ANALYTICAL REPORT

Prepared for:
NewFields Environmental Forensics Practice
100 Ledgewood Place, Suite 302
Rockland, MA 02370

Project:	Gowanus Canal
ETR:	0609032
Report Date:	October 02, 2006

Certifications and Accreditations
Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090
Army Corps of Engineers
Department of the Navy
Florida E87814

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375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Sample ID Cross Reference

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0609032**

Lab Sample ID	Client Sample ID
0609032-01	FS-RED HOOK-1
0609032-02	FS-RED HOOK-2
0609032-03	FS-RED HOOK-3
0609032-04	FS-RED HOOK-4
0609032-05	FS-HALLECK ST ROW-2
0609032-06	FS-HALLECK ST ROW-3
0609032-07	FS-COURT ST ROW-1

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Certificate Program Summary

Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Alpha Woods Hole Lab Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate No. : PH-0141 - *Wastewater* (General Chemistry: 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2, 365.2, 405.1, 413.1, COD HACH 8000; Metals: 200.7, 245.1; Organics: 608, 624, 625). *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9056, 9060; Metals: 6010, 6020, 7041, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate No. : E87814 - Secondary NELAP Accreditation for *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, SM2320B, 335.2, 365.2, 413.1, 420.1, SM2540G, COD HACH 8000; Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9060, 9065; Metals: 6010, 6020, 7041, 7060, 7421, 7470, 7471, 7740, 7841; Organics: 8081, 8082, 8260, 8270).

Louisiana Department of Environmental Quality Certificate No. : 03090 - Primary NELAP Accrediting Authority for *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 376.2, 405.1, 413.1, 420.1, SM2540G, COD HACH 8000; Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625). *Solid and Hazardous Waste* (General Chemistry:1010, 1311, 9010/9014, 9045, 9056, 9060; Metals: 6010, 6020, 7041, 7060, 7191, 7421, 7470, 7471, 7740, 7841; Organics: 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate No. : MA030 - *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 405.1, 413.1, 420.1, COD HACH 8000; Metals: 200.7, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624).

Massachusetts Department of Environmental Protection Certificate No. : M-MA030 - *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 405.1, 413.1, 420.1, COD HACH 8000; Metals: 200.7, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624).

New Hampshire Department of Environmental Services Certificate No. : 220604 - Secondary NELAP Accreditation for *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 376.2, 405.1, 413.1, 420.1, COD HACH 8000, SM2540G; Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625).

New Jersey Department of Environmental Protection Certificate No. : MA015 - *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 3060, 7196, 9010/9014, 9045, 9056, 9060; Metals: 3010, 3015, 3020, 3050, 3051, 6010, 6020, 7041, 7060, 7131, 7191, 7211, 7421, 7470, 7471, 7520, 7740, 7761, 7841; Organics: 3510, 3545, 5030, 5035, 3620, 3630, 3640, 3660, 8081, 8082, 8100, 8260, 8270).

New York Department of Health Certificate No. : 11627 - Secondary NELAP Accreditation for *Wastewater* (Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625). *Solid and Hazardous Waste* (Metals: 6010, 7041, 7060, 7470, 7471, 7740; Organics: 8081, 8082, 8260, 8270).

Rhode Island Department of Health Certificate No. : 00064 - Chemistry: *Organic and Inorganic in Surface Water, Wastewater/Sewage and Soil* (Method numbers not specified with certificate.)

U.S. Army Corps of Engineers - General Chemistry: 9010/9014, 9071/418.1, 9060; Organics: 8081, 8082, 8260, 8270, 8270-SIM; Metals: 6010, 6020, 7000.

Department of the Navy - General Chemistry: 9010/9014, 9060; Organics: 8081, 8082, 8015-mod, 8260, 8270, 8270-SIM; Metals: 6010, 6020.

CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0609032
Project: Gowanus Canal

All analyses were performed according to Alpha Woods Hole Lab quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report meet all applicable agency and/or NELAC standards, were performed within holding time, and with appropriate quality control measures, except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted. Tissue and sediment samples are not certifiable under the NELAC accreditation.

Alkylated Polynuclear Aromatic Hydrocarbons
Steranes and Triterpanes

Polynuclear aromatic hydrocarbons and Geochemical Biomarkers were analyzed following Alpha Woods Hole Lab *Analysis of Parent and Alkylated Polynuclear Aromatic Hydrocarbons and Selected Heterocyclic Compounds by Gas Chromatography/Mass Spectrometry with Selected Ion Monitoring (Revision 2.0, 06/28/02).* Due to their tarry nature, the soil samples were prepared as solids. They were weighed (approximately 0.5g) and soaked in methylene chloride overnight. The solvent extract was passed through a glass fiber filter with sodium sulfate and eluted to a 10mL volume. A pre-determined volume of the extract as determined by gravimetric weighing was spiked with PAH surrogate compounds. This portion was alumina cleaned (*Alumina Column Cleanup of Organic Extracts, Revision 0.0, 02/21/1999*) and concentrated to a 1mL final volume. Another aliquot was spiked with Biomarker surrogate compounds, silica fractionated for Biomarker analysis, and concentrated to a 1mL final volume. A post silica gravimetric weight was determined and the final effective volume was adjusted based on oil content. The total extract oil weight as determined by gravimetric weighing was used as the weight for these samples. Qualitative identifications are confirmed by analyzing standards under the same conditions used for samples, comparing mass spectra, GC retention times, and patterns generated from reference oils. Quantification is based on response factors derived from a multi-level initial calibration using internal standard techniques. Alkyl homologues are quantified using the response factor of the parent PAH compound. Target triterpane biomarker concentrations are quantified using the response factor of 17α(H),21β(H)-hopane and the steranes are quantified using the response factor of 5β(H)-cholane.

1. Method blank SS090806B10 contained compounds below the reporting limit. Associated field sample results were flagged with "B" qualifiers if the concentration of the analyte in the sample is less than 5X the concentration in the blank.

2. All samples required dilutions due to over-calibration concentration of target compounds. The diluted analyses were only quantified for the compounds that were out of range in the un-diluted analysis.

3. The North Slope Crude reference oil (SO053106AWS01) analyzed after the initial calibration on 05/25/06 had Acenaphthene above the 135% upper limit. Please see the enclosed Form III Spike Recovery Summary for details.

4. The continuing calibration verification standard analyzed on 9/13/06, C4091202, has Indeno(1,2,3-cd)pyrene and Dibenz(a,h)anthracene above the 25%D QC limit. These values are greater than 25% but less than 35% and represent less than 10% of the compounds, therefore analysis proceeded.

Total Petroleum Hydrocarbons by GC/FID

Samples for Total Petroleum Hydrocarbons were analyzed following the procedures in Alpha Woods Hole Lab *Total Petroleum Hydrocarbons by Gas Chromatography/Flame Ionization Detector (Revision 1.1)* Method 8100/8015mod and SOP *Addendum for Saturated Hydrocarbons, Rev. 1.0, 2004.* Samples were prepared as stated above for the PAH analysis. A portion of the final extract was aliquoted for GC/FID analysis. Extracts are analyzed by gas chromatography with flame ionization detection (FID). A multi-level initial calibration over the n-alkane range from C9-C40 was evaluated and quantified using internal standard techniques prior to sample analysis.

1. All quality control parameters met the specified criteria.

The enclosed results of analyses are representative of the samples as received by the laboratory. Alpha Woods Hole Lab makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Alpha Woods Hole Lab. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: Normand Laurianno Jr. Title: Forensics Manager Date: 10/02/06

Normand Laurianno Jr. **Forensics Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
09/08/2006 0609032ST - OP NEWFIE

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount	Final Volume	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume	Vialed By	Vialed Date	Cell Number
0609032-01	D	3580A	DMP	9/8/2006	9/11/2006		0.1722	20	False	DMP			0.15	DMP	9/11/2006	
0609032-01	SAM	3580A	DMP	9/8/2006	9/11/2006		0.1206	20	False				0.15	DMP	9/11/2006	
0609032-02	SAM	3580A	DMP	9/8/2006	9/11/2006		0.1912	22.22	False				0.15	DMP	9/11/2006	
0609032-03	SAM	3580A	DMP	9/8/2006	9/11/2006		0.136	16.67	False				0.15	DMP	9/11/2006	
0609032-04	SAM	3580A	DMP	9/8/2006	9/11/2006		0.1404	16.67	False				0.15	DMP	9/11/2006	
0609032-05	SAM	3580A	DMP	9/8/2006	9/11/2006		0.11	13.33	False				0.15	DMP	9/11/2006	
0609032-06	SAM	3580A	DMP	9/8/2006	9/11/2006		0.165	20	False				0.15	DMP	9/11/2006	
0609032-07	SAM	3580A	DMP	9/8/2006	9/11/2006		0.1468	18.18	False				0.15	DMP	9/11/2006	
SS090806B10	B	3580A	DMP	9/8/2006	9/11/2006		0.1	1	False				0.15	DMP	9/11/2006	
SS090806LCS05	LCS	3580A	DMP	9/8/2006	9/11/2006		0.1	1	False				0.15	DMP	9/11/2006	
SS090806LCSD05	LCSD	3580A	DMP	9/8/2006	9/11/2006		0.1	1	False				0.15	DMP	9/11/2006	

MLS 9/29/06

Alpha Woods Hole Lab
Batch Prep Report
09/08/2006 0609032ST - OP NEWFIE

Lab ID	Notes
0609032-01	1st Prep
0609032-01	1st Prep
0609032-02	1st Prep
0609032-03	1st Prep
0609032-04	1st Prep
0609032-05	1st Prep
0609032-06	1st Prep
0609032-07	1st Prep
SS090806B10	1st Prep
SS090806LCS05	1st Prep
SS090806LCSD05	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
09/08/2006

Lab ID	QC Type	0609032ST - Sample
0609032-01	D	0.5003
0609032-01	SAM	0.4963
0609032-02	SAM	0.5506
0609032-03	SAM	0.5006
0609032-04	SAM	0.5388
0609032-05	SAM	0.5848
0609032-06	SAM	0.5322
0609032-07	SAM	0.5102
SS090806B10	B	0.5
SS090806LCS05LCS	OP NEWFIE	0.5
SS090806LCS05LCS	OP SHC	0.5
SS090806LCS05LCS	OP Steranes/Triterpanes	0.5
SS090806LCSD05LCSD	OP NEWFIE	0.5
SS090806LCSD05LCSD	OP SHC	0.5
SS090806LCSD05LCSD	OP Steranes/Triterpanes	0.5

Methylene Chloride: C12E56 (tank) - C21H07 - Acetone: C18E02 -
Hexane: B52E53 - Copper: B48607 - Sulfuric Acid: 3104070 -
Glass Wool: 4303309989 - Sodium Sulfate: B42602 - Pentane: B29E29 -
Hydrochloric Acid: 4105030 - Alumina 193 - Silica 06127MC

Alpha Woods Hole Lab
Batch Prep Spike Report

09/08/2006 0609032ST - OP NEWFIE Analyst: DMP Witness: DMP

Lab ID	QC Type	OP NEWFIE - surr	Vol OP NEWFIE - surr	Units OP NEWFIE - surr	OP NEWFIE - spk 1	Vol OP NEWFIE - spk 1	Units OP NEWFIE - spk 1	OP NEWFIE - spk 2	Vol OP NEWFIE - spk 2	Units OP NEWFIE - spk 2
0609032-01	D	WHAC75	100	µl						
0609032-01	SAM	WHAC75	100	µl						
0609032-02	SAM	WHAC75	100	µl						
0609032-03	SAM	WHAC75	100	µl						
0609032-04	SAM	WHAC75	100	µl						
0609032-05	SAM	WHAC75	100	µl						
0609032-06	SAM	WHAC75	100	µl						
0609032-07	SAM	WHAC75	100	µl						
SS090806B10	B	WHAC75	100	µl						
SS090806LCS05	LCS	WHAC75	100	µl	WHAD06	100	µl			
SS090806LCSD05	LCSD	WHAC75	100	µl	WHAD06	100	µl			

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____

ID# WHAC75

Conc. 10ug/ml 500ug/ml

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____

ID# WHAD06

Conc. 10ug/ml 500ug/ml

Alpha Woods Hole Lab
Batch Clean Up Report

09/08/2006 0609032ST - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0609032-01	D	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.5	0	0.15
0609032-01	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.5	0	0.15
0609032-02	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.45	0	0.15
0609032-03	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.6	0	0.15
0609032-04	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.6	0	0.15
0609032-05	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.75	0	0.15
0609032-06	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.5	0	0.15
0609032-07	SAM	3610	DMP	9/11/2006				DMP	9/11/2006	False	10	0.55	0	0.15
SS090806B10	B	3610	DMP	9/11/2006				DMP	9/11/2006	False	1	1	0	0.15
SS090806LCS05	LCS	3610	DMP	9/11/2006				DMP	9/11/2006	False	1	1	0	0.15
SS090806LCSD05	LCSD	3610	DMP	9/11/2006				DMP	9/11/2006	False	1	1	0	0.15

Alpha Woods Hole Lab
Batch Clean Up Report

09/08/2006 0609032ST - OP NEWFIE

Lab ID	Notes
0609032-01	
0609032-01	
0609032-02	
0609032-03	
0609032-04	
0609032-05	
0609032-06	
0609032-07	
SS090806B10	
SS090806LCS05	
SS090806LCSD05	

Pre-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 9/11/06

BATCH: 0609032

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.252	N/A	50.40	N/A	N/A	N/A	101%
0609032	1	D	10000	50	N/A	0.861	N/A	172.20	500	8.61	20.00	35%
0609032	1		10000	50	N/A	0.603	N/A	120.60	500	6.03	20.00	
0609032	2		10000	50	N/A	0.956	N/A	191.20	450	8.60	22.22	
0609032	3		10000	50	N/A	0.680	N/A	136.00	600	8.16	16.67	
0609032	4		10000	50	N/A	0.702	N/A	140.40	600	8.42	16.67	
0609032	5		10000	50	N/A	0.550	N/A	110.00	750	8.25	13.33	
0609032	6		10000	50	N/A	0.825	N/A	165.00	500	8.25	20.00	
0609032	7		10000	50	N/A	0.734	N/A	146.80	550	8.07	18.18	

9/12/06

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

Oil to Column = Total Extract Oil Weight (mg) / Dilution Factor
Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Column (ul)

TEMPLATE: GravimetricT.XLT
Duplicates should agree within +/- 10%.

Pre-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 9/11/06

BATCH: 0609032

Entered by: DMP
Verified by:

Batch #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.252	N/A		N/A	N/A	N/A	0%
0609032	1	D	10000	50	N/A	0.861	N/A					#VALUE!
0609032	1		10000	50	N/A	0.603	N/A					
0609032	2		10000	50	N/A	0.956	N/A					
0609032	3		10000	50	N/A	0.680	N/A					
0609032	4		10000	50	N/A	0.702	N/A					
0609032	5		10000	50	N/A	0.550	N/A					
0609032	6		10000	50	N/A	0.825	N/A					
0609032	7		10000	50	N/A	0.734	N/A					

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

Oil to Column = Total Extract Oil Weight (mg) / Dilution Factor
Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Column (ul)

TEMPLATE: GravimetricT.XLT
Duplicates should agree within +/- 10%.

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name:GOWANUS CANAL
ETR: 0609032

ALK-PAH/SHC

Lab ID	Extract Vol (uL)	Standard ID and Vol #	Vol IS Added (uL)	Pre-Injection Vol (uL)	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0609032-01D	900	WHAD19#2	100	1000	20.00	DMP	150	150	9/11/06
0609032-01	900	WHAD19#2	100	1000	20.00	DMP	150	150	9/11/06
0609032-02	900	WHAD19#2	100	1000	22.22	DMP	150	150	9/11/06
0609032-03	900	WHAD19#2	100	1000	16.67	DMP	150	150	9/11/06
0609032-04	900	WHAD19#2	100	1000	16.67	DMP	150	150	9/11/06
0609032-05	900	WHAD19#2	100	1000	13.33	DMP	150	150	9/11/06
0609032-06	900	WHAD19#2	100	1000	20.00	DMP	150	150	9/11/06
0609032-07	900	WHAD19#2	100	1000	18.18	DMP	150	150	9/11/06
SS090806B10	900	WHAD19#2	100	1000	1.00	DMP	150	150	9/11/06
SS090806LCS05	900	WHAD19#2	100	1000	1.00	DMP	150	150	9/11/06
SS090806LCSD05	900	WHAD19#2	100	1000	1.00	DMP	150	150	9/11/06

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 0609032 Client: Newfields Project: Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

Test Requested	
ALK-PAH	X
CHROMATOGRAM	
DENSITY	
HOMOLOG	
Pb	
SHC	X
TPH	
WHOLE OIL	
BIOMARKER	X
PHENOL	
OTHER	

Required Cleanups	
No Cleanup Required	
Copper	X
Conc. Sulfuric Acid	
GPC	
Silica Gel 923 Grade Glass Column	X
Alumina (Super I) Glass Column	X
Alumina (F20) Glass Column	

Sample Observations			
Normal Weight/Volume Extracted		Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target Analytes	
Lesser Amount Used - Strong Hydrocarbon Odor		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	

Other: Samples consist of solid tar. oily material prep. performed and let sit in DCM over night. DMP 9/1/06

Extraction Notes	
Emulsions During Shake	
Samples Extracted Outside Of Hold Time	
No Observations	X

Other:

Identify Matrix - Circle One

Soil/Sediment/Water/Sheen/NAPL /Solid/Tissue/Product/Oil/Net/Wipe

	Date	Initials
1st Extraction	9-8-06	DMP
2nd Extraction		
3rd Extraction		

DMP 9/11/06

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate Further	
Precipitate Formed During Concentration		No Observations	X

Other:

Batch Reviewed

Analyst: RPR

Date: 9/13/06

Batch Completed

Analyst: DMP

Date: 9/11/06

Forensic Dilution Sheet

Client Name:	NEWFIELDS						Instr # 4		
Project :	GOWANUS CANAL								
ETR # :	**0609032**								
Matrix :	SOIL								
Analysis Type :	GS/MS								
Relinquished By:	**MAL**			**Received By:**	MAL				
Date:	**9/13/06 10:43 am**			**Date:**	9/13/6				

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0609032-01	640	700	10	1000	0609032-01-RE	WHAD19 99UL	MAL 9/13/6	100	100
0609032-01D	650		10	1000	0609032-01D-RE	WHAD19 99UL		100	100
0609032-02	640		10	1000	0609032-02-RE	WHAD19 99UL		100	100
0609032-03	660		10	1000	0609032-03-RE	WHAD19 99UL		100	100
0609032-04	660		10	1000	0609032-04-RE	WHAD19 99UL		100	100
0609032-05	650		10	1000	0609032-05-RE	WHAD19 99UL		100	100
0609032-06	640		10	1000	0609032-06-RE	WHAD19 99UL		100	100
0609032-07	660		10	1000	0609032-07-RE	WHAD19 99UL		100	100

Dilution Calculations Validated by: MS
Date: 9/29/06

Alpha Woods Hole Lab
Batch Prep Report

09/08/2006 0609032ST - OP Steranes/Triterpanes

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount	Final Volume	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume	Vialed By	Vialed Date	Cell Number
0609032-01	D	3580A	DMP	9/8/2006	9/18/2006		0.1722	3.45					0.15	DMP	9/18/2006	
0609032-01	SAM	3580A	DMP	9/8/2006	9/18/2006		0.1206	2.38					0.15	DMP	9/18/2006	
0609032-02	SAM	3580A	DMP	9/8/2006	9/18/2006		0.1912	3.77					0.15	DMP	9/18/2006	
0609032-03	SAM	3580A	DMP	9/8/2006	9/18/2006		0.136	2.7					0.15	DMP	9/18/2006	
0609032-04	SAM	3580A	DMP	9/8/2006	9/18/2006		0.1404	2.78					0.15	DMP	9/18/2006	
0609032-05	SAM	3580A	DMP	9/8/2006	9/18/2006		0.11	2.17					0.15	DMP	9/18/2006	
0609032-06	SAM	3580A	DMP	9/8/2006	9/18/2006		0.165	3.28					0.15	DMP	9/18/2006	
0609032-07	SAM	3580A	DMP	9/8/2006	9/18/2006		0.1468	2.94					0.15	DMP	9/18/2006	
SS091806B03	B		DMP	9/18/2006	9/18/2006		0.1	1					0.15	DMP	9/18/2006	

DMS 9/29/06

Alpha Woods Hole Lab
Batch Prep Report
09/08/2006 0609032ST - OP Steranes/Triterpanes

Lab ID	Notes
0609032-01	1st Prep
0609032-01	1st Prep
0609032-02	1st Prep
0609032-03	1st Prep
0609032-04	1st Prep
0609032-05	1st Prep
0609032-06	1st Prep
0609032-07	1st Prep
SS091806B03	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
09/08/2006

Lab ID	QC Type	0609032ST - Sample
0609032-01	D	0.5003
0609032-01	SAM	0.4963
0609032-02	SAM	0.5506
0609032-03	SAM	0.5006
0609032-04	SAM	0.5388
0609032-05	SAM	0.5848
0609032-06	SAM	0.5322
0609032-07	SAM	0.5102
~~SS090806B10~~	~~B~~	~~0.5~~
SS090806LCS05LCS	OP NEWFIE	0.5
SS090806LCS05LCS	OP SHC	0.5
SS090806LCSD05LCSD	NEWFIE	0.5
~~SS090806LCSD05LCSD~~	~~SHC~~	~~0.5~~
SS091806B03	B	0.5

Amp 9/18/06

Methylene Chloride: C12E56 (tank) - C21H07 - Acetone: C18E02 -
Hexane: B52E53 - Copper: B48607 - Sulfuric Acid: 3104070 -
Glass Wool: 4303309989 - Sodium Sulfate: B42602 - Pentane: B29E29 -
Hydrochloric Acid: 4105030 - Alumina 193 - Silica 06127MC

Alpha Woods Hole Lab
Batch Prep Spike Report

09/08/2006 0609032ST - OP Steranes/Tri Analyst: DMP Witness: DMP

Lab ID	QC Type	OP Steranes/Tri - surr	Vol OP Steranes/Tri - surr	Units OP Steranes/Tri - surr	OP Steranes/Tri - spk 1	Vol OP Steranes/Tri - spk 1	Units OP Steranes/Tri - spk 1	OP Steranes/Tri - spk 2	Vol OP Steranes/Tri - spk 2	Units OP Steranes/Tri - spk 2
0609032-01	D	WHAD21	200	µl						
0609032-01	SAM	WHAD21	200	µl						
0609032-02	SAM	WHAD21	200	µl						
0609032-03	SAM	WHAD21	200	µl						
0609032-04	SAM	WHAD21	200	µl						
0609032-05	SAM	WHAD21	200	µl						
0609032-06	SAM	WHAD21	200	µl						
0609032-07	SAM	WHAD21	200	µl						
SS090806B10	B	-99	-99	-99	-99	-99	-99	-99	-99	-99
SS090806LCS05	LCS	-99	-99	-99	-99	-99	-99	-99	-99	-99
SS090806LCSD05	LCSD	-99	-99	-99	-99	-99	-99	-99	-99	-99
SS091806B03	B	WHAD21	200	µl						
SS092706AWS02	AWS	WHAD21	200	µl						

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAD21

Conc. 10ug/ml

Alpha Woods Hole Lab
Batch Clean Up Report

09/08/2006 0609032ST - OP Steranes/Triterpanes

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0609032-01	D	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	2.9	1	0.15
0609032-01	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	4.2	1	0.15
0609032-02	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	2.65	1	0.15
0609032-03	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	3.7	1	0.15
0609032-04	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	3.6	1	0.15
0609032-05	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	4.6	1	0.15
0609032-06	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	3.05	1	0.15
0609032-07	SAM	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	3.4	1	0.15
SS091806B03	B	3630	DMP	9/18/2006				DMP	9/18/2006	True	10	1	1	0.15

Alpha Woods Hole Lab
Batch Clean Up Report

09/08/2006 0609032ST - OP Steranes/Triterpanes

Lab ID	Notes
0609032-01	
0609032-01	
0609032-02	
0609032-03	
0609032-04	
0609032-05	
0609032-06	
0609032-07	
SS091806B03	

Pre-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 9/18/2006

BATCH: 0609032

Entered by: DMP
Verified by: DMP

		LCS	10000	50	N/A	0.252	N/A	50.40	N/A	N/A	N/A	101%
0609032	1	D	10000	50	N/A	0.861	N/A	172.20	2900	49.91	3.45	35%
0609032	1		10000	50	N/A	0.603	N/A	120.60	4200	50.67	2.38	
0609032	2		10000	50	N/A	0.956	N/A	191.20	2650	50.72	3.77	
0609032	3		10000	50	N/A	0.680	N/A	136.00	3700	50.37	2.70	
0609032	4		10000	50	N/A	0.702	N/A	140.40	3600	50.50	2.78	
0609032	5		10000	50	N/A	0.550	N/A	110.00	4600	50.69	2.17	
0609032	6		10000	50	N/A	0.825	N/A	165.00	3050	50.30	3.28	
0609032	7		10000	50	N/A	0.734	N/A	146.80	3400	49.93	2.94	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

Oil to Column = Total Extract Oil Weight (mg) / Dilution Factor
Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Column (ul)

TEMPLATE: GravimetricT.XLT
Duplicates should agree within +/- 10%.

Post-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 9/18/06

BATCH: 0609032

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A	49.60	N/A	N/A	N/A	99%
0609032	1	D	1000	50	N/A	0.005	N/A	0.10	950	0.10	1.05	22%
0609032	1		1000	50	N/A	0.004	N/A	0.08	950	0.08	1.05	
0609032	2		1000	50	N/A	0.007	N/A	0.14	950	0.13	1.05	
0609032	3		1000	50	N/A	0.007	N/A	0.14	950	0.13	1.05	
0609032	4		1000	50	N/A	0.008	N/A	0.16	950	0.15	1.05	
0609032	5		1000	50	N/A	0.190	N/A	3.80	950	3.62	1.05	
0609032	6		1000	50	N/A	0.096	N/A	1.92	950	1.83	1.05	
0609032	7		1000	50	N/A	0.041	N/A	0.82	950	0.78	1.05	

KVB 9/29/06

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

Oil to Column = Total Extract Oil Weight (mg) / Dilution Factor
Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Column (ul)

TEMPLATE: GravimetricT.XLT
Duplicates should agree within +/- 10%.

Post-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 9-18-06

BATCH: 0609032

Entered by: DMP
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A		N/A	N/A	N/A	0%
0609032	1	D	1000	50	N/A	0.005	N/A					#VALUE!
0609032	1		1000	50	N/A	0.004	N/A					
0609032	2		1000	50	N/A	0.007	N/A					
0609032	3		1000	50	N/A	0.007	N/A					
0609032	4		1000	50	N/A	0.008	N/A					
0609032	5		1000	50	N/A	0.190	N/A					
0609032	6		1000	50	N/A	0.096	N/A					
0609032	7		1000	50	N/A	0.041	N/A					

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

Oil to Column = Total Extract Oil Weight (mg) / Dilution Factor
Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Column (ul)

TEMPLATE: GravimetricT.XLT
Duplicates should agree within +/- 10%.

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name:GOWANUS CANAL
ETR: 0609032

Biomarker

Lab ID	Extract Vol Adjust	Standard Dend Vol	Vol IS Added (ug)	Pre-Injection Vol (uL)	Final Volume Equivalent	Spiked By	Aliquot Removed (uL)	Aliquot Remaining (uL)	Date
0609032-01D	900	WHAD19#2	100	1000	3.45	DMP	150	N/A	9/18/2006
0609032-01	900	WHAD19#2	100	1000	2.38	DMP	150	N/A	9/18/2006
0609032-02	900	WHAD19#2	100	1000	3.77	DMP	150	N/A	9/18/2006
0609032-03	900	WHAD19#2	100	1000	2.70	DMP	150	N/A	9/18/2006
0609032-04	900	WHAD19#2	100	1000	2.78	DMP	150	N/A	9/18/2006
0609032-05	900	WHAD19#2	100	1000	2.17	DMP	150	N/A	9/18/2006
0609032-06	900	WHAD19#2	100	1000	3.28	DMP	150	N/A	9/18/2006
0609032-07	900	WHAD19#2	100	1000	2.94	DMP	150	N/A	9/18/2006
SS091806B03	900	WHAD19#2	100	1000	1.00	DMP	150	N/A	9/18/2006

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 0609032 Client: Newfields Project: Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

Test Requested	
ALK-PAH	
CHROMATOGRAM	
DENSITY	
HOMOLOG	
Pb	
SHC	
TPH	
WHOLE OIL	
BIOMARKER	X
PHENOL	
OTHER	

Required Cleanups	
No Cleanup Required	
Copper	X
Conc. Sulfuric Acid	
GPC	
Silica Gel 923 Grade Glass Column	X
Alumina (Super I) Glass Column	
Alumina (F20) Glass Column	

Sample Observations			
Normal Weight/Volume Extracted		Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target Analytes	
Lesser Amount Used - Strong Hydrocarbon Odor		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	

Other:
Samples split from PAH/SHC archive and spiked w/ Low Biomarker surrogate (WHAD21-200ul, conc. 10ug/ml). DMP 9/18/06

Extraction Notes	
Emulsions During Shake	
Samples Extracted Outside Of Hold Time	
No Observations	

Other: N/A

Identify Matrix - Circle One
Soil/Sediment/Water/Sheen/NAPL/Solid/Tissue/Product/Oil/Net/Wipe

	Date	Initials
1st Extraction		
2nd Extraction		
3rd Extraction		

DMP 9/19/06

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate Further	
Precipitate Formed During Concentration		No Observations	

Other: N/A

Batch Reviewed
Analyst: RAR
Date: 9/20/06

Batch Completed
Analyst: DMP
Date: 9/18/06

Forensic Dilution Sheet

Client Name:	NEWFIELDS						Instr # 4		
Project :	GOWANUS CANAL								
ETR # :	0609032								
Matrix :	SOIL								
Analysis Type :	GS/MS BIOMARKERS								
Relinquished By:	MAL			**Received By:**	DMP				
Date:	9/25/06 3:35 pm			**Date:**	9-25-06				

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0609032-05			500	1000	0609032-05	WHAD19 50UL	DMP 9/25/06	2	2

Dilution Calculations Validated by: MS 9/29/06

Date:

Alkylated Polynuclear Aromatic Hydrocarbons, Steranes and Triterpanes by Selective Ion Monitoring

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1206	20	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**16000000**	E	Fluoranthene	**31000000**	E
C1-Naphthalenes	**4300000**	E	Pyrene	**28000000**	E
C2-Naphthalenes	**2600000**		C1-Fluoranthenes/Pyrenes	**9700000**	E
C3-Naphthalenes	**1300000**		C2-Fluoranthenes/Pyrenes	**2700000**	
C4-Naphthalenes	**480000**		C3-Fluoranthenes/Pyrenes	**1200000**	
Biphenyl	**1100000**		C4-Fluoranthenes/Pyrenes	**700000**	
Dibenzofuran	**6200000**	E	Naphthobenzothiophenes	**1800000**	
Acenaphthylene	**530000**		C1-Naphthobenzothiophenes	**630000**	
Acenaphthene	**7600000**	E	C2-Naphthobenzothiophenes	**260000**	
Fluorene	**7000000**	E	C3-Naphthobenzothiophenes	**170000**	
C1-Fluorenes	**1300000**		C4-Naphthobenzothiophenes	**72000**	
C2-Fluorenes	**800000**		Benz[a]anthracene	**12000000**	E
C3-Fluorenes	**600000**		Chrysene/Triphenylene	**10000000**	E
Anthracene	**13000000**	E	C1-Chrysenes	**3400000**	
Phenanthrene	**39000000**	E	C2-Chrysenes	**1300000**	
C1-Phenanthrenes/Anthracenes	**9300000**	E	C3-Chrysenes	**920000**	
C2-Phenanthrenes/Anthracenes	**3300000**		C4-Chrysenes	**360000**	
C3-Phenanthrenes/Anthracenes	**1100000**		Benzo[b]fluoranthene	**9600000**	E
C4-Phenanthrenes/Anthracenes	**310000**		Benzo[k]fluoranthene	**6200000**	E
Retene	**42000**		Benzo[a]fluoranthene	**1800000**	E
Dibenzothiophene	**2700000**	E	Benzo[e]pyrene	**6000000**	E
C1-Dibenzothiophenes	**750000**		Benzo[a]pyrene	**11000000**	E
C2-Dibenzothiophenes	**350000**		Perylene	**2800000**	E
C3-Dibenzothiophenes	**180000**		Indeno[1,2,3-cd]pyrene	**6900000**	E
C4-Dibenzothiophenes	**52000**		Dibenz[a,h]anthracene	**2200000**	E
Benzo(b)fluorene	**3100000**	E	Benzo[g,h,i]perylene	**6000000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:08

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.121	20	1	AC

Parameter	Result
Carbazole	**5700000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

09/27/06 11:11

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.121	2.38	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	85	U	30,31-Bishomohopane-22S	**880**	
C24 Tricyclic Terpane	85	U	30,31-Bishomohopane-22R	**660**	
C25 Tricyclic Terpane	85	U	30,31-Trishomohopane-22S	85	U
C24 Tetracyclic Terpane	**530**		30,31-Trishomohopane-22R	85	U
C26 Tricyclic Terpane-22S	85	U	Tetrakishomohopane-22S	85	U
C26 Tricyclic Terpane-22R	85	U	Tetrakishomohopane-22R	85	U
C28 Tricyclic Terpane-22S	85	U	Pentakishomohopane-22S	85	U
C28 Tricyclic Terpane-22R	85	U	Pentakishomohopane-22R	85	U
C29 Tricyclic Terpane-22S	85	U	13b(H),17a(H)-20S-Diacholestane	30	U
C29 Tricyclic Terpane-22R	85	U	13b(H),17a(H)-20R-Diacholestane	30	U
18a-22,29,30-Trisnorneohopane-TS	85	U	13b,17a-20S-Methyldiacholestane	30	U
C30 Tricyclic Terpane-22S	85	U	14a(H),17a(H)-20S-Cholestane	30	U
C30 Tricyclic Terpane-22R	85	U	14a(H),17a(H)-20R-Cholestane	**380**	
17a(H)-22,29,30-Trisnorhopane-TM	**3200**		13b,17a-20R-Ethyldiacholestane	30	U
17a/b,21b/a 28,30-Bisnorhopane	85	U	13a,17b-20S-Ethyldiacholestane	30	U
17a(H),21b(H)-25-Norhopane	85	U	14a,17a-20S-Methylcholestane	30	U
30-Norhopane	**3900**		14a,17a-20R-Methylcholestane	**180**	J
18a(H)-30-Norneohopane-C29Ts	85	U	14a(H),17a(H)-20S-Ethylcholestane	**200**	
17a(H)-Diahopane	85	U	14a(H),17a(H)-20R-Ethylcholestane	**270**	
30-Normoretane	**780**		14b(H),17b(H)-20R-Cholestane	30	U
18a(H)&18b(H)-Oleananes	85	U	14b(H),17b(H)-20S-Cholestane	30	U
Hopane	**4900**		14b,17b-20R-Methylcholestane	30	U
Moretane	**1200**		14b,17b-20S-Methylcholestane	30	U
30-Homohopane-22S	**1500**		14b(H),17b(H)-20R-Ethylcholestane	**220**	
30-Homohopane-22R	**1200**		14b(H),17b(H)-20S-Ethylcholestane	**240**	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	80	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46342.D
Acq On : 13 Sep 2006 2:53 am
Operator : AC
Sample : 0609032-01
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

MAL 1/17/7

Quant Time: Jan 17 10:47:58 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	50141m	500.00 ng/mL	0.00
72) Chrysene-d12	43.24	240	80885m	500.00 ng/mL	0.05

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	101968m	902.18 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 90.22%		
58) Pyrene-d10	38.32	212	211968m	1024.36 ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 102.44%		
81) Benzo[b]fluoranthene-d12	47.12	264	157118	928.52 ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 92.85%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.92	128	20654395m	94061.32 ng/mL E	
10) C1-Naphthalenes	22.58	142	5684171m	25886.05 ng/mL E	
11) C2-Naphthalenes	25.41	156	3437699m	15655.48 ng/mL	
12) C3-Naphthalenes	27.74	170	1738743m	7918.34 ng/mL	
13) C4-Naphthalenes	31.76	184	631160m	2874.34 ng/mL	
15) 2-Methylnaphthalene	22.58	142	3668080m	24880.22 ng/mL E	
16) 1-Methylnaphthalene	23.00	142	1981614m	14291.96 ng/mL E	
22) Biphenyl	24.45	154	1219944m	6558.57 ng/mL	
23) 2,6-Dimethylnaphthalene	25.07	156	804718	6276.71 ng/mL#	100
24) Dibenzofuran	27.55	168	7136014	37564.36 ng/mL E	97
25) Acenaphthylene	26.15	152	654638m	3189.97 ng/mL	
26) Acenaphthene	26.91	153	6114780m	45884.48 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.45	170	158442m	1403.70 ng/mL	
28) Fluorene	28.93	166	6657482m	42163.14 ng/mL E	
29) C1-Fluorenes	31.13	180	1212409m	7678.42 ng/mL	
30) C2-Fluorenes	32.79	194	762914m	4831.68 ng/mL	
31) C3-Fluorenes	35.98	208	569807m	3608.70 ng/mL	
32) Dibenzothiophene	32.23	184	3127778m	16113.73 ng/mL E	
36) OTP	34.42	198	25479	131.26 ng/mL#	100
37) C1-Dibenzothiophenes	34.00	198	903123m	4652.72 ng/mL	
38) C2-Dibenzothiophenes	36.48	212	414463m	2135.24 ng/mL	
39) C3-Dibenzothiophenes	37.99	226	215683m	1111.16 ng/mL	
40) C4-Dibenzothiophenes	39.74	240	61472m	316.69 ng/mL	
41) Phenanthrene	32.80	178	51933987m	234744.82 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.81	192	12353215m	55837.29 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.95	206	4434462m	20044.04 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.80	220	1516102m	6852.87 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	414864m	1875.21 ng/mL	
52) Retene	39.71	234	14405m	256.27 ng/mL ✓	
53) Anthracene	32.97	178	14947309m	75903.50 ng/mL E	
54) Carbazole	33.59	167	6489108m	34397.18 ng/mL	
55) 1-Methylphenanthrene	35.24	192	1686108	10947.48 ng/mL	100
56) Fluoranthene	37.58	202	42291769m	187627.62 ng/mL	
57) Benzo(b)fluorene	40.03	216	2389360m	18747.62 ng/mL	
59) Pyrene	38.47	202	38454104m	169657.36 ng/mL ✓	
60) C1-Fluoranthenes/Pyrenes	39.79	216	13220071m	58326.22 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.49	230	3645722m	16084.72 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.18	244	1681643m	7419.32 ng/mL	

MAS 1/17/07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46342.D
Acq On : 13 Sep 2006 2:53 am
Operator : AC
Sample : 0609032-01
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 17 10:47:58 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

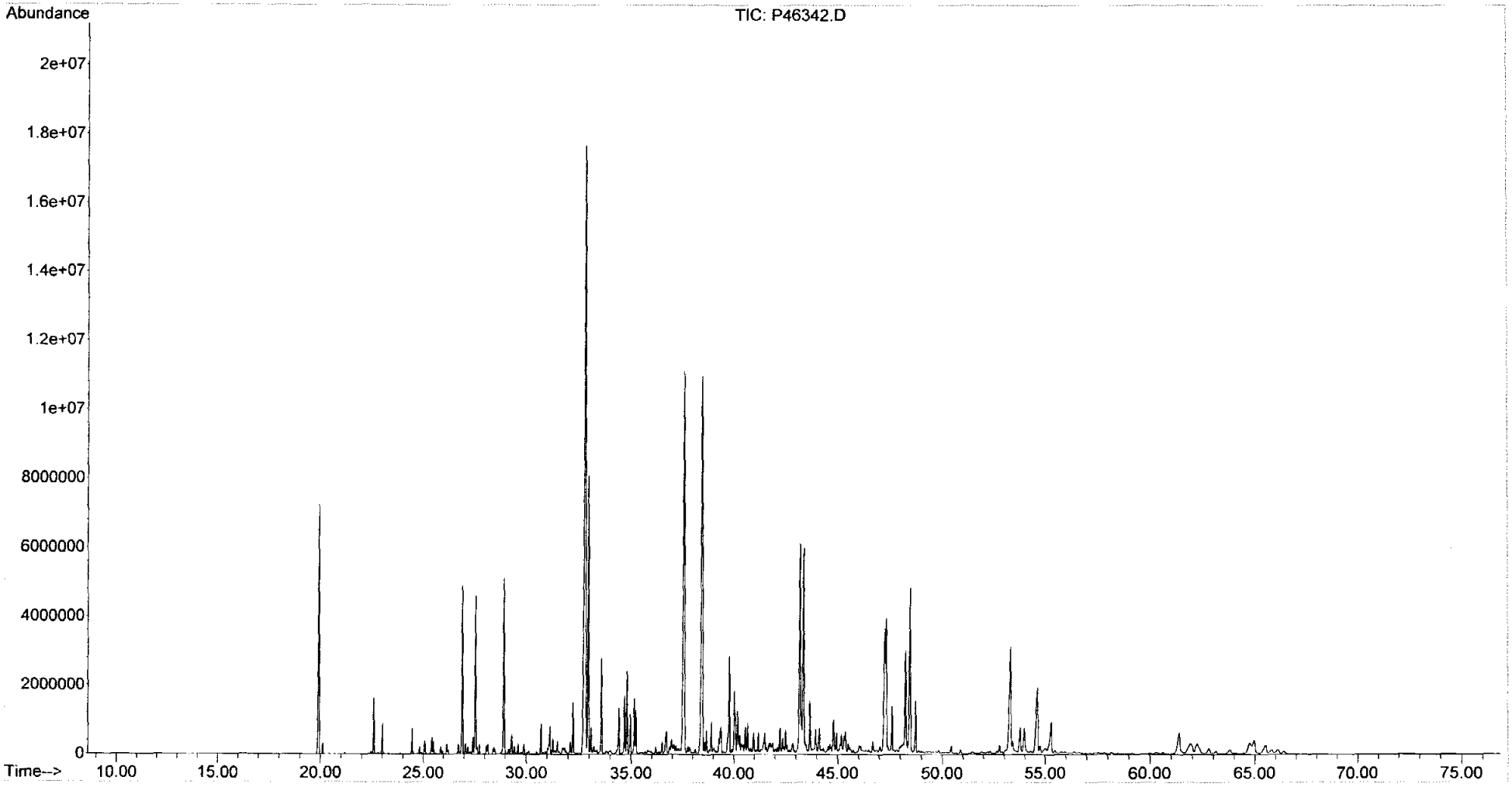
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	43.98	258	963730m	4251.92 ng/mL	
64) Naphthobenzothiophene	42.22	234	1290697m	6643.30 ng/ml	
65) Naphthobenzothiophene-2,1-	42.22	234	1290707m	6643.35 ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	352964m	1816.73 ng/mL	
67) Naphthobenzothiophene-2,3-	42.86	234	419966m	2161.59 ng/mL	
68) C1-Naphthobenzothiophenes	43.88	248	738994m	3803.65 ng/ml	
69) C2-Naphthobenzothiophenes	46.04	262	302340m	1556.16 ng/ml	
70) C3-Naphthobenzothiophenes	46.83	276	194285m	1000.00 ng/ml	
71) C4-Naphthobenzothiophenes	49.81	290	83968m	432.19 ng/mL	
73) Benz[a]anthracene	43.21	228	14741251m	69295.10 ng/mL	E
74) Chrysene	43.38	228	13295808m	63366.97 ng/mL	E
75) Chrysene/Triphenylene	43.38	228	13291301m	63345.49 ng/mL	
76) C1-Chrysenes	44.79	242	4316156m	20570.52 ng/mL	
77) C2-Chrysenes	46.48	256	1588298m	7569.73 ng/mL	
79) C3-Chrysenes	48.43	270	1158645m	5522.03 ng/mL	
80) C4-Chrysenes	49.09	284	452005m	2154.23 ng/mL	
82) Benzo[b]fluoranthene	47.28	252	13041839m	57911.45 ng/mL	E
83) Benzo[k]fluoranthene	47.34	252	8658810m	37702.13 ng/mL	
84) Benzo[a]fluoranthene	47.61	252	2537800m	11050.07 ng/mL	
85) Benzo[e]pyrene	48.26	252	7772443m	36053.09 ng/mL	
86) Benzo[a]pyrene	48.48	252	13996159m	67344.73 ng/mL	
87) Perylene	48.74	252	3486240m	16860.86 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.31	276	8308429m	41865.62 ng/mL	
89) Dibenz[a,h]anthracene	53.31	278	2523027m	13058.38 ng/mL	
90) Benzo[g,h,i]perylene	54.62	276	7672350m	36192.57 ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46342.D
Acq On : 13 Sep 2006 2:53 am
Operator : AC
Sample : 0609032-01
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 17 10:47:58 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20112.D
Acq On : 19 Sep 2006 5:22 am
Operator : AC
Sample : 0609032-01
Misc : 1x
ALS Vial : 12 Sample Multiplier: 1

MM 9/28/6

Quant Time: Sep 27 17:08:15 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	42.43	240	42405	500.00 ng/mL	0.16

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
50) Pyrene-d10	0.00	212	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
117) 5B(H)Cholane - Surr	42.90	217	29223	1601.07 ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 160.11%#		

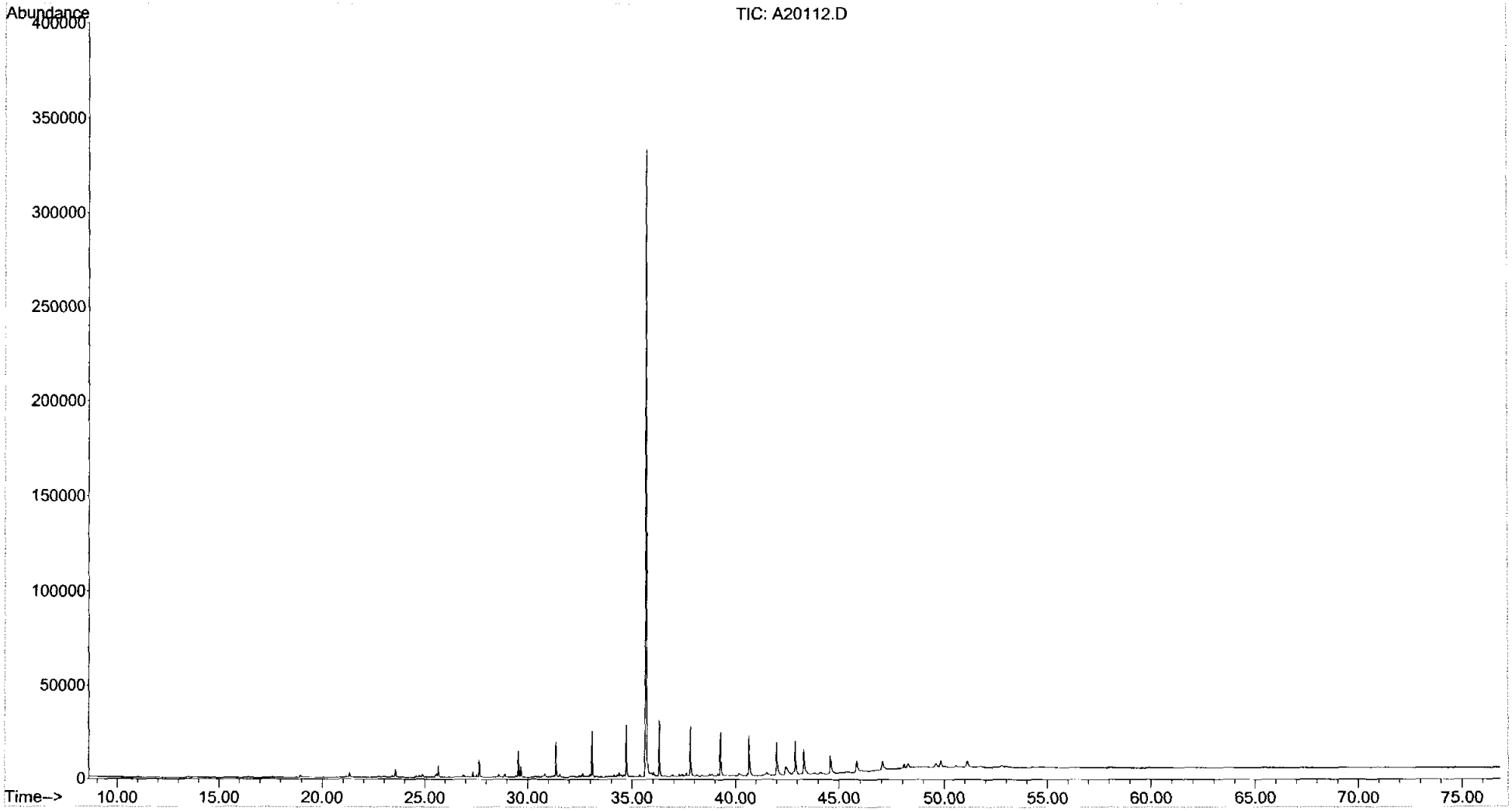
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	51.09	191	9681m	248.44 ng/mL	
84) Hopane (T19)	51.09	191	9681m	248.44 ng/mL	
88) C24 Tetracyclic Terpane (T	43.44	191	1047m	26.87 ng/ml	
98) 17a(H)-22,29,30-Trisnorhop	48.06	191	6352	163.01 ng/ml	100
101) 30-Norhopane (T15)	49.82	191	7706m	197.76 ng/ml	
104) 30-Normoretane (T17)	50.56	191	1541m	39.55 ng/ml	
106) Moretane (T20)	51.74	191	2306m	59.18 ng/ml	
107) 30-Homohopane-22S (T21)	52.78	191	2991	76.76 ng/ml	100
108) 30-Homohopane-22R (T22)	52.99	191	2343m	60.13 ng/ml	
109) 30,31-Bishomohopane-22S (T	54.23	191	1744m	44.76 ng/ml	
110) 30,31-Bishomohopane-22R (T	54.59	191	1293m	33.18 ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.03	217	349	19.12 ng/ml	100
126) 14a,17a-20R-Methylcholesta	48.33	217	167m	9.15 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	48.70	217	183m	10.03 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	49.54	217	247m	13.53 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.94	218	199m	10.90 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.95	218	224m	12.27 ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20112.D
Acq On : 19 Sep 2006 5:22 am
Operator : AC
Sample : 0609032-01
Misc : 1x
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 27 17:08:15 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1206	20	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**14000000**		Fluoranthene	**24000000**	
C1-Naphthalenes	**3600000**		Pyrene	**21000000**	
C2-Naphthalenes	29000	U	C1-Fluoranthenes/Pyrenes	**7100000**	
C3-Naphthalenes	29000	U	C2-Fluoranthenes/Pyrenes	13000	U
C4-Naphthalenes	29000	U	C3-Fluoranthenes/Pyrenes	13000	U
Biphenyl	10000	U	C4-Fluoranthenes/Pyrenes	13000	U
Dibenzofuran	**5000000**		Naphthobenzothiophenes	**1300000**	
Acenaphthylene	24000	U	C1-Naphthobenzothiophenes	7100	U
Acenaphthene	**6200000**		C2-Naphthobenzothiophenes	7100	U
Fluorene	**5400000**		C3-Naphthobenzothiophenes	7100	U
C1-Fluorenes	13000	U	C4-Naphthobenzothiophenes	7100	U
C2-Fluorenes	13000	U	Benz[a]anthracene	**8700000**	
C3-Fluorenes	13000	U	Chrysene/Triphenylene	**8100000**	
Anthracene	**8700000**		C1-Chrysenes	12000	U
Phenanthrene	**33000000**		C2-Chrysenes	12000	U
C1-Phenanthrenes/Anthracenes	**6500000**		C3-Chrysenes	12000	U
C2-Phenanthrenes/Anthracenes	30000	U	C4-Chrysenes	12000	U
C3-Phenanthrenes/Anthracenes	30000	U	Benzo[b]fluoranthene	**6000000**	
C4-Phenanthrenes/Anthracenes	30000	U	Benzo[k]fluoranthene	**6200000**	
Retene	13000	U	Benzo[a]fluoranthene	**1500000**	
Dibenzothiophene	**2100000**		Benzo[e]pyrene	**4800000**	
C1-Dibenzothiophenes	5100	U	Benzo[a]pyrene	**8500000**	
C2-Dibenzothiophenes	5100	U	Perylene	**2200000**	
C3-Dibenzothiophenes	5100	U	Indeno[1,2,3-cd]pyrene	**5600000**	
C4-Dibenzothiophenes	5100	U	Dibenz[a,h]anthracene	**1400000**	
Benzo(b)fluorene	**2100000**		Benzo[g,h,i]perylene	**4900000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	74	50-130
Pyrene-d10	78	50-130
Benzo[b]fluoranthene-d12	85	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:43

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.121	20	100	AC

Parameter	Result
Carbazole	**4000000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	74	50-130
Pyrene-d10	78	50-130
Benzo[b]fluoranthene-d12	85	50-130

N/A - Not Applicable

09/27/06 11:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46362.D
Acq On : 13 Sep 2006 6:18 pm
Operator : AC
Sample : 0609032-01-re
Misc : 100x
ALS Vial : 19 Sample Multiplier: 1

MAL 9/27/06

Quant Time: Sep 27 10:51:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	30673	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	45226	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	512	7.41	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.74%#			
58) Pyrene-d10	38.30	212	992	7.84	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.78%#			
81) Benzo[b]fluoranthene-d12	47.11	264	803	8.49	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.85%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

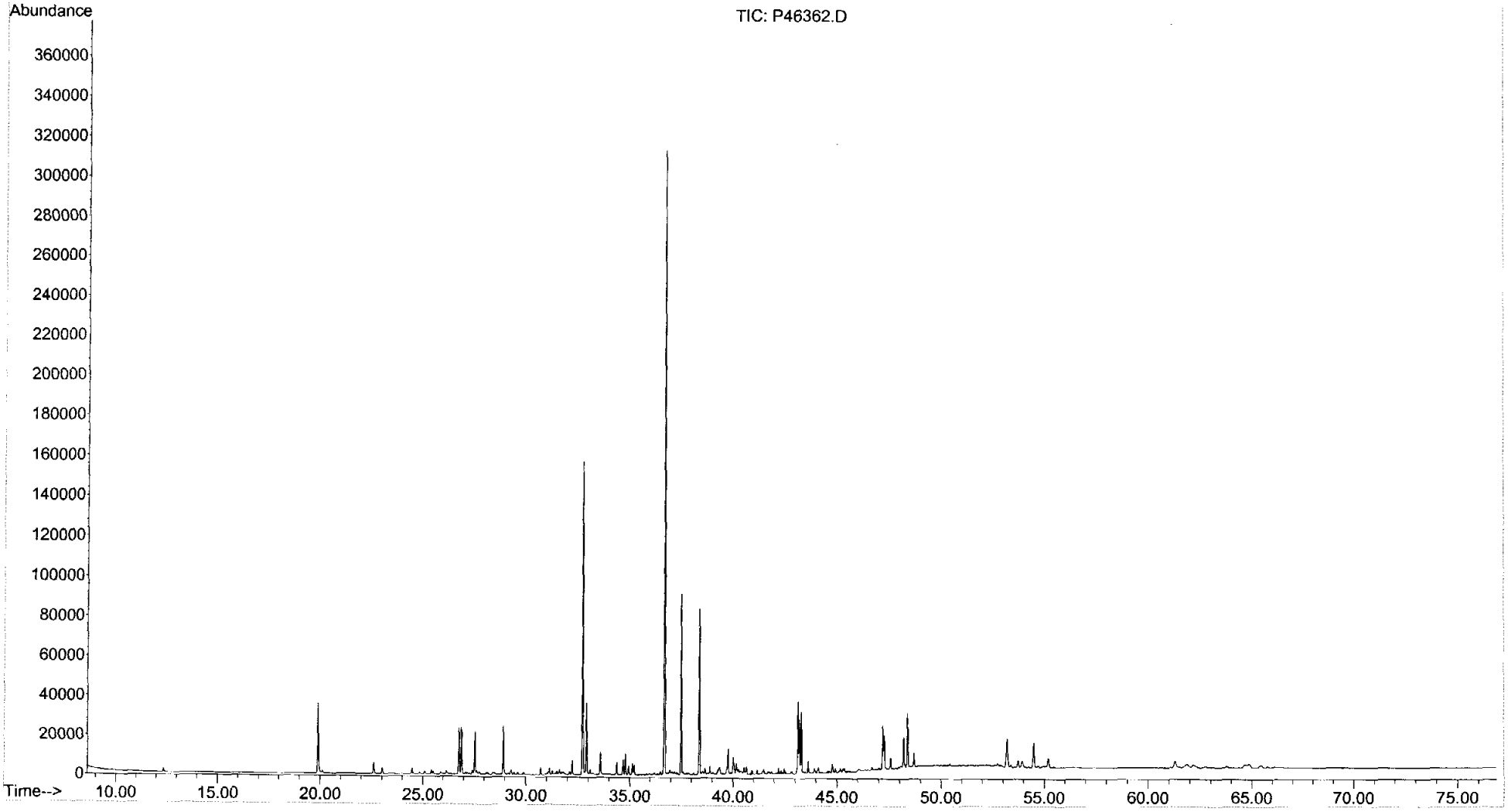
Target Compounds						Qvalue
9) Naphthalene	19.90	128	109258	813.37	ng/mL#	100
10) C1-Naphthalenes	22.60	142	29276m	217.95	ng/mL	
15) 2-Methylnaphthalene	22.60	142	18499	205.12	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	9976	117.62	ng/mL#	100
24) Dibenzofuran	27.55	168	34928m	300.56	ng/mL	
26) Acenaphthene	26.90	153	30698	376.56	ng/mL	99
28) Fluorene	28.91	166	31659	327.76	ng/mL	99
32) Dibenzothiophene	32.22	184	14885	125.36	ng/mL	97
41) Phenanthrene	32.72	178	269919	1994.41	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.79	192	53411m	394.65	ng/mL	
53) Anthracene	32.90	178	63390	526.21	ng/mL	100
54) Carbazole	33.57	167	27630	239.42	ng/mL	99
55) 1-Methylphenanthrene	35.23	192	7599	80.65	ng/mL	99
56) Fluoranthene	37.49	202	198762m	1441.49	ng/mL	
57) Benzo(b)fluorene	40.01	216	9924m	127.29	ng/mL	
59) Pyrene	38.37	202	172885	1246.88	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	59075m	426.06	ng/mL	
64) Naphthobenzothiophene	42.22	234	5903m	49.67	ng/ml	
65) Naphthobenzothiophene-2,1-	42.22	234	5896m	49.61	ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	1647m	13.86	ng/mL	
67) Naphthobenzothiophene-2,3-	42.85	234	1901m	15.99	ng/mL	
73) Benz[a]anthracene	43.15	228	62181m	522.76	ng/mL	
74) Chrysene	43.30	228	57173m	487.33	ng/mL	
75) Chrysene/Triphenylene	43.30	228	57084m	486.57	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	45220	359.12	ng/mL	96
83) Benzo[k]fluoranthene	47.26	252	48367	376.65	ng/mL	99
84) Benzo[a]fluoranthene	47.58	252	11867	92.41	ng/mL#	1
85) Benzo[e]pyrene	48.19	252	35030	290.61	ng/mL	100
86) Benzo[a]pyrene	48.38	252	59384	511.03	ng/mL	99
87) Perylene	48.69	252	15270m	132.08	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.20	276	37515	338.08	ng/mL	94
89) Dibenz[a,h]anthracene	53.24	278	9198m	85.14	ng/mL	
90) Benzo[g,h,i]perylene	54.50	276	35301	297.82	ng/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46362.D
Acq On : 13 Sep 2006 6:18 pm
Operator : AC
Sample : 0609032-01-re
Misc : 100x
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 27 10:51:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01 D**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1722	20	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**16000000**	E	Fluoranthene	**32000000**	E
C1-Naphthalenes	**4600000**	E	Pyrene	**29000000**	E
C2-Naphthalenes	**2800000**		C1-Fluoranthenes/Pyrenes	**10000000**	E
C3-Naphthalenes	**1400000**		C2-Fluoranthenes/Pyrenes	**2900000**	
C4-Naphthalenes	**510000**		C3-Fluoranthenes/Pyrenes	**1300000**	
Biphenyl	**1200000**		C4-Fluoranthenes/Pyrenes	**750000**	
Dibenzofuran	**6700000**	E	Naphthobenzothiophenes	**2000000**	E
Acenaphthylene	**560000**		C1-Naphthobenzothiophenes	**710000**	
Acenaphthene	**8200000**	E	C2-Naphthobenzothiophenes	**270000**	
Fluorene	**7500000**	E	C3-Naphthobenzothiophenes	**170000**	
C1-Fluorenes	**1400000**		C4-Naphthobenzothiophenes	**72000**	
C2-Fluorenes	**860000**		Benz[a]anthracene	**13000000**	E
C3-Fluorenes	**600000**		Chrysene/Triphenylene	**12000000**	E
Anthracene	**14000000**	E	C1-Chrysenes	**3900000**	
Phenanthrene	**39000000**	E	C2-Chrysenes	**1400000**	
C1-Phenanthrenes/Anthracenes	**9900000**	E	C3-Chrysenes	**1000000**	
C2-Phenanthrenes/Anthracenes	**3600000**		C4-Chrysenes	**420000**	
C3-Phenanthrenes/Anthracenes	**1200000**		Benzo[b]fluoranthene	**12000000**	E
C4-Phenanthrenes/Anthracenes	**360000**		Benzo[k]fluoranthene	**6000000**	E
Retene	**39000**		Benzo[a]fluoranthene	**2100000**	E
Dibenzothiophene	**2900000**	E	Benzo[e]pyrene	**6700000**	E
C1-Dibenzothiophenes	**790000**		Benzo[a]pyrene	**13000000**	E
C2-Dibenzothiophenes	**380000**		Perylene	**3200000**	E
C3-Dibenzothiophenes	**200000**		Indeno[1,2,3-cd]pyrene	**7800000**	E
C4-Dibenzothiophenes	**57000**		Dibenz[a,h]anthracene	**2100000**	E
Benzo(b)fluorene	**3700000**	E	Benzo[g,h,i]perylene	**6700000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	96	50-130
Pyrene-d10	112	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:09

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01 D**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.172	20	1	AC

Parameter	Result
Carbazole	**6200000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	96	50-130
Pyrene-d10	112	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Form I
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01 D**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.172	3.45	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	86	U	30,31-Bishomohopane-22S	**1100**	
C24 Tricyclic Terpane	86	U	30,31-Bishomohopane-22R	**760**	
C25 Tricyclic Terpane	86	U	30,31-Trishomohopane-22S	86	U
C24 Tetracyclic Terpane	**630**		30,31-Trishomohopane-22R	86	U
C26 Tricyclic Terpane-22S	86	U	Tetrakishomohopane-22S	86	U
C26 Tricyclic Terpane-22R	86	U	Tetrakishomohopane-22R	86	U
C28 Tricyclic Terpane-22S	86	U	Pentakishomohopane-22S	86	U
C28 Tricyclic Terpane-22R	86	U	Pentakishomohopane-22R	86	U
C29 Tricyclic Terpane-22S	86	U	13b(H),17a(H)-20S-Diacholestane	31	U
C29 Tricyclic Terpane-22R	86	U	13b(H),17a(H)-20R-Diacholestane	31	U
18a-22,29,30-Trisnorneohopane-TS	86	U	13b,17a-20S-Methyldiacholestane	31	U
C30 Tricyclic Terpane-22S	86	U	14a(H),17a(H)-20S-Cholestane	31	U
C30 Tricyclic Terpane-22R	86	U	14a(H),17a(H)-20R-Cholestane	**400**	
17a(H)-22,29,30-Trisnorhopane-TM	**3700**		13b,17a-20R-Ethyldiacholestane	31	U
17a/b,21b/a 28,30-Bisnorhopane	86	U	13a,17b-20S-Ethyldiacholestane	31	U
17a(H),21b(H)-25-Norhopane	86	U	14a,17a-20S-Methylcholestane	31	U
30-Norhopane	**4800**		14a,17a-20R-Methylcholestane	**200**	
18a(H)-30-Norneohopane-C29Ts	86	U	14a(H),17a(H)-20S-Ethylcholestane	**210**	
17a(H)-Diahopane	86	U	14a(H),17a(H)-20R-Ethylcholestane	**310**	
30-Normoretane	**990**		14b(H),17b(H)-20R-Cholestane	31	U
18a(H)&18b(H)-Oleananes	86	U	14b(H),17b(H)-20S-Cholestane	31	U
Hopane	**6000**		14b,17b-20R-Methylcholestane	31	U
Moretane	**1200**		14b,17b-20S-Methylcholestane	31	U
30-Homohopane-22S	**2000**		14b(H),17b(H)-20R-Ethylcholestane	**220**	
30-Homohopane-22R	**1000**		14b(H),17b(H)-20S-Ethylcholestane	**260**	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	93	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46344.D
Acq On : 13 Sep 2006 4:22 am
Operator : AC
Sample : 0609032-01D
Misc : 1X
ALS Vial : 10 Sample Multiplier: 1

MM 1/17/7

Quant Time: Jan 17 10:48:30 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	43554m	500.00 ng/mL	0.00
72) Chrysene-d12	43.27	240	67346m	500.00 ng/mL	0.08

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	94352m	961.05 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 96.10%		
58) Pyrene-d10	38.34	212	200852	1117.44 ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 111.74%		
81) Benzo[b]fluoranthene-d12	47.15	264	148008	1050.53 ng/mL	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 105.05%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.93	128	26688263m	139921.31 ng/mL E	
10) C1-Naphthalenes	22.59	142	7500212m	39322.14 ng/mL E	
11) C2-Naphthalenes	25.42	156	4561936m	23917.33 ng/mL	
12) C3-Naphthalenes	27.75	170	2324906m	12189.02 ng/mL	
13) C4-Naphthalenes	30.51	184	839968m	4403.79 ng/mL	
15) 2-Methylnaphthalene	22.59	142	4834510m	37751.38 ng/mL E	
16) 1-Methylnaphthalene	23.01	142	2621677	21767.91 ng/mL# E	100
22) Biphenyl	24.46	154	1612896	9982.53 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	1065777	9570.16 ng/mL#	100
24) Dibenzofuran	27.56	168	9488678m	57503.07 ng/mL E	
25) Acenaphthylene	26.16	152	853057m	4785.51 ng/mL	
26) Acenaphthene	26.93	153	8154288m	70442.70 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.45	170	214489m	2187.64 ng/mL	
28) Fluorene	28.94	166	8847831m	64509.65 ng/mL E	
29) C1-Fluorenes	31.13	180	1614757m	11773.21 ng/mL	
30) C2-Fluorenes	32.81	194	1013927m	7392.55 ng/mL	
31) C3-Fluorenes	35.99	208	707774m	5160.39 ng/mL	
32) Dibenzothiophene	32.24	184	4157901	24660.35 ng/mL E	97
36) OTP	34.43	198	22157	131.41 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	1173045m	6957.29 ng/mL	
38) C2-Dibenzothiophenes	36.49	212	549863m	3261.22 ng/mL	
39) C3-Dibenzothiophenes	37.57	226	290542m	1723.19 ng/mL	
40) C4-Dibenzothiophenes	39.74	240	83181m	493.34 ng/mL	
41) Phenanthrene	32.80	178	64784083m	337114.64 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.83	192	16407963m	85381.54 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.67	206	5943298m	30926.93 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.81	220	2001252m	10413.84 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.97	234	593446m	3088.09 ng/mL	
52) Retene	39.73	234	16385m	335.58 ng/mL	
53) Anthracene	32.99	178	19924953	116482.60 ng/mL E	99
54) Carbazole	33.61	167	8821214m	53830.83 ng/mL E	
55) 1-Methylphenanthrene	35.25	192	2200109	16445.15 ng/mL E	100
56) Fluoranthene	37.60	202	53229948m	271870.39 ng/mL E	
57) Benzo(b)fluorene	40.05	216	3490853m	31532.69 ng/mL E	
59) Pyrene	38.50	202	49910721	253506.33 ng/mL E	93
60) C1-Fluoranthenes/Pyrenes	39.81	216	17614481m	89467.40 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.50	230	4858570m	24677.63 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.18	244	2156595m	10953.77 ng/mL	

MS 1/17/07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46344.D
Acq On : 13 Sep 2006 4:22 am
Operator : AC
Sample : 0609032-01D
Misc : 1X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 17 10:48:30 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

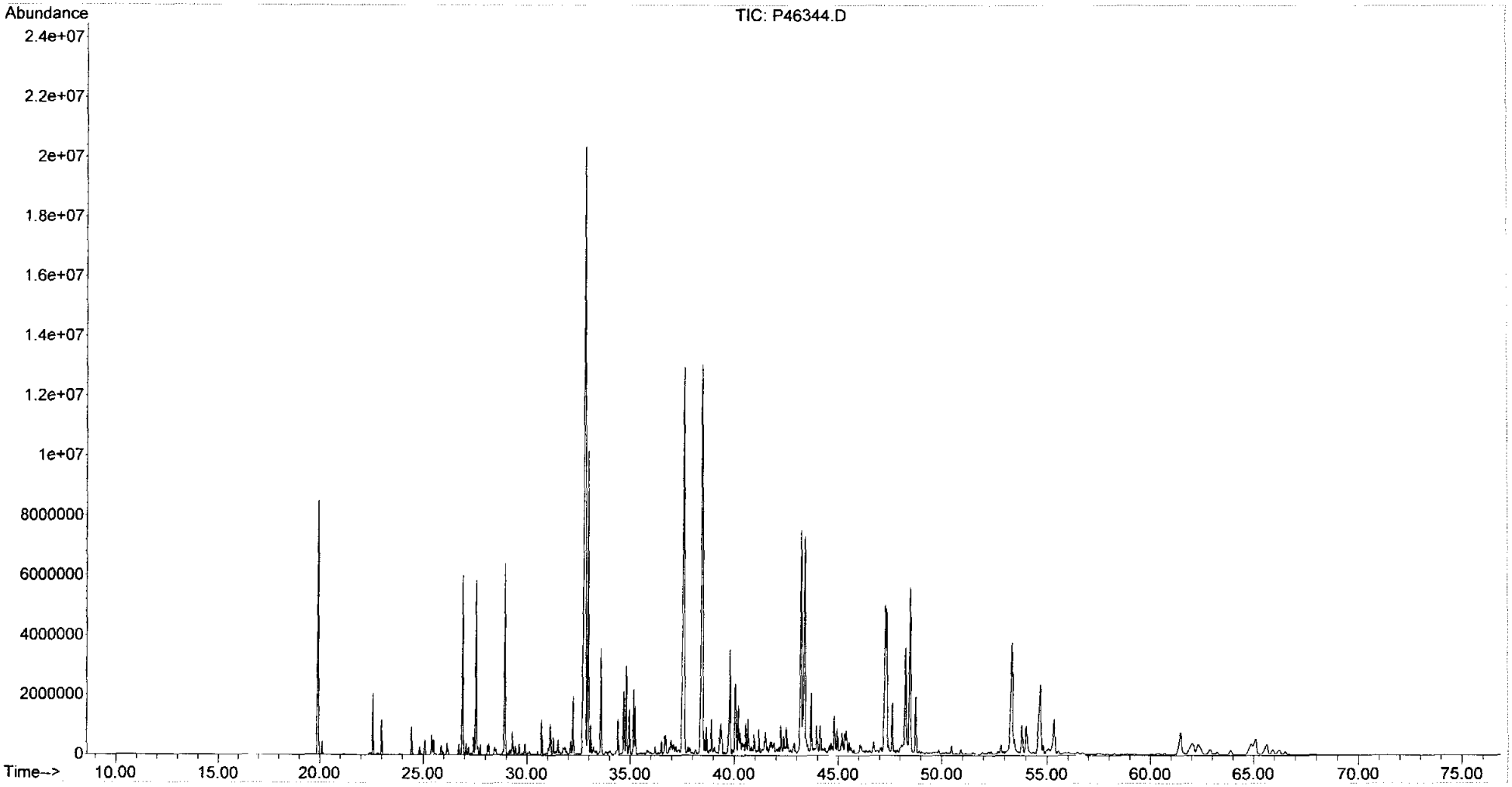
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.00	258	1274669m	6474.29 ng/mL	
64) Naphthobenzothiophene	42.24	234	1729218	10246.46 ng/ml# E	64
65) Naphthobenzothiophene-2,1-	42.24	234	1727636	10237.09 ng/mL E	100
66) Naphthobenzothiophene-1,2-	42.57	234	468727	2777.44 ng/mL#	20
67) Naphthobenzothiophene-2,3-	42.87	234	639587m	3789.87 ng/mL	
68) C1-Naphthobenzothiophenes	43.89	248	1031414m	6111.63 ng/ml	
69) C2-Naphthobenzothiophenes	46.05	262	389750m	2309.46 ng/ml	
70) C3-Naphthobenzothiophenes	46.84	276	253425m	1501.67 ng/ml	
71) C4-Naphthobenzothiophenes	49.83	290	104175m	617.29 ng/mL	
73) Benz[a]anthracene	43.24	228	19993291	112877.83 ng/mL E	98
74) Chrysene	43.41	228	17673702m	101165.38 ng/mL E	
75) Chrysene/Triphenylene	43.41	228	17670280m	101145.79 ng/mL E	
76) C1-Chrysenes	44.81	242	5918881m	33880.05 ng/mL	
77) C2-Chrysenes	46.50	256	2114338m	12102.60 ng/mL	
79) C3-Chrysenes	48.47	270	1544388m	8840.17 ng/mL	
80) C4-Chrysenes	49.10	284	637039m	3646.45 ng/mL	
82) Benzo[b]fluoranthene	47.31	252	19459613	103780.55 ng/mL E	97
83) Benzo[k]fluoranthene	47.37	252	9834515m	51430.03 ng/mL	
84) Benzo[a]fluoranthene	47.64	252	3472278m	18158.43 ng/mL	
85) Benzo[e]pyrene	48.29	252	10374352m	57796.57 ng/mL	
86) Benzo[a]pyrene	48.52	252	19166305	110761.62 ng/mL	96
87) Perylene	48.78	252	4696423m	27280.09 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.37	276	11133046m	67376.56 ng/mL	
89) Dibenz[a,h]anthracene	53.37	278	2899171m	18021.77 ng/mL	
90) Benzo[g,h,i]perylene	54.69	276	10162710	57578.01 ng/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46344.D
Acq On : 13 Sep 2006 4:22 am
Operator : AC
Sample : 0609032-01D
Misc : 1X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 17 10:48:30 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20113.D
Acq On : 19 Sep 2006 9:57 am
Operator : AC
Sample : 0609032-01d
Misc : 1x
ALS Vial : 13 Sample Multiplier: 1

MAL 9/28/06

Quant Time: Sep 27 17:09:21 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.44	240	53864	500.00	ng/mL	0.17

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	42.94	217	43161	1861.64	ng/ml	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	186.16%#	

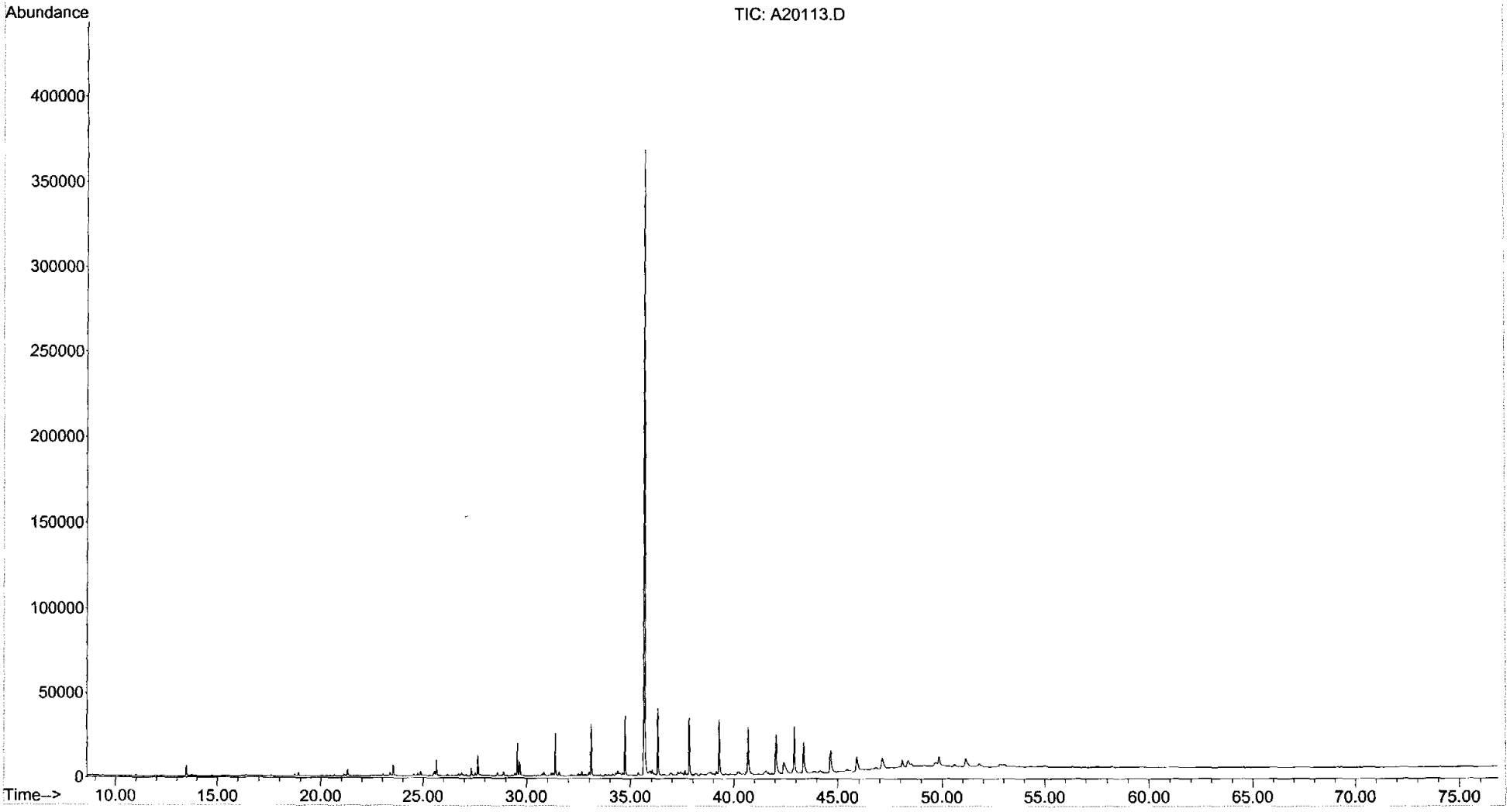
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.16	191	14923m	301.49	ng/mL	
84) Hopane (T19)	51.16	191	14849m	300.00	ng/mL	
88) C24 Tetracyclic Terpane (T	43.48	191	1555	31.42	ng/ml	100
98) 17a(H)-22,29,30-Trisnorhop	48.11	191	9175m	185.36	ng/ml	
101) 30-Norhopane (T15)	49.87	191	11965m	241.73	ng/ml	
104) 30-Normoretane (T17)	50.61	191	2453m	49.56	ng/ml	
106) Moretane (T20)	51.80	191	3014m	60.89	ng/ml	
107) 30-Homohopane-22S (T21)	52.84	191	4863	98.25	ng/ml	100
108) 30-Homohopane-22R (T22)	53.07	191	2563m	51.78	ng/ml	
109) 30,31-Bishomohopane-22S (T	54.32	191	2680	54.14	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.70	191	1875m	37.88	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.07	217	469	20.23	ng/ml	100
126) 14a,17a-20R-Methylcholesta	48.40	217	232m	10.01	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	48.74	217	248m	10.70	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	49.61	217	354m	15.27	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.99	218	253m	10.91	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	49.01	218	305m	13.16	ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20113.D
Acq On : 19 Sep 2006 9:57 am
Operator : AC
Sample : 0609032-01d
Misc : 1x
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 27 17:09:21 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E D**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1722	20	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**14000000**		Fluoranthene	**25000000**	
C1-Naphthalenes	**3700000**		Pyrene	**21000000**	
C2-Naphthalenes	20000	U	C1-Fluoranthenes/Pyrenes	**7100000**	
C3-Naphthalenes	20000	U	C2-Fluoranthenes/Pyrenes	8800	U
C4-Naphthalenes	20000	U	C3-Fluoranthenes/Pyrenes	8800	U
Biphenyl	7300	U	C4-Fluoranthenes/Pyrenes	8800	U
Dibenzofuran	**5100000**		Naphthobenzothiophenes	**1400000**	
Acenaphthylene	17000	U	C1-Naphthobenzothiophenes	5000	U
Acenaphthene	**6400000**		C2-Naphthobenzothiophenes	5000	U
Fluorene	**5600000**		C3-Naphthobenzothiophenes	5000	U
C1-Fluorenes	9400	U	C4-Naphthobenzothiophenes	5000	U
C2-Fluorenes	9400	U	Benz[a]anthracene	**9000000**	
C3-Fluorenes	9400	U	Chrysene/Triphenylene	**8300000**	
Anthracene	**9200000**		C1-Chrysenes	8600	U
Phenanthrene	**34000000**		C2-Chrysenes	8600	U
C1-Phenanthrenes/Anthracenes	**6800000**		C3-Chrysenes	8600	U
C2-Phenanthrenes/Anthracenes	21000	U	C4-Chrysenes	8600	U
C3-Phenanthrenes/Anthracenes	21000	U	Benzo[b]fluoranthene	**6300000**	
C4-Phenanthrenes/Anthracenes	21000	U	Benzo[k]fluoranthene	**6200000**	
Retene	9400	U	Benzo[a]fluoranthene	**1500000**	
Dibenzothiophene	**2100000**		Benzo[e]pyrene	**4900000**	
C1-Dibenzothiophenes	3600	U	Benzo[a]pyrene	**8700000**	
C2-Dibenzothiophenes	3600	U	Perylene	**2200000**	
C3-Dibenzothiophenes	3600	U	Indeno[1,2,3-cd]pyrene	**5600000**	
C4-Dibenzothiophenes	3600	U	Dibenz[a,h]anthracene	**1400000**	
Benzo(b)fluorene	**2300000**		Benzo[g,h,i]perylene	**5000000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	79	50-130
Benzo[b]fluoranthene-d12	87	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:45

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E D**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.172	20	100	AC

Parameter	Result
Carbazole	**4300000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	79	50-130
Benzo[b]fluoranthene-d12	87	50-130

N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46364.D
Acq On : 13 Sep 2006 7:47 pm
Operator : AC
Sample : 0609032-01d-re
Misc : 100x
ALS Vial : 20 Sample Multiplier: 1

MM 9/27/06

Quant Time: Sep 27 10:51:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

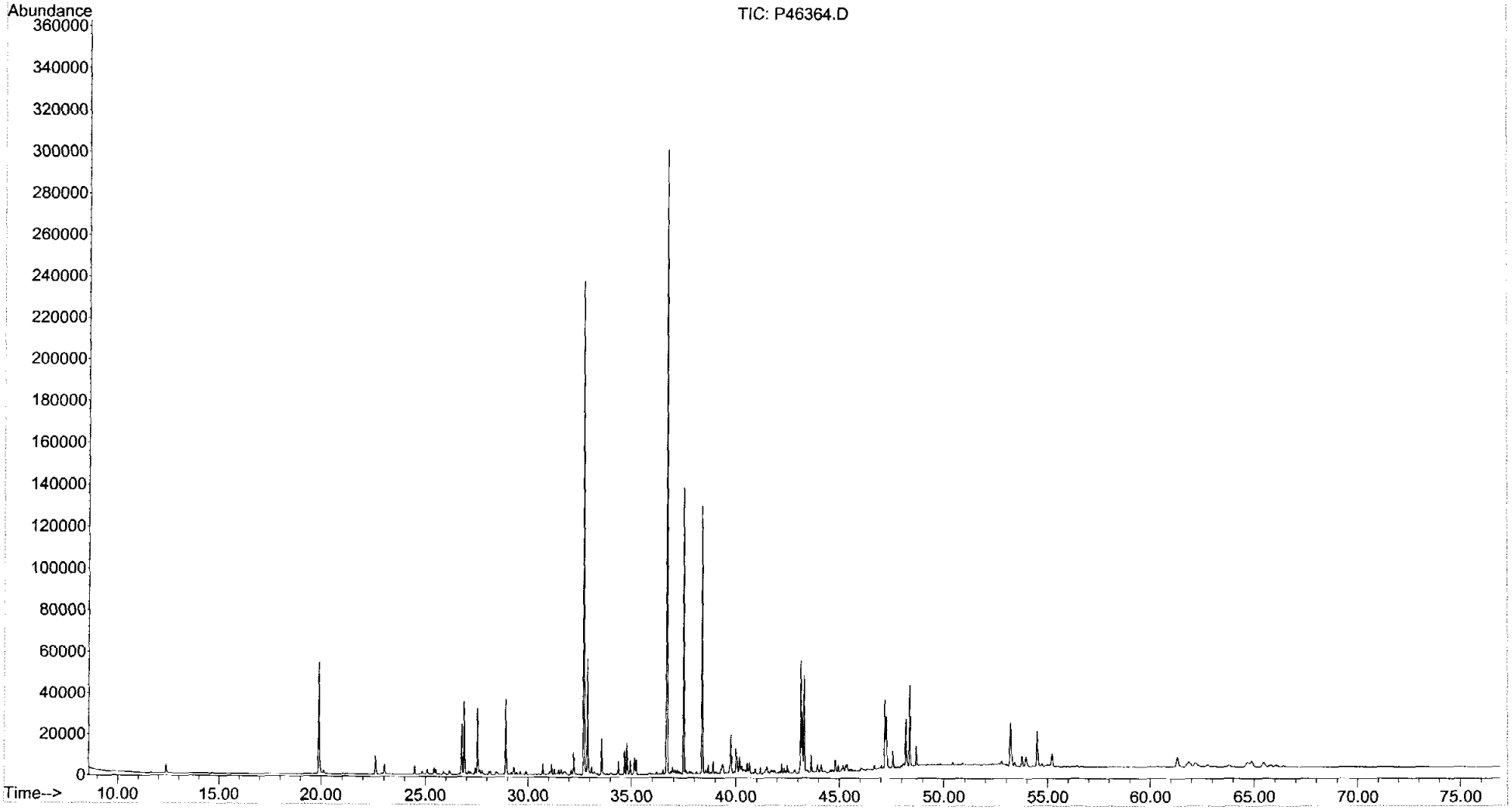
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	30619	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	44602	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	553	8.01	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.80%#	
58) Pyrene-d10	38.30	212	995	7.87	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.79%#	
81) Benzo[b]fluoranthene-d12	47.10	264	813	8.71	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.87%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	19.89	128	157267	1172.84	ng/mL#	100
10) C1-Naphthalenes	22.59	142	42326m	315.65	ng/mL	
15) 2-Methylnaphthalene	22.59	142	26702	296.59	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	14642	172.93	ng/mL#	100
24) Dibenzofuran	27.54	168	51268	441.95	ng/mL	97
26) Acenaphthene	26.89	153	44985	552.78	ng/mL	99
28) Fluorene	28.91	166	46904	486.45	ng/mL	100
32) Dibenzothiophene	32.22	184	21829	184.16	ng/mL	98
41) Phenanthrene	32.72	178	399752	2958.95	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.79	192	78682m	582.40	ng/mL	
53) Anthracene	32.90	178	94829	788.57	ng/mL	100
54) Carbazole	33.57	167	42501	368.93	ng/mL	99
55) 1-Methylphenanthrene	35.22	192	11440	121.63	ng/mL	99
56) Fluoranthene	37.48	202	291887m	2120.59	ng/mL	
57) Benzo(b)fluorene	40.01	216	15454m	198.57	ng/mL	
59) Pyrene	38.37	202	254214	1836.67	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	85091m	614.77	ng/mL	
64) Naphthobenzothiophene	42.22	234	8571	72.24	ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.22	234	8571	72.24	ng/mL	97
66) Naphthobenzothiophene-1,2-	42.55	234	2320m	19.55	ng/mL	
67) Naphthobenzothiophene-2,3-	42.85	234	2989m	25.19	ng/mL	
73) Benz[a]anthracene	43.15	228	90646m	772.73	ng/mL	
74) Chrysene	43.30	228	82855m	716.11	ng/mL	
75) Chrysene/Triphenylene	43.30	228	82960m	717.02	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	67452	543.17	ng/mL	96
83) Benzo[k]fluoranthene	47.26	252	67182	530.49	ng/mL	97
84) Benzo[a]fluoranthene	47.57	252	16369m	129.25	ng/mL	
85) Benzo[e]pyrene	48.19	252	49774	418.70	ng/mL	99
86) Benzo[a]pyrene	48.38	252	85917	749.70	ng/mL	96
87) Perylene	48.69	252	21866m	191.78	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	53216	486.29	ng/mL	95
89) Dibenz[a,h]anthracene	53.24	278	12571m	117.99	ng/mL	
90) Benzo[g,h,i]perylene	54.50	276	49979	427.56	ng/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46364.D
Acq On : 13 Sep 2006 7:47 pm
Operator : AC
Sample : 0609032-01d-re
Misc : 100x
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 27 10:51:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	16000000 E	16000000 E	4	30
C1-Naphthalenes	4300000 E	4600000 E	6	30
C2-Naphthalenes	2600000	2800000	7	30
C3-Naphthalenes	1300000	1400000	8	30
C4-Naphthalenes	480000	510000	7	30
Biphenyl	1100000	1200000	6	30
Dibenzofuran	6200000 E	6700000 E	7	30
Acenaphthylene	530000	560000	5	30
Acenaphthene	7600000 E	8200000 E	7	30
Fluorene	7000000 E	7500000 E	7	30
C1-Fluorenes	1300000	1400000	7	30
C2-Fluorenes	800000	860000	7	30
C3-Fluorenes	600000	600000	0	30
Anthracene	13000000 E	14000000 E	7	30
Phenanthrene	39000000 E	39000000 E	1	30
C1-Phenanthrenes/Anthracenes	9300000 E	9900000 E	7	30
C2-Phenanthrenes/Anthracenes	3300000	3600000	8	30
C3-Phenanthrenes/Anthracenes	1100000	1200000	6	30
C4-Phenanthrenes/Anthracenes	310000	360000	14	30
Retene	42000	39000	7	30
Dibenzothiophene	2700000 E	2900000 E	7	30
C1-Dibenzothiophenes	750000	790000	6	30
C2-Dibenzothiophenes	350000	380000	7	30
C3-Dibenzothiophenes	180000	200000	8	30
C4-Dibenzothiophenes	52000	57000	9	30
Benzo(b)fluorene	3100000 E	3700000 E	16	30
Fluoranthene	31000000 E	32000000 E	1	30
Pyrene	28000000 E	29000000 E	5	30
C1-Fluoranthenes/Pyrenes	9700000 E	10000000 E	7	30
C2-Fluoranthenes/Pyrenes	2700000	2900000	7	30
C3-Fluoranthenes/Pyrenes	1200000	1300000	3	30
C4-Fluoranthenes/Pyrenes	700000	750000	6	30
Naphthobenzothiophenes	1800000	2000000 E	10	30
C1-Naphthobenzothiophenes	630000	710000	12	30
C2-Naphthobenzothiophenes	260000	270000	4	30

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	170000	170000	5	30
C4-Naphthobenzothiophenes	72000	72000	0	30
Benz[a]anthracene	12000000 E	13000000 E	13	30
Chrysene/Triphenylene	10000000 E	12000000 E	11	30
C1-Chrysenes	3400000	3900000	14	30
C2-Chrysenes	1300000	1400000	11	30
C3-Chrysenes	920000	1000000	11	30
C4-Chrysenes	360000	420000	17	30
Benzo[b]fluoranthene	9600000 E	12000000 E	23	30
Benzo[k]fluoranthene	6200000 E	6000000 E	5	30
Benzo[a]fluoranthene	1800000 E	2100000 E	14	30
Benzo[e]pyrene	6000000 E	6700000 E	12	30
Benzo[a]pyrene	11000000 E	13000000 E	14	30
Perylene	2800000 E	3200000 E	12	30
Indeno[1,2,3-cd]pyrene	6900000 E	7800000 E	12	30
Dibenz[a,h]anthracene	2200000 E	2100000 E	3	30
Benzo[g,h,i]perylene	6000000 E	6700000 E	11	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	90	96	50-130
Pyrene-d10	102	112	50-130
Benzo[b]fluoranthene-d12	93	105	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

01/17/07 11:11

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	**5700000** E	**6200000** E	9	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	90	96	50-130
Pyrene-d10	102	112	50-130
Benzo[b]fluoranthene-d12	93	105	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

