American West
ANALYTICAL LABORATORIES

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Galen Williams
EarthFax Engineering
7324 So. Union Park Ave., # 100
Midvale, UT 84047
TEL: (801) 561-1555

RE: Red Butte / 1300-02

Dear Galen Williams: Lab Set ID: 1108489

American West Analytical Laboratories received 38 sample(s) on 8/24/2011 for the analyses presented in the following report.

All analyses were performed in accordance to The NELAC Institute protocols unless noted otherwise. American West Analytical Laboratories is certified by The NELAC Institute in Utah and Texas; and is state certified in Colorado, Idaho, and Missouri. Certification document is available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by: Kyle F. Gross
Digitally signed by Kyle F. Gross
DN: cn=Kyle F. Gross, o=AWAL, ou=AWAL, email=kyle@awal-labs.com, c=US
Date: 2011.09.07 13:47:00 -06'00'

Laboratory Director or designee

INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-002
Client Sample ID: Mill Cr. Below 700 E. - Bed
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**22.1**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**77.9**	

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Laboratory Director

Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-003
Client Sample ID: Mill Cr. Below 700 E. - Bank
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**31.8**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**68.2**	

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Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-006
Client Sample ID: BD-1 - Bed
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**22.6**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**77.4**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-007
Client Sample ID: BD-1 - Bank
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**31.8**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**68.2**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-011
Client Sample ID: Mill Cr. Below Highland Drive - Bed
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**20.6**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**79.4**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-012
Client Sample ID: Mill Cr. Below Highland Drive - Bank
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**26.6**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**73.4**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-014
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**10.7**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**89.3**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-015
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**28.4**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**71.6**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-017
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**20.8**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**79.2**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-018
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**25.1**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**74.9**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-022
Client Sample ID: BD-2 - Bed
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**19.0**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**81.0**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-023
Client Sample ID: BD-2 - Bank
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**24.5**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**75.5**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-026
Client Sample ID: Mill Cr. Below 2300 E. - Bed
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**19.2**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**80.8**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-027
Client Sample ID: Mill Cr. Below 2300 E. - Bank
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**24.3**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**75.7**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-029
Client Sample ID: Mill Cr. Above Country Gage - Bed
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**20.8**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**79.2**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-030
Client Sample ID: Mill Cr. Above Country Gage - Bank
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**16.0**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**84.0**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-032
Client Sample ID: City Cr. @ Lower Natural Channel - Bed
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**20.4**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**79.6**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-033
Client Sample ID: City Cr. @ Lower Natural Channel - Bank
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**22.0**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**78.0**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-035
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**17.7**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**82.3**	

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INORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-036
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Percent Moisture	wt%		8/25/2011 1805h	SM2540B	0.0100	**15.8**	
Total Solids	%		8/25/2011 1805h	SM2540B	0.0100	**84.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-001B
Client Sample ID: Mill Cr. Below 700 E.
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/25/2011 2219h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**80.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-002A
Client Sample ID: Mill Cr. Below 700 E. - Bed
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0734h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.7	**64.2**	
Surr: C27		10-200	**96.4**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-003A
Client Sample ID: Mill Cr. Below 700 E. - Bank
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0758h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		29.3	**214**	
Surr: C27		10-200	**110**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-005B
Client Sample ID: BD-1
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/25/2011 2242h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**77.7**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-006A
Client Sample ID: BD-1 - Bed
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0821h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.8	**161**	
Surr: C27		10-200	**97.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-007A
Client Sample ID: BD-1 - Bank
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0845h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		29.3	**180**	
Surr: C27		10-200	**107**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-008B
Client Sample ID: EB-1
Collection Date: 8/24/2011 0905h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/25/2011 2354h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**77.9**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-010B
Client Sample ID: Mill Cr. Below Highland Drive
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/26/2011 0017h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**71.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-011A
Client Sample ID: Mill Cr. Below Highland Drive - Bed
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0909h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.2	< 25.2	
Surr: C27		10-200	**107**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-012A
Client Sample ID: Mill Cr. Below Highland Drive - Bank
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0933h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		27.2	**125**	
Surr: C27		10-200	**107**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-013B
Client Sample ID: City Cr. Below N. Cyn. Loop
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/26/2011 0041h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**77.9**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-014A
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 0957h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		22.4	**81.0**	
Surr: C27		10-200	**126**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-015A
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 1020h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		27.9	**31.4**	
Surr: C27		10-200	**112**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-016B
Client Sample ID: City Cr. Near Cyn. Entrance Gate
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/26/2011 0105h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**79.3**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-017A
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 1044h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.3	< 25.3	
Surr: C27		10-200	**122**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-018A
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/28/2011 1108h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		26.7	**59.4**	
Surr: C27		10-200	**114**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-021B
Client Sample ID: BD-2
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/26/2011 0129h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**78.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-022A
Client Sample ID: BD-2 - Bed
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 0846h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		24.7	< 24.7	
Surr: C27		10-200	**54.4**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-023A
Client Sample ID: BD-2 - Bank
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 0957h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		26.5	< 26.5	
Surr: C27		10-200	**53.7**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-024B
Client Sample ID: EB-2
Collection Date: 8/24/2011 1600h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/26/2011 0153h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**80.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-025B
Client Sample ID: Mill Cr. Below 2300 E.
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/26/2011 0216h **Extracted:** 8/25/2011 1646h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**80.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-026A
Client Sample ID: Mill Cr. Below 2300 E. - Bed
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1020h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		24.7	< 24.7	
Surr: C27		10-200	**54.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-027A
Client Sample ID: Mill Cr. Below 2300 E. - Bank
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1044h **Extracted:** 8/26/2011 1034h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		26.4	**90.4**	
Surr: C27		10-200	**60.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-028B
Client Sample ID: Mill Cr. Above Country Gage
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/30/2011 0115h **Extracted:** 8/26/2011 1232h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**52.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-029A
Client Sample ID: Mill Cr. Above Country Gage - Bed
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1108h **Extracted:** 8/26/2011 1214h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.2	< 25.2	
Surr: C27		10-200	**73.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-030A
Client Sample ID: Mill Cr. Above Country Gage - Bank
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1219h **Extracted:** 8/26/2011 1214h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		23.8	**26.2**	
Surr: C27		10-200	**69.3**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-031B
Client Sample ID: City Cr. @ Lower Natural Channel
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/30/2011 0226h **Extracted:** 8/26/2011 1232h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**51.6**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-032A
Client Sample ID: City Cr. @ Lower Natural Channel - Bed
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1242h **Extracted:** 8/26/2011 1214h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.1	**80.4**	
Surr: C27		10-200	**77.9**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-033A
Client Sample ID: City Cr. @ Lower Natural Channel - Bank
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1306h **Extracted:** 8/26/2011 1214h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		25.6	**189**	
Surr: C27		10-200	**86.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-034B
Client Sample ID: City Cr. @ N. Cyn. Footbridge
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/30/2011 0250h **Extracted:** 8/26/2011 1232h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**47.5**	

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Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-035A
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1330h **Extracted:** 8/26/2011 1214h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		24.3	**29.0**	
Surr: C27		10-200	**73.4**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-036A
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3546

Analyzed: 8/30/2011 1441h **Extracted:** 8/26/2011 1214h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		23.7	**53.6**	
Surr: C27		10-200	**72.8**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-037B
Client Sample ID: Jordan River Above 800 So.
Collection Date: 8/24/2011 1645h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/30/2011 0314h **Extracted:** 8/26/2011 1232h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**55.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-038B
Client Sample ID: Jordan River Above 1700 So.
Collection Date: 8/24/2011 1720h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-ORO (C28-C36) by GC/FID Method 8015D/3510C

Analyzed: 8/30/2011 0337h **Extracted:** 8/26/2011 1232h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Oil Range Organics (ORO) (C28-C36)		0.500	< 0.500	
Surr: C27		10-200	**51.7**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-001A
Client Sample ID: Mill Cr. Below 700 E.
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 1737h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**53.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-002A
Client Sample ID: Mill Cr. Below 700 E. - Bed
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/30/2011 0044h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	25.7	**113**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**54.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-003A
Client Sample ID: Mill Cr. Below 700 E. - Bank
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1142h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 2

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	58.7	**255**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**57.2**	

The reporting limits were raised due to high analyte concentrations.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-005A
Client Sample ID: BD-1
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 1836h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**54.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-006A
Client Sample ID: BD-1 - Bed
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1221h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 2

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	51.7	**186**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**52.9**	

The reporting limits were raised due to high analyte concentrations.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-007A
Client Sample ID: BD-1 - Bank
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1301h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 2

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	58.6	**258**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**54.4**	

The reporting limits were raised due to high analyte concentrations.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-008A
Client Sample ID: EB-1
Collection Date: 8/24/2011 0905h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 1855h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**41.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-010A
Client Sample ID: Mill Cr. Below Highland Drive
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 1915h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**43.6**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-011A
Client Sample ID: Mill Cr. Below Highland Drive - Bed
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1340h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	25.2	**54.9**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**55.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-012A
Client Sample ID: Mill Cr. Below Highland Drive - Bank
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1420h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 2

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	54.5	**308**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**59.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-013A
Client Sample ID: City Cr. Below N. Cyn. Loop
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 1934h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**53.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-014A
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1539h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	22.4	**53.7**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**55.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-015A
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1618h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	27.9	**50.5**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**40.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-016A
Client Sample ID: City Cr. Near Cyn. Entrance Gate
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 1953h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**51.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-017A
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1658h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	25.3	**29.5**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**39.7**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-018A
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1737h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	26.7	**36.7**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**34.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-021A
Client Sample ID: BD-2
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2052h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**55.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-022A
Client Sample ID: BD-2 - Bed
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/31/2011 1817h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	24.7	< 24.7	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**38.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-023A
Client Sample ID: BD-2 - Bank
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h
Method: SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1431h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	26.5	**42.8**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**64.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-024A
Client Sample ID: EB-2
Collection Date: 8/24/2011 1600h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2111h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**53.7**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-025A
Client Sample ID: Mill Cr. Below 2300 E.
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2130h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**49.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-026A
Client Sample ID: Mill Cr. Below 2300 E. - Bed
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1510h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	24.7	**34.4**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**52.5**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-027A
Client Sample ID: Mill Cr. Below 2300 E. - Bank
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1550h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	26.4	**136**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**50.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-028A
Client Sample ID: Mill Cr. Above Country Gage
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2150h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**52.7**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-029A
Client Sample ID: Mill Cr. Above Country Gage - Bed
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1629h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	25.2	**38.7**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**61.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-030A
Client Sample ID: Mill Cr. Above Country Gage - Bank
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1708h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	23.8	**36.3**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**57.0**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-031A
Client Sample ID: City Cr. @ Lower Natural Channel
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2209h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**55.9**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-032A
Client Sample ID: City Cr. @ Lower Natural Channel - Bed
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1827h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	25.1	**58.1**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**57.6**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-033A
Client Sample ID: City Cr. @ Lower Natural Channel - Bank
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 1907h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	25.6	**90.4**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**55.2**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-034A
Client Sample ID: City Cr. @ N. Cyn. Footbridge
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2229h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**52.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-035A
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 2006h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	24.3	**35.1**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**58.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-036A
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by Method 8015D Mod/3546

Analyzed: 8/29/2011 2045h **Extracted:** 8/29/2011 0919h
Units: mg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	23.7	**96.1**	
Surr: 4-Bromofluorobenzene	460-00-4	10-122	**63.1**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-037A
Client Sample ID: Jordan River Above 800 So.
Collection Date: 8/24/2011 1645h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2248h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**48.4**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-038A
Client Sample ID: Jordan River Above 1700 So.
Collection Date: 8/24/2011 1720h
Received Date: 8/24/2011 1745h **Method:** SW8015D

Analytical Results TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 8/27/2011 2307h **Extracted:** 8/27/2011 1031h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500	
Surr: 4-Bromofluorobenzene	460-00-4	10-190	**51.6**	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-001C
Client Sample ID: Mill Cr. Below 700 E.
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 8/30/2011 1937h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-002C
Client Sample ID: Mill Cr. Below 700 E. - Bed
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 0541h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.8	**53.1**	
2-Methylnaphthalene	91-57-6	12.8	< 12.8	
Acenaphthene	83-32-9	12.8	< 12.8	
Acenaphthylene	208-96-8	12.8	< 12.8	
Anthracene	120-12-7	12.8	< 12.8	
Benz(a)anthracene	56-55-3	12.8	**88.2**	
Benzo(a)pyrene	50-32-8	12.8	**44.5**	
Benzo(b)fluoranthene	205-99-2	12.8	**79.6**	
Benzo(g,h,i)perylene	191-24-2	12.8	< 12.8	
Benzo(k)fluoranthene	207-08-9	12.8	**20.5**	
Chrysene	218-01-9	12.8	**90.7**	
Dibenz(a,h)anthracene	53-70-3	12.8	< 12.8	
Fluoranthene	206-44-0	12.8	**232**	
Fluorene	86-73-7	12.8	< 12.8	
Indene	95-13-6	12.8	< 12.8	
Indeno(1,2,3-cd)pyrene	193-39-5	12.8	**32.5**	
Naphthalene	91-20-3	12.8	**48.8**	
Phenanthrene	85-01-8	12.8	**136**	
Pyrene	129-00-0	12.8	**200**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-003C
Client Sample ID: Mill Cr. Below 700 E. - Bank
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 0607h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	14.7	< 14.7	
2-Methylnaphthalene	91-57-6	14.7	< 14.7	
Acenaphthene	83-32-9	14.7	< 14.7	
Acenaphthylene	208-96-8	14.7	< 14.7	
Anthracene	120-12-7	14.7	< 14.7	
Benz(a)anthracene	56-55-3	14.7	**42.1**	
Benzo(a)pyrene	50-32-8	14.7	< 14.7	
Benzo(b)fluoranthene	205-99-2	14.7	**43.0**	
Benzo(g,h,i)perylene	191-24-2	14.7	< 14.7	
Benzo(k)fluoranthene	207-08-9	14.7	< 14.7	
Chrysene	218-01-9	14.7	**58.7**	
Dibenz(a,h)anthracene	53-70-3	14.7	< 14.7	
Fluoranthene	206-44-0	14.7	**104**	
Fluorene	86-73-7	14.7	< 14.7	
Indene	95-13-6	14.7	< 14.7	
Indeno(1,2,3-cd)pyrene	193-39-5	14.7	< 14.7	
Naphthalene	91-20-3	14.7	< 14.7	
Phenanthrene	85-01-8	14.7	**62.6**	
Pyrene	129-00-0	14.7	**111**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-005C
Client Sample ID: BD-1
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 1339h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-006C
Client Sample ID: BD-1 - Bed
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 0633h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.9	< 12.9	
2-Methylnaphthalene	91-57-6	12.9	< 12.9	
Acenaphthene	83-32-9	12.9	< 12.9	
Acenaphthylene	208-96-8	12.9	< 12.9	
Anthracene	120-12-7	12.9	< 12.9	
Benz(a)anthracene	56-55-3	12.9	< 12.9	
Benzo(a)pyrene	50-32-8	12.9	< 12.9	
Benzo(b)fluoranthene	205-99-2	12.9	< 12.9	
Benzo(g,h,i)perylene	191-24-2	12.9	< 12.9	
Benzo(k)fluoranthene	207-08-9	12.9	< 12.9	
Chrysene	218-01-9	12.9	< 12.9	
Dibenz(a,h)anthracene	53-70-3	12.9	< 12.9	
Fluoranthene	206-44-0	12.9	**35.3**	
Fluorene	86-73-7	12.9	< 12.9	
Indene	95-13-6	12.9	< 12.9	
Indeno(1,2,3-cd)pyrene	193-39-5	12.9	< 12.9	
Naphthalene	91-20-3	12.9	< 12.9	
Phenanthrene	85-01-8	12.9	< 12.9	
Pyrene	129-00-0	12.9	**40.5**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-007C
Client Sample ID: BD-1 - Bank
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1553h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	14.7	< 14.7	
2-Methylnaphthalene	91-57-6	14.7	< 14.7	
Acenaphthene	83-32-9	14.7	< 14.7	
Acenaphthylene	208-96-8	14.7	< 14.7	
Anthracene	120-12-7	14.7	< 14.7	
Benz(a)anthracene	56-55-3	14.7	**39.1**	
Benzo(a)pyrene	50-32-8	14.7	< 14.7	
Benzo(b)fluoranthene	205-99-2	14.7	**46.9**	
Benzo(g,h,i)perylene	191-24-2	14.7	< 14.7	
Benzo(k)fluoranthene	207-08-9	14.7	< 14.7	
Chrysene	218-01-9	14.7	**58.6**	
Dibenz(a,h)anthracene	53-70-3	14.7	< 14.7	
Fluoranthene	206-44-0	14.7	**75.2**	
Fluorene	86-73-7	14.7	< 14.7	
Indene	95-13-6	14.7	< 14.7	
Indeno(1,2,3-cd)pyrene	193-39-5	14.7	< 14.7	
Naphthalene	91-20-3	14.7	< 14.7	
Phenanthrene	85-01-8	14.7	**34.2**	
Pyrene	129-00-0	14.7	**87.0**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-008C
Client Sample ID: EB-1
Collection Date: 8/24/2011 0905h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 1406h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-010C
Client Sample ID: Mill Cr. Below Highland Drive
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 1433h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-011C
Client Sample ID: Mill Cr. Below Highland Drive - Bed
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1620h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.6	< 12.6	
2-Methylnaphthalene	91-57-6	12.6	< 12.6	
Acenaphthene	83-32-9	12.6	< 12.6	
Acenaphthylene	208-96-8	12.6	< 12.6	
Anthracene	120-12-7	12.6	< 12.6	
Benz(a)anthracene	56-55-3	12.6	**43.7**	
Benzo(a)pyrene	50-32-8	12.6	**41.2**	
Benzo(b)fluoranthene	205-99-2	12.6	**56.3**	
Benzo(g,h,i)perylene	191-24-2	12.6	< 12.6	
Benzo(k)fluoranthene	207-08-9	12.6	< 12.6	
Chrysene	218-01-9	12.6	**55.4**	
Dibenz(a,h)anthracene	53-70-3	12.6	< 12.6	
Fluoranthene	206-44-0	12.6	**93.2**	
Fluorene	86-73-7	12.6	< 12.6	
Indene	95-13-6	12.6	< 12.6	
Indeno(1,2,3-cd)pyrene	193-39-5	12.6	< 12.6	
Naphthalene	91-20-3	12.6	< 12.6	
Phenanthrene	85-01-8	12.6	**35.3**	
Pyrene	129-00-0	12.6	**89.0**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-012C
Client Sample ID: Mill Cr. Below Highland Drive - Bank
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1646h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	13.6	< 13.6	
2-Methylnaphthalene	91-57-6	13.6	< 13.6	
Acenaphthene	83-32-9	13.6	< 13.6	
Acenaphthylene	208-96-8	13.6	< 13.6	
Anthracene	120-12-7	13.6	**40.0**	
Benz(a)anthracene	56-55-3	13.6	**126**	
Benzo(a)pyrene	50-32-8	13.6	**125**	
Benzo(b)fluoranthene	205-99-2	13.6	**144**	
Benzo(g,h,i)perylene	191-24-2	13.6	< 13.6	
Benzo(k)fluoranthene	207-08-9	13.6	**49.0**	
Chrysene	218-01-9	13.6	**152**	
Dibenz(a,h)anthracene	53-70-3	13.6	< 13.6	
Fluoranthene	206-44-0	13.6	**303**	
Fluorene	86-73-7	13.6	< 13.6	
Indene	95-13-6	13.6	< 13.6	
Indeno(1,2,3-cd)pyrene	193-39-5	13.6	**59.0**	
Naphthalene	91-20-3	13.6	< 13.6	
Phenanthrene	85-01-8	13.6	**235**	
Pyrene	129-00-0	13.6	**321**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-013C
Client Sample ID: City Cr. Below N. Cyn. Loop
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 1459h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-014C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1713h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	11.2	< 11.2	
2-Methylnaphthalene	91-57-6	11.2	< 11.2	
Acenaphthene	83-32-9	11.2	< 11.2	
Acenaphthylene	208-96-8	11.2	< 11.2	
Anthracene	120-12-7	11.2	**26.1**	
Benz(a)anthracene	56-55-3	11.2	**39.5**	
Benzo(a)pyrene	50-32-8	11.2	**31.3**	
Benzo(b)fluoranthene	205-99-2	11.2	**36.6**	
Benzo(g,h,i)perylene	191-24-2	11.2	< 11.2	
Benzo(k)fluoranthene	207-08-9	11.2	< 11.2	
Chrysene	218-01-9	11.2	**35.8**	
Dibenz(a,h)anthracene	53-70-3	11.2	< 11.2	
Fluoranthene	206-44-0	11.2	**96.3**	
Fluorene	86-73-7	11.2	< 11.2	
Indene	95-13-6	11.2	< 11.2	
Indeno(1,2,3-cd)pyrene	193-39-5	11.2	< 11.2	
Naphthalene	91-20-3	11.2	< 11.2	
Phenanthrene	85-01-8	11.2	**90.3**	
Pyrene	129-00-0	11.2	**83.6**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-015C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1244h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	14.0	< 14.0	
2-Methylnaphthalene	91-57-6	14.0	< 14.0	
Acenaphthene	83-32-9	14.0	< 14.0	
Acenaphthylene	208-96-8	14.0	< 14.0	
Anthracene	120-12-7	14.0	< 14.0	
Benz(a)anthracene	56-55-3	14.0	< 14.0	
Benzo(a)pyrene	50-32-8	14.0	< 14.0	
Benzo(b)fluoranthene	205-99-2	14.0	< 14.0	
Benzo(g,h,i)perylene	191-24-2	14.0	< 14.0	
Benzo(k)fluoranthene	207-08-9	14.0	< 14.0	
Chrysene	218-01-9	14.0	< 14.0	
Dibenz(a,h)anthracene	53-70-3	14.0	< 14.0	
Fluoranthene	206-44-0	14.0	< 14.0	
Fluorene	86-73-7	14.0	< 14.0	
Indene	95-13-6	14.0	< 14.0	
Indeno(1,2,3-cd)pyrene	193-39-5	14.0	< 14.0	
Naphthalene	91-20-3	14.0	< 14.0	
Phenanthrene	85-01-8	14.0	< 14.0	
Pyrene	129-00-0	14.0	< 14.0	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-016C
Client Sample ID: City Cr. Near Cyn. Entrance Gate
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 1526h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-017C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1401h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.6	< 12.6	
2-Methylnaphthalene	91-57-6	12.6	< 12.6	
Acenaphthene	83-32-9	12.6	< 12.6	
Acenaphthylene	208-96-8	12.6	< 12.6	
Anthracene	120-12-7	12.6	< 12.6	
Benz(a)anthracene	56-55-3	12.6	< 12.6	
Benzo(a)pyrene	50-32-8	12.6	< 12.6	
Benzo(b)fluoranthene	205-99-2	12.6	< 12.6	
Benzo(g,h,i)perylene	191-24-2	12.6	< 12.6	
Benzo(k)fluoranthene	207-08-9	12.6	< 12.6	
Chrysene	218-01-9	12.6	< 12.6	
Dibenz(a,h)anthracene	53-70-3	12.6	< 12.6	
Fluoranthene	206-44-0	12.6	< 12.6	
Fluorene	86-73-7	12.6	< 12.6	
Indene	95-13-6	12.6	< 12.6	
Indeno(1,2,3-cd)pyrene	193-39-5	12.6	< 12.6	
Naphthalene	91-20-3	12.6	< 12.6	
Phenanthrene	85-01-8	12.6	< 12.6	
Pyrene	129-00-0	12.6	< 12.6	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-018C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1427h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	13.3	< 13.3	
2-Methylnaphthalene	91-57-6	13.3	< 13.3	
Acenaphthene	83-32-9	13.3	< 13.3	
Acenaphthylene	208-96-8	13.3	< 13.3	
Anthracene	120-12-7	13.3	< 13.3	
Benz(a)anthracene	56-55-3	13.3	< 13.3	
Benzo(a)pyrene	50-32-8	13.3	< 13.3	
Benzo(b)fluoranthene	205-99-2	13.3	< 13.3	
Benzo(g,h,i)perylene	191-24-2	13.3	< 13.3	
Benzo(k)fluoranthene	207-08-9	13.3	< 13.3	
Chrysene	218-01-9	13.3	< 13.3	
Dibenz(a,h)anthracene	53-70-3	13.3	< 13.3	
Fluoranthene	206-44-0	13.3	< 13.3	
Fluorene	86-73-7	13.3	< 13.3	
Indene	95-13-6	13.3	< 13.3	
Indeno(1,2,3-cd)pyrene	193-39-5	13.3	< 13.3	
Naphthalene	91-20-3	13.3	< 13.3	
Phenanthrene	85-01-8	13.3	< 13.3	
Pyrene	129-00-0	13.3	< 13.3	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-021C
Client Sample ID: BD-2
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0012h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-022C
Client Sample ID: BD-2 - Bed
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1453h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.3	< 12.3	
2-Methylnaphthalene	91-57-6	12.3	< 12.3	
Acenaphthene	83-32-9	12.3	< 12.3	
Acenaphthylene	208-96-8	12.3	< 12.3	
Anthracene	120-12-7	12.3	< 12.3	
Benz(a)anthracene	56-55-3	12.3	< 12.3	
Benzo(a)pyrene	50-32-8	12.3	< 12.3	
Benzo(b)fluoranthene	205-99-2	12.3	< 12.3	
Benzo(g,h,i)perylene	191-24-2	12.3	< 12.3	
Benzo(k)fluoranthene	207-08-9	12.3	< 12.3	
Chrysene	218-01-9	12.3	< 12.3	
Dibenz(a,h)anthracene	53-70-3	12.3	< 12.3	
Fluoranthene	206-44-0	12.3	< 12.3	
Fluorene	86-73-7	12.3	< 12.3	
Indene	95-13-6	12.3	< 12.3	
Indeno(1,2,3-cd)pyrene	193-39-5	12.3	< 12.3	
Naphthalene	91-20-3	12.3	< 12.3	
Phenanthrene	85-01-8	12.3	< 12.3	
Pyrene	129-00-0	12.3	< 12.3	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-023C
Client Sample ID: BD-2 - Bank
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1518h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	13.3	< 13.3	
2-Methylnaphthalene	91-57-6	13.3	< 13.3	
Acenaphthene	83-32-9	13.3	< 13.3	
Acenaphthylene	208-96-8	13.3	< 13.3	
Anthracene	120-12-7	13.3	< 13.3	
Benz(a)anthracene	56-55-3	13.3	< 13.3	
Benzo(a)pyrene	50-32-8	13.3	< 13.3	
Benzo(b)fluoranthene	205-99-2	13.3	< 13.3	
Benzo(g,h,i)perylene	191-24-2	13.3	< 13.3	
Benzo(k)fluoranthene	207-08-9	13.3	< 13.3	
Chrysene	218-01-9	13.3	< 13.3	
Dibenz(a,h)anthracene	53-70-3	13.3	< 13.3	
Fluoranthene	206-44-0	13.3	< 13.3	
Fluorene	86-73-7	13.3	< 13.3	
Indene	95-13-6	13.3	< 13.3	
Indeno(1,2,3-cd)pyrene	193-39-5	13.3	< 13.3	
Naphthalene	91-20-3	13.3	< 13.3	
Phenanthrene	85-01-8	13.3	< 13.3	
Pyrene	129-00-0	13.3	< 13.3	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-024C
Client Sample ID: EB-2
Collection Date: 8/24/2011 1600h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0037h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-025C
Client Sample ID: Mill Cr. Below 2300 E.
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0103h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-026C
Client Sample ID: Mill Cr. Below 2300 E. - Bed
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1544h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.4	< 12.4	
2-Methylnaphthalene	91-57-6	12.4	< 12.4	
Acenaphthene	83-32-9	12.4	< 12.4	
Acenaphthylene	208-96-8	12.4	< 12.4	
Anthracene	120-12-7	12.4	< 12.4	
Benz(a)anthracene	56-55-3	12.4	< 12.4	
Benzo(a)pyrene	50-32-8	12.4	< 12.4	
Benzo(b)fluoranthene	205-99-2	12.4	< 12.4	
Benzo(g,h,i)perylene	191-24-2	12.4	< 12.4	
Benzo(k)fluoranthene	207-08-9	12.4	< 12.4	
Chrysene	218-01-9	12.4	< 12.4	
Dibenz(a,h)anthracene	53-70-3	12.4	< 12.4	
Fluoranthene	206-44-0	12.4	< 12.4	
Fluorene	86-73-7	12.4	< 12.4	
Indene	95-13-6	12.4	< 12.4	
Indeno(1,2,3-cd)pyrene	193-39-5	12.4	< 12.4	
Naphthalene	91-20-3	12.4	< 12.4	
Phenanthrene	85-01-8	12.4	< 12.4	
Pyrene	129-00-0	12.4	< 12.4	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-027C
Client Sample ID: Mill Cr. Below 2300 E. - Bank
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1610h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	13.2	< 13.2	
2-Methylnaphthalene	91-57-6	13.2	< 13.2	
Acenaphthene	83-32-9	13.2	< 13.2	
Acenaphthylene	208-96-8	13.2	< 13.2	
Anthracene	120-12-7	13.2	< 13.2	
Benz(a)anthracene	56-55-3	13.2	**34.3**	
Benzo(a)pyrene	50-32-8	13.2	< 13.2	
Benzo(b)fluoranthene	205-99-2	13.2	**67.8**	
Benzo(g,h,i)perylene	191-24-2	13.2	< 13.2	
Benzo(k)fluoranthene	207-08-9	13.2	< 13.2	
Chrysene	218-01-9	13.2	**81.9**	
Dibenz(a,h)anthracene	53-70-3	13.2	< 13.2	
Fluoranthene	206-44-0	13.2	**61.6**	
Fluorene	86-73-7	13.2	< 13.2	
Indene	95-13-6	13.2	< 13.2	
Indeno(1,2,3-cd)pyrene	193-39-5	13.2	< 13.2	
Naphthalene	91-20-3	13.2	< 13.2	
Phenanthrene	85-01-8	13.2	**27.3**	
Pyrene	129-00-0	13.2	**62.5**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-028C
Client Sample ID: Mill Cr. Above Country Gage
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0129h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-029C
Client Sample ID: Mill Cr. Above Country Gage - Bed
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1635h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.6	< 12.6	
2-Methylnaphthalene	91-57-6	12.6	< 12.6	
Acenaphthene	83-32-9	12.6	< 12.6	
Acenaphthylene	208-96-8	12.6	< 12.6	
Anthracene	120-12-7	12.6	**42.9**	
Benz(a)anthracene	56-55-3	12.6	**98.5**	
Benzo(a)pyrene	50-32-8	12.6	**61.4**	
Benzo(b)fluoranthene	205-99-2	12.6	**72.4**	
Benzo(g,h,i)perylene	191-24-2	12.6	< 12.6	
Benzo(k)fluoranthene	207-08-9	12.6	**26.1**	
Chrysene	218-01-9	12.6	**83.3**	
Dibenz(a,h)anthracene	53-70-3	12.6	< 12.6	
Fluoranthene	206-44-0	12.6	**237**	
Fluorene	86-73-7	12.6	< 12.6	
Indene	95-13-6	12.6	< 12.6	
Indeno(1,2,3-cd)pyrene	193-39-5	12.6	**25.2**	
Naphthalene	91-20-3	12.6	< 12.6	
Phenanthrene	85-01-8	12.6	**234**	
Pyrene	129-00-0	12.6	**219**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-030C
Client Sample ID: Mill Cr. Above Country Gage - Bank
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1701h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	11.9	< 11.9	
2-Methylnaphthalene	91-57-6	11.9	< 11.9	
Acenaphthene	83-32-9	11.9	< 11.9	
Acenaphthylene	208-96-8	11.9	< 11.9	
Anthracene	120-12-7	11.9	< 11.9	
Benz(a)anthracene	56-55-3	11.9	< 11.9	
Benzo(a)pyrene	50-32-8	11.9	< 11.9	
Benzo(b)fluoranthene	205-99-2	11.9	< 11.9	
Benzo(g,h,i)perylene	191-24-2	11.9	< 11.9	
Benzo(k)fluoranthene	207-08-9	11.9	< 11.9	
Chrysene	218-01-9	11.9	< 11.9	
Dibenz(a,h)anthracene	53-70-3	11.9	< 11.9	
Fluoranthene	206-44-0	11.9	< 11.9	
Fluorene	86-73-7	11.9	< 11.9	
Indene	95-13-6	11.9	< 11.9	
Indeno(1,2,3-cd)pyrene	193-39-5	11.9	< 11.9	
Naphthalene	91-20-3	11.9	< 11.9	
Phenanthrene	85-01-8	11.9	< 11.9	
Pyrene	129-00-0	11.9	< 11.9	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-031C
Client Sample ID: City Cr. @ Lower Natural Channel
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0155h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-032C
Client Sample ID: City Cr. @ Lower Natural Channel - Bed
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1727h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.6	< 12.6	
2-Methylnaphthalene	91-57-6	12.6	< 12.6	
Acenaphthene	83-32-9	12.6	< 12.6	
Acenaphthylene	208-96-8	12.6	< 12.6	
Anthracene	120-12-7	12.6	< 12.6	
Benz(a)anthracene	56-55-3	12.6	< 12.6	
Benzo(a)pyrene	50-32-8	12.6	< 12.6	
Benzo(b)fluoranthene	205-99-2	12.6	< 12.6	
Benzo(g,h,i)perylene	191-24-2	12.6	< 12.6	
Benzo(k)fluoranthene	207-08-9	12.6	< 12.6	
Chrysene	218-01-9	12.6	< 12.6	
Dibenz(a,h)anthracene	53-70-3	12.6	< 12.6	
Fluoranthene	206-44-0	12.6	< 12.6	
Fluorene	86-73-7	12.6	< 12.6	
Indene	95-13-6	12.6	< 12.6	
Indeno(1,2,3-cd)pyrene	193-39-5	12.6	< 12.6	
Naphthalene	91-20-3	12.6	< 12.6	
Phenanthrene	85-01-8	12.6	< 12.6	
Pyrene	129-00-0	12.6	< 12.6	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-033C
Client Sample ID: City Cr. @ Lower Natural Channel - Bank
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1752h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.8	< 12.8	
2-Methylnaphthalene	91-57-6	12.8	< 12.8	
Acenaphthene	83-32-9	12.8	< 12.8	
Acenaphthylene	208-96-8	12.8	< 12.8	
Anthracene	120-12-7	12.8	< 12.8	
Benz(a)anthracene	56-55-3	12.8	**67.5**	
Benzo(a)pyrene	50-32-8	12.8	**63.2**	
Benzo(b)fluoranthene	205-99-2	12.8	**88.0**	
Benzo(g,h,i)perylene	191-24-2	12.8	< 12.8	
Benzo(k)fluoranthene	207-08-9	12.8	< 12.8	
Chrysene	218-01-9	12.8	**109**	
Dibenz(a,h)anthracene	53-70-3	12.8	< 12.8	
Fluoranthene	206-44-0	12.8	**109**	
Fluorene	86-73-7	12.8	< 12.8	
Indene	95-13-6	12.8	< 12.8	
Indeno(1,2,3-cd)pyrene	193-39-5	12.8	**58.1**	
Naphthalene	91-20-3	12.8	< 12.8	
Phenanthrene	85-01-8	12.8	**109**	
Pyrene	129-00-0	12.8	**120**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-034C
Client Sample ID: City Cr. @ N. Cyn. Footbridge
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0220h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-035C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1818h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	12.2	< 12.2	
2-Methylnaphthalene	91-57-6	12.2	< 12.2	
Acenaphthene	83-32-9	12.2	< 12.2	
Acenaphthylene	208-96-8	12.2	< 12.2	
Anthracene	120-12-7	12.2	< 12.2	
Benz(a)anthracene	56-55-3	12.2	< 12.2	
Benzo(a)pyrene	50-32-8	12.2	< 12.2	
Benzo(b)fluoranthene	205-99-2	12.2	< 12.2	
Benzo(g,h,i)perylene	191-24-2	12.2	< 12.2	
Benzo(k)fluoranthene	207-08-9	12.2	< 12.2	
Chrysene	218-01-9	12.2	< 12.2	
Dibenz(a,h)anthracene	53-70-3	12.2	< 12.2	
Fluoranthene	206-44-0	12.2	**31.6**	
Fluorene	86-73-7	12.2	< 12.2	
Indene	95-13-6	12.2	< 12.2	
Indeno(1,2,3-cd)pyrene	193-39-5	12.2	< 12.2	
Naphthalene	91-20-3	12.2	< 12.2	
Phenanthrene	85-01-8	12.2	< 12.2	
Pyrene	129-00-0	12.2	**34.0**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-036C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA SIM List by GC/MS Method 8270D/3546

Analyzed: 9/3/2011 1844h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	11.9	< 11.9	
2-Methylnaphthalene	91-57-6	11.9	< 11.9	
Acenaphthene	83-32-9	11.9	< 11.9	
Acenaphthylene	208-96-8	11.9	< 11.9	
Anthracene	120-12-7	11.9	< 11.9	
Benz(a)anthracene	56-55-3	11.9	**42.7**	
Benzo(a)pyrene	50-32-8	11.9	< 11.9	
Benzo(b)fluoranthene	205-99-2	11.9	**26.1**	
Benzo(g,h,i)perylene	191-24-2	11.9	< 11.9	
Benzo(k)fluoranthene	207-08-9	11.9	< 11.9	
Chrysene	218-01-9	11.9	**37.2**	
Dibenz(a,h)anthracene	53-70-3	11.9	< 11.9	
Fluoranthene	206-44-0	11.9	**111**	
Fluorene	86-73-7	11.9	< 11.9	
Indene	95-13-6	11.9	< 11.9	
Indeno(1,2,3-cd)pyrene	193-39-5	11.9	< 11.9	
Naphthalene	91-20-3	11.9	< 11.9	
Phenanthrene	85-01-8	11.9	**89.4**	
Pyrene	129-00-0	11.9	**79.9**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-037C
Client Sample ID: Jordan River Above 800 So.
Collection Date: 8/24/2011 1645h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0246h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-038C
Client Sample ID: Jordan River Above 1700 So.
Collection Date: 8/24/2011 1720h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA PNA SIM List by GC/MS Method 8270D/3510C

Analyzed: 9/3/2011 0312h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1-Methylnaphthalene	90-12-0	0.100	< 0.100	
2-Methylnaphthalene	91-57-6	0.100	< 0.100	
Acenaphthene	83-32-9	0.100	< 0.100	
Acenaphthylene	208-96-8	0.100	< 0.100	
Anthracene	120-12-7	0.100	< 0.100	
Benz(a)anthracene	56-55-3	0.100	< 0.100	
Benzo(a)pyrene	50-32-8	0.100	< 0.100	
Benzo(b)fluoranthene	205-99-2	0.100	< 0.100	
Benzo(g,h,i)perylene	191-24-2	0.100	< 0.100	
Benzo(k)fluoranthene	207-08-9	0.100	< 0.100	
Chrysene	218-01-9	0.100	< 0.100	
Dibenz(a,h)anthracene	53-70-3	0.100	< 0.100	
Fluoranthene	206-44-0	0.100	< 0.100	
Fluorene	86-73-7	0.100	< 0.100	
Indene	95-13-6	0.100	< 0.100	
Indeno(1,2,3-cd)pyrene	193-39-5	0.100	< 0.100	
Naphthalene	91-20-3	0.100	< 0.100	
Phenanthrene	85-01-8	0.100	< 0.100	
Pyrene	129-00-0	0.100	< 0.100	

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-001C
Client Sample ID: Mill Cr. Below 700 E.
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/27/2011 2246h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Lab Sample ID: 1108489-001C
Client Sample ID: Mill Cr. Below 700 E.

Analyzed: 8/27/2011 2246h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-001C
Client Sample ID: Mill Cr. Below 700 E.

Analyzed: 8/27/2011 2246h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-001C
Client Sample ID: Mill Cr. Below 700 E.

Analyzed: 8/27/2011 2246h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**90.3**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**61.0**	
Surr: 2-Fluorophenol	367-12-4	10-106	**35.2**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**53.7**	
Surr: Phenol-d6	13127-88-3	10-122	**25.2**	
Surr: Terphenyl-d14	1718-51-0	10-199	**97.6**	

This sample was analyzed for TICs. Those results can be found on pages 400 to 403.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-002C
Client Sample ID: Mill Cr. Below 700 E. - Bed
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/29/2011 0440h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	437	< 437	
1,2,4,5-Tetrachlorobenzene	95-94-3	437	< 437	
1,2,4-Trichlorobenzene	120-82-1	437	< 437	
1,2-Dichlorobenzene	95-50-1	437	< 437	
1,3,5-Trinitrobenzene	99-35-4	437	< 437	
1,4-Naphthoquinone	130-15-4	860	< 860	
1,3-Dichlorobenzene	541-73-1	437	< 437	
1,3-Dinitrobenzene	99-65-0	437	< 437	
1,4-Dichlorobenzene	106-46-7	437	< 437	
1,4-Phenylenediamine	106-50-3	437	< 437	
1-Chloronaphthalene	90-13-1	437	< 437	
1-Methylnaphthalene	90-12-0	437	< 437	
1-Naphthylamine	134-32-7	860	< 860	
2,3,4,6-Tetrachlorophenol	58-90-2	437	< 437	
2,4,5-Trichlorophenol	95-95-4	437	< 437	
2,4,6-Trichlorophenol	88-06-2	437	< 437	
2,4-Dichlorophenol	120-83-2	437	< 437	
2,4-Dimethylphenol	105-67-9	437	< 437	
2,4-Dinitrophenol	51-28-5	860	< 860	
2,4-Dinitrotoluene	121-14-2	437	< 437	
2,6-Dichlorophenol	87-65-0	437	< 437	
2,6-Dinitrotoluene	606-20-2	437	< 437	
2-Acetylaminofluorene	53-96-3	437	< 437	
2-Chloronaphthalene	91-58-7	437	< 437	
2-Chlorophenol	95-57-8	437	< 437	
2-Methylnaphthalene	91-57-6	437	< 437	
2-Methylphenol	95-48-7	437	< 437	
2-Naphthylamine	91-59-8	860	< 860	
2-Nitroaniline	88-74-4	437	< 437	
2-Nitrophenol	88-75-5	437	< 437	
2-Picoline	109-06-8	437	< 437	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-002C
Client Sample ID: Mill Cr. Below 700 E. - Bed

Analyzed: 8/29/2011 0440h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		437	< 437	
3,3´-Dichlorobenzidine	91-94-1	437	< 437	
3,3´-Dimethylbenzidine	119-93-7	860	< 860	
3-Methylcholanthrene	56-49-5	437	< 437	
3-Nitroaniline	99-09-2	1,280	< 1,280	
4,6-Dinitro-2-methylphenol	534-52-1	860	< 860	
4-Aminobiphenyl	92-67-1	437	< 437	
4-Bromophenyl phenyl ether	101-55-3	437	< 437	
4-Chloro-3-methylphenol	59-50-7	437	< 437	
4-Chloroaniline	106-47-8	437	< 437	
4-Chlorophenyl phenyl ether	7005-72-3	437	< 437	
4-Nitroaniline	100-01-6	1,280	< 1,280	
4-Nitrophenol	100-02-7	860	< 860	
5-Nitro-o-toluidine	99-55-8	437	< 437	
7,12-Dimethylbenz(a)anthracene	57-97-6	437	< 437	
a,a-Dimethylphenethylamine	122-09-8	860	< 860	
Acenaphthene	83-32-9	437	< 437	
Acenaphthylene	208-96-8	437	< 437	
Acetophenone	98-86-2	437	< 437	
alpha-Terpineol	98-55-5	437	< 437	
Aniline	62-53-3	860	< 860	
Anthracene	120-12-7	437	< 437	
Aramite	140-57-8	860	< 860	
Azobenzene	103-33-3	437	< 437	
Benz(a)anthracene	56-55-3	437	< 437	
Benzidine	92-87-5	1,720	< 1,720	
Benzo(a)pyrene	50-32-8	437	< 437	
Benzo(b)fluoranthene	205-99-2	437	< 437	
Benzo(g,h,i)perylene	191-24-2	437	< 437	
Benzo(k)fluoranthene	207-08-9	437	< 437	
Benzoic acid	65-85-0	1,280	< 1,280	
Benzyl alcohol	100-51-6	437	< 437	
Bis(2-chloroethoxy)methane	111-91-1	437	< 437	
Bis(2-chloroethyl) ether	111-44-4	437	< 437	
Bis(2-chloroisopropyl) ether	108-60-1	437	< 437	
Bis(2-ethylhexyl) phthalate	117-81-7	437	**581**	
bis(2-ethylhexyl)adipate	103-23-1	860	**1,370**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-002C
Client Sample ID: Mill Cr. Below 700 E. - Bed

Analyzed: 8/29/2011 0440h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	437	< 437	
Carbazole	86-74-8	437	< 437	
Chlorobenzilate	510-15-6	437	< 437	
Chrysene	218-01-9	437	< 437	
Di-n-butyl phthalate	84-74-2	437	< 437	
Di-n-octyl phthalate	117-84-0	437	< 437	
Diallate (cis or trans)	2303-16-4	437	< 437	
Dibenz(a,h)anthracene	53-70-3	437	< 437	
Dibenzofuran	132-64-9	437	< 437	
Diethyl phthalate	84-66-2	437	< 437	
Dimethoate	60-51-5	437	< 437	
Dimethyl phthalate	131-11-3	437	< 437	
Dimethylaminoazobenzene	60-11-7	437	< 437	
Dinoseb	88-85-7	860	< 860	
Diphenylamine	122-39-4	437	< 437	
Disulfoton	298-04-4	437	< 437	
Ethyl methanesulfonate	62-50-0	437	< 437	
Famphur	52-85-7	437	< 437	
Fluoranthene	206-44-0	437	< 437	
Fluorene	86-73-7	437	< 437	
Hexachlorobenzene	118-74-1	437	< 437	
Hexachlorobutadiene	87-68-3	437	< 437	
Hexachlorocyclopentadiene	77-47-4	437	< 437	
Hexachloroethane	67-72-1	437	< 437	
Hexachlorophene	70-30-4	437	< 437	
Hexachloropropene	1888-71-7	437	< 437	
Indene	95-13-6	437	< 437	
Indeno(1,2,3-cd)pyrene	193-39-5	437	< 437	
Isodrin	465-73-6	437	< 437	
Isophorone	78-59-1	437	< 437	
Isosafrole	120-58-1	437	< 437	
Kepone	143-50-0	437	< 437	
Methapyrilene	91-80-5	860	< 860	
Methyl methanesulfonate	66-27-3	437	< 437	
n-Decane	124-18-5	437	< 437	
N-Nitrosodi-n-butylamine	924-16-3	437	< 437	
N-Nitrosodiethylamine	55-18-5	437	< 437	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-002C
Client Sample ID: Mill Cr. Below 700 E. - Bed

Analyzed: 8/29/2011 0440h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	860	< 860	
N-Nitrosodiphenylamine	86-30-6	437	< 437	
N-Nitrosodi-n-propylamine	621-64-7	437	< 437	
N-Nitrosomethylethylamine	10595-95-6	437	< 437	
N-Nitrosomorpholine	59-89-2	437	< 437	
N-Nitrosopiperidine	100-75-4	437	< 437	
N-Nitrosopyrrolidine	930-55-2	437	< 437	
n-Octadecane	593-45-3	437	< 437	
Naphthalene	91-20-3	437	< 437	
Nitrobenzene	98-95-3	437	< 437	
Nitroquinoline-1-oxide	56-57-5	860	< 860	
O,O,O-Triethyl phosphorothioate	126-68-1	437	< 437	
o-Toluidine	95-53-4	437	< 437	
Parathion	56-38-2	437	< 437	
Methyl parathion	298-00-0	437	< 437	
Pentachlorobenzene	608-93-5	437	< 437	
Pentachloronitrobenzene	82-68-8	437	< 437	
Pentachlorophenol	87-86-5	437	< 437	
Phenacetin	62-44-2	437	< 437	
Phenanthrene	85-01-8	437	< 437	
Phenol	108-95-2	437	< 437	
Phorate	298-02-2	437	< 437	
Pronamide	23950-58-5	437	< 437	
Pyrene	129-00-0	437	< 437	
Pyridine	110-86-1	860	< 860	
Quinoline	91-22-5	437	< 437	
Safrole	94-59-7	437	< 437	
Tetraethyl dithiopyrophosphate	3689-24-5	437	< 437	
Thionazin	297-97-2	437	< 437	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**109**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**116**	
Surr: 2-Fluorophenol	367-12-4	10-186	**107**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**115**	
Surr: Phenol-d6	13127-88-3	10-194	**112**	
Surr: Terphenyl-d14	1718-51-0	10-265	**148**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 456 to 465.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-003C
Client Sample ID: Mill Cr. Below 700 E. - Bank
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/29/2011 0506h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	499	< 499	
1,2,4,5-Tetrachlorobenzene	95-94-3	499	< 499	
1,2,4-Trichlorobenzene	120-82-1	499	< 499	
1,2-Dichlorobenzene	95-50-1	499	< 499	
1,3,5-Trinitrobenzene	99-35-4	499	< 499	
1,4-Naphthoquinone	130-15-4	983	< 983	
1,3-Dichlorobenzene	541-73-1	499	< 499	
1,3-Dinitrobenzene	99-65-0	499	< 499	
1,4-Dichlorobenzene	106-46-7	499	< 499	
1,4-Phenylenediamine	106-50-3	499	< 499	
1-Chloronaphthalene	90-13-1	499	< 499	
1-Methylnaphthalene	90-12-0	499	< 499	
1-Naphthylamine	134-32-7	983	< 983	
2,3,4,6-Tetrachlorophenol	58-90-2	499	< 499	
2,4,5-Trichlorophenol	95-95-4	499	< 499	
2,4,6-Trichlorophenol	88-06-2	499	< 499	
2,4-Dichlorophenol	120-83-2	499	< 499	
2,4-Dimethylphenol	105-67-9	499	< 499	
2,4-Dinitrophenol	51-28-5	983	< 983	
2,4-Dinitrotoluene	121-14-2	499	< 499	
2,6-Dichlorophenol	87-65-0	499	< 499	
2,6-Dinitrotoluene	606-20-2	499	< 499	
2-Acetylaminofluorene	53-96-3	499	< 499	
2-Chloronaphthalene	91-58-7	499	< 499	
2-Chlorophenol	95-57-8	499	< 499	
2-Methylnaphthalene	91-57-6	499	< 499	
2-Methylphenol	95-48-7	499	< 499	
2-Naphthylamine	91-59-8	983	< 983	
2-Nitroaniline	88-74-4	499	< 499	
2-Nitrophenol	88-75-5	499	< 499	
2-Picoline	109-06-8	499	< 499	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-003C
Client Sample ID: Mill Cr. Below 700 E. - Bank

Analyzed: 8/29/2011 0506h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		499	< 499	
3,3´-Dichlorobenzidine	91-94-1	499	< 499	
3,3´-Dimethylbenzidine	119-93-7	983	< 983	
3-Methylcholanthrene	56-49-5	499	< 499	
3-Nitroaniline	99-09-2	1,470	< 1,470	
4,6-Dinitro-2-methylphenol	534-52-1	983	< 983	
4-Aminobiphenyl	92-67-1	499	< 499	
4-Bromophenyl phenyl ether	101-55-3	499	< 499	
4-Chloro-3-methylphenol	59-50-7	499	< 499	
4-Chloroaniline	106-47-8	499	< 499	
4-Chlorophenyl phenyl ether	7005-72-3	499	< 499	
4-Nitroaniline	100-01-6	1,470	< 1,470	
4-Nitrophenol	100-02-7	983	< 983	
5-Nitro-o-toluidine	99-55-8	499	< 499	
7,12-Dimethylbenz(a)anthracene	57-97-6	499	< 499	
a,a-Dimethylphenethylamine	122-09-8	983	< 983	
Acenaphthene	83-32-9	499	< 499	
Acenaphthylene	208-96-8	499	< 499	
Acetophenone	98-86-2	499	< 499	
alpha-Terpineol	98-55-5	499	< 499	
Aniline	62-53-3	983	< 983	
Anthracene	120-12-7	499	< 499	
Aramite	140-57-8	983	< 983	
Azobenzene	103-33-3	499	< 499	
Benz(a)anthracene	56-55-3	499	< 499	
Benzidine	92-87-5	1,970	< 1,970	
Benzo(a)pyrene	50-32-8	499	< 499	
Benzo(b)fluoranthene	205-99-2	499	< 499	
Benzo(g,h,i)perylene	191-24-2	499	< 499	
Benzo(k)fluoranthene	207-08-9	499	< 499	
Benzoic acid	65-85-0	1,470	< 1,470	
Benzyl alcohol	100-51-6	499	< 499	
Bis(2-chloroethoxy)methane	111-91-1	499	< 499	
Bis(2-chloroethyl) ether	111-44-4	499	< 499	
Bis(2-chloroisopropyl) ether	108-60-1	499	< 499	
Bis(2-ethylhexyl) phthalate	117-81-7	499	**1,640**	
bis(2-ethylhexyl)adipate	103-23-1	983	< 983	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-003C
Client Sample ID: Mill Cr. Below 700 E. - Bank

Analyzed: 8/29/2011 0506h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	499	< 499	
Carbazole	86-74-8	499	< 499	
Chlorobenzilate	510-15-6	499	< 499	
Chrysene	218-01-9	499	< 499	
Di-n-butyl phthalate	84-74-2	499	< 499	
Di-n-octyl phthalate	117-84-0	499	< 499	
Diallate (cis or trans)	2303-16-4	499	< 499	
Dibenz(a,h)anthracene	53-70-3	499	< 499	
Dibenzofuran	132-64-9	499	< 499	
Diethyl phthalate	84-66-2	499	< 499	
Dimethoate	60-51-5	499	< 499	
Dimethyl phthalate	131-11-3	499	< 499	
Dimethylaminoazobenzene	60-11-7	499	< 499	
Dinoseb	88-85-7	983	< 983	
Diphenylamine	122-39-4	499	< 499	
Disulfoton	298-04-4	499	< 499	
Ethyl methanesulfonate	62-50-0	499	< 499	
Famphur	52-85-7	499	< 499	
Fluoranthene	206-44-0	499	< 499	
Fluorene	86-73-7	499	< 499	
Hexachlorobenzene	118-74-1	499	< 499	
Hexachlorobutadiene	87-68-3	499	< 499	
Hexachlorocyclopentadiene	77-47-4	499	< 499	
Hexachloroethane	67-72-1	499	< 499	
Hexachlorophene	70-30-4	499	< 499	
Hexachloropropene	1888-71-7	499	< 499	
Indene	95-13-6	499	< 499	
Indeno(1,2,3-cd)pyrene	193-39-5	499	< 499	
Isodrin	465-73-6	499	< 499	
Isophorone	78-59-1	499	< 499	
Isosafrole	120-58-1	499	< 499	
Kepone	143-50-0	499	< 499	
Methapyrilene	91-80-5	983	< 983	
Methyl methanesulfonate	66-27-3	499	< 499	
n-Decane	124-18-5	499	< 499	
N-Nitrosodi-n-butylamine	924-16-3	499	< 499	
N-Nitrosodiethylamine	55-18-5	499	< 499	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-003C
Client Sample ID: Mill Cr. Below 700 E. - Bank

Analyzed: 8/29/2011 0506h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	983	< 983	
N-Nitrosodiphenylamine	86-30-6	499	< 499	
N-Nitrosodi-n-propylamine	621-64-7	499	< 499	
N-Nitrosomethylethylamine	10595-95-6	499	< 499	
N-Nitrosomorpholine	59-89-2	499	< 499	
N-Nitrosopiperidine	100-75-4	499	< 499	
N-Nitrosopyrrolidine	930-55-2	499	< 499	
n-Octadecane	593-45-3	499	< 499	
Naphthalene	91-20-3	499	< 499	
Nitrobenzene	98-95-3	499	< 499	
Nitroquinoline-1-oxide	56-57-5	983	< 983	
O,O,O-Triethyl phosphorothioate	126-68-1	499	< 499	
o-Toluidine	95-53-4	499	< 499	
Parathion	56-38-2	499	< 499	
Methyl parathion	298-00-0	499	< 499	
Pentachlorobenzene	608-93-5	499	< 499	
Pentachloronitrobenzene	82-68-8	499	< 499	
Pentachlorophenol	87-86-5	499	< 499	
Phenacetin	62-44-2	499	< 499	
Phenanthrene	85-01-8	499	< 499	
Phenol	108-95-2	499	< 499	
Phorate	298-02-2	499	< 499	
Pronamide	23950-58-5	499	< 499	
Pyrene	129-00-0	499	< 499	
Pyridine	110-86-1	983	< 983	
Quinoline	91-22-5	499	< 499	
Safrole	94-59-7	499	< 499	
Tetraethyl dithiopyrophosphate	3689-24-5	499	< 499	
Thionazin	297-97-2	499	< 499	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**105**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**108**	
Surr: 2-Fluorophenol	367-12-4	10-186	**97.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**103**	
Surr: Phenol-d6	13127-88-3	10-194	**102**	
Surr: Terphenyl-d14	1718-51-0	10-265	**134**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 466 to 478.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-005C
Client Sample ID: BD-1
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/27/2011 2313h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-005C
Client Sample ID: BD-1

Analyzed: 8/27/2011 2313h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-005C
Client Sample ID: BD-1

Analyzed: 8/27/2011 2313h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-005C
Client Sample ID: BD-1

Analyzed: 8/27/2011 2313h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**84.6**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**55.4**	
Surr: 2-Fluorophenol	367-12-4	10-106	**33.7**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**51.5**	
Surr: Phenol-d6	13127-88-3	10-122	**23.7**	
Surr: Terphenyl-d14	1718-51-0	10-199	**93.9**	

This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-006C
Client Sample ID: BD-1 - Bed
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/29/2011 0532h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	439	< 439	
1,2,4,5-Tetrachlorobenzene	95-94-3	439	< 439	
1,2,4-Trichlorobenzene	120-82-1	439	< 439	
1,2-Dichlorobenzene	95-50-1	439	< 439	
1,3,5-Trinitrobenzene	99-35-4	439	< 439	
1,4-Naphthoquinone	130-15-4	866	< 866	
1,3-Dichlorobenzene	541-73-1	439	< 439	
1,3-Dinitrobenzene	99-65-0	439	< 439	
1,4-Dichlorobenzene	106-46-7	439	< 439	
1,4-Phenylenediamine	106-50-3	439	< 439	
1-Chloronaphthalene	90-13-1	439	< 439	
1-Methylnaphthalene	90-12-0	439	< 439	
1-Naphthylamine	134-32-7	866	< 866	
2,3,4,6-Tetrachlorophenol	58-90-2	439	< 439	
2,4,5-Trichlorophenol	95-95-4	439	< 439	
2,4,6-Trichlorophenol	88-06-2	439	< 439	
2,4-Dichlorophenol	120-83-2	439	< 439	
2,4-Dimethylphenol	105-67-9	439	< 439	
2,4-Dinitrophenol	51-28-5	866	< 866	
2,4-Dinitrotoluene	121-14-2	439	< 439	
2,6-Dichlorophenol	87-65-0	439	< 439	
2,6-Dinitrotoluene	606-20-2	439	< 439	
2-Acetylaminofluorene	53-96-3	439	< 439	
2-Chloronaphthalene	91-58-7	439	< 439	
2-Chlorophenol	95-57-8	439	< 439	
2-Methylnaphthalene	91-57-6	439	< 439	
2-Methylphenol	95-48-7	439	< 439	
2-Naphthylamine	91-59-8	866	< 866	
2-Nitroaniline	88-74-4	439	< 439	
2-Nitrophenol	88-75-5	439	< 439	
2-Picoline	109-06-8	439	< 439	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-006C
Client Sample ID: BD-1 - Bed

Analyzed: 8/29/2011 0532h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		439	< 439	
3,3´-Dichlorobenzidine	91-94-1	439	< 439	
3,3´-Dimethylbenzidine	119-93-7	866	< 866	
3-Methylcholanthrene	56-49-5	439	< 439	
3-Nitroaniline	99-09-2	1,290	< 1,290	
4,6-Dinitro-2-methylphenol	534-52-1	866	< 866	
4-Aminobiphenyl	92-67-1	439	< 439	
4-Bromophenyl phenyl ether	101-55-3	439	< 439	
4-Chloro-3-methylphenol	59-50-7	439	< 439	
4-Chloroaniline	106-47-8	439	< 439	
4-Chlorophenyl phenyl ether	7005-72-3	439	< 439	
4-Nitroaniline	100-01-6	1,290	< 1,290	
4-Nitrophenol	100-02-7	866	< 866	
5-Nitro-o-toluidine	99-55-8	439	< 439	
7,12-Dimethylbenz(a)anthracene	57-97-6	439	< 439	
a,a-Dimethylphenethylamine	122-09-8	866	< 866	
Acenaphthene	83-32-9	439	< 439	
Acenaphthylene	208-96-8	439	< 439	
Acetophenone	98-86-2	439	< 439	
alpha-Terpineol	98-55-5	439	< 439	
Aniline	62-53-3	866	< 866	
Anthracene	120-12-7	439	< 439	
Aramite	140-57-8	866	< 866	
Azobenzene	103-33-3	439	< 439	
Benz(a)anthracene	56-55-3	439	< 439	
Benzidine	92-87-5	1,730	< 1,730	
Benzo(a)pyrene	50-32-8	439	< 439	
Benzo(b)fluoranthene	205-99-2	439	< 439	
Benzo(g,h,i)perylene	191-24-2	439	< 439	
Benzo(k)fluoranthene	207-08-9	439	< 439	
Benzoic acid	65-85-0	1,290	< 1,290	
Benzyl alcohol	100-51-6	439	< 439	
Bis(2-chloroethoxy)methane	111-91-1	439	< 439	
Bis(2-chloroethyl) ether	111-44-4	439	< 439	
Bis(2-chloroisopropyl) ether	108-60-1	439	< 439	
Bis(2-ethylhexyl) phthalate	117-81-7	439	< 439	
bis(2-ethylhexyl)adipate	103-23-1	866	**1,470**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-006C
Client Sample ID: BD-1 - Bed

Analyzed: 8/29/2011 0532h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	439	< 439	
Carbazole	86-74-8	439	< 439	
Chlorobenzilate	510-15-6	439	< 439	
Chrysene	218-01-9	439	< 439	
Di-n-butyl phthalate	84-74-2	439	< 439	
Di-n-octyl phthalate	117-84-0	439	< 439	
Diallate (cis or trans)	2303-16-4	439	< 439	
Dibenz(a,h)anthracene	53-70-3	439	< 439	
Dibenzofuran	132-64-9	439	< 439	
Diethyl phthalate	84-66-2	439	< 439	
Dimethoate	60-51-5	439	< 439	
Dimethyl phthalate	131-11-3	439	< 439	
Dimethylaminoazobenzene	60-11-7	439	< 439	
Dinoseb	88-85-7	866	< 866	
Diphenylamine	122-39-4	439	< 439	
Disulfoton	298-04-4	439	< 439	
Ethyl methanesulfonate	62-50-0	439	< 439	
Famphur	52-85-7	439	< 439	
Fluoranthene	206-44-0	439	< 439	
Fluorene	86-73-7	439	< 439	
Hexachlorobenzene	118-74-1	439	< 439	
Hexachlorobutadiene	87-68-3	439	< 439	
Hexachlorocyclopentadiene	77-47-4	439	< 439	
Hexachloroethane	67-72-1	439	< 439	
Hexachlorophene	70-30-4	439	< 439	
Hexachloropropene	1888-71-7	439	< 439	
Indene	95-13-6	439	< 439	
Indeno(1,2,3-cd)pyrene	193-39-5	439	< 439	
Isodrin	465-73-6	439	< 439	
Isophorone	78-59-1	439	< 439	
Isosafrole	120-58-1	439	< 439	
Kepone	143-50-0	439	< 439	
Methapyrilene	91-80-5	866	< 866	
Methyl methanesulfonate	66-27-3	439	< 439	
n-Decane	124-18-5	439	< 439	
N-Nitrosodi-n-butylamine	924-16-3	439	< 439	
N-Nitrosodiethylamine	55-18-5	439	< 439	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-006C
Client Sample ID: BD-1 - Bed

Analyzed: 8/29/2011 0532h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	866	< 866	
N-Nitrosodiphenylamine	86-30-6	439	< 439	
N-Nitrosodi-n-propylamine	621-64-7	439	< 439	
N-Nitrosomethylethylamine	10595-95-6	439	< 439	
N-Nitrosomorpholine	59-89-2	439	< 439	
N-Nitrosopiperidine	100-75-4	439	< 439	
N-Nitrosopyrrolidine	930-55-2	439	< 439	
n-Octadecane	593-45-3	439	< 439	
Naphthalene	91-20-3	439	< 439	
Nitrobenzene	98-95-3	439	< 439	
Nitroquinoline-1-oxide	56-57-5	866	< 866	
O,O,O-Triethyl phosphorothioate	126-68-1	439	< 439	
o-Toluidine	95-53-4	439	< 439	
Parathion	56-38-2	439	< 439	
Methyl parathion	298-00-0	439	< 439	
Pentachlorobenzene	608-93-5	439	< 439	
Pentachloronitrobenzene	82-68-8	439	< 439	
Pentachlorophenol	87-86-5	439	< 439	
Phenacetin	62-44-2	439	< 439	
Phenanthrene	85-01-8	439	< 439	
Phenol	108-95-2	439	< 439	
Phorate	298-02-2	439	< 439	
Pronamide	23950-58-5	439	< 439	
Pyrene	129-00-0	439	< 439	
Pyridine	110-86-1	866	< 866	
Quinoline	91-22-5	439	< 439	
Safrole	94-59-7	439	< 439	
Tetraethyl dithiopyrophosphate	3689-24-5	439	< 439	
Thionazin	297-97-2	439	< 439	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**89.6**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**96.3**	
Surr: 2-Fluorophenol	367-12-4	10-186	**85.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**91.6**	
Surr: Phenol-d6	13127-88-3	10-194	**90.0**	
Surr: Terphenyl-d14	1718-51-0	10-265	**118**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 479 to 488.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-007C
Client Sample ID: BD-1 - Bank
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1740h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	498	< 498	
1,2,4,5-Tetrachlorobenzene	95-94-3	498	< 498	
1,2,4-Trichlorobenzene	120-82-1	498	< 498	
1,2-Dichlorobenzene	95-50-1	498	< 498	
1,3,5-Trinitrobenzene	99-35-4	498	< 498	
1,4-Naphthoquinone	130-15-4	982	< 982	
1,3-Dichlorobenzene	541-73-1	498	< 498	
1,3-Dinitrobenzene	99-65-0	498	< 498	
1,4-Dichlorobenzene	106-46-7	498	< 498	
1,4-Phenylenediamine	106-50-3	498	< 498	
1-Chloronaphthalene	90-13-1	498	< 498	
1-Methylnaphthalene	90-12-0	498	< 498	
1-Naphthylamine	134-32-7	982	< 982	
2,3,4,6-Tetrachlorophenol	58-90-2	498	< 498	
2,4,5-Trichlorophenol	95-95-4	498	< 498	
2,4,6-Trichlorophenol	88-06-2	498	< 498	
2,4-Dichlorophenol	120-83-2	498	< 498	
2,4-Dimethylphenol	105-67-9	498	< 498	
2,4-Dinitrophenol	51-28-5	982	< 982	
2,4-Dinitrotoluene	121-14-2	498	< 498	
2,6-Dichlorophenol	87-65-0	498	< 498	
2,6-Dinitrotoluene	606-20-2	498	< 498	
2-Acetylaminofluorene	53-96-3	498	< 498	
2-Chloronaphthalene	91-58-7	498	< 498	
2-Chlorophenol	95-57-8	498	< 498	
2-Methylnaphthalene	91-57-6	498	< 498	
2-Methylphenol	95-48-7	498	< 498	
2-Naphthylamine	91-59-8	982	< 982	
2-Nitroaniline	88-74-4	498	< 498	
2-Nitrophenol	88-75-5	498	< 498	
2-Picoline	109-06-8	498	< 498	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-007C
Client Sample ID: BD-1 - Bank

Analyzed: 8/31/2011 1740h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		498	< 498	
3,3´-Dichlorobenzidine	91-94-1	498	< 498	
3,3´-Dimethylbenzidine	119-93-7	982	< 982	
3-Methylcholanthrene	56-49-5	498	< 498	
3-Nitroaniline	99-09-2	1,470	< 1,470	
4,6-Dinitro-2-methylphenol	534-52-1	982	< 982	
4-Aminobiphenyl	92-67-1	498	< 498	
4-Bromophenyl phenyl ether	101-55-3	498	< 498	
4-Chloro-3-methylphenol	59-50-7	498	< 498	
4-Chloroaniline	106-47-8	498	< 498	
4-Chlorophenyl phenyl ether	7005-72-3	498	< 498	
4-Nitroaniline	100-01-6	1,470	< 1,470	
4-Nitrophenol	100-02-7	982	< 982	
5-Nitro-o-toluidine	99-55-8	498	< 498	
7,12-Dimethylbenz(a)anthracene	57-97-6	498	< 498	
a,a-Dimethylphenethylamine	122-09-8	982	< 982	
Acenaphthene	83-32-9	498	< 498	
Acenaphthylene	208-96-8	498	< 498	
Acetophenone	98-86-2	498	< 498	
alpha-Terpineol	98-55-5	498	< 498	
Aniline	62-53-3	982	< 982	
Anthracene	120-12-7	498	< 498	
Aramite	140-57-8	982	< 982	
Azobenzene	103-33-3	498	< 498	
Benz(a)anthracene	56-55-3	498	< 498	
Benzidine	92-87-5	1,960	< 1,960	
Benzo(a)pyrene	50-32-8	498	< 498	
Benzo(b)fluoranthene	205-99-2	498	< 498	
Benzo(g,h,i)perylene	191-24-2	498	< 498	
Benzo(k)fluoranthene	207-08-9	498	< 498	
Benzoic acid	65-85-0	1,470	< 1,470	
Benzyl alcohol	100-51-6	498	< 498	
Bis(2-chloroethoxy)methane	111-91-1	498	< 498	
Bis(2-chloroethyl) ether	111-44-4	498	< 498	
Bis(2-chloroisopropyl) ether	108-60-1	498	< 498	
Bis(2-ethylhexyl) phthalate	117-81-7	498	< 498	
bis(2-ethylhexyl)adipate	103-23-1	982	< 982	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-007C
Client Sample ID: BD-1 - Bank

Analyzed: 8/31/2011 1740h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	498	< 498	
Carbazole	86-74-8	498	< 498	
Chlorobenzilate	510-15-6	498	< 498	
Chrysene	218-01-9	498	< 498	
Di-n-butyl phthalate	84-74-2	498	< 498	
Di-n-octyl phthalate	117-84-0	498	< 498	
Diallate (cis or trans)	2303-16-4	498	< 498	
Dibenz(a,h)anthracene	53-70-3	498	< 498	
Dibenzofuran	132-64-9	498	< 498	
Diethyl phthalate	84-66-2	498	< 498	
Dimethoate	60-51-5	498	< 498	
Dimethyl phthalate	131-11-3	498	< 498	
Dimethylaminoazobenzene	60-11-7	498	< 498	
Dinoseb	88-85-7	982	< 982	
Diphenylamine	122-39-4	498	< 498	
Disulfoton	298-04-4	498	< 498	
Ethyl methanesulfonate	62-50-0	498	< 498	
Famphur	52-85-7	498	< 498	
Fluoranthene	206-44-0	498	< 498	
Fluorene	86-73-7	498	< 498	
Hexachlorobenzene	118-74-1	498	< 498	
Hexachlorobutadiene	87-68-3	498	< 498	
Hexachlorocyclopentadiene	77-47-4	498	< 498	
Hexachloroethane	67-72-1	498	< 498	
Hexachlorophene	70-30-4	498	< 498	
Hexachloropropene	1888-71-7	498	< 498	
Indene	95-13-6	498	< 498	
Indeno(1,2,3-cd)pyrene	193-39-5	498	< 498	
Isodrin	465-73-6	498	< 498	
Isophorone	78-59-1	498	< 498	
Isosafrole	120-58-1	498	< 498	
Kepone	143-50-0	498	< 498	
Methapyrilene	91-80-5	982	< 982	
Methyl methanesulfonate	66-27-3	498	< 498	
n-Decane	124-18-5	498	< 498	
N-Nitrosodi-n-butylamine	924-16-3	498	< 498	
N-Nitrosodiethylamine	55-18-5	498	< 498	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-007C
Client Sample ID: BD-1 - Bank

Analyzed: 8/31/2011 1740h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	982	< 982	
N-Nitrosodiphenylamine	86-30-6	498	< 498	
N-Nitrosodi-n-propylamine	621-64-7	498	< 498	
N-Nitrosomethylethylamine	10595-95-6	498	< 498	
N-Nitrosomorpholine	59-89-2	498	< 498	
N-Nitrosopiperidine	100-75-4	498	< 498	
N-Nitrosopyrrolidine	930-55-2	498	< 498	
n-Octadecane	593-45-3	498	< 498	
Naphthalene	91-20-3	498	< 498	
Nitrobenzene	98-95-3	498	< 498	
Nitroquinoline-1-oxide	56-57-5	982	< 982	
O,O,O-Triethyl phosphorothioate	126-68-1	498	< 498	
o-Toluidine	95-53-4	498	< 498	
Parathion	56-38-2	498	< 498	
Methyl parathion	298-00-0	498	< 498	
Pentachlorobenzene	608-93-5	498	< 498	
Pentachloronitrobenzene	82-68-8	498	< 498	
Pentachlorophenol	87-86-5	498	< 498	
Phenacetin	62-44-2	498	< 498	
Phenanthrene	85-01-8	498	< 498	
Phenol	108-95-2	498	< 498	
Phorate	298-02-2	498	< 498	
Pronamide	23950-58-5	498	< 498	
Pyrene	129-00-0	498	< 498	
Pyridine	110-86-1	982	< 982	
Quinoline	91-22-5	498	< 498	
Safrole	94-59-7	498	< 498	
Tetraethyl dithiopyrophosphate	3689-24-5	498	< 498	
Thionazin	297-97-2	498	< 498	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**99.0**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**93.5**	
Surr: 2-Fluorophenol	367-12-4	10-186	**83.0**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**89.9**	
Surr: Phenol-d6	13127-88-3	10-194	**92.0**	
Surr: Terphenyl-d14	1718-51-0	10-265	**116**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 489 to 502.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-008C
Client Sample ID: EB-1
Collection Date: 8/24/2011 0905h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/27/2011 2339h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-008C
Client Sample ID: EB-1

Analyzed: 8/27/2011 2339h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-008C
Client Sample ID: EB-1

Analyzed: 8/27/2011 2339h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-008C
Client Sample ID: EB-1

Analyzed: 8/27/2011 2339h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**89.0**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**59.5**	
Surr: 2-Fluorophenol	367-12-4	10-106	**35.0**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**58.3**	
Surr: Phenol-d6	13127-88-3	10-122	**24.1**	
Surr: Terphenyl-d14	1718-51-0	10-199	**102**	

This sample was analyzed for TICs. Those results can be found on pages 404 to 407.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-010C
Client Sample ID: Mill Cr. Below Highland Drive
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/28/2011 0005h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Laboratory Director

Jose Rocha
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Lab Sample ID: 1108489-010C
Client Sample ID: Mill Cr. Below Highland Drive

Analyzed: 8/28/2011 0005h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-010C
Client Sample ID: Mill Cr. Below Highland Drive

Analyzed: 8/28/2011 0005h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-010C
Client Sample ID: Mill Cr. Below Highland Drive

Analyzed: 8/28/2011 0005h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**94.4**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**58.0**	
Surr: 2-Fluorophenol	367-12-4	10-106	**36.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**58.2**	
Surr: Phenol-d6	13127-88-3	10-122	**25.4**	
Surr: Terphenyl-d14	1718-51-0	10-199	**100**	

This sample was analyzed for TICs. Those results can be found on pages 408 to 411.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-011C
Client Sample ID: Mill Cr. Below Highland Drive - Bed
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1807h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	428	< 428	
1,2,4,5-Tetrachlorobenzene	95-94-3	428	< 428	
1,2,4-Trichlorobenzene	120-82-1	428	< 428	
1,2-Dichlorobenzene	95-50-1	428	< 428	
1,3,5-Trinitrobenzene	99-35-4	428	< 428	
1,4-Naphthoquinone	130-15-4	844	< 844	
1,3-Dichlorobenzene	541-73-1	428	< 428	
1,3-Dinitrobenzene	99-65-0	428	< 428	
1,4-Dichlorobenzene	106-46-7	428	< 428	
1,4-Phenylenediamine	106-50-3	428	< 428	
1-Chloronaphthalene	90-13-1	428	< 428	
1-Methylnaphthalene	90-12-0	428	< 428	
1-Naphthylamine	134-32-7	844	< 844	
2,3,4,6-Tetrachlorophenol	58-90-2	428	< 428	
2,4,5-Trichlorophenol	95-95-4	428	< 428	
2,4,6-Trichlorophenol	88-06-2	428	< 428	
2,4-Dichlorophenol	120-83-2	428	< 428	
2,4-Dimethylphenol	105-67-9	428	< 428	
2,4-Dinitrophenol	51-28-5	844	< 844	
2,4-Dinitrotoluene	121-14-2	428	< 428	
2,6-Dichlorophenol	87-65-0	428	< 428	
2,6-Dinitrotoluene	606-20-2	428	< 428	
2-Acetylaminofluorene	53-96-3	428	< 428	
2-Chloronaphthalene	91-58-7	428	< 428	
2-Chlorophenol	95-57-8	428	< 428	
2-Methylnaphthalene	91-57-6	428	< 428	
2-Methylphenol	95-48-7	428	< 428	
2-Naphthylamine	91-59-8	844	< 844	
2-Nitroaniline	88-74-4	428	< 428	
2-Nitrophenol	88-75-5	428	< 428	
2-Picoline	109-06-8	428	< 428	

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Laboratory Director

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-011C
Client Sample ID: Mill Cr. Below Highland Drive - Bed

Analyzed: 8/31/2011 1807h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		428	< 428	
3,3´-Dichlorobenzidine	91-94-1	428	< 428	
3,3´-Dimethylbenzidine	119-93-7	844	< 844	
3-Methylcholanthrene	56-49-5	428	< 428	
3-Nitroaniline	99-09-2	1,260	< 1,260	
4,6-Dinitro-2-methylphenol	534-52-1	844	< 844	
4-Aminobiphenyl	92-67-1	428	< 428	
4-Bromophenyl phenyl ether	101-55-3	428	< 428	
4-Chloro-3-methylphenol	59-50-7	428	< 428	
4-Chloroaniline	106-47-8	428	< 428	
4-Chlorophenyl phenyl ether	7005-72-3	428	< 428	
4-Nitroaniline	100-01-6	1,260	< 1,260	
4-Nitrophenol	100-02-7	844	< 844	
5-Nitro-o-toluidine	99-55-8	428	< 428	
7,12-Dimethylbenz(a)anthracene	57-97-6	428	< 428	
a,a-Dimethylphenethylamine	122-09-8	844	< 844	
Acenaphthene	83-32-9	428	< 428	
Acenaphthylene	208-96-8	428	< 428	
Acetophenone	98-86-2	428	< 428	
alpha-Terpineol	98-55-5	428	< 428	
Aniline	62-53-3	844	< 844	
Anthracene	120-12-7	428	< 428	
Aramite	140-57-8	844	< 844	
Azobenzene	103-33-3	428	< 428	
Benz(a)anthracene	56-55-3	428	< 428	
Benzidine	92-87-5	1,690	< 1,690	
Benzo(a)pyrene	50-32-8	428	< 428	
Benzo(b)fluoranthene	205-99-2	428	< 428	
Benzo(g,h,i)perylene	191-24-2	428	< 428	
Benzo(k)fluoranthene	207-08-9	428	< 428	
Benzoic acid	65-85-0	1,260	< 1,260	
Benzyl alcohol	100-51-6	428	< 428	
Bis(2-chloroethoxy)methane	111-91-1	428	< 428	
Bis(2-chloroethyl) ether	111-44-4	428	< 428	
Bis(2-chloroisopropyl) ether	108-60-1	428	< 428	
Bis(2-ethylhexyl) phthalate	117-81-7	428	< 428	
bis(2-ethylhexyl)adipate	103-23-1	844	< 844	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-011C
Client Sample ID: Mill Cr. Below Highland Drive - Bed

Analyzed: 8/31/2011 1807h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	428	< 428	
Carbazole	86-74-8	428	< 428	
Chlorobenzilate	510-15-6	428	< 428	
Chrysene	218-01-9	428	< 428	
Di-n-butyl phthalate	84-74-2	428	< 428	
Di-n-octyl phthalate	117-84-0	428	< 428	
Diallate (cis or trans)	2303-16-4	428	< 428	
Dibenz(a,h)anthracene	53-70-3	428	< 428	
Dibenzofuran	132-64-9	428	< 428	
Diethyl phthalate	84-66-2	428	< 428	
Dimethoate	60-51-5	428	< 428	
Dimethyl phthalate	131-11-3	428	< 428	
Dimethylaminoazobenzene	60-11-7	428	< 428	
Dinoseb	88-85-7	844	< 844	
Diphenylamine	122-39-4	428	< 428	
Disulfoton	298-04-4	428	< 428	
Ethyl methanesulfonate	62-50-0	428	< 428	
Famphur	52-85-7	428	< 428	
Fluoranthene	206-44-0	428	< 428	
Fluorene	86-73-7	428	< 428	
Hexachlorobenzene	118-74-1	428	< 428	
Hexachlorobutadiene	87-68-3	428	< 428	
Hexachlorocyclopentadiene	77-47-4	428	< 428	
Hexachloroethane	67-72-1	428	< 428	
Hexachlorophene	70-30-4	428	< 428	
Hexachloropropene	1888-71-7	428	< 428	
Indene	95-13-6	428	< 428	
Indeno(1,2,3-cd)pyrene	193-39-5	428	< 428	
Isodrin	465-73-6	428	< 428	
Isophorone	78-59-1	428	< 428	
Isosafrole	120-58-1	428	< 428	
Kepone	143-50-0	428	< 428	
Methapyrilene	91-80-5	844	< 844	
Methyl methanesulfonate	66-27-3	428	< 428	
n-Decane	124-18-5	428	< 428	
N-Nitrosodi-n-butylamine	924-16-3	428	< 428	
N-Nitrosodiethylamine	55-18-5	428	< 428	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-011C
Client Sample ID: Mill Cr. Below Highland Drive - Bed

Analyzed: 8/31/2011 1807h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	844	< 844	
N-Nitrosodiphenylamine	86-30-6	428	< 428	
N-Nitrosodi-n-propylamine	621-64-7	428	< 428	
N-Nitrosomethylethylamine	10595-95-6	428	< 428	
N-Nitrosomorpholine	59-89-2	428	< 428	
N-Nitrosopiperidine	100-75-4	428	< 428	
N-Nitrosopyrrolidine	930-55-2	428	< 428	
n-Octadecane	593-45-3	428	< 428	
Naphthalene	91-20-3	428	< 428	
Nitrobenzene	98-95-3	428	< 428	
Nitroquinoline-1-oxide	56-57-5	844	< 844	
O,O,O-Triethyl phosphorothioate	126-68-1	428	< 428	
o-Toluidine	95-53-4	428	< 428	
Parathion	56-38-2	428	< 428	
Methyl parathion	298-00-0	428	< 428	
Pentachlorobenzene	608-93-5	428	< 428	
Pentachloronitrobenzene	82-68-8	428	< 428	
Pentachlorophenol	87-86-5	428	< 428	
Phenacetin	62-44-2	428	< 428	
Phenanthrene	85-01-8	428	< 428	
Phenol	108-95-2	428	< 428	
Phorate	298-02-2	428	< 428	
Pronamide	23950-58-5	428	< 428	
Pyrene	129-00-0	428	< 428	
Pyridine	110-86-1	844	< 844	
Quinoline	91-22-5	428	< 428	
Safrole	94-59-7	428	< 428	
Tetraethyl dithiopyrophosphate	3689-24-5	428	< 428	
Thionazin	297-97-2	428	< 428	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**93.9**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**87.5**	
Surr: 2-Fluorophenol	367-12-4	10-186	**77.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**85.6**	
Surr: Phenol-d6	13127-88-3	10-194	**88.5**	
Surr: Terphenyl-d14	1718-51-0	10-265	**105**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 503 to 510.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-012C
Client Sample ID: Mill Cr. Below Highland Drive - Bank
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1834h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	463	< 463	
1,2,4,5-Tetrachlorobenzene	95-94-3	463	< 463	
1,2,4-Trichlorobenzene	120-82-1	463	< 463	
1,2-Dichlorobenzene	95-50-1	463	< 463	
1,3,5-Trinitrobenzene	99-35-4	463	< 463	
1,4-Naphthoquinone	130-15-4	913	< 913	
1,3-Dichlorobenzene	541-73-1	463	< 463	
1,3-Dinitrobenzene	99-65-0	463	< 463	
1,4-Dichlorobenzene	106-46-7	463	< 463	
1,4-Phenylenediamine	106-50-3	463	< 463	
1-Chloronaphthalene	90-13-1	463	< 463	
1-Methylnaphthalene	90-12-0	463	< 463	
1-Naphthylamine	134-32-7	913	< 913	
2,3,4,6-Tetrachlorophenol	58-90-2	463	< 463	
2,4,5-Trichlorophenol	95-95-4	463	< 463	
2,4,6-Trichlorophenol	88-06-2	463	< 463	
2,4-Dichlorophenol	120-83-2	463	< 463	
2,4-Dimethylphenol	105-67-9	463	< 463	
2,4-Dinitrophenol	51-28-5	913	< 913	
2,4-Dinitrotoluene	121-14-2	463	< 463	
2,6-Dichlorophenol	87-65-0	463	< 463	
2,6-Dinitrotoluene	606-20-2	463	< 463	
2-Acetylaminofluorene	53-96-3	463	< 463	
2-Chloronaphthalene	91-58-7	463	< 463	
2-Chlorophenol	95-57-8	463	< 463	
2-Methylnaphthalene	91-57-6	463	< 463	
2-Methylphenol	95-48-7	463	< 463	
2-Naphthylamine	91-59-8	913	< 913	
2-Nitroaniline	88-74-4	463	< 463	
2-Nitrophenol	88-75-5	463	< 463	
2-Picoline	109-06-8	463	< 463	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-012C
Client Sample ID: Mill Cr. Below Highland Drive - Bank

Analyzed: 8/31/2011 1834h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		463	< 463	
3,3´-Dichlorobenzidine	91-94-1	463	< 463	
3,3´-Dimethylbenzidine	119-93-7	913	< 913	
3-Methylcholanthrene	56-49-5	463	< 463	
3-Nitroaniline	99-09-2	1,360	< 1,360	
4,6-Dinitro-2-methylphenol	534-52-1	913	< 913	
4-Aminobiphenyl	92-67-1	463	< 463	
4-Bromophenyl phenyl ether	101-55-3	463	< 463	
4-Chloro-3-methylphenol	59-50-7	463	< 463	
4-Chloroaniline	106-47-8	463	< 463	
4-Chlorophenyl phenyl ether	7005-72-3	463	< 463	
4-Nitroaniline	100-01-6	1,360	< 1,360	
4-Nitrophenol	100-02-7	913	< 913	
5-Nitro-o-toluidine	99-55-8	463	< 463	
7,12-Dimethylbenz(a)anthracene	57-97-6	463	< 463	
a,a-Dimethylphenethylamine	122-09-8	913	< 913	
Acenaphthene	83-32-9	463	< 463	
Acenaphthylene	208-96-8	463	< 463	
Acetophenone	98-86-2	463	< 463	
alpha-Terpineol	98-55-5	463	< 463	
Aniline	62-53-3	913	< 913	
Anthracene	120-12-7	463	< 463	
Aramite	140-57-8	913	< 913	
Azobenzene	103-33-3	463	< 463	
Benz(a)anthracene	56-55-3	463	< 463	
Benzidine	92-87-5	1,830	< 1,830	
Benzo(a)pyrene	50-32-8	463	< 463	
Benzo(b)fluoranthene	205-99-2	463	< 463	
Benzo(g,h,i)perylene	191-24-2	463	< 463	
Benzo(k)fluoranthene	207-08-9	463	< 463	
Benzoic acid	65-85-0	1,360	< 1,360	
Benzyl alcohol	100-51-6	463	< 463	
Bis(2-chloroethoxy)methane	111-91-1	463	< 463	
Bis(2-chloroethyl) ether	111-44-4	463	< 463	
Bis(2-chloroisopropyl) ether	108-60-1	463	< 463	
Bis(2-ethylhexyl) phthalate	117-81-7	463	< 463	
bis(2-ethylhexyl)adipate	103-23-1	913	< 913	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-012C
Client Sample ID: Mill Cr. Below Highland Drive - Bank

Analyzed: 8/31/2011 1834h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	463	< 463	
Carbazole	86-74-8	463	< 463	
Chlorobenzilate	510-15-6	463	< 463	
Chrysene	218-01-9	463	< 463	
Di-n-butyl phthalate	84-74-2	463	< 463	
Di-n-octyl phthalate	117-84-0	463	< 463	
Diallate (cis or trans)	2303-16-4	463	< 463	
Dibenz(a,h)anthracene	53-70-3	463	< 463	
Dibenzofuran	132-64-9	463	< 463	
Diethyl phthalate	84-66-2	463	< 463	
Dimethoate	60-51-5	463	< 463	
Dimethyl phthalate	131-11-3	463	< 463	
Dimethylaminoazobenzene	60-11-7	463	< 463	
Dinoseb	88-85-7	913	< 913	
Diphenylamine	122-39-4	463	< 463	
Disulfoton	298-04-4	463	< 463	
Ethyl methanesulfonate	62-50-0	463	< 463	
Famphur	52-85-7	463	< 463	
Fluoranthene	206-44-0	463	< 463	
Fluorene	86-73-7	463	< 463	
Hexachlorobenzene	118-74-1	463	< 463	
Hexachlorobutadiene	87-68-3	463	< 463	
Hexachlorocyclopentadiene	77-47-4	463	< 463	
Hexachloroethane	67-72-1	463	< 463	
Hexachlorophene	70-30-4	463	< 463	
Hexachloropropene	1888-71-7	463	< 463	
Indene	95-13-6	463	< 463	
Indeno(1,2,3-cd)pyrene	193-39-5	463	< 463	
Isodrin	465-73-6	463	< 463	
Isophorone	78-59-1	463	< 463	
Isosafrole	120-58-1	463	< 463	
Kepone	143-50-0	463	< 463	
Methapyrilene	91-80-5	913	< 913	
Methyl methanesulfonate	66-27-3	463	< 463	
n-Decane	124-18-5	463	< 463	
N-Nitrosodi-n-butylamine	924-16-3	463	< 463	
N-Nitrosodiethylamine	55-18-5	463	< 463	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-012C
Client Sample ID: Mill Cr. Below Highland Drive - Bank

Analyzed: 8/31/2011 1834h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	913	< 913	
N-Nitrosodiphenylamine	86-30-6	463	< 463	
N-Nitrosodi-n-propylamine	621-64-7	463	< 463	
N-Nitrosomethylethylamine	10595-95-6	463	< 463	
N-Nitrosomorpholine	59-89-2	463	< 463	
N-Nitrosopiperidine	100-75-4	463	< 463	
N-Nitrosopyrrolidine	930-55-2	463	< 463	
n-Octadecane	593-45-3	463	< 463	
Naphthalene	91-20-3	463	< 463	
Nitrobenzene	98-95-3	463	< 463	
Nitroquinoline-1-oxide	56-57-5	913	< 913	
O,O,O-Triethyl phosphorothioate	126-68-1	463	< 463	
o-Toluidine	95-53-4	463	< 463	
Parathion	56-38-2	463	< 463	
Methyl parathion	298-00-0	463	< 463	
Pentachlorobenzene	608-93-5	463	< 463	
Pentachloronitrobenzene	82-68-8	463	< 463	
Pentachlorophenol	87-86-5	463	< 463	
Phenacetin	62-44-2	463	< 463	
Phenanthrene	85-01-8	463	< 463	
Phenol	108-95-2	463	< 463	
Phorate	298-02-2	463	< 463	
Pronamide	23950-58-5	463	< 463	
Pyrene	129-00-0	463	< 463	
Pyridine	110-86-1	913	< 913	
Quinoline	91-22-5	463	< 463	
Safrole	94-59-7	463	< 463	
Tetraethyl dithiopyrophosphate	3689-24-5	463	< 463	
Thionazin	297-97-2	463	< 463	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**77.3**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**71.6**	
Surr: 2-Fluorophenol	367-12-4	10-186	**61.6**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**71.1**	
Surr: Phenol-d6	13127-88-3	10-194	**69.9**	
Surr: Terphenyl-d14	1718-51-0	10-265	**85.5**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 511 to 525.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-013C
Client Sample ID: City Cr. Below N. Cyn. Loop
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/28/2011 0032h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Lab Sample ID: 1108489-013C
Client Sample ID: City Cr. Below N. Cyn. Loop

Analyzed: 8/28/2011 0032h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Lab Sample ID: 1108489-013C
Client Sample ID: City Cr. Below N. Cyn. Loop

Analyzed: 8/28/2011 0032h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Lab Sample ID: 1108489-013C
Client Sample ID: City Cr. Below N. Cyn. Loop

Analyzed: 8/28/2011 0032h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**94.0**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**61.0**	
Surr: 2-Fluorophenol	367-12-4	10-106	**36.1**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**62.0**	
Surr: Phenol-d6	13127-88-3	10-122	**25.0**	
Surr: Terphenyl-d14	1718-51-0	10-199	**102**	

This sample was analyzed for TICs. Those results can be found on pages 412 to 415.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-014C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 8/31/2011 1901h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	381	< 381	
1,2,4,5-Tetrachlorobenzene	95-94-3	381	< 381	
1,2,4-Trichlorobenzene	120-82-1	381	< 381	
1,2-Dichlorobenzene	95-50-1	381	< 381	
1,3,5-Trinitrobenzene	99-35-4	381	< 381	
1,4-Naphthoquinone	130-15-4	750	< 750	
1,3-Dichlorobenzene	541-73-1	381	< 381	
1,3-Dinitrobenzene	99-65-0	381	< 381	
1,4-Dichlorobenzene	106-46-7	381	< 381	
1,4-Phenylenediamine	106-50-3	381	< 381	
1-Chloronaphthalene	90-13-1	381	< 381	
1-Methylnaphthalene	90-12-0	381	< 381	
1-Naphthylamine	134-32-7	750	< 750	
2,3,4,6-Tetrachlorophenol	58-90-2	381	< 381	
2,4,5-Trichlorophenol	95-95-4	381	< 381	
2,4,6-Trichlorophenol	88-06-2	381	< 381	
2,4-Dichlorophenol	120-83-2	381	< 381	
2,4-Dimethylphenol	105-67-9	381	< 381	
2,4-Dinitrophenol	51-28-5	750	< 750	
2,4-Dinitrotoluene	121-14-2	381	< 381	
2,6-Dichlorophenol	87-65-0	381	< 381	
2,6-Dinitrotoluene	606-20-2	381	< 381	
2-Acetylaminofluorene	53-96-3	381	< 381	
2-Chloronaphthalene	91-58-7	381	< 381	
2-Chlorophenol	95-57-8	381	< 381	
2-Methylnaphthalene	91-57-6	381	< 381	
2-Methylphenol	95-48-7	381	< 381	
2-Naphthylamine	91-59-8	750	< 750	
2-Nitroaniline	88-74-4	381	< 381	
2-Nitrophenol	88-75-5	381	< 381	
2-Picoline	109-06-8	381	< 381	

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Kyle F. Gross
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Jose Rocha
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Lab Sample ID: 1108489-014C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed

Analyzed: 8/31/2011 1901h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		381	< 381	
3,3´-Dichlorobenzidine	91-94-1	381	< 381	
3,3´-Dimethylbenzidine	119-93-7	750	< 750	
3-Methylcholanthrene	56-49-5	381	< 381	
3-Nitroaniline	99-09-2	1,120	< 1,120	
4,6-Dinitro-2-methylphenol	534-52-1	750	< 750	
4-Aminobiphenyl	92-67-1	381	< 381	
4-Bromophenyl phenyl ether	101-55-3	381	< 381	
4-Chloro-3-methylphenol	59-50-7	381	< 381	
4-Chloroaniline	106-47-8	381	< 381	
4-Chlorophenyl phenyl ether	7005-72-3	381	< 381	
4-Nitroaniline	100-01-6	1,120	< 1,120	
4-Nitrophenol	100-02-7	750	< 750	
5-Nitro-o-toluidine	99-55-8	381	< 381	
7,12-Dimethylbenz(a)anthracene	57-97-6	381	< 381	
a,a-Dimethylphenethylamine	122-09-8	750	< 750	
Acenaphthene	83-32-9	381	< 381	
Acenaphthylene	208-96-8	381	< 381	
Acetophenone	98-86-2	381	< 381	
alpha-Terpineol	98-55-5	381	< 381	
Aniline	62-53-3	750	< 750	
Anthracene	120-12-7	381	< 381	
Aramite	140-57-8	750	< 750	
Azobenzene	103-33-3	381	< 381	
Benz(a)anthracene	56-55-3	381	< 381	
Benzidine	92-87-5	1,500	< 1,500	
Benzo(a)pyrene	50-32-8	381	< 381	
Benzo(b)fluoranthene	205-99-2	381	< 381	
Benzo(g,h,i)perylene	191-24-2	381	< 381	
Benzo(k)fluoranthene	207-08-9	381	< 381	
Benzoic acid	65-85-0	1,120	< 1,120	
Benzyl alcohol	100-51-6	381	< 381	
Bis(2-chloroethoxy)methane	111-91-1	381	< 381	
Bis(2-chloroethyl) ether	111-44-4	381	< 381	
Bis(2-chloroisopropyl) ether	108-60-1	381	< 381	
Bis(2-ethylhexyl) phthalate	117-81-7	381	< 381	
bis(2-ethylhexyl)adipate	103-23-1	750	< 750	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-014C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed

Analyzed: 8/31/2011 1901h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	381	< 381	
Carbazole	86-74-8	381	< 381	
Chlorobenzilate	510-15-6	381	< 381	
Chrysene	218-01-9	381	< 381	
Di-n-butyl phthalate	84-74-2	381	< 381	
Di-n-octyl phthalate	117-84-0	381	< 381	
Diallate (cis or trans)	2303-16-4	381	< 381	
Dibenz(a,h)anthracene	53-70-3	381	< 381	
Dibenzofuran	132-64-9	381	< 381	
Diethyl phthalate	84-66-2	381	< 381	
Dimethoate	60-51-5	381	< 381	
Dimethyl phthalate	131-11-3	381	< 381	
Dimethylaminoazobenzene	60-11-7	381	< 381	
Dinoseb	88-85-7	750	< 750	
Diphenylamine	122-39-4	381	< 381	
Disulfoton	298-04-4	381	< 381	
Ethyl methanesulfonate	62-50-0	381	< 381	
Famphur	52-85-7	381	< 381	
Fluoranthene	206-44-0	381	< 381	
Fluorene	86-73-7	381	< 381	
Hexachlorobenzene	118-74-1	381	< 381	
Hexachlorobutadiene	87-68-3	381	< 381	
Hexachlorocyclopentadiene	77-47-4	381	< 381	
Hexachloroethane	67-72-1	381	< 381	
Hexachlorophene	70-30-4	381	< 381	
Hexachloropropene	1888-71-7	381	< 381	
Indene	95-13-6	381	< 381	
Indeno(1,2,3-cd)pyrene	193-39-5	381	< 381	
Isodrin	465-73-6	381	< 381	
Isophorone	78-59-1	381	< 381	
Isosafrole	120-58-1	381	< 381	
Kepone	143-50-0	381	< 381	
Methapyrilene	91-80-5	750	< 750	
Methyl methanesulfonate	66-27-3	381	< 381	
n-Decane	124-18-5	381	< 381	
N-Nitrosodi-n-butylamine	924-16-3	381	< 381	
N-Nitrosodiethylamine	55-18-5	381	< 381	

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Lab Sample ID: 1108489-014C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed

Analyzed: 8/31/2011 1901h **Extracted:** 8/25/2011 1017h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	750	< 750	
N-Nitrosodiphenylamine	86-30-6	381	< 381	
N-Nitrosodi-n-propylamine	621-64-7	381	< 381	
N-Nitrosomethylethylamine	10595-95-6	381	< 381	
N-Nitrosomorpholine	59-89-2	381	< 381	
N-Nitrosopiperidine	100-75-4	381	< 381	
N-Nitrosopyrrolidine	930-55-2	381	< 381	
n-Octadecane	593-45-3	381	< 381	
Naphthalene	91-20-3	381	< 381	
Nitrobenzene	98-95-3	381	< 381	
Nitroquinoline-1-oxide	56-57-5	750	< 750	
O,O,O-Triethyl phosphorothioate	126-68-1	381	< 381	
o-Toluidine	95-53-4	381	< 381	
Parathion	56-38-2	381	< 381	
Methyl parathion	298-00-0	381	< 381	
Pentachlorobenzene	608-93-5	381	< 381	
Pentachloronitrobenzene	82-68-8	381	< 381	
Pentachlorophenol	87-86-5	381	< 381	
Phenacetin	62-44-2	381	< 381	
Phenanthrene	85-01-8	381	< 381	
Phenol	108-95-2	381	< 381	
Phorate	298-02-2	381	< 381	
Pronamide	23950-58-5	381	< 381	
Pyrene	129-00-0	381	< 381	
Pyridine	110-86-1	750	< 750	
Quinoline	91-22-5	381	< 381	
Safrole	94-59-7	381	< 381	
Tetraethyl dithiopyrophosphate	3689-24-5	381	< 381	
Thionazin	297-97-2	381	< 381	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**86.2**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**78.9**	
Surr: 2-Fluorophenol	367-12-4	10-186	**72.6**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**79.6**	
Surr: Phenol-d6	13127-88-3	10-194	**79.9**	
Surr: Terphenyl-d14	1718-51-0	10-265	**93.0**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 526 to 539.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-015C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1320h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	475	< 475	
1,2,4,5-Tetrachlorobenzene	95-94-3	475	< 475	
1,2,4-Trichlorobenzene	120-82-1	475	< 475	
1,2-Dichlorobenzene	95-50-1	475	< 475	
1,3,5-Trinitrobenzene	99-35-4	475	< 475	
1,4-Naphthoquinone	130-15-4	935	< 935	
1,3-Dichlorobenzene	541-73-1	475	< 475	
1,3-Dinitrobenzene	99-65-0	475	< 475	
1,4-Dichlorobenzene	106-46-7	475	< 475	
1,4-Phenylenediamine	106-50-3	475	< 475	
1-Chloronaphthalene	90-13-1	475	< 475	
1-Methylnaphthalene	90-12-0	475	< 475	
1-Naphthylamine	134-32-7	935	< 935	
2,3,4,6-Tetrachlorophenol	58-90-2	475	< 475	
2,4,5-Trichlorophenol	95-95-4	475	< 475	
2,4,6-Trichlorophenol	88-06-2	475	< 475	
2,4-Dichlorophenol	120-83-2	475	< 475	
2,4-Dimethylphenol	105-67-9	475	< 475	
2,4-Dinitrophenol	51-28-5	935	< 935	
2,4-Dinitrotoluene	121-14-2	475	< 475	
2,6-Dichlorophenol	87-65-0	475	< 475	
2,6-Dinitrotoluene	606-20-2	475	< 475	
2-Acetylaminofluorene	53-96-3	475	< 475	
2-Chloronaphthalene	91-58-7	475	< 475	
2-Chlorophenol	95-57-8	475	< 475	
2-Methylnaphthalene	91-57-6	475	< 475	
2-Methylphenol	95-48-7	475	< 475	
2-Naphthylamine	91-59-8	935	< 935	
2-Nitroaniline	88-74-4	475	< 475	
2-Nitrophenol	88-75-5	475	< 475	
2-Picoline	109-06-8	475	< 475	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-015C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank

Analyzed: 9/1/2011 1320h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		475	< 475	
3,3´-Dichlorobenzidine	91-94-1	475	< 475	
3,3´-Dimethylbenzidine	119-93-7	935	< 935	
3-Methylcholanthrene	56-49-5	475	< 475	
3-Nitroaniline	99-09-2	1,400	< 1,400	
4,6-Dinitro-2-methylphenol	534-52-1	935	< 935	
4-Aminobiphenyl	92-67-1	475	< 475	
4-Bromophenyl phenyl ether	101-55-3	475	< 475	
4-Chloro-3-methylphenol	59-50-7	475	< 475	
4-Chloroaniline	106-47-8	475	< 475	
4-Chlorophenyl phenyl ether	7005-72-3	475	< 475	
4-Nitroaniline	100-01-6	1,400	< 1,400	
4-Nitrophenol	100-02-7	935	< 935	
5-Nitro-o-toluidine	99-55-8	475	< 475	
7,12-Dimethylbenz(a)anthracene	57-97-6	475	< 475	
a,a-Dimethylphenethylamine	122-09-8	935	< 935	
Acenaphthene	83-32-9	475	< 475	
Acenaphthylene	208-96-8	475	< 475	
Acetophenone	98-86-2	475	< 475	
alpha-Terpineol	98-55-5	475	< 475	
Aniline	62-53-3	935	< 935	
Anthracene	120-12-7	475	< 475	
Aramite	140-57-8	935	< 935	
Azobenzene	103-33-3	475	< 475	
Benz(a)anthracene	56-55-3	475	< 475	
Benzidine	92-87-5	1,870	< 1,870	
Benzo(a)pyrene	50-32-8	475	< 475	
Benzo(b)fluoranthene	205-99-2	475	< 475	
Benzo(g,h,i)perylene	191-24-2	475	< 475	
Benzo(k)fluoranthene	207-08-9	475	< 475	
Benzoic acid	65-85-0	1,400	< 1,400	
Benzyl alcohol	100-51-6	475	< 475	
Bis(2-chloroethoxy)methane	111-91-1	475	< 475	
Bis(2-chloroethyl) ether	111-44-4	475	< 475	
Bis(2-chloroisopropyl) ether	108-60-1	475	< 475	
Bis(2-ethylhexyl) phthalate	117-81-7	475	< 475	
bis(2-ethylhexyl)adipate	103-23-1	935	< 935	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-015C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank

Analyzed: 9/1/2011 1320h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	475	< 475	
Carbazole	86-74-8	475	< 475	
Chlorobenzilate	510-15-6	475	< 475	
Chrysene	218-01-9	475	< 475	
Di-n-butyl phthalate	84-74-2	475	< 475	
Di-n-octyl phthalate	117-84-0	475	< 475	
Diallate (cis or trans)	2303-16-4	475	< 475	
Dibenz(a,h)anthracene	53-70-3	475	< 475	
Dibenzofuran	132-64-9	475	< 475	
Diethyl phthalate	84-66-2	475	< 475	
Dimethoate	60-51-5	475	< 475	
Dimethyl phthalate	131-11-3	475	< 475	
Dimethylaminoazobenzene	60-11-7	475	< 475	
Dinoseb	88-85-7	935	< 935	
Diphenylamine	122-39-4	475	< 475	
Disulfoton	298-04-4	475	< 475	
Ethyl methanesulfonate	62-50-0	475	< 475	
Famphur	52-85-7	475	< 475	
Fluoranthene	206-44-0	475	< 475	
Fluorene	86-73-7	475	< 475	
Hexachlorobenzene	118-74-1	475	< 475	
Hexachlorobutadiene	87-68-3	475	< 475	
Hexachlorocyclopentadiene	77-47-4	475	< 475	
Hexachloroethane	67-72-1	475	< 475	
Hexachlorophene	70-30-4	475	< 475	
Hexachloropropene	1888-71-7	475	< 475	
Indene	95-13-6	475	< 475	
Indeno(1,2,3-cd)pyrene	193-39-5	475	< 475	
Isodrin	465-73-6	475	< 475	
Isophorone	78-59-1	475	< 475	
Isosafrole	120-58-1	475	< 475	
Kepone	143-50-0	475	< 475	
Methapyrilene	91-80-5	935	< 935	
Methyl methanesulfonate	66-27-3	475	< 475	
n-Decane	124-18-5	475	< 475	
N-Nitrosodi-n-butylamine	924-16-3	475	< 475	
N-Nitrosodiethylamine	55-18-5	475	< 475	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-015C
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank

Analyzed: 9/1/2011 1320h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	935	< 935	
N-Nitrosodiphenylamine	86-30-6	475	< 475	
N-Nitrosodi-n-propylamine	621-64-7	475	< 475	
N-Nitrosomethylethylamine	10595-95-6	475	< 475	
N-Nitrosomorpholine	59-89-2	475	< 475	
N-Nitrosopiperidine	100-75-4	475	< 475	
N-Nitrosopyrrolidine	930-55-2	475	< 475	
n-Octadecane	593-45-3	475	< 475	
Naphthalene	91-20-3	475	< 475	
Nitrobenzene	98-95-3	475	< 475	
Nitroquinoline-1-oxide	56-57-5	935	< 935	
O,O,O-Triethyl phosphorothioate	126-68-1	475	< 475	
o-Toluidine	95-53-4	475	< 475	
Parathion	56-38-2	475	< 475	
Methyl parathion	298-00-0	475	< 475	
Pentachlorobenzene	608-93-5	475	< 475	
Pentachloronitrobenzene	82-68-8	475	< 475	
Pentachlorophenol	87-86-5	475	< 475	
Phenacetin	62-44-2	475	< 475	
Phenanthrene	85-01-8	475	< 475	
Phenol	108-95-2	475	< 475	[1]
Phorate	298-02-2	475	< 475	
Pronamide	23950-58-5	475	< 475	
Pyrene	129-00-0	475	< 475	
Pyridine	110-86-1	935	< 935	
Quinoline	91-22-5	475	< 475	
Safrole	94-59-7	475	< 475	
Tetraethyl dithiopyrophosphate	3689-24-5	475	< 475	
Thionazin	297-97-2	475	< 475	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**108**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**93.0**	
Surr: 2-Fluorophenol	367-12-4	10-186	**84.6**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**94.8**	
Surr: Phenol-d6	13127-88-3	10-194	**94.1**	
Surr: Terphenyl-d14	1718-51-0	10-265	**103**	

[1] - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.
Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 540 to 553.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-016C
Client Sample ID: City Cr. Near Cyn. Entrance Gate
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/28/2011 0058h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Lab Sample ID: 1108489-016C
Client Sample ID: City Cr. Near Cyn. Entrance Gate

Analyzed: 8/28/2011 0058h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-016C
Client Sample ID: City Cr. Near Cyn. Entrance Gate

Analyzed: 8/28/2011 0058h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-016C
Client Sample ID: City Cr. Near Cyn. Entrance Gate

Analyzed: 8/28/2011 0058h **Extracted:** 8/25/2011 1022h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**89.0**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**54.5**	
Surr: 2-Fluorophenol	367-12-4	10-106	**33.6**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**55.9**	
Surr: Phenol-d6	13127-88-3	10-122	**23.3**	
Surr: Terphenyl-d14	1718-51-0	10-199	**100**	

This sample was analyzed for TICs. Those results can be found on pages 416 to 419.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-017C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1439h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	429	< 429	
1,2,4,5-Tetrachlorobenzene	95-94-3	429	< 429	
1,2,4-Trichlorobenzene	120-82-1	429	< 429	
1,2-Dichlorobenzene	95-50-1	429	< 429	
1,3,5-Trinitrobenzene	99-35-4	429	< 429	
1,4-Naphthoquinone	130-15-4	846	< 846	
1,3-Dichlorobenzene	541-73-1	429	< 429	
1,3-Dinitrobenzene	99-65-0	429	< 429	
1,4-Dichlorobenzene	106-46-7	429	< 429	
1,4-Phenylenediamine	106-50-3	429	< 429	
1-Chloronaphthalene	90-13-1	429	< 429	
1-Methylnaphthalene	90-12-0	429	< 429	
1-Naphthylamine	134-32-7	846	< 846	
2,3,4,6-Tetrachlorophenol	58-90-2	429	< 429	
2,4,5-Trichlorophenol	95-95-4	429	< 429	
2,4,6-Trichlorophenol	88-06-2	429	< 429	
2,4-Dichlorophenol	120-83-2	429	< 429	
2,4-Dimethylphenol	105-67-9	429	< 429	
2,4-Dinitrophenol	51-28-5	846	< 846	
2,4-Dinitrotoluene	121-14-2	429	< 429	
2,6-Dichlorophenol	87-65-0	429	< 429	
2,6-Dinitrotoluene	606-20-2	429	< 429	
2-Acetylaminofluorene	53-96-3	429	< 429	
2-Chloronaphthalene	91-58-7	429	< 429	
2-Chlorophenol	95-57-8	429	< 429	
2-Methylnaphthalene	91-57-6	429	< 429	
2-Methylphenol	95-48-7	429	< 429	
2-Naphthylamine	91-59-8	846	< 846	
2-Nitroaniline	88-74-4	429	< 429	
2-Nitrophenol	88-75-5	429	< 429	
2-Picoline	109-06-8	429	< 429	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-017C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed

Analyzed: 9/1/2011 1439h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		429	< 429	
3,3´-Dichlorobenzidine	91-94-1	429	< 429	
3,3´-Dimethylbenzidine	119-93-7	846	< 846	
3-Methylcholanthrene	56-49-5	429	< 429	
3-Nitroaniline	99-09-2	1,260	< 1,260	
4,6-Dinitro-2-methylphenol	534-52-1	846	< 846	
4-Aminobiphenyl	92-67-1	429	< 429	
4-Bromophenyl phenyl ether	101-55-3	429	< 429	
4-Chloro-3-methylphenol	59-50-7	429	< 429	
4-Chloroaniline	106-47-8	429	< 429	
4-Chlorophenyl phenyl ether	7005-72-3	429	< 429	
4-Nitroaniline	100-01-6	1,260	< 1,260	
4-Nitrophenol	100-02-7	846	< 846	
5-Nitro-o-toluidine	99-55-8	429	< 429	
7,12-Dimethylbenz(a)anthracene	57-97-6	429	< 429	
a,a-Dimethylphenethylamine	122-09-8	846	< 846	
Acenaphthene	83-32-9	429	< 429	
Acenaphthylene	208-96-8	429	< 429	
Acetophenone	98-86-2	429	< 429	
alpha-Terpineol	98-55-5	429	< 429	
Aniline	62-53-3	846	< 846	
Anthracene	120-12-7	429	< 429	
Aramite	140-57-8	846	< 846	
Azobenzene	103-33-3	429	< 429	
Benz(a)anthracene	56-55-3	429	< 429	
Benzidine	92-87-5	1,690	< 1,690	
Benzo(a)pyrene	50-32-8	429	< 429	
Benzo(b)fluoranthene	205-99-2	429	< 429	
Benzo(g,h,i)perylene	191-24-2	429	< 429	
Benzo(k)fluoranthene	207-08-9	429	< 429	
Benzoic acid	65-85-0	1,260	< 1,260	
Benzyl alcohol	100-51-6	429	< 429	
Bis(2-chloroethoxy)methane	111-91-1	429	< 429	
Bis(2-chloroethyl) ether	111-44-4	429	< 429	
Bis(2-chloroisopropyl) ether	108-60-1	429	< 429	
Bis(2-ethylhexyl) phthalate	117-81-7	429	< 429	
bis(2-ethylhexyl)adipate	103-23-1	846	< 846	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-017C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed

Analyzed: 9/1/2011 1439h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	429	< 429	
Carbazole	86-74-8	429	< 429	
Chlorobenzilate	510-15-6	429	< 429	
Chrysene	218-01-9	429	< 429	
Di-n-butyl phthalate	84-74-2	429	< 429	
Di-n-octyl phthalate	117-84-0	429	< 429	
Diallate (cis or trans)	2303-16-4	429	< 429	
Dibenz(a,h)anthracene	53-70-3	429	< 429	
Dibenzofuran	132-64-9	429	< 429	
Diethyl phthalate	84-66-2	429	< 429	
Dimethoate	60-51-5	429	< 429	
Dimethyl phthalate	131-11-3	429	< 429	
Dimethylaminoazobenzene	60-11-7	429	< 429	
Dinoseb	88-85-7	846	< 846	
Diphenylamine	122-39-4	429	< 429	
Disulfoton	298-04-4	429	< 429	
Ethyl methanesulfonate	62-50-0	429	< 429	
Famphur	52-85-7	429	< 429	
Fluoranthene	206-44-0	429	< 429	
Fluorene	86-73-7	429	< 429	
Hexachlorobenzene	118-74-1	429	< 429	
Hexachlorobutadiene	87-68-3	429	< 429	
Hexachlorocyclopentadiene	77-47-4	429	< 429	
Hexachloroethane	67-72-1	429	< 429	
Hexachlorophene	70-30-4	429	< 429	
Hexachloropropene	1888-71-7	429	< 429	
Indene	95-13-6	429	< 429	
Indeno(1,2,3-cd)pyrene	193-39-5	429	< 429	
Isodrin	465-73-6	429	< 429	
Isophorone	78-59-1	429	< 429	
Isosafrole	120-58-1	429	< 429	
Kepone	143-50-0	429	< 429	
Methapyrilene	91-80-5	846	< 846	
Methyl methanesulfonate	66-27-3	429	< 429	
n-Decane	124-18-5	429	< 429	
N-Nitrosodi-n-butylamine	924-16-3	429	< 429	
N-Nitrosodiethylamine	55-18-5	429	< 429	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-017C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed

Analyzed: 9/1/2011 1439h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	846	< 846	
N-Nitrosodiphenylamine	86-30-6	429	< 429	
N-Nitrosodi-n-propylamine	621-64-7	429	< 429	
N-Nitrosomethylethylamine	10595-95-6	429	< 429	
N-Nitrosomorpholine	59-89-2	429	< 429	
N-Nitrosopiperidine	100-75-4	429	< 429	
N-Nitrosopyrrolidine	930-55-2	429	< 429	
n-Octadecane	593-45-3	429	< 429	
Naphthalene	91-20-3	429	< 429	
Nitrobenzene	98-95-3	429	< 429	
Nitroquinoline-1-oxide	56-57-5	846	< 846	
O,O,O-Triethyl phosphorothioate	126-68-1	429	< 429	
o-Toluidine	95-53-4	429	< 429	
Parathion	56-38-2	429	< 429	
Methyl parathion	298-00-0	429	< 429	
Pentachlorobenzene	608-93-5	429	< 429	
Pentachloronitrobenzene	82-68-8	429	< 429	
Pentachlorophenol	87-86-5	429	< 429	
Phenacetin	62-44-2	429	< 429	
Phenanthrene	85-01-8	429	< 429	
Phenol	108-95-2	429	< 429	
Phorate	298-02-2	429	< 429	
Pronamide	23950-58-5	429	< 429	
Pyrene	129-00-0	429	< 429	
Pyridine	110-86-1	846	< 846	
Quinoline	91-22-5	429	< 429	
Safrole	94-59-7	429	< 429	
Tetraethyl dithiopyrophosphate	3689-24-5	429	< 429	
Thionazin	297-97-2	429	< 429	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**95.2**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**80.7**	
Surr: 2-Fluorophenol	367-12-4	10-186	**71.6**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**82.4**	
Surr: Phenol-d6	13127-88-3	10-194	**83.9**	
Surr: Terphenyl-d14	1718-51-0	10-265	**94.7**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 554 to 562.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-018C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1506h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	454	< 454	
1,2,4,5-Tetrachlorobenzene	95-94-3	454	< 454	
1,2,4-Trichlorobenzene	120-82-1	454	< 454	
1,2-Dichlorobenzene	95-50-1	454	< 454	
1,3,5-Trinitrobenzene	99-35-4	454	< 454	
1,4-Naphthoquinone	130-15-4	894	< 894	
1,3-Dichlorobenzene	541-73-1	454	< 454	
1,3-Dinitrobenzene	99-65-0	454	< 454	
1,4-Dichlorobenzene	106-46-7	454	< 454	
1,4-Phenylenediamine	106-50-3	454	< 454	
1-Chloronaphthalene	90-13-1	454	< 454	
1-Methylnaphthalene	90-12-0	454	< 454	
1-Naphthylamine	134-32-7	894	< 894	
2,3,4,6-Tetrachlorophenol	58-90-2	454	< 454	
2,4,5-Trichlorophenol	95-95-4	454	< 454	
2,4,6-Trichlorophenol	88-06-2	454	< 454	
2,4-Dichlorophenol	120-83-2	454	< 454	
2,4-Dimethylphenol	105-67-9	454	< 454	
2,4-Dinitrophenol	51-28-5	894	< 894	
2,4-Dinitrotoluene	121-14-2	454	< 454	
2,6-Dichlorophenol	87-65-0	454	< 454	
2,6-Dinitrotoluene	606-20-2	454	< 454	
2-Acetylaminofluorene	53-96-3	454	< 454	
2-Chloronaphthalene	91-58-7	454	< 454	
2-Chlorophenol	95-57-8	454	< 454	
2-Methylnaphthalene	91-57-6	454	< 454	
2-Methylphenol	95-48-7	454	< 454	
2-Naphthylamine	91-59-8	894	< 894	
2-Nitroaniline	88-74-4	454	< 454	
2-Nitrophenol	88-75-5	454	< 454	
2-Picoline	109-06-8	454	< 454	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-018C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank

Analyzed: 9/1/2011 1506h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		454	< 454	
3,3´-Dichlorobenzidine	91-94-1	454	< 454	
3,3´-Dimethylbenzidine	119-93-7	894	< 894	
3-Methylcholanthrene	56-49-5	454	< 454	
3-Nitroaniline	99-09-2	1,330	< 1,330	
4,6-Dinitro-2-methylphenol	534-52-1	894	< 894	
4-Aminobiphenyl	92-67-1	454	< 454	
4-Bromophenyl phenyl ether	101-55-3	454	< 454	
4-Chloro-3-methylphenol	59-50-7	454	< 454	
4-Chloroaniline	106-47-8	454	< 454	
4-Chlorophenyl phenyl ether	7005-72-3	454	< 454	
4-Nitroaniline	100-01-6	1,330	< 1,330	
4-Nitrophenol	100-02-7	894	< 894	
5-Nitro-o-toluidine	99-55-8	454	< 454	
7,12-Dimethylbenz(a)anthracene	57-97-6	454	< 454	
a,a-Dimethylphenethylamine	122-09-8	894	< 894	
Acenaphthene	83-32-9	454	< 454	
Acenaphthylene	208-96-8	454	< 454	
Acetophenone	98-86-2	454	< 454	
alpha-Terpineol	98-55-5	454	< 454	
Aniline	62-53-3	894	< 894	
Anthracene	120-12-7	454	< 454	
Aramite	140-57-8	894	< 894	
Azobenzene	103-33-3	454	< 454	
Benz(a)anthracene	56-55-3	454	< 454	
Benzidine	92-87-5	1,790	< 1,790	
Benzo(a)pyrene	50-32-8	454	< 454	
Benzo(b)fluoranthene	205-99-2	454	< 454	
Benzo(g,h,i)perylene	191-24-2	454	< 454	
Benzo(k)fluoranthene	207-08-9	454	< 454	
Benzoic acid	65-85-0	1,330	< 1,330	
Benzyl alcohol	100-51-6	454	< 454	
Bis(2-chloroethoxy)methane	111-91-1	454	< 454	
Bis(2-chloroethyl) ether	111-44-4	454	< 454	
Bis(2-chloroisopropyl) ether	108-60-1	454	< 454	
Bis(2-ethylhexyl) phthalate	117-81-7	454	< 454	
bis(2-ethylhexyl)adipate	103-23-1	894	< 894	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-018C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank

Analyzed: 9/1/2011 1506h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	454	< 454	
Carbazole	86-74-8	454	< 454	
Chlorobenzilate	510-15-6	454	< 454	
Chrysene	218-01-9	454	< 454	
Di-n-butyl phthalate	84-74-2	454	< 454	
Di-n-octyl phthalate	117-84-0	454	< 454	
Diallate (cis or trans)	2303-16-4	454	< 454	
Dibenz(a,h)anthracene	53-70-3	454	< 454	
Dibenzofuran	132-64-9	454	< 454	
Diethyl phthalate	84-66-2	454	< 454	
Dimethoate	60-51-5	454	< 454	
Dimethyl phthalate	131-11-3	454	< 454	
Dimethylaminoazobenzene	60-11-7	454	< 454	
Dinoseb	88-85-7	894	< 894	
Diphenylamine	122-39-4	454	< 454	
Disulfoton	298-04-4	454	< 454	
Ethyl methanesulfonate	62-50-0	454	< 454	
Famphur	52-85-7	454	< 454	
Fluoranthene	206-44-0	454	< 454	
Fluorene	86-73-7	454	< 454	
Hexachlorobenzene	118-74-1	454	< 454	
Hexachlorobutadiene	87-68-3	454	< 454	
Hexachlorocyclopentadiene	77-47-4	454	< 454	
Hexachloroethane	67-72-1	454	< 454	
Hexachlorophene	70-30-4	454	< 454	
Hexachloropropene	1888-71-7	454	< 454	
Indene	95-13-6	454	< 454	
Indeno(1,2,3-cd)pyrene	193-39-5	454	< 454	
Isodrin	465-73-6	454	< 454	
Isophorone	78-59-1	454	< 454	
Isosafrole	120-58-1	454	< 454	
Kepone	143-50-0	454	< 454	
Methapyrilene	91-80-5	894	< 894	
Methyl methanesulfonate	66-27-3	454	< 454	
n-Decane	124-18-5	454	< 454	
N-Nitrosodi-n-butylamine	924-16-3	454	< 454	
N-Nitrosodiethylamine	55-18-5	454	< 454	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-018C
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank

Analyzed: 9/1/2011 1506h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	894	< 894	
N-Nitrosodiphenylamine	86-30-6	454	< 454	
N-Nitrosodi-n-propylamine	621-64-7	454	< 454	
N-Nitrosomethylethylamine	10595-95-6	454	< 454	
N-Nitrosomorpholine	59-89-2	454	< 454	
N-Nitrosopiperidine	100-75-4	454	< 454	
N-Nitrosopyrrolidine	930-55-2	454	< 454	
n-Octadecane	593-45-3	454	< 454	
Naphthalene	91-20-3	454	< 454	
Nitrobenzene	98-95-3	454	< 454	
Nitroquinoline-1-oxide	56-57-5	894	< 894	
O,O,O-Triethyl phosphorothioate	126-68-1	454	< 454	
o-Toluidine	95-53-4	454	< 454	
Parathion	56-38-2	454	< 454	
Methyl parathion	298-00-0	454	< 454	
Pentachlorobenzene	608-93-5	454	< 454	
Pentachloronitrobenzene	82-68-8	454	< 454	
Pentachlorophenol	87-86-5	454	< 454	
Phenacetin	62-44-2	454	< 454	
Phenanthrene	85-01-8	454	< 454	
Phenol	108-95-2	454	< 454	
Phorate	298-02-2	454	< 454	
Pronamide	23950-58-5	454	< 454	
Pyrene	129-00-0	454	< 454	
Pyridine	110-86-1	894	< 894	
Quinoline	91-22-5	454	< 454	
Safrole	94-59-7	454	< 454	
Tetraethyl dithiopyrophosphate	3689-24-5	454	< 454	
Thionazin	297-97-2	454	< 454	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**108**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**90.8**	
Surr: 2-Fluorophenol	367-12-4	10-186	**82.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**89.9**	
Surr: Phenol-d6	13127-88-3	10-194	**91.2**	
Surr: Terphenyl-d14	1718-51-0	10-265	**105**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 563 to 576.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-021C
Client Sample ID: BD-2
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 2236h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Lab Sample ID: 1108489-021C
Client Sample ID: BD-2

Analyzed: 8/31/2011 2236h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-021C
Client Sample ID: BD-2

Analyzed: 8/31/2011 2236h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Lab Sample ID: 1108489-021C
Client Sample ID: BD-2

Analyzed: 8/31/2011 2236h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**81.7**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**37.0**	
Surr: 2-Fluorophenol	367-12-4	10-106	**26.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**31.7**	
Surr: Phenol-d6	13127-88-3	10-122	**23.8**	
Surr: Terphenyl-d14	1718-51-0	10-199	**83.8**	

This sample was analyzed for TICs. Those results can be found on pages 420 to 424.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-022C
Client Sample ID: BD-2 - Bed
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1532h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	420	< 420	
1,2,4,5-Tetrachlorobenzene	95-94-3	420	< 420	
1,2,4-Trichlorobenzene	120-82-1	420	< 420	
1,2-Dichlorobenzene	95-50-1	420	< 420	
1,3,5-Trinitrobenzene	99-35-4	420	< 420	
1,4-Naphthoquinone	130-15-4	827	< 827	
1,3-Dichlorobenzene	541-73-1	420	< 420	
1,3-Dinitrobenzene	99-65-0	420	< 420	
1,4-Dichlorobenzene	106-46-7	420	< 420	
1,4-Phenylenediamine	106-50-3	420	< 420	
1-Chloronaphthalene	90-13-1	420	< 420	
1-Methylnaphthalene	90-12-0	420	< 420	
1-Naphthylamine	134-32-7	827	< 827	
2,3,4,6-Tetrachlorophenol	58-90-2	420	< 420	
2,4,5-Trichlorophenol	95-95-4	420	< 420	
2,4,6-Trichlorophenol	88-06-2	420	< 420	
2,4-Dichlorophenol	120-83-2	420	< 420	
2,4-Dimethylphenol	105-67-9	420	< 420	
2,4-Dinitrophenol	51-28-5	827	< 827	
2,4-Dinitrotoluene	121-14-2	420	< 420	
2,6-Dichlorophenol	87-65-0	420	< 420	
2,6-Dinitrotoluene	606-20-2	420	< 420	
2-Acetylaminofluorene	53-96-3	420	< 420	
2-Chloronaphthalene	91-58-7	420	< 420	
2-Chlorophenol	95-57-8	420	< 420	
2-Methylnaphthalene	91-57-6	420	< 420	
2-Methylphenol	95-48-7	420	< 420	
2-Naphthylamine	91-59-8	827	< 827	
2-Nitroaniline	88-74-4	420	< 420	
2-Nitrophenol	88-75-5	420	< 420	
2-Picoline	109-06-8	420	< 420	

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Kyle F. Gross
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Jose Rocha
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Lab Sample ID: 1108489-022C
Client Sample ID: BD-2 - Bed

Analyzed: 9/1/2011 1532h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		420	< 420	
3,3´-Dichlorobenzidine	91-94-1	420	< 420	
3,3´-Dimethylbenzidine	119-93-7	827	< 827	
3-Methylcholanthrene	56-49-5	420	< 420	
3-Nitroaniline	99-09-2	1,230	< 1,230	
4,6-Dinitro-2-methylphenol	534-52-1	827	< 827	
4-Aminobiphenyl	92-67-1	420	< 420	
4-Bromophenyl phenyl ether	101-55-3	420	< 420	
4-Chloro-3-methylphenol	59-50-7	420	< 420	
4-Chloroaniline	106-47-8	420	< 420	
4-Chlorophenyl phenyl ether	7005-72-3	420	< 420	
4-Nitroaniline	100-01-6	1,230	< 1,230	
4-Nitrophenol	100-02-7	827	< 827	
5-Nitro-o-toluidine	99-55-8	420	< 420	
7,12-Dimethylbenz(a)anthracene	57-97-6	420	< 420	
a,a-Dimethylphenethylamine	122-09-8	827	< 827	
Acenaphthene	83-32-9	420	< 420	
Acenaphthylene	208-96-8	420	< 420	
Acetophenone	98-86-2	420	< 420	
alpha-Terpineol	98-55-5	420	< 420	
Aniline	62-53-3	827	< 827	
Anthracene	120-12-7	420	< 420	
Aramite	140-57-8	827	< 827	
Azobenzene	103-33-3	420	< 420	
Benz(a)anthracene	56-55-3	420	< 420	
Benzidine	92-87-5	1,650	< 1,650	
Benzo(a)pyrene	50-32-8	420	< 420	
Benzo(b)fluoranthene	205-99-2	420	< 420	
Benzo(g,h,i)perylene	191-24-2	420	< 420	
Benzo(k)fluoranthene	207-08-9	420	< 420	
Benzoic acid	65-85-0	1,230	< 1,230	
Benzyl alcohol	100-51-6	420	< 420	
Bis(2-chloroethoxy)methane	111-91-1	420	< 420	
Bis(2-chloroethyl) ether	111-44-4	420	< 420	
Bis(2-chloroisopropyl) ether	108-60-1	420	< 420	
Bis(2-ethylhexyl) phthalate	117-81-7	420	< 420	
bis(2-ethylhexyl)adipate	103-23-1	827	< 827	

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Jose Rocha
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Lab Sample ID: 1108489-022C
Client Sample ID: BD-2 - Bed

Analyzed: 9/1/2011 1532h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	420	< 420	
Carbazole	86-74-8	420	< 420	
Chlorobenzilate	510-15-6	420	< 420	
Chrysene	218-01-9	420	< 420	
Di-n-butyl phthalate	84-74-2	420	< 420	
Di-n-octyl phthalate	117-84-0	420	< 420	
Diallate (cis or trans)	2303-16-4	420	< 420	
Dibenz(a,h)anthracene	53-70-3	420	< 420	
Dibenzofuran	132-64-9	420	< 420	
Diethyl phthalate	84-66-2	420	< 420	
Dimethoate	60-51-5	420	< 420	
Dimethyl phthalate	131-11-3	420	< 420	
Dimethylaminoazobenzene	60-11-7	420	< 420	
Dinoseb	88-85-7	827	< 827	
Diphenylamine	122-39-4	420	< 420	
Disulfoton	298-04-4	420	< 420	
Ethyl methanesulfonate	62-50-0	420	< 420	
Famphur	52-85-7	420	< 420	
Fluoranthene	206-44-0	420	< 420	
Fluorene	86-73-7	420	< 420	
Hexachlorobenzene	118-74-1	420	< 420	
Hexachlorobutadiene	87-68-3	420	< 420	
Hexachlorocyclopentadiene	77-47-4	420	< 420	
Hexachloroethane	67-72-1	420	< 420	
Hexachlorophene	70-30-4	420	< 420	
Hexachloropropene	1888-71-7	420	< 420	
Indene	95-13-6	420	< 420	
Indeno(1,2,3-cd)pyrene	193-39-5	420	< 420	
Isodrin	465-73-6	420	< 420	
Isophorone	78-59-1	420	< 420	
Isosafrole	120-58-1	420	< 420	
Kepone	143-50-0	420	< 420	
Methapyrilene	91-80-5	827	< 827	
Methyl methanesulfonate	66-27-3	420	< 420	
n-Decane	124-18-5	420	< 420	
N-Nitrosodi-n-butylamine	924-16-3	420	< 420	
N-Nitrosodiethylamine	55-18-5	420	< 420	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-022C
Client Sample ID: BD-2 - Bed

Analyzed: 9/1/2011 1532h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	827	< 827	
N-Nitrosodiphenylamine	86-30-6	420	< 420	
N-Nitrosodi-n-propylamine	621-64-7	420	< 420	
N-Nitrosomethylethylamine	10595-95-6	420	< 420	
N-Nitrosomorpholine	59-89-2	420	< 420	
N-Nitrosopiperidine	100-75-4	420	< 420	
N-Nitrosopyrrolidine	930-55-2	420	< 420	
n-Octadecane	593-45-3	420	< 420	
Naphthalene	91-20-3	420	< 420	
Nitrobenzene	98-95-3	420	< 420	
Nitroquinoline-1-oxide	56-57-5	827	< 827	
O,O,O-Triethyl phosphorothioate	126-68-1	420	< 420	
o-Toluidine	95-53-4	420	< 420	
Parathion	56-38-2	420	< 420	
Methyl parathion	298-00-0	420	< 420	
Pentachlorobenzene	608-93-5	420	< 420	
Pentachloronitrobenzene	82-68-8	420	< 420	
Pentachlorophenol	87-86-5	420	< 420	
Phenacetin	62-44-2	420	< 420	
Phenanthrene	85-01-8	420	< 420	
Phenol	108-95-2	420	< 420	
Phorate	298-02-2	420	< 420	
Pronamide	23950-58-5	420	< 420	
Pyrene	129-00-0	420	< 420	
Pyridine	110-86-1	827	< 827	
Quinoline	91-22-5	420	< 420	
Safrole	94-59-7	420	< 420	
Tetraethyl dithiopyrophosphate	3689-24-5	420	< 420	
Thionazin	297-97-2	420	< 420	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**101**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**88.1**	
Surr: 2-Fluorophenol	367-12-4	10-186	**81.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**90.9**	
Surr: Phenol-d6	13127-88-3	10-194	**91.6**	
Surr: Terphenyl-d14	1718-51-0	10-265	**100**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 577 to 588.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-023C
Client Sample ID: BD-2 - Bank
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1558h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	451	< 451	
1,2,4,5-Tetrachlorobenzene	95-94-3	451	< 451	
1,2,4-Trichlorobenzene	120-82-1	451	< 451	
1,2-Dichlorobenzene	95-50-1	451	< 451	
1,3,5-Trinitrobenzene	99-35-4	451	< 451	
1,4-Naphthoquinone	130-15-4	888	< 888	
1,3-Dichlorobenzene	541-73-1	451	< 451	
1,3-Dinitrobenzene	99-65-0	451	< 451	
1,4-Dichlorobenzene	106-46-7	451	< 451	
1,4-Phenylenediamine	106-50-3	451	< 451	
1-Chloronaphthalene	90-13-1	451	< 451	
1-Methylnaphthalene	90-12-0	451	< 451	
1-Naphthylamine	134-32-7	888	< 888	
2,3,4,6-Tetrachlorophenol	58-90-2	451	< 451	
2,4,5-Trichlorophenol	95-95-4	451	< 451	
2,4,6-Trichlorophenol	88-06-2	451	< 451	
2,4-Dichlorophenol	120-83-2	451	< 451	
2,4-Dimethylphenol	105-67-9	451	< 451	
2,4-Dinitrophenol	51-28-5	888	< 888	
2,4-Dinitrotoluene	121-14-2	451	< 451	
2,6-Dichlorophenol	87-65-0	451	< 451	
2,6-Dinitrotoluene	606-20-2	451	< 451	
2-Acetylaminofluorene	53-96-3	451	< 451	
2-Chloronaphthalene	91-58-7	451	< 451	
2-Chlorophenol	95-57-8	451	< 451	
2-Methylnaphthalene	91-57-6	451	< 451	
2-Methylphenol	95-48-7	451	< 451	
2-Naphthylamine	91-59-8	888	< 888	
2-Nitroaniline	88-74-4	451	< 451	
2-Nitrophenol	88-75-5	451	< 451	
2-Picoline	109-06-8	451	< 451	

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Jose Rocha
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Lab Sample ID: 1108489-023C
Client Sample ID: BD-2 - Bank

Analyzed: 9/1/2011 1558h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		451	< 451	
3,3´-Dichlorobenzidine	91-94-1	451	< 451	
3,3´-Dimethylbenzidine	119-93-7	888	< 888	
3-Methylcholanthrene	56-49-5	451	< 451	
3-Nitroaniline	99-09-2	1,330	< 1,330	
4,6-Dinitro-2-methylphenol	534-52-1	888	< 888	
4-Aminobiphenyl	92-67-1	451	< 451	
4-Bromophenyl phenyl ether	101-55-3	451	< 451	
4-Chloro-3-methylphenol	59-50-7	451	< 451	
4-Chloroaniline	106-47-8	451	< 451	
4-Chlorophenyl phenyl ether	7005-72-3	451	< 451	
4-Nitroaniline	100-01-6	1,330	< 1,330	
4-Nitrophenol	100-02-7	888	< 888	
5-Nitro-o-toluidine	99-55-8	451	< 451	
7,12-Dimethylbenz(a)anthracene	57-97-6	451	< 451	
a,a-Dimethylphenethylamine	122-09-8	888	< 888	
Acenaphthene	83-32-9	451	< 451	
Acenaphthylene	208-96-8	451	< 451	
Acetophenone	98-86-2	451	< 451	
alpha-Terpineol	98-55-5	451	< 451	
Aniline	62-53-3	888	< 888	
Anthracene	120-12-7	451	< 451	
Aramite	140-57-8	888	< 888	
Azobenzene	103-33-3	451	< 451	
Benz(a)anthracene	56-55-3	451	< 451	
Benzidine	92-87-5	1,780	< 1,780	
Benzo(a)pyrene	50-32-8	451	< 451	
Benzo(b)fluoranthene	205-99-2	451	< 451	
Benzo(g,h,i)perylene	191-24-2	451	< 451	
Benzo(k)fluoranthene	207-08-9	451	< 451	
Benzoic acid	65-85-0	1,330	< 1,330	
Benzyl alcohol	100-51-6	451	< 451	
Bis(2-chloroethoxy)methane	111-91-1	451	< 451	
Bis(2-chloroethyl) ether	111-44-4	451	< 451	
Bis(2-chloroisopropyl) ether	108-60-1	451	< 451	
Bis(2-ethylhexyl) phthalate	117-81-7	451	< 451	
bis(2-ethylhexyl)adipate	103-23-1	888	< 888	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-023C
Client Sample ID: BD-2 - Bank

Analyzed: 9/1/2011 1558h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	451	< 451	
Carbazole	86-74-8	451	< 451	
Chlorobenzilate	510-15-6	451	< 451	
Chrysene	218-01-9	451	< 451	
Di-n-butyl phthalate	84-74-2	451	< 451	
Di-n-octyl phthalate	117-84-0	451	< 451	
Diallate (cis or trans)	2303-16-4	451	< 451	
Dibenz(a,h)anthracene	53-70-3	451	< 451	
Dibenzofuran	132-64-9	451	< 451	
Diethyl phthalate	84-66-2	451	< 451	
Dimethoate	60-51-5	451	< 451	
Dimethyl phthalate	131-11-3	451	< 451	
Dimethylaminoazobenzene	60-11-7	451	< 451	
Dinoseb	88-85-7	888	< 888	
Diphenylamine	122-39-4	451	< 451	
Disulfoton	298-04-4	451	< 451	
Ethyl methanesulfonate	62-50-0	451	< 451	
Famphur	52-85-7	451	< 451	
Fluoranthene	206-44-0	451	< 451	
Fluorene	86-73-7	451	< 451	
Hexachlorobenzene	118-74-1	451	< 451	
Hexachlorobutadiene	87-68-3	451	< 451	
Hexachlorocyclopentadiene	77-47-4	451	< 451	
Hexachloroethane	67-72-1	451	< 451	
Hexachlorophene	70-30-4	451	< 451	
Hexachloropropene	1888-71-7	451	< 451	
Indene	95-13-6	451	< 451	
Indeno(1,2,3-cd)pyrene	193-39-5	451	< 451	
Isodrin	465-73-6	451	< 451	
Isophorone	78-59-1	451	< 451	
Isosafrole	120-58-1	451	< 451	
Kepone	143-50-0	451	< 451	
Methapyrilene	91-80-5	888	< 888	
Methyl methanesulfonate	66-27-3	451	< 451	
n-Decane	124-18-5	451	< 451	
N-Nitrosodi-n-butylamine	924-16-3	451	< 451	
N-Nitrosodiethylamine	55-18-5	451	< 451	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-023C
Client Sample ID: BD-2 - Bank

Analyzed: 9/1/2011 1558h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	888	< 888	
N-Nitrosodiphenylamine	86-30-6	451	< 451	
N-Nitrosodi-n-propylamine	621-64-7	451	< 451	
N-Nitrosomethylethylamine	10595-95-6	451	< 451	
N-Nitrosomorpholine	59-89-2	451	< 451	
N-Nitrosopiperidine	100-75-4	451	< 451	
N-Nitrosopyrrolidine	930-55-2	451	< 451	
n-Octadecane	593-45-3	451	< 451	
Naphthalene	91-20-3	451	< 451	
Nitrobenzene	98-95-3	451	< 451	
Nitroquinoline-1-oxide	56-57-5	888	< 888	
O,O,O-Triethyl phosphorothioate	126-68-1	451	< 451	
o-Toluidine	95-53-4	451	< 451	
Parathion	56-38-2	451	< 451	
Methyl parathion	298-00-0	451	< 451	
Pentachlorobenzene	608-93-5	451	< 451	
Pentachloronitrobenzene	82-68-8	451	< 451	
Pentachlorophenol	87-86-5	451	< 451	
Phenacetin	62-44-2	451	< 451	
Phenanthrene	85-01-8	451	< 451	
Phenol	108-95-2	451	< 451	
Phorate	298-02-2	451	< 451	
Pronamide	23950-58-5	451	< 451	
Pyrene	129-00-0	451	< 451	
Pyridine	110-86-1	888	< 888	
Quinoline	91-22-5	451	< 451	
Safrole	94-59-7	451	< 451	
Tetraethyl dithiopyrophosphate	3689-24-5	451	< 451	
Thionazin	297-97-2	451	< 451	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**103**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**86.3**	
Surr: 2-Fluorophenol	367-12-4	10-186	**75.8**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**85.9**	
Surr: Phenol-d6	13127-88-3	10-194	**86.3**	
Surr: Terphenyl-d14	1718-51-0	10-265	**102**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 589 to 602.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-024C
Client Sample ID: EB-2
Collection Date: 8/24/2011 1600h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 2302h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Lab Sample ID: 1108489-024C
Client Sample ID: EB-2

Analyzed: 8/31/2011 2302h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-024C
Client Sample ID: EB-2

Analyzed: 8/31/2011 2302h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-024C
Client Sample ID: EB-2

Analyzed: 8/31/2011 2302h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**84.5**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**38.9**	
Surr: 2-Fluorophenol	367-12-4	10-106	**26.0**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**35.3**	
Surr: Phenol-d6	13127-88-3	10-122	**22.8**	
Surr: Terphenyl-d14	1718-51-0	10-199	**86.5**	

This sample was analyzed for TICs. Those results can be found on pages 425 to 429.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-025C
Client Sample ID: Mill Cr. Below 2300 E.
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 2328h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Jose Rocha
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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-025C
Client Sample ID: Mill Cr. Below 2300 E.

Analyzed: 8/31/2011 2328h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-025C
Client Sample ID: Mill Cr. Below 2300 E.

Analyzed: 8/31/2011 2328h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-025C
Client Sample ID: Mill Cr. Below 2300 E.

Analyzed: 8/31/2011 2328h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**86.7**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**38.4**	
Surr: 2-Fluorophenol	367-12-4	10-106	**25.7**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**36.0**	
Surr: Phenol-d6	13127-88-3	10-122	**21.8**	
Surr: Terphenyl-d14	1718-51-0	10-199	**83.9**	

This sample was analyzed for TICs. Those results can be found on pages 430 to 433.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-026C
Client Sample ID: Mill Cr. Below 2300 E. - Bed
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1625h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	421	< 421	
1,2,4,5-Tetrachlorobenzene	95-94-3	421	< 421	
1,2,4-Trichlorobenzene	120-82-1	421	< 421	
1,2-Dichlorobenzene	95-50-1	421	< 421	
1,3,5-Trinitrobenzene	99-35-4	421	< 421	
1,4-Naphthoquinone	130-15-4	829	< 829	
1,3-Dichlorobenzene	541-73-1	421	< 421	
1,3-Dinitrobenzene	99-65-0	421	< 421	
1,4-Dichlorobenzene	106-46-7	421	< 421	
1,4-Phenylenediamine	106-50-3	421	< 421	
1-Chloronaphthalene	90-13-1	421	< 421	
1-Methylnaphthalene	90-12-0	421	< 421	
1-Naphthylamine	134-32-7	829	< 829	
2,3,4,6-Tetrachlorophenol	58-90-2	421	< 421	
2,4,5-Trichlorophenol	95-95-4	421	< 421	
2,4,6-Trichlorophenol	88-06-2	421	< 421	
2,4-Dichlorophenol	120-83-2	421	< 421	
2,4-Dimethylphenol	105-67-9	421	< 421	
2,4-Dinitrophenol	51-28-5	829	< 829	
2,4-Dinitrotoluene	121-14-2	421	< 421	
2,6-Dichlorophenol	87-65-0	421	< 421	
2,6-Dinitrotoluene	606-20-2	421	< 421	
2-Acetylaminofluorene	53-96-3	421	< 421	
2-Chloronaphthalene	91-58-7	421	< 421	
2-Chlorophenol	95-57-8	421	< 421	
2-Methylnaphthalene	91-57-6	421	< 421	
2-Methylphenol	95-48-7	421	< 421	
2-Naphthylamine	91-59-8	829	< 829	
2-Nitroaniline	88-74-4	421	< 421	
2-Nitrophenol	88-75-5	421	< 421	
2-Picoline	109-06-8	421	< 421	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-026C
Client Sample ID: Mill Cr. Below 2300 E. - Bed

Analyzed: 9/1/2011 1625h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		421	< 421	
3,3´-Dichlorobenzidine	91-94-1	421	< 421	
3,3´-Dimethylbenzidine	119-93-7	829	< 829	
3-Methylcholanthrene	56-49-5	421	< 421	
3-Nitroaniline	99-09-2	1,240	< 1,240	
4,6-Dinitro-2-methylphenol	534-52-1	829	< 829	
4-Aminobiphenyl	92-67-1	421	< 421	
4-Bromophenyl phenyl ether	101-55-3	421	< 421	
4-Chloro-3-methylphenol	59-50-7	421	< 421	
4-Chloroaniline	106-47-8	421	< 421	
4-Chlorophenyl phenyl ether	7005-72-3	421	< 421	
4-Nitroaniline	100-01-6	1,240	< 1,240	
4-Nitrophenol	100-02-7	829	< 829	
5-Nitro-o-toluidine	99-55-8	421	< 421	
7,12-Dimethylbenz(a)anthracene	57-97-6	421	< 421	
a,a-Dimethylphenethylamine	122-09-8	829	< 829	
Acenaphthene	83-32-9	421	< 421	
Acenaphthylene	208-96-8	421	< 421	
Acetophenone	98-86-2	421	< 421	
alpha-Terpineol	98-55-5	421	< 421	
Aniline	62-53-3	829	< 829	
Anthracene	120-12-7	421	< 421	
Aramite	140-57-8	829	< 829	
Azobenzene	103-33-3	421	< 421	
Benz(a)anthracene	56-55-3	421	< 421	
Benzidine	92-87-5	1,660	< 1,660	
Benzo(a)pyrene	50-32-8	421	< 421	
Benzo(b)fluoranthene	205-99-2	421	< 421	
Benzo(g,h,i)perylene	191-24-2	421	< 421	
Benzo(k)fluoranthene	207-08-9	421	< 421	
Benzoic acid	65-85-0	1,240	< 1,240	
Benzyl alcohol	100-51-6	421	< 421	
Bis(2-chloroethoxy)methane	111-91-1	421	< 421	
Bis(2-chloroethyl) ether	111-44-4	421	< 421	
Bis(2-chloroisopropyl) ether	108-60-1	421	< 421	
Bis(2-ethylhexyl) phthalate	117-81-7	421	< 421	
bis(2-ethylhexyl)adipate	103-23-1	829	< 829	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-026C
Client Sample ID: Mill Cr. Below 2300 E. - Bed

Analyzed: 9/1/2011 1625h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	421	< 421	
Carbazole	86-74-8	421	< 421	
Chlorobenzilate	510-15-6	421	< 421	
Chrysene	218-01-9	421	< 421	
Di-n-butyl phthalate	84-74-2	421	< 421	
Di-n-octyl phthalate	117-84-0	421	< 421	
Diallate (cis or trans)	2303-16-4	421	< 421	
Dibenz(a,h)anthracene	53-70-3	421	< 421	
Dibenzofuran	132-64-9	421	< 421	
Diethyl phthalate	84-66-2	421	< 421	
Dimethoate	60-51-5	421	< 421	
Dimethyl phthalate	131-11-3	421	< 421	
Dimethylaminoazobenzene	60-11-7	421	< 421	
Dinoseb	88-85-7	829	< 829	
Diphenylamine	122-39-4	421	< 421	
Disulfoton	298-04-4	421	< 421	
Ethyl methanesulfonate	62-50-0	421	< 421	
Famphur	52-85-7	421	< 421	
Fluoranthene	206-44-0	421	< 421	
Fluorene	86-73-7	421	< 421	
Hexachlorobenzene	118-74-1	421	< 421	
Hexachlorobutadiene	87-68-3	421	< 421	
Hexachlorocyclopentadiene	77-47-4	421	< 421	
Hexachloroethane	67-72-1	421	< 421	
Hexachlorophene	70-30-4	421	< 421	
Hexachloropropene	1888-71-7	421	< 421	
Indene	95-13-6	421	< 421	
Indeno(1,2,3-cd)pyrene	193-39-5	421	< 421	
Isodrin	465-73-6	421	< 421	
Isophorone	78-59-1	421	< 421	
Isosafrole	120-58-1	421	< 421	
Kepone	143-50-0	421	< 421	
Methapyrilene	91-80-5	829	< 829	
Methyl methanesulfonate	66-27-3	421	< 421	
n-Decane	124-18-5	421	< 421	
N-Nitrosodi-n-butylamine	924-16-3	421	< 421	
N-Nitrosodiethylamine	55-18-5	421	< 421	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-026C
Client Sample ID: Mill Cr. Below 2300 E. - Bed

Analyzed: 9/1/2011 1625h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	829	< 829	
N-Nitrosodiphenylamine	86-30-6	421	< 421	
N-Nitrosodi-n-propylamine	621-64-7	421	< 421	
N-Nitrosomethylethylamine	10595-95-6	421	< 421	
N-Nitrosomorpholine	59-89-2	421	< 421	
N-Nitrosopiperidine	100-75-4	421	< 421	
N-Nitrosopyrrolidine	930-55-2	421	< 421	
n-Octadecane	593-45-3	421	< 421	
Naphthalene	91-20-3	421	< 421	
Nitrobenzene	98-95-3	421	< 421	
Nitroquinoline-1-oxide	56-57-5	829	< 829	
O,O,O-Triethyl phosphorothioate	126-68-1	421	< 421	
o-Toluidine	95-53-4	421	< 421	
Parathion	56-38-2	421	< 421	
Methyl parathion	298-00-0	421	< 421	
Pentachlorobenzene	608-93-5	421	< 421	
Pentachloronitrobenzene	82-68-8	421	< 421	
Pentachlorophenol	87-86-5	421	< 421	
Phenacetin	62-44-2	421	< 421	
Phenanthrene	85-01-8	421	< 421	
Phenol	108-95-2	421	< 421	
Phorate	298-02-2	421	< 421	
Pronamide	23950-58-5	421	< 421	
Pyrene	129-00-0	421	< 421	
Pyridine	110-86-1	829	< 829	
Quinoline	91-22-5	421	< 421	
Safrole	94-59-7	421	< 421	
Tetraethyl dithiopyrophosphate	3689-24-5	421	< 421	
Thionazin	297-97-2	421	< 421	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**108**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**102**	
Surr: 2-Fluorophenol	367-12-4	10-186	**86.9**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**96.7**	
Surr: Phenol-d6	13127-88-3	10-194	**99.1**	
Surr: Terphenyl-d14	1718-51-0	10-265	**118**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 603 to 612.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-027C
Client Sample ID: Mill Cr. Below 2300 E. - Bank
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1651h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	449	< 449	
1,2,4,5-Tetrachlorobenzene	95-94-3	449	< 449	
1,2,4-Trichlorobenzene	120-82-1	449	< 449	
1,2-Dichlorobenzene	95-50-1	449	< 449	
1,3,5-Trinitrobenzene	99-35-4	449	< 449	
1,4-Naphthoquinone	130-15-4	885	< 885	
1,3-Dichlorobenzene	541-73-1	449	< 449	
1,3-Dinitrobenzene	99-65-0	449	< 449	
1,4-Dichlorobenzene	106-46-7	449	< 449	
1,4-Phenylenediamine	106-50-3	449	< 449	
1-Chloronaphthalene	90-13-1	449	< 449	
1-Methylnaphthalene	90-12-0	449	< 449	
1-Naphthylamine	134-32-7	885	< 885	
2,3,4,6-Tetrachlorophenol	58-90-2	449	< 449	
2,4,5-Trichlorophenol	95-95-4	449	< 449	
2,4,6-Trichlorophenol	88-06-2	449	< 449	
2,4-Dichlorophenol	120-83-2	449	< 449	
2,4-Dimethylphenol	105-67-9	449	< 449	
2,4-Dinitrophenol	51-28-5	885	< 885	
2,4-Dinitrotoluene	121-14-2	449	< 449	
2,6-Dichlorophenol	87-65-0	449	< 449	
2,6-Dinitrotoluene	606-20-2	449	< 449	
2-Acetylaminofluorene	53-96-3	449	< 449	
2-Chloronaphthalene	91-58-7	449	< 449	
2-Chlorophenol	95-57-8	449	< 449	
2-Methylnaphthalene	91-57-6	449	< 449	
2-Methylphenol	95-48-7	449	< 449	
2-Naphthylamine	91-59-8	885	< 885	
2-Nitroaniline	88-74-4	449	< 449	
2-Nitrophenol	88-75-5	449	< 449	
2-Picoline	109-06-8	449	< 449	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-027C
Client Sample ID: Mill Cr. Below 2300 E. - Bank

Analyzed: 9/1/2011 1651h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		449	< 449	
3,3´-Dichlorobenzidine	91-94-1	449	< 449	
3,3´-Dimethylbenzidine	119-93-7	885	< 885	
3-Methylcholanthrene	56-49-5	449	< 449	
3-Nitroaniline	99-09-2	1,320	< 1,320	
4,6-Dinitro-2-methylphenol	534-52-1	885	< 885	
4-Aminobiphenyl	92-67-1	449	< 449	
4-Bromophenyl phenyl ether	101-55-3	449	< 449	
4-Chloro-3-methylphenol	59-50-7	449	< 449	
4-Chloroaniline	106-47-8	449	< 449	
4-Chlorophenyl phenyl ether	7005-72-3	449	< 449	
4-Nitroaniline	100-01-6	1,320	< 1,320	
4-Nitrophenol	100-02-7	885	< 885	
5-Nitro-o-toluidine	99-55-8	449	< 449	
7,12-Dimethylbenz(a)anthracene	57-97-6	449	< 449	
a,a-Dimethylphenethylamine	122-09-8	885	< 885	
Acenaphthene	83-32-9	449	< 449	
Acenaphthylene	208-96-8	449	< 449	
Acetophenone	98-86-2	449	< 449	
alpha-Terpineol	98-55-5	449	< 449	
Aniline	62-53-3	885	< 885	
Anthracene	120-12-7	449	< 449	
Aramite	140-57-8	885	< 885	
Azobenzene	103-33-3	449	< 449	
Benz(a)anthracene	56-55-3	449	< 449	
Benzidine	92-87-5	1,770	< 1,770	
Benzo(a)pyrene	50-32-8	449	< 449	
Benzo(b)fluoranthene	205-99-2	449	< 449	
Benzo(g,h,i)perylene	191-24-2	449	< 449	
Benzo(k)fluoranthene	207-08-9	449	< 449	
Benzoic acid	65-85-0	1,320	< 1,320	
Benzyl alcohol	100-51-6	449	< 449	
Bis(2-chloroethoxy)methane	111-91-1	449	< 449	
Bis(2-chloroethyl) ether	111-44-4	449	< 449	
Bis(2-chloroisopropyl) ether	108-60-1	449	< 449	
Bis(2-ethylhexyl) phthalate	117-81-7	449	< 449	
bis(2-ethylhexyl)adipate	103-23-1	885	< 885	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-027C
Client Sample ID: Mill Cr. Below 2300 E. - Bank

Analyzed: 9/1/2011 1651h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	449	< 449	
Carbazole	86-74-8	449	< 449	
Chlorobenzilate	510-15-6	449	< 449	
Chrysene	218-01-9	449	< 449	
Di-n-butyl phthalate	84-74-2	449	< 449	
Di-n-octyl phthalate	117-84-0	449	< 449	
Diallate (cis or trans)	2303-16-4	449	< 449	
Dibenz(a,h)anthracene	53-70-3	449	< 449	
Dibenzofuran	132-64-9	449	< 449	
Diethyl phthalate	84-66-2	449	< 449	
Dimethoate	60-51-5	449	< 449	
Dimethyl phthalate	131-11-3	449	< 449	
Dimethylaminoazobenzene	60-11-7	449	< 449	
Dinoseb	88-85-7	885	< 885	
Diphenylamine	122-39-4	449	< 449	
Disulfoton	298-04-4	449	< 449	
Ethyl methanesulfonate	62-50-0	449	< 449	
Famphur	52-85-7	449	< 449	
Fluoranthene	206-44-0	449	< 449	
Fluorene	86-73-7	449	< 449	
Hexachlorobenzene	118-74-1	449	< 449	
Hexachlorobutadiene	87-68-3	449	< 449	
Hexachlorocyclopentadiene	77-47-4	449	< 449	
Hexachloroethane	67-72-1	449	< 449	
Hexachlorophene	70-30-4	449	< 449	
Hexachloropropene	1888-71-7	449	< 449	
Indene	95-13-6	449	< 449	
Indeno(1,2,3-cd)pyrene	193-39-5	449	< 449	
Isodrin	465-73-6	449	< 449	
Isophorone	78-59-1	449	< 449	
Isosafrole	120-58-1	449	< 449	
Kepone	143-50-0	449	< 449	
Methapyrilene	91-80-5	885	< 885	
Methyl methanesulfonate	66-27-3	449	< 449	
n-Decane	124-18-5	449	< 449	
N-Nitrosodi-n-butylamine	924-16-3	449	< 449	
N-Nitrosodiethylamine	55-18-5	449	< 449	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-027C
Client Sample ID: Mill Cr. Below 2300 E. - Bank

Analyzed: 9/1/2011 1651h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	885	< 885	
N-Nitrosodiphenylamine	86-30-6	449	< 449	
N-Nitrosodi-n-propylamine	621-64-7	449	< 449	
N-Nitrosomethylethylamine	10595-95-6	449	< 449	
N-Nitrosomorpholine	59-89-2	449	< 449	
N-Nitrosopiperidine	100-75-4	449	< 449	
N-Nitrosopyrrolidine	930-55-2	449	< 449	
n-Octadecane	593-45-3	449	< 449	
Naphthalene	91-20-3	449	< 449	
Nitrobenzene	98-95-3	449	< 449	
Nitroquinoline-1-oxide	56-57-5	885	< 885	
O,O,O-Triethyl phosphorothioate	126-68-1	449	< 449	
o-Toluidine	95-53-4	449	< 449	
Parathion	56-38-2	449	< 449	
Methyl parathion	298-00-0	449	< 449	
Pentachlorobenzene	608-93-5	449	< 449	
Pentachloronitrobenzene	82-68-8	449	< 449	
Pentachlorophenol	87-86-5	449	< 449	
Phenacetin	62-44-2	449	< 449	
Phenanthrene	85-01-8	449	< 449	
Phenol	108-95-2	449	< 449	
Phorate	298-02-2	449	< 449	
Pronamide	23950-58-5	449	< 449	
Pyrene	129-00-0	449	< 449	
Pyridine	110-86-1	885	< 885	
Quinoline	91-22-5	449	< 449	
Safrole	94-59-7	449	< 449	
Tetraethyl dithiopyrophosphate	3689-24-5	449	< 449	
Thionazin	297-97-2	449	< 449	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**96.7**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**92.2**	
Surr: 2-Fluorophenol	367-12-4	10-186	**85.5**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**92.4**	
Surr: Phenol-d6	13127-88-3	10-194	**94.3**	
Surr: Terphenyl-d14	1718-51-0	10-265	**107**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 613 to 626.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-028C
Client Sample ID: Mill Cr. Above Country Gage
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 8/31/2011 2355h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-028C
Client Sample ID: Mill Cr. Above Country Gage

Analyzed: 8/31/2011 2355h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-028C
Client Sample ID: Mill Cr. Above Country Gage

Analyzed: 8/31/2011 2355h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-028C
Client Sample ID: Mill Cr. Above Country Gage

Analyzed: 8/31/2011 2355h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**85.5**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**45.2**	
Surr: 2-Fluorophenol	367-12-4	10-106	**31.3**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**42.4**	
Surr: Phenol-d6	13127-88-3	10-122	**25.0**	
Surr: Terphenyl-d14	1718-51-0	10-199	**82.8**	

This sample was analyzed for TICs. Those results can be found on pages 434 to 439.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-029C
Client Sample ID: Mill Cr. Above Country Gage - Bed
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1717h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	429	< 429	
1,2,4,5-Tetrachlorobenzene	95-94-3	429	< 429	
1,2,4-Trichlorobenzene	120-82-1	429	< 429	
1,2-Dichlorobenzene	95-50-1	429	< 429	
1,3,5-Trinitrobenzene	99-35-4	429	< 429	
1,4-Naphthoquinone	130-15-4	846	< 846	
1,3-Dichlorobenzene	541-73-1	429	< 429	
1,3-Dinitrobenzene	99-65-0	429	< 429	
1,4-Dichlorobenzene	106-46-7	429	< 429	
1,4-Phenylenediamine	106-50-3	429	< 429	
1-Chloronaphthalene	90-13-1	429	< 429	
1-Methylnaphthalene	90-12-0	429	< 429	
1-Naphthylamine	134-32-7	846	< 846	
2,3,4,6-Tetrachlorophenol	58-90-2	429	< 429	
2,4,5-Trichlorophenol	95-95-4	429	< 429	
2,4,6-Trichlorophenol	88-06-2	429	< 429	
2,4-Dichlorophenol	120-83-2	429	< 429	
2,4-Dimethylphenol	105-67-9	429	< 429	
2,4-Dinitrophenol	51-28-5	846	< 846	
2,4-Dinitrotoluene	121-14-2	429	< 429	
2,6-Dichlorophenol	87-65-0	429	< 429	
2,6-Dinitrotoluene	606-20-2	429	< 429	
2-Acetylaminofluorene	53-96-3	429	< 429	
2-Chloronaphthalene	91-58-7	429	< 429	
2-Chlorophenol	95-57-8	429	< 429	
2-Methylnaphthalene	91-57-6	429	< 429	
2-Methylphenol	95-48-7	429	< 429	
2-Naphthylamine	91-59-8	846	< 846	
2-Nitroaniline	88-74-4	429	< 429	
2-Nitrophenol	88-75-5	429	< 429	
2-Picoline	109-06-8	429	< 429	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-029C
Client Sample ID: Mill Cr. Above Country Gage - Bed

Analyzed: 9/1/2011 1717h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		429	< 429	
3,3´-Dichlorobenzidine	91-94-1	429	< 429	
3,3´-Dimethylbenzidine	119-93-7	846	< 846	
3-Methylcholanthrene	56-49-5	429	< 429	
3-Nitroaniline	99-09-2	1,260	< 1,260	
4,6-Dinitro-2-methylphenol	534-52-1	846	< 846	
4-Aminobiphenyl	92-67-1	429	< 429	
4-Bromophenyl phenyl ether	101-55-3	429	< 429	
4-Chloro-3-methylphenol	59-50-7	429	< 429	
4-Chloroaniline	106-47-8	429	< 429	
4-Chlorophenyl phenyl ether	7005-72-3	429	< 429	
4-Nitroaniline	100-01-6	1,260	< 1,260	
4-Nitrophenol	100-02-7	846	< 846	
5-Nitro-o-toluidine	99-55-8	429	< 429	
7,12-Dimethylbenz(a)anthracene	57-97-6	429	< 429	
a,a-Dimethylphenethylamine	122-09-8	846	< 846	
Acenaphthene	83-32-9	429	< 429	
Acenaphthylene	208-96-8	429	< 429	
Acetophenone	98-86-2	429	< 429	
alpha-Terpineol	98-55-5	429	< 429	
Aniline	62-53-3	846	< 846	
Anthracene	120-12-7	429	< 429	
Aramite	140-57-8	846	< 846	
Azobenzene	103-33-3	429	< 429	
Benz(a)anthracene	56-55-3	429	< 429	
Benzidine	92-87-5	1,690	< 1,690	
Benzo(a)pyrene	50-32-8	429	< 429	
Benzo(b)fluoranthene	205-99-2	429	< 429	
Benzo(g,h,i)perylene	191-24-2	429	< 429	
Benzo(k)fluoranthene	207-08-9	429	< 429	
Benzoic acid	65-85-0	1,260	< 1,260	
Benzyl alcohol	100-51-6	429	< 429	
Bis(2-chloroethoxy)methane	111-91-1	429	< 429	
Bis(2-chloroethyl) ether	111-44-4	429	< 429	
Bis(2-chloroisopropyl) ether	108-60-1	429	< 429	
Bis(2-ethylhexyl) phthalate	117-81-7	429	< 429	
bis(2-ethylhexyl)adipate	103-23-1	846	< 846	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-029C
Client Sample ID: Mill Cr. Above Country Gage - Bed

Analyzed: 9/1/2011 1717h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	429	< 429	
Carbazole	86-74-8	429	< 429	
Chlorobenzilate	510-15-6	429	< 429	
Chrysene	218-01-9	429	< 429	
Di-n-butyl phthalate	84-74-2	429	< 429	
Di-n-octyl phthalate	117-84-0	429	< 429	
Diallate (cis or trans)	2303-16-4	429	< 429	
Dibenz(a,h)anthracene	53-70-3	429	< 429	
Dibenzofuran	132-64-9	429	< 429	
Diethyl phthalate	84-66-2	429	< 429	
Dimethoate	60-51-5	429	< 429	
Dimethyl phthalate	131-11-3	429	< 429	
Dimethylaminoazobenzene	60-11-7	429	< 429	
Dinoseb	88-85-7	846	< 846	
Diphenylamine	122-39-4	429	< 429	
Disulfoton	298-04-4	429	< 429	
Ethyl methanesulfonate	62-50-0	429	< 429	
Famphur	52-85-7	429	< 429	
Fluoranthene	206-44-0	429	< 429	
Fluorene	86-73-7	429	< 429	
Hexachlorobenzene	118-74-1	429	< 429	
Hexachlorobutadiene	87-68-3	429	< 429	
Hexachlorocyclopentadiene	77-47-4	429	< 429	
Hexachloroethane	67-72-1	429	< 429	
Hexachlorophene	70-30-4	429	< 429	
Hexachloropropene	1888-71-7	429	< 429	
Indene	95-13-6	429	< 429	
Indeno(1,2,3-cd)pyrene	193-39-5	429	< 429	
Isodrin	465-73-6	429	< 429	
Isophorone	78-59-1	429	< 429	
Isosafrole	120-58-1	429	< 429	
Kepone	143-50-0	429	< 429	
Methapyrilene	91-80-5	846	< 846	
Methyl methanesulfonate	66-27-3	429	< 429	
n-Decane	124-18-5	429	< 429	
N-Nitrosodi-n-butylamine	924-16-3	429	< 429	
N-Nitrosodiethylamine	55-18-5	429	< 429	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-029C
Client Sample ID: Mill Cr. Above Country Gage - Bed

Analyzed: 9/1/2011 1717h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	846	< 846	
N-Nitrosodiphenylamine	86-30-6	429	< 429	
N-Nitrosodi-n-propylamine	621-64-7	429	< 429	
N-Nitrosomethylethylamine	10595-95-6	429	< 429	
N-Nitrosomorpholine	59-89-2	429	< 429	
N-Nitrosopiperidine	100-75-4	429	< 429	
N-Nitrosopyrrolidine	930-55-2	429	< 429	
n-Octadecane	593-45-3	429	< 429	
Naphthalene	91-20-3	429	< 429	
Nitrobenzene	98-95-3	429	< 429	
Nitroquinoline-1-oxide	56-57-5	846	< 846	
O,O,O-Triethyl phosphorothioate	126-68-1	429	< 429	
o-Toluidine	95-53-4	429	< 429	
Parathion	56-38-2	429	< 429	
Methyl parathion	298-00-0	429	< 429	
Pentachlorobenzene	608-93-5	429	< 429	
Pentachloronitrobenzene	82-68-8	429	< 429	
Pentachlorophenol	87-86-5	429	< 429	
Phenacetin	62-44-2	429	< 429	
Phenanthrene	85-01-8	429	< 429	
Phenol	108-95-2	429	< 429	
Phorate	298-02-2	429	< 429	
Pronamide	23950-58-5	429	< 429	
Pyrene	129-00-0	429	< 429	
Pyridine	110-86-1	846	< 846	
Quinoline	91-22-5	429	< 429	
Safrole	94-59-7	429	< 429	
Tetraethyl dithiopyrophosphate	3689-24-5	429	< 429	
Thionazin	297-97-2	429	< 429	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**106**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**95.5**	
Surr: 2-Fluorophenol	367-12-4	10-186	**85.3**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**93.6**	
Surr: Phenol-d6	13127-88-3	10-194	**95.5**	
Surr: Terphenyl-d14	1718-51-0	10-265	**112**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 627 to 637.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-030C
Client Sample ID: Mill Cr. Above Country Gage - Bank
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1743h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	405	< 405	
1,2,4,5-Tetrachlorobenzene	95-94-3	405	< 405	
1,2,4-Trichlorobenzene	120-82-1	405	< 405	
1,2-Dichlorobenzene	95-50-1	405	< 405	
1,3,5-Trinitrobenzene	99-35-4	405	< 405	
1,4-Naphthoquinone	130-15-4	797	< 797	
1,3-Dichlorobenzene	541-73-1	405	< 405	
1,3-Dinitrobenzene	99-65-0	405	< 405	
1,4-Dichlorobenzene	106-46-7	405	< 405	
1,4-Phenylenediamine	106-50-3	405	< 405	
1-Chloronaphthalene	90-13-1	405	< 405	
1-Methylnaphthalene	90-12-0	405	< 405	
1-Naphthylamine	134-32-7	797	< 797	
2,3,4,6-Tetrachlorophenol	58-90-2	405	< 405	
2,4,5-Trichlorophenol	95-95-4	405	< 405	
2,4,6-Trichlorophenol	88-06-2	405	< 405	
2,4-Dichlorophenol	120-83-2	405	< 405	
2,4-Dimethylphenol	105-67-9	405	< 405	
2,4-Dinitrophenol	51-28-5	797	< 797	
2,4-Dinitrotoluene	121-14-2	405	< 405	
2,6-Dichlorophenol	87-65-0	405	< 405	
2,6-Dinitrotoluene	606-20-2	405	< 405	
2-Acetylaminofluorene	53-96-3	405	< 405	
2-Chloronaphthalene	91-58-7	405	< 405	
2-Chlorophenol	95-57-8	405	< 405	
2-Methylnaphthalene	91-57-6	405	< 405	
2-Methylphenol	95-48-7	405	< 405	
2-Naphthylamine	91-59-8	797	< 797	
2-Nitroaniline	88-74-4	405	< 405	
2-Nitrophenol	88-75-5	405	< 405	
2-Picoline	109-06-8	405	< 405	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-030C
Client Sample ID: Mill Cr. Above Country Gage - Bank

