ANALYTICAL REPORT

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

Project: Gowanus Canal
ETR: 0601040
Report Date: January 31, 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

This report shall not be reproduced except in full, without written approval from the laboratory.

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: **0601040**

Lab Sample ID	Client Sample ID
0601040-01	GC-SED-24 (12.6-13.4)
0601040-02	GC-SED-23 (17.5-19)
0601040-03	GC-SED-20 (4-5)
0601040-04	GC-SED-104 (3.7-5.1)
0601040-05	GC-SED-64D (2-4)

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

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: 0601040
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).* Sediment samples (approximately 5-30g) are spiked with surrogate compounds and extracted by *Shaker Table Extraction (Revision 0.0, 02/20/02).* Solvent extracts are dried over sodium sulfate and concentrated to an appropriate final volume based on oil content as determined by gravimetric weighing. A pre-determined volume of the extract was alumina cleaned (*Alumina Column Cleanup of Organic Extracts, Revision 0.0, 02/21/1999*) and again concentrated to a final effective volume determined by a post alumina gravimetric weight. All extracts were treated with activated copper to remove sulfur interferences. A portion of the remaining archive extract portion to equal approximately 50mg was silica fractionated for Biomarker analysis and again concentrated to a final effective volume determined by a post silica gravimetric weight. 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. The sediment method blank SS011306B04 contained low-level target compounds detected below the reporting limit, with the compound Retene detected above the reporting limit. Associated field sample results would be flagged with "B" qualifiers if the concentration of the analyte in the sample is less than 5X the concentration in the blank. Please note that no "B" qualifiers were utilized.

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

3. Sample GC-SED-104 (3.7-5.1) (0601040-04) and its duplicate (0601040-04) have most of the compounds above the 30% relative percent difference QC limit due to potential matrix in-homogeneity. The integrations in the native sample and the duplicate were reviewed and found to be appropriate. It was also noted that the gravimetric determination also exhibited a relative percent difference above 30%.

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. The method blank SS011306B04 contained a reportable concentration detected below the reporting limit. Associated field sample results would be flagged with "B" qualifiers if the concentration of the analyte in the sample is less than 5X the concentration in the blank.

2. The laboratory control sample (SS011306LCS02) and the laboratory control sample duplicate (SS011306LCSD02) exhibited recoveries for n-Nonane (C9) at 34% and 43% respectively, which is below the 50% lower QC limit. The integrations were reviewed and found to be appropriate. After consulting Stephen Emsbo-Mattingly of NewFields on 01/27/06, the data is released without further corrective action.

3. Sample GC-SED-104 (3.7-5.1) (0601040-04) and its duplicate (0601040-04) have the range material above the 30% relative percent difference QC limit due to potential matrix in-homogeneity. The integrations in the native sample and the duplicate were reviewed and found to be appropriate. It was also noted that the gravimetric determination also exhibited a relative percent difference above 30%.

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: Elizabeth Porta Title: QA manager Date: 1/31/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report

01/13/2006 0601040STBIO - 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
0601040-01	SAM	Shaker	KLA	1/13/06	1/18/06		10.36	16.7	False	DMP	1/16/06	KD Flask	0.15	DMP	1/18/06	
0601040-02	SAM	Shaker	KLA	1/13/06	1/18/06		10.09	6.96	False	DMP	1/16/06	KD Flask	0.15	DMP	1/18/06	
0601040-03	SAM	Shaker	KLA	1/13/06	1/18/06		10.53	31.25	False	DMP	1/16/06	KD Flask	0.15	DMP	1/18/06	
0601040-04	D	Shaker	KLA	1/13/06	1/18/06		10.12	10.44	False	DMP	1/16/06	KD Flask	0.15	DMP	1/18/06	
0601040-04	SAM	Shaker	KLA	1/13/06	1/18/06		10.12	13.89	False	DMP	1/16/06	KD Flask	0.15	DMP	1/18/06	
0601040-05	SAM	Shaker	KLA	1/13/06	1/18/06		5.14	128.46	False	DMP	1/16/06	KD Flask	0.15	DMP	1/18/06	
SS011306B04	B	Shaker	KLA	1/13/06	1/24/06		30	2	False	DMP	1/16/06	KD Flask	0.15	DMP	1/24/06	
SS011306LCS02	LCS	Shaker	KLA	1/13/06	1/24/06		30	2	False	DMP	1/16/06	KD Flask	0.15	DMP	1/24/06	
SS011306LCSD02	LCSD	Shaker	KLA	1/13/06	1/24/06		30	2	False	DMP	1/16/06	KD Flask	0.15	DMP	1/24/06	

2nd
1/30/06

Alpha Woods Hole Lab
Batch Prep Report

01/13/2006 0601040STBIO - OP NEWFIE

Lab ID	Notes
0601040-01	1st Prep
0601040-02	1st Prep
0601040-03	1st Prep
0601040-04	1st Prep
0601040-04	1st Prep
0601040-05	1st Prep
SS011306B04	1st Prep: RE-ALUMINA CLEANED
SS011306LCS02	1st Prep: RE-ALUMINA CLEANED
SS011306LCSD02	1st Prep: RE-ALUMINA CLEANED

Alpha Woods Hole Lab
Batch Weight Report
01/13/2006

Lab ID	QC Type	0601040STBIO - Sample
0601040-01	SAM	10.36
0601040-02	SAM	10.09
0601040-03	SAM	10.53
0601040-04	D	10.12
0601040-04	SAM	10.12
0601040-05	SAM	5.14
SS011306B04	B	30
SS011306LCS02LCS	OP NEWFIE	30
SS011306LCS02LCS	OP SHC	30
SS011306LCS02LCS	OP Steranes/Triterpanes	30
SS011306LCSD02LCSD	OP NEWFIE	30
SS011306LCSD02LCSD	OP SHC	30
SS011306LCSD02LCSD	OP Steranes/Triterpanes	30

METHYLENE CHLORIDE: B44E66(tank) B32E08(bottle)
HEXANE: B45E60(tank) B36E18(bottle)
ACETONE: B27E38
SULFURIC ACID: 3104070
GLASS WOOL: +H1084303302$
SODIUM SULFATE: B26593
COPPER: A49597
ALUMINA: 183
PENTANE: B11E31
SILICA(923): 0617MC

Alpha Woods Hole Lab
Batch Prep Spike Report

01/13/2006 0601040STBIO - OP NEWFIE Analyst: KLA 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
0601040-01	SAM	WHAC11	200	µl				WHAC05	200	µl
0601040-02	SAM	WHAC11	200	µl				WHAC05	200	µl
0601040-03	SAM	WHAC11	200	µl				WHAC05	200	µl
0601040-04	D	WHAC11	200	µl				WHAC05	200	µl
0601040-04	SAM	WHAC11	200	µl				WHAC05	200	µl
0601040-05	SAM	WHAC11	200	µl				WHAC05	200	µl
SS011306B04	B	WHAB63	100	µl				WHAB14	200	µl
SS011306LCS02	LCS	WHAB63	100	µl	WHAB85	100	µl	WHAB14	200	µl
SS011306LCSD02	LCSD	WHAB63	100	µl	WHAB85	100	µl	WHAB14	200	µl

Test: ALK-PAH/SHC (High)

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# WHAC11
Conc. 100ug/ml / 5000ug/ml

Test: BIOMARKER HIGH (High)

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# WHAC05
Conc. 100ug/ml

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____

ID# WHAB63
Conc. 10ug/ml 500ug/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAB14
Conc. 10ug/ml

Test: ALK-PAH/SHC

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# WHAB85
Conc. 10ug/ml / 500ug/ml

Pre-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 1/17/06

BATCH: 0601040

Entered by: DMP
Verified by: DMP

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	50.40	N/A	N/A	N/A	101%
0601040	01		5000	50	N/A	0.837	N/A	83.70	500	8.37	10.00	
0601040	02		5000	50	N/A	0.358	N/A	35.80	1200	8.59	4.17	
0601040	03		10000	50	N/A	1.025	N/A	205.00	400	8.20	25.00	
0601040	04	D	5000	50	N/A	0.529	N/A	52.90	800	8.46	6.25	55%
0601040	04		10000	50	N/A	0.465	N/A	93.00	900	8.37	11.11	
0601040	05		10000	50	N/A	3.156	N/A	631.20	130	8.21	76.92	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight

2nd 1/30/06

2nd 1/30/06

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 Laboratories Raynham, MA

Gravimetric Determination for Column

Analyst: DMP
Date: 1-17-06

BATCH: 0601040

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					0%
0601040	01		5000	50	N/A	0.837	N/A					
0601040	02		5000	50	N/A	0.358	N/A					
0601040	03		10000	50	N/A	1.025	N/A					
0601040	04	D	5000	50	N/A	0.529	N/A					#VALUE!
0601040	04		10000	50	N/A	0.465	N/A					
0601040	05		10000	50	N/A	3.156	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 Lab
Batch Clean Up Report

01/13/2006 0601040STBIO - 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.	Prefractionation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0601040-01	SAM	3610	DMP	1/17/06				KLA	1/18/06	False	5	0.5	0	0.15
0601040-02	SAM	3610	DMP	1/17/06				KLA	1/18/06	False	5	1.2	0	0.15
0601040-03	SAM	3610	DMP	1/17/06				KLA	1/18/06	False	10	0.4	0	0.15
0601040-04	D	3610	DMP	1/17/06				KLA	1/18/06	False	5	0.8	0	0.15
0601040-04	SAM	3610	DMP	1/17/06				KLA	1/18/06	False	10	0.9	0	0.15
0601040-05	SAM	3610	DMP	1/17/06				KLA	1/18/06	False	10	0.13	0	0.15
SS011306B04	B	3610	DMP	1/24/06				DMP	1/24/06	False	1	0.25	0	0.15
SS011306LCS02	LCS	3610	DMP	1/24/06				DMP	1/24/06	False	1	0.25	0	0.15
SS011306LCSD02	LCSD	3610	DMP	1/24/06				DMP	1/24/06	False	1	0.25	0	0.15

✓ 2nd 1/30/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/13/2006 0601040STBIO - OP NEWFIE

Lab ID	Notes
0601040-01	
0601040-02	
0601040-03	
0601040-04	
0601040-04	
0601040-05	
SS011306B04	RE-ALUMINA CLEANED
SS011306LCS02	RE-ALUMINA CLEANED
SS011306LCSD02	RE-ALUMINA CLEANED

Post-Alumina Column Gravimetric Determination

Analyst: MAL
Date: 1/18/06

BATCH: 0601040

Entered by: MAL
Verified by: MAL

Post- Column

Batch #	Sample #	QC (ME, 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	NA	0.248	NA	49.60	NA	NA	NA	99%
0601040	01		1000	50	NA	0.364	NA	7.28	600	4.37	1.67	
0601040	02		1000	50	NA	0.381	NA	7.62	600	4.57	1.67	
0601040	03		1000	50	NA	0.318	NA	6.36	800	5.09	1.25	
0601040	04	D	1000	50	NA	0.342	NA	6.84	600	4.10	1.67	4%
0601040	04		1000	50	NA	0.328	NA	6.56	800	5.25	1.25	
0601040	05		1000	50	NA	0.352	NA	7.04	600	4.22	1.67	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight 3rd 1/30/06

2nd 1/30/06

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-Alumina Column Gravimetric Determination

Analyst: MAL
Date: 1/18/6

BATCH: 0601040

Entered by: MAL
Verified by:

Post-Column

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	NA	0.248	NA		NA	NA	NA	0%
0601040	01		1000	50	NA	0.364	NA					
0601040	02		1000	50	NA	0.381	NA					
0601040	03		1000	50	NA	0.318	NA					
0601040	04	D	1000	50	NA	0.342	NA					#VALUE!
0601040	04		1000	50	NA	0.328	NA					
0601040	05		1000	50	NA	0.352	NA					

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: 0601040STBIO

Lab ID	Extract Vol (ml)	Standard Brand/Vial #	Vol IS Added (ml)	Pre-injection Vol (ml)	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (ul)	Aliquot 2 Removed (ul)	Date
0601040-01	900	WHAC12#1	100	1000	16.7	DMP	150	150	01/18/2006
0601040-02	900	WHAC12#1	100	1000	6.96	DMP	150	150	01/18/2006
0601040-03	900	WHAC12#1	100	1000	31.25	DMP	150	150	01/18/2006
0601040-04D	900	WHAC12#1	100	1000	10.44	DMP	150	150	01/18/2006
0601040-04	900	WHAC12#1	100	1000	13.89	DMP	150	150	01/18/2006
0601040-05	900	WHAC12#1	100	1000	128.46	DMP	150	150	01/18/2006
SS011306B04*	450	WHAC12#2	50	500	2	DMP	150	150	01/24/2006
SS011306LCS02*	450	WHAC12#2	50	500	2	DMP	150	150	01/24/2006
SS011306LCSD02*	450	WHAC12#2	50	500	2	DMP	150	150	01/24/2006
* RE-ALUMINA CLEANED									

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 0601040 Client: Newfie Project: Gowanus Canal

Workplan Present	

Workplan Reviewed With Project Manager	

Tests Requested	
ALK-PAH	✓
CHROMATOGRAM	
DENSITY	
HOMOLOG	
Pb	
SHC	✓
TPH	
WHOLE OIL	
BIOMARKER	✓
PHENOL	
OTHER	

Required Cleanups	
No Cleanup Required	
Copper	✓
Conc. Sulfuric Acid	
GPC	
Silica Gel 923 Grade Glass Column Biomarker	✓
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: dark - all samples petroleum odor - all samples
sheen - 5
Strong odor (sulfur) - 3

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

Other:
Sample 04 Darker than 04D, final volume is higher and grav weights are different. SP 1/17/06

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

	Date	Initials
1st Extraction	1/14/06	[illegible]
2nd Extraction	1/15/06	[illegible]
3rd Extraction	1/15/06	DMP

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

Other: QC for ALK-PAH/SHC split to maintain an archive. Split for samples should be 4. 1/18/06 RPR - original analysis -
- QC for ALKPAH/SHC was re-alumina cleaned due to low surr/spike recoveries - FV=2mL

CW 1/30/06

Batch Completed
Analyst: DMP
Date: 1/18/06

Forensic Dilution Sheet

Client Name:	NewFields
Project	Gowanus Canal
ETR # :	0601040
Matrix :	Sediment
Analysis Type :	GC/MS

Relinquished By: DMP
Date: 1/20/06 3:05 PM

Received By: CW
Date: 1/20/06

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
0601040-01		700	10	1000	0601040-01-RE2	WHAC12 99UL	1/19/2006	100	100
0601040-02		700	10	1000	0601040-02-RE2	WHAC12 99UL	1/19/2006	100	100
0601040-03		700	10	1000	0601040-03D-RE2	WHAC12 99UL	1/19/2006	100	100
0601040-04D		700	10	1000	0601040-03-RE2	WHAC12 99UL	1/19/2006	100	100
0601040-04		700	10	1000	0601040-04-RE2	WHAC12 99UL	1/19/2006	100	100
0601040-05		700	10	1000	0601040-05-RE2	WHAC12 99UL	1/19/2006	100	100
0601040-01		700	100	1000	0601019-01-RE1	WHAC12 90UL	1/19/2006	10	10
0601040-02		700	100	1000	0601019-02-RE1	WHAC12 90UL	1/19/2006	10	10
0601040-03		700	100	1000	0601019-03D-RE1	WHAC12 90UL	1/19/2006	10	10
0601040-04D		700	100	1000	0601019-03-RE1	WHAC12 90UL	1/19/2006	10	10
0601040-04		700	100	1000	0601019-04-RE1	WHAC12 90UL	1/19/2006	10	10
0601040-05		700	100	1000	0601019-05-RE1	WHAC12 90UL	1/19/2006	10	10

Dilution Calculations Validated by: CW
Date: 1/20/06

Alpha Woods Hole Lab
Batch Prep Report

01/13/2006 0601040STBIO - 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
0601040-01	SAM	Shaker	KLA	1/13/06	1/18/06		10.36	1.75	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
0601040-02	SAM	Shaker	KLA	1/13/06	1/18/06		10.09	1.4	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
0601040-03	SAM	Shaker	KLA	1/13/06	1/18/06		10.53	8.88	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
0601040-04	D	Shaker	KLA	1/13/06	1/18/06		10.12	1.72	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
0601040-04	SAM	Shaker	KLA	1/13/06	1/18/06		10.12	2.1	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
0601040-05	SAM	Shaker	KLA	1/13/06	1/18/06		5.14	20.88	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
SS011306B04	B	Shaker	KLA	1/13/06	1/18/06		30	4	False	DMP	1/16/06	KD Flask	0.15	DMP	1/20/06	
~~SS011306LCS02~~	~~LCS~~	~~Shaker~~	~~KLA~~	~~1/13/06~~	~~1/18/06~~		~~30~~	~~2~~	~~False~~	~~DMP~~	~~1/16/06~~	~~KD Flask~~		~~DMP~~	~~1/20/06~~	
① ~~SS011306LCSD02~~	~~LCSD~~	~~Shaker~~	~~KLA~~	~~1/13/06~~	~~1/18/06~~		~~30~~	~~2~~	~~False~~	~~DMP~~	~~1/16/06~~	~~KD Flask~~		~~DMP~~	~~1/20/06~~	

① Samples not processed for biomarkers 1/23/06 KAR

2nd 1/30/06

Alpha Woods Hole Lab
Batch Prep Report

01/13/2006 0601040STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0601040-01	1st Prep
0601040-02	1st Prep
0601040-03	1st Prep
0601040-04	1st Prep
0601040-04	1st Prep
0601040-05	1st Prep
SS011306B04	1st Prep
① ~~SS011306LCS02~~	~~1st Prep~~
~~SS011306LCSD02~~	~~1st Prep~~

① Samples not processed for biomarkers 1/23/06 RAA

Pre-Silica Gel Column Gravimetric Determination

Analyst: DMP
Date: 1/17/2006

BATCH: 0601040

Entered by: DMP
Verified by: DMP

		LCS	10000	50	N/A	0.252	N/A	50.40	N/A	N/A	N/A	101%
0601040	01		5000	50	N/A	0.837	N/A	83.70	3000	50.22	1.67	
0601040	02		5000	50	N/A	0.358	N/A	35.80	3750	26.85	1.33	
0601040	03		10000	50	N/A	1.025	N/A	205.00	2500	51.25	4.00	
0601040	04	D	5000	50	N/A	0.529	N/A	52.90	4150	43.91	1.20	55%
0601040	04		10000	50	N/A	0.465	N/A	93.00	5000	46.50	2.00	
0601040	05		10000	50	N/A	3.156	N/A	631.20	800	50.50	12.50	

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)

2nd
1/30/06

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

Alpha Woods Hole Lab
Batch Clean Up Report
01/13/2006 0601040STBIO - 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.	Prefraction Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0601040-01	SAM	3630	DMP	1/19/06				DMP	1/19/06	True	5	3	0	0.15
0601040-02	SAM	3630	DMP	1/19/06				DMP	1/19/06	True	5	3.75	0	0.15
0601040-03	SAM	3630	DMP	1/19/06				DMP	1/19/06	True	10	2.5	0	0.15
0601040-04	D	3630	DMP	1/19/06				DMP	1/19/06	True	5	4.15	0	0.15
0601040-04	SAM	3630	DMP	1/19/06				DMP	1/19/06	True	10	5	0	0.15
0601040-05	SAM	3630	DMP	1/19/06				DMP	1/19/06	True	10	0.8	0	0.15
SS011306B04	B	3630	DMP	1/19/06				DMP	1/19/06	True	2	0.5	0	0.15
① ~~SS011306LCS02~~	~~LCS~~	~~3630~~	~~DMP~~	~~1/19/06~~				~~DMP~~	~~1/19/06~~	~~True~~				
~~SS011306LCSD02~~	~~LCSD~~	~~3630~~	~~DMP~~	~~1/19/06~~				~~DMP~~	~~1/19/06~~	~~True~~				

① Samples not processed for biomarkers 1/23/06

✓ JRC 1/30/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/13/2006 0601040STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0601040-01	Samples were copper cleaned post column 1/19/06 DMP
0601040-02	Samples were copper cleaned post column 1/19/06 DMP
0601040-03	Samples were copper cleaned post column 1/19/06 DMP
0601040-04	Samples were copper cleaned post column 1/19/06 DMP
0601040-04	Samples were copper cleaned post column 1/19/06 DMP
0601040-05	Samples were copper cleaned post column 1/19/06 DMP
SS011306B04	Samples were copper cleaned post column 1/19/06 DMP
~~SS011306LCS02~~	
~~SS011306LCSD02~~	

① Samples not processed for biomarkers 4/23/06 RPC

Post-Silica Gel Column Gravimetric Determination

Analyst: DMP
Date: ########

BATCH: 0601040

Entered by: DMP
Verified by: DMP

[illegible]	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	NA	0.251	NA	50.20	NA	NA	NA	100%
0601040	01		1000	50	NA	0.185	NA	3.70	950	3.52	1.05	
0601040	02		1000	50	NA	0.099	NA	1.98	950	1.88	1.05	
0601040	03		1000	50	NA	0.546	NA	10.92	450	4.91	2.22	
0601040	04	D	1000	50	NA	0.360	NA	7.20	700	5.04	1.43	46%
0601040	04		1000	50	NA	0.226	NA	4.52	950	4.29	1.05	
0601040	05		1000	50	NA	0.419	NA	8.38	600	5.03	1.67	

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

2nd cw 1/31/06

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%.

Gravimetric Determination for Column

Analyst: DMP
Date: 1-20-06

BATCH: 0601040

Entered by: DMP
Verified by:

POST SILICA COLUMN

		LCS	10000	50	N/A	0.251	N/A					0%
0601040	1		1000	50	N/A	0.185	N/A					
0601040	2		1000	50	N/A	0.099	N/A					
0601040	3		1000	50	N/A	0.546	N/A					
0601040	4	D	1000	50	N/A	0.360	N/A					#VALUE!
0601040	4		1000	50	N/A	0.226	N/A					
0601040	5		1000	50	N/A	0.419	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 Laboratories Raynham, MA

0601040SILICA

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: GOWANUS CANAL
ETR: 0601040STBIO

-F1 Biomarker Fractions

Lab ID	Extract Vol (uL)	Standard Mix Used	Vol IS Added (uL)	Pre-Injection Vol (uL)	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0601040-01-F1	900	WHAC12#1	100	1000	1.75	DMP	150	NA	1/20/06
0601040-02-F1	900	WHAC12#1	100	1000	1.4	DMP	150	NA	1/20/06
0601040-03-F1	900	WHAC12#1	100	1000	8.88	DMP	150	NA	1/20/06
0601040-04D-F1	900	WHAC12#1	100	1000	1.72	DMP	150	NA	1/20/06
0601040-04-F1	900	WHAC12#1	100	1000	2.1	DMP	150	NA	1/20/06
0601040-05-F1	900	WHAC12#1	100	1000	20.88	DMP	150	NA	1/20/06
SS011306B04-F1	900	WHAC12#1	100	1000	4	DMP	150	NA	1/20/06

[1] Includes Internal Std

2nd
on
1/30/06

Alpha Woods Hole Lab
Batch Weight Report
01/13/2006

Lab ID	QC Type	PS011306 - Pan Weight	PS011306 - Wet Weight	PS011306 - Dry Weight	PS011306 - Dry Weight #2	PS011306 - Dry Weight #3	Percent Solid	RPD
0601040-01	D	1.04	6.47	5.51	5.51		82.32	0.07%
0601040-01	SAM	0.98	6.73	5.71	5.71		82.26	
0601040-02	SAM	1.03	7.72	6.77	6.77		85.8	
0601040-03	SAM	0.99	8.08	4.08	4.08		43.58	
0601040-04	SAM	1.02	9.46	7.76	7.76		79.86	
0601040-05	SAM	0.98	6.55	5.25	5.25		76.66	
PSS011306B08	B	1	1	1	1		100	

Initial: 1/13/2006 3:30:56 PM KJB
Weight #1: 1/16/2006 9:28:14 AM KJB
Weight #2: 1/16/2006 11:44:32 AM KJB

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: **GC-SED-24 (12.6-13.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-01**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/26/06	82.3	10.36	16.7	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**140000**	E	Fluoranthene	**63000**	E
C1-Naphthalenes	**130000**	E	Pyrene	**90000**	E
C2-Naphthalenes	**140000**	E	C1-Fluoranthenes/Pyrenes	**110000**	
C3-Naphthalenes	**59000**		C2-Fluoranthenes/Pyrenes	**36000**	
C4-Naphthalenes	**18000**		C3-Fluoranthenes/Pyrenes	**10000**	
Biphenyl	**21000**	E	C4-Fluoranthenes/Pyrenes	**2400**	
Dibenzofuran	**7100**		Naphthobenzothiophenes	**11000**	
Acenaphthylene	**58000**	E	C1-Naphthobenzothiophenes	**10000**	
Acenaphthene	**66000**	E	C2-Naphthobenzothiophenes	**4200**	
Fluorene	**51000**	E	C3-Naphthobenzothiophenes	**1500**	
C1-Fluorenes	**39000**		C4-Naphthobenzothiophenes	**490**	
C2-Fluorenes	**29000**		Benz[a]anthracene	**36000**	E
C3-Fluorenes	**13000**		Chrysene/Triphenylene	**36000**	E
Anthracene	**75000**	E	C1-Chrysenes	**32000**	
Phenanthrene	**200000**	E	C2-Chrysenes	**12000**	
C1-Phenanthrenes/Anthracenes	**170000**	E	C3-Chrysenes	**4200**	
C2-Phenanthrenes/Anthracenes	**78000**		C4-Chrysenes	**1100**	
C3-Phenanthrenes/Anthracenes	**24000**		Benzo[b]fluoranthene	**11000**	
C4-Phenanthrenes/Anthracenes	**4800**		Benzo[k]fluoranthene	**14000**	
Retene	2.8	U	Benzo[a]fluoranthene	**6100**	
Dibenzothiophene	**23000**	E	Benzo[e]pyrene	**12000**	
C1-Dibenzothiophenes	**29000**		Benzo[a]pyrene	**24000**	E
C2-Dibenzothiophenes	**22000**		Perylene	**3600**	
C3-Dibenzothiophenes	**9900**		Indeno[1,2,3-cd]pyrene	**8300**	
C4-Dibenzothiophenes	**2700**		Dibenz[a,h]anthracene	**2400**	
Benzo(b)fluorene	**16000**		Benzo[g,h,i]perylene	**8400**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/27/06 15:40

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-24 (12.6-13.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-01**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/26/06	82.3	10.36	16.7	1	AC

Parameter	Result
Carbazole	1200

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

01/27/06 15:40

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27904.D
Acq On : 26 Jan 2006 2:56 am
Operator : AC
Sample : 0601040-01
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 26 16:20:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

ans for WW 11/27/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.14	164	52752m	500.00 ng/mL	0.00
72) Chrysene-d12	43.67	240	92937m	500.00 ng/mL	0.04
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.80	152	128677m	1186.93 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 118.69%		
58) Pyrene-d10	38.75	212	279582m	1253.79 ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 125.38%		
81) Benzo[b]fluoranthene-d12	47.59	264	222582	1168.20 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 116.82%		
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	20.25	128	17349454	73120.60 ng/mL# E	100
10) C1-Naphthalenes	23.38	142	15790992m	66552.34 ng/mL E	
11) C2-Naphthalenes	25.80	156	17043183m	71829.80 ng/mL E	
12) C3-Naphthalenes	28.12	170	7159878m	30175.85 ng/mL	
13) C4-Naphthalenes	30.88	184	2196937m	9259.16 ng/mL	
15) 2-Methylnaphthalene	22.95	142	6633750	43922.38 ng/mL# E	100
16) 1-Methylnaphthalene	23.38	142	9135332m	63547.57 ng/mL E	
22) Biphenyl	24.81	154	2074850m	10912.68 ng/mL E	
23) 2,6-Dimethylnaphthalene	25.45	156	2969550m	22824.50 ng/mL E	
24) Dibenzofuran	27.90	168	761738	3629.37 ng/mL	97
25) Acenaphthylene	26.55	152	7009691m	29775.86 ng/mL E	
26) Acenaphthene	27.29	153	4868369m	33737.42 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.82	170	478909m	4217.95 ng/mL	
28) Fluorene	29.32	166	4402132m	26090.39 ng/mL E	
29) C1-Fluorenes	31.53	180	3367205m	19956.62 ng/mL	
30) C2-Fluorenes	33.70	194	2472370m	14653.15 ng/mL	
31) C3-Fluorenes	36.41	208	1113769m	6601.04 ng/mL	
32) Dibenzothiophene	32.64	184	2676930	11865.51 ng/mL# E	86
36) OTP	34.83	198	17808m	78.93 ng/mL	
37) C1-Dibenzothiophenes	34.41	198	3369114m	14933.62 ng/mL	
38) C2-Dibenzothiophenes	36.10	212	2521390m	11176.08 ng/mL	
39) C3-Dibenzothiophenes	37.91	226	1135422m	5032.77 ng/mL	
40) C4-Dibenzothiophenes	39.58	240	305933m	1356.05 ng/mL	
41) Phenanthrene	33.20	178	24730977	102726.32 ng/mL E	94
47) C1-Phenanthrenes/Anthracen	35.25	192	21258511m	88302.56 ng/mL E	
48) C2-Phenanthrenes/Anthracen	37.40	206	9543880m	39642.90 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.20	220	2942996m	12224.47 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.40	234	592053m	2459.24 ng/mL	
53) Anthracene	33.35	178	8585414m	38397.99 ng/mL E	
54) Carbazole	33.97	167	127437m	598.02 ng/mL	
55) 1-Methylphenanthrene	35.68	192	3208047m	19208.01 ng/mL E	
56) Fluoranthene	37.97	202	8225916m	32013.69 ng/mL E	
57) Benzo(b)fluorene	40.45	216	1258901m	7969.73 ng/mL	
59) Pyrene	38.86	202	12152620m	46187.05 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	40.22	216	14181159m	53896.68 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.94	230	4895668m	18606.40 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.75	244	1413941m	5373.80 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.37	258	323113m	1228.02 ng/mL	
64) Naphthobenzothiophene	42.67	234	856397m	3509.91 ng/ml	
65) Naphthobenzothiophene-2,1-	42.67	234	856288m	3509.46 ng/mL	

RF + RPD conc 2nd ck 1/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27904.D
Acq On : 26 Jan 2006 2:56 am
Operator : AC
Sample : 0601040-01
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 26 16:20:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

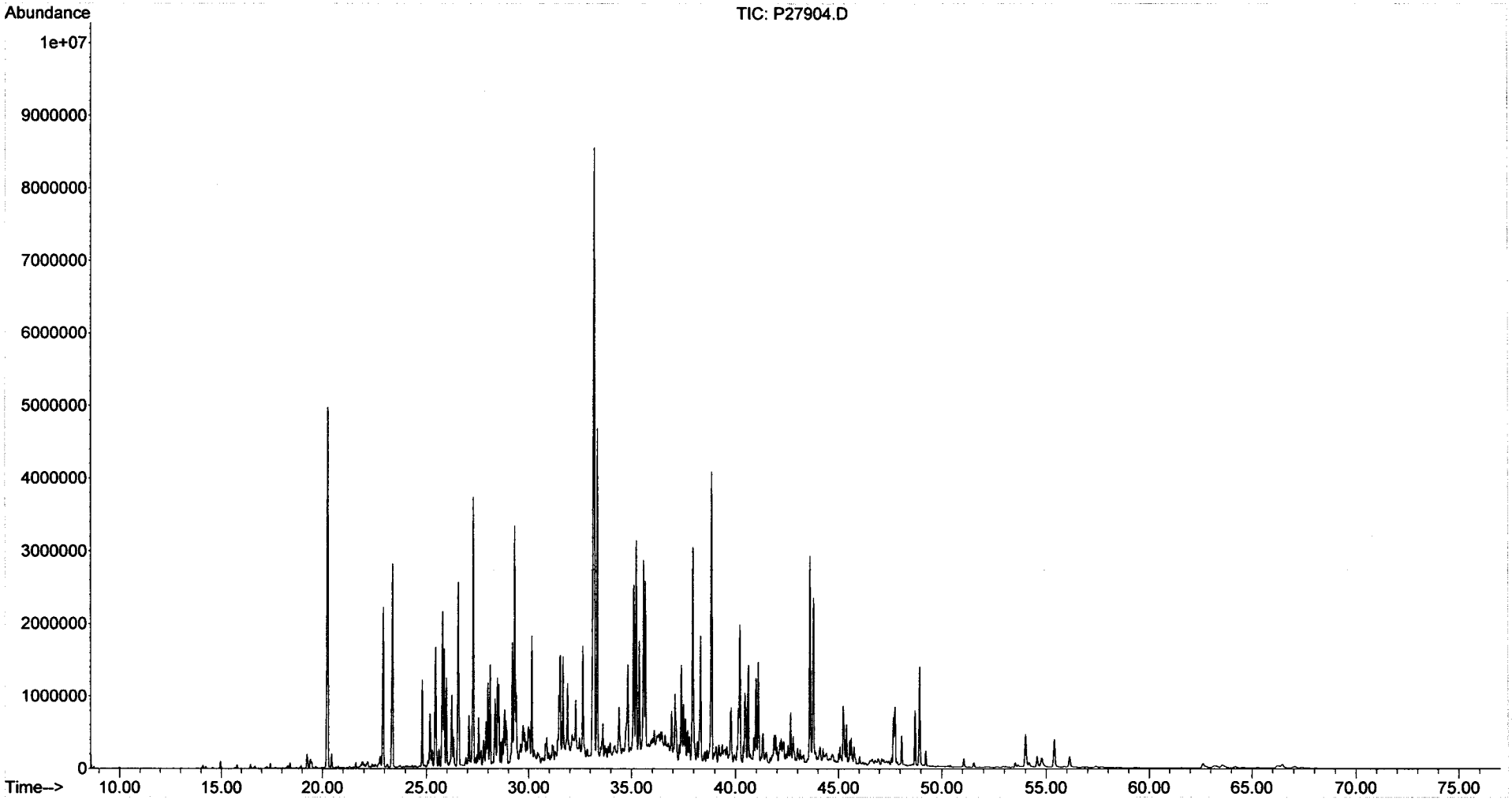
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	43.00	234	218952m	897.37 ng/mL	
67) Naphthobenzothiophene-2,3-	43.30	234	241475m	989.67 ng/mL	
68) C1-Naphthobenzothiophenes	44.05	248	1239017m	5078.06 ng/ml	
69) C2-Naphthobenzothiophenes	45.57	262	520070m	2131.48 ng/ml	
70) C3-Naphthobenzothiophenes	47.70	276	189779m	777.80 ng/ml	
71) C4-Naphthobenzothiophenes	48.81	290	60698m	248.77 ng/mL	
73) Benz[a]anthracene	43.62	228	4937156m	18602.45 ng/mL E	
74) Chrysene	43.78	228	4859993m	18231.81 ng/mL E	
75) Chrysene/Triphenylene	43.78	228	4858638m	18226.72 ng/mL E	
76) C1-Chrysenes	45.23	242	4322057m	16213.79 ng/mL	
77) C2-Chrysenes	46.93	256	1652757m	6200.16 ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	19796	74.26 ng/mL	100
79) C3-Chrysenes	48.59	270	568189m	2131.51 ng/mL	
80) C4-Chrysenes	49.63	284	150562m	564.82 ng/mL	
82) Benzo[b]fluoranthene	47.68	252	1556016	5458.89 ng/mL	99
83) Benzo[k]fluoranthene	47.76	252	2133194m	7156.54 ng/mL	
84) Benzo[a]fluoranthene	48.08	252	930825m	3122.78 ng/mL	
85) Benzo[e]pyrene	48.73	252	1753775m	6382.42 ng/mL	
86) Benzo[a]pyrene	48.95	252	3376340m	12290.33 ng/mL E	
87) Perylene	49.23	252	510750m	1864.90 ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.00	276	1150278m	4224.55 ng/mL	
89) Dibenz[a,h]anthracene	54.03	278	316658m	1236.67 ng/mL	
90) Benzo[g,h,i]perylene	55.39	276	1219004m	4293.79 ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27904.D
Acq On : 26 Jan 2006 2:56 am
Operator : AC
Sample : 0601040-01
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 26 16:20:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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: **GC-SED-24 (12.6-13.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-01E**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/20/06	82.3	10.36	16.7	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**120000**		Fluoranthene	**57000**	
C1-Naphthalenes	**110000**		Pyrene	**87000**	
C2-Naphthalenes	**110000**		C1-Fluoranthenes/Pyrenes	17	U
C3-Naphthalenes	32	U	C2-Fluoranthenes/Pyrenes	17	U
C4-Naphthalenes	32	U	C3-Fluoranthenes/Pyrenes	17	U
Biphenyl	**16000**		C4-Fluoranthenes/Pyrenes	17	U
Dibenzofuran	23	U	Naphthobenzothiophenes	24	U
Acenaphthylene	**46000**		C1-Naphthobenzothiophenes	24	U
Acenaphthene	**52000**		C2-Naphthobenzothiophenes	24	U
Fluorene	**42000**		C3-Naphthobenzothiophenes	24	U
C1-Fluorenes	22	U	C4-Naphthobenzothiophenes	24	U
C2-Fluorenes	22	U	Benz[a]anthracene	**34000**	
C3-Fluorenes	22	U	Chrysene/Triphenylene	**34000**	
Anthracene	**64000**		C1-Chrysenes	21	U
Phenanthrene	**190000**		C2-Chrysenes	21	U
C1-Phenanthrenes/Anthracenes	**150000**		C3-Chrysenes	21	U
C2-Phenanthrenes/Anthracenes	28	U	C4-Chrysenes	21	U
C3-Phenanthrenes/Anthracenes	28	U	Benzo[b]fluoranthene	21	U
C4-Phenanthrenes/Anthracenes	28	U	Benzo[k]fluoranthene	40	U
Retene	28	U	Benzo[a]fluoranthene	40	U
Dibenzothiophene	**18000**		Benzo[e]pyrene	27	U
C1-Dibenzothiophenes	22	U	Benzo[a]pyrene	**20000**	
C2-Dibenzothiophenes	22	U	Perylene	34	U
C3-Dibenzothiophenes	22	U	Indeno[1,2,3-cd]pyrene	47	U
C4-Dibenzothiophenes	22	U	Dibenz[a,h]anthracene	37	U
Benzo(b)fluorene	20	U	Benzo[g,h,i]perylene	34	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	73	50-130
Pyrene-d10	85	50-130
Benzo[b]fluoranthene-d12	75	50-130

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

01/27/06 15:32

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27806.D
Acq On : 20 Jan 2006 8:31 pm
Operator : AC
Sample : 0601040-01-RE
Misc : 10X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 26 17:39:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WW 1/27/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	39754m	500.00	ng/mL	0.00
72) Chrysene-d12	43.81	240	64971m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	7186m	87.96	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.80%#			
58) Pyrene-d10	38.89	212	17026m	101.32	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.13%#			
81) Benzo[b]fluoranthene-d12	47.76	264	11913m	89.44	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.94%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

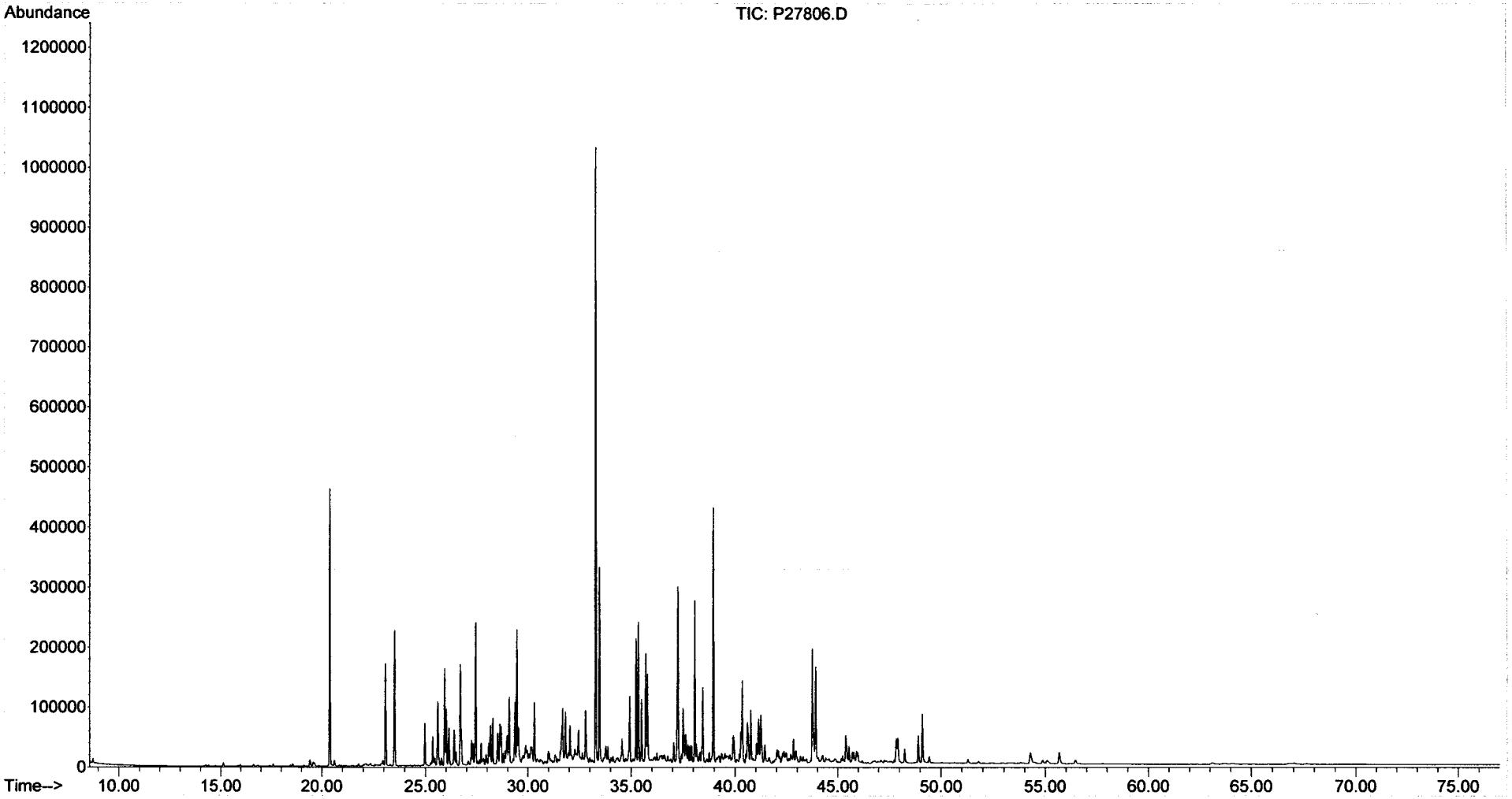
Target Compounds						Qvalue
9) Naphthalene	20.39	128	1107074m	6191.40	ng/mL	
10) C1-Naphthalenes	23.52	142	972943m	5441.26	ng/mL	
11) C2-Naphthalenes	25.94	156	986479m	5516.96	ng/mL	
15) 2-Methylnaphthalene	23.09	142	404985	3558.15	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	566426	5228.49	ng/mL#	100
22) Biphenyl	24.97	154	120057m	837.90	ng/mL	
23) 2,6-Dimethylnaphthalene	25.59	156	168862m	1722.27	ng/mL	
25) Acenaphthylene	26.69	152	417087m	2350.99	ng/mL	
26) Acenaphthene	27.43	153	287141m	2640.47	ng/mL	
28) Fluorene	29.45	166	269278m	2117.76	ng/mL	
32) Dibenzothiophene	32.78	184	159900m	940.49	ng/mL	
41) Phenanthrene	33.29	178	1720579	9483.60	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.36	192	1381904m	7616.87	ng/mL	
53) Anthracene	33.46	178	551707m	3274.27	ng/mL	
55) 1-Methylphenanthrene	35.79	192	214782m	1706.47	ng/mL	
56) Fluoranthene	38.07	202	564894m	2917.27	ng/mL	
59) Pyrene	38.96	202	876635	4421.07	ng/mL	99
73) Benz[a]anthracene	43.74	228	321025m	1730.22	ng/mL	
74) Chrysene	43.91	228	317855m	1705.66	ng/mL	
75) Chrysene/Triphenylene	43.91	228	318132m	1707.15	ng/mL	
86) Benzo[a]pyrene	49.11	252	198658m	1034.41	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27806.D
Acq On : 20 Jan 2006 8:31 pm
Operator : AC
Sample : 0601040-01-RE
Misc : 10X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 26 17:39:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-24 (12.6-13.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-01**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/22/06	82.3	10.36	1.75	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**50**	30,31-Bishomohopane-22S	**8.8**
C24 Tricyclic Terpane	**31**	30,31-Bishomohopane-22R	**6.5**
C25 Tricyclic Terpane	**23**	30,31-Trishomohopane-22S	**4.5**
C24 Tetracyclic Terpane	**9.7**	30,31-Trishomohopane-22R	**3.1**
C26 Tricyclic Terpane-22S	**9.6**	Tetrakishomohopane-22S	**2.4**
C26 Tricyclic Terpane-22R	**9.5**	Tetrakishomohopane-22R	**1.7** J
C28 Tricyclic Terpane-22S	**9.5**	Pentakishomohopane-22S	**2.1**
C28 Tricyclic Terpane-22R	**9.7**	Pentakishomohopane-22R	0.58 U
C29 Tricyclic Terpane-22S	**8.3**	13b(H),17a(H)-20S-Diacholestane	**33**
C29 Tricyclic Terpane-22R	**8.4**	13b(H),17a(H)-20R-Diacholestane	**17**
18a-22,29,30-Trisnorneohopane-TS	**15**	13b,17a-20S-Methyldiacholestane	**11**
C30 Tricyclic Terpane-22S	**6.1**	14a(H),17a(H)-20S-Cholestane	**11**
C30 Tricyclic Terpane-22R	**4.2**	14a(H),17a(H)-20R-Cholestane	**42**
17a(H)-22,29,30-Trisnorhopane-TM	**21**	13b,17a-20R-Ethyldiacholestane	**8.2**
17a/b,21b/a 28,30-Bisnorhopane	**5.3**	13a,17b-20S-Ethyldiacholestane	**0.77** J
17a(H),21b(H)-25-Norhopane	**3.8**	14a,17a-20S-Methylcholestane	**15**
30-Norhopane	**33**	14a,17a-20R-Methylcholestane	**14**
18a(H)-30-Norneohopane-C29Ts	**10**	14a(H),17a(H)-20S-Ethylcholestane	**13**
17a(H)-Diahopane	**4.9**	14a(H),17a(H)-20R-Ethylcholestane	**14**
30-Normoretane	**5.8**	14b(H),17b(H)-20R-Cholestane	**18**
18a(H)&18b(H)-Oleananes	**4.1**	14b(H),17b(H)-20S-Cholestane	**17**
Hopane	**52**	14b,17b-20R-Methylcholestane	**14**
Moretane	**7.4**	14b,17b-20S-Methylcholestane	**18**
30-Homohopane-22S	**14**	14b(H),17b(H)-20R-Ethylcholestane	**25**
30-Homohopane-22R	**14**	14b(H),17b(H)-20S-Ethylcholestane	**19**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	76	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.

01/27/06 16:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34850.D
Acq On : 22 Jan 2006 1:24 am
Operator : AC
Sample : 0601040-01
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jan 24 13:40:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

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	43.41	240	125357	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	43.94	217	457888	8691.15	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 869.12%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	27106	251.62	ng/mL#	95
84) Hopane (T19)	52.48	191	27106	251.62	ng/mL#	95
85) C23 Tricyclic Terpane (T4)	40.95	191	26249m	243.67	ng/ml	-RF+Ref conc
86) C24 Tricyclic Terpane (T5)	41.68	191	16067	149.15	ng/ml	100 and
87) C25 Tricyclic Terpane (T6)	43.16	191	12288m	114.07	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	5103	47.37	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	5055m	46.92	ng/ml	
90) C26 Tricyclic Terpane-22R	44.32	191	4995m	46.37	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	4995m	46.37	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	5075m	47.11	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	4358m	40.45	ng/ml	
94) C29 Tricyclic Terpane-22R	47.48	191	4379m	40.65	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	7779m	72.21	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	3212m	29.82	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	2208m	20.50	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	10902m	101.20	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	2779m	25.80	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.17	191	2019	18.74	ng/ml	100
101) 30-Norhopane (T15)	51.08	191	17366m	161.21	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	5486m	50.93	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	2591m	24.05	ng/ml	
104) 30-Normoretane (T17)	51.87	191	3051m	28.32	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	2167m	20.12	ng/ml	
106) Moretane (T20)	53.18	191	3887m	36.08	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	7201m	66.85	ng/ml	
108) 30-Homohopane-22R (T22)	54.54	191	7085	65.77	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.89	191	4639	43.06	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	3409	31.65	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	2380m	22.09	ng/ml	
112) 30,31-Trishomohopane-22R (	58.68	191	1630m	15.13	ng/ml	
113) Tetrakishomohopane-22S (T3	60.74	191	1256m	11.66	ng/ml	
114) Tetrakishomohopane-22R (T3	61.67	191	871m	8.09	ng/ml	
115) Pentakishomohopane-22S (T3	63.95	191	1093m	10.15	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	8491m	161.17	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	4376m	83.06	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	2822m	53.56	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	2924m	55.50	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	10686m	202.83	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	2105m	39.95	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	48.50	217	198	3.76	ng/ml	100

and cw 1/30/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34850.D
Acq On : 22 Jan 2006 1:24 am
Operator : AC
Sample : 0601040-01
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jan 24 13:40:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

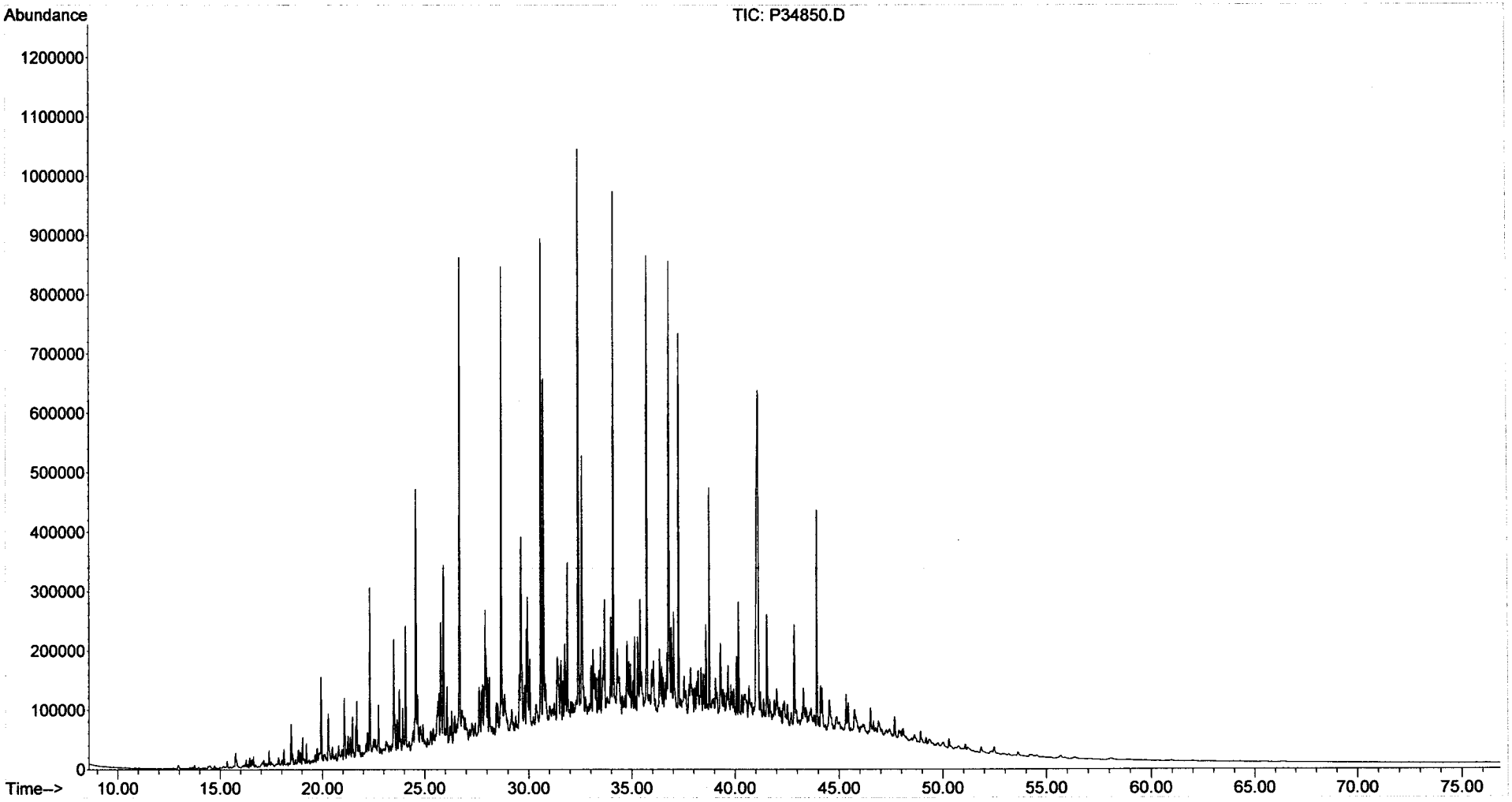
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.66	217	3734m	70.87	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	3476	65.98	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	3234m	61.38	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	3626m	68.82	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	4728m	89.74	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	4395m	83.42	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	3474m	65.94	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	4731m	89.80	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	6472m	122.84	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	4973m	94.39	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34850.D
Acq On : 22 Jan 2006 1:24 am
Operator : AC
Sample : 0601040-01
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jan 24 13:40:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **GC-SED-23 (17.5-19)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-02**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/26/06	85.8	10.09	6.96	1	AC

Parameter	Result	
Naphthalene	2100	
C1-Naphthalenes	24000	E
C2-Naphthalenes	41000	E
C3-Naphthalenes	20000	
C4-Naphthalenes	5700	
Biphenyl	6500	
Dibenzofuran	2100	
Acenaphthylene	5700	
Acenaphthene	33000	E
Fluorene	18000	E
C1-Fluorenes	12000	
C2-Fluorenes	8800	
C3-Fluorenes	3400	
Anthracene	24000	E
Phenanthrene	67000	E
C1-Phenanthrenes/Anthracenes	48000	E
C2-Phenanthrenes/Anthracenes	18000	
C3-Phenanthrenes/Anthracenes	5200	
C4-Phenanthrenes/Anthracenes	900	
Retene	1.2	U
Dibenzothiophene	8500	E
C1-Dibenzothiophenes	9400	
C2-Dibenzothiophenes	6400	
C3-Dibenzothiophenes	2700	
C4-Dibenzothiophenes	780	
Benzo(b)fluorene	4700	

Parameter	Result	
Fluoranthene	21000	E
Pyrene	30000	E
C1-Fluoranthenes/Pyrenes	26000	
C2-Fluoranthenes/Pyrenes	8100	
C3-Fluoranthenes/Pyrenes	2300	
C4-Fluoranthenes/Pyrenes	630	
Naphthobenzothiophenes	3400	
C1-Naphthobenzothiophenes	2800	
C2-Naphthobenzothiophenes	1300	
C3-Naphthobenzothiophenes	500	
C4-Naphthobenzothiophenes	180	
Benz[a]anthracene	12000	E
Chrysene/Triphenylene	11000	E
C1-Chrysenes	8700	
C2-Chrysenes	3200	
C3-Chrysenes	1100	
C4-Chrysenes	320	
Benzo[b]fluoranthene	4000	
Benzo[k]fluoranthene	5100	
Benzo[a]fluoranthene	2000	
Benzo[e]pyrene	4400	
Benzo[a]pyrene	8800	E
Perylene	1300	
Indeno[1,2,3-cd]pyrene	3300	
Dibenz[a,h]anthracene	890	
Benzo[g,h,i]perylene	3300	

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

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
U - The analyte was analyzed for but not detected at the sample specific level reported.

01/27/06 15:41

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-23 (17.5-19)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-02**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/26/06	85.8	10.09	6.96	1	AC

Parameter	Result
Carbazole	230

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

N/A - Not Applicable

01/27/06 15:41

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27906.D
Acq On : 26 Jan 2006 4:33 am
Operator : AC
Sample : 0601040-02
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 27 14:43:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for WP 1/27/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.14	164	35696m	500.00 ng/mL	0.00
72) Chrysene-d12	43.65	240	55981m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	204057m	2781.60 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 278.16%#		
58) Pyrene-d10	38.74	212	419109m	2777.55 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 277.76%#		
81) Benzo[b]fluoranthene-d12	47.57	264	344540	3002.02 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 300.20%#		
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	20.21	128	428147m	2666.65 ng/mL	
10) C1-Naphthalenes	23.36	142	4763235m	29667.12 ng/mL E	
11) C2-Naphthalenes	25.79	156	8126926m	50617.38 ng/mL E	
12) C3-Naphthalenes	28.11	170	3998086m	24901.50 ng/mL	
13) C4-Naphthalenes	30.88	184	1145724m	7135.98 ng/mL	
15) 2-Methylnaphthalene	22.91	142	101547m	993.60 ng/mL	
16) 1-Methylnaphthalene	23.36	142	4667783m	47984.91 ng/mL E	
22) Biphenyl	24.80	154	1044539m	8118.74 ng/mL	
23) 2,6-Dimethylnaphthalene	25.43	156	1186335m	13475.27 ng/mL E	
24) Dibenzofuran	27.90	168	371090	2612.91 ng/mL	95
25) Acenaphthylene	26.53	152	1123861m	7055.01 ng/mL	
26) Acenaphthene	27.27	153	3954590m	40499.46 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.81	170	252531m	3286.87 ng/mL	
28) Fluorene	29.29	166	2623378m	22977.23 ng/mL E	
29) C1-Fluorenes	31.52	180	1710122m	14978.35 ng/mL	
30) C2-Fluorenes	33.70	194	1256839m	11008.20 ng/mL	
31) C3-Fluorenes	36.40	208	486743m	4263.21 ng/mL	
32) Dibenzothiophene	32.62	184	1618076m	10599.07 ng/mL E	
36) OTP	34.84	198	37036m	242.60 ng/mL	
37) C1-Dibenzothiophenes	34.39	198	1823446m	11944.33 ng/mL	
38) C2-Dibenzothiophenes	36.09	212	1221250m	7999.70 ng/mL	
39) C3-Dibenzothiophenes	37.91	226	512759m	3358.78 ng/mL	
40) C4-Dibenzothiophenes	39.57	240	148107m	970.16 ng/mL	
41) Phenanthrene	33.17	178	13631274	83675.11 ng/mL E	95
47) C1-Phenanthrenes/Anthracen	35.22	192	9721211m	59673.32 ng/mL E	
48) C2-Phenanthrenes/Anthracen	37.40	206	3685827m	22625.32 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	1045397m	6417.13 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	182994m	1123.30 ng/mL	
53) Anthracene	33.33	178	4539553m	30004.04 ng/mL E	
54) Carbazole	33.96	167	40706m	282.29 ng/mL	
55) 1-Methylphenanthrene	35.66	192	1396938m	12360.56 ng/mL E	
56) Fluoranthene	37.95	202	4515606m	25970.89 ng/mL E	
57) Benzo(b)fluorene	40.44	216	622732m	5826.03 ng/mL	
59) Pyrene	38.84	202	6700248	37632.28 ng/mL E	93
60) C1-Fluoranthenes/Pyrenes	40.19	216	5878857m	33018.90 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.92	230	1799306m	10105.89 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.73	244	515301m	2894.21 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	139290m	782.33 ng/mL	
64) Naphthobenzothiophene	42.66	234	430832m	2609.44 ng/ml	
65) Naphthobenzothiophene-2,1-	42.66	234	431162m	2611.44 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27906.D
Acq On : 26 Jan 2006 4:33 am
Operator : AC
Sample : 0601040-02
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 27 14:43:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

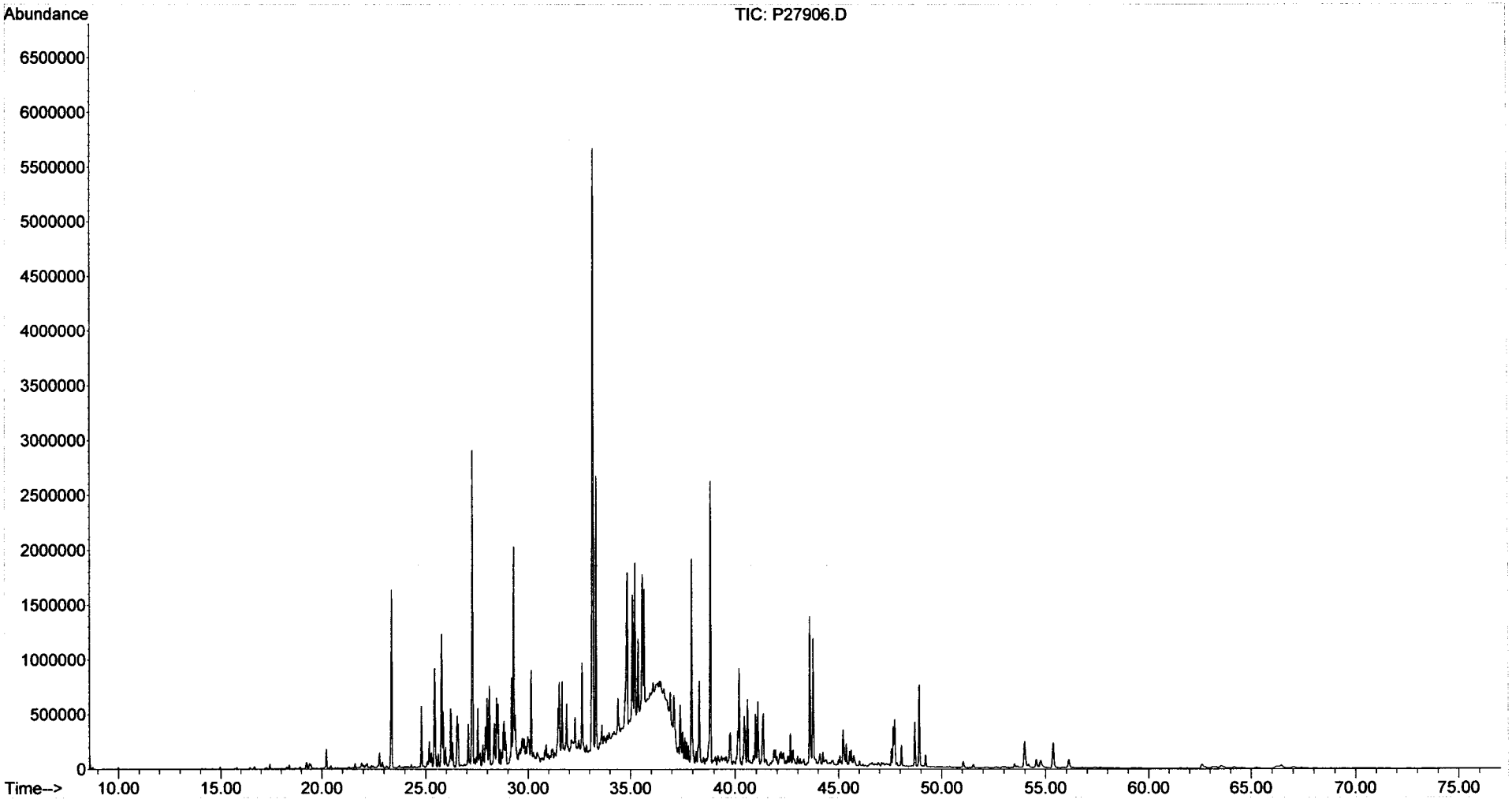
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.99	234	116603m	706.24 ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	144958m	877.97 ng/mL	
68) C1-Naphthobenzothiophenes	44.05	248	569703m	3450.55 ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	261268m	1582.44 ng/ml	
70) C3-Naphthobenzothiophenes	47.45	276	102758m	622.38 ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	37391m	226.47 ng/mL	
73) Benz[a]anthracene	43.60	228	2341259m	14645.05 ng/mL E	
74) Chrysene	43.76	228	2284116m	14225.26 ng/mL E	
75) Chrysene/Triphenylene	43.76	228	2283743m	14222.94 ng/mL	
76) C1-Chrysenes	45.22	242	1738492m	10827.16 ng/mL	
77) C2-Chrysenes	46.92	256	656160m	4086.50 ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	19366	120.61 ng/mL	100
79) C3-Chrysenes	48.58	270	224385m	1397.45 ng/mL	
80) C4-Chrysenes	49.63	284	63427m	395.02 ng/mL	
82) Benzo[b]fluoranthene	47.67	252	854997	4979.70 ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	1135434	6323.87 ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	439676	2448.80 ng/mL#	1
85) Benzo[e]pyrene	48.71	252	911522m	5507.14 ng/mL	
86) Benzo[a]pyrene	48.92	252	1806272	10915.62 ng/mL E	99
87) Perylene	49.22	252	266758	1617.01 ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.98	276	670169m	4086.11 ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	169897m	1101.53 ng/mL	
90) Benzo[g,h,i]perylene	55.37	276	707181m	4135.37 ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27906.D
Acq On : 26 Jan 2006 4:33 am
Operator : AC
Sample : 0601040-02
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 27 14:43:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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: **GC-SED-23 (17.5-19)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-02E**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/20/06	85.8	10.09	6.96	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	13	U	Fluoranthene	**21000**	
C1-Naphthalenes	**21000**		Pyrene	**32000**	
C2-Naphthalenes	**34000**		C1-Fluoranthenes/Pyrenes	7.2	U
C3-Naphthalenes	13	U	C2-Fluoranthenes/Pyrenes	7.2	U
C4-Naphthalenes	13	U	C3-Fluoranthenes/Pyrenes	7.2	U
Biphenyl	7.3	U	C4-Fluoranthenes/Pyrenes	7.2	U
Dibenzofuran	9.6	U	Naphthobenzothiophenes	9.7	U
Acenaphthylene	15	U	C1-Naphthobenzothiophenes	9.7	U
Acenaphthene	**28000**		C2-Naphthobenzothiophenes	9.7	U
Fluorene	**16000**		C3-Naphthobenzothiophenes	9.7	U
C1-Fluorenes	9.2	U	C4-Naphthobenzothiophenes	9.7	U
C2-Fluorenes	9.2	U	Benz[a]anthracene	**11000**	
C3-Fluorenes	9.2	U	Chrysene/Triphenylene	**11000**	
Anthracene	**22000**		C1-Chrysenes	8.7	U
Phenanthrene	**66000**		C2-Chrysenes	8.7	U
C1-Phenanthrenes/Anthracenes	**45000**		C3-Chrysenes	8.7	U
C2-Phenanthrenes/Anthracenes	12	U	C4-Chrysenes	8.7	U
C3-Phenanthrenes/Anthracenes	12	U	Benzo[b]fluoranthene	8.5	U
C4-Phenanthrenes/Anthracenes	12	U	Benzo[k]fluoranthene	16	U
Retene	12	U	Benzo[a]fluoranthene	16	U
Dibenzothiophene	**7500**		Benzo[e]pyrene	11	U
C1-Dibenzothiophenes	8.9	U	Benzo[a]pyrene	**7400**	
C2-Dibenzothiophenes	8.9	U	Perylene	14	U
C3-Dibenzothiophenes	8.9	U	Indeno[1,2,3-cd]pyrene	19	U
C4-Dibenzothiophenes	8.9	U	Dibenz[a,h]anthracene	15	U
Benzo(b)fluorene	8.1	U	Benzo[g,h,i]perylene	14	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	83	50-130

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

01/27/06 15:32

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27808.D
Acq On : 20 Jan 2006 10:11 pm
Operator : AC
Sample : 0601040-02-RE
Misc : 10X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 26 17:42:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WW
1/27/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	40097m	500.00	ng/mL	0.00
72) Chrysene-d12	43.81	240	64431m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	19025m	230.87	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.09%#			
58) Pyrene-d10	38.89	212	44827	264.47	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.45%#			
81) Benzo[b]fluoranthene-d12	47.76	264	31516m	238.59	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.86%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

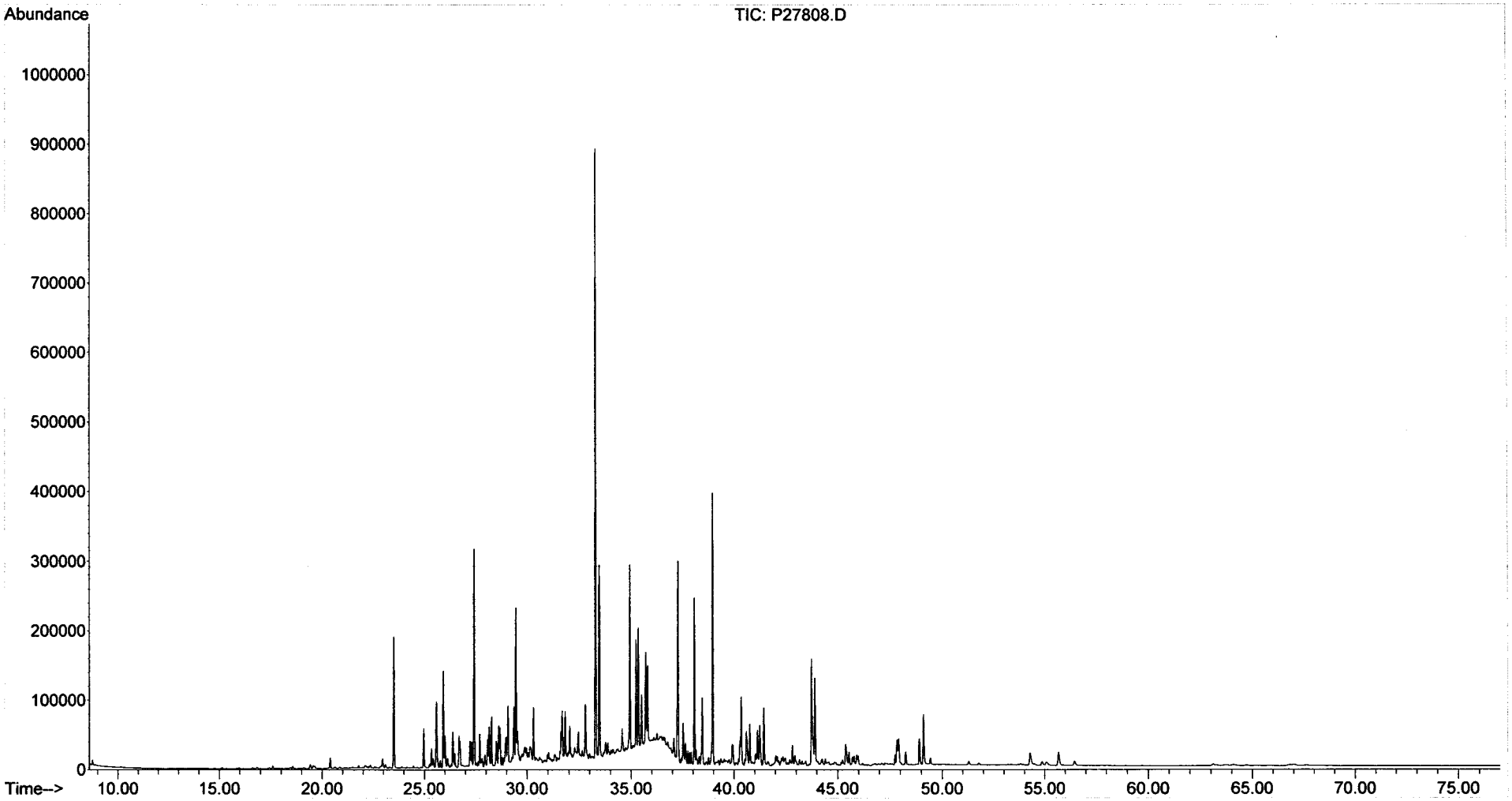
Target Compounds						Qvalue
10) C1-Naphthalenes	23.51	142	477969m	2650.21	ng/mL	
11) C2-Naphthalenes	25.94	156	772317m	4282.30	ng/mL	
16) 1-Methylnaphthalene	23.51	142	469092	4292.99	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	105879m	1070.65	ng/mL	
26) Acenaphthene	27.42	153	388925m	3545.86	ng/mL	
28) Fluorene	29.45	166	262685m	2048.24	ng/mL	
32) Dibenzothiophene	32.78	184	160658m	936.87	ng/mL	
41) Phenanthrene	33.29	178	1514084	8274.04	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.36	192	1026769m	5611.00	ng/mL	
53) Anthracene	33.46	178	464962m	2735.85	ng/mL	
55) 1-Methylphenanthrene	35.79	192	158336	1247.23	ng/mL	100
56) Fluoranthene	38.07	202	511739m	2620.16	ng/mL	
59) Pyrene	38.96	202	794735	3973.74	ng/mL	100
73) Benz[a]anthracene	43.74	228	252612m	1372.91	ng/mL	
74) Chrysene	43.91	228	246621m	1334.50	ng/mL	
75) Chrysene/Triphenylene	43.91	228	248462m	1344.46	ng/mL	
86) Benzo[a]pyrene	49.11	252	175365m	920.78	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27808.D
Acq On : 20 Jan 2006 10:11 pm
Operator : AC
Sample : 0601040-02-RE
Misc : 10X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 26 17:42:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-23 (17.5-19)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-02**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/22/06	85.8	10.09	1.4	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	17	30,31-Bishomohopane-22S	5.0
C24 Tricyclic Terpane	11	30,31-Bishomohopane-22R	3.8
C25 Tricyclic Terpane	8.8	30,31-Trishomohopane-22S	2.8
C24 Tetracyclic Terpane	4.0	30,31-Trishomohopane-22R	1.9
C26 Tricyclic Terpane-22S	3.8	Tetrakishomohopane-22S	2.1
C26 Tricyclic Terpane-22R	3.7	Tetrakishomohopane-22R	1.6 J
C28 Tricyclic Terpane-22S	3.9	Pentakishomohopane-22S	1.3 J
C28 Tricyclic Terpane-22R	4.5	Pentakishomohopane-22R	1.3 J
C29 Tricyclic Terpane-22S	3.7	13b(H),17a(H)-20S-Diacholestane	14
C29 Tricyclic Terpane-22R	3.9	13b(H),17a(H)-20R-Diacholestane	6.5
18a-22,29,30-Trisnorneohopane-TS	8.6	13b,17a-20S-Methyldiacholestane	4.5
C30 Tricyclic Terpane-22S	2.9	14a(H),17a(H)-20S-Cholestane	6.8
C30 Tricyclic Terpane-22R	1.9	14a(H),17a(H)-20R-Cholestane	22
17a(H)-22,29,30-Trisnorhopane-TM	11	13b,17a-20R-Ethyldiacholestane	3.5
17a/b,21b/a 28,30-Bisnorhopane	4.4	13a,17b-20S-Ethyldiacholestane	0.56 J
17a(H),21b(H)-25-Norhopane	1.7	14a,17a-20S-Methylcholestane	3.2
30-Norhopane	21	14a,17a-20R-Methylcholestane	10
18a(H)-30-Norneohopane-C29Ts	7.0	14a(H),17a(H)-20S-Ethylcholestane	7.0
17a(H)-Diahopane	2.6	14a(H),17a(H)-20R-Ethylcholestane	9.0
30-Normoretane	4.2	14b(H),17b(H)-20R-Cholestane	10
18a(H)&18b(H)-Oleananes	3.4	14b(H),17b(H)-20S-Cholestane	9.6
Hopane	32	14b,17b-20R-Methylcholestane	8.2
Moretane	5.1	14b,17b-20S-Methylcholestane	9.9
30-Homohopane-22S	8.2	14b(H),17b(H)-20R-Ethylcholestane	11
30-Homohopane-22R	8.0	14b(H),17b(H)-20S-Ethylcholestane	11

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	83	50-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.