09/27/06 11:24

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	85 U	86 U	N/A	30
C24 Tricyclic Terpane	85 U	86 U	N/A	30
C25 Tricyclic Terpane	85 U	86 U	N/A	30
C24 Tetracyclic Terpane	**530**	**630**	17	30
C26 Tricyclic Terpane-22S	85 U	86 U	N/A	30
C26 Tricyclic Terpane-22R	85 U	86 U	N/A	30
C28 Tricyclic Terpane-22S	85 U	86 U	N/A	30
C28 Tricyclic Terpane-22R	85 U	86 U	N/A	30
C29 Tricyclic Terpane-22S	85 U	86 U	N/A	30
C29 Tricyclic Terpane-22R	85 U	86 U	N/A	30
18a-22,29,30-Trisnorneohopane-TS	85 U	86 U	N/A	30
C30 Tricyclic Terpane-22S	85 U	86 U	N/A	30
C30 Tricyclic Terpane-22R	85 U	86 U	N/A	30
17a(H)-22,29,30-Trisnorhopane-TM	**3200**	**3700**	14	30
17a/b,21b/a 28,30-Bisnorhopane	85 U	86 U	N/A	30
17a(H),21b(H)-25-Norhopane	85 U	86 U	N/A	30
30-Norhopane	**3900**	**4800**	22	30
18a(H)-30-Norneohopane-C29Ts	85 U	86 U	N/A	30
17a(H)-Diahopane	85 U	86 U	N/A	30
30-Normoretane	**780**	**990**	24	30
18a(H)&18b(H)-Oleananes	85 U	86 U	N/A	30
Hopane	**4900**	**6000**	20	30
Moretane	**1200**	**1200**	4	30
30-Homohopane-22S	**1500**	**2000**	26	30
30-Homohopane-22R	**1200**	**1000**	13	30
30,31-Bishomohopane-22S	**880**	**1100**	20	30
30,31-Bishomohopane-22R	**660**	**760**	15	30
30,31-Trishomohopane-22S	85 U	86 U	N/A	30
30,31-Trishomohopane-22R	85 U	86 U	N/A	30
Tetrakishomohopane-22S	85 U	86 U	N/A	30
Tetrakishomohopane-22R	85 U	86 U	N/A	30
Pentakishomohopane-22S	85 U	86 U	N/A	30
Pentakishomohopane-22R	85 U	86 U	N/A	30
13b(H),17a(H)-20S-Diacholestane	30 U	31 U	N/A	30
13b(H),17a(H)-20R-Diacholestane	30 U	31 U	N/A	30

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	30 U	31 U	N/A	30
14a(H),17a(H)-20S-Cholestane	30 U	31 U	N/A	30
14a(H),17a(H)-20R-Cholestane	**380**	**400**	7	30
13b,17a-20R-Ethyldiacholestane	30 U	31 U	N/A	30
13a,17b-20S-Ethyldiacholestane	30 U	31 U	N/A	30
14a,17a-20S-Methylcholestane	30 U	31 U	N/A	30
14a,17a-20R-Methylcholestane	**180** J	**200**	10	30
14a(H),17a(H)-20S-Ethylcholestane	**200**	**210**	8	30
14a(H),17a(H)-20R-Ethylcholestane	**270**	**310**	14	30
14b(H),17b(H)-20R-Cholestane	30 U	31 U	N/A	30
14b(H),17b(H)-20S-Cholestane	30 U	31 U	N/A	30
14b,17b-20R-Methylcholestane	30 U	31 U	N/A	30
14b,17b-20S-Methylcholestane	30 U	31 U	N/A	30
14b(H),17b(H)-20R-Ethylcholestane	**220**	**220**	2	30
14b(H),17b(H)-20S-Ethylcholestane	**240**	**260**	9	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	80	93	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

09/27/06 17:13

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	**14000000**	**14000000**	1	30
C1-Naphthalenes	**3600000**	**3700000**	1	30
C2-Naphthalenes	29000 U	20000 U	N/A	30
C3-Naphthalenes	29000 U	20000 U	N/A	30
C4-Naphthalenes	29000 U	20000 U	N/A	30
Biphenyl	10000 U	7300 U	N/A	30
Dibenzofuran	**5000000**	**5100000**	3	30
Acenaphthylene	24000 U	17000 U	N/A	30
Acenaphthene	**6200000**	**6400000**	3	30
Fluorene	**5400000**	**5600000**	4	30
C1-Fluorenes	13000 U	9400 U	N/A	30
C2-Fluorenes	13000 U	9400 U	N/A	30
C3-Fluorenes	13000 U	9400 U	N/A	30
Anthracene	**8700000**	**9200000**	5	30
Phenanthrene	**33000000**	**34000000**	4	30
C1-Phenanthrenes/Anthracenes	**6500000**	**6800000**	3	30
C2-Phenanthrenes/Anthracenes	30000 U	21000 U	N/A	30
C3-Phenanthrenes/Anthracenes	30000 U	21000 U	N/A	30
C4-Phenanthrenes/Anthracenes	30000 U	21000 U	N/A	30
Retene	13000 U	9400 U	N/A	30
Dibenzothiophene	**2100000**	**2100000**	3	30
C1-Dibenzothiophenes	5100 U	3600 U	N/A	30
C2-Dibenzothiophenes	5100 U	3600 U	N/A	30
C3-Dibenzothiophenes	5100 U	3600 U	N/A	30
C4-Dibenzothiophenes	5100 U	3600 U	N/A	30
Benzo(b)fluorene	**2100000**	**2300000**	9	30
Fluoranthene	**24000000**	**25000000**	3	30
Pyrene	**21000000**	**21000000**	3	30
C1-Fluoranthenes/Pyrenes	**7100000**	**7100000**	1	30
C2-Fluoranthenes/Pyrenes	13000 U	8800 U	N/A	30
C3-Fluoranthenes/Pyrenes	13000 U	8800 U	N/A	30
C4-Fluoranthenes/Pyrenes	13000 U	8800 U	N/A	30
Naphthobenzothiophenes	**1300000**	**1400000**	3	30
C1-Naphthobenzothiophenes	7100 U	5000 U	N/A	30
C2-Naphthobenzothiophenes	7100 U	5000 U	N/A	30

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	7100 U	5000 U	N/A	30
C4-Naphthobenzothiophenes	7100 U	5000 U	N/A	30
Benz[a]anthracene	**8700000**	**9000000**	3	30
Chrysene/Triphenylene	**8100000**	**8300000**	3	30
C1-Chrysenes	12000 U	8600 U	N/A	30
C2-Chrysenes	12000 U	8600 U	N/A	30
C3-Chrysenes	12000 U	8600 U	N/A	30
C4-Chrysenes	12000 U	8600 U	N/A	30
Benzo[b]fluoranthene	**6000000**	**6300000**	6	30
Benzo[k]fluoranthene	**6200000**	**6200000**	1	30
Benzo[a]fluoranthene	**1500000**	**1500000**	2	30
Benzo[e]pyrene	**4800000**	**4900000**	1	30
Benzo[a]pyrene	**8500000**	**8700000**	3	30
Perylene	**2200000**	**2200000**	2	30
Indeno[1,2,3-cd]pyrene	**5600000**	**5600000**	1	30
Dibenz[a,h]anthracene	**1400000**	**1400000**	3	30
Benzo[g,h,i]perylene	**4900000**	**5000000**	1	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	74	80	50-130
Pyrene-d10	78	79	50-130
Benzo[b]fluoranthene-d12	85	87	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

01/17/07 11:47

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	4000000	4300000	8	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	74	80	50-130
Pyrene-d10	78	79	50-130
Benzo[b]fluoranthene-d12	85	87	50-130

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

09/27/06 11:25

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-02**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1912	22.22	1	AC

Parameter	Result	
Naphthalene	**22000000**	E
C1-Naphthalenes	**4100000**	E
C2-Naphthalenes	**2500000**	
C3-Naphthalenes	**1300000**	
C4-Naphthalenes	**470000**	
Biphenyl	**1000000**	
Dibenzofuran	**6000000**	E
Acenaphthylene	**680000**	
Acenaphthene	**7900000**	E
Fluorene	**7100000**	E
C1-Fluorenes	**1300000**	
C2-Fluorenes	**750000**	
C3-Fluorenes	**840000**	
Anthracene	**12000000**	E
Phenanthrene	**41000000**	E
C1-Phenanthrenes/Anthracenes	**9100000**	E
C2-Phenanthrenes/Anthracenes	**3200000**	
C3-Phenanthrenes/Anthracenes	**1100000**	
C4-Phenanthrenes/Anthracenes	**300000**	
Retene	**69000**	
Dibenzothiophene	**2800000**	E
C1-Dibenzothiophenes	**720000**	
C2-Dibenzothiophenes	**340000**	
C3-Dibenzothiophenes	**180000**	
C4-Dibenzothiophenes	**53000**	
Benzo(b)fluorene	**3200000**	E

Parameter	Result	
Fluoranthene	**34000000**	E
Pyrene	**32000000**	E
C1-Fluoranthenes/Pyrenes	**10000000**	E
C2-Fluoranthenes/Pyrenes	**2800000**	
C3-Fluoranthenes/Pyrenes	**1200000**	
C4-Fluoranthenes/Pyrenes	**730000**	
Naphthobenzothiophenes	**1900000**	E
C1-Naphthobenzothiophenes	**640000**	
C2-Naphthobenzothiophenes	**240000**	
C3-Naphthobenzothiophenes	**170000**	
C4-Naphthobenzothiophenes	**67000**	
Benz[a]anthracene	**13000000**	E
Chrysene/Triphenylene	**12000000**	E
C1-Chrysenes	**3600000**	
C2-Chrysenes	**1200000**	
C3-Chrysenes	**960000**	
C4-Chrysenes	**360000**	
Benzo[b]fluoranthene	**13000000**	E
Benzo[k]fluoranthene	**5900000**	E
Benzo[a]fluoranthene	**2000000**	E
Benzo[e]pyrene	**7400000**	E
Benzo[a]pyrene	**13000000**	E
Perylene	**3400000**	E
Indeno[1,2,3-cd]pyrene	**8600000**	E
Dibenz[a,h]anthracene	**2200000**	E
Benzo[g,h,i]perylene	**7600000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	92	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	102	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:16

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-02**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.191	22.22	1	AC

Parameter	Result
Carbazole	**5900000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	92	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	102	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

09/27/06 11:50

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-02**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.191	3.77	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**100**	J	30,31-Bishomohopane-22S	**1200**	
C24 Tricyclic Terpane	85	U	30,31-Bishomohopane-22R	**790**	
C25 Tricyclic Terpane	85	U	30,31-Trishomohopane-22S	85	U
C24 Tetracyclic Terpane	**510**		30,31-Trishomohopane-22R	85	U
C26 Tricyclic Terpane-22S	85	U	Tetrakishomohopane-22S	85	U
C26 Tricyclic Terpane-22R	85	U	Tetrakishomohopane-22R	85	U
C28 Tricyclic Terpane-22S	85	U	Pentakishomohopane-22S	85	U
C28 Tricyclic Terpane-22R	85	U	Pentakishomohopane-22R	85	U
C29 Tricyclic Terpane-22S	85	U	13b(H),17a(H)-20S-Diacholestane	**120**	J
C29 Tricyclic Terpane-22R	85	U	13b(H),17a(H)-20R-Diacholestane	30	U
18a-22,29,30-Trisnorneohopane-TS	85	U	13b,17a-20S-Methyldiacholestane	30	U
C30 Tricyclic Terpane-22S	85	U	14a(H),17a(H)-20S-Cholestane	**100**	J
C30 Tricyclic Terpane-22R	85	U	14a(H),17a(H)-20R-Cholestane	**540**	
17a(H)-22,29,30-Trisnorhopane-TM	**3200**		13b,17a-20R-Ethyldiacholestane	30	U
17a/b,21b/a 28,30-Bisnorhopane	85	U	13a,17b-20S-Ethyldiacholestane	30	U
17a(H),21b(H)-25-Norhopane	85	U	14a,17a-20S-Methylcholestane	**77**	J
30-Norhopane	**4800**		14a,17a-20R-Methylcholestane	**330**	
18a(H)-30-Norneohopane-C29Ts	85	U	14a(H),17a(H)-20S-Ethylcholestane	**250**	
17a(H)-Diahopane	**420**		14a(H),17a(H)-20R-Ethylcholestane	**410**	
30-Normoretane	**820**		14b(H),17b(H)-20R-Cholestane	**160**	J
18a(H)&18b(H)-Oleananes	85	U	14b(H),17b(H)-20S-Cholestane	**140**	J
Hopane	**6100**		14b,17b-20R-Methylcholestane	**280**	
Moretane	**1200**		14b,17b-20S-Methylcholestane	**260**	
30-Homohopane-22S	**2000**		14b(H),17b(H)-20R-Ethylcholestane	**440**	
30-Homohopane-22R	**1500**		14b(H),17b(H)-20S-Ethylcholestane	**260**	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	77	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46346.D
Acq On : 13 Sep 2006 5:51 am
Operator : AC
Sample : 0609032-02
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

MAL 1/17/07

Quant Time: Jan 17 10:48:56 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.78	164	42649m	500.00 ng/mL	0.02
72) Chrysene-d12	43.27	240	66943m	500.00 ng/mL	0.08

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	88872	924.44 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 92.44%		
58) Pyrene-d10	38.36	212	190142	1080.30 ng/mL	0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.03%		
81) Benzo[b]fluoranthene-d12	47.16	264	142337	1016.36 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 101.64%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.94	128	35235764	188654.18 ng/mL#	100
10) C1-Naphthalenes	22.59	142	6611934m	35400.65 ng/mL	
11) C2-Naphthalenes	25.42	156	4014447m	21493.57 ng/mL	
12) C3-Naphthalenes	27.75	170	2093658m	11209.56 ng/mL	
13) C4-Naphthalenes	30.51	184	754135m	4037.68 ng/mL	
15) 2-Methylnaphthalene	22.59	142	4226246	33701.90 ng/mL#	100
16) 1-Methylnaphthalene	23.01	142	2352623	19948.45 ng/mL#	100
22) Biphenyl	24.46	154	1414333	8939.33 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	945065	8666.30 ng/mL#	100
24) Dibenzofuran	27.56	168	8385687	51897.11 ng/mL	98
25) Acenaphthylene	26.16	152	1023220m	5861.90 ng/mL	
26) Acenaphthene	26.93	153	7707035	67991.79 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	175495m	1827.91 ng/mL	
28) Fluorene	28.94	166	8191552m	60992.05 ng/mL	
29) C1-Fluorenes	31.14	180	1450824m	10802.44 ng/mL	
30) C2-Fluorenes	32.82	194	863288m	6427.81 ng/mL	
31) C3-Fluorenes	36.00	208	973081m	7245.29 ng/mL	
32) Dibenzothiophene	32.24	184	4012192	24301.11 ng/mL	97
36) OTP	34.43	198	23139m	140.15 ng/mL	
37) C1-Dibenzothiophenes	34.01	198	1042807m	6316.09 ng/mL	
38) C2-Dibenzothiophenes	36.49	212	485273m	2939.21 ng/mL	
39) C3-Dibenzothiophenes	38.54	226	258039m	1562.89 ng/mL	
40) C4-Dibenzothiophenes	39.74	240	75693m	458.46 ng/mL	
41) Phenanthrene	32.81	178	66186154m	351718.85 ng/mL	
47) C1-Phenanthrenes/Anthracen	34.83	192	14759817m	78434.92 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	5256792m	27935.04 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.82	220	1805839m	9596.38 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.97	234	492879m	2619.20 ng/mL	
52) Retene	39.73	234	28450m	595.05 ng/mL ✓	
53) Anthracene	33.00	178	17203954	102709.64 ng/mL	99
54) Carbazole	33.61	167	8162377m	50867.29 ng/mL	
55) 1-Methylphenanthrene	35.26	192	2060950	15731.87 ng/mL	100
56) Fluoranthene	37.60	202	56704350m	295761.37 ng/mL	
57) Benzo(b)fluorene	40.05	216	3031759m	27966.83 ng/mL ✓ MS 1/17/07	
59) Pyrene	38.50	202	53474664m	277371.74 ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.81	216	16616203m	86187.83 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.50	230	4626676m	23998.45 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.19	244	1955733m	10144.34 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46346.D
Acq On : 13 Sep 2006 5:51 am
Operator : AC
Sample : 0609032-02
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 17 10:48:56 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

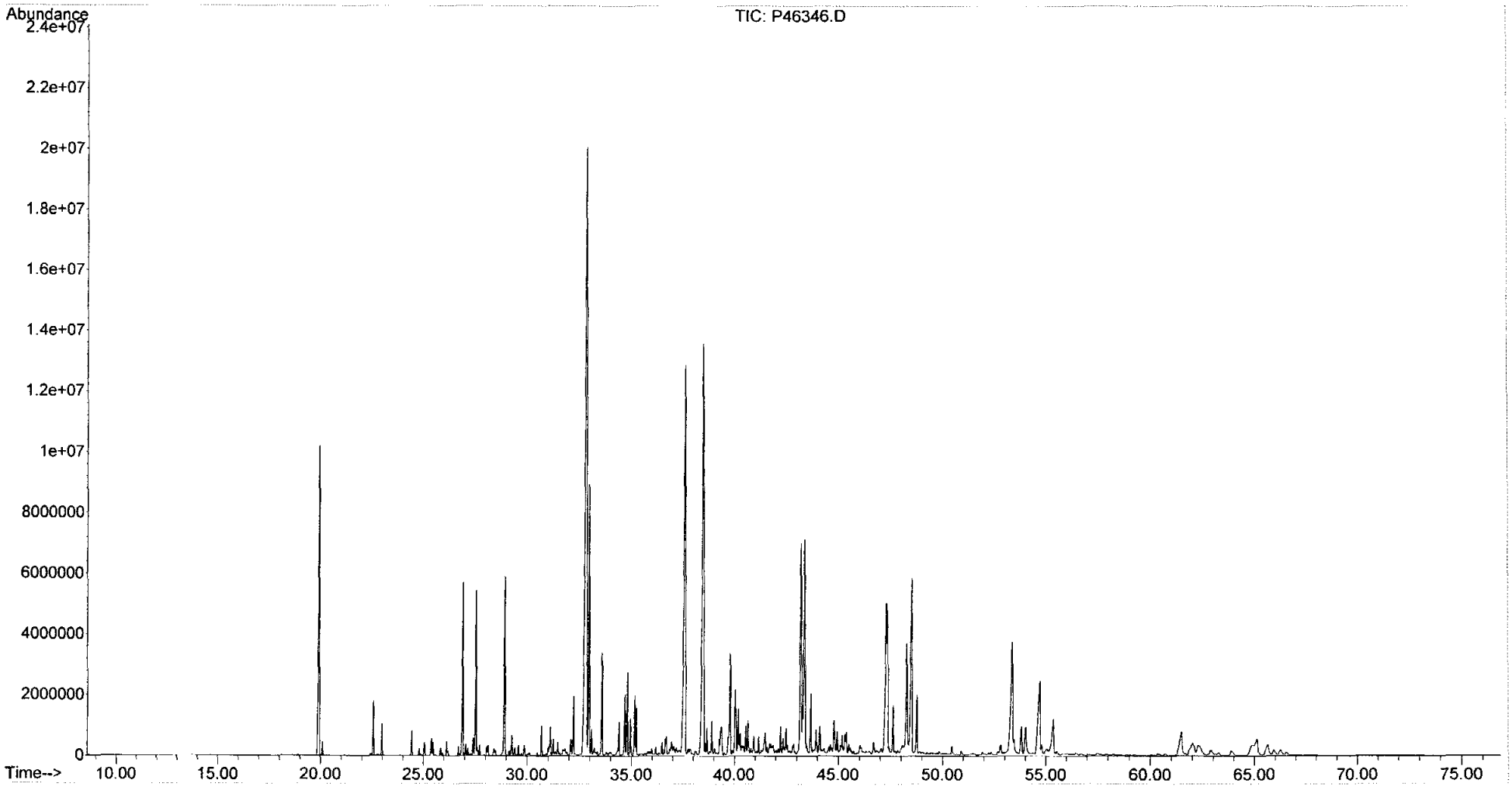
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.01	258	1215760m	6306.12 ng/mL	
64) Naphthobenzothiophene	42.24	234	1733038m	10487.01 ng/ml	
65) Naphthobenzothiophene-2,1-	42.24	234	1733311m	10488.66 ng/mL	
66) Naphthobenzothiophene-1,2-	42.58	234	455680	2757.42 ng/mL#	19
67) Naphthobenzothiophene-2,3-	42.87	234	572670m	3465.36 ng/mL	
68) C1-Naphthobenzothiophenes	43.90	248	916504m	5545.97 ng/ml	
69) C2-Naphthobenzothiophenes	46.06	262	348777m	2110.53 ng/ml	
70) C3-Naphthobenzothiophenes	46.84	276	247124m	1495.40 ng/ml	
71) C4-Naphthobenzothiophenes	49.84	290	95048m	575.16 ng/mL	
73) Benz[a]anthracene	43.24	228	19084023	108392.93 ng/mL	97
74) Chrysene	43.41	228	18171640m	104641.78 ng/mL	
75) Chrysene/Triphenylene	43.41	228	18170681m	104636.26 ng/mL	
76) C1-Chrysenes	44.82	242	5321199m	30642.24 ng/mL	
77) C2-Chrysenes	46.50	256	1867901m	10756.35 ng/mL	
79) C3-Chrysenes	48.48	270	1427998m	8223.16 ng/mL	
80) C4-Chrysenes	49.11	284	539155m	3104.74 ng/mL	
82) Benzo[b]fluoranthene	47.32	252	20863630	111938.19 ng/mL	97
83) Benzo[k]fluoranthene	47.39	252	9608941m	50552.89 ng/mL	
84) Benzo[a]fluoranthene	47.65	252	3186678m	16765.20 ng/mL	
85) Benzo[e]pyrene	48.31	252	11293374m	63295.30 ng/mL	
86) Benzo[a]pyrene	48.53	252	19555078m	113688.65 ng/mL	
87) Perylene	48.79	252	4997586m	29204.22 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.39	276	12119897m	73790.49 ng/mL	
89) Dibenz[a,h]anthracene	53.39	278	3041800m	19022.21 ng/mL	
90) Benzo[g,h,i]perylene	54.72	276	11478159	65422.33 ng/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46346.D
Acq On : 13 Sep 2006 5:51 am
Operator : AC
Sample : 0609032-02
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 17 10:48:56 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20114.D
Acq On : 19 Sep 2006 11:29 am
Operator : AC
Sample : 0609032-02
Misc : 1x
ALS Vial : 14 Sample Multiplier: 1

MM 9/28/6

Quant Time: Sep 27 15:21:34 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.42	240	56802	500.00	ng/mL	0.15
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.90	217	37600	1537.90	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 153.79%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.07	191	16198	310.32	ng/mL#	60
84) Hopane (T19)	51.07	191	16198	310.32	ng/mL#	60
85) C23 Tricyclic Terpane (T4)	39.89	191	270	5.17	ng/ml	100
88) C24 Tetracyclic Terpane (T	43.44	191	1339m	25.65	ng/ml	
98) 17a(H)-22,29,30-Trisnorhop	48.05	191	8506	162.96	ng/ml	100
101) 30-Norhopane (T15)	49.81	191	12845	246.09	ng/ml	100
103) 17a(H)-Diahopane (X)	50.05	191	1101m	21.09	ng/ml	
104) 30-Normoretane (T17)	50.54	191	2177m	41.71	ng/ml	
106) Moretane (T20)	51.73	191	3105m	59.49	ng/ml	
107) 30-Homohopane-22S (T21)	52.75	191	5268	100.93	ng/ml	100
108) 30-Homohopane-22R (T22)	52.96	191	3948	75.64	ng/ml	100
109) 30,31-Bishomohopane-22S (T	54.21	191	3236	62.00	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.59	191	2100	40.23	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	44.47	217	146	5.97	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	46.51	217	126m	5.15	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.01	217	663	27.12	ng/ml	100
125) 14a,17a-20S-Methylcholesta	47.68	217	95m	3.89	ng/ml	
126) 14a,17a-20R-Methylcholesta	48.33	217	407	16.65	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	48.68	217	315m	12.88	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	49.54	217	509	20.82	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	46.60	218	192m	7.85	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	46.68	218	172m	7.04	ng/ml	
131) 14b,17b-20R-Methylcholesta	47.81	218	342m	13.99	ng/ml	
132) 14b,17b-20S-Methylcholesta	47.92	218	319m	13.05	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.92	218	541m	22.13	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.95	218	321m	13.13	ng/ml	

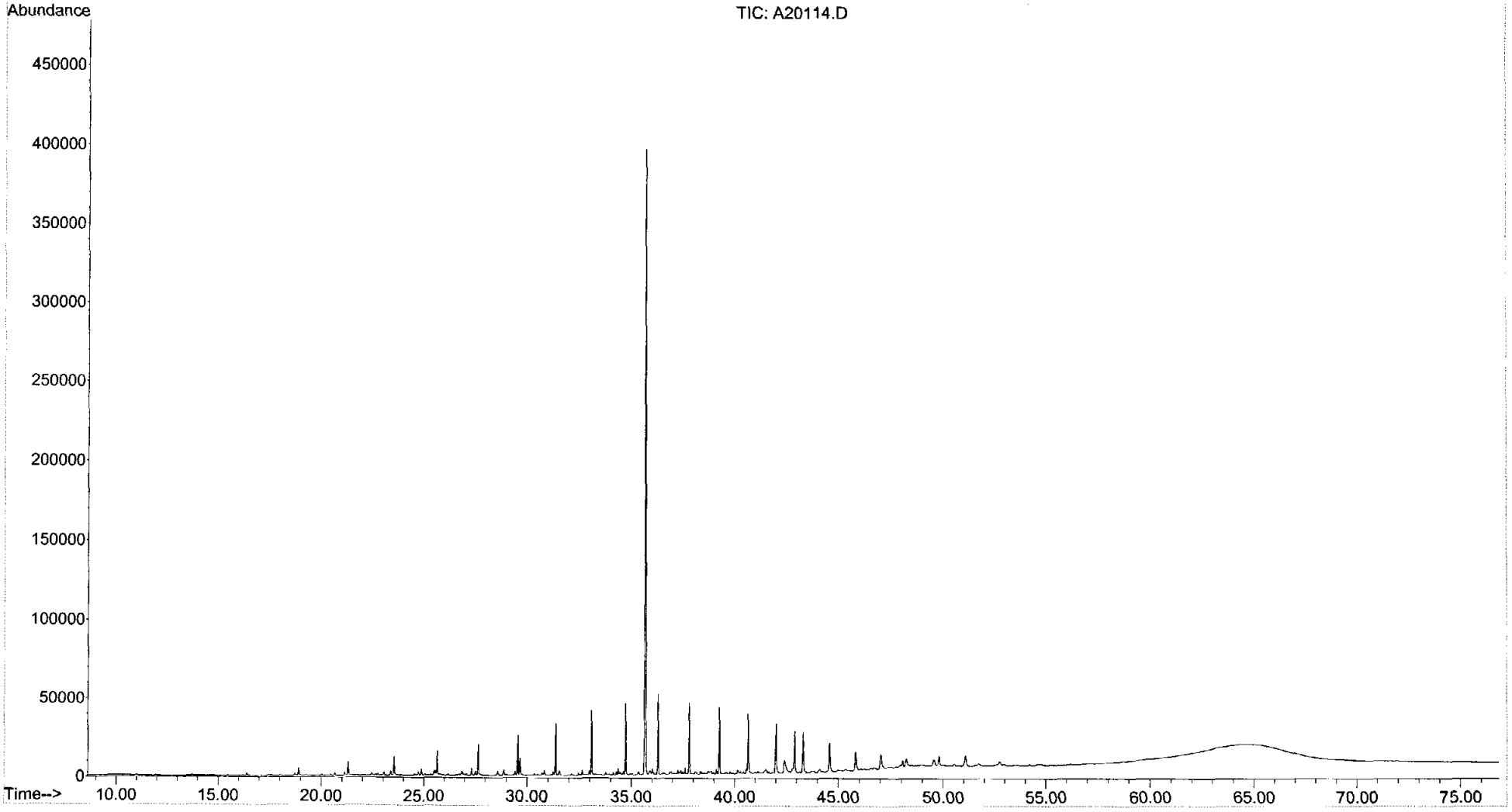
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MS 10/2/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20114.D
Acq On : 19 Sep 2006 11:29 am
Operator : AC
Sample : 0609032-02
Misc : 1x
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 27 15:21:34 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-02E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1912	22.22	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**20000000**		Fluoranthene	**27000000**	
C1-Naphthalenes	**3300000**		Pyrene	**24000000**	
C2-Naphthalenes	20000	U	C1-Fluoranthenes/Pyrenes	**6800000**	
C3-Naphthalenes	20000	U	C2-Fluoranthenes/Pyrenes	8800	U
C4-Naphthalenes	20000	U	C3-Fluoranthenes/Pyrenes	8800	U
Biphenyl	7300	U	C4-Fluoranthenes/Pyrenes	8800	U
Dibenzofuran	**4600000**		Naphthobenzothiophenes	**1400000**	
Acenaphthylene	17000	U	C1-Naphthobenzothiophenes	5000	U
Acenaphthene	**6200000**		C2-Naphthobenzothiophenes	5000	U
Fluorene	**5400000**		C3-Naphthobenzothiophenes	5000	U
C1-Fluorenes	9400	U	C4-Naphthobenzothiophenes	5000	U
C2-Fluorenes	9400	U	Benz[a]anthracene	**8600000**	
C3-Fluorenes	9400	U	Chrysene/Triphenylene	**8500000**	
Anthracene	**8100000**		C1-Chrysenes	8600	U
Phenanthrene	**36000000**		C2-Chrysenes	8600	U
C1-Phenanthrenes/Anthracenes	**6200000**		C3-Chrysenes	8600	U
C2-Phenanthrenes/Anthracenes	21000	U	C4-Chrysenes	8600	U
C3-Phenanthrenes/Anthracenes	21000	U	Benzo[b]fluoranthene	**6600000**	
C4-Phenanthrenes/Anthracenes	21000	U	Benzo[k]fluoranthene	**6200000**	
Retene	9400	U	Benzo[a]fluoranthene	**1400000**	
Dibenzothiophene	**2100000**		Benzo[e]pyrene	**5200000**	
C1-Dibenzothiophenes	3600	U	Benzo[a]pyrene	**8800000**	
C2-Dibenzothiophenes	3600	U	Perylene	**2300000**	
C3-Dibenzothiophenes	3600	U	Indeno[1,2,3-cd]pyrene	**5900000**	
C4-Dibenzothiophenes	3600	U	Dibenz[a,h]anthracene	**450000**	
Benzo(b)fluorene	**2100000**		Benzo[g,h,i]perylene	**5500000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	78	50-130
Benzo[b]fluoranthene-d12	82	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:50

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-02E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.191	22.22	100	AC

Parameter	Result
Carbazole	**4000000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	78	50-130
Benzo[b]fluoranthene-d12	82	50-130

N/A - Not Applicable

09/27/06 11:51

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46366.D
Acq On : 13 Sep 2006 9:17 pm
Operator : AC
Sample : 0609032-02-re
Misc : 100x
ALS Vial : 21 Sample Multiplier: 1

MAL 9/27/6

Quant Time: Sep 27 10:51:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	30604	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	45036	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	554	8.03	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.80%#	
58) Pyrene-d10	38.30	212	986	7.81	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.78%#	
81) Benzo[b]fluoranthene-d12	47.10	264	775	8.23	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.82%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	

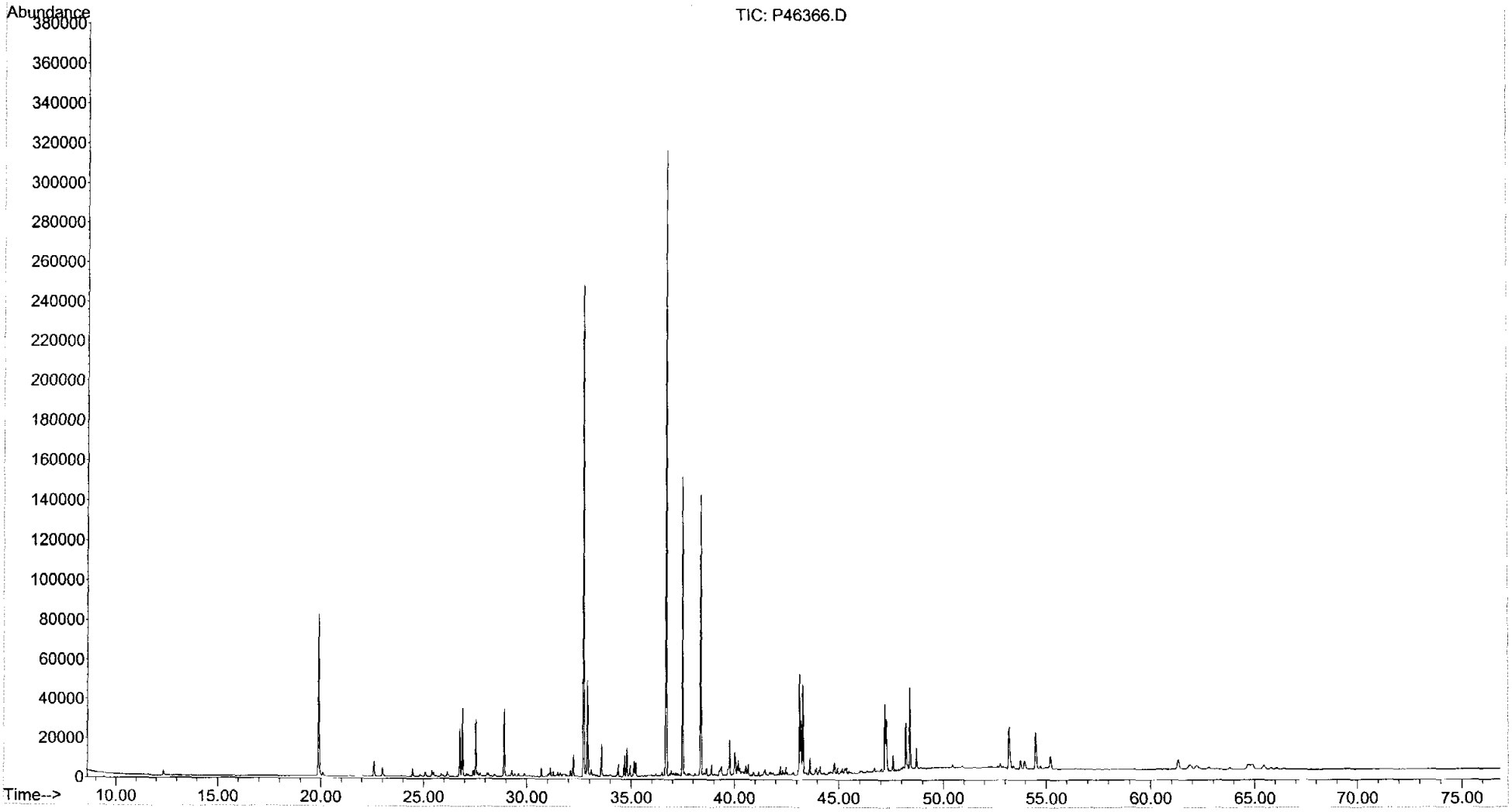
Target Compounds						Qvalue
9) Naphthalene	19.89	128	224570	1675.58	ng/mL#	100
10) C1-Naphthalenes	22.59	142	38390m	286.44	ng/mL	
15) 2-Methylnaphthalene	22.59	142	24040	267.16	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	13473	159.20	ng/mL#	100
24) Dibenzofuran	27.54	168	46441m	400.53	ng/mL	
26) Acenaphthene	26.90	153	43682	537.03	ng/mL	99
28) Fluorene	28.91	166	44339m	460.07	ng/mL	
32) Dibenzothiophene	32.22	184	21630	182.57	ng/mL	97
41) Phenanthrene	32.72	178	415214	3074.90	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.79	192	71827m	531.92	ng/mL	
53) Anthracene	32.90	178	83719	696.53	ng/mL	100
54) Carbazole	33.57	167	39311m	341.40	ng/mL	
55) 1-Methylphenanthrene	35.22	192	10855	115.47	ng/mL	99
56) Fluoranthene	37.48	202	319417m	2321.74	ng/mL	
57) Benzo(b)fluorene	40.01	216	14225m	182.87	ng/mL	
59) Pyrene	38.37	202	280074	2024.50	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.76	216	80901m	584.79	ng/mL	
64) Naphthobenzothiophene	42.22	234	8660	73.03	ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.22	234	8660	73.03	ng/mL	97
66) Naphthobenzothiophene-1,2-	42.56	234	2340	19.73	ng/mL#	22
67) Naphthobenzothiophene-2,3-	42.85	234	3367m	28.39	ng/mL	
73) Benz[a]anthracene	43.14	228	87873m	741.88	ng/mL	
74) Chrysene	43.30	228	85808m	734.49	ng/mL	
75) Chrysene/Triphenylene	43.30	228	85808m	734.49	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	71459	569.89	ng/mL	96
83) Benzo[k]fluoranthene	47.26	252	68099	532.55	ng/mL	98
84) Benzo[a]fluoranthene	47.57	252	15377	120.25	ng/mL#	1
85) Benzo[e]pyrene	48.19	252	53322	444.22	ng/mL	98
86) Benzo[a]pyrene	48.38	252	88070	761.08	ng/mL	100
87) Perylene	48.69	252	23226m	201.75	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	56390	510.33	ng/mL	94
89) Dibenz[a,h]anthracene	53.38	278	4198	39.02	ng/mL	98
90) Benzo[g,h,i]perylene	54.50	276	55947	474.00	ng/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46366.D
Acq On : 13 Sep 2006 9:17 pm
Operator : AC
Sample : 0609032-02-re
Misc : 100x
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 27 10:51:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-03**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.136	16.67	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**21000000**	E	Fluoranthene	**39000000**	E
C1-Naphthalenes	**5700000**	E	Pyrene	**36000000**	E
C2-Naphthalenes	**3600000**	E	C1-Fluoranthenes/Pyrenes	**11000000**	E
C3-Naphthalenes	**1800000**		C2-Fluoranthenes/Pyrenes	**3000000**	
C4-Naphthalenes	**610000**		C3-Fluoranthenes/Pyrenes	**1200000**	
Biphenyl	**1400000**	E	C4-Fluoranthenes/Pyrenes	**750000**	
Dibenzofuran	**8700000**	E	Naphthobenzothiophenes	**2000000**	E
Acenaphthylene	**330000**		C1-Naphthobenzothiophenes	**690000**	
Acenaphthene	**11000000**	E	C2-Naphthobenzothiophenes	**260000**	
Fluorene	**9600000**	E	C3-Naphthobenzothiophenes	**180000**	
C1-Fluorenes	**1600000**		C4-Naphthobenzothiophenes	**70000**	
C2-Fluorenes	**900000**		Benz[a]anthracene	**13000000**	E
C3-Fluorenes	**640000**		Chrysene/Triphenylene	**12000000**	E
Anthracene	**15000000**	E	C1-Chrysenes	**3600000**	
Phenanthrene	**50000000**	E	C2-Chrysenes	**1300000**	
C1-Phenanthrenes/Anthracenes	**10000000**	E	C3-Chrysenes	**950000**	
C2-Phenanthrenes/Anthracenes	**3700000**		C4-Chrysenes	**350000**	
C3-Phenanthrenes/Anthracenes	**1200000**		Benzo[b]fluoranthene	**12000000**	E
C4-Phenanthrenes/Anthracenes	**350000**		Benzo[k]fluoranthene	**6600000**	E
Retene	**98000**		Benzo[a]fluoranthene	**2000000**	E
Dibenzothiophene	**3400000**	E	Benzo[e]pyrene	**7200000**	E
C1-Dibenzothiophenes	**820000**		Benzo[a]pyrene	**13000000**	E
C2-Dibenzothiophenes	**380000**		Perylene	**3400000**	E
C3-Dibenzothiophenes	**200000**		Indeno[1,2,3-cd]pyrene	**8400000**	E
C4-Dibenzothiophenes	**54000**		Dibenz[a,h]anthracene	**2100000**	E
Benzo(b)fluorene	**3800000**	E	Benzo[g,h,i]perylene	**7500000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	118	50-130
Benzo[b]fluoranthene-d12	129	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:31

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-03**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.136	16.67	1	AC

Parameter	Result
Carbazole	**6700000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	118	50-130
Benzo[b]fluoranthene-d12	129	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

09/27/06 11:53

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-03**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.136	2.7	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**120**	J	30,31-Bishomohopane-22S	**1000**	
C24 Tricyclic Terpane	86	U	30,31-Bishomohopane-22R	**820**	
C25 Tricyclic Terpane	86	U	30,31-Trishomohopane-22S	86	U
C24 Tetracyclic Terpane	**540**		30,31-Trishomohopane-22R	86	U
C26 Tricyclic Terpane-22S	86	U	Tetrakishomohopane-22S	86	U
C26 Tricyclic Terpane-22R	86	U	Tetrakishomohopane-22R	86	U
C28 Tricyclic Terpane-22S	86	U	Pentakishomohopane-22S	86	U
C28 Tricyclic Terpane-22R	86	U	Pentakishomohopane-22R	86	U
C29 Tricyclic Terpane-22S	86	U	13b(H),17a(H)-20S-Diacholestane	**80**	J
C29 Tricyclic Terpane-22R	86	U	13b(H),17a(H)-20R-Diacholestane	31	U
18a-22,29,30-Trisnorneohopane-TS	86	U	13b,17a-20S-Methyldiacholestane	31	U
C30 Tricyclic Terpane-22S	86	U	14a(H),17a(H)-20S-Cholestane	**70**	J
C30 Tricyclic Terpane-22R	86	U	14a(H),17a(H)-20R-Cholestane	**460**	
17a(H)-22,29,30-Trisnorhopane-TM	**2900**		13b,17a-20R-Ethyldiacholestane	31	U
17a/b,21b/a 28,30-Bisnorhopane	86	U	13a,17b-20S-Ethyldiacholestane	31	U
17a(H),21b(H)-25-Norhopane	86	U	14a,17a-20S-Methylcholestane	**54**	J
30-Norhopane	**3900**		14a,17a-20R-Methylcholestane	**250**	
18a(H)-30-Norneohopane-C29Ts	86	U	14a(H),17a(H)-20S-Ethylcholestane	**280**	
17a(H)-Diahopane	**320**		14a(H),17a(H)-20R-Ethylcholestane	**430**	
30-Normoretane	**750**		14b(H),17b(H)-20R-Cholestane	**74**	J
18a(H)&18b(H)-Oleananes	86	U	14b(H),17b(H)-20S-Cholestane	**69**	J
Hopane	**5400**		14b,17b-20R-Methylcholestane	**220**	
Moretane	**1200**		14b,17b-20S-Methylcholestane	**220**	
30-Homohopane-22S	**1600**		14b(H),17b(H)-20R-Ethylcholestane	**430**	
30-Homohopane-22R	**1100**		14b(H),17b(H)-20S-Ethylcholestane	**190**	J

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	79	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46348.D
Acq On : 13 Sep 2006 7:20 am
Operator : AC
Sample : 0609032-03
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

MAL 9/25/6

Quant Time: Sep 21 20:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.78	164	37604m	500.00 ng/mL	0.02
72) Chrysene-d12	43.27	240	62640m	500.00 ng/mL	0.08

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.46	152	84810	1000.54 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.05%		
58) Pyrene-d10	38.37	212	182364	1175.11 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 117.51%		
81) Benzo[b]fluoranthene-d12	47.16	264	169325m	1292.12 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 129.21%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.94	128	28058700	170382.55 ng/mL#E	100
10) C1-Naphthalenes	22.59	142	7603504m	46171.22 ng/mL E	
11) C2-Naphthalenes	25.42	156	4823174m	29288.05 ng/mL E	
12) C3-Naphthalenes	27.75	170	2408720m	14626.62 ng/mL	
13) C4-Naphthalenes	30.52	184	816839m	4960.14 ng/mL	
15) 2-Methylnaphthalene	22.59	142	4893241	44255.88 ng/mL#E	100
16) 1-Methylnaphthalene	23.01	142	2682281	25795.02 ng/mL#E	100
22) Biphenyl	24.46	154	1654899	11863.14 ng/mL#E	100
23) 2,6-Dimethylnaphthalene	25.08	156	1171147	12180.31 ng/mL#E	100
24) Dibenzofuran	27.57	168	10078237	70739.81 ng/mL E	98
25) Acenaphthylene	26.16	152	416372m	2705.36 ng/mL	
26) Acenaphthene	26.94	153	9202611	92077.82 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	215054m	2540.46 ng/mL	
28) Fluorene	28.95	166	9310285m	78622.13 ng/mL E	
29) C1-Fluorenes	31.14	180	1499770m	12665.04 ng/mL	
30) C2-Fluorenes	32.83	194	872768m	7370.22 ng/mL	
31) C3-Fluorenes	36.00	208	622783m	5259.19 ng/mL	
32) Dibenzothiophene	32.25	184	4058084	27876.62 ng/mL E	97
36) OTP	34.43	198	18306	125.75 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	990540m	6804.42 ng/mL	
38) C2-Dibenzothiophenes	36.49	212	453238m	3113.48 ng/mL	
39) C3-Dibenzothiophenes	37.58	226	233119m	1601.39 ng/mL	
40) C4-Dibenzothiophenes	39.75	240	64052m	440.00 ng/mL	
41) Phenanthrene	32.82	178	67495058m	406794.69 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.83	192	14250040m	85885.41 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.67	206	5018639m	30247.48 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.82	220	1688113m	10174.31 ng/mL	
51) C4-Phenanthrenes/Anthracen	39.73	234	469355m	2828.82 ng/mL	
52) Retene	39.73	234	33870m	803.45 ng/mL	
53) Anthracene	33.01	178	18598643m	125932.84 ng/mL E	
54) Carbazole	33.61	167	7759703m	54845.61 ng/mL E	
55) 1-Methylphenanthrene	35.26	192	1914972	16578.69 ng/mL E	100
56) Fluoranthene	37.62	202	54119256m	320148.66 ng/mL E	
57) Benzo(b)fluorene	40.05	216	3000927m	31396.33 ng/mL E	
59) Pyrene	38.51	202	49991574	294093.73 ng/mL E	93
60) C1-Fluoranthenes/Pyrenes	39.82	216	15267278m	89815.35 ng/mL E	
61) C2-Fluoranthenes/Pyrenes	41.51	230	4136879m	24336.71 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.19	244	1724822m	10146.90 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46348.D
Acq On : 13 Sep 2006 7:20 am
Operator : AC
Sample : 0609032-03
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 20:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

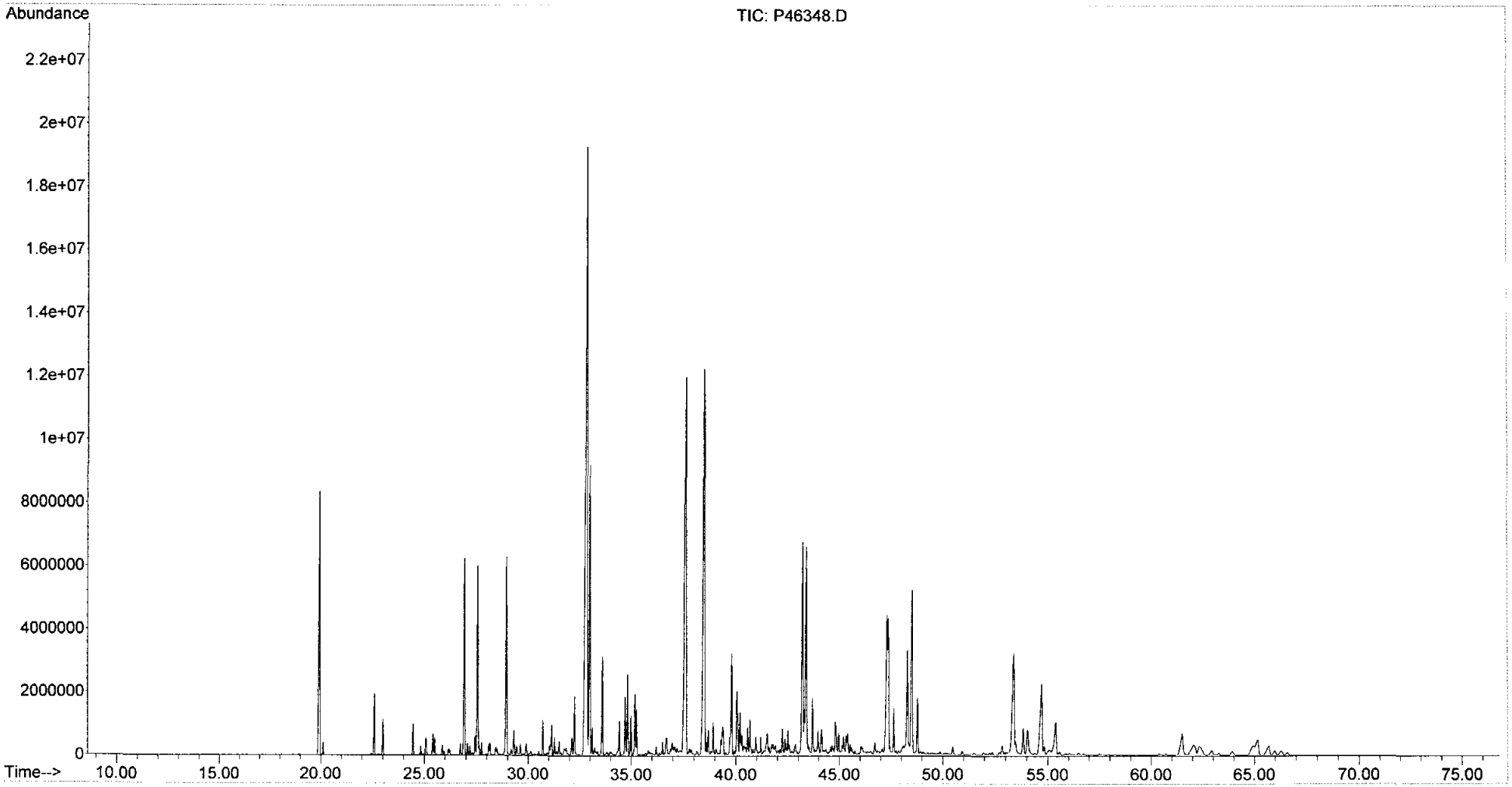
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.01	258	1038404m	6108.79 ng/mL	
64) Naphthobenzothiophene	42.25	234	1560411m	10709.21 ng/mL E	
65) Naphthobenzothiophene-2,1-	42.25	234	1560150m	10707.41 ng/mL E	
66) Naphthobenzothiophene-1,2-	42.58	234	411605	2824.87 ng/mL#	19
67) Naphthobenzothiophene-2,3-	42.88	234	434337m	2980.88 ng/mL	
68) C1-Naphthobenzothiophenes	43.90	248	820018m	5627.84 ng/ml	
69) C2-Naphthobenzothiophenes	46.06	262	305572m	2097.16 ng/ml	
70) C3-Naphthobenzothiophenes	46.84	276	211706m	1452.95 ng/ml	
71) C4-Naphthobenzothiophenes	49.84	290	83794m	575.08 ng/mL	
73) Benz[a]anthracene	43.24	228	17273999	104852.15 ng/mL E	98
74) Chrysene	43.42	228	16172580m	99527.65 ng/mL E	
75) Chrysene/Triphenylene	43.42	228	16168240m	99500.94 ng/mL E	
76) C1-Chrysenes	44.82	242	4747753m	29218.14 ng/mL	
77) C2-Chrysenes	46.50	256	1681110m	10345.72 ng/mL	
79) C3-Chrysenes	48.48	270	1254255m	7718.81 ng/mL	
80) C4-Chrysenes	49.11	284	460469m	2833.77 ng/mL	
82) Benzo[b]fluoranthene	47.32	252	17401402	99775.99 ng/mL E	97
83) Benzo[k]fluoranthene	47.38	252	9529401m	53578.37 ng/mL E	
84) Benzo[a]fluoranthene	47.65	252	2838078m	15956.89 ng/mL E	
85) Benzo[e]pyrene	48.31	252	9790327m	58640.59 ng/mL E	
86) Benzo[a]pyrene	48.53	252	17318968	107605.13 ng/mL E	96
87) Perylene	48.79	252	4469776m	27914.15 ng/mL E	
88) Indeno[1,2,3-cd]pyrene	53.40	276	10569803m	68773.60 ng/mL E	
89) Dibenz[a,h]anthracene	53.39	278	2615113m	17477.29 ng/mL E	
90) Benzo[g,h,i]perylene	54.72	276	10045305	61188.57 ng/mL E	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46348.D
Acq On : 13 Sep 2006 7:20 am
Operator : AC
Sample : 0609032-03
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 20:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20115.D
Acq On : 19 Sep 2006 1:06 pm
Operator : AC
Sample : 0609032-03
Misc : 1x
ALS Vial : 15 Sample Multiplier: 1

MAL 9/28/6

Quant Time: Sep 27 15:09:49 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.42	240	76465	500.00	ng/mL	0.15

System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.90	217	52118	1583.54	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 158.35%#			

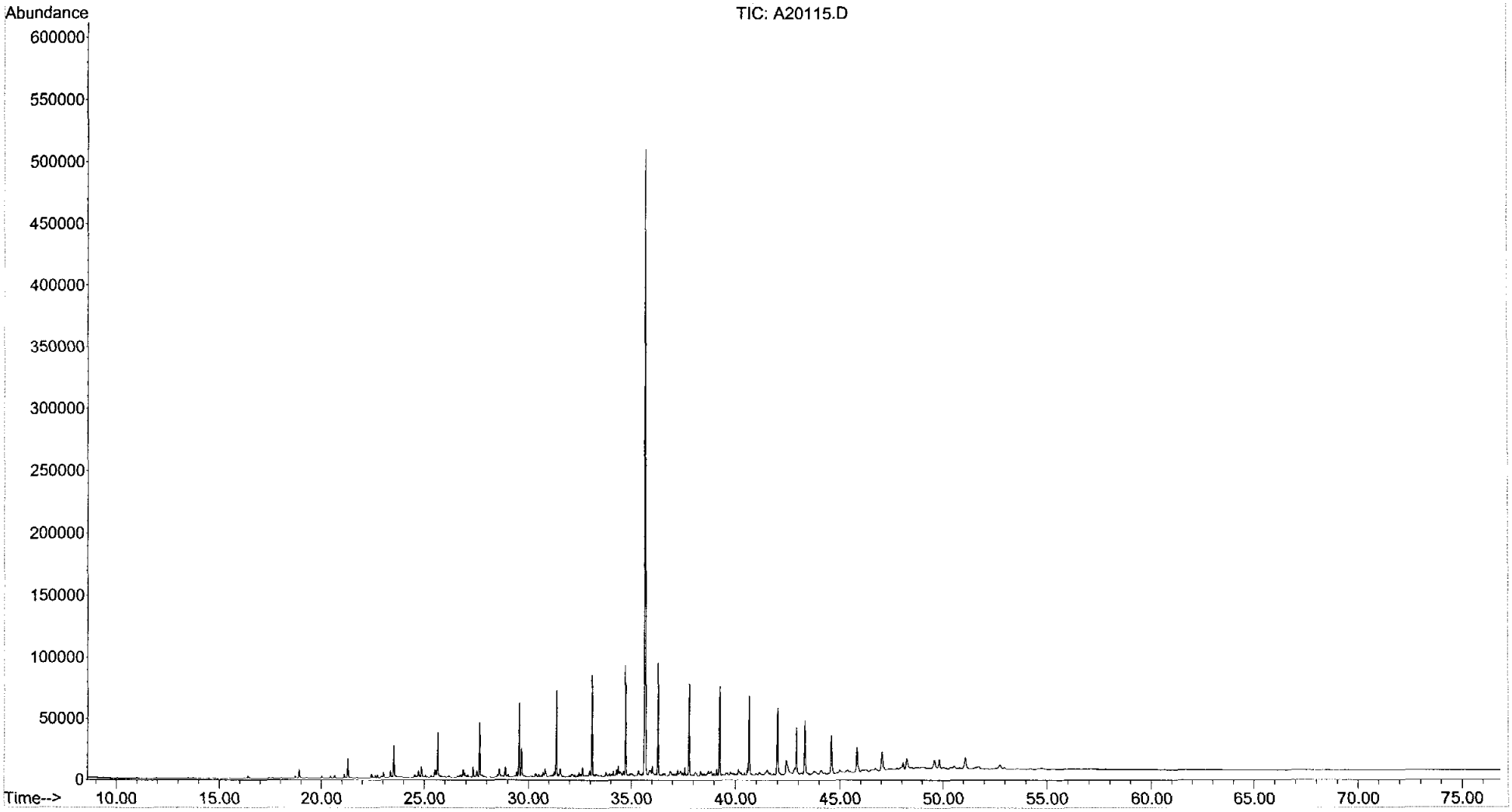
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.08	191	19282	274.41	ng/mL#	83
84) Hopane (T19)	51.08	191	19282	274.41	ng/mL#	83
85) C23 Tricyclic Terpane (T4)	39.89	191	433m	6.16	ng/ml	
88) C24 Tetracyclic Terpane (T	43.44	191	1912	27.21	ng/ml	100
98) 17a(H)-22,29,30-Trisnorhop	48.06	191	10238	145.70	ng/ml	100
101) 30-Norhopane (T15)	49.82	191	13809m	196.52	ng/ml	
103) 17a(H)-Diahopane (X)	50.07	191	1117m	15.90	ng/ml	
104) 30-Normoretane (T17)	50.54	191	2655m	37.78	ng/ml	
106) Moretane (T20)	51.73	191	4284m	60.97	ng/ml	
107) 30-Homohopane-22S (T21)	52.76	191	5854	83.31	ng/ml	100
108) 30-Homohopane-22R (T22)	52.97	191	4035	57.42	ng/ml	100
109) 30,31-Bishomohopane-22S (T	54.22	191	3659	52.07	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.58	191	2919	41.54	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	44.47	217	132	4.01	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	46.52	217	116m	3.52	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.02	217	754m	22.91	ng/ml	
125) 14a,17a-20S-Methylcholesta	47.69	217	90m	2.73	ng/ml	
126) 14a,17a-20R-Methylcholesta	48.35	217	415	12.61	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	48.68	217	457m	13.89	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	49.53	217	712	21.63	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	46.59	218	123m	3.74	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	46.68	218	114m	3.46	ng/ml	
131) 14b,17b-20R-Methylcholesta	47.82	218	361m	10.97	ng/ml	
132) 14b,17b-20S-Methylcholesta	47.92	218	370m	11.24	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.90	218	707m	21.48	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.95	218	314m	9.54	ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20115.D
Acq On : 19 Sep 2006 1:06 pm
Operator : AC
Sample : 0609032-03
Misc : 1x
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 27 15:09:49 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-03E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.136	16.67	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**17000000**		Fluoranthene	**28000000**	
C1-Naphthalenes	**4300000**		Pyrene	**24000000**	
C2-Naphthalenes	**2700000**		C1-Fluoranthenes/Pyrenes	**7000000**	
C3-Naphthalenes	21000	U	C2-Fluoranthenes/Pyrenes	9300	U
C4-Naphthalenes	21000	U	C3-Fluoranthenes/Pyrenes	9300	U
Biphenyl	**1100000**		C4-Fluoranthenes/Pyrenes	9300	U
Dibenzofuran	**6200000**		Naphthobenzothiophenes	**1400000**	
Acenaphthylene	18000	U	C1-Naphthobenzothiophenes	5300	U
Acenaphthene	**8300000**		C2-Naphthobenzothiophenes	5300	U
Fluorene	**6700000**		C3-Naphthobenzothiophenes	5300	U
C1-Fluorenes	9900	U	C4-Naphthobenzothiophenes	5300	U
C2-Fluorenes	9900	U	Benz[a]anthracene	**8700000**	
C3-Fluorenes	9900	U	Chrysene/Triphenylene	**8500000**	
Anthracene	**9700000**		C1-Chrysenes	9100	U
Phenanthrene	**39000000**		C2-Chrysenes	9100	U
C1-Phenanthrenes/Anthracenes	**6700000**		C3-Chrysenes	9100	U
C2-Phenanthrenes/Anthracenes	22000	U	C4-Chrysenes	9100	U
C3-Phenanthrenes/Anthracenes	22000	U	Benzo[b]fluoranthene	**6600000**	
C4-Phenanthrenes/Anthracenes	22000	U	Benzo[k]fluoranthene	**6000000**	
Retene	9900	U	Benzo[a]fluoranthene	**1300000**	
Dibenzothiophene	**2400000**		Benzo[e]pyrene	**5000000**	
C1-Dibenzothiophenes	3800	U	Benzo[a]pyrene	**8700000**	
C2-Dibenzothiophenes	3800	U	Perylene	**2300000**	
C3-Dibenzothiophenes	3800	U	Indeno[1,2,3-cd]pyrene	**5800000**	
C4-Dibenzothiophenes	3800	U	Dibenz[a,h]anthracene	**1300000**	
Benzo(b)fluorene	**2000000**		Benzo[g,h,i]perylene	**5400000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	59	50-130
Pyrene-d10	63	50-130
Benzo[b]fluoranthene-d12	82	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:51

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-03E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.136	16.67	100	AC

Parameter	Result
Carbazole	**4200000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	59	50-130
Pyrene-d10	63	50-130
Benzo[b]fluoranthene-d12	82	50-130

N/A - Not Applicable

09/28/06 21:20

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\September06\sep12\
Data File : P46368.D
Acq On : 13 Sep 2006 10:46 pm
Operator : AC
Sample : 0609032-03-re
Misc : 100x
ALS Vial : 22 Sample Multiplier: 1

MAL 9/28/06

Quant Time: Sep 28 21:11:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

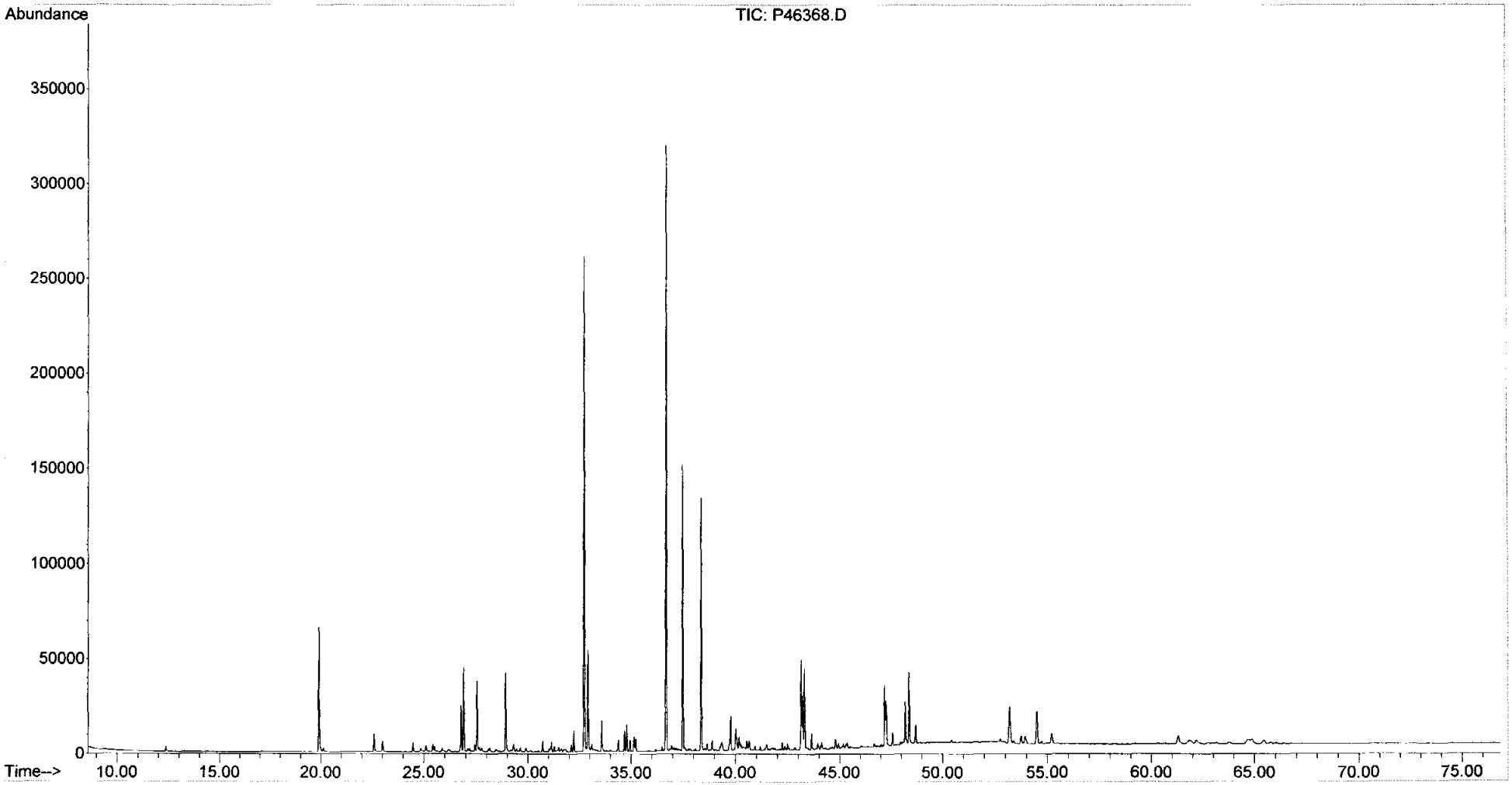
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	30651	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	44926	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	485	7.02	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.70%#	
58) Pyrene-d10	38.29	212	957	7.57	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.76%#	
81) Benzo[b]fluoranthene-d12	47.11	264	924	9.83	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.98%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	

Target Compounds						Qvalue
9) Naphthalene	19.89	128	181240	1350.21	ng/mL#	100
10) C1-Naphthalenes	22.59	142	47116m	351.01	ng/mL	
11) C2-Naphthalenes	25.42	156	29684m	221.14	ng/mL	
15) 2-Methylnaphthalene	22.59	142	29413	326.36	ng/mL#	100
16) 1-Methylnaphthalene	23.01	142	16167	190.74	ng/mL#	100
22) Biphenyl	24.47	154	10327	90.82	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	6783	86.55	ng/mL#	100
24) Dibenzofuran	27.54	168	58366m	502.61	ng/mL	
26) Acenaphthene	26.89	153	54959	674.64	ng/mL	99
28) Fluorene	28.91	166	52834	547.37	ng/mL	100
32) Dibenzothiophene	32.22	184	22966	193.55	ng/mL	97
41) Phenanthrene	32.71	178	434787	3214.91	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.79	192	73448m	543.09	ng/mL	
53) Anthracene	32.90	178	95137	790.31	ng/mL	100
54) Carbazole	33.57	167	39079	338.87	ng/mL	99
55) 1-Methylphenanthrene	35.22	192	10709	113.74	ng/mL	100
56) Fluoranthene	37.48	202	309279m	2244.60	ng/mL	
57) Benzo(b)fluorene	40.01	216	12728m	163.37	ng/mL	
59) Pyrene	38.37	202	270776	1954.29	ng/mL	100
60) C1-Fluoranthenes/Pyrenes	39.77	216	78714m	568.11	ng/mL	
64) Naphthobenzothiophene	42.22	234	8297	69.86	ng/ml#	65
65) Naphthobenzothiophene-2,1-	42.22	234	8297	69.86	ng/mL	98
66) Naphthobenzothiophene-1,2-	42.56	234	2267	19.09	ng/mL#	20
67) Naphthobenzothiophene-2,3-	42.85	234	2781m	23.42	ng/mL	
73) Benz[a]anthracene	43.14	228	83528m	706.92	ng/mL	
74) Chrysene	43.30	228	81097m	695.86	ng/mL	
75) Chrysene/Triphenylene	43.30	228	81157m	696.38	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	67764	541.74	ng/mL	96
83) Benzo[k]fluoranthene	47.25	252	62262	488.09	ng/mL	98
84) Benzo[a]fluoranthene	47.57	252	13910m	109.04	ng/mL	
85) Benzo[e]pyrene	48.19	252	48926	408.60	ng/mL	98
86) Benzo[a]pyrene	48.38	252	81772	708.39	ng/mL	99
87) Perylene	48.69	252	21960m	191.22	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	51925	471.07	ng/mL	95
89) Dibenz[a,h]anthracene	53.24	278	11483m	107.00	ng/mL	
90) Benzo[g,h,i]perylene	54.49	276	51454	437.00	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\September06\sep12\
Data File : P46368.D
Acq On : 13 Sep 2006 10:46 pm
Operator : AC
Sample : 0609032-03-re
Misc : 100x
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 28 21:11:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-4**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-04**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1404	16.67	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**6200000**	E	Fluoranthene	**41000000**	E
C1-Naphthalenes	**3000000**	E	Pyrene	**37000000**	E
C2-Naphthalenes	**2700000**		C1-Fluoranthenes/Pyrenes	**11000000**	E
C3-Naphthalenes	**1700000**		C2-Fluoranthenes/Pyrenes	**3600000**	
C4-Naphthalenes	**660000**		C3-Fluoranthenes/Pyrenes	**1400000**	
Biphenyl	**970000**		C4-Fluoranthenes/Pyrenes	**880000**	
Dibenzofuran	**7200000**	E	Naphthobenzothiophenes	**2100000**	E
Acenaphthylene	**84000**		C1-Naphthobenzothiophenes	**720000**	
Acenaphthene	**11000000**	E	C2-Naphthobenzothiophenes	**260000**	
Fluorene	**9000000**	E	C3-Naphthobenzothiophenes	**180000**	
C1-Fluorenes	**1600000**		C4-Naphthobenzothiophenes	**72000**	
C2-Fluorenes	**970000**		Benz[a]anthracene	**13000000**	E
C3-Fluorenes	**1500000**		Chrysene/Triphenylene	**12000000**	E
Anthracene	**17000000**	E	C1-Chrysenes	**3600000**	
Phenanthrene	**52000000**	E	C2-Chrysenes	**1200000**	
C1-Phenanthrenes/Anthracenes	**12000000**	E	C3-Chrysenes	**960000**	
C2-Phenanthrenes/Anthracenes	**4200000**		C4-Chrysenes	**370000**	
C3-Phenanthrenes/Anthracenes	**1400000**		Benzo[b]fluoranthene	**12000000**	E
C4-Phenanthrenes/Anthracenes	**340000**		Benzo[k]fluoranthene	**6200000**	E
Retene	**39000**		Benzo[a]fluoranthene	**1900000**	E
Dibenzothiophene	**3400000**	E	Benzo[e]pyrene	**6700000**	E
C1-Dibenzothiophenes	**910000**		Benzo[a]pyrene	**12000000**	E
C2-Dibenzothiophenes	**440000**		Perylene	**3100000**	E
C3-Dibenzothiophenes	**220000**		Indeno[1,2,3-cd]pyrene	**7800000**	E
C4-Dibenzothiophenes	**66000**		Dibenz[a,h]anthracene	**2100000**	E
Benzo(b)fluorene	**3500000**	E	Benzo[g,h,i]perylene	**6700000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	119	50-130
Benzo[b]fluoranthene-d12	100	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:19

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-4**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-04**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.14	16.67	1	AC

Parameter	Result
Carbazole	**6800000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	119	50-130
Benzo[b]fluoranthene-d12	100	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-4**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-04**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.14	2.78	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**190**	J	30,31-Bishomohopane-22S	**1200**	
C24 Tricyclic Terpane	**130**	J	30,31-Bishomohopane-22R	**970**	
C25 Tricyclic Terpane	85	U	30,31-Trishomohopane-22S	**650**	
C24 Tetracyclic Terpane	**720**		30,31-Trishomohopane-22R	85	U
C26 Tricyclic Terpane-22S	85	U	Tetrakishomohopane-22S	85	U
C26 Tricyclic Terpane-22R	85	U	Tetrakishomohopane-22R	85	U
C28 Tricyclic Terpane-22S	85	U	Pentakishomohopane-22S	85	U
C28 Tricyclic Terpane-22R	85	U	Pentakishomohopane-22R	85	U
C29 Tricyclic Terpane-22S	85	U	13b(H),17a(H)-20S-Diacholestane	**110**	J
C29 Tricyclic Terpane-22R	85	U	13b(H),17a(H)-20R-Diacholestane	30	U
18a-22,29,30-Trisnorneohopane-TS	**580**		13b,17a-20S-Methyldiacholestane	**110**	J
C30 Tricyclic Terpane-22S	**480**		14a(H),17a(H)-20S-Cholestane	**110**	J
C30 Tricyclic Terpane-22R	85	U	14a(H),17a(H)-20R-Cholestane	**700**	
17a(H)-22,29,30-Trisnorhopane-TM	**4000**		13b,17a-20R-Ethyldiacholestane	**73**	J
17a/b,21b/a 28,30-Bisnorhopane	85	U	13a,17b-20S-Ethyldiacholestane	30	U
17a(H),21b(H)-25-Norhopane	85	U	14a,17a-20S-Methylcholestane	**160**	J
30-Norhopane	**5700**		14a,17a-20R-Methylcholestane	**280**	
18a(H)-30-Norneohopane-C29Ts	85	U	14a(H),17a(H)-20S-Ethylcholestane	**420**	
17a(H)-Diahopane	**430**		14a(H),17a(H)-20R-Ethylcholestane	**640**	
30-Normoretane	**1100**		14b(H),17b(H)-20R-Cholestane	**93**	J
18a(H)&18b(H)-Oleananes	85	U	14b(H),17b(H)-20S-Cholestane	**110**	J
Hopane	**7200**		14b,17b-20R-Methylcholestane	**300**	
Moretane	**1700**		14b,17b-20S-Methylcholestane	**370**	
30-Homohopane-22S	**2200**		14b(H),17b(H)-20R-Ethylcholestane	**630**	
30-Homohopane-22R	**1600**		14b(H),17b(H)-20S-Ethylcholestane	**390**	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	89	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46350.D
Acq On : 13 Sep 2006 8:49 am
Operator : AC
Sample : 0609032-04
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

MAB 1/17/7

Quant Time: Jan 17 10:49:39 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.78	164	35310m	500.00 ng/mL	0.02
72) Chrysene-d12	43.28	240	61075m	500.00 ng/mL	0.09
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	78724	989.08 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 98.91%		
58) Pyrene-d10	38.37	212	173785	1192.58 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 119.26%		
81) Benzo[b]fluoranthene-d12	47.16	264	128329	1004.38 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.44%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	19.90	128	8138350	52629.62 ng/mL#	100
10) C1-Naphthalenes	22.58	142	3906965m	25265.82 ng/mL	
11) C2-Naphthalenes	25.42	156	3556183m	22997.36 ng/mL	
12) C3-Naphthalenes	28.16	170	2216829m	14335.94 ng/mL	
13) C4-Naphthalenes	30.52	184	866681m	5604.71 ng/mL	
15) 2-Methylnaphthalene	22.58	142	2434208	23445.98 ng/mL#	100
16) 1-Methylnaphthalene	23.01	142	1459920	14951.92 ng/mL#	100
22) Biphenyl	24.46	154	1074201	8200.68 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	815921	9037.15 ng/mL#	100
24) Dibenzofuran	27.57	168	8070730	60329.32 ng/mL	98
25) Acenaphthylene	26.16	152	102579	709.80 ng/mL#	100
26) Acenaphthene	26.94	153	8371868	89207.76 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	177599m	2234.30 ng/mL	
28) Fluorene	28.95	166	8476176	76228.63 ng/mL	99
29) C1-Fluorenes	31.14	180	1542711m	13874.03 ng/mL	
30) C2-Fluorenes	33.00	194	905558m	8143.94 ng/mL	
31) C3-Fluorenes	36.02	208	1386543m	12469.57 ng/mL	
32) Dibenzothiophene	32.25	184	3965099	29007.45 ng/mL	97
36) OTP	34.43	198	17999	131.68 ng/mL#	100
37) C1-Dibenzothiophenes	34.02	198	1070690m	7832.84 ng/mL	
38) C2-Dibenzothiophenes	36.49	212	503074m	3680.33 ng/mL	
39) C3-Dibenzothiophenes	38.53	226	253145m	1851.93 ng/mL	
40) C4-Dibenzothiophenes	40.97	240	76539m	559.94 ng/mL	
41) Phenanthrene	32.83	178	68216467m	437853.53 ng/mL	
47) C1-Phenanthrenes/Anthracen	34.84	192	15334791m	98427.74 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	5448366m	34970.83 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.82	220	1829063m	11740.01 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	442865m	2842.57 ng/mL	
52) Retene	39.74	234	12839m	324.35 ng/mL	
53) Anthracene	33.02	178	19356861	139581.87 ng/mL	99
54) Carbazole	33.62	167	7618610m	57346.75 ng/mL	
55) 1-Methylphenanthrene	35.27	192	2111189	19464.86 ng/mL	97
56) Fluoranthene	37.63	202	54724833m	344763.00 ng/mL	
57) Benzo(b)fluorene	40.06	216	2641945m	29436.32 ng/mL	
59) Pyrene	38.52	202	49541133	310378.21 ng/mL	93
60) C1-Fluoranthenes/Pyrenes	39.82	216	14873663m	93184.40 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.51	230	4777366m	29930.49 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.20	244	1882721m	11795.36 ng/mL	

AWS 1/17/07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46350.D
Acq On : 13 Sep 2006 8:49 am
Operator : AC
Sample : 0609032-04
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 17 10:49:39 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

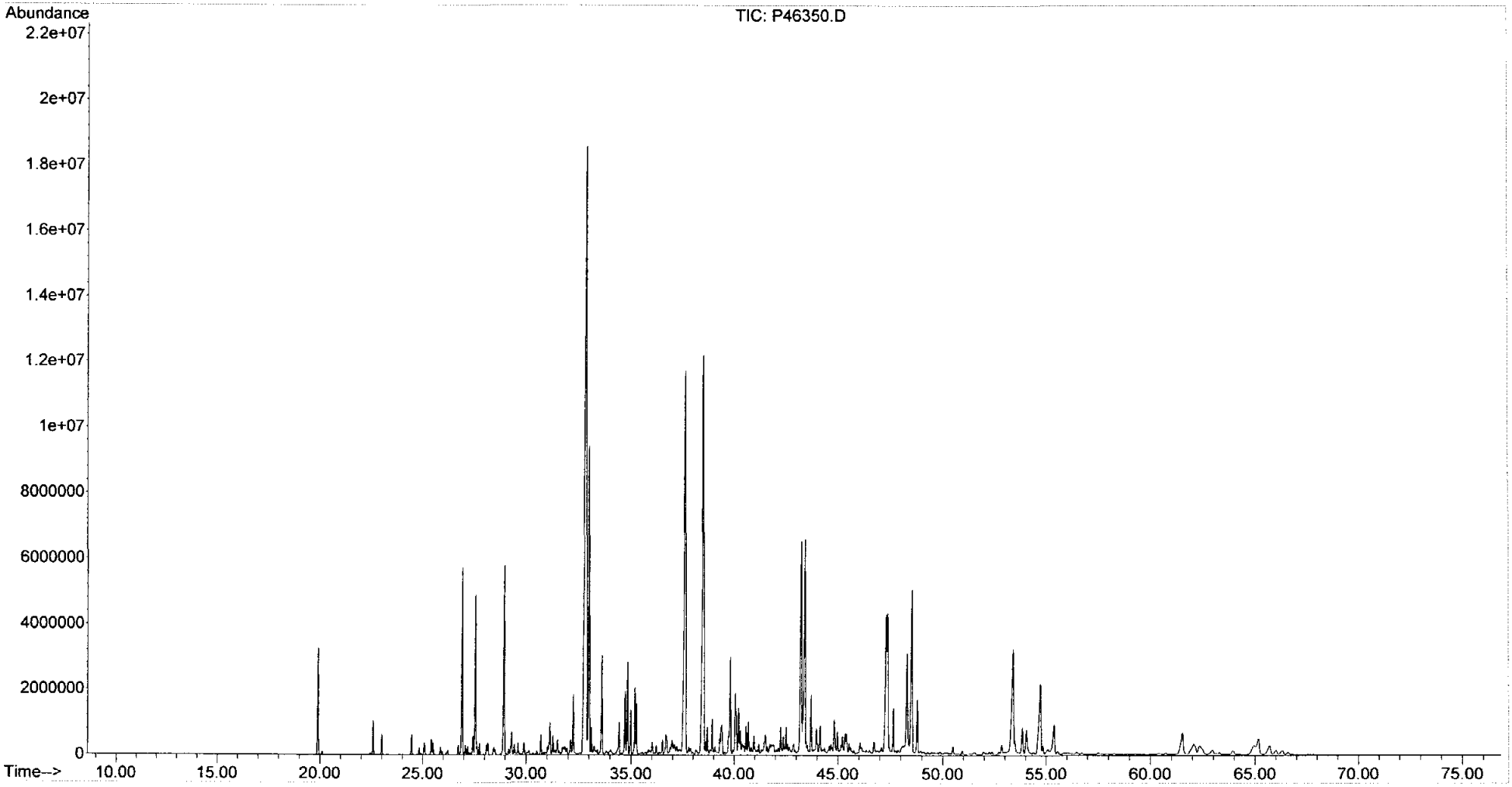
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.01	258	1179977m	7392.63 ng/mL	
64) Naphthobenzothiophene	42.25	234	1525048m	11146.49 ng/ml	
65) Naphthobenzothiophene-2,1-	42.25	234	1528905m	11174.68 ng/mL	
66) Naphthobenzothiophene-1,2-	42.59	234	403906	2952.13 ng/mL#	19
67) Naphthobenzothiophene-2,3-	42.88	234	455316m	3327.88 ng/mL	
68) C1-Naphthobenzothiophenes	43.90	248	828309m	6054.06 ng/ml	
69) C2-Naphthobenzothiophenes	46.07	262	304527m	2225.77 ng/ml	
70) C3-Naphthobenzothiophenes	46.84	276	204807m	1496.92 ng/ml	
71) C4-Naphthobenzothiophenes	49.84	290	83219m	608.24 ng/mL	
73) Benz[a]anthracene	43.24	228	17186092	106991.64 ng/mL	98
74) Chrysene	43.42	228	15957424m	100719.95 ng/mL	
75) Chrysene/Triphenylene	43.42	228	15913931m	100445.43 ng/mL	
76) C1-Chrysenes	44.82	242	4757019m	30025.32 ng/mL	
77) C2-Chrysenes	46.50	256	1650530m	10417.80 ng/mL	
79) C3-Chrysenes	48.48	270	1282603m	8095.52 ng/mL	
80) C4-Chrysenes	49.12	284	493277m	3113.46 ng/mL	
82) Benzo[b]fluoranthene	47.32	252	16802880	98812.94 ng/mL	97
83) Benzo[k]fluoranthene	47.39	252	9035460m	52102.96 ng/mL	
84) Benzo[a]fluoranthene	47.65	252	2752401m	15871.72 ng/mL	
85) Benzo[e]pyrene	48.31	252	9144342m	56174.84 ng/mL	
86) Benzo[a]pyrene	48.54	252	16108877m	102651.31 ng/mL	
87) Perylene	48.79	252	4110286m	26326.86 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.41	276	9854662m	65763.49 ng/mL	
89) Dibenz[a,h]anthracene	53.40	278	2633527m	18051.35 ng/mL	
90) Benzo[g,h,i]perylene	54.73	276	9072029	56676.09 ng/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46350.D
Acq On : 13 Sep 2006 8:49 am
Operator : AC
Sample : 0609032-04
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 17 10:49:39 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20116.D
Acq On : 19 Sep 2006 2:39 pm
Operator : AC
Sample : 0609032-04
Misc : 1x
ALS Vial : 16 Sample Multiplier: 1

MAL 9/28/6

Quant Time: Sep 27 15:18:00 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.41	240	73952	500.00	ng/mL	0.13
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	42.90	217	56768	1783.44	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	178.34%#	

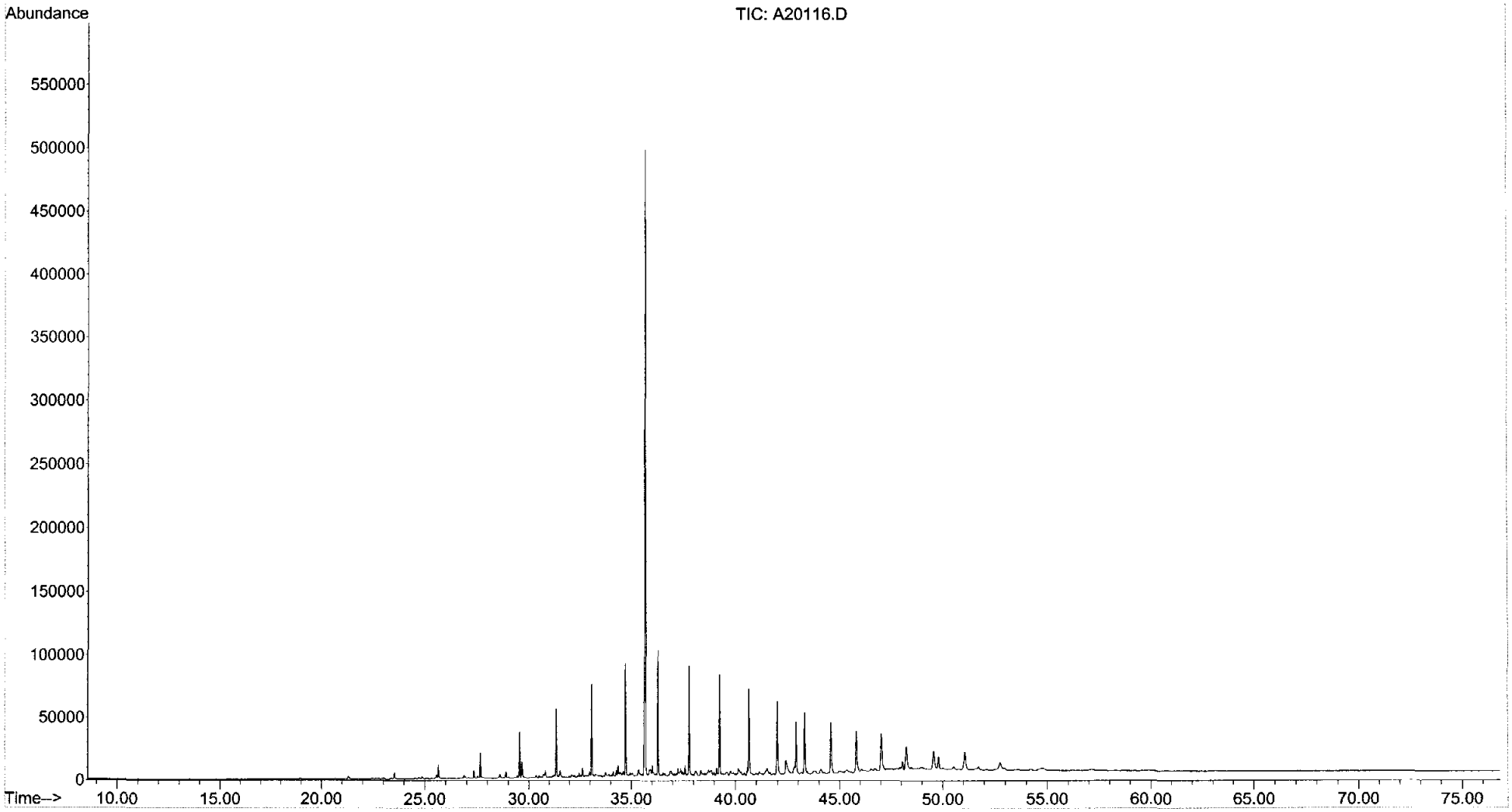
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.08	191	24670	363.03	ng/mL#	81
84) Hopane (T19)	51.08	191	24670	363.03	ng/mL#	81
85) C23 Tricyclic Terpane (T4)	39.89	191	666	9.80	ng/ml	100
86) C24 Tricyclic Terpane (T5)	40.63	191	457m	6.72	ng/ml	
88) C24 Tetracyclic Terpane (T	43.44	191	2471	36.36	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	47.56	191	1981	29.15	ng/ml	100
96) C30 Tricyclic Terpane-22S	47.76	191	1644	24.19	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	48.06	191	13761m	202.50	ng/ml	
101) 30-Norhopane (T15)	49.82	191	19621	288.73	ng/ml	100
103) 17a(H)-Diahopane (X)	50.07	191	1470m	21.63	ng/ml	
104) 30-Normoretane (T17)	50.54	191	3706m	54.53	ng/ml	
106) Moretane (T20)	51.73	191	5915	87.04	ng/ml	100
107) 30-Homohopane-22S (T21)	52.76	191	7587	111.64	ng/ml	100
108) 30-Homohopane-22R (T22)	52.97	191	5510	81.08	ng/ml	100
109) 30,31-Bishomohopane-22S (T	54.23	191	4272	62.86	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.58	191	3315	48.78	ng/ml	100
111) 30,31-Trishomohopane-22S (	56.22	191	2240	32.96	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	44.47	217	184	5.78	ng/ml	100
120) 13b,17a-20S-Methyldiachole	45.62	217	183m	5.75	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	46.52	217	184m	5.78	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.02	217	1121m	35.22	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	47.29	217	117m	3.68	ng/ml	
125) 14a,17a-20S-Methylcholesta	47.67	217	258m	8.11	ng/ml	
126) 14a,17a-20R-Methylcholesta	48.33	217	458m	14.39	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	48.68	217	675m	21.21	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	49.53	217	1027	32.26	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	46.59	218	149m	4.68	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	46.67	218	179	5.62	ng/ml	100
131) 14b,17b-20R-Methylcholesta	47.82	218	481m	15.11	ng/ml	
132) 14b,17b-20S-Methylcholesta	47.92	218	599m	18.82	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.91	218	1011m	31.76	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.95	218	630m	19.79	ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20116.D
Acq On : 19 Sep 2006 2:39 pm
Operator : AC
Sample : 0609032-04
Misc : 1x
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 27 15:18:00 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-4**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-04E**
Associated Blank: **SS090806B10**
Concentration Units: ***µg/Kg***

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.1404	16.67	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4600000**		Fluoranthene	**28000000**	
C1-Naphthalenes	**2200000**		Pyrene	**24000000**	
C2-Naphthalenes	20000	U	C1-Fluoranthenes/Pyrenes	**6800000**	
C3-Naphthalenes	20000	U	C2-Fluoranthenes/Pyrenes	9000	U
C4-Naphthalenes	20000	U	C3-Fluoranthenes/Pyrenes	9000	U
Biphenyl	7500	U	C4-Fluoranthenes/Pyrenes	9000	U
Dibenzofuran	**5000000**		Naphthobenzothiophenes	**1300000**	
Acenaphthylene	17000	U	C1-Naphthobenzothiophenes	5100	U
Acenaphthene	**7600000**		C2-Naphthobenzothiophenes	5100	U
Fluorene	**6200000**		C3-Naphthobenzothiophenes	5100	U
C1-Fluorenes	9600	U	C4-Naphthobenzothiophenes	5100	U
C2-Fluorenes	9600	U	Benz[a]anthracene	**8500000**	
C3-Fluorenes	9600	U	Chrysene/Triphenylene	**8300000**	
Anthracene	**10000000**		C1-Chrysenes	8800	U
Phenanthrene	**39000000**		C2-Chrysenes	8800	U
C1-Phenanthrenes/Anthracenes	**7100000**		C3-Chrysenes	8800	U
C2-Phenanthrenes/Anthracenes	21000	U	C4-Chrysenes	8800	U
C3-Phenanthrenes/Anthracenes	21000	U	Benzo[b]fluoranthene	**5800000**	
C4-Phenanthrenes/Anthracenes	21000	U	Benzo[k]fluoranthene	**6000000**	
Retene	9600	U	Benzo[a]fluoranthene	**1400000**	
Dibenzothiophene	**2300000**		Benzo[e]pyrene	**4600000**	
C1-Dibenzothiophenes	3700	U	Benzo[a]pyrene	**8000000**	
C2-Dibenzothiophenes	3700	U	Perylene	**2100000**	
C3-Dibenzothiophenes	3700	U	Indeno[1,2,3-cd]pyrene	**5300000**	
C4-Dibenzothiophenes	3700	U	Dibenz[a,h]anthracene	**1200000**	
Benzo(b)fluorene	**2100000**		Benzo[g,h,i]perylene	**4800000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	80	50-130
Benzo[b]fluoranthene-d12	76	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:52

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-4**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-04E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.14	16.67	100	AC

Parameter	Result
Carbazole	**4000000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	80	50-130
Benzo[b]fluoranthene-d12	76	50-130

N/A - Not Applicable

09/27/06 11:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46370.D
Acq On : 14 Sep 2006 12:15 am
Operator : AC
Sample : 0609032-04-re
Misc : 100x
ALS Vial : 23 Sample Multiplier: 1

MM 9/27/6

Quant Time: Sep 27 10:52:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	29362	500.00 ng/mL	0.00
72) Chrysene-d12	43.21	240	43568	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.48	152	529	7.99 ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.80%#	
58) Pyrene-d10	38.29	212	973	8.03 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.80%#	
81) Benzo[b]fluoranthene-d12	47.10	264	697	7.65 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.77%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	