Analyzed: 9/1/2011 1743h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		405	< 405	
3,3´-Dichlorobenzidine	91-94-1	405	< 405	
3,3´-Dimethylbenzidine	119-93-7	797	< 797	
3-Methylcholanthrene	56-49-5	405	< 405	
3-Nitroaniline	99-09-2	1,190	< 1,190	
4,6-Dinitro-2-methylphenol	534-52-1	797	< 797	
4-Aminobiphenyl	92-67-1	405	< 405	
4-Bromophenyl phenyl ether	101-55-3	405	< 405	
4-Chloro-3-methylphenol	59-50-7	405	< 405	
4-Chloroaniline	106-47-8	405	< 405	
4-Chlorophenyl phenyl ether	7005-72-3	405	< 405	
4-Nitroaniline	100-01-6	1,190	< 1,190	
4-Nitrophenol	100-02-7	797	< 797	
5-Nitro-o-toluidine	99-55-8	405	< 405	
7,12-Dimethylbenz(a)anthracene	57-97-6	405	< 405	
a,a-Dimethylphenethylamine	122-09-8	797	< 797	
Acenaphthene	83-32-9	405	< 405	
Acenaphthylene	208-96-8	405	< 405	
Acetophenone	98-86-2	405	< 405	
alpha-Terpineol	98-55-5	405	< 405	
Aniline	62-53-3	797	< 797	
Anthracene	120-12-7	405	< 405	
Aramite	140-57-8	797	< 797	
Azobenzene	103-33-3	405	< 405	
Benz(a)anthracene	56-55-3	405	< 405	
Benzidine	92-87-5	1,590	< 1,590	
Benzo(a)pyrene	50-32-8	405	< 405	
Benzo(b)fluoranthene	205-99-2	405	< 405	
Benzo(g,h,i)perylene	191-24-2	405	< 405	
Benzo(k)fluoranthene	207-08-9	405	< 405	
Benzoic acid	65-85-0	1,190	< 1,190	
Benzyl alcohol	100-51-6	405	< 405	
Bis(2-chloroethoxy)methane	111-91-1	405	< 405	
Bis(2-chloroethyl) ether	111-44-4	405	< 405	
Bis(2-chloroisopropyl) ether	108-60-1	405	< 405	
Bis(2-ethylhexyl) phthalate	117-81-7	405	< 405	
bis(2-ethylhexyl)adipate	103-23-1	797	< 797	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-030C
Client Sample ID: Mill Cr. Above Country Gage - Bank

Analyzed: 9/1/2011 1743h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	405	< 405	
Carbazole	86-74-8	405	< 405	
Chlorobenzilate	510-15-6	405	< 405	
Chrysene	218-01-9	405	< 405	
Di-n-butyl phthalate	84-74-2	405	< 405	
Di-n-octyl phthalate	117-84-0	405	< 405	
Diallate (cis or trans)	2303-16-4	405	< 405	
Dibenz(a,h)anthracene	53-70-3	405	< 405	
Dibenzofuran	132-64-9	405	< 405	
Diethyl phthalate	84-66-2	405	< 405	
Dimethoate	60-51-5	405	< 405	
Dimethyl phthalate	131-11-3	405	< 405	
Dimethylaminoazobenzene	60-11-7	405	< 405	
Dinoseb	88-85-7	797	< 797	
Diphenylamine	122-39-4	405	< 405	
Disulfoton	298-04-4	405	< 405	
Ethyl methanesulfonate	62-50-0	405	< 405	
Famphur	52-85-7	405	< 405	
Fluoranthene	206-44-0	405	< 405	
Fluorene	86-73-7	405	< 405	
Hexachlorobenzene	118-74-1	405	< 405	
Hexachlorobutadiene	87-68-3	405	< 405	
Hexachlorocyclopentadiene	77-47-4	405	< 405	
Hexachloroethane	67-72-1	405	< 405	
Hexachlorophene	70-30-4	405	< 405	
Hexachloropropene	1888-71-7	405	< 405	
Indene	95-13-6	405	< 405	
Indeno(1,2,3-cd)pyrene	193-39-5	405	< 405	
Isodrin	465-73-6	405	< 405	
Isophorone	78-59-1	405	< 405	
Isosafrole	120-58-1	405	< 405	
Kepone	143-50-0	405	< 405	
Methapyrilene	91-80-5	797	< 797	
Methyl methanesulfonate	66-27-3	405	< 405	
n-Decane	124-18-5	405	< 405	
N-Nitrosodi-n-butylamine	924-16-3	405	< 405	
N-Nitrosodiethylamine	55-18-5	405	< 405	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-030C
Client Sample ID: Mill Cr. Above Country Gage - Bank

Analyzed: 9/1/2011 1743h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	797	< 797	
N-Nitrosodiphenylamine	86-30-6	405	< 405	
N-Nitrosodi-n-propylamine	621-64-7	405	< 405	
N-Nitrosomethylethylamine	10595-95-6	405	< 405	
N-Nitrosomorpholine	59-89-2	405	< 405	
N-Nitrosopiperidine	100-75-4	405	< 405	
N-Nitrosopyrrolidine	930-55-2	405	< 405	
n-Octadecane	593-45-3	405	< 405	
Naphthalene	91-20-3	405	< 405	
Nitrobenzene	98-95-3	405	< 405	
Nitroquinoline-1-oxide	56-57-5	797	< 797	
O,O,O-Triethyl phosphorothioate	126-68-1	405	< 405	
o-Toluidine	95-53-4	405	< 405	
Parathion	56-38-2	405	< 405	
Methyl parathion	298-00-0	405	< 405	
Pentachlorobenzene	608-93-5	405	< 405	
Pentachloronitrobenzene	82-68-8	405	< 405	
Pentachlorophenol	87-86-5	405	< 405	
Phenacetin	62-44-2	405	< 405	
Phenanthrene	85-01-8	405	< 405	
Phenol	108-95-2	405	< 405	
Phorate	298-02-2	405	< 405	
Pronamide	23950-58-5	405	< 405	
Pyrene	129-00-0	405	< 405	
Pyridine	110-86-1	797	< 797	
Quinoline	91-22-5	405	< 405	
Safrole	94-59-7	405	< 405	
Tetraethyl dithiopyrophosphate	3689-24-5	405	< 405	
Thionazin	297-97-2	405	< 405	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**98.5**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**79.1**	
Surr: 2-Fluorophenol	367-12-4	10-186	**60.5**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**72.4**	
Surr: Phenol-d6	13127-88-3	10-194	**72.6**	
Surr: Terphenyl-d14	1718-51-0	10-265	**99.8**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 638 to 651.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-031C
Client Sample ID: City Cr. @ Lower Natural Channel
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 9/1/2011 0020h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Jose Rocha
QA Officer

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-031C
Client Sample ID: City Cr. @ Lower Natural Channel

Analyzed: 9/1/2011 0020h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-031C
Client Sample ID: City Cr. @ Lower Natural Channel

Analyzed: 9/1/2011 0020h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-031C
Client Sample ID: City Cr. @ Lower Natural Channel

Analyzed: 9/1/2011 0020h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**83.6**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**43.4**	
Surr: 2-Fluorophenol	367-12-4	10-106	**33.8**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**43.4**	
Surr: Phenol-d6	13127-88-3	10-122	**26.0**	
Surr: Terphenyl-d14	1718-51-0	10-199	**82.1**	

This sample was analyzed for TICs. Those results can be found on pages 440 to 443.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-032C
Client Sample ID: City Cr. @ Lower Natural Channel - Bed
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1810h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	427	< 427	
1,2,4,5-Tetrachlorobenzene	95-94-3	427	< 427	
1,2,4-Trichlorobenzene	120-82-1	427	< 427	
1,2-Dichlorobenzene	95-50-1	427	< 427	
1,3,5-Trinitrobenzene	99-35-4	427	< 427	
1,4-Naphthoquinone	130-15-4	842	< 842	
1,3-Dichlorobenzene	541-73-1	427	< 427	
1,3-Dinitrobenzene	99-65-0	427	< 427	
1,4-Dichlorobenzene	106-46-7	427	< 427	
1,4-Phenylenediamine	106-50-3	427	< 427	
1-Chloronaphthalene	90-13-1	427	< 427	
1-Methylnaphthalene	90-12-0	427	< 427	
1-Naphthylamine	134-32-7	842	< 842	
2,3,4,6-Tetrachlorophenol	58-90-2	427	< 427	
2,4,5-Trichlorophenol	95-95-4	427	< 427	
2,4,6-Trichlorophenol	88-06-2	427	< 427	
2,4-Dichlorophenol	120-83-2	427	< 427	
2,4-Dimethylphenol	105-67-9	427	< 427	
2,4-Dinitrophenol	51-28-5	842	< 842	
2,4-Dinitrotoluene	121-14-2	427	< 427	
2,6-Dichlorophenol	87-65-0	427	< 427	
2,6-Dinitrotoluene	606-20-2	427	< 427	
2-Acetylaminofluorene	53-96-3	427	< 427	
2-Chloronaphthalene	91-58-7	427	< 427	
2-Chlorophenol	95-57-8	427	< 427	
2-Methylnaphthalene	91-57-6	427	< 427	
2-Methylphenol	95-48-7	427	< 427	
2-Naphthylamine	91-59-8	842	< 842	
2-Nitroaniline	88-74-4	427	< 427	
2-Nitrophenol	88-75-5	427	< 427	
2-Picoline	109-06-8	427	< 427	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-032C
Client Sample ID: City Cr. @ Lower Natural Channel - Bed

Analyzed: 9/1/2011 1810h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		427	< 427	
3,3´-Dichlorobenzidine	91-94-1	427	< 427	
3,3´-Dimethylbenzidine	119-93-7	842	< 842	
3-Methylcholanthrene	56-49-5	427	< 427	
3-Nitroaniline	99-09-2	1,260	< 1,260	
4,6-Dinitro-2-methylphenol	534-52-1	842	< 842	
4-Aminobiphenyl	92-67-1	427	< 427	
4-Bromophenyl phenyl ether	101-55-3	427	< 427	
4-Chloro-3-methylphenol	59-50-7	427	< 427	
4-Chloroaniline	106-47-8	427	< 427	
4-Chlorophenyl phenyl ether	7005-72-3	427	< 427	
4-Nitroaniline	100-01-6	1,260	< 1,260	
4-Nitrophenol	100-02-7	842	< 842	
5-Nitro-o-toluidine	99-55-8	427	< 427	
7,12-Dimethylbenz(a)anthracene	57-97-6	427	< 427	
a,a-Dimethylphenethylamine	122-09-8	842	< 842	
Acenaphthene	83-32-9	427	< 427	
Acenaphthylene	208-96-8	427	< 427	
Acetophenone	98-86-2	427	< 427	
alpha-Terpineol	98-55-5	427	< 427	
Aniline	62-53-3	842	< 842	
Anthracene	120-12-7	427	< 427	
Aramite	140-57-8	842	< 842	
Azobenzene	103-33-3	427	< 427	
Benz(a)anthracene	56-55-3	427	< 427	
Benzidine	92-87-5	1,680	< 1,680	
Benzo(a)pyrene	50-32-8	427	< 427	
Benzo(b)fluoranthene	205-99-2	427	< 427	
Benzo(g,h,i)perylene	191-24-2	427	< 427	
Benzo(k)fluoranthene	207-08-9	427	< 427	
Benzoic acid	65-85-0	1,260	< 1,260	
Benzyl alcohol	100-51-6	427	< 427	
Bis(2-chloroethoxy)methane	111-91-1	427	< 427	
Bis(2-chloroethyl) ether	111-44-4	427	< 427	
Bis(2-chloroisopropyl) ether	108-60-1	427	< 427	
Bis(2-ethylhexyl) phthalate	117-81-7	427	< 427	
bis(2-ethylhexyl)adipate	103-23-1	842	< 842	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-032C
Client Sample ID: City Cr. @ Lower Natural Channel - Bed

Analyzed: 9/1/2011 1810h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	427	< 427	
Carbazole	86-74-8	427	< 427	
Chlorobenzilate	510-15-6	427	< 427	
Chrysene	218-01-9	427	< 427	
Di-n-butyl phthalate	84-74-2	427	< 427	
Di-n-octyl phthalate	117-84-0	427	< 427	
Diallate (cis or trans)	2303-16-4	427	< 427	
Dibenz(a,h)anthracene	53-70-3	427	< 427	
Dibenzofuran	132-64-9	427	< 427	
Diethyl phthalate	84-66-2	427	< 427	
Dimethoate	60-51-5	427	< 427	
Dimethyl phthalate	131-11-3	427	< 427	
Dimethylaminoazobenzene	60-11-7	427	< 427	
Dinoseb	88-85-7	842	< 842	
Diphenylamine	122-39-4	427	< 427	
Disulfoton	298-04-4	427	< 427	
Ethyl methanesulfonate	62-50-0	427	< 427	
Famphur	52-85-7	427	< 427	
Fluoranthene	206-44-0	427	< 427	
Fluorene	86-73-7	427	< 427	
Hexachlorobenzene	118-74-1	427	< 427	
Hexachlorobutadiene	87-68-3	427	< 427	
Hexachlorocyclopentadiene	77-47-4	427	< 427	
Hexachloroethane	67-72-1	427	< 427	
Hexachlorophene	70-30-4	427	< 427	
Hexachloropropene	1888-71-7	427	< 427	
Indene	95-13-6	427	< 427	
Indeno(1,2,3-cd)pyrene	193-39-5	427	< 427	
Isodrin	465-73-6	427	< 427	
Isophorone	78-59-1	427	< 427	
Isosafrole	120-58-1	427	< 427	
Kepone	143-50-0	427	< 427	
Methapyrilene	91-80-5	842	< 842	
Methyl methanesulfonate	66-27-3	427	< 427	
n-Decane	124-18-5	427	< 427	
N-Nitrosodi-n-butylamine	924-16-3	427	< 427	
N-Nitrosodiethylamine	55-18-5	427	< 427	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-032C
Client Sample ID: City Cr. @ Lower Natural Channel - Bed

Analyzed: 9/1/2011 1810h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	842	< 842	
N-Nitrosodiphenylamine	86-30-6	427	< 427	
N-Nitrosodi-n-propylamine	621-64-7	427	< 427	
N-Nitrosomethylethylamine	10595-95-6	427	< 427	
N-Nitrosomorpholine	59-89-2	427	< 427	
N-Nitrosopiperidine	100-75-4	427	< 427	
N-Nitrosopyrrolidine	930-55-2	427	< 427	
n-Octadecane	593-45-3	427	< 427	
Naphthalene	91-20-3	427	< 427	
Nitrobenzene	98-95-3	427	< 427	
Nitroquinoline-1-oxide	56-57-5	842	< 842	
O,O,O-Triethyl phosphorothioate	126-68-1	427	< 427	
o-Toluidine	95-53-4	427	< 427	
Parathion	56-38-2	427	< 427	
Methyl parathion	298-00-0	427	< 427	
Pentachlorobenzene	608-93-5	427	< 427	
Pentachloronitrobenzene	82-68-8	427	< 427	
Pentachlorophenol	87-86-5	427	< 427	
Phenacetin	62-44-2	427	< 427	
Phenanthrene	85-01-8	427	< 427	
Phenol	108-95-2	427	< 427	
Phorate	298-02-2	427	< 427	
Pronamide	23950-58-5	427	< 427	
Pyrene	129-00-0	427	< 427	
Pyridine	110-86-1	842	< 842	
Quinoline	91-22-5	427	< 427	
Safrole	94-59-7	427	< 427	
Tetraethyl dithiopyrophosphate	3689-24-5	427	< 427	
Thionazin	297-97-2	427	< 427	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**97.3**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**93.5**	
Surr: 2-Fluorophenol	367-12-4	10-186	**83.0**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**94.9**	
Surr: Phenol-d6	13127-88-3	10-194	**92.5**	
Surr: Terphenyl-d14	1718-51-0	10-265	**114**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 652 to 662.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-033C
Client Sample ID: City Cr. @ Lower Natural Channel - Bank
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1836h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	436	< 436	
1,2,4,5-Tetrachlorobenzene	95-94-3	436	< 436	
1,2,4-Trichlorobenzene	120-82-1	436	< 436	
1,2-Dichlorobenzene	95-50-1	436	< 436	
1,3,5-Trinitrobenzene	99-35-4	436	< 436	
1,4-Naphthoquinone	130-15-4	859	< 859	
1,3-Dichlorobenzene	541-73-1	436	< 436	
1,3-Dinitrobenzene	99-65-0	436	< 436	
1,4-Dichlorobenzene	106-46-7	436	< 436	
1,4-Phenylenediamine	106-50-3	436	< 436	
1-Chloronaphthalene	90-13-1	436	< 436	
1-Methylnaphthalene	90-12-0	436	< 436	
1-Naphthylamine	134-32-7	859	< 859	
2,3,4,6-Tetrachlorophenol	58-90-2	436	< 436	
2,4,5-Trichlorophenol	95-95-4	436	< 436	
2,4,6-Trichlorophenol	88-06-2	436	< 436	
2,4-Dichlorophenol	120-83-2	436	< 436	
2,4-Dimethylphenol	105-67-9	436	< 436	
2,4-Dinitrophenol	51-28-5	859	< 859	
2,4-Dinitrotoluene	121-14-2	436	< 436	
2,6-Dichlorophenol	87-65-0	436	< 436	
2,6-Dinitrotoluene	606-20-2	436	< 436	
2-Acetylaminofluorene	53-96-3	436	< 436	
2-Chloronaphthalene	91-58-7	436	< 436	
2-Chlorophenol	95-57-8	436	< 436	
2-Methylnaphthalene	91-57-6	436	< 436	
2-Methylphenol	95-48-7	436	< 436	
2-Naphthylamine	91-59-8	859	< 859	
2-Nitroaniline	88-74-4	436	< 436	
2-Nitrophenol	88-75-5	436	< 436	
2-Picoline	109-06-8	436	< 436	

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Jose Rocha
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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-033C
Client Sample ID: City Cr. @ Lower Natural Channel - Bank

Analyzed: 9/1/2011 1836h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		436	< 436	
3,3´-Dichlorobenzidine	91-94-1	436	< 436	
3,3´-Dimethylbenzidine	119-93-7	859	< 859	
3-Methylcholanthrene	56-49-5	436	< 436	
3-Nitroaniline	99-09-2	1,280	< 1,280	
4,6-Dinitro-2-methylphenol	534-52-1	859	< 859	
4-Aminobiphenyl	92-67-1	436	< 436	
4-Bromophenyl phenyl ether	101-55-3	436	< 436	
4-Chloro-3-methylphenol	59-50-7	436	< 436	
4-Chloroaniline	106-47-8	436	< 436	
4-Chlorophenyl phenyl ether	7005-72-3	436	< 436	
4-Nitroaniline	100-01-6	1,280	< 1,280	
4-Nitrophenol	100-02-7	859	< 859	
5-Nitro-o-toluidine	99-55-8	436	< 436	
7,12-Dimethylbenz(a)anthracene	57-97-6	436	< 436	
a,a-Dimethylphenethylamine	122-09-8	859	< 859	
Acenaphthene	83-32-9	436	< 436	
Acenaphthylene	208-96-8	436	< 436	
Acetophenone	98-86-2	436	< 436	
alpha-Terpineol	98-55-5	436	< 436	
Aniline	62-53-3	859	< 859	
Anthracene	120-12-7	436	< 436	
Aramite	140-57-8	859	< 859	
Azobenzene	103-33-3	436	< 436	
Benz(a)anthracene	56-55-3	436	< 436	
Benzidine	92-87-5	1,720	< 1,720	
Benzo(a)pyrene	50-32-8	436	< 436	
Benzo(b)fluoranthene	205-99-2	436	< 436	
Benzo(g,h,i)perylene	191-24-2	436	< 436	
Benzo(k)fluoranthene	207-08-9	436	< 436	
Benzoic acid	65-85-0	1,280	< 1,280	
Benzyl alcohol	100-51-6	436	< 436	
Bis(2-chloroethoxy)methane	111-91-1	436	< 436	
Bis(2-chloroethyl) ether	111-44-4	436	< 436	
Bis(2-chloroisopropyl) ether	108-60-1	436	< 436	
Bis(2-ethylhexyl) phthalate	117-81-7	436	< 436	
bis(2-ethylhexyl)adipate	103-23-1	859	< 859	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-033C
Client Sample ID: City Cr. @ Lower Natural Channel - Bank

Analyzed: 9/1/2011 1836h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	436	< 436	
Carbazole	86-74-8	436	< 436	
Chlorobenzilate	510-15-6	436	< 436	
Chrysene	218-01-9	436	< 436	
Di-n-butyl phthalate	84-74-2	436	< 436	
Di-n-octyl phthalate	117-84-0	436	< 436	
Diallate (cis or trans)	2303-16-4	436	< 436	
Dibenz(a,h)anthracene	53-70-3	436	< 436	
Dibenzofuran	132-64-9	436	< 436	
Diethyl phthalate	84-66-2	436	< 436	
Dimethoate	60-51-5	436	< 436	
Dimethyl phthalate	131-11-3	436	< 436	
Dimethylaminoazobenzene	60-11-7	436	< 436	
Dinoseb	88-85-7	859	< 859	
Diphenylamine	122-39-4	436	< 436	
Disulfoton	298-04-4	436	< 436	
Ethyl methanesulfonate	62-50-0	436	< 436	
Famphur	52-85-7	436	< 436	
Fluoranthene	206-44-0	436	< 436	
Fluorene	86-73-7	436	< 436	
Hexachlorobenzene	118-74-1	436	< 436	
Hexachlorobutadiene	87-68-3	436	< 436	
Hexachlorocyclopentadiene	77-47-4	436	< 436	
Hexachloroethane	67-72-1	436	< 436	
Hexachlorophene	70-30-4	436	< 436	
Hexachloropropene	1888-71-7	436	< 436	
Indene	95-13-6	436	< 436	
Indeno(1,2,3-cd)pyrene	193-39-5	436	< 436	
Isodrin	465-73-6	436	< 436	
Isophorone	78-59-1	436	< 436	
Isosafrole	120-58-1	436	< 436	
Kepone	143-50-0	436	< 436	
Methapyrilene	91-80-5	859	< 859	
Methyl methanesulfonate	66-27-3	436	< 436	
n-Decane	124-18-5	436	< 436	
N-Nitrosodi-n-butylamine	924-16-3	436	< 436	
N-Nitrosodiethylamine	55-18-5	436	< 436	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-033C
Client Sample ID: City Cr. @ Lower Natural Channel - Bank

Analyzed: 9/1/2011 1836h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	859	< 859	
N-Nitrosodiphenylamine	86-30-6	436	< 436	
N-Nitrosodi-n-propylamine	621-64-7	436	< 436	
N-Nitrosomethylethylamine	10595-95-6	436	< 436	
N-Nitrosomorpholine	59-89-2	436	< 436	
N-Nitrosopiperidine	100-75-4	436	< 436	
N-Nitrosopyrrolidine	930-55-2	436	< 436	
n-Octadecane	593-45-3	436	< 436	
Naphthalene	91-20-3	436	< 436	
Nitrobenzene	98-95-3	436	< 436	
Nitroquinoline-1-oxide	56-57-5	859	< 859	
O,O,O-Triethyl phosphorothioate	126-68-1	436	< 436	
o-Toluidine	95-53-4	436	< 436	
Parathion	56-38-2	436	< 436	
Methyl parathion	298-00-0	436	< 436	
Pentachlorobenzene	608-93-5	436	< 436	
Pentachloronitrobenzene	82-68-8	436	< 436	
Pentachlorophenol	87-86-5	436	< 436	
Phenacetin	62-44-2	436	< 436	
Phenanthrene	85-01-8	436	< 436	
Phenol	108-95-2	436	< 436	
Phorate	298-02-2	436	< 436	
Pronamide	23950-58-5	436	< 436	
Pyrene	129-00-0	436	< 436	
Pyridine	110-86-1	859	< 859	
Quinoline	91-22-5	436	< 436	
Safrole	94-59-7	436	< 436	
Tetraethyl dithiopyrophosphate	3689-24-5	436	< 436	
Thionazin	297-97-2	436	< 436	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**115**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**109**	
Surr: 2-Fluorophenol	367-12-4	10-186	**91.8**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**102**	
Surr: Phenol-d6	13127-88-3	10-194	**101**	
Surr: Terphenyl-d14	1718-51-0	10-265	**166**	

Internal standard areas were outside of the QC limits. Reanalysis of sample yielded similar results indicating matrix interference.
Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 663 to 676.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-034C
Client Sample ID: City Cr. @ N. Cyn. Footbridge
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 9/1/2011 0047h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Lab Sample ID: 1108489-034C
Client Sample ID: City Cr. @ N. Cyn. Footbridge

Analyzed: 9/1/2011 0047h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Jose Rocha
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Lab Sample ID: 1108489-034C
Client Sample ID: City Cr. @ N. Cyn. Footbridge

Analyzed: 9/1/2011 0047h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-034C
Client Sample ID: City Cr. @ N. Cyn. Footbridge

Analyzed: 9/1/2011 0047h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**77.4**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**40.5**	
Surr: 2-Fluorophenol	367-12-4	10-106	**31.1**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**42.2**	
Surr: Phenol-d6	13127-88-3	10-122	**24.3**	
Surr: Terphenyl-d14	1718-51-0	10-199	**78.9**	

This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-035C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1903h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	413	< 413	
1,2,4,5-Tetrachlorobenzene	95-94-3	413	< 413	
1,2,4-Trichlorobenzene	120-82-1	413	< 413	
1,2-Dichlorobenzene	95-50-1	413	< 413	
1,3,5-Trinitrobenzene	99-35-4	413	< 413	
1,4-Naphthoquinone	130-15-4	814	< 814	
1,3-Dichlorobenzene	541-73-1	413	< 413	
1,3-Dinitrobenzene	99-65-0	413	< 413	
1,4-Dichlorobenzene	106-46-7	413	< 413	
1,4-Phenylenediamine	106-50-3	413	< 413	
1-Chloronaphthalene	90-13-1	413	< 413	
1-Methylnaphthalene	90-12-0	413	< 413	
1-Naphthylamine	134-32-7	814	< 814	
2,3,4,6-Tetrachlorophenol	58-90-2	413	< 413	
2,4,5-Trichlorophenol	95-95-4	413	< 413	
2,4,6-Trichlorophenol	88-06-2	413	< 413	
2,4-Dichlorophenol	120-83-2	413	< 413	
2,4-Dimethylphenol	105-67-9	413	< 413	
2,4-Dinitrophenol	51-28-5	814	< 814	
2,4-Dinitrotoluene	121-14-2	413	< 413	
2,6-Dichlorophenol	87-65-0	413	< 413	
2,6-Dinitrotoluene	606-20-2	413	< 413	
2-Acetylaminofluorene	53-96-3	413	< 413	
2-Chloronaphthalene	91-58-7	413	< 413	
2-Chlorophenol	95-57-8	413	< 413	
2-Methylnaphthalene	91-57-6	413	< 413	
2-Methylphenol	95-48-7	413	< 413	
2-Naphthylamine	91-59-8	814	< 814	
2-Nitroaniline	88-74-4	413	< 413	
2-Nitrophenol	88-75-5	413	< 413	
2-Picoline	109-06-8	413	< 413	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-035C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed

Analyzed: 9/1/2011 1903h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		413	< 413	
3,3´-Dichlorobenzidine	91-94-1	413	< 413	
3,3´-Dimethylbenzidine	119-93-7	814	< 814	
3-Methylcholanthrene	56-49-5	413	< 413	
3-Nitroaniline	99-09-2	1,220	< 1,220	
4,6-Dinitro-2-methylphenol	534-52-1	814	< 814	
4-Aminobiphenyl	92-67-1	413	< 413	
4-Bromophenyl phenyl ether	101-55-3	413	< 413	
4-Chloro-3-methylphenol	59-50-7	413	< 413	
4-Chloroaniline	106-47-8	413	< 413	
4-Chlorophenyl phenyl ether	7005-72-3	413	< 413	
4-Nitroaniline	100-01-6	1,220	< 1,220	
4-Nitrophenol	100-02-7	814	< 814	
5-Nitro-o-toluidine	99-55-8	413	< 413	
7,12-Dimethylbenz(a)anthracene	57-97-6	413	< 413	
a,a-Dimethylphenethylamine	122-09-8	814	< 814	
Acenaphthene	83-32-9	413	< 413	
Acenaphthylene	208-96-8	413	< 413	
Acetophenone	98-86-2	413	< 413	
alpha-Terpineol	98-55-5	413	< 413	
Aniline	62-53-3	814	< 814	
Anthracene	120-12-7	413	< 413	
Aramite	140-57-8	814	< 814	
Azobenzene	103-33-3	413	< 413	
Benz(a)anthracene	56-55-3	413	< 413	
Benzidine	92-87-5	1,630	< 1,630	
Benzo(a)pyrene	50-32-8	413	< 413	
Benzo(b)fluoranthene	205-99-2	413	< 413	
Benzo(g,h,i)perylene	191-24-2	413	< 413	
Benzo(k)fluoranthene	207-08-9	413	< 413	
Benzoic acid	65-85-0	1,220	< 1,220	
Benzyl alcohol	100-51-6	413	< 413	
Bis(2-chloroethoxy)methane	111-91-1	413	< 413	
Bis(2-chloroethyl) ether	111-44-4	413	< 413	
Bis(2-chloroisopropyl) ether	108-60-1	413	< 413	
Bis(2-ethylhexyl) phthalate	117-81-7	413	< 413	
bis(2-ethylhexyl)adipate	103-23-1	814	< 814	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-035C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed

Analyzed: 9/1/2011 1903h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	413	< 413	
Carbazole	86-74-8	413	< 413	
Chlorobenzilate	510-15-6	413	< 413	
Chrysene	218-01-9	413	< 413	
Di-n-butyl phthalate	84-74-2	413	< 413	
Di-n-octyl phthalate	117-84-0	413	< 413	
Diallate (cis or trans)	2303-16-4	413	< 413	
Dibenz(a,h)anthracene	53-70-3	413	< 413	
Dibenzofuran	132-64-9	413	< 413	
Diethyl phthalate	84-66-2	413	< 413	
Dimethoate	60-51-5	413	< 413	
Dimethyl phthalate	131-11-3	413	< 413	
Dimethylaminoazobenzene	60-11-7	413	< 413	
Dinoseb	88-85-7	814	< 814	
Diphenylamine	122-39-4	413	< 413	
Disulfoton	298-04-4	413	< 413	
Ethyl methanesulfonate	62-50-0	413	< 413	
Famphur	52-85-7	413	< 413	
Fluoranthene	206-44-0	413	< 413	
Fluorene	86-73-7	413	< 413	
Hexachlorobenzene	118-74-1	413	< 413	
Hexachlorobutadiene	87-68-3	413	< 413	
Hexachlorocyclopentadiene	77-47-4	413	< 413	
Hexachloroethane	67-72-1	413	< 413	
Hexachlorophene	70-30-4	413	< 413	
Hexachloropropene	1888-71-7	413	< 413	
Indene	95-13-6	413	< 413	
Indeno(1,2,3-cd)pyrene	193-39-5	413	< 413	
Isodrin	465-73-6	413	< 413	
Isophorone	78-59-1	413	< 413	
Isosafrole	120-58-1	413	< 413	
Kepone	143-50-0	413	< 413	
Methapyrilene	91-80-5	814	< 814	
Methyl methanesulfonate	66-27-3	413	< 413	
n-Decane	124-18-5	413	< 413	
N-Nitrosodi-n-butylamine	924-16-3	413	< 413	
N-Nitrosodiethylamine	55-18-5	413	< 413	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-035C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed

Analyzed: 9/1/2011 1903h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	814	< 814	
N-Nitrosodiphenylamine	86-30-6	413	< 413	
N-Nitrosodi-n-propylamine	621-64-7	413	< 413	
N-Nitrosomethylethylamine	10595-95-6	413	< 413	
N-Nitrosomorpholine	59-89-2	413	< 413	
N-Nitrosopiperidine	100-75-4	413	< 413	
N-Nitrosopyrrolidine	930-55-2	413	< 413	
n-Octadecane	593-45-3	413	< 413	
Naphthalene	91-20-3	413	< 413	
Nitrobenzene	98-95-3	413	< 413	
Nitroquinoline-1-oxide	56-57-5	814	< 814	
O,O,O-Triethyl phosphorothioate	126-68-1	413	< 413	
o-Toluidine	95-53-4	413	< 413	
Parathion	56-38-2	413	< 413	
Methyl parathion	298-00-0	413	< 413	
Pentachlorobenzene	608-93-5	413	< 413	
Pentachloronitrobenzene	82-68-8	413	< 413	
Pentachlorophenol	87-86-5	413	< 413	
Phenacetin	62-44-2	413	< 413	
Phenanthrene	85-01-8	413	< 413	
Phenol	108-95-2	413	< 413	
Phorate	298-02-2	413	< 413	
Pronamide	23950-58-5	413	< 413	
Pyrene	129-00-0	413	< 413	
Pyridine	110-86-1	814	< 814	
Quinoline	91-22-5	413	< 413	
Safrole	94-59-7	413	< 413	
Tetraethyl dithiopyrophosphate	3689-24-5	413	< 413	
Thionazin	297-97-2	413	< 413	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**98.6**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**83.6**	
Surr: 2-Fluorophenol	367-12-4	10-186	**71.5**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**82.8**	
Surr: Phenol-d6	13127-88-3	10-194	**82.2**	
Surr: Terphenyl-d14	1718-51-0	10-265	**122**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 677 to 686.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-036C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3546

Analyzed: 9/1/2011 1929h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	404	< 404	
1,2,4,5-Tetrachlorobenzene	95-94-3	404	< 404	
1,2,4-Trichlorobenzene	120-82-1	404	< 404	
1,2-Dichlorobenzene	95-50-1	404	< 404	
1,3,5-Trinitrobenzene	99-35-4	404	< 404	
1,4-Naphthoquinone	130-15-4	795	< 795	
1,3-Dichlorobenzene	541-73-1	404	< 404	
1,3-Dinitrobenzene	99-65-0	404	< 404	
1,4-Dichlorobenzene	106-46-7	404	< 404	
1,4-Phenylenediamine	106-50-3	404	< 404	
1-Chloronaphthalene	90-13-1	404	< 404	
1-Methylnaphthalene	90-12-0	404	< 404	
1-Naphthylamine	134-32-7	795	< 795	
2,3,4,6-Tetrachlorophenol	58-90-2	404	< 404	
2,4,5-Trichlorophenol	95-95-4	404	< 404	
2,4,6-Trichlorophenol	88-06-2	404	< 404	
2,4-Dichlorophenol	120-83-2	404	< 404	
2,4-Dimethylphenol	105-67-9	404	< 404	
2,4-Dinitrophenol	51-28-5	795	< 795	
2,4-Dinitrotoluene	121-14-2	404	< 404	
2,6-Dichlorophenol	87-65-0	404	< 404	
2,6-Dinitrotoluene	606-20-2	404	< 404	
2-Acetylaminofluorene	53-96-3	404	< 404	
2-Chloronaphthalene	91-58-7	404	< 404	
2-Chlorophenol	95-57-8	404	< 404	
2-Methylnaphthalene	91-57-6	404	< 404	
2-Methylphenol	95-48-7	404	< 404	
2-Naphthylamine	91-59-8	795	< 795	
2-Nitroaniline	88-74-4	404	< 404	
2-Nitrophenol	88-75-5	404	< 404	
2-Picoline	109-06-8	404	< 404	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-036C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank

Analyzed: 9/1/2011 1929h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
3&4-Methylphenol		404	< 404	
3,3´-Dichlorobenzidine	91-94-1	404	< 404	
3,3´-Dimethylbenzidine	119-93-7	795	< 795	
3-Methylcholanthrene	56-49-5	404	< 404	
3-Nitroaniline	99-09-2	1,190	< 1,190	
4,6-Dinitro-2-methylphenol	534-52-1	795	< 795	
4-Aminobiphenyl	92-67-1	404	< 404	
4-Bromophenyl phenyl ether	101-55-3	404	< 404	
4-Chloro-3-methylphenol	59-50-7	404	< 404	
4-Chloroaniline	106-47-8	404	< 404	
4-Chlorophenyl phenyl ether	7005-72-3	404	< 404	
4-Nitroaniline	100-01-6	1,190	< 1,190	
4-Nitrophenol	100-02-7	795	< 795	
5-Nitro-o-toluidine	99-55-8	404	< 404	
7,12-Dimethylbenz(a)anthracene	57-97-6	404	< 404	
a,a-Dimethylphenethylamine	122-09-8	795	< 795	
Acenaphthene	83-32-9	404	< 404	
Acenaphthylene	208-96-8	404	< 404	
Acetophenone	98-86-2	404	< 404	
alpha-Terpineol	98-55-5	404	< 404	
Aniline	62-53-3	795	< 795	
Anthracene	120-12-7	404	< 404	
Aramite	140-57-8	795	< 795	
Azobenzene	103-33-3	404	< 404	
Benz(a)anthracene	56-55-3	404	< 404	
Benzidine	92-87-5	1,590	< 1,590	
Benzo(a)pyrene	50-32-8	404	< 404	
Benzo(b)fluoranthene	205-99-2	404	< 404	
Benzo(g,h,i)perylene	191-24-2	404	< 404	
Benzo(k)fluoranthene	207-08-9	404	< 404	
Benzoic acid	65-85-0	1,190	< 1,190	
Benzyl alcohol	100-51-6	404	< 404	
Bis(2-chloroethoxy)methane	111-91-1	404	< 404	
Bis(2-chloroethyl) ether	111-44-4	404	< 404	
Bis(2-chloroisopropyl) ether	108-60-1	404	< 404	
Bis(2-ethylhexyl) phthalate	117-81-7	404	< 404	
bis(2-ethylhexyl)adipate	103-23-1	795	< 795	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-036C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank

Analyzed: 9/1/2011 1929h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Butyl benzyl phthalate	85-68-7	404	< 404	
Carbazole	86-74-8	404	< 404	
Chlorobenzilate	510-15-6	404	< 404	
Chrysene	218-01-9	404	< 404	
Di-n-butyl phthalate	84-74-2	404	< 404	
Di-n-octyl phthalate	117-84-0	404	< 404	
Diallate (cis or trans)	2303-16-4	404	< 404	
Dibenz(a,h)anthracene	53-70-3	404	< 404	
Dibenzofuran	132-64-9	404	< 404	
Diethyl phthalate	84-66-2	404	< 404	
Dimethoate	60-51-5	404	< 404	
Dimethyl phthalate	131-11-3	404	< 404	
Dimethylaminoazobenzene	60-11-7	404	< 404	
Dinoseb	88-85-7	795	< 795	
Diphenylamine	122-39-4	404	< 404	
Disulfoton	298-04-4	404	< 404	
Ethyl methanesulfonate	62-50-0	404	< 404	
Famphur	52-85-7	404	< 404	
Fluoranthene	206-44-0	404	< 404	
Fluorene	86-73-7	404	< 404	
Hexachlorobenzene	118-74-1	404	< 404	
Hexachlorobutadiene	87-68-3	404	< 404	
Hexachlorocyclopentadiene	77-47-4	404	< 404	
Hexachloroethane	67-72-1	404	< 404	
Hexachlorophene	70-30-4	404	< 404	
Hexachloropropene	1888-71-7	404	< 404	
Indene	95-13-6	404	< 404	
Indeno(1,2,3-cd)pyrene	193-39-5	404	< 404	
Isodrin	465-73-6	404	< 404	
Isophorone	78-59-1	404	< 404	
Isosafrole	120-58-1	404	< 404	
Kepone	143-50-0	404	< 404	
Methapyrilene	91-80-5	795	< 795	
Methyl methanesulfonate	66-27-3	404	< 404	
n-Decane	124-18-5	404	< 404	
N-Nitrosodi-n-butylamine	924-16-3	404	< 404	
N-Nitrosodiethylamine	55-18-5	404	< 404	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-036C
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank

Analyzed: 9/1/2011 1929h **Extracted:** 8/26/2011 1505h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodimethylamine	62-75-9	795	< 795	
N-Nitrosodiphenylamine	86-30-6	404	< 404	
N-Nitrosodi-n-propylamine	621-64-7	404	< 404	
N-Nitrosomethylethylamine	10595-95-6	404	< 404	
N-Nitrosomorpholine	59-89-2	404	< 404	
N-Nitrosopiperidine	100-75-4	404	< 404	
N-Nitrosopyrrolidine	930-55-2	404	< 404	
n-Octadecane	593-45-3	404	< 404	
Naphthalene	91-20-3	404	< 404	
Nitrobenzene	98-95-3	404	< 404	
Nitroquinoline-1-oxide	56-57-5	795	< 795	
O,O,O-Triethyl phosphorothioate	126-68-1	404	< 404	
o-Toluidine	95-53-4	404	< 404	
Parathion	56-38-2	404	< 404	
Methyl parathion	298-00-0	404	< 404	
Pentachlorobenzene	608-93-5	404	< 404	
Pentachloronitrobenzene	82-68-8	404	< 404	
Pentachlorophenol	87-86-5	404	< 404	
Phenacetin	62-44-2	404	< 404	
Phenanthrene	85-01-8	404	< 404	
Phenol	108-95-2	404	< 404	
Phorate	298-02-2	404	< 404	
Pronamide	23950-58-5	404	< 404	
Pyrene	129-00-0	404	< 404	
Pyridine	110-86-1	795	< 795	
Quinoline	91-22-5	404	< 404	
Safrole	94-59-7	404	< 404	
Tetraethyl dithiopyrophosphate	3689-24-5	404	< 404	
Thionazin	297-97-2	404	< 404	
Surr: 2,4,6-Tribromophenol	118-79-6	10-237	**103**	
Surr: 2-Fluorobiphenyl	321-60-8	17-179	**90.7**	
Surr: 2-Fluorophenol	367-12-4	10-186	**77.4**	
Surr: Nitrobenzene-d5	4165-60-0	10-166	**87.7**	
Surr: Phenol-d6	13127-88-3	10-194	**84.9**	
Surr: Terphenyl-d14	1718-51-0	10-265	**136**	

Gel-Permeation Chromatography (GPC) Cleanup, method 3640A, utilized for this sample.
This sample was analyzed for TICs. Those results can be found on pages 687 to 695.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-037C
Client Sample ID: Jordan River Above 800 So.
Collection Date: 8/24/2011 1645h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 9/1/2011 0113h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Kyle F. Gross
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Jose Rocha
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Lab Sample ID: 1108489-037C
Client Sample ID: Jordan River Above 800 So.

Analyzed: 9/1/2011 0113h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-037C
Client Sample ID: Jordan River Above 800 So.

Analyzed: 9/1/2011 0113h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-037C
Client Sample ID: Jordan River Above 800 So.

Analyzed: 9/1/2011 0113h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**78.5**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**40.3**	
Surr: 2-Fluorophenol	367-12-4	10-106	**31.1**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**39.0**	
Surr: Phenol-d6	13127-88-3	10-122	**25.6**	
Surr: Terphenyl-d14	1718-51-0	10-199	**76.8**	

This sample was analyzed for TICs. Those results can be found on pages 444 to 448.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-038C
Client Sample ID: Jordan River Above 1700 So.
Collection Date: 8/24/2011 1720h
Received Date: 8/24/2011 1745h **Method:** SW8270D

Analytical Results SVOA List by GC/MS Method 8270D/3510C

Analyzed: 9/1/2011 0139h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1´-Biphenyl	92-52-4	10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0	< 10.0	
1,2,4-Trichlorobenzene	120-82-1	10.0	< 10.0	
1,2-Dichlorobenzene	95-50-1	10.0	< 10.0	
1,3,5-Trinitrobenzene	99-35-4	10.0	< 10.0	
1,3-Dichlorobenzene	541-73-1	10.0	< 10.0	
1,3-Dinitrobenzene	99-65-0	10.0	< 10.0	
1,4-Dichlorobenzene	106-46-7	10.0	< 10.0	
1,4-Dinitrobenzene	100-25-4	10.0	< 10.0	
1,4-Naphthoquinone	130-15-4	10.0	< 10.0	
1,4-Phenylenediamine	106-50-3	10.0	< 10.0	
1-Chloronaphthalene	90-13-1	10.0	< 10.0	
1-Methylnaphthalene	90-12-0	10.0	< 10.0	
1-Naphthylamine	134-32-7	10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	58-90-2	10.0	< 10.0	
2,4,5-Trichlorophenol	95-95-4	10.0	< 10.0	
2,4,6-Trichlorophenol	88-06-2	10.0	< 10.0	
2,4-Dichlorophenol	120-83-2	10.0	< 10.0	
2,4-Dimethylphenol	105-67-9	10.0	< 10.0	
2,4-Dinitrophenol	51-28-5	20.0	< 20.0	
2,4-Dinitrotoluene	121-14-2	10.0	< 10.0	
2,6-Dichlorophenol	87-65-0	10.0	< 10.0	
2,6-Dinitrotoluene	606-20-2	10.0	< 10.0	
2-Acetylaminofluorene	53-96-3	10.0	< 10.0	
2-Chloronaphthalene	91-58-7	10.0	< 10.0	
2-Chlorophenol	95-57-8	10.0	< 10.0	
2-Methylnaphthalene	91-57-6	10.0	< 10.0	
2-Methylphenol	95-48-7	10.0	< 10.0	
2-Naphthylamine	91-59-8	10.0	< 10.0	
2-Nitroaniline	88-74-4	10.0	< 10.0	
2-Nitrophenol	88-75-5	10.0	< 10.0	

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Jose Rocha
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Lab Sample ID: 1108489-038C
Client Sample ID: Jordan River Above 1700 So.

Analyzed: 9/1/2011 0139h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Picoline	109-06-8	10.0	< 10.0	
3&4-Methylphenol		10.0	< 10.0	
3,3´-Dichlorobenzidine	91-94-1	10.0	< 10.0	
3,3´-Dimethylbenzidine	119-93-7	10.0	< 10.0	
3-Methylcholanthrene	56-49-5	10.0	< 10.0	
3-Nitroaniline	99-09-2	10.0	< 10.0	
4,6-Dinitro-2-methylphenol	534-52-1	10.0	< 10.0	
4-Aminobiphenyl	92-67-1	10.0	< 10.0	
4-Bromophenyl phenyl ether	101-55-3	10.0	< 10.0	
4-Chloro-3-methylphenol	59-50-7	10.0	< 10.0	
4-Chloroaniline	106-47-8	10.0	< 10.0	
4-Chlorophenyl phenyl ether	7005-72-3	10.0	< 10.0	
4-Nitroaniline	100-01-6	10.0	< 10.0	
4-Nitrophenol	100-02-7	10.0	< 10.0	
5-Nitro-o-toluidine	99-55-8	10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	57-97-6	10.0	< 10.0	
a,a-Dimethylphenethylamine	122-09-8	10.0	< 10.0	
Acenaphthene	83-32-9	10.0	< 10.0	
Acenaphthylene	208-96-8	10.0	< 10.0	
Acetophenone	98-86-2	10.0	< 10.0	
alpha-Terpineol	98-55-5	10.0	< 10.0	
Aniline	62-53-3	10.0	< 10.0	
Anthracene	120-12-7	10.0	< 10.0	
Aramite	140-57-8	10.0	< 10.0	
Azobenzene	103-33-3	10.0	< 10.0	
Benz(a)anthracene	56-55-3	10.0	< 10.0	
Benzidine	92-87-5	10.0	< 10.0	
Benzo(a)pyrene	50-32-8	10.0	< 10.0	
Benzo(b)fluoranthene	205-99-2	10.0	< 10.0	
Benzo(g,h,i)perylene	191-24-2	10.0	< 10.0	
Benzo(k)fluoranthene	207-08-9	10.0	< 10.0	
Benzoic acid	65-85-0	20.0	< 20.0	
Benzyl alcohol	100-51-6	10.0	< 10.0	
Bis(2-chloroethoxy)methane	111-91-1	10.0	< 10.0	
Bis(2-chloroethyl) ether	111-44-4	10.0	< 10.0	
Bis(2-chloroisopropyl) ether	108-60-1	10.0	< 10.0	
Bis(2-ethylhexyl) phthalate	117-81-7	10.0	< 10.0	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-038C
Client Sample ID: Jordan River Above 1700 So.

Analyzed: 9/1/2011 0139h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
bis(2-ethylhexyl)adipate	103-23-1	10.0	< 10.0	
Butyl benzyl phthalate	85-68-7	10.0	< 10.0	
Carbazole	86-74-8	10.0	< 10.0	
Chlorobenzilate	510-15-6	10.0	< 10.0	
Chrysene	218-01-9	10.0	< 10.0	
Di-n-butyl phthalate	84-74-2	10.0	< 10.0	
Di-n-octyl phthalate	117-84-0	10.0	< 10.0	
Diallate (cis or trans)	2303-16-4	10.0	< 10.0	
Dibenz(a,h)anthracene	53-70-3	10.0	< 10.0	
Dibenzofuran	132-64-9	10.0	< 10.0	
Diethyl phthalate	84-66-2	10.0	< 10.0	
Dimethoate	60-51-5	10.0	< 10.0	
Dimethyl phthalate	131-11-3	10.0	< 10.0	
Dimethylaminoazobenzene	60-11-7	10.0	< 10.0	
Dinoseb	88-85-7	10.0	< 10.0	
Diphenylamine	122-39-4	10.0	< 10.0	
Disulfoton	298-04-4	10.0	< 10.0	
Ethyl methanesulfonate	62-50-0	10.0	< 10.0	
Famphur	52-85-7	10.0	< 10.0	
Fluoranthene	206-44-0	10.0	< 10.0	
Fluorene	86-73-7	10.0	< 10.0	
Hexachlorobenzene	118-74-1	10.0	< 10.0	
Hexachlorobutadiene	87-68-3	10.0	< 10.0	
Hexachlorocyclopentadiene	77-47-4	10.0	< 10.0	
Hexachloroethane	67-72-1	10.0	< 10.0	
Hexachlorophene	70-30-4	10.0	< 10.0	
Hexachloropropene	1888-71-7	10.0	< 10.0	
Indene	95-13-6	10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	193-39-5	10.0	< 10.0	
Isodrin	465-73-6	10.0	< 10.0	
Isophorone	78-59-1	10.0	< 10.0	
Isosafrole	120-58-1	10.0	< 10.0	
Kepone	143-50-0	10.0	< 10.0	
Methapyrilene	91-80-5	10.0	< 10.0	
Methyl methanesulfonate	66-27-3	10.0	< 10.0	
n-Decane	124-18-5	10.0	< 10.0	
N-Nitrosodi-n-butylamine	924-16-3	10.0	< 10.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-038C
Client Sample ID: Jordan River Above 1700 So.

Analyzed: 9/1/2011 0139h **Extracted:** 8/29/2011 0854h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
N-Nitrosodiethylamine	55-18-5	10.0	< 10.0	
N-Nitrosodimethylamine	62-75-9	10.0	< 10.0	
N-Nitrosodiphenylamine	86-30-6	10.0	< 10.0	
N-Nitrosodi-n-propylamine	621-64-7	10.0	< 10.0	
N-Nitrosomethylethylamine	10595-95-6	10.0	< 10.0	
N-Nitrosomorpholine	59-89-2	10.0	< 10.0	
N-Nitrosopiperidine	100-75-4	10.0	< 10.0	
N-Nitrosopyrrolidine	930-55-2	10.0	< 10.0	
n-Octadecane	593-45-3	10.0	< 10.0	
Naphthalene	91-20-3	10.0	< 10.0	
Nitrobenzene	98-95-3	10.0	< 10.0	
Nitroquinoline-1-oxide	56-57-5	10.0	< 10.0	
O,O,O-Triethyl phosphorothioate	126-68-1	10.0	< 10.0	
o-Toluidine	95-53-4	10.0	< 10.0	
Parathion	56-38-2	10.0	< 10.0	
Methyl parathion	298-00-0	10.0	< 10.0	
Pentachlorobenzene	608-93-5	10.0	< 10.0	
Pentachloronitrobenzene	82-68-8	10.0	< 10.0	
Pentachlorophenol	87-86-5	10.0	< 10.0	
Phenacetin	62-44-2	10.0	< 10.0	
Phenanthrene	85-01-8	10.0	< 10.0	
Phenol	108-95-2	10.0	< 10.0	
Phorate	298-02-2	10.0	< 10.0	
Pronamide	23950-58-5	10.0	< 10.0	
Pyrene	129-00-0	10.0	< 10.0	
Pyridine	110-86-1	10.0	< 10.0	
Quinoline	91-22-5	10.0	< 10.0	
Safrole	94-59-7	10.0	< 10.0	
Tetraethyl dithiopyrophosphate	3689-24-5	10.0	< 10.0	
Thionazin	297-97-2	10.0	< 10.0	
Surr: 2,4,6-Tribromophenol	118-79-6	14-159	**82.5**	
Surr: 2-Fluorobiphenyl	321-60-8	10-124	**42.7**	
Surr: 2-Fluorophenol	367-12-4	10-106	**34.6**	
Surr: Nitrobenzene-d5	4165-60-0	10-180	**42.2**	
Surr: Phenol-d6	13127-88-3	10-122	**28.0**	
Surr: Terphenyl-d14	1718-51-0	10-199	**68.0**	

This sample was analyzed for TICs. Those results can be found on pages 449 to 455.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-001D
Client Sample ID: Mill Cr. Below 700 E.
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 0938h
Units: µg/L
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-001D
Client Sample ID: Mill Cr. Below 700 E.

Analyzed: 8/25/2011 0938h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-001D
Client Sample ID: Mill Cr. Below 700 E.

Analyzed: 8/25/2011 0938h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**112**	

Lab Sample ID: 1108489-001D
Client Sample ID: Mill Cr. Below 700 E.

Analyzed: 8/25/2011 0938h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**97.2**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-002B
Client Sample ID: Mill Cr. Below 700 E. - Bed
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h
Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 1246h
Units: µg/kg-dry
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.57	< 2.57	
1,1,1-Trichloroethane	71-55-6	2.57	< 2.57	
1,1,2,2-Tetrachloroethane	79-34-5	2.57	< 2.57	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.57	< 2.57	
1,1,2-Trichloroethane	79-00-5	2.57	< 2.57	
1,1-Dichloropropene	563-58-6	2.57	< 2.57	
1,1-Dichloroethane	75-34-3	2.57	< 2.57	
1,1-Dichloroethene	75-35-4	2.57	< 2.57	
1,2,3-Trichlorobenzene	87-61-6	2.57	< 2.57	
1,2,3-Trichloropropane	96-18-4	2.57	< 2.57	
1,2,3-Trimethylbenzene	526-73-8	2.57	< 2.57	
1,2,4-Trichlorobenzene	120-82-1	2.57	< 2.57	
1,2,4-Trimethylbenzene	95-63-6	2.57	< 2.57	
1,2-Dibromo-3-chloropropane	96-12-8	6.42	< 6.42	
1,2-Dibromoethane	106-93-4	2.57	< 2.57	
1,2-Dichlorobenzene	95-50-1	2.57	< 2.57	
1,2-Dichloroethane	107-06-2	2.57	< 2.57	
1,2-Dichloropropane	78-87-5	2.57	< 2.57	
1,3,5-Trimethylbenzene	108-67-8	2.57	< 2.57	
1,3-Dichlorobenzene	541-73-1	2.57	< 2.57	
1,3-Dichloropropane	142-28-9	2.57	< 2.57	
1,4-Dichlorobenzene	106-46-7	2.57	< 2.57	
1,4-Dioxane	123-91-1	64.2	< 64.2	
2,2-Dichloropropane	594-20-7	2.57	< 2.57	
2-Butanone	78-93-3	12.8	< 12.8	
2-Chloroethyl vinyl ether	110-75-8	6.42	< 6.42	
2-Chlorotoluene	95-49-8	2.57	< 2.57	
2-Hexanone	591-78-6	6.42	< 6.42	
2-Nitropropane	79-46-9	6.42	< 6.42	
4-Chlorotoluene	106-43-4	2.57	< 2.57	
4-Isopropyltoluene	99-87-6	2.57	**2.66**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-002B
Client Sample ID: Mill Cr. Below 700 E. - Bed

Analyzed: 8/25/2011 1246h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.42	< 6.42	
Acetone	67-64-1	12.8	< 12.8	
Acetonitrile	75-05-8	6.42	< 6.42	
Acrolein	107-02-8	6.42	< 6.42	
Acrylonitrile	107-13-1	12.8	< 12.8	
Allyl chloride	107-05-1	6.42	< 6.42	
Benzene	71-43-2	2.57	< 2.57	
Benzyl chloride	100-44-7	6.42	< 6.42	
Bis(2-chloroisopropyl) ether	108-60-1	6.42	< 6.42	
Bromobenzene	108-86-1	2.57	< 2.57	
Bromochloromethane	74-97-5	2.57	< 2.57	
Bromodichloromethane	75-27-4	2.57	< 2.57	
Bromoform	75-25-2	2.57	< 2.57	
Bromomethane	74-83-9	6.42	< 6.42	
Butyl acetate	123-86-4	12.8	< 12.8	
Carbon disulfide	75-15-0	2.57	< 2.57	
Carbon tetrachloride	56-23-5	2.57	< 2.57	
Chlorobenzene	108-90-7	2.57	< 2.57	
Chloroethane	75-00-3	2.57	< 2.57	
Chloroform	67-66-3	2.57	< 2.57	
Chloromethane	74-87-3	6.42	< 6.42	
Chloroprene	126-99-8	2.57	< 2.57	
cis-1,2-Dichloroethene	156-59-2	2.57	< 2.57	
cis-1,3-Dichloropropene	10061-01-5	2.57	< 2.57	
Cyclohexane	110-82-7	2.57	< 2.57	
Cyclohexanone	108-94-1	64.2	< 64.2	
Dibromochloromethane	124-48-1	2.57	< 2.57	
Dibromomethane	74-95-3	2.57	< 2.57	
Dichlorodifluoromethane	75-71-8	2.57	< 2.57	
Ethyl acetate	141-78-6	12.8	< 12.8	
Ethyl ether	60-29-7	12.8	< 12.8	
Ethyl methacrylate	97-63-2	2.57	< 2.57	
Ethylbenzene	100-41-4	2.57	< 2.57	
Hexachlorobutadiene	87-68-3	2.57	< 2.57	
Iodomethane	74-88-4	6.42	< 6.42	
Isobutyl alcohol	78-83-1	128	< 128	
Isopropyl acetate	108-21-4	12.8	< 12.8	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-002B
Client Sample ID: Mill Cr. Below 700 E. - Bed

Analyzed: 8/25/2011 1246h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	51.4	< 51.4	
Isopropylbenzene	98-82-8	2.57	< 2.57	
m,p-Xylene	179601-23-1	2.57	< 2.57	
Methacrylonitrile	126-98-7	6.42	< 6.42	
Methyl Acetate	79-20-9	6.42	< 6.42	
Methyl methacrylate	80-62-6	6.42	< 6.42	
Methyl tert-butyl ether	1634-04-4	2.57	< 2.57	
Methylcyclohexane	108-87-2	2.57	< 2.57	
Methylene chloride	75-09-2	6.42	< 6.42	
n-Amyl acetate	628-63-7	12.8	< 12.8	
n-Butyl alcohol	71-36-3	128	< 128	
n-Butylbenzene	104-51-8	2.57	< 2.57	
n-Hexane	110-54-3	2.57	< 2.57	
n-Octane	111-65-9	2.57	< 2.57	
n-Propylbenzene	103-65-1	2.57	< 2.57	
Naphthalene	91-20-3	2.57	< 2.57	
o-Xylene	95-47-6	2.57	< 2.57	
Pentachloroethane	76-01-7	2.57	< 2.57	
Propionitrile	107-12-0	32.1	< 32.1	
Propyl acetate	109-60-4	12.8	< 12.8	
sec-Butylbenzene	135-98-8	2.57	< 2.57	
Styrene	100-42-5	2.57	< 2.57	
tert-Butyl alcohol	76-65-0	25.7	< 25.7	
tert-Butylbenzene	98-06-6	2.57	< 2.57	
Tetrachloroethene	127-18-4	2.57	< 2.57	
Tetrahydrofuran	109-99-9	2.57	< 2.57	
Toluene	108-88-3	2.57	**74.1**	
trans-1,2-Dichloroethene	156-60-5	2.57	< 2.57	
trans-1,3-Dichloropropene	10061-02-6	2.57	< 2.57	
trans-1,4-Dichloro-2-butene	110-57-6	2.57	< 2.57	
Trichloroethene	79-01-6	2.57	< 2.57	
Trichlorofluoromethane	75-69-4	2.57	< 2.57	
Vinyl acetate	108-05-4	12.8	< 12.8	
Vinyl chloride	75-01-4	1.28	< 1.28	
Xylenes, Total	1330-20-7	2.57	< 2.57	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**117**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**103**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-002B
Client Sample ID: Mill Cr. Below 700 E. - Bed

Analyzed: 8/25/2011 1246h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**119**	
Surr: Toluene-d8	2037-26-5	72-129	**101**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs. Those results can be found on pages 696 to 697.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-003B
Client Sample ID: Mill Cr. Below 700 E. - Bank
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h
Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0322h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.93	< 2.93	
1,1,1-Trichloroethane	71-55-6	2.93	< 2.93	
1,1,2,2-Tetrachloroethane	79-34-5	2.93	< 2.93	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.93	< 2.93	
1,1,2-Trichloroethane	79-00-5	2.93	< 2.93	
1,1-Dichloropropene	563-58-6	2.93	< 2.93	
1,1-Dichloroethane	75-34-3	2.93	< 2.93	
1,1-Dichloroethene	75-35-4	2.93	< 2.93	
1,2,3-Trichlorobenzene	87-61-6	2.93	< 2.93	
1,2,3-Trichloropropane	96-18-4	2.93	< 2.93	
1,2,3-Trimethylbenzene	526-73-8	2.93	< 2.93	
1,2,4-Trichlorobenzene	120-82-1	2.93	< 2.93	
1,2,4-Trimethylbenzene	95-63-6	2.93	< 2.93	
1,2-Dibromo-3-chloropropane	96-12-8	7.33	< 7.33	
1,2-Dibromoethane	106-93-4	2.93	< 2.93	
1,2-Dichlorobenzene	95-50-1	2.93	< 2.93	
1,2-Dichloroethane	107-06-2	2.93	< 2.93	
1,2-Dichloropropane	78-87-5	2.93	< 2.93	
1,3,5-Trimethylbenzene	108-67-8	2.93	< 2.93	
1,3-Dichlorobenzene	541-73-1	2.93	< 2.93	
1,3-Dichloropropane	142-28-9	2.93	< 2.93	
1,4-Dichlorobenzene	106-46-7	2.93	< 2.93	
1,4-Dioxane	123-91-1	73.3	< 73.3	
2,2-Dichloropropane	594-20-7	2.93	< 2.93	
2-Butanone	78-93-3	14.7	< 14.7	
2-Chloroethyl vinyl ether	110-75-8	7.33	< 7.33	
2-Chlorotoluene	95-49-8	2.93	< 2.93	
2-Hexanone	591-78-6	7.33	< 7.33	
2-Nitropropane	79-46-9	7.33	< 7.33	
4-Chlorotoluene	106-43-4	2.93	< 2.93	
4-Isopropyltoluene	99-87-6	2.93	< 2.93	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-003B
Client Sample ID: Mill Cr. Below 700 E. - Bank

Analyzed: 8/26/2011 0322h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	7.33	< 7.33	
Acetone	67-64-1	14.7	< 14.7	
Acetonitrile	75-05-8	7.33	< 7.33	
Acrolein	107-02-8	7.33	< 7.33	
Acrylonitrile	107-13-1	14.7	< 14.7	
Allyl chloride	107-05-1	7.33	< 7.33	
Benzene	71-43-2	2.93	< 2.93	
Benzyl chloride	100-44-7	7.33	< 7.33	
Bis(2-chloroisopropyl) ether	108-60-1	7.33	< 7.33	
Bromobenzene	108-86-1	2.93	< 2.93	
Bromochloromethane	74-97-5	2.93	< 2.93	
Bromodichloromethane	75-27-4	2.93	< 2.93	
Bromoform	75-25-2	2.93	< 2.93	
Bromomethane	74-83-9	7.33	< 7.33	
Butyl acetate	123-86-4	14.7	< 14.7	
Carbon disulfide	75-15-0	2.93	< 2.93	
Carbon tetrachloride	56-23-5	2.93	< 2.93	
Chlorobenzene	108-90-7	2.93	< 2.93	
Chloroethane	75-00-3	2.93	< 2.93	
Chloroform	67-66-3	2.93	< 2.93	
Chloromethane	74-87-3	7.33	< 7.33	
Chloroprene	126-99-8	2.93	< 2.93	
cis-1,2-Dichloroethene	156-59-2	2.93	< 2.93	
cis-1,3-Dichloropropene	10061-01-5	2.93	< 2.93	
Cyclohexane	110-82-7	2.93	< 2.93	
Cyclohexanone	108-94-1	73.3	< 73.3	
Dibromochloromethane	124-48-1	2.93	< 2.93	
Dibromomethane	74-95-3	2.93	< 2.93	
Dichlorodifluoromethane	75-71-8	2.93	< 2.93	
Ethyl acetate	141-78-6	14.7	< 14.7	
Ethyl ether	60-29-7	14.7	< 14.7	
Ethyl methacrylate	97-63-2	2.93	< 2.93	
Ethylbenzene	100-41-4	2.93	< 2.93	
Hexachlorobutadiene	87-68-3	2.93	< 2.93	
Iodomethane	74-88-4	7.33	< 7.33	
Isobutyl alcohol	78-83-1	147	< 147	
Isopropyl acetate	108-21-4	14.7	< 14.7	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-003B
Client Sample ID: Mill Cr. Below 700 E. - Bank

Analyzed: 8/26/2011 0322h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	58.7	< 58.7	
Isopropylbenzene	98-82-8	2.93	< 2.93	
m,p-Xylene	179601-23-1	2.93	< 2.93	
Methacrylonitrile	126-98-7	7.33	< 7.33	
Methyl Acetate	79-20-9	7.33	< 7.33	
Methyl methacrylate	80-62-6	7.33	< 7.33	
Methyl tert-butyl ether	1634-04-4	2.93	< 2.93	
Methylcyclohexane	108-87-2	2.93	< 2.93	
Methylene chloride	75-09-2	7.33	< 7.33	
n-Amyl acetate	628-63-7	14.7	< 14.7	
n-Butyl alcohol	71-36-3	147	< 147	
n-Butylbenzene	104-51-8	2.93	< 2.93	
n-Hexane	110-54-3	2.93	< 2.93	
n-Octane	111-65-9	2.93	< 2.93	
n-Propylbenzene	103-65-1	2.93	< 2.93	
Naphthalene	91-20-3	2.93	< 2.93	
o-Xylene	95-47-6	2.93	< 2.93	
Pentachloroethane	76-01-7	2.93	< 2.93	
Propionitrile	107-12-0	36.7	< 36.7	
Propyl acetate	109-60-4	14.7	< 14.7	
sec-Butylbenzene	135-98-8	2.93	< 2.93	
Styrene	100-42-5	2.93	< 2.93	
tert-Butyl alcohol	76-65-0	29.3	< 29.3	
tert-Butylbenzene	98-06-6	2.93	< 2.93	
Tetrachloroethene	127-18-4	2.93	< 2.93	
Tetrahydrofuran	109-99-9	2.93	< 2.93	
Toluene	108-88-3	2.93	< 2.93	
trans-1,2-Dichloroethene	156-60-5	2.93	< 2.93	
trans-1,3-Dichloropropene	10061-02-6	2.93	< 2.93	
trans-1,4-Dichloro-2-butene	110-57-6	2.93	< 2.93	
Trichloroethene	79-01-6	2.93	< 2.93	
Trichlorofluoromethane	75-69-4	2.93	< 2.93	
Vinyl acetate	108-05-4	14.7	< 14.7	
Vinyl chloride	75-01-4	1.47	< 1.47	
Xylenes, Total	1330-20-7	2.93	< 2.93	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**136**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**97.2**	

Lab Sample ID: 1108489-003B
Client Sample ID: Mill Cr. Below 700 E. - Bank

Analyzed: 8/26/2011 0322h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**112**	
Surr: Toluene-d8	2037-26-5	72-129	**98.3**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

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Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-004A
Client Sample ID: FB-1
Collection Date: 8/24/2011 0745h
Received Date: 8/24/2011 1745h

Contact: Galen Williams
Method: SW8260C

Analytical Results VOAs MBTEXN List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 0957h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Benzene	71-43-2	0.00100	< 0.00100	
Ethylbenzene	100-41-4	0.00200	< 0.00200	
Toluene	108-88-3	0.00200	< 0.00200	
Xylenes, Total	1330-20-7	0.00200	< 0.00200	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**113**	
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**97.1**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Laboratory Director

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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-005D
Client Sample ID: BD-1
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1016h
Units: µg/L
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Jose Rocha
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Lab Sample ID: 1108489-005D
Client Sample ID: BD-1

Analyzed: 8/25/2011 1016h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Jose Rocha
QA Officer

Lab Sample ID: 1108489-005D
Client Sample ID: BD-1

Analyzed: 8/25/2011 1016h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**111**	

Lab Sample ID: 1108489-005D
Client Sample ID: BD-1

Analyzed: 8/25/2011 1016h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**96.2**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
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ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-006B
Client Sample ID: BD-1 - Bed
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 1331h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.58	< 2.58	
1,1,1-Trichloroethane	71-55-6	2.58	< 2.58	
1,1,2,2-Tetrachloroethane	79-34-5	2.58	< 2.58	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.58	< 2.58	
1,1,2-Trichloroethane	79-00-5	2.58	< 2.58	
1,1-Dichloropropene	563-58-6	2.58	< 2.58	
1,1-Dichloroethane	75-34-3	2.58	< 2.58	
1,1-Dichloroethene	75-35-4	2.58	< 2.58	
1,2,3-Trichlorobenzene	87-61-6	2.58	< 2.58	
1,2,3-Trichloropropane	96-18-4	2.58	< 2.58	
1,2,3-Trimethylbenzene	526-73-8	2.58	< 2.58	
1,2,4-Trichlorobenzene	120-82-1	2.58	< 2.58	
1,2,4-Trimethylbenzene	95-63-6	2.58	< 2.58	
1,2-Dibromo-3-chloropropane	96-12-8	6.46	< 6.46	
1,2-Dibromoethane	106-93-4	2.58	< 2.58	
1,2-Dichlorobenzene	95-50-1	2.58	< 2.58	
1,2-Dichloroethane	107-06-2	2.58	< 2.58	
1,2-Dichloropropane	78-87-5	2.58	< 2.58	
1,3,5-Trimethylbenzene	108-67-8	2.58	< 2.58	
1,3-Dichlorobenzene	541-73-1	2.58	< 2.58	
1,3-Dichloropropane	142-28-9	2.58	< 2.58	
1,4-Dichlorobenzene	106-46-7	2.58	< 2.58	
1,4-Dioxane	123-91-1	64.6	< 64.6	
2,2-Dichloropropane	594-20-7	2.58	< 2.58	
2-Butanone	78-93-3	12.9	< 12.9	
2-Chloroethyl vinyl ether	110-75-8	6.46	< 6.46	
2-Chlorotoluene	95-49-8	2.58	< 2.58	
2-Hexanone	591-78-6	6.46	< 6.46	
2-Nitropropane	79-46-9	6.46	< 6.46	
4-Chlorotoluene	106-43-4	2.58	< 2.58	
4-Isopropyltoluene	99-87-6	2.58	< 2.58	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-006B
Client Sample ID: BD-1 - Bed

Analyzed: 8/25/2011 1331h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.46	< 6.46	
Acetone	67-64-1	12.9	< 12.9	
Acetonitrile	75-05-8	6.46	< 6.46	
Acrolein	107-02-8	6.46	< 6.46	
Acrylonitrile	107-13-1	12.9	< 12.9	
Allyl chloride	107-05-1	6.46	< 6.46	
Benzene	71-43-2	2.58	< 2.58	
Benzyl chloride	100-44-7	6.46	< 6.46	
Bis(2-chloroisopropyl) ether	108-60-1	6.46	< 6.46	
Bromobenzene	108-86-1	2.58	< 2.58	
Bromochloromethane	74-97-5	2.58	< 2.58	
Bromodichloromethane	75-27-4	2.58	< 2.58	
Bromoform	75-25-2	2.58	< 2.58	
Bromomethane	74-83-9	6.46	< 6.46	
Butyl acetate	123-86-4	12.9	< 12.9	
Carbon disulfide	75-15-0	2.58	< 2.58	
Carbon tetrachloride	56-23-5	2.58	< 2.58	
Chlorobenzene	108-90-7	2.58	< 2.58	
Chloroethane	75-00-3	2.58	< 2.58	
Chloroform	67-66-3	2.58	< 2.58	
Chloromethane	74-87-3	6.46	< 6.46	
Chloroprene	126-99-8	2.58	< 2.58	
cis-1,2-Dichloroethene	156-59-2	2.58	< 2.58	
cis-1,3-Dichloropropene	10061-01-5	2.58	< 2.58	
Cyclohexane	110-82-7	2.58	< 2.58	
Cyclohexanone	108-94-1	64.6	< 64.6	
Dibromochloromethane	124-48-1	2.58	< 2.58	
Dibromomethane	74-95-3	2.58	< 2.58	
Dichlorodifluoromethane	75-71-8	2.58	< 2.58	
Ethyl acetate	141-78-6	12.9	< 12.9	
Ethyl ether	60-29-7	12.9	< 12.9	
Ethyl methacrylate	97-63-2	2.58	< 2.58	
Ethylbenzene	100-41-4	2.58	< 2.58	
Hexachlorobutadiene	87-68-3	2.58	< 2.58	
Iodomethane	74-88-4	6.46	< 6.46	
Isobutyl alcohol	78-83-1	129	< 129	
Isopropyl acetate	108-21-4	12.9	< 12.9	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-006B
Client Sample ID: BD-1 - Bed

Analyzed: 8/25/2011 1331h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	51.7	< 51.7	
Isopropylbenzene	98-82-8	2.58	< 2.58	
m,p-Xylene	179601-23-1	2.58	< 2.58	
Methacrylonitrile	126-98-7	6.46	< 6.46	
Methyl Acetate	79-20-9	6.46	< 6.46	
Methyl methacrylate	80-62-6	6.46	< 6.46	
Methyl tert-butyl ether	1634-04-4	2.58	< 2.58	
Methylcyclohexane	108-87-2	2.58	< 2.58	
Methylene chloride	75-09-2	6.46	< 6.46	
n-Amyl acetate	628-63-7	12.9	< 12.9	
n-Butyl alcohol	71-36-3	129	< 129	
n-Butylbenzene	104-51-8	2.58	< 2.58	
n-Hexane	110-54-3	2.58	< 2.58	
n-Octane	111-65-9	2.58	< 2.58	
n-Propylbenzene	103-65-1	2.58	< 2.58	
Naphthalene	91-20-3	2.58	< 2.58	
o-Xylene	95-47-6	2.58	< 2.58	
Pentachloroethane	76-01-7	2.58	< 2.58	
Propionitrile	107-12-0	32.3	< 32.3	
Propyl acetate	109-60-4	12.9	< 12.9	
sec-Butylbenzene	135-98-8	2.58	< 2.58	
Styrene	100-42-5	2.58	< 2.58	
tert-Butyl alcohol	76-65-0	25.8	< 25.8	
tert-Butylbenzene	98-06-6	2.58	< 2.58	
Tetrachloroethene	127-18-4	2.58	< 2.58	
Tetrahydrofuran	109-99-9	2.58	< 2.58	
Toluene	108-88-3	2.58	< 2.58	
trans-1,2-Dichloroethene	156-60-5	2.58	< 2.58	
trans-1,3-Dichloropropene	10061-02-6	2.58	< 2.58	
trans-1,4-Dichloro-2-butene	110-57-6	2.58	< 2.58	
Trichloroethene	79-01-6	2.58	< 2.58	
Trichlorofluoromethane	75-69-4	2.58	< 2.58	
Vinyl acetate	108-05-4	12.9	< 12.9	
Vinyl chloride	75-01-4	1.29	< 1.29	
Xylenes, Total	1330-20-7	2.58	< 2.58	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**119**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**96.5**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-006B
Client Sample ID: BD-1 - Bed

Analyzed: 8/25/2011 1331h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**127**	
Surr: Toluene-d8	2037-26-5	72-129	**94.9**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-007B
Client Sample ID: BD-1 - Bank
Collection Date: 8/24/2011 0815h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0345h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.93	< 2.93	
1,1,1-Trichloroethane	71-55-6	2.93	< 2.93	
1,1,2,2-Tetrachloroethane	79-34-5	2.93	< 2.93	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.93	< 2.93	
1,1,2-Trichloroethane	79-00-5	2.93	< 2.93	
1,1-Dichloropropene	563-58-6	2.93	< 2.93	
1,1-Dichloroethane	75-34-3	2.93	< 2.93	
1,1-Dichloroethene	75-35-4	2.93	< 2.93	
1,2,3-Trichlorobenzene	87-61-6	2.93	< 2.93	
1,2,3-Trichloropropane	96-18-4	2.93	< 2.93	
1,2,3-Trimethylbenzene	526-73-8	2.93	< 2.93	
1,2,4-Trichlorobenzene	120-82-1	2.93	< 2.93	
1,2,4-Trimethylbenzene	95-63-6	2.93	< 2.93	
1,2-Dibromo-3-chloropropane	96-12-8	7.33	< 7.33	
1,2-Dibromoethane	106-93-4	2.93	< 2.93	
1,2-Dichlorobenzene	95-50-1	2.93	< 2.93	
1,2-Dichloroethane	107-06-2	2.93	< 2.93	
1,2-Dichloropropane	78-87-5	2.93	< 2.93	
1,3,5-Trimethylbenzene	108-67-8	2.93	< 2.93	
1,3-Dichlorobenzene	541-73-1	2.93	< 2.93	
1,3-Dichloropropane	142-28-9	2.93	< 2.93	
1,4-Dichlorobenzene	106-46-7	2.93	< 2.93	
1,4-Dioxane	123-91-1	73.3	< 73.3	
2,2-Dichloropropane	594-20-7	2.93	< 2.93	
2-Butanone	78-93-3	14.7	< 14.7	
2-Chloroethyl vinyl ether	110-75-8	7.33	< 7.33	
2-Chlorotoluene	95-49-8	2.93	< 2.93	
2-Hexanone	591-78-6	7.33	< 7.33	
2-Nitropropane	79-46-9	7.33	< 7.33	
4-Chlorotoluene	106-43-4	2.93	< 2.93	
4-Isopropyltoluene	99-87-6	2.93	< 2.93	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-007B
Client Sample ID: BD-1 - Bank

Analyzed: 8/26/2011 0345h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	7.33	< 7.33	
Acetone	67-64-1	14.7	< 14.7	
Acetonitrile	75-05-8	7.33	< 7.33	
Acrolein	107-02-8	7.33	< 7.33	
Acrylonitrile	107-13-1	14.7	< 14.7	
Allyl chloride	107-05-1	7.33	< 7.33	
Benzene	71-43-2	2.93	< 2.93	
Benzyl chloride	100-44-7	7.33	< 7.33	
Bis(2-chloroisopropyl) ether	108-60-1	7.33	< 7.33	
Bromobenzene	108-86-1	2.93	< 2.93	
Bromochloromethane	74-97-5	2.93	< 2.93	
Bromodichloromethane	75-27-4	2.93	< 2.93	
Bromoform	75-25-2	2.93	< 2.93	
Bromomethane	74-83-9	7.33	< 7.33	
Butyl acetate	123-86-4	14.7	< 14.7	
Carbon disulfide	75-15-0	2.93	< 2.93	
Carbon tetrachloride	56-23-5	2.93	< 2.93	
Chlorobenzene	108-90-7	2.93	< 2.93	
Chloroethane	75-00-3	2.93	< 2.93	
Chloroform	67-66-3	2.93	< 2.93	
Chloromethane	74-87-3	7.33	< 7.33	
Chloroprene	126-99-8	2.93	< 2.93	
cis-1,2-Dichloroethene	156-59-2	2.93	< 2.93	
cis-1,3-Dichloropropene	10061-01-5	2.93	< 2.93	
Cyclohexane	110-82-7	2.93	< 2.93	
Cyclohexanone	108-94-1	73.3	< 73.3	
Dibromochloromethane	124-48-1	2.93	< 2.93	
Dibromomethane	74-95-3	2.93	< 2.93	
Dichlorodifluoromethane	75-71-8	2.93	< 2.93	
Ethyl acetate	141-78-6	14.7	< 14.7	
Ethyl ether	60-29-7	14.7	< 14.7	
Ethyl methacrylate	97-63-2	2.93	< 2.93	
Ethylbenzene	100-41-4	2.93	< 2.93	
Hexachlorobutadiene	87-68-3	2.93	< 2.93	
Iodomethane	74-88-4	7.33	< 7.33	
Isobutyl alcohol	78-83-1	147	< 147	
Isopropyl acetate	108-21-4	14.7	< 14.7	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-007B
Client Sample ID: BD-1 - Bank

Analyzed: 8/26/2011 0345h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	58.6	< 58.6	
Isopropylbenzene	98-82-8	2.93	< 2.93	
m,p-Xylene	179601-23-1	2.93	< 2.93	
Methacrylonitrile	126-98-7	7.33	< 7.33	
Methyl Acetate	79-20-9	7.33	< 7.33	
Methyl methacrylate	80-62-6	7.33	< 7.33	
Methyl tert-butyl ether	1634-04-4	2.93	< 2.93	
Methylcyclohexane	108-87-2	2.93	< 2.93	
Methylene chloride	75-09-2	7.33	< 7.33	
n-Amyl acetate	628-63-7	14.7	< 14.7	
n-Butyl alcohol	71-36-3	147	< 147	
n-Butylbenzene	104-51-8	2.93	< 2.93	
n-Hexane	110-54-3	2.93	< 2.93	
n-Octane	111-65-9	2.93	< 2.93	
n-Propylbenzene	103-65-1	2.93	< 2.93	
Naphthalene	91-20-3	2.93	< 2.93	
o-Xylene	95-47-6	2.93	< 2.93	
Pentachloroethane	76-01-7	2.93	< 2.93	
Propionitrile	107-12-0	36.6	< 36.6	
Propyl acetate	109-60-4	14.7	< 14.7	
sec-Butylbenzene	135-98-8	2.93	< 2.93	
Styrene	100-42-5	2.93	< 2.93	
tert-Butyl alcohol	76-65-0	29.3	< 29.3	
tert-Butylbenzene	98-06-6	2.93	< 2.93	
Tetrachloroethene	127-18-4	2.93	< 2.93	
Tetrahydrofuran	109-99-9	2.93	< 2.93	
Toluene	108-88-3	2.93	< 2.93	
trans-1,2-Dichloroethene	156-60-5	2.93	< 2.93	
trans-1,3-Dichloropropene	10061-02-6	2.93	< 2.93	
trans-1,4-Dichloro-2-butene	110-57-6	2.93	< 2.93	
Trichloroethene	79-01-6	2.93	< 2.93	
Trichlorofluoromethane	75-69-4	2.93	< 2.93	
Vinyl acetate	108-05-4	14.7	< 14.7	
Vinyl chloride	75-01-4	1.47	< 1.47	
Xylenes, Total	1330-20-7	2.93	< 2.93	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**139**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**120**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-007B
Client Sample ID: BD-1 - Bank

Analyzed: 8/26/2011 0345h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**115**	
Surr: Toluene-d8	2037-26-5	72-129	**107**	

Internal standard areas were outside of the QC limits. Reanalysis yielded similar results indicating matrix interference.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-008D
Client Sample ID: EB-1
Collection Date: 8/24/2011 0905h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1035h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-008D
Client Sample ID: EB-1

Analyzed: 8/25/2011 1035h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-008D
Client Sample ID: EB-1

Analyzed: 8/25/2011 1035h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**119**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**115**	

Lab Sample ID: 1108489-008D
Client Sample ID: EB-1

Analyzed: 8/25/2011 1035h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**98.9**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-009A
Client Sample ID: TB-1
Collection Date: 8/24/2011 0910h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs MBTEXN List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1054h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Benzene	71-43-2	0.00100	< 0.00100	
Ethylbenzene	100-41-4	0.00200	< 0.00200	
Toluene	108-88-3	0.00200	< 0.00200	
Xylenes, Total	1330-20-7	0.00200	< 0.00200	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**113**	
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**97.2**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-010D
Client Sample ID: Mill Cr. Below Highland Drive
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1113h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Lab Sample ID: 1108489-010D
Client Sample ID: Mill Cr. Below Highland Drive

Analyzed: 8/25/2011 1113h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-010D
Client Sample ID: Mill Cr. Below Highland Drive

Analyzed: 8/25/2011 1113h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**120**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**115**	

Lab Sample ID: 1108489-010D
Client Sample ID: Mill Cr. Below Highland Drive

Analyzed: 8/25/2011 1113h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**113**	
Surr: Toluene-d8	2037-26-5	80-125	**97.7**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-011B
Client Sample ID: Mill Cr. Below Highland Drive - Bed
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 1415h
Units: µg/kg-dry
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.52	< 2.52	
1,1,1-Trichloroethane	71-55-6	2.52	< 2.52	
1,1,2,2-Tetrachloroethane	79-34-5	2.52	< 2.52	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.52	< 2.52	
1,1,2-Trichloroethane	79-00-5	2.52	< 2.52	
1,1-Dichloropropene	563-58-6	2.52	< 2.52	
1,1-Dichloroethane	75-34-3	2.52	< 2.52	
1,1-Dichloroethene	75-35-4	2.52	< 2.52	
1,2,3-Trichlorobenzene	87-61-6	2.52	< 2.52	
1,2,3-Trichloropropane	96-18-4	2.52	< 2.52	
1,2,3-Trimethylbenzene	526-73-8	2.52	< 2.52	
1,2,4-Trichlorobenzene	120-82-1	2.52	< 2.52	
1,2,4-Trimethylbenzene	95-63-6	2.52	< 2.52	
1,2-Dibromo-3-chloropropane	96-12-8	6.30	< 6.30	
1,2-Dibromoethane	106-93-4	2.52	< 2.52	
1,2-Dichlorobenzene	95-50-1	2.52	< 2.52	
1,2-Dichloroethane	107-06-2	2.52	< 2.52	
1,2-Dichloropropane	78-87-5	2.52	< 2.52	
1,3,5-Trimethylbenzene	108-67-8	2.52	< 2.52	
1,3-Dichlorobenzene	541-73-1	2.52	< 2.52	
1,3-Dichloropropane	142-28-9	2.52	< 2.52	
1,4-Dichlorobenzene	106-46-7	2.52	< 2.52	
1,4-Dioxane	123-91-1	63.0	< 63.0	
2,2-Dichloropropane	594-20-7	2.52	< 2.52	
2-Butanone	78-93-3	12.6	< 12.6	
2-Chloroethyl vinyl ether	110-75-8	6.30	< 6.30	
2-Chlorotoluene	95-49-8	2.52	< 2.52	
2-Hexanone	591-78-6	6.30	< 6.30	
2-Nitropropane	79-46-9	6.30	< 6.30	
4-Chlorotoluene	106-43-4	2.52	< 2.52	
4-Isopropyltoluene	99-87-6	2.52	< 2.52	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-011B
Client Sample ID: Mill Cr. Below Highland Drive - Bed

Analyzed: 8/25/2011 1415h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.30	< 6.30	
Acetone	67-64-1	12.6	< 12.6	
Acetonitrile	75-05-8	6.30	< 6.30	
Acrolein	107-02-8	6.30	< 6.30	
Acrylonitrile	107-13-1	12.6	< 12.6	
Allyl chloride	107-05-1	6.30	< 6.30	
Benzene	71-43-2	2.52	< 2.52	
Benzyl chloride	100-44-7	6.30	< 6.30	
Bis(2-chloroisopropyl) ether	108-60-1	6.30	< 6.30	
Bromobenzene	108-86-1	2.52	< 2.52	
Bromochloromethane	74-97-5	2.52	< 2.52	
Bromodichloromethane	75-27-4	2.52	< 2.52	
Bromoform	75-25-2	2.52	< 2.52	
Bromomethane	74-83-9	6.30	< 6.30	
Butyl acetate	123-86-4	12.6	< 12.6	
Carbon disulfide	75-15-0	2.52	< 2.52	
Carbon tetrachloride	56-23-5	2.52	< 2.52	
Chlorobenzene	108-90-7	2.52	< 2.52	
Chloroethane	75-00-3	2.52	< 2.52	
Chloroform	67-66-3	2.52	< 2.52	
Chloromethane	74-87-3	6.30	< 6.30	
Chloroprene	126-99-8	2.52	< 2.52	
cis-1,2-Dichloroethene	156-59-2	2.52	< 2.52	
cis-1,3-Dichloropropene	10061-01-5	2.52	< 2.52	
Cyclohexane	110-82-7	2.52	< 2.52	
Cyclohexanone	108-94-1	63.0	< 63.0	
Dibromochloromethane	124-48-1	2.52	< 2.52	
Dibromomethane	74-95-3	2.52	< 2.52	
Dichlorodifluoromethane	75-71-8	2.52	< 2.52	
Ethyl acetate	141-78-6	12.6	< 12.6	
Ethyl ether	60-29-7	12.6	< 12.6	
Ethyl methacrylate	97-63-2	2.52	< 2.52	
Ethylbenzene	100-41-4	2.52	< 2.52	
Hexachlorobutadiene	87-68-3	2.52	< 2.52	
Iodomethane	74-88-4	6.30	< 6.30	
Isobutyl alcohol	78-83-1	126	< 126	
Isopropyl acetate	108-21-4	12.6	< 12.6	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-011B
Client Sample ID: Mill Cr. Below Highland Drive - Bed

Analyzed: 8/25/2011 1415h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	50.4	< 50.4	
Isopropylbenzene	98-82-8	2.52	< 2.52	
m,p-Xylene	179601-23-1	2.52	< 2.52	
Methacrylonitrile	126-98-7	6.30	< 6.30	
Methyl Acetate	79-20-9	6.30	< 6.30	
Methyl methacrylate	80-62-6	6.30	< 6.30	
Methyl tert-butyl ether	1634-04-4	2.52	< 2.52	
Methylcyclohexane	108-87-2	2.52	< 2.52	
Methylene chloride	75-09-2	6.30	< 6.30	
n-Amyl acetate	628-63-7	12.6	< 12.6	
n-Butyl alcohol	71-36-3	126	< 126	
n-Butylbenzene	104-51-8	2.52	< 2.52	
n-Hexane	110-54-3	2.52	< 2.52	
n-Octane	111-65-9	2.52	< 2.52	
n-Propylbenzene	103-65-1	2.52	< 2.52	
Naphthalene	91-20-3	2.52	< 2.52	
o-Xylene	95-47-6	2.52	< 2.52	
Pentachloroethane	76-01-7	2.52	< 2.52	
Propionitrile	107-12-0	31.5	< 31.5	
Propyl acetate	109-60-4	12.6	< 12.6	
sec-Butylbenzene	135-98-8	2.52	< 2.52	
Styrene	100-42-5	2.52	< 2.52	
tert-Butyl alcohol	76-65-0	25.2	< 25.2	
tert-Butylbenzene	98-06-6	2.52	< 2.52	
Tetrachloroethene	127-18-4	2.52	< 2.52	
Tetrahydrofuran	109-99-9	2.52	< 2.52	
Toluene	108-88-3	2.52	< 2.52	
trans-1,2-Dichloroethene	156-60-5	2.52	< 2.52	
trans-1,3-Dichloropropene	10061-02-6	2.52	< 2.52	
trans-1,4-Dichloro-2-butene	110-57-6	2.52	< 2.52	
Trichloroethene	79-01-6	2.52	< 2.52	
Trichlorofluoromethane	75-69-4	2.52	< 2.52	
Vinyl acetate	108-05-4	12.6	< 12.6	
Vinyl chloride	75-01-4	1.26	< 1.26	
Xylenes, Total	1330-20-7	2.52	< 2.52	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**93.3**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-011B
Client Sample ID: Mill Cr. Below Highland Drive - Bed

Analyzed: 8/25/2011 1415h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**126**	
Surr: Toluene-d8	2037-26-5	72-129	**95.6**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-012B
Client Sample ID: Mill Cr. Below Highland Drive - Bank
Collection Date: 8/24/2011 0950h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0407h
Units: µg/kg-dry
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.72	< 2.72	
1,1,1-Trichloroethane	71-55-6	2.72	< 2.72	
1,1,2,2-Tetrachloroethane	79-34-5	2.72	< 2.72	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.72	< 2.72	
1,1,2-Trichloroethane	79-00-5	2.72	< 2.72	
1,1-Dichloropropene	563-58-6	2.72	< 2.72	
1,1-Dichloroethane	75-34-3	2.72	< 2.72	
1,1-Dichloroethene	75-35-4	2.72	< 2.72	
1,2,3-Trichlorobenzene	87-61-6	2.72	< 2.72	
1,2,3-Trichloropropane	96-18-4	2.72	< 2.72	
1,2,3-Trimethylbenzene	526-73-8	2.72	< 2.72	
1,2,4-Trichlorobenzene	120-82-1	2.72	< 2.72	
1,2,4-Trimethylbenzene	95-63-6	2.72	< 2.72	
1,2-Dibromo-3-chloropropane	96-12-8	6.81	< 6.81	
1,2-Dibromoethane	106-93-4	2.72	< 2.72	
1,2-Dichlorobenzene	95-50-1	2.72	< 2.72	
1,2-Dichloroethane	107-06-2	2.72	< 2.72	
1,2-Dichloropropane	78-87-5	2.72	< 2.72	
1,3,5-Trimethylbenzene	108-67-8	2.72	< 2.72	
1,3-Dichlorobenzene	541-73-1	2.72	< 2.72	
1,3-Dichloropropane	142-28-9	2.72	< 2.72	
1,4-Dichlorobenzene	106-46-7	2.72	< 2.72	
1,4-Dioxane	123-91-1	68.1	< 68.1	
2,2-Dichloropropane	594-20-7	2.72	< 2.72	
2-Butanone	78-93-3	13.6	< 13.6	
2-Chloroethyl vinyl ether	110-75-8	6.81	< 6.81	
2-Chlorotoluene	95-49-8	2.72	< 2.72	
2-Hexanone	591-78-6	6.81	< 6.81	
2-Nitropropane	79-46-9	6.81	< 6.81	
4-Chlorotoluene	106-43-4	2.72	< 2.72	
4-Isopropyltoluene	99-87-6	2.72	**17.6**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-012B
Client Sample ID: Mill Cr. Below Highland Drive - Bank

Analyzed: 8/26/2011 0407h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.81	< 6.81	
Acetone	67-64-1	13.6	**23.0**	
Acetonitrile	75-05-8	6.81	< 6.81	
Acrolein	107-02-8	6.81	< 6.81	
Acrylonitrile	107-13-1	13.6	< 13.6	
Allyl chloride	107-05-1	6.81	< 6.81	
Benzene	71-43-2	2.72	< 2.72	
Benzyl chloride	100-44-7	6.81	< 6.81	
Bis(2-chloroisopropyl) ether	108-60-1	6.81	< 6.81	
Bromobenzene	108-86-1	2.72	< 2.72	
Bromochloromethane	74-97-5	2.72	< 2.72	
Bromodichloromethane	75-27-4	2.72	< 2.72	
Bromoform	75-25-2	2.72	< 2.72	
Bromomethane	74-83-9	6.81	< 6.81	
Butyl acetate	123-86-4	13.6	< 13.6	
Carbon disulfide	75-15-0	2.72	< 2.72	
Carbon tetrachloride	56-23-5	2.72	< 2.72	
Chlorobenzene	108-90-7	2.72	< 2.72	
Chloroethane	75-00-3	2.72	< 2.72	
Chloroform	67-66-3	2.72	< 2.72	
Chloromethane	74-87-3	6.81	< 6.81	
Chloroprene	126-99-8	2.72	< 2.72	
cis-1,2-Dichloroethene	156-59-2	2.72	< 2.72	
cis-1,3-Dichloropropene	10061-01-5	2.72	< 2.72	
Cyclohexane	110-82-7	2.72	< 2.72	
Cyclohexanone	108-94-1	68.1	< 68.1	
Dibromochloromethane	124-48-1	2.72	< 2.72	
Dibromomethane	74-95-3	2.72	< 2.72	
Dichlorodifluoromethane	75-71-8	2.72	< 2.72	
Ethyl acetate	141-78-6	13.6	< 13.6	
Ethyl ether	60-29-7	13.6	< 13.6	
Ethyl methacrylate	97-63-2	2.72	< 2.72	
Ethylbenzene	100-41-4	2.72	< 2.72	
Hexachlorobutadiene	87-68-3	2.72	< 2.72	
Iodomethane	74-88-4	6.81	< 6.81	
Isobutyl alcohol	78-83-1	136	< 136	
Isopropyl acetate	108-21-4	13.6	< 13.6	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-012B
Client Sample ID: Mill Cr. Below Highland Drive - Bank

Analyzed: 8/26/2011 0407h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	54.5	< 54.5	
Isopropylbenzene	98-82-8	2.72	< 2.72	
m,p-Xylene	179601-23-1	2.72	< 2.72	
Methacrylonitrile	126-98-7	6.81	< 6.81	
Methyl Acetate	79-20-9	6.81	< 6.81	
Methyl methacrylate	80-62-6	6.81	< 6.81	
Methyl tert-butyl ether	1634-04-4	2.72	< 2.72	
Methylcyclohexane	108-87-2	2.72	< 2.72	
Methylene chloride	75-09-2	6.81	< 6.81	
n-Amyl acetate	628-63-7	13.6	< 13.6	
n-Butyl alcohol	71-36-3	136	< 136	
n-Butylbenzene	104-51-8	2.72	< 2.72	
n-Hexane	110-54-3	2.72	< 2.72	
n-Octane	111-65-9	2.72	< 2.72	
n-Propylbenzene	103-65-1	2.72	< 2.72	
Naphthalene	91-20-3	2.72	< 2.72	
o-Xylene	95-47-6	2.72	**4.00**	
Pentachloroethane	76-01-7	2.72	< 2.72	
Propionitrile	107-12-0	34.1	< 34.1	
Propyl acetate	109-60-4	13.6	< 13.6	
sec-Butylbenzene	135-98-8	2.72	< 2.72	
Styrene	100-42-5	2.72	< 2.72	
tert-Butyl alcohol	76-65-0	27.2	< 27.2	
tert-Butylbenzene	98-06-6	2.72	< 2.72	
Tetrachloroethene	127-18-4	2.72	< 2.72	
Tetrahydrofuran	109-99-9	2.72	< 2.72	
Toluene	108-88-3	2.72	< 2.72	
trans-1,2-Dichloroethene	156-60-5	2.72	< 2.72	
trans-1,3-Dichloropropene	10061-02-6	2.72	< 2.72	
trans-1,4-Dichloro-2-butene	110-57-6	2.72	< 2.72	
Trichloroethene	79-01-6	2.72	< 2.72	
Trichlorofluoromethane	75-69-4	2.72	< 2.72	
Vinyl acetate	108-05-4	13.6	< 13.6	
Vinyl chloride	75-01-4	1.36	< 1.36	
Xylenes, Total	1330-20-7	2.72	**4.00**	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**132**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**118**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-012B
Client Sample ID: Mill Cr. Below Highland Drive - Bank

Analyzed: 8/26/2011 0407h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**109**	
Surr: Toluene-d8	2037-26-5	72-129	**111**	

Internal standard areas were outside of the QC limits. Reanalysis yielded similar results indicating matrix interference.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs. Those results can be found on pages 698 to 701.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-013D
Client Sample ID: City Cr. Below N. Cyn. Loop
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1132h
Units: µg/L
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-013D
Client Sample ID: City Cr. Below N. Cyn. Loop

Analyzed: 8/25/2011 1132h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-013D
Client Sample ID: City Cr. Below N. Cyn. Loop

Analyzed: 8/25/2011 1132h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**115**	

Lab Sample ID: 1108489-013D
Client Sample ID: City Cr. Below N. Cyn. Loop

Analyzed: 8/25/2011 1132h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**97.9**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-014B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0429h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.24	< 2.24	
1,1,1-Trichloroethane	71-55-6	2.24	< 2.24	
1,1,2,2-Tetrachloroethane	79-34-5	2.24	< 2.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.24	< 2.24	
1,1,2-Trichloroethane	79-00-5	2.24	< 2.24	
1,1-Dichloropropene	563-58-6	2.24	< 2.24	
1,1-Dichloroethane	75-34-3	2.24	< 2.24	
1,1-Dichloroethene	75-35-4	2.24	< 2.24	
1,2,3-Trichlorobenzene	87-61-6	2.24	< 2.24	
1,2,3-Trichloropropane	96-18-4	2.24	< 2.24	
1,2,3-Trimethylbenzene	526-73-8	2.24	< 2.24	
1,2,4-Trichlorobenzene	120-82-1	2.24	< 2.24	
1,2,4-Trimethylbenzene	95-63-6	2.24	< 2.24	
1,2-Dibromo-3-chloropropane	96-12-8	5.60	< 5.60	
1,2-Dibromoethane	106-93-4	2.24	< 2.24	
1,2-Dichlorobenzene	95-50-1	2.24	< 2.24	
1,2-Dichloroethane	107-06-2	2.24	< 2.24	
1,2-Dichloropropane	78-87-5	2.24	< 2.24	
1,3,5-Trimethylbenzene	108-67-8	2.24	< 2.24	
1,3-Dichlorobenzene	541-73-1	2.24	< 2.24	
1,3-Dichloropropane	142-28-9	2.24	< 2.24	
1,4-Dichlorobenzene	106-46-7	2.24	< 2.24	
1,4-Dioxane	123-91-1	56.0	< 56.0	
2,2-Dichloropropane	594-20-7	2.24	< 2.24	
2-Butanone	78-93-3	11.2	< 11.2	
2-Chloroethyl vinyl ether	110-75-8	5.60	< 5.60	
2-Chlorotoluene	95-49-8	2.24	< 2.24	
2-Hexanone	591-78-6	5.60	< 5.60	
2-Nitropropane	79-46-9	5.60	< 5.60	
4-Chlorotoluene	106-43-4	2.24	< 2.24	
4-Isopropyltoluene	99-87-6	2.24	< 2.24	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-014B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed

Analyzed: 8/26/2011 0429h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.60	< 5.60	
Acetone	67-64-1	11.2	< 11.2	
Acetonitrile	75-05-8	5.60	< 5.60	
Acrolein	107-02-8	5.60	< 5.60	
Acrylonitrile	107-13-1	11.2	< 11.2	
Allyl chloride	107-05-1	5.60	< 5.60	
Benzene	71-43-2	2.24	< 2.24	
Benzyl chloride	100-44-7	5.60	< 5.60	
Bis(2-chloroisopropyl) ether	108-60-1	5.60	< 5.60	
Bromobenzene	108-86-1	2.24	< 2.24	
Bromochloromethane	74-97-5	2.24	< 2.24	
Bromodichloromethane	75-27-4	2.24	< 2.24	
Bromoform	75-25-2	2.24	< 2.24	
Bromomethane	74-83-9	5.60	< 5.60	
Butyl acetate	123-86-4	11.2	< 11.2	
Carbon disulfide	75-15-0	2.24	< 2.24	
Carbon tetrachloride	56-23-5	2.24	< 2.24	
Chlorobenzene	108-90-7	2.24	< 2.24	
Chloroethane	75-00-3	2.24	< 2.24	
Chloroform	67-66-3	2.24	< 2.24	
Chloromethane	74-87-3	5.60	< 5.60	
Chloroprene	126-99-8	2.24	< 2.24	
cis-1,2-Dichloroethene	156-59-2	2.24	< 2.24	
cis-1,3-Dichloropropene	10061-01-5	2.24	< 2.24	
Cyclohexane	110-82-7	2.24	< 2.24	
Cyclohexanone	108-94-1	56.0	< 56.0	
Dibromochloromethane	124-48-1	2.24	< 2.24	
Dibromomethane	74-95-3	2.24	< 2.24	
Dichlorodifluoromethane	75-71-8	2.24	< 2.24	
Ethyl acetate	141-78-6	11.2	< 11.2	
Ethyl ether	60-29-7	11.2	< 11.2	
Ethyl methacrylate	97-63-2	2.24	< 2.24	
Ethylbenzene	100-41-4	2.24	< 2.24	
Hexachlorobutadiene	87-68-3	2.24	< 2.24	
Iodomethane	74-88-4	5.60	< 5.60	
Isobutyl alcohol	78-83-1	112	< 112	
Isopropyl acetate	108-21-4	11.2	< 11.2	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-014B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed

Analyzed: 8/26/2011 0429h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	44.8	< 44.8	
Isopropylbenzene	98-82-8	2.24	< 2.24	
m,p-Xylene	179601-23-1	2.24	< 2.24	
Methacrylonitrile	126-98-7	5.60	< 5.60	
Methyl Acetate	79-20-9	5.60	< 5.60	
Methyl methacrylate	80-62-6	5.60	< 5.60	
Methyl tert-butyl ether	1634-04-4	2.24	< 2.24	
Methylcyclohexane	108-87-2	2.24	< 2.24	
Methylene chloride	75-09-2	5.60	< 5.60	
n-Amyl acetate	628-63-7	11.2	< 11.2	
n-Butyl alcohol	71-36-3	112	< 112	
n-Butylbenzene	104-51-8	2.24	< 2.24	
n-Hexane	110-54-3	2.24	< 2.24	
n-Octane	111-65-9	2.24	< 2.24	
n-Propylbenzene	103-65-1	2.24	< 2.24	
Naphthalene	91-20-3	2.24	< 2.24	
o-Xylene	95-47-6	2.24	< 2.24	
Pentachloroethane	76-01-7	2.24	< 2.24	
Propionitrile	107-12-0	28.0	< 28.0	
Propyl acetate	109-60-4	11.2	< 11.2	
sec-Butylbenzene	135-98-8	2.24	< 2.24	
Styrene	100-42-5	2.24	< 2.24	
tert-Butyl alcohol	76-65-0	22.4	< 22.4	
tert-Butylbenzene	98-06-6	2.24	< 2.24	
Tetrachloroethene	127-18-4	2.24	< 2.24	
Tetrahydrofuran	109-99-9	2.24	< 2.24	
Toluene	108-88-3	2.24	< 2.24	
trans-1,2-Dichloroethene	156-60-5	2.24	< 2.24	
trans-1,3-Dichloropropene	10061-02-6	2.24	< 2.24	
trans-1,4-Dichloro-2-butene	110-57-6	2.24	< 2.24	
Trichloroethene	79-01-6	2.24	< 2.24	
Trichlorofluoromethane	75-69-4	2.24	< 2.24	
Vinyl acetate	108-05-4	11.2	< 11.2	
Vinyl chloride	75-01-4	1.12	< 1.12	
Xylenes, Total	1330-20-7	2.24	< 2.24	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**130**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**97.9**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-014B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bed

Analyzed: 8/26/2011 0429h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**110**	
Surr: Toluene-d8	2037-26-5	72-129	**99.2**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-015B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank
Collection Date: 8/24/2011 1350h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 1522h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.79	< 2.79	
1,1,1-Trichloroethane	71-55-6	2.79	< 2.79	
1,1,2,2-Tetrachloroethane	79-34-5	2.79	< 2.79	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.79	< 2.79	
1,1,2-Trichloroethane	79-00-5	2.79	< 2.79	
1,1-Dichloropropene	563-58-6	2.79	< 2.79	
1,1-Dichloroethane	75-34-3	2.79	< 2.79	
1,1-Dichloroethene	75-35-4	2.79	< 2.79	
1,2,3-Trichlorobenzene	87-61-6	2.79	< 2.79	
1,2,3-Trichloropropane	96-18-4	2.79	< 2.79	
1,2,3-Trimethylbenzene	526-73-8	2.79	< 2.79	
1,2,4-Trichlorobenzene	120-82-1	2.79	< 2.79	
1,2,4-Trimethylbenzene	95-63-6	2.79	< 2.79	
1,2-Dibromo-3-chloropropane	96-12-8	6.98	< 6.98	
1,2-Dibromoethane	106-93-4	2.79	< 2.79	
1,2-Dichlorobenzene	95-50-1	2.79	< 2.79	
1,2-Dichloroethane	107-06-2	2.79	< 2.79	
1,2-Dichloropropane	78-87-5	2.79	< 2.79	
1,3,5-Trimethylbenzene	108-67-8	2.79	< 2.79	
1,3-Dichlorobenzene	541-73-1	2.79	< 2.79	
1,3-Dichloropropane	142-28-9	2.79	< 2.79	
1,4-Dichlorobenzene	106-46-7	2.79	< 2.79	
1,4-Dioxane	123-91-1	69.8	< 69.8	
2,2-Dichloropropane	594-20-7	2.79	< 2.79	
2-Butanone	78-93-3	14.0	< 14.0	
2-Chloroethyl vinyl ether	110-75-8	6.98	< 6.98	
2-Chlorotoluene	95-49-8	2.79	< 2.79	
2-Hexanone	591-78-6	6.98	< 6.98	
2-Nitropropane	79-46-9	6.98	< 6.98	
4-Chlorotoluene	106-43-4	2.79	< 2.79	
4-Isopropyltoluene	99-87-6	2.79	< 2.79	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-015B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank

Analyzed: 8/25/2011 1522h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.98	< 6.98	
Acetone	67-64-1	14.0	< 14.0	
Acetonitrile	75-05-8	6.98	< 6.98	
Acrolein	107-02-8	6.98	< 6.98	
Acrylonitrile	107-13-1	14.0	< 14.0	
Allyl chloride	107-05-1	6.98	< 6.98	
Benzene	71-43-2	2.79	< 2.79	
Benzyl chloride	100-44-7	6.98	< 6.98	
Bis(2-chloroisopropyl) ether	108-60-1	6.98	< 6.98	
Bromobenzene	108-86-1	2.79	< 2.79	
Bromochloromethane	74-97-5	2.79	< 2.79	
Bromodichloromethane	75-27-4	2.79	< 2.79	
Bromoform	75-25-2	2.79	< 2.79	
Bromomethane	74-83-9	6.98	< 6.98	
Butyl acetate	123-86-4	14.0	< 14.0	
Carbon disulfide	75-15-0	2.79	< 2.79	
Carbon tetrachloride	56-23-5	2.79	< 2.79	
Chlorobenzene	108-90-7	2.79	< 2.79	
Chloroethane	75-00-3	2.79	< 2.79	
Chloroform	67-66-3	2.79	< 2.79	
Chloromethane	74-87-3	6.98	< 6.98	
Chloroprene	126-99-8	2.79	< 2.79	
cis-1,2-Dichloroethene	156-59-2	2.79	< 2.79	
cis-1,3-Dichloropropene	10061-01-5	2.79	< 2.79	
Cyclohexane	110-82-7	2.79	< 2.79	
Cyclohexanone	108-94-1	69.8	< 69.8	
Dibromochloromethane	124-48-1	2.79	< 2.79	
Dibromomethane	74-95-3	2.79	< 2.79	
Dichlorodifluoromethane	75-71-8	2.79	< 2.79	
Ethyl acetate	141-78-6	14.0	< 14.0	
Ethyl ether	60-29-7	14.0	< 14.0	
Ethyl methacrylate	97-63-2	2.79	< 2.79	
Ethylbenzene	100-41-4	2.79	< 2.79	
Hexachlorobutadiene	87-68-3	2.79	< 2.79	
Iodomethane	74-88-4	6.98	< 6.98	
Isobutyl alcohol	78-83-1	140	< 140	
Isopropyl acetate	108-21-4	14.0	< 14.0	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-015B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank

Analyzed: 8/25/2011 1522h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	55.8	< 55.8	
Isopropylbenzene	98-82-8	2.79	< 2.79	
m,p-Xylene	179601-23-1	2.79	< 2.79	
Methacrylonitrile	126-98-7	6.98	< 6.98	
Methyl Acetate	79-20-9	6.98	< 6.98	
Methyl methacrylate	80-62-6	6.98	< 6.98	
Methyl tert-butyl ether	1634-04-4	2.79	< 2.79	
Methylcyclohexane	108-87-2	2.79	< 2.79	
Methylene chloride	75-09-2	6.98	< 6.98	
n-Amyl acetate	628-63-7	14.0	< 14.0	
n-Butyl alcohol	71-36-3	140	< 140	
n-Butylbenzene	104-51-8	2.79	< 2.79	
n-Hexane	110-54-3	2.79	< 2.79	
n-Octane	111-65-9	2.79	< 2.79	
n-Propylbenzene	103-65-1	2.79	< 2.79	
Naphthalene	91-20-3	2.79	< 2.79	
o-Xylene	95-47-6	2.79	< 2.79	
Pentachloroethane	76-01-7	2.79	< 2.79	
Propionitrile	107-12-0	34.9	< 34.9	
Propyl acetate	109-60-4	14.0	< 14.0	
sec-Butylbenzene	135-98-8	2.79	< 2.79	
Styrene	100-42-5	2.79	< 2.79	
tert-Butyl alcohol	76-65-0	27.9	< 27.9	
tert-Butylbenzene	98-06-6	2.79	< 2.79	
Tetrachloroethene	127-18-4	2.79	< 2.79	
Tetrahydrofuran	109-99-9	2.79	< 2.79	
Toluene	108-88-3	2.79	< 2.79	
trans-1,2-Dichloroethene	156-60-5	2.79	< 2.79	
trans-1,3-Dichloropropene	10061-02-6	2.79	< 2.79	
trans-1,4-Dichloro-2-butene	110-57-6	2.79	< 2.79	
Trichloroethene	79-01-6	2.79	< 2.79	
Trichlorofluoromethane	75-69-4	2.79	< 2.79	
Vinyl acetate	108-05-4	14.0	< 14.0	
Vinyl chloride	75-01-4	1.40	< 1.40	
Xylenes, Total	1330-20-7	2.79	< 2.79	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**122**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**97.5**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-015B
Client Sample ID: City Cr. Below N. Cyn. Loop - Bank

Analyzed: 8/25/2011 1522h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**118**	
Surr: Toluene-d8	2037-26-5	72-129	**97.2**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-016D
Client Sample ID: City Cr. Near Cyn. Entrance Gate
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1151h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-016D
Client Sample ID: City Cr. Near Cyn. Entrance Gate

Analyzed: 8/25/2011 1151h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-016D
Client Sample ID: City Cr. Near Cyn. Entrance Gate

Analyzed: 8/25/2011 1151h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**120**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**114**	

Lab Sample ID: 1108489-016D
Client Sample ID: City Cr. Near Cyn. Entrance Gate

Analyzed: 8/25/2011 1151h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**113**	
Surr: Toluene-d8	2037-26-5	80-125	**96.5**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-017B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 1544h
Units: µg/kg-dry
Dilution Factor: 1

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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.53	< 2.53	
1,1,1-Trichloroethane	71-55-6	2.53	< 2.53	
1,1,2,2-Tetrachloroethane	79-34-5	2.53	< 2.53	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.53	< 2.53	
1,1,2-Trichloroethane	79-00-5	2.53	< 2.53	
1,1-Dichloropropene	563-58-6	2.53	< 2.53	
1,1-Dichloroethane	75-34-3	2.53	< 2.53	
1,1-Dichloroethene	75-35-4	2.53	< 2.53	
1,2,3-Trichlorobenzene	87-61-6	2.53	< 2.53	
1,2,3-Trichloropropane	96-18-4	2.53	< 2.53	
1,2,3-Trimethylbenzene	526-73-8	2.53	< 2.53	
1,2,4-Trichlorobenzene	120-82-1	2.53	< 2.53	
1,2,4-Trimethylbenzene	95-63-6	2.53	< 2.53	
1,2-Dibromo-3-chloropropane	96-12-8	6.31	< 6.31	
1,2-Dibromoethane	106-93-4	2.53	< 2.53	
1,2-Dichlorobenzene	95-50-1	2.53	< 2.53	
1,2-Dichloroethane	107-06-2	2.53	< 2.53	
1,2-Dichloropropane	78-87-5	2.53	< 2.53	
1,3,5-Trimethylbenzene	108-67-8	2.53	< 2.53	
1,3-Dichlorobenzene	541-73-1	2.53	< 2.53	
1,3-Dichloropropane	142-28-9	2.53	< 2.53	
1,4-Dichlorobenzene	106-46-7	2.53	< 2.53	
1,4-Dioxane	123-91-1	63.1	< 63.1	
2,2-Dichloropropane	594-20-7	2.53	< 2.53	
2-Butanone	78-93-3	12.6	< 12.6	
2-Chloroethyl vinyl ether	110-75-8	6.31	< 6.31	
2-Chlorotoluene	95-49-8	2.53	< 2.53	
2-Hexanone	591-78-6	6.31	< 6.31	
2-Nitropropane	79-46-9	6.31	< 6.31	
4-Chlorotoluene	106-43-4	2.53	< 2.53	
4-Isopropyltoluene	99-87-6	2.53	**2.54**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-017B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed

Analyzed: 8/25/2011 1544h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.31	< 6.31	
Acetone	67-64-1	12.6	< 12.6	
Acetonitrile	75-05-8	6.31	< 6.31	
Acrolein	107-02-8	6.31	< 6.31	
Acrylonitrile	107-13-1	12.6	< 12.6	
Allyl chloride	107-05-1	6.31	< 6.31	
Benzene	71-43-2	2.53	< 2.53	
Benzyl chloride	100-44-7	6.31	< 6.31	
Bis(2-chloroisopropyl) ether	108-60-1	6.31	< 6.31	
Bromobenzene	108-86-1	2.53	< 2.53	
Bromochloromethane	74-97-5	2.53	< 2.53	
Bromodichloromethane	75-27-4	2.53	< 2.53	
Bromoform	75-25-2	2.53	< 2.53	
Bromomethane	74-83-9	6.31	< 6.31	
Butyl acetate	123-86-4	12.6	< 12.6	
Carbon disulfide	75-15-0	2.53	< 2.53	
Carbon tetrachloride	56-23-5	2.53	< 2.53	
Chlorobenzene	108-90-7	2.53	< 2.53	
Chloroethane	75-00-3	2.53	< 2.53	
Chloroform	67-66-3	2.53	< 2.53	
Chloromethane	74-87-3	6.31	< 6.31	
Chloroprene	126-99-8	2.53	< 2.53	
cis-1,2-Dichloroethene	156-59-2	2.53	< 2.53	
cis-1,3-Dichloropropene	10061-01-5	2.53	< 2.53	
Cyclohexane	110-82-7	2.53	< 2.53	
Cyclohexanone	108-94-1	63.1	< 63.1	
Dibromochloromethane	124-48-1	2.53	< 2.53	
Dibromomethane	74-95-3	2.53	< 2.53	
Dichlorodifluoromethane	75-71-8	2.53	< 2.53	
Ethyl acetate	141-78-6	12.6	< 12.6	
Ethyl ether	60-29-7	12.6	< 12.6	
Ethyl methacrylate	97-63-2	2.53	< 2.53	
Ethylbenzene	100-41-4	2.53	< 2.53	
Hexachlorobutadiene	87-68-3	2.53	< 2.53	
Iodomethane	74-88-4	6.31	< 6.31	
Isobutyl alcohol	78-83-1	126	< 126	
Isopropyl acetate	108-21-4	12.6	< 12.6	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-017B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed

Analyzed: 8/25/2011 1544h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	50.5	< 50.5	
Isopropylbenzene	98-82-8	2.53	< 2.53	
m,p-Xylene	179601-23-1	2.53	< 2.53	
Methacrylonitrile	126-98-7	6.31	< 6.31	
Methyl Acetate	79-20-9	6.31	< 6.31	
Methyl methacrylate	80-62-6	6.31	< 6.31	
Methyl tert-butyl ether	1634-04-4	2.53	< 2.53	
Methylcyclohexane	108-87-2	2.53	< 2.53	
Methylene chloride	75-09-2	6.31	< 6.31	
n-Amyl acetate	628-63-7	12.6	< 12.6	
n-Butyl alcohol	71-36-3	126	< 126	
n-Butylbenzene	104-51-8	2.53	< 2.53	
n-Hexane	110-54-3	2.53	< 2.53	
n-Octane	111-65-9	2.53	< 2.53	
n-Propylbenzene	103-65-1	2.53	< 2.53	
Naphthalene	91-20-3	2.53	< 2.53	
o-Xylene	95-47-6	2.53	< 2.53	
Pentachloroethane	76-01-7	2.53	< 2.53	
Propionitrile	107-12-0	31.6	< 31.6	
Propyl acetate	109-60-4	12.6	< 12.6	
sec-Butylbenzene	135-98-8	2.53	< 2.53	
Styrene	100-42-5	2.53	< 2.53	
tert-Butyl alcohol	76-65-0	25.3	< 25.3	
tert-Butylbenzene	98-06-6	2.53	< 2.53	
Tetrachloroethene	127-18-4	2.53	< 2.53	
Tetrahydrofuran	109-99-9	2.53	< 2.53	
Toluene	108-88-3	2.53	< 2.53	
trans-1,2-Dichloroethene	156-60-5	2.53	< 2.53	
trans-1,3-Dichloropropene	10061-02-6	2.53	< 2.53	
trans-1,4-Dichloro-2-butene	110-57-6	2.53	< 2.53	
Trichloroethene	79-01-6	2.53	< 2.53	
Trichlorofluoromethane	75-69-4	2.53	< 2.53	
Vinyl acetate	108-05-4	12.6	< 12.6	
Vinyl chloride	75-01-4	1.26	< 1.26	
Xylenes, Total	1330-20-7	2.53	< 2.53	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**123**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**98.1**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-017B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bed

Analyzed: 8/25/2011 1544h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**107**	
Surr: Toluene-d8	2037-26-5	72-129	**101**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-018B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 2150h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.67	< 2.67	
1,1,1-Trichloroethane	71-55-6	2.67	< 2.67	
1,1,2,2-Tetrachloroethane	79-34-5	2.67	< 2.67	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.67	< 2.67	
1,1,2-Trichloroethane	79-00-5	2.67	< 2.67	
1,1-Dichloropropene	563-58-6	2.67	< 2.67	
1,1-Dichloroethane	75-34-3	2.67	< 2.67	
1,1-Dichloroethene	75-35-4	2.67	< 2.67	
1,2,3-Trichlorobenzene	87-61-6	2.67	< 2.67	
1,2,3-Trichloropropane	96-18-4	2.67	< 2.67	
1,2,3-Trimethylbenzene	526-73-8	2.67	< 2.67	
1,2,4-Trichlorobenzene	120-82-1	2.67	< 2.67	
1,2,4-Trimethylbenzene	95-63-6	2.67	< 2.67	
1,2-Dibromo-3-chloropropane	96-12-8	6.67	< 6.67	
1,2-Dibromoethane	106-93-4	2.67	< 2.67	
1,2-Dichlorobenzene	95-50-1	2.67	< 2.67	
1,2-Dichloroethane	107-06-2	2.67	< 2.67	
1,2-Dichloropropane	78-87-5	2.67	< 2.67	
1,3,5-Trimethylbenzene	108-67-8	2.67	< 2.67	
1,3-Dichlorobenzene	541-73-1	2.67	< 2.67	
1,3-Dichloropropane	142-28-9	2.67	< 2.67	
1,4-Dichlorobenzene	106-46-7	2.67	< 2.67	
1,4-Dioxane	123-91-1	66.7	< 66.7	
2,2-Dichloropropane	594-20-7	2.67	< 2.67	
2-Butanone	78-93-3	13.3	< 13.3	
2-Chloroethyl vinyl ether	110-75-8	6.67	< 6.67	
2-Chlorotoluene	95-49-8	2.67	< 2.67	
2-Hexanone	591-78-6	6.67	< 6.67	
2-Nitropropane	79-46-9	6.67	< 6.67	
4-Chlorotoluene	106-43-4	2.67	< 2.67	
4-Isopropyltoluene	99-87-6	2.67	< 2.67	

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Kyle F. Gross
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Jose Rocha
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Lab Sample ID: 1108489-018B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank

Analyzed: 8/25/2011 2150h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.67	< 6.67	
Acetone	67-64-1	13.3	< 13.3	
Acetonitrile	75-05-8	6.67	< 6.67	
Acrolein	107-02-8	6.67	< 6.67	
Acrylonitrile	107-13-1	13.3	< 13.3	
Allyl chloride	107-05-1	6.67	< 6.67	
Benzene	71-43-2	2.67	< 2.67	
Benzyl chloride	100-44-7	6.67	< 6.67	
Bis(2-chloroisopropyl) ether	108-60-1	6.67	< 6.67	
Bromobenzene	108-86-1	2.67	< 2.67	
Bromochloromethane	74-97-5	2.67	< 2.67	
Bromodichloromethane	75-27-4	2.67	< 2.67	
Bromoform	75-25-2	2.67	< 2.67	
Bromomethane	74-83-9	6.67	< 6.67	
Butyl acetate	123-86-4	13.3	< 13.3	
Carbon disulfide	75-15-0	2.67	< 2.67	
Carbon tetrachloride	56-23-5	2.67	< 2.67	
Chlorobenzene	108-90-7	2.67	< 2.67	
Chloroethane	75-00-3	2.67	< 2.67	
Chloroform	67-66-3	2.67	< 2.67	
Chloromethane	74-87-3	6.67	< 6.67	
Chloroprene	126-99-8	2.67	< 2.67	
cis-1,2-Dichloroethene	156-59-2	2.67	< 2.67	
cis-1,3-Dichloropropene	10061-01-5	2.67	< 2.67	
Cyclohexane	110-82-7	2.67	< 2.67	
Cyclohexanone	108-94-1	66.7	< 66.7	
Dibromochloromethane	124-48-1	2.67	< 2.67	
Dibromomethane	74-95-3	2.67	< 2.67	
Dichlorodifluoromethane	75-71-8	2.67	< 2.67	
Ethyl acetate	141-78-6	13.3	< 13.3	
Ethyl ether	60-29-7	13.3	< 13.3	
Ethyl methacrylate	97-63-2	2.67	< 2.67	
Ethylbenzene	100-41-4	2.67	< 2.67	
Hexachlorobutadiene	87-68-3	2.67	< 2.67	
Iodomethane	74-88-4	6.67	< 6.67	
Isobutyl alcohol	78-83-1	133	< 133	
Isopropyl acetate	108-21-4	13.3	< 13.3	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-018B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank

Analyzed: 8/25/2011 2150h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	53.4	< 53.4	
Isopropylbenzene	98-82-8	2.67	< 2.67	
m,p-Xylene	179601-23-1	2.67	**7.22**	
Methacrylonitrile	126-98-7	6.67	< 6.67	
Methyl Acetate	79-20-9	6.67	< 6.67	
Methyl methacrylate	80-62-6	6.67	< 6.67	
Methyl tert-butyl ether	1634-04-4	2.67	< 2.67	
Methylcyclohexane	108-87-2	2.67	< 2.67	
Methylene chloride	75-09-2	6.67	< 6.67	
n-Amyl acetate	628-63-7	13.3	< 13.3	
n-Butyl alcohol	71-36-3	133	< 133	
n-Butylbenzene	104-51-8	2.67	< 2.67	
n-Hexane	110-54-3	2.67	< 2.67	
n-Octane	111-65-9	2.67	< 2.67	
n-Propylbenzene	103-65-1	2.67	< 2.67	
Naphthalene	91-20-3	2.67	< 2.67	
o-Xylene	95-47-6	2.67	< 2.67	
Pentachloroethane	76-01-7	2.67	< 2.67	
Propionitrile	107-12-0	33.4	< 33.4	
Propyl acetate	109-60-4	13.3	< 13.3	
sec-Butylbenzene	135-98-8	2.67	< 2.67	
Styrene	100-42-5	2.67	< 2.67	
tert-Butyl alcohol	76-65-0	26.7	< 26.7	
tert-Butylbenzene	98-06-6	2.67	< 2.67	
Tetrachloroethene	127-18-4	2.67	< 2.67	
Tetrahydrofuran	109-99-9	2.67	< 2.67	
Toluene	108-88-3	2.67	**8.66**	
trans-1,2-Dichloroethene	156-60-5	2.67	< 2.67	
trans-1,3-Dichloropropene	10061-02-6	2.67	< 2.67	
trans-1,4-Dichloro-2-butene	110-57-6	2.67	< 2.67	
Trichloroethene	79-01-6	2.67	< 2.67	
Trichlorofluoromethane	75-69-4	2.67	< 2.67	
Vinyl acetate	108-05-4	13.3	< 13.3	
Vinyl chloride	75-01-4	1.33	< 1.33	
Xylenes, Total	1330-20-7	2.67	**8.70**	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**126**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**119**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-018B
Client Sample ID: City Cr. Near Cyn. Entrance Gate - Bank

Analyzed: 8/25/2011 2150h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**109**	
Surr: Toluene-d8	2037-26-5	72-129	**107**	

Internal standard areas were outside of the QC limits. Reanalysis yielded similar results indicating matrix interference.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-019A
Client Sample ID: FB-2
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs MBTEXN List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1210h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Benzene	71-43-2	0.00100	< 0.00100	
Ethylbenzene	100-41-4	0.00200	< 0.00200	
Toluene	108-88-3	0.00200	< 0.00200	
Xylenes, Total	1330-20-7	0.00200	< 0.00200	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**120**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**114**	
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**99.0**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-020A
Client Sample ID: TB-2
Collection Date: 8/24/2011 1510h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs MBTEXN List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1228h
Units: mg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Benzene	71-43-2	0.00100	< 0.00100	
Ethylbenzene	100-41-4	0.00200	< 0.00200	
Toluene	108-88-3	0.00200	< 0.00200	
Xylenes, Total	1330-20-7	0.00200	< 0.00200	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**121**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**113**	
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**96.6**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-021D
Client Sample ID: BD-2
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1247h
Units: µg/L
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-021D
Client Sample ID: BD-2

Analyzed: 8/25/2011 1247h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-021D
Client Sample ID: BD-2

Analyzed: 8/25/2011 1247h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**120**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**116**	

Lab Sample ID: 1108489-021D
Client Sample ID: BD-2

Analyzed: 8/25/2011 1247h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**98.2**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-022B
Client Sample ID: BD-2 - Bed
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/25/2011 2257h
Units: µg/kg-dry
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.47	< 2.47	
1,1,1-Trichloroethane	71-55-6	2.47	< 2.47	
1,1,2,2-Tetrachloroethane	79-34-5	2.47	< 2.47	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.47	< 2.47	
1,1,2-Trichloroethane	79-00-5	2.47	< 2.47	
1,1-Dichloropropene	563-58-6	2.47	< 2.47	
1,1-Dichloroethane	75-34-3	2.47	< 2.47	
1,1-Dichloroethene	75-35-4	2.47	< 2.47	
1,2,3-Trichlorobenzene	87-61-6	2.47	< 2.47	
1,2,3-Trichloropropane	96-18-4	2.47	< 2.47	
1,2,3-Trimethylbenzene	526-73-8	2.47	< 2.47	
1,2,4-Trichlorobenzene	120-82-1	2.47	< 2.47	
1,2,4-Trimethylbenzene	95-63-6	2.47	< 2.47	
1,2-Dibromo-3-chloropropane	96-12-8	6.17	< 6.17	
1,2-Dibromoethane	106-93-4	2.47	< 2.47	
1,2-Dichlorobenzene	95-50-1	2.47	< 2.47	
1,2-Dichloroethane	107-06-2	2.47	< 2.47	
1,2-Dichloropropane	78-87-5	2.47	< 2.47	
1,3,5-Trimethylbenzene	108-67-8	2.47	< 2.47	
1,3-Dichlorobenzene	541-73-1	2.47	< 2.47	
1,3-Dichloropropane	142-28-9	2.47	< 2.47	
1,4-Dichlorobenzene	106-46-7	2.47	< 2.47	
1,4-Dioxane	123-91-1	61.7	< 61.7	
2,2-Dichloropropane	594-20-7	2.47	< 2.47	
2-Butanone	78-93-3	12.3	< 12.3	
2-Chloroethyl vinyl ether	110-75-8	6.17	< 6.17	
2-Chlorotoluene	95-49-8	2.47	< 2.47	
2-Hexanone	591-78-6	6.17	< 6.17	
2-Nitropropane	79-46-9	6.17	< 6.17	
4-Chlorotoluene	106-43-4	2.47	< 2.47	
4-Isopropyltoluene	99-87-6	2.47	< 2.47	

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Jose Rocha
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Lab Sample ID: 1108489-022B
Client Sample ID: BD-2 - Bed

Analyzed: 8/25/2011 2257h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.17	< 6.17	
Acetone	67-64-1	12.3	< 12.3	
Acetonitrile	75-05-8	6.17	< 6.17	
Acrolein	107-02-8	6.17	< 6.17	
Acrylonitrile	107-13-1	12.3	< 12.3	
Allyl chloride	107-05-1	6.17	< 6.17	
Benzene	71-43-2	2.47	< 2.47	
Benzyl chloride	100-44-7	6.17	< 6.17	
Bis(2-chloroisopropyl) ether	108-60-1	6.17	< 6.17	
Bromobenzene	108-86-1	2.47	< 2.47	
Bromochloromethane	74-97-5	2.47	< 2.47	
Bromodichloromethane	75-27-4	2.47	< 2.47	
Bromoform	75-25-2	2.47	< 2.47	
Bromomethane	74-83-9	6.17	< 6.17	
Butyl acetate	123-86-4	12.3	< 12.3	
Carbon disulfide	75-15-0	2.47	< 2.47	
Carbon tetrachloride	56-23-5	2.47	< 2.47	
Chlorobenzene	108-90-7	2.47	< 2.47	
Chloroethane	75-00-3	2.47	< 2.47	
Chloroform	67-66-3	2.47	< 2.47	
Chloromethane	74-87-3	6.17	< 6.17	
Chloroprene	126-99-8	2.47	< 2.47	
cis-1,2-Dichloroethene	156-59-2	2.47	< 2.47	
cis-1,3-Dichloropropene	10061-01-5	2.47	< 2.47	
Cyclohexane	110-82-7	2.47	< 2.47	
Cyclohexanone	108-94-1	61.7	< 61.7	
Dibromochloromethane	124-48-1	2.47	< 2.47	
Dibromomethane	74-95-3	2.47	< 2.47	
Dichlorodifluoromethane	75-71-8	2.47	< 2.47	
Ethyl acetate	141-78-6	12.3	< 12.3	
Ethyl ether	60-29-7	12.3	< 12.3	
Ethyl methacrylate	97-63-2	2.47	< 2.47	
Ethylbenzene	100-41-4	2.47	< 2.47	
Hexachlorobutadiene	87-68-3	2.47	< 2.47	
Iodomethane	74-88-4	6.17	< 6.17	
Isobutyl alcohol	78-83-1	123	< 123	
Isopropyl acetate	108-21-4	12.3	< 12.3	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-022B
Client Sample ID: BD-2 - Bed

Analyzed: 8/25/2011 2257h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	49.4	< 49.4	
Isopropylbenzene	98-82-8	2.47	< 2.47	
m,p-Xylene	179601-23-1	2.47	< 2.47	
Methacrylonitrile	126-98-7	6.17	< 6.17	
Methyl Acetate	79-20-9	6.17	< 6.17	
Methyl methacrylate	80-62-6	6.17	< 6.17	
Methyl tert-butyl ether	1634-04-4	2.47	< 2.47	
Methylcyclohexane	108-87-2	2.47	< 2.47	
Methylene chloride	75-09-2	6.17	< 6.17	
n-Amyl acetate	628-63-7	12.3	< 12.3	
n-Butyl alcohol	71-36-3	123	< 123	
n-Butylbenzene	104-51-8	2.47	< 2.47	
n-Hexane	110-54-3	2.47	< 2.47	
n-Octane	111-65-9	2.47	< 2.47	
n-Propylbenzene	103-65-1	2.47	< 2.47	
Naphthalene	91-20-3	2.47	< 2.47	
o-Xylene	95-47-6	2.47	< 2.47	
Pentachloroethane	76-01-7	2.47	< 2.47	
Propionitrile	107-12-0	30.9	< 30.9	
Propyl acetate	109-60-4	12.3	< 12.3	
sec-Butylbenzene	135-98-8	2.47	< 2.47	
Styrene	100-42-5	2.47	< 2.47	
tert-Butyl alcohol	76-65-0	24.7	< 24.7	
tert-Butylbenzene	98-06-6	2.47	< 2.47	
Tetrachloroethene	127-18-4	2.47	< 2.47	
Tetrahydrofuran	109-99-9	2.47	< 2.47	
Toluene	108-88-3	2.47	**2.53**	
trans-1,2-Dichloroethene	156-60-5	2.47	< 2.47	
trans-1,3-Dichloropropene	10061-02-6	2.47	< 2.47	
trans-1,4-Dichloro-2-butene	110-57-6	2.47	< 2.47	
Trichloroethene	79-01-6	2.47	< 2.47	
Trichlorofluoromethane	75-69-4	2.47	< 2.47	
Vinyl acetate	108-05-4	12.3	< 12.3	
Vinyl chloride	75-01-4	1.23	< 1.23	
Xylenes, Total	1330-20-7	2.47	< 2.47	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**126**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**98.3**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-022B
Client Sample ID: BD-2 - Bed

Analyzed: 8/25/2011 2257h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**111**	
Surr: Toluene-d8	2037-26-5	72-129	**98.4**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-023B
Client Sample ID: BD-2 - Bank
Collection Date: 8/24/2011 1530h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 1208h
Units: µg/kg-dry
Dilution Factor: 1

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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.65	< 2.65	
1,1,1-Trichloroethane	71-55-6	2.65	< 2.65	
1,1,2,2-Tetrachloroethane	79-34-5	2.65	< 2.65	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.65	< 2.65	
1,1,2-Trichloroethane	79-00-5	2.65	< 2.65	
1,1-Dichloropropene	563-58-6	2.65	< 2.65	
1,1-Dichloroethane	75-34-3	2.65	< 2.65	
1,1-Dichloroethene	75-35-4	2.65	< 2.65	
1,2,3-Trichlorobenzene	87-61-6	2.65	< 2.65	
1,2,3-Trichloropropane	96-18-4	2.65	< 2.65	
1,2,3-Trimethylbenzene	526-73-8	2.65	< 2.65	
1,2,4-Trichlorobenzene	120-82-1	2.65	< 2.65	
1,2,4-Trimethylbenzene	95-63-6	2.65	< 2.65	
1,2-Dibromo-3-chloropropane	96-12-8	6.63	< 6.63	
1,2-Dibromoethane	106-93-4	2.65	< 2.65	
1,2-Dichlorobenzene	95-50-1	2.65	< 2.65	
1,2-Dichloroethane	107-06-2	2.65	< 2.65	
1,2-Dichloropropane	78-87-5	2.65	< 2.65	
1,3,5-Trimethylbenzene	108-67-8	2.65	< 2.65	
1,3-Dichlorobenzene	541-73-1	2.65	< 2.65	
1,3-Dichloropropane	142-28-9	2.65	< 2.65	
1,4-Dichlorobenzene	106-46-7	2.65	< 2.65	
1,4-Dioxane	123-91-1	66.3	< 66.3	
2,2-Dichloropropane	594-20-7	2.65	< 2.65	
2-Butanone	78-93-3	13.3	< 13.3	
2-Chloroethyl vinyl ether	110-75-8	6.63	< 6.63	
2-Chlorotoluene	95-49-8	2.65	< 2.65	
2-Hexanone	591-78-6	6.63	< 6.63	
2-Nitropropane	79-46-9	6.63	< 6.63	
4-Chlorotoluene	106-43-4	2.65	< 2.65	
4-Isopropyltoluene	99-87-6	2.65	< 2.65	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-023B
Client Sample ID: BD-2 - Bank

Analyzed: 8/26/2011 1208h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.63	< 6.63	
Acetone	67-64-1	13.3	< 13.3	
Acetonitrile	75-05-8	6.63	< 6.63	
Acrolein	107-02-8	6.63	< 6.63	
Acrylonitrile	107-13-1	13.3	< 13.3	
Allyl chloride	107-05-1	6.63	< 6.63	
Benzene	71-43-2	2.65	< 2.65	
Benzyl chloride	100-44-7	6.63	< 6.63	
Bis(2-chloroisopropyl) ether	108-60-1	6.63	< 6.63	
Bromobenzene	108-86-1	2.65	< 2.65	
Bromochloromethane	74-97-5	2.65	< 2.65	
Bromodichloromethane	75-27-4	2.65	< 2.65	
Bromoform	75-25-2	2.65	< 2.65	
Bromomethane	74-83-9	6.63	< 6.63	
Butyl acetate	123-86-4	13.3	< 13.3	
Carbon disulfide	75-15-0	2.65	< 2.65	
Carbon tetrachloride	56-23-5	2.65	< 2.65	
Chlorobenzene	108-90-7	2.65	< 2.65	
Chloroethane	75-00-3	2.65	< 2.65	
Chloroform	67-66-3	2.65	< 2.65	
Chloromethane	74-87-3	6.63	< 6.63	
Chloroprene	126-99-8	2.65	< 2.65	
cis-1,2-Dichloroethene	156-59-2	2.65	< 2.65	
cis-1,3-Dichloropropene	10061-01-5	2.65	< 2.65	
Cyclohexane	110-82-7	2.65	< 2.65	
Cyclohexanone	108-94-1	66.3	< 66.3	
Dibromochloromethane	124-48-1	2.65	< 2.65	
Dibromomethane	74-95-3	2.65	< 2.65	
Dichlorodifluoromethane	75-71-8	2.65	< 2.65	
Ethyl acetate	141-78-6	13.3	< 13.3	
Ethyl ether	60-29-7	13.3	< 13.3	
Ethyl methacrylate	97-63-2	2.65	< 2.65	
Ethylbenzene	100-41-4	2.65	< 2.65	
Hexachlorobutadiene	87-68-3	2.65	< 2.65	
Iodomethane	74-88-4	6.63	< 6.63	
Isobutyl alcohol	78-83-1	133	< 133	
Isopropyl acetate	108-21-4	13.3	< 13.3	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-023B
Client Sample ID: BD-2 - Bank

Analyzed: 8/26/2011 1208h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	53.0	< 53.0	
Isopropylbenzene	98-82-8	2.65	< 2.65	
m,p-Xylene	179601-23-1	2.65	< 2.65	
Methacrylonitrile	126-98-7	6.63	< 6.63	
Methyl Acetate	79-20-9	6.63	< 6.63	
Methyl methacrylate	80-62-6	6.63	< 6.63	
Methyl tert-butyl ether	1634-04-4	2.65	< 2.65	
Methylcyclohexane	108-87-2	2.65	< 2.65	
Methylene chloride	75-09-2	6.63	< 6.63	
n-Amyl acetate	628-63-7	13.3	< 13.3	
n-Butyl alcohol	71-36-3	133	< 133	
n-Butylbenzene	104-51-8	2.65	< 2.65	
n-Hexane	110-54-3	2.65	< 2.65	
n-Octane	111-65-9	2.65	< 2.65	
n-Propylbenzene	103-65-1	2.65	< 2.65	
Naphthalene	91-20-3	2.65	< 2.65	
o-Xylene	95-47-6	2.65	< 2.65	
Pentachloroethane	76-01-7	2.65	< 2.65	
Propionitrile	107-12-0	33.1	< 33.1	
Propyl acetate	109-60-4	13.3	< 13.3	
sec-Butylbenzene	135-98-8	2.65	< 2.65	
Styrene	100-42-5	2.65	< 2.65	
tert-Butyl alcohol	76-65-0	26.5	< 26.5	
tert-Butylbenzene	98-06-6	2.65	< 2.65	
Tetrachloroethene	127-18-4	2.65	< 2.65	
Tetrahydrofuran	109-99-9	2.65	< 2.65	
Toluene	108-88-3	2.65	< 2.65	
trans-1,2-Dichloroethene	156-60-5	2.65	< 2.65	
trans-1,3-Dichloropropene	10061-02-6	2.65	< 2.65	
trans-1,4-Dichloro-2-butene	110-57-6	2.65	< 2.65	
Trichloroethene	79-01-6	2.65	< 2.65	
Trichlorofluoromethane	75-69-4	2.65	< 2.65	
Vinyl acetate	108-05-4	13.3	< 13.3	
Vinyl chloride	75-01-4	1.33	< 1.33	
Xylenes, Total	1330-20-7	2.65	< 2.65	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**104**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**101**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-023B
Client Sample ID: BD-2 - Bank

Analyzed: 8/26/2011 1208h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**101**	
Surr: Toluene-d8	2037-26-5	72-129	**103**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-024D
Client Sample ID: EB-2
Collection Date: 8/24/2011 1600h
Received Date: 8/24/2011 1745h

Contact: Galen Williams

Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1306h
Units: µg/L
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-024D
Client Sample ID: EB-2

Analyzed: 8/25/2011 1306h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-024D
Client Sample ID: EB-2

Analyzed: 8/25/2011 1306h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**120**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**115**	

Lab Sample ID: 1108489-024D
Client Sample ID: EB-2

Analyzed: 8/25/2011 1306h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**97.1**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-025D
Client Sample ID: Mill Cr. Below 2300 E.
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h
Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1325h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-025D
Client Sample ID: Mill Cr. Below 2300 E.

Analyzed: 8/25/2011 1325h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-025D
Client Sample ID: Mill Cr. Below 2300 E.

Analyzed: 8/25/2011 1325h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**122**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**113**	

Lab Sample ID: 1108489-025D
Client Sample ID: Mill Cr. Below 2300 E.

Analyzed: 8/25/2011 1325h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**98.1**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering
Contact: Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-026B
Client Sample ID: Mill Cr. Below 2300 E. - Bed
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h
Method: SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0025h
Units: µg/kg-dry
Dilution Factor: 1

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Jose Rocha
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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.47	< 2.47	
1,1,1-Trichloroethane	71-55-6	2.47	< 2.47	
1,1,2,2-Tetrachloroethane	79-34-5	2.47	< 2.47	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.47	< 2.47	
1,1,2-Trichloroethane	79-00-5	2.47	< 2.47	
1,1-Dichloropropene	563-58-6	2.47	< 2.47	
1,1-Dichloroethane	75-34-3	2.47	< 2.47	
1,1-Dichloroethene	75-35-4	2.47	< 2.47	
1,2,3-Trichlorobenzene	87-61-6	2.47	< 2.47	
1,2,3-Trichloropropane	96-18-4	2.47	< 2.47	
1,2,3-Trimethylbenzene	526-73-8	2.47	< 2.47	
1,2,4-Trichlorobenzene	120-82-1	2.47	< 2.47	
1,2,4-Trimethylbenzene	95-63-6	2.47	< 2.47	
1,2-Dibromo-3-chloropropane	96-12-8	6.19	< 6.19	
1,2-Dibromoethane	106-93-4	2.47	< 2.47	
1,2-Dichlorobenzene	95-50-1	2.47	< 2.47	
1,2-Dichloroethane	107-06-2	2.47	< 2.47	
1,2-Dichloropropane	78-87-5	2.47	< 2.47	
1,3,5-Trimethylbenzene	108-67-8	2.47	< 2.47	
1,3-Dichlorobenzene	541-73-1	2.47	< 2.47	
1,3-Dichloropropane	142-28-9	2.47	< 2.47	
1,4-Dichlorobenzene	106-46-7	2.47	< 2.47	
1,4-Dioxane	123-91-1	61.9	< 61.9	
2,2-Dichloropropane	594-20-7	2.47	< 2.47	
2-Butanone	78-93-3	12.4	< 12.4	
2-Chloroethyl vinyl ether	110-75-8	6.19	< 6.19	
2-Chlorotoluene	95-49-8	2.47	< 2.47	
2-Hexanone	591-78-6	6.19	< 6.19	
2-Nitropropane	79-46-9	6.19	< 6.19	
4-Chlorotoluene	106-43-4	2.47	< 2.47	
4-Isopropyltoluene	99-87-6	2.47	< 2.47	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-026B
Client Sample ID: Mill Cr. Below 2300 E. - Bed

Analyzed: 8/26/2011 0025h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.19	< 6.19	
Acetone	67-64-1	12.4	< 12.4	
Acetonitrile	75-05-8	6.19	< 6.19	
Acrolein	107-02-8	6.19	< 6.19	
Acrylonitrile	107-13-1	12.4	< 12.4	
Allyl chloride	107-05-1	6.19	< 6.19	
Benzene	71-43-2	2.47	< 2.47	
Benzyl chloride	100-44-7	6.19	< 6.19	
Bis(2-chloroisopropyl) ether	108-60-1	6.19	< 6.19	
Bromobenzene	108-86-1	2.47	< 2.47	
Bromochloromethane	74-97-5	2.47	< 2.47	
Bromodichloromethane	75-27-4	2.47	< 2.47	
Bromoform	75-25-2	2.47	< 2.47	
Bromomethane	74-83-9	6.19	< 6.19	
Butyl acetate	123-86-4	12.4	< 12.4	
Carbon disulfide	75-15-0	2.47	< 2.47	
Carbon tetrachloride	56-23-5	2.47	< 2.47	
Chlorobenzene	108-90-7	2.47	< 2.47	
Chloroethane	75-00-3	2.47	< 2.47	
Chloroform	67-66-3	2.47	< 2.47	
Chloromethane	74-87-3	6.19	< 6.19	
Chloroprene	126-99-8	2.47	< 2.47	
cis-1,2-Dichloroethene	156-59-2	2.47	< 2.47	
cis-1,3-Dichloropropene	10061-01-5	2.47	< 2.47	
Cyclohexane	110-82-7	2.47	< 2.47	
Cyclohexanone	108-94-1	61.9	< 61.9	
Dibromochloromethane	124-48-1	2.47	< 2.47	
Dibromomethane	74-95-3	2.47	< 2.47	
Dichlorodifluoromethane	75-71-8	2.47	< 2.47	
Ethyl acetate	141-78-6	12.4	< 12.4	
Ethyl ether	60-29-7	12.4	< 12.4	
Ethyl methacrylate	97-63-2	2.47	< 2.47	
Ethylbenzene	100-41-4	2.47	< 2.47	
Hexachlorobutadiene	87-68-3	2.47	< 2.47	
Iodomethane	74-88-4	6.19	< 6.19	
Isobutyl alcohol	78-83-1	124	< 124	
Isopropyl acetate	108-21-4	12.4	< 12.4	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-026B
Client Sample ID: Mill Cr. Below 2300 E. - Bed

Analyzed: 8/26/2011 0025h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	49.5	< 49.5	
Isopropylbenzene	98-82-8	2.47	< 2.47	
m,p-Xylene	179601-23-1	2.47	< 2.47	
Methacrylonitrile	126-98-7	6.19	< 6.19	
Methyl Acetate	79-20-9	6.19	< 6.19	
Methyl methacrylate	80-62-6	6.19	< 6.19	
Methyl tert-butyl ether	1634-04-4	2.47	< 2.47	
Methylcyclohexane	108-87-2	2.47	< 2.47	
Methylene chloride	75-09-2	6.19	< 6.19	
n-Amyl acetate	628-63-7	12.4	< 12.4	
n-Butyl alcohol	71-36-3	124	< 124	
n-Butylbenzene	104-51-8	2.47	< 2.47	
n-Hexane	110-54-3	2.47	< 2.47	
n-Octane	111-65-9	2.47	< 2.47	
n-Propylbenzene	103-65-1	2.47	< 2.47	
Naphthalene	91-20-3	2.47	< 2.47	
o-Xylene	95-47-6	2.47	< 2.47	
Pentachloroethane	76-01-7	2.47	< 2.47	
Propionitrile	107-12-0	30.9	< 30.9	
Propyl acetate	109-60-4	12.4	< 12.4	
sec-Butylbenzene	135-98-8	2.47	< 2.47	
Styrene	100-42-5	2.47	< 2.47	
tert-Butyl alcohol	76-65-0	24.7	< 24.7	
tert-Butylbenzene	98-06-6	2.47	< 2.47	
Tetrachloroethene	127-18-4	2.47	< 2.47	
Tetrahydrofuran	109-99-9	2.47	< 2.47	
Toluene	108-88-3	2.47	< 2.47	
trans-1,2-Dichloroethene	156-60-5	2.47	< 2.47	
trans-1,3-Dichloropropene	10061-02-6	2.47	< 2.47	
trans-1,4-Dichloro-2-butene	110-57-6	2.47	< 2.47	
Trichloroethene	79-01-6	2.47	< 2.47	
Trichlorofluoromethane	75-69-4	2.47	< 2.47	
Vinyl acetate	108-05-4	12.4	< 12.4	
Vinyl chloride	75-01-4	1.24	< 1.24	
Xylenes, Total	1330-20-7	2.47	< 2.47	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**122**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**98.6**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-026B
Client Sample ID: Mill Cr. Below 2300 E. - Bed

Analyzed: 8/26/2011 0025h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**108**	
Surr: Toluene-d8	2037-26-5	72-129	**99.6**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-027B
Client Sample ID: Mill Cr. Below 2300 E. - Bank
Collection Date: 8/24/2011 1025h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0047h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.64	< 2.64	
1,1,1-Trichloroethane	71-55-6	2.64	< 2.64	
1,1,2,2-Tetrachloroethane	79-34-5	2.64	< 2.64	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.64	< 2.64	
1,1,2-Trichloroethane	79-00-5	2.64	< 2.64	
1,1-Dichloropropene	563-58-6	2.64	< 2.64	
1,1-Dichloroethane	75-34-3	2.64	< 2.64	
1,1-Dichloroethene	75-35-4	2.64	< 2.64	
1,2,3-Trichlorobenzene	87-61-6	2.64	< 2.64	
1,2,3-Trichloropropane	96-18-4	2.64	< 2.64	
1,2,3-Trimethylbenzene	526-73-8	2.64	< 2.64	
1,2,4-Trichlorobenzene	120-82-1	2.64	< 2.64	
1,2,4-Trimethylbenzene	95-63-6	2.64	< 2.64	
1,2-Dibromo-3-chloropropane	96-12-8	6.60	< 6.60	
1,2-Dibromoethane	106-93-4	2.64	< 2.64	
1,2-Dichlorobenzene	95-50-1	2.64	< 2.64	
1,2-Dichloroethane	107-06-2	2.64	< 2.64	
1,2-Dichloropropane	78-87-5	2.64	< 2.64	
1,3,5-Trimethylbenzene	108-67-8	2.64	< 2.64	
1,3-Dichlorobenzene	541-73-1	2.64	< 2.64	
1,3-Dichloropropane	142-28-9	2.64	< 2.64	
1,4-Dichlorobenzene	106-46-7	2.64	< 2.64	
1,4-Dioxane	123-91-1	66.0	< 66.0	
2,2-Dichloropropane	594-20-7	2.64	< 2.64	
2-Butanone	78-93-3	13.2	< 13.2	
2-Chloroethyl vinyl ether	110-75-8	6.60	< 6.60	
2-Chlorotoluene	95-49-8	2.64	< 2.64	
2-Hexanone	591-78-6	6.60	< 6.60	
2-Nitropropane	79-46-9	6.60	< 6.60	
4-Chlorotoluene	106-43-4	2.64	< 2.64	
4-Isopropyltoluene	99-87-6	2.64	< 2.64	

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Kyle F. Gross
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Jose Rocha
QA Officer

Lab Sample ID: 1108489-027B
Client Sample ID: Mill Cr. Below 2300 E. - Bank

Analyzed: 8/26/2011 0047h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.60	< 6.60	
Acetone	67-64-1	13.2	< 13.2	
Acetonitrile	75-05-8	6.60	< 6.60	
Acrolein	107-02-8	6.60	< 6.60	
Acrylonitrile	107-13-1	13.2	< 13.2	
Allyl chloride	107-05-1	6.60	< 6.60	
Benzene	71-43-2	2.64	< 2.64	
Benzyl chloride	100-44-7	6.60	< 6.60	
Bis(2-chloroisopropyl) ether	108-60-1	6.60	< 6.60	
Bromobenzene	108-86-1	2.64	< 2.64	
Bromochloromethane	74-97-5	2.64	< 2.64	
Bromodichloromethane	75-27-4	2.64	< 2.64	
Bromoform	75-25-2	2.64	< 2.64	
Bromomethane	74-83-9	6.60	< 6.60	
Butyl acetate	123-86-4	13.2	< 13.2	
Carbon disulfide	75-15-0	2.64	< 2.64	
Carbon tetrachloride	56-23-5	2.64	< 2.64	
Chlorobenzene	108-90-7	2.64	< 2.64	
Chloroethane	75-00-3	2.64	< 2.64	
Chloroform	67-66-3	2.64	< 2.64	
Chloromethane	74-87-3	6.60	< 6.60	
Chloroprene	126-99-8	2.64	< 2.64	
cis-1,2-Dichloroethene	156-59-2	2.64	< 2.64	
cis-1,3-Dichloropropene	10061-01-5	2.64	< 2.64	
Cyclohexane	110-82-7	2.64	< 2.64	
Cyclohexanone	108-94-1	66.0	< 66.0	
Dibromochloromethane	124-48-1	2.64	< 2.64	
Dibromomethane	74-95-3	2.64	< 2.64	
Dichlorodifluoromethane	75-71-8	2.64	< 2.64	
Ethyl acetate	141-78-6	13.2	< 13.2	
Ethyl ether	60-29-7	13.2	< 13.2	
Ethyl methacrylate	97-63-2	2.64	< 2.64	
Ethylbenzene	100-41-4	2.64	< 2.64	
Hexachlorobutadiene	87-68-3	2.64	< 2.64	
Iodomethane	74-88-4	6.60	< 6.60	
Isobutyl alcohol	78-83-1	132	< 132	
Isopropyl acetate	108-21-4	13.2	< 13.2	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-027B
Client Sample ID: Mill Cr. Below 2300 E. - Bank

Analyzed: 8/26/2011 0047h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	52.8	< 52.8	
Isopropylbenzene	98-82-8	2.64	< 2.64	
m,p-Xylene	179601-23-1	2.64	**2.75**	
Methacrylonitrile	126-98-7	6.60	< 6.60	
Methyl Acetate	79-20-9	6.60	< 6.60	
Methyl methacrylate	80-62-6	6.60	< 6.60	
Methyl tert-butyl ether	1634-04-4	2.64	< 2.64	
Methylcyclohexane	108-87-2	2.64	< 2.64	
Methylene chloride	75-09-2	6.60	< 6.60	
n-Amyl acetate	628-63-7	13.2	< 13.2	
n-Butyl alcohol	71-36-3	132	< 132	
n-Butylbenzene	104-51-8	2.64	< 2.64	
n-Hexane	110-54-3	2.64	< 2.64	
n-Octane	111-65-9	2.64	< 2.64	
n-Propylbenzene	103-65-1	2.64	< 2.64	
Naphthalene	91-20-3	2.64	< 2.64	
o-Xylene	95-47-6	2.64	< 2.64	
Pentachloroethane	76-01-7	2.64	< 2.64	
Propionitrile	107-12-0	33.0	< 33.0	
Propyl acetate	109-60-4	13.2	< 13.2	
sec-Butylbenzene	135-98-8	2.64	< 2.64	
Styrene	100-42-5	2.64	< 2.64	
tert-Butyl alcohol	76-65-0	26.4	< 26.4	
tert-Butylbenzene	98-06-6	2.64	< 2.64	
Tetrachloroethene	127-18-4	2.64	< 2.64	
Tetrahydrofuran	109-99-9	2.64	< 2.64	
Toluene	108-88-3	2.64	**3.20**	
trans-1,2-Dichloroethene	156-60-5	2.64	< 2.64	
trans-1,3-Dichloropropene	10061-02-6	2.64	< 2.64	
trans-1,4-Dichloro-2-butene	110-57-6	2.64	< 2.64	
Trichloroethene	79-01-6	2.64	< 2.64	
Trichlorofluoromethane	75-69-4	2.64	< 2.64	
Vinyl acetate	108-05-4	13.2	< 13.2	
Vinyl chloride	75-01-4	1.32	< 1.32	
Xylenes, Total	1330-20-7	2.64	**2.75**	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**131**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**103**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-027B
Client Sample ID: Mill Cr. Below 2300 E. - Bank

Analyzed: 8/26/2011 0047h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**111**	
Surr: Toluene-d8	2037-26-5	72-129	**102**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-028D
Client Sample ID: Mill Cr. Above Country Gage
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1344h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-028D
Client Sample ID: Mill Cr. Above Country Gage

Analyzed: 8/25/2011 1344h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-028D
Client Sample ID: Mill Cr. Above Country Gage

Analyzed: 8/25/2011 1344h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**121**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**116**	

Lab Sample ID: 1108489-028D
Client Sample ID: Mill Cr. Above Country Gage

Analyzed: 8/25/2011 1344h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**98.5**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-029B
Client Sample ID: Mill Cr. Above Country Gage - Bed
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0110h
Units: µg/kg-dry
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.52	< 2.52	
1,1,1-Trichloroethane	71-55-6	2.52	< 2.52	
1,1,2,2-Tetrachloroethane	79-34-5	2.52	< 2.52	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.52	< 2.52	
1,1,2-Trichloroethane	79-00-5	2.52	< 2.52	
1,1-Dichloropropene	563-58-6	2.52	< 2.52	
1,1-Dichloroethane	75-34-3	2.52	< 2.52	
1,1-Dichloroethene	75-35-4	2.52	< 2.52	
1,2,3-Trichlorobenzene	87-61-6	2.52	< 2.52	
1,2,3-Trichloropropane	96-18-4	2.52	< 2.52	
1,2,3-Trimethylbenzene	526-73-8	2.52	< 2.52	
1,2,4-Trichlorobenzene	120-82-1	2.52	< 2.52	
1,2,4-Trimethylbenzene	95-63-6	2.52	< 2.52	
1,2-Dibromo-3-chloropropane	96-12-8	6.31	< 6.31	
1,2-Dibromoethane	106-93-4	2.52	< 2.52	
1,2-Dichlorobenzene	95-50-1	2.52	< 2.52	
1,2-Dichloroethane	107-06-2	2.52	< 2.52	
1,2-Dichloropropane	78-87-5	2.52	< 2.52	
1,3,5-Trimethylbenzene	108-67-8	2.52	< 2.52	
1,3-Dichlorobenzene	541-73-1	2.52	< 2.52	
1,3-Dichloropropane	142-28-9	2.52	< 2.52	
1,4-Dichlorobenzene	106-46-7	2.52	< 2.52	
1,4-Dioxane	123-91-1	63.1	< 63.1	
2,2-Dichloropropane	594-20-7	2.52	< 2.52	
2-Butanone	78-93-3	12.6	< 12.6	
2-Chloroethyl vinyl ether	110-75-8	6.31	< 6.31	
2-Chlorotoluene	95-49-8	2.52	< 2.52	
2-Hexanone	591-78-6	6.31	< 6.31	
2-Nitropropane	79-46-9	6.31	< 6.31	
4-Chlorotoluene	106-43-4	2.52	< 2.52	
4-Isopropyltoluene	99-87-6	2.52	< 2.52	

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Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-029B
Client Sample ID: Mill Cr. Above Country Gage - Bed

Analyzed: 8/26/2011 0110h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.31	< 6.31	
Acetone	67-64-1	12.6	< 12.6	
Acetonitrile	75-05-8	6.31	< 6.31	
Acrolein	107-02-8	6.31	< 6.31	
Acrylonitrile	107-13-1	12.6	< 12.6	
Allyl chloride	107-05-1	6.31	< 6.31	
Benzene	71-43-2	2.52	< 2.52	
Benzyl chloride	100-44-7	6.31	< 6.31	
Bis(2-chloroisopropyl) ether	108-60-1	6.31	< 6.31	
Bromobenzene	108-86-1	2.52	< 2.52	
Bromochloromethane	74-97-5	2.52	< 2.52	
Bromodichloromethane	75-27-4	2.52	< 2.52	
Bromoform	75-25-2	2.52	< 2.52	
Bromomethane	74-83-9	6.31	< 6.31	
Butyl acetate	123-86-4	12.6	< 12.6	
Carbon disulfide	75-15-0	2.52	< 2.52	
Carbon tetrachloride	56-23-5	2.52	< 2.52	
Chlorobenzene	108-90-7	2.52	< 2.52	
Chloroethane	75-00-3	2.52	< 2.52	
Chloroform	67-66-3	2.52	< 2.52	
Chloromethane	74-87-3	6.31	< 6.31	
Chloroprene	126-99-8	2.52	< 2.52	
cis-1,2-Dichloroethene	156-59-2	2.52	< 2.52	
cis-1,3-Dichloropropene	10061-01-5	2.52	< 2.52	
Cyclohexane	110-82-7	2.52	< 2.52	
Cyclohexanone	108-94-1	63.1	< 63.1	
Dibromochloromethane	124-48-1	2.52	< 2.52	
Dibromomethane	74-95-3	2.52	< 2.52	
Dichlorodifluoromethane	75-71-8	2.52	< 2.52	
Ethyl acetate	141-78-6	12.6	< 12.6	
Ethyl ether	60-29-7	12.6	< 12.6	
Ethyl methacrylate	97-63-2	2.52	< 2.52	
Ethylbenzene	100-41-4	2.52	< 2.52	
Hexachlorobutadiene	87-68-3	2.52	< 2.52	
Iodomethane	74-88-4	6.31	< 6.31	
Isobutyl alcohol	78-83-1	126	< 126	
Isopropyl acetate	108-21-4	12.6	< 12.6	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-029B
Client Sample ID: Mill Cr. Above Country Gage - Bed

Analyzed: 8/26/2011 0110h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	50.5	< 50.5	
Isopropylbenzene	98-82-8	2.52	< 2.52	
m,p-Xylene	179601-23-1	2.52	< 2.52	
Methacrylonitrile	126-98-7	6.31	< 6.31	
Methyl Acetate	79-20-9	6.31	< 6.31	
Methyl methacrylate	80-62-6	6.31	< 6.31	
Methyl tert-butyl ether	1634-04-4	2.52	< 2.52	
Methylcyclohexane	108-87-2	2.52	< 2.52	
Methylene chloride	75-09-2	6.31	< 6.31	
n-Amyl acetate	628-63-7	12.6	< 12.6	
n-Butyl alcohol	71-36-3	126	< 126	
n-Butylbenzene	104-51-8	2.52	< 2.52	
n-Hexane	110-54-3	2.52	< 2.52	
n-Octane	111-65-9	2.52	< 2.52	
n-Propylbenzene	103-65-1	2.52	< 2.52	
Naphthalene	91-20-3	2.52	< 2.52	
o-Xylene	95-47-6	2.52	< 2.52	
Pentachloroethane	76-01-7	2.52	< 2.52	
Propionitrile	107-12-0	31.6	< 31.6	
Propyl acetate	109-60-4	12.6	< 12.6	
sec-Butylbenzene	135-98-8	2.52	< 2.52	
Styrene	100-42-5	2.52	< 2.52	
tert-Butyl alcohol	76-65-0	25.2	< 25.2	
tert-Butylbenzene	98-06-6	2.52	< 2.52	
Tetrachloroethene	127-18-4	2.52	< 2.52	
Tetrahydrofuran	109-99-9	2.52	< 2.52	
Toluene	108-88-3	2.52	< 2.52	
trans-1,2-Dichloroethene	156-60-5	2.52	< 2.52	
trans-1,3-Dichloropropene	10061-02-6	2.52	< 2.52	
trans-1,4-Dichloro-2-butene	110-57-6	2.52	< 2.52	
Trichloroethene	79-01-6	2.52	< 2.52	
Trichlorofluoromethane	75-69-4	2.52	< 2.52	
Vinyl acetate	108-05-4	12.6	< 12.6	
Vinyl chloride	75-01-4	1.26	< 1.26	
Xylenes, Total	1330-20-7	2.52	< 2.52	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**125**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**98.3**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-029B
Client Sample ID: Mill Cr. Above Country Gage - Bed

Analyzed: 8/26/2011 0110h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**108**	
Surr: Toluene-d8	2037-26-5	72-129	**98.1**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-030B
Client Sample ID: Mill Cr. Above Country Gage - Bank
Collection Date: 8/24/2011 1115h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0132h
Units: µg/kg-dry
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.38	< 2.38	
1,1,1-Trichloroethane	71-55-6	2.38	< 2.38	
1,1,2,2-Tetrachloroethane	79-34-5	2.38	< 2.38	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.38	< 2.38	
1,1,2-Trichloroethane	79-00-5	2.38	< 2.38	
1,1-Dichloropropene	563-58-6	2.38	< 2.38	
1,1-Dichloroethane	75-34-3	2.38	< 2.38	
1,1-Dichloroethene	75-35-4	2.38	< 2.38	
1,2,3-Trichlorobenzene	87-61-6	2.38	< 2.38	
1,2,3-Trichloropropane	96-18-4	2.38	< 2.38	
1,2,3-Trimethylbenzene	526-73-8	2.38	< 2.38	
1,2,4-Trichlorobenzene	120-82-1	2.38	< 2.38	
1,2,4-Trimethylbenzene	95-63-6	2.38	< 2.38	
1,2-Dibromo-3-chloropropane	96-12-8	5.95	< 5.95	
1,2-Dibromoethane	106-93-4	2.38	< 2.38	
1,2-Dichlorobenzene	95-50-1	2.38	< 2.38	
1,2-Dichloroethane	107-06-2	2.38	< 2.38	
1,2-Dichloropropane	78-87-5	2.38	< 2.38	
1,3,5-Trimethylbenzene	108-67-8	2.38	< 2.38	
1,3-Dichlorobenzene	541-73-1	2.38	< 2.38	
1,3-Dichloropropane	142-28-9	2.38	< 2.38	
1,4-Dichlorobenzene	106-46-7	2.38	< 2.38	
1,4-Dioxane	123-91-1	59.5	< 59.5	
2,2-Dichloropropane	594-20-7	2.38	< 2.38	
2-Butanone	78-93-3	11.9	< 11.9	
2-Chloroethyl vinyl ether	110-75-8	5.95	< 5.95	
2-Chlorotoluene	95-49-8	2.38	< 2.38	
2-Hexanone	591-78-6	5.95	< 5.95	
2-Nitropropane	79-46-9	5.95	< 5.95	
4-Chlorotoluene	106-43-4	2.38	< 2.38	
4-Isopropyltoluene	99-87-6	2.38	< 2.38	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-030B
Client Sample ID: Mill Cr. Above Country Gage - Bank

Analyzed: 8/26/2011 0132h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.95	< 5.95	
Acetone	67-64-1	11.9	< 11.9	
Acetonitrile	75-05-8	5.95	< 5.95	
Acrolein	107-02-8	5.95	< 5.95	
Acrylonitrile	107-13-1	11.9	< 11.9	
Allyl chloride	107-05-1	5.95	< 5.95	
Benzene	71-43-2	2.38	< 2.38	
Benzyl chloride	100-44-7	5.95	< 5.95	
Bis(2-chloroisopropyl) ether	108-60-1	5.95	< 5.95	
Bromobenzene	108-86-1	2.38	< 2.38	
Bromochloromethane	74-97-5	2.38	< 2.38	
Bromodichloromethane	75-27-4	2.38	< 2.38	
Bromoform	75-25-2	2.38	< 2.38	
Bromomethane	74-83-9	5.95	< 5.95	
Butyl acetate	123-86-4	11.9	< 11.9	
Carbon disulfide	75-15-0	2.38	< 2.38	
Carbon tetrachloride	56-23-5	2.38	< 2.38	
Chlorobenzene	108-90-7	2.38	< 2.38	
Chloroethane	75-00-3	2.38	< 2.38	
Chloroform	67-66-3	2.38	< 2.38	
Chloromethane	74-87-3	5.95	< 5.95	
Chloroprene	126-99-8	2.38	< 2.38	
cis-1,2-Dichloroethene	156-59-2	2.38	< 2.38	
cis-1,3-Dichloropropene	10061-01-5	2.38	< 2.38	
Cyclohexane	110-82-7	2.38	< 2.38	
Cyclohexanone	108-94-1	59.5	< 59.5	
Dibromochloromethane	124-48-1	2.38	< 2.38	
Dibromomethane	74-95-3	2.38	< 2.38	
Dichlorodifluoromethane	75-71-8	2.38	< 2.38	
Ethyl acetate	141-78-6	11.9	< 11.9	
Ethyl ether	60-29-7	11.9	< 11.9	
Ethyl methacrylate	97-63-2	2.38	< 2.38	
Ethylbenzene	100-41-4	2.38	< 2.38	
Hexachlorobutadiene	87-68-3	2.38	< 2.38	
Iodomethane	74-88-4	5.95	< 5.95	
Isobutyl alcohol	78-83-1	119	< 119	
Isopropyl acetate	108-21-4	11.9	< 11.9	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-030B
Client Sample ID: Mill Cr. Above Country Gage - Bank