01/27/06 16:09

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34851.D
Acq On : 22 Jan 2006 2:54 am
Operator : AC
Sample : 0601040-02
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jan 24 13:46:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

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	43.41	240	121286	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	43.93	217	607648	11920.87 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1192.09%#	

Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	20634m	197.97 ng/mL	
84) Hopane (T19)	52.47	191	20544m	197.11 ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	10946m	105.02 ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	7215	69.22 ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.21	191	5681m	54.51 ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	2559m	24.55 ng/ml	
89) C26 Tricyclic Terpane-22S	44.21	191	2420m	23.22 ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	2380m	22.83 ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	2513m	24.11 ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	2892m	27.75 ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	2387	22.90 ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	2517m	24.15 ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	5519m	52.95 ng/ml	
96) C30 Tricyclic Terpane-22S	48.71	191	1896m	18.19 ng/mL	
97) C30 Tricyclic Terpane-22R	48.96	191	1228m	11.78 ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.19	191	7157m	68.67 ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	2855m	27.39 ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.17	191	1079m	10.35 ng/ml	
101) 30-Norhopane (T15)	51.07	191	13314m	127.74 ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	4537m	43.53 ng/ml	
103) 17a(H)-Diahopane (X)	51.30	191	1646m	15.79 ng/ml	
104) 30-Normoretane (T17)	51.87	191	2712m	26.02 ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	2180m	20.92 ng/ml	
106) Moretane (T20)	53.17	191	3284m	31.51 ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	5316m	51.00 ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	5165m	49.56 ng/ml	
109) 30,31-Bishomohopane-22S (T	55.87	191	3216	30.86 ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.26	191	2424m	23.26 ng/ml	
111) 30,31-Trishomohopane-22S (	58.05	191	1811m	17.38 ng/ml	
112) 30,31-Trishomohopane-22R (	58.67	191	1208m	11.59 ng/ml	
113) Tetrakishomohopane-22S (T3	60.74	191	1334m	12.80 ng/ml	
114) Tetrakishomohopane-22R (T3	61.68	191	1015m	9.74 ng/ml	
115) Pentakishomohopane-22S (T3	63.96	191	824m	7.91 ng/ml	
116) Pentakishomohopane-22R (T3	65.25	191	829m	7.95 ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	4275	83.87 ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	2062m	40.45 ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	1432m	28.09 ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	2132m	41.83 ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	6989	137.11 ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	1098m	21.54 ng/ml	

2nd ✓ MS 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34851.D
Acq On : 22 Jan 2006 2:54 am
Operator : AC
Sample : 0601040-02
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jan 24 13:46:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

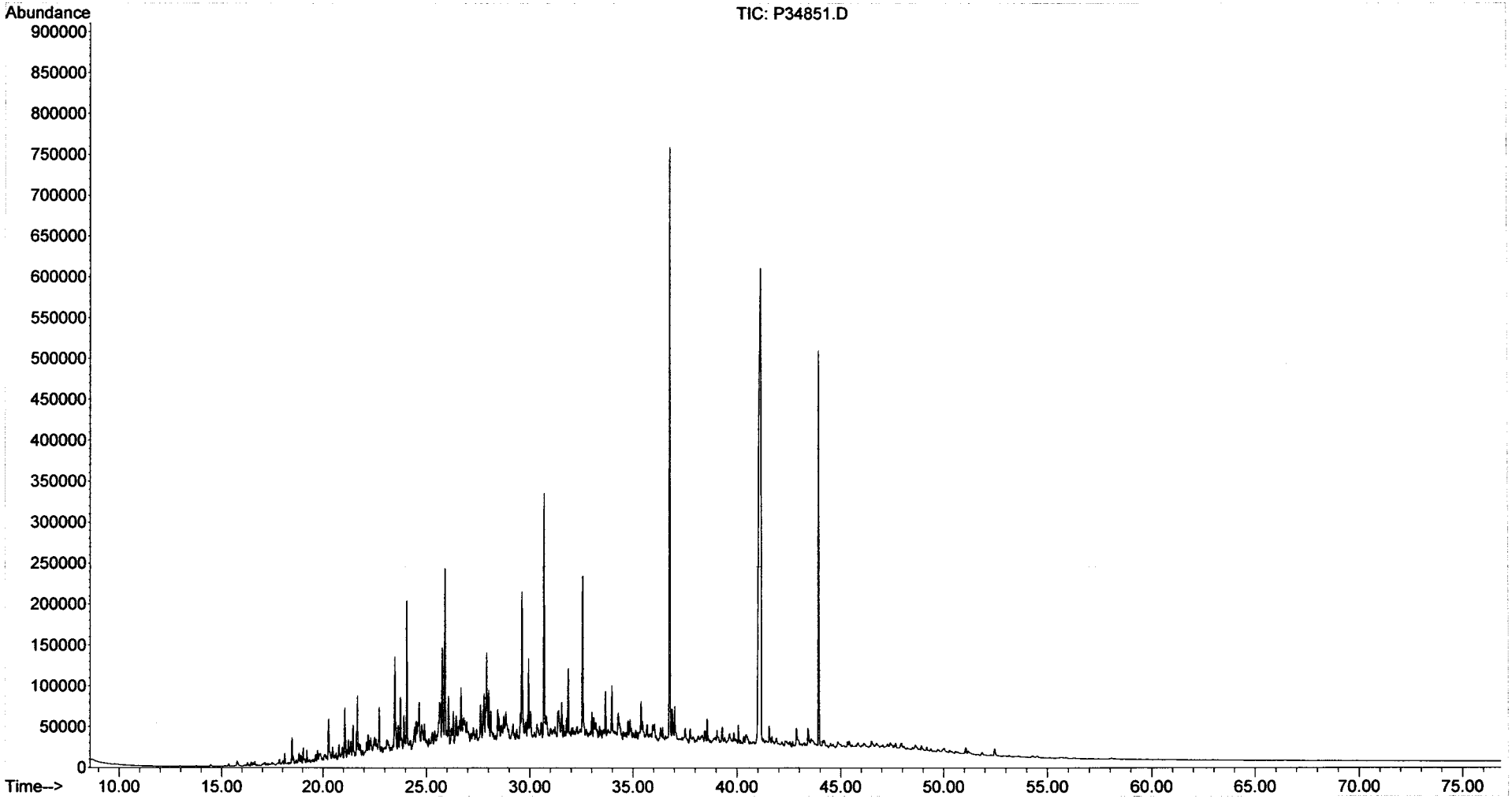
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	176m	3.45 ng/ml	
125) 14a,17a-20S-Methylcholesta	48.66	217	1020m	20.01 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	3315m	65.03 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	2192m	43.00 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	2843m	55.77 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	3187	62.52 ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	3010m	59.05 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	2580m	50.61 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	3119m	61.19 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	3415m	67.00 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	3394m	66.58 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34851.D
Acq On : 22 Jan 2006 2:54 am
Operator : AC
Sample : 0601040-02
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jan 24 13:46:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **GC-SED-20 (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-03**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/26/06	43.6	10.53	31.25	1	AC

Parameter	Result	Parameter	Result
Naphthalene	14000	Fluoranthene	49000
C1-Naphthalenes	7300	Pyrene	66000
C2-Naphthalenes	13000	C1-Fluoranthenes/Pyrenes	59000
C3-Naphthalenes	23000	C2-Fluoranthenes/Pyrenes	24000
C4-Naphthalenes	18000	C3-Fluoranthenes/Pyrenes	10000
Biphenyl	1500	C4-Fluoranthenes/Pyrenes	4200
Dibenzofuran	1500	Naphthobenzothiophenes	8800
Acenaphthylene	14000	C1-Naphthobenzothiophenes	8800
Acenaphthene	19000	C2-Naphthobenzothiophenes	6400
Fluorene	3000	C3-Naphthobenzothiophenes	3800
C1-Fluorenes	8600	C4-Naphthobenzothiophenes	2200
C2-Fluorenes	14000	Benz[a]anthracene	30000
C3-Fluorenes	13000	Chrysene/Triphenylene	31000
Anthracene	27000	C1-Chrysenes	25000
Phenanthrene	16000	C2-Chrysenes	13000
C1-Phenanthrenes/Anthracenes	56000	C3-Chrysenes	6400
C2-Phenanthrenes/Anthracenes	46000	C4-Chrysenes	2300
C3-Phenanthrenes/Anthracenes	21000	Benzo[b]fluoranthene	15000
C4-Phenanthrenes/Anthracenes	6100	Benzo[k]fluoranthene	16000
Retene	2400	Benzo[a]fluoranthene	6000
Dibenzothiophene	5300	Benzo[e]pyrene	15000
C1-Dibenzothiophenes	12000	Benzo[a]pyrene	26000
C2-Dibenzothiophenes	17000	Perylene	4300
C3-Dibenzothiophenes	11000	Indeno[1,2,3-cd]pyrene	12000
C4-Dibenzothiophenes	4700	Dibenz[a,h]anthracene	3400
Benzo(b)fluorene	12000	Benzo[g,h,i]perylene	13000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

01/27/06 15:46

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-20 (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-03**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/26/06	43.6	10.53	31.25	1	AC

Parameter	Result
Carbazole	680

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

01/27/06 15:47

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27908.D
Acq On : 26 Jan 2006 6:10 am
Operator : AC
Sample : 0601040-03
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 27 14:38:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

CMS for WW 1/27/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	53191m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.65	240	84945m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	61579m	563.32	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.33%			
58) Pyrene-d10	38.73	212	134092m	596.37	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 59.64%			
81) Benzo[b]fluoranthene-d12	47.59	264	116788m	670.62	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 67.06%			
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	20.21	128	510152m	2132.33	ng/mL	
10) C1-Naphthalenes	22.91	142	257838m	1077.71	ng/mL	
11) C2-Naphthalenes	25.76	156	453300m	1894.70	ng/mL	
12) C3-Naphthalenes	27.99	170	793347m	3316.03	ng/mL	
13) C4-Naphthalenes	30.88	184	638101m	2667.13	ng/mL	
15) 2-Methylnaphthalene	22.91	142	149162	979.46	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	106485	734.62	ng/mL#	100
22) Biphenyl	24.80	154	41805m	218.06	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	54667m	416.71	ng/mL	
24) Dibenzofuran	27.89	168	45445m	214.74	ng/mL	
25) Acenaphthylene	26.52	152	471575m	1986.63	ng/mL	
26) Acenaphthene	27.25	153	403273	2771.59	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.80	170	70615m	616.80	ng/mL	
28) Fluorene	29.28	166	76212m	447.96	ng/mL	
29) C1-Fluorenes	31.51	180	215026m	1263.89	ng/mL	
30) C2-Fluorenes	33.69	194	361571m	2125.26	ng/mL	
31) C3-Fluorenes	35.69	208	321356m	1888.88	ng/mL	
32) Dibenzothiophene	32.61	184	178090m	782.87	ng/mL	
36) OTP	34.80	198	11414m	50.18	ng/mL	
37) C1-Dibenzothiophenes	34.39	198	425991m	1872.62	ng/mL	
38) C2-Dibenzothiophenes	36.09	212	556034m	2444.28	ng/mL	
39) C3-Dibenzothiophenes	37.90	226	367226m	1614.30	ng/mL	
40) C4-Dibenzothiophenes	39.57	240	157617m	692.87	ng/mL	
41) Phenanthrene	33.11	178	580732	2392.31	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.55	192	1982492m	8166.81	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.40	206	1642274m	6765.30	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	750985m	3093.66	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.40	234	218515m	900.17	ng/mL	
52) Retene	40.12	234	19736m	358.31	ng/mL	
53) Anthracene	33.29	178	881148m	3908.38	ng/mL	
54) Carbazole	33.96	167	21484m	99.99	ng/mL	
55) 1-Methylphenanthrene	35.63	192	344542m	2045.90	ng/mL	
56) Fluoranthene	37.94	202	1857654m	7169.97	ng/mL	
57) Benzo(b)fluorene	40.43	216	268373m	1684.97	ng/mL	
59) Pyrene	38.82	202	2567405	9677.11	ng/mL	96
60) C1-Fluoranthenes/Pyrenes	40.19	216	2295162m	8650.96	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.92	230	933617m	3519.00	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	389717m	1468.93	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.37	258	164154m	618.73	ng/mL	
64) Naphthobenzothiophene	42.66	234	200137m	813.48	ng/ml	

CMS 1/27/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27908.D
Acq On : 26 Jan 2006 6:10 am
Operator : AC
Sample : 0601040-03
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 27 14:38:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

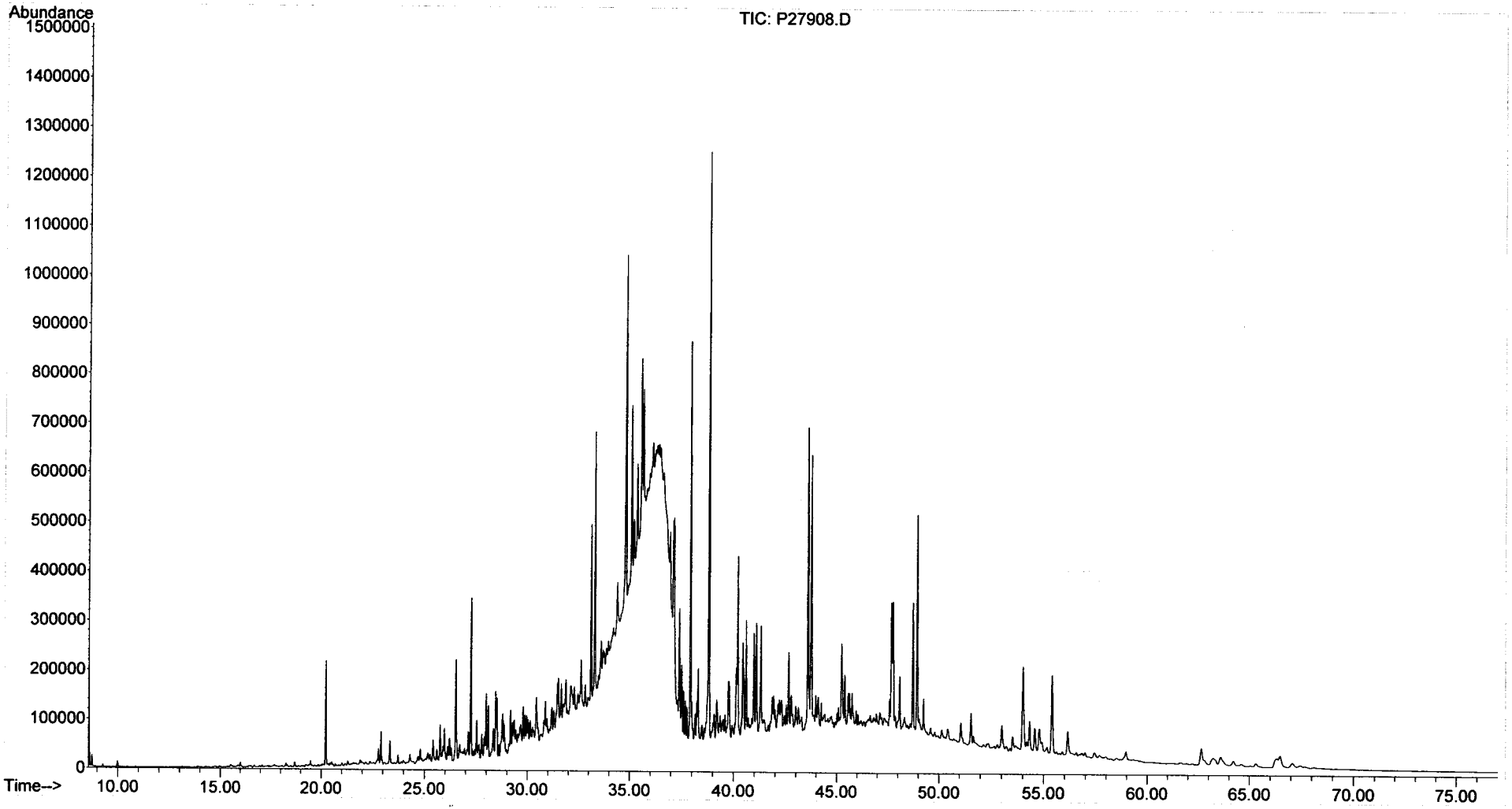
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.66	234	200707m	815.80	ng/mL	
66) Naphthobenzothiophene-1,2-	43.00	234	51195m	208.09	ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	66945m	272.11	ng/mL	
68) C1-Naphthobenzothiophenes	44.05	248	316505m	1286.48	ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	229811m	934.10	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	136144m	553.38	ng/ml	
71) C4-Naphthobenzothiophenes	48.81	290	81298m	330.45	ng/mL	
73) Benz[a]anthracene	43.58	228	1066157m	4395.06	ng/mL	
74) Chrysene	43.76	228	1111592m	4562.37	ng/mL	
75) Chrysene/Triphenylene	43.76	228	1124128m	4613.82	ng/mL	
76) C1-Chrysenes	45.22	242	897696m	3684.46	ng/mL	
77) C2-Chrysenes	46.93	256	458743m	1882.84	ng/mL	
78) BBF-d12 Surr BKGD	47.59	256	8516	34.95	ng/mL	100
79) C3-Chrysenes	48.59	270	230762m	947.13	ng/mL	
80) C4-Chrysenes	49.64	284	82888m	340.20	ng/mL	
82) Benzo[b]fluoranthene	47.67	252	586846	2252.50	ng/mL	99
83) Benzo[k]fluoranthene	47.75	252	636429m	2336.01	ng/mL	
84) Benzo[a]fluoranthene	48.07	252	241325m	885.78	ng/mL	
85) Benzo[e]pyrene	48.72	252	555314	2211.06	ng/mL	97
86) Benzo[a]pyrene	48.92	252	943235m	3756.54	ng/mL	
87) Perylene	49.25	252	156783	626.32	ng/mL	94
88) Indeno[1,2,3-cd]pyrene	54.00	276	436873m	1755.43	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	115352m	492.88	ng/mL	
90) Benzo[g,h,i]perylene	55.40	276	501356	1932.11	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27908.D
Acq On : 26 Jan 2006 6:10 am
Operator : AC
Sample : 0601040-03
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 27 14:38:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-20 (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-03**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/22/06	43.6	10.53	8.88	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1300**	30,31-Bishomohopane-22S	**2000**
C24 Tricyclic Terpane	**710**	30,31-Bishomohopane-22R	**1300**
C25 Tricyclic Terpane	**770**	30,31-Trishomohopane-22S	**1200**
C24 Tetracyclic Terpane	**800**	30,31-Trishomohopane-22R	**750**
C26 Tricyclic Terpane-22S	**340**	Tetrakishomohopane-22S	**730**
C26 Tricyclic Terpane-22R	**350**	Tetrakishomohopane-22R	**490**
C28 Tricyclic Terpane-22S	**400**	Pentakishomohopane-22S	**660**
C28 Tricyclic Terpane-22R	**430**	Pentakishomohopane-22R	**500**
C29 Tricyclic Terpane-22S	**480**	13b(H),17a(H)-20S-Diacholestane	**1500**
C29 Tricyclic Terpane-22R	**500**	13b(H),17a(H)-20R-Diacholestane	**850**
18a-22,29,30-Trisnorneohopane-TS	**2000**	13b,17a-20S-Methyldiacholestane	**610**
C30 Tricyclic Terpane-22S	**380**	14a(H),17a(H)-20S-Cholestane	**1000**
C30 Tricyclic Terpane-22R	**390**	14a(H),17a(H)-20R-Cholestane	**2900**
17a(H)-22,29,30-Trisnorhopane-TM	**2000**	13b,17a-20R-Ethyldiacholestane	**520**
17a/b,21b/a 28,30-Bisnorhopane	**440**	13a,17b-20S-Ethyldiacholestane	**170**
17a(H),21b(H)-25-Norhopane	**200**	14a,17a-20S-Methylcholestane	**570**
30-Norhopane	**6300**	14a,17a-20R-Methylcholestane	**1100**
18a(H)-30-Norneohopane-C29Ts	**1700**	14a(H),17a(H)-20S-Ethylcholestane	**1100**
17a(H)-Diahopane	**380**	14a(H),17a(H)-20R-Ethylcholestane	**1500**
30-Normoretane	**1000**	14b(H),17b(H)-20R-Cholestane	**1500**
18a(H)&18b(H)-Oleananes	**750**	14b(H),17b(H)-20S-Cholestane	**1500**
Hopane	**8600**	14b,17b-20R-Methylcholestane	**1400**
Moretane	**1000**	14b,17b-20S-Methylcholestane	**1700**
30-Homohopane-22S	**2900**	14b(H),17b(H)-20R-Ethylcholestane	**2200**
30-Homohopane-22R	**2600**	14b(H),17b(H)-20S-Ethylcholestane	**2000**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	78	50-130

N/A - Not Applicable

01/27/06 16:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34852.D
Acq On : 22 Jan 2006 4:22 am
Operator : AC
Sample : 0601040-03
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jan 24 13:51:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

CMS 1/24/06

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	43.41	240	130611	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	43.93	217	96561	1759.09	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 175.91%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.51	191	495659m	4416.05	ng/mL	
84) Hopane (T19)	52.51	191	496018m	4419.25	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	73055	650.88	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.68	191	41129	366.44	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.21	191	44813m	399.26	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	46299	412.50	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	19799	176.40	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.33	191	20191	179.89	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.61	191	23235m	207.01	ng/ml	
92) C28 Tricyclic Terpane-22R	46.78	191	24875m	221.62	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	28071	250.10	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.50	191	28984m	258.23	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.66	191	115576	1029.72	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	22300m	198.68	ng/mL	
97) C30 Tricyclic Terpane-22R	48.99	191	22433m	199.87	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	118163	1052.77	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	25653m	228.55	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.21	191	11812	105.24	ng/ml	100
101) 30-Norhopane (T15)	51.11	191	366278m	3263.34	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.22	191	96897m	863.30	ng/ml	
103) 17a(H)-Diahopane (X)	51.34	191	21827m	194.47	ng/ml	
104) 30-Normoretane (T17)	51.90	191	58016	516.89	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	43576m	388.24	ng/ml	
106) Moretane (T20)	53.21	191	59517m	530.26	ng/ml	
107) 30-Homohopane-22S (T21)	54.33	191	169707m	1512.00	ng/ml	
108) 30-Homohopane-22R (T22)	54.56	191	148433	1322.46	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.91	191	116989	1042.31	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.31	191	76847	684.67	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.09	191	69140m	616.00	ng/ml	
112) 30,31-Trishomohopane-22R (	58.72	191	43423m	386.88	ng/ml	
113) Tetrakishomohopane-22S (T3	60.78	191	42393	377.70	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.70	191	28658	255.33	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	38158m	339.97	ng/ml	
116) Pentakishomohopane-22R (T3	65.32	191	28912m	257.59	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	42068m	766.37	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.86	217	24183	440.55	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.56	217	17230	313.89	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	28593m	520.89	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	83012	1512.26	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.25	217	14805m	269.71	ng/ml	

2nd CMS for all 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34852.D
Acq On : 22 Jan 2006 4:22 am
Operator : AC
Sample : 0601040-03
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jan 24 13:51:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

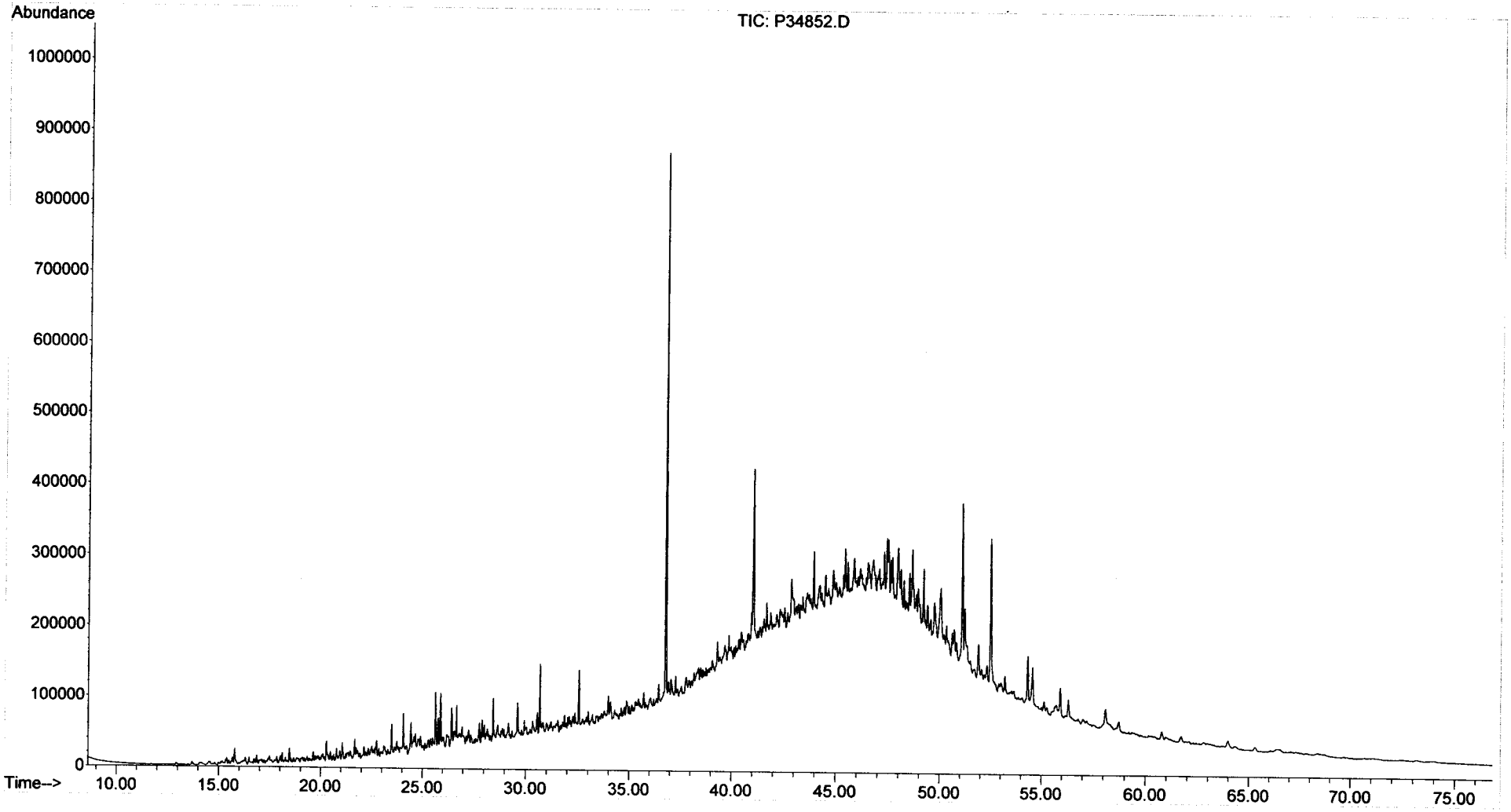
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	4815	87.72 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	16168m	294.54 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	31625m	576.13 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	32069m	584.21 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	42767m	779.10 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	41734m	760.29 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	41625m	758.30 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.85	218	38741m	705.76 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	49473m	901.27 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.03	218	61736	1124.67 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	56274m	1025.17 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34852.D
Acq On : 22 Jan 2006 4:22 am
Operator : AC
Sample : 0601040-03
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jan 24 13:51:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/26/06	79.9	10.12	13.89	1	AC

Parameter	Result	Parameter	Result
Naphthalene	2400	Fluoranthene	22000 E
C1-Naphthalenes	1100	Pyrene	27000 E
C2-Naphthalenes	1200	C1-Fluoranthenes/Pyrenes	34000
C3-Naphthalenes	1400	C2-Fluoranthenes/Pyrenes	18000
C4-Naphthalenes	3300	C3-Fluoranthenes/Pyrenes	8400
Biphenyl	220	C4-Fluoranthenes/Pyrenes	3100
Dibenzofuran	170	Naphthobenzothiophenes	4800
Acenaphthylene	5200	C1-Naphthobenzothiophenes	6200
Acenaphthene	570	C2-Naphthobenzothiophenes	4700
Fluorene	440	C3-Naphthobenzothiophenes	2600
C1-Fluorenes	2100	C4-Naphthobenzothiophenes	1200
C2-Fluorenes	4100	Benz[a]anthracene	13000
C3-Fluorenes	5200	Chrysene/Triphenylene	11000
Anthracene	3800	C1-Chrysenes	16000
Phenanthrene	1800	C2-Chrysenes	9600
C1-Phenanthrenes/Anthracenes	9400	C3-Chrysenes	5200
C2-Phenanthrenes/Anthracenes	18000	C4-Chrysenes	1600
C3-Phenanthrenes/Anthracenes	13000	Benzo[b]fluoranthene	6000
C4-Phenanthrenes/Anthracenes	4000	Benzo[k]fluoranthene	7000
Retene	810	Benzo[a]fluoranthene	2700
Dibenzothiophene	360	Benzo[e]pyrene	6300
C1-Dibenzothiophenes	2200	Benzo[a]pyrene	11000
C2-Dibenzothiophenes	7000	Perylene	2000
C3-Dibenzothiophenes	6100	Indeno[1,2,3-cd]pyrene	4700
C4-Dibenzothiophenes	2600	Dibenz[a,h]anthracene	1400
Benzo(b)fluorene	5200	Benzo[g,h,i]perylene	4900

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	102	50-130

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

01/27/06 15:43

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/26/06	79.9	10.12	13.89	1	AC

Parameter	Result
Carbazole	150

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	102	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\PAH2\JANUARY06\JAN23\
Data File : P27910.D
Acq On : 26 Jan 2006 7:49 am
Operator : AC
Sample : 0601040-04
Misc : PAH STD
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 27 14:40:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

AMS for WW 1/27/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	51222m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.66	240	84301m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	130334m	1238.12 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 123.81%		
58) Pyrene-d10	38.74	212	294409m	1359.72 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 135.97%#		
81) Benzo[b]fluoranthene-d12	47.59	264	253024	1464.01 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 146.40%#		
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	20.21	128	327795m	1422.78 ng/mL	
10) C1-Naphthalenes	22.91	142	145097m	629.79 ng/mL	
11) C2-Naphthalenes	25.42	156	158384m	687.46 ng/mL	
12) C3-Naphthalenes	29.33	170	186270m	808.50 ng/mL	
13) C4-Naphthalenes	30.42	184	437039m	1896.95 ng/mL	
15) 2-Methylnaphthalene	22.91	142	98179m	669.46 ng/mL	
16) 1-Methylnaphthalene	23.33	142	44965m	322.13 ng/mL	
22) Biphenyl	24.80	154	23295m	126.18 ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	17958m	142.15 ng/mL	
24) Dibenzofuran	27.89	168	20225m	99.24 ng/mL	
25) Acenaphthylene	26.52	152	698516m	3055.79 ng/mL	
26) Acenaphthene	27.25	153	46316	330.55 ng/mL	97
27) 2,3,5-Trimethylnaphthalene	28.80	170	8137m	73.81 ng/mL	
28) Fluorene	29.28	166	41426m	252.86 ng/mL	
29) C1-Fluorenes	31.88	180	199637m	1218.54 ng/mL	
30) C2-Fluorenes	34.13	194	391502m	2389.65 ng/mL	
31) C3-Fluorenes	35.69	208	498209m	3040.97 ng/mL	
32) Dibenzothiophene	32.61	184	45518m	207.79 ng/mL	
36) OTP	34.81	198	27471m	125.40 ng/mL	
37) C1-Dibenzothiophenes	35.17	198	310810m	1418.82 ng/mL	
38) C2-Dibenzothiophenes	36.09	212	886685m	4047.63 ng/mL	
39) C3-Dibenzothiophenes	37.90	226	779937m	3560.34 ng/mL	
40) C4-Dibenzothiophenes	39.58	240	327964m	1497.13 ng/mL	
41) Phenanthrene	33.11	178	248878	1064.66 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.56	192	1282992m	5488.41 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.40	206	2522330m	10790.08 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.20	220	1737989m	7434.81 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.40	234	540626m	2312.70 ng/mL	
52) Retene	40.13	234	25060m	472.45 ng/mL	
53) Anthracene	33.29	178	486111m	2239.06 ng/mL	
54) Carbazole	33.96	167	18400m	88.92 ng/mL	
55) 1-Methylphenanthrene	35.63	192	69372m	427.77 ng/mL	
56) Fluoranthene	37.94	202	3174209m	12722.41 ng/mL E	
57) Benzo(b)fluorene	40.44	216	459262m	2994.30 ng/mL	
59) Pyrene	38.83	202	3987974	15609.36 ng/mL E	93
60) C1-Fluoranthenes/Pyrenes	40.20	216	5069765m	19843.60 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.67	230	2679891m	10489.38 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.13	244	1242811m	4864.50 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.38	258	464991m	1820.02 ng/mL	
64) Naphthobenzothiophene	42.67	234	420023m	1772.87 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27910.D
Acq On : 26 Jan 2006 7:49 am
Operator : AC
Sample : 0601040-04
Misc : PAH STD
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 27 14:40:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

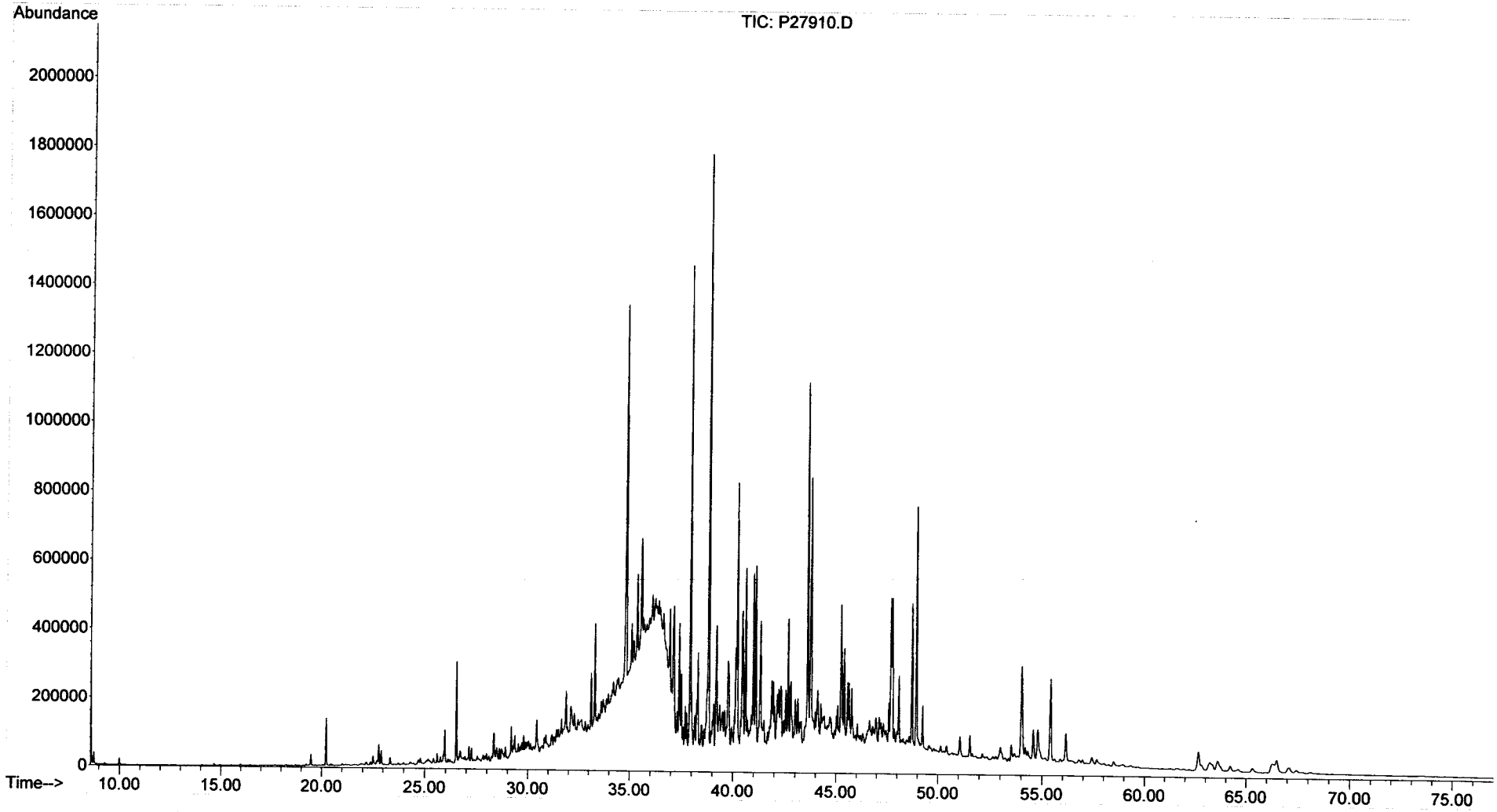
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.67	234	419316m	1769.88	ng/mL	
66) Naphthobenzothiophene-1,2-	43.00	234	115982m	489.55	ng/mL	
67) Naphthobenzothiophene-2,3-	43.30	234	132317m	558.49	ng/mL	
68) C1-Naphthobenzothiophenes	44.05	248	849438m	3585.37	ng/ml	
69) C2-Naphthobenzothiophenes	45.57	262	649396m	2741.02	ng/ml	
70) C3-Naphthobenzothiophenes	47.70	276	351794m	1484.88	ng/ml	
71) C4-Naphthobenzothiophenes	48.81	290	167616m	707.49	ng/mL	
73) Benz[a]anthracene	43.60	228	1775501m	7375.14	ng/mL	
74) Chrysene	43.76	228	1587692m	6566.23	ng/mL	
75) Chrysene/Triphenylene	43.76	228	1576220m	6518.79	ng/mL	
76) C1-Chrysenes	45.23	242	2192551m	9067.75	ng/mL	
77) C2-Chrysenes	46.93	256	1383538m	5721.91	ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	25196	104.20	ng/mL	100
79) C3-Chrysenes	48.59	270	731093m	3023.59	ng/mL	
80) C4-Chrysenes	50.24	284	229609m	949.60	ng/mL	
82) Benzo[b]fluoranthene	47.68	252	897003	3469.29	ng/mL	99
83) Benzo[k]fluoranthene	47.76	252	1098925	4064.41	ng/mL	99
84) Benzo[a]fluoranthene	48.08	252	428007m	1583.00	ng/mL	
85) Benzo[e]pyrene	48.72	252	914595	3669.41	ng/mL	97
86) Benzo[a]pyrene	48.94	252	1545164m	6200.80	ng/mL	
87) Perylene	49.25	252	291680	1174.11	ng/mL	96
88) Indeno[1,2,3-cd]pyrene	54.02	276	669423m	2710.40	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	193968m	835.12	ng/mL	
90) Benzo[g,h,i]perylene	55.42	276	733840	2849.66	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27910.D
Acq On : 26 Jan 2006 7:49 am
Operator : AC
Sample : 0601040-04
Misc : PAH STD
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 27 14:40:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04E**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/21/06	79.9	10.12	13.89	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	28	U	Fluoranthene	**21000**	
C1-Naphthalenes	28	U	Pyrene	**26000**	
C2-Naphthalenes	28	U	C1-Fluoranthenes/Pyrenes	15	U
C3-Naphthalenes	28	U	C2-Fluoranthenes/Pyrenes	15	U
C4-Naphthalenes	28	U	C3-Fluoranthenes/Pyrenes	15	U
Biphenyl	16	U	C4-Fluoranthenes/Pyrenes	15	U
Dibenzofuran	20	U	Naphthobenzothiophenes	21	U
Acenaphthylene	31	U	C1-Naphthobenzothiophenes	21	U
Acenaphthene	20	U	C2-Naphthobenzothiophenes	21	U
Fluorene	20	U	C3-Naphthobenzothiophenes	21	U
C1-Fluorenes	20	U	C4-Naphthobenzothiophenes	21	U
C2-Fluorenes	20	U	Benz[a]anthracene	27	U
C3-Fluorenes	20	U	Chrysene/Triphenylene	19	U
Anthracene	23	U	C1-Chrysenes	19	U
Phenanthrene	25	U	C2-Chrysenes	19	U
C1-Phenanthrenes/Anthracenes	25	U	C3-Chrysenes	19	U
C2-Phenanthrenes/Anthracenes	25	U	C4-Chrysenes	19	U
C3-Phenanthrenes/Anthracenes	25	U	Benzo[b]fluoranthene	18	U
C4-Phenanthrenes/Anthracenes	25	U	Benzo[k]fluoranthene	35	U
Retene	25	U	Benzo[a]fluoranthene	35	U
Dibenzothiophene	19	U	Benzo[e]pyrene	24	U
C1-Dibenzothiophenes	19	U	Benzo[a]pyrene	24	U
C2-Dibenzothiophenes	19	U	Perylene	30	U
C3-Dibenzothiophenes	19	U	Indeno[1,2,3-cd]pyrene	41	U
C4-Dibenzothiophenes	19	U	Dibenz[a,h]anthracene	33	U
Benzo(b)fluorene	17	U	Benzo[g,h,i]perylene	30	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	71	50-130
Pyrene-d10	84	50-130
Benzo[b]fluoranthene-d12	80	50-130

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27812.D
Acq On : 21 Jan 2006 1:31 am
Operator : AC
Sample : 0601040-04-RE
Misc : 10X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 26 17:44:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WTD
1/27/06

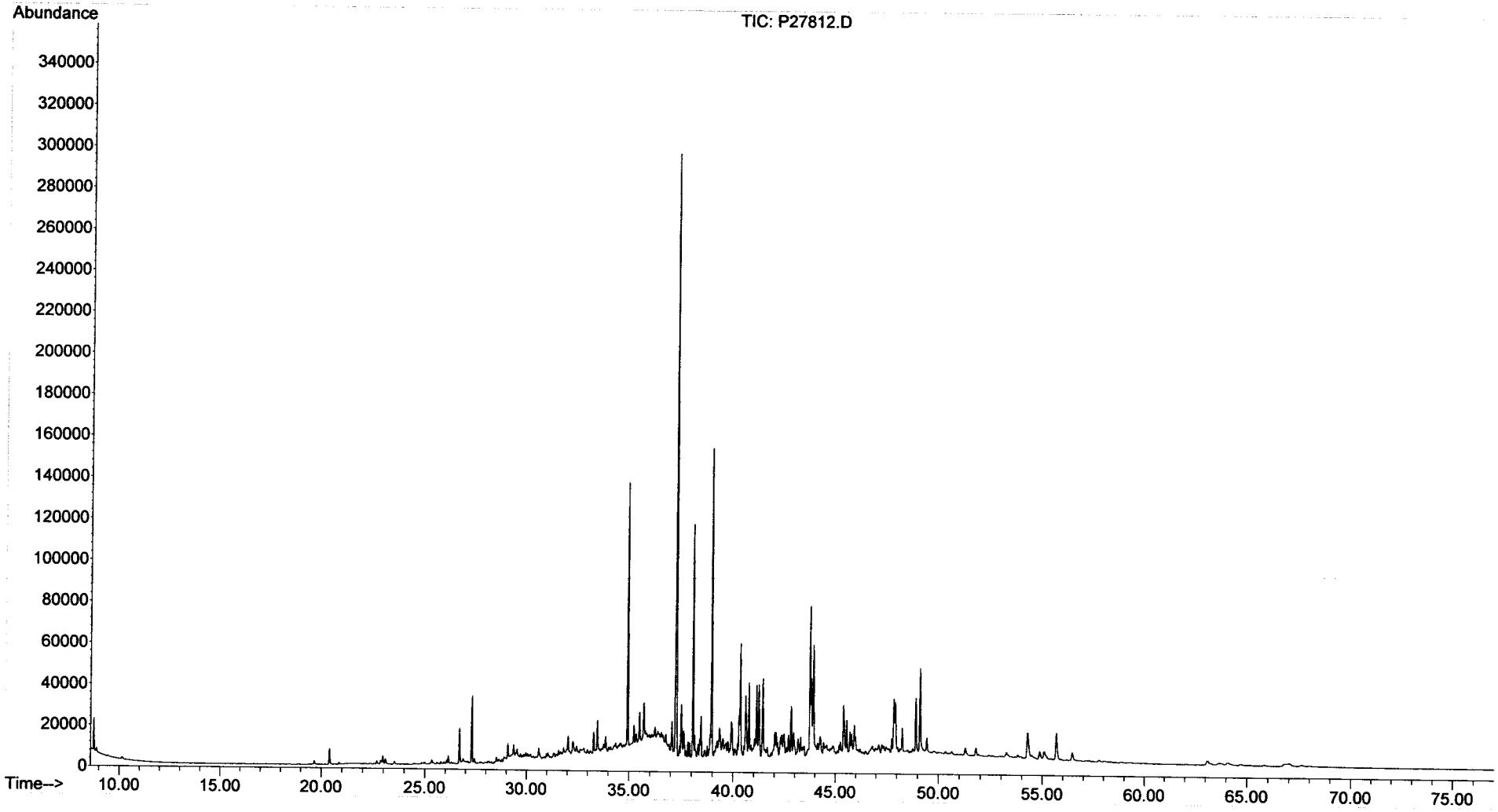
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	40282m	500.00	ng/mL	0.00
72) Chrysene-d12	43.81	240	65934m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	8406m	101.54	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.15%#			
58) Pyrene-d10	38.89	212	20568m	120.79	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 12.08%#			
81) Benzo[b]fluoranthene-d12	47.76	264	15499m	114.66	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.47%#			
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
56) Fluoranthene	38.07	202	236617m	1205.94	ng/mL	
59) Pyrene	38.96	202	304322	1514.65	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27812.D
Acq On : 21 Jan 2006 1:31 am
Operator : AC
Sample : 0601040-04-RE
Misc : 10X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 26 17:44:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/22/06	79.9	10.12	2.1	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	190	30,31-Bishomohopane-22S	260
C24 Tricyclic Terpane	110	30,31-Bishomohopane-22R	170
C25 Tricyclic Terpane	120	30,31-Trishomohopane-22S	150
C24 Tetracyclic Terpane	120	30,31-Trishomohopane-22R	89
C26 Tricyclic Terpane-22S	50	Tetrakishomohopane-22S	98
C26 Tricyclic Terpane-22R	50	Tetrakishomohopane-22R	67
C28 Tricyclic Terpane-22S	60	Pentakishomohopane-22S	93
C28 Tricyclic Terpane-22R	62	Pentakishomohopane-22R	66
C29 Tricyclic Terpane-22S	73	13b(H),17a(H)-20S-Diacholestane	210
C29 Tricyclic Terpane-22R	70	13b(H),17a(H)-20R-Diacholestane	120
18a-22,29,30-Trisnorneohopane-TS	300	13b,17a-20S-Methyldiacholestane	88
C30 Tricyclic Terpane-22S	55	14a(H),17a(H)-20S-Cholestane	120
C30 Tricyclic Terpane-22R	51	14a(H),17a(H)-20R-Cholestane	320
17a(H)-22,29,30-Trisnorhopane-TM	280	13b,17a-20R-Ethyldiacholestane	73
17a/b,21b/a 28,30-Bisnorhopane	79	13a,17b-20S-Ethyldiacholestane	20
17a(H),21b(H)-25-Norhopane	33	14a,17a-20S-Methylcholestane	56
30-Norhopane	860	14a,17a-20R-Methylcholestane	110
18a(H)-30-Norneohopane-C29Ts	240	14a(H),17a(H)-20S-Ethylcholestane	100
17a(H)-Diahopane	58	14a(H),17a(H)-20R-Ethylcholestane	140
30-Normoretane	160	14b(H),17b(H)-20R-Cholestane	130
18a(H)&18b(H)-Oleananes	130	14b(H),17b(H)-20S-Cholestane	130
Hopane	1100	14b,17b-20R-Methylcholestane	140
Moretane	150	14b,17b-20S-Methylcholestane	170
30-Homohopane-22S	380	14b(H),17b(H)-20R-Ethylcholestane	260
30-Homohopane-22R	340	14b(H),17b(H)-20S-Ethylcholestane	120

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	58	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\PAH3\JANUARY06\JAN18\
Data File : P34853.D
Acq On : 22 Jan 2006 5:52 am
Operator : AC
Sample : 0601040-04
Misc : 1X
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 24 13:56:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

AW 1/24/06

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	43.41	240	125343	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	43.94	217	291698	5537.32	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 553.73%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.51	191	464446m	4311.88	ng/mL	
84) Hopane (T19)	52.51	191	463282m	4301.07	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	80549m	747.81	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	46742	433.95	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.17	191	50275m	466.75	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	49026	455.15	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	20812	193.22	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	20680m	191.99	ng/ml	
91) C28 Tricyclic Terpane-22S	46.61	191	24782m	230.07	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	25484m	236.59	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	30319	281.48	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	29130m	270.44	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	122577	1137.99	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	22871m	212.33	ng/mL	
97) C30 Tricyclic Terpane-22R	48.99	191	21120m	196.08	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	116162	1078.44	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.42	191	32771m	304.24	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	13607	126.33	ng/ml	100
101) 30-Norhopane (T15)	51.11	191	357959m	3323.26	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.21	191	98117m	910.91	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	24025	223.05	ng/ml	100
104) 30-Normoretane (T17)	51.90	191	64654	600.24	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	53962m	500.98	ng/ml	
106) Moretane (T20)	53.20	191	60526m	561.92	ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	158825	1474.52	ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	139293	1293.18	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	109743	1018.84	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.31	191	70516	654.66	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	60955m	565.90	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	36986m	343.37	ng/ml	
113) Tetrakishomohopane-22S (T3	60.78	191	40483	375.84	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.70	191	27721	257.36	ng/ml	100
115) Pentakishomohopane-22S (T3	64.00	191	38529	357.70	ng/ml	100
116) Pentakishomohopane-22R (T3	65.31	191	27227m	252.77	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	42435	805.55	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.86	217	24423	463.62	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.56	217	17732	336.61	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	23667m	449.27	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	64383	1222.19	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.25	217	14787m	280.70	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34853.D
Acq On : 22 Jan 2006 5:52 am
Operator : AC
Sample : 0601040-04
Misc : 1X
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 24 13:56:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

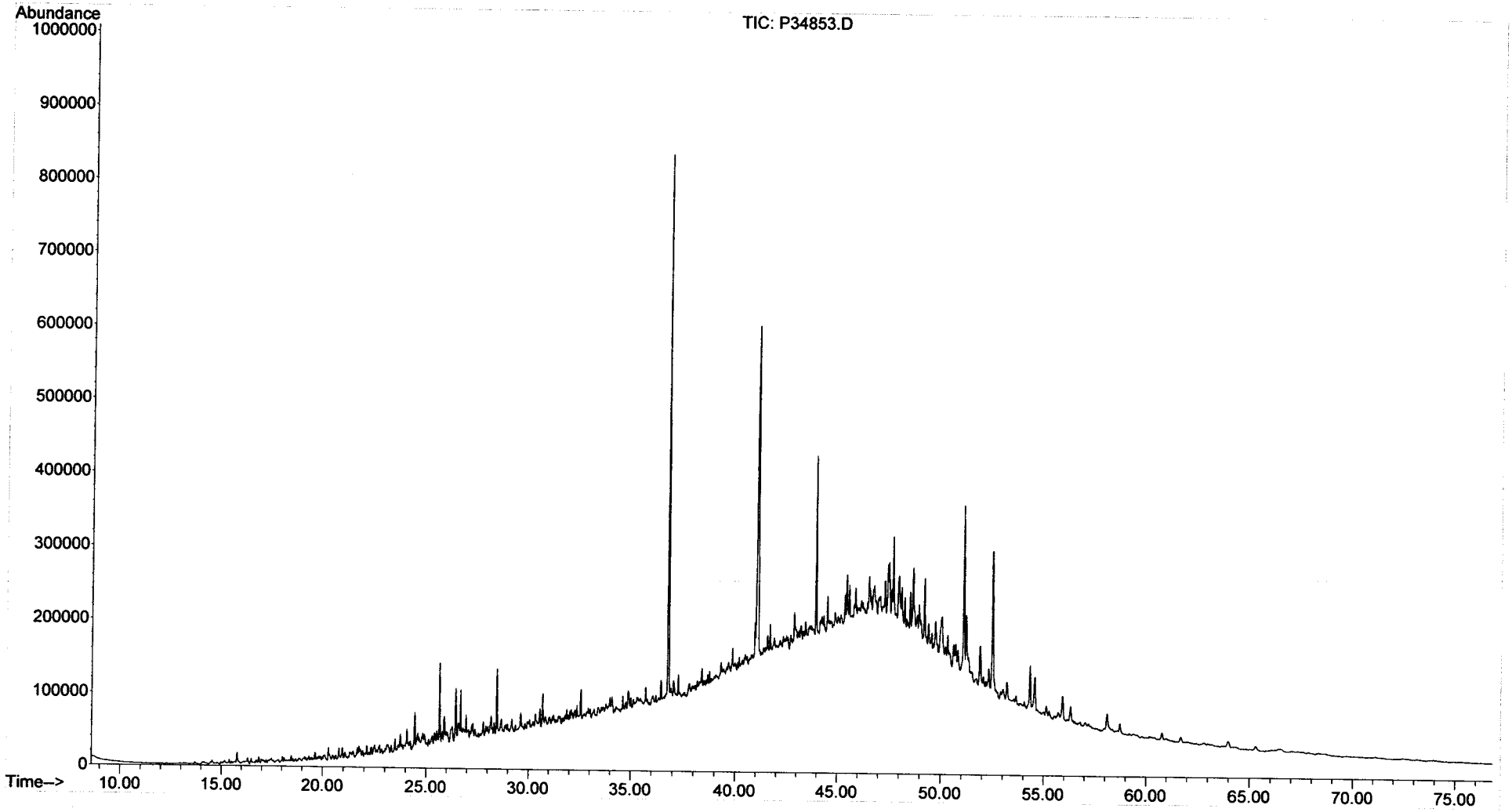
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	4003	75.99	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	11261m	213.77	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	22552m	428.11	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	21109m	400.71	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	29074	551.91	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	25671m	487.31	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	26661m	506.11	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.85	218	29036m	551.19	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	34964m	663.72	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.03	218	53721m	1019.79	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	25324m	480.73	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34853.D
Acq On : 22 Jan 2006 5:52 am
Operator : AC
Sample : 0601040-04
Misc : 1X
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 24 13:56:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04 D**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/26/06	79.9	10.12	10.44	1	AC

Parameter	Result	Parameter	Result
Naphthalene	2500	Fluoranthene	12000
C1-Naphthalenes	880	Pyrene	17000 E
C2-Naphthalenes	820	C1-Fluoranthenes/Pyrenes	21000
C3-Naphthalenes	1000	C2-Fluoranthenes/Pyrenes	11000
C4-Naphthalenes	2100	C3-Fluoranthenes/Pyrenes	5500
Biphenyl	180	C4-Fluoranthenes/Pyrenes	1900
Dibenzofuran	130	Naphthobenzothiophenes	3000
Acenaphthylene	3400	C1-Naphthobenzothiophenes	3800
Acenaphthene	390	C2-Naphthobenzothiophenes	2900
Fluorene	320	C3-Naphthobenzothiophenes	1500
C1-Fluorenes	1400	C4-Naphthobenzothiophenes	770
C2-Fluorenes	2500	Benz[a]anthracene	7400
C3-Fluorenes	3200	Chrysene/Triphenylene	7100
Anthracene	2400	C1-Chrysenes	9500
Phenanthrene	1400	C2-Chrysenes	6000
C1-Phenanthrenes/Anthracenes	6300	C3-Chrysenes	3300
C2-Phenanthrenes/Anthracenes	12000	C4-Chrysenes	1100
C3-Phenanthrenes/Anthracenes	7600	Benzo[b]fluoranthene	3800
C4-Phenanthrenes/Anthracenes	2300	Benzo[k]fluoranthene	4300
Retene	420	Benzo[a]fluoranthene	1800
Dibenzothiophene	290	Benzo[e]pyrene	4000
C1-Dibenzothiophenes	1500	Benzo[a]pyrene	6800
C2-Dibenzothiophenes	4100	Perylene	1300
C3-Dibenzothiophenes	3700	Indeno[1,2,3-cd]pyrene	3000
C4-Dibenzothiophenes	1500	Dibenz[a,h]anthracene	940
Benzo(b)fluorene	3900	Benzo[g,h,i]perylene	3100

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	102	50-130

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

01/27/06 15:43

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04 D**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/26/06	79.9	10.12	10.44	1	AC

Parameter	Result
Carbazole	94

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	102	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\PAH2\JANUARY06\JAN23\
Data File : P27912.D
Acq On : 26 Jan 2006 9:24 am
Operator : AC
Sample : 0601040-04D
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 27 14:41:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for WTW 1/27/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	38572m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.65	240	63763m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	128133m	1616.41 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 161.64%#		
58) Pyrene-d10	38.73	212	295250	1810.81 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 181.08%#		
81) Benzo[b]fluoranthene-d12	47.57	264	255231m	1952.44 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 195.24%#		
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	20.21	128	329962m	1901.89 ng/mL	
10) C1-Naphthalenes	22.91	142	117645m	678.10 ng/mL	
11) C2-Naphthalenes	25.42	156	109777m	632.75 ng/mL	
12) C3-Naphthalenes	29.33	170	138289m	797.09 ng/mL	
13) C4-Naphthalenes	30.42	184	276376m	1593.02 ng/mL	
15) 2-Methylnaphthalene	22.91	142	82072	743.17 ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	35262	335.47 ng/mL#	100
22) Biphenyl	24.80	154	19701m	141.71 ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	13549m	142.42 ng/mL	
24) Dibenzofuran	27.89	168	15697m	102.28 ng/mL	
25) Acenaphthylene	26.52	152	449956m	2613.98 ng/mL	
26) Acenaphthene	27.25	153	32204m	305.21 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	6581m	79.27 ng/mL	
28) Fluorene	29.27	166	30734m	249.12 ng/mL	
29) C1-Fluorenes	31.87	180	128555m	1042.01 ng/mL	
30) C2-Fluorenes	33.85	194	238083m	1929.80 ng/mL	
31) C3-Fluorenes	35.68	208	301641m	2444.98 ng/mL	
32) Dibenzothiophene	32.61	184	37004m	224.32 ng/mL	
36) OTP	34.81	198	29854m	180.98 ng/mL	
37) C1-Dibenzothiophenes	35.16	198	222324m	1347.73 ng/mL	
38) C2-Dibenzothiophenes	36.08	212	526836m	3193.68 ng/mL	
39) C3-Dibenzothiophenes	37.89	226	470119m	2849.86 ng/mL	
40) C4-Dibenzothiophenes	39.57	240	188355m	1141.81 ng/mL	
41) Phenanthrene	33.11	178	188452	1070.55 ng/mL	100
47) C1-Phenanthrenes/Anthracen	35.55	192	858051m	4874.39 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.38	206	1599996m	9089.21 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	1038036m	5896.84 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	318172m	1807.46 ng/mL	
52) Retene	40.12	234	12876m	322.36 ng/mL	
53) Anthracene	33.29	178	298035m	1822.98 ng/mL	
54) Carbazole	33.96	167	11368m	72.96 ng/mL	
55) 1-Methylphenanthrene	35.63	192	60886m	498.57 ng/mL	
56) Fluoranthene	37.91	202	1780508m	9476.81 ng/mL	
57) Benzo(b)fluorene	40.43	216	350721m	3036.55 ng/mL	
59) Pyrene	38.80	202	2489463	12939.66 ng/mL E	94
60) C1-Fluoranthenes/Pyrenes	40.19	216	3171795m	16486.26 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.66	230	1686842m	8767.82 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	813902m	4230.48 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	288033m	1497.13 ng/mL	
64) Naphthobenzothiophene	42.66	234	260271m	1458.86 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27912.D
Acq On : 26 Jan 2006 9:24 am
Operator : AC
Sample : 0601040-04D
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 27 14:41:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

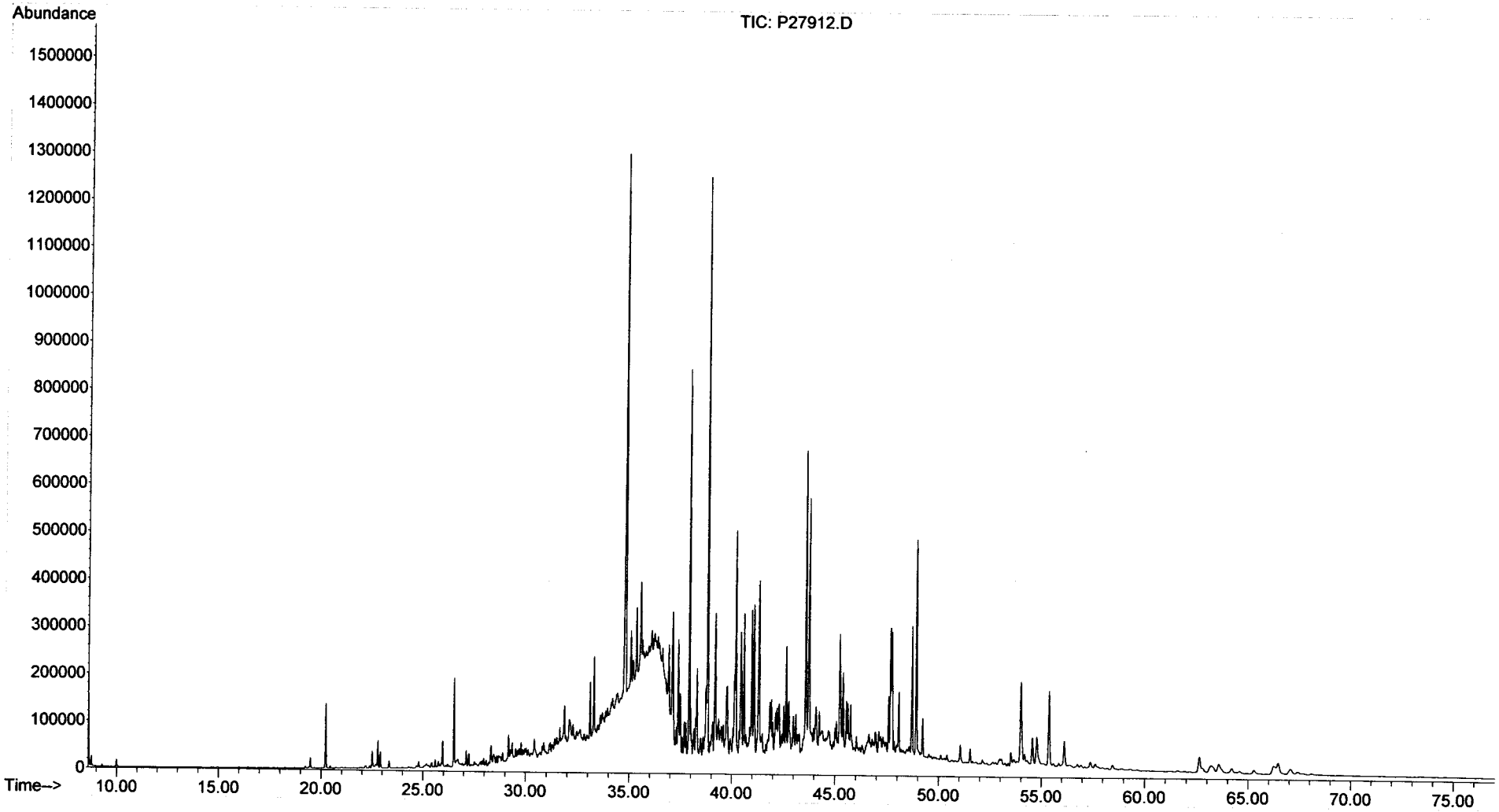
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.66	234	260116m	1457.99	ng/mL	
66) Naphthobenzothiophene-1,2-	42.99	234	70480m	395.05	ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	87211m	488.83	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	525671m	2946.46	ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	396636m	2223.20	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	211608m	1186.09	ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	106522m	597.07	ng/mL	
73) Benz[a]anthracene	43.58	228	1040383m	5713.56	ng/mL	
74) Chrysene	43.75	228	1010298m	5524.12	ng/mL	
75) Chrysene/Triphenylene	43.75	228	1003401m	5486.41	ng/mL	
76) C1-Chrysenes	45.22	242	1349217m	7377.27	ng/mL	
77) C2-Chrysenes	46.92	256	874438m	4781.27	ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	19731	107.89	ng/mL	100
79) C3-Chrysenes	48.58	270	469689m	2568.17	ng/mL	
80) C4-Chrysenes	50.22	284	159756m	873.52	ng/mL	
82) Benzo[b]fluoranthene	47.67	252	577415	2952.56	ng/mL	99
83) Benzo[k]fluoranthene	47.73	252	681920	3334.47	ng/mL	100
84) Benzo[a]fluoranthene	48.07	252	286192m	1399.43	ng/mL	
85) Benzo[e]pyrene	48.71	252	576863m	3059.88	ng/mL	
86) Benzo[a]pyrene	48.91	252	991629m	5261.22	ng/mL	
87) Perylene	49.23	252	193154	1027.95	ng/mL	96
88) Indeno[1,2,3-cd]pyrene	53.99	276	426856m	2284.96	ng/mL	
89) Dibenz[a,h]anthracene	54.03	278	127102m	723.50	ng/mL	
90) Benzo[g,h,i]perylene	55.38	276	470103	2413.51	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27912.D
Acq On : 26 Jan 2006 9:24 am
Operator : AC
Sample : 0601040-04D
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 27 14:41:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04E D**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/21/06	79.9	10.12	10.44	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	21	U	Fluoranthene	13	U
C1-Naphthalenes	21	U	Pyrene	**16000**	
C2-Naphthalenes	21	U	C1-Fluoranthenes/Pyrenes	12	U
C3-Naphthalenes	21	U	C2-Fluoranthenes/Pyrenes	12	U
C4-Naphthalenes	21	U	C3-Fluoranthenes/Pyrenes	12	U
Biphenyl	12	U	C4-Fluoranthenes/Pyrenes	12	U
Dibenzofuran	15	U	Naphthobenzothiophenes	16	U
Acenaphthylene	23	U	C1-Naphthobenzothiophenes	16	U
Acenaphthene	15	U	C2-Naphthobenzothiophenes	16	U
Fluorene	15	U	C3-Naphthobenzothiophenes	16	U
C1-Fluorenes	15	U	C4-Naphthobenzothiophenes	16	U
C2-Fluorenes	15	U	Benz[a]anthracene	20	U
C3-Fluorenes	15	U	Chrysene/Triphenylene	14	U
Anthracene	17	U	C1-Chrysenes	14	U
Phenanthrene	19	U	C2-Chrysenes	14	U
C1-Phenanthrenes/Anthracenes	19	U	C3-Chrysenes	14	U
C2-Phenanthrenes/Anthracenes	19	U	C4-Chrysenes	14	U
C3-Phenanthrenes/Anthracenes	19	U	Benzo[b]fluoranthene	14	U
C4-Phenanthrenes/Anthracenes	19	U	Benzo[k]fluoranthene	26	U
Retene	19	U	Benzo[a]fluoranthene	26	U
Dibenzothiophene	14	U	Benzo[e]pyrene	18	U
C1-Dibenzothiophenes	14	U	Benzo[a]pyrene	18	U
C2-Dibenzothiophenes	14	U	Perylene	22	U
C3-Dibenzothiophenes	14	U	Indeno[1,2,3-cd]pyrene	31	U
C4-Dibenzothiophenes	14	U	Dibenz[a,h]anthracene	24	U
Benzo(b)fluorene	13	U	Benzo[g,h,i]perylene	23	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	69	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	79	50-130

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27814.D
Acq On : 21 Jan 2006 3:12 am
Operator : AC
Sample : 0601040-04D-RE
Misc : 10X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 26 17:45:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WB 1/27/06

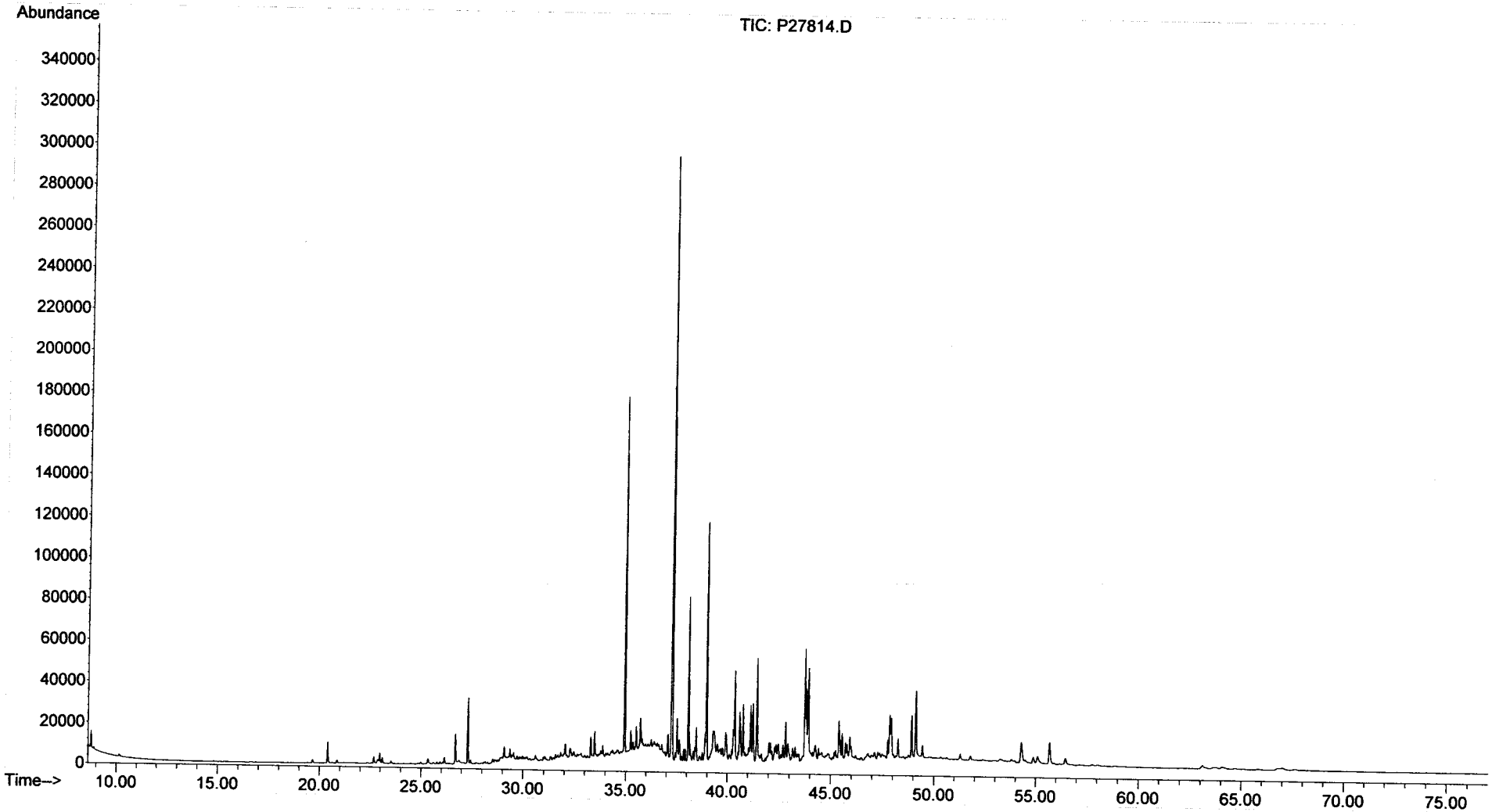
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	39793m	500.00	ng/mL	0.00
72) Chrysene-d12	43.81	240	65596m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	10818m	132.28	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 13.23%#			
58) Pyrene-d10	38.89	212	26834	159.53	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 15.95%#			
81) Benzo[b]fluoranthene-d12	47.76	264	20331m	151.18	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 15.12%#			
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
59) Pyrene	38.96	202	240366	1211.03	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27814.D
Acq On : 21 Jan 2006 3:12 am
Operator : AC
Sample : 0601040-04D-RE
Misc : 10X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 26 17:45:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04 D**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/22/06	79.9	10.12	1.72	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	100	30,31-Bishomohopane-22S	100
C24 Tricyclic Terpane	58	30,31-Bishomohopane-22R	66
C25 Tricyclic Terpane	59	30,31-Trishomohopane-22S	57
C24 Tetracyclic Terpane	60	30,31-Trishomohopane-22R	37
C26 Tricyclic Terpane-22S	25	Tetrakishomohopane-22S	41
C26 Tricyclic Terpane-22R	25	Tetrakishomohopane-22R	26
C28 Tricyclic Terpane-22S	32	Pentakishomohopane-22S	43
C28 Tricyclic Terpane-22R	32	Pentakishomohopane-22R	27
C29 Tricyclic Terpane-22S	36	13b(H),17a(H)-20S-Diacholestane	97
C29 Tricyclic Terpane-22R	38	13b(H),17a(H)-20R-Diacholestane	56
18a-22,29,30-Trisnorneohopane-TS	140	13b,17a-20S-Methyldiacholestane	42
C30 Tricyclic Terpane-22S	32	14a(H),17a(H)-20S-Cholestane	54
C30 Tricyclic Terpane-22R	26	14a(H),17a(H)-20R-Cholestane	150
17a(H)-22,29,30-Trisnorhopane-TM	120	13b,17a-20R-Ethyldiacholestane	32
17a/b,21b/a 28,30-Bisnorhopane	38	13a,17b-20S-Ethyldiacholestane	8.4
17a(H),21b(H)-25-Norhopane	19	14a,17a-20S-Methylcholestane	27
30-Norhopane	390	14a,17a-20R-Methylcholestane	56
18a(H)-30-Norneohopane-C29Ts	120	14a(H),17a(H)-20S-Ethylcholestane	49
17a(H)-Diahopane	33	14a(H),17a(H)-20R-Ethylcholestane	67
30-Normoretane	81	14b(H),17b(H)-20R-Cholestane	54
18a(H)&18b(H)-Oleananes	82	14b(H),17b(H)-20S-Cholestane	59
Hopane	450	14b,17b-20R-Methylcholestane	57
Moretane	70	14b,17b-20S-Methylcholestane	79
30-Homohopane-22S	140	14b(H),17b(H)-20R-Ethylcholestane	98
30-Homohopane-22R	140	14b(H),17b(H)-20S-Ethylcholestane	68

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	79	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\PAH3\JANUARY06\JAN18\
Data File : P34854.D
Acq On : 22 Jan 2006 7:21 am
Operator : AC
Sample : 0601040-04D
Misc : 1X
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Jan 24 14:01:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

AMS 1/24/06

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	43.41	240	119717	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	43.94	217	461732	9177.00	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 917.70%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	219893m	2137.40	ng/mL	
84) Hopane (T19)	52.49	191	219406m	2132.67	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	49036m	476.64	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	28061	272.76	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.17	191	28731m	279.27	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	29264	284.45	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	12226	118.84	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	12262m	119.19	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	15248m	148.21	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	15554m	151.19	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	17302	168.18	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	18188m	176.79	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	68332	664.20	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	15609m	151.72	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	12682	123.27	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	60159m	584.76	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.42	191	18156m	176.48	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	9015	87.63	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	188626m	1833.48	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	60117m	584.35	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	16034m	155.85	ng/ml	
104) 30-Normoretane (T17)	51.89	191	39311	382.11	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	39527m	384.21	ng/ml	
106) Moretane (T20)	53.19	191	33835m	328.88	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	69266	673.28	ng/ml	100
108) 30-Homohopane-22R (T22)	54.54	191	67497	656.08	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.89	191	50631	492.14	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	31957	310.63	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.07	191	27584m	268.12	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	17773	172.76	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.76	191	19669	191.19	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.67	191	12716	123.60	ng/ml	100
115) Pentakishomohopane-22S (T3	63.97	191	20974	203.87	ng/ml	100
116) Pentakishomohopane-22R (T3	65.31	191	13178	128.09	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	45.43	217	22933	455.80	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	13245	263.25	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.55	217	9983	198.41	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	12867m	255.73	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	35422	704.02	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.24	217	7484m	148.75	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34854.D
Acq On : 22 Jan 2006 7:21 am
Operator : AC
Sample : 0601040-04D
Misc : 1X
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Jan 24 14:01:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

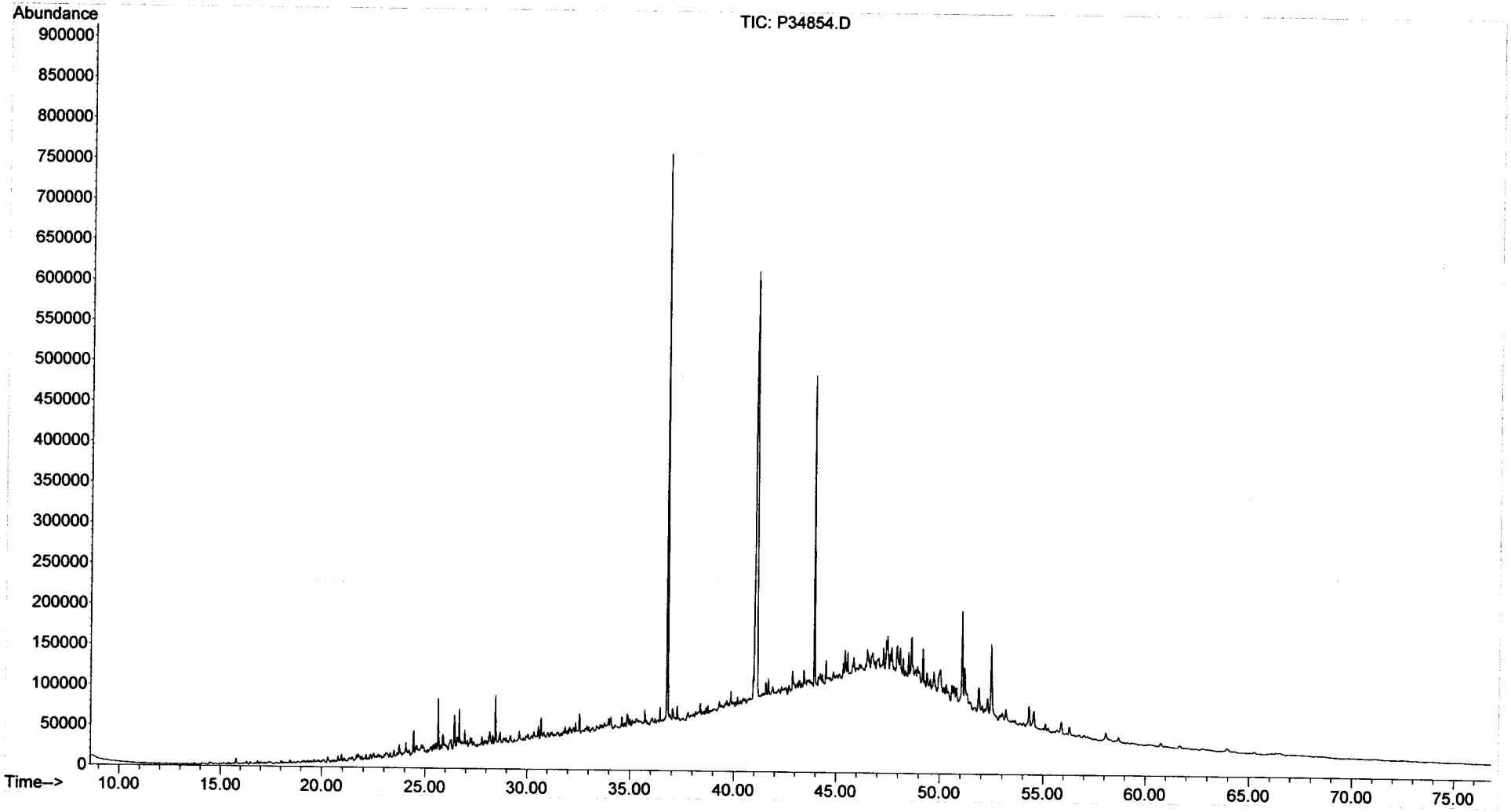
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	1982	39.39	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	6405m	127.30	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	13146m	261.28	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	11608m	230.71	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	15798m	313.99	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	12662m	251.66	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	13977m	277.80	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	13516m	268.63	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	18745m	372.56	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	23074m	458.60	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	16129m	320.57	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34854.D
Acq On : 22 Jan 2006 7:21 am
Operator : AC
Sample : 0601040-04D
Misc : 1X
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Jan 24 14:01:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	2400	2500	0	30
C1-Naphthalenes	1100	880	21	30
C2-Naphthalenes	1200	820	36[a]	30
C3-Naphthalenes	1400	1000	30	30
C4-Naphthalenes	3300	2100	45[a]	30
Biphenyl	220	180	17	30
Dibenzofuran	170	130	25	30
Acenaphthylene	5200	3400	43[a]	30
Acenaphthene	570	390	36[a]	30
Fluorene	440	320	30	30
C1-Fluorenes	2100	1400	43[a]	30
C2-Fluorenes	4100	2500	49[a]	30
C3-Fluorenes	5200	3200	49[a]	30
Anthracene	3800	2400	48[a]	30
Phenanthrene	1800	1400	28	30
C1-Phenanthrenes/Anthracenes	9400	6300	40[a]	30
C2-Phenanthrenes/Anthracenes	18000	12000	45[a]	30
C3-Phenanthrenes/Anthracenes	13000	7600	51[a]	30
C4-Phenanthrenes/Anthracenes	4000	2300	52[a]	30
Retene	810	420	64[a]	30
Dibenzothiophene	360	290	21	30
C1-Dibenzothiophenes	2200	1500	38[a]	30
C2-Dibenzothiophenes	7000	4100	51[a]	30
C3-Dibenzothiophenes	6100	3700	50[a]	30
C4-Dibenzothiophenes	2600	1500	54[a]	30
Benzo(b)fluorene	5200	3900	27	30
Fluoranthene	22000 E	12000	56[a]	30
Pyrene	27000 E	17000 E	46[a]	30
C1-Fluoranthenes/Pyrenes	34000	21000	46[a]	30
C2-Fluoranthenes/Pyrenes	18000	11000	46[a]	30
C3-Fluoranthenes/Pyrenes	8400	5500	42[a]	30
C4-Fluoranthenes/Pyrenes	3100	1900	47[a]	30
Naphthobenzothiophenes	4800	3000	46[a]	30
C1-Naphthobenzothiophenes	6200	3800	47[a]	30
C2-Naphthobenzothiophenes	4700	2900	49[a]	30

N/A - Not Applicable
[a] - Value outside of QC Limits.
E - Estimated value, exceeds the upper limit of calibration.

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	2600	1500	50[a]	30
C4-Naphthobenzothiophenes	1200	770	45[a]	30
Benz[a]anthracene	13000	7400	53[a]	30
Chrysene/Triphenylene	11000	7100	45[a]	30
C1-Chrysenes	16000	9500	48[a]	30
C2-Chrysenes	9600	6000	46[a]	30
C3-Chrysenes	5200	3300	44[a]	30
C4-Chrysenes	1600	1100	36[a]	30
Benzo[b]fluoranthene	6000	3800	44[a]	30
Benzo[k]fluoranthene	7000	4300	47[a]	30
Benzo[a]fluoranthene	2700	1800	40[a]	30
Benzo[e]pyrene	6300	4000	46[a]	30
Benzo[a]pyrene	11000	6800	44[a]	30
Perylene	2000	1300	41[a]	30
Indeno[1,2,3-cd]pyrene	4700	3000	45[a]	30
Dibenz[a,h]anthracene	1400	940	42[a]	30
Benzo[g,h,i]perylene	4900	3100	44[a]	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	86	84	50-130
Pyrene-d10	94	95	50-130
Benzo[b]fluoranthene-d12	102	102	50-130

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

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

01/27/06 15:49

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	150	94	47[a]	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	86	84	50-130
Pyrene-d10	94	95	50-130
Benzo[b]fluoranthene-d12	102	102	50-130

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

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

01/27/06 15:50

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04E**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	28 U	21 U	N/A	30
C1-Naphthalenes	28 U	21 U	N/A	30
C2-Naphthalenes	28 U	21 U	N/A	30
C3-Naphthalenes	28 U	21 U	N/A	30
C4-Naphthalenes	28 U	21 U	N/A	30
Biphenyl	16 U	12 U	N/A	30
Dibenzofuran	20 U	15 U	N/A	30
Acenaphthylene	31 U	23 U	N/A	30
Acenaphthene	20 U	15 U	N/A	30
Fluorene	20 U	15 U	N/A	30
C1-Fluorenes	20 U	15 U	N/A	30
C2-Fluorenes	20 U	15 U	N/A	30
C3-Fluorenes	20 U	15 U	N/A	30
Anthracene	23 U	17 U	N/A	30
Phenanthrene	25 U	19 U	N/A	30
C1-Phenanthrenes/Anthracenes	25 U	19 U	N/A	30
C2-Phenanthrenes/Anthracenes	25 U	19 U	N/A	30
C3-Phenanthrenes/Anthracenes	25 U	19 U	N/A	30
C4-Phenanthrenes/Anthracenes	25 U	19 U	N/A	30
Retene	25 U	19 U	N/A	30
Dibenzothiophene	19 U	14 U	N/A	30
C1-Dibenzothiophenes	19 U	14 U	N/A	30
C2-Dibenzothiophenes	19 U	14 U	N/A	30
C3-Dibenzothiophenes	19 U	14 U	N/A	30
C4-Dibenzothiophenes	19 U	14 U	N/A	30
Benzo(b)fluorene	17 U	13 U	N/A	30
Fluoranthene	**21000**	13 U	X	30
Pyrene	**26000**	**16000**	50[a]	30
C1-Fluoranthenes/Pyrenes	15 U	12 U	N/A	30
C2-Fluoranthenes/Pyrenes	15 U	12 U	N/A	30
C3-Fluoranthenes/Pyrenes	15 U	12 U	N/A	30
C4-Fluoranthenes/Pyrenes	15 U	12 U	N/A	30
Naphthobenzothiophenes	21 U	16 U	N/A	30
C1-Naphthobenzothiophenes	21 U	16 U	N/A	30
C2-Naphthobenzothiophenes	21 U	16 U	N/A	30

N/A - Not Applicable
X - It is not possible to calculate RPD, one result is below the detection limit, the other is above reporting limit.
[a] - Value outside of QC Limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04E**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	21 U	16 U	N/A	30
C4-Naphthobenzothiophenes	21 U	16 U	N/A	30
Benz[a]anthracene	27 U	20 U	N/A	30
Chrysene/Triphenylene	19 U	14 U	N/A	30
C1-Chrysenes	19 U	14 U	N/A	30
C2-Chrysenes	19 U	14 U	N/A	30
C3-Chrysenes	19 U	14 U	N/A	30
C4-Chrysenes	19 U	14 U	N/A	30
Benzo[b]fluoranthene	18 U	14 U	N/A	30
Benzo[k]fluoranthene	35 U	26 U	N/A	30
Benzo[a]fluoranthene	35 U	26 U	N/A	30
Benzo[e]pyrene	24 U	18 U	N/A	30
Benzo[a]pyrene	24 U	18 U	N/A	30
Perylene	30 U	22 U	N/A	30
Indeno[1,2,3-cd]pyrene	41 U	31 U	N/A	30
Dibenz[a,h]anthracene	33 U	24 U	N/A	30
Benzo[g,h,i]perylene	30 U	23 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	71	69	50-130
Pyrene-d10	84	83	50-130
Benzo[b]fluoranthene-d12	80	79	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.