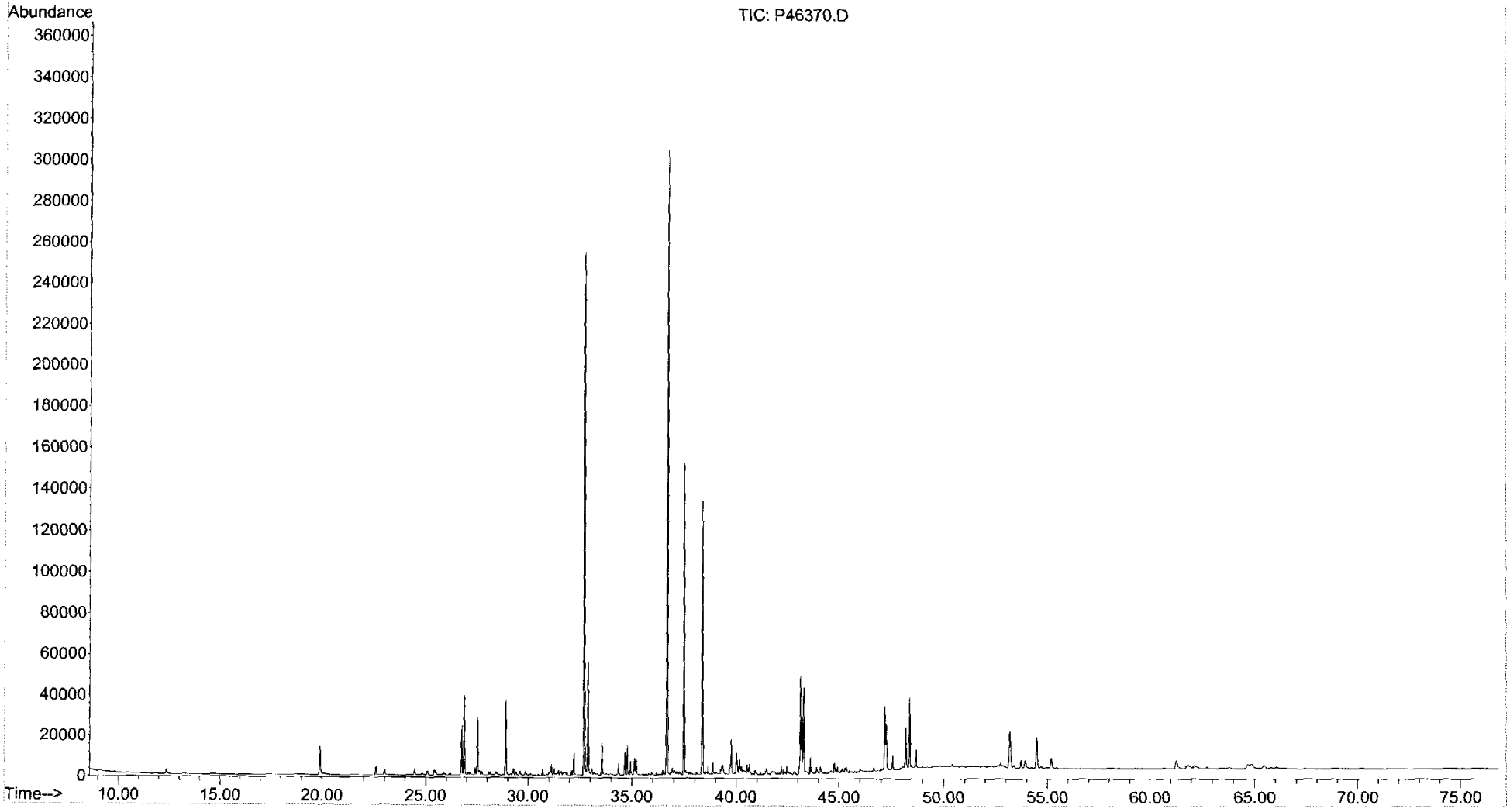
Target Compounds					Qvalue
9) Naphthalene	19.90	128	50103	389.65 ng/mL#	100
10) C1-Naphthalenes	22.61	142	23900m	185.87 ng/mL	
15) 2-Methylnaphthalene	22.61	142	14365	166.39 ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	8664	106.71 ng/mL#	100
24) Dibenzofuran	27.55	168	46521m	418.19 ng/mL	
26) Acenaphthene	26.89	153	49765	637.70 ng/mL	99
28) Fluorene	28.91	166	48183	521.10 ng/mL	99
32) Dibenzothiophene	32.22	184	22257	195.81 ng/mL	96
41) Phenanthrene	32.71	178	427443	3299.36 ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.78	192	77867m	601.04 ng/mL	
53) Anthracene	32.90	178	98939	857.97 ng/mL	100
54) Carbazole	33.57	167	37539m	339.80 ng/mL	
55) 1-Methylphenanthrene	35.22	192	11431	126.74 ng/mL	99
56) Fluoranthene	37.48	202	309985m	2348.49 ng/mL	
57) Benzo(b)fluorene	40.01	216	12930m	173.25 ng/mL	
59) Pyrene	38.37	202	263294	1983.71 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	75453m	568.48 ng/mL	
64) Naphthobenzothiophene	42.22	234	7974	70.09 ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.22	234	7974	70.09 ng/mL	97
66) Naphthobenzothiophene-1,2-	42.55	234	2146	18.86 ng/mL#	32
67) Naphthobenzothiophene-2,3-	42.85	234	2623m	23.05 ng/mL	
73) Benz[a]anthracene	43.14	228	82293m	718.18 ng/mL	
74) Chrysene	43.30	228	78628m	695.71 ng/mL	
75) Chrysene/Triphenylene	43.30	228	78580m	695.28 ng/mL	
82) Benzo[b]fluoranthene	47.19	252	58954	486.00 ng/mL	95
83) Benzo[k]fluoranthene	47.25	252	62762m	507.35 ng/mL	
84) Benzo[a]fluoranthene	47.57	252	14081	113.83 ng/mL#	1
85) Benzo[e]pyrene	48.19	252	45304	390.14 ng/mL	99
86) Benzo[a]pyrene	48.38	252	75018	670.13 ng/mL	99
87) Perylene	48.69	252	19737m	177.22 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	47879	447.90 ng/mL	96
89) Dibenz[a,h]anthracene	53.24	278	10588m	101.74 ng/mL	
90) Benzo[g,h,i]perylene	54.49	276	46111	403.83 ng/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46370.D
Acq On : 14 Sep 2006 12:15 am
Operator : AC
Sample : 0609032-04-re
Misc : 100x
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 27 10:52:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.11	13.33	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4600000**	E	Fluoranthene	**17000000**	E
C1-Naphthalenes	**1700000**	E	Pyrene	**14000000**	E
C2-Naphthalenes	**1200000**		C1-Fluoranthenes/Pyrenes	**6400000**	E
C3-Naphthalenes	**660000**		C2-Fluoranthenes/Pyrenes	**2400000**	
C4-Naphthalenes	**240000**		C3-Fluoranthenes/Pyrenes	**970000**	
Biphenyl	**340000**		C4-Fluoranthenes/Pyrenes	**600000**	
Dibenzofuran	**2500000**	E	Naphthobenzothiophenes	**1400000**	
Acenaphthylene	**500000**		C1-Naphthobenzothiophenes	**660000**	
Acenaphthene	**2200000**	E	C2-Naphthobenzothiophenes	**320000**	
Fluorene	**3200000**	E	C3-Naphthobenzothiophenes	**200000**	
C1-Fluorenes	**710000**		C4-Naphthobenzothiophenes	**120000**	
C2-Fluorenes	**420000**		Benz[a]anthracene	**6300000**	E
C3-Fluorenes	**660000**		Chrysene/Triphenylene	**6400000**	E
Anthracene	**5900000**	E	C1-Chrysenes	**2500000**	
Phenanthrene	**19000000**	E	C2-Chrysenes	**980000**	
C1-Phenanthrenes/Anthracenes	**5500000**		C3-Chrysenes	**680000**	
C2-Phenanthrenes/Anthracenes	**2400000**		C4-Chrysenes	**290000**	
C3-Phenanthrenes/Anthracenes	**810000**		Benzo[b]fluoranthene	**5600000**	E
C4-Phenanthrenes/Anthracenes	**240000**		Benzo[k]fluoranthene	**4000000**	E
Retene	**79000**		Benzo[a]fluoranthene	**1000000**	
Dibenzothiophene	**1200000**	E	Benzo[e]pyrene	**3400000**	E
C1-Dibenzothiophenes	**540000**		Benzo[a]pyrene	**6000000**	E
C2-Dibenzothiophenes	**360000**		Perylene	**1400000**	E
C3-Dibenzothiophenes	**210000**		Indeno[1,2,3-cd]pyrene	**3800000**	E
C4-Dibenzothiophenes	**88000**		Dibenz[a,h]anthracene	**1200000**	
Benzo(b)fluorene	**2100000**	E	Benzo[g,h,i]perylene	**3100000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	92	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	97	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:36

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.11	13.33	1	AC

Parameter	Result
Carbazole	**3000000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	92	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	97	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

09/27/06 11:59

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.11	2.17	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**4600**	30,31-Bishomohopane-22S	**32000**
C24 Tricyclic Terpane	**2200**	30,31-Bishomohopane-22R	**23000**
C25 Tricyclic Terpane	**2700**	30,31-Trishomohopane-22S	**23000**
C24 Tetracyclic Terpane	**5900**	30,31-Trishomohopane-22R	**16000**
C26 Tricyclic Terpane-22S	**1200**	Tetrakishomohopane-22S	**15000**
C26 Tricyclic Terpane-22R	**1300**	Tetrakishomohopane-22R	**10000**
C28 Tricyclic Terpane-22S	**1800**	Pentakishomohopane-22S	**23000**
C28 Tricyclic Terpane-22R	**2900**	Pentakishomohopane-22R	**14000**
C29 Tricyclic Terpane-22S	**2600**	13b(H),17a(H)-20S-Diacholestane	**6700**
C29 Tricyclic Terpane-22R	**1800**	13b(H),17a(H)-20R-Diacholestane	**3500**
18a-22,29,30-Trisnorneohopane-TS	**11000**	13b,17a-20S-Methyldiacholestane	**4800**
C30 Tricyclic Terpane-22S	**4000**	14a(H),17a(H)-20S-Cholestane	**5000**
C30 Tricyclic Terpane-22R	**2000**	14a(H),17a(H)-20R-Cholestane	**27000**
17a(H)-22,29,30-Trisnorhopane-TM	**33000**	13b,17a-20R-Ethyldiacholestane	**1600**
17a/b,21b/a 28,30-Bisnorhopane	**12000**	13a,17b-20S-Ethyldiacholestane	**1300**
17a(H),21b(H)-25-Norhopane	**4700**	14a,17a-20S-Methylcholestane	**2600**
30-Norhopane	**110000** E	14a,17a-20R-Methylcholestane	**14000**
18a(H)-30-Norneohopane-C29Ts	**7800**	14a(H),17a(H)-20S-Ethylcholestane	**18000**
17a(H)-Diahopane	**1300**	14a(H),17a(H)-20R-Ethylcholestane	**23000**
30-Normoretane	**9800**	14b(H),17b(H)-20R-Cholestane	**18000**
18a(H)&18b(H)-Oleananes	**2200**	14b(H),17b(H)-20S-Cholestane	**16000**
Hopane	**96000**	14b,17b-20R-Methylcholestane	**17000**
Moretane	**13000**	14b,17b-20S-Methylcholestane	**15000**
30-Homohopane-22S	**54000**	14b(H),17b(H)-20R-Ethylcholestane	**28000**
30-Homohopane-22R	**41000**	14b(H),17b(H)-20S-Ethylcholestane	**21000**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	96	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

09/28/06 21:24

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\September06\sep12\
Data File : P46352.D
Acq On : 13 Sep 2006 10:18 am
Operator : AC
Sample : 0609032-05
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

MAL 9/25/6

Quant Time: Sep 22 08:45:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	37654m	500.00 ng/mL	0.00
72) Chrysene-d12	43.25	240	61878m	500.00 ng/mL	0.06

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	77945	918.33 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 91.83%		
58) Pyrene-d10	38.34	212	161194	1037.32 ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 103.73%		
81) Benzo[b]fluoranthene-d12	47.15	264	125104	966.43 ng/mL	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 96.64%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.90	128	6267873	38010.25 ng/mL# E	100
10) C1-Naphthalenes	22.58	142	2313708m	14031.01 ng/mL E	
11) C2-Naphthalenes	25.42	156	1661697m	10077.02 ng/mL	
12) C3-Naphthalenes	27.75	170	897622m	5443.45 ng/mL	
13) C4-Naphthalenes	30.51	184	328509m	1992.18 ng/mL	
15) 2-Methylnaphthalene	22.58	142	1462290	13207.81 ng/mL# E	100
16) 1-Methylnaphthalene	23.00	142	839962	8067.04 ng/mL#	100
22) Biphenyl	24.45	154	395908	2834.30 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	409483	4253.10 ng/mL#	100
24) Dibenzofuran	27.55	168	2890493	20261.62 ng/mL E	98
25) Acenaphthylene	26.16	152	642581m	4169.61 ng/mL	
26) Acenaphthene	26.91	153	1854911	18534.89 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	76814m	906.21 ng/mL	
28) Fluorene	28.93	166	3111111m	26237.37 ng/mL E	
29) C1-Fluorenes	31.13	180	694235m	5854.79 ng/mL	
30) C2-Fluorenes	33.22	194	412281m	3476.95 ng/mL	
31) C3-Fluorenes	35.99	208	648360m	5467.91 ng/mL	
32) Dibenzothiophene	32.23	184	1508114m	10346.09 ng/mL E	
36) OTP	34.43	198	18347	125.87 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	668715m	4587.57 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	436844m	2996.87 ng/mL	
39) C3-Dibenzothiophenes	37.53	226	257101m	1763.79 ng/mL	
40) C4-Dibenzothiophenes	39.76	240	106349m	729.58 ng/mL	
41) Phenanthrene	32.80	178	25552726	153802.53 ng/mL E	98
47) C1-Phenanthrenes/Anthracen	34.82	192	7489742m	45080.95 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	3241387m	19509.99 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.81	220	1108128m	6669.85 ng/mL	
51) C4-Phenanthrenes/Anthracen	39.72	234	328271m	1975.87 ng/mL	
52) Retene	39.72	234	27508m	651.67 ng/mL	
53) Anthracene	32.95	178	7252374	49041.17 ng/mL E	100
54) Carbazole	33.59	167	3547882m	25043.14 ng/mL E	
55) 1-Methylphenanthrene	35.25	192	1029697	8902.67 ng/mL	100
56) Fluoranthene	37.59	202	24121830m	142505.97 ng/mL E	
57) Benzo(b)fluorene	40.04	216	1677752m	17529.68 ng/mL E	
59) Pyrene	38.46	202	20020603	117622.13 ng/mL E	96
60) C1-Fluoranthenes/Pyrenes	39.80	216	8915450m	52378.75 ng/mL E	
61) C2-Fluoranthenes/Pyrenes	41.83	230	3296434m	19366.73 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.39	244	1365043m	8019.70 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\September06\sep12\
Data File : P46352.D
Acq On : 13 Sep 2006 10:18 am
Operator : AC
Sample : 0609032-05
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 22 08:45:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

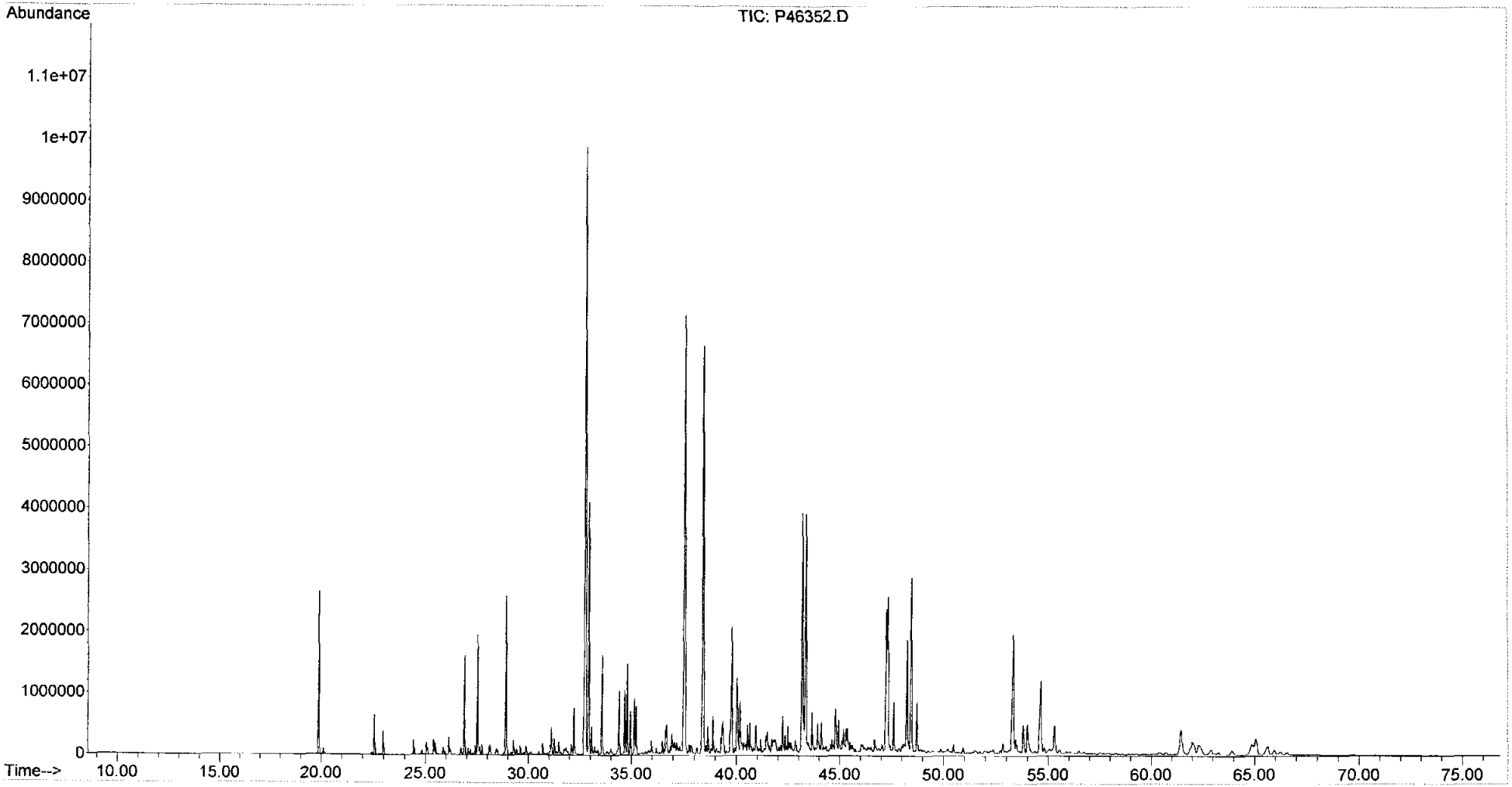
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.00	258	837221m	4918.72 ng/mL	
64) Naphthobenzothiophene	42.24	234	1058193m	7252.81 ng/ml	
65) Naphthobenzothiophene-2,1-	42.24	234	1057336m	7246.93 ng/mL	
66) Naphthobenzothiophene-1,2-	42.57	234	257851	1767.30 ng/mL#	23
67) Naphthobenzothiophene-2,3-	42.87	234	314460m	2155.29 ng/mL	
68) C1-Naphthobenzothiophenes	43.64	248	794229m	5443.61 ng/ml	
69) C2-Naphthobenzothiophenes	45.49	262	389657m	2670.69 ng/ml	
70) C3-Naphthobenzothiophenes	47.28	276	244652m	1676.83 ng/ml	
71) C4-Naphthobenzothiophenes	49.83	290	147463m	1010.70 ng/mL	
73) Benz[a]anthracene	43.21	228	8500297m	52231.68 ng/mL E	
74) Chrysene	43.39	228	8541697m	53213.78 ng/mL E	
75) Chrysene/Triphenylene	43.39	228	8547590m	53250.49 ng/mL	
76) C1-Chrysenes	44.81	242	3302736m	20575.66 ng/mL	
77) C2-Chrysenes	46.50	256	1295089m	8068.25 ng/mL	
79) C3-Chrysenes	47.34	270	899908m	5606.32 ng/mL	
80) C4-Chrysenes	48.04	284	380693m	2371.67 ng/mL	
82) Benzo[b]fluoranthene	47.28	252	7947889	46132.72 ng/mL E	97
83) Benzo[k]fluoranthene	47.36	252	5723036m	32573.61 ng/mL E	
84) Benzo[a]fluoranthene	47.63	252	1467113m	8350.32 ng/mL	
85) Benzo[e]pyrene	48.28	252	4624547	28040.50 ng/mL E	97
86) Benzo[a]pyrene	48.49	252	7835260	49281.04 ng/mL E	95
87) Perylene	48.75	252	1762370m	11141.70 ng/mL E	
88) Indeno[1,2,3-cd]pyrene	53.35	276	4790920m	31556.53 ng/mL E	
89) Dibenz[a,h]anthracene	53.35	278	1437934m	9728.33 ng/mL	
90) Benzo[g,h,i]perylene	54.66	276	4153590	25612.17 ng/mL E	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\September06\sep12\
Data File : P46352.D
Acq On : 13 Sep 2006 10:18 am
Operator : AC
Sample : 0609032-05
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 22 08:45:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20117.D
Acq On : 19 Sep 2006 4:12 pm
Operator : AC
Sample : 0609032-05
Misc : 1x
ALS Vial : 17 Sample Multiplier: 1

MAL 9/28/06

Quant Time: Sep 26 13:28:26 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.40	240	66990	500.00	ng/mL	0.12

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.90	217	55471	1923.80	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 192.38%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.12	191	298272m	4845.29	ng/mL	
84) Hopane (T19)	51.12	191	298507m	4849.11	ng/mL	
85) C23 Tricyclic Terpane (T4)	39.89	191	14522	235.90	ng/ml	100
86) C24 Tricyclic Terpane (T5)	40.63	191	6764m	109.88	ng/ml	
87) C25 Tricyclic Terpane (T6)	42.15	191	8493m	137.96	ng/ml	
88) C24 Tetracyclic Terpane (T	43.44	191	18479	300.18	ng/ml	100
89) C26 Tricyclic Terpane-22S	43.24	191	3765m	61.16	ng/ml	
90) C26 Tricyclic Terpane-22R	43.33	191	4099m	66.59	ng/ml	
91) C28 Tricyclic Terpane-22S	45.70	191	5558	90.29	ng/ml	100
92) C28 Tricyclic Terpane-22R	45.86	191	9053	147.06	ng/ml	100
93) C29 Tricyclic Terpane-22S	46.40	191	8044	130.67	ng/ml	100
94) C29 Tricyclic Terpane-22R	46.60	191	5701m	92.61	ng/ml	
95) 18a-22,29,30-Trisnorneohop	47.57	191	35693	579.82	ng/ml	100
96) C30 Tricyclic Terpane-22S	47.78	191	12321	200.15	ng/mL	100
97) C30 Tricyclic Terpane-22R	47.95	191	6380m	103.64	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	48.07	191	102327m	1662.25	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	49.22	191	36424	591.69	ng/ml	100
100) 17a(H),21b(H)-25-Norhopane	48.88	191	14534	236.10	ng/ml	100
101) 30-Norhopane (T15)	49.84	191	344762m	5600.50	ng/ml E	
102) 18a(H)-30-Norneohopane-C29	49.92	191	24455m	397.26	ng/ml	
103) 17a(H)-Diahopane (X)	50.08	191	3967	64.44	ng/ml	100
104) 30-Normoretane (T17)	50.57	191	30580	496.76	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	50.93	191	6831	110.97	ng/ml	100
106) Moretane (T20)	51.75	191	40051	650.61	ng/ml	100
107) 30-Homohopane-22S (T21)	52.79	191	168259	2733.29	ng/ml	100
108) 30-Homohopane-22R (T22)	52.99	191	127427	2069.99	ng/ml	100
109) 30,31-Bishomohopane-22S (T	54.25	191	98400	1598.46	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.61	191	71974	1169.18	ng/ml	100
111) 30,31-Trishomohopane-22S (	56.25	191	73045	1186.58	ng/ml	100
112) 30,31-Trishomohopane-22R (	56.85	191	50311	817.28	ng/ml	100
113) Tetrakishomohopane-22S (T3	58.74	191	46175	750.09	ng/ml	100
114) Tetrakishomohopane-22R (T3	59.59	191	31927	518.64	ng/ml	100
115) Pentakishomohopane-22S (T3	61.69	191	70683	1148.21	ng/ml	100
116) Pentakishomohopane-22R (T3	62.92	191	42369	688.26	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	44.48	217	9797m	339.77	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	44.92	217	5077m	176.08	ng/ml	
120) 13b,17a-20S-Methyldiachole	45.63	217	7056m	244.71	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	46.51	217	7277m	252.37	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.02	217	38956m	1351.04	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	47.30	217	2318m	80.39	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	47.54	217	1962m	68.04	ng/ml	
125) 14a,17a-20S-Methylcholesta	47.69	217	3820m	132.48	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20117.D
Acq On : 19 Sep 2006 4:12 pm
Operator : AC
Sample : 0609032-05
Misc : 1x
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 26 13:28:26 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

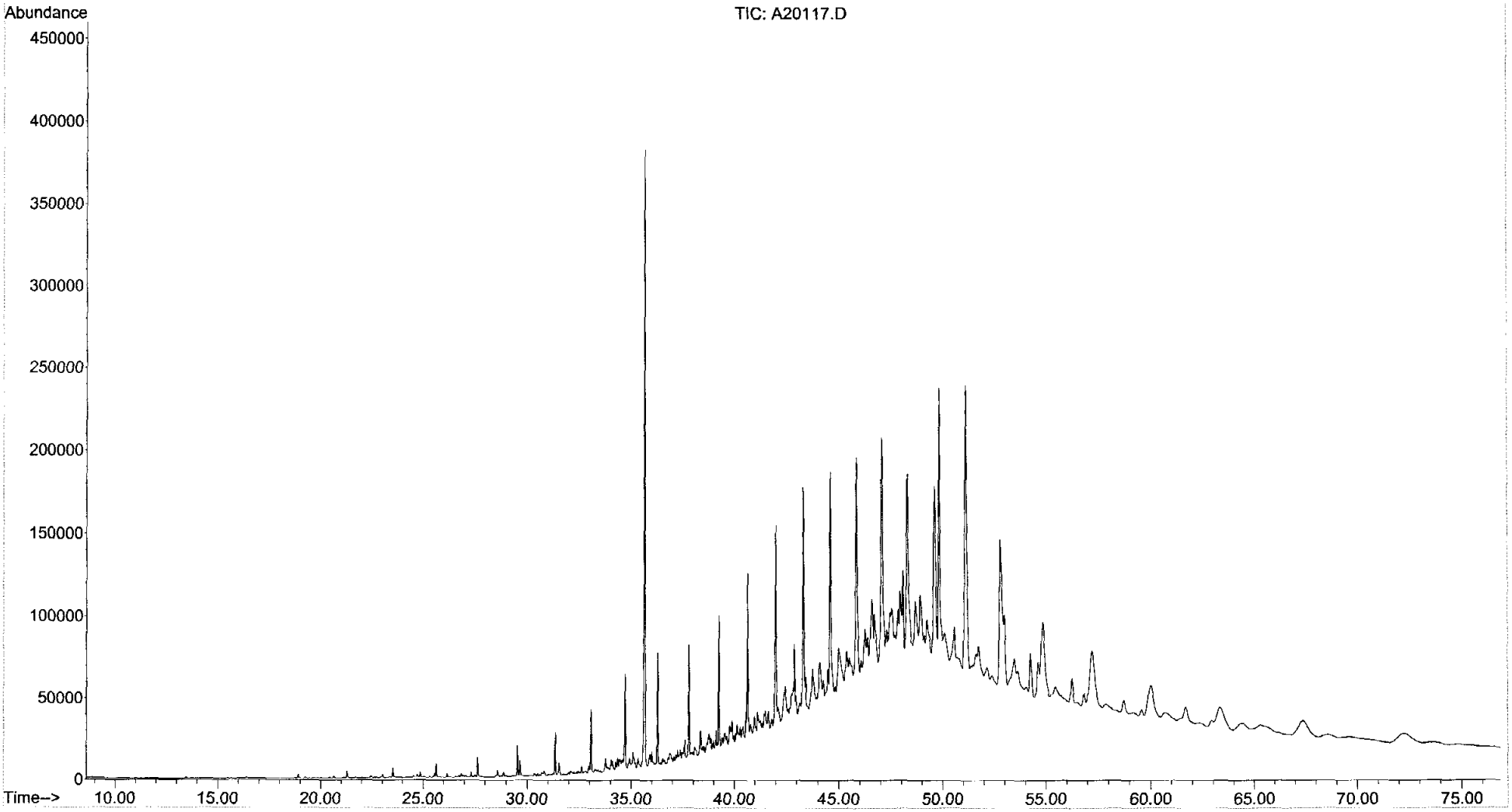
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
126) 14a,17a-20R-Methylcholesta	48.35	217	20156	699.03 ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	48.69	217	26875	932.06 ng/ml	100
128) 14a(H),17a(H)-20R-Ethylcho	49.55	217	33844	1173.75 ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	46.60	218	25529m	885.38 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	46.68	218	22941m	795.62 ng/ml	
131) 14b,17b-20R-Methylcholesta	47.84	218	24772m	859.12 ng/ml	
132) 14b,17b-20S-Methylcholesta	47.93	218	22148m	768.12 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.93	218	40881m	1417.80 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.95	218	30664m	1063.46 ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20117.D
Acq On : 19 Sep 2006 4:12 pm
Operator : AC
Sample : 0609032-05
Misc : 1x
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 26 13:28:26 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.11	13.33	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**3700000**		Fluoranthene	**12000000**	
C1-Naphthalenes	**1400000**		Pyrene	**9700000**	
C2-Naphthalenes	21000	U	C1-Fluoranthenes/Pyrenes	**4300000**	
C3-Naphthalenes	21000	U	C2-Fluoranthenes/Pyrenes	9200	U
C4-Naphthalenes	21000	U	C3-Fluoranthenes/Pyrenes	9200	U
Biphenyl	7600	U	C4-Fluoranthenes/Pyrenes	9200	U
Dibenzofuran	**1900000**		Naphthobenzothiophenes	5200	U
Acenaphthylene	18000	U	C1-Naphthobenzothiophenes	5200	U
Acenaphthene	**1800000**		C2-Naphthobenzothiophenes	5200	U
Fluorene	**2400000**		C3-Naphthobenzothiophenes	5200	U
C1-Fluorenes	9800	U	C4-Naphthobenzothiophenes	5200	U
C2-Fluorenes	9800	U	Benz[a]anthracene	**4600000**	
C3-Fluorenes	9800	U	Chrysene/Triphenylene	**4800000**	
Anthracene	**3900000**		C1-Chrysenes	9000	U
Phenanthrene	**14000000**		C2-Chrysenes	9000	U
C1-Phenanthrenes/Anthracenes	22000	U	C3-Chrysenes	9000	U
C2-Phenanthrenes/Anthracenes	22000	U	C4-Chrysenes	9000	U
C3-Phenanthrenes/Anthracenes	22000	U	Benzo[b]fluoranthene	**3300000**	
C4-Phenanthrenes/Anthracenes	22000	U	Benzo[k]fluoranthene	**3400000**	
Retene	9800	U	Benzo[a]fluoranthene	8500	U
Dibenzothiophene	**930000**		Benzo[e]pyrene	**2400000**	
C1-Dibenzothiophenes	3800	U	Benzo[a]pyrene	**4100000**	
C2-Dibenzothiophenes	3800	U	Perylene	**960000**	
C3-Dibenzothiophenes	3800	U	Indeno[1,2,3-cd]pyrene	**2700000**	
C4-Dibenzothiophenes	3800	U	Dibenz[a,h]anthracene	4700	U
Benzo(b)fluorene	**1300000**		Benzo[g,h,i]perylene	**2300000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	78	50-130
Pyrene-d10	74	50-130
Benzo[b]fluoranthene-d12	77	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:54

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.11	13.33	100	AC

Parameter	Result
Carbazole	**1900000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	78	50-130
Pyrene-d10	74	50-130
Benzo[b]fluoranthene-d12	77	50-130

N/A - Not Applicable

09/27/06 12:00

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05E**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/25/06	100	0.11	2.17	2	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	170	U	30,31-Bishomohopane-22S	170	U
C24 Tricyclic Terpane	170	U	30,31-Bishomohopane-22R	170	U
C25 Tricyclic Terpane	170	U	30,31-Trishomohopane-22S	170	U
C24 Tetracyclic Terpane	170	U	30,31-Trishomohopane-22R	170	U
C26 Tricyclic Terpane-22S	170	U	Tetrakishomohopane-22S	170	U
C26 Tricyclic Terpane-22R	170	U	Tetrakishomohopane-22R	170	U
C28 Tricyclic Terpane-22S	170	U	Pentakishomohopane-22S	170	U
C28 Tricyclic Terpane-22R	170	U	Pentakishomohopane-22R	170	U
C29 Tricyclic Terpane-22S	170	U	13b(H),17a(H)-20S-Diacholestane	61	U
C29 Tricyclic Terpane-22R	170	U	13b(H),17a(H)-20R-Diacholestane	61	U
18a-22,29,30-Trisnorneohopane-TS	170	U	13b,17a-20S-Methyldiacholestane	61	U
C30 Tricyclic Terpane-22S	170	U	14a(H),17a(H)-20S-Cholestane	61	U
C30 Tricyclic Terpane-22R	170	U	14a(H),17a(H)-20R-Cholestane	61	U
17a(H)-22,29,30-Trisnorhopane-TM	170	U	13b,17a-20R-Ethyldiacholestane	61	U
17a/b,21b/a 28,30-Bisnorhopane	170	U	13a,17b-20S-Ethyldiacholestane	61	U
17a(H),21b(H)-25-Norhopane	170	U	14a,17a-20S-Methylcholestane	61	U
30-Norhopane	**76000**		14a,17a-20R-Methylcholestane	61	U
18a(H)-30-Norneohopane-C29Ts	170	U	14a(H),17a(H)-20S-Ethylcholestane	61	U
17a(H)-Diahopane	170	U	14a(H),17a(H)-20R-Ethylcholestane	61	U
30-Normoretane	170	U	14b(H),17b(H)-20R-Cholestane	61	U
18a(H)&18b(H)-Oleananes	170	U	14b(H),17b(H)-20S-Cholestane	61	U
Hopane	170	U	14b,17b-20R-Methylcholestane	61	U
Moretane	170	U	14b,17b-20S-Methylcholestane	61	U
30-Homohopane-22S	170	U	14b(H),17b(H)-20R-Ethylcholestane	61	U
30-Homohopane-22R	170	U	14b(H),17b(H)-20S-Ethylcholestane	61	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	75	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:20

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46372.D
Acq On : 14 Sep 2006 1:44 am
Operator : AC
Sample : 0609032-05-re
Misc : 100x
ALS Vial : 24 Sample Multiplier: 1

MAL 9/27/6

Quant Time: Sep 27 10:52:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	28298	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	41209	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.50	152	498m	7.81	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.78%#	
58) Pyrene-d10	38.30	212	870	7.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.75%#	
81) Benzo[b]fluoranthene-d12	47.11	264	665	7.71	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.77%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	

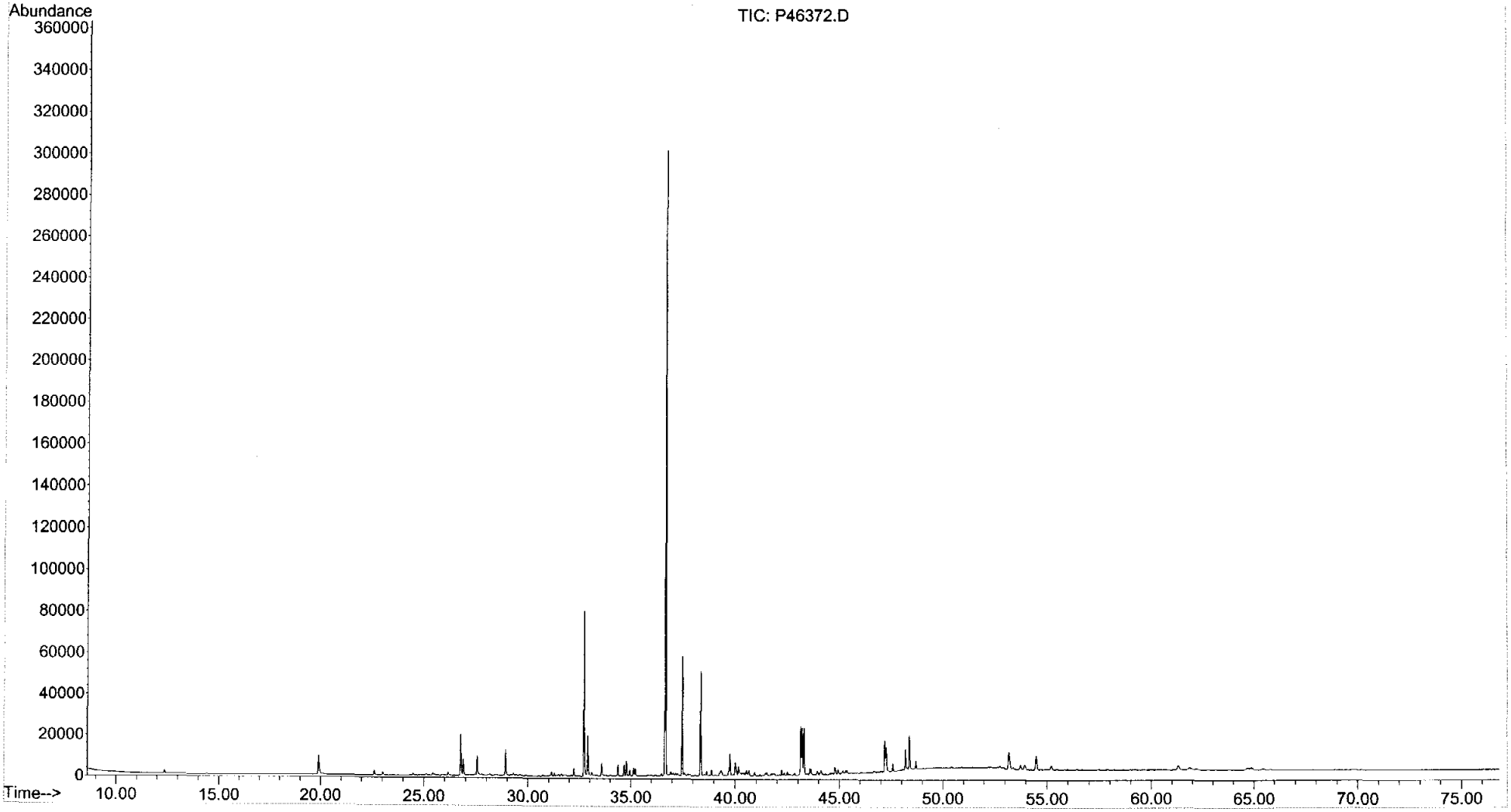
Target Compounds						Qvalue
9) Naphthalene	19.90	128	37790	304.94	ng/mL#	100
10) C1-Naphthalenes	22.61	142	13858m	111.82	ng/mL	
15) 2-Methylnaphthalene	22.61	142	8280	99.51	ng/mL#	100
24) Dibenzofuran	27.55	168	16630	155.11	ng/mL	95
26) Acenaphthene	26.90	153	11087	147.41	ng/mL	100
28) Fluorene	28.92	166	17415m	195.43	ng/mL	
32) Dibenzothiophene	32.23	184	8388	76.57	ng/mL	97
41) Phenanthrene	32.72	178	138718	1111.00	ng/mL	100
53) Anthracene	32.91	178	35409	318.60	ng/mL	100
54) Carbazole	33.58	167	16801	157.80	ng/mL	100
56) Fluoranthene	37.48	202	126398m	993.62	ng/mL	
57) Benzo(b)fluorene	40.02	216	7654m	106.41	ng/mL	
59) Pyrene	38.37	202	102273	799.52	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	45302m	354.15	ng/mL	
73) Benz[a]anthracene	43.14	228	40808m	376.52	ng/mL	
74) Chrysene	43.30	228	42269m	395.41	ng/mL	
75) Chrysene/Triphenylene	43.30	228	42223m	394.98	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	31350	273.24	ng/mL	96
83) Benzo[k]fluoranthene	47.26	252	33033m	282.31	ng/mL	
85) Benzo[e]pyrene	48.19	252	22154	201.70	ng/mL	100
86) Benzo[a]pyrene	48.38	252	35641	336.60	ng/mL	100
87) Perylene	48.69	252	8366m	79.42	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.20	276	22675	224.27	ng/mL	97
90) Benzo[g,h,i]perylene	54.50	276	20605	190.78	ng/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46372.D
Acq On : 14 Sep 2006 1:44 am
Operator : AC
Sample : 0609032-05-re
Misc : 100x
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 27 10:52:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20128.D
Acq On : 25 Sep 2006 5:05 pm
Operator : AC
Sample : 0609032-05-RE
Misc : 2x
ALS Vial : 4 Sample Multiplier: 1

MML 9/28/6

Quant Time: Sep 27 14:51:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.28	240	103795	500.00	ng/mL	0.01

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.87	217	33359m	746.69	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 74.67%			

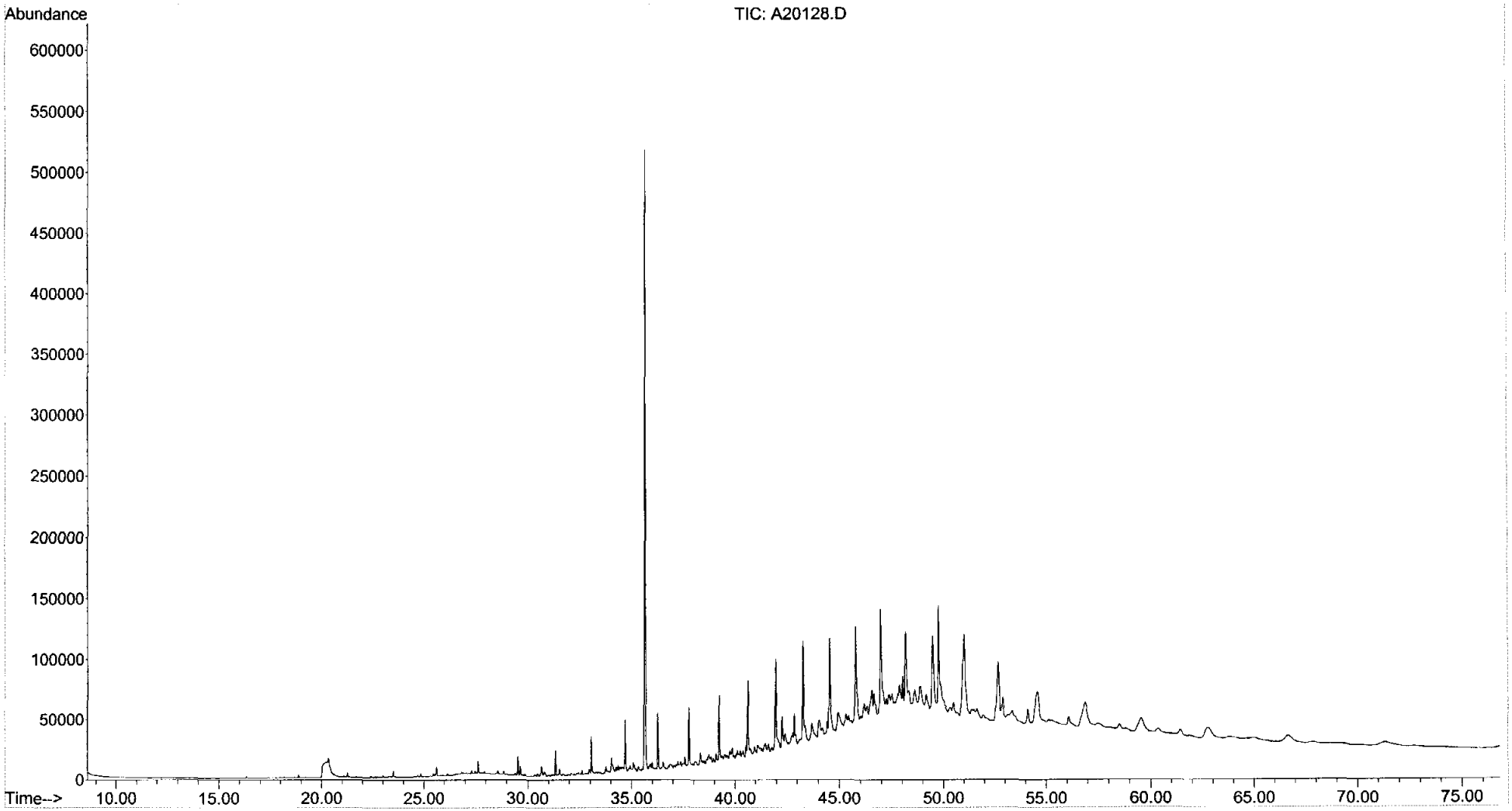
Target Compounds						Qvalue
101) 30-Norhopane (T15)	49.76	191	182942m	1918.03	ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20128.D
Acq On : 25 Sep 2006 5:05 pm
Operator : AC
Sample : 0609032-05-RE
Misc : 2x
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 27 14:51:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-06**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.165	20	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**17000000**	E	Fluoranthene	**36000000**	E
C1-Naphthalenes	**4700000**	E	Pyrene	**32000000**	E
C2-Naphthalenes	**2900000**		C1-Fluoranthenes/Pyrenes	**11000000**	E
C3-Naphthalenes	**1500000**		C2-Fluoranthenes/Pyrenes	**2900000**	
C4-Naphthalenes	**550000**		C3-Fluoranthenes/Pyrenes	**1300000**	
Biphenyl	**1300000**	E	C4-Fluoranthenes/Pyrenes	**770000**	
Dibenzofuran	**7100000**	E	Naphthobenzothiophenes	**2000000**	E
Acenaphthylene	**230000**		C1-Naphthobenzothiophenes	**700000**	
Acenaphthene	**9800000**	E	C2-Naphthobenzothiophenes	**270000**	
Fluorene	**8100000**	E	C3-Naphthobenzothiophenes	**190000**	
C1-Fluorenes	**1500000**		C4-Naphthobenzothiophenes	**81000**	
C2-Fluorenes	**860000**		Benz[a]anthracene	**12000000**	E
C3-Fluorenes	**530000**		Chrysene/Triphenylene	**11000000**	E
Anthracene	**15000000**	E	C1-Chrysenes	**3600000**	
Phenanthrene	**47000000**	E	C2-Chrysenes	**1200000**	
C1-Phenanthrenes/Anthracenes	**10000000**	E	C3-Chrysenes	**910000**	
C2-Phenanthrenes/Anthracenes	**3700000**		C4-Chrysenes	**370000**	
C3-Phenanthrenes/Anthracenes	**1300000**		Benzo[b]fluoranthene	**11000000**	E
C4-Phenanthrenes/Anthracenes	**350000**		Benzo[k]fluoranthene	**6000000**	E
Retene	**35000**		Benzo[a]fluoranthene	**2000000**	E
Dibenzothiophene	**3000000**	E	Benzo[e]pyrene	**6600000**	E
C1-Dibenzothiophenes	**800000**		Benzo[a]pyrene	**12000000**	E
C2-Dibenzothiophenes	**380000**		Perylene	**3100000**	E
C3-Dibenzothiophenes	**210000**		Indeno[1,2,3-cd]pyrene	**7600000**	E
C4-Dibenzothiophenes	**68000**		Dibenz[a,h]anthracene	**2100000**	E
Benzo(b)fluorene	**3600000**	E	Benzo[g,h,i]perylene	**6600000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	119	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-06**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.165	20	1	AC

Parameter	Result
Carbazole	**6600000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	119	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-06**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.165	3.28	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	86	U	30,31-Bishomohopane-22S	**1300**	
C24 Tricyclic Terpane	86	U	30,31-Bishomohopane-22R	**970**	
C25 Tricyclic Terpane	86	U	30,31-Trishomohopane-22S	86	U
C24 Tetracyclic Terpane	**630**		30,31-Trishomohopane-22R	86	U
C26 Tricyclic Terpane-22S	86	U	Tetrakishomohopane-22S	86	U
C26 Tricyclic Terpane-22R	86	U	Tetrakishomohopane-22R	86	U
C28 Tricyclic Terpane-22S	86	U	Pentakishomohopane-22S	86	U
C28 Tricyclic Terpane-22R	86	U	Pentakishomohopane-22R	86	U
C29 Tricyclic Terpane-22S	86	U	13b(H),17a(H)-20S-Diacholestane	31	U
C29 Tricyclic Terpane-22R	86	U	13b(H),17a(H)-20R-Diacholestane	31	U
18a-22,29,30-Trisnorneohopane-TS	86	U	13b,17a-20S-Methyldiacholestane	**54**	J
C30 Tricyclic Terpane-22S	86	U	14a(H),17a(H)-20S-Cholestane	**73**	J
C30 Tricyclic Terpane-22R	86	U	14a(H),17a(H)-20R-Cholestane	**510**	
17a(H)-22,29,30-Trisnorhopane-TM	**4000**		13b,17a-20R-Ethyldiacholestane	31	U
17a/b,21b/a 28,30-Bisnorhopane	86	U	13a,17b-20S-Ethyldiacholestane	31	U
17a(H),21b(H)-25-Norhopane	86	U	14a,17a-20S-Methylcholestane	**69**	J
30-Norhopane	**5300**		14a,17a-20R-Methylcholestane	**280**	
18a(H)-30-Norneohopane-C29Ts	86	U	14a(H),17a(H)-20S-Ethylcholestane	**330**	
17a(H)-Diahopane	**500**		14a(H),17a(H)-20R-Ethylcholestane	**450**	
30-Normoretane	**1200**		14b(H),17b(H)-20R-Cholestane	31	U
18a(H)&18b(H)-Oleananes	86	U	14b(H),17b(H)-20S-Cholestane	31	U
Hopane	**7000**		14b,17b-20R-Methylcholestane	**190**	J
Moretane	**1800**		14b,17b-20S-Methylcholestane	**190**	J
30-Homohopane-22S	**2000**		14b(H),17b(H)-20R-Ethylcholestane	**360**	
30-Homohopane-22R	**1400**		14b(H),17b(H)-20S-Ethylcholestane	**280**	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	87	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:17

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46354.D
Acq On : 13 Sep 2006 12:19 pm
Operator : AC
Sample : 0609032-06
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

MM 1/17/7

Quant Time: Jan 17 10:50:34 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.78	164	32788m	500.00 ng/mL	0.02
72) Chrysene-d12	43.28	240	55000m	500.00 ng/mL	0.09

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.46	152	74585	1009.16 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.92%		
58) Pyrene-d10	38.35	212	160363	1185.12 ng/mL	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 118.51%		
81) Benzo[b]fluoranthene-d12	47.16	264	120764	1049.57 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 104.96%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.93	128	19780299	137755.68 ng/mL#	100
10) C1-Naphthalenes	22.59	142	5554628m	38684.02 ng/mL	
11) C2-Naphthalenes	25.42	156	3478383m	24224.46 ng/mL	
12) C3-Naphthalenes	27.76	170	1788674m	12456.84 ng/mL	
13) C4-Naphthalenes	30.52	184	647623m	4510.23 ng/mL	
15) 2-Methylnaphthalene	22.59	142	3548224	36804.81 ng/mL#	100
16) 1-Methylnaphthalene	23.01	142	1975547	21789.04 ng/mL#	100
22) Biphenyl	24.46	154	1288211	10590.93 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	787996	9399.18 ng/mL#	100
24) Dibenzofuran	27.57	168	7279462	58600.01 ng/mL	98
25) Acenaphthylene	26.16	152	251780	1876.22 ng/mL#	100
26) Acenaphthene	26.94	153	7008938	80429.48 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	161316m	2185.55 ng/mL	
28) Fluorene	28.95	166	6917239m	66993.67 ng/mL	
29) C1-Fluorenes	31.14	180	1246975m	12076.99 ng/mL	
30) C2-Fluorenes	32.82	194	728679m	7057.28 ng/mL	
31) C3-Fluorenes	35.92	208	450371m	4361.86 ng/mL	
32) Dibenzothiophene	32.25	184	3137624	24719.47 ng/mL	97
36) OTP	34.43	198	17676	139.26 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	855322m	6738.57 ng/mL	
38) C2-Dibenzothiophenes	36.50	212	403645m	3180.08 ng/mL	
39) C3-Dibenzothiophenes	37.57	226	215504m	1697.83 ng/mL	
40) C4-Dibenzothiophenes	40.97	240	71593m	564.04 ng/mL	
41) Phenanthrene	32.84	178	56597643m	391219.75 ng/mL	
47) C1-Phenanthrenes/Anthracen	34.84	192	12326391m	85203.68 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	4389320m	30340.29 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.82	220	1501315m	10377.54 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	415055m	2868.98 ng/mL	
52) Retene	39.74	234	10598m	288.33 ng/mL ✓	
53) Anthracene	33.00	178	15492208	120306.80 ng/mL	99
54) Carbazole	33.61	167	6683524m	54177.80 ng/mL	
55) 1-Methylphenanthrene	35.27	192	1710311	16981.73 ng/mL	100
56) Fluoranthene	37.63	202	43560245m	295535.26 ng/mL	
57) Benzo(b)fluorene	40.06	216	2476413m	29714.31 ng/mL ✓ MS 1/17/07	
59) Pyrene	38.51	202	39517027	266619.77 ng/mL	93
60) C1-Fluoranthenes/Pyrenes	39.82	216	13134533m	88618.16 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.52	230	3528078m	23803.80 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.20	244	1570100m	10593.40 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46354.D
Acq On : 13 Sep 2006 12:19 pm
Operator : AC
Sample : 0609032-06
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 17 10:50:34 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

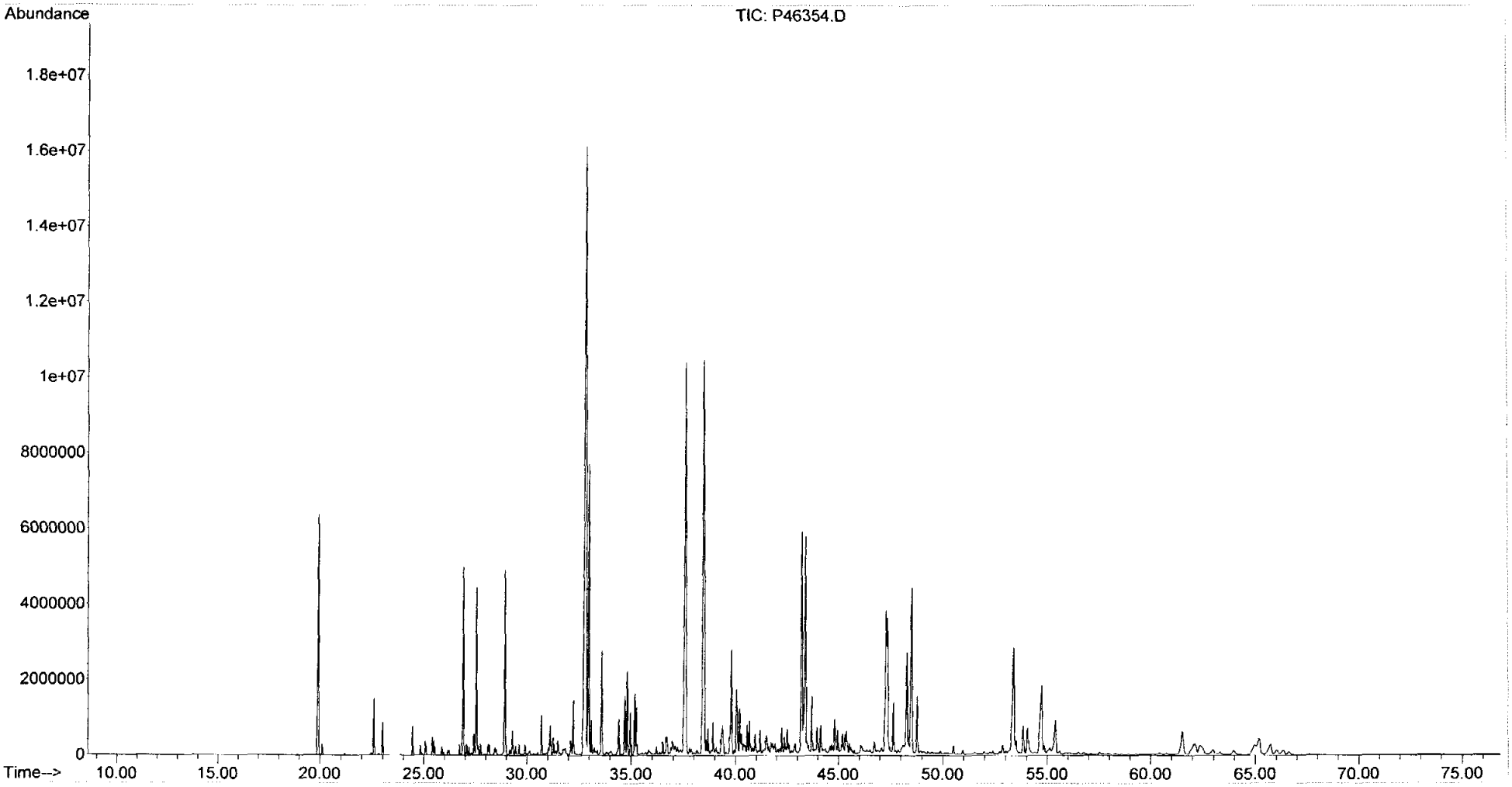
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.01	258	943800m	6367.78 ng/mL	
64) Naphthobenzothiophene	42.25	234	1271905m	10011.34 ng/ml	
65) Naphthobenzothiophene-2,1-	42.25	234	1272084m	10012.74 ng/mL	
66) Naphthobenzothiophene-1,2-	42.59	234	342248	2693.88 ng/mL#	20
67) Naphthobenzothiophene-2,3-	42.89	234	471697m	3712.79 ng/mL	
68) C1-Naphthobenzothiophenes	43.91	248	733669m	5774.81 ng/ml	
69) C2-Naphthobenzothiophenes	46.07	262	287440m	2262.48 ng/ml	
70) C3-Naphthobenzothiophenes	46.85	276	195842m	1541.50 ng/ml	
71) C4-Naphthobenzothiophenes	49.84	290	84796m	667.44 ng/mL	
73) Benz[a]anthracene	43.24	228	14617532m	101052.61 ng/mL	
74) Chrysene	43.42	228	13477608m	94463.99 ng/mL	
75) Chrysene/Triphenylene	43.42	228	13475692m	94450.57 ng/mL	
76) C1-Chrysenes	44.83	242	4287854m	30053.39 ng/mL	
77) C2-Chrysenes	46.51	256	1425216m	9989.28 ng/mL	
79) C3-Chrysenes	48.49	270	1072372m	7516.21 ng/mL	
80) C4-Chrysenes	49.12	284	439043m	3077.23 ng/mL	
82) Benzo[b]fluoranthene	47.32	252	14426999	94212.14 ng/mL	97
83) Benzo[k]fluoranthene	47.39	252	7690954m	49248.52 ng/mL	
84) Benzo[a]fluoranthene	47.65	252	2561567m	16402.83 ng/mL	
85) Benzo[e]pyrene	48.31	252	8022563m	54727.21 ng/mL	
86) Benzo[a]pyrene	48.54	252	14454361m	102281.93 ng/mL	
87) Perylene	48.79	252	3561251m	25329.72 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.40	276	8497801m	62972.44 ng/mL	
89) Dibenz[a,h]anthracene	53.40	278	2239709m	17047.64 ng/mL	
90) Benzo[g,h,i]perylene	54.74	276	7853458	54482.52 ng/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46354.D
Acq On : 13 Sep 2006 12:19 pm
Operator : AC
Sample : 0609032-06
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 17 10:50:34 2007
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20118.D
Acq On : 19 Sep 2006 5:44 pm
Operator : AC
Sample : 0609032-06
Misc : 1x
ALS Vial : 18 Sample Multiplier: 1

MAL 9/28/6

Quant Time: Sep 26 14:39:02 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.38	240	82147	500.00	ng/mL	0.10

System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.90	217	61622	1742.80	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 174.28%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.10	191	26507	351.14	ng/mL#	79
84) Hopane (T19)	51.10	191	26507	351.14	ng/mL#	79
88) C24 Tetracyclic Terpane (T	43.43	191	2379m	31.52	ng/ml	
98) 17a(H)-22,29,30-Trisnorhop	48.06	191	15029	199.09	ng/ml	100
101) 30-Norhopane (T15)	49.82	191	19999	264.93	ng/ml	100
103) 17a(H)-Diahopane (X)	50.07	191	1884	24.96	ng/ml	100
104) 30-Normoretane (T17)	50.56	191	4720	62.53	ng/ml	100
106) Moretane (T20)	51.74	191	6673	88.40	ng/ml	100
107) 30-Homohopane-22S (T21)	52.77	191	7697	101.96	ng/ml	100
108) 30-Homohopane-22R (T22)	52.98	191	5369	71.12	ng/ml	100
109) 30,31-Bishomohopane-22S (T	54.23	191	5008	66.34	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.57	191	3697	48.98	ng/ml	100
120) 13b,17a-20S-Methyldiachole	45.63	217	95m	2.69	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	46.52	217	130m	3.68	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.02	217	907	25.65	ng/ml	100
125) 14a,17a-20S-Methylcholesta	47.68	217	123m	3.48	ng/ml	
126) 14a,17a-20R-Methylcholesta	48.34	217	505m	14.28	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	48.68	217	582	16.46	ng/ml	100
128) 14a(H),17a(H)-20R-Ethylcho	49.54	217	805	22.77	ng/ml	100
131) 14b,17b-20R-Methylcholesta	47.84	218	332m	9.39	ng/ml	
132) 14b,17b-20S-Methylcholesta	47.92	218	344m	9.73	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.93	218	650m	18.38	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.94	218	498m	14.08	ng/ml	

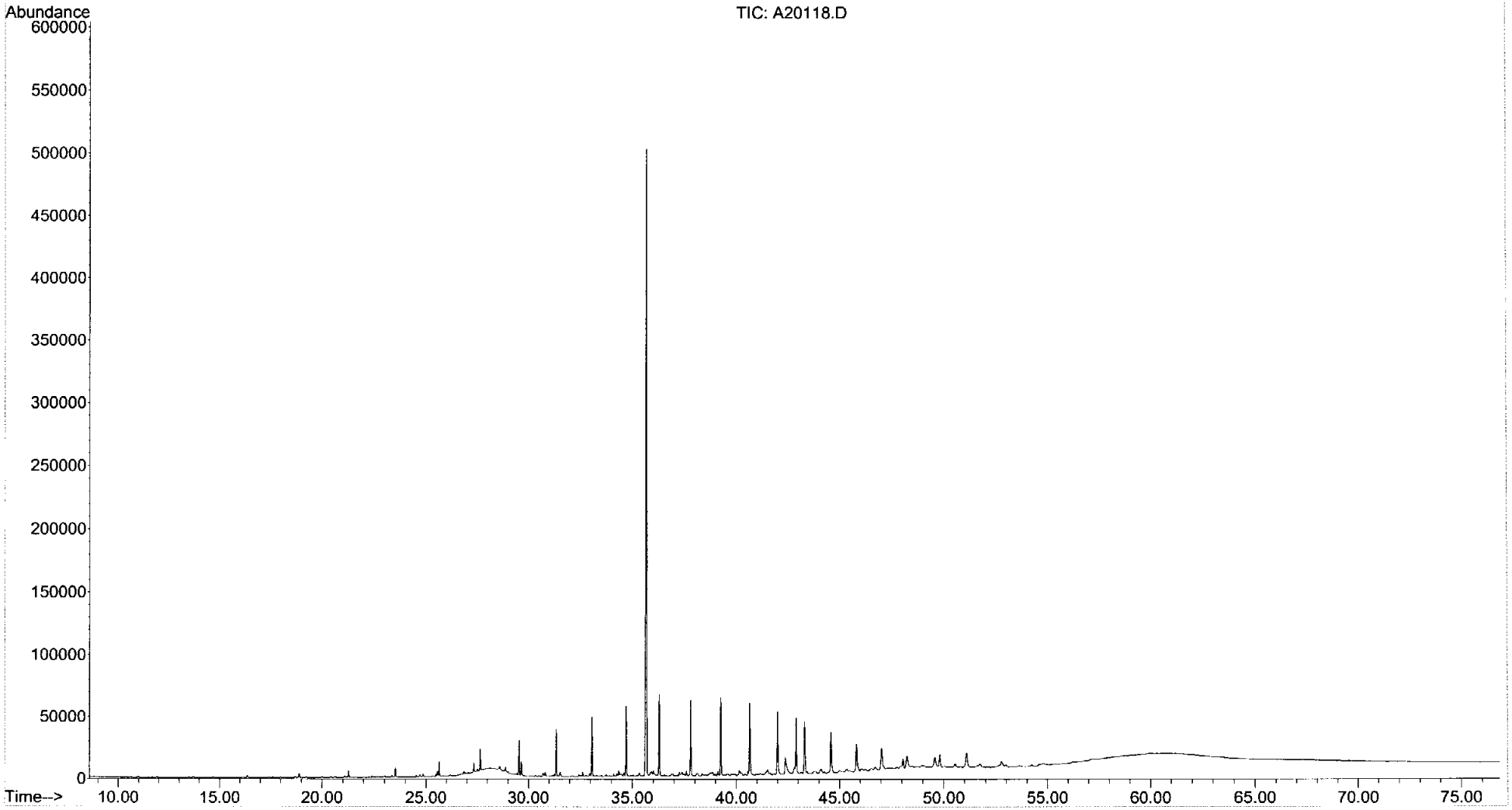
(#) = qualifier out of range (m) = manual integration (+) = signals summed

TMS 10/2/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20118.D
Acq On : 19 Sep 2006 5:44 pm
Operator : AC
Sample : 0609032-06
Misc : 1x
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 26 14:39:02 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-06E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.165	20	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**13000000**		Fluoranthene	**24000000**	
C1-Naphthalenes	**3600000**		Pyrene	**22000000**	
C2-Naphthalenes	21000	U	C1-Fluoranthenes/Pyrenes	**6800000**	
C3-Naphthalenes	21000	U	C2-Fluoranthenes/Pyrenes	9200	U
C4-Naphthalenes	21000	U	C3-Fluoranthenes/Pyrenes	9200	U
Biphenyl	**1000000**		C4-Fluoranthenes/Pyrenes	9200	U
Dibenzofuran	**5100000**		Naphthobenzothiophenes	**1300000**	
Acenaphthylene	18000	U	C1-Naphthobenzothiophenes	5200	U
Acenaphthene	**7300000**		C2-Naphthobenzothiophenes	5200	U
Fluorene	**5700000**		C3-Naphthobenzothiophenes	5200	U
C1-Fluorenes	9800	U	C4-Naphthobenzothiophenes	5200	U
C2-Fluorenes	9800	U	Benz[a]anthracene	**8500000**	
C3-Fluorenes	9800	U	Chrysene/Triphenylene	**8000000**	
Anthracene	**9200000**		C1-Chrysenes	9000	U
Phenanthrene	**35000000**		C2-Chrysenes	9000	U
C1-Phenanthrenes/Anthracenes	**6600000**		C3-Chrysenes	9000	U
C2-Phenanthrenes/Anthracenes	22000	U	C4-Chrysenes	9000	U
C3-Phenanthrenes/Anthracenes	22000	U	Benzo[b]fluoranthene	**5600000**	
C4-Phenanthrenes/Anthracenes	22000	U	Benzo[k]fluoranthene	**6000000**	
Retene	9800	U	Benzo[a]fluoranthene	**1400000**	
Dibenzothiophene	**2100000**		Benzo[e]pyrene	**4600000**	
C1-Dibenzothiophenes	3800	U	Benzo[a]pyrene	**8200000**	
C2-Dibenzothiophenes	3800	U	Perylene	**2100000**	
C3-Dibenzothiophenes	3800	U	Indeno[1,2,3-cd]pyrene	**5200000**	
C4-Dibenzothiophenes	3800	U	Dibenz[a,h]anthracene	**1200000**	
Benzo(b)fluorene	**2200000**		Benzo[g,h,i]perylene	**4700000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	81	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	84	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:56

Form I
Carbazole

Client:	**NewFields Environmental Forensics Practice**	Lab Code:	**MA00030**
Project:	**Gowanus Canal**	ETR:	**0609032**
Client ID:	**FS-HALLECK ST ROW-3**	Lab ID:	**0609032-06E**
Case:	**N/A** SDG: **N/A**	Associated Blank:	**SS090806B10**
Matrix:	**Soil**	Concentration Units:	**µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.165	20	100	AC

Parameter	Result
Carbazole	**4100000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	81	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	84	50-130

N/A - Not Applicable

09/27/06 11:21

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46374.D
Acq On : 14 Sep 2006 3:12 am
Operator : AC
Sample : 0609032-06-re
Misc : 100x
ALS Vial : 25 Sample Multiplier: 1

MAL 9/27/6

Quant Time: Sep 27 10:53:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

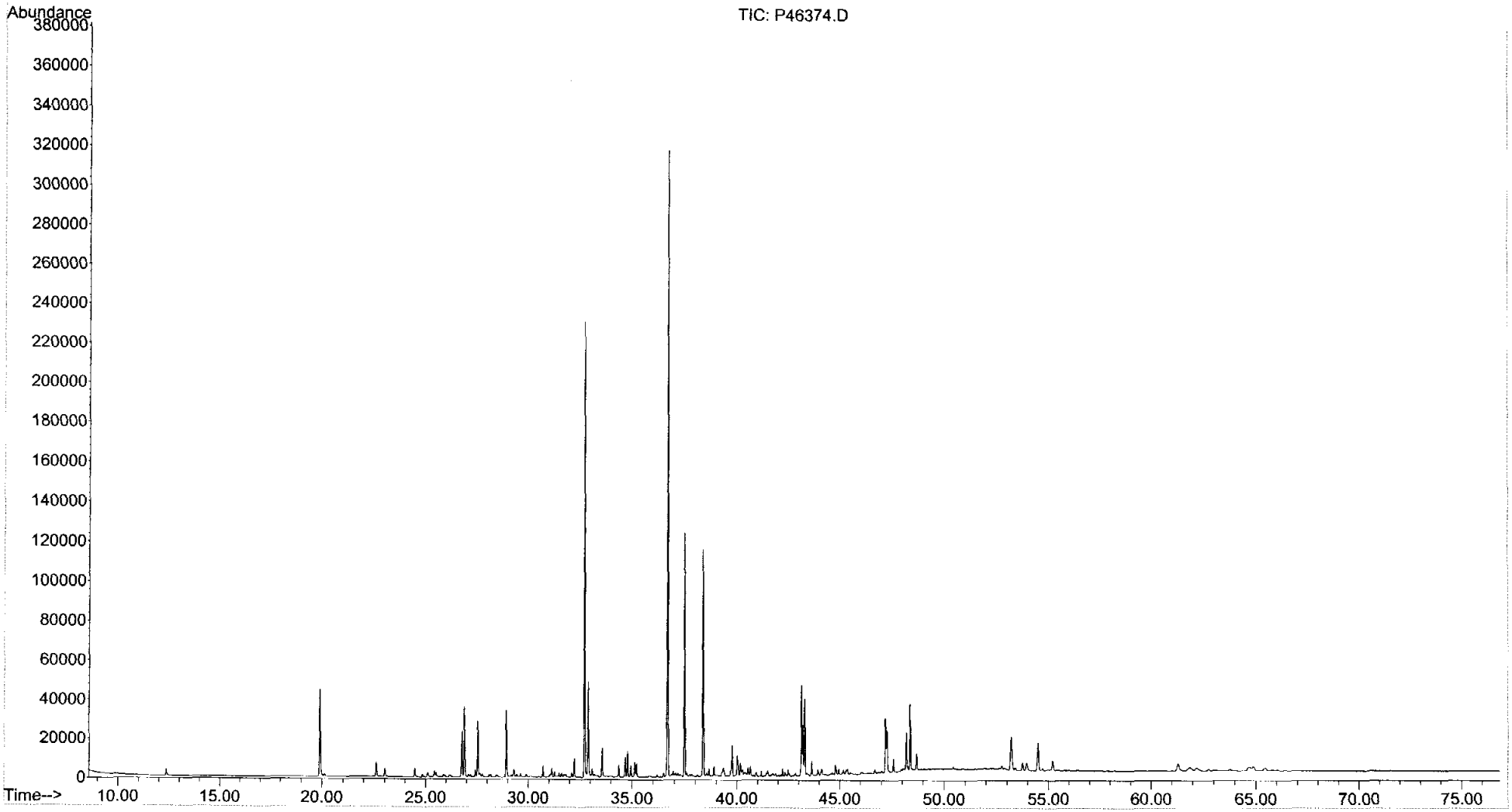
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	29131	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	42926	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.48	152	530	8.07	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.81%#	
58) Pyrene-d10	38.29	212	931	7.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.77%#	
81) Benzo[b]fluoranthene-d12	47.10	264	756	8.42	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.84%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	19.89	128	138772	1087.77	ng/mL#	100
10) C1-Naphthalenes	22.60	142	37998m	297.85	ng/mL	
15) 2-Methylnaphthalene	22.60	142	23470	274.01	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	13065	162.19	ng/mL#	100
22) Biphenyl	24.47	154	8888	82.25	ng/mL#	100
24) Dibenzofuran	27.54	168	46511m	421.42	ng/mL	
26) Acenaphthene	26.89	153	46424	599.60	ng/mL	99
28) Fluorene	28.91	166	43348m	472.53	ng/mL	
32) Dibenzothiophene	32.22	184	19668	174.40	ng/mL	98
41) Phenanthrene	32.71	178	371743	2892.18	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.79	192	69674m	542.07	ng/mL	
53) Anthracene	32.90	178	86627	757.16	ng/mL	99
54) Carbazole	33.57	167	37041	337.95	ng/mL	99
55) 1-Methylphenanthrene	35.22	192	10332	115.47	ng/mL	100
56) Fluoranthene	37.48	202	263253m	2010.26	ng/mL	
57) Benzo(b)fluorene	40.01	216	13375m	180.63	ng/mL	
59) Pyrene	38.37	202	233142	1770.47	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	73971m	561.73	ng/mL	
64) Naphthobenzothiophene	42.22	234	7405	65.60	ng/ml#	64
65) Naphthobenzothiophene-2,1-	42.22	234	7405	65.60	ng/mL	99
66) Naphthobenzothiophene-1,2-	42.55	234	2024	17.93	ng/mL#	21
67) Naphthobenzothiophene-2,3-	42.85	234	2507m	22.21	ng/mL	
73) Benz[a]anthracene	43.14	228	78888m	698.76	ng/mL	
74) Chrysene	43.30	228	73756m	662.36	ng/mL	
75) Chrysene/Triphenylene	43.30	228	73616m	661.10	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	54983	460.05	ng/mL	92
83) Benzo[k]fluoranthene	47.26	252	60681m	497.86	ng/mL	
84) Benzo[a]fluoranthene	47.57	252	13852	113.65	ng/mL#	1
85) Benzo[e]pyrene	48.19	252	43578	380.89	ng/mL	99
86) Benzo[a]pyrene	48.38	252	74433	674.85	ng/mL	100
87) Perylene	48.69	252	18914m	172.37	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	44944	426.73	ng/mL	95
89) Dibenz[a,h]anthracene	53.24	278	9788m	95.46	ng/mL	
90) Benzo[g,h,i]perylene	54.49	276	43628	387.80	ng/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46374.D
Acq On : 14 Sep 2006 3:12 am
Operator : AC
Sample : 0609032-06-re
Misc : 100x
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 27 10:53:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-COURT ST ROW-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-07**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.1468	18.18	1	AC

Parameter	Result	
Naphthalene	**20000000**	E
C1-Naphthalenes	**5000000**	E
C2-Naphthalenes	**3000000**	
C3-Naphthalenes	**1500000**	
C4-Naphthalenes	**510000**	
Biphenyl	**1300000**	E
Dibenzofuran	**7000000**	E
Acenaphthylene	**560000**	
Acenaphthene	**9600000**	E
Fluorene	**8000000**	E
C1-Fluorenes	**1300000**	
C2-Fluorenes	**780000**	
C3-Fluorenes	**810000**	
Anthracene	**12000000**	E
Phenanthrene	**47000000**	E
C1-Phenanthrenes/Anthracenes	**9200000**	E
C2-Phenanthrenes/Anthracenes	**3200000**	
C3-Phenanthrenes/Anthracenes	**1100000**	
C4-Phenanthrenes/Anthracenes	**300000**	
Retene	**64000**	
Dibenzothiophene	**3000000**	E
C1-Dibenzothiophenes	**740000**	
C2-Dibenzothiophenes	**350000**	
C3-Dibenzothiophenes	**180000**	
C4-Dibenzothiophenes	**52000**	
Benzo(b)fluorene	**3400000**	E

Parameter	Result	
Fluoranthene	**37000000**	E
Pyrene	**33000000**	E
C1-Fluoranthenes/Pyrenes	**9800000**	E
C2-Fluoranthenes/Pyrenes	**2700000**	
C3-Fluoranthenes/Pyrenes	**1200000**	
C4-Fluoranthenes/Pyrenes	**710000**	
Naphthobenzothiophenes	**1900000**	
C1-Naphthobenzothiophenes	**640000**	
C2-Naphthobenzothiophenes	**230000**	
C3-Naphthobenzothiophenes	**170000**	
C4-Naphthobenzothiophenes	**69000**	
Benz[a]anthracene	**12000000**	E
Chrysene/Triphenylene	**12000000**	E
C1-Chrysenes	**3400000**	
C2-Chrysenes	**1200000**	
C3-Chrysenes	**890000**	
C4-Chrysenes	**290000**	
Benzo[b]fluoranthene	**12000000**	E
Benzo[k]fluoranthene	**6400000**	E
Benzo[a]fluoranthene	**2000000**	E
Benzo[e]pyrene	**7100000**	E
Benzo[a]pyrene	**13000000**	E
Perylene	**3300000**	E
Indeno[1,2,3-cd]pyrene	**8200000**	E
Dibenz[a,h]anthracene	**2100000**	E
Benzo[g,h,i]perylene	**7300000**	E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	110	50-130
Benzo[b]fluoranthene-d12	102	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

01/17/07 11:22

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-COURT ST ROW-1**
Case: **N/A** SDG: N/A
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-07**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.147	18.18	1	AC

Parameter	Result
Carbazole	**5500000** E

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	110	50-130
Benzo[b]fluoranthene-d12	102	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.

09/27/06 12:02

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-COURT ST ROW-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-07**
Associated Blank: **SS091806B03**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/19/06	100	0.147	2.94	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**92**	J	30,31-Bishomohopane-22S	**730**	
C24 Tricyclic Terpane	86	U	30,31-Bishomohopane-22R	86	U
C25 Tricyclic Terpane	86	U	30,31-Trishomohopane-22S	86	U
C24 Tetracyclic Terpane	**360**		30,31-Trishomohopane-22R	86	U
C26 Tricyclic Terpane-22S	86	U	Tetrakishomohopane-22S	86	U
C26 Tricyclic Terpane-22R	86	U	Tetrakishomohopane-22R	86	U
C28 Tricyclic Terpane-22S	86	U	Pentakishomohopane-22S	86	U
C28 Tricyclic Terpane-22R	86	U	Pentakishomohopane-22R	86	U
C29 Tricyclic Terpane-22S	86	U	13b(H),17a(H)-20S-Diacholestane	**130**	J
C29 Tricyclic Terpane-22R	86	U	13b(H),17a(H)-20R-Diacholestane	**66**	J
18a-22,29,30-Trisnorneohopane-TS	86	U	13b,17a-20S-Methyldiacholestane	31	U
C30 Tricyclic Terpane-22S	86	U	14a(H),17a(H)-20S-Cholestane	**69**	J
C30 Tricyclic Terpane-22R	86	U	14a(H),17a(H)-20R-Cholestane	**360**	
17a(H)-22,29,30-Trisnorhopane-TM	**2000**		13b,17a-20R-Ethyldiacholestane	31	U
17a/b,21b/a 28,30-Bisnorhopane	86	U	13a,17b-20S-Ethyldiacholestane	31	U
17a(H),21b(H)-25-Norhopane	86	U	14a,17a-20S-Methylcholestane	**66**	J
30-Norhopane	**2600**		14a,17a-20R-Methylcholestane	**140**	J
18a(H)-30-Norneohopane-C29Ts	86	U	14a(H),17a(H)-20S-Ethylcholestane	**200**	J
17a(H)-Diahopane	**290**		14a(H),17a(H)-20R-Ethylcholestane	**260**	
30-Normoretane	**460**		14b(H),17b(H)-20R-Cholestane	**83**	J
18a(H)&18b(H)-Oleananes	86	U	14b(H),17b(H)-20S-Cholestane	**58**	J
Hopane	**3300**		14b,17b-20R-Methylcholestane	**130**	J
Moretane	**880**		14b,17b-20S-Methylcholestane	**130**	J
30-Homohopane-22S	**1100**		14b(H),17b(H)-20R-Ethylcholestane	**270**	
30-Homohopane-22R	**770**		14b(H),17b(H)-20S-Ethylcholestane	**150**	J

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	50	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 17:17

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46356.D
Acq On : 13 Sep 2006 1:49 pm
Operator : AC
Sample : 0609032-07
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

MAG 1/17/7

Quant Time: Jan 17 10:51:04 2007
Quant Method : K:\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.78	164	37486m	500.00 ng/mL	0.02
72) Chrysene-d12	43.28	240	59916m	500.00 ng/mL	0.09

System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.46	152	79313	938.64 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 93.86%		
58) Pyrene-d10	38.36	212	169783	1097.49 ng/mL	0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 109.75%		
81) Benzo[b]fluoranthene-d12	47.17	264	127753	1019.21 ng/mL	0.08
Spiked Amount 1000.000	Range 50 - 130		Recovery = 101.92%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.94	128	25839599	157401.28 ng/mL#	100
10) C1-Naphthalenes	22.60	142	6605714m	40238.54 ng/mL	
11) C2-Naphthalenes	25.42	156	3973535m	24204.69 ng/mL	
12) C3-Naphthalenes	27.76	170	1966006m	11975.88 ng/mL	
13) C4-Naphthalenes	30.52	184	674431m	4108.28 ng/mL	
15) 2-Methylnaphthalene	22.60	142	4226556	38346.52 ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	2348587	22657.04 ng/mL#	100
22) Biphenyl	24.47	154	1506455	10833.01 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	955037	9963.96 ng/mL#	100
24) Dibenzofuran	27.57	168	8083793	56919.28 ng/mL	98
25) Acenaphthylene	26.17	152	700178	4563.71 ng/mL#	100
26) Acenaphthene	26.94	153	7756695	77854.84 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	160693m	1904.26 ng/mL	
28) Fluorene	28.96	166	7580329m	64214.76 ng/mL	
29) C1-Fluorenes	31.15	180	1263651m	10704.69 ng/mL	
30) C2-Fluorenes	32.83	194	742231m	6287.61 ng/mL	
31) C3-Fluorenes	36.02	208	767808m	6504.28 ng/mL	
32) Dibenzothiophene	32.25	184	3529977	24325.17 ng/mL	98
36) OTP	34.44	198	15904	109.59 ng/mL#	100
37) C1-Dibenzothiophenes	34.02	198	876985m	6043.33 ng/mL	
38) C2-Dibenzothiophenes	36.50	212	404887m	2790.09 ng/mL	
39) C3-Dibenzothiophenes	38.55	226	209301m	1442.30 ng/mL	
40) C4-Dibenzothiophenes	39.75	240	60425m	416.39 ng/mL	
41) Phenanthrene	32.84	178	62632727m	378677.56 ng/mL	
47) C1-Phenanthrenes/Anthracen	34.84	192	12247444m	74048.06 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	4331054m	26185.56 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.83	220	1512380m	9143.85 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	403687m	2440.69 ng/mL ✓	
52) Retene	39.74	234	21672m	515.71 ng/mL ✓	
53) Anthracene	33.01	178	14715281	99951.94 ng/mL	99
54) Carbazole	33.61	167	6240000m	44243.17 ng/mL	
55) 1-Methylphenanthrene	35.27	192	1653458	14359.72 ng/mL	100
56) Fluoranthene	37.64	202	50134321m	297508.90 ng/mL ✓	
57) Benzo(b)fluorene	40.07	216	2606565m	27356.27 ng/mL ✓	
59) Pyrene	38.53	202	45472322	268349.65 ng/mL	93
60) C1-Fluoranthenes/Pyrenes	39.83	216	13475264m	79522.71 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.52	230	3681309m	21724.82 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.21	244	1628855m	9612.50 ng/mL	

MAG 1/17/07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46356.D
Acq On : 13 Sep 2006 1:49 pm
Operator : AC
Sample : 0609032-07
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 17 10:51:04 2007
Quant Method : K:\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

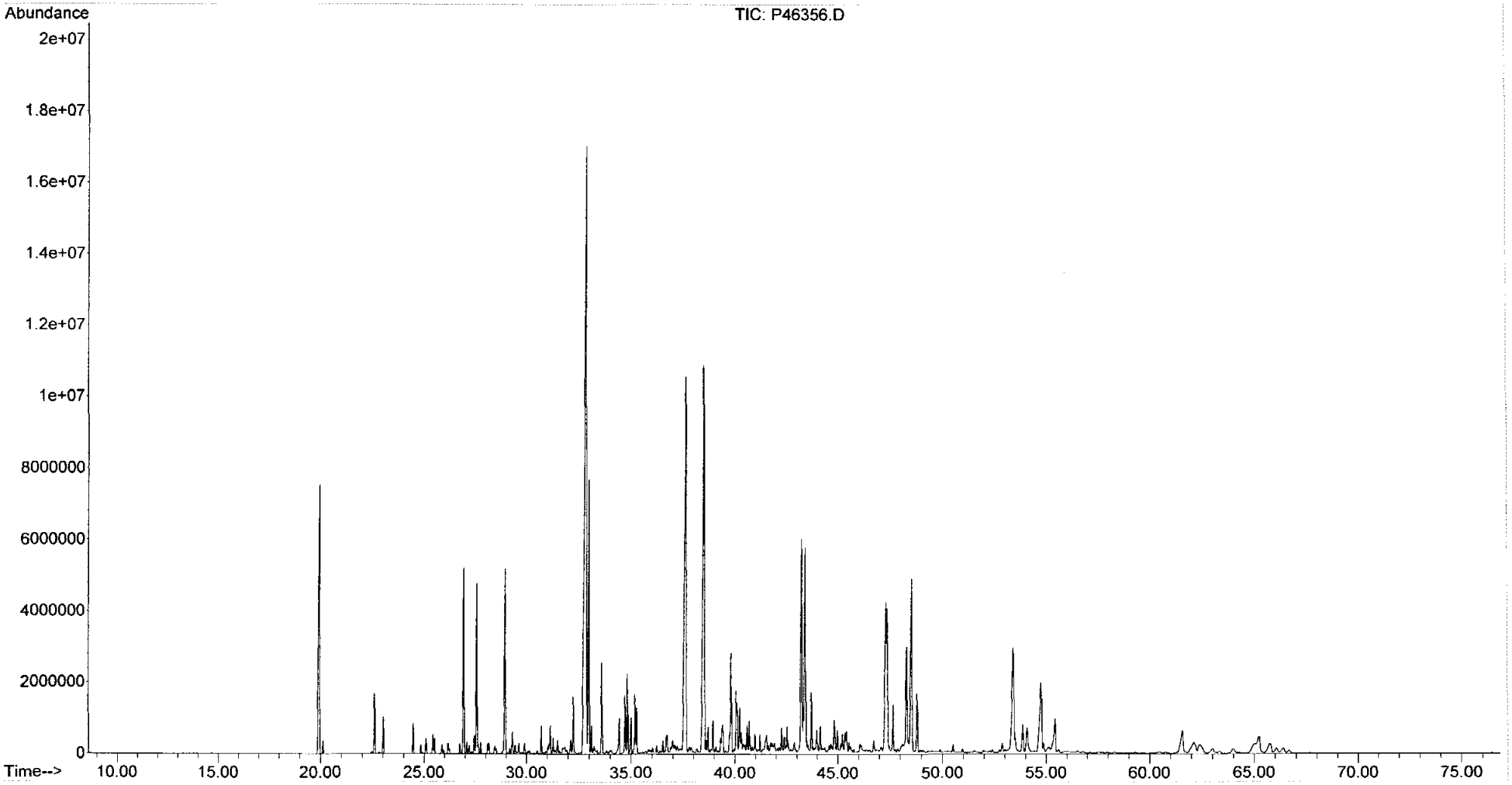
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) C4-Fluoranthenes/Pyrenes	44.01	258	972192m	5737.28 ng/mL	
64) Naphthobenzothiophene	42.25	234	1384910m	9534.65 ng/ml	
65) Naphthobenzothiophene-2,1-	42.25	234	1385328m	9537.53 ng/mL	
66) Naphthobenzothiophene-1,2-	42.59	234	366367	2522.32 ng/mL#	19
67) Naphthobenzothiophene-2,3-	42.89	234	429220m	2955.04 ng/mL	
68) C1-Naphthobenzothiophenes	43.91	248	746089m	5136.58 ng/ml	
69) C2-Naphthobenzothiophenes	46.07	262	272939m	1879.10 ng/ml	
70) C3-Naphthobenzothiophenes	46.85	276	195204m	1343.92 ng/ml	
71) C4-Naphthobenzothiophenes	49.84	290	80521m	554.36 ng/mL	
73) Benz[a]anthracene	43.25	228	15512743m	98442.35 ng/mL	
74) Chrysene	43.43	228	14490436m	93229.81 ng/mL	
75) Chrysene/Triphenylene	43.43	228	14488141m	93215.05 ng/mL	
76) C1-Chrysenes	44.82	242	4320454m	27797.31 ng/mL	
77) C2-Chrysenes	46.51	256	1489593m	9583.87 ng/mL	
79) C3-Chrysenes	48.50	270	1120856m	7211.46 ng/mL	
80) C4-Chrysenes	49.12	284	362390m	2331.58 ng/mL	
82) Benzo[b]fluoranthene	47.34	252	16869777	101125.36 ng/mL	97
83) Benzo[k]fluoranthene	47.41	252	8796393m	51705.58 ng/mL	
84) Benzo[a]fluoranthene	47.66	252	2689012m	15806.13 ng/mL	
85) Benzo[e]pyrene	48.32	252	9099514m	56980.77 ng/mL	
86) Benzo[a]pyrene	48.56	252	16092098m	104527.98 ng/mL	
87) Perylene	48.81	252	4066720m	26551.67 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.44	276	9773730m	66485.07 ng/mL	
89) Dibenz[a,h]anthracene	53.42	278	2443966m	17076.06 ng/mL	
90) Benzo[g,h,i]perylene	54.77	276	9273393	59054.75 ng/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06PAH4\SEP12\
Data File : P46356.D
Acq On : 13 Sep 2006 1:49 pm
Operator : AC
Sample : 0609032-07
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 17 10:51:04 2007
Quant Method : K:\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20119.D
Acq On : 19 Sep 2006 7:16 pm
Operator : AC
Sample : 0609032-07
Misc : 1x
ALS Vial : 19 Sample Multiplier: 1

MAL 9/28/06

Quant Time: Sep 26 15:58:50 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.39	240	76258	500.00	ng/mL	0.11

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.90	217	33035	1006.45	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.65%			