Analyzed: 8/26/2011 0132h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	47.6	< 47.6	
Isopropylbenzene	98-82-8	2.38	< 2.38	
m,p-Xylene	179601-23-1	2.38	< 2.38	
Methacrylonitrile	126-98-7	5.95	< 5.95	
Methyl Acetate	79-20-9	5.95	< 5.95	
Methyl methacrylate	80-62-6	5.95	< 5.95	
Methyl tert-butyl ether	1634-04-4	2.38	< 2.38	
Methylcyclohexane	108-87-2	2.38	< 2.38	
Methylene chloride	75-09-2	5.95	< 5.95	
n-Amyl acetate	628-63-7	11.9	< 11.9	
n-Butyl alcohol	71-36-3	119	< 119	
n-Butylbenzene	104-51-8	2.38	< 2.38	
n-Hexane	110-54-3	2.38	< 2.38	
n-Octane	111-65-9	2.38	< 2.38	
n-Propylbenzene	103-65-1	2.38	< 2.38	
Naphthalene	91-20-3	2.38	< 2.38	
o-Xylene	95-47-6	2.38	< 2.38	
Pentachloroethane	76-01-7	2.38	< 2.38	
Propionitrile	107-12-0	29.8	< 29.8	
Propyl acetate	109-60-4	11.9	< 11.9	
sec-Butylbenzene	135-98-8	2.38	< 2.38	
Styrene	100-42-5	2.38	< 2.38	
tert-Butyl alcohol	76-65-0	23.8	< 23.8	
tert-Butylbenzene	98-06-6	2.38	< 2.38	
Tetrachloroethene	127-18-4	2.38	< 2.38	
Tetrahydrofuran	109-99-9	2.38	< 2.38	
Toluene	108-88-3	2.38	< 2.38	
trans-1,2-Dichloroethene	156-60-5	2.38	< 2.38	
trans-1,3-Dichloropropene	10061-02-6	2.38	< 2.38	
trans-1,4-Dichloro-2-butene	110-57-6	2.38	< 2.38	
Trichloroethene	79-01-6	2.38	< 2.38	
Trichlorofluoromethane	75-69-4	2.38	< 2.38	
Vinyl acetate	108-05-4	11.9	< 11.9	
Vinyl chloride	75-01-4	1.19	< 1.19	
Xylenes, Total	1330-20-7	2.38	< 2.38	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**130**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**105**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-030B
Client Sample ID: Mill Cr. Above Country Gage - Bank

Analyzed: 8/26/2011 0132h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**111**	
Surr: Toluene-d8	2037-26-5	72-129	**102**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-031D
Client Sample ID: City Cr. @ Lower Natural Channel
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1403h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-031D
Client Sample ID: City Cr. @ Lower Natural Channel

Analyzed: 8/25/2011 1403h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-031D
Client Sample ID: City Cr. @ Lower Natural Channel

Analyzed: 8/25/2011 1403h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**121**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**116**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-031D
Client Sample ID: City Cr. @ Lower Natural Channel

Analyzed: 8/25/2011 1403h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**97.5**	

This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-032B
Client Sample ID: City Cr. @ Lower Natural Channel - Bed
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0154h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.51	< 2.51	
1,1,1-Trichloroethane	71-55-6	2.51	< 2.51	
1,1,2,2-Tetrachloroethane	79-34-5	2.51	< 2.51	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.51	< 2.51	
1,1,2-Trichloroethane	79-00-5	2.51	< 2.51	
1,1-Dichloropropene	563-58-6	2.51	< 2.51	
1,1-Dichloroethane	75-34-3	2.51	< 2.51	
1,1-Dichloroethene	75-35-4	2.51	< 2.51	
1,2,3-Trichlorobenzene	87-61-6	2.51	< 2.51	
1,2,3-Trichloropropane	96-18-4	2.51	< 2.51	
1,2,3-Trimethylbenzene	526-73-8	2.51	< 2.51	
1,2,4-Trichlorobenzene	120-82-1	2.51	< 2.51	
1,2,4-Trimethylbenzene	95-63-6	2.51	< 2.51	
1,2-Dibromo-3-chloropropane	96-12-8	6.28	< 6.28	
1,2-Dibromoethane	106-93-4	2.51	< 2.51	
1,2-Dichlorobenzene	95-50-1	2.51	< 2.51	
1,2-Dichloroethane	107-06-2	2.51	< 2.51	
1,2-Dichloropropane	78-87-5	2.51	< 2.51	
1,3,5-Trimethylbenzene	108-67-8	2.51	< 2.51	
1,3-Dichlorobenzene	541-73-1	2.51	< 2.51	
1,3-Dichloropropane	142-28-9	2.51	< 2.51	
1,4-Dichlorobenzene	106-46-7	2.51	< 2.51	
1,4-Dioxane	123-91-1	62.8	< 62.8	
2,2-Dichloropropane	594-20-7	2.51	< 2.51	
2-Butanone	78-93-3	12.6	< 12.6	
2-Chloroethyl vinyl ether	110-75-8	6.28	< 6.28	
2-Chlorotoluene	95-49-8	2.51	< 2.51	
2-Hexanone	591-78-6	6.28	< 6.28	
2-Nitropropane	79-46-9	6.28	< 6.28	
4-Chlorotoluene	106-43-4	2.51	< 2.51	
4-Isopropyltoluene	99-87-6	2.51	< 2.51	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-032B
Client Sample ID: City Cr. @ Lower Natural Channel - Bed

Analyzed: 8/26/2011 0154h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.28	< 6.28	
Acetone	67-64-1	12.6	< 12.6	
Acetonitrile	75-05-8	6.28	< 6.28	
Acrolein	107-02-8	6.28	< 6.28	
Acrylonitrile	107-13-1	12.6	< 12.6	
Allyl chloride	107-05-1	6.28	< 6.28	
Benzene	71-43-2	2.51	< 2.51	
Benzyl chloride	100-44-7	6.28	< 6.28	
Bis(2-chloroisopropyl) ether	108-60-1	6.28	< 6.28	
Bromobenzene	108-86-1	2.51	< 2.51	
Bromochloromethane	74-97-5	2.51	< 2.51	
Bromodichloromethane	75-27-4	2.51	< 2.51	
Bromoform	75-25-2	2.51	< 2.51	
Bromomethane	74-83-9	6.28	< 6.28	
Butyl acetate	123-86-4	12.6	< 12.6	
Carbon disulfide	75-15-0	2.51	< 2.51	
Carbon tetrachloride	56-23-5	2.51	< 2.51	
Chlorobenzene	108-90-7	2.51	< 2.51	
Chloroethane	75-00-3	2.51	< 2.51	
Chloroform	67-66-3	2.51	< 2.51	
Chloromethane	74-87-3	6.28	< 6.28	
Chloroprene	126-99-8	2.51	< 2.51	
cis-1,2-Dichloroethene	156-59-2	2.51	< 2.51	
cis-1,3-Dichloropropene	10061-01-5	2.51	< 2.51	
Cyclohexane	110-82-7	2.51	< 2.51	
Cyclohexanone	108-94-1	62.8	< 62.8	
Dibromochloromethane	124-48-1	2.51	< 2.51	
Dibromomethane	74-95-3	2.51	< 2.51	
Dichlorodifluoromethane	75-71-8	2.51	< 2.51	
Ethyl acetate	141-78-6	12.6	< 12.6	
Ethyl ether	60-29-7	12.6	< 12.6	
Ethyl methacrylate	97-63-2	2.51	< 2.51	
Ethylbenzene	100-41-4	2.51	< 2.51	
Hexachlorobutadiene	87-68-3	2.51	< 2.51	
Iodomethane	74-88-4	6.28	< 6.28	
Isobutyl alcohol	78-83-1	126	< 126	
Isopropyl acetate	108-21-4	12.6	< 12.6	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-032B
Client Sample ID: City Cr. @ Lower Natural Channel - Bed

Analyzed: 8/26/2011 0154h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	50.3	< 50.3	
Isopropylbenzene	98-82-8	2.51	< 2.51	
m,p-Xylene	179601-23-1	2.51	< 2.51	
Methacrylonitrile	126-98-7	6.28	< 6.28	
Methyl Acetate	79-20-9	6.28	< 6.28	
Methyl methacrylate	80-62-6	6.28	< 6.28	
Methyl tert-butyl ether	1634-04-4	2.51	< 2.51	
Methylcyclohexane	108-87-2	2.51	< 2.51	
Methylene chloride	75-09-2	6.28	< 6.28	
n-Amyl acetate	628-63-7	12.6	< 12.6	
n-Butyl alcohol	71-36-3	126	< 126	
n-Butylbenzene	104-51-8	2.51	< 2.51	
n-Hexane	110-54-3	2.51	< 2.51	
n-Octane	111-65-9	2.51	< 2.51	
n-Propylbenzene	103-65-1	2.51	< 2.51	
Naphthalene	91-20-3	2.51	< 2.51	
o-Xylene	95-47-6	2.51	< 2.51	
Pentachloroethane	76-01-7	2.51	< 2.51	
Propionitrile	107-12-0	31.4	< 31.4	
Propyl acetate	109-60-4	12.6	< 12.6	
sec-Butylbenzene	135-98-8	2.51	< 2.51	
Styrene	100-42-5	2.51	< 2.51	
tert-Butyl alcohol	76-65-0	25.1	< 25.1	
tert-Butylbenzene	98-06-6	2.51	< 2.51	
Tetrachloroethene	127-18-4	2.51	< 2.51	
Tetrahydrofuran	109-99-9	2.51	< 2.51	
Toluene	108-88-3	2.51	< 2.51	
trans-1,2-Dichloroethene	156-60-5	2.51	< 2.51	
trans-1,3-Dichloropropene	10061-02-6	2.51	< 2.51	
trans-1,4-Dichloro-2-butene	110-57-6	2.51	< 2.51	
Trichloroethene	79-01-6	2.51	< 2.51	
Trichlorofluoromethane	75-69-4	2.51	< 2.51	
Vinyl acetate	108-05-4	12.6	< 12.6	
Vinyl chloride	75-01-4	1.26	< 1.26	
Xylenes, Total	1330-20-7	2.51	< 2.51	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**129**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**103**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-032B
Client Sample ID: City Cr. @ Lower Natural Channel - Bed

Analyzed: 8/26/2011 0154h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**108**	
Surr: Toluene-d8	2037-26-5	72-129	**99.9**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-033B
Client Sample ID: City Cr. @ Lower Natural Channel - Bank
Collection Date: 8/24/2011 1215h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0216h
Units: µg/kg-dry
Dilution Factor: 1

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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.56	< 2.56	
1,1,1-Trichloroethane	71-55-6	2.56	< 2.56	
1,1,2,2-Tetrachloroethane	79-34-5	2.56	< 2.56	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.56	< 2.56	
1,1,2-Trichloroethane	79-00-5	2.56	< 2.56	
1,1-Dichloropropene	563-58-6	2.56	< 2.56	
1,1-Dichloroethane	75-34-3	2.56	< 2.56	
1,1-Dichloroethene	75-35-4	2.56	< 2.56	
1,2,3-Trichlorobenzene	87-61-6	2.56	< 2.56	
1,2,3-Trichloropropane	96-18-4	2.56	< 2.56	
1,2,3-Trimethylbenzene	526-73-8	2.56	< 2.56	
1,2,4-Trichlorobenzene	120-82-1	2.56	< 2.56	
1,2,4-Trimethylbenzene	95-63-6	2.56	< 2.56	
1,2-Dibromo-3-chloropropane	96-12-8	6.41	< 6.41	
1,2-Dibromoethane	106-93-4	2.56	< 2.56	
1,2-Dichlorobenzene	95-50-1	2.56	< 2.56	
1,2-Dichloroethane	107-06-2	2.56	< 2.56	
1,2-Dichloropropane	78-87-5	2.56	< 2.56	
1,3,5-Trimethylbenzene	108-67-8	2.56	< 2.56	
1,3-Dichlorobenzene	541-73-1	2.56	< 2.56	
1,3-Dichloropropane	142-28-9	2.56	< 2.56	
1,4-Dichlorobenzene	106-46-7	2.56	< 2.56	
1,4-Dioxane	123-91-1	64.1	< 64.1	
2,2-Dichloropropane	594-20-7	2.56	< 2.56	
2-Butanone	78-93-3	12.8	< 12.8	
2-Chloroethyl vinyl ether	110-75-8	6.41	< 6.41	
2-Chlorotoluene	95-49-8	2.56	< 2.56	
2-Hexanone	591-78-6	6.41	< 6.41	
2-Nitropropane	79-46-9	6.41	< 6.41	
4-Chlorotoluene	106-43-4	2.56	< 2.56	
4-Isopropyltoluene	99-87-6	2.56	< 2.56	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-033B
Client Sample ID: City Cr. @ Lower Natural Channel - Bank

Analyzed: 8/26/2011 0216h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.41	< 6.41	
Acetone	67-64-1	12.8	< 12.8	
Acetonitrile	75-05-8	6.41	< 6.41	
Acrolein	107-02-8	6.41	< 6.41	
Acrylonitrile	107-13-1	12.8	< 12.8	
Allyl chloride	107-05-1	6.41	< 6.41	
Benzene	71-43-2	2.56	< 2.56	
Benzyl chloride	100-44-7	6.41	< 6.41	
Bis(2-chloroisopropyl) ether	108-60-1	6.41	< 6.41	
Bromobenzene	108-86-1	2.56	< 2.56	
Bromochloromethane	74-97-5	2.56	< 2.56	
Bromodichloromethane	75-27-4	2.56	< 2.56	
Bromoform	75-25-2	2.56	< 2.56	
Bromomethane	74-83-9	6.41	< 6.41	
Butyl acetate	123-86-4	12.8	< 12.8	
Carbon disulfide	75-15-0	2.56	< 2.56	
Carbon tetrachloride	56-23-5	2.56	< 2.56	
Chlorobenzene	108-90-7	2.56	< 2.56	
Chloroethane	75-00-3	2.56	< 2.56	
Chloroform	67-66-3	2.56	< 2.56	
Chloromethane	74-87-3	6.41	< 6.41	
Chloroprene	126-99-8	2.56	< 2.56	
cis-1,2-Dichloroethene	156-59-2	2.56	< 2.56	
cis-1,3-Dichloropropene	10061-01-5	2.56	< 2.56	
Cyclohexane	110-82-7	2.56	< 2.56	
Cyclohexanone	108-94-1	64.1	< 64.1	
Dibromochloromethane	124-48-1	2.56	< 2.56	
Dibromomethane	74-95-3	2.56	< 2.56	
Dichlorodifluoromethane	75-71-8	2.56	< 2.56	
Ethyl acetate	141-78-6	12.8	< 12.8	
Ethyl ether	60-29-7	12.8	< 12.8	
Ethyl methacrylate	97-63-2	2.56	< 2.56	
Ethylbenzene	100-41-4	2.56	< 2.56	
Hexachlorobutadiene	87-68-3	2.56	< 2.56	
Iodomethane	74-88-4	6.41	< 6.41	
Isobutyl alcohol	78-83-1	128	< 128	
Isopropyl acetate	108-21-4	12.8	< 12.8	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-033B
Client Sample ID: City Cr. @ Lower Natural Channel - Bank

Analyzed: 8/26/2011 0216h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	51.3	< 51.3	
Isopropylbenzene	98-82-8	2.56	< 2.56	
m,p-Xylene	179601-23-1	2.56	< 2.56	
Methacrylonitrile	126-98-7	6.41	< 6.41	
Methyl Acetate	79-20-9	6.41	< 6.41	
Methyl methacrylate	80-62-6	6.41	< 6.41	
Methyl tert-butyl ether	1634-04-4	2.56	< 2.56	
Methylcyclohexane	108-87-2	2.56	< 2.56	
Methylene chloride	75-09-2	6.41	< 6.41	
n-Amyl acetate	628-63-7	12.8	< 12.8	
n-Butyl alcohol	71-36-3	128	< 128	
n-Butylbenzene	104-51-8	2.56	< 2.56	
n-Hexane	110-54-3	2.56	< 2.56	
n-Octane	111-65-9	2.56	< 2.56	
n-Propylbenzene	103-65-1	2.56	< 2.56	
Naphthalene	91-20-3	2.56	< 2.56	
o-Xylene	95-47-6	2.56	< 2.56	
Pentachloroethane	76-01-7	2.56	< 2.56	
Propionitrile	107-12-0	32.0	< 32.0	
Propyl acetate	109-60-4	12.8	< 12.8	
sec-Butylbenzene	135-98-8	2.56	< 2.56	
Styrene	100-42-5	2.56	< 2.56	
tert-Butyl alcohol	76-65-0	25.6	< 25.6	
tert-Butylbenzene	98-06-6	2.56	< 2.56	
Tetrachloroethene	127-18-4	2.56	< 2.56	
Tetrahydrofuran	109-99-9	2.56	< 2.56	
Toluene	108-88-3	2.56	< 2.56	
trans-1,2-Dichloroethene	156-60-5	2.56	< 2.56	
trans-1,3-Dichloropropene	10061-02-6	2.56	< 2.56	
trans-1,4-Dichloro-2-butene	110-57-6	2.56	< 2.56	
Trichloroethene	79-01-6	2.56	< 2.56	
Trichlorofluoromethane	75-69-4	2.56	< 2.56	
Vinyl acetate	108-05-4	12.8	< 12.8	
Vinyl chloride	75-01-4	1.28	< 1.28	
Xylenes, Total	1330-20-7	2.56	< 2.56	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**133**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**109**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-033B
Client Sample ID: City Cr. @ Lower Natural Channel - Bank

Analyzed: 8/26/2011 0216h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**111**	
Surr: Toluene-d8	2037-26-5	72-129	**105**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-034D
Client Sample ID: City Cr. @ N. Cyn. Footbridge
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 1422h
Units: µg/L
Dilution Factor: 1

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-034D
Client Sample ID: City Cr. @ N. Cyn. Footbridge

Analyzed: 8/25/2011 1422h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-034D
Client Sample ID: City Cr. @ N. Cyn. Footbridge

Analyzed: 8/25/2011 1422h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**121**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**116**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-034D
Client Sample ID: City Cr. @ N. Cyn. Footbridge

Analyzed: 8/25/2011 1422h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**112**	
Surr: Toluene-d8	2037-26-5	80-125	**98.9**	

This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-035B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 0238h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.43	< 2.43	
1,1,1-Trichloroethane	71-55-6	2.43	< 2.43	
1,1,2,2-Tetrachloroethane	79-34-5	2.43	< 2.43	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.43	< 2.43	
1,1,2-Trichloroethane	79-00-5	2.43	< 2.43	
1,1-Dichloropropene	563-58-6	2.43	< 2.43	
1,1-Dichloroethane	75-34-3	2.43	< 2.43	
1,1-Dichloroethene	75-35-4	2.43	< 2.43	
1,2,3-Trichlorobenzene	87-61-6	2.43	< 2.43	
1,2,3-Trichloropropane	96-18-4	2.43	< 2.43	
1,2,3-Trimethylbenzene	526-73-8	2.43	< 2.43	
1,2,4-Trichlorobenzene	120-82-1	2.43	< 2.43	
1,2,4-Trimethylbenzene	95-63-6	2.43	< 2.43	
1,2-Dibromo-3-chloropropane	96-12-8	6.08	< 6.08	
1,2-Dibromoethane	106-93-4	2.43	< 2.43	
1,2-Dichlorobenzene	95-50-1	2.43	< 2.43	
1,2-Dichloroethane	107-06-2	2.43	< 2.43	
1,2-Dichloropropane	78-87-5	2.43	< 2.43	
1,3,5-Trimethylbenzene	108-67-8	2.43	< 2.43	
1,3-Dichlorobenzene	541-73-1	2.43	< 2.43	
1,3-Dichloropropane	142-28-9	2.43	< 2.43	
1,4-Dichlorobenzene	106-46-7	2.43	< 2.43	
1,4-Dioxane	123-91-1	60.8	< 60.8	
2,2-Dichloropropane	594-20-7	2.43	< 2.43	
2-Butanone	78-93-3	12.2	< 12.2	
2-Chloroethyl vinyl ether	110-75-8	6.08	< 6.08	
2-Chlorotoluene	95-49-8	2.43	< 2.43	
2-Hexanone	591-78-6	6.08	< 6.08	
2-Nitropropane	79-46-9	6.08	< 6.08	
4-Chlorotoluene	106-43-4	2.43	< 2.43	
4-Isopropyltoluene	99-87-6	2.43	< 2.43	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-035B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed

Analyzed: 8/26/2011 0238h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	6.08	< 6.08	
Acetone	67-64-1	12.2	< 12.2	
Acetonitrile	75-05-8	6.08	< 6.08	
Acrolein	107-02-8	6.08	< 6.08	
Acrylonitrile	107-13-1	12.2	< 12.2	
Allyl chloride	107-05-1	6.08	< 6.08	
Benzene	71-43-2	2.43	< 2.43	
Benzyl chloride	100-44-7	6.08	< 6.08	
Bis(2-chloroisopropyl) ether	108-60-1	6.08	< 6.08	
Bromobenzene	108-86-1	2.43	< 2.43	
Bromochloromethane	74-97-5	2.43	< 2.43	
Bromodichloromethane	75-27-4	2.43	< 2.43	
Bromoform	75-25-2	2.43	< 2.43	
Bromomethane	74-83-9	6.08	< 6.08	
Butyl acetate	123-86-4	12.2	< 12.2	
Carbon disulfide	75-15-0	2.43	< 2.43	
Carbon tetrachloride	56-23-5	2.43	< 2.43	
Chlorobenzene	108-90-7	2.43	< 2.43	
Chloroethane	75-00-3	2.43	< 2.43	
Chloroform	67-66-3	2.43	< 2.43	
Chloromethane	74-87-3	6.08	< 6.08	
Chloroprene	126-99-8	2.43	< 2.43	
cis-1,2-Dichloroethene	156-59-2	2.43	< 2.43	
cis-1,3-Dichloropropene	10061-01-5	2.43	< 2.43	
Cyclohexane	110-82-7	2.43	< 2.43	
Cyclohexanone	108-94-1	60.8	< 60.8	
Dibromochloromethane	124-48-1	2.43	< 2.43	
Dibromomethane	74-95-3	2.43	< 2.43	
Dichlorodifluoromethane	75-71-8	2.43	< 2.43	
Ethyl acetate	141-78-6	12.2	< 12.2	
Ethyl ether	60-29-7	12.2	< 12.2	
Ethyl methacrylate	97-63-2	2.43	< 2.43	
Ethylbenzene	100-41-4	2.43	< 2.43	
Hexachlorobutadiene	87-68-3	2.43	< 2.43	
Iodomethane	74-88-4	6.08	< 6.08	
Isobutyl alcohol	78-83-1	122	< 122	
Isopropyl acetate	108-21-4	12.2	< 12.2	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-035B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed

Analyzed: 8/26/2011 0238h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	48.6	< 48.6	
Isopropylbenzene	98-82-8	2.43	< 2.43	
m,p-Xylene	179601-23-1	2.43	< 2.43	
Methacrylonitrile	126-98-7	6.08	< 6.08	
Methyl Acetate	79-20-9	6.08	< 6.08	
Methyl methacrylate	80-62-6	6.08	< 6.08	
Methyl tert-butyl ether	1634-04-4	2.43	< 2.43	
Methylcyclohexane	108-87-2	2.43	< 2.43	
Methylene chloride	75-09-2	6.08	< 6.08	
n-Amyl acetate	628-63-7	12.2	< 12.2	
n-Butyl alcohol	71-36-3	122	< 122	
n-Butylbenzene	104-51-8	2.43	< 2.43	
n-Hexane	110-54-3	2.43	< 2.43	
n-Octane	111-65-9	2.43	< 2.43	
n-Propylbenzene	103-65-1	2.43	< 2.43	
Naphthalene	91-20-3	2.43	< 2.43	
o-Xylene	95-47-6	2.43	< 2.43	
Pentachloroethane	76-01-7	2.43	< 2.43	
Propionitrile	107-12-0	30.4	< 30.4	
Propyl acetate	109-60-4	12.2	< 12.2	
sec-Butylbenzene	135-98-8	2.43	< 2.43	
Styrene	100-42-5	2.43	< 2.43	
tert-Butyl alcohol	76-65-0	24.3	< 24.3	
tert-Butylbenzene	98-06-6	2.43	< 2.43	
Tetrachloroethene	127-18-4	2.43	< 2.43	
Tetrahydrofuran	109-99-9	2.43	< 2.43	
Toluene	108-88-3	2.43	< 2.43	
trans-1,2-Dichloroethene	156-60-5	2.43	< 2.43	
trans-1,3-Dichloropropene	10061-02-6	2.43	< 2.43	
trans-1,4-Dichloro-2-butene	110-57-6	2.43	< 2.43	
Trichloroethene	79-01-6	2.43	< 2.43	
Trichlorofluoromethane	75-69-4	2.43	< 2.43	
Vinyl acetate	108-05-4	12.2	< 12.2	
Vinyl chloride	75-01-4	1.22	< 1.22	
Xylenes, Total	1330-20-7	2.43	< 2.43	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**127**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**105**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-035B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bed

Analyzed: 8/26/2011 0238h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**110**	
Surr: Toluene-d8	2037-26-5	72-129	**101**	

The sample was received with headspace.
Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs. Those results can be found on pages 702 to 703.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-036B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank
Collection Date: 8/24/2011 1300h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C

Analyzed: 8/26/2011 1230h
Units: µg/kg-dry
Dilution Factor: 1

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Kyle F. Gross
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Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.37	< 2.37	
1,1,1-Trichloroethane	71-55-6	2.37	< 2.37	
1,1,2,2-Tetrachloroethane	79-34-5	2.37	< 2.37	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.37	< 2.37	
1,1,2-Trichloroethane	79-00-5	2.37	< 2.37	
1,1-Dichloropropene	563-58-6	2.37	< 2.37	
1,1-Dichloroethane	75-34-3	2.37	< 2.37	
1,1-Dichloroethene	75-35-4	2.37	< 2.37	
1,2,3-Trichlorobenzene	87-61-6	2.37	< 2.37	
1,2,3-Trichloropropane	96-18-4	2.37	< 2.37	
1,2,3-Trimethylbenzene	526-73-8	2.37	< 2.37	
1,2,4-Trichlorobenzene	120-82-1	2.37	< 2.37	
1,2,4-Trimethylbenzene	95-63-6	2.37	< 2.37	
1,2-Dibromo-3-chloropropane	96-12-8	5.94	< 5.94	
1,2-Dibromoethane	106-93-4	2.37	< 2.37	
1,2-Dichlorobenzene	95-50-1	2.37	< 2.37	
1,2-Dichloroethane	107-06-2	2.37	< 2.37	
1,2-Dichloropropane	78-87-5	2.37	< 2.37	
1,3,5-Trimethylbenzene	108-67-8	2.37	< 2.37	
1,3-Dichlorobenzene	541-73-1	2.37	< 2.37	
1,3-Dichloropropane	142-28-9	2.37	< 2.37	
1,4-Dichlorobenzene	106-46-7	2.37	< 2.37	
1,4-Dioxane	123-91-1	59.4	< 59.4	
2,2-Dichloropropane	594-20-7	2.37	< 2.37	
2-Butanone	78-93-3	11.9	< 11.9	
2-Chloroethyl vinyl ether	110-75-8	5.94	< 5.94	
2-Chlorotoluene	95-49-8	2.37	< 2.37	
2-Hexanone	591-78-6	5.94	< 5.94	
2-Nitropropane	79-46-9	5.94	< 5.94	
4-Chlorotoluene	106-43-4	2.37	< 2.37	
4-Isopropyltoluene	99-87-6	2.37	< 2.37	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-036B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank

Analyzed: 8/26/2011 1230h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.94	< 5.94	
Acetone	67-64-1	11.9	< 11.9	
Acetonitrile	75-05-8	5.94	< 5.94	
Acrolein	107-02-8	5.94	< 5.94	
Acrylonitrile	107-13-1	11.9	< 11.9	
Allyl chloride	107-05-1	5.94	< 5.94	
Benzene	71-43-2	2.37	< 2.37	
Benzyl chloride	100-44-7	5.94	< 5.94	
Bis(2-chloroisopropyl) ether	108-60-1	5.94	< 5.94	
Bromobenzene	108-86-1	2.37	< 2.37	
Bromochloromethane	74-97-5	2.37	< 2.37	
Bromodichloromethane	75-27-4	2.37	< 2.37	
Bromoform	75-25-2	2.37	< 2.37	
Bromomethane	74-83-9	5.94	< 5.94	
Butyl acetate	123-86-4	11.9	< 11.9	
Carbon disulfide	75-15-0	2.37	< 2.37	
Carbon tetrachloride	56-23-5	2.37	< 2.37	
Chlorobenzene	108-90-7	2.37	< 2.37	
Chloroethane	75-00-3	2.37	< 2.37	
Chloroform	67-66-3	2.37	**2.59**	
Chloromethane	74-87-3	5.94	< 5.94	
Chloroprene	126-99-8	2.37	< 2.37	
cis-1,2-Dichloroethene	156-59-2	2.37	< 2.37	
cis-1,3-Dichloropropene	10061-01-5	2.37	< 2.37	
Cyclohexane	110-82-7	2.37	< 2.37	
Cyclohexanone	108-94-1	59.4	< 59.4	
Dibromochloromethane	124-48-1	2.37	< 2.37	
Dibromomethane	74-95-3	2.37	< 2.37	
Dichlorodifluoromethane	75-71-8	2.37	< 2.37	
Ethyl acetate	141-78-6	11.9	< 11.9	
Ethyl ether	60-29-7	11.9	< 11.9	
Ethyl methacrylate	97-63-2	2.37	< 2.37	
Ethylbenzene	100-41-4	2.37	< 2.37	
Hexachlorobutadiene	87-68-3	2.37	< 2.37	
Iodomethane	74-88-4	5.94	< 5.94	
Isobutyl alcohol	78-83-1	119	< 119	
Isopropyl acetate	108-21-4	11.9	< 11.9	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-036B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank

Analyzed: 8/26/2011 1230h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	47.5	< 47.5	
Isopropylbenzene	98-82-8	2.37	< 2.37	
m,p-Xylene	179601-23-1	2.37	< 2.37	
Methacrylonitrile	126-98-7	5.94	< 5.94	
Methyl Acetate	79-20-9	5.94	< 5.94	
Methyl methacrylate	80-62-6	5.94	< 5.94	
Methyl tert-butyl ether	1634-04-4	2.37	< 2.37	
Methylcyclohexane	108-87-2	2.37	< 2.37	
Methylene chloride	75-09-2	5.94	< 5.94	
n-Amyl acetate	628-63-7	11.9	< 11.9	
n-Butyl alcohol	71-36-3	119	< 119	
n-Butylbenzene	104-51-8	2.37	< 2.37	
n-Hexane	110-54-3	2.37	< 2.37	
n-Octane	111-65-9	2.37	< 2.37	
n-Propylbenzene	103-65-1	2.37	< 2.37	
Naphthalene	91-20-3	2.37	< 2.37	
o-Xylene	95-47-6	2.37	< 2.37	
Pentachloroethane	76-01-7	2.37	< 2.37	
Propionitrile	107-12-0	29.7	< 29.7	
Propyl acetate	109-60-4	11.9	< 11.9	
sec-Butylbenzene	135-98-8	2.37	< 2.37	
Styrene	100-42-5	2.37	< 2.37	
tert-Butyl alcohol	76-65-0	23.7	< 23.7	
tert-Butylbenzene	98-06-6	2.37	< 2.37	
Tetrachloroethene	127-18-4	2.37	**4.55**	
Tetrahydrofuran	109-99-9	2.37	< 2.37	
Toluene	108-88-3	2.37	< 2.37	
trans-1,2-Dichloroethene	156-60-5	2.37	< 2.37	
trans-1,3-Dichloropropene	10061-02-6	2.37	< 2.37	
trans-1,4-Dichloro-2-butene	110-57-6	2.37	< 2.37	
Trichloroethene	79-01-6	2.37	< 2.37	
Trichlorofluoromethane	75-69-4	2.37	< 2.37	
Vinyl acetate	108-05-4	11.9	< 11.9	
Vinyl chloride	75-01-4	1.19	< 1.19	
Xylenes, Total	1330-20-7	2.37	< 2.37	
Surr: 1,2-Dichloroethane-d4	17060-07-0	68-147	**103**	
Surr: 4-Bromofluorobenzene	460-00-4	71-144	**110**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-036B
Client Sample ID: City Cr. @ N. Cyn. Footbridge - Bank

Analyzed: 8/26/2011 1230h
Units: µg/kg-dry
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	71-129	**102**	
Surr: Toluene-d8	2037-26-5	72-129	**107**	

Sampling and analytical preparation performed by method 5030C.
This sample was analyzed for TICs and no unknown peaks were detected.

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-037D
Client Sample ID: Jordan River Above 800 So.
Collection Date: 8/24/2011 1645h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 2023h
Units: µg/L
Dilution Factor: 1

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Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-037D
Client Sample ID: Jordan River Above 800 So.

Analyzed: 8/25/2011 2023h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-037D
Client Sample ID: Jordan River Above 800 So.

Analyzed: 8/25/2011 2023h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**118**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**113**	

Lab Sample ID: 1108489-037D
Client Sample ID: Jordan River Above 800 So.

Analyzed: 8/25/2011 2023h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**97.5**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

ORGANIC ANALYTICAL REPORT

Client: EarthFax Engineering **Contact:** Galen Williams
Project: Red Butte / 1300-02
Lab Sample ID: 1108489-038D
Client Sample ID: Jordan River Above 1700 So.
Collection Date: 8/24/2011 1720h
Received Date: 8/24/2011 1745h **Method:** SW8260C

Analytical Results VOAs Full List by GC/MS Method 8260C/5030C

Analyzed: 8/25/2011 2042h
Units: µg/L
Dilution Factor: 1

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Compound	CAS Number	Reporting Limit	Analytical Result	Qual
1,1,1,2-Tetrachloroethane	630-20-6	2.00	< 2.00	
1,1,1-Trichloroethane	71-55-6	2.00	< 2.00	
1,1,2,2-Tetrachloroethane	79-34-5	2.00	< 2.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.00	< 2.00	
1,1,2-Trichloroethane	79-00-5	2.00	< 2.00	
1,1-Dichloropropene	563-58-6	2.00	< 2.00	
1,1-Dichloroethane	75-34-3	2.00	< 2.00	
1,1-Dichloroethene	75-35-4	2.00	< 2.00	
1,2,3-Trichlorobenzene	87-61-6	2.00	< 2.00	
1,2,3-Trichloropropane	96-18-4	2.00	< 2.00	
1,2,3-Trimethylbenzene	526-73-8	2.00	< 2.00	
1,2,4-Trichlorobenzene	120-82-1	2.00	< 2.00	
1,2,4-Trimethylbenzene	95-63-6	2.00	< 2.00	
1,2-Dibromo-3-chloropropane	96-12-8	5.00	< 5.00	
1,2-Dibromoethane	106-93-4	2.00	< 2.00	
1,2-Dichlorobenzene	95-50-1	2.00	< 2.00	
1,2-Dichloroethane	107-06-2	2.00	< 2.00	
1,2-Dichloropropane	78-87-5	2.00	< 2.00	
1,3,5-Trimethylbenzene	108-67-8	2.00	< 2.00	
1,3-Dichlorobenzene	541-73-1	2.00	< 2.00	
1,3-Dichloropropane	142-28-9	2.00	< 2.00	
1,4-Dichlorobenzene	106-46-7	2.00	< 2.00	
1,4-Dioxane	123-91-1	50.0	< 50.0	
2,2-Dichloropropane	594-20-7	2.00	< 2.00	
2-Butanone	78-93-3	10.0	< 10.0	
2-Chloroethyl vinyl ether	110-75-8	5.00	< 5.00	
2-Chlorotoluene	95-49-8	2.00	< 2.00	
2-Hexanone	591-78-6	5.00	< 5.00	
2-Nitropropane	79-46-9	5.00	< 5.00	
4-Chlorotoluene	106-43-4	2.00	< 2.00	
4-Isopropyltoluene	99-87-6	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-038D
Client Sample ID: Jordan River Above 1700 So.

Analyzed: 8/25/2011 2042h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
4-Methyl-2-pentanone	108-10-1	5.00	< 5.00	
Acetone	67-64-1	10.0	< 10.0	
Acetonitrile	75-05-8	5.00	< 5.00	
Acrolein	107-02-8	5.00	< 5.00	
Acrylonitrile	107-13-1	10.0	< 10.0	
Allyl chloride	107-05-1	5.00	< 5.00	
Benzene	71-43-2	2.00	< 2.00	
Benzyl chloride	100-44-7	5.00	< 5.00	
Bis(2-chloroisopropyl) ether	108-60-1	5.00	< 5.00	
Bromobenzene	108-86-1	2.00	< 2.00	
Bromochloromethane	74-97-5	2.00	< 2.00	
Bromodichloromethane	75-27-4	2.00	< 2.00	
Bromoform	75-25-2	2.00	< 2.00	
Bromomethane	74-83-9	5.00	< 5.00	
Butyl acetate	123-86-4	5.00	< 5.00	
Carbon disulfide	75-15-0	2.00	< 2.00	
Carbon tetrachloride	56-23-5	2.00	< 2.00	
Chlorobenzene	108-90-7	2.00	< 2.00	
Chloroethane	75-00-3	2.00	< 2.00	
Chloroform	67-66-3	2.00	< 2.00	
Chloromethane	74-87-3	3.00	< 3.00	
Chloroprene	126-99-8	2.00	< 2.00	
cis-1,2-Dichloroethene	156-59-2	2.00	< 2.00	
cis-1,3-Dichloropropene	10061-01-5	2.00	< 2.00	
Cyclohexane	110-82-7	2.00	< 2.00	
Cyclohexanone	108-94-1	50.0	< 50.0	
Dibromochloromethane	124-48-1	2.00	< 2.00	
Dibromomethane	74-95-3	2.00	< 2.00	
Dichlorodifluoromethane	75-71-8	2.00	< 2.00	
Ethyl acetate	141-78-6	10.0	< 10.0	
Ethyl ether	60-29-7	10.0	< 10.0	
Ethyl methacrylate	97-63-2	2.00	< 2.00	
Ethylbenzene	100-41-4	2.00	< 2.00	
Hexachlorobutadiene	87-68-3	2.00	< 2.00	
Iodomethane	74-88-4	5.00	< 5.00	
Isobutyl alcohol	78-83-1	100	< 100	
Isopropyl acetate	108-21-4	2.00	< 2.00	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Lab Sample ID: 1108489-038D
Client Sample ID: Jordan River Above 1700 So.

Analyzed: 8/25/2011 2042h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Isopropyl alcohol	67-63-0	25.0	< 25.0	
Isopropylbenzene	98-82-8	2.00	< 2.00	
m,p-Xylene	179601-23-1	2.00	< 2.00	
Methacrylonitrile	126-98-7	5.00	< 5.00	
Methyl Acetate	79-20-9	5.00	< 5.00	
Methyl methacrylate	80-62-6	5.00	< 5.00	
Methyl tert-butyl ether	1634-04-4	2.00	< 2.00	
Methylcyclohexane	108-87-2	2.00	< 2.00	
Methylene chloride	75-09-2	2.00	< 2.00	
n-Amyl acetate	628-63-7	2.00	< 2.00	
n-Butyl alcohol	71-36-3	50.0	< 50.0	
n-Butylbenzene	104-51-8	2.00	< 2.00	
n-Hexane	110-54-3	2.00	< 2.00	
n-Octane	111-65-9	2.00	< 2.00	
n-Propylbenzene	103-65-1	2.00	< 2.00	
Naphthalene	91-20-3	2.00	< 2.00	
o-Xylene	95-47-6	2.00	< 2.00	
Pentachloroethane	76-01-7	5.00	< 5.00	
Propionitrile	107-12-0	25.0	< 25.0	
Propyl acetate	109-60-4	2.00	< 2.00	
sec-Butylbenzene	135-98-8	2.00	< 2.00	
Styrene	100-42-5	2.00	< 2.00	
tert-Butyl alcohol	76-65-0	20.0	< 20.0	
tert-Butylbenzene	98-06-6	2.00	< 2.00	
Tetrachloroethene	127-18-4	2.00	< 2.00	
Tetrahydrofuran	109-99-9	2.00	< 2.00	
Toluene	108-88-3	2.00	< 2.00	
trans-1,2-Dichloroethene	156-60-5	2.00	< 2.00	
trans-1,3-Dichloropropene	10061-02-6	2.00	< 2.00	
trans-1,4-Dichloro-2-butene	110-57-6	2.00	< 2.00	
Trichloroethene	79-01-6	2.00	< 2.00	
Trichlorofluoromethane	75-69-4	2.00	< 2.00	
Vinyl acetate	108-05-4	10.0	< 10.0	
Vinyl chloride	75-01-4	1.00	< 1.00	
Xylenes, Total	1330-20-7	2.00	< 2.00	
Surr: 1,2-Dichloroethane-d4	17060-07-0	77-144	**120**	
Surr: 4-Bromofluorobenzene	460-00-4	80-123	**115**	

Lab Sample ID: 1108489-038D
Client Sample ID: Jordan River Above 1700 So.

Analyzed: 8/25/2011 2042h
Units: µg/L
Dilution Factor: 1

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
Surr: Dibromofluoromethane	1868-53-7	80-124	**111**	
Surr: Toluene-d8	2037-26-5	80-125	**98.3**	

This sample was analyzed for TICs and no unknown peaks were detected.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U18 1108489-001C.D
Acq On : 27 Aug 2011 10:46 pm
Operator : ALICIA HABERLE
Sample : 1108489-001C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

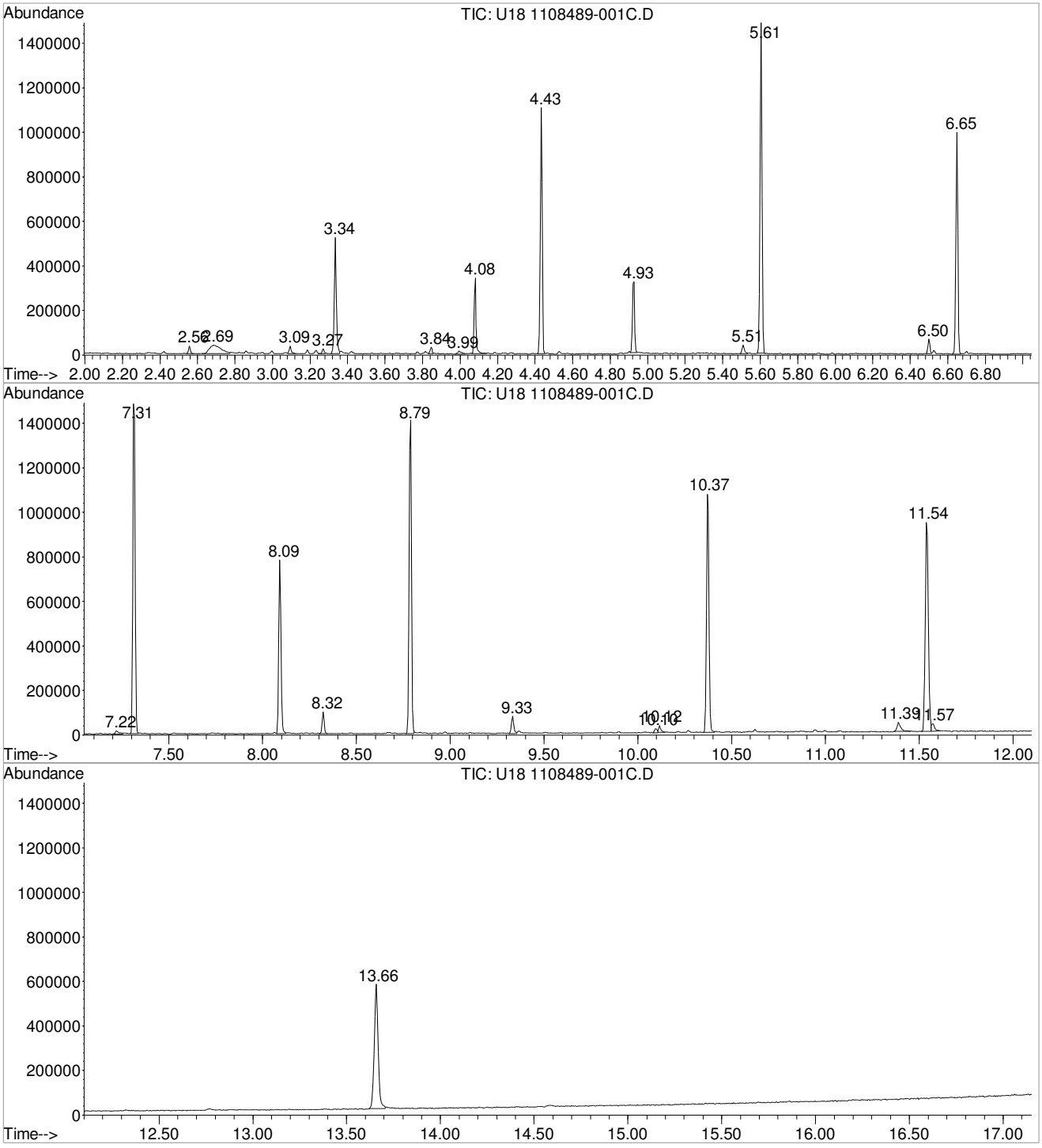
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.556	115	118	122	rVB	33633	22292	1.86%	0.228%
2	2.686	132	145	163	rBV3	39063	172218	14.35%	1.763%
3	3.095	227	230	235	rVB	34299	25580	2.13%	0.262%
4	3.273	261	267	269	rBV	22610	16424	1.37%	0.168%
5	3.335	275	280	285	rBV	521251	380990	31.75%	3.901%
6	3.845	383	386	389	rBV	28286	19281	1.61%	0.197%
7	3.994	413	417	424	rBV2	15220	18204	1.52%	0.186%
8	4.081	431	435	447	rBV	339508	249443	20.78%	2.554%
9	4.432	504	508	512	rBV	1105899	777816	64.81%	7.963%
10	4.927	607	611	614	rBV	317352	239910	19.99%	2.456%
11	5.509	729	732	737	rBV2	39992	35174	2.93%	0.360%
12	5.605	748	752	756	rVB	1486581	1049693	87.46%	10.747%
13	6.499	935	938	941	rBV	66930	45438	3.79%	0.465%
14	6.649	964	969	973	rBV	995941	672162	56.01%	6.882%
15	7.221	1083	1088	1095	rBV3	13181	20295	1.69%	0.208%
16	7.312	1103	1107	1112	rBV	1480499	1200131	100.00%	12.287%
17	8.091	1265	1269	1276	rBV	780028	600098	50.00%	6.144%
18	8.322	1313	1317	1321	rBV	99342	72138	6.01%	0.739%
19	8.788	1409	1414	1418	rBV	1408830	1157733	96.47%	11.853%
20	9.332	1523	1527	1532	rBV	79177	69078	5.76%	0.707%
21	10.096	1683	1686	1688	rBV2	18774	17149	1.43%	0.176%
22	10.116	1688	1690	1695	rVB3	29717	25580	2.13%	0.262%
23	10.371	1739	1743	1751	rBV	1070274	929107	77.42%	9.512%
24	11.390	1950	1955	1968	rVB4	41378	59851	4.99%	0.613%
25	11.539	1980	1986	1991	rBV	940049	1018885	84.90%	10.431%
26	11.573	1991	1993	2001	rVB	32147	36989	3.08%	0.379%
27	13.660	2419	2427	2437	rBV	559091	835795	69.64%	8.557%

Sum of corrected areas: 9767454

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U18 1108489-001C.D
Acq On : 27 Aug 2011 10:46 pm
Operator : ALICIA HABERLE
Sample : 1108489-001C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U18 1108489-001C.D
Acq On : 27 Aug 2011 10:46 pm
Operator : ALICIA HABERLE
Sample : 1108489-001C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

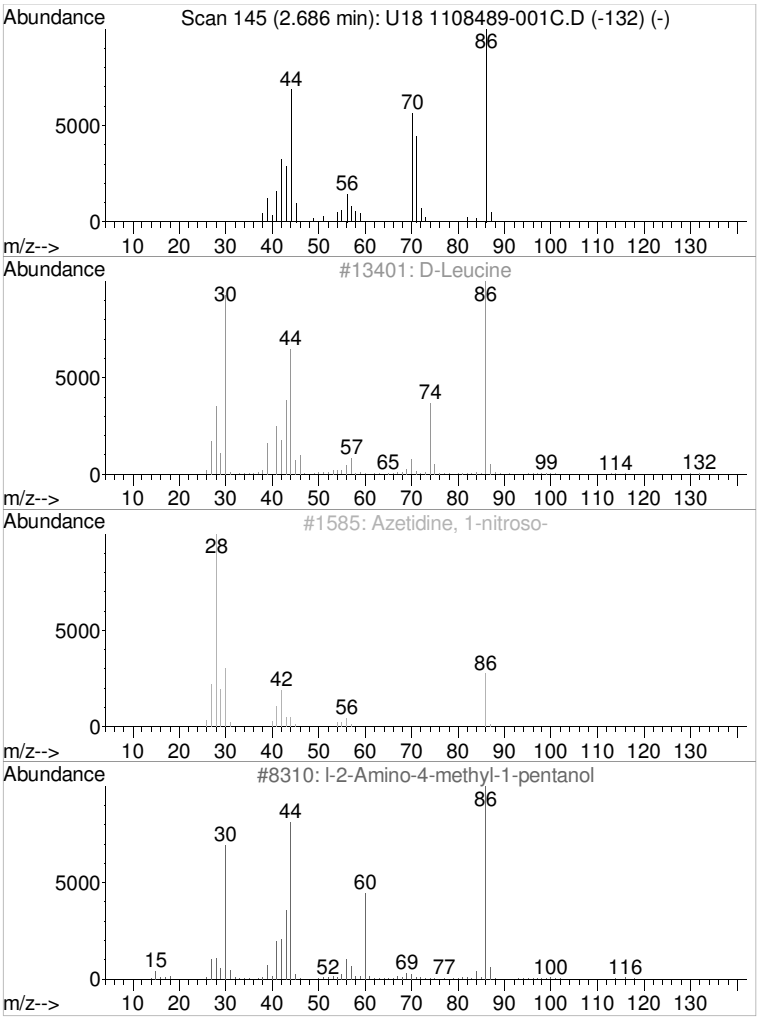
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

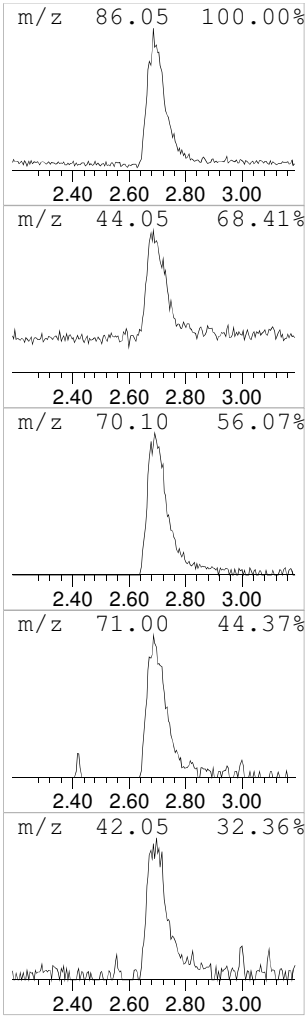
****

Peak Number 1 D-Leucine Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.69	8.86 ug/l	172218	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Leucine	131	C6H13NO2	000328-38-1	37
2	Azetidine, 1-nitroso-	86	C3H6N2O	015216-10-1	35
3	l-2-Amino-4-methyl-1-pentanol	117	C6H15NO	1000235-34-2	28
4	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	28
5	1-Propanol, 2-(dimethylamino)-2-...	117	C6H15NO	007005-47-2	23





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U18 1108489-001C.D
Acq On : 27 Aug 2011 10:46 pm
Operator : ALICIA HABERLE
Sample : 1108489-001C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
D-Leucine	2.69	8.9	ug/l	172218	1	4.43	777816	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U20 1108489-008C.D
Acq On : 27 Aug 2011 11:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-008C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

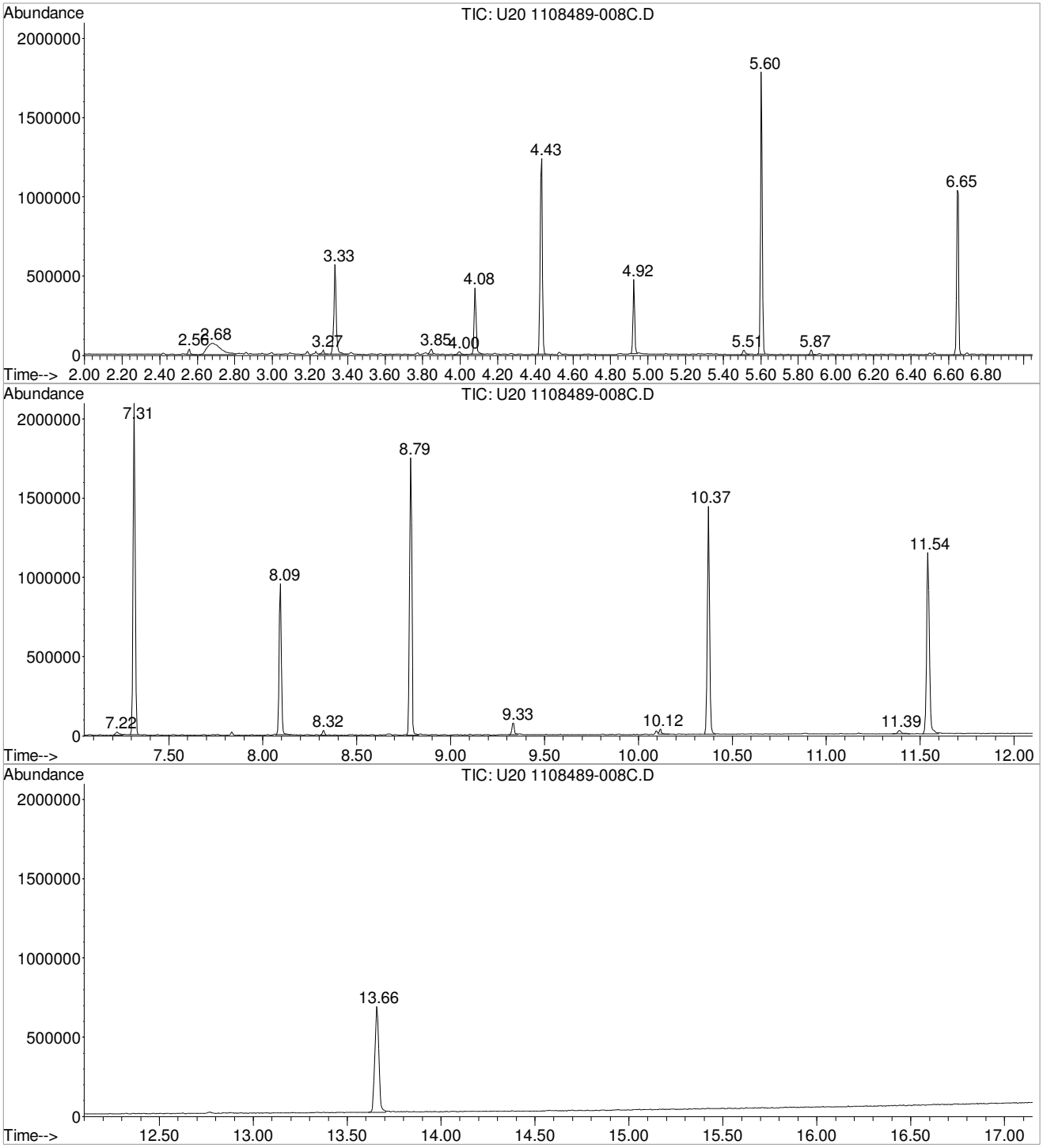
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.559	115	118	126	rVB	35680	25210	1.70%	0.213%
2	2.679	129	143	169	rBV4	72009	357403	24.07%	3.022%
3	3.270	261	266	271	rBV	26778	20575	1.39%	0.174%
4	3.333	274	279	293	rBV2	565302	487159	32.81%	4.119%
5	3.847	382	386	388	rBV	31397	25127	1.69%	0.212%
6	3.996	411	417	424	rBV2	18411	22217	1.50%	0.188%
7	4.078	430	434	443	rBV	417279	295899	19.93%	2.502%
8	4.434	503	508	512	rBV	1234958	964161	64.95%	8.153%
9	4.924	606	610	614	rBV	467606	321103	21.63%	2.715%
10	5.506	728	731	738	rBV2	26766	30914	2.08%	0.261%
11	5.603	747	751	755	rBV	1781996	1293081	87.10%	10.934%
12	5.867	803	806	811	rVB	30605	23129	1.56%	0.196%
13	6.646	964	968	972	rBV	1035891	810778	54.61%	6.856%
14	7.223	1084	1088	1095	rBV3	20772	30090	2.03%	0.254%
15	7.314	1103	1107	1111	rBV	2091260	1484574	100.00%	12.553%
16	8.093	1264	1269	1280	rBV	953532	747213	50.33%	6.318%
17	8.324	1313	1317	1320	rBV	30016	22994	1.55%	0.194%
18	8.786	1409	1413	1422	rBV2	1747995	1413561	95.22%	11.953%
19	9.334	1522	1527	1532	rBV2	72839	69869	4.71%	0.591%
20	10.118	1687	1690	1699	rVB3	32146	30476	2.05%	0.258%
21	10.373	1739	1743	1751	rBV	1437966	1129387	76.07%	9.550%
22	11.387	1947	1954	1965	rBV8	21496	30113	2.03%	0.255%
23	11.541	1980	1986	1998	rBV	1143112	1215807	81.90%	10.281%
24	13.657	2417	2426	2436	rBV	669974	975484	65.71%	8.248%

Sum of corrected areas: 11826324

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U20 1108489-008C.D
Acq On : 27 Aug 2011 11:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-008C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U20 1108489-008C.D
Acq On : 27 Aug 2011 11:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-008C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

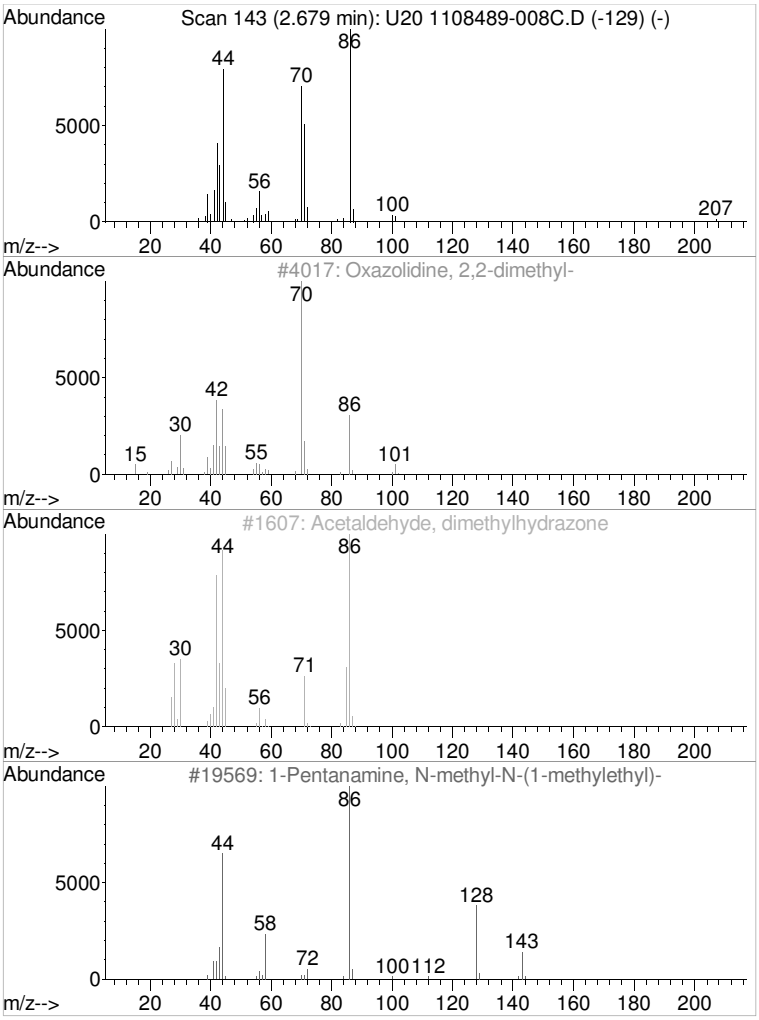
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

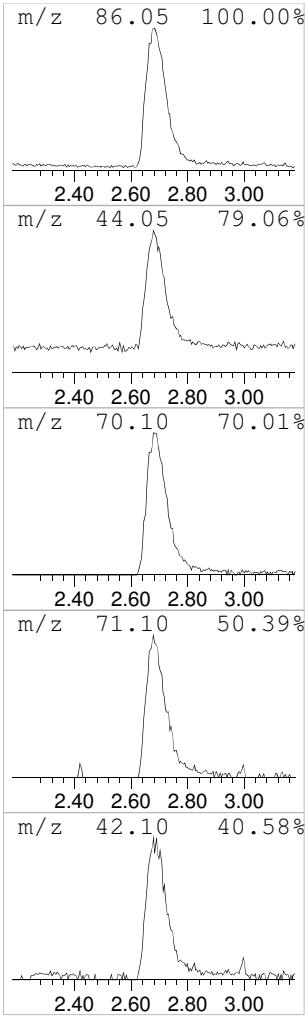
****

Peak Number 1 Oxazolidine, 2,2-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	14.83 ug/l	357403	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxazolidine, 2,2-dimethyl-	101	C5H11NO	020515-62-2	53
2	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	42
3	1-Pentanamine, N-methyl-N-(1-met...	143	C9H21N	005756-49-0	38
4	1,3-Butanediamine	88	C4H12N2	000590-88-5	37
5	1-Propanol, 2-(dimethylamino)-2-...	117	C6H15NO	007005-47-2	36





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U20 1108489-008C.D
Acq On : 27 Aug 2011 11:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-008C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Oxazolidine, 2,2-...	2.68	14.8	ug/l	357403	1	4.43	964161	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U21 1108489-010C.D
Acq On : 28 Aug 2011 12:05 am
Operator : ALICIA HABERLE
Sample : 1108489-010C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.559	114	118	121	rVB	31175	20930	1.59%	0.201%
2	2.693	130	146	169	rBV5	43939	203618	15.43%	1.959%
3	3.270	261	266	270	rBV	27683	20752	1.57%	0.200%
4	3.333	274	279	284	rBV2	556124	437923	33.18%	4.214%
5	3.847	382	386	388	rBV	27879	22421	1.70%	0.216%
6	3.996	411	417	423	rBV2	16469	18823	1.43%	0.181%
7	4.078	430	434	443	rBV	383244	273645	20.73%	2.633%
8	4.434	504	508	512	rBV	1133699	852825	64.62%	8.207%
9	4.848	587	594	598	rBV5	10377	23520	1.78%	0.226%
10	4.925	606	610	614	rBV	421061	284967	21.59%	2.742%
11	5.506	728	731	736	rBV2	44563	40841	3.09%	0.393%
12	5.603	747	751	755	rBV	1570724	1155021	87.51%	11.115%
13	6.646	964	968	972	rBV	883572	692575	52.47%	6.665%
14	7.223	1084	1088	1095	rBV4	13416	21467	1.63%	0.207%
15	7.315	1103	1107	1111	rBV	1808446	1319836	100.00%	12.701%
16	8.094	1265	1269	1281	rVB	865505	692179	52.44%	6.661%
17	8.324	1313	1317	1321	rVB	33639	26744	2.03%	0.257%
18	8.786	1409	1413	1417	rBV	1633012	1256384	95.19%	12.091%
19	9.329	1521	1526	1531	rBV2	62955	54424	4.12%	0.524%
20	10.373	1739	1743	1750	rBV	1229721	996788	75.52%	9.592%
21	11.388	1950	1954	1960	rBV5	20639	27448	2.08%	0.264%
22	11.541	1980	1986	1991	rBV	1028133	1070701	81.12%	10.304%
23	13.657	2418	2426	2441	rBV	571781	877600	66.49%	8.445%

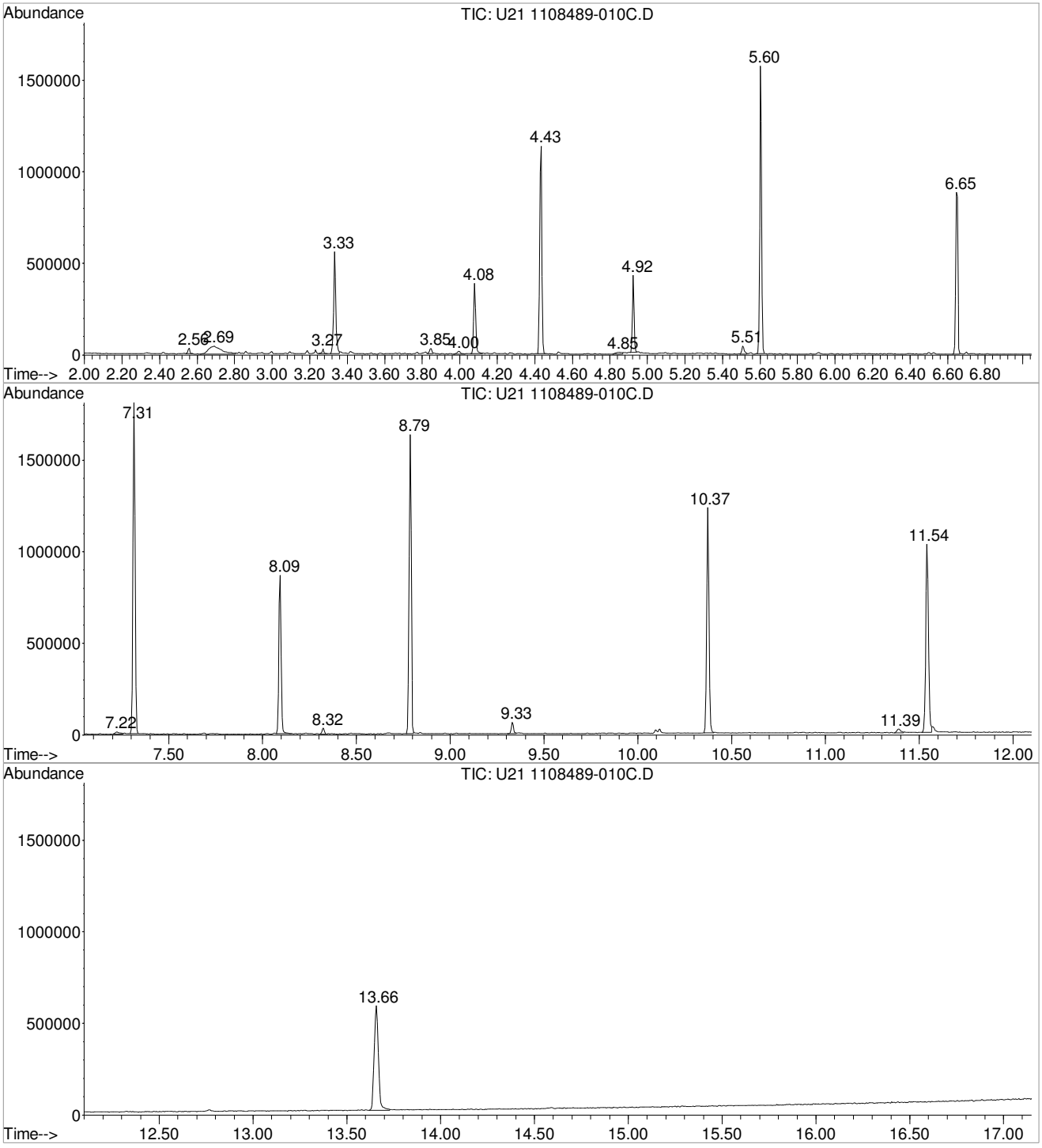
Sum of corrected areas: 10391432

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U21 1108489-010C.D
Acq On : 28 Aug 2011 12:05 am
Operator : ALICIA HABERLE
Sample : 1108489-010C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U21 1108489-010C.D
Acq On : 28 Aug 2011 12:05 am
Operator : ALICIA HABERLE
Sample : 1108489-010C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

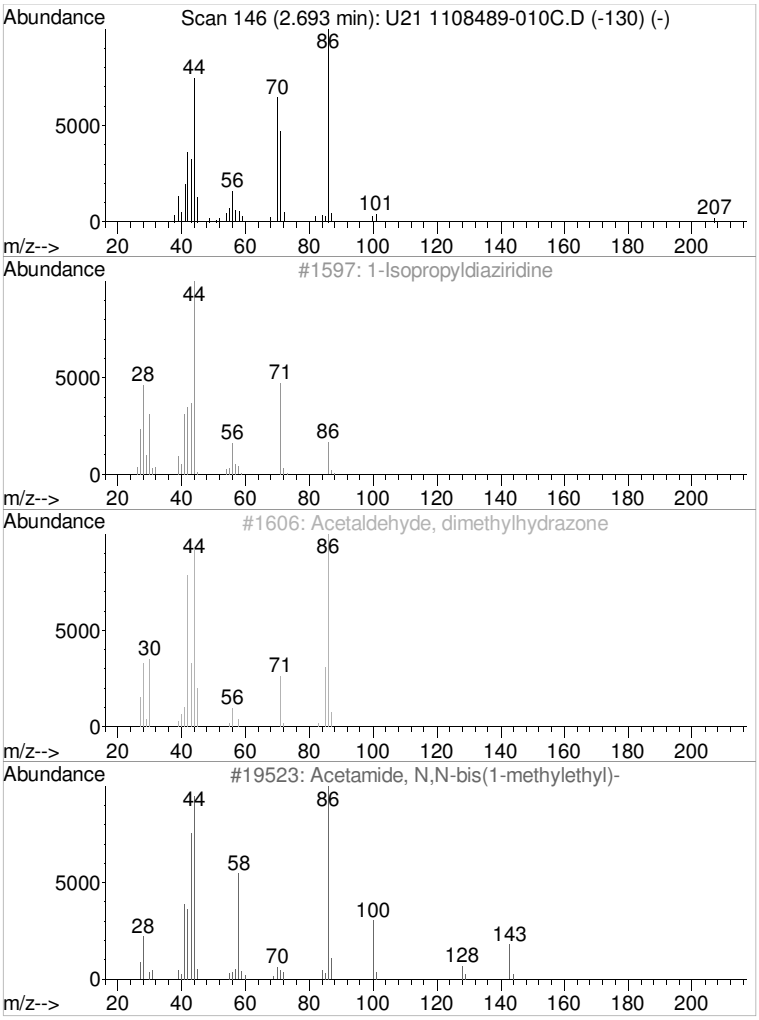
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

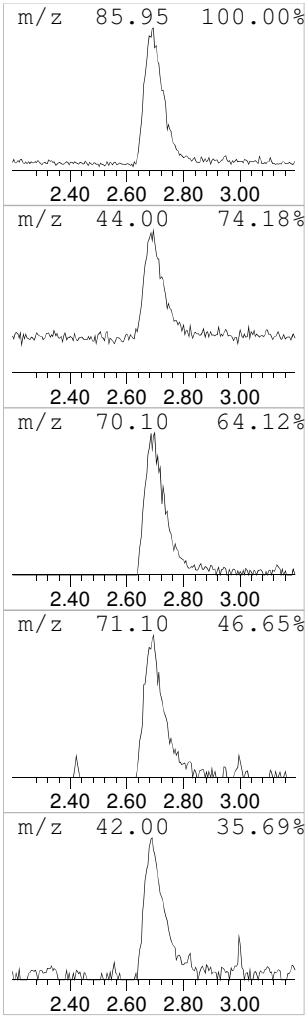
****

Peak Number 1 1-Isopropyldiaziridine Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.69	9.55 ug/l	203618	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Isopropyldiaziridine	86	C4H10N2	033657-26-0	43
2	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	42
3	Acetamide, N,N-bis(1-methylethyl)-	143	C8H17NO	000759-22-8	40
4	Butylamine, N-methyl-N-propyl-	129	C8H19N	024551-99-3	40
5	Hexylamine, N-methyl-N-propyl-	157	C10H23N	024552-00-9	40





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U21 1108489-010C.D
Acq On : 28 Aug 2011 12:05 am
Operator : ALICIA HABERLE
Sample : 1108489-010C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1-Isopropyldiazir...	2.69	9.6	ug/l	203618	1	4.43	852825	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U22 1108489-013C.D
Acq On : 28 Aug 2011 12:32 am
Operator : ALICIA HABERLE
Sample : 1108489-013C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

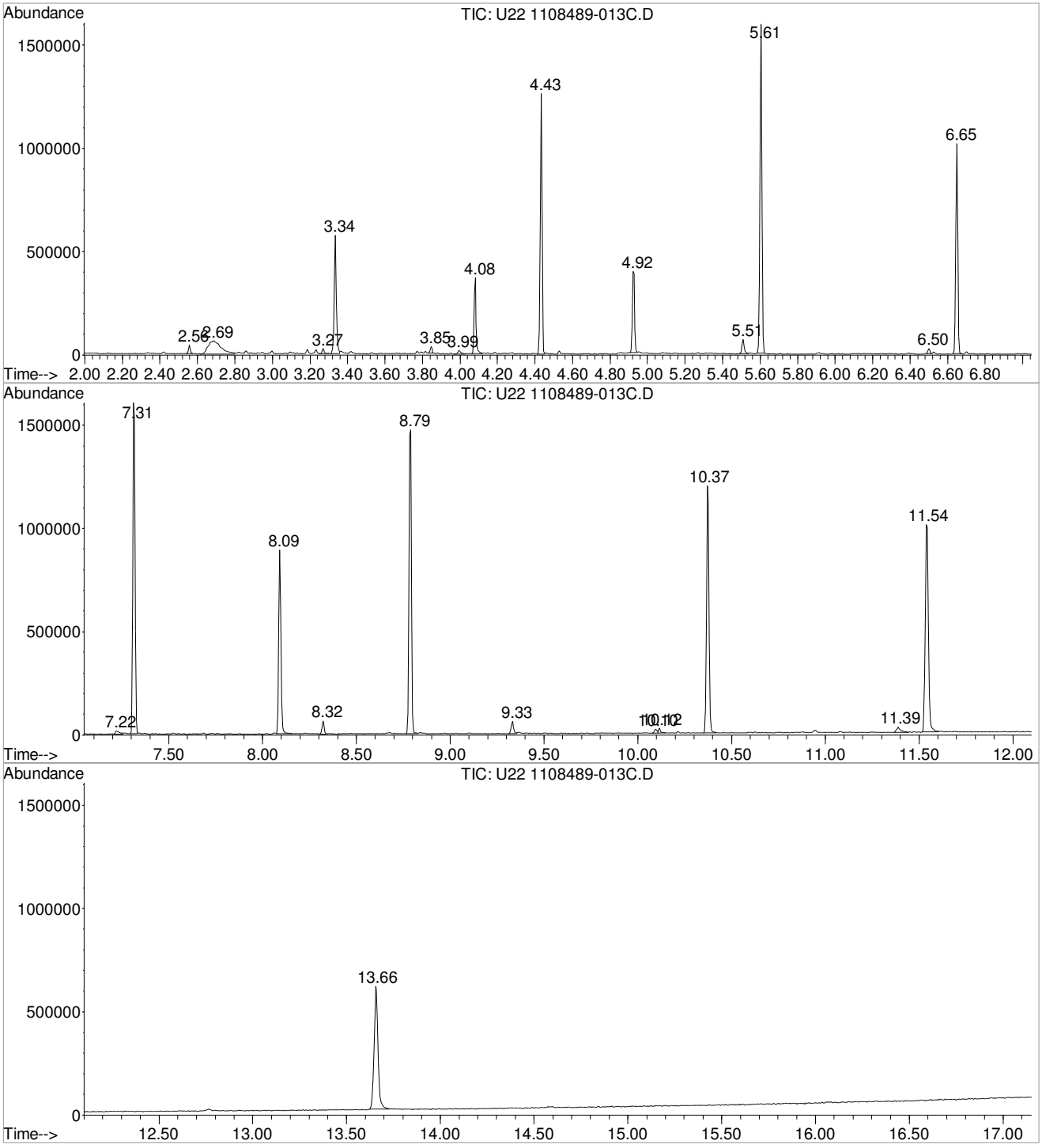
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.557	115	118	121	rVB	41395	26601	2.06%	0.251%
2	2.687	130	145	168	rBV3	63326	302417	23.44%	2.854%
3	3.273	262	267	272	rBV	23543	19256	1.49%	0.182%
4	3.336	275	280	285	rBV2	573902	433154	33.57%	4.088%
5	3.845	382	386	389	rBV	33869	23652	1.83%	0.223%
6	3.994	412	417	423	rBV2	17655	18406	1.43%	0.174%
7	4.081	431	435	443	rBV	368765	272888	21.15%	2.575%
8	4.432	504	508	512	rBV	1260163	848739	65.78%	8.010%
9	4.923	607	610	614	rBV	394727	303040	23.49%	2.860%
10	5.509	728	732	738	rBV2	69447	56676	4.39%	0.535%
11	5.605	748	752	756	rBV	1595507	1135496	88.00%	10.716%
12	6.500	935	938	941	rVB2	26235	17955	1.39%	0.169%
13	6.649	965	969	973	rVB	1016381	705227	54.65%	6.656%
14	7.221	1084	1088	1095	rBV4	16165	24166	1.87%	0.228%
15	7.313	1103	1107	1111	rBV	1603620	1290343	100.00%	12.178%
16	8.092	1265	1269	1282	rBV	890906	680995	52.78%	6.427%
17	8.322	1313	1317	1320	rBV	63088	45416	3.52%	0.429%
18	8.789	1409	1414	1422	rBV	1471636	1237162	95.88%	11.676%
19	9.332	1523	1527	1532	rBV	60463	53079	4.11%	0.501%
20	10.097	1682	1686	1688	rBV2	18597	18459	1.43%	0.174%
21	10.116	1688	1690	1696	rVB2	24354	19367	1.50%	0.183%
22	10.371	1739	1743	1752	rBV	1197788	1031695	79.96%	9.737%
23	11.390	1950	1955	1966	rBV5	24589	36661	2.84%	0.346%
24	11.540	1981	1986	1999	rBV	1002846	1104489	85.60%	10.424%
25	13.655	2419	2426	2441	rBV	596311	890691	69.03%	8.406%

Sum of corrected areas: 10596030

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U22 1108489-013C.D
Acq On : 28 Aug 2011 12:32 am
Operator : ALICIA HABERLE
Sample : 1108489-013C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U22 1108489-013C.D
Acq On : 28 Aug 2011 12:32 am
Operator : ALICIA HABERLE
Sample : 1108489-013C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

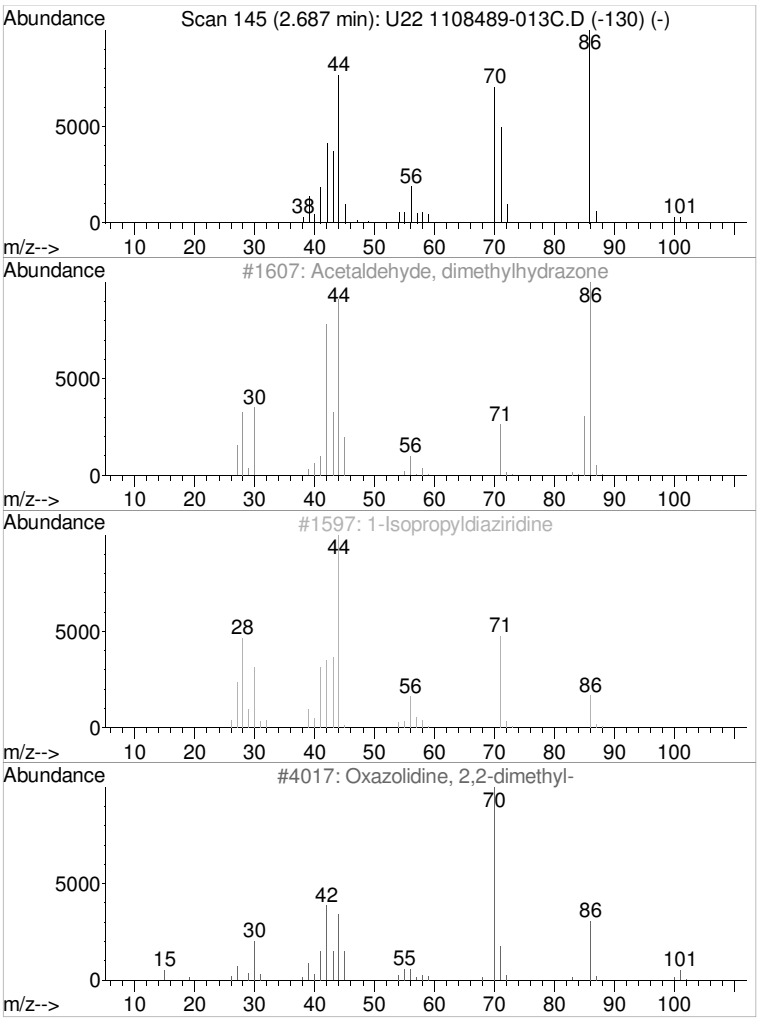
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

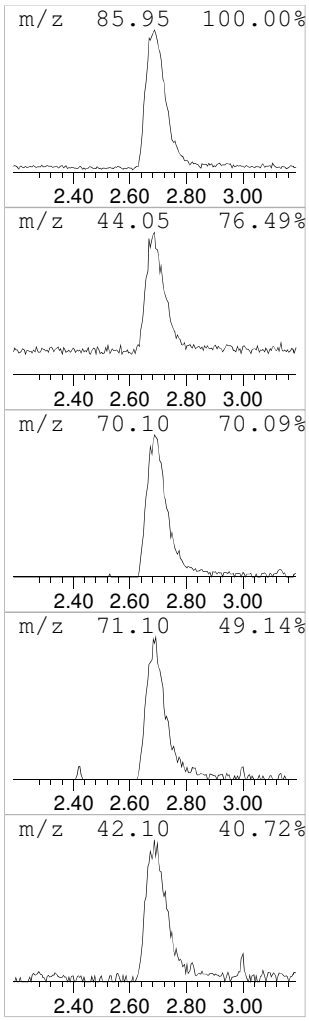
****

Peak Number 1 Acetaldehyde, dimethylhydra... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.69	14.25 ug/l	302417	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	42
2	1-Isopropyldiaziridine	86	C4H10N2	033657-26-0	38
3	Oxazolidine, 2,2-dimethyl-	101	C5H11NO	020515-62-2	36
4	Heptanal	114	C7H14O	000111-71-7	28
5	1-Pentanol, 2-amino-4-methyl-, (S)-	117	C6H15NO	007533-40-6	28





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U22 1108489-013C.D
Acq On : 28 Aug 2011 12:32 am
Operator : ALICIA HABERLE
Sample : 1108489-013C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Acetaldehyde, dim...	2.69	14.3	ug/l	302417	1	4.43	848739	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U23 1108489-016C.D
Acq On : 28 Aug 2011 12:58 am
Operator : ALICIA HABERLE
Sample : 1108489-016C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.556	115	118	122	rVB	32788	24017	1.88%	0.238%
2	2.676	131	143	144	rBV2	68922	140489	11.00%	1.392%
3	3.272	263	267	269	rBV	23343	16332	1.28%	0.162%
4	3.335	274	280	285	rBV2	534377	389373	30.50%	3.857%
5	3.845	382	386	389	rBV	32047	23145	1.81%	0.229%
6	3.994	413	417	424	rBV2	16793	17080	1.34%	0.169%
7	4.080	431	435	443	rBV	347910	247682	19.40%	2.453%
8	4.431	504	508	512	rBV	1143961	825537	64.66%	8.177%
9	4.854	590	596	599	rBV6	8967	17883	1.40%	0.177%
10	4.927	607	611	615	rBV	367409	267993	20.99%	2.654%
11	5.508	726	732	738	rBV2	72260	59818	4.69%	0.592%
12	5.605	748	752	756	rVB	1596651	1118830	87.64%	11.082%
13	6.648	965	969	973	rBV	902428	638194	49.99%	6.321%
14	7.225	1085	1089	1094	rBV4	10279	15448	1.21%	0.153%
15	7.316	1103	1108	1112	rBV	1605907	1276689	100.00%	12.645%
16	8.091	1265	1269	1281	rBV	821280	640746	50.19%	6.346%
17	8.322	1313	1317	1321	rBV	55869	39842	3.12%	0.395%
18	8.788	1409	1414	1418	rBV	1541348	1233234	96.60%	12.215%
19	9.331	1522	1527	1532	rBV	74511	64643	5.06%	0.640%
20	10.115	1688	1690	1697	rVB3	25895	21476	1.68%	0.213%
21	10.370	1739	1743	1752	rBV	1144080	1005048	78.72%	9.955%
22	11.390	1950	1955	1961	rBV3	29642	33075	2.59%	0.328%
23	11.543	1981	1987	1997	rBV	963544	1094148	85.70%	10.837%
24	13.655	2419	2426	2442	rBV	581506	885398	69.35%	8.770%

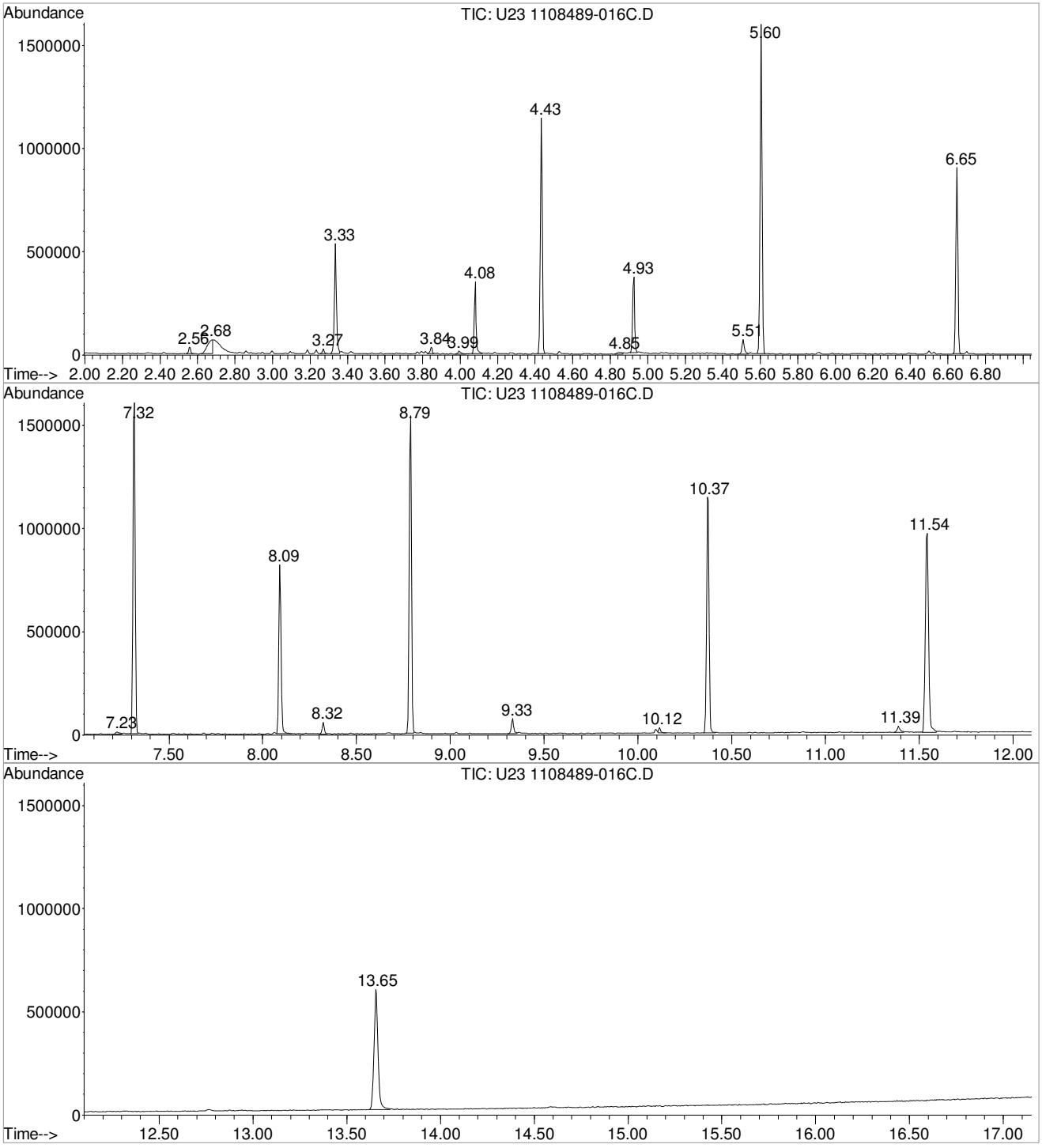
Sum of corrected areas: 10096120

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U23 1108489-016C.D
Acq On : 28 Aug 2011 12:58 am
Operator : ALICIA HABERLE
Sample : 1108489-016C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U23 1108489-016C.D
Acq On : 28 Aug 2011 12:58 am
Operator : ALICIA HABERLE
Sample : 1108489-016C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

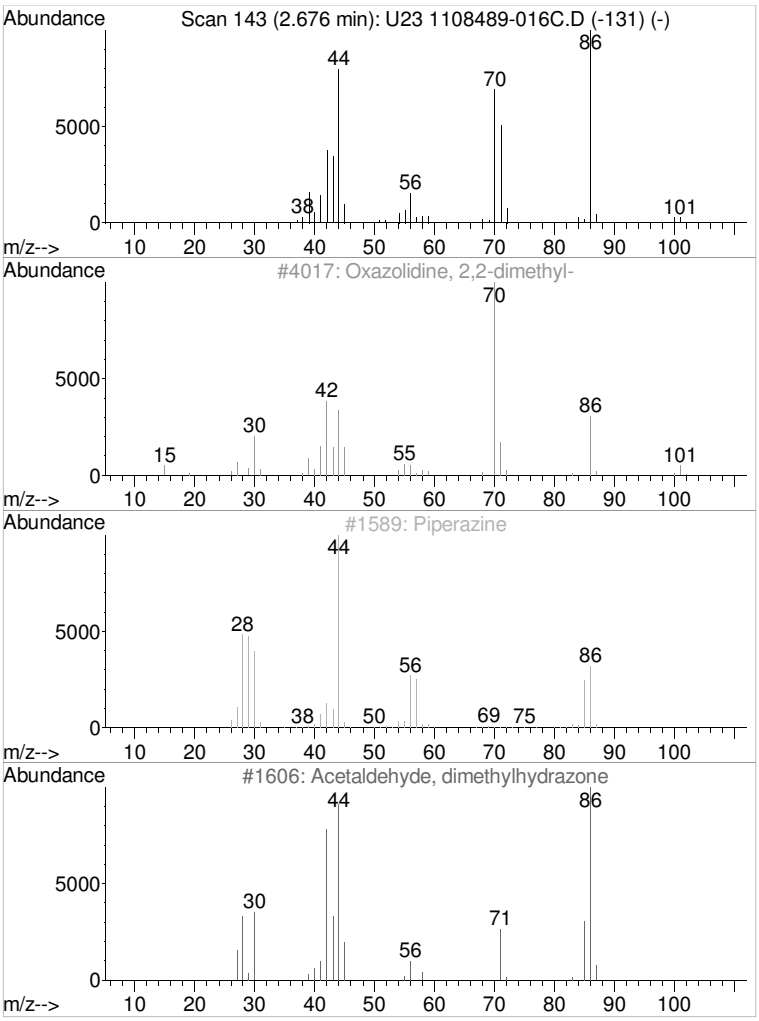
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

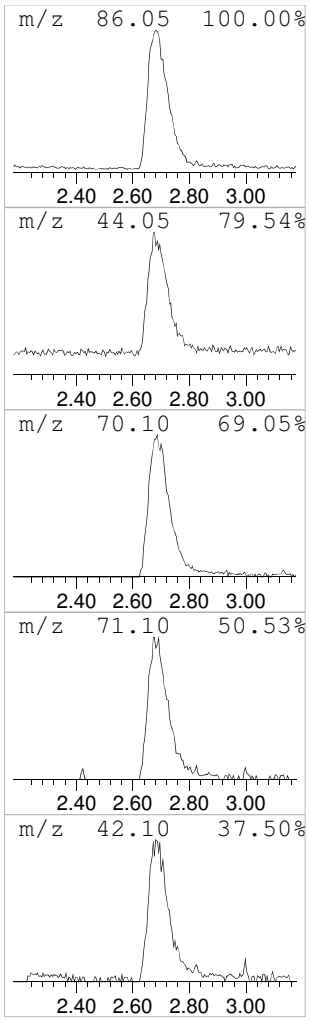
****

Peak Number 1 Oxazolidine, 2,2-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	6.81 ug/l	140489	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxazolidine, 2,2-dimethyl-	101	C5H11NO	020515-62-2	38
2	Piperazine	86	C4H10N2	000110-85-0	37
3	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	33
4	Heptanal	114	C7H14O	000111-71-7	28
5	(R)-(-)-Leucinol	117	C6H15NO	053448-09-2	28





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\27AUG11\
Data File : U23 1108489-016C.D
Acq On : 28 Aug 2011 12:58 am
Operator : ALICIA HABERLE
Sample : 1108489-016C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Oxazolidine, 2,2-...	2.68	6.8	ug/l	140489	1	4.43	825537	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V75 1108489-021C.D
Acq On : 31 Aug 2011 10:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-021C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.118	230	235	239	rVB	22739	19063	1.52%	0.199%
2	3.186	244	249	264	rBV2	311337	307083	24.56%	3.212%
3	3.936	401	405	416	rBV	240713	225235	18.01%	2.356%
4	4.277	471	476	486	rBV	918588	772293	61.76%	8.078%
5	4.676	553	559	561	rBV4	20590	25567	2.04%	0.267%
6	4.768	574	578	593	rVB	167604	159399	12.75%	1.667%
7	5.354	696	700	706	rBV	90593	98189	7.85%	1.027%
8	5.441	714	718	729	rVB	1340238	1071239	85.67%	11.205%
9	6.485	931	935	942	rBV	558314	430002	34.39%	4.498%
10	7.143	1068	1072	1080	rBV	1619277	1250455	100.00%	13.079%
11	7.514	1142	1149	1154	rBV2	13987	17589	1.41%	0.184%
12	7.918	1229	1233	1245	rVB	660555	577789	46.21%	6.043%
13	8.158	1279	1283	1287	rVB	49950	39558	3.16%	0.414%
14	8.610	1373	1377	1385	rBV2	1529873	1195069	95.57%	12.500%
15	9.173	1489	1494	1498	rBV	179395	163294	13.06%	1.708%
16	9.918	1645	1649	1653	rBV4	16511	17203	1.38%	0.180%
17	9.952	1653	1656	1664	rVB3	36702	37778	3.02%	0.395%
18	10.197	1703	1707	1713	rBV	1071847	859011	68.70%	8.985%
19	10.938	1858	1861	1868	rVB3	16618	20172	1.61%	0.211%
20	11.192	1909	1914	1928	rBV2	69342	150769	12.06%	1.577%
21	11.313	1934	1939	1945	rBV	1056680	1101619	88.10%	11.522%
22	12.500	2181	2186	2193	rBV4	18173	26981	2.16%	0.282%
23	12.755	2234	2239	2244	rBV3	13602	19315	1.54%	0.202%
24	13.342	2353	2361	2373	rBV	642728	975950	78.05%	10.208%

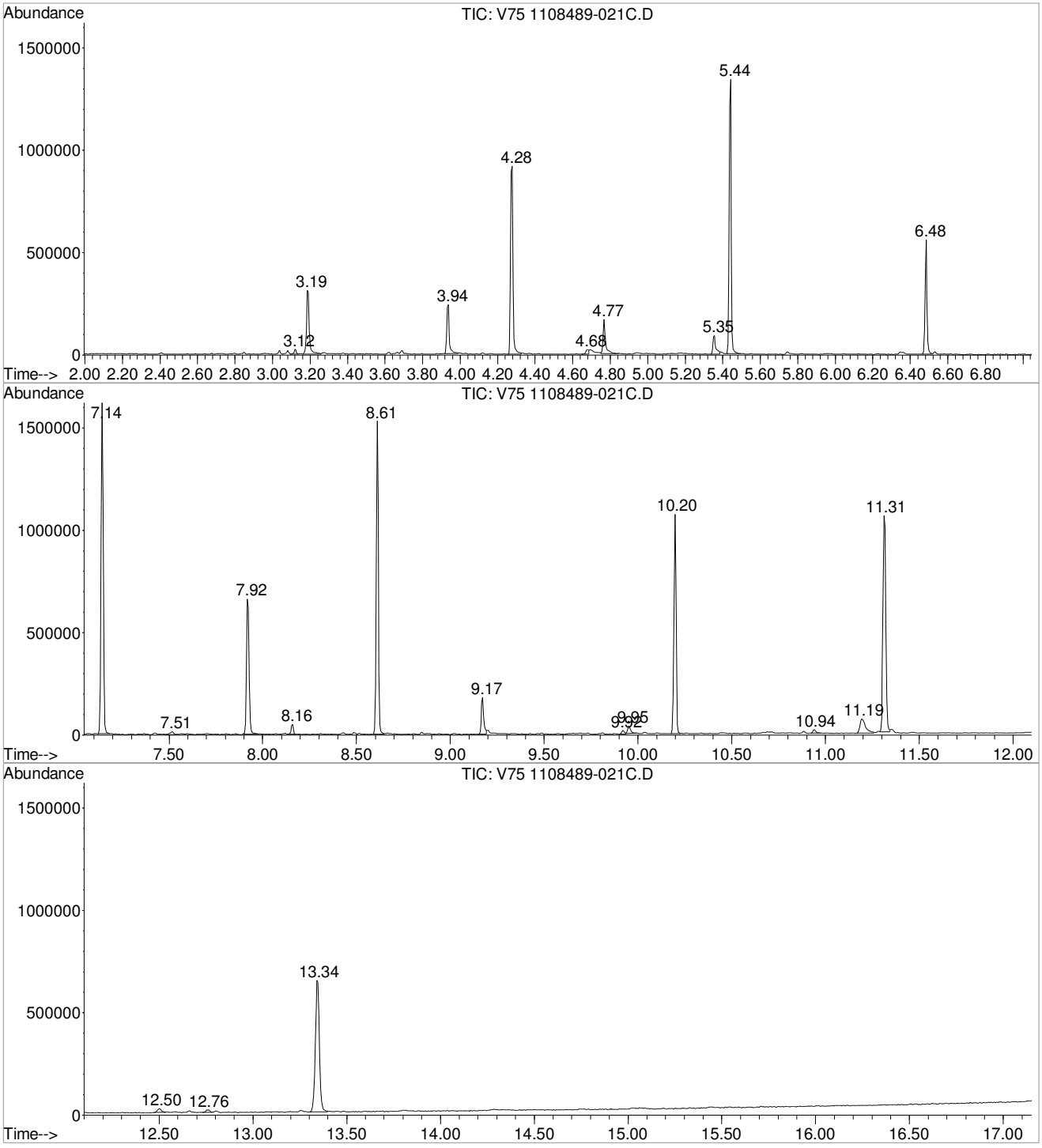
Sum of corrected areas: 9560622

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V75 1108489-021C.D
Acq On : 31 Aug 2011 10:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-021C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V75 1108489-021C.D
Acq On : 31 Aug 2011 10:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-021C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

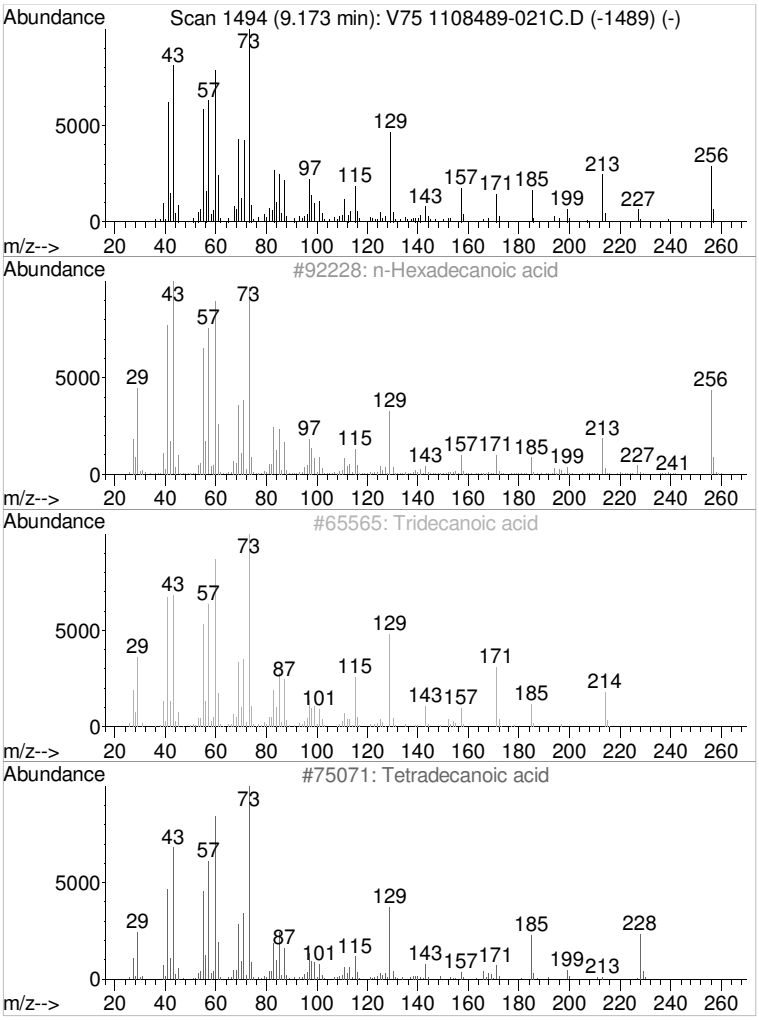
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

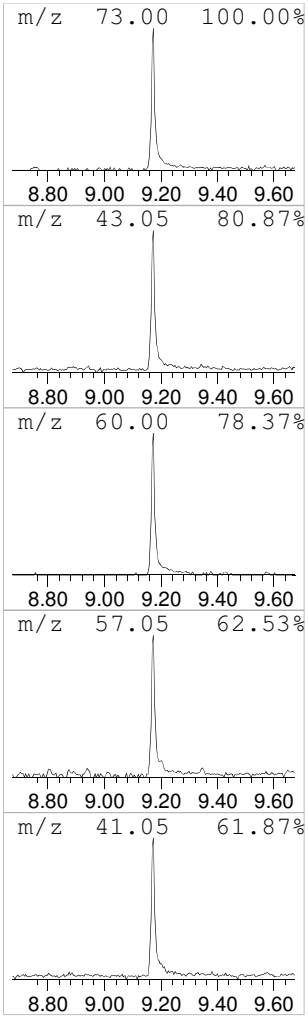
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	5.47 ug/l	163294	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	93
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	81
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	74
5	n-Decanoic acid	172	C10H20O2	000334-48-5	70





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V75 1108489-021C.D
Acq On : 31 Aug 2011 10:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-021C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

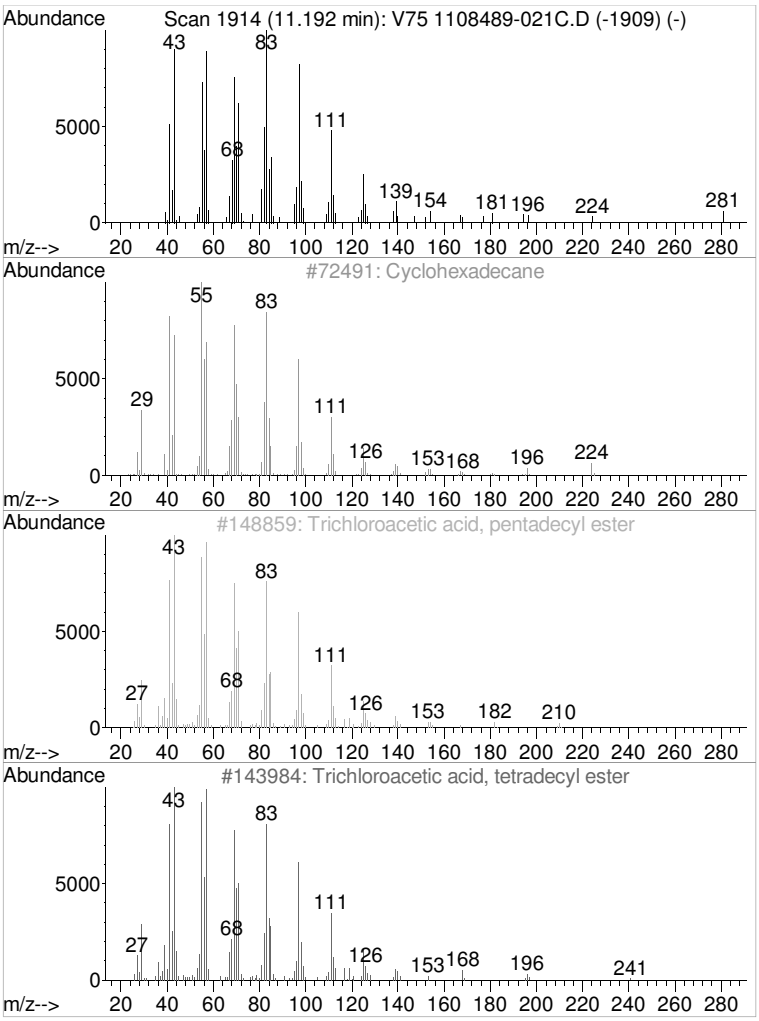
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

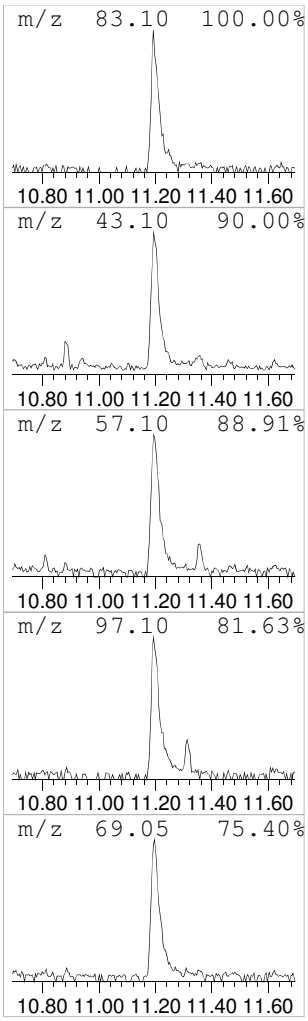
****

Peak Number 2 Cyclohexadecane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	5.47 ug/l	150769	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane	224	C16H32	000295-65-8	96
2	Trichloroacetic acid, pentadecyl...	372	C17H31Cl3O2	074339-53-0	91
3	Trichloroacetic acid, tetradecyl...	358	C16H29Cl3O2	074339-52-9	91
4	1-Octadecanol	270	C18H38O	000112-92-5	91
5	1-Nonadecene	266	C19H38	018435-45-5	90





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V75 1108489-021C.D
Acq On : 31 Aug 2011 10:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-021C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	9.17	5.5	ug/l	163294	4	8.61	1195070	40.0
Cyclohexadecane	11.19	5.5	ug/l	150769	5	11.31	1101620	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V76 1108489-024C.D
Acq On : 31 Aug 2011 11:02 pm
Operator : ALICIA HABERLE
Sample : 1108489-024C
Misc : SAMP
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.118	230	235	239	rBV	22047	18185	1.44%	0.184%
2	3.186	243	249	264	rBV2	320512	311341	24.72%	3.149%
3	3.936	401	405	423	rBV	241069	227304	18.04%	2.299%
4	4.273	471	475	490	rBV	934840	798994	63.43%	8.081%
5	4.691	556	562	572	rBV4	20837	55262	4.39%	0.559%
6	4.768	574	578	590	rVB	189154	176489	14.01%	1.785%
7	5.355	696	700	705	rBV2	59817	61435	4.88%	0.621%
8	5.441	713	718	731	rVB	1356022	1086426	86.24%	10.988%
9	6.485	931	935	942	rBV	567638	452573	35.93%	4.577%
10	7.143	1068	1072	1081	rBV	1698627	1259714	100.00%	12.740%
11	7.918	1229	1233	1243	rVB	708459	596348	47.34%	6.031%
12	8.158	1279	1283	1287	rBV	44976	34563	2.74%	0.350%
13	8.610	1373	1377	1386	rBV	1533427	1206575	95.78%	12.203%
14	9.168	1489	1493	1505	rBV2	203192	217026	17.23%	2.195%
15	9.918	1645	1649	1653	rBV2	19894	19204	1.52%	0.194%
16	9.952	1653	1656	1664	rVB2	52781	54945	4.36%	0.556%
17	10.197	1702	1707	1712	rBV	1149997	908699	72.14%	9.190%
18	10.702	1806	1812	1819	rVB3	38881	49146	3.90%	0.497%
19	11.192	1908	1914	1930	rBV2	80534	174592	13.86%	1.766%
20	11.313	1933	1939	1945	rVV	1084764	1129443	89.66%	11.423%
21	11.356	1945	1948	1952	rVB2	15298	16971	1.35%	0.172%
22	12.500	2181	2186	2195	rBV4	18411	26831	2.13%	0.271%
23	13.342	2353	2361	2371	rBV	692920	1005699	79.84%	10.171%

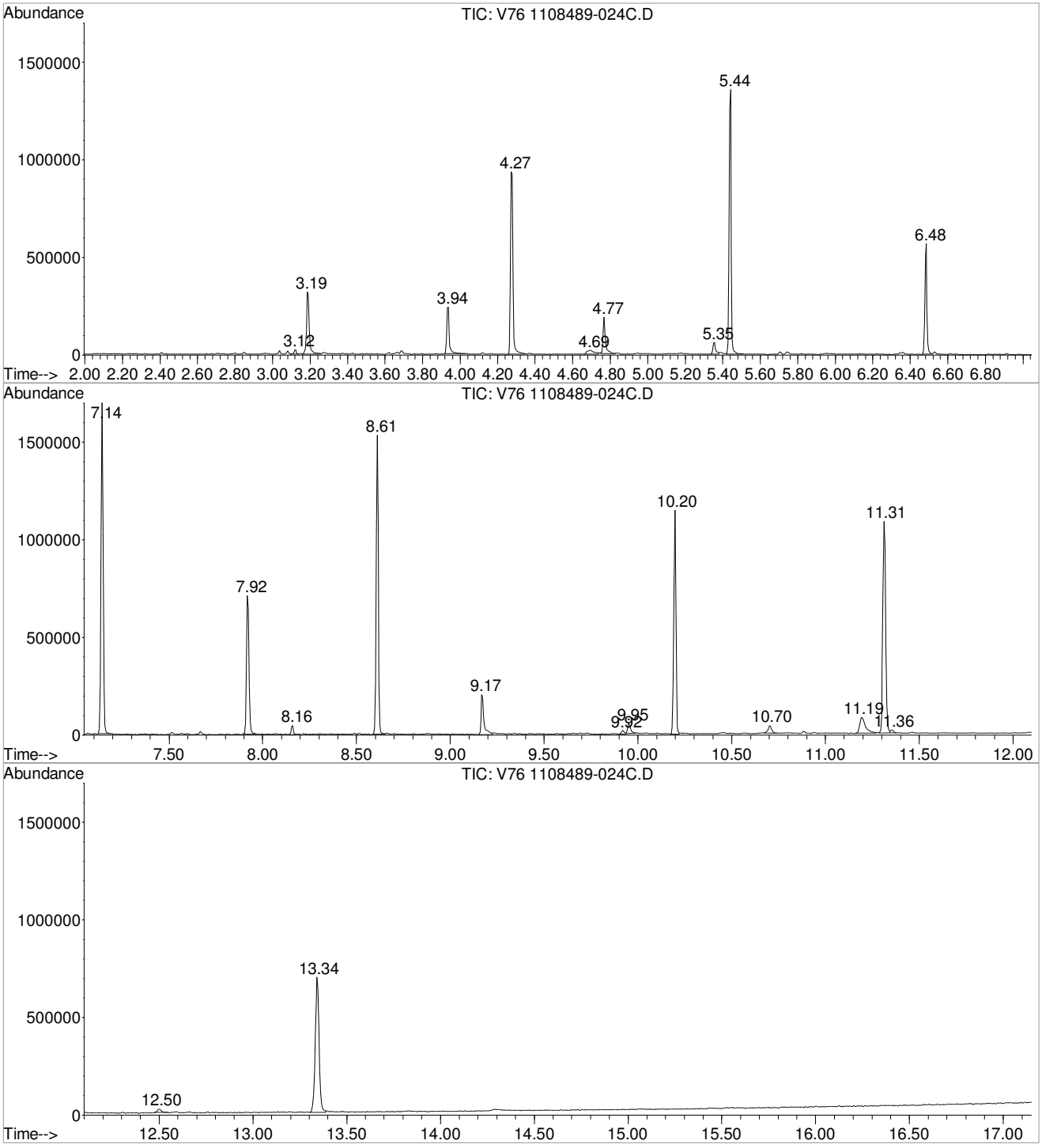
Sum of corrected areas: 9887765

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V76 1108489-024C.D
Acq On : 31 Aug 2011 11:02 pm
Operator : ALICIA HABERLE
Sample : 1108489-024C
Misc : SAMP
ALS Vial : 8 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V76 1108489-024C.D
Acq On : 31 Aug 2011 11:02 pm
Operator : ALICIA HABERLE
Sample : 1108489-024C
Misc : SAMP
ALS Vial : 8 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

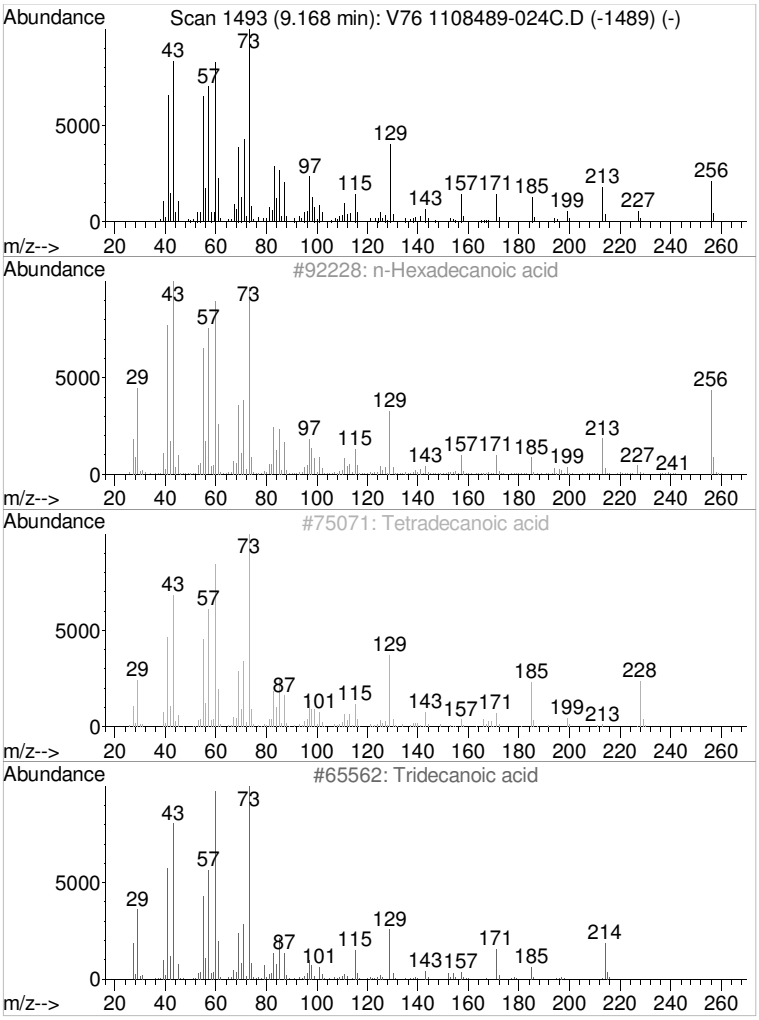
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

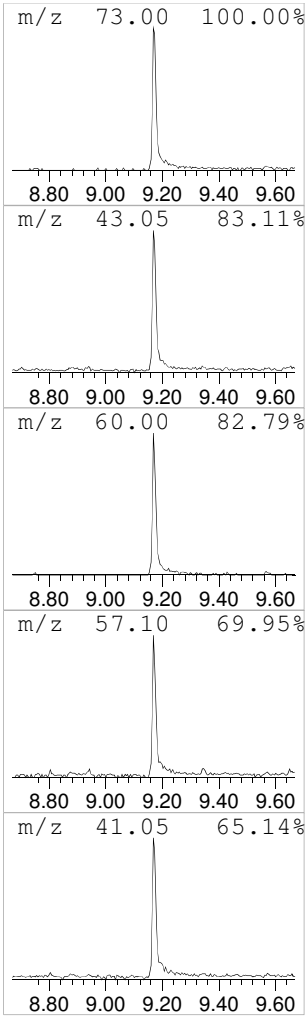
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	7.19 ug/l	217026	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	94
3	Tridecanoic acid	214	C13H26O2	000638-53-9	89
4	n-Decanoic acid	172	C10H20O2	000334-48-5	76
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	72





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V76 1108489-024C.D
Acq On : 31 Aug 2011 11:02 pm
Operator : ALICIA HABERLE
Sample : 1108489-024C
Misc : SAMP
ALS Vial : 8 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

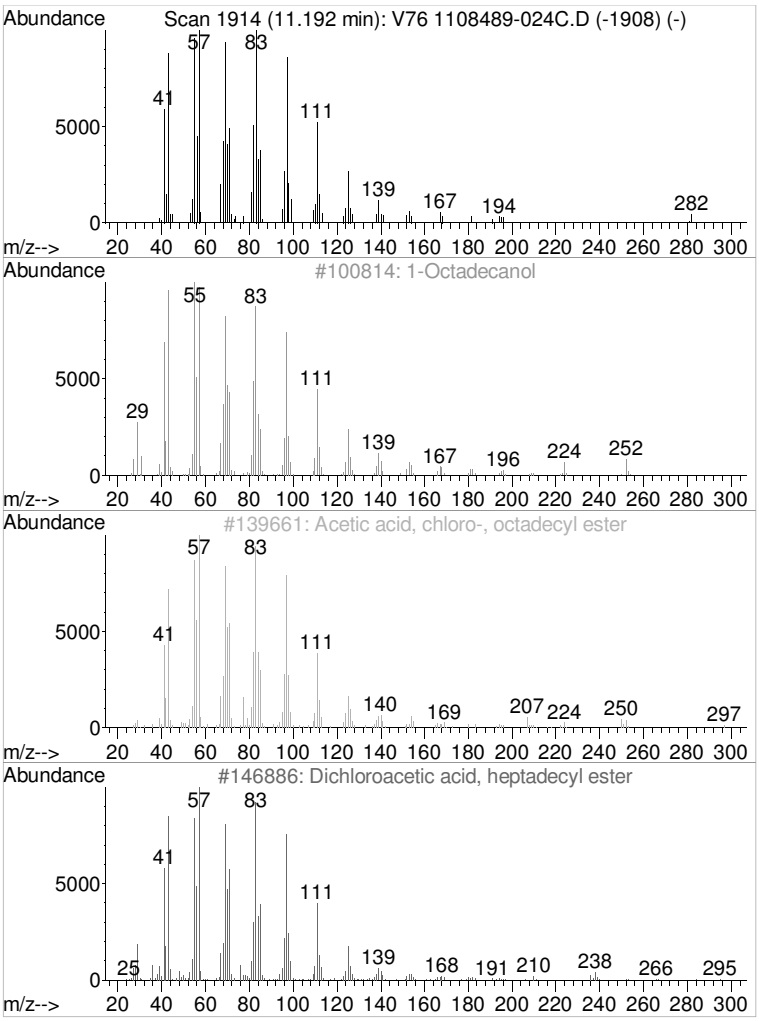
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

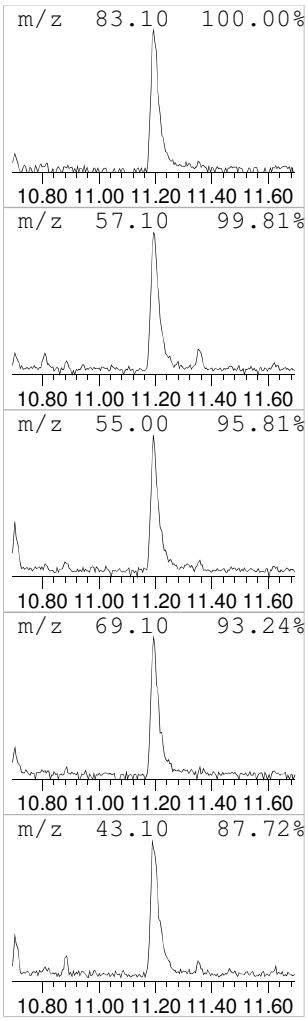
****

Peak Number 2 1-Octadecanol Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	6.18 ug/l	174592	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octadecanol	270	C18H38O	000112-92-5	94
2	Acetic acid, chloro-, octadecyl ...	346	C20H39ClO2	005348-82-3	87
3	Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	87
4	1-Hexadecanol	242	C16H34O	036653-82-4	87
5	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V76 1108489-024C.D
Acq On : 31 Aug 2011 11:02 pm
Operator : ALICIA HABERLE
Sample : 1108489-024C
Misc : SAMP
ALS Vial : 8 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	9.17	7.2	ug/l	217026	4	8.61	1206580	40.0
1-Octadecanol	11.19	6.2	ug/l	174592	5	11.31	1129440	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V77 1108489-025C.D
Acq On : 31 Aug 2011 11:28 pm
Operator : ALICIA HABERLE
Sample : 1108489-025C
Misc : SAMP
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.083	221	227	230	rVB	16943	14656	1.27%	0.162%
2	3.122	230	235	238	rBV	23741	17959	1.55%	0.198%
3	3.189	243	249	262	rBV2	341551	295557	25.55%	3.258%
4	3.935	400	404	413	rBV	232267	196575	16.99%	2.167%
5	4.276	471	475	487	rBV	947847	726070	62.76%	8.005%
6	4.694	556	562	571	rBV6	16944	44772	3.87%	0.494%
7	4.767	573	577	589	rVB	182380	165388	14.30%	1.823%
8	5.353	695	699	710	rBV2	89065	93588	8.09%	1.032%
9	5.440	713	717	728	rVB	1365703	998653	86.32%	11.010%
10	6.483	930	934	941	rBV	555932	417851	36.12%	4.607%
11	7.142	1067	1071	1083	rVB	1540922	1156884	100.00%	12.754%
12	7.921	1228	1233	1241	rBV	646084	562059	48.58%	6.197%
13	8.157	1277	1282	1286	rBV	57058	45361	3.92%	0.500%
14	8.609	1372	1376	1384	rBV	1425777	1116859	96.54%	12.313%
15	9.167	1488	1492	1497	rBV2	102758	102996	8.90%	1.136%
16	9.917	1645	1648	1652	rBV3	14439	15717	1.36%	0.173%
17	9.950	1652	1655	1663	rVB3	30583	32162	2.78%	0.355%
18	10.196	1702	1706	1713	rBV	1014151	809067	69.94%	8.920%
19	11.191	1907	1913	1933	rBV2	80828	181555	15.69%	2.002%
20	11.311	1933	1938	1945	rVV	990901	1056455	91.32%	11.647%
21	11.355	1945	1947	1954	rVB	15942	17014	1.47%	0.188%
22	12.499	2179	2185	2193	rBV6	16493	29446	2.55%	0.325%
23	12.658	2213	2218	2227	rBV2	23617	38021	3.29%	0.419%
24	13.345	2352	2361	2374	rBV	611081	935798	80.89%	10.317%

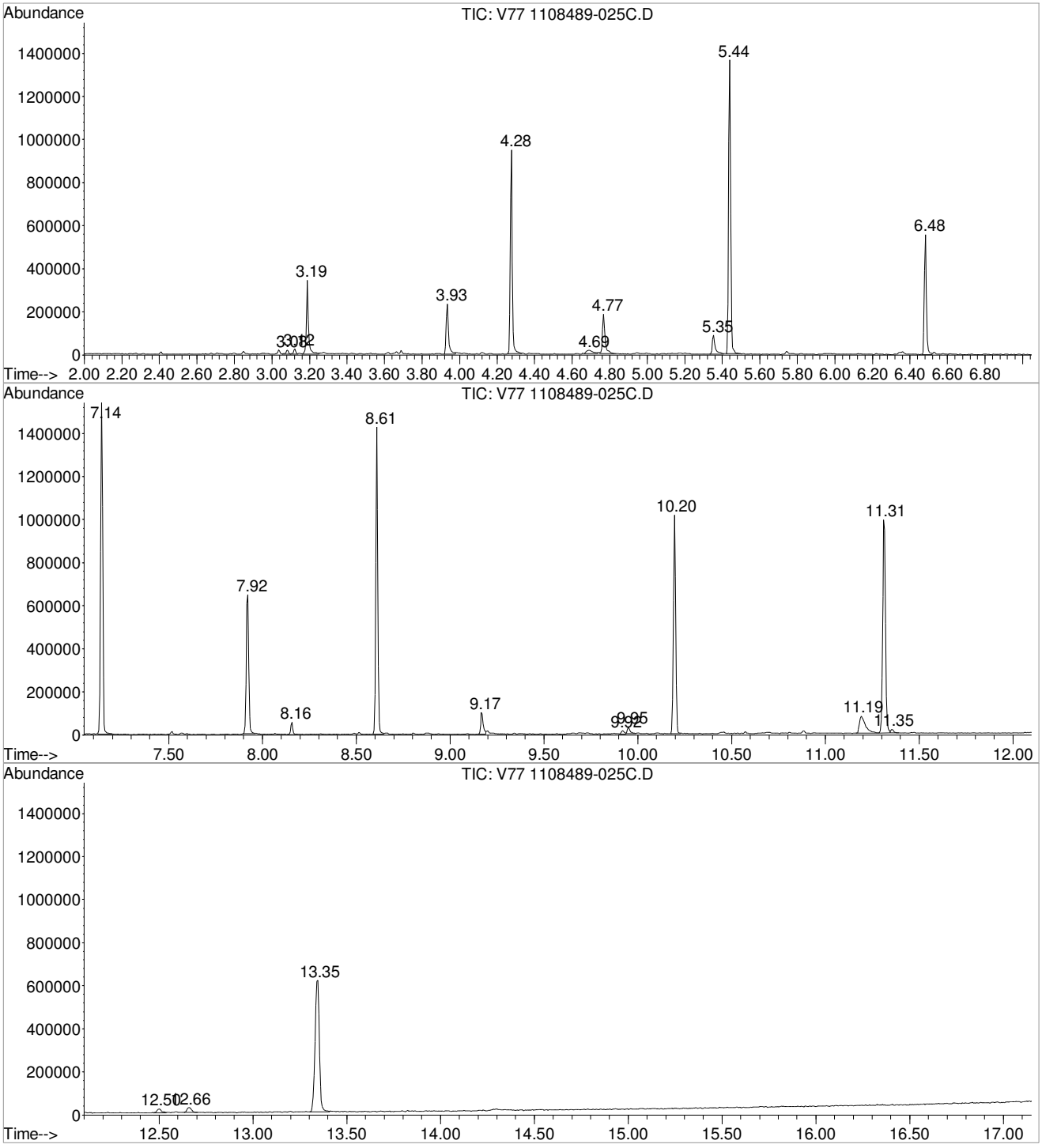
Sum of corrected areas: 9070463

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V77 1108489-025C.D
Acq On : 31 Aug 2011 11:28 pm
Operator : ALICIA HABERLE
Sample : 1108489-025C
Misc : SAMP
ALS Vial : 9 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V77 1108489-025C.D
Acq On : 31 Aug 2011 11:28 pm
Operator : ALICIA HABERLE
Sample : 1108489-025C
Misc : SAMP
ALS Vial : 9 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

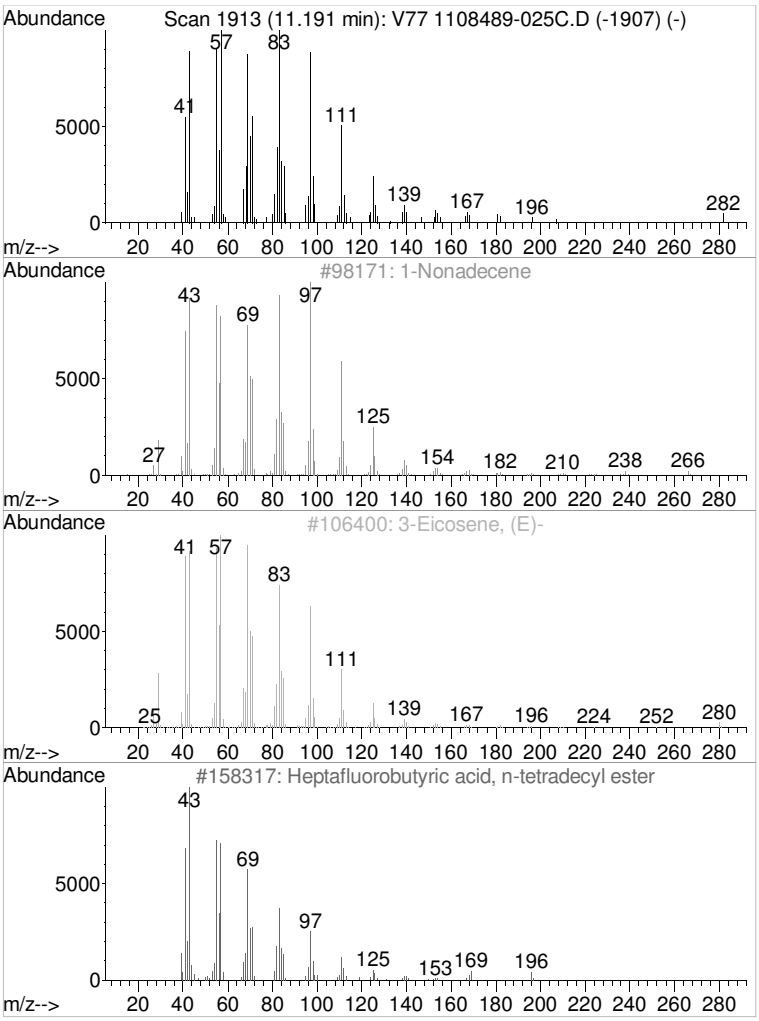
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

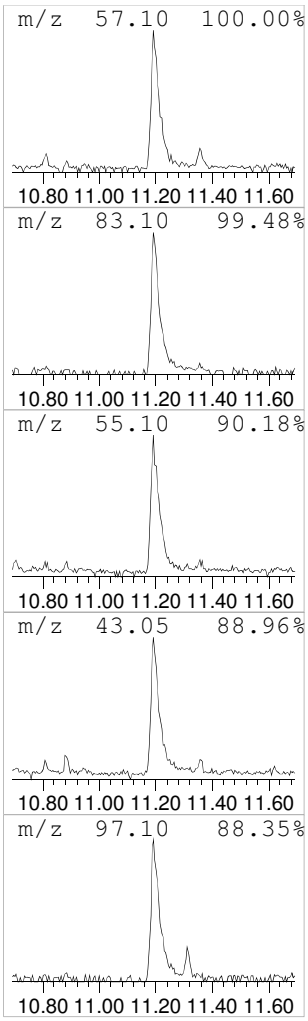
****

Peak Number 1 1-Nonadecene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	6.87 ug/l	181555	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	94
2	3-Eicosene, (E)-	280	C20H40	074685-33-9	91
3	Heptafluorobutyric acid, n-tetra...	410	C18H29F7O2	007365-36-8	87
4	1-Octadecanol	270	C18H38O	000112-92-5	87
5	Acetic acid, chloro-, octadecyl ...	346	C20H39ClO2	005348-82-3	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V77 1108489-025C.D
Acq On : 31 Aug 2011 11:28 pm
Operator : ALICIA HABERLE
Sample : 1108489-025C
Misc : SAMP
ALS Vial : 9 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1-Nonadecene	11.19	6.9	ug/l	181555	5	11.31	1056460	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V78 1108489-028C.D
Acq On : 31 Aug 2011 11:55 pm
Operator : ALICIA HABERLE
Sample : 1108489-028C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.034	212	217	221	rVB	21733	16947	1.32%	0.167%
2	3.082	221	227	230	rBV	22953	18476	1.44%	0.182%
3	3.120	230	235	239	rBV	31705	24598	1.91%	0.243%
4	3.188	243	249	258	rBV2	453188	376495	29.29%	3.713%
5	3.664	341	348	350	rBV2	15176	14921	1.16%	0.147%
6	3.688	350	353	356	rVB	20940	16024	1.25%	0.158%
7	3.933	400	404	413	rBV	301993	247856	19.28%	2.445%
8	4.275	471	475	487	rBV	1078164	815582	63.46%	8.044%
9	4.674	552	558	559	rBV2	26964	25332	1.97%	0.250%
10	4.765	573	577	590	rVB	235765	217280	16.91%	2.143%
11	5.352	695	699	705	rBV	130277	116818	9.09%	1.152%
12	5.438	713	717	721	rBV	1509078	1101655	85.71%	10.866%
13	5.746	775	781	784	rBV2	16872	17642	1.37%	0.174%
14	6.482	930	934	941	rBV	705788	536881	41.77%	5.295%
15	7.145	1067	1072	1082	rBV	1529071	1285259	100.00%	12.677%
16	7.516	1144	1149	1155	rVB2	17378	16793	1.31%	0.166%
17	7.920	1229	1233	1242	rVB	741210	603463	46.95%	5.952%
18	8.155	1278	1282	1286	rVB	53999	41545	3.23%	0.410%
19	8.612	1372	1377	1385	rBV	1418309	1200874	93.43%	11.845%
20	9.170	1488	1493	1498	rBV	190154	175306	13.64%	1.729%
21	9.920	1645	1649	1652	rBV3	17376	17273	1.34%	0.170%
22	9.949	1652	1655	1664	rVB2	35616	39094	3.04%	0.386%
23	10.194	1702	1706	1716	rBV	1033331	871006	67.77%	8.591%
24	11.190	1908	1913	1933	rBV4	72385	160827	12.51%	1.586%
25	11.315	1933	1939	1945	rBV	1035833	1129516	87.88%	11.141%
26	12.498	2179	2185	2190	rBV5	18611	25056	1.95%	0.247%
27	13.344	2352	2361	2374	rBV	667417	1026114	79.84%	10.121%

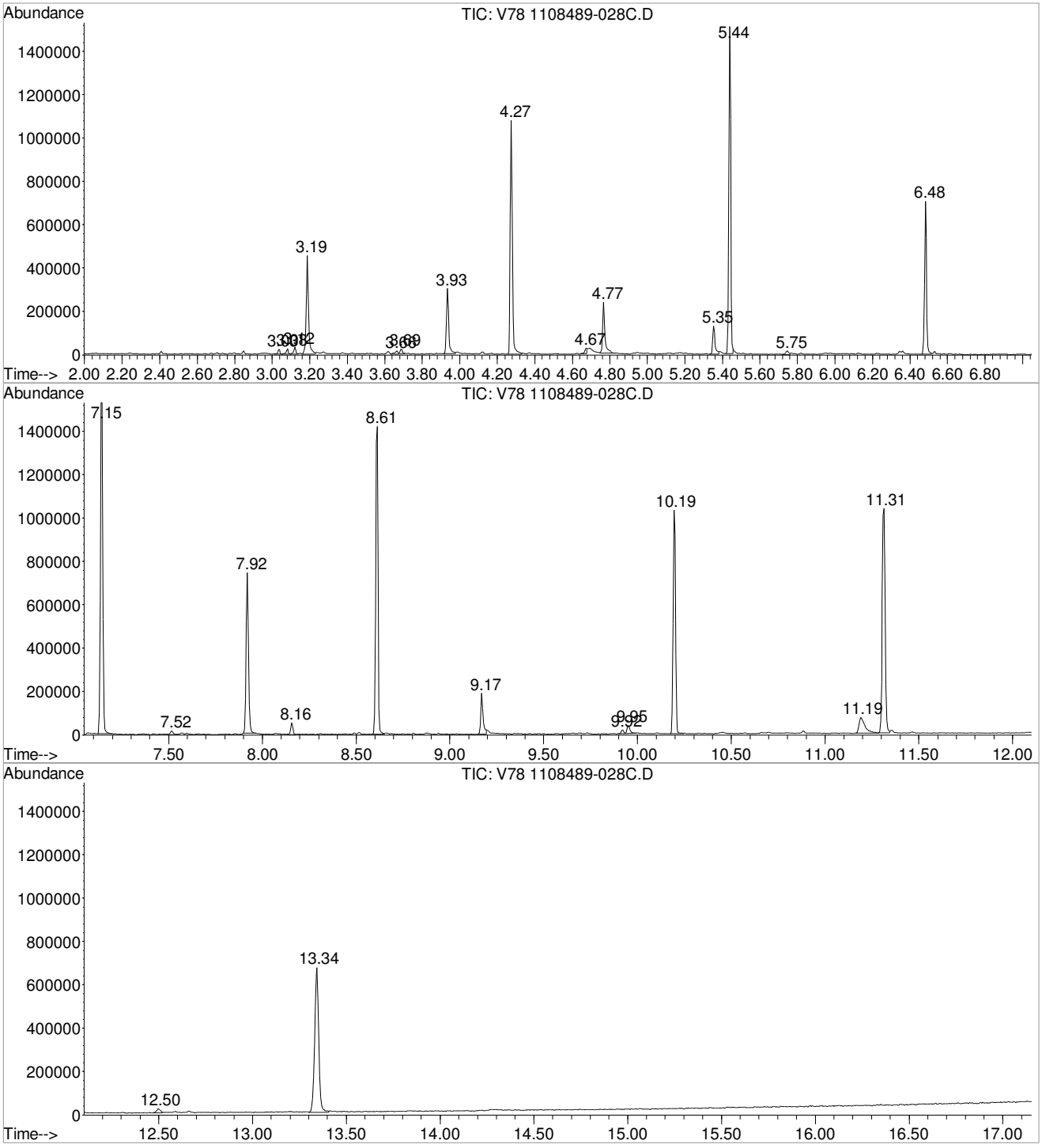
Sum of corrected areas: 10138633

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V78 1108489-028C.D
Acq On : 31 Aug 2011 11:55 pm
Operator : ALICIA HABERLE
Sample : 1108489-028C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V78 1108489-028C.D
Acq On : 31 Aug 2011 11:55 pm
Operator : ALICIA HABERLE
Sample : 1108489-028C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

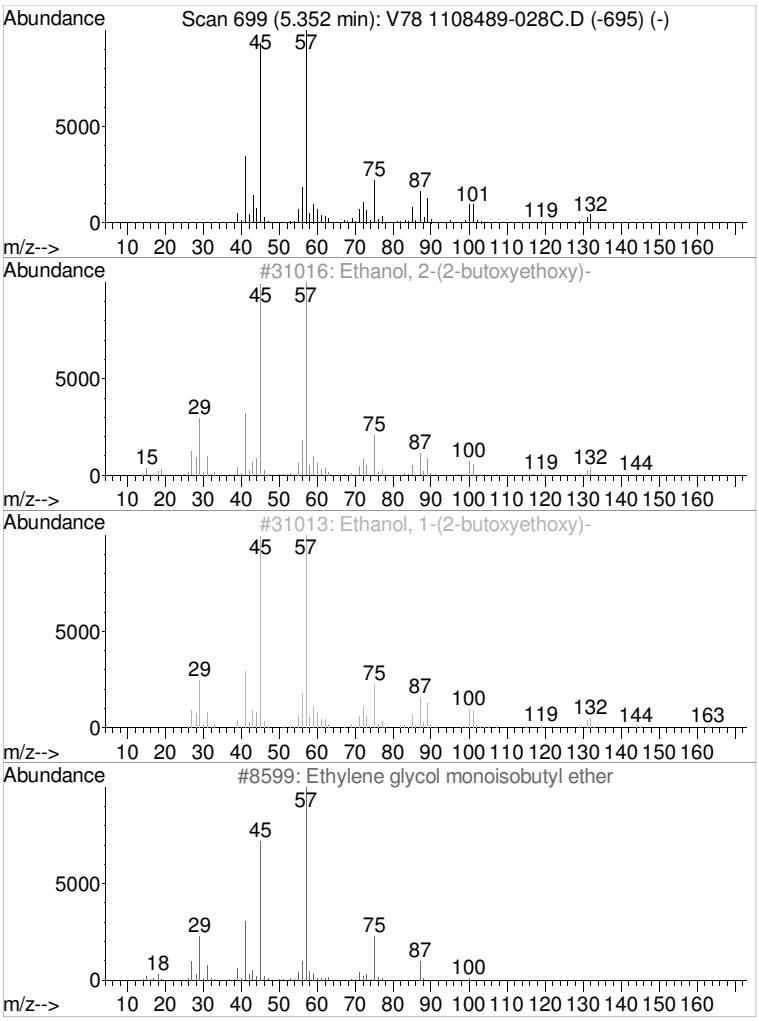
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

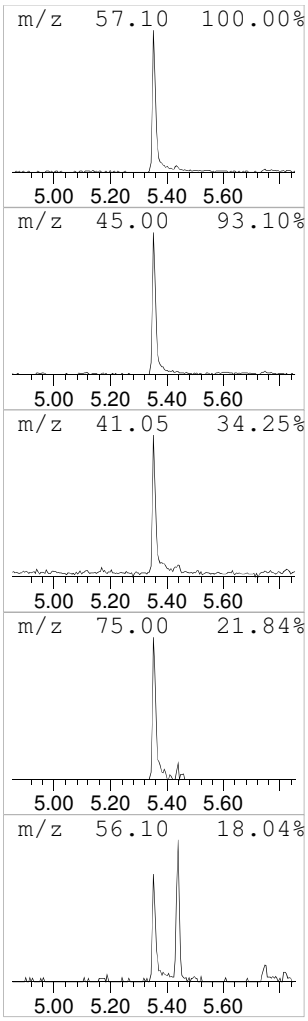
****

Peak Number 1 Ethanol, 2-(2-butoxyethoxy)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.35	4.24 ug/l	116818	ISTD Naphthalene-d8	5.44

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(2-butoxyethoxy)-	162	C8H18O3	000112-34-5	90
2	Ethanol, 1-(2-butoxyethoxy)-	162	C8H18O3	054446-78-5	90
3	Ethylene glycol monoisobutyl ether	118	C6H14O2	004439-24-1	53
4	4-Octanone, 5-hydroxy-3,6-dimethyl-	172	C10H20O2	062759-47-1	47
5	Di-sec-butyl ether	130	C8H18O	006863-58-7	47





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V78 1108489-028C.D
Acq On : 31 Aug 2011 11:55 pm
Operator : ALICIA HABERLE
Sample : 1108489-028C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

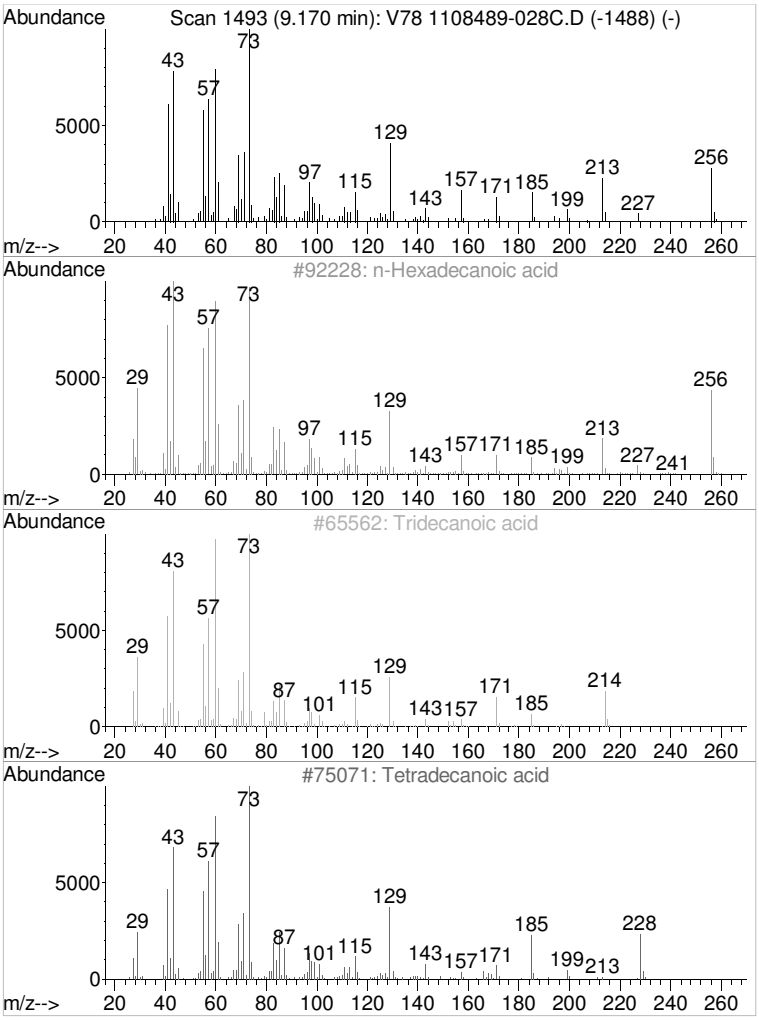
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

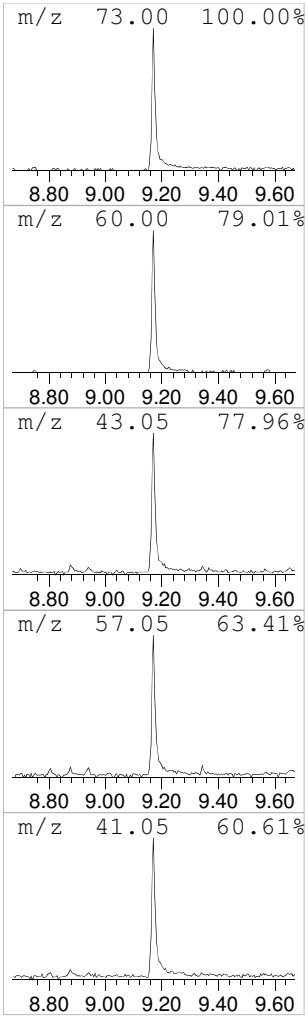
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	5.84 ug/l	175306	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	89
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	68
4	Undecanoic acid	186	C11H22O2	000112-37-8	64
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	58





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V78 1108489-028C.D
Acq On : 31 Aug 2011 11:55 pm
Operator : ALICIA HABERLE
Sample : 1108489-028C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

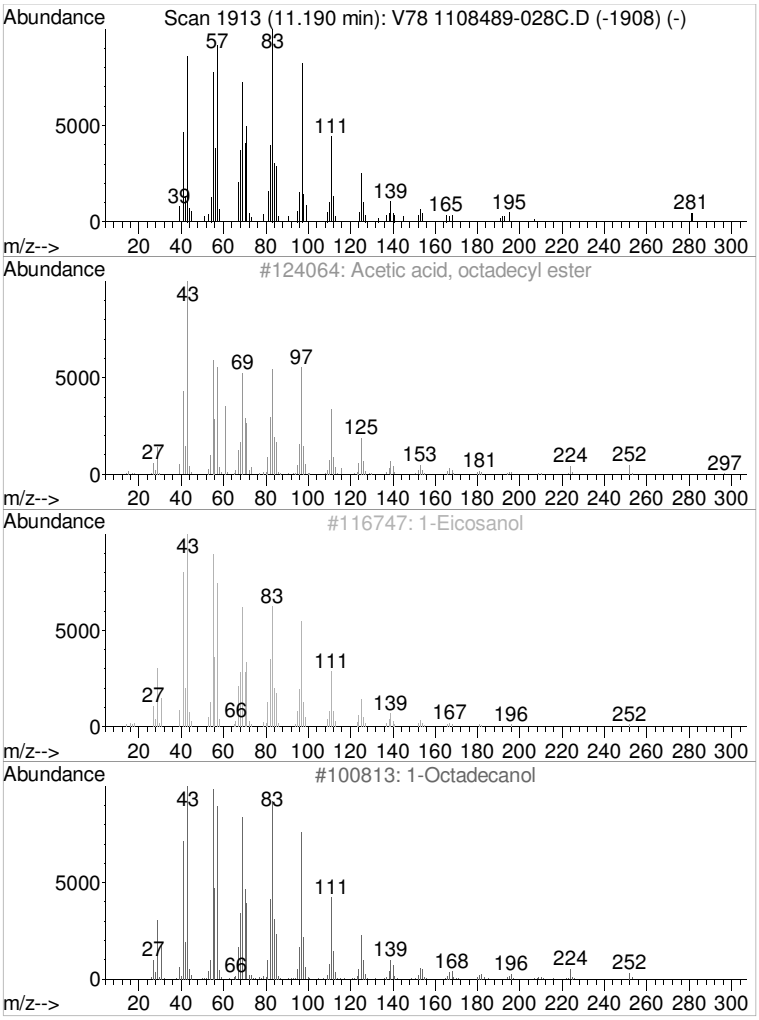
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

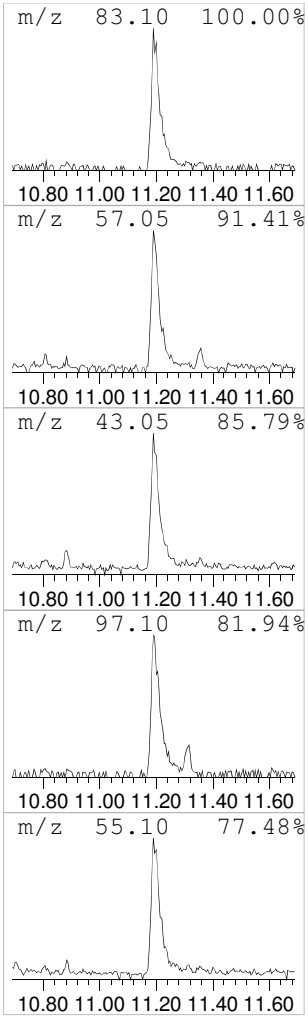
****

Peak Number 3 Acetic acid, octadecyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	5.70 ug/l	160827	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, octadecyl ester	312	C20H40O2	000822-23-1	91
2	1-Eicosanol	298	C20H42O	000629-96-9	91
3	1-Octadecanol	270	C18H38O	000112-92-5	90
4	13-Tetradecen-1-ol acetate	254	C16H30O2	056221-91-1	86
5	Bacteriochlorophyll-c-stearyl	841	C52H72MgN4O4	1000164-49-7	83





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V78 1108489-028C.D
Acq On : 31 Aug 2011 11:55 pm
Operator : ALICIA HABERLE
Sample : 1108489-028C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Ethanol, 2-(2-but...	5.35	4.2	ug/l	116818	2	5.44	1101660	40.0
n-Hexadecanoic acid	9.17	5.8	ug/l	175306	4	8.61	1200870	40.0
Acetic acid, octa...	11.19	5.7	ug/l	160827	5	11.31	1129520	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V79 1108489-031C.D
Acq On : 1 Sep 2011 12:20 am
Operator : ALICIA HABERLE
Sample : 1108489-031C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.035	211	217	221	rBV	22658	17389	1.37%	0.176%
2	3.083	221	227	230	rBV	19851	17678	1.40%	0.179%
3	3.122	230	235	239	rBV	27900	21812	1.72%	0.221%
4	3.189	243	249	258	rBV2	453198	394409	31.15%	3.990%
5	3.934	400	404	420	rBV	314187	263535	20.81%	2.666%
6	4.276	471	475	486	rBV	1049963	796678	62.91%	8.059%
7	4.694	554	562	573	rBV6	24023	75438	5.96%	0.763%
8	4.766	573	577	588	rVB	244099	217713	17.19%	2.202%
9	5.353	696	699	705	rBV2	75532	70320	5.55%	0.711%
10	5.439	713	717	730	rBV	1521727	1096881	86.62%	11.096%
11	6.483	930	934	941	rBV	688161	513699	40.57%	5.196%
12	7.142	1067	1071	1085	rVB	1706387	1266339	100.00%	12.810%
13	7.921	1228	1233	1248	rVB	680224	605451	47.81%	6.124%
14	8.156	1277	1282	1287	rBV	44920	34803	2.75%	0.352%
15	8.608	1372	1376	1384	rBV2	1449661	1201429	94.87%	12.153%
16	9.171	1488	1493	1503	rBV2	130464	142564	11.26%	1.442%
17	9.950	1652	1655	1662	rBV2	27088	26684	2.11%	0.270%
18	10.195	1702	1706	1712	rBV	1024900	854338	67.47%	8.642%
19	11.196	1907	1914	1926	rBV3	46299	109362	8.64%	1.106%
20	11.311	1933	1938	1944	rBV	1090125	1124839	88.83%	11.378%
21	12.499	2179	2185	2189	rBV7	13324	20689	1.63%	0.209%
22	13.340	2352	2360	2374	rBV	690680	1013727	80.05%	10.254%

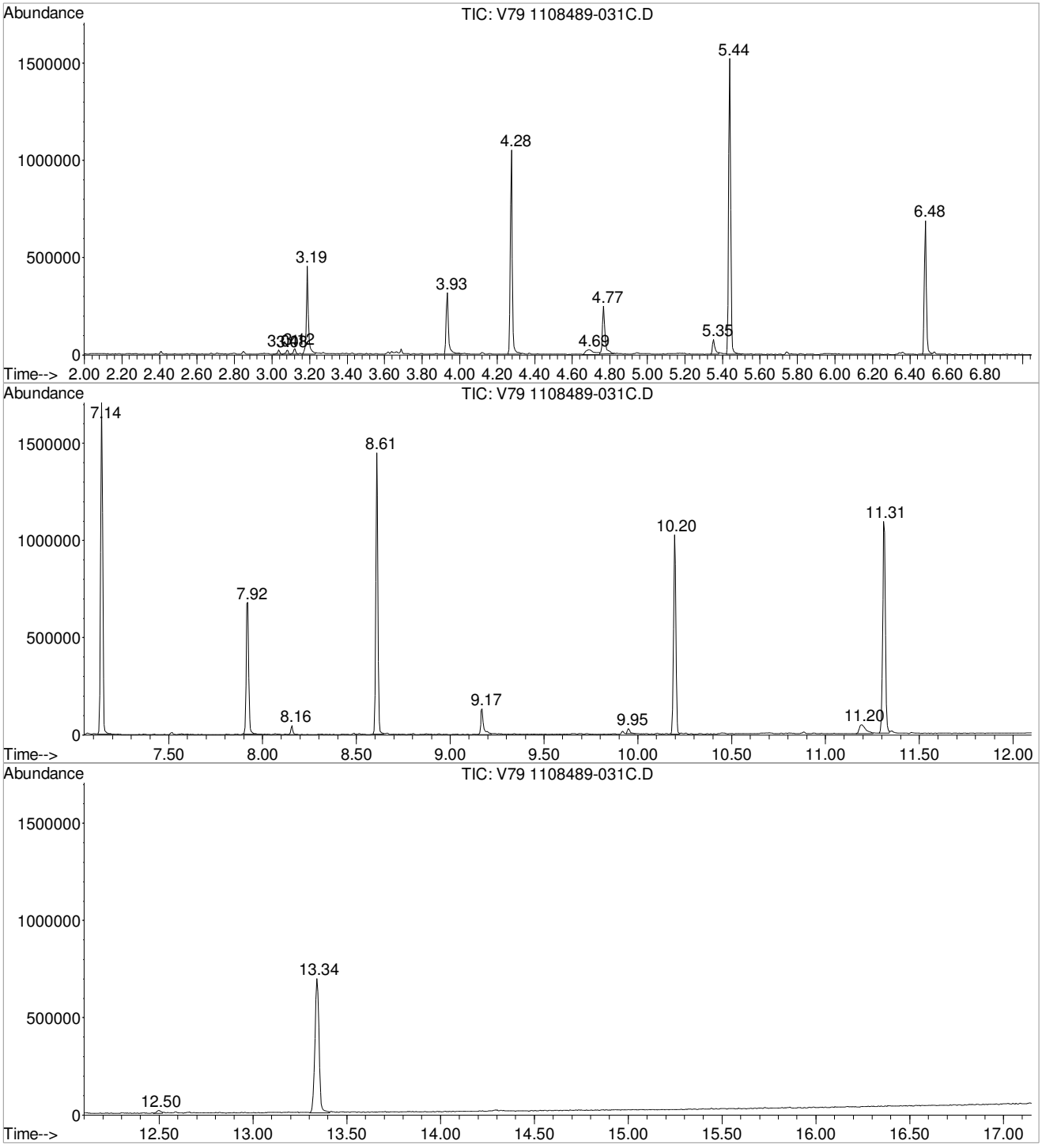
Sum of corrected areas: 9885777

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V79 1108489-031C.D
Acq On : 1 Sep 2011 12:20 am
Operator : ALICIA HABERLE
Sample : 1108489-031C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V79 1108489-031C.D
Acq On : 1 Sep 2011 12:20 am
Operator : ALICIA HABERLE
Sample : 1108489-031C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

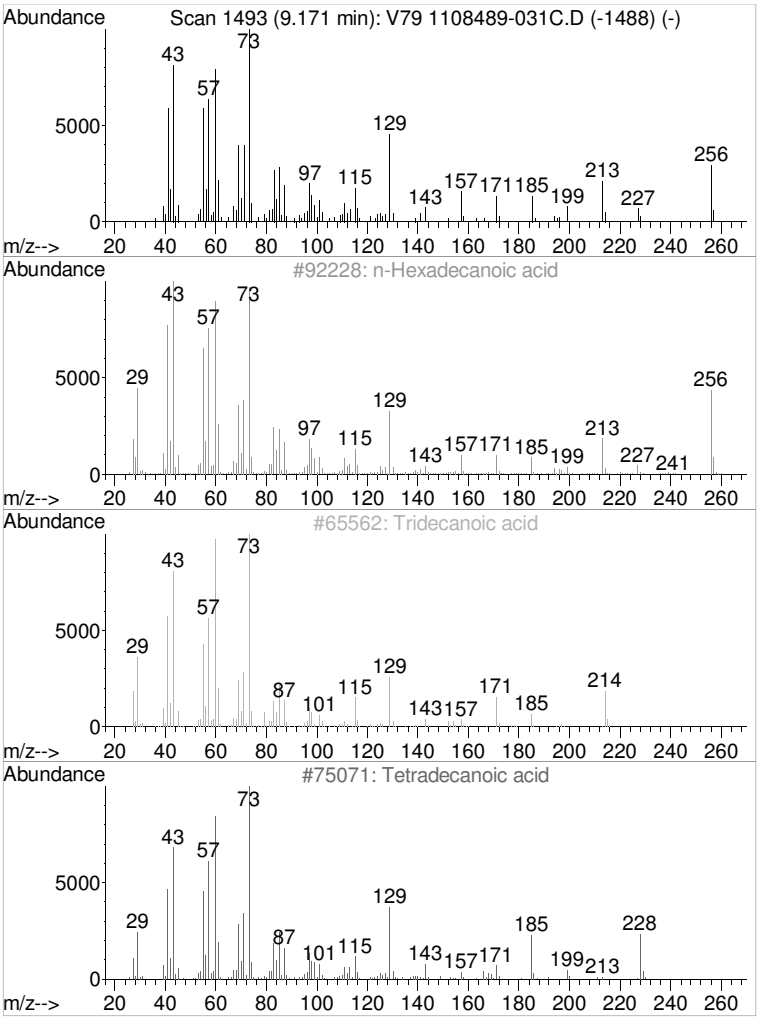
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

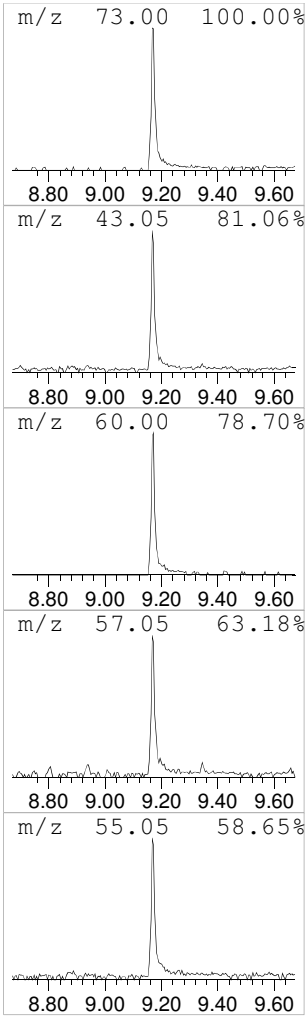
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	4.75 ug/l	142564	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	90
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	81
4	n-Decanoic acid	172	C10H20O2	000334-48-5	64
5	Dodecanoic acid	200	C12H24O2	000143-07-7	47





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V79 1108489-031C.D
Acq On : 1 Sep 2011 12:20 am
Operator : ALICIA HABERLE
Sample : 1108489-031C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	9.17	4.7	ug/l	142564	4	8.61	1201430	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V81 1108489-037C.D
Acq On : 1 Sep 2011 1:13 am
Operator : ALICIA HABERLE
Sample : 1108489-037C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.037	210	218	221	rBV	24676	20774	1.60%	0.205%
2	3.080	221	227	230	rBV	27345	20518	1.58%	0.203%
3	3.119	230	235	239	rBV	32520	25947	2.00%	0.257%
4	3.186	243	249	263	rBV2	432181	377957	29.09%	3.738%
5	3.662	341	348	350	rBV	16876	15958	1.23%	0.158%
6	3.686	350	353	356	rVB	21012	17388	1.34%	0.172%
7	3.931	400	404	415	rBV	296686	256774	19.76%	2.540%
8	4.273	471	475	492	rBV	1014168	823300	63.37%	8.142%
9	4.696	556	563	567	rBV6	13510	24181	1.86%	0.239%
10	4.768	574	578	589	rVB	205429	190658	14.67%	1.886%
11	5.350	695	699	705	rBV2	44810	50052	3.85%	0.495%
12	5.437	713	717	730	rBV	1427507	1114270	85.76%	11.020%
13	6.480	930	934	942	rBV	582116	490213	37.73%	4.848%
14	7.072	1052	1057	1062	rBV3	18829	28192	2.17%	0.279%
15	7.144	1067	1072	1084	rVB	1638160	1299249	100.00%	12.850%
16	7.918	1229	1233	1243	rVB	687686	574114	44.19%	5.678%
17	8.067	1261	1264	1272	rVB	28465	22079	1.70%	0.218%
18	8.154	1279	1282	1287	rBV	46324	38247	2.94%	0.378%
19	8.610	1372	1377	1386	rBV	1542624	1222585	94.10%	12.091%
20	9.168	1486	1493	1509	rBV2	206468	219241	16.87%	2.168%
21	9.918	1646	1649	1652	rBV2	17234	17178	1.32%	0.170%
22	9.952	1652	1656	1664	rVV	73460	74450	5.73%	0.736%
23	10.197	1702	1707	1714	rBV	939159	806341	62.06%	7.975%
24	11.188	1907	1913	1933	rBV2	91144	196462	15.12%	1.943%
25	11.313	1933	1939	1945	rBV	1064866	1126038	86.67%	11.137%
26	11.351	1945	1947	1951	rVB2	14317	16357	1.26%	0.162%
27	12.496	2180	2185	2190	rBV3	21677	31551	2.43%	0.312%
28	12.655	2210	2218	2224	rBV5	14148	23432	1.80%	0.232%
29	13.342	2352	2361	2373	rBV	629325	987640	76.02%	9.768%

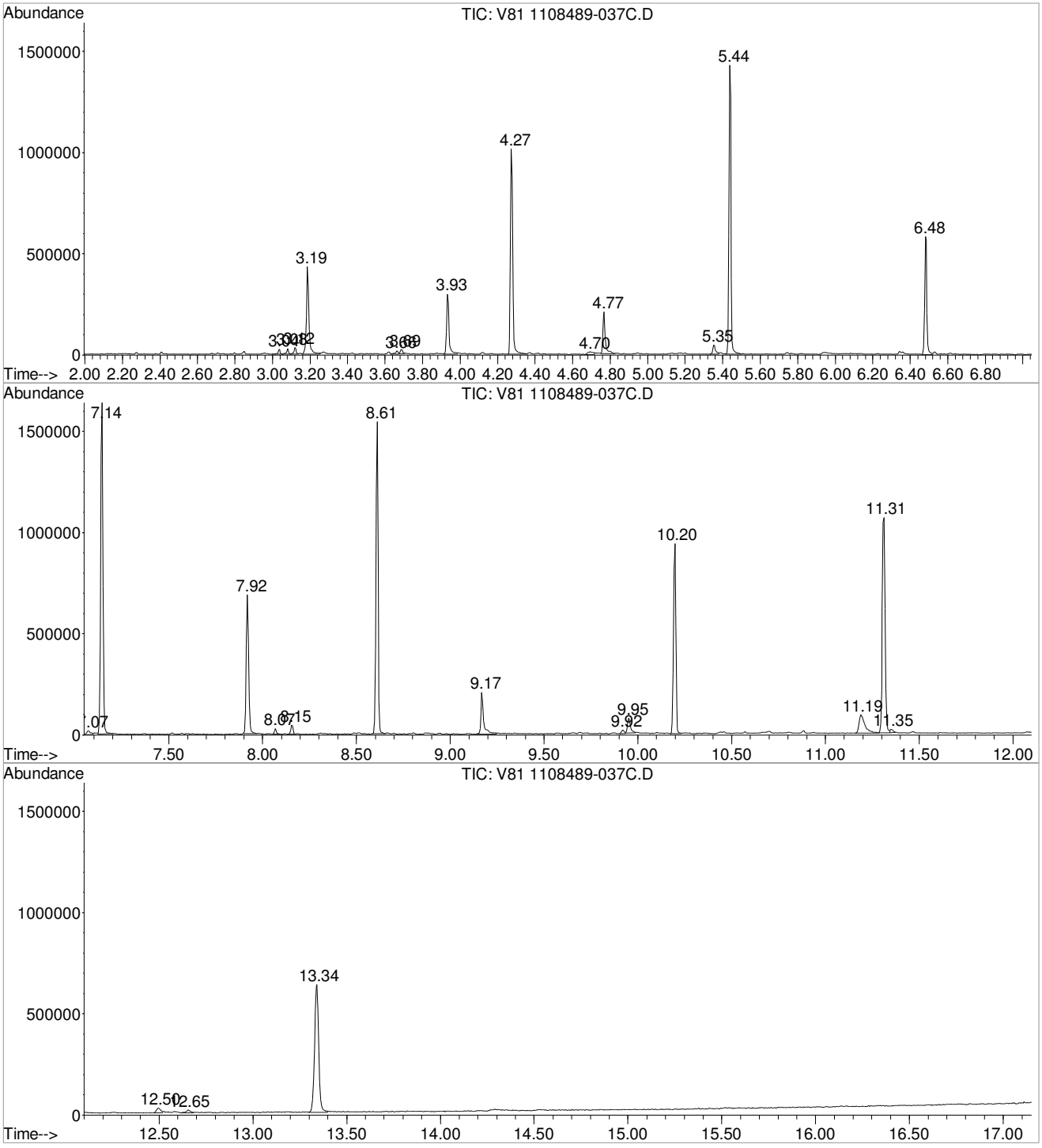
Sum of corrected areas: 10111146

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V81 1108489-037C.D
Acq On : 1 Sep 2011 1:13 am
Operator : ALICIA HABERLE
Sample : 1108489-037C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V81 1108489-037C.D
Acq On : 1 Sep 2011 1:13 am
Operator : ALICIA HABERLE
Sample : 1108489-037C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

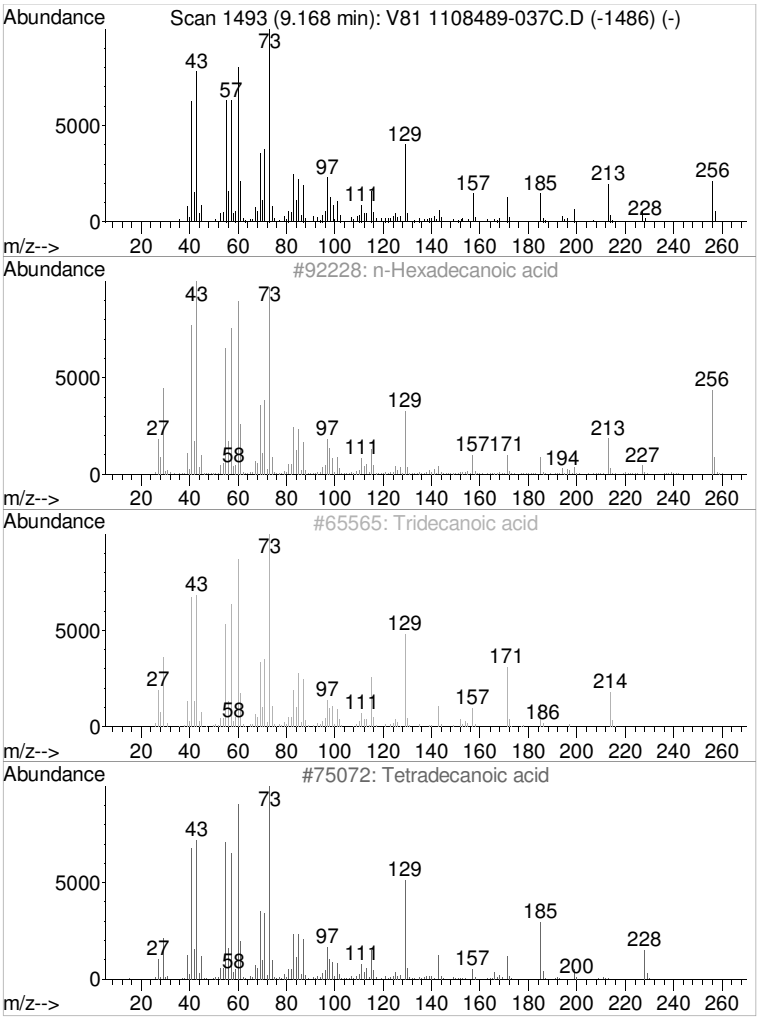
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

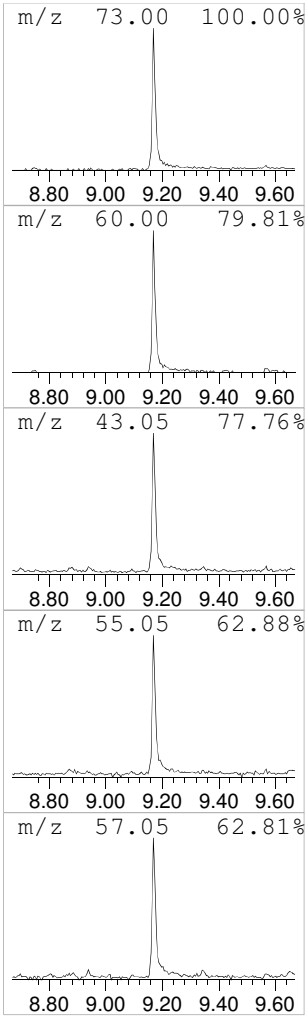
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	7.17 ug/l	219241	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	94
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
4	n-Decanoic acid	172	C10H20O2	000334-48-5	64
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	64





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V81 1108489-037C.D
Acq On : 1 Sep 2011 1:13 am
Operator : ALICIA HABERLE
Sample : 1108489-037C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

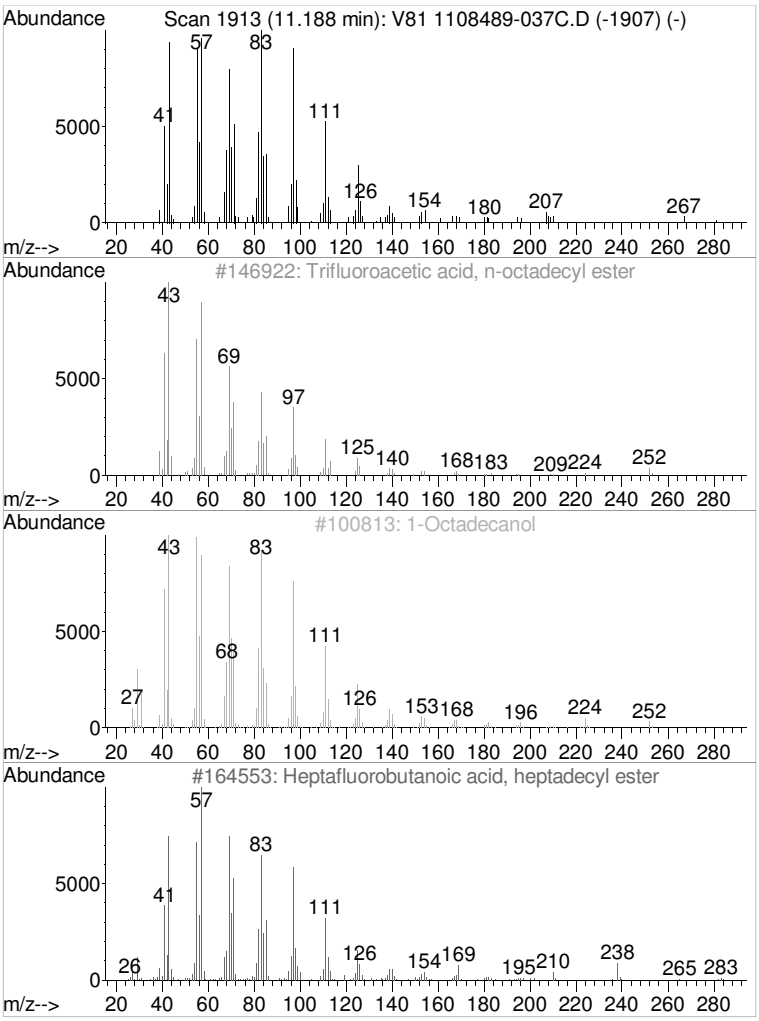
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