01/27/06 15:37

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	190	100	63[a]	30
C24 Tricyclic Terpane	110	58	64[a]	30
C25 Tricyclic Terpane	120	59	68[a]	30
C24 Tetracyclic Terpane	120	60	65[a]	30
C26 Tricyclic Terpane-22S	50	25	66[a]	30
C26 Tricyclic Terpane-22R	50	25	65[a]	30
C28 Tricyclic Terpane-22S	60	32	62[a]	30
C28 Tricyclic Terpane-22R	62	32	63[a]	30
C29 Tricyclic Terpane-22S	73	36	69[a]	30
C29 Tricyclic Terpane-22R	70	38	61[a]	30
18a-22,29,30-Trisnorneohopane-TS	300	140	71[a]	30
C30 Tricyclic Terpane-22S	55	32	52[a]	30
C30 Tricyclic Terpane-22R	51	26	64[a]	30
17a(H)-22,29,30-Trisnorhopane-TM	280	120	77[a]	30
17a/b,21b/a 28,30-Bisnorhopane	79	38	71[a]	30
17a(H),21b(H)-25-Norhopane	33	19	55[a]	30
30-Norhopane	860	390	76[a]	30
18a(H)-30-Norneohopane-C29Ts	240	120	62[a]	30
17a(H)-Diahopane	58	33	54[a]	30
30-Normoretane	160	81	63[a]	30
18a(H)&18b(H)-Oleananes	130	82	46[a]	30
Hopane	1100	450	84[a]	30
Moretane	150	70	70[a]	30
30-Homohopane-22S	380	140	91[a]	30
30-Homohopane-22R	340	140	83[a]	30
30,31-Bishomohopane-22S	260	100	87[a]	30
30,31-Bishomohopane-22R	170	66	88[a]	30
30,31-Trishomohopane-22S	150	57	88[a]	30
30,31-Trishomohopane-22R	89	37	83[a]	30
Tetrakishomohopane-22S	98	41	82[a]	30
Tetrakishomohopane-22R	67	26	87[a]	30
Pentakishomohopane-22S	93	43	73[a]	30
Pentakishomohopane-22R	66	27	83[a]	30
13b(H),17a(H)-20S-Diacholestane	210	97	73[a]	30
13b(H),17a(H)-20R-Diacholestane	120	56	73[a]	30

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

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

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	88	42	70[a]	30
14a(H),17a(H)-20S-Cholestane	120	54	73[a]	30
14a(H),17a(H)-20R-Cholestane	320	150	72[a]	30
13b,17a-20R-Ethyldiacholestane	73	32	79[a]	30
13a,17b-20S-Ethyldiacholestane	20	8.4	81[a]	30
14a,17a-20S-Methylcholestane	56	27	69[a]	30
14a,17a-20R-Methylcholestane	110	56	67[a]	30
14a(H),17a(H)-20S-Ethylcholestane	100	49	72[a]	30
14a(H),17a(H)-20R-Ethylcholestane	140	67	73[a]	30
14b(H),17b(H)-20R-Cholestane	130	54	81[a]	30
14b(H),17b(H)-20S-Cholestane	130	59	76[a]	30
14b,17b-20R-Methylcholestane	140	57	86[a]	30
14b,17b-20S-Methylcholestane	170	79	74[a]	30
14b(H),17b(H)-20R-Ethylcholestane	260	98	92[a]	30
14b(H),17b(H)-20S-Ethylcholestane	120	68	59[a]	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	58	79	50-130

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

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

01/27/06 16:02

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-64D (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-05**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/21/06	76.7	5.14	128.46	10	AC

Parameter	Result		Parameter	Result
Naphthalene	4200000	E	Fluoranthene	680000
C1-Naphthalenes	2300000		Pyrene	1100000
C2-Naphthalenes	2000000		C1-Fluoranthenes/Pyrenes	1200000
C3-Naphthalenes	870000		C2-Fluoranthenes/Pyrenes	570000
C4-Naphthalenes	270000		C3-Fluoranthenes/Pyrenes	230000
Biphenyl	270000		C4-Fluoranthenes/Pyrenes	79000
Dibenzofuran	87000		Naphthobenzothiophenes	150000
Acenaphthylene	200000		C1-Naphthobenzothiophenes	180000
Acenaphthene	1400000		C2-Naphthobenzothiophenes	120000
Fluorene	710000		C3-Naphthobenzothiophenes	58000
C1-Fluorenes	510000		C4-Naphthobenzothiophenes	25000
C2-Fluorenes	380000		Benz[a]anthracene	380000
C3-Fluorenes	200000		Chrysene/Triphenylene	410000
Anthracene	730000		C1-Chrysenes	430000
Phenanthrene	2200000		C2-Chrysenes	240000
C1-Phenanthrenes/Anthracenes	1800000		C3-Chrysenes	120000
C2-Phenanthrenes/Anthracenes	920000		C4-Chrysenes	49000
C3-Phenanthrenes/Anthracenes	400000		Benzo[b]fluoranthene	110000
C4-Phenanthrenes/Anthracenes	100000		Benzo[k]fluoranthene	170000
Retene	470	U	Benzo[a]fluoranthene	73000
Dibenzothiophene	310000		Benzo[e]pyrene	140000
C1-Dibenzothiophenes	400000		Benzo[a]pyrene	270000
C2-Dibenzothiophenes	340000		Perylene	45000
C3-Dibenzothiophenes	190000		Indeno[1,2,3-cd]pyrene	82000
C4-Dibenzothiophenes	63000		Dibenz[a,h]anthracene	26000
Benzo(b)fluorene	180000		Benzo[g,h,i]perylene	100000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	117	50-130
Benzo[b]fluoranthene-d12	88	50-130

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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: **GC-SED-64D (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-05**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/21/06	76.7	5.14	128.46	10	AC

Parameter	Result
Carbazole	23000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	117	50-130
Benzo[b]fluoranthene-d12	88	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\PAH2\JANUARY06\JAN18\
Data File : P27816.D
Acq On : 21 Jan 2006 4:53 am
Operator : AC
Sample : 0601040-05
Misc : 10X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 26 17:33:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WW
1/27/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.30	164	42517m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.81	240	69752m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	1274m	14.58	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.46%#		
58) Pyrene-d10	38.89	212	3288m	18.29	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.83%#		
81) Benzo[b]fluoranthene-d12	47.76	264	1955m	13.67	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.37%#		
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	20.39	128	2432561m	12720.20	ng/mL	E
10) C1-Naphthalenes	23.51	142	1340089m	7007.51	ng/mL	
11) C2-Naphthalenes	25.94	156	1183945m	6191.01	ng/mL	
12) C3-Naphthalenes	28.28	170	507713m	2654.90	ng/mL	
13) C4-Naphthalenes	31.04	184	156566m	818.71	ng/mL	
15) 2-Methylnaphthalene	23.09	142	633746	5206.17	ng/mL#	100
16) 1-Methylnaphthalene	23.51	142	703691	6073.41	ng/mL#	100
22) Biphenyl	24.97	154	126571	825.95	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	150692m	1437.07	ng/mL	
24) Dibenzofuran	28.08	168	45069m	266.43	ng/mL	
25) Acenaphthylene	26.69	152	116712m	615.12	ng/mL	
26) Acenaphthene	27.42	153	484895m	4169.20	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.97	170	39917m	436.20	ng/mL	
28) Fluorene	29.45	166	295390m	2172.15	ng/mL	
29) C1-Fluorenes	31.68	180	213089m	1566.95	ng/mL	
30) C2-Fluorenes	33.87	194	157018m	1154.63	ng/mL	
31) C3-Fluorenes	35.85	208	82320m	605.34	ng/mL	
32) Dibenzothiophene	32.78	184	171276m	941.94	ng/mL	
37) C1-Dibenzothiophenes	34.57	198	222697m	1224.73	ng/mL	
38) C2-Dibenzothiophenes	36.61	212	192215m	1057.09	ng/mL	
39) C3-Dibenzothiophenes	38.05	226	107044m	588.69	ng/mL	
40) C4-Dibenzothiophenes	39.73	240	35314m	194.21	ng/mL	
41) Phenanthrene	33.28	178	1333358	6871.69	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.35	192	1070226m	5515.59	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.51	206	580312m	2990.74	ng/mL	
49) 5AA IS BKGD	37.29	206	35574	183.34	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.35	220	235287m	1212.59	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.56	234	61021m	314.48	ng/mL	
53) Anthracene	33.46	178	405032m	2247.57	ng/mL	
54) Carbazole	34.15	167	11884m	69.19	ng/mL	
55) 1-Methylphenanthrene	35.79	192	174847m	1298.90	ng/mL	
56) Fluoranthene	38.07	202	432764	2089.68	ng/mL	100
57) Benzo(b)fluorene	40.60	216	70567m	554.28	ng/mL	
59) Pyrene	38.96	202	692958	3267.63	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.35	216	798010m	3763.01	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.82	230	367903m	1734.84	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.29	244	151609m	714.91	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.53	258	51267m	241.75	ng/mL	
64) Naphthobenzothiophene	42.82	234	55575m	282.60	ng/ml	
65) Naphthobenzothiophene-2,1-	42.82	234	55641m	282.94	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27816.D
Acq On : 21 Jan 2006 4:53 am
Operator : AC
Sample : 0601040-05
Misc : 10X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 26 17:33:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

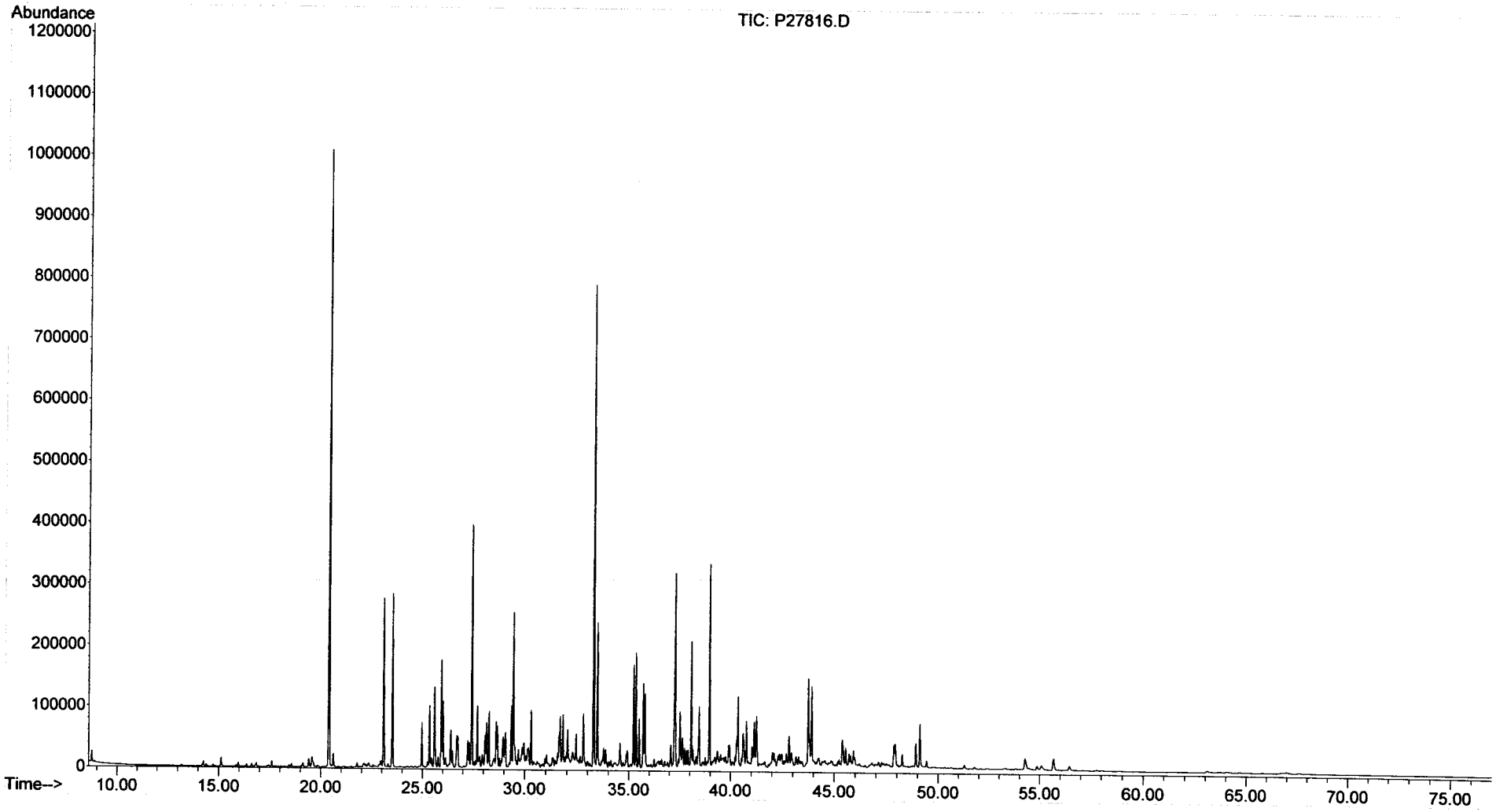
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	43.16	234	15749	80.08	ng/mL#	29
67) Naphthobenzothiophene-2,3-	43.46	234	17577m	89.38	ng/mL	
68) C1-Naphthobenzothiophenes	44.22	248	108214m	550.28	ng/ml	
69) C2-Naphthobenzothiophenes	45.71	262	72059m	366.42	ng/ml	
70) C3-Naphthobenzothiophenes	47.86	276	35304m	179.52	ng/ml	
71) C4-Naphthobenzothiophenes	49.01	290	14937m	75.96	ng/mL	
73) Benz[a]anthracene	43.74	228	234777m	1178.64	ng/mL	
74) Chrysene	43.91	228	248806m	1243.62	ng/mL	
75) Chrysene/Triphenylene	43.91	228	249230m	1245.74	ng/mL	
76) C1-Chrysenes	45.39	242	263791m	1318.52	ng/mL	
77) C2-Chrysenes	47.10	256	146958m	734.55	ng/mL	
79) C3-Chrysenes	48.76	270	73619m	367.97	ng/mL	
80) C4-Chrysenes	50.34	284	29934m	149.62	ng/mL	
82) Benzo[b]fluoranthene	47.85	252	73977	345.80	ng/mL	100
83) Benzo[k]fluoranthene	47.92	252	113996	509.56	ng/mL	98
84) Benzo[a]fluoranthene	48.25	252	50221m	224.49	ng/mL	
85) Benzo[e]pyrene	48.91	252	90783m	440.20	ng/mL	
86) Benzo[a]pyrene	49.11	252	169464m	821.91	ng/mL	
87) Perylene	49.44	252	28523m	138.76	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.28	276	51394m	251.49	ng/mL	
89) Dibenz[a,h]anthracene	54.33	278	15389m	80.08	ng/mL	
90) Benzo[g,h,i]perylene	55.69	276	65586	307.81	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27816.D
Acq On : 21 Jan 2006 4:53 am
Operator : AC
Sample : 0601040-05
Misc : 10X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 26 17:33:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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: **GC-SED-64D (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-05E**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/25/06	76.7	5.14	128.46	100	AC

Parameter	Result	
Naphthalene	**4700000**	
C1-Naphthalenes	5400	U
C2-Naphthalenes	5400	U
C3-Naphthalenes	5400	U
C4-Naphthalenes	5400	U
Biphenyl	3000	U
Dibenzofuran	3900	U
Acenaphthylene	5900	U
Acenaphthene	3800	U
Fluorene	3800	U
C1-Fluorenes	3800	U
C2-Fluorenes	3800	U
C3-Fluorenes	3800	U
Anthracene	4400	U
Phenanthrene	4700	U
C1-Phenanthrenes/Anthracenes	4700	U
C2-Phenanthrenes/Anthracenes	4700	U
C3-Phenanthrenes/Anthracenes	4700	U
C4-Phenanthrenes/Anthracenes	4700	U
Retene	4700	U
Dibenzothiophene	3600	U
C1-Dibenzothiophenes	3600	U
C2-Dibenzothiophenes	3600	U
C3-Dibenzothiophenes	3600	U
C4-Dibenzothiophenes	3600	U
Benzo(b)fluorene	3300	U

Parameter	Result	
Fluoranthene	3300	U
Pyrene	2900	U
C1-Fluoranthenes/Pyrenes	2900	U
C2-Fluoranthenes/Pyrenes	2900	U
C3-Fluoranthenes/Pyrenes	2900	U
C4-Fluoranthenes/Pyrenes	2900	U
Naphthobenzothiophenes	3900	U
C1-Naphthobenzothiophenes	3900	U
C2-Naphthobenzothiophenes	3900	U
C3-Naphthobenzothiophenes	3900	U
C4-Naphthobenzothiophenes	3900	U
Benz[a]anthracene	5100	U
Chrysene/Triphenylene	3500	U
C1-Chrysenes	3500	U
C2-Chrysenes	3500	U
C3-Chrysenes	3500	U
C4-Chrysenes	3500	U
Benzo[b]fluoranthene	3500	U
Benzo[k]fluoranthene	6600	U
Benzo[a]fluoranthene	6600	U
Benzo[e]pyrene	4500	U
Benzo[a]pyrene	4500	U
Perylene	5700	U
Indeno[1,2,3-cd]pyrene	7800	U
Dibenz[a,h]anthracene	6200	U
Benzo[g,h,i]perylene	5700	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	97	50-130
Pyrene-d10	115	50-130
Benzo[b]fluoranthene-d12	91	50-130

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27886.D
Acq On : 25 Jan 2006 6:59 am
Operator : AC
Sample : 0601040-05-RE
Misc : 100X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 26 17:47:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WTW
1/27/06

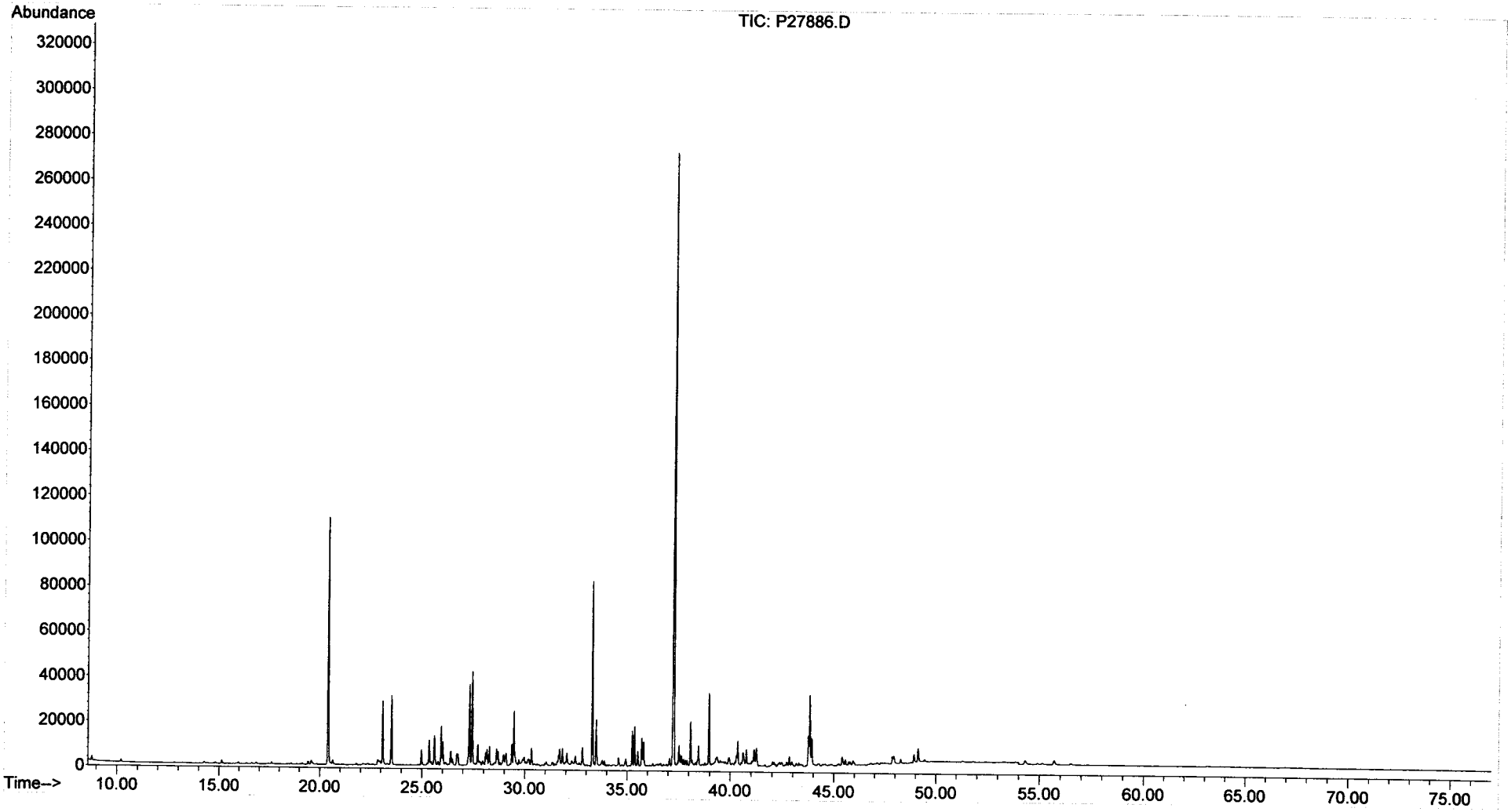
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	43456m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	64098m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	135m	1.51	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.15%#	
58) Pyrene-d10	38.90	212	328m	1.79	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.18%#	
81) Benzo[b]fluoranthene-d12	47.78	264	187m	1.42	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.14%#	
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	20.40	128	280460m	1434.87	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27886.D
Acq On : 25 Jan 2006 6:59 am
Operator : AC
Sample : 0601040-05-RE
Misc : 100X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 26 17:47:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-64D (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-05**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/25/06	76.7	5.14	13.13	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**680**	30,31-Bishomohopane-22S	**720**
C24 Tricyclic Terpane	**430**	30,31-Bishomohopane-22R	**540**
C25 Tricyclic Terpane	**420**	30,31-Trishomohopane-22S	**410**
C24 Tetracyclic Terpane	**490**	30,31-Trishomohopane-22R	**250**
C26 Tricyclic Terpane-22S	**180**	Tetrakishomohopane-22S	**230**
C26 Tricyclic Terpane-22R	**170**	Tetrakishomohopane-22R	**160**
C28 Tricyclic Terpane-22S	**200**	Pentakishomohopane-22S	**160**
C28 Tricyclic Terpane-22R	**220**	Pentakishomohopane-22R	**120**
C29 Tricyclic Terpane-22S	**240**	13b(H),17a(H)-20S-Diacholestane	**830**
C29 Tricyclic Terpane-22R	**240**	13b(H),17a(H)-20R-Diacholestane	**440**
18a-22,29,30-Trisnorneohopane-TS	**1500**	13b,17a-20S-Methyldiacholestane	**310**
C30 Tricyclic Terpane-22S	**200**	14a(H),17a(H)-20S-Cholestane	**460**
C30 Tricyclic Terpane-22R	**120**	14a(H),17a(H)-20R-Cholestane	**1300**
17a(H)-22,29,30-Trisnorhopane-TM	**1100**	13b,17a-20R-Ethyldiacholestane	**180**
17a/b,21b/a 28,30-Bisnorhopane	**310**	13a,17b-20S-Ethyldiacholestane	**58**
17a(H),21b(H)-25-Norhopane	**120**	14a,17a-20S-Methylcholestane	**310**
30-Norhopane	**3000**	14a,17a-20R-Methylcholestane	**680**
18a(H)-30-Norneohopane-C29Ts	**1400**	14a(H),17a(H)-20S-Ethylcholestane	**420**
17a(H)-Diahopane	**350**	14a(H),17a(H)-20R-Ethylcholestane	**600**
30-Normoretane	**650**	14b(H),17b(H)-20R-Cholestane	**600**
18a(H)&18b(H)-Oleananes	**700**	14b(H),17b(H)-20S-Cholestane	**610**
Hopane	**5100**	14b,17b-20R-Methylcholestane	**640**
Moretane	**670**	14b,17b-20S-Methylcholestane	**700**
30-Homohopane-22S	**1200**	14b(H),17b(H)-20R-Ethylcholestane	**860**
30-Homohopane-22R	**1100**	14b(H),17b(H)-20S-Ethylcholestane	**550**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	69	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\PAH3\January06\JAN23\
Data File : P34867.D
Acq On : 25 Jan 2006 3:25 pm
Operator : AC
Sample : 0601040-05
Misc : 1x recleaned
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 14:27:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/27/06

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	43.42	240	100324	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	43.92	217	44094	1045.78	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 104.58%			

Target Compounds

						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	132253	1534.02	ng/mL	96
84) Hopane (T19)	52.49	191	132253	1534.02	ng/mL	96
85) C23 Tricyclic Terpane (T4)	40.94	191	17478m	202.73	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	11194	129.84	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	11002m	127.61	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	12670	146.96	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	4590m	53.24	ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	4501m	52.21	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	5188m	60.18	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	5695m	66.06	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	6189m	71.79	ng/ml	
94) C29 Tricyclic Terpane-22R	47.48	191	6194m	71.85	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	39830m	461.99	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	5171	59.98	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.97	191	3201m	37.13	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	29542	342.66	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	7981m	92.57	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	3114m	36.12	ng/ml	
101) 30-Norhopane (T15)	51.08	191	77969m	904.37	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	36676m	425.41	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	9043m	104.89	ng/ml	
104) 30-Normoretane (T17)	51.88	191	16795	194.81	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	17973m	208.47	ng/ml	
106) Moretane (T20)	53.19	191	17355m	201.30	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	31543	365.87	ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	28694	332.83	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.89	191	18743	217.40	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	13871	160.89	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	10521m	122.03	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	6369	73.88	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.76	191	6005	69.65	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	4128	47.88	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	4195m	48.66	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	3220m	37.35	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	10559	250.43	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	5628m	133.48	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	3897m	92.43	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	5799m	137.54	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	16636m	394.56	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	2282m	54.12	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34867.D
Acq On : 25 Jan 2006 3:25 pm
Operator : AC
Sample : 0601040-05
Misc : 1x recleaned
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 14:27:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

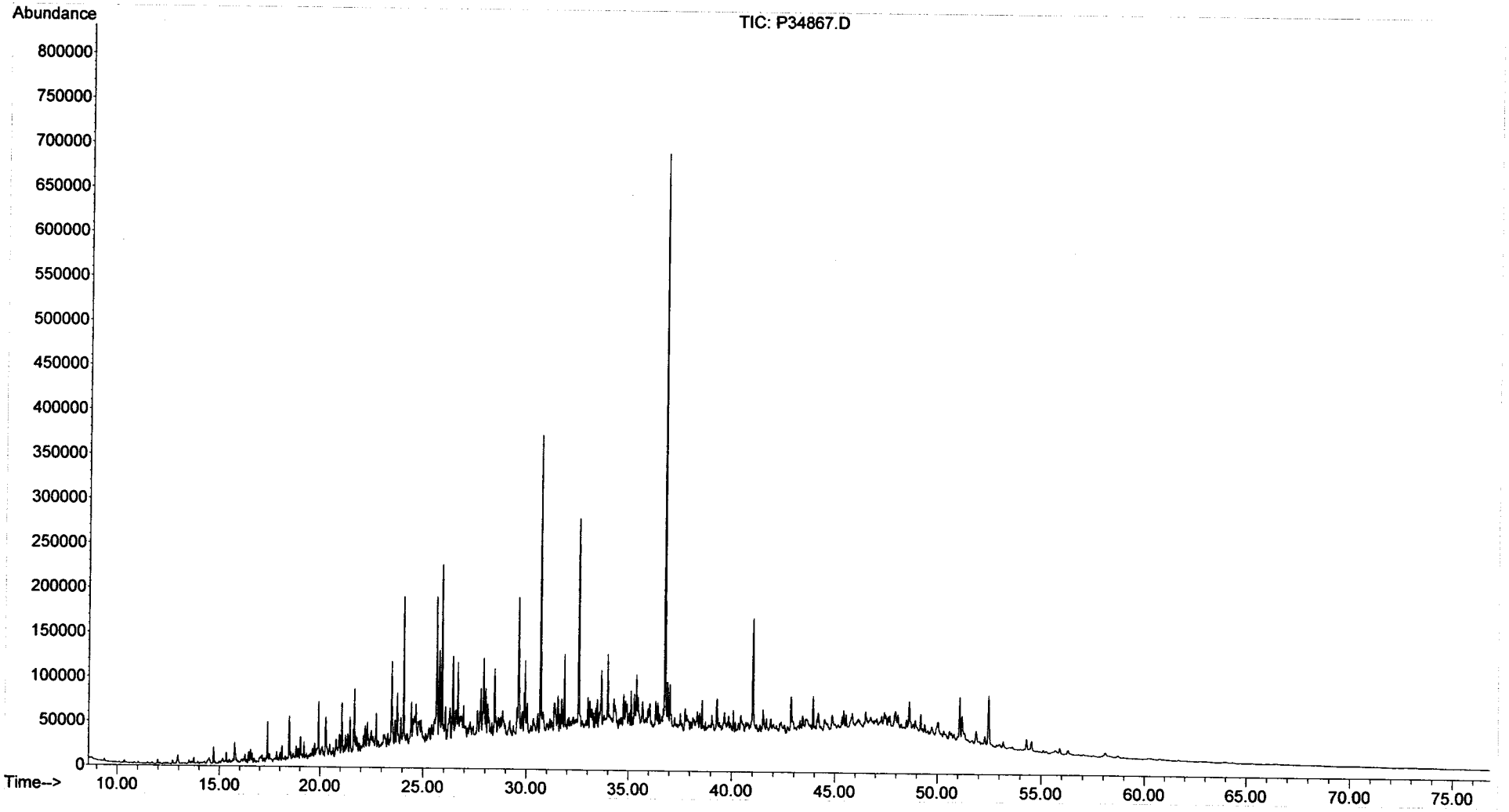
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	736	17.46	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	3895m	92.38	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	8601m	203.99	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	5281m	125.25	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	7523m	178.42	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	7564	179.40	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	7698	182.57	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	8166m	193.67	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	8838m	209.61	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	10881m	258.07	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	6961m	165.09	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34867.D
Acq On : 25 Jan 2006 3:25 pm
Operator : AC
Sample : 0601040-05
Misc : 1x recleaned
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 14:27:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306B04**
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	01/13/06	01/25/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.14**	J	Fluoranthene	**0.045**	J
C1-Naphthalenes	**0.11**	J	Pyrene	**0.068**	J
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**0.13**	J	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	0.077	U	C2-Naphthobenzothiophenes	0.081	U
Fluorene	0.077	U	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	0.10	U
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**0.020**	J
Anthracene	0.089	U	C1-Chrysenes	0.072	U
Phenanthrene	**0.093**	J	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	0.071	U
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	0.14	U
Retene	**1.2**		Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	0.093	U
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	0.16	U
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	0.13	U
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**0.027**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	78	50-130
Pyrene-d10	89	50-130
Benzo[b]fluoranthene-d12	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.

01/31/06 09:51

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306B04**
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	01/13/06	01/25/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	78	50-130
Pyrene-d10	89	50-130
Benzo[b]fluoranthene-d12	79	50-130

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

01/31/06 09:51

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27896.D
Acq On : 25 Jan 2006 8:28 pm
Operator : AC
Sample : SS011306B04
Misc : 1X ETR0601040 RERUN
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 31 09:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for WW 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.14	164	32012m	500.00	ng/mL	0.00
72) Chrysene-d12	43.65	240	51641	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.81	152	25655m	389.96	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.00%#			
58) Pyrene-d10	38.72	212	60244m	445.20	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.52%#			
81) Benzo[b]fluoranthene-d12	47.59	264	42014	396.84	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.68%#			
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	20.28	128	304m	2.11	ng/mL	
10) C1-Naphthalenes	22.94	142	246m	1.71	ng/mL	
15) 2-Methylnaphthalene	22.94	142	151	1.65	ng/mL#	100
16) 1-Methylnaphthalene	23.37	142	65m	0.75	ng/mL	
25) Acenaphthylene	26.55	152	273m	1.91	ng/mL	
41) Phenanthrene	33.18	178	203m	1.39	ng/mL	
52) Retene	40.12	234	600	18.10	ng/mL	94
56) Fluoranthene	37.95	202	104	0.67	ng/mL#	64
59) Pyrene	38.79	202	163m	1.02	ng/mL	
74) Chrysene	43.75	228	45m	0.30	ng/mL	
75) Chrysene/Triphenylene	43.75	228	45m	0.30	ng/mL	
90) Benzo[g,h,i]perylene	55.53	276	65m	0.41	ng/mL	

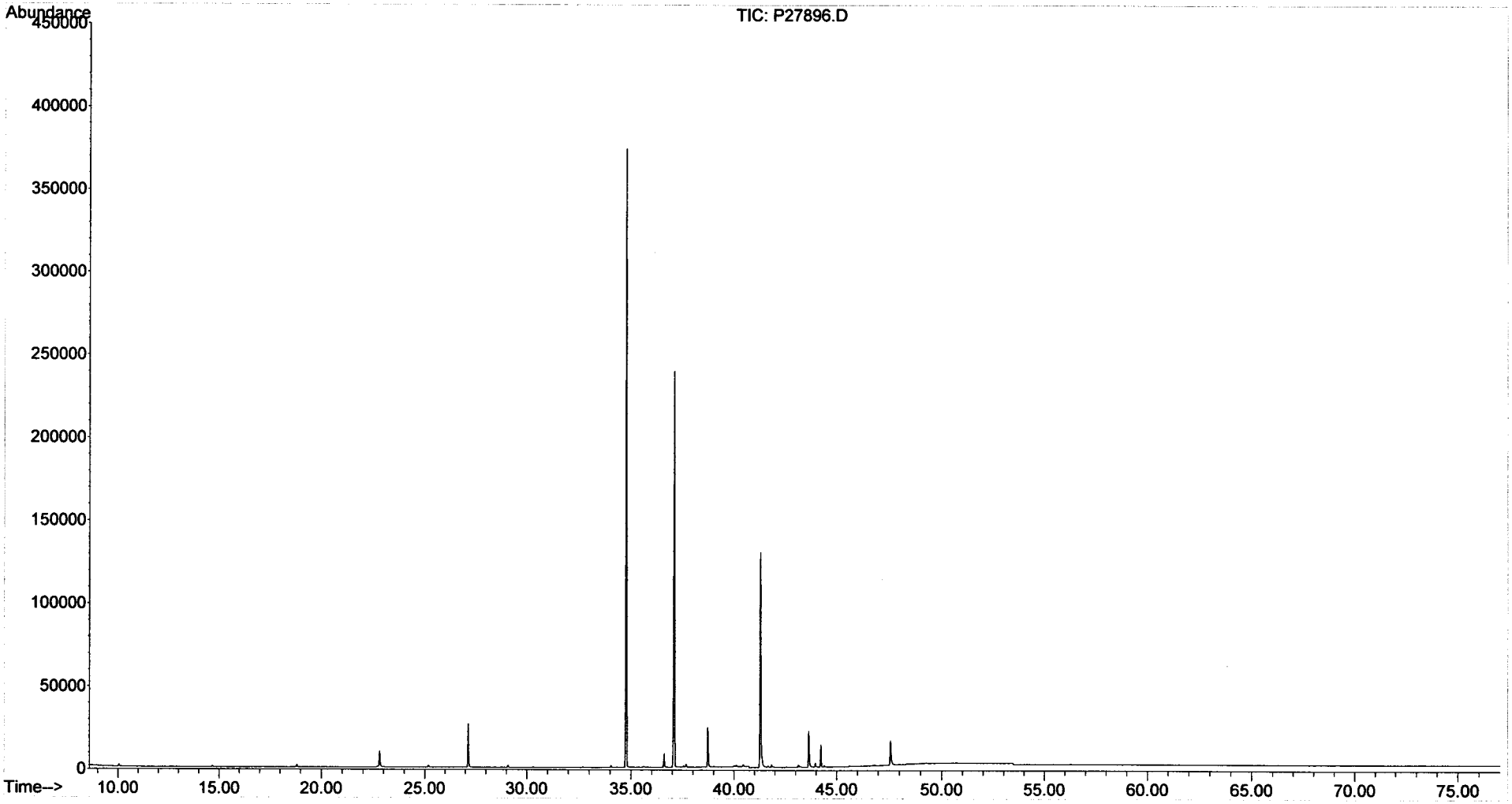
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MS 1/31/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27896.D
Acq On : 25 Jan 2006 8:28 pm
Operator : AC
Sample : SS011306B04
Misc : 1X ETR0601040 RERUN
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 31 09:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306B04**
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	01/13/06	01/21/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.38	U	30,31-Bishomohopane-22S	0.38	U
C24 Tricyclic Terpane	0.38	U	30,31-Bishomohopane-22R	0.38	U
C25 Tricyclic Terpane	0.38	U	30,31-Trishomohopane-22S	0.38	U
C24 Tetracyclic Terpane	0.38	U	30,31-Trishomohopane-22R	0.38	U
C26 Tricyclic Terpane-22S	0.38	U	Tetrakishomohopane-22S	0.38	U
C26 Tricyclic Terpane-22R	0.38	U	Tetrakishomohopane-22R	0.38	U
C28 Tricyclic Terpane-22S	0.38	U	Pentakishomohopane-22S	0.38	U
C28 Tricyclic Terpane-22R	0.38	U	Pentakishomohopane-22R	0.38	U
C29 Tricyclic Terpane-22S	0.38	U	13b(H),17a(H)-20S-Diacholestane	0.38	U
C29 Tricyclic Terpane-22R	0.38	U	13b(H),17a(H)-20R-Diacholestane	0.38	U
18a-22,29,30-Trisnorneohopane-TS	0.38	U	13b,17a-20S-Methyldiacholestane	0.38	U
C30 Tricyclic Terpane-22S	0.38	U	14a(H),17a(H)-20S-Cholestane	0.38	U
C30 Tricyclic Terpane-22R	0.38	U	14a(H),17a(H)-20R-Cholestane	0.38	U
17a(H)-22,29,30-Trisnorhopane-TM	0.38	U	13b,17a-20R-Ethyldiacholestane	0.38	U
17a/b,21b/a 28,30-Bisnorhopane	0.38	U	13a,17b-20S-Ethyldiacholestane	0.38	U
17a(H),21b(H)-25-Norhopane	0.38	U	14a,17a-20S-Methylcholestane	0.38	U
30-Norhopane	0.38	U	14a,17a-20R-Methylcholestane	0.38	U
18a(H)-30-Norneohopane-C29Ts	0.38	U	14a(H),17a(H)-20S-Ethylcholestane	0.38	U
17a(H)-Diahopane	0.38	U	14a(H),17a(H)-20R-Ethylcholestane	0.38	U
30-Normoretane	0.38	U	14b(H),17b(H)-20R-Cholestane	0.38	U
18a(H)&18b(H)-Oleananes	0.38	U	14b(H),17b(H)-20S-Cholestane	0.38	U
Hopane	0.38	U	14b,17b-20R-Methylcholestane	0.38	U
Moretane	0.38	U	14b,17b-20S-Methylcholestane	0.38	U
30-Homohopane-22S	0.38	U	14b(H),17b(H)-20R-Ethylcholestane	0.38	U
30-Homohopane-22R	0.38	U	14b(H),17b(H)-20S-Ethylcholestane	0.38	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	86	50-130

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

01/27/06 16:06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34849.D
Acq On : 21 Jan 2006 11:54 pm
Operator : AC
Sample : SS011306B04
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 24 13:34:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

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	43.42	240	99876	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	43.91	217	18020	429.30	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	42.93%#	

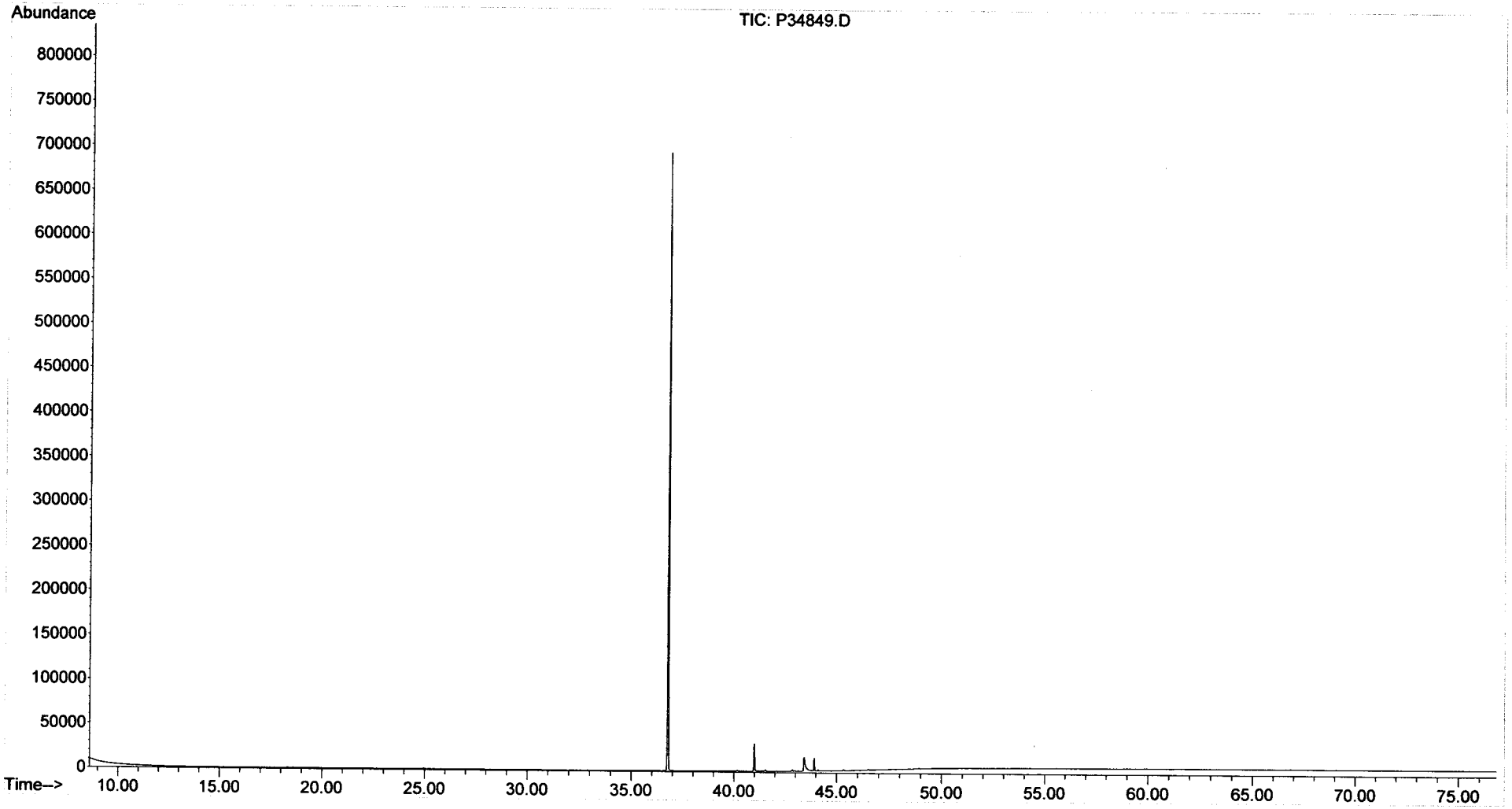
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34849.D
Acq On : 21 Jan 2006 11:54 pm
Operator : AC
Sample : SS011306B04
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 24 13:34:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **See Below**
Associated Blank: **SS011306B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/13/06	100	AC

Lab ID:	SS011306B04		SS011306LCS02		SS011306LCSD02				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.14		25	75	26	79	6	30	50-130
Acenaphthylene	0.13		24	71	24	72	2	30	50-130
Acenaphthene	0.077	U	25	75	26	77	2	30	50-130
Fluorene	0.077	U	24	73	24	73	0	30	50-130
Anthracene	0.089	U	23	68	23	68	0	30	50-130
Phenanthrene	0.093		25	74	25	75	0	30	50-130
Fluoranthene	0.045		26	79	26	78	2	30	50-130
Pyrene	0.068		27	82	27	81	1	30	50-130
Benz[a]anthracene	0.10	U	25	74	25	76	2	30	50-130
Chrysene/Triphenylene	0.020		26	78	26	79	2	30	50-130
Benzo[b]fluoranthene	0.071	U	24	73	25	74	1	30	50-130
Benzo[k]fluoranthene	0.14	U	26	80	27	82	3	30	50-130
Benzo[a]pyrene	0.093	U	22	65	21	63	4	30	50-130
Indeno[1,2,3-cd]pyrene	0.16	U	22	65	20	61	6	30	50-130
Dibenz[a,h]anthracene	0.13	U	20	62	21	62	0	30	50-130
Benzo[g,h,i]perylene	0.027		20	62	20	62	0	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	76	79	50-130
Pyrene-d10	84	85	50-130
Benzo[b]fluoranthene-d12	76	78	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.

01/30/06 10:40

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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306LCS02**
Associated Blank: **SS011306B04**
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	01/13/06	01/25/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**25**	S	Fluoranthene	**26**	S
C1-Naphthalenes	0.11	U	Pyrene	**27**	S
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**24**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**25**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**24**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**25**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**26**	S
Anthracene	**23**	S	C1-Chrysenes	0.072	U
Phenanthrene	**25**	S	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**24**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**26**	S
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	**22**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**22**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**20**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**20**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	76	50-130
Pyrene-d10	84	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.
S - Spike compound.

01/27/06 15:18

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306LCS02**
Associated Blank: **SS011306B04**
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	01/13/06	01/25/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	76	50-130
Pyrene-d10	84	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.

01/27/06 15:19

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27898.D
Acq On : 25 Jan 2006 10:05 pm
Operator : AC
Sample : SS011306LCS02
Misc : 1X ETR0601040
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 26 15:53:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

AMS for WDD 1/27/06

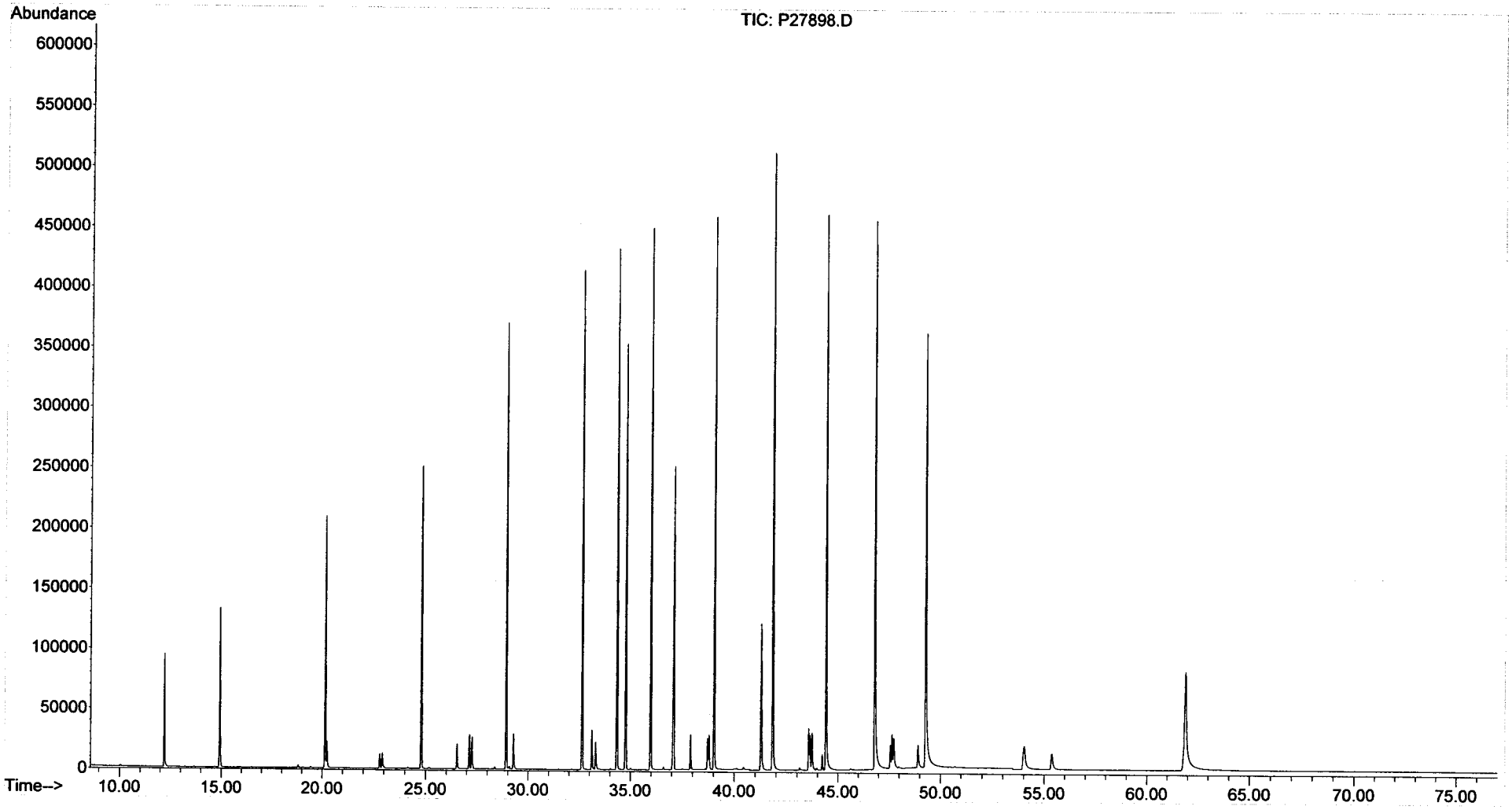
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.14	164	34642m	500.00	ng/mL	0.00
72) Chrysene-d12	43.63	240	59528m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	26965m	378.76	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 37.88%#			
58) Pyrene-d10	38.72	212	61159m	417.65	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 41.76%#			
81) Benzo[b]fluoranthene-d12	47.57	264	46155m	378.19	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 37.82%#			
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	20.23	128	58314m	374.25	ng/mL	
15) 2-Methylnaphthalene	22.93	142	35802	360.97	ng/mL#	100
25) Acenaphthylene	26.53	152	54974m	355.60	ng/mL	
26) Acenaphthene	27.26	153	35760m	377.37	ng/mL	
28) Fluorene	29.28	166	40434m	364.92	ng/mL	
41) Phenanthrene	33.11	178	58706	371.33	ng/mL	100
53) Anthracene	33.30	178	50189m	341.82	ng/mL	
56) Fluoranthene	37.90	202	66861m	396.24	ng/mL	
59) Pyrene	38.78	202	70916m	410.42	ng/mL	
73) Benz[a]anthracene	43.57	228	63123	371.32	ng/mL	100
74) Chrysene	43.73	228	66102m	387.15	ng/mL	
75) Chrysene/Triphenylene	43.73	228	66493m	389.44	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	66401m	363.69	ng/mL	
83) Benzo[k]fluoranthene	47.75	252	75975m	397.93	ng/mL	
86) Benzo[a]pyrene	48.91	252	57218m	325.18	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.99	276	56840m	325.91	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	50443	307.56	ng/mL	98
90) Benzo[g,h,i]perylene	55.37	276	55944	307.65	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27898.D
Acq On : 25 Jan 2006 10:05 pm
Operator : AC
Sample : SS011306LCS02
Misc : 1X ETR0601040
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 26 15:53:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306LCSD02**
Associated Blank: **SS011306B04**
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	01/13/06	01/25/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**26**	S	Fluoranthene	**26**	S
C1-Naphthalenes	0.11	U	Pyrene	**27**	S
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**24**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**26**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**24**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**25**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**26**	S
Anthracene	**23**	S	C1-Chrysenes	0.072	U
Phenanthrene	**25**	S	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**25**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**27**	S
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	**21**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**20**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**21**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**20**	S

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

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

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: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306LCSD02**
Associated Blank: **SS011306B04**
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	01/13/06	01/25/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

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

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27900.D
Acq On : 25 Jan 2006 11:41 pm
Operator : AC
Sample : SS011306LCSD02
Misc : 1X ETR0601040
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 30 10:33:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for MW 1/30/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.14	164	36653m	500.00	ng/mL	0.00
72) Chrysene-d12	43.63	240	60353m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	29859m	396.40	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.64%#			
58) Pyrene-d10	38.72	212	65961m	425.73	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.57%#			
81) Benzo[b]fluoranthene-d12	47.57	264	48076m	388.55	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 38.86%#			
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	20.23	128	65374m	396.54	ng/mL	
15) 2-Methylnaphthalene	22.93	142	39359m	375.06	ng/mL	
25) Acenaphthylene	26.53	152	59148m	361.61	ng/mL	
26) Acenaphthene	27.26	153	38587m	384.86	ng/mL	
28) Fluorene	29.28	166	42977m	366.59	ng/mL	
41) Phenanthrene	33.11	178	62345	372.71	ng/mL	100
53) Anthracene	33.30	178	52864m	340.28	ng/mL	
56) Fluoranthene	37.90	202	69572m	389.69	ng/mL	
59) Pyrene	38.78	202	74330m	406.58	ng/mL	
73) Benz[a]anthracene	43.57	228	65174	378.14	ng/mL	100
74) Chrysene	43.73	228	68760m	397.21	ng/mL	
75) Chrysene/Triphenylene	43.73	228	68682m	396.76	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	68249m	368.70	ng/mL	
83) Benzo[k]fluoranthene	47.75	252	79285m	409.59	ng/mL	
86) Benzo[a]pyrene	48.91	252	55985m	313.82	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.99	276	54040m	305.62	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	51348	308.80	ng/mL	99
90) Benzo[g,h,i]perylene	55.37	276	56693	307.51	ng/mL	99

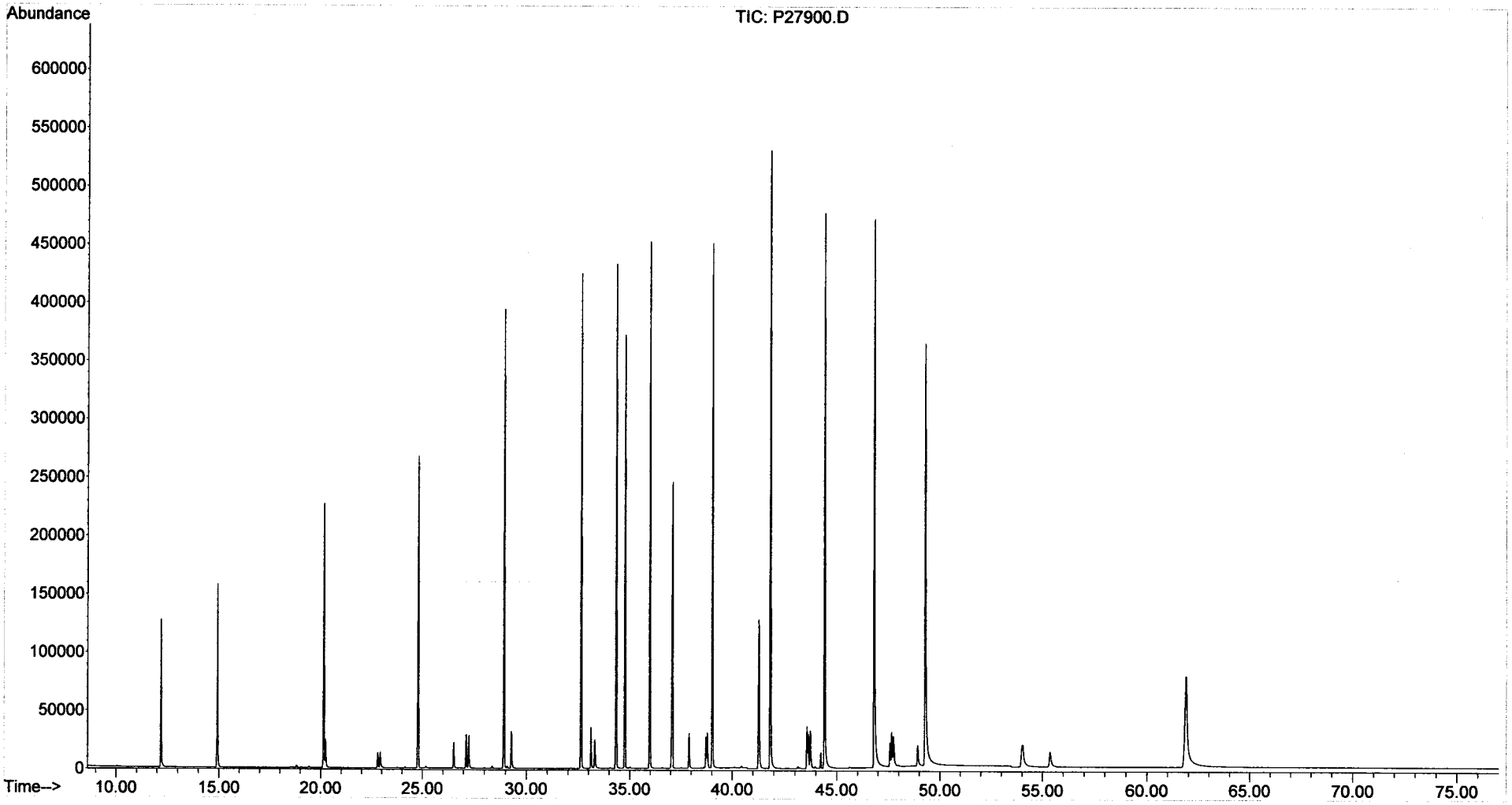
✓ MS 1/30/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27900.D
Acq On : 25 Jan 2006 11:41 pm
Operator : AC
Sample : SS011306LCSD02
Misc : 1X ETR0601040
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 30 10:33:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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: **0601040**
Lab ID: **SO011706AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Naphthalene	714.43	700	99	65-135
C1-Naphthalenes	1534.53	1500	98	65-135
C2-Naphthalenes	1897.27	1900	98	65-135
C3-Naphthalenes	1436.53	1400	95	65-135
C4-Naphthalenes	773.42	730	95	65-135
Biphenyl	216.49	220	101	65-135
Acenaphthene	15.55	18	114	65-135
Fluorene	87.56	88	100	65-135
C1-Fluorenes	219.89	210	94	65-135
C2-Fluorenes	341.2	310	90	65-135
C3-Fluorenes	299.61	290	96	65-135
Phenanthrene	272.58	270	97	65-135
C1-Phenanthrenes/Anthracenes	564.81	560	100	65-135
C2-Phenanthrenes/Anthracenes	660.43	620	95	65-135
C3-Phenanthrenes/Anthracenes	448.76	420	93	65-135
C4-Phenanthrenes/Anthracenes	175.88	150	85	65-135
Dibenzothiophene	218.8	230	107	65-135
C1-Dibenzothiophenes	434.54	430	99	65-135
C2-Dibenzothiophenes	551.44	560	102	65-135
C3-Dibenzothiophenes	460.96	480	105	65-135
C4-Dibenzothiophenes	236.77	240	102	65-135
Fluoranthene	4.26	3.0	71	65-135
Pyrene	15.56	13	81	65-135
C1-Fluoranthenes/Pyrenes	78.43	71	90	65-135
C2-Fluoranthenes/Pyrenes	132.93	120	89	65-135
C3-Fluoranthenes/Pyrenes	111.33	130	120	65-135
Chrysene/Triphenylene	50.99	46	91	65-135
C1-Chrysenes	81.69	80	98	65-135
C2-Chrysenes	95.93	93	97	65-135
C3-Chrysenes	89.87	89	99	65-135
C4-Chrysenes	51.86	55	107	65-135
Benzo[b]fluoranthene	6.54	5.7	87	65-135
Benzo[e]pyrene	12.88	13	103	65-135

01/27/06 15:54

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: **0601040**
Lab ID: **SO011706AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Dibenz[a,h]anthracene	1.02	1.1	112	65-135
Benzo[g,h,i]perylene	3.35	3.5	105	65-135
Hopane	118.8	150	129	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.

01/27/06 15:54

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: **0601040**
Lab ID: **SO011706AWS01**
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	01/15/06	100	0.051	10	1	NLJr

Parameter	Result		Parameter	Result	
Naphthalene	**700**		Fluoranthene	**3.0**	
C1-Naphthalenes	**1500**		Pyrene	**13**	
C2-Naphthalenes	**1900**		C1-Fluoranthenes/Pyrenes	**71**	
C3-Naphthalenes	**1400**		C2-Fluoranthenes/Pyrenes	**120**	
C4-Naphthalenes	**730**		C3-Fluoranthenes/Pyrenes	**130**	
Biphenyl	**220**		C4-Fluoranthenes/Pyrenes	**100**	
Dibenzofuran	**70**		Naphthobenzothiophenes	**59**	
Acenaphthylene	**6.0**		C1-Naphthobenzothiophenes	**150**	
Acenaphthene	**18**		C2-Naphthobenzothiophenes	**190**	
Fluorene	**88**		C3-Naphthobenzothiophenes	**130**	
C1-Fluorenes	**210**		C4-Naphthobenzothiophenes	**88**	
C2-Fluorenes	**310**		Benz[a]anthracene	**1.2**	J
C3-Fluorenes	**290**		Chrysene/Triphenylene	**46**	
Anthracene	0.26	U	C1-Chrysenes	**80**	
Phenanthrene	**270**		C2-Chrysenes	**93**	
C1-Phenanthrenes/Anthracenes	**560**		C3-Chrysenes	**89**	
C2-Phenanthrenes/Anthracenes	**620**		C4-Chrysenes	**55**	
C3-Phenanthrenes/Anthracenes	**420**		Benzo[b]fluoranthene	**5.7**	
C4-Phenanthrenes/Anthracenes	**150**		Benzo[k]fluoranthene	0.40	U
Retene	0.28	U	Benzo[a]fluoranthene	0.40	U
Dibenzothiophene	**230**		Benzo[e]pyrene	**13**	
C1-Dibenzothiophenes	**430**		Benzo[a]pyrene	**2.5**	
C2-Dibenzothiophenes	**560**		Perylene	**0.59**	J
C3-Dibenzothiophenes	**480**		Indeno[1,2,3-cd]pyrene	**1.1**	J
C4-Dibenzothiophenes	**240**		Dibenz[a,h]anthracene	**1.1**	J
Benzo(b)fluorene	0.20	U	Benzo[g,h,i]perylene	**3.5**	

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.

01/27/06 15:53

Form I
Alaska North Slope Crude
Carbazole

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: **0601040**
Lab ID: **SO011706AWS01**
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	01/15/06	100	0.051	10	1	NLJr

Parameter	Result
Carbazole	8.4

N/A - Not Applicable

01/27/06 15:53

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27672.D
Acq On : 15 Jan 2006 4:03 am
Operator : NLJr
Sample : SO011706AWS01
Misc : ANS2011301 ANS
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 17 12:32:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 12:08:00 2006
Response via : Initial Calibration

MG 1/17/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.36	164	60203m	500.00 ng/mL	0.01
72) Chrysene-d12	43.87	240	99371	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	123926m	1001.63 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.16%		
58) Pyrene-d10	38.95	212	276434	1086.25 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.63%		
81) Benzo[b]fluoranthene-d12	47.82	264	222726	1093.26 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 109.33%		
125) 5B(H)Cholane - Surr	44.46	217	46841	1025.32 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 102.53%		

Target Compounds					Qvalue
3) trans-Decalin	16.99	138	111121	2189.08 ng/mL	100
4) cis-Decalin	18.22	138	3500m	92.15 ng/mL	
5) C1-Decalins	18.48	152	194296m	3827.62 ng/mL	
6) C2-Decalins	20.26	166	184310m	3630.89 ng/mL	
7) C3-Decalins	22.74	180	93032m	1832.72 ng/mL	
8) C4-Decalins	26.15	194	97452m	1919.80 ng/mL	
9) Naphthalene	20.44	128	972946m	3593.05 ng/mL	
10) C1-Naphthalenes	23.14	142	2073529m	7657.46 ng/mL	
11) C2-Naphthalenes	25.98	156	2561527m	9459.62 ng/mL	
12) C3-Naphthalenes	28.33	170	1889244m	6976.90 ng/mL	
13) C4-Naphthalenes	31.10	184	1013533m	3742.94 ng/mL	
15) 2-Methylnaphthalene	23.14	142	1204512	6988.09 ng/mL#	100
16) 1-Methylnaphthalene	23.57	142	864864	5271.61 ng/mL#	100
17) Benzothiophene	20.62	134	6111m	28.04 ng/mL	
18) C1-Benzo(b)thiophenes	22.69	148	35880m	164.62 ng/mL	
19) C2-Benzo(b)thiophenes	26.18	162	73497m	337.21 ng/mL	
20) C3-Benzo(b)thiophenes	28.16	176	138063m	633.44 ng/mL	
21) C4-Benzo(b)thiophenes	30.27	190	126181m	578.93 ng/mL	
22) Biphenyl	25.02	154	241686	1113.82 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	324116m	2182.89 ng/mL	
24) Dibenzofuran	28.13	168	85404	356.55 ng/mL#	88
25) Acenaphthylene	26.73	152	8177m	30.44 ng/mL	
26) Acenaphthene	27.48	153	14874m	90.32 ng/mL	
27) 2,3,5-Trimethylnaphthalene	29.02	170	150504m	1161.50 ng/mL	
28) Fluorene	29.50	166	86233	447.83 ng/mL	87
29) C1-Fluorenes	31.88	180	202291m	1050.55 ng/mL	
30) C2-Fluorenes	34.07	194	301214m	1564.28 ng/mL	
31) C3-Fluorenes	35.90	208	282572m	1467.46 ng/mL	
32) Dibenzothiophene	32.85	184	306474	1190.32 ng/mL#	84
33) 4-Methyldibenzothiophene(4	34.62	198	276612	1074.34 ng/mL#	100
34) 2/3-Methyldibenzothiophene	34.96	198	197165m	765.77 ng/mL	
35) 1-Methyldibenzothiophene(1	35.40	198	82976	322.27 ng/mL#	100
36) OTP	35.00	198	22920m	89.02 ng/mL	
37) C1-Dibenzothiophenes	34.62	198	587613m	2282.24 ng/mL	
38) C2-Dibenzothiophenes	36.30	212	735837m	2857.93 ng/mL	
39) C3-Dibenzothiophenes	38.11	226	632572m	2456.86 ng/mL	
40) C4-Dibenzothiophenes	39.79	240	316870m	1230.70 ng/mL	
41) Phenanthrene	33.34	178	371844m	1353.39 ng/mL	
42) 3-Methylphenanthrene(3MP)	35.30	192	158459	576.74 ng/mL	100
43) 2/4-Methylphenanthrene(2MP	35.42	192	178226	648.68 ng/mL	98

AF 2nd 01/20/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27672.D
Acq On : 15 Jan 2006 4:03 am
Operator : NLJr
Sample : SO011706AWS01
Misc : ANS2011301 ANS
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 17 12:32:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 12:08:00 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2-Methylanthracene(2MA)	35.57	192	4849	17.65	ng/mL	87
45) 9-Methylphenanthrene(9MP)	35.76	192	254103	924.85	ng/mL	100
46) 1-Methylphenanthrene(1MP)	35.86	192	182971m	665.95	ng/mL	
47) C1-Phenanthrenes/Anthracen	35.76	192	788710m	2870.64	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.58	206	874146m	3181.60	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.41	220	584708m	2128.14	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.59	234	210535m	766.28	ng/mL	
54) Carbazole	34.16	167	10445	42.95	ng/mL#	16
55) 1-Methylphenanthrene	35.86	192	189875	996.16	ng/mL	98
56) Fluoranthene	38.13	202	4541m	15.49	ng/mL	
59) Pyrene	39.01	202	19398m	64.60	ng/mL	
60) C1-Fluoranthenes/Pyrenes	40.41	216	108427m	361.08	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	180046m	599.59	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.23	244	203828m	678.79	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.59	258	156876m	522.43	ng/mL	
64) Naphthobenzothiophene	42.88	234	63649	228.58	ng/ml#	75
65) Naphthobenzothiophene-2,1-	42.88	234	63649	228.58	ng/mL#	75
66) Naphthobenzothiophene-1,2-	43.22	234	14129m	50.74	ng/mL	
67) Naphthobenzothiophene-2,3-	43.52	234	5579	20.04	ng/mL#	100
68) C1-Naphthobenzothiophenes	44.28	248	218899m	786.11	ng/ml	
69) C2-Naphthobenzothiophenes	46.28	262	270069m	969.88	ng/ml	
70) C3-Naphthobenzothiophenes	47.92	276	186033m	668.08	ng/ml	
71) C4-Naphthobenzothiophenes	49.06	290	125493m	450.67	ng/mL	
73) Benz[a]anthracene	43.81	228	1676m	5.91	ng/mL	
74) Chrysene	43.94	228	66964m	234.94	ng/mL	
75) Chrysene/Triphenylene	43.94	228	67094m	235.40	ng/mL	
76) C1-Chrysenes	45.44	242	116392m	408.36	ng/mL	
77) C2-Chrysenes	46.88	256	143599m	503.82	ng/mL	
78) BBF-d12 Surr BKGD	47.82	256	8100	28.42	ng/mL	100
79) C3-Chrysenes	50.42	270	129761m	455.27	ng/mL	
80) C4-Chrysenes	50.51	284	80406m	282.11	ng/mL	
82) Benzo[b]fluoranthene	47.91	252	8808m	28.90	ng/mL	
85) Benzo[e]pyrene	48.98	252	19841	67.53	ng/mL#	89
86) Benzo[a]pyrene	49.18	252	3793m	12.91	ng/mL	
87) Perylene	49.52	252	877m	2.99	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.39	276	1633m	5.61	ng/mL	
89) Dibenz[a,h]anthracene	54.42	278	1597m	5.83	ng/mL	
90) Benzo[g,h,i]perylene	55.80	276	5433	17.90	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.36	191	77182m	787.62	ng/mL	
92) Hopane (T19)	53.36	191	76631m	782.00	ng/mL	
93) C23 Tricyclic Terpane (T4)	41.48	191	32272m	329.33	ng/ml	
94) C24 Tricyclic Terpane (T5)	42.20	191	21350	217.87	ng/ml	100
95) C25 Tricyclic Terpane (T6)	43.73	191	20626m	210.48	ng/ml	
96) C24 Tetracyclic Terpane (T	45.03	191	6969m	71.12	ng/ml	
97) C26 Tricyclic Terpane-22S	44.75	191	6495m	66.28	ng/ml	
98) C26 Tricyclic Terpane-22R	44.83	191	6610m	67.45	ng/ml	
99) C28 Tricyclic Terpane-22S	47.13	191	7199m	73.46	ng/ml	
100) C28 Tricyclic Terpane-22R	47.30	191	7914m	80.76	ng/ml	
101) C29 Tricyclic Terpane-22S	47.85	191	9646m	98.44	ng/ml	
102) C29 Tricyclic Terpane-22R	48.06	191	9484m	96.78	ng/ml	
103) 18a-22,29,30-Trisnorneohop	49.29	191	13753m	140.35	ng/ml	
104) C30 Tricyclic Terpane-22S	49.34	191	5787m	59.05	ng/mL	
105) C30 Tricyclic Terpane-22R	49.60	191	5644m	57.60	ng/mL	
106) 17a(H)-22,29,30-Trisnorhop	49.88	191	17071m	174.21	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27672.D
Acq On : 15 Jan 2006 4:03 am
Operator : NLJr
Sample : SO011706AWS01
Misc : ANS2011301 ANS
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 17 12:32:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 12:08:00 2006
Response via : Initial Calibration

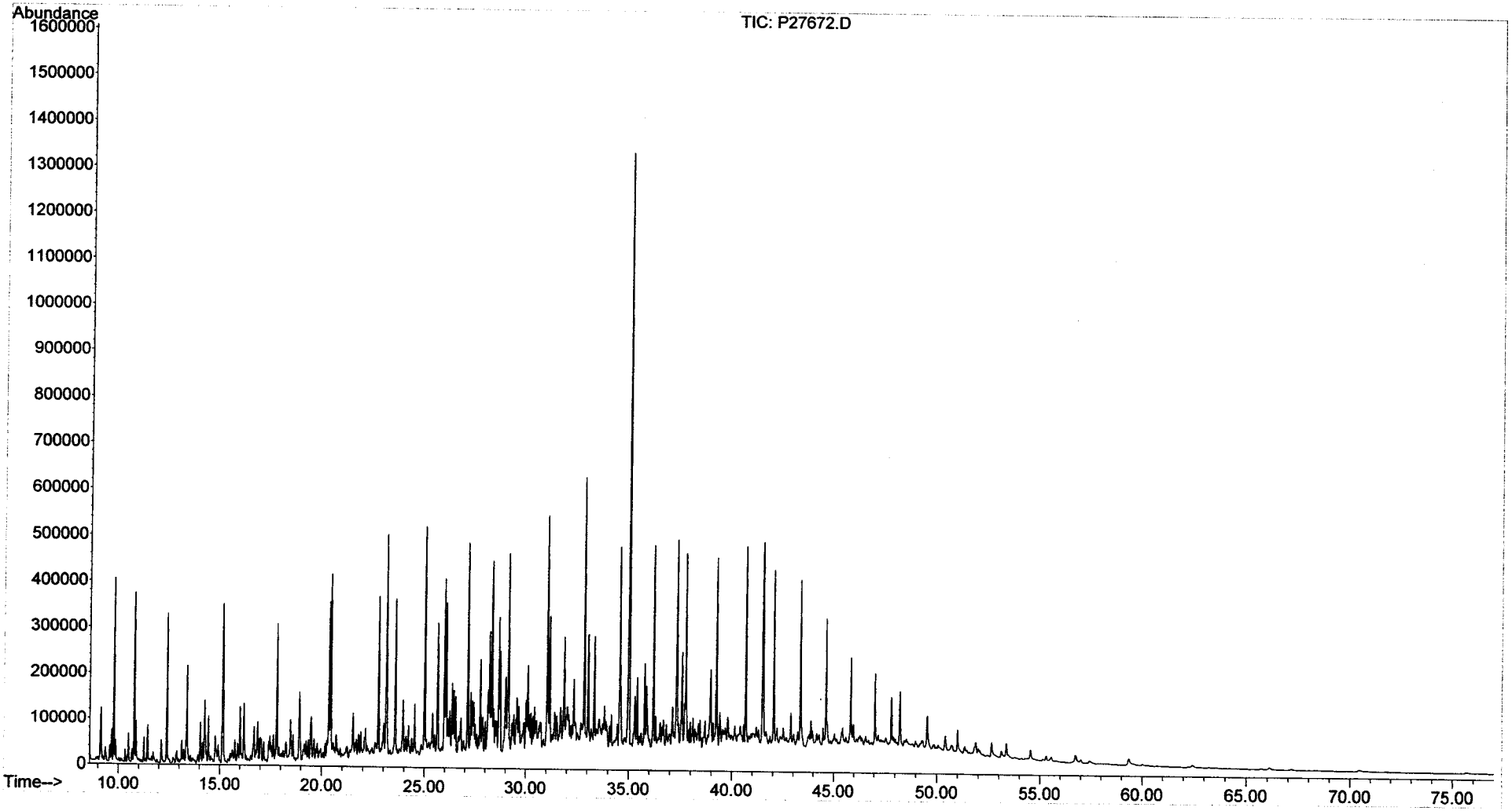
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	51.17	191	2797	28.54 ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.89	191	2670m	27.25 ng/ml	
109) 30-Norhopane (T15)	51.87	191	42464m	433.34 ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.98	191	8425m	85.98 ng/ml	
111) 17a(H)-Diahopane (X)	52.11	191	5341m	54.50 ng/ml	
112) 30-Normoretane (T17)	52.73	191	4025m	41.07 ng/ml	
114) Moretane (T20)	54.11	191	6303m	64.32 ng/ml	
115) 30-Homohopane-22S (T21)	55.30	191	34870	355.84 ng/ml	100
116) 30-Homohopane-22R (T22)	55.56	191	28054	286.28 ng/ml	100
117) 30,31-Bishomohopane-22S (T	57.01	191	24629	251.33 ng/ml	100
118) 30,31-Bishomohopane-22R (T	57.43	191	17922	182.89 ng/ml	100
119) 30,31-Trishomohopane-22S (	59.35	191	17590	179.50 ng/ml	100
120) 30,31-Trishomohopane-22R (	60.04	191	11729	119.69 ng/ml	100
121) Tetrakishomohopane-22S (T3	62.25	191	14562	148.60 ng/ml	100
122) Tetrakishomohopane-22R (T3	63.24	191	9420	96.13 ng/ml	100
123) Pentakishomohopane-22S (T3	65.71	191	15060	153.68 ng/ml	100
124) Pentakishomohopane-22R (T3	67.13	191	10265m	104.75 ng/ml	
126) 13b(H),17a(H)-20S-Diachole	45.96	217	12241m	267.95 ng/ml	
127) 13b(H),17a(H)-20R-Diachole	46.38	217	5286m	115.71 ng/ml	
128) 13b,17a-20S-Methyldiachole	47.09	217	5406m	118.33 ng/ml	
129) 14a(H),17a(H)-20S-Cholesta	47.99	217	7136m	156.20 ng/ml	
130) 14a(H),17a(H)-20R-Cholesta	48.55	217	18537m	405.76 ng/ml	
131) 13b,17a-20R-Ethyldiacholes	48.85	217	5006	109.58 ng/ml	100
132) 13a,17b-20S-Ethyldiacholes	49.13	217	1024	22.41 ng/ml	100
133) 14a,17a-20S-Methylcholesta	49.31	217	3107m	68.01 ng/ml	
134) 14a,17a-20R-Methylcholesta	50.08	217	8758m	191.71 ng/ml	
135) 14a(H),17a(H)-20S-Ethylcho	50.45	217	12483m	273.25 ng/ml	
136) 14a(H),17a(H)-20R-Ethylcho	51.43	217	10127m	221.67 ng/ml	
137) 14b(H),17b(H)-20R-Cholesta	48.09	218	10116m	221.43 ng/ml	
138) 14b(H),17b(H)-20S-Cholesta	48.19	218	10563m	231.22 ng/ml	
139) 14b,17b-20R-Methylcholesta	49.48	218	11362m	248.71 ng/ml	
140) 14b,17b-20S-Methylcholesta	49.57	218	12877m	281.87 ng/ml	
141) 14b(H),17b(H)-20R-Ethylcho	50.72	218	15475m	338.74 ng/ml	
142) 14b(H),17b(H)-20S-Ethylcho	50.74	218	10848m	237.46 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27672.D
Acq On : 15 Jan 2006 4:03 am
Operator : NLJr
Sample : SO011706AWS01
Misc : ANS2011301 ANS
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 17 12:32:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 12:08:00 2006
Response via : Initial Calibration



Form III
Spike Recovery Summary
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: **0601040**
Lab ID: **SS012506AWS01**
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
Hopane	118.8	160	134	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.