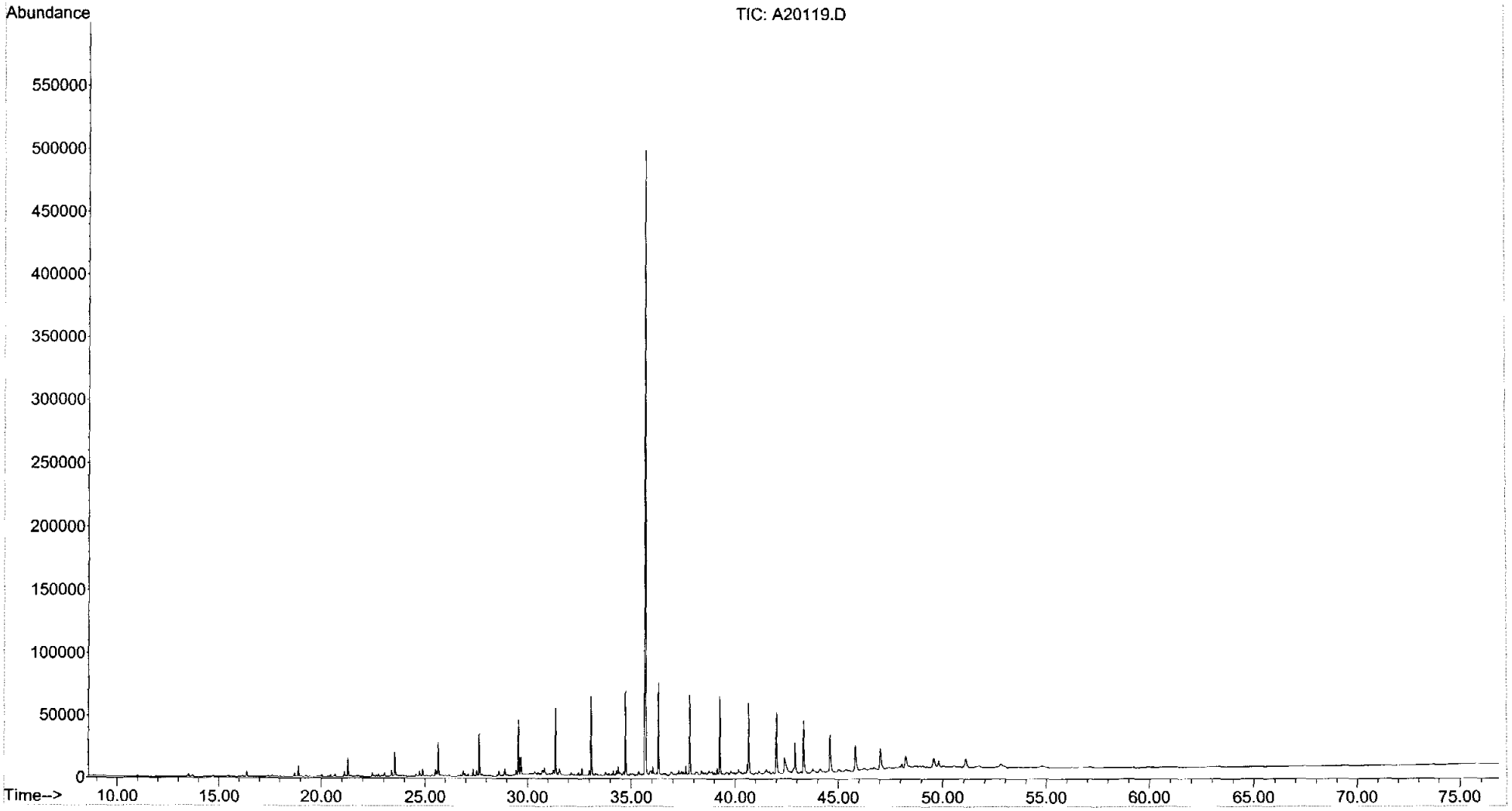
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.09	191	11671	166.55	ng/mL#	84
84) Hopane (T19)	51.09	191	11671	166.55	ng/mL#	84
85) C23 Tricyclic Terpane (T4)	39.89	191	322	4.60	ng/ml	100
88) C24 Tetracyclic Terpane (T	43.44	191	1271m	18.14	ng/ml	
98) 17a(H)-22,29,30-Trisnorhop	48.06	191	6987m	99.71	ng/ml	
101) 30-Norhopane (T15)	49.82	191	9187	131.10	ng/ml	100
103) 17a(H)-Diahopane (X)	50.07	191	1010	14.41	ng/ml	100
104) 30-Normoretane (T17)	50.54	191	1595	22.76	ng/ml	100
106) Moretane (T20)	51.73	191	3078	43.92	ng/ml	100
107) 30-Homohopane-22S (T21)	52.77	191	3867	55.18	ng/ml	100
108) 30-Homohopane-22R (T22)	52.98	191	2703	38.57	ng/ml	100
109) 30,31-Bishomohopane-22S (T	54.23	191	2548	36.36	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	44.47	217	209	6.37	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	44.91	217	108	3.29	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	46.52	217	113m	3.44	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.03	217	592	18.04	ng/ml	100
125) 14a,17a-20S-Methylcholesta	47.69	217	108m	3.29	ng/ml	
126) 14a,17a-20R-Methylcholesta	48.34	217	227	6.92	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	48.69	217	320	9.75	ng/ml	100
128) 14a(H),17a(H)-20R-Ethylcho	49.54	217	427	13.01	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	46.59	218	136m	4.14	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	46.68	218	95m	2.89	ng/ml	
131) 14b,17b-20R-Methylcholesta	47.84	218	210m	6.40	ng/ml	
132) 14b,17b-20S-Methylcholesta	47.92	218	209m	6.37	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.93	218	448m	13.65	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	48.97	218	253m	7.71	ng/ml	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20119.D
Acq On : 19 Sep 2006 7:16 pm
Operator : AC
Sample : 0609032-07
Misc : 1x
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 26 15:58:50 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-COURT ST ROW-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-07E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.1468	18.18	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**16000000**		Fluoranthene	**27000000**	
C1-Naphthalenes	**4000000**		Pyrene	**23000000**	
C2-Naphthalenes	21000	U	C1-Fluoranthenes/Pyrenes	**6500000**	
C3-Naphthalenes	21000	U	C2-Fluoranthenes/Pyrenes	9400	U
C4-Naphthalenes	21000	U	C3-Fluoranthenes/Pyrenes	9400	U
Biphenyl	**1100000**		C4-Fluoranthenes/Pyrenes	9400	U
Dibenzofuran	**5300000**		Naphthobenzothiophenes	5300	U
Acenaphthylene	18000	U	C1-Naphthobenzothiophenes	5300	U
Acenaphthene	**7500000**		C2-Naphthobenzothiophenes	5300	U
Fluorene	**5900000**		C3-Naphthobenzothiophenes	5300	U
C1-Fluorenes	10000	U	C4-Naphthobenzothiophenes	5300	U
C2-Fluorenes	10000	U	Benz[a]anthracene	**8400000**	
C3-Fluorenes	10000	U	Chrysene/Triphenylene	**8300000**	
Anthracene	**8300000**		C1-Chrysenes	9200	U
Phenanthrene	**37000000**		C2-Chrysenes	9200	U
C1-Phenanthrenes/Anthracenes	**6100000**		C3-Chrysenes	9200	U
C2-Phenanthrenes/Anthracenes	22000	U	C4-Chrysenes	9200	U
C3-Phenanthrenes/Anthracenes	22000	U	Benzo[b]fluoranthene	**6100000**	
C4-Phenanthrenes/Anthracenes	22000	U	Benzo[k]fluoranthene	**6200000**	
Retene	10000	U	Benzo[a]fluoranthene	**1400000**	
Dibenzothiophene	**2200000**		Benzo[e]pyrene	**5000000**	
C1-Dibenzothiophenes	3800	U	Benzo[a]pyrene	**8600000**	
C2-Dibenzothiophenes	3800	U	Perylene	**2200000**	
C3-Dibenzothiophenes	3800	U	Indeno[1,2,3-cd]pyrene	**5600000**	
C4-Dibenzothiophenes	3800	U	Dibenz[a,h]anthracene	**1200000**	
Benzo(b)fluorene	**2100000**		Benzo[g,h,i]perylene	**5300000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	75	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	81	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:57

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-COURT ST ROW-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-07E**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/14/06	100	0.147	18.18	100	AC

Parameter	Result
Carbazole	**3300000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	75	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	81	50-130

N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46376.D
Acq On : 14 Sep 2006 4:42 am
Operator : AC
Sample : 0609032-07-re
Misc : 100x
ALS Vial : 26 Sample Multiplier: 1

MM 9/27/6

Quant Time: Sep 25 16:40:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	29415	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	42859	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	495	7.47	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.75%#	
58) Pyrene-d10	38.29	212	937	7.72	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.77%#	
81) Benzo[b]fluoranthene-d12	47.10	264	723	8.06	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.81%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	

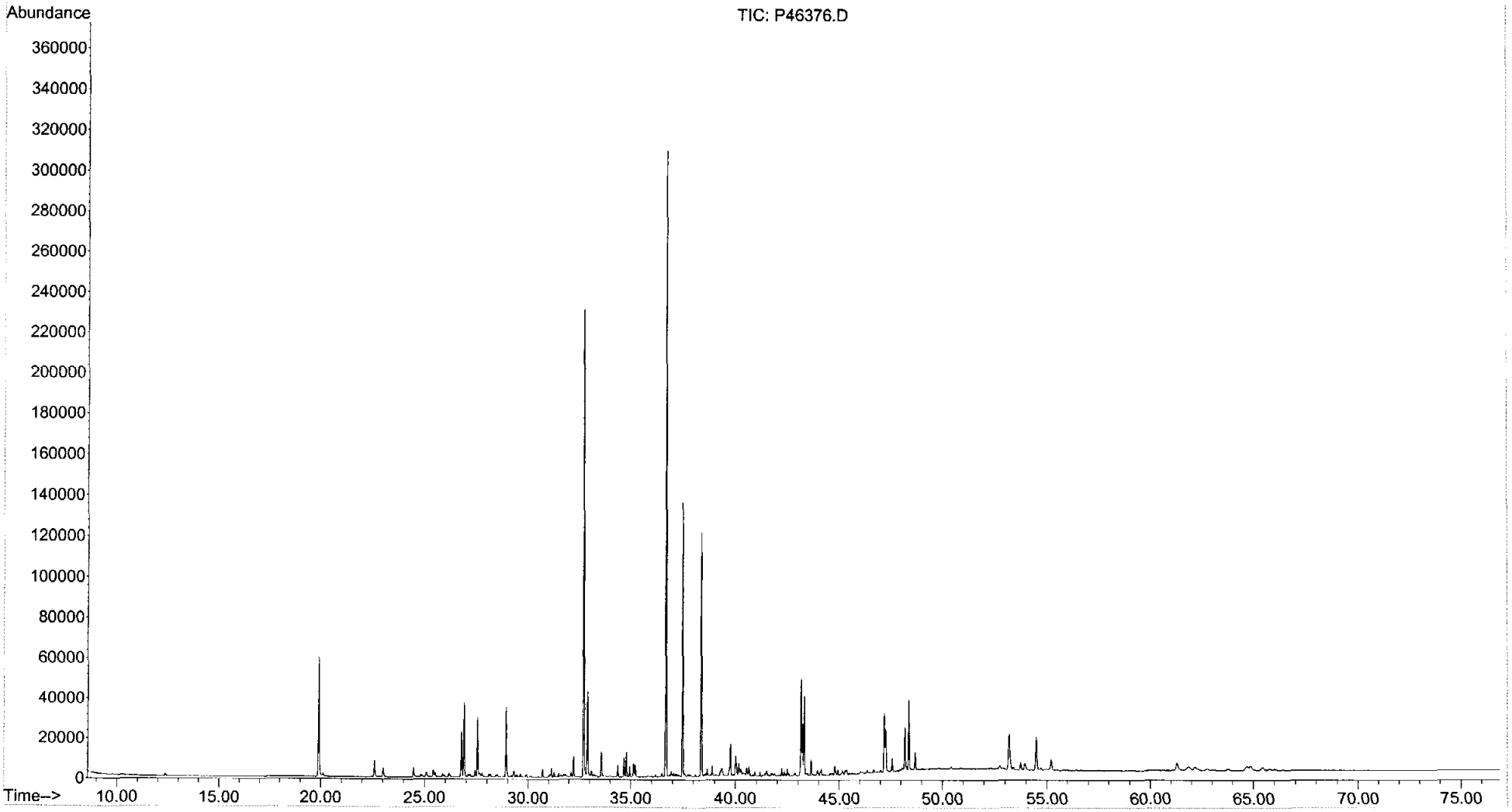
Target Compounds						Qvalue
9) Naphthalene	19.89	128	169933	1319.17	ng/mL#	100
10) C1-Naphthalenes	22.60	142	41504m	322.19	ng/mL	
15) 2-Methylnaphthalene	22.60	142	25830	298.65	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	14299	175.79	ng/mL#	100
22) Biphenyl	24.47	154	9530	87.33	ng/mL#	100
24) Dibenzofuran	27.54	168	47473m	425.98	ng/mL	
26) Acenaphthene	26.89	153	47430	606.68	ng/mL	99
28) Fluorene	28.91	166	44198	477.14	ng/mL	100
32) Dibenzothiophene	32.22	184	20529	180.28	ng/mL	98
41) Phenanthrene	32.71	178	388480	2993.21	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.79	192	64282m	495.29	ng/mL	
53) Anthracene	32.90	178	77025	666.74	ng/mL	100
54) Carbazole	33.57	167	29795m	269.22	ng/mL	
55) 1-Methylphenanthrene	35.22	192	9527	105.44	ng/mL	99
56) Fluoranthene	37.48	202	285373m	2158.13	ng/mL	
57) Benzo(b)fluorene	40.01	216	12798m	171.17	ng/mL	
59) Pyrene	38.36	202	251518	1891.57	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	69886m	525.59	ng/mL	
73) Benz[a]anthracene	43.14	228	76879m	682.03	ng/mL	
74) Chrysene	43.30	228	74232m	667.68	ng/mL	
75) Chrysene/Triphenylene	43.30	228	74253m	667.86	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	58879	493.41	ng/mL	96
83) Benzo[k]fluoranthene	47.26	252	60557m	497.62	ng/mL	
84) Benzo[a]fluoranthene	47.57	252	13848	113.79	ng/mL#	1
85) Benzo[e]pyrene	48.19	252	45916	401.95	ng/mL	98
86) Benzo[a]pyrene	48.37	252	76094	690.99	ng/mL	96
87) Perylene	48.69	252	19823m	180.93	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	47468	451.40	ng/mL	95
89) Dibenz[a,h]anthracene	53.24	278	9762m	95.35	ng/mL	
90) Benzo[g,h,i]perylene	54.49	276	47697	424.63	ng/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46376.D
Acq On : 14 Sep 2006 4:42 am
Operator : AC
Sample : 0609032-07-re
Misc : 100x
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 25 16:40:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806B10**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/12/06	100	0.10	1	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**13**	J	Fluoranthene	**3.6**	J
C1-Naphthalenes	17	U	Pyrene	7.6	U
C2-Naphthalenes	17	U	C1-Fluoranthenes/Pyrenes	7.6	U
C3-Naphthalenes	17	U	C2-Fluoranthenes/Pyrenes	7.6	U
C4-Naphthalenes	17	U	C3-Fluoranthenes/Pyrenes	7.6	U
Biphenyl	**17**	J	C4-Fluoranthenes/Pyrenes	7.6	U
Dibenzofuran	6.3	U	Naphthobenzothiophenes	4.3	U
Acenaphthylene	14	U	C1-Naphthobenzothiophenes	4.3	U
Acenaphthene	6.6	U	C2-Naphthobenzothiophenes	4.3	U
Fluorene	8.1	U	C3-Naphthobenzothiophenes	4.3	U
C1-Fluorenes	8.1	U	C4-Naphthobenzothiophenes	4.3	U
C2-Fluorenes	8.1	U	Benz[a]anthracene	7.0	U
C3-Fluorenes	8.1	U	Chrysene/Triphenylene	7.4	U
Anthracene	8.1	U	C1-Chrysenes	7.4	U
Phenanthrene	**9.1**	J	C2-Chrysenes	7.4	U
C1-Phenanthrenes/Anthracenes	18	U	C3-Chrysenes	7.4	U
C2-Phenanthrenes/Anthracenes	18	U	C4-Chrysenes	7.4	U
C3-Phenanthrenes/Anthracenes	18	U	Benzo[b]fluoranthene	6.9	U
C4-Phenanthrenes/Anthracenes	18	U	Benzo[k]fluoranthene	7.0	U
Retene	8.1	U	Benzo[a]fluoranthene	7.0	U
Dibenzothiophene	3.1	U	Benzo[e]pyrene	8.8	U
C1-Dibenzothiophenes	3.1	U	Benzo[a]pyrene	4.6	U
C2-Dibenzothiophenes	3.1	U	Perylene	10	U
C3-Dibenzothiophenes	3.1	U	Indeno[1,2,3-cd]pyrene	6.1	U
C4-Dibenzothiophenes	3.1	U	Dibenz[a,h]anthracene	3.9	U
Benzo(b)fluorene	5.4	U	Benzo[g,h,i]perylene	8.5	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	94	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 11:59

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806B10**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/12/06	100	0.10	1	1	AC

Parameter	Result
Carbazole	3.3 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	94	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/23/06 12:57

Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS091806B03**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/18/06	09/19/06	100	0.10	1	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	43	U	30,31-Bishomohopane-22S	43	U
C24 Tricyclic Terpane	43	U	30,31-Bishomohopane-22R	43	U
C25 Tricyclic Terpane	43	U	30,31-Trishomohopane-22S	43	U
C24 Tetracyclic Terpane	43	U	30,31-Trishomohopane-22R	43	U
C26 Tricyclic Terpane-22S	43	U	Tetrakishomohopane-22S	43	U
C26 Tricyclic Terpane-22R	43	U	Tetrakishomohopane-22R	43	U
C28 Tricyclic Terpane-22S	43	U	Pentakishomohopane-22S	43	U
C28 Tricyclic Terpane-22R	43	U	Pentakishomohopane-22R	43	U
C29 Tricyclic Terpane-22S	43	U	13b(H),17a(H)-20S-Diacholestane	15	U
C29 Tricyclic Terpane-22R	43	U	13b(H),17a(H)-20R-Diacholestane	15	U
18a-22,29,30-Trisnorneohopane-TS	43	U	13b,17a-20S-Methyldiacholestane	15	U
C30 Tricyclic Terpane-22S	43	U	14a(H),17a(H)-20S-Cholestane	15	U
C30 Tricyclic Terpane-22R	43	U	14a(H),17a(H)-20R-Cholestane	15	U
17a(H)-22,29,30-Trisnorhopane-TM	43	U	13b,17a-20R-Ethyldiacholestane	15	U
17a/b,21b/a 28,30-Bisnorhopane	43	U	13a,17b-20S-Ethyldiacholestane	15	U
17a(H),21b(H)-25-Norhopane	43	U	14a,17a-20S-Methylcholestane	15	U
30-Norhopane	43	U	14a,17a-20R-Methylcholestane	15	U
18a(H)-30-Norneohopane-C29Ts	43	U	14a(H),17a(H)-20S-Ethylcholestane	15	U
17a(H)-Diahopane	43	U	14a(H),17a(H)-20R-Ethylcholestane	15	U
30-Normoretane	43	U	14b(H),17b(H)-20R-Cholestane	15	U
18a(H)&18b(H)-Oleananes	43	U	14b(H),17b(H)-20S-Cholestane	15	U
Hopane	43	U	14b,17b-20R-Methylcholestane	15	U
Moretane	43	U	14b,17b-20S-Methylcholestane	15	U
30-Homohopane-22S	43	U	14b(H),17b(H)-20R-Ethylcholestane	15	U
30-Homohopane-22R	43	U	14b(H),17b(H)-20S-Ethylcholestane	15	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	114	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 16:44

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46336.D
Acq On : 12 Sep 2006 10:25 pm
Operator : AC
Sample : SS090806B10
Misc : 1X ETR0609032
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 08:34:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

MAL 9/21/06

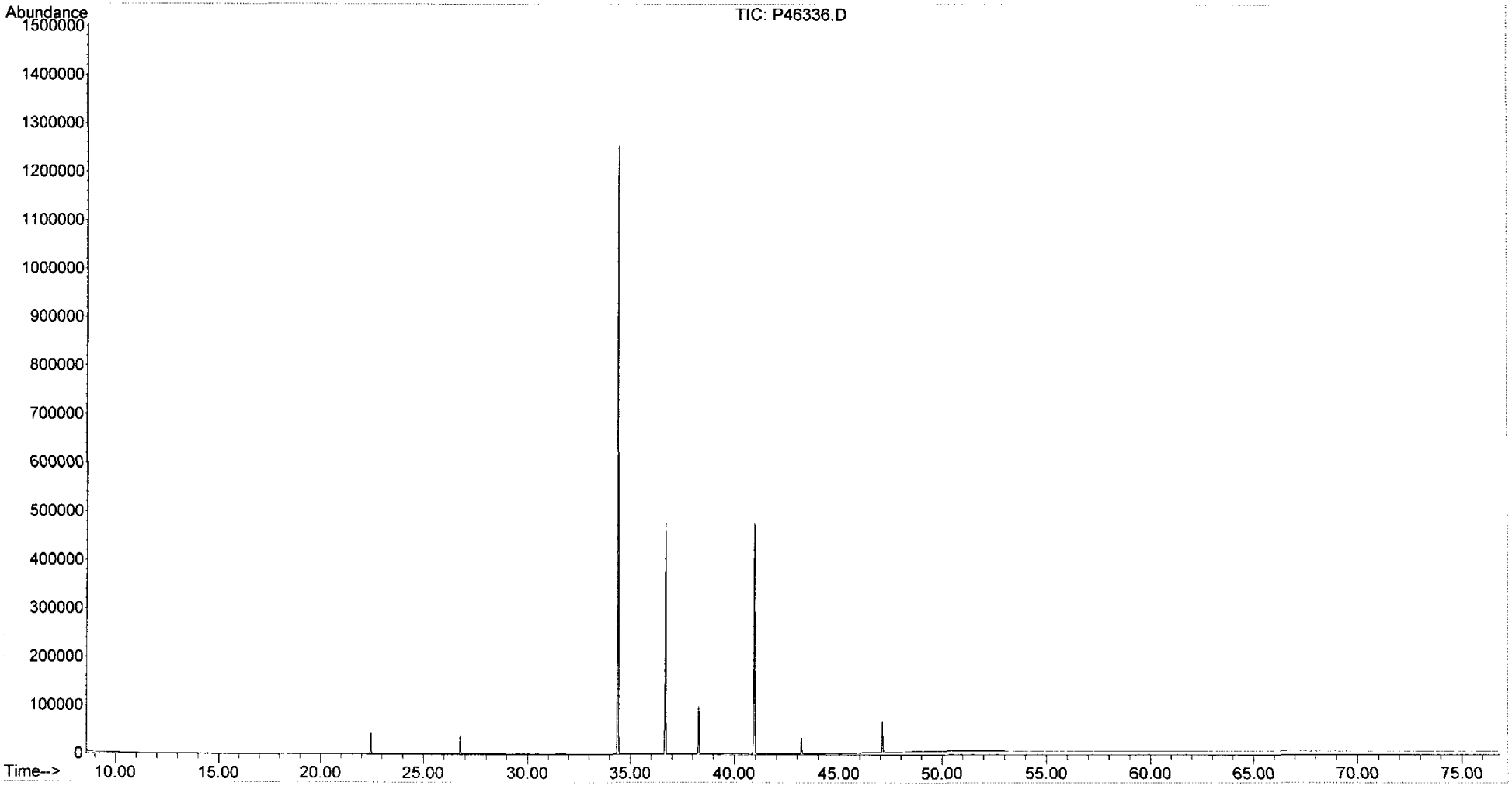
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	46507m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	68804m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.45	152	95049m	906.67	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 90.67%			
58) Pyrene-d10	38.29	212	182249m	949.56	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 94.96%			
81) Benzo[b]fluoranthene-d12	47.09	264	135170	939.08	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 93.91%			
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.90	128	262m	1.29	ng/mL	
22) Biphenyl	24.44	154	292m	1.69	ng/mL	
41) Phenanthrene	32.73	178	186m	0.91	ng/mL	
56) Fluoranthene	37.48	202	76m	0.36	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46336.D
Acq On : 12 Sep 2006 10:25 pm
Operator : AC
Sample : SS090806B10
Misc : 1X ETR0609032
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 08:34:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20111.D
Acq On : 19 Sep 2006 3:54 am
Operator : AC
Sample : ss091806b03
Misc : 1x etr0609032
ALS Vial : 11 Sample Multiplier: 1

MM 9/28/06

Quant Time: Sep 27 15:52:37 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	42.47	240	33543m	500.00 ng/mL	0.20

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
50) Pyrene-d10	0.00	212	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
117) 5B(H)Cholane - Surr	42.90	217	32907	2279.24 ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 227.92%#		

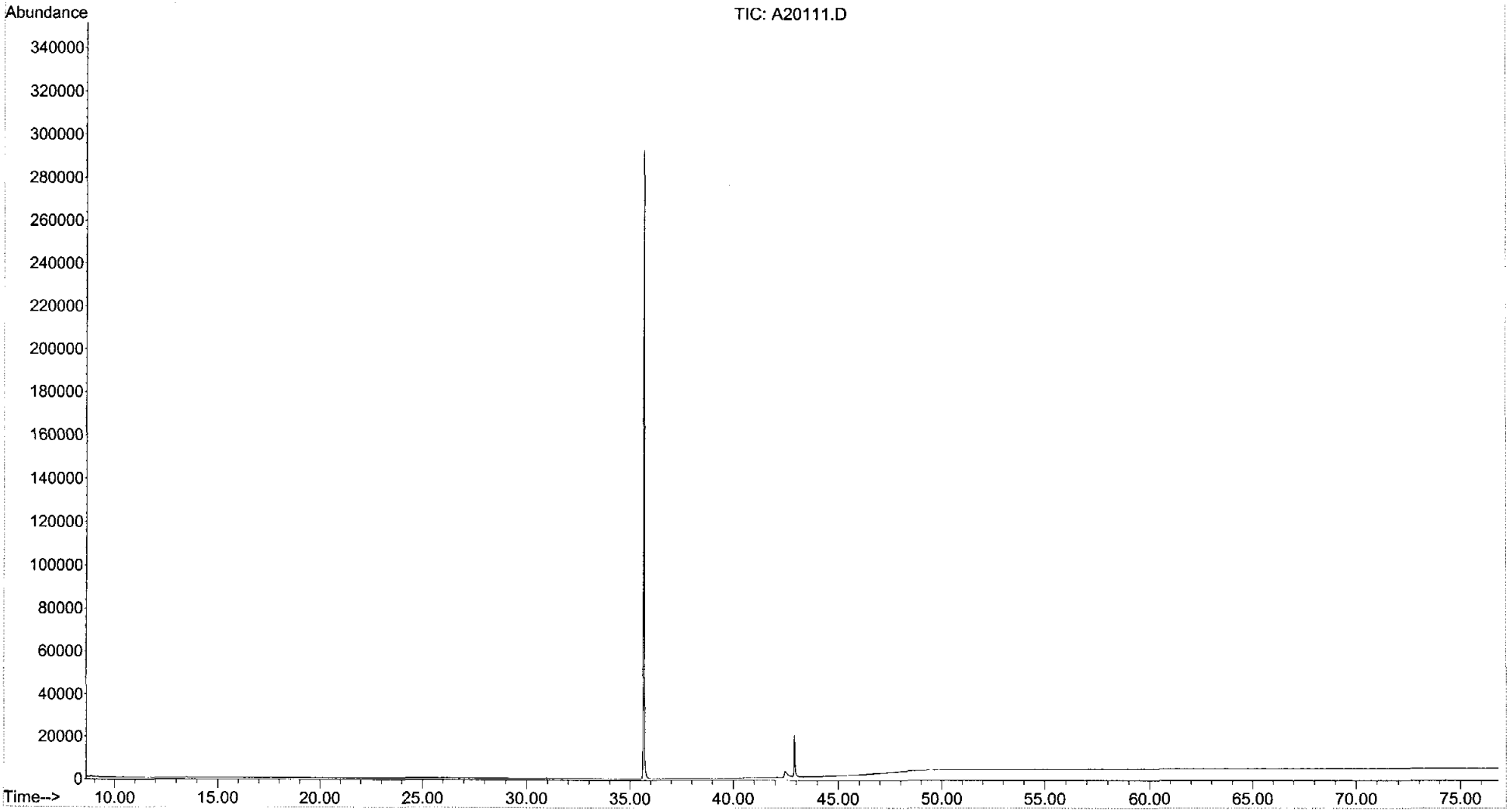
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20111.D
Acq On : 19 Sep 2006 3:54 am
Operator : AC
Sample : ss091806b03
Misc : 1x etr0609032
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 27 15:52:37 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



Form III
Spike Recovery Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **See Below**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	09/08/06	100	AC

Lab ID:	SS090806B10		SS090806LCS05		SS090806LCSD05				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	13		9800	98	9900	99	1	30	50-130
Acenaphthylene	14	U	9300	93	9400	94	1	30	50-130
Acenaphthene	6.6	U	8800	88	8900	89	1	30	50-130
Fluorene	8.1	U	8600	86	8600	86	0	30	50-130
Anthracene	8.1	U	9300	93	9400	94	1	30	50-130
Phenanthrene	9.1		8600	86	8600	86	0	30	50-130
Fluoranthene	3.6		8500	85	8500	85	0	30	50-130
Pyrene	7.6	U	9100	91	9100	91	0	30	50-130
Benz[a]anthracene	7.0	U	9000	90	9100	91	1	30	50-130
Chrysene/Triphenylene	7.4	U	8800	88	8900	89	1	30	50-130
Benzo[b]fluoranthene	6.9	U	9000	90	9100	91	1	30	50-130
Benzo[k]fluoranthene	7.0	U	9100	91	9200	92	1	30	50-130
Benzo[a]pyrene	4.6	U	9100	91	9100	91	0	30	50-130
Indeno[1,2,3-cd]pyrene	6.1	U	10000	100	9200	93	7	30	50-130
Dibenz[a,h]anthracene	3.9	U	9900	99	9900	99	0	30	50-130
Benzo[g,h,i]perylene	8.5	U	9100	91	9100	91	0	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	94	95	50-130
Pyrene-d10	95	96	50-130
Benzo[b]fluoranthene-d12	94	95	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

09/23/06 13:06

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806LCS05**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/12/06	100	0.10	1	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**9800**	S	Fluoranthene	**8500**	S
C1-Naphthalenes	17	U	Pyrene	**9100**	S
C2-Naphthalenes	17	U	C1-Fluoranthenes/Pyrenes	7.6	U
C3-Naphthalenes	17	U	C2-Fluoranthenes/Pyrenes	7.6	U
C4-Naphthalenes	17	U	C3-Fluoranthenes/Pyrenes	7.6	U
Biphenyl	6.3	U	C4-Fluoranthenes/Pyrenes	7.6	U
Dibenzofuran	6.3	U	Naphthobenzothiophenes	4.3	U
Acenaphthylene	**9300**	S	C1-Naphthobenzothiophenes	4.3	U
Acenaphthene	**8800**	S	C2-Naphthobenzothiophenes	4.3	U
Fluorene	**8600**	S	C3-Naphthobenzothiophenes	4.3	U
C1-Fluorenes	8.1	U	C4-Naphthobenzothiophenes	4.3	U
C2-Fluorenes	8.1	U	Benz[a]anthracene	**9000**	S
C3-Fluorenes	8.1	U	Chrysene/Triphenylene	**8800**	S
Anthracene	**9300**	S	C1-Chrysenes	7.4	U
Phenanthrene	**8600**	S	C2-Chrysenes	7.4	U
C1-Phenanthrenes/Anthracenes	18	U	C3-Chrysenes	7.4	U
C2-Phenanthrenes/Anthracenes	18	U	C4-Chrysenes	7.4	U
C3-Phenanthrenes/Anthracenes	18	U	Benzo[b]fluoranthene	**9000**	S
C4-Phenanthrenes/Anthracenes	18	U	Benzo[k]fluoranthene	**9100**	S
Retene	8.1	U	Benzo[a]fluoranthene	7.0	U
Dibenzothiophene	3.1	U	Benzo[e]pyrene	8.8	U
C1-Dibenzothiophenes	3.1	U	Benzo[a]pyrene	**9100**	S
C2-Dibenzothiophenes	3.1	U	Perylene	10	U
C3-Dibenzothiophenes	3.1	U	Indeno[1,2,3-cd]pyrene	**10000**	S
C4-Dibenzothiophenes	3.1	U	Dibenz[a,h]anthracene	**9900**	S
Benzo(b)fluorene	5.4	U	Benzo[g,h,i]perylene	**9100**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	94	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

01/17/07 12:00

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806LCS05**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/12/06	100	0.10	1	1	AC

Parameter	Result
Carbazole	3.3 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	94	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/23/06 12:58

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46338.D
Acq On : 12 Sep 2006 11:54 pm
Operator : AC
Sample : SS090806LCS05
Misc : 1X ETR0609032
ALS Vial : 7 Sample Multiplier: 1

MAL 9/21/6

Quant Time: Sep 21 08:36:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.76	164	47039m	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	72627m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.45	152	99616m	939.49	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 93.95%			
58) Pyrene-d10	38.29	212	185063m	953.31	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 95.33%			
81) Benzo[b]fluoranthene-d12	47.09	264	142530m	938.09	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 93.81%			
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

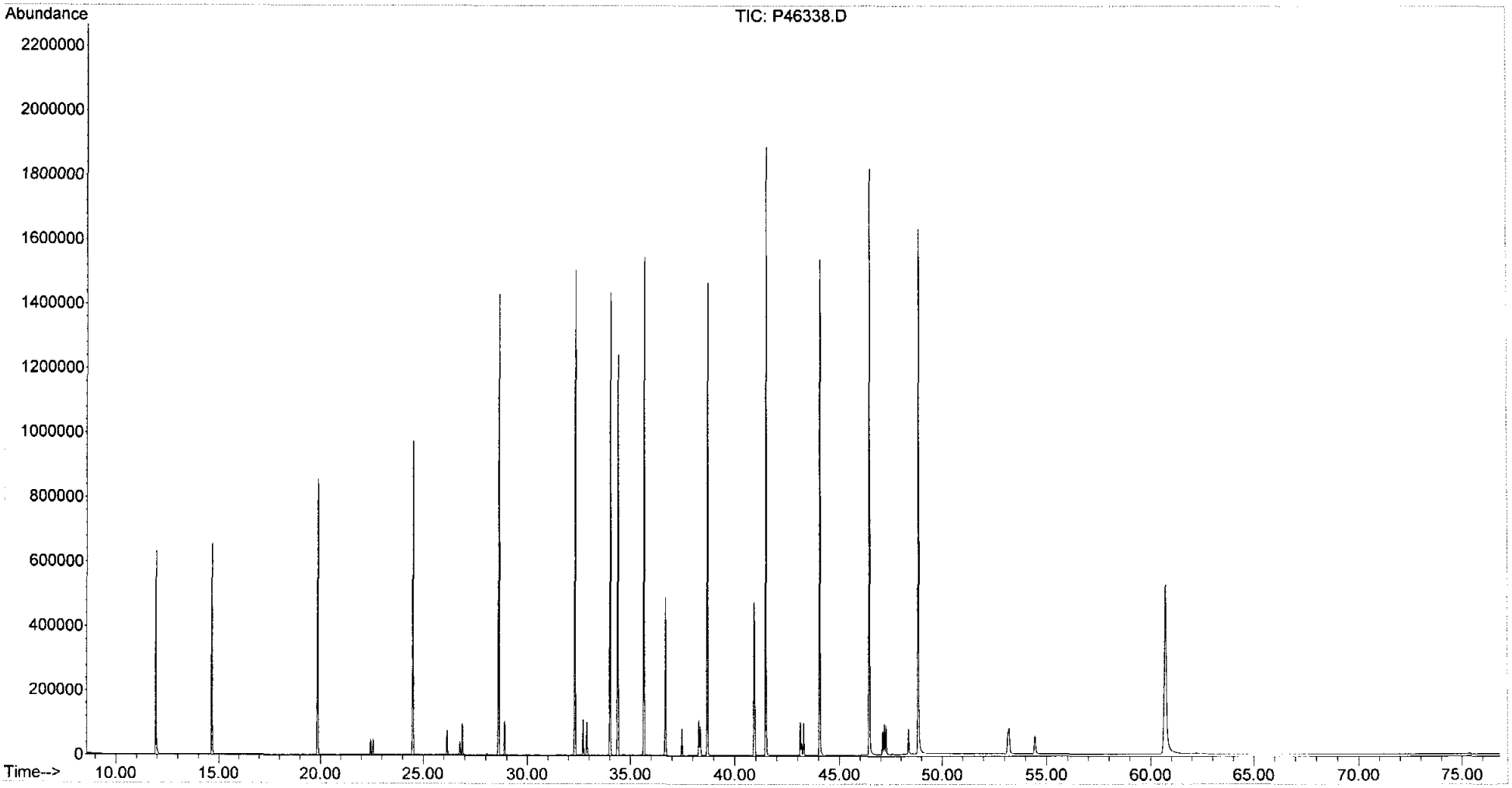
Target Compounds						Qvalue
9) Naphthalene	19.88	128	202252m	981.81	ng/mL	
15) 2-Methylnaphthalene	22.57	142	112951m	816.66	ng/mL	
25) Acenaphthylene	26.16	152	178291m	926.08	ng/mL	
26) Acenaphthene	26.89	153	110532m	884.11	ng/mL	
28) Fluorene	28.91	166	126710m	855.40	ng/mL	
41) Phenanthrene	32.71	178	177840	856.86	ng/mL	100
53) Anthracene	32.89	178	171954	930.78	ng/mL	100
56) Fluoranthene	37.48	202	179331m	848.07	ng/mL	
59) Pyrene	38.36	202	193718m	911.03	ng/mL	
73) Benz[a]anthracene	43.13	228	170975	895.10	ng/mL	99
74) Chrysene	43.30	228	166765m	885.16	ng/mL	
75) Chrysene/Triphenylene	43.30	228	166728m	884.97	ng/mL	
82) Benzo[b]fluoranthene	47.18	252	182594m	902.99	ng/mL	
83) Benzo[k]fluoranthene	47.25	252	186795m	905.82	ng/mL	
86) Benzo[a]pyrene	48.37	252	169625m	908.98	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.16	276	177503m	996.13	ng/mL	
89) Dibenz[a,h]anthracene	53.22	278	171379m	987.86	ng/mL	
90) Benzo[g,h,i]perylene	54.45	276	173765m	912.90	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46338.D
Acq On : 12 Sep 2006 11:54 pm
Operator : AC
Sample : SS090806LCS05
Misc : 1X ETR0609032
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 21 08:36:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806LCSD05**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/13/06	100	0.10	1	1	AC

Parameter	Result	
Naphthalene	**9900**	S
C1-Naphthalenes	17	U
C2-Naphthalenes	17	U
C3-Naphthalenes	17	U
C4-Naphthalenes	17	U
Biphenyl	6.3	U
Dibenzofuran	6.3	U
Acenaphthylene	**9400**	S
Acenaphthene	**8900**	S
Fluorene	**8600**	S
C1-Fluorenes	8.1	U
C2-Fluorenes	8.1	U
C3-Fluorenes	8.1	U
Anthracene	**9400**	S
Phenanthrene	**8600**	S
C1-Phenanthrenes/Anthracenes	18	U
C2-Phenanthrenes/Anthracenes	18	U
C3-Phenanthrenes/Anthracenes	18	U
C4-Phenanthrenes/Anthracenes	18	U
Retene	8.1	U
Dibenzothiophene	3.1	U
C1-Dibenzothiophenes	3.1	U
C2-Dibenzothiophenes	3.1	U
C3-Dibenzothiophenes	3.1	U
C4-Dibenzothiophenes	3.1	U
Benzo(b)fluorene	5.4	U

Parameter	Result	
Fluoranthene	**8500**	S
Pyrene	**9100**	S
C1-Fluoranthenes/Pyrenes	7.6	U
C2-Fluoranthenes/Pyrenes	7.6	U
C3-Fluoranthenes/Pyrenes	7.6	U
C4-Fluoranthenes/Pyrenes	7.6	U
Naphthobenzothiophenes	4.3	U
C1-Naphthobenzothiophenes	4.3	U
C2-Naphthobenzothiophenes	4.3	U
C3-Naphthobenzothiophenes	4.3	U
C4-Naphthobenzothiophenes	4.3	U
Benz[a]anthracene	**9100**	S
Chrysene/Triphenylene	**8900**	S
C1-Chrysenes	7.4	U
C2-Chrysenes	7.4	U
C3-Chrysenes	7.4	U
C4-Chrysenes	7.4	U
Benzo[b]fluoranthene	**9100**	S
Benzo[k]fluoranthene	**9200**	S
Benzo[a]fluoranthene	7.0	U
Benzo[e]pyrene	8.8	U
Benzo[a]pyrene	**9100**	S
Perylene	10	U
Indeno[1,2,3-cd]pyrene	**9200**	S
Dibenz[a,h]anthracene	**9900**	S
Benzo[g,h,i]perylene	**9100**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	96	50-130
Benzo[b]fluoranthene-d12	95	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

01/17/07 12:01

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806LCSD05**
Associated Blank: **SS090806B10**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/13/06	100	0.10	1	1	AC

Parameter	Result
Carbazole	3.3 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	96	50-130
Benzo[b]fluoranthene-d12	95	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/23/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46340.D
Acq On : 13 Sep 2006 1:23 am
Operator : AC
Sample : SS090806LCSD05
Misc : 1X ETR0609032
ALS Vial : 8 Sample Multiplier: 1

MAL 9/21/06

Quant Time: Sep 21 08:39:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.76	164	48641	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	74128m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.45	152	104256m	950.87	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 95.09%			
58) Pyrene-d10	38.29	212	193325m	963.07	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 96.31%			
81) Benzo[b]fluoranthene-d12	47.09	264	147591m	951.73	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 95.17%			
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

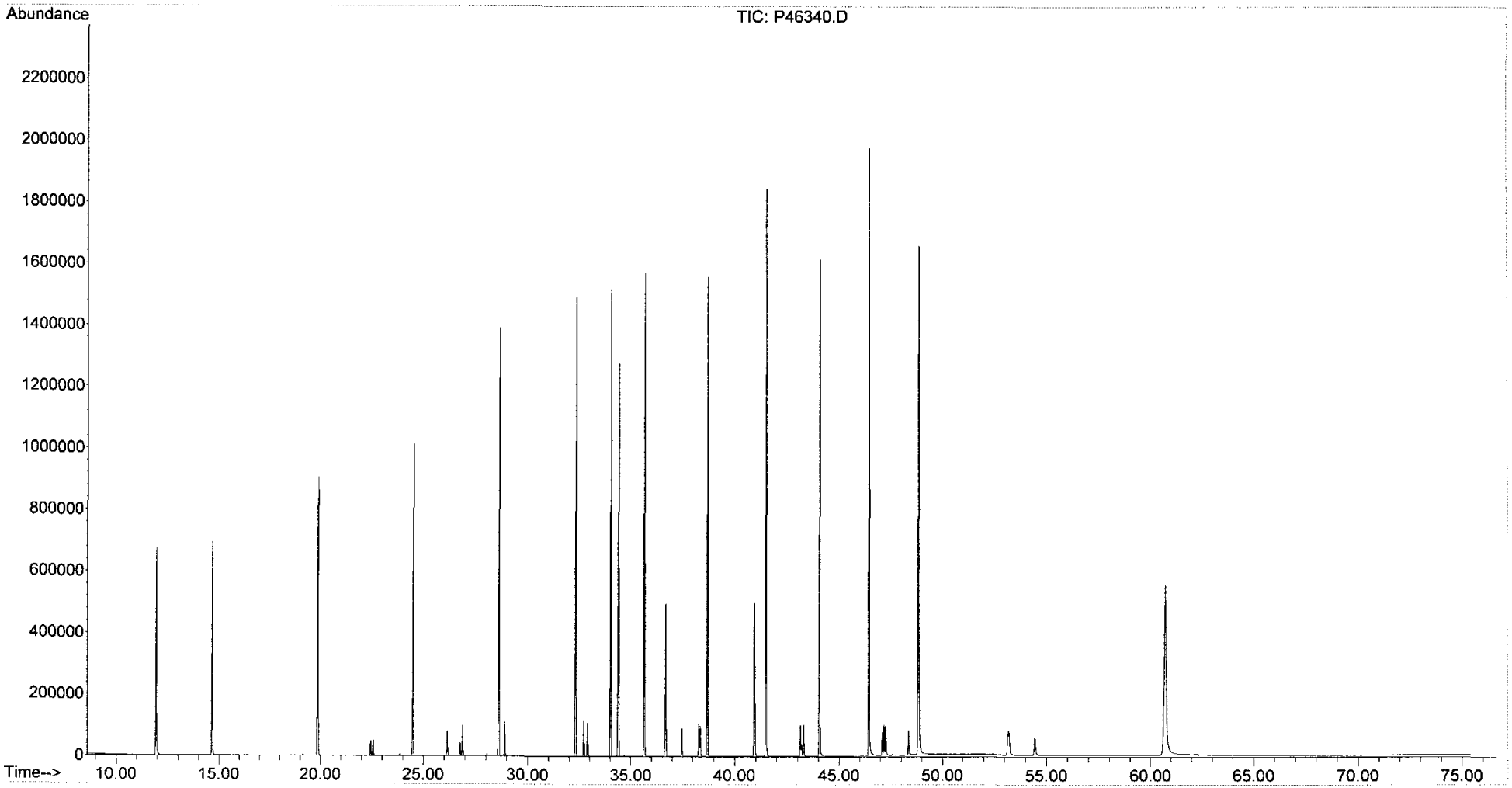
Target Compounds						Qvalue
9) Naphthalene	19.88	128	211762m	994.12	ng/mL	
15) 2-Methylnaphthalene	22.57	142	117855m	824.05	ng/mL	
25) Acenaphthylene	26.15	152	186292m	935.77	ng/mL	
26) Acenaphthene	26.88	153	115553m	893.83	ng/mL	
28) Fluorene	28.90	166	131187m	856.45	ng/mL	
41) Phenanthrene	32.71	178	184439m	859.38	ng/mL	
53) Anthracene	32.89	178	179417m	939.19	ng/mL	
56) Fluoranthene	37.48	202	186055m	850.89	ng/mL	
59) Pyrene	38.36	202	200590m	912.28	ng/mL	
73) Benz[a]anthracene	43.13	228	176903	907.38	ng/mL	99
74) Chrysene	43.29	228	171926m	894.08	ng/mL	
75) Chrysene/Triphenylene	43.29	228	171745m	893.14	ng/mL	
82) Benzo[b]fluoranthene	47.18	252	187318m	907.59	ng/mL	
83) Benzo[k]fluoranthene	47.26	252	192938m	916.67	ng/mL	
86) Benzo[a]pyrene	48.37	252	173669m	911.81	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.16	276	168298m	925.34	ng/mL	
89) Dibenz[a,h]anthracene	53.22	278	175286m	989.92	ng/mL	
90) Benzo[g,h,i]perylene	54.45	276	177233m	912.27	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46340.D
Acq On : 13 Sep 2006 1:23 am
Operator : AC
Sample : SS090806LCSD05
Misc : 1X ETR0609032
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 21 08:39:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Form III
Spike Recovery Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SO053106AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	N/A	100	AC

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Naphthalene	669.92	690	103	65-135
C1-Naphthalenes	1432.05	1500	103	65-135
C2-Naphthalenes	1770.37	1800	102	65-135
C3-Naphthalenes	1321.83	1300	100	65-135
C4-Naphthalenes	731.64	730	99	65-135
Biphenyl	190.36	200	105	65-135
Acenaphthene	14.71	20	139[a]	65-135
Fluorene	77.57	80	103	65-135
C1-Fluorenes	203.54	200	96	65-135
C2-Fluorenes	314.43	280	90	65-135
C3-Fluorenes	290.03	270	92	65-135
Phenanthrene	259.89	260	99	65-135
C1-Phenanthrenes/Anthracenes	545.98	530	98	65-135
C2-Phenanthrenes/Anthracenes	587.69	600	102	65-135
C3-Phenanthrenes/Anthracenes	428.71	410	96	65-135
C4-Phenanthrenes/Anthracenes	159.5	150	96	65-135
Dibenzothiophene	210.91	210	101	65-135
C1-Dibenzothiophenes	396.93	400	100	65-135
C2-Dibenzothiophenes	538.82	520	97	65-135
C3-Dibenzothiophenes	464.97	450	97	65-135
C4-Dibenzothiophenes	243.14	240	101	65-135
Fluoranthene	4.14	3.9	94	65-135
Pyrene	12.07	13	105	65-135
C1-Fluoranthenes/Pyrenes	72.24	70	97	65-135
C2-Fluoranthenes/Pyrenes	120.66	120	99	65-135
C3-Fluoranthenes/Pyrenes	130.08	130	100	65-135
Chrysene/Triphenylene	49.55	44	89	65-135
C1-Chrysenes	82.86	80	96	65-135
C2-Chrysenes	102.78	95	93	65-135
C3-Chrysenes	107.68	100	94	65-135
C4-Chrysenes	62.56	59	94	65-135
Benzo[b]fluoranthene	5.79	5.8	100	65-135
Benzo[e]pyrene	12.05	11	91	65-135

09/27/06 11:37

Form III
Spike Recovery Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SO053106AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	N/A	100	AC

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Dibenz[a,h]anthracene	0.94	0.83	88	65-135
Benzo[g,h,i]perylene	3.47	3.3	96	65-135
Hopane	155.8	160	100	65-135

N/A - Not Applicable
[a] - Value outside of QC Limits.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

09/27/06 11:37

Form I
Alaska North Slope Crude
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SO053106AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	05/30/06	100	0.05096	10	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**690**		Fluoranthene	**3.9**	
C1-Naphthalenes	**1500**		Pyrene	**13**	
C2-Naphthalenes	**1800**		C1-Fluoranthenes/Pyrenes	**70**	
C3-Naphthalenes	**1300**		C2-Fluoranthenes/Pyrenes	**120**	
C4-Naphthalenes	**730**		C3-Fluoranthenes/Pyrenes	**130**	
Biphenyl	**200**		C4-Fluoranthenes/Pyrenes	**110**	
Dibenzofuran	**66**		Naphthobenzothiophenes	**54**	
Acenaphthylene	**6.4**		C1-Naphthobenzothiophenes	**150**	
Acenaphthene	**20**		C2-Naphthobenzothiophenes	**180**	
Fluorene	**80**		C3-Naphthobenzothiophenes	**140**	
C1-Fluorenes	**200**		C4-Naphthobenzothiophenes	**92**	
C2-Fluorenes	**280**		Benz[a]anthracene	**1.6**	J
C3-Fluorenes	**270**		Chrysene/Triphenylene	**44**	
Anthracene	0.16	U	C1-Chrysenes	**80**	
Phenanthrene	**260**		C2-Chrysenes	**95**	
C1-Phenanthrenes/Anthracenes	**530**		C3-Chrysenes	**100**	
C2-Phenanthrenes/Anthracenes	**600**		C4-Chrysenes	**59**	
C3-Phenanthrenes/Anthracenes	**410**		Benzo[b]fluoranthene	**5.8**	
C4-Phenanthrenes/Anthracenes	**150**		Benzo[k]fluoranthene	0.14	U
Retene	0.16	U	Benzo[a]fluoranthene	**0.99**	J
Dibenzothiophene	**210**		Benzo[e]pyrene	**11**	
C1-Dibenzothiophenes	**400**		Benzo[a]pyrene	**1.5**	J
C2-Dibenzothiophenes	**520**		Perylene	**1.2**	J
C3-Dibenzothiophenes	**450**		Indeno[1,2,3-cd]pyrene	**0.59**	J
C4-Dibenzothiophenes	**240**		Dibenz[a,h]anthracene	**0.83**	J
Benzo(b)fluorene	0.11	U	Benzo[g,h,i]perylene	**3.3**	

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/17/07 12:04

Form I
Alaska North Slope Crude
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SO053106AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	05/30/06	100	0.051	10	1	AC

Parameter	Result
Carbazole	**6.0**

N/A - Not Applicable

09/27/06 11:38

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY30\
Data File : P45492.D
Acq On : 30 May 2006 6:50 pm
Operator : AC
Sample : SO053106AWS01
Misc : ANS4053001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 08:26:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 11:31:00 2006
Response via : Initial Calibration

6/1/06.

AWS 5/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.08	164	101030m	500.00	ng/mL	-0.02
72) Chrysene-d12	43.53	240	162531	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	214385	941.38	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 94.14%			
58) Pyrene-d10	38.62	212	420407m	1008.31	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.83%			
81) Benzo[b]fluoranthene-d12	47.44	264	354241	1041.83	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 104.18%			
125) 5B(H)Cholane - Surr	44.18	217	77326m	949.90	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 94.99%			

Target Compounds						Qvalue
3) trans-Decalin	16.77	138	213949	2178.80	ng/mL	100
4) cis-Decalin	17.98	138	6851m	89.76	ng/mL	
5) C1-Decalins	18.70	152	371567m	3783.94	ng/mL	
6) C2-Decalins	20.03	166	341642m	3479.20	ng/mL	
7) C3-Decalins	22.50	180	188577m	1920.42	ng/mL	
8) C4-Decalins	25.89	194	190277m	1937.73	ng/mL	
9) Naphthalene	20.18	128	1550774	3505.01	ng/mL#	100
10) C1-Naphthalenes	22.88	142	3339620m	7548.11	ng/mL	
11) C2-Naphthalenes	25.73	156	4090853m	9246.03	ng/mL	
12) C3-Naphthalenes	28.06	170	2976853m	6728.20	ng/mL	
13) C4-Naphthalenes	30.83	184	1641076m	3709.11	ng/mL	
15) 2-Methylnaphthalene	22.88	142	1952772	6573.70	ng/mL#	100
16) 1-Methylnaphthalene	23.30	142	1380044	4939.79	ng/mL#	100
17) Benzothiophene	20.39	134	11235m	31.77	ng/mL	
18) C1-Benzo(b)thiophenes	22.44	148	67136m	189.83	ng/mL	
19) C2-Benzo(b)thiophenes	25.92	162	104039m	294.17	ng/mL	
20) C3-Benzo(b)thiophenes	27.89	176	213784m	604.48	ng/mL	
21) C4-Benzo(b)thiophenes	29.64	190	196924m	556.81	ng/mL	
22) Biphenyl	24.76	154	382895	1021.62	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.39	156	1019553	3946.76	ng/mL#	100
24) Dibenzofuran	27.85	168	128130	334.74	ng/mL#	85
25) Acenaphthylene	26.47	152	13568m	32.81	ng/mL	
26) Acenaphthene	27.22	153	27891m	103.87	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.76	170	239692m	1053.90	ng/mL	
28) Fluorene	29.22	166	129164	405.98	ng/mL	98
29) C1-Fluorenes	31.59	180	316203m	993.87	ng/mL	
30) C2-Fluorenes	33.79	194	459693m	1444.89	ng/mL	
31) C3-Fluorenes	35.62	208	431190m	1355.30	ng/mL	
32) Dibenzothiophene	32.55	184	425828	1088.77	ng/mL#	77
33) 4-Methyldibenzothiophene(4	34.32	198	402452	1029.00	ng/mL#	100
34) 2/3-Methyldibenzothiophene	34.67	198	268141	685.59	ng/mL#	100
35) 1-Methyldibenzothiophene(1	35.09	198	119426	305.35	ng/mL#	100
36) OTP	34.75	198	51835m	132.53	ng/mL	
37) C1-Dibenzothiophenes	34.32	198	846882m	2165.34	ng/mL	
38) C2-Dibenzothiophenes	36.01	212	1044282m	2670.06	ng/mL	
39) C3-Dibenzothiophenes	37.81	226	899618m	2300.18	ng/mL	
40) C4-Dibenzothiophenes	38.70	240	488080m	1247.94	ng/mL	
41) Phenanthrene	33.04	178	582383	1306.46	ng/mL	95

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY30\
Data File : P45492.D
Acq On : 30 May 2006 6:50 pm
Operator : AC
Sample : SO053106AWS01
Misc : ANS4053001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 08:26:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 11:31:00 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 3-Methylphenanthrene(3MP)	35.00	192	245198	550.05	ng/mL	100
43) 2/4-Methylphenanthrene(2MP	35.12	192	280994	630.35	ng/mL	100
44) 2-Methylanthracene(2MA)	35.27	192	7428	16.66	ng/mL	84
45) 9-Methylphenanthrene(9MP)	35.46	192	391932	879.22	ng/mL	98
46) 1-Methylphenanthrene(1MP)	35.55	192	281900m	632.39	ng/mL	
47) C1-Phenanthrenes/Anthracen	35.46	192	1211268m	2717.24	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.28	206	1365564m	3063.37	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.11	220	936582m	2101.03	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.29	234	347233m	778.95	ng/mL	
54) Carbazole	33.88	167	11694m	30.76	ng/mL	
55) 1-Methylphenanthrene	35.55	192	282733m	911.06	ng/mL	
56) Fluoranthene	37.82	202	8980m	19.77	ng/mL	
59) Pyrene	38.70	202	29563m	64.73	ng/mL	
60) C1-Fluoranthenes/Pyrenes	40.08	216	162656m	356.16	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.89	230	278583m	610.00	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.91	244	302542m	662.46	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.26	258	256550m	561.75	ng/mL	
64) Naphthobenzothiophene	42.54	234	82136m	209.81	ng/ml	
65) Naphthobenzothiophene-2,1-	42.54	234	82263m	210.14	ng/mL	
66) Naphthobenzothiophene-1,2-	42.89	234	18642m	47.62	ng/mL	
67) Naphthobenzothiophene-2,3-	43.18	234	7587m	19.38	ng/mL	
68) C1-Naphthobenzothiophenes	43.94	248	292813m	747.98	ng/ml	
69) C2-Naphthobenzothiophenes	45.94	262	368927m	942.42	ng/ml	
70) C3-Naphthobenzothiophenes	47.56	276	270904m	692.02	ng/ml	
71) C4-Naphthobenzothiophenes	48.66	290	183692m	469.24	ng/mL	
73) Benz[a]anthracene	43.47	228	3546m	8.30	ng/mL	
74) Chrysene	43.61	228	94387m	223.87	ng/mL	
75) Chrysene/Triphenylene	43.61	228	95062m	225.47	ng/mL	
76) C1-Chrysenes	45.10	242	170855m	405.24	ng/mL	
77) C2-Chrysenes	47.19	256	218492m	518.22	ng/mL	
78) BBF-d12 Surr BKGD	47.44	256	13493	32.00	ng/mL	100
79) C3-Chrysenes	49.97	270	217399m	515.63	ng/mL	
80) C4-Chrysenes	49.54	284	126959m	301.12	ng/mL	
82) Benzo[b]fluoranthene	47.53	252	13362	29.53	ng/mL	93
84) Benzo[a]fluoranthene	47.90	252	2323m	5.03	ng/mL	
85) Benzo[e]pyrene	48.56	252	24337m	56.18	ng/mL	
86) Benzo[a]pyrene	48.75	252	3143m	7.53	ng/mL	
87) Perylene	49.11	252	2622m	6.31	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.69	276	1194	2.99	ng/mL#	46
89) Dibenz[a,h]anthracene	53.76	278	1637m	4.22	ng/mL	
90) Benzo[g,h,i]perylene	55.04	276	7230	16.97	ng/mL#	52
91) 17a(H),21B(H)-hopane - C30	52.85	191	130609m	799.59	ng/mL	
92) Hopane (T19)	52.85	191	129477m	792.66	ng/mL	
93) C23 Tricyclic Terpane (T4)	41.20	191	56892	348.29	ng/ml	100
94) C24 Tricyclic Terpane (T5)	41.93	191	35558	217.69	ng/ml	100
95) C25 Tricyclic Terpane (T6)	43.41	191	33833m	207.13	ng/ml	
96) C24 Tetracyclic Terpane (T	44.74	191	11576	70.87	ng/ml	100
97) C26 Tricyclic Terpane-22S	44.47	191	13322m	81.56	ng/ml	
98) C26 Tricyclic Terpane-22R	44.57	191	11612	71.09	ng/ml	100
99) C28 Tricyclic Terpane-22S	46.85	191	11111m	68.02	ng/ml	
100) C28 Tricyclic Terpane-22R	47.01	191	13803m	84.50	ng/ml	
101) C29 Tricyclic Terpane-22S	47.55	191	18426	112.80	ng/ml	100

Quantitation Report (QT Reviewed)

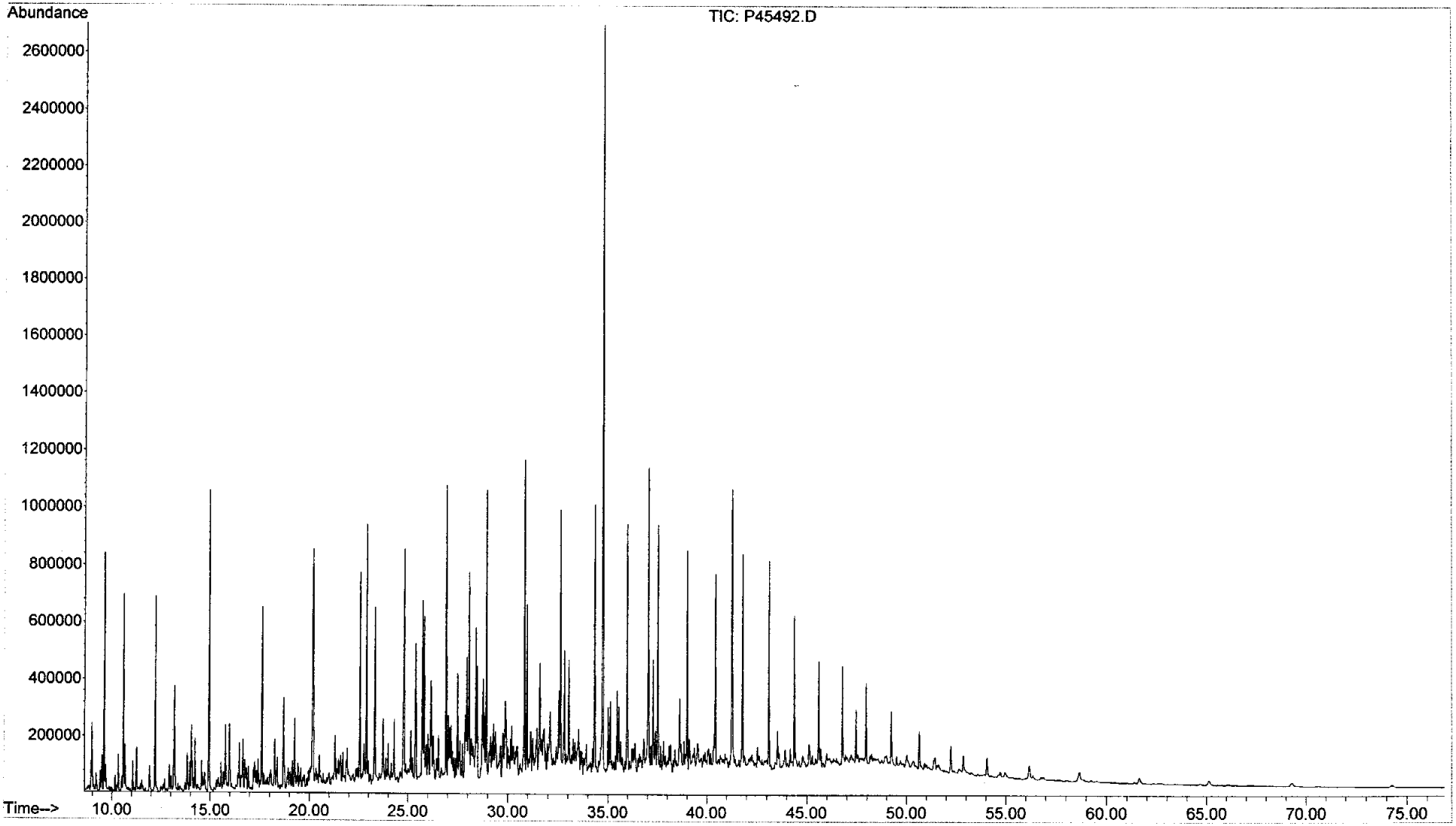
Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY30\
Data File : P45492.D
Acq On : 30 May 2006 6:50 pm
Operator : AC
Sample : SO053106AWS01
Misc : ANS4053001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 08:26:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 11:31:00 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) C29 Tricyclic Terpane-22R	47.75	191	17697m	108.34	ng/ml	
103) 18a-22,29,30-Trisnorneohop	48.92	191	22128m	135.47	ng/ml	
104) C30 Tricyclic Terpane-22S	49.01	191	10140m	62.08	ng/mL	
105) C30 Tricyclic Terpane-22R	49.26	191	10184m	62.35	ng/mL	
106) 17a(H)-22,29,30-Trisnorhop	49.50	191	28305m	173.28	ng/ml	
107) 17a/b,21b/a 28,30-Bisnorho	50.72	191	4800m	29.39	ng/ml	
108) 17a(H),21b(H)-25-Norhopane	50.51	191	6508m	39.84	ng/ml	
109) 30-Norhopane (T15)	51.43	191	72513m	443.93	ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.53	191	16546m	101.29	ng/ml	
111) 17a(H)-Diahopane (X)	51.66	191	9899m	60.60	ng/ml	
112) 30-Normoretane (T17)	52.24	191	9643	59.03	ng/ml	100
114) Moretane (T20)	53.58	191	10134m	62.04	ng/ml	
115) 30-Homohopane-22S (T21)	54.72	191	57046m	349.24	ng/ml	
116) 30-Homohopane-22R (T22)	54.96	191	46948m	287.42	ng/ml	
117) 30,31-Bishomohopane-22S (T	56.36	191	41669m	255.10	ng/ml	
118) 30,31-Bishomohopane-22R (T	56.76	191	28718m	175.81	ng/ml	
119) 30,31-Trishomohopane-22S (	58.60	191	31887	195.21	ng/ml	100
120) 30,31-Trishomohopane-22R (	59.24	191	20364m	124.67	ng/ml	
121) Tetrakishomohopane-22S (T3	61.38	191	22897	140.18	ng/ml	100
122) Tetrakishomohopane-22R (T3	62.33	191	14966m	91.62	ng/ml	
123) Pentakishomohopane-22S (T3	64.68	191	25310m	154.95	ng/ml	
124) Pentakishomohopane-22R (T3	66.03	191	17761m	108.73	ng/ml	
126) 13b(H),17a(H)-20S-Diachole	45.69	217	19922m	244.73	ng/ml	
127) 13b(H),17a(H)-20R-Diachole	46.11	217	10468m	128.59	ng/ml	
128) 13b,17a-20S-Methyldiachole	46.81	217	8416	103.39	ng/ml	100
129) 14a(H),17a(H)-20S-Cholesta	47.69	217	9940m	122.11	ng/ml	
130) 14a(H),17a(H)-20R-Cholesta	48.23	217	31250m	383.89	ng/ml	
131) 13b,17a-20R-Ethyldiacholes	48.52	217	7343m	90.20	ng/ml	
132) 13a,17b-20S-Ethyldiacholes	48.79	217	1993	24.48	ng/ml	100
133) 14a,17a-20S-Methylcholesta	48.96	217	6727m	82.64	ng/ml	
134) 14a,17a-20R-Methylcholesta	49.70	217	15832m	194.49	ng/ml	
135) 14a(H),17a(H)-20S-Ethylcho	50.06	217	16331m	200.62	ng/ml	
136) 14a(H),17a(H)-20R-Ethylcho	51.01	217	15265m	187.52	ng/ml	
137) 14b(H),17b(H)-20R-Cholesta	47.78	218	18132	222.74	ng/ml	100
138) 14b(H),17b(H)-20S-Cholesta	47.87	218	18419m	226.27	ng/ml	
139) 14b,17b-20R-Methylcholesta	49.13	218	20025m	245.99	ng/ml	
140) 14b,17b-20S-Methylcholesta	49.22	218	22028m	270.60	ng/ml	
141) 14b(H),17b(H)-20R-Ethylcho	50.32	218	27896m	342.68	ng/ml	
142) 14b(H),17b(H)-20S-Ethylcho	50.35	218	17908m	219.99	ng/ml	
143) C26,20R- +C27,20S- triarom	50.00	231	118546	1456.26	ng/mL	100
144) C28,20S-triaromatic steroi	50.90	231	67253m	826.16	ng/ml	
145) C27,20R-triaromatic steroi	51.37	231	75457m	926.94	ng/mL	
146) C28,20R-triaromatic steroi	52.62	231	56412	692.98	ng/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

File :O:\Forensics\Data\PAH4\May06\MAY30\P45492.D
Operator : AC
Acquired : 30 May 2006 6:50 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: SO053106AWS01
Misc Info : ANS4053001
Vial Number: 4



Form I
Alaska North Slope Crude
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS092706AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	09/25/06	100	0.052	10	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**62**	30,31-Bishomohopane-22S	**49**
C24 Tricyclic Terpane	**47**	30,31-Bishomohopane-22R	**34**
C25 Tricyclic Terpane	**41**	30,31-Trishomohopane-22S	**41**
C24 Tetracyclic Terpane	**12**	30,31-Trishomohopane-22R	**30**
C26 Tricyclic Terpane-22S	**15**	Tetrakishomohopane-22S	**26**
C26 Tricyclic Terpane-22R	**16**	Tetrakishomohopane-22R	**17**
C28 Tricyclic Terpane-22S	**12**	Pentakishomohopane-22S	**31**
C28 Tricyclic Terpane-22R	**13**	Pentakishomohopane-22R	**21**
C29 Tricyclic Terpane-22S	**21**	13b(H),17a(H)-20S-Diacholestane	**51**
C29 Tricyclic Terpane-22R	**15**	13b(H),17a(H)-20R-Diacholestane	**26**
18a-22,29,30-Trisnorneohopane-TS	**20**	13b,17a-20S-Methyldiacholestane	**27**
C30 Tricyclic Terpane-22S	**15**	14a(H),17a(H)-20S-Cholestane	**15**
C30 Tricyclic Terpane-22R	**10**	14a(H),17a(H)-20R-Cholestane	**83**
17a(H)-22,29,30-Trisnorhopane-TM	**31**	13b,17a-20R-Ethyldiacholestane	**13**
17a/b,21b/a 28,30-Bisnorhopane	**5.1**	13a,17b-20S-Ethyldiacholestane	**2.1**
17a(H),21b(H)-25-Norhopane	**19**	14a,17a-20S-Methylcholestane	**11**
30-Norhopane	**88**	14a,17a-20R-Methylcholestane	**39**
18a(H)-30-Norneohopane-C29Ts	**21**	14a(H),17a(H)-20S-Ethylcholestane	**63**
17a(H)-Diahopane	**8.5**	14a(H),17a(H)-20R-Ethylcholestane	**43**
30-Normoretane	**7.3**	14b(H),17b(H)-20R-Cholestane	**37**
18a(H)&18b(H)-Oleananes	0.82 U	14b(H),17b(H)-20S-Cholestane	**36**
Hopane	**170**	14b,17b-20R-Methylcholestane	**42**
Moretane	**15**	14b,17b-20S-Methylcholestane	**42**
30-Homohopane-22S	**79**	14b(H),17b(H)-20R-Ethylcholestane	**54**
30-Homohopane-22R	**39**	14b(H),17b(H)-20S-Ethylcholestane	**37**

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/28/06 18:35

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20127.D
Acq On : 25 Sep 2006 2:57 pm
Operator : AC
Sample : SS092706AWS02
Misc : ans
ALS Vial : 3 Sample Multiplier: 1

MML 9/28/6

Quant Time: Sep 26 11:52:58 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.27	240	174796	500.00	ng/mL	0.00

System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.87	217	79001m	1050.04	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 105.00%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.00	191	140665	875.73	ng/mL#	80
84) Hopane (T19)	51.00	191	140665	875.73	ng/mL#	80
85) C23 Tricyclic Terpane (T4)	39.87	191	52498m	326.84	ng/ml	
86) C24 Tricyclic Terpane (T5)	40.61	191	39139	243.67	ng/ml	100
87) C25 Tricyclic Terpane (T6)	42.16	191	34370m	213.98	ng/ml	
88) C24 Tetracyclic Terpane (T	43.41	191	9631m	59.96	ng/ml	
89) C26 Tricyclic Terpane-22S	43.20	191	12463	77.59	ng/ml	100
90) C26 Tricyclic Terpane-22R	43.29	191	13383m	83.32	ng/ml	
91) C28 Tricyclic Terpane-22S	45.65	191	10168m	63.30	ng/ml	
92) C28 Tricyclic Terpane-22R	45.80	191	10870m	67.67	ng/ml	
93) C29 Tricyclic Terpane-22S	46.34	191	17319	107.82	ng/ml	100
94) C29 Tricyclic Terpane-22R	46.54	191	12446	77.48	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	47.50	191	16885m	105.12	ng/ml	
96) C30 Tricyclic Terpane-22S	47.70	191	12785m	79.60	ng/mL	
97) C30 Tricyclic Terpane-22R	47.92	191	8787	54.70	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	48.00	191	25925m	161.40	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	49.13	191	4258	26.51	ng/ml	100
100) 17a(H),21b(H)-25-Norhopane	48.79	191	15680	97.62	ng/ml	100
101) 30-Norhopane (T15)	49.75	191	74053	461.03	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	49.84	191	17626m	109.73	ng/ml	
103) 17a(H)-Diahopane (X)	49.97	191	7112	44.28	ng/ml	100
104) 30-Normoretane (T17)	50.47	191	6100	37.98	ng/ml	100
106) Moretane (T20)	51.63	191	12554m	78.16	ng/ml	
107) 30-Homohopane-22S (T21)	52.65	191	66046	411.18	ng/ml	100
108) 30-Homohopane-22R (T22)	52.87	191	32875m	204.67	ng/ml	
109) 30,31-Bishomohopane-22S (T	54.10	191	41175	256.34	ng/ml	100
110) 30,31-Bishomohopane-22R (T	54.45	191	28930	180.11	ng/ml	100
111) 30,31-Trishomohopane-22S (	56.07	191	34415	214.26	ng/ml	100
112) 30,31-Trishomohopane-22R (	56.65	191	25195	156.86	ng/ml	100
113) Tetrakishomohopane-22S (T3	58.51	191	21541	134.11	ng/ml	100
114) Tetrakishomohopane-22R (T3	59.34	191	14538	90.51	ng/ml	100
115) Pentakishomohopane-22S (T3	61.42	191	26127	162.66	ng/ml	100
116) Pentakishomohopane-22R (T3	62.62	191	17428	108.50	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	44.43	217	19952m	265.19	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	44.87	217	10016	133.13	ng/ml	100
120) 13b,17a-20S-Methyldiachole	45.57	217	10555	140.29	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	46.45	217	5841m	77.64	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	46.94	217	32635m	433.77	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	47.21	217	5078m	67.49	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	47.46	217	833m	11.07	ng/ml	
125) 14a,17a-20S-Methylcholesta	47.61	217	4212m	55.98	ng/ml	
126) 14a,17a-20R-Methylcholesta	48.26	217	15185m	201.83	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20127.D
Acq On : 25 Sep 2006 2:57 pm
Operator : AC
Sample : SS092706AWS02
Misc : ans
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 11:52:58 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration

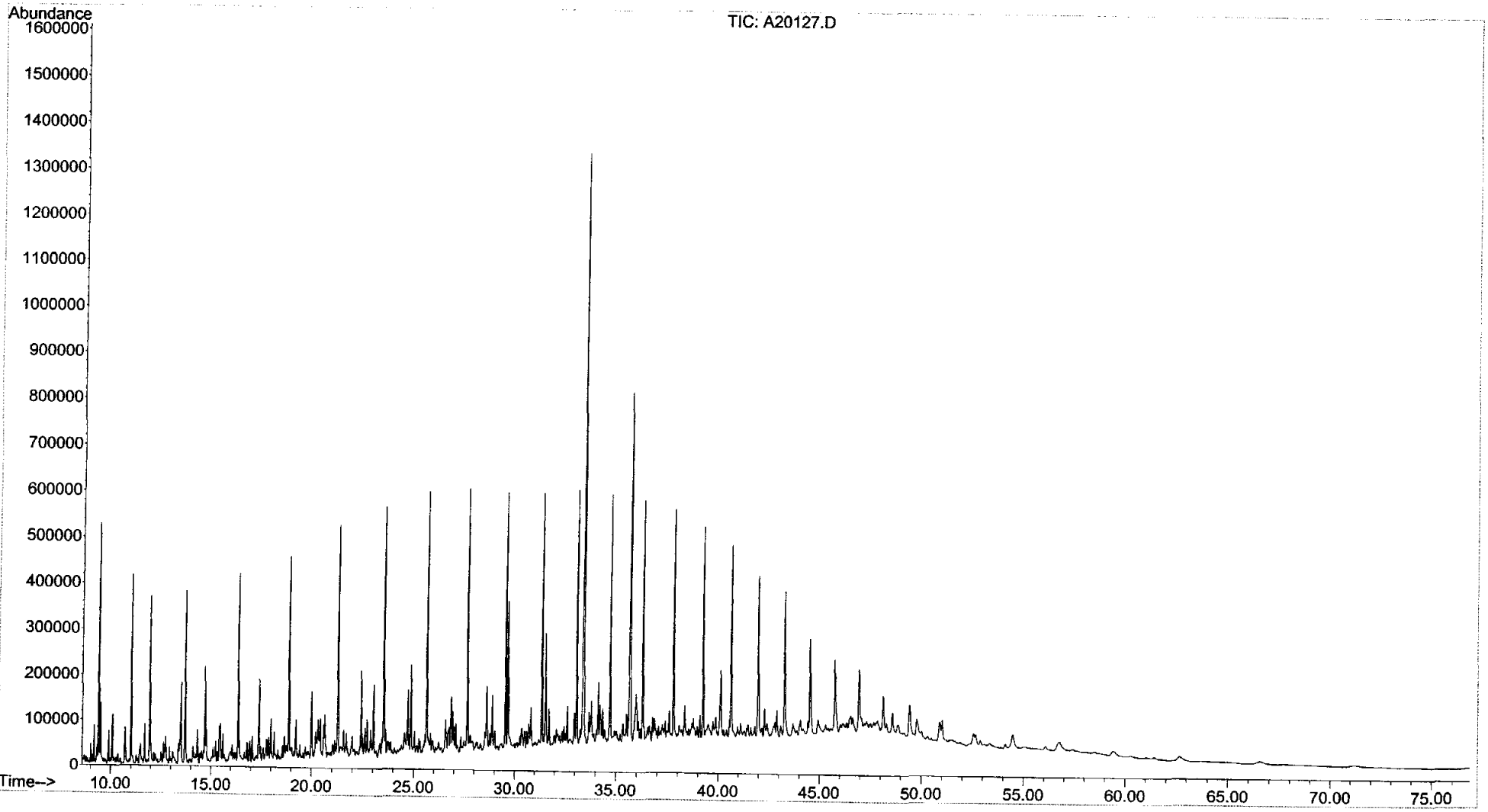
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
127) 14a(H),17a(H)-20S-Ethylcho	48.60	217	24835m	330.09 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	49.44	217	16752m	222.66 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	46.54	218	14418m	191.64 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	46.62	218	14362m	190.89 ng/ml	
131) 14b,17b-20R-Methylcholesta	47.76	218	16433m	218.42 ng/ml	
132) 14b,17b-20S-Methylcholesta	47.84	218	16663m	221.48 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	48.83	218	21133	280.89 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	48.87	218	14694m	195.30 ng/ml	
135) C26,20R- +C27,20S- triarom	48.56	231	140450m	1866.78 ng/mL	
136) C28,20S-triaromatic steroi	49.37	231	78795m	1047.30 ng/mL	
137) C27,20R-triaromatic steroi	49.79	231	82099	1091.21 ng/mL	100
138) C28,20R-triaromatic steroi	50.91	231	68495m	910.40 ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20127.D
Acq On : 25 Sep 2006 2:57 pm
Operator : AC
Sample : SS092706AWS02
Misc : ans
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 11:52:58 2006
Quant Method : K:\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 26 11:46:47 2006
Response via : Initial Calibration



PAH10807.M Thu Sep 28 18:41:17 2006

Sequence Name: C:\MSDCHEM\4\SEQUENCE\S4091201.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\DATA\SEPTEMBER06\sep12\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

MAL 9/18/06

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P46323	FRNC4B	TEST
4)	Sample	1	P46324	FRNC4B	TEST
5)	RearSamp	51	P46325	FRNC4B	TEST
6)	Sample	1	P46326	FRNC4B	TEST
7)	RearSamp	52	P46327	FRNC4B	C4091201-AFID
8)	Sample	2	P46328	FRNC4B	C4091201 PASS
9)	RearSamp	53	P46329	FRNC4B	~~ANS4091201-AFID~~ TS091806AWS01 9/18/06 RAR
10)	Sample	3	P46330	FRNC4B	ANS4091201
11)	RearSamp	54	P46331	FRNC4B	DCM-AFID
12)	Sample	4	P46332	FRNC4B	DCM
13)	RearSamp	55	P46333	FRNC4B	DCM-AFID
14)	Sample	5	P46334	FRNC4B	DCM
15)	RearSamp	56	P46335	FRNC4B	SS090806B10-AFID
16)	Sample	6	P46336	FRNC4B	SS090806B10 ✓
17)	RearSamp	57	P46337	FRNC4B	SS090806LCS05-AFID
18)	Sample	7	P46338	FRNC4B	SS090806LCS05 ✓
19)	RearSamp	58	P46339	FRNC4B	SS090806LCSD05-AFID
20)	Sample	8	P46340	FRNC4B	SS090806LCSD05 ✓
21)	RearSamp	59	P46341	FRNC4B	0609032-01-AFID
22)	Sample	9	P46342	FRNC4B	0609032-01 ✓
23)	RearSamp	60	P46343	FRNC4B	0609032-01D-AFID
24)	Sample	10	P46344	FRNC4B	0609032-01D ✓
25)	RearSamp	61	P46345	FRNC4B	0609032-02-AFID
26)	Sample	11	P46346	FRNC4B	0609032-02 ✓
27)	RearSamp	62	P46347	FRNC4B	0609032-03-AFID
28)	Sample	12	P46348	FRNC4B	0609032-03 ✓
29)	RearSamp	63	P46349	FRNC4B	0609032-04-AFID
30)	Sample	13	P46350	FRNC4B	0609032-04 ✓
31)	RearSamp	64	P46351	FRNC4B	0609032-05-AFID
32)	Sample	14	P46352	FRNC4B	0609032-05 ✓
33)	RearSamp	65	P46353	FRNC4B	0609032-06-AFID
34)	Sample	15	P46354	FRNC4B	0609032-06 ✓
35)	RearSamp	66	P46355	FRNC4B	0609032-07-AFID
36)	Sample	16	P46356	FRNC4B	0609032-07 ✓
37)	RearSamp	67	P46357	FRNC4B	C4091202-AFID
38)	Sample	17	P46358	FRNC4B	C4091202 PASS
39)	RearSamp	68	P46359	FRNC4B	dcm
40)	Sample	18	P46360	FRNC4B	qa ad24
41)	RearSamp	69	P46361	FRNC4B	ss091106b05-AFID
42)	Sample	19	P46362	FRNC4B	0609032-01-re ✓
43)	RearSamp	70	P46363	FRNC4B	ss0911061cs01-AFID

PAH #4 Sequence Information

SHC Continuing Calibration: WHAD16 ✓ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB55 ✓ Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAD20 ✓ Conc.: 5.23 mg/mL PAH40525

FID Process Method: HC40721.M ✓ PAH Process Method: ~~PAH40219.M~~

Last Modified: Thu Sep 14 23:18:44 2006

Sequence Name: C:\MSDCHEM\4\SEQUENCE\S4091201.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P46364	FRNC4B	0609032-01d-re
45)	RearSamp	71	P46365	FRNC4B	ss091106lcsd01-AFID
46)	Sample	21	P46366	FRNC4B	0609032-02-re
47)	RearSamp	72	P46367	FRNC4B	0608100-01-AFID
48)	Sample	22	P46368	FRNC4B	0609032-03-re
49)	RearSamp	73	P46369	FRNC4B	0608100-01ms-AFID
50)	Sample	23	P46370	FRNC4B	0609032-04-re
51)	RearSamp	74	P46371	FRNC4B	0608100-01msd-AFID
52)	Sample	24	P46372	FRNC4B	0609032-05-re
53)	RearSamp	75	P46373	FRNC4B	C4091203-AFID
54)	Sample	25	P46374	FRNC4B	0609032-06-re
55)	RearSamp	76	P46375	FRNC4B	dcm
56)	Sample	26	P46376	FRNC4B	0609032-07-re
57)	RearSamp	76	P46377	FRNC4B	
58)	Sample	27	P46378	FRNC4B	C4091203 PASS
59)	RearSamp	76	P46379	FRNC4B	
60)	Sample	28	P46380	FRNC4B	dcm
61)	RearSamp	76	P46381	FRNC4B	
62)	Sample	29	P46382	FRNC4B	ss091106b05
63)	RearSamp	76	P46383	FRNC4B	
64)	Sample	30	P46384	FRNC4B	ss091106lcs01
65)	RearSamp	76	P46385	FRNC4B	
66)	Sample	31	P46386	FRNC4B	ss091106lcsd01
67)	RearSamp	76	P46387	FRNC4B	
68)	Sample	32	P46388	FRNC4B	0608100-01
69)	RearSamp	76	P46389	FRNC4B	
70)	Sample	33	P46390	FRNC4B	0608100-01ms 9/18/06 RAA
71)	RearSamp	76	P46391	FRNC4B	
72)	Sample	34	P46392	FRNC4B	0608100-01msd 9/18/06 RAA
73)	RearSamp	77	P46393	FRNC4B	
74)	Sample	35	P46394	FRNC4B	C4091204 PASS

runs used

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2091801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER06\sep18\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

9/20/06.

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line			Sample Name/Misc Info		
1)	Sample	1	A20101	FRNC2B	test
2)	Sample	2	A20102	FRBIO2B	test bio
3)	Sample	3	A20103	FRBIO2B	C2091801 ~~PASS~~ FAILED
4)	Sample	4	A20104	FRBIO2B	i2091801
5)	Sample	5	A20105	FRBIO2B	i2091802
6)	Sample	6	A20106	FRBIO2B	i2091803
7)	Sample	7	A20107	FRBIO2B	i2091804
8)	Sample	8	A20108	FRBIO2B	i2091805
9)	Sample	9	A20109	FRBIO2B	i2091806
10)	Sample	10	A20110	FRBIO2B	dcm
11)	Sample	11	A20111	FRBIO2B	ss091806b03
12)	Sample	12	A20112	FRBIO2B	0609032-01
13)	Sample	13	A20113	FRBIO2B	0609032-01d
14)	Sample	14	A20114	FRBIO2B	0609032-02
15)	Sample	15	A20115	FRBIO2B	0609032-03
16)	Sample	16	A20116	FRBIO2B	0609032-04
17)	Sample	17	A20117	FRBIO2B	0609032-05
18)	Sample	18	A20118	FRBIO2B	0609032-06
[illegible]	Sample	19	A20119	FRBIO2B	0609032-07
[illegible]	Sample	20	A20120	FRBIO2B	C2091801 PASS.
21)	Sample	21	A20121	FRBIO2B	ans2091801 - FAILS. Not used MAL 9/27/6

ICAL Also used as C2091801A MAL 9/27/6

PAH #2 Sequence Information

SHC Continuing Calibration: ~~WHAD16~~ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB55 Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAD20 Conc.: 5.23mg/mL

FID Process Method: ~~HC20228.M~~ PAH Process Method: PAH20313.M

B1020918.M Biomarkers.
MG 9/29/06

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2092501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER06\sep25\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

MAL 9/27/6

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line			Sample Name/Misc Info		
1)	Sample	1	A20125	FRBIO2B	TEST
2)	Sample	2	A20126	FRBIO2B	C2092501 ✓ PASS
3)	Sample	3	A20127	FRBIO2B	Ans2092501 ANS SS092706 AWS02 MAL 9/27/6
4)	Sample	4	A20128	FRBIO2B	0609032-05 RE ✓
5)	Sample	5	A20129	FRBIO2B	C2092502 ✓ PASS

B1020918.M
Biomarkers

NS 9/29/06

PAH #2 Sequence Information

SHC Continuing Calibration: WHAD16 Conc.: 50ug/mL
PAH Continuing Calibration: WHAB55Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAD20 Conc.: 5.23mg/mL

FID Process Method: HC20228.M PAH Process Method: PAH20313.M

Supporting Quality Control Results

Form IV
Method Blank Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806B10**
Date Analyzed: **09/12/06 22:25**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS090806LCS05	09/12/06 23:54
LCSD	SS090806LCSD05	09/13/06 01:23
FS-RED HOOK-1	0609032-01	09/13/06 02:53
FS-RED HOOK-1	0609032-01 D	09/13/06 04:22
FS-RED HOOK-2	0609032-02	09/13/06 05:51
FS-RED HOOK-3	0609032-03	09/13/06 07:20
FS-RED HOOK-4	0609032-04	09/13/06 08:49
FS-HALLECK ST ROW-2	0609032-05	09/13/06 10:18
FS-HALLECK ST ROW-3	0609032-06	09/13/06 12:19
FS-COURT ST ROW-1	0609032-07	09/13/06 13:49
FS-RED HOOK-1	0609032-01E	09/13/06 18:18
FS-RED HOOK-1	0609032-01E D	09/13/06 19:47
FS-RED HOOK-2	0609032-02E	09/13/06 21:17
FS-RED HOOK-3	0609032-03E	09/13/06 22:46
FS-RED HOOK-4	0609032-04E	09/14/06 00:15
FS-HALLECK ST ROW-2	0609032-05E	09/14/06 01:44
FS-HALLECK ST ROW-3	0609032-06E	09/14/06 03:12
FS-COURT ST ROW-1	0609032-07E	09/14/06 04:42

N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Form IV
Method Blank Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS091806B03**
Date Analyzed: **09/19/06 03:54**

Client ID	Lab ID	Date/Time Analyzed
FS-RED HOOK-1	0609032-01	09/19/06 05:22
FS-RED HOOK-1	0609032-01 D	09/19/06 09:57
FS-RED HOOK-2	0609032-02	09/19/06 11:29
FS-RED HOOK-3	0609032-03	09/19/06 13:06
FS-RED HOOK-4	0609032-04	09/19/06 14:39
FS-HALLECK ST ROW-2	0609032-05	09/19/06 16:12
FS-HALLECK ST ROW-3	0609032-06	09/19/06 17:44
FS-COURT ST ROW-1	0609032-07	09/19/06 19:16
FS-HALLECK ST ROW-2	0609032-05E	09/25/06 17:05

N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

```
   Sequence Name: C:\MSDChem\4\sequence\S4052501.S
         Comment:
        Operator: AC
       Data Path: C:\MSDCHEM\4\DATA\MAY06\MAY25\
Top                    Pre-Seq Cmd:
Instrument Control     Pre-Seq Cmd:
Data Analysis          Pre-Seq Cmd:

Top                   Post-Seq Cmd:
Instrument Control    Post-Seq Cmd:
Data Analysis         Post-Seq Cmd:

   Method Sections To Run      On A Barcode Mismatch
    (X) Full Method              (X) Inject Anyway
    ( ) Reprocessing Only        ( ) Don't Inject

   ---------------------------------------------------------------------
   Line                    Sample Name/Misc Info
 1)  Sample          1  P45474   FRNC4B   TEST
 2)  Sample          2  P45475   FRNC4B   DCM
 3)  Sample          3  P45476   FRNC4B   I4052501
 4)  Sample          4  P45477   FRNC4B   I4052502
 5)  Sample          5  P45478   FRNC4B   I4052503
 6)  Sample          6  P45479   FRNC4B   I4052504
 7)  Sample          7  P45480   FRNC4B   I4052505
 8)  Sample          8  P45481   FRNC4B   I4052506
 9)  Sample          9  P45482   FRNC4B   ANS4052501
10)  Sample         10  P45483   FRNC4B   Q4052501
11)  Sample         11  P45484   FRNC4B   BaF
12)  Sample         12  P45485   FRNC4B   C4052501
13)  Sample         13  P45486   FRNC4B   DCM
14)  Sample         14  P45487   FRNC4B   DCM
```

*KAL40525.M.