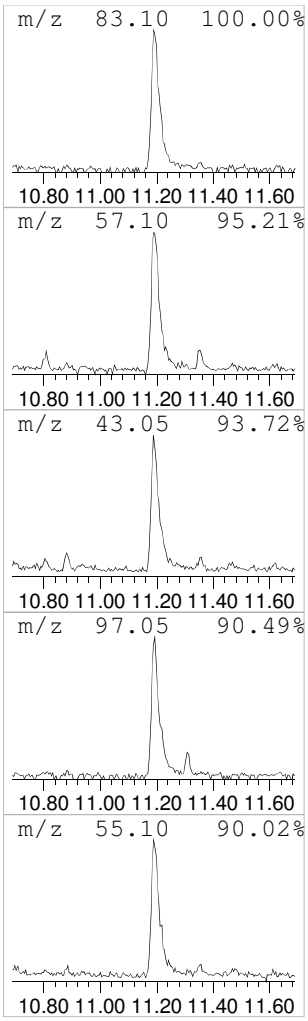
****

Peak Number 2 Trifluoroacetic acid, n-oct... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	6.98 ug/l	196462	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
2	1-Octadecanol	270	C18H38O	000112-92-5	91
3	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	91
4	1-Nonadecene	266	C19H38	018435-45-5	90
5	Isoheptadecanol	256	C17H36O	057289-07-3	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V81 1108489-037C.D
Acq On : 1 Sep 2011 1:13 am
Operator : ALICIA HABERLE
Sample : 1108489-037C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	9.17	7.2	ug/l	219241	4	8.61	1222590	40.0
Trifluoroacetic a...	11.19	7.0	ug/l	196462	5	11.31	1126040	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.847	170	178	182	rBV3	18605	17454	1.29%	0.155%
2	2.943	193	198	201	rBV	23205	22893	1.69%	0.203%
3	3.034	210	217	221	rBV	30826	24243	1.79%	0.215%
4	3.083	221	227	230	rVV	29865	25795	1.90%	0.229%
5	3.121	230	235	239	rVV	40420	35676	2.63%	0.316%
6	3.188	243	249	263	rBV2	507277	452482	33.41%	4.009%
7	3.275	263	267	271	rVB2	15868	17245	1.27%	0.153%
8	3.664	341	348	350	rBV	17036	17534	1.29%	0.155%
9	3.688	350	353	356	rVB	26675	20483	1.51%	0.181%
10	3.934	400	404	417	rBV	365123	295555	21.83%	2.619%
11	4.275	471	475	486	rBV	1100825	851377	62.87%	7.543%
12	4.693	557	562	572	rBV4	18859	40839	3.02%	0.362%
13	4.766	573	577	583	rBV	254062	197152	14.56%	1.747%
14	5.352	695	699	705	rBV2	139854	124023	9.16%	1.099%
15	5.439	713	717	726	rBV	1613157	1155166	85.30%	10.235%
16	5.939	816	821	831	rBV4	12161	28824	2.13%	0.255%
17	6.343	899	905	907	rBV	45081	36119	2.67%	0.320%
18	6.482	930	934	941	rBV	721452	537042	39.66%	4.758%
19	7.083	1053	1059	1067	rBV3	40258	69749	5.15%	0.618%
20	7.141	1067	1071	1084	rVB	1709791	1354180	100.00%	11.998%
21	7.920	1226	1233	1242	rBV	700698	628340	46.40%	5.567%
22	8.069	1260	1264	1267	rBV	25719	24934	1.84%	0.221%
23	8.156	1277	1282	1286	rBV	146058	107770	7.96%	0.955%
24	8.608	1372	1376	1385	rBV2	1560101	1260543	93.09%	11.168%
25	8.872	1425	1431	1441	rBV5	16680	27197	2.01%	0.241%
26	9.170	1488	1493	1502	rBV2	325195	305354	22.55%	2.705%
27	9.921	1645	1649	1652	rBV3	16713	23007	1.70%	0.204%
28	9.949	1652	1655	1664	rVV	114433	117410	8.67%	1.040%
29	10.195	1702	1706	1715	rBV	917312	738786	54.56%	6.545%
30	10.666	1797	1804	1806	rBV6	11132	16408	1.21%	0.145%
31	10.700	1806	1811	1818	rVB6	13349	22678	1.67%	0.201%
32	10.882	1845	1849	1852	rBV	25638	24715	1.83%	0.219%
33	11.185	1907	1912	1929	rBV	186569	356291	26.31%	3.157%
34	11.310	1932	1938	1944	rVV	1069818	1173812	86.68%	10.400%
35	11.354	1944	1947	1956	rVB2	20577	27686	2.04%	0.245%
36	12.498	2177	2185	2191	rBV2	34439	56709	4.19%	0.502%
37	12.662	2213	2219	2224	rBV7	11914	19163	1.42%	0.170%
38	13.340	2352	2360	2370	rBV	667017	1015535	74.99%	8.997%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	14.282	2550	2556	2557	rBV6	11932	16773	1.24%	0.149%

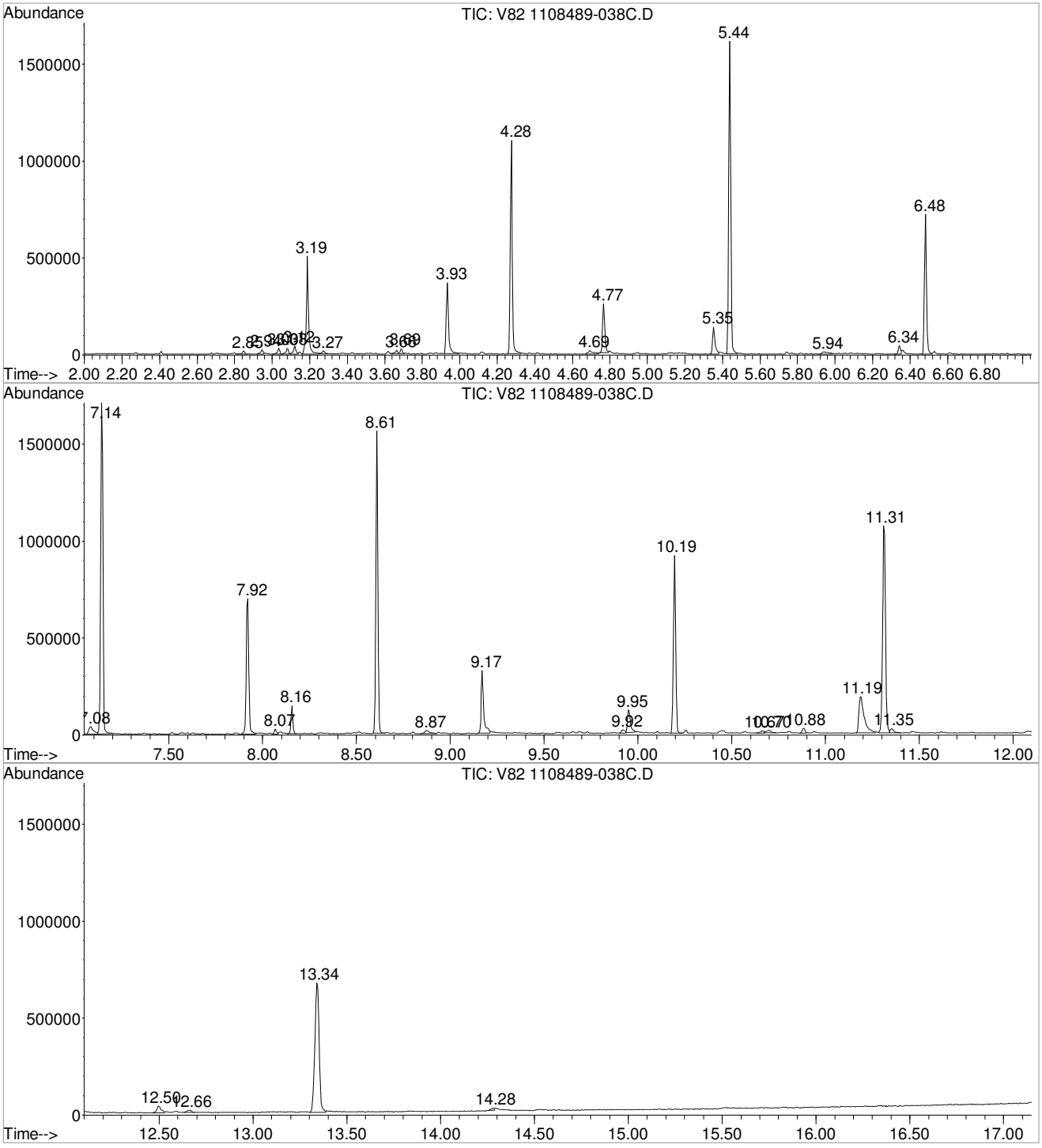
Sum of corrected areas: 11286942

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

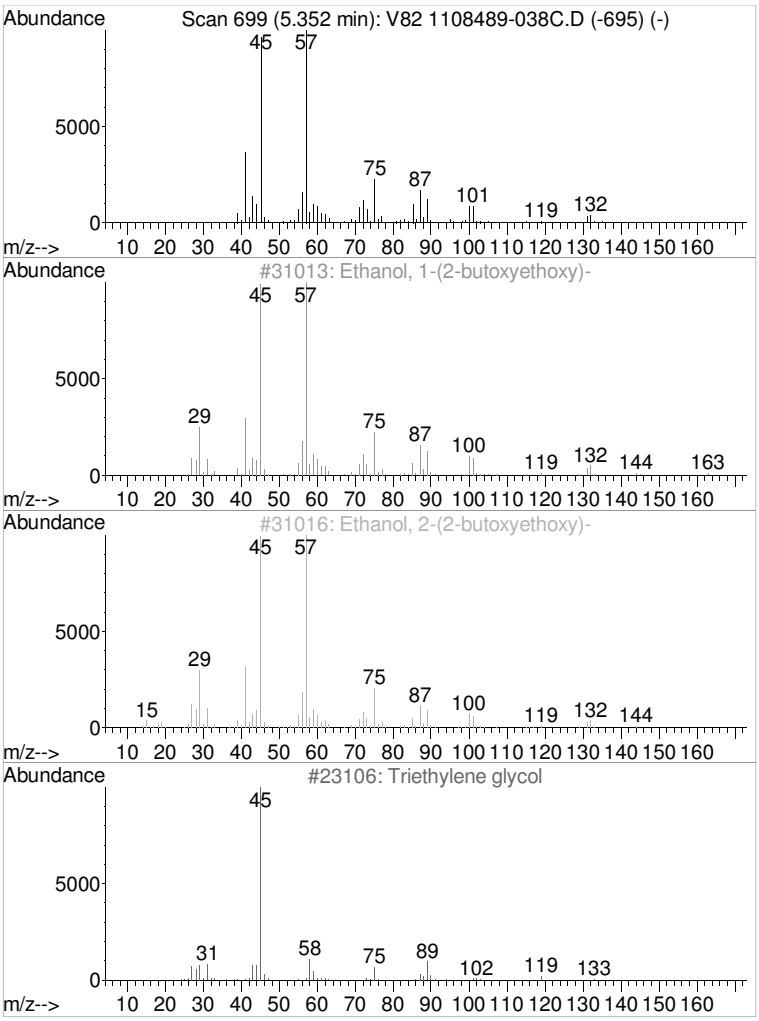
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

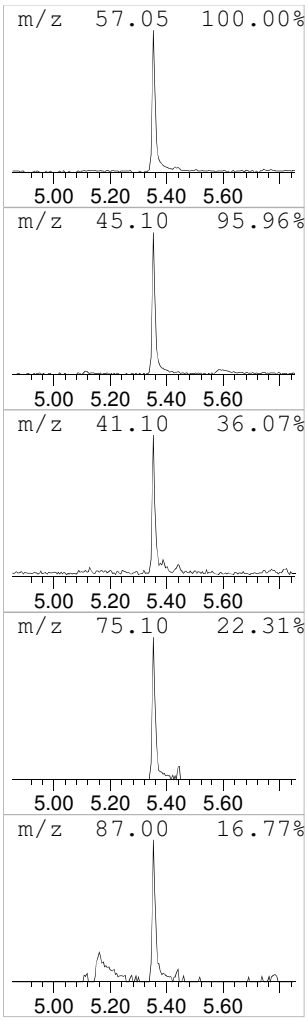
****

Peak Number 1 Ethanol, 1-(2-butoxyethoxy)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.35	4.29 ug/l	124023	ISTD Naphthalene-d8	5.44

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 1-(2-butoxyethoxy)-	162	C8H18O3	054446-78-5	90
2	Ethanol, 2-(2-butoxyethoxy)-	162	C8H18O3	000112-34-5	90
3	Triethylene glycol	150	C6H14O4	000112-27-6	47
4	Methoxyacetic acid, 2-butyl ester	146	C7H14O3	070159-90-9	47
5	3,3-Dimethylbutane-2-ol	102	C6H14O	000464-07-3	47





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

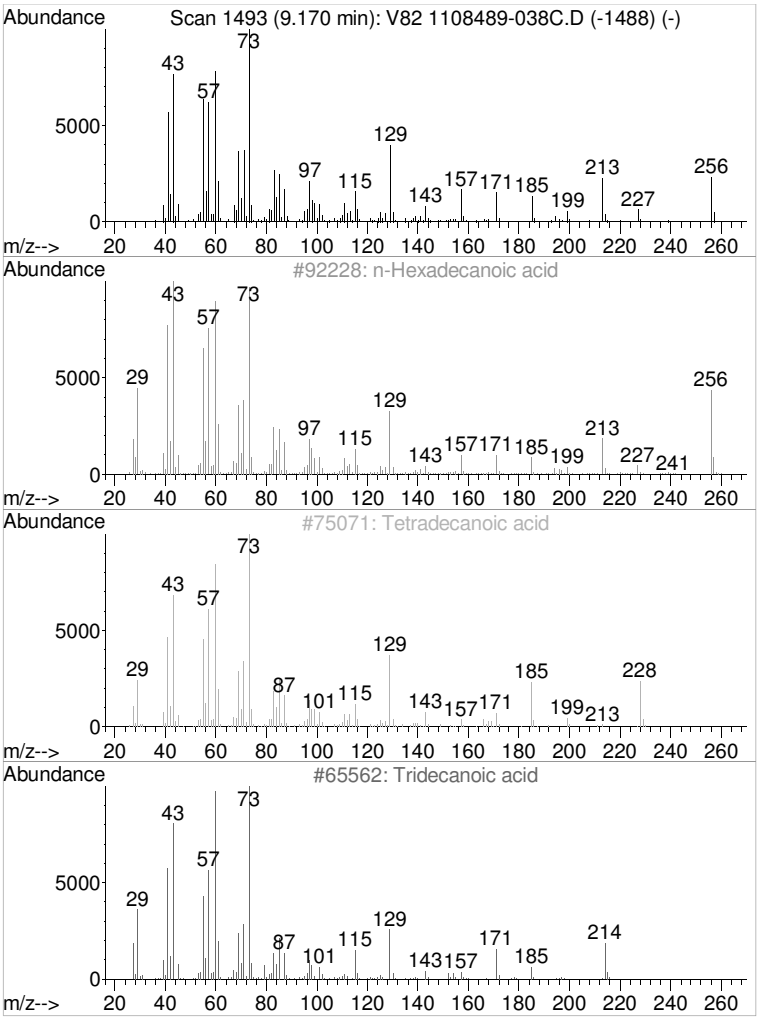
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

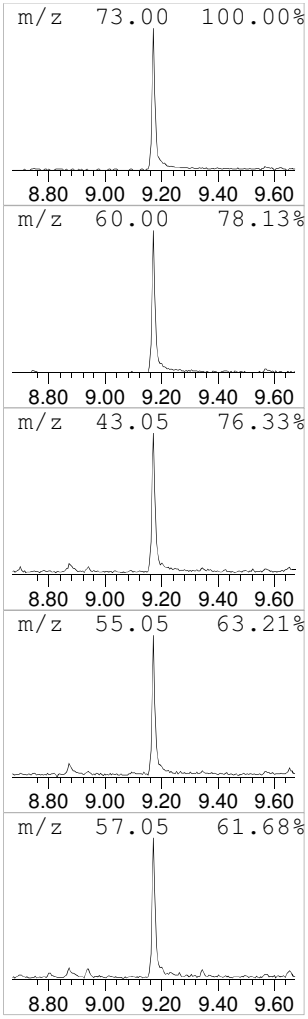
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	9.69 ug/l	305354	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	94
3	Tridecanoic acid	214	C13H26O2	000638-53-9	93
4	n-Decanoic acid	172	C10H20O2	000334-48-5	53
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	47





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

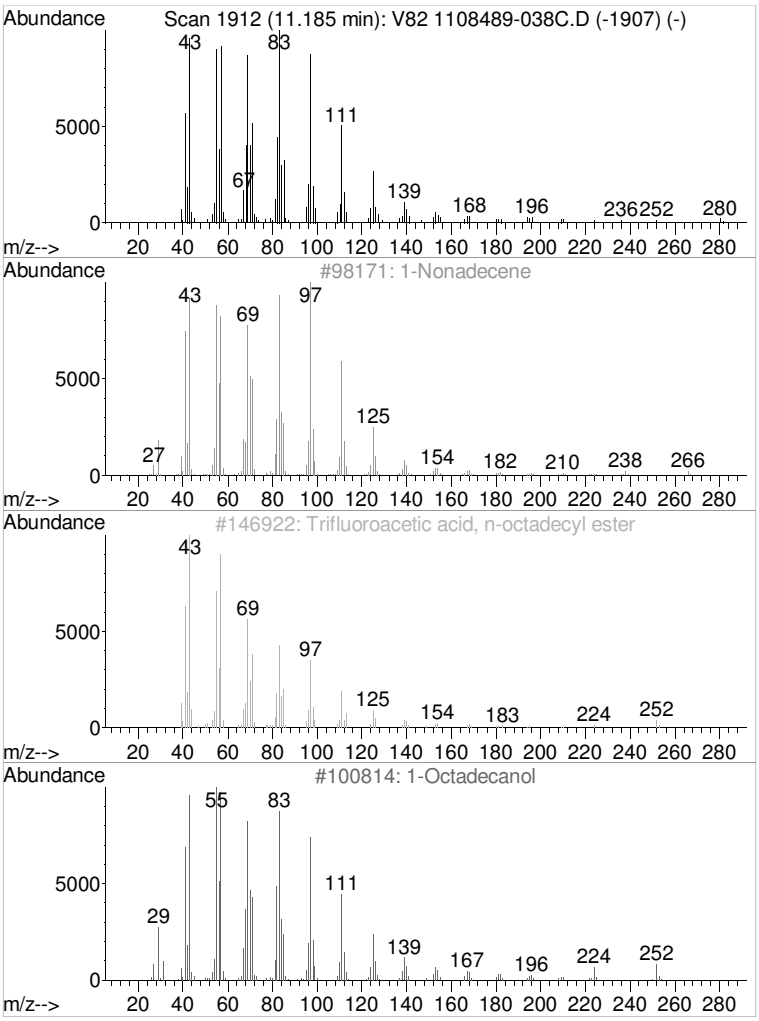
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

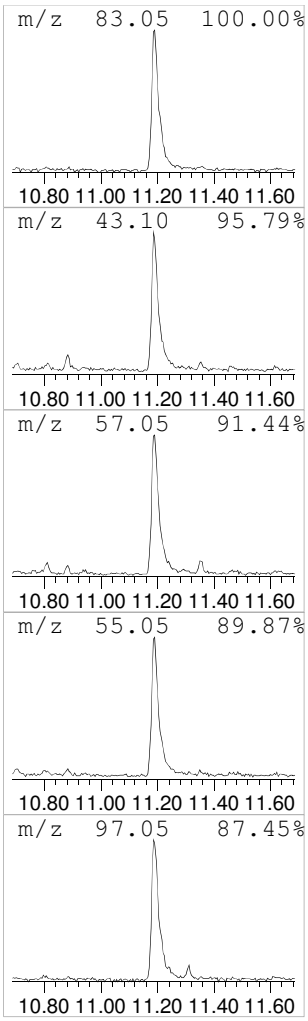
****

Peak Number 3 1-Nonadecene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	12.14 ug/l	356291	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	94
2	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
3	1-Octadecanol	270	C18H38O	000112-92-5	91
4	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	90
5	1-Eicosanol	298	C20H42O	000629-96-9	90





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V82 1108489-038C.D
Acq On : 1 Sep 2011 1:39 am
Operator : ALICIA HABERLE
Sample : 1108489-038C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Ethanol, 1-(2-but...	5.35	4.3	ug/l	124023	2	5.44	1155170	40.0
n-Hexadecanoic acid	9.17	9.7	ug/l	305354	4	8.61	1260540	40.0
1-Nonadecene	11.19	12.1	ug/l	356291	5	11.31	1173810	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.561	116	119	130	rVB	68504	53966	2.68%	0.302%
2	3.100	224	231	234	rBV	2011900	1454059	72.11%	8.125%
3	3.191	245	250	253	rVB	54867	38503	1.91%	0.215%
4	3.235	253	259	263	rVB	56507	39464	1.96%	0.221%
5	3.273	263	267	272	rBV	77026	56646	2.81%	0.317%
6	3.340	276	281	295	rBV	1621744	1213118	60.16%	6.779%
7	3.845	382	386	389	rBV	152646	109549	5.43%	0.612%
8	3.994	412	417	420	rBV2	30156	32732	1.62%	0.183%
9	4.086	432	436	451	rBV	1426048	1135867	56.33%	6.347%
10	4.187	454	457	460	rVB	49967	35642	1.77%	0.199%
11	4.278	472	476	479	rVB3	33177	29233	1.45%	0.163%
12	4.326	483	486	492	rVB	66855	54837	2.72%	0.306%
13	4.437	504	509	517	rBV	993537	821644	40.75%	4.591%
14	4.528	524	528	531	rBV2	41914	33926	1.68%	0.190%
15	4.773	572	579	587	rBV4	16760	35285	1.75%	0.197%
16	4.927	607	611	622	rVB	685399	530613	26.32%	2.965%
17	5.605	746	752	762	rBV	1370437	1124643	55.78%	6.284%
18	6.500	931	938	941	rBV2	24404	25568	1.27%	0.143%
19	6.649	962	969	977	rBV	1578672	1301990	64.57%	7.275%
20	6.981	1035	1038	1042	rVB	34091	27293	1.35%	0.153%
21	7.317	1099	1108	1118	rVB	1462523	1236119	61.30%	6.907%
22	7.731	1190	1194	1197	rBV	33689	27085	1.34%	0.151%
23	8.039	1248	1258	1259	rBV8	23326	40454	2.01%	0.226%
24	8.096	1259	1270	1277	rVB	843572	808373	40.09%	4.517%
25	8.231	1293	1298	1304	rBV3	46953	51133	2.54%	0.286%
26	8.322	1313	1317	1321	rVB2	60934	55329	2.74%	0.309%
27	8.471	1343	1348	1352	rBV3	27471	32938	1.63%	0.184%
28	8.789	1402	1414	1418	rBV	1172394	1087049	53.91%	6.074%
29	8.813	1418	1419	1424	rVB	53088	30353	1.51%	0.170%
30	9.265	1509	1513	1516	rBV3	28344	30085	1.49%	0.168%
31	9.337	1523	1528	1532	rBV	198593	182373	9.04%	1.019%
32	9.900	1641	1645	1649	rBV3	21373	24391	1.21%	0.136%
33	9.996	1662	1665	1668	rVB	80913	61228	3.04%	0.342%
34	10.044	1672	1675	1679	rBV4	39836	54272	2.69%	0.303%
35	10.097	1683	1686	1688	rBV4	24735	25672	1.27%	0.143%
36	10.121	1688	1691	1695	rBV	144472	130585	6.48%	0.730%
37	10.217	1707	1711	1716	rVB	2464896	2016344	100.00%	11.267%
38	10.376	1740	1744	1752	rVB	1212448	964943	47.86%	5.392%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

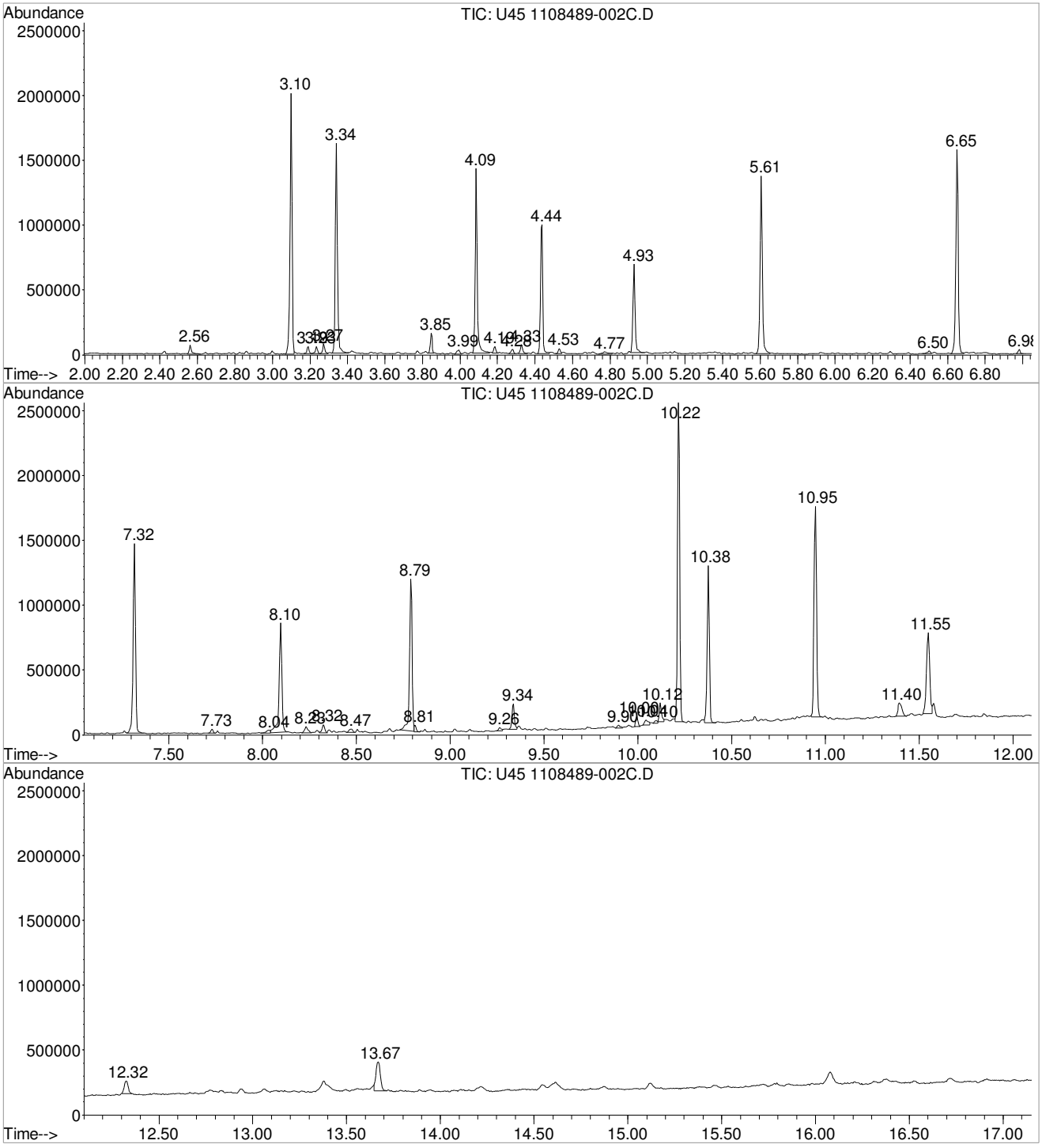
39	10.948	1858	1863	1869	rVB	1624960	1513814	75.08%	8.459%
40	11.395	1952	1956	1963	rVB3	103836	150130	7.45%	0.839%
41	11.549	1982	1988	1992	rBV	626227	710167	35.22%	3.968%
42	12.323	2145	2149	2155	rVB2	100087	138853	6.89%	0.776%
43	13.670	2424	2429	2438	rVB	225597	370142	18.36%	2.068%

Sum of corrected areas: 17896410

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

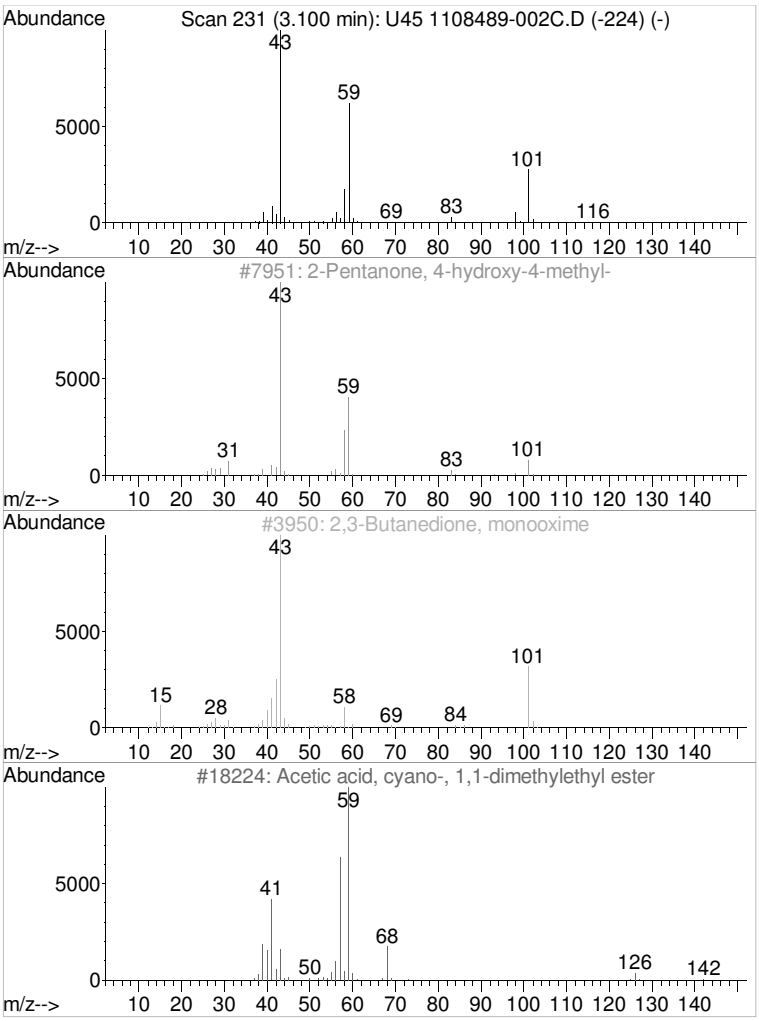
Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

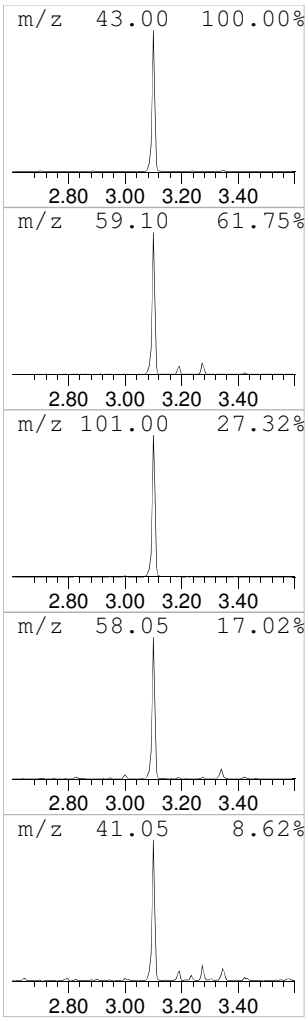
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.10	70.79 ug/l	1454060	ISTD 1,4-Dichlorobenzene-d4	4.44

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9
5	Acetone	58	C3H6O	000067-64-1	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

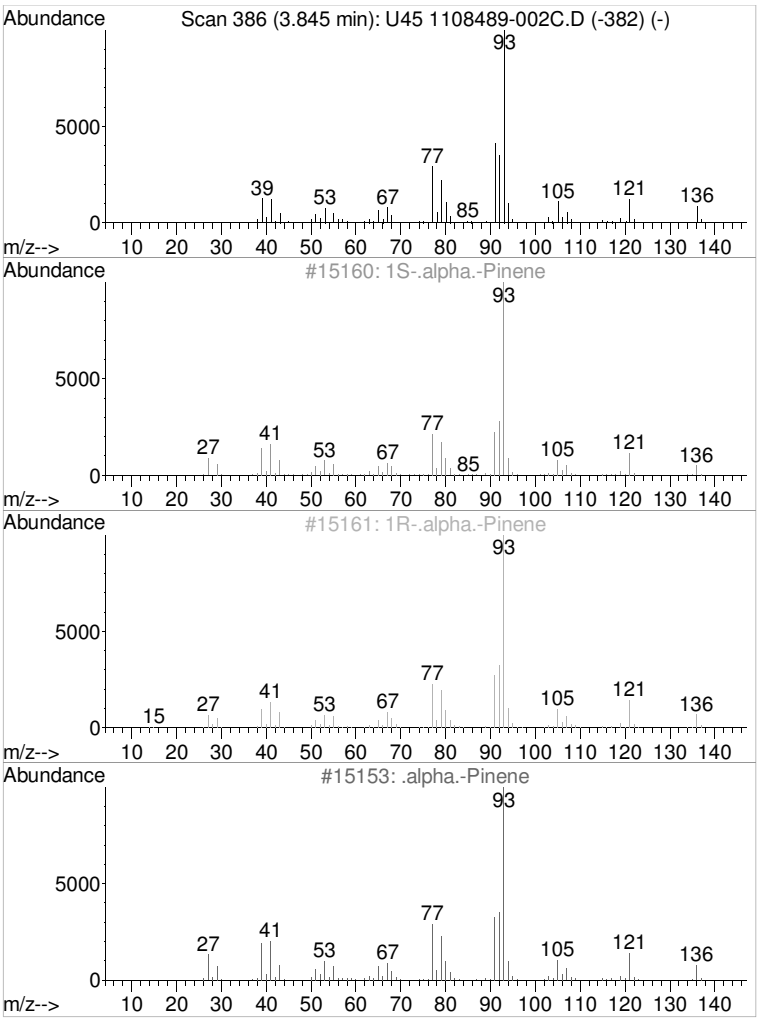
Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

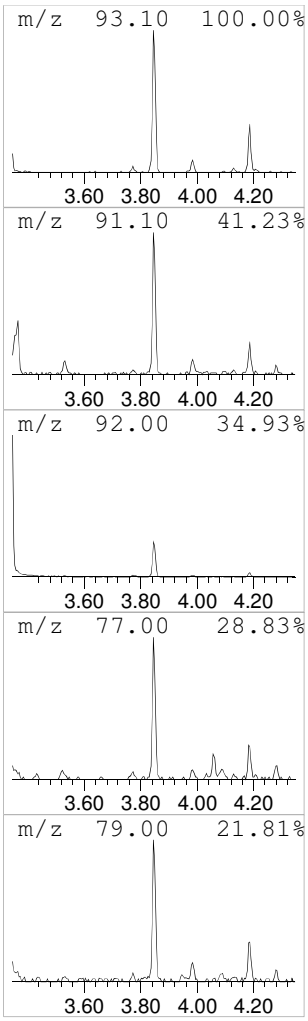
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 1S-.alpha.-Pinene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.85	5.33 ug/l	109549	ISTD 1,4-Dichlorobenzene-d4	4.44

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1S-.alpha.-Pinene	136	C10H16	007785-26-4	97
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
3	.alpha.-Pinene	136	C10H16	000080-56-8	96
4	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	94
5	Bicyclo[4.1.0]hept-3-ene, 3,7,7-...	136	C10H16	000498-15-7	91





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

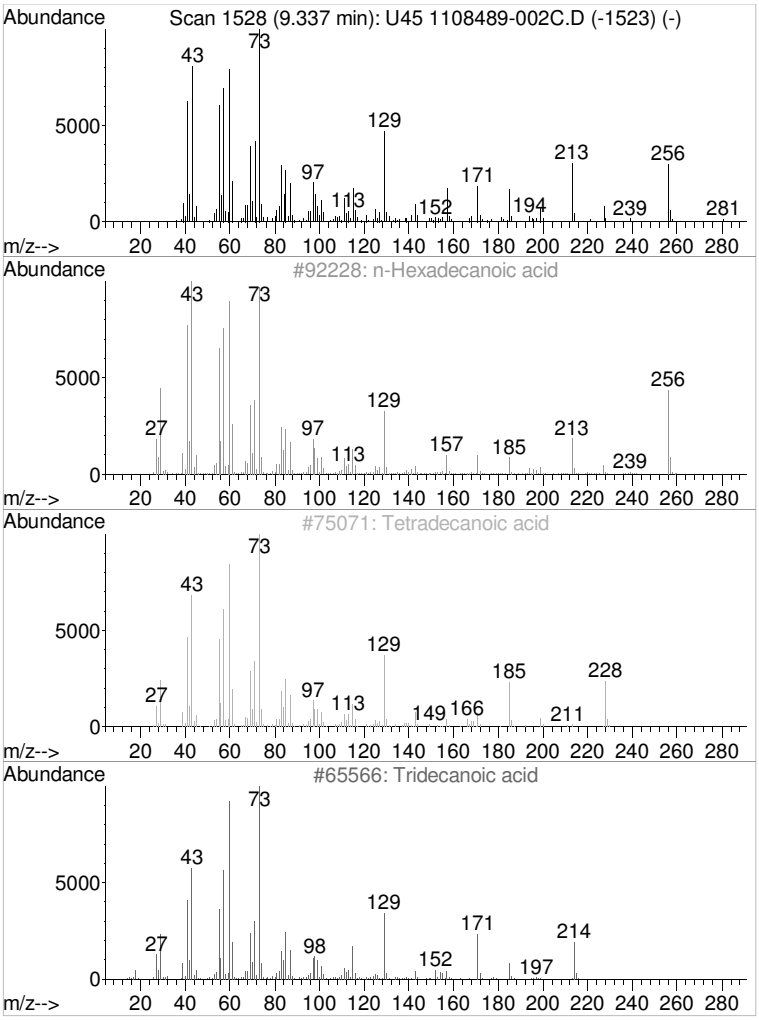
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

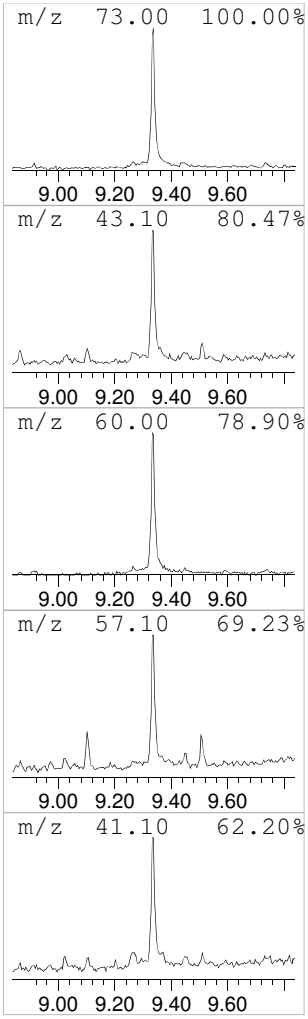
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.34	6.71 ug/l	182373	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	95
3	Tridecanoic acid	214	C13H26O2	000638-53-9	74
4	n-Decanoic acid	172	C10H20O2	000334-48-5	70
5	Undecanoic acid	186	C11H22O2	000112-37-8	62





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

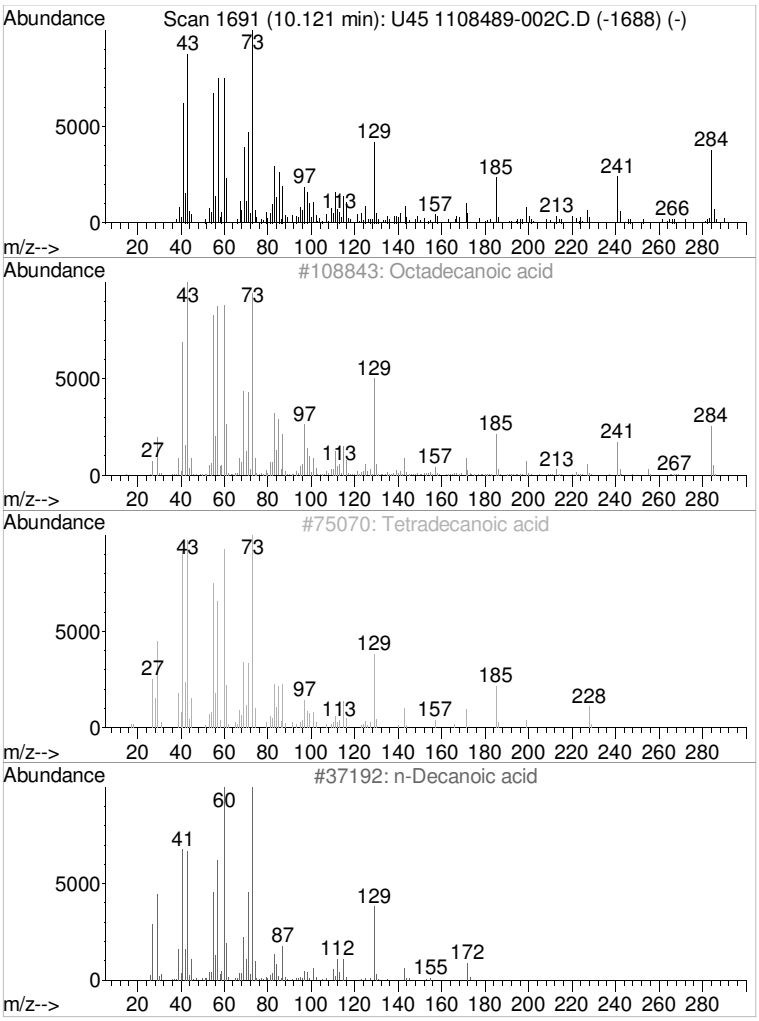
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

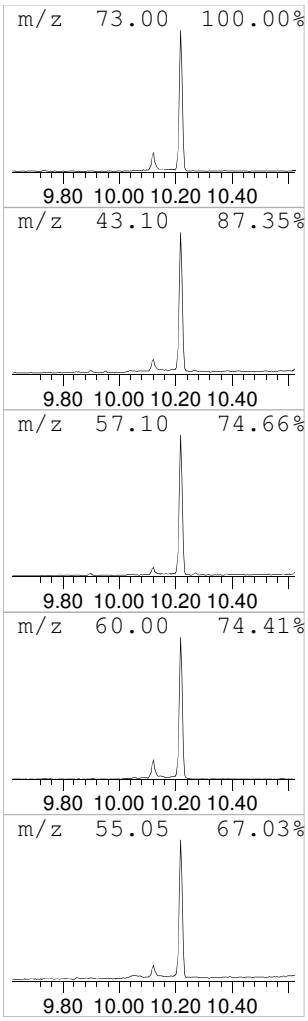
****

Peak Number 4 Octadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.12	4.81 ug/1	130585	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	89
3	n-Decanoic acid	172	C10H20O2	000334-48-5	58
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	58
5	Dodecanoic acid	200	C12H24O2	000143-07-7	52





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

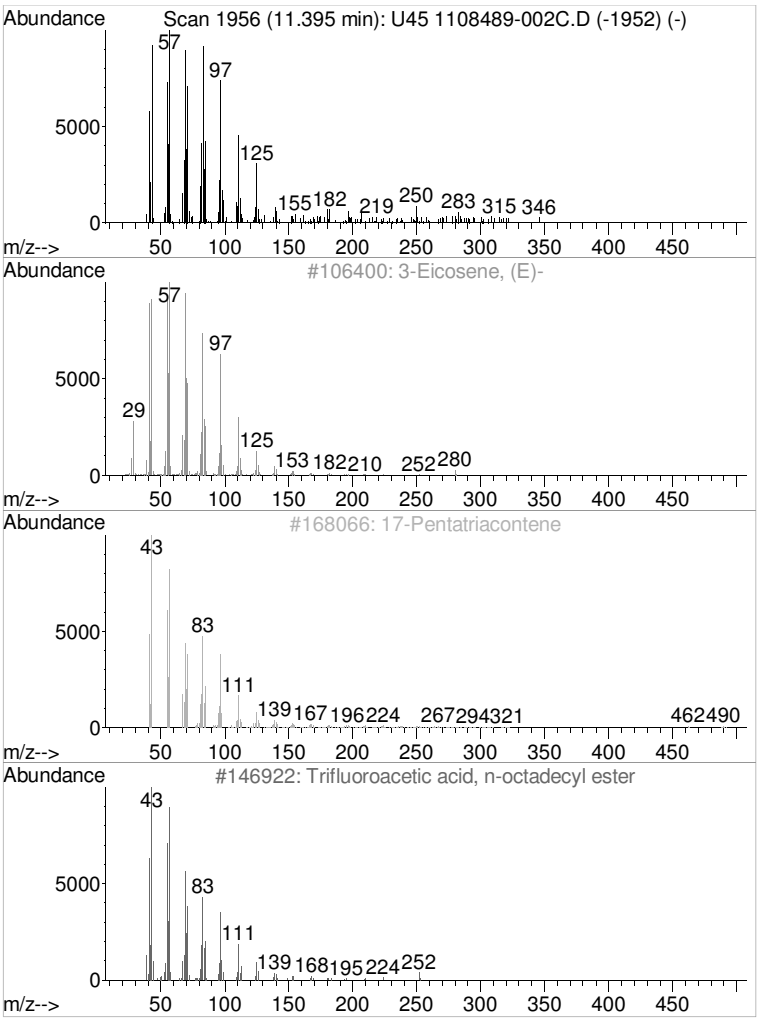
Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

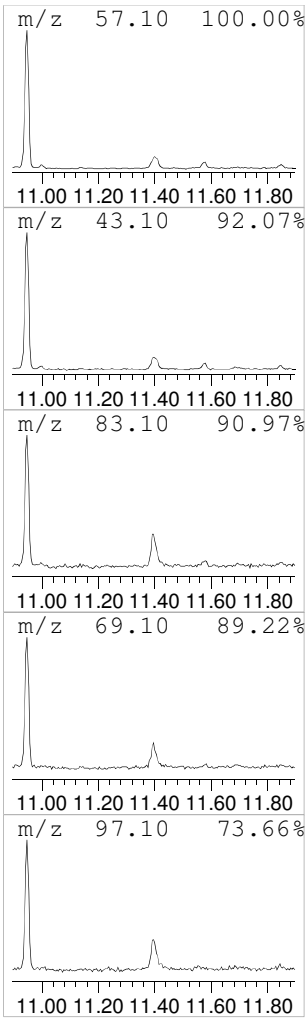
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 3-Eicosene, (E)- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.40	8.46 ug/l	150130	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Eicosene, (E)-	280	C20H40	074685-33-9	96
2	17-Pentatriacontene	491	C35H70	006971-40-0	91
3	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
4	9-Tricosene, (Z)-	322	C23H46	027519-02-4	90
5	1-Heneicosyl formate	340	C22H44O2	077899-03-7	90





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

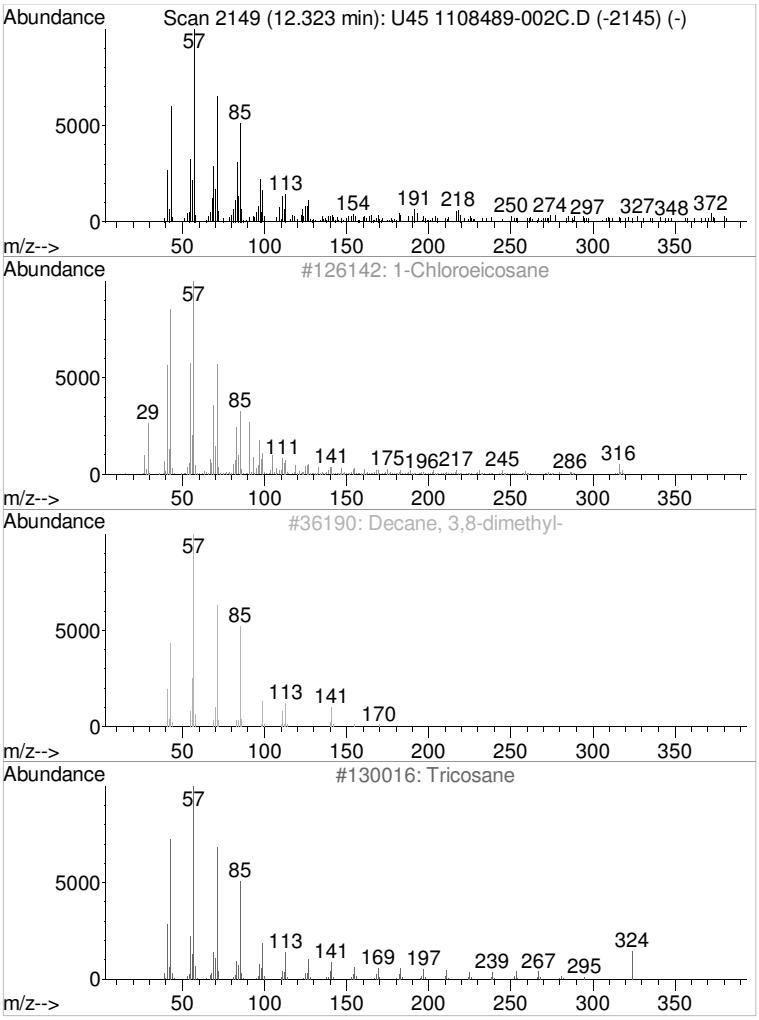
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

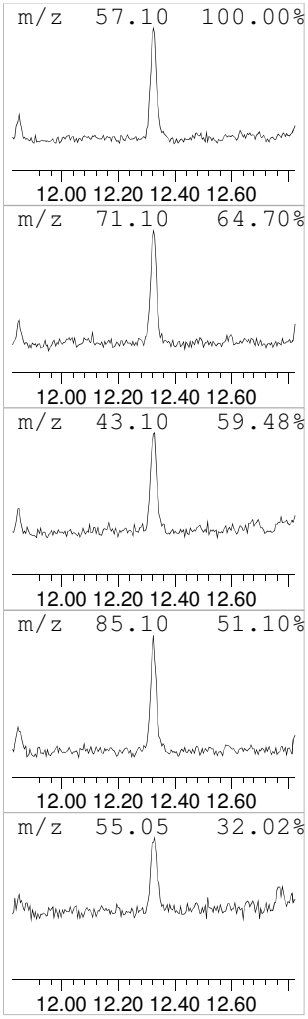
****

Peak Number 6 1-Chloroeicosane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.32	7.82 ug/l	138853	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Chloroeicosane	316	C20H41Cl	042217-02-7	93
2	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	92
3	Tricosane	324	C23H48	000638-67-5	89
4	Heptacosane	380	C27H56	000593-49-7	83
5	Hexacosane	366	C26H54	000630-01-3	76





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U45 1108489-002C.D
Acq On : 29 Aug 2011 4:40 am
Operator : ALICIA HABERLE
Sample : 1108489-002C
Misc : SAMP
ALS Vial : 22 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	3.10	70.8	ug/l	1454060	1	4.44	821644	40.0
1S-.alpha.-Pinene	3.85	5.3	ug/l	109549	1	4.44	821644	40.0
n-Hexadecanoic acid	9.34	6.7	ug/l	182373	4	8.79	1087050	40.0
Octadecanoic acid	10.12	4.8	ug/l	130585	4	8.79	1087050	40.0
3-Eicosene, (E)-	11.40	8.5	ug/l	150130	5	11.55	710167	40.0
1-Chloroeicosane	12.32	7.8	ug/l	138853	5	11.55	710167	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.562	116	119	122	rBV	83197	52842	3.65%	0.299%
2	3.100	224	231	234	rBV	1948494	1448716	100.00%	8.189%
3	3.192	244	250	253	rBV	56826	42870	2.96%	0.242%
4	3.235	257	259	262	rVB	56431	35850	2.47%	0.203%
5	3.273	262	267	271	rBV	74416	55393	3.82%	0.313%
6	3.341	276	281	291	rVV2	1494340	1138073	78.56%	6.433%
7	3.422	295	298	305	rVB2	19570	22510	1.55%	0.127%
8	3.773	366	371	375	rVB	27133	22258	1.54%	0.126%
9	3.817	375	380	382	rBV2	22254	21305	1.47%	0.120%
10	3.846	382	386	392	rVB	120696	94713	6.54%	0.535%
11	3.995	410	417	420	rBV2	25930	31782	2.19%	0.180%
12	4.086	432	436	448	rBV	1319298	1056616	72.93%	5.973%
13	4.187	454	457	459	rVB2	26700	19265	1.33%	0.109%
14	4.326	483	486	492	rVB	59111	50560	3.49%	0.286%
15	4.432	504	508	519	rBV	1011540	845335	58.35%	4.779%
16	4.528	525	528	531	rBV	37850	29887	2.06%	0.169%
17	4.769	572	578	592	rBV5	15496	39992	2.76%	0.226%
18	4.928	607	611	621	rBV	619384	501804	34.64%	2.837%
19	4.995	621	625	631	rVB3	20787	20093	1.39%	0.114%
20	5.606	746	752	762	rBV	1431609	1135999	78.41%	6.422%
21	6.500	933	938	941	rBV2	35626	35136	2.43%	0.199%
22	6.529	941	944	952	rVB3	24820	23438	1.62%	0.132%
23	6.649	962	969	977	rBV	1461180	1255312	86.65%	7.096%
24	6.793	996	999	1006	rVB2	28468	37086	2.56%	0.210%
25	7.318	1099	1108	1117	rBV	1601421	1297045	89.53%	7.332%
26	7.731	1191	1194	1198	rVB3	22050	19722	1.36%	0.111%
27	7.842	1212	1217	1223	rBV8	10755	18586	1.28%	0.105%
28	8.097	1251	1270	1277	rBV	826234	841356	58.08%	4.756%
29	8.231	1294	1298	1307	rVB6	30767	37799	2.61%	0.214%
30	8.323	1313	1317	1321	rVB2	113976	99693	6.88%	0.564%
31	8.467	1343	1347	1353	rBV3	38228	56418	3.89%	0.319%
32	8.755	1403	1407	1409	rBV3	32822	38129	2.63%	0.216%
33	8.794	1410	1415	1419	rVB	1234144	1054937	72.82%	5.963%
34	8.866	1427	1430	1434	rVB2	31107	23913	1.65%	0.135%
35	9.025	1460	1463	1469	rBV3	32777	30821	2.13%	0.174%
36	9.265	1505	1513	1517	rBV2	62500	83035	5.73%	0.469%
37	9.299	1517	1520	1524	rVV3	56152	63119	4.36%	0.357%
38	9.337	1524	1528	1532	rVV	327552	296344	20.46%	1.675%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

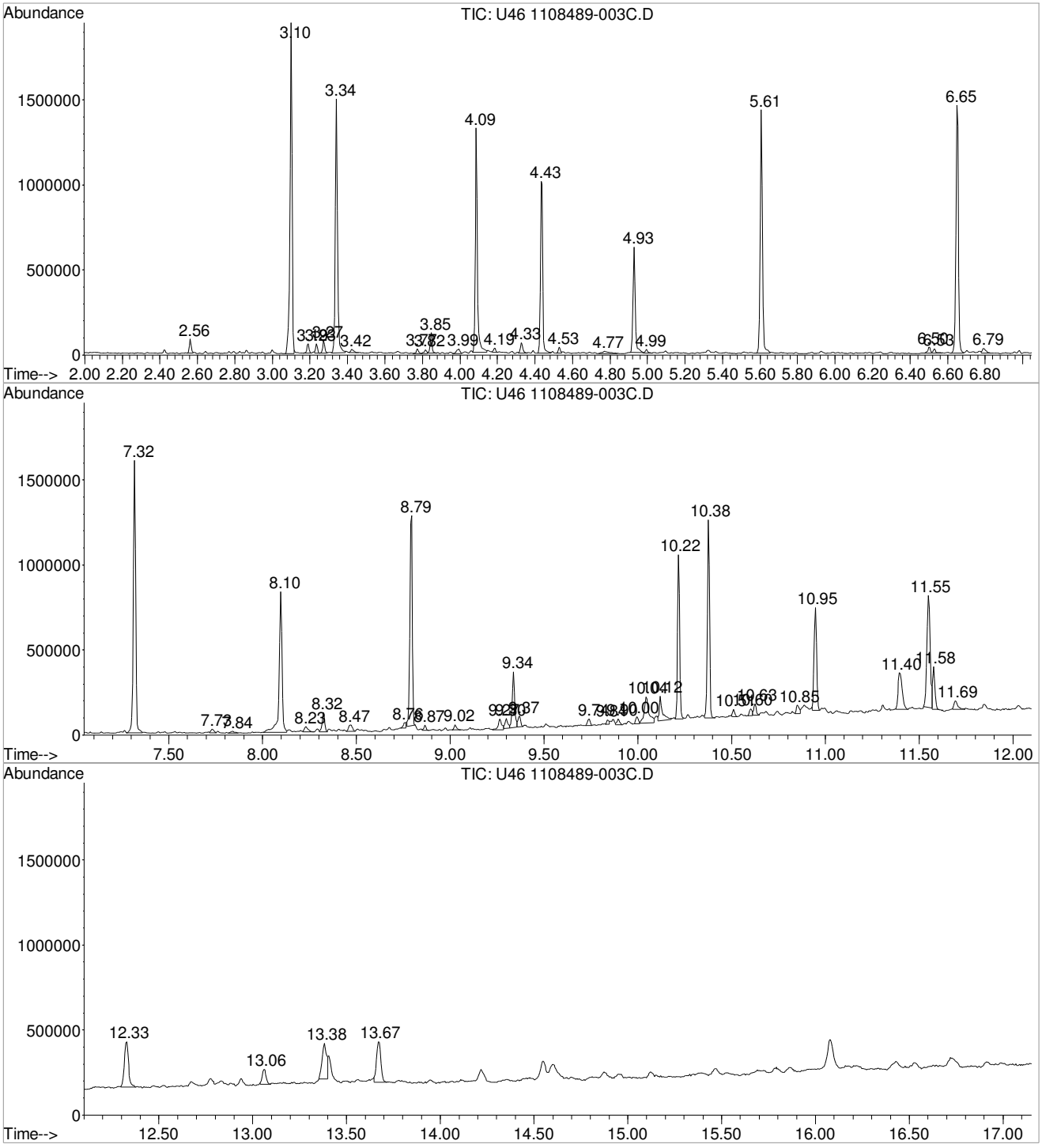
39	9.371	1532	1535	1538	rVB	61495	57367	3.96%	0.324%
40	9.741	1608	1612	1615	rBV3	38624	37148	2.56%	0.210%
41	9.837	1630	1632	1634	rBV2	26597	22042	1.52%	0.125%
42	9.895	1641	1644	1648	rVB3	33420	33076	2.28%	0.187%
43	9.996	1662	1665	1668	rBV	41530	37040	2.56%	0.209%
44	10.044	1668	1675	1684	rVV2	151737	250943	17.32%	1.419%
45	10.121	1688	1691	1703	rVV2	140718	175835	12.14%	0.994%
46	10.217	1707	1711	1716	rVV	967626	761933	52.59%	4.307%
47	10.376	1740	1744	1751	rVB	1166521	929892	64.19%	5.257%
48	10.511	1770	1772	1776	rVB	40306	28145	1.94%	0.159%
49	10.602	1788	1791	1793	rBV3	39266	36941	2.55%	0.209%
50	10.626	1793	1796	1800	rVB	66394	60406	4.17%	0.341%
51	10.852	1840	1843	1846	rBV4	49556	57129	3.94%	0.323%
52	10.948	1859	1863	1867	rVB	604868	552012	38.10%	3.120%
53	11.395	1952	1956	1965	rVB3	215656	332201	22.93%	1.878%
54	11.549	1983	1988	1992	rBV	655796	759598	52.43%	4.294%
55	11.578	1992	1994	1999	rVB	253015	219295	15.14%	1.240%
56	11.694	2015	2018	2028	rVB8	48340	67007	4.63%	0.379%
57	12.328	2144	2150	2159	rVB	268106	408835	28.22%	2.311%
58	13.059	2298	2302	2309	rVB3	87204	124787	8.61%	0.705%
59	13.381	2363	2369	2373	rBV2	212293	382328	26.39%	2.161%
60	13.670	2424	2429	2438	rVB	239056	378423	26.12%	2.139%

Sum of corrected areas: 17690135

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

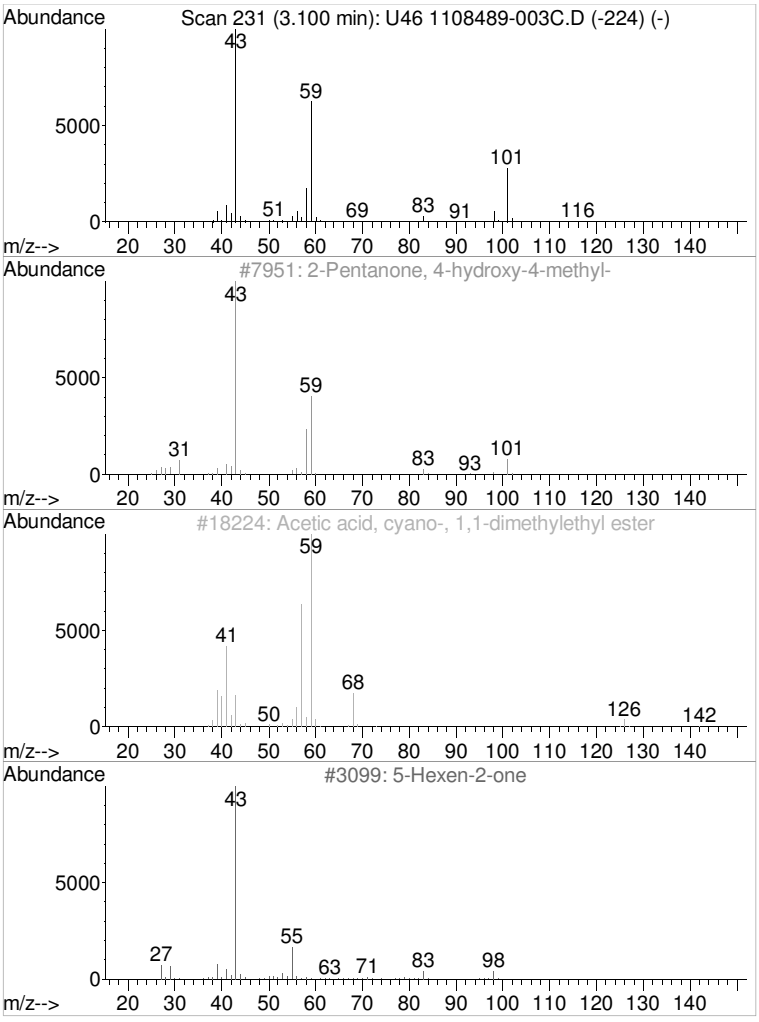
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

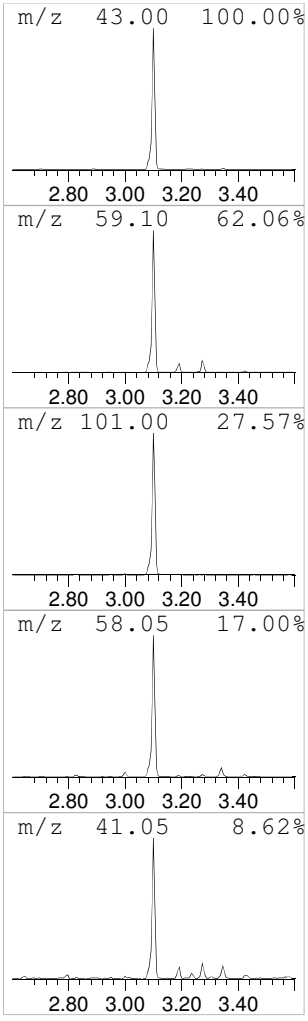
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.10	68.55 ug/l	1448720	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	5-Hexen-2-one	98	C6H10O	000109-49-9	9
4	Acetone	58	C3H6O	000067-64-1	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

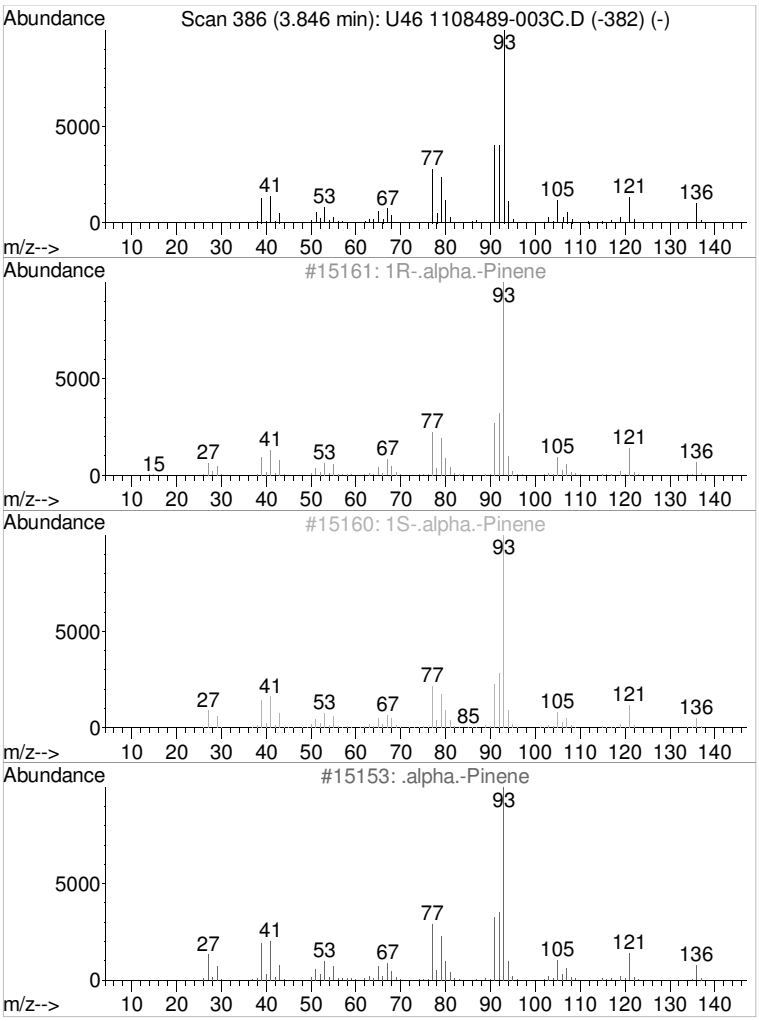
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

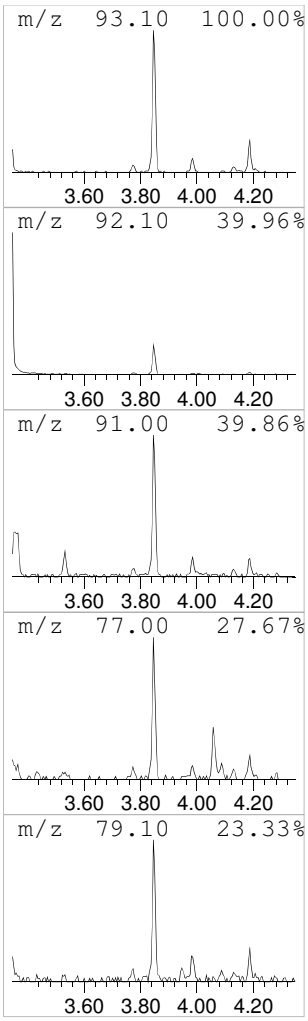
****

Peak Number 2 1R-.alpha.-Pinene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.85	4.48 ug/l	94713	ISTD 1,4-Dichlorobenzene-d4	4.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
2	1S-.alpha.-Pinene	136	C10H16	007785-26-4	97
3	.alpha.-Pinene	136	C10H16	000080-56-8	96
4	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	94
5	Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000488-97-1	91





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

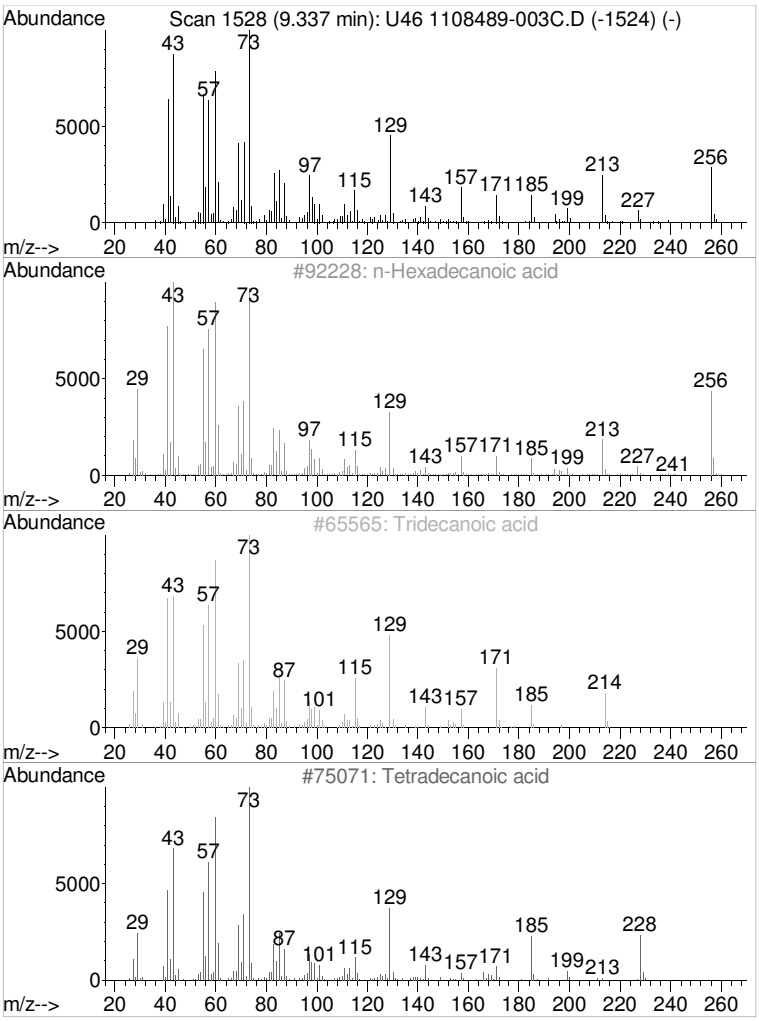
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

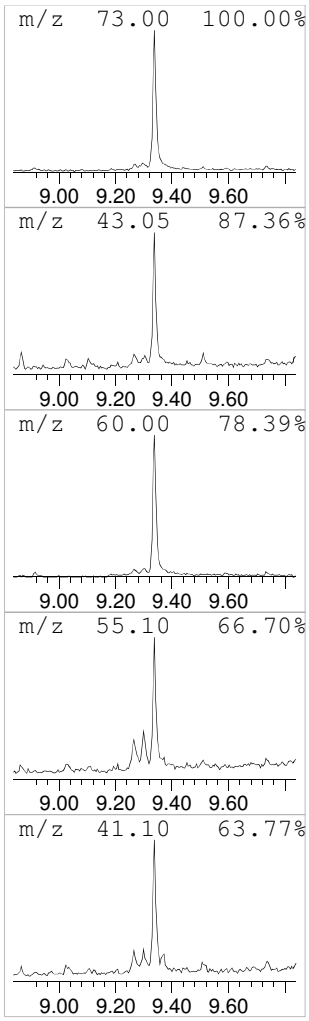
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.34	11.24 ug/l	296344	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	90
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
5	n-Decanoic acid	172	C10H20O2	000334-48-5	70





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

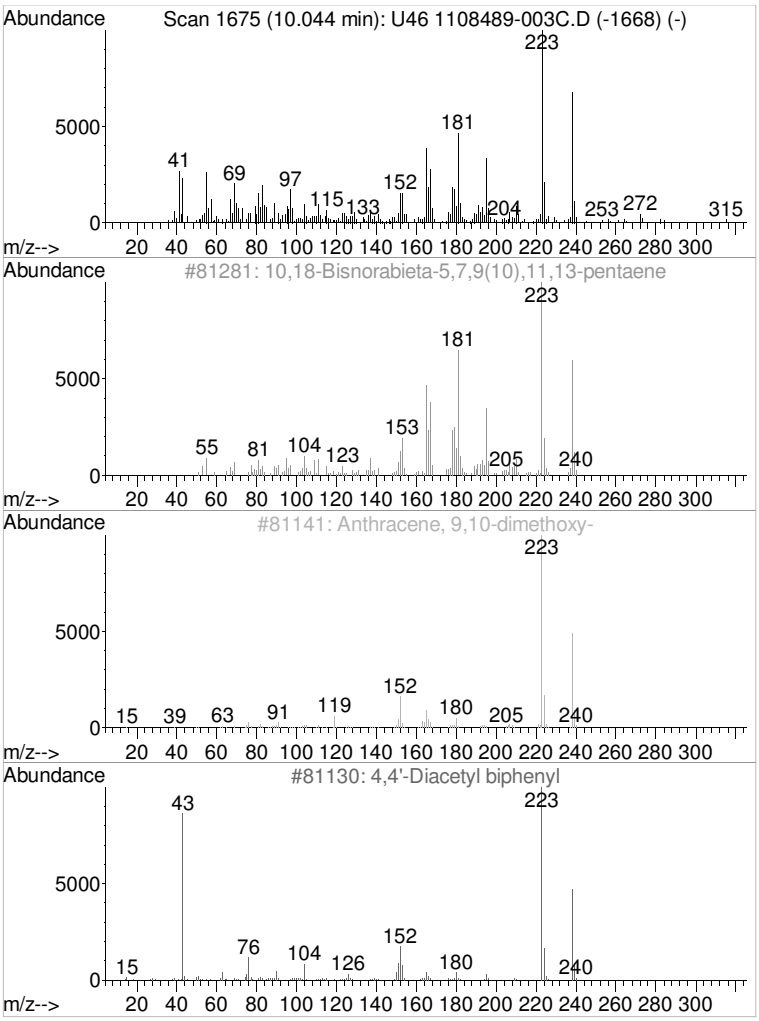
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

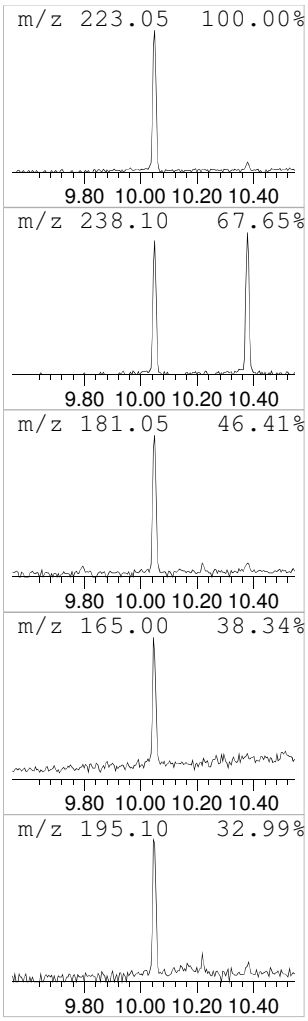
****

Peak Number 4 10,18-Bisnorabieta-5,7,9(10... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.04	9.51 ug/l	250943	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10,18-Bisnorabieta-5,7,9(10),11,...	238	C18H22	006566-19-4	98
2	Anthracene, 9,10-dimethoxy-	238	C16H14O2	002395-97-3	55
3	4,4'-Diacetyl biphenyl	238	C16H14O2	000787-69-9	49
4	4,4'-Diisopropylbiphenyl	238	C18H22	018970-30-4	47
5	9,10-Anthracenedione, 2-amino-	223	C14H9NO2	000117-79-3	43





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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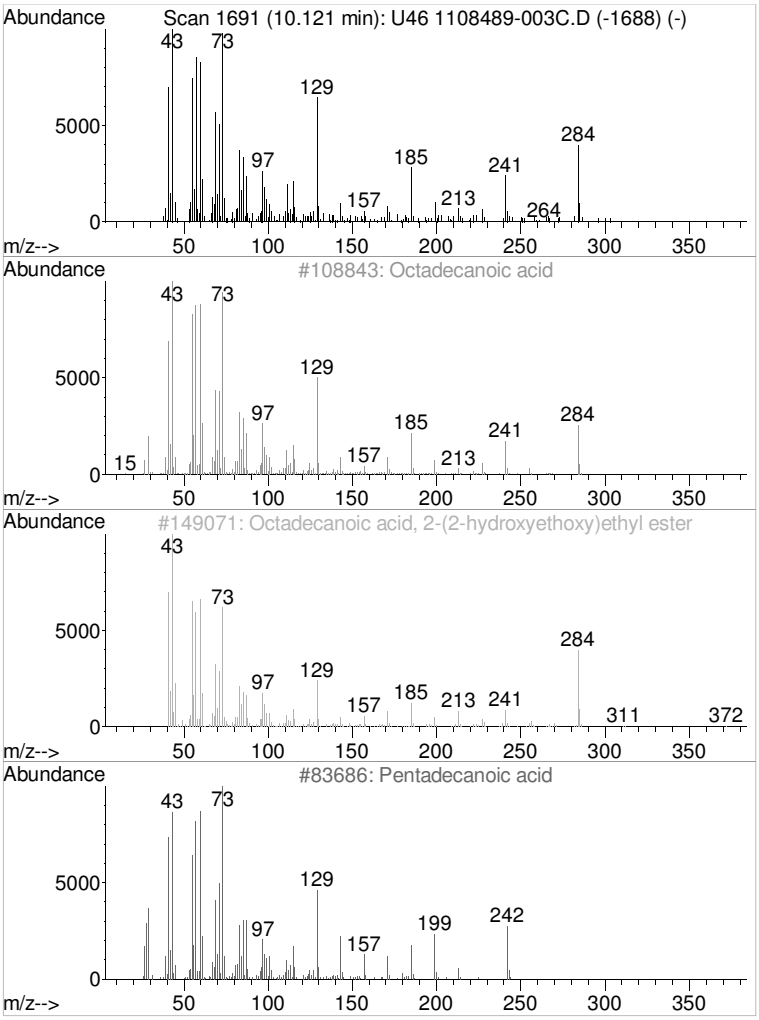
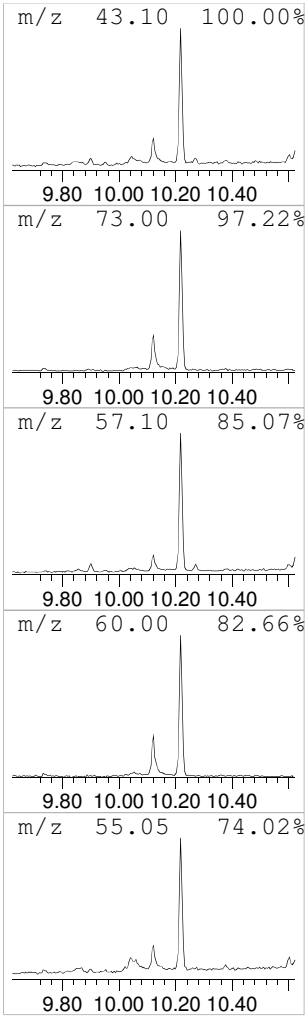
Peak Number 5 Octadecanoic acid Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.12	6.67 ug/l	175835	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	87
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	58
4	Tridecanoic acid	214	C13H26O2	000638-53-9	55
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	53





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

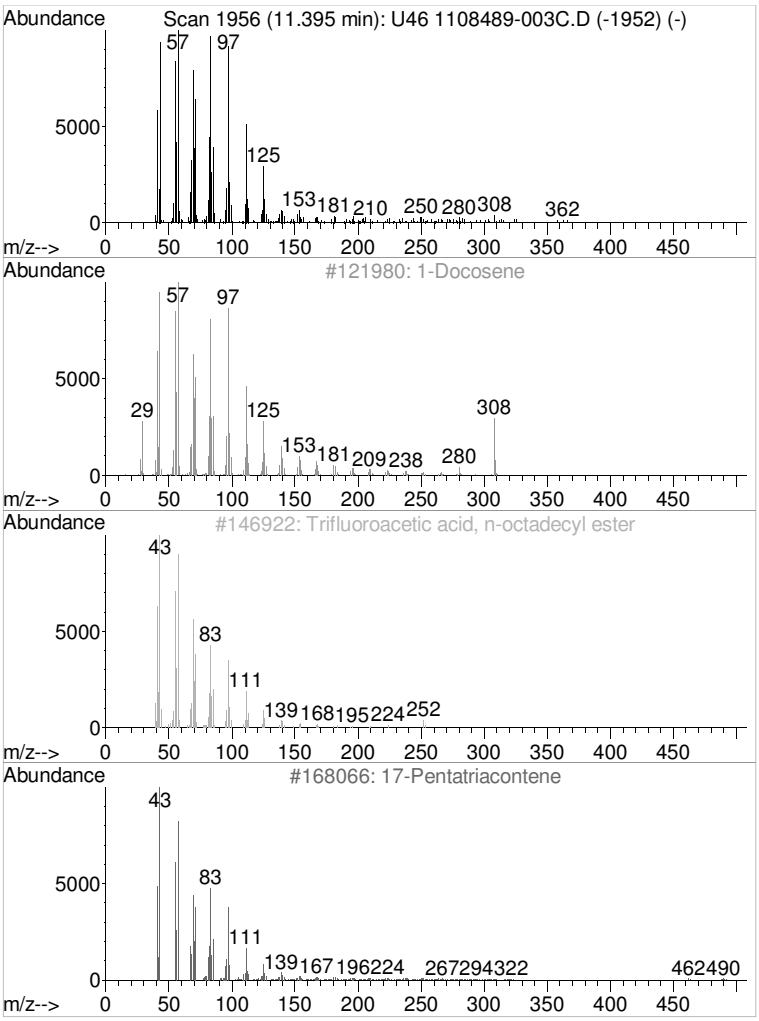
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

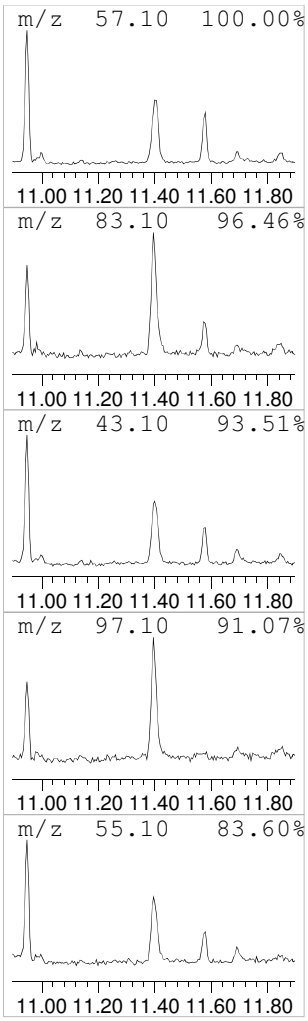
****

Peak Number 6 1-Docosene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.40	17.49 ug/l	332201	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Docosene	308	C22H44	001599-67-3	94
2	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
3	17-Pentatriacontene	491	C35H70	006971-40-0	91
4	9-Nonadecene	266	C19H38	031035-07-1	91
5	1-Tricosanol	340	C23H48O	003133-01-5	90





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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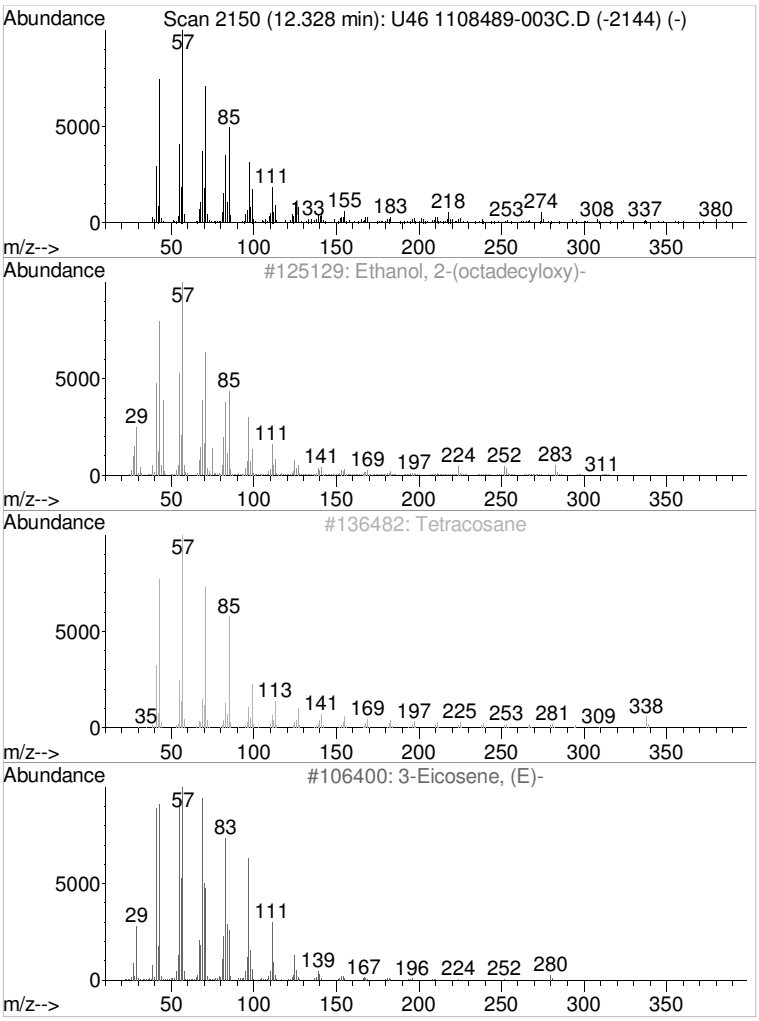
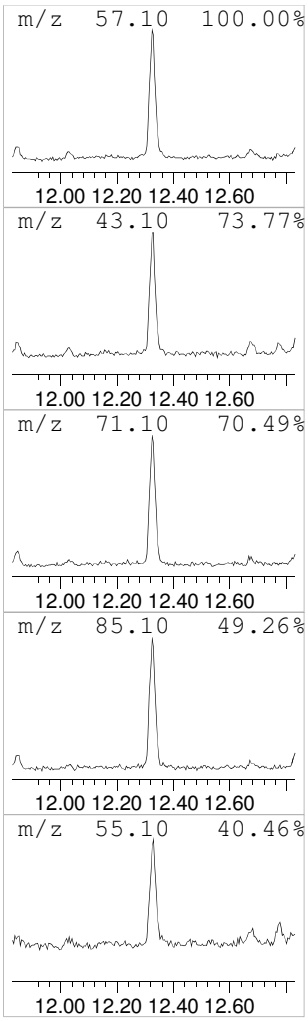
Peak Number 7 Ethanol, 2-(octadecyloxy)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.33	21.53 ug/l	408835	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(octadecyloxy)-	314	C20H42O2	002136-72-3	91
2	Tetracosane	338	C24H50	000646-31-1	90
3	3-Eicosene, (E)-	280	C20H40	074685-33-9	89
4	Heptacosane	380	C27H56	000593-49-7	86
5	Eicosane	282	C20H42	000112-95-8	64





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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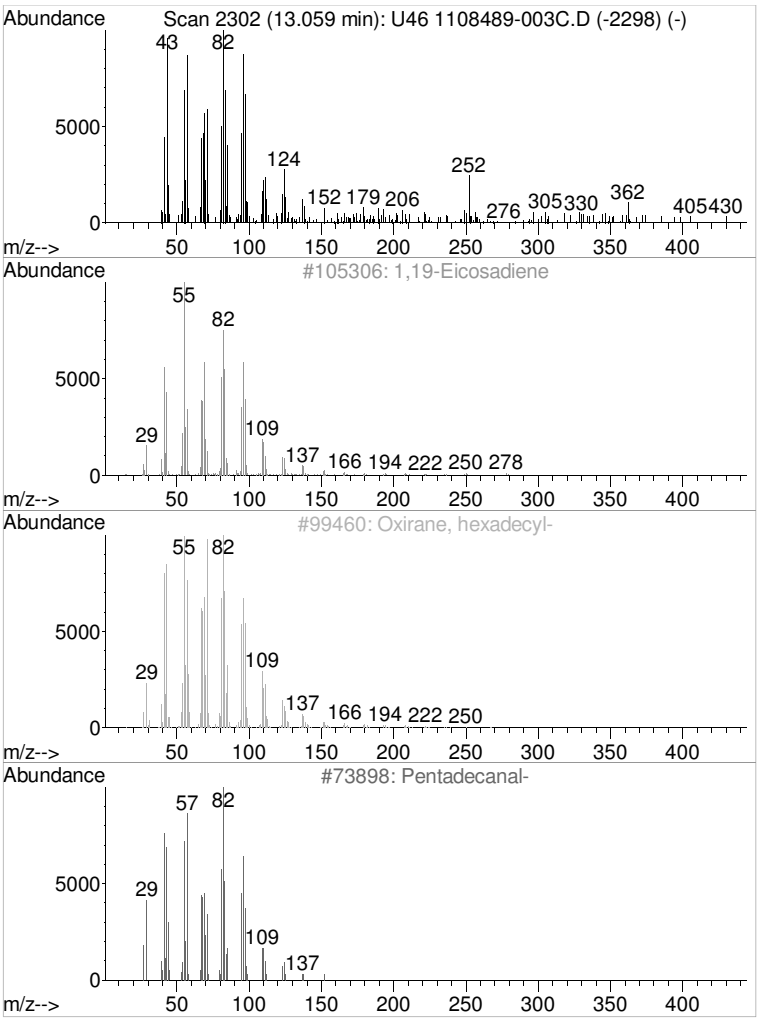
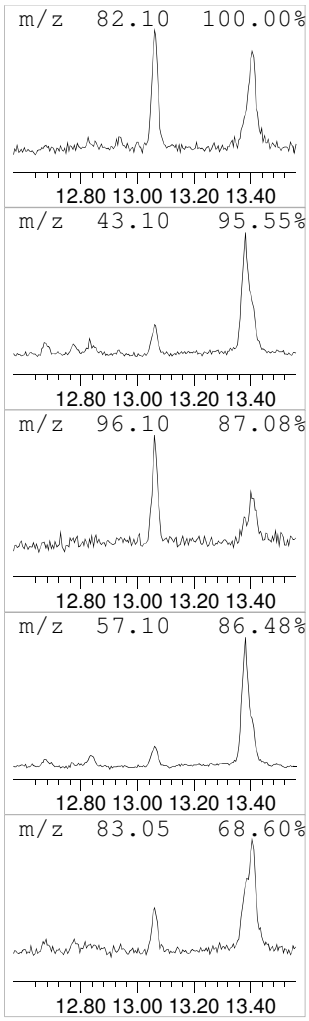
Peak Number 8 1,19-Eicosadiene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.06	13.19 ug/l	124787	ISTD-Perylene-d12	13.67

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,19-Eicosadiene	278	C20H38	014811-95-1	64
2	Oxirane, hexadecyl-	268	C18H36O	007390-81-0	64
3	Pentadecanal-	226	C15H30O	002765-11-9	62
4	1,16-Hexadecanediol	258	C16H34O2	007735-42-4	46
5	1,13-Tetradecadiene	194	C14H26	021964-49-8	43





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

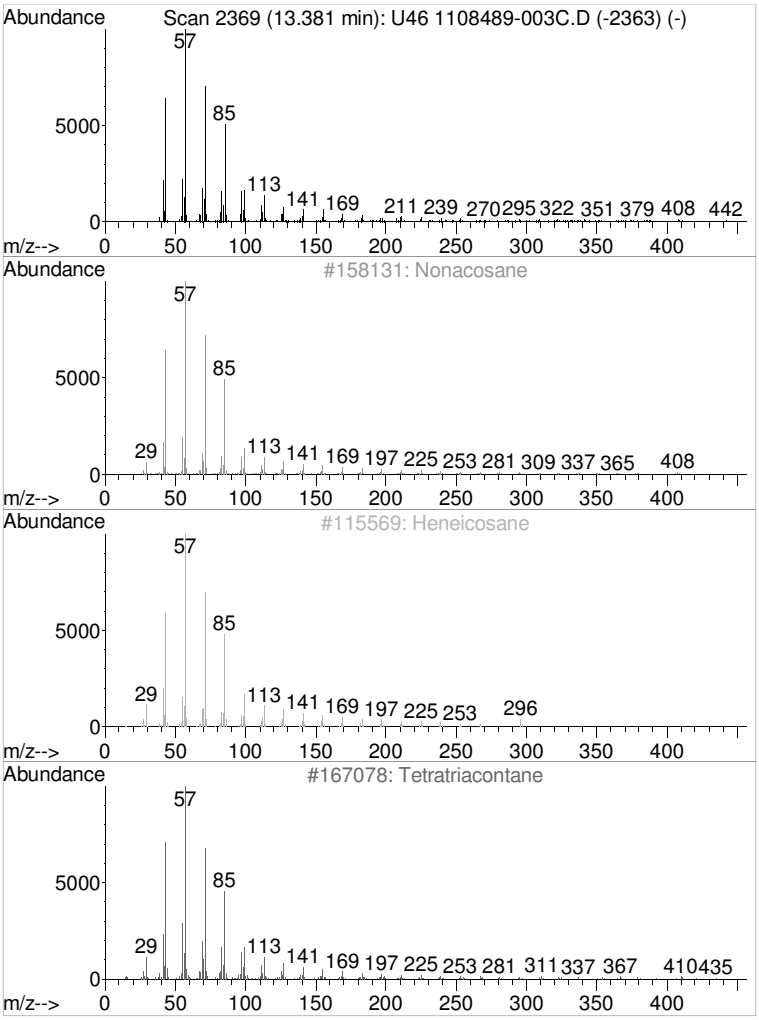
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

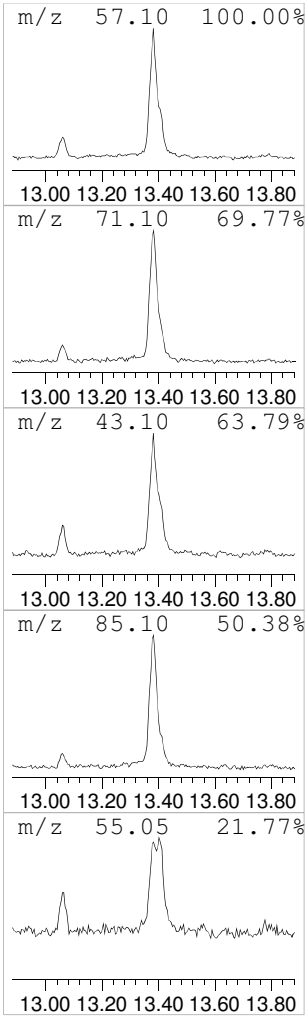
****

Peak Number 9 Nonacosane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.38	40.41 ug/l	382328	ISTD-Perylene-d12	13.67

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	98
2	Heneicosane	296	C21H44	000629-94-7	95
3	Tetratriacontane	479	C34H70	014167-59-0	95
4	Tetratetracontane	619	C44H90	007098-22-8	93
5	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	93





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U46 1108489-003C.D
Acq On : 29 Aug 2011 5:06 am
Operator : ALICIA HABERLE
Sample : 1108489-003C
Misc : SAMP
ALS Vial : 23 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	3.10	68.6	ug/l	1448720	1	4.43	845335	40.0
1R-.alpha.-Pinene	3.85	4.5	ug/l	94713	1	4.43	845335	40.0
n-Hexadecanoic acid	9.34	11.2	ug/l	296344	4	8.79	1054940	40.0
10,18-Bisnorabiet...	10.04	9.5	ug/l	250943	4	8.79	1054940	40.0
Octadecanoic acid	10.12	6.7	ug/l	175835	4	8.79	1054940	40.0
1-Docosene	11.40	17.5	ug/l	332201	5	11.55	759598	40.0
Ethanol, 2-(octad...	12.33	21.5	ug/l	408835	5	11.55	759598	40.0
1,19-Eicosadiene	13.06	13.2	ug/l	124787	6	13.67	378423	40.0
Nonacosane	13.38	40.4	ug/l	382328	6	13.67	378423	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.561	116	119	122	rBV	42189	26811	1.31%	0.161%
2	3.099	224	231	234	rBV	1599621	1174242	57.35%	7.063%
3	3.191	245	250	254	rVB	51986	35463	1.73%	0.213%
4	3.234	254	259	263	rVB	44949	35742	1.75%	0.215%
5	3.272	263	267	272	rBV	59699	50567	2.47%	0.304%
6	3.340	276	281	296	rBV2	1158319	969066	47.33%	5.829%
7	3.849	383	387	390	rVB	64980	50995	2.49%	0.307%
8	4.090	432	437	454	rBV	971062	905361	44.21%	5.446%
9	4.330	483	487	494	rVB	54672	49222	2.40%	0.296%
10	4.436	505	509	518	rBV	1083494	820675	40.08%	4.937%
11	4.927	607	611	621	rBV	457714	423200	20.67%	2.546%
12	5.605	746	752	766	rBV	1230620	1117698	54.58%	6.723%
13	6.653	962	970	978	rBV	1285660	1088875	53.18%	6.550%
14	6.706	978	981	990	rVB7	13516	27080	1.32%	0.163%
15	7.316	1099	1108	1114	rBV	1345227	1235496	60.34%	7.432%
16	7.730	1191	1194	1198	rVB	95415	71181	3.48%	0.428%
17	8.096	1260	1270	1277	rVB	628253	637108	31.11%	3.832%
18	8.230	1294	1298	1304	rBV3	41946	46151	2.25%	0.278%
19	8.326	1314	1318	1322	rVB2	56972	48063	2.35%	0.289%
20	8.475	1344	1349	1354	rBV5	20180	26574	1.30%	0.160%
21	8.519	1354	1358	1362	rVB2	35065	35426	1.73%	0.213%
22	8.793	1405	1415	1423	rVB	1226164	1111843	54.30%	6.688%
23	9.264	1510	1513	1518	rBV5	28484	34931	1.71%	0.210%
24	9.336	1524	1528	1533	rBV	170176	155593	7.60%	0.936%
25	9.509	1559	1564	1568	rBV8	22244	29970	1.46%	0.180%
26	9.870	1631	1639	1643	rBV	402703	351087	17.15%	2.112%
27	10.048	1669	1676	1682	rBV7	35083	75839	3.70%	0.456%
28	10.120	1689	1691	1695	rVB	66747	48157	2.35%	0.290%
29	10.221	1707	1712	1716	rVB	2478992	2047677	100.00%	12.317%
30	10.380	1740	1745	1750	rVB	923282	769353	37.57%	4.628%
31	10.856	1841	1844	1846	rBV3	34803	37876	1.85%	0.228%
32	10.947	1859	1863	1870	rVB	1685344	1610591	78.65%	9.688%
33	11.000	1871	1874	1879	rVB4	71221	73552	3.59%	0.442%
34	11.308	1935	1938	1944	rVB2	56830	63221	3.09%	0.380%
35	11.394	1953	1956	1966	rVB3	113767	158162	7.72%	0.951%
36	11.553	1984	1989	2001	rVB	632001	745474	36.41%	4.484%
37	12.322	2146	2149	2156	rVB2	67090	86197	4.21%	0.518%
38	13.674	2425	2430	2437	rVB	229724	350022	17.09%	2.105%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

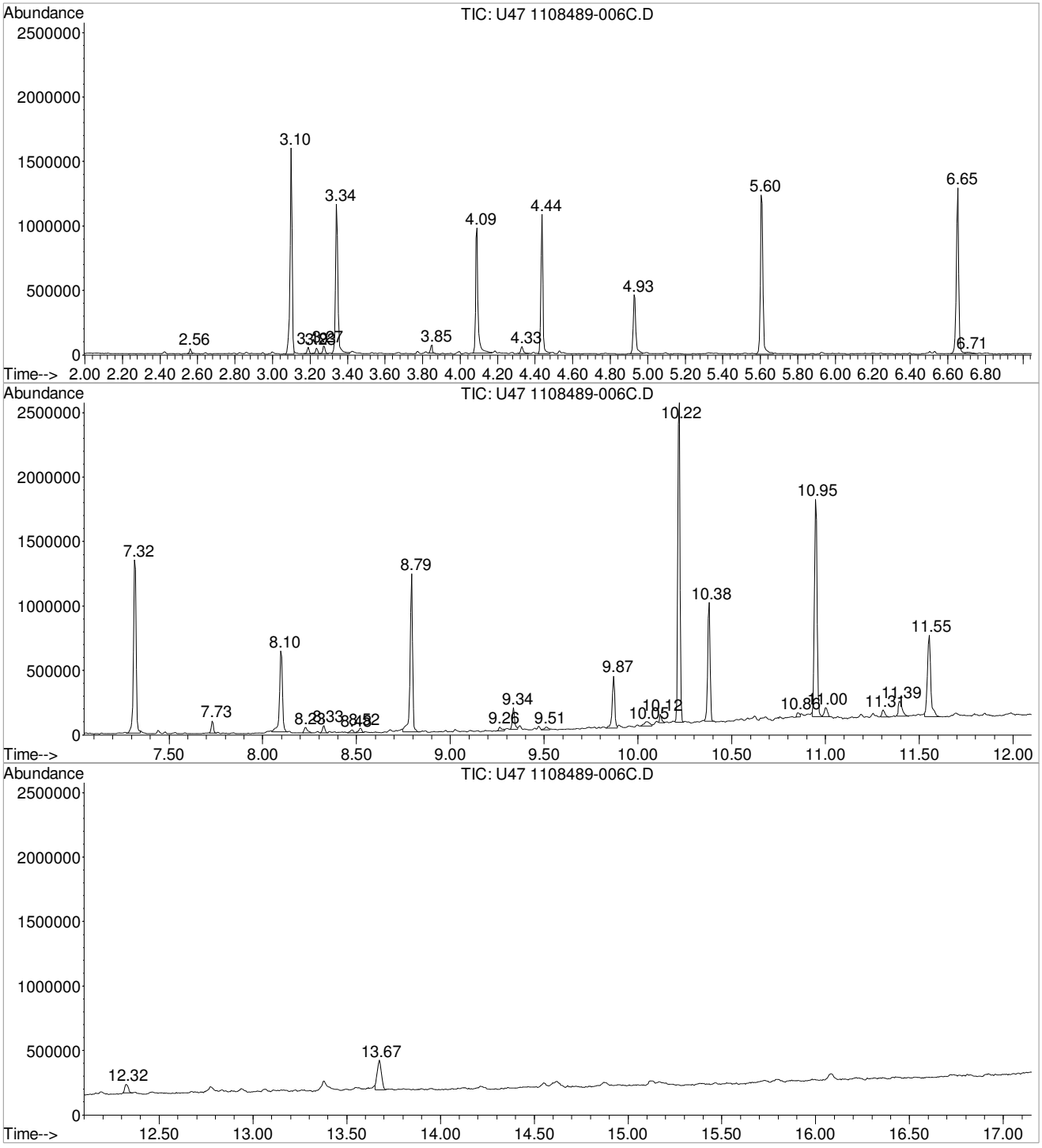
Sum of corrected areas: 16624541

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

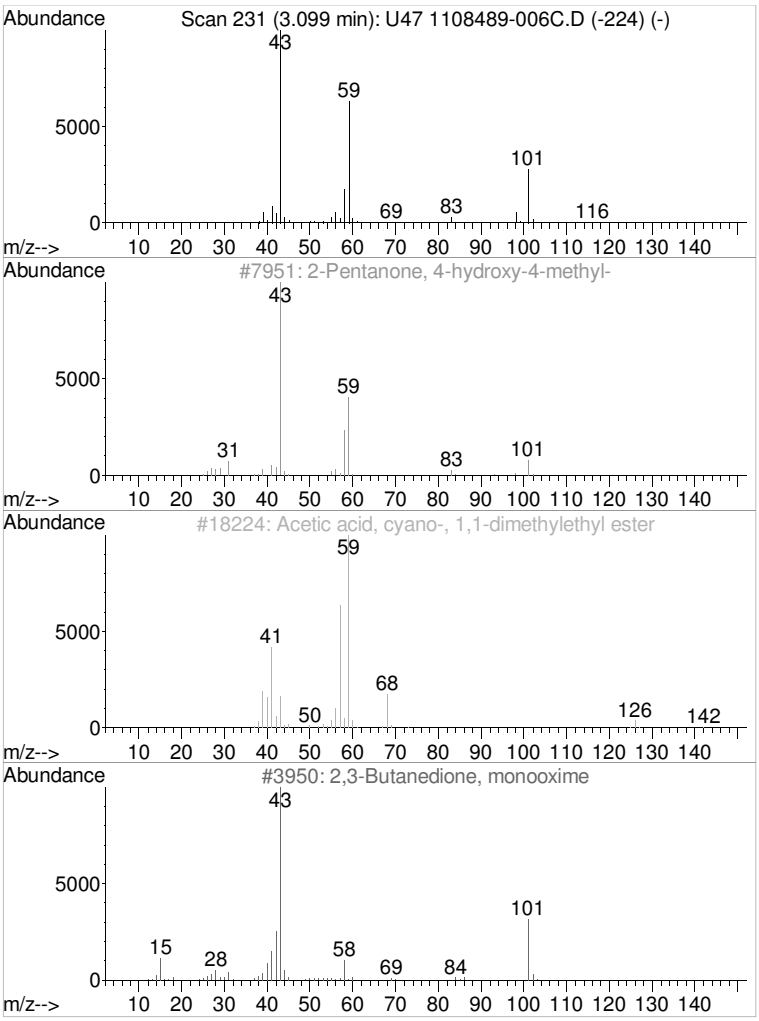
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

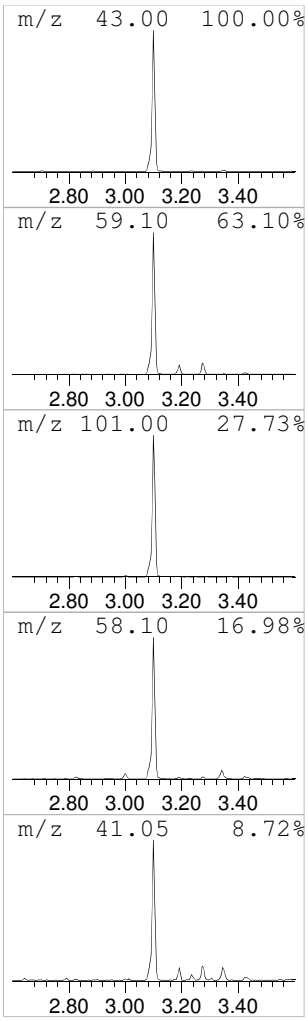
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.10	57.23 ug/l	1174240	ISTD 1,4-Dichlorobenzene-d4	4.44

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

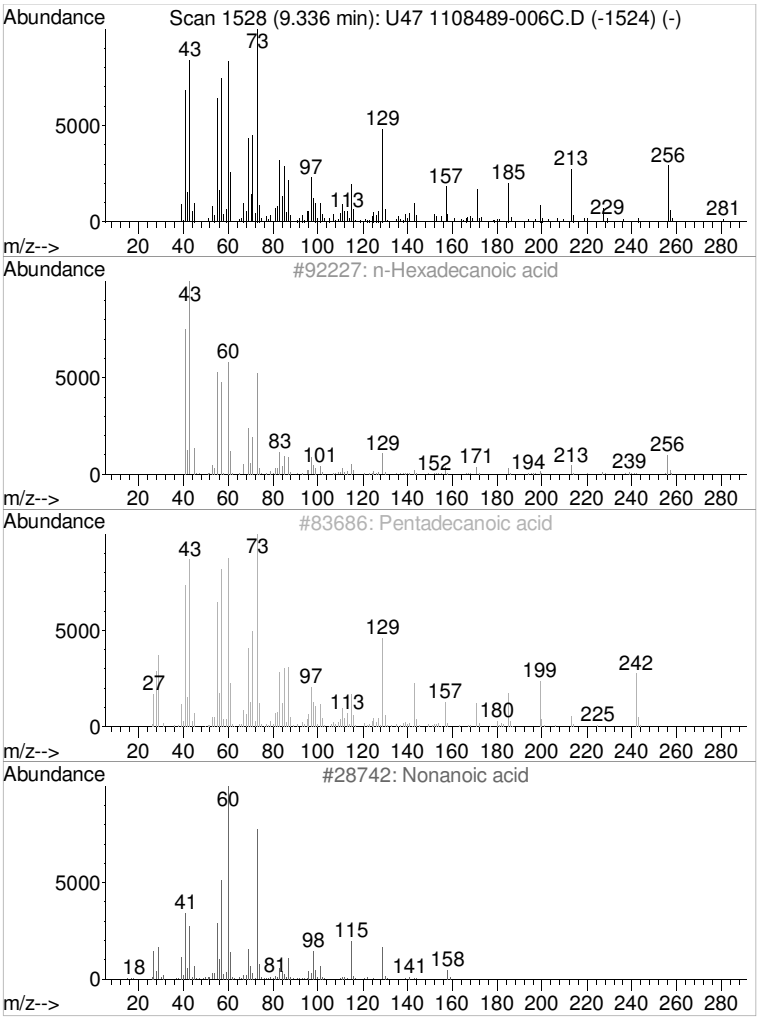
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

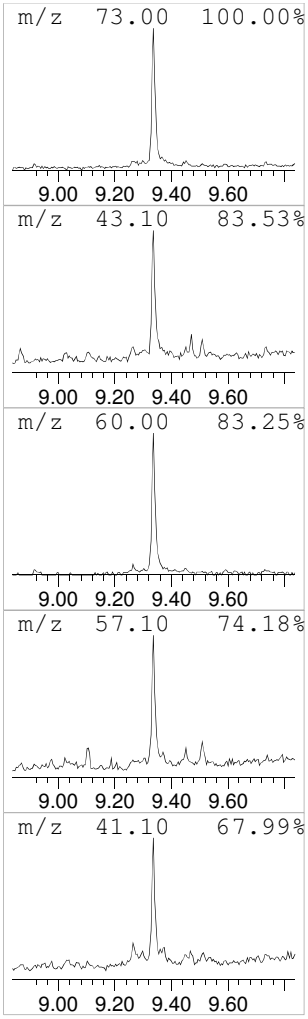
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.34	5.60 ug/l	155593	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	72
3	Nonanoic acid	158	C9H18O2	000112-05-0	25
4	Pentadecane	212	C15H32	000629-62-9	11
5	Tetradecane	198	C14H30	000629-59-4	11





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

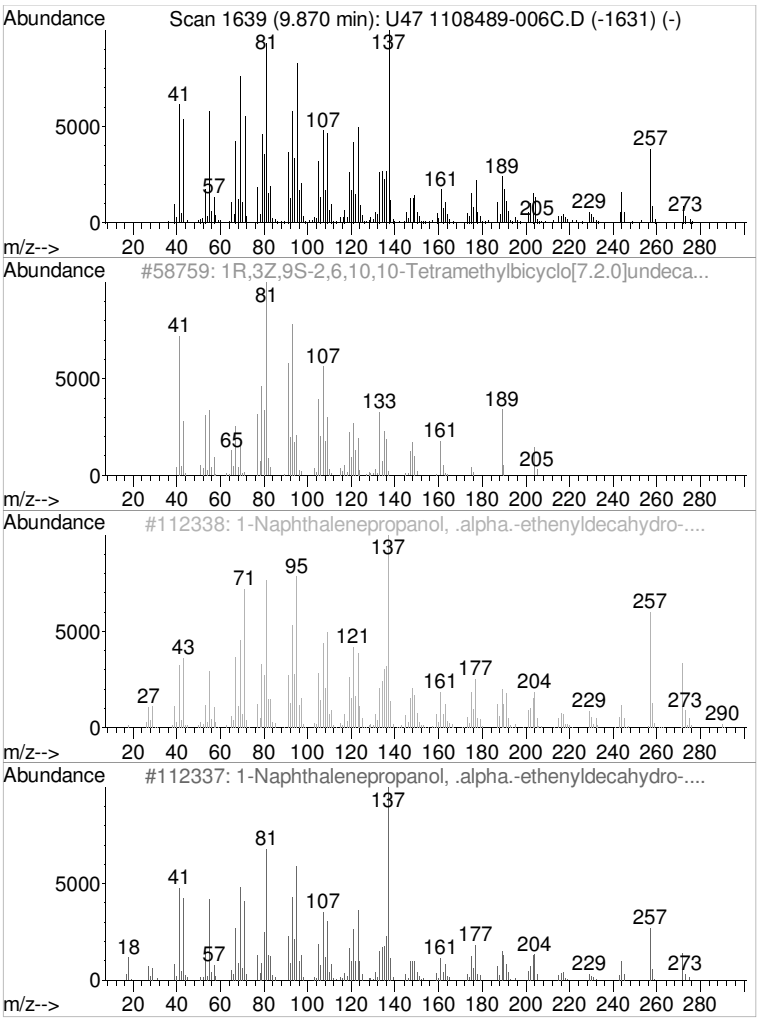
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

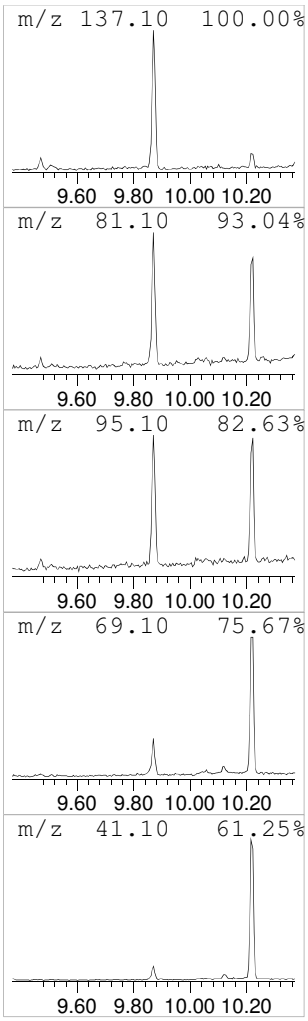
****

Peak Number 3 1R,3Z,9S-2,6,10,10-Tetramet... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.87	12.63 ug/l	351087	ISTD-Phenanthrene-d10	8.79

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R,3Z,9S-2,6,10,10-Tetramethylbi...	204	C15H24	1000140-07-4	70
2	1-Naphthalenepropanol, .alpha.-e...	290	C20H34O	000596-85-0	68
3	1-Naphthalenepropanol, .alpha.-e...	290	C20H34O	001438-62-6	64
4	1-Naphthalenepropanol, .alpha.-e...	306	C20H34O2	004549-12-6	45
5	cis, cis-3-Ethylbicyclo[4.4.0]de...	166	C12H22	066660-42-2	43





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

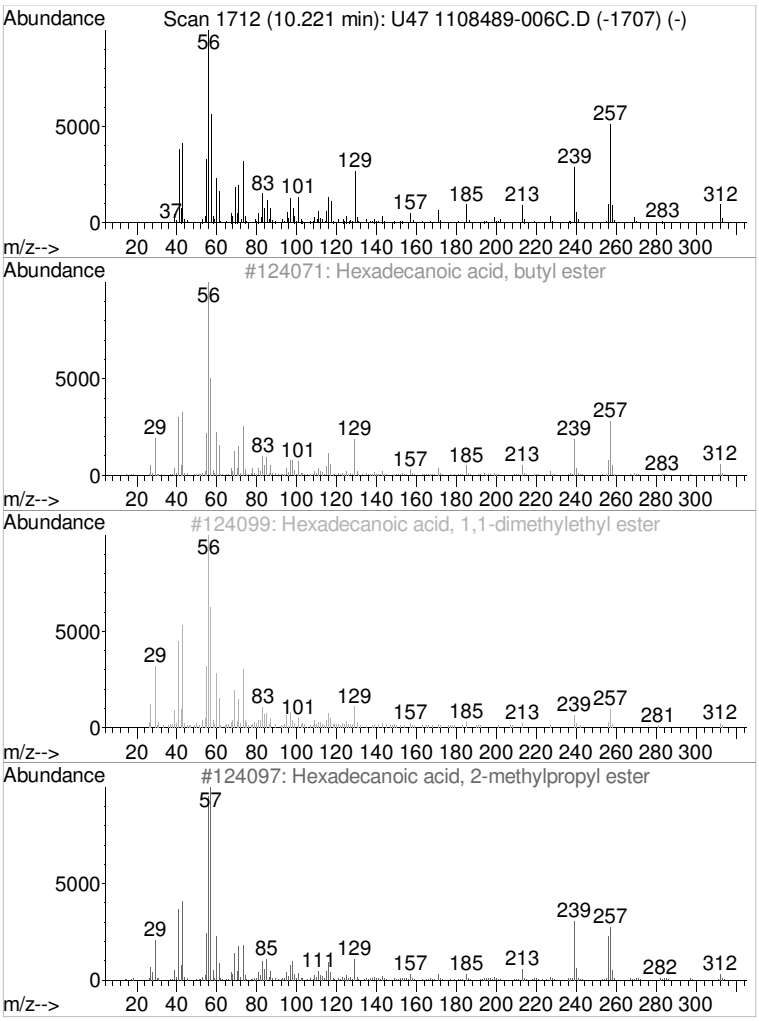
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

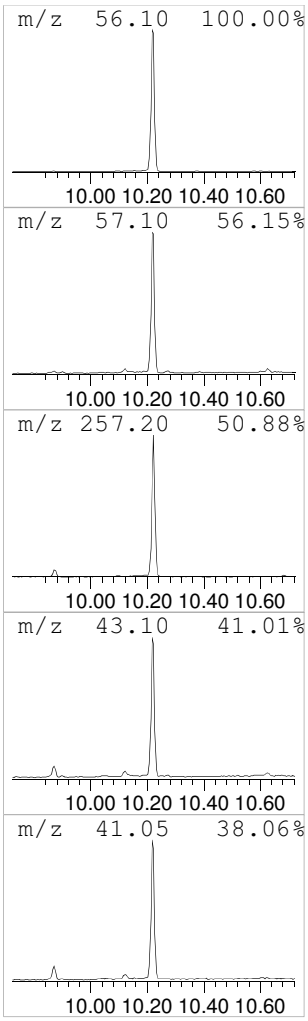
****

Peak Number 4 Hexadecanoic acid, butyl ester Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.22	109.87 ug/l	2047680	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	91
3	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	53
4	Benz[c]acridine, 7,8-dimethyl-	257	C19H15N	003518-01-2	43
5	Cyclohexanol, 4-amino-, trans-	115	C6H13NO	027489-62-9	25





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

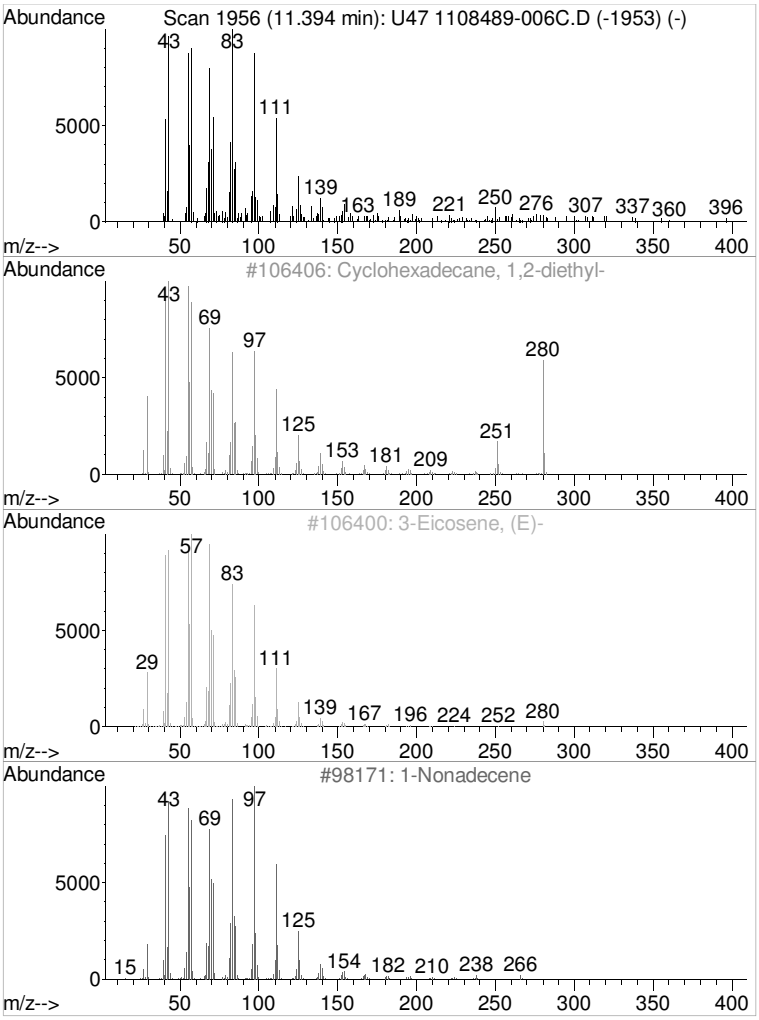
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

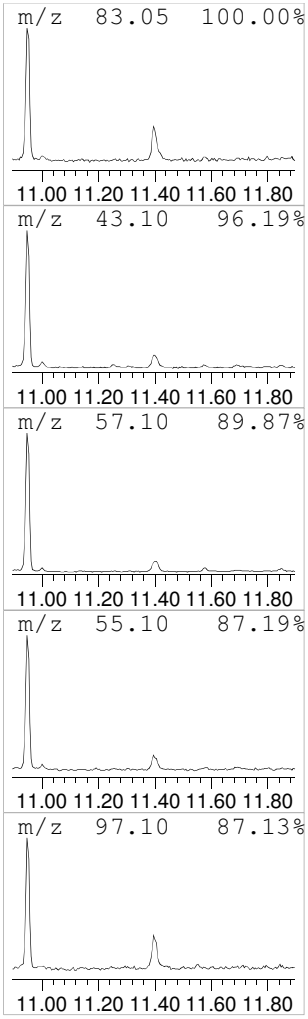
****

Peak Number 5 Cyclohexadecane, 1,2-diethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.39	8.49 ug/l	158162	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane, 1,2-diethyl-	280	C20H40	1000155-85-3	95
2	3-Eicosene, (E)-	280	C20H40	074685-33-9	91
3	1-Nonadecene	266	C19H38	018435-45-5	91
4	1-Eicosene	280	C20H40	003452-07-1	89
5	2-Butenedioic acid (Z)-, monodod...	284	C16H28O4	002424-61-5	83





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

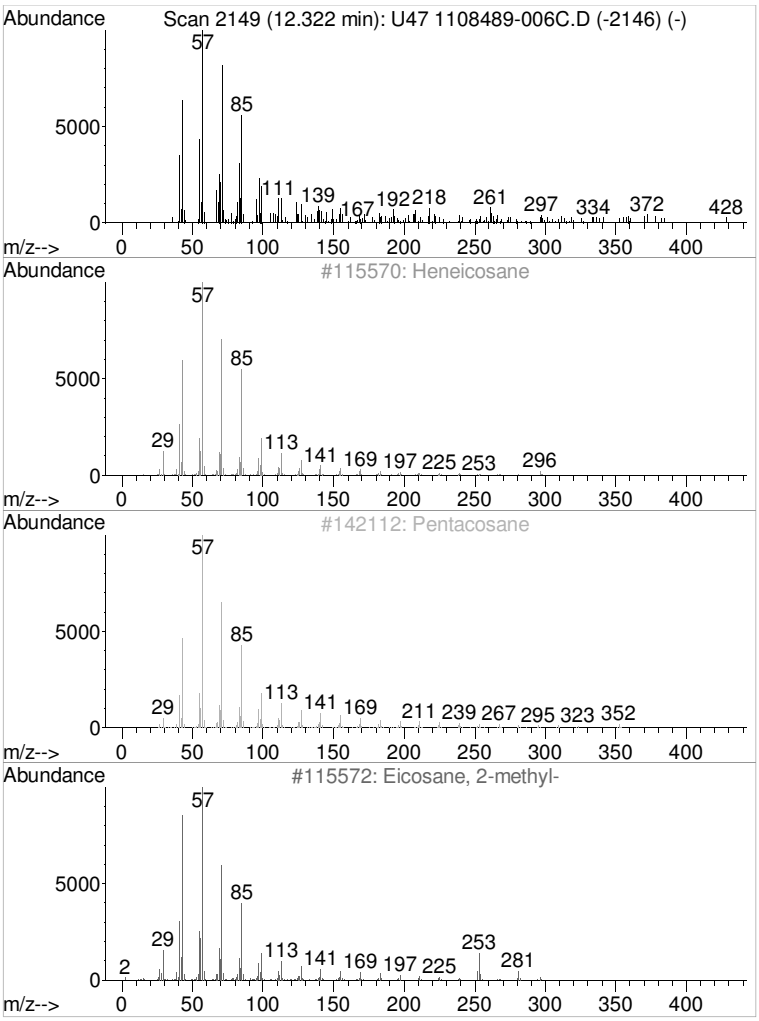
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

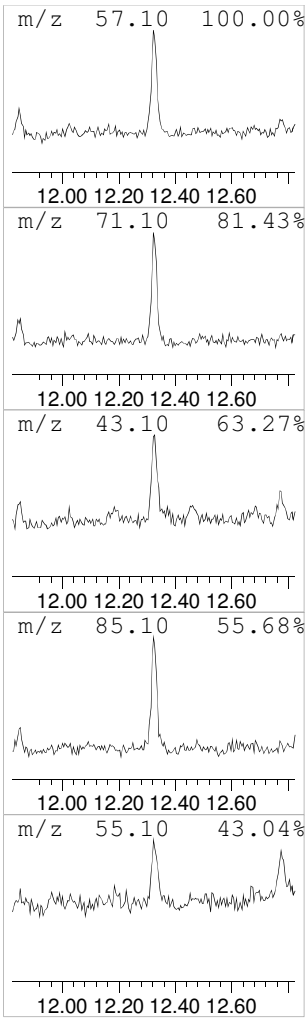
****

Peak Number 6 Heneicosane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.32	4.63 ug/l	86197	ISTD-Chrysene-d12	11.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	93
2	Pentacosane	352	C25H52	000629-99-2	89
3	Eicosane, 2-methyl-	296	C21H44	001560-84-5	86
4	Tetracosane	338	C24H50	000646-31-1	86
5	Octadecane	254	C18H38	000593-45-3	86





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\28AUG11\
Data File : U47 1108489-006C.D
Acq On : 29 Aug 2011 5:32 am
Operator : ALICIA HABERLE
Sample : 1108489-006C
Misc : SAMP
ALS Vial : 24 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	3.10	57.2	ug/l	1174240	1	4.44	820675	40.0
n-Hexadecanoic acid	9.34	5.6	ug/l	155593	4	8.79	1111840	40.0
1R,3Z,9S-2,6,10,1...	9.87	12.6	ug/l	351087	4	8.79	1111840	40.0
Hexadecanoic acid...	10.22	109.9	ug/l	2047680	5	11.55	745474	40.0
Cyclohexadecane, ...	11.39	8.5	ug/l	158162	5	11.55	745474	40.0
Heneicosane	12.32	4.6	ug/l	86197	5	11.55	745474	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.446	92	95	98	rBV	54003	32534	2.72%	0.188%
2	2.984	200	207	210	rBV	1620057	1147264	95.90%	6.615%
3	3.071	219	225	229	rBV	50504	36459	3.05%	0.210%
4	3.119	229	235	238	rVB	49969	39137	3.27%	0.226%
5	3.157	238	243	247	rBV	67777	50387	4.21%	0.291%
6	3.225	251	257	270	rBV2	1277501	944507	78.95%	5.446%
7	3.306	271	274	279	rVB	26864	24115	2.02%	0.139%
8	3.653	342	346	349	rVB3	20511	16502	1.38%	0.095%
9	3.701	349	356	357	rBV2	15198	17139	1.43%	0.099%
10	3.725	357	361	364	rVB	115021	83020	6.94%	0.479%
11	3.970	408	412	418	rBV	1200223	893910	74.72%	5.154%
12	4.061	428	431	435	rVB2	28299	23037	1.93%	0.133%
13	4.211	459	462	467	rBV	57077	42914	3.59%	0.247%
14	4.312	479	483	490	rBV	1050621	779241	65.14%	4.493%
15	4.408	500	503	505	rBV	49187	34311	2.87%	0.198%
16	4.802	581	585	590	rBV	526567	398306	33.30%	2.296%
17	4.874	597	600	604	rVB3	17893	15425	1.29%	0.089%
18	5.475	721	725	732	rBV	1331808	1056813	88.34%	6.093%
19	5.807	788	794	798	rBV2	19639	18389	1.54%	0.106%
20	6.379	906	913	915	rBV4	19979	24447	2.04%	0.141%
21	6.403	915	918	924	rVB2	23106	26706	2.23%	0.154%
22	6.524	937	943	950	rBV	1263603	1045710	87.41%	6.029%
23	6.663	969	972	975	rBV	32472	27217	2.28%	0.157%
24	7.115	1059	1066	1069	rBV6	10989	20574	1.72%	0.119%
25	7.182	1073	1080	1084	rBV	1560376	1196278	100.00%	6.897%
26	7.606	1165	1168	1172	rBV3	24606	23866	2.00%	0.138%
27	7.961	1233	1242	1251	rVB	778124	676528	56.55%	3.901%
28	8.106	1268	1272	1277	rVB3	28907	31489	2.63%	0.182%
29	8.197	1286	1291	1294	rBV2	59685	58461	4.89%	0.337%
30	8.332	1316	1319	1321	rBV2	38126	39843	3.33%	0.230%
31	8.346	1321	1322	1326	rVB	35790	28094	2.35%	0.162%
32	8.654	1374	1386	1394	rBV	1253968	1117322	93.40%	6.442%
33	8.736	1400	1403	1408	rVB3	19551	17232	1.44%	0.099%
34	8.899	1433	1437	1446	rBV9	26889	37474	3.13%	0.216%
35	8.976	1450	1453	1459	rVV6	12954	18107	1.51%	0.104%
36	9.140	1481	1487	1491	rBV	76132	102931	8.60%	0.593%
37	9.173	1491	1494	1498	rVV2	68666	66838	5.59%	0.385%
38	9.212	1498	1502	1510	rVV2	747959	670133	56.02%	3.864%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	9.385	1535	1538	1541	rBV4	21742	21104	1.76%	0.122%
40	9.601	1580	1583	1587	rBV2	54137	51476	4.30%	0.297%
41	9.731	1606	1610	1612	rBV3	26641	26183	2.19%	0.151%
42	9.827	1627	1630	1633	rBV5	13329	17935	1.50%	0.103%
43	9.856	1633	1636	1638	rBV	26743	21179	1.77%	0.122%
44	9.909	1641	1647	1650	rBV2	170235	206686	17.28%	1.192%
45	9.962	1656	1658	1661	rVB2	48262	36487	3.05%	0.210%
46	9.996	1661	1665	1674	rBV	497198	492985	41.21%	2.842%
47	10.092	1680	1685	1689	rVB	1086321	907646	75.87%	5.233%
48	10.241	1712	1716	1724	rVB	977676	828484	69.26%	4.777%
49	10.476	1762	1765	1768	rBV4	37148	44508	3.72%	0.257%
50	10.500	1768	1770	1772	rVB	40241	28161	2.35%	0.162%
51	10.712	1811	1814	1823	rBV7	49145	86720	7.25%	0.500%
52	10.770	1824	1826	1829	rVV	39098	36246	3.03%	0.209%
53	10.803	1829	1833	1839	rVB	770787	708342	59.21%	4.084%
54	11.140	1900	1903	1910	rVB4	40604	45762	3.83%	0.264%
55	11.241	1919	1924	1934	rVB2	198670	296440	24.78%	1.709%
56	11.371	1945	1951	1955	rBV	730773	774216	64.72%	4.464%
57	11.405	1955	1958	1964	rVB2	69862	80412	6.72%	0.464%
58	11.520	1979	1982	1990	rBV4	46603	68963	5.76%	0.398%
59	12.135	2104	2110	2120	rVB2	229953	385297	32.21%	2.221%
60	12.842	2254	2257	2263	rVB3	77963	105433	8.81%	0.608%
61	13.155	2317	2322	2326	rBV	193311	315216	26.35%	1.817%
62	13.424	2373	2378	2385	rVB	278480	413584	34.57%	2.385%
63	14.299	2555	2560	2565	rBV3	90051	155392	12.99%	0.896%
64	15.795	2866	2871	2884	rVB4	135970	306612	25.63%	1.768%

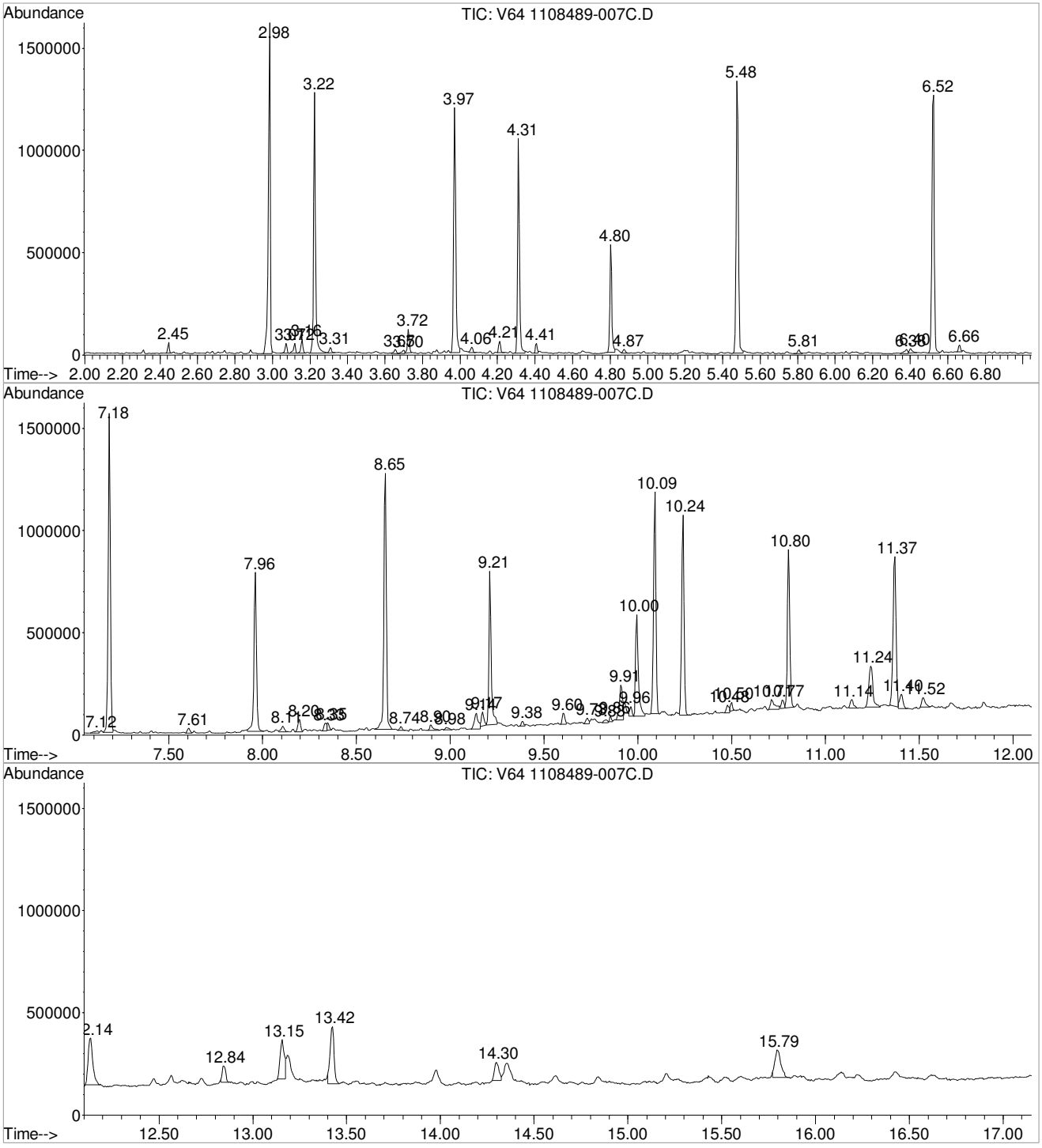
Sum of corrected areas: 17344129

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

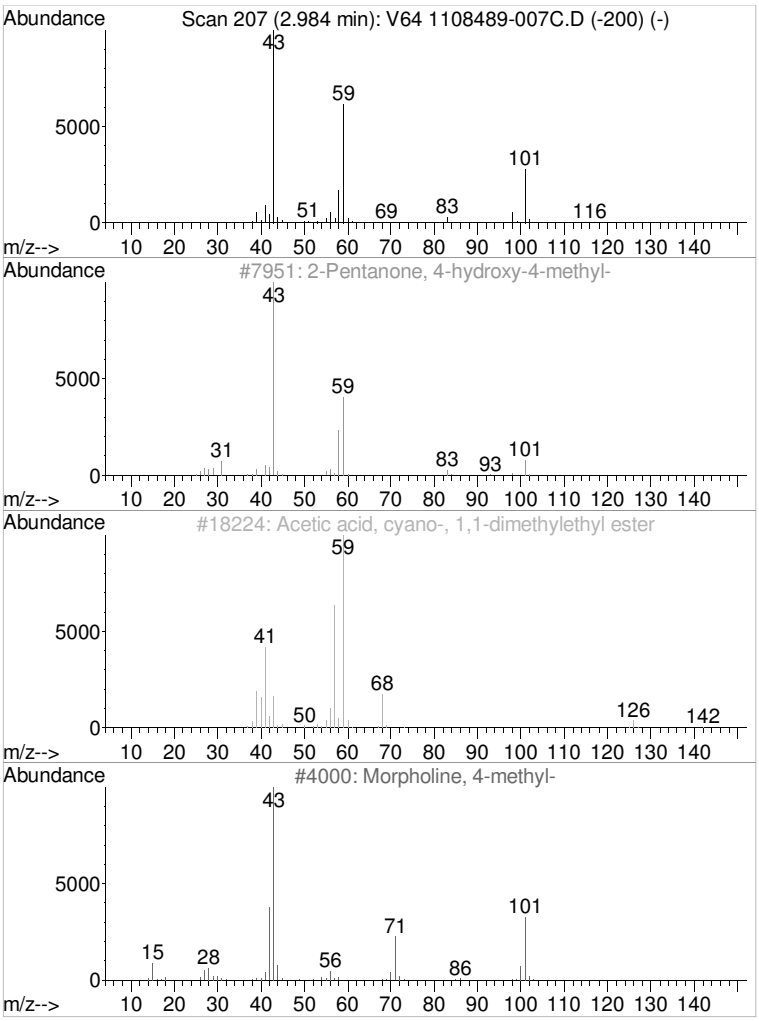
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

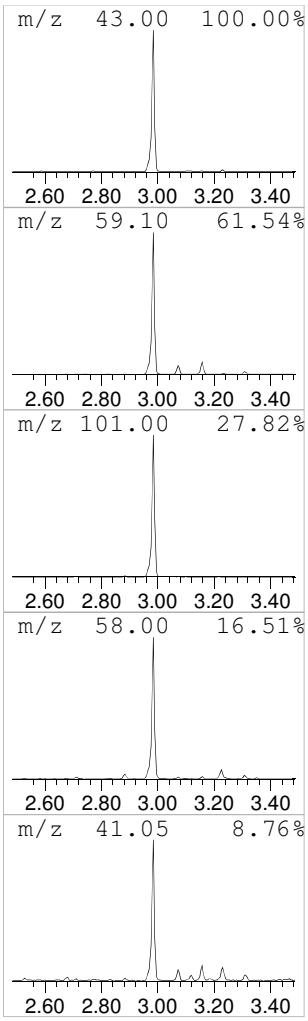
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.98	58.89 ug/l	1147260	ISTD 1,4-Dichlorobenzene-d4	4.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

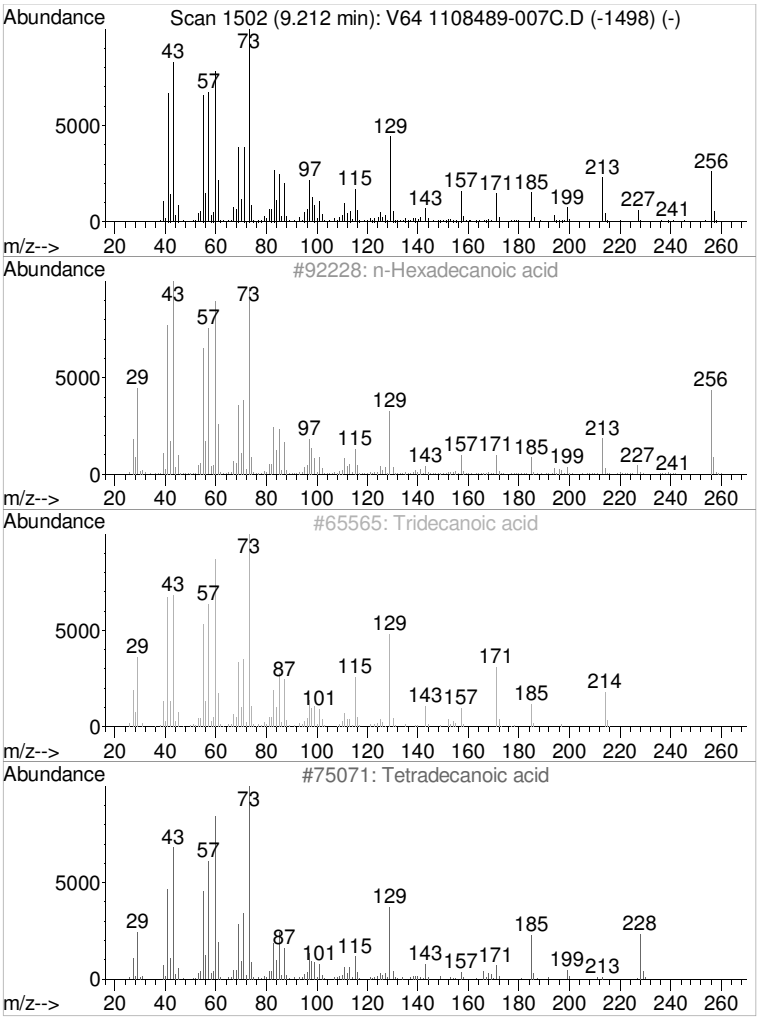
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

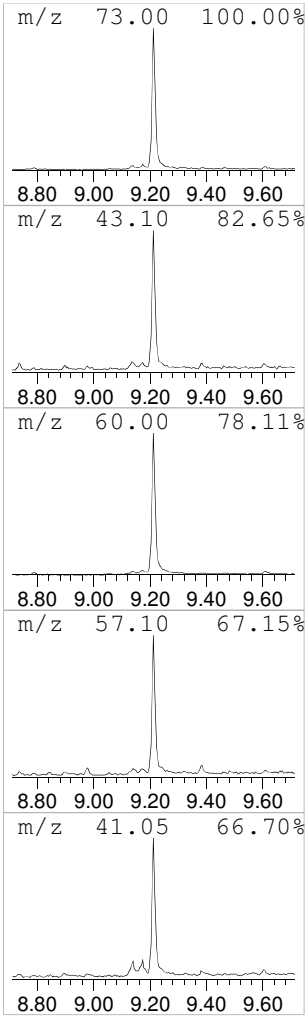
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.21	23.99 ug/l	670133	ISTD-Phenanthrene-d10	8.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	92
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
4	n-Decanoic acid	172	C10H20O2	000334-48-5	62
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	58





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Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

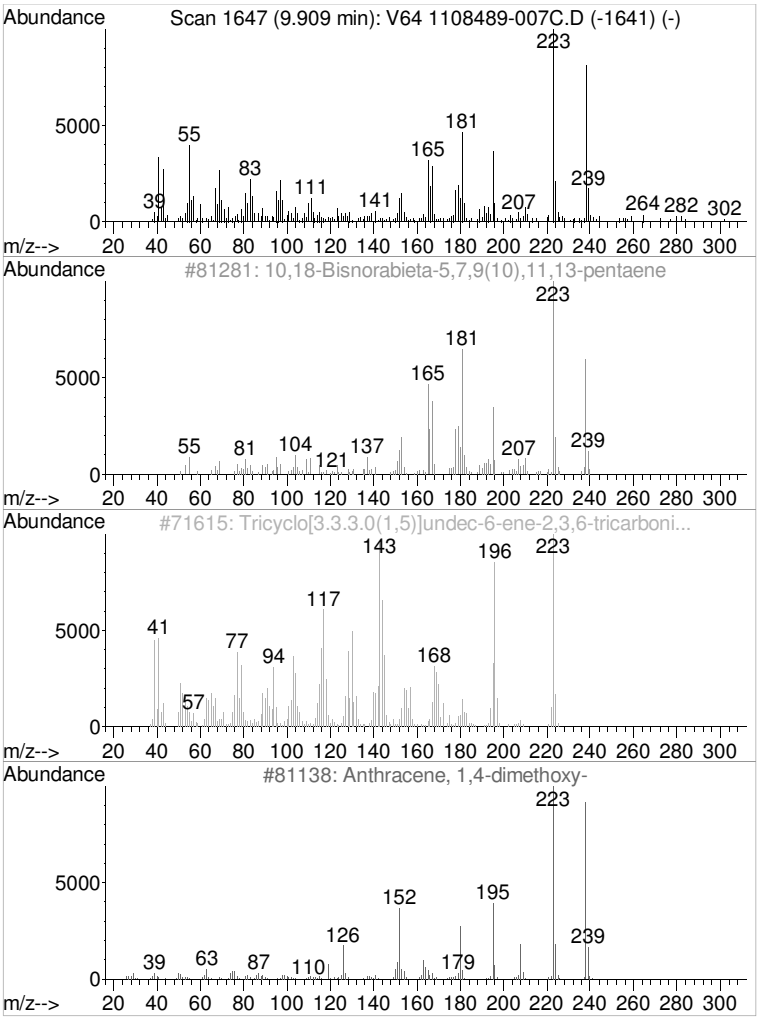
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

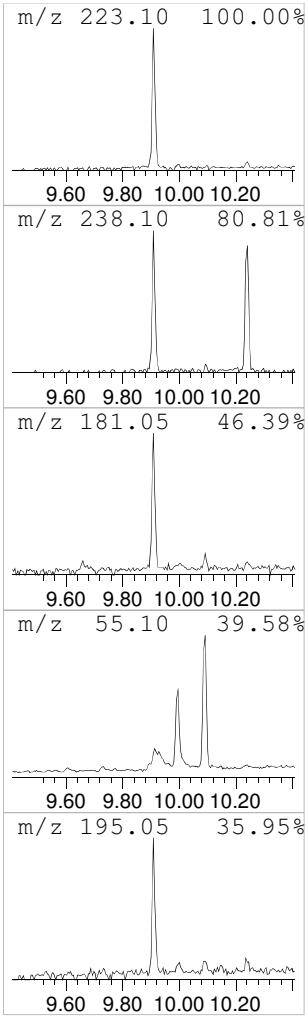
****

Peak Number 3 10,18-Bisnorabieta-5,7,9(10... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.91	7.40 ug/l	206686	ISTD-Phenanthrene-d10	8.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10,18-Bisnorabieta-5,7,9(10),11,...	238	C18H22	006566-19-4	95
2	Tricyclo[3.3.3.0(1,5)]undec-6-en...	223	C14H13N3	118894-71-6	92
3	Anthracene, 1,4-dimethoxy-	238	C16H14O2	013076-29-4	62
4	4,4'-Diisopropylbiphenyl	238	C18H22	018970-30-4	49
5	3,4'-Diisopropylbiphenyl	238	C18H22	061434-46-6	46





Library Search Compound Report

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Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

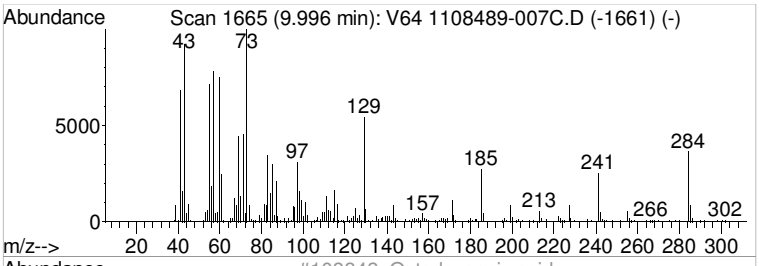
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

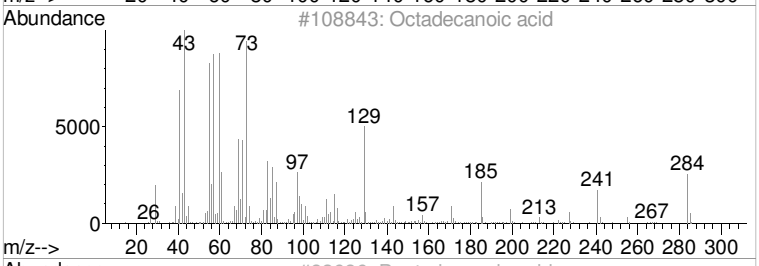
****

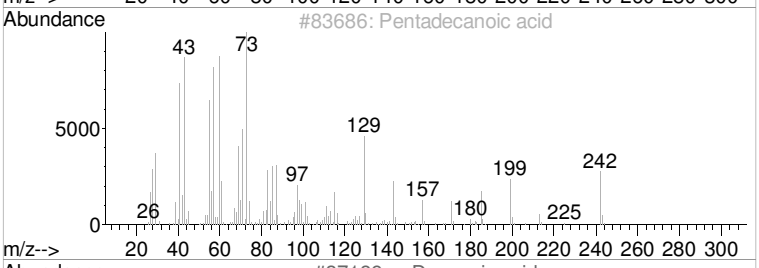
Peak Number 4 Octadecanoic acid Concentration Rank 6

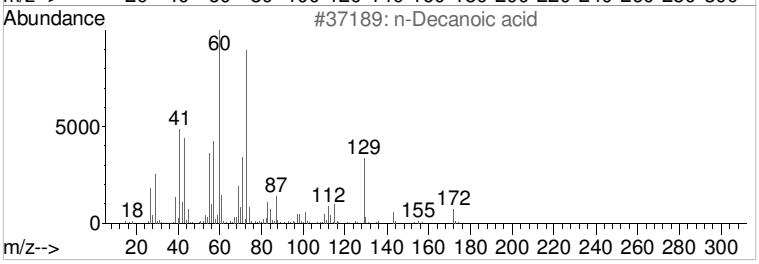
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.00	17.65 ug/l	492985	ISTD-Phenanthrene-d10	8.65

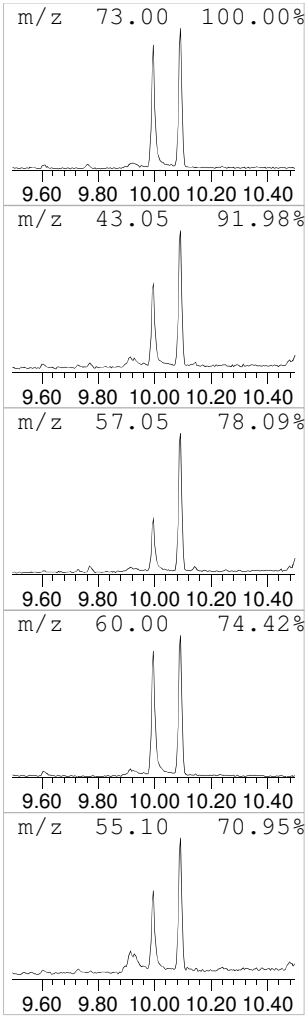
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	76
3	n-Decanoic acid	172	C10H20O2	000334-48-5	64
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	58
5	Undecanoic acid	186	C11H22O2	000112-37-8	49











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Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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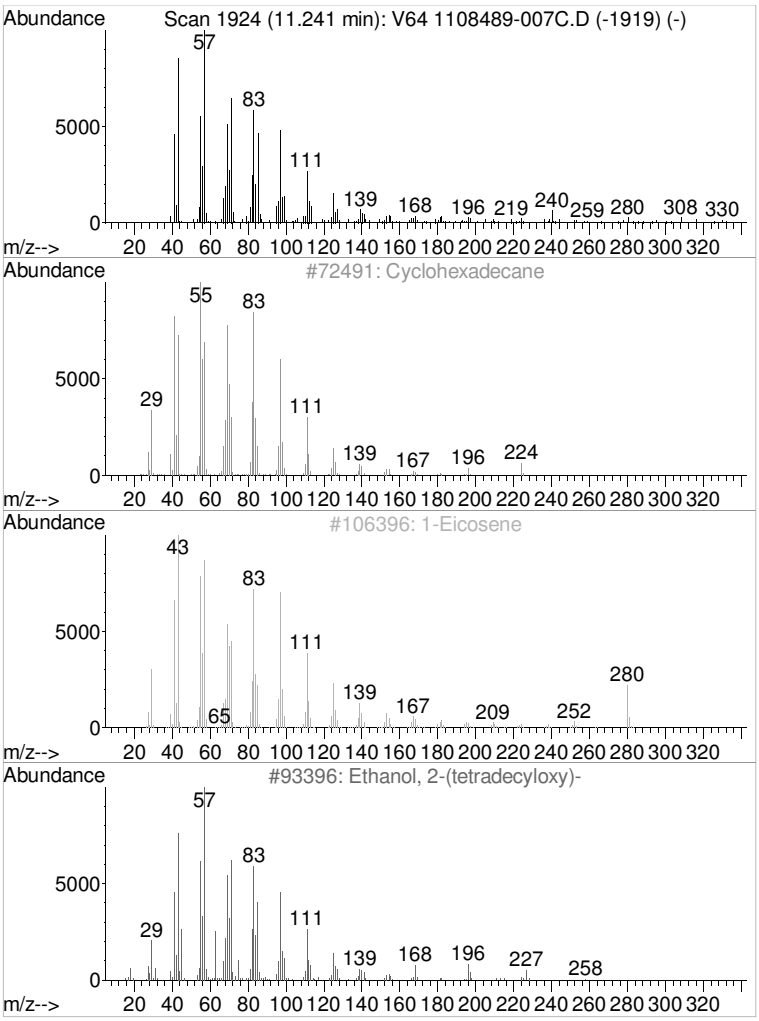
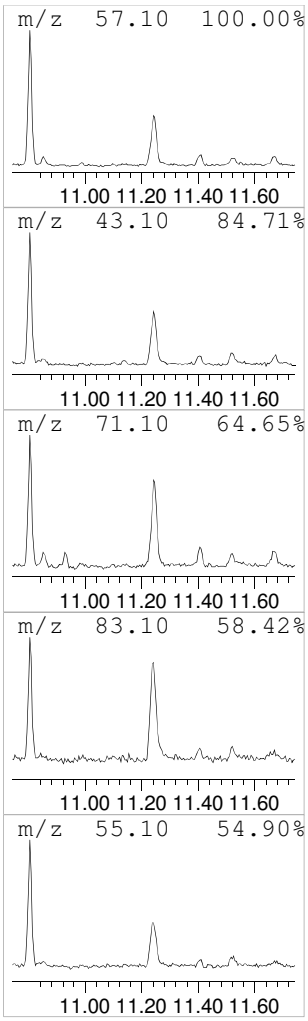
Peak Number 5 Cyclohexadecane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.24	15.32 ug/l	296440	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane	224	C16H32	000295-65-8	98
2	1-Eicosene	280	C20H40	003452-07-1	98
3	Ethanol, 2-(tetradecyloxy)-	258	C16H34O2	002136-70-1	96
4	3-Eicosene, (E)-	280	C20H40	074685-33-9	95
5	Methoxyacetic acid, heptadecyl e...	328	C20H40O3	1000282-99-1	91





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Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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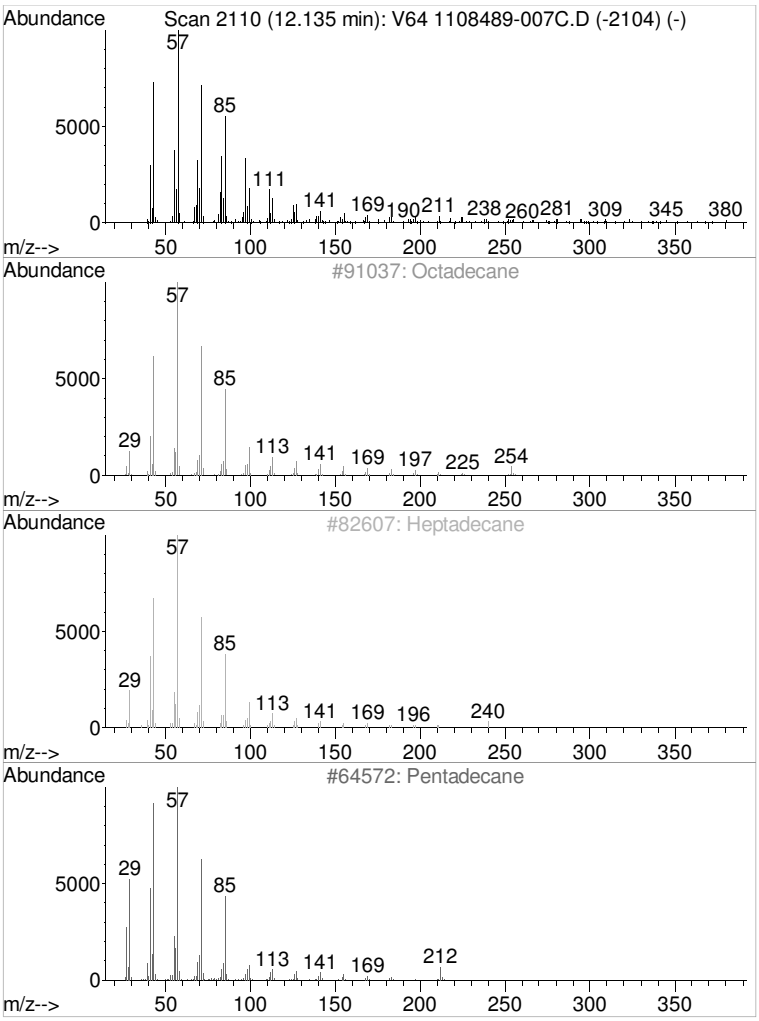
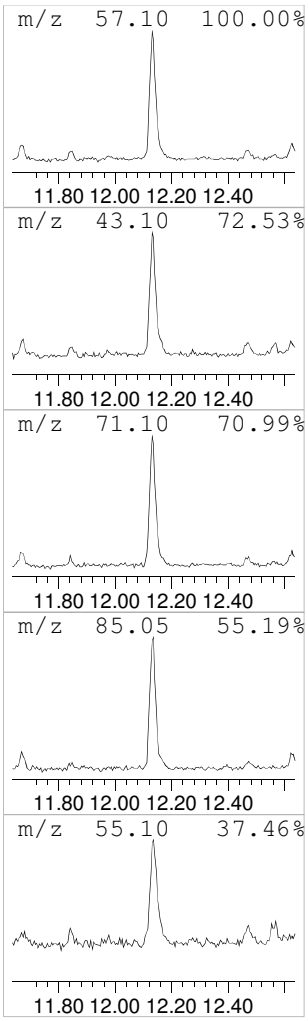
Peak Number 6 Octadecane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.14	19.91 ug/l	385297	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	95
2	Heptadecane	240	C17H36	000629-78-7	95
3	Pentadecane	212	C15H32	000629-62-9	92
4	Nonahexacontanoic acid	999	C69H138O2	040710-32-5	90
5	11-Tricosene	322	C23H46	052078-56-5	84





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Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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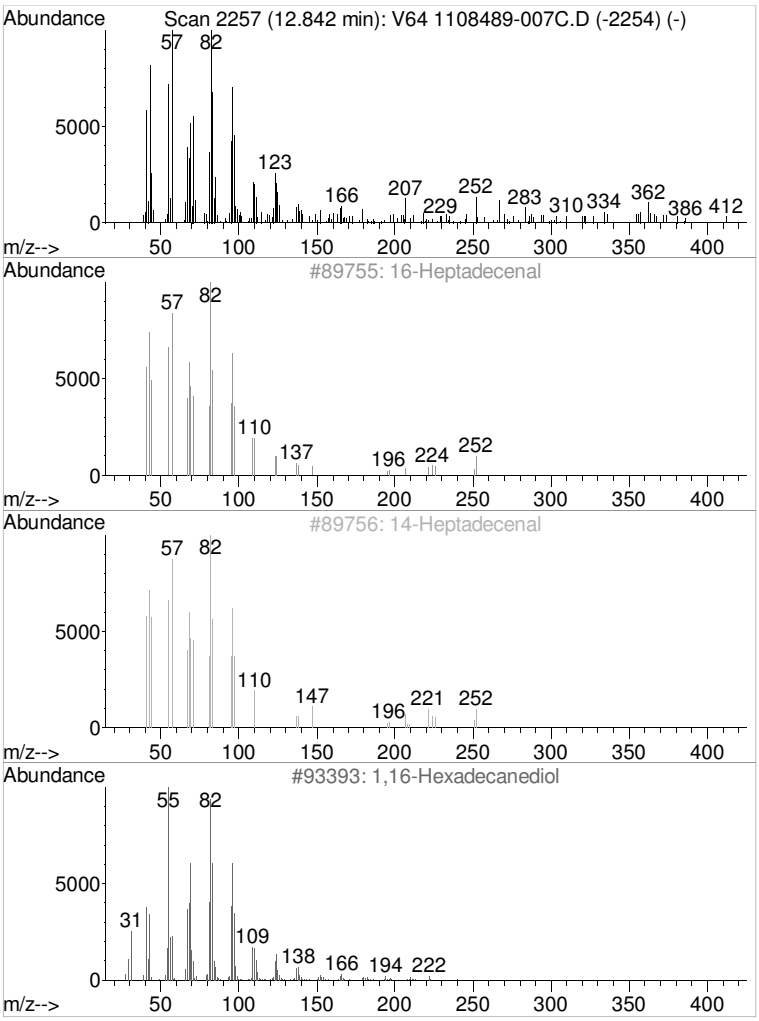
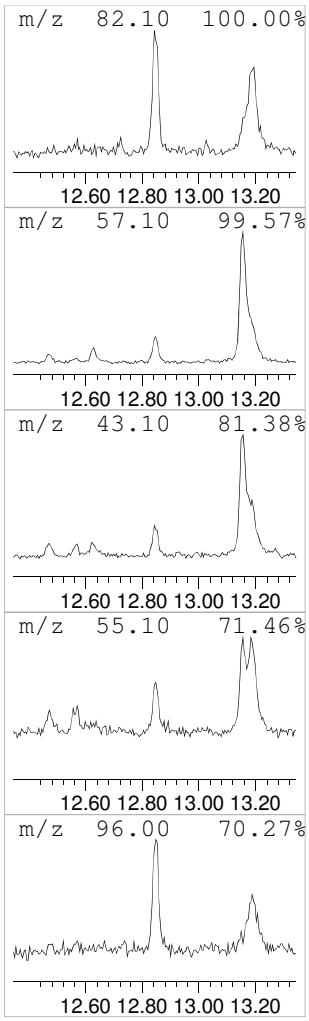
Peak Number 7 16-Heptadecenal Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.84	10.20 ug/l	105433	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	16-Heptadecenal	252	C17H32O	1000144-57-9	93
2	14-Heptadecenal	252	C17H32O	1000144-58-0	89
3	1,16-Hexadecanediol	258	C16H34O2	007735-42-4	86
4	Oxirane, heptadecyl-	282	C19H38O	067860-04-2	72
5	Tetracosanal	352	C24H48O	057866-08-7	64





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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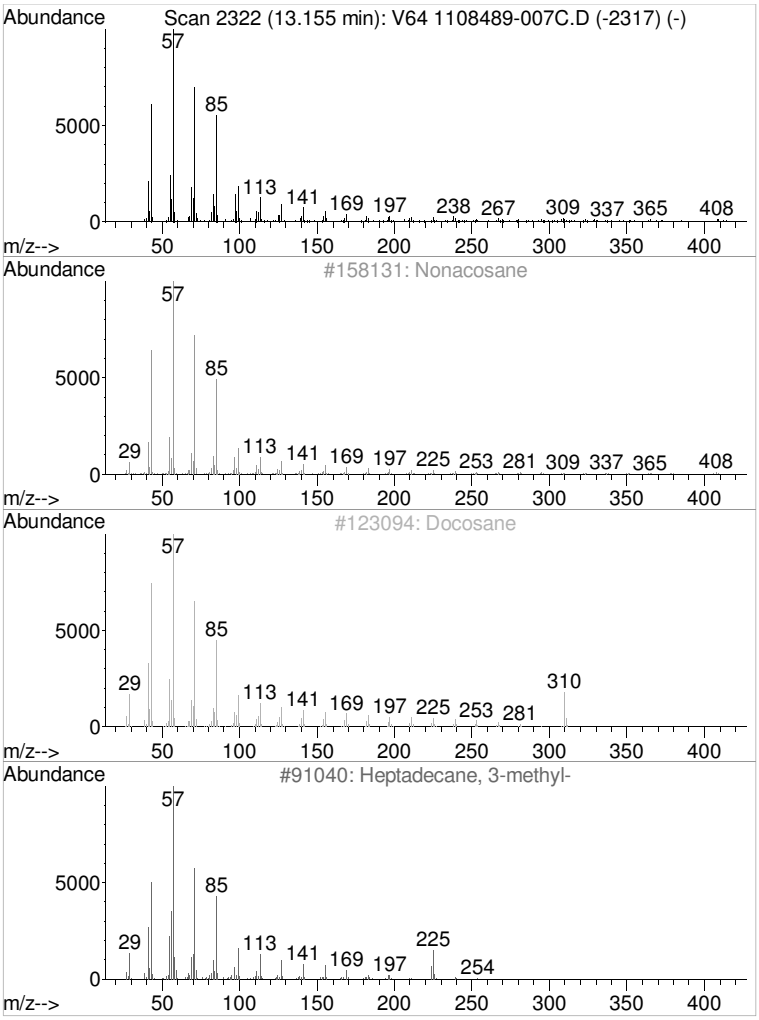
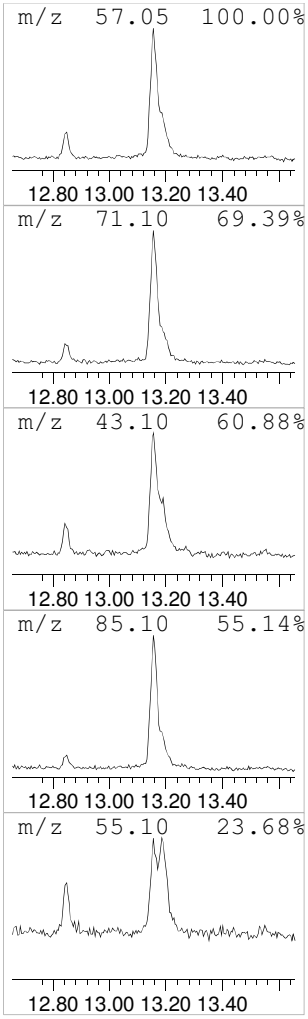
Peak Number 8 Nonacosane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.15	30.49 ug/l	315216	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	98
2	Docosane	310	C22H46	000629-97-0	94
3	Heptadecane, 3-methyl-	254	C18H38	006418-44-6	93
4	Heneicosane	296	C21H44	000629-94-7	91
5	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	91





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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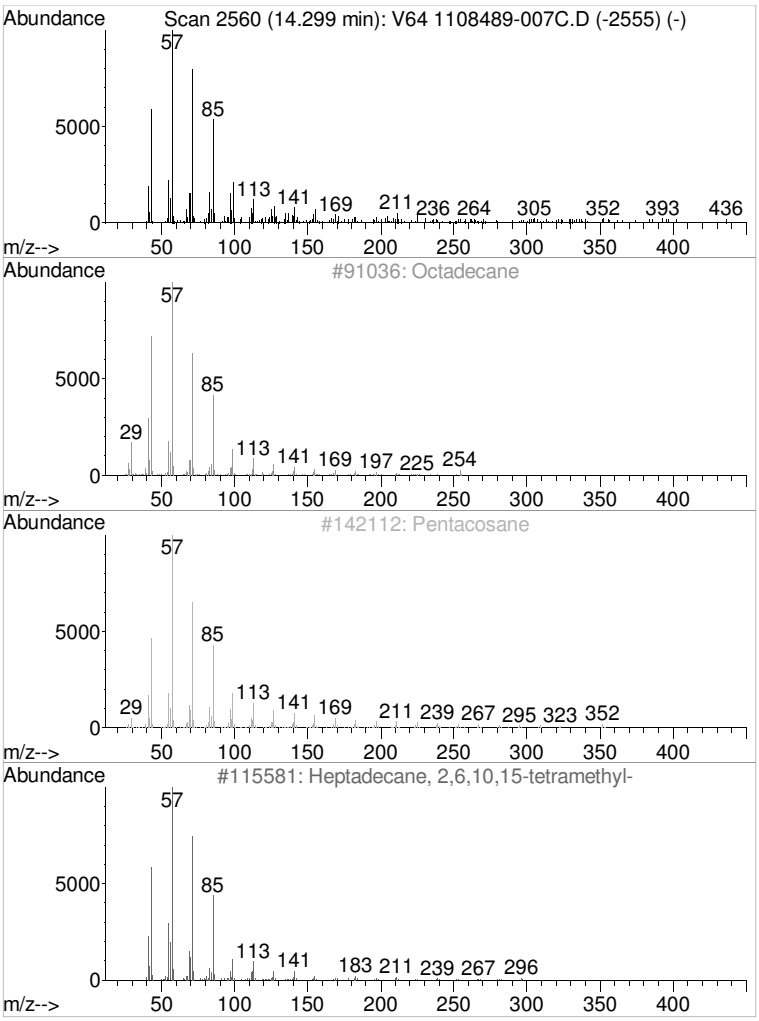
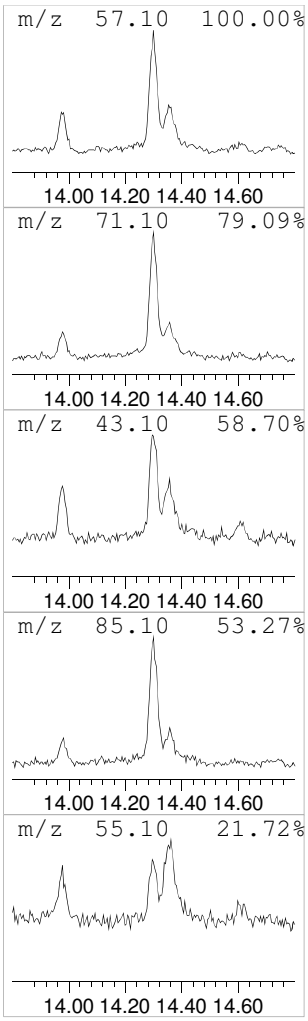
Peak Number 9 Octadecane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	15.03 ug/l	155392	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	97
2	Pentacosane	352	C25H52	000629-99-2	95
3	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	91
4	Tetratriacontane	479	C34H70	014167-59-0	91
5	Docosane, 11-butyl-	366	C26H54	013475-76-8	91





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Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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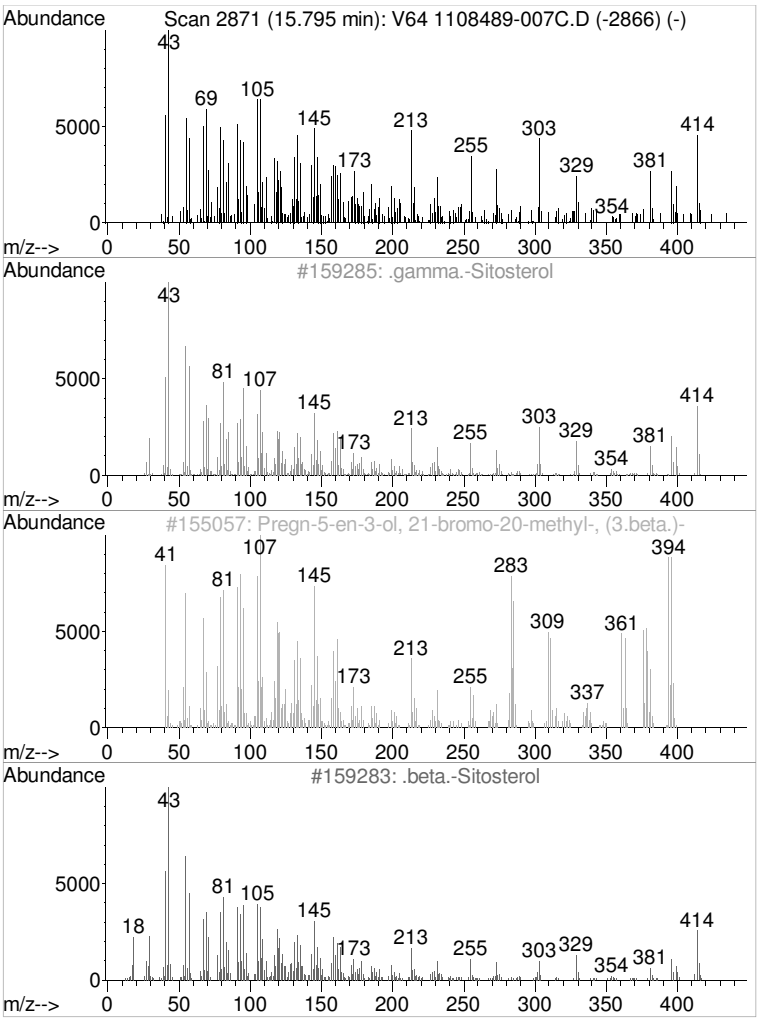
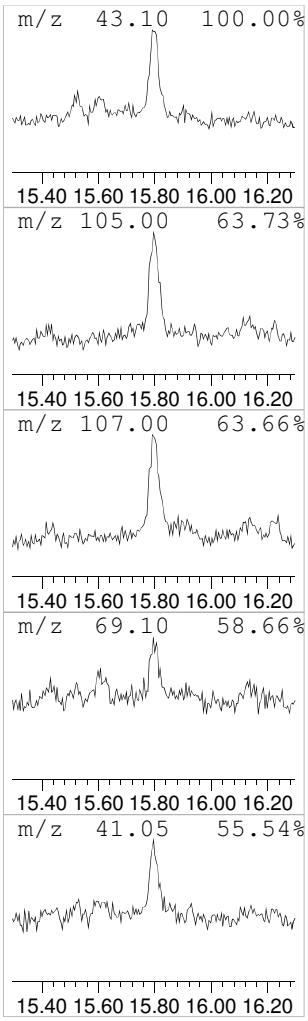
Peak Number 10 .gamma.-Sitosterol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.79	29.65 ug/l	306612	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	98
2	Pregn-5-en-3-ol, 21-bromo-20-met...	394	C22H35BrO	055103-80-5	91
3	.beta.-Sitosterol	414	C29H50O	000083-46-5	78
4	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	49
5	Cholest-7-en-3-ol, 4,4-dimethyl-...	414	C29H50O	006384-28-7	11