01/27/06 16:11

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: **0601040**
Lab ID: **SS012506AWS01**
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	01/12/06	100	0.051	10	1	AC

Parameter	Result		Parameter	Result
C23 Tricyclic Terpane	66		30,31-Bishomohopane-22S	53
C24 Tricyclic Terpane	45		30,31-Bishomohopane-22R	39
C25 Tricyclic Terpane	42		30,31-Trishomohopane-22S	39
C24 Tetracyclic Terpane	13		30,31-Trishomohopane-22R	25
C26 Tricyclic Terpane-22S	16		Tetrakishomohopane-22S	28
C26 Tricyclic Terpane-22R	16		Tetrakishomohopane-22R	20
C28 Tricyclic Terpane-22S	14		Pentakishomohopane-22S	29
C28 Tricyclic Terpane-22R	17		Pentakishomohopane-22R	22
C29 Tricyclic Terpane-22S	21		13b(H),17a(H)-20S-Diacholestane	56
C29 Tricyclic Terpane-22R	22		13b(H),17a(H)-20R-Diacholestane	26
18a-22,29,30-Trisnorneohopane-TS	30		13b,17a-20S-Methyldiacholestane	24
C30 Tricyclic Terpane-22S	16		14a(H),17a(H)-20S-Cholestane	27
C30 Tricyclic Terpane-22R	16		14a(H),17a(H)-20R-Cholestane	90
17a(H)-22,29,30-Trisnorhopane-TM	37		13b,17a-20R-Ethyldiacholestane	20
17a/b,21b/a 28,30-Bisnorhopane	5.6		13a,17b-20S-Ethyldiacholestane	5.2
17a(H),21b(H)-25-Norhopane	7.1		14a,17a-20S-Methylcholestane	17
30-Norhopane	93		14a,17a-20R-Methylcholestane	42
18a(H)-30-Norneohopane-C29Ts	21		14a(H),17a(H)-20S-Ethylcholestane	55
17a(H)-Diahopane	11		14a(H),17a(H)-20R-Ethylcholestane	46
30-Normoretane	11		14b(H),17b(H)-20R-Cholestane	48
18a(H)&18b(H)-Oleananes	0.55	U	14b(H),17b(H)-20S-Cholestane	47
Hopane	160		14b,17b-20R-Methylcholestane	48
Moretane	14		14b,17b-20S-Methylcholestane	64
30-Homohopane-22S	74		14b(H),17b(H)-20R-Ethylcholestane	73
30-Homohopane-22R	60		14b(H),17b(H)-20S-Ethylcholestane	47

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

01/27/06 16:11

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN11\
Data File : P34770.D
Acq On : 12 Jan 2006 2:32 am
Operator : AC
Sample : SS012506AWS01
Misc : ANS3011101
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 25 12:12:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/25/06

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	43.37	240	70030	500.00 ng/mL	-0.04
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	43.93	217	33089m	1124.26 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	112.43%	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	48689m	809.05 ng/mL	
84) Hopane (T19)	52.50	191	48881m	812.25 ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	20159m	334.98 ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	13909	231.12 ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	12863m	213.74 ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	4087	67.91 ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	4764m	79.16 ng/ml	
90) C26 Tricyclic Terpane-22R	44.32	191	4866m	80.86 ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	4320m	71.78 ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	5254	87.30 ng/ml	100
93) C29 Tricyclic Terpane-22S	47.29	191	6514m	108.24 ng/ml	
94) C29 Tricyclic Terpane-22R	47.49	191	6824m	113.39 ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	9295	154.45 ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	4858m	80.72 ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	4756m	79.03 ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	11399	189.41 ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.43	191	1702m	28.28 ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	2188	36.36 ng/ml	100
101) 30-Norhopane (T15)	51.10	191	28539	474.23 ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.20	191	6373m	105.90 ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	3346	55.60 ng/ml	100
104) 30-Normoretane (T17)	51.89	191	3333	55.38 ng/ml	100
106) Moretane (T20)	53.20	191	4341m	72.13 ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	22669	376.69 ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	18500m	307.41 ng/ml	
109) 30,31-Bishomohopane-22S (T	55.91	191	16187	268.98 ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	12050	200.23 ng/ml	100
111) 30,31-Trishomohopane-22S (	58.09	191	12088m	200.86 ng/ml	
112) 30,31-Trishomohopane-22R (	58.73	191	7754m	128.85 ng/ml	
113) Tetrakishomohopane-22S (T3	60.79	191	8432	140.11 ng/ml	100
114) Tetrakishomohopane-22R (T3	61.70	191	5982	99.40 ng/ml	100
115) Pentakishomohopane-22S (T3	64.01	191	8806m	146.33 ng/ml	
116) Pentakishomohopane-22R (T3	65.32	191	6839m	113.64 ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	8350	283.71 ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	3834m	130.27 ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	3541m	120.31 ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	4085m	138.80 ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	13500m	458.69 ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	2996	101.79 ng/ml	100
124) 13a,17b-20S-Ethyldiacholes	48.51	217	785m	26.67 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN11\
Data File : P34770.D
Acq On : 12 Jan 2006 2:32 am
Operator : AC
Sample : SS012506AWS01
Misc : ANS3011101
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 25 12:12:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

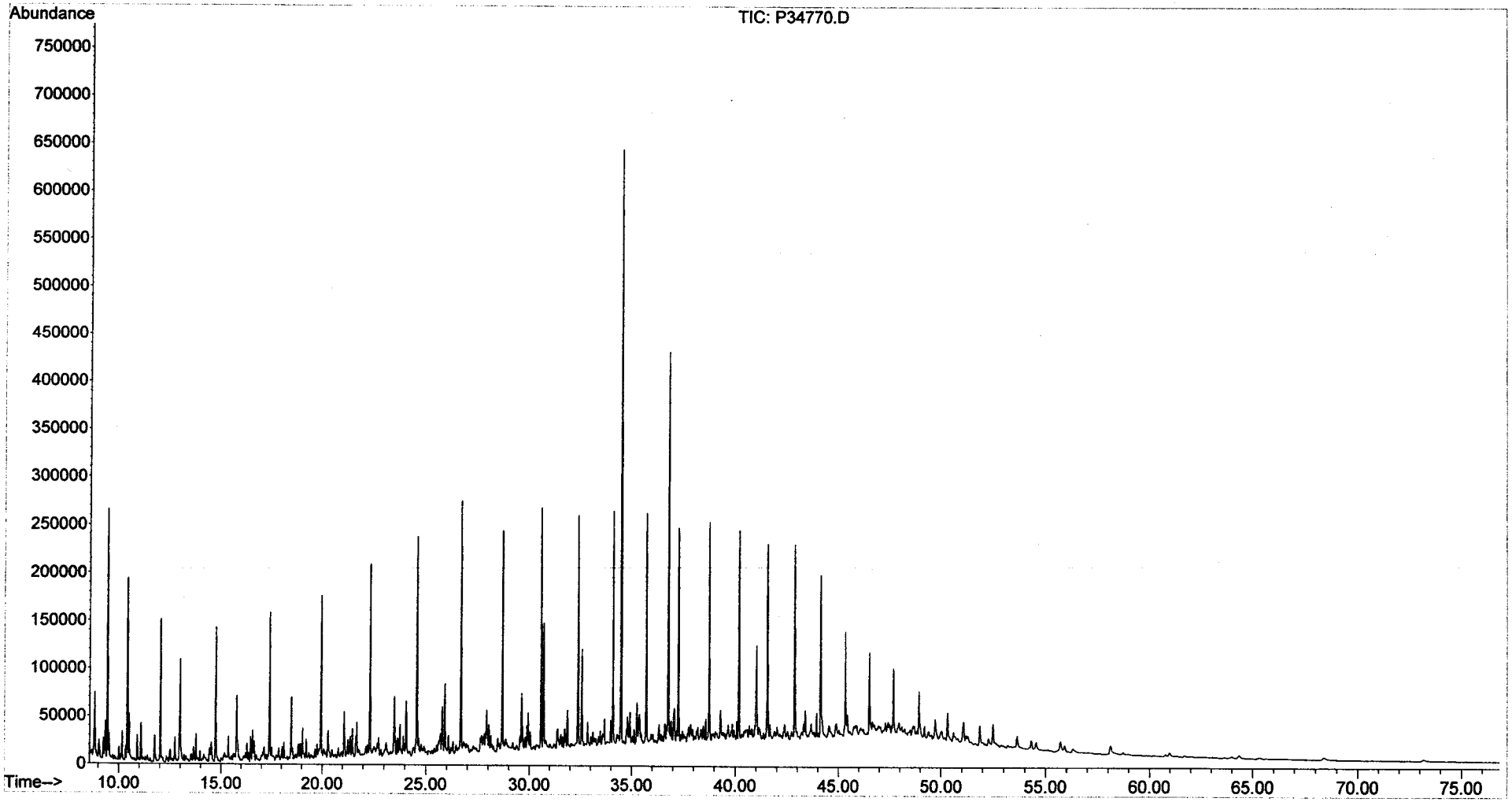
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.68	217	2524m	85.76 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	6356m	215.96 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	8252m	280.38 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	6836m	232.27 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	7198m	244.56 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	7077m	240.45 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	7244m	246.13 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	9665m	328.39 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	10882	369.74 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	6995m	237.67 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN11\
Data File : P34770.D
Acq On : 12 Jan 2006 2:32 am
Operator : AC
Sample : SS012506AWS01
Misc : ANS3011101
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 25 12:12:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Sequence Name: C:\MSDChem\1\sequence\S2011801A.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN18A\

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

Line	Sample Name/Misc Info				
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27743	FRNC2B	DCM
5)	Sample	1	P27744	FRNC2B	pah std
6)	RearSamp	52	P27745	FRNC2B	C2011801-AFID
7)	Sample	2	P27746	FRNC2B	C2011801 PASS
8)	RearSamp	53	P27747	FRNC2B	ANS2011801-AFID
9)	Sample	3	P27748	FRNC2B	ANS2011801
10)	Pause				
11)	RearSamp	54	P27749	FRNC2B	LCS CHECK-AFID
12)	Sample	4	P27750	FRNC2B	DCM
13)	RearSamp	55	P27751	FRNC2B	BIO CHECK-AFID
14)	Sample	5	P27752	FRNC2B	LCS CHECK
15)	RearSamp	56	P27753	FRNC2B	BIO CHECK-AFID
16)	Sample	6	P27754	FRNC2B	BIO CHECK
17)	RearSamp	57	P27755	FRNC2B	SO011006LCS01-AFID
18)	Sample	7	P27756	FRNC2B	0512128-04-RE2
19)	RearSamp	58	P27757	FRNC2B	C2011802-AFID
20)	Sample	8	P27758	FRNC2B	0512128-05-RE2 remake & rerun
21)	RearSamp	59	P27759	FRNC2B	DCM-AFID these dilutions
22)	Sample	9	P27760	FRNC2B	0512128-01-RE2
23)	RearSamp	60	P27761	FRNC2B	DCM-AFID
24)	Sample	10	P27762	FRNC2B	0512128-02-RE2
25)	RearSamp	61	P27763	FRNC2B	DCM-AFID
26)	Sample	11	P27764	FRNC2B	DCM
27)	RearSamp	62	P27765	FRNC2B	DCM-AFID
28)	Sample	12	P27766	FRNC2B	C2011802 PASS
29)	RearSamp	63	P27767	FRNC2B	DCM-AFID
30)	Sample	13	P27768	FRNC2B	DCM
31)	RearSamp	64	P27769	FRNC2B	C2011803-AFID
32)	Sample	14	P27770	FRNC2B	SS010606B04 rerun
33)	Pause				
34)	RearSamp	65	P27771	FRNC2B	DCM-AFID
35)	Sample	15	P27772	FRNC2B	C2011803 PASS
36)	RearSamp	66	P27773	FRNC2B	DCM-AFID
37)	Sample	16	P27774	FRNC2B	DCM
38)	RearSamp	67	P27775	FRNC2B	SS011306B04-AFID
39)	Sample	17	P27776	FRNC2B	SS010606B04 ✓
40)	RearSamp	68	P27777	FRNC2B	SS011306LCS02-AFID
41)	Sample	18	P27778	FRNC2B	SO011006B01 ✓
42)	RearSamp	69	P27779	FRNC2B	SS011306LCSD02-AFID
43)	Sample	19	P27780	FRNC2B	SS010606LCS04 ✓

✓ run used

Reduns clean + Rerun 1/30/06

MS 1/23/06

PAH2 0113.rd 1/30/06

Last Modified: Tue Jan 17 15:44:30 2006

Sequence Name: C:\MSDChem\1\sequence\S2011801A.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	70	P27781	FRNC2B	0601040-01-AFID
45)	Sample	20	P27782	FRNC2B	SS010606LCSD03 ✓
46)	RearSamp	71	P27783	FRNC2B	0601040-02-AFID
47)	Sample	21	P27784	FRNC2B	SO011006LCS01 ✓
48)	RearSamp	72	P27785	FRNC2B	0601040-03-AFID
49)	Sample	22	P27786	FRNC2B	SO011006LCSD01 ✓
50)	RearSamp	73	P27787	FRNC2B	0601040-04-AFID
51)	Sample	23	P27788	FRNC2B	0512128-03 ✓
52)	RearSamp	74	P27789	FRNC2B	0601040-04D-AFID
53)	Sample	24	P27790	FRNC2B	0512128-03D ✓
54)	RearSamp	75	P27791	FRNC2B	0601040-05-AFID
55)	Sample	25	P27792	FRNC2B	C2011804 PASS
56)	RearSamp	76	P27793	FRNC2B	C2011804-AFID
57)	Sample	26	P27794	FRNC2B	DCM
58)	Pause				
59)	RearSamp	77	P27795	FRNC2B	DCM-AFID
60)	Sample	27	P27796	FRNC2B	0512128-01-RE3 ✓
61)	RearSamp	78	P27797	FRNC2B	DCM-AFID
62)	Sample	28	P27798	FRNC2B	0512128-02-RE3 ✓
63)	RearSamp	79	P27799	FRNC2B	DCM-AFID
64)	Sample	29	P27800	FRNC2B	0512128-04-RE3 ✓
65)	RearSamp	80	P27801	FRNC2B	DCM-AFID
66)	Sample	30	P27802	FRNC2B	0512128-05-RE3 ✓
67)	RearSamp	81	P27803	FRNC2B	DCM-AFID
68)	Sample	31	P27804	FRNC2B	C2011805 PASS
69)	RearSamp	82	P27805	FRNC2B	DCM-AFID
70)	Sample	32	P27806	FRNC2B	0601040-01-RE ✓
71)	RearSamp	83	P27807	FRNC2B	DCM-AFID
72)	Sample	33	P27808	FRNC2B	0601040-02-RE ✓
73)	RearSamp	84	P27809	FRNC2B	DCM-AFID
74)	Sample	34	P27810	FRNC2B	0601040-03-RE ✓
75)	RearSamp	85	P27811	FRNC2B	DCM-AFID
76)	Sample	35	P27812	FRNC2B	0601040-04-RE ✓
77)	RearSamp	86	P27813	FRNC2B	DCM-AFID
78)	Sample	36	P27814	FRNC2B	0601040-04D-RE ✓
79)	RearSamp	87	P27815	FRNC2B	DCM-AFID
80)	Sample	37	P27816	FRNC2B	0601040-05-RE ✓
81)	RearSamp	88	P27817	FRNC2B	DCM-AFID
82)	Sample	38	P27818	FRNC2B	C2011806 PASS
83)	RearSamp	89	P27819	FRNC2BF	ROB ALK FID
84)	Sample	39	P27820	FRNC2BF	DCM FULL SCN
85)	RearSamp	90	P27821	FRNC2B	ROB ALK FID
86)	Sample	40	P27822	FRNC2B	ROB BLK
87)	RearSamp	91	P27823	FRNC2B	GRIPPER
88)	Sample	41	P27824	FRNC2B	CONTAM BLK
89)	RearSamp	41	P27825	FRNC2BF	CONTAM BLK-AFID
90)	Sample	42	P27826	FRNC2BF	GRIPPER FULL SCN
91)	RearSamp	93	P27827	FRNC2B	DCM
92)	Sample	42	P27828	FRNC2B	GRIPPER SIM
93)	RearSamp	94	P27829	FRNC2B	DCM
94)	Sample	44	P27830	FRNC2B	DCM
95)	RearSamp	95	P27831	FRNC2B	DCM LOT CHECK
96)	Sample	45	P27832	FRNC2B	DCM LOT CHECK

✓ good runs

MS 1/23/06

Injection Log

Directory: C:\MSDCHEM\1\DATA\JANUARY06\JAN23

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	P27834.d	0.	PAH STD	B52E28	23 Jan 2006 11:46
2	2	P27836.d	0.	PAH STD		23 Jan 2006 13:34
3	3	P27838.d	0.	C2012301 PASS	PAH STD	23 Jan 2006 15:16
4	4	P27840.d	0.	ANS2012301	ANS	23 Jan 2006 16:57
5	5	P27842.d	0.	DCM	DCM	23 Jan 2006 18:33
6	6	P27844.d	0.	DCM	DCM	23 Jan 2006 20:10
7	7	P27846.d	0.	SS011306B04	1X ETR0601040	23 Jan 2006 21:46
8	8	P27848.d	0.	SS011106B01 ✓	1X ETR0601019	23 Jan 2006 23:22
9	9	P27850.d	0.	SS011306LCS02	1X ETR0601040	24 Jan 2006 00:59
10	10	P27852.d	0.	SS011306LCSD02	1X ETR0601040	24 Jan 2006 02:38
11	11	P27854.d	0.	SS011106LCS01 ✓	1X ETR0601019	24 Jan 2006 04:16
12	12	P27856.d	0.	SS011106LCSD01 ✓	1X ETR0601019	24 Jan 2006 05:54
13	13	P27858.d	0.	C2012302 PASS	PAH STD	24 Jan 2006 07:32
14	14	P27860.d	0.	0601019-01-RE ✓	10X	24 Jan 2006 09:08
15	15	P27862.d	0.	0601019-02-RE ✓	10X	24 Jan 2006 11:50
16	16	P27864.d	0.	0601019-03-RE ✓	10X	24 Jan 2006 13:24
17	17	P27866.d	0.	0601019-03D-RE ✓ ✓ rerunned	10X	24 Jan 2006 14:58
18	18	P27868.d	0.	0601019-04-RE ✓	10X	24 Jan 2006 16:35
19	19	P27870.d	0.	0601019-05-RE ✓	10X	24 Jan 2006 18:11
20	20	P27872.d	0.	0601019-06-RE ✓	10X	24 Jan 2006 19:41
21	21	P27874.d	0.	0601019-07-RE ✓	10X	24 Jan 2006 21:21
22	22	P27876.d	0.	0601019-08-RE ✓	10X	24 Jan 2006 22:57
23	23	P27878.d	0.	0601019-09-RE ✓	10X	25 Jan 2006 00:33
24	24	P27880.d	0.	C2012303 PASS	PAH STD	25 Jan 2006 02:09
25	25	P27882.d	0.	0601019-10-RE ✓	10X	25 Jan 2006 03:46
26	26	P27884.d	0.	0601019-11-RE ✓	10X	25 Jan 2006 05:22
27	27	P27886.d	0.	0601040-05-RE ✓	100X	25 Jan 2006 06:59
28	28	P27888.d	0.	C2012304 PASS	PAH STD	25 Jan 2006 08:36
29	29	P27890.d	0.	DCM	DCM	25 Jan 2006 10:13
30	30	P27892.d	0.	SS011306B04	1X ETR0601040	25 Jan 2006 12:03
31	100	P27892b.d	0.	PAH STD RT CHECK	RT CHECK	25 Jan 2006 13:57
32	100	P27892d.d	0.	C3012304A PASS	PAH STD	25 Jan 2006 15:48
33	31	P27894.d	0.	DCM	DCM	25 Jan 2006 17:27
34	32	P27896.d	0.	SS011306B04 ✓	1X ETR0601040 RERUN	25 Jan 2006 20:28
35	33	P27898.d	0.	SS011306LCS02 ✓	1X ETR0601040	25 Jan 2006 22:05
36	34	P27900.d	0.	SS011306LCSD02 ✓	1X ETR0601040	25 Jan 2006 23:41
37	35	P27902.d	0.	C2012305 PASS not needed	PAH STD	26 Jan 2006 01:19
38	36	P27904.d	0.	0601040-01 ✓	1X	26 Jan 2006 02:56
39	37	P27906.d	0.	0601040-02 ✓	1X	26 Jan 2006 04:33
40	38	P27908.d	0.	0601040-03 ✓	1X	26 Jan 2006 06:10
41	39	P27910.d	0.	0601040-04 ✓	PAH STD	26 Jan 2006 07:49
42	40	P27912.d	0.	0601040-04D ✓	1X	26 Jan 2006 09:24
43	41	P27914.d	0.	C2012306 PASS	PAH STD	26 Jan 2006 11:00
44	42	P27916.d	0.	ANS2012302	ANS	26 Jan 2006 12:36
45	43	P27918.d	0.	DCM	DCM	26 Jan 2006 14:12
46	1	P27920.d	0.	0601019-02-RE ✓	100X	26 Jan 2006 16:13
47	2	P27922.d	0.	0601019-04-RE ✓	100X	26 Jan 2006 17:50
48	3	P27924.d	0.	0601019-05-RE ✓	100X	26 Jan 2006 19:27
49	4	P27926.d	0.	0601019-06-RE ✓	100X	26 Jan 2006 21:02
50	5	P27928.d	0.	C2012307 PASS	PAH STD	26 Jan 2006 22:36
51	6	P27930.d	0.	DCM	DCM	27 Jan 2006 00:11
52	7	P27932.d	0.	0601019-01 ✓	1X	27 Jan 2006 01:47
53	8	P27934.d	0.	0601019-03	1X PAH20113.M	27 Jan 2006 08:36
54	9	P27936.d	0.	0601019-03D	1X CW 1/30/06	27 Jan 2006 10:11
55	60	P27938.d	1.	C2042405-AFID		27 Jan 2006 11:48

MS 1/27/06

Sequence Name: C:\MSDChem\1\sequence\S3011801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN18\

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

Line			Sample Name/Misc Info			
1)	Sample	1	P34805	FRBIO3A	dcm	
2)	Sample	2	P34806	FRBIO3A	C3011801 PASS	5deg/min
3)	Sample	3	P34807	FRBIO3A	0512110-14	
4)	Sample	4	P34808	FRBIO3A	C3011802 PASS	
5)	Sample	4	P34809	FRBIO3B	C3011803 PASS	6deg/min
6)	Sample	5	P34810	FRBIO3B	dcm	
7)	Sample	6	P34811	FRBIO3B	SS010606B04 ✓	
8)	Sample	7	P34812	FRBIO3B	SO011006B01 ✓	
9)	Sample	8	P34813	FRBIO3B	0512128-01 ✓	
10)	Sample	9	P34814	FRBIO3B	0512128-02 ✓	
11)	Sample	10	P34815	FRBIO3B	0512128-03 ✓	
12)	Sample	11	P34816	FRBIO3B	0512128-03D ✓	
13)	Sample	12	P34817	FRBIO3B	0512128-04 ✓	✓ run used
14)	Sample	13	P34818	FRBIO3B	0512128-05 - see refractionated run.	
15)	Sample	14	P34819	FRBIO3B	C3011804 PASS	
16)	Sample	15	P34820	FRBIO3B	DCM	
17)	Sample	16	P34821	FRBIO3B	SS010306B11 ✓	
18)	Sample	17	P34822	FRBIO3B	0512124-01 ✓	
19)	Sample	18	P34823	FRBIO3B	0512124-02 ✓	
20)	Sample	19	P34824	FRBIO3B	0512124-03 ✓	
21)	Sample	20	P34825	FRBIO3B	0512124-04 ✓	
22)	Sample	21	P34826	FRBIO3B	0512124-04D ✓	
23)	Sample	22	P34827	FRBIO3B	0512124-05 ✓	
24)	Sample	23	P34828	FRBIO3B	0512124-06 ✓	
25)	Sample	24	P34829	FRBIO3B	0512124-07 ✓	
26)	Sample	25	P34830	FRBIO3B	0512124-08 ✓	
27)	Sample	26	P34831	FRBIO3B	C3011805 PASS	
28)	Sample	27	P34832	FRBIO3B	DCM	
29)	Sample	28	P34833	FRBIO3B	SS011106B01 ✓	
30)	Sample	29	P34834	FRBIO3B	0601019-01 SS Low - ReSi Cleant ReRun	CT 1/30/06
31)	Sample	30	P34835	FRBIO3B	0601019-02 ✓	
32)	Sample	31	P34836	FRBIO3B	0601019-03 ✓	
33)	Sample	32	P34837	FRBIO3B	0601019-03D ✓	
34)	Sample	33	P34838	FRBIO3B	0601019-04 ✓	
35)	Sample	34	P34839	FRBIO3B	0601019-05 ✓	
36)	Sample	35	P34840	FRBIO3B	0601019-06 ✓	
37)	Sample	36	P34841	FRBIO3B	0601019-07 ✓	
38)	Sample	37	P34842	FRBIO3B	0601019-08 ✓	
39)	Sample	38	P34843	FRBIO3B	0601019-09 ✓	
40)	Sample	39	P34844	FRBIO3B	0601019-10 ✓	
41)	Sample	40	P34845	FRBIO3B	0601019-11 ✓	
42)	Sample	41	P34846	FRBIO3B	C3011806 PASS	
43)	Sample	42	P34847	FRBIO3B	DCM	

B1030111.M
CT 1/30/06

MS
1/23/06

Last Modified: Sun Jan 15 13:41:44 2006

Sequence Name: C:\MSDChem\1\sequence\S3011801.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	43	P34848	FRBIO3B	DCM
45)	Sample	44	P34849	FRBIO3B	SS011306B04 ✓
46)	Sample	45	P34850	FRBIO3B	0601040-01 ✓
47)	Sample	46	P34851	FRBIO3B	0601040-02 ✓
48)	Sample	47	P34852	FRBIO3B	0601040-03 ✓
49)	Sample	48	P34853	FRBIO3B	0601040-04 ✓
50)	Sample	49	P34854	FRBIO3B	0601040-04D ✓
51)	Sample	50	P34855	FRBIO3B	0601040-~~04D~~ 05 SS High – Re Silica cleant Re Run cw 1/30/06
52)	Sample	51	P34856	FRBIO3B	C3011807 PASS
53)	Sample	52	P34857	FRBIO3B	DCM

MS 1/23/06

Last Modified: Sun Jan 15 13:41:44 2006

Sequence Name: C:\MSDChem\1\sequence\S3012301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN23\

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

Line			Sample Name/Misc Info			
1)	Sample	1	P34858	FRBIO3B	C3012301	PASS
2)	Sample	2	P34859	FRBIO3B	DCM	
3)	Sample	3	P34860	FRBIO3B	0601040-05	
4)	Sample	4	P34861	FRBIO3B	0512128-05 ✓	
5)	Sample	5	P34862	FRBIO3B	C3012302	PASS
6)	Sample	6	P34863	FRBIO3B	C3012303	
7)	Sample	7	P34864	FRBIO3B	C3012304	PASS
8)	Sample	8	P34865	FRBIO3B	dcm	
9)	Sample	9	P34866	FRBIO3B	0601019-01 ✓	
10)	Sample	10	P34867	FRBIO3B	0601040-05 ✓	
11)	Sample	11	P34868	FRBIO3B	C3012305	PASS

✓ run used

MS 1/24/06

B1030111.M 01/30/06

Last Modified: Mon Jan 23 05:56:53 2006

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: **0601040**
Lab ID: **SS011306B04**
Date Analyzed: **01/25/06 20:28**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-24 (12.6-13.4)	0601040-01E	01/20/06 20:31
GC-SED-23 (17.5-19)	0601040-02E	01/20/06 22:11
GC-SED-104 (3.7-5.1)	0601040-04E	01/21/06 01:31
GC-SED-104 (3.7-5.1)	0601040-04E D	01/21/06 03:12
GC-SED-64D (2-4)	0601040-05	01/21/06 04:53
GC-SED-64D (2-4)	0601040-05E	01/25/06 06:59
LCS	SS011306LCS02	01/25/06 22:05
LCSD	SS011306LCSD02	01/25/06 23:41
GC-SED-24 (12.6-13.4)	0601040-01	01/26/06 02:56
GC-SED-23 (17.5-19)	0601040-02	01/26/06 04:33
GC-SED-20 (4-5)	0601040-03	01/26/06 06:10
GC-SED-104 (3.7-5.1)	0601040-04	01/26/06 07:49
GC-SED-104 (3.7-5.1)	0601040-04 D	01/26/06 09:24

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: **0601040**
Lab ID: **SS011306B04**
Date Analyzed: **01/21/06 23:54**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-24 (12.6-13.4)	0601040-01	01/22/06 01:24
GC-SED-23 (17.5-19)	0601040-02	01/22/06 02:54
GC-SED-20 (4-5)	0601040-03	01/22/06 04:22
GC-SED-104 (3.7-5.1)	0601040-04	01/22/06 05:52
GC-SED-104 (3.7-5.1)	0601040-04 D	01/22/06 07:21
GC-SED-64D (2-4)	0601040-05	01/25/06 15:25

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\1\sequence\S2011301.S
Comment:
Operator: NLJr
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN13\

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

1/17/07

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	65	P27641	FRNC2B	ALK STD
5)	Sample	1	P27642	FRNC2B	PAH STD
6)	RearSamp	51	P27643	FRNC2B	C2011301-AFID
7)	Sample	1	P27644	FRNC2B	C2011301
8)	RearSamp	52	P27645	FRNC2B	ANS2011301-AFID
9)	Sample	2	P27646	FRNC2B	ANS2011301
10)	Pause				
11)	RearSamp	53	P27647	FRNC2B	HIGH PAH STD
12)	Sample	3	P27648	FRNC2B	DCM
13)	RearSamp	54	P27649	FRNC2B	DCM-AFID
14)	Sample	4	P27650	FRNC2B	DCM
15)	RearSamp	55	P27651	FRNC2B	DCM
16)	Sample	5	P27652	FRNC2B	*I2011301 ✓
17)	RearSamp	56	P27653	FRNC2B	SS010606B04
18)	Sample	6	P27654	FRNC2B	*I2011302 ✓
19)	RearSamp	57	P27655	FRNC2B	SO011006B01
20)	Sample	7	P27656	FRNC2B	*I2011303 ✓
21)	RearSamp	58	P27657	FRNC2B	SS010606LCS04
22)	Sample	8	P27658	FRNC2B	*I2011304 ✓
23)	RearSamp	59	P27659	FRNC2B	SS010606LCSD03
24)	Sample	9	P27660	FRNC2B	*I2011305 ✓ → Instrument error, sequence re-start
25)	RearSamp	50	P27661	FRNC2B	PRIMER-AFID
26)	Sample	49	P27662	FRNC2B	DCM
27)	RearSamp	50	P27663	FRNC2B	C2011302-AFID
28)	Sample	10	P27664	FRNC2B	PRIMER
29)	RearSamp	60	P27665	FRNC2B	SO011006LCS01 - mis-inject, re-analyze
30)	Sample	10	P27666	FRNC2B	*I2011306 ✓
31)	RearSamp	61	P27667	FRNC2B	SO0111006LCSD01
32)	Sample	11	P27668	FRNC2B	*I2011307 ✓
33)	RearSamp	62	P27669	FRNC2B	C2011303-AFID
34)	Sample	12	P27670	FRNC2B	*Q2011301
35)	RearSamp	63	P27671	FRNC2B	DCM-AFID
36)	Sample	13	P27672	FRNC2B	*ANS2011301 SO011706ANS01
37)	RearSamp	64	P27673	FRNC2B	0512128-01-AFID
38)	Sample	14	P27674	FRNC2B	LA2011301
39)	RearSamp	65	P27675	FRNC2B	0512128-02-AFID
40)	Sample	15	P27676	FRNC2B	SOURCE01
41)	RearSamp	66	P27677	FRNC2B	0512128-03-AFID
42)	Sample	16	P27678	FRNC2B	SFFS2011301
43)	RearSamp	67	P27679	FRNC2B	0512128-03D-AFID

*ICAL PAH20113.M

1/17/06

PAH #2 Sequence Information

SHC Continuing Calibration: WHAC10 Conc.: 50ug/mL
PAH Continuing Calibration: WHAC13 Conc.: 500ng/mL

Alaska North Slope Crude Standard: WHAB79 Conc.: 5.096mg/mL PAH20113.M

FID Process Method: HC20901.M PAH Process Method: ~~PAH21202~~.M

Last Modified: Mon Jan 16 14:50:45 2006

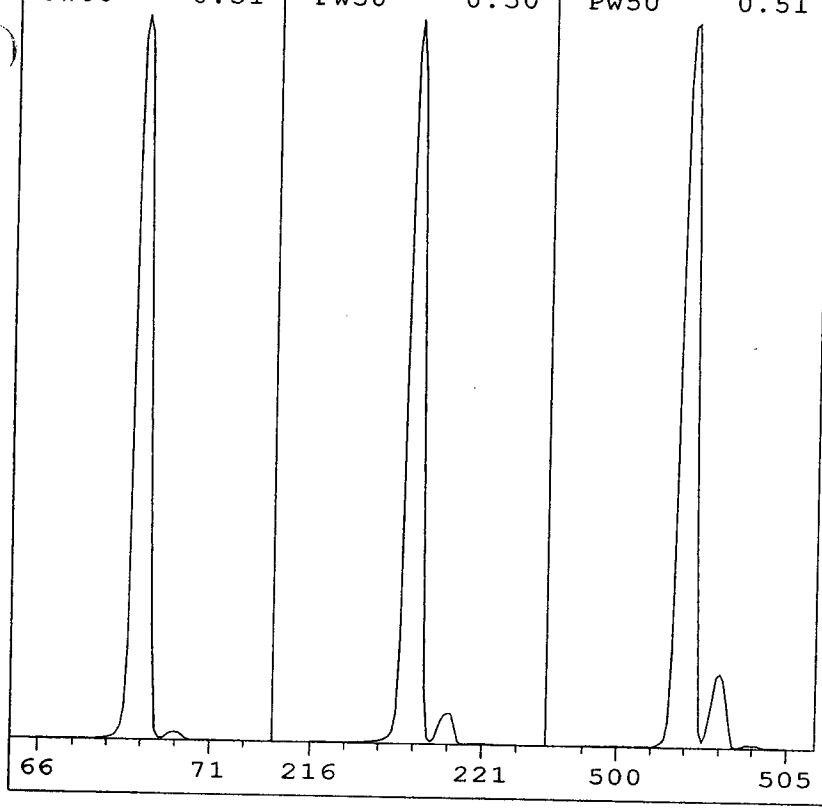
Sequence Name: C:\MSDChem\1\sequence\S2011301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	17	P27680	FRNC2B	SFFCO2011301
45)	RearSamp	68	P27681	FRNC2B	0512128-04-AFID
[illegible])	Sample	18	P27682	FRNC2B	DCM
[illegible])	RearSamp	69	P27683	FRNC2B	0512128-05-AFID
48)	Sample	19	P27684	FRNC2B	C2011301
49)	RearSamp	70	P27685	FRNC2B	C2011304-AFID
50)	Sample	20	P27686	FRNC2B	DCM
51)	RearSamp	71	P27687	FRNC2B	DCM-AFID
52)	Sample	21	P27688	FRNC2B	0512128-01-RE
53)	RearSamp	72	P27689	FRNC2B	DCM-AFID
54)	Sample	22	P27690	FRNC2B	0512128-02-RE
55)	RearSamp	71	P27691	FRNC2B	DCM-AFID
56)	Sample	23	P27692	FRNC2B	0512128-03-RE
57)	RearSamp	72	P27693	FRNC2B	DCM-AFID
58)	Sample	24	P27694	FRNC2B	0512128-03D-RE
59)	RearSamp	71	P27695	FRNC2B	DCM-AFID
60)	Sample	25	P27696	FRNC2B	0512128-04-RE
61)	RearSamp	72	P27697	FRNC2B	DCM-AFID
62)	Sample	26	P27698	FRNC2B	0512128-05-RE
63)	RearSamp	73	P27699	FRNC2B	DCM-AFID
64)	Sample	27	P27700	FRNC2B	C2011304
65)	RearSamp	73	P27701	FRNC2B	DCM-AFID
66)	Sample	28	P27702	FRNC2B	DCM
67)	RearSamp	74	P27703	FRNC2B	DCM-AFID did not inject [illegible]/17/07

Fri Jan 13 15:00:29 2006 5973 Tune 1/13/06

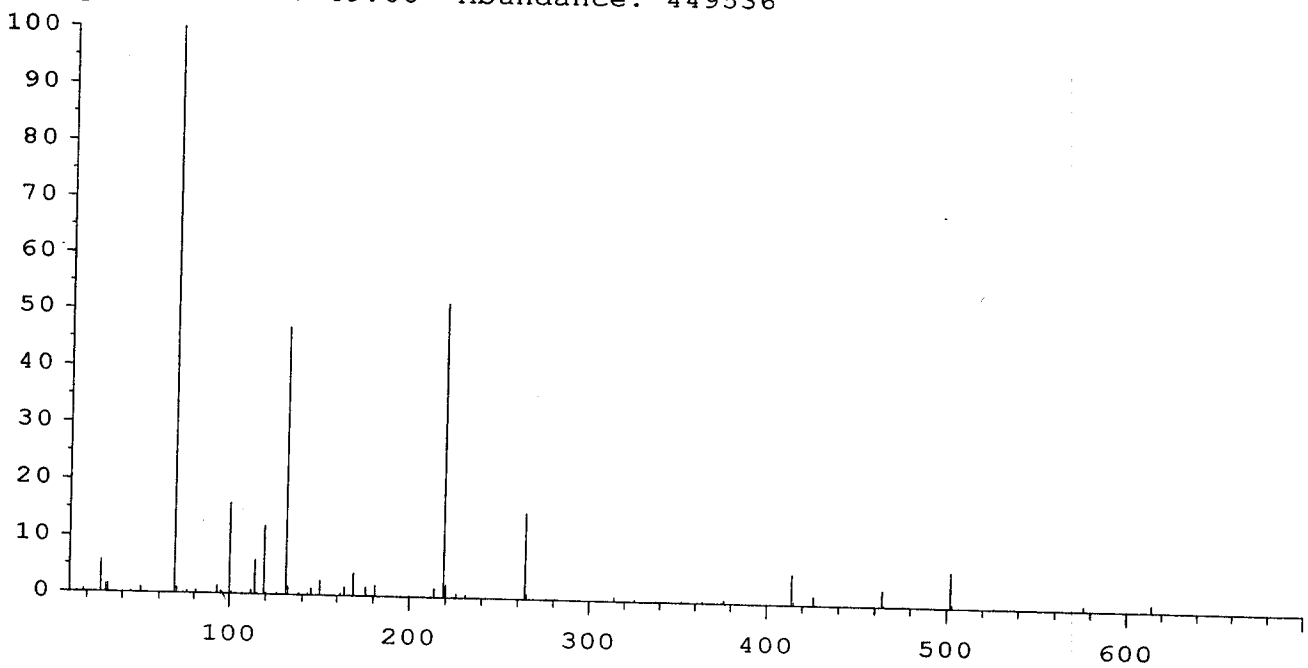
C:\MSDCHEM\1\5973N\PFTBA.U Instrument: PAHINST2

Mass	69.00	Mass	219.00	Mass	502.10
Ab	501471	Ab	267823	Ab	31528
Pw50	0.51	Pw50	0.50	Pw50	0.51



Ion Pol	POS	MassGain	132
		MassOffs	-12
Emission	34.6	AmuGain	2591
ElEnrgy	69.9	AmuOffs	131
Filament	1	Wid219	-0.038
		DC Pol	POS
Repeller	28.45		
IonFcus	81.6	HEDEnab	ON
EntLens	0.0	EMVolts	1553
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	Foreline	47
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
139 peaks Base: 69.00 Abundance: 449536



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	449536	100.00	70.00	5051	1.12
219.00	231744	51.55	220.00	9994	4.31
502.00	28032	6.24	503.00	2825	10.08

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	15.3	15.3	15.3	14.8	15.6	21.1
TARGET ABUND(%):	1.0	100.0	45.0	50.0	5.0	6.0
ACTUAL TUNE ABUND(%):	1.0	100.0	47.0	51.6	5.4	6.2

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\JAN06\
Method File : PAH20113.M
Title : Decalins & Alkylated PAH's
Last Update : Tue Jan 17 11:45:09 2006
Response Via : Initial Calibration

ms 1-17-06

Calibration Files
10 =P27652.D 25 =P27654.D 100 =P27656.D
500 =P27658.D 1250=P27660.D 5000=P27666.D 10,000=P27668

		Compound	10	25	100	500	1250	5000	Avg	%RSD
1)	i	Acenaphthene-d10	----------ISTD----------							
2)	t	Decalin							~~0.000#~~	~~1.00~~ NA
3)	A1	trans-Decalin	0.443	0.454	0.425	0.403	0.412	0.415	0.422	4.84
4)	t	cis-Decalin	0.319	0.328	0.322	0.307	0.313	0.314	0.315	2.65
5)	A2	C1-Decalins	0.443	0.454	0.425	0.403	0.412	0.415	0.422	4.84
6)	A2	C2-Decalins	0.443	0.454	0.425	0.403	0.412	0.415	0.422	4.84
7)	A2	C3-Decalins	0.443	0.454	0.425	0.403	0.412	0.415	0.422	4.84
8)	A2	C4-Decalins	0.443	0.454	0.425	0.403	0.412	0.415	0.422	4.84
9)	A1	Naphthalene	2.443	2.222	2.204	2.224	2.242	2.249	2.249	4.04
10)	A2	C1-Naphthalenes	2.443	2.222	2.204	2.224	2.242	2.249	2.249	4.04
11)	A2	C2-Naphthalenes	2.443	2.222	2.204	2.224	2.242	2.249	2.249	4.04
12)	A2	C3-Naphthalenes	2.443	2.222	2.204	2.224	2.242	2.249	2.249	4.04
13)	A2	C4-Naphthalenes	2.443	2.222	2.204	2.224	2.242	2.249	2.249	4.04
14)	s	2-Methylnaphthale	0.998	1.035	1.037	1.017	1.039	1.059	1.028	2.04
15)	t	2-Methylnaphthale	1.403	1.426	1.399	1.424	1.462	1.478	1.432	2.04
16)	t	1-Methylnaphthale	1.401	1.335	1.320	1.341	1.378	1.403	1.363	2.39
17)	A1	Benzothiophene	1.810	1.813	1.795	1.804	1.823	1.841	1.810	1.01
18)	A2	C1-Benzo(b)thioph	1.810	1.813	1.795	1.804	1.823	1.841	1.810	1.01
19)	A2	C2-Benzo(b)thioph	1.810	1.813	1.795	1.804	1.823	1.841	1.810	1.01
20)	A2	C3-Benzo(b)thioph	1.810	1.813	1.795	1.804	1.823	1.841	1.810	1.01
21)	A2	C4-Benzo(b)thioph	1.810	1.813	1.795	1.804	1.823	1.841	1.810	1.01
22)	t	Biphenyl	2.003	1.833	1.732	1.738	1.787	1.788	1.802	5.33
23)	t	2,6-Dimethylnapht	1.246	1.203	1.179	1.215	1.255	1.282	1.233	2.88
24)	t	Dibenzofuran	1.933	1.971	1.935	1.998	2.033	2.052	1.989	2.32
25)	t	Acenaphthylene	2.172	2.187	2.156	2.211	2.288	2.337	2.231	3.03
26)	t	Acenaphthene	1.364	1.378	1.326	1.349	1.385	1.401	1.368	1.80
27)	t	2,3,5-Trimethylna	1.077	1.072	1.027	1.056	1.091	1.114	1.076	2.67
28)	A1	Fluorene	1.659	1.565	1.540	1.567	1.613	1.641	1.599	2.72
29)	A2	C1-Fluorenes	1.659	1.565	1.540	1.567	1.613	1.641	1.599	2.72
30)	A2	C2-Fluorenes	1.659	1.565	1.540	1.567	1.613	1.641	1.599	2.72
31)	A2	C3-Fluorenes	1.659	1.565	1.540	1.567	1.613	1.641	1.599	2.72
32)	A1	Dibenzothiophene	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
33)	A2	4-Methyldibenzoth	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
34)	A2	2/3-Methyldibenzo	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
35)	A2	1-Methyldibenzoth	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
36)	A2	OTP	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
37)	A2	C1-Dibenzothiophe	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
38)	A2	C2-Dibenzothiophe	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
39)	A2	C3-Dibenzothiophe	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
40)	A2	C4-Dibenzothiophe	2.142	2.120	2.082	2.133	2.170	2.183	2.138	1.53
41)	A1	Phenanthrene	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
42)	A2	3-Methylphenanthr	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
43)	A2	2/4-Methylphenant	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
44)	A2	2-Methylanthracen	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
45)	A2	9-Methylphenanthr	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
46)	A2	1-Methylphenanthr	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
47)	A2	C1-Phenanthrenes/	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
48)	A2	C2-Phenanthrenes/	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
49)	A2	5AA IS BKGD	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
50)	A2	C3-Phenanthrenes/	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
51)	A2	C4-Phenanthrenes/	2.390	2.253	2.198	2.248	2.304	2.319	2.282	2.71
52)	t	Retene	0.556	0.509	0.480	0.494	0.520	0.537	0.518	5.03
53)	t	Anthracene	1.972	1.948	2.063	2.110	2.227	2.287	2.119	6.26
54)	t	Carbazole	1.967	1.810	1.880	2.022	2.118	2.195	2.020	7.08
55)	t	1-Methylphenanthr	1.508	1.524	1.543	1.579	1.638	1.664	1.583	3.84
56)	A1	Fluoranthene	2.379	2.377	2.344	2.451	2.498	2.540	2.435	2.94
57)	t	Benzo(b)fluorene	1.473	1.383	1.399	1.474	1.549	1.613	1.497	6.01

RF 2nd CV 1/2010

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\JAN06\
Method File : PAH20113.M
Title : Decalins & Alkylated PAH's
Last Update : Tue Jan 17 11:45:09 2006
Response Via : Initial Calibration

Calibration Files
10 =P27652.D 25 =P27654.D 100 =P27656.D
500 =P27658.D 1250=P27660.D 5000=P27666.D 10,000 - P27668 CT 1/20/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
58)	s	Pyrene-d10	2.045	2.043	2.042	2.141	2.161	2.215	2.114	3.30
59)	A1	Pyrene	2.485	2.408	2.377	2.488	2.560	2.605	2.494	3.24
60)	A2	C1-Fluoranthenes/	2.485	2.408	2.377	2.488	2.560	2.605	2.494	3.24
61)	A2	C2-Fluoranthenes/	2.485	2.408	2.377	2.488	2.560	2.605	2.494	3.24
62)	A2	C3-Fluoranthenes/	2.485	2.408	2.377	2.488	2.560	2.605	2.494	3.24
63)	A2	C4-Fluoranthenes/	2.485	2.408	2.377	2.488	2.560	2.605	2.494	3.24
64)	A1	Naphthobenzothiop	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
65)	A2	Naphthobenzothiop	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
66)	A2	Naphthobenzothiop	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
67)	A2	Naphthobenzothiop	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
68)	A2	C1-Naphthobenzoth	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
69)	A2	C2-Naphthobenzoth	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
70)	A2	C3-Naphthobenzoth	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
71)	A2	C4-Naphthobenzoth	2.301	2.236	2.209	2.283	2.359	2.430	2.313	3.39
72)	i	Chrysene-d12	----------ISTD----------							
73)	t	Benz[a]anthracene	1.415	1.385	1.408	1.412	1.460	1.484	1.428	2.36
74)	A1	Chrysene	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
75)	A2	Chrysene/Tripheny	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
76)	A2	C1-Chrysenes	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
77)	A2	C2-Chrysenes	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
78)	A2	BBF-d12 Surr BKGD	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
79)	A2	C3-Chrysenes	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
80)	A2	C4-Chrysenes	1.446	1.429	1.409	1.426	1.462	1.469	1.434	1.84
81)	s	Benzo[b]fluoranth	1.028	1.005	1.016	1.026	1.037	1.060	1.025	1.93
82)	t	Benzo[b]fluoranth	1.598	1.469	1.484	1.507	1.557	1.587	1.534	3.24
83)	A1	Benzo[k]fluoranth	1.544	1.591	1.568	1.582	1.663	1.681	1.604	3.13
84)	A2	Benzo[a]fluoranth	1.544	1.591	1.568	1.582	1.663	1.681	1.604	3.13
85)	t	Benzo[e]pyrene	1.464	1.501	1.459	1.468	1.496	1.511	1.478	1.62
86)	t	Benzo[a]pyrene	1.416	1.456	1.426	1.459	1.515	1.561	1.478	3.59
87)	t	Perylene	1.420	1.466	1.414	1.459	1.501	1.553	1.473	3.34
88)	t	Indeno[1,2,3-cd]p	1.544	1.404	1.385	1.417	1.484	1.530	1.465	4.31
89)	t	Dibenz[a,h]anthra	1.294	1.315	1.343	1.377	1.427	1.459	1.378	4.56
90)	t	Benzo[g,h,i]peryl	1.643	1.511	1.495	1.479	1.523	1.543	1.527	3.62
91)	A1	17a(H),21B(H)-hop	0.524 ✓	0.494	0.554	0.442	0.533	0.471	0.493	9.37 RF 2nd
92)	A2	Hopane (T19)	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37 CT 1/20/06
93)	A2	C23 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
94)	A2	C24 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
95)	A2	C25 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
96)	A2	C24 Tetracyclic T	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
97)	A2	C26 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
98)	A2	C26 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
99)	A2	C28 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
100)	A2	C28 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
101)	A2	C29 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
102)	A2	C29 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
103)	A2	18a-22,29,30-Tris	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
104)	A2	C30 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
105)	A2	C30 Tricyclic Ter	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
106)	A2	17a(H)-22,29,30-T	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
107)	A2	17a/b,21b/a 28,30	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
108)	A2	17a(H),21b(H)-25-	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
109)	A2	30-Norhopane (T15	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
110)	A2	18a(H)-30-Norneoh	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
111)	A2	17a(H)-Diahopane	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
112)	A2	30-Normoretane (T	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
113)	A2	18a(H)&18b(H)-Ole	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
114)	A2	Moretane (T20)	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\JAN06\
Method File : PAH20113.M
Title : Decalins & Alkylated PAH's
Last Update : Tue Jan 17 11:45:09 2006
Response Via : Initial Calibration

Calibration Files
10 =P27652.D 25 =P27654.D 100 =P27656.D
500 =P27658.D 1250=P27660.D 5000=P27666.D 10000=P27668 CV 1/20/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
115)	A2	30-Homohopane-22S	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
116)	A2	30-Homohopane-22R	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
117)	A2	30,31-Bishomohopa	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
118)	A2	30,31-Bishomohopa	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
119)	A2	30,31-Trishomohop	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
120)	A2	30,31-Trishomohop	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
121)	A2	Tetrakishomohopan	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
122)	A2	Tetrakishomohopan	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
123)	A2	Pentakishomohopan	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
124)	A2	Pentakishomohopan	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37
125)	SA1	5B(H)Cholane - Su	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
126)	A2	13b(H),17a(H)-20S	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
127)	A2	13b(H),17a(H)-20R	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
128)	A2	13b,17a-20S-Methy	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
129)	A2	14a(H),17a(H)-20S	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
130)	A2	14a(H),17a(H)-20R	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
131)	A2	13b,17a-20R-Ethyl	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
132)	A2	13a,17b-20S-Ethyl	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
133)	A2	14a,17a-20S-Methy	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
134)	A2	14a,17a-20R-Methy	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
135)	A2	14a(H),17a(H)-20S	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
136)	A2	14a(H),17a(H)-20R	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
137)	A2	14b(H),17b(H)-20R	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
138)	A2	14b(H),17b(H)-20S	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
139)	A2	14b,17b-20R-Methy	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
140)	A2	14b,17b-20S-Methy	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
141)	A2	14b(H),17b(H)-20R	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52
142)	A2	14b(H),17b(H)-20S	0.262	0.230	0.221	0.218	0.225	0.232	0.230	6.52

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27652.D
Acq On : 13 Jan 2006 7:59 pm
Operator : AC
Sample : I2011301
Misc : L1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 17 11:18:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:40:42 2006
Response via : Initial Calibration

CMS 1/17/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48581	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	73691	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	970	9.32	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.93%#			
58) Pyrene-d10	38.95	212	1987	9.62	ng/mL	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.96%#			
81) Benzo[b]fluoranthene-d12	47.82	264	1515	10.05	ng/mL	0.09
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.00%#			
125) 5B(H)Cholane - Surr	44.45	217	386m	11.81	ng/ml	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.18%#			
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	215m	5.31	ng/mL	
4) cis-Decalin	18.21	138	155m	4.97	ng/mL	
9) Naphthalene	20.44	128	2374	10.91	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1363	9.30	ng/mL#	100
16) 1-Methylnaphthalene	23.57	142	1361	9.86	ng/mL#	100
17) Benzothiophene	20.66	134	1759	9.66	ng/mL	100
22) Biphenyl	25.02	154	1946	10.54	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	1211	9.57	ng/mL#	100
24) Dibenzofuran	28.13	168	1878	9.36	ng/mL	100
25) Acenaphthylene	26.74	152	2110	9.18	ng/mL#	100
26) Acenaphthene	27.47	153	1325	9.67	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.03	170	1046	9.27	ng/mL	93
28) Fluorene	29.50	166	1612	10.19	ng/mL	94
32) Dibenzothiophene	32.85	184	2081	9.35	ng/mL	96
41) Phenanthrene	33.34	178	2322	9.80	ng/mL	99
52) Retene	40.33	234	540	10.87	ng/mL	97
53) Anthracene	33.53	178	1916	8.60	ng/mL	98
54) Carbazole	34.21	167	1911	9.13	ng/mL	96
55) 1-Methylphenanthrene	35.86	192	1465m	9.17	ng/mL	
56) Fluoranthene	38.13	202	2311	9.60	ng/mL#	62
57) Benzo(b)fluorene	40.65	216	1431	9.49	ng/mL	97
59) Pyrene	39.01	202	2414	9.62	ng/mL	95
64) Naphthobenzothiophene	42.88	234	2236	9.60	ng/ml#	89
65) Naphthobenzothiophene-2,1-	42.88	234	2236	9.60	ng/mL#	92
73) Benz[a]anthracene	43.79	228	2086m	9.45	ng/mL	
74) Chrysene	43.96	228	2131	9.84	ng/mL	98
75) Chrysene/Triphenylene	43.96	228	2131	9.84	ng/mL	98
82) Benzo[b]fluoranthene	47.91	252	2355	9.94	ng/mL	99
83) Benzo[k]fluoranthene	47.99	252	2275	9.38	ng/mL	96
85) Benzo[e]pyrene	48.97	252	2157m	9.45	ng/mL	
86) Benzo[a]pyrene	49.18	252	2087m	8.96	ng/mL	
87) Perylene	49.51	252	2093m	9.13	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.39	276	2275m	10.35	ng/mL	
89) Dibenz[a,h]anthracene	54.44	278	1907	8.88	ng/mL#	71
90) Benzo[g,h,i]perylene	55.80	276	2422	10.40	ng/mL#	52
91) 17a(H),21B(H)-hopane - C30	53.33	191	772m	9.32	ng/mL	
92) Hopane (T19)	53.33	191	772m	9.32	ng/mL	

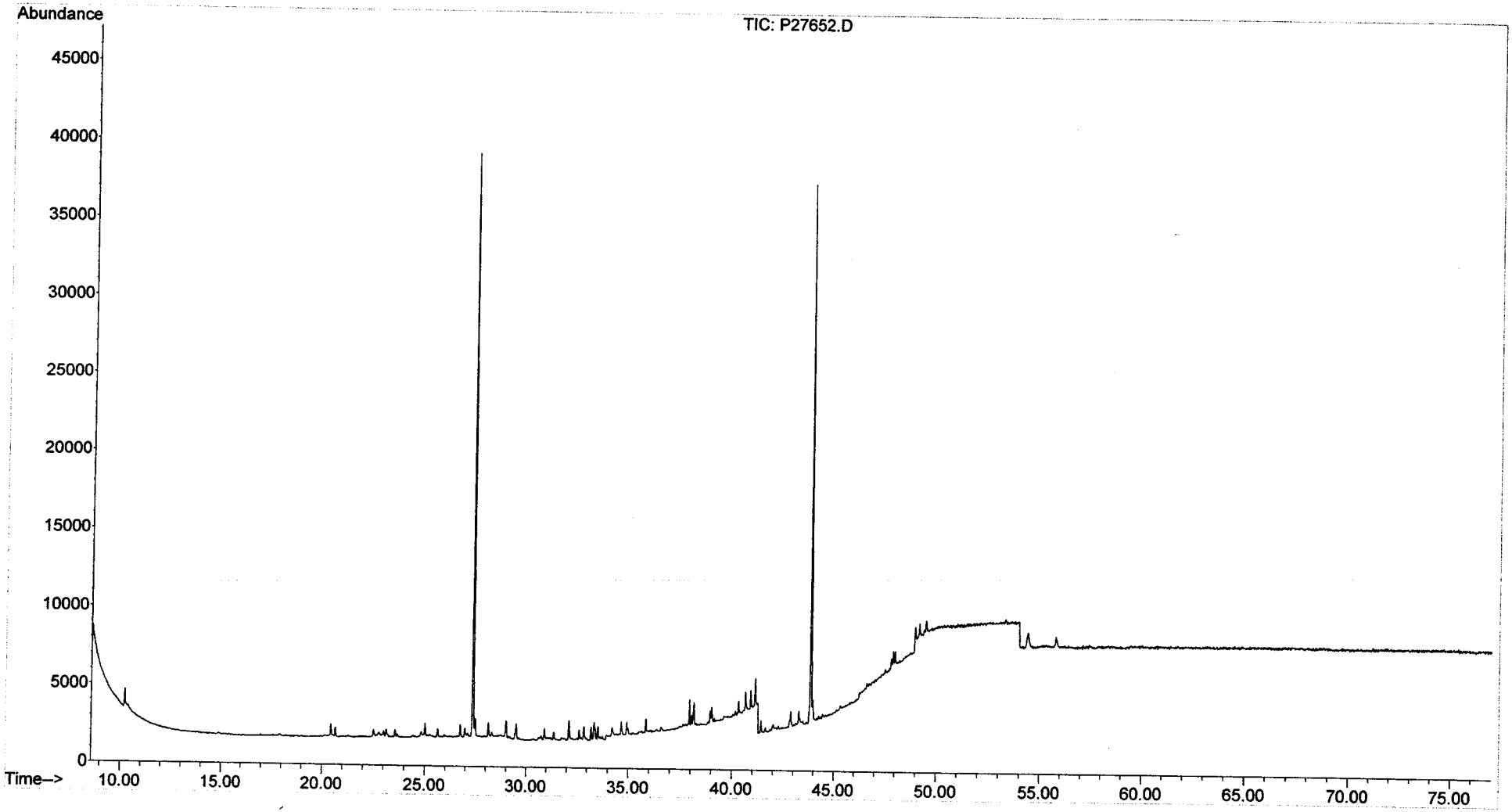
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Tue Jan 17 11:52:27 2006

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27652.D
Acq On : 13 Jan 2006 7:59 pm
Operator : AC
Sample : I2011301
Misc : L1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 17 11:18:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:40:42 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27654.D
Acq On : 13 Jan 2006 9:50 pm
Operator : AC
Sample : I2011302
Misc : L2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 17 11:22:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:40:42 2006
Response via : Initial Calibration

AMS 1-17-06

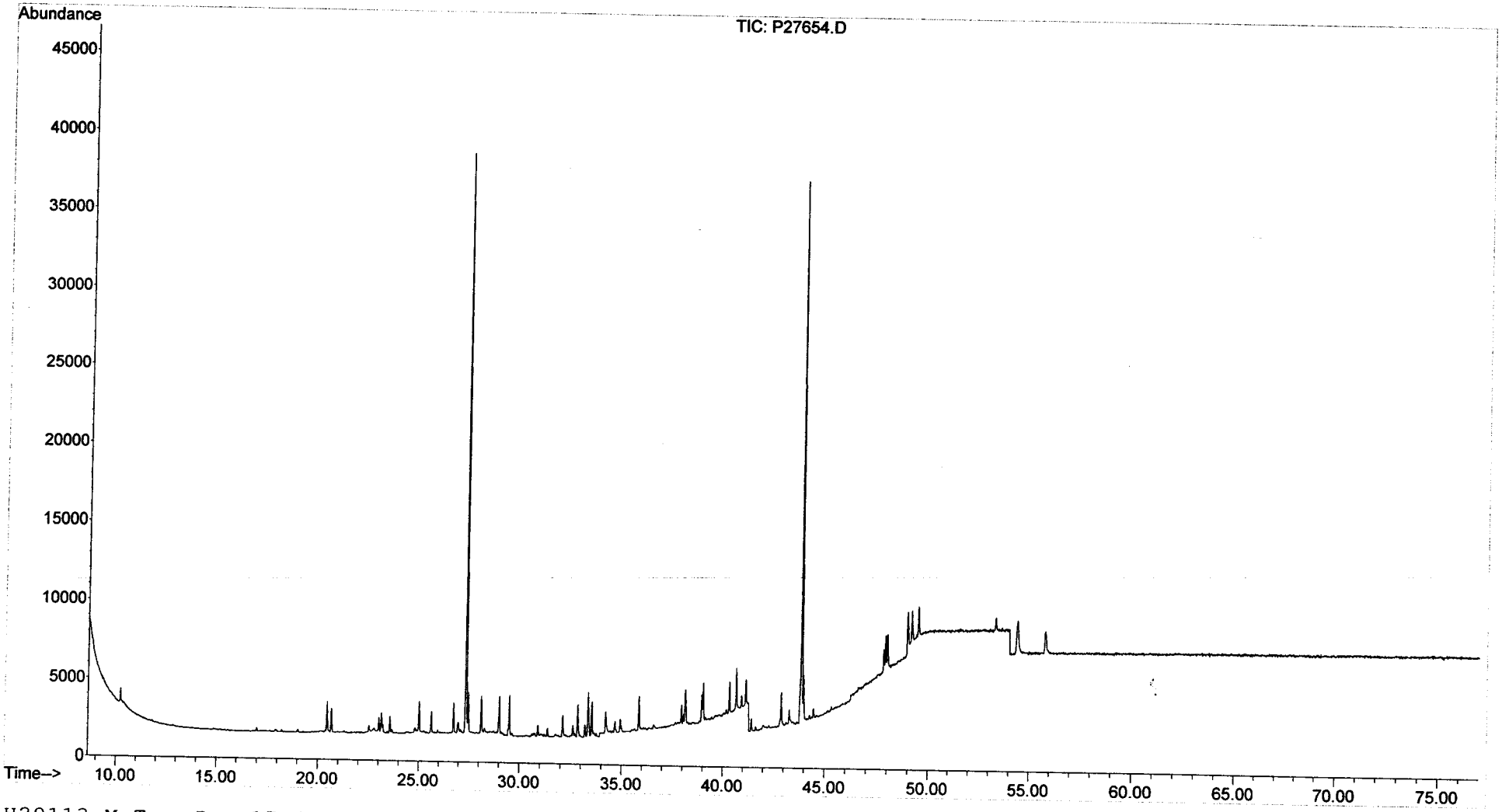
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47740	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	71793	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	2471	24.16	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.42%#			
58) Pyrene-d10	38.95	212	4876	24.01	ng/mL	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.40%#			
81) Benzo[b]fluoranthene-d12	47.82	264	3609	24.58	ng/mL	0.09
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.46%#			
125) 5B(H)Cholane - Surr	44.45	217	826m	25.94	ng/ml	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.59%#			
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	542	13.63	ng/mL	100
4) cis-Decalin	18.21	138	392	12.79	ng/mL	100
9) Naphthalene	20.44	128	5305	24.80	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	3404	23.64	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	3187	23.50	ng/mL#	100
17) Benzothiophene	20.66	134	4327	24.17	ng/mL	100
22) Biphenyl	25.02	154	4376	24.13	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	2872	23.09	ng/mL#	100
24) Dibenzofuran	28.13	168	4704	23.86	ng/mL	99
25) Acenaphthylene	26.74	152	5220	23.11	ng/mL#	100
26) Acenaphthene	27.47	153	3290	24.44	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	29.02	170	2558	23.08	ng/mL	96
28) Fluorene	29.50	166	3735m	24.03	ng/mL	
32) Dibenzothiophene	32.85	184	5061	23.15	ng/mL	96
41) Phenanthrene	33.34	178	5377	23.10	ng/mL	98
52) Retene	40.31	234	1214	24.86	ng/mL	98
53) Anthracene	33.53	178	4650	21.23	ng/mL	99
54) Carbazole	34.21	167	4321	21.01	ng/mL	96
55) 1-Methylphenanthrene	35.84	192	3638	23.17	ng/mL	99
56) Fluoranthene	38.12	202	5674	24.00	ng/mL#	62
57) Benzo(b)fluorene	40.65	216	3301	22.28	ng/mL	97
59) Pyrene	39.01	202	5749	23.32	ng/mL	100
64) Naphthobenzothiophene	42.88	234	5337	23.33	ng/ml	96
65) Naphthobenzothiophene-2,1-	42.88	234	5337	23.33	ng/mL	96
73) Benz[a]anthracene	43.79	228	4972m	23.11	ng/mL	
74) Chrysene	43.96	228	5129	24.31	ng/mL	99
75) Chrysene/Triphenylene	43.96	228	5129	24.31	ng/mL	99
82) Benzo[b]fluoranthene	47.91	252	5273	22.85	ng/mL	98
83) Benzo[k]fluoranthene	47.99	252	5711	24.18	ng/mL	96
85) Benzo[e]pyrene	48.97	252	5389	24.24	ng/mL#	79
86) Benzo[a]pyrene	49.17	252	5226m	23.04	ng/mL	
87) Perylene	49.51	252	5264	23.57	ng/mL	93
88) Indeno[1,2,3-cd]pyrene	54.37	276	5040m	23.53	ng/mL	
89) Dibenz[a,h]anthracene	54.42	278	4721	22.57	ng/mL#	91
90) Benzo[g,h,i]perylene	55.77	276	5424	23.92	ng/mL	98
91) 17a(H),21B(H)-hopane - C30	53.33	191	1775m	22.00	ng/mL	
92) Hopane (T19)	53.33	191	1803m	22.35	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27654.D
Acq On : 13 Jan 2006 9:50 pm
Operator : AC
Sample : I2011302
Misc : L2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 17 11:22:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:40:42 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27656.D
Acq On : 13 Jan 2006 11:51 pm
Operator : AC
Sample : I2011303
Misc : L3
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 11:25:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:40:42 2006
Response via : Initial Calibration

AMS 1-17-06

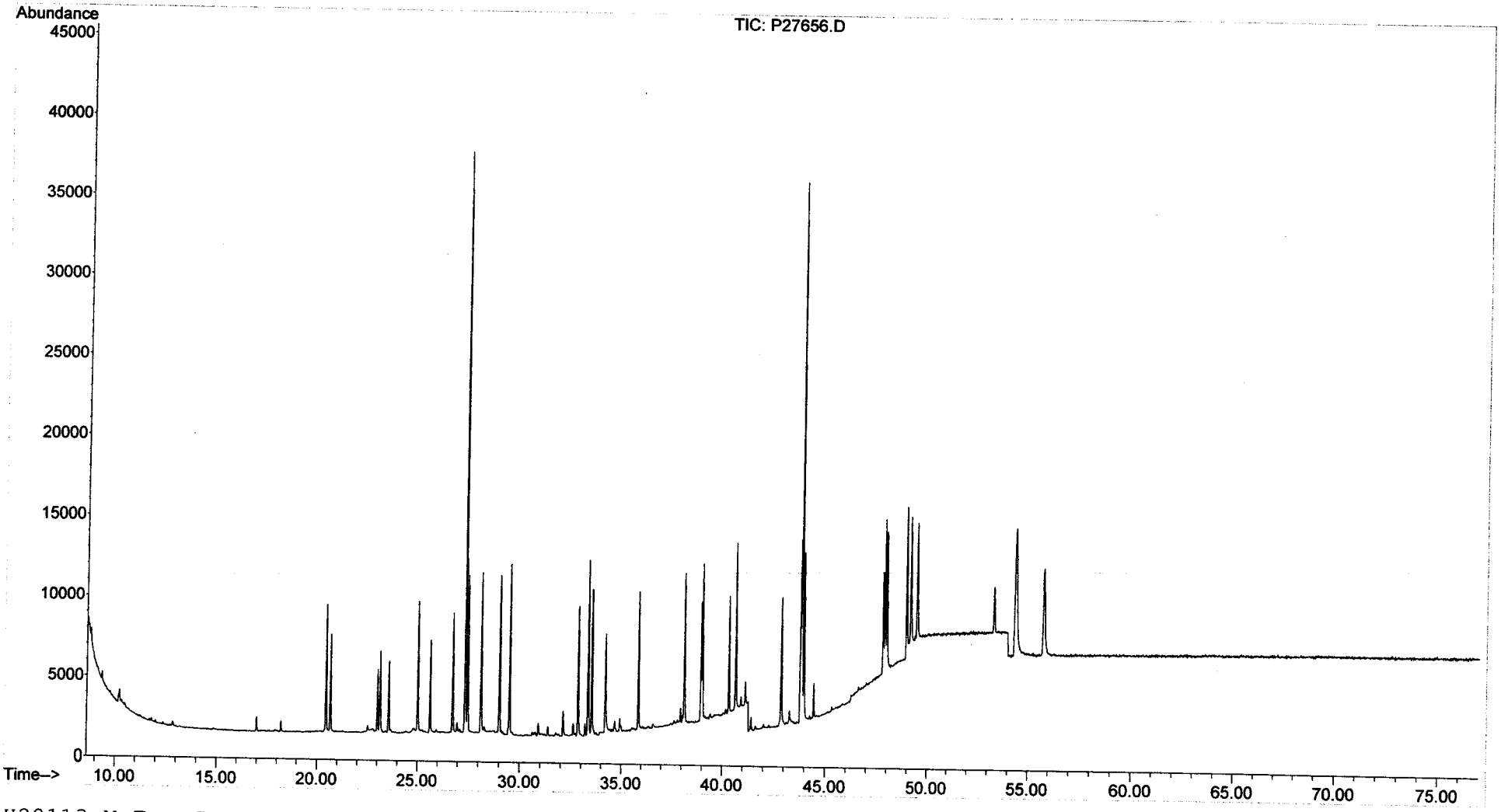
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46810	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	70628	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	9713	96.87	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.69%#			
58) Pyrene-d10	38.94	212	19120	96.03	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.60%#			
81) Benzo[b]fluoranthene-d12	47.81	264	14352	99.38	ng/mL	0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.94%#			
125) 5B(H)Cholane - Surr	44.45	217	3127	99.82	ng/ml	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.98%#			
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	1991	51.06	ng/mL	100
4) cis-Decalin	18.21	138	1508	50.17	ng/mL	100
9) Naphthalene	20.44	128	20632	98.37	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	13096	92.75	ng/mL#	100
16) 1-Methylnaphthalene	23.57	142	12362	92.95	ng/mL#	100
17) Benzothiophene	20.66	134	16807	95.74	ng/mL	100
22) Biphenyl	25.02	154	16211	91.15	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	11034	90.46	ng/mL#	100
24) Dibenzofuran	28.13	168	18111	93.70	ng/mL	100
25) Acenaphthylene	26.74	152	20186	91.14	ng/mL#	100
26) Acenaphthene	27.47	153	12416	94.06	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.02	170	9612	88.45	ng/mL	97
28) Fluorene	29.50	166	14416	94.59	ng/mL	99
32) Dibenzothiophene	32.85	184	19496	90.94	ng/mL	99
41) Phenanthrene	33.34	178	20576	90.13	ng/mL	98
52) Retene	40.33	234	4491	93.78	ng/mL	99
53) Anthracene	33.53	178	19311m	89.91	ng/mL	
54) Carbazole	34.20	167	17602	87.27	ng/mL	98
55) 1-Methylphenanthrene	35.84	192	14444	93.84	ng/mL	97
56) Fluoranthene	38.12	202	21940m	94.63	ng/mL	
57) Benzo(b)fluorene	40.65	216	13098	90.18	ng/mL	99
59) Pyrene	39.01	202	22258	92.08	ng/mL	98
64) Naphthobenzothiophene	42.88	234	20676	92.17	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.88	234	20676	92.17	ng/mL	99
73) Benz[a]anthracene	43.79	228	19890	93.96	ng/mL	97
74) Chrysene	43.96	228	19901	95.90	ng/mL	98
75) Chrysene/Triphenylene	43.96	228	19901	95.90	ng/mL	98
82) Benzo[b]fluoranthene	47.89	252	20969	92.37	ng/mL	99
83) Benzo[k]fluoranthene	47.98	252	22155	95.36	ng/mL	96
85) Benzo[e]pyrene	48.96	252	20610m	94.24	ng/mL	
86) Benzo[a]pyrene	49.17	252	20140	90.25	ng/mL	99
87) Perylene	49.49	252	19972	90.90	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.36	276	19558m	92.81	ng/mL	
89) Dibenz[a,h]anthracene	54.41	278	18967	92.19	ng/mL#	93
90) Benzo[g,h,i]perylene	55.77	276	21116	94.64	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.33	191	7820	98.54	ng/mL#	86
92) Hopane (T19)	53.33	191	7820	98.54	ng/mL#	86

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27656.D
Acq On : 13 Jan 2006 11:51 pm
Operator : AC
Sample : I2011303
Misc : L3
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 17 11:25:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:40:42 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27658.D
Acq On : 14 Jan 2006 2:04 am
Operator : AC
Sample : I2011304
Misc : L4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 11:31:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration

AMS 1-17-06

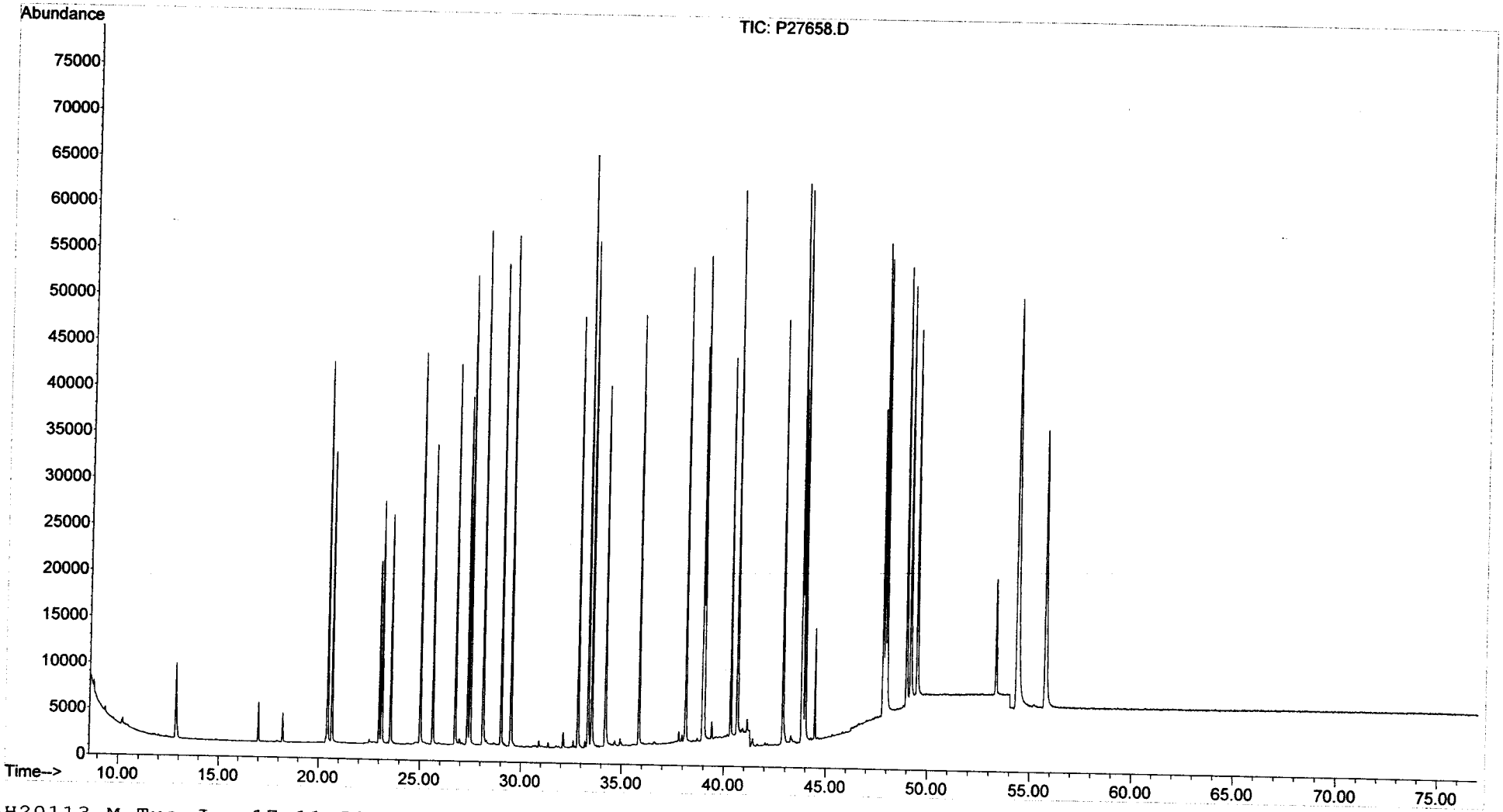
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48150	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	74806	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	48972	496.78	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.68%#			
58) Pyrene-d10	38.94	212	103104	523.97	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.40%			
81) Benzo[b]fluoranthene-d12	47.81	264	76743	504.64	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.46%			
125) 5B(H)Cholane - Surr	44.45	217	16321	458.75	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.88%#			
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	9714	228.90	ng/mL	100
4) cis-Decalin	18.21	138	7379	237.07	ng/mL	100
9) Naphthalene	20.44	128	107063	485.52	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	68545	505.09	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	64581	495.98	ng/mL#	100
17) Benzothiophene	20.66	134	86849	499.34	ng/mL	100
22) Biphenyl	25.02	154	83661	468.11	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	58523	502.50	ng/mL#	100
24) Dibenzofuran	28.12	168	96189	513.28	ng/mL	99
25) Acenaphthylene	26.74	152	106446m	509.02	ng/mL	
26) Acenaphthene	27.47	153	64952	497.37	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	29.02	170	50855	499.00	ng/mL	98
28) Fluorene	29.50	166	75465	493.52	ng/mL	99
32) Dibenzothiophene	32.83	184	102726	504.40	ng/mL	100
41) Phenanthrene	33.33	178	108251	493.01	ng/mL	98
52) Retene	40.31	234	23771	479.60	ng/mL	99
53) Anthracene	33.51	178	101619m	529.14	ng/mL	
54) Carbazole	34.18	167	97351	536.09	ng/mL	98
55) 1-Methylphenanthrene	35.84	192	76035	517.78	ng/mL	99
56) Fluoranthene	38.12	202	118016m	517.89	ng/mL	
57) Benzo(b)fluorene	40.64	216	70958	519.54	ng/mL	100
59) Pyrene	39.00	202	119803	513.34	ng/mL	97
64) Naphthobenzothiophene	42.87	234	109937	507.71	ng/ml	98
65) Naphthobenzothiophene-2,1-	42.87	234	109937	507.71	ng/mL	98
73) Benz[a]anthracene	43.79	228	105633	503.29	ng/mL	97
74) Chrysene	43.96	228	106651	499.24	ng/mL	98
75) Chrysene/Triphenylene	43.96	228	106651	499.24	ng/mL	98
82) Benzo[b]fluoranthene	47.89	252	112722	496.62	ng/mL	99
83) Benzo[k]fluoranthene	47.98	252	118313	504.44	ng/mL	99
85) Benzo[e]pyrene	48.96	252	109813	497.75	ng/mL	99
86) Benzo[a]pyrene	49.16	252	109170	509.36	ng/mL	99
87) Perylene	49.49	252	109109	508.75	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.34	276	105991m	490.58	ng/mL	
89) Dibenz[a,h]anthracene	54.40	278	103037	522.82	ng/mL	96
90) Benzo[g,h,i]perylene	55.75	276	110609	477.05	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.33	191	33070	421.86	ng/mL	100
92) Hopane (T19)	53.33	191	33070	419.78	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27658.D
Acq On : 14 Jan 2006 2:04 am
Operator : AC
Sample : I2011304
Misc : L4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 17 11:31:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration



PAH20113.M Tue Jan 17 11:53:04 2006

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27660.D
Acq On : 14 Jan 2006 4:49 am
Operator : AC
Sample : I2011305
Misc : L5
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 17 11:35:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration

AWS 1-17-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48512	500.00 ng/mL	0.00
72) Chrysene-d12	43.86	240	76104	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	126002	1268.64 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 126.86%		
58) Pyrene-d10	38.94	212	262028	1321.67 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 132.17%#		
81) Benzo[b]fluoranthene-d12	47.81	264	197295	1275.24 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 127.52%		
125) 5B(H)Cholane - Surr	44.45	217	42853	1183.98 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 118.40%		
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	24976	584.15 ng/mL	100
4) cis-Decalin	18.22	138	18985	605.39 ng/mL	100
9) Naphthalene	20.44	128	271952	1224.06 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	177332	1296.95 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	167142	1274.07 ng/mL#	100
17) Benzothiophene	20.66	134	221091	1261.67 ng/mL	100
22) Biphenyl	25.02	154	216714	1203.52 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	152169	1296.83 ng/mL#	100
24) Dibenzofuran	28.11	168	246613	1306.14 ng/mL	99
25) Acenaphthylene	26.74	152	277501m	1317.09 ng/mL	
26) Acenaphthene	27.47	153	168012	1276.96 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.02	170	132314	1288.60 ng/mL	99
28) Fluorene	29.50	166	195680	1270.13 ng/mL	98
32) Dibenzothiophene	32.83	184	263168	1282.56 ng/mL	100
41) Phenanthrene	33.33	178	279429	1263.11 ng/mL	98
52) Retene	40.33	234	63052	1262.63 ng/mL	100
53) Anthracene	33.51	178	270098m	1395.93 ng/mL	
54) Carbazole	34.18	167	256886	1404.05 ng/mL	98
55) 1-Methylphenanthrene	35.84	192	198637	1342.57 ng/mL	99
56) Fluoranthene	38.12	202	302940m	1319.46 ng/mL	
57) Benzo(b)fluorene	40.64	216	187904	1365.53 ng/mL	100
59) Pyrene	39.01	202	310499	1320.51 ng/mL	97
64) Naphthobenzothiophene	42.87	234	286121	1311.49 ng/ml	98
65) Naphthobenzothiophene-2,1-	42.87	234	285937	1310.65 ng/mL	98
73) Benz[a]anthracene	43.79	228	277727	1300.68 ng/mL	98
74) Chrysene	43.96	228	278106	1279.63 ng/mL	98
75) Chrysene/Triphenylene	43.96	228	278106	1279.63 ng/mL	98
82) Benzo[b]fluoranthene	47.89	252	296154	1282.52 ng/mL	99
83) Benzo[k]fluoranthene	47.98	252	316434	1326.15 ng/mL	98
85) Benzo[e]pyrene	48.96	252	284708	1268.48 ng/mL	100
86) Benzo[a]pyrene	49.16	252	288328	1322.32 ng/mL	99
87) Perylene	49.49	252	285674	1309.31 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.34	276	282400m	1284.81 ng/mL	
89) Dibenz[a,h]anthracene	54.40	278	271582	1354.52 ng/mL	96
90) Benzo[g,h,i]perylene	55.75	276	289828	1228.69 ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.33	191	101405	1271.51 ng/mL	99
92) Hopane (T19)	53.33	191	101405	1265.23 ng/mL	99

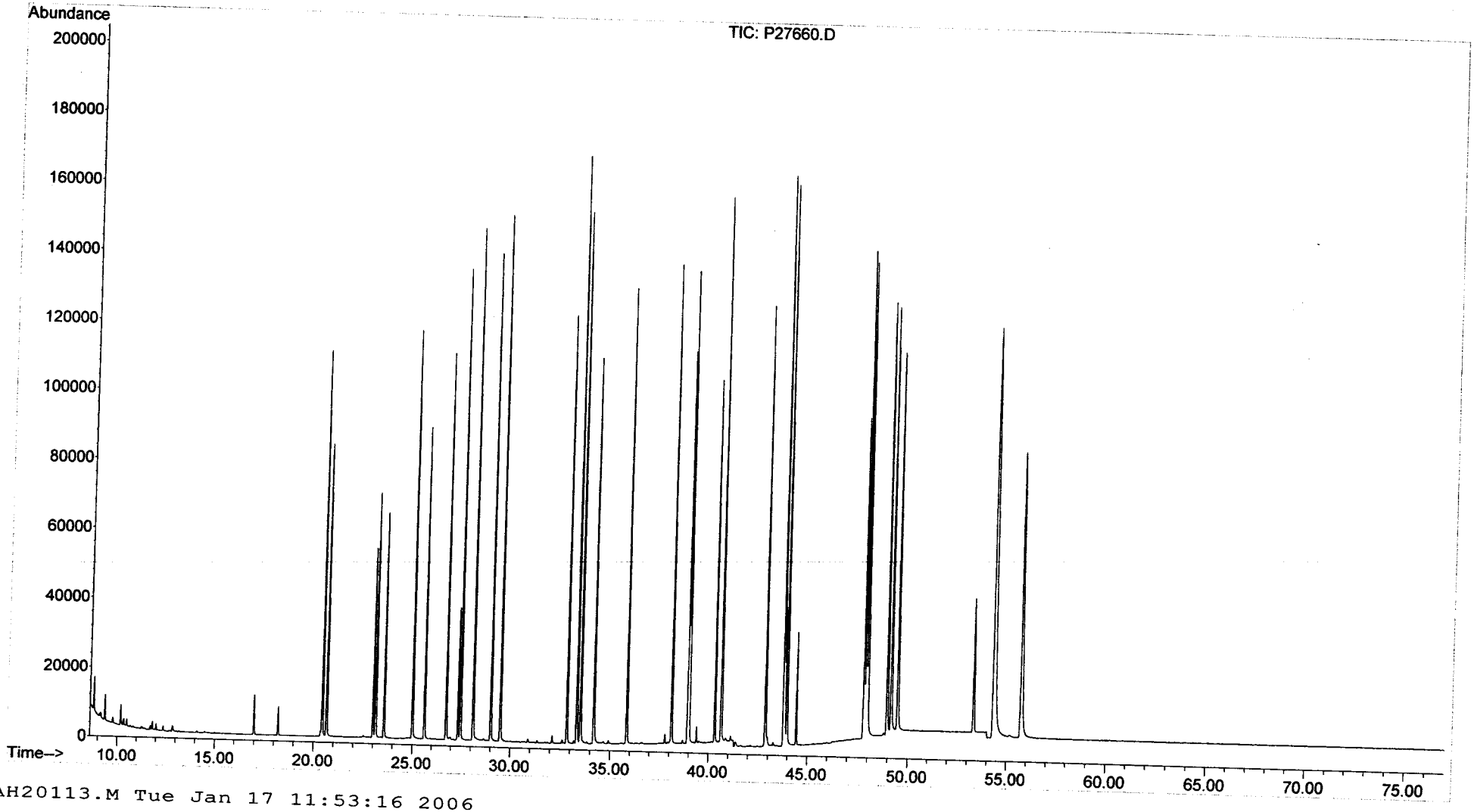
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Tue Jan 17 11:53:14 2006

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27660.D
Acq On : 14 Jan 2006 4:49 am
Operator : AC
Sample : I2011305
Misc : L5
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 17 11:35:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27666.D
Acq On : 14 Jan 2006 10:30 pm
Operator : NLJr
Sample : I2011306
Misc : L6
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 17 11:39:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration

CMS 1-17-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46063	500.00 ng/mL	0.00
72) Chrysene-d12	43.87	240	73685	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	487671	5171.11 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 517.11%#		
58) Pyrene-d10	38.94	212	1020298	5420.02 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 542.00%#		
81) Benzo[b]fluoranthene-d12	47.82	264	781336	5216.05 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 521.61%#		
125) 5B(H)Cholane - Surr	44.46	217	170706	4871.23 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 487.12%#		

Target Compounds					Qvalue
3) trans-Decalin	16.99	138	95544	2353.44 ng/mL	100
4) cis-Decalin	18.22	138	72265	2426.89 ng/mL	100
9) Naphthalene	20.44	128	1036151	4911.69 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	681031	5245.66 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	646356	5188.91 ng/mL#	100
17) Benzothiophene	20.66	134	848055	5096.78 ng/mL	100
22) Biphenyl	25.02	154	823786	4818.14 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	590536	5300.30 ng/mL#	100
24) Dibenzofuran	28.11	168	945432	5273.53 ng/mL	99
25) Acenaphthylene	26.74	152	1076718m	5382.09 ng/mL	
26) Acenaphthene	27.47	153	645372	5165.89 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	29.02	170	513137	5263.12 ng/mL	98
28) Fluorene	29.50	166	756061	5168.40 ng/mL	98
32) Dibenzothiophene	32.83	184	1005402	5160.39 ng/mL	100
41) Phenanthrene	33.33	178	1068109	5084.89 ng/mL	98
52) Retene	40.33	234	247313	5215.79 ng/mL	99
53) Anthracene	33.51	178	1053415m	5733.77 ng/mL	
54) Carbazole	34.18	167	1011097	5820.10 ng/mL	99
55) 1-Methylphenanthrene	35.84	192	766613	5456.97 ng/mL	99
56) Fluoranthene	38.12	202	1170208m	5367.86 ng/mL	
57) Benzo(b)fluorene	40.65	216	742988	5686.50 ng/mL	99
59) Pyrene	39.01	202	1199846	5374.06 ng/mL	99
64) Naphthobenzothiophene	42.88	234	1119111	5402.40 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.88	234	1118755	5400.68 ng/mL	99
73) Benz[a]anthracene	43.79	228	1093639	5289.98 ng/mL	98
74) Chrysene	43.97	228	1082773	5145.66 ng/mL	99
75) Chrysene/Triphenylene	43.97	228	1082773	5145.66 ng/mL	99
82) Benzo[b]fluoranthene	47.91	252	1169529	5231.03 ng/mL	99
83) Benzo[k]fluoranthene	47.99	252	1238816	5362.21 ng/mL	99
85) Benzo[e]pyrene	48.97	252	1113209	5122.57 ng/mL	100
86) Benzo[a]pyrene	49.17	252	1150153	5447.96 ng/mL	100
87) Perylene	49.51	252	1144460	5417.51 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.36	276	1127369m	5297.46 ng/mL	
89) Dibenz[a,h]anthracene	54.41	278	1074999	5537.61 ng/mL	96
90) Benzo[g,h,i]perylene	55.77	276	1137201	4979.30 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.35	191	346745	4490.55 ng/mL	100
92) Hopane (T19)	53.35	191	346745	4468.38 ng/mL	100