FAILED - LOT USED. SEE P45492

PAH #4 Sequence Information

SHC Continuing Calibration: WHAC44 Conc.: 50ug/mL
PAH Continuing Calibration: WHAC13 Conc.: 500ng/mL
PAH Continuing Calibration: WHAB55 Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAB79 Conc.: 5.096mg/mL

FID Process Method: HC40217.M PAH Process Method: PAH40525.M

MG 6/1/06

PAH Calibration IDs

PAH Calibration Level 1: WHAB60 Conc.: 10ng/mL
PAH Calibration Level 2: WHAB59 Conc.: 25ng/mL
PAH Calibration Level 3: WHAB58 Conc.: 100ng/mL
PAH Calibration Level 4 (CC): WHAC13 Conc.: 500ng/mL
PAH Calibration Level 5: WHAB55 Conc.: 1250ng/mL
PAH Calibration Level 6: WHAB54 Conc.: 5000ng/mL
PAH Calibration Level 7: WHAB53 Conc.: 10000ng/mL
PAH Independent Check Verification: WHAB69 Conc. 500ng/mL

Sequence Name: C:\MSDChem\4\sequence\S4053001.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\DATA\MAY06\MAY30\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

6/01/06

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line			Sample Name/Misc Info		
1)	Sample	1	P45489	FRNC4B	TEST
2)	Sample	2	P45490	FRNC4B	C4053001
3)	Sample	3	P45491	FRNC4B	DCM
4)	Sample	4	P45492	FRNC4B	ANS4053001 - used for ical. PAH40525.M
5)	Sample	5	P45493	FRNC4B	DCM
6)	Sample	6	P45494	FRNC4B	SO052406B05
7)	Sample	7	P45495	FRNC4B	SO052406LCS02
8)	Sample	8	P45496	FRNC4B	SO052406LCSD02
9)	Sample	9	P45497	FRNC4B	0605117-01
10)	Sample	10	P45498	FRNC4B	0605117-02
11)	Sample	11	P45499	FRNC4B	0605117-03
12)	Sample	12	P45500	FRNC4B	0605117-04
13)	Sample	13	P45501	FRNC4B	0605117-05
14)	Sample	14	P45502	FRNC4B	C4053002
15)	Sample	15	P45503	FRNC4B	DCM
16)	Sample	16	P45504	FRNC4B	DCM

SO053106AWS01

MS 6/1/06

PAH #4 Sequence Information

SHC Continuing Calibration: ~~WHAC44~~ Conc.: 50ug/mL
PAH Continuing Calibration: WHAC13 Conc.: 500ng/mL
PAH Continuing Calibration: WHAB55 Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAB79 Conc.: 5.096mg/mL

FID Process Method: ~~HG40217.M~~ PAH Process Method: ~~PAH40219.M~~ 40525.M

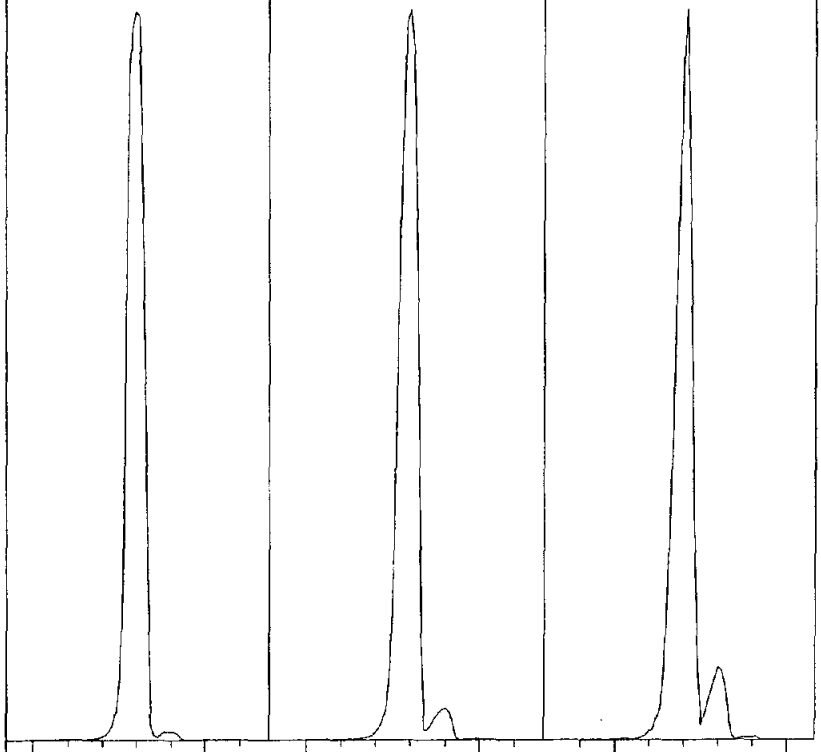
5973

5/25/06

Thu May 25 14:26:06 2006
C:\MSDCHEM\4\5973N\PFTBA.U

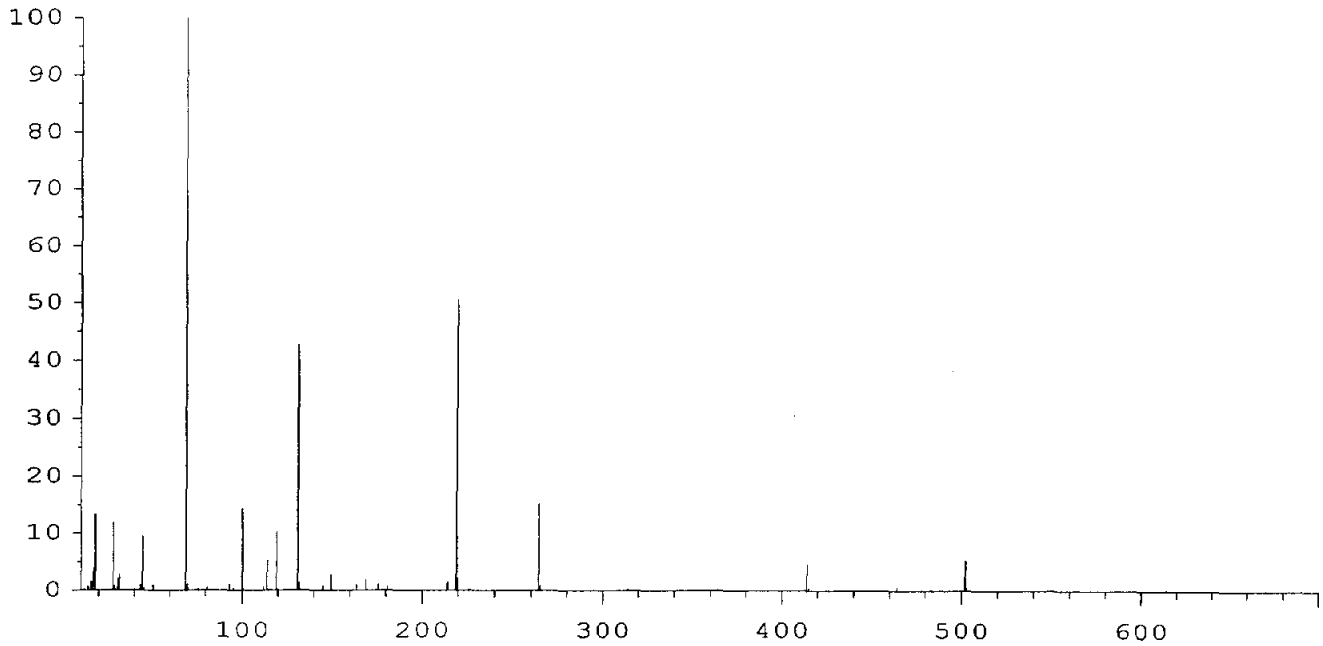
Instrument: PAH-4

Mass	69.00	Mass	219.00	Mass	502.10
Ab	497863	Ab	262620	Ab	28583
Pw50	0.57	Pw50	0.61	Pw50	0.52



Ion Pol	POS	MassGain	211
		MassOffs	-12
Emission	34.6	AmuGain	2371
ElEnrgy	69.9	AmuOffs	136
Filament	2	Wid219	-0.010
		DC Pol	POS
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	2200
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
124 peaks Base: 69.00 Abundance: 489920



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	489920	100.00	70.00	5290	1.08
219.00	246976	50.41	219.90	10445	4.23
502.00	25928	5.29	503.10	2546	9.82

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	15.8	17.3	17.6	15.8	18.3	20.8
TARGET ABUND(%):	1.0	100.0	45.0	55.0	5.0	6.0
ACTUAL TUNE ABUND(%):	1.0	100.0	42.6	50.4	4.7	5.3

Response Factor Report PAH-4

Method Path : O:\FORENSICS\METHODS\PAH4\MAY06\
Method File : PAH40525.M
Title : Decalins & Alkylated PAH's
Last Update : Tue May 30 10:38:48 2006
Response Via : Initial Calibration

Calibration Files
10 =P45476.D 25 =P45477.D 500 =P45478.D
1250=P45479.D 5000=P45480.D 1e4 =P45481.D

		Compound	10	25	500	1250	5000	1e4	Avg	%RSD
1)	i	Acenaphthene-d10	----------ISTD----------							
2)	t	Decalin							0.000#	-1.00
3)	A1	trans-Decalin	0.518	0.496	0.464	0.483	0.487	0.467	0.486	4.11
4)	t	cis-Decalin	0.408	0.387	0.359	0.374	0.377	0.363	0.378	4.70
5)	A2	C1-Decalins	0.518	0.496	0.464	0.483	0.487	0.467	0.486	4.11
6)	A2	C2-Decalins	0.518	0.496	0.464	0.483	0.487	0.467	0.486	4.11
7)	A2	C3-Decalins	0.518	0.496	0.464	0.483	0.487	0.467	0.486	4.11
8)	A2	C4-Decalins	0.518	0.496	0.464	0.483	0.487	0.467	0.486	4.11
9)	A1	Naphthalene	2.381	2.235	2.067	2.163	2.176	2.117	2.190	5.00
10)	A2	C1-Naphthalenes	2.381	2.235	2.067	2.163	2.176	2.117	2.190	5.00
11)	A2	C2-Naphthalenes	2.381	2.235	2.067	2.163	2.176	2.117	2.190	5.00
12)	A2	C3-Naphthalenes	2.381	2.235	2.067	2.163	2.176	2.117	2.190	5.00
13)	A2	C4-Naphthalenes	2.381	2.235	2.067	2.163	2.176	2.117	2.190	5.00
14)	s	2-Methylnaphthale	1.181	1.140	1.072	1.107	1.148	1.115	1.127	3.33
15)	t	2-Methylnaphthale	1.552	1.435	1.407	1.472	1.490	1.464	1.470	3.39
16)	t	1-Methylnaphthale	1.422	1.372	1.331	1.385	1.405	1.381	1.383	2.24
17)	A1	Benzothiophene	1.731	1.723	1.701	1.777	1.805	1.765	1.750	2.22
18)	A2	C1-Benzo(b)thioph	1.731	1.723	1.701	1.777	1.805	1.765	1.750	2.22
19)	A2	C2-Benzo(b)thioph	1.731	1.723	1.701	1.777	1.805	1.765	1.750	2.22
20)	A2	C3-Benzo(b)thioph	1.731	1.723	1.701	1.777	1.805	1.765	1.750	2.22
21)	A2	C4-Benzo(b)thioph	1.731	1.723	1.701	1.777	1.805	1.765	1.750	2.22
22)	t	Biphenyl	2.125	1.970	1.716	1.776	1.786	1.756	1.855	8.57
23)	t	2,6-Dimethylnapht	1.349	1.242	1.206	1.270	1.302	1.301	1.278	3.94
24)	t	Dibenzofuran	1.910	1.836	1.832	1.913	1.944	1.930	1.894	2.56
25)	t	Acenaphthylene	1.984	1.904	1.957	2.076	2.178	2.178	2.046	5.69
26)	t	Acenaphthene	1.347	1.292	1.275	1.333	1.367	1.359	1.329	2.81
27)	t	2,3,5-Trimethylna	1.134	1.088	1.066	1.127	1.168	1.171	1.126	3.76
28)	A1	Fluorene	1.849	1.528	1.447	1.513	1.555	1.555	1.575	8.92
29)	A2	C1-Fluorenes	1.849	1.528	1.447	1.513	1.555	1.555	1.575	8.92
30)	A2	C2-Fluorenes	1.849	1.528	1.447	1.513	1.555	1.555	1.575	8.92
31)	A2	C3-Fluorenes	1.849	1.528	1.447	1.513	1.555	1.555	1.575	8.92
32)	A1	Dibenzothiophene	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
33)	A2	4-Methyldibenzoth	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
34)	A2	2/3-Methyldibenzo	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
35)	A2	1-Methyldibenzoth	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
36)	A2	OTP	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
37)	A2	C1-Dibenzothiophe	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
38)	A2	C2-Dibenzothiophe	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
39)	A2	C3-Dibenzothiophe	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
40)	A2	C4-Dibenzothiophe	1.924	1.859	1.882	1.959	1.995	1.993	1.936	2.96
41)	A1	Phenanthrene	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
42)	A2	3-Methylphenanthr	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
43)	A2	2/4-Methylphenant	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
44)	A2	2-Methylanthracen	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
45)	A2	9-Methylphenanthr	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
46)	A2	1-Methylphenanthr	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
47)	A2	C1-Phenanthrenes/	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
48)	A2	C2-Phenanthrenes/	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
49)	A2	5AA IS BKGD	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
50)	A2	C3-Phenanthrenes/	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
51)	A2	C4-Phenanthrenes/	2.295	2.196	2.093	2.175	2.241	2.236	2.206	3.13
52)	t	Retene	0.760	0.568	0.470	0.493	0.531	0.540	0.561	18.52
53)	t	Anthracene	1.902	1.853	1.883	2.017	2.095	2.032	1.964	4.95
54)	t	Carbazole	1.902	1.762	1.792	1.868	1.968	1.995	1.881	4.95
55)	t	1-Methylphenanthr	1.514	1.455	1.467	1.542	1.615	1.621	1.536	4.63

6/1/06

KMS 5/30/06

Method Path : O:\FORENSICS\METHODS\PAH4\MAY06\
Method File : PAH40525.M
Title : Decalins & Alkylated PAH's
Last Update : Tue May 30 10:38:48 2006
Response Via : Initial Calibration

Calibration Files
10 =P45476.D 25 =P45477.D 500 =P45478.D
1250=P45479.D 5000=P45480.D 1e4 =P45481.D

		Compound	10	25	500	1250	5000	1e4	Avg	%RSD
56)	A1	Fluoranthene	2.266	2.126	2.161	2.248	2.352	2.332	2.248	4.02
57)	t	Benzo(b)fluorene	1.326	1.199	1.198	1.222	1.319	1.361	1.271	5.71
58)	s	Pyrene-d10	2.050	1.928	2.005	2.027	2.181	2.190	2.063	5.00
59)	A1	Pyrene	2.227	2.088	2.187	2.294	2.392	2.373	2.260	5.13
60)	A2	C1-Fluoranthenes/	2.227	2.088	2.187	2.294	2.392	2.373	2.260	5.13
61)	A2	C2-Fluoranthenes/	2.227	2.088	2.187	2.294	2.392	2.373	2.260	5.13
62)	A2	C3-Fluoranthenes/	2.227	2.088	2.187	2.294	2.392	2.373	2.260	5.13
63)	A2	C4-Fluoranthenes/	2.227	2.088	2.187	2.294	2.392	2.373	2.260	5.13
64)	A1	Naphthobenzothiop	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
65)	A2	Naphthobenzothiop	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
66)	A2	Naphthobenzothiop	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
67)	A2	Naphthobenzothiop	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
68)	A2	C1-Naphthobenzoth	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
69)	A2	C2-Naphthobenzoth	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
70)	A2	C3-Naphthobenzoth	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
71)	A2	C4-Naphthobenzoth	1.959	1.781	1.871	1.941	2.017	2.055	1.937	5.14
72)	i	Chrysene-d12	----------ISTD----------							
73)	t	Benz[a]anthracene	1.306	1.249	1.265	1.314	1.383	1.373	1.315	4.16
74)	A1	Chrysene	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
75)	A2	Chrysene/Tripheny	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
76)	A2	C1-Chrysenes	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
77)	A2	C2-Chrysenes	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
78)	A2	BBF-d12 Surr BKGD	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
79)	A2	C3-Chrysenes	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
80)	A2	C4-Chrysenes	1.279	1.229	1.267	1.324	1.352	1.331	1.297	3.58
81)	s	Benzo[b]fluoranth	1.070	0.998	0.994	1.018	1.103	1.093	1.046	4.64
82)	t	Benzo[b]fluoranth	1.391	1.311	1.326	1.387	1.469	1.469	1.392	4.85
83)	A1	Benzo[k]fluoranth	1.449	1.339	1.336	1.412	1.497	1.485	1.420	4.94
84)	A2	Benzo[a]fluoranth	1.449	1.339	1.336	1.412	1.497	1.485	1.420	4.94
85)	t	Benzo[e]pyrene	1.386	1.235	1.270	1.330	1.396	1.379	1.333	5.02
86)	t	Benzo[a]pyrene	1.213	1.205	1.216	1.274	1.389	1.412	1.285	7.26
87)	t	Perylene	1.333	1.154	1.190	1.251	1.368	1.372	1.278	7.34
88)	t	Indeno[1,2,3-cd]p	1.342	1.149	1.094	1.144	1.271	1.361	1.227	9.21
89)	t	Dibenz[a,h]anthra	1.158	1.105	1.135	1.155	1.286	1.327	1.194	7.54
90)	t	Benzo[g,h,i]peryl	1.457	1.226	1.200	1.249	1.368	1.364	1.310	7.69
91)	A1	17a(H),21B(H)-hop	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
92)	A2	Hopane (T19)	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
93)	A2	C23 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
94)	A2	C24 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
95)	A2	C25 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
96)	A2	C24 Tetracyclic T	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
97)	A2	C26 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
98)	A2	C26 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
99)	A2	C28 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
100)	A2	C28 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
101)	A2	C29 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
102)	A2	C29 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
103)	A2	18a-22,29,30-Tris	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
104)	A2	C30 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
105)	A2	C30 Tricyclic Ter	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
106)	A2	17a(H)-22,29,30-T	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
107)	A2	17a/b,21b/a 28,30	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
108)	A2	17a(H),21b(H)-25-	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
109)	A2	30-Norhopane (T15	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
110)	A2	18a(H)-30-Norneoh	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99

Method Path : O:\FORENSICS\METHODS\PAH4\MAY06\
Method File : PAH40525.M
Title : Decalins & Alkylated PAH's
Last Update : Tue May 30 10:38:48 2006
Response Via : Initial Calibration

Calibration Files
10 =P45476.D 25 =P45477.D 500 =P45478.D
1250=P45479.D 5000=P45480.D 1e4 =P45481.D

		Compound	10	25	500	1250	5000	1e4	Avg	%RSD
111)	A2	17a(H)-Diahopane	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
112)	A2	30-Normoretane (T	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
113)	A2	18a(H)&18b(H)-Ole	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
114)	A2	Moretane (T20)	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
115)	A2	30-Homohopane-22S	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
116)	A2	30-Homohopane-22R	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
117)	A2	30,31-Bishomohopa	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
118)	A2	30,31-Bishomohopa	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
119)	A2	30,31-Trishomohop	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
120)	A2	30,31-Trishomohop	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
121)	A2	Tetrakishomohopan	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
122)	A2	Tetrakishomohopan	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
123)	A2	Pentakishomohopan	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
124)	A2	Pentakishomohopan	0.440	0.518	0.468	0.567	0.527	0.496	0.503	8.99
125)	SA1	5B(H)Cholane - Su	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
126)	A2	13b(H),17a(H)-20S	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
127)	A2	13b(H),17a(H)-20R	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
128)	A2	13b,17a-20S-Methy	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
129)	A2	14a(H),17a(H)-20S	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
130)	A2	14a(H),17a(H)-20R	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
131)	A2	13b,17a-20R-Ethyl	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
132)	A2	13a,17b-20S-Ethyl	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
133)	A2	14a,17a-20S-Methy	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
134)	A2	14a,17a-20R-Methy	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
135)	A2	14a(H),17a(H)-20S	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
136)	A2	14a(H),17a(H)-20R	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
137)	A2	14b(H),17b(H)-20R	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
138)	A2	14b(H),17b(H)-20S	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
139)	A2	14b,17b-20R-Methy	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
140)	A2	14b,17b-20S-Methy	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
141)	A2	14b(H),17b(H)-20R	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
142)	A2	14b(H),17b(H)-20S	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
143)	A2	C26,20R- +C27,20S	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
144)	A2	C28,20S-triaromat	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
145)	A2	C27,20R-triaromat	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50
146)	A2	C28,20R-triaromat	0.270	0.232	0.234	0.242	0.264	0.260	0.250	6.50

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45476.D
Acq On : 25 May 2006 5:33 pm
Operator : AC
Sample : I4052501
Misc : WHAC60
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 30 10:37:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu May 25 11:11:11 2006
Response via : Initial Calibration

6/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	104764	500.00	ng/mL	-0.02
72) Chrysene-d12	43.55	240	155011	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	2474	10.80	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.08%#		
58) Pyrene-d10	38.65	212	4295	10.33	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.03%#		
81) Benzo[b]fluoranthene-d12	47.47	264	3318	10.24	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.02%#		
125) 5B(H)Cholane - Surr	44.20	217	836	9.60	ng/ml	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.96%#		

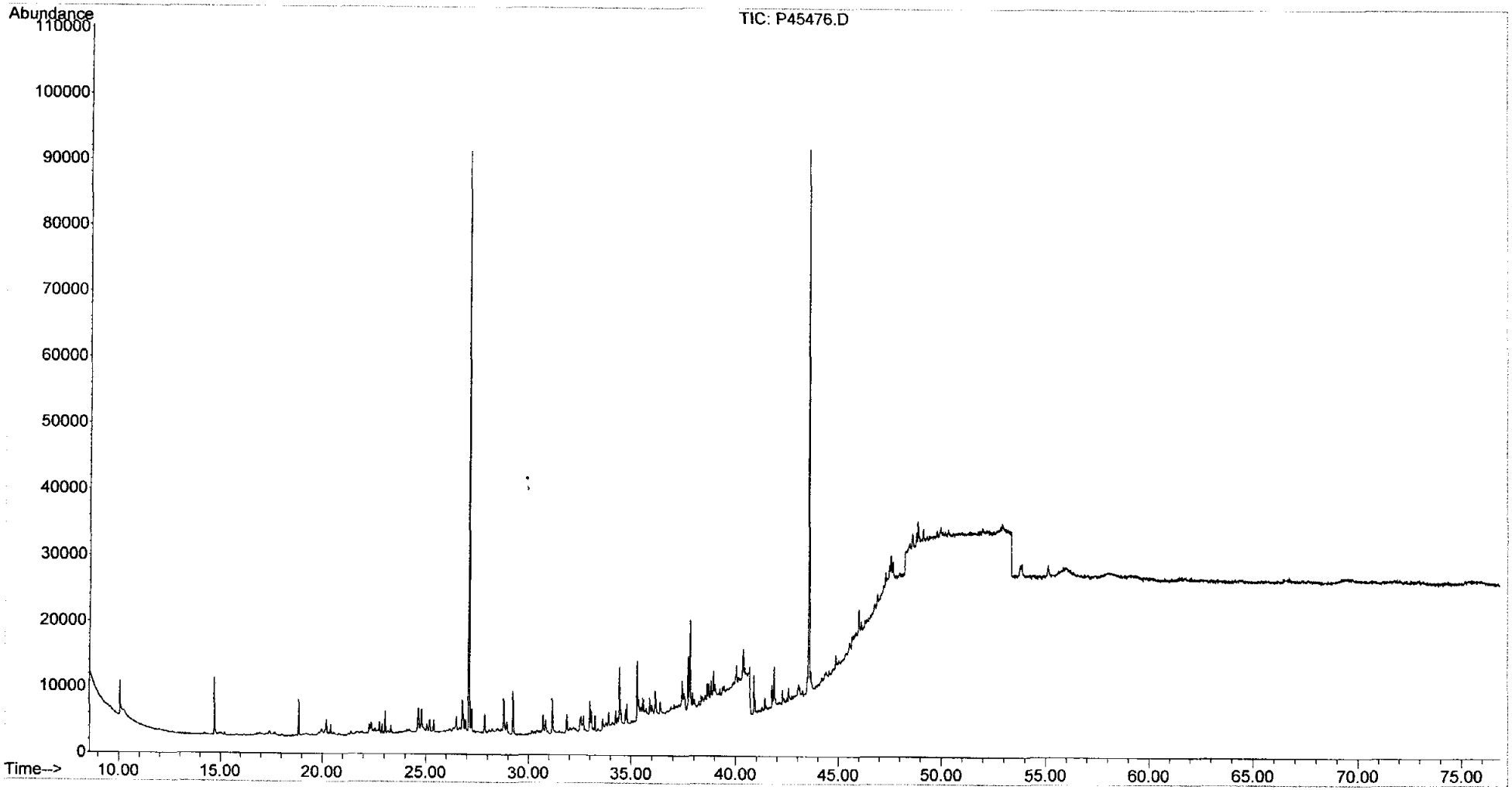
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	543	4.82	ng/mL	100
4) cis-Decalin	18.00	138	427	4.90	ng/mL	100
9) Naphthalene	20.20	128	4989m	10.08	ng/mL	
15) 2-Methylnaphthalene	22.89	142	3252	10.88	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	2979m	9.83	ng/mL	
17) Benzothiophene	20.42	134	3627	9.58	ng/mL	100
22) Biphenyl	24.78	154	4453m	10.07	ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	2827	11.78	ng/mL#	100
24) Dibenzofuran	27.86	168	4003	10.28	ng/mL	96
25) Acenaphthylene	26.48	152	4158	10.92	ng/mL#	100
26) Acenaphthene	27.22	153	2822	11.42	ng/mL	83
27) 2,3,5-Trimethylnaphthalene	28.78	170	2377	10.68	ng/mL	99
28) Fluorene	29.24	166	3875m	13.21	ng/mL	
32) Dibenzothiophene	32.56	184	4032	10.11	ng/mL#	92
41) Phenanthrene	33.05	178	4809	11.39	ng/mL	92
52) Retene	40.05	234	1593m	15.49	ng/mL	
53) Anthracene	33.23	178	3986	10.87	ng/mL	97
54) Carbazole	33.90	167	3986	12.48	ng/mL	94
55) 1-Methylphenanthrene	35.56	192	3172	10.20	ng/mL	92
56) Fluoranthene	37.83	202	4748	10.60	ng/mL#	47
57) Benzo(b)fluorene	40.35	216	2779	5.93	ng/mL	99
59) Pyrene	38.71	202	4667	10.22	ng/mL#	92
64) Naphthobenzothiophene	42.56	234	4104	10.37	ng/ml	95
65) Naphthobenzothiophene-2,1-	42.56	234	4104	10.37	ng/mL	95
73) Benz[a]anthracene	43.49	228	4049	10.47	ng/mL	99
74) Chrysene	43.65	228	3966	9.87	ng/mL	97
75) Chrysene/Triphenylene	43.65	228	3961	9.86	ng/mL	98
82) Benzo[b]fluoranthene	47.55	252	4312	9.90	ng/mL	93
83) Benzo[k]fluoranthene	47.64	252	4493	10.93	ng/mL#	91
85) Benzo[e]pyrene	48.59	252	4296m	10.05	ng/mL	
86) Benzo[a]pyrene	48.78	252	3760m	10.16	ng/mL	
87) Perylene	49.09	252	4134	11.29	ng/mL	95
88) Indeno[1,2,3-cd]pyrene	53.75	276	4161m	11.27	ng/mL	
89) Dibenz[a,h]anthracene	53.82	278	3590	12.10	ng/mL#	74
90) Benzo[g,h,i]perylene	55.09	276	4516	12.88	ng/mL	97
91) 17a(H),21B(H)-hopane - C30	52.90	191	1363m	8.09	ng/mL	
92) Hopane (T19)	52.90	191	1541m	7.29	ng/mL	

5/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45476.D
Acq On : 25 May 2006 5:33 pm
Operator : AC
Sample : I4052501
Misc : WHAC60
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 30 10:37:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu May 25 11:11:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45477.D
Acq On : 25 May 2006 7:04 pm
Operator : AC
Sample : I4052502
Misc : WHAB59
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 30 10:28:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 11:50:39 2006
Response via : Initial Calibration

6/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	98872	500.00	ng/mL	0.00
72) Chrysene-d12	43.55	240	143700	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	5634	24.13	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.41%#			
58) Pyrene-d10	38.65	212	9529	23.51	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.35%#			
81) Benzo[b]fluoranthene-d12	47.47	264	7172	23.32	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.33%#			
125) 5B(H)Cholane - Surr	44.20	217	1670	21.55	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.15%#			

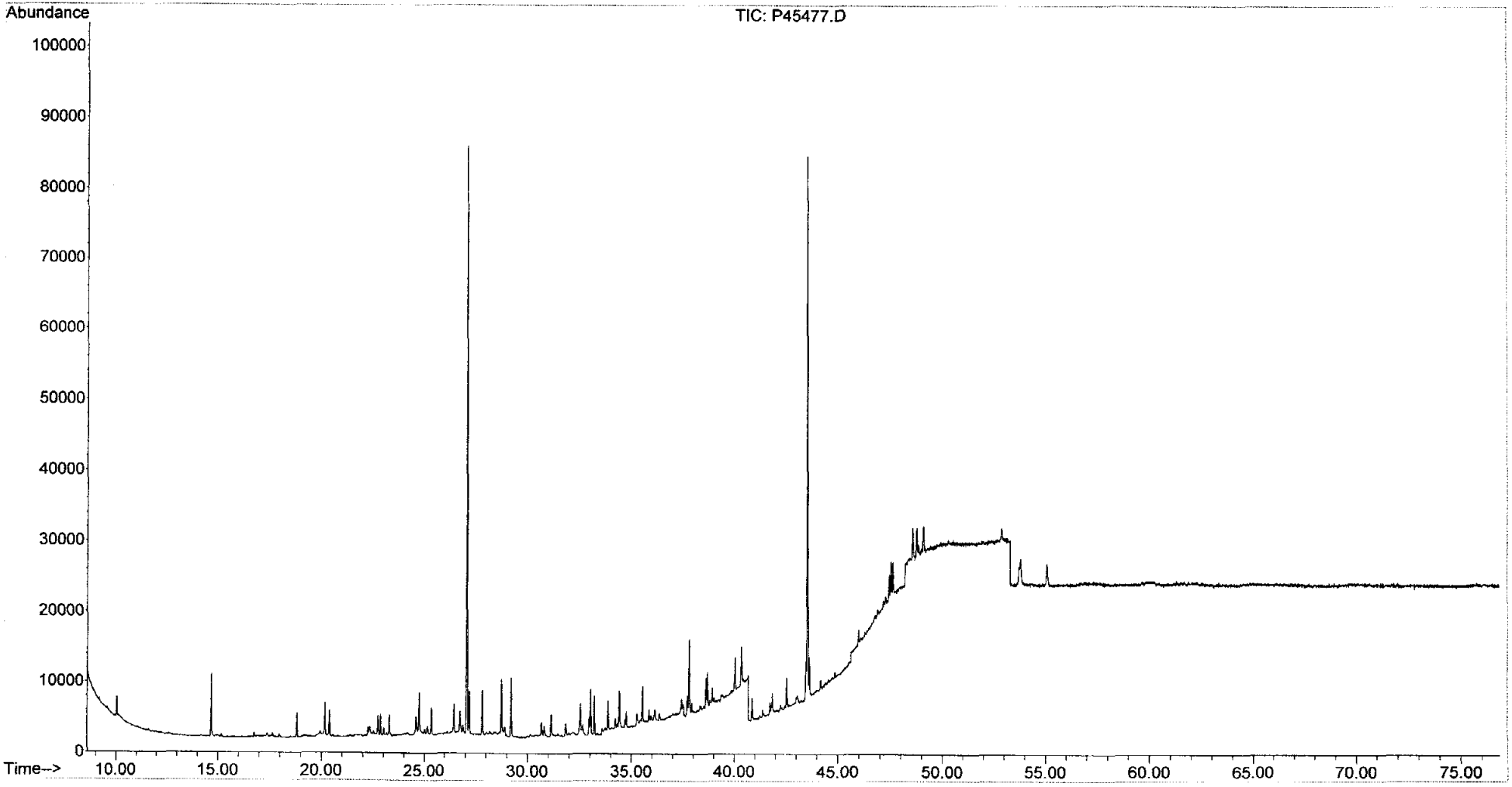
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	1226	11.96	ng/mL	100
4) cis-Decalin	18.00	138	956	11.86	ng/mL	100
9) Naphthalene	20.20	128	11047	23.46	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	7096	23.12	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	6785	22.95	ng/mL#	100
17) Benzothiophene	20.42	134	8516	24.88	ng/mL	100
22) Biphenyl	24.78	154	9739	21.66	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	6142	23.02	ng/mL#	100
24) Dibenzofuran	27.86	168	9074	24.02	ng/mL	97
25) Acenaphthylene	26.48	152	9413	23.99	ng/mL#	100
26) Acenaphthene	27.22	153	6388	23.99	ng/mL	94
27) 2,3,5-Trimethylnaphthalene	28.77	170	5378	23.97	ng/mL	99
28) Fluorene	29.24	166	7555	19.13	ng/mL	99
32) Dibenzothiophene	32.56	184	9189	24.15	ng/mL	98
41) Phenanthrene	33.05	178	10856	23.92	ng/mL	100
52) Retene	40.05	234	2807m	16.91	ng/mL	
53) Anthracene	33.23	178	9162m	24.36	ng/mL	
54) Carbazole	33.90	167	8709	23.15	ng/mL	99
55) 1-Methylphenanthrene	35.56	192	7195	24.03	ng/mL	98
56) Fluoranthene	37.83	202	10511	23.46	ng/mL#	82
57) Benzo(b)fluorene	40.35	216	5928	22.60	ng/mL	99
59) Pyrene	38.71	202	10321	23.43	ng/mL	96
64) Naphthobenzothiophene	42.56	234	8804	22.73	ng/ml	94
65) Naphthobenzothiophene-2,1-	42.56	234	8804	22.73	ng/mL	94
73) Benz[a]anthracene	43.49	228	8976m	23.91	ng/mL	
74) Chrysene	43.65	228	8828	24.01	ng/mL	100
75) Chrysene/Triphenylene	43.65	228	8814	24.00	ng/mL	100
82) Benzo[b]fluoranthene	47.55	252	9419m	23.56	ng/mL	
83) Benzo[k]fluoranthene	47.64	252	9621m	23.10	ng/mL	
85) Benzo[e]pyrene	48.58	252	8874m	22.28	ng/mL	
86) Benzo[a]pyrene	48.78	252	8657m	22.06	ng/mL	
87) Perylene	49.09	252	8290	21.63	ng/mL#	80
88) Indeno[1,2,3-cd]pyrene	53.74	276	8259m	21.41	ng/mL	
89) Dibenz[a,h]anthracene	53.82	278	7938	23.85	ng/mL	94
90) Benzo[g,h,i]perylene	55.09	276	8807	21.04	ng/mL	97
91) 17a(H),21B(H)-hopane - C30	52.91	191	3719m	29.43	ng/mL	
92) Hopane (T19)	52.91	191	3714m	24.28	ng/mL	

5/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45477.D
Acq On : 25 May 2006 7:04 pm
Operator : AC
Sample : I4052502
Misc : WHAB59
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 30 10:28:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 11:50:39 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45478.D
Acq On : 25 May 2006 8:34 pm
Operator : AC
Sample : I4052503
Misc : WHAC13
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 30 10:38:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 11:55:07 2006
Response via : Initial Calibration

6/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	99204	500.00	ng/mL	0.00
72) Chrysene-d12	43.55	240	147358	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	106352	462.01	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.20%#			
58) Pyrene-d10	38.65	212	198938	504.19	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.42%			
81) Benzo[b]fluoranthene-d12	47.47	264	146516	480.69	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.07%#			
125) 5B(H)Cholane - Surr	44.20	217	34455	465.69	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.57%#			

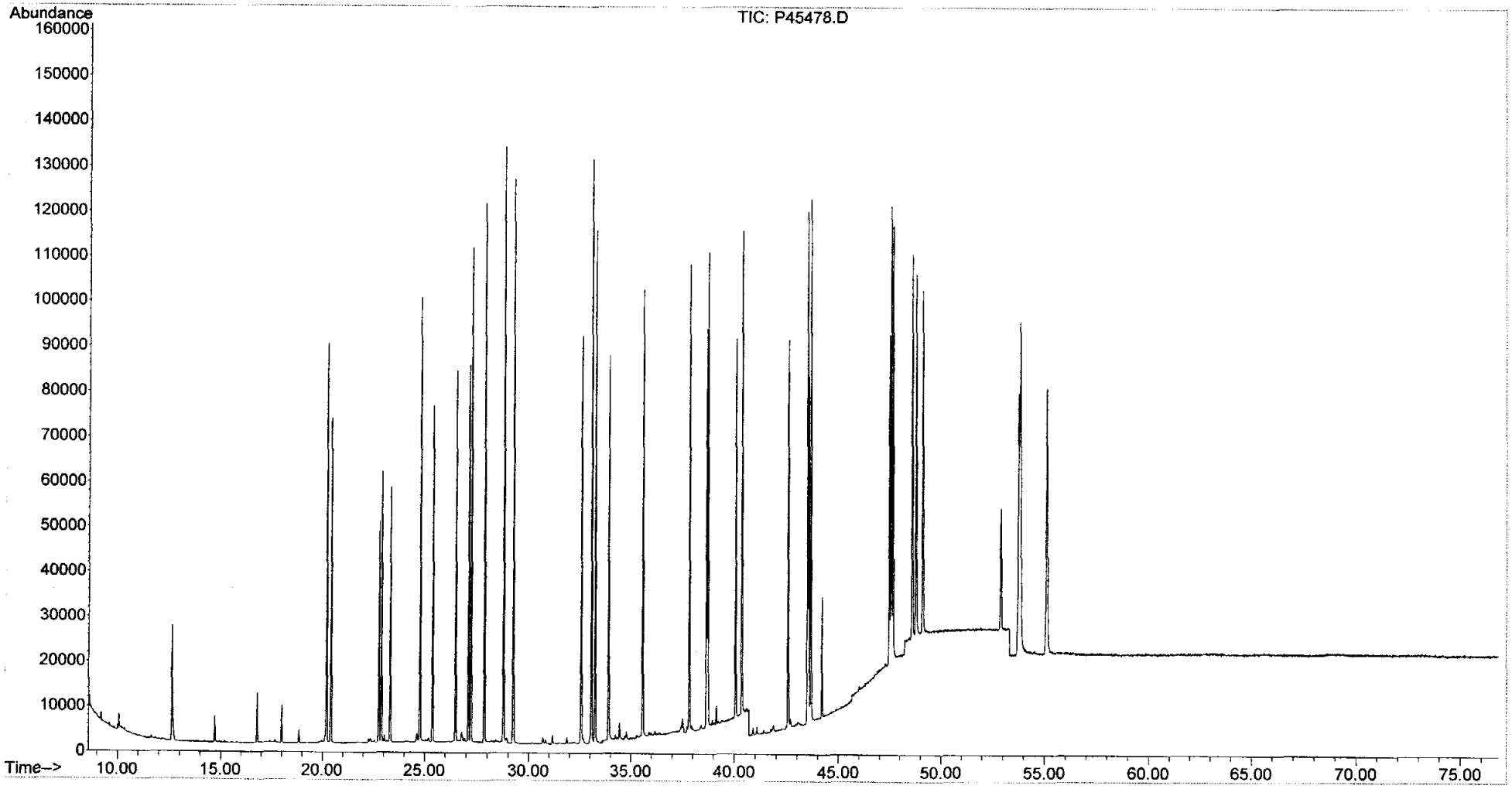
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	23029	228.86	ng/mL	100
4) cis-Decalin	18.00	138	17785	225.69	ng/mL	100
9) Naphthalene	20.20	128	205032	447.77	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	139553	470.88	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	132026	464.08	ng/mL#	100
17) Benzothiophene	20.42	134	168712	492.42	ng/mL	100
22) Biphenyl	24.78	154	170210	404.26	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	119655	465.40	ng/mL#	100
24) Dibenzofuran	27.86	168	181770	489.13	ng/mL	99
25) Acenaphthylene	26.48	152	194130	503.24	ng/mL#	100
26) Acenaphthene	27.22	153	126478	483.11	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.77	170	105710m	479.49	ng/mL	
28) Fluorene	29.24	166	143542	410.41	ng/mL	99
32) Dibenzothiophene	32.56	184	186733	497.56	ng/mL	99
41) Phenanthrene	33.05	178	207647	466.06	ng/mL	99
52) Retene	40.05	234	46657m	328.90	ng/mL	
53) Anthracene	33.23	178	186792m	495.29	ng/mL	
54) Carbazole	33.90	167	177811	489.18	ng/mL	100
55) 1-Methylphenanthrene	35.56	192	145548m	494.11	ng/mL	
56) Fluoranthene	37.83	202	214412	492.08	ng/mL	96
57) Benzo(b)fluorene	40.35	216	118813	474.24	ng/mL	99
59) Pyrene	38.71	202	216995	506.90	ng/mL	96
64) Naphthobenzothiophene	42.56	234	185644	500.41	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.56	234	185644	500.41	ng/mL	99
73) Benz[a]anthracene	43.49	228	186382	494.98	ng/mL	98
74) Chrysene	43.65	228	186749	505.32	ng/mL	97
75) Chrysene/Triphenylene	43.65	228	186749	506.04	ng/mL	97
82) Benzo[b]fluoranthene	47.55	252	195416m	495.87	ng/mL	
83) Benzo[k]fluoranthene	47.64	252	196876m	479.16	ng/mL	
85) Benzo[e]pyrene	48.58	252	187210	466.90	ng/mL	99
86) Benzo[a]pyrene	48.77	252	179192m	473.06	ng/mL	
87) Perylene	49.09	252	175414	478.60	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.74	276	161166m	438.95	ng/mL	
89) Dibenz[a,h]anthracene	53.81	278	167203	501.45	ng/mL	95
90) Benzo[g,h,i]perylene	55.09	276	176807	447.30	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.90	191	68902m	445.16	ng/mL	
92) Hopane (T19)	52.90	191	68647m	428.52	ng/mL	

5/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45478.D
Acq On : 25 May 2006 8:34 pm
Operator : AC
Sample : I4052503
Misc : WHAC13
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 30 10:38:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 11:55:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45479.D
Acq On : 25 May 2006 10:04 pm
Operator : AC
Sample : I4052504
Misc : WHAC55
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 30 10:29:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 12:01:01 2006
Response via : Initial Calibration

6/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	93013	500.00 ng/mL	0.00
72) Chrysene-d12	43.55	240	139083	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	257458	1223.88 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 122.39%		
58) Pyrene-d10	38.65	212	471272	1270.34 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 127.03%		
81) Benzo[b]fluoranthene-d12	47.47	264	353841	1246.00 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 124.60%		
125) 5B(H)Cholane - Surr	44.20	217	84212	1234.15 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 123.42%		

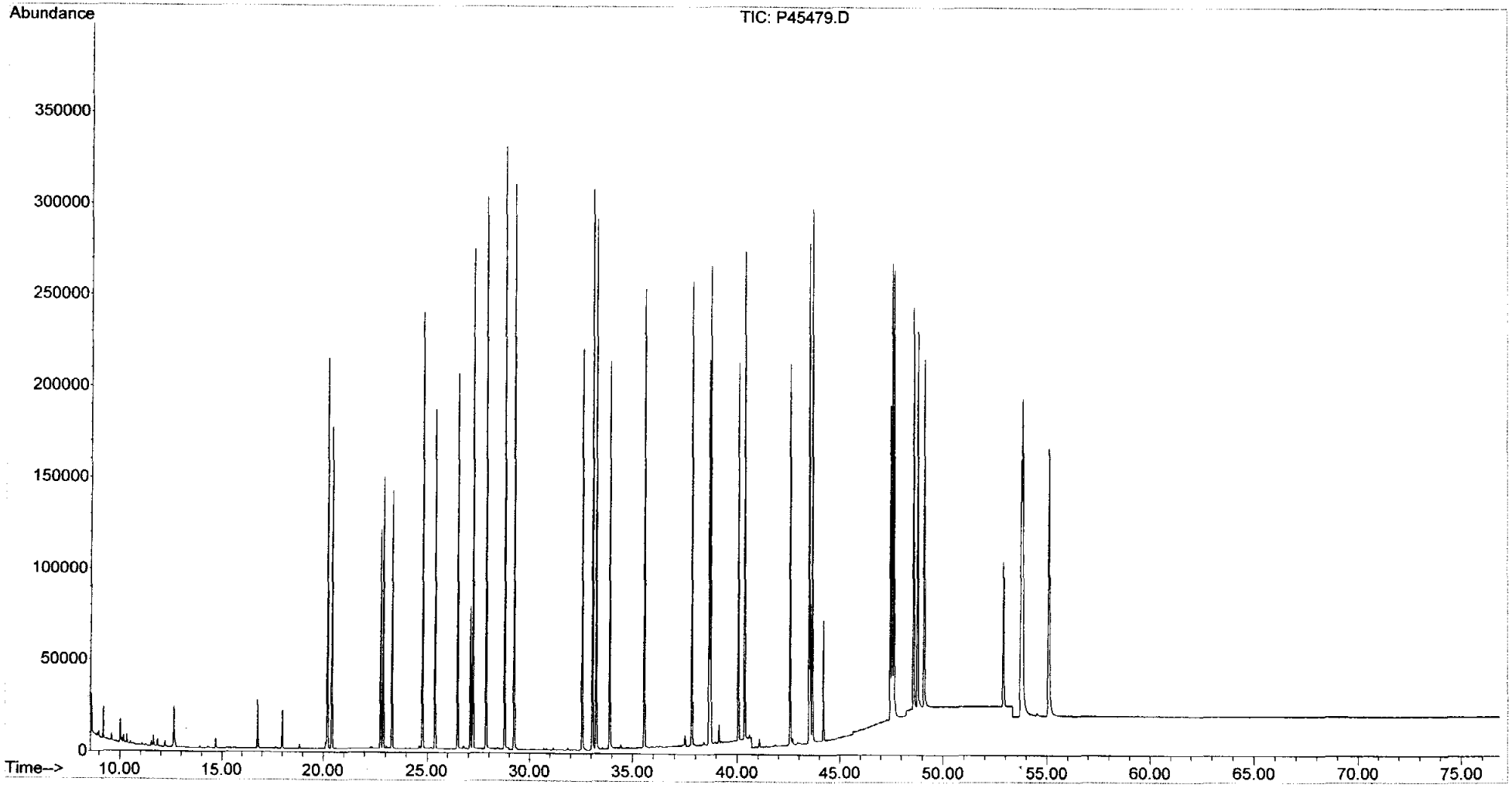
Target Compounds					Qvalue
3) trans-Decalin	16.78	138	56152	612.45 ng/mL	100
4) cis-Decalin	18.00	138	43440	607.64 ng/mL	100
9) Naphthalene	20.20	128	502948	1213.77 ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	342274	1256.16 ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	322094	1237.16 ng/mL#	100
17) Benzothiophene	20.42	134	413197	1292.81 ng/mL	100
22) Biphenyl	24.78	154	412933	1117.34 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	295365	1254.23 ng/mL#	100
24) Dibenzofuran	27.86	168	444866	1286.11 ng/mL	99
25) Acenaphthylene	26.48	152	482849	1332.12 ng/mL#	100
26) Acenaphthene	27.22	153	310064	1277.57 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.77	170	261986	1285.01 ng/mL	97
28) Fluorene	29.24	166	351756	1140.81 ng/mL	100
32) Dibenzothiophene	32.56	184	455614	1296.92 ng/mL	99
41) Phenanthrene	33.05	178	505836	1238.94 ng/mL	99
52) Retene	40.05	234	114748m	973.94 ng/mL	
53) Anthracene	33.23	178	468927m	1327.95 ng/mL	
54) Carbazole	33.90	167	434302	1283.61 ng/mL	100
55) 1-Methylphenanthrene	35.56	192	358674m	1304.64 ng/mL	
56) Fluoranthene	37.83	202	522643m	1286.10 ng/mL	
57) Benzo(b)fluorene	40.35	216	284247	1231.23 ng/mL	99
59) Pyrene	38.71	202	533462	1323.03 ng/mL	96
64) Naphthobenzothiophene	42.56	234	451290	1297.09 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.56	234	451290	1297.09 ng/mL	99
73) Benz[a]anthracene	43.49	228	456789	1289.60 ng/mL	99
74) Chrysene	43.65	228	460407	1315.27 ng/mL	98
75) Chrysene/Triphenylene	43.65	228	459046	1312.62 ng/mL	98
82) Benzo[b]fluoranthene	47.55	252	482151	1301.00 ng/mL	98
83) Benzo[k]fluoranthene	47.64	252	491018	1287.94 ng/mL	100
85) Benzo[e]pyrene	48.58	252	462403	1249.42 ng/mL	99
86) Benzo[a]pyrene	48.78	252	442840	1266.42 ng/mL	99
87) Perylene	49.09	252	434853	1275.24 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.74	276	397620m	1208.47 ng/mL	
89) Dibenz[a,h]anthracene	53.81	278	401702	1275.17 ng/mL	95
90) Benzo[g,h,i]perylene	55.09	276	434183	1206.16 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.89	191	197166m	1378.47 ng/mL	
92) Hopane (T19)	52.89	191	197270m	1344.74 ng/mL	

5/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45479.D
Acq On : 25 May 2006 10:04 pm
Operator : AC
Sample : I4052504
Misc : WHAC55
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 30 10:29:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 12:01:01 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45480.D
Acq On : 25 May 2006 11:34 pm
Operator : AC
Sample : I4052505
Misc : WHAC54
ALS Vial : 7 Sample Multiplier: 1

6/1/06

Quant Time: May 30 10:30:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 12:05:29 2006
Response via : Initial Calibration

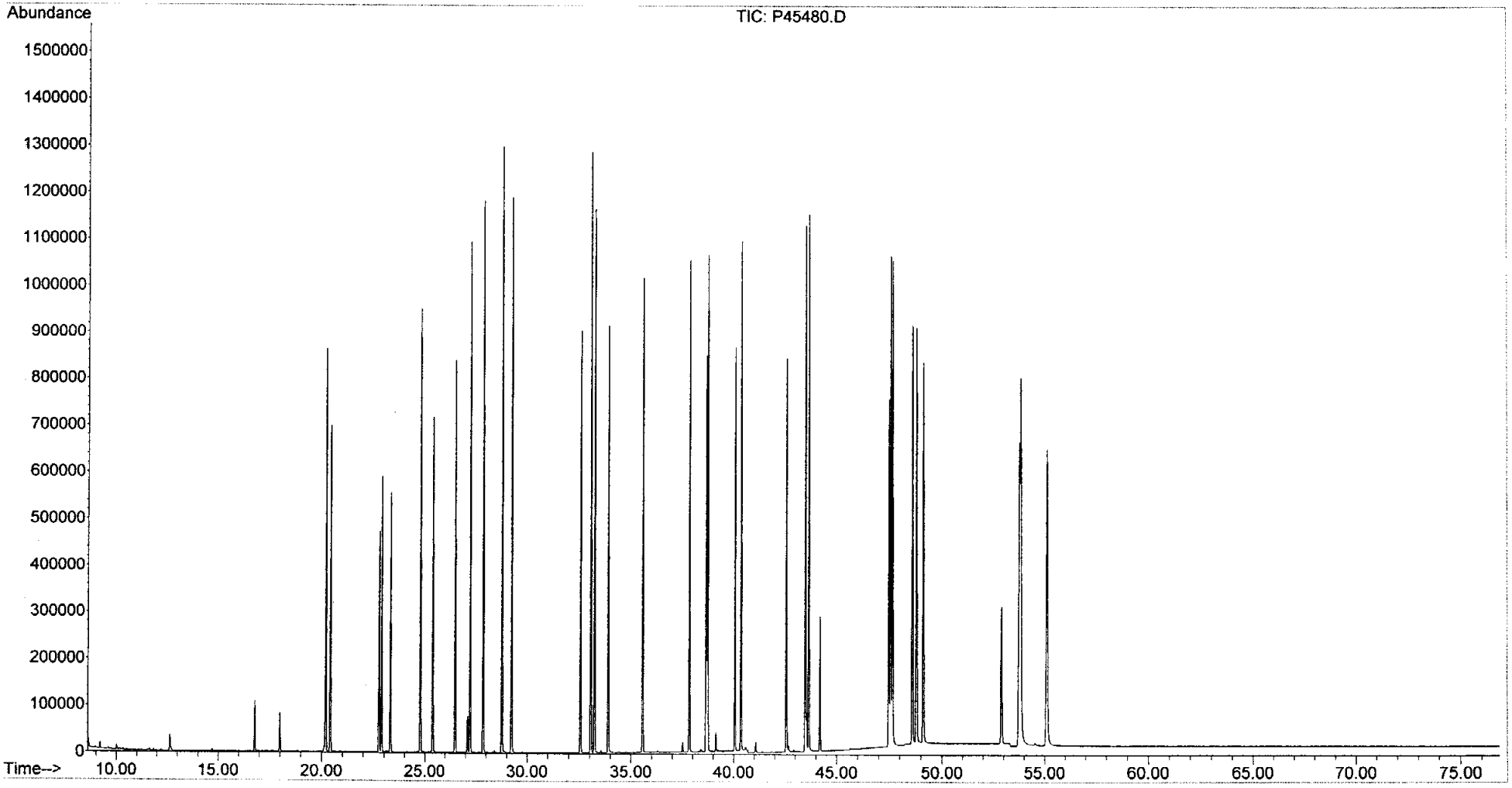
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	90601	500.00 ng/mL	0.00
72) Chrysene-d12	43.55	240	136400	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	1039778	5101.04 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 510.10%#		
58) Pyrene-d10	38.65	212	1976405	5447.18 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 544.72%#		
81) Benzo[b]fluoranthene-d12	47.47	264	1504464	5406.28 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 540.63%#		
125) 5B(H)Cholane - Surr	44.20	217	360773	5408.38 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 540.84%#		
Target Compounds					Qvalue
3) trans-Decalin	16.78	138	220823	2485.10 ng/mL	100
4) cis-Decalin	18.00	138	170835	2470.42 ng/mL	100
9) Naphthalene	20.20	128	1971333	4919.73 ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	1350371	5081.59 ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	1272632	5031.22 ng/mL#	100
17) Benzothiophene	20.42	134	1635599	5209.08 ng/mL	100
22) Biphenyl	24.78	154	1618497	4618.56 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.39	156	1179347	5136.91 ng/mL#	100
24) Dibenzofuran	27.86	168	1761554	5190.74 ng/mL	99
25) Acenaphthylene	26.48	152	1973595	5499.54 ng/mL#	100
26) Acenaphthene	27.22	153	1238915	5211.92 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.78	170	1057892	5289.93 ng/mL	98
28) Fluorene	29.24	166	1408404	4794.00 ng/mL	100
32) Dibenzothiophene	32.56	184	1807941	5234.26 ng/mL	98
41) Phenanthrene	33.06	178	2030178	5116.19 ng/mL	99
52) Retene	40.05	234	481316m	4436.59 ng/mL	
53) Anthracene	33.23	178	1897956m	5448.94 ng/mL	
54) Carbazole	33.90	167	1782775	5373.26 ng/mL	99
55) 1-Methylphenanthrene	35.56	192	1463156m	5407.66 ng/mL	
56) Fluoranthene	37.83	202	2131379	5344.41 ng/mL	96
57) Benzo(b)fluorene	40.36	216	1195069	5334.33 ng/mL	99
59) Pyrene	38.72	202	2167073	5438.18 ng/mL	95
64) Naphthobenzothiophene	42.57	234	1827796m	5342.96 ng/ml	
65) Naphthobenzothiophene-2,1-	42.57	234	1828729m	5345.68 ng/mL	
73) Benz[a]anthracene	43.50	228	1886732	5388.69 ng/mL	99
74) Chrysene	43.66	228	1843503	5300.82 ng/mL	99
75) Chrysene/Triphenylene	43.66	228	1843556	5308.75 ng/mL	99
82) Benzo[b]fluoranthene	47.56	252	2003344m	5456.34 ng/mL	
83) Benzo[k]fluoranthene	47.65	252	2042051	5420.54 ng/mL	100
85) Benzo[e]pyrene	48.59	252	1903638	5245.45 ng/mL	99
86) Benzo[a]pyrene	48.78	252	1894406	5506.03 ng/mL	100
87) Perylene	49.10	252	1866099	5552.08 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.76	276	1733336m	5416.68 ng/mL	
89) Dibenz[a,h]anthracene	53.83	278	1754229	5649.74 ng/mL	95
90) Benzo[g,h,i]perylene	55.12	276	1865349	5330.60 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.90	191	718608m	4956.76 ng/mL	
92) Hopane (T19)	52.90	191	717587	4881.51 ng/mL#	84

TMS 5/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45480.D
Acq On : 25 May 2006 11:34 pm
Operator : AC
Sample : I4052505
Misc : WHAC54
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 30 10:30:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 12:05:29 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45481.D
Acq On : 26 May 2006 1:05 am
Operator : AC
Sample : I4052506
Misc : WHAC53
ALS Vial : 8 Sample Multiplier: 1

6/1/06.

Quant Time: May 30 10:30:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 12:09:25 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	101124	500.00 ng/mL	0.00
72) Chrysene-d12	43.56	240	155762	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	2255221	9872.67 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 987.27%#		
58) Pyrene-d10	38.66	212	4429000	10744.36 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1074.44%#		
81) Benzo[b]fluoranthene-d12	47.49	264	3404050m	10540.58 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1054.06%#		
125) 5B(H)Cholane - Surr	44.20	217	809870	10460.79 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1046.08%#		

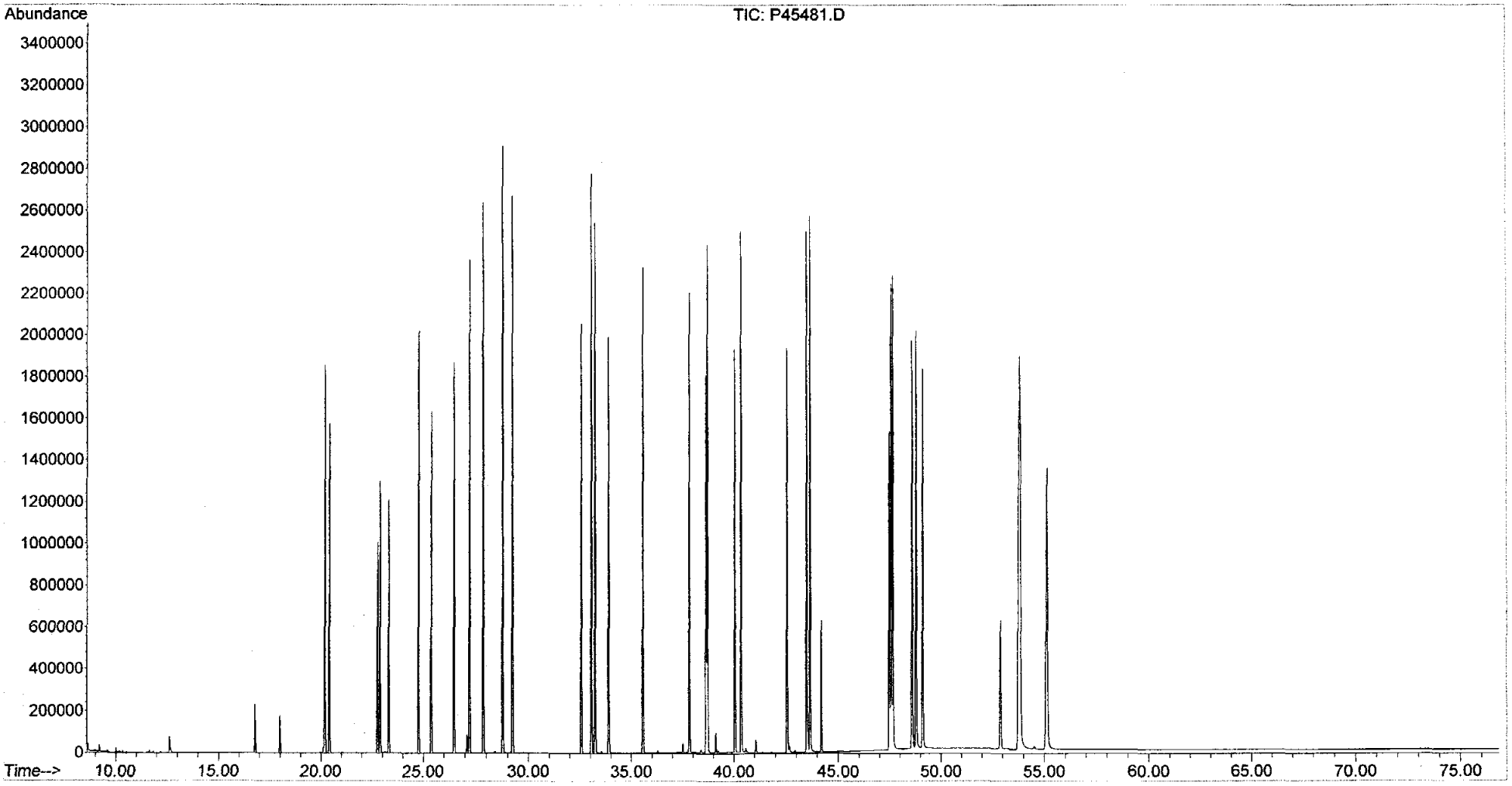
Target Compounds					Qvalue
3) trans-Decalin	16.78	138	472083	4765.57 ng/mL	100
4) cis-Decalin	18.00	138	366930	4765.23 ng/mL	100
9) Naphthalene	20.20	128	4281212	9603.37 ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	2961558	9952.45 ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	2792712	9879.46 ng/mL#	100
17) Benzothiophene	20.42	134	3570100	10102.45 ng/mL	100
22) Biphenyl	24.78	154	3551143	9219.75 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.39	156	2631449	10213.21 ng/mL#	100
24) Dibenzofuran	27.86	168	3903992	10228.69 ng/mL	99
25) Acenaphthylene	26.49	152	4405372	10782.94 ng/mL#	100
26) Acenaphthene	27.23	153	2747723	10269.32 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.79	170	2368724	10490.45 ng/mL	98
28) Fluorene	29.25	166	3145862	9673.48 ng/mL	100
32) Dibenzothiophene	32.57	184	4031557	10360.29 ng/mL	98
41) Phenanthrene	33.06	178	4523160	10165.29 ng/mL	100
52) Retene	40.06	234	1092172m	9225.39 ng/mL	
53) Anthracene	33.24	178	4110164m	10386.59 ng/mL	
54) Carbazole	33.91	167	4035788	10737.72 ng/mL	99
55) 1-Methylphenanthrene	35.57	192	3278885m	10680.56 ng/mL	
56) Fluoranthene	37.85	202	4717383m	10453.86 ng/mL	
57) Benzo(b)fluorene	40.36	216	2752340	10861.71 ng/mL	99
59) Pyrene	38.73	202	4798697	10603.18 ng/mL	94
64) Naphthobenzothiophene	42.58	234	4156746m	10727.06 ng/ml	
65) Naphthobenzothiophene-2,1-	42.58	234	4155157m	10722.95 ng/mL	
73) Benz[a]anthracene	43.51	228	4277429	10534.36 ng/mL	99
74) Chrysene	43.67	228	4147428m	10318.97 ng/mL	
75) Chrysene/Triphenylene	43.67	228	4146317m	10328.11 ng/mL	
82) Benzo[b]fluoranthene	47.58	252	4577552m	10723.37 ng/mL	
83) Benzo[k]fluoranthene	47.66	252	4624771	10572.41 ng/mL	100
85) Benzo[e]pyrene	48.61	252	4296548	10266.63 ng/mL	99
86) Benzo[a]pyrene	48.80	252	4399089m	10974.34 ng/mL	
87) Perylene	49.12	252	4275615	10898.99 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.79	276	4239710m	11411.97 ng/mL	
89) Dibenz[a,h]anthracene	53.85	278	4134901	11366.26 ng/mL	96
90) Benzo[g,h,i]perylene	55.15	276	4249201	10494.72 ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.91	191	1546106m	9355.13 ng/mL	
92) Hopane (T19)	52.91	191	1543236	9236.94 ng/mL#	84

5/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45481.D
Acq On : 26 May 2006 1:05 am
Operator : AC
Sample : I4052506
Misc : WHAC53
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:30:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri May 26 12:09:25 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45483.D
Acq On : 26 May 2006 4:06 am
Operator : AC
Sample : Q4052501
Misc : ICC 69
ALS Vial : 10 Sample Multiplier: 1

6/1/06.

Quant Time: May 30 10:56:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 10:38:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

MS 5/30/06

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	88	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.81#
3	A1	trans-Decalin	0.486	0.000#	100.0#	0#	-16.78#
4	t	cis-Decalin	0.378	0.000#	100.0#	0#	-18.00#
5	A2	C1-Decalins	0.486	0.000#	100.0#	0#	-18.56#
6	A2	C2-Decalins	0.486	0.000#	100.0#	0#	-19.91#
7	A2	C3-Decalins	0.486	0.000#	100.0#	0#	-22.43#
8	A2	C4-Decalins	0.486	0.000#	100.0#	0#	-25.28#
9	A1	Naphthalene	2.190	2.025	7.5	87	0.00
10	A2	C1-Naphthalenes	2.190	0.000#	100.0#	0#	-22.80#
11	A2	C2-Naphthalenes	2.190	0.000#	100.0#	0#	-25.84#
12	A2	C3-Naphthalenes	2.190	0.000#	100.0#	0#	-29.32#
13	A2	C4-Naphthalenes	2.190	0.000#	100.0#	0#	-32.23#
14	s	2-Methylnaphthalene-d10	1.127	1.124	0.3	93	0.00
15	t	2-Methylnaphthalene	1.470	1.328	9.7	84	0.00
16	t	1-Methylnaphthalene	1.383	1.322	4.4	88	0.00
17	A1	Benzothiophene	1.750	0.000#	100.0#	0#	-20.42#
18	A2	C1-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-22.79#
19	A2	C2-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-25.40#
20	A2	C3-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-27.96#
21	A2	C4-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-30.11#
22	t	Biphenyl	1.855	1.721	7.2	89	0.00
23	t	2,6-Dimethylnaphthalene	1.278	1.201	6.0	88	0.00
24	t	Dibenzofuran	1.894	1.834	3.2	89	0.00
25	t	Acenaphthylene	2.046	1.861	9.0	84	0.00
26	t	Acenaphthene	1.329	1.229	7.5	85	0.00
27	t	2,3,5-Trimethylnaphthalene	1.126	1.092	3.0	91	0.00
28	A1	Fluorene	1.575	1.330	15.6	81	0.00
29	A2	C1-Fluorenes	1.575	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.575	0.000#	100.0#	0#	-33.99#
31	A2	C3-Fluorenes	1.575	0.000#	100.0#	0#	-36.31#
32	A1	Dibenzothiophene	1.936	0.000#	100.0#	0#	-32.56#
33	A2	4-Methyldibenzothiophene(4M	1.936	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	1.936	0.000#	100.0#	0#	-34.89#
35	A2	1-Methyldibenzothiophene(1M	1.936	0.000#	100.0#	0#	-35.31#
36	A2	OTP	1.936	0.000#	100.0#	0#	-34.95#
37	A2	C1-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-34.53#
38	A2	C2-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-36.37#
39	A2	C3-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-38.10#
40	A2	C4-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-41.08#
41	A1	Phenanthrene	2.206	1.901	13.8	80	0.00
42	A2	3-Methylphenanthrene(3MP)	2.206	0.000#	100.0#	0#	-35.59#
43	A2	2/4-Methylphenanthrene(2MP)	2.206	0.000#	100.0#	0#	-35.59#
44	A2	2-Methylanthracene(2MA)	2.206	0.000#	100.0#	0#	-35.49#
45	A2	9-Methylphenanthrene(9MP)	2.206	0.000#	100.0#	0#	-35.59#
46	A2	1-Methylphenanthrene(1MP)	2.206	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-35.59#
48	A2	C2-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-37.54#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45483.D
Acq On : 26 May 2006 4:06 am
Operator : AC
Sample : Q4052501
Misc : ICC 69
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 30 10:56:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 10:38:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	A2	5AA IS BKGD	2.206	0.000#	100.0#	0#	-37.31#
50	A2	C3-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-40.42#
51	A2	C4-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-40.36#
52	t	Retene	0.561	0.000#	100.0#	0#	-40.05#
53	t	Anthracene	1.964	1.745	11.2	82	0.00
54	t	Carbazole	1.881	0.000#	100.0#	0#	-33.90#
55	t	1-Methylphenanthrene	1.536	1.453	5.4	88	0.00
56	A1	Fluoranthene	2.248	1.984	11.7	81	0.00
57	t	Benzo(b)fluorene	1.271	0.000#	100.0#	0#	-40.36#
58	s	Pyrene-d10	2.063	1.959	5.0	86	0.00
59	A1	Pyrene	2.260	2.084	7.8	84	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-40.39#
61	A2	C2-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-42.24#
62	A2	C3-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-44.23#
63	A2	C4-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-46.34#
64	A1	Naphthobenzothiophene	1.937	0.000#	100.0#	0#	-42.57#
65	A2	Naphthobenzothiophene-2,1-D	1.937	0.000#	100.0#	0#	-42.57#
66	A2	Naphthobenzothiophene-1,2-D	1.937	0.000#	100.0#	0#	-43.23#
67	A2	Naphthobenzothiophene-2,3-D	1.937	0.000#	100.0#	0#	-43.58#
68	A2	C1-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-45.09#
69	A2	C2-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-46.47#
70	A2	C3-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-48.06#
71	A2	C4-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-49.14#
72	i	Chrysene-d12	1.000	1.000	0.0	88	0.00
73	t	Benz[a]anthracene	1.315	1.243	5.5	87	-0.02
74	A1	Chrysene	1.297	1.207	6.9	84	0.00
75	A2	Chrysene/Triphenylene	1.297	1.207	6.9	84	0.00
76	A2	C1-Chrysenes	1.297	0.000#	100.0#	0#	-45.16#
77	A2	C2-Chrysenes	1.297	0.000#	100.0#	0#	-47.51#
78	A2	BBF-d12 Surr BKGD	1.297	0.000#	100.0#	0#	-47.51#
79	A2	C3-Chrysenes	1.297	0.000#	100.0#	0#	-49.14#
80	A2	C4-Chrysenes	1.297	0.000#	100.0#	0#	-50.26#
81	s	Benzo[b]fluoranthene-d12	1.046	1.100	-5.2	98	0.00
82	t	Benzo[b]fluoranthene	1.392	1.310	5.9	87	-0.02
83	A1	Benzo[k]fluoranthene	1.420	1.306	8.0	86	-0.02
84	A2	Benzo[a]fluoranthene	1.420	0.000#	100.0#	0#	-48.34#
85	t	Benzo[e]pyrene	1.333	1.313	1.5	91	-0.02
86	t	Benzo[a]pyrene	1.285	1.172	8.8	85	-0.02
87	t	Perylene	1.278	1.296	-1.4	96	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.227	1.136	7.4	92	-0.02
89	t	Dibenz[a,h]anthracene	1.194	1.114	6.7	87	-0.02
90	t	Benzo[g,h,i]perylene	1.310	1.235	5.7	91	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.503	0.000#	100.0#	0#	-52.90#
92	A2	Hopane (T19)	0.503	0.000#	100.0#	0#	-52.90#
93	A2	C23 Tricyclic Terpane (T4)	0.503	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.503	0.000#	100.0#	0#	-41.84#
95	A2	C25 Tricyclic Terpane (T6)	0.503	0.000#	100.0#	0#	-43.44#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45483.D
Acq On : 26 May 2006 4:06 am
Operator : AC
Sample : Q4052501
Misc : ICC 69
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 30 10:56:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 10:38:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	A2	C24 Tetracyclic Terpane (T6	0.503	0.000#	100.0#	0#	-44.72#
97	A2	C26 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-44.45#
98	A2	C26 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-44.45#
99	A2	C28 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-46.79#
100	A2	C28 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-47.00#
101	A2	C29 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-47.87#
103	A2	18a-22,29,30-Trisnorneohopa	0.503	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.503	0.000#	100.0#	0#	-49.03#
105	A2	C30 Tricyclic Terpane-22R	0.503	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.503	0.000#	100.0#	0#	-49.44#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.503	0.000#	100.0#	0#	-50.69#
108	A2	17a(H),21b(H)-25-Norhopane	0.503	0.000#	100.0#	0#	-50.48#
109	A2	30-Norhopane (T15)	0.503	0.000#	100.0#	0#	-51.34#
110	A2	18a(H)-30-Norneohopane-C29T	0.503	0.000#	100.0#	0#	-51.47#
111	A2	17a(H)-Diahopane (X)	0.503	0.000#	100.0#	0#	-51.58#
112	A2	30-Normoretane (T17)	0.503	0.000#	100.0#	0#	-52.06#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.503	0.000#	100.0#	0#	-52.50#
114	A2	Moretane (T20)	0.503	0.000#	100.0#	0#	-53.40#
115	A2	30-Homohopane-22S (T21)	0.503	0.000#	100.0#	0#	-54.48#
116	A2	30-Homohopane-22R (T22)	0.503	0.000#	100.0#	0#	-54.68#
117	A2	30,31-Bishomohopane-22S (T2	0.503	0.000#	100.0#	0#	-56.02#
118	A2	30,31-Bishomohopane-22R (T2	0.503	0.000#	100.0#	0#	-56.38#
119	A2	30,31-Trishomohopane-22S (T	0.503	0.000#	100.0#	0#	-58.13#
120	A2	30,31-Trishomohopane-22R (T	0.503	0.000#	100.0#	0#	-58.73#
121	A2	Tetrakishomohopane-22S (T32	0.503	0.000#	100.0#	0#	-60.72#
122	A2	Tetrakishomohopane-22R (T33	0.503	0.000#	100.0#	0#	-61.73#
123	A2	Pentakishomohopane-22S (T34	0.503	0.000#	100.0#	0#	-63.84#
124	A2	Pentakishomohopane-22R (T35	0.503	0.000#	100.0#	0#	-65.15#
125	SA1	5B(H)Cholane - Surr	0.250	0.242	3.2	91	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.250	0.000#	100.0#	0#	-45.75#
127	A2	13b(H),17a(H)-20R-Diacholes	0.250	0.000#	100.0#	0#	-46.18#
128	A2	13b,17a-20S-Methyldiacholes	0.250	0.000#	100.0#	0#	-46.89#
129	A2	14a(H),17a(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.76#
130	A2	14a(H),17a(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-48.62#
131	A2	13b,17a-20R-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.62#
132	A2	13a,17b-20S-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.62#
133	A2	14a,17a-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.62#
134	A2	14a,17a-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-49.70#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-50.04#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-50.95#
137	A2	14b(H),17b(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.68#
138	A2	14b(H),17b(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.68#
139	A2	14b,17b-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-49.14#
140	A2	14b,17b-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-49.14#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-50.29#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-50.33#
143	A2	C26,20R- +C27,20S- triaroma	0.250	0.000#	100.0#	0#	-50.00#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45483.D
Acq On : 26 May 2006 4:06 am
Operator : AC
Sample : Q4052501
Misc : ICC 69
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 30 10:56:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 10:38:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
144 A2	C28,20S-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.98#
145 A2	C27,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-51.44#
146 A2	C28,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-52.95#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45483.D
Acq On : 26 May 2006 4:06 am
Operator : AC
Sample : Q4052501
Misc : ICC 69
ALS Vial : 10 Sample Multiplier: 1

6/1/06

Quant Time: May 30 10:56:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 10:38:48 2006
Response via : Initial Calibration

5/30/06

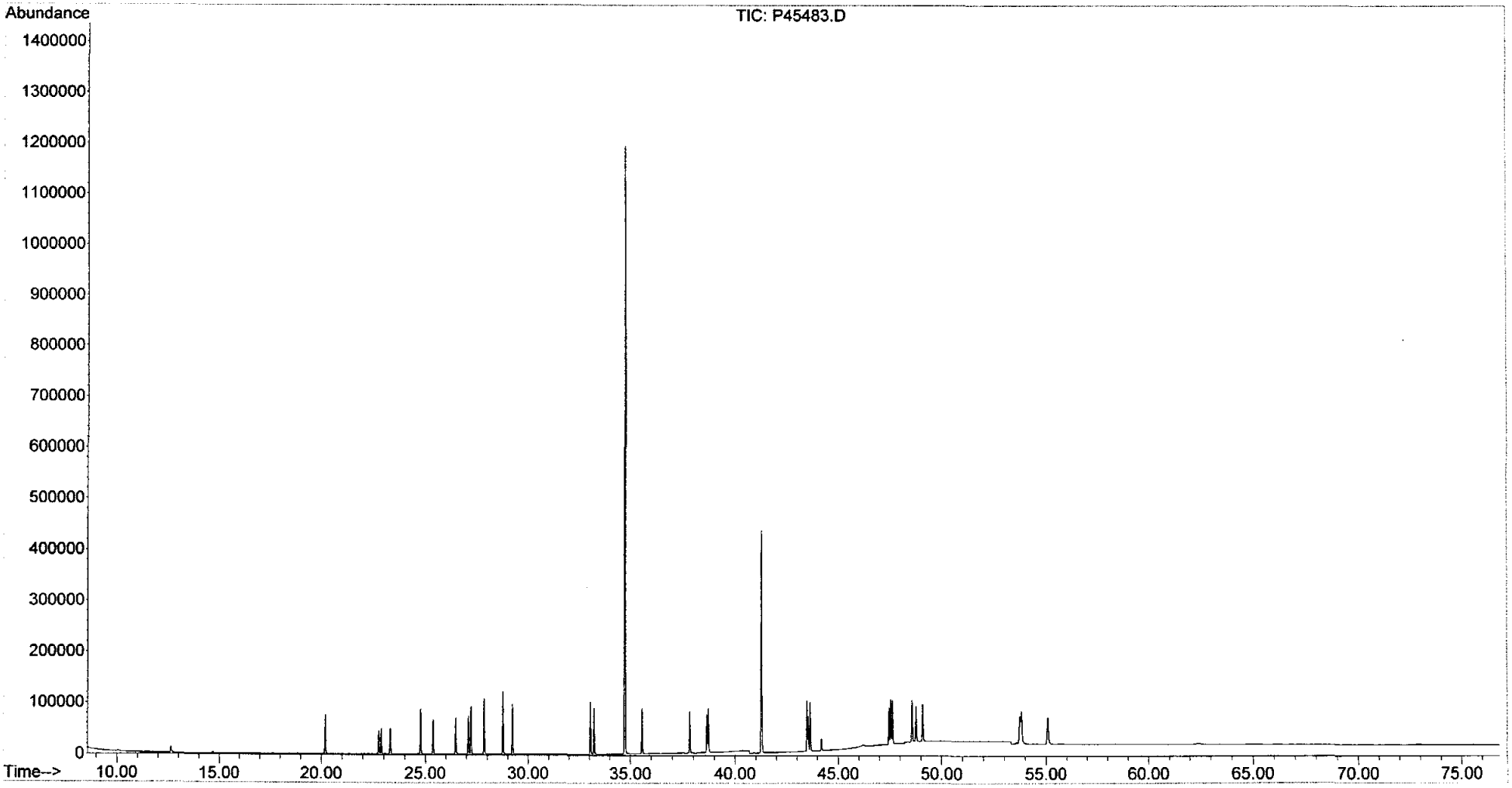
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	87747	500.00	ng/mL	0.00
72) Chrysene-d12	43.55	240	129931	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	98618	498.59	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.86%#			
58) Pyrene-d10	38.64	212	171933	474.79	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.48%#			
81) Benzo[b]fluoranthene-d12	47.47	264	142973	525.99	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.60%			
125) 5B(H)Cholane - Surr	44.20	217	31411	482.68	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.27%#			
Target Compounds						Qvalue
9) Naphthalene	20.20	128	177703	462.44	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	116539	451.70	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	115986	478.01	ng/mL#	100
22) Biphenyl	24.78	154	151014	463.92	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	105364	469.61	ng/mL#	100
24) Dibenzofuran	27.86	168	160894	483.97	ng/mL	99
25) Acenaphthylene	26.48	152	163314	454.75	ng/mL#	100
26) Acenaphthene	27.22	153	107843	462.42	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.77	170	95777	484.87	ng/mL	100
28) Fluorene	29.24	166	116689	422.29	ng/mL	100
41) Phenanthrene	33.05	178	166818	430.87	ng/mL	100
53) Anthracene	33.23	178	153104m	444.27	ng/mL	
55) 1-Methylphenanthrene	35.56	192	127537	473.18	ng/mL	100
56) Fluoranthene	37.83	202	174069	441.29	ng/mL	99
59) Pyrene	38.71	202	182891	461.09	ng/mL	100
73) Benz[a]anthracene	43.49	228	161503	472.61	ng/mL	99
74) Chrysene	43.65	228	156819	465.27	ng/mL	99
75) Chrysene/Triphenylene	43.65	228	156767	465.11	ng/mL	99
82) Benzo[b]fluoranthene	47.55	252	170241	470.59	ng/mL	99
83) Benzo[k]fluoranthene	47.63	252	169687	459.95	ng/mL	100
85) Benzo[e]pyrene	48.58	252	170559	492.51	ng/mL	99
86) Benzo[a]pyrene	48.77	252	152271	456.11	ng/mL	99
87) Perylene	49.09	252	168392	506.99	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.74	276	147662m	463.19	ng/mL	
89) Dibenz[a,h]anthracene	53.81	278	144771	466.45	ng/mL	98
90) Benzo[g,h,i]perylene	55.08	276	160503	471.33	ng/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\MAY06\MAY25\
Data File : P45483.D
Acq On : 26 May 2006 4:06 am
Operator : AC
Sample : Q4052501
Misc : ICC 69
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 30 10:56:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue May 30 10:38:48 2006
Response via : Initial Calibration



Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2091801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER06\sep18\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

9/20/06.

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

	Line		Sample Name/Misc Info		
1)	Sample	1	A20101	FRNC2B	test
2)	Sample	2	A20102	FRBIO2B	test bio
3)	Sample	3	A20103	FRBIO2B	C2091801 ~~ANLS~~ FILLED
4)	Sample	4	A20104	FRBIO2B	i2091801
5)	Sample	5	A20105	FRBIO2B	i2091802
6)	Sample	6	A20106	FRBIO2B	i2091803
7)	Sample	7	A20107	FRBIO2B	i2091804
8)	Sample	8	A20108	FRBIO2B	i2091805
9)	Sample	9	A20109	FRBIO2B	i2091806
10)	Sample	10	A20110	FRBIO2B	dcm
11)	Sample	11	A20111	FRBIO2B	ss091806b03
12)	Sample	12	A20112	FRBIO2B	0609032-01
13)	Sample	13	A20113	FRBIO2B	0609032-01d
14)	Sample	14	A20114	FRBIO2B	0609032-02
15)	Sample	15	A20115	FRBIO2B	0609032-03
16)	Sample	16	A20116	FRBIO2B	0609032-04
17)	Sample	17	A20117	FRBIO2B	0609032-05
18)	Sample	18	A20118	FRBIO2B	0609032-06
[illegible]	Sample	19	A20119	FRBIO2B	0609032-07
[illegible]	Sample	20	A20120	FRBIO2B	C2091801 PASS.
21)	Sample	21	A20121	FRBIO2B	ans2091801 – FINS.