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V64 1108489-007C.D
Acq On : 31 Aug 2011 5:40 pm
Operator : ALICIA HABERLE
Sample : 1108489-007C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.98	58.9	ug/l	1147260	1	4.31	779241	40.0
n-Hexadecanoic acid	9.21	24.0	ug/l	670133	4	8.65	1117320	40.0
10,18-Bisnorabiet...	9.91	7.4	ug/l	206686	4	8.65	1117320	40.0
Octadecanoic acid	10.00	17.6	ug/l	492985	4	8.65	1117320	40.0
Cyclohexadecane	11.24	15.3	ug/l	296440	5	11.37	774216	40.0
Octadecane	12.14	19.9	ug/l	385297	5	11.37	774216	40.0
16-Heptadecenal	12.84	10.2	ug/l	105433	6	13.42	413584	40.0
Nonacosane	13.15	30.5	ug/l	315216	6	13.42	413584	40.0
Octadecane	14.30	15.0	ug/l	155392	6	13.42	413584	40.0
.gamma.-Sitosterol	15.79	29.7	ug/l	306612	6	13.42	413584	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.310	63	67	71	rVB	21310	16028	1.22%	0.120%
2	2.445	92	95	98	rBV	29346	17853	1.36%	0.133%
3	2.882	183	186	191	rVB2	21686	18378	1.40%	0.137%
4	2.983	200	207	210	rBV	1637528	1233594	94.21%	9.224%
5	3.070	218	225	229	rVB	48798	40028	3.06%	0.299%
6	3.118	229	235	238	rBV	50666	38202	2.92%	0.286%
7	3.156	238	243	247	rBV	74249	53222	4.06%	0.398%
8	3.224	251	257	271	rBV2	1172089	935913	71.48%	6.998%
9	3.310	271	275	279	rVB3	37267	37015	2.83%	0.277%
10	3.656	341	347	350	rBV3	16480	16934	1.29%	0.127%
11	3.700	350	356	358	rVV	16291	16288	1.24%	0.122%
12	3.724	358	361	364	rVB	42466	31957	2.44%	0.239%
13	3.878	387	393	396	rBV	17765	15758	1.20%	0.118%
14	3.969	408	412	423	rBV	1121954	921253	70.36%	6.889%
15	4.310	479	483	495	rBV	1057200	831458	63.50%	6.217%
16	4.806	582	586	597	rBV	500929	417153	31.86%	3.119%
17	5.479	722	726	737	rBV	1402865	1119056	85.46%	8.368%
18	6.522	938	943	950	rBV	1355938	1067139	81.50%	7.979%
19	7.186	1074	1081	1092	rVB	1527045	1309400	100.00%	9.791%
20	7.960	1238	1242	1252	rVB	822959	671895	51.31%	5.024%
21	8.196	1287	1291	1295	rVB2	39149	30519	2.33%	0.228%
22	8.653	1382	1386	1395	rVB	1433340	1162418	88.77%	8.692%
23	9.138	1482	1487	1491	rBV6	16105	22112	1.69%	0.165%
24	9.206	1497	1501	1506	rBV	102803	103232	7.88%	0.772%
25	9.239	1506	1508	1511	rVB	25446	19582	1.50%	0.146%
26	9.855	1633	1636	1640	rBV	33507	26749	2.04%	0.200%
27	9.913	1643	1648	1650	rBV5	13410	16542	1.26%	0.124%
28	9.961	1655	1658	1661	rVB	23711	17013	1.30%	0.127%
29	9.990	1661	1664	1673	rBV	50458	61034	4.66%	0.456%
30	10.091	1679	1685	1689	rBV2	356322	308567	23.57%	2.307%
31	10.240	1712	1716	1724	rVB	1077413	889192	67.91%	6.649%
32	10.802	1829	1833	1838	rBV	236334	221505	16.92%	1.656%
33	11.240	1919	1924	1932	rBV4	60560	104089	7.95%	0.778%
34	11.370	1945	1951	1956	rBV	880824	929463	70.98%	6.950%
35	11.403	1956	1958	1963	rVB	46456	47013	3.59%	0.352%
36	12.562	2196	2199	2207	rVB2	45010	64098	4.90%	0.479%
37	13.423	2372	2378	2386	rVB	365505	542043	41.40%	4.053%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

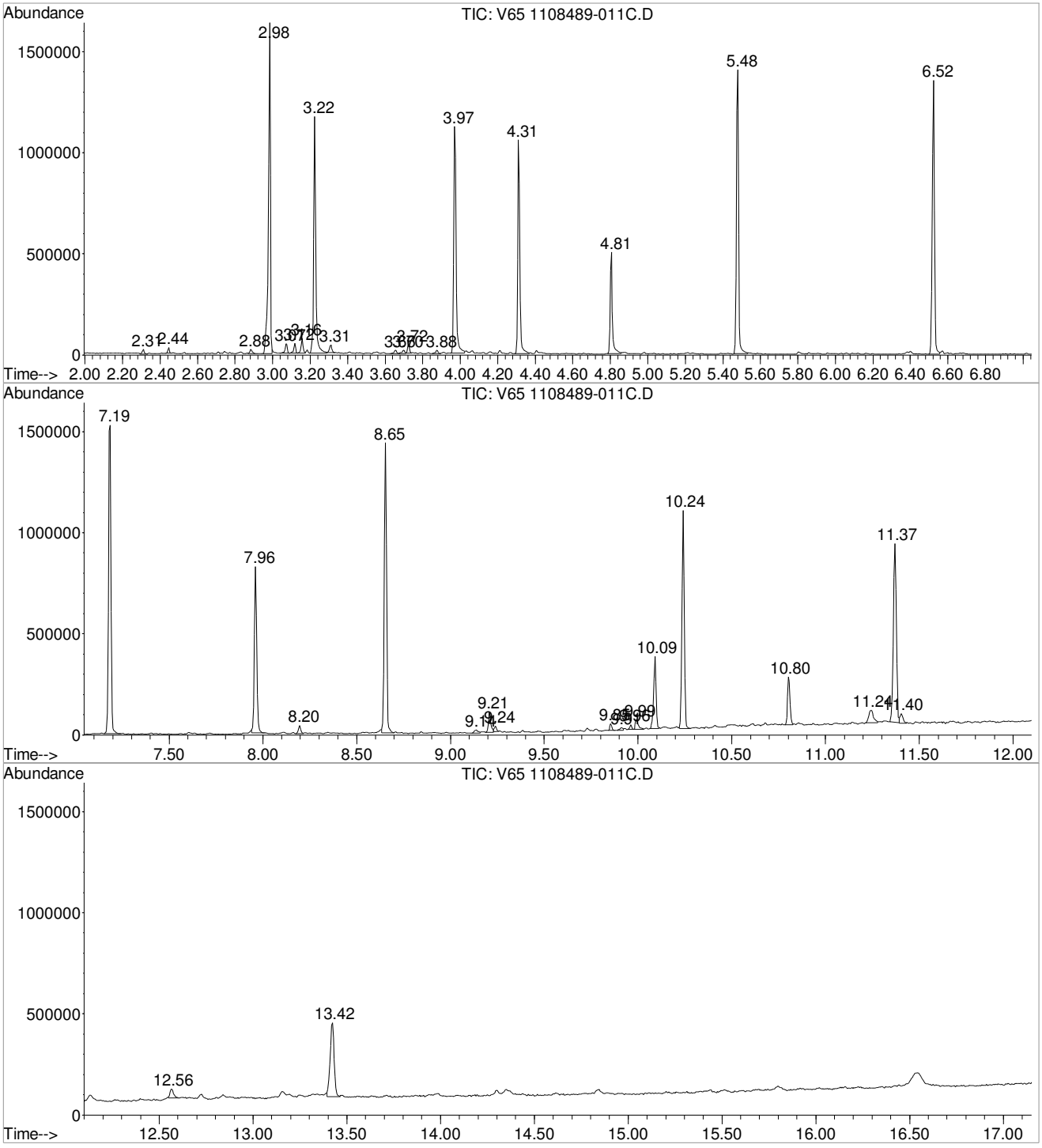
Sum of corrected areas: 13373695

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

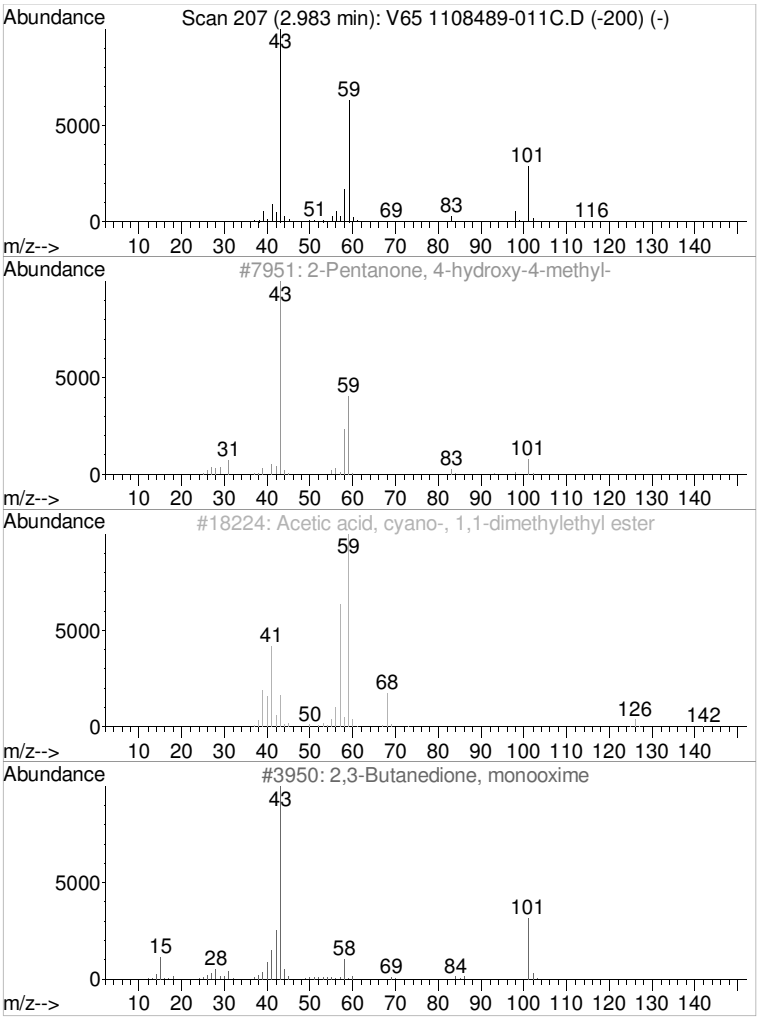
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

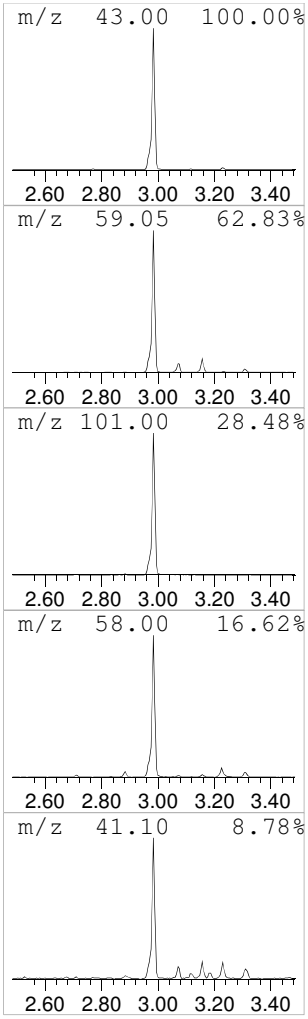
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.98	59.35 ug/l	1233590	ISTD 1,4-Dichlorobenzene-d4	4.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

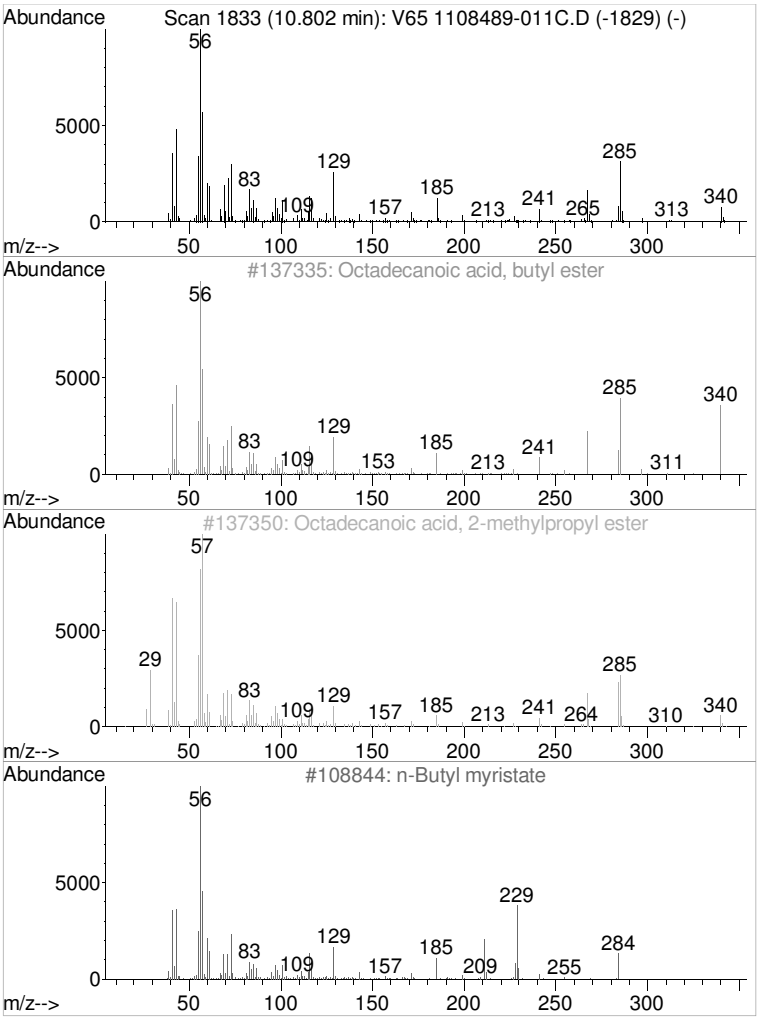
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

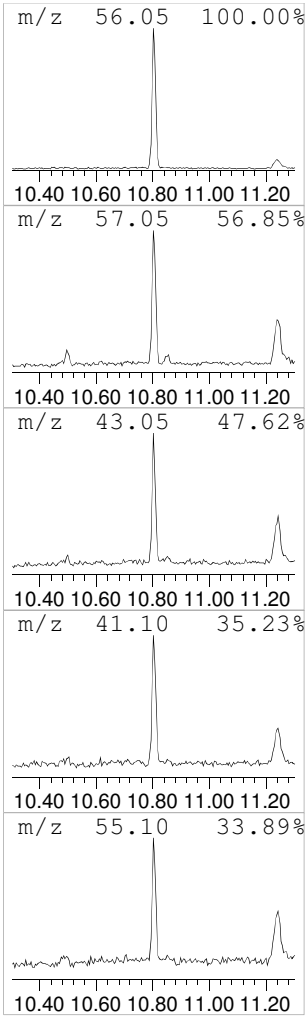
****

Peak Number 2 Octadecanoic acid, butyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.80	9.53 ug/l	221505	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	58
4	Nipecotic acid	129	C6H11NO2	000498-95-3	47
5	Piperidin-4-carboxylic acid	129	C6H11NO2	000498-94-2	38





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

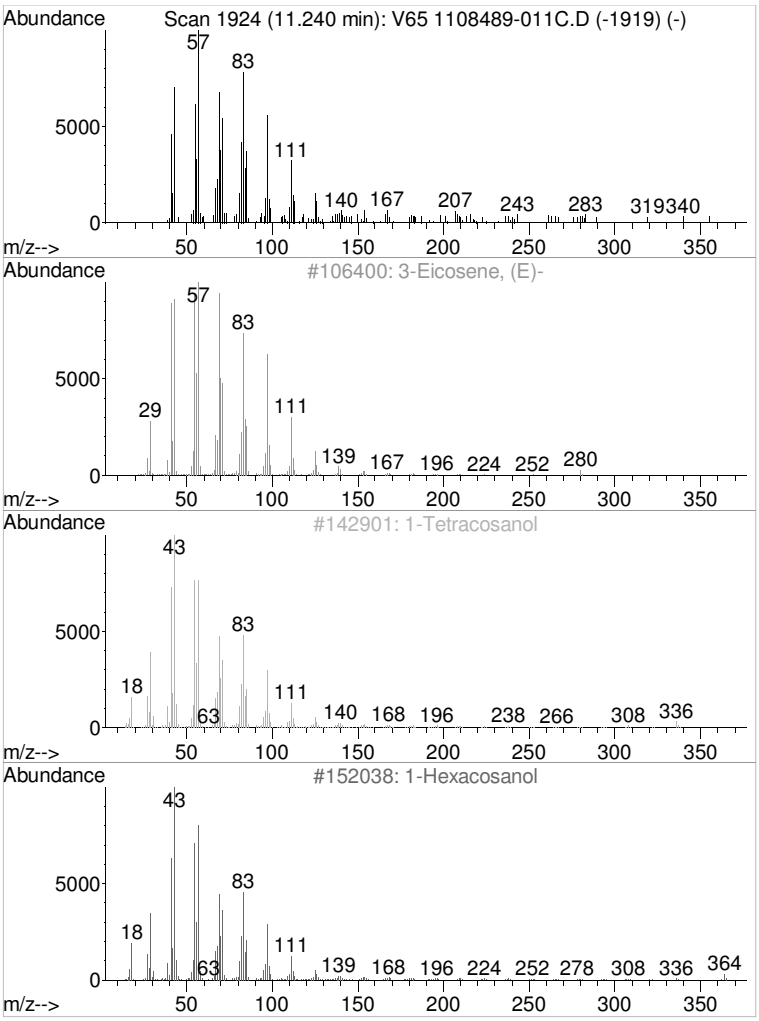
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

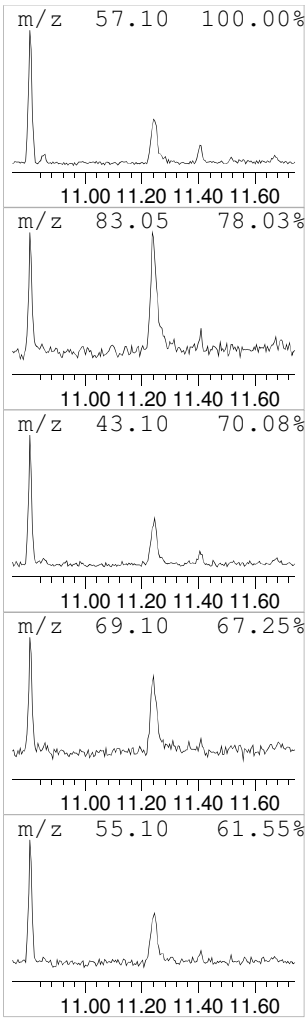
****

Peak Number 3 3-Eicosene, (E)- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.24	4.48 ug/l	104089	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Eicosene, (E)-	280	C20H40	074685-33-9	96
2	1-Tetracosanol	354	C24H50O	000506-51-4	91
3	1-Hexacosanol	382	C26H54O	000506-52-5	91
4	5-Eicosene, (E)-	280	C20H40	074685-30-6	90
5	Cycloeicosane	280	C20H40	000296-56-0	89





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

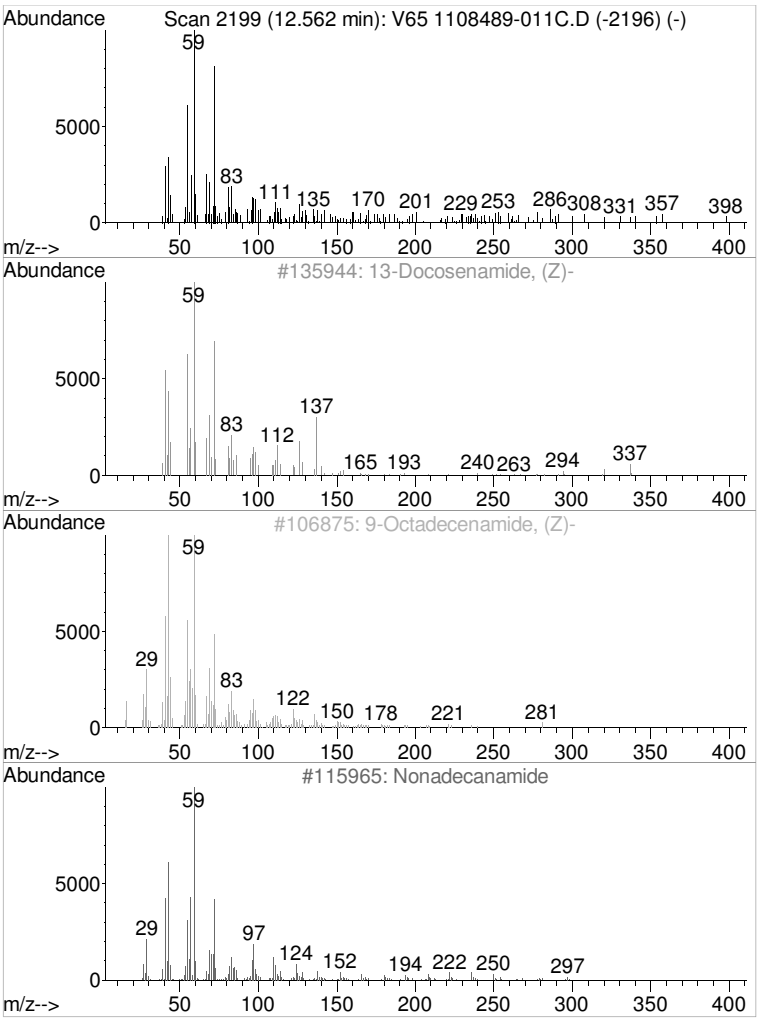
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

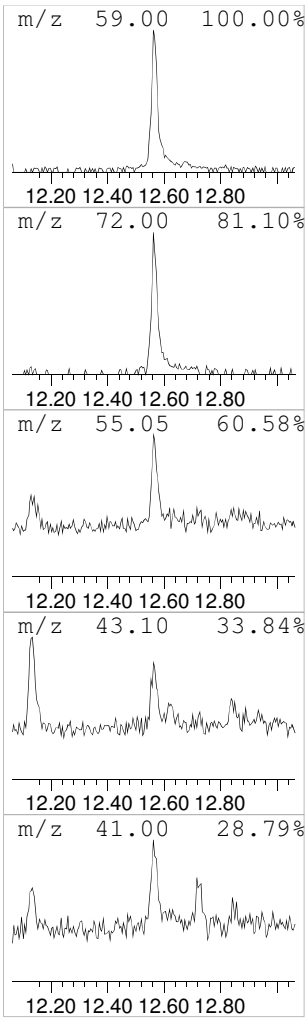
****

Peak Number 4 13-Docosenamide, (Z)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.56	4.73 ug/l	64098	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	74
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	60
3	Nonadecanamide	297	C19H39NO	058185-32-3	47
4	Cyclohexanol, 4-methoxy-	130	C7H14O2	018068-06-9	35
5	2-Propenoic acid	72	C3H4O2	000079-10-7	30





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V65 1108489-011C.D
Acq On : 31 Aug 2011 6:07 pm
Operator : ALICIA HABERLE
Sample : 1108489-011C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

				--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.98	59.3	ug/l	1233590	1	4.31	831458	40.0
Octadecanoic acid...	10.80	9.5	ug/l	221505	5	11.37	929463	40.0
3-Eicosene, (E)-	11.24	4.5	ug/l	104089	5	11.37	929463	40.0
13-Docosenamide, ...	12.56	4.7	ug/l	64098	6	13.42	542043	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.445	92	95	98	rVB	24827	16045	1.25%	0.092%
2	2.882	180	186	194	rVB3	18067	18656	1.46%	0.107%
3	2.983	199	207	210	rBV	1202530	887243	69.28%	5.080%
4	3.070	220	225	229	rVB	42460	32565	2.54%	0.186%
5	3.118	229	235	238	rBV	42855	36219	2.83%	0.207%
6	3.156	238	243	246	rBV	58908	41077	3.21%	0.235%
7	3.224	251	257	271	rBV2	927595	742734	58.00%	4.253%
8	3.305	271	274	280	rVB3	26480	28897	2.26%	0.165%
9	3.652	338	346	350	rBV4	15650	16815	1.31%	0.096%
10	3.700	350	356	357	rBV2	14991	14881	1.16%	0.085%
11	3.724	357	361	365	rVB	206738	156209	12.20%	0.894%
12	3.863	386	390	391	rBV	20930	18278	1.43%	0.105%
13	3.878	391	393	397	rVB	23609	16694	1.30%	0.096%
14	3.940	402	406	408	rBV	18967	15865	1.24%	0.091%
15	3.969	408	412	423	rVV	865330	710321	55.47%	4.067%
16	4.060	428	431	435	rVB2	25209	22448	1.75%	0.129%
17	4.209	460	462	470	rVB	27889	22078	1.72%	0.126%
18	4.310	479	483	494	rBV	1071382	821870	64.18%	4.706%
19	4.407	500	503	506	rBV	34420	25853	2.02%	0.148%
20	4.508	521	524	528	rBV	25420	20636	1.61%	0.118%
21	4.806	582	586	598	rBV	379654	347433	27.13%	1.989%
22	4.979	618	622	627	rVB2	25957	22461	1.75%	0.129%
23	5.070	638	641	647	rVB	23846	18800	1.47%	0.108%
24	5.176	660	663	664	rBV3	20380	16808	1.31%	0.096%
25	5.195	664	667	675	rVB3	169294	165080	12.89%	0.945%
26	5.479	722	726	732	rBV	1372657	1097039	85.66%	6.282%
27	5.604	743	752	755	rBV	85947	71881	5.61%	0.412%
28	5.638	755	759	763	rVB2	19677	17240	1.35%	0.099%
29	5.801	790	793	799	rBV2	21343	20464	1.60%	0.117%
30	6.378	906	913	915	rBV6	22935	28329	2.21%	0.162%
31	6.402	915	918	924	rVB5	18156	23814	1.86%	0.136%
32	6.522	939	943	950	rBV	1100570	845067	65.99%	4.839%
33	6.585	954	956	960	rVB4	25347	22927	1.79%	0.131%
34	6.662	969	972	980	rVB	40398	46682	3.65%	0.267%
35	6.773	992	995	1000	rBV	17202	23553	1.84%	0.135%
36	7.181	1074	1080	1085	rBV	1526501	1280656	100.00%	7.333%
37	7.215	1085	1087	1094	rVB4	18885	27348	2.14%	0.157%
38	7.316	1103	1108	1109	rBV3	22630	26806	2.09%	0.153%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	7.460	1134	1138	1142	rBV	19941	17975	1.40%	0.103%
40	7.571	1156	1161	1166	rBV4	22324	23888	1.87%	0.137%
41	7.696	1184	1187	1190	rBV2	67885	51323	4.01%	0.294%
42	7.960	1234	1242	1250	rBV	687585	597987	46.69%	3.424%
43	8.090	1263	1269	1273	rBV3	17863	28797	2.25%	0.165%
44	8.191	1287	1290	1296	rBV3	36147	34392	2.69%	0.197%
45	8.335	1315	1320	1321	rBV3	25919	24713	1.93%	0.142%
46	8.513	1354	1357	1360	rBV	50623	39100	3.05%	0.224%
47	8.653	1382	1386	1389	rBV	1432890	1122697	87.67%	6.429%
48	8.672	1389	1390	1395	rVB	84898	63360	4.95%	0.363%
49	9.023	1460	1463	1467	rVB	27315	22297	1.74%	0.128%
50	9.138	1482	1487	1491	rBV4	42550	60815	4.75%	0.348%
51	9.172	1491	1494	1497	rVV3	47014	39203	3.06%	0.224%
52	9.211	1497	1502	1507	rBV2	229492	230708	18.01%	1.321%
53	9.360	1530	1533	1535	rBV3	21324	14801	1.16%	0.085%
54	9.403	1540	1542	1546	rVB5	17289	16054	1.25%	0.092%
55	9.441	1546	1550	1554	rBV4	38161	39402	3.08%	0.226%
56	9.528	1564	1568	1572	rBV3	34183	40923	3.20%	0.234%
57	9.566	1572	1576	1579	rVV4	31857	38221	2.98%	0.219%
58	9.600	1579	1583	1586	rVV	89333	82499	6.44%	0.472%
59	9.629	1586	1589	1592	rVV2	41916	38091	2.97%	0.218%
60	9.663	1592	1596	1601	rVB5	31211	37320	2.91%	0.214%
61	9.730	1607	1610	1612	rBV3	26132	24361	1.90%	0.139%
62	9.754	1612	1615	1626	rVB6	80208	114230	8.92%	0.654%
63	9.855	1632	1636	1639	rBV	111303	94216	7.36%	0.539%
64	9.889	1639	1643	1646	rBV4	77275	77121	6.02%	0.442%
65	9.937	1646	1653	1657	rBV	251364	252488	19.72%	1.446%
66	9.961	1657	1658	1661	rVB3	30571	18039	1.41%	0.103%
67	9.994	1661	1665	1666	rBV2	102241	92384	7.21%	0.529%
68	10.038	1671	1674	1677	rVB4	24303	18989	1.48%	0.109%
69	10.091	1678	1685	1688	rBV2	267175	285037	22.26%	1.632%
70	10.153	1696	1698	1702	rVB4	26739	24075	1.88%	0.138%
71	10.216	1707	1711	1712	rBV3	23180	21816	1.70%	0.125%
72	10.240	1712	1716	1725	rVB	991232	803434	62.74%	4.600%
73	10.293	1725	1727	1730	rBV3	19154	18878	1.47%	0.108%
74	10.345	1735	1738	1740	rBV2	65841	57203	4.47%	0.328%
75	10.437	1754	1757	1759	rVB4	20200	16294	1.27%	0.093%
76	10.485	1763	1767	1772	rVV2	194721	215175	16.80%	1.232%
77	10.543	1772	1779	1787	rVB4	264951	306514	23.93%	1.755%
78	10.600	1787	1791	1796	rBV	217218	193350	15.10%	1.107%
79	10.644	1796	1800	1806	rBV6	58054	78473	6.13%	0.449%
80	10.716	1811	1815	1820	rBV7	53940	76543	5.98%	0.438%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

81	10.759	1820	1824	1825	rVV2	100008	100519	7.85%	0.576%
82	10.778	1825	1828	1831	rVV3	118118	138301	10.80%	0.792%
83	10.802	1831	1833	1839	rVB	160071	142159	11.10%	0.814%
84	10.850	1839	1843	1849	rVB8	39788	45026	3.52%	0.258%
85	10.908	1851	1855	1859	rBV2	103262	114602	8.95%	0.656%
86	11.028	1876	1880	1884	rVB6	65828	68279	5.33%	0.391%
87	11.144	1899	1904	1910	rBV	142916	152901	11.94%	0.876%
88	11.240	1918	1924	1930	rBV3	145523	229483	17.92%	1.314%
89	11.370	1944	1951	1956	rBV	896433	996591	77.82%	5.706%
90	11.403	1956	1958	1970	rVB3	73732	104869	8.19%	0.600%
91	11.524	1979	1983	1987	rBV4	37494	41421	3.23%	0.237%
92	12.134	2104	2110	2121	rBV2	154762	293516	22.92%	1.681%
93	12.562	2195	2199	2207	rBV3	39028	65334	5.10%	0.374%
94	12.846	2253	2258	2263	rBV3	55008	90568	7.07%	0.519%
95	13.154	2317	2322	2338	rVB	239501	478466	37.36%	2.740%
96	13.423	2372	2378	2385	rVB	386064	551781	43.09%	3.159%
97	13.976	2490	2493	2502	rVB7	34219	53639	4.19%	0.307%
98	14.303	2555	2561	2567	rBV2	107934	197664	15.43%	1.132%
99	14.351	2569	2571	2585	rVB4	60621	118236	9.23%	0.677%
100	15.799	2867	2872	2885	rVB6	118323	260009	20.30%	1.489%

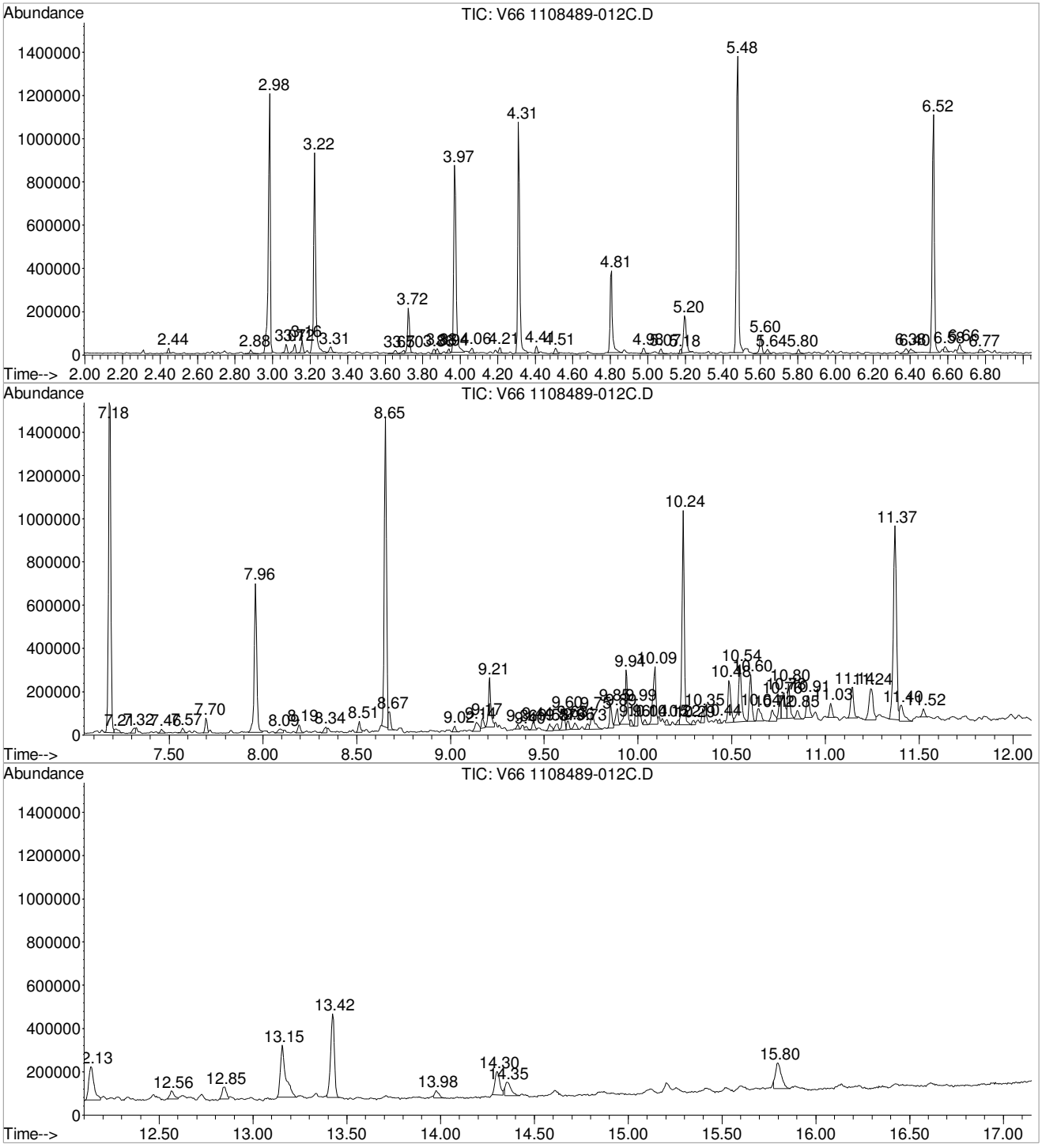
Sum of corrected areas: 17464322

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

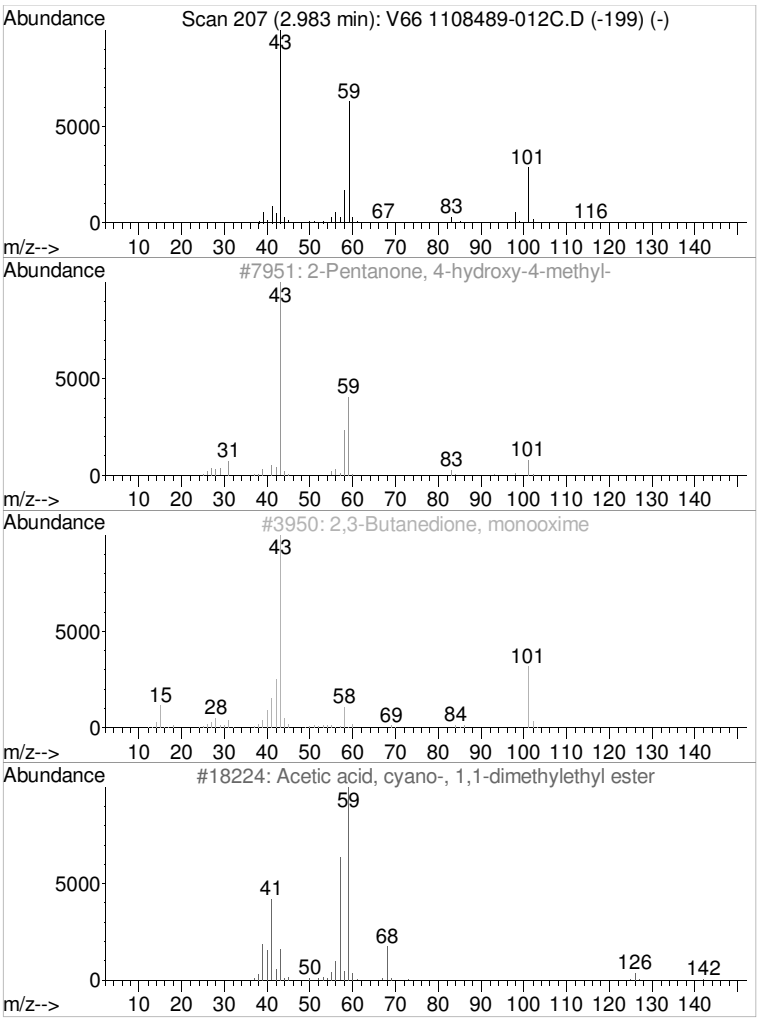
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

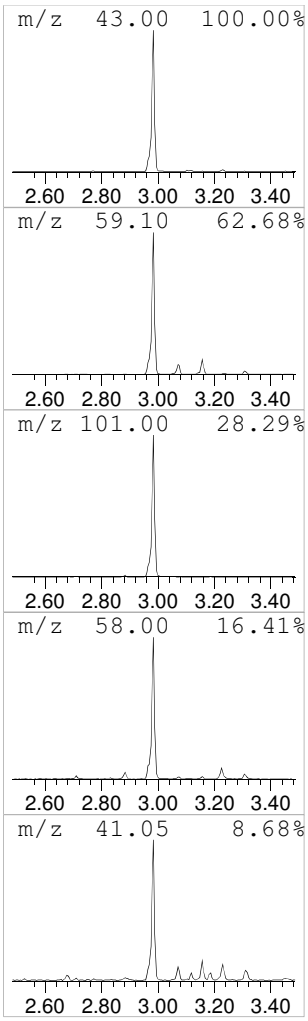
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.98	43.18 ug/l	887243	ISTD 1,4-Dichlorobenzene-d4	4.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	Propanamide, N-ethyl-	101	C5H11NO	005129-72-6	9
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





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Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

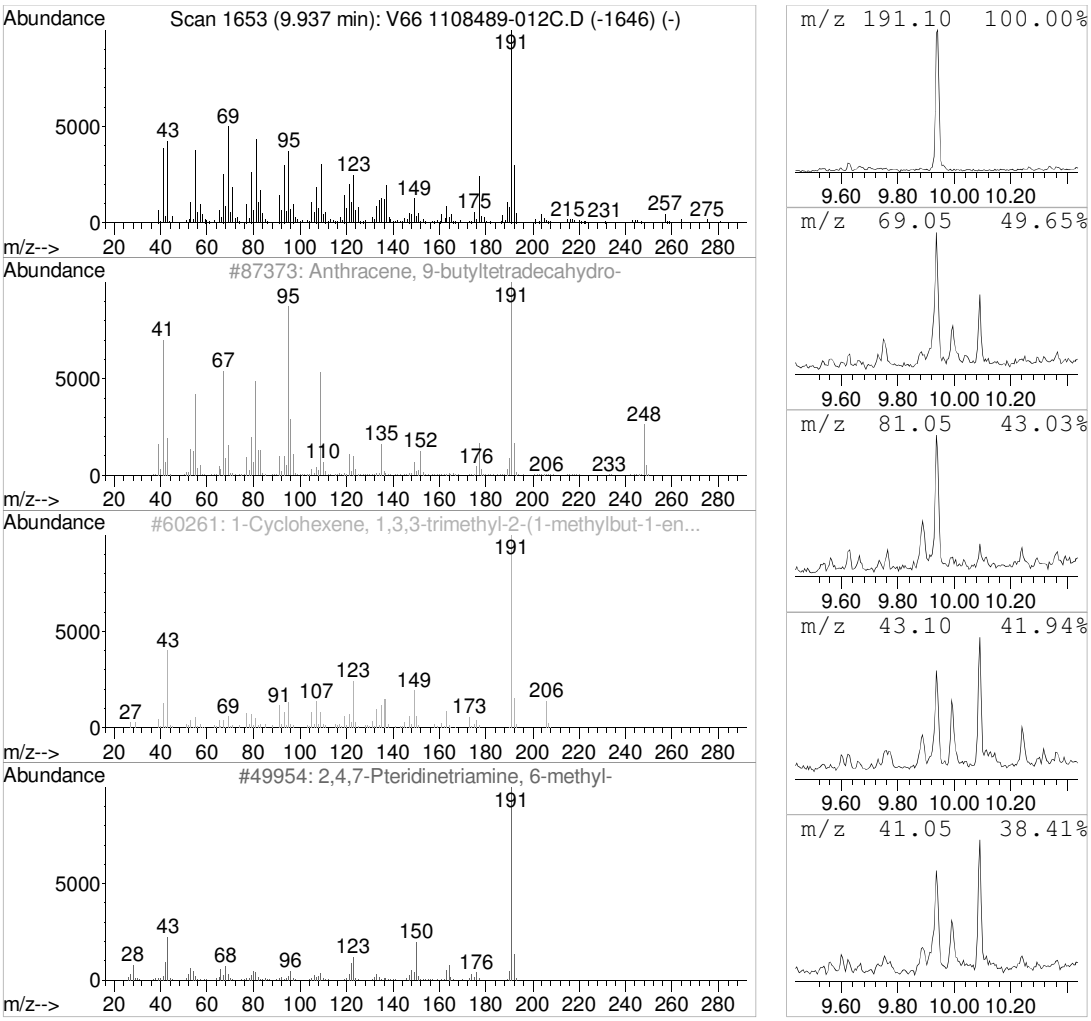
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 2 Anthracene, 9-butyltetradec... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.94	9.00 ug/l	252488	ISTD-Phenanthrene-d10	8.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 9-butyltetradecahydro-	248	C18H32	055133-89-6	40
2	1-Cyclohexene, 1,3,3-trimethyl-2...	206	C14H22O	1000197-08-4	38
3	2,4,7-Pteridinetriamine, 6-methyl-	191	C7H9N7	017539-50-3	35
4	9H-Fluorene-2-carbonitrile	191	C14H9N	002523-48-0	35
5	5-(1-Isopropenyl-4,5-dimethylbic...	332	C22H36O2	1000195-69-8	32



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Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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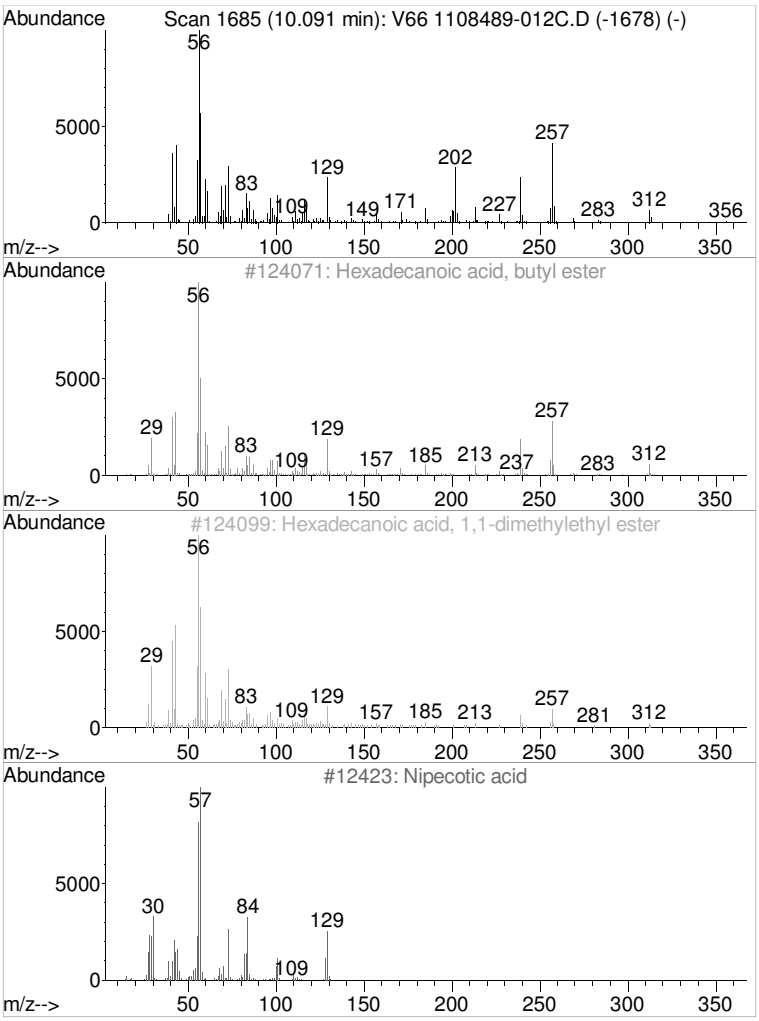
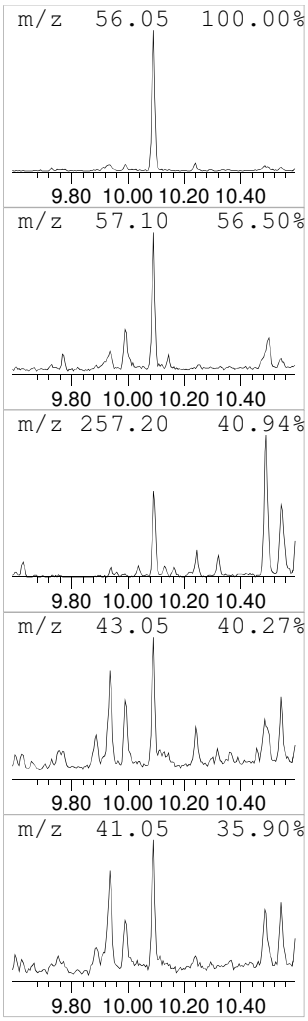
Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.09	11.44 ug/l	285037	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	49
3	Nipecotic acid	129	C6H11NO2	000498-95-3	38
4	n-Butyl laurate	256	C16H32O2	000106-18-3	38
5	2,4-Dipropyl-5-ethyl-1,3-dioxane	200	C12H24O2	006413-83-8	35





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

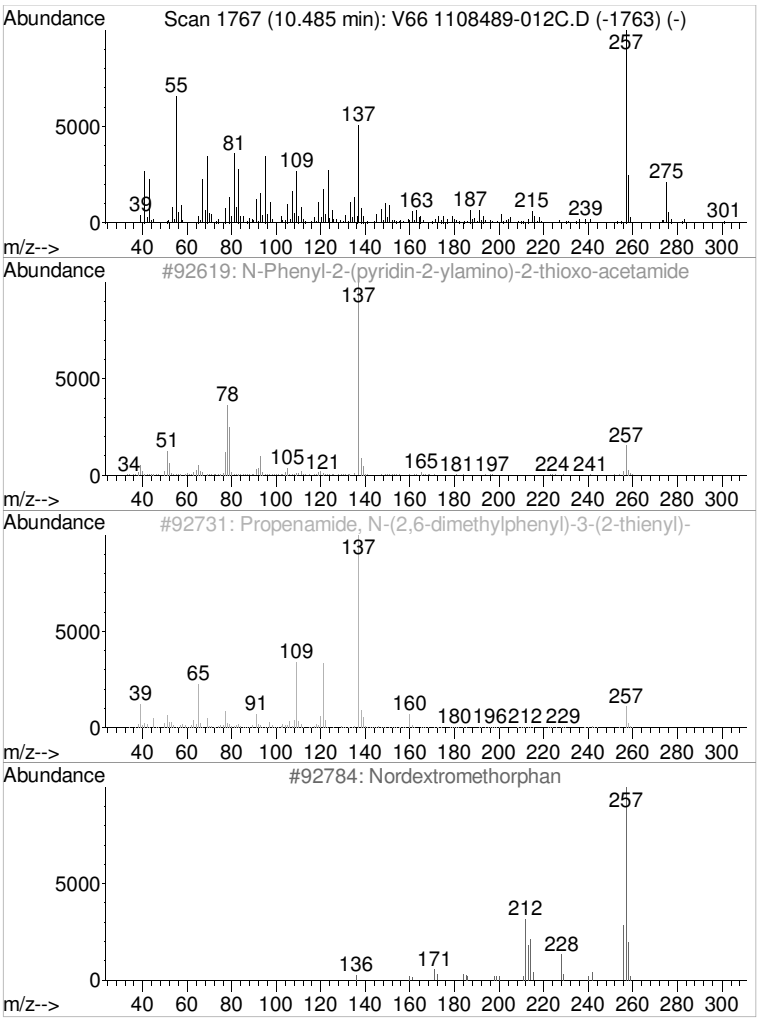
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

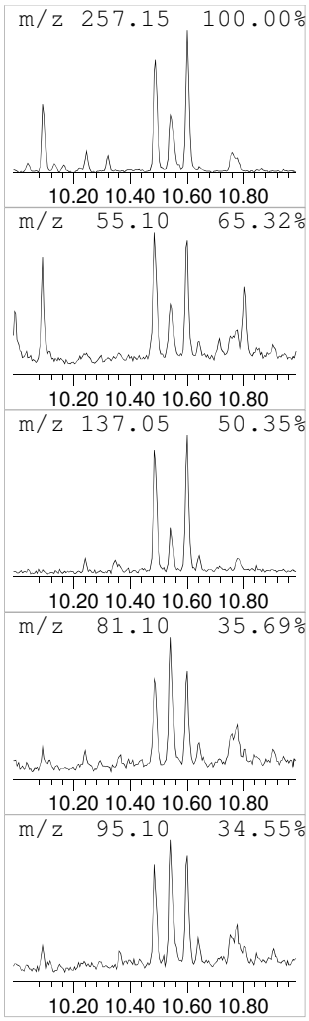
****

Peak Number 4 N-Phenyl-2-(pyridin-2-ylami... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.48	8.64 ug/l	215175	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Phenyl-2-(pyridin-2-ylamino)-2...	257	C13H11N3OS	312261-35-1	46
2	Propenamide, N-(2,6-dimethylphen...	257	C15H15NOS	284680-01-9	43
3	Nordextromethorphan	257	C17H23NO	051195-74-5	43
4	Phenanthrene, 7-ethenyl-1,2,3,4,...	272	C20H32	001686-67-5	38
5	Pyrrole, 2-phenyl-4-phenylethynyl-	257	C19H15N	066463-26-1	35





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

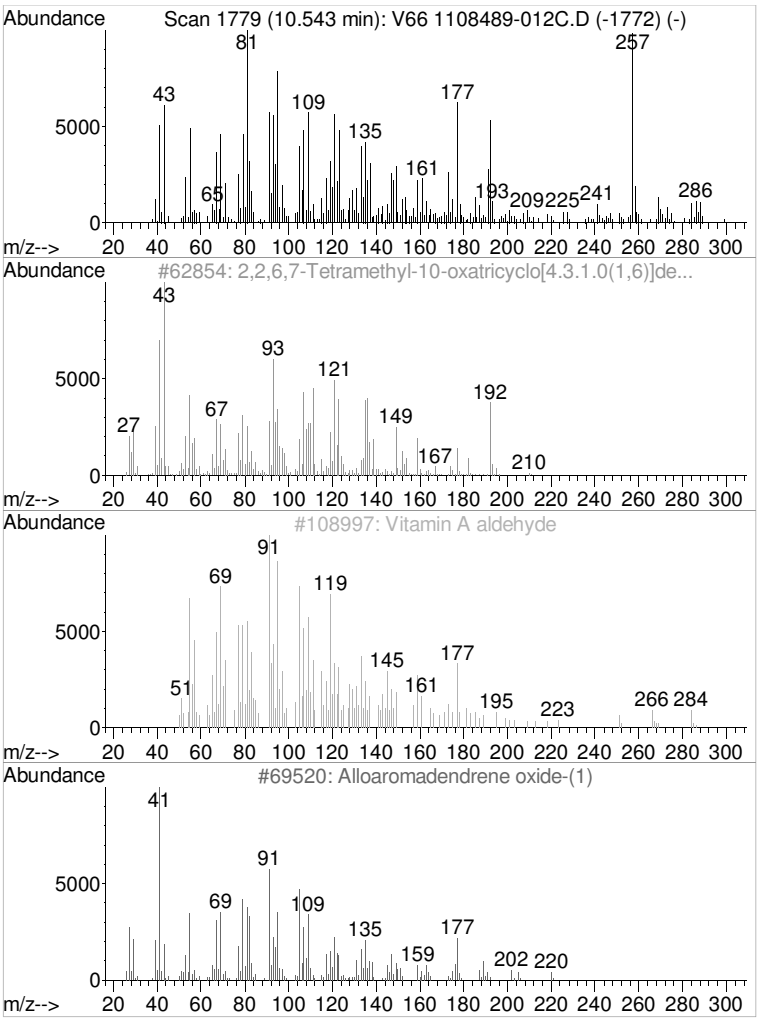
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

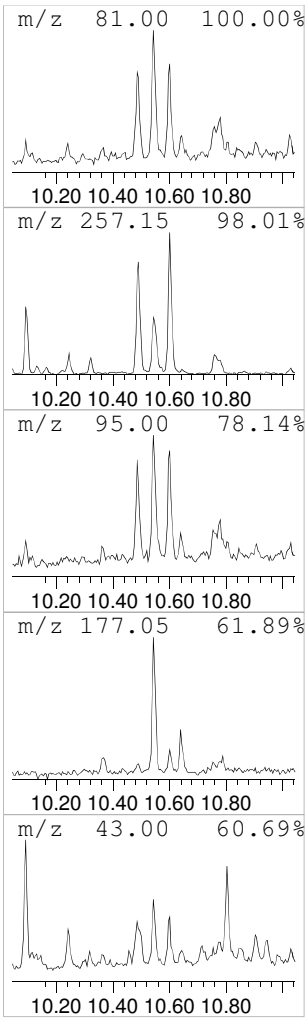
****

Peak Number 5 2,2,6,7-Tetramethyl-10-oxat... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.54	12.30 ug/l	306514	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2,6,7-Tetramethyl-10-oxatricyc...	210	C13H22O2	121841-67-6	55
2	Vitamin A aldehyde	284	C20H28O	000116-31-4	45
3	Alloaromadendrene oxide-(1)	220	C15H24O	1000156-12-8	38
4	(3E,5E,7E)-6-Methyl-8-(2,6,6-tri...	258	C18H26O	017974-57-1	30
5	2-(Pyridin-2-ylamino)-cyclohexanol	192	C11H16N2O	1000194-39-2	30





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

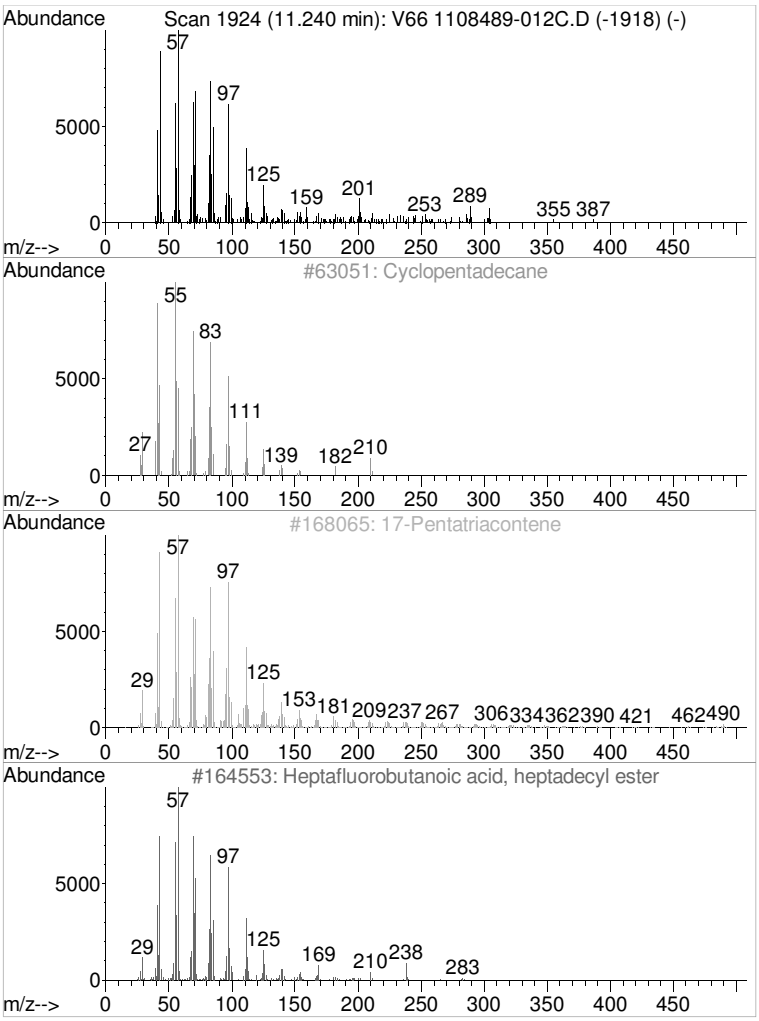
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

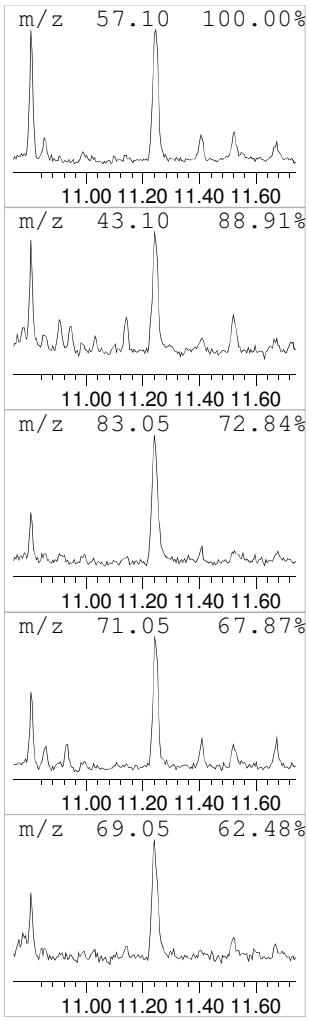
****

Peak Number 6 Cyclopentadecane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.24	9.21 ug/l	229483	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentadecane	210	C15H30	000295-48-7	98
2	17-Pentatriacontene	491	C35H70	006971-40-0	91
3	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	87
4	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	87
5	9-Eicosene, (E)-	280	C20H40	074685-29-3	78





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Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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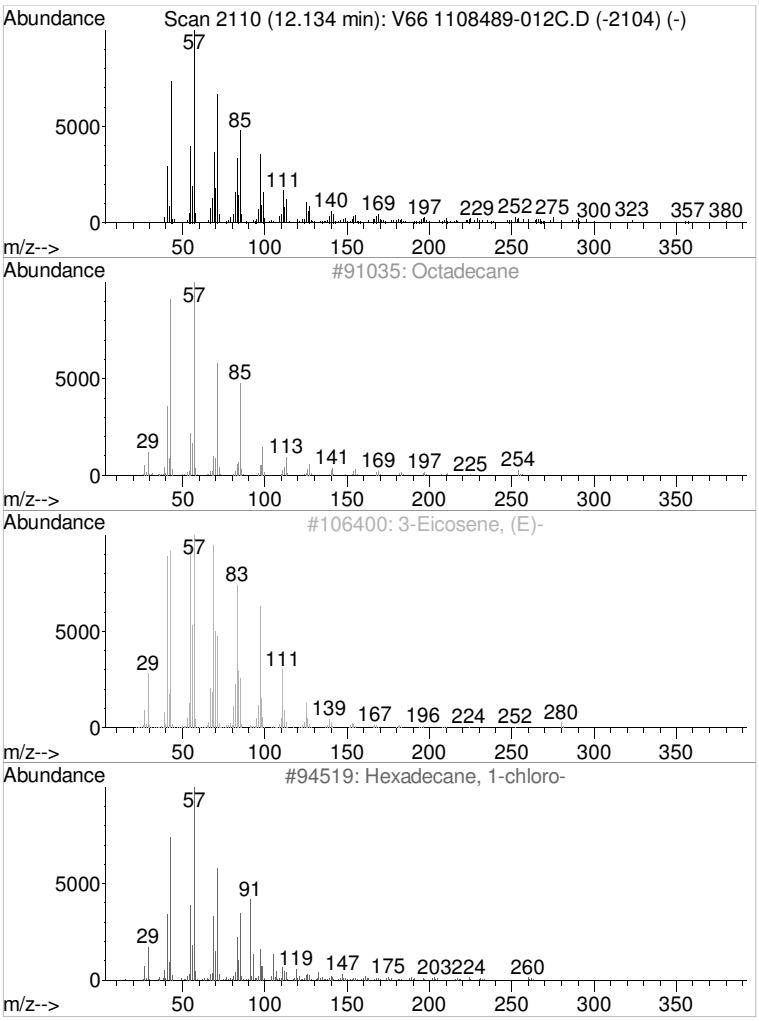
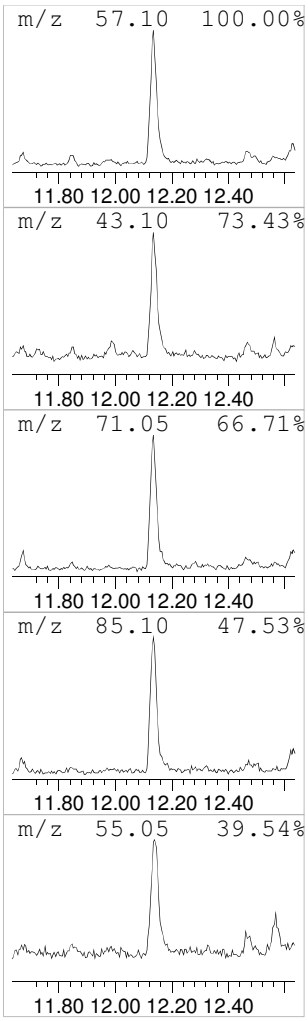
Peak Number 7 Octadecane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.13	11.78 ug/l	293516	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	93
2	3-Eicosene, (E)-	280	C20H40	074685-33-9	83
3	Hexadecane, 1-chloro-	260	C16H33Cl	004860-03-1	74
4	Cyclononane, 1,1,4,4,7,7-hexamet...	210	C15H30	149331-19-1	70
5	Tetradecane	198	C14H30	000629-59-4	62





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

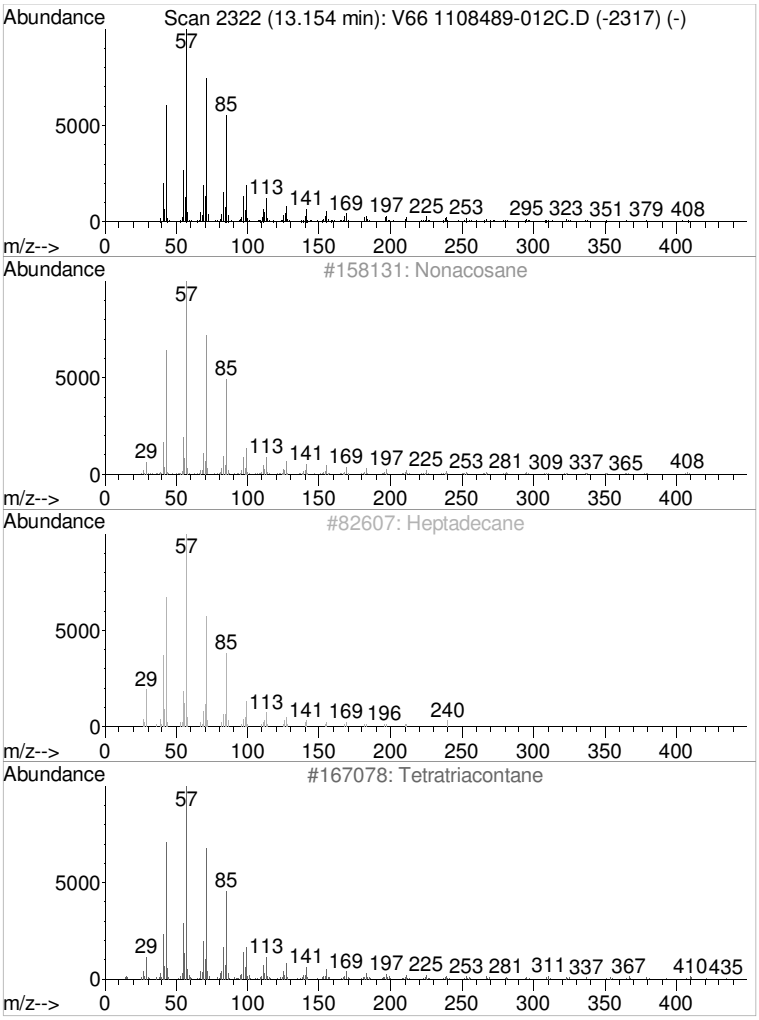
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

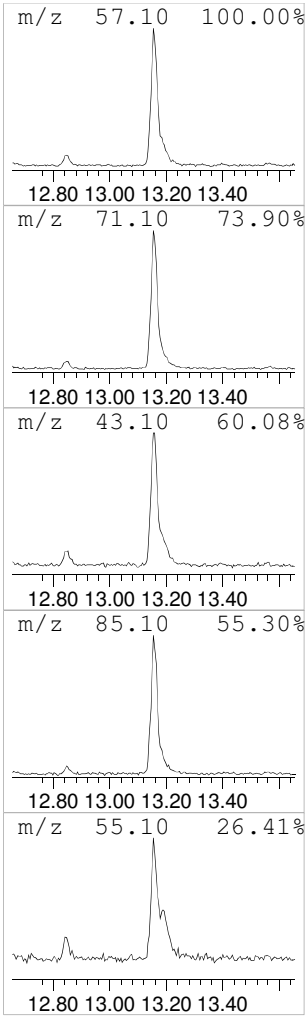
****

Peak Number 8 Nonacosane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.15	34.69 ug/l	478466	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	98
2	Heptadecane	240	C17H36	000629-78-7	95
3	Tetratriacontane	479	C34H70	014167-59-0	94
4	Heneicosane	296	C21H44	000629-94-7	91
5	Eicosane	282	C20H42	000112-95-8	91





Library Search Compound Report

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Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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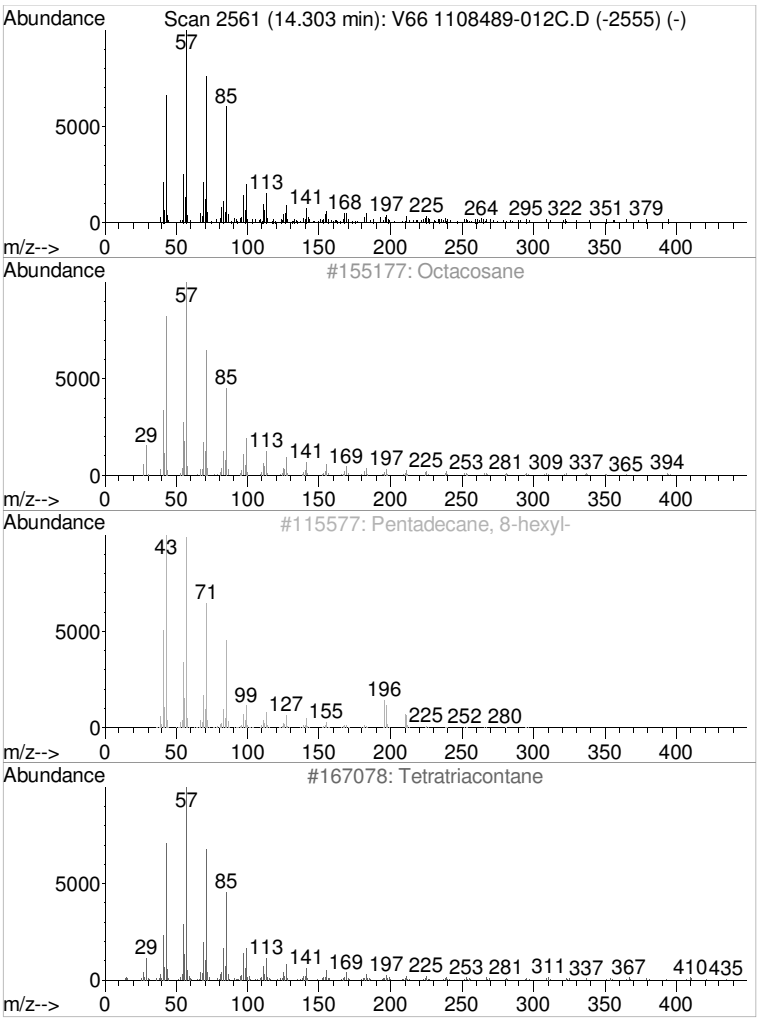
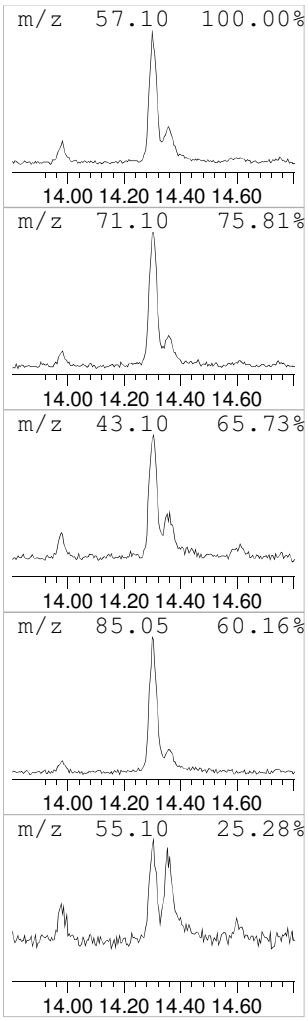
Peak Number 9 Octacosane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	14.33 ug/l	197664	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	94
2	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	91
3	Tetratriacontane	479	C34H70	014167-59-0	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Pentacosane	352	C25H52	000629-99-2	91





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

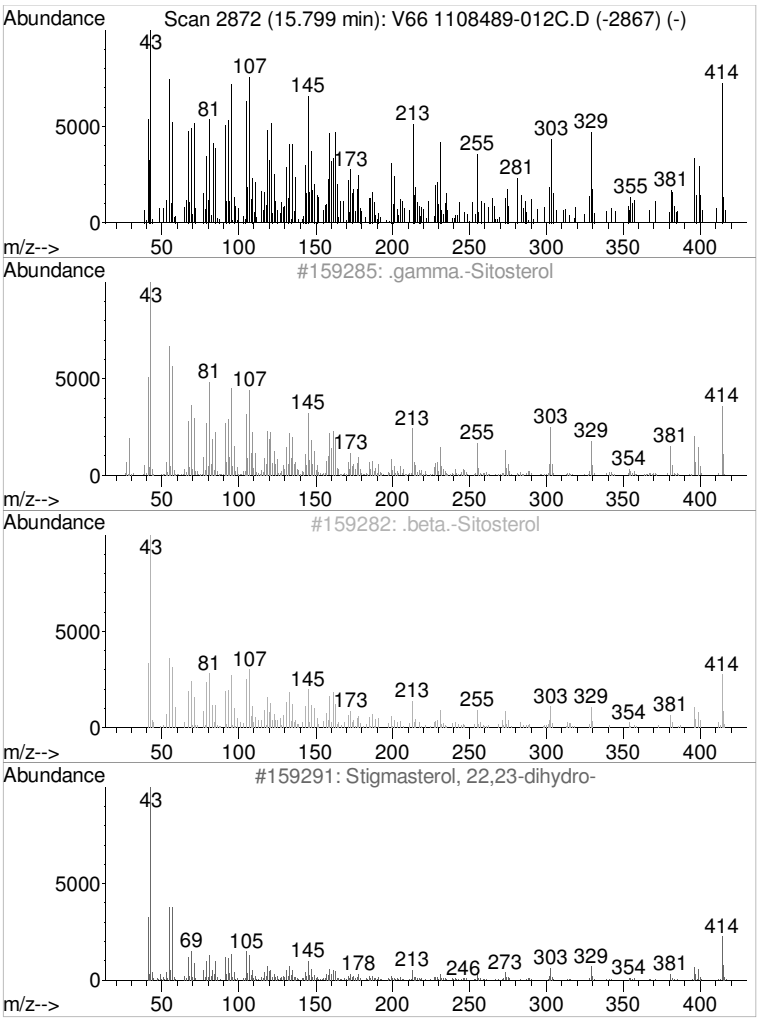
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

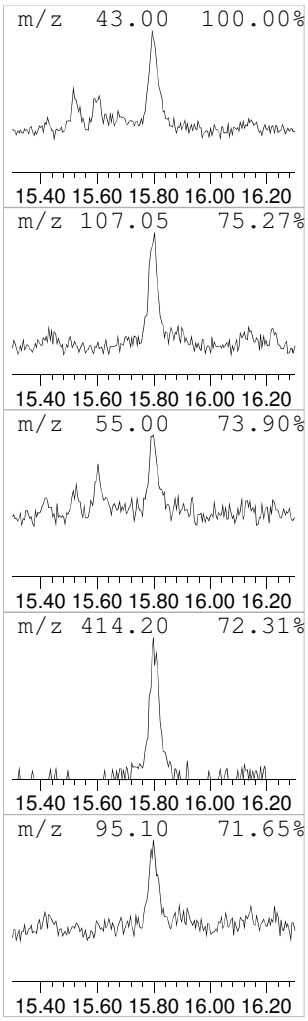
****

Peak Number 10 .gamma.-Sitosterol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.80	18.85 ug/l	260009	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	95
2	.beta.-Sitosterol	414	C29H50O	000083-46-5	95
3	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	93
4	Ergost-7-en-3-ol, (3.beta.)-	400	C28H48O	026047-31-4	59
5	Stigmast-7-en-3-ol, (3.beta.,5.a...	414	C29H50O	018525-35-4	46





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V66 1108489-012C.D
Acq On : 31 Aug 2011 6:34 pm
Operator : ALICIA HABERLE
Sample : 1108489-012C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.98	43.2	ug/l	887243	1	4.31	821870	40.0
Anthracene, 9-but...	9.94	9.0	ug/l	252488	4	8.65	1122700	40.0
Hexadecanoic acid...	10.09	11.4	ug/l	285037	5	11.37	996591	40.0
N-Phenyl-2-(pyrid...	10.48	8.6	ug/l	215175	5	11.37	996591	40.0
2,2,6,7-Tetrameth...	10.54	12.3	ug/l	306514	5	11.37	996591	40.0
Cyclopentadecane	11.24	9.2	ug/l	229483	5	11.37	996591	40.0
Octadecane	12.13	11.8	ug/l	293516	5	11.37	996591	40.0
Nonacosane	13.15	34.7	ug/l	478466	6	13.42	551781	40.0
Octacosane	14.30	14.3	ug/l	197664	6	13.42	551781	40.0
.gamma.-Sitosterol	15.80	18.8	ug/l	260009	6	13.42	551781	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.445	92	95	98	rBV	27970	18022	1.43%	0.110%
2	2.984	199	207	210	rBV	1336171	952422	75.67%	5.838%
3	3.070	220	225	229	rBV	39767	30519	2.42%	0.187%
4	3.119	229	235	238	rVV	41857	31665	2.52%	0.194%
5	3.157	238	243	247	rVV	56995	39712	3.15%	0.243%
6	3.224	251	257	272	rBV2	1096019	840927	66.81%	5.155%
7	3.306	272	274	280	rVB	23869	22000	1.75%	0.135%
8	3.724	358	361	364	rVB	38611	25603	2.03%	0.157%
9	3.878	386	393	395	rBV	15967	15524	1.23%	0.095%
10	3.970	408	412	424	rBV	983131	801441	63.67%	4.913%
11	4.311	479	483	500	rBV	1051857	813184	64.60%	4.985%
12	4.806	582	586	597	rVB	415675	371677	29.53%	2.278%
13	5.480	721	726	739	rBV	1338770	1244508	98.87%	7.629%
14	6.379	905	913	915	rBV2	18519	18840	1.50%	0.115%
15	6.523	938	943	950	rBV	1169194	935922	74.36%	5.737%
16	6.667	965	973	974	rBV2	48569	74302	5.90%	0.455%
17	6.696	974	979	991	rVV	935081	828751	65.84%	5.080%
18	6.788	991	998	1006	rVB2	66326	82904	6.59%	0.508%
19	7.182	1073	1080	1085	rBV	1530470	1258711	100.00%	7.716%
20	7.220	1085	1088	1104	rVB	88054	108612	8.63%	0.666%
21	7.889	1222	1227	1232	rBV8	8212	14742	1.17%	0.090%
22	7.961	1238	1242	1253	rVB	743550	613450	48.74%	3.760%
23	8.197	1287	1291	1294	rBV	46529	37838	3.01%	0.232%
24	8.514	1354	1357	1359	rBV	43199	32807	2.61%	0.201%
25	8.653	1382	1386	1390	rBV	1400237	1097092	87.16%	6.725%
26	8.730	1399	1402	1407	rVB3	14699	19838	1.58%	0.122%
27	9.139	1480	1487	1488	rBV3	23049	24032	1.91%	0.147%
28	9.173	1488	1494	1498	rVB4	79638	80392	6.39%	0.493%
29	9.211	1498	1502	1506	rBV	191905	172389	13.70%	1.057%
30	9.856	1633	1636	1639	rBV	40045	30767	2.44%	0.189%
31	9.894	1641	1644	1646	rBV2	26852	26259	2.09%	0.161%
32	9.961	1655	1658	1661	rVB4	24637	20398	1.62%	0.125%
33	9.990	1661	1664	1674	rBV2	96509	112221	8.92%	0.688%
34	10.091	1678	1685	1690	rBV2	247402	233443	18.55%	1.431%
35	10.240	1711	1716	1723	rVB	945848	792923	62.99%	4.861%
36	10.476	1761	1765	1768	rBV2	62340	67727	5.38%	0.415%
37	10.712	1810	1814	1820	rBV7	26796	40335	3.20%	0.247%
38	10.803	1829	1833	1838	rBV	178347	158762	12.61%	0.973%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	10.986	1868	1871	1874	rBV5	18105	19797	1.57%	0.121%
40	11.236	1918	1923	1935	rBV2	267684	418515	33.25%	2.565%
41	11.370	1945	1951	1955	rBV	870559	896845	71.25%	5.498%
42	11.524	1978	1983	1989	rBV4	55044	81746	6.49%	0.501%
43	11.846	2046	2050	2053	rBV6	23448	29690	2.36%	0.182%
44	12.135	2104	2110	2124	rBV	375879	670631	53.28%	4.111%
45	12.472	2175	2180	2188	rBV5	43427	73185	5.81%	0.449%
46	12.726	2228	2233	2240	rVB2	42312	68825	5.47%	0.422%
47	12.842	2254	2257	2263	rVB5	29284	35918	2.85%	0.220%
48	13.154	2317	2322	2339	rVB2	243366	591952	47.03%	3.629%
49	13.424	2372	2378	2385	rVB	362444	525590	41.76%	3.222%
50	13.977	2489	2493	2503	rVB4	70581	124200	9.87%	0.761%
51	14.304	2555	2561	2566	rBV2	80455	141461	11.24%	0.867%
52	15.203	2744	2748	2755	rVB3	56488	86642	6.88%	0.531%
53	15.794	2865	2871	2881	rVB5	208796	457892	36.38%	2.807%

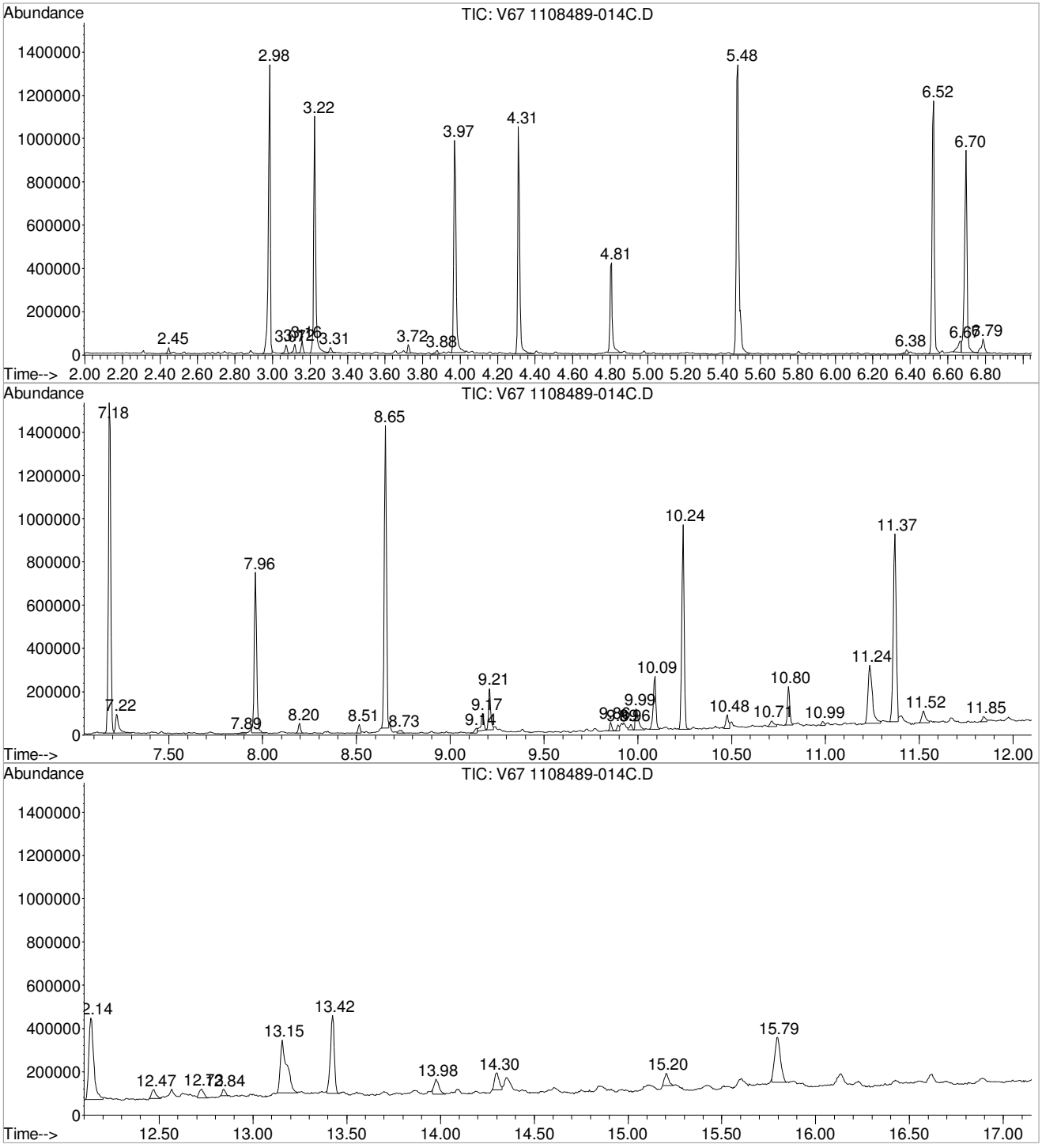
Sum of corrected areas: 16313550

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

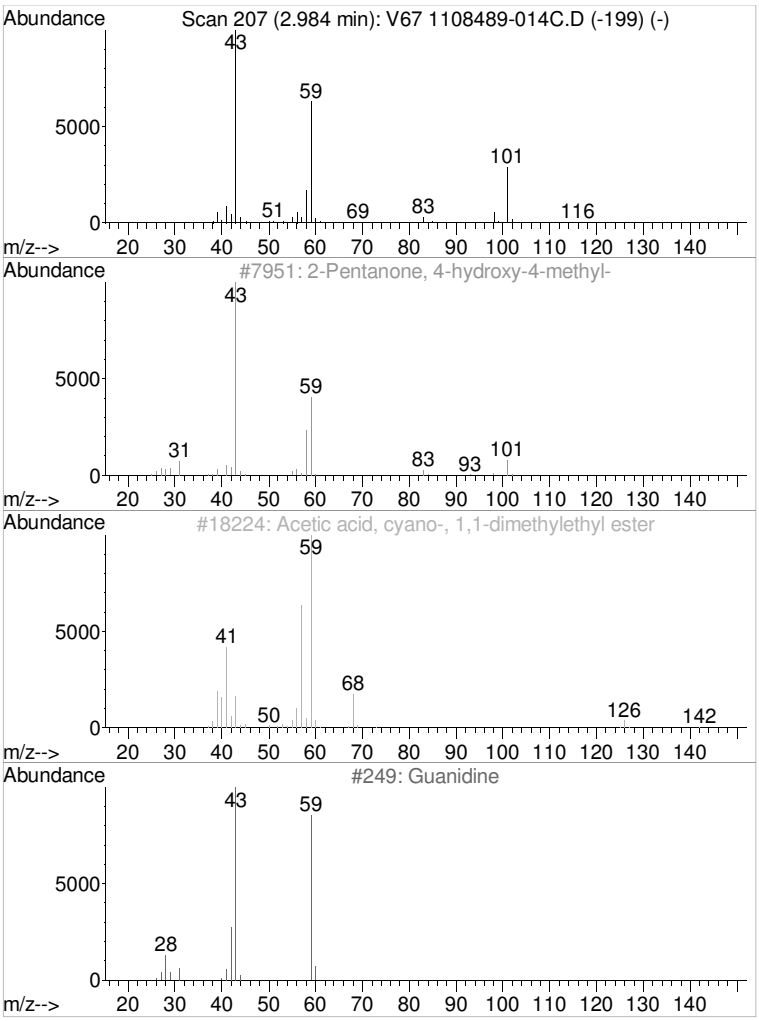
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

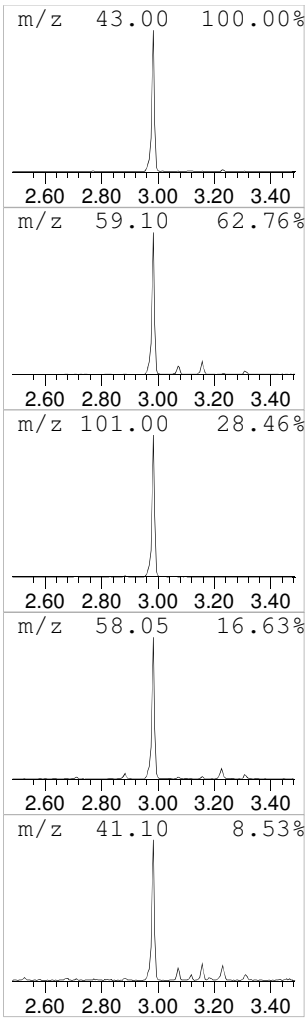
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.98	46.85 ug/l	952422	ISTD 1,4-Dichlorobenzene-d4	4.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Guanidine	59	CH5N3	000113-00-8	9
4	5-Hexen-2-one	98	C6H10O	000109-49-9	9
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

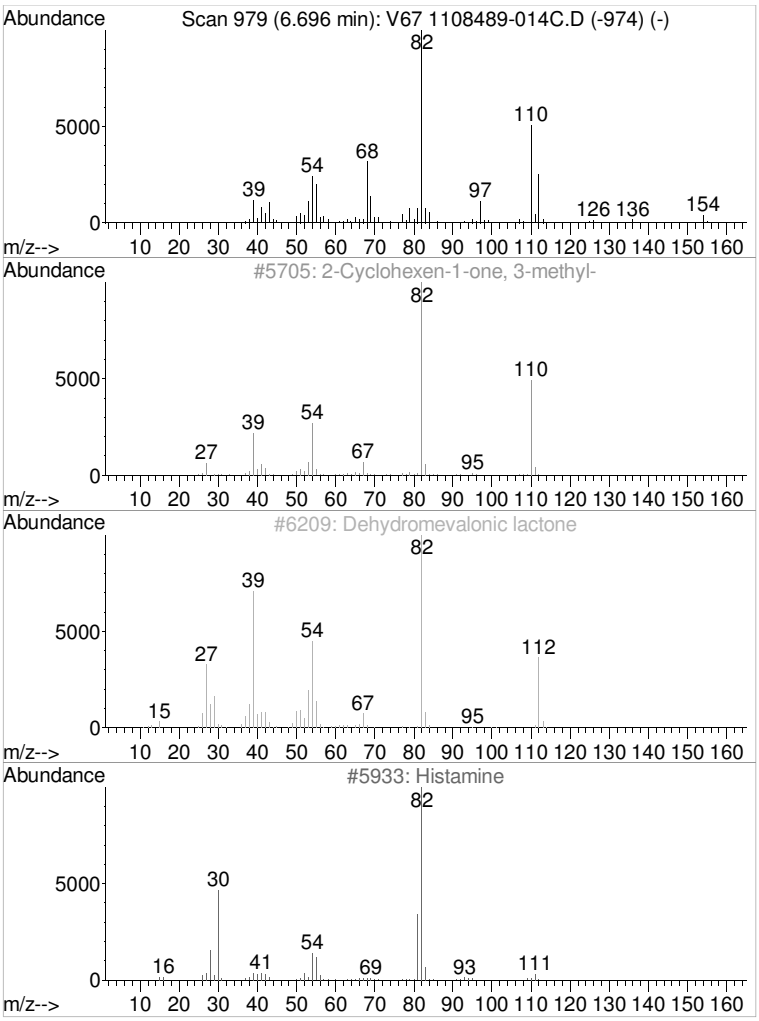
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

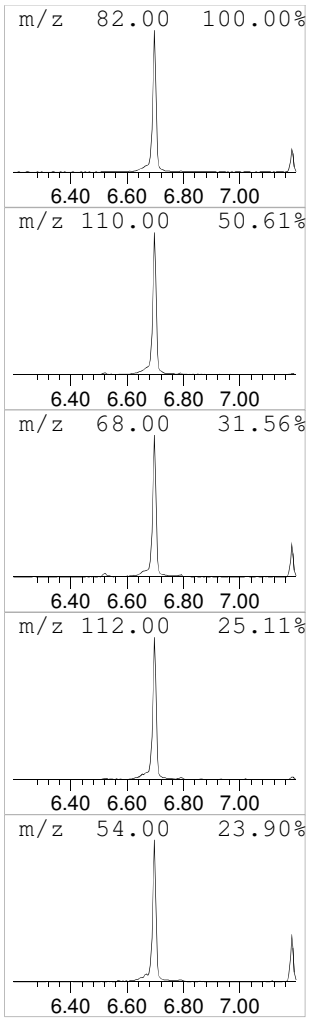
****

Peak Number 2 2-Cyclohexen-1-one, 3-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.70	26.34 ug/l	828751	ISTD Acenaphthene-d10	7.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-one, 3-methyl-	110	C7H10O	001193-18-6	52
2	Dehydromevalonic lactone	112	C6H8O2	002381-87-5	46
3	Histamine	111	C5H9N3	000051-45-6	35
4	2-Cyclohexen-1-one, 3,5-dimethyl-	124	C8H12O	001123-09-7	35
5	Cyclohexanone, 4-methylidene-	110	C7H10O	029648-66-6	35





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

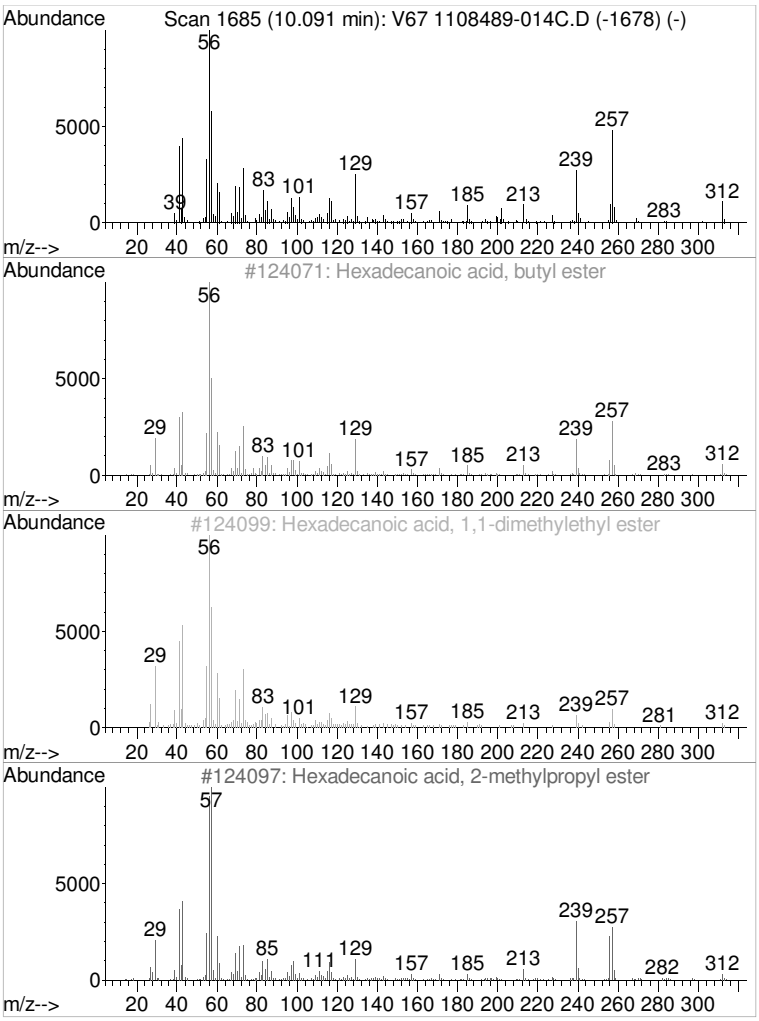
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

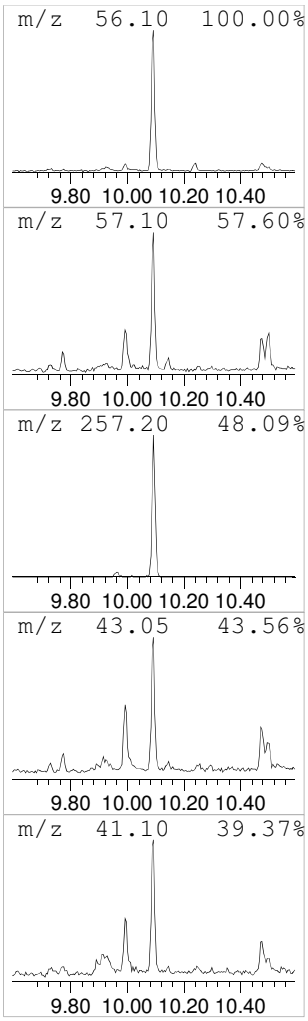
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.09	10.41 ug/l	233443	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	92
3	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	58
4	Nipecotic acid	129	C6H11NO2	000498-95-3	38
5	Pentanal, 3-methyl-	100	C6H12O	015877-57-3	22





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

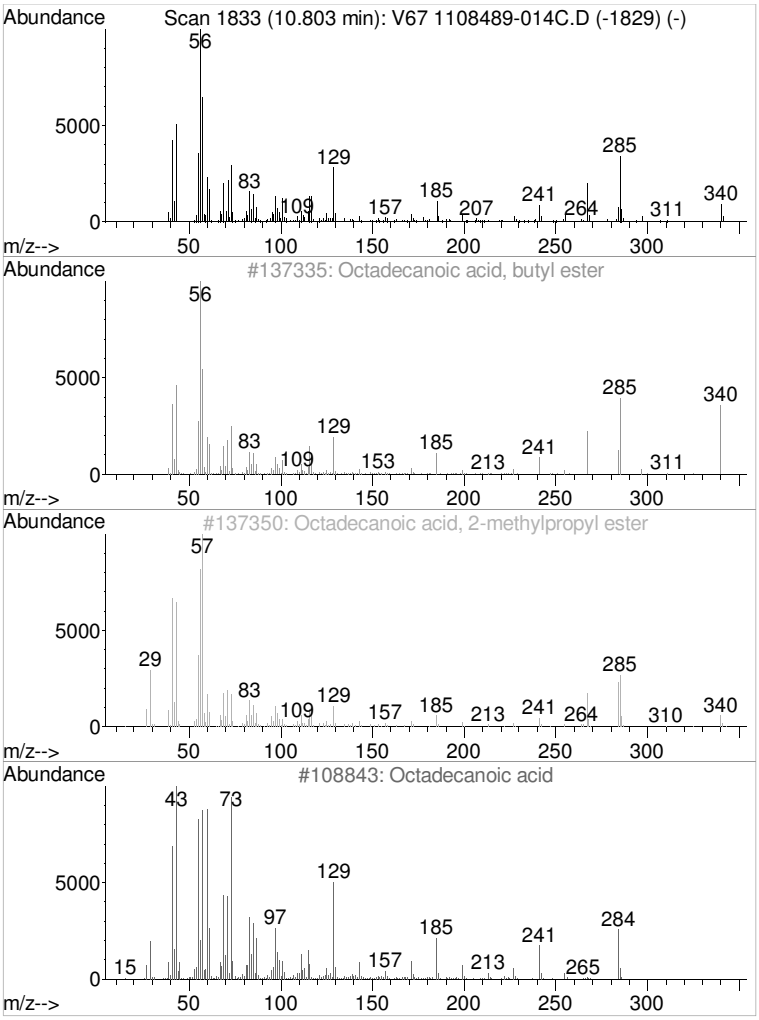
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

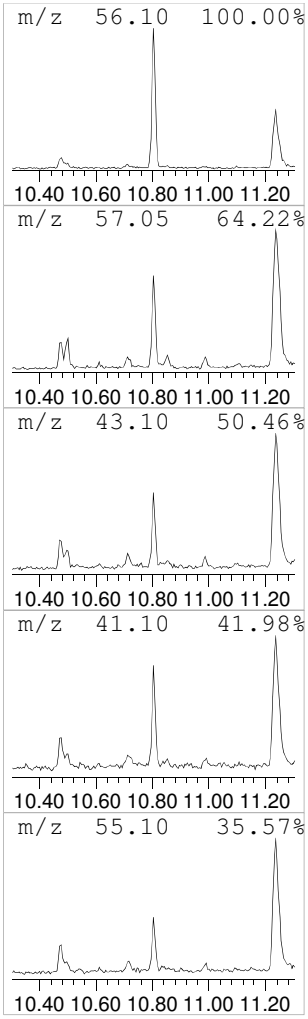
****

Peak Number 4 Octadecanoic acid, butyl ester Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.80	7.08 ug/l	158762	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	98
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	91
3	Octadecanoic acid	284	C18H36O2	000057-11-4	74
4	Docosanoic acid	340	C22H44O2	000112-85-6	72
5	n-Butyl myristate	284	C18H36O2	000110-36-1	52





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

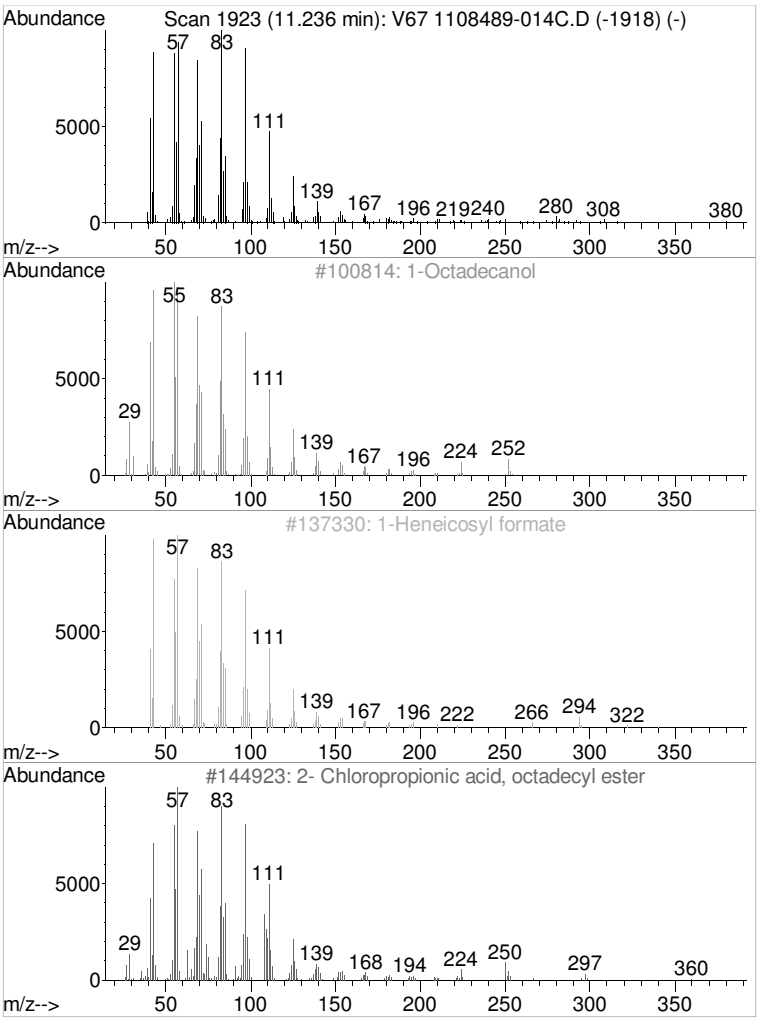
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

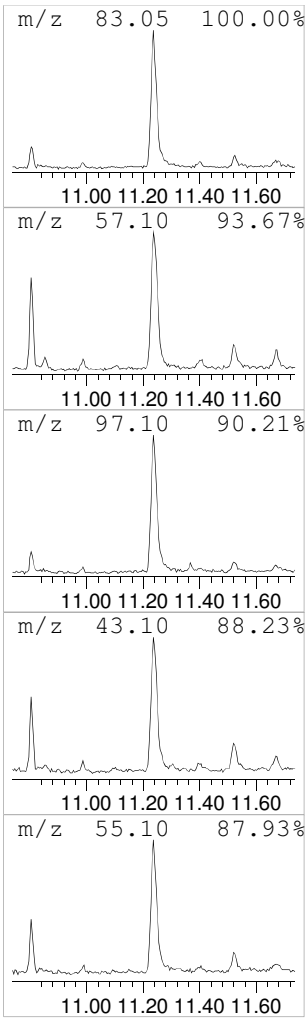
****

Peak Number 5 1-Octadecanol Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.24	18.67 ug/l	418515	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octadecanol	270	C18H38O	000112-92-5	94
2	1-Heneicosyl formate	340	C22H44O2	077899-03-7	93
3	2- Chloropropionic acid, octadec...	360	C21H41ClO2	088104-31-8	93
4	5-Eicosene, (E)-	280	C20H40	074685-30-6	91
5	3-Eicosene, (E)-	280	C20H40	074685-33-9	91





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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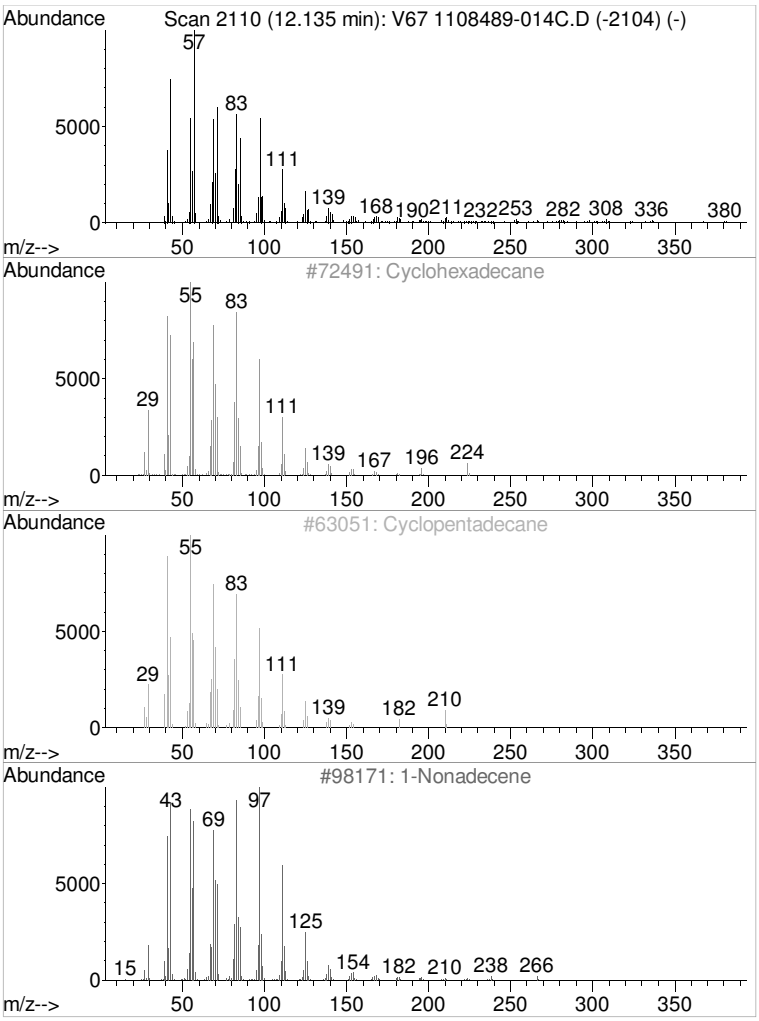
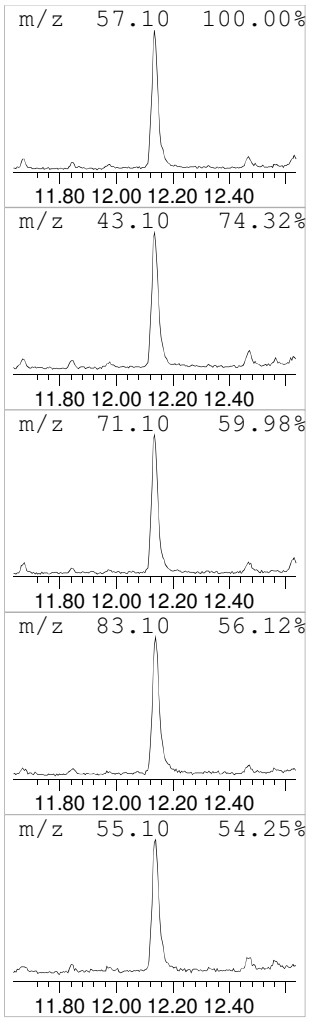
Peak Number 6 Cyclohexadecane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.14	29.91 ug/l	670631	ISTD-Chrysene-d12	11.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane	224	C16H32	000295-65-8	98
2	Cyclopentadecane	210	C15H30	000295-48-7	97
3	1-Nonadecene	266	C19H38	018435-45-5	96
4	1-Docosene	308	C22H44	001599-67-3	95
5	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	87





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

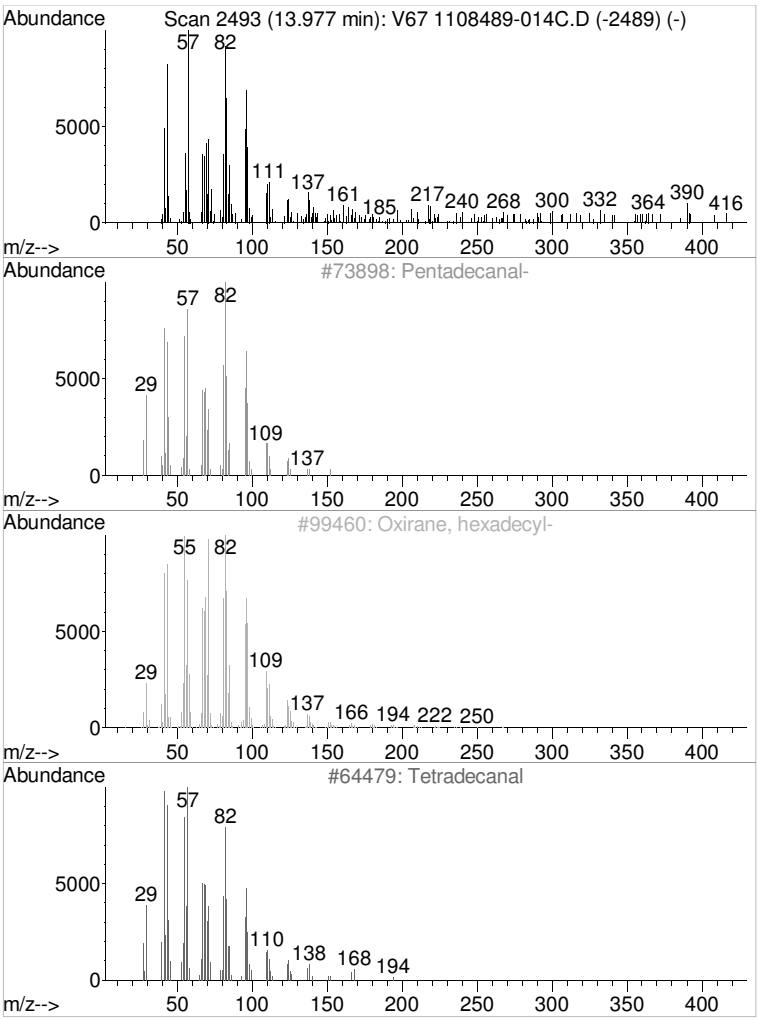
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

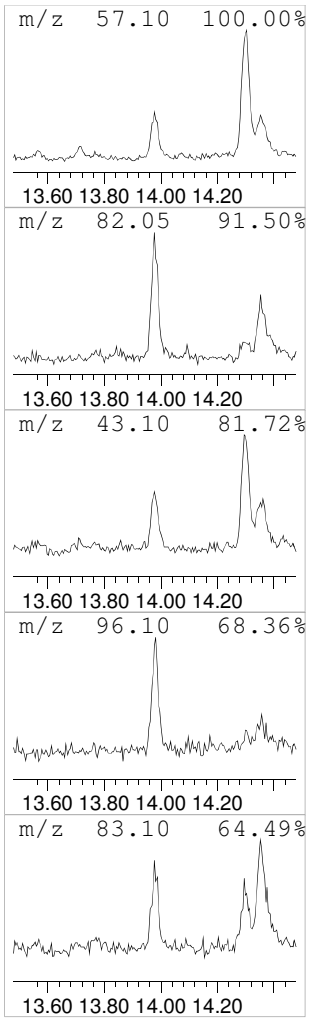
****

Peak Number 7 Pentadecanal- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.98	9.45 ug/l	124200	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecanal-	226	C15H30O	002765-11-9	74
2	Oxirane, hexadecyl-	268	C18H36O	007390-81-0	72
3	Tetradecanal	212	C14H28O	000124-25-4	64
4	16-Heptadecenal	252	C17H32O	1000144-57-9	64
5	15-Octadecenal	266	C18H34O	056554-93-9	59





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

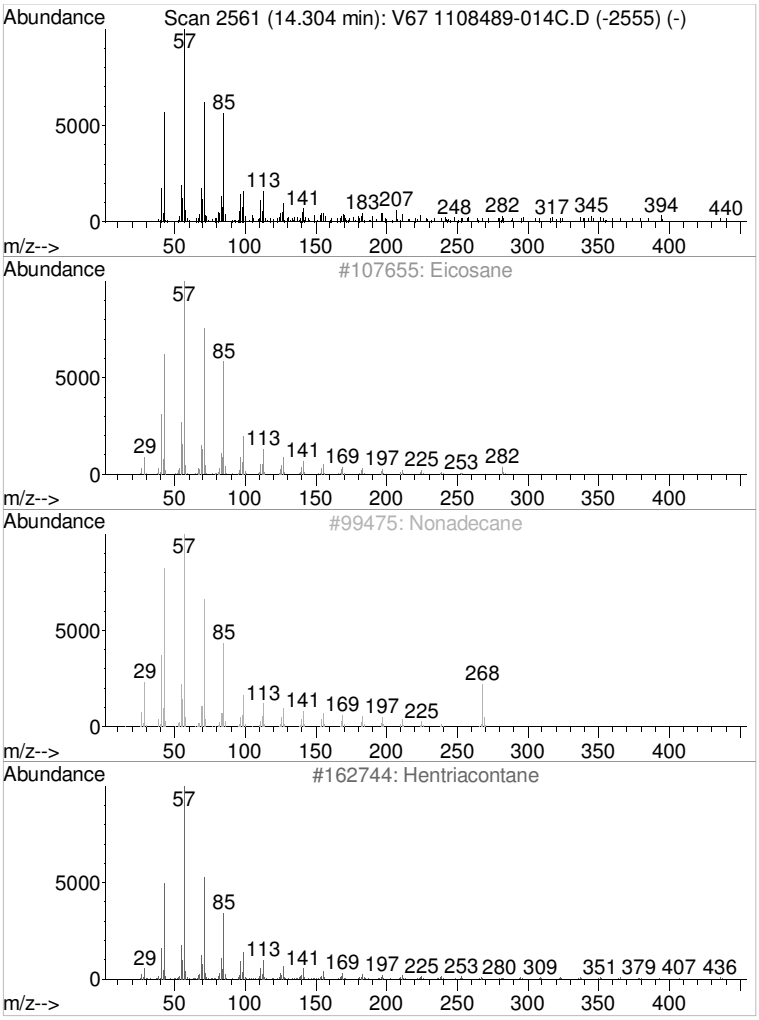
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

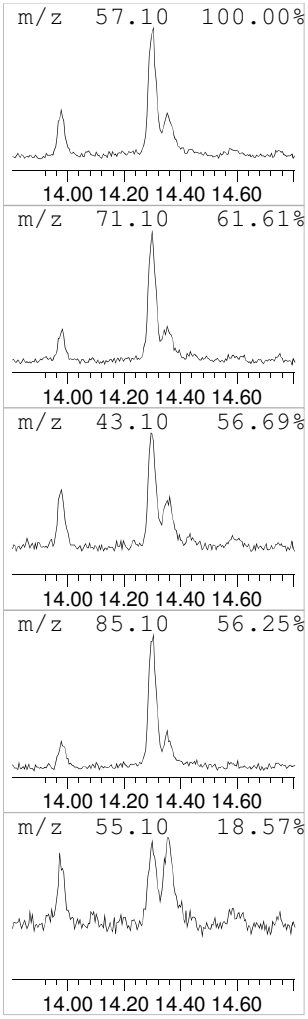
****

Peak Number 8 Eicosane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	10.77 ug/l	141461	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	98
2	Nonadecane	268	C19H40	000629-92-5	91
3	Hentriacontane	437	C31H64	000630-04-6	87
4	Tricosane	324	C23H48	000638-67-5	86
5	Heneicosane	296	C21H44	000629-94-7	83





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

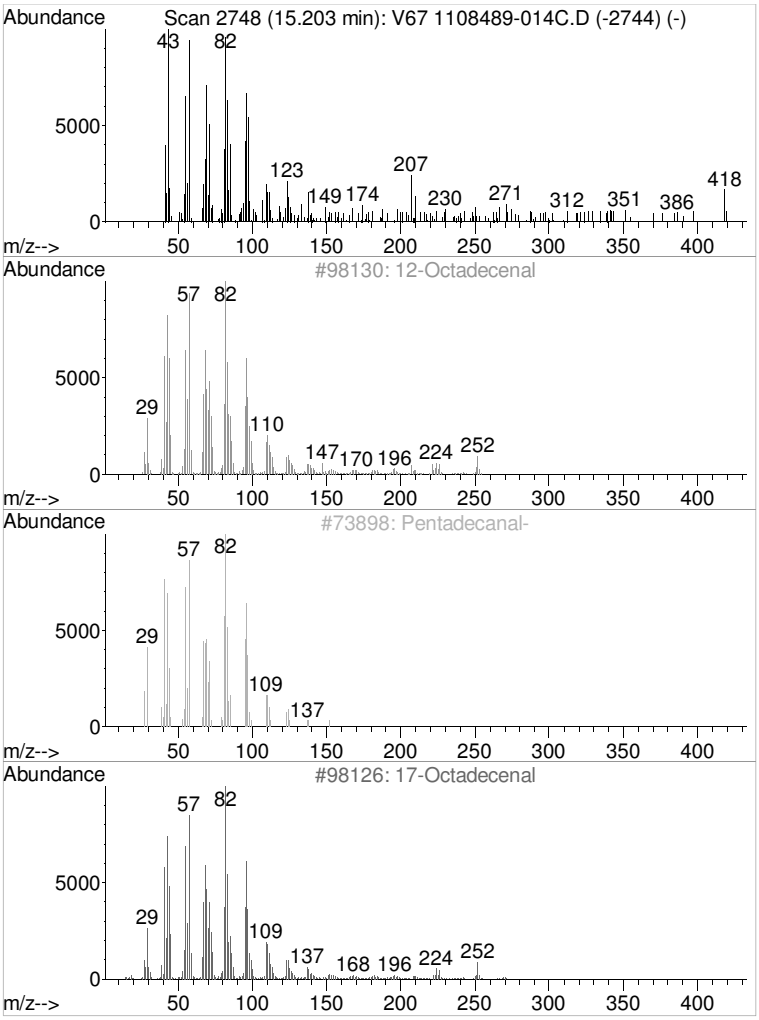
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

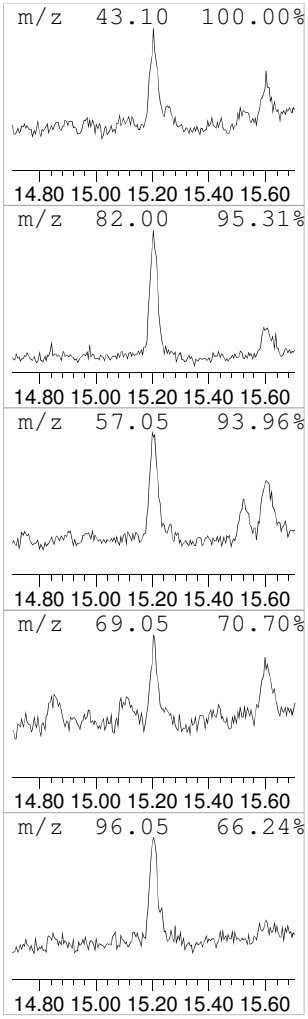
****

Peak Number 9 12-Octadecenal Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.20	6.59 ug/l	86642	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	12-Octadecenal	266	C18H34O	056554-91-7	64
2	Pentadecanal-	226	C15H30O	002765-11-9	52
3	17-Octadecenal	266	C18H34O	056554-86-0	50
4	Octadecanal	268	C18H36O	000638-66-4	50
5	1,16-Hexadecanediol	258	C16H34O2	007735-42-4	47





Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

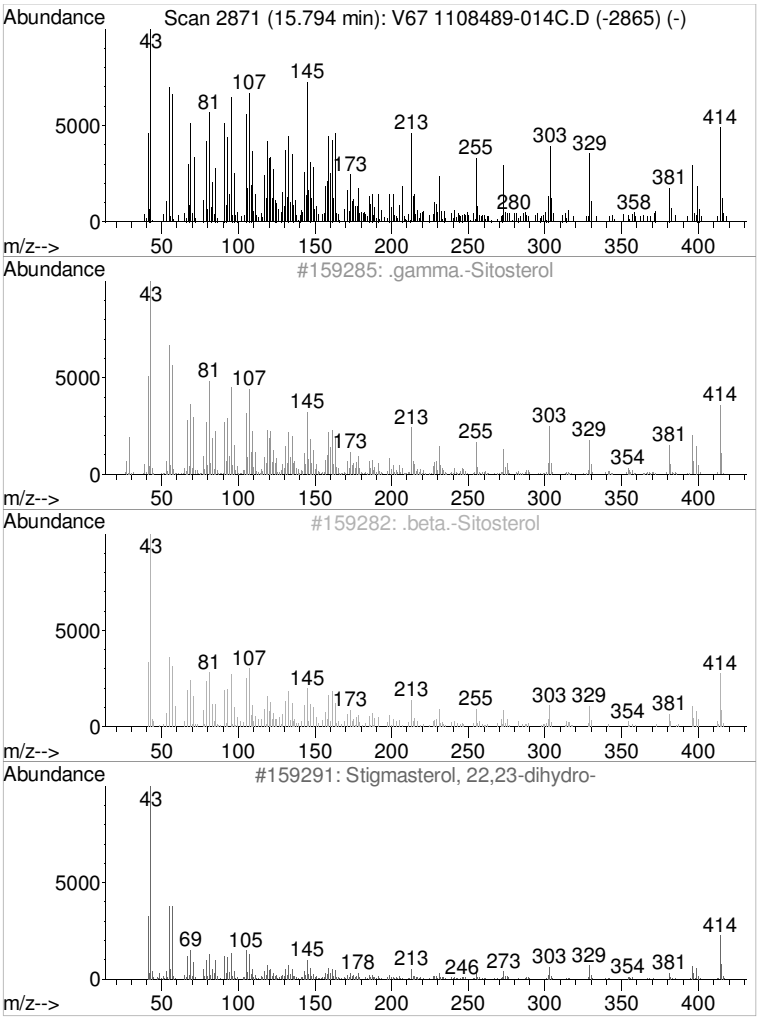
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

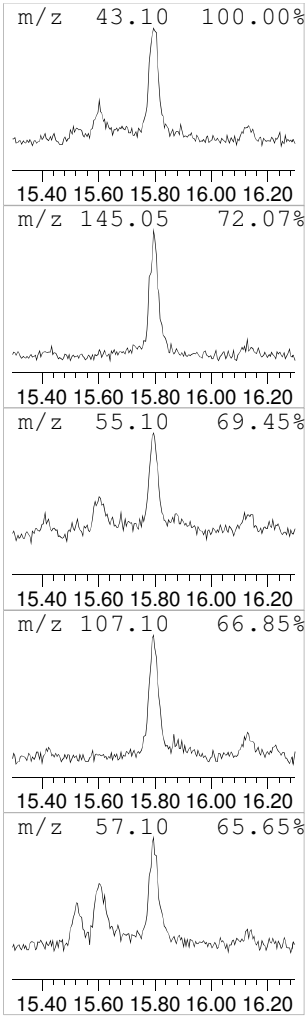
****

Peak Number 10 .gamma.-Sitosterol Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.79	34.85 ug/l	457892	ISTD-Perylene-d12	13.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	95
2	.beta.-Sitosterol	414	C29H50O	000083-46-5	93
3	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	89
4	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	25
5	Pregn-5-en-3-ol, 21-bromo-20-met...	394	C22H35BrO	055103-80-5	11





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\AUG11-B\31AUG11\
Data File : V67 1108489-014C.D
Acq On : 31 Aug 2011 7:01 pm
Operator : ALICIA HABERLE
Sample : 1108489-014C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.98	46.8	ug/l	952422	1	4.31	813184	40.0
2-Cyclohexen-1-on...	6.70	26.3	ug/l	828751	3	7.18	1258710	40.0
Hexadecanoic acid...	10.09	10.4	ug/l	233443	5	11.37	896845	40.0
Octadecanoic acid...	10.80	7.1	ug/l	158762	5	11.37	896845	40.0
1-Octadecanol	11.24	18.7	ug/l	418515	5	11.37	896845	40.0
Cyclohexadecane	12.14	29.9	ug/l	670631	5	11.37	896845	40.0
Pentadecanal-	13.98	9.5	ug/l	124200	6	13.42	525590	40.0
Eicosane	14.30	10.8	ug/l	141461	6	13.42	525590	40.0
12-Octadecenal	15.20	6.6	ug/l	86642	6	13.42	525590	40.0
.gamma.-Sitosterol	15.79	34.8	ug/l	457892	6	13.42	525590	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.412	84	88	91	rVB	46768	31405	1.21%	0.112%
2	2.532	107	113	128	rBV2	78834	151344	5.81%	0.541%
3	2.705	147	149	154	rVB2	40807	29238	1.12%	0.104%
4	2.950	192	200	203	rBV	2086164	1558354	59.83%	5.568%
5	3.037	213	218	221	rBV	60214	39923	1.53%	0.143%
6	3.080	221	227	231	rBV	52762	41513	1.59%	0.148%
7	3.118	231	235	239	rBV	68875	55814	2.14%	0.199%
8	3.191	244	250	264	rVV2	1206452	975521	37.45%	3.486%
9	3.272	264	267	273	rVB2	31362	28898	1.11%	0.103%
10	3.691	350	354	356	rVB	36578	26618	1.02%	0.095%
11	3.936	401	405	420	rBV	1237448	939352	36.06%	3.356%
12	4.172	451	454	464	rBV	103445	79938	3.07%	0.286%
13	4.273	471	475	481	rBV	976860	766214	29.42%	2.738%
14	4.768	574	578	583	rBV	526314	407918	15.66%	1.458%
15	5.441	714	718	721	rBV	1315393	1076660	41.33%	3.847%
16	6.307	888	898	908	rBV	359411	733232	28.15%	2.620%
17	6.485	931	935	942	rBV	1327837	1043968	40.08%	3.730%
18	6.658	966	971	983	rVB	628940	549236	21.09%	1.962%
19	6.749	983	990	995	rBV2	18537	27854	1.07%	0.100%
20	7.091	1052	1061	1068	rBV4	36951	64782	2.49%	0.231%
21	7.143	1068	1072	1077	rVV	1685867	1233858	47.37%	4.409%
22	7.812	1204	1211	1218	rBV2	986643	1178501	45.24%	4.211%
23	7.918	1225	1233	1244	rBV	925954	776695	29.82%	2.775%
24	8.158	1278	1283	1286	rVB2	65984	57861	2.22%	0.207%
25	8.298	1306	1312	1318	rBV4	22087	38254	1.47%	0.137%
26	8.610	1372	1377	1381	rBV	1458866	1175135	45.12%	4.199%
27	8.846	1422	1426	1441	rBV2	179336	248093	9.52%	0.886%
28	9.101	1475	1479	1483	rBV3	27665	29000	1.11%	0.104%
29	9.173	1489	1494	1497	rBV	298346	283051	10.87%	1.011%
30	9.197	1497	1499	1506	rVB	59169	66857	2.57%	0.239%
31	9.485	1556	1559	1563	rBV	34885	33529	1.29%	0.120%
32	9.817	1625	1628	1634	rBV2	76479	77478	2.97%	0.277%
33	9.928	1646	1651	1655	rBV	1773547	1650224	63.36%	5.896%
34	10.048	1671	1676	1686	rBV2	2698949	2604720	100.00%	9.307%
35	10.197	1702	1707	1715	rVB	1197170	1003240	38.52%	3.585%
36	10.635	1795	1798	1802	rBV	38692	34694	1.33%	0.124%
37	10.707	1808	1813	1820	rVB	1499062	1360384	52.23%	4.861%
38	10.760	1820	1824	1833	rVB	1514999	1352725	51.93%	4.833%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	10.885	1846	1850	1854	rVB2	34260	34702	1.33%	0.124%
40	10.962	1859	1866	1870	rBV3	32184	35540	1.36%	0.127%
41	11.154	1900	1906	1910	rBV3	76194	115667	4.44%	0.413%
42	11.197	1910	1915	1918	rVV2	86297	149059	5.72%	0.533%
43	11.231	1918	1922	1933	rVB	938493	1037212	39.82%	3.706%
44	11.313	1933	1939	1945	rBV	992158	1039402	39.90%	3.714%
45	12.072	2088	2097	2110	rVB2	65434	177609	6.82%	0.635%
46	12.399	2159	2165	2172	rBV10	12544	27012	1.04%	0.097%
47	12.496	2175	2185	2195	rBV	224091	562885	21.61%	2.011%
48	12.654	2212	2218	2224	rVB2	18240	36792	1.41%	0.131%
49	12.871	2259	2263	2267	rBV6	17098	26756	1.03%	0.096%
50	13.082	2299	2307	2314	rBV2	92555	198434	7.62%	0.709%
51	13.313	2347	2355	2357	rBV	567348	834020	32.02%	2.980%
52	13.337	2357	2360	2372	rVB	593671	871360	33.45%	3.113%
53	14.222	2536	2544	2549	rBV3	52160	114774	4.41%	0.410%
54	14.289	2551	2558	2565	rVB3	18952	56745	2.18%	0.203%
55	14.520	2598	2606	2618	rBV7	122915	353503	13.57%	1.263%
56	15.703	2843	2852	2866	rBV6	137416	430488	16.53%	1.538%
57	16.328	2977	2982	2990	rVB6	24344	52636	2.02%	0.188%

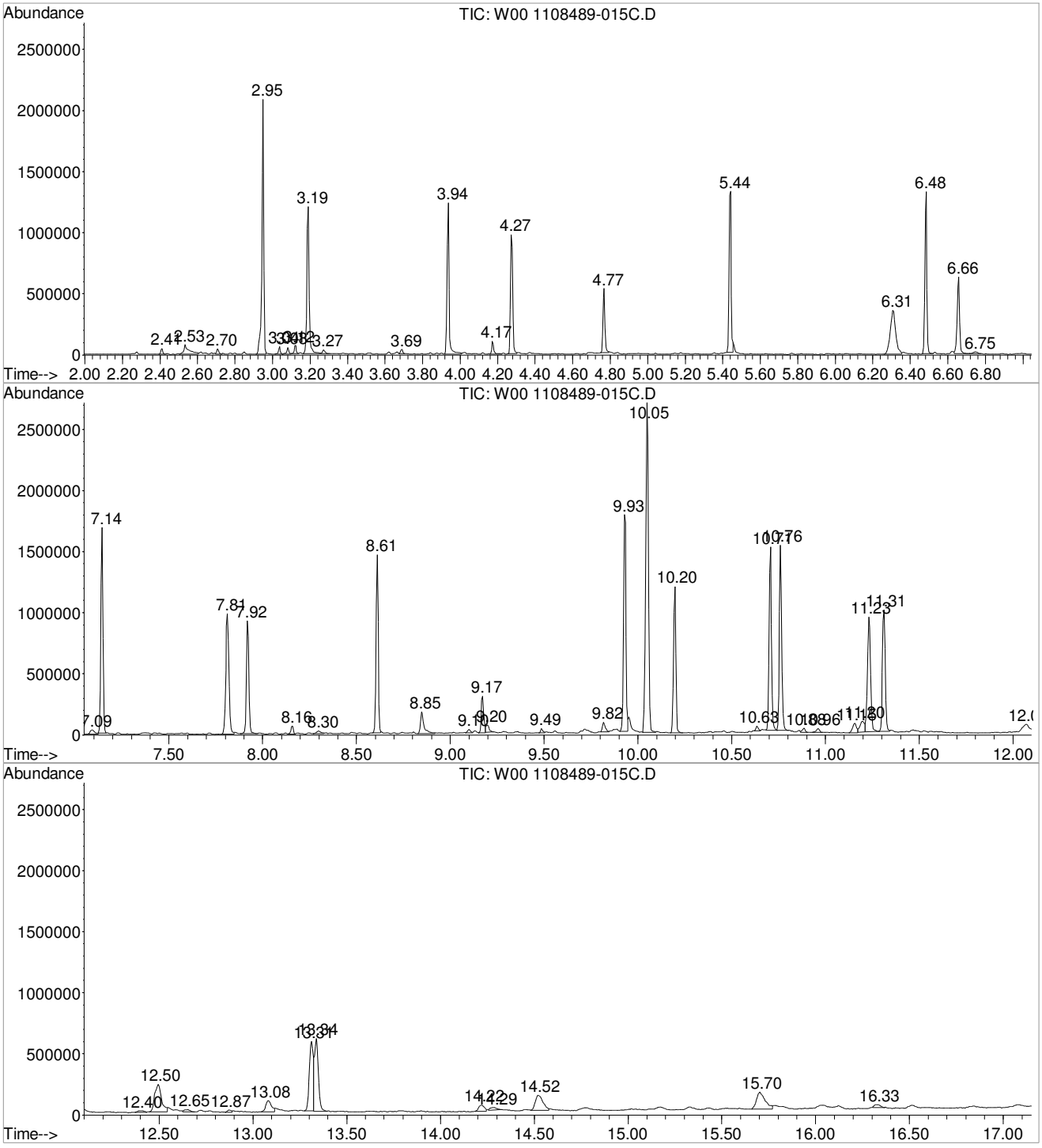
Sum of corrected areas: 27986677

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

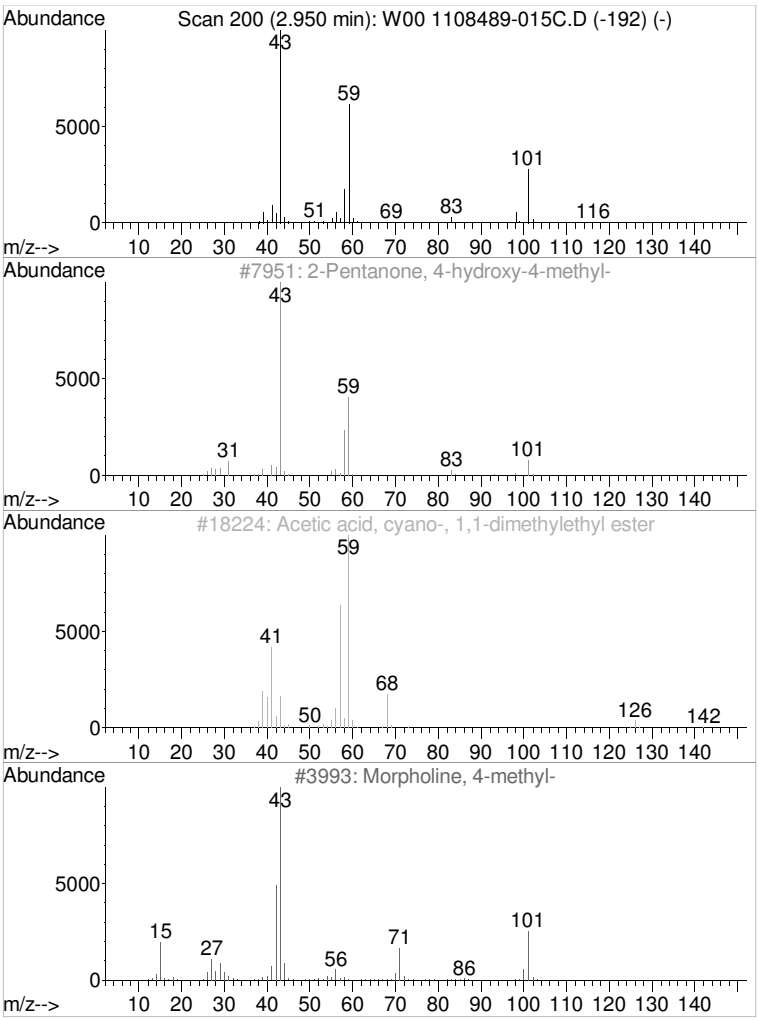
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

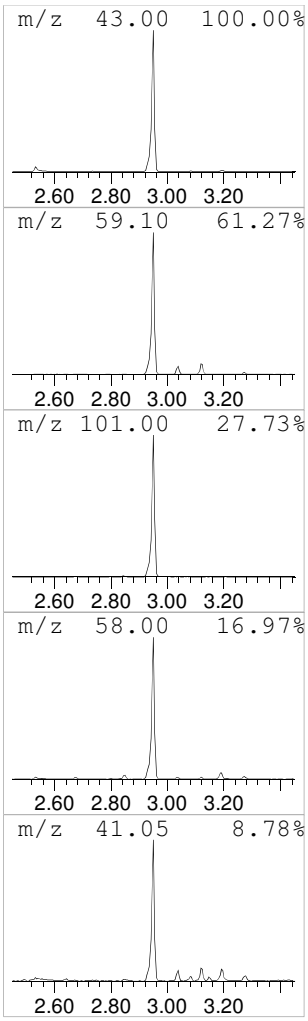
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	81.35 ug/l	1558350	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9
5	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9





Library Search Compound Report

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Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

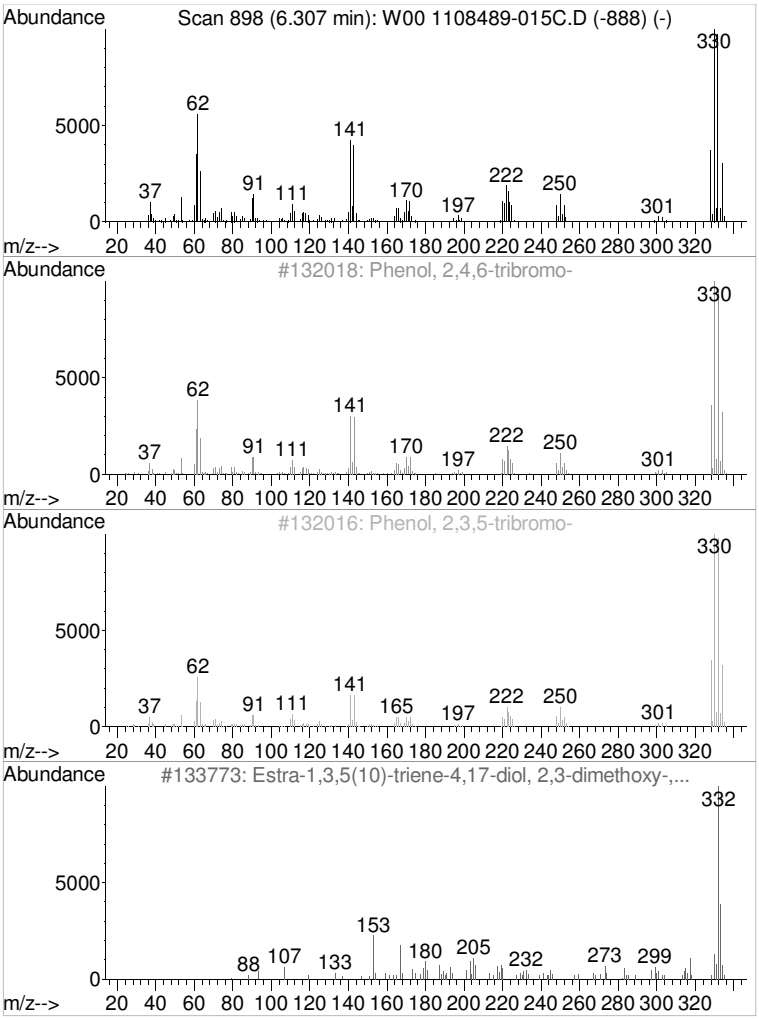
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

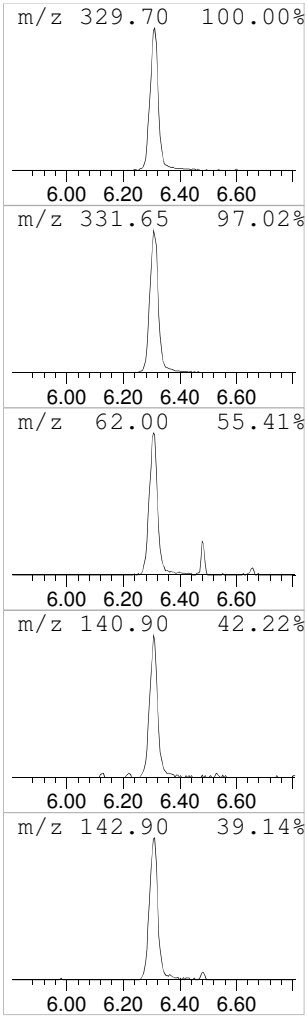
****

Peak Number 2 Phenol, 2,4,6-tribromo- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.31	23.77 ug/l	733232	ISTD Acenaphthene-d10	7.14

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 2,4,6-tribromo-	328	C6H3Br3O	000118-79-6	99
2	Phenol, 2,3,5-tribromo-	328	C6H3Br3O	057383-81-0	99
3	Estra-1,3,5(10)-triene-4,17-diol...	332	C20H28O4	065968-98-1	10
4	Naphtho[2,1-b]thiophene-4-carbox...	330	C14H6ClF3O2S	052300-59-1	10
5	7-Bromo-2,3-dihydro-5-phenyl-1H-...	330	C15H11BrN2S	034099-70-2	10





Library Search Compound Report

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Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

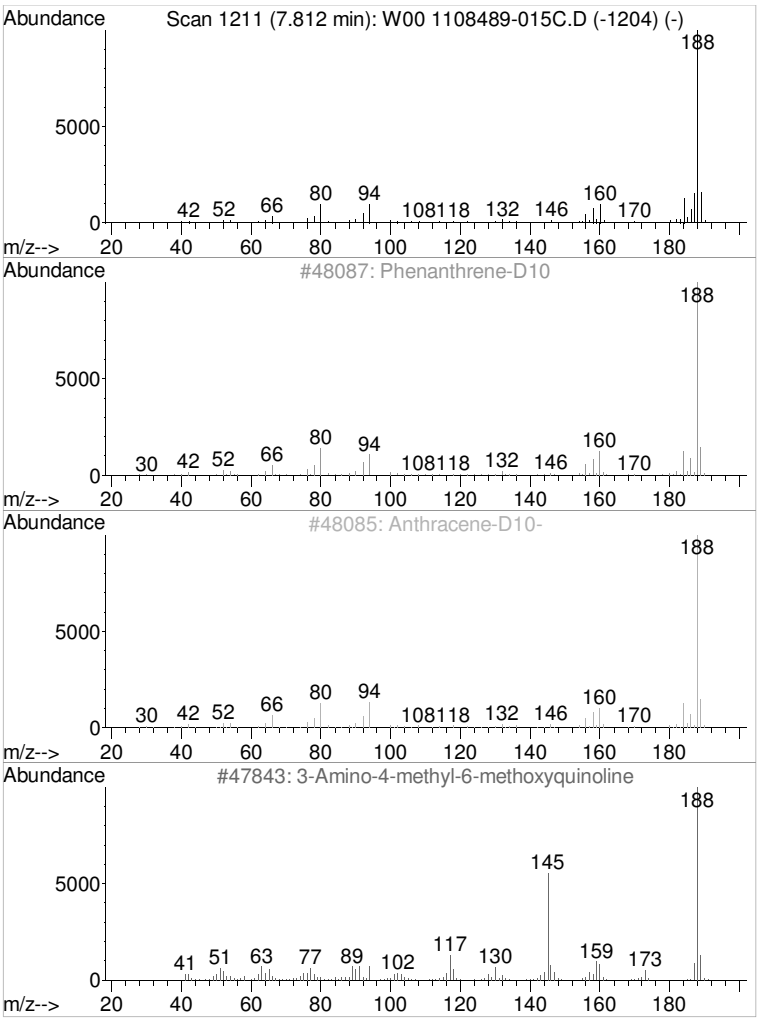
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

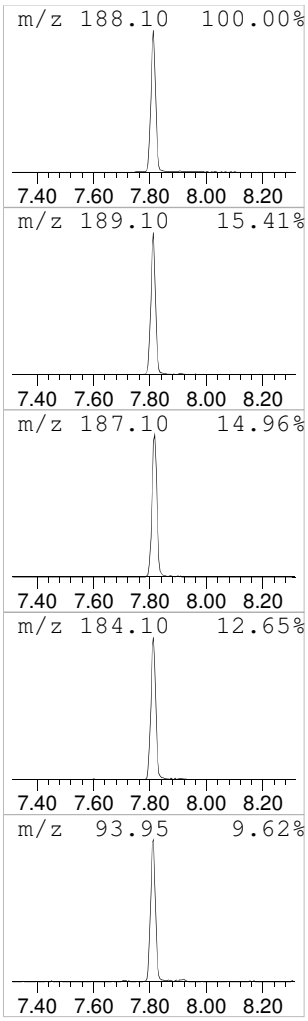
****

Peak Number 3 Phenanthrene-D10 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.81	38.21 ug/l	1178500	ISTD Acenaphthene-d10	7.14

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene-D10	188	C14D10	001517-22-2	97
2	Anthracene-D10-	188	C14D10	001719-06-8	95
3	3-Amino-4-methyl-6-methoxyquinoline	188	C11H12N2O	070945-24-3	53
4	Naphthalene, 2,7-dimethoxy-	188	C12H12O2	003469-26-9	53
5	4-Fluoro-6-methyl-2-phenylpyrimi...	188	C11H9FN2	051421-92-2	52





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Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

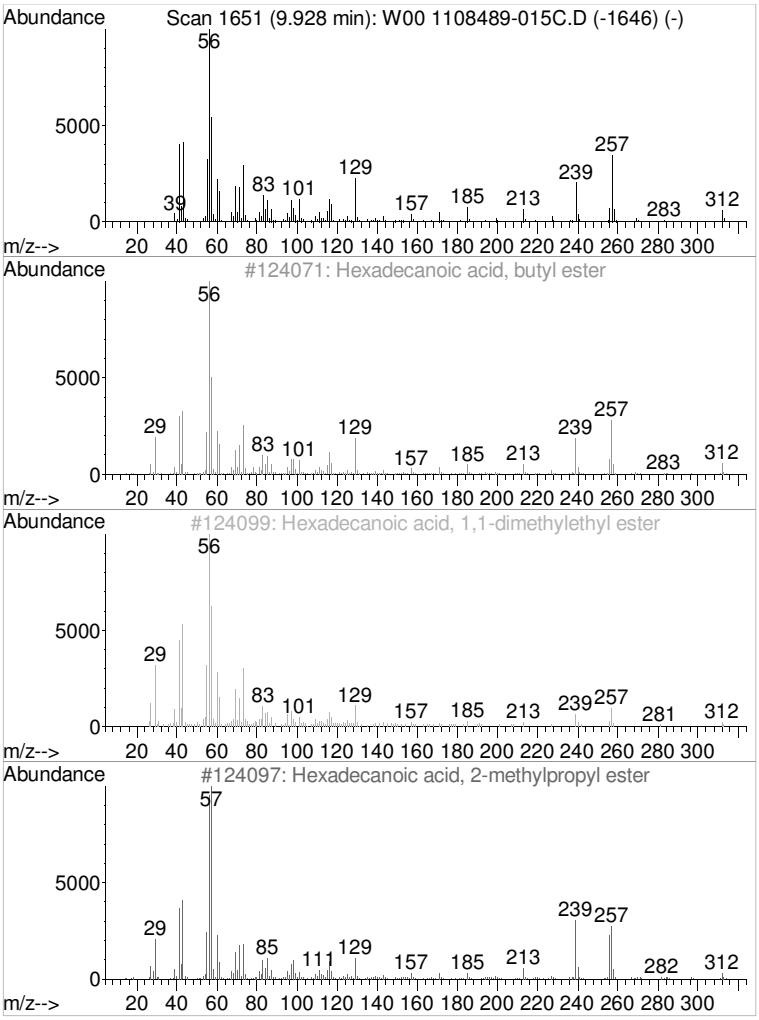
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

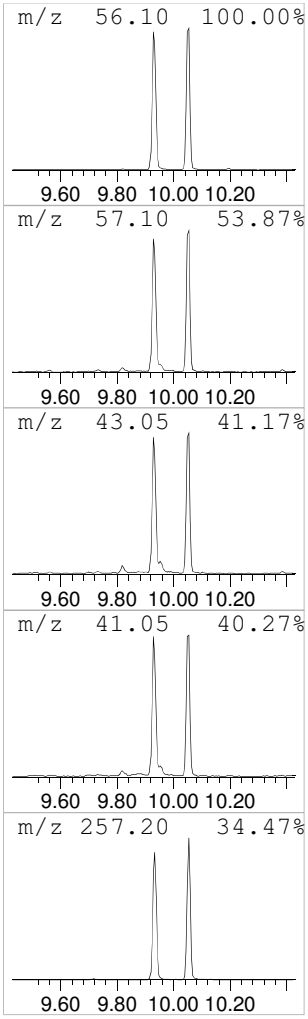
****

Peak Number 4 Hexadecanoic acid, butyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.93	56.17 ug/l	1650220	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	89
3	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	76
4	Nipecotic acid	129	C6H11NO2	000498-95-3	43
5	Cyclohexanamine	99	C6H13N	000108-91-8	30





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Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

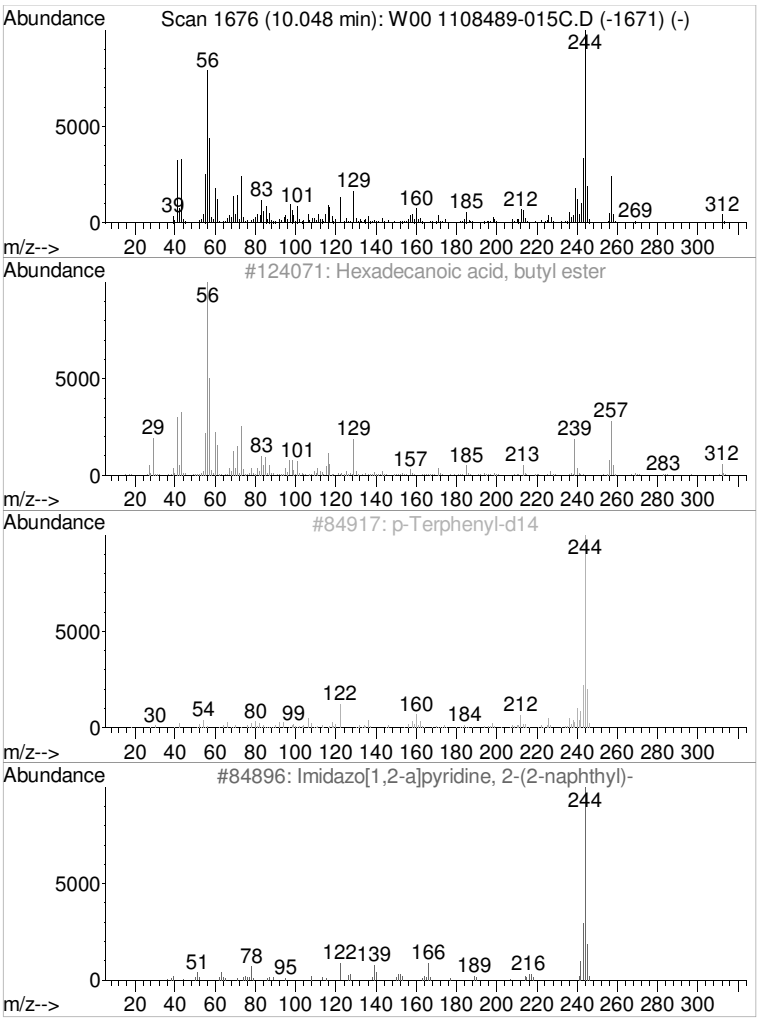
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

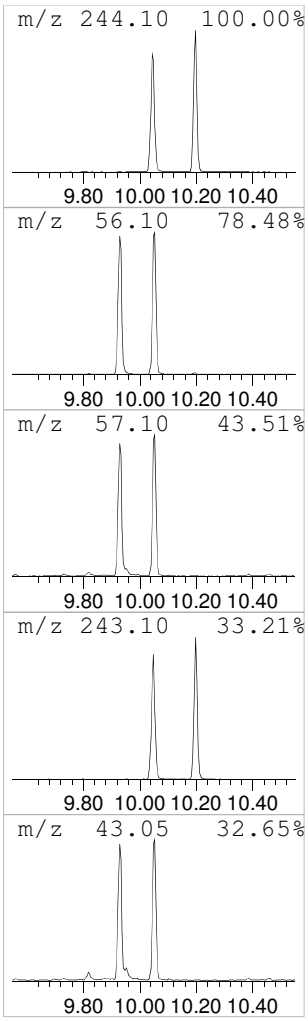
****

Peak Number 5 Hexadecanoic acid, butyl ester Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	100.24 ug/l	2604720	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	98
2	p-Terphenyl-d14	244	C18D14	001718-51-0	95
3	Imidazo[1,2-a]pyridine, 2-(2-nap...	244	C17H12N2	038922-71-3	38
4	1,4-Cyclohexadiene, 6-methylene-...	244	C19H16	018636-59-4	35
5	2,4-Pyrimidinediamine, 5-(1,3-be...	244	C12H12N4O2	013932-40-6	27





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Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

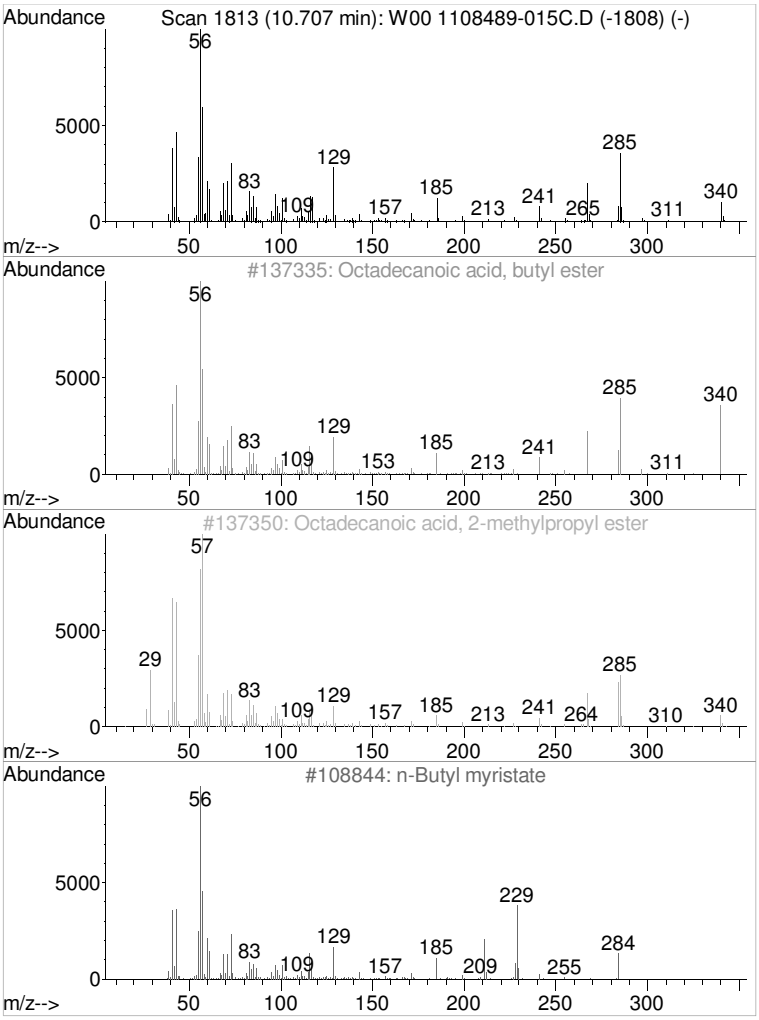
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

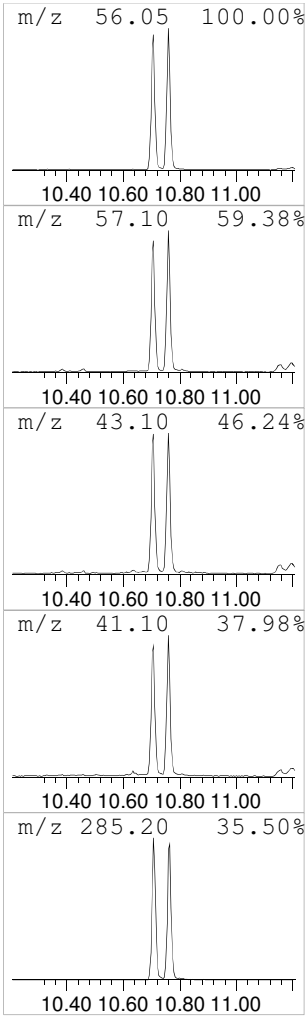
****

Peak Number 6 Octadecanoic acid, butyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.71	52.35 ug/l	1360380	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	98
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	53
4	Cyclohexanamine	99	C6H13N	000108-91-8	30
5	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	27





Library Search Compound Report

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Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

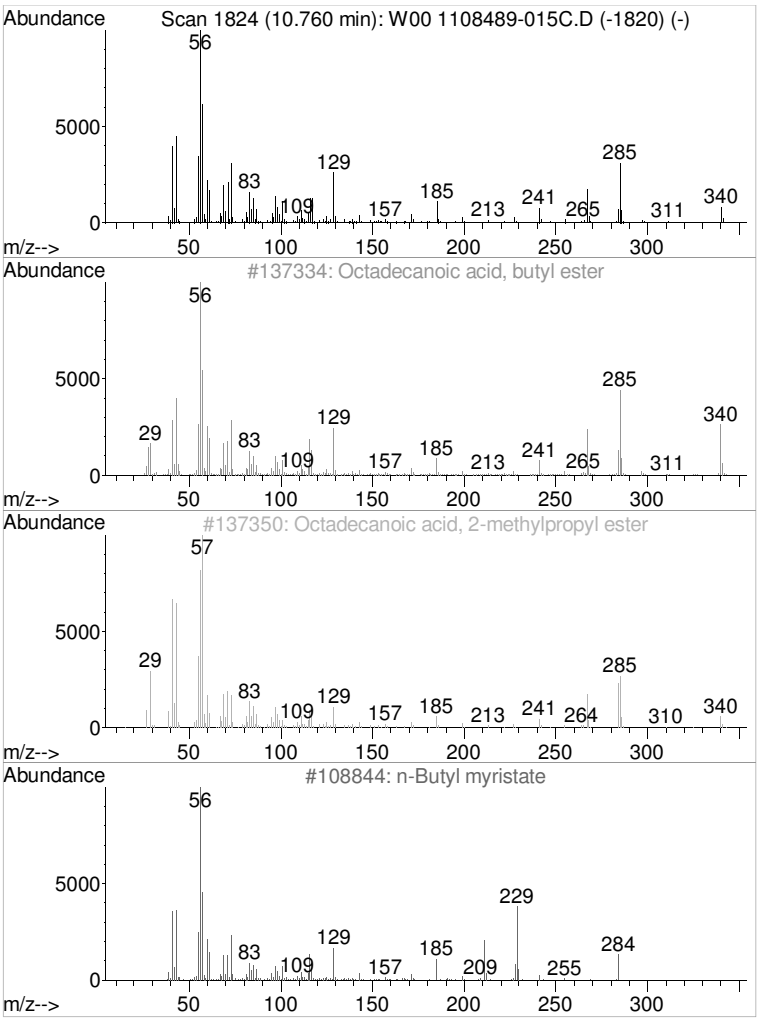
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

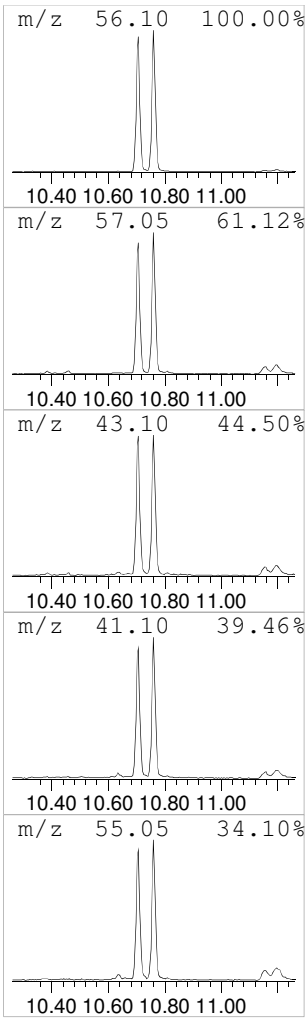
****

Peak Number 7 Octadecanoic acid, butyl ester Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	52.06 ug/l	1352730	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	97
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	58
4	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	27
5	Cyclohexane, (1,1-dimethylethyl)-	140	C10H20	003178-22-1	27





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Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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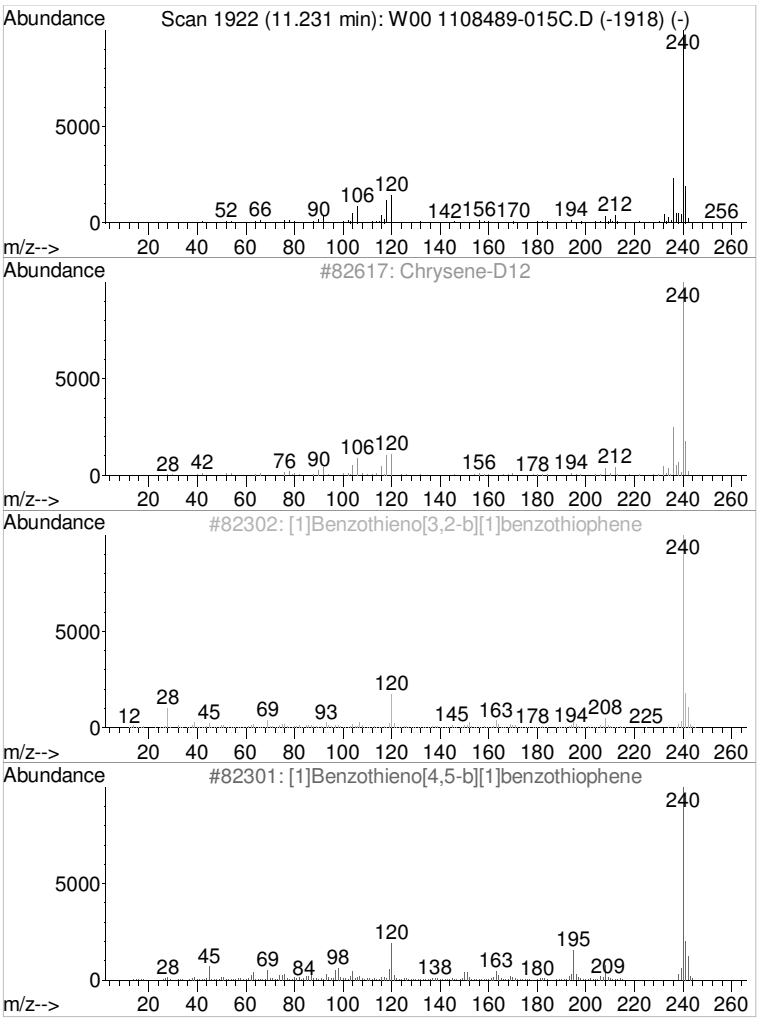
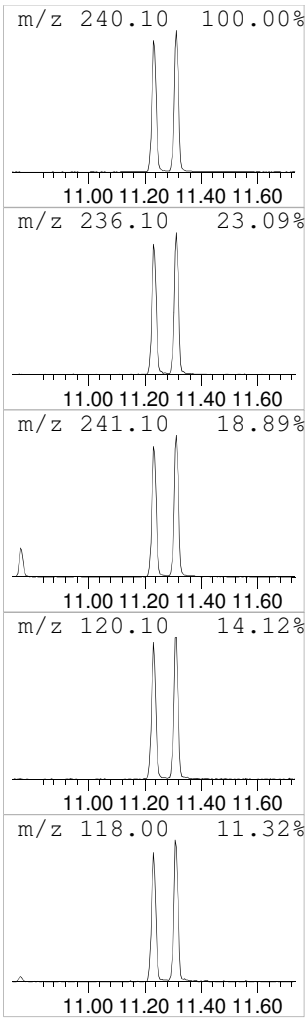
Peak Number 8 Chrysene-D12 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.23	39.92 ug/l	1037210	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Chrysene-D12	240	C18D12	001719-03-5	62
2	[1]Benzothieno[3,2-b][1]benzothi...	240	C14H8S2	000248-70-4	53
3	[1]Benzothieno[4,5-b][1]benzothi...	240	C14H8S2	055134-02-6	53
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	240	C16H20N2	054827-17-7	52
5	4H-Naphtho[1,2-b]pyran-4-one, 5-...	240	C15H12O3	032454-43-6	50





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Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

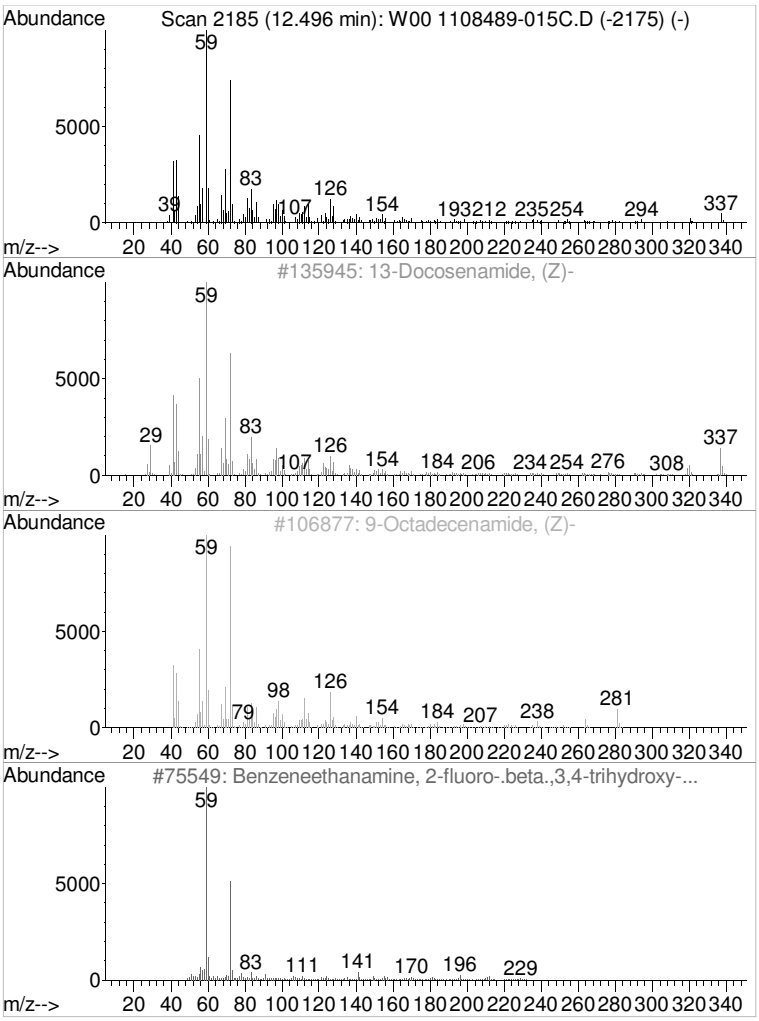
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

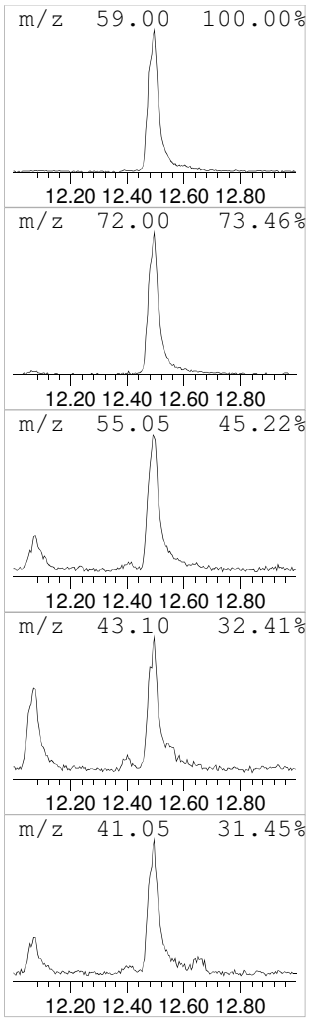
****

Peak Number 9 13-Docosenamide, (Z)- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	25.84 ug/l	562885	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	93
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	59
3	Benzeneethanamine, 2-fluoro-.bet...	229	C11H16FNO3	061338-98-5	58
4	Octadecanamide	283	C18H37NO	000124-26-5	43
5	Heptanamide, 4-ethyl-5-methyl-	171	C10H21NO	054789-40-1	43





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Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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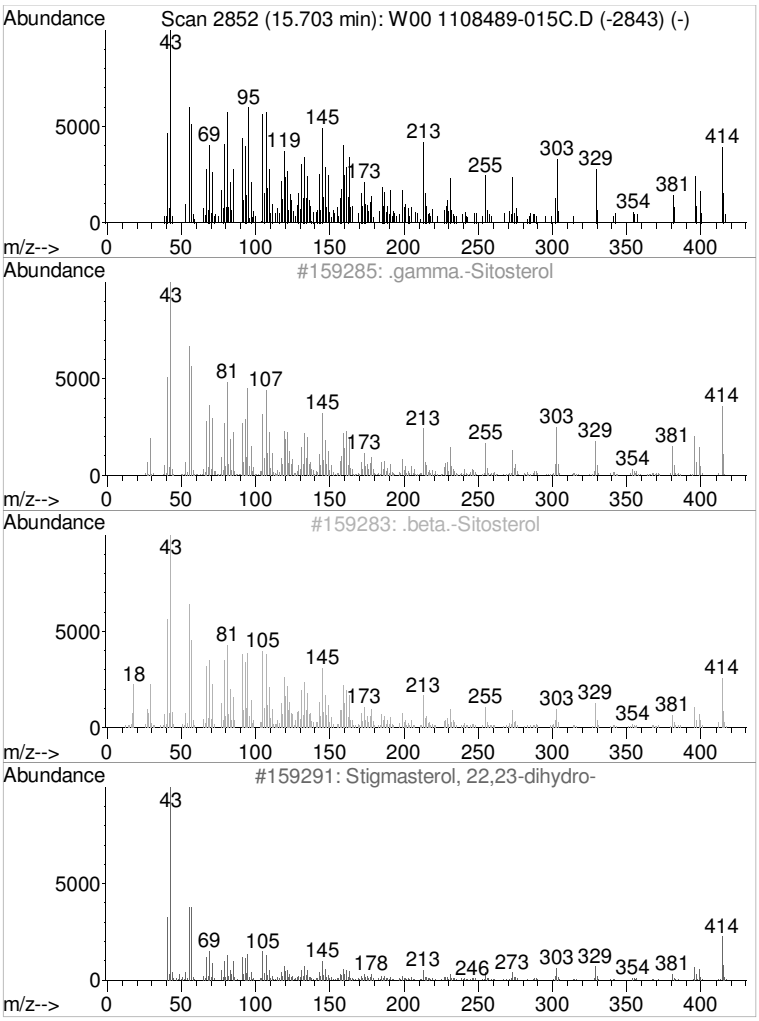
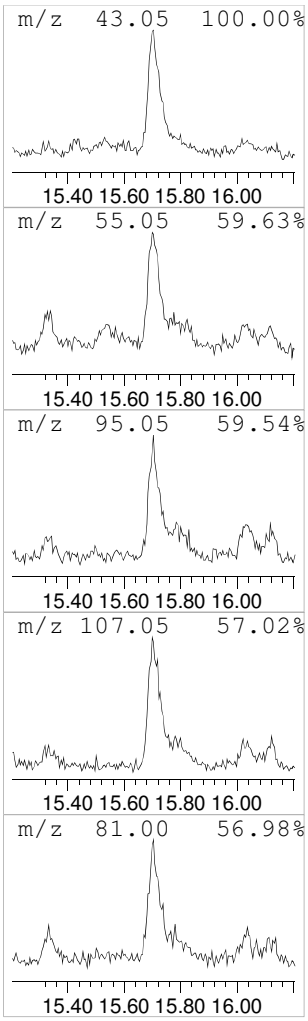
Peak Number 10 .gamma.-Sitosterol Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.70	19.76 ug/l	430488	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	99
2	.beta.-Sitosterol	414	C29H50O	000083-46-5	99
3	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	97
4	17-(1,5-Dimethylhexyl)-10,13-dim...	414	C29H50O	1000210-86-9	55
5	Cholestan-3-one, 4,4-dimethyl-, ...	414	C29H50O	002097-85-0	41