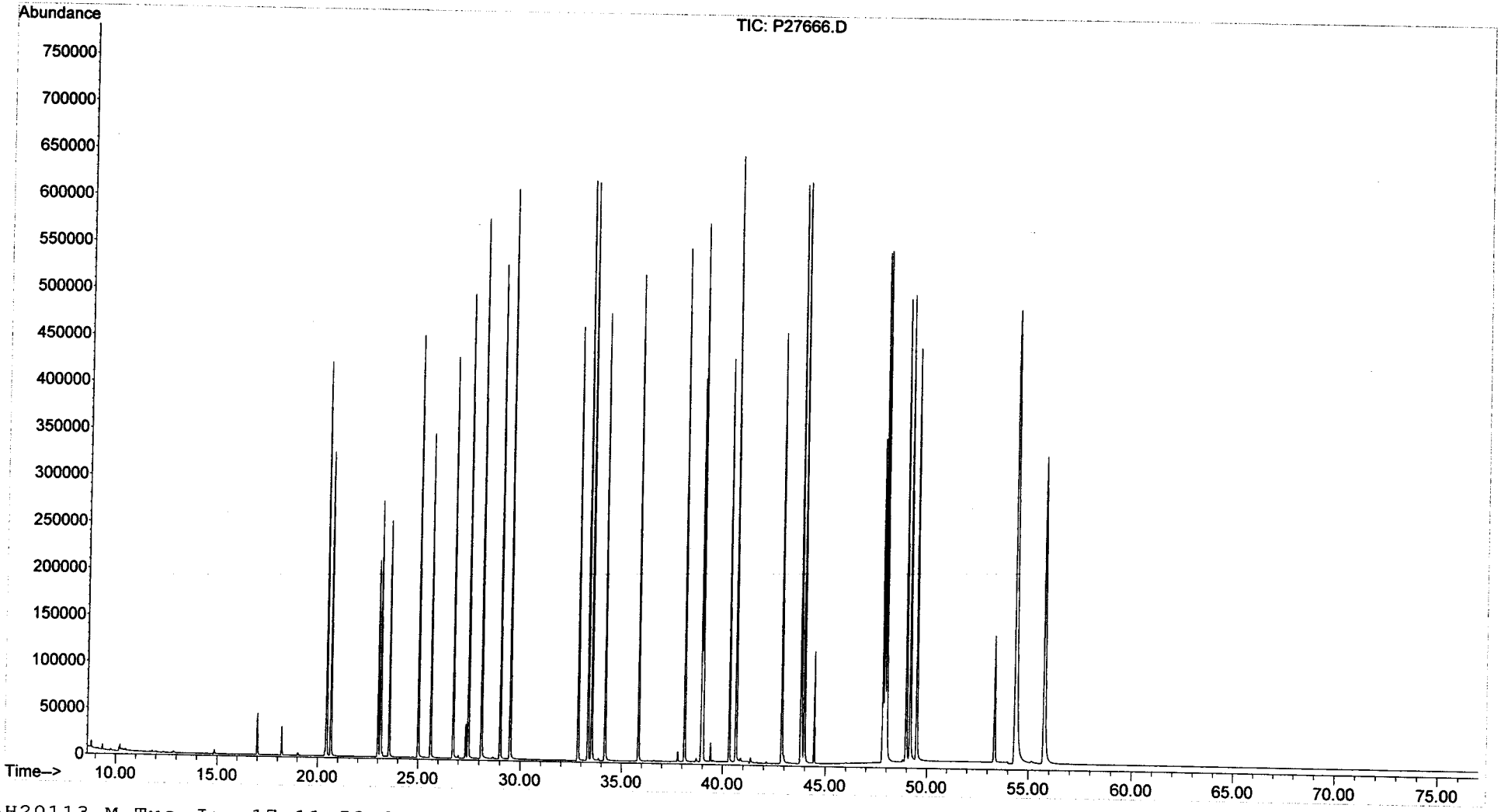
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Tue Jan 17 11:53:26 2006

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27666.D
Acq On : 14 Jan 2006 10:30 pm
Operator : NLJr
Sample : I2011306
Misc : L6
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 17 11:39:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27668.D
Acq On : 15 Jan 2006 12:36 am
Operator : NLJr
Sample : I2011307
Misc : L7
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 17 11:43:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration

CWS 1-17-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	49430	500.00 ng/mL	0.00
72) Chrysene-d12	43.87	240	80511	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	995717	9839.08 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 983.91%#		
58) Pyrene-d10	38.95	212	2123561	10512.36 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1051.24%#		
81) Benzo[b]fluoranthene-d12	47.82	264	1614934	9866.93 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 986.69%#		
125) 5B(H)Cholane - Surr	44.46	217	355222	9277.14 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 927.71%#		

Target Compounds					Qvalue
3) trans-Decalin	16.99	138	197168	4525.83 ng/mL	100
4) cis-Decalin	18.22	138	150854	4721.07 ng/mL	100
9) Naphthalene	20.44	128	2133056	9422.62 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1412575	10139.26 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	1343503	10050.88 ng/mL#	100
17) Benzothiophene	20.66	134	1764823	9884.05 ng/mL	100
22) Biphenyl	25.02	154	1714684	9345.67 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	1237577	10351.13 ng/mL#	100
24) Dibenzofuran	28.13	168	1980778	10296.00 ng/mL	99
25) Acenaphthylene	26.74	152	2242568m	10446.14 ng/mL	
26) Acenaphthene	27.48	153	1354984	10107.21 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.03	170	1084668	10367.36 ng/mL	98
28) Fluorene	29.50	166	1590576	10132.46 ng/mL	99
32) Dibenzothiophene	32.85	184	2113646	10109.67 ng/mL	99
41) Phenanthrene	33.34	178	2236030	9919.86 ng/mL	99
52) Retene	40.33	234	523787	10294.13 ng/mL	99
53) Anthracene	33.51	178	2202264m	11170.47 ng/mL	
54) Carbazole	34.18	167	2122011	11382.75 ng/mL	100
55) 1-Methylphenanthrene	35.84	192	1606742	10658.18 ng/mL	100
56) Fluoranthene	38.13	202	2431749m	10394.86 ng/mL	
57) Benzo(b)fluorene	40.66	216	1571491	11208.23 ng/mL	100
59) Pyrene	39.03	202	2504931m	10455.26 ng/mL	
64) Naphthobenzothiophene	42.88	234	2343956	10544.47 ng/ml	100
65) Naphthobenzothiophene-2,1-	42.88	234	2343526	10542.53 ng/mL	100
73) Benz[a]anthracene	43.81	228	2303431	10197.16 ng/mL	99
74) Chrysene	43.97	228	2251749	9793.72 ng/mL	100
75) Chrysene/Triphenylene	43.97	228	2251749	9793.72 ng/mL	100
82) Benzo[b]fluoranthene	47.92	252	2468055	10103.11 ng/mL	100
83) Benzo[k]fluoranthene	48.01	252	2570752	10184.07 ng/mL	100
85) Benzo[e]pyrene	48.98	252	2333639	9828.08 ng/mL	100
86) Benzo[a]pyrene	49.18	252	2435216	10556.97 ng/mL	100
87) Perylene	49.52	252	2416019	10467.02 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.39	276	2400567m	10323.79 ng/mL	
89) Dibenz[a,h]anthracene	54.44	278	2298618	10836.90 ng/mL	97
90) Benzo[g,h,i]perylene	55.81	276	2410706	9660.48 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.36	191	698760	8282.12 ng/mL	99
92) Hopane (T19)	53.36	191	698760	8241.23 ng/mL	99

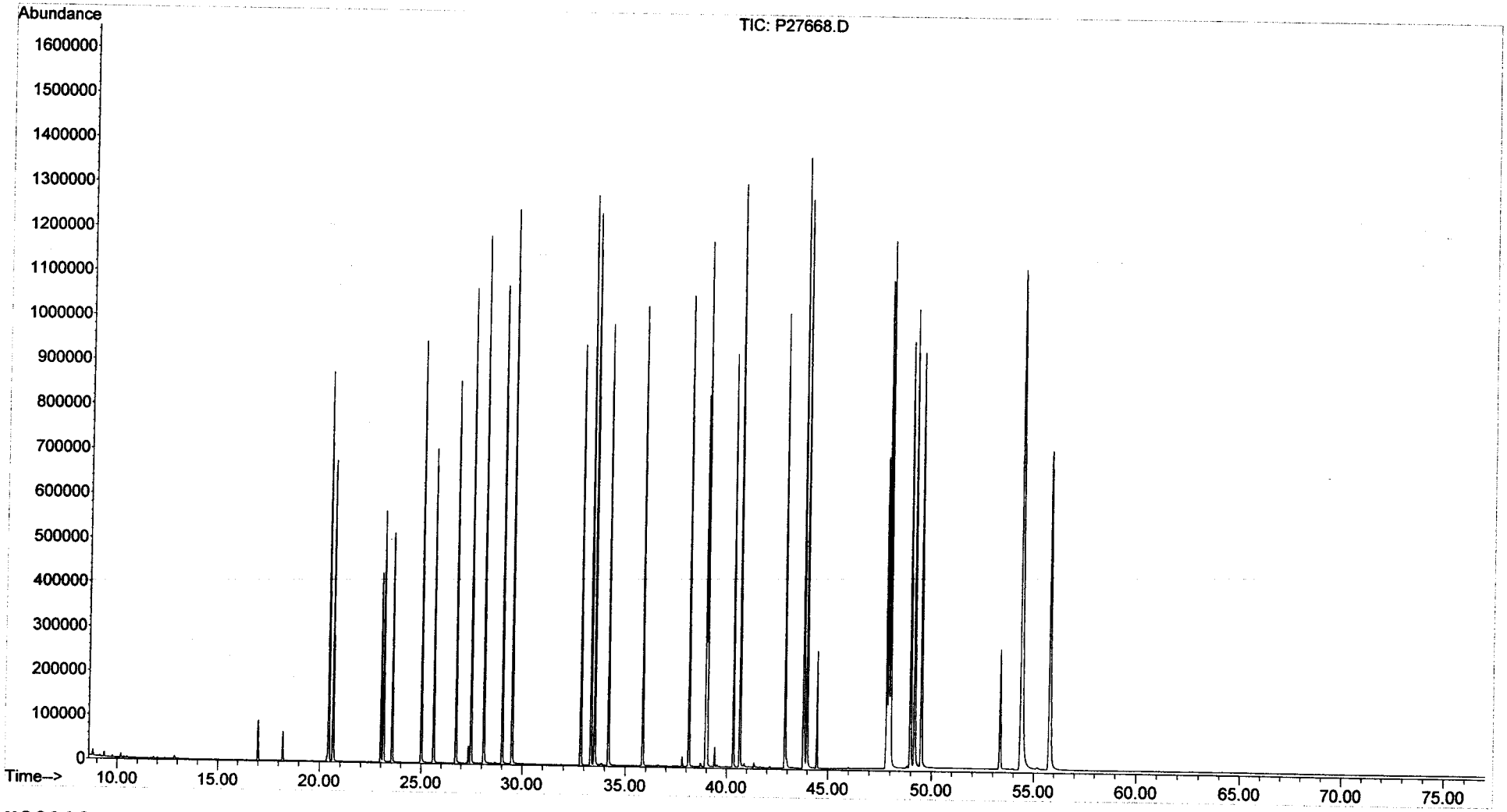
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Tue Jan 17 11:53:38 2006

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27668.D
Acq On : 15 Jan 2006 12:36 am
Operator : NLJr
Sample : I2011307
Misc : L7
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 17 11:43:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:26:24 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13\
Data File : P27670.D
Acq On : 15 Jan 2006 2:20 am
Operator : NLJr
Sample : Q2011301
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 11:50:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:45:09 2006
Response via : Initial Calibration

MS 1-17-06

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	98	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.000#	100.0#	0#	-16.99#
4	t	cis-Decalin	0.315	0.000#	100.0#	0#	-18.22#
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.165	3.7	95	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.05#
14	s	2-Methylnaphthalene-d10	1.028	1.056	-2.7	102	0.00
15	t	2-Methylnaphthalene	1.432	1.350	5.7	93	0.00
16	t	1-Methylnaphthalene	1.363	1.352	0.8	99	0.00
17	A1	Benzothiophene	1.810	0.000#	100.0#	0#	-20.66#
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.86#
22	t	Biphenyl	1.802	1.747	3.1	98	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.213	1.6	98	0.00
24	t	Dibenzofuran	1.989	1.984	0.3	97	0.01
25	t	Acenaphthylene	2.231	2.101	5.8	93	0.00
26	t	Acenaphthene	1.368	1.324	3.2	96	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.087	-1.0	101	0.00
28	A1	Fluorene	1.599	1.450	9.3	90	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.02#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.85#
32	A1	Dibenzothiophene	2.138	0.000#	100.0#	0#	-32.83#
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.57#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.91#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.95#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.57#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.25#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.06#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.74#
41	A1	Phenanthrene	2.282	2.049	10.2	89	0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.25#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.52#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.71#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.81#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.71#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.53#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.29#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.36#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13\
Data File : P27670.D
Acq On : 15 Jan 2006 2:20 am
Operator : NLJr
Sample : Q2011301
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 11:50:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:45:09 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)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.54#
52	t	Retene	0.518	0.000#	100.0#	0#	-40.33#
53	t	Anthracene	2.119	1.927	9.1	89	0.00
54	t	Carbazole	2.020	0.000#	100.0#	0#	-34.18#
55	t	1-Methylphenanthrene	1.583	1.575	0.5	98	0.00
56	A1	Fluoranthene	2.435	2.226	8.6	89	0.00
57	t	Benzo(b)fluorene	1.497	0.000#	100.0#	0#	-40.65#
58	s	Pyrene-d10	2.114	2.046	3.2	93	0.00
59	A1	Pyrene	2.494	2.357	5.5	93	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.35#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.16#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.17#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.53#
64	A1	Naphthobenzothiophene	2.313	0.000#	100.0#	0#	-42.88#
65	A2	Naphthobenzothiophene-2,1-D	2.313	0.000#	100.0#	0#	-42.88#
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.16#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.46#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.22#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.22#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.86#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.98#
72	i	Chrysene-d12	1.000	1.000	0.0	97	0.00
73	t	Benz[a]anthracene	1.428	1.363	4.6	94	0.00
74	A1	Chrysene	1.434	1.407	1.9	96	0.00
75	A2	Chrysene/Triphenylene	1.434	1.407	1.9	96	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.38#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.82#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.75#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.34#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-50.43#
81	s	Benzo[b]fluoranthene-d12	1.025	1.049	-2.3	99	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.391	9.3	89	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.521	5.2	93	0.00
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.24#
85	t	Benzo[e]pyrene	1.478	1.425	3.6	94	-0.01
86	t	Benzo[a]pyrene	1.478	1.276	13.7	85	0.00
87	t	Perylene	1.473	1.409	4.3	94	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.199	18.2	82	0.00
89	t	Dibenz[a,h]anthracene	1.378	1.137	17.5	80	0.01
90	t	Benzo[g,h,i]perylene	1.527	1.264	17.2	83	0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.000#	100.0#	0#	-53.35#
92	A2	Hopane (T19)	0.493	0.000#	100.0#	0#	-53.35#
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.43#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.15#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.63#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.98#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.69#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.79#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.08#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13\
Data File : P27670.D
Acq On : 15 Jan 2006 2:20 am
Operator : NLJr
Sample : Q2011301
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 11:50:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:45:09 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)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.24#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.78#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.99#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.22#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.28#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.54#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.80#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.07#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.81#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.79#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.90#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.02#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.63#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.04#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.00#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.19#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.44#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.89#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.30#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.21#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.89#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.09#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.08#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.54#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.97#
125	SA1	5B(H)Cholane - Surr	0.230	0.214	7.0	95	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.91#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.33#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.03#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.93#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.49#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.77#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.06#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.23#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.99#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.36#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.34#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.03#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.12#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.42#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.49#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.63#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13\
Data File : P27670.D
Acq On : 15 Jan 2006 2:20 am
Operator : NLJr
Sample : Q2011301
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 11:50:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:45:09 2006
Response via : Initial Calibration

MS 1-17-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47092	500.00	ng/mL	0.00
72) Chrysene-d12	43.87	240	72455	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	49721	513.75	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.38%			
58) Pyrene-d10	38.94	212	96367	484.10	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.41%#			
81) Benzo[b]fluoranthene-d12	47.81	264	75992	511.58	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.16%			
125) 5B(H)Cholane - Surr	44.45	217	15474	464.55	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.45%#			

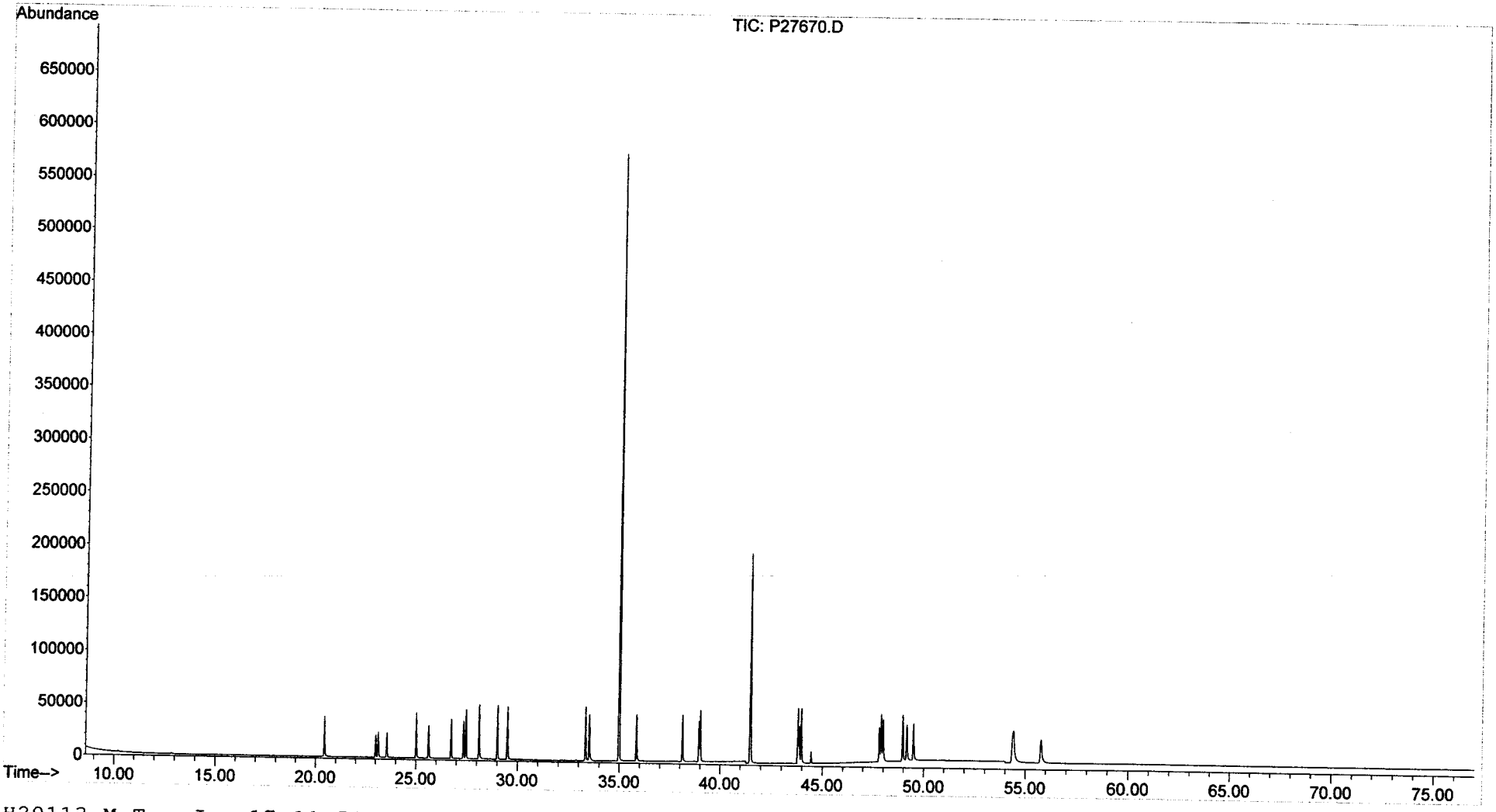
Target Compounds						Qvalue
9) Naphthalene	20.44	128	101937	481.26	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	63568	471.47	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	63677	496.19	ng/mL#	100
22) Biphenyl	25.02	154	82264	484.67	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	57120	491.80	ng/mL#	100
24) Dibenzofuran	28.13	168	93440	498.71	ng/mL	100
25) Acenaphthylene	26.74	152	98956m	470.87	ng/mL	
26) Acenaphthene	27.47	153	62330	483.86	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.02	170	51189	505.03	ng/mL	100
28) Fluorene	29.50	166	68274	453.28	ng/mL	99
41) Phenanthrene	33.34	178	96471	448.88	ng/mL	99
53) Anthracene	33.51	178	90748m	454.65	ng/mL	
55) 1-Methylphenanthrene	35.84	192	74185	497.56	ng/mL	100
56) Fluoranthene	38.12	202	104842	457.07	ng/mL	99
59) Pyrene	39.01	202	111007	472.60	ng/mL	98
73) Benz[a]anthracene	43.79	228	98771	477.36	ng/mL	100
74) Chrysene	43.97	228	101958	490.61	ng/mL	99
75) Chrysene/Triphenylene	43.97	228	101958	490.61	ng/mL	99
82) Benzo[b]fluoranthene	47.89	252	100767	453.45	ng/mL	98
83) Benzo[k]fluoranthene	47.99	252	110190	474.17	ng/mL	99
85) Benzo[e]pyrene	48.96	252	103237	481.91	ng/mL	99
86) Benzo[a]pyrene	49.17	252	92418m	431.51	ng/mL	
87) Perylene	49.51	252	102074	478.06	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.36	276	86850m	409.14	ng/mL	
89) Dibenz[a,h]anthracene	54.42	278	82352	412.53	ng/mL	99
90) Benzo[g,h,i]perylene	55.79	276	91594	413.83	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13\
Data File : P27670.D
Acq On : 15 Jan 2006 2:20 am
Operator : NLJr
Sample : Q2011301
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 17 11:50:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 17 11:45:09 2006
Response via : Initial Calibration



Sequence Name: C:\MSDChem\1\sequence\S3011101.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN11\

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

6 deg/min Runs. posted 1/18/06 MS w/method B1030111.

Line			Sample Name/Misc Info		
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P34759	FRBIO3B	alk std
4)	Sample	1	P34760	FRBIO3B	pah std
5)	RearSamp	51	P34761	FRBIO3B	alk std
6)	Sample	1	P34762	FRBIO3B	pah std
7)	Sample	2	P34763	FRBIO3B	i3011101
8)	Sample	3	P34764	FRBIO3B	i3011102
9)	Sample	4	P34765	FRBIO3B	i3011103
10)	Sample	5	P34766	FRBIO3B	i3011104
11)	Sample	6	P34767	FRBIO3B	i3011105
12)	Sample	7	P34768	FRBIO3B	i3011106
13)	Sample	8	P34769	FRBIO3B	i3011107
14)	Sample	9	P34770	FRBIO3B	ANS3011101 SS012506AWS01
15)	Sample	10	P34771	FRBIO3B	DCM
16)	Sample	11	P34772	FRBIO3B	DCM
17)	Sample	12	P34773	FRBIO3B	i3011108
18)	Sample	13	P34774	FRBIO3B	i3011109
19)	Sample	14	P34775	FRBIO3B	DCM
20)	Sample	15	P34776	FRBIO3B	SS122105B14
21)	Sample	16	P34777	FRBIO3B	0512105-01
22)	Sample	17	P34778	FRBIO3B	0512105-02
23)	Sample	18	P34779	FRBIO3B	0512105-03
24)	Sample	19	P34780	FRBIO3B	0512105-04
25)	Sample	20	P34781	FRBIO3B	0512105-05
26)	Sample	21	P34782	FRBIO3B	0512105-06
27)	Sample	22	P34783	FRBIO3B	0512105-07
28)	Sample	23	P34784	FRBIO3B	0512105-08
29)	Sample	24	P34785	FRBIO3B	0512105-08D
30)	Sample	25	P34786	FRBIO3B	C3011101
31)	Sample	26	P34787	FRBIO3B	SS122105B16
32)	Sample	27	P34788	FRBIO3B	0512110-01
33)	Sample	28	P34789	FRBIO3B	0512110-02
34)	Sample	29	P34790	FRBIO3B	0512110-03
35)	Sample	30	P34791	FRBIO3B	0512110-04
36)	Sample	31	P34792	FRBIO3B	0512110-05
37)	Sample	32	P34793	FRBIO3B	0512110-06
38)	Sample	33	P34794	FRBIO3B	0512110-07
39)	Sample	34	P34795	FRBIO3B	0512110-08
40)	Sample	35	P34796	FRBIO3B	0512110-09
41)	Sample	36	P34797	FRBIO3B	0512110-10
42)	Sample	37	P34798	FRBIO3B	C3011102
43)	Sample	38	P34799	FRBIO3B	0512110-11

B1030111.M cw 1/24/06

MS 1/25/06

no quant - just post.

Last Modified: Thu Jan 12 09:57:58 2006

Sequence Name: C:\MSDChem\1\sequence\S3011101.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	39	P34800	FRBIO3B	0512110-11D
45)	Sample	40	P34801	FRBIO3B	0512110-12
46)	Sample	41	P34802	FRBIO3B	0512110-13
47)	Sample	42	P34803	FRBIO3B	0512110-14
48)	Sample	43	P34804	FRBIO3B	C3011103

CW 1/30/06

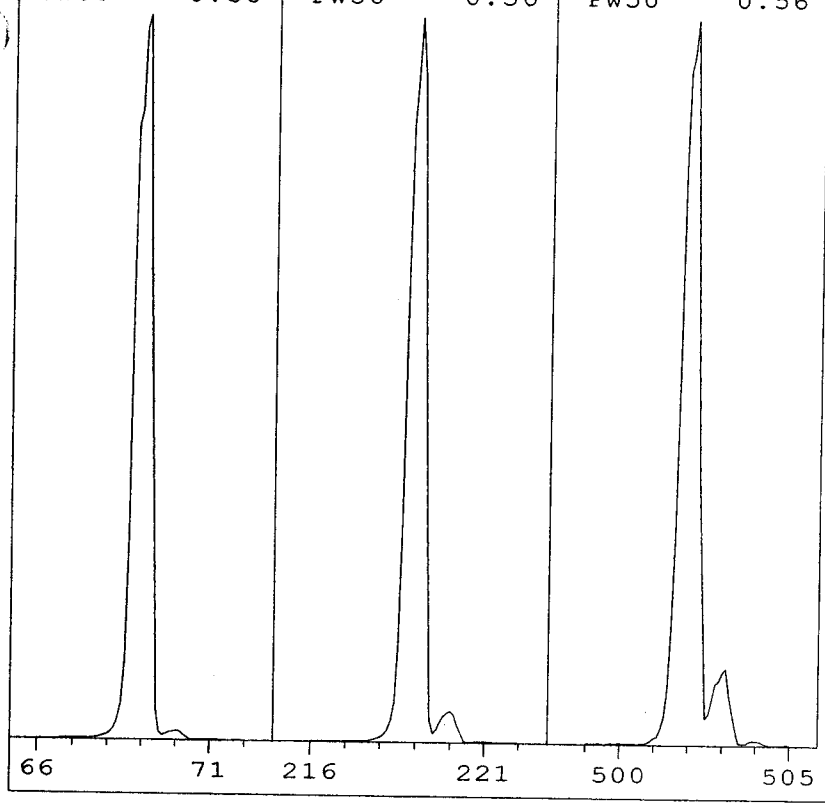
5973

Wed Jan 11 12:32:26 2006
C:\MSDCHEM\1\5973N\PFTBA.U

1/11/06

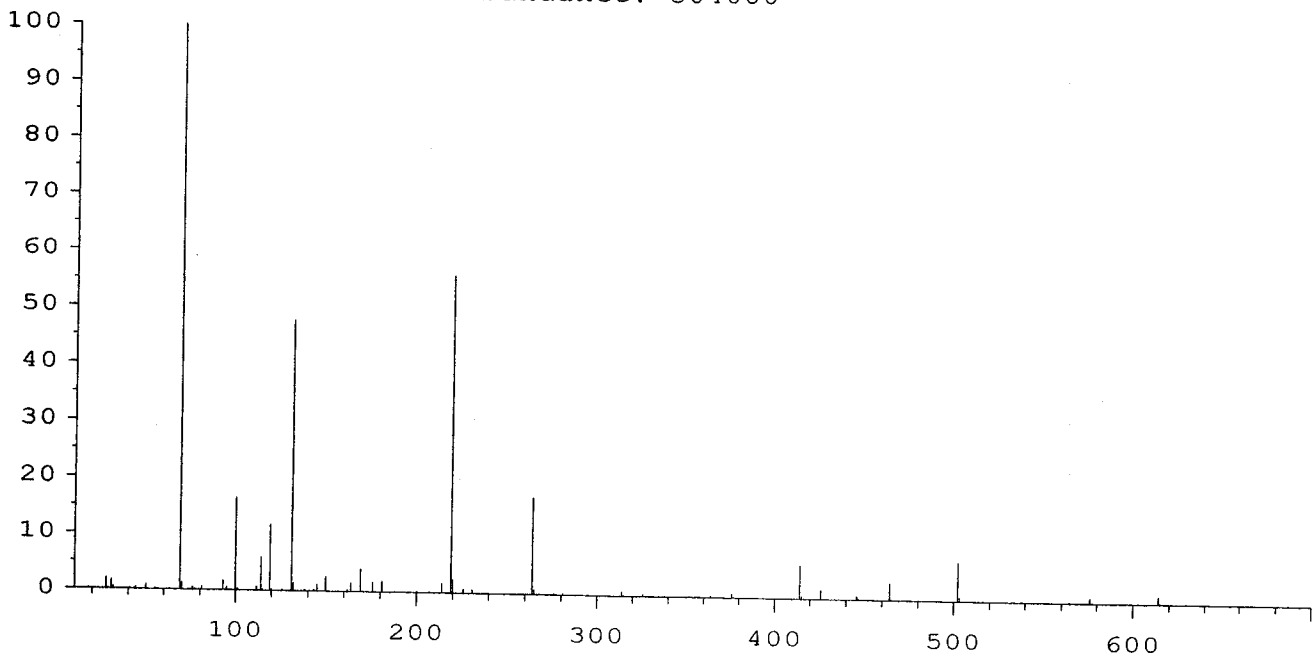
Instrument: PAH-3

Mass	69.10	Mass	219.00	Mass	502.10
Ab	354062	Ab	198044	Ab	23388
Pw50	0.58	Pw50	0.56	Pw50	0.56



Ion Pol	POS	MassGain	63
		MassOffs	-12
Emission	34.6	AmuGain	2443
ElEnrgy	69.9	AmuOffs	127
Filament	1	Wid219	-0.043
		DC Pol	POS
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	1588
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	Foreline	48
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
177 peaks Base: 69.00 Abundance: 304000



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	304000	100.00	70.00	3780	1.24
219.00	170112	55.96	220.00	7509	4.41
502.00	20984	6.90	503.00	2191	10.44

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	15.3	18.1	18.3	19.3	19.1	21.3
TARGET ABUND(%):	1.0	100.0	45.0	55.0	5.0	6.0
ACTUAL TUNE ABUND(%):	1.0	100.0	47.8	56.0	5.9	6.9

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\JAN06\
Method File : BIO30111.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Jan 13 06:21:10 2006
Response Via : Initial Calibration

Calibration Files
10 =P34773.D 25 =P34774.D 100 =P34765.D
500 =P34766.D 1250=P34767.D 5000=P34768.D
10000=P34769.D

MS 1-13-06 G 1/24/06

		Compound	10	25	100	500	1250	5000	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
56)	A1	Naphthobenzothiop							0.000#	-1.00
57)	A2	Naphthobenzothiop							0.000#	-1.00

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\JAN06\
Method File : BIO30111.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Jan 13 06:21:10 2006
Response Via : Initial Calibration

Calibration Files
10 =P34773.D 25 =P34774.D 100 =P34765.D
500 =P34766.D 1250=P34767.D 5000=P34768.D 10000 = P34769 1/24/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
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	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
84)	A2	Hopane (T19)	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
85)	A2	C23 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
86)	A2	C24 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
87)	A2	C25 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
88)	A2	C24 Tetracyclic T	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
89)	A2	C26 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
90)	A2	C26 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
91)	A2	C28 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
92)	A2	C28 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
93)	A2	C29 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
94)	A2	C29 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
95)	A2	18a-22,29,30-Tris	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
96)	A2	C30 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
97)	A2	C30 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
98)	A2	17a(H)-22,29,30-T	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
99)	A2	17a/b,21b/a 28,30	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
100)	A2	17a(H),21b(H)-25-	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
101)	A2	30-Norhopane (T15	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
102)	A2	18a(H)-30-Norneoh	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
103)	A2	17a(H)-Diahopane	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
104)	A2	30-Normoretane (T	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
105)	A2	18a(H)&18b(H)-Ole	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
106)	A2	Moretane (T20)	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
107)	A2	30-Homohopane-22S	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
108)	A2	30-Homohopane-22R	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
109)	A2	30,31-Bishomohopa	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
110)	A2	30,31-Bishomohopa	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
111)	A2	30,31-Trishomohop	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
112)	A2	30,31-Trishomohop	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
113)	A2	Tetrakishomohopan	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
114)	A2	Tetrakishomohopan	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93

RF and 1/24/01

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\JAN06\
Method File : BIO30111.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Jan 13 06:21:10 2006
Response Via : Initial Calibration

Calibration Files
10 =P34773.D 25 =P34774.D 100 =P34765.D
500 =P34766.D 1250=P34767.D 5000=P34768.D 10000 = P34769 1/24/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
115)	A2	Pentakishomohopan	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
116)	A2	Pentakishomohopan	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
117)	SA1	5B(H)Cholane - Su	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
118)	A2	13b(H),17a(H)-20S	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
119)	A2	13b(H),17a(H)-20R	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
120)	A2	13b,17a-20S-Methy	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
121)	A2	14a(H),17a(H)-20S	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
122)	A2	14a(H),17a(H)-20R	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
123)	A2	13b,17a-20R-Ethyl	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
124)	A2	13a,17b-20S-Ethyl	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
125)	A2	14a,17a-20S-Methy	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
126)	A2	14a,17a-20R-Methy	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
127)	A2	14a(H),17a(H)-20S	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
128)	A2	14a(H),17a(H)-20R	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
129)	A2	14b(H),17b(H)-20R	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
130)	A2	14b(H),17b(H)-20S	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
131)	A2	14b,17b-20R-Methy	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
132)	A2	14b,17b-20S-Methy	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
133)	A2	14b(H),17b(H)-20R	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20
134)	A2	14b(H),17b(H)-20S	0.195	0.187	0.213	0.207	0.215	0.229	0.210	7.20

(#) = Out of Range ### Number of calibration levels exceeded format ###

RFand 1/24/06

RESPONSE FACTOR REPORT PAH3

METHOD: O: FORENSICS\METHODS\PAH3\JAN06\BIO30105.M

INITIAL CALIBRATION

MS 1-13-06

CALIBRATION FILES	P34773.D	P34774.D	P34765.D	P34766.D	P34767.D	P34768.D	P34769.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
Chrysene-d12	ISTD								
17a(H),21B(H)-hopane - C30H52	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
Hopane (T19)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C23 Tricyclic Terpane (T4)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C24 Tricyclic Terpane (T5)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C25 Tricyclic Terpane (T6)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C24 Tetracyclic Terpane (T6a)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C26 Tricyclic Terpane-22S (T6b)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C26 Tricyclic Terpane-22R (T6c)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C28 Tricyclic Terpane-22S (T7)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C28 Tricyclic Terpane-22R (T8)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C29 Tricyclic Terpane-22S (T9)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C29 Tricyclic Terpane-22R (T10)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
18a-22,29,30-Trisnorneohopane-TS (T11)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C30 Tricyclic Terpane-22S	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
C30 Tricyclic Terpane-22R	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
17a(H)-22,29,30-Trisnorhopane-TM (T12)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
17a/b,21b/a 28,30-Bisnorhopane (T14a)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
17a(H),21b(H)-25-Norhopane (T14b)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30-Norhopane (T15)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
18a(H)-30-Norneohopane-C29Ts (T16)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
17a(H)-Diahopane (X)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30-Normoretane (T17)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
18a(H)&18b(H)-Oleananes (T18)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
Moretane (T20)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30-Homohopane-22S (T21)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30-Homohopane-22R (T22)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30,31-Bishomohopane-22S (T26)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30,31-Bishomohopane-22R (T27)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30,31-Trishomohopane-22S (T30)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
30,31-Trishomohopane-22R (T31)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
Tetrakishomohopane-22S (T32)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
Tetrakishomohopane-22R (T33)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
Pentakishomohopane-22S (T34)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
Pentakishomohopane-22R (T35)	0.433	0.429	0.463	0.375	0.477	0.425	0.407	0.430	7.93
5B(H)Cholane - Surr	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
13b(H),17a(H)-20S-Diacholestane (S4)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
13b(H),17a(H)-20R-Diacholestane (S5)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
13b,17a-20S-Methyldiacholestane (S8)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14a(H),17a(H)-20S-Cholestane (S12)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14a(H),17a(H)-20R-Cholestane (S17)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
13b,17a-20R-Ethyldiacholestane (S18)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
13a,17b-20S-Ethyldiacholestane (S19)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14a,17a-20S-Methylcholestane (S20)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14a,17a-20R-Methylcholestane (S24)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14a(H),17a(H)-20S-Ethylcholestane (S25)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14a(H),17a(H)-20R-Ethylcholestane (S28)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b(H),17b(H)-20R-Cholestane (S14)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b(H),17b(H)-20S-Cholestane (S15)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20

Re 2nd 1/24/06

RESPONSE FACTOR REPORT PAH3

METHOD: O: FORENSICS\METHODS\PAH3\JAN06\BIO30105.M

INITIAL CALIBRATION

CALIBRATION FILES	P34773.D	P34774.D	P34765.D	P34766.D	P34767.D	P34768.D	P34769.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
14b,17b-20R-Methylcholestane (S22)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b,17b-20S-Methylcholestane (S23)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b(H),17b(H)-20R-Ethylcholestane (S26)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b(H),17b(H)-20S-Ethylcholestane (S27)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34773.D
Acq On : 12 Jan 2006 11:44 am
Operator : AC
Sample : i3011108
Misc : BIO CAL 6dm L1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 06:19:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 07:12:11 2006
Response via : Initial Calibration

MS 1-13-06

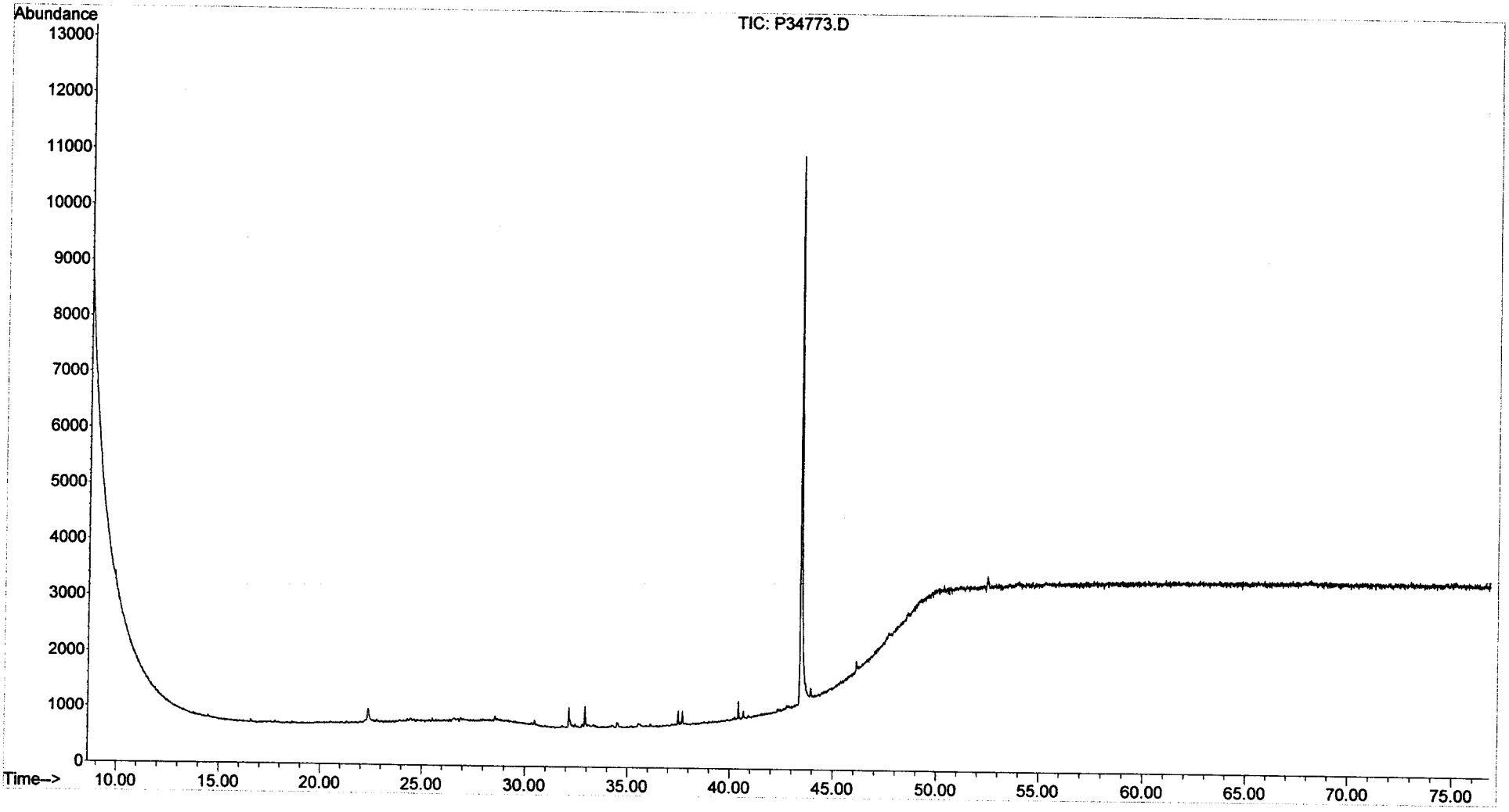
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	50898m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	43.92	217	199m	9.14	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.91%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	441m	9.86	ng/mL	
84) Hopane (T19)	52.50	191	446m	9.97	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34773.D
Acq On : 12 Jan 2006 11:44 am
Operator : AC
Sample : i3011108
Misc : BIO CAL 6dm L1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 06:19:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 07:12:11 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34774.D
Acq On : 12 Jan 2006 1:15 pm
Operator : AC
Sample : i3011109
Misc : BIO CAL 6dm L2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 13 06:20:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 14:54:25 2006
Response via : Initial Calibration

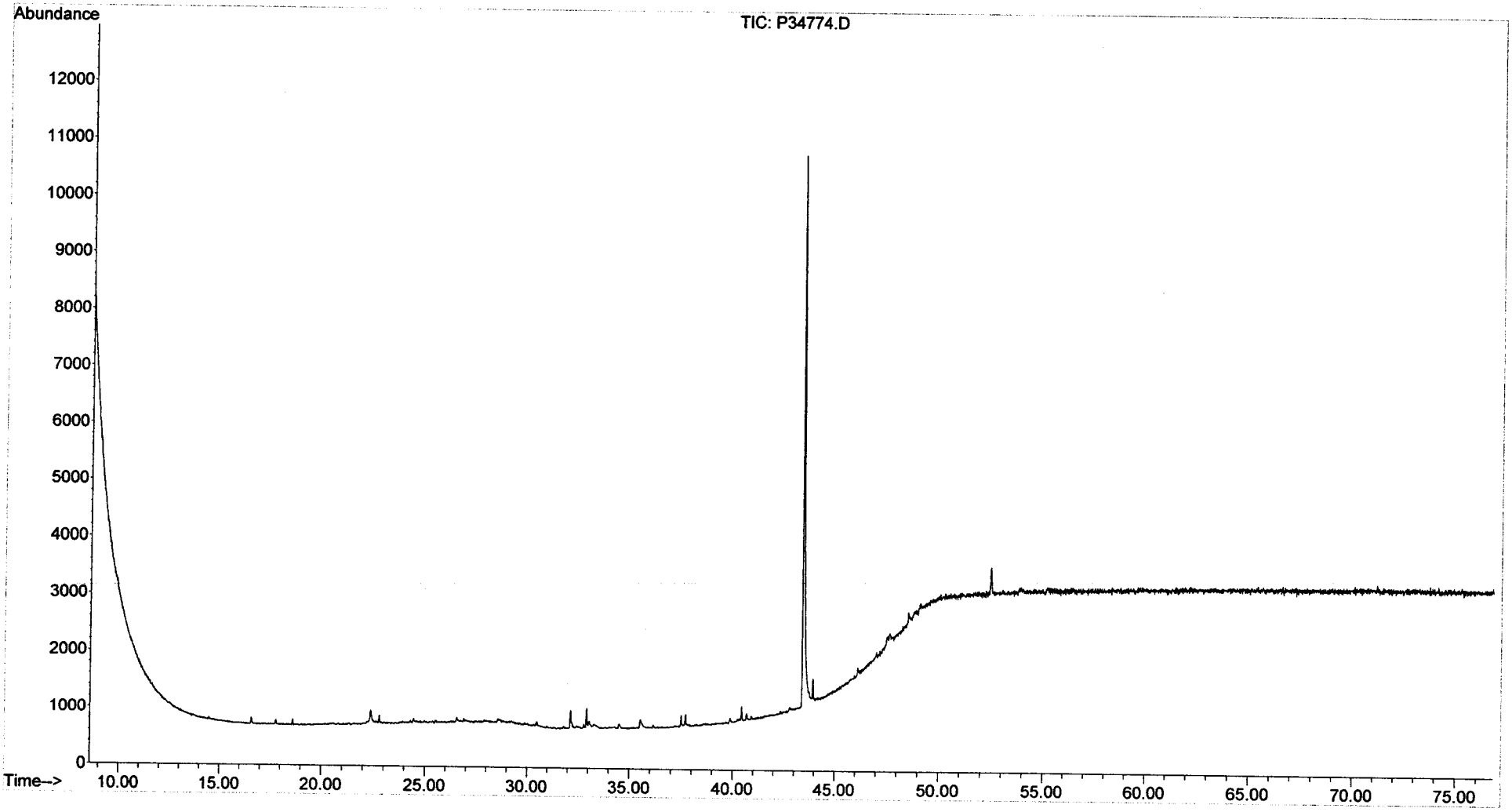
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	49829	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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	43.92	217	466m	21.81	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.18%#		
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	1068m	24.77	ng/mL	
84) Hopane (T19)	52.49	191	1040m	23.00	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34774.D
Acq On : 12 Jan 2006 1:15 pm
Operator : AC
Sample : i3011109
Misc : BIO CAL 6dm L2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 13 06:20:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 14:54:25 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34765.D
Acq On : 11 Jan 2006 7:02 pm
Operator : AC
Sample : i3011103
Misc : BIO CAL 6dm L3
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 12 07:09:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration

MB 1-13-06

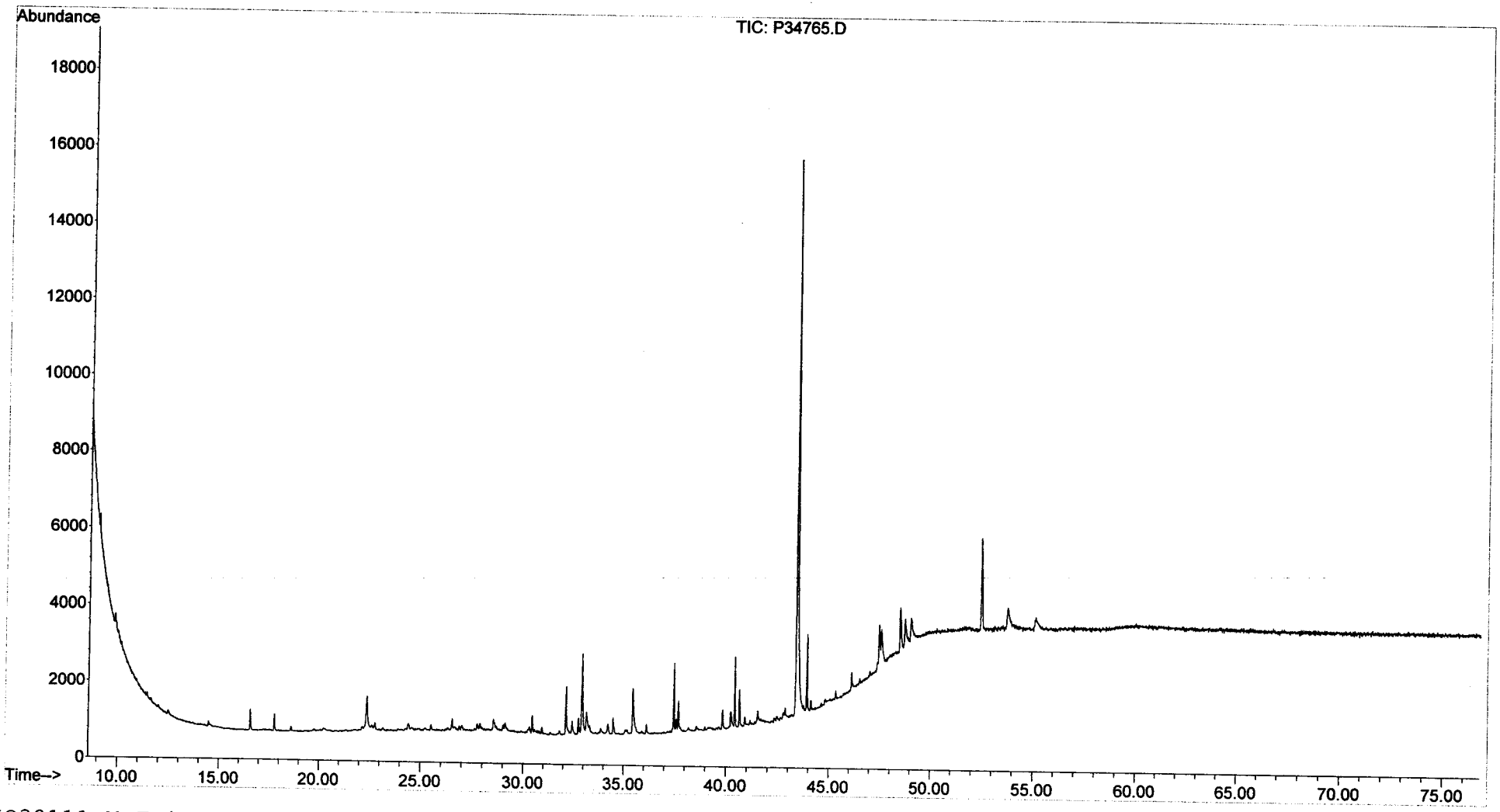
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.40	240	63328	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.92	217	2693	91.76	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.18%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	5860m	91.41	ng/mL	
84) Hopane (T19)	52.49	191	5878m	91.69	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34765.D
Acq On : 11 Jan 2006 7:02 pm
Operator : AC
Sample : i3011103
Misc : BIO CAL 6dm L3
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 12 07:09:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34766.D
Acq On : 11 Jan 2006 8:32 pm
Operator : AC
Sample : i3011104
Misc : BIO CAL 6dm L4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 12 07:02:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration

MS 1/13/06

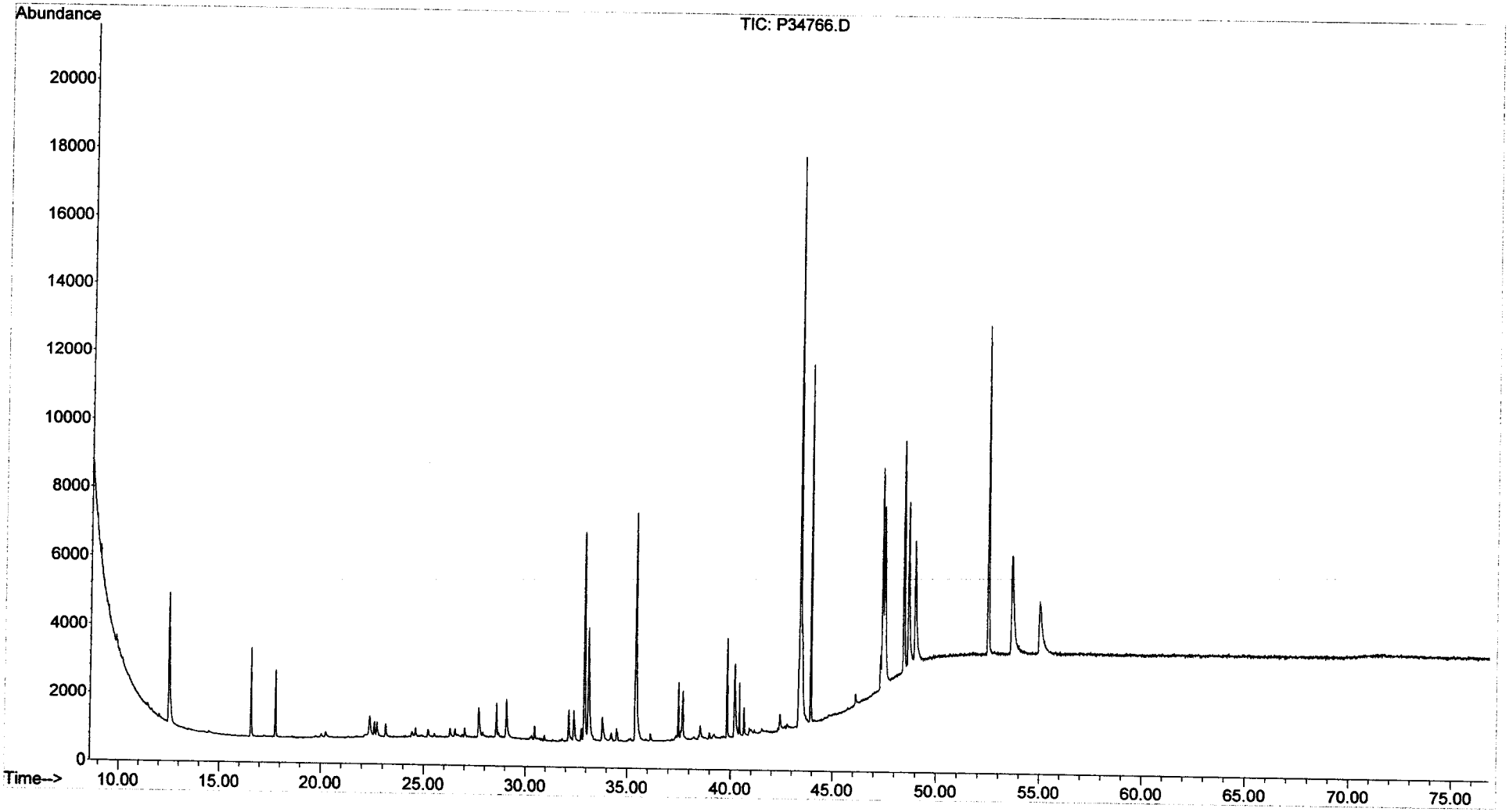
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	61149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.92	217	12651	446.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.64%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	22905	370.02	ng/mL#	86
84) Hopane (T19)	52.49	191	22905	370.02	ng/mL#	86

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34766.D
Acq On : 11 Jan 2006 8:32 pm
Operator : AC
Sample : i3011104
Misc : BIO CAL 6dm L4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 12 07:02:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34767.D
Acq On : 11 Jan 2006 10:02 pm
Operator : AC
Sample : i3011105
Misc : BIO CAL 6dm L5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 07:03:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration

CMS 1-13-06

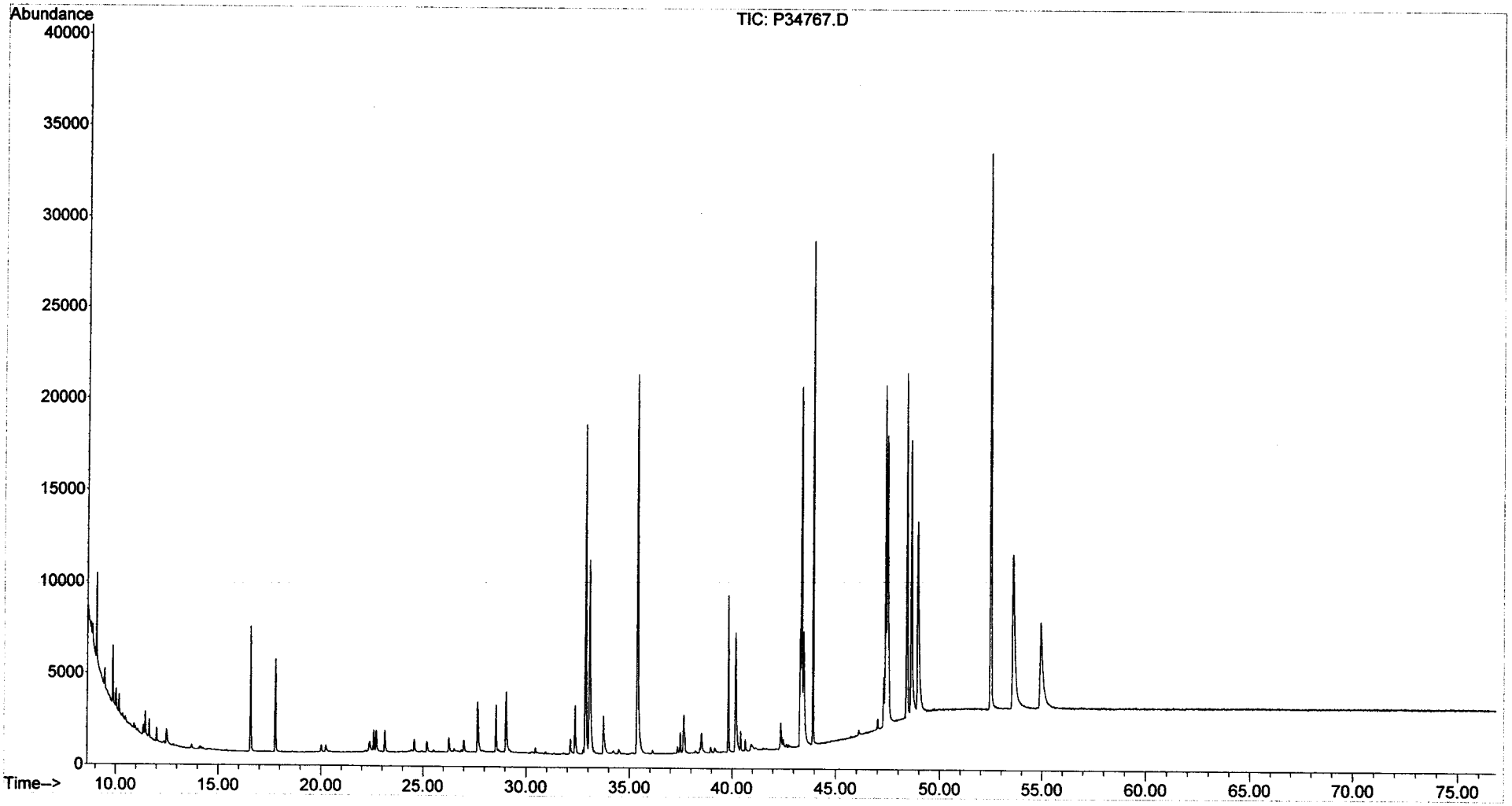
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.36	240	62167	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.92	217	33352	1157.67	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 115.77%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	74177	1178.67	ng/mL#	84
84) Hopane (T19)	52.49	191	74177	1178.67	ng/mL#	84

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34767.D
Acq On : 11 Jan 2006 10:02 pm
Operator : AC
Sample : i3011105
Misc : BIO CAL 6dm L5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 07:03:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34768.D
Acq On : 11 Jan 2006 11:32 pm
Operator : AC
Sample : i3011106
Misc : BIO CAL 6dm L6
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 07:04:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration

MG 1-13-06

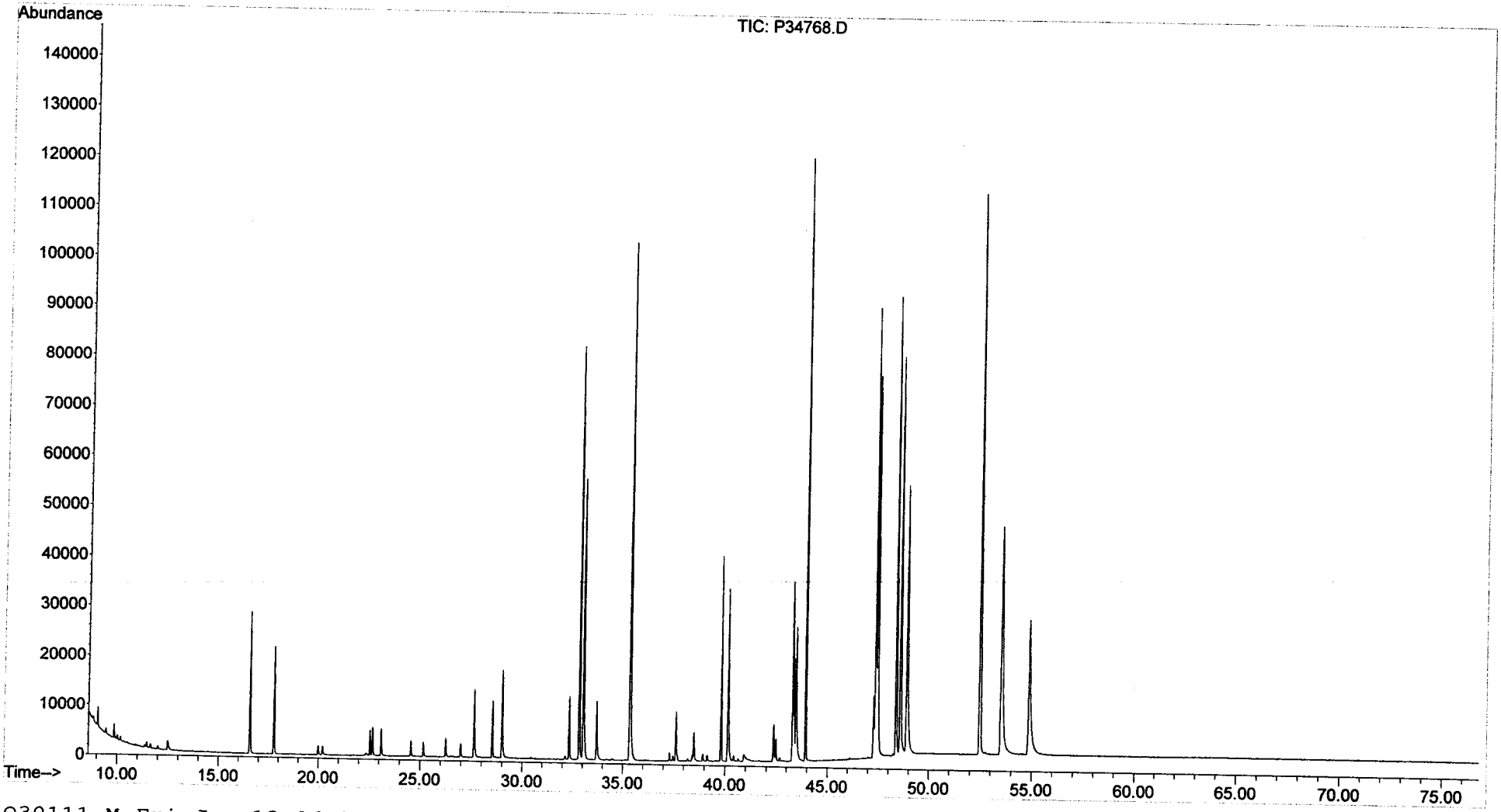
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.35	240	62301	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.92	217	142826	4946.93	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 494.69%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	264591	4195.30	ng/mL#	83
84) Hopane (T19)	52.49	191	264591	4195.30	ng/mL#	83

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34768.D
Acq On : 11 Jan 2006 11:32 pm
Operator : AC
Sample : i3011106
Misc : BIO CAL 6dm L6
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 07:04:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34769.D
Acq On : 12 Jan 2006 1:01 am
Operator : AC
Sample : i3011107
Misc : BIO CAL 6dm L7
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 07:05:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration

MS 1-13-06

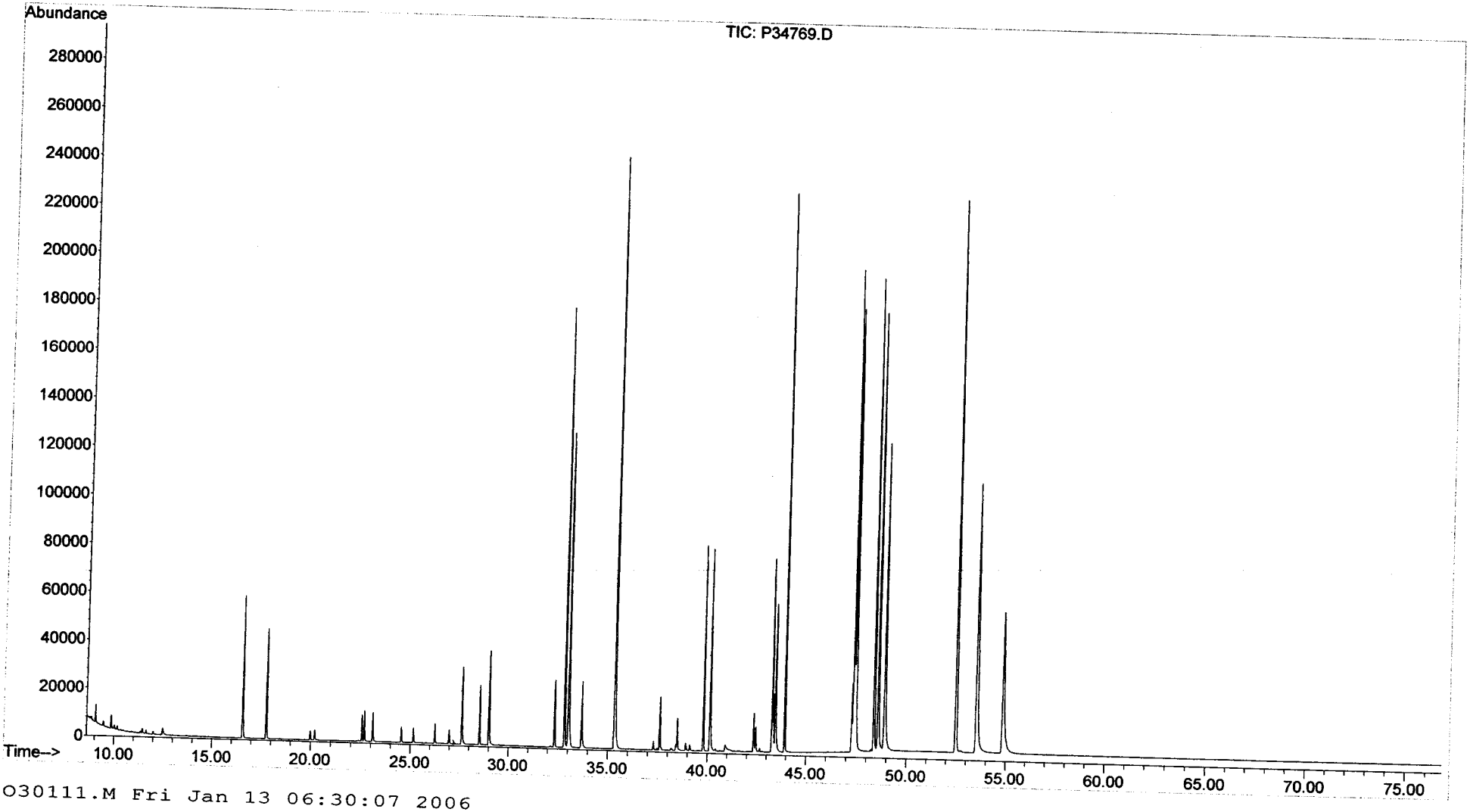
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.34	240	64774	500.00 ng/mL	-0.04
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	
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	43.93	217	291580	9713.60 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	971.36%#	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	526755	8033.25 ng/mL#	83
84) Hopane (T19)	52.49	191	526755	8033.25 ng/mL#	83

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN11\
Data File : P34769.D
Acq On : 12 Jan 2006 1:01 am
Operator : AC
Sample : i3011107
Misc : BIO CAL 6dm L7
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 07:05:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 12 06:50:43 2006
Response via : Initial Calibration



BIO30111.M Fri Jan 13 06:30:07 2006

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27804.D
Acq On : 20 Jan 2006 6:53 pm
Operator : AC
Sample : C2011805
Misc : PAH STD
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 23 07:28:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

AMS 1/23/06

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	74	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.420	0.5	77	-0.01
4	t	cis-Decalin	0.315	0.320	-1.6	77	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.313	-2.8	77	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.039	-1.1	75	-0.01
15	t	2-Methylnaphthalene	1.432	1.478	-3.2	77	-0.01
16	t	1-Methylnaphthalene	1.363	1.395	-2.3	77	0.00
17	A1	Benzothiophene	1.810	1.889	-4.4	77	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.786	0.9	76	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.227	0.5	75	0.00
24	t	Dibenzofuran	1.989	2.029	-2.0	75	0.00
25	t	Acenaphthylene	2.231	2.232	-0.0	75	-0.01
26	t	Acenaphthene	1.368	1.402	-2.5	77	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.110	-3.2	78	-0.01
28	A1	Fluorene	1.599	1.595	0.3	75	-0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.181	-2.0	76	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.265	0.7	74	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27804.D
Acq On : 20 Jan 2006 6:53 pm
Operator : AC
Sample : C2011805
Misc : PAH STD
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 23 07:28:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.483	6.8	72	-0.01
53	t	Anthracene	2.119	2.081	1.8	73	-0.01
54	t	Carbazole	2.020	1.969	2.5	72	0.00
55	t	1-Methylphenanthrene	1.583	1.579	0.3	74	-0.01
56	A1	Fluoranthene	2.435	2.415	0.8	73	-0.01
57	t	Benzo(b)fluorene	1.497	1.449	3.2	73	-0.01
58	s	Pyrene-d10	2.114	2.084	1.4	72	-0.01
59	A1	Pyrene	2.494	2.520	-1.0	75	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.281	1.4	74	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.280	1.4	74	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	71	-0.01
73	t	Benz[a]anthracene	1.428	1.427	0.1	72	-0.01
74	A1	Chrysene	1.434	1.507	-5.1	75	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.508	-5.2	75	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.991	3.3	69	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.522	0.8	72	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.635	-1.9	74	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.489	-0.7	72	-0.01
86	t	Benzo[a]pyrene	1.478	1.420	3.9	69	-0.02
87	t	Perylene	1.473	1.432	2.8	70	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.291	11.9	65	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.257	8.8	65	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.413	7.5	68	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.426	13.6	69	-0.02
92	A2	Hopane (T19)	0.493	0.426	13.6	69	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27804.D
Acq On : 20 Jan 2006 6:53 pm
Operator : AC
Sample : C2011805
Misc : PAH STD
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 23 07:28:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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 (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.209	9.1	68	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27804.D
Acq On : 20 Jan 2006 6:53 pm
Operator : AC
Sample : C2011805
Misc : PAH STD
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 23 07:28:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS 1/23/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	35572	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	53209	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	36962	505.60	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.56%			
58) Pyrene-d10	38.89	212	74126	492.97	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.30%#			
81) Benzo[b]fluoranthene-d12	47.76	264	52723	483.31	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.33%#			
125) 5B(H)Cholane - Surr	44.40	217	11141	455.44	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.54%#			
Target Compounds						Qvalue
3) trans-Decalin	16.94	138	7462	248.79	ng/mL	100
4) cis-Decalin	18.17	138	5683	253.22	ng/mL	100
9) Naphthalene	20.39	128	82263	514.15	ng/mL#	100
15) 2-Methylnaphthalene	23.09	142	52559	516.07	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	49626	511.93	ng/mL#	100
17) Benzothiophene	20.61	134	67212	521.90	ng/mL	100
22) Biphenyl	24.97	154	63536	495.56	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	43644	497.47	ng/mL#	100
24) Dibenzofuran	28.08	168	72162	509.88	ng/mL	99
25) Acenaphthylene	26.69	152	79385m	500.07	ng/mL	
26) Acenaphthene	27.43	153	49881	512.62	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.98	170	39476	515.60	ng/mL	100
28) Fluorene	29.45	166	56737	498.67	ng/mL	99
32) Dibenzothiophene	32.80	184	77576	509.93	ng/mL	100
41) Phenanthrene	33.29	178	80558	496.23	ng/mL	100
52) Retene	40.28	234	17189	466.64	ng/mL	98
53) Anthracene	33.46	178	74029m	491.00	ng/mL	
54) Carbazole	34.15	167	70024m	487.30	ng/mL	
55) 1-Methylphenanthrene	35.79	192	56151	498.57	ng/mL	99
56) Fluoranthene	38.07	202	85906m	495.80	ng/mL	
57) Benzo(b)fluorene	40.60	216	51556	484.02	ng/mL	99
59) Pyrene	38.96	202	89645	505.25	ng/mL	99
64) Naphthobenzothiophene	42.83	234	81156	493.26	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.83	234	81107	492.96	ng/mL#	68
73) Benz[a]anthracene	43.74	228	75919	499.63	ng/mL	99
74) Chrysene	43.92	228	80199	525.49	ng/mL	99
75) Chrysene/Triphenylene	43.92	228	80236	525.73	ng/mL	99
82) Benzo[b]fluoranthene	47.85	252	80991	496.28	ng/mL	99
83) Benzo[k]fluoranthene	47.93	252	86997	509.78	ng/mL	99
85) Benzo[e]pyrene	48.91	252	79248	503.74	ng/mL	99
86) Benzo[a]pyrene	49.11	252	75563	480.43	ng/mL	99
87) Perylene	49.44	252	76195	485.93	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.29	276	68708m	440.75	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	66903	456.37	ng/mL	99
90) Benzo[g,h,i]perylene	55.69	276	75207	462.70	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.27	191	22683	432.29	ng/mL	97
92) Hopane (T19)	53.27	191	22683	432.29	ng/mL	97

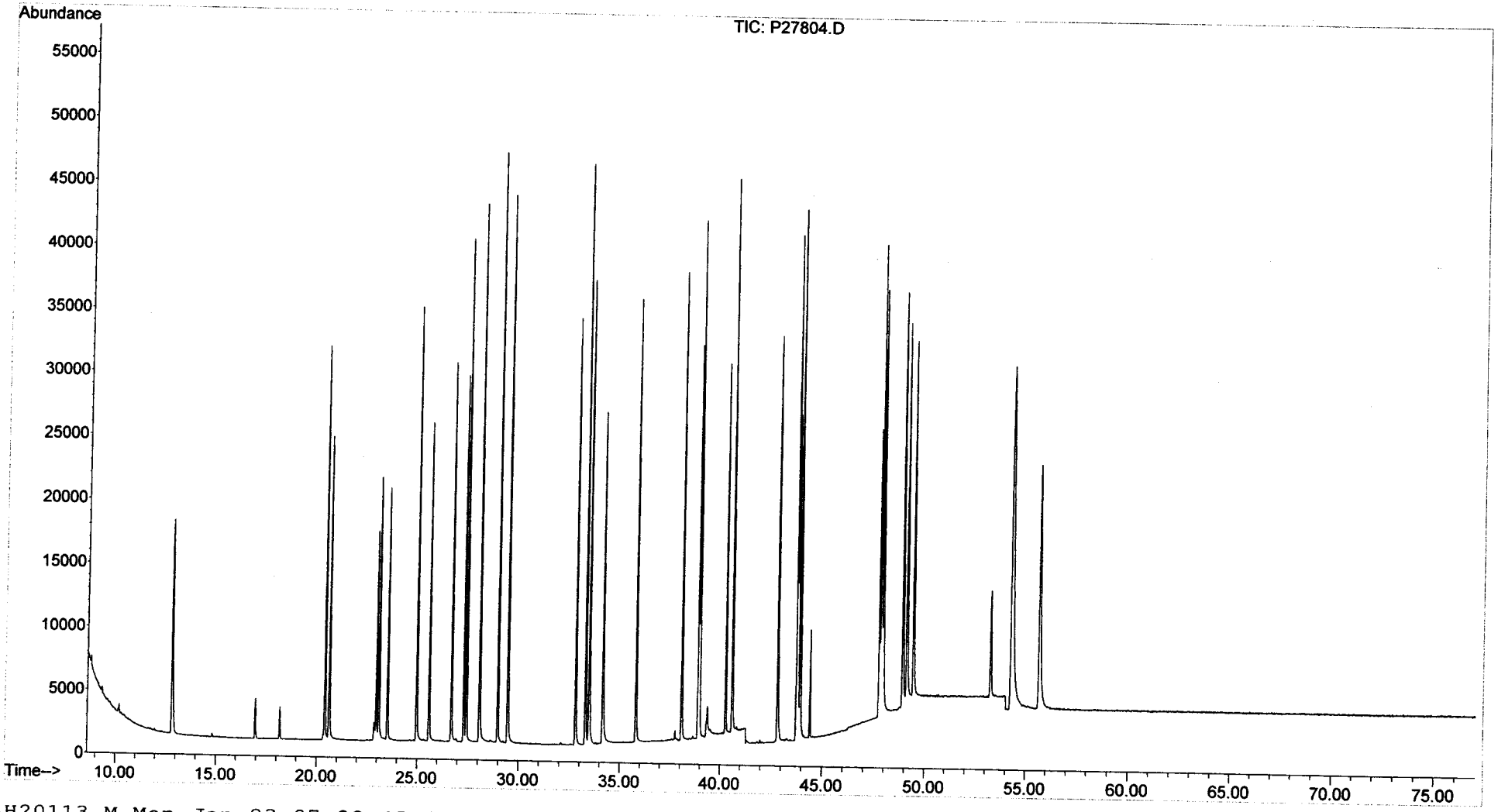
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Mon Jan 23 07:28:43 2006

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27804.D
Acq On : 20 Jan 2006 6:53 pm
Operator : AC
Sample : C2011805
Misc : PAH STD
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 23 07:28:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27818.D
Acq On : 21 Jan 2006 6:31 am
Operator : AC
Sample : C2011806
Misc : PAH STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 23 07:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

1/23/06

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	70	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.422	0.0	73	-0.01
4	t	cis-Decalin	0.315	0.321	-1.9	73	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.302	-2.4	72	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.036	-0.8	71	-0.01
15	t	2-Methylnaphthalene	1.432	1.474	-2.9	72	-0.01
16	t	1-Methylnaphthalene	1.363	1.397	-2.5	73	0.00
17	A1	Benzothiophene	1.810	1.879	-3.8	73	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.798	0.2	72	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.224	0.7	70	0.00
24	t	Dibenzofuran	1.989	2.026	-1.9	71	0.00
25	t	Acenaphthylene	2.231	2.240	-0.4	71	-0.01
26	t	Acenaphthene	1.368	1.385	-1.2	72	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.110	-3.2	73	-0.01
28	A1	Fluorene	1.599	1.560	2.4	69	-0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.153	-0.7	70	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.253	1.3	70	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27818.D
Acq On : 21 Jan 2006 6:31 am
Operator : AC
Sample : C2011806
Misc : PAH STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 23 07:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.480	7.3	68	-0.01
53	t	Anthracene	2.119	2.091	1.3	69	-0.01
54	t	Carbazole	2.020	1.965	2.7	68	0.00
55	t	1-Methylphenanthrene	1.583	1.577	0.4	70	-0.01
56	A1	Fluoranthene	2.435	2.406	1.2	68	-0.01
57	t	Benzo(b)fluorene	1.497	1.422	5.0	67	-0.01
58	s	Pyrene-d10	2.114	2.085	1.4	68	-0.01
59	A1	Pyrene	2.494	2.521	-1.1	71	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.274	1.7	69	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.274	1.7	69	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	67	-0.01
73	t	Benz[a]anthracene	1.428	1.422	0.4	68	-0.01
74	A1	Chrysene	1.434	1.475	-2.9	70	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.475	-2.9	70	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.994	3.0	65	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.531	0.2	68	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.609	-0.3	68	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.479	-0.1	68	-0.01
86	t	Benzo[a]pyrene	1.478	1.429	3.3	66	-0.02
87	t	Perylene	1.473	1.442	2.1	66	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.247	14.9	59	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.274	7.5	62	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.415	7.3	64	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.424	14.0	64	-0.02
92	A2	Hopane (T19)	0.493	0.424	14.0	64	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27818.D
Acq On : 21 Jan 2006 6:31 am
Operator : AC
Sample : C2011806
Misc : PAH STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 23 07:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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 (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.213	7.4	66	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27818.D
Acq On : 21 Jan 2006 6:31 am
Operator : AC
Sample : C2011806
Misc : PAH STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 23 07:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

CMG 1/23/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	33576	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	50279	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	34776	503.98	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.40%			
58) Pyrene-d10	38.89	212	70001	493.21	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.32%#			
81) Benzo[b]fluoranthene-d12	47.76	264	49989	484.96	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.50%#			
125) 5B(H)Cholane - Surr	44.40	217	10693	462.60	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.26%#			
Target Compounds						Qvalue
3) trans-Decalin	16.94	138	7089	250.40	ng/mL	100
4) cis-Decalin	18.17	138	5382	254.07	ng/mL	100
9) Naphthalene	20.39	128	77308	511.90	ng/mL#	100
15) 2-Methylnaphthalene	23.09	142	49477	514.68	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	46918	512.77	ng/mL#	100
17) Benzothiophene	20.61	134	63096	519.06	ng/mL	100
22) Biphenyl	24.97	154	60367	498.83	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	41091	496.21	ng/mL#	100
24) Dibenzofuran	28.08	168	68019	509.17	ng/mL	100
25) Acenaphthylene	26.69	152	75214m	501.97	ng/mL	
26) Acenaphthene	27.43	153	46505	506.34	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.98	170	37276	515.81	ng/mL	99
28) Fluorene	29.45	166	52371	487.66	ng/mL	98
32) Dibenzothiophene	32.80	184	72304	503.53	ng/mL	100
41) Phenanthrene	33.29	178	75653	493.72	ng/mL	100
52) Retene	40.28	234	16131	463.95	ng/mL	98
53) Anthracene	33.46	178	70219m	493.41	ng/mL	
54) Carbazole	34.15	167	65961	486.32	ng/mL	100
55) 1-Methylphenanthrene	35.79	192	52939	498.00	ng/mL	100
56) Fluoranthene	38.07	202	80794m	494.02	ng/mL	
57) Benzo(b)fluorene	40.60	216	47736	474.80	ng/mL	100
59) Pyrene	38.96	202	84651	505.47	ng/mL	98
64) Naphthobenzothiophene	42.83	234	76364	491.72	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.83	234	76364	491.72	ng/mL#	67
73) Benz[a]anthracene	43.74	228	71476	497.80	ng/mL	99
74) Chrysene	43.92	228	74169	514.30	ng/mL	100
75) Chrysene/Triphenylene	43.92	228	74169	514.30	ng/mL	100
82) Benzo[b]fluoranthene	47.85	252	76976	499.17	ng/mL	99
83) Benzo[k]fluoranthene	47.93	252	80878	501.54	ng/mL	99
85) Benzo[e]pyrene	48.91	252	74367	500.26	ng/mL	99
86) Benzo[a]pyrene	49.11	252	71826	483.28	ng/mL	100
87) Perylene	49.44	252	72483	489.20	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.29	276	62690m	425.58	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	64053	462.39	ng/mL	99
90) Benzo[g,h,i]perylene	55.69	276	71136	463.16	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.27	191	21301	429.61	ng/mL	99
92) Hopane (T19)	53.27	191	21301	429.61	ng/mL	99