ICAL
Also used as C2091801A MML 9/27/6

5 level ICAL 10-5000

Not used MML 9/27/6

PAH #2 Sequence Information

SHC Continuing Calibration: ~~WHAD16 Conc.~~: 50ug/mL
PAH Continuing Calibration: WHAB55Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAD20 Conc.: 5.23mg/mL

FID Process Method: ~~HC20228.M~~ PAH Process Method: PAH20313.M

B1020918.M
B Bromarkers

MMG 9/29/06

Last Modified: Wed Sep 20 08:59:43 2006

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2092501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER06\sep25\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

MML 9/27/6

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line			Sample Name/Misc Info		
1)	Sample	1	A20125	FRBIO2B	TEST
2)	Sample	2	A20126	FRBIO2B	C2092501 ✓ PASS
3)	Sample	3	A20127	FRBIO2B	Ans2092501 ANS SS092706 AWS02 MML 9/27/6
4)	Sample	4	A20128	FRBIO2B	0609032-05 RE ✓
5)	Sample	5	A20129	FRBIO2B	C2092502 ✓ PASS

PAH #2 Sequence Information

SHC Continuing Calibration: WHAD16 Conc.: 50ug/mL
PAH Continuing Calibration: WHAB55 Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAD20 Conc.: 5.23mg/mL

FID Process Method: HC20228.M PAH Process Method: PAH20313.M

BIO20918.M
Biomarkers

MS 9/29/06

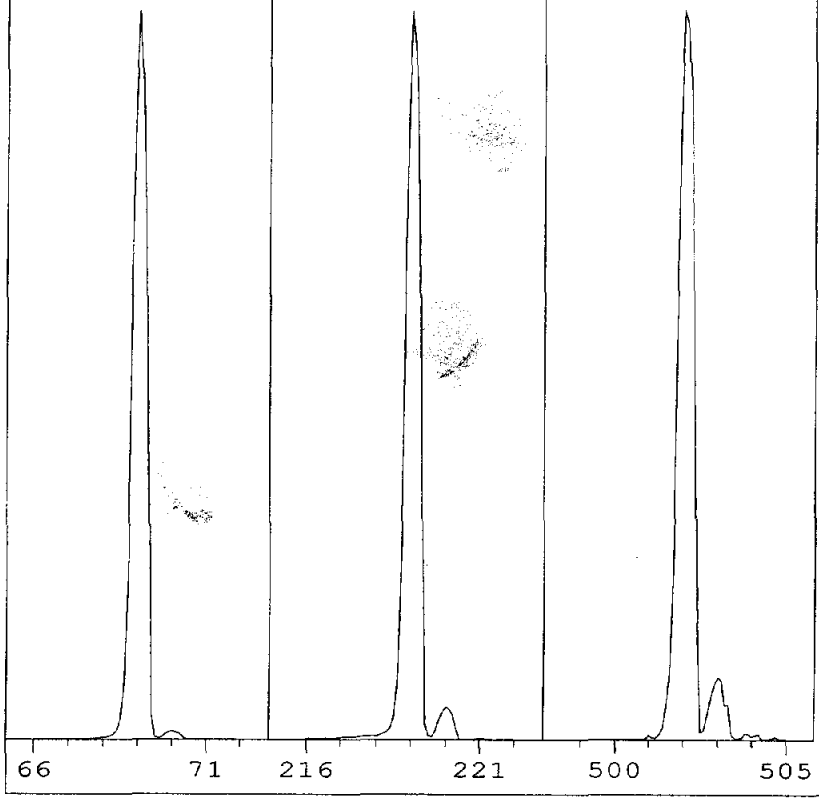
Last Modified: Mon Sep 25 16:45:54 2006

5973 Tune

Thu Sep 07 18:12:11 2006 Instrument: PAHINST2

C:\MSDCHEM\1\5973N\DFTPP.U

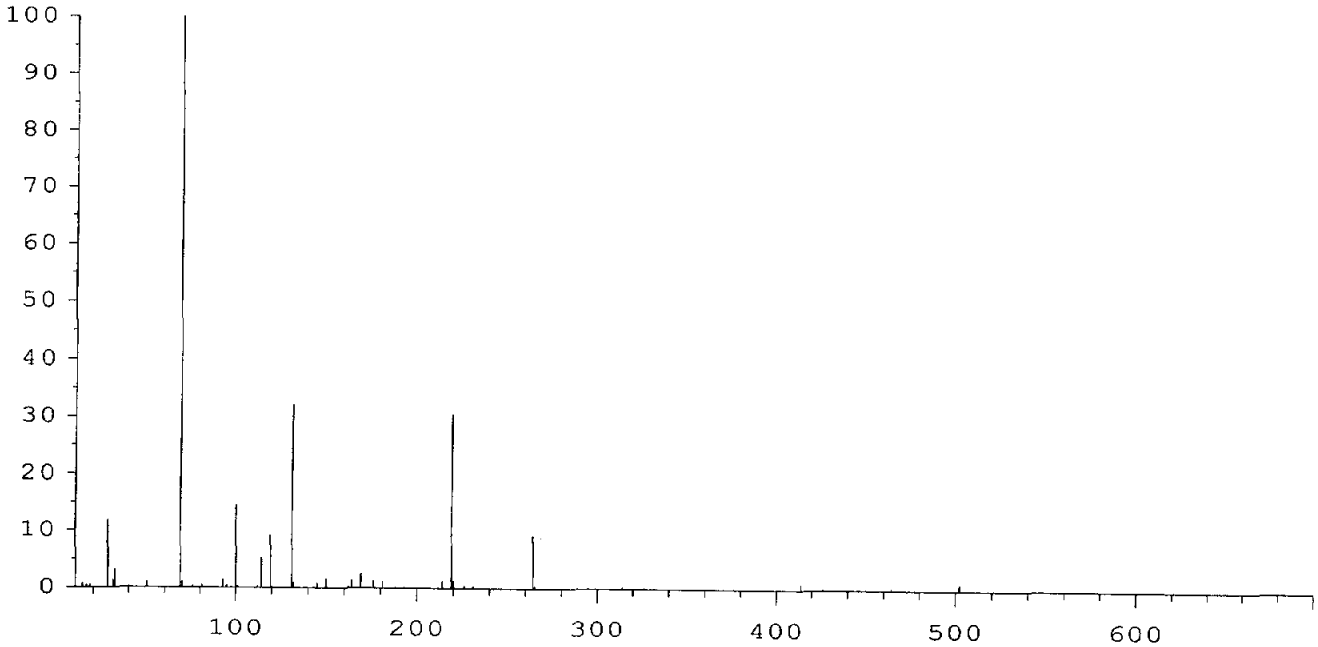
Mass	69.00	Mass	219.00	Mass	502.00
Ab	875845	Ab	260619	Ab	9033
Pw50	0.50	Pw50	0.49	Pw50	0.52



Ion Pol	POS	MassGain	129
		MassOffs	-11
Emission	34.6	AmuGain	2594
ElEnrgy	69.9	AmuOffs	134
Filament	2	Wid219	-0.031
		DC Pol	POS
Repeller	25.26		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	2506
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	Foreline	67
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10

150 peaks Base: 69.00 Abundance: 740672



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	740672	100.00	70.00	8279	1.12
219.00	225792	30.48	220.00	9357	4.14
502.10	8303	1.12	503.00	886	10.67

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	17.1	17.8	13.6	14.3	9.8	11.5
TARGET ABUND(%):	1.0	100.0	30.0	30.0	1.0	1.0
ACTUAL TUNE ABUND(%):	1.1	100.0	32.2	30.5	1.1	1.1

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\
Method File : BIO20918.M
Title : Decalins & Alkylated PAH's
Last Update : Mon Sep 25 10:18:30 2006
Response Via : Initial Calibration

MAL for AC 9/25/6

Calibration Files
10 =A20104.D ✓ 25 =A20105.D ✓ 100 =A20106.D ✓
1250=A20107.D ✓ 5000=A20108.D ✓ 1e4 =A20109.D ✓

		Compound	10	25	100	1250	5000	1e4	Avg	%RSD
1)	i	Acenaphthene-d10				ISTD				
2)	t	Decalin							0.000#	-1.00
3)	A1	trans-Decalin							0.000#	-1.00
4)	t	cis-Decalin							0.000#	-1.00
5)	A2	C1-Decalins							0.000#	-1.00
6)	A2	C2-Decalins							0.000#	-1.00
7)	A2	C3-Decalins							0.000#	-1.00
8)	A2	C4-Decalins							0.000#	-1.00
9)	A1	Naphthalene							0.000#	-1.00
10)	A2	C1-Naphthalenes							0.000#	-1.00
11)	A2	C2-Naphthalenes							0.000#	-1.00
12)	A2	C3-Naphthalenes							0.000#	-1.00
13)	A2	C4-Naphthalenes							0.000#	-1.00
14)	s	2-Methylnaphthale							0.000#	-1.00
15)	t	2-Methylnaphthale							0.000#	-1.00
16)	t	1-Methylnaphthale							0.000#	-1.00
17)	A1	Benzothiophene							0.000#	-1.00
18)	A2	C1-Benzo(b)thioph							0.000#	-1.00
19)	A2	C2-Benzo(b)thioph							0.000#	-1.00
20)	A2	C3-Benzo(b)thioph							0.000#	-1.00
21)	A2	C4-Benzo(b)thioph							0.000#	-1.00
22)	t	Biphenyl							0.000#	-1.00
23)	t	2,6-Dimethylnapht							0.000#	-1.00
24)	t	Dibenzofuran							0.000#	-1.00
25)	t	Acenaphthylene							0.000#	-1.00
26)	t	Acenaphthene							0.000#	-1.00
27)	t	2,3,5-Trimethylna							0.000#	-1.00
28)	A1	Fluorene							0.000#	-1.00
29)	A2	C1-Fluorenes							0.000#	-1.00
30)	A2	C2-Fluorenes							0.000#	-1.00
31)	A2	C3-Fluorenes							0.000#	-1.00
32)	A1	Dibenzothiophene							0.000#	-1.00
33)	A2	OTP							0.000#	-1.00
34)	A2	C1-Dibenzothiophe							0.000#	-1.00
35)	A2	C2-Dibenzothiophe							0.000#	-1.00
36)	A2	C3-Dibenzothiophe							0.000#	-1.00
37)	A2	C4-Dibenzothiophe							0.000#	-1.00
38)	A1	Phenanthrene							0.000#	-1.00
39)	A2	C1-Phenanthrenes/							0.000#	-1.00
40)	A2	C2-Phenanthrenes/							0.000#	-1.00
41)	A2	5AA IS BKGD							0.000#	-1.00
42)	A2	C3-Phenanthrenes/							0.000#	-1.00
43)	A2	C4-Phenanthrenes/							0.000#	-1.00
44)	A2	Retene							0.000#	-1.00
45)	t	Anthracene							0.000#	-1.00
46)	t	Carbazole							0.000#	-1.00
47)	t	1-Methylphenanthr							0.000#	-1.00
48)	A1	Fluoranthene							0.000#	-1.00
49)	A2	Benzo(b)fluorene							0.000#	-1.00
50)	s	Pyrene-d10							0.000#	-1.00
51)	A1	Pyrene							0.000#	-1.00
52)	A2	C1-Fluoranthenes/							0.000#	-1.00
53)	A2	C2-Fluoranthenes/							0.000#	-1.00
54)	A2	C3-Fluoranthenes/							0.000#	-1.00
55)	A2	C4-Fluoranthenes/							0.000#	-1.00

Method Path : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\
Method File : BIO20918.M
Title : Decalins & Alkylated PAH's
Last Update : Mon Sep 25 10:18:30 2006
Response Via : Initial Calibration

Calibration Files
10 =A20104.D 25 =A20105.D 100 =A20106.D
1250=A20107.D 5000=A20108.D 1e4 =A20109.D

		Compound	10	25	100	1250	5000	1e4	Avg	%RSD
56)	A1	Naphthobenzothiop							0.000#	-1.00
57)	A2	Naphthobenzothiop							0.000#	-1.00
58)	A2	Naphthobenzothiop							0.000#	-1.00
59)	A2	Naphthobenzothiop							0.000#	-1.00
60)	A2	C1-Naphthobenzoth							0.000#	-1.00
61)	A2	C2-Naphthobenzoth							0.000#	-1.00
62)	A2	C3-Naphthobenzoth							0.000#	-1.00
63)	A2	C4-Naphthobenzoth							0.000#	-1.00
64)	i	Chrysene-d12	----------ISTD----------							
65)	t	Benz[a]anthracene							0.000#	-1.00
66)	t	Chrysene							0.000#	-1.00
67)	A1	Chrysene/Tripheny							0.000#	-1.00
68)	A2	C1-Chrysenes							0.000#	-1.00
69)	A2	C2-Chrysenes							0.000#	-1.00
70)	A2	BBF-d12 Surr BKGD							0.000#	-1.00
71)	A2	C3-Chrysenes							0.000#	-1.00
72)	A2	C4-Chrysenes							0.000#	-1.00
73)	s	Benzo[b]fluoranth							0.000#	-1.00
74)	t	Benzo[b]fluoranth							0.000#	-1.00
75)	A1	Benzo[k]fluoranth							0.000#	-1.00
76)	A2	Benzo[a]fluoranth							0.000#	-1.00
77)	t	Benzo[e]pyrene							0.000#	-1.00
78)	t	Benzo[a]pyrene							0.000#	-1.00
79)	t	Perylene							0.000#	-1.00
80)	t	Indeno[1,2,3-cd]p							0.000#	-1.00
81)	t	Dibenz[a,h]anthra							0.000#	-1.00
82)	t	Benzo[g,h,i]peryl							0.000#	-1.00
83)	A1	17a(H),21B(H)-hop	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
84)	A2	Hopane (T19)	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
85)	A2	C23 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
86)	A2	C24 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
87)	A2	C25 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
88)	A2	C24 Tetracyclic T	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
89)	A2	C26 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
90)	A2	C26 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
91)	A2	C28 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
92)	A2	C28 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
93)	A2	C29 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
94)	A2	C29 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
95)	A2	18a-22,29,30-Tris	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
96)	A2	C30 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
97)	A2	C30 Tricyclic Ter	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
98)	A2	17a(H)-22,29,30-T	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
99)	A2	17a/b,21b/a 28,30	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
100)	A2	17a(H),21b(H)-25-	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
101)	A2	30-Norhopane (T15	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
102)	A2	18a(H)-30-Norneoh	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
103)	A2	17a(H)-Diahopane	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
104)	A2	30-Normoretane (T	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
105)	A2	18a(H)&18b(H)-Ole	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
106)	A2	Moretane (T20)	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
107)	A2	30-Homohopane-22S	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
108)	A2	30-Homohopane-22R	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
109)	A2	30,31-Bishomohopa	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
110)	A2	30,31-Bishomohopa	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62

Method Path : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\
Method File : BIO20918.M
Title : Decalins & Alkylated PAH's
Last Update : Mon Sep 25 10:18:30 2006
Response Via : Initial Calibration

Calibration Files
10 =A20104.D 25 =A20105.D 100 =A20106.D
1250=A20107.D 5000=A20108.D 1e4 =A20109.D

	Compound	10	25	100	1250	5000	1e4	Avg	%RSD
111) A2	30,31-Trishomohop	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
112) A2	30,31-Trishomohop	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
113) A2	Tetrakishomohopan	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
114) A2	Tetrakishomohopan	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
115) A2	Pentakishomohopan	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
116) A2	Pentakishomohopan	0.458	0.447	0.471	0.511	0.451	0.419	0.459	6.62
117) SA1	5B(H)Cholane - Su	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
118) A2	13b(H),17a(H)-20S	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
119) A2	13b(H),17a(H)-20R	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
120) A2	13b,17a-20S-Methy	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
121) A2	14a(H),17a(H)-20S	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
122) A2	14a(H),17a(H)-20R	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
123) A2	13b,17a-20R-Ethyl	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
124) A2	13a,17b-20S-Ethyl	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
125) A2	14a,17a-20S-Methy	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
126) A2	14a,17a-20R-Methy	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
127) A2	14a(H),17a(H)-20S	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
128) A2	14a(H),17a(H)-20R	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
129) A2	14b(H),17b(H)-20R	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
130) A2	14b(H),17b(H)-20S	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
131) A2	14b,17b-20R-Methy	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
132) A2	14b,17b-20S-Methy	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
133) A2	14b(H),17b(H)-20R	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
134) A2	14b(H),17b(H)-20S	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
135) A2	C26,20R- +C27,20S	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
136) A2	C28,20S-triaromat	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
137) A2	C27,20R-triaromat	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96
138) A2	C28,20R-triaromat	0.199	0.219	0.217	0.218	0.224	0.214	0.215	3.96

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20104.D
Acq On : 18 Sep 2006 5:28 pm
Operator : AC
Sample : i2091801
Misc : ab60
ALS Vial : 4 Sample Multiplier: 1

MAL for AC 9/26/06

Quant Time: Sep 25 10:05:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 10:59:39 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.45	240	36139m	500.00	ng/mL	0.10

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	42.91	217	144m	9.59	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.96%#	

Target Compounds

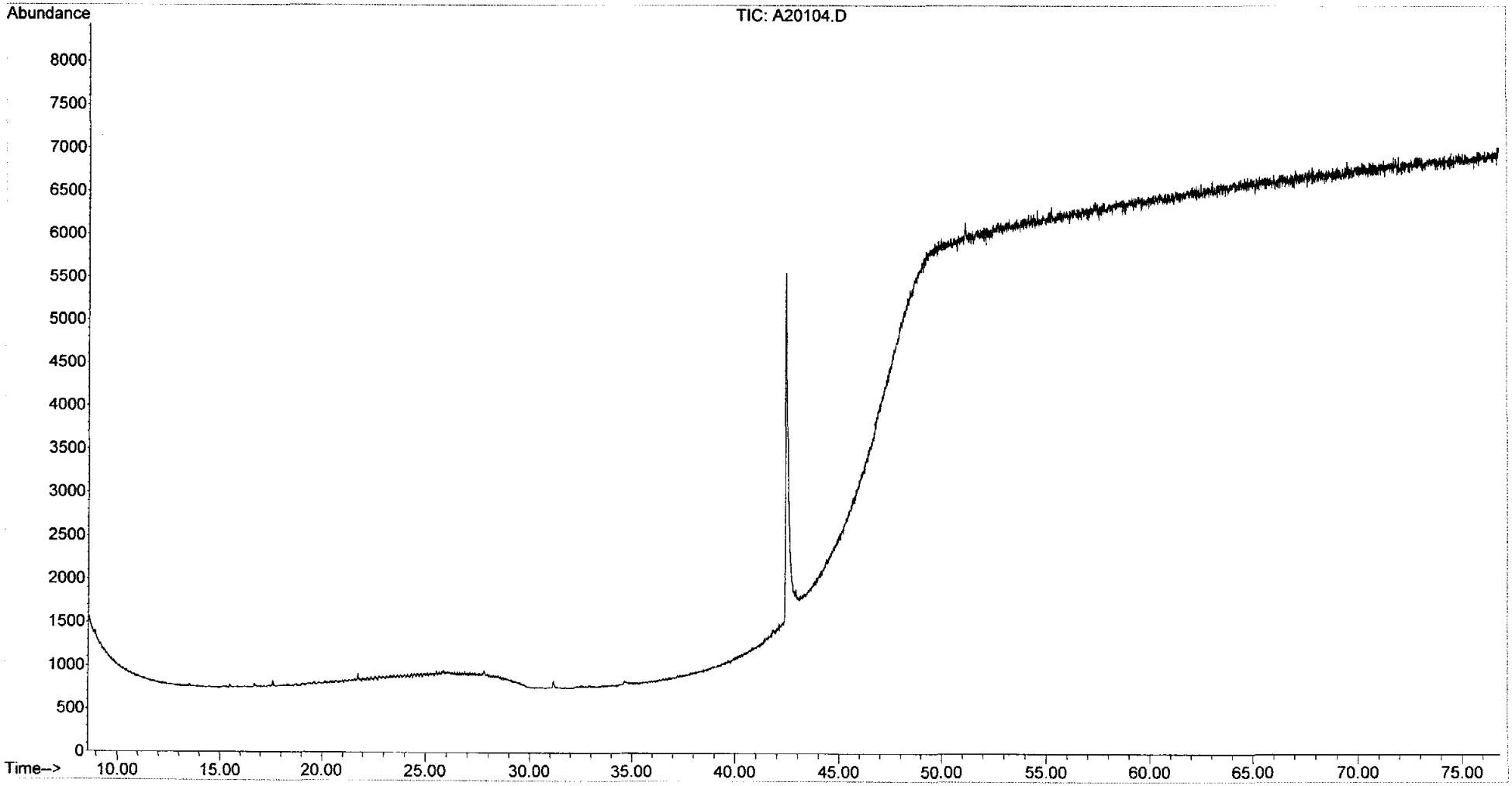
						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.14	191	331m	11.00	ng/mL	
84) Hopane (T19)	51.14	191	336m	11.11	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20104.D
Acq On : 18 Sep 2006 5:28 pm
Operator : AC
Sample : i2091801
Misc : ab60
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 10:05:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 10:59:39 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20105.D
Acq On : 18 Sep 2006 6:59 pm
Operator : AC
Sample : i2091802
Misc : ab59
ALS Vial : 5 Sample Multiplier: 1

MAL for AC 9/25/6

Quant Time: Sep 25 10:03:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:01:50 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.45	240	32813	500.00	ng/mL	0.00

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.93	217	359m	25.84	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.58%#			

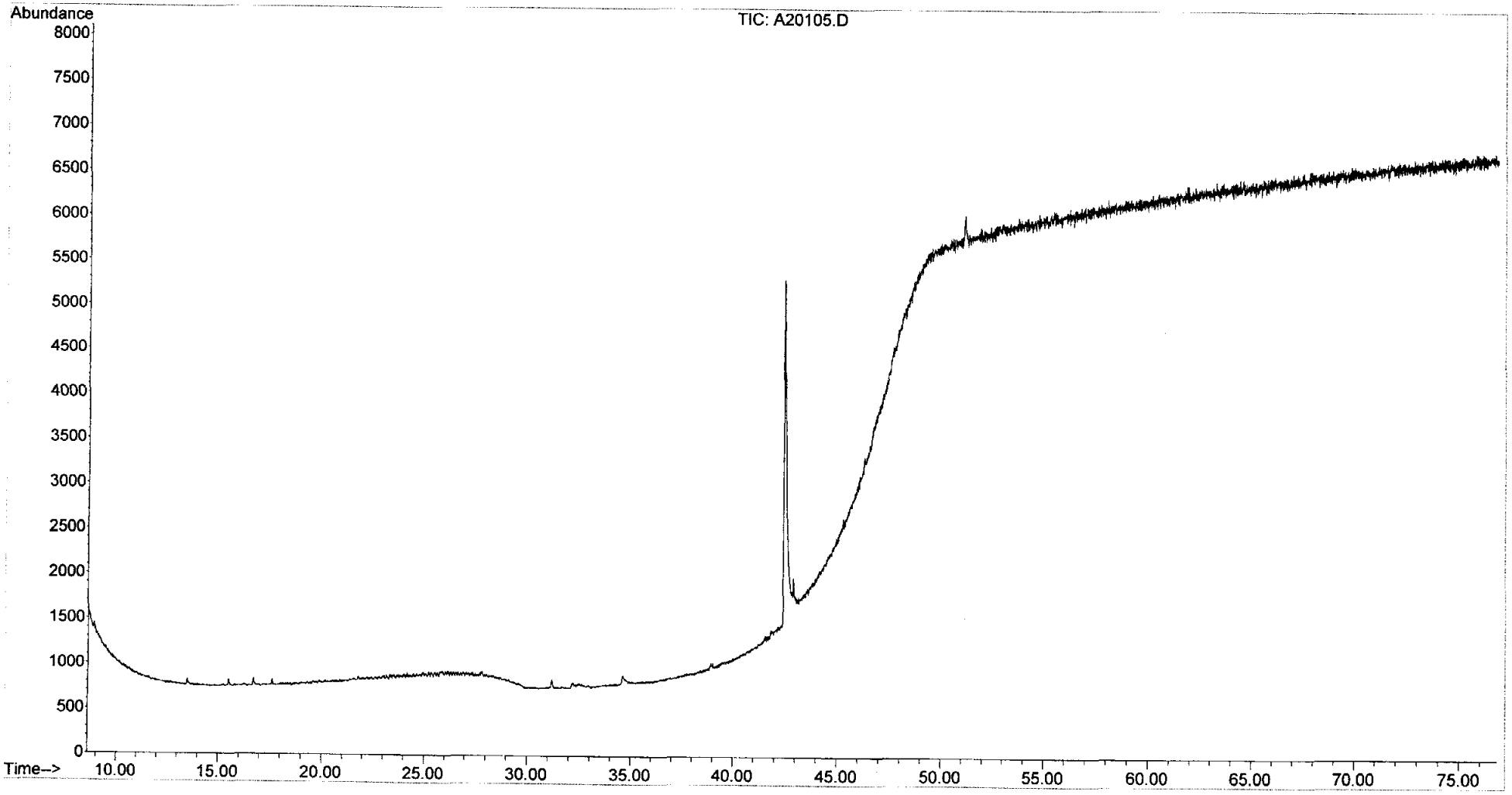
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.14	191	734m	26.55	ng/mL	
84) Hopane (T19)	51.14	191	809m	26.56	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20105.D
Acq On : 18 Sep 2006 6:59 pm
Operator : AC
Sample : i2091802
Misc : ab59
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 10:03:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:01:50 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20106.D
Acq On : 18 Sep 2006 8:29 pm
Operator : AC
Sample : i2091803
Misc : ab58
ALS Vial : 6 Sample Multiplier: 1

MAL for AC 9/25/6

Quant Time: Sep 25 10:11:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:03:28 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.44	240	35371	500.00	ng/mL	-0.01

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.92	217	1536	101.80	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.18%#			

Target Compounds

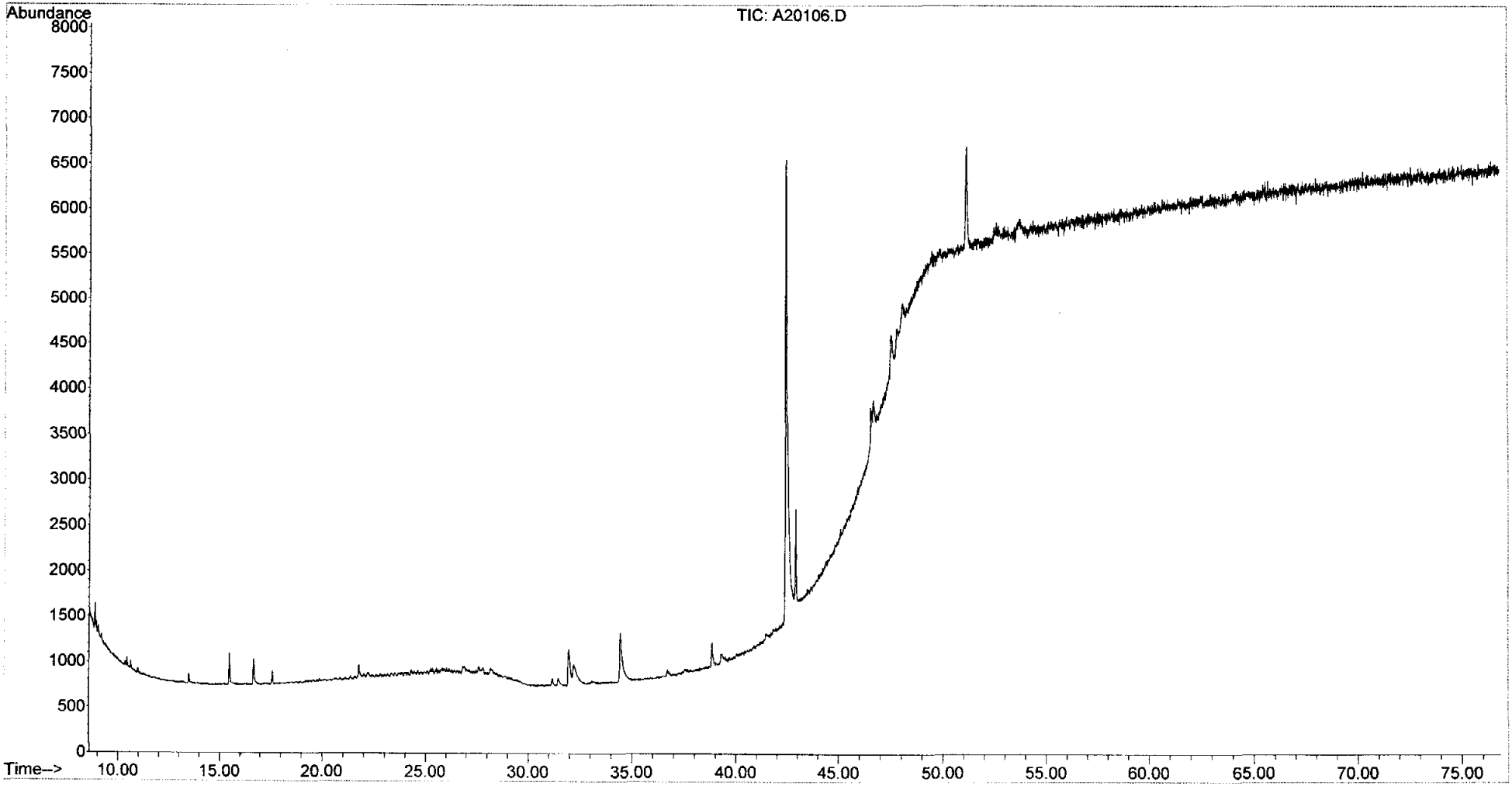
						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.12	191	3333m	106.40	ng/mL	
84) Hopane (T19)	51.12	191	3499m	101.83	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20106.D
Acq On : 18 Sep 2006 8:29 pm
Operator : AC
Sample : i2091803
Misc : ab58
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 10:11:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:03:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : i2091804 Also used as C2091801A MAL 9/27/6
Misc : ab55
ALS Vial : 7 Sample Multiplier: 1

9/19/06

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration

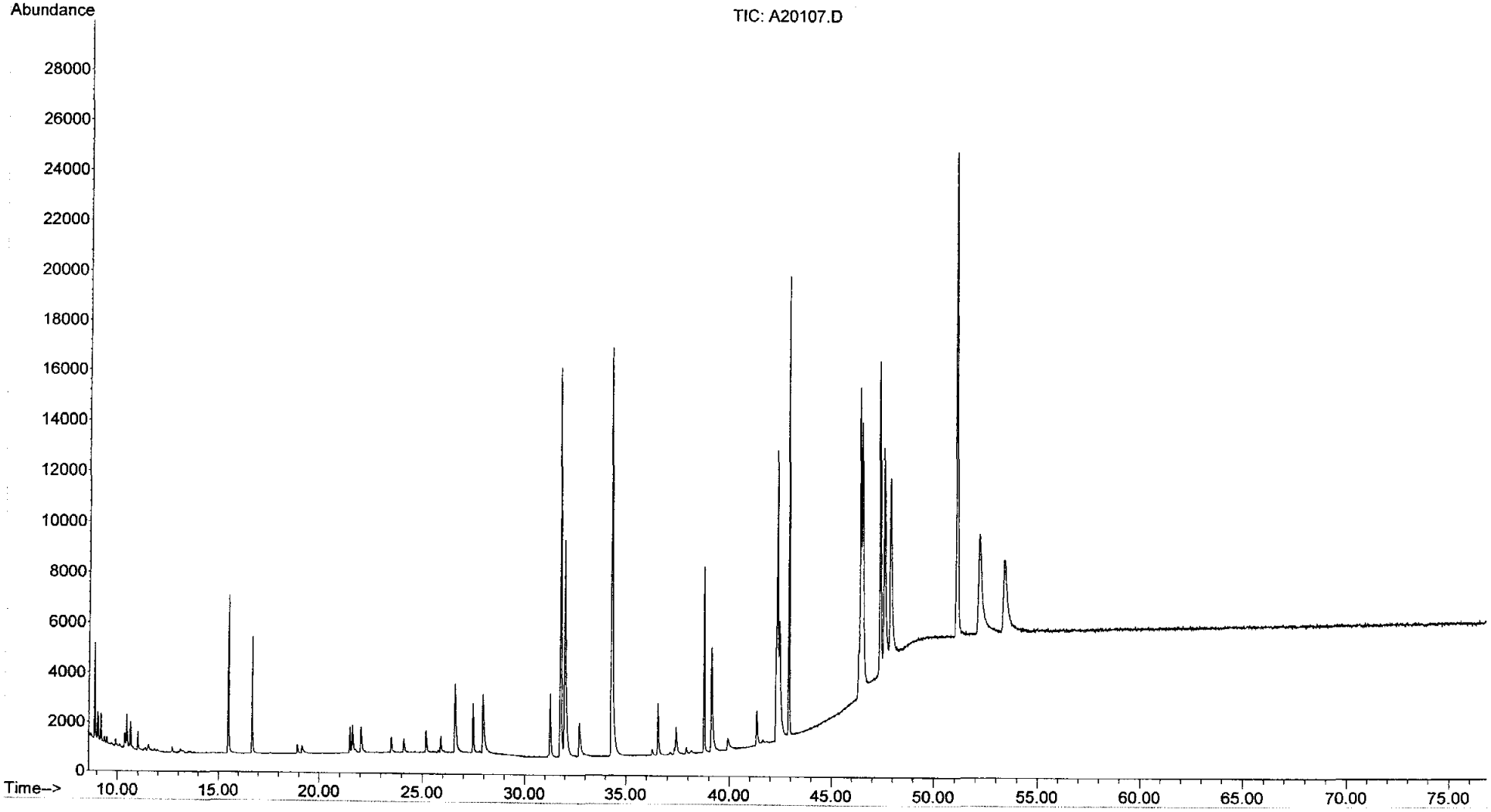
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.34	240	46648	500.00	ng/mL	-0.10
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.91	217	25438	1275.10	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 127.51%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.13	191	59548m	1375.68	ng/mL	
84) Hopane (T19)	51.13	191	59640m	1276.52	ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : i2091804
Misc : ab55
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20108.D
Acq On : 18 Sep 2006 11:28 pm
Operator : AC
Sample : i2091805
Misc : ab54
ALS Vial : 8 Sample Multiplier: 1

9/19/06

Quant Time: Sep 19 11:08:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:06:57 2006
Response via : Initial Calibration

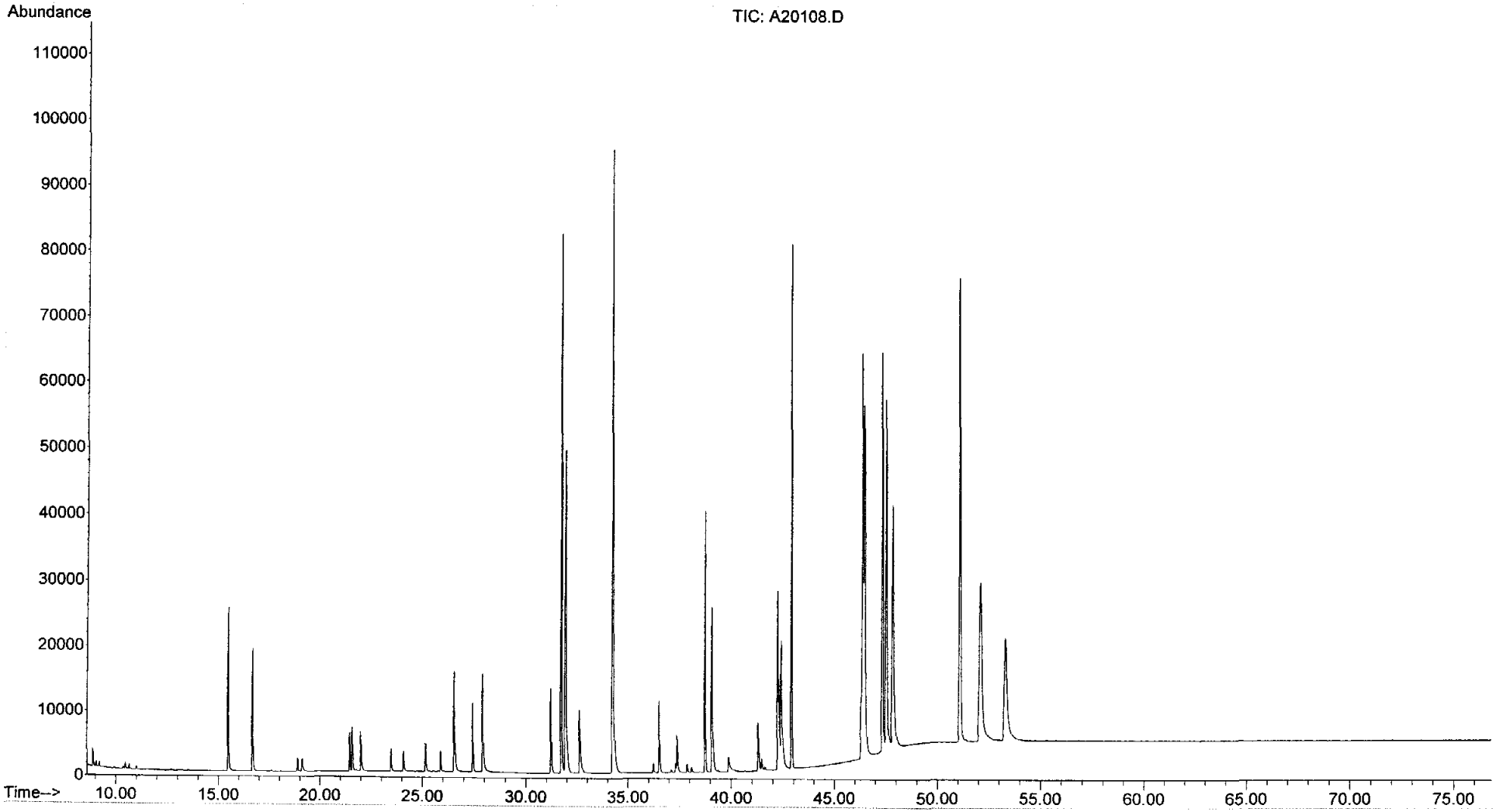
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.31	240	48922	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.91	217	109690	5240.35	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 524.04%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.13	191	220610	4861.84	ng/mL#	85
84) Hopane (T19)	51.13	191	220610	4517.99	ng/mL#	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP18\
Data File : A20108.D
Acq On : 18 Sep 2006 11:28 pm
Operator : AC
Sample : i2091805
Misc : ab54
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:08:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:06:57 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	49	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.65#
3	A1	trans-Decalin	0.486	0.489	-0.6	50	0.00
4	t	cis-Decalin	0.378	0.376	0.5	50	0.00
5	A2	C1-Decalins	0.486	0.000#	100.0#	0#	-18.41#
6	A2	C2-Decalins	0.486	0.000#	100.0#	0#	-19.73#
7	A2	C3-Decalins	0.486	0.000#	100.0#	0#	-22.20#
8	A2	C4-Decalins	0.486	0.000#	100.0#	0#	-25.58#
9	A1	Naphthalene	2.190	2.150	1.8	49	0.00
10	A2	C1-Naphthalenes	2.190	0.000#	100.0#	0#	-22.58#
11	A2	C2-Naphthalenes	2.190	0.000#	100.0#	0#	-25.42#
12	A2	C3-Naphthalenes	2.190	0.000#	100.0#	0#	-27.75#
13	A2	C4-Naphthalenes	2.190	0.000#	100.0#	0#	-30.51#
14	s	2-Methylnaphthalene-d10	1.127	1.103	2.1	49	0.00
15	t	2-Methylnaphthalene	1.470	1.463	0.5	49	0.00
16	t	1-Methylnaphthalene	1.383	1.368	1.1	49	0.00
17	A1	Benzothiophene	1.750	1.801	-2.9	50	0.00
18	A2	C1-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-22.15#
19	A2	C2-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-25.61#
20	A2	C3-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-27.59#
21	A2	C4-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-29.32#
22	t	Biphenyl	1.855	1.725	7.0	48	0.00
23	t	2,6-Dimethylnaphthalene	1.278	1.254	1.9	49	0.00
24	t	Dibenzofuran	1.894	1.869	1.3	48	0.00
25	t	Acenaphthylene	2.046	2.154	-5.3	51	0.00
26	t	Acenaphthene	1.329	1.323	0.5	49	0.00
27	t	2,3,5-Trimethylnaphthalene	1.126	1.101	2.2	48	0.00
28	A1	Fluorene	1.575	1.492	5.3	49	0.00
29	A2	C1-Fluorenes	1.575	0.000#	100.0#	0#	-31.27#
30	A2	C2-Fluorenes	1.575	0.000#	100.0#	0#	-33.46#
31	A2	C3-Fluorenes	1.575	0.000#	100.0#	0#	-35.30#
32	A1	Dibenzothiophene	1.936	1.886	2.6	48	0.00
33	A2	4-Methyldibenzothiophene(4M	1.936	0.000#	100.0#	0#	-34.00#
34	A2	2/3-Methyldibenzothiophene(	1.936	0.000#	100.0#	0#	-34.35#
35	A2	1-Methyldibenzothiophene(1M	1.936	0.000#	100.0#	0#	-34.76#
36	A2	OTP	1.936	0.000#	100.0#	0#	-34.41#
37	A2	C1-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-34.00#
38	A2	C2-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-35.68#
39	A2	C3-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-37.48#
40	A2	C4-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-39.17#
41	A1	Phenanthrene	2.206	2.096	5.0	48	0.00
42	A2	3-Methylphenanthrene(3MP)	2.206	0.000#	100.0#	0#	-34.68#
43	A2	2/4-Methylphenanthrene(2MP)	2.206	0.000#	100.0#	0#	-34.79#
44	A2	2-Methylanthracene(2MA)	2.206	0.000#	100.0#	0#	-34.95#
45	A2	9-Methylphenanthrene(9MP)	2.206	0.000#	100.0#	0#	-35.13#
46	A2	1-Methylphenanthrene(1MP)	2.206	0.000#	100.0#	0#	-35.22#
47	A2	C1-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-35.13#
48	A2	C2-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-36.95#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	A2	5AA IS BKGD	2.206	0.000#	100.0#	0#	-36.71#
50	A2	C3-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-38.78#
51	A2	C4-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-40.95#
52	t	Retene	0.561	0.476	15.2	48	0.00
53	t	Anthracene	1.964	1.985	-1.1	49	0.00
54	t	Carbazole	1.881	1.946	-3.5	52	0.00
55	t	1-Methylphenanthrene	1.536	1.476	3.9	47	0.00
56	A1	Fluoranthene	2.248	2.129	5.3	47	0.00
57	t	Benzo(b)fluorene	1.271	1.320	-3.9	53	0.00
58	s	Pyrene-d10	2.063	1.922	6.8	47	0.00
59	A1	Pyrene	2.260	2.172	3.9	47	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-39.76#
61	A2	C2-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-41.56#
62	A2	C3-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-43.57#
63	A2	C4-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-44.92#
64	A1	Naphthobenzothiophene	1.937	1.874	3.3	48	0.00
65	A2	Naphthobenzothiophene-2,1-D	1.937	1.874	3.3	48	0.00
66	A2	Naphthobenzothiophene-1,2-D	1.937	0.000#	100.0#	0#	-42.55#
67	A2	Naphthobenzothiophene-2,3-D	1.937	0.000#	100.0#	0#	-42.85#
68	A2	C1-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-43.61#
69	A2	C2-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-45.61#
70	A2	C3-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-47.21#
71	A2	C4-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-48.29#
72	i	Chrysene-d12	1.000	1.000	0.0	47	0.00
73	t	Benz[a]anthracene	1.315	1.345	-2.3	48	0.00
74	A1	Chrysene	1.297	1.309	-0.9	47	0.00
75	A2	Chrysene/Triphenylene	1.297	1.310	-1.0	47	0.00
76	A2	C1-Chrysenes	1.297	0.000#	100.0#	0#	-44.77#
77	A2	C2-Chrysenes	1.297	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.297	0.000#	100.0#	0#	-47.09#
79	A2	C3-Chrysenes	1.297	0.000#	100.0#	0#	-49.55#
80	A2	C4-Chrysenes	1.297	0.000#	100.0#	0#	-49.15#
81	s	Benzo[b]fluoranthene-d12	1.046	1.054	-0.8	49	0.00
82	t	Benzo[b]fluoranthene	1.392	1.429	-2.7	48	0.00
83	A1	Benzo[k]fluoranthene	1.420	1.458	-2.7	49	0.00
84	A2	Benzo[a]fluoranthene	1.420	0.000#	100.0#	0#	-47.71#
85	t	Benzo[e]pyrene	1.333	1.349	-1.2	48	0.00
86	t	Benzo[a]pyrene	1.285	1.395	-8.6	52	0.00
87	t	Perylene	1.278	1.348	-5.5	51	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.227	1.414	-15.2	58	0.00
89	t	Dibenz[a,h]anthracene	1.194	1.421	-19.0	58	0.00
90	t	Benzo[g,h,i]perylene	1.310	1.415	-8.0	53	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.503	0.589	-17.1	49	0.00
92	A2	Hopane (T19)	0.503	0.589	-17.1	49	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.503	0.000#	100.0#	0#	-40.86#
94	A2	C24 Tricyclic Terpane (T5)	0.503	0.000#	100.0#	0#	-41.58#
95	A2	C25 Tricyclic Terpane (T6)	0.503	0.000#	100.0#	0#	-43.07#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	A2	C24 Tetracyclic Terpane (T6	0.503	0.000#	100.0#	0#	-44.38#
97	A2	C26 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-44.12#
98	A2	C26 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-44.22#
99	A2	C28 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-46.50#
100	A2	C28 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-46.66#
101	A2	C29 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-47.19#
102	A2	C29 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-47.39#
103	A2	18a-22,29,30-Trisnorneohopa	0.503	0.000#	100.0#	0#	-48.51#
104	A2	C30 Tricyclic Terpane-22S	0.503	0.000#	100.0#	0#	-48.61#
105	A2	C30 Tricyclic Terpane-22R	0.503	0.000#	100.0#	0#	-48.85#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.503	0.000#	100.0#	0#	-49.06#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.503	0.000#	100.0#	0#	-50.27#
108	A2	17a(H),21b(H)-25-Norhopane	0.503	0.000#	100.0#	0#	-50.06#
109	A2	30-Norhopane (T15)	0.503	0.000#	100.0#	0#	-50.93#
110	A2	18a(H)-30-Norneohopane-C29T	0.503	0.000#	100.0#	0#	-51.03#
111	A2	17a(H)-Diahopane (X)	0.503	0.000#	100.0#	0#	-51.16#
112	A2	30-Normoretane (T17)	0.503	0.000#	100.0#	0#	-51.70#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.503	0.000#	100.0#	0#	-52.10#
114	A2	Moretane (T20)	0.503	0.000#	100.0#	0#	-52.99#
115	A2	30-Homohopane-22S (T21)	0.503	0.000#	100.0#	0#	-54.09#
116	A2	30-Homohopane-22R (T22)	0.503	0.000#	100.0#	0#	-54.32#
117	A2	30,31-Bishomohopane-22S (T2	0.503	0.000#	100.0#	0#	-55.65#
118	A2	30,31-Bishomohopane-22R (T2	0.503	0.000#	100.0#	0#	-56.05#
119	A2	30,31-Trishomohopane-22S (T	0.503	0.000#	100.0#	0#	-57.80#
120	A2	30,31-Trishomohopane-22R (T	0.503	0.000#	100.0#	0#	-58.41#
121	A2	Tetrakishomohopane-22S (T32	0.503	0.000#	100.0#	0#	-60.43#
122	A2	Tetrakishomohopane-22R (T33	0.503	0.000#	100.0#	0#	-61.36#
123	A2	Pentakishomohopane-22S (T34	0.503	0.000#	100.0#	0#	-63.57#
124	A2	Pentakishomohopane-22R (T35	0.503	0.000#	100.0#	0#	-64.89#
125	SA1	5B(H)Cholane - Surr	0.250	0.249	0.4	48	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.250	0.000#	100.0#	0#	-45.34#
127	A2	13b(H),17a(H)-20R-Diacholes	0.250	0.000#	100.0#	0#	-45.76#
128	A2	13b,17a-20S-Methyldiacholes	0.250	0.000#	100.0#	0#	-46.46#
129	A2	14a(H),17a(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.33#
130	A2	14a(H),17a(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.84#
131	A2	13b,17a-20R-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.12#
132	A2	13a,17b-20S-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.40#
133	A2	14a,17a-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.56#
134	A2	14a,17a-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-49.27#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-49.62#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-50.53#
137	A2	14b(H),17b(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.42#
138	A2	14b(H),17b(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.50#
139	A2	14b,17b-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-48.72#
140	A2	14b,17b-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.80#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-49.87#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-49.91#
143	A2	C26,20R- +C27,20S- triaroma	0.250	0.000#	100.0#	0#	-49.56#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
144 A2	C28,20S-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.44#
145 A2	C27,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.88#
146 A2	C28,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-52.09#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.76	164	46003m	500.00 ng/mL	0.00
72) Chrysene-d12	43.19	240	65427m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	126864	1223.42 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 122.34%		
58) Pyrene-d10	38.29	212	221028	1164.22 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 116.42%		
81) Benzo[b]fluoranthene-d12	47.09	264	172323	1258.99 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 125.90%		
125) 5B(H)Cholane - Surr	43.82	217	40657	1240.70 ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 124.07%		
Target Compounds					Qvalue
3) trans-Decalin	16.47	138	28107	628.62 ng/mL	100
4) cis-Decalin	17.68	138	21626	622.24 ng/mL	100
9) Naphthalene	19.88	128	247242	1227.23 ng/mL#	100
15) 2-Methylnaphthalene	22.57	142	168232	1243.74 ng/mL#	100
16) 1-Methylnaphthalene	22.99	142	157366	1237.06 ng/mL#	100
17) Benzothiophene	20.10	134	207100	1286.04 ng/mL	100
22) Biphenyl	24.45	154	198376	1162.43 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.05	156	144228	1226.15 ng/mL#	100
24) Dibenzofuran	27.52	168	214914	1233.08 ng/mL	98
25) Acenaphthylene	26.15	152	247702	1315.59 ng/mL#	100
26) Acenaphthene	26.89	153	152120	1244.17 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.44	170	126665	1223.12 ng/mL	96
28) Fluorene	28.90	166	171606	1184.57 ng/mL	100
32) Dibenzothiophene	32.21	184	216902	1217.95 ng/mL	99
41) Phenanthrene	32.71	178	241023	1187.43 ng/mL	100
52) Retene	39.69	234	54784	1062.29 ng/mL#	59
53) Anthracene	32.89	178	228247	1263.31 ng/mL	100
54) Carbazole	33.56	167	223773m	1292.86 ng/mL	
55) 1-Methylphenanthrene	35.21	192	169711	1201.01 ng/mL	100
56) Fluoranthene	37.48	202	244854m	1184.01 ng/mL	
57) Benzo(b)fluorene	39.99	216	151782	1298.05 ng/mL	100
59) Pyrene	38.36	202	249823	1201.35 ng/mL	98
64) Naphthobenzothiophene	42.20	234	215480	1208.85 ng/ml#	64
65) Naphthobenzothiophene-2,1-	42.20	234	215480	1208.85 ng/mL	100
73) Benz[a]anthracene	43.13	228	219962	1278.28 ng/mL	99
74) Chrysene	43.29	228	214177m	1261.92 ng/mL	
75) Chrysene/Triphenylene	43.29	228	214344m	1262.90 ng/mL	
82) Benzo[b]fluoranthene	47.18	252	233740m	1283.13 ng/mL	
83) Benzo[k]fluoranthene	47.26	252	238488m	1283.76 ng/mL	
85) Benzo[e]pyrene	48.18	252	220712	1265.67 ng/mL	100
86) Benzo[a]pyrene	48.36	252	228141	1357.09 ng/mL	100
87) Perylene	48.67	252	220503	1318.40 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.16	276	231333m	1441.08 ng/mL	
89) Dibenz[a,h]anthracene	53.22	278	232387m	1486.93 ng/mL	
90) Benzo[g,h,i]perylene	54.45	276	231445	1349.74 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.29	191	96327	1464.95 ng/mL#	80
92) Hopane (T19)	52.29	191	96327	1464.95 ng/mL#	80

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration

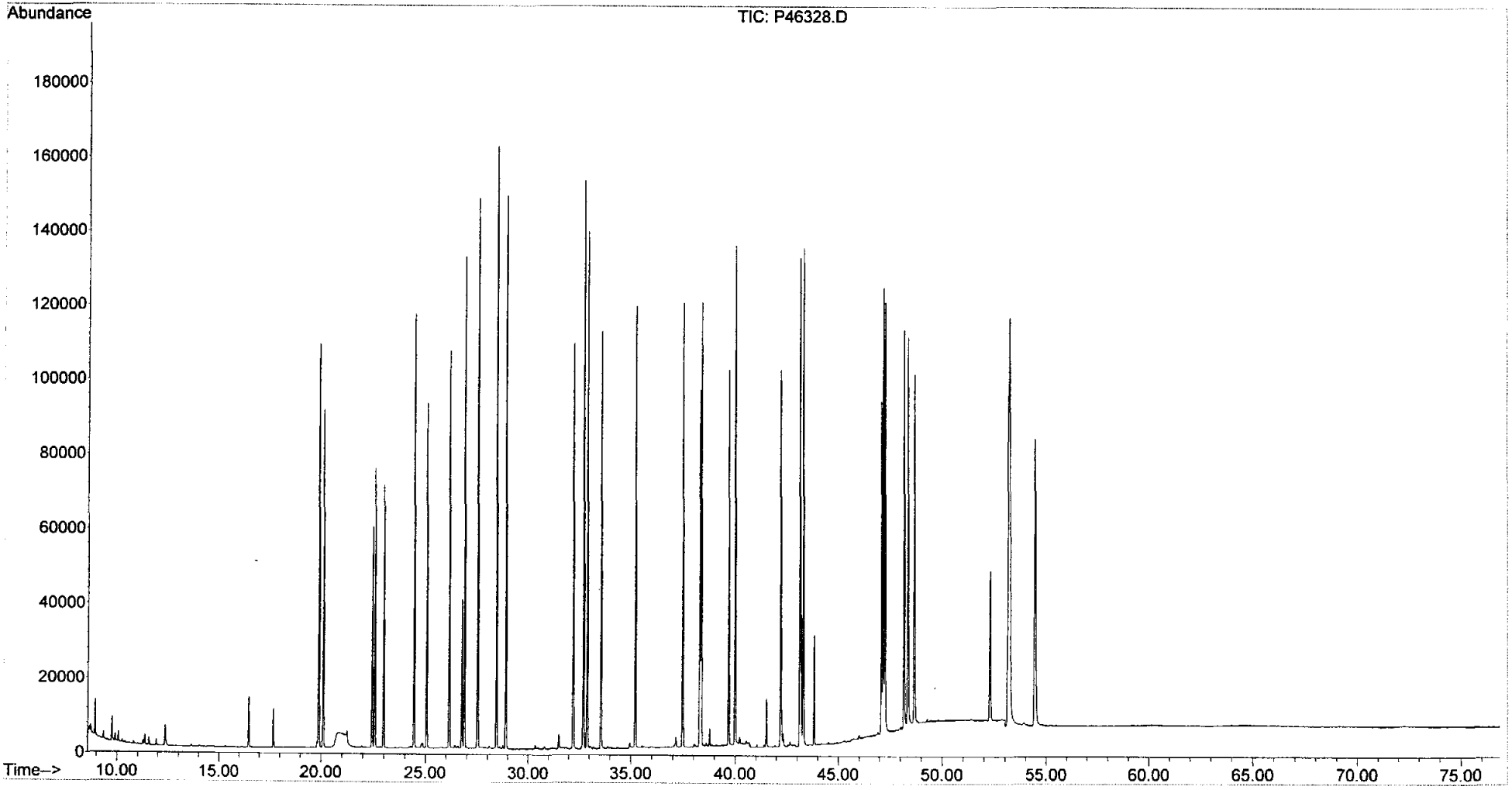
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46328.D
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 13 16:15:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 13:35:48 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46358.D
Acq On : 13 Sep 2006 3:19 pm
Operator : AC
Sample : C4091202
Misc : CC
ALS Vial : 17 Sample Multiplier: 1

9/13/06

Quant Time: Sep 13 17:12:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	40	0.02
2	t	Decalin	0.000	0.000#	0.0	0#	-16.65#
3	A1	trans-Decalin	0.486	0.490	-0.8	41	0.00
4	t	cis-Decalin	0.378	0.374	1.1	40	0.00
5	A2	C1-Decalins	0.486	0.000#	100.0#	0#	-18.41#
6	A2	C2-Decalins	0.486	0.000#	100.0#	0#	-19.73#
7	A2	C3-Decalins	0.486	0.000#	100.0#	0#	-22.20#
8	A2	C4-Decalins	0.486	0.000#	100.0#	0#	-25.58#
9	A1	Naphthalene	2.190	2.192	-0.1	41	0.00
10	A2	C1-Naphthalenes	2.190	0.000#	100.0#	0#	-22.58#
11	A2	C2-Naphthalenes	2.190	0.000#	100.0#	0#	-25.42#
12	A2	C3-Naphthalenes	2.190	0.000#	100.0#	0#	-27.75#
13	A2	C4-Naphthalenes	2.190	0.000#	100.0#	0#	-30.51#
14	s	2-Methylnaphthalene-d10	1.127	1.111	1.4	40	0.00
15	t	2-Methylnaphthalene	1.470	1.482	-0.8	41	0.00
16	t	1-Methylnaphthalene	1.383	1.384	-0.1	40	0.00
17	A1	Benzothiophene	1.750	1.801	-2.9	41	0.00
18	A2	C1-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-22.15#
19	A2	C2-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-25.61#
20	A2	C3-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-27.59#
21	A2	C4-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-29.32#
22	t	Biphenyl	1.855	1.766	4.8	40	0.00
23	t	2,6-Dimethylnaphthalene	1.278	1.259	1.5	40	0.02
24	t	Dibenzofuran	1.894	1.888	0.3	40	0.02
25	t	Acenaphthylene	2.046	2.217	-8.4	43	0.00
26	t	Acenaphthene	1.329	1.346	-1.3	41	0.00
27	t	2,3,5-Trimethylnaphthalene	1.126	1.099	2.4	39	0.02
28	A1	Fluorene	1.575	1.505	4.4	40	0.02
29	A2	C1-Fluorenes	1.575	0.000#	100.0#	0#	-31.27#
30	A2	C2-Fluorenes	1.575	0.000#	100.0#	0#	-33.46#
31	A2	C3-Fluorenes	1.575	0.000#	100.0#	0#	-35.30#
32	A1	Dibenzothiophene	1.936	1.888	2.5	39	0.02
33	A2	4-Methyldibenzothiophene(4M	1.936	0.000#	100.0#	0#	-34.00#
34	A2	2/3-Methyldibenzothiophene(	1.936	0.000#	100.0#	0#	-34.35#
35	A2	1-Methyldibenzothiophene(1M	1.936	0.000#	100.0#	0#	-34.76#
36	A2	OTP	1.936	0.000#	100.0#	0#	-34.41#
37	A2	C1-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-34.00#
38	A2	C2-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-35.68#
39	A2	C3-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-37.48#
40	A2	C4-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-39.17#
41	A1	Phenanthrene	2.206	2.099	4.9	39	0.02
42	A2	3-Methylphenanthrene(3MP)	2.206	0.000#	100.0#	0#	-34.68#
43	A2	2/4-Methylphenanthrene(2MP)	2.206	0.000#	100.0#	0#	-34.79#
44	A2	2-Methylanthracene(2MA)	2.206	0.000#	100.0#	0#	-34.95#
45	A2	9-Methylphenanthrene(9MP)	2.206	0.000#	100.0#	0#	-35.13#
46	A2	1-Methylphenanthrene(1MP)	2.206	0.000#	100.0#	0#	-35.22#
47	A2	C1-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-35.13#
48	A2	C2-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-36.95#
49	A2	5AA IS BKGD	2.206	0.000#	100.0#	0#	-36.71#
50	A2	C3-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-38.78#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46358.D
Acq On : 13 Sep 2006 3:19 pm
Operator : AC
Sample : C4091202
Misc : CC
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 13 17:12:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-40.95#
52	t	Retene	0.561	0.481	14.3	39	0.02
53	t	Anthracene	1.964	2.022	-3.0	40	0.02
54	t	Carbazole	1.881	1.947	-3.5	42	0.02
55	t	1-Methylphenanthrene	1.536	1.476	3.9	39	0.02
56	A1	Fluoranthene	2.248	2.142	4.7	38	0.02
57	t	Benzo(b)fluorene	1.271	1.352	-6.4	45	0.02
58	s	Pyrene-d10	2.063	1.921	6.9	38	0.02
59	A1	Pyrene	2.260	2.173	3.8	38	0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-39.76#
61	A2	C2-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-41.56#
62	A2	C3-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-43.57#
63	A2	C4-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-44.92#
64	A1	Naphthobenzothiophene	1.937	1.909	1.4	40	0.02
65	A2	Naphthobenzothiophene-2,1-D	1.937	1.909	1.4	40	0.02
66	A2	Naphthobenzothiophene-1,2-D	1.937	0.000#	100.0#	0#	-42.55#
67	A2	Naphthobenzothiophene-2,3-D	1.937	0.000#	100.0#	0#	-42.85#
68	A2	C1-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-43.61#
69	A2	C2-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-45.61#
70	A2	C3-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-47.21#
71	A2	C4-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-48.29#
72	i	Chrysene-d12	1.000	1.000	0.0	39	0.02
73	t	Benz[a]anthracene	1.315	1.365	-3.8	41	0.02
74	A1	Chrysene	1.297	1.309	-0.9	39	0.02
75	A2	Chrysene/Triphenylene	1.297	1.315	-1.4	39	0.02
76	A2	C1-Chrysenes	1.297	0.000#	100.0#	0#	-44.77#
77	A2	C2-Chrysenes	1.297	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.297	0.000#	100.0#	0#	-47.09#
79	A2	C3-Chrysenes	1.297	0.000#	100.0#	0#	-49.55#
80	A2	C4-Chrysenes	1.297	0.000#	100.0#	0#	-49.15#
81	s	Benzo[b]fluoranthene-d12	1.046	1.121	-7.2	43	0.03
82	t	Benzo[b]fluoranthene	1.392	1.535	-10.3	43	0.02
83	A1	Benzo[k]fluoranthene	1.420	1.529	-7.7	42	0.02
84	A2	Benzo[a]fluoranthene	1.420	0.000#	100.0#	0#	-47.71#
85	t	Benzo[e]pyrene	1.333	1.448	-8.6	43	0.03
86	t	Benzo[a]pyrene	1.285	1.516	-18.0	47	0.04
87	t	Perylene	1.278	1.440	-12.7	45	0.04
88	t	Indeno[1,2,3-cd]pyrene	1.227	1.542	-25.7	53	0.07
89	t	Dibenz[a,h]anthracene	1.194	1.585	-32.7#	54	0.05
90	t	Benzo[g,h,i]perylene	1.310	1.497	-14.3	47	0.08
91	A1	17a(H),21B(H)-hopane - C30H	0.503	0.619	-23.1	43	0.00
92	A2	Hopane (T19)	0.503	0.619	-23.1	43	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.503	0.000#	100.0#	0#	-40.86#
94	A2	C24 Tricyclic Terpane (T5)	0.503	0.000#	100.0#	0#	-41.58#
95	A2	C25 Tricyclic Terpane (T6)	0.503	0.000#	100.0#	0#	-43.07#
96	A2	C24 Tetracyclic Terpane (T6	0.503	0.000#	100.0#	0#	-44.38#
97	A2	C26 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-44.12#
98	A2	C26 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-44.22#
99	A2	C28 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-46.50#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46358.D
Acq On : 13 Sep 2006 3:19 pm
Operator : AC
Sample : C4091202
Misc : CC
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 13 17:12:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-46.66#
101	A2	C29 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-47.19#
102	A2	C29 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-47.39#
103	A2	18a-22,29,30-Trisnorneohopa	0.503	0.000#	100.0#	0#	-48.51#
104	A2	C30 Tricyclic Terpane-22S	0.503	0.000#	100.0#	0#	-48.61#
105	A2	C30 Tricyclic Terpane-22R	0.503	0.000#	100.0#	0#	-48.85#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.503	0.000#	100.0#	0#	-49.06#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.503	0.000#	100.0#	0#	-50.27#
108	A2	17a(H),21b(H)-25-Norhopane	0.503	0.000#	100.0#	0#	-50.06#
109	A2	30-Norhopane (T15)	0.503	0.000#	100.0#	0#	-50.93#
110	A2	18a(H)-30-Norneohopane-C29T	0.503	0.000#	100.0#	0#	-51.03#
111	A2	17a(H)-Diahopane (X)	0.503	0.000#	100.0#	0#	-51.16#
112	A2	30-Normoretane (T17)	0.503	0.000#	100.0#	0#	-51.70#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.503	0.000#	100.0#	0#	-52.10#
114	A2	Moretane (T20)	0.503	0.000#	100.0#	0#	-52.99#
115	A2	30-Homohopane-22S (T21)	0.503	0.000#	100.0#	0#	-54.09#
116	A2	30-Homohopane-22R (T22)	0.503	0.000#	100.0#	0#	-54.32#
117	A2	30,31-Bishomohopane-22S (T2	0.503	0.000#	100.0#	0#	-55.65#
118	A2	30,31-Bishomohopane-22R (T2	0.503	0.000#	100.0#	0#	-56.05#
119	A2	30,31-Trishomohopane-22S (T	0.503	0.000#	100.0#	0#	-57.80#
120	A2	30,31-Trishomohopane-22R (T	0.503	0.000#	100.0#	0#	-58.41#
121	A2	Tetrakishomohopane-22S (T32	0.503	0.000#	100.0#	0#	-60.43#
122	A2	Tetrakishomohopane-22R (T33	0.503	0.000#	100.0#	0#	-61.36#
123	A2	Pentakishomohopane-22S (T34	0.503	0.000#	100.0#	0#	-63.57#
124	A2	Pentakishomohopane-22R (T35	0.503	0.000#	100.0#	0#	-64.89#
125	SA1	5B(H)Cholane - Surr	0.250	0.245	2.0	40	0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.250	0.000#	100.0#	0#	-45.34#
127	A2	13b(H),17a(H)-20R-Diacholes	0.250	0.000#	100.0#	0#	-45.76#
128	A2	13b,17a-20S-Methyldiacholes	0.250	0.000#	100.0#	0#	-46.46#
129	A2	14a(H),17a(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.33#
130	A2	14a(H),17a(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.84#
131	A2	13b,17a-20R-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.12#
132	A2	13a,17b-20S-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.40#
133	A2	14a,17a-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.56#
134	A2	14a,17a-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-49.27#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-49.62#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-50.53#
137	A2	14b(H),17b(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.42#
138	A2	14b(H),17b(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.50#
139	A2	14b,17b-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-48.72#
140	A2	14b,17b-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.80#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-49.87#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-49.91#
143	A2	C26,20R- +C27,20S- triaroma	0.250	0.000#	100.0#	0#	-49.56#
144	A2	C28,20S-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.44#
145	A2	C27,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.88#
146	A2	C28,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-52.09#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46358.D
Acq On : 13 Sep 2006 3:19 pm
Operator : AC
Sample : C4091202
Misc : CC
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 13 17:12:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

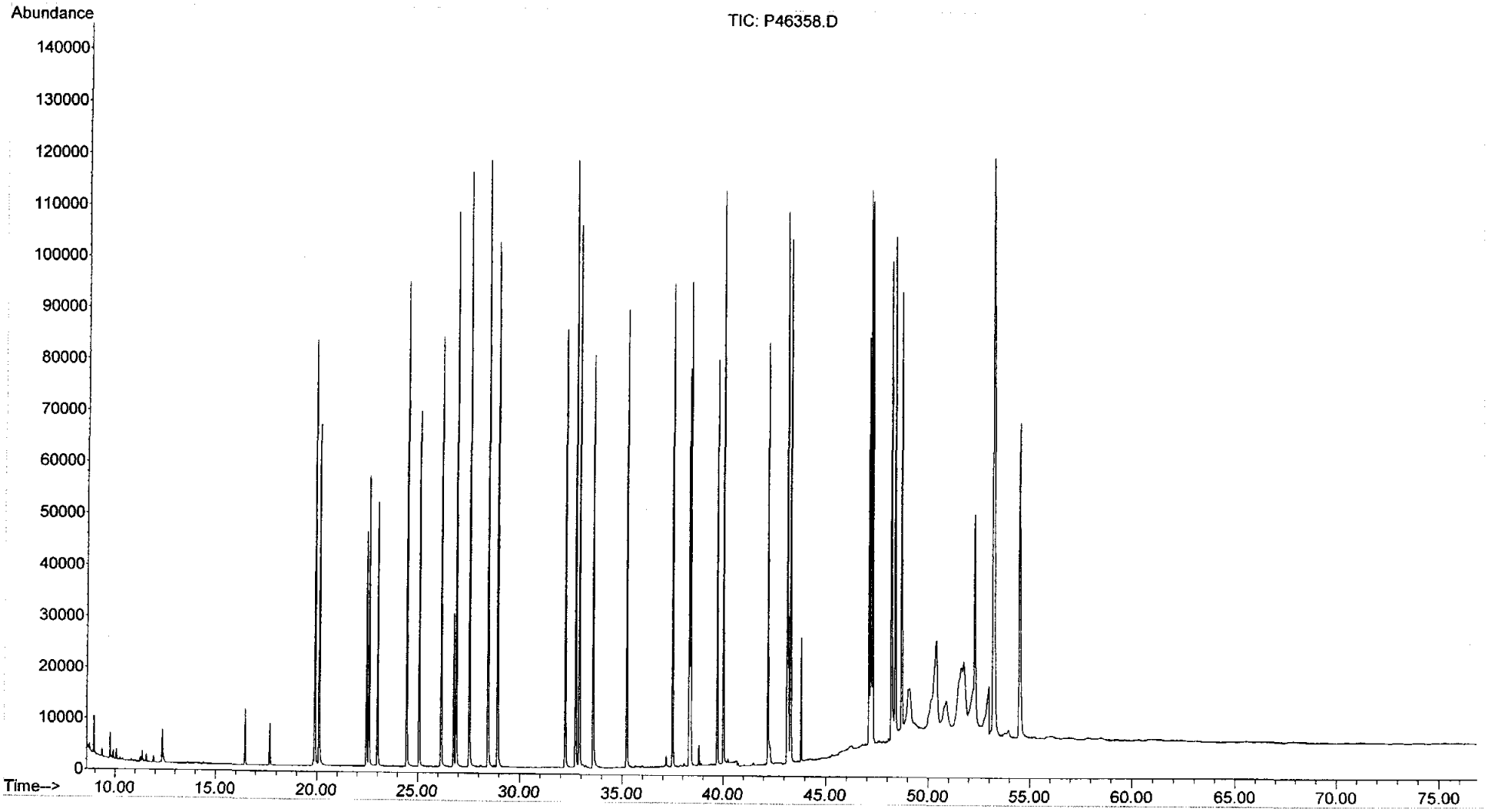
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.78	164	37459	500.00	ng/mL	0.02
72) Chrysene-d12	43.21	240	54338	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.46	152	104084	1232.68	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 123.27%			
58) Pyrene-d10	38.31	212	179941	1163.99	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 116.40%			
81) Benzo[b]fluoranthene-d12	47.12	264	152260	1339.42	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 133.94%#			
125) 5B(H)Cholane - Surr	43.83	217	33326	1224.53	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 122.45%			
Target Compounds						Qvalue
3) trans-Decalin	16.47	138	22954	630.46	ng/mL	100
4) cis-Decalin	17.69	138	17511	618.76	ng/mL	100
9) Naphthalene	19.89	128	205230	1251.05	ng/mL#	100
15) 2-Methylnaphthalene	22.58	142	138758	1259.83	ng/mL#	100
16) 1-Methylnaphthalene	23.00	142	129579	1250.96	ng/mL#	100
17) Benzothiophene	20.11	134	168628	1285.98	ng/mL	100
22) Biphenyl	24.46	154	165377	1190.09	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.07	156	117876	1230.69	ng/mL#	100
24) Dibenzofuran	27.54	168	176833	1246.01	ng/mL	99
25) Acenaphthylene	26.16	152	207585	1354.00	ng/mL#	100
26) Acenaphthene	26.90	153	126042	1266.01	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	102888	1220.13	ng/mL	96
28) Fluorene	28.91	166	140909	1194.53	ng/mL	100
32) Dibenzothiophene	32.23	184	176764	1218.96	ng/mL	99
41) Phenanthrene	32.72	178	196584	1189.40	ng/mL	100
52) Retene	39.71	234	45088	1073.70	ng/mL#	59
53) Anthracene	32.91	178	189364m	1287.16	ng/mL	
54) Carbazole	33.57	167	182353m	1293.86	ng/mL	
55) 1-Methylphenanthrene	35.23	192	138254	1201.55	ng/mL	100
56) Fluoranthene	37.49	202	200604m	1191.29	ng/mL	
57) Benzo(b)fluorene	40.02	216	126645	1330.12	ng/mL	100
59) Pyrene	38.37	202	203463	1201.58	ng/mL	99
64) Naphthobenzothiophene	42.22	234	178795	1231.83	ng/ml#	63
65) Naphthobenzothiophene-2,1-	42.22	234	178795	1231.83	ng/mL	99
73) Benz[a]anthracene	43.15	228	185361	1297.03	ng/mL	100
74) Chrysene	43.31	228	177793	1261.33	ng/mL	100
75) Chrysene/Triphenylene	43.31	228	178624m	1267.22	ng/mL	
82) Benzo[b]fluoranthene	47.20	252	208514	1378.24	ng/mL	100
83) Benzo[k]fluoranthene	47.28	252	207721	1346.33	ng/mL	100
85) Benzo[e]pyrene	48.21	252	196750	1358.51	ng/mL	100
86) Benzo[a]pyrene	48.40	252	205994m	1475.41	ng/mL	
87) Perylene	48.71	252	195573	1407.98	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.22	276	209534m	1571.66	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	215346	1659.08	ng/mL	99
90) Benzo[g,h,i]perylene	54.53	276	203417	1428.38	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.30	191	84155	1541.02	ng/mL#	81
92) Hopane (T19)	52.30	191	84155	1541.02	ng/mL#	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46358.D
Acq On : 13 Sep 2006 3:19 pm
Operator : AC
Sample : C4091202
Misc : CC
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 13 17:12:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46378.D
Acq On : 14 Sep 2006 6:10 am
Operator : AC
Sample : C4091203
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 14 11:30:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

MS for AC 9/29/06

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	34	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.65#
3	A1	trans-Decalin	0.486	0.507	-4.3	35	0.00
4	t	cis-Decalin	0.378	0.385	-1.9	35	0.00
5	A2	C1-Decalins	0.486	0.000#	100.0#	0#	-18.41#
6	A2	C2-Decalins	0.486	0.000#	100.0#	0#	-19.73#
7	A2	C3-Decalins	0.486	0.000#	100.0#	0#	-22.20#
8	A2	C4-Decalins	0.486	0.000#	100.0#	0#	-25.58#
9	A1	Naphthalene	2.190	2.220	-1.4	35	0.00
10	A2	C1-Naphthalenes	2.190	0.000#	100.0#	0#	-22.58#
11	A2	C2-Naphthalenes	2.190	0.000#	100.0#	0#	-25.42#
12	A2	C3-Naphthalenes	2.190	0.000#	100.0#	0#	-27.75#
13	A2	C4-Naphthalenes	2.190	0.000#	100.0#	0#	-30.51#
14	s	2-Methylnaphthalene-d10	1.127	1.114	1.2	34	0.00
15	t	2-Methylnaphthalene	1.470	1.494	-1.6	34	0.00
16	t	1-Methylnaphthalene	1.383	1.395	-0.9	34	0.00
17	A1	Benzothiophene	1.750	1.812	-3.5	34	0.00
18	A2	C1-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-22.15#
19	A2	C2-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-25.61#
20	A2	C3-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-27.59#
21	A2	C4-Benzo(b)thiophenes	1.750	0.000#	100.0#	0#	-29.32#
22	t	Biphenyl	1.855	1.770	4.6	34	0.00
23	t	2,6-Dimethylnaphthalene	1.278	1.267	0.9	34	0.00
24	t	Dibenzofuran	1.894	1.883	0.6	33	0.02
25	t	Acenaphthylene	2.046	2.184	-6.7	36	0.00
26	t	Acenaphthene	1.329	1.352	-1.7	34	0.00
27	t	2,3,5-Trimethylnaphthalene	1.126	1.094	2.8	33	0.00
28	A1	Fluorene	1.575	1.496	5.0	33	0.02
29	A2	C1-Fluorenes	1.575	0.000#	100.0#	0#	-31.27#
30	A2	C2-Fluorenes	1.575	0.000#	100.0#	0#	-33.46#
31	A2	C3-Fluorenes	1.575	0.000#	100.0#	0#	-35.30#
32	A1	Dibenzothiophene	1.936	1.879	2.9	32	0.00
33	A2	4-Methyldibenzothiophene(4M	1.936	0.000#	100.0#	0#	-34.00#
34	A2	2/3-Methyldibenzothiophene(	1.936	0.000#	100.0#	0#	-34.35#
35	A2	1-Methyldibenzothiophene(1M	1.936	0.000#	100.0#	0#	-34.76#
36	A2	OTP	1.936	0.000#	100.0#	0#	-34.41#
37	A2	C1-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-34.00#
38	A2	C2-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-35.68#
39	A2	C3-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-37.48#
40	A2	C4-Dibenzothiophenes	1.936	0.000#	100.0#	0#	-39.17#
41	A1	Phenanthrene	2.206	2.077	5.8	32	0.00
42	A2	3-Methylphenanthrene(3MP)	2.206	0.000#	100.0#	0#	-34.68#
43	A2	2/4-Methylphenanthrene(2MP)	2.206	0.000#	100.0#	0#	-34.79#
44	A2	2-Methylanthracene(2MA)	2.206	0.000#	100.0#	0#	-34.95#
45	A2	9-Methylphenanthrene(9MP)	2.206	0.000#	100.0#	0#	-35.13#
46	A2	1-Methylphenanthrene(1MP)	2.206	0.000#	100.0#	0#	-35.22#
47	A2	C1-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-35.13#
48	A2	C2-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-36.95#
49	A2	5AA IS BKGD	2.206	0.000#	100.0#	0#	-36.71#
50	A2	C3-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-38.78#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46378.D
Acq On : 14 Sep 2006 6:10 am
Operator : AC
Sample : C4091203
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 14 11:30:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.206	0.000#	100.0#	0#	-40.95#
52	t	Retene	0.561	0.459	18.2	31	0.00
53	t	Anthracene	1.964	1.993	-1.5	33	0.02
54	t	Carbazole	1.881	1.880	0.1	34	0.00
55	t	1-Methylphenanthrene	1.536	1.453	5.4	32	0.00
56	A1	Fluoranthene	2.248	2.104	6.4	32	0.00
57	t	Benzo(b)fluorene	1.271	1.255	1.3	35	0.02
58	s	Pyrene-d10	2.063	1.890	8.4	32	0.00
59	A1	Pyrene	2.260	2.165	4.2	32	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-39.76#
61	A2	C2-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-41.56#
62	A2	C3-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-43.57#
63	A2	C4-Fluoranthenes/Pyrenes	2.260	0.000#	100.0#	0#	-44.92#
64	A1	Naphthobenzothiophene	1.937	1.831	5.5	32	0.00
65	A2	Naphthobenzothiophene-2,1-D	1.937	1.831	5.5	32	0.00
66	A2	Naphthobenzothiophene-1,2-D	1.937	0.000#	100.0#	0#	-42.55#
67	A2	Naphthobenzothiophene-2,3-D	1.937	0.000#	100.0#	0#	-42.85#
68	A2	C1-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-43.61#
69	A2	C2-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-45.61#
70	A2	C3-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-47.21#
71	A2	C4-Naphthobenzothiophenes	1.937	0.000#	100.0#	0#	-48.29#
72	i	Chrysene-d12	1.000	1.000	0.0	31	0.02
73	t	Benz[a]anthracene	1.315	1.325	-0.8	31	0.00
74	A1	Chrysene	1.297	1.317	-1.5	31	0.02
75	A2	Chrysene/Triphenylene	1.297	1.324	-2.1	31	0.02
76	A2	C1-Chrysenes	1.297	0.000#	100.0#	0#	-44.77#
77	A2	C2-Chrysenes	1.297	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.297	0.000#	100.0#	0#	-47.09#
79	A2	C3-Chrysenes	1.297	0.000#	100.0#	0#	-49.55#
80	A2	C4-Chrysenes	1.297	0.000#	100.0#	0#	-49.15#
81	s	Benzo[b]fluoranthene-d12	1.046	1.033	1.2	32	0.02
82	t	Benzo[b]fluoranthene	1.392	1.404	-0.9	31	0.00
83	A1	Benzo[k]fluoranthene	1.420	1.470	-3.5	32	0.00
84	A2	Benzo[a]fluoranthene	1.420	0.000#	100.0#	0#	-47.71#
85	t	Benzo[e]pyrene	1.333	1.328	0.4	31	0.00
86	t	Benzo[a]pyrene	1.285	1.369	-6.5	33	0.02
87	t	Perylene	1.278	1.315	-2.9	33	0.02
88	t	Indeno[1,2,3-cd]pyrene	1.227	1.367	-11.4	37	0.03
89	t	Dibenz[a,h]anthracene	1.194	1.376	-15.2	37	0.03
90	t	Benzo[g,h,i]perylene	1.310	1.312	-0.2	33	0.05
91	A1	17a(H),21B(H)-hopane - C30H	0.503	0.547	-8.7	30	0.00
92	A2	Hopane (T19)	0.503	0.547	-8.7	30	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.503	0.000#	100.0#	0#	-40.86#
94	A2	C24 Tricyclic Terpane (T5)	0.503	0.000#	100.0#	0#	-41.58#
95	A2	C25 Tricyclic Terpane (T6)	0.503	0.000#	100.0#	0#	-43.07#
96	A2	C24 Tetracyclic Terpane (T6	0.503	0.000#	100.0#	0#	-44.38#
97	A2	C26 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-44.12#
98	A2	C26 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-44.22#
99	A2	C28 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-46.50#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46378.D
Acq On : 14 Sep 2006 6:10 am
Operator : AC
Sample : C4091203
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 14 11:30:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-46.66#
101	A2	C29 Tricyclic Terpane-22S (	0.503	0.000#	100.0#	0#	-47.19#
102	A2	C29 Tricyclic Terpane-22R (	0.503	0.000#	100.0#	0#	-47.39#
103	A2	18a-22,29,30-Trisnorneohopa	0.503	0.000#	100.0#	0#	-48.51#
104	A2	C30 Tricyclic Terpane-22S	0.503	0.000#	100.0#	0#	-48.61#
105	A2	C30 Tricyclic Terpane-22R	0.503	0.000#	100.0#	0#	-48.85#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.503	0.000#	100.0#	0#	-49.06#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.503	0.000#	100.0#	0#	-50.27#
108	A2	17a(H),21b(H)-25-Norhopane	0.503	0.000#	100.0#	0#	-50.06#
109	A2	30-Norhopane (T15)	0.503	0.000#	100.0#	0#	-50.93#
110	A2	18a(H)-30-Norneohopane-C29T	0.503	0.000#	100.0#	0#	-51.03#
111	A2	17a(H)-Diahopane (X)	0.503	0.000#	100.0#	0#	-51.16#
112	A2	30-Normoretane (T17)	0.503	0.000#	100.0#	0#	-51.70#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.503	0.000#	100.0#	0#	-52.10#
114	A2	Moretane (T20)	0.503	0.000#	100.0#	0#	-52.99#
115	A2	30-Homohopane-22S (T21)	0.503	0.000#	100.0#	0#	-54.09#
116	A2	30-Homohopane-22R (T22)	0.503	0.000#	100.0#	0#	-54.32#
117	A2	30,31-Bishomohopane-22S (T2	0.503	0.000#	100.0#	0#	-55.65#
118	A2	30,31-Bishomohopane-22R (T2	0.503	0.000#	100.0#	0#	-56.05#
119	A2	30,31-Trishomohopane-22S (T	0.503	0.000#	100.0#	0#	-57.80#
120	A2	30,31-Trishomohopane-22R (T	0.503	0.000#	100.0#	0#	-58.41#
121	A2	Tetrakishomohopane-22S (T32	0.503	0.000#	100.0#	0#	-60.43#
122	A2	Tetrakishomohopane-22R (T33	0.503	0.000#	100.0#	0#	-61.36#
123	A2	Pentakishomohopane-22S (T34	0.503	0.000#	100.0#	0#	-63.57#
124	A2	Pentakishomohopane-22R (T35	0.503	0.000#	100.0#	0#	-64.89#
125	SA1	5B(H)Cholane - Surr	0.250	0.241	3.6	31	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.250	0.000#	100.0#	0#	-45.34#
127	A2	13b(H),17a(H)-20R-Diacholes	0.250	0.000#	100.0#	0#	-45.76#
128	A2	13b,17a-20S-Methyldiacholes	0.250	0.000#	100.0#	0#	-46.46#
129	A2	14a(H),17a(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.33#
130	A2	14a(H),17a(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.84#
131	A2	13b,17a-20R-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.12#
132	A2	13a,17b-20S-Ethyldiacholest	0.250	0.000#	100.0#	0#	-48.40#
133	A2	14a,17a-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.56#
134	A2	14a,17a-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-49.27#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-49.62#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-50.53#
137	A2	14b(H),17b(H)-20R-Cholestan	0.250	0.000#	100.0#	0#	-47.42#
138	A2	14b(H),17b(H)-20S-Cholestan	0.250	0.000#	100.0#	0#	-47.50#
139	A2	14b,17b-20R-Methylcholestan	0.250	0.000#	100.0#	0#	-48.72#
140	A2	14b,17b-20S-Methylcholestan	0.250	0.000#	100.0#	0#	-48.80#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.250	0.000#	100.0#	0#	-49.87#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.250	0.000#	100.0#	0#	-49.91#
143	A2	C26,20R- +C27,20S- triaroma	0.250	0.000#	100.0#	0#	-49.56#
144	A2	C28,20S-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.44#
145	A2	C27,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-50.88#
146	A2	C28,20R-triaromatic steroid	0.250	0.000#	100.0#	0#	-52.09#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46378.D
Acq On : 14 Sep 2006 6:10 am
Operator : AC
Sample : C4091203
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 14 11:30:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.77	164	31424	500.00 ng/mL	0.00
72) Chrysene-d12	43.21	240	43253	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	87547	1235.95 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 123.60%		
58) Pyrene-d10	38.29	212	148481	1144.94 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 114.49%		
81) Benzo[b]fluoranthene-d12	47.10	264	111667	1234.08 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 123.41%		
125) 5B(H)Cholane - Surr	43.82	217	26014	1200.82 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 120.08%		

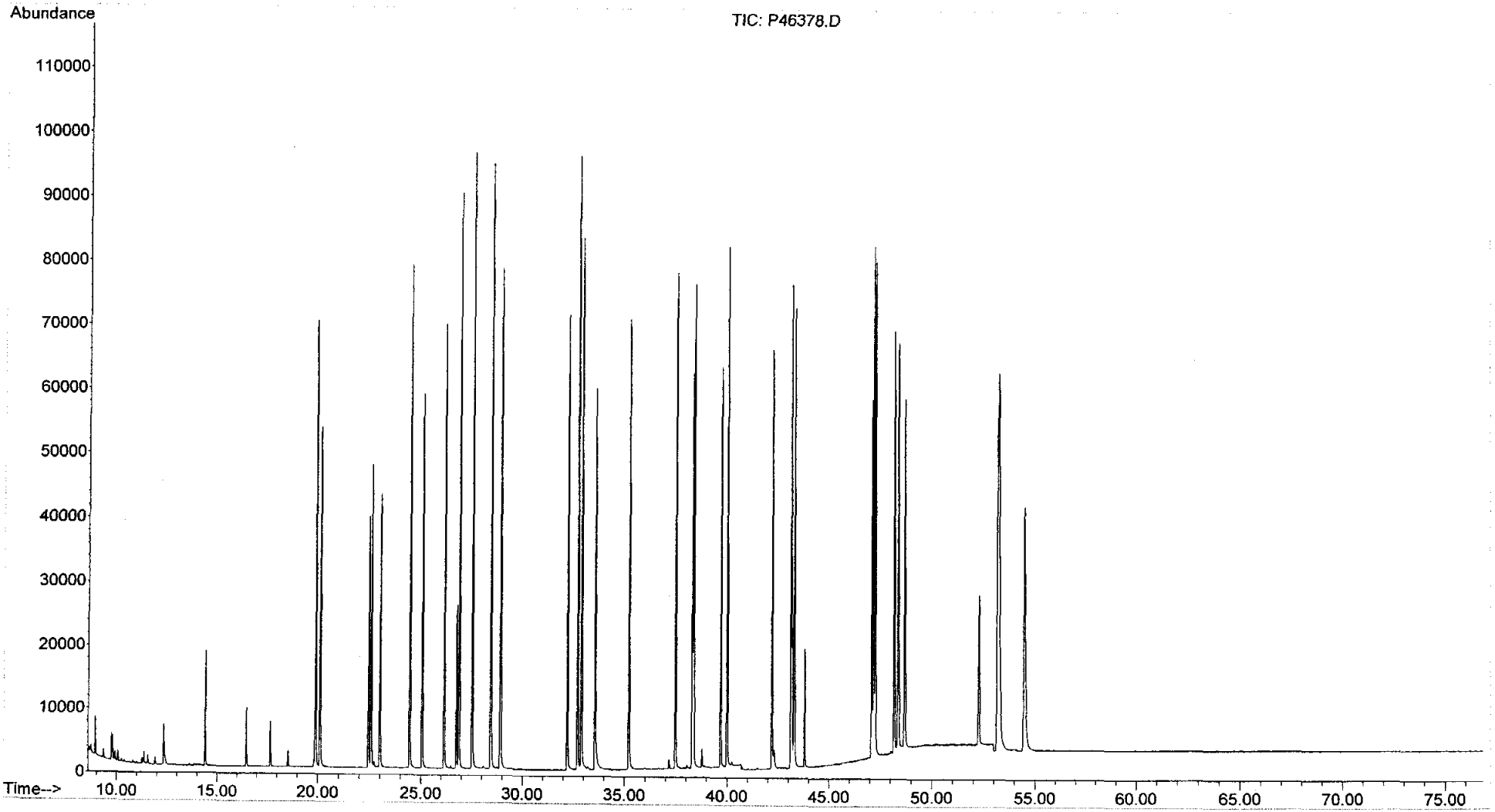
Target Compounds					Qvalue
3) trans-Decalin	16.47	138	19927	652.44 ng/mL	100
4) cis-Decalin	17.68	138	15108	636.37 ng/mL	100
9) Naphthalene	19.89	128	174396	1267.26 ng/mL#	100
15) 2-Methylnaphthalene	22.58	142	117367	1270.26 ng/mL#	100
16) 1-Methylnaphthalene	23.00	142	109560	1260.83 ng/mL#	100
17) Benzothiophene	20.11	134	142386	1294.39 ng/mL	100
22) Biphenyl	24.46	154	139061	1192.91 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.06	156	99563	1239.13 ng/mL#	100
24) Dibenzofuran	27.54	168	147905	1242.32 ng/mL	97
25) Acenaphthylene	26.16	152	171537	1333.75 ng/mL#	100
26) Acenaphthene	26.89	153	106222	1271.84 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	85937	1214.83 ng/mL	95
28) Fluorene	28.91	166	117542	1187.81 ng/mL	100
32) Dibenzothiophene	32.22	184	147580	1213.16 ng/mL	99
41) Phenanthrene	32.71	178	163197	1177.03 ng/mL	100
52) Retene	39.70	234	36075	1024.05 ng/mL#	59
53) Anthracene	32.90	178	156608m	1268.95 ng/mL	
54) Carbazole	33.57	167	147704	1249.29 ng/mL	98
55) 1-Methylphenanthrene	35.22	192	114169	1182.79 ng/mL	99
56) Fluoranthene	37.48	202	165271m	1169.95 ng/mL	
57) Benzo(b)fluorene	40.01	216	98621	1234.71 ng/mL	100
59) Pyrene	38.37	202	170085	1197.37 ng/mL	98
64) Naphthobenzothiophene	42.21	234	143831	1181.25 ng/ml#	63
65) Naphthobenzothiophene-2,1-	42.21	234	143831	1181.25 ng/mL	99
73) Benz[a]anthracene	43.14	228	143316	1259.84 ng/mL	100
74) Chrysene	43.30	228	142443	1269.52 ng/mL	99
75) Chrysene/Triphenylene	43.30	228	143148m	1275.81 ng/mL	
82) Benzo[b]fluoranthene	47.19	252	151767	1260.24 ng/mL	99
83) Benzo[k]fluoranthene	47.27	252	158957	1294.31 ng/mL	100
85) Benzo[e]pyrene	48.19	252	143590	1245.55 ng/mL	99
86) Benzo[a]pyrene	48.38	252	148067m	1332.31 ng/mL	
87) Perylene	48.69	252	142141	1285.56 ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.19	276	147802m	1392.74 ng/mL	
89) Dibenz[a,h]anthracene	53.25	278	148751	1439.72 ng/mL	99
90) Benzo[g,h,i]perylene	54.50	276	141850	1251.33 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.28	191	59141	1360.51 ng/mL#	80
92) Hopane (T19)	52.28	191	59141	1360.51 ng/mL#	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12\
Data File : P46378.D
Acq On : 14 Sep 2006 6:10 am
Operator : AC
Sample : C4091203
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 14 11:30:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\MAY06\PAH40525.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Sep 13 15:54:11 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : C2091801A Also used as i2091804 MML 9/27/6
Misc : CC
ALS Vial : 7 Sample Multiplier: 1

MML 9/27/6

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.83#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : C2091801A
Misc : CC
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	100	0.07
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.42#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.58#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.58#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.69#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.30#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.54#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.87#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.53#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.54#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.62#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.70#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.18#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.58#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.75#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.04#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-53.04#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.11#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.15#
83	A1	17a(H),21B(H)-hopane - C30H	0.459	0.511	-11.3	100	0.12
84	A2	Hopane (T19)	0.459	0.511	-11.3	100	0.12
85	A2	C23 Tricyclic Terpane (T4)	0.459	0.000#	100.0#	0#	-39.87#
86	A2	C24 Tricyclic Terpane (T5)	0.459	0.000#	100.0#	0#	-40.61#
87	A2	C25 Tricyclic Terpane (T6)	0.459	0.000#	100.0#	0#	-42.16#
88	A2	C24 Tetracyclic Terpane (T6	0.459	0.000#	100.0#	0#	-43.41#
89	A2	C26 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-43.20#
90	A2	C26 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-43.29#
91	A2	C28 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-45.65#
92	A2	C28 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-45.80#
93	A2	C29 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-46.34#
94	A2	C29 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-46.54#
95	A2	18a-22,29,30-Trisnorneohopa	0.459	0.000#	100.0#	0#	-47.50#
96	A2	C30 Tricyclic Terpane-22S	0.459	0.000#	100.0#	0#	-47.64#
97	A2	C30 Tricyclic Terpane-22R	0.459	0.000#	100.0#	0#	-47.92#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.459	0.000#	100.0#	0#	-48.00#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.459	0.000#	100.0#	0#	-49.13#
100	A2	17a(H),21b(H)-25-Norhopane	0.459	0.000#	100.0#	0#	-48.79#
101	A2	30-Norhopane (T15)	0.459	0.000#	100.0#	0#	-49.75#
102	A2	18a(H)-30-Norneohopane-C29T	0.459	0.000#	100.0#	0#	-49.84#
103	A2	17a(H)-Diahopane (X)	0.459	0.000#	100.0#	0#	-49.97#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : C2091801A
Misc : CC
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	A2	30-Normoretane (T17)	0.459	0.000#	100.0#	0#	-50.47#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.459	0.000#	100.0#	0#	-50.76#
106	A2	Moretane (T20)	0.459	0.000#	100.0#	0#	-51.63#
107	A2	30-Homohopane-22S (T21)	0.459	0.000#	100.0#	0#	-52.65#
108	A2	30-Homohopane-22R (T22)	0.459	0.000#	100.0#	0#	-52.87#
109	A2	30,31-Bishomohopane-22S (T2	0.459	0.000#	100.0#	0#	-54.10#
110	A2	30,31-Bishomohopane-22R (T2	0.459	0.000#	100.0#	0#	-54.45#
111	A2	30,31-Trishomohopane-22S (T	0.459	0.000#	100.0#	0#	-56.07#
112	A2	30,31-Trishomohopane-22R (T	0.459	0.000#	100.0#	0#	-56.65#
113	A2	Tetrakishomohopane-22S (T32	0.459	0.000#	100.0#	0#	-58.51#
114	A2	Tetrakishomohopane-22R (T33	0.459	0.000#	100.0#	0#	-59.34#
115	A2	Pentakishomohopane-22S (T34	0.459	0.000#	100.0#	0#	-61.42#
116	A2	Pentakishomohopane-22R (T35	0.459	0.000#	100.0#	0#	-62.62#
117	SA1	5B(H)Cholane - Surr	0.215	0.218	-1.4	100	0.04
118	A2	13b(H),17a(H)-20S-Diacholes	0.215	0.000#	100.0#	0#	-44.43#
119	A2	13b(H),17a(H)-20R-Diacholes	0.215	0.000#	100.0#	0#	-44.87#
120	A2	13b,17a-20S-Methyldiacholes	0.215	0.000#	100.0#	0#	-45.57#
121	A2	14a(H),17a(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.45#
122	A2	14a(H),17a(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-46.94#
123	A2	13b,17a-20R-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.21#
124	A2	13a,17b-20S-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.47#
125	A2	14a,17a-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.61#
126	A2	14a,17a-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-48.26#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.60#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-49.44#
129	A2	14b(H),17b(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-46.54#
130	A2	14b(H),17b(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.62#
131	A2	14b,17b-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-47.76#
132	A2	14b,17b-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.84#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-48.83#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.87#
135	A2	C26,20R- +C27,20S- triaroma	0.215	0.000#	100.0#	0#	-48.56#
136	A2	C28,20S-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.37#
137	A2	C27,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.79#
138	A2	C28,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-50.91#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : C2091801A Also used as i2091804 MAL 9/27/6 MAL 9/27/6
Misc : CC
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration

✓ MAL 9/27/6

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	42.34	240	46648	500.00 ng/mL	-0.10

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
50) Pyrene-d10	0.00	212	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		
117) 5B(H)Cholane - Surr	42.91	217	25438	1275.10 ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 127.51%		

Target Compounds

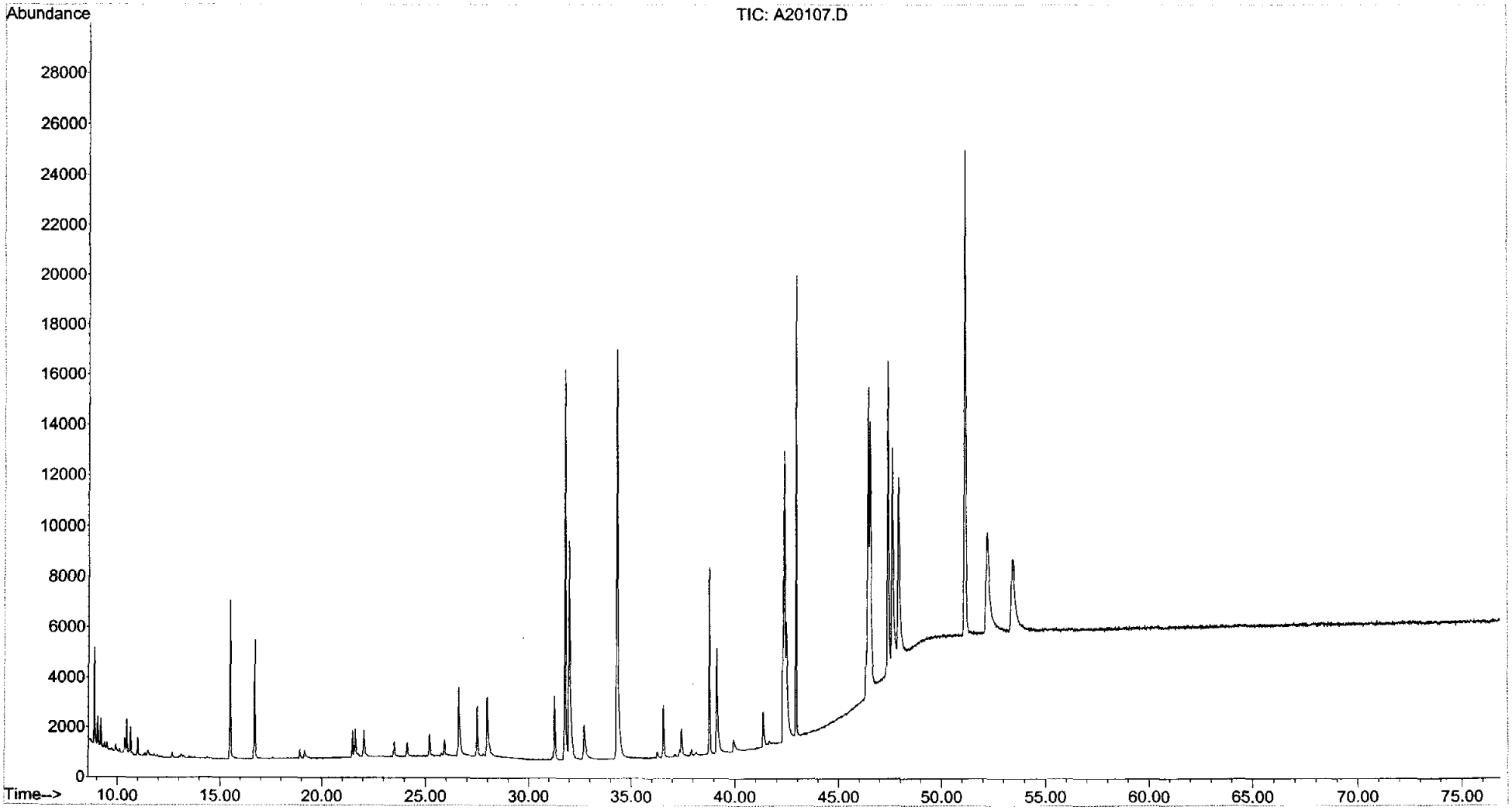
					Qvalue
83) 17a(H),21B(H)-hopane - C30	51.13	191	59548m	1375.68 ng/mL	
84) Hopane (T19)	51.13	191	59640m	1276.52 ng/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20107.D
Acq On : 18 Sep 2006 9:59 pm
Operator : AC
Sample : C2091801A
Misc : CC
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:06:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Sep 19 11:05:09 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20120.D
Acq On : 19 Sep 2006 8:48 pm
Operator : AC
Sample : C2091801
Misc : cc
ALS Vial : 20 Sample Multiplier: 1

MAL for AC 9/25/06

Quant Time: Sep 25 10:39:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.83#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20120.D
Acq On : 19 Sep 2006 8:48 pm
Operator : AC
Sample : C2091801
Misc : cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 25 10:39:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	181	-0.01
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.48#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.65#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.65#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.76#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.37#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.61#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.94#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.60#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.61#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.69#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.77#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.25#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.65#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.82#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.12#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-53.11#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.19#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.23#
83	A1	17a(H),21B(H)-hopane - C30H	0.459	0.494	-7.6	175	-0.04
84	A2	Hopane (T19)	0.459	0.494	-7.6	175	-0.04
85	A2	C23 Tricyclic Terpane (T4)	0.459	0.000#	100.0#	0#	-39.91#
86	A2	C24 Tricyclic Terpane (T5)	0.459	0.000#	100.0#	0#	-40.66#
87	A2	C25 Tricyclic Terpane (T6)	0.459	0.000#	100.0#	0#	-42.18#
88	A2	C24 Tetracyclic Terpane (T6	0.459	0.000#	100.0#	0#	-43.47#
89	A2	C26 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-43.26#
90	A2	C26 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-43.35#
91	A2	C28 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-45.73#
92	A2	C28 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-45.89#
93	A2	C29 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-46.43#
94	A2	C29 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-46.63#
95	A2	18a-22,29,30-Trisnorneohopa	0.459	0.000#	100.0#	0#	-47.71#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20120.D
Acq On : 19 Sep 2006 8:48 pm
Operator : AC
Sample : C2091801
Misc : cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 25 10:39:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	A2	C30 Tricyclic Terpane-22S	0.459	0.000#	100.0#	0#	-47.71#
97	A2	C30 Tricyclic Terpane-22R	0.459	0.000#	100.0#	0#	-47.98#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.459	0.000#	100.0#	0#	-48.17#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.459	0.000#	100.0#	0#	-49.22#
100	A2	17a(H),21b(H)-25-Norhopane	0.459	0.000#	100.0#	0#	-48.92#
101	A2	30-Norhopane (T15)	0.459	0.000#	100.0#	0#	-49.86#
102	A2	18a(H)-30-Norneohopane-C29T	0.459	0.000#	100.0#	0#	-49.95#
103	A2	17a(H)-Diahopane (X)	0.459	0.000#	100.0#	0#	-50.10#
104	A2	30-Normoretane (T17)	0.459	0.000#	100.0#	0#	-50.59#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.459	0.000#	100.0#	0#	-50.92#
106	A2	Moretane (T20)	0.459	0.000#	100.0#	0#	-51.77#
107	A2	30-Homohopane-22S (T21)	0.459	0.000#	100.0#	0#	-52.82#
108	A2	30-Homohopane-22R (T22)	0.459	0.000#	100.0#	0#	-53.04#
109	A2	30,31-Bishomohopane-22S (T2	0.459	0.000#	100.0#	0#	-54.28#
110	A2	30,31-Bishomohopane-22R (T2	0.459	0.000#	100.0#	0#	-54.65#
111	A2	30,31-Trishomohopane-22S (T	0.459	0.000#	100.0#	0#	-56.30#
112	A2	30,31-Trishomohopane-22R (T	0.459	0.000#	100.0#	0#	-56.87#
113	A2	Tetrakishomohopane-22S (T32	0.459	0.000#	100.0#	0#	-58.78#
114	A2	Tetrakishomohopane-22R (T33	0.459	0.000#	100.0#	0#	-59.64#
115	A2	Pentakishomohopane-22S (T34	0.459	0.000#	100.0#	0#	-61.77#
116	A2	Pentakishomohopane-22R (T35	0.459	0.000#	100.0#	0#	-63.00#
117	SA1	5B(H)Cholane - Surr	0.215	0.219	-1.9	181	-0.02
118	A2	13b(H),17a(H)-20S-Diacholes	0.215	0.000#	100.0#	0#	-44.50#
119	A2	13b(H),17a(H)-20R-Diacholes	0.215	0.000#	100.0#	0#	-44.94#
120	A2	13b,17a-20S-Methyldiacholes	0.215	0.000#	100.0#	0#	-45.66#
121	A2	14a(H),17a(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.54#
122	A2	14a(H),17a(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-47.05#
123	A2	13b,17a-20R-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.32#
124	A2	13a,17b-20S-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.56#
125	A2	14a,17a-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.71#
126	A2	14a,17a-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-48.38#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.72#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-49.58#
129	A2	14b(H),17b(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-46.62#
130	A2	14b(H),17b(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.71#
131	A2	14b,17b-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-47.87#
132	A2	14b,17b-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.95#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-48.95#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.99#
135	A2	C26,20R- +C27,20S- triaroma	0.215	0.000#	100.0#	0#	-48.69#
136	A2	C28,20S-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.50#
137	A2	C27,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.93#
138	A2	C28,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-51.07#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20120.D
Acq On : 19 Sep 2006 8:48 pm
Operator : AC
Sample : C2091801
Misc : cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 25 10:39:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.32	240	84248	500.00	ng/mL	-0.01