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W00 1108489-015C.D
Acq On : 1 Sep 2011 1:20 pm
Operator : ALICIA HABERLE
Sample : 1108489-015C
Misc : SAMP
ALS Vial : 7 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.95	81.4	ug/l	1558350	1	4.27	766214	40.0
Phenol, 2,4,6-tri...	6.31	23.8	ug/l	733232	3	7.14	1233860	40.0
Phenanthrene-D10	7.81	38.2	ug/l	1178500	3	7.14	1233860	40.0
Hexadecanoic acid...	9.93	56.2	ug/l	1650220	4	8.61	1175140	40.0
Hexadecanoic acid...	10.05	100.2	ug/l	2604720	5	11.31	1039400	40.0
Octadecanoic acid...	10.71	52.4	ug/l	1360380	5	11.31	1039400	40.0
Octadecanoic acid...	10.76	52.1	ug/l	1352730	5	11.31	1039400	40.0
Chrysene-D12	11.23	39.9	ug/l	1037210	5	11.31	1039400	40.0
13-Docosenamide, ...	12.50	25.8	ug/l	562885	6	13.34	871360	40.0
.gamma.-Sitosterol	15.70	19.8	ug/l	430488	6	13.34	871360	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.410	84	87	90	rVB	43273	26373	1.88%	0.191%
2	2.539	106	114	127	rBV2	44526	139866	9.97%	1.012%
3	2.708	144	149	153	rVB2	37834	27843	1.99%	0.202%
4	2.948	191	199	202	rBV	1897891	1402614	100.00%	10.153%
5	3.035	214	217	221	rVB	52801	37977	2.71%	0.275%
6	3.083	221	227	230	rBV	52134	37839	2.70%	0.274%
7	3.121	230	235	238	rBV	79032	52488	3.74%	0.380%
8	3.189	243	249	263	rBV2	1078930	831041	59.25%	6.016%
9	3.270	263	266	271	rVB2	31532	28954	2.06%	0.210%
10	3.689	350	353	356	rVB	37891	24682	1.76%	0.179%
11	3.934	400	404	414	rBV	1043247	810080	57.76%	5.864%
12	4.275	471	475	481	rBV	1019112	772382	55.07%	5.591%
13	4.766	573	577	589	rBV	443316	371744	26.50%	2.691%
14	5.439	713	717	730	rVB	1440079	1087552	77.54%	7.872%
15	6.483	930	934	941	rBV	1257074	940326	67.04%	6.807%
16	7.141	1067	1071	1085	rVB	1609198	1251615	89.23%	9.060%
17	7.920	1228	1233	1244	rBV	764443	700023	49.91%	5.067%
18	8.156	1278	1282	1286	rBV2	64316	50989	3.64%	0.369%
19	8.608	1372	1376	1385	rBV2	1513499	1214767	86.61%	8.793%
20	9.166	1489	1492	1497	rBV	92180	99142	7.07%	0.718%
21	9.200	1497	1499	1509	rVB	20134	20318	1.45%	0.147%
22	9.950	1652	1655	1664	rVB4	30945	35333	2.52%	0.256%
23	10.046	1670	1675	1680	rBV	215394	192464	13.72%	1.393%
24	10.195	1701	1706	1711	rBV	1185315	962903	68.65%	6.970%
25	10.700	1806	1811	1819	rVB	38406	39602	2.82%	0.287%
26	10.758	1819	1823	1828	rBV	170296	151981	10.84%	1.100%
27	10.940	1856	1861	1868	rBV6	10595	19276	1.37%	0.140%
28	11.195	1908	1914	1927	rBV2	46293	91400	6.52%	0.662%
29	11.311	1932	1938	1944	rBV	1040878	1075024	76.64%	7.782%
30	12.070	2090	2096	2105	rBV3	26643	48507	3.46%	0.351%
31	12.494	2178	2184	2195	rBV	103170	190284	13.57%	1.377%
32	12.652	2212	2217	2226	rVB5	11581	19141	1.36%	0.139%
33	13.080	2300	2306	2321	rBV3	34972	76080	5.42%	0.551%
34	13.335	2351	2359	2371	rBV	580344	891524	63.56%	6.453%
35	14.215	2536	2542	2546	rBV7	11787	22380	1.60%	0.162%
36	15.696	2845	2850	2863	rBV7	28304	70342	5.02%	0.509%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

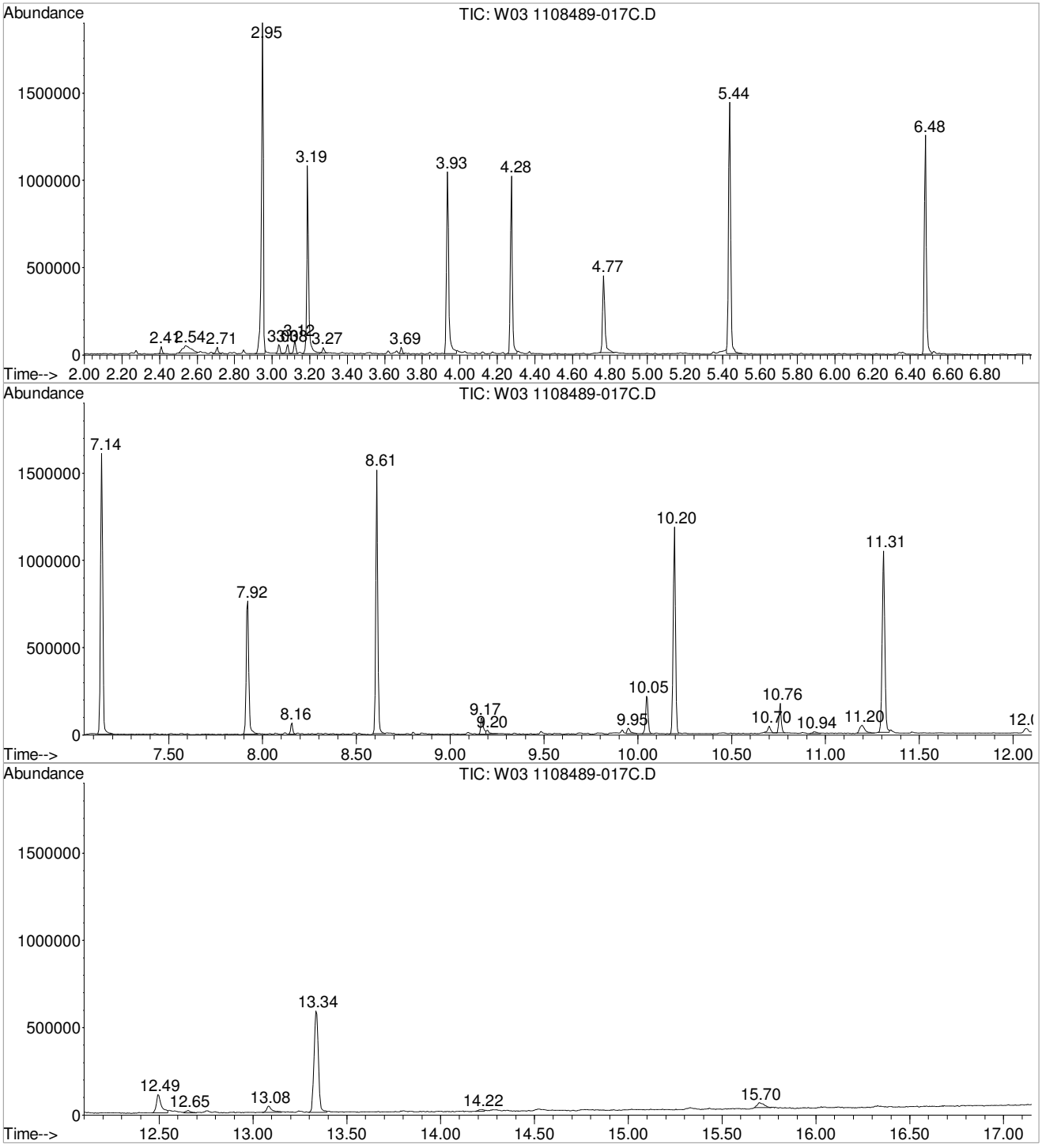
Sum of corrected areas: 13814856

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

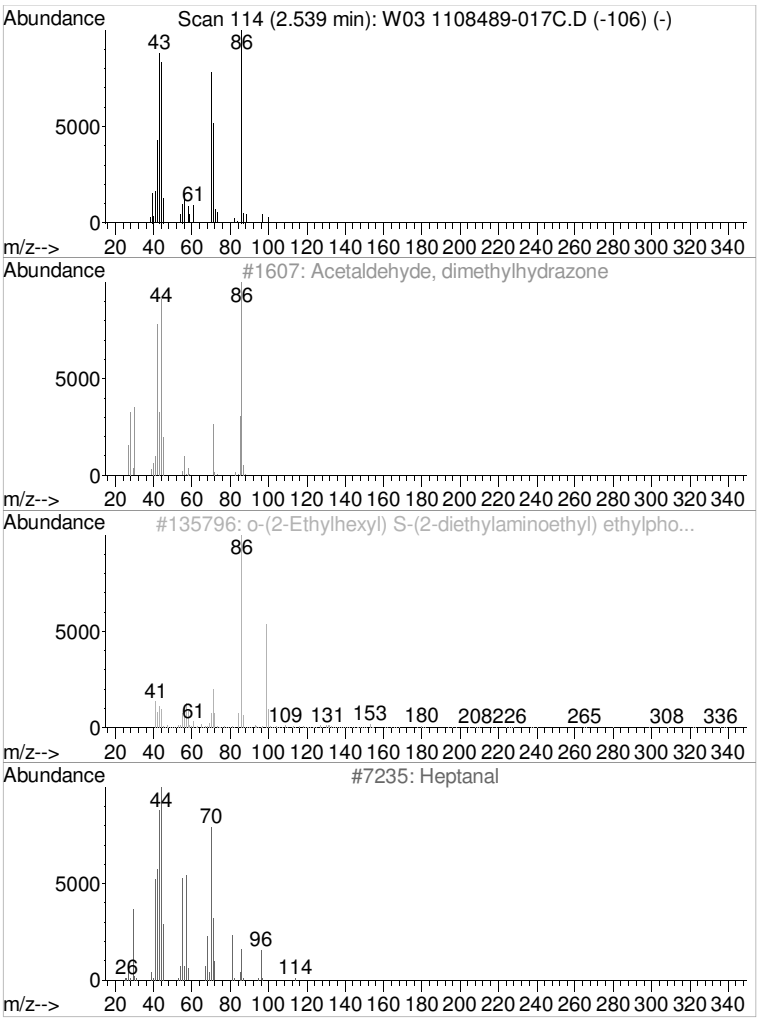
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

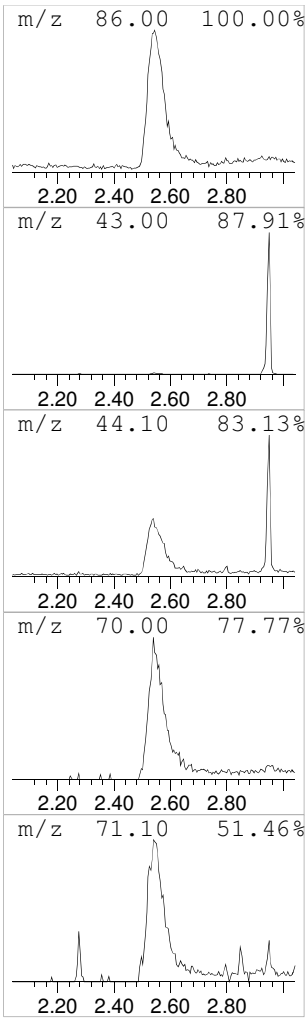
****

Peak Number 1 Acetaldehyde, dimethylhydra... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	7.24 ug/l	139866	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	38
2	o-(2-Ethylhexyl) S-(2-diethylami...	337	C16H36NO2PS	1000273-63-2	38
3	Heptanal	114	C7H14O	000111-71-7	33
4	1-Propyne, 1-(methylthio)-	86	C4H6S	022174-51-2	27
5	1-Isopropyldiaziridine	86	C4H10N2	033657-26-0	23





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

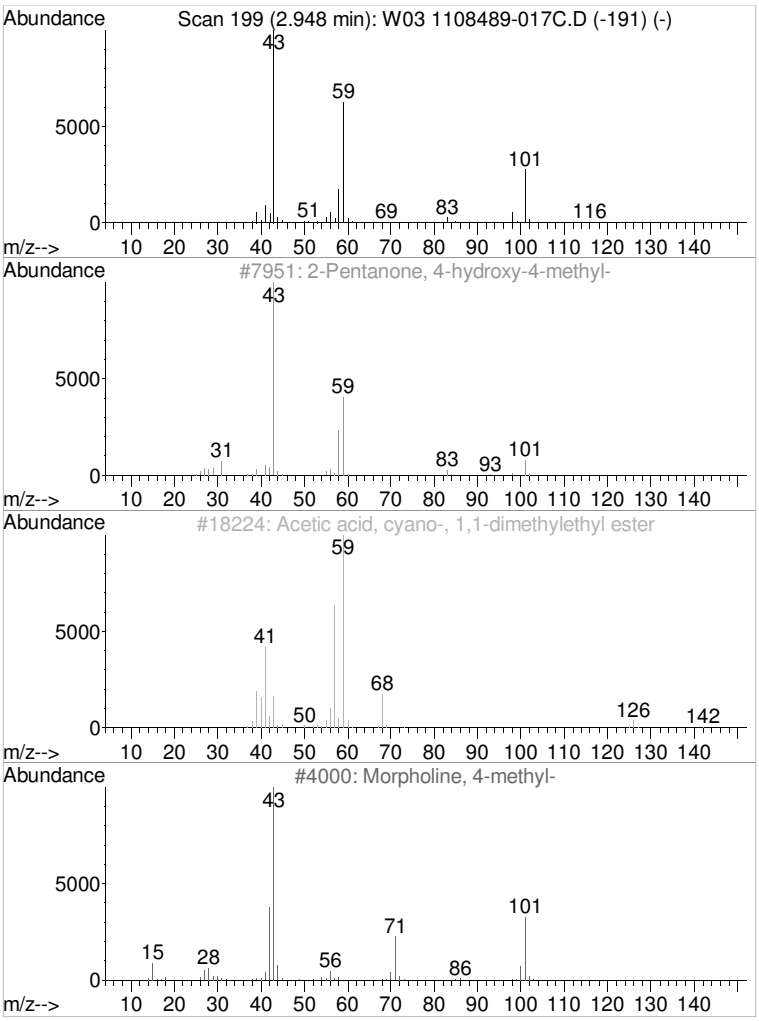
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

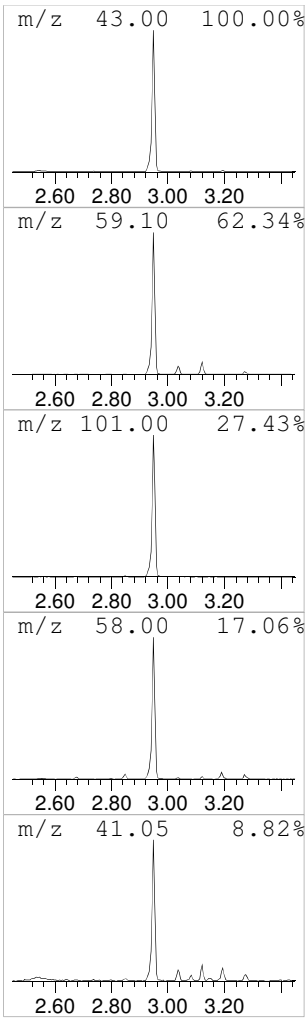
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	72.64 ug/l	1402610	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

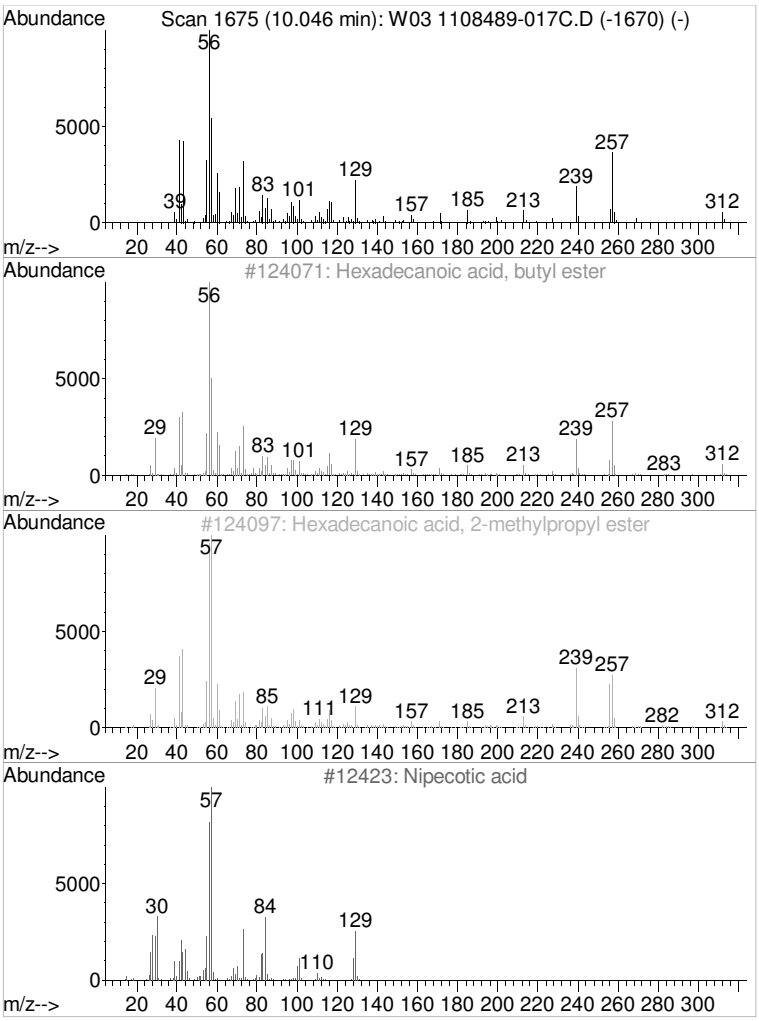
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

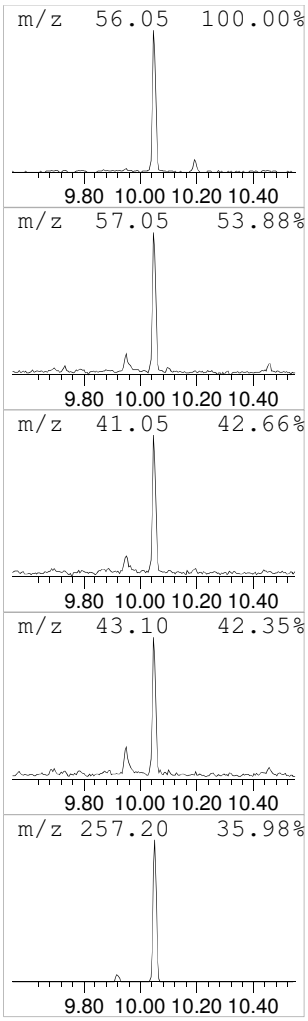
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	7.16 ug/l	192464	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	56
3	Nipecotic acid	129	C6H11NO2	000498-95-3	47
4	4-Decene, 2-methyl-, (E)-	154	C11H22	028665-56-7	27
5	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	27





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

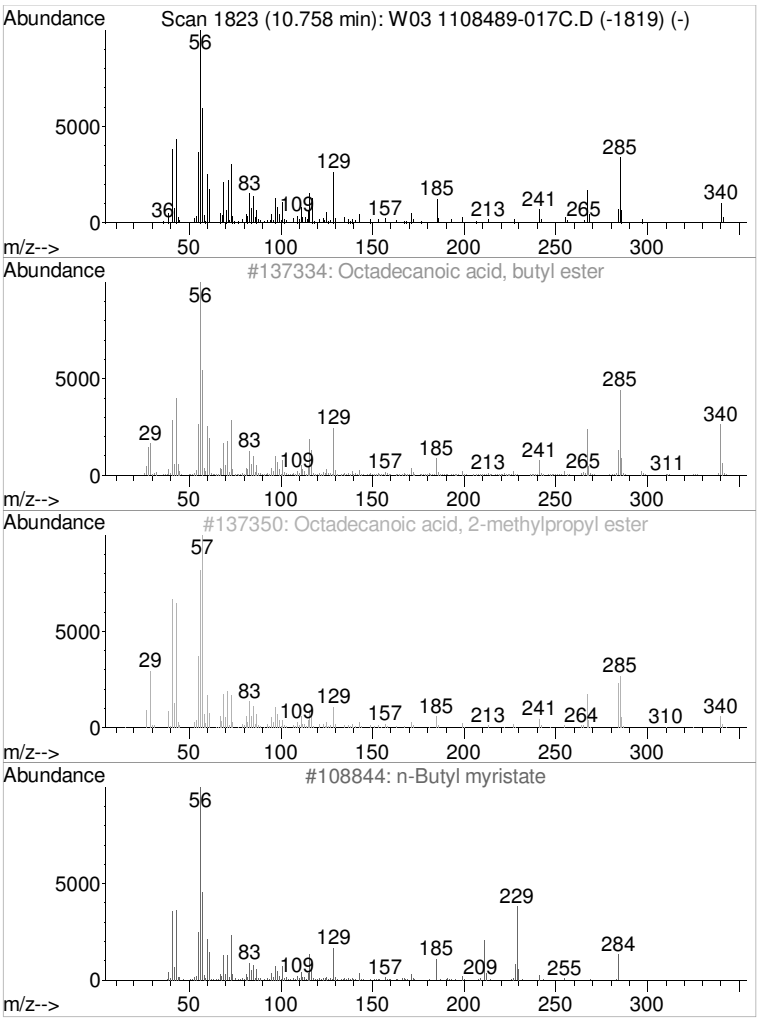
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

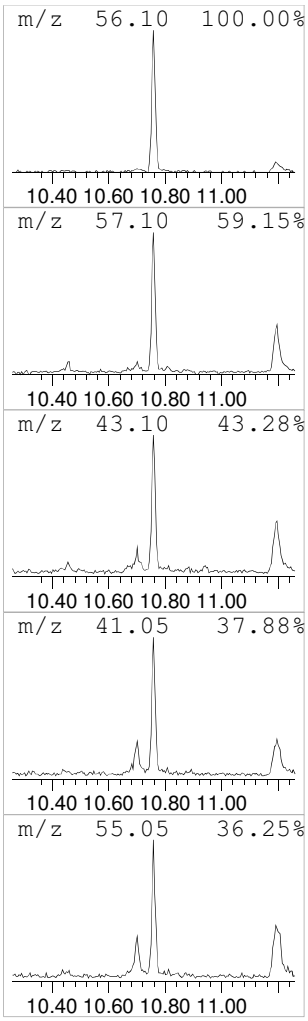
****

Peak Number 4 Octadecanoic acid, butyl ester Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	5.65 ug/l	151981	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	93
3	n-Butyl myristate	284	C18H36O2	000110-36-1	58
4	Propan-2-one O-(2-chloro-1-methy...	149	C6H12ClNO	1000186-05-6	32
5	1-Heptene, 2-methyl-	112	C8H16	015870-10-7	30





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

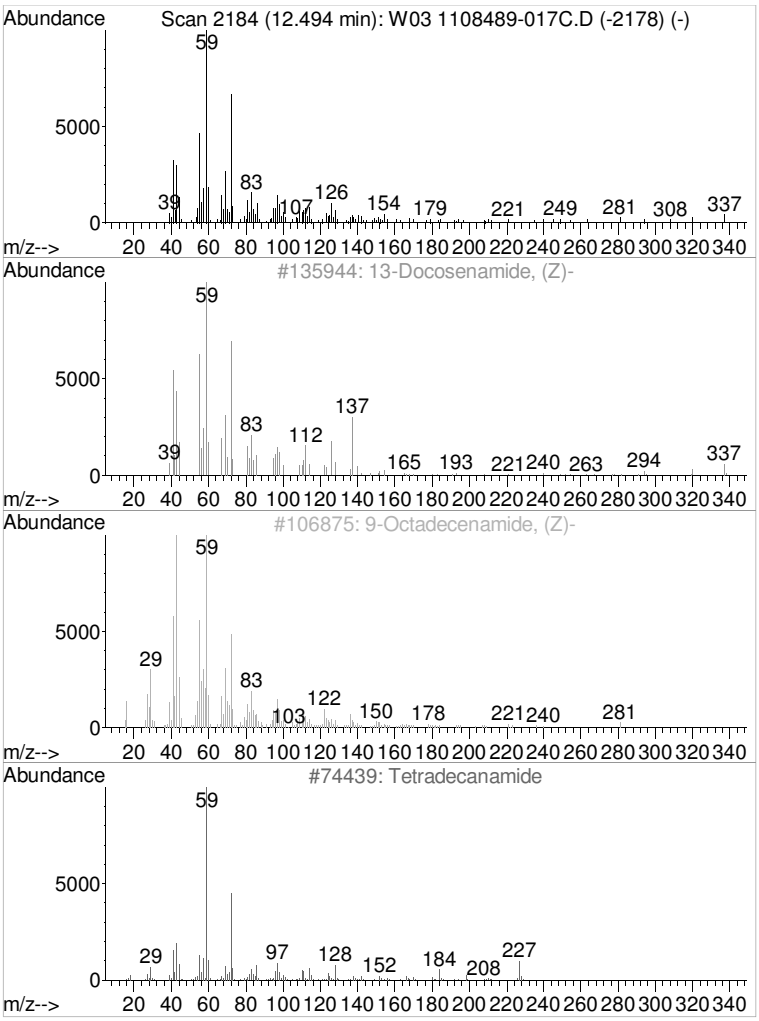
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

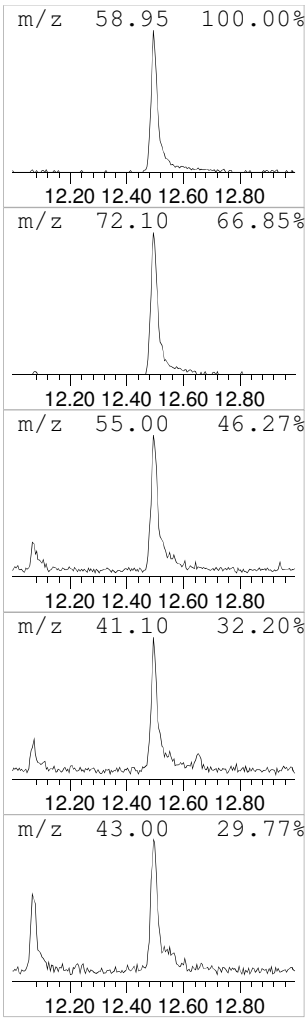
****

Peak Number 5 13-Docosenamide, (Z)- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.49	8.54 ug/l	190284	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	94
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	90
3	Tetradecanamide	227	C14H29NO	000638-58-4	53
4	Dodecanamide	199	C12H25NO	001120-16-7	50
5	Decanamide-	171	C10H21NO	002319-29-1	50





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W03 1108489-017C.D
Acq On : 1 Sep 2011 2:39 pm
Operator : ALICIA HABERLE
Sample : 1108489-017C
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Acetaldehyde, dim...	2.54	7.2	ug/l	139866	1	4.28	772382	40.0
2-Pentanone, 4-hy...	2.95	72.6	ug/l	1402610	1	4.28	772382	40.0
Hexadecanoic acid...	10.05	7.2	ug/l	192464	5	11.31	1075020	40.0
Octadecanoic acid...	10.76	5.7	ug/l	151981	5	11.31	1075020	40.0
13-Docosenamide, ...	12.49	8.5	ug/l	190284	6	13.34	891524	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W04 1108489-018C.D
Acq On : 1 Sep 2011 3:06 pm
Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.410	84	87	90	rBV	57798	34699	2.71%	0.208%
2	2.545	107	115	125	rBV4	24514	71995	5.63%	0.431%
3	2.708	144	149	153	rVB2	48293	36750	2.87%	0.220%
4	2.848	173	178	183	rVB2	22621	17124	1.34%	0.102%
5	2.949	192	199	202	rBV	1797287	1278614	100.00%	7.649%
6	3.035	213	217	221	rBV	58384	38355	3.00%	0.229%
7	3.083	221	227	230	rBV	52980	40566	3.17%	0.243%
8	3.122	230	235	239	rVV	81745	58471	4.57%	0.350%
9	3.189	243	249	263	rVV2	1232584	925593	72.39%	5.537%
10	3.271	263	266	273	rVB	35277	31389	2.45%	0.188%
11	3.665	342	348	350	rBV2	17632	19453	1.52%	0.116%
12	3.689	350	353	356	rVB	44710	30214	2.36%	0.181%
13	3.901	394	397	400	rBV	29274	21953	1.72%	0.131%
14	3.935	400	404	418	rVV	1181036	890571	69.65%	5.328%
15	4.175	451	454	463	rVB	47957	41544	3.25%	0.249%
16	4.276	471	475	491	rVB	999402	794275	62.12%	4.752%
17	4.767	573	577	588	rBV	504461	407936	31.90%	2.440%
18	5.353	695	699	703	rBV2	31894	30091	2.35%	0.180%
19	5.440	713	717	724	rBV	1345995	1071831	83.83%	6.412%
20	6.344	898	905	907	rBV	49786	40844	3.19%	0.244%
21	6.483	930	934	941	rBV	1407768	1034760	80.93%	6.190%
22	6.623	956	963	973	rBV5	21175	41155	3.22%	0.246%
23	7.142	1067	1071	1082	rVB	1610887	1241557	97.10%	7.428%
24	7.916	1225	1232	1242	rBV	872717	771343	60.33%	4.615%
25	8.157	1277	1282	1285	rBV	108104	91510	7.16%	0.547%
26	8.296	1307	1311	1317	rBV5	34849	57935	4.53%	0.347%
27	8.609	1367	1376	1383	rBV	1458717	1225267	95.83%	7.330%
28	8.801	1413	1416	1422	rVB	27122	21641	1.69%	0.129%
29	8.859	1422	1428	1437	rBV8	12232	19839	1.55%	0.119%
30	9.099	1471	1478	1482	rBV2	41446	52340	4.09%	0.313%
31	9.133	1482	1485	1489	rBV2	57430	49355	3.86%	0.295%
32	9.167	1489	1492	1497	rBV	255213	247967	19.39%	1.483%
33	9.345	1524	1529	1542	rBV7	26246	37759	2.95%	0.226%
34	9.691	1596	1601	1607	rBV2	29664	35426	2.77%	0.212%
35	9.854	1631	1635	1636	rBV2	33451	29410	2.30%	0.176%
36	9.883	1636	1641	1645	rVV3	57734	98377	7.69%	0.589%
37	9.917	1645	1648	1652	rVV	32223	35332	2.76%	0.211%
38	9.950	1652	1655	1668	rVV2	90368	116332	9.10%	0.696%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W04 1108489-018C.D
Acq On : 1 Sep 2011 3:06 pm
Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	10.047	1670	1675	1682	rVB2	272908	250542	19.59%	1.499%
40	10.196	1701	1706	1714	rBV	1193681	997813	78.04%	5.969%
41	10.701	1800	1811	1817	rBV	172011	273015	21.35%	1.633%
42	10.758	1820	1823	1828	rVB	200981	176404	13.80%	1.055%
43	10.960	1861	1865	1872	rVB	22368	26108	2.04%	0.156%
44	11.186	1905	1912	1928	rBV2	142178	295021	23.07%	1.765%
45	11.311	1932	1938	1943	rVV	978376	1034030	80.87%	6.186%
46	11.350	1943	1946	1952	rVV	39388	52156	4.08%	0.312%
47	11.403	1953	1957	1961	rVB3	17583	20668	1.62%	0.124%
48	11.465	1966	1970	1979	rBV6	29040	42338	3.31%	0.253%
49	12.071	2089	2096	2109	rBV4	128757	276449	21.62%	1.654%
50	12.191	2117	2121	2126	rBV6	25187	31330	2.45%	0.187%
51	12.302	2139	2144	2154	rVB9	12967	22801	1.78%	0.136%
52	12.398	2160	2164	2169	rBV6	19170	28654	2.24%	0.171%
53	12.494	2178	2184	2192	rBV	136398	219907	17.20%	1.316%
54	12.653	2212	2217	2228	rVB2	30548	51945	4.06%	0.311%
55	13.086	2301	2307	2331	rVB3	113454	280267	21.92%	1.677%
56	13.336	2352	2359	2371	rVB	521906	817496	63.94%	4.891%
57	14.216	2537	2542	2548	rBV4	42169	77250	6.04%	0.462%
58	14.524	2600	2606	2615	rVB4	22246	45604	3.57%	0.273%
59	14.769	2653	2657	2659	rBV5	16447	18658	1.46%	0.112%
60	15.697	2842	2850	2864	rBV5	184119	521106	40.76%	3.117%
61	16.317	2974	2979	2987	rBV9	28530	66497	5.20%	0.398%

Sum of corrected areas: 16715632

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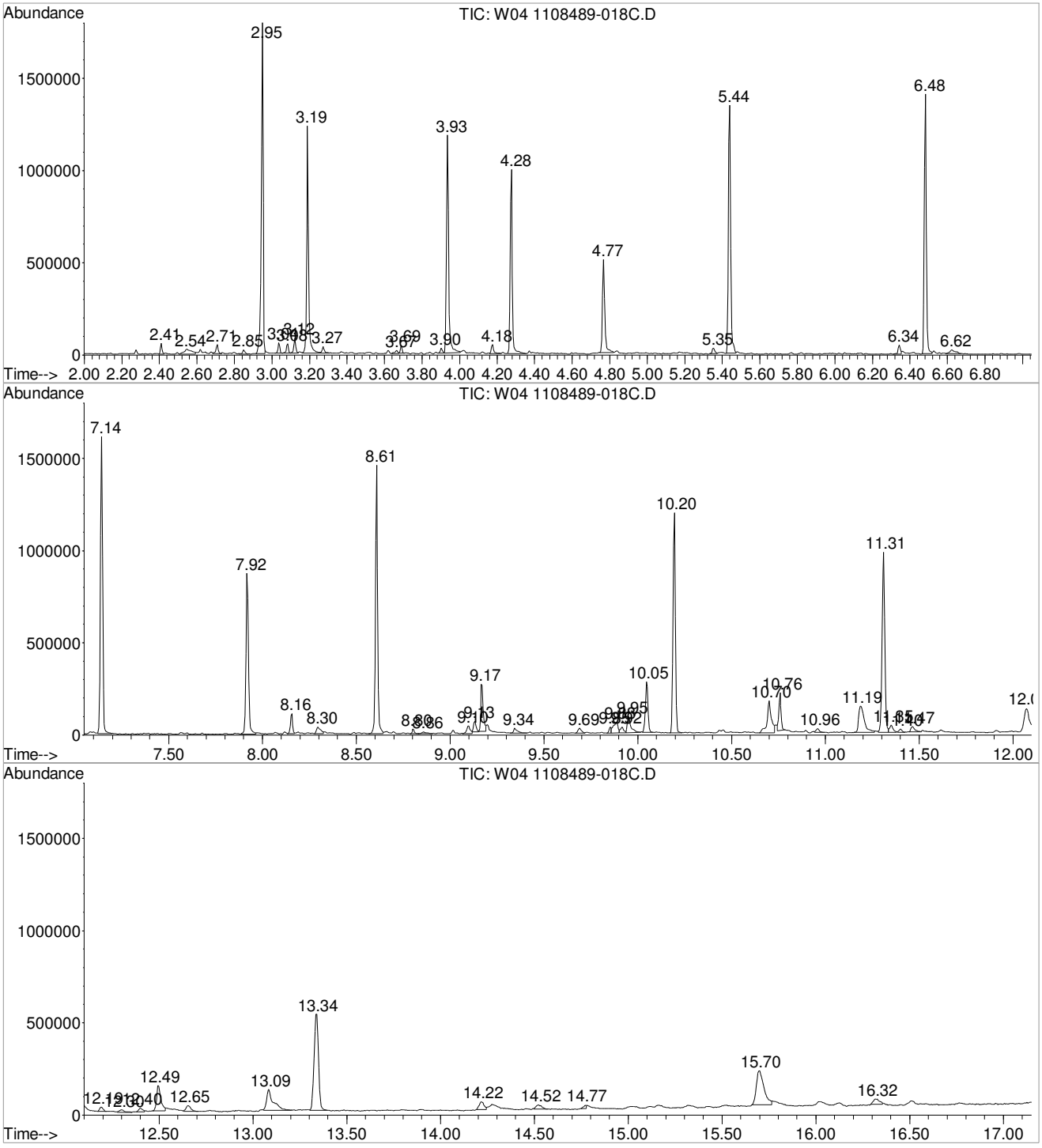
Data File : W04 1108489-018C.D
Acq On : 1 Sep 2011 3:06 pm
Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

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TIC Integration Parameters: LSCINT.P

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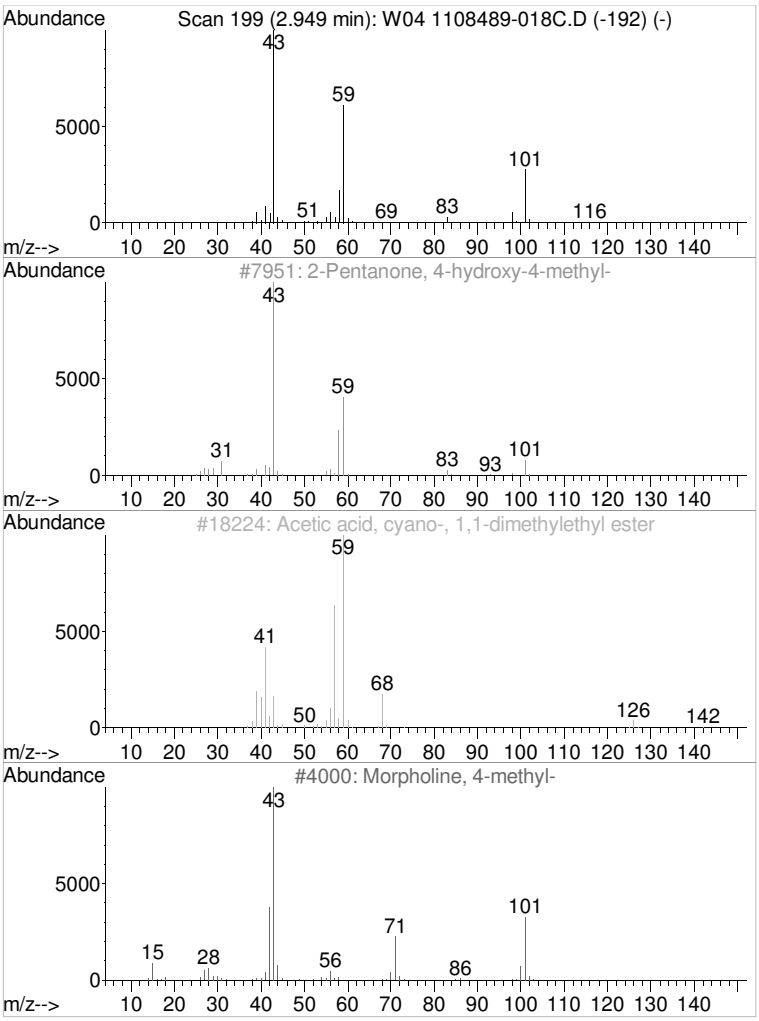
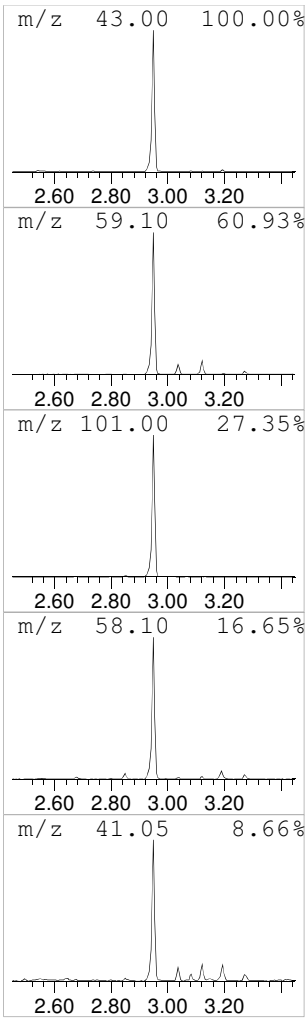
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	64.39 ug/l	1278610	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9
5	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9





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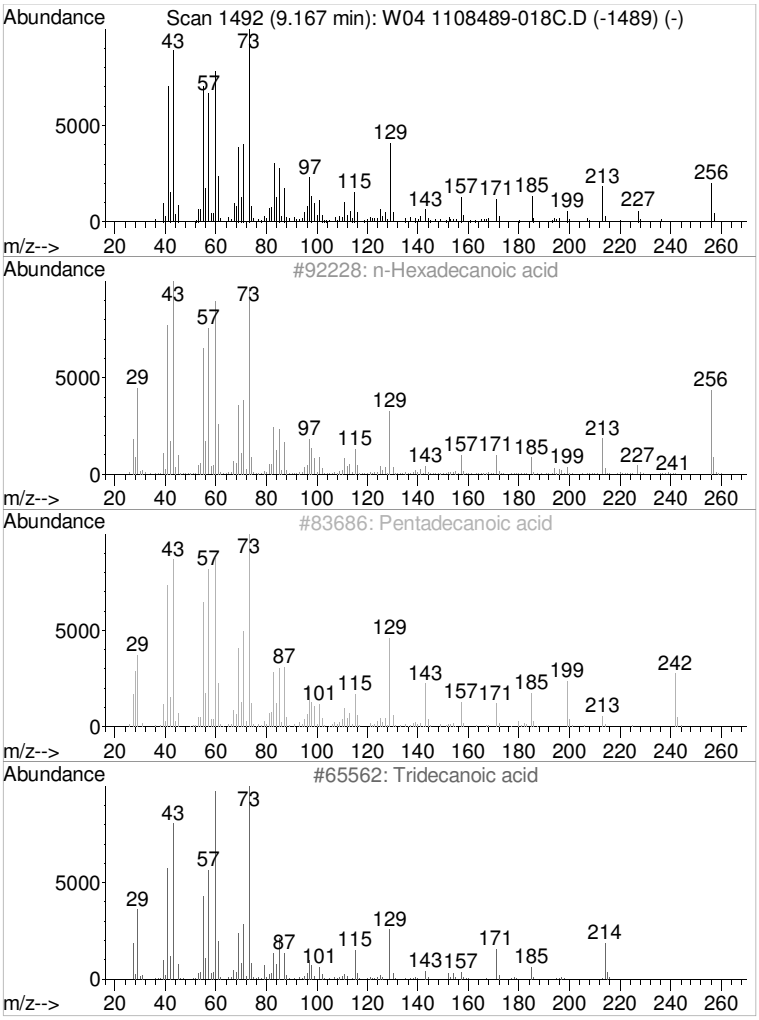
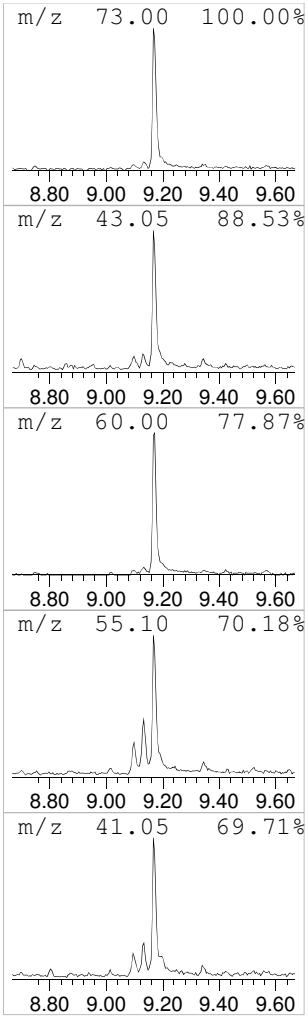
Peak Number 2 n-Hexadecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	8.10 ug/l	247967	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	86
3	Tridecanoic acid	214	C13H26O2	000638-53-9	81
4	n-Decanoic acid	172	C10H20O2	000334-48-5	62
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	43





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ALS Vial : 11 Sample Multiplier: 1

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TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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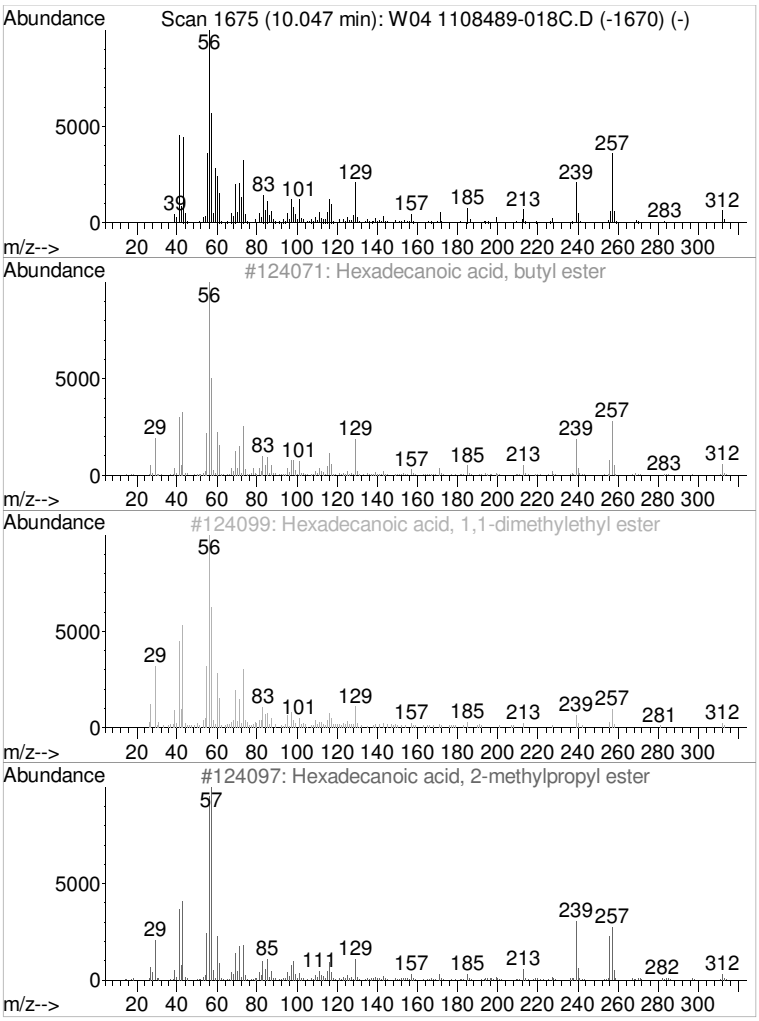
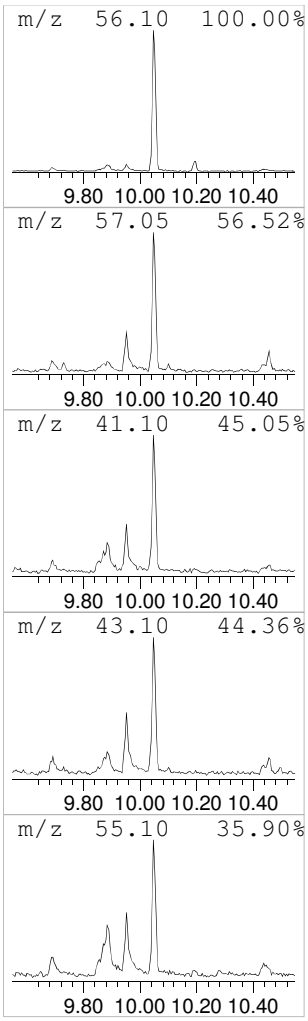
Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	9.69 ug/l	250542	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	93
3	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	70
4	Thiazole, 2-amino-4,5-dihydro-5-...	116	C4H8N2S	010416-80-5	43
5	Oxirane, 2,3-bis(1-methylethyl)-...	128	C8H16O	054644-32-5	35





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ALS Vial : 11 Sample Multiplier: 1

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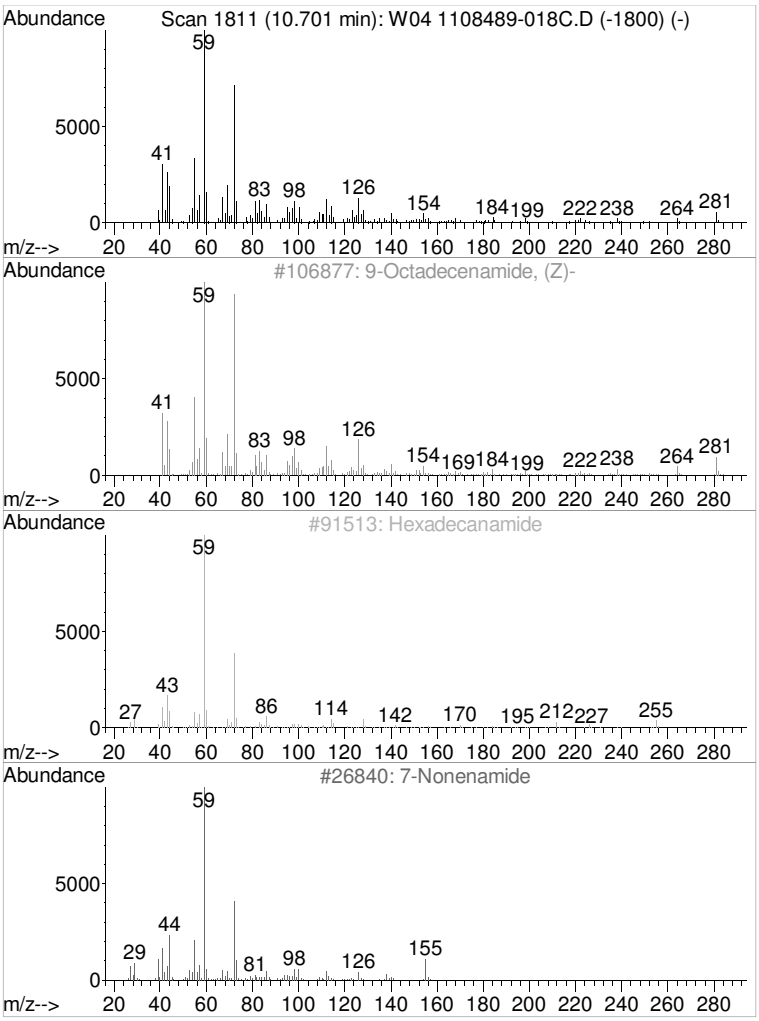
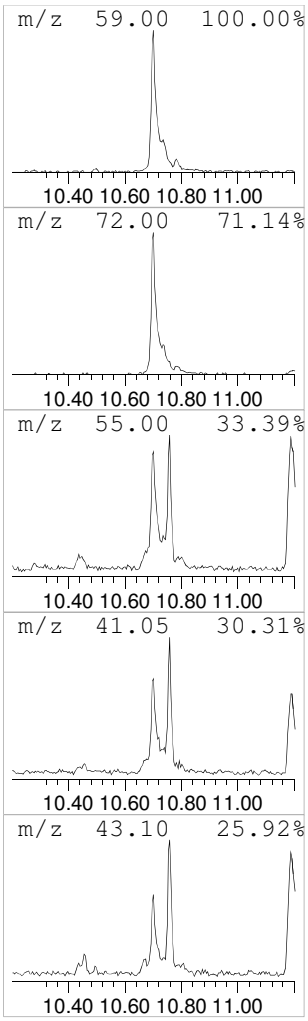
Peak Number 4 9-Octadecenamide, (Z)- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.70	10.56 ug/l	273015	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	98
2	Hexadecanamide	255	C16H33NO	000629-54-9	59
3	7-Nonenamide	155	C9H17NO	090949-53-4	56
4	Tetradecanamide	227	C14H29NO	000638-58-4	53
5	Octanamide	143	C8H17NO	000629-01-6	40





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Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
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TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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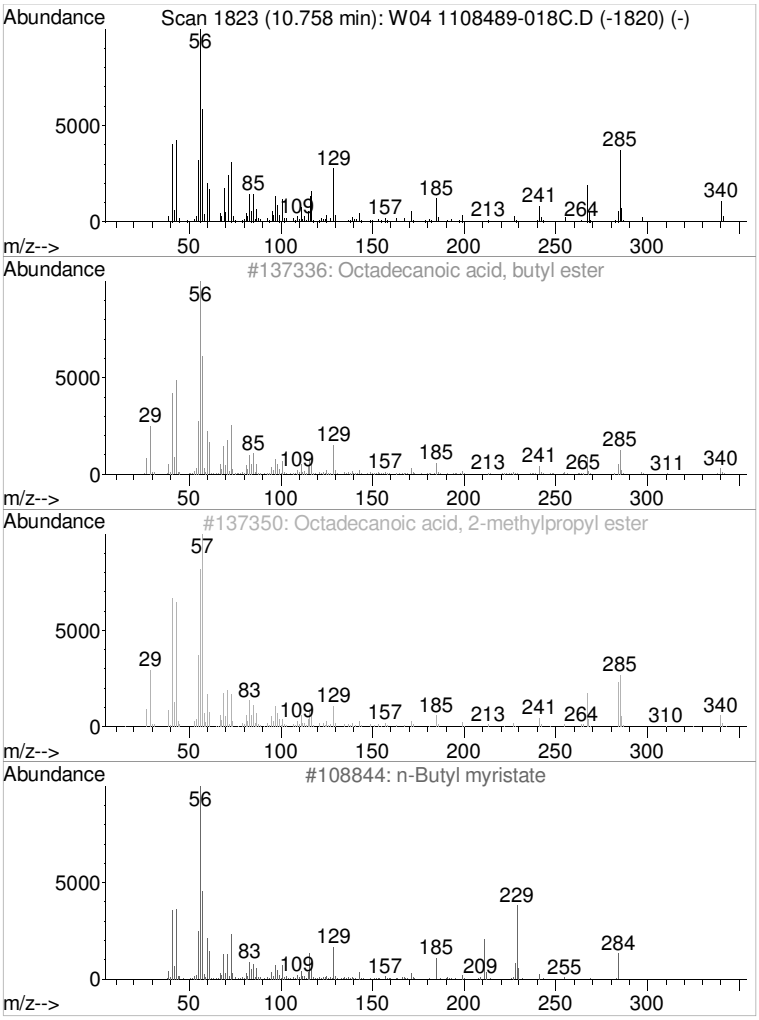
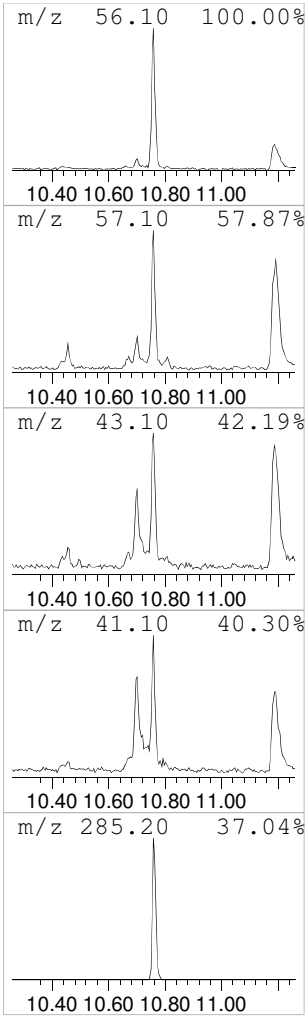
Peak Number 5 Octadecanoic acid, butyl ester Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	6.82 ug/l	176404	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	96
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	52
4	Nipecotic acid	129	C6H11NO2	000498-95-3	47
5	1,3-Pentanediol, 2,2,4-trimethyl-	146	C8H18O2	000144-19-4	38





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Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

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TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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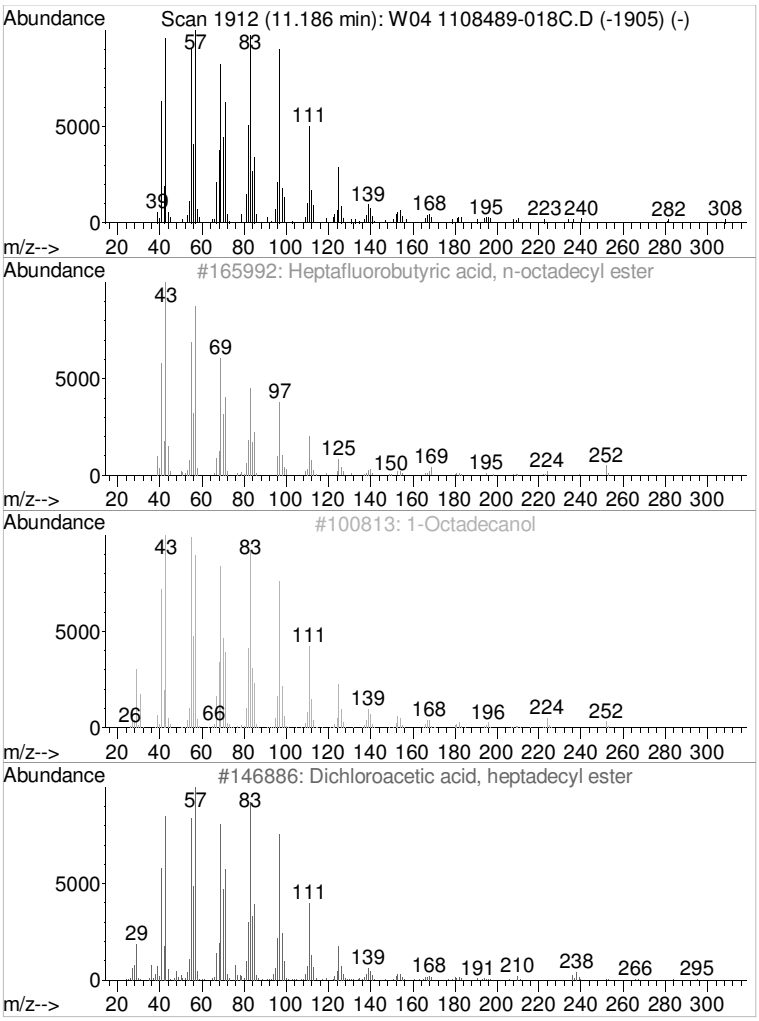
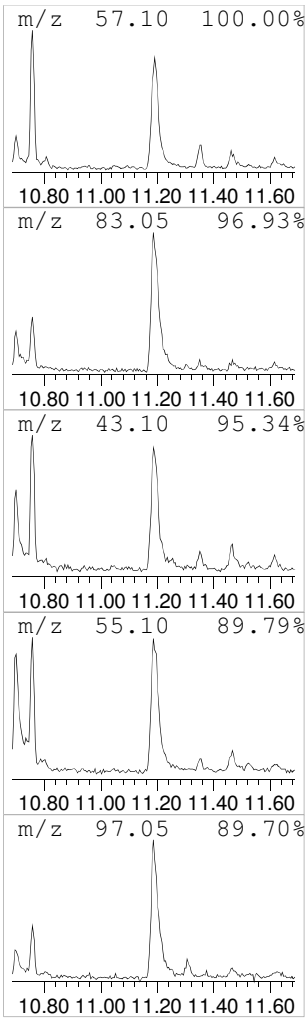
Peak Number 6 Heptafluorobutyric acid, n-... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	11.41 ug/l	295021	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	90
2	1-Octadecanol	270	C18H38O	000112-92-5	90
3	Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	87
4	2- Chloropropionic acid, octadec...	360	C21H41ClO2	088104-31-8	87
5	1-Docosene	308	C22H44	001599-67-3	86





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Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

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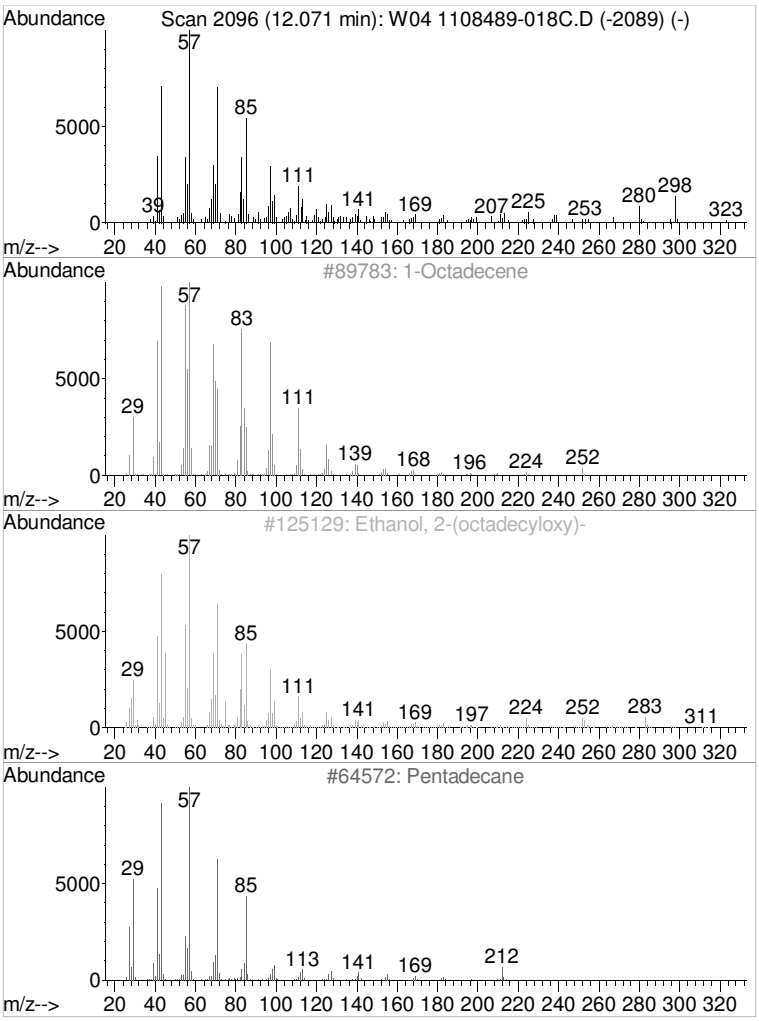
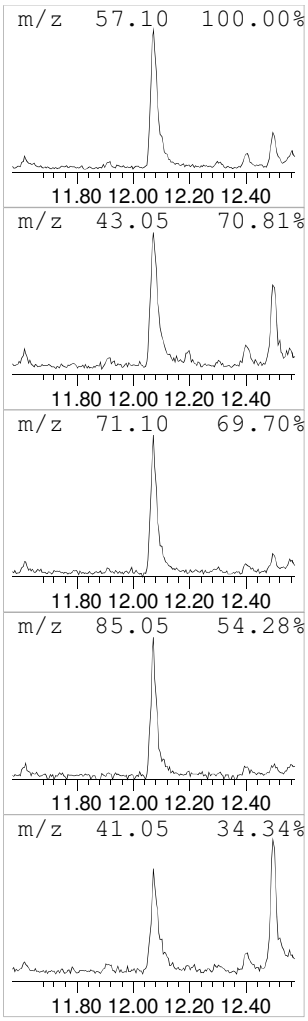
Peak Number 7 1-Octadecene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.07	10.69 ug/l	276449	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octadecene	252	C18H36	000112-88-9	92
2	Ethanol, 2-(octadecyloxy)-	314	C20H42O2	002136-72-3	83
3	Pentadecane	212	C15H32	000629-62-9	78
4	Nonahexacontanoic acid	999	C69H138O2	040710-32-5	76
5	Eicosane	282	C20H42	000112-95-8	64





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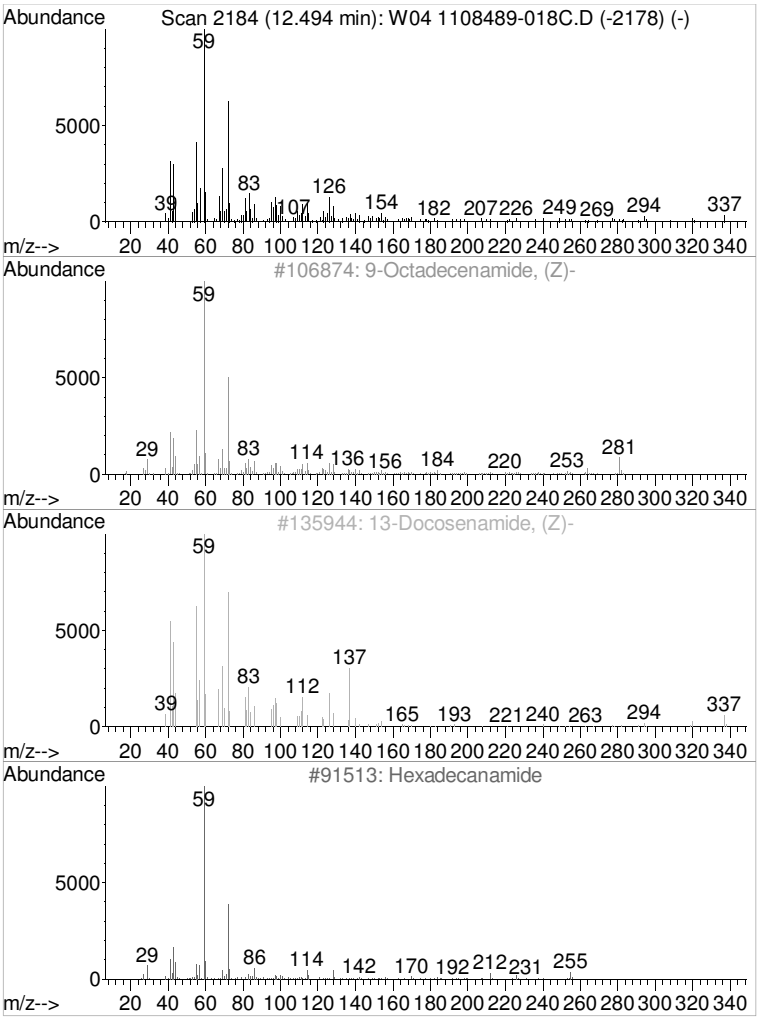
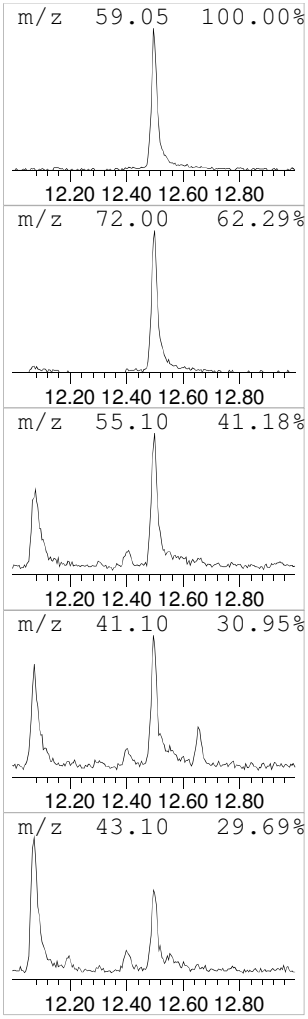
Peak Number 8 9-Octadecenamide, (Z)- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.49	10.76 ug/l	219907	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	94
2	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	70
3	Hexadecanamide	255	C16H33NO	000629-54-9	64
4	Decanamide-	171	C10H21NO	002319-29-1	53
5	Dodecanamide	199	C12H25NO	001120-16-7	50





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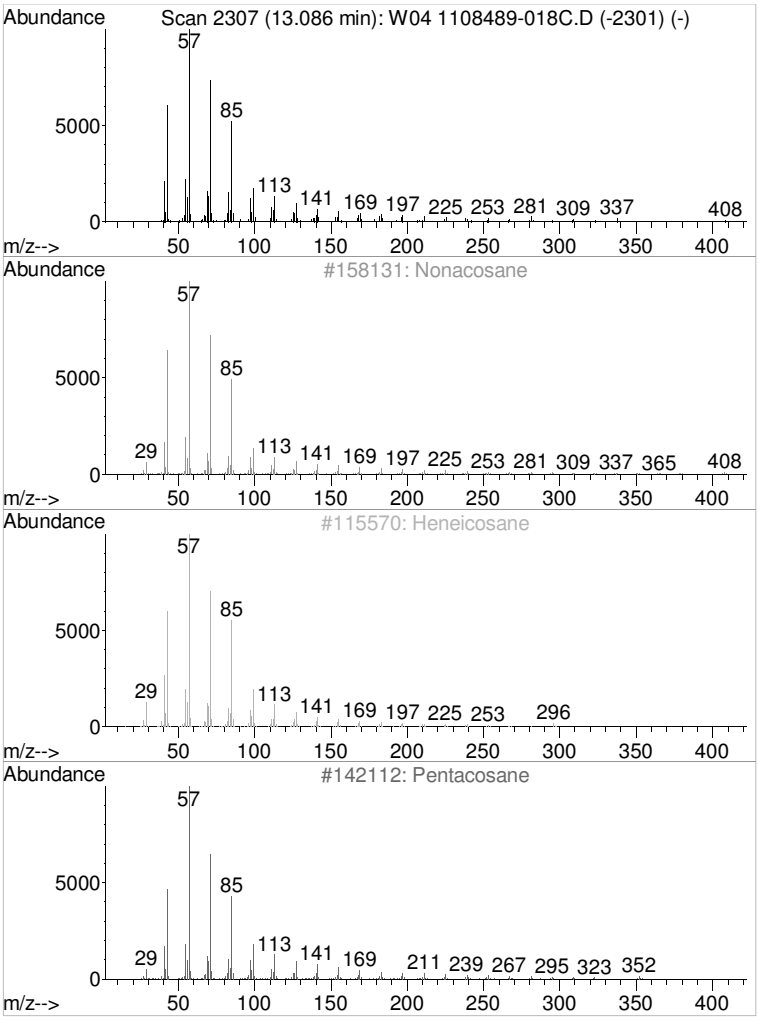
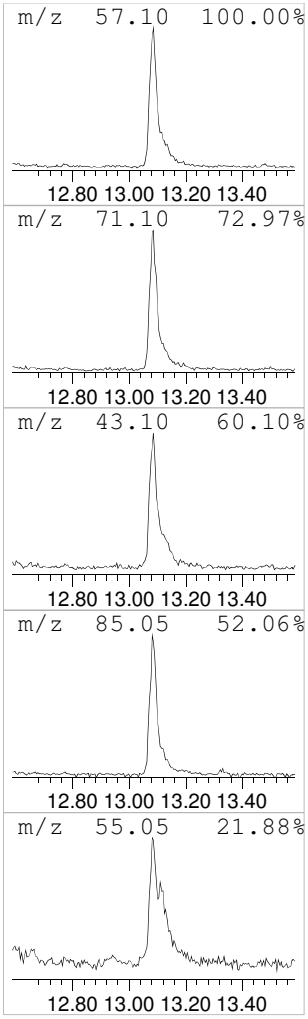
Peak Number 9 Nonacosane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.09	13.71 ug/l	280267	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	98
2	Heneicosane	296	C21H44	000629-94-7	91
3	Pentacosane	352	C25H52	000629-99-2	91
4	Eicosane	282	C20H42	000112-95-8	91
5	Tetratriacontane	479	C34H70	014167-59-0	91





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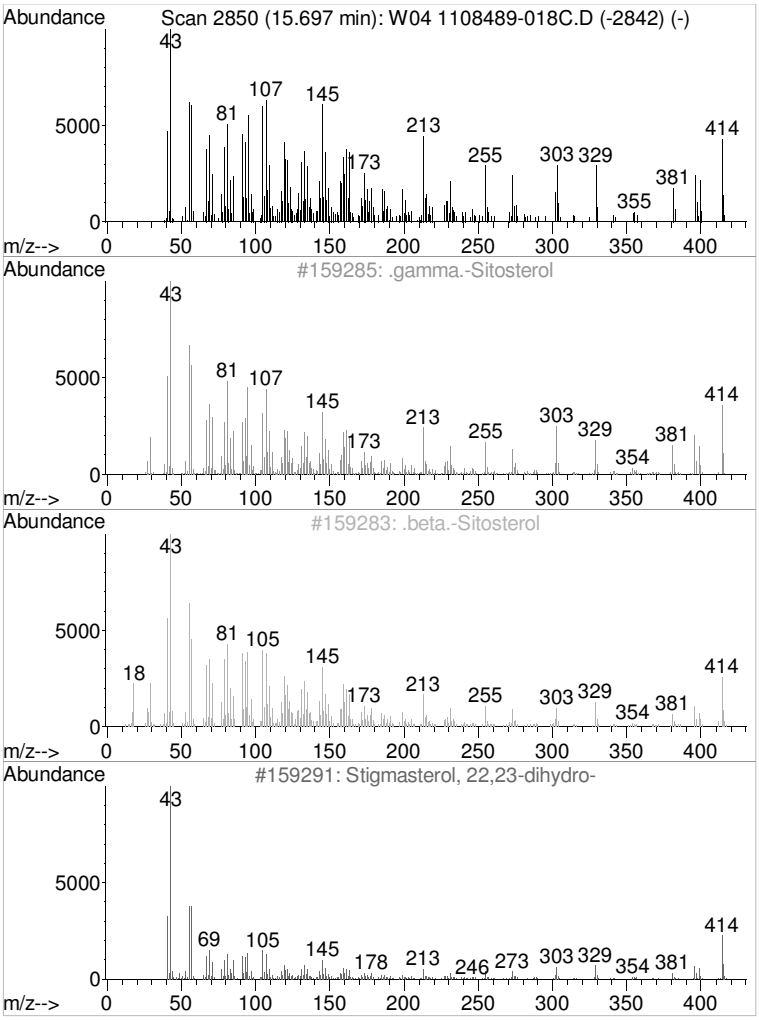
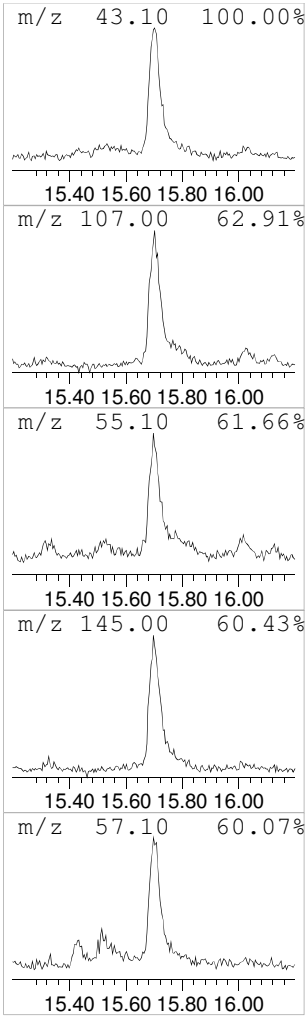
Peak Number 10 .gamma.-Sitosterol Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.70	25.50 ug/l	521106	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	99
2	.beta.-Sitosterol	414	C29H50O	000083-46-5	98
3	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	95
4	17-(1,5-Dimethylhexyl)-10,13-dim...	414	C29H50O	1000210-86-9	48
5	Campesterol	400	C28H48O	000474-62-4	35





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W04 1108489-018C.D
Acq On : 1 Sep 2011 3:06 pm
Operator : ALICIA HABERLE
Sample : 1108489-018C
Misc : SAMP
ALS Vial : 11 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.95	64.4	ug/l	1278610	1	4.28	794275	40.0
n-Hexadecanoic acid	9.17	8.1	ug/l	247967	4	8.61	1225270	40.0
Hexadecanoic acid...	10.05	9.7	ug/l	250542	5	11.31	1034030	40.0
9-Octadecenamide,...	10.70	10.6	ug/l	273015	5	11.31	1034030	40.0
Octadecanoic acid...	10.76	6.8	ug/l	176404	5	11.31	1034030	40.0
Heptafluorobutyri...	11.19	11.4	ug/l	295021	5	11.31	1034030	40.0
1-Octadecene	12.07	10.7	ug/l	276449	5	11.31	1034030	40.0
9-Octadecenamide,...	12.49	10.8	ug/l	219907	6	13.34	817496	40.0
Nonacosane	13.09	13.7	ug/l	280267	6	13.34	817496	40.0
.gamma.-Sitosterol	15.70	25.5	ug/l	521106	6	13.34	817496	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.412	85	88	91	rBV	47640	32547	1.59%	0.163%
2	2.537	107	114	129	rBV3	48979	133256	6.51%	0.666%
3	2.705	146	149	153	rVB	50157	37071	1.81%	0.185%
4	2.951	192	200	203	rBV	2320140	1780418	87.02%	8.896%
5	3.037	212	218	221	rBV	59889	40989	2.00%	0.205%
6	3.080	221	227	230	rVV	52730	40959	2.00%	0.205%
7	3.119	230	235	239	rVB	68894	55574	2.72%	0.278%
8	3.191	244	250	263	rBV2	1109899	939896	45.94%	4.696%
9	3.273	264	267	273	rVB	28913	26306	1.29%	0.131%
10	3.686	350	353	356	rVB	41896	32867	1.61%	0.164%
11	3.936	401	405	421	rBV	1091954	889319	43.47%	4.444%
12	4.273	471	475	480	rBV	998915	769737	37.62%	3.846%
13	4.307	480	482	491	rVB2	33141	39227	1.92%	0.196%
14	4.768	574	578	589	rBV	450185	402653	19.68%	2.012%
15	5.437	713	717	730	rBV	1387605	1074481	52.52%	5.369%
16	6.480	930	934	942	rBV	1263207	1013311	49.53%	5.063%
17	7.144	1067	1072	1091	rVB	1500198	1273324	62.23%	6.362%
18	7.918	1229	1233	1242	rBV	879042	719255	35.15%	3.594%
19	8.154	1278	1282	1286	rBV2	63977	52092	2.55%	0.260%
20	8.606	1372	1376	1385	rBV	1345328	1200020	58.65%	5.996%
21	9.168	1489	1493	1497	rBV	112046	103293	5.05%	0.516%
22	9.197	1497	1499	1506	rVB	26479	26871	1.31%	0.134%
23	9.688	1596	1601	1608	rBV2	25488	32610	1.59%	0.163%
24	9.952	1652	1656	1671	rBV3	47588	83059	4.06%	0.415%
25	10.048	1671	1676	1684	rBV2	2409372	2046004	100.00%	10.223%
26	10.193	1702	1706	1715	rVB	1101168	975750	47.69%	4.876%
27	10.702	1800	1812	1814	rBV	1439195	1559115	76.20%	7.790%
28	10.736	1818	1819	1821	rVV	586144	457484	22.36%	2.286%
29	10.760	1821	1824	1828	rVB	1523656	1426437	69.72%	7.127%
30	11.193	1908	1914	1928	rVB3	51318	95719	4.68%	0.478%
31	11.308	1933	1938	1944	rVV	1014666	1036933	50.68%	5.181%
32	11.351	1944	1947	1953	rVB	22549	28146	1.38%	0.141%
33	11.525	1978	1983	1987	rBV2	58832	83773	4.09%	0.419%
34	12.068	2090	2096	2107	rBV3	26748	54760	2.68%	0.274%
35	12.299	2139	2144	2150	rBV3	22701	31704	1.55%	0.158%
36	12.496	2178	2185	2202	rBV	184050	346215	16.92%	1.730%
37	12.655	2213	2218	2224	rVB2	19339	30579	1.49%	0.153%
38	13.087	2302	2308	2313	rBV3	25624	43128	2.11%	0.215%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	13.338	2352	2360	2375	rBV	569672	871951	42.62%	4.357%
40	14.213	2536	2542	2549	rBV7	16936	32592	1.59%	0.163%
41	15.694	2845	2850	2865	rVB7	36447	93906	4.59%	0.469%

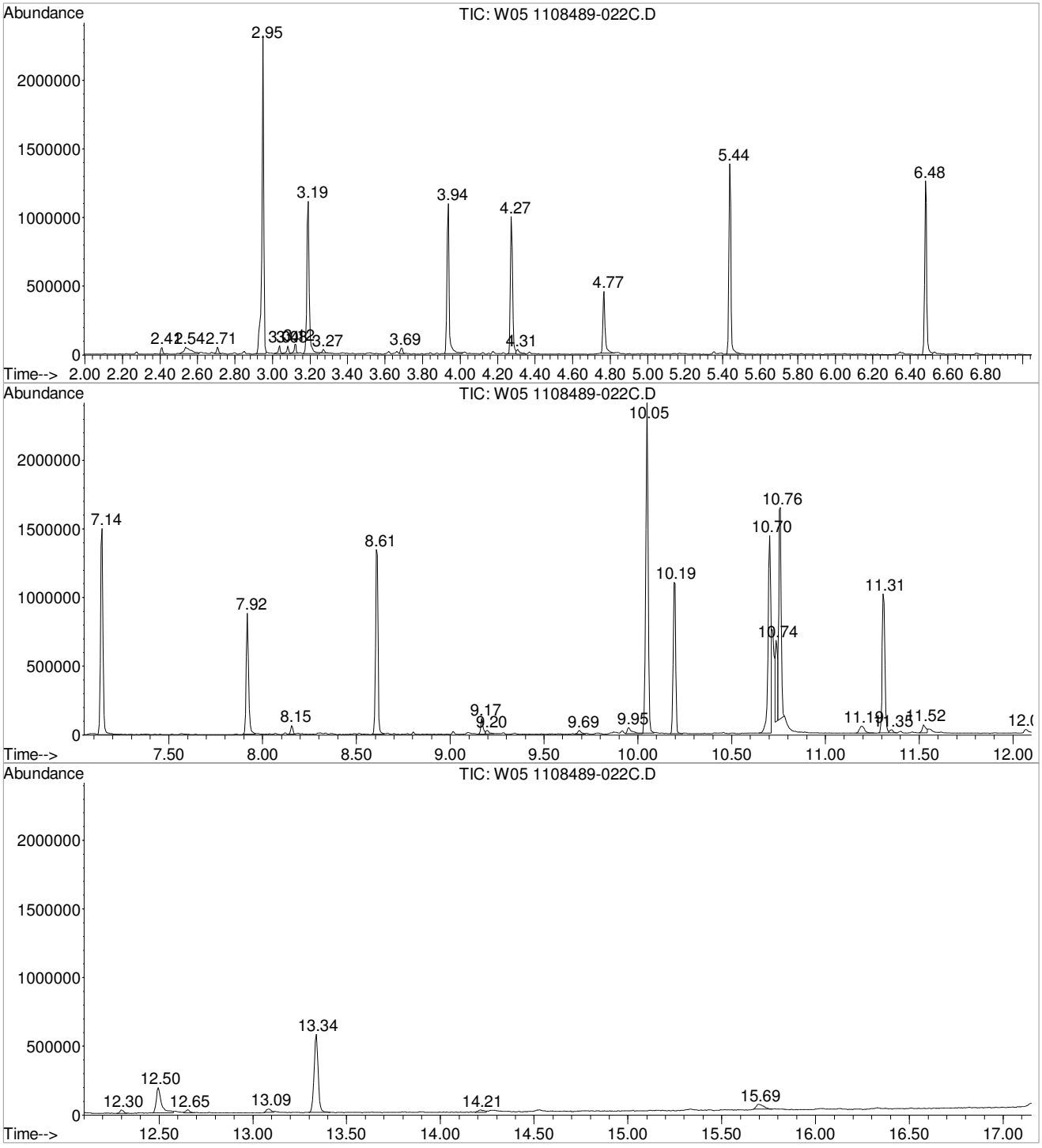
Sum of corrected areas: 20013331

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

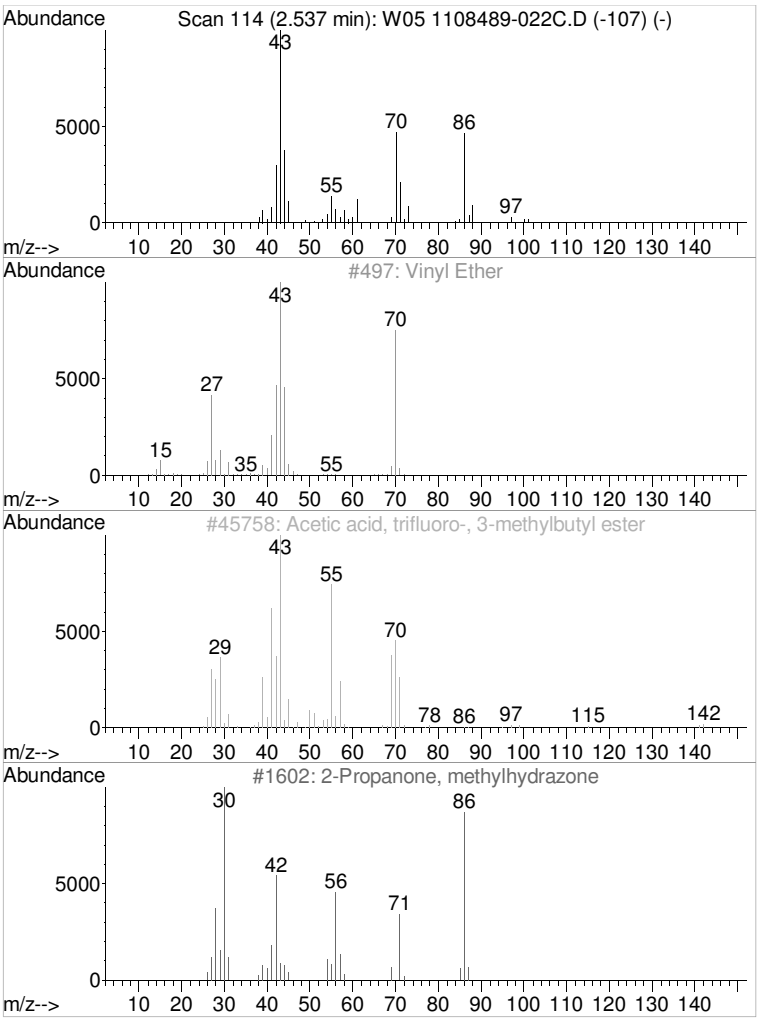
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

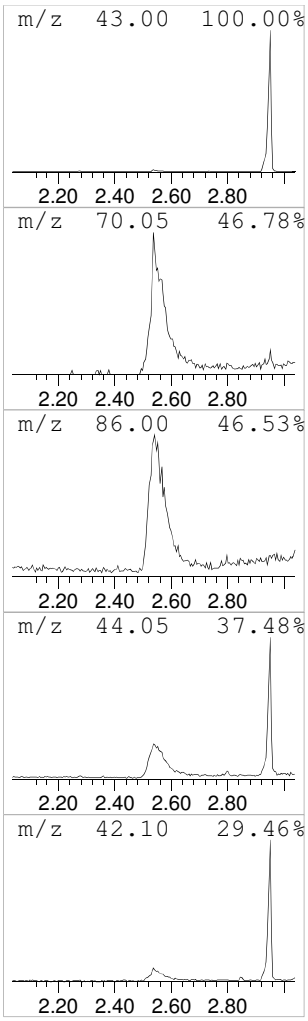
****

Peak Number 1 Vinyl Ether Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	6.92 ug/l	133256	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Vinyl Ether	70	C4H6O	000109-93-3	38
2	Acetic acid, trifluoro-, 3-methy...	184	C7H11F3O2	000327-69-5	35
3	2-Propanone, methylhydrazone	86	C4H10N2	005771-02-8	17
4	Acetamide, N-(aminoiminomethyl)-	101	C3H7N3O	005699-40-1	16
5	Azetidine, 1-nitroso-	86	C3H6N2O	015216-10-1	16





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

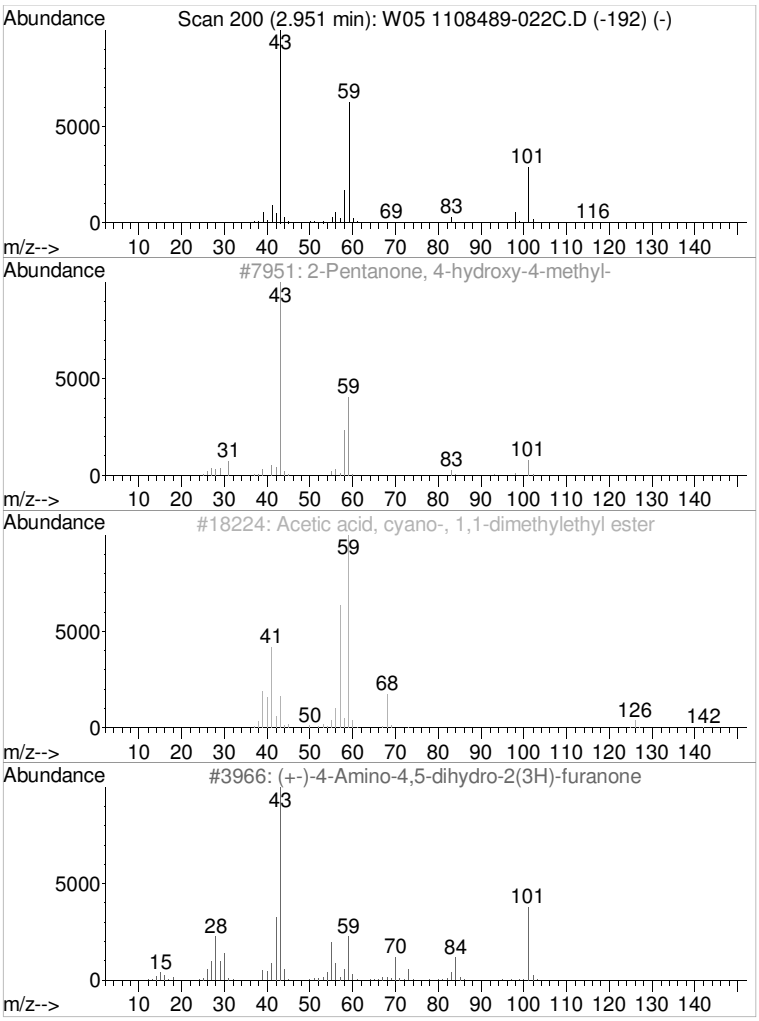
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

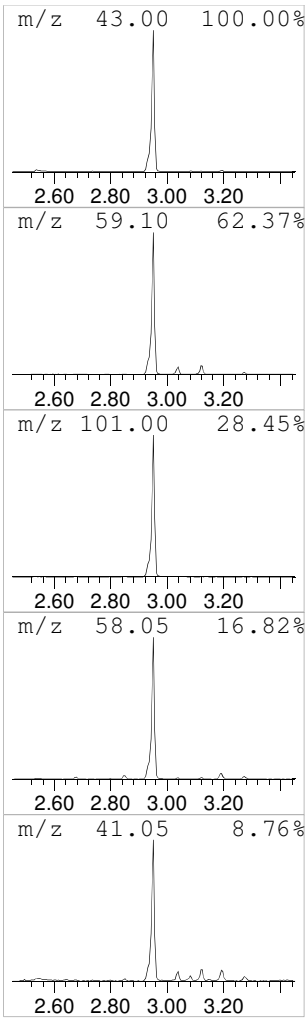
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	92.52 ug/l	1780420	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

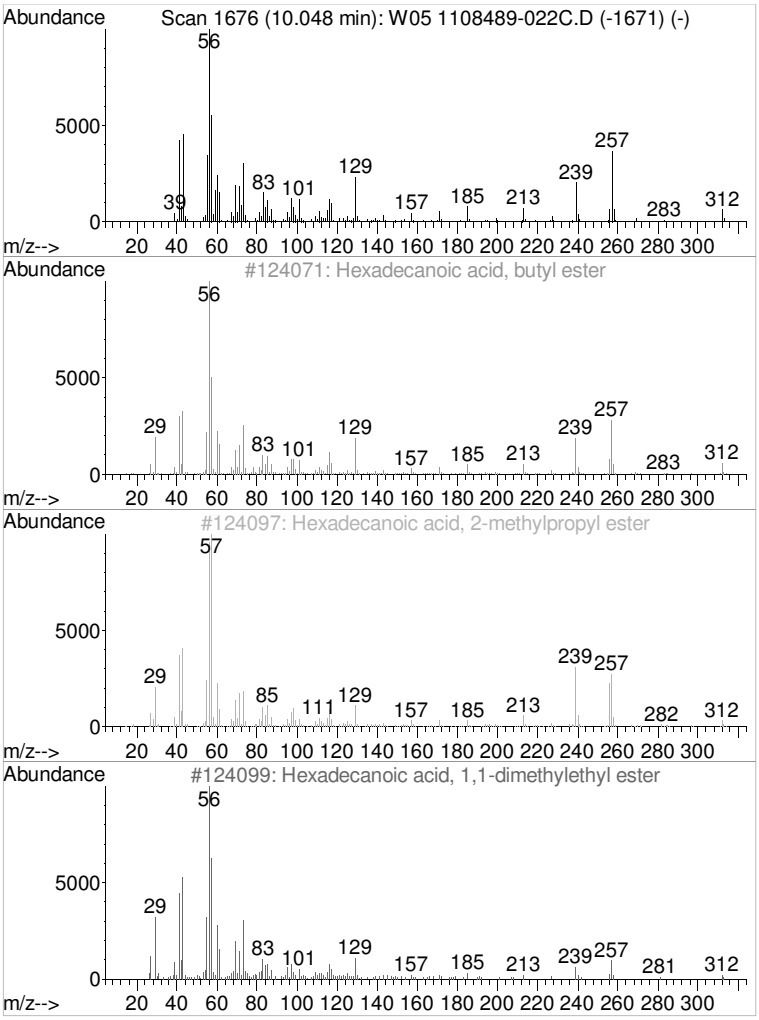
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

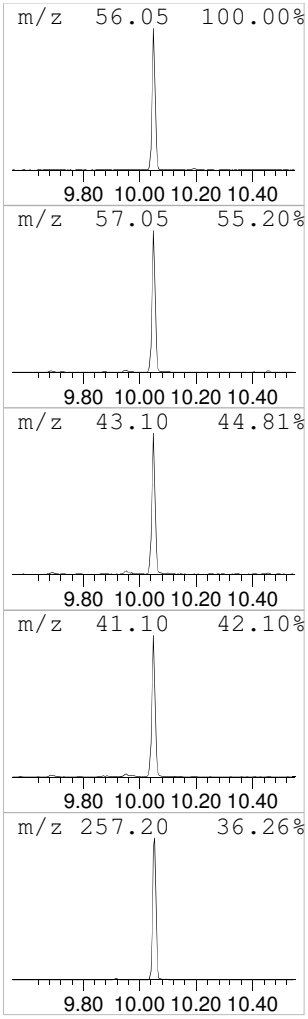
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	78.93 ug/l	2046000	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	76
3	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	70
4	Nipecotic acid	129	C6H11NO2	000498-95-3	43
5	1-Pentene, 2,4-dimethyl-	98	C7H14	002213-32-3	27





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

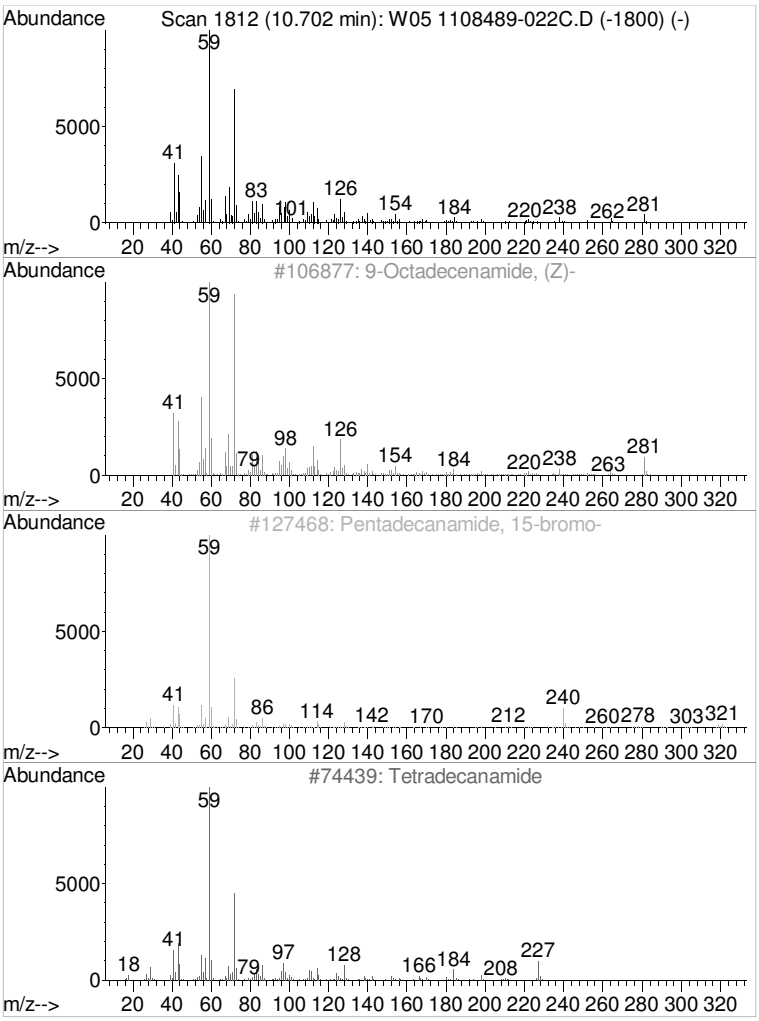
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

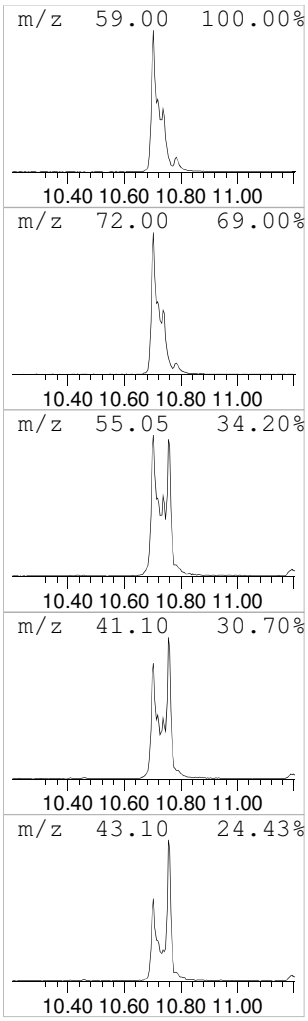
****

Peak Number 4 9-Octadecenamide, (Z)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.70	60.14 ug/l	1559120	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	95
2	Pentadecanamide, 15-bromo-	319	C15H30BrNO	1000163-86-1	59
3	Tetradecanamide	227	C14H29NO	000638-58-4	53
4	Octanamide	143	C8H17NO	000629-01-6	50
5	Dodecanamide	199	C12H25NO	001120-16-7	50





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

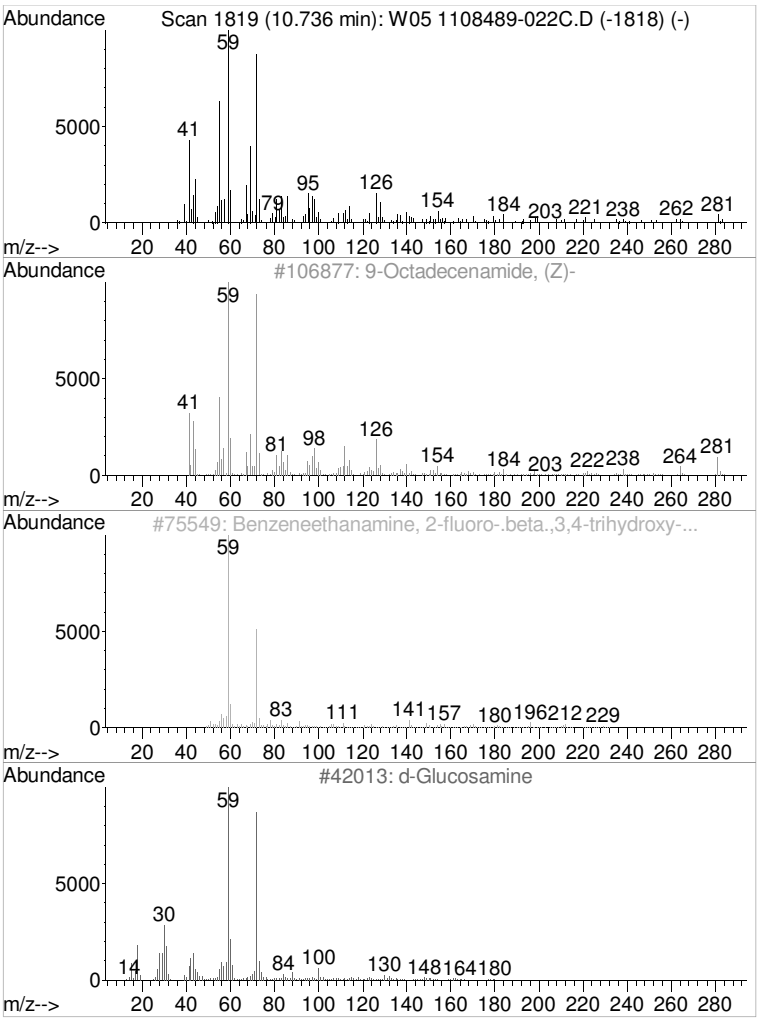
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

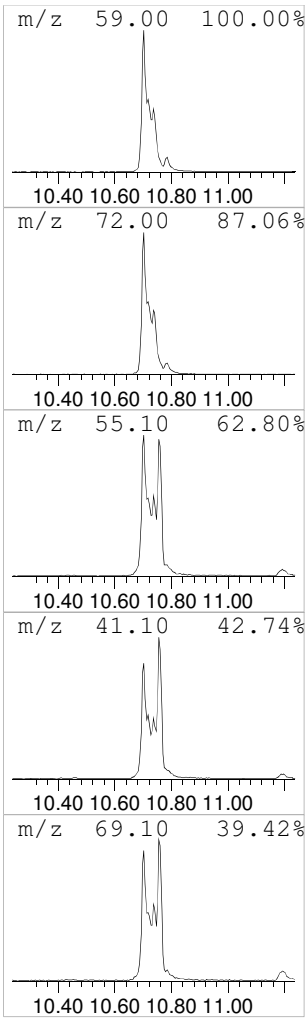
****

Peak Number 5 9-Octadecenamide, (Z)- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.74	17.65 ug/l	457484	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	87
2	Benzeneethanamine, 2-fluoro-.bet...	229	C11H16FNO3	061338-98-5	53
3	d-Glucosamine	179	C6H13NO5	000090-77-7	53
4	Tetradecanamide	227	C14H29NO	000638-58-4	43
5	Dodecanamide	199	C12H25NO	001120-16-7	41





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

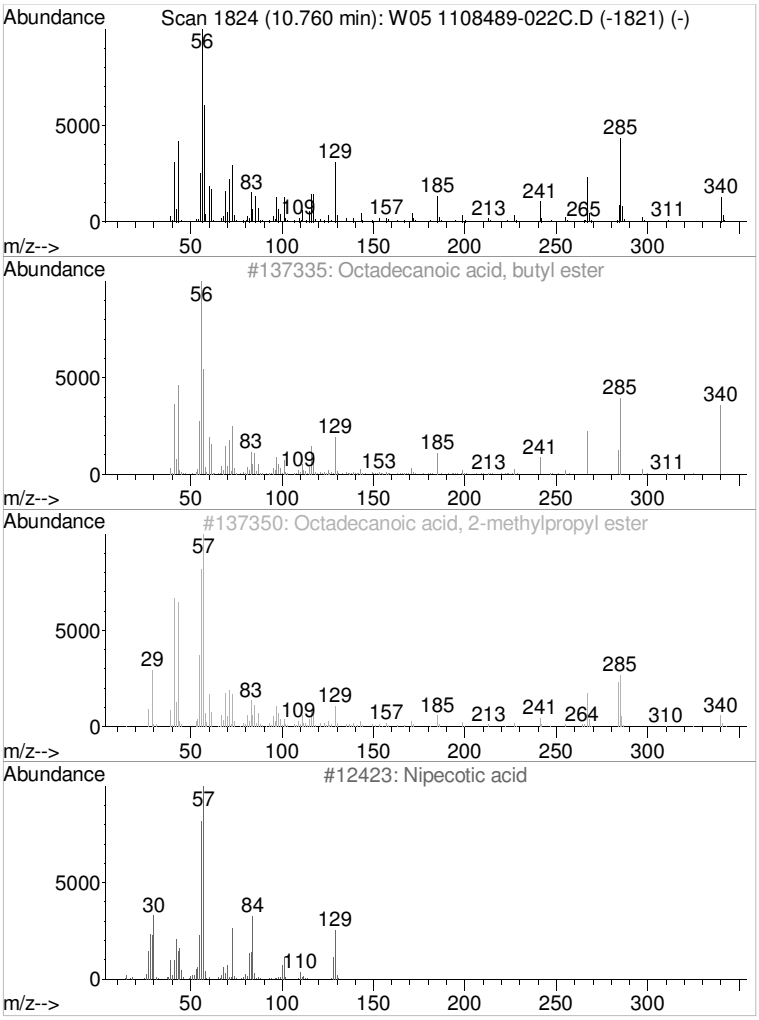
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

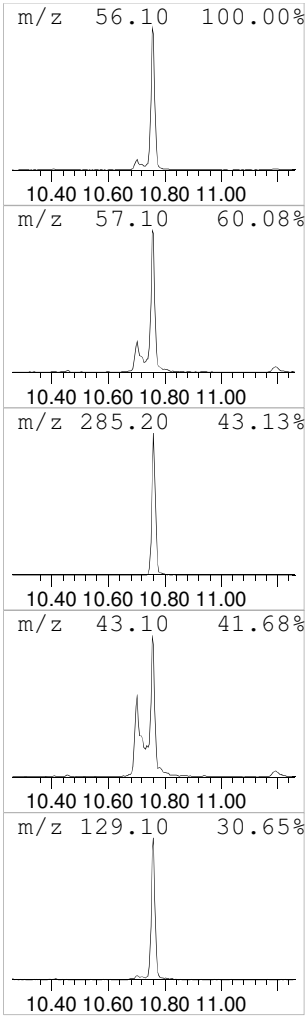
****

Peak Number 6 Octadecanoic acid, butyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	55.03 ug/l	1426440	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	90
3	Nipecotic acid	129	C6H11NO2	000498-95-3	43
4	n-Butyl myristate	284	C18H36O2	000110-36-1	43
5	1,3-Pentanediol, 2,2,4-trimethyl-	146	C8H18O2	000144-19-4	25





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

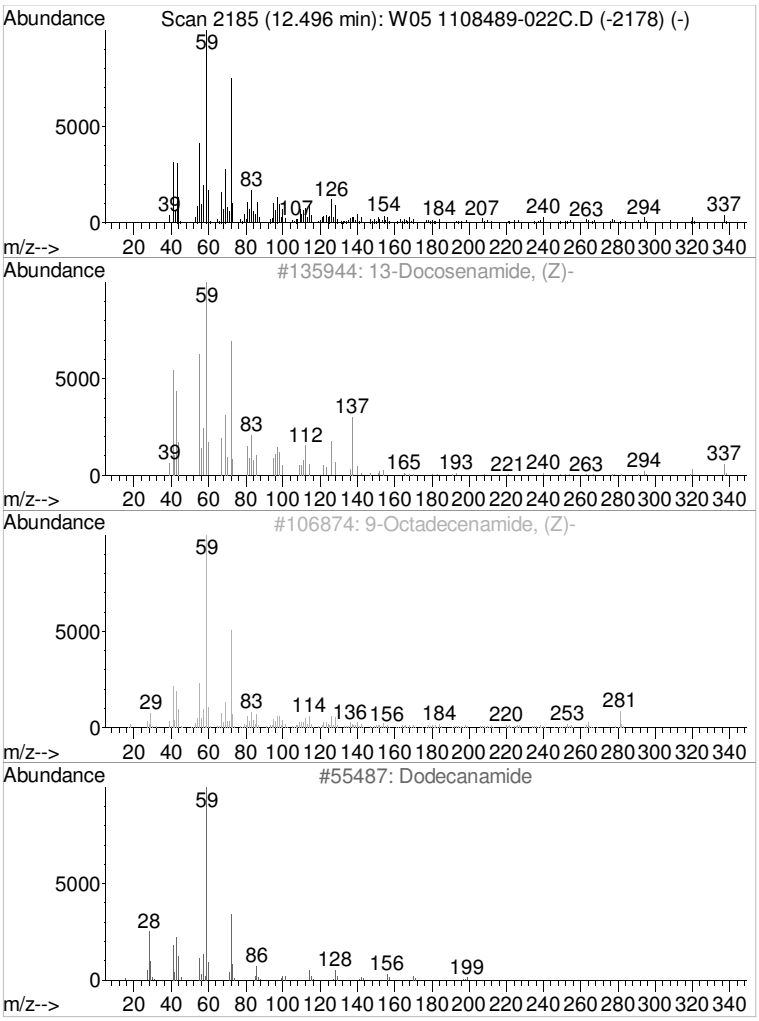
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

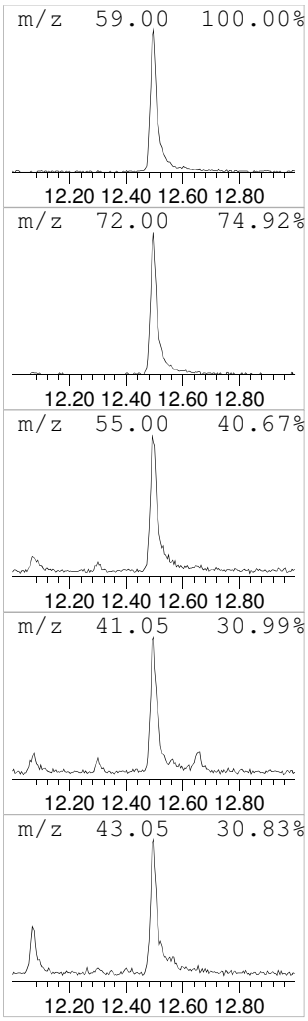
****

Peak Number 7 13-Docosenamide, (Z)- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	15.88 ug/l	346215	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	93
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	86
3	Dodecanamide	199	C12H25NO	001120-16-7	46
4	Tetradecanamide	227	C14H29NO	000638-58-4	43
5	Decanamide-	171	C10H21NO	002319-29-1	43





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

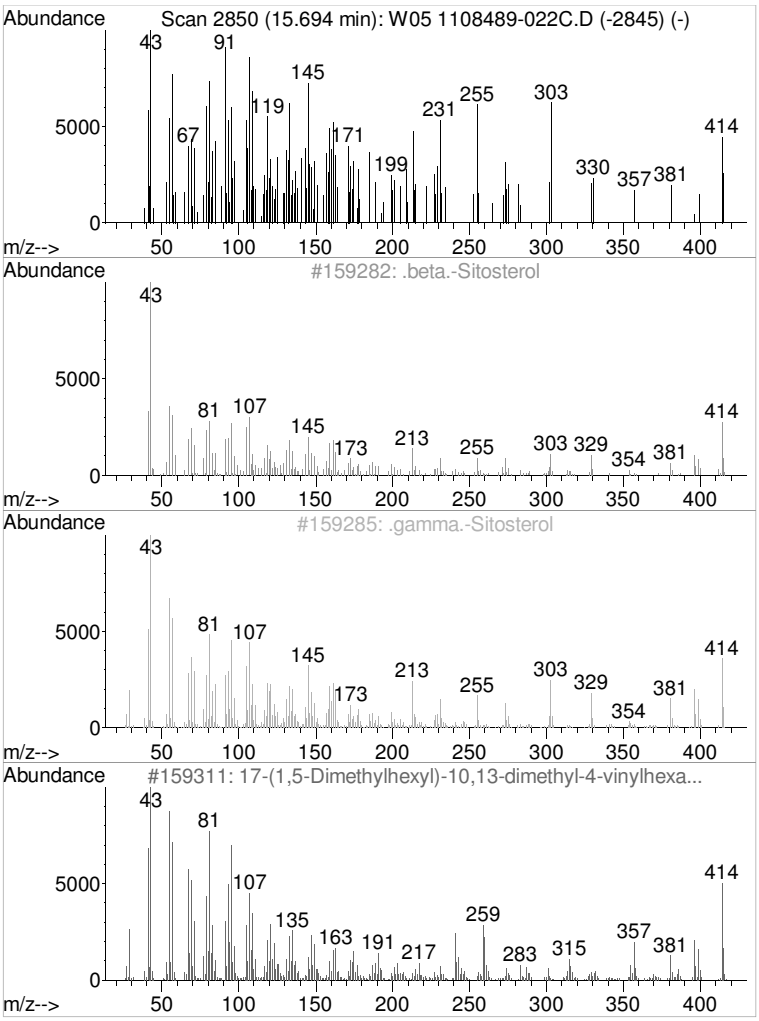
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

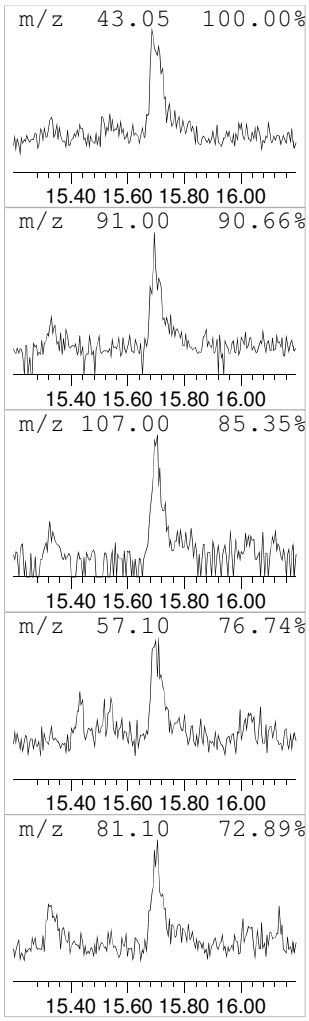
****

Peak Number 8 .beta.-Sitosterol Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.69	4.31 ug/l	93906	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-Sitosterol	414	C29H50O	000083-46-5	90
2	.gamma.-Sitosterol	414	C29H50O	000083-47-6	55
3	17-(1,5-Dimethylhexyl)-10,13-dim...	414	C29H50O	1000210-86-9	41
4	Cholest-7-en-3-ol, 4,4-dimethyl-...	414	C29H50O	006384-28-7	22
5	Kauren-18-ol, acetate, (4.beta.)-	330	C22H34O2	072150-74-4	20





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W05 1108489-022C.D
Acq On : 1 Sep 2011 3:32 pm
Operator : ALICIA HABERLE
Sample : 1108489-022C
Misc : SAMP
ALS Vial : 12 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Vinyl Ether	2.54	6.9	ug/l	133256	1	4.27	769737	40.0
2-Pentanone, 4-hy...	2.95	92.5	ug/l	1780420	1	4.27	769737	40.0
Hexadecanoic acid...	10.05	78.9	ug/l	2046000	5	11.31	1036930	40.0
9-Octadecenamide,...	10.70	60.1	ug/l	1559120	5	11.31	1036930	40.0
9-Octadecenamide,...	10.74	17.6	ug/l	457484	5	11.31	1036930	40.0
Octadecanoic acid...	10.76	55.0	ug/l	1426440	5	11.31	1036930	40.0
13-Docosenamide, ...	12.50	15.9	ug/l	346215	6	13.34	871951	40.0
.beta.-Sitosterol	15.69	4.3	ug/l	93906	6	13.34	871951	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.408	84	87	90	rBV	49714	30490	2.26%	0.176%
2	2.542	107	115	124	rBV5	23064	67236	4.98%	0.387%
3	2.706	144	149	153	rVB2	48618	35411	2.62%	0.204%
4	2.845	171	178	182	rBV2	19422	18465	1.37%	0.106%
5	2.946	192	199	203	rBV	1617802	1349077	100.00%	7.774%
6	3.038	212	218	221	rVB	54526	40028	2.97%	0.231%
7	3.081	221	227	230	rVB	53429	40225	2.98%	0.232%
8	3.119	230	235	239	rBV	76952	56562	4.19%	0.326%
9	3.187	243	249	263	rBV2	1009959	875702	64.91%	5.046%
10	3.273	263	267	272	rVB	28828	26273	1.95%	0.151%
11	3.663	342	348	350	rBV	19913	18655	1.38%	0.107%
12	3.687	350	353	356	rVB	44891	34366	2.55%	0.198%
13	3.937	401	405	419	rBV	964880	839852	62.25%	4.840%
14	4.173	451	454	463	rVB	53131	41902	3.11%	0.241%
15	4.274	471	475	492	rVB	1051174	789716	58.54%	4.551%
16	4.706	559	565	567	rBV4	11289	18143	1.34%	0.105%
17	4.764	573	577	589	rVB	429113	382241	28.33%	2.203%
18	5.351	696	699	702	rBV3	19332	16184	1.20%	0.093%
19	5.437	713	717	729	rBV	1410358	1083994	80.35%	6.247%
20	6.341	898	905	907	rBV	28810	26828	1.99%	0.155%
21	6.481	930	934	942	rBV	1308696	975104	72.28%	5.619%
22	6.625	956	964	966	rBV2	18308	25868	1.92%	0.149%
23	6.649	966	969	978	rVB	31396	41339	3.06%	0.238%
24	7.140	1067	1071	1083	rBV	1514561	1239095	91.85%	7.140%
25	7.919	1225	1233	1243	rBV	852247	737220	54.65%	4.248%
26	8.154	1278	1282	1286	rBV	145559	110883	8.22%	0.639%
27	8.294	1307	1311	1318	rBV4	37263	63788	4.73%	0.368%
28	8.606	1369	1376	1384	rBV	1373576	1222130	90.59%	7.043%
29	8.861	1423	1429	1434	rBV7	11109	16507	1.22%	0.095%
30	9.097	1472	1478	1482	rBV2	31921	37832	2.80%	0.218%
31	9.130	1482	1485	1489	rBV	116464	100599	7.46%	0.580%
32	9.169	1489	1493	1498	rBV	362986	311886	23.12%	1.797%
33	9.342	1525	1529	1544	rVB7	23323	38530	2.86%	0.222%
34	9.852	1631	1635	1637	rBV5	21872	22877	1.70%	0.132%
35	9.885	1637	1642	1646	rVV2	52381	80069	5.94%	0.461%
36	9.914	1646	1648	1652	rVV	30288	30903	2.29%	0.178%
37	9.948	1652	1655	1666	rVB2	83949	103252	7.65%	0.595%
38	10.049	1671	1676	1683	rVB	967834	790959	58.63%	4.558%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

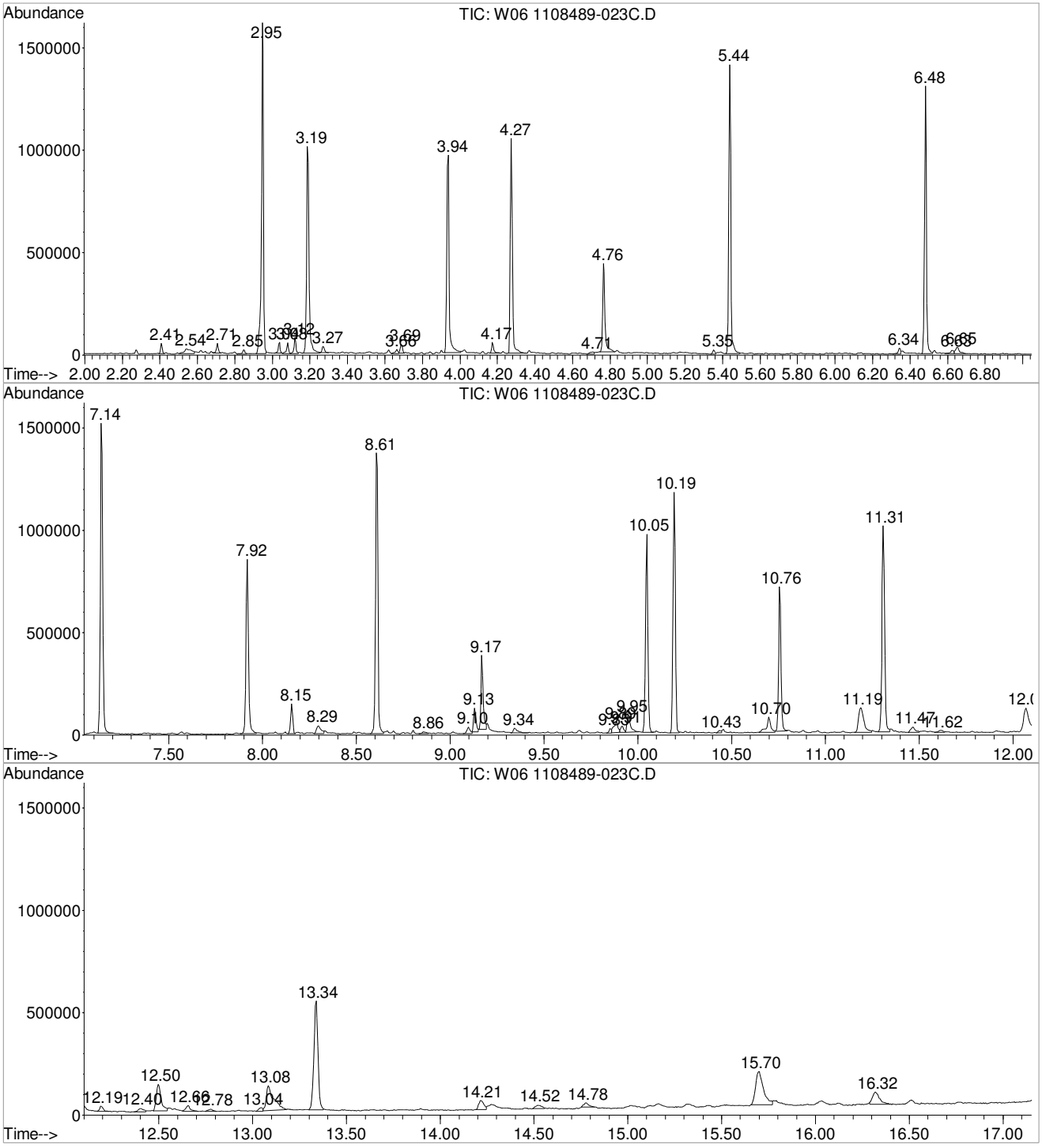
39	10.193	1702	1706	1712	rBV	1175938	963842	71.44%	5.554%
40	10.434	1753	1756	1759	rBV5	12100	15881	1.18%	0.092%
41	10.698	1800	1811	1818	rBV2	73331	111927	8.30%	0.645%
42	10.756	1819	1823	1832	rVV	704432	640434	47.47%	3.691%
43	11.189	1906	1913	1925	rBV3	120822	234445	17.38%	1.351%
44	11.309	1932	1938	1945	rBV	1007916	1016335	75.34%	5.857%
45	11.468	1966	1971	1978	rBV10	24015	37611	2.79%	0.217%
46	11.617	1995	2002	2006	rBV6	10732	18895	1.40%	0.109%
47	12.069	2088	2096	2108	rBV5	118014	257068	19.06%	1.481%
48	12.189	2117	2121	2130	rVB7	26002	36746	2.72%	0.212%
49	12.400	2158	2165	2171	rBV10	18378	35238	2.61%	0.203%
50	12.497	2179	2185	2195	rBV2	129024	221329	16.41%	1.275%
51	12.655	2212	2218	2228	rVB3	29170	50915	3.77%	0.293%
52	12.776	2237	2243	2249	rVB3	10738	17432	1.29%	0.100%
53	13.045	2293	2299	2301	rBV5	18266	25404	1.88%	0.146%
54	13.083	2301	2307	2327	rVB3	119866	318715	23.62%	1.837%
55	13.338	2352	2360	2368	rBV	531434	820976	60.85%	4.731%
56	14.213	2537	2542	2549	rBV3	44575	85440	6.33%	0.492%
57	14.521	2600	2606	2613	rBV3	17136	38220	2.83%	0.220%
58	14.776	2654	2659	2668	rVB10	22266	42169	3.13%	0.243%
59	15.699	2842	2851	2866	rBV4	162836	472979	35.06%	2.726%
60	16.320	2974	2980	2996	rVB4	59665	151341	11.22%	0.872%

Sum of corrected areas: 17353533

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



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Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

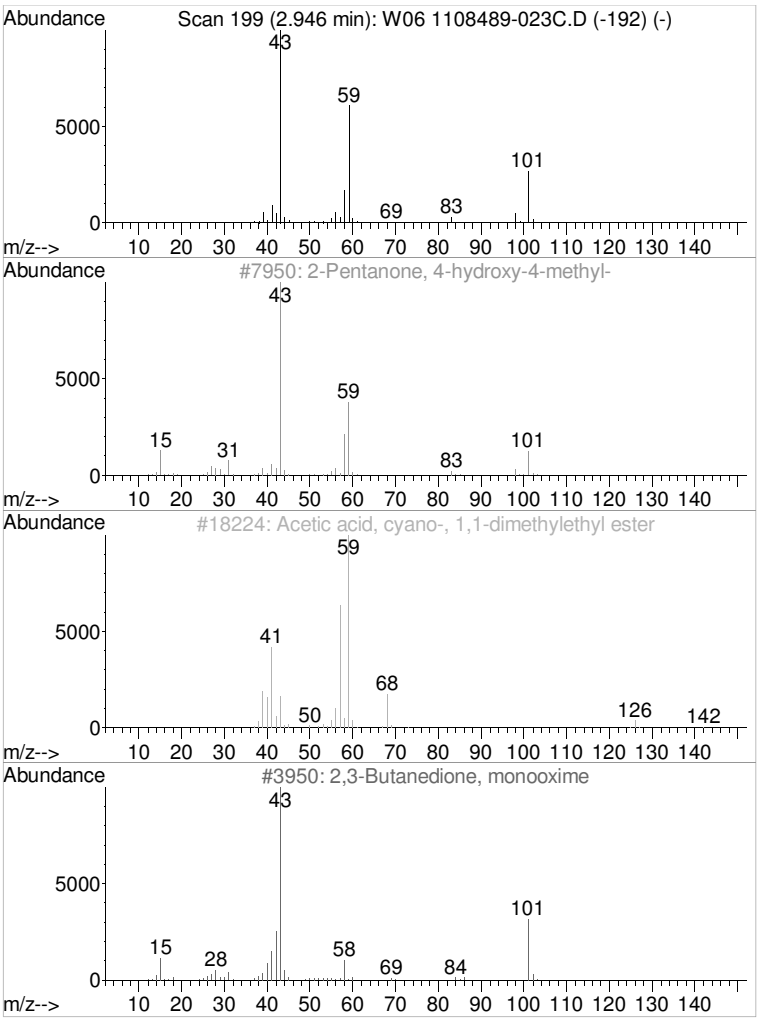
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

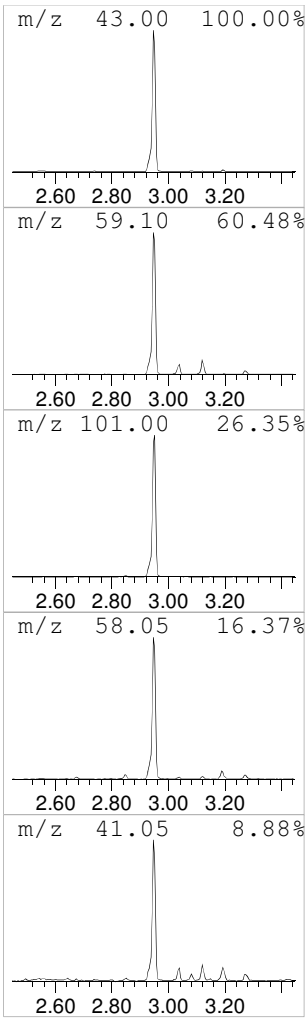
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	68.33 ug/l	1349080	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
4	Propanamide, N-ethyl-	101	C5H11NO	005129-72-6	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

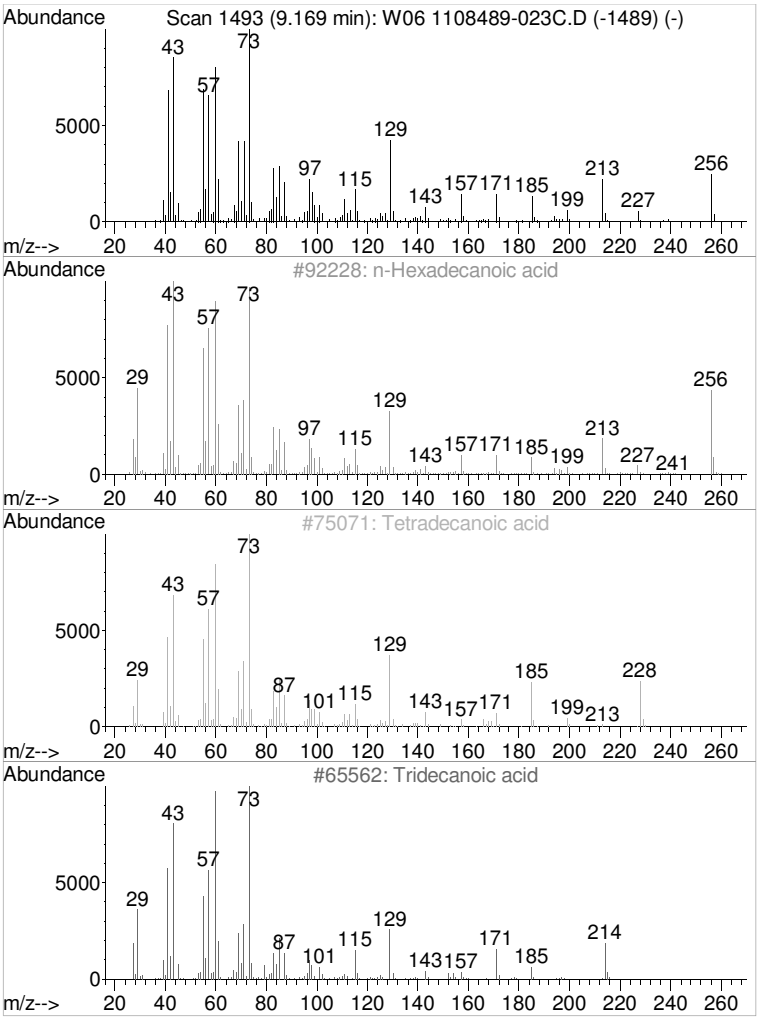
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

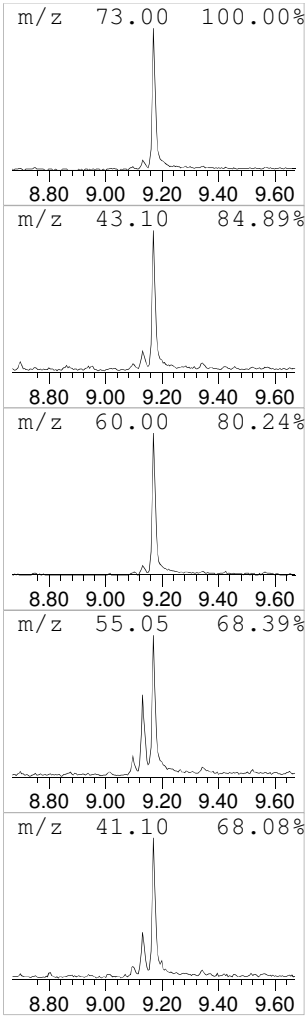
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	10.21 ug/l	311886	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
3	Tridecanoic acid	214	C13H26O2	000638-53-9	86
4	Undecanoic acid	186	C11H22O2	000112-37-8	74
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	64





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

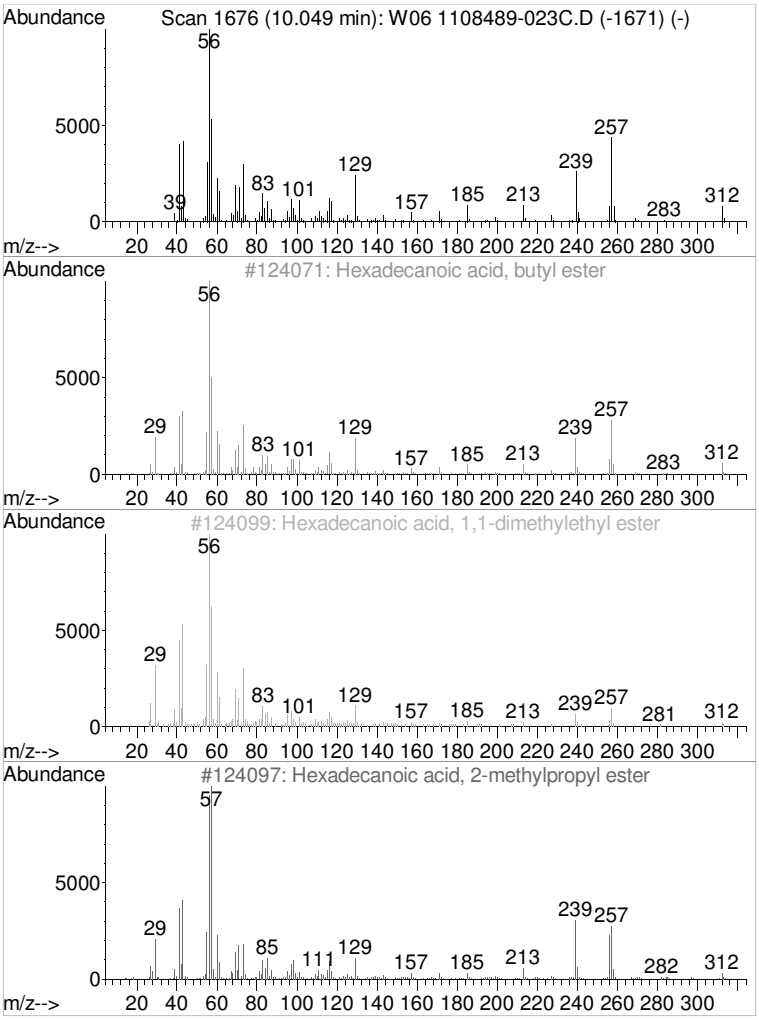
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

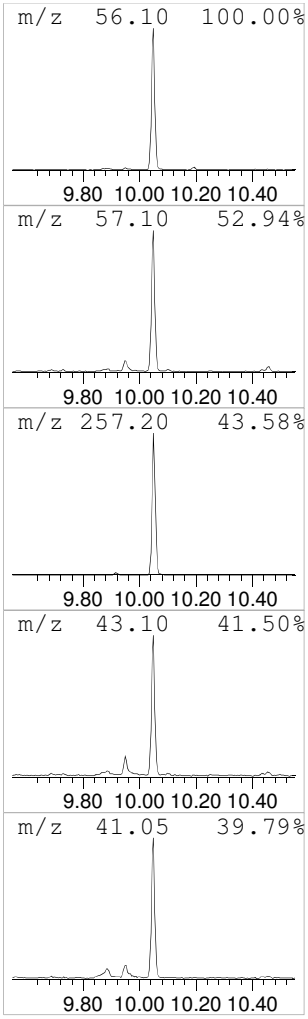
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	31.13 ug/l	790959	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	93
3	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	59
4	Nipecotic acid	129	C6H11NO2	000498-95-3	38
5	Cyclohexanamine	99	C6H13N	000108-91-8	25





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

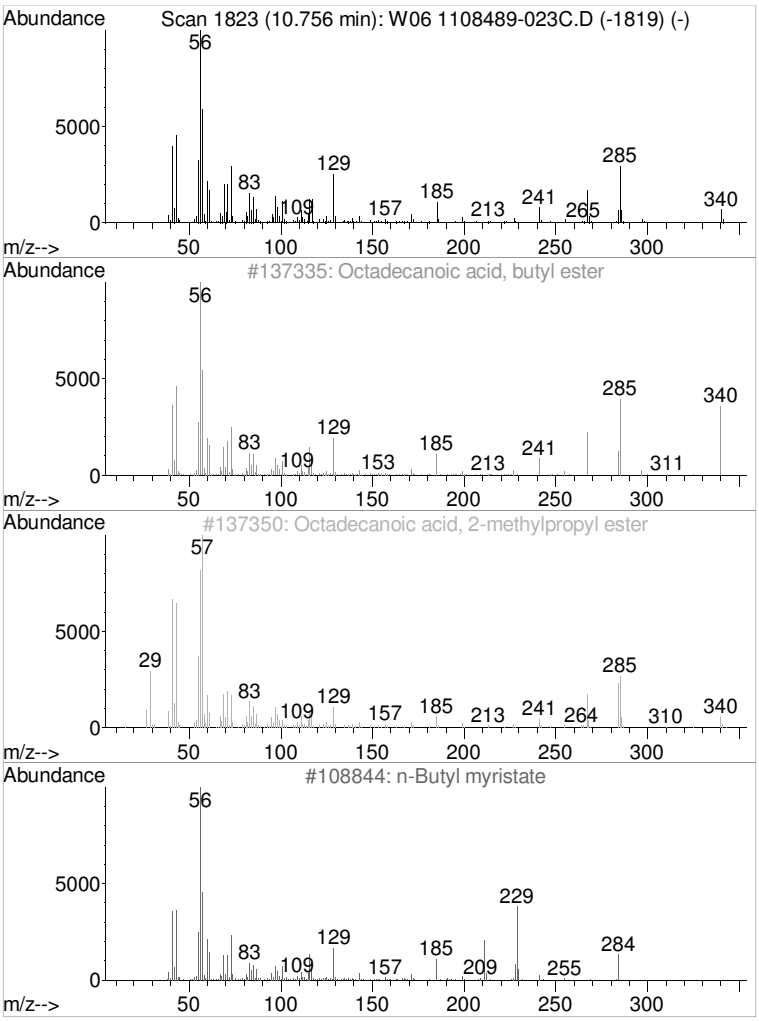
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

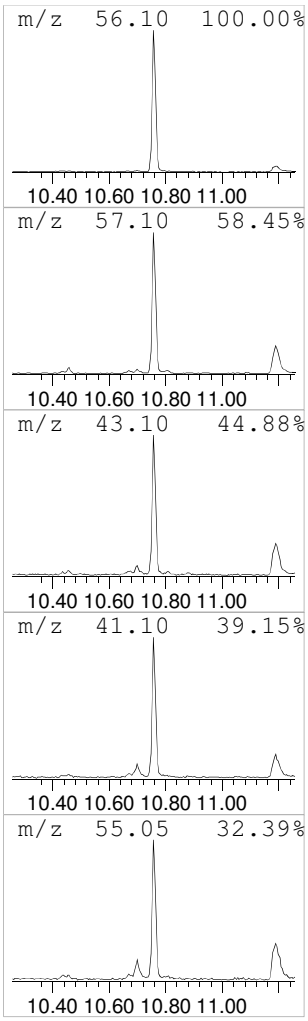
****

Peak Number 4 Octadecanoic acid, butyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	25.21 ug/l	640434	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	96
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	93
3	n-Butyl myristate	284	C18H36O2	000110-36-1	62
4	Cyclohexanamine	99	C6H13N	000108-91-8	30
5	Cyclobutane, 1,2-diethyl-, trans-	112	C8H16	019341-98-1	27





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

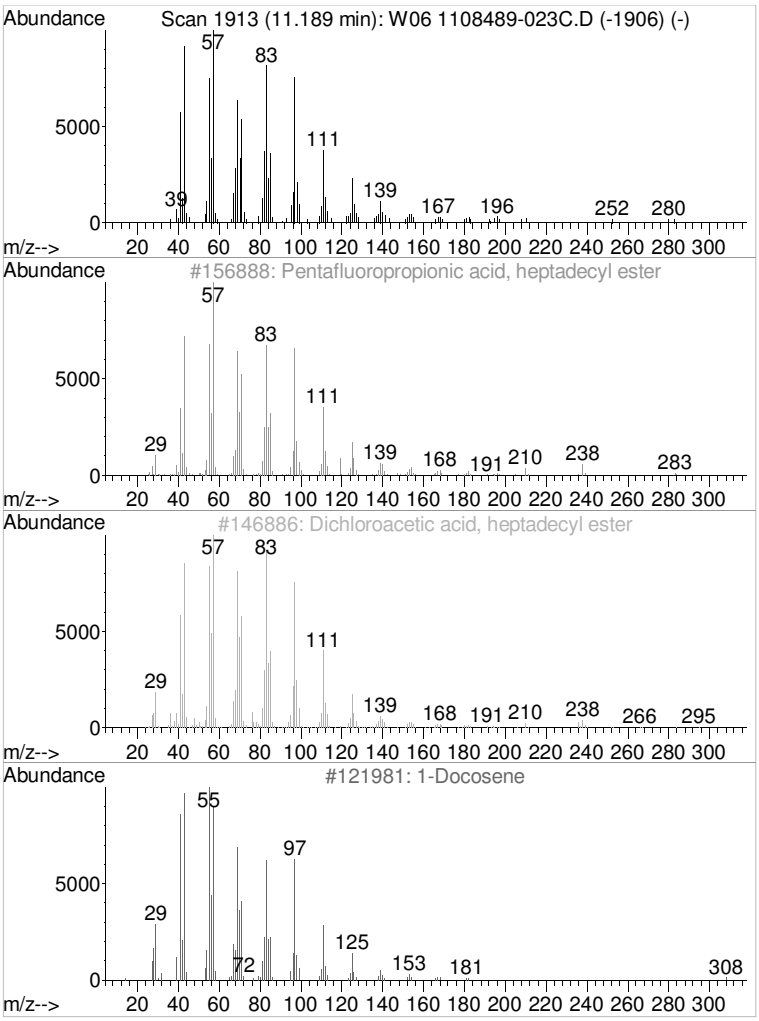
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

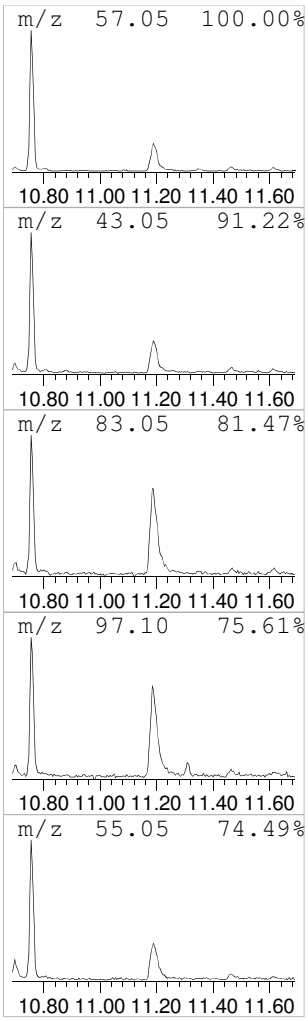
****

Peak Number 5 Pentafluoropropionic acid, ... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	9.23 ug/l	234445	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	94
2	Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	93
3	1-Docosene	308	C22H44	001599-67-3	91
4	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
5	1-Hexadecanesulfonyl chloride	324	C16H33ClO2S	038775-38-1	91





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

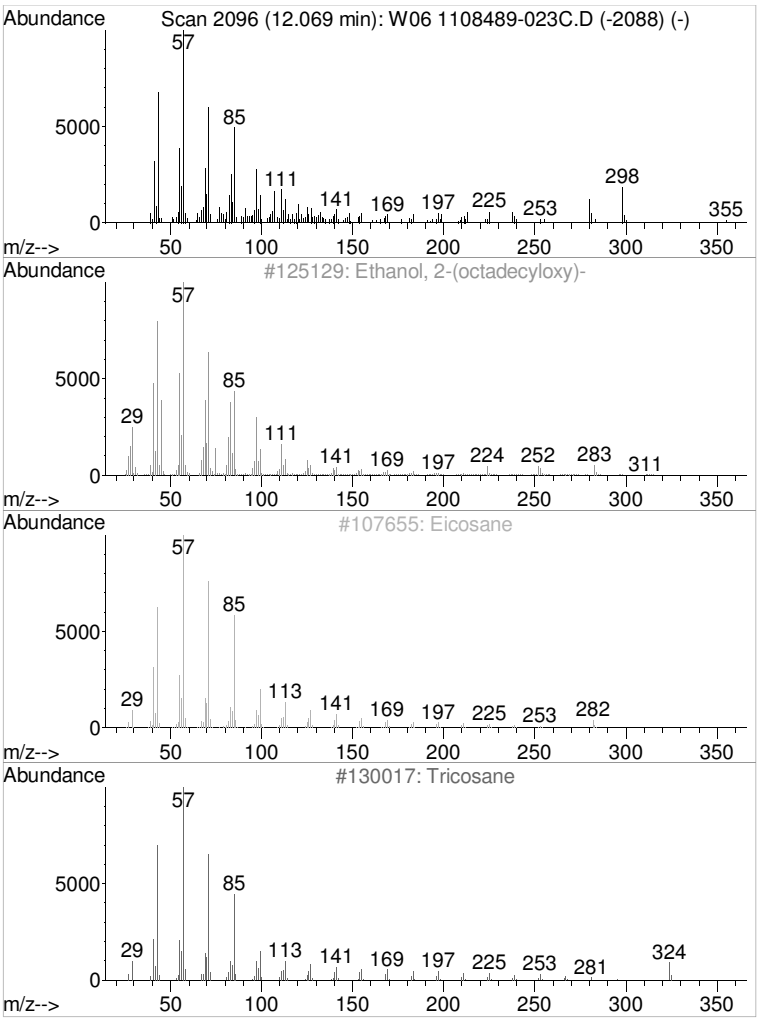
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

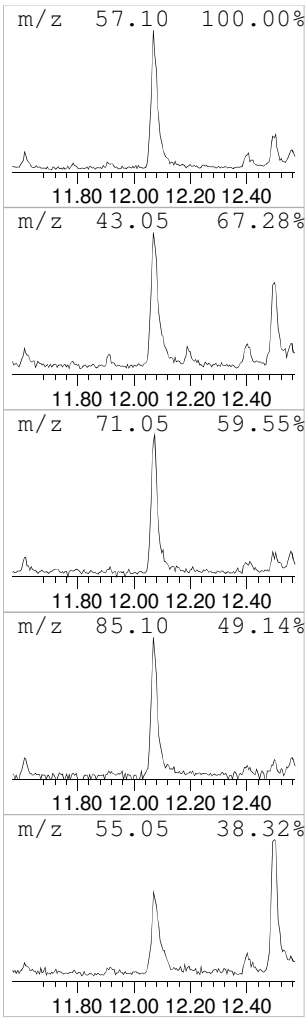
****

Peak Number 6 Ethanol, 2-(octadecyloxy)- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.07	10.12 ug/l	257068	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(octadecyloxy)-	314	C20H42O2	002136-72-3	68
2	Eicosane	282	C20H42	000112-95-8	60
3	Tricosane	324	C23H48	000638-67-5	60
4	Heneicosane	296	C21H44	000629-94-7	60
5	Nonahexacontanoic acid	999	C69H138O2	040710-32-5	60





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

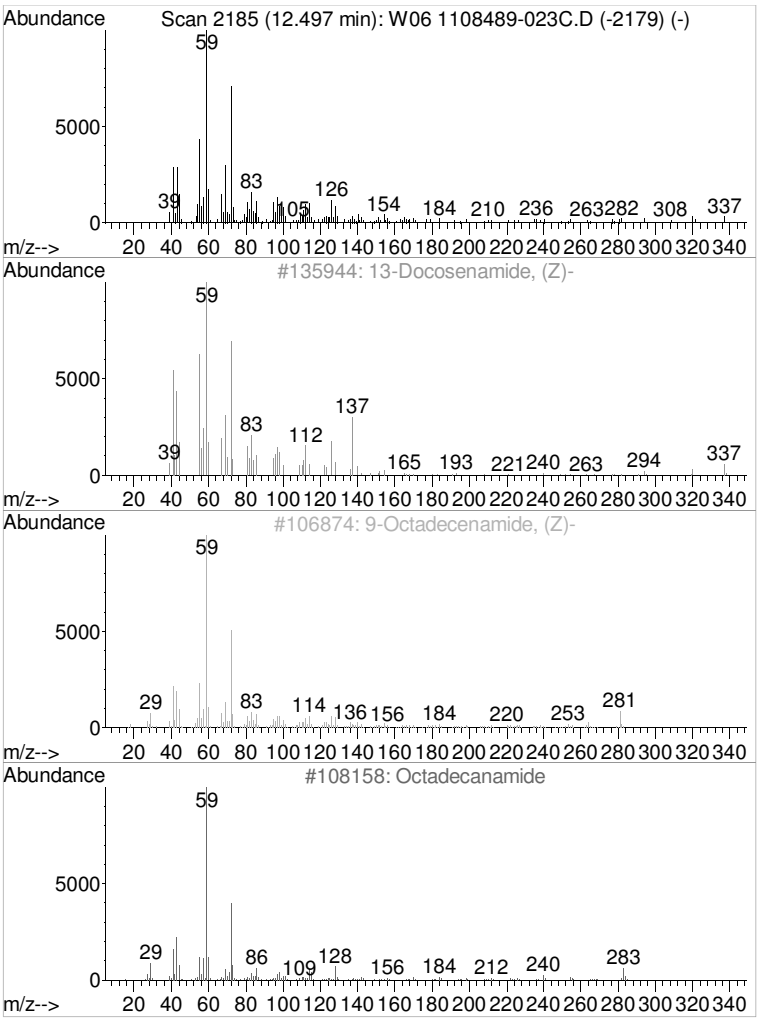
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

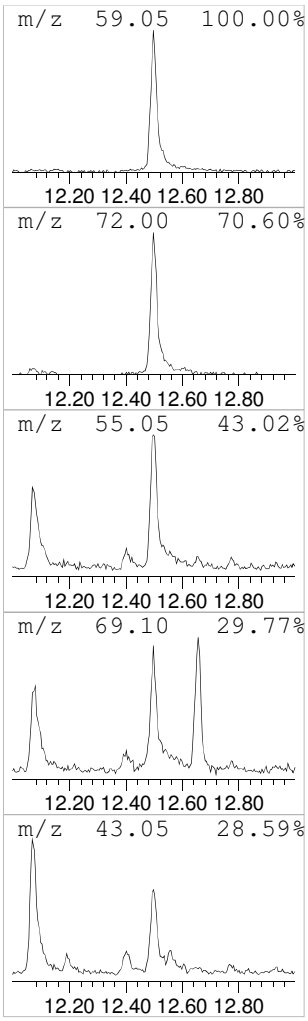
****

Peak Number 7 13-Docosenamide, (Z)- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	10.78 ug/l	221329	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	90
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	87
3	Octadecanamide	283	C18H37NO	000124-26-5	59
4	Hexadecanamide	255	C16H33NO	000629-54-9	59
5	Dodecanamide	199	C12H25NO	001120-16-7	52





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Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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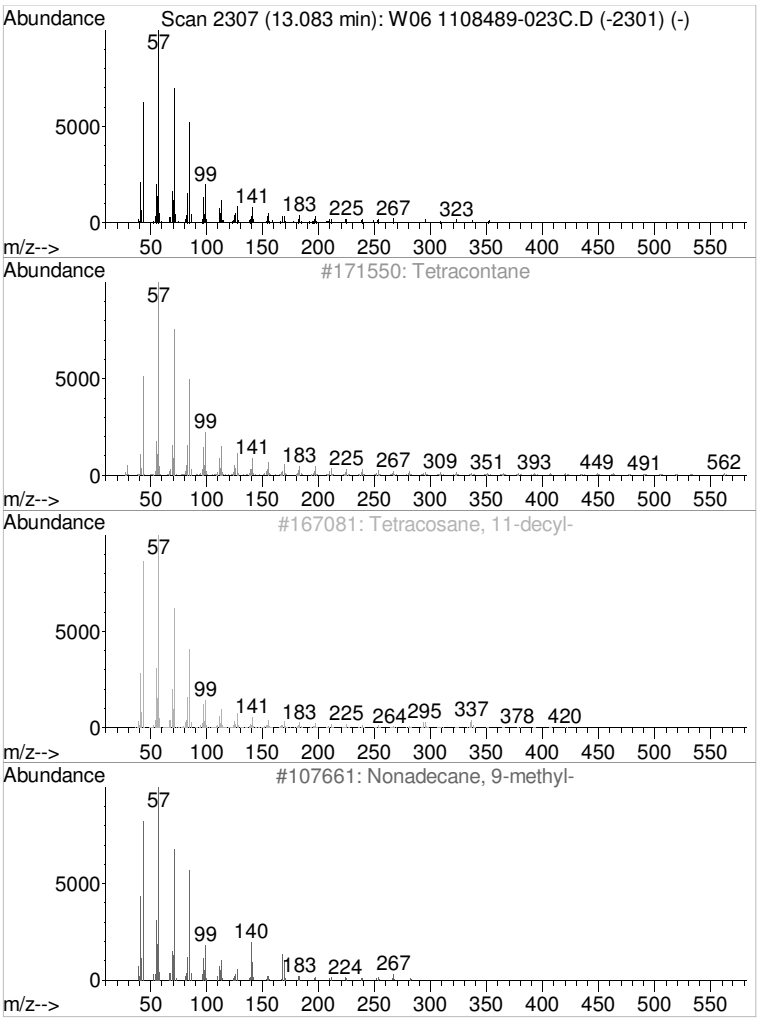
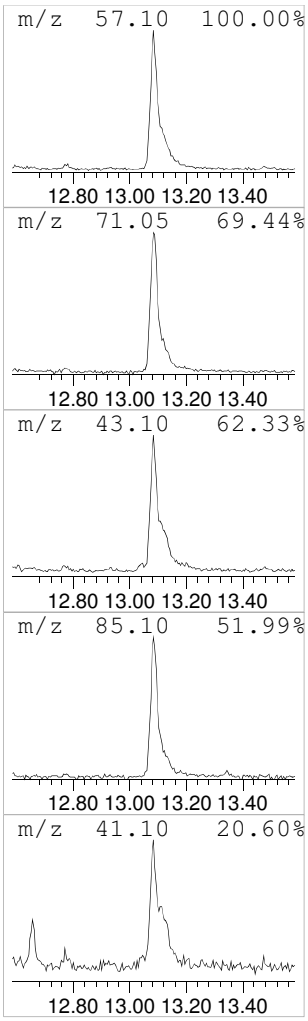
Peak Number 8 Tetracontane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.08	15.53 ug/l	318715	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracontane	563	C40H82	004181-95-7	91
2	Tetracosane, 11-decyl-	479	C34H70	055429-84-0	91
3	Nonadecane, 9-methyl-	282	C20H42	013287-24-6	91
4	Heneicosane	296	C21H44	000629-94-7	90
5	Octacosane	394	C28H58	000630-02-4	90





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

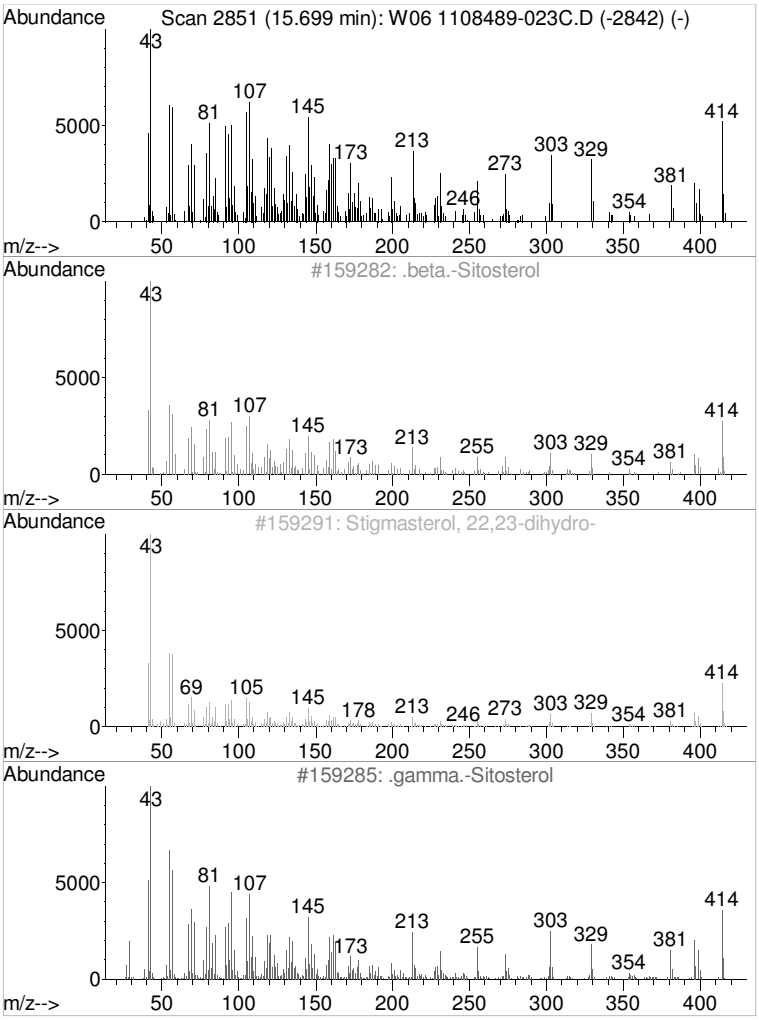
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

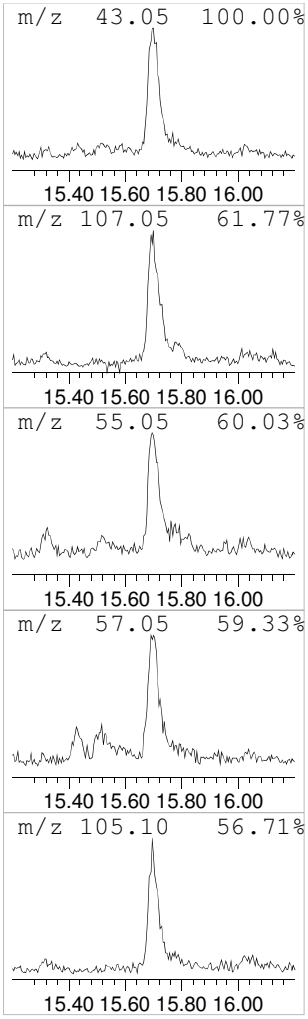
****

Peak Number 9 .beta.-Sitosterol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.70	23.04 ug/l	472979	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-Sitosterol	414	C29H50O	000083-46-5	99
2	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	97
3	.gamma.-Sitosterol	414	C29H50O	000083-47-6	70
4	Stigmast-7-en-3-ol, (3.beta.,5.a...	414	C29H50O	018525-35-4	64
5	Isocholesteryl methyl ether	400	C28H48O	029944-53-4	32





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

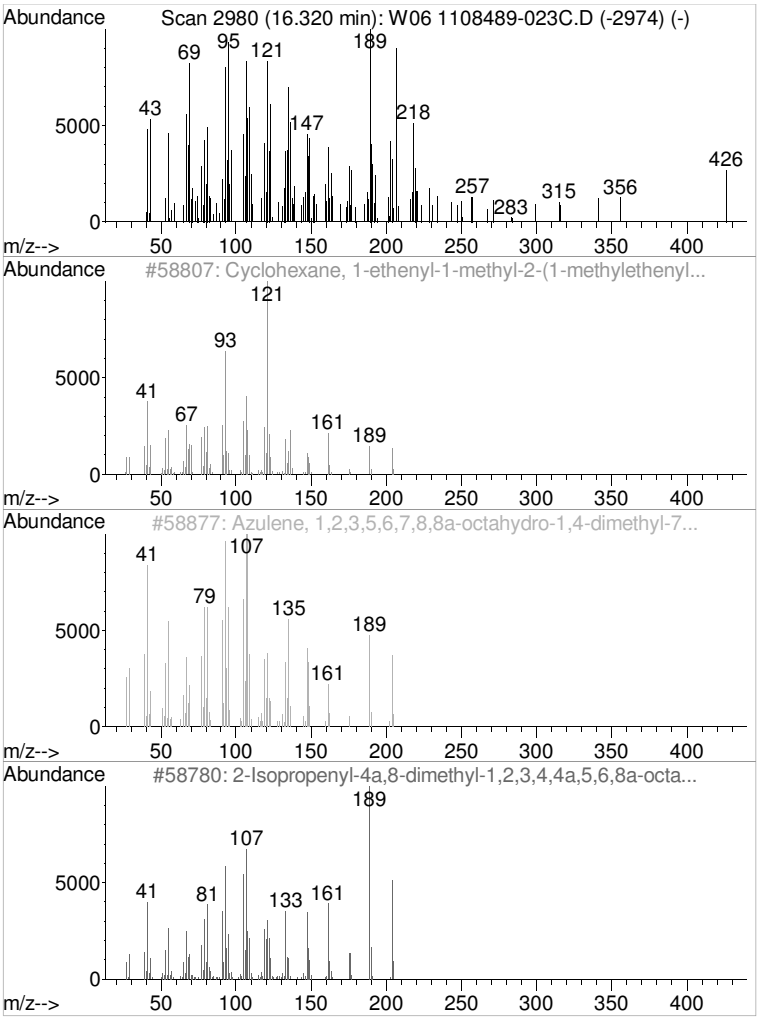
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

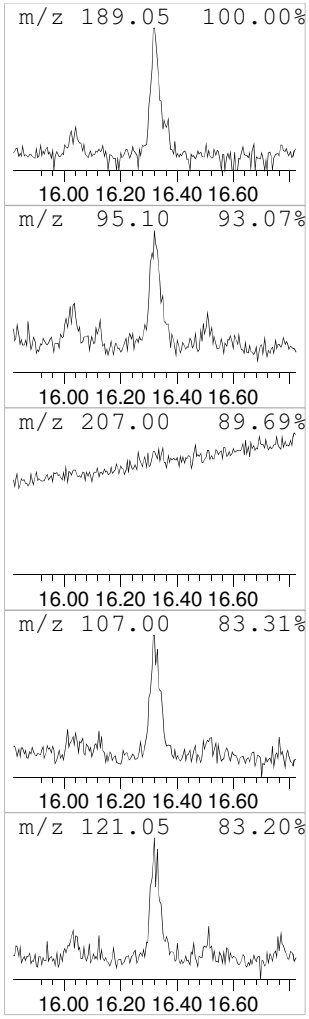
****

Peak Number 10 Cyclohexane, 1-ethenyl-1-me... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.32	7.37 ug/l	151341	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethenyl-1-methyl-...	204	C15H24	003242-08-8	46
2	Azulene, 1,2,3,5,6,7,8,8a-octahy...	204	C15H24	003691-11-0	35
3	2-Isopropenyl-4a,8-dimethyl-1,2,...	204	C15H24	1000193-57-0	30
4	Cyclopropa[d]naphthalen-2(4aH)-o...	204	C14H20O	004677-90-1	25
5	2,6,10-Cycloundecatrien-1-one, 2...	218	C15H22O	000471-05-6	25





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W06 1108489-023C.D
Acq On : 1 Sep 2011 3:58 pm
Operator : ALICIA HABERLE
Sample : 1108489-023C
Misc : SAMP
ALS Vial : 13 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.95	68.3	ug/l	1349080	1	4.27	789716	40.0
n-Hexadecanoic acid	9.17	10.2	ug/l	311886	4	8.61	1222130	40.0
Hexadecanoic acid...	10.05	31.1	ug/l	790959	5	11.31	1016340	40.0
Octadecanoic acid...	10.76	25.2	ug/l	640434	5	11.31	1016340	40.0
Pentafluoropropio...	11.19	9.2	ug/l	234445	5	11.31	1016340	40.0
Ethanol, 2-(octad...	12.07	10.1	ug/l	257068	5	11.31	1016340	40.0
13-Docosenamide, ...	12.50	10.8	ug/l	221329	6	13.34	820976	40.0
Tetracontane	13.08	15.5	ug/l	318715	6	13.34	820976	40.0
.beta.-Sitosterol	15.70	23.0	ug/l	472979	6	13.34	820976	40.0
Cyclohexane, 1-et...	16.32	7.4	ug/l	151341	6	13.34	820976	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.410	84	87	91	rVB	56328	33969	2.01%	0.225%
2	2.535	101	113	128	rBV4	87543	300037	17.77%	1.989%
3	2.708	146	149	153	rVB	49751	32985	1.95%	0.219%
4	2.949	192	199	202	rBV	2057362	1688099	100.00%	11.191%
5	3.035	212	217	221	rVB	55825	41177	2.44%	0.273%
6	3.083	221	227	230	rBV	55910	41839	2.48%	0.277%
7	3.122	230	235	239	rVV	81126	58682	3.48%	0.389%
8	3.189	243	249	263	rVV2	1334956	1021778	60.53%	6.774%
9	3.271	263	266	272	rVB	31240	30164	1.79%	0.200%
10	3.689	350	353	356	rVB	43026	28935	1.71%	0.192%
11	3.934	400	404	421	rBV	1208149	1011615	59.93%	6.707%
12	4.276	471	475	492	rVB	1038294	807552	47.84%	5.354%
13	4.699	558	563	570	rBV3	19063	51688	3.06%	0.343%
14	4.766	573	577	589	rVB	559116	468245	27.74%	3.104%
15	5.353	695	699	704	rBV3	26613	28049	1.66%	0.186%
16	5.440	713	717	729	rVB	1397301	1088431	64.48%	7.216%
17	6.344	900	905	907	rBV	35495	30251	1.79%	0.201%
18	6.483	930	934	941	rBV	1499673	1150125	68.13%	7.625%
19	7.142	1064	1071	1088	rVB	1593679	1276344	75.61%	8.462%
20	7.916	1223	1232	1249	rBV	814751	778562	46.12%	5.161%
21	8.157	1278	1282	1286	rBV	126272	102823	6.09%	0.682%
22	8.609	1366	1376	1385	rBV	1374590	1137294	67.37%	7.540%
23	9.166	1488	1492	1497	rBV	165726	171271	10.15%	1.135%
24	9.917	1644	1648	1651	rBV2	26190	22748	1.35%	0.151%
25	9.950	1651	1655	1663	rVV2	41558	49746	2.95%	0.330%
26	10.046	1670	1675	1683	rBV	446309	384583	22.78%	2.550%
27	10.195	1701	1706	1714	rVB	1216161	1014793	60.11%	6.728%
28	10.700	1807	1811	1818	rVB2	54561	54309	3.22%	0.360%
29	10.758	1819	1823	1830	rVB	332055	307474	18.21%	2.038%
30	11.191	1908	1913	1924	rBV4	64088	125963	7.46%	0.835%
31	11.311	1932	1938	1945	rBV	890535	903530	53.52%	5.990%
32	12.071	2092	2096	2107	rVB6	25107	45258	2.68%	0.300%
33	12.499	2179	2185	2194	rBV	108586	190363	11.28%	1.262%
34	13.336	2353	2359	2369	rVB	391021	605373	35.86%	4.013%

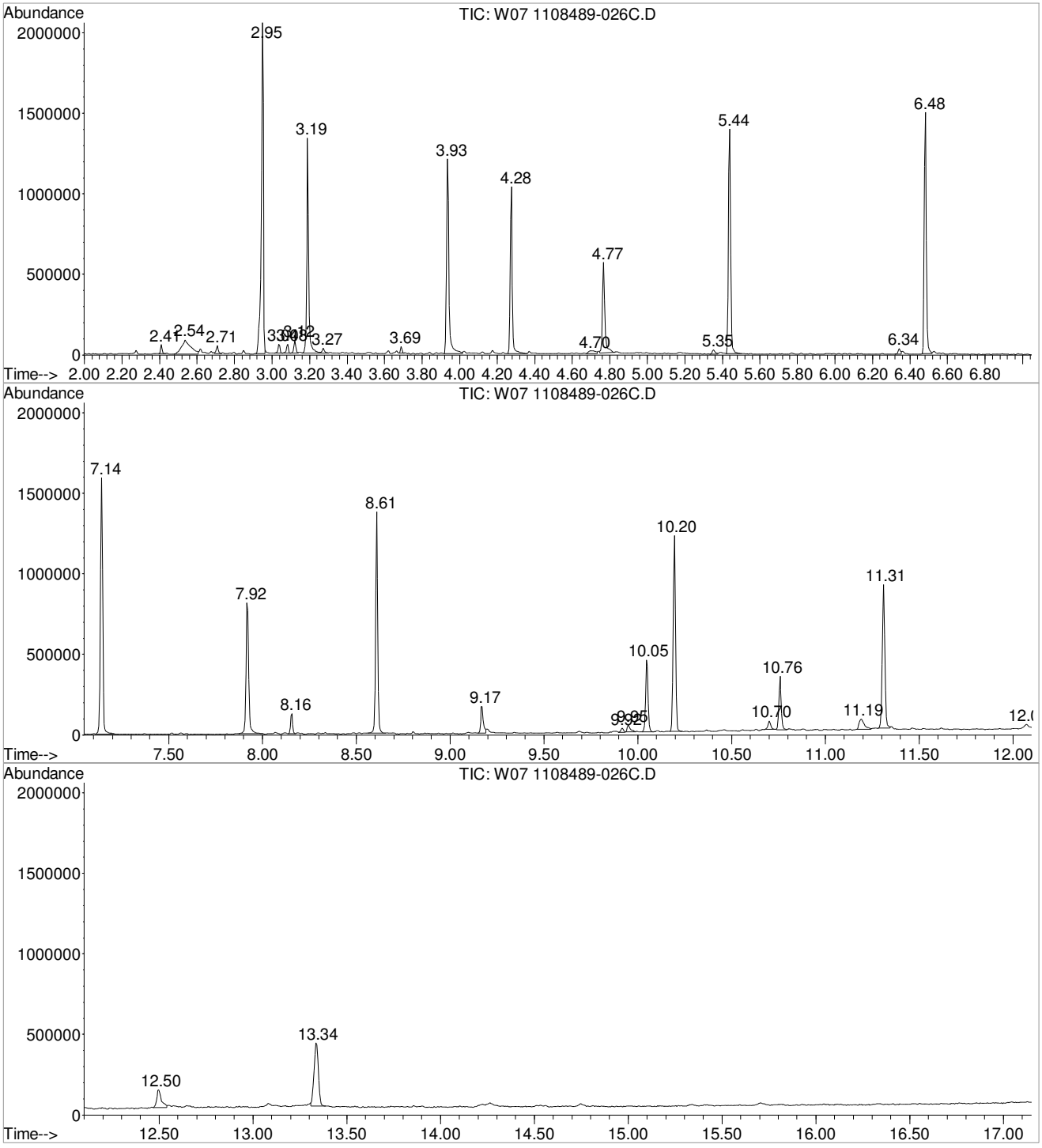
Sum of corrected areas: 15084055

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
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Misc : SAMP
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Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

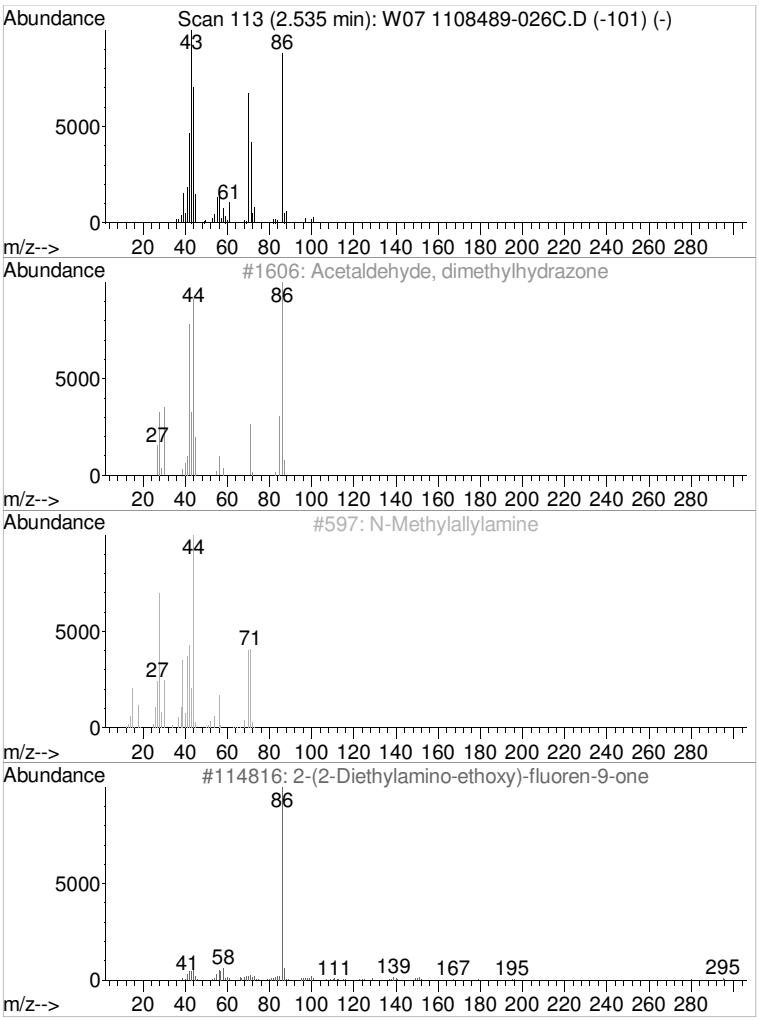
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

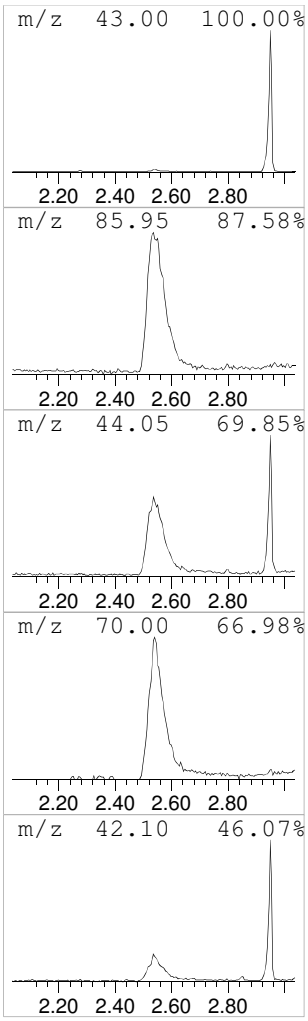
****

Peak Number 1 Acetaldehyde, dimethylhydra... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	14.86 ug/l	300037	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetaldehyde, dimethylhydrazone	86	C4H10N2	007422-90-4	52
2	N-Methylallylamine	71	C4H9N	000627-37-2	38
3	2-(2-Diethylamino-ethoxy)-fluore...	295	C19H21NO2	054153-31-0	33
4	Pentanamide, 2-amino-4-methyl-, ...	130	C6H14N2O	000687-51-4	32
5	Oxazolidine, 2,2-dimethyl-	101	C5H11NO	020515-62-2	28