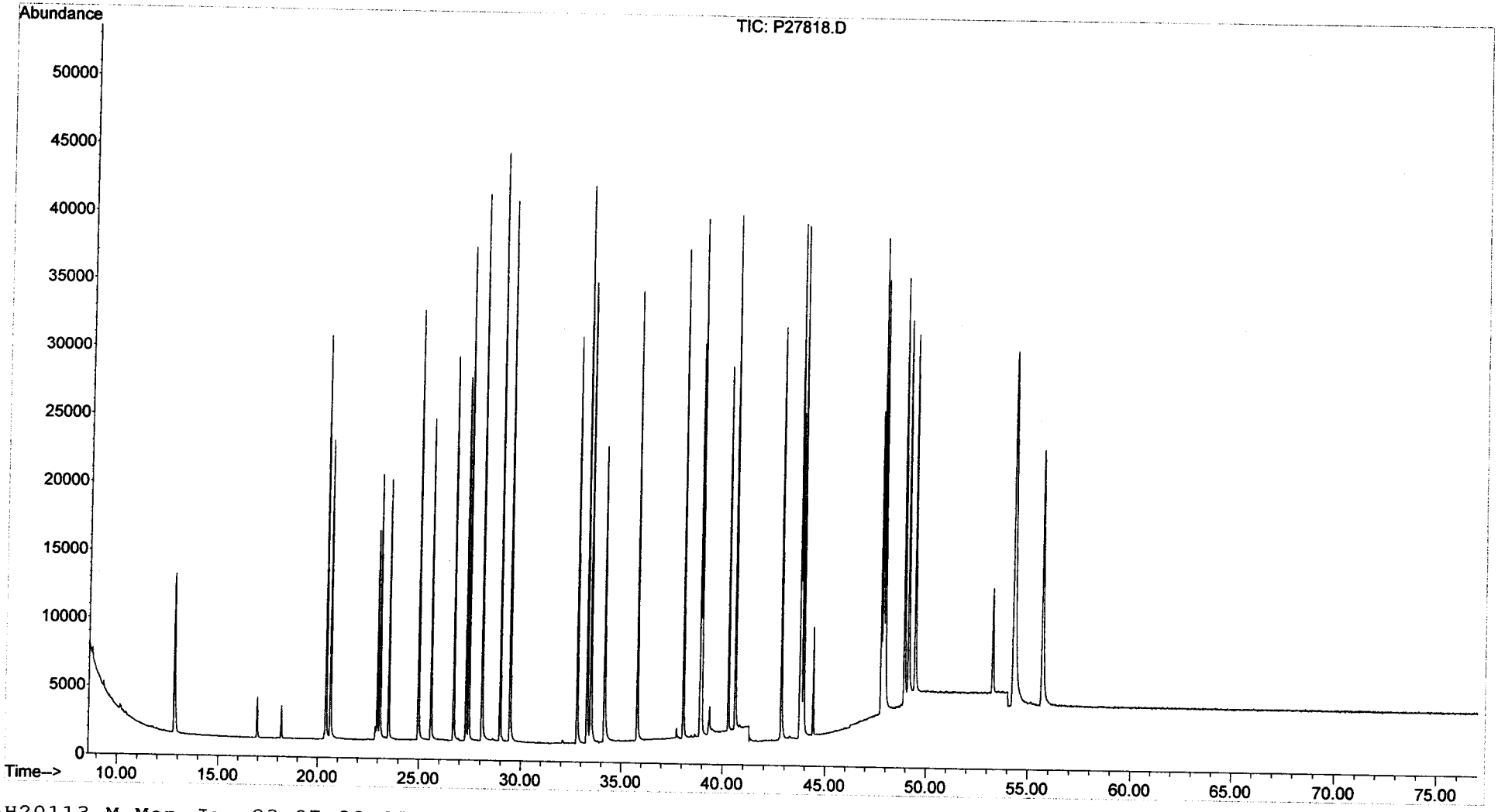
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Mon Jan 23 07:32:24 2006

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27818.D
Acq On : 21 Jan 2006 6:31 am
Operator : AC
Sample : C2011806
Misc : PAH STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 23 07:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



PAH20113.M Mon Jan 23 07:32:25 2006

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27880.D
Acq On : 25 Jan 2006 2:09 am
Operator : AC
Sample : C2012303
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 25 08:15:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

ms 1/25/06

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	80	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.415	1.7	82	0.00
4	t	cis-Decalin	0.315	0.318	-1.0	83	0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.320	-3.2	83	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.039	-1.1	82	0.00
15	t	2-Methylnaphthalene	1.432	1.484	-3.6	83	0.00
16	t	1-Methylnaphthalene	1.363	1.399	-2.6	83	0.00
17	A1	Benzothiophene	1.810	1.909	-5.5	85	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.793	0.5	82	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.223	0.8	80	0.00
24	t	Dibenzofuran	1.989	2.018	-1.5	81	0.01
25	t	Acenaphthylene	2.231	2.250	-0.9	81	0.00
26	t	Acenaphthene	1.368	1.395	-2.0	83	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.099	-2.1	83	-0.01
28	A1	Fluorene	1.599	1.574	1.6	80	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.139	-0.0	80	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.248	1.5	80	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27880.D
Acq On : 25 Jan 2006 2:09 am
Operator : AC
Sample : C2012303
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 25 08:15:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.457	11.8	74	-0.01
53	t	Anthracene	2.119	2.042	3.6	77	0.00
54	t	Carbazole	2.020	1.970	2.5	78	0.00
55	t	1-Methylphenanthrene	1.583	1.536	3.0	78	0.00
56	A1	Fluoranthene	2.435	2.351	3.4	77	0.00
57	t	Benzo(b)fluorene	1.497	1.399	6.5	76	-0.01
58	s	Pyrene-d10	2.114	2.002	5.3	75	0.00
59	A1	Pyrene	2.494	2.458	1.4	79	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.209	4.5	77	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.209	4.5	77	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	74	-0.01
73	t	Benz[a]anthracene	1.428	1.438	-0.7	75	0.00
74	A1	Chrysene	1.434	1.496	-4.3	78	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.496	-4.3	78	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.995	2.9	72	0.00
82	t	Benzo[b]fluoranthene	1.534	1.498	2.3	73	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.695	-5.7	79	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.505	-1.8	76	-0.01
86	t	Benzo[a]pyrene	1.478	1.452	1.8	73	-0.01
87	t	Perylene	1.473	1.469	0.3	74	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.315	10.2	69	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.317	4.4	71	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.456	4.6	73	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.431	12.6	72	-0.02
92	A2	Hopane (T19)	0.493	0.431	12.6	72	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27880.D
Acq On : 25 Jan 2006 2:09 am
Operator : AC
Sample : C2012303
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 25 08:15:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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 (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.211	8.3	71	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27880.D
Acq On : 25 Jan 2006 2:09 am
Operator : AC
Sample : C2012303
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 25 08:15:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS 1/25/06

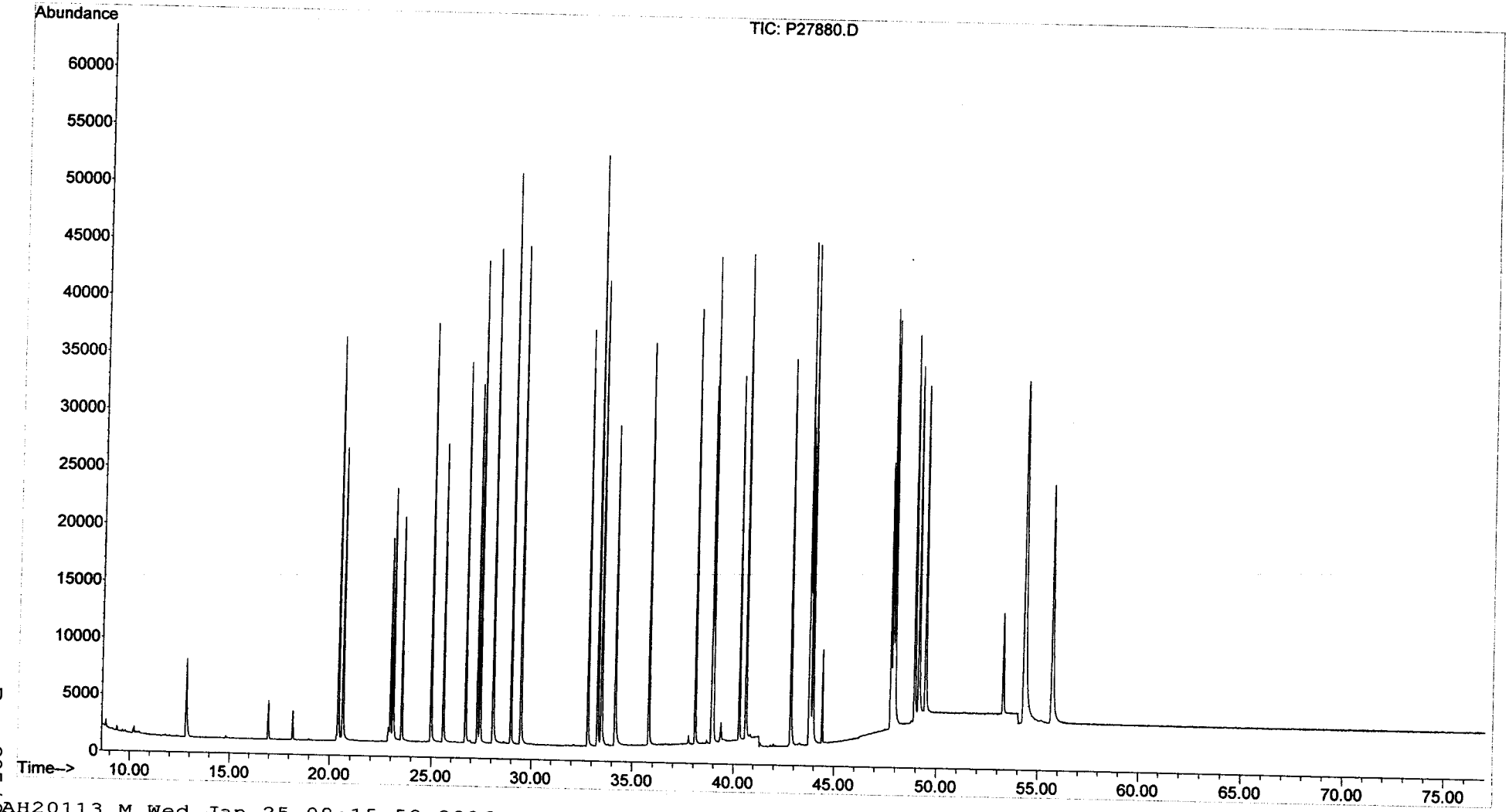
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	38469	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	55244	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	39983	505.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.57%			
58) Pyrene-d10	38.90	212	77025	473.67	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.37%#			
81) Benzo[b]fluoranthene-d12	47.77	264	54941	485.09	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.51%#			
125) 5B(H)Cholane - Surr	44.41	217	11669	459.45	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.95%#			
Target Compounds						Qvalue
3) trans-Decalin	16.96	138	7983	246.11	ng/mL	100
4) cis-Decalin	18.18	138	6110	251.75	ng/mL	100
9) Naphthalene	20.40	128	89261	515.87	ng/mL#	100
15) 2-Methylnaphthalene	23.10	142	57070	518.16	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	53808	513.27	ng/mL#	100
17) Benzothiophene	20.62	134	73455	527.42	ng/mL	100
22) Biphenyl	24.98	154	68984	497.53	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	47033	495.73	ng/mL#	100
24) Dibenzofuran	28.09	168	77635	507.24	ng/mL	99
25) Acenaphthylene	26.70	152	86558m	504.20	ng/mL	
26) Acenaphthene	27.43	153	53681	510.13	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.98	170	42261	510.41	ng/mL	99
28) Fluorene	29.46	166	60537	492.00	ng/mL	99
32) Dibenzothiophene	32.80	184	82272	500.07	ng/mL	100
41) Phenanthrene	33.29	178	86467	492.51	ng/mL	100
52) Retene	40.28	234	17598	441.76	ng/mL	96
53) Anthracene	33.48	178	78548m	481.74	ng/mL	
54) Carbazole	34.15	167	75802	487.79	ng/mL	100
55) 1-Methylphenanthrene	35.81	192	59079	485.07	ng/mL	100
56) Fluoranthene	38.08	202	90438m	482.65	ng/mL	
57) Benzo(b)fluorene	40.60	216	53829	467.30	ng/mL	100
59) Pyrene	38.96	202	94541	492.72	ng/mL	100
64) Naphthobenzothiophene	42.83	234	84964	477.51	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.83	234	84964	477.51	ng/mL#	68
73) Benz[a]anthracene	43.76	228	79459m	503.66	ng/mL	
74) Chrysene	43.92	228	82659	521.66	ng/mL	100
75) Chrysene/Triphenylene	43.92	228	82659	521.66	ng/mL	100
82) Benzo[b]fluoranthene	47.86	252	82728	488.25	ng/mL	100
83) Benzo[k]fluoranthene	47.94	252	93663	528.62	ng/mL	99
85) Benzo[e]pyrene	48.91	252	83159	509.12	ng/mL	100
86) Benzo[a]pyrene	49.12	252	80222	491.26	ng/mL	99
87) Perylene	49.44	252	81154	498.50	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.29	276	72671m	449.00	ng/mL	
89) Dibenz[a,h]anthracene	54.35	278	72776	478.14	ng/mL	99
90) Benzo[g,h,i]perylene	55.70	276	80432	476.62	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.27	191	23785	436.60	ng/mL	96
92) Hopane (T19)	53.27	191	23785	436.60	ng/mL	96

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27880.D
Acq On : 25 Jan 2006 2:09 am
Operator : AC
Sample : C2012303
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 25 08:15:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27888.D
Acq On : 25 Jan 2006 8:36 am
Operator : AC
Sample : C2012304
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

1/25/06.

Quant Time: Jan 25 10:00:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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	68	0.00
2	t	Decalin	0.000	0.369	0.0	0#	0.00
3	A1	trans-Decalin	0.422	0.425	-0.7	71	0.00
4	t	cis-Decalin	0.315	0.321	-1.9	71	0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.341	-4.1	71	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.041	-1.3	69	0.00
15	t	2-Methylnaphthalene	1.432	1.485	-3.7	71	0.00
16	t	1-Methylnaphthalene	1.363	1.408	-3.3	71	0.01
17	A1	Benzothiophene	1.810	1.919	-6.0	72	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.787	0.8	70	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.216	1.4	68	0.01
24	t	Dibenzofuran	1.989	2.016	-1.4	68	0.01
25	t	Acenaphthylene	2.231	2.295	-2.9	70	0.00
26	t	Acenaphthene	1.368	1.402	-2.5	70	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.097	-2.0	70	-0.01
28	A1	Fluorene	1.599	1.570	1.8	68	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.128	0.5	67	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.228	2.4	67	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27888.D
Acq On : 25 Jan 2006 8:36 am
Operator : AC
Sample : C2012304
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 25 10:00:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.452	12.7	62	-0.01
53	t	Anthracene	2.119	2.050	3.3	66	0.00
54	t	Carbazole	2.020	1.930	4.5	65	0.00
55	t	1-Methylphenanthrene	1.583	1.515	4.3	65	0.00
56	A1	Fluoranthene	2.435	2.363	3.0	65	0.00
57	t	Benzo(b)fluorene	1.497	1.369	8.6	63	-0.01
58	s	Pyrene-d10	2.114	2.002	5.3	63	0.00
59	A1	Pyrene	2.494	2.453	1.6	67	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.188	5.4	65	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.186	5.5	65	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	62	-0.01
73	t	Benz[a]anthracene	1.428	1.432	-0.3	63	0.00
74	A1	Chrysene	1.434	1.517	-5.8	66	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.517	-5.8	66	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.991	3.3	60	0.00
82	t	Benzo[b]fluoranthene	1.534	1.471	4.1	60	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.715	-6.9	67	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.503	-1.7	63	0.00
86	t	Benzo[a]pyrene	1.478	1.440	2.6	61	-0.01
87	t	Perylene	1.473	1.477	-0.3	63	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.433	2.2	63	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.293	6.2	58	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.435	6.0	60	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.437	11.4	61	-0.02
92	A2	Hopane (T19)	0.493	0.437	11.4	61	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27888.D
Acq On : 25 Jan 2006 8:36 am
Operator : AC
Sample : C2012304
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 25 10:00:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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 (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.210	8.7	59	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27888.D
Acq On : 25 Jan 2006 8:36 am
Operator : AC
Sample : C2012304
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 25 10:00:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	32574	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	46271	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	33911	506.56	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.66%			
58) Pyrene-d10	38.90	212	65199	473.50	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.35%#			
81) Benzo[b]fluoranthene-d12	47.77	264	45834	483.16	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.32%#			
125) 5B(H)Cholane - Surr	44.41	217	9709	456.41	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.64%#			
Target Compounds						Qvalue
3) trans-Decalin	16.96	138	6914	251.73	ng/mL	100
4) cis-Decalin	18.18	138	5230	254.49	ng/mL	100
9) Naphthalene	20.40	128	76253	520.45	ng/mL#	100
15) 2-Methylnaphthalene	23.10	142	48368	518.62	ng/mL#	100
16) 1-Methylnaphthalene	23.53	142	45852	516.54	ng/mL#	100
17) Benzothiophene	20.62	134	62494	529.92	ng/mL	100
22) Biphenyl	24.98	154	58196	495.68	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.60	156	39603	492.95	ng/mL#	100
24) Dibenzofuran	28.09	168	65676	506.76	ng/mL	100
25) Acenaphthylene	26.70	152	74742	514.16	ng/mL#	100
26) Acenaphthene	27.43	153	45654	512.36	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.98	170	35722	509.51	ng/mL	100
28) Fluorene	29.46	166	51141	490.86	ng/mL	99
32) Dibenzothiophene	32.80	184	69307	497.50	ng/mL	100
41) Phenanthrene	33.29	178	72563	488.12	ng/mL	100
52) Retene	40.28	234	14729	436.65	ng/mL	97
53) Anthracene	33.48	178	66787m	483.73	ng/mL	
54) Carbazole	34.15	167	62858	477.69	ng/mL	100
55) 1-Methylphenanthrene	35.81	192	49365	478.66	ng/mL	100
56) Fluoranthene	38.08	202	76975	485.14	ng/mL	99
57) Benzo(b)fluorene	40.60	216	44588	457.13	ng/mL	100
59) Pyrene	38.96	202	79905	491.80	ng/mL	99
64) Naphthobenzothiophene	42.83	234	71267	473.02	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.83	234	71211	472.65	ng/mL#	67
73) Benz[a]anthracene	43.76	228	66269	501.51	ng/mL	100
74) Chrysene	43.92	228	70204	528.98	ng/mL	100
75) Chrysene/Triphenylene	43.92	228	70204	528.98	ng/mL	100
82) Benzo[b]fluoranthene	47.86	252	68062	479.60	ng/mL	99
83) Benzo[k]fluoranthene	47.94	252	79346	534.66	ng/mL	98
85) Benzo[e]pyrene	48.92	252	69556	508.42	ng/mL	99
86) Benzo[a]pyrene	49.12	252	66643	487.25	ng/mL	99
87) Perylene	49.46	252	68331	501.12	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.30	276	66311m	489.15	ng/mL	
89) Dibenz[a,h]anthracene	54.35	278	59806	469.12	ng/mL	99
90) Benzo[g,h,i]perylene	55.70	276	66419	469.90	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.27	191	20240	443.57	ng/mL	96
92) Hopane (T19)	53.27	191	20240	443.57	ng/mL	96

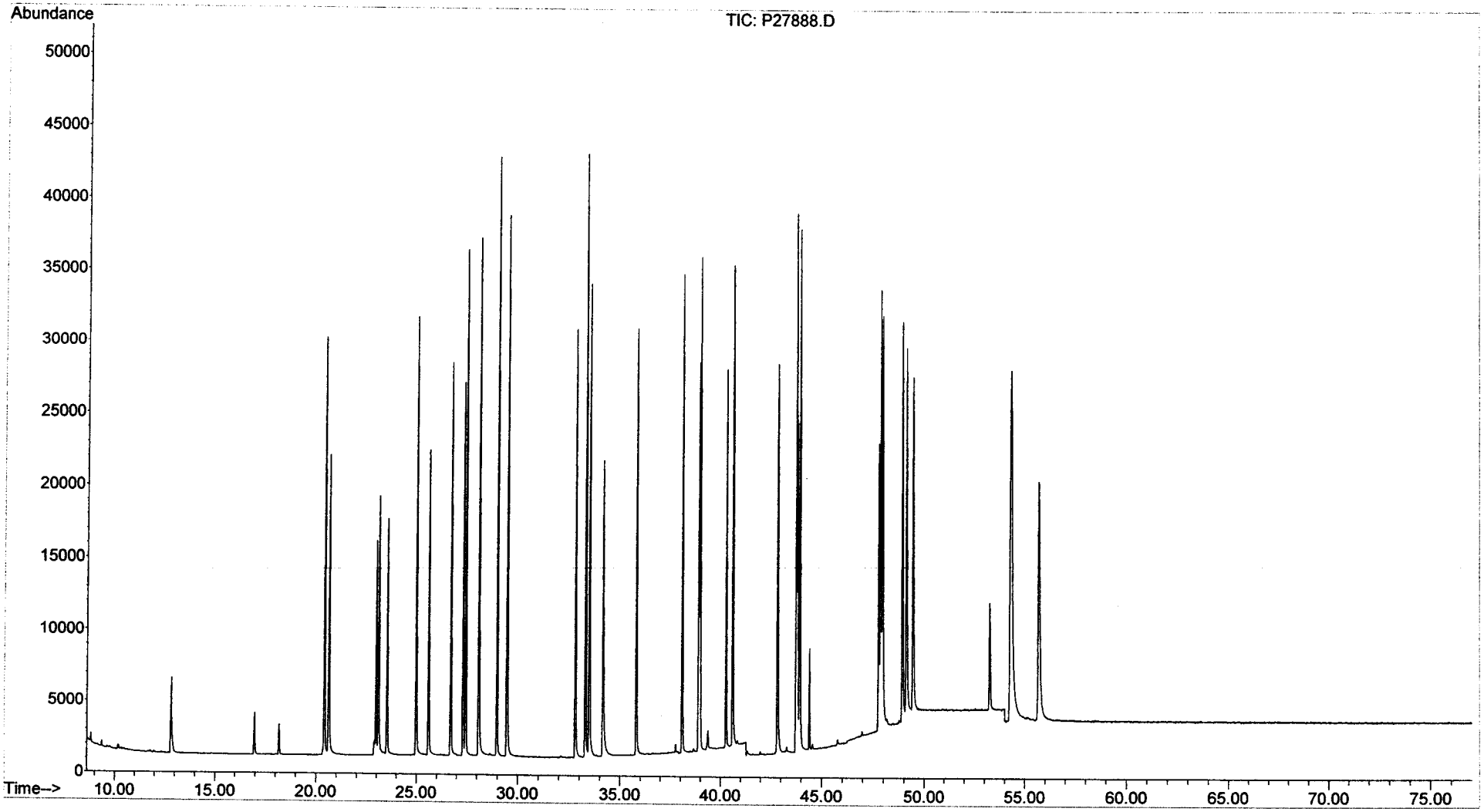
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Wed Jan 25 10:00:44 2006 TEST

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27888.D
Acq On : 25 Jan 2006 8:36 am
Operator : AC
Sample : C2012304
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 25 10:00:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27892D.D
Acq On : 25 Jan 2006 3:48 pm
Operator : AC
Sample : C2012304A
Misc : PAH STD
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 26 07:00:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for AC 1/26/06

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	84	0.00
2	t	Decalin	0.000	0.382	0.0	0#	0.00
3	A1	trans-Decalin	0.422	0.433	-2.6	90	0.00
4	t	cis-Decalin	0.315	0.325	-3.2	89	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.33#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.10#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.56#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.94#
9	A1	Naphthalene	2.249	2.348	-4.4	89	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.95#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.78#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.11#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.87#
14	s	2-Methylnaphthalene-d10	1.028	1.044	-1.6	86	0.00
15	t	2-Methylnaphthalene	1.432	1.515	-5.8	90	0.00
16	t	1-Methylnaphthalene	1.363	1.423	-4.4	89	0.00
17	A1	Benzothiophene	1.810	1.937	-7.0	90	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.51#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.98#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.95#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.68#
22	t	Biphenyl	1.802	1.819	-0.9	88	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.249	-1.3	86	0.00
24	t	Dibenzofuran	1.989	2.051	-3.1	86	0.00
25	t	Acenaphthylene	2.231	2.207	1.1	84	0.00
26	t	Acenaphthene	1.368	1.398	-2.2	87	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.102	-2.4	88	0.00
28	A1	Fluorene	1.599	1.573	1.6	84	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.132	0.3	84	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.232	2.2	84	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.04#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.15#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.31#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.49#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.49#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.30#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.07#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.12#

2nd ✓ MS 1/26/06

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27892D.D
Acq On : 25 Jan 2006 3:48 pm
Operator : AC
Sample : C2012304A
Misc : PAH STD
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 26 07:00:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.432	16.6	74	0.00
53	t	Anthracene	2.119	1.988	6.2	79	0.00
54	t	Carbazole	2.020	1.874	7.2	78	0.00
55	t	1-Methylphenanthrene	1.583	1.502	5.1	80	0.00
56	A1	Fluoranthene	2.435	2.325	4.5	80	0.00
57	t	Benzo(b)fluorene	1.497	1.293	13.6	74	0.00
58	s	Pyrene-d10	2.114	1.996	5.6	79	0.00
59	A1	Pyrene	2.494	2.464	1.2	83	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.12#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.92#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.91#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.26#
64	A1	Naphthobenzothiophene	2.313	2.134	7.7	79	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.142	7.4	79	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	78	0.00
73	t	Benz[a]anthracene	1.428	1.378	3.5	76	0.00
74	A1	Chrysene	1.434	1.502	-4.7	82	0.00
75	A2	Chrysene/Triphenylene	1.434	1.502	-4.7	82	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	0.977	4.7	74	0.00
82	t	Benzo[b]fluoranthene	1.534	1.400	8.7	72	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.711	-6.7	84	0.00
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.451	1.8	77	0.00
86	t	Benzo[a]pyrene	1.478	1.418	4.1	75	0.00
87	t	Perylene	1.473	1.404	4.7	75	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.247	14.9	68	0.00
89	t	Dibenz[a,h]anthracene	1.378	1.195	13.3	67	0.00
90	t	Benzo[g,h,i]perylene	1.527	1.332	12.8	70	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.411	16.6	72	0.00
92	A2	Hopane (T19)	0.493	0.411	16.6	72	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27892D.D
Acq On : 25 Jan 2006 3:48 pm
Operator : AC
Sample : C2012304A
Misc : PAH STD
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 26 07:00:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 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 (	0.493	0.000#	100.0#	0#	-47.05#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.80#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.02#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.10#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.34#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.60#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.87#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.63#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.59#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.70#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.83#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.43#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.87#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.81#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.99#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.25#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.69#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.11#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.01#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.68#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.90#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.88#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.33#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.74#
125	SA1	5B(H)Cholane - Surr	0.230	0.205	10.9	73	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27892D.D
Acq On : 25 Jan 2006 3:48 pm
Operator : AC
Sample : C2012304A
Misc : PAH STD
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 26 07:00:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for AC 1/26/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.14	164	40543m	500.00	ng/mL	-0.17
72) Chrysene-d12	43.63	240	58093m	500.00	ng/mL	-0.20
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	42347	508.24	ng/mL	-0.17
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.82%			
58) Pyrene-d10	38.72	212	80939m	472.28	ng/mL	-0.19
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.23%#			
81) Benzo[b]fluoranthene-d12	47.57	264	56753	476.52	ng/mL	-0.20
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.65%#			
125) 5B(H)Cholane - Surr	44.23	217	11918	446.24	ng/ml	-0.20
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.62%#			
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	8786	257.01	ng/mL	100
4) cis-Decalin	18.00	138	6592	257.71	ng/mL	100
9) Naphthalene	20.23	128	95203m	522.07	ng/mL	
15) 2-Methylnaphthalene	22.93	142	61434m	529.25	ng/mL	
16) 1-Methylnaphthalene	23.35	142	57699m	522.23	ng/mL	
17) Benzothiophene	20.45	134	78547	535.13	ng/mL	100
22) Biphenyl	24.81	154	73746m	504.67	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	50622m	506.26	ng/mL	
24) Dibenzofuran	27.90	168	83162m	515.55	ng/mL	
25) Acenaphthylene	26.53	152	89467m	494.48	ng/mL	
26) Acenaphthene	27.26	153	56678m	511.05	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.81	170	44695m	512.19	ng/mL	
28) Fluorene	29.28	166	63756m	491.66	ng/mL	
32) Dibenzothiophene	32.62	184	86421	498.42	ng/mL	100
41) Phenanthrene	33.11	178	90500m	489.12	ng/mL	
52) Retene	40.10	234	17516m	417.21	ng/mL	
53) Anthracene	33.29	178	80610m	469.09	ng/mL	
54) Carbazole	33.97	167	75972	463.87	ng/mL	99
55) 1-Methylphenanthrene	35.62	192	60902	474.46	ng/mL	100
56) Fluoranthene	37.90	202	94266	477.34	ng/mL	100
57) Benzo(b)fluorene	40.43	216	52406	431.67	ng/mL	99
59) Pyrene	38.78	202	99887m	493.95	ng/mL	
64) Naphthobenzothiophene	42.64	234	86528m	461.42	ng/ml	
65) Naphthobenzothiophene-2,1-	42.64	234	86829m	463.03	ng/mL	
73) Benz[a]anthracene	43.57	228	80072m	482.66	ng/mL	
74) Chrysene	43.73	228	87241	523.58	ng/mL	100
75) Chrysene/Triphenylene	43.73	228	87241	523.58	ng/mL	100
82) Benzo[b]fluoranthene	47.66	252	81310m	456.35	ng/mL	
83) Benzo[k]fluoranthene	47.75	252	99384	533.40	ng/mL	99
85) Benzo[e]pyrene	48.70	252	84287m	490.72	ng/mL	
86) Benzo[a]pyrene	48.90	252	82376m	479.71	ng/mL	
87) Perylene	49.23	252	81586	476.57	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.99	276	72445m	425.65	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	69438	433.84	ng/mL	98
90) Benzo[g,h,i]perylene	55.37	276	77395	436.13	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.99	191	23878	416.81	ng/mL	98
92) Hopane (T19)	52.99	191	23878	416.81	ng/mL	98

2nd ✓ CMS 1/26/06

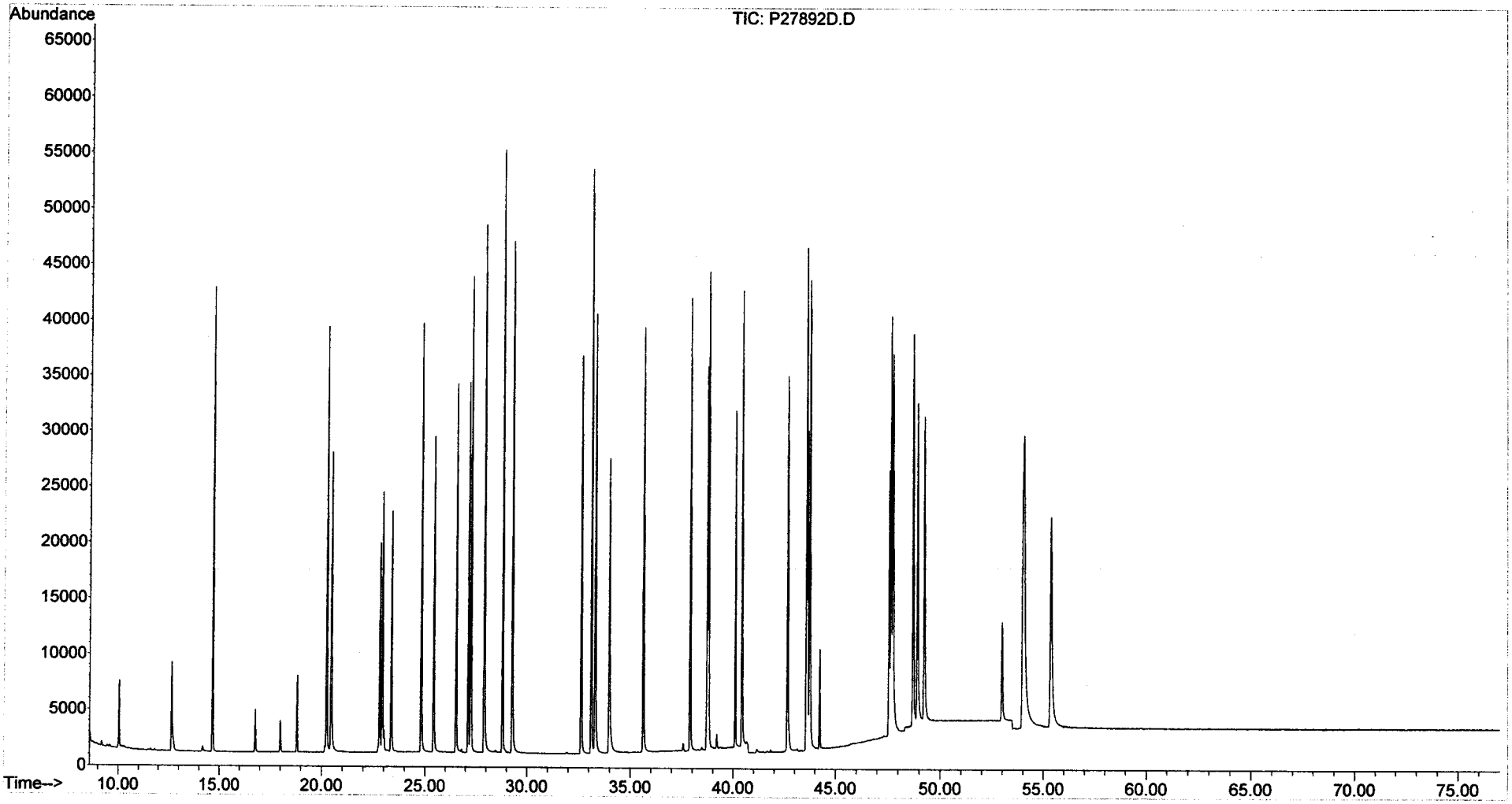
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Thu Jan 26 07:08:02 2006

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27892D.D
Acq On : 25 Jan 2006 3:48 pm
Operator : AC
Sample : C2012304A
Misc : PAH STD
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 26 07:00:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27914.D
Acq On : 26 Jan 2006 11:00 am
Operator : AC
Sample : C2012306
Misc : PAH STD
ALS Vial : 41 Sample Multiplier: 1

~~1/26/06~~
1/26/06.

Quant Time: Jan 26 12:37:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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	70	-0.01
2	t	Decalin	0.000	0.367	0.0	0#	0.00
3	A1	trans-Decalin	0.422	0.410	2.8	71	0.00
4	t	cis-Decalin	0.315	0.306	2.9	70	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.33#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.10#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.56#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.94#
9	A1	Naphthalene	2.249	2.282	-1.5	72	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.95#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.78#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.11#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.87#
14	s	2-Methylnaphthalene-d10	1.028	1.025	0.3	71	-0.01
15	t	2-Methylnaphthalene	1.432	1.456	-1.7	72	-0.01
16	t	1-Methylnaphthalene	1.363	1.379	-1.2	72	-0.01
17	A1	Benzothiophene	1.810	1.854	-2.4	72	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.51#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.98#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.95#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.68#
22	t	Biphenyl	1.802	1.759	2.4	71	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.226	0.6	71	-0.01
24	t	Dibenzofuran	1.989	1.996	-0.4	70	-0.01
25	t	Acenaphthylene	2.231	2.467	-10.6	78	-0.01
26	t	Acenaphthene	1.368	1.365	0.2	71	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.112	-3.3	74	-0.01
28	A1	Fluorene	1.599	1.567	2.0	70	-0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.094	2.1	69	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.211	3.1	69	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.04#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.15#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.31#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.49#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.49#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.30#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.07#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.12#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27914.D
Acq On : 26 Jan 2006 11:00 am
Operator : AC
Sample : C2012306
Misc : PAH STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 26 12:37:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.533	-2.9	76	-0.01
53	t	Anthracene	2.119	2.080	1.8	69	-0.01
54	t	Carbazole	2.020	2.038	-0.9	71	-0.01
55	t	1-Methylphenanthrene	1.583	1.573	0.6	70	-0.01
56	A1	Fluoranthene	2.435	2.427	0.3	69	-0.01
57	t	Benzo(b)fluorene	1.497	1.577	-5.3	75	-0.01
58	s	Pyrene-d10	2.114	2.080	1.6	68	-0.01
59	A1	Pyrene	2.494	2.477	0.7	70	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.12#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.92#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.91#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.26#
64	A1	Naphthobenzothiophene	2.313	2.380	-2.9	73	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.380	-2.9	73	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	69	-0.01
73	t	Benz[a]anthracene	1.428	1.515	-6.1	74	-0.01
74	A1	Chrysene	1.434	1.493	-4.1	72	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.482	-3.3	72	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	1.065	-3.9	71	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.631	-6.3	75	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.709	-6.5	74	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.552	-5.0	73	-0.01
86	t	Benzo[a]pyrene	1.478	1.608	-8.8	76	-0.01
87	t	Perylene	1.473	1.580	-7.3	75	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.582	-8.0	77	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.525	-10.7	76	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.581	-3.5	74	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.462	6.3	72	-0.01
92	A2	Hopane (T19)	0.493	0.462	6.3	72	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27914.D
Acq On : 26 Jan 2006 11:00 am
Operator : AC
Sample : C2012306
Misc : PAH STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 26 12:37:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 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 (	0.493	0.000#	100.0#	0#	-47.05#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.80#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.02#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.10#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.34#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.60#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.87#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.63#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.59#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.70#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.83#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.43#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.87#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.81#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.99#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.25#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.69#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.11#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.01#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.68#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.90#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.88#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.33#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.74#
125	SA1	5B(H)Cholane - Surr	0.230	0.216	6.1	68	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27914.D
Acq On : 26 Jan 2006 11:00 am
Operator : AC
Sample : C2012306
Misc : PAH STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 26 12:37:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

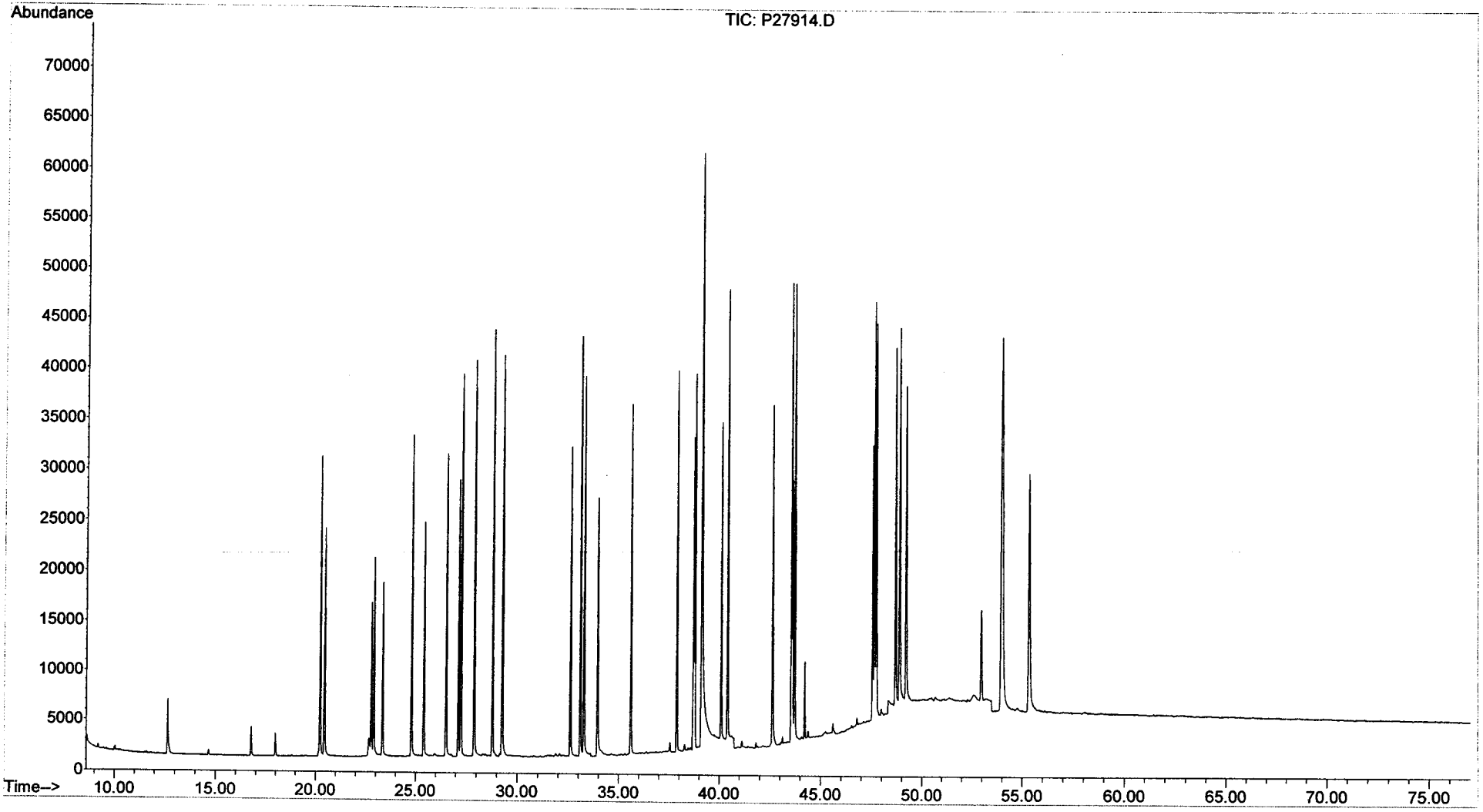
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33762	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	51506	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	34597	498.62	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.86%#			
58) Pyrene-d10	38.70	212	70212	491.97	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.20%#			
81) Benzo[b]fluoranthene-d12	47.56	264	54841	519.35	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.93%			
125) 5B(H)Cholane - Surr	44.23	217	11141	470.50	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.05%#			
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	6929	243.40	ng/mL	100
4) cis-Decalin	18.00	138	5168	242.62	ng/mL	100
9) Naphthalene	20.21	128	77040	507.32	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	49162	508.59	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	46541	505.85	ng/mL#	100
17) Benzothiophene	20.44	134	62584	512.01	ng/mL	100
22) Biphenyl	24.80	154	59375	487.93	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.40	156	41408	497.29	ng/mL#	100
24) Dibenzofuran	27.89	168	67398	501.75	ng/mL	98
25) Acenaphthylene	26.52	152	83303	552.89	ng/mL#	100
26) Acenaphthene	27.25	153	46075	498.89	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.80	170	37540	516.60	ng/mL	98
28) Fluorene	29.27	166	52900	489.87	ng/mL	99
32) Dibenzothiophene	32.61	184	70700	489.64	ng/mL	99
41) Phenanthrene	33.11	178	74659	484.54	ng/mL	99
52) Retene	40.09	234	17997	514.76	ng/mL	98
53) Anthracene	33.28	178	70219m	490.70	ng/mL	
54) Carbazole	33.96	167	68814	504.56	ng/mL	99
55) 1-Methylphenanthrene	35.61	192	53103	496.79	ng/mL	100
56) Fluoranthene	37.89	202	81951	498.33	ng/mL	100
57) Benzo(b)fluorene	40.41	216	53244	526.66	ng/mL	100
59) Pyrene	38.78	202	83613	496.52	ng/mL	100
64) Naphthobenzothiophene	42.63	234	80368	514.65	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.63	234	80368	514.65	ng/mL#	67
73) Benz[a]anthracene	43.56	228	78057	530.68	ng/mL	95
74) Chrysene	43.72	228	76880	520.40	ng/mL	99
75) Chrysene/Triphenylene	43.72	228	76320	516.61	ng/mL	99
82) Benzo[b]fluoranthene	47.65	252	83997	531.72	ng/mL	99
83) Benzo[k]fluoranthene	47.73	252	88033	532.90	ng/mL	99
85) Benzo[e]pyrene	48.69	252	79959	525.06	ng/mL	100
86) Benzo[a]pyrene	48.89	252	82811m	543.92	ng/mL	
87) Perylene	49.21	252	81395	536.26	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.97	276	81474m	539.92	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	78560	553.60	ng/mL	99
90) Benzo[g,h,i]perylene	55.34	276	81432	517.56	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.98	191	23804	468.66	ng/mL#	95
92) Hopane (T19)	52.98	191	23804	468.66	ng/mL#	95

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27914.D
Acq On : 26 Jan 2006 11:00 am
Operator : AC
Sample : C2012306
Misc : PAH STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 26 12:37:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34846.D
Acq On : 21 Jan 2006 7:24 pm
Operator : AC
Sample : C3011806
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 23 06:52:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MMS 1/23/06

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	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#	-45.74#
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\PAH3\JANUARY06\JAN18\
Data File : P34846.D
Acq On : 21 Jan 2006 7:24 pm
Operator : AC
Sample : C3011806
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 23 06:52:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	174	-0.03
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.446	-3.7	208#	-0.01
84	A2	Hopane (T19)	0.430	0.446	-3.7	208#	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34846.D
Acq On : 21 Jan 2006 7:24 pm
Operator : AC
Sample : C3011806
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 23 06:52:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.232	-10.5	196	0.00
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34846.D
Acq On : 21 Jan 2006 7:24 pm
Operator : AC
Sample : C3011806
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 23 06:52:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/23/06

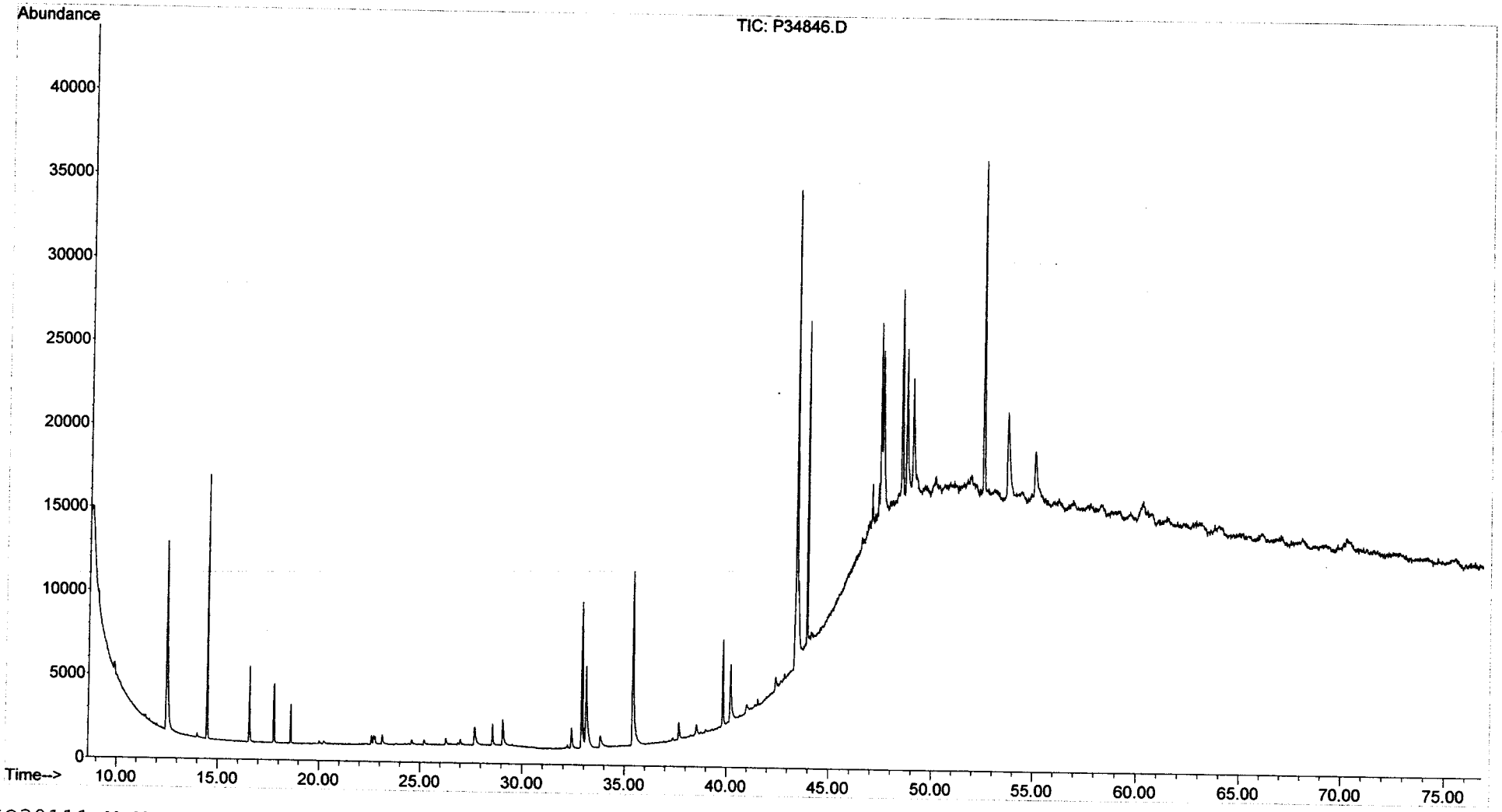
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.38	240	106542	500.00 ng/mL	-0.03
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	= 0.00%#	
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	43.92	217	24763	553.03 ng/ml	0.00
Spiked Amount 1000.000	Range	50 - 130	Recovery	= 55.30%	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	47568	519.55 ng/mL	98
84) Hopane (T19)	52.48	191	47568	519.55 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34846.D
Acq On : 21 Jan 2006 7:24 pm
Operator : AC
Sample : C3011806
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 23 06:52:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34856.D
Acq On : 22 Jan 2006 10:19 am
Operator : AC
Sample : C3011807
Misc : 1X
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Jan 23 06:50:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MB 1/23/06

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	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#	-45.74#
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\PAH3\JANUARY06\JAN18\
Data File : P34856.D
Acq On : 22 Jan 2006 10:19 am
Operator : AC
Sample : C3011807
Misc : 1X
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Jan 23 06:50:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	205#	-0.03
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.445	-3.5	243#	-0.02
84	A2	Hopane (T19)	0.430	0.445	-3.5	243#	-0.02
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34856.D
Acq On : 22 Jan 2006 10:19 am
Operator : AC
Sample : C3011807
Misc : 1X
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Jan 23 06:50:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.230	-9.5	228#	-0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34856.D
Acq On : 22 Jan 2006 10:19 am
Operator : AC
Sample : C3011807
Misc : 1X
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Jan 23 06:50:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

CMS 1/23/06

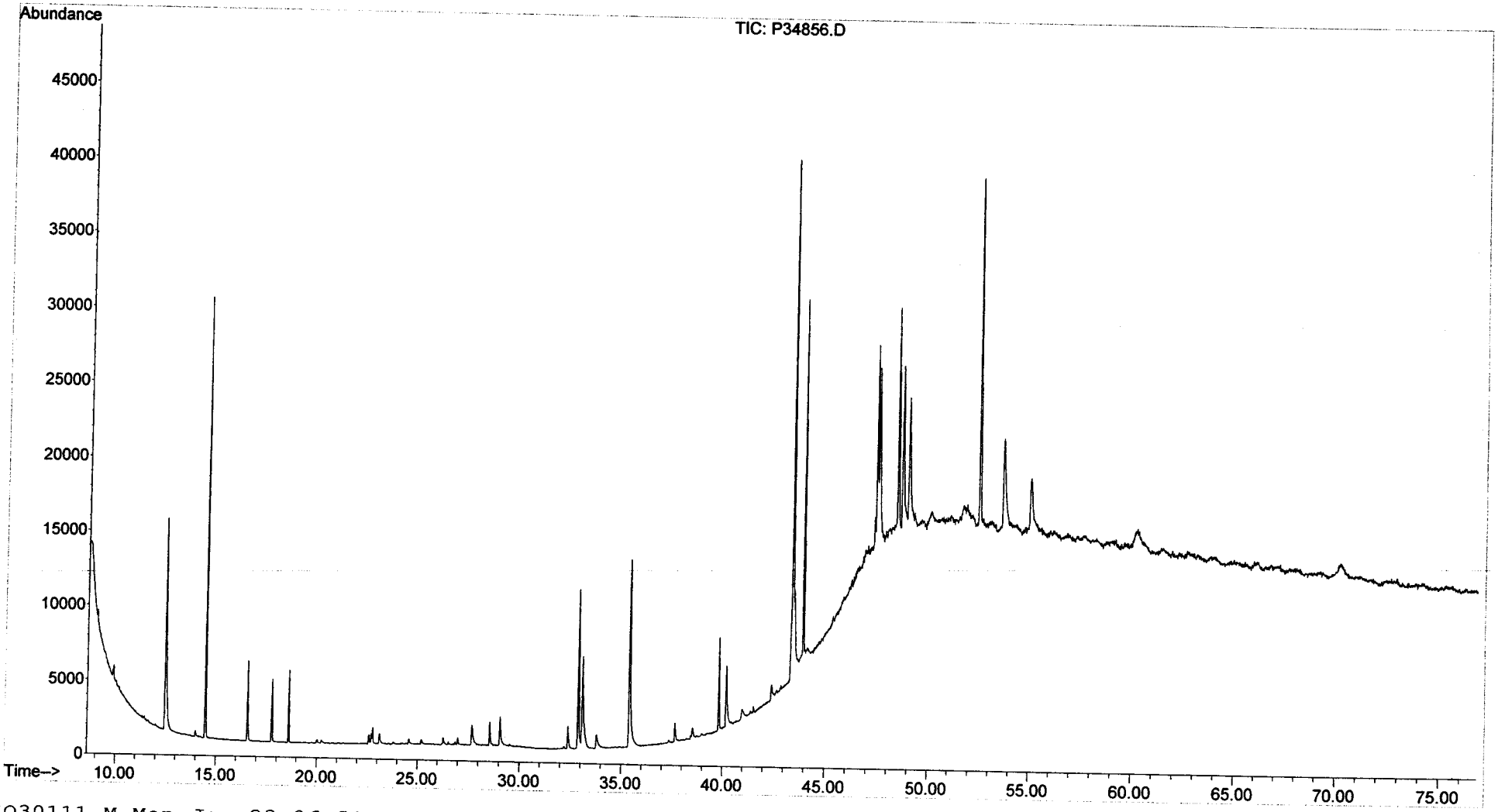
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	125386	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.91	217	28816	546.83	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 54.68%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	55759	517.48	ng/mL	100
84) Hopane (T19)	52.47	191	55759	517.48	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34856.D
Acq On : 22 Jan 2006 10:19 am
Operator : AC
Sample : C3011807
Misc : 1X
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Jan 23 06:50:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



BIO30111.M Mon Jan 23 06:51:44 2006

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34864.D
Acq On : 25 Jan 2006 10:54 am
Operator : AC
Sample : C3012304
Misc : STD
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 16:59:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

Ms for AC 1/31/06

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	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#	-45.74#
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\PAH3\January06\JAN23\
Data File : P34864.D
Acq On : 25 Jan 2006 10:54 am
Operator : AC
Sample : C3012304
Misc : STD
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 16:59:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	233#	-0.04
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.431	-0.2	268#	-0.01
84	A2	Hopane (T19)	0.430	0.431	-0.2	268#	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34864.D
Acq On : 25 Jan 2006 10:54 am
Operator : AC
Sample : C3012304
Misc : STD
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 16:59:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.225	-7.1	253#	0.00
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34864.D
Acq On : 25 Jan 2006 10:54 am
Operator : AC
Sample : C3012304
Misc : STD
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 16:59:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	43.37	240	142354	500.00	ng/mL	-0.04

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	43.92	217	32017	535.15	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	53.52%	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	61350	501.51	ng/mL	99
84) Hopane (T19)	52.48	191	61350	501.51	ng/mL	99

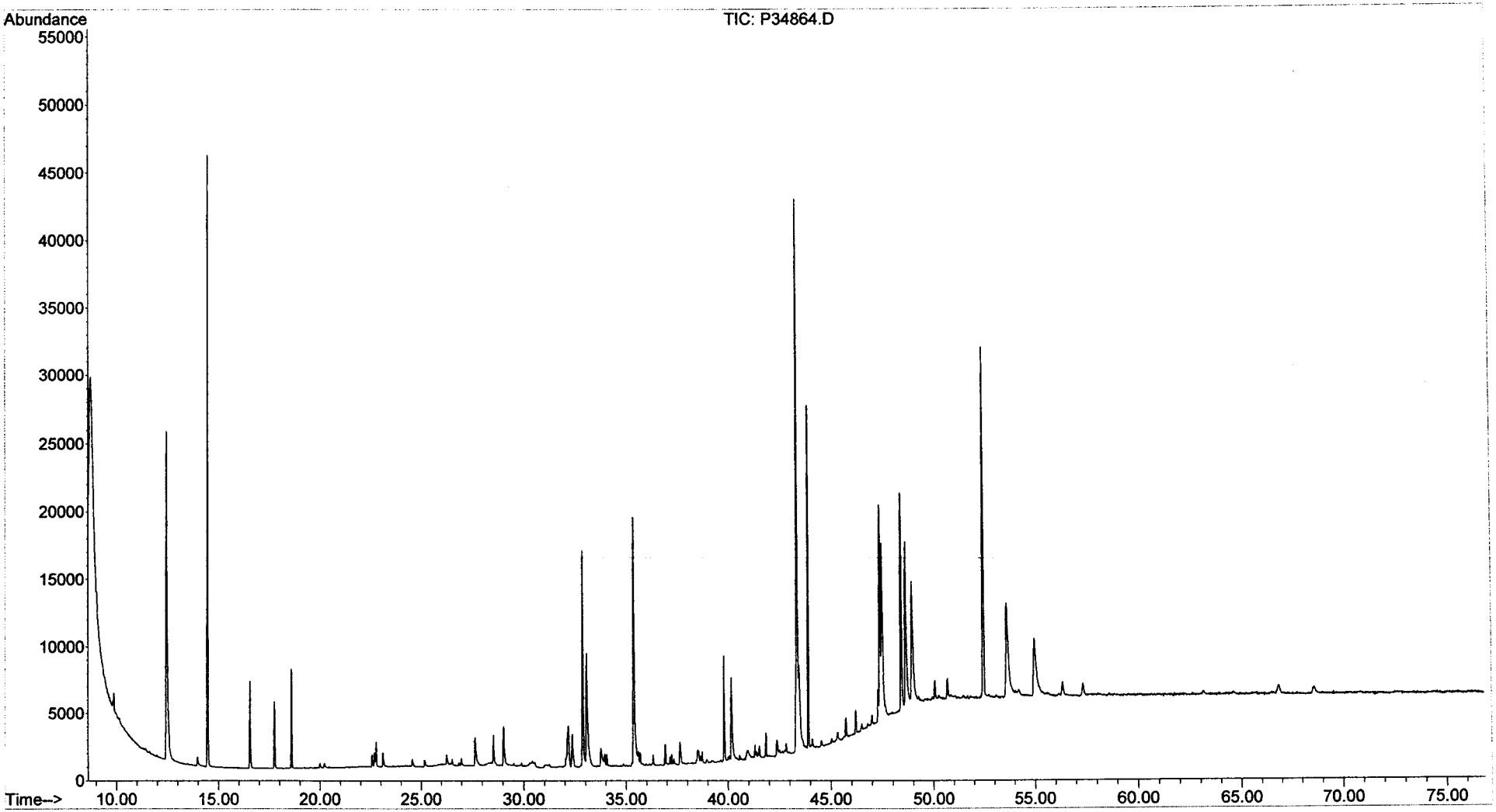
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓ CMS 1/26/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34864.D
Acq On : 25 Jan 2006 10:54 am
Operator : AC
Sample : C3012304
Misc : STD
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 16:59:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34868.D
Acq On : 25 Jan 2006 4:55 pm
Operator : AC
Sample : C3012305
Misc : STD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 26 08:26:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/26/06

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	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#	-45.74#
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\PAH3\January06\JAN23\
Data File : P34868.D
Acq On : 25 Jan 2006 4:55 pm
Operator : AC
Sample : C3012305
Misc : STD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 26 08:26:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	237#	-0.04
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.451	-4.9	286#	-0.01
84	A2	Hopane (T19)	0.430	0.451	-4.9	286#	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34868.D
Acq On : 25 Jan 2006 4:55 pm
Operator : AC
Sample : C3012305
Misc : STD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 26 08:26:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.224	-6.7	257#	-0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34868.D
Acq On : 25 Jan 2006 4:55 pm
Operator : AC
Sample : C3012305
Misc : STD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 26 08:26:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/26/06

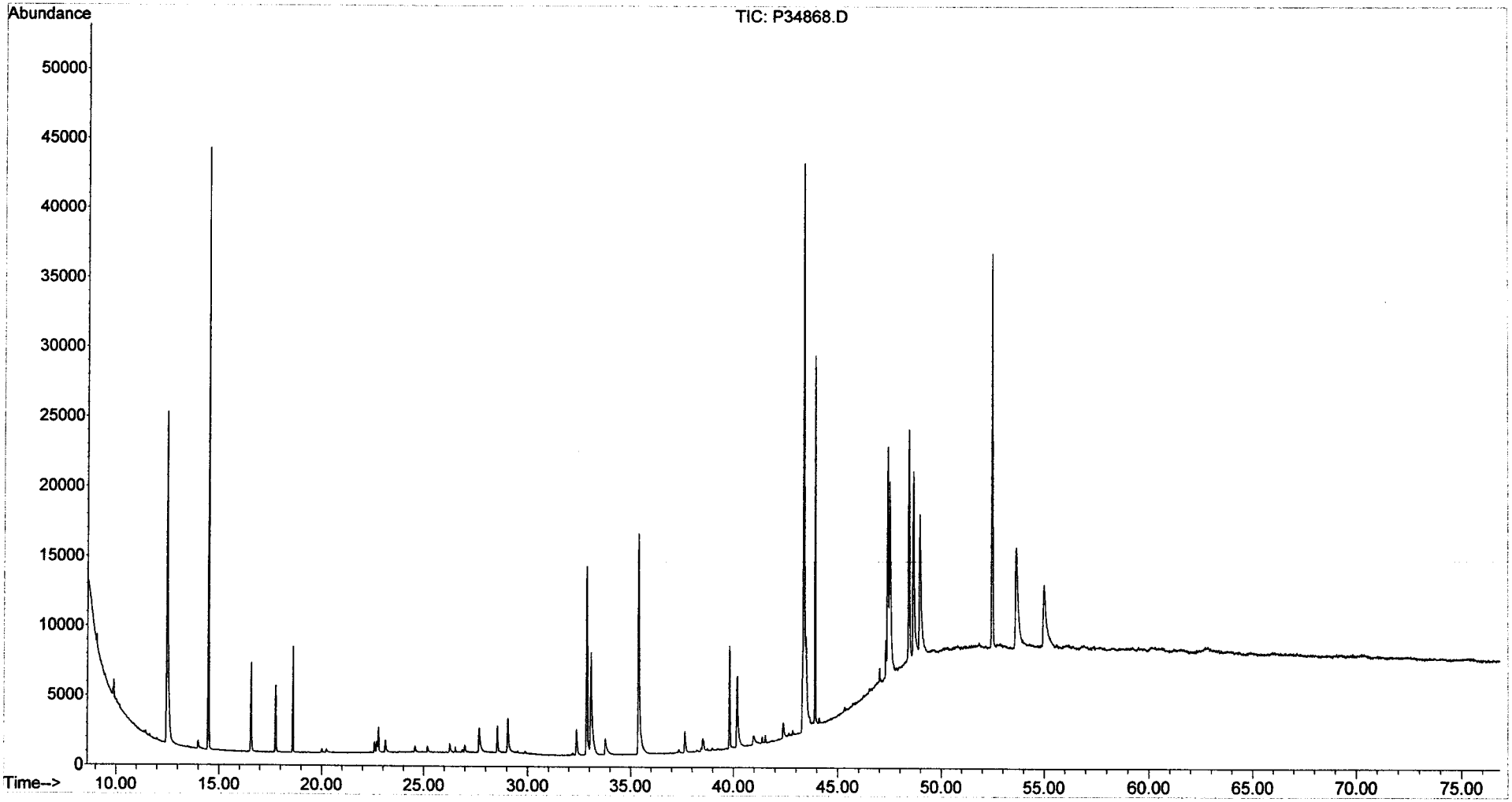
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.37	240	145189	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.91	217	32522	532.98	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.30%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	65550	525.38	ng/mL	100
84) Hopane (T19)	52.48	191	65550	525.38	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34868.D
Acq On : 25 Jan 2006 4:55 pm
Operator : AC
Sample : C3012305
Misc : STD
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 26 08:26:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 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: **0601040**
Lab ID: **C2011805**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		35572	27.31	53209	43.82
Upper Limit:		71144	27.81	106418	44.32
Lower Limit:		17786	26.81	26604	43.32
Client ID	**Lab ID**				
GC-SED-24 (12.6-13.4)	0601040-01E	39754	27.31	64971	43.81
GC-SED-23 (17.5-19)	0601040-02E	40097	27.31	64431	43.81
GC-SED-104 (3.7-5.1)	0601040-04E	40282	27.31	65934	43.81
GC-SED-104 (3.7-5.1)	0601040-04E D	39793	27.31	65596	43.81
GC-SED-64D (2-4)	0601040-05	42517	27.30	69752	43.81
CCV	C2011806	33576	27.31	50279	43.82

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

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601040**
Lab ID: **C2012303**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		38469	27.31	55244	43.82
Upper Limit:		76938	27.81	110488	44.32
Lower Limit:		19234	26.81	27622	43.32
Client ID	**Lab ID**				
GC-SED-64D (2-4)	0601040-05E	43456	27.31	64098	43.82
CCV	C2012304	32574	27.31	46271	43.82

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

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601040**
Lab ID: **C2012304A**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		40543	27.14	58093	43.63
Upper Limit:		81086	27.64	116186	44.13
Lower Limit:		20272	26.64	29046	43.13
Client ID	**Lab ID**				
Blank	SS011306B04	32012	27.14	51641	43.65
LCS	SS011306LCS02	34642	27.14	59528	43.63
LCSD	SS011306LCSD02	36653	27.14	60353	43.63
GC-SED-24 (12.6-13.4)	0601040-01	52752	27.14	92937	43.67
GC-SED-23 (17.5-19)	0601040-02	35696	27.14	55981	43.65
GC-SED-20 (4-5)	0601040-03	53191	27.12	84945	43.65
GC-SED-104 (3.7-5.1)	0601040-04	51222	27.12	84301	43.66
GC-SED-104 (3.7-5.1)	0601040-04 D	38572	27.12	63763	43.65
CCV	C2012306	33762	27.12	51506	43.62

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
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **C3011806**

		Chrysene-d12	
		Area	**RT**
Standard:		106542	43.38
Upper Limit:		213084	43.88
Lower Limit:		53271	42.88
Client ID	**Lab ID**		
Blank	SS011306B04	99876	43.42
GC-SED-24 (12.6-13.4)	0601040-01	125357	43.41
GC-SED-23 (17.5-19)	0601040-02	121286	43.41
GC-SED-20 (4-5)	0601040-03	130611	43.41
GC-SED-104 (3.7-5.1)	0601040-04	125343	43.41
GC-SED-104 (3.7-5.1)	0601040-04 D	119717	43.41
CCV	C3011807	125386	43.38

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
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601040**
Lab ID: **C3012304**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		142354	43.37
Upper Limit:		284708	43.87
Lower Limit:		71177	42.87
Client ID	**Lab ID**		
GC-SED-64D (2-4)	0601040-05	100324	43.42
CCV	C3012305	145189	43.37

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

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: **GC-SED-24 (12.6-13.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-01**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/20/06	82.3	10.36	16.7	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**5400**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	79	50-130
d50-Tetracosane	75	50-130

01/26/06 22:02

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27781.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 12:33 am
Operator : AC
Sample : 0601040-01-AFID
Misc : 1X
ALS Vial : 70 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 24 09:28:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

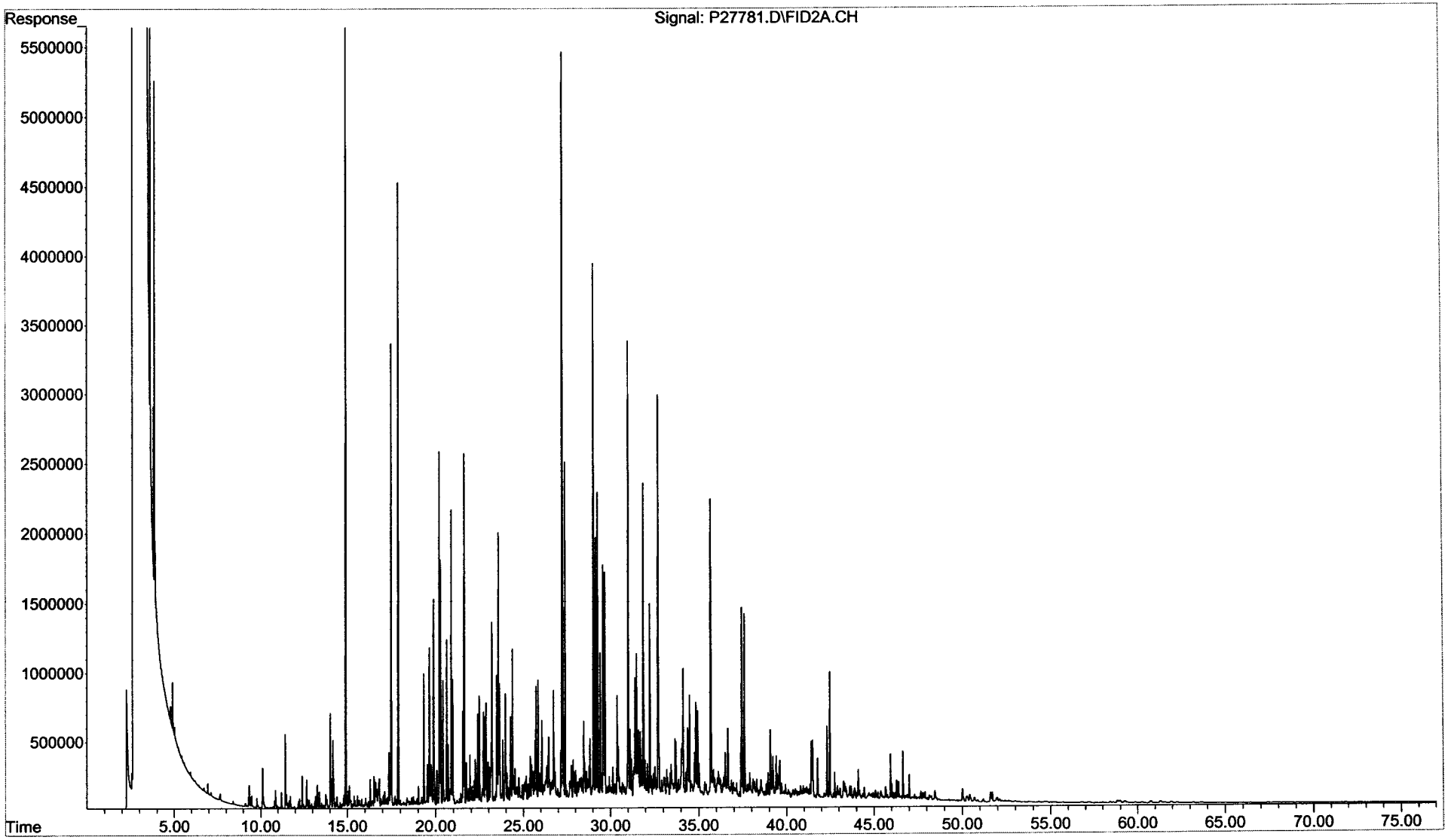
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.04	84252189	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	84574341	47.094 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	94.19%
24) s d50-Tetracosane	35.70	71428804	45.032 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	90.06%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4901278889	2974.188 ug/mL
44) h Total Resolved Hydrocarbon	40.84	2913847355	1768.178 ug/L

RT+Rpt conc 2nd 1/30/06

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27781.D
Operator : AC
Acquired : 20 Jan 2006 12:33 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601040-01-AFID
Misc Info : 1X
Vial Number: 70



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-23 (17.5-19)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-02**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/20/06	85.8	10.09	6.96	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**1800**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	86	50-130
d50-Tetracosane	81	50-130

01/26/06 22:02

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27783.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 2:12 am
Operator : AC
Sample : 0601040-02-AFID
Misc : 1X
ALS Vial : 71 Sample Multiplier: 1

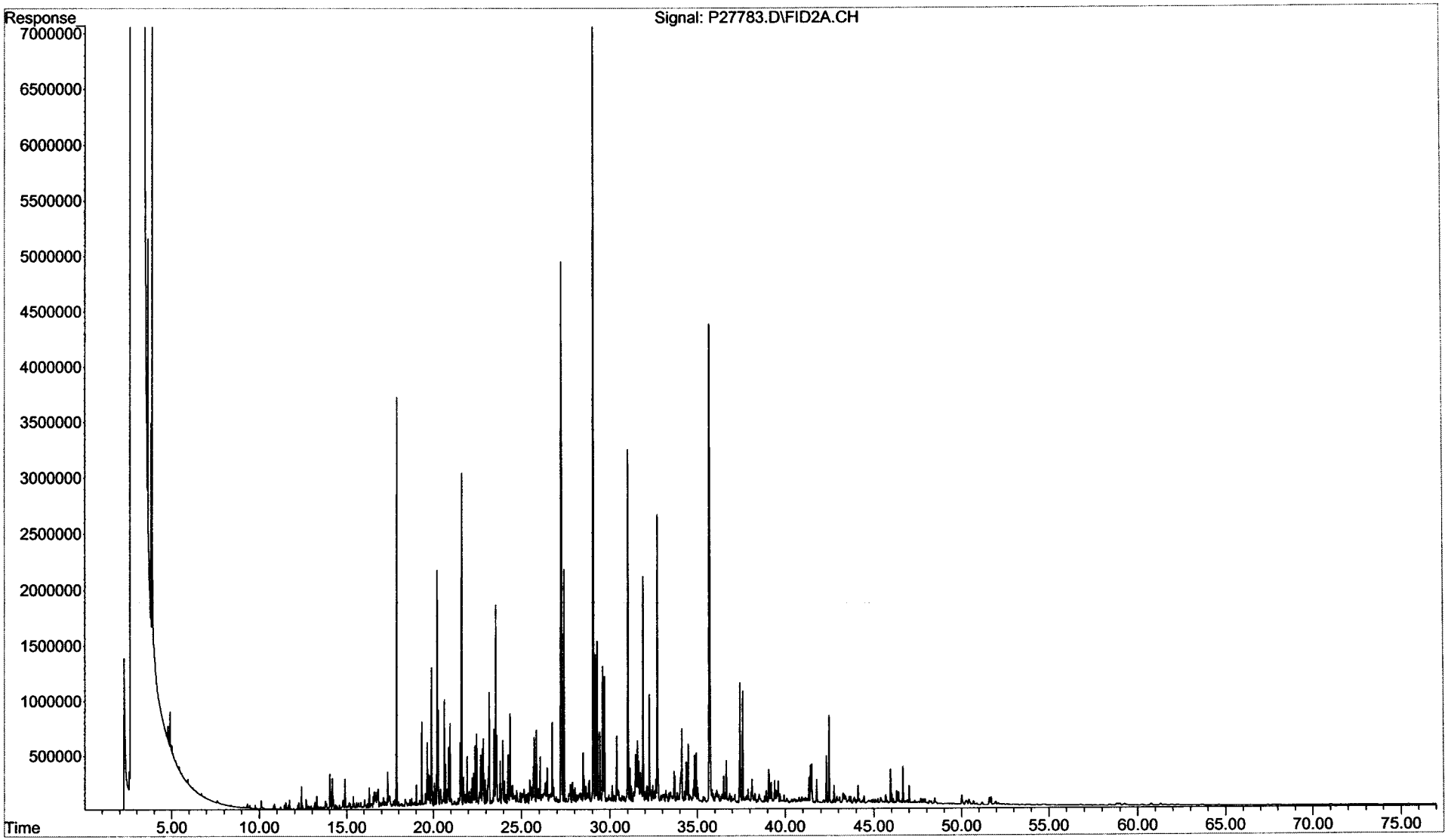
Integration File: SHCINT1.E
Quant Time: Jan 24 09:30:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	79424777	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.08	208809130	123.340 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 246.68%#
24) s d50-Tetracosane	35.72	174782365	116.888 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 233.78%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	3724382111	2397.389 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1994046805	1283.570 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27783.D
Operator : AC
Acquired : 20 Jan 2006 2:12 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601040-02-AFID
Misc Info : 1X
Vial Number: 71



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-20 (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-03**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/10/06	01/12/06	01/13/06	01/20/06	43.6	10.53	31.25	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**19000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	86	50-130
d50-Tetracosane	82	50-130

01/26/06 22:02

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27785.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 3:52 am
Operator : AC
Sample : 0601040-03-AFID
Misc : 1X
ALS Vial : 72 Sample Multiplier: 1

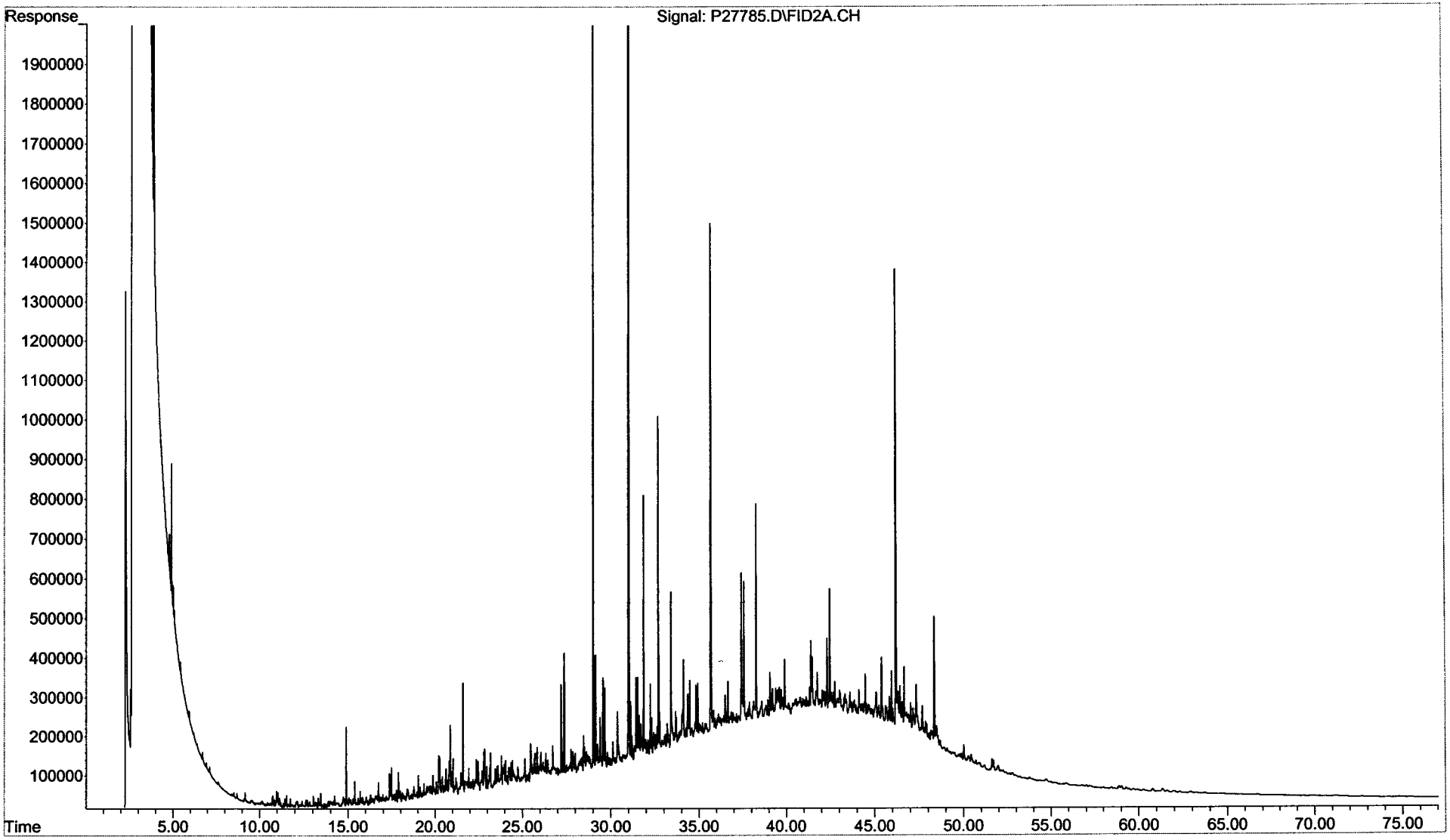
Integration File: SHCINT1.E
Quant Time: Jan 24 09:54:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.04	78197288	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02	45677767	27.405 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	54.81%
24) s d50-Tetracosane	35.68	38702612	26.289 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	52.58%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4555066523	2978.128 ug/mL
44) h Total Resolved Hydrocarbon	40.84	650907775	425.567 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27785.D
Operator : AC
Acquired : 20 Jan 2006 3:52 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601040-03-AFID
Misc Info : 1X
Vial Number: 72



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/20/06	79.9	10.12	13.89	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**4500**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	82	50-130
d50-Tetracosane	78	50-130

01/26/06 22:02

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27787.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 5:33 am
Operator : AC
Sample : 0601040-04-AFID
Misc : 1X
ALS Vial : 73 Sample Multiplier: 1

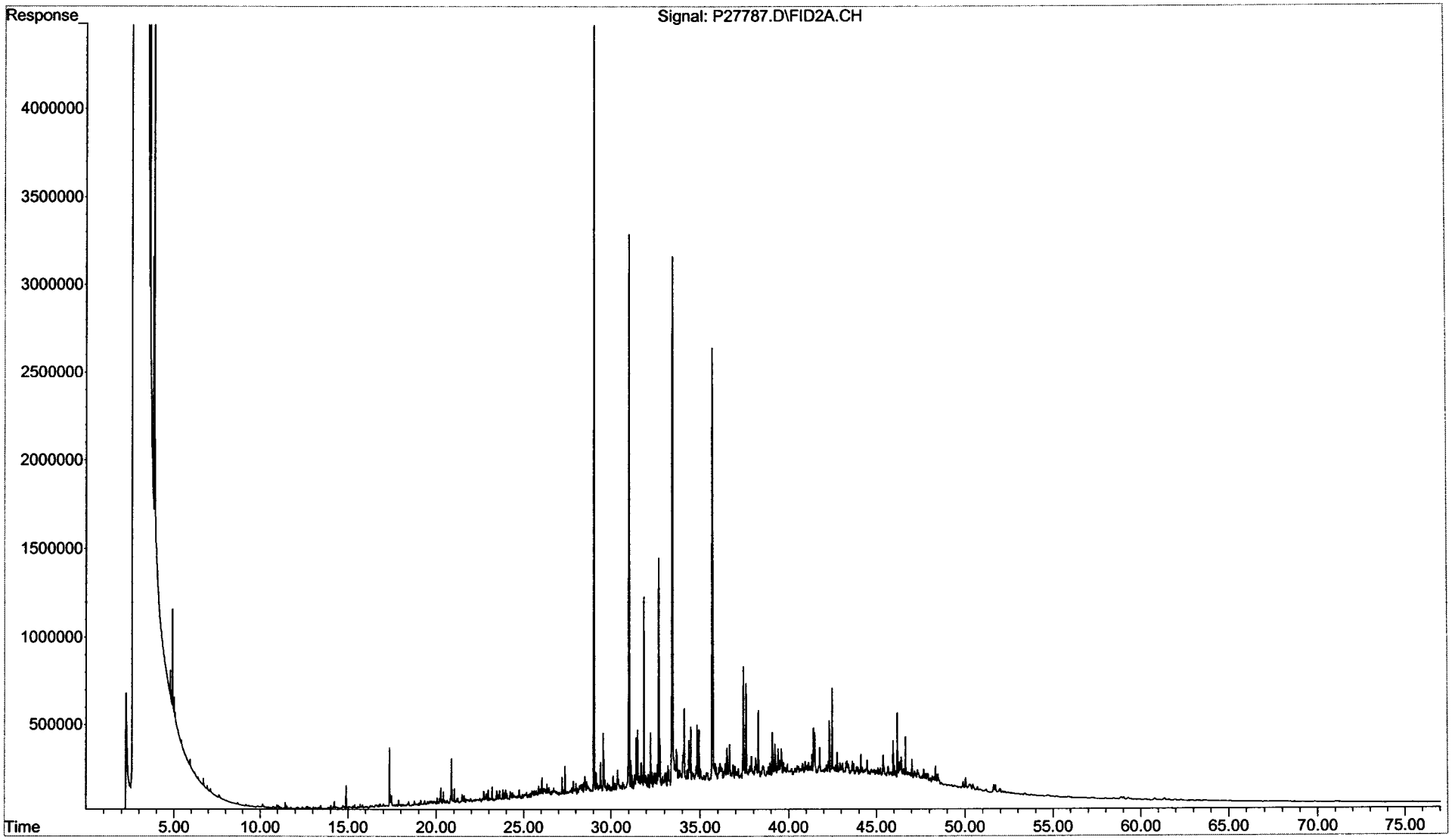
Integration File: SHCINT1.E
Quant Time: Jan 24 10:16:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.04	79759206	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.04	100942493	59.375 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 118.75%
24) s	d50-Tetracosane	35.70	84814368	56.483 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 112.97%
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.84	4402712351	2822.148 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	841351946	539.308 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27787.D
Operator : AC
Acquired : 20 Jan 2006 5:33 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601040-04-AFID
Misc Info : 1X
Vial Number: 73



Form I
Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04 D**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/20/06	79.9	10.12	10.44	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**2400**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	80	50-130

01/26/06 22:02

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27789.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 7:16 am
Operator : AC
Sample : 0601040-04D-AFID
Misc : 1X
ALS Vial : 74 Sample Multiplier: 1

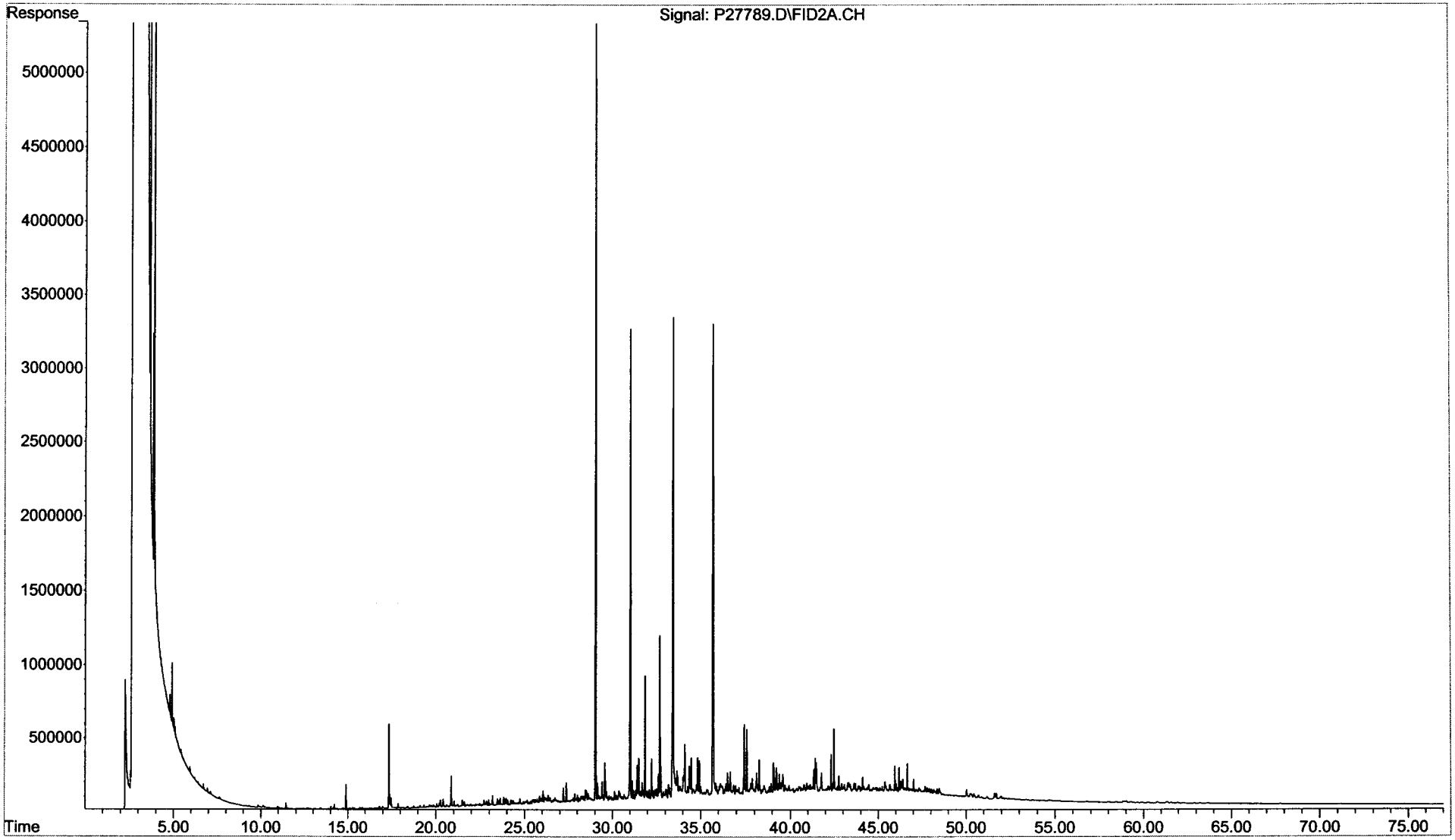
Integration File: SHCINT1.E
Quant Time: Jan 24 10:45:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.04	78784262	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	136043772	81.012 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	162.02%#
24) s d50-Tetracosane	35.70	113845897	76.755 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	153.51%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	3165318397	2054.084 ug/mL
44) h Total Resolved Hydrocarbon	40.84	675124039	438.111 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27789.D
Operator : AC
Acquired : 20 Jan 2006 7:16 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601040-04D-AFID
Misc Info : 1X
Vial Number: 74



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-104 (3.7-5.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-04**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/11/06	01/12/06	01/13/06	79.9	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**4500**	**2400**	61[a]	30

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	82	85	50-130
d50-Tetracosane	78	80	50-130

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

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

01/26/06 22:03

Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-64D (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **0601040-05**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/11/06	01/12/06	01/13/06	01/20/06	76.7	5.14	128.46	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**120000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	102	50-130
d50-Tetracosane	95	50-130

01/26/06 22:03

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27791.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 8:54 am
Operator : AC
Sample : 0601040-05-AFID
Misc : 1X
ALS Vial : 75 Sample Multiplier: 1

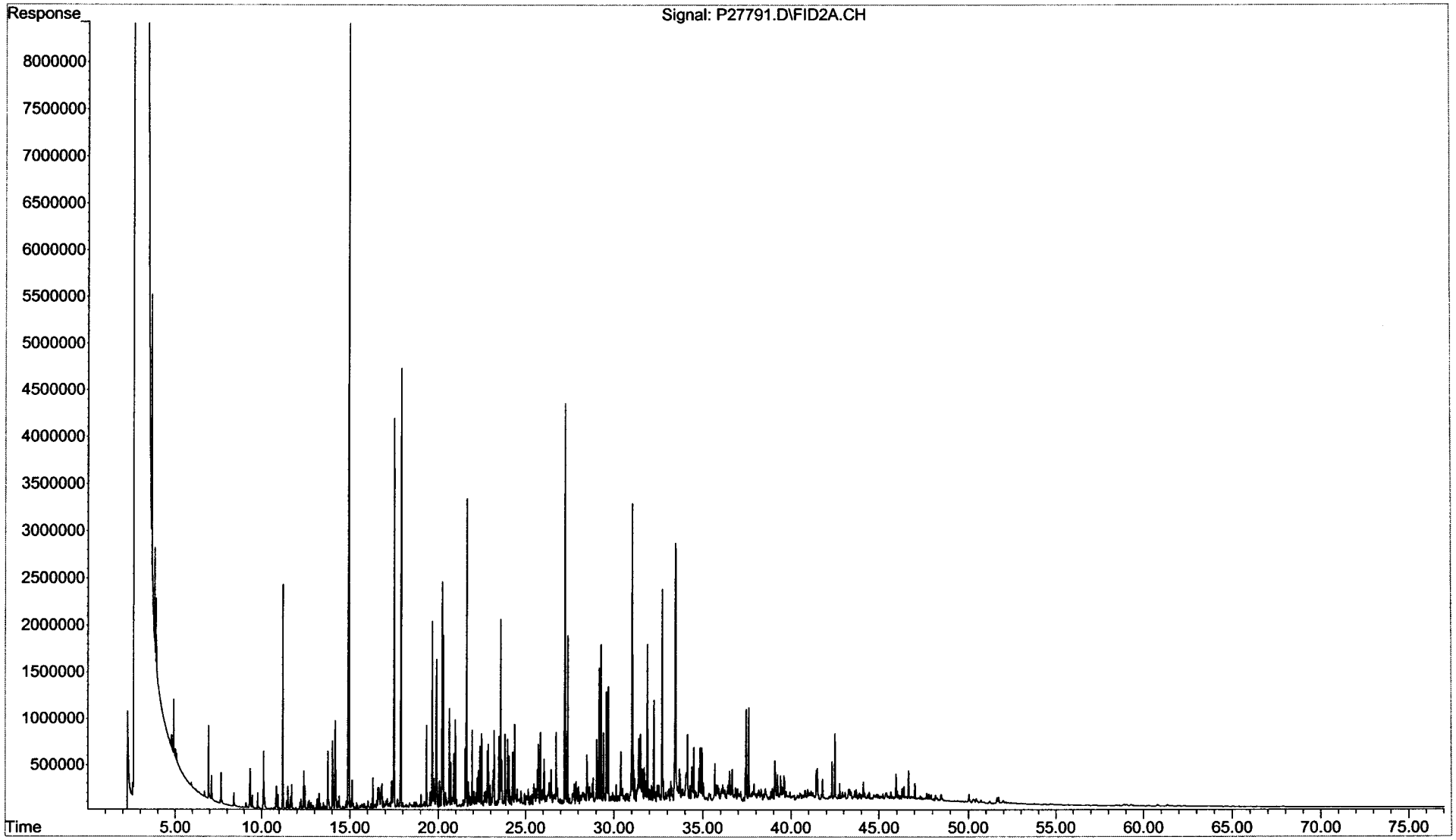
Integration File: SHCINT1.E
Quant Time: Jan 24 11:10:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.04	76220788	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02	12910257	7.946 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	15.89%#
24) s d50-Tetracosane	35.67	10572664	7.368 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	14.74%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5717744563	3835.231 ug/mL
44) h Total Resolved Hydrocarbon	40.84	2893840084	1941.071 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27791.D
Operator : AC
Acquired : 20 Jan 2006 8:54 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601040-05-AFID
Misc Info : 1X
Vial Number: 75



Form I
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306B04**
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	01/13/06	01/26/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	1.1 J

N/A - Not Applicable
J - Estimated value, below quantitation limit.

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	81	50-130
d50-Tetracosane	78	50-130

01/26/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27901.D
Signal(s) : FID2A.CH
Acq On : 26 Jan 2006 1:19 am
Operator : AC
Sample : SS011306B04-AFID
Misc : 1X ETR0601040
ALS Vial : 75 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 26 16:51:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

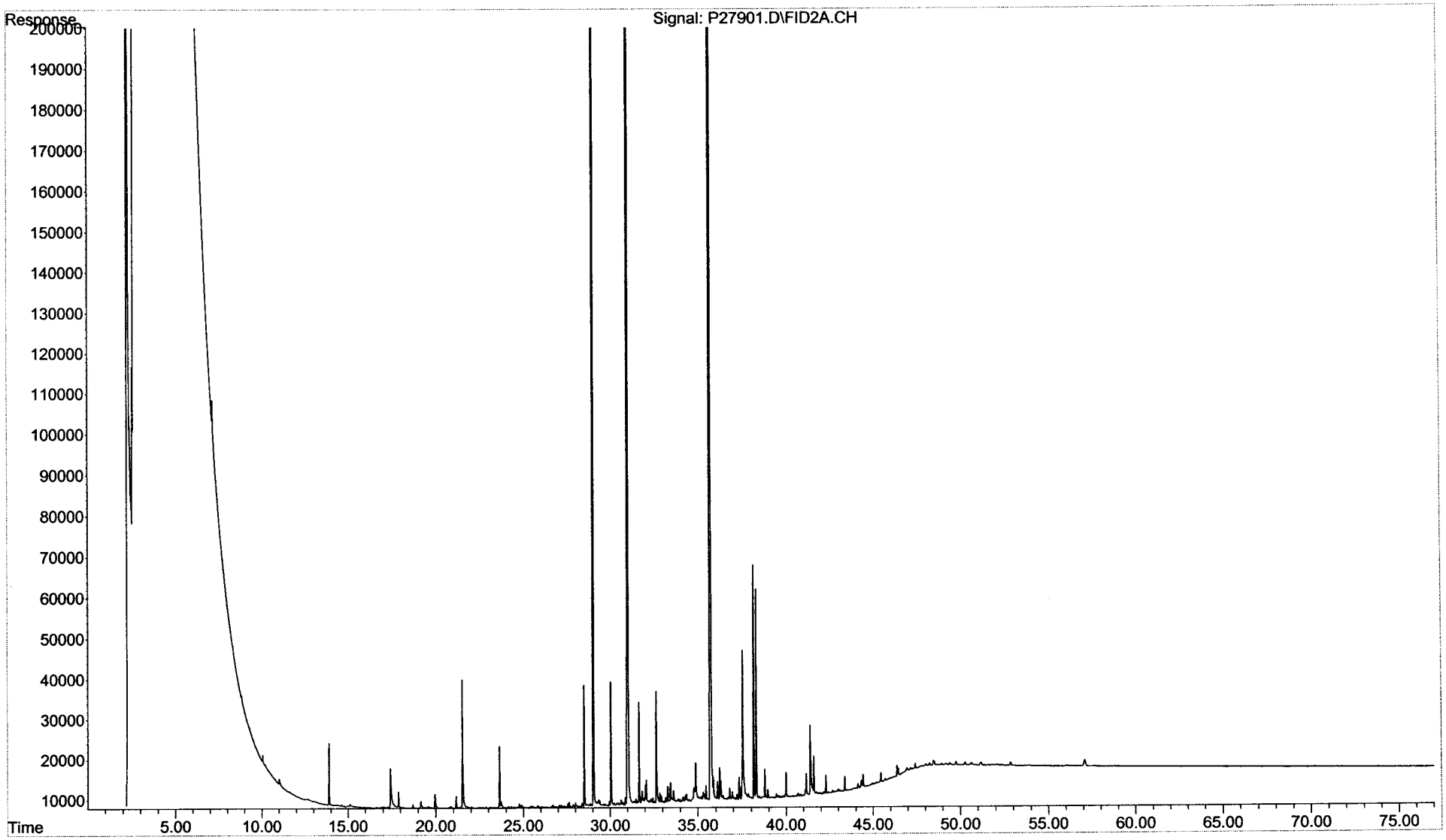
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/26/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	80655202	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	34651824	20.156 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	40.31%#
24) s d50-Tetracosane	35.70	29708898	19.565 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	39.13%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	298188780	189.016 ug/mL
44) h Total Resolved Hydrocarbon	40.84	16517301	10.470 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27901.D
Operator : AC
Acquired : 26 Jan 2006 1:19 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011306B04-AFID
Misc Info : 1X ETR0601040
Vial Number: 75



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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **See Below**
Associated Blank: **SS011306B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/13/06	100	AC

Lab ID:	SS011306B04		SS011306LCS02		SS011306LCSD02				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.067	U	0.57	34[a]	0.72	43[a]	22	30	50-130
n-Decane (C10)	0.067	U	0.88	53	1.0	60	13	30	50-130
n-Dodecane (C12)	0.067	U	1.1	68	1.2	72	6	30	50-130
n-Tetradecane (C14)	0.067	U	1.2	70	1.2	72	2	30	50-130
n-Hexadecane (C16)	0.067	U	1.2	72	1.2	73	2	30	50-130
n-Octadecane (C18)	0.067	U	1.2	72	1.2	74	2	30	50-130
n-Nonadecane (C19)	0.067	U	1.2	73	1.2	75	2	30	50-130
n-Eicosane (C20)	0.067	U	1.2	74	1.2	75	2	30	50-130
n-Docosane (C22)	0.067	U	1.2	73	1.2	75	2	30	50-130
n-Tetracosane (C24)	0.067	U	1.2	72	1.2	74	2	30	50-130
n-Hexacosane (C26)	0.067	U	1.2	74	1.2	75	2	30	50-130
n-Octacosane (C28)	0.067	U	1.2	73	1.2	74	2	30	50-130
n-Triacontane (C30)	0.067	U	1.2	72	1.2	73	1	30	50-130
n-Hexatriacontane (C36)	0.067	U	1.1	67	1.1	67	0	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	73	76	50-130
d50-Tetracosane	70	72	50-130

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

01/26/06 22:08

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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306LCS02**
Associated Blank: **SS011306B04**
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	01/13/06	01/26/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	18

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	73	50-130
d50-Tetracosane	70	50-130

01/26/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27903.D
Signal(s) : FID2A.CH
Acq On : 26 Jan 2006 2:56 am
Operator : AC
Sample : SS011306LCS02-AFID
Misc : 1X ETR0601040
ALS Vial : 76 Sample Multiplier: 1

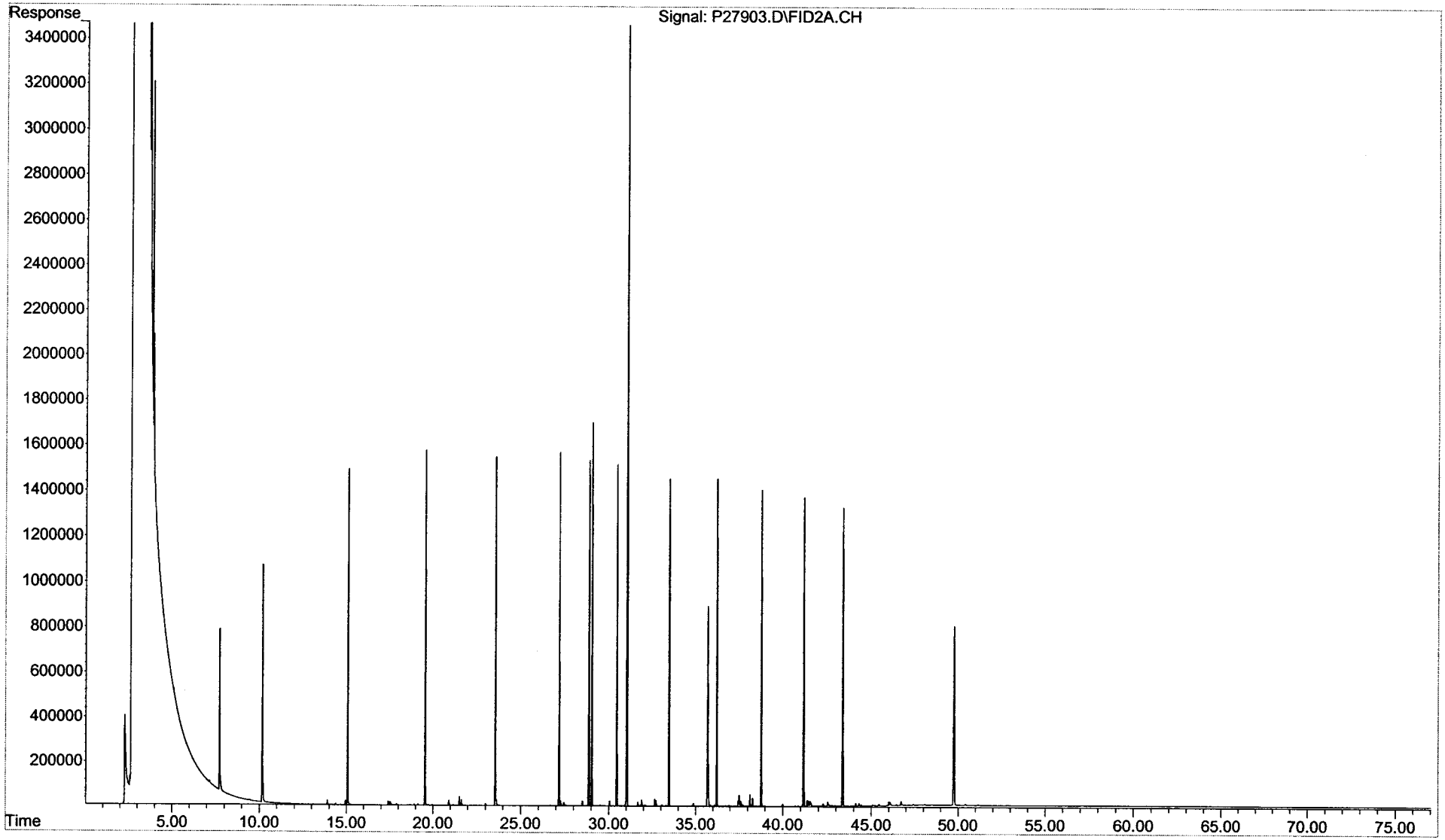
Integration File: SHCINT1.E
Quant Time: Jan 26 16:54:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.05	80920820	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.04	31392635	18.200 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery	= 36.40%#
24) s	d50-Tetracosane	35.69	26565852	17.438 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery	= 34.88%#
Target Compounds				
3) t	n-Nonane (C9)	7.72	12412428	8.612 ug/mLm
4) t	n-Decane (C10)	10.17	19419229	13.184 ug/mLm
6) t	n-Dodecane (C12)	15.07	25581015	16.979 ug/mLm
9) t	n-Tetradecane (C14)	19.55	27123208	17.565 ug/mL
12) t	n-Hexadecane (C16)	23.56	28214667	17.971 ug/mL
16) t	n-Octadecane (C18)	27.18	28731143	18.033 ug/mL
18) t	n-Nonadecane (C19)	28.86	28942889	18.235 ug/mL
20) t	n-Eicosane (C20)	30.46	29129493	18.418 ug/mL
22) t	n-Docosane (C22)	33.46	29413285	18.267 ug/mL
25) t	n-Tetracosane (C24)	36.23	29516301	18.093 ug/mL
27) t	n-Hexacosane (C26)	38.78	29583105	18.434 ug/mL
29) t	n-Octacosane (C28)	41.16	29450986	18.188 ug/mLm
31) t	n-Triacontane (C30)	43.38	29282803	17.992 ug/mLm
37) t	n-Hexatriacontane (C36)	49.77	26926351	16.799 ug/mL
42) h	C9-C40 Total Petroleum Hyd	40.84	691327859	436.781 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	399407921	252.346 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27903.D
Operator : AC
Acquired : 26 Jan 2006 2:56 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011306LCS02-AFID
Misc Info : 1X ETR0601040
Vial Number: 76



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: **Sediment**

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **SS011306LCSD02**
Associated Blank: **SS011306B04**
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	01/13/06	01/26/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	17

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	76	50-130
d50-Tetracosane	72	50-130

01/26/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27905.D
Signal(s) : FID2A.CH
Acq On : 26 Jan 2006 4:33 am
Operator : AC
Sample : SS011306LCSD02-AFID
Misc : 1X ETR0601040
ALS Vial : 77 Sample Multiplier: 1

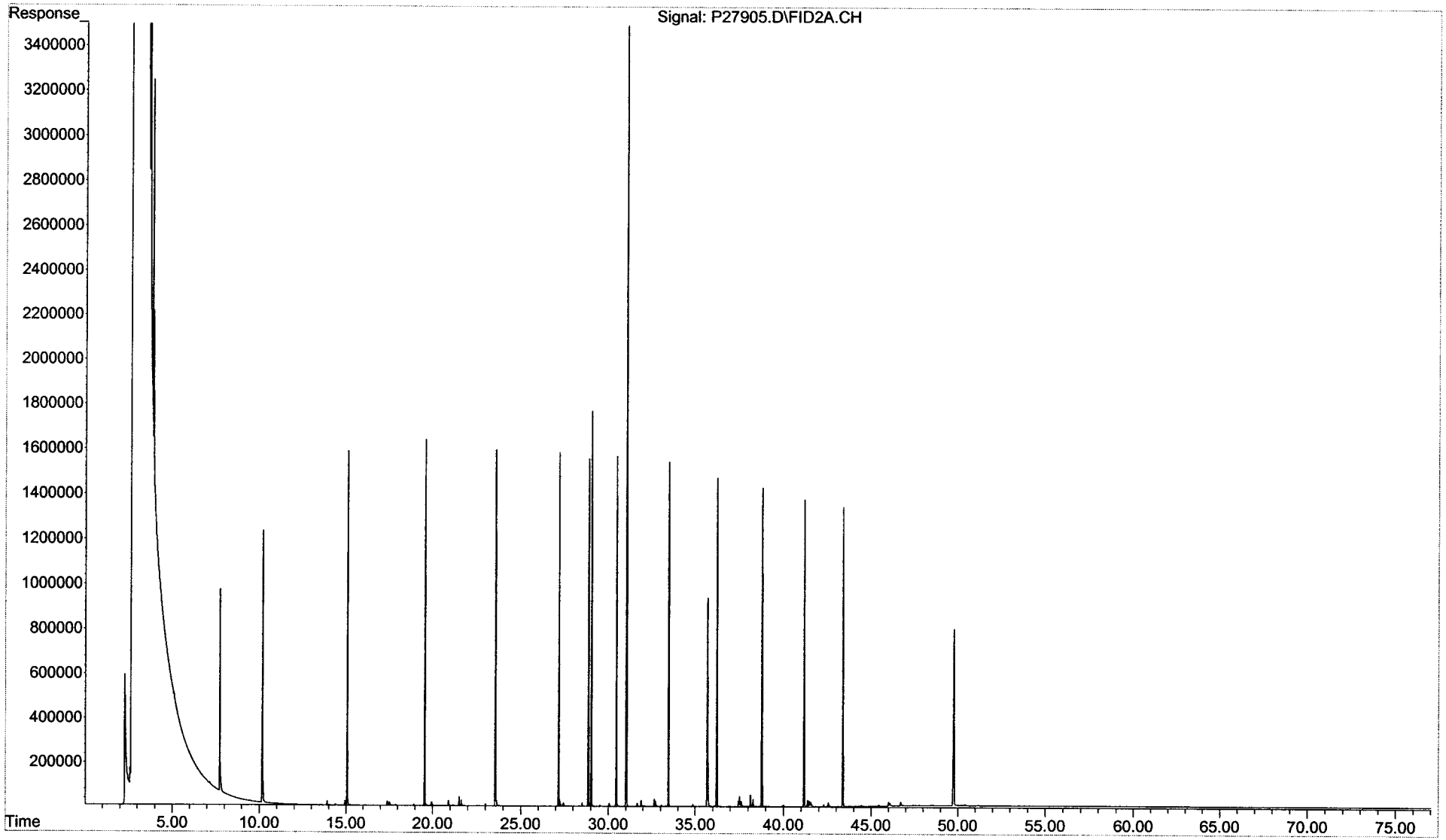
Integration File: SHCINT1.E
Quant Time: Jan 26 16:57:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.05	81054293	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.04	32702805	18.929 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 37.86%#
24) s	d50-Tetracosane	35.69	27438729	17.981 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 35.96%#
Target Compounds				
3) t	n-Nonane (C9)	7.72	15524308	10.753 ug/mLm
4) t	n-Decane (C10)	10.17	22144209	15.010 ug/mLm
6) t	n-Dodecane (C12)	15.07	27121293	17.971 ug/mLm
9) t	n-Tetradecane (C14)	19.55	27858000	18.011 ug/mL
12) t	n-Hexadecane (C16)	23.56	28739125	18.275 ug/mL
16) t	n-Octadecane (C18)	27.18	29431564	18.442 ug/mL
18) t	n-Nonadecane (C19)	28.86	29623002	18.633 ug/mLm
20) t	n-Eicosane (C20)	30.46	29795997	18.809 ug/mL
22) t	n-Docosane (C22)	33.46	30064505	18.641 ug/mL
25) t	n-Tetracosane (C24)	36.23	30142707	18.446 ug/mL
27) t	n-Hexacosane (C26)	38.78	30239209	18.812 ug/mLm
29) t	n-Octacosane (C28)	41.16	29983189	18.487 ug/mL
31) t	n-Triacontane (C30)	43.38	29576557	18.142 ug/mL
37) t	n-Hexatriacontane (C36)	49.77	27053140	16.850 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.84	687060038	433.370 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	411117718	259.317 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27905.D
Operator : AC
Acquired : 26 Jan 2006 4:33 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011306LCSD02-AFID
Misc Info : 1X ETR0601040
Vial Number: 77



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: **0601040**
Lab ID: **TO011906AWS01**
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	01/18/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**590000**

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\PAH2\JANUARY06\JAN18.SEC\
Data File : P27747.D
Signal(s) : FID2A.CH
Acq On : 18 Jan 2006 7:18 pm
Operator : AC
Sample : TO011906AWS01
Misc : 1X ANS STD
ALS Vial : 53 Sample Multiplier: 1

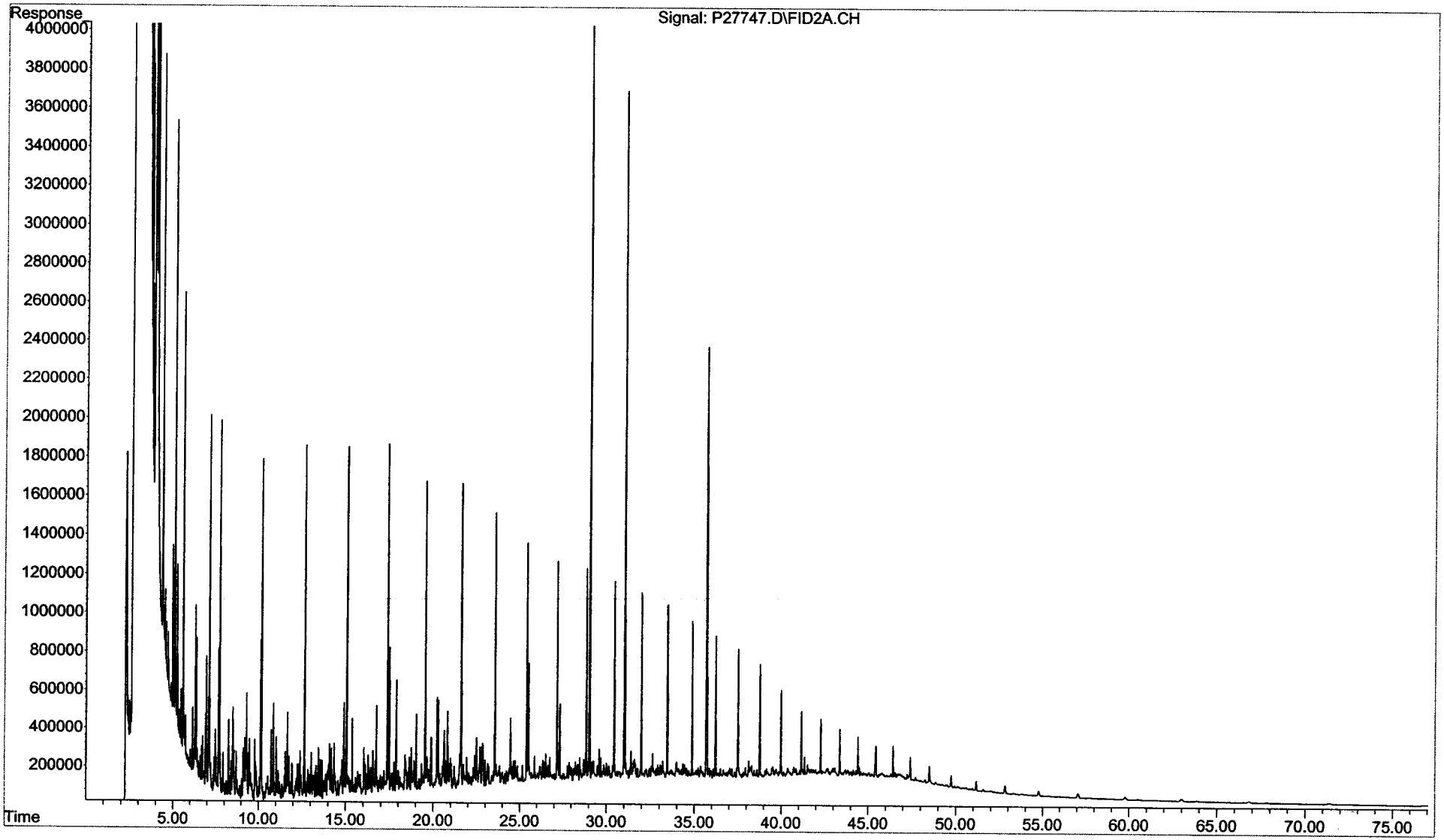
Integration File: SHCINT1.E
Quant Time: Jan 19 19:20:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	84266960	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	88398706	49.215 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	98.43%
24) s d50-Tetracosane	35.71	72439795	45.661 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.32%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5338826643	3239.133 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1581064255	959.251 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27747.D
Operator : AC
Acquired : 18 Jan 2006 7:18 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: TO011906AWS01
Misc Info : 1X ANS STD
Vial Number: 53



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: **0601040**
Lab ID: **TS012606AWS01**
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	01/25/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**590000**

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\PAH2\JANUARY06\JAN23.SEC\
Data File : P27891.D
Signal(s) : FID2A.CH
Acq On : 25 Jan 2006 12:03 pm
Operator : AC
Sample : TS012606AWS01
Misc : 1X ANS STD
ALS Vial : 70 Sample Multiplier: 1

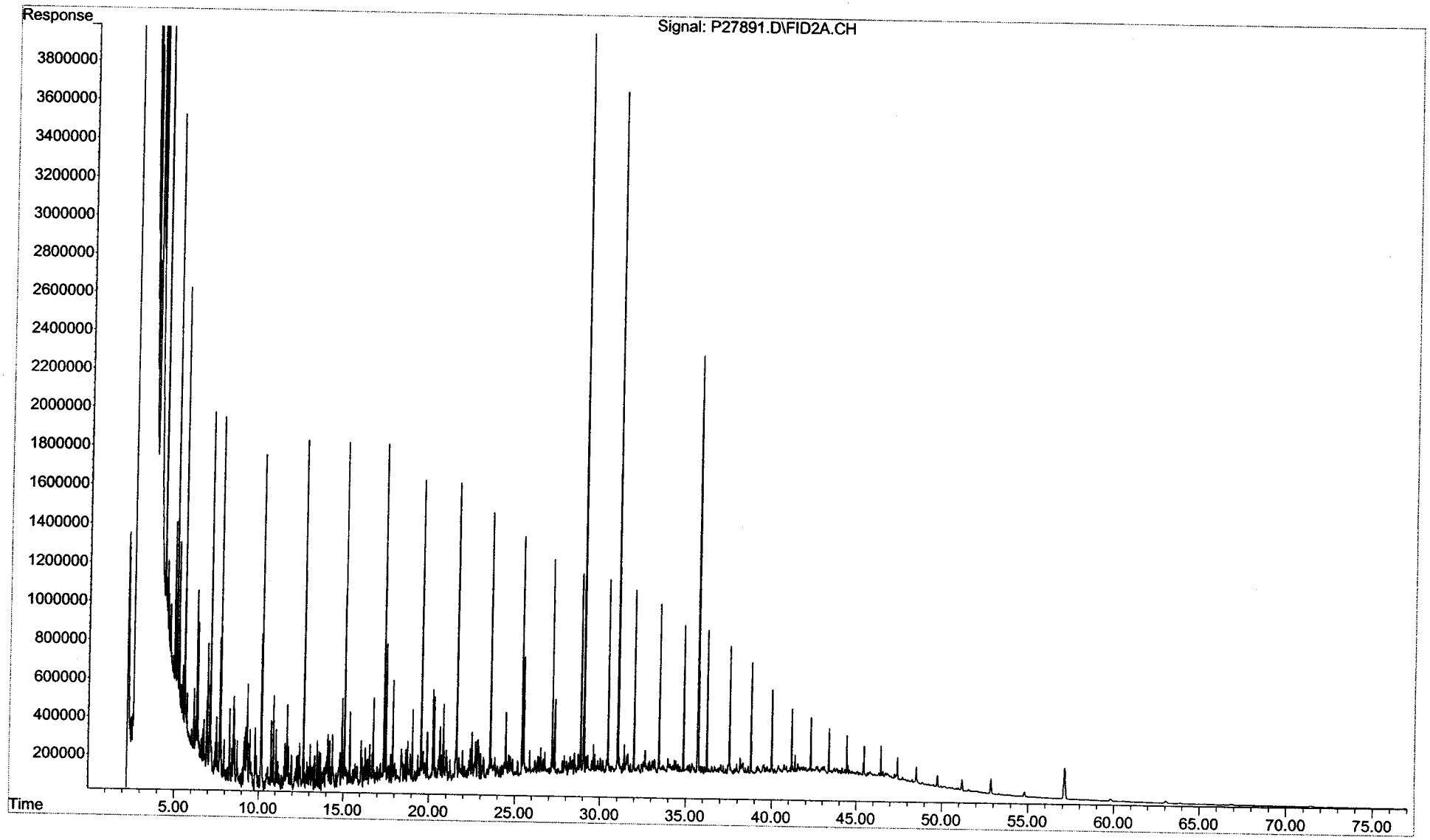
Integration File: SHCINT1.E
Quant Time: Jan 26 21:24:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	81673984	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.07	86807978	49.864 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.73%
24) s d50-Tetracosane	35.72	70881869	46.098 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	92.20%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5084386489	3182.695 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1497010491	937.090 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27891.D
Operator : AC
Acquired : 25 Jan 2006 12:03 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: TS012606AWS01
Misc Info : 1X ANS STD
Vial Number: 70



Instrument Blank Association

ETR: 0601040

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
TO011906AWS01	IB201180601	P27755.D
0601040-01	IB201180602	P27773.D
0601040-02	IB201180602	P27773.D
0601040-03	IB201180602	P27773.D
0601040-04	IB201180602	P27773.D
0601040-04 D	IB201180602	P27773.D
0601040-05	IB201180602	P27773.D
SS011306B04	IB201230602	P27899.D
SS011306LCS02	IB201230602	P27899.D
SS011306LCSD02	IB201230602	P27899.D
TS012606AWS01	IB201230602	P27899.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27755.D
Signal(s) : FID2A.CH
Acq On : 19 Jan 2006 1:46 am
Operator : AC
Sample : IB201180601
Misc : DCM
ALS Vial : 57 Sample Multiplier: 1

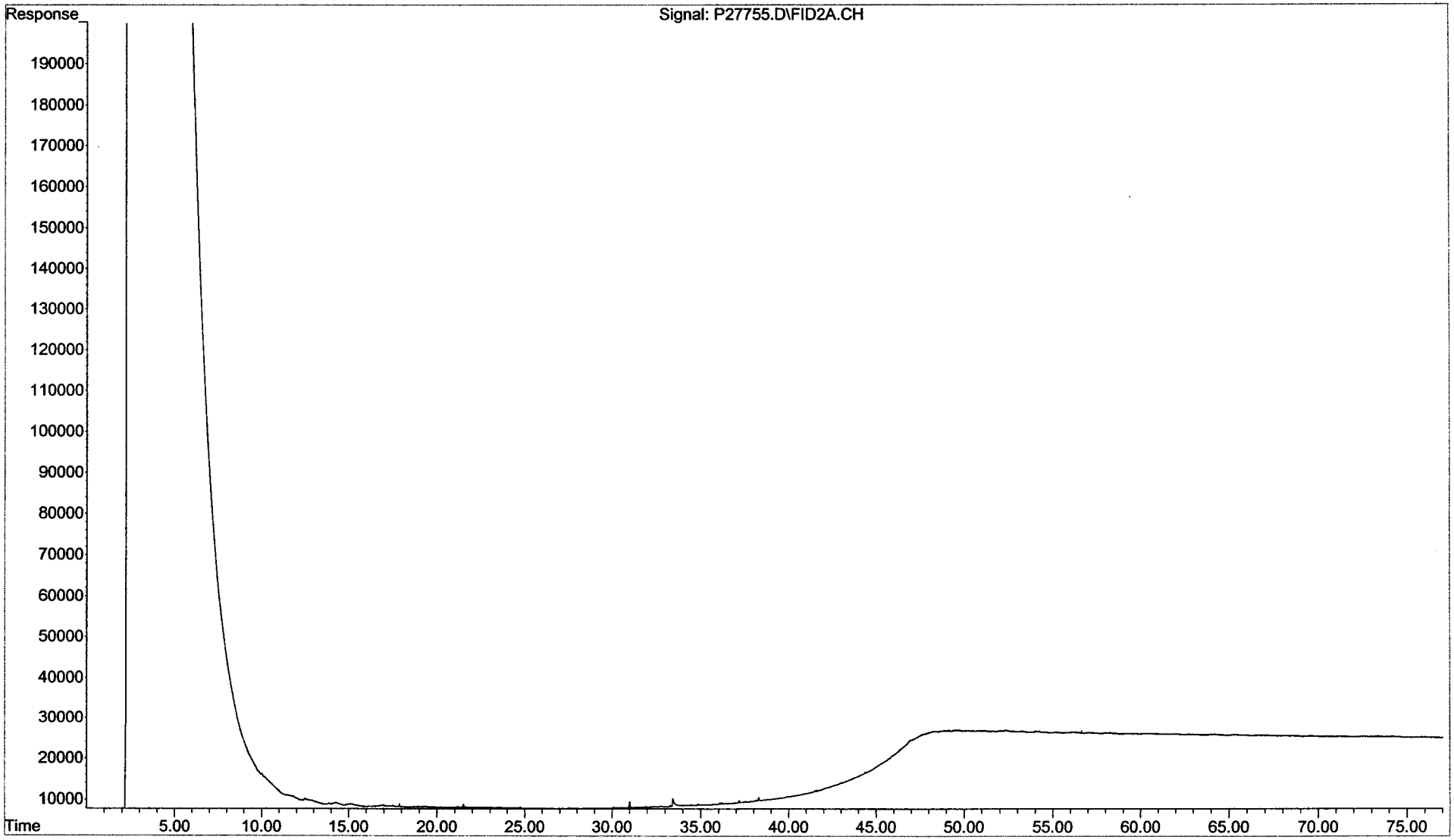
Integration File: SHCINT1.E
Quant Time: Jan 19 19:06:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.00	34552	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	409914580	606542.441 ug/mL

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27755.D
Operator : AC
Acquired : 19 Jan 2006 1:46 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201180601
Misc Info : DCM
Vial Number: 57



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27773.D
Signal(s) : FID2A.CH
Acq On : 19 Jan 2006 6:07 pm
Operator : AC
Sample : IB201180602
Misc : DCM
ALS Vial : 66 Sample Multiplier: 1

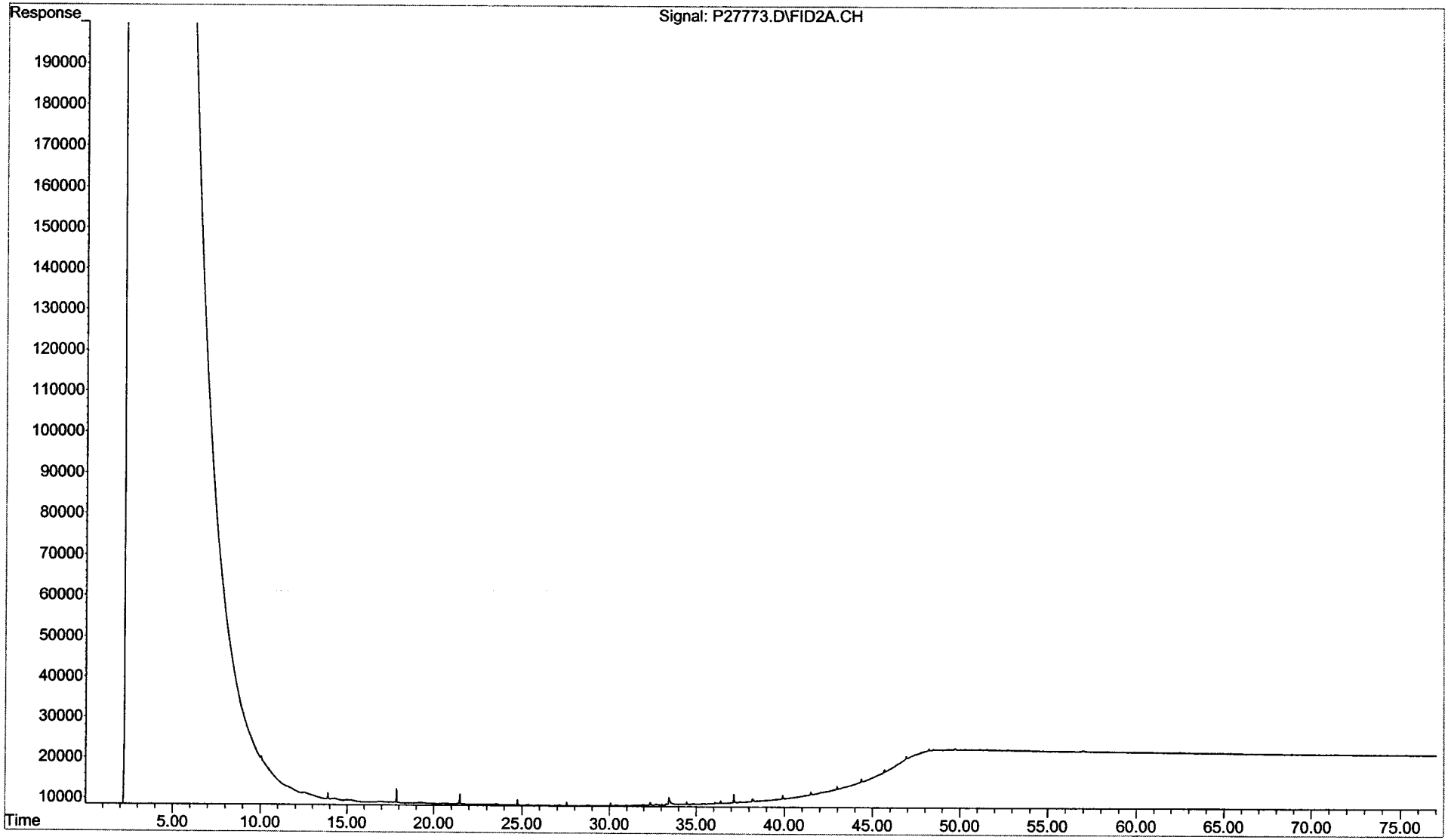
Integration File: SHCINT1.E
Quant Time: Jan 23 21:16:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.00	25	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	318628566	655781855.763 ug/mL

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27773.D
Operator : AC
Acquired : 19 Jan 2006 6:07 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201180602
Misc Info : DCM
Vial Number: 66



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27899.D
Signal(s) : FID2A.CH
Acq On : 25 Jan 2006 11:41 pm
Operator : AC
Sample : IB201230602
Misc : DCM
ALS Vial : 74 Sample Multiplier: 1

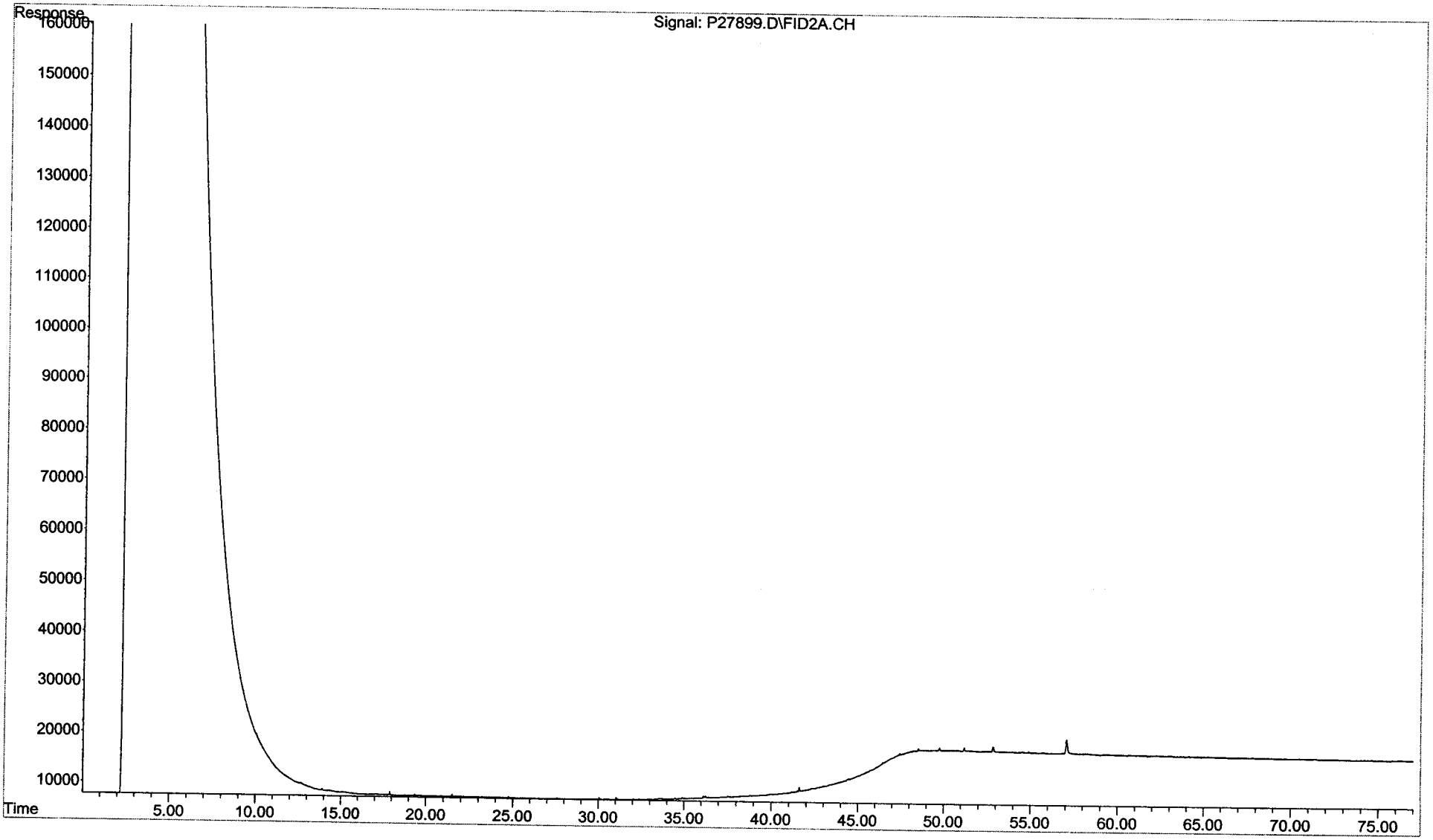
Integration File: SHCINT1.E
Quant Time: Jan 26 16:49:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.03	11934	50.000 ug/mL
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	273051352	1169812.192 ug/mL

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27899.D
Operator : AC
Acquired : 25 Jan 2006 11:41 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201230602
Misc Info : DCM
Vial Number: 74



Sequence Name: C:\MSDChem\1\sequence\S2011801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN18\

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

Line		Sample Name/Misc Info			
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27743	FRNC2B	DCM
5)	Sample	1	P27744	FRNC2B	pah std
6)	RearSamp	52	P27745	FRNC2B	C2011801-AFID PASS
7)	Sample	2	P27746	FRNC2B	C2011801
8)	RearSamp	53	P27747	FRNC2B	ANS2011801-AFID TO011906AWS01 [illegible] 1/19/06
9)	Sample	3	P27748	FRNC2B	ANS2011801
10)	Pause				
11)	RearSamp	54	P27749	FRNC2B	~~LCS CHECK-AFID~~ DCM [illegible] 1/19/06
12)	Sample	4	P27750	FRNC2B	DCM
13)	RearSamp	55	P27751	FRNC2B	~~BIO CHECK-AFID~~ LCS Check [illegible] 1/19/06
14)	Sample	5	P27752	FRNC2B	LCS CHECK
15)	RearSamp	56	P27753	FRNC2B	BIO CHECK-AFID
16)	Sample	6	P27754	FRNC2B	BIO CHECK
17)	RearSamp	57	P27755	FRNC2B	~~SO011006LCS01-AFID~~ IB201180601 [illegible] 1/19/06
18)	Sample	7	P27756	FRNC2B	0512128-04-RE2
19)	RearSamp	58	P27757	FRNC2B	~~C2011802-AFID PASS~~ SO011006LCS01 [illegible] 1/19/06
[illegible]	Sample	8	P27758	FRNC2B	0512128-05-RE2
[illegible]	RearSamp	59	P27759	FRNC2B	~~DCM-AFID~~ C2011802-AFID PASS [illegible] 1/19/06
22)	Sample	9	P27760	FRNC2B	0512128-01-RE2
23)	RearSamp	60	P27761	FRNC2B	DCM-AFID
24)	Sample	10	P27762	FRNC2B	0512128-02-RE2
25)	RearSamp	61	P27763	FRNC2B	DCM-AFID
26)	Sample	11	P27764	FRNC2B	DCM
27)	RearSamp	62	P27765	FRNC2B	DCM-AFID
28)	Sample	12	P27766	FRNC2B	C2011802
29)	RearSamp	63	P27767	FRNC2B	DCM-AFID
30)	Sample	13	P27768	FRNC2B	DCM
31)	RearSamp	64	P27769	FRNC2B	C2011803-AFID PASS
32)	Sample	14	P27770	FRNC2B	SS010606B04
33)	Pause				
34)	RearSamp	65	P27771	FRNC2B	DCM-AFID
35)	Sample	15	P27772	FRNC2B	C2011803
36)	RearSamp	66	P27773	FRNC2B	DCM-AFID IB201180602 [illegible] 1/19/06
37)	Sample	16	P27774	FRNC2B	DCM
38)	RearSamp	67	P27775	FRNC2B	SS011306B04-AFID
39)	Sample	17	P27776	FRNC2B	SS010606B04
40)	RearSamp	68	P27777	FRNC2B	SS011306LCS02-AFID
41)	Sample	18	P27778	FRNC2B	SO011006B01
42)	RearSamp	69	P27779	FRNC2B	SS011306LCSD02-AFID
43)	Sample	19	P27780	FRNC2B	SS010606LCS04

Realumina clean [illegible] 1/30/06

PAH #2 Sequence Information

SHC Continuing Calibration: WHAC10 Conc.: 50ug/mL
PAH Continuing Calibration: WHAC13 Conc.: 500ng/mL

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

FID Process Method: HC20901.M PAH Process Method: PAH20113.M

Last Modified: Tue Jan 17 15:44:30 2006

Sequence Name: C:\MSDChem\1\sequence\S2011801.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	70	P27781	FRNC2B	0601040-01-AFID
45)	Sample	20	P27782	FRNC2B	SS010606LCSD03
46)	RearSamp	71	P27783	FRNC2B	0601040-02-AFID
47)	Sample	21	P27784	FRNC2B	SO011006LCS01
48)	RearSamp	72	P27785	FRNC2B	0601040-03-AFID
49)	Sample	22	P27786	FRNC2B	SO011006LCSD01
50)	RearSamp	73	P27787	FRNC2B	0601040-04-AFID
51)	Sample	23	P27788	FRNC2B	0512128-03
52)	RearSamp	74	P27789	FRNC2B	0601040-04D-AFID
53)	Sample	24	P27790	FRNC2B	0512128-03D
54)	RearSamp	75	P27791	FRNC2B	0601040-05-AFID
55)	Sample	25	P27792	FRNC2B	C2011804
56)	RearSamp	76	P27793	FRNC2B	C2011804-AFID PASS
57)	Sample	26	P27794	FRNC2B	DCM
58)	Pause				
59)	RearSamp	77	P27795	FRNC2B	DCM-AFID
60)	Sample	27	P27796	FRNC2B	0512128-01-RE3
61)	RearSamp	78	P27797	FRNC2B	DCM-AFID
62)	Sample	28	P27798	FRNC2B	0512128-02-RE3
63)	RearSamp	79	P27799	FRNC2B	DCM-AFID
64)	Sample	29	P27800	FRNC2B	0512128-04-RE3
65)	RearSamp	80	P27801	FRNC2B	DCM-AFID
66)	Sample	30	P27802	FRNC2B	0512128-05-RE3
67)	RearSamp	81	P27803	FRNC2B	DCM-AFID
68)	Sample	31	P27804	FRNC2B	C2011805
69)	RearSamp	82	P27805	FRNC2B	DCM-AFID
70)	Sample	32	P27806	FRNC2B	0601040-01-RE
71)	RearSamp	83	P27807	FRNC2B	DCM-AFID
72)	Sample	33	P27808	FRNC2B	0601040-02-RE
73)	RearSamp	84	P27809	FRNC2B	DCM-AFID
74)	Sample	34	P27810	FRNC2B	0601040-03-RE
75)	RearSamp	85	P27811	FRNC2B	DCM-AFID
76)	Sample	35	P27812	FRNC2B	0601040-04-RE
77)	RearSamp	86	P27813	FRNC2B	DCM-AFID
78)	Sample	36	P27814	FRNC2B	0601040-04D-RE
79)	RearSamp	87	P27815	FRNC2B	DCM-AFID
80)	Sample	37	P27816	FRNC2B	0601040-05-RE.
81)	RearSamp	88	P27817	FRNC2B	DCM-AFID
82)	Sample	38	P27818	FRNC2B	C2011806
83)	RearSamp	89	P27819	FRNC2BF	DCM-AFID
84)	Sample	39	P27820	FRNC2BF	DCM FULL SCN
85)	RearSamp	90	P27821	FRNC2B	DCM-AFID
86)	Sample	40	P27822	FRNC2B	ROB BLK

OW 1/30/06

Sequence Name: C:\MSDChem\1\sequence\S2012301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN23\

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:

1/26/06

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)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27833	FRNC2B	DCM
5)	Sample	1	P27834	FRNC2B	PAH STD
6)	RearSamp	52	P27835	FRNC2B	dcm
7)	Sample	2	P27836	FRNC2B	PAH STD
8)	RearSamp	53	P27837	FRNC2B	
9)	Sample	3	P27838	FRNC2B	C2012301
10)	RearSamp	53	P27839	FRNC2B	
11)	Sample	4	P27840	FRNC2B	ANS2012301
12)	RearSamp	53	P27841	FRNC2B	
13)	Sample	5	P27842	FRNC2B	DCM
14)	RearSamp	53	P27843	FRNC2B	
15)	Sample	6	P27844	FRNC2B	DCM
16)	RearSamp	54	P27845	FRNC2B	
17)	Sample	7	P27846	FRNC2B	SS011306B04
18)	RearSamp	54	P27847	FRNC2B	
19)	Sample	8	P27848	FRNC2B	SS011106B01
20)	RearSamp	54	P27849	FRNC2B	
21)	Sample	9	P27850	FRNC2B	SS011306LCS02
22)	RearSamp	54	P27851	FRNC2B	
23)	Sample	10	P27852	FRNC2B	SS011306LCSD02
24)	RearSamp	54	P27853	FRNC2B	
25)	Sample	11	P27854	FRNC2B	SS011106LCS01
26)	RearSamp	54	P27855	FRNC2B	
27)	Sample	12	P27856	FRNC2B	SS011106LCSD01
28)	RearSamp	55	P27857	FRNC2B	
29)	Sample	13	P27858	FRNC2B	C2012302
30)	RearSamp	55	P27859	FRNC2B	
31)	Sample	14	P27860	FRNC2B	0601019-01-RE
32)	Pause				
33)	RearSamp	56	P27861	FRNC2B	
34)	Sample	15	P27862	FRNC2B	0601019-02-RE
35)	RearSamp	58	P27863	FRNC2B	DCM-AFID
36)	Sample	16	P27864	FRNC2B	0601019-03-RE
37)	RearSamp	57	P27865	FRNC2B	
38)	Sample	17	P27866	FRNC2B	0601019-03D-RE
39)	RearSamp	58	P27867	FRNC2B	DCM-AFID
40)	Sample	18	P27868	FRNC2B	0601019-04-RE
41)	RearSamp	59	P27869	FRNC2B	DCM-AFID
42)	Sample	19	P27870	FRNC2B	0601019-05-RE
43)	RearSamp	60	P27871	FRNC2B	C2012401-AFID - PAH standard

PAH #2 Sequence Information

SHC Continuing Calibration: WHAC10 Conc.: 50ug/mL
PAH Continuing Calibration: WHAC13 Conc.: 500ng/mL

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

FID Process Method: HC20901.M PAH Process Method: PAH20113.M

Last Modified: Wed Jan 25 15:42:38 2006

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P27872	FRNC2B	0601019-06-RE
45)	RearSamp	61	P27873	FRNC2B	DCM-AFID
[illegible]	Sample	21	P27874	FRNC2B	0601019-07-RE
[illegible]	RearSamp	62	P27875	FRNC2B	DCM-AFID
48)	Sample	22	P27876	FRNC2B	0601019-08-RE
49)	RearSamp	63	P27877	FRNC2B	TO012306B04-AFID
50)	Sample	23	P27878	FRNC2B	0601019-09-RE
51)	RearSamp	64	P27879	FRNC2B	TO012306LCS01
52)	Sample	24	P27880	FRNC2B	C2012303
53)	RearSamp	65	P27881	FRNC2B	TO012306LCSD01
54)	Sample	25	P27882	FRNC2B	0601019-10-RE
55)	RearSamp	66	P27883	FRNC2B	0601054-01-AFID
56)	Sample	26	P27884	FRNC2B	0601019-11-RE
57)	RearSamp	67	P27885	FRNC2B	0601054-01D-AFID
58)	Sample	27	P27886	FRNC2B	0601040-05-RE
59)	RearSamp	68	P27887	FRNC2B	0601054-02-AFID
60)	Sample	28	P27888	FRNC2B	C2012304
61)	Pause				
62)	RearSamp	69	P27889	FRNC2B	C2012402-AFID PASS
63)	Sample	29	P27890	FRNC2B	DCM
64)	RearSamp	70	P27891	FRNC2B	ANS2012401-AFID T S012606AWS01 1/26/06
65)	Sample	30	P27892	FRNC2B	SS011306B04
66)	RearSamp	99	P27892A	FRNC2B	DCM
67)	Sample	100	P27892B	FRNC2B	PAH STD RT CHECK ← R.T. change 1/26/06
68)	RearSamp	99	P27892C	FRNC2B	DCM
69)	Sample	100	P27892D	FRNC2B	C3012304A
70)	Pause				
71)	RearSamp	71	P27893	FRNC2B	LD70212401-AFID
72)	Sample	31	P27894	FRNC2B	DCM 1/26/06
73)	RearSamp	72	P27895	FRNC2B	C2012403-AFID PASS
74)	Sample	32	P27896	FRNC2B	SS011306B04
75)	RearSamp	73	P27897	FRNC2B	DCM-AFID
76)	Sample	33	P27898	FRNC2B	SS011306LCS02
[illegible]	RearSamp	74	P27899	FRNC2B	DCM-AFID IB201230602
78)	Sample	34	P27900	FRNC2B	SS011306LCSD02
79)	RearSamp	75	P27901	FRNC2B	SS011306B04-AFID
80)	Sample	35	P27902	FRNC2B	C2012305 1/26/06
81)	RearSamp	76	P27903	FRNC2B	SS011306LCS02-AFID
82)	Sample	36	P27904	FRNC2B	0601040-01
83)	RearSamp	77	P27905	FRNC2B	SS011306LCSD02-AFID
84)	Sample	37	P27906	FRNC2B	0601040-02 1/26/06
85)	RearSamp	78	P27907	FRNC2B	C2012404-AFID PASS 1/26/06
86)	Sample	38	P27908	FRNC2B	0601040-03
87)	RearSamp	79	P27909	FRNC2B	DCM-AFID IB201260601 1/26/06
88)	Sample	39	P27910	FRNC2B	0601040-04
89)	RearSamp	80	P27911	FRNC2B	TS012306B06-AFID
90)	Sample	40	P27912	FRNC2B	0601040-04D
91)	RearSamp	81	P27913	FRNC2B	TS012306LCS03-AFID
92)	Sample	41	P27914	FRNC2B	C2012306 PASS
93)	Pause				
94)	RearSamp	82	P27915	FRNC2BF	0601056-01-AFID
95)	Sample	42	P27916	FRNC2BF	ANS2012302
96)	RearSamp	83	P27917	FRNC2B	C2012405-AFID PASS

re-analyze FID due to failing opening CCV

1/26/06 5 1/26/06

Last Modified: Wed Jan 25 15:42:38 2006

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: **0601040**
Lab ID: **SS011306B04**
Date Analyzed: **01/26/06 01:19**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-24 (12.6-13.4)	0601040-01	01/20/06 00:33
GC-SED-23 (17.5-19)	0601040-02	01/20/06 02:12
GC-SED-20 (4-5)	0601040-03	01/20/06 03:52
GC-SED-104 (3.7-5.1)	0601040-04	01/20/06 05:33
GC-SED-104 (3.7-5.1)	0601040-04 D	01/20/06 07:16
GC-SED-64D (2-4)	0601040-05	01/20/06 08:54
LCS	SS011306LCS02	01/26/06 02:56
LCSD	SS011306LCSD02	01/26/06 04:33

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\1\sequence\S2090101.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER\SEP01\

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

9/1/05

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P25456	FRNC2B	DCM
4)	Sample	1	P25457	FRNC2B	DCM
5)	RearSamp	52	P25458	FRNC2B	I2090101
6)	Sample	2	P25459	FRNC2B	ALKANE STD
7)	RearSamp	53	P25460	FRNC2B	I2090102
8)	Sample	3	P25461	FRNC2B	PRIME
9)	RearSamp	54	P25462	FRNC2B	I2090103
10)	Sample	1	P25463	FRNC2B	DCM
11)	RearSamp	55	P25464	FRNC2B	I2090104
12)	Sample	2	P25465	FRNC2B	PAH STD
13)	RearSamp	56	P25466	FRNC2B	I2090105
14)	Sample	3	P25467	FRNC2B	PRIME
15)	RearSamp	57	P25468	FRNC2B	Q2090101
16)	Sample	1	P25469	FRNC2B	DCM
17)	RearSamp	58	P25470	FRNC2B	DCM
18)	Sample	2	P25471	FRNC2B	PAH STD
19)	RearSamp	59	P25472	FRNC2B	ANS2090101
20)	Sample	3	P25473	FRNC2B	PRIME
21)	RearSamp	60	P25474	FRNC2B	LA2090101
22)	Sample	1	P25475	FRNC2B	DCM
23)	RearSamp	61	P25476	FRNC2B	SFFSW2090101
24)	Sample	2	P25477	FRNC2B	PAH STD
25)	RearSamp	62	P25478	FRNC2B	SFFCO2090101
26)	Sample	3	P25479	FRNC2B	PRIME
27)	RearSamp	63	P25480	FRNC2B	SA2090101
28)	Sample	1	P25481	FRNC2B	DCM
29)	RearSamp	64	P25482	FRNC2B	SFFN2090101
30)	Sample	2	P25483	FRNC2B	PAH STD
31)	RearSamp	65	P25484	FRNC2B	SFFS2090101
32)	Sample	3	P25485	FRNC2B	PRIME

FID Process Method: HC20901.M

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\
Method File : HC20901.M
Title : FID Forensics
Last Update : Tue Sep 06 10:22:24 2005
Response Via : Initial Calibration

Calibration Files
1 =P25458.D 10 =P25460.D 50 =P25462.D
100 =P25464.D 200 =P25466.D

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.788	0.829	0.834	0.837	0.837	0.825	2.54
3)	t	n-Nonane (C9)	0.891	0.888	0.885	0.895	0.894	0.891	0.45
4)	t	n-Decane (C10)	0.913	0.906	0.904	0.913	0.914	0.910	0.50
5)	t	n-Undecane (C11)	0.907	0.910	0.909	0.918	0.920	0.913	0.63
6)	t	n-Dodecane (C12)	0.924	0.928	0.928	0.936	0.938	0.931	0.65
7)	t	n-Tridecane (C13)	0.936	0.937	0.938	0.944	0.945	0.940	0.46
8)	t	1380	0.954	0.953	0.951	0.957	0.956	0.954	0.26
9)	t	n-Tetradecane (C14)	0.954	0.953	0.951	0.957	0.956	0.954	0.26
10)	t	1470	0.964	0.963	0.958	0.963	0.961	0.962	0.25
11)	t	n-Pentadecane (C15)	0.964	0.963	0.958	0.963	0.961	0.962	0.25
12)	t	n-Hexadecane (C16)	0.976	0.972	0.966	0.970	0.967	0.970	0.44
13)	t	1650	0.988	0.983	0.975	0.979	0.978	0.981	0.48
14)	t	n-Heptadecane (C17)	0.988	0.983	0.975	0.979	0.978	0.981	0.48
15)	t	Pristane	0.946	0.941	0.933	0.936	0.930	0.937	0.67
16)	t	n-Octadecane (C18)	0.991	0.988	0.980	0.983	0.980	0.984	0.49
17)	t	Phytane	0.981	0.979	0.971	0.974	0.970	0.975	0.49
18)	t	n-Nonadecane (C19)	0.990	0.984	0.976	0.979	0.975	0.981	0.66
19)	s	ortho-terphenyl	1.140	1.055	1.046	1.044	1.044	1.066	3.92
20)	t	n-Eicosane (C20)	0.991	0.980	0.971	0.974	0.970	0.977	0.89
21)	t	n-Heneicosane (C21)	1.021	1.012	1.003	1.005	1.001	1.008	0.79
22)	t	n-Docosane (C22)	1.005	0.998	0.990	0.992	0.989	0.995	0.69
23)	t	n-Tricosane (C23)	1.012	1.004	0.996	0.998	0.995	1.001	0.72
24)	s	d50-Tetracosane	1.259	0.869	0.862	0.859	0.857	0.941	18.86
25)	t	n-Tetracosane (C24)	1.024	1.010	1.002	1.003	1.000	1.008	0.98
26)	t	n-Pentacosane (C25)	1.024	1.005	0.996	0.997	0.993	1.003	1.24
27)	t	n-Hexacosane (C26)	1.004	0.994	0.987	0.988	0.985	0.992	0.79
28)	t	n-Heptacosane (C27)	1.005	0.991	0.983	0.983	0.981	0.989	0.99
29)	t	n-Octacosane (C28)	1.016	1.004	0.995	0.995	0.993	1.000	0.96
30)	t	n-Nonacosane (C29)	1.037	1.026	1.018	1.018	1.016	1.023	0.85
31)	t	n-Triacontane (C30)	1.018	1.009	1.002	1.001	0.999	1.006	0.77
32)	t	n-Hentriacontane (C31	0.998	0.978	0.970	0.970	0.968	0.977	1.27
33)	t	n-Dotriacontane (C32)	0.989	0.984	0.977	0.976	0.975	0.980	0.62
34)	t	n-Tritriacontane (C33	1.005	1.000	0.993	0.992	0.989	0.996	0.67
35)	t	n-tetratriacontane (C	1.018	1.010	1.004	1.003	1.001	1.007	0.67
36)	t	n-Pentatriacontane (C	0.982	0.970	0.964	0.963	0.960	0.968	0.88
37)	t	n-Hexatriacontane (C3	1.006	0.992	0.986	0.985	0.983	0.990	0.93
38)	t	n-Heptatriacontane (C	1.061	1.055	1.051	1.051	1.048	1.053	0.46
39)	t	n-Octatriacontane (C3	1.006	0.998	0.994	0.993	0.991	0.997	0.61
40)	t	n-Nonatriacontane (C3	0.983	0.973	0.974	0.973	0.971	0.975	0.49
41)	t	n-Tetracontane (C40)	0.983	0.973	0.974	0.973	0.971	0.975	0.49
42)	h	C9-C40 Total Petroleu	0.987	0.980	0.974	0.976	0.974	0.978	0.56
43)	h	C10-C28 DRO	0.987	0.980	0.974	0.976	0.974	0.978	0.56
44)	h	Total Resolved Hydroc	0.987	0.980	0.974	0.976	0.974	0.978	0.56

(#) = Out of Range

FID TPH RF CALCULATION

	L5	L4	L3	L2	L1
Method ID	FRNC2B.M	FRNC2B.M	FRNC2B.M	FRNC2B.M	FRNC2B.M
Date	Mon Sep 05 21:27:09 2005	Mon Sep 05 21:27:09 2005	Mon Sep 05 21:08:55 2005	Mon Sep 05 21:05:32 2005	Tue Aug 30 10:50:27 2005
File ID	P25466.D	P25464.D	P25462.D	P25460.D	P25458.D

n-Octane (C8)	222197992	111621441	55357660	11047330	1063166
n-Nonane (C9)	237390685	119271616	58745501	11837371	1202863
n-Decane (C10)	242789522	121741910	60010356	12083244	1231334
n-Undecane (C11)	244375644	122338353	60360019	12134854	1223510
n-Dodecane (C12)	249124168	124836563	61620584	12372116	1246543
n-Tridecane (C13)	250959644	125904193	62231550	12496296	1262814
n-Tetradecane (C14)	253891658	127573339	63099832	12703009	1287355
n-Pentadecane (C15)	255267441	128457843	63590343	12842670	1300776
n-Hexadecane (C16)	256742972	129275965	64084175	12960631	1317241
n-Heptadecane (C17)	259771215	130588165	64739328	13099811	1332840
Pristane	247041081	124834324	61938632	12540388	1277059
n-Octadecane (C18)	260200700	131100996	65051952	13173644	1337001
Phytane	257598423	129831456	64429582	13048074	1323351
n-Nonadecane (C19)	258783183	130469466	64775082	13120898	1336318
n-Eicosane (C20)	257595382	129803367	64452491	13069645	1337253
n-Heneicosane (C21)	265904802	134016323	66577835	13487676	1377674
n-Docosane (C22)	262538137	132270977	65715019	13311425	1356292
n-Tricosane (C23)	264122802	133011321	66086647	13385819	1365547
n-Tetracosane (C24)	265619038	133788179	66507982	13462433	1382398
n-Pentacosane (C25)	263680892	132880514	66112269	13403075	1381382
n-Hexacosane (C26)	261479436	131676219	65521218	13257363	1354696
n-Heptacosane (C27)	260490730	131119363	65258410	13215842	1355818
n-Octacosane (C28)	263581351	132661371	66050731	13383477	1370666
n-Nonacosane (C29)	269696287	135721175	67583335	13678131	1399181
n-Triacontane (C30)	265226719	133450262	66478810	13454014	1373270
n-Hentriacontane (C31)	256979309	129312028	64402179	13036096	1346470
n-Dotriacontane (C32)	258813237	130190494	64844061	13117363	1334659
n-Tritriacontane (C33)	262684075	132203159	65888928	13330486	1356572
n-tetratriacontane (C34)	265835468	133722500	66604987	13460354	1373039
n-Pentatriacontane (C35)	255041607	128379572	63975402	12928605	1324543
n-Hexatriacontane (C36)	261018713	131361401	65466917	13219676	1357233
n-Heptatriacontane (C37)	278362887	140156490	69777844	14068486	1431658
n-Octatriacontane (C38)	263048176	132434607	65981882	13311533	1357646
n-Tetracontane (C40)	257774066	129767988	64628739	12976710	1326686

	L5	L4	L3	L2	L1
C9-C40 Total Petroleum Hydrocarbons	258588771	130125803	64624019	13059734	1331566
C10-C28 DRO	258588771	130125803	64624019	13059734	1331566
Total Resolved Hydrocarbons	258588771	130125803	64624019	13059734	1331566

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25458.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 4:06 pm
Operator : AC
Sample : I2090101
Misc : WHAB29
ALS Vial : 52 Sample Multiplier: 1

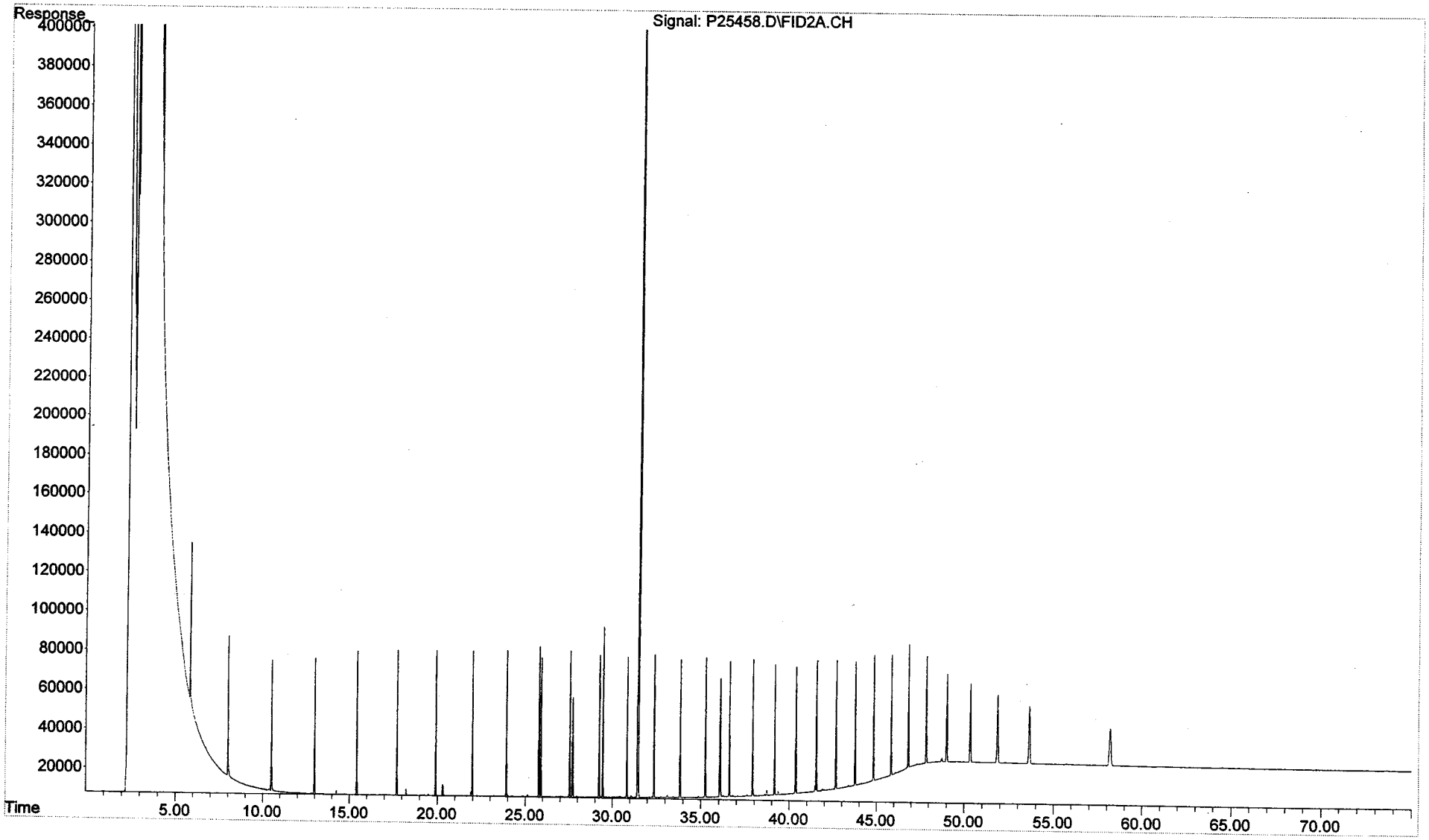
Integration File: SHCINT1.E
Quant Time: Sep 05 21:05:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Aug 30 10:50:27 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

9/6/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	67468758	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.45	1538387	1.071 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 2.14%#
24) s	d50-Tetracosane	36.08	1698697	1.335 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 2.67%#
	Target Compounds			
2) t	n-Octane (C8)	5.82	1063166	0.992 ug/mLm
3) t	n-Nonane (C9)	8.02	1202863	1.008 ug/mLm
4) t	n-Decane (C10)	10.50	1231334	1.001 ug/mL
5) t	n-Undecane (C11)	13.00	1223510	0.990 ug/mL
6) t	n-Dodecane (C12)	15.43	1246543	0.993 ug/mL
7) t	n-Tridecane (C13)	17.73	1262814	0.999 ug/mLm
9) t	n-Tetradecane (C14)	19.91	1287355	1.005 ug/mL
11) t	n-Pentadecane (C15)	21.98	1300776	1.008 ug/mL
12) t	n-Hexadecane (C16)	23.93	1317241	1.011 ug/mL
14) t	n-Heptadecane (C17)	25.79	1332840	1.010 ug/mL
15) t	Pristane	25.90	1277059	1.008 ug/mLm
16) t	n-Octadecane (C18)	27.55	1337001	1.007 ug/mLm
17) t	Phytane	27.72	1323351	1.004 ug/mLm
18) t	n-Nonadecane (C19)	29.24	1336318	1.009 ug/mLm
20) t	n-Eicosane (C20)	30.84	1337253	1.012 ug/mL
21) t	n-Heneicosane (C21)	32.38	1377674	1.009 ug/mL
22) t	n-Docosane (C22)	33.85	1356292	1.005 ug/mLm
23) t	n-Tricosane (C23)	35.26	1365547	1.006 ug/mL
25) t	n-Tetracosane (C24)	36.61	1382398	1.012 ug/mL
26) t	n-Pentacosane (C25)	37.91	1381382	1.017 ug/mL
27) t	n-Hexacosane (C26)	39.17	1354696	1.010 ug/mLm
28) t	n-Heptacosane (C27)	40.38	1355818	1.013 ug/mLm
29) t	n-Octacosane (C28)	41.55	1370666	1.014 ug/mLm
30) t	n-Nonacosane (C29)	42.67	1399181	1.012 ug/mL
31) t	n-Triacontane (C30)	43.76	1373270	1.010 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	1346470	1.024 ug/mL
33) t	n-Dotriacontane (C32)	45.84	1334659	1.010 ug/mL
34) t	n-Tritriacontane (C33)	46.83	1356572	1.012 ug/mLm
35) t	n-tetratriacontane (C34)	47.86	1373039	1.013 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	1324543	1.020 ug/mLm
37) t	n-Hexatriacontane (C36)	50.34	1357233	1.032 ug/mLm
38) t	n-Heptatriacontane (C37)	51.86	1431658	1.040 ug/mLm
39) t	n-Octatriacontane (C38)	53.64f	1357646	1.057 ug/mLm
41) t	n-Tetracontane (C40)	58.19f	1326686	1.136 ug/mLm