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.90	217	46091	1271.04	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 127.10%			

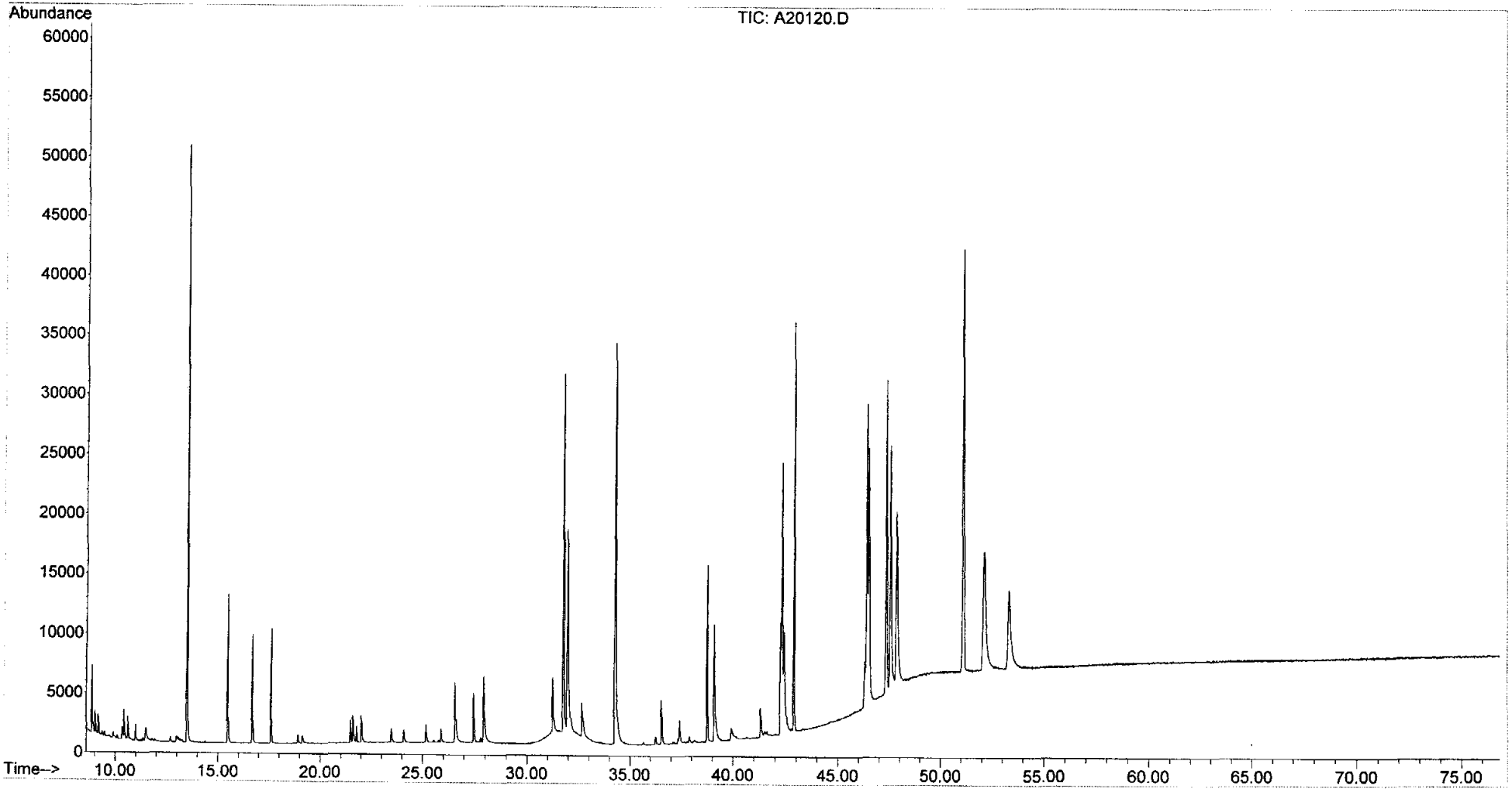
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.09	191	104107	1344.74	ng/mL#	82
84) Hopane (T19)	51.09	191	104107	1344.74	ng/mL#	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep18\
Data File : A20120.D
Acq On : 19 Sep 2006 8:48 pm
Operator : AC
Sample : C2091801
Misc : cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 25 10:39:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP25\
Data File : A20126.D
Acq On : 25 Sep 2006 1:25 pm
Operator : AC
Sample : C2092501
Misc :
ALS Vial : 2 Sample Multiplier: 1

9/25/06

Quant Time: Sep 25 15:06:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.83#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP25\
Data File : A20126.D
Acq On : 25 Sep 2006 1:25 pm
Operator : AC
Sample : C2092501
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:06:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	222#	-0.07
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.48#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.65#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.65#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.76#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.37#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.61#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.94#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.60#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.61#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.69#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.77#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.25#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.65#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.82#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.12#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-53.11#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.19#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.23#
83	A1	17a(H),21B(H)-hopane - C30H	0.459	0.520	-13.3	226#	-0.14
84	A2	Hopane (T19)	0.459	0.520	-13.3	226#	-0.14
85	A2	C23 Tricyclic Terpane (T4)	0.459	0.000#	100.0#	0#	-39.91#
86	A2	C24 Tricyclic Terpane (T5)	0.459	0.000#	100.0#	0#	-40.66#
87	A2	C25 Tricyclic Terpane (T6)	0.459	0.000#	100.0#	0#	-42.18#
88	A2	C24 Tetracyclic Terpane (T6	0.459	0.000#	100.0#	0#	-43.47#
89	A2	C26 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-43.26#
90	A2	C26 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-43.35#
91	A2	C28 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-45.73#
92	A2	C28 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-45.89#
93	A2	C29 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-46.43#
94	A2	C29 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-46.63#
95	A2	18a-22,29,30-Trisnorneohopa	0.459	0.000#	100.0#	0#	-47.71#
96	A2	C30 Tricyclic Terpane-22S	0.459	0.000#	100.0#	0#	-47.71#
97	A2	C30 Tricyclic Terpane-22R	0.459	0.000#	100.0#	0#	-47.98#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.459	0.000#	100.0#	0#	-48.17#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.459	0.000#	100.0#	0#	-49.22#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP25\
Data File : A20126.D
Acq On : 25 Sep 2006 1:25 pm
Operator : AC
Sample : C2092501
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:06:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.459	0.000#	100.0#	0#	-48.92#
101	A2	30-Norhopane (T15)	0.459	0.000#	100.0#	0#	-49.86#
102	A2	18a(H)-30-Norneohopane-C29T	0.459	0.000#	100.0#	0#	-49.95#
103	A2	17a(H)-Diahopane (X)	0.459	0.000#	100.0#	0#	-50.10#
104	A2	30-Normoretane (T17)	0.459	0.000#	100.0#	0#	-50.59#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.459	0.000#	100.0#	0#	-50.92#
106	A2	Moretane (T20)	0.459	0.000#	100.0#	0#	-51.77#
107	A2	30-Homohopane-22S (T21)	0.459	0.000#	100.0#	0#	-52.82#
108	A2	30-Homohopane-22R (T22)	0.459	0.000#	100.0#	0#	-53.04#
109	A2	30,31-Bishomohopane-22S (T2	0.459	0.000#	100.0#	0#	-54.28#
110	A2	30,31-Bishomohopane-22R (T2	0.459	0.000#	100.0#	0#	-54.65#
111	A2	30,31-Trishomohopane-22S (T	0.459	0.000#	100.0#	0#	-56.30#
112	A2	30,31-Trishomohopane-22R (T	0.459	0.000#	100.0#	0#	-56.87#
113	A2	Tetrakishomohopane-22S (T32	0.459	0.000#	100.0#	0#	-58.78#
114	A2	Tetrakishomohopane-22R (T33	0.459	0.000#	100.0#	0#	-59.64#
115	A2	Pentakishomohopane-22S (T34	0.459	0.000#	100.0#	0#	-61.77#
116	A2	Pentakishomohopane-22R (T35	0.459	0.000#	100.0#	0#	-63.00#
117	SA1	5B(H)Cholane - Surr	0.215	0.217	-0.9	221#	-0.06
118	A2	13b(H),17a(H)-20S-Diacholes	0.215	0.000#	100.0#	0#	-44.50#
119	A2	13b(H),17a(H)-20R-Diacholes	0.215	0.000#	100.0#	0#	-44.94#
120	A2	13b,17a-20S-Methyldiacholes	0.215	0.000#	100.0#	0#	-45.66#
121	A2	14a(H),17a(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.54#
122	A2	14a(H),17a(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-47.05#
123	A2	13b,17a-20R-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.32#
124	A2	13a,17b-20S-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.56#
125	A2	14a,17a-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.71#
126	A2	14a,17a-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-48.38#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.72#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-49.58#
129	A2	14b(H),17b(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-46.62#
130	A2	14b(H),17b(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.71#
131	A2	14b,17b-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-47.87#
132	A2	14b,17b-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.95#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-48.95#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.99#
135	A2	C26,20R- +C27,20S- triaroma	0.215	0.000#	100.0#	0#	-48.69#
136	A2	C28,20S-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.50#
137	A2	C27,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.93#
138	A2	C28,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-51.07#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP25\
Data File : A20126.D
Acq On : 25 Sep 2006 1:25 pm
Operator : AC
Sample : C2092501
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:06:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.26	240	103328	500.00	ng/mL	-0.07

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	42.86	217	56152	1262.56	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 126.26%			

Target Compounds

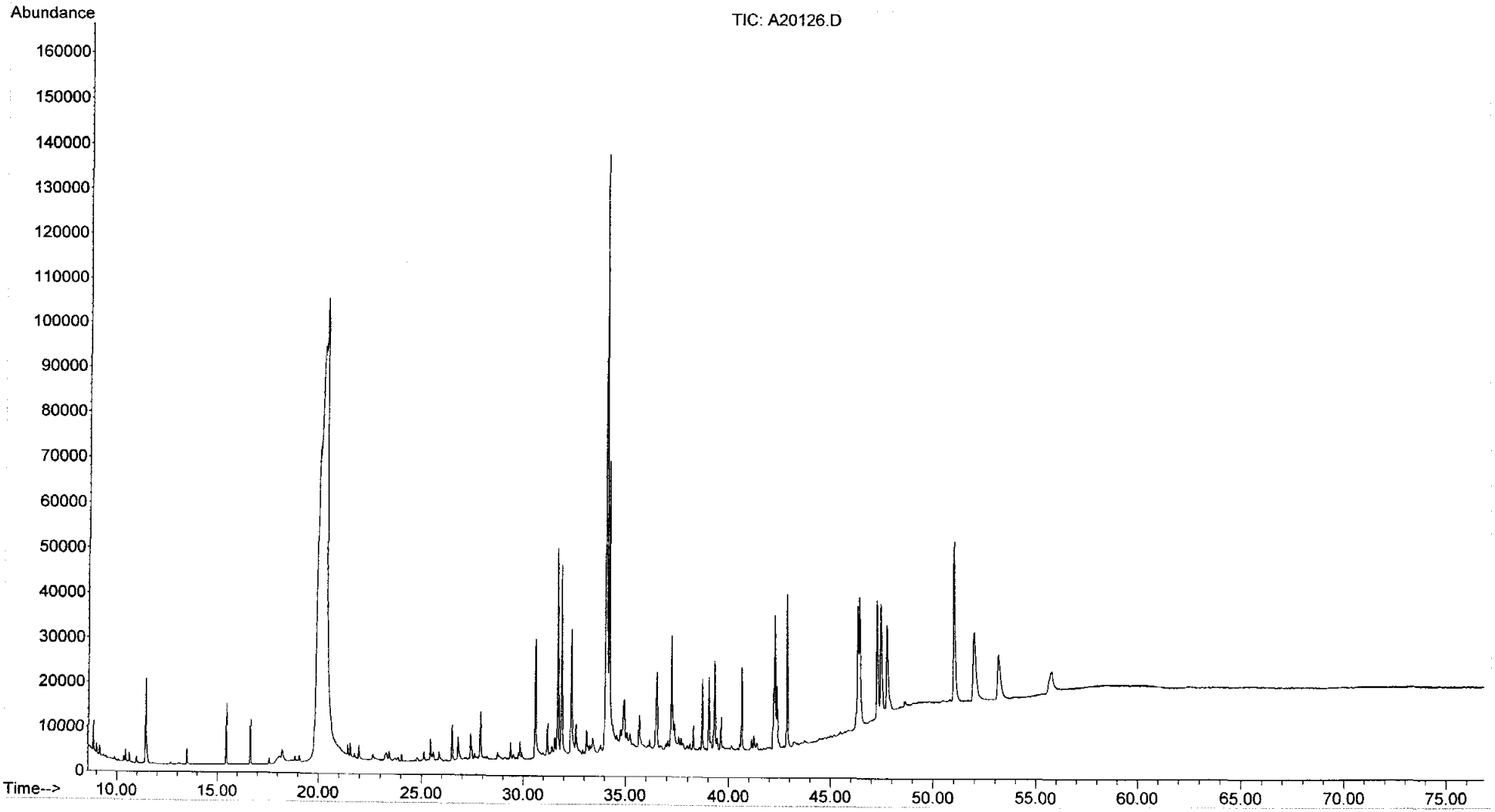
						Qvalue
83) 17a(H),21B(H)-hopane - C30	51.00	191	134414	1415.61	ng/mL#	81
84) Hopane (T19)	51.00	191	134414	1415.61	ng/mL#	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER06\SEP25\
Data File : A20126.D
Acq On : 25 Sep 2006 1:25 pm
Operator : AC
Sample : C2092501
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:06:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 10:32:32 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20129.D
Acq On : 25 Sep 2006 6:35 pm
Operator : AC
Sample : C2092502
Misc : cc
ALS Vial : 5 Sample Multiplier: 1

MAL 9/27/6

Quant Time: Sep 27 14:43:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.83#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20129.D
Acq On : 25 Sep 2006 6:35 pm
Operator : AC
Sample : C2092502
Misc : cc
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 27 14:43:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	182	-0.01
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.42#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.58#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.58#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.69#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.30#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.54#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.87#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.53#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.54#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.62#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.70#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.18#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.58#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.75#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.04#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-53.04#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.11#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.15#
83	A1	17a(H),21B(H)-hopane - C30H	0.459	0.523	-13.9	186	-0.01
84	A2	Hopane (T19)	0.459	0.523	-13.9	186	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.459	0.000#	100.0#	0#	-39.87#
86	A2	C24 Tricyclic Terpane (T5)	0.459	0.000#	100.0#	0#	-40.61#
87	A2	C25 Tricyclic Terpane (T6)	0.459	0.000#	100.0#	0#	-42.16#
88	A2	C24 Tetracyclic Terpane (T6	0.459	0.000#	100.0#	0#	-43.41#
89	A2	C26 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-43.20#
90	A2	C26 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-43.29#
91	A2	C28 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-45.65#
92	A2	C28 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-45.80#
93	A2	C29 Tricyclic Terpane-22S (	0.459	0.000#	100.0#	0#	-46.34#
94	A2	C29 Tricyclic Terpane-22R (	0.459	0.000#	100.0#	0#	-46.54#
95	A2	18a-22,29,30-Trisnorneohopa	0.459	0.000#	100.0#	0#	-47.50#
96	A2	C30 Tricyclic Terpane-22S	0.459	0.000#	100.0#	0#	-47.64#
97	A2	C30 Tricyclic Terpane-22R	0.459	0.000#	100.0#	0#	-47.92#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.459	0.000#	100.0#	0#	-48.00#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.459	0.000#	100.0#	0#	-49.13#
100	A2	17a(H),21b(H)-25-Norhopane	0.459	0.000#	100.0#	0#	-48.79#
101	A2	30-Norhopane (T15)	0.459	0.000#	100.0#	0#	-49.75#
102	A2	18a(H)-30-Norneohopane-C29T	0.459	0.000#	100.0#	0#	-49.84#
103	A2	17a(H)-Diahopane (X)	0.459	0.000#	100.0#	0#	-49.97#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20129.D
Acq On : 25 Sep 2006 6:35 pm
Operator : AC
Sample : C2092502
Misc : cc
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 27 14:43:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	A2	30-Normoretane (T17)	0.459	0.000#	100.0#	0#	-50.47#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.459	0.000#	100.0#	0#	-50.76#
106	A2	Moretane (T20)	0.459	0.000#	100.0#	0#	-51.63#
107	A2	30-Homohopane-22S (T21)	0.459	0.000#	100.0#	0#	-52.65#
108	A2	30-Homohopane-22R (T22)	0.459	0.000#	100.0#	0#	-52.87#
109	A2	30,31-Bishomohopane-22S (T2	0.459	0.000#	100.0#	0#	-54.10#
110	A2	30,31-Bishomohopane-22R (T2	0.459	0.000#	100.0#	0#	-54.45#
111	A2	30,31-Trishomohopane-22S (T	0.459	0.000#	100.0#	0#	-56.07#
112	A2	30,31-Trishomohopane-22R (T	0.459	0.000#	100.0#	0#	-56.65#
113	A2	Tetrakishomohopane-22S (T32	0.459	0.000#	100.0#	0#	-58.51#
114	A2	Tetrakishomohopane-22R (T33	0.459	0.000#	100.0#	0#	-59.34#
115	A2	Pentakishomohopane-22S (T34	0.459	0.000#	100.0#	0#	-61.42#
116	A2	Pentakishomohopane-22R (T35	0.459	0.000#	100.0#	0#	-62.62#
117	SA1	5B(H)Cholane - Surr	0.215	0.213	0.9	177	-0.02
118	A2	13b(H),17a(H)-20S-Diacholes	0.215	0.000#	100.0#	0#	-44.43#
119	A2	13b(H),17a(H)-20R-Diacholes	0.215	0.000#	100.0#	0#	-44.87#
120	A2	13b,17a-20S-Methyldiacholes	0.215	0.000#	100.0#	0#	-45.57#
121	A2	14a(H),17a(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.45#
122	A2	14a(H),17a(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-46.94#
123	A2	13b,17a-20R-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.21#
124	A2	13a,17b-20S-Ethyldiacholest	0.215	0.000#	100.0#	0#	-47.47#
125	A2	14a,17a-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.61#
126	A2	14a,17a-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-48.26#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.60#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-49.44#
129	A2	14b(H),17b(H)-20R-Cholestan	0.215	0.000#	100.0#	0#	-46.54#
130	A2	14b(H),17b(H)-20S-Cholestan	0.215	0.000#	100.0#	0#	-46.62#
131	A2	14b,17b-20R-Methylcholestan	0.215	0.000#	100.0#	0#	-47.76#
132	A2	14b,17b-20S-Methylcholestan	0.215	0.000#	100.0#	0#	-47.84#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.215	0.000#	100.0#	0#	-48.83#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.215	0.000#	100.0#	0#	-48.87#
135	A2	C26,20R- +C27,20S- triaroma	0.215	0.000#	100.0#	0#	-48.56#
136	A2	C28,20S-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.37#
137	A2	C27,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-49.79#
138	A2	C28,20R-triaromatic steroid	0.215	0.000#	100.0#	0#	-50.91#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20129.D
Acq On : 25 Sep 2006 6:35 pm
Operator : AC
Sample : C2092502
Misc : cc
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 27 14:43:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	42.26	240	84789	500.00	ng/mL	-0.01

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	42.85	217	45122	1236.38	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	123.64%	

Target Compounds

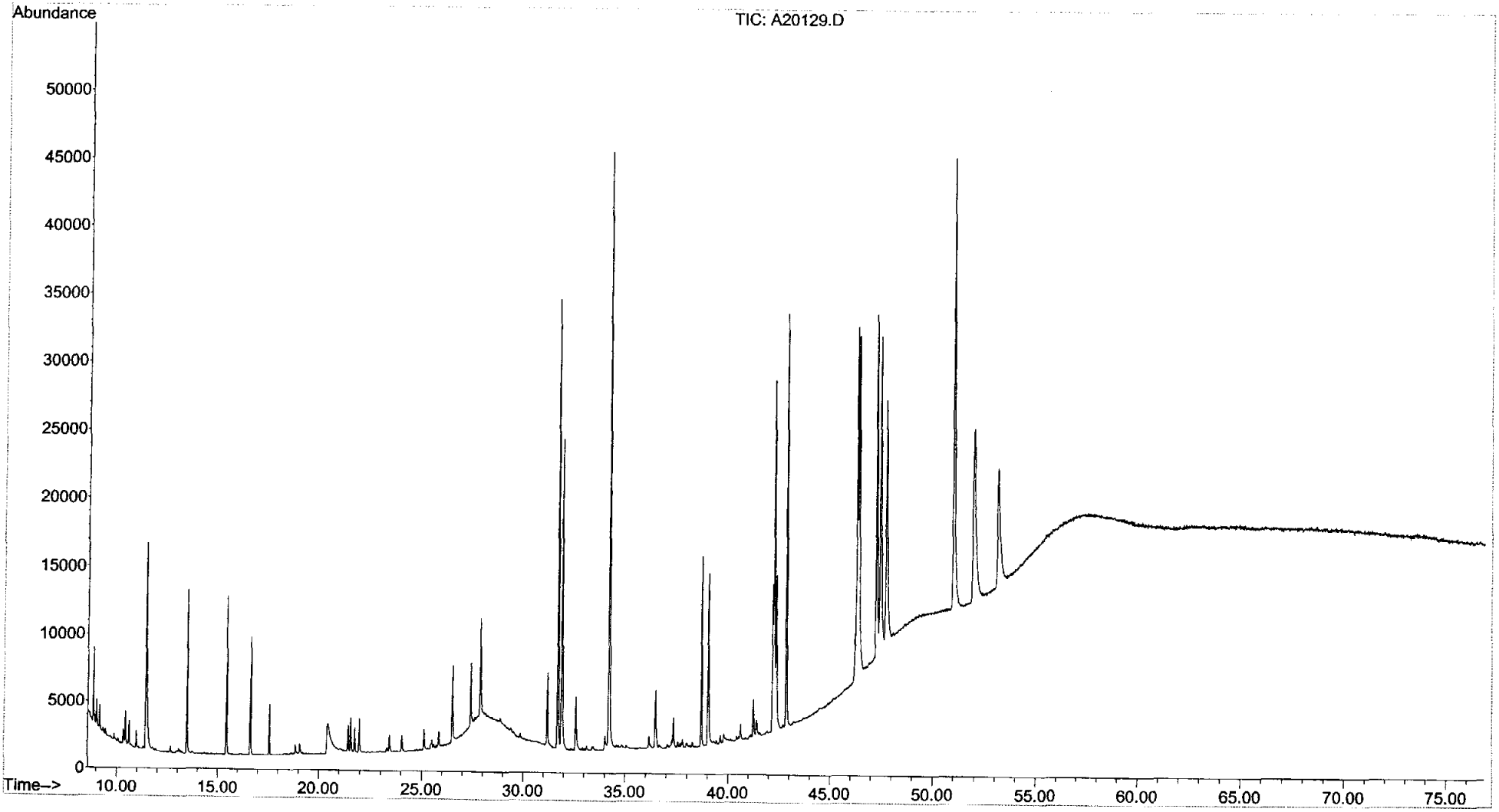
						Qvalue
83) 17a(H),21B(H)-hopane - C30	50.99	191	110835	1422.51	ng/mL#	77
84) Hopane (T19)	50.99	191	110835	1422.51	ng/mL#	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\september06\sep25\
Data File : A20129.D
Acq On : 25 Sep 2006 6:35 pm
Operator : AC
Sample : C2092502
Misc : cc
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 27 14:43:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER06\BIO20918.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Sep 25 17:00:19 2006
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0609032**
Lab ID: **C4091201**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		46003	26.76	65427	43.19
Upper Limit:		92006	27.26	130854	43.69
Lower Limit:		23002	26.26	32714	42.69
Client ID	**Lab ID**				
Blank	SS090806B10	46507	26.77	68804	43.20
LCS	SS090806LCS05	47039	26.76	72627	43.19
LCSD	SS090806LCSD05	48641	26.76	74128	43.19
FS-RED HOOK-1	0609032-01	50141	26.77	80885	43.24
FS-RED HOOK-1	0609032-01 D	43554	26.77	67346	43.27
FS-RED HOOK-2	0609032-02	42649	26.78	66943	43.27
FS-RED HOOK-3	0609032-03	37604	26.78	62640	43.27
FS-RED HOOK-4	0609032-04	35310	26.78	61075	43.28
FS-HALLECK ST ROW-2	0609032-05	37654	26.77	61878	43.25
FS-HALLECK ST ROW-3	0609032-06	32788	26.78	55000	43.28
FS-COURT ST ROW-1	0609032-07	37486	26.78	59916	43.28
CCV	C4091202	37459	26.78	54338	43.21

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0609032**
Lab ID: **C4091202**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		37459	26.78	54338	43.21
Upper Limit:		74918	27.28	108676	43.71
Lower Limit:		18730	26.28	27169	42.71
Client ID	**Lab ID**				
FS-RED HOOK-1	0609032-01E	30673	26.77	45226	43.21
FS-RED HOOK-1	0609032-01E D	30619	26.77	44602	43.21
FS-RED HOOK-2	0609032-02E	30604	26.77	45036	43.20
FS-RED HOOK-3	0609032-03E	30651	26.77	44926	43.21
FS-RED HOOK-4	0609032-04E	29362	26.77	43568	43.21
FS-HALLECK ST ROW-2	0609032-05E	28298	26.77	41209	43.21
FS-HALLECK ST ROW-3	0609032-06E	29131	26.77	42926	43.20
FS-COURT ST ROW-1	0609032-07E	29415	26.77	42859	43.20
CCV	C4091203	31424	26.77	43253	43.21

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

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Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **C2091801A**

		Chrysene-d12	
		Area	**RT**
Standard:		46648	42.34
Upper Limit:		93296	42.84
Lower Limit:		23324	41.84
Client ID	**Lab ID**		
Blank	SS091806B03	33543	42.47
FS-RED HOOK-1	0609032-01	42405	42.43
FS-RED HOOK-1	0609032-01 D	53864	42.44
FS-RED HOOK-2	0609032-02	56802	42.42
FS-RED HOOK-3	0609032-03	76465	42.42
FS-RED HOOK-4	0609032-04	73952	42.41
FS-HALLECK ST ROW-2	0609032-05	66990	42.40
FS-HALLECK ST ROW-3	0609032-06	82147	42.38
FS-COURT ST ROW-1	0609032-07	76258	42.39
CCV	C2091801	84248	42.32

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

09/27/06 17 19

Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0609032**
Lab ID: **C2092501**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		103328	42.26
Upper Limit:		206656	42.76
Lower Limit:		51664	41.76
Client ID	**Lab ID**		
FS-HALLECK ST ROW-2	0609032-05E	103795	42.28
CCV	C2092502	84789	42.26

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

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TOTAL PETROLEUM HYDROCARBON (TPH)

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.121	20	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**560000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	97	50-130
d50-Tetracosane	102	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46341.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 2:53 am
Operator : AC
Sample : 0609032-01-AFID
Misc : 1X
ALS Vial : 59 Sample Multiplier: 1

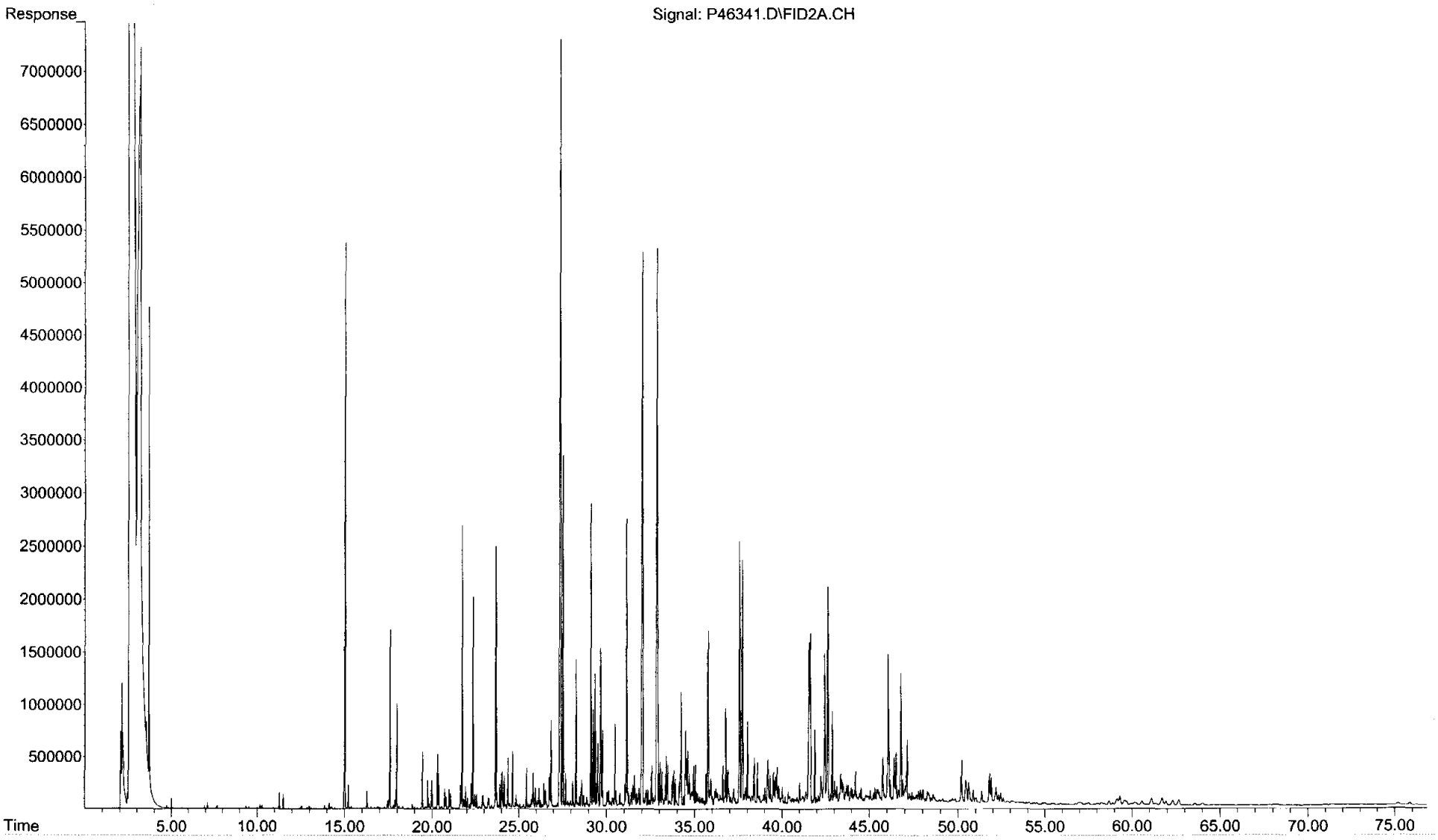
Integration File: SHCINT1.E
Quant Time: Sep 20 10:55:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M 9/27/06 RPR
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	60893097	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	59940500	48.562 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	97.12%
24) s d50-Tetracosane	35.77	51986570	50.970 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	101.94%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	4284930767	3678.356 ug/mL
44) h Total Resolved Hydrocarbon	40.04	2980994968	2559.006 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\P46341.D
Operator : AC
Acquired : 13 Sep 2006 2:53 am using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: 0609032-01-AFID
Misc Info : 1X
Vial Number: 59



Form I
Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01 D**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.172	20	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**580000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	106	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46343.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 4:22 am
Operator : AC
Sample : 0609032-01D-AFID
Misc : 1X
ALS Vial : 60 Sample Multiplier: 1

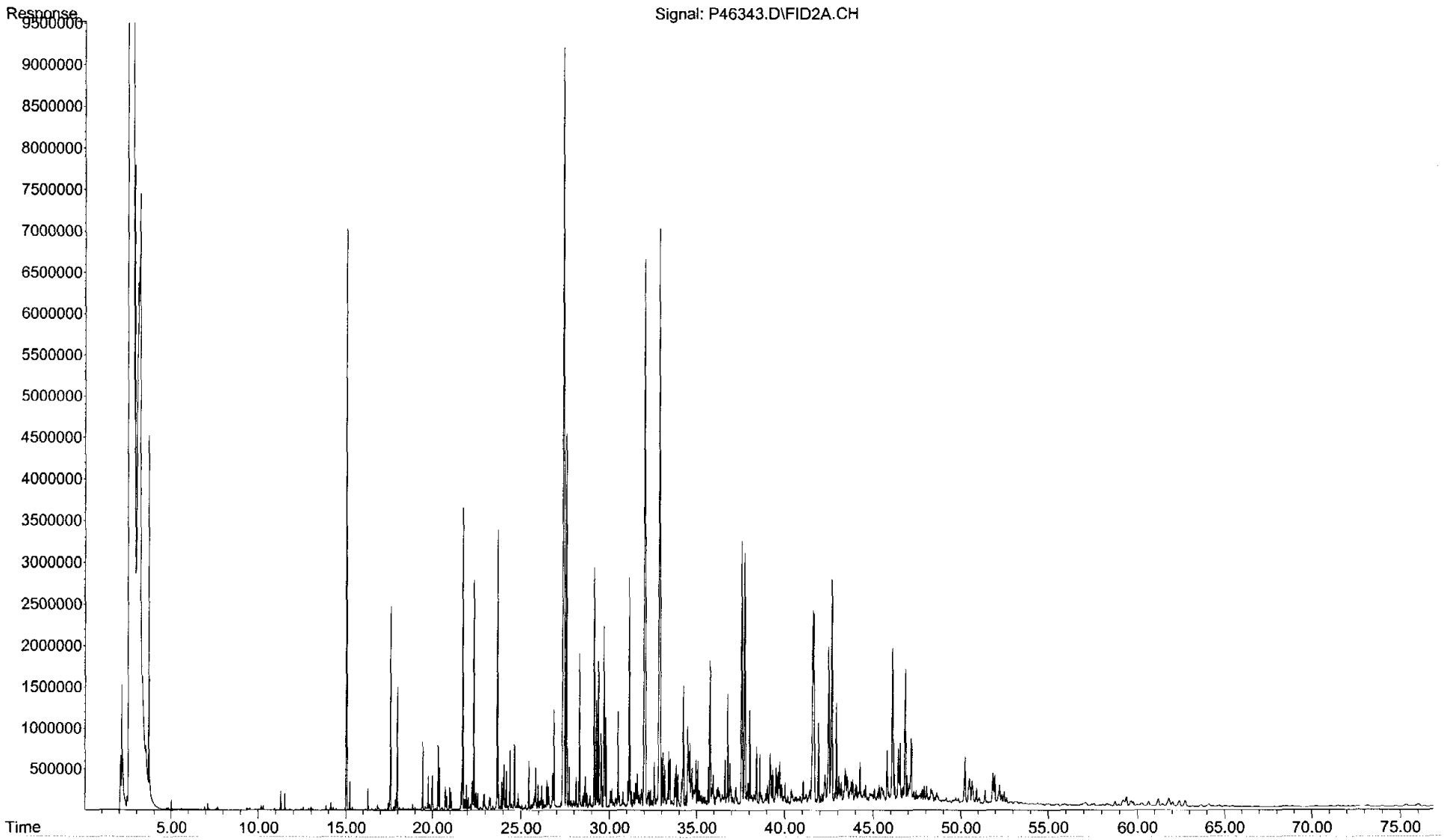
Integration File: SHCINT1.E
Quant Time: Sep 20 10:57:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M 9/27/06 RPR
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	62598390	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	62816104	49.505 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 99.01%	
24) s d50-Tetracosane	35.77	55433972	52.870 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 105.74%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	6369355845	5318.760 ug/mL
44) h Total Resolved Hydrocarbon	40.04	4519674473	3774.175 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

```
File        :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46343.D
Operator    : AC
Acquired    : 13 Sep 2006   4:22 am using AcqMethod FRNC4B.M
Instrument :   PAH-4
Sample Name: 0609032-01D-AFID
Misc Info   : 1X
Vial Number: 60
```



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-01**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
09/06/06	09/08/06	09/08/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**560000**	**580000**	4	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	97	99	50-130
d50-Tetracosane	102	106	50-130

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

09/27/06 14:33

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-02**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.191	22.22	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**590000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	105	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46345.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 5:51 am
Operator : AC
Sample : 0609032-02-AFID
Misc : 1X
ALS Vial : 61 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:01:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

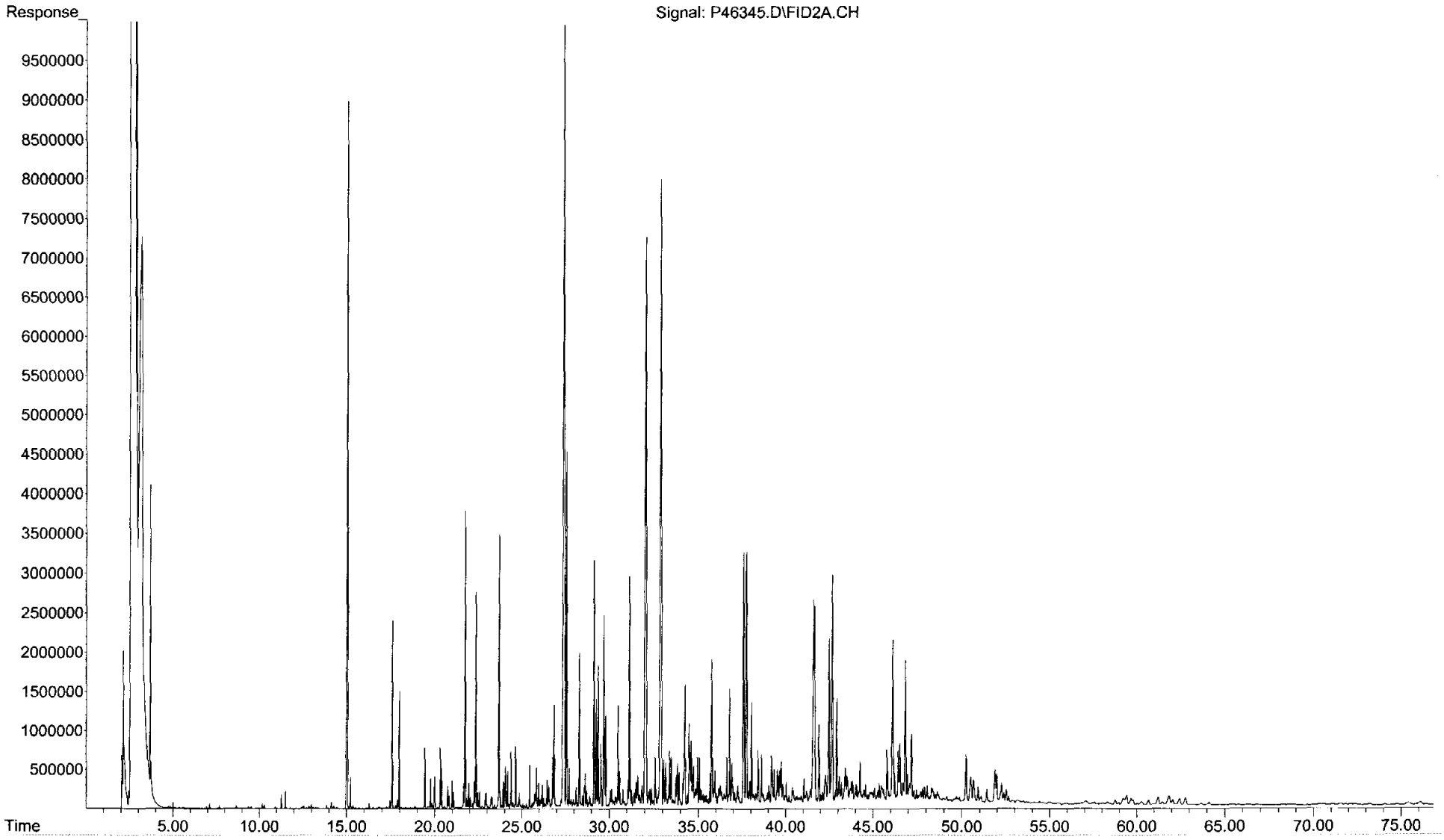
9/27/06 RPM

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	67198727	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	67520424	49.570 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.14%
24) s d50-Tetracosane	35.77	59136578	52.540 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	105.08%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	6906092314	5372.165 ug/mL
44) h Total Resolved Hydrocarbon	40.04	5004159898	3892.675 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46345.D
Operator : AC
Acquired : 13 Sep 2006 5:51 am using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: 0609032-02-AFID
Misc Info : 1X
Vial Number: 61



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-03**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.136	16.67	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**630000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	101	50-130
d50-Tetracosane	107	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46347.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 7:20 am
Operator : AC
Sample : 0609032-03-AFID
Misc : 1X
ALS Vial : 62 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:09:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

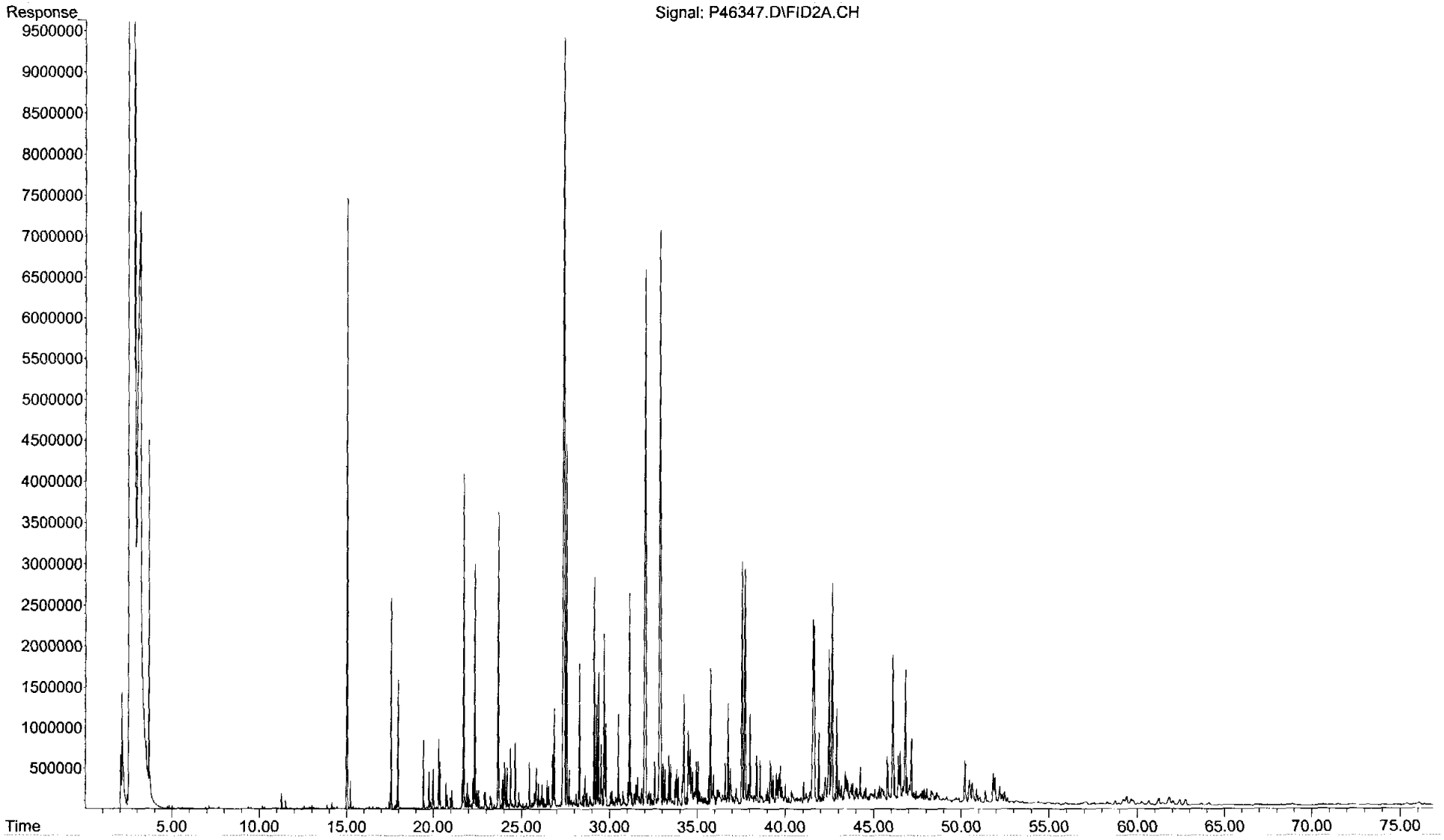
9/27/06 RPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	58771960	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	59980259	50.348 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	100.70%
24) s d50-Tetracosane	35.77	52571973	53.405 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	106.81%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	6134591505	5456.241 ug/mL
44) h Total Resolved Hydrocarbon	40.04	4355630693	3873.994 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46347.D
Operator : AC
Acquired : 13 Sep 2006 7:20 am using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: 0609032-03-AFID
Misc Info : 1X
Vial Number: 62



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-RED HOOK-4**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-04**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.14	16.67	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**600000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	101	50-130
d50-Tetracosane	106	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46349.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 8:49 am
Operator : AC
Sample : 0609032-04-AFID
Misc : 1X
ALS Vial : 63 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:12:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

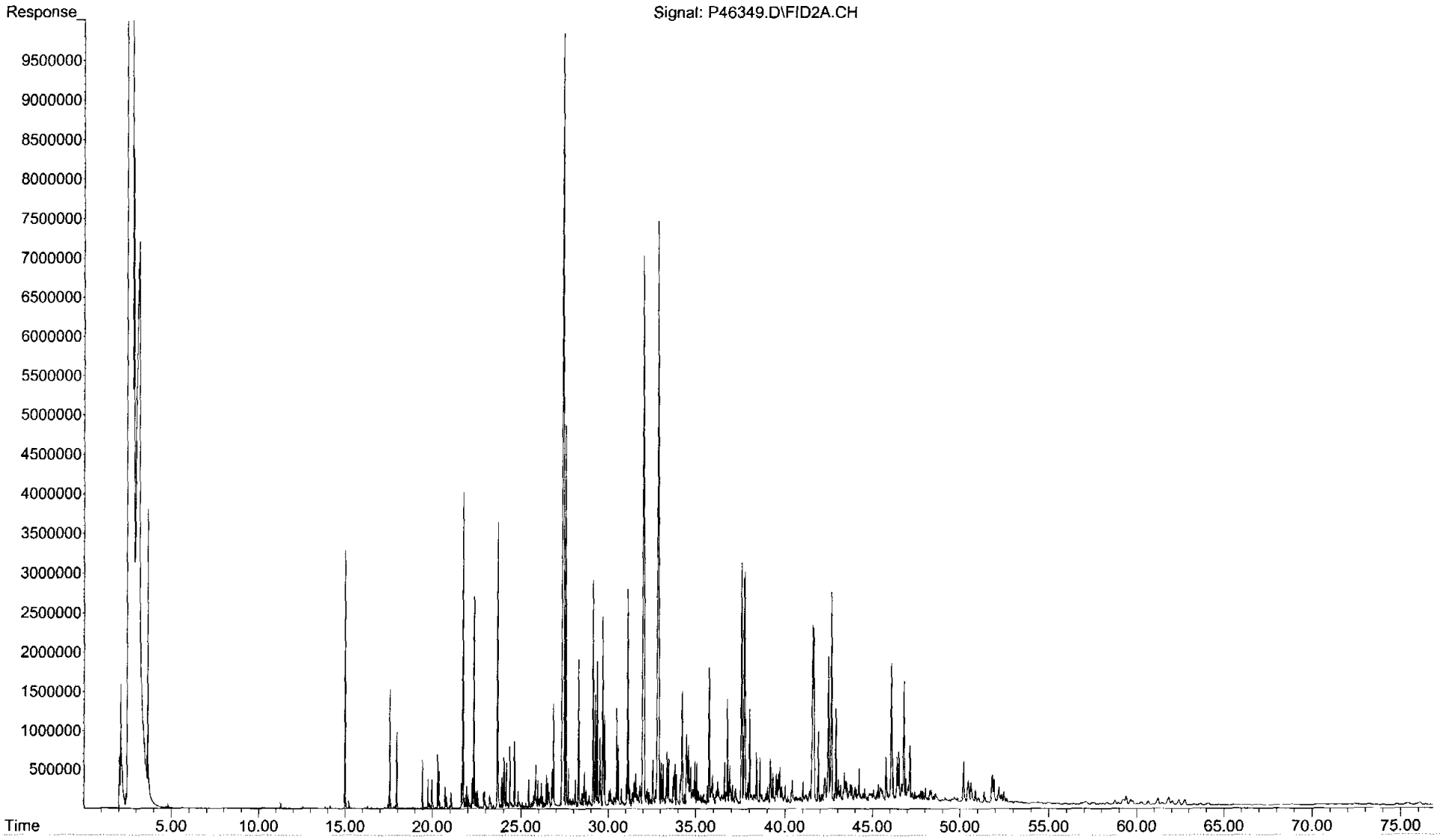
9/27/06
RPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	61374269	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	62707290	50.405 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	100.81%
24) s d50-Tetracosane	35.78	54638711	53.151 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	106.30%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	6284429096	5352.511 ug/mL
44) h Total Resolved Hydrocarbon	40.04	4441094320	3782.524 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

```
File        :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46349.D
Operator    : AC
Acquired    : 13 Sep 2006   8:49 am using AcqMethod FRNC4B.M
Instrument :   PAH-4
Sample Name: 0609032-04-AFID
Misc Info   : 1X
Vial Number: 63
```



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-2**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-05**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.11	13.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**430000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	101	50-130
d50-Tetracosane	107	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46351.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 10:18 am
Operator : AC
Sample : 0609032-05-AFID
Misc : 1X
ALS Vial : 64 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:19:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

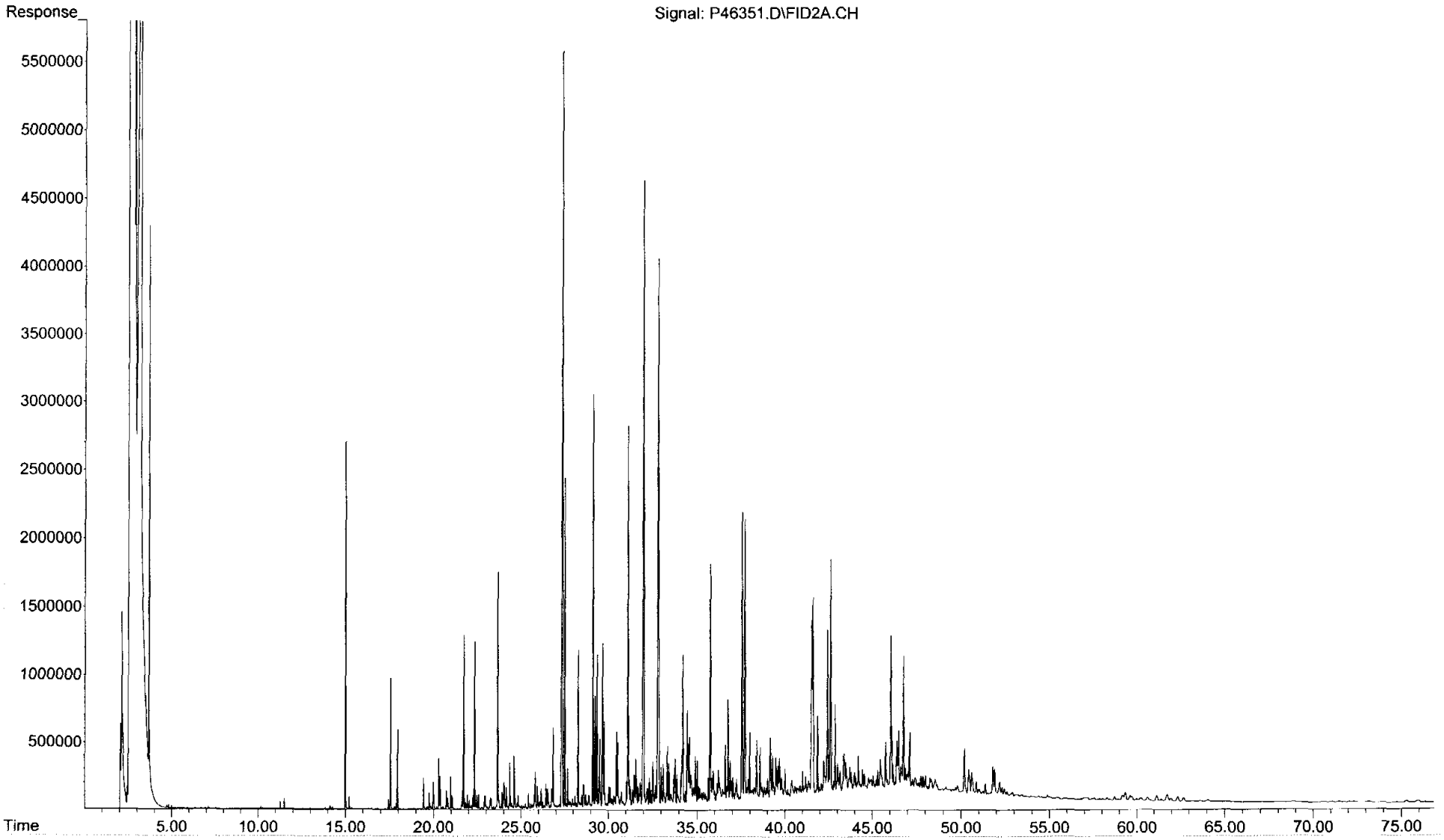
9/27/06 RDR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	62669200	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	64058636	50.427 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 100.85%	
24) s d50-Tetracosane	35.77	56165985	53.507 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 107.01%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	4655433304	3883.148 ug/mL
44) h Total Resolved Hydrocarbon	40.04	2265834367	1889.958 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

```
File        :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46351.D
Operator    : AC
Acquired    : 13 Sep 2006  10:18 am using AcqMethod FRNC4B.M
Instrument :   PAH-4
Sample Name: 0609032-05-AFID
Misc Info   : 1X
Vial Number: 64
```



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-HALLECK ST ROW-3**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-06**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.165	20	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**590000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	100	50-130
d50-Tetracosane	108	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46353.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 12:19 pm
Operator : AC
Sample : 0609032-06-AFID
Misc : 1X
ALS Vial : 65 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:21:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

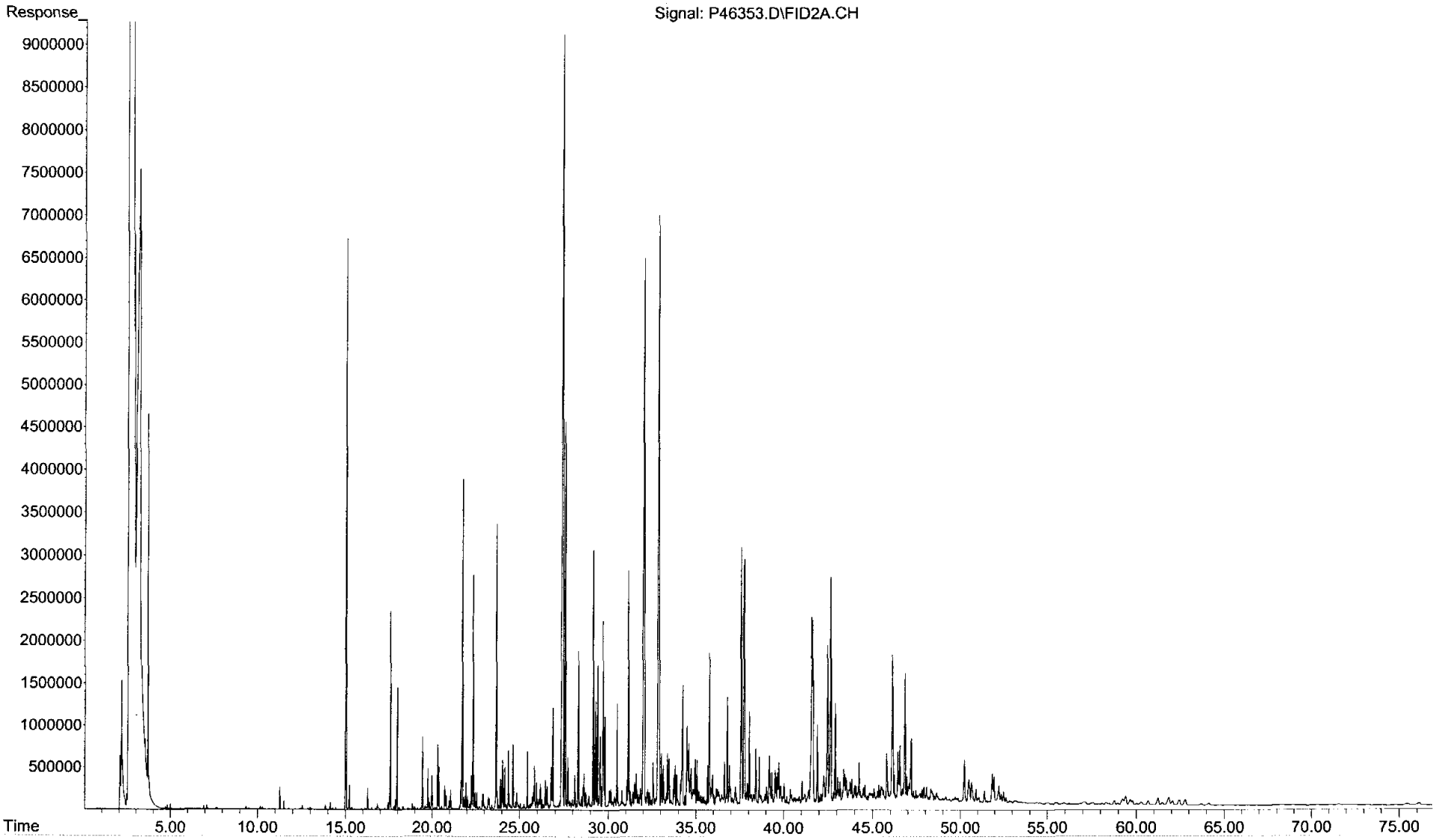
9/27/06
RPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	63477119	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	64644610	50.241 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 100.48%	
24) s d50-Tetracosane	35.78	57297271	53.890 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 107.78%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	6309818571	5196.102 ug/mL
44) h Total Resolved Hydrocarbon	40.04	4340059547	3574.016 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46353.D
Operator : AC
Acquired : 13 Sep 2006 12:19 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: 0609032-06-AFID
Misc Info : 1X
Vial Number: 65



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **FS-COURT ST ROW-1**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **0609032-07**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/06/06	09/08/06	09/08/06	09/13/06	100	0.147	18.18	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**610000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	100	50-130
d50-Tetracosane	107	50-130

09/27/06 14:32

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46355.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 1:49 pm
Operator : AC
Sample : 0609032-07-AFID
Misc : 1X
ALS Vial : 66 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:25:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

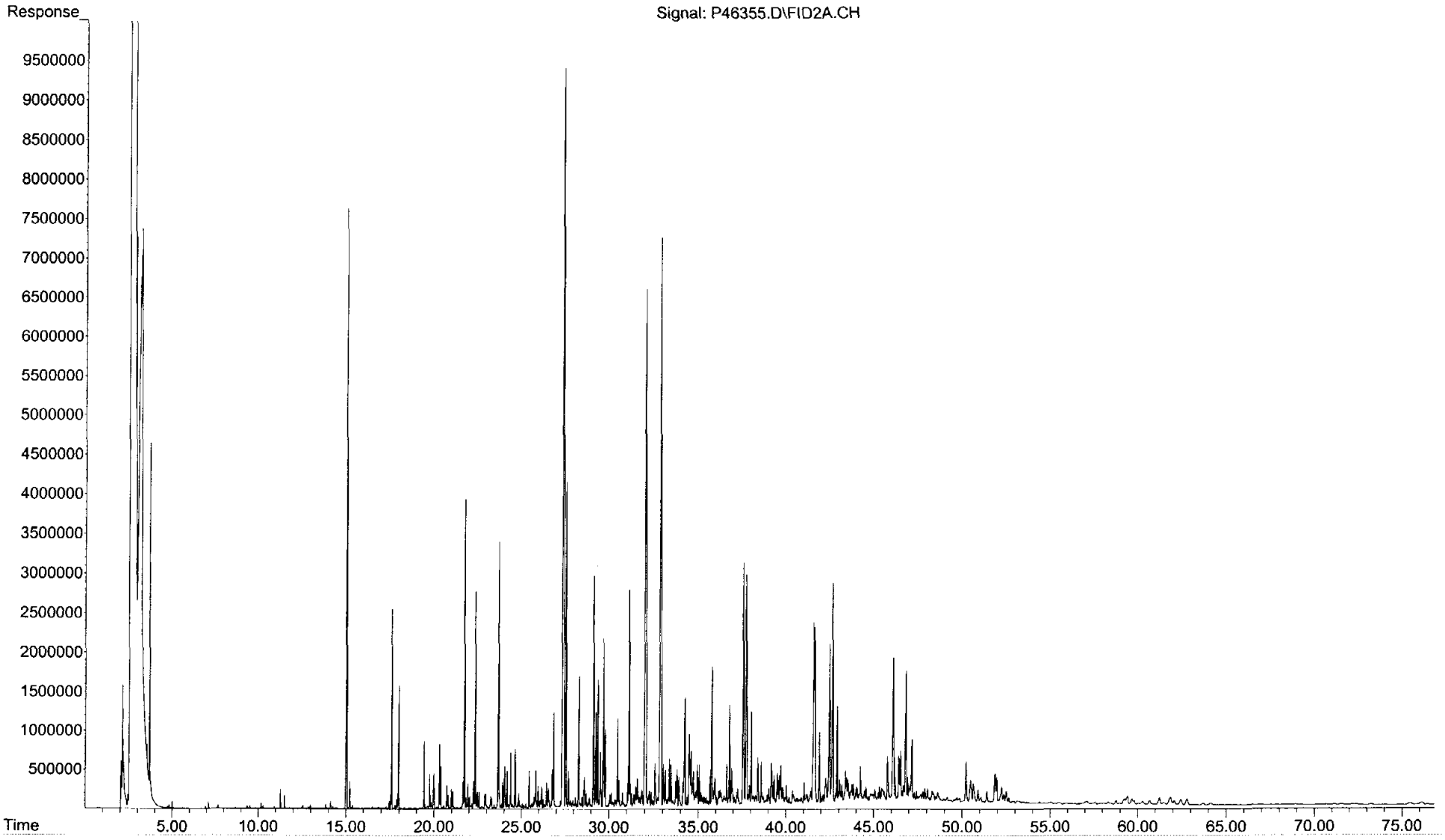
9/27/06
RPL

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.15	62929989	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	63514156	49.792 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.58%
24) s d50-Tetracosane	35.78	56189775	53.308 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	106.62%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	6292696307	5227.056 ug/mL
44) h Total Resolved Hydrocarbon	40.04	4358343488	3620.277 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

```
File        :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46355.D
Operator    : AC
Acquired    : 13 Sep 2006   1:49 pm using AcqMethod FRNC4B.M
Instrument :   PAH-4
Sample Name: 0609032-07-AFID
Misc Info   : 1X
Vial Number: 66
```



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806B10**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/12/06	100	0.10	1	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	330 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	98	50-130
d50-Tetracosane	101	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

09/27/06 14:30

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46335.D
Signal(s) : FID2A.CH
Acq On : 12 Sep 2006 10:25 pm
Operator : AC
Sample : SS090806B10-AFID
Misc : 1X ETR0609032
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 10:38:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

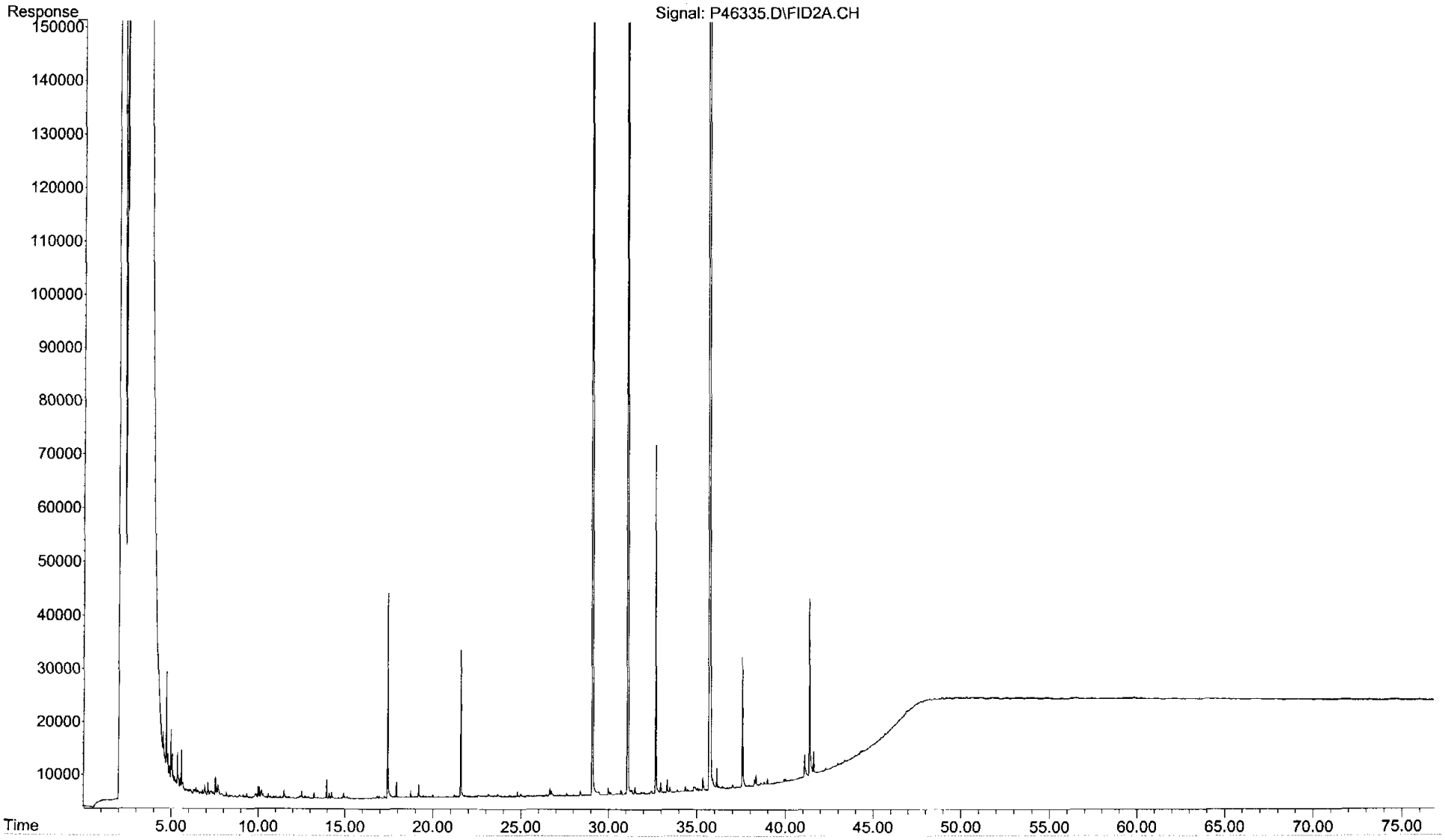
9/27/06
RPA

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	57454890	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.14	57189689	49.106 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	98.21%
24) s d50-Tetracosane	35.76	48582810	50.484 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	100.97%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	373588588	339.895 ug/mL
44) h Total Resolved Hydrocarbon	40.04	8399177	7.642 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46335.D
Operator : AC
Acquired : 12 Sep 2006 10:25 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: SS090806B10-AFID
Misc Info : 1X ETR0609032
Vial Number: 56



Form III
Spike Recovery Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **See Below**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	09/08/06	100	AC

Lab ID:	SS090806B10		SS090806LCS05		SS090806LCSD05				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	10	U	370	75	380	76	2	30	50-130
n-Decane (C10)	10	U	410	81	410	82	1	30	50-130
n-Dodecane (C12)	10	U	440	88	440	89	1	30	50-130
n-Tetradecane (C14)	10	U	450	90	450	91	1	30	50-130
n-Hexadecane (C16)	10	U	470	94	470	95	1	30	50-130
n-Octadecane (C18)	10	U	470	93	470	94	1	30	50-130
n-Nonadecane (C19)	10	U	470	94	470	95	1	30	50-130
n-Eicosane (C20)	10	U	470	94	480	95	1	30	50-130
n-Docosane (C22)	10	U	480	96	480	97	1	30	50-130
n-Tetracosane (C24)	10	U	460	92	460	93	1	30	50-130
n-Hexacosane (C26)	10	U	460	92	460	92	1	30	50-130
n-Octacosane (C28)	10	U	450	91	460	92	1	30	50-130
n-Triacontane (C30)	10	U	450	91	460	92	1	30	50-130
n-Hexatriacontane (C36)	10	U	460	91	470	94	3	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	97	99	50-130
d50-Tetracosane	100	102	50-130

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

09/27/06 14:33

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806LCS05**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/12/06	100	0.10	1	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**5900**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	97	50-130
d50-Tetracosane	100	50-130

09/27/06 14:30

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46337.D
Signal(s) : FID2A.CH
Acq On : 12 Sep 2006 11:54 pm
Operator : AC
Sample : SS090806LCS05
Misc : 1X ETR0609032
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 10:45:17 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

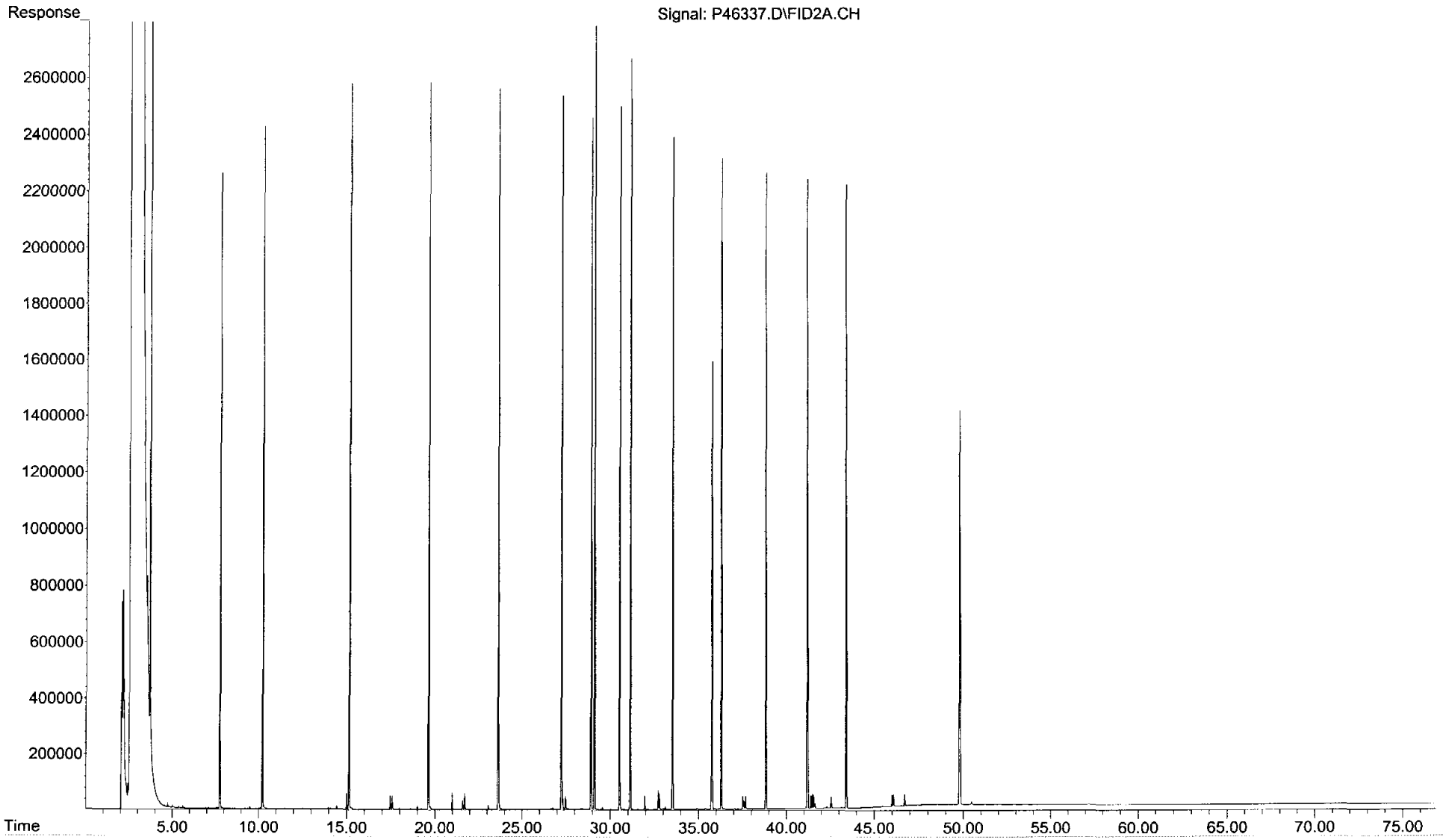
9/27/06 VRR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.14	58110156	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.14	57154295	48.522 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 97.04%
24) s	d50-Tetracosane	35.76	48799634	50.137 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 100.27%
	Target Compounds			
3) t	n-Nonane (C9)	7.74	38218402	37.351 ug/mLm
4) t	n-Decane (C10)	10.23	42456178	40.678 ug/mLm
6) t	n-Dodecane (C12)	15.16	46265905	44.072 ug/mLm
9) t	n-Tetradecane (C14)	19.64	48262969	45.041 ug/mLm
12) t	n-Hexadecane (C16)	23.65	50869828	46.982 ug/mLm
16) t	n-Octadecane (C18)	27.26	51407486	46.601 ug/mLm
18) t	n-Nonadecane (C19)	28.94	51626341	46.948 ug/mLm
20) t	n-Eicosane (C20)	30.54	51965469	47.090 ug/mLm
22) t	n-Docosane (C22)	33.54	52038259	48.039 ug/mLm
25) t	n-Tetracosane (C24)	36.30	51970567	46.145 ug/mLm
27) t	n-Hexacosane (C26)	38.85	52085691	45.749 ug/mLm
29) t	n-Octacosane (C28)	41.22	51898650	45.446 ug/mLm
31) t	n-Triacontane (C30)	43.43	51874549	45.412 ug/mLm
37) t	n-Hexatriacontane (C36)	49.83	51641130	45.726 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.89	1044098257	939.220 ug/mL
44) h	Total Resolved Hydrocarbon	40.04	723364537	650.704 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46337.D
Operator : AC
Acquired : 12 Sep 2006 11:54 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: SS090806LCS05
Misc Info : 1X ETR0609032
Vial Number: 57



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Soil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806LCSD05**
Associated Blank: **SS090806B10**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/08/06	09/13/06	100	0.10	1	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**5900**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	102	50-130

09/27/06 14:31

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46339.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 1:23 am
Operator : AC
Sample : SS090806LCSD05-AFID
Misc : 1X ETR0609032
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 10:53:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

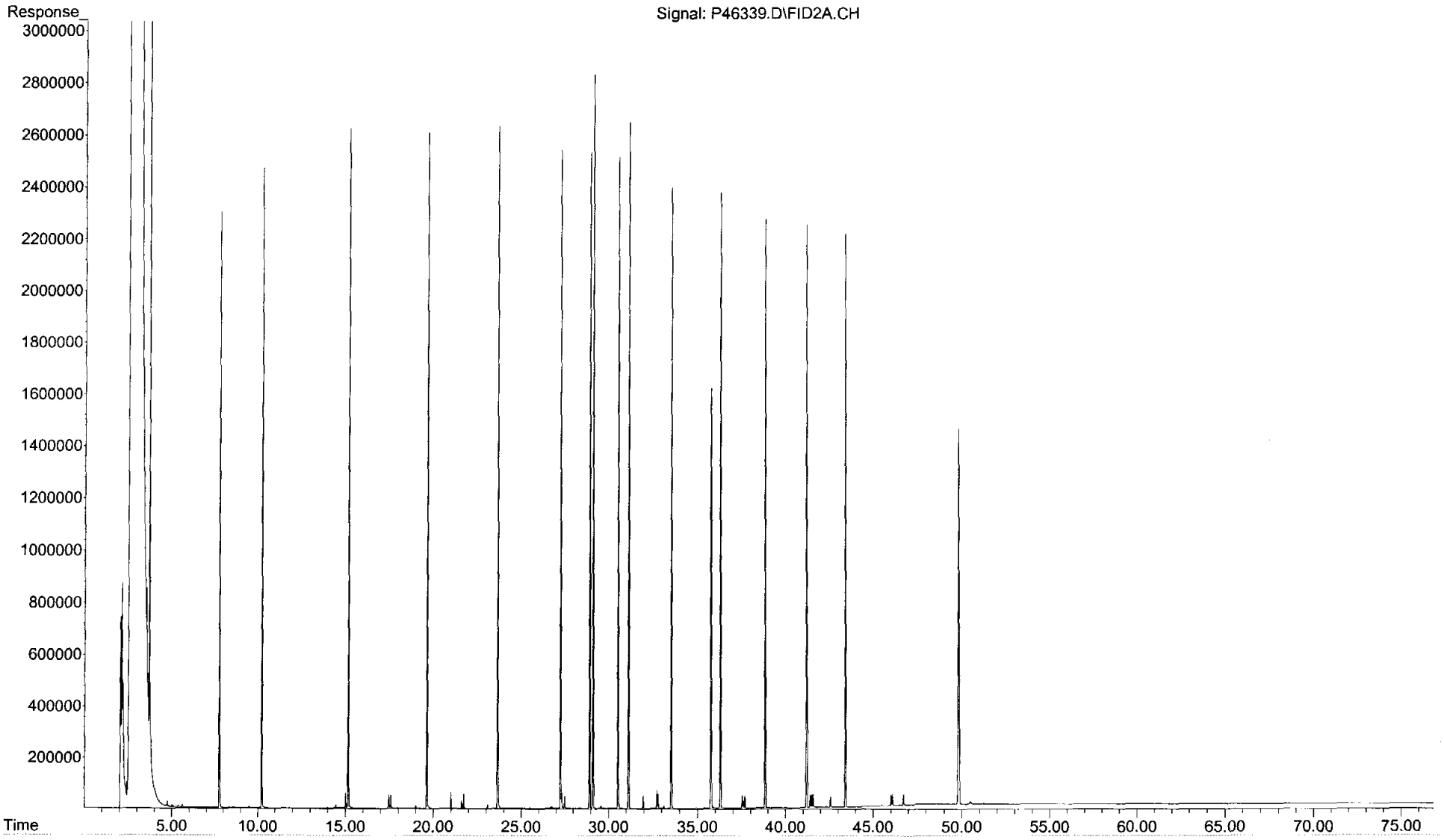
9/27/06
RPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.14	58616014	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.14	58546906	49.275 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 98.55%
24) s	d50-Tetracosane	35.76	49879846	50.805 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 101.61%
	Target Compounds			
3) t	n-Nonane (C9)	7.74	39194462	37.974 ug/mLm
4) t	n-Decane (C10)	10.23	43383413	41.208 ug/mLm
6) t	n-Dodecane (C12)	15.16	47147082	44.523 ug/mLm
9) t	n-Tetradecane (C14)	19.64	49130107	45.454 ug/mLm
12) t	n-Hexadecane (C16)	23.65	51730110	47.364 ug/mLm
16) t	n-Octadecane (C18)	27.26	52238578	46.945 ug/mLm
18) t	n-Nonadecane (C19)	28.94	52470297	47.304 ug/mLm
20) t	n-Eicosane (C20)	30.54	52837981	47.468 ug/mLm
22) t	n-Docosane (C22)	33.54	52887281	48.402 ug/mLm
25) t	n-Tetracosane (C24)	36.30	52791163	46.470 ug/mLm
27) t	n-Hexacosane (C26)	38.85	52893132	46.057 ug/mLm
29) t	n-Octacosane (C28)	41.22	52700832	45.751 ug/mLm
31) t	n-Triacontane (C30)	43.43	52772360	45.799 ug/mLm
37) t	n-Hexatriacontane (C36)	49.84	53656583	47.101 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.89	1048357136	934.913 ug/mL
44) h	Total Resolved Hydrocarbon	40.04	734709078	655.205 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46339.D
Operator : AC
Acquired : 13 Sep 2006 1:23 am using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: SS090806LCSD05-AFID
Misc Info : 1X ETR0609032
Vial Number: 58



Form III
Spike Recovery Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **TS091806AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	N/A	100	AC

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Total Petroleum Hydrocarbons	623913	560000	89	65-135

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

10/02/06 13:05

Form I
Alaska North Slope Crude
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **Alaska North Slope Crude**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **TS091806AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	09/12/06	100	0.052	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**560000**

N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46329.D
Signal(s) : FID2A.CH
Acq On : 12 Sep 2006 5:57 pm
Operator : AC
Sample : TS091806AWS01
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 18 08:45:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

9/27/06 RAR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	55415102	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.14	57471928	51.165 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 102.33%	
24) s d50-Tetracosane	35.77	48497060	52.250 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 104.50%	
Target Compounds			
2) t n-Octane (C8)	5.53	25733390	28.178 ug/mLm
3) t n-Nonane (C9)	7.74	22005504	22.552 ug/mLm
4) t n-Decane (C10)	10.23	21382017	21.483 ug/mLm
5) t n-Undecane (C11)	12.73	21391899	21.710 ug/mLm
6) t n-Dodecane (C12)	15.15	20504955	20.482 ug/mLm
7) t n-Tridecane (C13)	17.45	21540464	21.410 ug/mLm
8) t 1380	19.13	5199391	5.088 ug/mLm
9) t n-Tetradecane (C14)	19.63	18879672	18.476 ug/mLm
10) t 1470	20.91	7223515	7.037 ug/mLm
11) t n-Pentadecane (C15)	21.69	20642437	20.109 ug/mLm
12) t n-Hexadecane (C16)	23.64	18078132	17.509 ug/mLm
13) t 1650	24.54	5567708	5.312 ug/mLm
14) t n-Heptadecane (C17)	25.49	15354051	14.650 ug/mLm
15) t Pristane	25.59	11275583	11.208 ug/mLm
16) t n-Octadecane (C18)	27.25	14114442	13.417 ug/mLm
17) t Phytane	27.41	7469779	7.089 ug/mLm
18) t n-Nonadecane (C19)	28.93	13729789	13.093 ug/mLm
20) t n-Eicosane (C20)	30.53	13658636	12.979 ug/mLm
21) t n-Heneicosane (C21)	32.06	12889973	11.964 ug/mLm
22) t n-Docosane (C22)	33.52	12230551	11.840 ug/mLm
23) t n-Tricosane (C23)	34.93	10619494	9.873 ug/mLm
25) t n-Tetracosane (C24)	36.28	9842093	9.164 ug/mLm
26) t n-Pentacosane (C25)	37.58	9804647	9.077 ug/mLm
27) t n-Hexacosane (C26)	38.83	8696092	8.010 ug/mLm
28) t n-Heptacosane (C27)	40.03	6272084	5.844 ug/mLm
29) t n-Octacosane (C28)	41.20	4559645	4.187 ug/mLm
30) t n-Nonacosane (C29)	42.32	4289416	3.871 ug/mLm
31) t n-Triacontane (C30)	43.41	3573606	3.281 ug/mLm
32) t n-Hentriacontane (C31)	44.46	3024190	2.735 ug/mLm
33) t n-Dotriacontane (C32)	45.48	3223633	3.041 ug/mLm
34) t n-Tritriacontane (C33)	46.47	1965367	1.809 ug/mLm
35) t n-tetratriacontane (C34)	47.46	1831199	1.676 ug/mLm
36) t n-Pentatriacontane (C35)	48.55	1714289	1.631 ug/mLm
37) t n-Hexatriacontane (C36)	49.80	1206181	1.120 ug/mLm
38) t n-Heptatriacontane (C37)	51.23	1244630	1.124 ug/mLm
39) t n-Octatriacontane (C38)	52.91	1177297	1.082 ug/mLm
40) t n-Nonatriacontane (C39)	54.87	944945	0.872 ug/mLm
41) t n-Tetracontane (C40)	57.18f	972592	0.898 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.89	3557898145	3356.166 ug/mL

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46329.D
Signal(s) : FID2A.CH
Acq On : 12 Sep 2006 5:57 pm
Operator : AC
Sample : TS091806AWS01
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 18 08:45:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
44) h Total Resolved Hydrocarbon	40.04	1012501681	955.093 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

```
File        :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46329.D
Operator    : AC
Acquired    : 12 Sep 2006   5:57 pm using AcqMethod FRNC4B.M
Instrument :   PAH-4
Sample Name: TS091806AWS01
Misc Info  :
Vial Number: 53
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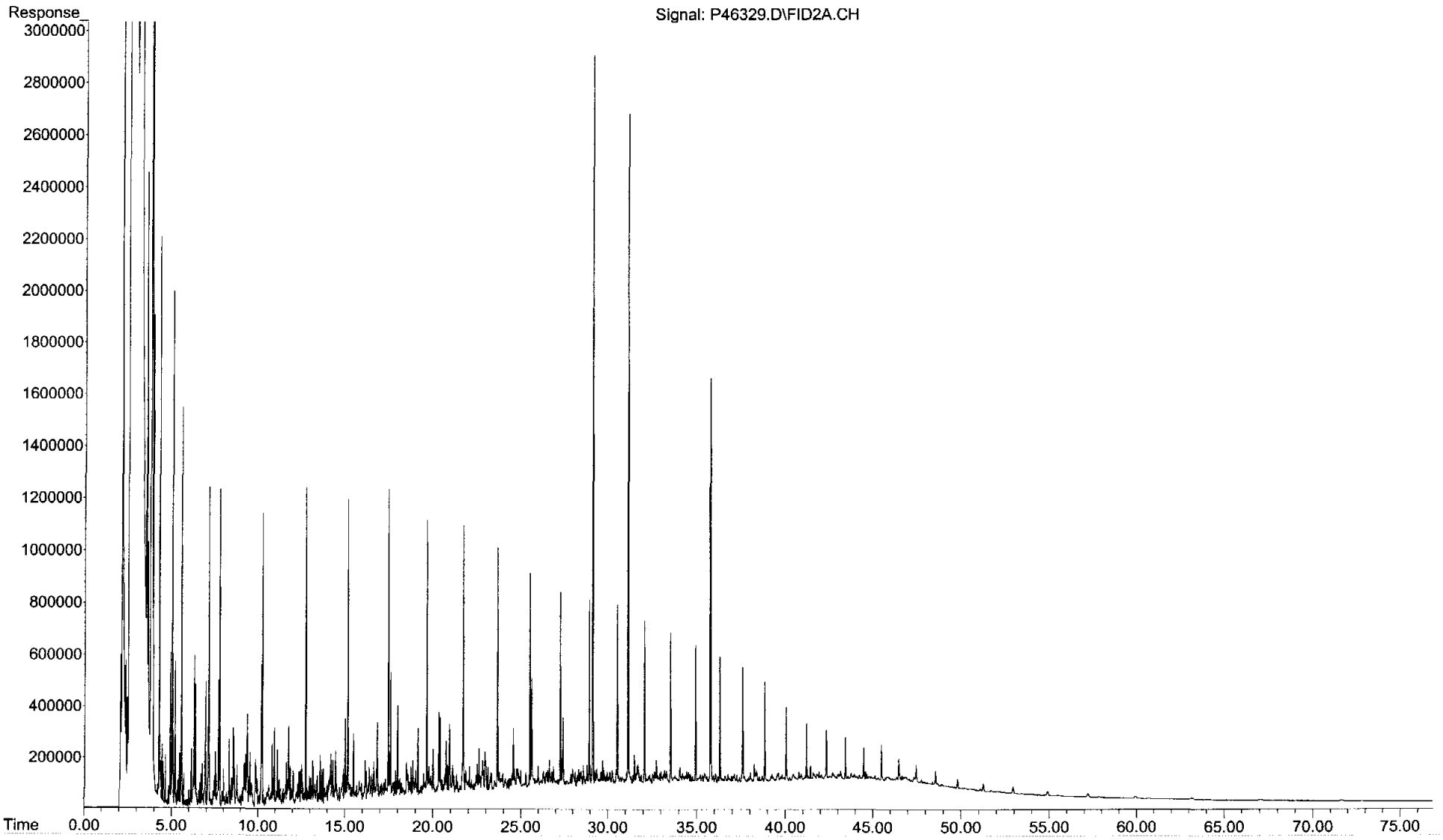


Instrument Blank Association

ETR: 0609032

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
TS091806AWS01	IB409120601	P46333
SS090806B10	IB409120601	P46333
SS090806LCS05	IB409120601	P46333
SS090806LCSD05	IB409120601	P46333
0609032-01	IB409120601	P46333
0609032-01	IB409120601	P46333
0609032-02	IB409120601	P46333
0609032-03	IB409120601	P46333
0609032-04	IB409120601	P46333
0609032-05	IB409120601	P46333
0609032-06	IB409120601	P46333
0609032-07	IB409120601	P46333

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46333.D
Signal(s) : FID2A.CH
Acq On : 12 Sep 2006 8:55 pm
Operator : AC
Sample : IB409120601
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 11:29:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

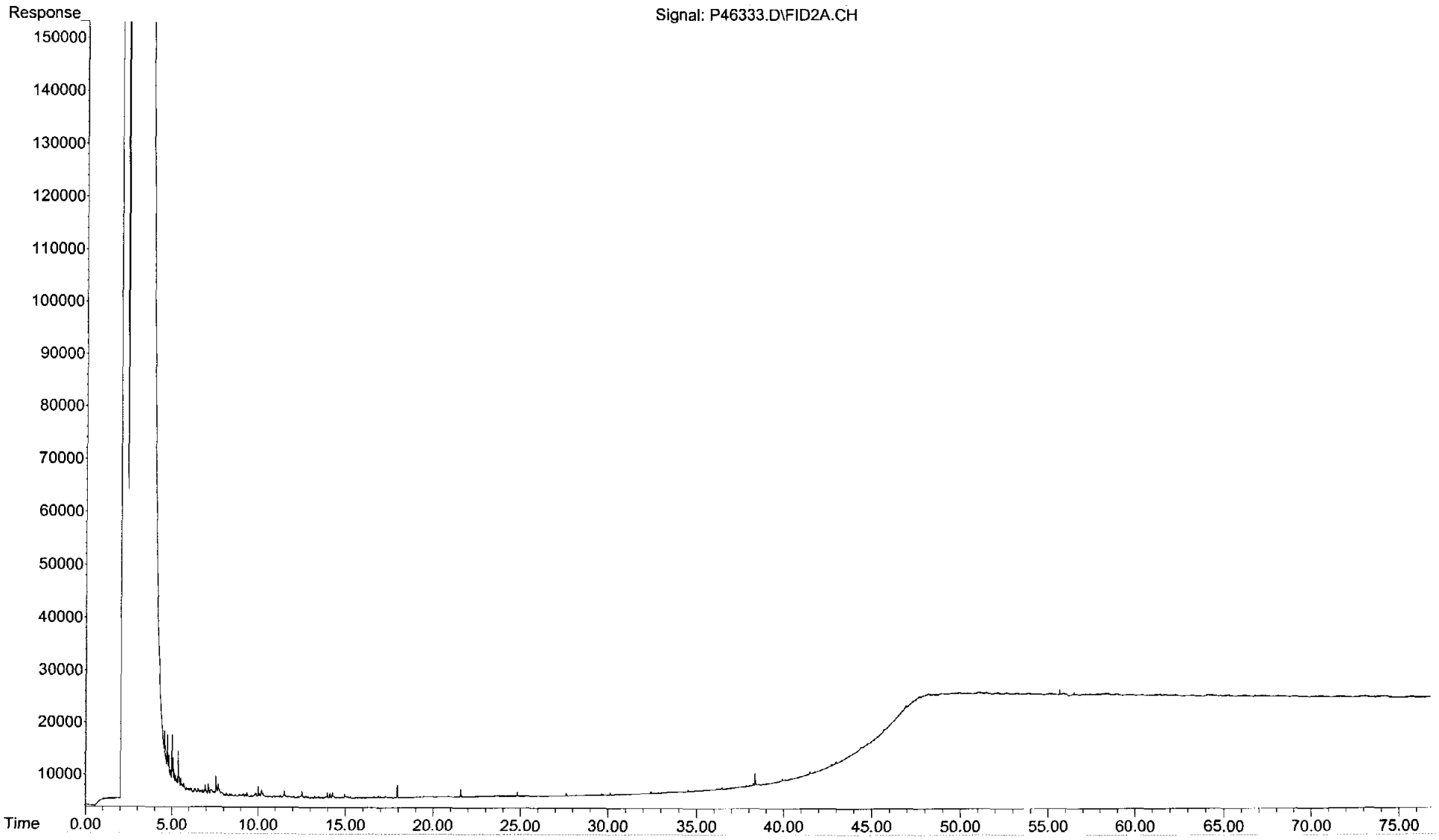
9/27/06
RPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	134	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.89	389416440	152029418.753 ug/mL
44) h Total Resolved Hydrocarbon	40.04	2701351	1054616.225 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46333.D
Operator : AC
Acquired : 12 Sep 2006 8:55 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: IB409120601
Misc Info :
Vial Number: 55



Sequence Name: C:\MSDCHEM\4\SEQUENCE\S4091201.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\DATA\SEPTEMBER06\sep12\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

MAL 9/18/06

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P46323	FRNC4B	TEST
4)	Sample	1	P46324	FRNC4B	TEST
5)	RearSamp	51	P46325	FRNC4B	TEST
6)	Sample	1	P46326	FRNC4B	TEST
7)	RearSamp	52	P46327	FRNC4B	C4091201-AFID
8)	Sample	2	P46328	FRNC4B	C4091201 PASS
9)	RearSamp	53	P46329	FRNC4B	~~ANS4091201-AFID~~ TS091806AWS01 9/18/06 RAR
10)	Sample	3	P46330	FRNC4B	ANS4091201
11)	RearSamp	54	P46331	FRNC4B	DCM-AFID
12)	Sample	4	P46332	FRNC4B	DCM
13)	RearSamp	55	P46333	FRNC4B	~~DCM-AFID~~ IB409120601 9/28/06 RAR
14)	Sample	5	P46334	FRNC4B	DCM
15)	RearSamp	56	P46335	FRNC4B	SS090806B10-AFID
16)	Sample	6	P46336	FRNC4B	SS090806B10 ✓
17)	RearSamp	57	P46337	FRNC4B	SS090806LCS05-AFID
18)	Sample	7	P46338	FRNC4B	SS090806LCS05 ✓
19)	RearSamp	58	P46339	FRNC4B	SS090806LCSD05-AFID
20)	Sample	8	P46340	FRNC4B	SS090806LCSD05 ✓
21)	RearSamp	59	P46341	FRNC4B	0609032-01-AFID
22)	Sample	9	P46342	FRNC4B	0609032-01 ✓
23)	RearSamp	60	P46343	FRNC4B	0609032-01D-AFID
24)	Sample	10	P46344	FRNC4B	0609032-01D ✓
25)	RearSamp	61	P46345	FRNC4B	0609032-02-AFID
26)	Sample	11	P46346	FRNC4B	0609032-02 ✓
27)	RearSamp	62	P46347	FRNC4B	0609032-03-AFID
28)	Sample	12	P46348	FRNC4B	0609032-03 ✓
29)	RearSamp	63	P46349	FRNC4B	0609032-04-AFID
30)	Sample	13	P46350	FRNC4B	0609032-04 ✓
31)	RearSamp	64	P46351	FRNC4B	0609032-05-AFID
32)	Sample	14	P46352	FRNC4B	0609032-05 ✓
33)	RearSamp	65	P46353	FRNC4B	0609032-06-AFID
34)	Sample	15	P46354	FRNC4B	0609032-06 ✓
35)	RearSamp	66	P46355	FRNC4B	0609032-07-AFID
36)	Sample	16	P46356	FRNC4B	0609032-07 ✓
37)	RearSamp	67	P46357	FRNC4B	C4091202-AFID
38)	Sample	17	P46358	FRNC4B	C4091202 PASS
39)	RearSamp	68	P46359	FRNC4B	dcm
40)	Sample	18	P46360	FRNC4B	qa ad24
41)	RearSamp	69	P46361	FRNC4B	ss091106b05-AFID
42)	Sample	19	P46362	FRNC4B	0609032-01-re ✓
43)	RearSamp	70	P46363	FRNC4B	ss091106lcs01-AFID

PAH #4 Sequence Information

SHC Continuing Calibration: WHAD16 ✓ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB55 ✓ Conc.: 1250ng/mL

Alaska North Slope Crude Standard: WHAD20 ✓ Conc.: 5.23 mg/mL PAH40525

FID Process Method: HC40721.M ✓ PAH Process Method: ~~PAH40219.M~~

Last Modified: Thu Sep 14 23:18:44 2006

Sequence Name: C:\MSDCHEM\4\SEQUENCE\S4091201.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P46364	FRNC4B	0609032-01d-re ✓
45)	RearSamp	71	P46365	FRNC4B	ss091106lcsd01-AFID
46)	Sample	21	P46366	FRNC4B	0609032-02-re ✓
47)	RearSamp	72	P46367	FRNC4B	0608100-01-AFID
48)	Sample	22	P46368	FRNC4B	0609032-03-re ✓
49)	RearSamp	73	P46369	FRNC4B	0608100-01ms-AFID
50)	Sample	23	P46370	FRNC4B	0609032-04-re ✓
51)	RearSamp	74	P46371	FRNC4B	0608100-01msd-AFID
52)	Sample	24	P46372	FRNC4B	0609032-05-re ✓
53)	RearSamp	75	P46373	FRNC4B	C4091203-AFID
54)	Sample	25	P46374	FRNC4B	0609032-06-re ✓
55)	RearSamp	76	P46375	FRNC4B	dcm
56)	Sample	26	P46376	FRNC4B	0609032-07-re ✓
57)	RearSamp	76	P46377	FRNC4B	
58)	Sample	27	P46378	FRNC4B	C4091203 PASS
59)	RearSamp	76	P46379	FRNC4B	
60)	Sample	28	P46380	FRNC4B	dcm
61)	RearSamp	76	P46381	FRNC4B	
62)	Sample	29	P46382	FRNC4B	ss091106b05 ✓
63)	RearSamp	76	P46383	FRNC4B	runs used
64)	Sample	30	P46384	FRNC4B	ss091106lcs01 ✓
65)	RearSamp	76	P46385	FRNC4B	
66)	Sample	31	P46386	FRNC4B	ss091106lcsd01 ✓
67)	RearSamp	76	P46387	FRNC4B	
68)	Sample	32	P46388	FRNC4B	0608100-01 ✓
69)	RearSamp	76	P46389	FRNC4B	
70)	Sample	33	P46390	FRNC4B	0608100-01ms ✓ 9/18/06 RM
71)	RearSamp	76	P46391	FRNC4B	
72)	Sample	34	P46392	FRNC4B	0608100-01msd ✓ 9/18/06 RM
73)	RearSamp	77	P46393	FRNC4B	
74)	Sample	35	P46394	FRNC4B	C4091204 PASS

QUALITY CONTROL RESULTS

Form IV
Method Blank Summary
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0609032**
Lab ID: **SS090806B10**
Date Analyzed: **09/12/06 22:25**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS090806LCS05	09/12/06 23:54
LCSD	SS090806LCSD05	09/13/06 01:23
FS-RED HOOK-1	0609032-01	09/13/06 02:53
FS-RED HOOK-1	0609032-01 D	09/13/06 04:22
FS-RED HOOK-2	0609032-02	09/13/06 05:51
FS-RED HOOK-3	0609032-03	09/13/06 07:20
FS-RED HOOK-4	0609032-04	09/13/06 08:49
FS-HALLECK ST ROW-2	0609032-05	09/13/06 10:18
FS-HALLECK ST ROW-3	0609032-06	09/13/06 12:19
FS-COURT ST ROW-1	0609032-07	09/13/06 13:49

N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288

Sequence Name: C:\MSDCHEM\4\SEQUENCE\S4072101.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\DATA\JULY06/jULY21\

Top	Pre-Seq Cmd:
Instrument Control	Pre-Seq Cmd:
Data Analysis	Pre-Seq Cmd:
Top	Post-Seq Cmd:
Instrument Control	Post-Seq Cmd:
Data Analysis	Post-Seq Cmd:

8/9/06.

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P45890	FRNC4B	dcm-afid
4)	Sample	1	P45891	FRNC4B	
5)	RearSamp	52	P45892	FRNC4B	i4072101-afid ✓
6)	Sample	1	P45893	FRNC4B	
7)	RearSamp	53	P45894	FRNC4B	i4072102-afid ✓
8)	Sample	1	P45895	FRNC4B	
9)	RearSamp	54	P45896	FRNC4B	i4072103-afid ✓
10)	Sample	1	P45897	FRNC4B	
11)	RearSamp	55	P45898	FRNC4B	i4072104-afid ✓
12)	Sample	1	P45899	FRNC4B	
13)	RearSamp	56	P45900	FRNC4B	i4072105-afid ✓
14)	Sample	1	P45901	FRNC4B	
15)	RearSamp	57	P45902	FRNC4B	ans4072101-afid ✓ ~~WHAD20~~ needs rerun
16)	Sample	1	P45903	FRNC4B	double peaks
17)	RearSamp	58	P45904	FRNC4B	q4072101 ✓ WHAC44.
18)	Sample	1	P45905	FRNC4B	C40-C44.
19)	RearSamp	59	P45906	FRNC4B	dcm ✓
20)	Sample	1	P45907	FRNC4B	
21)	RearSamp	60	P45908	FRNC4B	c4072101-afid ✓ ~~WHAC44~~
22)	Sample	1	P45909	FRNC4B	

SHC Calibration IDs

SHC Calibration Level 1: WHAD14 Conc.: 1.0ug/mL
SHC Calibration Level 2: WHAD15 Conc.: 10ug/mL
SHC Calibration Level 3 (CC): WHAD16 Conc.: 50ug/mL
SHC Calibration Level 4: WHAD17 Conc.: 100ug/mL
SHC Calibration Level 5: WHAD18 Conc.: 200ug/mL

SHC Independent Check Verification: WHAC44 Conc. 50ug/mL

Last Modified: Fri Jul 21 15:48:59 2006

Response Factor Report PAH-4

Method Path : O:\FORENSICS\METHODS\PAH4\JULY06\
Method File : HC40721.M
Title : FID Forensics
Last Update : Tue Aug 08 12:32:46 2006
Response Via : Initial Calibration

8/9/06

Calibration Files

1	=P45892.D	10	=P45894.D	50	=P45896.D
100	=P45898.D	200	=P45900.D		

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.926	0.813	0.829	0.795	0.757	0.824	7.64
3)	t	n-Nonane (C9)	1.001	0.864	0.882	0.849	0.805	0.880	8.34
4)	t	n-Decane (C10)	1.007	0.882	0.905	0.871	0.826	0.898	7.48
5)	t	n-Undecane (C11)	0.972	0.878	0.900	0.869	0.826	0.889	6.00
6)	t	n-Dodecane (C12)	0.977	0.891	0.917	0.887	0.844	0.903	5.41
7)	t	n-Tridecane (C13)	0.986	0.894	0.920	0.891	0.848	0.908	5.57
8)	t	1380	1.009	0.907	0.932	0.903	0.859	0.922	5.98
9)	t	n-Tetradecane (C14)	1.009	0.907	0.932	0.903	0.859	0.922	5.98
10)	t	1470	1.013	0.912	0.936	0.907	0.863	0.926	5.97
11)	t	n-Pentadecane (C15)	1.013	0.912	0.936	0.907	0.863	0.926	5.97
12)	t	n-Hexadecane (C16)	1.026	0.916	0.940	0.910	0.867	0.932	6.34
13)	t	1650	1.041	0.926	0.952	0.923	0.886	0.946	6.17
14)	t	n-Heptadecane (C17)	1.041	0.926	0.952	0.923	0.886	0.946	6.17
15)	t	Pristane	1.017	0.890	0.913	0.884	0.834	0.908	7.43
16)	t	n-Octadecane (C18)	1.057	0.930	0.954	0.924	0.881	0.949	6.94
17)	t	Phytane	1.066	0.929	0.954	0.925	0.880	0.951	7.34
18)	t	n-Nonadecane (C19)	1.060	0.926	0.950	0.920	0.876	0.946	7.29
19)	s	ortho-terphenyl	1.049	1.062	1.020	1.000	0.937	1.014	4.85
20)	t	n-Eicosane (C20)	1.065	0.929	0.953	0.922	0.879	0.950	7.38
21)	t	n-Heneicosane (C21)	1.092	0.951	0.975	0.943	0.899	0.972	7.47
22)	t	n-Docosane (C22)	1.054	0.911	0.934	0.902	0.859	0.932	7.86
23)	t	n-Tricosane (C23)	1.101	0.950	0.971	0.937	0.893	0.971	8.09
24)	s	d50-Tetracosane	0.885	0.875	0.839	0.820	0.770	0.837	5.51
25)	t	n-Tetracosane (C24)	1.107	0.946	0.969	0.934	0.888	0.969	8.50
26)	t	n-Pentacosane (C25)	1.120	0.953	0.973	0.937	0.891	0.975	8.91
27)	t	n-Hexacosane (C26)	1.121	0.960	0.980	0.942	0.895	0.980	8.70
28)	t	n-Heptacosane (C27)	1.116	0.949	0.967	0.928	0.882	0.968	9.11
29)	t	n-Octacosane (C28)	1.138	0.962	0.980	0.940	0.893	0.983	9.43
30)	t	n-Nonacosane (C29)	1.149	0.982	1.000	0.958	0.910	1.000	8.98
31)	t	n-Triacontane (C30)	1.131	0.965	0.983	0.941	0.895	0.983	9.07
32)	t	n-Hentriacontane (C31	1.153	0.979	0.996	0.953	0.908	0.998	9.31
33)	t	n-Dotriacontane (C32)	1.100	0.940	0.956	0.914	0.873	0.957	8.97
34)	t	n-Tritriacontane (C33	1.130	0.961	0.978	0.935	0.897	0.980	9.11
35)	t	n-tetratriacontane (C	1.129	0.968	0.984	0.941	0.907	0.986	8.63
36)	t	n-Pentatriacontane (C	1.089	0.929	0.945	0.904	0.876	0.949	8.72
37)	t	n-Hexatriacontane (C3	1.107	0.952	0.969	0.928	0.903	0.972	8.18
38)	t	n-Heptatriacontane (C	1.141	0.976	0.995	0.954	0.932	0.999	8.24
39)	t	n-Octatriacontane (C3	1.134	0.954	0.973	0.935	0.916	0.982	8.90
40)	t	n-Nonatriacontane (C3	1.105	0.951	0.973	0.939	0.921	0.978	7.55
41)	t	n-Tetracontane (C40)	1.105	0.951	0.973	0.939	0.921	0.978	7.55
42)	h	C9-C40 Total Petroleu	1.076	0.934	0.955	0.939	0.879	0.957	7.60
43)	h	C10-C28 DRO	1.076	0.934	0.955	0.939	0.879	0.957	7.60
44)	h	Total Resolved Hydroc	1.076	0.934	0.955	0.939	0.879	0.957	7.60

(#) = Out of Range

2° Review
RPR 9/11/06

8/9/06

FID TPH RF CALULATION

Method ID	L5 FRNC4B.M	L4 FRNC4B.M	L3 FRNC4B.M	L2 FRNC4B.M	L1 FRNC4B.M
Date	7/21/06 11:35 PM	7/21/06 10:04 PM	7/21/06 8:33 PM	7/21/06 7:01 PM	7/21/06 5:28 PM
File ID	P45900.D	P45898.D	P45896.D	P45894.D	P45892.D
n-Octane (C8)	194735939	98513614	48761837	9988964	1099480
n-Nonane (C9)	207281230	105138157	51898878	10614220	1189356
n-Decane (C10)	212584945	107865163	53224538	10832245	1195538
n-Undecane (C11)	212742235	107631873	52938748	10786023	1154001
n-Dodecane (C12)	217266230	109889731	53937463	10941769	1160595
n-Tridecane (C13)	218306141	110381895	54122848	10979544	1170541
n-Tetradecane (C14)	221224592	111825674	54825419	11136899	1198122
n-Pentadecane (C15)	222262001	112313483	55069163	11193169	1203465
n-Hexadecane (C16)	223097791	112697586	55288304	11243419	1218732
n-Heptadecane (C17)	228043935	114331148	55992384	11374040	1236518
Pristane	214768966	109535195	53714656	10925704	1207745
n-Octadecane (C18)	226705821	114485408	56104117	11421604	1255491
Phytane	226586163	114574145	56097113	11405942	1266482
n-Nonadecane (C19)	225433340	113912861	55880956	11365753	1258822
n-Eicosane (C20)	226148370	114242589	56044287	11403562	1265252
n-Heneicosane (C21)	231354601	116862067	57381591	11676183	1297161
n-Docosane (C22)	221182716	111773743	54940003	11185260	1251630
n-Tricosane (C23)	229846486	116108273	57146568	11659691	1308092
n-Tetracosane (C24)	228701296	115722108	57030215	11620927	1314381
n-Pentacosane (C25)	229230996	116039778	57245198	11697543	1330369
n-Hexacosane (C26)	230424269	116682949	57633802	11784399	1331929
n-Heptacosane (C27)	227011276	115004615	56889723	11646825	1324947
n-Octacosane (C28)	229781519	116484212	57678426	11811092	1351032
n-Nonacosane (C29)	234293821	118696030	58846057	12054469	1364241
n-Triacontane (C30)	230296490	116565409	57803350	11849365	1343374
n-Hentriacontane (C31)	233636949	118035085	58593765	12016960	1369120
n-Dotriacontane (C32)	224837121	113250412	56212002	11541448	1306136
n-Tritriacontane (C33)	230820456	115792675	57525245	11804509	1342333
n-tetratriacontane (C34)	233511236	116549403	57903888	11883315	1340630
n-Pentatriacontane (C35)	225496881	112004704	55585466	11403059	1293461
n-Hexatriacontane (C36)	232530231	114919485	56981370	11690458	1314599
n-Heptatriacontane (C37)	239901155	118151111	58506206	11984733	1354562
n-Octatriacontane (C38)	235665594	115817530	57232131	11709644	1346514
n-Tetracontane (C40)	236968363	116293570	57232289	11677048	1312823

	L5	L4	L3	L2	L1
C9-C40 Total Petroleum Hydrocarbons	226301310	113926608	56166854	11464267	1278121
C10-C28 DRO	226301310	113926608	56166854	11464267	1278121
Total Resolved Hydrocarbons	226301310	113926608	56166854	11464267	1278121

2° Review
RDR 9/8/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\
Data File : P45892.D
Signal(s) : FID2A.CH
Acq On : 21 Jul 2006 5:28 pm
Operator : AC
Sample : i4072101-afid
Misc : whad14
ALS Vial : 52 Sample Multiplier: 1

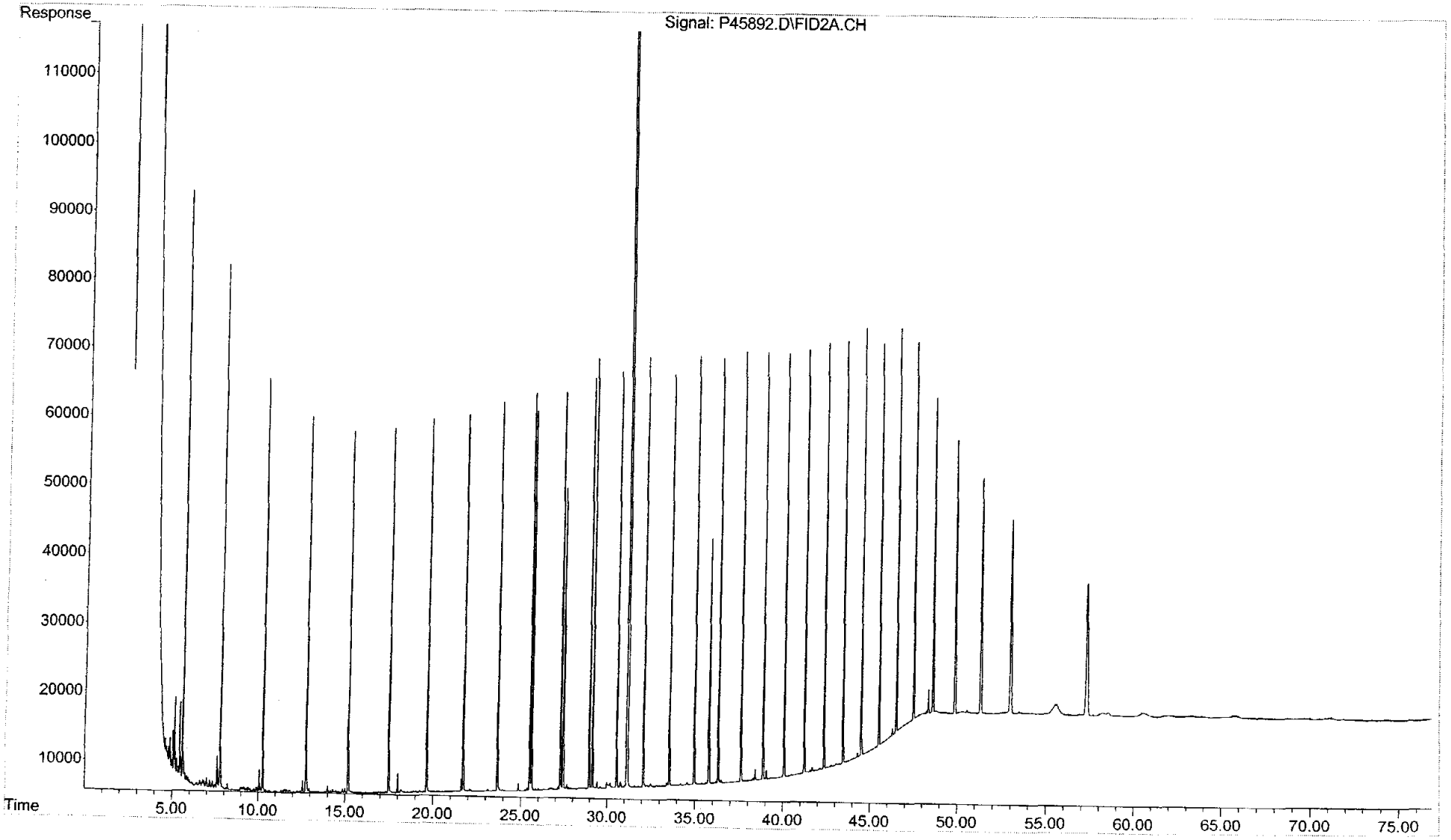
Integration File: SHCINT1.E
Quant Time: Jul 28 09:16:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Fri Jul 28 08:26:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	59384032	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.14	1245486	0.971 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	1.94%#
24) s d50-Tetracosane	35.77	1050529	0.914 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	1.83%#
Target Compounds			
2) t n-Octane (C8)	5.57	1099480	1.104✓ug/mLm
3) t n-Nonane (C9)	7.77	1189356	1.090 ug/mLm
4) t n-Decane (C10)	10.24	1195538	1.064 ug/mLm
5) t n-Undecane (C11)	12.75	1154001	1.024 ug/mLm
6) t n-Dodecane (C12)	15.17	1160595	1.013 ug/mLm
7) t n-Tridecane (C13)	17.47	1170541	1.014 ug/mLm
9) t n-Tetradecane (C14)	19.65	1198122	1.024 ug/mLm
11) t n-Pentadecane (C15)	21.70	1203465	1.019 ug/mLm
12) t n-Hexadecane (C16)	23.66	1218732	1.026 ug/mLm
14) t n-Heptadecane (C17)	25.51	1236518	1.035✓ug/mLm
15) t Pristane	25.61	1207745	1.051 ug/mLm
16) t n-Octadecane (C18)	27.27	1255491	1.050 ug/mLm
17) t Phytane	27.43	1266482	1.058 ug/mLm
18) t n-Nonadecane (C19)	28.95	1258822✓	1.059 ug/mLm
20) t n-Eicosane (C20)	30.55	1265252	1.068 ug/mLm
21) t n-Heneicosane (C21)	32.08	1297161	1.063 ug/mLm
22) t n-Docosane (C22)	33.55	1251630	1.046 ug/mLm
23) t n-Tricosane (C23)	34.95	1308092	1.078 ug/mLm
25) t n-Tetracosane (C24)	36.30	1314381	1.075✓ug/mLm
26) t n-Pentacosane (C25)	37.60	1330369	1.093 ug/mLm
27) t n-Hexacosane (C26)	38.86	1331929	1.102 ug/mLm
28) t n-Heptacosane (C27)	40.06	1324947	1.101 ug/mLm
29) t n-Octacosane (C28)	41.23	1351032	1.108 ug/mLm
30) t n-Nonacosane (C29)	42.35	1364241	1.096 ug/mLm
31) t n-Triacontane (C30)	43.44	1343374✓	1.100 ug/mLm
32) t n-Hentriacontane (C31)	44.49	1369120	1.148 ug/mLm
33) t n-Dotriacontane (C32)	45.51	1306136	1.100 ug/mLm
34) t n-Tritriacontane (C33)	46.50	1342333	1.111✓ug/mLm
35) t n-tetratriacontane (C34)	47.49	1340630	1.099 ug/mLm
36) t n-Pentatriacontane (C35)	48.59	1293461	1.100 ug/mLm
37) t n-Hexatriacontane (C36)	49.85	1314599	1.088 ug/mLm
38) t n-Heptatriacontane (C37)	51.30	1354562	1.062 ug/mLm
39) t n-Octatriacontane (C38)	52.98	1346514	1.105 ug/mLm
41) t n-Tetracontane (C40)	57.28	1312823	1.094 ug/mLm

2° Review EPR 9/11/06

File :O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\P45892.D
Operator : AC
Acquired : 21 Jul 2006 5:28 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: i4072101-afid
Misc Info : whad14
Vial Number: 52



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\
Data File : P45894.D
Signal(s) : FID2A.CH
Acq On : 21 Jul 2006 7:01 pm
Operator : AC
Sample : i4072102-afid
Misc : whad15
ALS Vial : 53 Sample Multiplier: 1

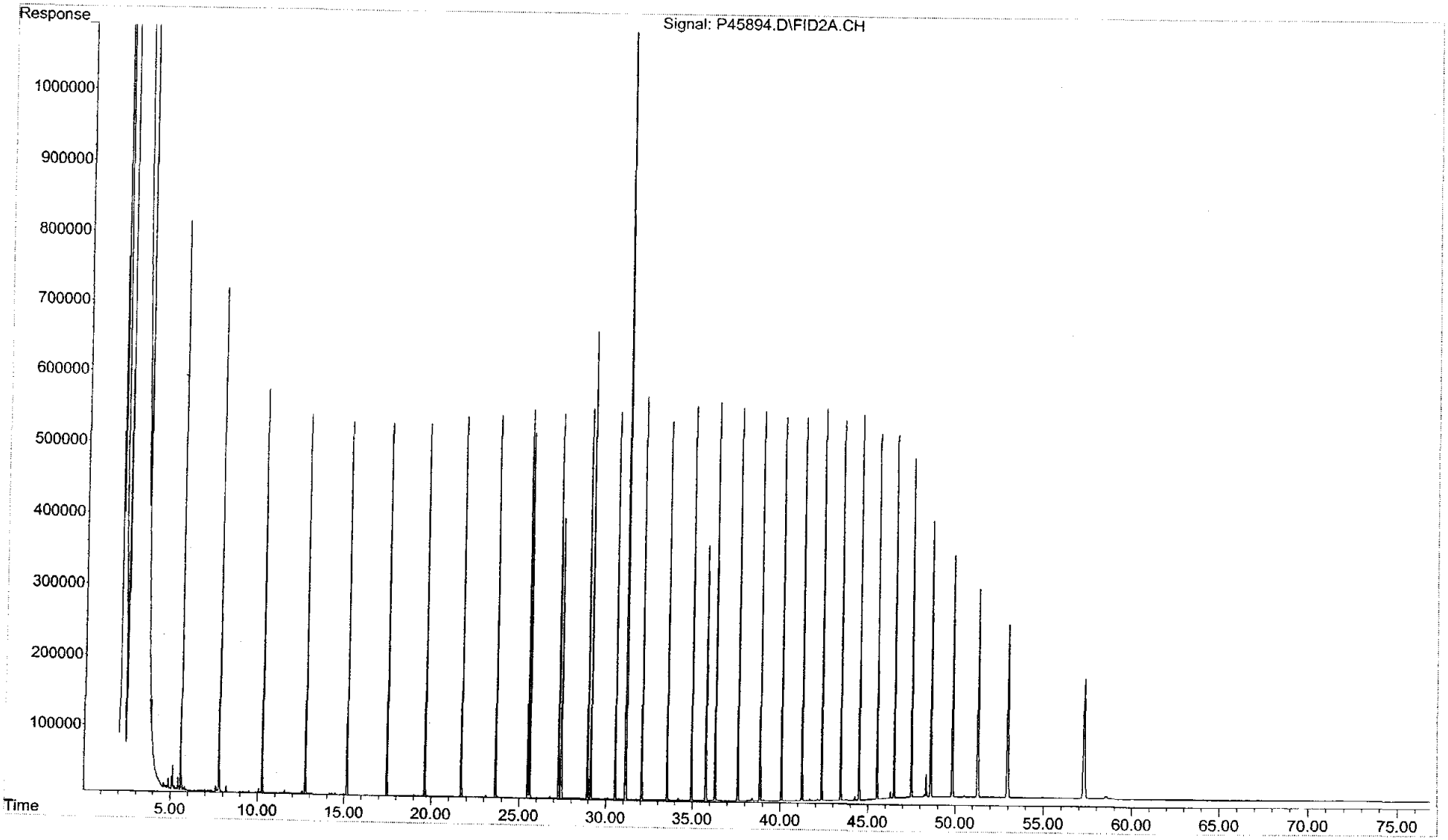
Integration File: SHCINT1.E
Quant Time: Jul 28 09:25:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Fri Jul 28 08:26:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	61395109	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	13039747	9.831 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	19.66%#
24) s d50-Tetracosane	35.77	10741374	9.036 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	18.07%#
Target Compounds			
2) t n-Octane (C8)	5.58	9988964	9.699 ug/mLm
3) t n-Nonane (C9)	7.77	10614220	9.407 ug/mLm
4) t n-Decane (C10)	10.24	10832245	9.325 ug/mLm
5) t n-Undecane (C11)	12.75	10786023	9.256 ug/mLm
6) t n-Dodecane (C12)	15.17	10941769	9.233 ug/mLm
7) t n-Tridecane (C13)	17.47	10979544	9.201 ug/mLm
9) t n-Tetradecane (C14)	19.65	11136899	9.203 ug/mLm
11) t n-Pentadecane (C15)	21.71	11193169	9.169 ug/mLm
12) t n-Hexadecane (C16)	23.66	11243419	9.154 ug/mLm
14) t n-Heptadecane (C17)	25.51	11374040	9.208 ug/mLm
15) t Pristane	25.62	10925704	9.194 ug/mLm
16) t n-Octadecane (C18)	27.27	11421604	9.242 ug/mLm
17) t Phytane	27.43	11405942	9.218 ug/mLm
18) t n-Nonadecane (C19)	28.95	11365753	9.253 ug/mLm
20) t n-Eicosane (C20)	30.55	11403562	9.309 ug/mLm
21) t n-Heneicosane (C21)	32.08	11676183	9.253 ug/mLm
22) t n-Docosane (C22)	33.55	11185260	9.038 ug/mLm
23) t n-Tricosane (C23)	34.96	11659691	9.295 ug/mLm
25) t n-Tetracosane (C24)	36.31	11620927	9.195 ug/mLm
26) t n-Pentacosane (C25)	37.61	11697543	9.298 ug/mLm
27) t n-Hexacosane (C26)	38.86	11784399	9.428 ug/mLm
28) t n-Heptacosane (C27)	40.07	11646825	9.365 ug/mLm
29) t n-Octacosane (C28)	41.23	11811092	9.372 ug/mLm
30) t n-Nonacosane (C29)	42.36	12054469	9.371 ug/mLm
31) t n-Triacontane (C30)	43.44	11849365	9.383 ug/mLm
32) t n-Hentriacontane (C31)	44.50	12016960	9.746 ug/mLm
33) t n-Dotriacontane (C32)	45.52	11541448	9.399 ug/mLm
34) t n-Tritriacontane (C33)	46.51	11804509	9.448 ug/mLm
35) t n-tetratriacontane (C34)	47.50	11883315	9.422 ug/mLm
36) t n-Pentatriacontane (C35)	48.60	11403059	9.384 ug/mLm
37) t n-Hexatriacontane (C36)	49.86	11690458	9.354 ug/mLm
38) t n-Heptatriacontane (C37)	51.30	11984733	9.085 ug/mLm
39) t n-Octatriacontane (C38)	52.99	11709644	9.291 ug/mLm
41) t n-Tetracontane (C40)	57.30	11677048	9.414 ug/mLm

2° Review RPR 9/11/06

File :O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\P45894.D
Operator : AC
Acquired : 21 Jul 2006 7:01 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: i4072102-afid
Misc Info : whad15
Vial Number: 53



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\
Data File : P45896.D
Signal(s) : FID2A.CH
Acq On : 21 Jul 2006 8:33 pm
Operator : AC
Sample : i4072103-afid
Misc : whad16
ALS Vial : 54 Sample Multiplier: 1

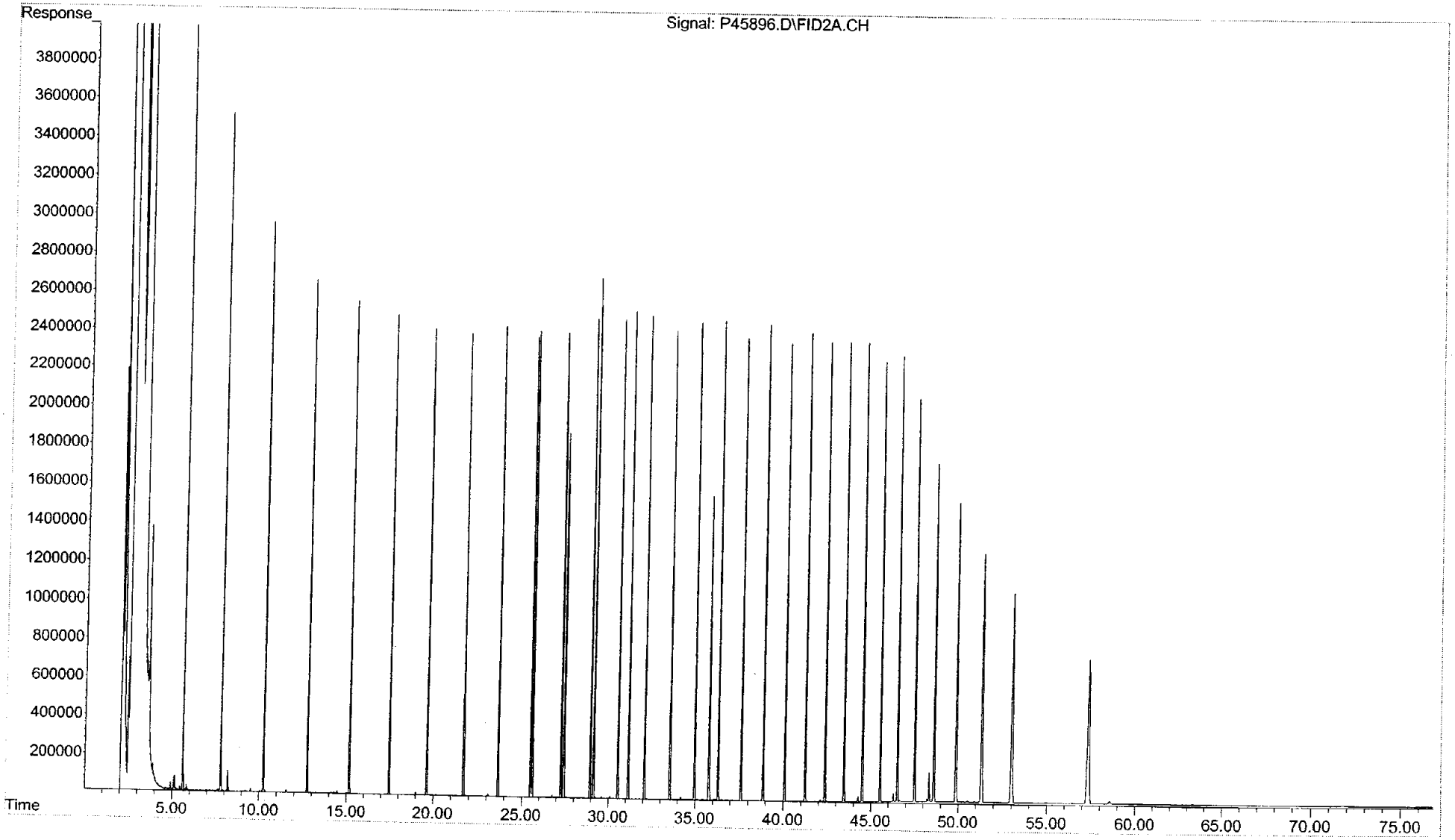
Integration File: SHCINT1.E
Quant Time: Jul 28 09:38:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Fri Jul 28 08:26:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	58828780	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.17	60026325	47.228 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	94.46%
24) s d50-Tetracosane	35.79	49333509	43.312 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	86.62%
Target Compounds			
2) t n-Octane (C8)	5.60	48761837	49.414 ug/mLm
3) t n-Nonane (C9)	7.79	51898878	48.003 ug/mLm
4) t n-Decane (C10)	10.26	53224538	47.818 ug/mLm
5) t n-Undecane (C11)	12.76	52938748	47.413 ug/mLm
6) t n-Dodecane (C12)	15.18	53937463	47.501✓ ug/mLm
7) t n-Tridecane (C13)	17.48	54122848	47.334 ug/mLm
9) t n-Tetradecane (C14)	19.66	54825419	47.281 ug/mLm
11) t n-Pentadecane (C15)	21.72	55069163	47.076 ug/mLm
12) t n-Hexadecane (C16)	23.67	55288304	46.978 ug/mLm
14) t n-Heptadecane (C17)	25.53	55992384	47.305✓ ug/mLm
15) t Pristane	25.64	53714656	47.172 ug/mLm
16) t n-Octadecane (C18)	27.29	56104117✓	47.376 ug/mLm
17) t Phytane	27.45	56097113	47.315 ug/mLm
18) t n-Nonadecane (C19)	28.97	55880956	47.476 ug/mLm
20) t n-Eicosane (C20)	30.57	56044287	47.748 ug/mLm
21) t n-Heneicosane (C21)	32.10	57381591	47.457 ug/mLm
22) t n-Docosane (C22)	33.57	54940003	46.331 ug/mLm
23) t n-Tricosane (C23)	34.98	57146568	47.543 ug/mLm
25) t n-Tetracosane (C24)	36.33	57030215	47.095✓ ug/mLm
26) t n-Pentacosane (C25)	37.63	57245198	47.489 ug/mLm
27) t n-Hexacosane (C26)	38.88	57633802✓	48.119 ug/mLm
28) t n-Heptacosane (C27)	40.09	56889723	47.738 ug/mLm
29) t n-Octacosane (C28)	41.25	57678426	47.766 ug/mLm
30) t n-Nonacosane (C29)	42.38	58846057	47.740 ug/mLm
31) t n-Triacontane (C30)	43.47	57803350	47.768 ug/mLm
32) t n-Hentriacontane (C31)	44.52	58593765	49.594 ug/mLm
33) t n-Dotriacontane (C32)	45.54	56212002	47.773 ug/mLm
34) t n-Tritriacontane (C33)	46.53	57525245	48.048✓ ug/mLm
35) t n-tetratriacontane (C34)	47.53	57903888	47.914 ug/mLm
36) t n-Pentatriacontane (C35)	48.63	55585466✓	47.739 ug/mLm
37) t n-Hexatriacontane (C36)	49.89	56981370✓	47.583 ug/mLm
38) t n-Heptatriacontane (C37)	51.35	58506206	46.283 ug/mLm
39) t n-Octatriacontane (C38)	53.05	57232131	47.389 ug/mLm
41) t n-Tetracontane (C40)	57.38	57232289	48.152 ug/mLm

2ND RAR 9/11/06
Review

File :O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\P45896.D
Operator : AC
Acquired : 21 Jul 2006 8:33 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: i4072103-afid
Misc Info : whad16
Vial Number: 54



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JULY06\JULY21.SEC\
Data File : P45898.D
Signal(s) : FID2A.CH
Acq On : 21 Jul 2006 10:04 pm
Operator : AC
Sample : i4072104-afid
Misc : whad17
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Aug 04 13:29:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Fri Jul 28 08:26:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

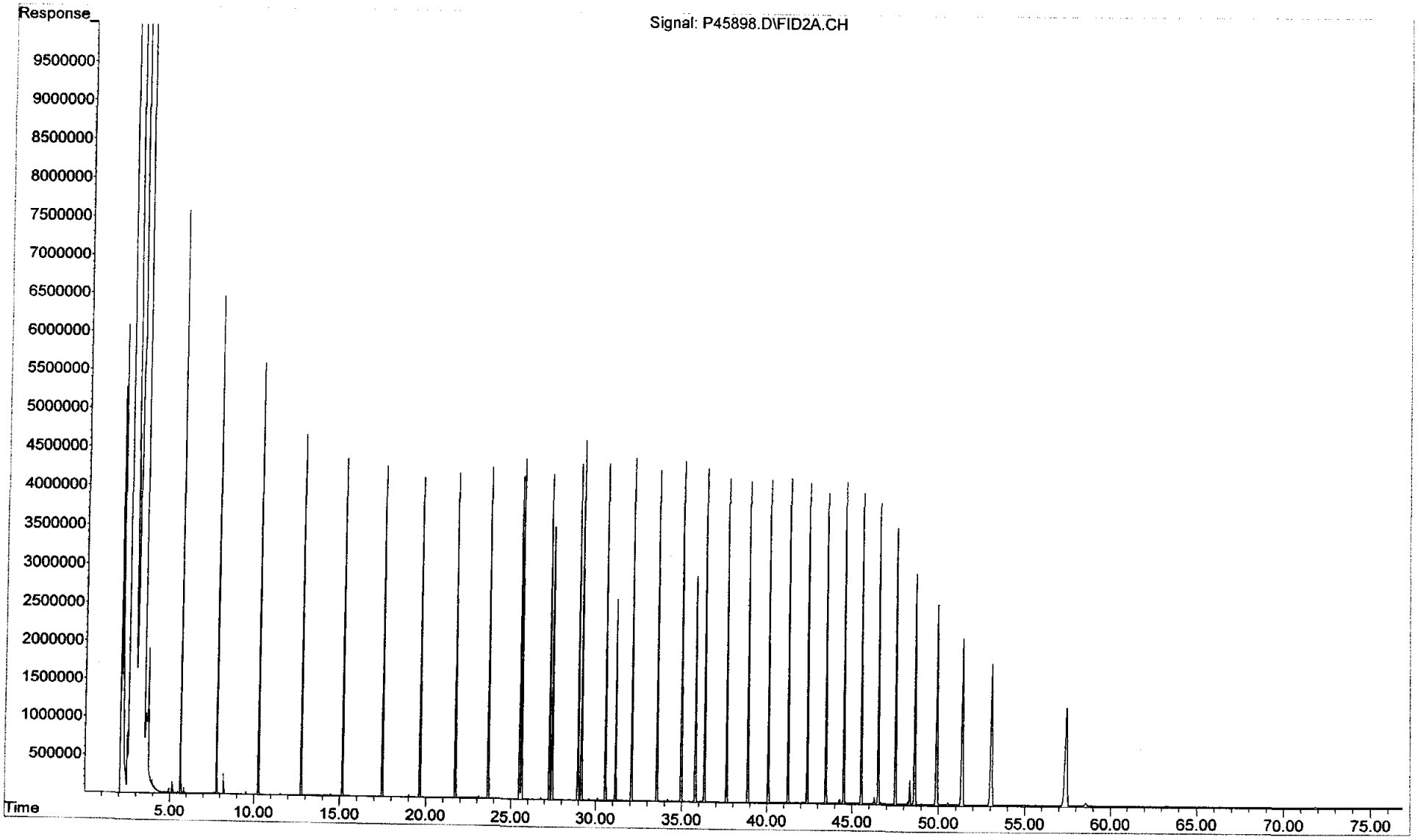
Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	61930813	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.19	123811309	92.534 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	185.07%#
24) s d50-Tetracosane	35.81	101539723	84.682 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	169.36%#
Target Compounds			
2) t n-Octane (C8)	5.64	98513614	94.830 ug/mLm
3) t n-Nonane (C9)	7.82	105138157	92.375 ug/mLm
4) t n-Decane (C10)	10.28	107865163	92.055 ug/mLm
5) t n-Undecane (C11)	12.78	107631873	91.568 ug/mLm
6) t n-Dodecane (C12)	15.20	109889731	91.929 ug/mLm
7) t n-Tridecane (C13)	17.50	110381895	91.702 ug/mLm
9) t n-Tetradecane (C14)	19.68	111825674	91.608 ug/mLm
11) t n-Pentadecane (C15)	21.74	112313483	91.203 ug/mLm
12) t n-Hexadecane (C16)	23.69	112697586	90.963 ug/mLm
14) t n-Heptadecane (C17)	25.55	114331148	91.755 ug/mLm
15) t Pristane	25.66	109535195	91.374 ug/mLm
16) t n-Octadecane (C18)	27.31	114485408	91.833 ug/mLm
17) t Phytane	27.47	114574145	91.797 ug/mLm
18) t n-Nonadecane (C19)	28.99	113912861	91.932 ug/mLm
20) t n-Eicosane (C20)	30.59	114242589	92.457 ug/mLm
21) t n-Heneicosane (C21)	32.12	116862067	91.810 ug/mLm
22) t n-Docosane (C22)	33.59	111773743	89.537 ug/mLm
23) t n-Tricosane (C23)	35.00	116108273	91.758 ug/mLm
25) t n-Tetracosane (C24)	36.35	115722108	90.775 ug/mLm
26) t n-Pentacosane (C25)	37.65	116039778	91.441 ug/mLm
27) t n-Hexacosane (C26)	38.91	116682949	92.540 ug/mLm
28) t n-Heptacosane (C27)	40.11	115004615	91.671 ug/mLm
29) t n-Octacosane (C28)	41.28	116484212	91.634 ug/mLm
30) t n-Nonacosane (C29)	42.40	118696030	91.471 ug/mLm
31) t n-Triacontane (C30)	43.49	116565409	91.504 ug/mLm
32) t n-Hentriacontane (C31)	44.55	118035085	94.901 ug/mLm
33) t n-Dotriacontane (C32)	45.57	113250412	91.427 ug/mLm
34) t n-Tritriacontane (C33)	46.56	115792675	91.872 ug/mLm
35) t n-tetratriacontane (C34)	47.55	116549403	91.611 ug/mLm
36) t n-Pentatriacontane (C35)	48.66	112004704	91.376 ug/mLm
37) t n-Hexatriacontane (C36)	49.93	114919485	91.158 ug/mLm
38) t n-Heptatriacontane (C37)	51.40	118151111	88.785 ug/mLm
39) t n-Octatriacontane (C38)	53.10	115817530	91.096 ug/mLm
41) t n-Tetracontane (C40)	57.45	116293570	92.942 ug/mLm

2° Review RAR 9/11/06

(f)=RT Delta > 1/2 Window (m)=manual int.

HC40721.M Fri Aug 04 13:30:56 2006

File :O:\FORENSICS\DATA\PAH4\JULY06\JULY21.SEC\P45898.D
Operator : AC
Acquired : 21 Jul 2006 10:04 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: i4072104-afid
Misc Info : whad17
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JULY06\JULY21.SEC\
Data File : P45900.D
Signal(s) : FID2A.CH
Acq On : 21 Jul 2006 11:35 pm
Operator : AC
Sample : i4072105-afid
Misc : whad18
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Aug 04 14:05:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Fri Aug 04 07:57:51 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.19	64353674	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.22	241189686	173.473 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 346.95%#	
24) s d50-Tetracosane	35.84	198140440	159.023 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 318.05%#	
Target Compounds			
2) t n-Octane (C8)	5.70	194735939	180.397 ug/mLm
3) t n-Nonane (C9)	7.86	207281230	175.261 ug/mLm
4) t n-Decane (C10)	10.31	212584945	174.595 ug/mLm
5) t n-Undecane (C11)	12.80	212742235✓	174.177 ug/mLm
6) t n-Dodecane (C12)	15.21	217266230	174.912 ug/mLm
7) t n-Tridecane (C13)	17.52	218306141	174.534✓ ug/mLm
9) t n-Tetradecane (C14)	19.70	221224592	174.405 ug/mLm
11) t n-Pentadecane (C15)	21.76	222262001	173.691 ug/mLm
12) t n-Hexadecane (C16)	23.71	223097791	173.291 ug/mLm
14) t n-Heptadecane (C17)	25.57	228043935	176.123 ug/mLm
15) t Pristane	25.68	214768966	172.415 ug/mLm
16) t n-Octadecane (C18)	27.34	226705821	175.004✓ ug/mLm
17) t Phytane	27.51	226586163	174.705 ug/mLm
18) t n-Nonadecane (C19)	29.02	225433340	175.084 ug/mLm
20) t n-Eicosane (C20)	30.62	226148370✓	176.132 ug/mLm
21) t n-Heneicosane (C21)	32.15	231354601	174.915 ug/mLm
22) t n-Docosane (C22)	33.62	221182716	170.510 ug/mLm
23) t n-Tricosane (C23)	35.03	229846486	174.805 ug/mLm
25) t n-Tetracosane (C24)	36.39	228701296	172.644 ug/mLm
26) t n-Pentacosane (C25)	37.68	229230996	173.836 ug/mLm
27) t n-Hexacosane (C26)	38.94	230424269	175.867 ug/mLm
28) t n-Heptacosane (C27)	40.14	227011276	174.140 ug/mLm
29) t n-Octacosane (C28)	41.31	229781519	173.955✓ ug/mLm
30) t n-Nonacosane (C29)	42.44	234293821	173.758 ug/mLm
31) t n-Triacontane (C30)	43.53	230296490	173.977 ug/mLm
32) t n-Hentriacontane (C31)	44.58	233636949	180.773 ug/mLm
33) t n-Dotriacontane (C32)	45.60	224837121	174.677 ug/mLm
34) t n-Tritriacontane (C33)	46.59	230820456	176.243 ug/mLm
35) t n-tetratriacontane (C34)	47.59	233511236	176.636 ug/mLm
36) t n-Pentatriacontane (C35)	48.71	225496881	177.039 ug/mLm
37) t n-Hexatriacontane (C36)	49.99	232530231	177.507✓ ug/mLm
38) t n-Heptatriacontane (C37)	51.46f	239901155	173.487 ug/mLm
39) t n-Octatriacontane (C38)	53.18f	235665594	178.383 ug/mLm
41) t n-Tetracontane (C40)	57.57f	236968363✓	182.255 ug/mLm

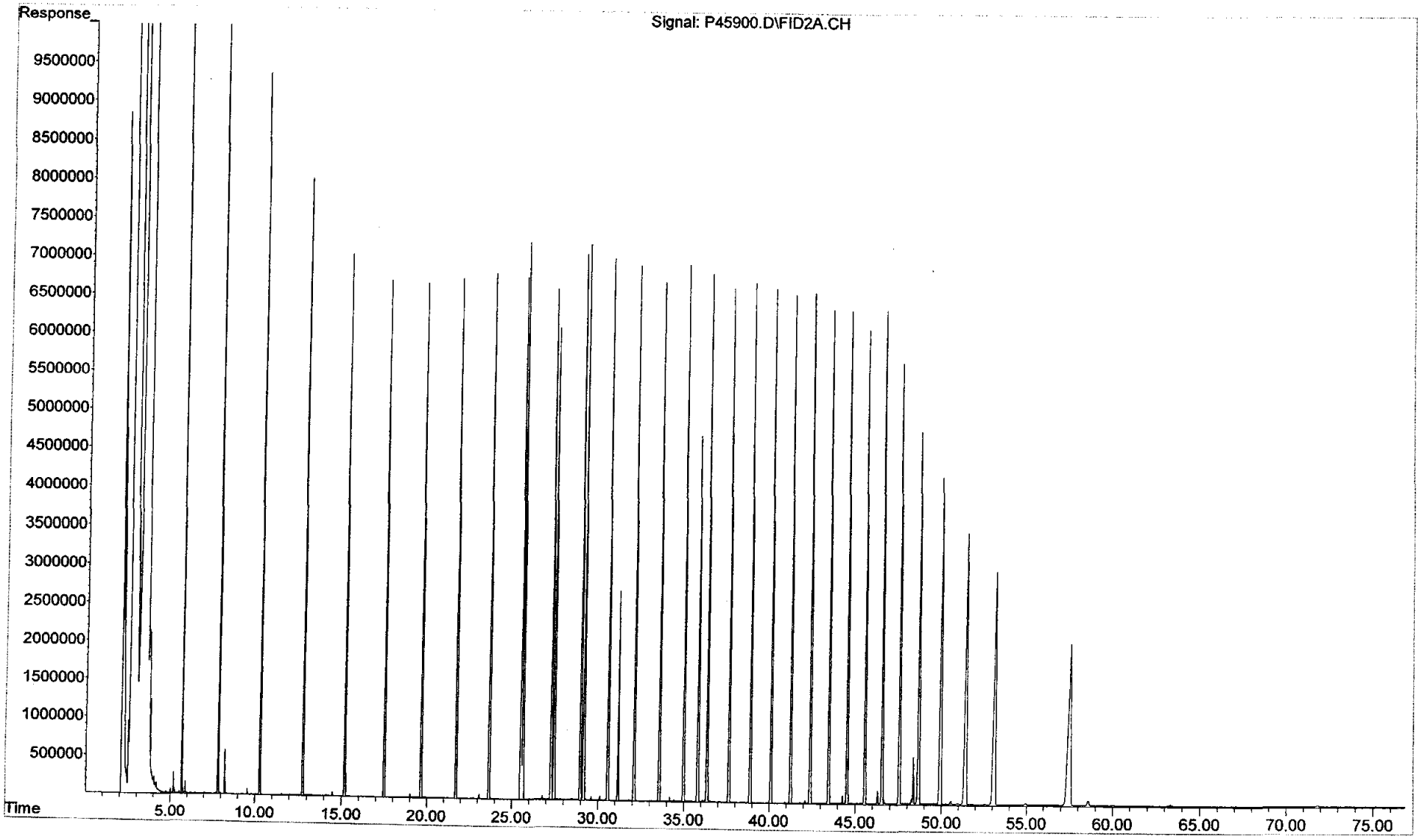
2ºReview RPR 9/11/06

(f)=RT Delta > 1/2 Window

(m)=manual int.

HC40721.M Fri Aug 04 14:05:26 2006

File :O:\FORENSICS\DATA\PAH4\JULY06\JULY21.SEC\P45900.D
Operator : AC
Acquired : 21 Jul 2006 11:35 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: i4072105-afid
Misc Info : whad18
Vial Number: 56



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\
Data File : P45904.D
Signal(s) : FID2A.CH
Acq On : 22 Jul 2006 2:35 am
Operator : AC
Sample : q4072101
Misc : icc
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 11 11:20:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M RPR 9/11/06
Quant Title : FID Forensics
QLast Update : Thu Aug 17 12:12:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	65564086	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.17	71147200	53.535 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	107.07%
24) s d50-Tetracosane	35.80	57940180	52.760 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	105.52%
Target Compounds			
2) t n-Octane (C8)	5.61	55742566	51.590 ✓ ug/mLm
3) t n-Nonane (C9)	7.79	60409471	52.326 ug/mLm
4) t n-Decane (C10)	10.26	62619892	53.176 ug/mLm
5) t n-Undecane (C11)	12.76	62599425	53.695 ug/mLm
6) t n-Dodecane (C12)	15.18	63475616	53.591 ug/mLm
7) t n-Tridecane (C13)	17.48	63738389	53.545 ug/mLm
9) t n-Tetradecane (C14)	19.66	64339449	53.217 ✓ ug/mLm
11) t n-Pentadecane (C15)	21.72	64495990	53.103 ug/mLm
12) t n-Hexadecane (C16)	23.68	64681578	52.947 ug/mLm
14) t n-Heptadecane (C17)	25.53	65027490	52.442 ug/mLm
15) t Pristane	25.64	62345221	52.381 ug/mLm
16) t n-Octadecane (C18)	27.29	65108018	52.310 ug/mLm
17) t Phytane	27.46	64696290	51.891 ug/mLm
18) t n-Nonadecane (C19)	28.97	64693171	52.143 ug/mLm
20) t n-Eicosane (C20)	30.58	64275135	51.623 ug/mLm
21) t n-Heneicosane (C21)	32.11	66334917	52.037 ug/mLm
22) t n-Docosane (C22)	33.58	65510475	53.601 ✓ ug/mLm
23) t n-Tricosane (C23)	34.98	65885065	51.770 ug/mLm
25) t n-Tetracosane (C24)	36.33	66410705	52.263 ug/mLm
26) t n-Pentacosane (C25)	37.63	66118561	51.735 ug/mLm
27) t n-Hexacosane (C26)	38.89	65523486	51.009 ug/mLm
28) t n-Heptacosane (C27)	40.09	65329914	51.452 ug/mLm
29) t n-Octacosane (C28)	41.26	66116842	51.315 ug/mLm
30) t n-Nonacosane (C29)	42.38	67618879	51.576 ug/mLm
31) t n-Triacontane (C30)	43.47	66518622	51.611 ug/mLm
32) t n-Hentriacontane (C31)	44.53	64471355	49.285 ug/mLm
33) t n-Dotriacontane (C32)	45.55	65139037	51.930 ug/mLm
34) t n-Tritriacontane (C33)	46.54	66093183	51.422 ✓ ug/mLm
35) t n-tetratriacontane (C34)	47.53	67081227	51.895 ug/mLm
36) t n-Pentatriacontane (C35)	48.64	64409791	51.783 ug/mLm
37) t n-Hexatriacontane (C36)	49.90	66060501	51.844 ug/mLm
38) t n-Heptatriacontane (C37)	51.36f	70455969	53.764 ug/mLm
39) t n-Octatriacontane (C38)	53.06f	66985744	52.012 ug/mLm
41) t n-Tetracontane (C40)	57.39f	66112720	51.567 ug/mLm

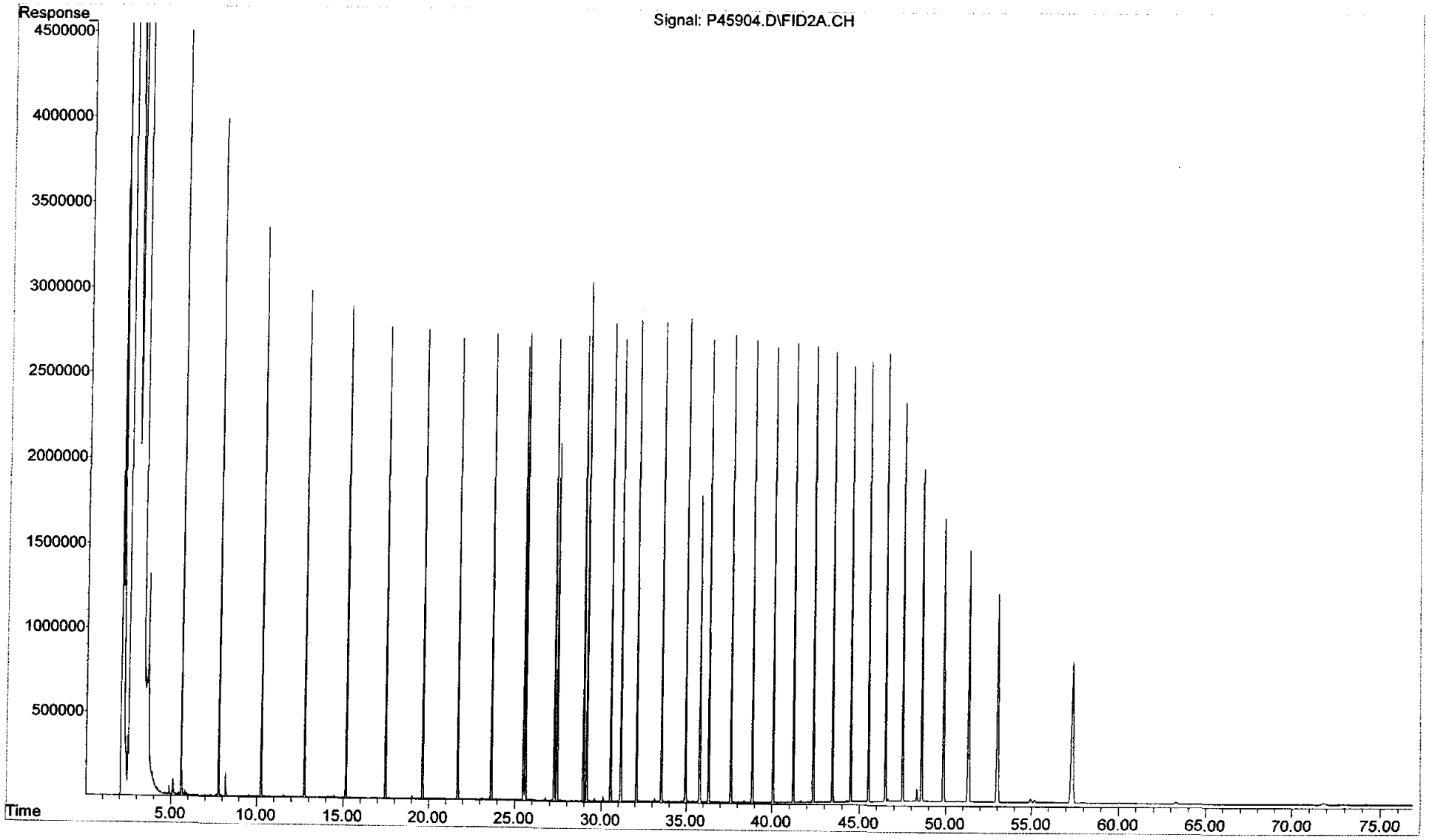
2° Review RPR 9/11/06

(f)=RT Delta > 1/2 Window

(m)=manual int.

HC40721.M Mon Sep 11 11:20:42 2006

File :O:\Forensics\Data\PAH4\jULY06\JULY21.SEC\P45904.D
Operator : AC
Acquired : 22 Jul 2006 2:35 am using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: q4072101
Misc Info : icc
Vial Number: 58



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\AUG06\AUG16.SEC\
Data File : P45993.D
Signal(s) : FID2A.CH
Acq On : 16 Aug 2006 3:48 pm
Operator : AC
Sample : ANS4081601-AFID
Misc : ANS
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 11 11:48:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M RPR 9/11/06
Quant Title : FID Forensics
QLast Update : Thu Aug 17 12:12:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	76692822	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.17	78249664	50.335 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	100.67%
24) s d50-Tetracosane	35.79	64540861	50.243 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	100.49%
Target Compounds			
2) t n-Octane (C8)	5.57f	33530478	26.530 ug/mLm
3) t n-Nonane (C9)	7.76	27375345	20.271 ug/mLm
4) t n-Decane (C10)	10.24	29493602	21.411 ug/mLm
5) t n-Undecane (C11)	12.75	29277746	21.469 ug/mLm
6) t n-Dodecane (C12)	15.17	28211320	20.362 ug/mLm
7) t n-Tridecane (C13)	17.47	27886159	20.027 ug/mLm
8) t 1380	19.15	6763279	4.782 ug/mLm
9) t n-Tetradecane (C14)	19.65	24850837	17.572 ug/mLm
10) t 1470	20.93	8516518	5.995 ug/mLm
11) t n-Pentadecane (C15)	21.71	31122593	21.906 ug/mLm
12) t n-Hexadecane (C16)	23.66	23734074	16.609 ug/mLm
13) t 1650	24.56	7191642	4.958 ug/mLm
14) t n-Heptadecane (C17)	25.51	20308089	14.001 ug/mLm
15) t Pristane	25.61	15123993	10.863 ug/mLm
16) t n-Octadecane (C18)	27.28	18452247	12.674 ug/mLm
17) t Phytane	27.43	9748606	6.684 ug/mLm
18) t n-Nonadecane (C19)	28.96	18525793	12.765 ug/mLm
20) t n-Eicosane (C20)	30.56	18108186	12.433 ug/mLm
21) t n-Heneicosane (C21)	32.08	16833059	11.289 ug/mLm
22) t n-Docosane (C22)	33.55	16053430	11.229 ug/mLm
23) t n-Tricosane (C23)	34.96	14210408	9.546 ug/mLm
25) t n-Tetracosane (C24)	36.31	12890041	8.672 ug/mLm
26) t n-Pentacosane (C25)	37.61	13276437	8.881 ug/mLm
27) t n-Hexacosane (C26)	38.86	11569577	7.700 ug/mLm
28) t n-Heptacosane (C27)	40.06	8344699	5.618 ug/mLm
29) t n-Octacosane (C28)	41.22	6071576	4.028 ug/mLm
30) t n-Nonacosane (C29)	42.35	5824918	3.798 ug/mLm
31) t n-Triacontane (C30)	43.44	4943224	3.279 ug/mLm
32) t n-Hentriacontane (C31)	44.49	4127113	2.697 ug/mLm
33) t n-Dotriacontane (C32)	45.51	4356396	2.969 ug/mLm
34) t n-Tritriacontane (C33)	46.50	2524185	1.679 ug/mLm
35) t n-tetratriacontane (C34)	47.48f	2538266	1.679 ug/mLm
36) t n-Pentatriacontane (C35)	48.58f	2332512	1.603 ug/mLm
37) t n-Hexatriacontane (C36)	49.83f	1642426	1.102 ug/mLm
38) t n-Heptatriacontane (C37)	51.28f	1778352	1.160 ug/mLm
39) t n-Octatriacontane (C38)	52.95f	1659355	1.101 ug/mLm
40) t n-Nonatriacontane (C39)	54.93f	1302691	0.869 ug/mLm

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\AUG06\AUG16.SEC\
Data File : P45993.D
Signal(s) : FID2A.CH
Acq On : 16 Aug 2006 3:48 pm
Operator : AC
Sample : ANS4081601-AFID
Misc : ANS
ALS Vial : 53 Sample Multiplier: 1

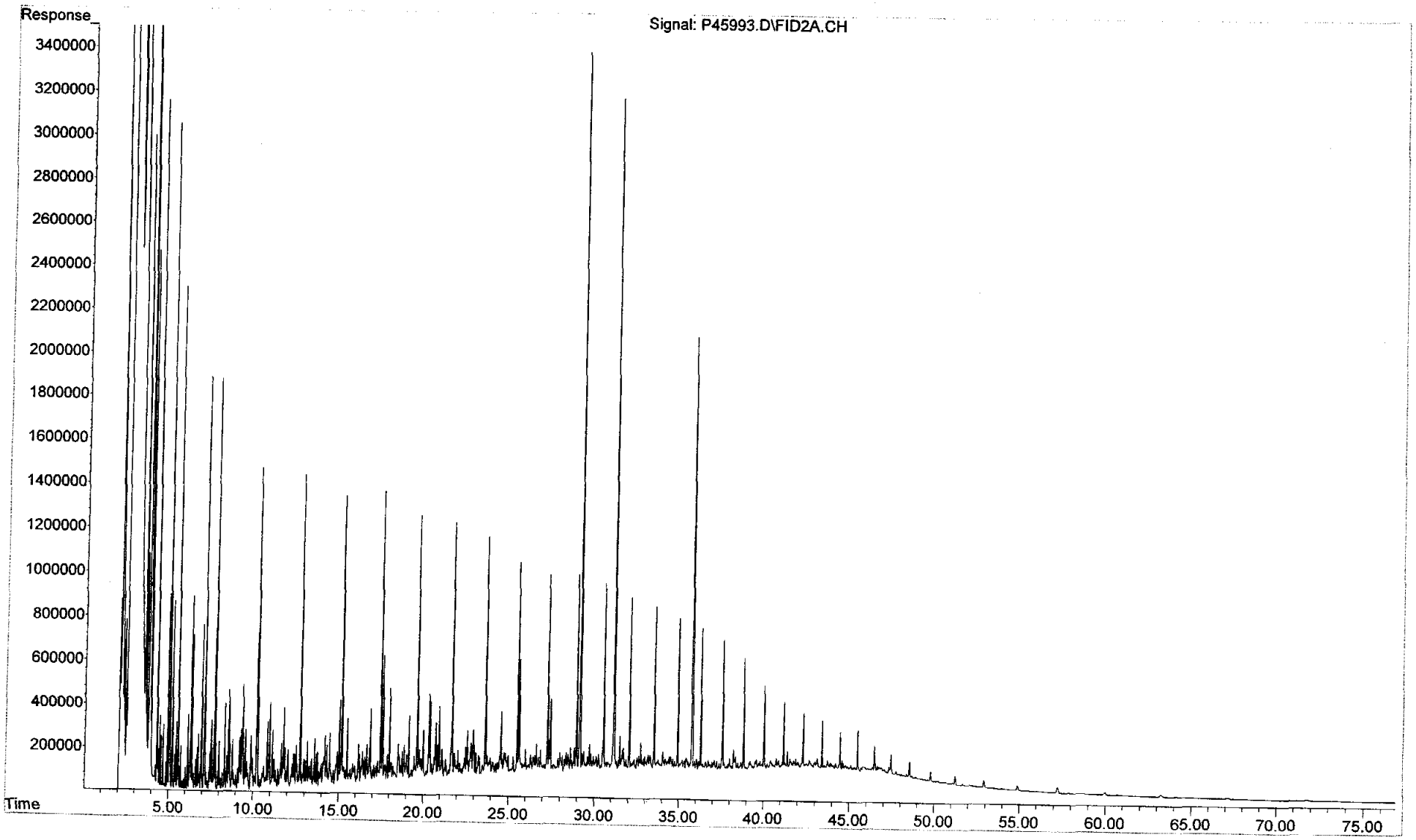
Integration File: SHCINT1.E
Quant Time: Sep 11 11:48:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Thu Aug 17 12:12:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

		Compound	R.T.	Response	Conc	Units
41)	t	n-Tetracontane (C40)	57.25f	1827477	1.219	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.95	4313985168	2940.370	ug/mL
43)	h	C10-C28 DRO	25.75	2888368266	1968.683	ug/mL
44)	h	Total Resolved Hydrocarbon	40.09	1269775174	865.466	ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\AUG06\AUG16.SEC\P45993.D
Operator : AC
Acquired : 16 Aug 2006 3:48 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: ANS4081601-AFID
Misc Info : ANS
Vial Number: 53



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0609032**
Lab ID: **C4091201**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	46.60	6.8	25
n-Decane (C10)	50.00	47.48	5.0	25
n-Undecane (C11)	50.00	48.22	3.6	25
n-Dodecane (C12)	50.00	49.13	1.7	25
n-Tridecane (C13)	50.00	49.75	0.5	25
n-Tetradecane (C14)	50.00	50.26	0.5	25
n-Pentadecane (C15)	50.00	50.70	1.4	25
n-Hexadecane (C16)	50.00	50.79	1.6	25
n-Heptadecane (C17)	50.00	50.90	1.8	25
Pristane	50.00	51.13	2.3	25
n-Octadecane (C18)	50.00	51.05	2.1	25
Phytane	50.00	51.09	2.2	25
n-Nonadecane (C19)	50.00	51.01	2.0	25
n-Eicosane (C20)	50.00	50.94	1.9	25
n-Heneicosane (C21)	50.00	50.82	1.6	25
n-Docosane (C22)	50.00	50.60	1.2	25
n-Tricosane (C23)	50.00	50.42	0.8	25
n-Tetracosane (C24)	50.00	50.17	0.3	25
n-Pentacosane (C25)	50.00	49.96	0.1	25
n-Hexacosane (C26)	50.00	49.90	0.2	25
n-Heptacosane (C27)	50.00	49.69	0.6	25
n-Octacosane (C28)	50.00	49.56	0.9	25
n-Nonacosane (C29)	50.00	49.66	0.7	25
n-Triacontane (C30)	50.00	49.61	0.8	25
n-Hentriacontane (C31)	50.00	49.58	0.8	25
n-Dotriacontane (C32)	50.00	49.74	0.5	25
n-Tritriacontane (C33)	50.00	49.69	0.6	25
n-Tetratriacontane (C34)	50.00	50.09	0.2	25
n-Pentatriacontane (C35)	50.00	50.19	0.4	25
n-Hexatriacontane (C36)	50.00	50.43	0.9	25
n-Heptatriacontane (C37)	50.00	50.51	1.0	25
n-Octatriacontane (C38)	50.00	50.40	0.8	25
n-Tetracontane (C40)	50.00	50.40	0.8	25
ortho-Terphenyl	50.00	50.38	0.8	25
d50-Tetracosane	50.00	50.44	0.9	25

Area Response Ratio C36 to C20	Ratio
(Area C36/Area C20)	1.01

N/A - Not Applicable

09/27/06 14 33

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46327.D
Signal(s) : FID2A.CH
Acq On : 12 Sep 2006 4:27 pm
Operator : AC
Sample : C4091201-AFID
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 20 10:34:15 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Mon Sep 18 08:09:46 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

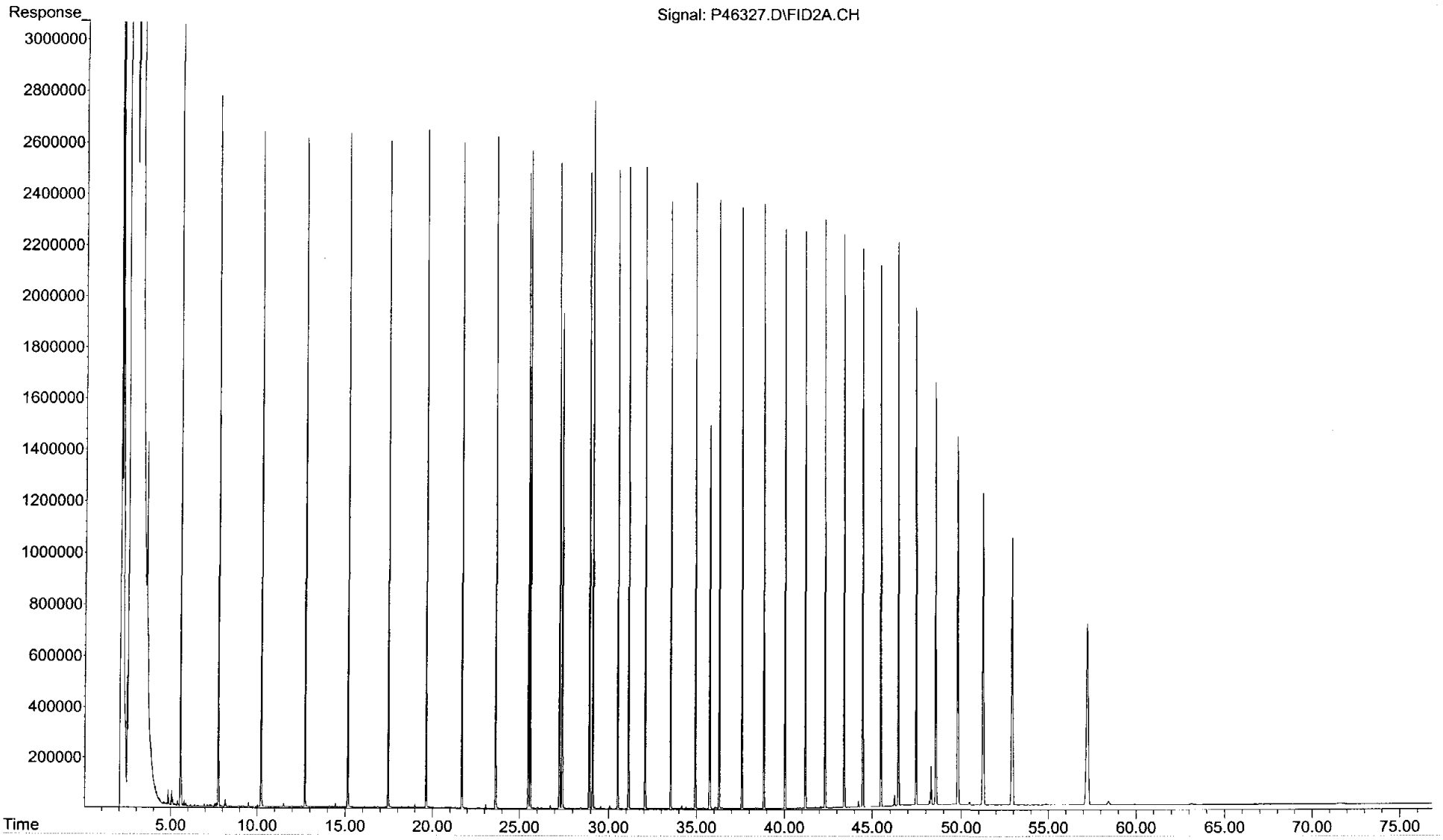
9/27/06 JPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.14	54477929	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.14	55633745	50.380 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 100.76%
24) s	d50-Tetracosane	35.76	46025024	50.439 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 100.88%
	Target Compounds			
2) t	n-Octane (C8)	5.55	41319787	46.024 ug/mLm
3) t	n-Nonane (C9)	7.75	44700008	46.598 ug/mLm
4) t	n-Decane (C10)	10.23	46461335	47.484 ug/mLm
5) t	n-Undecane (C11)	12.74	46714308	48.224 ug/mLm
6) t	n-Dodecane (C12)	15.16	48347438	49.125 ug/mLm
7) t	n-Tridecane (C13)	17.46	49207531	49.750 ug/mLm
9) t	n-Tetradecane (C14)	19.64	50488655	50.259 ug/mLm
11) t	n-Pentadecane (C15)	21.70	51163023	50.697 ug/mLm
12) t	n-Hexadecane (C16)	23.65	51553629	50.788 ug/mLm
14) t	n-Heptadecane (C17)	25.50	52446796	50.903 ug/mLm
15) t	Pristane	25.61	50568530	51.132 ug/mLm
16) t	n-Octadecane (C18)	27.26	52800351	51.054 ug/mLm
17) t	Phytane	27.43	52924697	51.087 ug/mLm
18) t	n-Nonadecane (C19)	28.94	52586690	51.010 ug/mLm
20) t	n-Eicosane (C20)	30.54	52703922	50.944 ug/mLm
21) t	n-Heneicosane (C21)	32.07	53832259	50.823 ug/mLm
22) t	n-Docosane (C22)	33.54	51387410	50.601 ug/mLm
23) t	n-Tricosane (C23)	34.95	53317574	50.421 ug/mLm
25) t	n-Tetracosane (C24)	36.30	52969232	50.168 ug/mLm
26) t	n-Pentacosane (C25)	37.60	53056730	49.962 ug/mLm
27) t	n-Hexacosane (C26)	38.85	53264360	49.904 ug/mLm
28) t	n-Heptacosane (C27)	40.05	52426569	49.692 ug/mLm
29) t	n-Octacosane (C28)	41.22	53063022	49.564 ug/mLm
30) t	n-Nonacosane (C29)	42.34	54099192	49.661 ug/mLm
31) t	n-Triacontane (C30)	43.43	53127728	49.610 ug/mLm
32) t	n-Hentriacontane (C31)	44.49	53888134	49.577 ug/mLm
33) t	n-Dotriacontane (C32)	45.51	51837776	49.736 ug/mLm
34) t	n-Tritriacontane (C33)	46.49	53070640	49.693 ug/mLm
35) t	n-tetratriacontane (C34)	47.48	53803763	50.093 ug/mLm
36) t	n-Pentatriacontane (C35)	48.58	51872658	50.190 ug/mLm
37) t	n-Hexatriacontane (C36)	49.84	53391296	50.428 ug/mLm
38) t	n-Heptatriacontane (C37)	51.28	55004789	50.515 ug/mLm
39) t	n-Octatriacontane (C38)	52.96	53936918	50.403 ug/mLm
41) t	n-Tetracontane (C40)	57.27	53691042	50.400 ug/mLm

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46327.D
Operator : AC
Acquired : 12 Sep 2006 4:27 pm using AcqMethod FRNC4B.M
Instrument : PAH-4
Sample Name: C4091201-AFID
Misc Info :
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0609032**
Lab ID: **C4091202**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.21	1.6	25
n-Decane (C10)	50.00	49.75	0.5	25
n-Undecane (C11)	50.00	50.60	1.2	25
n-Dodecane (C12)	50.00	51.24	2.5	25
n-Tridecane (C13)	50.00	51.54	3.1	25
n-Tetradecane (C14)	50.00	51.71	3.4	25
n-Pentadecane (C15)	50.00	51.85	3.7	25
n-Hexadecane (C16)	50.00	51.73	3.5	25
n-Heptadecane (C17)	50.00	51.67	3.3	25
Pristane	50.00	51.84	3.7	25
n-Octadecane (C18)	50.00	51.75	3.5	25
Phytane	50.00	51.67	3.3	25
n-Nonadecane (C19)	50.00	51.72	3.4	25
n-Eicosane (C20)	50.00	51.59	3.2	25
n-Heneicosane (C21)	50.00	51.53	3.1	25
n-Docosane (C22)	50.00	51.38	2.8	25
n-Tricosane (C23)	50.00	51.25	2.5	25
n-Tetracosane (C24)	50.00	51.03	2.1	25
n-Pentacosane (C25)	50.00	50.87	1.7	25
n-Hexacosane (C26)	50.00	50.89	1.8	25
n-Heptacosane (C27)	50.00	50.80	1.6	25
n-Octacosane (C28)	50.00	50.74	1.5	25
n-Nonacosane (C29)	50.00	50.99	2.0	25
n-Triacontane (C30)	50.00	51.19	2.4	25
n-Hentriacontane (C31)	50.00	51.29	2.6	25
n-Dotriacontane (C32)	50.00	51.55	3.1	25
n-Tritriacontane (C33)	50.00	52.19	4.4	25
n-Tetratriacontane (C34)	50.00	52.38	4.8	25
n-Pentatriacontane (C35)	50.00	54.27	8.5	25
n-Hexatriacontane (C36)	50.00	53.15	6.3	25
n-Heptatriacontane (C37)	50.00	53.23	6.5	25
n-Octatriacontane (C38)	50.00	53.23	6.5	25
n-Tetracontane (C40)	50.00	53.72	7.4	25
ortho-Terphenyl	50.00	50.41	0.8	25
d50-Tetracosane	50.00	51.34	2.7	25

Area Response Ratio C36 to C20	Ratio
(Area C36/Area C20)	1.05

N/A - Not Applicable

09/27/06 14:34

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\SEPTEMBER06\SEP12.SEC\
Data File : P46357.D
Signal(s) : FID2A.CH
Acq On : 13 Sep 2006 3:19 pm
Operator : AC
Sample : C4091202-AFID
Misc : CC
ALS Vial : 67 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 18 08:05:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\JULY06\HC40721.M
Quant Title : FID Forensics
QLast Update : Thu Aug 17 12:12:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

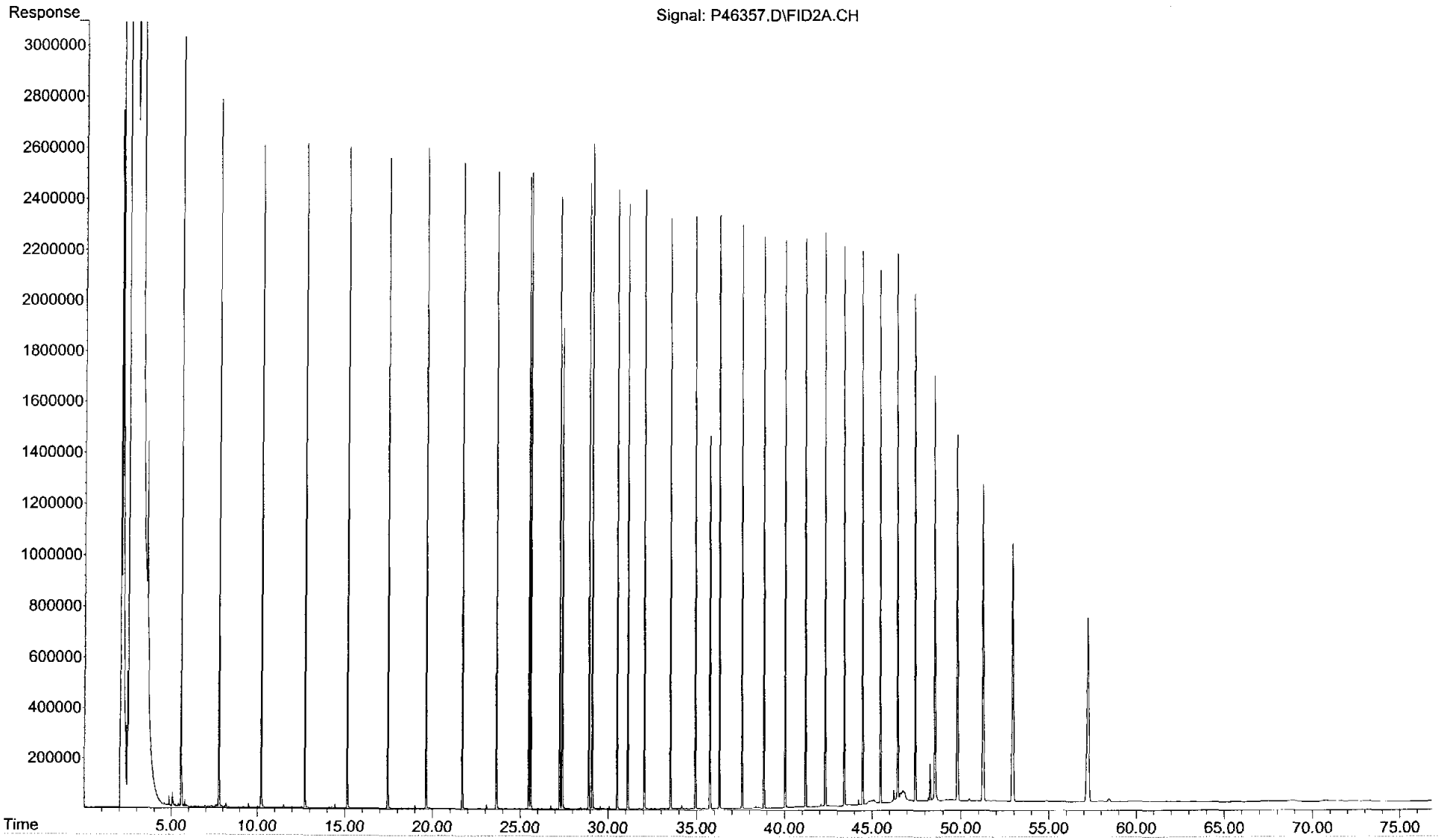
9/27/06 RPR

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	51690469	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.14	52822731	50.414 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 100.83%	
24) s d50-Tetracosane	35.76	44448254	51.338 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 102.68%	
Target Compounds			
2) t n-Octane (C8)	5.56f	41500844	48.718 ug/mLm
3) t n-Nonane (C9)	7.76f	44787168	49.206 ug/mLm
4) t n-Decane (C10)	10.23	46189959	49.752 ug/mLm
5) t n-Undecane (C11)	12.74	46508283	50.600 ug/mLm
6) t n-Dodecane (C12)	15.16	47850610	51.242 ug/mLm
7) t n-Tridecane (C13)	17.46	48369337	51.540 ug/mLm
9) t n-Tetradecane (C14)	19.64	49287495	51.709 ug/mLm
11) t n-Pentadecane (C15)	21.70	49648033	51.849 ug/mLm
12) t n-Hexadecane (C16)	23.65	49821142	51.728 ug/mLm
14) t n-Heptadecane (C17)	25.50	50511647	51.669 ug/mLm
15) t Pristane	25.61	48648653	51.844 ug/mLm
16) t n-Octadecane (C18)	27.26	50785166	51.754 ug/mLm
17) t Phytane	27.43	50787969	51.668 ug/mLm
18) t n-Nonadecane (C19)	28.94	50586711	51.716 ug/mLm
20) t n-Eicosane (C20)	30.54	50642687	51.591 ug/mLm
21) t n-Heneicosane (C21)	32.08	51791981	51.534 ug/mLm
22) t n-Docosane (C22)	33.54	49511688	51.383 ug/mLm
23) t n-Tricosane (C23)	34.95	51426075	51.255 ug/mLm
25) t n-Tetracosane (C24)	36.30	51124313	51.032 ug/mLm
26) t n-Pentacosane (C25)	37.60	51257039	50.871 ug/mLm
27) t n-Hexacosane (C26)	38.85	51538926	50.891 ug/mLm
28) t n-Heptacosane (C27)	40.06	50850838	50.798 ug/mLm
29) t n-Octacosane (C28)	41.22	51547087	50.745 ug/mLm
30) t n-Nonacosane (C29)	42.35	52705934	50.991 ug/mLm
31) t n-Triacontane (C30)	43.44	52013610	51.189 ug/mLm
32) t n-Hentriacontane (C31)	44.49	52893762	51.287 ug/mLm
33) t n-Dotriacontane (C32)	45.51	50979173	51.550 ug/mLm
34) t n-Tritriacontane (C33)	46.50	52887488	52.192 ug/mLm
35) t n-tetratriacontane (C34)	47.49f	53383269	52.382 ug/mLm
36) t n-Pentatriacontane (C35)	48.59f	53222165	54.273 ug/mLm
37) t n-Hexatriacontane (C36)	49.84f	53392086	53.148 ug/mLm
38) t n-Heptatriacontane (C37)	51.29f	54997657	53.232 ug/mLm
39) t n-Octatriacontane (C38)	52.97f	54048851	53.231 ug/mLm
41) t n-Tetracontane (C40)	57.29f	54295134	53.715 ug/mLm

(f)=RT Delta > 1/2 Window (m)=manual int.

```
File        :O:\Forensics\Data\PAH4\September06\SEP12.SEC\P46357.D
Operator    : AC
Acquired    : 13 Sep 2006   3:19 pm using AcqMethod FRNC4B.M
Instrument :   PAH-4
Sample Name: C4091202-AFID
Misc Info   : CC
Vial Number: 67
```



CHAIN OF CUSTODY RECORDS

NEWFIELDS

Chain of Custody

0609032

page 1 of 1

Environmental Forensics Practice LLC — 100 Ledgewood Place, Suite 302, Rockland, MA 02370 — ph: 781-681-5040 fax: 781-681-5048

Proj. Name: Red Hook Tar Sampling

Proj. No.: 061140-3-1202

Client Info: (Name/Address/Phone/Email) KeySpan Corporation, 1 Metro Tech Center, Brooklyn, New York

Samplers: Signature: Lynn Willey

ANALYSIS REQUESTED (# of containers)

LAB ID	CLIENT ID	COLLECTION DATE	COLLECTION TIME	MATRIX (Oil/Soil/Water/Sediment/Tissue)	SAMPLE DESCRIPTION	GC-FID-TPH (C_8+)	GCMS-Alkyl PAH	GCMS-Biomarkers	PIANO - VOA	Organic Lead	METALS	PCB	Pesticides	PRESERVED	Other	Total Number of containers
-1	FS-Red Hook-1	9/6/06	1120	Soil (Tar-like)	Tar-like material	X	X	X								
-2	FS-Red Hook-2		1150													
-3	FS-Red Hook-3		1140													
-4	FS-Red Hook-4		1235													
-5	FS-Halleck St ROW-2		1320													
-6	FS-Halleck St ROW-3		1340													
-7	FS-Court St ROW-1		1330													

Relinquished by:	Date	Time	Received by:	Date	Time
Via Fed Ex - #8564 0659 4468	9/7/06	1535	FED Ex		
FED Ex	9/8/06	0920		9/8/06	0920

Ship samples to:

Alpha Woods Hole Laboratory
375 Paramount Drive, Suite B
Raynham, MA 02767
Tel: (508) 822-9300
Attn: Liz Porta

Comments:

Please send analytical Results to Stephen Ensbo'-Mattinglye Newfields. Also send ~~electronic data deliverable to~~ Data to Lorie Mackiman - CEI FOR VALIDATION.

THANKS

Sample Receipt Checklist

Client: NEWTE		**Receipt Date:** 9/8/06	
Project: Red Hook Tar Sampling		**Log-in Date:** tr	
ETR #: 0609032		**Inspection by:** MR	**Login by:** MR

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? (Yes, FedEx) / UPS / Other:_____
No, WHG Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: Attached
No, Unavailable / NA

Number of coolers received for this project delivery: 1

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 6° IR Gun, _____ Temp. Blank, / NA

Were samples received on ice? (Yes) / No

Chain-of-Custody present? (Yes) / No
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)
Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / (No) If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / (NA)

Project Manager Acknowledgement: [signature] Date: 9/8/06

Sample storage refrigerator #: F1

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____
Cooler 4:_____ Cooler 5:_____
Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?
Yes / No / (NA)
If No, list samples below:

Please use back for any additional notes!

FedEx Express US Airbill

FedEx Tracking Number 8564 0659 4468

P/U # 36

Recipient's Copy

1 From

Date 9-7-06 [redacted]

Sender's Name Lynn Willey Phone 860 368-5300

Company GEI Consultants, Inc.

Address 455 Winding Brook Drive

Dept./Floor/Suite/Room

City Glastonbury State CT ZIP 06033

2 Your Internal Billing Reference 061140-3-~~1002~~ 1202

3 To

Recipient's Name Liz Porta Phone 508 822-9300

Company Alpha Woods Hole Laboratory

Recipient's Address 375 Paramount Drive Suite B

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City Raynham State MA ZIP 02767

8564 0659 4468

4a Express Package Service *Packages up to 150 lbs.*

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

* Declared value limit $500.

6 Special Handling

Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Obtain Recip. Acct. No. [ ]

[redacted]

Total Packages	Total Weight	Total Declared Value†	Total Charges
1	25	$ ____ .00	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [x] Direct Signature — Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

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