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

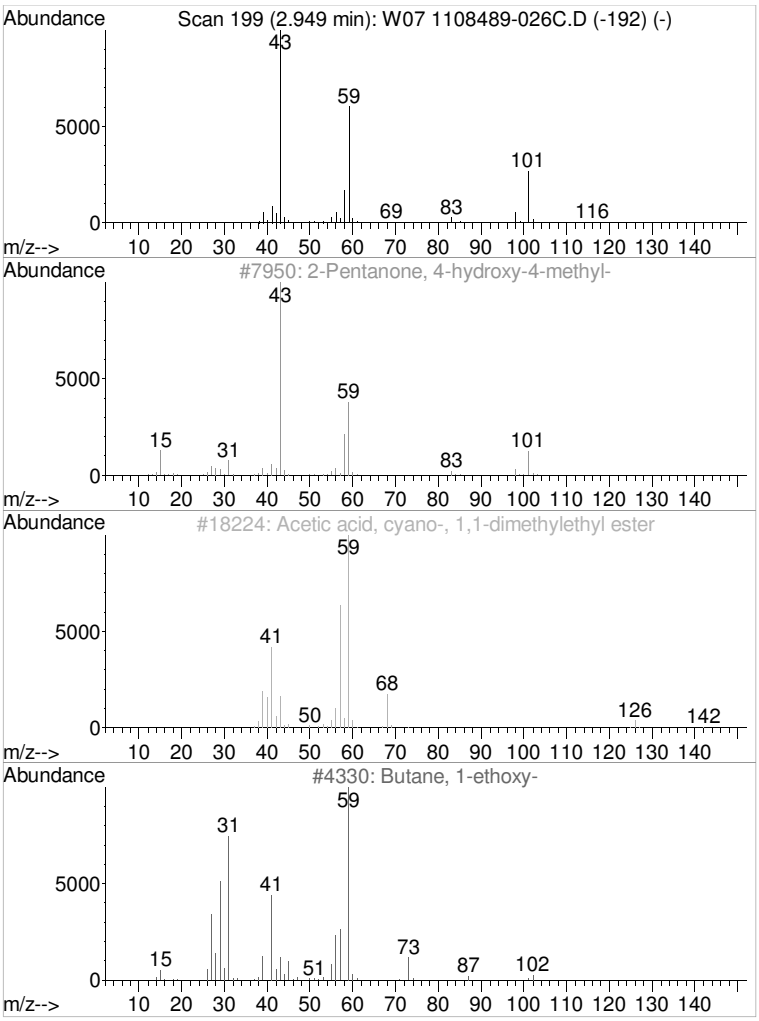
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

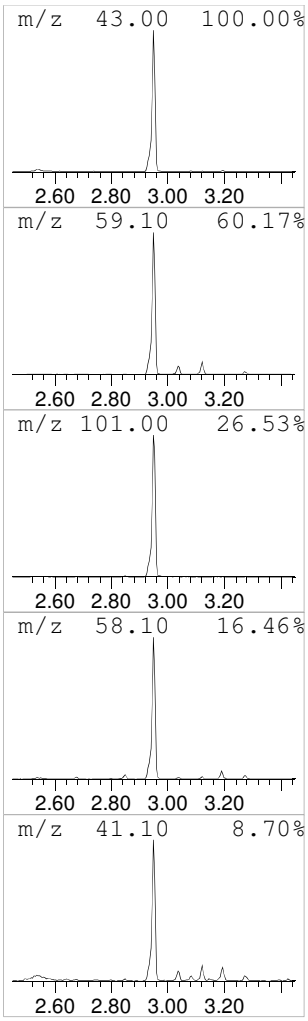
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	83.62 ug/l	1688100	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9
4	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

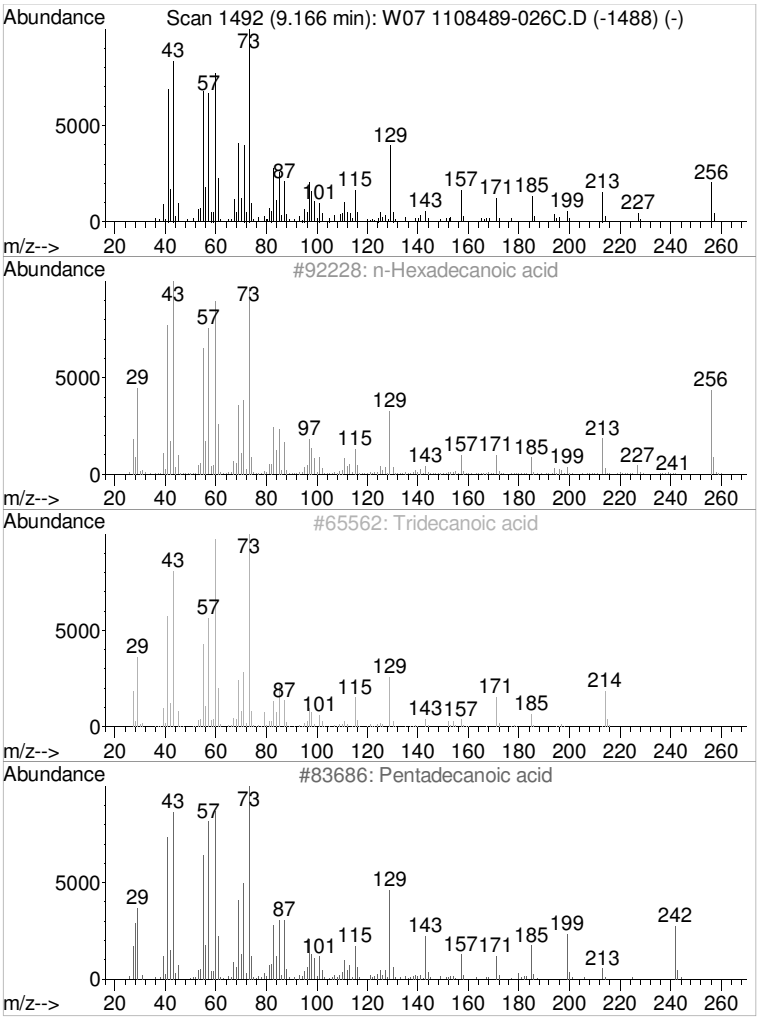
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

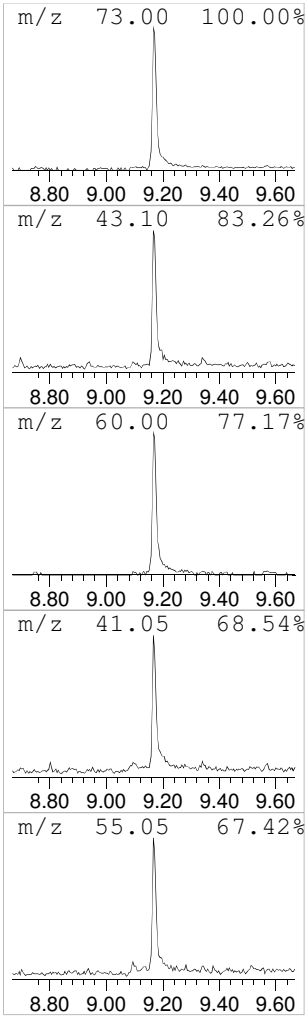
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	6.02 ug/l	171271	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	86
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	83
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	80
5	n-Decanoic acid	172	C10H20O2	000334-48-5	76





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

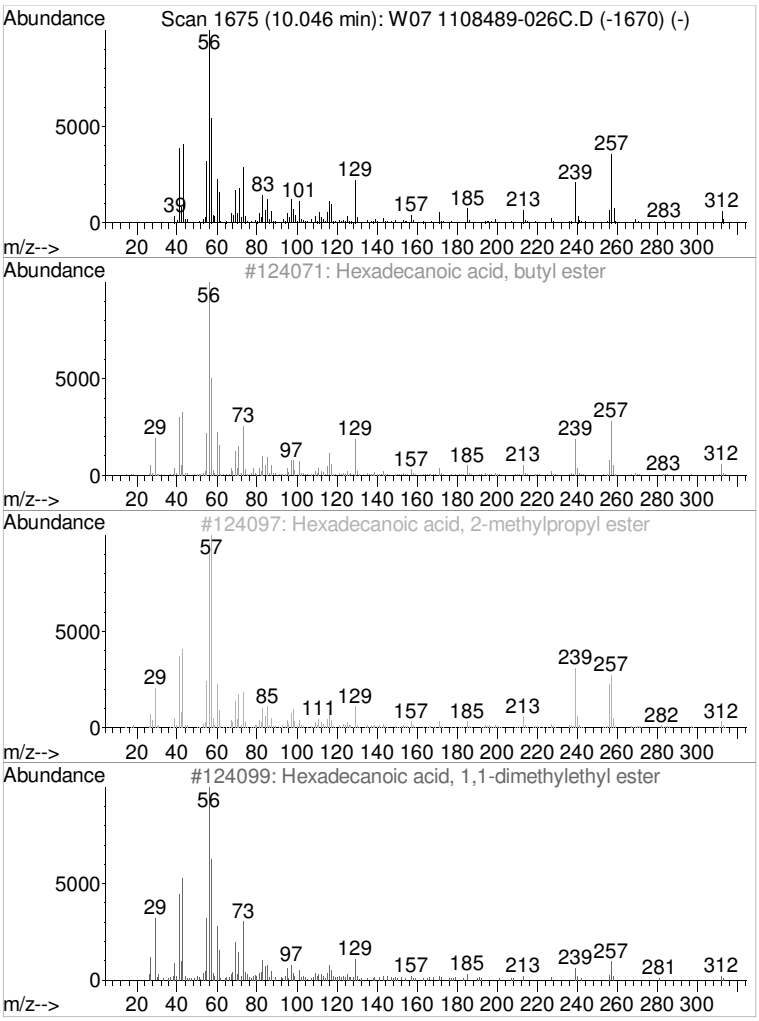
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

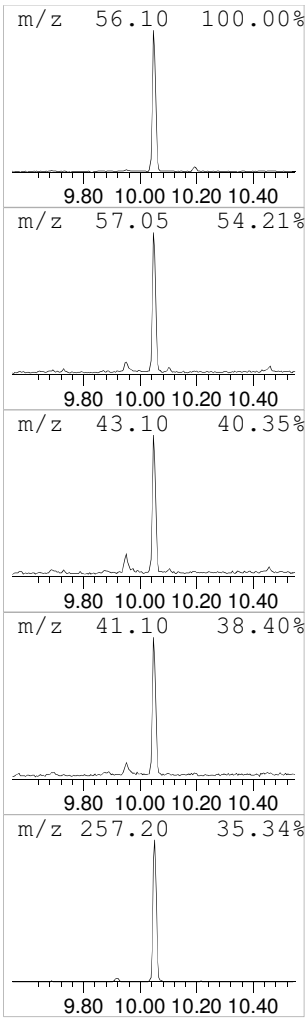
****

Peak Number 4 Hexadecanoic acid, butyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	17.03 ug/l	384583	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	76
3	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	58
4	Nipecotic acid	129	C6H11NO2	000498-95-3	43
5	1,3-Pentanediol, 2,2,4-trimethyl-	146	C8H18O2	000144-19-4	35





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

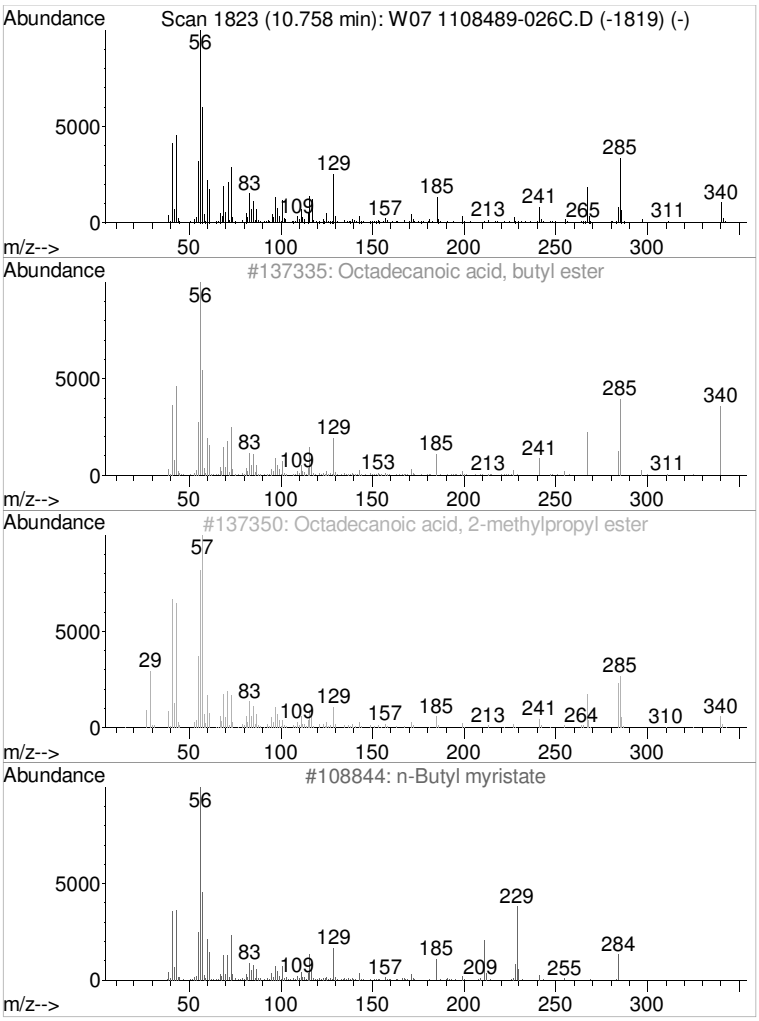
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

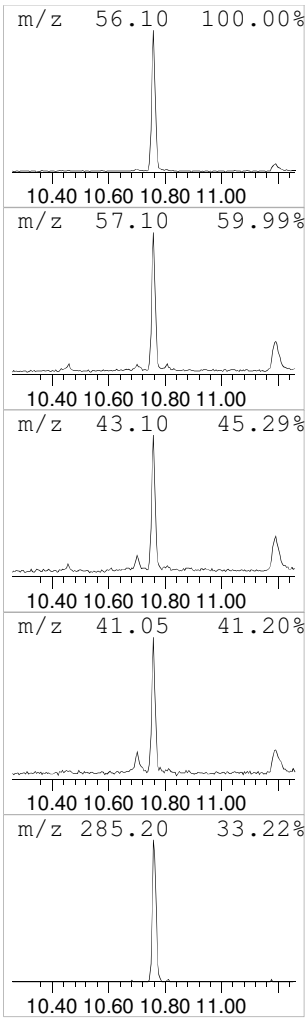
****

Peak Number 5 Octadecanoic acid, butyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	13.61 ug/l	307474	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	91
3	n-Butyl myristate	284	C18H36O2	000110-36-1	62
4	Cyclohexane, (1,1-dimethylethyl)-	140	C10H20	003178-22-1	30
5	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	30





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

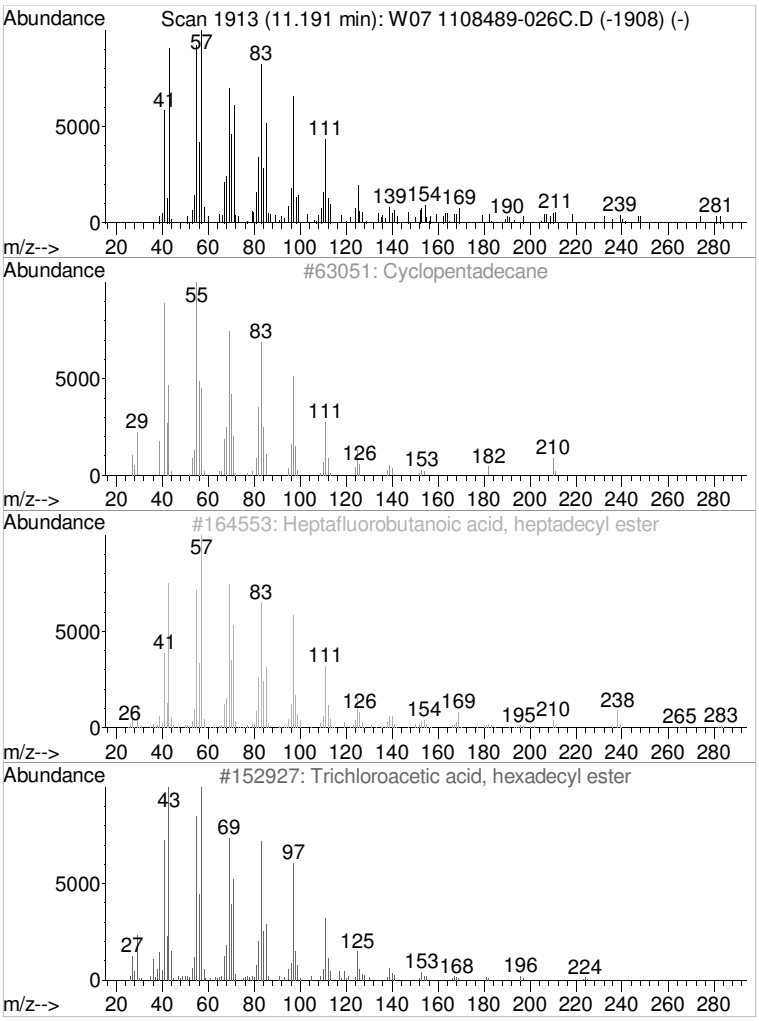
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

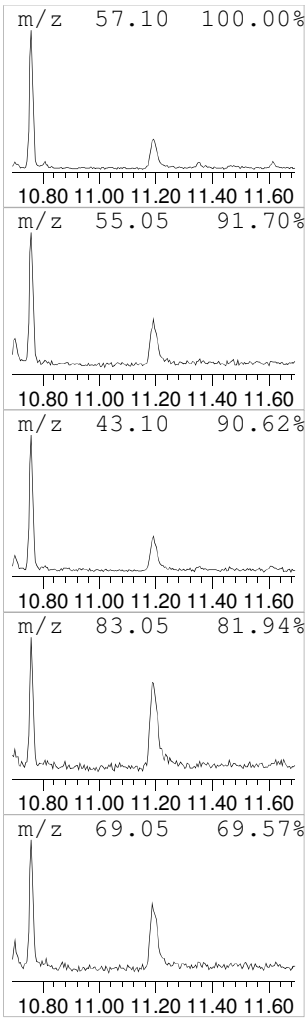
****

Peak Number 6 Cyclopentadecane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	5.58 ug/l	125963	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentadecane	210	C15H30	000295-48-7	96
2	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	87
3	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	87
4	1-Tetracosanol	354	C24H50O	000506-51-4	87
5	Trichloroacetic acid, pentadecyl...	372	C17H31Cl3O2	074339-53-0	83





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

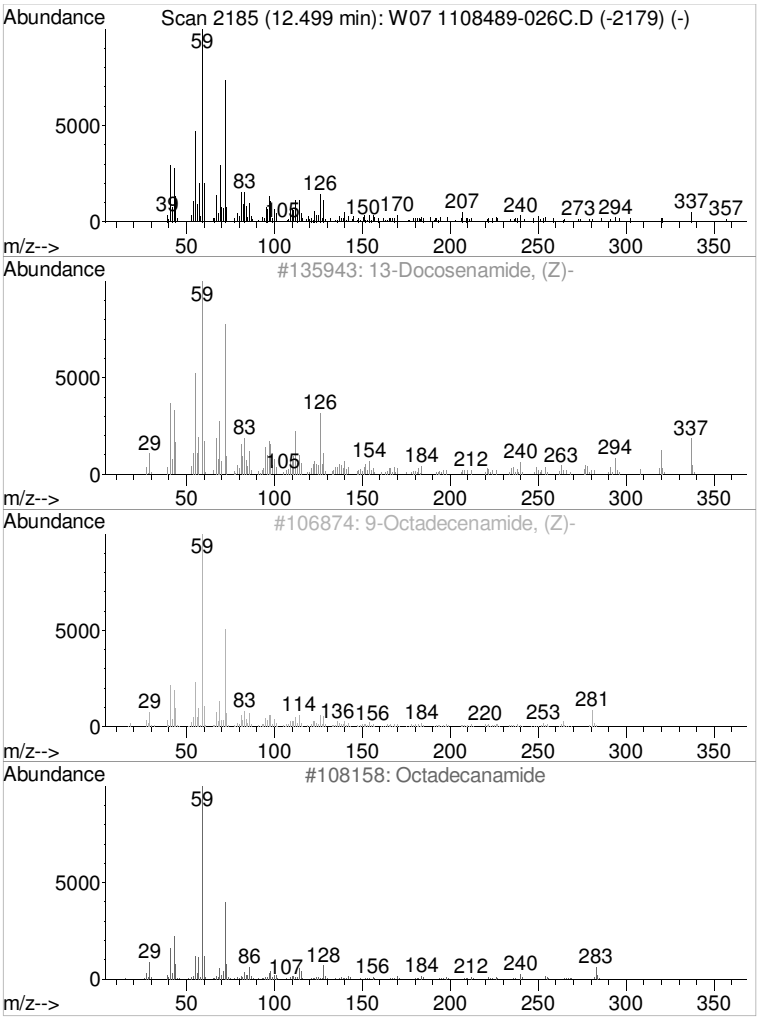
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

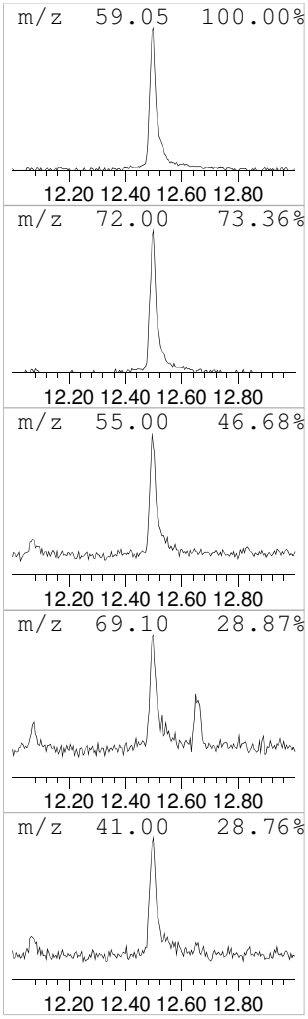
****

Peak Number 7 13-Docosenamide, (Z)- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	12.58 ug/l	190363	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	86
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	86
3	Octadecanamide	283	C18H37NO	000124-26-5	43
4	Tetradecanamide	227	C14H29NO	000638-58-4	43
5	1-Propyne, 3-[(1-methylethyl)thio]-	114	C6H10S	014272-25-4	35





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W07 1108489-026C.D
Acq On : 1 Sep 2011 4:25 pm
Operator : ALICIA HABERLE
Sample : 1108489-026C
Misc : SAMP
ALS Vial : 14 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Acetaldehyde, dim...	2.54	14.9	ug/l	300037	1	4.28	807552	40.0
2-Pentanone, 4-hy...	2.95	83.6	ug/l	1688100	1	4.28	807552	40.0
n-Hexadecanoic acid	9.17	6.0	ug/l	171271	4	8.61	1137290	40.0
Hexadecanoic acid...	10.05	17.0	ug/l	384583	5	11.31	903530	40.0
Octadecanoic acid...	10.76	13.6	ug/l	307474	5	11.31	903530	40.0
Cyclopentadecane	11.19	5.6	ug/l	125963	5	11.31	903530	40.0
13-Docosenamide, ...	12.50	12.6	ug/l	190363	6	13.34	605373	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.412	85	88	91	rVB	59255	36297	2.58%	0.206%
2	2.541	113	115	121	rBV	19821	23936	1.70%	0.136%
3	2.676	140	143	147	rBV2	14063	19267	1.37%	0.109%
4	2.710	147	150	154	rVB	45524	33545	2.39%	0.190%
5	2.849	171	179	182	rBV	22828	18944	1.35%	0.107%
6	2.950	192	200	203	rBV	1891676	1405864	100.00%	7.972%
7	3.037	211	218	221	rBV	69773	48368	3.44%	0.274%
8	3.085	222	228	230	rVB	54774	42994	3.06%	0.244%
9	3.123	230	236	239	rBV	86821	65657	4.67%	0.372%
10	3.191	244	250	263	rVV2	1382597	1053246	74.92%	5.972%
11	3.272	264	267	275	rVB	36720	35853	2.55%	0.203%
12	3.691	351	354	357	rVB	41921	30365	2.16%	0.172%
13	3.936	401	405	419	rBV	1265875	970722	69.05%	5.504%
14	4.023	419	423	427	rVB3	21091	24960	1.78%	0.142%
15	4.172	452	454	459	rVB	107090	82740	5.89%	0.469%
16	4.273	471	475	493	rBV	1039497	859726	61.15%	4.875%
17	4.768	574	578	583	rBV	552357	435835	31.00%	2.471%
18	4.840	590	593	598	rVB2	31915	28329	2.02%	0.161%
19	5.436	713	717	721	rBV	1353027	1109608	78.93%	6.292%
20	5.696	768	771	779	rVB2	18613	18005	1.28%	0.102%
21	6.485	930	935	942	rBV	1366395	1115549	79.35%	6.326%
22	6.624	961	964	971	rVB	60920	68427	4.87%	0.388%
23	7.143	1065	1072	1077	rBV	1580797	1300280	92.49%	7.373%
24	7.567	1157	1160	1163	rBV2	22141	19797	1.41%	0.112%
25	7.918	1225	1233	1239	rBV	837791	729515	51.89%	4.137%
26	8.052	1258	1261	1263	rBV	27322	24873	1.77%	0.141%
27	8.067	1263	1264	1269	rVB3	24920	24418	1.74%	0.138%
28	8.120	1272	1275	1278	rBV	35218	25954	1.85%	0.147%
29	8.153	1278	1282	1286	rBV2	83510	73962	5.26%	0.419%
30	8.187	1286	1289	1292	rBV2	29762	27435	1.95%	0.156%
31	8.298	1307	1312	1318	rBV4	106698	148432	10.56%	0.842%
32	8.610	1367	1377	1386	rBV	1339606	1217082	86.57%	6.901%
33	8.697	1392	1395	1400	rVB	68024	59747	4.25%	0.339%
34	8.870	1423	1431	1437	rBV	9526	24260	1.73%	0.138%
35	9.096	1473	1478	1483	rBV5	43699	53789	3.83%	0.305%
36	9.134	1483	1486	1489	rVV2	38674	39617	2.82%	0.225%
37	9.173	1489	1494	1509	rVB2	462921	481681	34.26%	2.731%
38	9.346	1526	1530	1541	rVB5	43823	69054	4.91%	0.392%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	9.808	1624	1626	1632	rVB	23591	23270	1.66%	0.132%
40	9.856	1632	1636	1637	rBV4	20508	19456	1.38%	0.110%
41	9.870	1637	1639	1641	rBV2	34638	31627	2.25%	0.179%
42	9.918	1647	1649	1652	rVB2	30073	23027	1.64%	0.131%
43	9.952	1652	1656	1669	rBV2	148874	176453	12.55%	1.001%
44	10.048	1670	1676	1681	rVV2	536747	438794	31.21%	2.488%
45	10.086	1682	1684	1690	rVB2	25549	38053	2.71%	0.216%
46	10.197	1702	1707	1713	rVB	1109077	921570	65.55%	5.226%
47	10.438	1754	1757	1759	rBV3	25983	27998	1.99%	0.159%
48	10.457	1759	1761	1766	rVB3	27069	21517	1.53%	0.122%
49	10.664	1800	1804	1809	rBV3	72949	116638	8.30%	0.661%
50	10.702	1809	1812	1819	rVB	74813	84187	5.99%	0.477%
51	10.760	1820	1824	1828	rVB	385113	336741	23.95%	1.909%
52	11.188	1908	1913	1925	rBV2	161072	282854	20.12%	1.604%
53	11.313	1933	1939	1944	rBV	812670	852712	60.65%	4.835%
54	11.467	1967	1971	1980	rBV3	67710	99453	7.07%	0.564%
55	11.611	1999	2001	2005	rBV4	18250	19274	1.37%	0.109%
56	12.072	2092	2097	2111	rVB3	198725	355642	25.30%	2.017%
57	12.400	2162	2165	2171	rBV6	37486	55674	3.96%	0.316%
58	12.500	2181	2186	2192	rBV	103224	140174	9.97%	0.795%
59	13.082	2302	2307	2312	rBV	185014	312335	22.22%	1.771%
60	13.337	2354	2360	2368	rVB	335638	545534	38.80%	3.093%
61	13.900	2472	2477	2485	rVB6	56468	101529	7.22%	0.576%
62	14.217	2536	2543	2550	rBV2	210521	421609	29.99%	2.391%
63	14.520	2603	2606	2616	rVB2	70072	127818	9.09%	0.725%
64	15.703	2847	2852	2863	rVB7	92721	213266	15.17%	1.209%

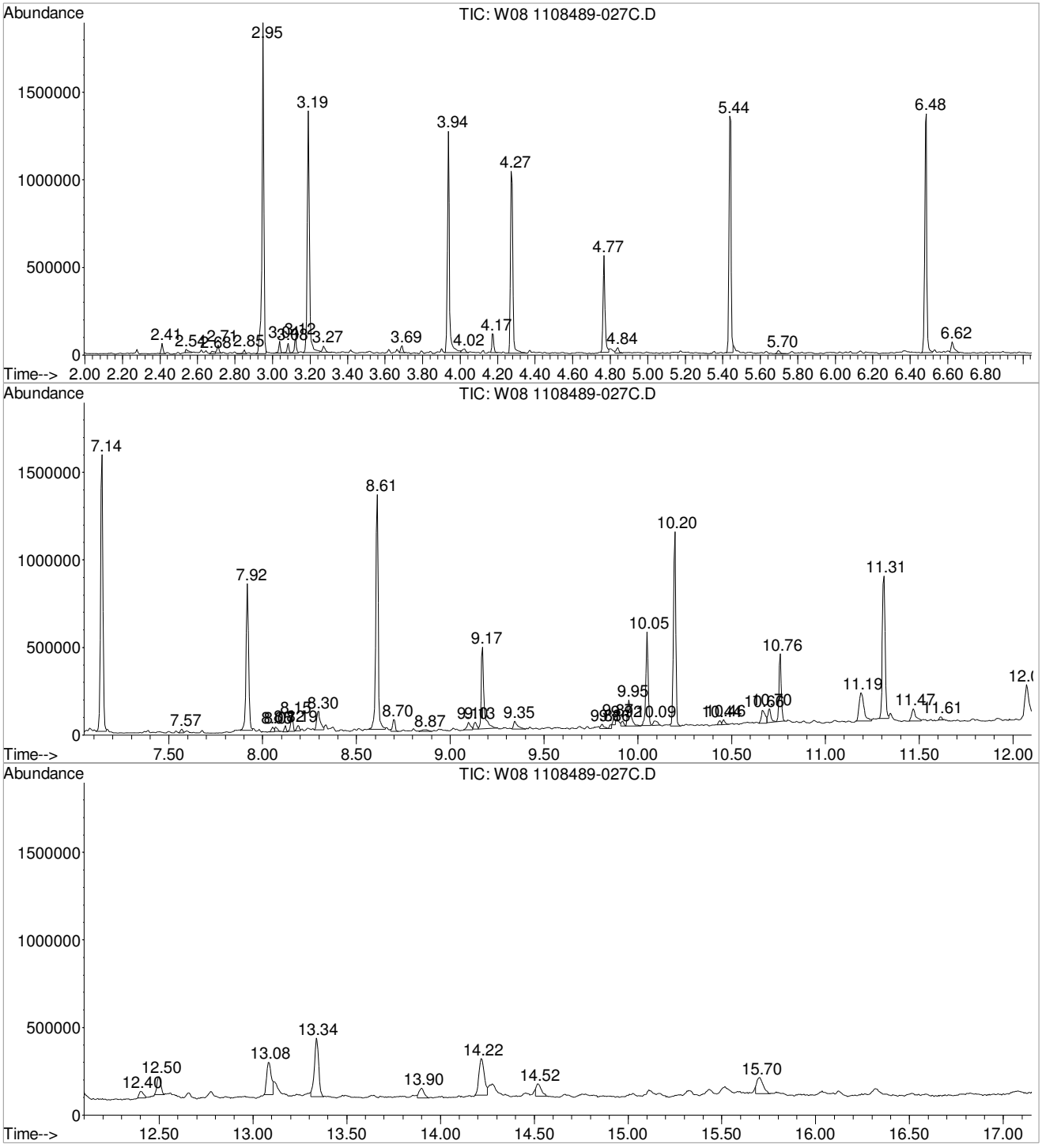
Sum of corrected areas: 17635338

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

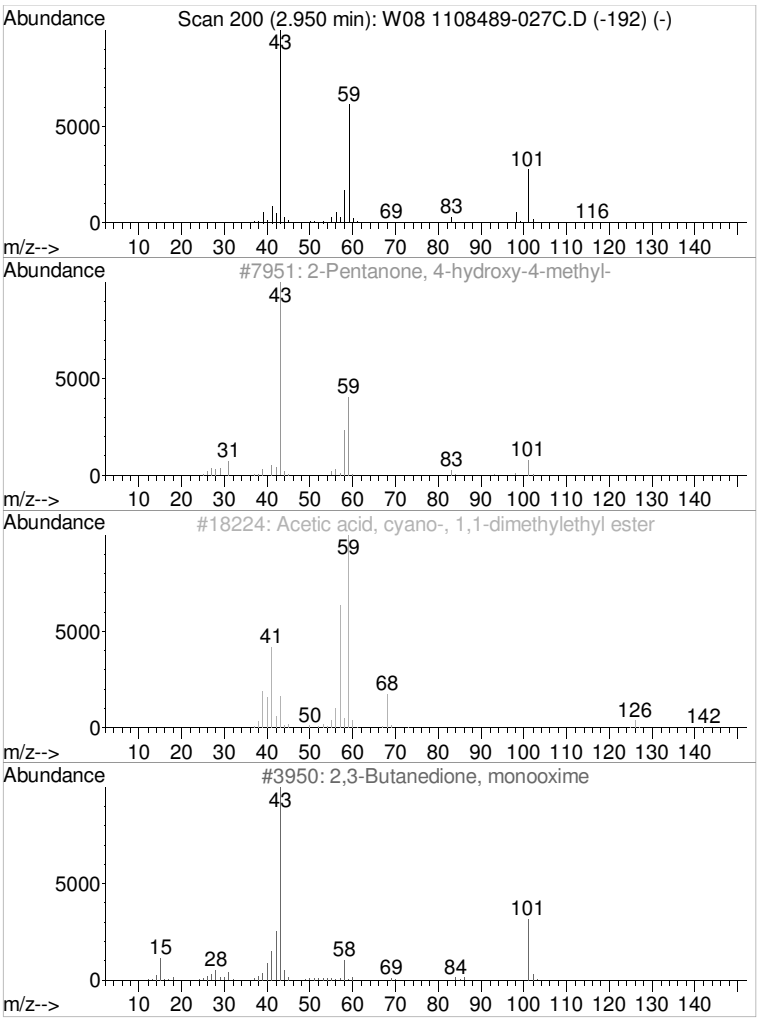
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

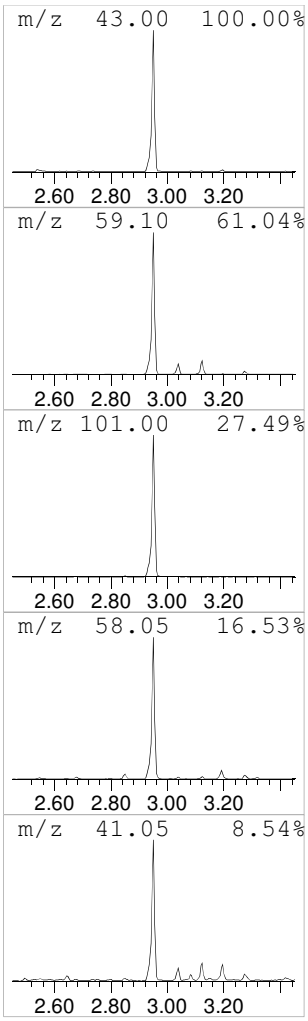
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	65.41 ug/l	1405860	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

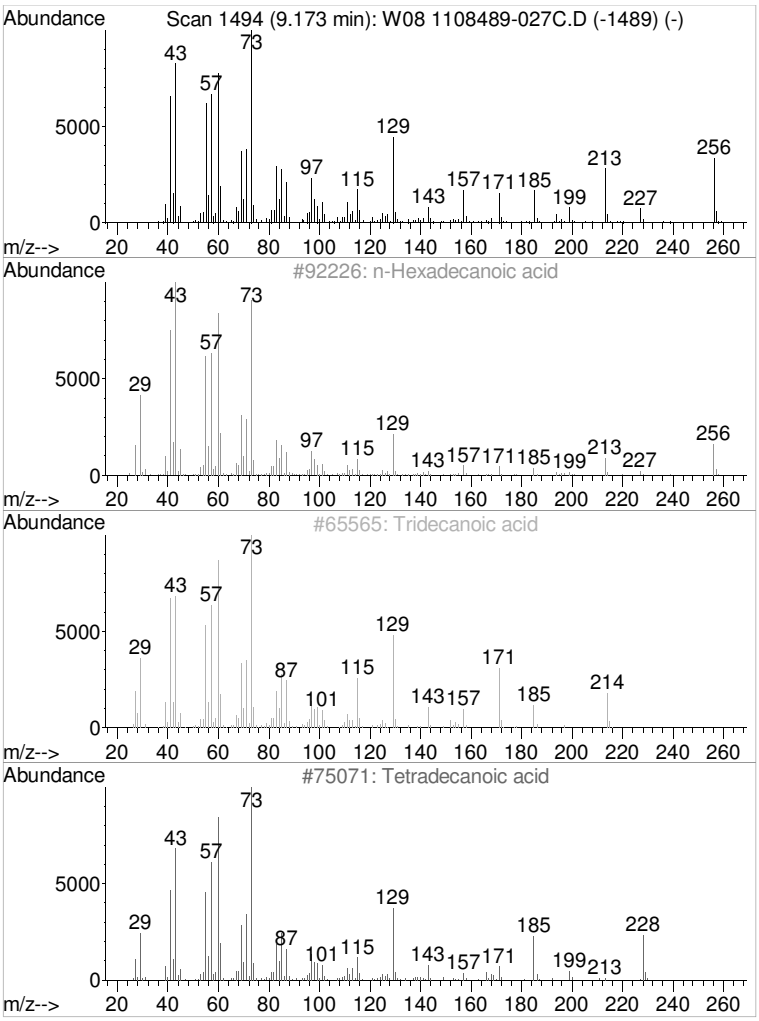
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

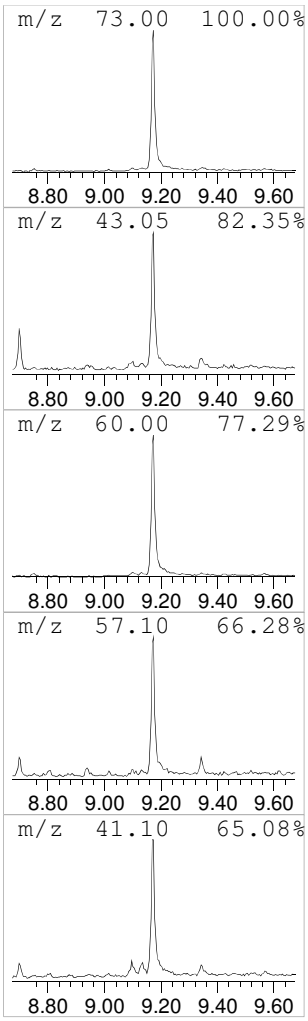
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	15.83 ug/l	481681	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	94
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	74
5	n-Decanoic acid	172	C10H20O2	000334-48-5	70





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Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

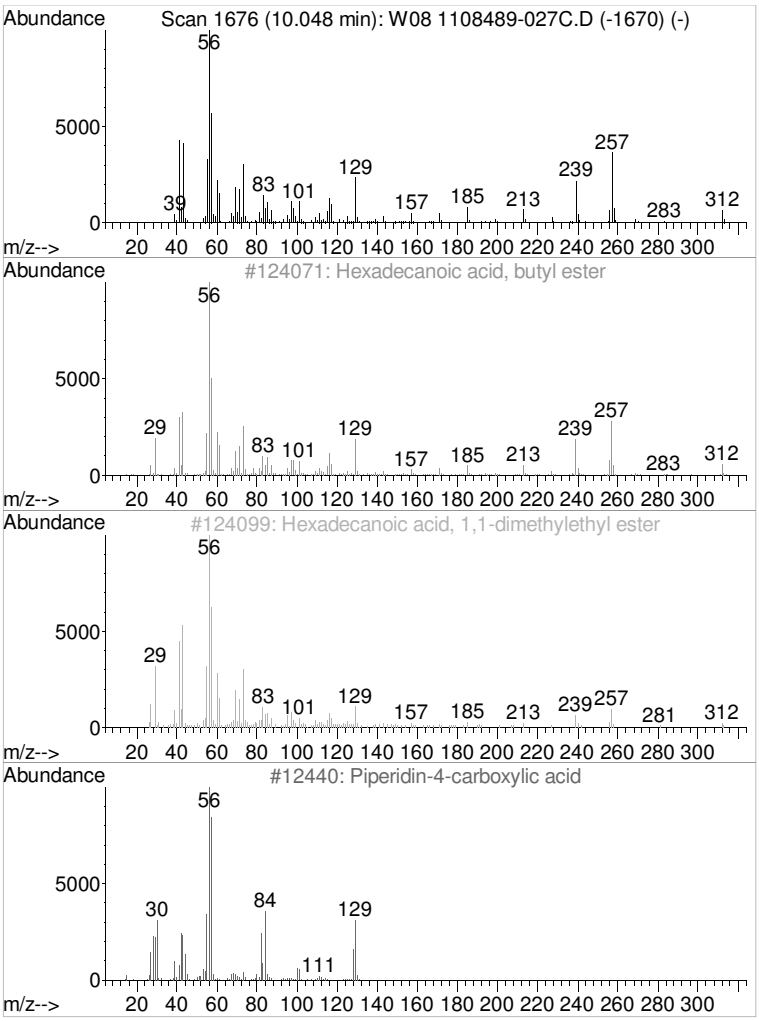
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

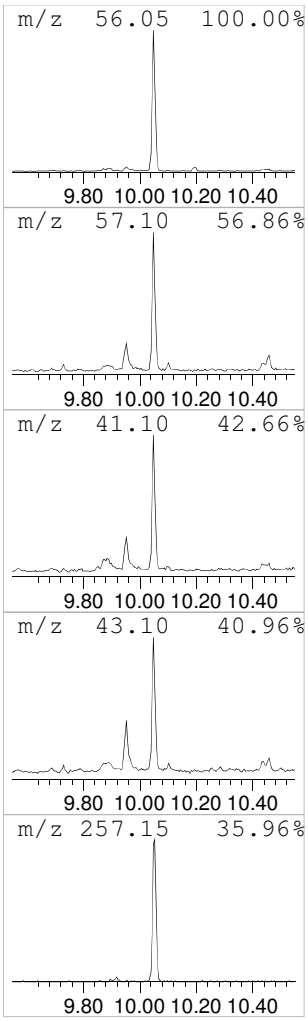
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	20.58 ug/l	438794	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	95
3	Piperidin-4-carboxylic acid	129	C6H11NO2	000498-94-2	38
4	Cyclopentanone, 2,2,5,5-tetramet...	140	C9H16O	004541-35-9	30
5	Pentadecane, 8-methylene-	224	C16H32	055668-09-2	27





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

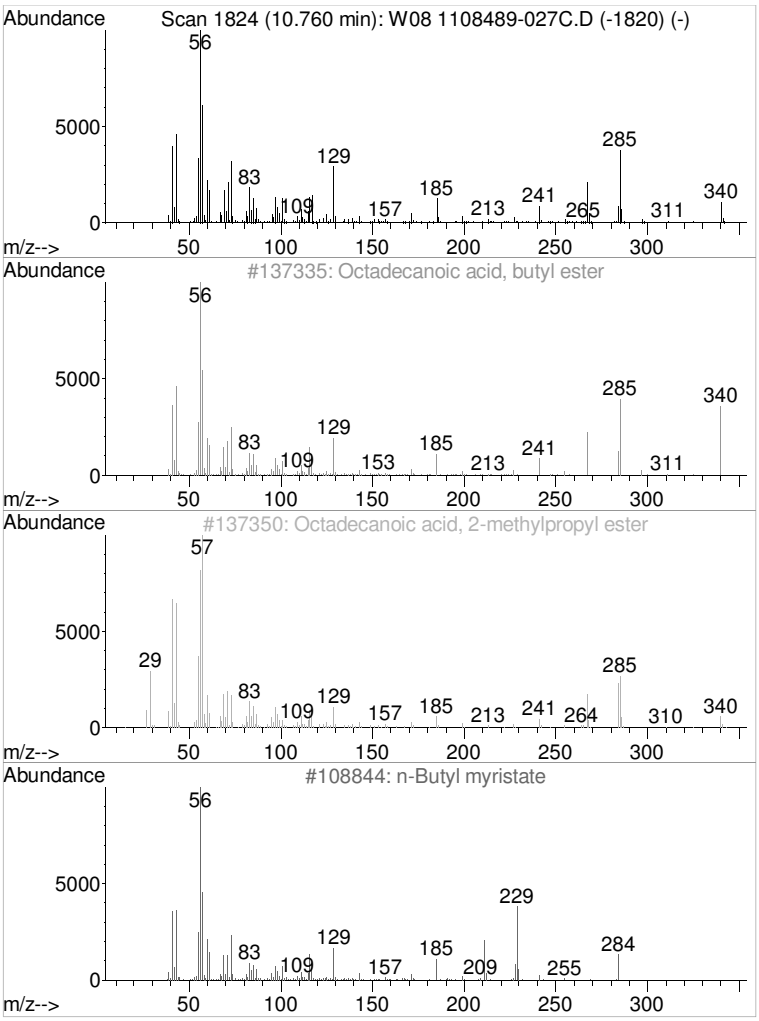
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

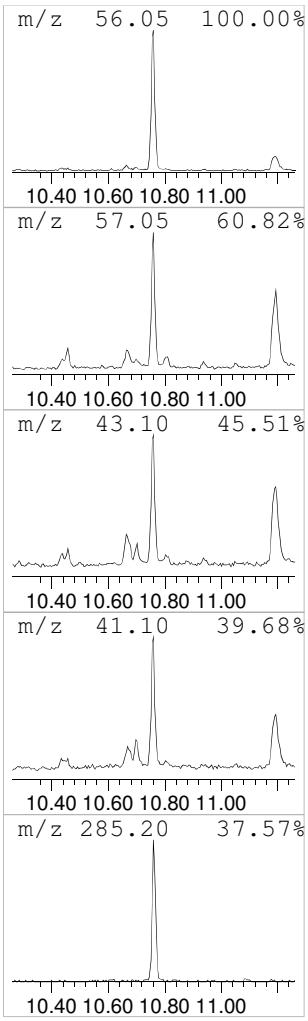
****

Peak Number 4 Octadecanoic acid, butyl ester Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	15.80 ug/l	336741	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	97
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	49
4	Nipecotic acid	129	C6H11NO2	000498-95-3	43
5	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	30





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Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

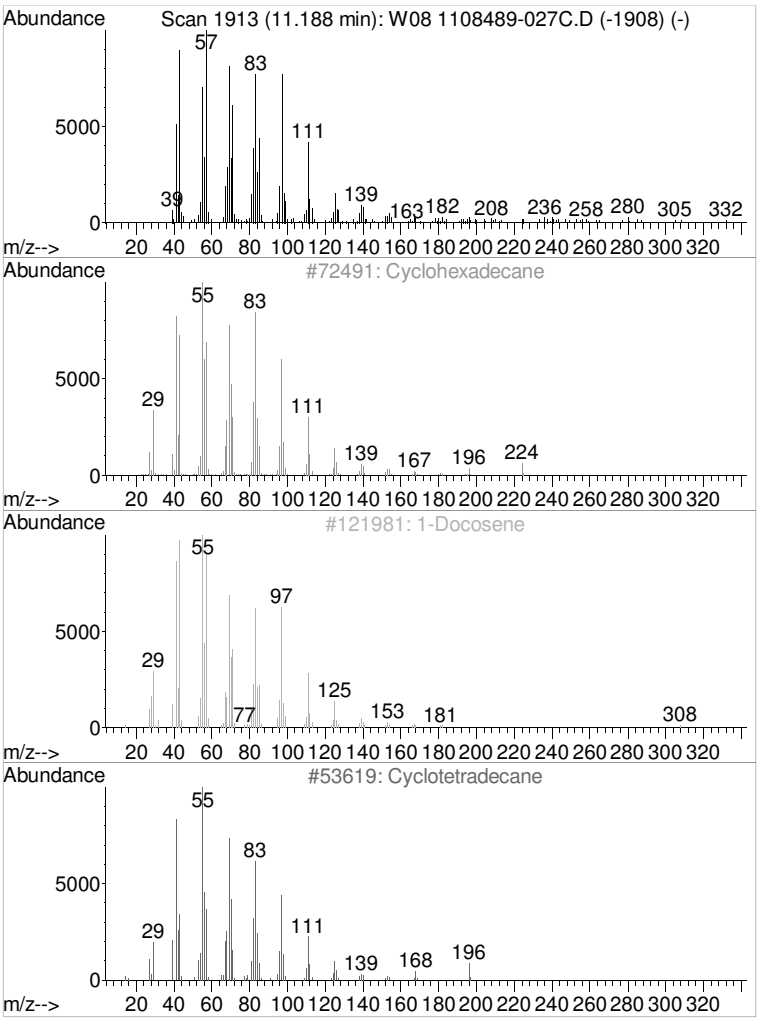
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

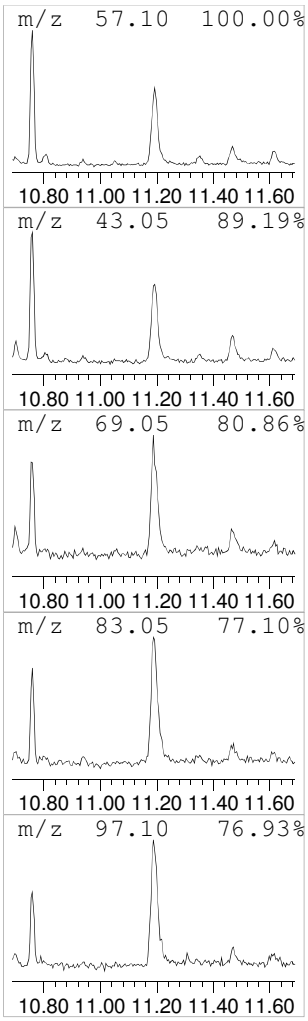
****

Peak Number 5 Cyclohexadecane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	13.27 ug/l	282854	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane	224	C16H32	000295-65-8	97
2	1-Docosene	308	C22H44	001599-67-3	93
3	Cyclotetradecane	196	C14H28	000295-17-0	91
4	9-Eicosene, (E)-	280	C20H40	074685-29-3	90
5	1-Octadecanol	270	C18H38O	000112-92-5	87





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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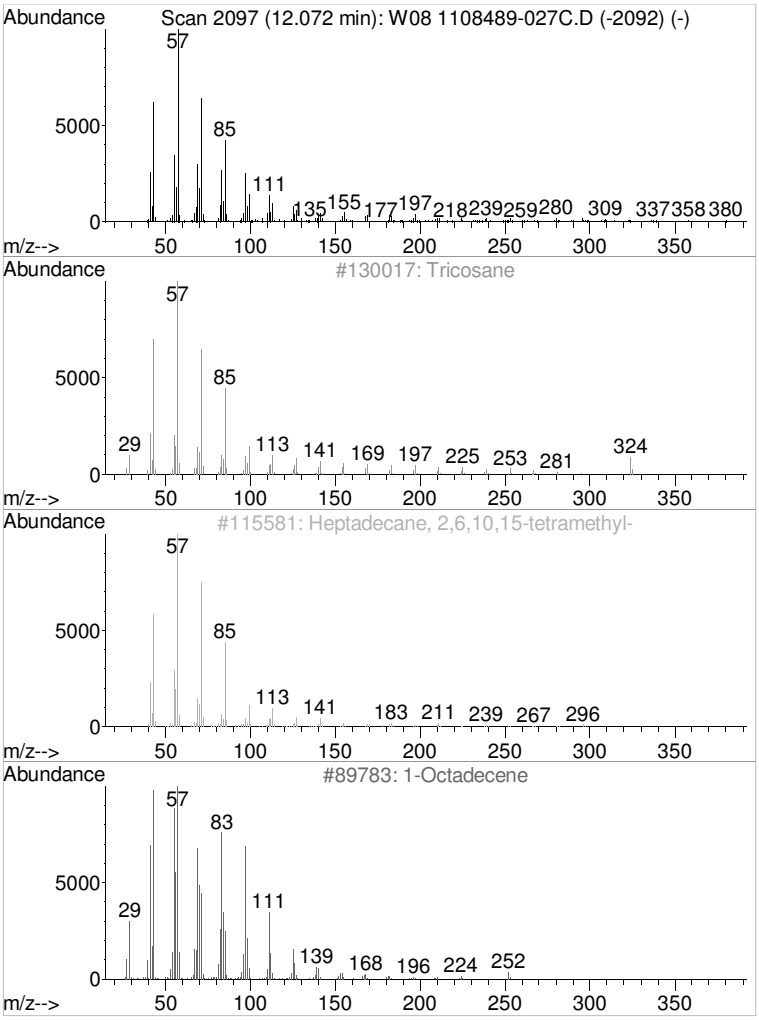
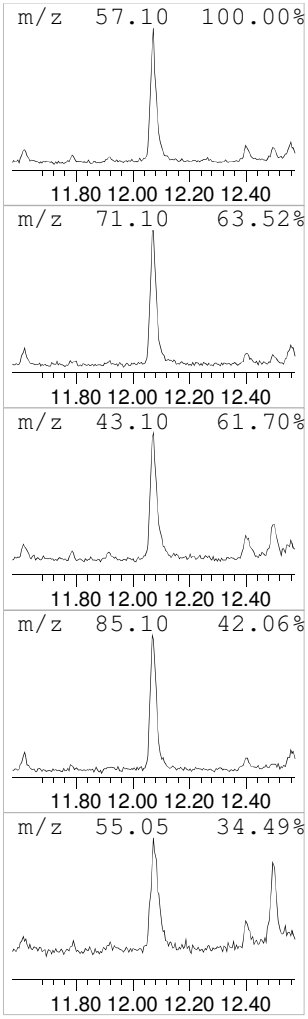
Peak Number 6 Tricosane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.07	16.68 ug/l	355642	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricosane	324	C23H48	000638-67-5	97
2	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	95
3	1-Octadecene	252	C18H36	000112-88-9	93
4	Tetradecane	198	C14H30	000629-59-4	92
5	Docosane	310	C22H46	000629-97-0	91





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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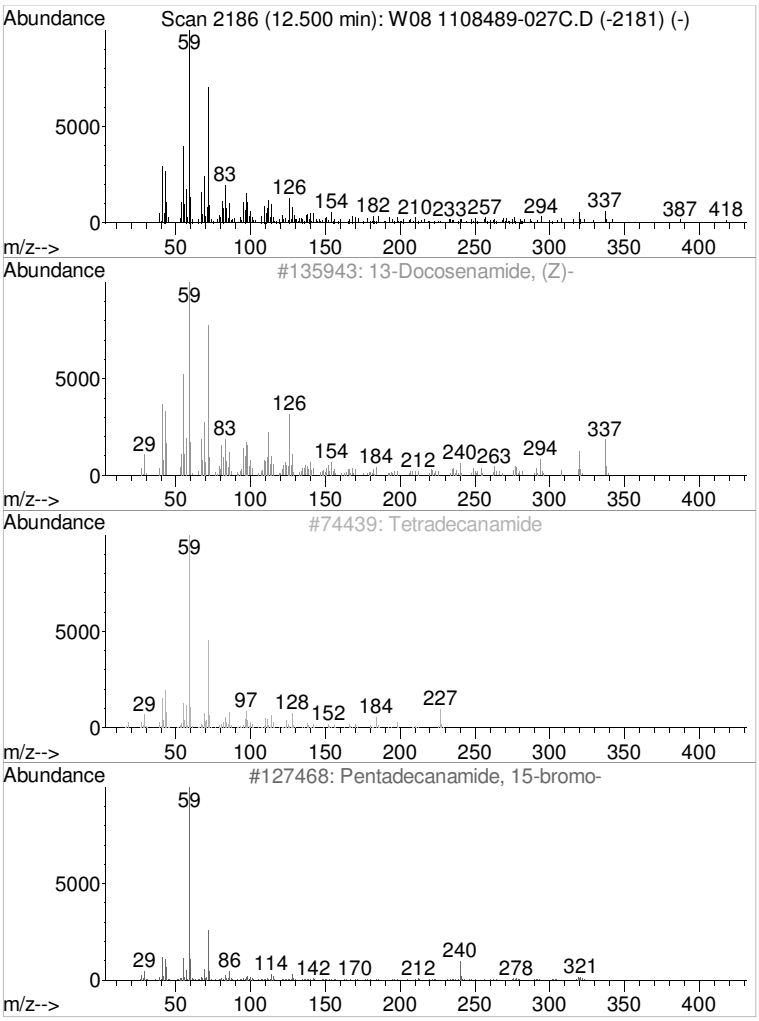
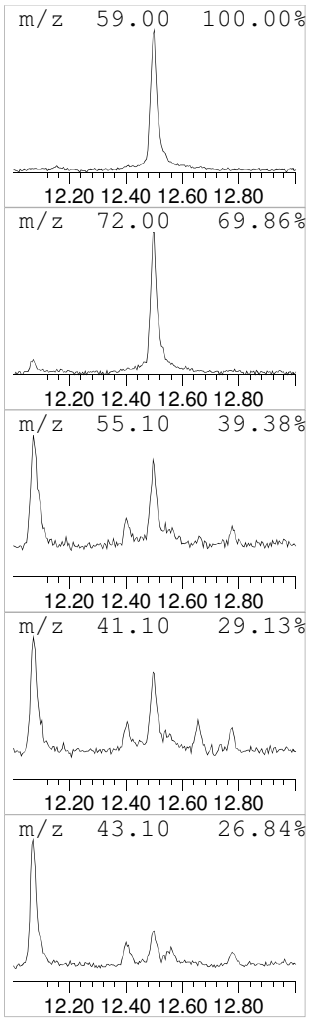
Peak Number 7 13-Docosenamide, (Z)- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	10.28 ug/l	140174	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	94
2	Tetradecanamide	227	C14H29NO	000638-58-4	72
3	Pentadecanamide, 15-bromo-	319	C15H30BrNO	1000163-86-1	53
4	Hexadecanamide	255	C16H33NO	000629-54-9	53
5	Decanamide-	171	C10H21NO	002319-29-1	47





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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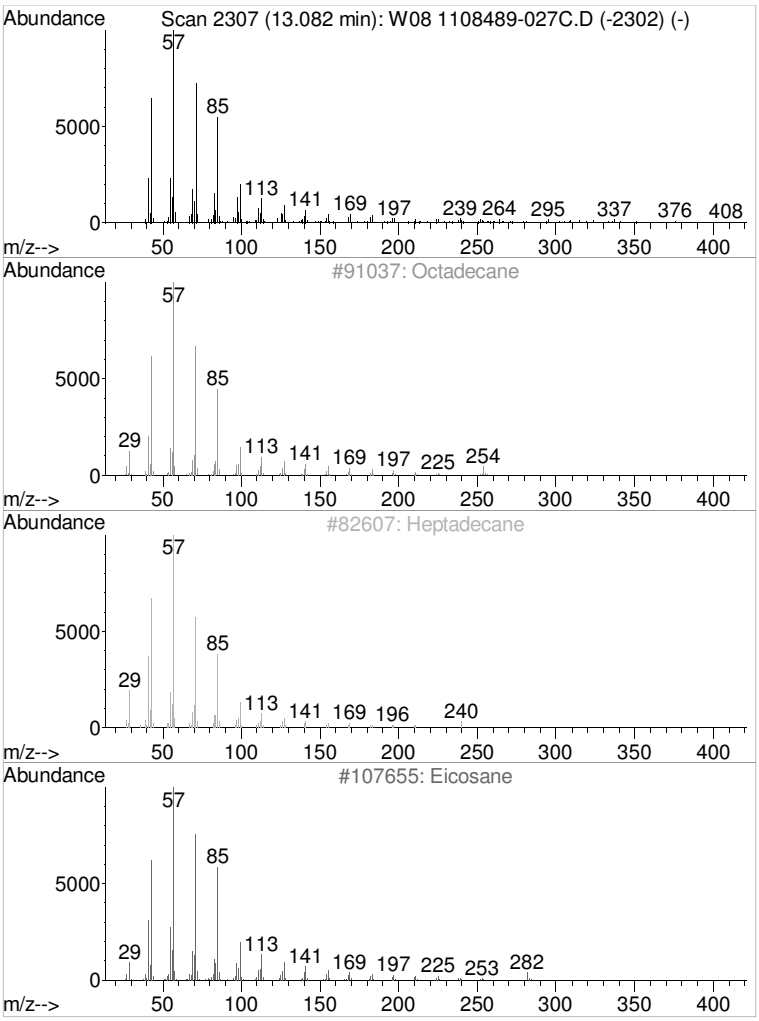
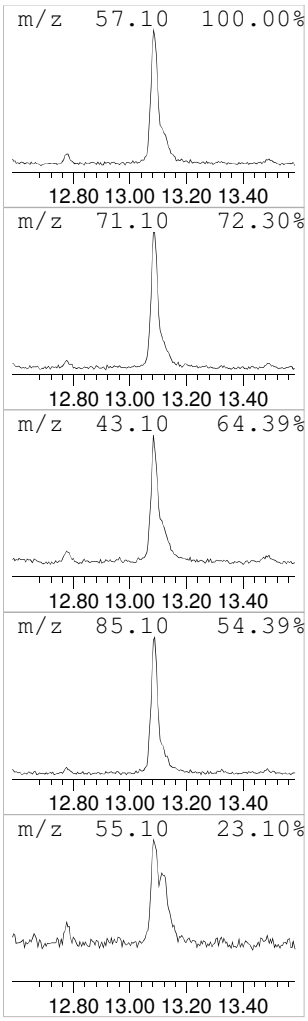
Peak Number 8 Octadecane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.08	22.90 ug/l	312335	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	96
2	Heptadecane	240	C17H36	000629-78-7	93
3	Eicosane	282	C20H42	000112-95-8	90
4	Triacontane	422	C30H62	000638-68-6	90
5	Heneicosane	296	C21H44	000629-94-7	90





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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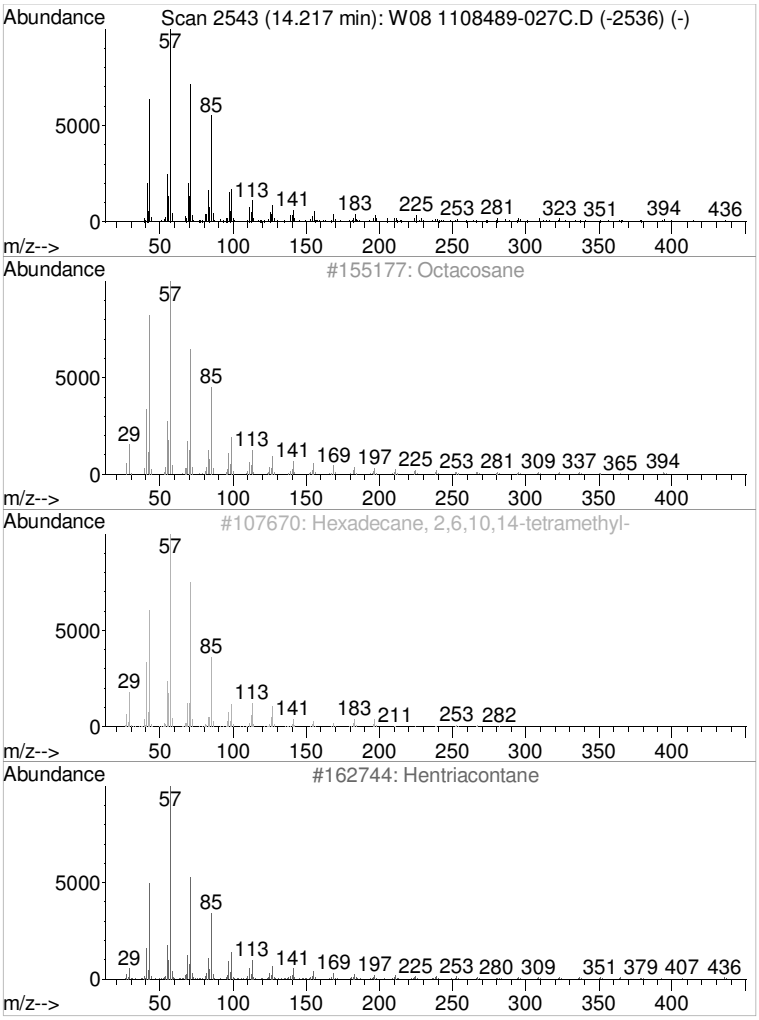
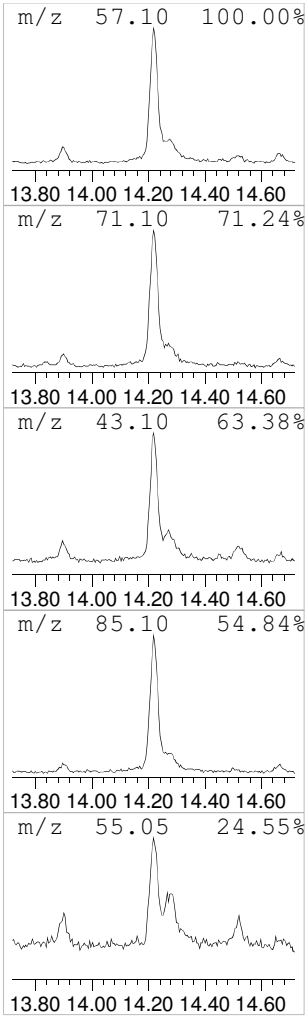
Peak Number 9 Octacosane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.22	30.91 ug/l	421609	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	99
2	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	96
3	Hentriacontane	437	C31H64	000630-04-6	96
4	Heneicosane	296	C21H44	000629-94-7	95
5	Hexacosane	366	C26H54	000630-01-3	93





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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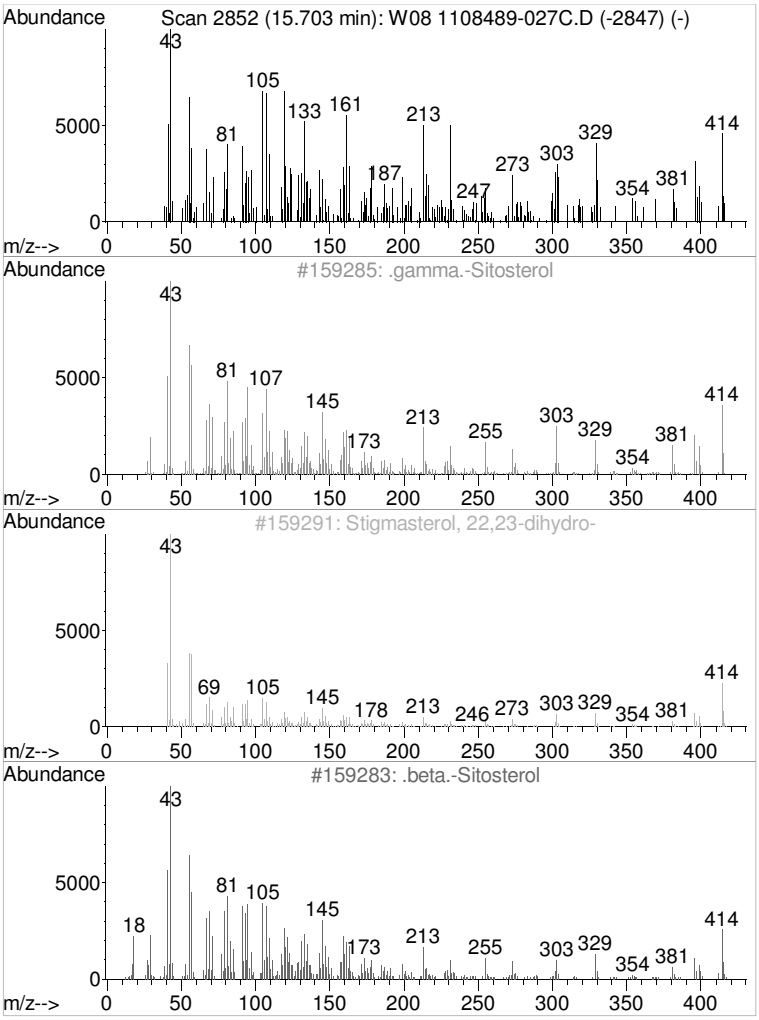
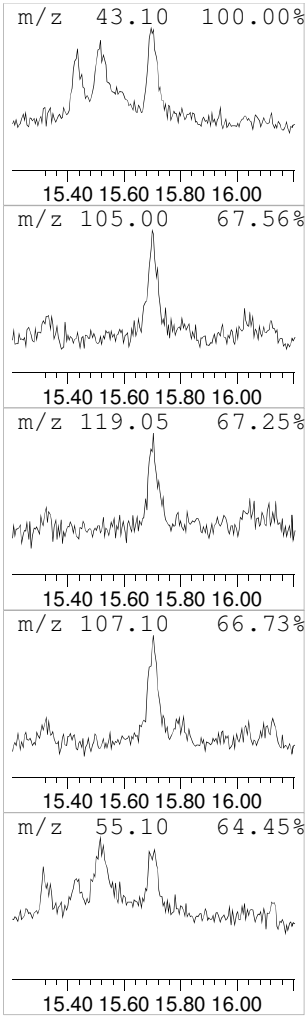
Peak Number 10 .gamma.-Sitosterol Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.70	15.64 ug/l	213266	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	64
2	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	58
3	.beta.-Sitosterol	414	C29H50O	000083-46-5	46
4	22,26-Oxido-4,17-cholestadien-3....	414	C27H42O3	1000252-80-4	25
5	Cholestan-3-one, 4,4-dimethyl-, ...	414	C29H50O	002097-85-0	15





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W08 1108489-027C.D
Acq On : 1 Sep 2011 4:51 pm
Operator : ALICIA HABERLE
Sample : 1108489-027C
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.95	65.4	ug/l	1405860	1	4.28	859726	40.0
n-Hexadecanoic acid	9.17	15.8	ug/l	481681	4	8.61	1217080	40.0
Hexadecanoic acid...	10.05	20.6	ug/l	438794	5	11.31	852712	40.0
Octadecanoic acid...	10.76	15.8	ug/l	336741	5	11.31	852712	40.0
Cyclohexadecane	11.19	13.3	ug/l	282854	5	11.31	852712	40.0
Tricosane	12.07	16.7	ug/l	355642	5	11.31	852712	40.0
13-Docosenamide, ...	12.50	10.3	ug/l	140174	6	13.34	545534	40.0
Octadecane	13.08	22.9	ug/l	312335	6	13.34	545534	40.0
Octacosane	14.22	30.9	ug/l	421609	6	13.34	545534	40.0
.gamma.-Sitosterol	15.70	15.6	ug/l	213266	6	13.34	545534	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.413	85	88	91	rBV	43867	30711	1.73%	0.194%
2	2.538	107	114	128	rBV3	54312	140532	7.91%	0.887%
3	2.706	146	149	153	rVB	41368	30086	1.69%	0.190%
4	2.951	192	200	203	rBV	2285391	1776054	100.00%	11.205%
5	3.038	212	218	221	rVB	65139	45195	2.54%	0.285%
6	3.081	221	227	230	rBV	61658	46539	2.62%	0.294%
7	3.120	230	235	239	rVB	80948	60705	3.42%	0.383%
8	3.192	244	250	264	rBV2	1311285	1047838	59.00%	6.611%
9	3.273	264	267	280	rVB	37841	41135	2.32%	0.260%
10	3.687	350	353	356	rVB	40622	30358	1.71%	0.192%
11	3.937	401	405	421	rBV	1290155	1017190	57.27%	6.417%
12	4.274	471	475	492	rVB	1079327	857144	48.26%	5.408%
13	4.769	574	578	589	rBV	484959	452705	25.49%	2.856%
14	5.437	713	717	739	rVB	1487583	1163658	65.52%	7.341%
15	6.481	930	934	942	rBV	1455058	1165476	65.62%	7.353%
16	7.145	1067	1072	1085	rVB	1608596	1357011	76.41%	8.561%
17	7.919	1229	1233	1242	rVB	936840	772237	43.48%	4.872%
18	8.154	1278	1282	1286	rBV2	82702	63614	3.58%	0.401%
19	8.611	1365	1377	1380	rBV	1506779	1272084	71.62%	8.026%
20	8.630	1380	1381	1386	rVB	120520	74714	4.21%	0.471%
21	8.871	1424	1431	1437	rBV6	17623	25940	1.46%	0.164%
22	9.107	1473	1480	1483	rBV2	19049	35230	1.98%	0.222%
23	9.169	1489	1493	1497	rBV2	152943	143265	8.07%	0.904%
24	9.688	1598	1601	1607	rBV5	19361	24226	1.36%	0.153%
25	9.809	1622	1626	1630	rBV	98194	81143	4.57%	0.512%
26	9.919	1644	1649	1652	rVB4	26060	31270	1.76%	0.197%
27	9.953	1652	1656	1664	rBV4	55388	77899	4.39%	0.491%
28	10.049	1668	1676	1681	rVB2	247067	288691	16.25%	1.821%
29	10.193	1702	1706	1716	rBV	1167537	1034820	58.27%	6.529%
30	10.698	1802	1811	1818	rBV	57531	73641	4.15%	0.465%
31	10.761	1819	1824	1828	rVB	160502	155009	8.73%	0.978%
32	11.189	1907	1913	1924	rBV2	84533	172556	9.72%	1.089%
33	11.314	1932	1939	1944	rBV	906979	1045094	58.84%	6.593%
34	11.343	1944	1945	1956	rVB3	40439	41659	2.35%	0.263%
35	12.074	2092	2097	2105	rVB3	27739	43935	2.47%	0.277%
36	12.497	2178	2185	2199	rBV	148374	272243	15.33%	1.718%
37	12.655	2216	2218	2224	rVB2	19738	21782	1.23%	0.137%
38	13.088	2302	2308	2313	rBV4	24712	47352	2.67%	0.299%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	13.338	2353	2360	2374	rVB	463381	729690	41.08%	4.604%
40	14.521	2601	2606	2618	rVB	25337	60041	3.38%	0.379%

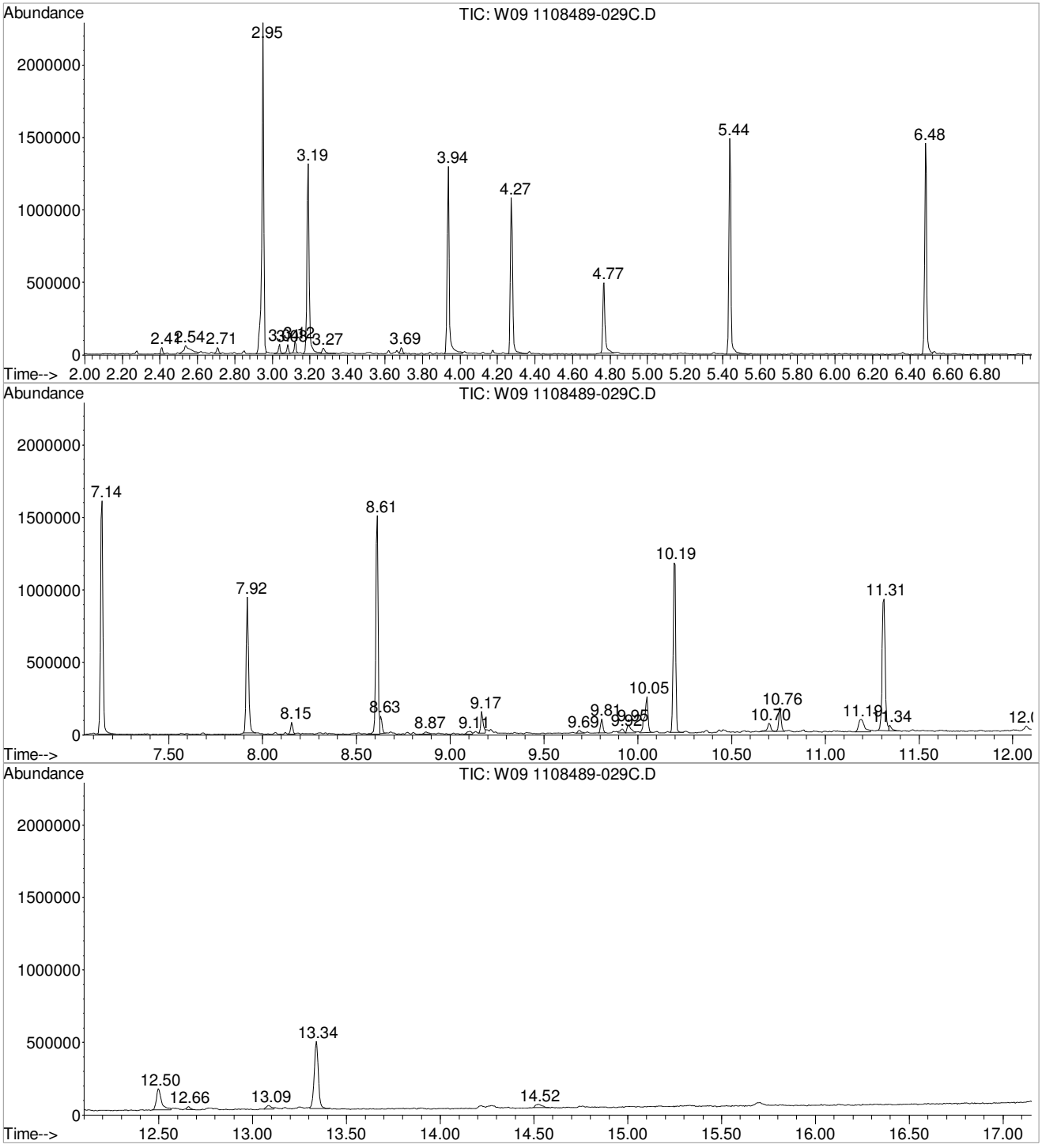
Sum of corrected areas: 15850472

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

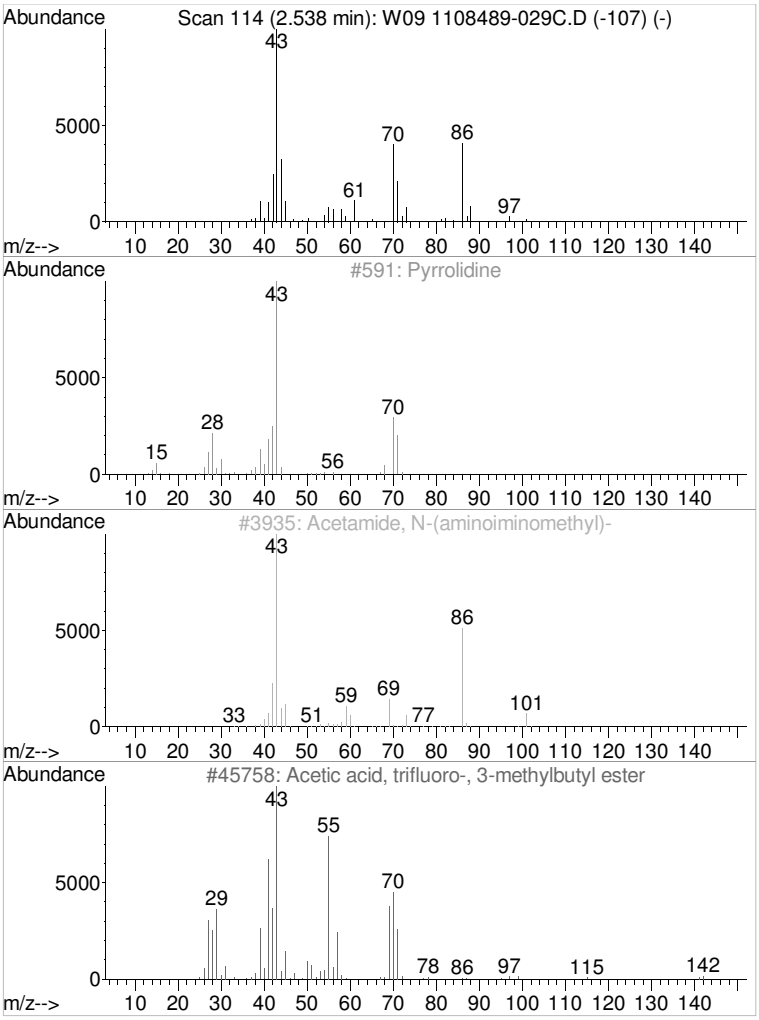
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

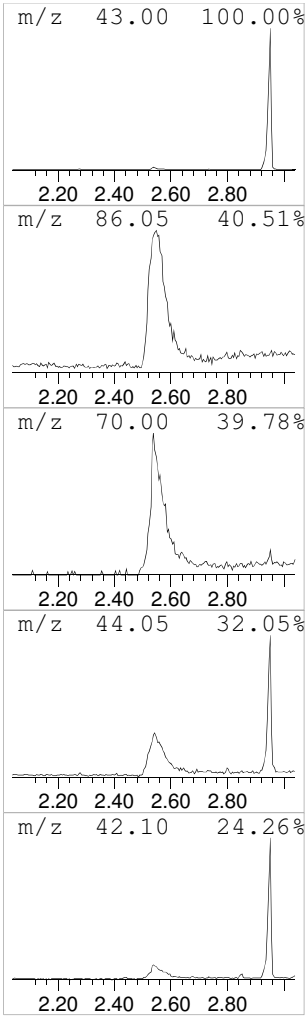
****

Peak Number 1 Pyrrolidine Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	6.56 ug/l	140532	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrrolidine	71	C4H9N	000123-75-1	43
2	Acetamide, N-(aminoiminomethyl)-	101	C3H7N3O	005699-40-1	32
3	Acetic acid, trifluoro-, 3-methy...	184	C7H11F3O2	000327-69-5	23
4	2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	22
5	Ethanedioic acid, bis(3-methylbu...	230	C12H22O4	002051-00-5	12





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

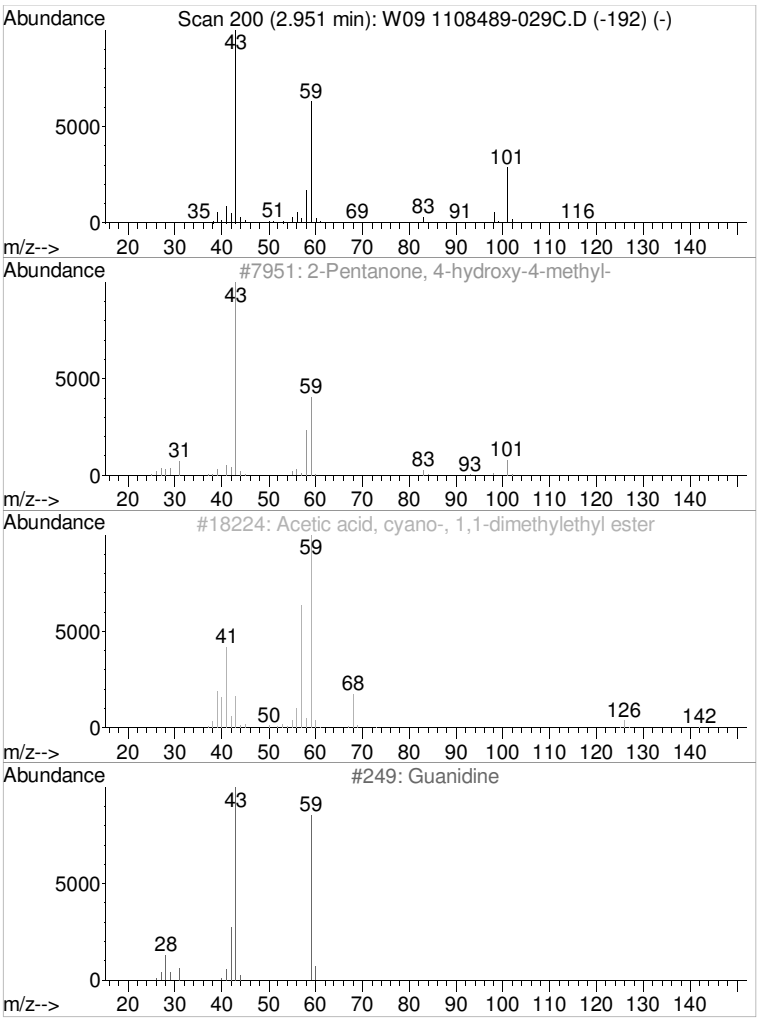
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

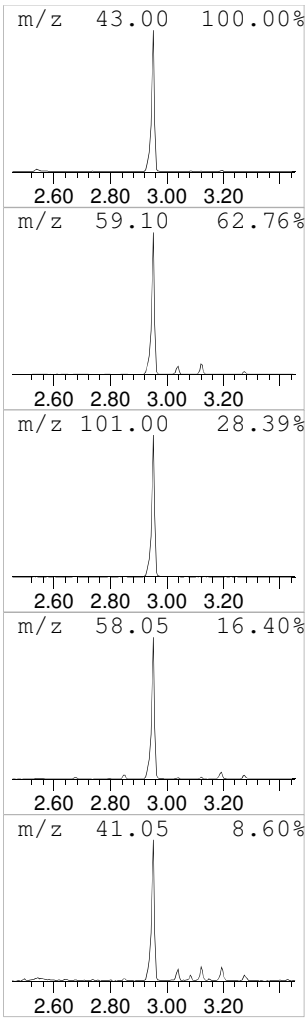
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	82.88 ug/l	1776050	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Guanidine	59	CH5N3	000113-00-8	9
4	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

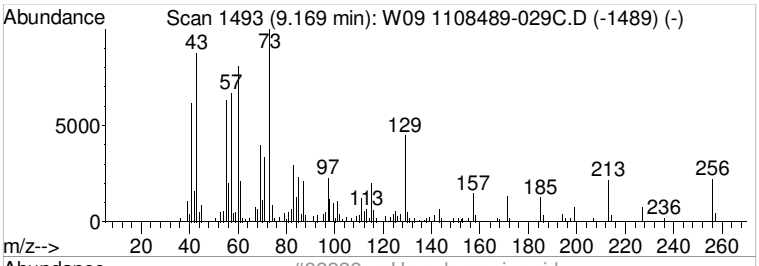
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

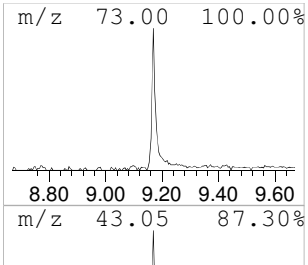
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	4.50 ug/l	143265	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	95
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	72
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	64
5	n-Decanoic acid	172	C10H20O2	000334-48-5	64





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

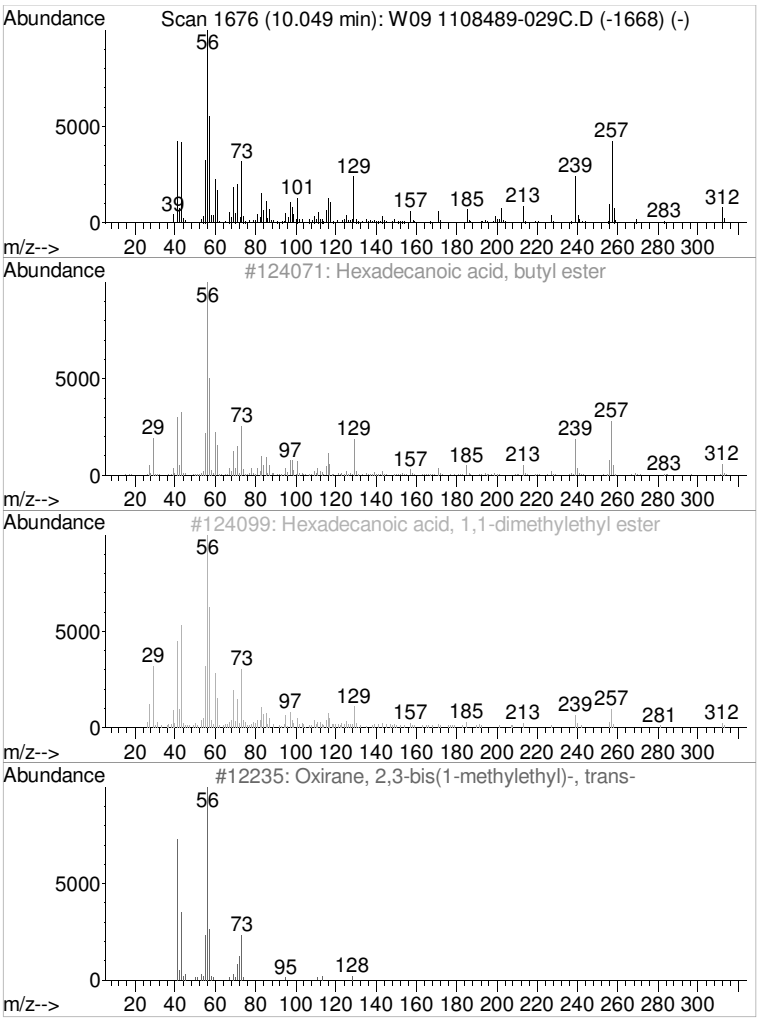
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

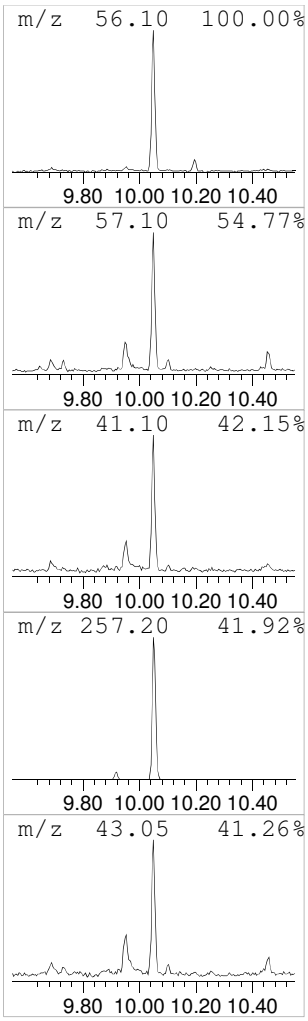
****

Peak Number 4 Hexadecanoic acid, butyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	11.05 ug/l	288691	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	52
3	Oxirane, 2,3-bis(1-methylethyl)-...	128	C8H16O	054644-32-5	25
4	Cyclohexanamine	99	C6H13N	000108-91-8	25
5	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	25





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

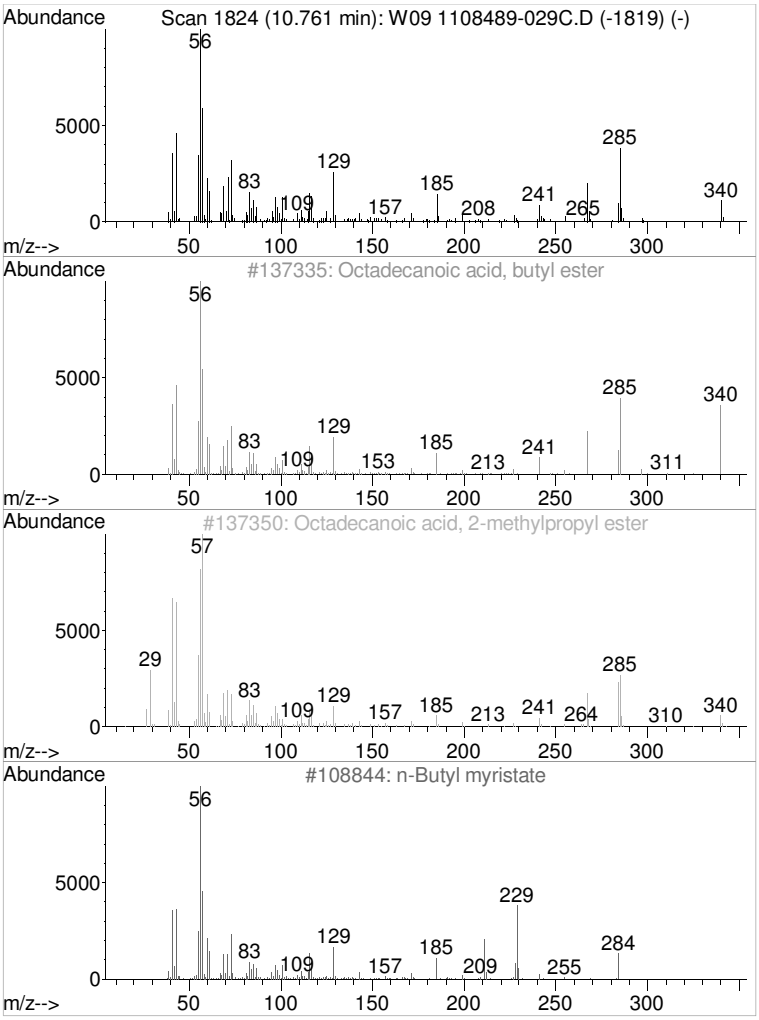
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

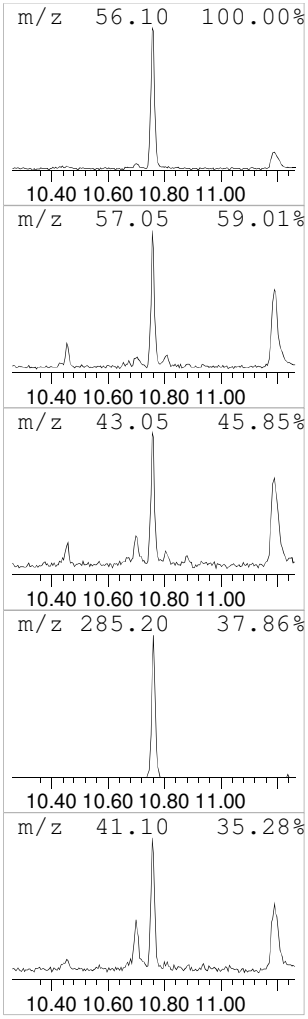
****

Peak Number 5 Octadecanoic acid, butyl ester Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	5.93 ug/l	155009	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	91
3	n-Butyl myristate	284	C18H36O2	000110-36-1	49
4	Nipecotic acid	129	C6H11NO2	000498-95-3	43
5	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	25





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

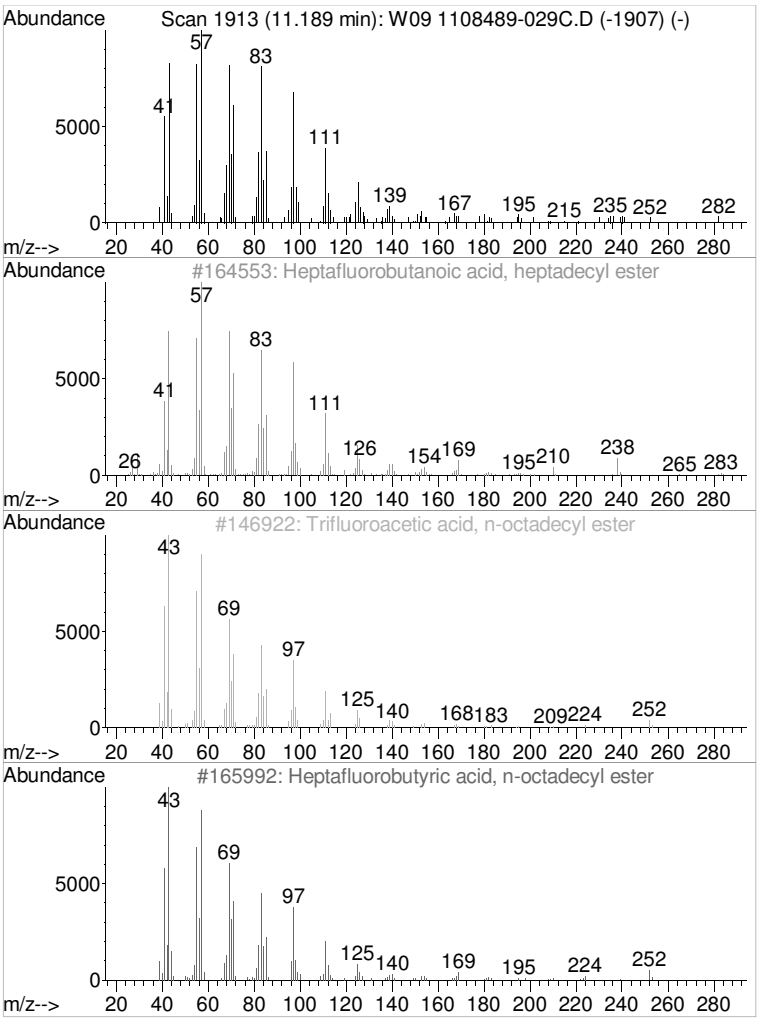
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

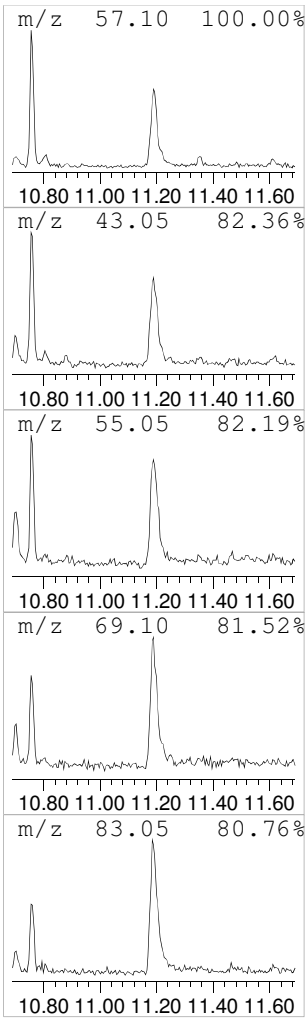
****

Peak Number 6 Heptafluorobutanoic acid, h... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	6.60 ug/l	172556	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	94
2	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
3	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	91
4	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91
5	17-Pentatriacontene	491	C35H70	006971-40-0	91





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

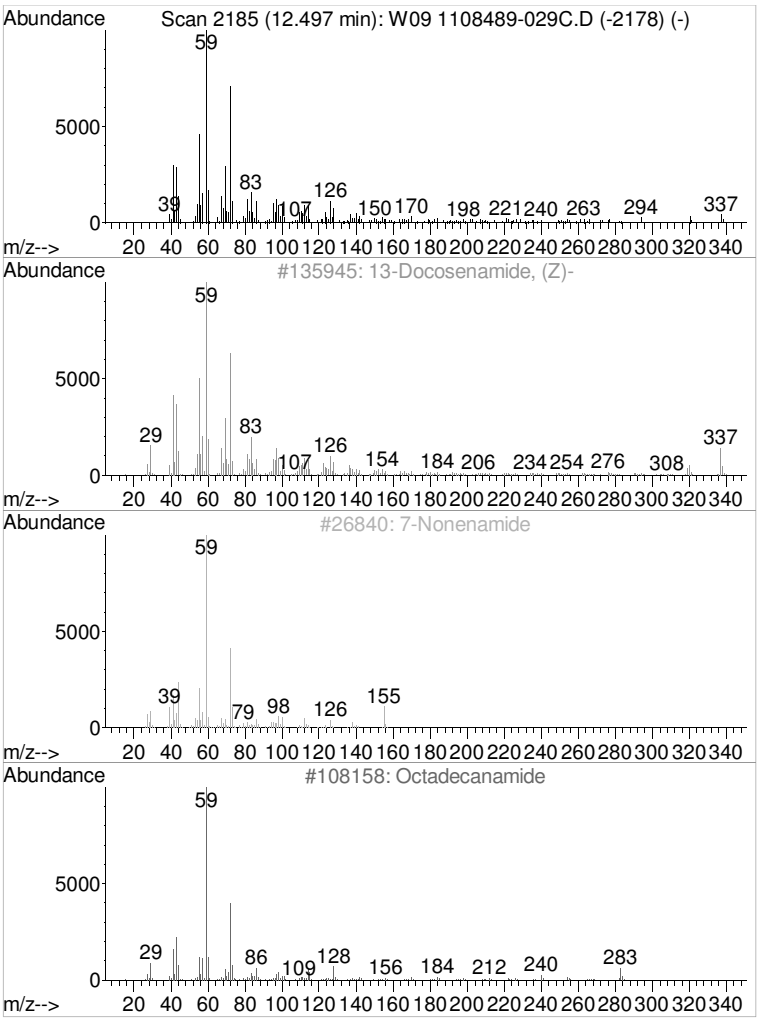
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

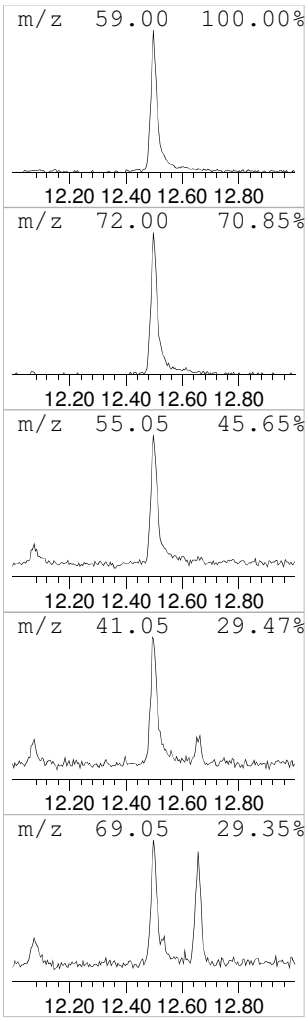
****

Peak Number 7 13-Docosenamide, (Z)- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	14.92 ug/l	272243	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	87
2	7-Nonenamide	155	C9H17NO	090949-53-4	64
3	Octadecanamide	283	C18H37NO	000124-26-5	64
4	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	53
5	Decanamide-	171	C10H21NO	002319-29-1	53





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W09 1108489-029C.D
Acq On : 1 Sep 2011 5:17 pm
Operator : ALICIA HABERLE
Sample : 1108489-029C
Misc : SAMP
ALS Vial : 16 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Pyrrolidine	2.54	6.6	ug/l	140532	1	4.27	857144	40.0
2-Pentanone, 4-hy...	2.95	82.9	ug/l	1776050	1	4.27	857144	40.0
n-Hexadecanoic acid	9.17	4.5	ug/l	143265	4	8.61	1272080	40.0
Hexadecanoic acid...	10.05	11.0	ug/l	288691	5	11.31	1045090	40.0
Octadecanoic acid...	10.76	5.9	ug/l	155009	5	11.31	1045090	40.0
Heptafluorobutano...	11.19	6.6	ug/l	172556	5	11.31	1045090	40.0
13-Docosenamide, ...	12.50	14.9	ug/l	272243	6	13.34	729690	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.413	85	88	91	rVB	30574	21528	1.58%	0.129%
2	2.543	107	115	129	rBV4	35946	117004	8.59%	0.702%
3	2.706	145	149	153	rVB3	28684	22072	1.62%	0.132%
4	2.850	173	179	181	rBV	20715	17087	1.25%	0.102%
5	2.951	192	200	203	rBV	1571634	1317503	96.70%	7.901%
6	3.038	212	218	221	rBV	59460	41177	3.02%	0.247%
7	3.081	222	227	230	rBV	57673	43462	3.19%	0.261%
8	3.120	230	235	239	rBV	74541	56252	4.13%	0.337%
9	3.192	244	250	263	rVV2	929385	779762	57.23%	4.676%
10	3.273	263	267	277	rVB	34711	32912	2.42%	0.197%
11	3.663	342	348	350	rBV	18455	16160	1.19%	0.097%
12	3.687	350	353	356	rVB	25689	20075	1.47%	0.120%
13	3.937	401	405	420	rBV	949261	774596	56.85%	4.645%
14	4.173	452	454	463	rVB	35472	28503	2.09%	0.171%
15	4.274	471	475	486	rBV	1139351	853209	62.62%	5.117%
16	4.769	573	578	589	rBV	367474	351667	25.81%	2.109%
17	5.437	713	717	731	rBV	1464474	1157008	84.92%	6.939%
18	6.481	930	934	942	rBV	1252410	972784	71.40%	5.834%
19	6.625	960	964	966	rBV	20140	18347	1.35%	0.110%
20	6.904	1015	1022	1030	rBV	144396	157458	11.56%	0.944%
21	7.145	1067	1072	1086	rVB	1592059	1362520	100.00%	8.171%
22	7.919	1224	1233	1242	rBV	868624	741665	54.43%	4.448%
23	8.154	1278	1282	1286	rBV2	33842	30207	2.22%	0.181%
24	8.313	1307	1315	1323	rBV	374545	373836	27.44%	2.242%
25	8.611	1366	1377	1384	rBV	1486198	1312527	96.33%	7.871%
26	8.871	1427	1431	1437	rBV4	18612	21011	1.54%	0.126%
27	9.097	1473	1478	1482	rBV	63761	78488	5.76%	0.471%
28	9.131	1482	1485	1489	rVV2	52738	57227	4.20%	0.343%
29	9.169	1489	1493	1513	rVB2	306883	328675	24.12%	1.971%
30	9.342	1526	1529	1534	rBV5	15209	17489	1.28%	0.105%
31	9.688	1596	1601	1608	rBV2	32819	43952	3.23%	0.264%
32	9.871	1632	1639	1640	rBV3	39112	42635	3.13%	0.256%
33	9.919	1646	1649	1652	rVB2	21452	19281	1.42%	0.116%
34	9.948	1652	1655	1665	rBV2	85156	100212	7.35%	0.601%
35	10.049	1671	1676	1680	rBV	184310	147718	10.84%	0.886%
36	10.193	1702	1706	1715	rVB	1138700	962685	70.65%	5.773%
37	10.439	1752	1757	1759	rBV4	17603	22344	1.64%	0.134%
38	10.568	1779	1784	1788	rBV	47010	46058	3.38%	0.276%

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	10.698	1807	1811	1818	rVB2	52731	59151	4.34%	0.355%
40	10.756	1820	1823	1828	rVB	117919	110062	8.08%	0.660%
41	11.189	1907	1913	1925	rBV3	111291	214607	15.75%	1.287%
42	11.314	1932	1939	1944	rBV	954438	1039818	76.32%	6.236%
43	11.347	1944	1946	1959	rVB3	28037	42773	3.14%	0.257%
44	11.468	1966	1971	1977	rBV9	20280	34998	2.57%	0.210%
45	12.069	2090	2096	2109	rBV2	101748	199382	14.63%	1.196%
46	12.497	2178	2185	2194	rBV	117046	214353	15.73%	1.285%
47	12.655	2212	2218	2226	rVB	170870	240919	17.68%	1.445%
48	13.083	2301	2307	2319	rBV2	84154	180002	13.21%	1.079%
49	13.343	2354	2361	2370	rVB	473059	736950	54.09%	4.420%
50	13.901	2473	2477	2484	rVB9	23581	39993	2.94%	0.240%
51	14.218	2537	2543	2549	rBV3	46725	89691	6.58%	0.538%
52	14.521	2598	2606	2624	rVB3	301644	716051	52.55%	4.294%
53	15.699	2844	2851	2863	rBV8	98981	249035	18.28%	1.493%

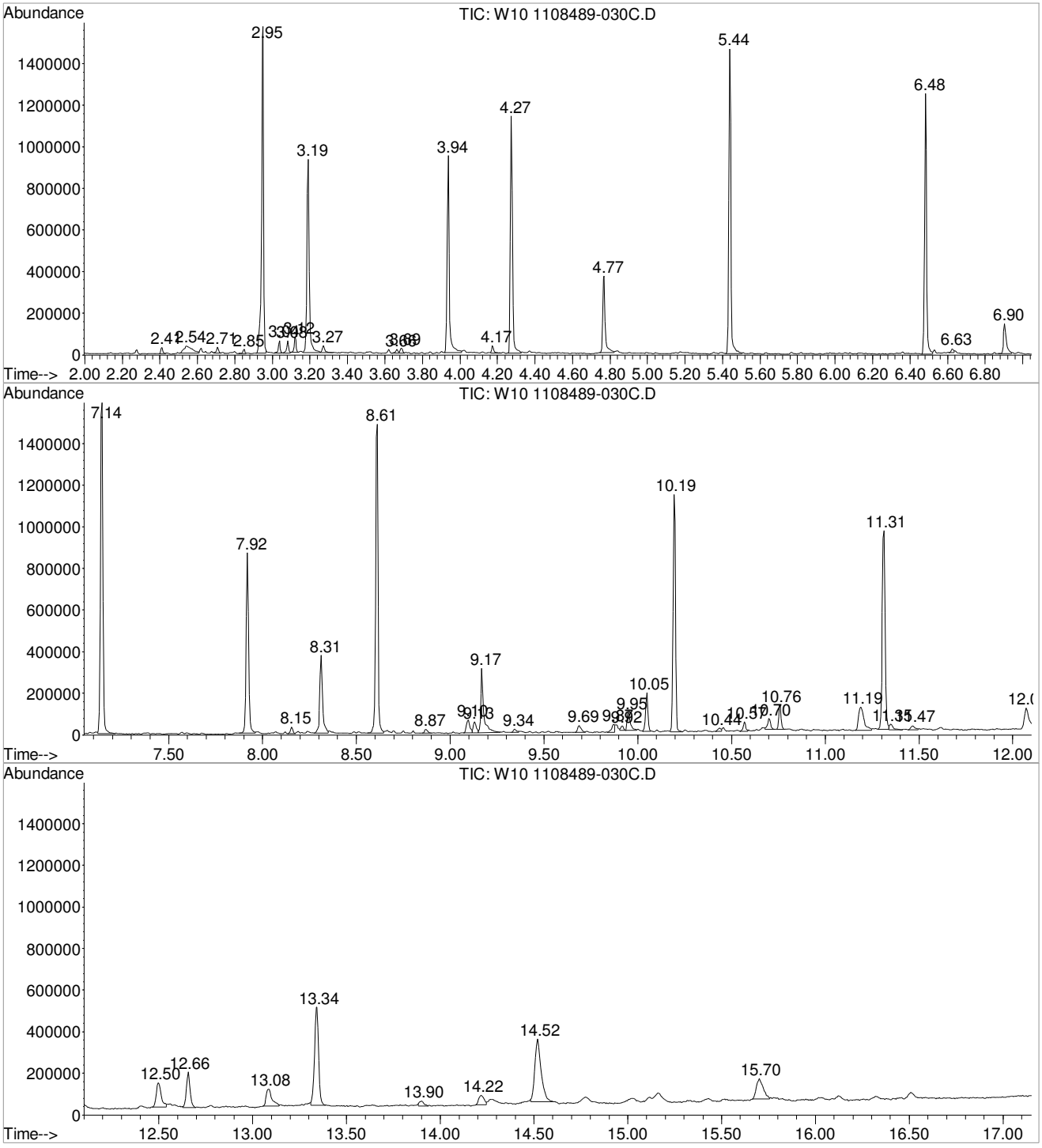
Sum of corrected areas: 16674881

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

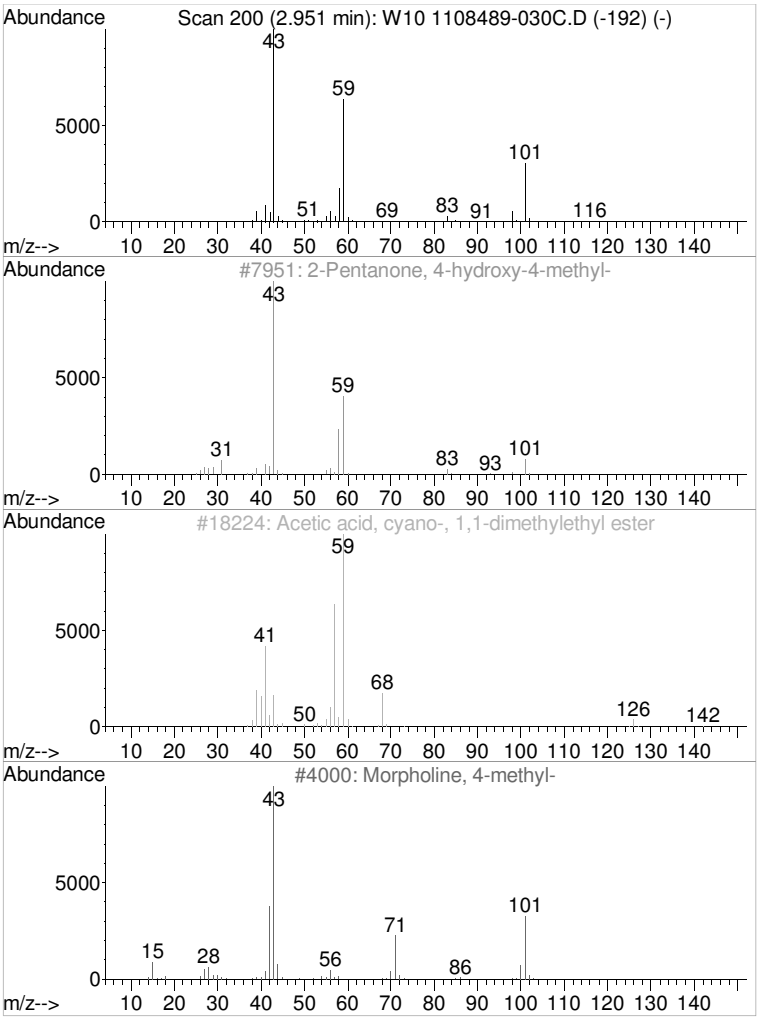
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

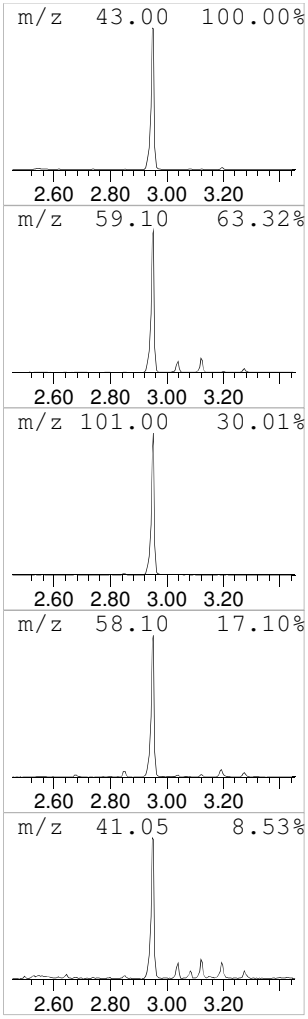
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	61.77 ug/l	1317500	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	Guanidine	59	CH5N3	000113-00-8	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

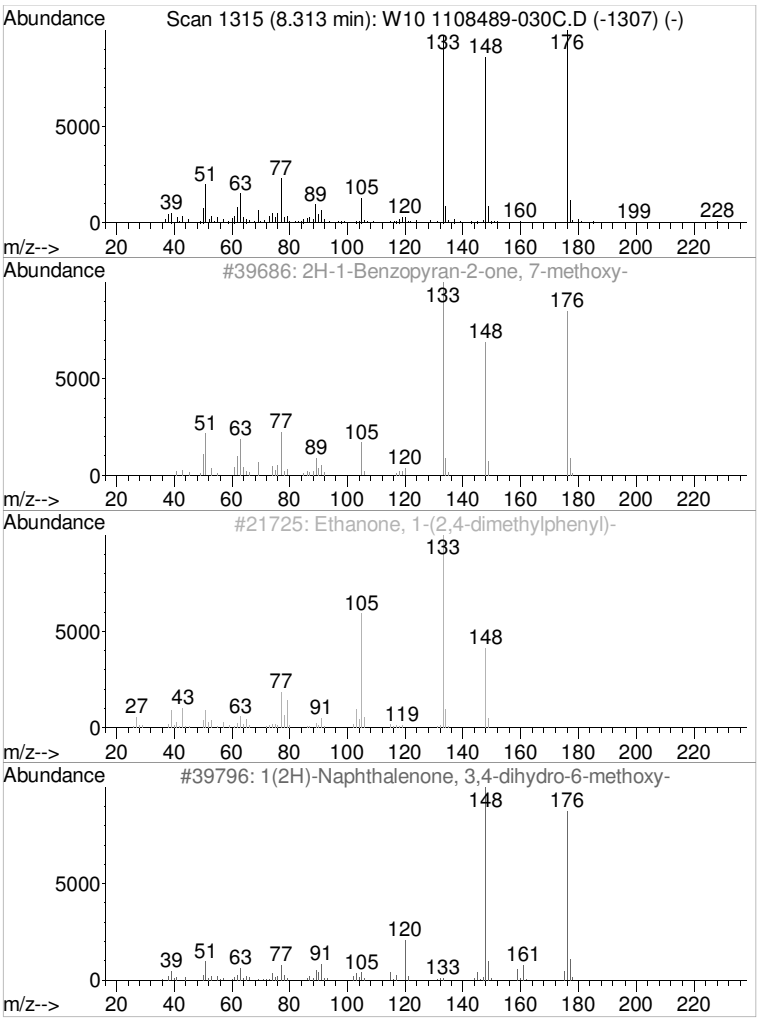
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

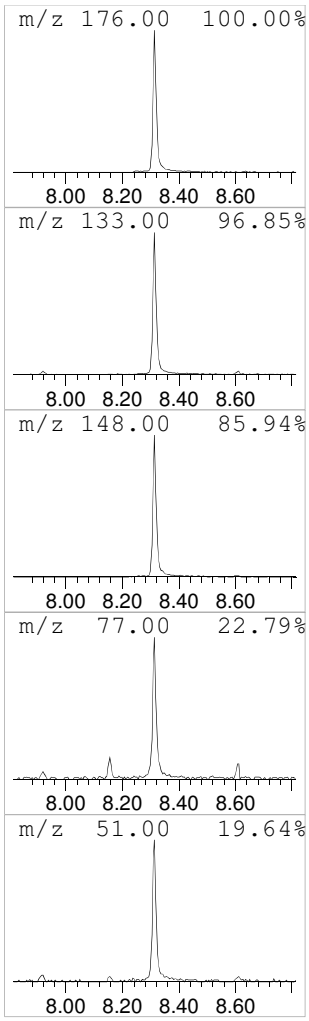
****

Peak Number 2 2H-1-Benzopyran-2-one, 7-me... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.31	11.39 ug/l	373836	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2H-1-Benzopyran-2-one, 7-methoxy-	176	C10H8O3	000531-59-9	97
2	Ethanone, 1-(2,4-dimethylphenyl)-	148	C10H12O	000089-74-7	49
3	1(2H)-Naphthalenone, 3,4-dihydro...	176	C11H12O2	001078-19-9	46
4	Benzene, pentamethyl-	148	C11H16	000700-12-9	46
5	Cumarin-3-carboxylic acid, 7-met...	220	C11H8O5	020300-59-8	40





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

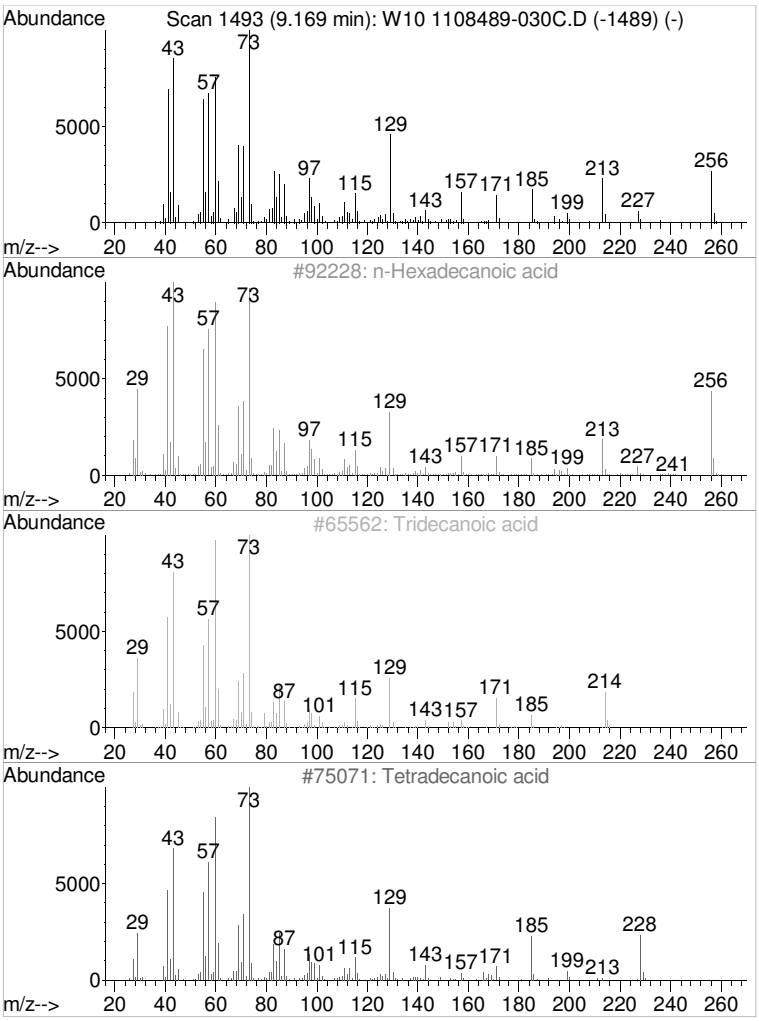
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

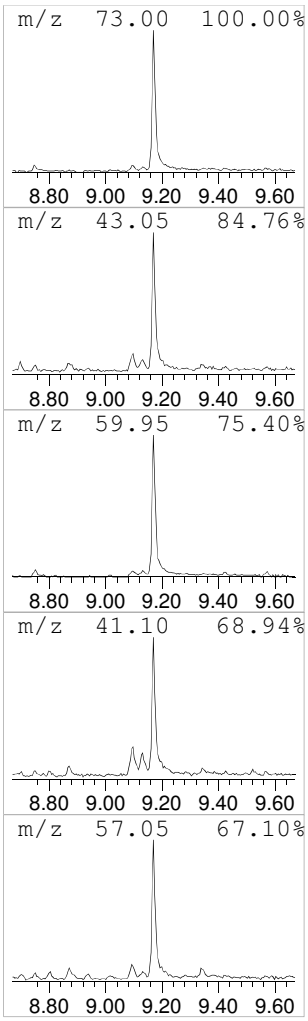
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	10.02 ug/l	328675	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	90
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	72
4	n-Decanoic acid	172	C10H20O2	000334-48-5	62
5	Estra-1,3,5(10)-trien-17.beta.-ol	256	C18H24O	002529-64-8	38





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Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

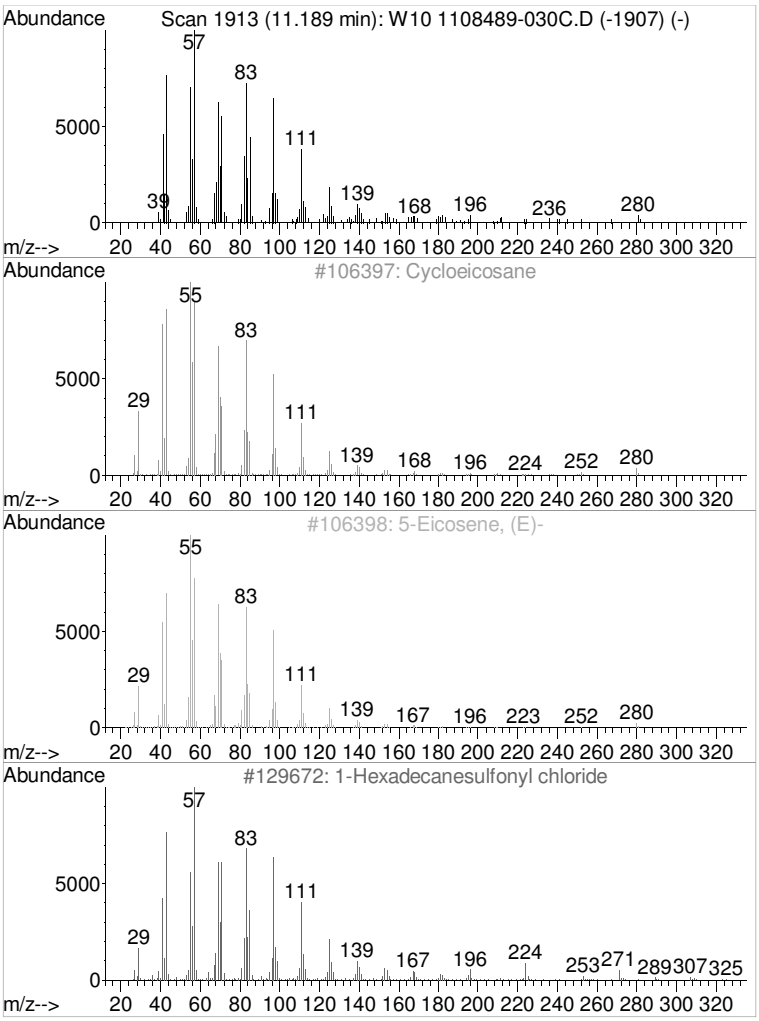
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

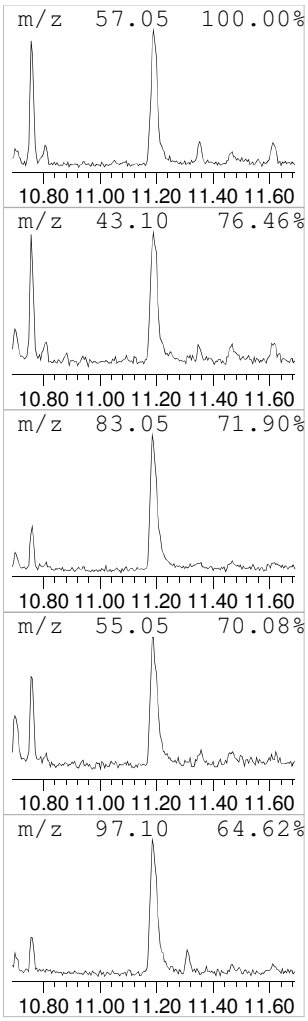
****

Peak Number 4 Cycloeicosane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	8.26 ug/l	214607	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cycloeicosane	280	C20H40	000296-56-0	97
2	5-Eicosene, (E)-	280	C20H40	074685-30-6	92
3	1-Hexadecanesulfonyl chloride	324	C16H33ClO2S	038775-38-1	91
4	17-Pentatriacontene	491	C35H70	006971-40-0	91
5	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	90





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

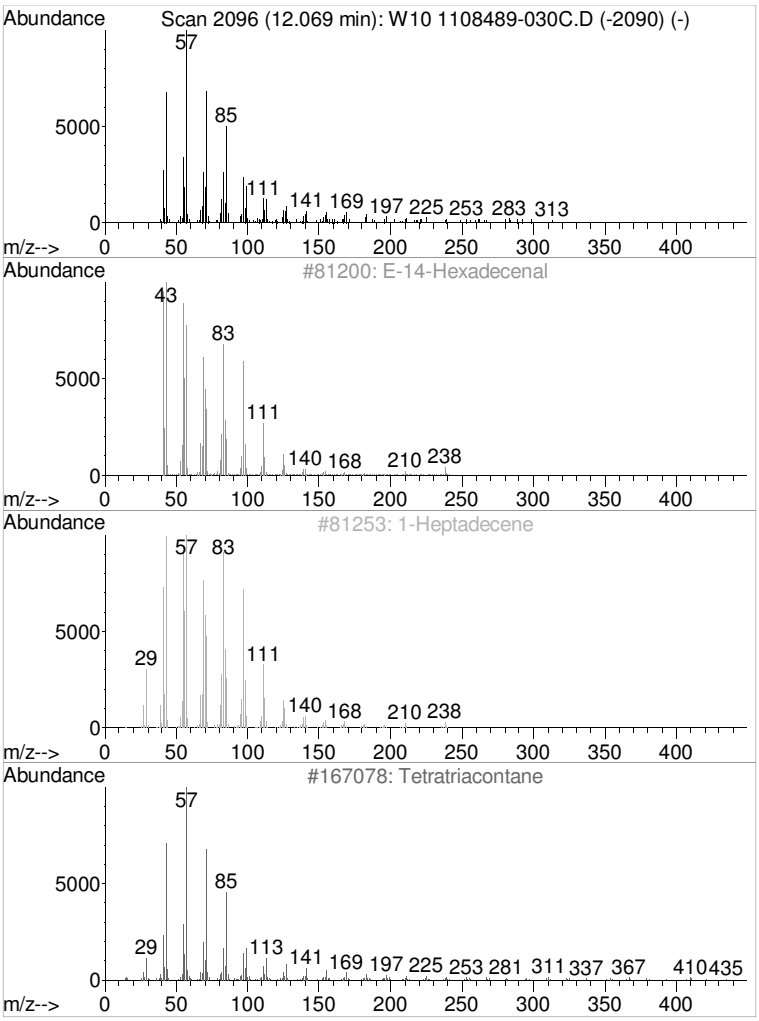
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

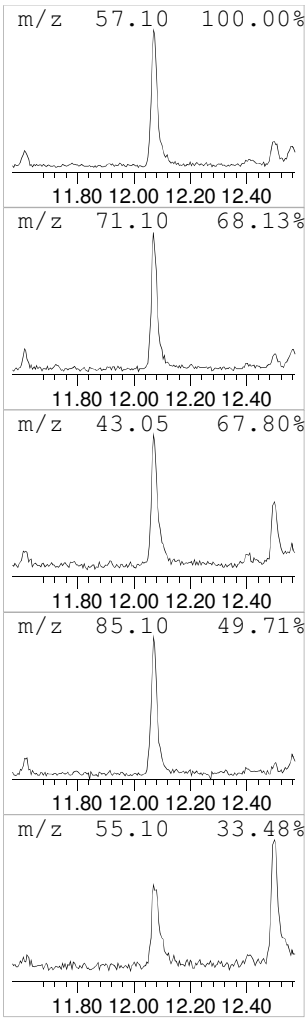
****

Peak Number 5 E-14-Hexadecenal Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.07	7.67 ug/l	199382	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	E-14-Hexadecenal	238	C16H30O	330207-53-9	83
2	1-Heptadecene	238	C17H34	006765-39-5	83
3	Tetratriacontane	479	C34H70	014167-59-0	83
4	Nonadecane, 2,3-dimethyl-	296	C21H44	075163-99-4	83
5	Octacosane	394	C28H58	000630-02-4	83





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

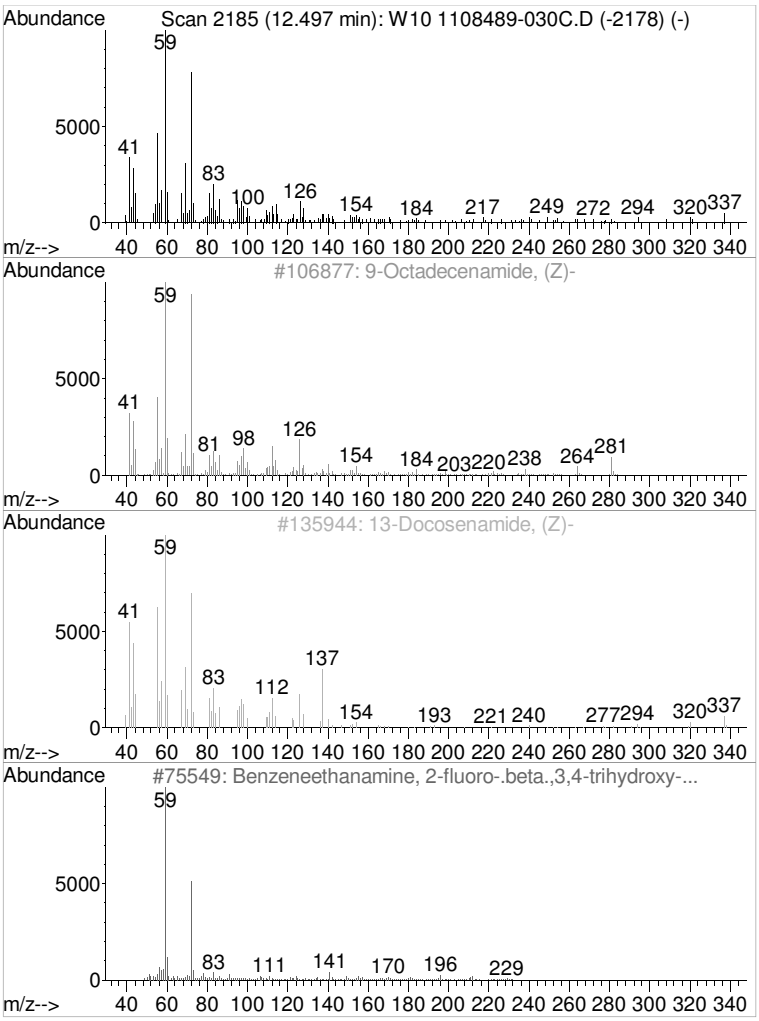
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

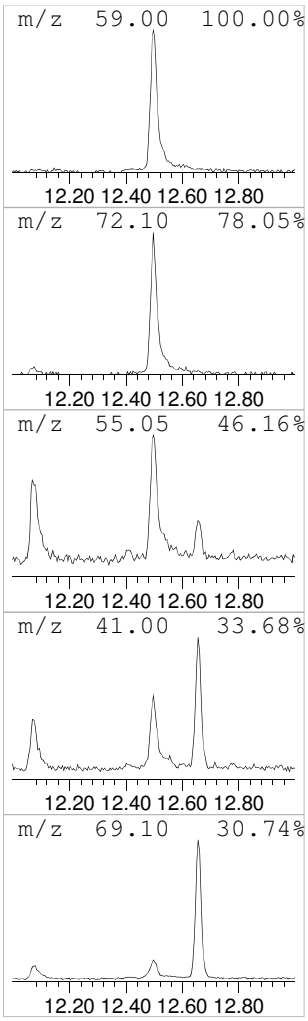
****

Peak Number 6 9-Octadecenamide, (Z)- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	11.63 ug/l	214353	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	95
2	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	64
3	Benzeneethanamine, 2-fluoro-.bet...	229	C11H16FNO3	061338-98-5	53
4	Octadecanamide	283	C18H37NO	000124-26-5	47
5	Nonanamide	157	C9H19NO	001120-07-6	38





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

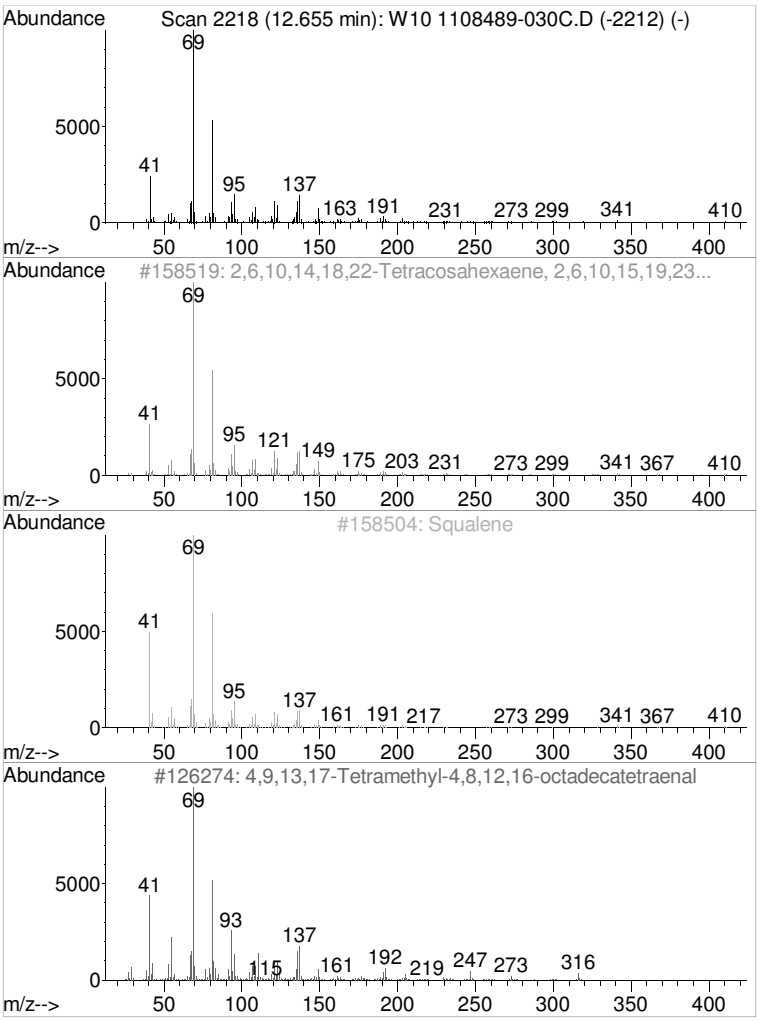
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

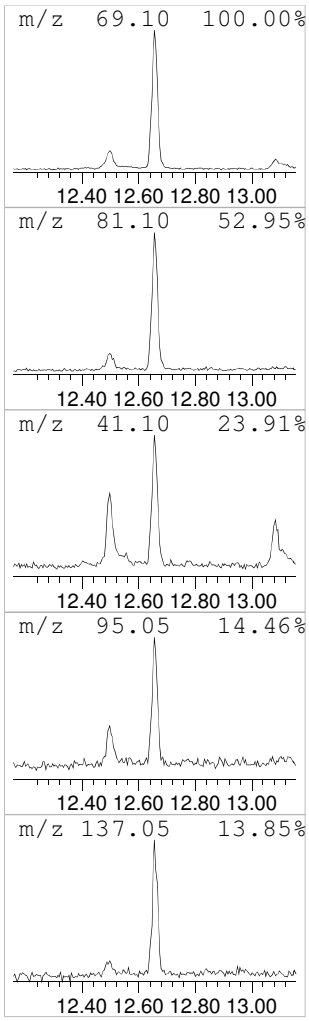
****

Peak Number 7 2,6,10,14,18,22-Tetracosahe... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.66	13.08 ug/l	240919	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6,10,14,18,22-Tetracosahexaene...	410	C30H50	000111-02-4	99
2	Squalene	410	C30H50	007683-64-9	98
3	4,9,13,17-Tetramethyl-4,8,12,16-...	316	C22H36O	056882-09-8	83
4	1,5,9-Undecatriene, 2,6,10-trime...	192	C14H24	062951-96-6	81
5	1,5,9-Decatriene, 2,3,5,8-tetram...	192	C14H24	230646-72-7	64





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

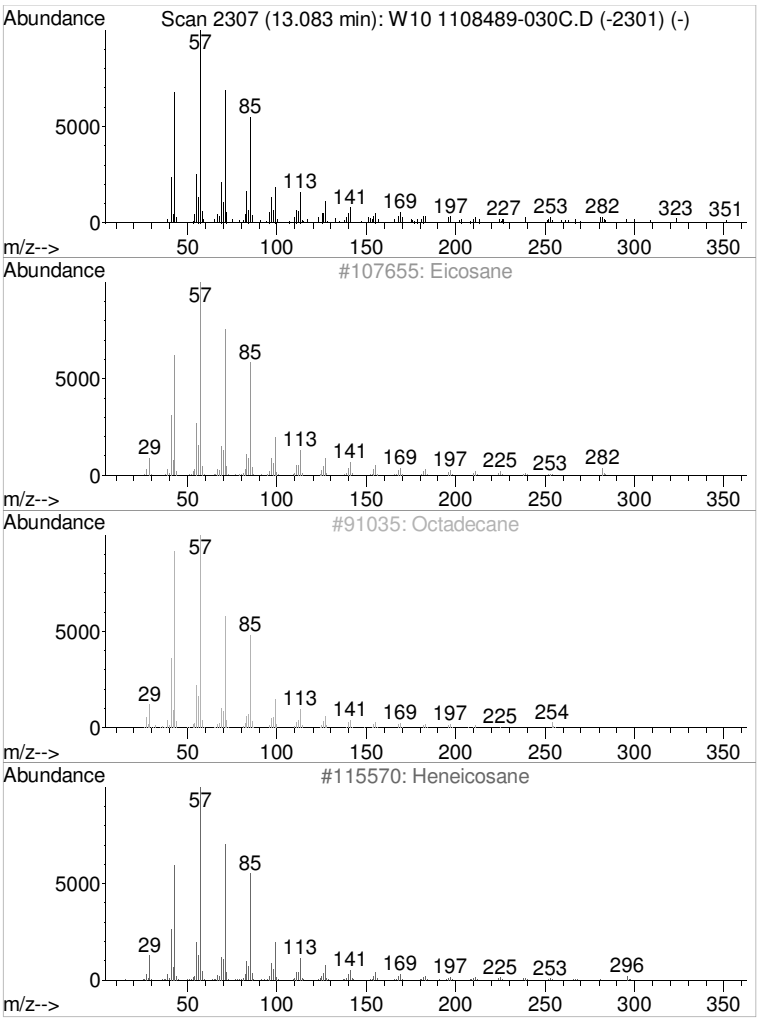
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

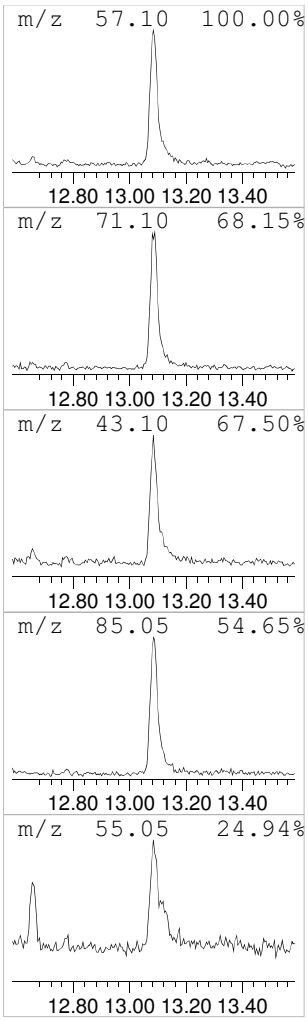
****

Peak Number 8 Eicosane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.08	9.77 ug/l	180002	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	98
2	Octadecane	254	C18H38	000593-45-3	93
3	Heneicosane	296	C21H44	000629-94-7	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	91





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Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

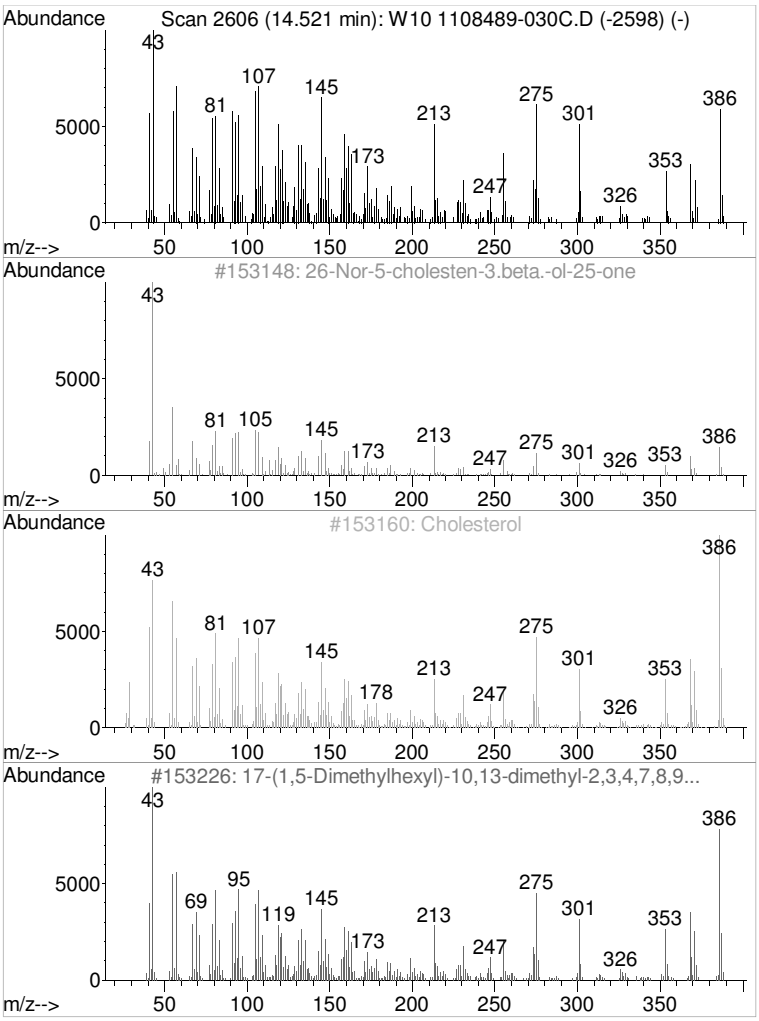
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

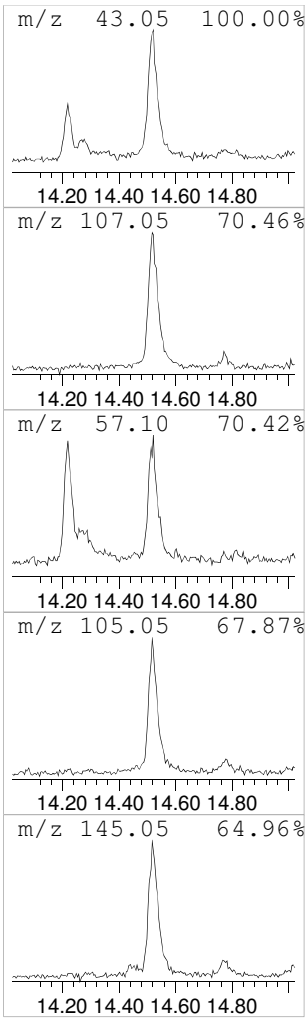
****

Peak Number 9 26-Nor-5-cholesten-3.beta.-... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.52	38.87 ug/l	716051	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	26-Nor-5-cholesten-3.beta.-ol-25...	386	C26H42O2	007494-34-0	97
2	Cholesterol	386	C27H46O	000057-88-5	92
3	17-(1,5-Dimethylhexyl)-10,13-dim...	386	C27H46O	1000210-38-4	91
4	Cholest-8-en-3-ol, (3.beta.)-	386	C27H46O	007199-91-9	83
5	Cholestane, 5,6-epoxy-, (5.alpha...	386	C27H46O	020230-22-2	44





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

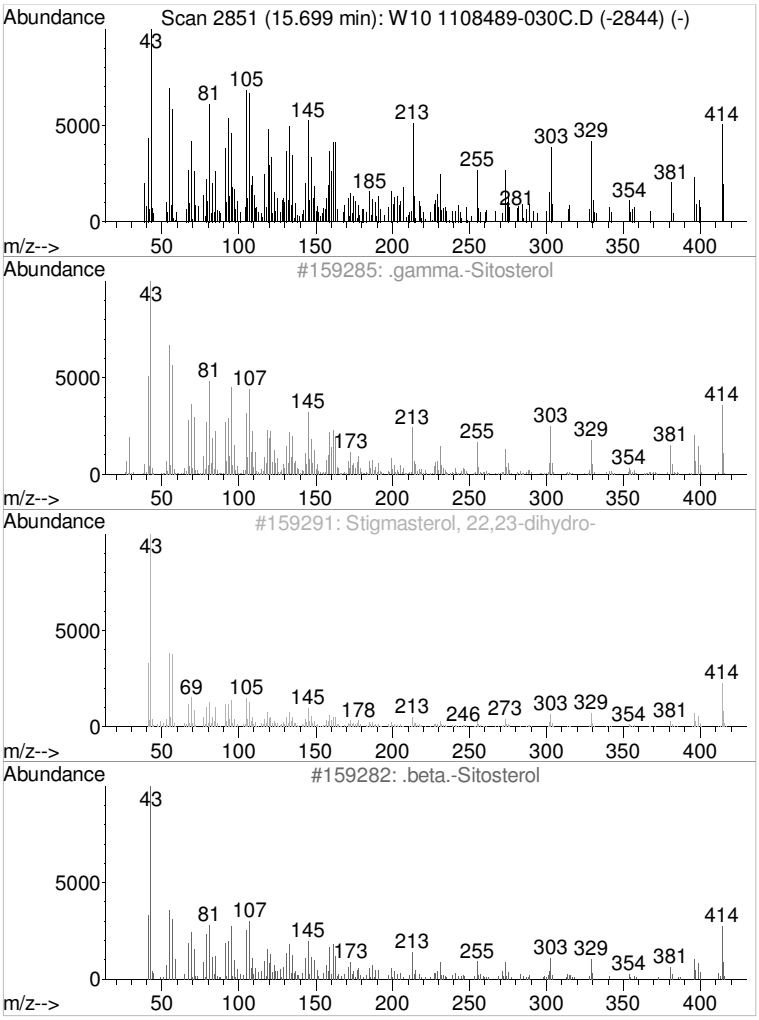
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

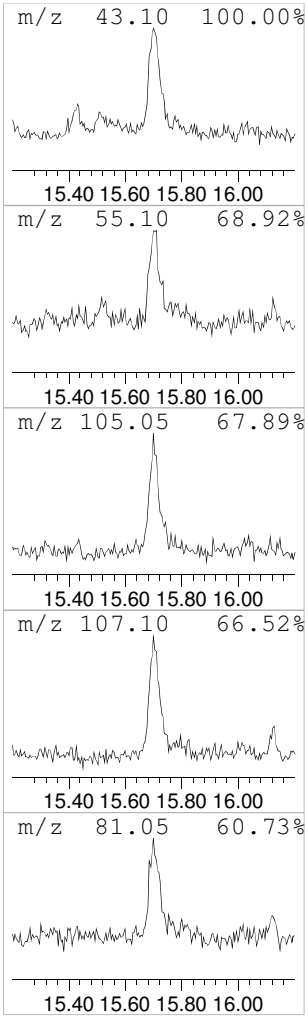
****

Peak Number 10 .gamma.-Sitosterol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.70	13.52 ug/l	249035	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	91
2	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	90
3	.beta.-Sitosterol	414	C29H50O	000083-46-5	83
4	Cholest-7-en-3-ol, 4,4-dimethyl-...	414	C29H50O	006384-28-7	12
5	17-(1,5-Dimethylhexyl)-10,13-dim...	414	C29H50O	1000210-86-9	10





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W10 1108489-030C.D
Acq On : 1 Sep 2011 5:43 pm
Operator : ALICIA HABERLE
Sample : 1108489-030C
Misc : SAMP
ALS Vial : 17 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.95	61.8	ug/l	1317500	1	4.27	853209	40.0
2H-1-Benzopyran-2...	8.31	11.4	ug/l	373836	4	8.61	1312530	40.0
n-Hexadecanoic acid	9.17	10.0	ug/l	328675	4	8.61	1312530	40.0
Cycloeicosane	11.19	8.3	ug/l	214607	5	11.31	1039820	40.0
E-14-Hexadecenal	12.07	7.7	ug/l	199382	5	11.31	1039820	40.0
9-Octadecenamide,...	12.50	11.6	ug/l	214353	6	13.34	736950	40.0
2,6,10,14,18,22-T...	12.66	13.1	ug/l	240919	6	13.34	736950	40.0
Eicosane	13.08	9.8	ug/l	180002	6	13.34	736950	40.0
26-Nor-5-choleste...	14.52	38.9	ug/l	716051	6	13.34	736950	40.0
.gamma.-Sitosterol	15.70	13.5	ug/l	249035	6	13.34	736950	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.274	54	59	63	rVB	17352	16322	1.23%	0.117%
2	2.409	85	87	90	rVB	33137	21716	1.64%	0.156%
3	2.543	107	115	128	rBV4	31929	105804	7.98%	0.758%
4	2.707	144	149	153	rVB3	32453	25348	1.91%	0.182%
5	2.846	171	178	182	rBV2	19771	18260	1.38%	0.131%
6	2.947	192	199	203	rBV	1615302	1326421	100.00%	9.499%
7	3.039	213	218	221	rBV	50602	38413	2.90%	0.275%
8	3.082	221	227	230	rBV	57705	41656	3.14%	0.298%
9	3.120	230	235	239	rBV	77228	55499	4.18%	0.397%
10	3.192	244	250	260	rVV	1205376	1020430	76.93%	7.308%
11	3.274	264	267	282	rVB	39261	50075	3.78%	0.359%
12	3.620	334	339	342	rBV	21093	17919	1.35%	0.128%
13	3.664	342	348	350	rVV	20190	18541	1.40%	0.133%
14	3.688	350	353	356	rVB	31305	23844	1.80%	0.171%
15	3.938	401	405	416	rBV	1200380	953100	71.86%	6.826%
16	4.173	451	454	461	rVB	30827	25062	1.89%	0.179%
17	4.274	471	475	487	rBV	1064287	839976	63.33%	6.015%
18	4.765	573	577	590	rBV	487607	449845	33.91%	3.222%
19	5.352	696	699	704	rBV3	14591	16468	1.24%	0.118%
20	5.438	713	717	725	rBV	1422250	1123347	84.69%	8.045%
21	6.361	907	909	914	rVB	19687	16322	1.23%	0.117%
22	6.482	927	934	942	rBV	1367260	1107711	83.51%	7.933%
23	7.140	1064	1071	1081	rVB	1421894	1257057	94.77%	9.002%
24	7.564	1155	1159	1163	rBV	145759	104613	7.89%	0.749%
25	7.919	1214	1233	1242	rBV	782880	752209	56.71%	5.387%
26	8.069	1261	1264	1269	rVB3	16948	17811	1.34%	0.128%
27	8.155	1278	1282	1286	rBV2	75450	60054	4.53%	0.430%
28	8.607	1365	1376	1385	rVB2	1211206	1129878	85.18%	8.092%
29	8.876	1427	1432	1439	rBV9	18095	26777	2.02%	0.192%
30	9.098	1471	1478	1482	rBV5	25877	40786	3.07%	0.292%
31	9.170	1489	1493	1502	rBV2	221969	223811	16.87%	1.603%
32	9.684	1597	1600	1607	rBV7	27860	40957	3.09%	0.293%
33	9.872	1633	1639	1640	rBV5	23033	29010	2.19%	0.208%
34	9.920	1646	1649	1652	rVB4	22364	18559	1.40%	0.133%
35	9.954	1652	1656	1662	rBV2	81503	103594	7.81%	0.742%
36	10.050	1672	1676	1679	rVB2	114478	93211	7.03%	0.668%
37	10.107	1685	1688	1692	rBV5	16949	19308	1.46%	0.138%
38	10.194	1702	1706	1714	rVB	971586	859542	64.80%	6.156%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

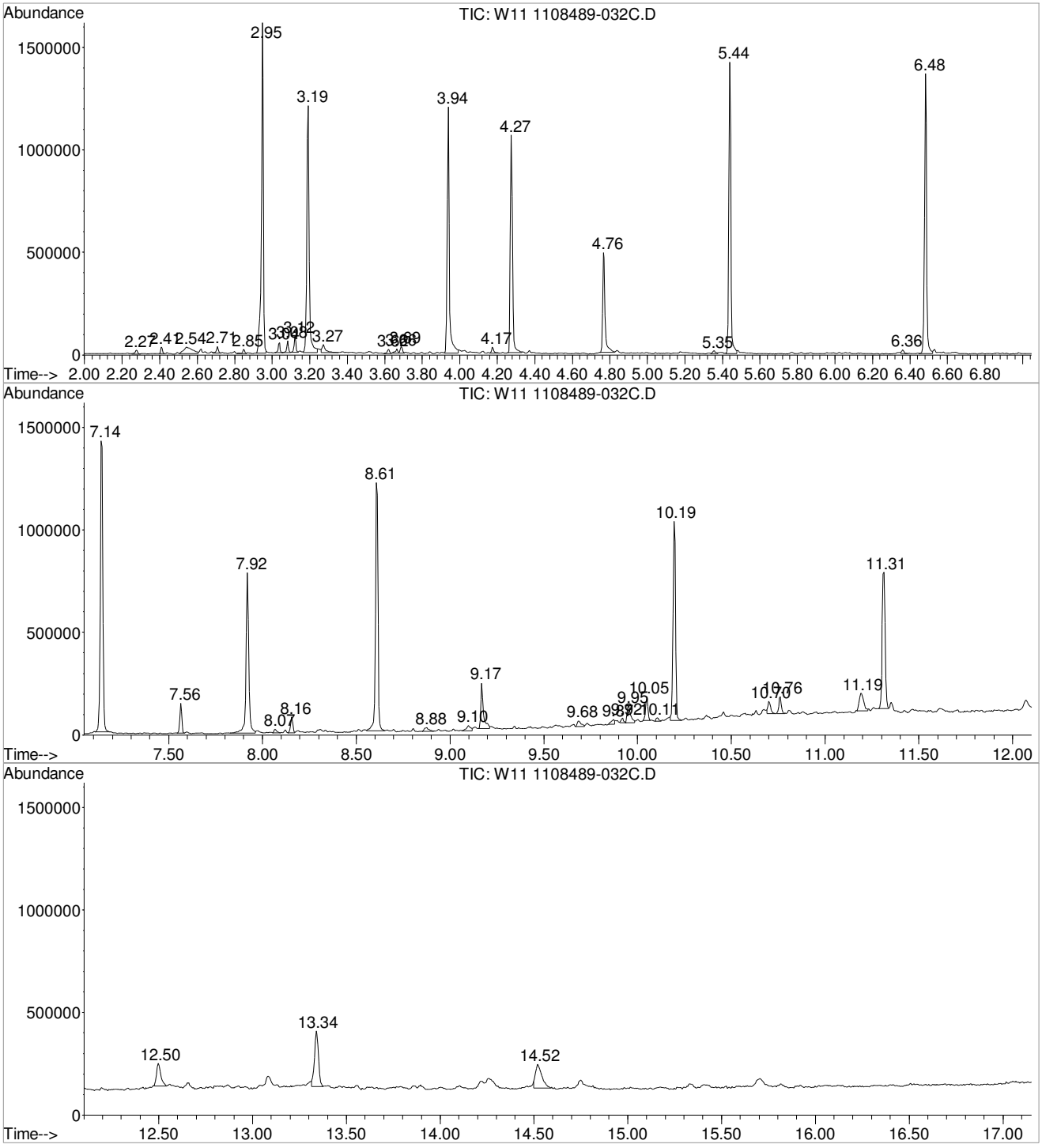
39	10.699	1809	1811	1818	rVB	59894	61821	4.66%	0.443%
40	10.761	1820	1824	1828	rVB	83604	80944	6.10%	0.580%
41	11.189	1909	1913	1921	rBV4	85776	137599	10.37%	0.985%
42	11.314	1933	1939	1944	rBV	666376	740001	55.79%	5.299%
43	12.497	2181	2185	2194	rVB2	110723	165844	12.50%	1.188%
44	13.339	2355	2360	2367	rVB	271967	413451	31.17%	2.961%
45	14.522	2601	2606	2620	rVB9	116234	274716	20.71%	1.967%

Sum of corrected areas: 13963632

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

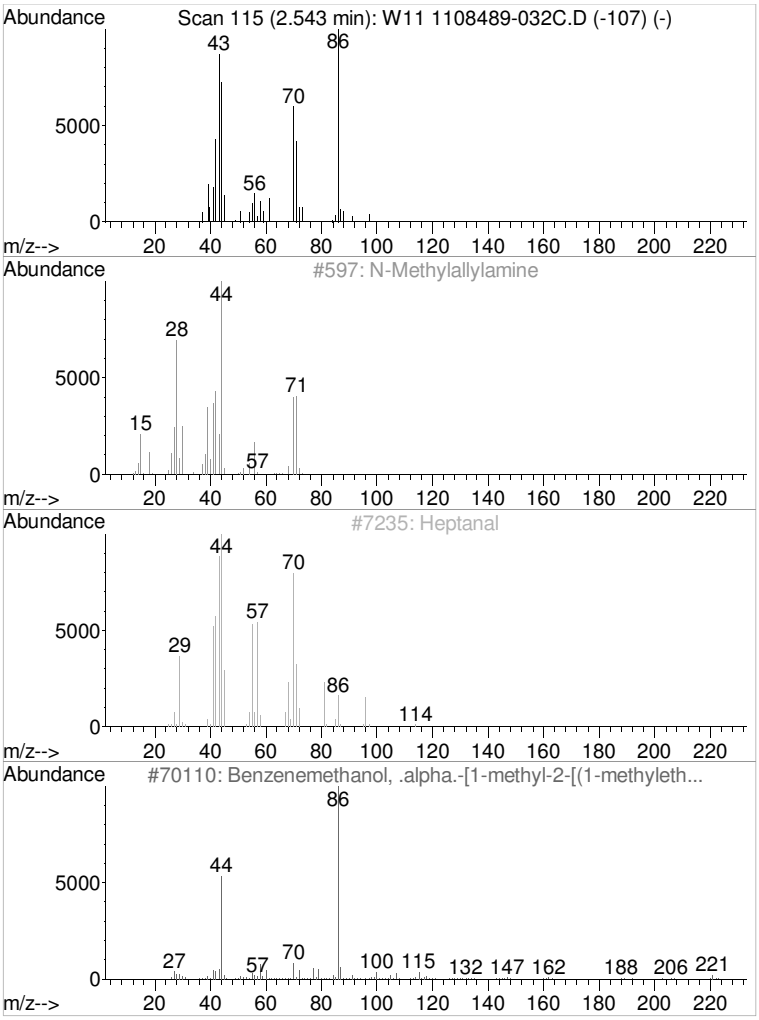
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

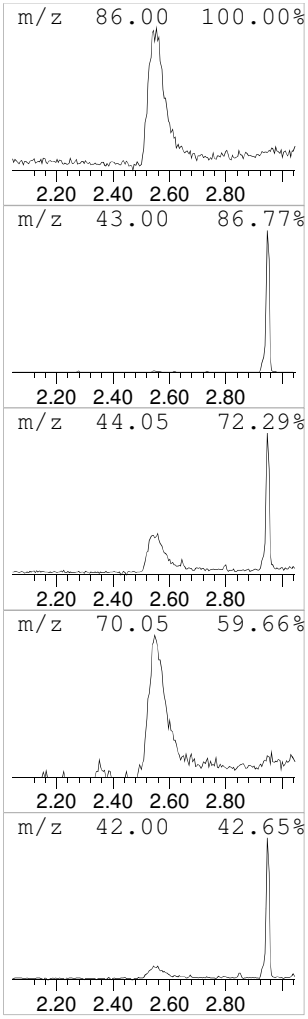
****

Peak Number 1 N-Methylallylamine Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	5.04 ug/l	105804	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Methylallylamine	71	C4H9N	000627-37-2	43
2	Heptanal	114	C7H14O	000111-71-7	37
3	Benzenemethanol, .alpha.-[1-meth...	221	C14H23NO	074793-40-1	32
4	Piperazine	86	C4H10N2	000110-85-0	25
5	Pentanamide, 2-amino-4-methyl-, ...	130	C6H14N2O	000687-51-4	23





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

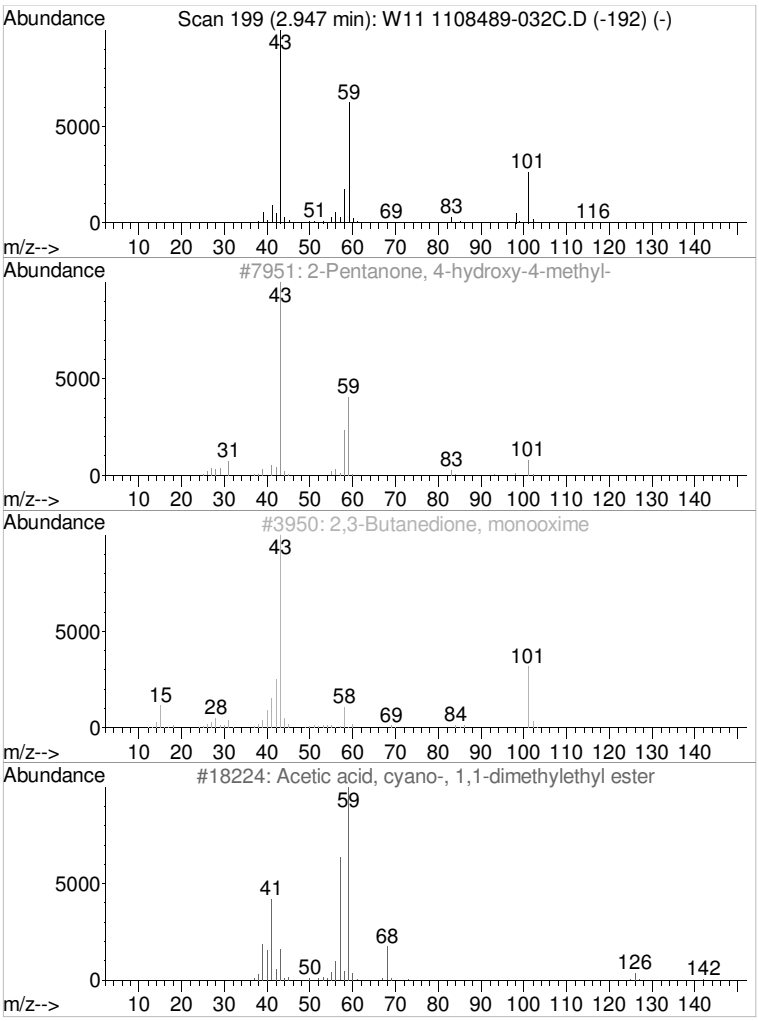
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

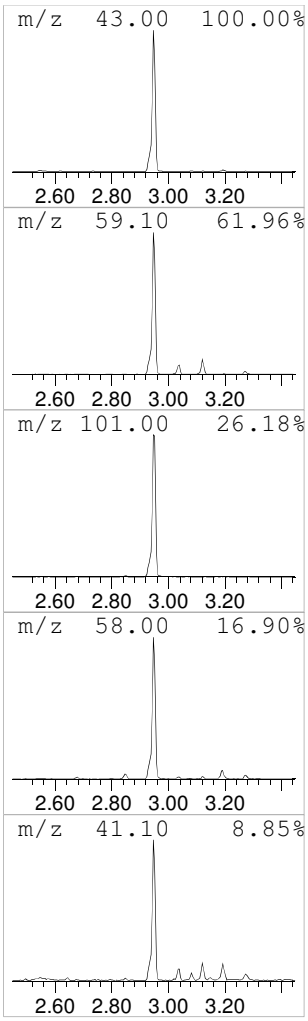
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	63.16 ug/l	1326420	ISTD 1,4-Dichlorobenzene-d4	4.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

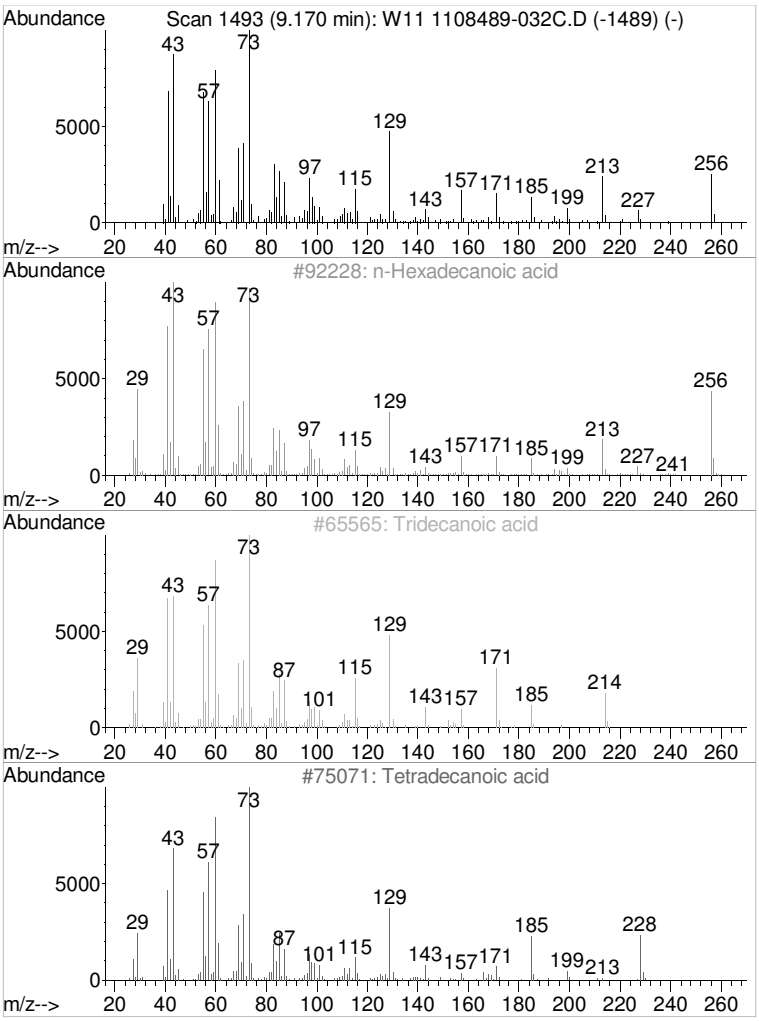
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

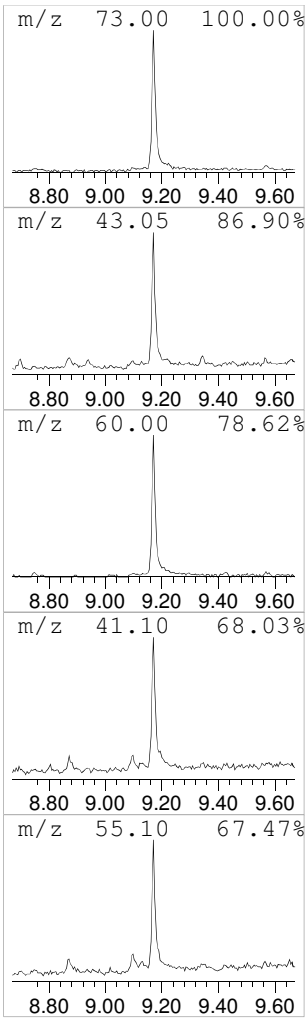
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	7.92 ug/l	223811	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	92
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	72
4	n-Decanoic acid	172	C10H20O2	000334-48-5	70
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	68





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

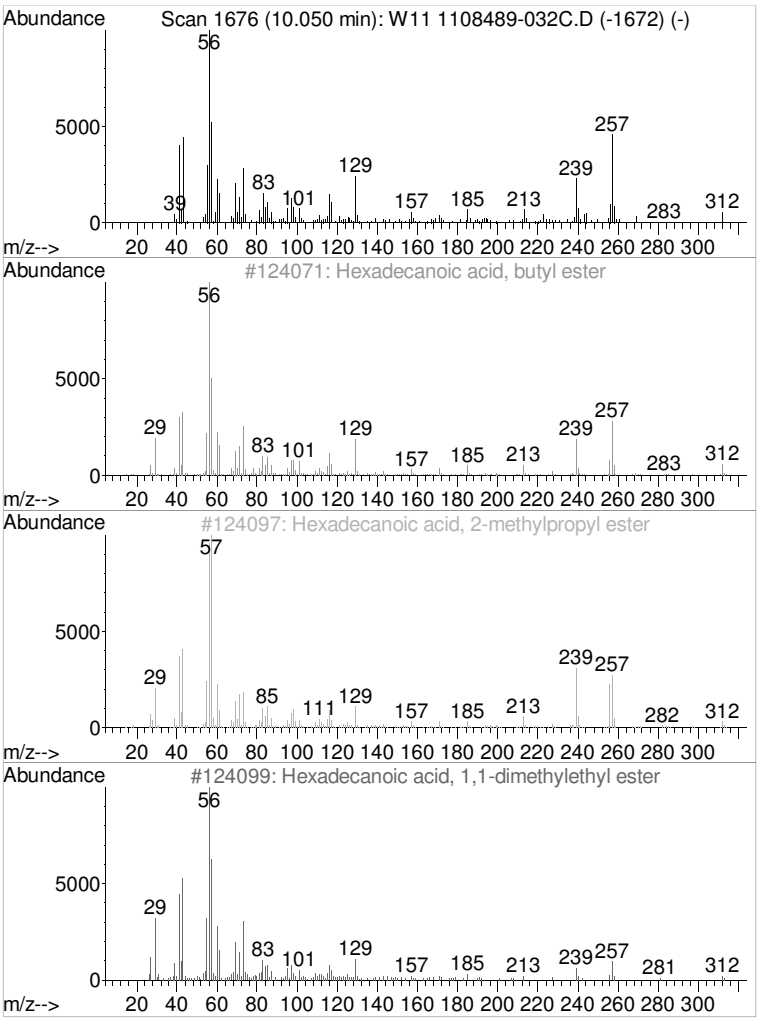
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

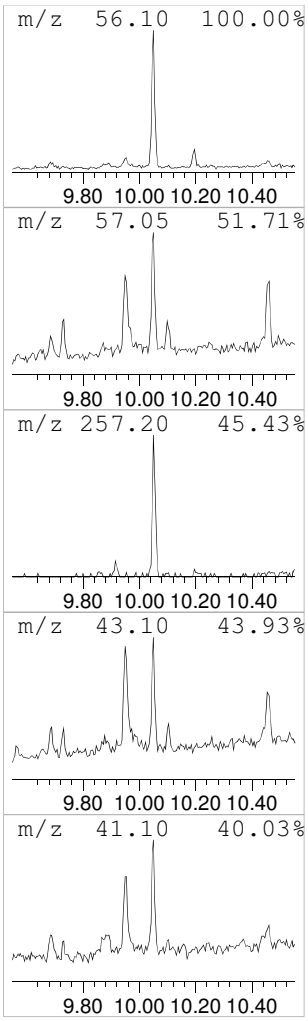
****

Peak Number 4 Hexadecanoic acid, butyl ester Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.05	5.04 ug/l	93211	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	99
2	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	83
3	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	50
4	Nipecotic acid	129	C6H11NO2	000498-95-3	32
5	Oxirane, 2,3-bis(1-methylethyl)-...	128	C8H16O	054644-32-5	25