File :O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\P25458.D
Operator : AC
Acquired : 01 Sep 2005 4:06 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090101
Misc Info : WHAB29
Vial Number: 52



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25460.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 5:38 pm
Operator : AC
Sample : I2090102
Misc : WHAB30
ALS Vial : 53 Sample Multiplier: 1

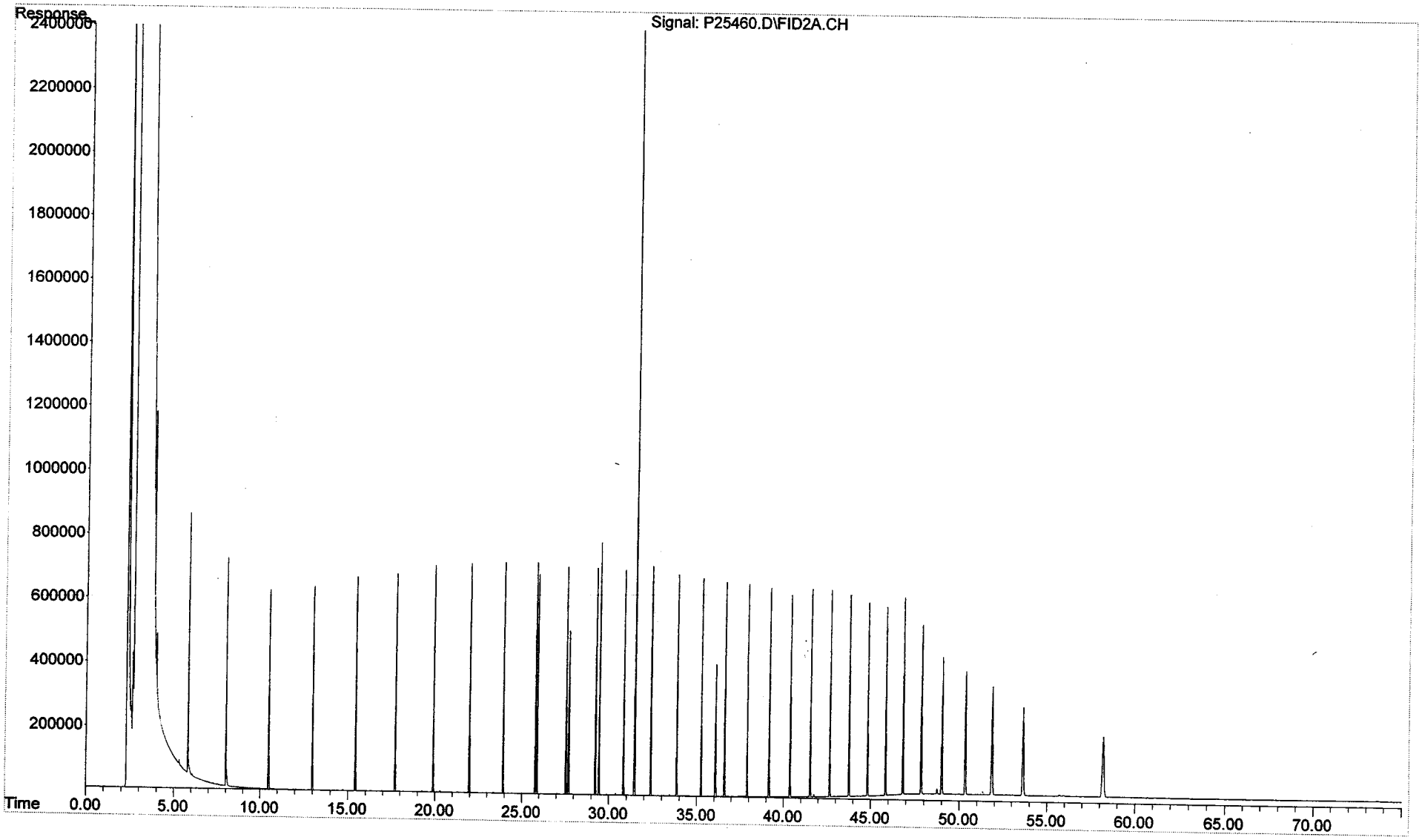
Integration File: SHCINT1.E
Quant Time: Sep 05 21:08:37 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:05:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

9/6/05

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.49	66658750	50.000 ug/mL
System Monitoring Compounds				
19) s	ortho-terphenyl	29.45	14062345	9.904 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 19.81%#
24) s	d50-Tetracosane	36.08	11587863	9.211 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 18.42%#
Target Compounds				
2) t	n-Octane (C8)	5.82	11047330	10.246 ug/mL
3) t	n-Nonane (C9)	8.02	11837371	10.078 ug/mLm
4) t	n-Decane (C10)	10.50	12083244	9.970 ug/mL
5) t	n-Undecane (C11)	13.00	12134854	9.958 ug/mL
6) t	n-Dodecane (C12)	15.43	12372116	9.972 ug/mL
7) t	n-Tridecane (C13)	17.73	12496296	9.989 ug/mLm
9) t	n-Tetradecane (C14)	19.92	12703009	10.013 ug/mLm
11) t	n-Pentadecane (C15)	21.98	12842670	10.043 ug/mL
12) t	n-Hexadecane (C16)	23.94	12960631	10.042 ug/mL
14) t	n-Heptadecane (C17)	25.79	13099811	10.028 ug/mL
15) t	Pristane	25.90	12540388	10.032 ug/mL
16) t	n-Octadecane (C18)	27.56	13173644	10.033 ug/mLm
17) t	Phytane	27.72	13048074	10.029 ug/mL
18) t	n-Nonadecane (C19)	29.24	13120898	10.019 ug/mL
20) t	n-Eicosane (C20)	30.85	13069645	10.000 ug/mL
21) t	n-Heneicosane (C21)	32.38	13487676	9.992 ug/mLm
22) t	n-Docosane (C22)	33.85	13311425	9.994 ug/mLm
23) t	n-Tricosane (C23)	35.26	13385819	9.985 ug/mL
25) t	n-Tetracosane (C24)	36.62	13462433	9.972 ug/mLm
26) t	n-Pentacosane (C25)	37.92	13403075	9.974 ug/mLm
27) t	n-Hexacosane (C26)	39.17	13257363	9.988 ug/mLm
28) t	n-Heptacosane (C27)	40.38	13215842	9.982 ug/mLm
29) t	n-Octacosane (C28)	41.55	13383477	9.999 ug/mL
30) t	n-Nonacosane (C29)	42.68	13678131	9.990 ug/mL
31) t	n-Triacontane (C30)	43.77	13454014	9.991 ug/mL
32) t	n-Hentriacontane (C31)	44.82	13036096	9.965 ug/mL
33) t	n-Dotriacontane (C32)	45.85	13117363	9.989 ug/mLm
34) t	n-Tritriacontane (C33)	46.84	13330486	10.001 ug/mLm
35) t	n-tetratriacontane (C34)	47.87	13460354	9.982 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	12928605	9.970 ug/mLm
37) t	n-Hexatriacontane (C36)	50.35	13219676	9.984 ug/mLm
38) t	n-Heptatriacontane (C37)	51.87	14068486	10.021 ug/mL
39) t	n-Octatriacontane (C38)	53.65	13311533	10.017 ug/mL
41) t	n-Tetracontane (C40)	58.21f	12976710	10.081 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25460.D
Operator : AC
Acquired : 01 Sep 2005 5:38 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090102
Misc Info : WHAB30
Vial Number: 53



Quantitation Report (QT Reviewed)

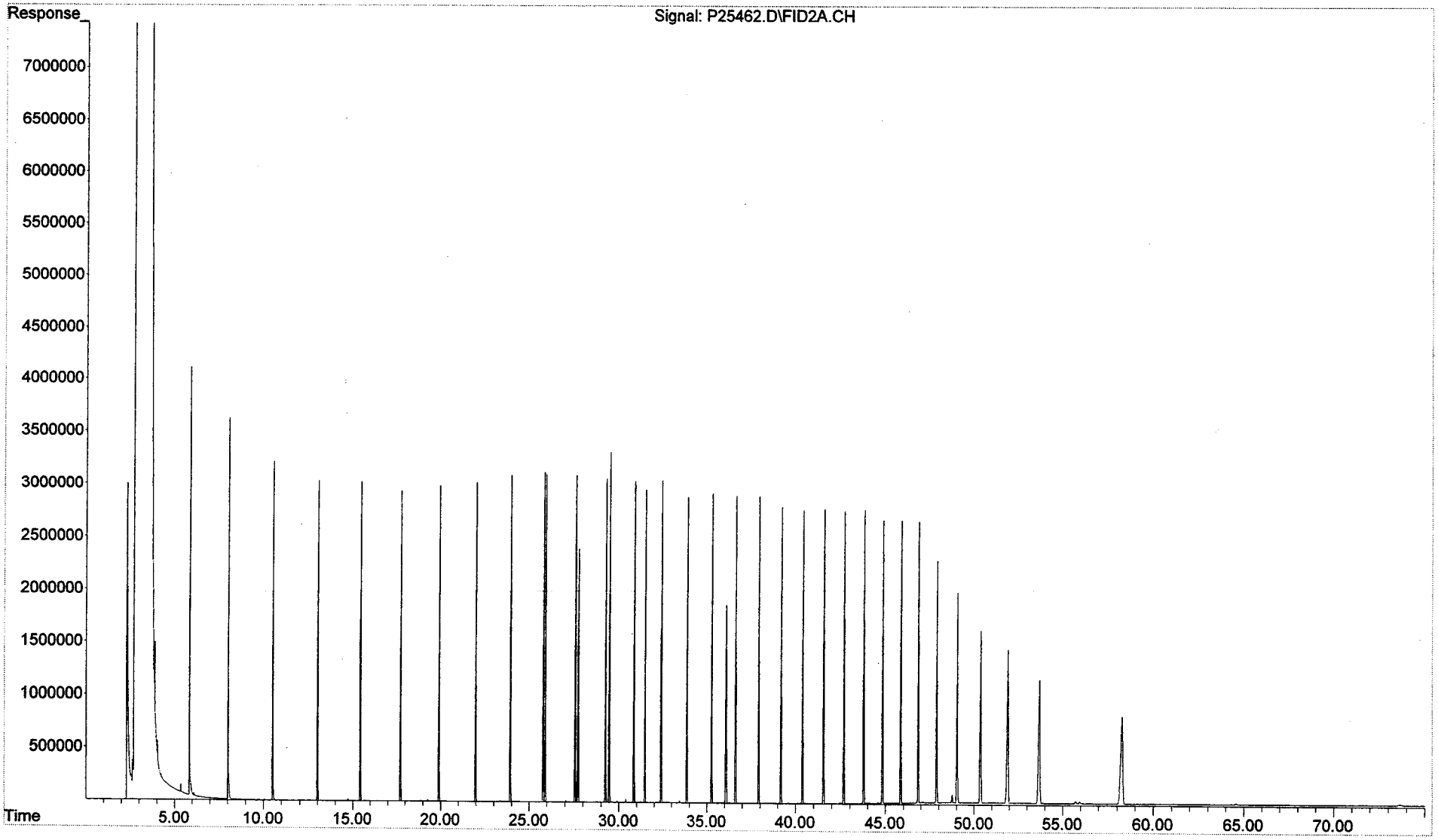
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25462.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 7:09 pm
Operator : AC
Sample : I2090103
Misc : WHAB31
ALS Vial : 54 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:18:22 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:08:55 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	66368155	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.48	69435771	49.105 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	98.21%
24) s	d50-Tetracosane	36.10	57218973	45.709 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	91.42%
	Target Compounds			
2) t	n-Octane (C8)	5.86	55357660	51.019 ug/mL
3) t	n-Nonane (C9)	8.04	58745501	49.974 ug/mL
4) t	n-Decane (C10)	10.51	60010356	49.728 ug/mL
5) t	n-Undecane (C11)	13.02	60360019	49.803 ug/mLm
6) t	n-Dodecane (C12)	15.44	61620584	49.912 ug/mL
7) t	n-Tridecane (C13)	17.75	62231550	49.974 ug/mL
9) t	n-Tetradecane (C14)	19.93	63099832	49.940 ug/mLm
11) t	n-Pentadecane (C15)	22.00	63590343	49.901 ug/mL
12) t	n-Hexadecane (C16)	23.96	64084175	49.837 ug/mL
14) t	n-Heptadecane (C17)	25.81	64739328	49.754 ug/mL
15) t	Pristane	25.92	61938632	49.772 ug/mL
16) t	n-Octadecane (C18)	27.58	65051952	49.756 ug/mLm
17) t	Phytane	27.75	64429582	49.755 ug/mL
18) t	n-Nonadecane (C19)	29.27	64775082	49.689 ug/mL
20) t	n-Eicosane (C20)	30.87	64452491	49.563 ug/mL
21) t	n-Heneicosane (C21)	32.41	66577835	49.585 ug/mL
22) t	n-Docosane (C22)	33.88	65715019	49.609 ug/mL
23) t	n-Tricosane (C23)	35.29	66086647	49.573 ug/mL
25) t	n-Tetracosane (C24)	36.64	66507982	49.539 ug/mL
26) t	n-Pentacosane (C25)	37.95	66112269	49.466 ug/mL
27) t	n-Hexacosane (C26)	39.20	65521218	49.640 ug/mL
28) t	n-Heptacosane (C27)	40.41	65258410	49.568 ug/mL
29) t	n-Octacosane (C28)	41.58	66050731	49.614 ug/mL
30) t	n-Nonacosane (C29)	42.70	67583335	49.640 ug/mL
31) t	n-Triacontane (C30)	43.80	66478810	49.656 ug/mL
32) t	n-Hentriacontane (C31)	44.85	64402179	49.516 ug/mL
33) t	n-Dotriacontane (C32)	45.88	64844061	49.674 ug/mLm
34) t	n-Tritriacontane (C33)	46.87	65888928	49.714 ug/mLm
35) t	n-tetratriacontane (C34)	47.90	66604987	49.689 ug/mLm
36) t	n-Pentatriacontane (C35)	49.06	63975402	49.636 ug/mLm
37) t	n-Hexatriacontane (C36)	50.39	65466917	49.696 ug/mLm
38) t	n-Heptatriacontane (C37)	51.93	69777844	49.812 ug/mL
39) t	n-Octatriacontane (C38)	53.71	65981882	49.825 ug/mL
41) t	n-Tetracontane (C40)	58.30	64628739	50.024 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25462.D
Operator : AC
Acquired : 01 Sep 2005 7:09 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090103
Misc Info : WHAB31
Vial Number: 54



Quantitation Report (QT Reviewed)

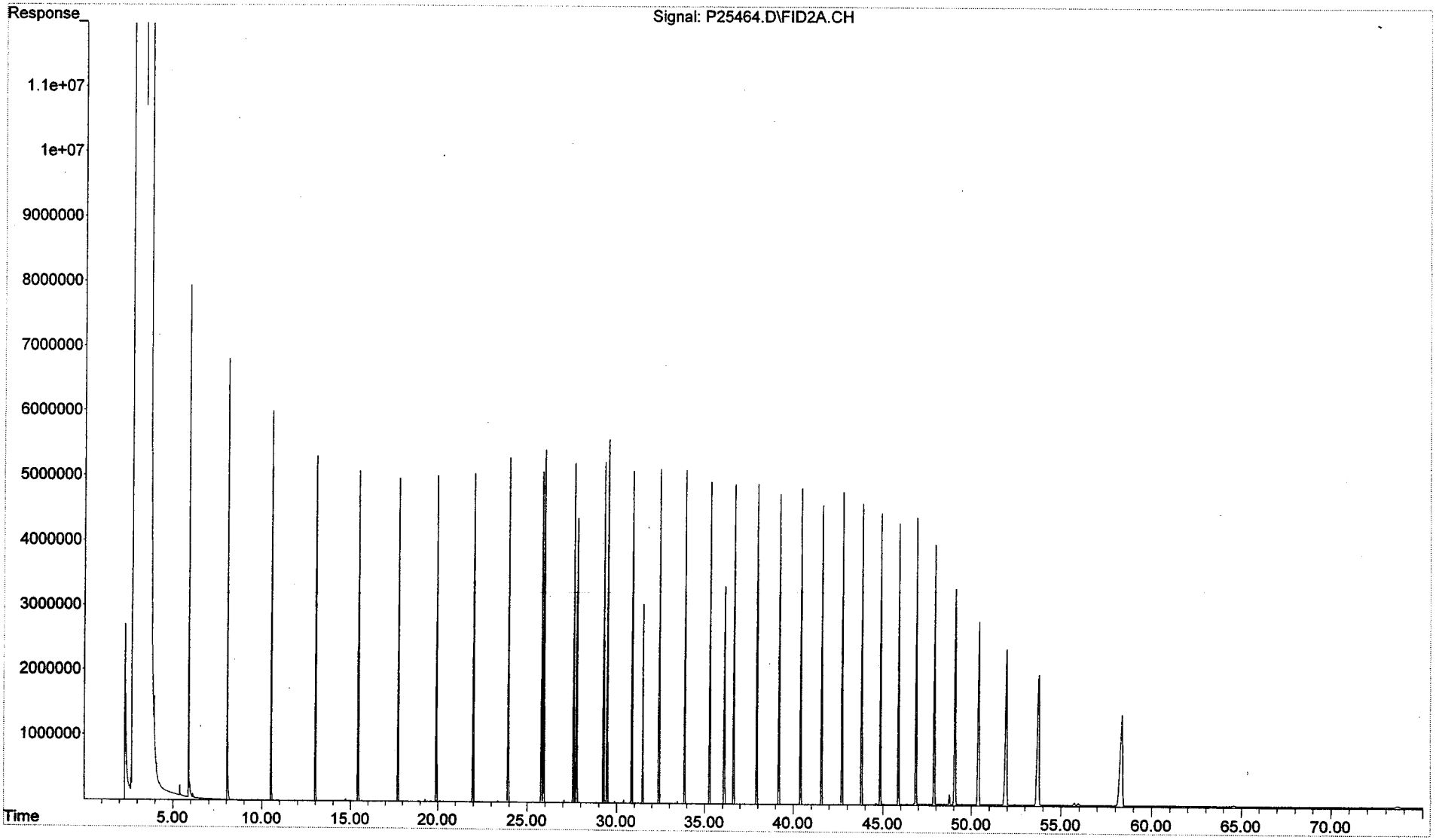
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25464.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 8:41 pm
Operator : AC
Sample : I2090104
Misc : WHAB32
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:28:16 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:19:05 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.49	66667338	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.50	139218991	97.984 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 195.97%#
24) s	d50-Tetracosane	36.12	114523552	91.120 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 182.24%#
Target Compounds				
2) t	n-Octane (C8)	5.89	111621441	102.136 ug/mL
3) t	n-Nonane (C9)	8.07	119271616	100.900 ug/mL
4) t	n-Decane (C10)	10.53	121741910	100.411 ug/mLm
5) t	n-Undecane (C11)	13.03	122338353	100.497 ug/mL
6) t	n-Dodecane (C12)	15.46	124836563	100.633 ug/mL
7) t	n-Tridecane (C13)	17.76	125904193	100.580 ug/mL
9) t	n-Tetradecane (C14)	19.95	127573339	100.434 ug/mLm
11) t	n-Pentadecane (C15)	22.02	128457843	100.278 ug/mL
12) t	n-Hexadecane (C16)	23.98	129275965	100.028 ug/mLm
14) t	n-Heptadecane (C17)	25.83	130588165	99.889 ug/mL
15) t	Pristane	25.95	124834324	99.863 ug/mL
16) t	n-Octadecane (C18)	27.60	131100996	99.843 ug/mLm
17) t	Phytane	27.77	129831456	99.845 ug/mL
18) t	n-Nonadecane (C19)	29.29	130469466	99.672 ug/mL
20) t	n-Eicosane (C20)	30.89	129803367	99.451 ug/mL
21) t	n-Heneicosane (C21)	32.43	134016323	99.457 ug/mL
22) t	n-Docosane (C22)	33.90	132270977	99.498 ug/mL
23) t	n-Tricosane (C23)	35.31	133011321	99.434 ug/mL
25) t	n-Tetracosane (C24)	36.67	133788179	99.304 ug/mL
26) t	n-Pentacosane (C25)	37.97	132880514	99.080 ug/mL
27) t	n-Hexacosane (C26)	39.22	131676219	99.377 ug/mL
28) t	n-Heptacosane (C27)	40.43	131119363	99.218 ug/mL
29) t	n-Octacosane (C28)	41.60	132661371	99.258 ug/mL
30) t	n-Nonacosane (C29)	42.73	135721175	99.302 ug/mL
31) t	n-Triacontane (C30)	43.82	133450262	99.303 ug/mL
32) t	n-Hentriacontane (C31)	44.88	129312028	99.060 ug/mL
33) t	n-Dotriacontane (C32)	45.90	130190494	99.383 ug/mL
34) t	n-Tritriacontane (C33)	46.89	132203159	99.373 ug/mL
35) t	n-tetratriacontane (C34)	47.93	133722500	99.400 ug/mLm
36) t	n-Pentatriacontane (C35)	49.09	128379572	99.276 ug/mL
37) t	n-Hexatriacontane (C36)	50.43	131361401	99.324 ug/mL
38) t	n-Heptatriacontane (C37)	51.98	140156490	99.638 ug/mL
39) t	n-Octatriacontane (C38)	53.78	132434607	99.578 ug/mL
41) t	n-Tetracontane (C40)	58.38	129767988	99.860 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25464.D
Operator : AC
Acquired : 01 Sep 2005 8:41 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090104
Misc Info : WHAB32
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25466.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 10:11 pm
Operator : AC
Sample : I2090105
Misc : WHAB33
ALS Vial : 56 Sample Multiplier: 1

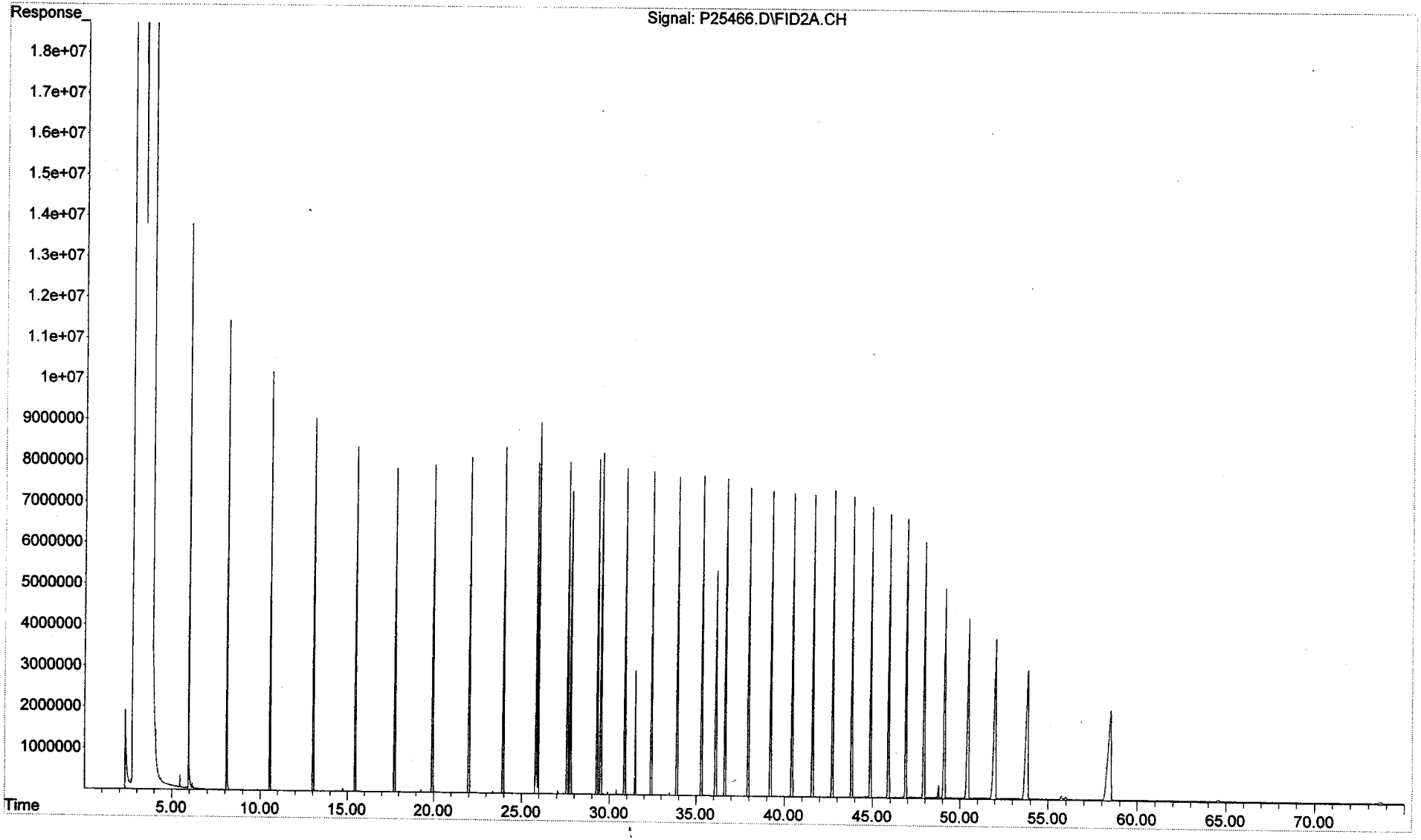
Integration File: SHCINT1.E
Quant Time: Sep 05 21:27:55 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:23:02 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

9/6/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	66383447	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.53	277102081	195.823 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery	= 391.65%#
24) s	d50-Tetracosane	36.15	227694395	182.078 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery	= 364.16%#
	Target Compounds			
2) t	n-Octane (C8)	5.97f	222197992	203.316 ug/mLm
3) t	n-Nonane (C9)	8.12	237390685	201.145 ug/mLm
4) t	n-Decane (C10)	10.57	242789522	201.004 ug/mLm
5) t	n-Undecane (C11)	13.06	244375644	201.656 ug/mL
6) t	n-Dodecane (C12)	15.48	249124168	201.651 ug/mL
7) t	n-Tridecane (C13)	17.79	250959644	201.234 ug/mL
9) t	n-Tetradecane (C14)	19.97	253891658	200.598 ug/mLm
11) t	n-Pentadecane (C15)	22.04	255267441	199.995 ug/mLm
12) t	n-Hexadecane (C16)	24.00	256742972	199.442 ug/mLm
14) t	n-Heptadecane (C17)	25.86	259771215	199.555 ug/mLm
15) t	Pristane	25.98	247041081	198.480 ug/mLm
16) t	n-Octadecane (C18)	27.63	260200700	199.066 ug/mL
17) t	Phytane	27.80	257598423	199.021 ug/mL
18) t	n-Nonadecane (C19)	29.32	258783183	198.646 ug/mL
20) t	n-Eicosane (C20)	30.92	257595382	198.382 ug/mL
21) t	n-Heneicosane (C21)	32.46	265904802	198.387 ug/mL
22) t	n-Docosane (C22)	33.93	262538137	198.557 ug/mL
23) t	n-Tricosane (C23)	35.34	264122802	198.542 ug/mL
25) t	n-Tetracosane (C24)	36.70	265619038	198.256 ug/mL
26) t	n-Pentacosane (C25)	38.00	263680892	197.731 ug/mL
27) t	n-Hexacosane (C26)	39.25	261479436	198.443 ug/mLm
28) t	n-Heptacosane (C27)	40.46	260490730	198.246 ug/mL
29) t	n-Octacosane (C28)	41.63	263581351	198.318 ug/mL
30) t	n-Nonacosane (C29)	42.76	269696287	198.453 ug/mL
31) t	n-Triacontane (C30)	43.85	265226719	198.519 ug/mL
32) t	n-Hentriacontane (C31)	44.91	256979309	198.025 ug/mL
33) t	n-Dotriacontane (C32)	45.93	258813237	198.758 ug/mL
34) t	n-Tritriacontane (C33)	46.93	262684075	198.622 ug/mL
35) t	n-tetratriacontane (C34)	47.97	265835468	198.784 ug/mL
36) t	n-Pentatriacontane (C35)	49.14	255041607	198.450 ug/mLm
37) t	n-Hexatriacontane (C36)	50.49f	261018713	198.511 ug/mLm
38) t	n-Heptatriacontane (C37)	52.05f	278362887	199.034 ug/mLm
39) t	n-Octatriacontane (C38)	53.86f	263048176	198.885 ug/mLm
41) t	n-Tetracontane (C40)	58.49f	257774066	199.321 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25466.D
Operator : AC
Acquired : 01 Sep 2005 10:11 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090105
Misc Info : WHAB33
Vial Number: 56



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25468.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 11:43 pm
Operator : AC
Sample : Q2090101
Misc : WHAB34
ALS Vial : 57 Sample Multiplier: 1

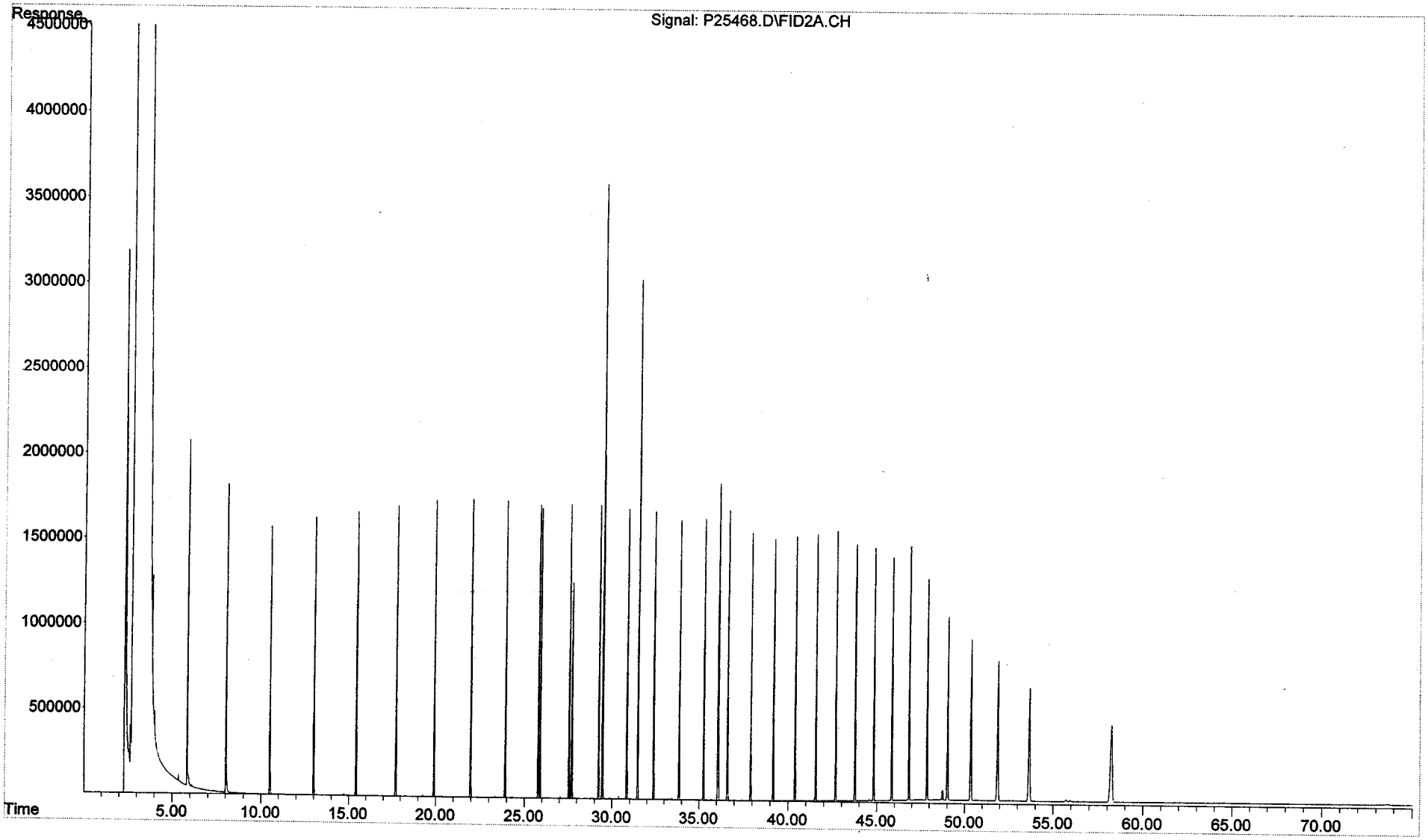
Integration File: SHCINT1.E
Quant Time: Sep 06 10:37:41 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

9/6/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	66538026	50.000 ug/mL
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.48	77961290	54.969 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	109.94%
24) s	d50-Tetracosane	36.10	57608656	45.988 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	91.98%
	Target Compounds			
2) t	n-Octane (C8)	5.84	27653651	25.191 ug/mL 101%
3) t	n-Nonane (C9)	8.03	29487539	24.880 ug/mL
4) t	n-Decane (C10)	10.50	30160125	24.903 ug/mLm
5) t	n-Undecane (C11)	13.01	30324225	24.963 ug/mLm
6) t	n-Dodecane (C12)	15.44	30974131	25.002 ug/mL
7) t	n-Tridecane (C13)	17.74	31293969	25.016 ug/mL
9) t	n-Tetradecane (C14)	19.92	31771245	25.023 ug/mLm
11) t	n-Pentadecane (C15)	21.99	32030885	25.019 ug/mLm
12) t	n-Hexadecane (C16)	23.94	32291432	25.014 ug/mLm
14) t	n-Heptadecane (C17)	25.80	32612740	24.989 ug/mLm
15) t	Pristane	25.91	31226578	25.033 ug/mLm
16) t	n-Octadecane (C18)	27.57	32780384	25.022 ug/mL
17) t	Phytane	27.73	32472660	25.032 ug/mL
18) t	n-Nonadecane (C19)	29.25	32626942	25.000 ug/mL
20) t	n-Eicosane (C20)	30.85	32510764	25.000 ug/mL
21) t	n-Heneicosane (C21)	32.39	33566105	25.011 ug/mL
22) t	n-Docosane (C22)	33.86	33139939	25.031 ug/mLm
23) t	n-Tricosane (C23)	35.27	33336871	25.031 ug/mL
25) t	n-Tetracosane (C24)	36.63	33520818	24.989 ug/mL
26) t	n-Pentacosane (C25)	37.93	33370910	25.002 ug/mL
27) t	n-Hexacosane (C26)	39.18	33025094	25.027 ug/mL
28) t	n-Heptacosane (C27)	40.39	32893878	24.999 ug/mL
29) t	n-Octacosane (C28)	41.56	33288759	25.002 ug/mL
30) t	n-Nonacosane (C29)	42.69	34039908	25.005 ug/mL
31) t	n-Triacontane (C30)	43.78	33474987	25.013 ug/mL
32) t	n-Hentriacontane (C31)	44.83	32431256	24.951 ug/mL
33) t	n-Dotriacontane (C32)	45.86	32651592	25.031 ug/mLm
34) t	n-Tritriacontane (C33)	46.85	33213796	25.065 ug/mL
35) t	n-tetratriacontane (C34)	47.88	33577457	25.057 ug/mL
36) t	n-Pentatriacontane (C35)	49.04	32255481	25.047 ug/mL
37) t	n-Hexatriacontane (C36)	50.36	32979695	25.023 ug/mL
38) t	n-Heptatriacontane (C37)	51.89	34873766	24.877 ug/mL 99.5%
39) t	n-Octatriacontane (C38)	53.67	33235050	25.061 ug/mL
41) t	n-Tetracontane (C40)	58.24	32550041	25.090 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25468.D
Operator : AC
Acquired : 01 Sep 2005 11:43 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: Q2090101
Misc Info : WHAB34
Vial Number: 57



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\September\SEP01.SEC\
Data File : P25472.D
Signal(s) : FID2A.CH
Acq On : 02 Sep 2005 2:41 am
Operator : AC
Sample : ANS2090101
Misc : WHAB40
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

9/7/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	70098468	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	88297654	59.095 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	118.19%
24) s	d50-Tetracosane	36.11	74137404	56.177 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	112.35%
	Target Compounds			
2) t	n-Octane (C8)	5.82	37921621	32.790 ug/mLm
3) t	n-Nonane (C9)	8.02	29254022	23.429 ug/mLm
4) t	n-Decane (C10)	10.50	32431131	25.418 ug/mLm
5) t	n-Undecane (C11)	13.01	32148864	25.120 ug/mLm
6) t	n-Dodecane (C12)	15.44	29145422	22.331 ug/mLm
7) t	n-Tridecane (C13)	17.74	30742901	23.327 ug/mLm
8) t	1380	19.42	7590330	5.674 ug/mLm
9) t	n-Tetradecane (C14)	19.93	27911894	20.867 ug/mLm
10) t	1470	21.21	10841213	8.038 ug/mLm
11) t	n-Pentadecane (C15)	21.99	30523700	22.631 ug/mLm
12) t	n-Hexadecane (C16)	23.94	26565746	19.533 ug/mLm
13) t	1650	24.85	7939974	5.775 ug/mLm
14) t	n-Heptadecane (C17)	25.80	22214514	16.157 ug/mLm
15) t	Pristane	25.90	16877813	12.843 ug/mLm
16) t	n-Octadecane (C18)	27.57	20227625	14.656 ug/mLm
17) t	Phytane	27.73	10824411	7.920 ug/mLm
18) t	n-Nonadecane (C19)	29.25	20632554	15.006 ug/mLm
20) t	n-Eicosane (C20)	30.86	19831242	14.475 ug/mLm
21) t	n-Heneicosane (C21)	32.39	19009322	13.445 ug/mLm
22) t	n-Docosane (C22)	33.86	17754688	12.729 ug/mLm
23) t	n-Tricosane (C23)	35.27	15790037	11.254 ug/mLm
25) t	n-Tetracosane (C24)	36.62	15148579	10.719 ug/mLm
26) t	n-Pentacosane (C25)	37.92	14860303	10.568 ug/mLm
27) t	n-Hexacosane (C26)	39.18	12790549	9.201 ug/mLm
28) t	n-Heptacosane (C27)	40.39	9564759	6.900 ug/mLm
29) t	n-Octacosane (C28)	41.55	6799210	4.847 ug/mLm
30) t	n-Nonacosane (C29)	42.68	7053938	4.919 ug/mLm
31) t	n-Triacontane (C30)	43.77	5461449	3.874 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	4735164	3.458 ug/mLm
33) t	n-Dotriacontane (C32)	45.85	5405402	3.933 ug/mLm
34) t	n-Tritriacontane (C33)	46.84	2812637	2.015 ug/mLm
35) t	n-tetratriacontane (C34)	47.87	2731192	1.935 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	2861707	2.109 ug/mLm
37) t	n-Hexatriacontane (C36)	50.34	1733362	1.248 ug/mLm

Data Path : O:\Forensics\Data\PAH2\September\SEP01.SEC\
Data File : P25472.D
Signal(s) : FID2A.CH
Acq On : 02 Sep 2005 2:41 am
Operator : AC
Sample : ANS2090101
Misc : WHAB40
ALS Vial : 59 Sample Multiplier: 1

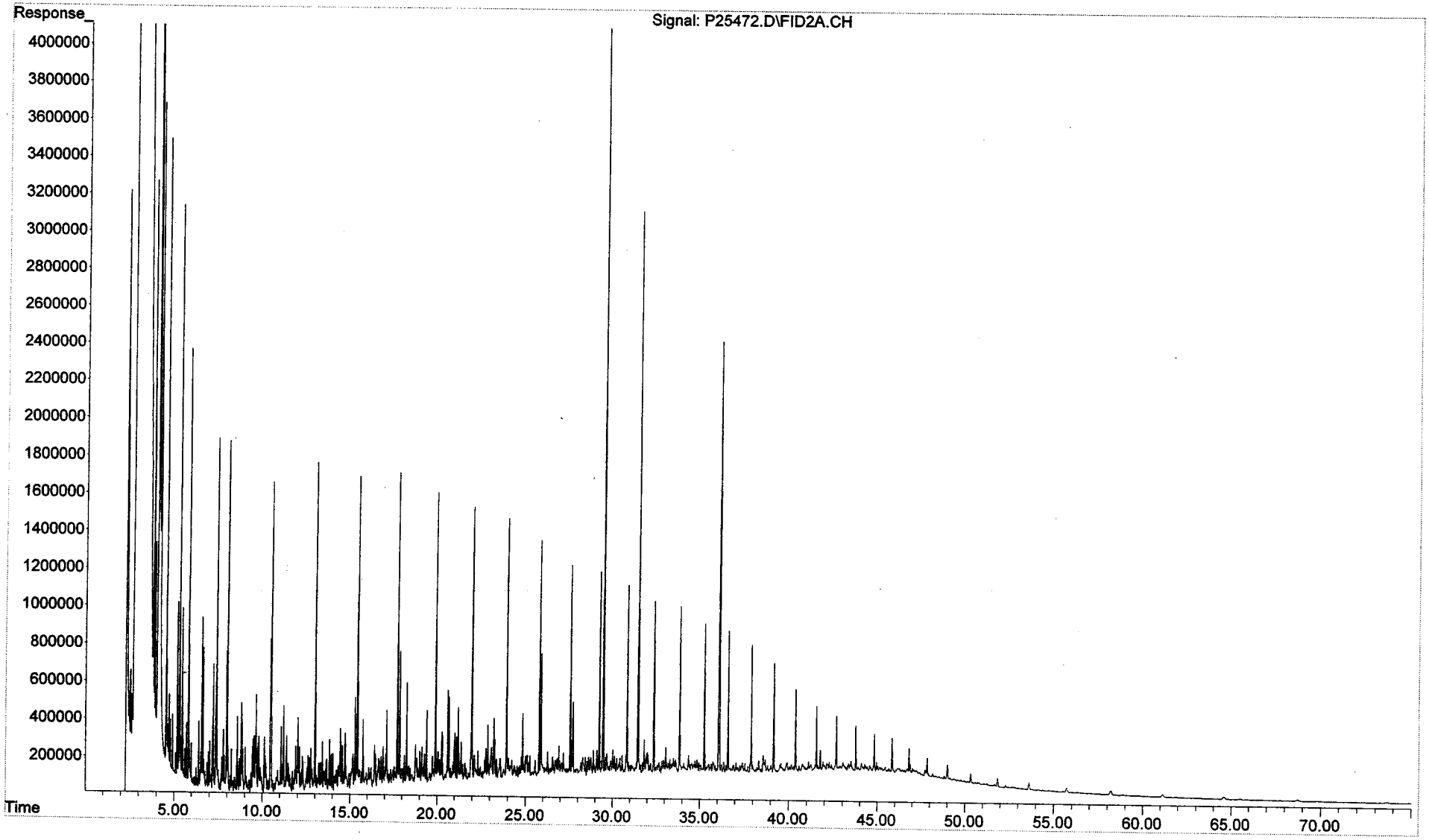
Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.87	1793787	1.215	ug/mLm
39)	t	n-Octatriacontane (C38)	53.64	1770061	1.267	ug/mLm
40)	t	n-Nonatriacontane (C39)	55.72	1456085	1.065	ug/mL
41)	t	n-Tetracontane (C40)	58.18f	1409223	1.031	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.84	5109029529	3726.234	ug/mL
43)	h	C10-C28 DRO	26.05	3241736187	2364.337	ug/mL
44)	h	Total Resolved Hydrocarbon	40.84	1519667622	1108.359	ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25472.D
Operator : AC
Acquired : 02 Sep 2005 2:41 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: ANS2090101
Misc Info : WHAB40
Vial Number: 59



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: **0601040**
Lab ID: **C2011803**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	51.68	3.4	25
n-Decane (C10)	50.00	51.46	2.9	25
n-Undecane (C11)	50.00	50.97	1.9	25
n-Dodecane (C12)	50.00	50.80	1.6	25
n-Tridecane (C13)	50.00	50.52	1.0	25
n-Tetradecane (C14)	50.00	50.38	0.8	25
n-Pentadecane (C15)	50.00	50.18	0.4	25
n-Hexadecane (C16)	50.00	49.92	0.2	25
n-Heptadecane (C17)	50.00	50.00	0.0	25
Pristane	50.00	50.01	0.0	25
n-Octadecane (C18)	50.00	49.95	0.1	25
Phytane	50.00	50.25	0.5	25
n-Nonadecane (C19)	50.00	49.87	0.3	25
n-Eicosane (C20)	50.00	50.19	0.4	25
n-Heneicosane (C21)	50.00	49.74	0.5	25
n-Docosane (C22)	50.00	48.28	3.4	25
n-Tricosane (C23)	50.00	49.82	0.4	25
n-Tetracosane (C24)	50.00	49.24	1.5	25
n-Pentacosane (C25)	50.00	49.71	0.6	25
n-Hexacosane (C26)	50.00	50.59	1.2	25
n-Heptacosane (C27)	50.00	50.04	0.1	25
n-Octacosane (C28)	50.00	50.16	0.3	25
n-Nonacosane (C29)	50.00	50.03	0.1	25
n-Triacontane (C30)	50.00	50.03	0.1	25
n-Hentriacontane (C31)	50.00	52.21	4.4	25
n-Dotriacontane (C32)	50.00	49.96	0.1	25
n-Tritriacontane (C33)	50.00	50.26	0.5	25
n-Tetratriacontane (C34)	50.00	50.24	0.5	25
n-Pentatriacontane (C35)	50.00	49.83	0.3	25
n-Hexatriacontane (C36)	50.00	50.38	0.8	25
n-Heptatriacontane (C37)	50.00	48.71	2.6	25
n-Octatriacontane (C38)	50.00	50.41	0.8	25
n-Tetracontane (C40)	50.00	51.45	2.9	25
ortho-Terphenyl	50.00	49.72	0.6	25
d50-Tetracosane	50.00	46.40	7.2	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/26/06 22:03

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27769.D
Signal(s) : FID2A.CH
Acq On : 19 Jan 2006 12:54 pm
Operator : AC
Sample : C2011803-AFID
Misc : ALK STD
ALS Vial : 64 Sample Multiplier: 1

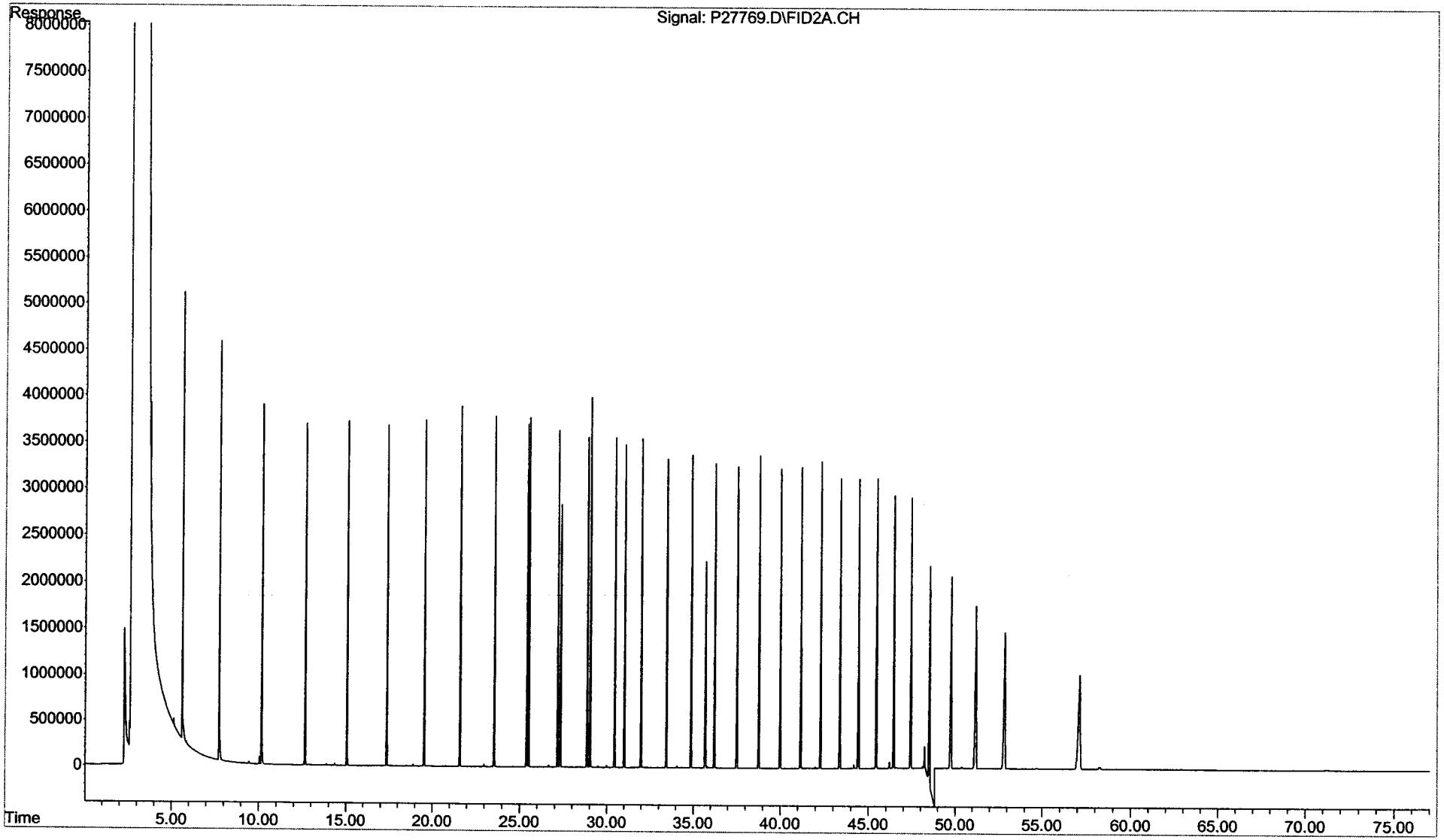
Integration File: SHCINT1.E
Quant Time: Jan 23 20:58:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/23/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.03	82107695	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	87009833	49.716 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.43%
24) s d50-Tetracosane	35.69	71727358	46.401 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	92.80%
Target Compounds			
2) t n-Octane (C8)	5.60	66789112	49.304 ug/mL
3) t n-Nonane (C9)	7.73	75581752	51.680 ug/mLm
4) t n-Decane (C10)	10.17	76907186	51.460 ug/mL
5) t n-Undecane (C11)	12.65	76412529	50.974 ug/mL
6) t n-Dodecane (C12)	15.07	77658032	50.798 ug/mL
7) t n-Tridecane (C13)	17.37	77985338	50.518 ug/mLm
9) t n-Tetradecane (C14)	19.55	78940409	50.383 ug/mL
11) t n-Pentadecane (C15)	21.61	79275789	50.180 ug/mL
12) t n-Hexadecane (C16)	23.56	79520107	49.918 ug/mLm
14) t n-Heptadecane (C17)	25.42	80516854	49.996 ug/mL
15) t Pristane	25.52	76986993	50.013 ug/mL
16) t n-Octadecane (C18)	27.18	80750540	49.950 ug/mL
17) t Phytane	27.34	80443378	50.252 ug/mL
18) t n-Nonadecane (C19)	28.86	80315336	49.870 ug/mLm
20) t n-Eicosane (C20)	30.46	80547713	50.193 ug/mL
21) t n-Heneicosane (C21)	32.00	82370502	49.739 ug/mL
22) t n-Docosane (C22)	33.46	78878358	48.280 ug/mL
23) t n-Tricosane (C23)	34.87	81875793	49.818 ug/mL
25) t n-Tetracosane (C24)	36.23	81502548	49.237 ug/mL
26) t n-Pentacosane (C25)	37.53	81869982	49.708 ug/mL
27) t n-Hexacosane (C26)	38.78	82380874	50.592 ug/mL
28) t n-Heptacosane (C27)	39.99	81256594	50.045 ug/mL
29) t n-Octacosane (C28)	41.16	82419159	50.165 ug/mL
30) t n-Nonacosane (C29)	42.29	84045305	50.031 ug/mL
31) t n-Triacontane (C30)	43.38	82621787	50.030 ug/mL
32) t n-Hentriacontane (C31)	44.44	83747559	52.213 ug/mL
33) t n-Dotriacontane (C32)	45.46	80424669	49.963 ug/mL
34) t n-Tritriacontane (C33)	46.45	82176465	50.255 ug/mL
35) t n-tetratriacontane (C34)	47.44	83071629	50.237 ug/mL
36) t n-Pentatriacontane (C35)	48.52	79183346	49.827 ug/mLm
37) t n-Hexatriacontane (C36)	49.77	81938620	50.380 ug/mLm
38) t n-Heptatriacontane (C37)	51.20	84264268	48.711 ug/mLm
39) t n-Octatriacontane (C38)	52.86	82491243	50.408 ug/mL
41) t n-Tetracontane (C40)	57.12	82372217	51.454 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27769.D
Operator : AC
Acquired : 19 Jan 2006 12:54 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011803-AFID
Misc Info : ALK STD
Vial Number: 64



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0601040**
Lab ID: **C2011804**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.35	1.3	25
n-Decane (C10)	50.00	49.57	0.9	25
n-Undecane (C11)	50.00	50.13	0.3	25
n-Dodecane (C12)	50.00	50.46	0.9	25
n-Tridecane (C13)	50.00	50.42	0.8	25
n-Tetradecane (C14)	50.00	50.33	0.7	25
n-Pentadecane (C15)	50.00	50.15	0.3	25
n-Hexadecane (C16)	50.00	49.95	0.1	25
n-Heptadecane (C17)	50.00	49.99	0.0	25
Pristane	50.00	50.04	0.1	25
n-Octadecane (C18)	50.00	49.96	0.1	25
Phytane	50.00	50.27	0.5	25
n-Nonadecane (C19)	50.00	49.87	0.3	25
n-Eicosane (C20)	50.00	50.18	0.4	25
n-Heneicosane (C21)	50.00	49.70	0.6	25
n-Docosane (C22)	50.00	50.86	1.7	25
n-Tricosane (C23)	50.00	49.81	0.4	25
n-Tetracosane (C24)	50.00	49.22	1.6	25
n-Pentacosane (C25)	50.00	49.72	0.6	25
n-Hexacosane (C26)	50.00	50.62	1.2	25
n-Heptacosane (C27)	50.00	50.09	0.2	25
n-Octacosane (C28)	50.00	50.22	0.4	25
n-Nonacosane (C29)	50.00	50.10	0.2	25
n-Triacontane (C30)	50.00	50.13	0.3	25
n-Hentriacontane (C31)	50.00	52.34	4.7	25
n-Dotriacontane (C32)	50.00	50.10	0.2	25
n-Tritriacontane (C33)	50.00	50.42	0.8	25
n-Tetratriacontane (C34)	50.00	50.51	1.0	25
n-Pentatriacontane (C35)	50.00	50.56	1.1	25
n-Hexatriacontane (C36)	50.00	50.73	1.5	25
n-Heptatriacontane (C37)	50.00	49.03	1.9	25
n-Octatriacontane (C38)	50.00	50.80	1.6	25
n-Tetracontane (C40)	50.00	52.04	4.1	25
ortho-Terphenyl	50.00	49.73	0.5	25
d50-Tetracosane	50.00	46.37	7.3	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/26/06 22:03

Quantitation Report (QT Reviewed)

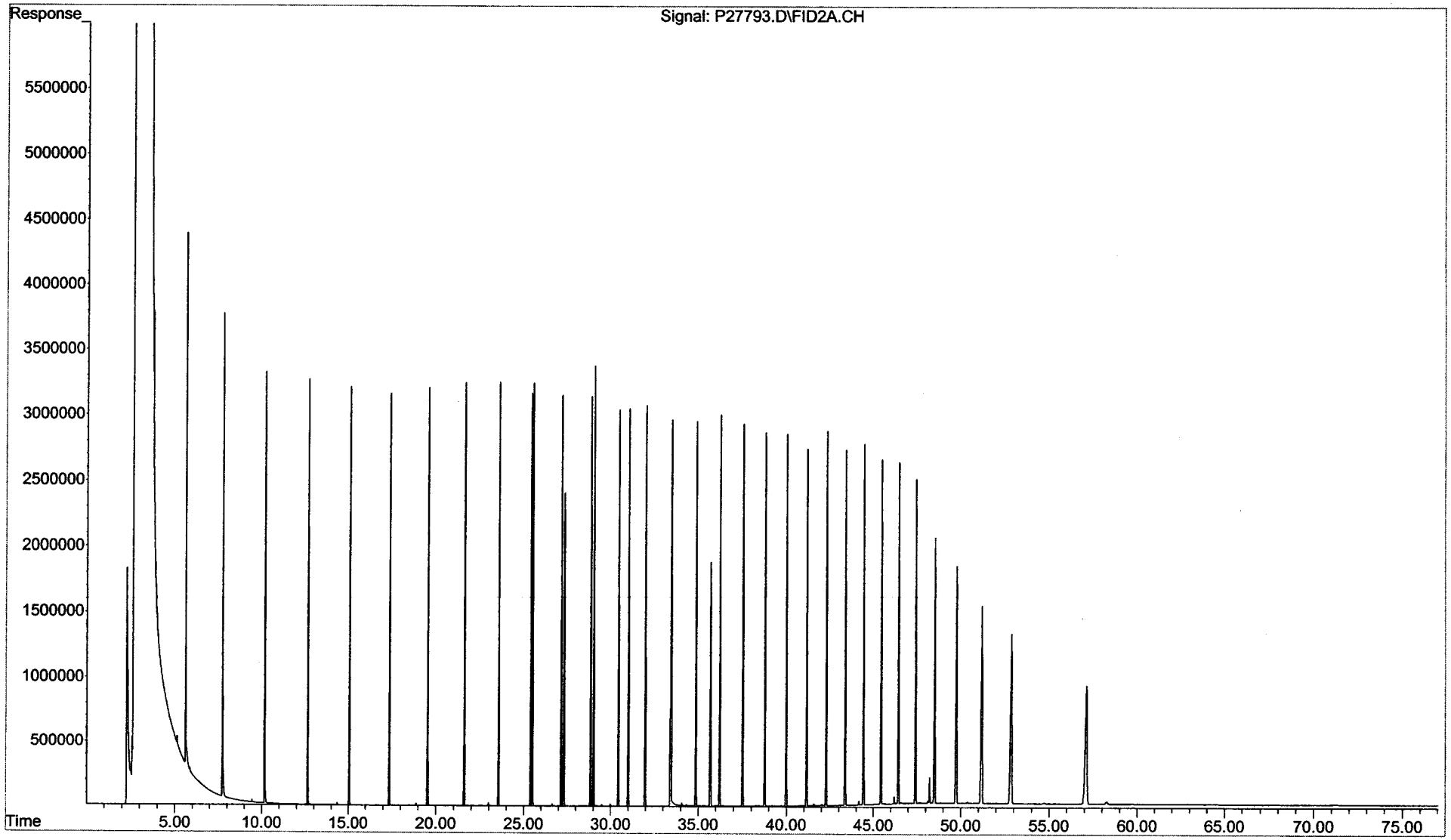
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27793.D
Signal(s) : FID2A.CH
Acq On : 20 Jan 2006 10:29 am
Operator : AC
Sample : C2011804-AFID
Misc : ALK STD
ALS Vial : 76 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 23 21:03:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.03	68444208	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.03	72546618	49.727 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	99.45%
24) s	d50-Tetracosane	35.68	59746739	46.367 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	92.73%
Target Compounds				
2) t	n-Octane (C8)	5.60	55474376	49.126 ug/mL
3) t	n-Nonane (C9)	7.73	60159038	49.346 ug/mLm
4) t	n-Decane (C10)	10.16	61754866	49.570 ug/mL
5) t	n-Undecane (C11)	12.65	62638091	50.127 ug/mL
6) t	n-Dodecane (C12)	15.06	64308187	50.463 ug/mL
7) t	n-Tridecane (C13)	17.36	64882882	50.421 ug/mLm
9) t	n-Tetradecane (C14)	19.54	65734418	50.330 ug/mL
11) t	n-Pentadecane (C15)	21.60	66042747	50.149 ug/mL
12) t	n-Hexadecane (C16)	23.55	66329958	49.950 ug/mL
14) t	n-Heptadecane (C17)	25.41	67108056	49.989 ug/mL
15) t	Pristane	25.52	64204485	50.036 ug/mL
16) t	n-Octadecane (C18)	27.17	67322482	49.957 ug/mL
17) t	Phytane	27.34	67081046	50.270 ug/mL
18) t	n-Nonadecane (C19)	28.86	66946002	49.867 ug/mLm
20) t	n-Eicosane (C20)	30.46	67132517	50.185 ug/mL
21) t	n-Heneicosane (C21)	31.99	68607462	49.698 ug/mL
22) t	n-Docosane (C22)	33.46	69273024	50.865 ug/mLm
23) t	n-Tricosane (C23)	34.87	68240113	49.810 ug/mLm
25) t	n-Tetracosane (C24)	36.22	67910720	49.216 ug/mL
26) t	n-Pentacosane (C25)	37.53	68267423	49.723 ug/mL
27) t	n-Hexacosane (C26)	38.78	68710059	50.620 ug/mL
28) t	n-Heptacosane (C27)	39.99	67797429	50.091 ug/mL
29) t	n-Octacosane (C28)	41.16	68777838	50.219 ug/mL
30) t	n-Nonacosane (C29)	42.28	70151467	50.097 ug/mL
31) t	n-Triacontane (C30)	43.37	69013807	50.133 ug/mLm
32) t	n-Hentriacontane (C31)	44.43	69975223	52.336 ug/mL
33) t	n-Dotriacontane (C32)	45.45	67229906	50.103 ug/mLm
34) t	n-Tritriacontane (C33)	46.45	68731528	50.424 ug/mLm
35) t	n-tetratriacontane (C34)	47.43	69622494	50.509 ug/mL
36) t	n-Pentatriacontane (C35)	48.52	66971622	50.556 ug/mLm
37) t	n-Hexatriacontane (C36)	49.77	68777254	50.730 ug/mL
38) t	n-Heptatriacontane (C37)	51.20	70702699	49.031 ug/mL
39) t	n-Octatriacontane (C38)	52.86	69294873	50.797 ug/mL
41) t	n-Tetracontane (C40)	57.11	69441415	52.036 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27793.D
Operator : AC
Acquired : 20 Jan 2006 10:29 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011804-AFID
Misc Info : ALK STD
Vial Number: 76



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: **0601040**
Lab ID: **C2012403**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.13	1.7	25
n-Decane (C10)	50.00	49.49	1.0	25
n-Undecane (C11)	50.00	49.80	0.4	25
n-Dodecane (C12)	50.00	50.03	0.1	25
n-Tridecane (C13)	50.00	49.95	0.1	25
n-Tetradecane (C14)	50.00	49.89	0.2	25
n-Pentadecane (C15)	50.00	49.75	0.5	25
n-Hexadecane (C16)	50.00	49.61	0.8	25
n-Heptadecane (C17)	50.00	49.68	0.6	25
Pristane	50.00	49.74	0.5	25
n-Octadecane (C18)	50.00	49.66	0.7	25
Phytane	50.00	50.00	0.0	25
n-Nonadecane (C19)	50.00	49.60	0.8	25
n-Eicosane (C20)	50.00	49.93	0.1	25
n-Heneicosane (C21)	50.00	49.45	1.1	25
n-Docosane (C22)	50.00	48.03	3.9	25
n-Tricosane (C23)	50.00	49.58	0.8	25
n-Tetracosane (C24)	50.00	49.00	2.0	25
n-Pentacosane (C25)	50.00	49.48	1.0	25
n-Hexacosane (C26)	50.00	50.36	0.7	25
n-Heptacosane (C27)	50.00	49.81	0.4	25
n-Octacosane (C28)	50.00	49.89	0.2	25
n-Nonacosane (C29)	50.00	49.78	0.4	25
n-Triacontane (C30)	50.00	49.76	0.5	25
n-Hentriacontane (C31)	50.00	51.90	3.8	25
n-Dotriacontane (C32)	50.00	49.64	0.7	25
n-Tritriacontane (C33)	50.00	49.91	0.2	25
n-Tetratriacontane (C34)	50.00	49.83	0.3	25
n-Pentatriacontane (C35)	50.00	49.79	0.4	25
n-Hexatriacontane (C36)	50.00	49.86	0.3	25
n-Heptatriacontane (C37)	50.00	47.95	4.1	25
n-Octatriacontane (C38)	50.00	49.24	1.5	25
n-Tetracontane (C40)	50.00	48.48	3.0	25
ortho-Terphenyl	50.00	49.44	1.1	25
d50-Tetracosane	50.00	46.18	7.6	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/26/06 22:04

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27895.D
Signal(s) : FID2A.CH
Acq On : 25 Jan 2006 8:28 pm
Operator : AC
Sample : C2012403-AFID
Misc : ALK STD
ALS Vial : 72 Sample Multiplier: 1

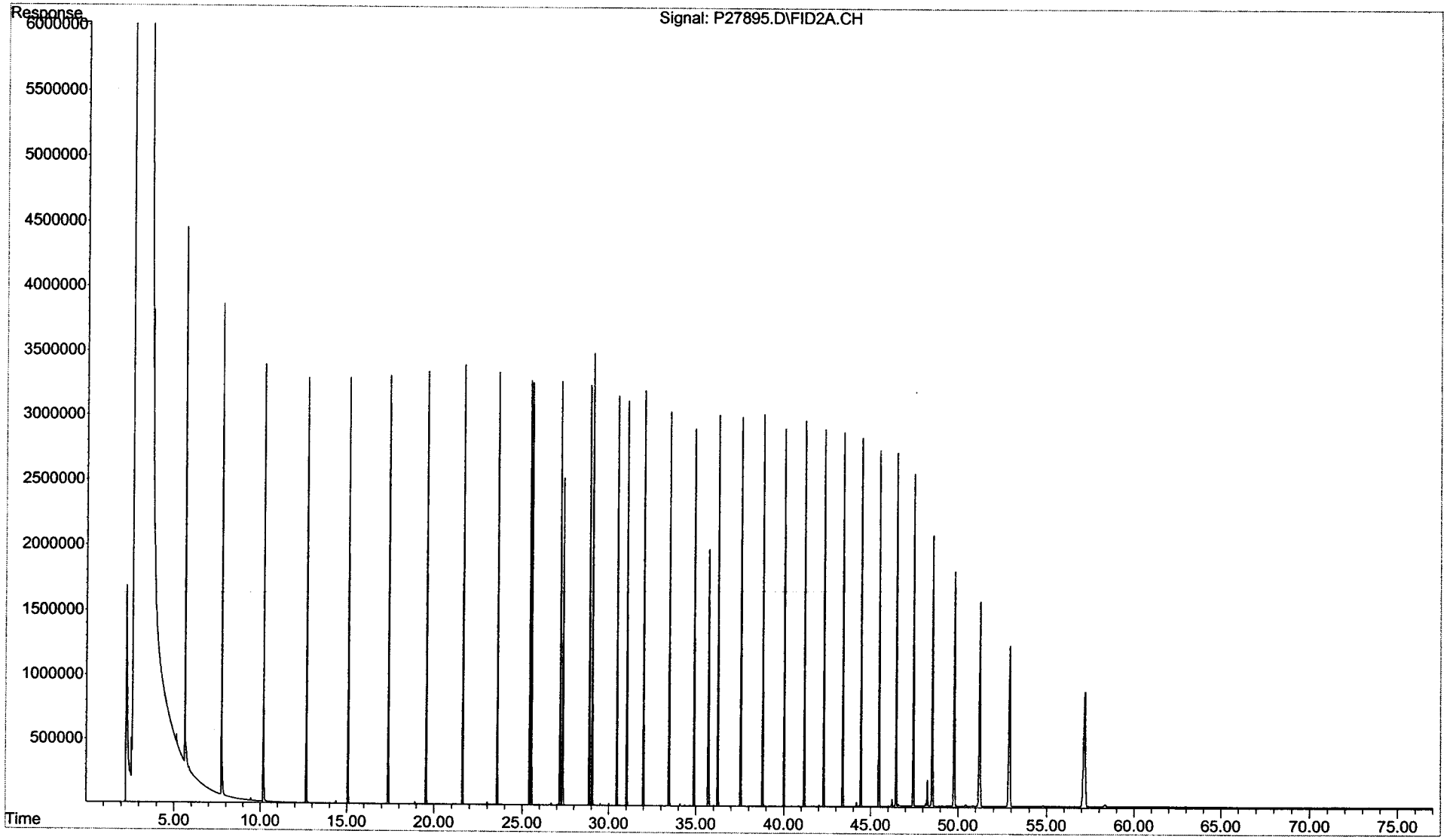
Integration File: SHCINT1.E
Quant Time: Jan 26 20:47:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/24/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	71007443	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	74830627	49.441 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	98.88%
24) s d50-Tetracosane	35.71	61739012	46.183 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	92.37%
Target Compounds			
2) t n-Octane (C8)	5.61	56571447	48.289 ug/mL
3) t n-Nonane (C9)	7.74	62138194	49.129 ug/mLm
4) t n-Decane (C10)	10.18	63958833	49.486 ug/mLm
5) t n-Undecane (C11)	12.66	64553582	49.795 ug/mL
6) t n-Dodecane (C12)	15.08	66138475	50.026 ug/mL
7) t n-Tridecane (C13)	17.38	66685940	49.952 ug/mL
9) t n-Tetradecane (C14)	19.56	67601066	49.891 ug/mL
11) t n-Pentadecane (C15)	21.62	67977184	49.755 ug/mL
12) t n-Hexadecane (C16)	23.58	68342144	49.608 ug/mL
14) t n-Heptadecane (C17)	25.43	69192809	49.681 ug/mL
15) t Pristane	25.54	66218785	49.743 ug/mL
16) t n-Octadecane (C18)	27.20	69432464	49.663 ug/mL
17) t Phytane	27.36	69214558	49.997 ug/mL
18) t n-Nonadecane (C19)	28.88	69080983	49.600 ug/mLm
20) t n-Eicosane (C20)	30.48	69290217	49.928 ug/mL
21) t n-Heneicosane (C21)	32.02	70825139	49.453 ug/mL
22) t n-Docosane (C22)	33.48	67856823	48.026 ug/mL
23) t n-Tricosane (C23)	34.90	70464071	49.577 ug/mL
25) t n-Tetracosane (C24)	36.25	70141944	48.998 ug/mL
26) t n-Pentacosane (C25)	37.55	70475113	49.478 ug/mLm
27) t n-Hexacosane (C26)	38.81	70911499	50.356 ug/mL
28) t n-Heptacosane (C27)	40.02	69936190	49.806 ug/mL
29) t n-Octacosane (C28)	41.18	70882820	49.888 ug/mL
30) t n-Nonacosane (C29)	42.31	72313640	49.777 ug/mL
31) t n-Triacontane (C30)	43.40	71064712	49.759 ug/mL
32) t n-Hentriacontane (C31)	44.46	71994753	51.903 ug/mL
33) t n-Dotriacontane (C32)	45.48	69099703	49.638 ug/mL
34) t n-Tritriacontane (C33)	46.48	70573304	49.906 ug/mL
35) t n-tetratriacontane (C34)	47.47	71255487	49.828 ug/mL
36) t n-Pentatriacontane (C35)	48.56	68421197	49.786 ug/mL
37) t n-Hexatriacontane (C36)	49.81	70129231	49.860 ug/mL
38) t n-Heptatriacontane (C37)	51.25	71733889	47.950 ug/mL
39) t n-Octatriacontane (C38)	52.92	69681642	49.237 ug/mL
41) t n-Tetracontane (C40)	57.19	67115034	48.477 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27895.D
Operator : AC
Acquired : 25 Jan 2006 8:28 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2012403-AFID
Misc Info : ALK STD
Vial Number: 72



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: **0601040**
Lab ID: **C2012404**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.42	1.2	25
n-Decane (C10)	50.00	49.81	0.4	25
n-Undecane (C11)	50.00	50.13	0.3	25
n-Dodecane (C12)	50.00	50.36	0.7	25
n-Tridecane (C13)	50.00	50.16	0.3	25
n-Tetradecane (C14)	50.00	50.07	0.1	25
n-Pentadecane (C15)	50.00	49.93	0.1	25
n-Hexadecane (C16)	50.00	49.70	0.6	25
n-Heptadecane (C17)	50.00	49.81	0.4	25
Pristane	50.00	49.88	0.2	25
n-Octadecane (C18)	50.00	49.80	0.4	25
Phytane	50.00	50.14	0.3	25
n-Nonadecane (C19)	50.00	49.74	0.5	25
n-Eicosane (C20)	50.00	50.05	0.1	25
n-Heneicosane (C21)	50.00	49.56	0.9	25
n-Docosane (C22)	50.00	48.07	3.9	25
n-Tricosane (C23)	50.00	49.70	0.6	25
n-Tetracosane (C24)	50.00	49.12	1.8	25
n-Pentacosane (C25)	50.00	49.59	0.8	25
n-Hexacosane (C26)	50.00	50.47	0.9	25
n-Heptacosane (C27)	50.00	49.95	0.1	25
n-Octacosane (C28)	50.00	50.04	0.1	25
n-Nonacosane (C29)	50.00	49.92	0.2	25
n-Triacontane (C30)	50.00	49.93	0.1	25
n-Hentriacontane (C31)	50.00	52.07	4.1	25
n-Dotriacontane (C32)	50.00	49.79	0.4	25
n-Tritriacontane (C33)	50.00	50.04	0.1	25
n-Tetratriacontane (C34)	50.00	49.94	0.1	25
n-Pentatriacontane (C35)	50.00	49.91	0.2	25
n-Hexatriacontane (C36)	50.00	50.50	1.0	25
n-Heptatriacontane (C37)	50.00	48.06	3.9	25
n-Octatriacontane (C38)	50.00	49.30	1.4	25
n-Tetracontane (C40)	50.00	47.76	4.5	25
ortho-Terphenyl	50.00	49.61	0.8	25
d50-Tetracosane	50.00	46.27	7.5	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/26/06 22:04

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27907.D
Signal(s) : FID2A.CH
Acq On : 26 Jan 2006 6:10 am
Operator : AC
Sample : C2012404-AFID
Misc : ALK STD
ALS Vial : 78 Sample Multiplier: 1

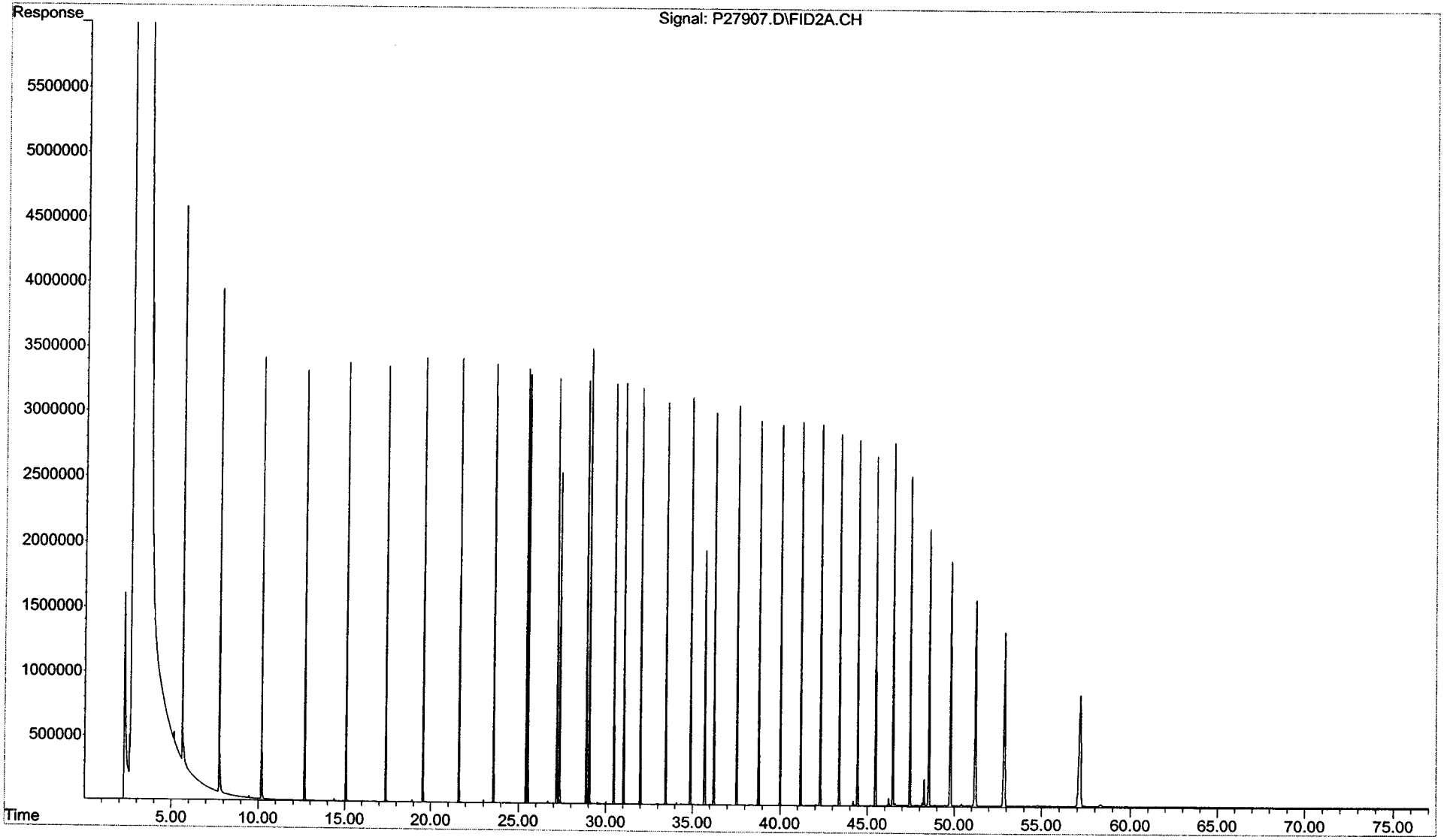
Integration File: SHCINT1.E
Quant Time: Jan 26 08:06:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/26/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	71664645	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	75775239	49.606 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.21%
24) s d50-Tetracosane	35.71	62428828	46.271 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	92.54%
Target Compounds			
2) t n-Octane (C8)	5.62	57520836	48.650 ug/mLm
3) t n-Nonane (C9)	7.75	63089443	49.424 ug/mLm
4) t n-Decane (C10)	10.18	64969956	49.807 ug/mLm
5) t n-Undecane (C11)	12.67	65588276	50.129 ug/mLm
6) t n-Dodecane (C12)	15.08	67193060	50.357 ug/mLm
7) t n-Tridecane (C13)	17.38	67580703	50.158 ug/mLm
9) t n-Tetradecane (C14)	19.56	68477552	50.074 ug/mLm
11) t n-Pentadecane (C15)	21.62	68847762	49.930 ug/mLm
12) t n-Hexadecane (C16)	23.58	69109566	49.705 ug/mLm
14) t n-Heptadecane (C17)	25.43	70012372	49.808 ug/mLm
15) t Pristane	25.54	67020863	49.884 ug/mLm
16) t n-Octadecane (C18)	27.20	70269558	49.801 ug/mLm
17) t Phytane	27.36	70056735	50.141 ug/mLm
18) t n-Nonadecane (C19)	28.88	69912991	49.737 ug/mLm
20) t n-Eicosane (C20)	30.48	70102615	50.050 ug/mLm
21) t n-Heneicosane (C21)	32.01	71635505	49.560 ug/mLm
22) t n-Docosane (C22)	33.48	68540547	48.065 ug/mLm
23) t n-Tricosane (C23)	34.89	71298805	49.704 ug/mLm
25) t n-Tetracosane (C24)	36.25	70974481	49.124 ug/mLm
26) t n-Pentacosane (C25)	37.55	71284855	49.588 ug/mLm
27) t n-Hexacosane (C26)	38.80	71734001	50.473 ug/mLm
28) t n-Heptacosane (C27)	40.01	70781442	49.946 ug/mLm
29) t n-Octacosane (C28)	41.18	71752438	50.037 ug/mLm
30) t n-Nonacosane (C29)	42.31	73188508	49.917 ug/mLm
31) t n-Triacontane (C30)	43.40	71962735	49.926 ug/mLm
32) t n-Hentriacontane (C31)	44.46	72888804	52.066 ug/mLm
33) t n-Dotriacontane (C32)	45.48	69948078	49.787 ug/mLm
34) t n-Tritriacontane (C33)	46.47	71421365	50.042 ug/mLm
35) t n-tetratriacontane (C34)	47.46	72082670	49.944 ug/mLm
36) t n-Pentatriacontane (C35)	48.55	69221706	49.906 ug/mLm
37) t n-Hexatriacontane (C36)	49.80	71682541	50.497 ug/mLm
38) t n-Heptatriacontane (C37)	51.24	72559067	48.057 ug/mLm
39) t n-Octatriacontane (C38)	52.91	70419492	49.302 ug/mLm
41) t n-Tetracontane (C40)	57.17	66730164	47.757 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27907.D
Operator : AC
Acquired : 26 Jan 2006 6:10 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2012404-AFID
Misc Info : ALK STD
Vial Number: 78



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 1 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0601040

Sample ID	Date	Time	Matrix	Environmental Forensics (Includes Lead-210, Cesium 137, EPA 8015 Modified GC/FID Hydrocarbon Fingerprint, 8270 Modified GC/MS/SIM Extended PAH and Biomarkers)
1 GC-SED-24 (12.6-13.4)	1/10/2006	16:30	Sediment	☑
2 GC-SED-23 (17.5-19)	1/10/2006	14:40	Sediment	☑
3 GC-SED-20 (4-5)	1/10/2006	12:40	Sediment	☑
4 GC-SED-104 (3.7-5.1)	1/11/2006	14:35	Sediment	☑
5 GC-SED-64D (2-4)	1/11/2006	13:10	Sediment	☑

Possible Hazard Identification	Turn Around Time Required (other than standard):			
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Unknown	QC Requirements:			
	Date	Time	Date	Time
1. Relinquished by: [signature]	1/11/06	1550	1. Received by: FED EX	
2. Relinquished by: FED EX			2. Received by: [signature]	1/12/06 0900
3. Relinquished by:			3. Received by:	
COMMENTS Fed Ex # 8544-0600-3180				

ORIGINAL

Sample Receipt Checklist

Client: NEWFIE	**Receipt Date:** 1/12/06		
Project: Gowanus	**Log-in Date:**		
ETR #: 0601040	**Inspection by:**	**Login by:**	

ALL SECTIONS BELOW MUST BE COMPLETED

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: 4° IR Gun, 4° 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: LMP Date: 1/12/06

Comments / Notes

Sample storage refrigerator #: C1

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!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

m This portion can be removed for Recipient's records.

te 1/11/06 FedEx Tracking Number 854406003180

nder's me MATT O'NEIL Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST

BROOKLYN Dept./Floor/Suite/Room

State NY ZIP 11231

ur Internal Billing Reference 982482-34-4403