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

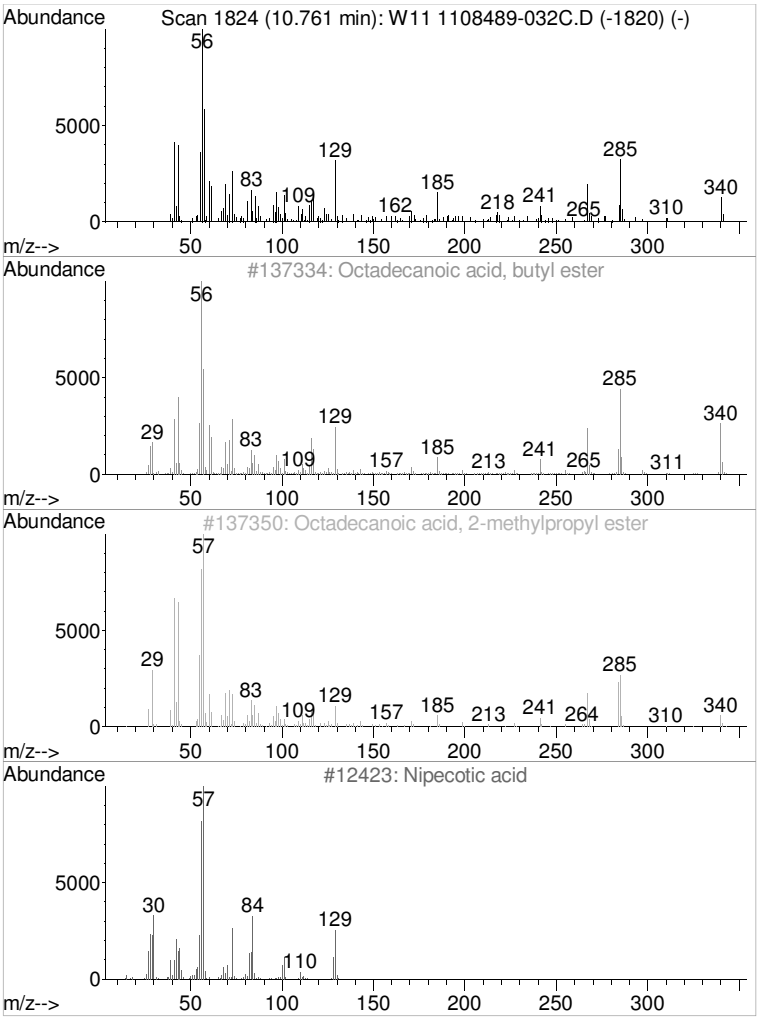
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

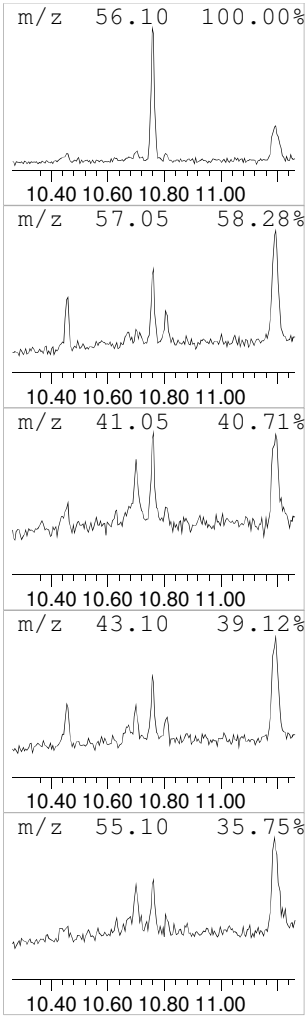
****

Peak Number 5 Octadecanoic acid, butyl ester Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	4.38 ug/l	80944	ISTD-Chrysene-d12	11.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	96
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	95
3	Nipecotic acid	129	C6H11NO2	000498-95-3	43
4	Pentadecane, 8-methylene-	224	C16H32	055668-09-2	38
5	n-Butyl myristate	284	C18H36O2	000110-36-1	38





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

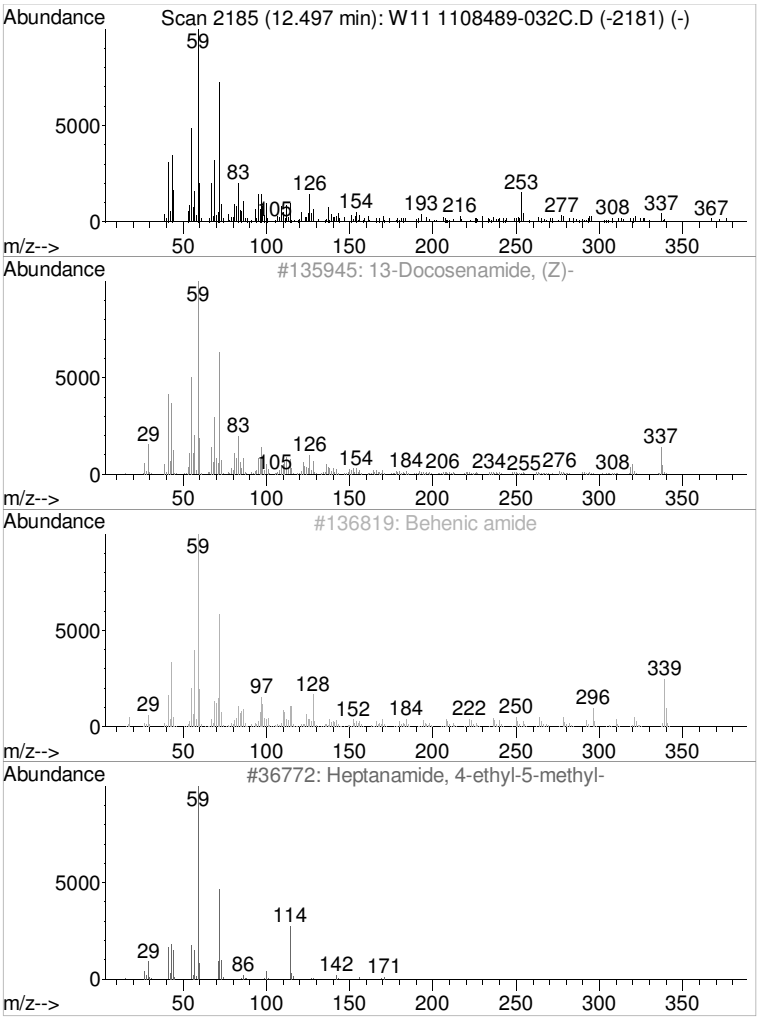
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

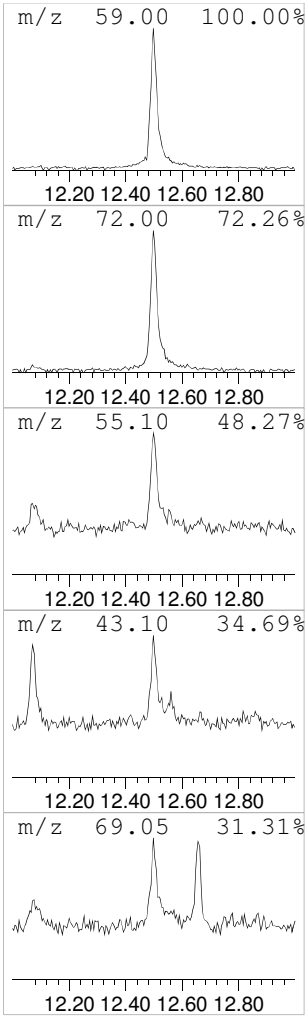
****

Peak Number 6 13-Docosenamide, (Z)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.50	16.04 ug/l	165844	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	91
2	Behenic amide	339	C22H45NO	003061-75-4	59
3	Heptanamide, 4-ethyl-5-methyl-	171	C10H21NO	054789-40-1	50
4	Pentanamide, 4-methyl-	115	C6H13NO	001119-29-5	43
5	Methoxycarbonylsulfenyl chloride	126	C2H3ClO2S	026555-40-8	43





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

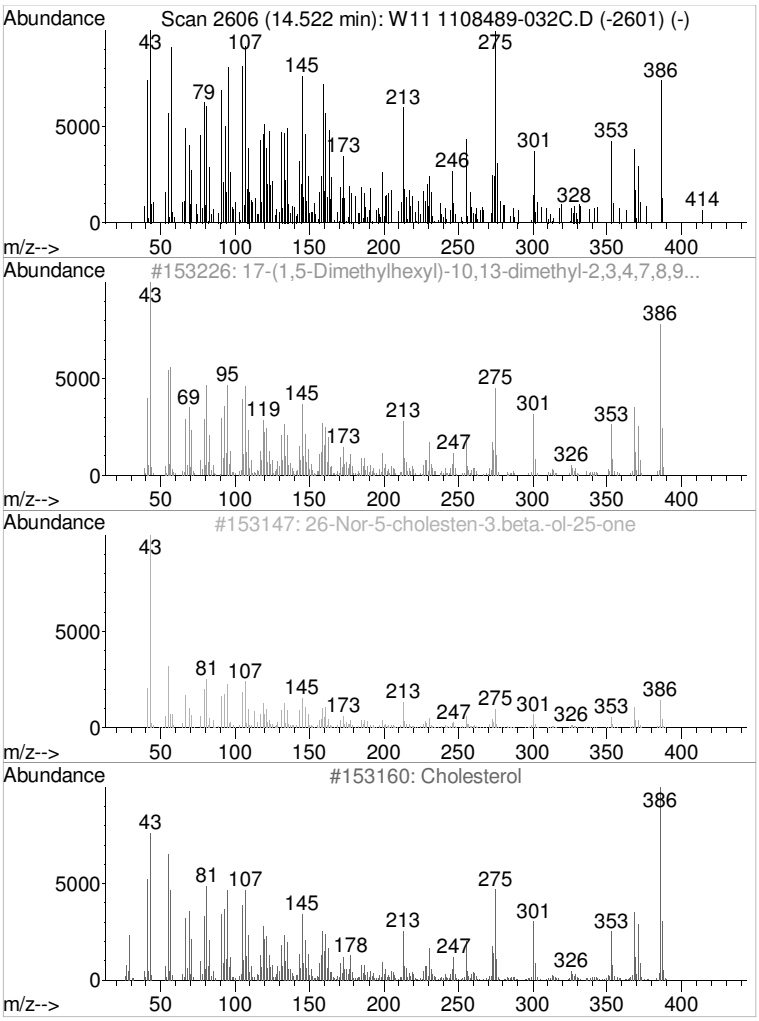
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

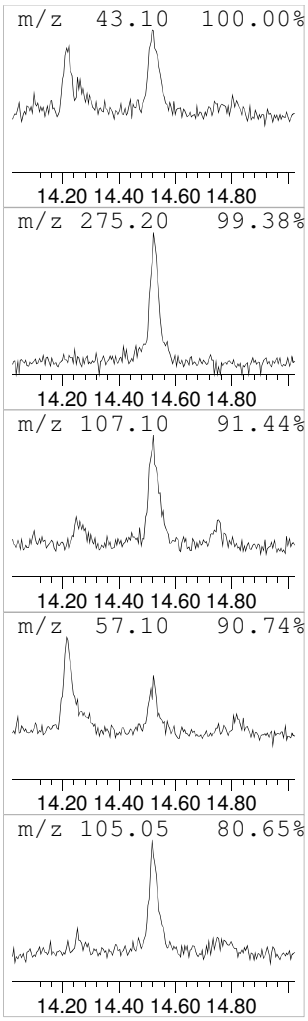
****

Peak Number 7 17-(1,5-Dimethylhexyl)-10,1... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.52	26.58 ug/l	274716	ISTD-Perylene-d12	13.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	17-(1,5-Dimethylhexyl)-10,13-dim...	386	C27H46O	1000210-38-4	94
2	26-Nor-5-cholesten-3.beta.-ol-25...	386	C26H42O2	007494-34-0	93
3	Cholesterol	386	C27H46O	000057-88-5	90
4	Cholest-5-en-3-ol, (3.alpha.)-	386	C27H46O	000474-77-1	68
5	Cholest-8(14)-en-3-ol, (3.beta.,...	386	C27H46O	000566-99-4	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W11 1108489-032C.D
Acq On : 1 Sep 2011 6:10 pm
Operator : ALICIA HABERLE
Sample : 1108489-032C
Misc : SAMP
ALS Vial : 18 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
N-Methylallylamine	2.54	5.0	ug/l	105804	1	4.27	839976	40.0
2-Pentanone, 4-hy...	2.95	63.2	ug/l	1326420	1	4.27	839976	40.0
n-Hexadecanoic acid	9.17	7.9	ug/l	223811	4	8.61	1129880	40.0
Hexadecanoic acid...	10.05	5.0	ug/l	93211	5	11.31	740001	40.0
Octadecanoic acid...	10.76	4.4	ug/l	80944	5	11.31	740001	40.0
13-Docosenamide, ...	12.50	16.0	ug/l	165844	6	13.34	413451	40.0
17-(1,5-Dimethylh...	14.52	26.6	ug/l	274716	6	13.34	413451	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.410	84	87	91	rVB	49771	30955	1.85%	0.184%
2	2.708	146	149	153	rVB	36274	28895	1.72%	0.172%
3	2.949	192	199	203	rBV	1644403	1411242	84.15%	8.376%
4	3.035	212	217	221	rBV	60832	50153	2.99%	0.298%
5	3.083	221	227	230	rVB	63563	47312	2.82%	0.281%
6	3.122	230	235	239	rBV	92158	71333	4.25%	0.423%
7	3.194	244	250	259	rBV	1270750	1050213	62.63%	6.234%
8	3.276	263	267	273	rVB2	31054	31083	1.85%	0.184%
9	3.665	342	348	350	rBV	21857	24076	1.44%	0.143%
10	3.689	350	353	356	rVB	61780	46867	2.79%	0.278%
11	3.901	393	397	400	rBV	41227	37231	2.22%	0.221%
12	3.944	402	406	418	rVV	1002296	946181	56.42%	5.616%
13	4.175	452	454	463	rVB	62511	48950	2.92%	0.291%
14	4.276	471	475	482	rBV	1041219	782911	46.69%	4.647%
15	4.766	573	577	590	rVV	522344	456702	27.23%	2.711%
16	4.838	590	592	598	rVB2	40331	35454	2.11%	0.210%
17	5.189	662	665	677	rVB7	21956	29750	1.77%	0.177%
18	5.353	694	699	704	rBV	124219	116858	6.97%	0.694%
19	5.440	713	717	724	rBV	1335250	1030151	61.43%	6.114%
20	6.344	900	905	908	rBV	62914	57950	3.46%	0.344%
21	6.483	928	934	941	rBV	1380181	1090394	65.02%	6.472%
22	6.627	960	964	971	rVB	49612	62594	3.73%	0.372%
23	7.147	1065	1072	1076	rBV	1248745	1100626	65.63%	6.533%
24	7.176	1076	1078	1085	rVB5	31816	30678	1.83%	0.182%
25	7.921	1225	1233	1243	rVB	794304	732896	43.70%	4.350%
26	8.056	1258	1261	1262	rBV	31616	24237	1.45%	0.144%
27	8.080	1263	1266	1270	rVB	80133	69852	4.17%	0.415%
28	8.157	1278	1282	1286	rBV	137862	106919	6.38%	0.635%
29	8.301	1307	1312	1314	rBV2	95121	114722	6.84%	0.681%
30	8.613	1370	1377	1380	rBV	1063491	969993	57.84%	5.757%
31	8.700	1392	1395	1398	rVB2	49033	36662	2.19%	0.218%
32	9.104	1475	1479	1483	rBV2	122743	128226	7.65%	0.761%
33	9.137	1483	1486	1489	rVV2	87260	85853	5.12%	0.510%
34	9.181	1490	1495	1506	rVB	1037282	1006454	60.02%	5.974%
35	9.349	1527	1530	1537	rBV7	73583	102576	6.12%	0.609%
36	9.859	1634	1636	1637	rBV	64843	44306	2.64%	0.263%
37	9.878	1638	1640	1647	rVB4	119774	160835	9.59%	0.955%
38	9.960	1653	1657	1663	rBV2	308471	331016	19.74%	1.965%

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

39	10.051	1672	1676	1680	rVB	2094594	1676975	100.00%	9.954%
40	10.200	1703	1707	1714	rVB	836985	747670	44.58%	4.438%
41	10.763	1820	1824	1829	rVB	1428233	1268880	75.66%	7.531%
42	11.196	1911	1914	1920	rVB	232148	248469	14.82%	1.475%
43	11.316	1936	1939	1945	rVB	362172	372724	22.23%	2.212%

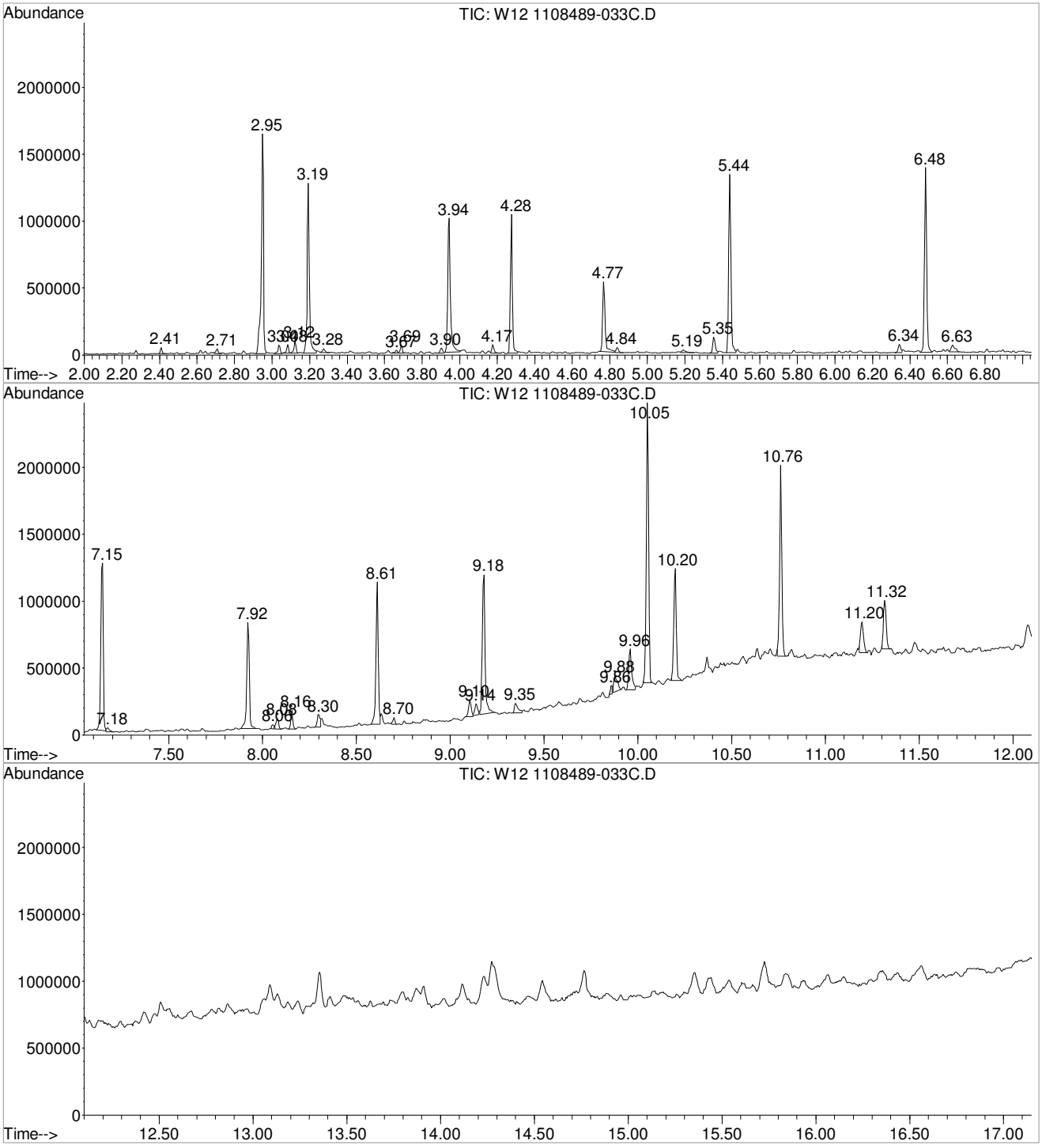
Sum of corrected areas: 16847824

LSC Report - Integrated Chromatogram

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

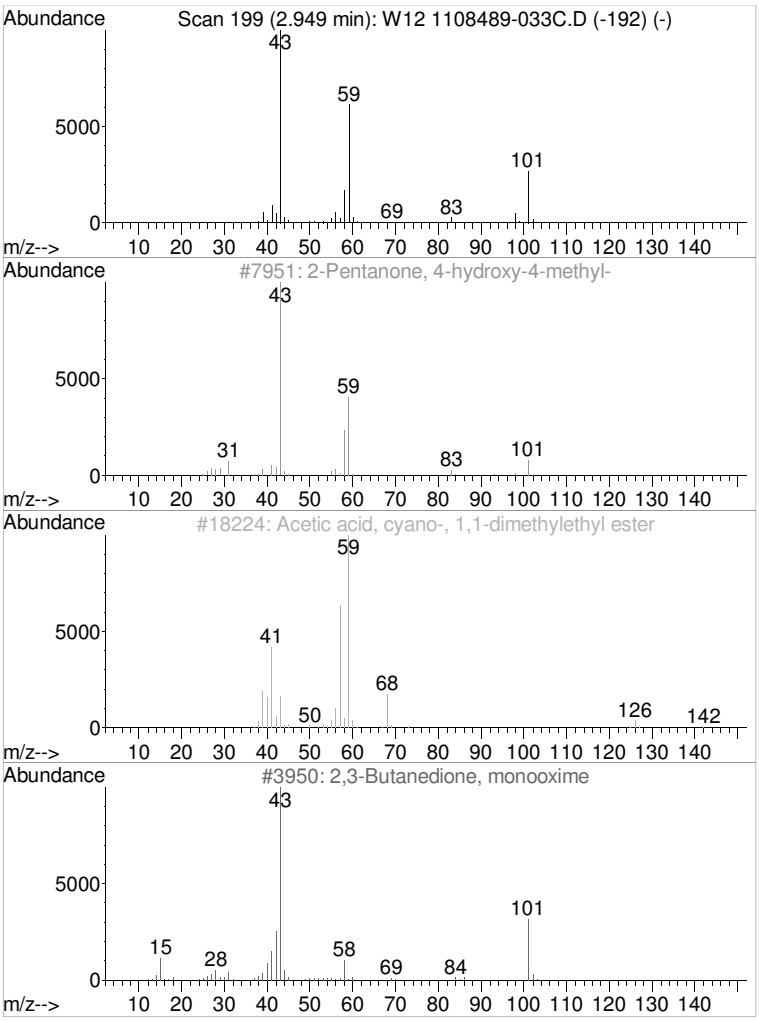
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

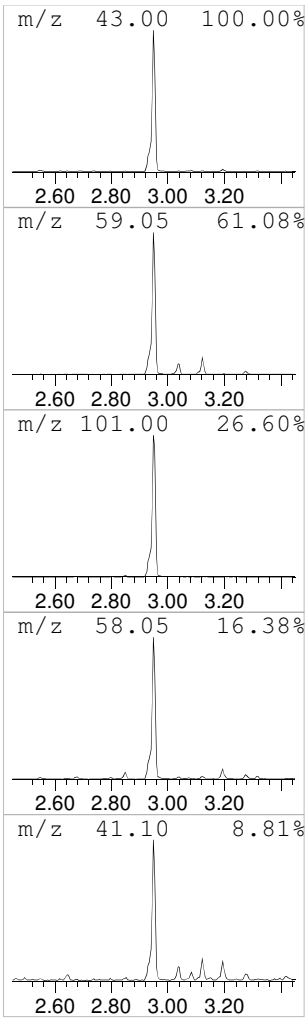
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.95	72.10 ug/l	1411240	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
4	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9
5	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

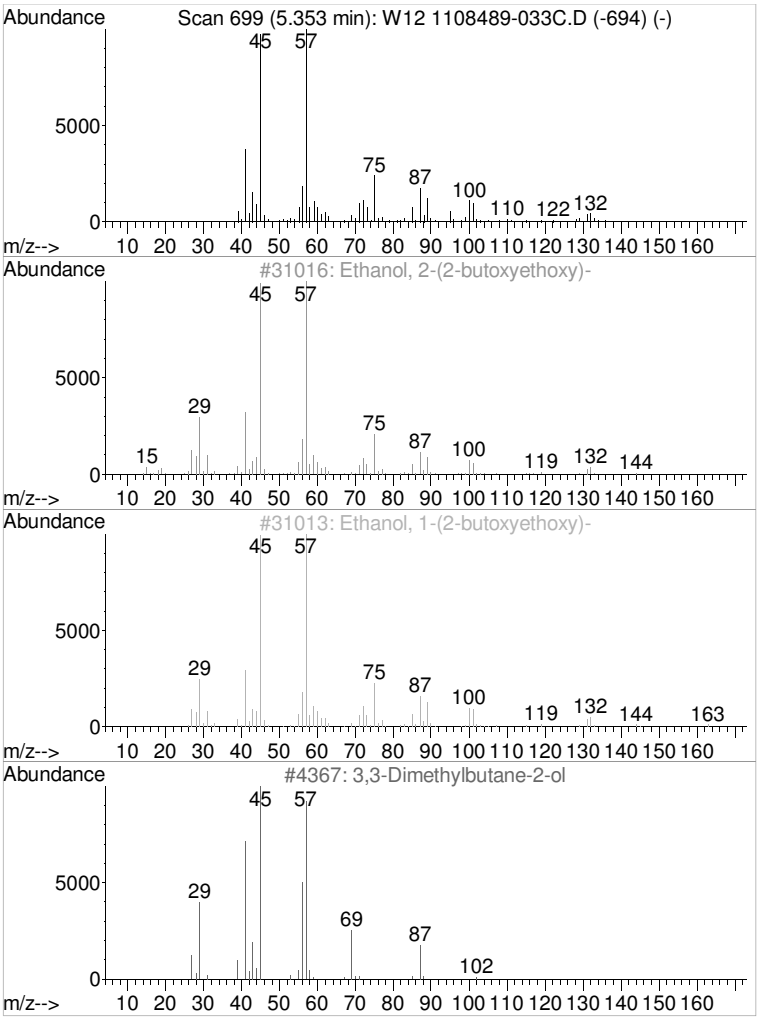
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

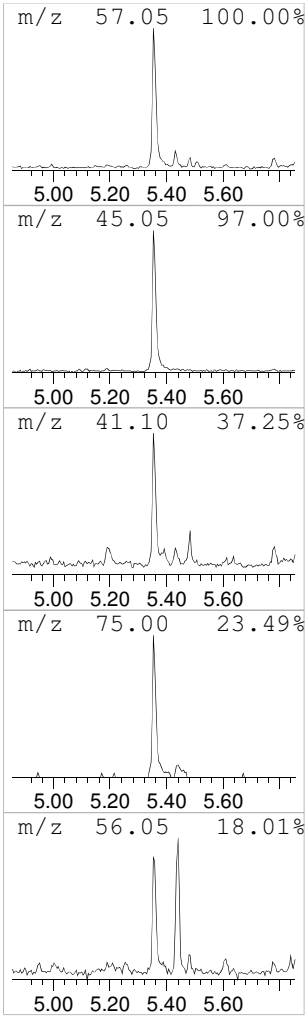
****

Peak Number 2 Ethanol, 2-(2-butoxyethoxy)- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.35	4.54 ug/l	116858	ISTD Naphthalene-d8	5.44

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(2-butoxyethoxy)-	162	C8H18O3	000112-34-5	90
2	Ethanol, 1-(2-butoxyethoxy)-	162	C8H18O3	054446-78-5	90
3	3,3-Dimethylbutane-2-ol	102	C6H14O	000464-07-3	47
4	Ethanol, 2,2'-[oxybis(2,1-ethane...	194	C8H18O5	000112-60-7	47
5	1-tert-Butoxy-2-ethoxyethane	146	C8H18O2	051422-54-9	47





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
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Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

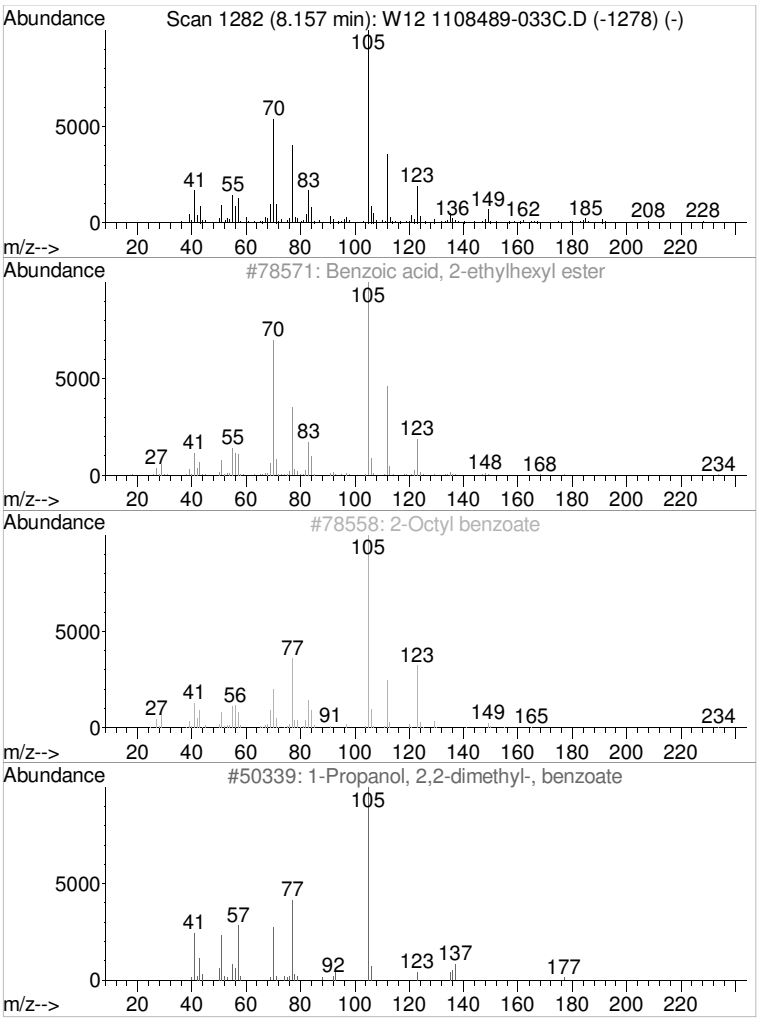
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

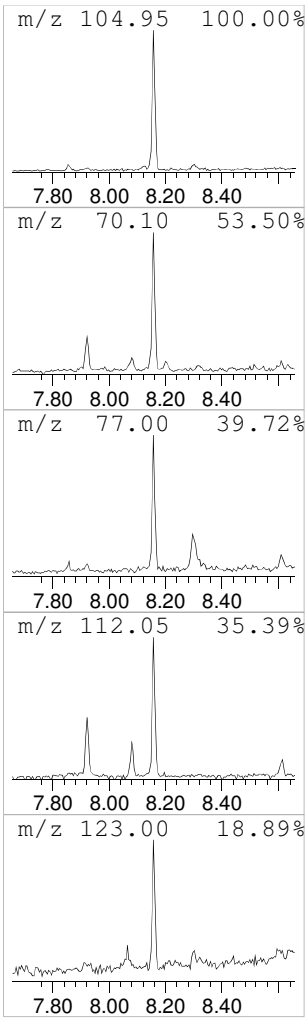
****

Peak Number 3 Benzoic acid, 2-ethylhexyl ... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.16	4.41 ug/l	106919	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-ethylhexyl ester	234	C15H22O2	005444-75-7	72
2	2-Octyl benzoate	234	C15H22O2	006938-51-8	50
3	1-Propanol, 2,2-dimethyl-, benzoate	192	C12H16O2	003581-70-2	47
4	1-Butanol, 3-methyl-, benzoate	192	C12H16O2	000094-46-2	47
5	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	27





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

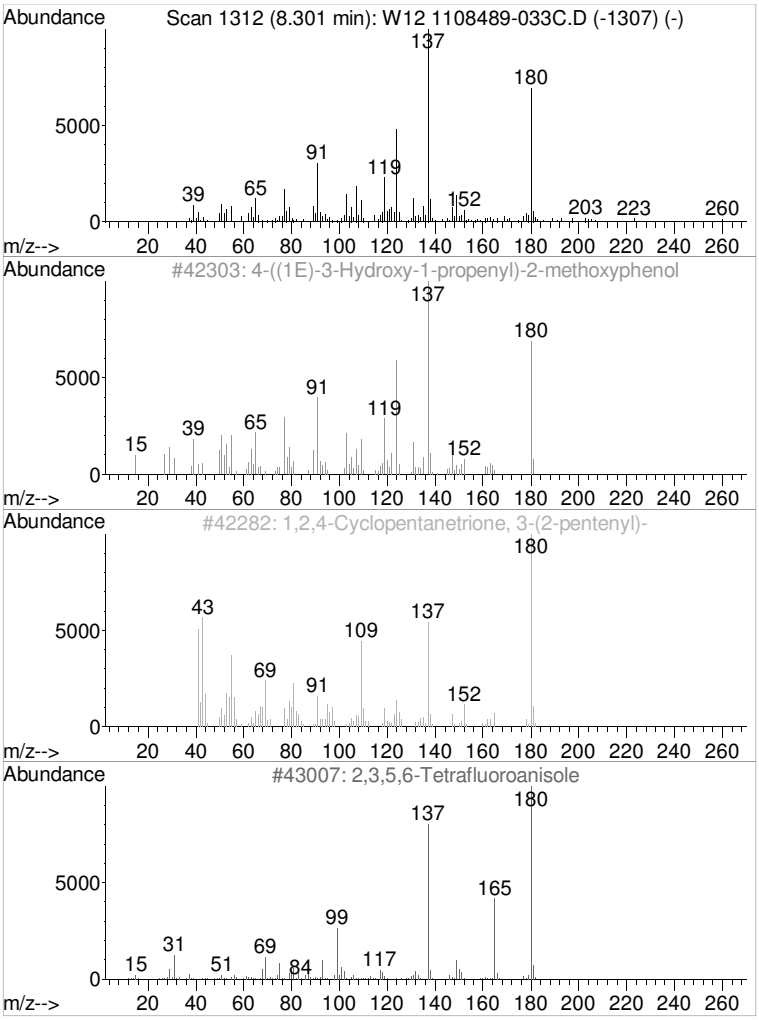
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

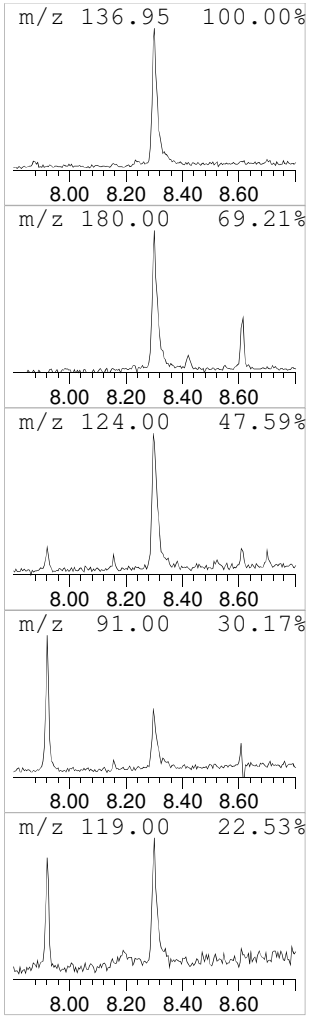
****

Peak Number 4 4-((1E)-3-Hydroxy-1-propeny... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.30	4.73 ug/l	114722	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-((1E)-3-Hydroxy-1-propenyl)-2-...	180	C10H12O3	1000297-95-5	64
2	1,2,4-Cyclopentanetrione, 3-(2-p...	180	C10H12O3	054644-27-8	47
3	2,3,5,6-Tetrafluoroanisole	180	C7H4F4O	002324-98-3	43
4	6-Methylnicotinic acid	137	C7H7NO2	003222-47-7	35
5	4-Fluorophenyl isocyanate	137	C7H4FNO	001195-45-5	30





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Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

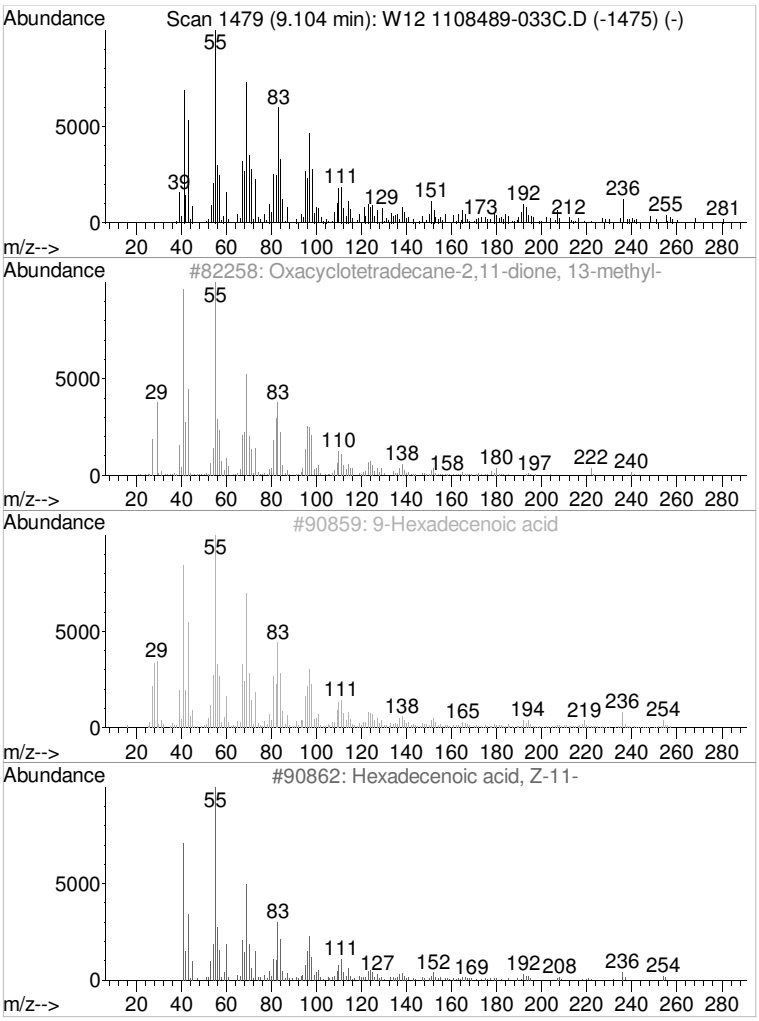
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

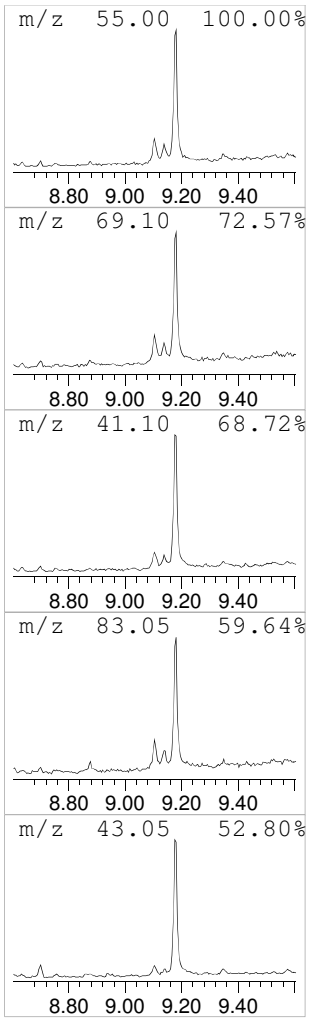
****

Peak Number 5 Oxacyclotetradecane-2,11-di... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.10	5.29 ug/l	128226	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxacyclotetradecane-2,11-dione, ...	240	C14H24O3	074685-36-2	83
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	81
3	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	72
4	Z-(13,14-Epoxy)tetradec-11-en-1-...	268	C16H28O3	1000131-33-2	60
5	15-Tetracosenoic acid, methyl es...	380	C25H48O2	002733-88-2	58





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

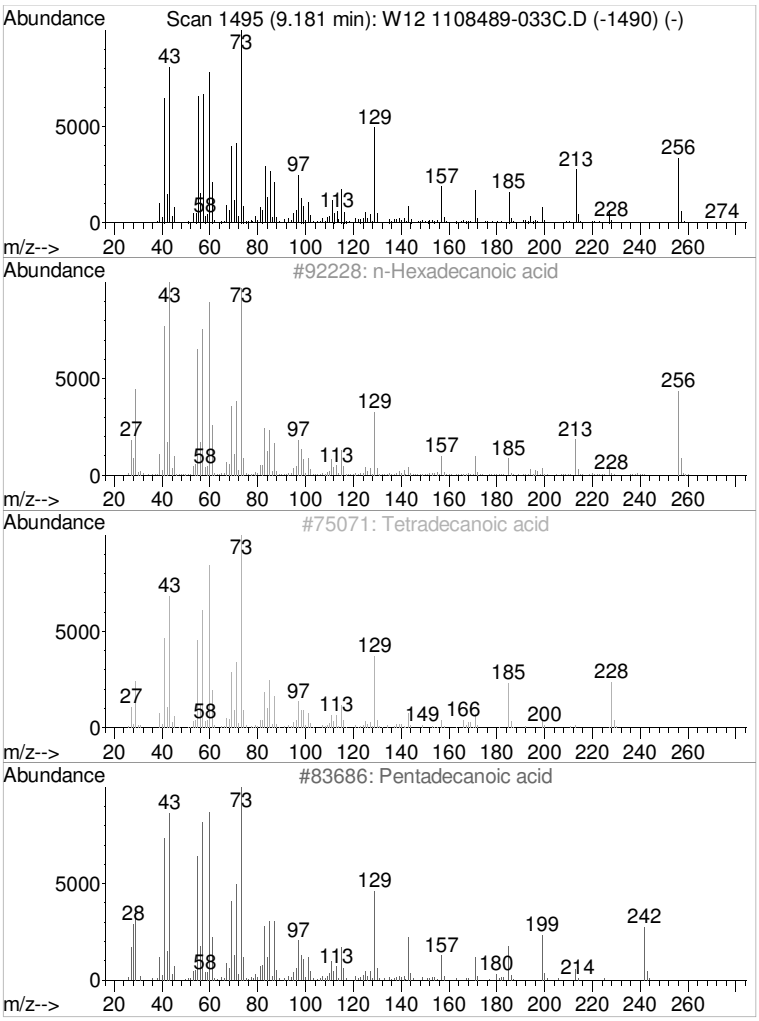
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

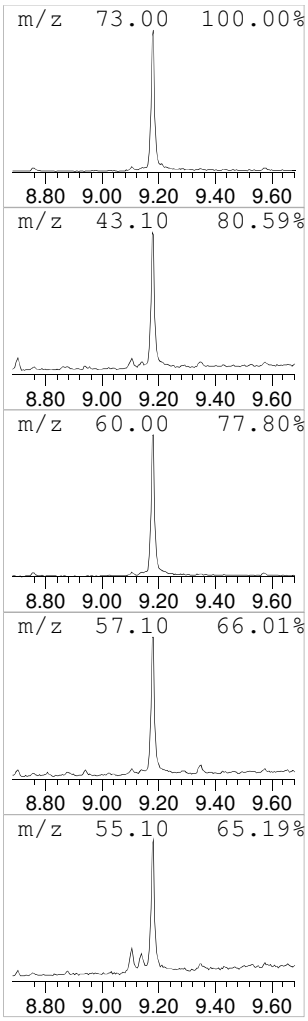
****

Peak Number 6 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.18	41.50 ug/l	1006450	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
4	n-Decanoic acid	172	C10H20O2	000334-48-5	70
5	Tridecanoic acid	214	C13H26O2	000638-53-9	64





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Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

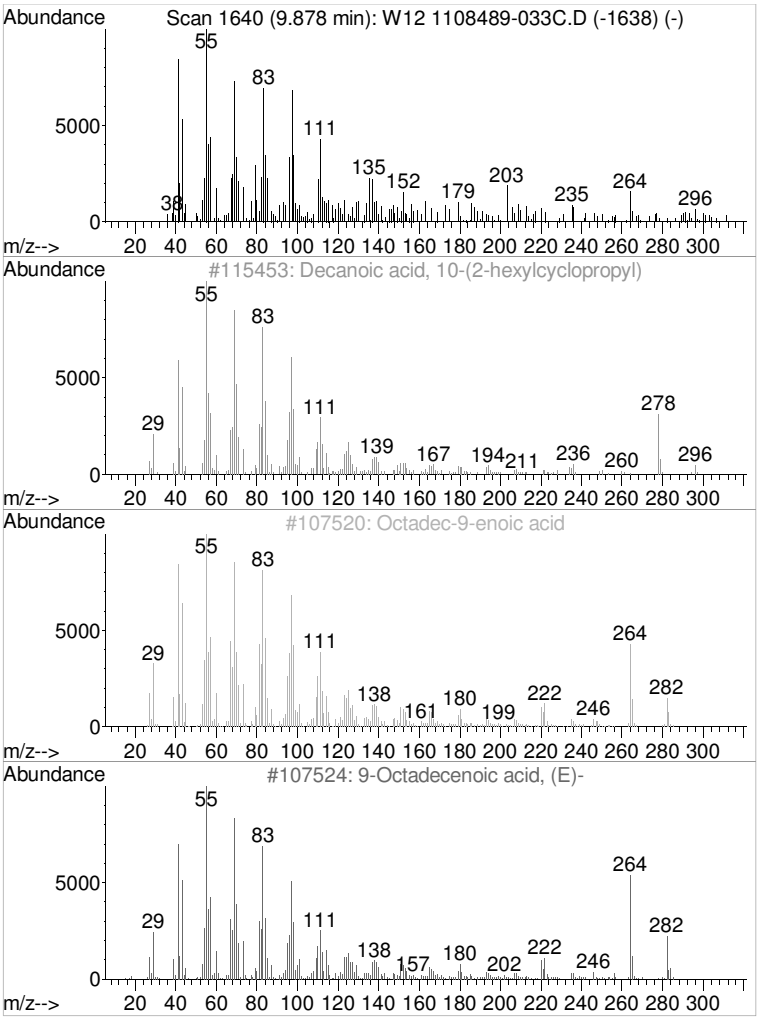
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

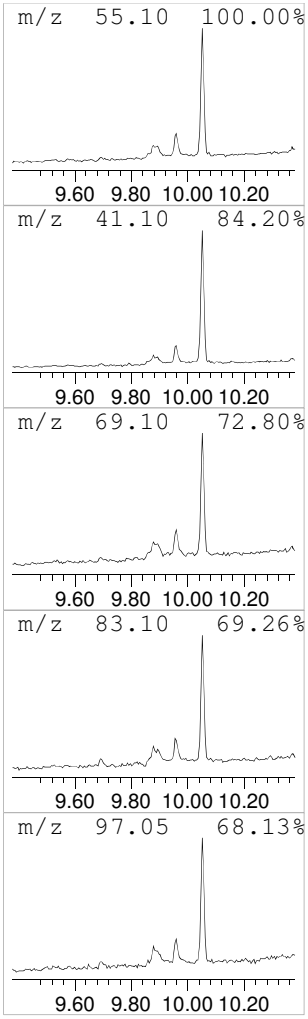
****

Peak Number 7 Decanoic acid, 10-(2-hexylc... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.88	6.63 ug/l	160835	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decanoic acid, 10-(2-hexylcyclop...	296	C19H36O2	1000197-99-5	60
2	Octadec-9-enoic acid	282	C18H34O2	1000190-13-7	60
3	9-Octadecenoic acid, (E)-	282	C18H34O2	000112-79-8	41
4	9-Methyl-Z-10-pentadecen-1-ol ac...	282	C18H34O2	1000131-00-8	38
5	Oleic Acid	282	C18H34O2	000112-80-1	38





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Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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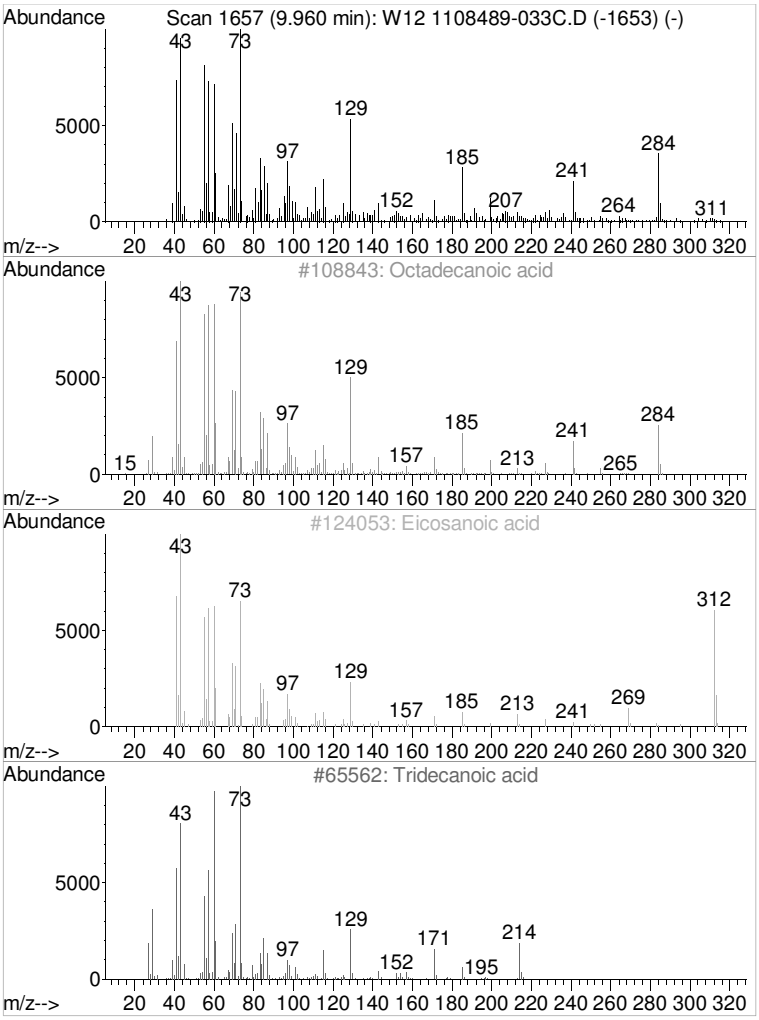
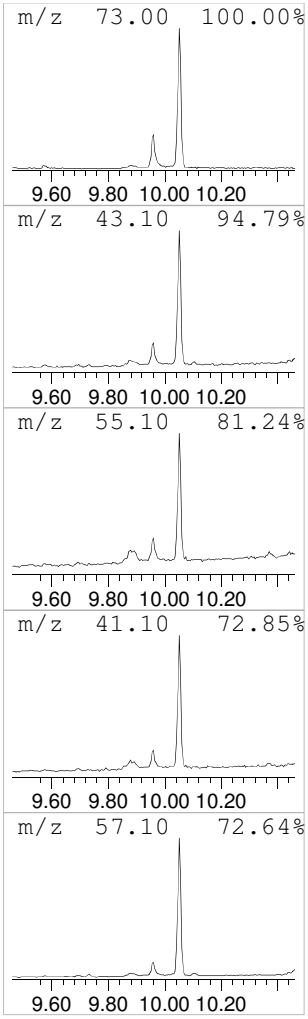
Peak Number 8 Octadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.96	13.65 ug/l	331016	ISTD-Phenanthrene-d10	8.61

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Eicosanoic acid	312	C20H40O2	000506-30-9	92
3	Tridecanoic acid	214	C13H26O2	000638-53-9	83
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	78
5	Cyclotetradecane, 1,7,11-trimeth...	280	C20H40	001786-12-5	59





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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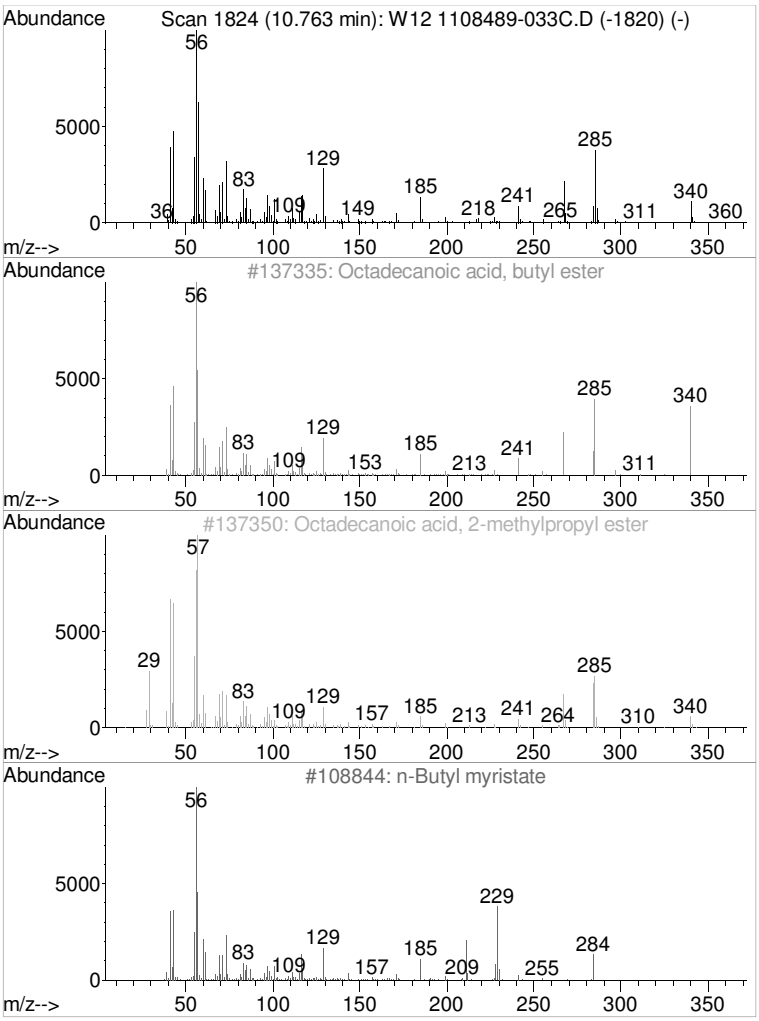
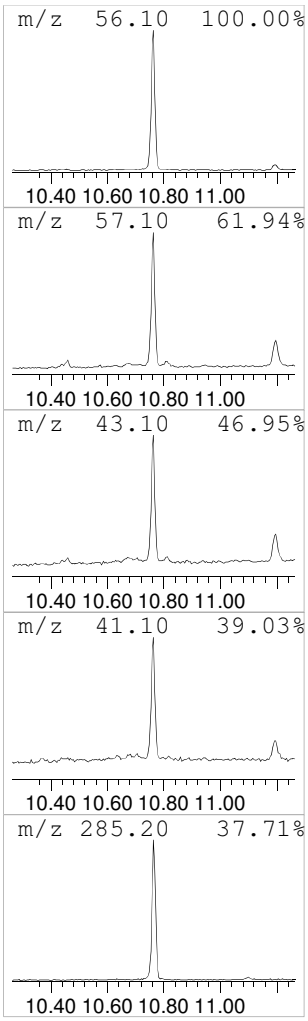
Peak Number 9 Octadecanoic acid, butyl ester Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	136.17 ug/l	1268880	ISTD-Chrysene-d12	11.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	98
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	49
4	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	27
5	Cyclohexanol, 4-amino-, trans-	115	C6H13NO	027489-62-9	27





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

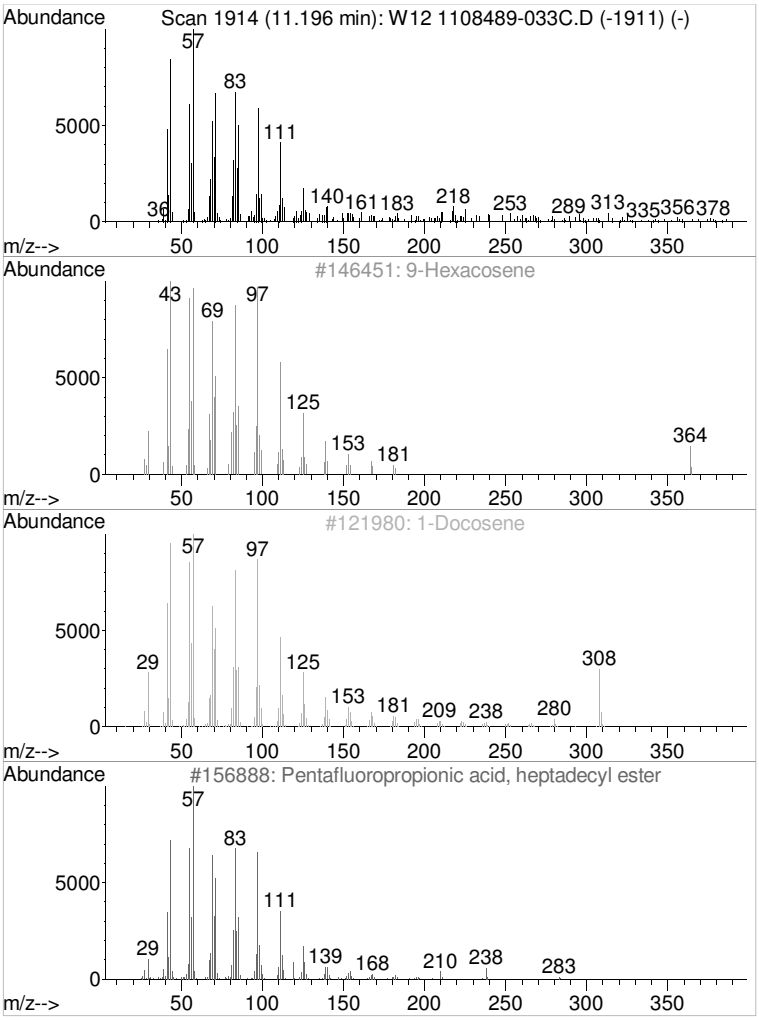
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

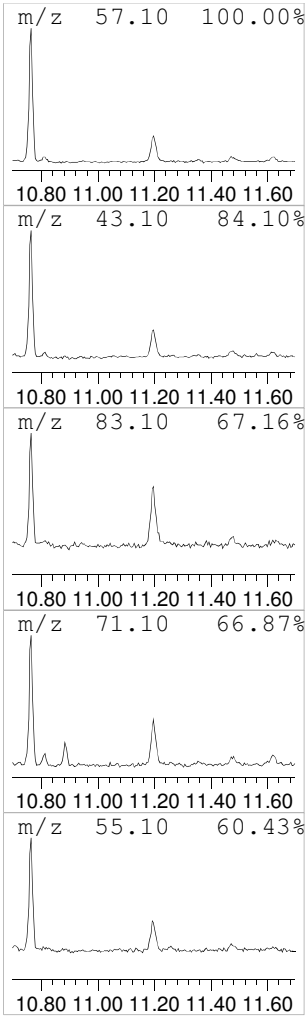
****

Peak Number 10 9-Hexacosene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.20	26.67 ug/l	248469	ISTD-Chrysene-d12	11.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Hexacosene	364	C26H52	071502-22-2	92
2	1-Docosene	308	C22H44	001599-67-3	91
3	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	87
4	1-Decanol, 2-hexyl-	242	C16H34O	002425-77-6	87
5	Acetic acid, trifluoro-, hexadec...	338	C18H33F3O2	006222-03-3	78





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W12 1108489-033C.D
Acq On : 1 Sep 2011 6:36 pm
Operator : ALICIA HABERLE
Sample : 1108489-033C
Misc : SAMP
ALS Vial : 19 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	2.95	72.1	ug/l	1411240	1	4.28	782911	40.0
Ethanol, 2-(2-but...	5.35	4.5	ug/l	116858	2	5.44	1030150	40.0
Benzoic acid, 2-e...	8.16	4.4	ug/l	106919	4	8.61	969993	40.0
4-((1E)-3-Hydroxy...	8.30	4.7	ug/l	114722	4	8.61	969993	40.0
Oxacyclotetradeca...	9.10	5.3	ug/l	128226	4	8.61	969993	40.0
n-Hexadecanoic acid	9.18	41.5	ug/l	1006450	4	8.61	969993	40.0
Decanoic acid, 10...	9.88	6.6	ug/l	160835	4	8.61	969993	40.0
Octadecanoic acid	9.96	13.7	ug/l	331016	4	8.61	969993	40.0
Octadecanoic acid...	10.76	136.2	ug/l	1268880	5	11.32	372724	40.0
9-Hexacosene	11.20	26.7	ug/l	248469	5	11.32	372724	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

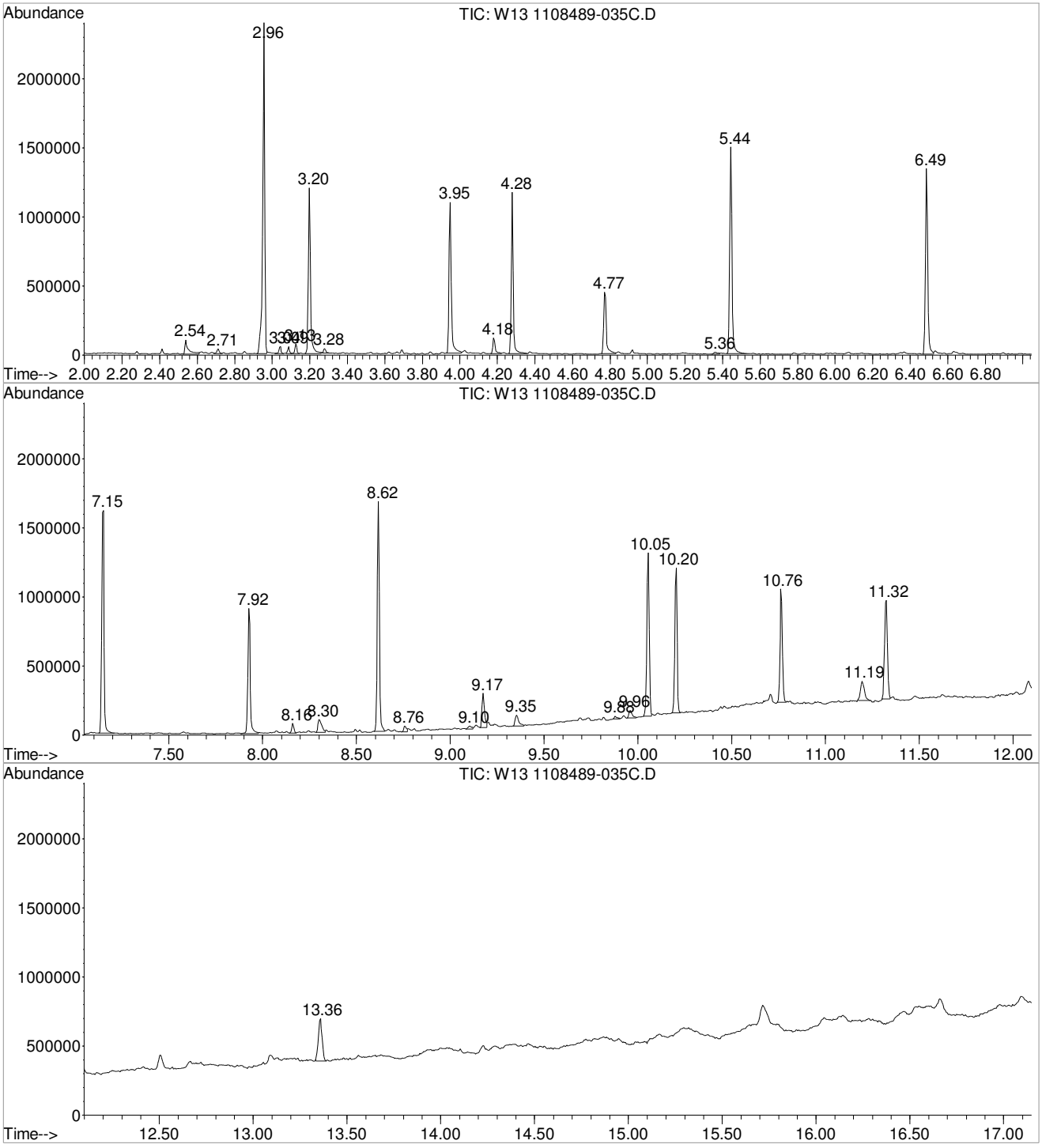
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.539	111	114	129	rBV	102877	134669	7.09%	0.843%
2	2.712	145	150	154	rVB3	34473	27874	1.47%	0.174%
3	2.957	193	201	204	rBV	2398698	1899023	100.00%	11.885%
4	3.043	213	219	222	rVV	48845	38211	2.01%	0.239%
5	3.087	225	228	231	rVV	50196	32469	1.71%	0.203%
6	3.125	231	236	240	rVB	71301	48760	2.57%	0.305%
7	3.197	246	251	264	rBV	1199354	914124	48.14%	5.721%
8	3.279	265	268	273	rVB	35967	30477	1.60%	0.191%
9	3.947	403	407	420	rBV	1092720	895963	47.18%	5.608%
10	4.178	452	455	464	rBV	113622	101889	5.37%	0.638%
11	4.279	472	476	492	rVB	1169461	887216	46.72%	5.553%
12	4.770	575	578	591	rBV	443640	417151	21.97%	2.611%
13	5.361	697	701	706	rBV4	15884	23344	1.23%	0.146%
14	5.443	714	718	735	rVB	1496353	1195027	62.93%	7.479%
15	6.487	931	935	943	rBV	1343332	1079019	56.82%	6.753%
16	7.150	1068	1073	1085	rBV	1613024	1412445	74.38%	8.840%
17	7.924	1225	1234	1245	rBV	906428	807833	42.54%	5.056%
18	8.160	1279	1283	1287	rBV2	71243	58639	3.09%	0.367%
19	8.299	1309	1312	1319	rBV	92740	134621	7.09%	0.843%
20	8.617	1373	1378	1385	rBV	1665054	1330160	70.04%	8.325%
21	8.756	1403	1407	1410	rBV2	41637	46544	2.45%	0.291%
22	9.103	1475	1479	1483	rBV7	20908	27944	1.47%	0.175%
23	9.175	1490	1494	1498	rBV	246161	220703	11.62%	1.381%
24	9.353	1527	1531	1539	rBV2	80126	102556	5.40%	0.642%
25	9.877	1638	1640	1646	rBV7	20447	23160	1.22%	0.145%
26	9.958	1654	1657	1664	rBV2	57478	70605	3.72%	0.442%
27	10.055	1672	1677	1681	rBV	1183679	988517	52.05%	6.187%
28	10.204	1703	1708	1713	rBV	1048977	889808	46.86%	5.569%
29	10.762	1820	1824	1830	rBV	822693	757557	39.89%	4.741%
30	11.194	1910	1914	1923	rVB2	140014	192703	10.15%	1.206%
31	11.324	1936	1941	1945	rBV	714987	751237	39.56%	4.702%
32	13.358	2359	2364	2370	rVB	307320	437611	23.04%	2.739%

Sum of corrected areas: 15977859

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
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Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

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Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

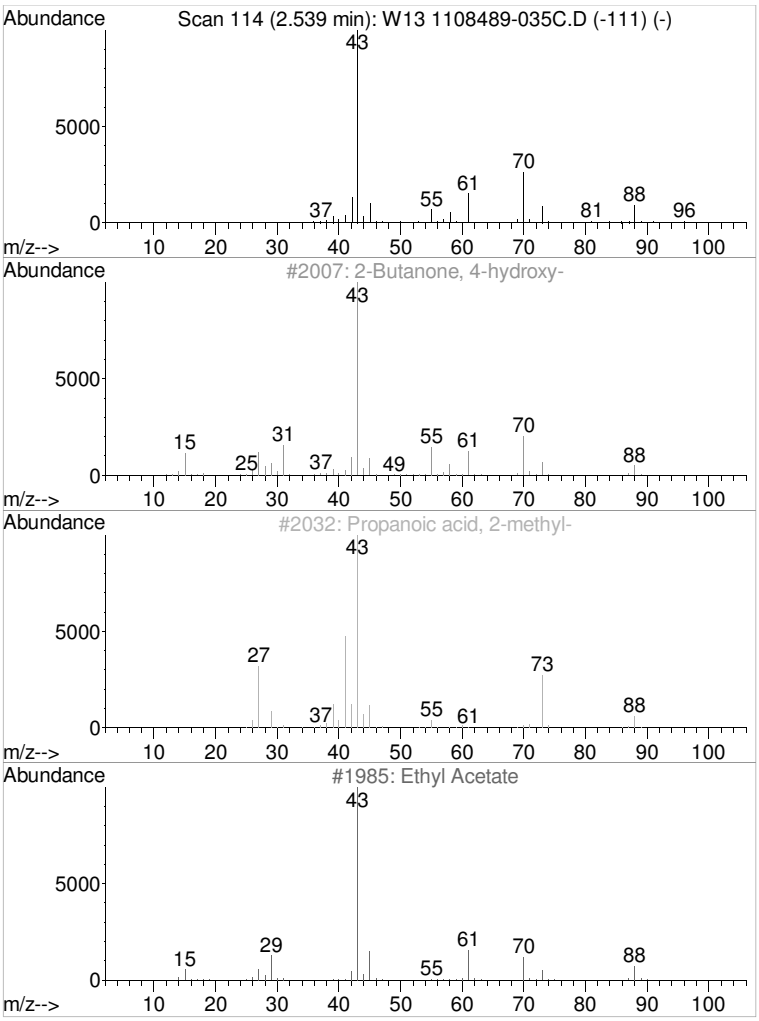
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

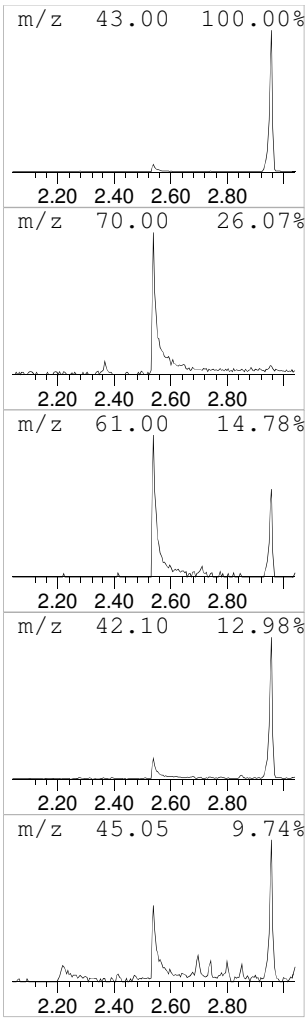
****

Peak Number 1 2-Butanone, 4-hydroxy- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	6.07 ug/l	134669	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	80
2	Propanoic acid, 2-methyl-	88	C4H8O2	000079-31-2	43
3	Ethyl Acetate	88	C4H8O2	000141-78-6	43
4	Propanoic acid, 2-oxo-, 3-methyl...	158	C8H14O3	007779-72-8	28
5	1,4-Butanediol, diacetate	174	C8H14O4	000628-67-1	12





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

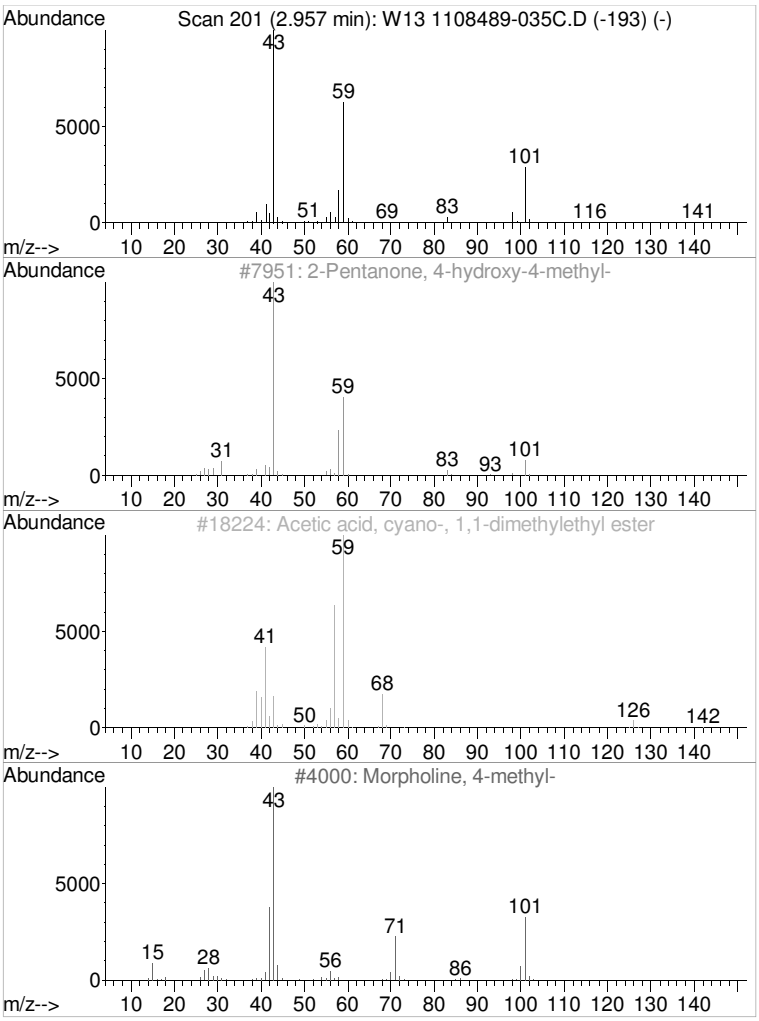
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

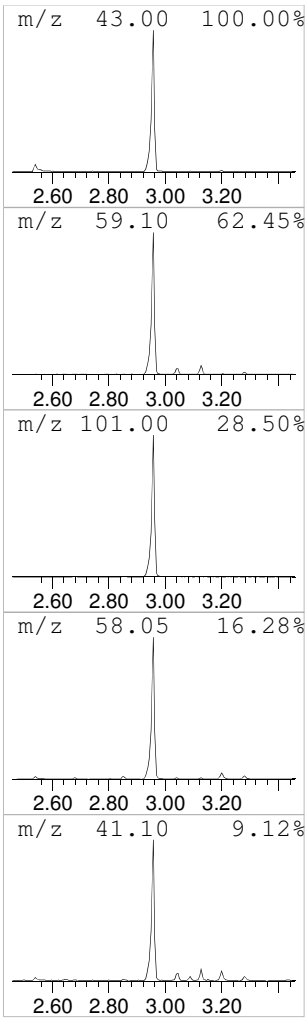
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.96	85.62 ug/l	1899020	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	9
5	5-Hexen-2-one	98	C6H10O	000109-49-9	9





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Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

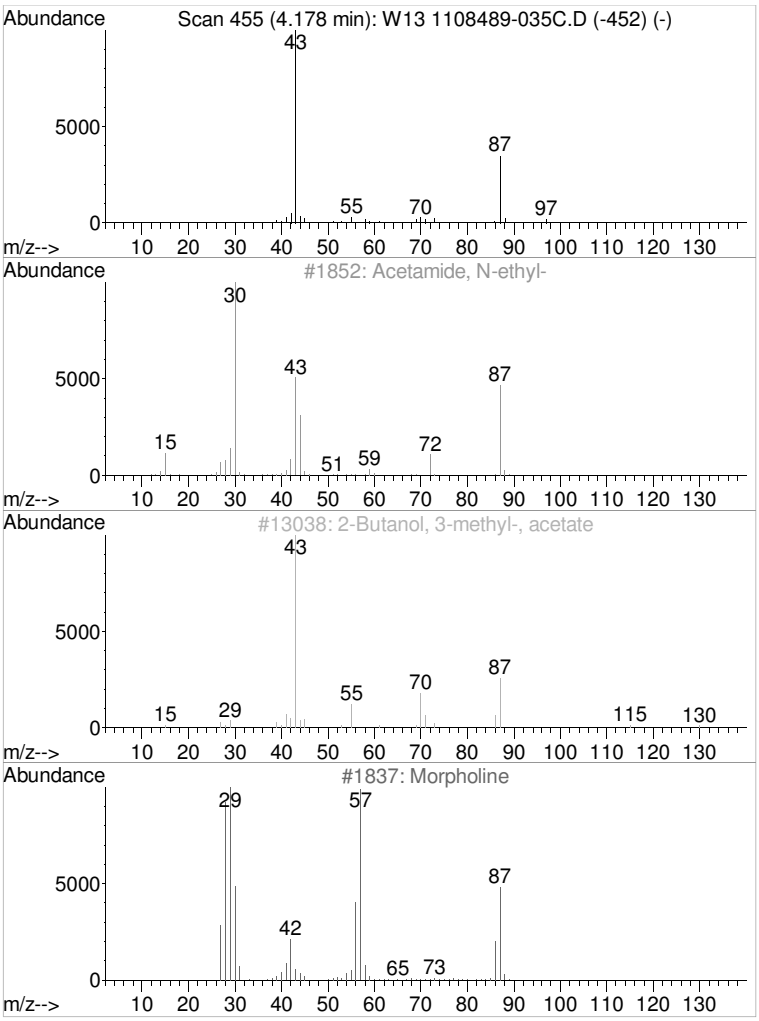
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

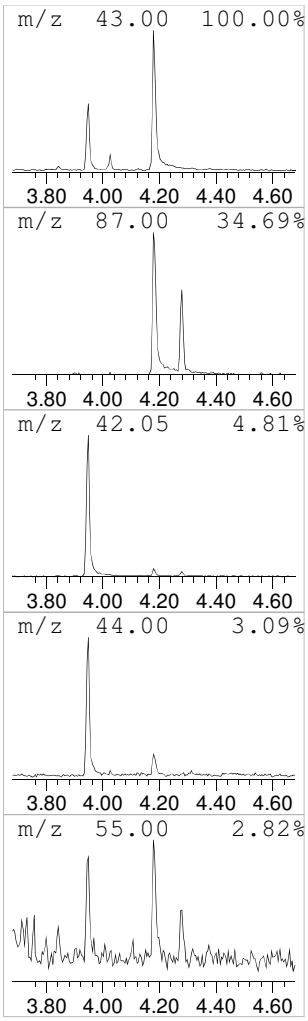
****

Peak Number 3 Acetamide, N-ethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.18	4.59 ug/l	101889	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	9
2	2-Butanol, 3-methyl-, acetate	130	C7H14O2	005343-96-4	9
3	Morpholine	87	C4H9NO	000110-91-8	7
4	1,4-Butanediamine	88	C4H12N2	000110-60-1	4
5	1-[3-(4-Bromophenyl)-2-thioureid...	560	C21H25BrN2O9S	094273-12-8	4





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Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

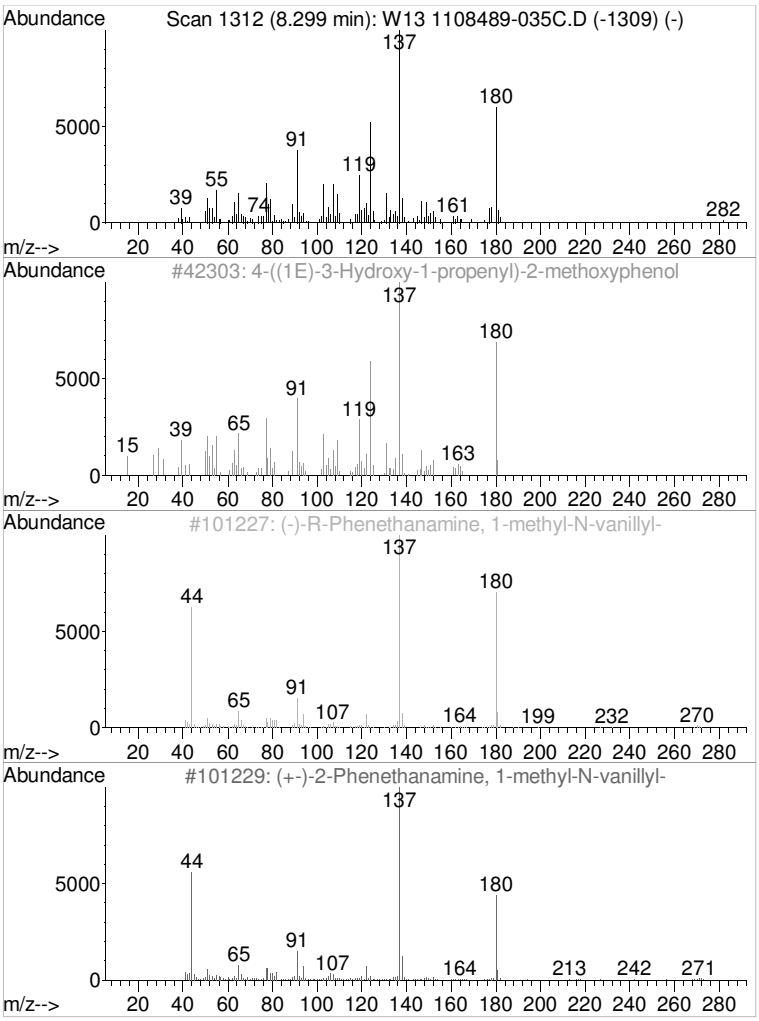
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

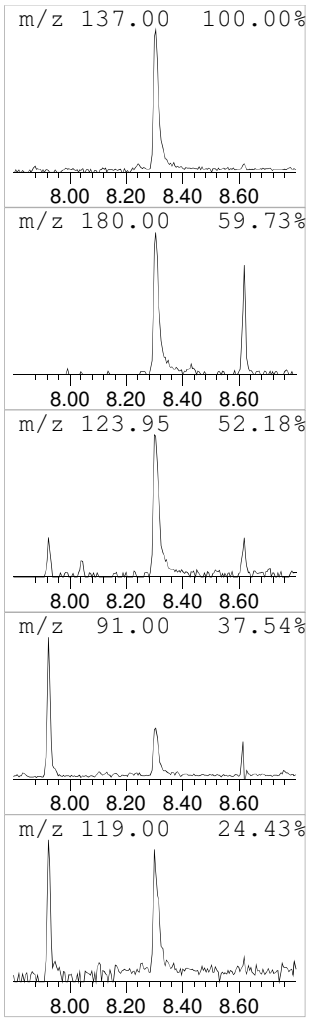
****

Peak Number 4 4-((1E)-3-Hydroxy-1-propeny... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.30	4.05 ug/l	134621	ISTD-Phenanthrene-d10	8.62

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-((1E)-3-Hydroxy-1-propenyl)-2-...	180	C10H12O3	1000297-95-5	98
2	(-)-R-Phenethanamine, 1-methyl-N...	271	C17H21NO2	1000127-90-4	38
3	(+-)-2-Phenethanamine, 1-methyl-...	271	C17H21NO2	1000127-89-8	38
4	3,7-Benzofurandiol, 2,3-dihydro-...	180	C10H12O3	017781-15-6	38
5	Sulfide, isobutyl o-tolyl	180	C11H16S	015561-00-9	30





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Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

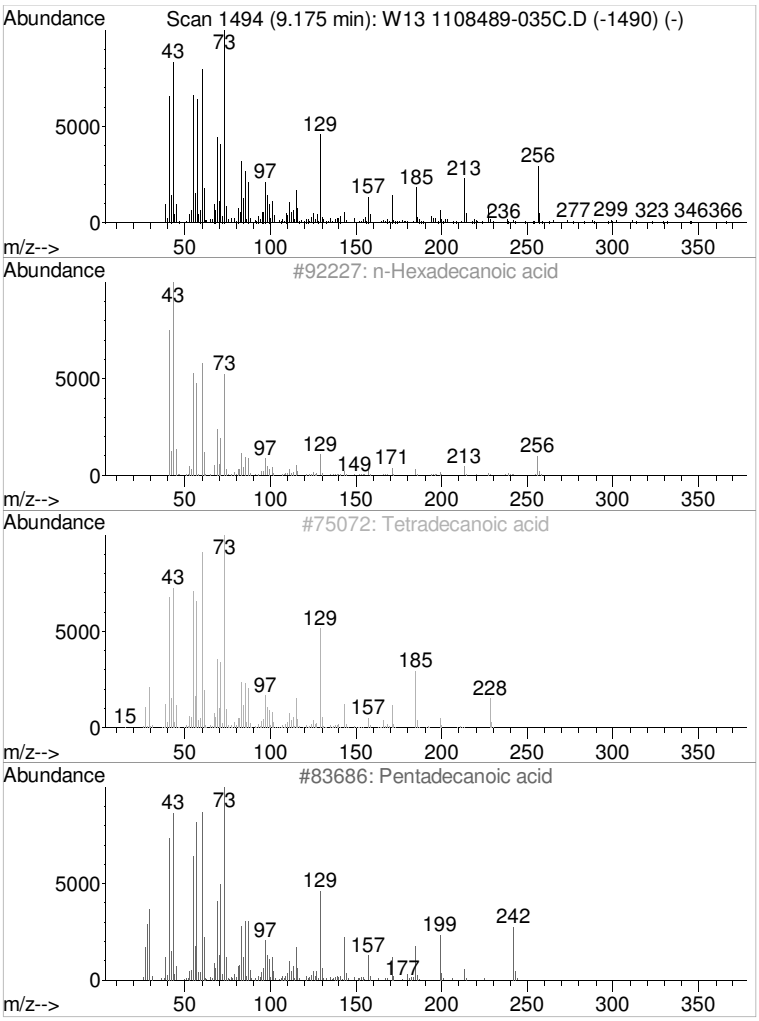
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

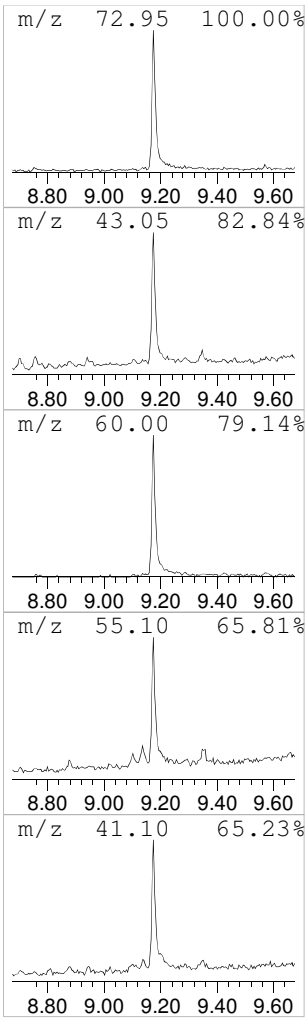
****

Peak Number 5 n-Hexadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	6.64 ug/l	220703	ISTD-Phenanthrene-d10	8.62

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	91
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	89
4	Tridecanoic acid	214	C13H26O2	000638-53-9	76
5	Undecanoic acid	186	C11H22O2	000112-37-8	74





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

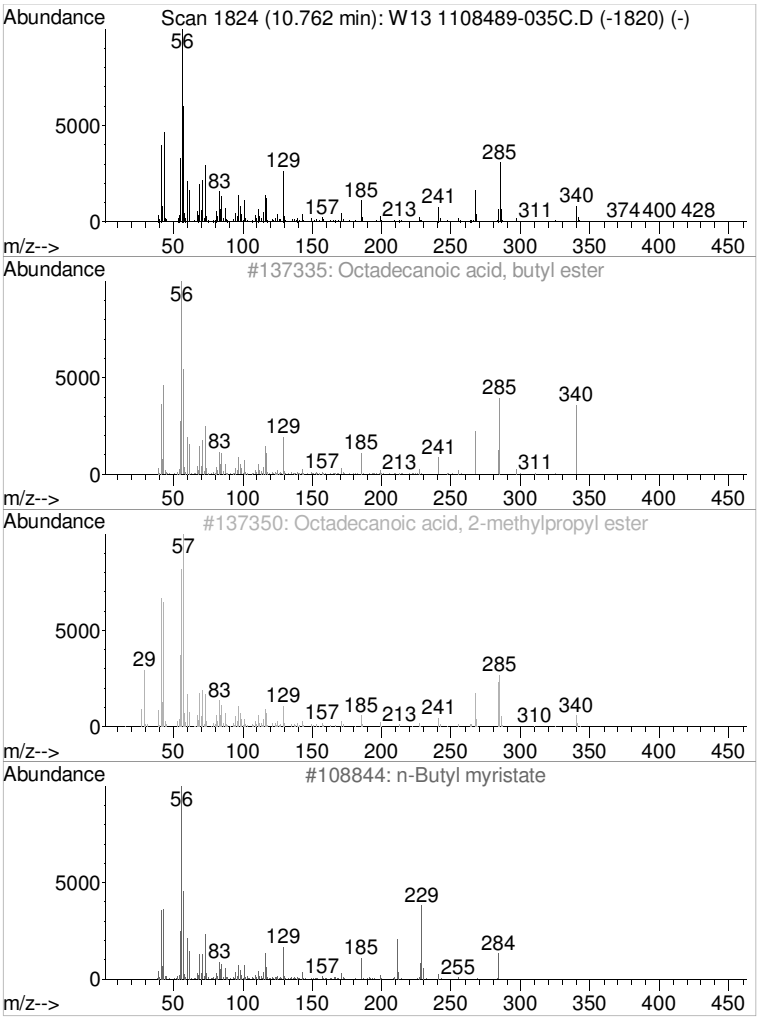
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

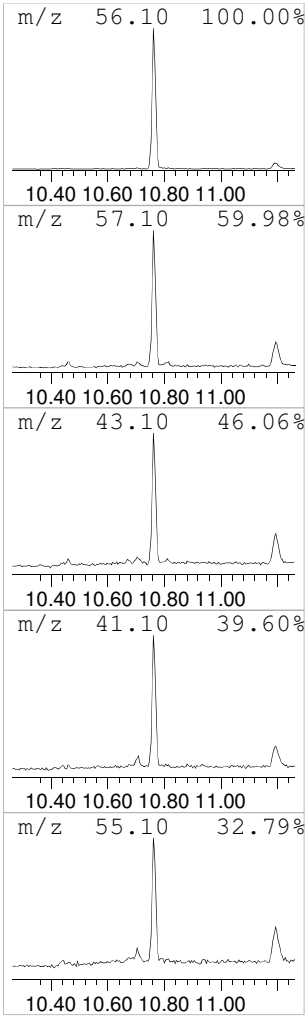
****

Peak Number 6 Octadecanoic acid, butyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.76	40.34 ug/l	757557	ISTD-Chrysene-d12	11.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	58
4	Nipecotic acid	129	C6H11NO2	000498-95-3	47
5	1-Hexene, 2-methyl-	98	C7H14	006094-02-6	27





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

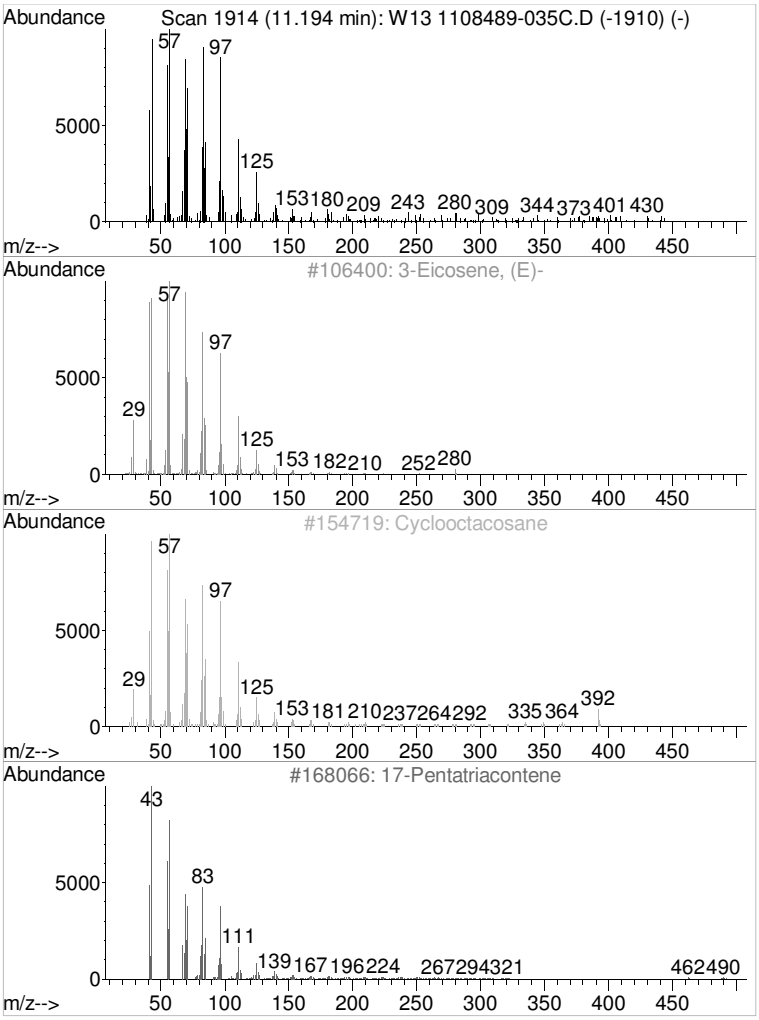
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

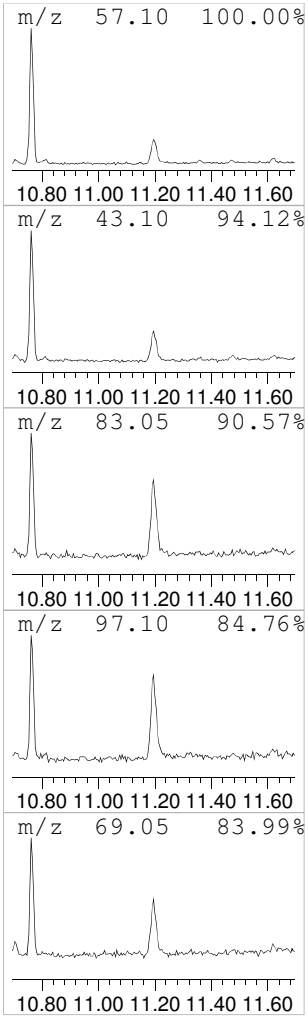
****

Peak Number 7 3-Eicosene, (E)- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	10.26 ug/l	192703	ISTD-Chrysene-d12	11.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Eicosene, (E)-	280	C20H40	074685-33-9	95
2	Cyclooctacosane	392	C28H56	000297-24-5	92
3	17-Pentatriacontene	491	C35H70	006971-40-0	91
4	Cycloeicosane	280	C20H40	000296-56-0	86
5	13-Methyl-Z-14-nonacosene	420	C30H60	1000131-19-0	86





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W13 1108489-035C.D
Acq On : 1 Sep 2011 7:03 pm
Operator : ALICIA HABERLE
Sample : 1108489-035C
Misc : SAMP
ALS Vial : 20 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Butanone, 4-hyd...	2.54	6.1	ug/l	134669	1	4.28	887216	40.0
2-Pentanone, 4-hy...	2.96	85.6	ug/l	1899020	1	4.28	887216	40.0
Acetamide, N-ethyl-	4.18	4.6	ug/l	101889	1	4.28	887216	40.0
4-((1E)-3-Hydroxy...	8.30	4.0	ug/l	134621	4	8.62	1330160	40.0
n-Hexadecanoic acid	9.17	6.6	ug/l	220703	4	8.62	1330160	40.0
Octadecanoic acid...	10.76	40.3	ug/l	757557	5	11.32	751237	40.0
3-Eicosene, (E)-	11.19	10.3	ug/l	192703	5	11.32	751237	40.0

LSC Area Percent Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Title : Semi-Volatile Compounds HP-GCMS 5973-B

Signal : TIC

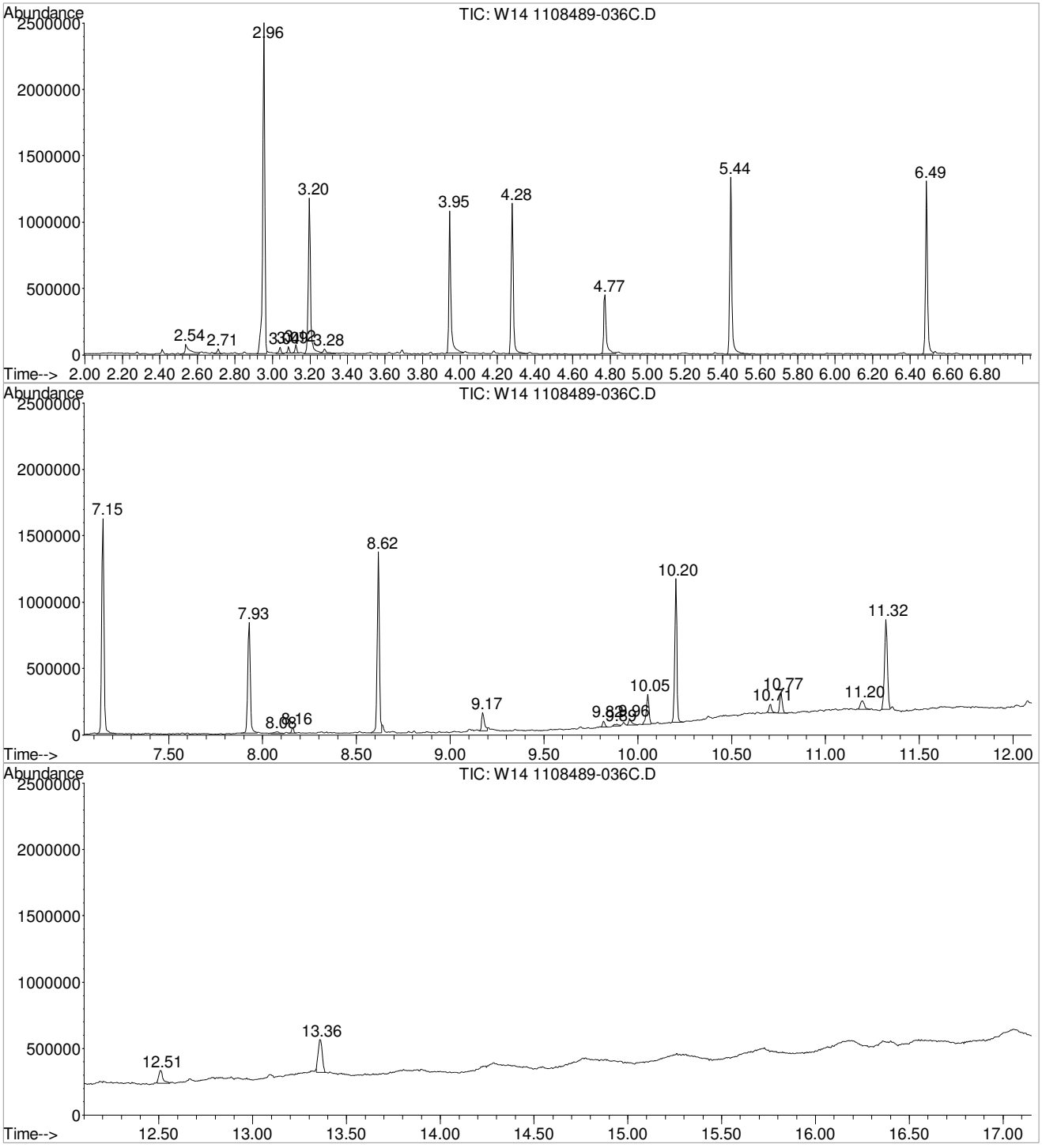
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.538	108	114	129	rBV	73022	129993	6.75%	0.946%
2	2.711	145	150	154	rVB3	36715	28256	1.47%	0.206%
3	2.956	193	201	204	rBV	2495038	1925050	100.00%	14.011%
4	3.042	214	219	223	rVB	49279	38743	2.01%	0.282%
5	3.086	225	228	232	rVV	49567	32736	1.70%	0.238%
6	3.124	232	236	240	rVV	64869	47261	2.46%	0.344%
7	3.196	245	251	264	rVV	1173444	925611	48.08%	6.737%
8	3.278	265	268	280	rVB	32958	37505	1.95%	0.273%
9	3.946	403	407	422	rBV	1073889	905897	47.06%	6.593%
10	4.278	472	476	493	rBV	1135428	852396	44.28%	6.204%
11	4.774	575	579	591	rBV	444934	422098	21.93%	3.072%
12	5.442	714	718	740	rBV	1334092	1148365	59.65%	8.358%
13	6.486	931	935	943	rBV	1307281	1079904	56.10%	7.860%
14	7.149	1066	1073	1087	rVB	1622620	1309362	68.02%	9.530%
15	7.928	1226	1235	1244	rBV	837747	761376	39.55%	5.541%
16	8.077	1259	1266	1273	rVB6	13532	26231	1.36%	0.191%
17	8.159	1279	1283	1287	rBV2	44453	37113	1.93%	0.270%
18	8.616	1370	1378	1382	rBV	1364000	1175786	61.08%	8.557%
19	9.174	1490	1494	1499	rBV	139017	140622	7.30%	1.023%
20	9.818	1625	1628	1632	rBV	47700	38001	1.97%	0.277%
21	9.890	1638	1643	1647	rBV8	15984	30435	1.58%	0.222%
22	9.957	1654	1657	1666	rBV5	44956	60598	3.15%	0.441%
23	10.054	1671	1677	1681	rVV2	226091	211874	11.01%	1.542%
24	10.203	1704	1708	1716	rVB	1083477	882241	45.83%	6.421%
25	10.708	1810	1813	1820	rVB	67152	65734	3.41%	0.478%
26	10.765	1821	1825	1832	rVB	154138	143504	7.45%	1.044%
27	11.198	1911	1915	1923	rVB3	62871	91842	4.77%	0.668%
28	11.323	1936	1941	1946	rBV	676768	686482	35.66%	4.996%
29	12.506	2184	2187	2197	rVB	94398	139668	7.26%	1.017%
30	13.357	2360	2364	2370	rVB	249419	365280	18.98%	2.659%

Sum of corrected areas: 13739964

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

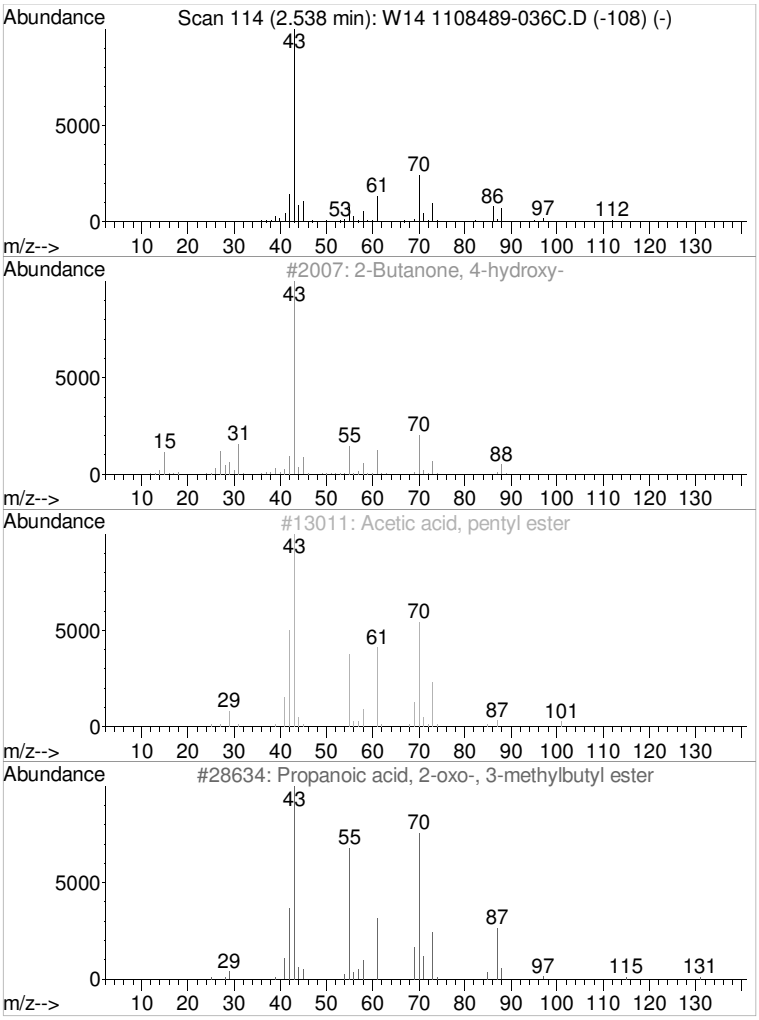
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

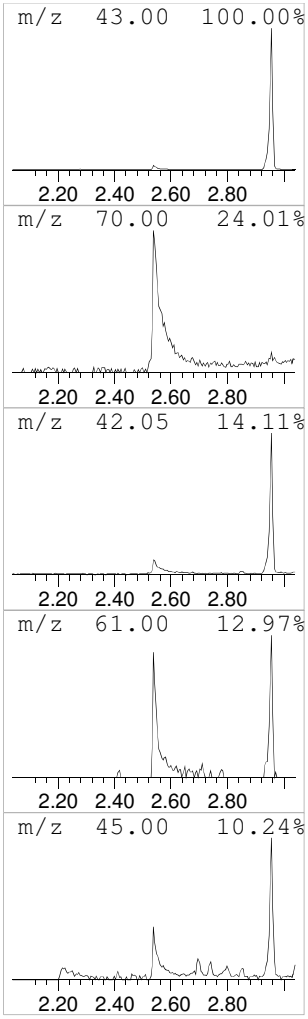
****

Peak Number 1 2-Butanone, 4-hydroxy- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	6.10 ug/l	129993	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	86
2	Acetic acid, pentyl ester	130	C7H14O2	000628-63-7	40
3	Propanoic acid, 2-oxo-, 3-methyl...	158	C8H14O3	007779-72-8	40
4	1-Butanol, 3-methyl-, acetate	130	C7H14O2	000123-92-2	40
5	Acetic acid, heptyl ester	158	C9H18O2	000112-06-1	36





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

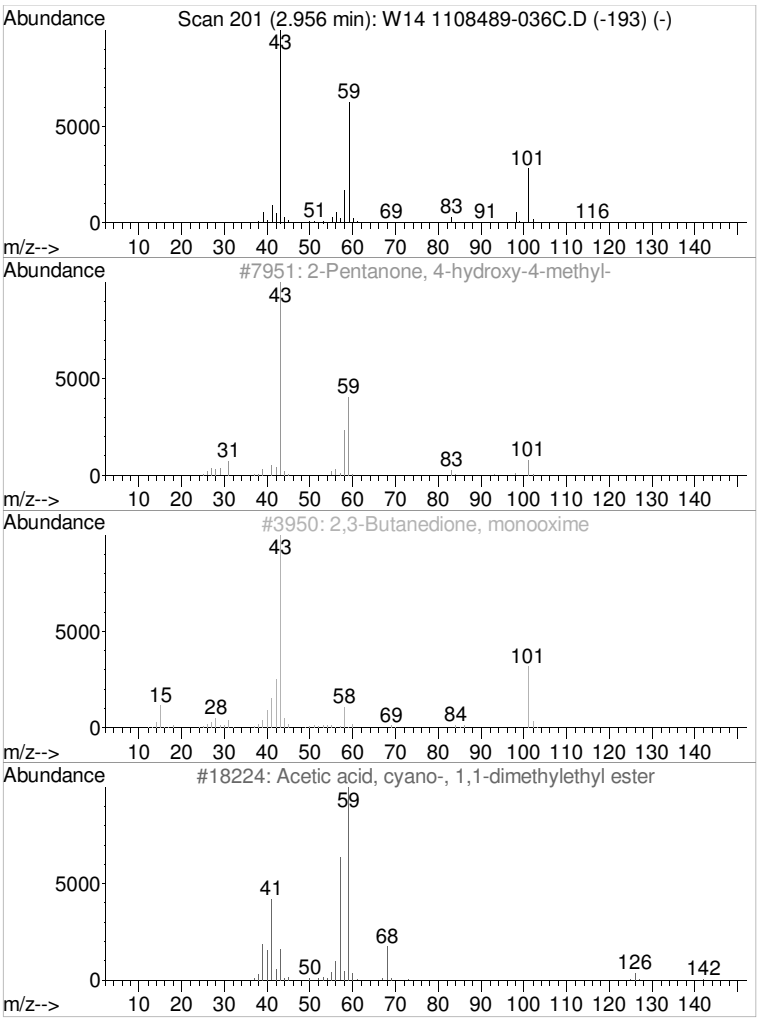
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

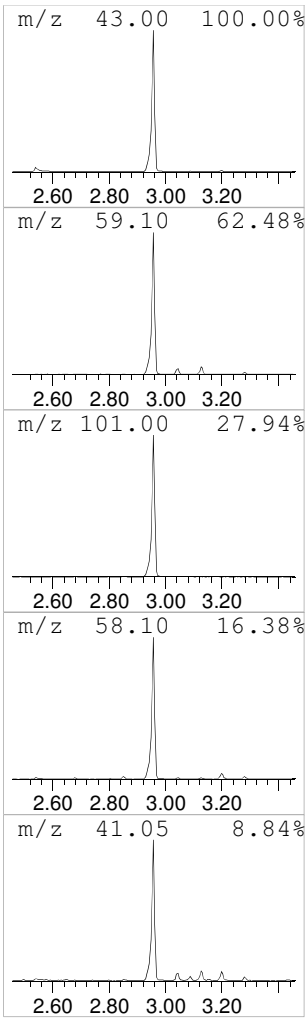
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.96	90.34 ug/l	1925050	ISTD 1,4-Dichlorobenzene-d4	4.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9





Library Search Compound Report

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Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

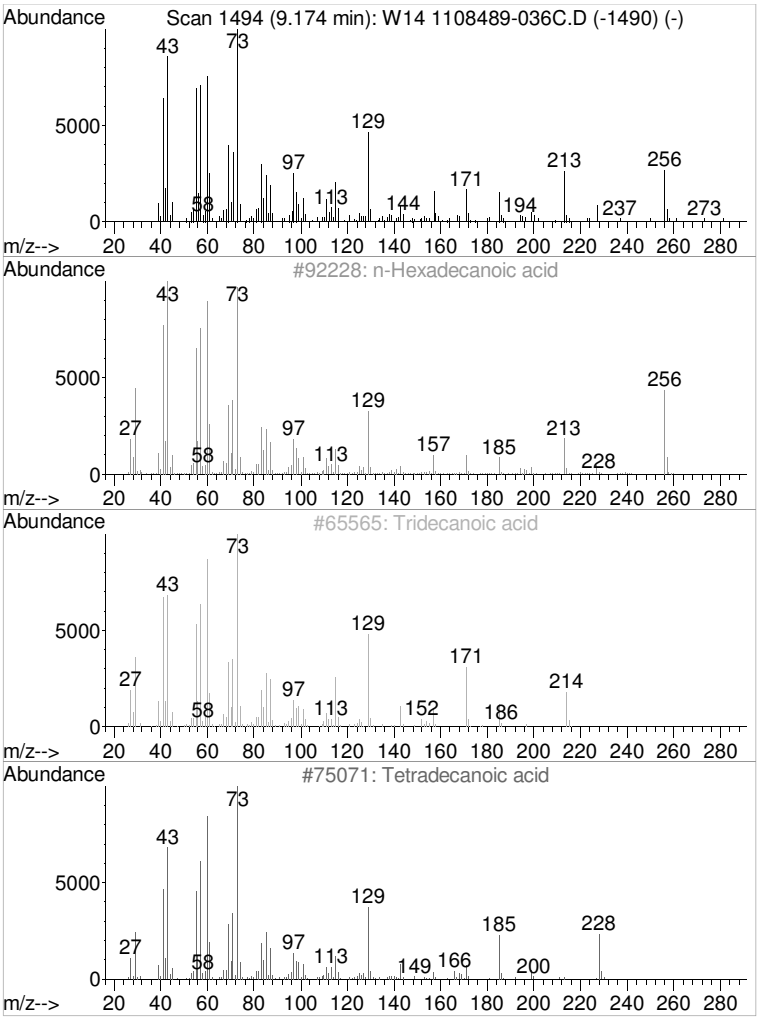
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

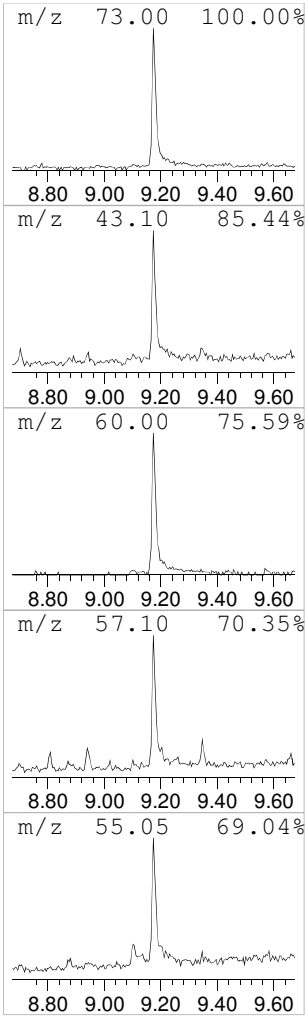
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.17	4.78 ug/l	140622	ISTD-Phenanthrene-d10	8.62

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	95
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	64
4	Dodecanoic acid	200	C12H24O2	000143-07-7	60
5	n-Decanoic acid	172	C10H20O2	000334-48-5	60





Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

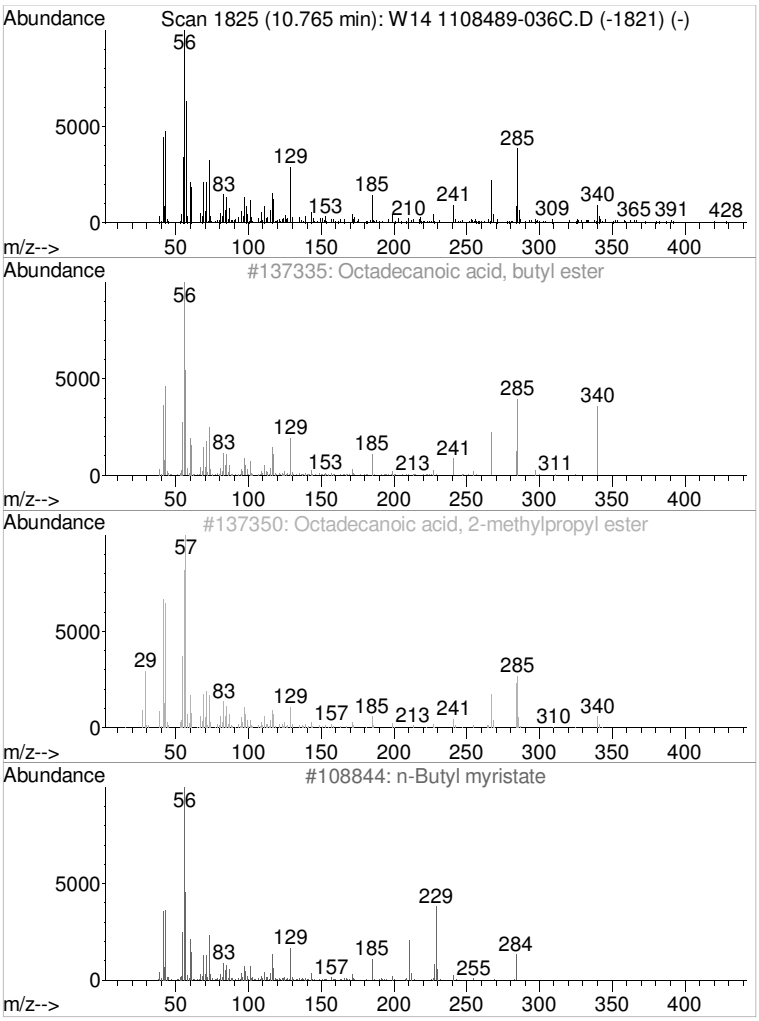
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

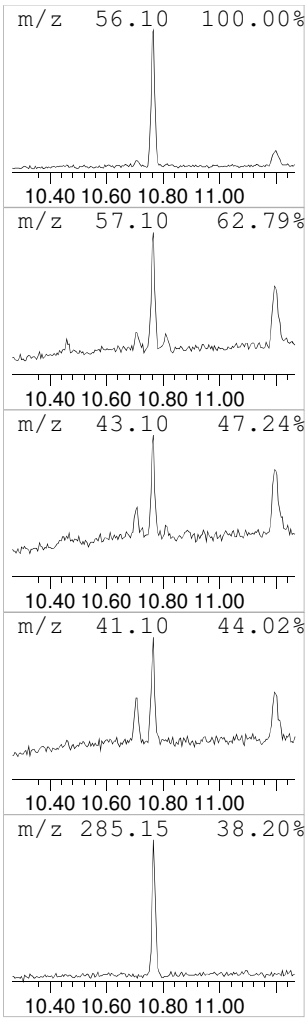
****

Peak Number 4 Octadecanoic acid, butyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.77	8.36 ug/l	143504	ISTD-Chrysene-d12	11.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	99
2	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	94
3	n-Butyl myristate	284	C18H36O2	000110-36-1	49
4	Oxirane, 2,3-bis(1-methylethyl)-...	128	C8H16O	054644-32-5	25
5	1-Hexene, 2,5-dimethyl-	112	C8H16	006975-92-4	22





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

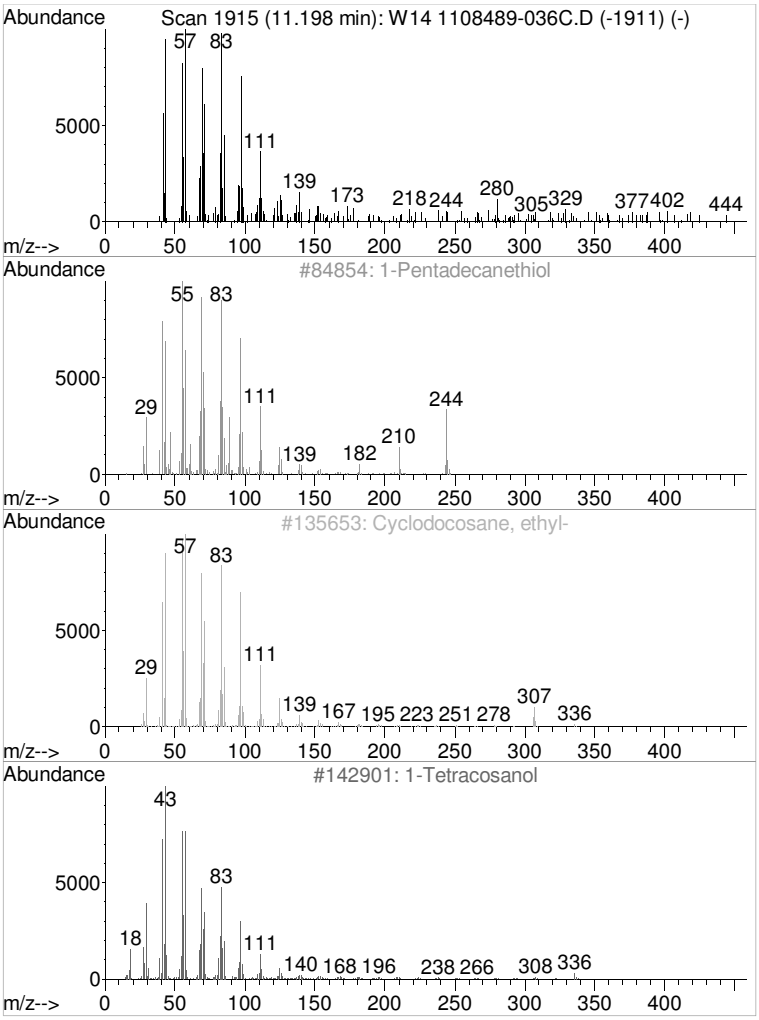
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

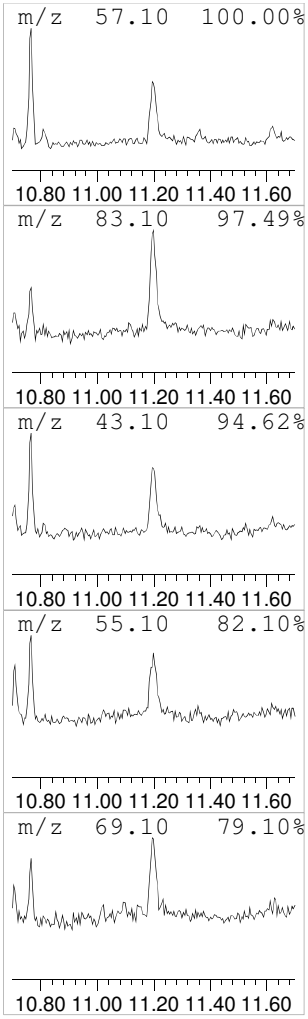
****

Peak Number 5 1-Pentadecanethiol Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.20	5.35 ug/l	91842	ISTD-Chrysene-d12	11.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentadecanethiol	244	C15H32S	025276-70-4	90
2	Cyclodocosane, ethyl-	336	C24H48	1000151-22-6	87
3	1-Tetracosanol	354	C24H50O	000506-51-4	87
4	9-Eicosene, (E)-	280	C20H40	074685-29-3	86
5	1-Nonadecanol	284	C19H40O	001454-84-8	83





Library Search Compound Report

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

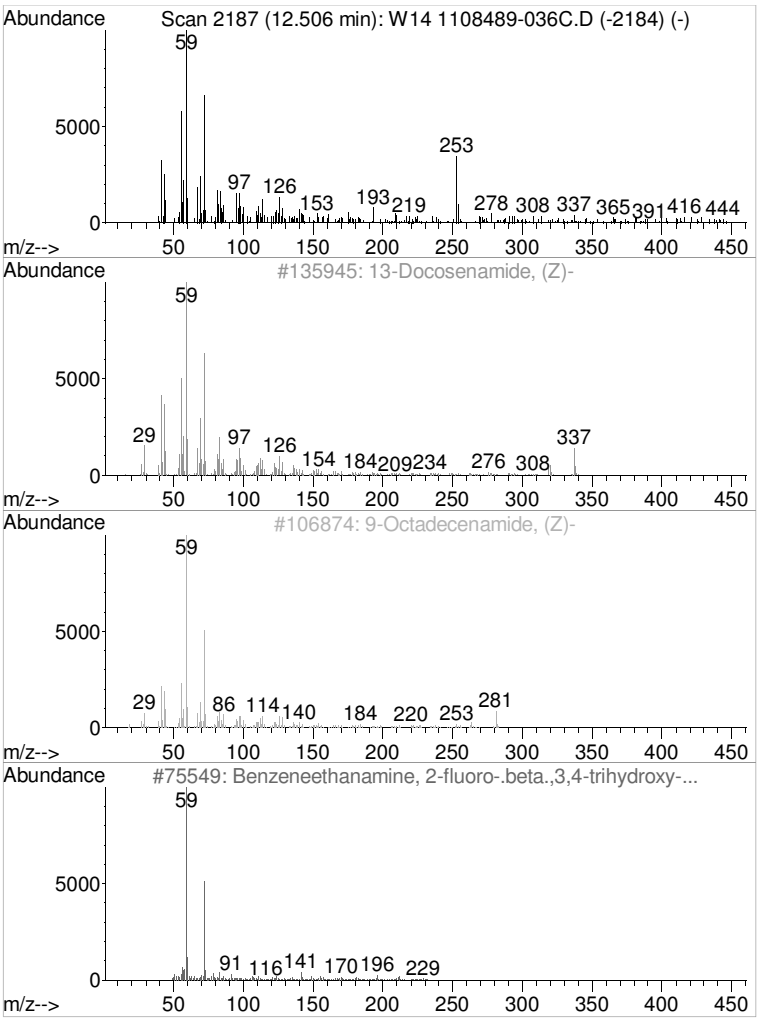
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

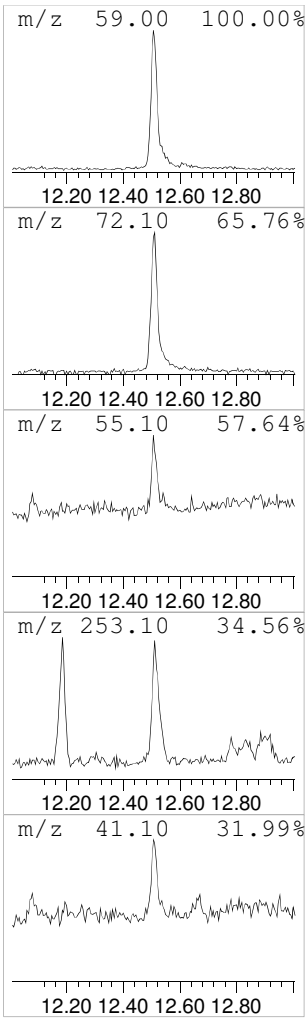
****

Peak Number 6 13-Docosenamide, (Z)- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.51	15.29 ug/l	139668	ISTD-Perylene-d12	13.36

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Docosenamide, (Z)-	337	C22H43NO	000112-84-5	70
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	59
3	Benzeneethanamine, 2-fluoro-.bet...	229	C11H16FNO3	061338-98-5	53
4	7-Nonenamide	155	C9H17NO	090949-53-4	53
5	Dodecanamide	199	C12H25NO	001120-16-7	47





Tentatively Identified Compound (LSC) summary

Data Path : Z:\MSDCHEM\1\DATA\SEP11-B\01SEP11\
Data File : W14 1108489-036C.D
Acq On : 1 Sep 2011 7:29 pm
Operator : ALICIA HABERLE
Sample : 1108489-036C
Misc : SAMP
ALS Vial : 21 Sample Multiplier: 1

Quant Method : M:\SVOAB\METHODS\QUANT-ORIGINAL-PERFECTFULLSV-X2_08-26-11.M
Quant Title : Semi-Volatile Compounds HP-GCMS 5973-B

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Butanone, 4-hyd...	2.54	6.1	ug/l	129993	1	4.28	852396	40.0
2-Pentanone, 4-hy...	2.96	90.3	ug/l	1925050	1	4.28	852396	40.0
n-Hexadecanoic acid	9.17	4.8	ug/l	140622	4	8.62	1175790	40.0
Octadecanoic acid...	10.77	8.4	ug/l	143504	5	11.32	686482	40.0
1-Pentadecanethiol	11.20	5.4	ug/l	91842	5	11.32	686482	40.0
13-Docosenamide, ...	12.51	15.3	ug/l	139668	6	13.36	365280	40.0

Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A18L4892.D
Acq On : 25 Aug 2011 12:46 pm
Operator :
Sample : 1108489-002B
Misc : SAMP SOIL 5.01G
ALS Vial : 19 Sample Multiplier: 1

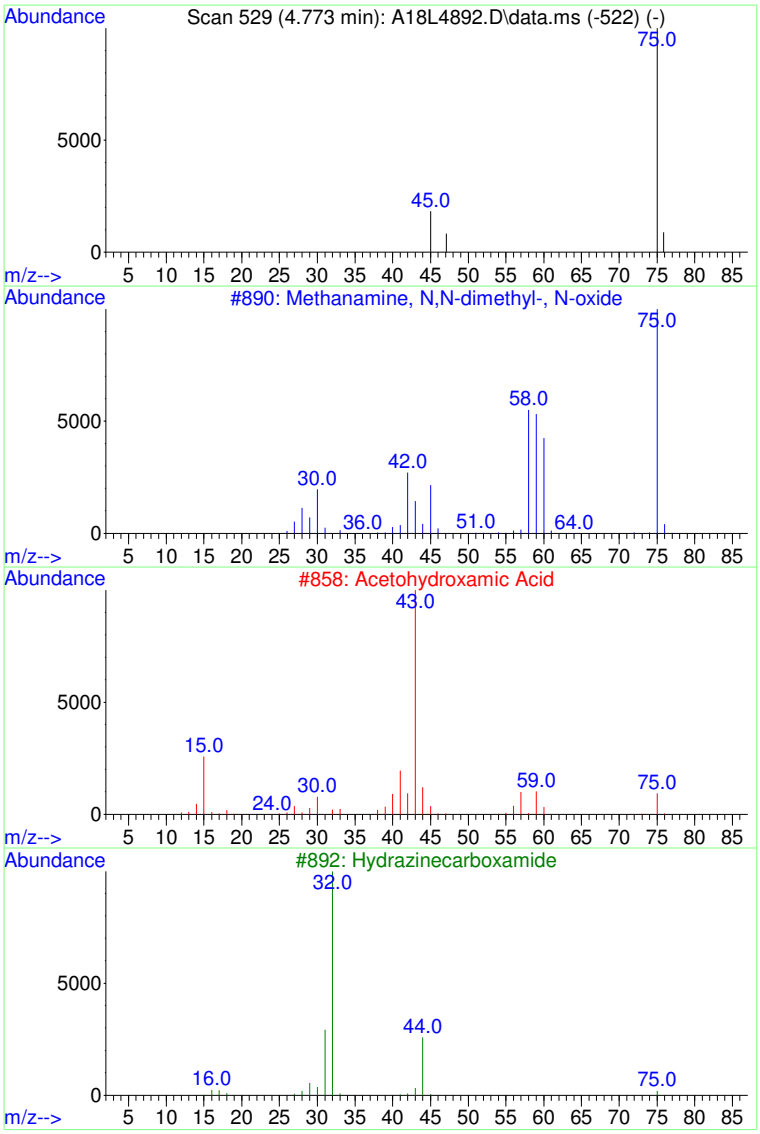
Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

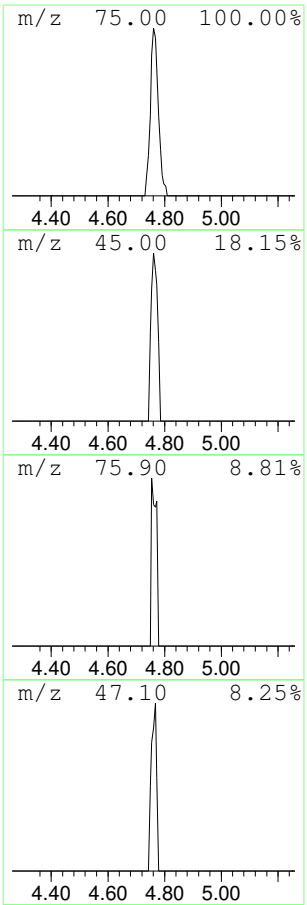
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: rteint.p

****
Peak Number 1 Methanamine, N,N-dimethyl-,... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.761	1.90 ug/l	22202	ISTD Fluorobenzene	5.521

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	4
2	Acetohydroxamic Acid	75	C2H5NO2	000546-88-3	3
3	Hydrazinecarboxamide	75	CH5N3O	000057-56-7	2
4	1,2,4-Butanetriol	106	C4H10O3	003068-00-6	2
5	Silanol, trimethyl-	90	C3H10OSi	001066-40-6	2





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A18L4892.D
Acq On : 25 Aug 2011 12:46 pm
Operator :
Sample : 1108489-002B
Misc : SAMP SOIL 5.01G
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Methanamine, N,...	4.761	1.9	ug/l	22202	1	5.521	585004	50.0

Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A52L8912.D
Acq On : 26 Aug 2011 4:07 am
Operator :
Sample : 1108489-012B
Misc : SAMP SOIL 4.98G
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

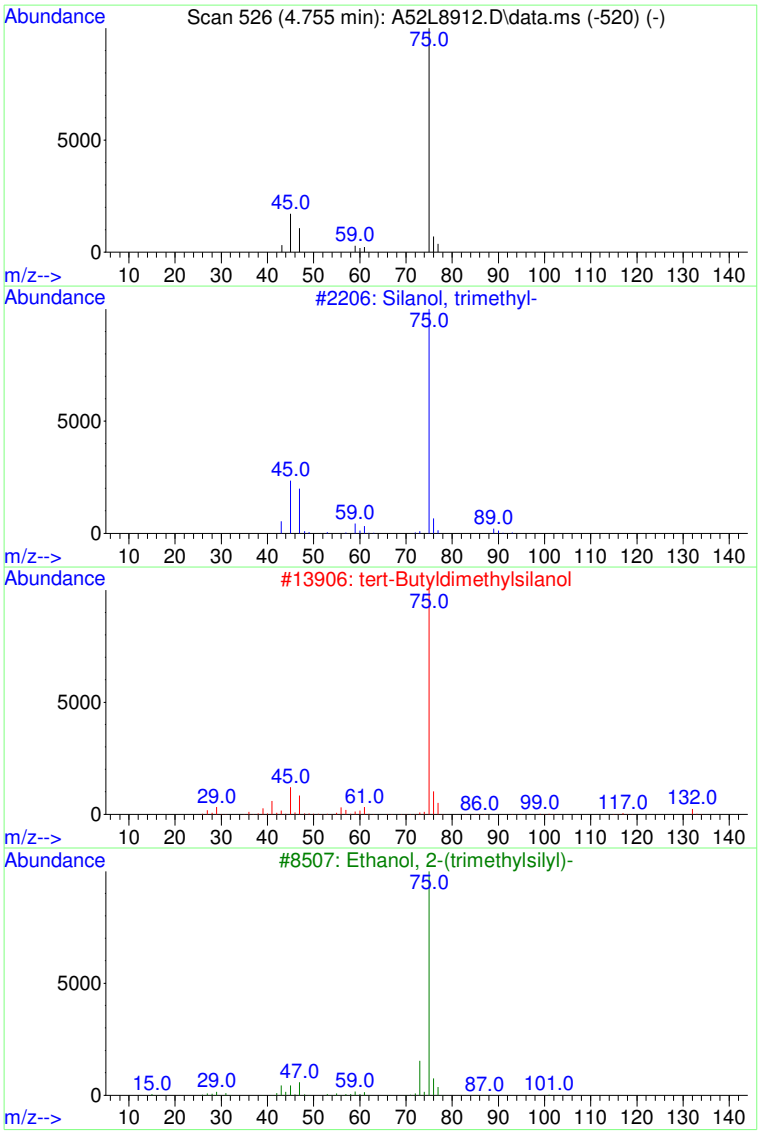
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

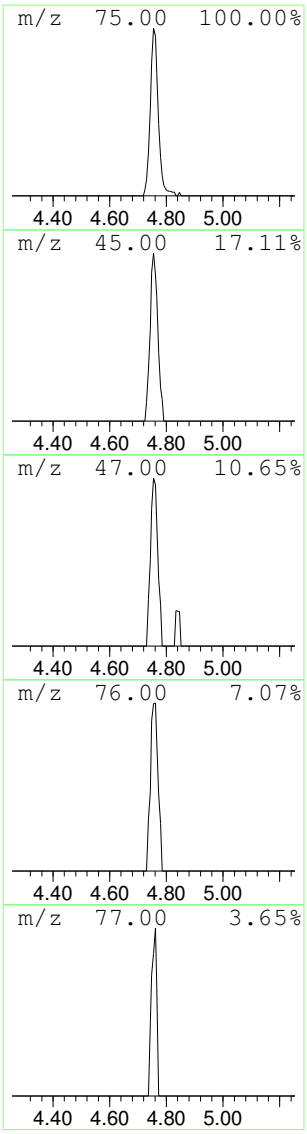
****

Peak Number 1 Silanol, trimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.755	5.48 ug/l	81199	ISTD Fluorobenzene	5.521

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silanol, trimethyl-	90	C3H10OSi	001066-40-6	83
2	tert-Butyldimethylsilanol	132	C6H16OSi	018173-64-3	74
3	Ethanol, 2-(trimethylsilyl)-	118	C5H14OSi	002916-68-9	64
4	Formamide, N-methylthio	75	C2H5NS	018952-41-5	64
5	Ethanethioamide	75	C2H5NS	000062-55-5	5





Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A52L8912.D
Acq On : 26 Aug 2011 4:07 am
Operator :
Sample : 1108489-012B
Misc : SAMP SOIL 4.98G
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

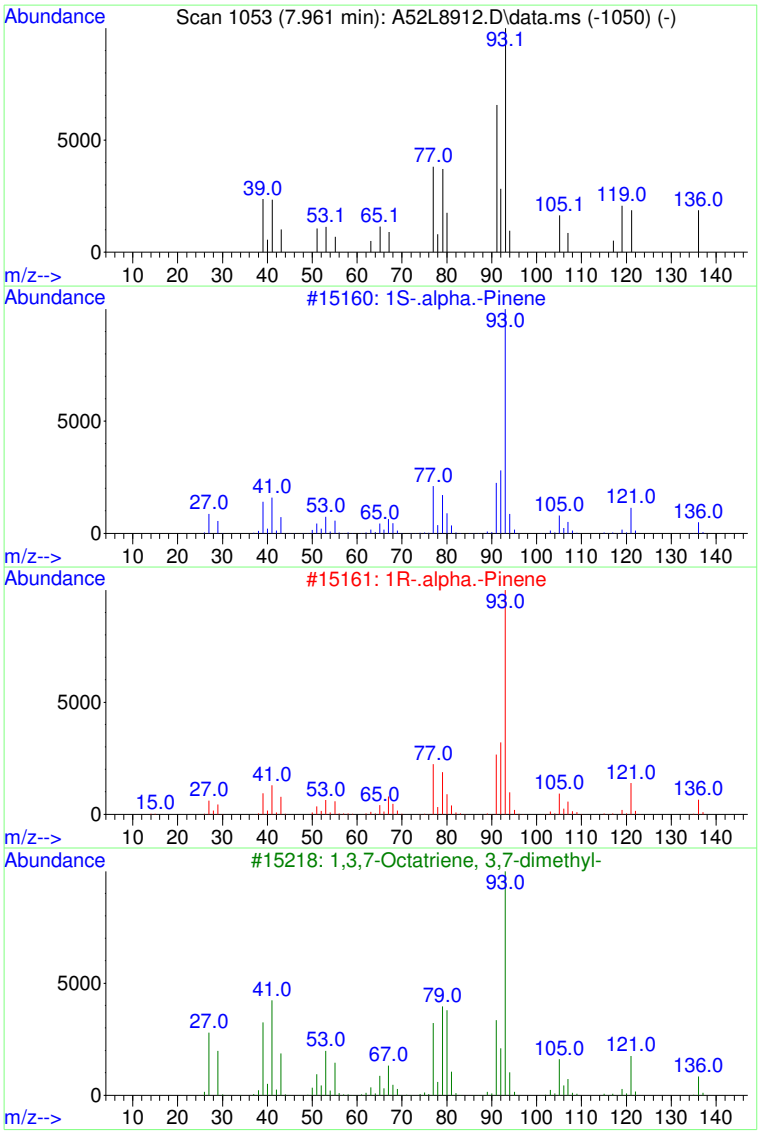
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

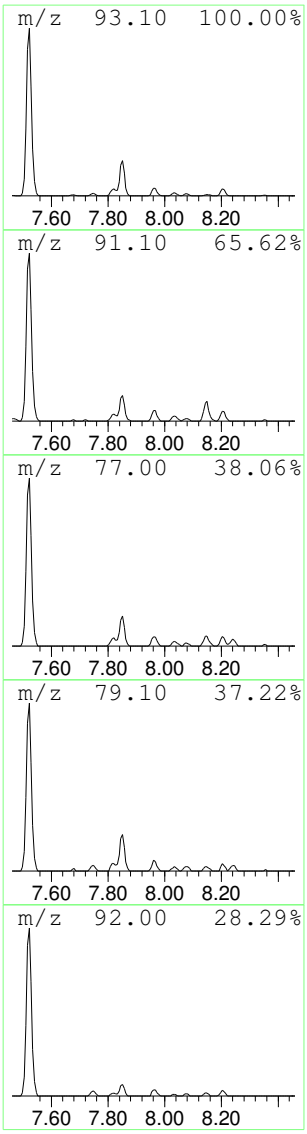
****

Peak Number 2 1S-.alpha.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.961	6.57 ug/l	61173	ISTD 1,4-Dichlorobenzene-d4	8.240

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1S-.alpha.-Pinene	136	C10H16	007785-26-4	90
2	1R-.alpha.-Pinene	136	C10H16	007785-70-8	90
3	1,3,7-Octatriene, 3,7-dimethyl-	136	C10H16	000502-99-8	87
4	Cyclopropane, 1,1-dimethyl-2-(3-...	136	C10H16	068998-21-0	87
5	Cyclohexene, 4-methylene-1-(1-me...	136	C10H16	000099-84-3	81





Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A52L8912.D
Acq On : 26 Aug 2011 4:07 am
Operator :
Sample : 1108489-012B
Misc : SAMP SOIL 4.98G
ALS Vial : 26 Sample Multiplier: 1

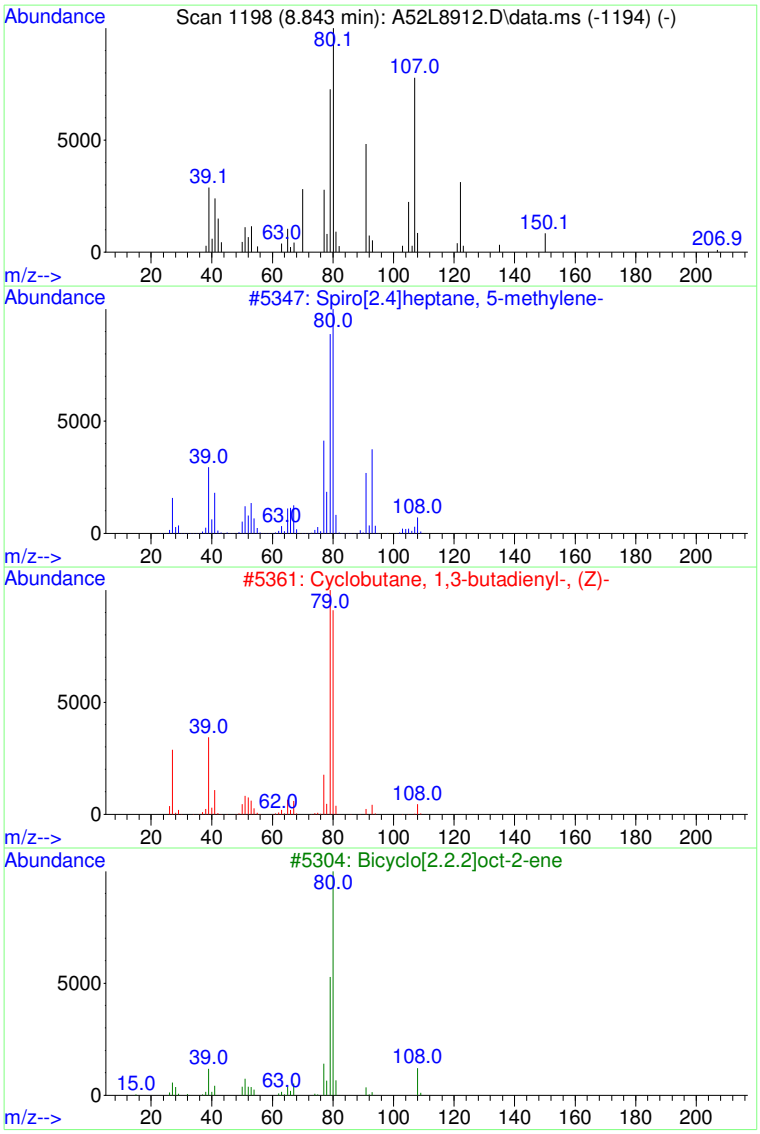
Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

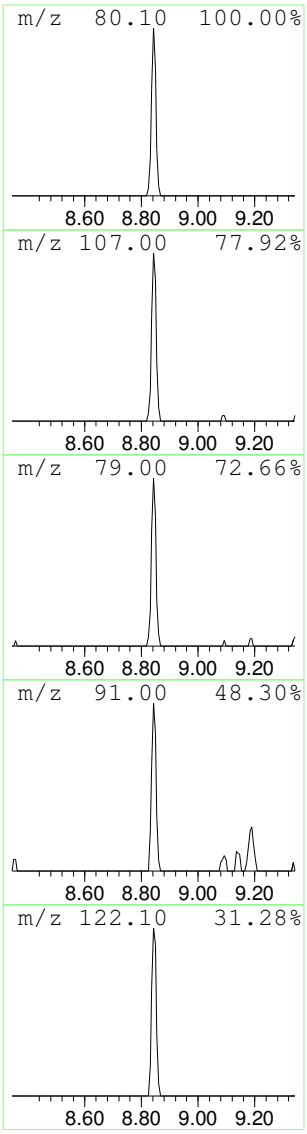
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Spiro[2.4]heptane, 5-methyl... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.843	16.00 ug/l	148874	ISTD 1,4-Dichlorobenzene-d4	8.240

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Spiro[2.4]heptane, 5-methylene-	108	C8H12	037745-07-6	58
2	Cyclobutane, 1,3-butadienyl-, (Z)-	108	C8H12	080344-45-2	52
3	Bicyclo[2.2.2]oct-2-ene	108	C8H12	000931-64-6	52
4	Bicyclo[2.2.1]hept-2-ene, 2-methyl-	108	C8H12	000694-92-8	52
5	1-Penten-3-yne, 2-methyl-	80	C6H8	000926-55-6	52





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A52L8912.D
Acq On : 26 Aug 2011 4:07 am
Operator :
Sample : 1108489-012B
Misc : SAMP SOIL 4.98G
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Silanol, trimet...	4.755	5.5	ug/l	81199	1	5.521	740220	50.0
1S-.alpha.-Pinene	7.961	6.6	ug/l	61173	3	8.240	465196	50.0
Spiro[2.4]hepta...	8.843	16.0	ug/l	148874	3	8.240	465196	50.0

Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A48L8935.D
Acq On : 26 Aug 2011 2:38 am
Operator :
Sample : 1108489-035B
Misc : SAMP SOIL 5.02G
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

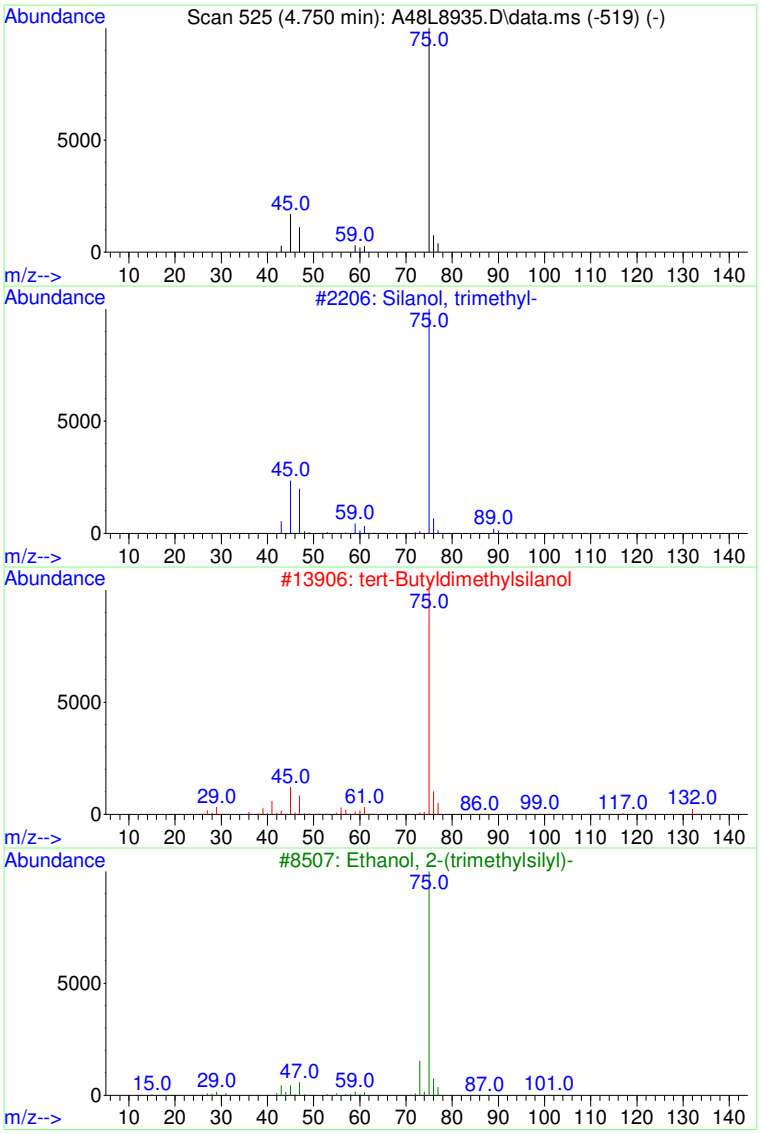
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

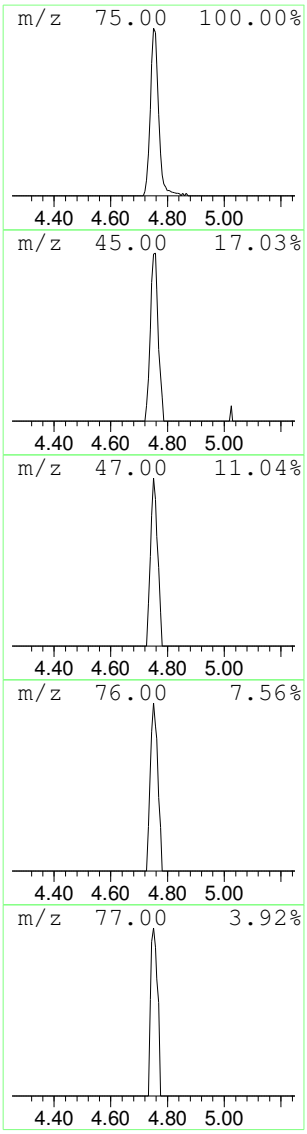
****

Peak Number 1 Silanol, trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.750	6.03 ug/l	103677	ISTD Fluorobenzene	5.523

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silanol, trimethyl-	90	C3H10OSi	001066-40-6	83
2	tert-Butyldimethylsilanol	132	C6H16OSi	018173-64-3	74
3	Ethanol, 2-(trimethylsilyl)-	118	C5H14OSi	002916-68-9	64
4	Formamide, N-methylthio	75	C2H5NS	018952-41-5	43
5	Ethanethioamide	75	C2H5NS	000062-55-5	5





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\AUG11-A\25AUG11A\
Data File : A48L8935.D
Acq On : 26 Aug 2011 2:38 am
Operator :
Sample : 1108489-035B
Misc : SAMP SOIL 5.02G
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FULS_137.M
Quant Title : VOA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Silanol, trimet...	4.750	6.0	ug/l	103677	1	5.523	859642	50.0

American West Analytical Laboratories

WORK ORDER Summary

Work Order: **1108489**

Page 1 of 11 8/24/2011

Client: EarthFax Engineering

Client ID: EAR100 **Contact:** Galen Williams

Project: Red Butte **QC Level:** LEVEL I **WO Type:** Project

Comments: Report out TIC's for Semi's and VOC's. For soil samples, homogonize voc sample. Report out pmoist for all solids. TOC sent to Paragon, Grain Size sent to IGES;

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-001A	Mill Cr. Below 700 E.	8/24/2011 0745h	8/24/2011 1745h	9/7/2011	Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-001B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-001C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-001D						8260-W	☑	VOCFridge	3
1108489-002A	Mill Cr. Below 700 E. - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-002B						8260-S	☑	VOCFridge	
1108489-002C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-002D						TS-S-2540B	☐	ww - ts	1
1108489-002E						OUTSIDE LAB	☐	Paragon	
1108489-002F						OUTSIDE LAB	☐	IGES	
1108489-003A	Mill Cr. Below 700 E. - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-003B						8260-S	☑	VOCFridge	
1108489-003C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-003C	Mill Cr. Below 700 E. - Bank	8/24/2011 0745h	8/24/2011 1745h	9/7/2011	Soil	PMOIST	☐	Hall-Semi	2
1108489-003D						TS-S-2540B	☐	ww - ts	1
1108489-003E						OUTSIDE LAB	☐	Paragon	
1108489-003F						OUTSIDE LAB	☐	IGES	
1108489-004A	FB-1				Aqueous	8260-W-PPM	☑	voc	3
1108489-005A	BD-1	8/24/2011 0815h				3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-005B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-005C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-005D						8260-W	☑	VOCFridge	3
1108489-006A	BD-1 - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-006B						8260-S	☑	VOCFridge	
1108489-006C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-006D						TS-S-2540B	☐	ww - ts	1
1108489-006E						OUTSIDE LAB	☐	Paragon	
1108489-006F						OUTSIDE LAB	☐	IGES	
1108489-007A	BD-1 - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-007B						8260-S	☑	VOCFridge	
1108489-007C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-007D	BD-1 - Bank	8/24/2011 0815h	8/24/2011 1745h	9/7/2011	Soil	TS-S-2540B	☐	ww - ts	1
1108489-007E						OUTSIDE LAB	☐	Paragon	
1108489-007F						OUTSIDE LAB	☐	IGES	
1108489-008A	EB-1	8/24/2011 0905h			Aqueous	3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-008B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-008C						3510-SVOA-PR	☐	Walkin-Semi	2
						8270-W-SIM	☑	Walkin-Semi	
1108489-008D						8260-W	☑	VOCFridge	3
1108489-009A	TB-1	8/24/2011 0910h				8260-W-PPM	☑	voc	
1108489-010A	Mill Cr. Below Highland Drive	8/24/2011 0950h				3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-010B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-010C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-010D						8260-W	☑	VOCFridge	3
1108489-011A	Mill Cr. Below Highland Drive - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-011B						8260-S	☑	VOCFridge	
1108489-011C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-011D						TS-S-2540B	☐	ww - ts	1
1108489-011E						OUTSIDE LAB	☐	Paragon	
1108489-011F						OUTSIDE LAB	☐	IGES	
1108489-012A	Mill Cr. Below Highland Drive - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-012A	Mill Cr. Below Highland Drive - Bank	8/24/2011 0950h	8/24/2011 1745h	9/7/2011	Soil	8015-S-ORO	☑	Hall-TPH	1
						8015-S-TPH	☑	Hall-TPH	
1108489-012B						8260-S	☑	VOCFridge	
1108489-012C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-012D						TS-S-2540B	☐	ww - ts	1
1108489-012E						OUTSIDE LAB	☐	Paragon	
1108489-012F						OUTSIDE LAB	☐	IGES	
1108489-013A	City Cr. Below N. Cyn. Loop	8/24/2011 1350h			Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-013B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-013C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-013D						8260-W	☑	VOCFridge	3
1108489-014A	City Cr. Below N. Cyn. Loop - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-014B						8260-S	☑	VOCFridge	
1108489-014C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-014D						TS-S-2540B	☐	ww - ts	1
1108489-014E						OUTSIDE LAB	☐	Paragon	
1108489-014F						OUTSIDE LAB	☐	IGES	
1108489-015A	City Cr. Below N. Cyn. Loop - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-015B	City Cr. Below N. Cyn. Loop - Bank	8/24/2011 1350h	8/24/2011 1745h	9/7/2011	Soil	8260-S	☑	VOCFridge	1
1108489-015C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-015D						TS-S-2540B	☐	ww - ts	1
1108489-015E						OUTSIDE LAB	☐	Paragon	
1108489-015F						OUTSIDE LAB	☐	IGES	
1108489-016A	City Cr. Near Cyn. Entrance Gate	8/24/2011 1510h			Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-016B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-016C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-016D						8260-W	☑	VOCFridge	3
1108489-017A	City Cr. Near Cyn. Entrance Gate - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-017B						8260-S	☑	VOCFridge	
1108489-017C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-017D						TS-S-2540B	☐	ww - ts	1
1108489-017E						OUTSIDE LAB	☐	Paragon	
1108489-017F						OUTSIDE LAB	☐	IGES	
1108489-018A	City Cr. Near Cyn. Entrance Gate - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-018B						8260-S	☑	VOCFridge	
1108489-018C						3546-SVOA-PR	☐	Hall-Semi	2

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: **1108489**

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-018C	City Cr. Near Cyn. Entrance Gate - Bank	8/24/2011 1510h	8/24/2011 1745h	9/7/2011	Soil	8270-S	☑	Hall-Semi	2
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-018D						TS-S-2540B	☐	ww - ts	1
1108489-018E						OUTSIDE LAB	☐	Paragon	
1108489-018F						OUTSIDE LAB	☐	IGES	
1108489-019A	FB-2				Aqueous	8260-W-PPM	☑	voc	3
1108489-020A	TB-2					8260-W-PPM	☑	voc	
1108489-021A	BD-2	8/24/2011 1530h				3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-021B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-021C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-021D						8260-W	☑	VOCFridge	3
1108489-022A	BD-2 - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-022B						8260-S	☑	VOCFridge	
1108489-022C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-022D						TS-S-2540B	☐	ww - ts	1
1108489-022E						OUTSIDE LAB	☐	Paragon	
1108489-022F						OUTSIDE LAB	☐	IGES	
1108489-023A	BD-2 - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-023B						8260-S	☑	VOCFridge	
1108489-023C						3546-SVOA-PR	☐	Hall-Semi	2

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-023C	BD-2 - Bank	8/24/2011 1530h	8/24/2011 1745h	9/7/2011	Soil	8270-S	☑	Hall-Semi	2
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-023D						TS-S-2540B	☐	ww - ts	1
1108489-023E						OUTSIDE LAB	☐	Paragon	
1108489-023F						OUTSIDE LAB	☐	IGES	
1108489-024A	EB-2	8/24/2011 0905h			Aqueous	3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-024B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-024C						3510-SVOA-PR	☐	Walkin-Semi	2
						8270-W-SIM	☑	Walkin-Semi	
1108489-024D						8260-W	☑	VOCFridge	3
1108489-025A	Mill Cr. Below 2300 E.	8/24/2011 1025h				3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-025B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-025C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-025D						8260-W	☑	VOCFridge	3
1108489-026A	Mill Cr. Below 2300 E. - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-026B						8260-S	☑	VOCFridge	
1108489-026C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-026D						TS-S-2540B	☐	ww - ts	1
1108489-026E						OUTSIDE LAB	☐	Paragon	
1108489-026F						OUTSIDE LAB	☐	IGES	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-027A	Mill Cr. Below 2300 E. - Bank	8/24/2011 1025h	8/24/2011 1745h	9/7/2011	Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-027B						8260-S	☑	VOCFridge	
1108489-027C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-027D						TS-S-2540B	☐	ww - ts	1
1108489-027E						OUTSIDE LAB	☐	Paragon	
1108489-027F						OUTSIDE LAB	☐	IGES	
1108489-028A	Mill Cr. Above Country Gage	8/24/2011 1115h			Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-028B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-028C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-028D						8260-W	☑	VOCFridge	3
1108489-029A	Mill Cr. Above Country Gage - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-029B						8260-S	☑	VOCFridge	
1108489-029C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-029D						TS-S-2540B	☐	ww - ts	1
1108489-029E						OUTSIDE LAB	☐	Paragon	
1108489-029F						OUTSIDE LAB	☐	IGES	
1108489-030A	Mill Cr. Above Country Gage - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-030A	Mill Cr. Above Country Gage - Bank	8/24/2011 1115h	8/24/2011 1745h	9/7/2011	Soil	8015-S-ORO	☑	Hall-TPH	1
						8015-S-TPH	☑	Hall-TPH	
1108489-030B						8260-S	☑	VOCFridge	
1108489-030C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-030D						TS-S-2540B	☐	ww - ts	1
1108489-030E						OUTSIDE LAB	☐	Paragon	
1108489-030F						OUTSIDE LAB	☐	IGES	
1108489-031A	City Cr. @ Lower Natural Channel	8/24/2011 1215h			Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-031B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-031C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-031D						8260-W	☑	VOCFridge	3
1108489-032A	City Cr. @ Lower Natural Channel - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-032B						8260-S	☑	VOCFridge	
1108489-032C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-032D						TS-S-2540B	☐	ww - ts	1
1108489-032E						OUTSIDE LAB	☐	Paragon	
1108489-032F						OUTSIDE LAB	☐	IGES	
1108489-033A	City Cr. @ Lower Natural Channel - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: 1108489

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-033B	City Cr. @ Lower Natural Channel - Bank	8/24/2011 1215h	8/24/2011 1745h	9/7/2011	Soil	8260-S	☑	VOCFridge	1
1108489-033C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-033D						TS-S-2540B	☐	ww - ts	1
1108489-033E						OUTSIDE LAB	☐	Paragon	
1108489-033F						OUTSIDE LAB	☐	IGES	
1108489-034A	City Cr. @ N. Cyn. Footbridge	8/24/2011 1300h			Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-034B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-034C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-034D						8260-W	☑	VOCFridge	3
1108489-035A	City Cr. @ N. Cyn. Footbridge - Bed				Soil	3546-ORO-PR	☐	Hall-TPH	1
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-035B						8260-S	☑	VOCFridge	
1108489-035C						3546-SVOA-PR	☐	Hall-Semi	2
						8270-S	☑	Hall-Semi	
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-035D						TS-S-2540B	☐	ww - ts	1
1108489-035E						OUTSIDE LAB	☐	Paragon	
1108489-035F						OUTSIDE LAB	☐	IGES	
1108489-036A	City Cr. @ N. Cyn. Footbridge - Bank					3546-ORO-PR	☐	Hall-TPH	
						3546-TPH-PR	☐	Hall-TPH	
						8015-S-ORO	☑	Hall-TPH	
						8015-S-TPH	☑	Hall-TPH	
1108489-036B						8260-S	☑	VOCFridge	
1108489-036C						3546-SVOA-PR	☐	Hall-Semi	2

WORK ORDER Summary

Client: EarthFax Engineering

Work Order: **1108489**

 8/24/2011

Sample ID	Client Sample ID	Collected Date	Received Date	Date Due	Matrix	Test Code	Sel	Storage	
1108489-036C	City Cr. @ N. Cyn. Footbridge - Bank	8/24/2011 1300h	8/24/2011 1745h	9/7/2011	Soil	8270-S	☑	Hall-Semi	2
						8270-S-SIM	☑	Hall-Semi	
						PMOIST	☐	Hall-Semi	
1108489-036D						TS-S-2540B	☐	ww - ts	1
1108489-036E						OUTSIDE LAB	☐	Paragon	
1108489-036F						OUTSIDE LAB	☐	IGES	
1108489-037A	Jordan River Above 800 So.	8/24/2011 1645h			Aqueous	3510-TPH-PR	☐	walkin-dro	3
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-037B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-037C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-037D						8260-W	☑	VOCFridge	3
1108489-038A	Jordan River Above 1700 So.	8/24/2011 1720h				3510-TPH-PR	☐	walkin-dro	
						8015-W-TPH(1L)	☑	walkin-dro	
1108489-038B						3510-ORO-PR	☐	walkin-oro	
						8015-W-ORO(1L)	☐	walkin-oro	
1108489-038C						3510-SVOA-PR	☐	Walkin-Semi	6
						8270-W-SIM	☑	Walkin-Semi	
1108489-038D						8260-W	☑	VOCFridge	3

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Project Number/P.O.# 1300-02
Sampler Name PB White / TA Jimenez

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CHAIN OF CUSTODY

Lab Sample Set # 1108489
Page 1 of 4

Turn Around Time (Circle One)
1 day 2 day 3 day 4 day 5 day (Standard)

	Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TPH-DRO	TPH-ORO	BTEX	PAHs	TOC	Grain Size	Total Solids	Moisture	SVOAs w/TICs	VOAs w/TICs	COMMENTS
1	Mill Cr below 700 E	8/24/11 07:45	W	15	✓	✓	✓	✓					✓	✓	
2*	Mill Cr below 700 E - Bed	8/24/11 07:45	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
3*	Mill Cr below 700 E - Bank	8/24/11 07:45	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
4	FB-1	8/24/11 07:45	W	3	✓	✓	✓	✓							
5	BD-1	8/24/11 08:15	W	15	✓	✓	✓	✓					✓	✓	
6*	BD-1 - Bed *per bottle	8/24/11 08:15	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7*	BD-1 - Bank *per bottle	8/24/11 08:15	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
8	EB-1	8/24/11 09:05	W	7	✓	✓	✓	✓	NA	NA	NA	NA	✓	✓	
9	TB-1	8/24/11 09:10	W	3			✓								
10	Mill Cr below Highland Drive	8/24/11 09:30	W	15	✓	✓	✓	✓					✓	✓	
11*	Mill Cr below Highland Drive - Bed	8/24/11 09:30	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
12*	Mill Cr below Highland Drive - Bank	8/24/11 09:30	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

QC LEVEL
1 2 2+
3 3+ 4

Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME Rich White	Time 17:45	PRINT NAME Denise Bruun	Time 17:45
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:
TPH-DRO & TPH-ORO (8015D GC/FID ext. range)
BTEX (8260C GC/MS/ to MDL)
PAHs (8270D GC/MS/SIM)
TOC (WALKLEY BLACK)
GRAIN SIZE (ASTM D422)
TOTAL SOLIDS & MOISTURE (SM 2540B)
SVOAs & VOAs (TENTATIVELY IDENTIFIED COMPOUNDS)

† * Composit samples for VOAs in lab

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered
Notes:
2 Ambient or Chilled
Notes: ON ICE
3 Temperature 6.8°
4 Received Broken/Leaking (Improperly Sealed) Y (N)
Notes:
5 Properly Preserved Y N
Checked at Bench Y N
Notes:
6 Received Within Holding Times Y N
Notes:

COC Tape Was:
1 Present on Outer Package Y (N) NA
2 Unbroken on Outer Package Y N (NA)
3 Present on Sample Y (N) NA
4 Unbroken on Sample Y N (NA)

Discrepancies Between Sample Labels and COC Record? Y (N)
Notes:

Client EARTH FAX ENGINEERING

Address 7324 S UNION PARK AVE STE 100

MIDVALE (City) UT (State) 84047 (Zip)

Phone (801) 561-1555 Fax (801) 561-1861

Contact GALEN WILLIAMS

E-mail gwilliams@earthfax.com

Project Name RED BUTTE

Project Number/P.O.# 1300-02

Sampler Name RB White / TA Jimenez

AMERICAN WEST ANALYTICAL LABORATORIES
463 West 3600 South
Salt Lake City, Utah 84115
(801) 263-8686
(888) 263-8686
Fax (801) 263-8687
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CHAIN OF CUSTODY

Lab Sample Set # 1108489

Page 2 of 4

Turn Around Time (Circle One)

1 day 2 day 3 day 4 day 5 day (Standard)

	Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TPH-DRO	TPH-ORO	BTEX	PAHs	TOC	Grain Size	Total Solids	Moisture	SVOAs w/ TICs	VOAs w/ TICs	COMMENTS
13	City Cr below N Cyn Loop	8/24/11 13:50	W	15	✓	✓	✓	✓					✓	✓	
14*	City Cr below N Cyn Loop - Bed	8/24/11 13:50	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
15*	City Cr below N Cyn Loop - Bank	8/24/11 13:50	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
16	City Cr Near Cyn Entrance Gate	8/24/11 15:10	W	15	✓	✓	✓	✓					✓	✓	
17*	City Cr Near Cyn Entrance Gate - Bed	8/24/11 15:10	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
18*	City Cr. Near Cyn Entrance Gate - Bank	8/24/11 15:10	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
19	FB-2 *per bottle	8/24/11 15:10	W	3			✓								
20	TB-2	8/24/11 15:10	W	3			✓								
21	BD-2	8/24/11 15:30	W	15	✓	✓	✓	✓					✓	✓	
22*	BD-2 - Bed x per bottle	8/24/11 15:30	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
23*	BD-2 - Bank	8/24/11 15:30	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
24	EB-2	8/24/11 16:00	W	7	✓	✓	✓	✓					✓	✓	

QC LEVEL: 1 2 2+ 3 3+ 4

TESTS REQUIRED

Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME: Rich White	Time: 17:45	PRINT NAME: Denise Brown	Time: 17:45
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:

TPH-DRO & TPH-ORO (8015D GC/FID ext range)
BTEX (8260C GC/MS/to MDL)
PAHs (8270D GC/MS/SIM)
TOC (WALKLEY BLACK)
GRAIN SIZE (ASTM D422)
TOTAL SOLIDS & MOISTURE (SM 2540B)
SVOAs & VOAs (TENTATIVELY IDENTIFIED COMPOUNDS)

*Composite sample for VOAs in Db

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered
Notes:
2 Ambient or Chilled
Notes: on ice
3 Temperature 6.8°
4 Received Broken/Leaking (Improperly Sealed) Y (N)
Notes:
5 Properly Preserved Y N
Checked at Bench Y N
Notes:
6 Received Within Holding Times Y N
Notes:

COC Tape Was:
1 Present on Outer Package Y (N) NA
2 Unbroken on Outer Package Y N (NA)
3 Present on Sample Y (N) NA
4 Unbroken on Sample Y N (NA)

Discrepancies Between Sample Labels and COC Record? Y (N)
Notes:

Client EARTH FAX ENGINEERING

Address 7324 S UNION PARK AVE STE 100

MIDVALE (City) UT (State) 84047 (Zip)

Phone (801) 561-1555 Fax (801) 561-1861

Contact GALEN WILLIAMS

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Project Number/P.O.# 1300-02

Sampler Name RB White / TA Jimenez

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CHAIN OF CUSTODY

Lab Sample Set # 1105489

Page 3 of 4

Turn Around Time (Circle One)

1 day 2 day 3 day 4 day 5 day (Standard)

	Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TPH-DRO	TPH-ORO	BTEX	PAHs	TOC	Grain Size	Total Solids	Moisture	SVOAs w/ TICs	VOAs w/ TICs	COMMENTS
25	Mill Cr below 2300 E	8/24/11 10:25	W	15	✓	✓	✓	✓					✓	✓	
26*	Mill Cr below 2300 E - Bed	8/24/11 10:25	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
27*	Mill Cr below 2300E - Bank	8/24/11 10:25	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
28	Mill Cr above County Gage	8/24/11 11:15	W	15	✓	✓	✓	✓					✓	✓	
29*	Mill Cr above County Gage - Bed	8/24/11 11:15	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
30*	Mill Cr above County Gage - Bank	8/24/11 11:25	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
31	City Cr @ lower natural channel	8/24/11 12:15	W	15	✓	✓	✓	✓					✓	✓	
32*	City Cr @ lower natural channel - Bed	8/24/11 12:15	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
33*	City Cr @ lower natural channel - Bank	8/24/11 12:15	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
34	City Cr @ N Cyn Footbridge	8/24/11 13:00	W	15	✓	✓	✓	✓					✓	✓	
35*	City Cr @ N Cyn Footbridge - Bed	8/24/11 13:00	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
36*	City Cr @ N Cyn Footbridge - Bank	8/24/11 13:00	S	7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

QC LEVEL: 1 2 2+ 3 3+ 4

Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME: Rich White	Time: 17:45	PRINT NAME: Denise Brunn	Time: 17:45
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:

TPH-DRO & TPH-ORO (8015D GC/FID ext range)
BTEX (8260C GC/MS/ to MDL)
PAHs (8270D GC/MS/SIM)
TOC (WALKLEY BLACK)
GRAIN SIZE (ASTM D422)
TOTAL SOLIDS & MOISTURE (SM 2540B)
SVOAs & VOAs (TENTATIVELY IDENTIFIED COMPOUNDS)

*Composit sample for VOAs in lab

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered
Notes:
2 Ambient or Chilled
Notes: ontice
3 Temperature 6.8°
4 Received Broken/Leaking (Improperly Sealed) Y N
Notes:
5 Properly Preserved Y N
Checked at Bench Y N
Notes:
6 Received Within Holding Times Y N
Notes:

COC Tape Was:
1 Present on Outer Package Y N NA
2 Unbroken on Outer Package Y N NA
3 Present on Sample Y N NA
4 Unbroken on Sample Y N NA

Discrepancies Between Sample Labels and COC Record? Y N
Notes:

Client EARTHFAX ENGINEERING
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MIDVALE (City) UT (State) 84047 (Zip)
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CHAIN OF CUSTODY

Lab Sample Set # 1108489
Page 3 4 of 4
DB 8/24/11

Turn Around Time (Circle One)
1 day 2 day 3 day 4 day 5 day Standard

	Sample ID	Date/Time Collected	Matrix	Number of Containers (Total)	TPH-DRO	TPH-ORO	BTEX	PAHs	TOC	Grain Size	Total Solids	Moisture	SVOAs w/TICs	VOAs w/TICs	COMMENTS
37	Jordan River above 800 S.	8/24/11 16:45	W	15	✓	✓	✓	✓					✓	✓	
38	Jordan River above 1700 S.	8/24/11 17:20	W	15	✓	✓	✓	✓					2	✓	

QC LEVEL: 1 2 2+ 3 3+ 4

Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME: Rich White	Time 17:45	PRINT NAME: Denise Braun	Time 17:45
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time
Relinquished By: Signature	Date	Received By: Signature	Date
PRINT NAME	Time	PRINT NAME	Time

Special Instructions:
TPH-DRO; TPH-ORO (8015D GC/FID ext range)
BTEX (8260C GC/MS/to MDL)
PAHs (8270D GC/MS/SIM)
TOC (WALKLEY BLACK)
GRAIN SIZE (ASTM D422)
TOTAL SOLIDS; MOISTURE (SM 2540B)
SVOAs; VOAs (TENTATIVELY IDENTIFIED COMPOUNDS)

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered
Notes:
2 Ambient or Chilled
Notes: ON ICE
3 Temperature 6.8°
4 Received Broken/Leaking (Improperly Sealed) Y N
Notes:
5 Properly Preserved Y N
Checked at Bench Y N
Notes:
6 Received Within Holding Times Y N
Notes:

COC Tape Was:
1 Present on Outer Package Y N NA
2 Unbroken on Outer Package Y N NA
3 Present on Sample Y N NA
4 Unbroken on Sample Y N NA

Discrepancies Between Sample Labels and COC Record? Y N
Notes: