ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0512128
Report Date:	February 03, 2006

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

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

Sample ID Cross Reference

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**

Lab Sample ID	Client Sample ID
0512128-01	GC-SED-08 (10.5-11.5)
0512128-02	GC-SED-09 (6-7)
0512128-03	GC-SED-05 (0-2)
0512128-04	GC-SED-04 (10.3-11.3)
0512128-05	GC-SED-RM 039

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: 0512128
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. Oil sample GC-SED-RM 039 (0512128-05) was treated as oily material and a portion of the sample was passed through a glass fiber filter with sodium sulfate. The total extract oil weight as determined by gravimetric weighing is used as the weight for this sample. A pre-determined volume of the extract for both matrices 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 SS010606B04 and sample GC-SED-05 (0-2) (0512128-03) contained a chromatographic pattern which was confirmed to be laboratory contamination. All samples were re-extracted outside of the 14 day extraction holding time and both extraction and data sets are submitted for review.

2. The sediment method blank SS010606B04 contained several target compounds detected above the reporting limit due to laboratory contamination. 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.

3. The oil method blank SO11006B01 contained low-level target compounds 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. Please note that no "B" qualifiers were utilized.

4. The sediment method blank SS011906B04 contained low-level target compounds detected below the reporting limit, with one compound 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.

5. 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. Additionally, the final diluted analyses on sample GC-SED-08 (10.5-11.5) (0512128-01E) and (0512128-01E X) had all the surrogates diluted out.

6. Sample GC-SED-05 (0-2) (0512128-03) and its duplicate (0512128-03D) have several compounds above the 30% relative percent difference QC limit due to potential matrix in-homogeneity and due to laboratory contamination present in the native sample. The integrations in the native sample and the duplicate were reviewed and found to be appropriate.

7. The re-extracted sample GC-SED-05 (0-2) (0512128-03X) and its duplicate (0512128-03X D) have most all 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%.

8. The re-extracted sample GC-SED-05 (0-2) (0512128-03X) was inadvertently double spiked with internal standard for the Biomarker analysis. The concentration of the internal standard was adjusted prior to quantification. This resulted in high internal standard area response versus the continuing calibration standard and is flagged out on the associated summary Form 8.

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 sediment method blank SS010606B04 and sample GC-SED-05 (0-2) (0512128-03) contained a chromatographic pattern which was confirmed to be laboratory contamination. All samples were re-extracted outside of the 14 day extraction holding time and both extraction and data sets are submitted for review.

2. The sediment method blank SS010606B04 contained range material above the reporting limit due to laboratory contamination. 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.

3. The oil method blank SO11006B01 contained range material 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.

4. The laboratory control sample (SS011906LCS03) exhibited a recovery for n-Nonane (C9) at 44%, which is below the 50% lower QC limit. The integration was reviewed and found to be appropriate.

5. Sample GC-SED-05 (0-2) (0512128-03) and its duplicate (0512128-03D) have the range material above the 30% relative percent difference QC limit due to potential matrix in-homogeneity and due to laboratory contamination present in the native sample. The integrations in the native sample and the duplicate were reviewed and found to be appropriate.

6. The re-extracted sample GC-SED-05 (0-2) (0512128-03X) and its duplicate (0512128-03X D) 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: 2/3/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
01/06/2006 0512128ST - 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
0512128-01	SAM	Shaker	DMP	1/6/2006	1/11/2006		5.21	60.61	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
0512128-02	SAM	Shaker	DMP	1/6/2006	1/11/2006		4.99	42.11	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
0512128-03	D	Shaker	DMP	1/6/2006	1/11/2006		10.28	9.26	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
0512128-03	SAM	Shaker	DMP	1/6/2006	1/11/2006		10.51	9.26	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
0512128-04	SAM	Shaker	DMP	1/6/2006	1/11/2006		5.29	19.23	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
SS010606B04	B	Shaker	DMP	1/6/2006	1/11/2006		30	2	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
SS010606LCS04	LCS	Shaker	DMP	1/6/2006	1/11/2006		30	2	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	
SS010606LCSD03	LCSD	Shaker	DMP	1/6/2006	1/11/2006		30	2	False	DMP	1/9/2006	KD Flask	0.15	KLA	1/11/2006	

2nd
w 2/2/06

Alpha Woods Hole Lab
Batch Prep Report

01/06/2006 0512128ST - OP NEWFIE

Lab ID	Notes
0512128-01	1st Prep
0512128-02	1st Prep
0512128-03	1st Prep
0512128-03	1st Prep
0512128-04	1st Prep
SS010606B04	1st Prep
SS010606LCS04	1st Prep
SS010606LCSD03	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
01/06/2006

Lab ID	QC Type	0512128ST - Sample
0512128-01	SAM	5.21
0512128-02	SAM	4.99
0512128-03	D	10.28
0512128-03	SAM	10.51
0512128-04	SAM	5.29
SS010606B04	B	~~20~~ 30
SS010606LCS04LCS	OP NEWFIE	~~20~~
SS010606LCS04LCS	OP SHC	~~20~~
SS010606LCS04LCS	OP Steranes/Triterpanes	~~20~~
SS010606LCSD03LCSD	NEWFIE	~~20~~
SS010606LCSD03LCSD	SHC	~~20~~
SS010606LCSD03LCSD	Steranes/Triterpanes	~~20~~

cw 1/25/06

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

01/06/2006 0512128ST - OP NEWFIE Analyst: DMP Witness: NLJr

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
0512128-01	SAM	WHAC11	200	µl	WHAC05	200	µl			
0512128-02	SAM	WHAC11	200	µl	WHAC05	200	µl			
0512128-03	D	WHAC11	200	µl	WHAC05	200	µl			
0512128-03	SAM	WHAC11	200	µl	WHAC05	200	µl			
0512128-04	SAM	WHAC11	200	µl	WHAC05	200	µl			
SS010606B04	B	WHAB63	100	µl	WHAB15	200	µl			
SS010606LCS04	LCS	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl
SS010606LCSD03	LCSD	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl

Test: ALK-PAH/SHC

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

LFB / *Other* High

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

Test: PAH/SHC

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

LFB / *Other* Low

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

Test: ALK-PAH/SHC

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

LFB / *Other*

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

Test: Biomarker

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

LFB / *Other* High

ID# WHAC05
Conc. 100 mg/ml

Test: Biomarker

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

LFB / *Other* Low

ID# WHAB15
Conc. 10 mg/ml

Gravimetric Determination for Column

Analyst: DMP
Date: 1/9/06

BATCH: 0512128

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A	49.60	N/A	N/A	N/A	99%
0512128	01		25000	50	N/A	0.773	N/A	386.50	550	8.50	45.45	
0512128	02		10000	50	N/A	1.609	N/A	321.80	250	8.05	40.00	
0512128	03	D	10000	50	N/A	0.334	N/A	66.80	1200	8.02	8.33	4%
0512128	03		10000	50	N/A	0.321	N/A	64.20	1200	7.70	8.33	
0512128	04		10000	50	N/A	0.633	N/A	126.60	650	8.23	15.38	

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

0512128.xls

Gravimetric Determination for Column

Analyst: DMP
Date: 1/9/06

BATCH: 0512128

Entered by: DMP
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A					0%
0512128	01		25000	50	N/A	0.773	N/A					
0512128	02		10000	50	N/A	1.609	N/A					
0512128	03	D	10000	50	N/A	0.334	N/A					#VALUE!
0512128	03		10000	50	N/A	0.321	N/A					
0512128	04		10000	50	N/A	0.633	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

01/06/2006 0512128ST - 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
0512128-01	SAM	3660B	DMP	1/10/06							25	0.55	0	0.15
0512128-02	SAM	3660B	DMP	1/10/06							10	0.25	0	0.15
0512128-03	D	3660B	DMP	1/10/06							10	1.2	0	0.15
0512128-03	SAM	3660B	DMP	1/10/06							10	1.2	0	0.15
0512128-04	SAM	3660B	DMP	1/10/06							10	0.65	0	0.15
SS010606B04	B	3660B	DMP	1/10/06							2	1	0	0.15
SS010606LCS04	LCS	3660B	DMP	1/10/06							2	1	0	0.15
SS010606LCSD03	LCSD	3660B	DMP	1/10/06							2	1	0	0.15

✓ 2nd 1/12/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/06/2006 0512128ST - OP NEWFIE

Lab ID	Notes
0512128-01	
0512128-02	
0512128-03	
0512128-03	
0512128-04	
SS010606B04	
SS010606LCS04	
SS010606LCSD03	

Alpha Woods Hole Lab
Batch Clean Up Report

01/06/2006 0512128ST - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction ation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512128-01	SAM	3610	DMP	1/10/06				DMP	1/10/06	False	25	0.55	0	0.15
0512128-02	SAM	3610	DMP	1/10/06				DMP	1/10/06	False	10	0.25	0	0.15
0512128-03	D	3610	DMP	1/10/06				DMP	1/10/06	False	10	1.2	0	0.15
0512128-03	SAM	3610	DMP	1/10/06				DMP	1/10/06	False	10	1.2	0	0.15
0512128-04	SAM	3610	DMP	1/10/06				DMP	1/10/06	False	10	0.65	0	0.15
SS010606B04	B	3610	DMP	1/10/06				DMP	1/10/06	False	2	1	0	0.15
SS010606LCS04	LCS	3610	DMP	1/10/06				DMP	1/10/06	False	2	1	0	0.15
SS010606LCSD03	LCSD	3610	DMP	1/10/06				DMP	1/10/06	False	2	1	0	0.15

✓ 2nd 2/2/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/06/2006 0512128ST - OP NEWFIE

Lab ID	Notes
0512128-01	
0512128-02	
0512128-03	
0512128-03	
0512128-04	
SS010606B04	
SS010606LCS04	
SS010606LCSD03	

Gravimetric Determination for Post Alumina Column

Analyst: KLA
Date: 1/11/06

BATCH: 0512128

Entered by: KLA
Verified by: KLA

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	N/A	0.245	N/A	4.90	N/A	N/A	N/A	98%
0512128	01		1000	50	N/A	0.323	N/A	6.46	750	4.85	1.33	
0512128	02		1000	50	N/A	0.250	N/A	5.00	950	4.75	1.05	
0512128	03	D	1000	50	50	0.163	0.156	3.26	900	2.93	1.11	27%
0512128	03		1000	50	50	0.214	0.163	4.28	900	3.85	1.11	
0512128	04		1000	50	N/A	0.312	N/A	6.24	800	4.99	1.25	

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 1/12/06

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

✓ 2nd 1/12/06

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

Gravimetric Determination for Post Alumina Column

Analyst: KLA
Date: 1/11/06

BATCH: 0512128

Entered by: KLA
Verified by: ↓

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	N/A	0.245	N/A		N/A	N/A	N/A	0%
0512128	01		1000	50	N/A	0.323	N/A					
0512128	02		1000	50	N/A	0.250	N/A					
0512128	03	D	1000	50	50	0.163	0.156					#VALUE!
0512128	03		1000	50	50	0.214	0.163					
0512128	04		1000	50	N/A	0.312	N/A					

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE Gowanus Canal
ETR: 0512128

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512128-01	900	WHAC12 2OF5	100	1000	60.61	KLA	150	150	1/11/06
0512128-02	900	WHAC12 2OF5	100	1000	42.11	KLA	150	150	1/11/06
0512128-03D	900	WHAC12 2OF5	100	1000	9.26	KLA	150	150	1/11/06
0512128-03	900	WHAC12 2OF5	100	1000	9.26	KLA	150	150	1/11/06
0512128-04	900	WHAC12 2OF5	100	1000	19.23	KLA	150	150	1/11/06
SS010606-B04	900	WHAC12 2OF5	100	1000	2	KLA	150	150	1/11/06
SS010606-LCS04	900	WHAC12 2OF5	100	1000	2	KLA	150	150	1/11/06
SS010606-LCSD03	900	WHAC12 2OF5	100	1000	2	KLA	150	150	1/11/06

[1] Includes Internal Std

Seds

Forensic Preparation Checklist

ETR: 0512-128 **Client:** Newfields **Project:** Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

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

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

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

Other: Samples 01,02,04 have very strong hydrocarbon/napthalene odors.
All Samples spiked High.

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

Other:

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

	Date	Initials
1st Extraction	1/6/06	DMP
2nd Extraction	1/7/06	RPR
3rd Extraction		

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

Other:
ALL Samples very dark, brought To 10ml FV.

Batch Completed
Analyst: KLA
Date: 1/11/06

Alpha Woods Hole Lab
Batch Prep Report
01/06/2006 0512128ST - 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
0512128-01	SAM	Shaker	DMP	1/6/2006	1/17/2006		5.21	8.75	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
0512128-02	SAM	Shaker	DMP	1/6/2006	1/17/2006		4.99	13.34	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
0512128-03	D	Shaker	DMP	1/6/2006	1/17/2006		10.28	1.5	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
0512128-03	SAM	Shaker	DMP	1/6/2006	1/17/2006		10.51	1.5	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
0512128-04	SAM	Shaker	DMP	1/6/2006	1/17/2006		5.29	6.25	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
SS010606B04	B	Shaker	DMP	1/6/2006	1/17/2006		30	2	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
SS010606LCS04	LCS	Shaker	DMP	1/6/2006	1/17/2006		30	2	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	
SS010606LCSD03	LCSD	Shaker	DMP	1/6/2006	1/17/2006		30	2	False	DMP	1/9/2006	KD Flask	0.15	RPR	1/17/2006	

✓ 2nd 1/23/06

Alpha Woods Hole Lab
Batch Prep Report

01/06/2006 0512128ST - OP Steranes/Triterpanes

Lab ID	Notes
0512128-01	1st Prep
0512128-02	1st Prep
0512128-03	1st Prep
0512128-03	1st Prep
0512128-04	1st Prep
SS010606B04	1st Prep
SS010606LCS04	1st Prep
SS010606LCSD03	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
01/06/2006

Lab ID	QC Type	0512128ST - Sample
0512128-01	SAM	5.21
0512128-02	SAM	4.99
0512128-03	D	10.28
0512128-03	SAM	10.51
0512128-04	SAM	5.29
SS010606B04	B	~~20~~ 30
SS010606LCS04LCS	OP NEWFIE	~~20~~
SS010606LCS04LCS	OP SHC	~~20~~
SS010606LCS04LCS	OP Steranes/Triterpanes	~~20~~
SS010606LCSD03LCSD	NEWFIE	~~20~~
SS010606LCSD03LCSD	SHC	~~20~~
SS010606LCSD03LCSD	Steranes/Triterpanes	~~20~~

cr 1/25/06

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

01/06/2006 0512128ST - OP NEWFIE Analyst: DMP Witness: NLJr

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
0512128-01	SAM	WHAC11	200	µl	WHAC05	200	µl			
0512128-02	SAM	WHAC11	200	µl	WHAC05	200	µl			
0512128-03	D	WHAC11	200	µl	WHAC05	200	µl			
0512128-03	SAM	WHAC11	200	µl	WHAC05	200	µl			
0512128-04	SAM	WHAC11	200	µl	WHAC05	200	µl			
SS010606B04	B	WHAB63	100	µl	WHAB15	200	µl			
SS010606LCS04	LCS	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl
SS010606LCSD03	LCSD	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl

Test: ALK-PAH/SHC

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

LFB / *Other* High

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

Test: PAH/SHC

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

LFB / *Other* Low

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

Test: ALK-PAH/SHC

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

LFB / *Other*

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

Test: Biomarker

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

LFB / *Other* High

ID# WHAC05
Conc. 100 mg/ml

Test: Biomarker

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

LFB / *Other* Low

ID# WHAB15
Conc. 10 mg/ml

Gravimetric Determination for Silica Column

Analyst: DMP
Date: 1/9/06

BATCH: 0512128

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Columnt (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A	49.60	N/A	N/A	N/A	99%
0512128	01		25000	50	N/A	0.773	N/A	386.50	3000	46.38	8.33	
0512128	02		10000	50	N/A	1.609	N/A	321.80	1500	48.27	6.67	
0512128	03	D	10000	50	N/A	0.334	N/A	66.80	7000	46.76	1.43	4%
0512128	03		10000	50	N/A	0.321	N/A	64.20	7000	44.94	1.43	
0512128	04		10000	50	N/A	0.633	N/A	126.60	4000	50.64	2.50	

2nd 2/2/06

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

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

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

Alpha Woods Hole Lab
Batch Clean Up Report

01/06/2006 0512128ST - 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 ation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512128-01	SAM	3630	RPR	1/16/06				MAL	1/16/06	False	25	3	0	0.15
0512128-02	SAM	3630	RPR	1/16/06				MAL	1/16/06	False	10	1.5	0	0.15
0512128-03	D	3630	RPR	1/16/06				MAL	1/16/06	False	10	7	0	0.15
0512128-03	SAM	3630	RPR	1/16/06				MAL	1/16/06	False	10	7	0	0.15
0512128-04	SAM	3630	RPR	1/16/06				MAL	1/16/06	False	10	4	0	0.15
SS010606B04	B	3630	RPR	1/16/06				MAL	1/16/06	False	2	1	0	0.15
SS010606LCS04	LCS	3630	RPR	1/16/06				MAL	1/16/06	False	2	1	0	0.15
SS010606LCSD03	LCSD	3630	RPR	1/16/06				MAL	1/16/06	False	2	1	0	0.15

2nd 2/2/06

Alpha Woods Hole Lab
Batch Clean Up Report
01/06/2006 0512128ST - OP Steranes/Triterpanes

Lab ID	Notes
0512128-01	Silica columns eluted with 20ml Pentane
0512128-02	
0512128-03	
0512128-03	
0512128-04	
SS010606B04	
SS010606LCS04	
SS010606LCSD03	

Post Silica Gel Column Gravimetric Determination

Analyst: RPR
Date: 1/17/2006

BATCH: 0512128

Entered by: RPR
Verified by: RPR

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	NA	0.252	NA	5.04	NA	NA	NA	101%
0512128	01		1000	50	NA	0.150	NA	3.00	950	2.85	1.05	
0512128	02		1000	50	NA	0.461	NA	9.22	500	4.61	2.00	
0512128	03	D	1000	50	NA	0.163	NA	3.26	950	3.10	1.05	1%
0512128	03		1000	50	NA	0.162	NA	3.24	950	3.08	1.05	
0512128	04		1000	50	NA	0.528	NA	10.56	400	4.22	2.50	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight ✓ 2nd 2/2/06

✓ 2nd 2/2/06

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 Silica Gel Column Gravimetric Determination

Analyst: RPR
Date: 1/17/06

BATCH: 0512128

Entered by: RPR
Verified by: -

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	NA	0.252	NA					0%
0512128	01		1000	50		0.150						
0512128	02		1000	50		0.461						
0512128	03	D	1000	50		0.163						#VALUE!
0512128	03		1000	50		0.162						
0512128	04		1000	50		0.528						

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: NEWFIE Gowanus Canal
ETR: 0512128

BIOMARKERS

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512128-01	900	WHAC12 2OF5	100	1000	8.75	RPR	150	NA	1/17/06
0512128-02	900	WHAC12 2OF5	100	1000	13.34	RPR	150	NA	1/17/06
0512128-03D	900	WHAC12 2OF5	100	1000	1.50	RPR	150	NA	1/17/06
0512128-03	900	WHAC12 2OF5	100	1000	1.50	RPR	150	NA	1/17/06
0512128-04	900	WHAC12 2OF5	100	1000	6.25	RPR	150	NA	1/17/06
SS010606-B04	900	WHAC12 2OF5	100	1000	2	RPR	150	NA	1/17/06
SS010606-LCS04	900	WHAC12 2OF5	100	1000	2	RPR	150	NA	1/17/06
SS010606-LCSD03	900	WHAC12 2OF5	100	1000	2	RPR	150	NA	1/17/06

[1] Includes Internal Std

Seds

Forensic Preparation Checklist

ETR: 0512-128 **Client:** New fields **Project:** Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

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

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

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

Other: Samples 01,02,04 have very strong hydrocarbon/napthalene odor. All Samples spiked High.

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

Other:

Identify Matrix - Circle One

Soil / Sediment / Water / Sheen / NAPL / Solid / Tissue / Product

	Date	Initials
1st Extraction	1/6/06	DMP
2nd Extraction	1/7/06	RPR
3rd Extraction	↓	↓

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

Other: ALL Samples very dark, brought To 10ml FV.

MAL (Biomarkers) 1/17/06

Batch Completed

Analyst: KLA

Date: 1/11/06

Forensic Dilution Sheet

Client Name:	NewFields
Project	Gowanus Canal
ETR # :	0512128
Matrix :	Sediment
Analysis Type :	GC/MS

Relinquished By:	KLA	Received By:	KLA
Date:	1/12/06 10:19 AM	Date:	1/12/06

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
0512128-01	700	700	100	1000	0512128-01-RE	WHAC12 90UL	KLA 1/12/06	10	10
0512128-02	700	700	100	1000	0512128-02-RE	WHAC12 90UL	↓	10	10
0512128-03	700	700	100	1000	0512128-03-RE	WHAC12 90UL	↓	10	10
0512128-03D	700	700	100	1000	0512128-03D-RE	WHAC12 90UL	↓	10	10
0512128-04	700	700	100	1000	0512128-04-RE	WHAC12 90UL	↓	10	10
✓ 0512128-01	600	600	10	1000	0512128-01-RE2	WHAC12 99UL	KLA 1/12/06	100	100
✓ 0512128-02	600	600	10	1000	0512128-02-RE2	WHAC12 99UL	↓	100	100
0512128-03	600	600	10	1000	0512128-03-RE2	WHAC12 99UL	↓	100	100
0512128-03D	600	600	10	1000	0512128-03D-RE2	WHAC12 99UL	↓	100	100
✓ 0512128-04	600	600	10	1000	0512128-04-RE2	WHAC12 99UL	↓	100	100

Dilution Calculations Validated by: KLA
Date: 1/12/06 CW 2/3/06

Forensic Dilution Sheet

Client Name:	NewFields
Project	Gowanus Canal
ETR # :	0512128
Matrix :	Sediment
Analysis Type :	GC/MS

Relinquished By: CLM
Date: 1/19/06 10:21 AM

Received By: KLA
Date: 1/19/06

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
0512128-01	590	590	10	1000	0512128-01-RE~~2~~3	WHAC12 99UL	KLA 1/19/06	100	100
0512128-02	↓	↓	10	1000	0512128-02-RE~~2~~3	WHAC12 99UL	↓	100	100
0512128-04	↓	↓	10	1000	0512128-04-RE~~2~~3	WHAC12 99UL	↓	100	100
0512128-05	↓	↓	10	1000	0512128-05-RE~~2~~3	WHAC12 99UL	↓	100	100

Dilution Calculations Validated by: KLA
Date: 1/19/06

w 2/2/06

Alpha Woods Hole Lab
Batch Prep Report
01/10/2006 0512128STBIO - 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
0512128-05	SAM	3580	RPR	1/10/2006	1/11/2006		0.0938	16.7	False				0.15	KLA	1/11/2006	
SO011006B01	B	3580	RPR	1/10/2006	1/11/2006		0.1	2	False				0.15	KLA	1/11/2006	
SO011006LCS01	LCS	3580	RPR	1/10/2006	1/11/2006		0.1	2	False				0.15	KLA	1/11/2006	
SO011006LCSD01	LCSD	3580	RPR	1/10/2006	1/11/2006		0.1	2	False				0.15	KLA	1/11/2006	
SO011706AWS01	AWS						0.05096	10								

Alpha Woods Hole Lab
Batch Prep Report
01/10/2006 0512128STBIO - OP NEWFIE

Lab ID	Notes
0512128-05	1st Prep
SO011006B01	1st Prep
SO011006LCS01	1st Prep
SO011006LCSD01	1st Prep
SO011706AWS01	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
01/10/2006

Lab ID	QC Type	0512128STBIO - Sample
0512128-05	SAM	0.0938
SO011006B01	B	0.1
SO011006LCS01LCSOP NEWFIE		0.1
SO011006LCS01LCSOP SHC		0.1
SO011006LCS01LCSOP Steranes/Triterpanes		0.1
SO011006LCSD01LCSDOP NEWFIE		0.1
SO011006LCSD01LCSDOP SHC		0.1
SO011006LCSD01LCSDOP Steranes/Triterpanes		0.1

gravemetric weight cw 2/3/06

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

01/10/2006 0512128STBIO - OP NEWFIE Analyst: RPR Witness: GJP

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
0512128-05	SAM	WHAB63	100	µl				WHAB15	200	µl
SO011006B01	B	WHAB63	100	µl				WHAB15	200	µl
SO011006LCS01	LCS	WHAB63	100	µl	WHAB85	100	µl	WHAB15	200	µl
SO011006LCSD01	LCSD	WHAB63	100	µl	WHAB85	100	µl	WHAB15	200	µl

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other

ID# WHAB63

Conc. 10ug/ml 500ug/ml

Test: ALK-PAH/SHC

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

LFB / *Other*

ID# WHAB85

Conc. 10ug/ml / 500ug/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAB15

Conc. 10ug/ml

Gravimetric Determination for Alumina Column

Analyst: RPR
Date: 1/10/06

BATCH: 0512128STBIO

Entered by: RPR
Verified by: RPR

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.248	NA	49.60	NA	NA	NA	99%
0512128	05		10000	50	NA	0.469	NA	93.80	1000	9.38	10.00	

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%.

Gravimetric Determination for Column

Analyst: RPR
Date: 1/16/06

BATCH: 0512128STBIO

Entered by: RPR
Verified by: —

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.248						0%
0512128	05		10000	50	↓	0.459						

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
01/10/2006 0512128STBIO - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512128-05	SAM	3610	KLA	1/11/2006				KLA	1/11/2006	False	10	1	0	0.15
SO011006B01	B	3610	KLA	1/11/2006				KLA	1/11/2006	False	2	1	0	0.15
SO011006LCS01	LCS	3610	KLA	1/11/2006				KLA	1/11/2006	False	2	1	0	0.15
SO011006LCSD01	LCSD	3610	KLA	1/11/2006				KLA	1/11/2006	False	2	1	0	0.15

Alpha Woods Hole Lab
Batch Clean Up Report
01/10/2006 0512128STBIO - OP NEWFIE

Lab ID	Notes
0512128-05	
SO011006B01	
SO011006LCS01	
SO011006LCSD01	

Gravimetric Determination for Post Alumina Column

Analyst: KLA
Date: 1/11/06

BATCH: 0512128STBIO

Entered by: KLA
Verified by: KLA

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	NA	0.245	NA	4.90	NA	NA	NA	98%
0512128	05		1000	50	NA	0.389	NA	7.78	600	4.67	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

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 ~~Silica~~ Post Alumina Column

Analyst: KLA
Date: 1/11/06

BATCH: 0512128STBIO

Entered by: KLA
Verified by: ↓

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	NA	0.245	NA		NA	NA	NA	0%
0512128	05		1000	50	↓	0.389	↓					

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: NEWFIE GOWANUS CANAL
ETR: 0512128STBIO OIL

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512128-05	900	WHAC12 2OF5	100	1000	16.7	KLA	150	150	1/11/06
SO011006-B01	900	WHAC12 2OF5	100	1000	1	KLA	150	150	1/11/06
SO011006-LCS01	900	WHAC12 2OF5	100	1000	1	KLA	150	150	1/11/06
SO011006-LCSD01	900	WHAC12 2OF5	100	1000	1	KLA	150	150	1/11/06

[1] Includes Internal Std

Oil

Forensic Preparation Checklist

ETR: 0512128 **Client:** Newfie **Project:** Gowanus Canal

Workplan Present	—

Workplan Reviewed With Project Manager	—

Test 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 only	✓
Alumina (Super I) Glass Column Alk./SHC	✓
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: Oil

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

Other: N/A

Identify Matrix - Circle One

Soil / Sediment / Water / Sheen / NAPL / Solid / Tissue / Product (Oil)

	Date	Initials
1st Extraction		
2nd Extraction		
3rd Extraction		

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

Other: N/A

Batch Completed

Analyst: KGA

Date: 1/11/06

Forensic Dilution Sheet

Client Name:	NewFields
Project	Gowanus Canal
ETR # :	0512128
Matrix :	OIL
Analysis Type :	GC/MS

Relinquished By:	KLA	Received By:	KLA
Date:	1/12/06 9:58 AM	Date:	1/12/06

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
0512128-05	700	700	100	1000	0512128-05-RE	WHAC12 90UL	KLA 1/12/06	10	10
0512128-05	600	600	10	1000	0512128-05-RE2	WHAC12 99UL	KLA 1/12/06	100	100

Dilution Calculations Validated by: KLA
Date: 1/12/06

CK 2/2/06

Alpha Woods Hole Lab
Batch Prep Report

01/10/2006 0512128STBIO - 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
0512128-05	SAM	3580	MAL	1/10/06	1/~~24~~ 23/06		0.0938	2.66	False				0.15	MAL	1/~~24~~ 23/06	CW 2/2/06
SO011006B01	B	3580	RPR	1/10/06	1/17/06		0.1	2	False				0.15	RPR	1/17/06	
SO011006LCS01	LCS	3580	RPR	1/10/06	1/17/06		0.1	2	False				0.15	RPR	1/17/06	
SO011006LCSD01	LCSD	3580	RPR	1/10/06	1/17/06		0.1	2	False				0.15	RPR	1/17/06	

Alpha Woods Hole Lab
Batch Prep Report

01/10/2006 0512128STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512128-05	1st Prep: SAMPLE RE-SILICA CLEANED ON 1/24/06 23 2/2/06
SO011006B01	1st Prep
SO011006LCS01	1st Prep
SO011006LCSD01	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
01/10/2006

Lab ID	QC Type	0512128STBIO - Sample
0512128-05	SAM	0.0938
SO011006B01	B	0.1
SO011006LCS01	LCSOP NEWFIE	0.1
SO011006LCS01	LCSOP SHC	0.1
SO011006LCS01	LCSOP Steranes/Triterpanes	0.1
SO011006LCSD01	LCSDOP NEWFIE	0.1
SO011006LCSD01	LCSDOP SHC	0.1
SO011006LCSD01	LCSDOP Steranes/Triterpanes	0.1

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

01/10/2006 0512128STBIO - OP NEWFIE Analyst: RPR Witness: GJP

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
0512128-05	SAM	WHAB63	100	µl				WHAB15	200	µl
SO011006B01	B	WHAB63	100	µl				WHAB15	200	µl
SO011006LCS01	LCS	WHAB63	100	µl	WHAB85	100	µl	WHAB15	200	µl
SO011006LCSD01	LCSD	WHAB63	100	µl	WHAB85	100	µl	WHAB15	200	µl

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____

ID# WHAB63

Conc. 10ug/ml 500ug/ml

Test: ALK-PAH/SHC

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

LFB / *Other* _____

ID# WHAB85

Conc. 10ug/ml / 500ug/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAB15

Conc. 10ug/ml

Gravimetric Determination for Silica Column

Analyst: ~~RPR~~ MAL
Date: ~~1/10/2006~~ 1/29/06 23

CL 2/2/06 Sample re-Si cleaned

BATCH: 0512128STBIO

Entered by: RPR
Verified by: RPR

consumed remaining extract CL 2/2/06

		LCS	10000	50	NA	0.248	NA	49.60	NA	NA	NA	99%
0512128	05		10000	50	NA	0.469	NA	93.80	3950	37.05	2.53	

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

01/10/2006 0512128STBIO - OP Steranes/Triterpanes

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512128-05	SAM	3630	MAL	1/~~24~~23/06			2/2/06	MAL	1/~~24~~23/06	False	10	3.95	0	0.15
SO011006B01	B	3630	RPR	1/16/06				MAL	1/16/06	False	2	1	0	0.15
SO011006LCS01	LCS	3630	RPR	1/16/06				MAL	1/16/06	False	2	1	0	0.15
SO011006LCSD01	LCSD	3630	RPR	1/16/06				MAL	1/16/06	False	2	1	0	0.15

Alpha Woods Hole Lab
Batch Clean Up Report

01/10/2006 0512128STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512128-05	Silica columns eluted with 20mL of Pentane RE-CLEANED 1/~~24~~23/06
SO011006B01	
SO011006LCS01	
SO011006LCSD01	

cs 1/2/06 original Si clean contained no surrogate

Post Silica Gel Column Gravimetric Determination

Analyst: DMP
Date: 1/23/06

BATCH: 0512128STBIO

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.253	N/A	50.60	N/A	N/A	N/A	101%
0512128	05		1000	50	N/A	0.115	N/A	2.30	950	2.19	1.05	

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

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

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

Post Silica Gel Column Gravimetric Determination

Analyst: DMP
Date: 1-23-06

BATCH: 0512128STBIO

Entered by: DMP
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.253	N/A					0%
0512128	05		1000	50	N/A	0.115	N/A					

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE GOWANUS CANAL
ETR: 0512128STBIO OIL

BIOMARKERS

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512128-05	900	WHAC12 2OF5	100	1000	2.11	RPR	150	150	1/17/06
SO011006-B01	900	WHAC12 2OF5	100	1000	2	RPR	150	150	1/17/06
SO011006-LCS01	900	WHAC12 2OF5	100	1000	2	RPR	150	150	1/17/06
SO011006-LCSD01	900	WHAC12 2OF5	100	1000	2	RPR	150	150	1/17/06

-See Next page. Re-Silica cleaned No surrogate cw 2/2/06

[1] Includes Internal Std

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE GOWANUS CANAL
ETR: 0512128STBIO OIL

BIOMARKERS

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512128-05	900	WHAC12 2OF5	100	1000	2.66	MAL	150	150	1/23/06

[1] Includes Internal Std

Oil

Forensic Preparation Checklist

ETR: 051128 **Client:** Newfie **Project:** Gowanus Canal

Workplan Present	—

Workplan Reviewed With Project Manager	—

Test 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 only	✓
Alumina (Super I) Glass Column Alk./SHC	✓
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: Oil

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

Other: N/A

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

	Date	Initials
1st Extraction		
2nd Extraction		
3rd Extraction		

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

Other: N/A Sample required re-silica clean - original was not surrogate spiked 5/13/06

MAL (Biomarkers) 1/17/06

Batch Completed
Analyst: KCA
Date: 1/11/06

Alpha Woods Hole Lab
Batch Prep Report
01/19/2006 0512128STBIO - 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
0512128-01	SAM	Shaker	DMP	1/19/2006	1/24/2006		5.29	63.33	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
0512128-02	SAM	Shaker	DMP	1/19/2006	1/24/2006		5.12	39.33	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
0512128-03	D	Shaker	DMP	1/19/2006	1/24/2006		10.6	3.75	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
0512128-03	SAM	Shaker	DMP	1/19/2006	1/24/2006		10.24	3.96	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
0512128-04	SAM	Shaker	DMP	1/19/2006	1/24/2006		5.54	21.99	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
SS011906B04	B	Shaker	DMP	1/19/2006	1/24/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
SS011906LCS03	LCS	Shaker	DMP	1/19/2006	1/24/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	
SS011906LCSD03	LCSD	Shaker	DMP	1/19/2006	1/24/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	DMP	1/24/2006	

Re-extractions 2nd cw 2/3/06

Alpha Woods Hole Lab
Batch Prep Report

01/19/2006 0512128STBIO - OP NEWFIE

Lab ID	Notes
0512128-01	2nd Prep (Re-prep)
0512128-02	2nd Prep (Re-prep)
0512128-03	2nd Prep (Re-prep)
0512128-03	2nd Prep (Re-prep)
0512128-04	2nd Prep (Re-prep)
SS011906B04	2nd Prep (Re-prep)
SS011906LCS03	2nd Prep (Re-prep)
SS011906LCSD03	2nd Prep (Re-prep)

Alpha Woods Hole Lab
Batch Weight Report
01/19/2006

Lab ID	QC Type	0512128STBIO - Sample
0512128-01	SAM	5.29
0512128-02	SAM	5.12
0512128-03	D	10.6
0512128-03	SAM	10.24
0512128-04	SAM	5.54
SS011906B04	B	30
SS011906LCS03LCS	OP NEWFIE	30
SS011906LCS03LCS	OP SHC	30
SS011906LCS03LCS	OP Steranes/Triterpanes	30
SS011906LCSD03LCSD	OP NEWFIE	30
SS011906LCSD03LCSD	OP SHC	30
SS011906LCSD03LCSD	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

01/19/2006 0512128STBIO - OP NEWFIE Analyst: KLA Witness: RPR

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
0512128-01	SAM	WHAC11	200	µl				WHAC15	200	µl
0512128-02	SAM	WHAC11	200	µl				WHAC15	200	µl
0512128-03	D	WHAC11	200	µl				WHAC15	200	µl
0512128-03	SAM	WHAC11	200	µl				WHAC15	200	µl
0512128-04	SAM	WHAC11	200	µl				WHAC15	200	µl
SS011906B04	B	WHAB63	100	µl				WHAB14	200	µl
SS011906LCS03	LCS	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl
SS011906LCSD03	LCSD	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other

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

Test: ALK-PAH/SHC (High)

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

LFB / *Other*

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

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other High

ID# WHAC15
Conc. 100ug/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAB14
Conc. 10ug/ml

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other

ID# WHAC14
Conc. 10ug/ml 500ug/ml

Gravimetric Determination for Alumina Column

Analyst: DMP
Date: 1/23/2006

BATCH: 0512128

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC %
		LCS	10000	50	N/A	0.253	N/A	50.60	N/A	N/A	N/A	101%
0512128	1		10000	50	N/A	1.935	N/A	387.00	210	8.13	47.62	
0512128	2		10000	50	N/A	1.350	N/A	270.00	300	8.10	33.33	
0512128	3	D	10000	50	N/A	0.126	N/A	25.20	2800	7.06	3.57	29%
0512128	3		10000	50	N/A	0.168	N/A	33.60	2800	9.41	3.57	
0512128	4		10000	50	N/A	0.635	N/A	127.00	650	8.26	15.38	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight 2nd 2/3/06
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)

2nd 2/3/06

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

re-extractions

Alpha Woods Hole Laboratories Raynham, MA

0512128ST

DMP
1-24-06

Auming 1/27/06 KAR

Gravimetric Determination for Column

Analyst: DMP
Date: 1-23-06

BATCH: 0512128

Entered by: DMP
Verified by:

ETB #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed (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	% RPD
		LCS	10000	50	N/A	0.253	N/A					0%
0512128	1		10000	50	N/A	1.935	N/A					
0512128	2		10000	50	N/A	1.350	N/A					
0512128	3	D	10000	50	N/A	0.126	N/A					#VALUE!
0512128	3		10000	50	N/A	0.168	N/A					
0512128	4		10000	50	N/A	0.635	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

0512128ST

Alpha Woods Hole Lab
Batch Clean Up Report

01/19/2006 0512128STBIO - 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
0512128-01	SAM	3610	RPR	1/24/2006				DMP	1/24/2006	False	10	0.21	0	0.15
0512128-02	SAM	3610	RPR	1/24/2006				DMP	1/24/2006	False	10	0.3	0	0.15
0512128-03	D	3610	RPR	1/24/2006				DMP	1/24/2006	False	10	2.8	0	0.15
0512128-03	SAM	3610	RPR	1/24/2006				DMP	1/24/2006	False	10	2.8	0	0.15
0512128-04	SAM	3610	RPR	1/24/2006				DMP	1/24/2006	False	10	0.65	0	0.15
SS011906B04	B	3610	RPR	1/24/2006				DMP	1/24/2006	False	2	0.5	0	0.15
SS011906LCS03	LCS	3610	RPR	1/24/2006				DMP	1/24/2006	False	2	0.5	0	0.15
SS011906LCSD03	LCSD	3610	RPR	1/24/2006				DMP	1/24/2006	False	2	0.5	0	0.15

2nd
2/3/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/19/2006 0512128STBIO - OP NEWFIE

Lab ID	Notes
0512128-01	
0512128-02	M-extractions
0512128-03	CW 2/3/06
0512128-03	
0512128-04	
SS011906B04	
SS011906LCS03	
SS011906LCSD03	

Post-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 1/24/2006

BATCH: 0512128

Entered by: DMP
Verified by: DMP

ETR #	Sample #	MB, LCS, D	Final Volume of Extract (ul)	Aliquot Removed (ul)	Aliquot Removed #2 (ul)	Aliquot Weight 1 (mg)	Aliquot Weight 2 (mg)	Total Extract Oil Weight (mg)	Volume Removed for Analysis (ul)	Oil After Dilution (mg)	Dilution Factor	% Difference
		LCS	10000	50	N/A	0.255	N/A	51.00	N/A	N/A	N/A	102%
0512128	1		1000	50	N/A	0.337	N/A	6.74	750	5.06	1.33	
0512128	2		1000	50	N/A	0.285	N/A	5.70	850	4.85	1.18	
0512128	3	D	1000	50	N/A	0.245	N/A	4.90	950	4.66	1.05	11%
0512128	3		1000	50	N/A	0.273	N/A	5.46	900	4.91	1.11	
0512128	4		1000	50	N/A	0.350	N/A	7.00	700	4.90	1.43	

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

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

and 2/3/06

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

and 2/3/06

re-extractions 2/3/06

Alpha Woods Hole Laboratories Raynham, MA

0512128POSTCOLUMN

DMP
1-24-06

Gravimetric Determination For Oils

Analyst: DMP
Date: 1-24-06

BATCH: 0512128

Entered by: DMP
Verified by:

Post Column (Alumina) ~~(Silica)~~ 1/27/06 RPR

ETP#	Sample#	QC	Final Volume of Extract (ml)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil After Dilution (mg)	Dilution Factor	% Difference
		LCS	10000	50	N/A	0.255	N/A					0%
0512128	1		1000	50	N/A	0.337	N/A					
0512128	2		1000	50	N/A	0.285	N/A					
0512128	3	D	1000	50	N/A	0.245	N/A					#VALUE!
0512128	3		1000	50	N/A	0.273	N/A					
0512128	4		1000	50	N/A	0.350	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 After Dilution = Total Extract Oil Weight (mg) / Dilution Factor
Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Analysis (ul)

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name:GOWANUS CANAL
ETR: 0512128

ALK-PAH/SHC

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0512128-01	900	WHAC12#1	100	1000	63.33	DMP	150	150	1/24/2006
0512128-02	900	WHAC12#1	100	1000	39.33	DMP	150	150	1/24/2006
0512128-03D	900	WHAC12#1	100	1000	3.75	DMP	150	150	1/24/2006
0512128-03	900	WHAC12#1	100	1000	3.96	DMP	150	150	1/24/2006
0512128-04	900	WHAC12#1	100	1000	21.99	DMP	150	150	1/24/2006
TS011906B04	900	WHAC12#1	100	1000	4	DMP	150	150	1/24/2006
TS011906LCS03	900	WHAC12#1	100	1000	4	DMP	150	150	1/24/2006
TS011906LCSD03	900	WHAC12#1	100	1000	4	DMP	150	150	1/24/2006

[1] Includes Internal Std

2nd
cv
2/3/06

Forensic Preparation Checklist

ETR: 0512128X **Client:** Newfie **Project:** Gowanus Canal

Workplan Present	NA

Workplan Reviewed With Project Manager	NA

Test 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: used five grams due to strong naphthalene odor (-01, -02, -04)

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

Other:

Identify Matrix - Circle One

Soil / ~~Sediment~~ / Water / Sheen / NAPL / Solid / Tissue / Product

	Date	Initials
1st Extraction	1-19-06	DMP
2nd Extraction	1/20/06	KLA
3rd Extraction	↓	↓

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

Other: BOH & LCSO3 have a slight yellow color MAL 1/23/6

-3, 3 dup may have 200ul, 100ul or 0 ul of RIS KLA 1/26/06

BIOmarkers

-03 has 200ul RIS

mg 1/27/06

Batch Completed

Analyst: DMP

Date: 1-24-06

Forensic Dilution Sheet

Client Name:	NewFields
Project	Gowanus Canal
ETR # :	0512128X
Matrix :	Sediment
Analysis Type :	GC/MS

~~Re-Alumina cleaned~~ extracts
Re-Extracted cr 2/2/06

Relinquished By:	KLA	Received By:	KLA
Date:	1/25/06 8:57 AM	Date:	1/25/06

Sample ID	Init. Sample Vol (uL) Measured	Init. Sample Vol (uL) Adjusted	Aliquot removed from Initial Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0512128-01	700	700	100	1000	0512128-01-RE	WHAC12 90UL	1/25/06 KLA	10	10
0512128-02	700	700	100	1000	0512128-02-RE	WHAC12 90UL		10	10
0512128-03	700	700	100	1000	0512128-03-RE	WHAC12 90UL		10	10
0512128-03D	700	700	100	1000	0512128-03D-RE	WHAC12 90UL		10	10
0512128-04	700	700	100	1000	0512128-04-RE	WHAC12 90UL		10	10
0512128-01	600	600	10	1000	0512128-01-RE2	WHAC12 99UL	1/25/06 KLA	100	100
0512128-02	600	600	10	1000	0512128-02-RE2	WHAC12 99UL		100	100
0512128-03	600	600	10	1000	0512128-03-RE2	WHAC12 99UL		100	100
0512128-03D	600	600	10	1000	0512128-03D-RE2	WHAC12 99UL		100	100
0512128-04	600	600	10	1000	0512128-04-RE2	WHAC12 99UL		100	100

Dilution Calculations Validated by: KLA
Date: 1/25/06

Alpha Woods Hole Lab
Batch Prep Report

01/19/2006 0512128STBIO - 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
0512128-01	SAM	Shaker	DMP	1/19/2006	1/26/2006		5.29	8.4	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0512128-02	SAM	Shaker	DMP	1/19/2006	1/26/2006		5.12	12.68	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0512128-03	D	Shaker	DMP	1/19/2006	1/26/2006		10.6	1.47	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0512128-03	SAM	Shaker	DMP	1/19/2006	1/26/2006		10.24	1.47	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0512128-04	SAM	Shaker	DMP	1/19/2006	1/26/2006		5.54	5	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
SS011906B04	B	Shaker	DMP	1/19/2006	1/26/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
SS011906LCS03	LCS	Shaker	DMP	1/19/2006	1/26/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
SS011906LCSD03	LCSD	Shaker	DMP	1/19/2006	1/26/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	

✓ ✓ 2nd re-extraction on 2/3/06

Alpha Woods Hole Lab
Batch Prep Report

01/19/2006 0512128STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512128-01	2nd Prep (Re-prep)
0512128-02	2nd Prep (Re-prep)
0512128-03	2nd Prep (Re-prep)
0512128-03	2nd Prep (Re-prep)
0512128-04	2nd Prep (Re-prep)
SS011906B04	2nd Prep (Re-prep)
SS011906LCS03	2nd Prep (Re-prep)
SS011906LCSD03	2nd Prep (Re-prep)

Gravimetric Determination for Silica Gel Column Fractionation

Analyst: DMP
Date: 1/23/2006

BATCH: 0512128

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	DC % R-RPD
		LCS	10000	50	N/A	0.253	N/A	50.60	N/A	N/A	N/A	101%
0512128	1		10000	50	N/A	1.935	N/A	387.00	1250	48.38	8.00	
0512128	2		10000	50	N/A	1.350	N/A	270.00	1750	47.25	5.71	
0512128	3	D	10000	50	N/A	0.126	N/A	25.20	7150	18.02	1.40	29%
0512128	3		10000	50	N/A	0.168	N/A	33.60	7150	24.02	1.40	
0512128	4		10000	50	N/A	0.635	N/A	127.00	4000	50.80	2.50	

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 cr 2/3/06

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

re-extracts cr 2/3/06

Alpha Woods Hole Laboratories Raynham, MA

0512128ST

Alpha Woods Hole Lab
Batch Clean Up Report

01/19/2006 0512128STBIO - 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
0512128-01	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	1.25	0	0.15
0512128-02	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	1.75	0	0.15
0512128-03	D	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	7.15	0	0.15
0512128-03	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	7.15	0	0.15
0512128-04	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	4	0	0.15
SS011906B04	B	3630	MAL	1/25/2006				DMP	1/25/2006	True	2	0.5	0	0.15
SS011906LCS03	LCS	3630	MAL	1/25/2006				DMP	1/25/2006	True	2	0.5	0	0.15
SS011906LCSD03	LCSD	3630	MAL	1/25/2006				DMP	1/25/2006	True	2	0.5	0	0.15

2nd
2/13/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/19/2006 0512128STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512128-01	Silica columns eluted with 20 ml Pentane
0512128-02	
0512128-03	
0512128-03	
0512128-04	
SS011906B04	
SS011906LCS03	
SS011906LCSD03	

Post-Silica Column Gravimetric Determination

Analyst: DMP
Date: 1/25/06

BATCH: 0512128

Entered by: DMP
Verified by: DMP

Batch ID	Sample #	QC	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	% Oil Recov
		LCS	10000	50	N/A	0.250	N/A	50.00	N/A	N/A	N/A	100%
0512128	1		1000	50	N/A	0.174	N/A	3.48	950	3.31	1.05	
0512128	2		1000	50	N/A	0.549	N/A	10.98	450	4.94	2.22	
0512128	3	D	1000	50	N/A	0.097	N/A	1.94	950	1.84	1.05	30%
0512128	3		1000	50	N/A	0.131	N/A	2.62	950	2.49	1.05	
0512128	4		1000	50	N/A	0.503	N/A	10.06	500	5.03	2.00	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight ✓ 2nd 1/31/06

✓ 2nd 1/31/06

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

0512128ST.xls

Post-Silica Column Gravimetric Determination

Analyst: DMP
Date: 1-25-06

BATCH: 0512128

Entered by: DMP
Verified by: —

LCS ID #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.250	N/A		N/A	N/A	N/A	0%
0512128	1		1000	50	N/A	0.174	N/A					
0512128	2		1000	50	N/A	0.549	N/A					
0512128	3	D	1000	50	N/A	0.097	N/A					#VALUE!
0512128	3		1000	50	N/A	0.131	N/A					
0512128	4		1000	50	N/A	0.503	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

0512128ST.xls

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE GOWANUS CANAL
ETR: 0512128X

BIOMARKERS

0512128-01-F1	900	WHAC12 2OF5	100	1000	8.40	KLA	150	NA	1/26/2006
0512128-02-F1	900	WHAC12 2OF5	100	1000	12.68	KLA	150	NA	1/26/2006
0512128-03D-F1	900	WHAC12 2OF5	100	1000	1.47	KLA	150	NA	1/26/2006
0512128-03-F1	900	WHAC12 2OF5	100	1000	1.47	KLA	150	NA	1/26/2006
0512128-04-F1	900	WHAC12 2OF5	100	1000	5.00	KLA	150	NA	1/26/2006
SS011906-B04-F1	900	WHAC12 2OF5	100	1000	4.00	KLA	150	NA	1/26/2006

***SAMPLES 0512128-03, AND 0512128-03DUP MAY HAVE 200uL, 100uL, OR 0uL OF RIS IN THEM. *

[1] Includes Internal Std

2nd
W 2/3/06

*Sample -03X contained 2X RIS.
W 2/3/06

Alpha Woods Hole Lab
Batch Weight Report
12/30/2005

Lab ID	QC Type	PS123005B - Pan Weight	PS123005B - Wet Weight	PS123005B - Dry Weight	PS123005B - Dry Weight #2	PS123005B - Dry Weight #3	Percent Solid	RPD
0512124-01	D	1.01	6.14	5.3	5.3		83.63	0.65%
0512124-01	SAM	1.02	7.11	6.08	6.08		83.09	
0512124-02	SAM	1	6.2	4.39	4.4		65.38	
0512124-03	SAM	1.01	8.18	6.89	6.9		82.15	
0512124-04	SAM	0.97	6.68	3.04	3.04		36.25	
0512124-05	SAM	1.04	6.01	3.85	3.85		56.54	
0512124-06	SAM	1.02	7.03	5.04	5.04		66.89	
0512124-07	SAM	1.02	6.64	4.48	4.48		61.57	
0512124-08	SAM	1.01	6.62	5.7	5.7		83.6	
0512128-01	SAM	1.01	7.06	3.89	3.89		47.6	
0512128-02	SAM	0.98	7.89	3.72	3.73		39.8	
0512128-03	SAM	1	8.32	3.54	3.54		34.7	
0512128-04	SAM	1.01	6.87	4.54	4.54		60.24	
PSS123005B09	B						100	
PSS123005B09	B	1.03	1.03	1.03	1.03		100	

Initial: 12/30/2005 4:07:29 PM KJB
Weight #1: 1/3/2006 10:25:14 AM KJB
Weight #2: 1/3/2006 1:12:33 PM 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-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	47.6	5.21	60.61	10	NLJr

Parameter	Result		Parameter	Result
Naphthalene	12000000	E	Fluoranthene	1500000
C1-Naphthalenes	5600000	E	Pyrene	2100000
C2-Naphthalenes	2900000		C1-Fluoranthenes/Pyrenes	1400000
C3-Naphthalenes	930000		C2-Fluoranthenes/Pyrenes	340000
C4-Naphthalenes	200000		C3-Fluoranthenes/Pyrenes	78000
Biphenyl	570000		C4-Fluoranthenes/Pyrenes	20000
Dibenzofuran	140000		Naphthobenzothiophenes	150000
Acenaphthylene	290000		C1-Naphthobenzothiophenes	94000
Acenaphthene	3300000	E	C2-Naphthobenzothiophenes	36000
Fluorene	1400000		C3-Naphthobenzothiophenes	16000
C1-Fluorenes	520000		C4-Naphthobenzothiophenes	5900
C2-Fluorenes	250000		Benz[a]anthracene	670000
C3-Fluorenes	100000		Chrysene/Triphenylene	640000
Anthracene	1800000		C1-Chrysenes	340000
Phenanthrene	4400000	E	C2-Chrysenes	100000
C1-Phenanthrenes/Anthracenes	2000000		C3-Chrysenes	32000
C2-Phenanthrenes/Anthracenes	600000		C4-Chrysenes	13000
C3-Phenanthrenes/Anthracenes	150000		Benzo[b]fluoranthene	210000
C4-Phenanthrenes/Anthracenes	28000		Benzo[k]fluoranthene	340000
Retene	7800		Benzo[a]fluoranthene	130000
Dibenzothiophene	480000		Benzo[e]pyrene	250000
C1-Dibenzothiophenes	350000		Benzo[a]pyrene	540000
C2-Dibenzothiophenes	200000		Perylene	86000
C3-Dibenzothiophenes	76000		Indeno[1,2,3-cd]pyrene	200000
C4-Dibenzothiophenes	19000		Dibenz[a,h]anthracene	50000
Benzo(b)fluorene	280000		Benzo[g,h,i]perylene	210000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

02/02/06 08:14

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	47.6	5.21	60.61	10	NLJr

Parameter	Result
Carbazole	**83000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	103	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\JAN13\
Data File : P27688.D
Acq On : 15 Jan 2006 4:57 pm
Operator : NLJr
Sample : 0512128-01
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 04:51:24 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

MS for rev 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	60760m	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	98302m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	4306m	34.48	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.45%#			
58) Pyrene-d10	38.94	212	8926m	34.75	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.48%#			
81) Benzo[b]fluoranthene-d12	47.81	264	6848m	33.98	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.40%#			
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	20.45	128	13372411	48931.08	ng/mL#E	100
10) C1-Naphthalenes	23.15	142	6216215m	22745.80	ng/mL E-RE Rpt conc 2/2 cw 2/3/06	
11) C2-Naphthalenes	25.99	156	3267004m	11954.32	ng/mL	
12) C3-Naphthalenes	28.33	170	1043989m	3820.07	ng/mL	
13) C4-Naphthalenes	31.09	184	227739m	833.32	ng/mL	
15) 2-Methylnaphthalene	23.15	142	3934266	22615.78	ng/mL#E	100
16) 1-Methylnaphthalene	23.57	142	2262861	13666.39	ng/mL#E	100
22) Biphenyl	25.02	154	512906	2342.09	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	471422m	3145.88	ng/mL	
24) Dibenzofuran	28.12	168	141781m	586.50	ng/mL	
25) Acenaphthylene	26.74	152	317114m	1169.50	ng/mL	
26) Acenaphthene	27.48	153	2222496	13371.82	ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	29.02	170	72680m	555.76	ng/mL	
28) Fluorene	29.50	166	1120884m	5767.66	ng/mL	
29) C1-Fluorenes	31.73	180	412867m	2124.46	ng/mL	
30) C2-Fluorenes	33.91	194	198464m	1021.22	ng/mL	
31) C3-Fluorenes	36.60	208	81542m	419.59	ng/mL	
32) Dibenzothiophene	32.83	184	514608m	1980.37	ng/mL	
37) C1-Dibenzothiophenes	34.62	198	374320m	1440.50	ng/mL	
38) C2-Dibenzothiophenes	36.66	212	209897m	807.75	ng/mL	
39) C3-Dibenzothiophenes	38.10	226	80284m	308.96	ng/mL	
40) C4-Dibenzothiophenes	39.78	240	20020m	77.04	ng/mL	
41) Phenanthrene	33.35	178	4965251	17906.17	ng/mL E	98
47) C1-Phenanthrenes/Anthracen	35.41	192	2281940m	8229.36	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.56	206	719216m	2593.71	ng/mL	
49) 5AA IS BKGD	37.34	206	33849	122.07	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.40	220	171480m	618.41	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.59	234	31211m	112.56	ng/mL	
52) Retene	40.33	234	2011m	31.96	ng/mL	
53) Anthracene	33.51	178	1903119m	7389.83	ng/mL	
54) Carbazole	34.18	167	82939m	337.91	ng/mL	
55) 1-Methylphenanthrene	35.84	192	350119	1820.03	ng/mL	100
56) Fluoranthene	38.12	202	1764682m	5962.65	ng/mL	
57) Benzo(b)fluorene	40.65	216	208096m	1143.76	ng/mL	
59) Pyrene	39.03	202	2591188	8550.08	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.40	216	1737833m	5734.29	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.07	230	421730m	1391.57	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.94	244	97008m	320.10	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.57	258	25034m	82.60	ng/mL	
64) Naphthobenzothiophene	42.87	234	107436	382.29	ng/ml#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27688.D
Acq On : 15 Jan 2006 4:57 pm
Operator : NLJr
Sample : 0512128-01
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 04:51:24 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

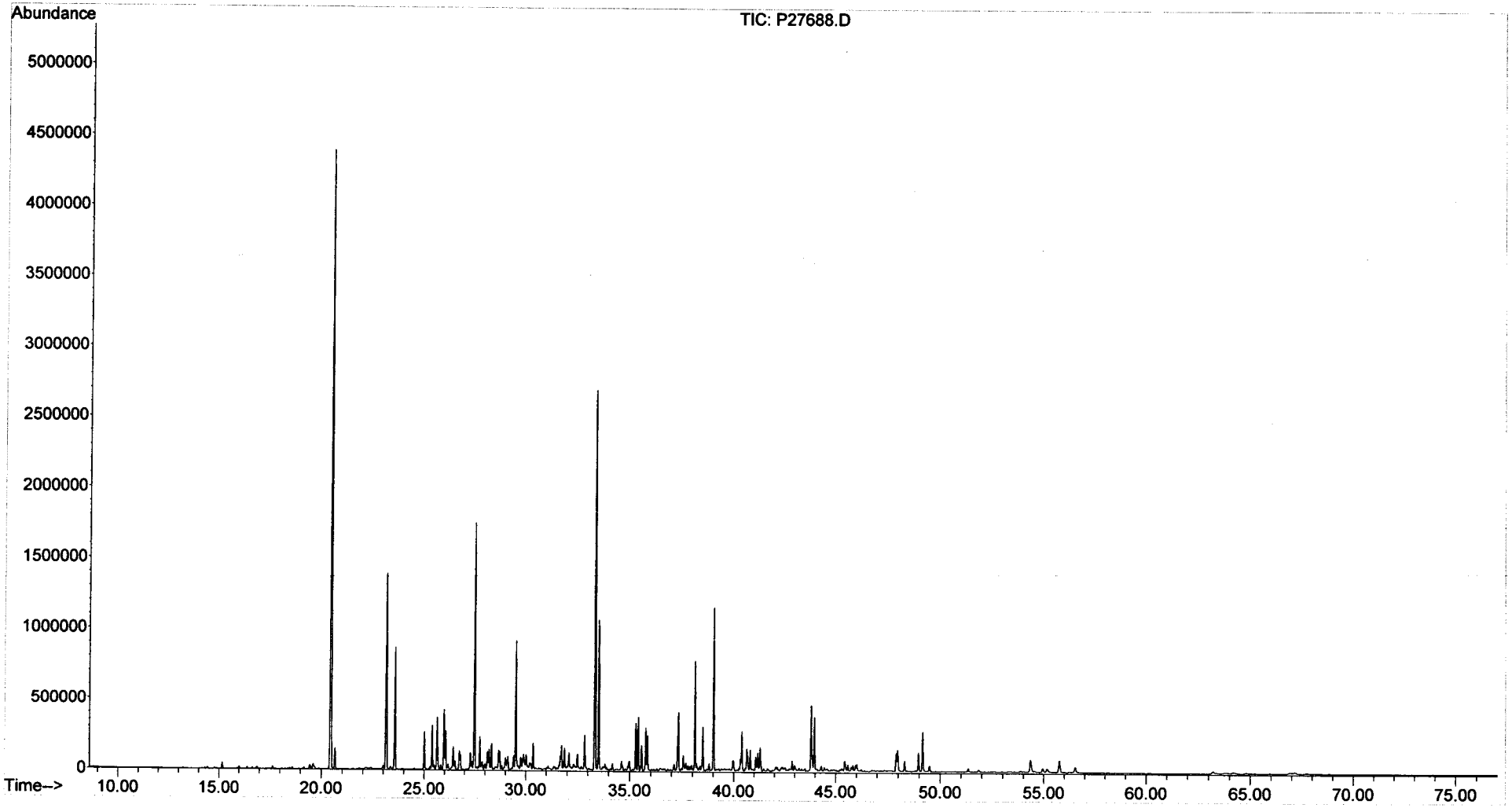
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.87	234	107436	382.29	ng/mL#	67
66) Naphthobenzothiophene-1,2-	43.21	234	30042m	106.90	ng/mL	
67) Naphthobenzothiophene-2,3-	43.51	234	34409m	122.44	ng/mL	
68) C1-Naphthobenzothiophenes	44.27	248	107947m	384.11	ng/ml	
69) C2-Naphthobenzothiophenes	45.76	262	40958m	145.74	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	18794m	66.87	ng/ml	
71) C4-Naphthobenzothiophenes	50.67	290	6757m	24.04	ng/mL	
73) Benz[a]anthracene	43.79	228	766307m	2729.75	ng/mL	
74) Chrysene	43.96	228	730814m	2591.95	ng/mL	
75) Chrysene/Triphenylene	43.96	228	735524m	2608.66	ng/mL	
76) C1-Chrysenes	45.43	242	393699m	1396.32	ng/mL	
77) C2-Chrysenes	47.15	256	118327m	419.67	ng/mL	
78) BBF-d12 Surr BKGD	47.77	256	2082	7.38	ng/mL	100
79) C3-Chrysenes	48.82	270	37193m	131.91	ng/mL	
80) C4-Chrysenes	49.90	284	15306m	54.29	ng/mL	
82) Benzo[b]fluoranthene	47.89	252	262327	870.08	ng/mL	100
83) Benzo[k]fluoranthene	47.97	252	443870	1407.85	ng/mL	100
84) Benzo[a]fluoranthene	48.30	252	172360	546.68	ng/mL#	1
85) Benzo[e]pyrene	48.96	252	297965m	1025.19	ng/mL	
86) Benzo[a]pyrene	49.17	252	646123m	2223.61	ng/mL	
87) Perylene	49.49	252	101884m	351.71	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.35	276	231001m	802.08	ng/mL	
89) Dibenz[a,h]anthracene	54.40	278	55439m	204.69	ng/mL	
90) Benzo[g,h,i]perylene	55.76	276	256561	854.38	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27688.D
Acq On : 15 Jan 2006 4:57 pm
Operator : NLJr
Sample : 0512128-01
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 04:51:24 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 I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01E**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	47.6	5.21	60.61	100	AC

Parameter	Result	
Naphthalene	**15000000**	
C1-Naphthalenes	**6800000**	
C2-Naphthalenes	4000	U
C3-Naphthalenes	4000	U
C4-Naphthalenes	4000	U
Biphenyl	2200	U
Dibenzofuran	2900	U
Acenaphthylene	4400	U
Acenaphthene	**3900000**	
Fluorene	2800	U
C1-Fluorenes	2800	U
C2-Fluorenes	2800	U
C3-Fluorenes	2800	U
Anthracene	3300	U
Phenanthrene	**5400000**	
C1-Phenanthrenes/Anthracenes	3500	U
C2-Phenanthrenes/Anthracenes	3500	U
C3-Phenanthrenes/Anthracenes	3500	U
C4-Phenanthrenes/Anthracenes	3500	U
Retene	3500	U
Dibenzothiophene	2700	U
C1-Dibenzothiophenes	2700	U
C2-Dibenzothiophenes	2700	U
C3-Dibenzothiophenes	2700	U
C4-Dibenzothiophenes	2700	U
Benzo(b)fluorene	2500	U

Parameter	Result	
Fluoranthene	2500	U
Pyrene	2200	U
C1-Fluoranthenes/Pyrenes	2200	U
C2-Fluoranthenes/Pyrenes	2200	U
C3-Fluoranthenes/Pyrenes	2200	U
C4-Fluoranthenes/Pyrenes	2200	U
Naphthobenzothiophenes	3000	U
C1-Naphthobenzothiophenes	3000	U
C2-Naphthobenzothiophenes	3000	U
C3-Naphthobenzothiophenes	3000	U
C4-Naphthobenzothiophenes	3000	U
Benz[a]anthracene	3800	U
Chrysene/Triphenylene	2600	U
C1-Chrysenes	2600	U
C2-Chrysenes	2600	U
C3-Chrysenes	2600	U
C4-Chrysenes	2600	U
Benzo[b]fluoranthene	2600	U
Benzo[k]fluoranthene	5000	U
Benzo[a]fluoranthene	5000	U
Benzo[e]pyrene	3400	U
Benzo[a]pyrene	3400	U
Perylene	4200	U
Indeno[1,2,3-cd]pyrene	5900	U
Dibenz[a,h]anthracene	4600	U
Benzo[g,h,i]perylene	4300	U

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

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

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 : P27796.D
Acq On : 20 Jan 2006 12:09 pm
Operator : AC
Sample : 0512128-01-RE
Misc : 100X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 05:17:16 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 MD 2/1/06

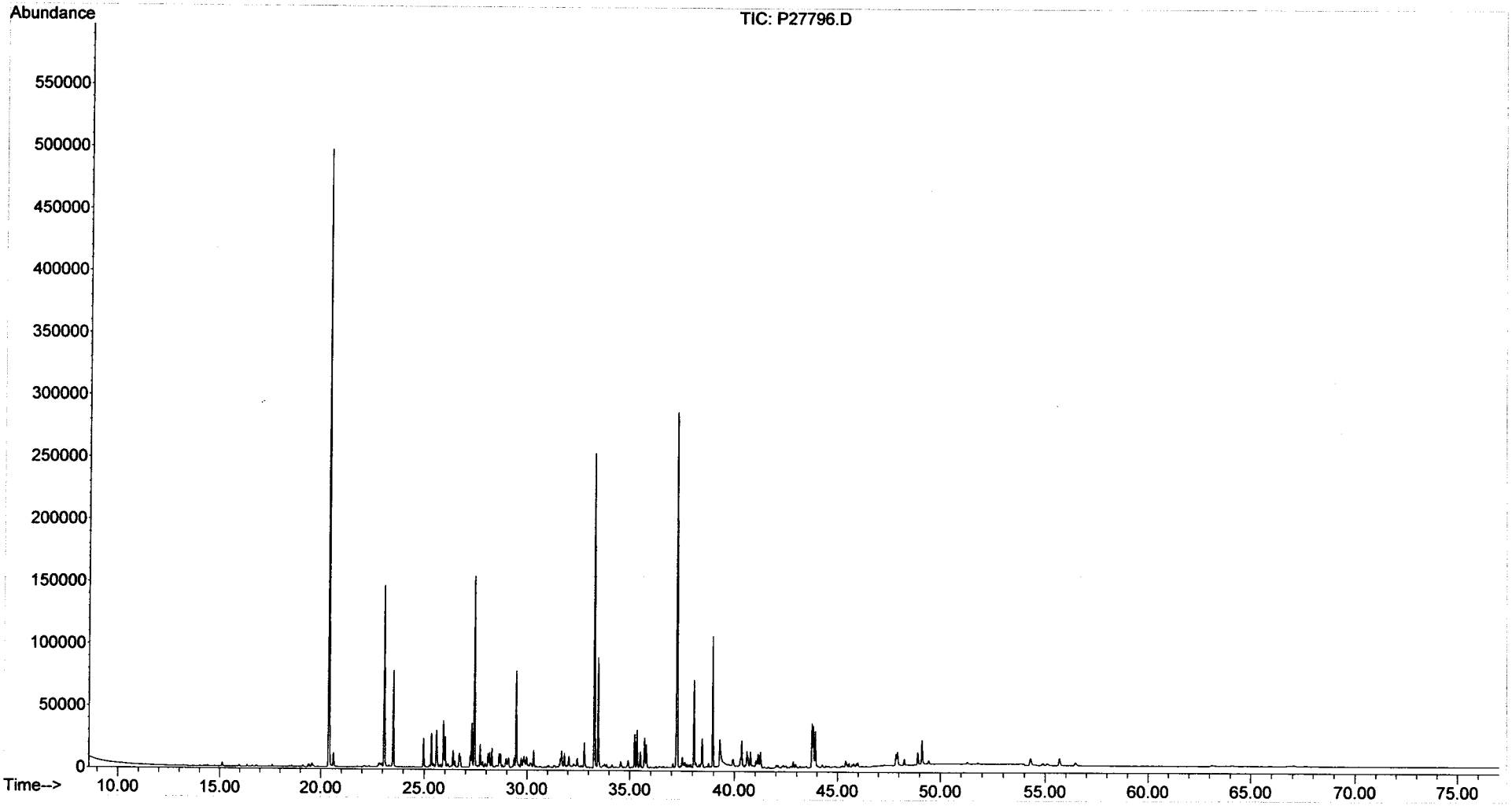
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	42858m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	66357m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	343m	3.89	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.39%#	
58) Pyrene-d10	38.89	212	687m	3.79	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.38%#	
81) Benzo[b]fluoranthene-d12	47.76	264	588m	4.32	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.43%#	
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	1206321m	6257.83	ng/mL	
10) C1-Naphthalenes	23.09	142	538583m	2793.92	ng/mL	
15) 2-Methylnaphthalene	23.09	142	342571	2791.80	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	193168	1653.93	ng/mL#	100
26) Acenaphthene	27.43	153	187986m	1603.47	ng/mL	
41) Phenanthrene	33.28	178	434525	2221.58	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 : P27796.D
Acq On : 20 Jan 2006 12:09 pm
Operator : AC
Sample : 0512128-01-RE
Misc : 100X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 05:17:16 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-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/19/06	47.6	5.21	8.75	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1000**	30,31-Bishomohopane-22S	**1100**
C24 Tricyclic Terpane	**690**	30,31-Bishomohopane-22R	**810**
C25 Tricyclic Terpane	**690**	30,31-Trishomohopane-22S	**600**
C24 Tetracyclic Terpane	**500**	30,31-Trishomohopane-22R	**380**
C26 Tricyclic Terpane-22S	**300**	Tetrakishomohopane-22S	**330**
C26 Tricyclic Terpane-22R	**290**	Tetrakishomohopane-22R	**240**
C28 Tricyclic Terpane-22S	**370**	Pentakishomohopane-22S	**220**
C28 Tricyclic Terpane-22R	**380**	Pentakishomohopane-22R	**160**
C29 Tricyclic Terpane-22S	**420**	13b(H),17a(H)-20S-Diacholestane	**1300**
C29 Tricyclic Terpane-22R	**410**	13b(H),17a(H)-20R-Diacholestane	**810**
18a-22,29,30-Trisnorneohopane-TS	**1500**	13b,17a-20S-Methyldiacholestane	**600**
C30 Tricyclic Terpane-22S	**330**	14a(H),17a(H)-20S-Cholestane	**1000**
C30 Tricyclic Terpane-22R	**260**	14a(H),17a(H)-20R-Cholestane	**3000**
17a(H)-22,29,30-Trisnorhopane-TM	**1800**	13b,17a-20R-Ethyldiacholestane	**400**
17a/b,21b/a 28,30-Bisnorhopane	**610**	13a,17b-20S-Ethyldiacholestane	**100**
17a(H),21b(H)-25-Norhopane	**200**	14a,17a-20S-Methylcholestane	**400**
30-Norhopane	**4300**	14a,17a-20R-Methylcholestane	**1600**
18a(H)-30-Norneohopane-C29Ts	**1400**	14a(H),17a(H)-20S-Ethylcholestane	**810**
17a(H)-Diahopane	**360**	14a(H),17a(H)-20R-Ethylcholestane	**1300**
30-Normoretane	**1000**	14b(H),17b(H)-20R-Cholestane	**1100**
18a(H)&18b(H)-Oleananes	**750**	14b(H),17b(H)-20S-Cholestane	**1100**
Hopane	**7400**	14b,17b-20R-Methylcholestane	**1100**
Moretane	**1200**	14b,17b-20S-Methylcholestane	**1400**
30-Homohopane-22S	**1800**	14b(H),17b(H)-20R-Ethylcholestane	**1400**
30-Homohopane-22R	**1600**	14b(H),17b(H)-20S-Ethylcholestane	**1300**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	99	50-130

N/A - Not Applicable

02/01/06 13:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34813.D
Acq On : 19 Jan 2006 3:32 pm
Operator : AC
Sample : 0512128-01
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 20 11:18:25 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 1/20/06

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	78277	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	74465	2263.52	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 226.35%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	140374m	2086.81	ng/mL	
84) Hopane (T19)	52.49	191	140047m	2081.95	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	19900	295.84	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.67	191	13168	195.76	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	13181m	195.95	ng/ml	RF Ret conc
88) C24 Tetracyclic Terpane (T	44.48	191	9560	142.12	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	5692m	84.62	ng/ml	2nd
90) C26 Tricyclic Terpane-22R	44.31	191	5497	81.72	ng/ml	100 2/3/06
91) C28 Tricyclic Terpane-22S	46.59	191	7059m	104.94	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	7146m	106.23	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	8087	120.22	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	7777m	115.61	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	28112	417.92	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.72	191	6312m	93.83	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	4865m	72.32	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	34153	507.72	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	11656m	173.28	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	3745	55.67	ng/ml	100
101) 30-Norhopane (T15)	51.08	191	81910m	1217.68	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	26884m	399.66	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	6879	102.26	ng/ml	100
104) 30-Normoretane (T17)	51.88	191	19715	293.09	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	14319m	212.87	ng/ml	
106) Moretane (T20)	53.18	191	22696m	337.40	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	35188	523.11	ng/ml	100
108) 30-Homohopane-22R (T22)	54.54	191	30719	456.67	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.89	191	20356	302.61	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	15439	229.52	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.07	191	11469m	170.50	ng/ml	
112) 30,31-Trishomohopane-22R (	58.69	191	7204m	107.10	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	6326m	94.04	ng/ml	
114) Tetrakishomohopane-22R (T3	61.68	191	4486	66.69	ng/ml	100
115) Pentakishomohopane-22S (T3	63.97	191	4137m	61.50	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	3092m	45.97	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	12532m	380.94	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	7552m	229.56	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	5602m	170.28	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	9634m	292.85	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	27565m	837.90	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	3760	114.29	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34813.D
Acq On : 19 Jan 2006 3:32 pm
Operator : AC
Sample : 0512128-01
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 20 11:18:25 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

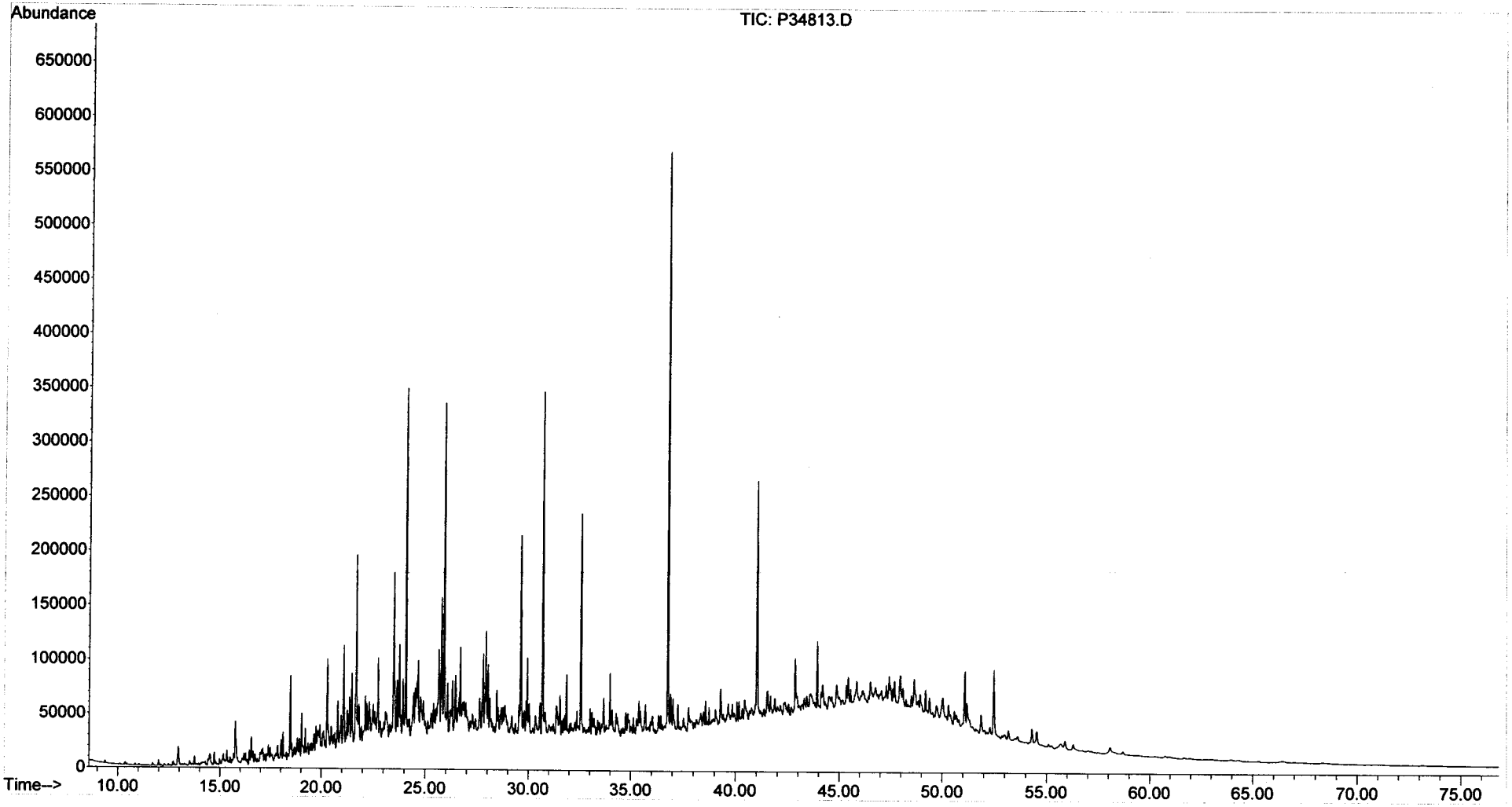
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	962	29.24	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	3770m	114.60	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	15178m	461.37	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	7523m	228.68	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	12441m	378.17	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	10635m	323.27	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	10655m	323.88	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	10270m	312.18	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	13045m	396.53	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	12830m	389.99	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	11849m	360.18	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 : P34813.D
Acq On : 19 Jan 2006 3:32 pm
Operator : AC
Sample : 0512128-01
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 20 11:18:25 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-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	47.6	5.29	63.33	10	AC

Parameter	Result		Parameter	Result
Naphthalene	13000000	E	Fluoranthene	1600000
C1-Naphthalenes	5800000	E	Pyrene	2300000
C2-Naphthalenes	2900000		C1-Fluoranthenes/Pyrenes	1500000
C3-Naphthalenes	910000		C2-Fluoranthenes/Pyrenes	340000
C4-Naphthalenes	190000		C3-Fluoranthenes/Pyrenes	73000
Biphenyl	580000		C4-Fluoranthenes/Pyrenes	19000
Dibenzofuran	140000		Naphthobenzothiophenes	160000
Acenaphthylene	240000		C1-Naphthobenzothiophenes	96000
Acenaphthene	3400000	E	C2-Naphthobenzothiophenes	34000
Fluorene	1500000		C3-Naphthobenzothiophenes	18000
C1-Fluorenes	560000		C4-Naphthobenzothiophenes	5100
C2-Fluorenes	250000		Benz[a]anthracene	690000
C3-Fluorenes	100000		Chrysene/Triphenylene	630000
Anthracene	1900000		C1-Chrysenes	330000
Phenanthrene	4900000	E	C2-Chrysenes	97000
C1-Phenanthrenes/Anthracenes	2100000		C3-Chrysenes	31000
C2-Phenanthrenes/Anthracenes	620000		C4-Chrysenes	12000
C3-Phenanthrenes/Anthracenes	150000		Benzo[b]fluoranthene	240000
C4-Phenanthrenes/Anthracenes	23000		Benzo[k]fluoranthene	340000
Retene	6700		Benzo[a]fluoranthene	130000
Dibenzothiophene	490000		Benzo[e]pyrene	250000
C1-Dibenzothiophenes	350000		Benzo[a]pyrene	560000
C2-Dibenzothiophenes	200000		Perylene	82000
C3-Dibenzothiophenes	74000		Indeno[1,2,3-cd]pyrene	230000
C4-Dibenzothiophenes	18000		Dibenz[a,h]anthracene	52000
Benzo(b)fluorene	300000		Benzo[g,h,i]perylene	230000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	116	50-130
Benzo[b]fluoranthene-d12	95	50-130

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

02/02/06 08:47

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	47.6	5.29	63.33	10	AC

Parameter	Result
Carbazole	**75000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	116	50-130
Benzo[b]fluoranthene-d12	95	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\PAH1\JANUARY06\JAN24\
Data File : P17758.D
Acq On : 26 Jan 2006 2:11 am
Operator : AC
Sample : 0512128-01X
Misc : 10X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 30 02:54:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS Gorum 2/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	41472m	500.00 ng/mL	0.00
72) Chrysene-d12	43.01	240	71899m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.22	152	2810m	31.61 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	3.16%#	
58) Pyrene-d10	38.10	212	6687m	36.58 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	3.66%#	
81) Benzo[b]fluoranthene-d12	46.92	264	4287m	29.94 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.99%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	

Target Compounds					Qvalue
9) Naphthalene	19.68	128	10897133m	51451.93 ng/mL E	
10) C1-Naphthalenes	22.37	142	4854389m	22920.50 ng/mL E	
11) C2-Naphthalenes	25.19	156	2429657m	11471.87 ng/mL	
12) C3-Naphthalenes	27.53	170	764142m	3607.97 ng/mL	
13) C4-Naphthalenes	30.29	184	162594m	767.70 ng/mL	
15) 2-Methylnaphthalene	22.37	142	3115341	23235.01 ng/mL# E	100
16) 1-Methylnaphthalene	22.78	142	1732656	13726.42 ng/mL# E	100
22) Biphenyl	24.24	154	386456m	2318.36 ng/mL	
23) 2,6-Dimethylnaphthalene	24.86	156	410954m	3693.21 ng/mL	
24) Dibenzofuran	27.31	168	104768m	559.48 ng/mL	
25) Acenaphthylene	25.94	152	197098m	970.57 ng/mL	
26) Acenaphthene	26.68	153	1713763	13585.87 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.23	170	67902m	679.77 ng/mL	
28) Fluorene	28.70	166	834674m	5899.99 ng/mL	
29) C1-Fluorenes	30.91	180	314065m	2220.00 ng/mL	
30) C2-Fluorenes	33.09	194	140763m	995.00 ng/mL	
31) C3-Fluorenes	35.74	208	58174m	411.21 ng/mL	
32) Dibenzothiophene	32.00	184	404404m	1938.39 ng/mL	
36) OTP	34.18	198	584m	2.80 ng/mL	
37) C1-Dibenzothiophenes	33.79	198	292852m	1403.70 ng/mL	
38) C2-Dibenzothiophenes	35.47	212	164891m	790.36 ng/mL	
39) C3-Dibenzothiophenes	37.28	226	61382m	294.22 ng/mL	
40) C4-Dibenzothiophenes	38.96	240	15202m	72.87 ng/mL	
41) Phenanthrene	32.52	178	4074193	19421.52 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.58	192	1742318m	8305.56 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.75	206	550626m	2624.81 ng/mL	
49) 5AA IS BKGD	36.51	206	33971	161.94 ng/mL	100
50) C3-Phenanthrenes/Anthracen	38.58	220	125485m	598.18 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.76	234	19337m	92.18 ng/mL	
52) Retene	39.51	234	1171m	26.70 ng/mL	
53) Anthracene	32.68	178	1462101m	7533.07 ng/mL	
54) Carbazole	33.34	167	53557m	298.14 ng/mL	
55) 1-Methylphenanthrene	35.01	192	263308m	1833.12 ng/mL	
56) Fluoranthene	37.28	202	1402166m	6277.64 ng/mL	
57) Benzo(b)fluorene	39.81	216	154706m	1186.82 ng/mL	
59) Pyrene	38.17	202	2048788	9018.74 ng/mL	100
60) C1-Fluoranthenes/Pyrenes	39.56	216	1315129m	5789.18 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.23	230	304975m	1342.50 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.11	244	66153m	291.20 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.75	258	17093m	75.24 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17758.D
Acq On : 26 Jan 2006 2:11 am
Operator : AC
Sample : 0512128-01X
Misc : 10X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 30 02:54:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

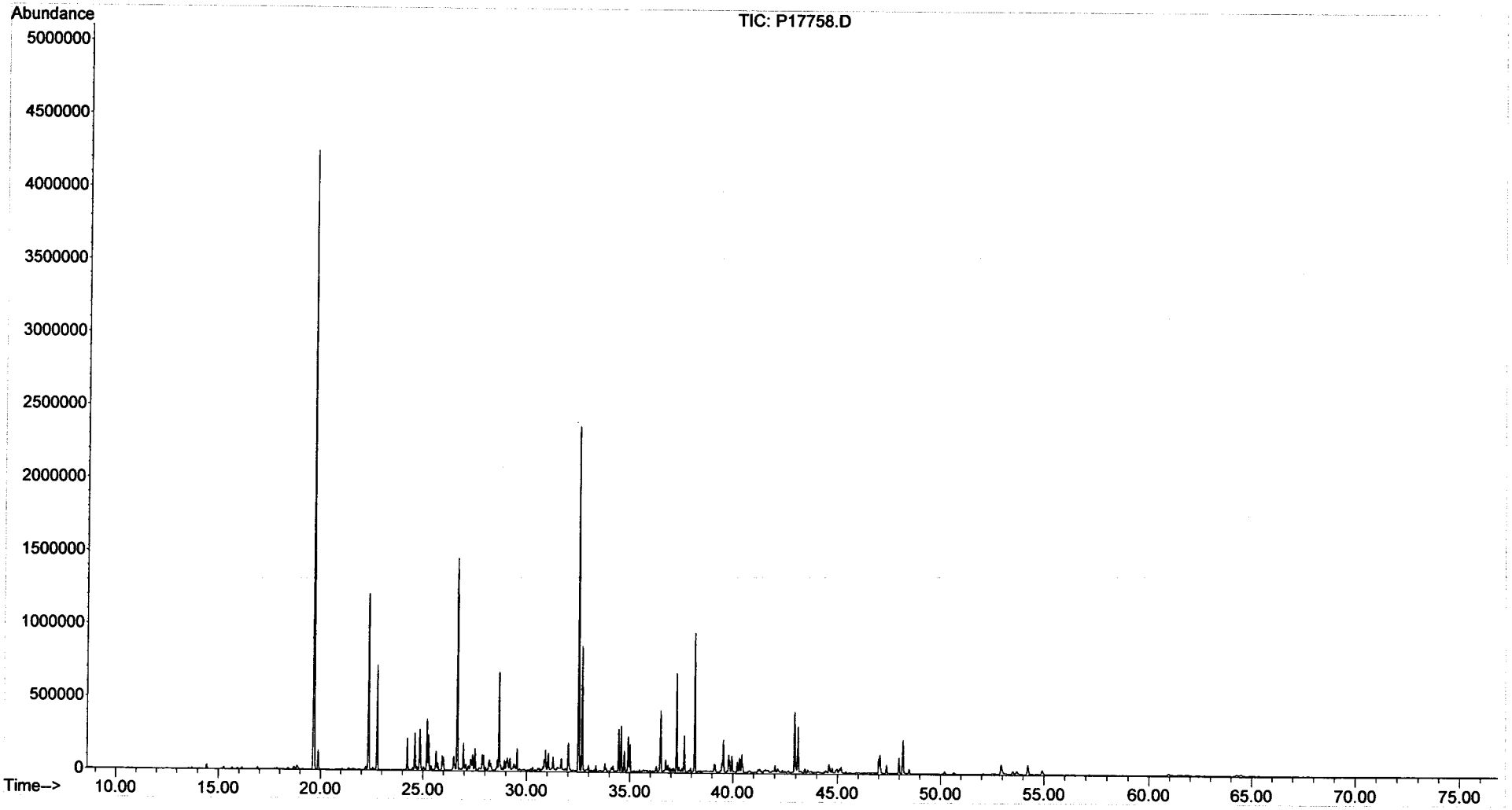
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
64) Naphthobenzothiophene	42.01	234	82357	387.52	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.01	234	82357	387.52	ng/mL	99
66) Naphthobenzothiophene-1,2-	42.36	234	23288	109.58	ng/mL#	24
67) Naphthobenzothiophene-2,3-	42.66	234	28425m	133.75	ng/mL	
68) C1-Naphthobenzothiophenes	43.42	248	81244m	382.28	ng/ml	
69) C2-Naphthobenzothiophenes	44.92	262	28834m	135.68	ng/ml	
70) C3-Naphthobenzothiophenes	46.83	276	15036m	70.75	ng/ml	
71) C4-Naphthobenzothiophenes	49.61	290	4343m	20.44	ng/mL	
73) Benz[a]anthracene	42.95	228	599143m	2737.47	ng/mL	
74) Chrysene	43.11	228	562796m	2516.53	ng/mL	
75) Chrysene/Triphenylene	43.11	228	562883m	2516.92	ng/mL	
76) C1-Chrysenes	44.59	242	294325m	1316.07	ng/mL	
77) C2-Chrysenes	46.30	256	87690m	392.10	ng/mL	
78) BBF-d12 Surr BKGD	46.90	256	1083m	4.84	ng/mL	
79) C3-Chrysenes	47.90	270	27796m	124.29	ng/mL	
80) C4-Chrysenes	48.89	284	11125m	49.75	ng/mL	
82) Benzo[b]fluoranthene	47.00	252	212146	943.80	ng/mL	100
83) Benzo[k]fluoranthene	47.07	252	313417	1340.29	ng/mL	100
84) Benzo[a]fluoranthene	47.38	252	121666	520.29	ng/mL#	1
85) Benzo[e]pyrene	47.99	252	218589	1004.44	ng/mL	97
86) Benzo[a]pyrene	48.18	252	477331m	2216.83	ng/mL	
87) Perylene	48.48	252	68770	326.74	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.94	276	173063m	913.33	ng/mL	
89) Dibenz[a,h]anthracene	53.00	278	39895m	206.55	ng/mL	
90) Benzo[g,h,i]perylene	54.23	276	196486	899.87	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17758.D
Acq On : 26 Jan 2006 2:11 am
Operator : AC
Sample : 0512128-01X
Misc : 10X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 30 02:54:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01EX**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	47.6	5.29	63.33	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**13000000**		Fluoranthene	2500	U
C1-Naphthalenes	**5800000**		Pyrene	2200	U
C2-Naphthalenes	4200	U	C1-Fluoranthenes/Pyrenes	2200	U
C3-Naphthalenes	4200	U	C2-Fluoranthenes/Pyrenes	2200	U
C4-Naphthalenes	4200	U	C3-Fluoranthenes/Pyrenes	2200	U
Biphenyl	2300	U	C4-Fluoranthenes/Pyrenes	2200	U
Dibenzofuran	3000	U	Naphthobenzothiophenes	3000	U
Acenaphthylene	4600	U	C1-Naphthobenzothiophenes	3000	U
Acenaphthene	**3400000**		C2-Naphthobenzothiophenes	3000	U
Fluorene	2900	U	C3-Naphthobenzothiophenes	3000	U
C1-Fluorenes	2900	U	C4-Naphthobenzothiophenes	3000	U
C2-Fluorenes	2900	U	Benz[a]anthracene	4000	U
C3-Fluorenes	2900	U	Chrysene/Triphenylene	2700	U
Anthracene	3400	U	C1-Chrysenes	2700	U
Phenanthrene	**4800000**		C2-Chrysenes	2700	U
C1-Phenanthrenes/Anthracenes	3600	U	C3-Chrysenes	2700	U
C2-Phenanthrenes/Anthracenes	3600	U	C4-Chrysenes	2700	U
C3-Phenanthrenes/Anthracenes	3600	U	Benzo[b]fluoranthene	2700	U
C4-Phenanthrenes/Anthracenes	3600	U	Benzo[k]fluoranthene	5100	U
Retene	3600	U	Benzo[a]fluoranthene	5100	U
Dibenzothiophene	2800	U	Benzo[e]pyrene	3400	U
C1-Dibenzothiophenes	2800	U	Benzo[a]pyrene	3500	U
C2-Dibenzothiophenes	2800	U	Perylene	4400	U
C3-Dibenzothiophenes	2800	U	Indeno[1,2,3-cd]pyrene	6000	U
C4-Dibenzothiophenes	2800	U	Dibenz[a,h]anthracene	4800	U
Benzo(b)fluorene	2500	U	Benzo[g,h,i]perylene	4400	U

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

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17772.D
Acq On : 26 Jan 2006 1:45 pm
Operator : AC
Sample : 0512128-01-RE X
Misc : 100X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 03:35:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WR 2/1/06

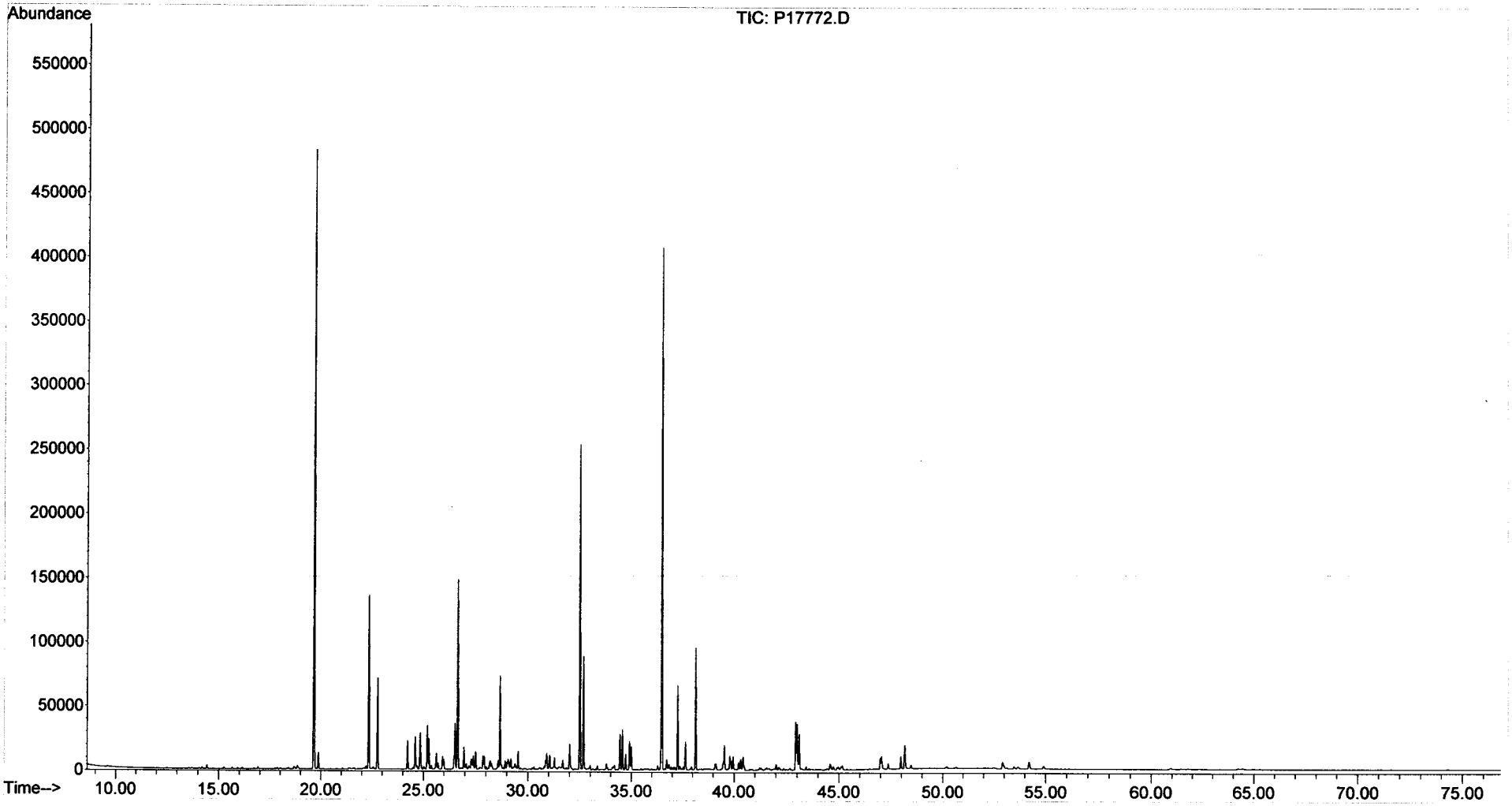
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	40803	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	63707m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	298m	3.41	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.34%#	
58) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
81) Benzo[b]fluoranthene-d12	46.90	264	364m	2.87	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.29%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	19.66	128	1105462	5305.13	ng/mL#	100
10) C1-Naphthalenes	22.34	142	478527m	2296.46	ng/mL	
15) 2-Methylnaphthalene	22.34	142	306313	2322.02	ng/mL#	100
16) 1-Methylnaphthalene	22.78	142	171818	1383.49	ng/mL#	100
26) Acenaphthene	26.67	153	169751	1367.77	ng/mL	99
41) Phenanthrene	32.50	178	397600	1926.42	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17772.D
Acq On : 26 Jan 2006 1:45 pm
Operator : AC
Sample : 0512128-01-RE X
Misc : 100X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 03:35:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/31/06	47.6	5.29	8.4	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**700**	30,31-Bishomohopane-22S	**570**
C24 Tricyclic Terpane	**460**	30,31-Bishomohopane-22R	**380**
C25 Tricyclic Terpane	**450**	30,31-Trishomohopane-22S	**310**
C24 Tetracyclic Terpane	**260**	30,31-Trishomohopane-22R	**210**
C26 Tricyclic Terpane-22S	**190**	Tetrakishomohopane-22S	**180**
C26 Tricyclic Terpane-22R	**190**	Tetrakishomohopane-22R	**110**
C28 Tricyclic Terpane-22S	**210**	Pentakishomohopane-22S	**120**
C28 Tricyclic Terpane-22R	**240**	Pentakishomohopane-22R	**90**
C29 Tricyclic Terpane-22S	**250**	13b(H),17a(H)-20S-Diacholestane	**800**
C29 Tricyclic Terpane-22R	**240**	13b(H),17a(H)-20R-Diacholestane	**460**
18a-22,29,30-Trisnorneohopane-TS	**710**	13b,17a-20S-Methyldiacholestane	**360**
C30 Tricyclic Terpane-22S	**180**	14a(H),17a(H)-20S-Cholestane	**600**
C30 Tricyclic Terpane-22R	**160**	14a(H),17a(H)-20R-Cholestane	**1800**
17a(H)-22,29,30-Trisnorhopane-TM	**950**	13b,17a-20R-Ethyldiacholestane	**210**
17a/b,21b/a 28,30-Bisnorhopane	**340**	13a,17b-20S-Ethyldiacholestane	**73**
17a(H),21b(H)-25-Norhopane	**110**	14a,17a-20S-Methylcholestane	**280**
30-Norhopane	**2100**	14a,17a-20R-Methylcholestane	**980**
18a(H)-30-Norneohopane-C29Ts	**710**	14a(H),17a(H)-20S-Ethylcholestane	**470**
17a(H)-Diahopane	**180**	14a(H),17a(H)-20R-Ethylcholestane	**770**
30-Normoretane	**530**	14b(H),17b(H)-20R-Cholestane	**690**
18a(H)&18b(H)-Oleananes	**380**	14b(H),17b(H)-20S-Cholestane	**660**
Hopane	**3600**	14b,17b-20R-Methylcholestane	**700**
Moretane	**550**	14b,17b-20S-Methylcholestane	**800**
30-Homohopane-22S	**890**	14b(H),17b(H)-20R-Ethylcholestane	**940**
30-Homohopane-22R	**810**	14b(H),17b(H)-20S-Ethylcholestane	**600**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	94	50-130

N/A - Not Applicable

02/01/06 13:49

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34905.D
Acq On : 31 Jan 2006 2:59 pm
Operator : AC
Sample : 0512128-01X
Misc : 1X REXTRACT RTERUN
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 01 10:20:19 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 2/1/06

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	91498	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	85782	2230.75	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 223.07%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	84082m	1069.36	ng/mL	
84) Hopane (T19)	52.47	191	83834m	1066.20	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	16447m	209.17	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	10952	139.29	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.14	191	10563m	134.34	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	6216m	79.06	ng/ml	
89) C26 Tricyclic Terpane-22S	44.20	191	4508	57.33	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.30	191	4517m	57.45	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	5020m	63.84	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	5726m	72.82	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	5859	74.51	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	5623m	71.51	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	16808m	213.76	ng/ml	
96) C30 Tricyclic Terpane-22S	48.71	191	4189	53.28	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	3743m	47.60	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	22326	283.94	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	8108m	103.12	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	2522	32.07	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	49422m	628.55	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.18	191	16796m	213.61	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	4306m	54.76	ng/ml	
104) 30-Normoretane (T17)	51.87	191	12506	159.05	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	8879m	112.92	ng/ml	
106) Moretane (T20)	53.17	191	13054m	166.02	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	20951	266.46	ng/ml	100
108) 30-Homohopane-22R (T22)	54.53	191	19144	243.47	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.87	191	13331	169.54	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.26	191	8925	113.51	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.05	191	7357	93.57	ng/ml	100
112) 30,31-Trishomohopane-22R (	58.67	191	5047	64.19	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.76	191	4335	55.13	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.66	191	2602	33.09	ng/ml	100
115) Pentakishomohopane-22S (T3	63.95	191	2865	36.44	ng/ml	100
116) Pentakishomohopane-22R (T3	65.26	191	2121m	26.97	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	9176	238.62	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	5260m	136.79	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	4107m	106.80	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.41	217	6861m	178.42	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	20410	530.76	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	2437m	63.37	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34905.D
Acq On : 31 Jan 2006 2:59 pm
Operator : AC
Sample : 0512128-01
Misc : 1X REXTRACT RTERUN
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 01 10:20:19 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

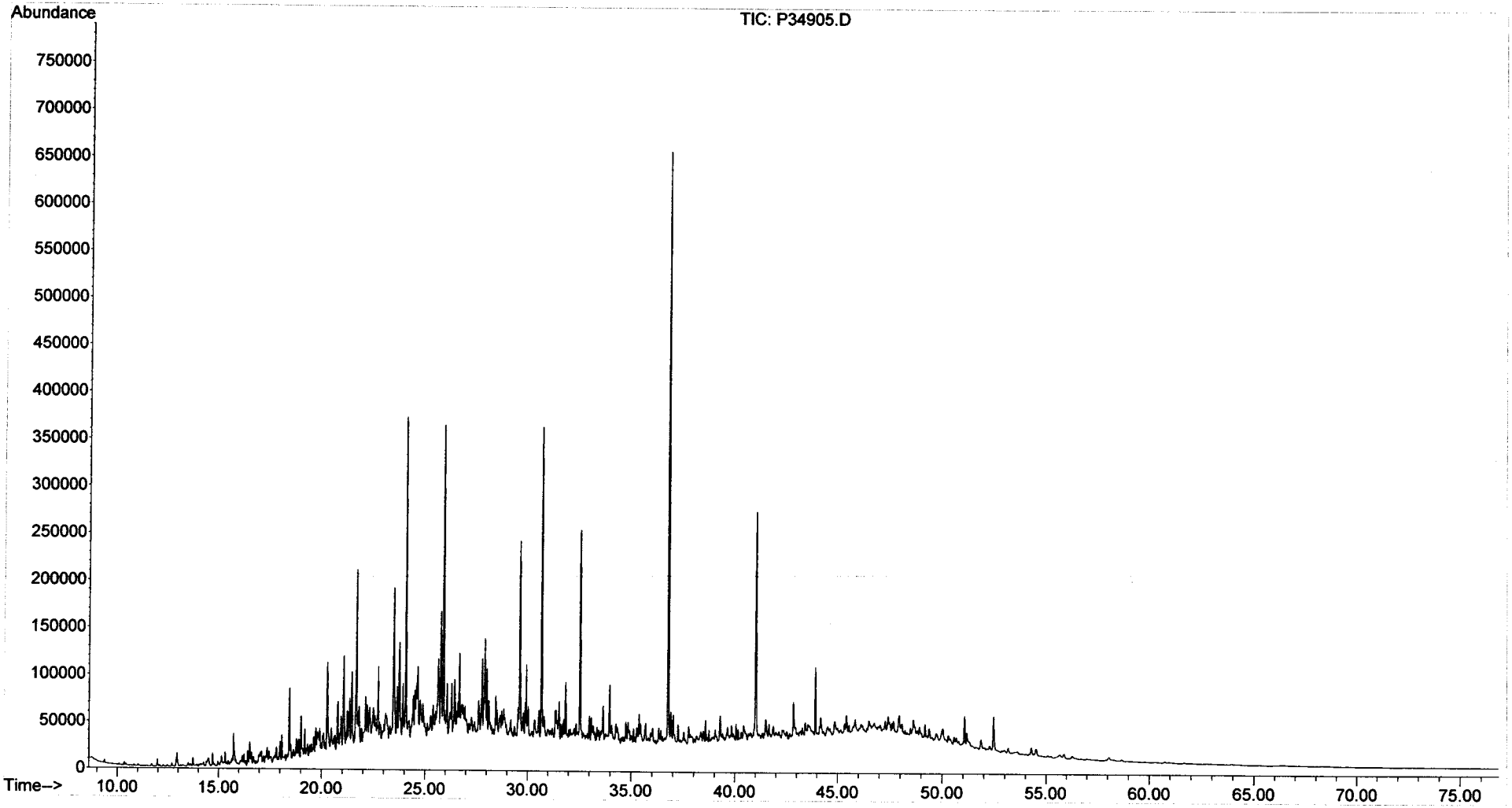
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	842	21.90	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	3283m	85.37	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	11343m	294.97	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	5453m	141.80	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	8831m	229.65	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	7949m	206.71	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	7662m	199.25	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	8053m	209.42	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	9278m	241.27	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.98	218	10898	283.40	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	6896m	179.33	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34905.D
Acq On : 31 Jan 2006 2:59 pm
Operator : AC
Sample : 0512128-01
Misc : 1X REXTRACT RTERUN
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 01 10:20:19 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-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	39.8	4.99	42.11	10	NLJr

Parameter	Result		Parameter	Result
Naphthalene	**4200000**	E	Fluoranthene	**610000**
C1-Naphthalenes	**2400000**	E	Pyrene	**950000**
C2-Naphthalenes	**1200000**		C1-Fluoranthenes/Pyrenes	**690000**
C3-Naphthalenes	**420000**		C2-Fluoranthenes/Pyrenes	**190000**
C4-Naphthalenes	**130000**		C3-Fluoranthenes/Pyrenes	**54000**
Biphenyl	**260000**		C4-Fluoranthenes/Pyrenes	**16000**
Dibenzofuran	**55000**		Naphthobenzothiophenes	**82000**
Acenaphthylene	**200000**		C1-Naphthobenzothiophenes	**63000**
Acenaphthene	**1200000**		C2-Naphthobenzothiophenes	**28000**
Fluorene	**490000**		C3-Naphthobenzothiophenes	**13000**
C1-Fluorenes	**210000**		C4-Naphthobenzothiophenes	**4500**
C2-Fluorenes	**140000**		Benz[a]anthracene	**330000**
C3-Fluorenes	**75000**		Chrysene/Triphenylene	**310000**
Anthracene	**540000**		C1-Chrysenes	**200000**
Phenanthrene	**1700000**		C2-Chrysenes	**64000**
C1-Phenanthrenes/Anthracenes	**890000**		C3-Chrysenes	**23000**
C2-Phenanthrenes/Anthracenes	**340000**		C4-Chrysenes	**12000**
C3-Phenanthrenes/Anthracenes	**110000**		Benzo[b]fluoranthene	**110000**
C4-Phenanthrenes/Anthracenes	**24000**		Benzo[k]fluoranthene	**170000**
Retene	**5800**		Benzo[a]fluoranthene	**70000**
Dibenzothiophene	**200000**		Benzo[e]pyrene	**140000**
C1-Dibenzothiophenes	**180000**		Benzo[a]pyrene	**290000**
C2-Dibenzothiophenes	**120000**		Perylene	**43000**
C3-Dibenzothiophenes	**61000**		Indeno[1,2,3-cd]pyrene	**110000**
C4-Dibenzothiophenes	**20000**		Dibenz[a,h]anthracene	**28000**
Benzo(b)fluorene	**120000**		Benzo[g,h,i]perylene	**120000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	92	50-130

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

02/02/06 08:15

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	39.8	4.99	42.11	10	NLJr

Parameter	Result
Carbazole	**11000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	92	50-130

N/A - Not Applicable

02/02/06 08:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27690.D
Acq On : 15 Jan 2006 6:32 pm
Operator : NLJr
Sample : 0512128-02
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 04:59:20 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

MSforWW 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	65412m	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	104040m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	5410	40.24	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.02%#			
58) Pyrene-d10	38.94	212	12090m	43.72	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.37%#			
81) Benzo[b]fluoranthene-d12	47.81	264	9269m	43.46	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.35%#			
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	20.44	128	5759536	19575.95	ng/mL#E	100
10) C1-Naphthalenes	23.14	142	3295308m	11200.35	ng/mL E	
11) C2-Naphthalenes	25.98	156	1701682m	5783.81	ng/mL	
12) C3-Naphthalenes	28.33	170	586364m	1992.98	ng/mL	
13) C4-Naphthalenes	31.09	184	179823m	611.20	ng/mL	
15) 2-Methylnaphthalene	23.14	142	2049903	10945.65	ng/mL#E	100
16) 1-Methylnaphthalene	23.56	142	1236670	6937.61	ng/mL#	100
22) Biphenyl	25.02	154	286502m	1215.22	ng/mL	
23) 2,6-Dimethylnaphthalene	25.64	156	251949m	1561.73	ng/mL	
24) Dibenzofuran	28.11	168	67585m	259.69	ng/mL	
25) Acenaphthylene	26.74	152	268142m	918.57	ng/mL	
26) Acenaphthene	27.47	153	984676m	5503.05	ng/mL	
27) 2,3,5-Trimethylnaphthalene	29.02	170	42222m	299.89	ng/mL	
28) Fluorene	29.50	166	480348	2295.91	ng/mL	99
29) C1-Fluorenes	31.73	180	210915m	1008.11	ng/mL	
30) C2-Fluorenes	33.91	194	133069m	636.03	ng/mL	
31) C3-Fluorenes	35.89	208	74135m	354.34	ng/mL	
32) Dibenzothiophene	32.83	184	262021m	936.63	ng/mL	
37) C1-Dibenzothiophenes	34.62	198	233939m	836.25	ng/mL	
38) C2-Dibenzothiophenes	36.30	212	163376m	584.01	ng/mL	
39) C3-Dibenzothiophenes	38.10	226	80979m	289.47	ng/mL	
40) C4-Dibenzothiophenes	39.78	240	26500m	94.73	ng/mL	
41) Phenanthrene	33.34	178	2390987	8009.38	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.41	192	1255795m	4206.69	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.56	206	509529m	1706.83	ng/mL	
49) 5AA IS BKGD	37.34	206	27582	92.39	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.40	220	153689m	514.83	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.61	234	33358m	111.74	ng/mL	
52) Retene	40.33	234	1843m	27.21	ng/mL	
53) Anthracene	33.51	178	707279m	2551.05	ng/mL	
54) Carbazole	34.18	167	14244m	53.91	ng/mL	
55) 1-Methylphenanthrene	35.84	192	190922	921.89	ng/mL	100
56) Fluoranthene	38.12	202	922005m	2893.78	ng/mL	
57) Benzo(b)fluorene	40.65	216	114427m	584.20	ng/mL	
59) Pyrene	39.01	202	1455441	4460.94	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.40	216	1055092m	3233.87	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.07	230	293917m	900.86	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.33	244	83259m	255.19	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.57	258	23954m	73.42	ng/mL	
64) Naphthobenzothiophene	42.87	234	73713	243.64	ng/ml#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27690.D
Acq On : 15 Jan 2006 6:32 pm
Operator : NLJr
Sample : 0512128-02
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 04:59:20 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

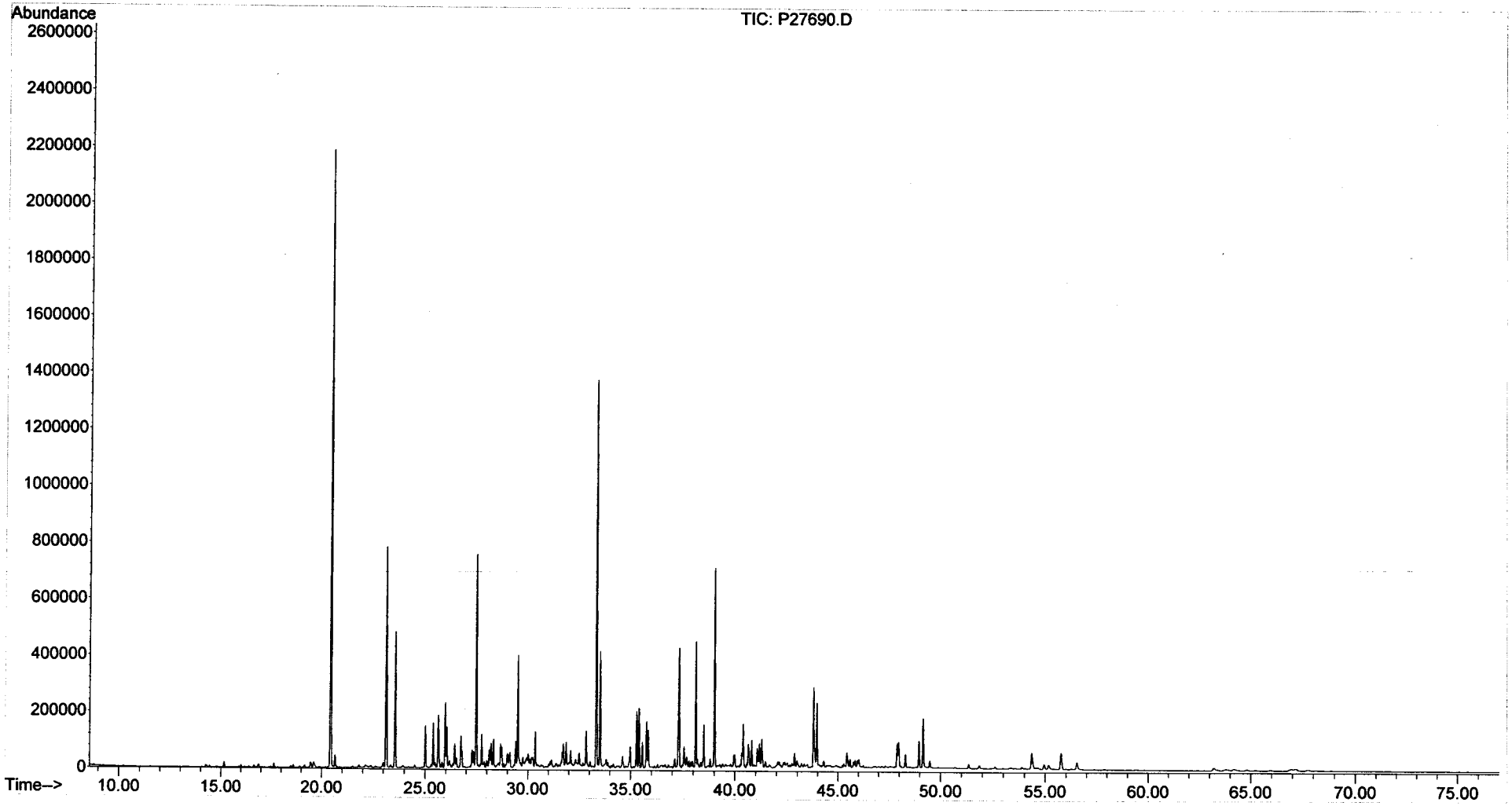
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.87	234	73713	243.64	ng/mL#	67
66) Naphthobenzothiophene-1,2-	43.21	234	20070m	66.34	ng/mL	
67) Naphthobenzothiophene-2,3-	43.51	234	22906m	75.71	ng/mL	
68) C1-Naphthobenzothiophenes	44.27	248	89275m	295.07	ng/ml	
69) C2-Naphthobenzothiophenes	45.76	262	39985m	132.16	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	18259m	60.35	ng/ml	
71) C4-Naphthobenzothiophenes	49.06	290	6448m	21.31	ng/mL	
73) Benz[a]anthracene	43.79	228	463155m	1558.86	ng/mL	
74) Chrysene	43.96	228	436849m	1463.91	ng/mL	
75) Chrysene/Triphenylene	43.96	228	436457m	1462.59	ng/mL	
76) C1-Chrysenes	45.43	242	277266m	929.14	ng/mL	
77) C2-Chrysenes	47.15	256	90878m	304.54	ng/mL	
78) BBF-d12 Surr BKGD	47.77	256	1464	4.91	ng/mL	100
79) C3-Chrysenes	48.82	270	32431m	108.68	ng/mL	
80) C4-Chrysenes	49.90	284	16731m	56.07	ng/mL	
82) Benzo[b]fluoranthene	47.89	252	171598	537.76	ng/mL	100
83) Benzo[k]fluoranthene	47.97	252	268237	803.86	ng/mL	100
84) Benzo[a]fluoranthene	48.30	252	110712	331.78	ng/mL#	1
85) Benzo[e]pyrene	48.96	252	207717m	675.26	ng/mL	
86) Benzo[a]pyrene	49.17	252	425695	1384.22	ng/mL	100
87) Perylene	49.49	252	62379	203.46	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.35	276	156472m	513.34	ng/mL	
89) Dibenz[a,h]anthracene	54.39	278	37162m	129.64	ng/mL	
90) Benzo[g,h,i]perylene	55.76	276	180697	568.56	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27690.D
Acq On : 15 Jan 2006 6:32 pm
Operator : NLJr
Sample : 0512128-02
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 04:59:20 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 I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02E**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	39.8	4.99	42.11	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4800000**		Fluoranthene	2100	U
C1-Naphthalenes	**2700000**		Pyrene	1900	U
C2-Naphthalenes	3500	U	C1-Fluoranthenes/Pyrenes	1900	U
C3-Naphthalenes	3500	U	C2-Fluoranthenes/Pyrenes	1900	U
C4-Naphthalenes	3500	U	C3-Fluoranthenes/Pyrenes	1900	U
Biphenyl	1900	U	C4-Fluoranthenes/Pyrenes	1900	U
Dibenzofuran	2500	U	Naphthobenzothiophenes	2600	U
Acenaphthylene	3800	U	C1-Naphthobenzothiophenes	2600	U
Acenaphthene	2400	U	C2-Naphthobenzothiophenes	2600	U
Fluorene	2400	U	C3-Naphthobenzothiophenes	2600	U
C1-Fluorenes	2400	U	C4-Naphthobenzothiophenes	2600	U
C2-Fluorenes	2400	U	Benz[a]anthracene	3300	U
C3-Fluorenes	2400	U	Chrysene/Triphenylene	2300	U
Anthracene	2800	U	C1-Chrysenes	2300	U
Phenanthrene	3100	U	C2-Chrysenes	2300	U
C1-Phenanthrenes/Anthracenes	3100	U	C3-Chrysenes	2300	U
C2-Phenanthrenes/Anthracenes	3100	U	C4-Chrysenes	2300	U
C3-Phenanthrenes/Anthracenes	3100	U	Benzo[b]fluoranthene	2200	U
C4-Phenanthrenes/Anthracenes	3100	U	Benzo[k]fluoranthene	4300	U
Retene	3100	U	Benzo[a]fluoranthene	4300	U
Dibenzothiophene	2400	U	Benzo[e]pyrene	2900	U
C1-Dibenzothiophenes	2400	U	Benzo[a]pyrene	3000	U
C2-Dibenzothiophenes	2400	U	Perylene	3700	U
C3-Dibenzothiophenes	2400	U	Indeno[1,2,3-cd]pyrene	5100	U
C4-Dibenzothiophenes	2400	U	Dibenz[a,h]anthracene	4000	U
Benzo(b)fluorene	2100	U	Benzo[g,h,i]perylene	3700	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	98	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 : P27798.D
Acq On : 20 Jan 2006 1:52 pm
Operator : AC
Sample : 0512128-02-RE
Misc : 100X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 30 05:19:04 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 MW 2/1/06

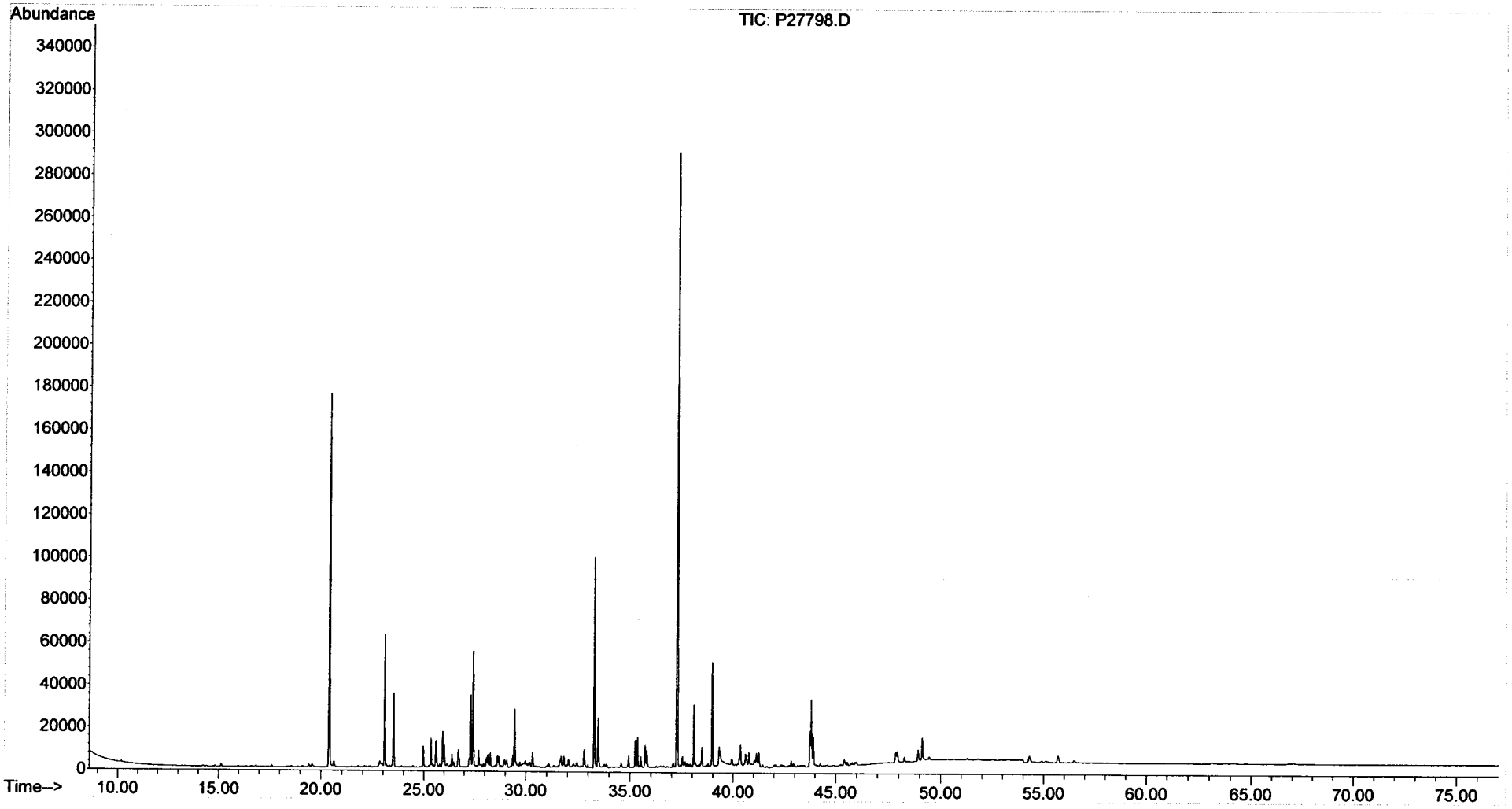
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	42103m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	64967m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	414	4.78	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.48%#	
58) Pyrene-d10	38.89	212	881m	4.95	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.50%#	
81) Benzo[b]fluoranthene-d12	47.77	264	620	4.65	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.47%#	
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
9) Naphthalene	20.39	128	430517m	2273.37	ng/mL	
10) C1-Naphthalenes	23.09	142	238250m	1258.09	ng/mL	
15) 2-Methylnaphthalene	23.09	142	148949	1235.64	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 : P27798.D
Acq On : 20 Jan 2006 1:52 pm
Operator : AC
Sample : 0512128-02-RE
Misc : 100X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 30 05:19:04 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-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/19/06	39.8	4.99	13.34	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**3500**	30,31-Bishomohopane-22S	**4400**
C24 Tricyclic Terpane	**2100**	30,31-Bishomohopane-22R	**3200**
C25 Tricyclic Terpane	**2100**	30,31-Trishomohopane-22S	**2600**
C24 Tetracyclic Terpane	**1900**	30,31-Trishomohopane-22R	**1800**
C26 Tricyclic Terpane-22S	**880**	Tetrakishomohopane-22S	**1600**
C26 Tricyclic Terpane-22R	**890**	Tetrakishomohopane-22R	**1100**
C28 Tricyclic Terpane-22S	**1100**	Pentakishomohopane-22S	**1300**
C28 Tricyclic Terpane-22R	**1100**	Pentakishomohopane-22R	**1000**
C29 Tricyclic Terpane-22S	**1400**	13b(H),17a(H)-20S-Diacholestane	**3900**
C29 Tricyclic Terpane-22R	**1200**	13b(H),17a(H)-20R-Diacholestane	**2200**
18a-22,29,30-Trisnorneohopane-TS	**5000**	13b,17a-20S-Methyldiacholestane	**1500**
C30 Tricyclic Terpane-22S	**990**	14a(H),17a(H)-20S-Cholestane	**2300**
C30 Tricyclic Terpane-22R	**940**	14a(H),17a(H)-20R-Cholestane	**6900**
17a(H)-22,29,30-Trisnorhopane-TM	**5100**	13b,17a-20R-Ethyldiacholestane	**1200**
17a/b,21b/a 28,30-Bisnorhopane	**1200**	13a,17b-20S-Ethyldiacholestane	**370**
17a(H),21b(H)-25-Norhopane	**690**	14a,17a-20S-Methylcholestane	**1200**
30-Norhopane	**15000**	14a,17a-20R-Methylcholestane	**3000**
18a(H)-30-Norneohopane-C29Ts	**4100**	14a(H),17a(H)-20S-Ethylcholestane	**2200**
17a(H)-Diahopane	**890**	14a(H),17a(H)-20R-Ethylcholestane	**3400**
30-Normoretane	**2800**	14b(H),17b(H)-20R-Cholestane	**3600**
18a(H)&18b(H)-Oleananes	**2200**	14b(H),17b(H)-20S-Cholestane	**3500**
Hopane	**22000**	14b,17b-20R-Methylcholestane	**3000**
Moretane	**2900**	14b,17b-20S-Methylcholestane	**4100**
30-Homohopane-22S	**7000**	14b(H),17b(H)-20R-Ethylcholestane	**4800**
30-Homohopane-22R	**6000**	14b(H),17b(H)-20S-Ethylcholestane	**4000**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	94	50-130

N/A - Not Applicable

02/01/06 13:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34814.D
Acq On : 19 Jan 2006 5:02 pm
Operator : AC
Sample : 0512128-02
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 20 11:23:16 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 1/20/06

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	82625	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	43.93	217	49003	1411.16	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 141.12%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	235681m	3319.28	ng/mL	
84) Hopane (T19)	52.50	191	234759m	3306.30	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	36877	519.37	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.67	191	21731	306.05	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	22213m	312.84	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	19641	276.62	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	9275m	130.63	ng/ml	
90) C26 Tricyclic Terpane-22R	44.32	191	9362m	131.85	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	11612m	163.54	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	11602m	163.40	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	14370	202.38	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	12916m	181.91	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	52442	738.58	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	10447m	147.13	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	9958m	140.25	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	53602	754.92	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	12414m	174.84	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	7306	102.90	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	155530m	2190.45	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	43408m	611.35	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	9439	132.94	ng/ml	100
104) 30-Normoretane (T17)	51.88	191	29416	414.29	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	23454m	330.32	ng/ml	
106) Moretane (T20)	53.19	191	31111m	438.16	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	73532m	1035.61	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	63711	897.29	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	45985	647.64	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	33462	471.27	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	27450m	386.60	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	18705	263.44	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.77	191	17254	243.00	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	11500	161.96	ng/ml	100
115) Pentakishomohopane-22S (T3	63.98	191	13916m	195.99	ng/ml	
116) Pentakishomohopane-22R (T3	65.31	191	10642m	149.88	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	20287	584.22	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	11267m	324.46	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	7748	223.12	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	11971m	344.74	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	35715m	1028.50	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	6348m	182.81	ng/ml	

2nd ✓ MS for WW 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34814.D
Acq On : 19 Jan 2006 5:02 pm
Operator : AC
Sample : 0512128-02
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 20 11:23:16 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

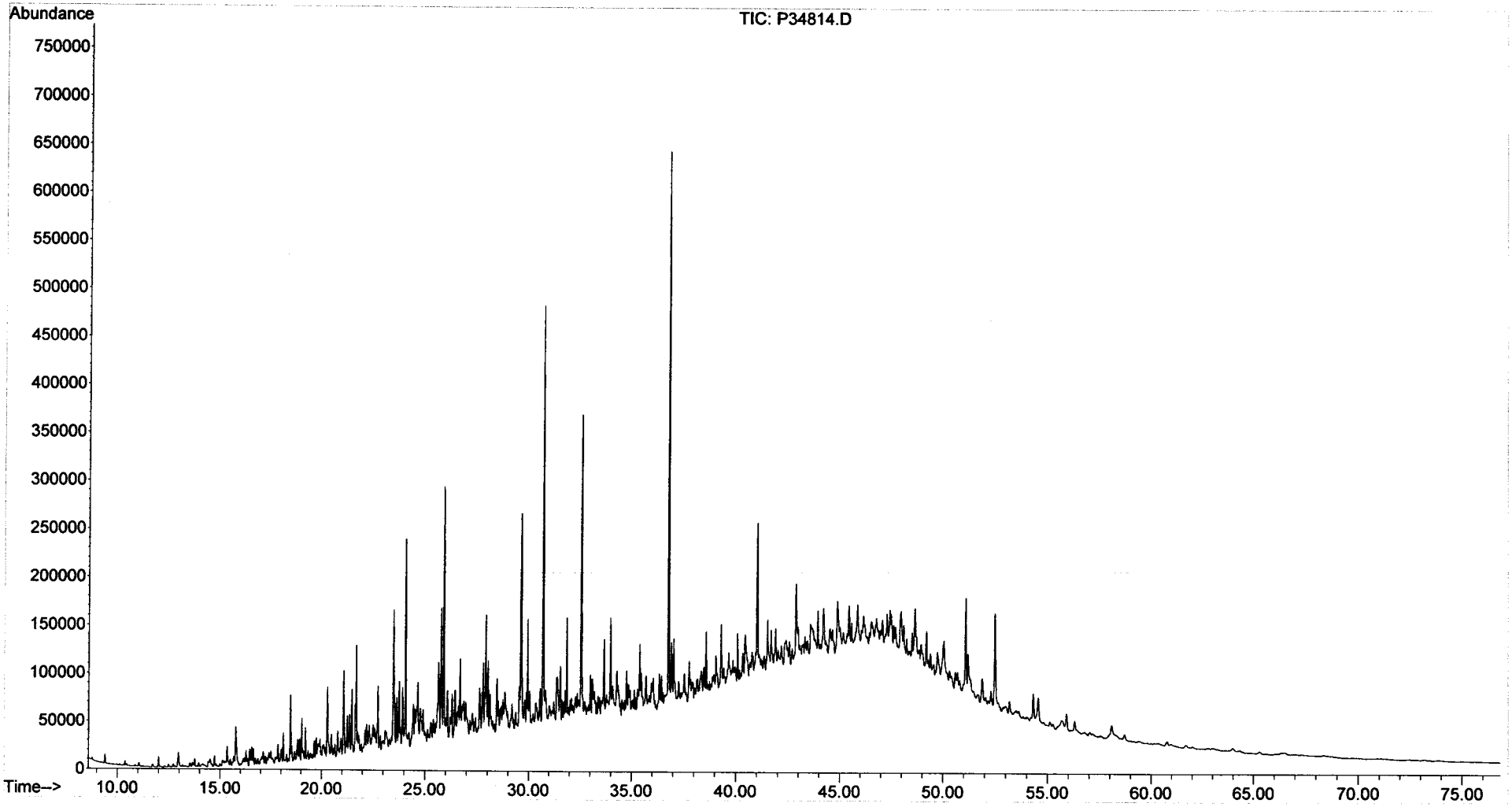
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	1912	55.06	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	6227m	179.32	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	15399m	443.45	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	11622m	334.68	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	17462m	502.86	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	18450m	531.31	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	17987	517.98	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	15790m	454.71	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	20971m	603.91	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	24558m	707.21	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	20783m	598.50	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 : P34814.D
Acq On : 19 Jan 2006 5:02 pm
Operator : AC
Sample : 0512128-02
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 20 11:23:16 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-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	39.8	5.12	39.33	10	AC

Parameter	Result		Parameter	Result
Naphthalene	4300000	E	Fluoranthene	580000
C1-Naphthalenes	2300000	E	Pyrene	890000
C2-Naphthalenes	1100000		C1-Fluoranthenes/Pyrenes	620000
C3-Naphthalenes	380000		C2-Fluoranthenes/Pyrenes	170000
C4-Naphthalenes	120000		C3-Fluoranthenes/Pyrenes	46000
Biphenyl	250000		C4-Fluoranthenes/Pyrenes	13000
Dibenzofuran	52000		Naphthobenzothiophenes	79000
Acenaphthylene	150000		C1-Naphthobenzothiophenes	56000
Acenaphthene	1100000		C2-Naphthobenzothiophenes	26000
Fluorene	480000		C3-Naphthobenzothiophenes	13000
C1-Fluorenes	210000		C4-Naphthobenzothiophenes	4300
C2-Fluorenes	120000		Benz[a]anthracene	290000
C3-Fluorenes	72000		Chrysene/Triphenylene	260000
Anthracene	490000		C1-Chrysenes	170000
Phenanthrene	1600000		C2-Chrysenes	54000
C1-Phenanthrenes/Anthracenes	820000		C3-Chrysenes	21000
C2-Phenanthrenes/Anthracenes	320000		C4-Chrysenes	8300
C3-Phenanthrenes/Anthracenes	100000		Benzo[b]fluoranthene	110000
C4-Phenanthrenes/Anthracenes	23000		Benzo[k]fluoranthene	140000
Retene	6400		Benzo[a]fluoranthene	58000
Dibenzothiophene	180000		Benzo[e]pyrene	120000
C1-Dibenzothiophenes	160000		Benzo[a]pyrene	260000
C2-Dibenzothiophenes	120000		Perylene	35000
C3-Dibenzothiophenes	56000		Indeno[1,2,3-cd]pyrene	110000
C4-Dibenzothiophenes	18000		Dibenz[a,h]anthracene	26000
Benzo(b)fluorene	120000		Benzo[g,h,i]perylene	120000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	100	50-130

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

02/02/06 08:49

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	39.8	5.12	39.33	10	AC

Parameter	Result
Carbazole	12000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	100	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\PAH1\JANUARY06\JAN24\
Data File : P17760.D
Acq On : 26 Jan 2006 3:45 am
Operator : AC
Sample : 0512128-02X
Misc : 10X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 03:04:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for NW 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	41467m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.01	240	72338m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.23	152	4409	49.60	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.96%#			
58) Pyrene-d10	38.08	212	10044m	54.95	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.50%#			
81) Benzo[b]fluoranthene-d12	46.92	264	7338m	50.94	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.09%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.67	128	4672174m	22062.81	ng/mL E	
10) C1-Naphthalenes	22.36	142	2547195m	12028.29	ng/mL E	
11) C2-Naphthalenes	25.19	156	1228540m	5801.38	ng/mL	
12) C3-Naphthalenes	27.53	170	413448m	1952.37	ng/mL	
13) C4-Naphthalenes	30.29	184	130531m	616.39	ng/mL	
15) 2-Methylnaphthalene	22.36	142	1605719	11977.30	ng/mL# E	100
16) 1-Methylnaphthalene	22.78	142	938560	7436.34	ng/mL#	100
22) Biphenyl	24.24	154	212990m	1277.89	ng/mL	
23) 2,6-Dimethylnaphthalene	24.86	156	214521m	1928.11	ng/mL	
24) Dibenzofuran	27.31	168	50252m	268.38	ng/mL	
25) Acenaphthylene	25.94	152	156880m	772.62	ng/mL	
26) Acenaphthene	26.68	153	730110	5788.65	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.23	170	30950m	309.88	ng/mL	
28) Fluorene	28.68	166	352175m	2489.69	ng/mL	
29) C1-Fluorenes	30.91	180	154169m	1089.89	ng/mL	
30) C2-Fluorenes	33.09	194	91656m	647.96	ng/mL	
31) C3-Fluorenes	35.74	208	53059m	375.10	ng/mL	
32) Dibenzothiophene	32.00	184	195399	936.70	ng/mL	96
36) OTP	34.17	198	1163m	5.58	ng/mL	
37) C1-Dibenzothiophenes	33.79	198	170964m	819.56	ng/mL	
38) C2-Dibenzothiophenes	35.47	212	124819m	598.35	ng/mL	
39) C3-Dibenzothiophenes	37.28	226	61097m	292.89	ng/mL	
40) C4-Dibenzothiophenes	38.96	240	19331m	92.67	ng/mL	
41) Phenanthrene	32.51	178	1780240	8487.36	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.58	192	892146m	4253.34	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.75	206	370212m	1765.00	ng/mL	
49) 5AA IS BKGD	36.51	206	27721	132.16	ng/mL	100
50) C3-Phenanthrenes/Anthracen	38.58	220	109038m	519.84	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.76	234	24567m	117.12	ng/mL	
52) Retene	39.51	234	1448m	33.02	ng/mL	
53) Anthracene	32.68	178	488768	2518.55	ng/mL	100
54) Carbazole	33.34	167	11188m	62.29	ng/mL	
55) 1-Methylphenanthrene	35.01	192	134899m	939.26	ng/mL	
56) Fluoranthene	37.28	202	671773m	3007.96	ng/mL	
57) Benzo(b)fluorene	39.79	216	78162m	599.69	ng/mL	
59) Pyrene	38.16	202	1048666m	4616.77	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.56	216	733831m	3230.70	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.23	230	203226m	894.71	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.50	244	54293m	239.03	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.75	258	15699m	69.12	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17760.D
Acq On : 26 Jan 2006 3:45 am
Operator : AC
Sample : 0512128-02X
Misc : 10X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 03:04:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

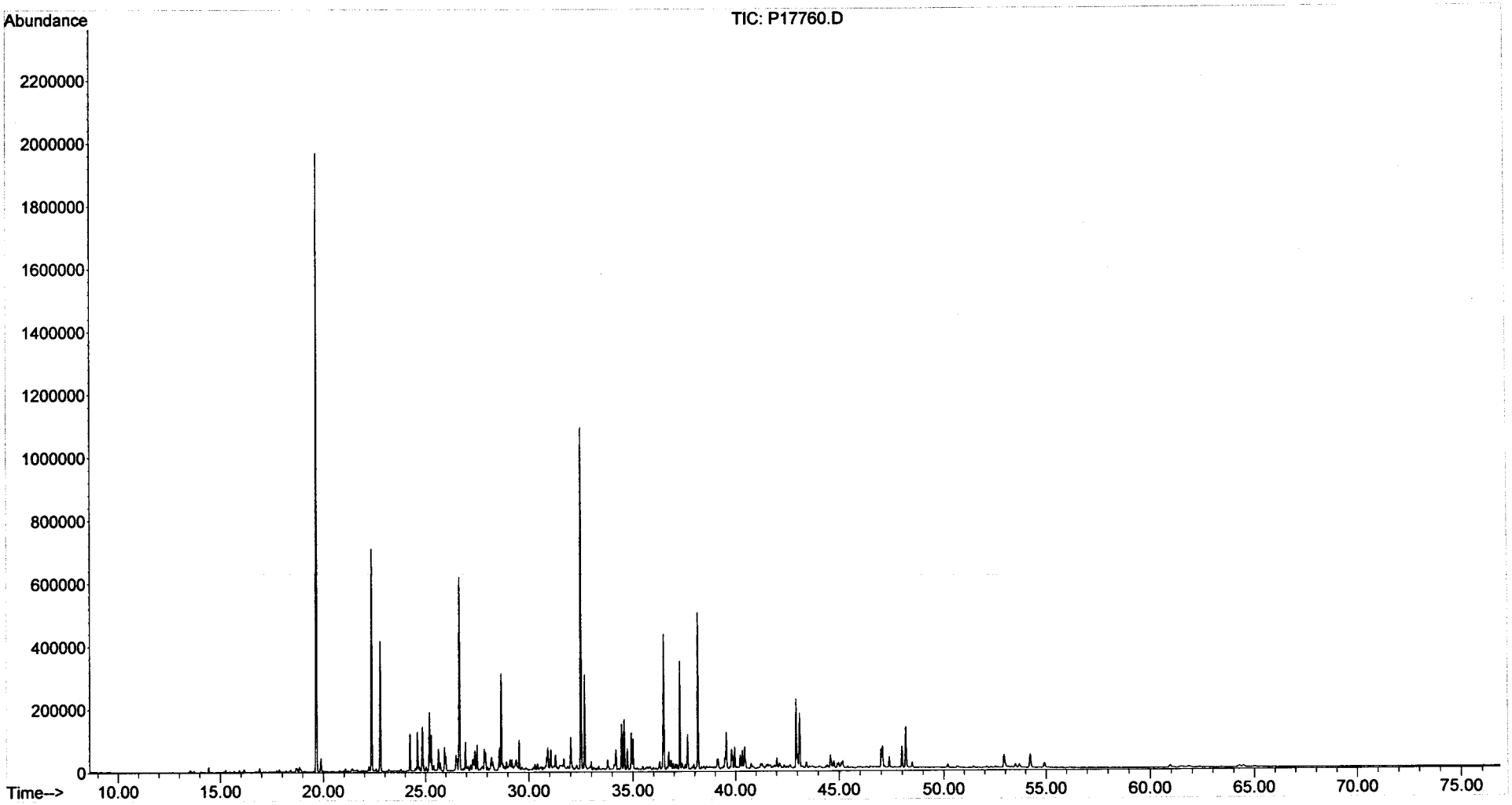
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
64) Naphthobenzothiophene	42.01	234	53680m	252.62	ng/ml	
65) Naphthobenzothiophene-2,1-	42.01	234	53635m	252.40	ng/mL	
66) Naphthobenzothiophene-1,2-	42.36	234	14851m	69.89	ng/mL	
67) Naphthobenzothiophene-2,3-	42.66	234	18236m	85.82	ng/mL	
68) C1-Naphthobenzothiophenes	43.41	248	62105m	292.26	ng/ml	
69) C2-Naphthobenzothiophenes	44.92	262	28149m	132.47	ng/ml	
70) C3-Naphthobenzothiophenes	46.66	276	14751m	69.42	ng/ml	
71) C4-Naphthobenzothiophenes	48.21	290	4753m	22.37	ng/mL	
73) Benz[a]anthracene	42.94	228	334326m	1518.26	ng/mL	
74) Chrysene	43.10	228	307875m	1368.30	ng/mL	
75) Chrysene/Triphenylene	43.10	228	308258m	1370.01	ng/mL	
76) C1-Chrysenes	44.59	242	196898m	875.08	ng/mL	
77) C2-Chrysenes	46.30	256	64156m	285.13	ng/mL	
78) BBF-d12 Surr BKGD	46.90	256	1012	4.50	ng/mL	100
79) C3-Chrysenes	47.90	270	24687m	109.72	ng/mL	
80) C4-Chrysenes	48.89	284	9682m	43.03	ng/mL	
82) Benzo[b]fluoranthene	46.99	252	131456	581.28	ng/mL	100
83) Benzo[k]fluoranthene	47.07	252	175091	744.21	ng/mL	99
84) Benzo[a]fluoranthene	47.37	252	70511m	299.70	ng/mL	
85) Benzo[e]pyrene	47.99	252	142292	649.88	ng/mL	99
86) Benzo[a]pyrene	48.18	252	288497m	1331.71	ng/mL	
87) Perylene	48.48	252	38440	181.53	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	52.94	276	110250m	578.30	ng/mL	
89) Dibenz[a,h]anthracene	52.99	278	26716m	137.48	ng/mL	
90) Benzo[g,h,i]perylene	54.21	276	134626	612.82	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17760.D
Acq On : 26 Jan 2006 3:45 am
Operator : AC
Sample : 0512128-02X
Misc : 10X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 03:04:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02EX**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	39.8	5.12	39.33	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4400000**		Fluoranthene	2000	U
C1-Naphthalenes	**2400000**		Pyrene	1700	U
C2-Naphthalenes	3200	U	C1-Fluoranthenes/Pyrenes	1700	U
C3-Naphthalenes	3200	U	C2-Fluoranthenes/Pyrenes	1700	U
C4-Naphthalenes	3200	U	C3-Fluoranthenes/Pyrenes	1700	U
Biphenyl	1800	U	C4-Fluoranthenes/Pyrenes	1700	U
Dibenzofuran	2300	U	Naphthobenzothiophenes	2300	U
Acenaphthylene	3500	U	C1-Naphthobenzothiophenes	2300	U
Acenaphthene	2200	U	C2-Naphthobenzothiophenes	2300	U
Fluorene	2200	U	C3-Naphthobenzothiophenes	2300	U
C1-Fluorenes	2200	U	C4-Naphthobenzothiophenes	2300	U
C2-Fluorenes	2200	U	Benz[a]anthracene	3000	U
C3-Fluorenes	2200	U	Chrysene/Triphenylene	2100	U
Anthracene	2600	U	C1-Chrysenes	2100	U
Phenanthrene	2800	U	C2-Chrysenes	2100	U
C1-Phenanthrenes/Anthracenes	2800	U	C3-Chrysenes	2100	U
C2-Phenanthrenes/Anthracenes	2800	U	C4-Chrysenes	2100	U
C3-Phenanthrenes/Anthracenes	2800	U	Benzo[b]fluoranthene	2000	U
C4-Phenanthrenes/Anthracenes	2800	U	Benzo[k]fluoranthene	3900	U
Retene	2800	U	Benzo[a]fluoranthene	3900	U
Dibenzothiophene	2100	U	Benzo[e]pyrene	2600	U
C1-Dibenzothiophenes	2100	U	Benzo[a]pyrene	2700	U
C2-Dibenzothiophenes	2100	U	Perylene	3400	U
C3-Dibenzothiophenes	2100	U	Indeno[1,2,3-cd]pyrene	4600	U
C4-Dibenzothiophenes	2100	U	Dibenz[a,h]anthracene	3700	U
Benzo(b)fluorene	2000	U	Benzo[g,h,i]perylene	3400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	110	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

02/02/06 08:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17774.D
Acq On : 26 Jan 2006 3:18 pm
Operator : AC
Sample : 0512128-02-RE X
Misc : 100X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 30 03:37:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for MD 2/1/06

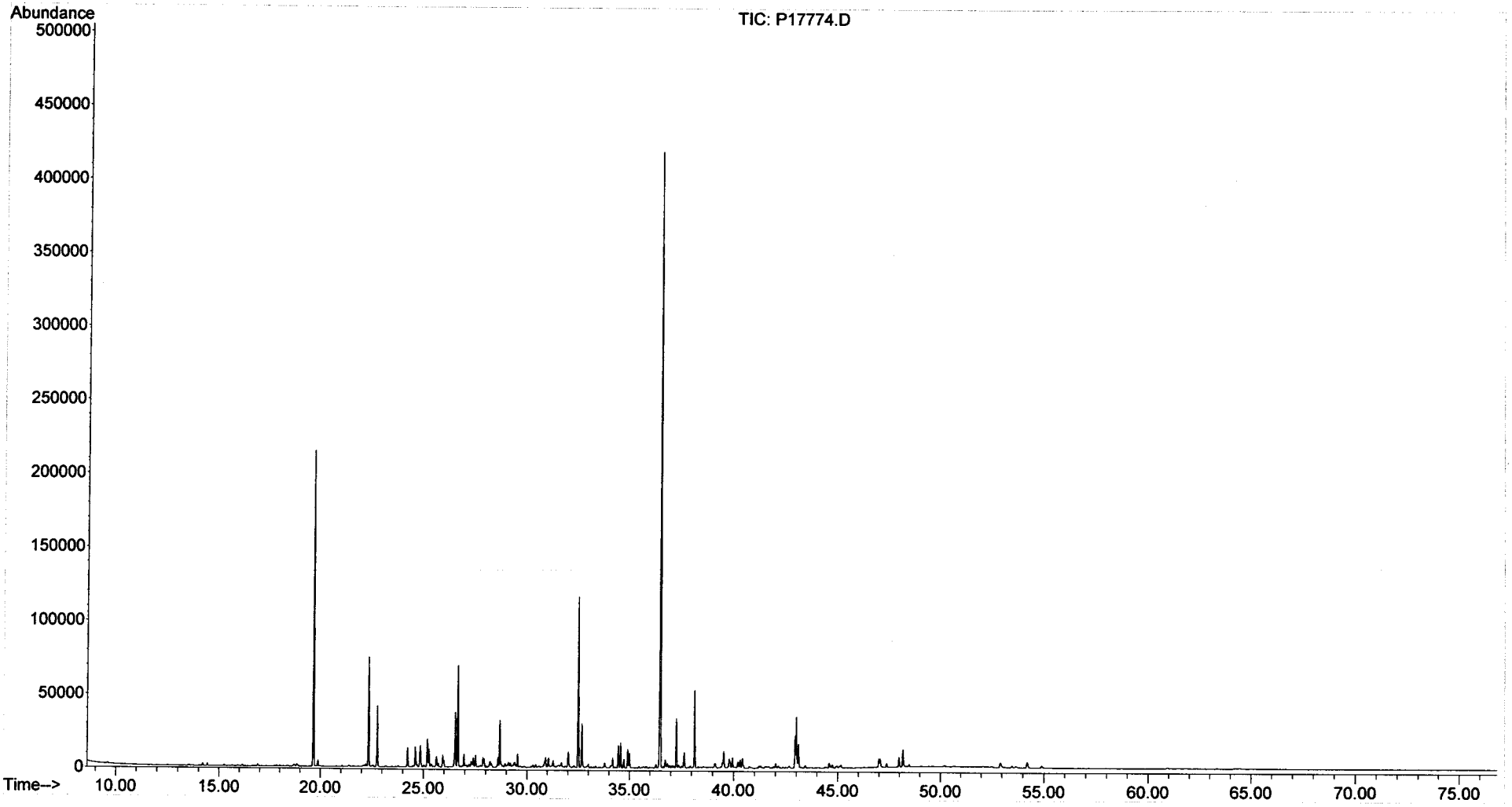
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	42056m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	66626m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	449m	4.98	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.50%#	
58) Pyrene-d10	38.08	212	1035m	5.58	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.56%#	
81) Benzo[b]fluoranthene-d12	46.90	264	682m	5.14	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.51%#	
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	19.66	128	494150m	2300.78	ng/mL	
10) C1-Naphthalenes	22.34	142	267313m	1244.62	ng/mL	
15) 2-Methylnaphthalene	22.34	142	167836	1234.38	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17774.D
Acq On : 26 Jan 2006 3:18 pm
Operator : AC
Sample : 0512128-02-RE X
Misc : 100X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 30 03:37:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	39.8	5.12	12.68	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**3600**	30,31-Bishomohopane-22S	**4700**
C24 Tricyclic Terpane	**2100**	30,31-Bishomohopane-22R	**3500**
C25 Tricyclic Terpane	**2200**	30,31-Trishomohopane-22S	**2700**
C24 Tetracyclic Terpane	**2000**	30,31-Trishomohopane-22R	**1800**
C26 Tricyclic Terpane-22S	**950**	Tetrakishomohopane-22S	**1800**
C26 Tricyclic Terpane-22R	**940**	Tetrakishomohopane-22R	**1200**
C28 Tricyclic Terpane-22S	**1200**	Pentakishomohopane-22S	**1600**
C28 Tricyclic Terpane-22R	**1200**	Pentakishomohopane-22R	**1200**
C29 Tricyclic Terpane-22S	**1400**	13b(H),17a(H)-20S-Diacholestane	**4100**
C29 Tricyclic Terpane-22R	**1400**	13b(H),17a(H)-20R-Diacholestane	**2300**
18a-22,29,30-Trisnorneohopane-TS	**5300**	13b,17a-20S-Methyldiacholestane	**1700**
C30 Tricyclic Terpane-22S	**1100**	14a(H),17a(H)-20S-Cholestane	**2200**
C30 Tricyclic Terpane-22R	**1000**	14a(H),17a(H)-20R-Cholestane	**7600**
17a(H)-22,29,30-Trisnorhopane-TM	**5300**	13b,17a-20R-Ethyldiacholestane	**1300**
17a/b,21b/a 28,30-Bisnorhopane	**1300**	13a,17b-20S-Ethyldiacholestane	**340**
17a(H),21b(H)-25-Norhopane	**650**	14a,17a-20S-Methylcholestane	**1200**
30-Norhopane	**16000**	14a,17a-20R-Methylcholestane	**3100**
18a(H)-30-Norneohopane-C29Ts	**4600**	14a(H),17a(H)-20S-Ethylcholestane	**2700**
17a(H)-Diahopane	**1000**	14a(H),17a(H)-20R-Ethylcholestane	**3700**
30-Normoretane	**2900**	14b(H),17b(H)-20R-Cholestane	**3800**
18a(H)&18b(H)-Oleananes	**2500**	14b(H),17b(H)-20S-Cholestane	**3700**
Hopane	**23000**	14b,17b-20R-Methylcholestane	**3500**
Moretane	**3000**	14b,17b-20S-Methylcholestane	**4400**
30-Homohopane-22S	**7500**	14b(H),17b(H)-20R-Ethylcholestane	**5400**
30-Homohopane-22R	**6500**	14b(H),17b(H)-20S-Ethylcholestane	**4100**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	110	50-130

N/A - Not Applicable

02/01/06 13:49

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34873.D
Acq On : 26 Jan 2006 5:24 pm
Operator : AC
Sample : 0512128-02X
Misc : 1X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 30 12:28:59 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

CMS 1/30/06

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	85791	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	62277	1727.24	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 172.72%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	275653m	3738.97	ng/mL	
84) Hopane (T19)	52.49	191	275632m	3738.69	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	42050m	570.37	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	25099	340.44	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	25787m	349.78	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	23490	318.62	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	11242	152.49	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	11153m	151.28	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	14132m	191.69	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	14589m	197.89	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	16784	227.66	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	16598m	225.14	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	62944m	853.78	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	12691m	172.14	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	12068m	163.69	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	63007m	854.63	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.42	191	15237m	206.68	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	7682	104.20	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	188223m	2553.07	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	54660m	741.41	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	11796m	160.00	ng/ml	
104) 30-Normoretane (T17)	51.88	191	34243	464.47	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	29949m	406.23	ng/ml	
106) Moretane (T20)	53.19	191	35424m	480.49	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	88583	1201.54	ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	76591	1038.88	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	56142	761.51	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	41033	556.57	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.07	191	32257m	437.54	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	20990m	284.71	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	21579	292.70	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	14305	194.03	ng/ml	100
115) Pentakishomohopane-22S (T3	63.98	191	19405	263.21	ng/ml	100
116) Pentakishomohopane-22R (T3	65.30	191	14365m	194.85	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	23939m	663.94	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	13152m	364.77	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	10022m	277.96	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	12468m	345.80	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	44098m	1223.05	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	7333m	203.38	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34873.D
Acq On : 26 Jan 2006 5:24 pm
Operator : AC
Sample : 0512128-02X
Misc : 1X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 30 12:28:59 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

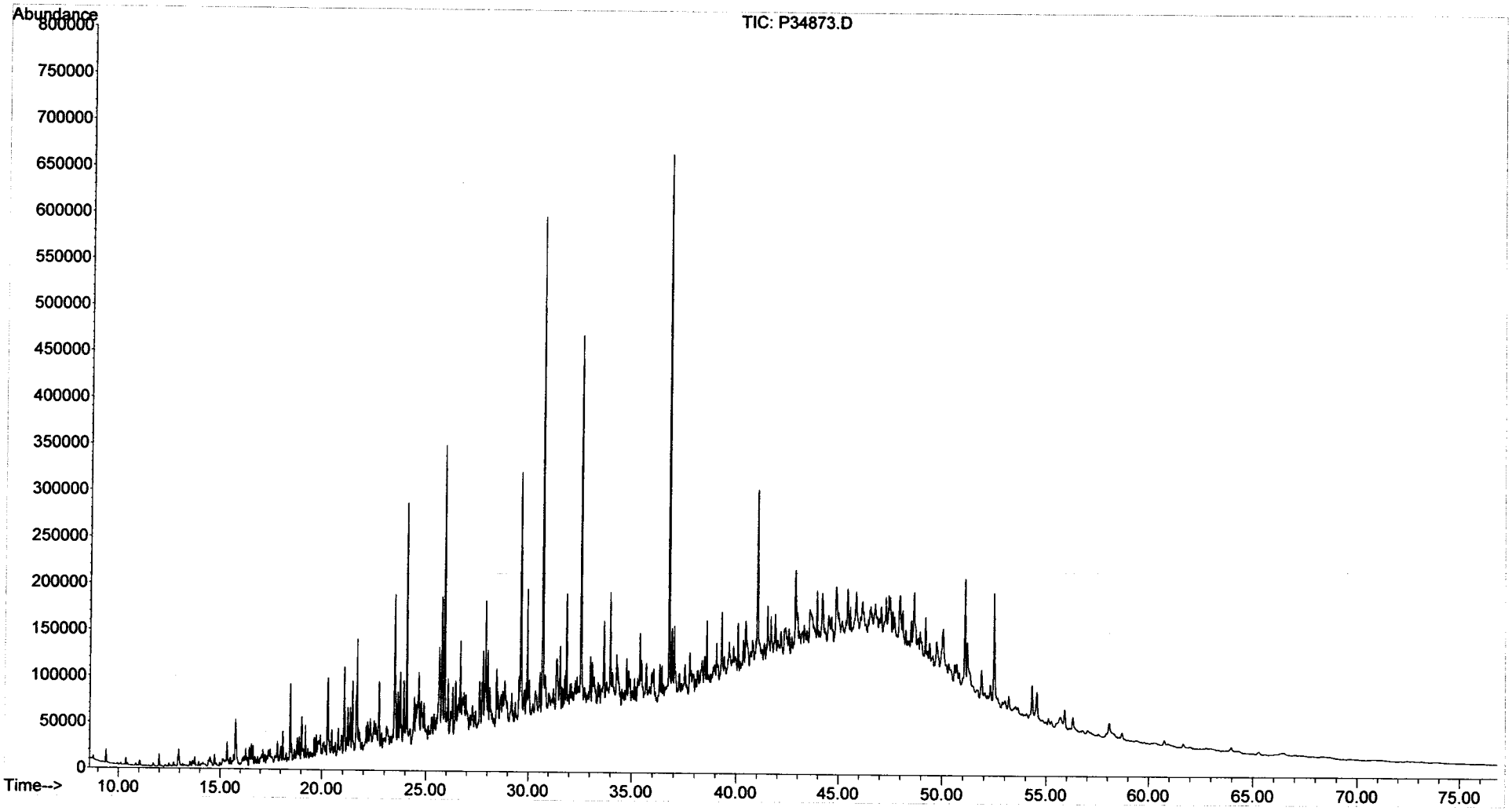
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	1996	55.36 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	7128m	197.69 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	17867m	495.54 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	15475m	429.20 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	21626m	599.79 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	21744m	603.07 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	21422m	594.13 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	20113m	557.83 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	25578m	709.40 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	31524m	874.31 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	23875m	662.17 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34873.D
Acq On : 26 Jan 2006 5:24 pm
Operator : AC
Sample : 0512128-02X
Misc : 1X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 30 12:28:59 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	34.7	10.51	9.26	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	12000		Fluoranthene	27000	E
C1-Naphthalenes	18000	E	Pyrene	42000	E
C2-Naphthalenes	32000		C1-Fluoranthenes/Pyrenes	39000	
C3-Naphthalenes	17000		C2-Fluoranthenes/Pyrenes	12000	
C4-Naphthalenes	5000		C3-Fluoranthenes/Pyrenes	3300	
Biphenyl	1800		C4-Fluoranthenes/Pyrenes	920	
Dibenzofuran	1500		Naphthobenzothiophenes	4200	
Acenaphthylene	6600		C1-Naphthobenzothiophenes	3200	
Acenaphthene	30000	E	C2-Naphthobenzothiophenes	1600	
Fluorene	6400		C3-Naphthobenzothiophenes	1300	
C1-Fluorenes	10000		C4-Naphthobenzothiophenes	340	
C2-Fluorenes	7400		Benz[a]anthracene	14000	
C3-Fluorenes	4600		Chrysene/Triphenylene	13000	
Anthracene	23000		C1-Chrysenes	9200	
Phenanthrene	63000	E	C2-Chrysenes	3600	
C1-Phenanthrenes/Anthracenes	46000		C3-Chrysenes	1400	
C2-Phenanthrenes/Anthracenes	33000		C4-Chrysenes	440	
C3-Phenanthrenes/Anthracenes	21000		Benzo[b]fluoranthene	4800	
C4-Phenanthrenes/Anthracenes	7900		Benzo[k]fluoranthene	6700	
Retene	3.7	U	Benzo[a]fluoranthene	2600	
Dibenzothiophene	8400		Benzo[e]pyrene	5600	
C1-Dibenzothiophenes	9100		Benzo[a]pyrene	10000	
C2-Dibenzothiophenes	9100		Perylene	2000	
C3-Dibenzothiophenes	7900		Indeno[1,2,3-cd]pyrene	3700	
C4-Dibenzothiophenes	4100		Dibenz[a,h]anthracene	1000	
Benzo(b)fluorene	6000		Benzo[g,h,i]perylene	4300	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	89	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	105	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.

02/02/06 08:21

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	34.7	10.51	9.26	1	AC

Parameter	Result
Carbazole	**450**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	89	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

02/02/06 08:21

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27788.D
Acq On : 20 Jan 2006 5:33 am
Operator : AC
Sample : 0512128-03
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 10:50:50 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

MS for WD 2/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	55431m	500.00 ng/mL	0.00
72) Chrysene-d12	43.84	240	96702m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.96	152	218036m	1913.98 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 191.40%#		
58) Pyrene-d10	38.90	212	521963m	2227.62 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 222.76%#		
81) Benzo[b]fluoranthene-d12	47.78	264	449436m	2266.97 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 226.70%#		
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	1174186m	4709.52 ng/mL	
10) C1-Naphthalenes	23.52	142	1748143m	7011.60 ng/mL E	
11) C2-Naphthalenes	25.95	156	3089843m	12393.00 ng/mL	
12) C3-Naphthalenes	28.28	170	1664468m	6675.99 ng/mL	
13) C4-Naphthalenes	31.05	184	495076m	1985.69 ng/mL	
15) 2-Methylnaphthalene	23.09	142	199091	1254.48 ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	1546663	10238.98 ng/mL# E	100
22) Biphenyl	24.97	154	141715	709.33 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	391435m	2863.23 ng/mL	
24) Dibenzofuran	28.08	168	132739m	601.88 ng/mL	
25) Acenaphthylene	26.69	152	642117m	2595.77 ng/mL	
26) Acenaphthene	27.43	153	1761899	11619.72 ng/mL E	100
27) 2,3,5-Trimethylnaphthalene	28.98	170	113360m	950.16 ng/mL	
28) Fluorene	29.45	166	448334m	2528.75 ng/mL	
29) C1-Fluorenes	31.68	180	731856m	4127.90 ng/mL	
30) C2-Fluorenes	33.87	194	517522m	2918.99 ng/mL	
31) C3-Fluorenes	36.56	208	324152m	1828.32 ng/mL	
32) Dibenzothiophene	32.80	184	784417m	3308.89 ng/mL	
36) OTP	35.00	198	46700m	196.99 ng/mL	
37) C1-Dibenzothiophenes	34.57	198	898583m	3790.48 ng/mL	
38) C2-Dibenzothiophenes	36.62	212	849469m	3583.30 ng/mL	
39) C3-Dibenzothiophenes	38.06	226	736262m	3105.76 ng/mL	
40) C4-Dibenzothiophenes	39.76	240	385021m	1624.13 ng/mL	
41) Phenanthrene	33.32	178	6282035	24832.88 ng/mL E	97
47) C1-Phenanthrenes/Anthracen	35.26	192	4636899m	18329.66 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.54	206	3253702m	12861.88 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.36	220	2130244m	8420.85 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.58	234	791402m	3128.41 ng/mL	
53) Anthracene	33.48	178	2152747	9162.76 ng/mL	99
54) Carbazole	34.15	167	39844m	177.94 ng/mL	
55) 1-Methylphenanthrene	35.82	192	814110m	4638.86 ng/mL	
56) Fluoranthene	38.10	202	2888474m	10698.09 ng/mL E	
57) Benzo(b)fluorene	40.61	216	389205m	2344.86 ng/mL	
59) Pyrene	38.99	202	4538122	16413.93 ng/mL E	95
60) C1-Fluoranthenes/Pyrenes	40.36	216	4270031m	15444.28 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.04	230	1313727m	4751.62 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.31	244	354842m	1283.43 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.55	258	99737m	360.74 ng/mL	
64) Naphthobenzothiophene	42.84	234	266263	1038.53 ng/ml#	69
65) Naphthobenzothiophene-2,1-	42.84	234	266994m	1041.38 ng/mL	

MS 2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27788.D
Acq On : 20 Jan 2006 5:33 am
Operator : AC
Sample : 0512128-03
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 10:50:50 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

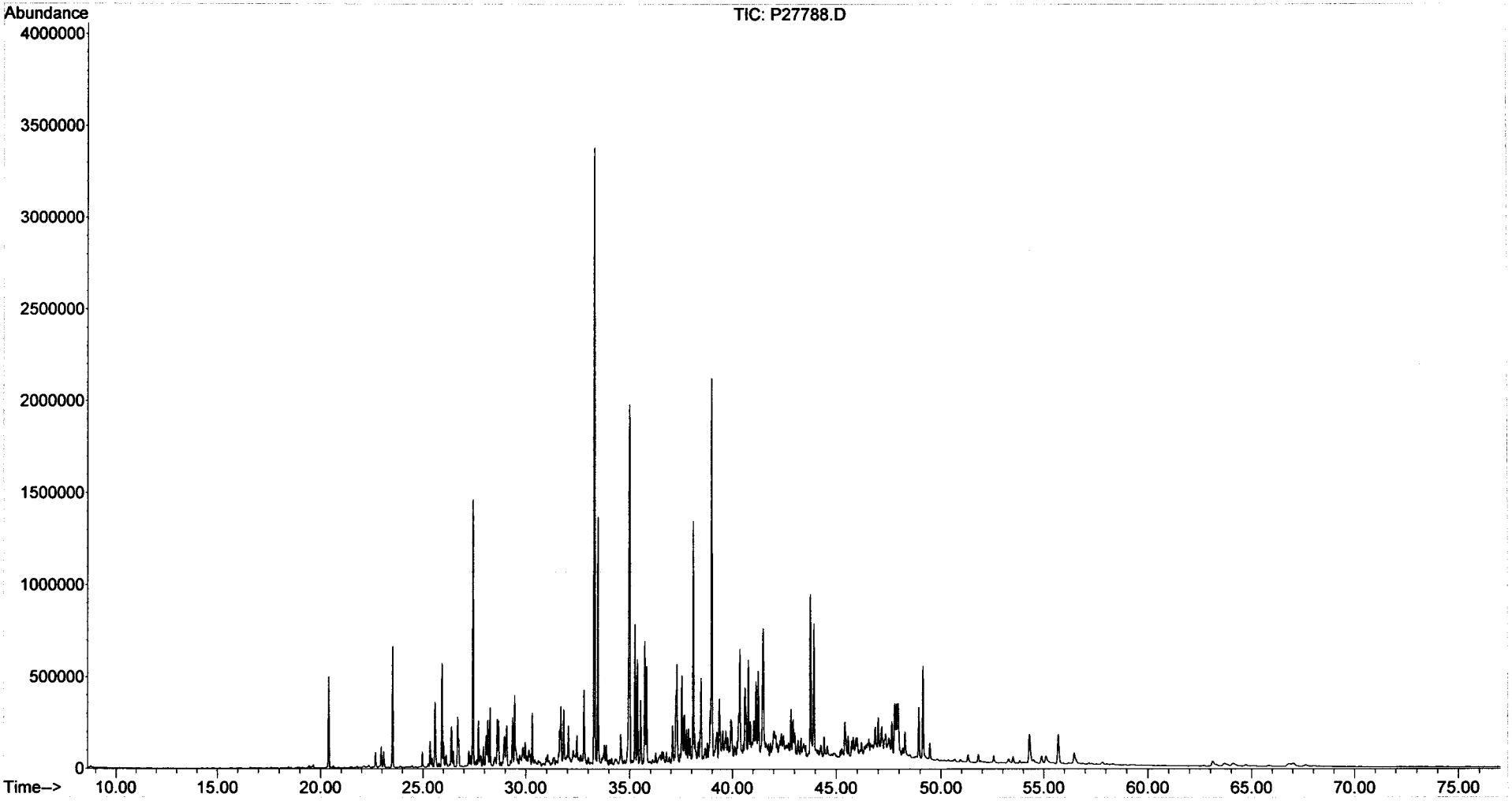
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	43.18	234	68284m	266.33	ng/mL	
67) Naphthobenzothiophene-2,3-	43.49	234	84467m	329.45	ng/mL	
68) C1-Naphthobenzothiophenes	44.24	248	319462m	1246.02	ng/ml	
69) C2-Naphthobenzothiophenes	45.74	262	164302m	640.84	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	134165m	523.29	ng/ml	
71) C4-Naphthobenzothiophenes	49.03	290	34087m	132.95	ng/mL	
73) Benz[a]anthracene	43.78	228	1463043m	5297.90	ng/mL	
74) Chrysene	43.94	228	1413130m	5094.83	ng/mL	
75) Chrysene/Triphenylene	43.94	228	1413059m	5094.57	ng/mL	
76) C1-Chrysenes	45.42	242	1004219m	3620.56	ng/mL	
77) C2-Chrysenes	47.11	256	411349m	1483.06	ng/mL	
78) BBF-d12 Surr BKGD	47.78	256	19898	71.74	ng/mL	100
79) C3-Chrysenes	48.80	270	149109m	537.59	ng/mL	
80) C4-Chrysenes	49.88	284	47778m	172.26	ng/mL	
82) Benzo[b]fluoranthene	47.87	252	565143	1905.47	ng/mL	100
83) Benzo[k]fluoranthene	47.94	252	818414	2638.76	ng/mL	99
84) Benzo[a]fluoranthene	48.28	252	320867	1034.55	ng/mL#	1
85) Benzo[e]pyrene	48.94	252	635833m	2223.86	ng/mL	
86) Benzo[a]pyrene	49.15	252	1176673m	4116.48	ng/mL	
87) Perylene	49.47	252	220887m	775.12	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.30	276	415957m	1468.18	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	110272m	413.89	ng/mL	
90) Benzo[g,h,i]perylene	55.71	276	505447	1711.06	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27788.D
Acq On : 20 Jan 2006 5:33 am
Operator : AC
Sample : 0512128-03
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 10:50:50 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03E**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	34.7	10.51	9.26	10	NLJr

Parameter	Result	
Naphthalene	42	U
C1-Naphthalenes	**18000**	
C2-Naphthalenes	42	U
C3-Naphthalenes	42	U
C4-Naphthalenes	42	U
Biphenyl	23	U
Dibenzofuran	30	U
Acenaphthylene	46	U
Acenaphthene	**30000**	
Fluorene	29	U
C1-Fluorenes	29	U
C2-Fluorenes	29	U
C3-Fluorenes	29	U
Anthracene	34	U
Phenanthrene	**64000**	
C1-Phenanthrenes/Anthracenes	37	U
C2-Phenanthrenes/Anthracenes	37	U
C3-Phenanthrenes/Anthracenes	37	U
C4-Phenanthrenes/Anthracenes	37	U
Retene	37	U
Dibenzothiophene	28	U
C1-Dibenzothiophenes	28	U
C2-Dibenzothiophenes	28	U
C3-Dibenzothiophenes	28	U
C4-Dibenzothiophenes	28	U
Benzo(b)fluorene	26	U

Parameter	Result	
Fluoranthene	**27000**	
Pyrene	**42000**	
C1-Fluoranthenes/Pyrenes	23	U
C2-Fluoranthenes/Pyrenes	23	U
C3-Fluoranthenes/Pyrenes	23	U
C4-Fluoranthenes/Pyrenes	23	U
Naphthobenzothiophenes	31	U
C1-Naphthobenzothiophenes	31	U
C2-Naphthobenzothiophenes	31	U
C3-Naphthobenzothiophenes	31	U
C4-Naphthobenzothiophenes	31	U
Benz[a]anthracene	40	U
Chrysene/Triphenylene	27	U
C1-Chrysenes	27	U
C2-Chrysenes	27	U
C3-Chrysenes	27	U
C4-Chrysenes	27	U
Benzo[b]fluoranthene	27	U
Benzo[k]fluoranthene	52	U
Benzo[a]fluoranthene	52	U
Benzo[e]pyrene	35	U
Benzo[a]pyrene	35	U
Perylene	44	U
Indeno[1,2,3-cd]pyrene	61	U
Dibenz[a,h]anthracene	48	U
Benzo[g,h,i]perylene	45	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/02/06 08:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27692.D
Acq On : 15 Jan 2006 8:06 pm
Operator : NLJr
Sample : 0512128-03-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 30 05:09:48 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

NS for MW 2/1/06

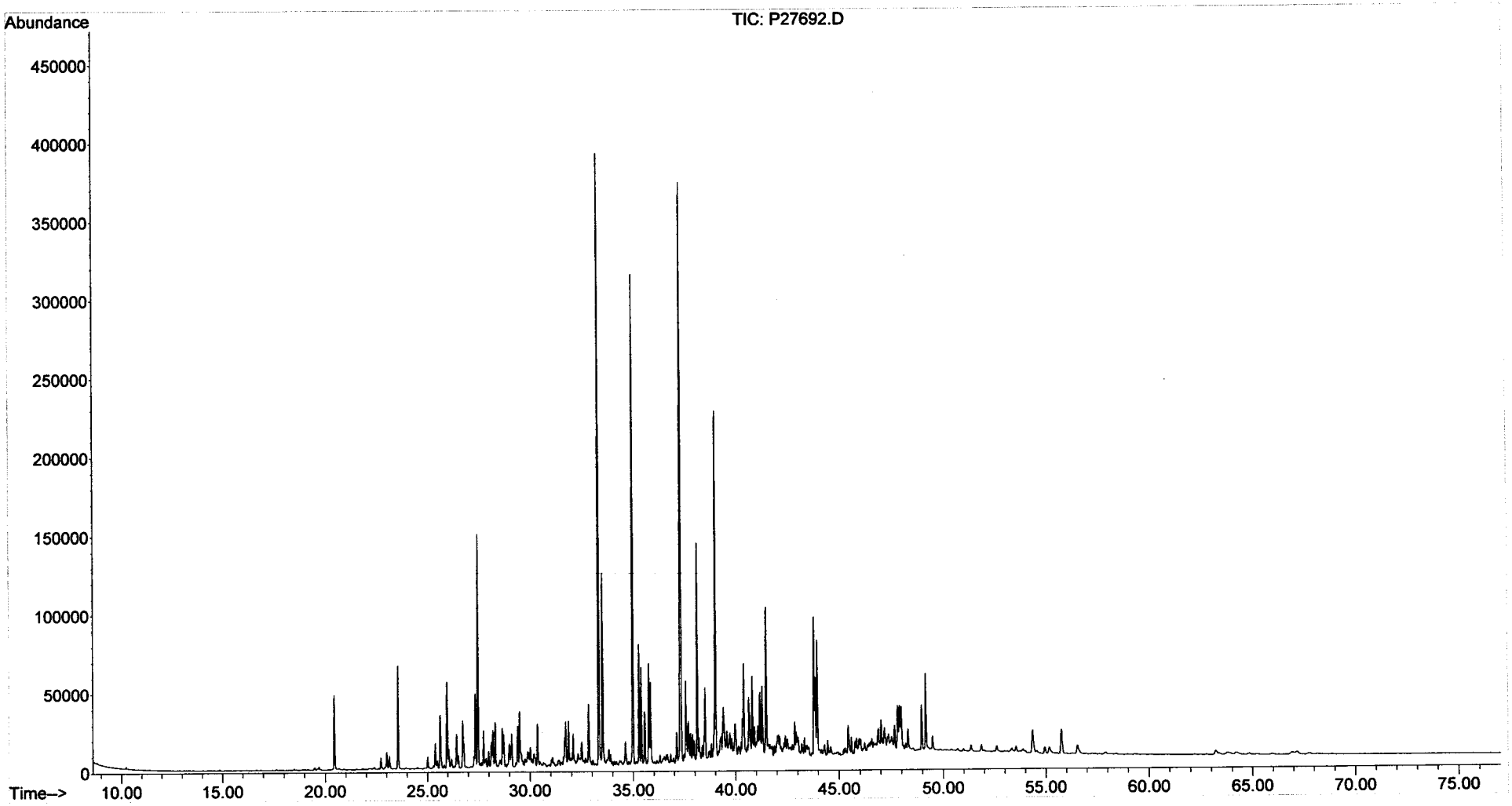
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	57390m	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	94075	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	22408m	189.99	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.00%#			
58) Pyrene-d10	38.94	212	52291	215.55	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.56%#			
81) Benzo[b]fluoranthene-d12	47.81	264	43276	224.38	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.44%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
10) C1-Naphthalenes	23.56	142	183740m	711.80	ng/mL	
16) 1-Methylnaphthalene	23.56	142	163658	1046.44	ng/mL#	100
26) Acenaphthene	27.47	153	183085m	1166.23	ng/mL	
41) Phenanthrene	33.33	178	662535	2529.60	ng/mL	100
56) Fluoranthene	38.12	202	297777m	1065.23	ng/mL	
59) Pyrene	39.01	202	475165	1659.96	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27692.D
Acq On : 15 Jan 2006 8:06 pm
Operator : NLJr
Sample : 0512128-03-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 30 05:09:48 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 I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/19/06	34.7	10.51	1.5	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	160	30,31-Bishomohopane-22S	330
C24 Tricyclic Terpane	96	30,31-Bishomohopane-22R	180
C25 Tricyclic Terpane	110	30,31-Trishomohopane-22S	200
C24 Tetracyclic Terpane	110	30,31-Trishomohopane-22R	100
C26 Tricyclic Terpane-22S	47	Tetrakishomohopane-22S	100
C26 Tricyclic Terpane-22R	44	Tetrakishomohopane-22R	70
C28 Tricyclic Terpane-22S	50	Pentakishomohopane-22S	94
C28 Tricyclic Terpane-22R	52	Pentakishomohopane-22R	70
C29 Tricyclic Terpane-22S	63	13b(H),17a(H)-20S-Diacholestane	200
C29 Tricyclic Terpane-22R	61	13b(H),17a(H)-20R-Diacholestane	100
18a-22,29,30-Trisnorneohopane-TS	260	13b,17a-20S-Methyldiacholestane	94
C30 Tricyclic Terpane-22S	53	14a(H),17a(H)-20S-Cholestane	110
C30 Tricyclic Terpane-22R	44	14a(H),17a(H)-20R-Cholestane	350
17a(H)-22,29,30-Trisnorhopane-TM	280	13b,17a-20R-Ethyldiacholestane	66
17a/b,21b/a 28,30-Bisnorhopane	74	13a,17b-20S-Ethyldiacholestane	22
17a(H),21b(H)-25-Norhopane	28	14a,17a-20S-Methylcholestane	71
30-Norhopane	900	14a,17a-20R-Methylcholestane	150
18a(H)-30-Norneohopane-C29Ts	220	14a(H),17a(H)-20S-Ethylcholestane	150
17a(H)-Diahopane	47	14a(H),17a(H)-20R-Ethylcholestane	200
30-Normoretane	140	14b(H),17b(H)-20R-Cholestane	200
18a(H)&18b(H)-Oleananes	95	14b(H),17b(H)-20S-Cholestane	200
Hopane	1200	14b,17b-20R-Methylcholestane	180
Moretane	160	14b,17b-20S-Methylcholestane	230
30-Homohopane-22S	420	14b(H),17b(H)-20R-Ethylcholestane	310
30-Homohopane-22R	360	14b(H),17b(H)-20S-Ethylcholestane	240

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	69	50-130

N/A - Not Applicable

02/01/06 13:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34815.D
Acq On : 19 Jan 2006 6:31 pm
Operator : AC
Sample : 0512128-03
Misc : 1X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 25 08:43:53 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	43.42	240	80886	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	43.93	217	310779	9142.07	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 914.21%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	197918m	2847.36	ng/mL	
84) Hopane (T19)	52.49	191	197791m	2845.54	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	27098m	389.85	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	16279m	234.20	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.16	191	18514m	266.35	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	18883	271.66	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	7883m	113.41	ng/ml	
90) C26 Tricyclic Terpane-22R	44.32	191	7384m	106.23	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	8481m	122.01	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	8880m	127.75	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	10685	153.72	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	10360m	149.05	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	43855m	630.92	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	8974m	129.11	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	7408m	106.58	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	47189	678.89	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	12533m	180.31	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	4824	69.40	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	151184m	2175.02	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	37762m	543.27	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	7911m	113.81	ng/ml	
104) 30-Normoretane (T17)	51.89	191	23758	341.80	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	16106m	231.71	ng/ml	
106) Moretane (T20)	53.19	191	26517m	381.49	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	71362m	1026.66	ng/ml	
108) 30-Homohopane-22R (T22)	54.54	191	61581m	885.94	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.89	191	55194	794.05	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	30598m	440.20	ng/ml	
111) 30,31-Trishomohopane-22S (	58.08	191	33758m	485.66	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	17302m	248.92	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	17362	249.78	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	11845	170.41	ng/ml	100
115) Pentakishomohopane-22S (T3	63.97	191	15911m	228.91	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	11810m	169.91	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	16330m	480.37	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	8683m	255.42	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	7743m	227.77	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	8999m	264.72	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	29197m	858.88	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	5448m	160.26	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34815.D
Acq On : 19 Jan 2006 6:31 pm
Operator : AC
Sample : 0512128-03
Misc : 1X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 25 08:43:53 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

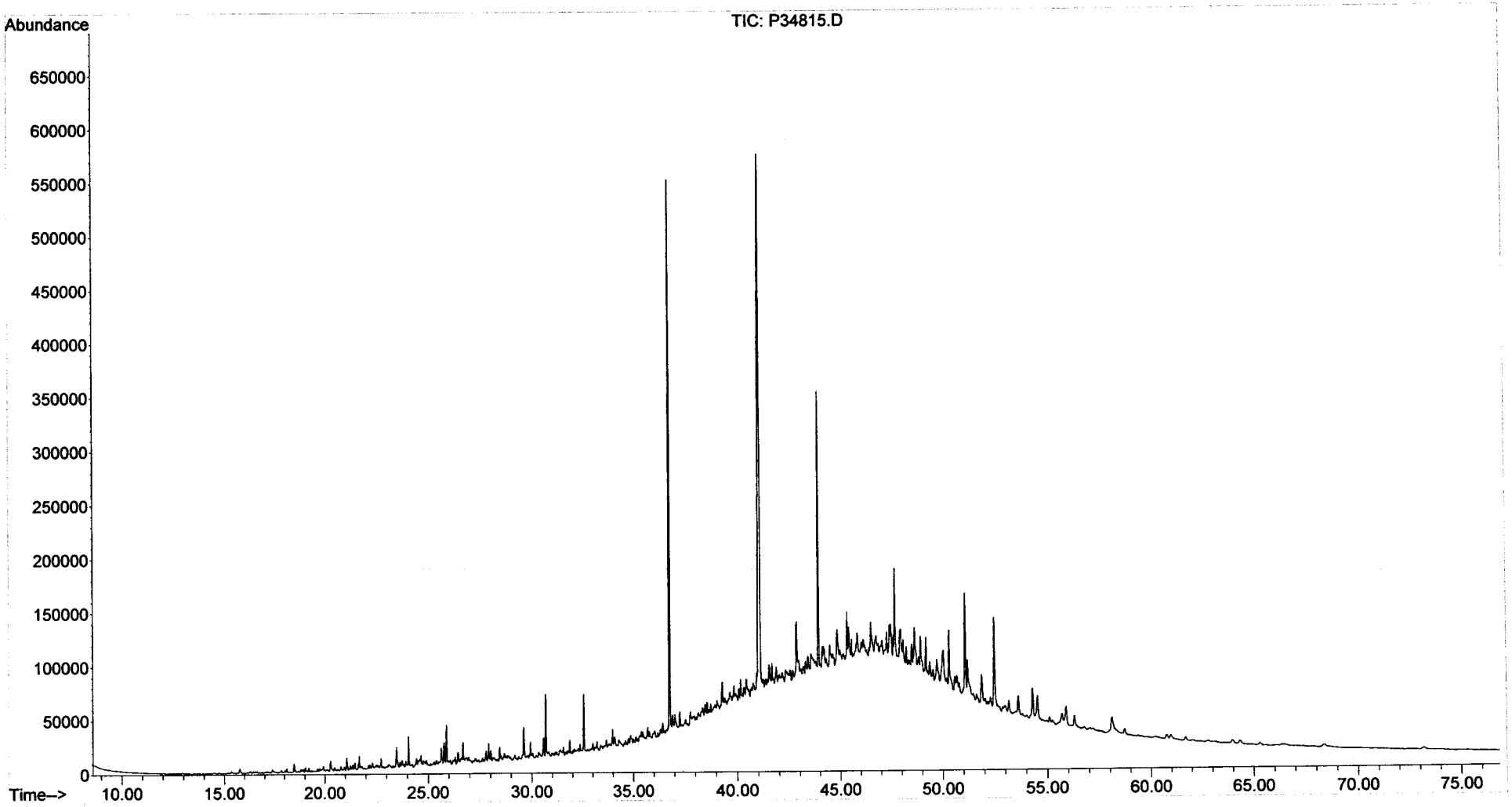
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	1862	54.77 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	5890m	173.26 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	12342	363.06 ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	12722m	374.24 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	16739m	492.41 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	16337m	480.58 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	16190m	476.26 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	14696m	432.31 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	19099m	561.83 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	25898	761.83 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	19892m	585.16 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 : P34815.D
Acq On : 19 Jan 2006 6:31 pm
Operator : AC
Sample : 0512128-03
Misc : 1X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 25 08:43:53 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.24	3.96	1	AC

Parameter	Result	
Naphthalene	6900	
C1-Naphthalenes	12000	E
C2-Naphthalenes	21000	
C3-Naphthalenes	11000	
C4-Naphthalenes	3300	
Biphenyl	1100	
Dibenzofuran	1000	
Acenaphthylene	5200	
Acenaphthene	21000	E
Fluorene	3900	
C1-Fluorenes	7700	
C2-Fluorenes	4800	
C3-Fluorenes	2700	
Anthracene	16000	E
Phenanthrene	47000	E
C1-Phenanthrenes/Anthracenes	31000	
C2-Phenanthrenes/Anthracenes	14000	
C3-Phenanthrenes/Anthracenes	4700	
C4-Phenanthrenes/Anthracenes	990	
Retene	300	
Dibenzothiophene	5500	
C1-Dibenzothiophenes	5500	
C2-Dibenzothiophenes	4600	
C3-Dibenzothiophenes	2200	
C4-Dibenzothiophenes	810	
Benzo(b)fluorene	4000	

Parameter	Result	
Fluoranthene	19000	E
Pyrene	29000	E
C1-Fluoranthenes/Pyrenes	24000	
C2-Fluoranthenes/Pyrenes	8400	
C3-Fluoranthenes/Pyrenes	2300	
C4-Fluoranthenes/Pyrenes	610	
Naphthobenzothiophenes	3100	
C1-Naphthobenzothiophenes	2700	
C2-Naphthobenzothiophenes	1300	
C3-Naphthobenzothiophenes	660	
C4-Naphthobenzothiophenes	250	
Benz[a]anthracene	11000	
Chrysene/Triphenylene	10000	
C1-Chrysenes	7600	
C2-Chrysenes	2600	
C3-Chrysenes	1100	
C4-Chrysenes	320	
Benzo[b]fluoranthene	4600	
Benzo[k]fluoranthene	5100	
Benzo[a]fluoranthene	2400	
Benzo[e]pyrene	4800	
Benzo[a]pyrene	9200	
Perylene	1400	
Indeno[1,2,3-cd]pyrene	4300	
Dibenz[a,h]anthracene	1200	
Benzo[g,h,i]perylene	4200	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	93	50-130

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

02/02/06 08:57

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.24	3.96	1	AC

Parameter	Result
Carbazole	290

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable

02/02/06 08:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17782.D
Acq On : 26 Jan 2006 9:27 pm
Operator : AC
Sample : 0512128-03X
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 01 12:14:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WO 2/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	50025m	500.00 ng/mL	0.00
72) Chrysene-d12	43.03	240	91131m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.23	152	445472m	4153.83 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 415.38%#		
58) Pyrene-d10	38.11	212	1039112m	4712.61 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 471.26%#		
81) Benzo[b]fluoranthene-d12	46.94	264	849356m	4680.28 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 468.03%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.66	128	1586702m	6210.87 ng/mL	
10) C1-Naphthalenes	22.79	142	2798816m	10955.49 ng/mL E	
11) C2-Naphthalenes	25.21	156	4777004m	18698.76 ng/mL	
12) C3-Naphthalenes	27.53	170	2521883m	9871.48 ng/mL	
13) C4-Naphthalenes	30.29	184	761819m	2982.01 ng/mL	
15) 2-Methylnaphthalene	22.34	142	262884	1625.43 ng/mL#	100
16) 1-Methylnaphthalene	22.79	142	2535411	16651.80 ng/mL# E	100
22) Biphenyl	24.24	154	190623m	948.03 ng/mL	
23) 2,6-Dimethylnaphthalene	24.86	156	790021m	5885.96 ng/mL	
24) Dibenzofuran	27.31	168	210421m	931.56 ng/mL	
25) Acenaphthylene	25.94	152	1150864m	4698.27 ng/mL	
26) Acenaphthene	26.69	153	2861179m	18803.97 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.23	170	161094m	1336.99 ng/mL	
28) Fluorene	28.70	166	601709m	3526.05 ng/mL	
29) C1-Fluorenes	30.93	180	1175742m	6889.92 ng/mL	
30) C2-Fluorenes	33.11	194	733885m	4300.61 ng/mL	
31) C3-Fluorenes	35.76	208	416603m	2441.32 ng/mL	
32) Dibenzothiophene	32.02	184	1236894m	4915.03 ng/mL	
36) OTP	34.29	198	177669m	706.00 ng/mL	
37) C1-Dibenzothiophenes	33.79	198	1420743m	5645.59 ng/mL	
38) C2-Dibenzothiophenes	35.48	212	1028855m	4088.35 ng/mL	
39) C3-Dibenzothiophenes	37.29	226	500904m	1990.44 ng/mL	
40) C4-Dibenzothiophenes	40.85	240	182106m	723.63 ng/mL	
41) Phenanthrene	32.55	178	10723047	42376.76 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.49	192	7005496m	27685.25 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.76	206	3288390m	12995.50 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.59	220	1069638m	4227.14 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.81	234	223958m	885.07 ng/mL	
52) Retene	39.52	234	14377m	271.74 ng/mL	
53) Anthracene	32.71	178	3411707m	14572.51 ng/mL E	
54) Carbazole	33.35	167	56087m	258.84 ng/mL	
55) 1-Methylphenanthrene	35.05	192	1121058m	6470.27 ng/mL	
56) Fluoranthene	37.32	202	4592653m	17046.23 ng/mL E	
57) Benzo(b)fluorene	39.82	216	569462m	3621.68 ng/mL	
59) Pyrene	38.20	202	7042924m	25702.15 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.58	216	6034724m	22022.87 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.32	230	2077147m	7580.25 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.13	244	569309m	2077.61 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.76	258	150942m	550.84 ng/mL	
64) Naphthobenzothiophene	42.04	234	454820m	1774.20 ng/ml	

✓ MS 2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17782.D
Acq On : 26 Jan 2006 9:27 pm
Operator : AC
Sample : 0512128-03X
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 01 12:14:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

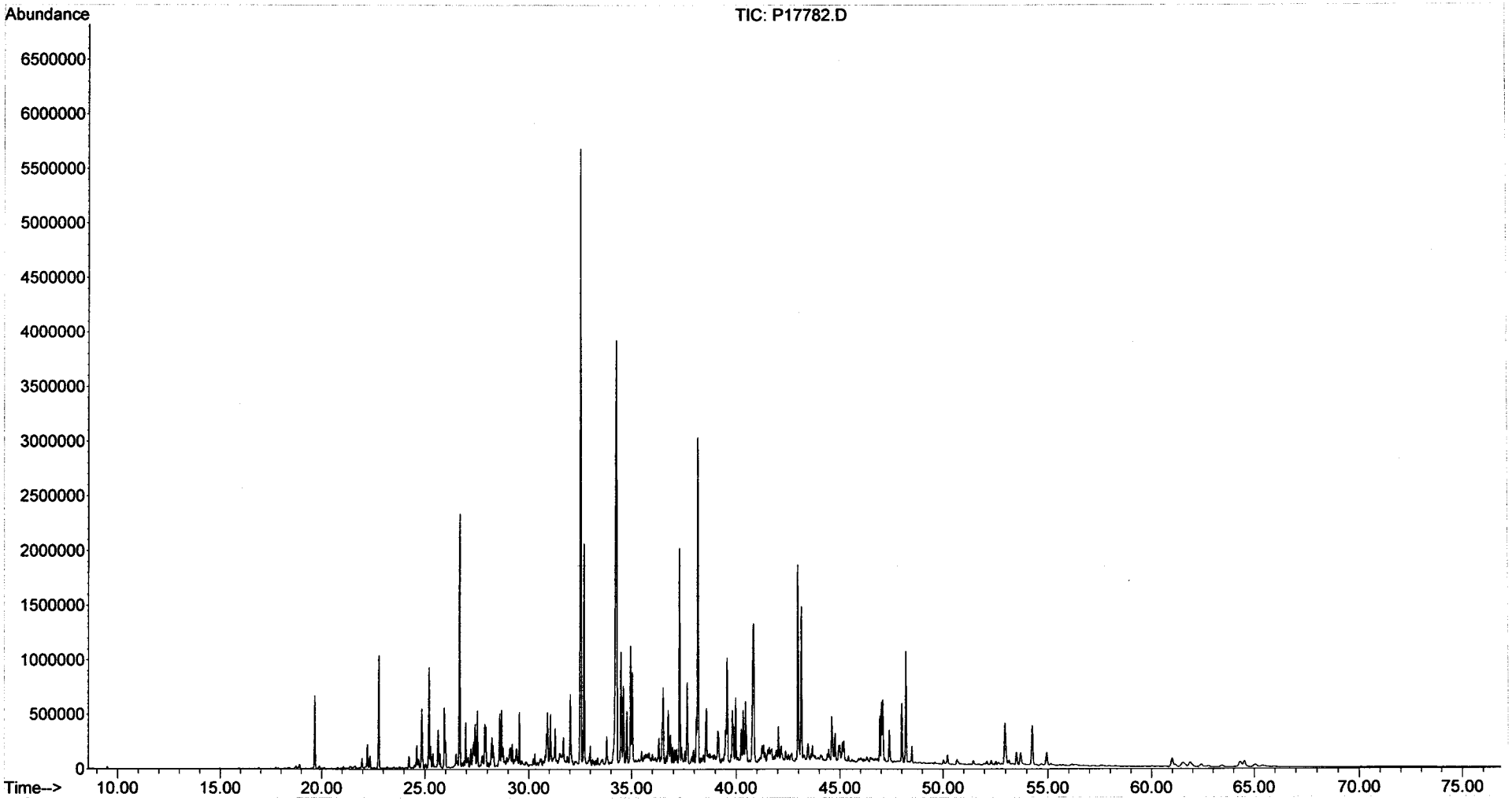
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.04	234	455008m	1774.93	ng/mL	
66) Naphthobenzothiophene-1,2-	42.37	234	118404m	461.88	ng/mL	
67) Naphthobenzothiophene-2,3-	42.67	234	140272m	547.19	ng/mL	
68) C1-Naphthobenzothiophenes	43.44	248	619678m	2417.29	ng/ml	
69) C2-Naphthobenzothiophenes	44.95	262	299597m	1168.69	ng/ml	
70) C3-Naphthobenzothiophenes	47.04	276	150953m	588.85	ng/ml	
71) C4-Naphthobenzothiophenes	48.13	290	57783m	225.40	ng/mL	
73) Benz[a]anthracene	42.98	228	2753791m	9926.75	ng/mL	
74) Chrysene	43.14	228	2583970m	9115.83	ng/mL	
75) Chrysene/Triphenylene	43.14	228	2584361m	9117.21	ng/mL	
76) C1-Chrysenes	44.60	242	1941143m	6848.04	ng/mL	
77) C2-Chrysenes	46.31	256	717157m	2530.01	ng/mL	
78) BBF-d12 Surr BKGD	46.93	256	42036	148.30	ng/mL	100
79) C3-Chrysenes	47.91	270	286581m	1011.01	ng/mL	
80) C4-Chrysenes	48.89	284	82134m	289.76	ng/mL	
82) Benzo[b]fluoranthene	47.02	252	1189564m	4175.34	ng/mL	
83) Benzo[k]fluoranthene	47.09	252	1350488m	4556.41	ng/mL	
84) Benzo[a]fluoranthene	47.40	252	631697m	2131.28	ng/mL	
85) Benzo[e]pyrene	48.02	252	1194738m	4331.35	ng/mL	
86) Benzo[a]pyrene	48.21	252	2249079m	8240.88	ng/mL	
87) Perylene	48.50	252	330928	1240.48	ng/mL	96
88) Indeno[1,2,3-cd]pyrene	52.98	276	927205m	3860.59	ng/mL	
89) Dibenz[a,h]anthracene	53.01	278	253888m	1037.09	ng/mL	
90) Benzo[g,h,i]perylene	54.26	276	1029408	3719.56	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17782.D
Acq On : 26 Jan 2006 9:27 pm
Operator : AC
Sample : 0512128-03 X
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 01 12:14:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03EX**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.24	3.96	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	18	U	Fluoranthene	**19000**	
C1-Naphthalenes	**13000**		Pyrene	**27000**	
C2-Naphthalenes	18	U	C1-Fluoranthenes/Pyrenes	9.9	U
C3-Naphthalenes	18	U	C2-Fluoranthenes/Pyrenes	9.9	U
C4-Naphthalenes	18	U	C3-Fluoranthenes/Pyrenes	9.9	U
Biphenyl	10	U	C4-Fluoranthenes/Pyrenes	9.9	U
Dibenzofuran	13	U	Naphthobenzothiophenes	14	U
Acenaphthylene	20	U	C1-Naphthobenzothiophenes	14	U
Acenaphthene	**22000**		C2-Naphthobenzothiophenes	14	U
Fluorene	13	U	C3-Naphthobenzothiophenes	14	U
C1-Fluorenes	13	U	C4-Naphthobenzothiophenes	14	U
C2-Fluorenes	13	U	Benz[a]anthracene	18	U
C3-Fluorenes	13	U	Chrysene/Triphenylene	12	U
Anthracene	**16000**		C1-Chrysenes	12	U
Phenanthrene	**46000**		C2-Chrysenes	12	U
C1-Phenanthrenes/Anthracenes	16	U	C3-Chrysenes	12	U
C2-Phenanthrenes/Anthracenes	16	U	C4-Chrysenes	12	U
C3-Phenanthrenes/Anthracenes	16	U	Benzo[b]fluoranthene	12	U
C4-Phenanthrenes/Anthracenes	16	U	Benzo[k]fluoranthene	23	U
Retene	16	U	Benzo[a]fluoranthene	23	U
Dibenzothiophene	12	U	Benzo[e]pyrene	15	U
C1-Dibenzothiophenes	12	U	Benzo[a]pyrene	16	U
C2-Dibenzothiophenes	12	U	Perylene	19	U
C3-Dibenzothiophenes	12	U	Indeno[1,2,3-cd]pyrene	27	U
C4-Dibenzothiophenes	12	U	Dibenz[a,h]anthracene	21	U
Benzo(b)fluorene	11	U	Benzo[g,h,i]perylene	20	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	100	50-130

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

02/02/06 08:49

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17762.D
Acq On : 26 Jan 2006 5:18 am
Operator : AC
Sample : 0512128-03-RE X
Misc : 10X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 03:31:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WB 2/1/06

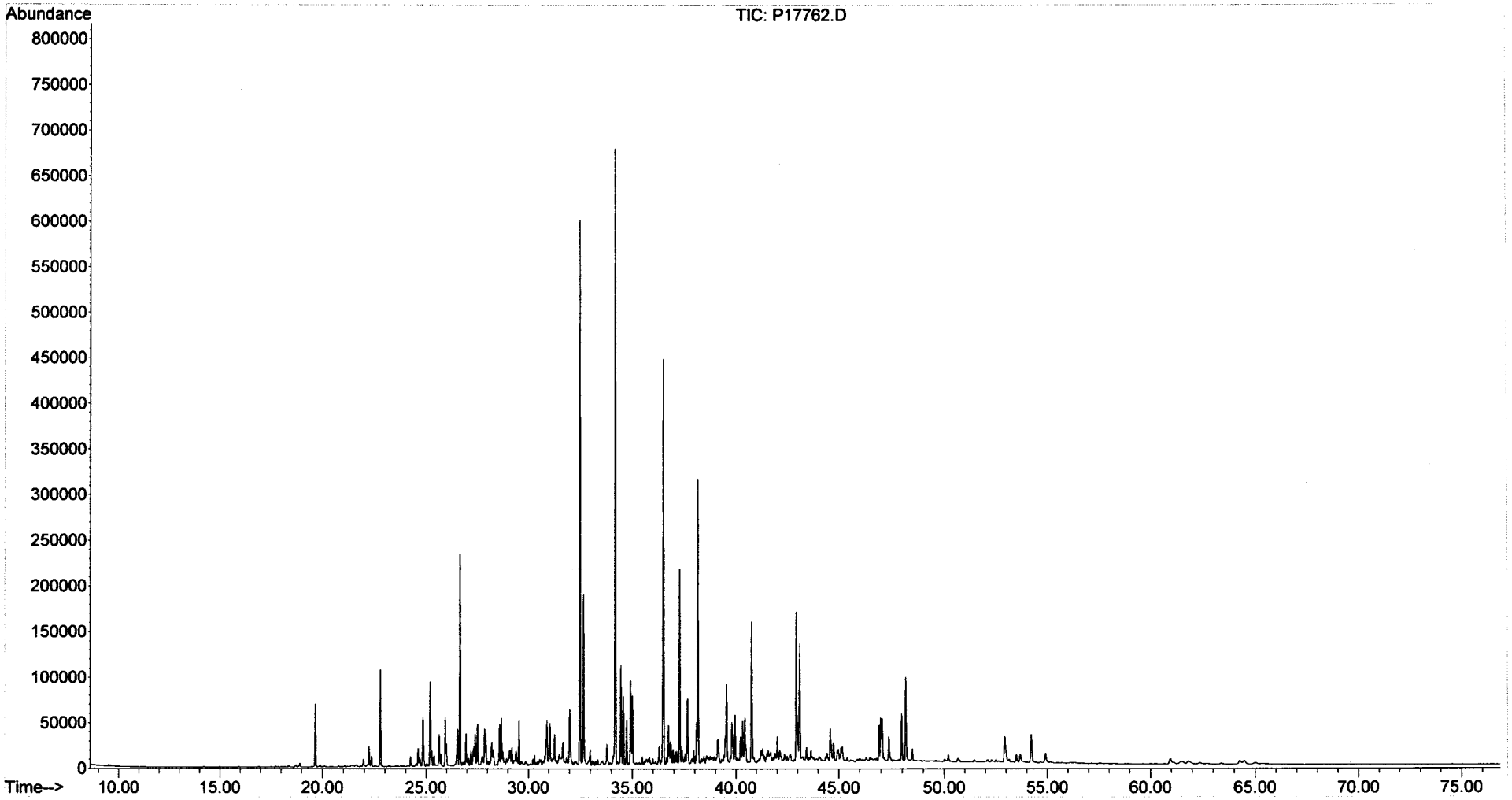
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	46661m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	76459	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	42630	426.16	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.62%#			
58) Pyrene-d10	38.09	212	97154	472.38	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.24%#			
81) Benzo[b]fluoranthene-d12	46.92	264	76751	504.09	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.41%			
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	22.78	142	271127m	1137.79	ng/mL	
16) 1-Methylnaphthalene	22.78	142	245205	1726.53	ng/mL#	100
26) Acenaphthene	26.67	153	274426	1933.58	ng/mL	100
41) Phenanthrene	32.50	178	969723	4108.57	ng/mL	100
53) Anthracene	32.68	178	309850	1418.88	ng/mL	100
56) Fluoranthene	37.28	202	429730m	1709.99	ng/mL	
59) Pyrene	38.16	202	629484	2462.83	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17762.D
Acq On : 26 Jan 2006 5:18 am
Operator : AC
Sample : 0512128-03-RE X
Misc : 10X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 03:31:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.24	1.47	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**120**	30,31-Bishomohopane-22S	**280**
C24 Tricyclic Terpane	**72**	30,31-Bishomohopane-22R	**140**
C25 Tricyclic Terpane	**76**	30,31-Trishomohopane-22S	**150**
C24 Tetracyclic Terpane	**83**	30,31-Trishomohopane-22R	**78**
C26 Tricyclic Terpane-22S	**32**	Tetrakishomohopane-22S	**79**
C26 Tricyclic Terpane-22R	**32**	Tetrakishomohopane-22R	**56**
C28 Tricyclic Terpane-22S	**38**	Pentakishomohopane-22S	**73**
C28 Tricyclic Terpane-22R	**41**	Pentakishomohopane-22R	**55**
C29 Tricyclic Terpane-22S	**48**	13b(H),17a(H)-20S-Diacholestane	**140**
C29 Tricyclic Terpane-22R	**47**	13b(H),17a(H)-20R-Diacholestane	**79**
18a-22,29,30-Trisnorneohopane-TS	**190**	13b,17a-20S-Methyldiacholestane	**67**
C30 Tricyclic Terpane-22S	**37**	14a(H),17a(H)-20S-Cholestane	**97**
C30 Tricyclic Terpane-22R	**37**	14a(H),17a(H)-20R-Cholestane	**260**
17a(H)-22,29,30-Trisnorhopane-TM	**200**	13b,17a-20R-Ethyldiacholestane	**44**
17a/b,21b/a 28,30-Bisnorhopane	**54**	13a,17b-20S-Ethyldiacholestane	**15**
17a(H),21b(H)-25-Norhopane	**21**	14a,17a-20S-Methylcholestane	**56**
30-Norhopane	**650**	14a,17a-20R-Methylcholestane	**110**
18a(H)-30-Norneohopane-C29Ts	**150**	14a(H),17a(H)-20S-Ethylcholestane	**110**
17a(H)-Diahopane	**28**	14a(H),17a(H)-20R-Ethylcholestane	**150**
30-Normoretane	**95**	14b(H),17b(H)-20R-Cholestane	**140**
18a(H)&18b(H)-Oleananes	**61**	14b(H),17b(H)-20S-Cholestane	**140**
Hopane	**820**	14b,17b-20R-Methylcholestane	**130**
Moretane	**98**	14b,17b-20S-Methylcholestane	**180**
30-Homohopane-22S	**310**	14b(H),17b(H)-20R-Ethylcholestane	**260**
30-Homohopane-22R	**280**	14b(H),17b(H)-20S-Ethylcholestane	**150**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	85	50-130

N/A - Not Applicable

02/01/06 14:05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34874.D
Acq On : 26 Jan 2006 6:54 pm
Operator : AC
Sample : 0512128-03 X
Misc : 1x
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 01 10:38:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:32:01 2006
Response via : Initial Calibration

MS 2/1/06

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	173414	1000.00	ng/mL	-0.01

* double IS spiked 2/3/06

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	43.93	217	420492	11539.05	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1153.91%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	148752m	1996.36	ng/mL	
84) Hopane (T19)	52.48	191	148399m	1991.63	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	21848m	293.22	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	13006	174.55	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	13695m	183.80	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	14974	200.96	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	5852m	78.54	ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	5704	76.55	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.59	191	6825m	91.60	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	7447m	99.94	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	8559	114.87	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	8492m	113.97	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	33890m	454.83	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	6652	89.27	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.97	191	6654	89.30	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	36784	493.67	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	9664m	129.70	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	3801	51.01	ng/ml	100
101) 30-Norhopane (T15)	51.08	191	117707m	1579.72	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	26550m	356.32	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	5104m	68.50	ng/ml	
104) 30-Normoretane (T17)	51.88	191	17107	229.59	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	11055m	148.37	ng/ml	
106) Moretane (T20)	53.18	191	17695m	237.48	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	56494m	758.19	ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	49466	663.87	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.87	191	49528	664.70	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	25672	344.54	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	26382	354.07	ng/ml	100
112) 30,31-Trishomohopane-22R (	58.69	191	14055m	188.63	ng/ml	
113) Tetrakishomohopane-22S (T3	60.75	191	14201	190.59	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	10159	136.34	ng/ml	100
115) Pentakishomohopane-22S (T3	63.97	191	13185m	176.95	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	9968	133.78	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	45.43	217	12576	345.11	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	6956	190.89	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.55	217	5870m	161.08	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	8531m	234.11	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	23038m	632.20	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	3910m	107.30	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34874.D
Acq On : 26 Jan 2006 6:54 pm
Operator : AC
Sample : 0512128-03
Misc : 1x
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 01 10:38:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:32:01 2006
Response via : Initial Calibration

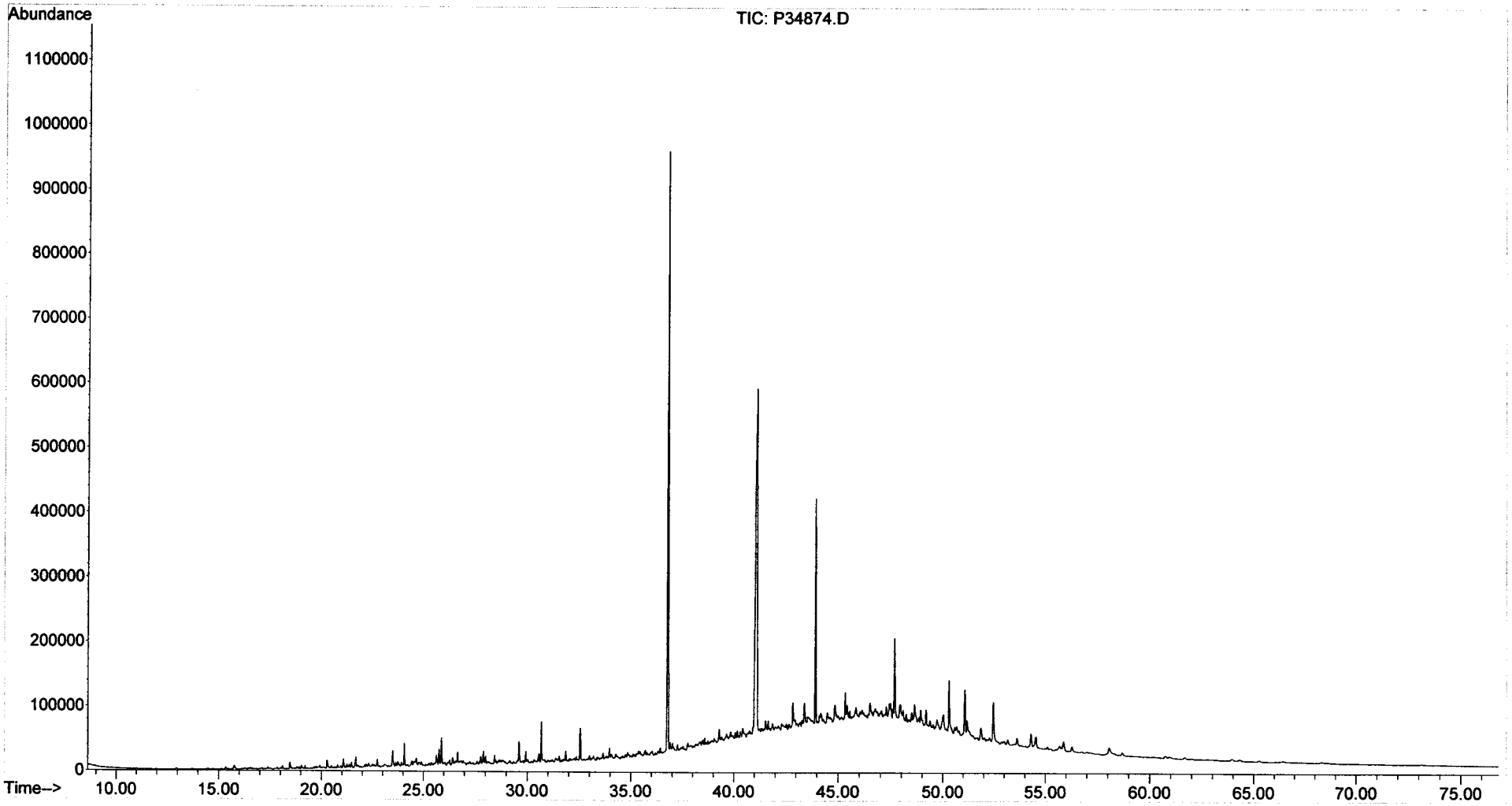
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	1312	36.00	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	4932m	135.34	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	9809m	269.18	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	9699m	266.16	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	13161m	361.16	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	12370m	339.45	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	12464m	342.03	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	11752m	322.50	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	15703m	430.92	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	22882m	627.92	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	12927m	354.74	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34874.D
Acq On : 26 Jan 2006 6:54 pm
Operator : AC
Sample : 0512128-03
Misc : 1x
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 01 10:38:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:32:01 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03 D**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	34.7	10.28	9.26	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	12000		Fluoranthene	25000	
C1-Naphthalenes	17000		Pyrene	36000	E
C2-Naphthalenes	30000		C1-Fluoranthenes/Pyrenes	30000	
C3-Naphthalenes	16000		C2-Fluoranthenes/Pyrenes	9800	
C4-Naphthalenes	4700		C3-Fluoranthenes/Pyrenes	3000	
Biphenyl	1700		C4-Fluoranthenes/Pyrenes	800	
Dibenzofuran	1400		Naphthobenzothiophenes	3600	
Acenaphthylene	6500		C1-Naphthobenzothiophenes	3000	
Acenaphthene	28000	E	C2-Naphthobenzothiophenes	1500	
Fluorene	5900		C3-Naphthobenzothiophenes	770	
C1-Fluorenes	9900		C4-Naphthobenzothiophenes	340	
C2-Fluorenes	6600		Benz[a]anthracene	13000	
C3-Fluorenes	3400		Chrysene/Triphenylene	13000	
Anthracene	22000		C1-Chrysenes	9000	
Phenanthrene	58000	E	C2-Chrysenes	3200	
C1-Phenanthrenes/Anthracenes	39000		C3-Chrysenes	1400	
C2-Phenanthrenes/Anthracenes	18000		C4-Chrysenes	400	
C3-Phenanthrenes/Anthracenes	5700		Benzo[b]fluoranthene	5400	
C4-Phenanthrenes/Anthracenes	1400		Benzo[k]fluoranthene	5900	
Retene	400		Benzo[a]fluoranthene	2600	
Dibenzothiophene	7800		Benzo[e]pyrene	5500	
C1-Dibenzothiophenes	7900		Benzo[a]pyrene	10000	
C2-Dibenzothiophenes	5800		Perylene	2000	
C3-Dibenzothiophenes	2900		Indeno[1,2,3-cd]pyrene	3900	
C4-Dibenzothiophenes	940		Dibenz[a,h]anthracene	1000	
Benzo(b)fluorene	5000		Benzo[g,h,i]perylene	4400	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	79	50-130
Pyrene-d10	87	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

02/02/06 08:22

Form I
Duplicate
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03 D**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	34.7	10.28	9.26	1	AC

Parameter	Result
Carbazole	390

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	79	50-130
Pyrene-d10	87	50-130
Benzo[b]fluoranthene-d12	89	50-130

N/A - Not Applicable

02/02/06 08:22

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27790.D
Acq On : 20 Jan 2006 7:16 am
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 30 04:31:22 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 MW 2/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	55383m	500.00 ng/mL	0.00
72) Chrysene-d12	43.83	240	94349m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.96	152	193277	1698.11 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 169.81%#		
58) Pyrene-d10	38.90	212	438012m	1870.96 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 187.10%#		
81) Benzo[b]fluoranthene-d12	47.77	264	370623	1916.06 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 191.61%#		
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	1110301m	4457.15 ng/mL	
10) C1-Naphthalenes	23.52	142	1623488m	6517.27 ng/mL	
11) C2-Naphthalenes	25.95	156	2859114m	11477.52 ng/mL	
12) C3-Naphthalenes	28.28	170	1533636m	6156.57 ng/mL	
13) C4-Naphthalenes	31.05	184	450817m	1809.74 ng/mL	
15) 2-Methylnaphthalene	23.09	142	175707	1108.10 ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	1447456	9590.53 ng/mL#	100
22) Biphenyl	24.97	154	127779m	640.13 ng/mL	
23) 2,6-Dimethylnaphthalene	25.59	156	374507m	2741.78 ng/mL	
24) Dibenzofuran	28.08	168	122098	554.11 ng/mL	91
25) Acenaphthylene	26.69	152	619251m	2505.50 ng/mL	
26) Acenaphthene	27.43	153	1616845	10672.33 ng/mL E	100
27) 2,3,5-Trimethylnaphthalene	28.98	170	105470m	884.79 ng/mL	
28) Fluorene	29.45	166	405107m	2286.91 ng/mL	
29) C1-Fluorenes	31.68	180	674356m	3806.88 ng/mL	
30) C2-Fluorenes	33.87	194	446739m	2521.93 ng/mL	
31) C3-Fluorenes	36.56	208	234052m	1321.27 ng/mL	
32) Dibenzothiophene	32.80	184	711062m	3002.06 ng/mL	
36) OTP	35.00	198	36744	155.13 ng/mL#	100
37) C1-Dibenzothiophenes	34.57	198	754164m	3184.03 ng/mL	
38) C2-Dibenzothiophenes	36.25	212	529304m	2234.69 ng/mL	
39) C3-Dibenzothiophenes	38.06	226	262328m	1107.53 ng/mL	
40) C4-Dibenzothiophenes	39.74	240	85796m	362.23 ng/mL	
41) Phenanthrene	33.30	178	5606068	22179.99 ng/mL E	97
47) C1-Phenanthrenes/Anthracen	35.26	192	3785373m	14976.54 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.53	206	1773760m	7017.75 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.36	220	550621m	2178.49 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.58	234	133171m	526.88 ng/mL	
52) Retene	40.29	234	8872m	154.70 ng/mL	
53) Anthracene	33.48	178	1962198	8358.97 ng/mL	99
54) Carbazole	34.13	167	33489	149.69 ng/mL#	81
55) 1-Methylphenanthrene	35.81	192	662447	3777.94 ng/mL	100
56) Fluoranthene	38.08	202	2623930m	9726.71 ng/mL	
57) Benzo(b)fluorene	40.61	216	320745m	1934.08 ng/mL	
59) Pyrene	38.99	202	3850253	13938.05 ng/mL E	97
60) C1-Fluoranthenes/Pyrenes	40.36	216	3245405m	11748.48 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.04	230	1039969m	3764.72 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.30	244	315165m	1140.91 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.54	258	85575m	309.78 ng/mL	
64) Naphthobenzothiophene	42.83	234	231093	902.13 ng/ml#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27790.D
Acq On : 20 Jan 2006 7:16 am
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 30 04:31:22 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

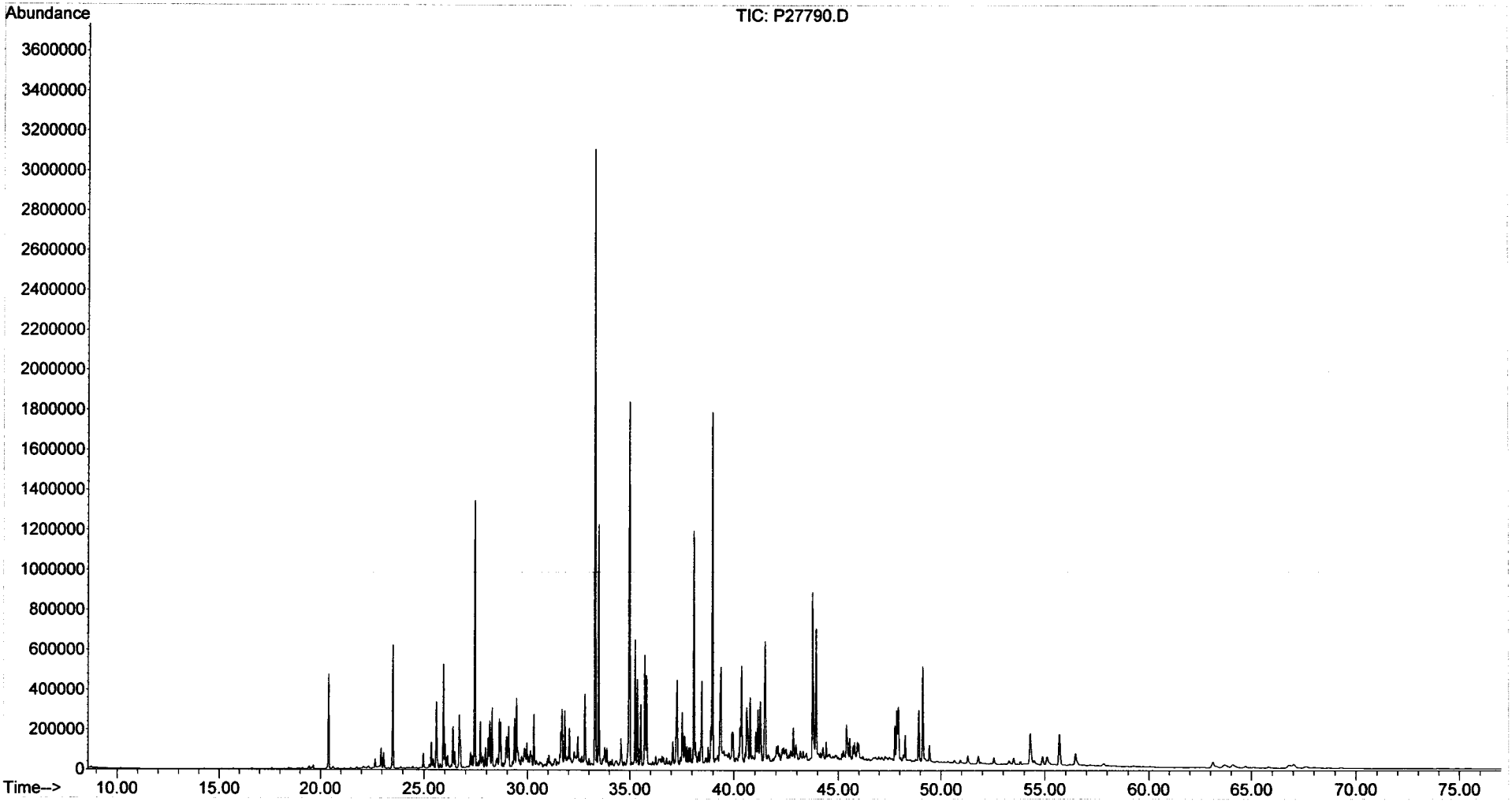
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.83	234	231275	902.84	ng/mL#	67
66) Naphthobenzothiophene-1,2-	43.18	234	60654m	236.78	ng/mL	
67) Naphthobenzothiophene-2,3-	43.47	234	65251m	254.72	ng/mL	
68) C1-Naphthobenzothiophenes	44.23	248	297472m	1161.26	ng/ml	
69) C2-Naphthobenzothiophenes	45.73	262	149631m	584.12	ng/ml	
70) C3-Naphthobenzothiophenes	47.87	276	76014m	296.74	ng/ml	
71) C4-Naphthobenzothiophenes	49.01	290	33204m	129.62	ng/mL	
73) Benz[a]anthracene	43.77	228	1340667m	4975.83	ng/mL	
74) Chrysene	43.93	228	1310400m	4842.27	ng/mL	
75) Chrysene/Triphenylene	43.93	228	1315136m	4859.77	ng/mL	
76) C1-Chrysenes	45.39	242	940285m	3474.60	ng/mL	
77) C2-Chrysenes	47.10	256	354268m	1309.11	ng/mL	
78) BBF-d12 Surr BKGD	47.77	256	17306	63.95	ng/mL	100
79) C3-Chrysenes	48.79	270	144936m	535.58	ng/mL	
80) C4-Chrysenes	49.85	284	41953m	155.03	ng/mL	
82) Benzo[b]fluoranthene	47.86	252	598664	2068.83	ng/mL	100
83) Benzo[k]fluoranthene	47.93	252	684075m	2260.62	ng/mL	
84) Benzo[a]fluoranthene	48.27	252	301584m	996.63	ng/mL	
85) Benzo[e]pyrene	48.92	252	591874	2121.74	ng/mL	99
86) Benzo[a]pyrene	49.12	252	1107827m	3972.29	ng/mL	
87) Perylene	49.44	252	208877m	751.26	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.30	276	414583m	1499.82	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	104457m	401.84	ng/mL	
90) Benzo[g,h,i]perylene	55.70	276	483136	1676.32	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27790.D
Acq On : 20 Jan 2006 7:16 am
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 30 04:31:22 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
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03E D**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	34.7	10.28	9.26	10	NLJr

Parameter	Result		Parameter	Result	
Naphthalene	43	U	Fluoranthene	26	U
C1-Naphthalenes	43	U	Pyrene	**38000**	
C2-Naphthalenes	43	U	C1-Fluoranthenes/Pyrenes	23	U
C3-Naphthalenes	43	U	C2-Fluoranthenes/Pyrenes	23	U
C4-Naphthalenes	43	U	C3-Fluoranthenes/Pyrenes	23	U
Biphenyl	24	U	C4-Fluoranthenes/Pyrenes	23	U
Dibenzofuran	31	U	Naphthobenzothiophenes	31	U
Acenaphthylene	47	U	C1-Naphthobenzothiophenes	31	U
Acenaphthene	**28000**		C2-Naphthobenzothiophenes	31	U
Fluorene	30	U	C3-Naphthobenzothiophenes	31	U
C1-Fluorenes	30	U	C4-Naphthobenzothiophenes	31	U
C2-Fluorenes	30	U	Benz[a]anthracene	41	U
C3-Fluorenes	30	U	Chrysene/Triphenylene	28	U
Anthracene	35	U	C1-Chrysenes	28	U
Phenanthrene	**60000**		C2-Chrysenes	28	U
C1-Phenanthrenes/Anthracenes	38	U	C3-Chrysenes	28	U
C2-Phenanthrenes/Anthracenes	38	U	C4-Chrysenes	28	U
C3-Phenanthrenes/Anthracenes	38	U	Benzo[b]fluoranthene	28	U
C4-Phenanthrenes/Anthracenes	38	U	Benzo[k]fluoranthene	53	U
Retene	38	U	Benzo[a]fluoranthene	53	U
Dibenzothiophene	29	U	Benzo[e]pyrene	36	U
C1-Dibenzothiophenes	29	U	Benzo[a]pyrene	36	U
C2-Dibenzothiophenes	29	U	Perylene	45	U
C3-Dibenzothiophenes	29	U	Indeno[1,2,3-cd]pyrene	62	U
C4-Dibenzothiophenes	29	U	Dibenz[a,h]anthracene	49	U
Benzo(b)fluorene	26	U	Benzo[g,h,i]perylene	46	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	77	50-130
Pyrene-d10	87	50-130
Benzo[b]fluoranthene-d12	88	50-130

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

02/02/06 08:17

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27694.D
Acq On : 15 Jan 2006 9:45 pm
Operator : NLJr
Sample : 0512128-03D-RE
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 30 05:11:40 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

MS for WW
2/1/06

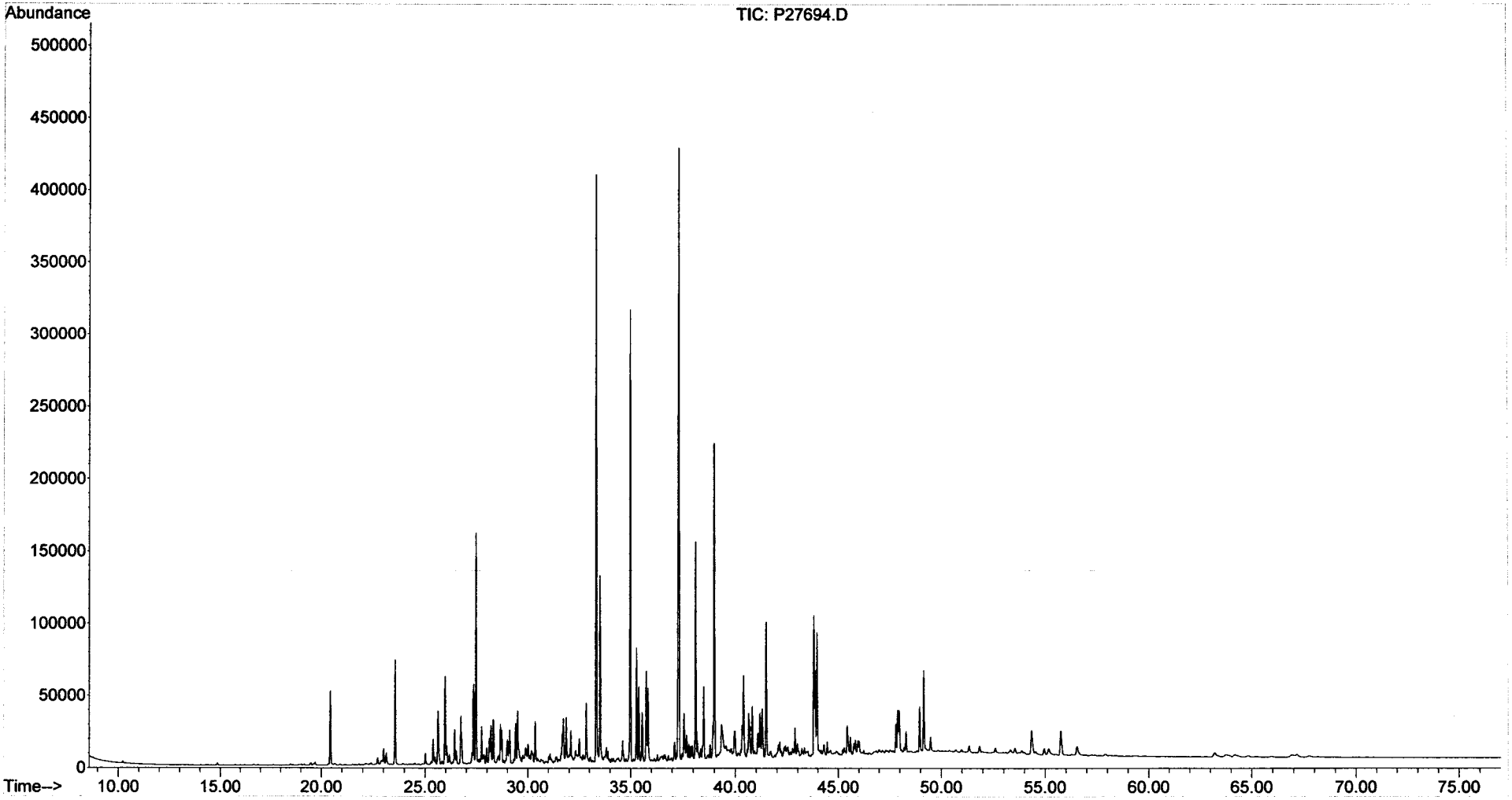
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	67320m	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	109458m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	22930m	165.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 16.57%#			
58) Pyrene-d10	38.94	212	53379	187.58	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 18.76%#			
81) Benzo[b]fluoranthene-d12	47.81	264	42661	190.11	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.01%#			
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
26) Acenaphthene	27.47	153	200053m	1086.35	ng/mL	
41) Phenanthrene	33.33	178	708477	2306.01	ng/mL	100
59) Pyrene	39.01	202	488184	1453.88	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 : P27694.D
Acq On : 15 Jan 2006 9:45 pm
Operator : NLJr
Sample : 0512128-03D-RE
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 30 05:11:40 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 I
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03 D**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/19/06	34.7	10.28	1.5	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	170	30,31-Bishomohopane-22S	350
C24 Tricyclic Terpane	100	30,31-Bishomohopane-22R	190
C25 Tricyclic Terpane	110	30,31-Trishomohopane-22S	210
C24 Tetracyclic Terpane	120	30,31-Trishomohopane-22R	120
C26 Tricyclic Terpane-22S	45	Tetrakishomohopane-22S	100
C26 Tricyclic Terpane-22R	47	Tetrakishomohopane-22R	75
C28 Tricyclic Terpane-22S	55	Pentakishomohopane-22S	95
C28 Tricyclic Terpane-22R	56	Pentakishomohopane-22R	77
C29 Tricyclic Terpane-22S	67	13b(H),17a(H)-20S-Diacholestane	200
C29 Tricyclic Terpane-22R	69	13b(H),17a(H)-20R-Diacholestane	120
18a-22,29,30-Trisnorneohopane-TS	270	13b,17a-20S-Methyldiacholestane	93
C30 Tricyclic Terpane-22S	52	14a(H),17a(H)-20S-Cholestane	120
C30 Tricyclic Terpane-22R	51	14a(H),17a(H)-20R-Cholestane	370
17a(H)-22,29,30-Trisnorhopane-TM	290	13b,17a-20R-Ethyldiacholestane	68
17a/b,21b/a 28,30-Bisnorhopane	78	13a,17b-20S-Ethyldiacholestane	21
17a(H),21b(H)-25-Norhopane	31	14a,17a-20S-Methylcholestane	80
30-Norhopane	920	14a,17a-20R-Methylcholestane	150
18a(H)-30-Norneohopane-C29Ts	230	14a(H),17a(H)-20S-Ethylcholestane	150
17a(H)-Diahopane	47	14a(H),17a(H)-20R-Ethylcholestane	210
30-Normoretane	140	14b(H),17b(H)-20R-Cholestane	200
18a(H)&18b(H)-Oleananes	95	14b(H),17b(H)-20S-Cholestane	200
Hopane	1200	14b,17b-20R-Methylcholestane	190
Moretane	150	14b,17b-20S-Methylcholestane	240
30-Homohopane-22S	430	14b(H),17b(H)-20R-Ethylcholestane	310
30-Homohopane-22R	370	14b(H),17b(H)-20S-Ethylcholestane	250

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	66	50-130

N/A - Not Applicable

02/01/06 13:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34816.D
Acq On : 19 Jan 2006 8:00 pm
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 25 08:44:30 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	43.42	240	80588	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	43.93	217	300084	8860.11	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 886.01%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	192960m	2786.30	ng/mL	
84) Hopane (T19)	52.49	191	193570m	2795.11	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	27840m	402.00	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	16479	237.95	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	17506m	252.78	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	18963	273.82	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	7470	107.87	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	7680	110.90	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	9050m	130.68	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	9242m	133.45	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	10999m	158.82	ng/ml	
94) C29 Tricyclic Terpane-22R	47.48	191	11386m	164.41	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	44793	646.80	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	8554m	123.52	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	8362m	120.75	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	47252m	682.31	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	12931m	186.72	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	5042	72.81	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	151045m	2181.06	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	38174m	551.22	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	7695m	111.11	ng/ml	
104) 30-Normoretane (T17)	51.89	191	23243	335.62	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	15662m	226.16	ng/ml	
106) Moretane (T20)	53.19	191	24692m	356.55	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	70834m	1022.83	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	61015	881.04	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	56986	822.87	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	31305	452.04	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	34711	501.22	ng/ml	100
112) 30,31-Trishomohopane-22R (	58.70	191	18898	272.88	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.77	191	16883	243.79	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	12342	178.22	ng/ml	100
115) Pentakishomohopane-22S (T3	63.98	191	15656m	226.07	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	12731	183.83	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	45.43	217	16074	474.59	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	9394m	277.36	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	7461m	220.29	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	9981m	294.69	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	29664m	875.84	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	5508m	162.63	ng/ml	

2nd ✓ MS for WD 1/24/06 25

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34816.D
Acq On : 19 Jan 2006 8:00 pm
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 25 08:44:30 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

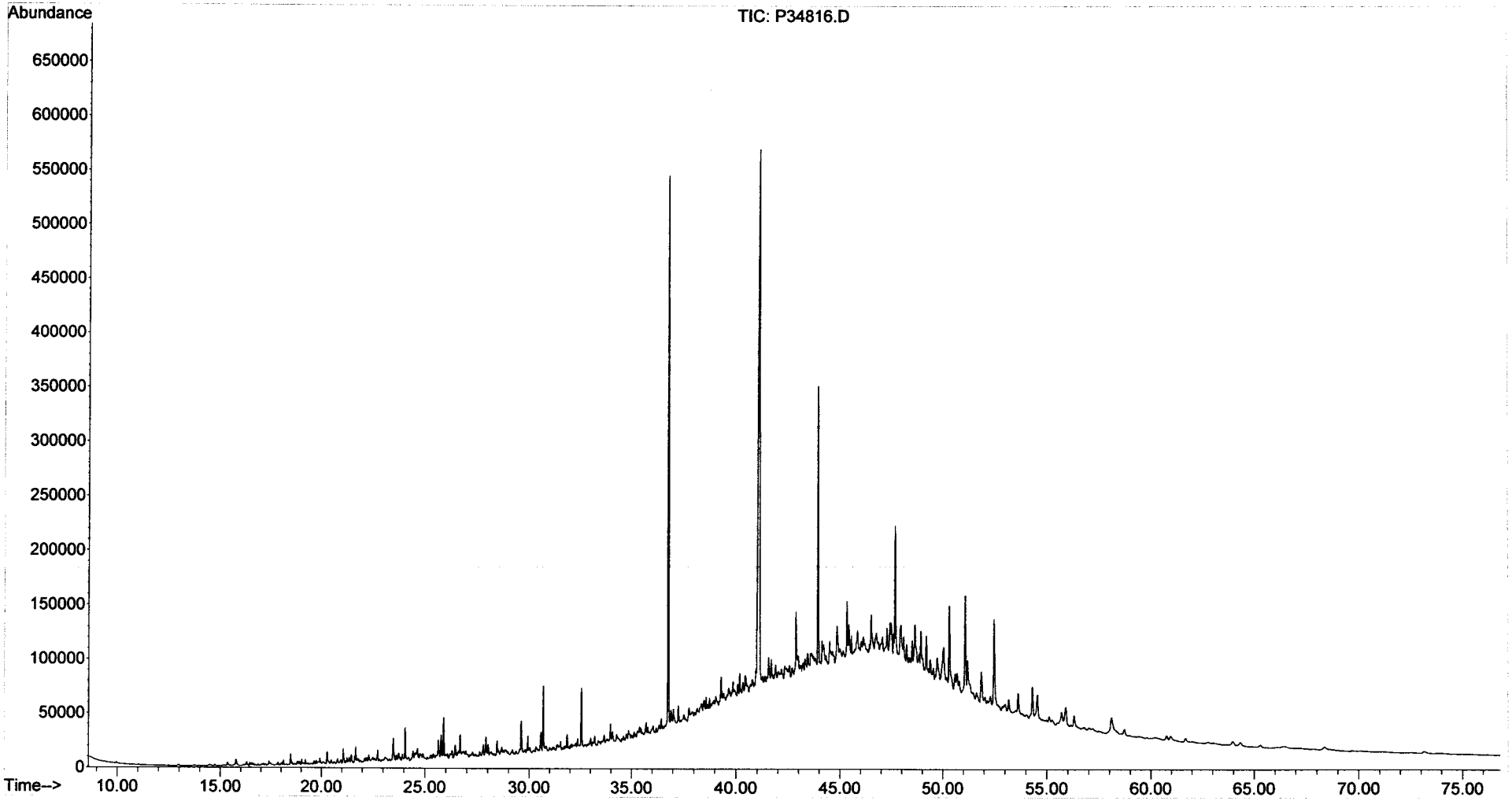
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	1707	50.40	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	6459m	190.70	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	11758m	347.16	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	11790m	348.10	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	16783m	495.53	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	15768m	465.56	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	15986m	471.99	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	15254m	450.38	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	19760m	583.42	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	25262	745.87	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	20093m	593.25	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 : P34816.D
Acq On : 19 Jan 2006 8:00 pm
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 25 08:44:30 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X D**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.60	3.75	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	4000		Fluoranthene	12000	E
C1-Naphthalenes	6700	E	Pyrene	18000	E
C2-Naphthalenes	12000		C1-Fluoranthenes/Pyrenes	18000	
C3-Naphthalenes	6500		C2-Fluoranthenes/Pyrenes	6300	
C4-Naphthalenes	2100		C3-Fluoranthenes/Pyrenes	1900	
Biphenyl	570		C4-Fluoranthenes/Pyrenes	470	
Dibenzofuran	550		Naphthobenzothiophenes	2400	
Acenaphthylene	4000		C1-Naphthobenzothiophenes	2100	
Acenaphthene	12000	E	C2-Naphthobenzothiophenes	960	
Fluorene	2200		C3-Naphthobenzothiophenes	480	
C1-Fluorenes	4600		C4-Naphthobenzothiophenes	160	
C2-Fluorenes	3200		Benz[a]anthracene	8200	
C3-Fluorenes	1800		Chrysene/Triphenylene	7600	
Anthracene	9800		C1-Chrysenes	5900	
Phenanthrene	26000	E	C2-Chrysenes	2100	
C1-Phenanthrenes/Anthracenes	20000		C3-Chrysenes	830	
C2-Phenanthrenes/Anthracenes	10000		C4-Chrysenes	220	
C3-Phenanthrenes/Anthracenes	3500		Benzo[b]fluoranthene	3300	
C4-Phenanthrenes/Anthracenes	730		Benzo[k]fluoranthene	4100	
Retene	180		Benzo[a]fluoranthene	1900	
Dibenzothiophene	3100		Benzo[e]pyrene	3700	
C1-Dibenzothiophenes	3500		Benzo[a]pyrene	7100	
C2-Dibenzothiophenes	3200		Perylene	1100	
C3-Dibenzothiophenes	1600		Indeno[1,2,3-cd]pyrene	3400	
C4-Dibenzothiophenes	630		Dibenz[a,h]anthracene	870	
Benzo(b)fluorene	3000		Benzo[g,h,i]perylene	3300	

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

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

02/02/06 08:58

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X D**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.60	3.75	1	AC

Parameter	Result
Carbazole	**140**

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

N/A - Not Applicable

02/02/06 08:59

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17784.D
Acq On : 26 Jan 2006 10:58 pm
Operator : AC
Sample : 0512128-03D X
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 03:26:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for NTO 2/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	49206m	500.00 ng/mL	0.00
72) Chrysene-d12	43.03	240	87336m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.23	152	445560m	4223.80 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 422.38%#	
58) Pyrene-d10	38.11	212	1004261	4630.36 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 463.04%#	
81) Benzo[b]fluoranthene-d12	46.93	264	804972m	4628.45 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 462.84%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	

Target Compounds					Qvalue
9) Naphthalene	19.66	128	976958m	3887.78 ng/mL	
10) C1-Naphthalenes	22.78	142	1647366m	6555.66 ng/mL E	
11) C2-Naphthalenes	25.21	156	2883439m	11474.59 ng/mL	
12) C3-Naphthalenes	27.53	170	1591478m	6333.26 ng/mL	
13) C4-Naphthalenes	30.29	184	513329m	2042.78 ng/mL	
15) 2-Methylnaphthalene	22.34	142	143430m	901.60 ng/mL	
16) 1-Methylnaphthalene	22.78	142	1507943	10068.55 ng/mL# E	100
22) Biphenyl	24.23	154	110882	560.63 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.85	156	506864m	3839.19 ng/mL	
24) Dibenzofuran	27.31	168	119987	540.04 ng/mL	89
25) Acenaphthylene	25.94	152	946826m	3929.64 ng/mL	
26) Acenaphthene	26.68	153	1735913m	11598.49 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.23	170	130898m	1104.46 ng/mL	
28) Fluorene	28.68	166	370831m	2209.26 ng/mL	
29) C1-Fluorenes	30.93	180	758611m	4519.50 ng/mL	
30) C2-Fluorenes	33.11	194	524593m	3125.31 ng/mL	
31) C3-Fluorenes	35.76	208	302861m	1804.32 ng/mL	
32) Dibenzothiophene	32.02	184	761378m	3075.83 ng/mL	
36) OTP	34.29	198	161346m	651.81 ng/mL	
37) C1-Dibenzothiophenes	33.79	198	1003646m	4054.55 ng/mL	
38) C2-Dibenzothiophenes	35.48	212	775379m	3132.40 ng/mL	
39) C3-Dibenzothiophenes	37.29	226	395880m	1599.29 ng/mL	
40) C4-Dibenzothiophenes	40.85	240	153668m	620.79 ng/mL	
41) Phenanthrene	32.54	178	6406459	25739.29 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.49	192	4817988m	19357.28 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.76	206	2468299m	9916.91 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.58	220	845420m	3396.65 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.80	234	177324m	712.44 ng/mL	
52) Retene	39.52	234	8915m	171.31 ng/mL	
53) Anthracene	32.70	178	2207070m	9584.02 ng/mL	
54) Carbazole	33.35	167	28610	134.23 ng/mL#	84
55) 1-Methylphenanthrene	35.04	192	809690m	4750.97 ng/mL	
56) Fluoranthene	37.30	202	3130810m	11813.82 ng/mL E	
57) Benzo(b)fluorene	39.82	216	456673m	2952.71 ng/mL	
59) Pyrene	38.20	202	4793254	17783.45 ng/mL E	99
60) C1-Fluoranthenes/Pyrenes	39.57	216	4641567m	17220.67 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.31	230	1674760m	6213.53 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.51	244	503188m	1866.88 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.76	258	124540m	462.06 ng/mL	
64) Naphthobenzothiophene	42.02	234	362053m	1435.83 ng/ml	

✓ MS 2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17784.D
Acq On : 26 Jan 2006 10:58 pm
Operator : AC
Sample : 0512128-03D X
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 03:26:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

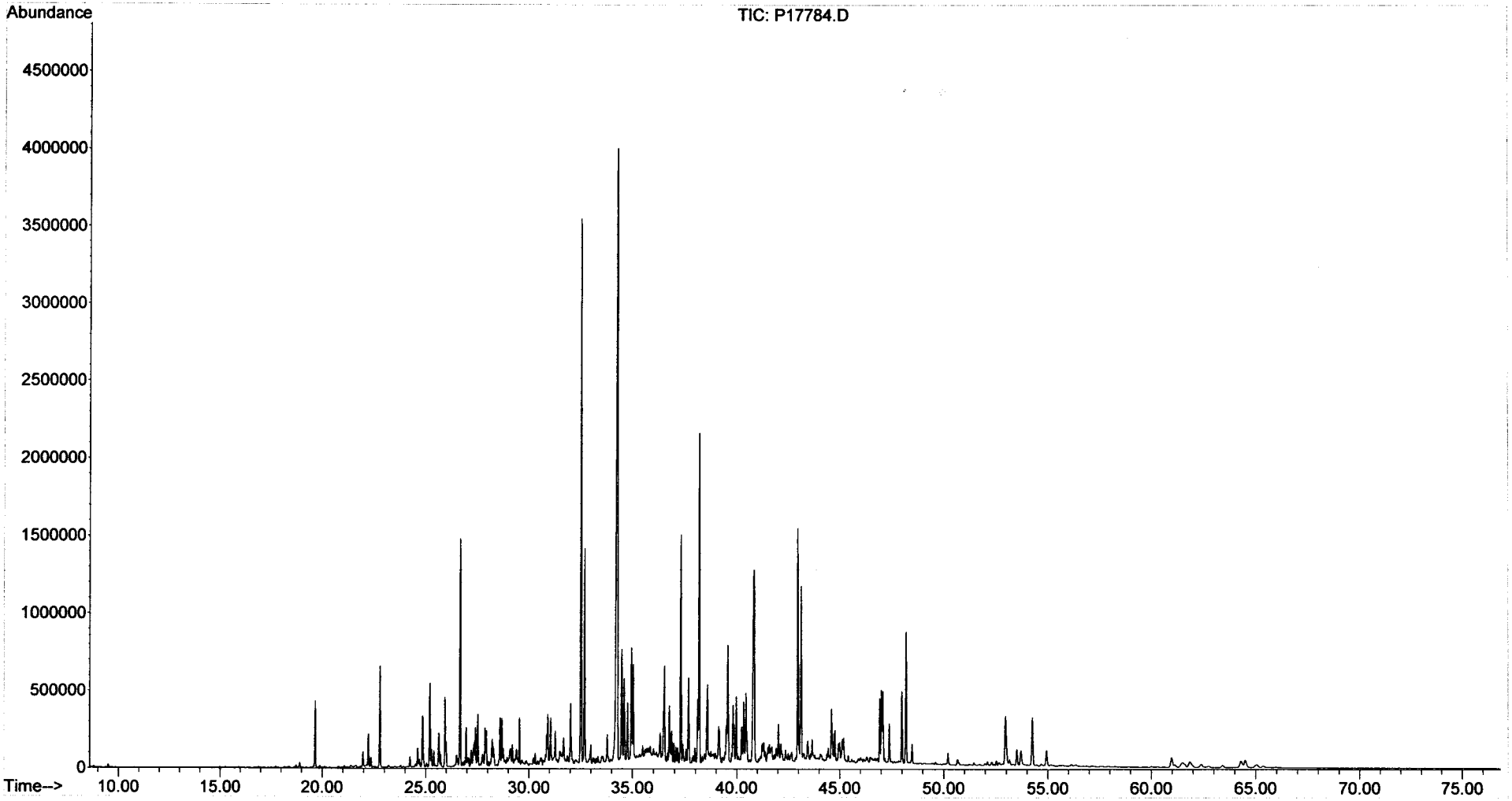
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.02	234	361110m	1432.09	ng/mL	
66) Naphthobenzothiophene-1,2-	42.37	234	92993m	368.79	ng/mL	
67) Naphthobenzothiophene-2,3-	42.67	234	128867m	511.06	ng/mL	
68) C1-Naphthobenzothiophenes	43.44	248	509693m	2021.35	ng/ml	
69) C2-Naphthobenzothiophenes	44.93	262	238788m	946.99	ng/ml	
70) C3-Naphthobenzothiophenes	46.83	276	117956m	467.79	ng/ml	
71) C4-Naphthobenzothiophenes	48.12	290	40775m	161.71	ng/mL	
73) Benz[a]anthracene	42.97	228	2143312m	8061.84	ng/mL	
74) Chrysene	43.13	228	2014530m	7415.75	ng/mL	
75) Chrysene/Triphenylene	43.13	228	2014853m	7416.94	ng/mL	
76) C1-Chrysenes	44.60	242	1581353m	5821.17	ng/mL	
77) C2-Chrysenes	46.31	256	599801m	2207.95	ng/mL	
78) BBF-d12 Surr BKGD	46.93	256	39489m	145.36	ng/mL	
79) C3-Chrysenes	47.90	270	222003m	817.22	ng/mL	
80) C4-Chrysenes	48.90	284	57833m	212.89	ng/mL	
82) Benzo[b]fluoranthene	47.02	252	883299m	3235.07	ng/mL	
83) Benzo[k]fluoranthene	47.09	252	1149619m	4047.23	ng/mL	
84) Benzo[a]fluoranthene	47.39	252	526550m	1853.72	ng/mL	
85) Benzo[e]pyrene	48.01	252	957438	3621.88	ng/mL	98
86) Benzo[a]pyrene	48.21	252	1833009m	7008.19	ng/mL	
87) Perylene	48.49	252	268550m	1050.39	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.96	276	762878m	3314.41	ng/mL	
89) Dibenz[a,h]anthracene	53.00	278	200779m	855.78	ng/mL	
90) Benzo[g,h,i]perylene	54.25	276	850308	3205.92	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17784.D
Acq On : 26 Jan 2006 10:58 pm
Operator : AC
Sample : 0512128-03D X
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 03:26:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03EX D**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.60	3.75	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	17	U	Fluoranthene	**12000**	
C1-Naphthalenes	**6900**		Pyrene	**18000**	
C2-Naphthalenes	17	U	C1-Fluoranthenes/Pyrenes	9.1	U
C3-Naphthalenes	17	U	C2-Fluoranthenes/Pyrenes	9.1	U
C4-Naphthalenes	17	U	C3-Fluoranthenes/Pyrenes	9.1	U
Biphenyl	9.3	U	C4-Fluoranthenes/Pyrenes	9.1	U
Dibenzofuran	12	U	Naphthobenzothiophenes	12	U
Acenaphthylene	18	U	C1-Naphthobenzothiophenes	12	U
Acenaphthene	**12000**		C2-Naphthobenzothiophenes	12	U
Fluorene	12	U	C3-Naphthobenzothiophenes	12	U
C1-Fluorenes	12	U	C4-Naphthobenzothiophenes	12	U
C2-Fluorenes	12	U	Benz[a]anthracene	16	U
C3-Fluorenes	12	U	Chrysene/Triphenylene	11	U
Anthracene	14	U	C1-Chrysenes	11	U
Phenanthrene	**26000**		C2-Chrysenes	11	U
C1-Phenanthrenes/Anthracenes	15	U	C3-Chrysenes	11	U
C2-Phenanthrenes/Anthracenes	15	U	C4-Chrysenes	11	U
C3-Phenanthrenes/Anthracenes	15	U	Benzo[b]fluoranthene	11	U
C4-Phenanthrenes/Anthracenes	15	U	Benzo[k]fluoranthene	21	U
Retene	15	U	Benzo[a]fluoranthene	21	U
Dibenzothiophene	11	U	Benzo[e]pyrene	14	U
C1-Dibenzothiophenes	11	U	Benzo[a]pyrene	14	U
C2-Dibenzothiophenes	11	U	Perylene	18	U
C3-Dibenzothiophenes	11	U	Indeno[1,2,3-cd]pyrene	24	U
C4-Dibenzothiophenes	11	U	Dibenz[a,h]anthracene	19	U
Benzo(b)fluorene	10	U	Benzo[g,h,i]perylene	18	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	81	50-130
Pyrene-d10	89	50-130
Benzo[b]fluoranthene-d12	94	50-130

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

02/02/06 08:50

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17764.D
Acq On : 26 Jan 2006 6:53 am
Operator : AC
Sample : 0512128-03D-RE X
Misc : 10X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 03:33:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WW 2/1/06

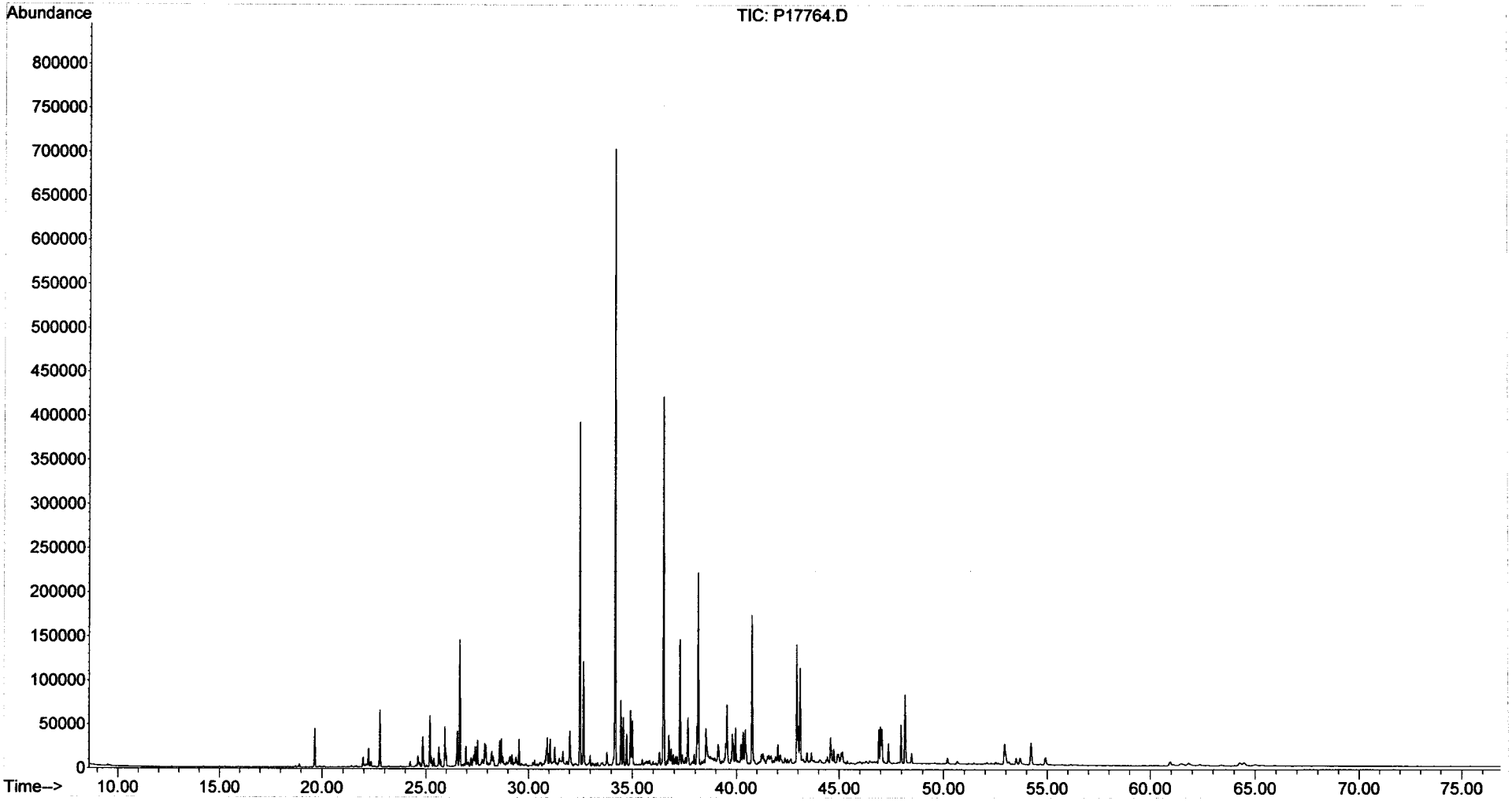
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	46914m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	75247m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.23	152	43237m	429.90	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.99%#			
58) Pyrene-d10	38.08	212	97943m	473.65	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.36%#			
81) Benzo[b]fluoranthene-d12	46.92	264	74766m	498.96	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.90%#			
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	22.78	142	161894m	675.73	ng/mL	
16) 1-Methylnaphthalene	22.78	142	147682	1034.25	ng/mL#	100
26) Acenaphthene	26.67	153	171221	1199.90	ng/mL	100
41) Phenanthrene	32.50	178	607237	2558.89	ng/mL	100
56) Fluoranthene	37.28	202	298715m	1182.24	ng/mL	
59) Pyrene	38.16	202	449877	1750.63	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17764.D
Acq On : 26 Jan 2006 6:53 am
Operator : AC
Sample : 0512128-03D-RE X
Misc : 10X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 03:33:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X D**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.60	1.47	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**74**	30,31-Bishomohopane-22S	**160**
C24 Tricyclic Terpane	**42**	30,31-Bishomohopane-22R	**83**
C25 Tricyclic Terpane	**46**	30,31-Trishomohopane-22S	**85**
C24 Tetracyclic Terpane	**50**	30,31-Trishomohopane-22R	**43**
C26 Tricyclic Terpane-22S	**20**	Tetrakishomohopane-22S	**47**
C26 Tricyclic Terpane-22R	**20**	Tetrakishomohopane-22R	**33**
C28 Tricyclic Terpane-22S	**24**	Pentakishomohopane-22S	**42**
C28 Tricyclic Terpane-22R	**24**	Pentakishomohopane-22R	**31**
C29 Tricyclic Terpane-22S	**32**	13b(H),17a(H)-20S-Diacholestane	**81**
C29 Tricyclic Terpane-22R	**27**	13b(H),17a(H)-20R-Diacholestane	**46**
18a-22,29,30-Trisnorneohopane-TS	**110**	13b,17a-20S-Methyldiacholestane	**39**
C30 Tricyclic Terpane-22S	**22**	14a(H),17a(H)-20S-Cholestane	**48**
C30 Tricyclic Terpane-22R	**20**	14a(H),17a(H)-20R-Cholestane	**160**
17a(H)-22,29,30-Trisnorhopane-TM	**120**	13b,17a-20R-Ethyldiacholestane	**27**
17a/b,21b/a 28,30-Bisnorhopane	**28**	13a,17b-20S-Ethyldiacholestane	**10**
17a(H),21b(H)-25-Norhopane	**11**	14a,17a-20S-Methylcholestane	**28**
30-Norhopane	**380**	14a,17a-20R-Methylcholestane	**61**
18a(H)-30-Norneohopane-C29Ts	**90**	14a(H),17a(H)-20S-Ethylcholestane	**66**
17a(H)-Diahopane	**18**	14a(H),17a(H)-20R-Ethylcholestane	**85**
30-Normoretane	**57**	14b(H),17b(H)-20R-Cholestane	**83**
18a(H)&18b(H)-Oleananes	**36**	14b(H),17b(H)-20S-Cholestane	**83**
Hopane	**470**	14b,17b-20R-Methylcholestane	**77**
Moretane	**53**	14b,17b-20S-Methylcholestane	**90**
30-Homohopane-22S	**180**	14b(H),17b(H)-20R-Ethylcholestane	**140**
30-Homohopane-22R	**160**	14b(H),17b(H)-20S-Ethylcholestane	**97**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	98	50-130

N/A - Not Applicable

02/01/06 14:06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34875.D
Acq On : 26 Jan 2006 8:24 pm
Operator : AC
Sample : 0512128-03D
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 12:49:42 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

AMG 1/30/06

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	43.43	240	83136	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	43.93	217	464525	13294.94	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1329.49%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	83467m	1168.31	ng/mL	
84) Hopane (T19)	52.48	191	83757m	1172.37	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	13147m	184.02	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	7515	105.19	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.20	191	8251m	115.49	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	8870	124.16	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	3608	50.50	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	3660	51.23	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.59	191	4322m	60.50	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	4339m	60.73	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	5637	78.90	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	4846m	67.83	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	19157m	268.14	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	3953	55.33	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	3536m	49.49	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	21125	295.69	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	5041m	70.56	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	1968m	27.55	ng/ml	
101) 30-Norhopane (T15)	51.07	191	68382m	957.16	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.18	191	16012m	224.12	ng/ml	
103) 17a(H)-Diahopane (X)	51.30	191	3148m	44.06	ng/ml	
104) 30-Normoretane (T17)	51.88	191	10197	142.73	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	6488m	90.81	ng/ml	
106) Moretane (T20)	53.17	191	9437m	132.09	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	32971m	461.50	ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	29202	408.75	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.87	191	29081	407.05	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	14911	208.71	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	15234	213.23	ng/ml	100
112) 30,31-Trishomohopane-22R (	58.68	191	7635	106.87	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.74	191	8469	118.54	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.67	191	5870	82.16	ng/ml	100
115) Pentakishomohopane-22S (T3	63.96	191	7412m	103.75	ng/ml	
116) Pentakishomohopane-22R (T3	65.28	191	5557m	77.78	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	7044m	201.60	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	3998m	114.42	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	3374m	96.57	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	4199m	120.18	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	13969m	399.80	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	2373m	67.92	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34875.D
Acq On : 26 Jan 2006 8:24 pm
Operator : AC
Sample : 0512128-03D X
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 12:49:42 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)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	899	25.73	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	2480m	70.98	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	5303m	151.77	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	5725m	163.85	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	7432m	212.71	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	7253m	207.58	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	7224m	206.75	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	6745m	193.05	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	7852m	224.73	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	12437	355.95	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	8500m	243.27	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34875.D
Acq On : 26 Jan 2006 8:24 pm
Operator : AC
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Quant Time: Jan 30 12:49:42 2006
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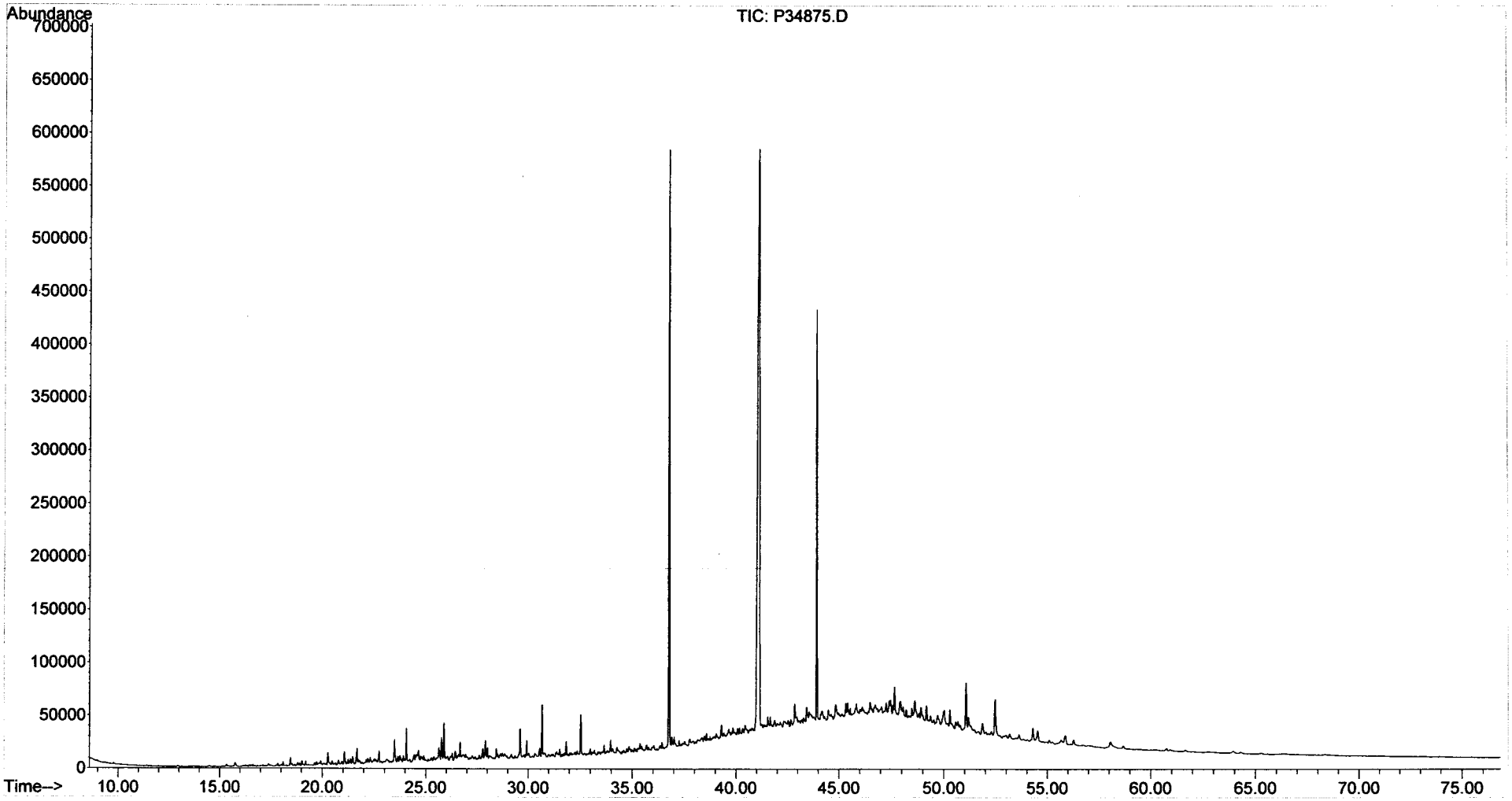
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	12000	12000	3	30
C1-Naphthalenes	18000 E	17000	5	30
C2-Naphthalenes	32000	30000	5	30
C3-Naphthalenes	17000	16000	6	30
C4-Naphthalenes	5000	4700	7	30
Biphenyl	1800	1700	8	30
Dibenzofuran	1500	1400	6	30
Acenaphthylene	6600	6500	1	30
Acenaphthene	30000 E	28000 E	6	30
Fluorene	6400	5900	8	30
C1-Fluorenes	10000	9900	6	30
C2-Fluorenes	7400	6600	12	30
C3-Fluorenes	4600	3400	30	30
Anthracene	23000	22000	7	30
Phenanthrene	63000 E	58000 E	9	30
C1-Phenanthrenes/Anthracenes	46000	39000	18	30
C2-Phenanthrenes/Anthracenes	33000	18000	57[a]	30
C3-Phenanthrenes/Anthracenes	21000	5700	116[a]	30
C4-Phenanthrenes/Anthracenes	7900	1400	141[a]	30
Retene	3.7 U	400	X	30
Dibenzothiophene	8400	7800	8	30
C1-Dibenzothiophenes	9100	7900	15	30
C2-Dibenzothiophenes	9100	5800	44[a]	30
C3-Dibenzothiophenes	7900	2900	93[a]	30
C4-Dibenzothiophenes	4100	940	126[a]	30
Benzo(b)fluorene	6000	5000	17	30
Fluoranthene	27000 E	25000	7	30
Pyrene	42000 E	36000 E	14	30
C1-Fluoranthenes/Pyrenes	39000	30000	25	30
C2-Fluoranthenes/Pyrenes	12000	9800	21	30
C3-Fluoranthenes/Pyrenes	3300	3000	10	30
C4-Fluoranthenes/Pyrenes	920	800	13	30
Naphthobenzothiophenes	4200	3600	14	30
C1-Naphthobenzothiophenes	3200	3000	5	30
C2-Naphthobenzothiophenes	1600	1500	7	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.
E - Estimated value, exceeds the upper limit of calibration.
U - The analyte was analyzed for but not detected at the sample specific level reported.

02/02/06 08:22

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	1300	770	53[a]	30
C4-Naphthobenzothiophenes	340	340	0	30
Benz[a]anthracene	14000	13000	4	30
Chrysene/Triphenylene	13000	13000	3	30
C1-Chrysenes	9200	9000	2	30
C2-Chrysenes	3600	3200	10	30
C3-Chrysenes	1400	1400	2	30
C4-Chrysenes	440	400	8	30
Benzo[b]fluoranthene	4800	5400	10	30
Benzo[k]fluoranthene	6700	5900	13	30
Benzo[a]fluoranthene	2600	2600	2	30
Benzo[e]pyrene	5600	5500	2	30
Benzo[a]pyrene	10000	10000	1	30
Perylene	2000	2000	1	30
Indeno[1,2,3-cd]pyrene	3700	3900	4	30
Dibenz[a,h]anthracene	1000	1000	1	30
Benzo[g,h,i]perylene	4300	4400	0	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	89	79	50-130
Pyrene-d10	103	87	50-130
Benzo[b]fluoranthene-d12	105	89	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.

02/02/06 08:22

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	**450**	**390**	15	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	89	79	50-130
Pyrene-d10	103	87	50-130
Benzo[b]fluoranthene-d12	105	89	50-130

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

02/02/06 08:23

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03E**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	NLJr

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	42 U	43 U	N/A	30
C1-Naphthalenes	**18000**	43 U	X	30
C2-Naphthalenes	42 U	43 U	N/A	30
C3-Naphthalenes	42 U	43 U	N/A	30
C4-Naphthalenes	42 U	43 U	N/A	30
Biphenyl	23 U	24 U	N/A	30
Dibenzofuran	30 U	31 U	N/A	30
Acenaphthylene	46 U	47 U	N/A	30
Acenaphthene	**30000**	**28000**	5	30
Fluorene	29 U	30 U	N/A	30
C1-Fluorenes	29 U	30 U	N/A	30
C2-Fluorenes	29 U	30 U	N/A	30
C3-Fluorenes	29 U	30 U	N/A	30
Anthracene	34 U	35 U	N/A	30
Phenanthrene	**64000**	**60000**	7	30
C1-Phenanthrenes/Anthracenes	37 U	38 U	N/A	30
C2-Phenanthrenes/Anthracenes	37 U	38 U	N/A	30
C3-Phenanthrenes/Anthracenes	37 U	38 U	N/A	30
C4-Phenanthrenes/Anthracenes	37 U	38 U	N/A	30
Retene	37 U	38 U	N/A	30
Dibenzothiophene	28 U	29 U	N/A	30
C1-Dibenzothiophenes	28 U	29 U	N/A	30
C2-Dibenzothiophenes	28 U	29 U	N/A	30
C3-Dibenzothiophenes	28 U	29 U	N/A	30
C4-Dibenzothiophenes	28 U	29 U	N/A	30
Benzo(b)fluorene	26 U	26 U	N/A	30
Fluoranthene	**27000**	26 U	X	30
Pyrene	**42000**	**38000**	11	30
C1-Fluoranthenes/Pyrenes	23 U	23 U	N/A	30
C2-Fluoranthenes/Pyrenes	23 U	23 U	N/A	30
C3-Fluoranthenes/Pyrenes	23 U	23 U	N/A	30
C4-Fluoranthenes/Pyrenes	23 U	23 U	N/A	30
Naphthobenzothiophenes	31 U	31 U	N/A	30
C1-Naphthobenzothiophenes	31 U	31 U	N/A	30
C2-Naphthobenzothiophenes	31 U	31 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.
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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03E**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	NLJr

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	31 U	31 U	N/A	30
C4-Naphthobenzothiophenes	31 U	31 U	N/A	30
Benz[a]anthracene	40 U	41 U	N/A	30
Chrysene/Triphenylene	27 U	28 U	N/A	30
C1-Chrysenes	27 U	28 U	N/A	30
C2-Chrysenes	27 U	28 U	N/A	30
C3-Chrysenes	27 U	28 U	N/A	30
C4-Chrysenes	27 U	28 U	N/A	30
Benzo[b]fluoranthene	27 U	28 U	N/A	30
Benzo[k]fluoranthene	52 U	53 U	N/A	30
Benzo[a]fluoranthene	52 U	53 U	N/A	30
Benzo[e]pyrene	35 U	36 U	N/A	30
Benzo[a]pyrene	35 U	36 U	N/A	30
Perylene	44 U	45 U	N/A	30
Indeno[1,2,3-cd]pyrene	61 U	62 U	N/A	30
Dibenz[a,h]anthracene	48 U	49 U	N/A	30
Benzo[g,h,i]perylene	45 U	46 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	88	77	50-130
Pyrene-d10	100	87	50-130
Benzo[b]fluoranthene-d12	104	88	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.

02/02/06 08:17

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	160	170	5	30
C24 Tricyclic Terpane	96	100	4	30
C25 Tricyclic Terpane	110	110	3	30
C24 Tetracyclic Terpane	110	120	3	30
C26 Tricyclic Terpane-22S	47	45	3	30
C26 Tricyclic Terpane-22R	44	47	7	30
C28 Tricyclic Terpane-22S	50	55	9	30
C28 Tricyclic Terpane-22R	52	56	7	30
C29 Tricyclic Terpane-22S	63	67	5	30
C29 Tricyclic Terpane-22R	61	69	12	30
18a-22,29,30-Trisnorneohopane-TS	260	270	5	30
C30 Tricyclic Terpane-22S	53	52	2	30
C30 Tricyclic Terpane-22R	44	51	15	30
17a(H)-22,29,30-Trisnorhopane-TM	280	290	3	30
17a/b,21b/a 28,30-Bisnorhopane	74	78	6	30
17a(H),21b(H)-25-Norhopane	28	31	7	30
30-Norhopane	900	920	2	30
18a(H)-30-Norneohopane-C29Ts	220	230	4	30
17a(H)-Diahopane	47	47	0	30
30-Normoretane	140	140	0	30
18a(H)&18b(H)-Oleananes	95	95	0	30
Hopane	1200	1200	0	30
Moretane	160	150	5	30
30-Homohopane-22S	420	430	2	30
30-Homohopane-22R	360	370	2	30
30,31-Bishomohopane-22S	330	350	6	30
30,31-Bishomohopane-22R	180	190	5	30
30,31-Trishomohopane-22S	200	210	5	30
30,31-Trishomohopane-22R	100	120	11	30
Tetrakishomohopane-22S	100	100	0	30
Tetrakishomohopane-22R	70	75	7	30
Pentakishomohopane-22S	94	95	1	30
Pentakishomohopane-22R	70	77	10	30
13b(H),17a(H)-20S-Diacholestane	200	200	1	30
13b(H),17a(H)-20R-Diacholestane	100	120	10	30

N/A - Not Applicable

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Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	94	93	1	30
14a(H),17a(H)-20S-Cholestane	110	120	13	30
14a(H),17a(H)-20R-Cholestane	350	370	4	30
13b,17a-20R-Ethyldiacholestane	66	68	4	30
13a,17b-20S-Ethyldiacholestane	22	21	6	30
14a,17a-20S-Methylcholestane	71	80	12	30
14a,17a-20R-Methylcholestane	150	150	2	30
14a(H),17a(H)-20S-Ethylcholestane	150	150	5	30
14a(H),17a(H)-20R-Ethylcholestane	200	210	3	30
14b(H),17b(H)-20R-Cholestane	200	200	1	30
14b(H),17b(H)-20S-Cholestane	200	200	1	30
14b,17b-20R-Methylcholestane	180	190	6	30
14b,17b-20S-Methylcholestane	230	240	6	30
14b(H),17b(H)-20R-Ethylcholestane	310	310	0	30
14b(H),17b(H)-20S-Ethylcholestane	240	250	4	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	69	66	50-130

N/A - Not Applicable

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

02/02/06 08:06

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	6900	4000	54[a]	30
C1-Naphthalenes	12000 E	6700 E	58[a]	30
C2-Naphthalenes	21000	12000	56[a]	30
C3-Naphthalenes	11000	6500	52[a]	30
C4-Naphthalenes	3300	2100	46[a]	30
Biphenyl	1100	570	60[a]	30
Dibenzofuran	1000	550	61[a]	30
Acenaphthylene	5200	4000	27	30
Acenaphthene	21000 E	12000 E	56[a]	30
Fluorene	3900	2200	54[a]	30
C1-Fluorenes	7700	4600	50[a]	30
C2-Fluorenes	4800	3200	40[a]	30
C3-Fluorenes	2700	1800	39[a]	30
Anthracene	16000 E	9800	50[a]	30
Phenanthrene	47000 E	26000 E	57[a]	30
C1-Phenanthrenes/Anthracenes	31000	20000	44[a]	30
C2-Phenanthrenes/Anthracenes	14000	10000	36[a]	30
C3-Phenanthrenes/Anthracenes	4700	3500	31[a]	30
C4-Phenanthrenes/Anthracenes	990	730	30	30
Retene	300	180	54[a]	30
Dibenzothiophene	5500	3100	54[a]	30
C1-Dibenzothiophenes	5500	3500	45[a]	30
C2-Dibenzothiophenes	4600	3200	35[a]	30
C3-Dibenzothiophenes	2200	1600	31[a]	30
C4-Dibenzothiophenes	810	630	24	30
Benzo(b)fluorene	4000	3000	29	30
Fluoranthene	19000 E	12000 E	45[a]	30
Pyrene	29000 E	18000 E	45[a]	30
C1-Fluoranthenes/Pyrenes	24000	18000	33[a]	30
C2-Fluoranthenes/Pyrenes	8400	6300	29	30
C3-Fluoranthenes/Pyrenes	2300	1900	20	30
C4-Fluoranthenes/Pyrenes	610	470	26	30
Naphthobenzothiophenes	3100	2400	27	30
C1-Naphthobenzothiophenes	2700	2100	27	30
C2-Naphthobenzothiophenes	1300	960	30	30

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

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	660	480	32[a]	30
C4-Naphthobenzothiophenes	250	160	41[a]	30
Benz[a]anthracene	11000	8200	29	30
Chrysene/Triphenylene	10000	7600	29	30
C1-Chrysenes	7600	5900	25	30
C2-Chrysenes	2600	2100	23	30
C3-Chrysenes	1100	830	30	30
C4-Chrysenes	320	220	39[a]	30
Benzo[b]fluoranthene	4600	3300	34[a]	30
Benzo[k]fluoranthene	5100	4100	21	30
Benzo[a]fluoranthene	2400	1900	23	30
Benzo[e]pyrene	4800	3700	27	30
Benzo[a]pyrene	9200	7100	25	30
Perylene	1400	1100	25	30
Indeno[1,2,3-cd]pyrene	4300	3400	24	30
Dibenz[a,h]anthracene	1200	870	28	30
Benzo[g,h,i]perylene	4200	3300	24	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	82	79	50-130
Pyrene-d10	93	87	50-130
Benzo[b]fluoranthene-d12	93	87	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.

02/02/06 08:59

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	**290**	**140**	71[a]	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	82	79	50-130
Pyrene-d10	93	87	50-130
Benzo[b]fluoranthene-d12	93	87	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.

02/02/06 09:00

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03EX**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	18 U	17 U	N/A	30
C1-Naphthalenes	**13000**	**6900**	59[a]	30
C2-Naphthalenes	18 U	17 U	N/A	30
C3-Naphthalenes	18 U	17 U	N/A	30
C4-Naphthalenes	18 U	17 U	N/A	30
Biphenyl	10 U	9.3 U	N/A	30
Dibenzofuran	13 U	12 U	N/A	30
Acenaphthylene	20 U	18 U	N/A	30
Acenaphthene	**22000**	**12000**	55[a]	30
Fluorene	13 U	12 U	N/A	30
C1-Fluorenes	13 U	12 U	N/A	30
C2-Fluorenes	13 U	12 U	N/A	30
C3-Fluorenes	13 U	12 U	N/A	30
Anthracene	**16000**	14 U	X	30
Phenanthrene	**46000**	**26000**	55[a]	30
C1-Phenanthrenes/Anthracenes	16 U	15 U	N/A	30
C2-Phenanthrenes/Anthracenes	16 U	15 U	N/A	30
C3-Phenanthrenes/Anthracenes	16 U	15 U	N/A	30
C4-Phenanthrenes/Anthracenes	16 U	15 U	N/A	30
Retene	16 U	15 U	N/A	30
Dibenzothiophene	12 U	11 U	N/A	30
C1-Dibenzothiophenes	12 U	11 U	N/A	30
C2-Dibenzothiophenes	12 U	11 U	N/A	30
C3-Dibenzothiophenes	12 U	11 U	N/A	30
C4-Dibenzothiophenes	12 U	11 U	N/A	30
Benzo(b)fluorene	11 U	10 U	N/A	30
Fluoranthene	**19000**	**12000**	45[a]	30
Pyrene	**27000**	**18000**	42[a]	30
C1-Fluoranthenes/Pyrenes	9.9 U	9.1 U	N/A	30
C2-Fluoranthenes/Pyrenes	9.9 U	9.1 U	N/A	30
C3-Fluoranthenes/Pyrenes	9.9 U	9.1 U	N/A	30
C4-Fluoranthenes/Pyrenes	9.9 U	9.1 U	N/A	30
Naphthobenzothiophenes	14 U	12 U	N/A	30
C1-Naphthobenzothiophenes	14 U	12 U	N/A	30
C2-Naphthobenzothiophenes	14 U	12 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.

02/02/06 08:51

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03EX**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	14 U	12 U	N/A	30
C4-Naphthobenzothiophenes	14 U	12 U	N/A	30
Benz[a]anthracene	18 U	16 U	N/A	30
Chrysene/Triphenylene	12 U	11 U	N/A	30
C1-Chrysenes	12 U	11 U	N/A	30
C2-Chrysenes	12 U	11 U	N/A	30
C3-Chrysenes	12 U	11 U	N/A	30
C4-Chrysenes	12 U	11 U	N/A	30
Benzo[b]fluoranthene	12 U	11 U	N/A	30
Benzo[k]fluoranthene	23 U	21 U	N/A	30
Benzo[a]fluoranthene	23 U	21 U	N/A	30
Benzo[e]pyrene	15 U	14 U	N/A	30
Benzo[a]pyrene	16 U	14 U	N/A	30
Perylene	19 U	18 U	N/A	30
Indeno[1,2,3-cd]pyrene	27 U	24 U	N/A	30
Dibenz[a,h]anthracene	21 U	19 U	N/A	30
Benzo[g,h,i]perylene	20 U	18 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	84	81	50-130
Pyrene-d10	94	89	50-130
Benzo[b]fluoranthene-d12	100	94	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.

02/02/06 08:51

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	120	74	49[a]	30
C24 Tricyclic Terpane	72	42	53[a]	30
C25 Tricyclic Terpane	76	46	49[a]	30
C24 Tetracyclic Terpane	83	50	50[a]	30
C26 Tricyclic Terpane-22S	32	20	47[a]	30
C26 Tricyclic Terpane-22R	32	20	43[a]	30
C28 Tricyclic Terpane-22S	38	24	44[a]	30
C28 Tricyclic Terpane-22R	41	24	52[a]	30
C29 Tricyclic Terpane-22S	48	32	40[a]	30
C29 Tricyclic Terpane-22R	47	27	54[a]	30
18a-22,29,30-Trisnorneohopane-TS	190	110	55[a]	30
C30 Tricyclic Terpane-22S	37	22	50[a]	30
C30 Tricyclic Terpane-22R	37	20	61[a]	30
17a(H)-22,29,30-Trisnorhopane-TM	200	120	53[a]	30
17a/b,21b/a 28,30-Bisnorhopane	54	28	62[a]	30
17a(H),21b(H)-25-Norhopane	21	11	63[a]	30
30-Norhopane	650	380	52[a]	30
18a(H)-30-Norneohopane-C29Ts	150	90	49[a]	30
17a(H)-Diahopane	28	18	47[a]	30
30-Normoretane	95	57	50[a]	30
18a(H)&18b(H)-Oleananes	61	36	51[a]	30
Hopane	820	470	55[a]	30
Moretane	98	53	60[a]	30
30-Homohopane-22S	310	180	52[a]	30
30-Homohopane-22R	280	160	51[a]	30
30,31-Bishomohopane-22S	280	160	51[a]	30
30,31-Bishomohopane-22R	140	83	52[a]	30
30,31-Trishomohopane-22S	150	85	53[a]	30
30,31-Trishomohopane-22R	78	43	59[a]	30
Tetrakishomohopane-22S	79	47	50[a]	30
Tetrakishomohopane-22R	56	33	53[a]	30
Pentakishomohopane-22S	73	42	55[a]	30
Pentakishomohopane-22R	55	31	56[a]	30
13b(H),17a(H)-20S-Diacholestane	140	81	56[a]	30
13b(H),17a(H)-20R-Diacholestane	79	46	53[a]	30

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

02/01/06 14:07

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	67	39	53[a]	30
14a(H),17a(H)-20S-Cholestane	97	48	67[a]	30
14a(H),17a(H)-20R-Cholestane	260	160	48[a]	30
13b,17a-20R-Ethyldiacholestane	44	27	48[a]	30
13a,17b-20S-Ethyldiacholestane	15	10	37[a]	30
14a,17a-20S-Methylcholestane	56	28	65[a]	30
14a,17a-20R-Methylcholestane	110	61	59[a]	30
14a(H),17a(H)-20S-Ethylcholestane	110	66	51[a]	30
14a(H),17a(H)-20R-Ethylcholestane	150	85	55[a]	30
14b(H),17b(H)-20R-Cholestane	140	83	51[a]	30
14b(H),17b(H)-20S-Cholestane	140	83	53[a]	30
14b,17b-20R-Methylcholestane	130	77	53[a]	30
14b,17b-20S-Methylcholestane	180	90	66[a]	30
14b(H),17b(H)-20R-Ethylcholestane	260	140	58[a]	30
14b(H),17b(H)-20S-Ethylcholestane	150	97	41[a]	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	85	98	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.

02/01/06 14:07

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	60.2	5.29	19.23	10	NLJr

Parameter	Result	Parameter	Result
Naphthalene	780000 E	Fluoranthene	200000
C1-Naphthalenes	440000	Pyrene	280000
C2-Naphthalenes	290000	C1-Fluoranthenes/Pyrenes	250000
C3-Naphthalenes	110000	C2-Fluoranthenes/Pyrenes	73000
C4-Naphthalenes	32000	C3-Fluoranthenes/Pyrenes	20000
Biphenyl	27000	C4-Fluoranthenes/Pyrenes	6800
Dibenzofuran	15000	Naphthobenzothiophenes	30000
Acenaphthylene	35000	C1-Naphthobenzothiophenes	27000
Acenaphthene	240000	C2-Naphthobenzothiophenes	13000
Fluorene	120000	C3-Naphthobenzothiophenes	5500
C1-Fluorenes	72000	C4-Naphthobenzothiophenes	1900
C2-Fluorenes	42000	Benz[a]anthracene	110000
C3-Fluorenes	23000	Chrysene/Triphenylene	110000
Anthracene	180000	C1-Chrysenes	80000
Phenanthrene	470000	C2-Chrysenes	26000
C1-Phenanthrenes/Anthracenes	350000	C3-Chrysenes	8900
C2-Phenanthrenes/Anthracenes	130000	C4-Chrysenes	4200
C3-Phenanthrenes/Anthracenes	38000	Benzo[b]fluoranthene	41000
C4-Phenanthrenes/Anthracenes	8500	Benzo[k]fluoranthene	55000
Retene	4400	Benzo[a]fluoranthene	20000
Dibenzothiophene	56000	Benzo[e]pyrene	47000
C1-Dibenzothiophenes	71000	Benzo[a]pyrene	83000
C2-Dibenzothiophenes	50000	Perylene	13000
C3-Dibenzothiophenes	21000	Indeno[1,2,3-cd]pyrene	32000
C4-Dibenzothiophenes	6300	Dibenz[a,h]anthracene	10000
Benzo(b)fluorene	50000	Benzo[g,h,i]perylene	36000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	102	50-130

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

02/02/06 08:19

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	60.2	5.29	19.23	10	NLJr

Parameter	Result
Carbazole	**5900**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	102	50-130

N/A - Not Applicable

02/02/06 08:19

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27696.D
Acq On : 15 Jan 2006 11:21 pm
Operator : NLJr
Sample : 0512128-04
Misc : 10X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 30 05:07:04 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

MS for WW 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	54197m	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	87388m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.00	152	10880m	97.68	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.77%#			
58) Pyrene-d10	38.94	212	24474m	106.83	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.68%#			
81) Benzo[b]fluoranthene-d12	47.81	264	18962m	105.84	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.58%#			
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	20.44	128	3129202	12836.64	ng/mL# E	100
10) C1-Naphthalenes	23.14	142	1788820m	7338.11	ng/mL	
11) C2-Naphthalenes	25.97	156	1169738m	4798.51	ng/mL	
12) C3-Naphthalenes	28.33	170	450975m	1849.99	ng/mL	
13) C4-Naphthalenes	31.09	184	129751m	532.27	ng/mL	
15) 2-Methylnaphthalene	23.14	142	1068142	6883.66	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	714940	4840.70	ng/mL#	100
22) Biphenyl	25.02	154	87050	445.63	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	187760m	1404.68	ng/mL	
24) Dibenzofuran	28.12	168	54529	252.88	ng/mL	97
25) Acenaphthylene	26.74	152	139649m	577.39	ng/mL	
26) Acenaphthene	27.47	153	594352m	4009.00	ng/mL	
27) 2,3,5-Trimethylnaphthalene	29.02	170	33785m	289.63	ng/mL	
28) Fluorene	29.49	166	351588	2028.22	ng/mL	100
29) C1-Fluorenes	31.73	180	207030m	1194.30	ng/mL	
30) C2-Fluorenes	33.91	194	119380m	688.67	ng/mL	
31) C3-Fluorenes	36.60	208	67109m	387.13	ng/mL	
32) Dibenzothiophene	32.83	184	215425m	929.41	ng/mL	
37) C1-Dibenzothiophenes	34.60	198	274336m	1183.58	ng/mL	
38) C2-Dibenzothiophenes	36.66	212	190133m	820.30	ng/mL	
39) C3-Dibenzothiophenes	38.10	226	79970m	345.02	ng/mL	
40) C4-Dibenzothiophenes	39.78	240	24083m	103.90	ng/mL	
41) Phenanthrene	33.33	178	1929152	7799.57	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.40	192	1433992m	5797.63	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.56	206	561093m	2268.50	ng/mL	
49) 5AA IS BKGD	37.34	206	31665	128.02	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.40	220	155327m	627.99	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.33	234	34669m	140.17	ng/mL	
52) Retene	40.33	234	4118m	73.37	ng/mL	
53) Anthracene	33.51	178	703969m	3064.53	ng/mL	
54) Carbazole	34.18	167	21337m	97.46	ng/mL	
55) 1-Methylphenanthrene	35.84	192	222799	1298.43	ng/mL	96
56) Fluoranthene	38.12	202	854114m	3235.42	ng/mL	
57) Benzo(b)fluorene	40.64	216	134694m	829.97	ng/mL	
59) Pyrene	39.01	202	1248654	4619.09	ng/mL	98
60) C1-Fluoranthenes/Pyrenes	40.40	216	1104245m	4084.88	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.13	230	327928m	1213.09	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.94	244	90662m	335.38	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.58	258	30638m	113.34	ng/mL	
64) Naphthobenzothiophene	42.87	234	82360	328.55	ng/ml#	66

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27696.D
Acq On : 15 Jan 2006 11:21 pm
Operator : NLJr
Sample : 0512128-04
Misc : 10X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 30 05:07:04 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

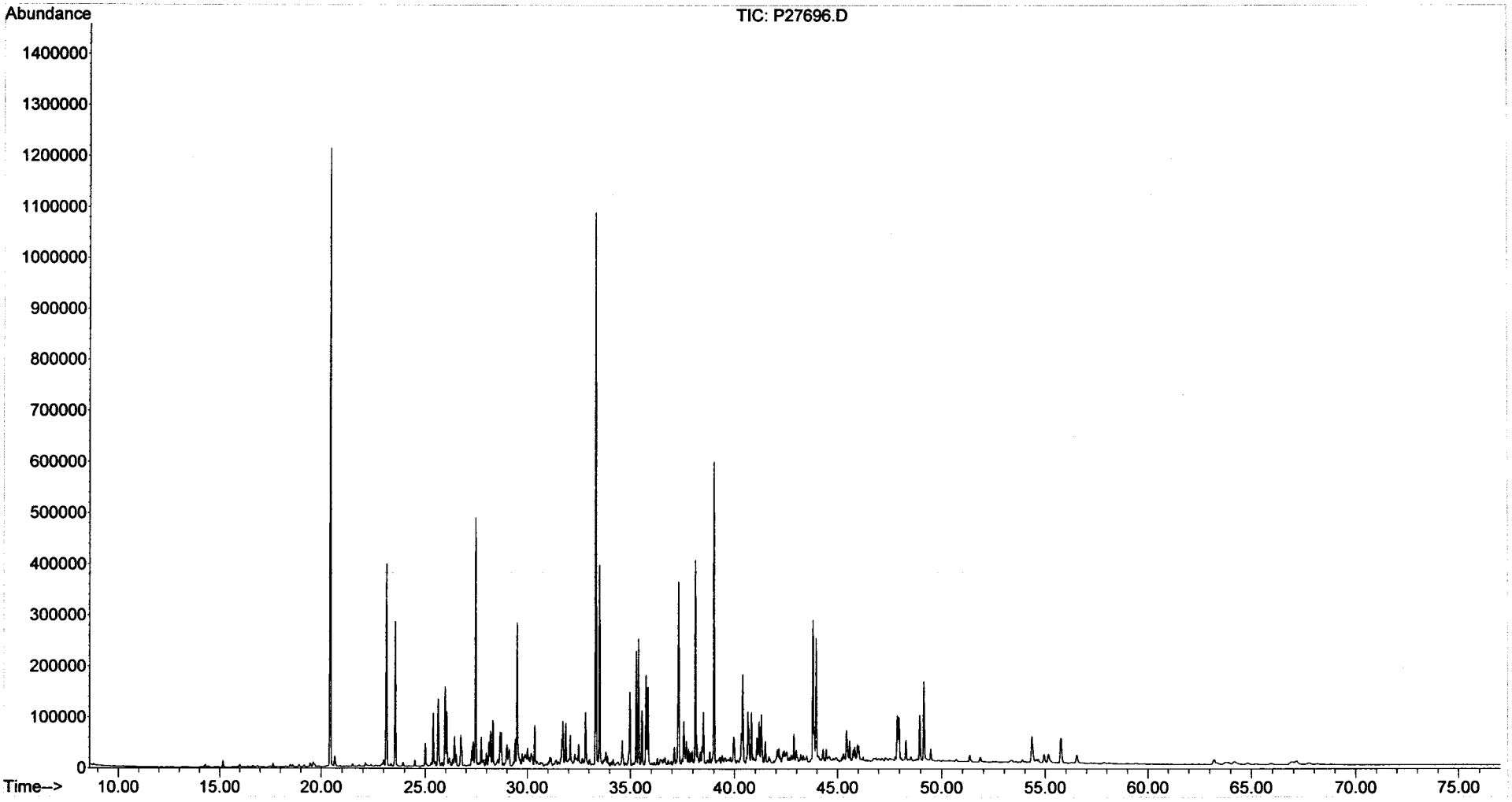
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.87	234	82360	328.55	ng/mL#	66
66) Naphthobenzothiophene-1,2-	43.21	234	21942m	87.53	ng/mL	
67) Naphthobenzothiophene-2,3-	43.51	234	22264m	88.82	ng/mL	
68) C1-Naphthobenzothiophenes	44.27	248	110811m	442.05	ng/ml	
69) C2-Naphthobenzothiophenes	45.76	262	52179m	208.15	ng/ml	
70) C3-Naphthobenzothiophenes	47.91	276	22798m	90.95	ng/ml	
71) C4-Naphthobenzothiophenes	49.06	290	7738m	30.87	ng/mL	
73) Benz[a]anthracene	43.79	228	449799m	1802.39	ng/mL	
74) Chrysene	43.96	228	463044m	1847.37	ng/mL	
75) Chrysene/Triphenylene	43.96	228	466600m	1861.55	ng/mL	
76) C1-Chrysenes	45.43	242	330085m	1316.91	ng/mL	
77) C2-Chrysenes	47.14	256	110228m	439.77	ng/mL	
78) BBF-d12 Surr BKGD	47.81	256	1861	7.42	ng/mL	100
79) C3-Chrysenes	48.82	270	37033m	147.75	ng/mL	
80) C4-Chrysenes	49.90	284	17454m	69.63	ng/mL	
82) Benzo[b]fluoranthene	47.89	252	183946	686.31	ng/mL	100
83) Benzo[k]fluoranthene	47.97	252	256207	914.12	ng/mL	100
84) Benzo[a]fluoranthene	48.30	252	93351m	333.06	ng/mL	
85) Benzo[e]pyrene	48.96	252	199764	773.15	ng/mL	97
86) Benzo[a]pyrene	49.16	252	357048m	1382.23	ng/mL	
87) Perylene	49.49	252	56636	219.93	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.35	276	136805m	534.34	ng/mL	
89) Dibenz[a,h]anthracene	54.39	278	40166m	166.82	ng/mL	
90) Benzo[g,h,i]perylene	55.76	276	157545m	590.17	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 : P27696.D
Acq On : 15 Jan 2006 11:21 pm
Operator : NLJr
Sample : 0512128-04
Misc : 10X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 30 05:07:04 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 I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04E**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/20/06	60.2	5.29	19.23	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**880000**		Fluoranthene	610	U
C1-Naphthalenes	1000	U	Pyrene	540	U
C2-Naphthalenes	1000	U	C1-Fluoranthenes/Pyrenes	540	U
C3-Naphthalenes	1000	U	C2-Fluoranthenes/Pyrenes	540	U
C4-Naphthalenes	1000	U	C3-Fluoranthenes/Pyrenes	540	U
Biphenyl	550	U	C4-Fluoranthenes/Pyrenes	540	U
Dibenzofuran	720	U	Naphthobenzothiophenes	730	U
Acenaphthylene	1100	U	C1-Naphthobenzothiophenes	730	U
Acenaphthene	690	U	C2-Naphthobenzothiophenes	730	U
Fluorene	690	U	C3-Naphthobenzothiophenes	730	U
C1-Fluorenes	690	U	C4-Naphthobenzothiophenes	730	U
C2-Fluorenes	690	U	Benz[a]anthracene	950	U
C3-Fluorenes	690	U	Chrysene/Triphenylene	650	U
Anthracene	810	U	C1-Chrysenes	650	U
Phenanthrene	880	U	C2-Chrysenes	650	U
C1-Phenanthrenes/Anthracenes	880	U	C3-Chrysenes	650	U
C2-Phenanthrenes/Anthracenes	880	U	C4-Chrysenes	650	U
C3-Phenanthrenes/Anthracenes	880	U	Benzo[b]fluoranthene	640	U
C4-Phenanthrenes/Anthracenes	880	U	Benzo[k]fluoranthene	1200	U
Retene	880	U	Benzo[a]fluoranthene	1200	U
Dibenzothiophene	670	U	Benzo[e]pyrene	830	U
C1-Dibenzothiophenes	670	U	Benzo[a]pyrene	840	U
C2-Dibenzothiophenes	670	U	Perylene	1000	U
C3-Dibenzothiophenes	670	U	Indeno[1,2,3-cd]pyrene	1400	U
C4-Dibenzothiophenes	670	U	Dibenz[a,h]anthracene	1200	U
Benzo(b)fluorene	610	U	Benzo[g,h,i]perylene	1100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

02/02/06 08:25

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27800.D
Acq On : 20 Jan 2006 3:34 pm
Operator : AC
Sample : 0512128-04-RE
Misc : 100X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 05:20:30 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 2/1/06

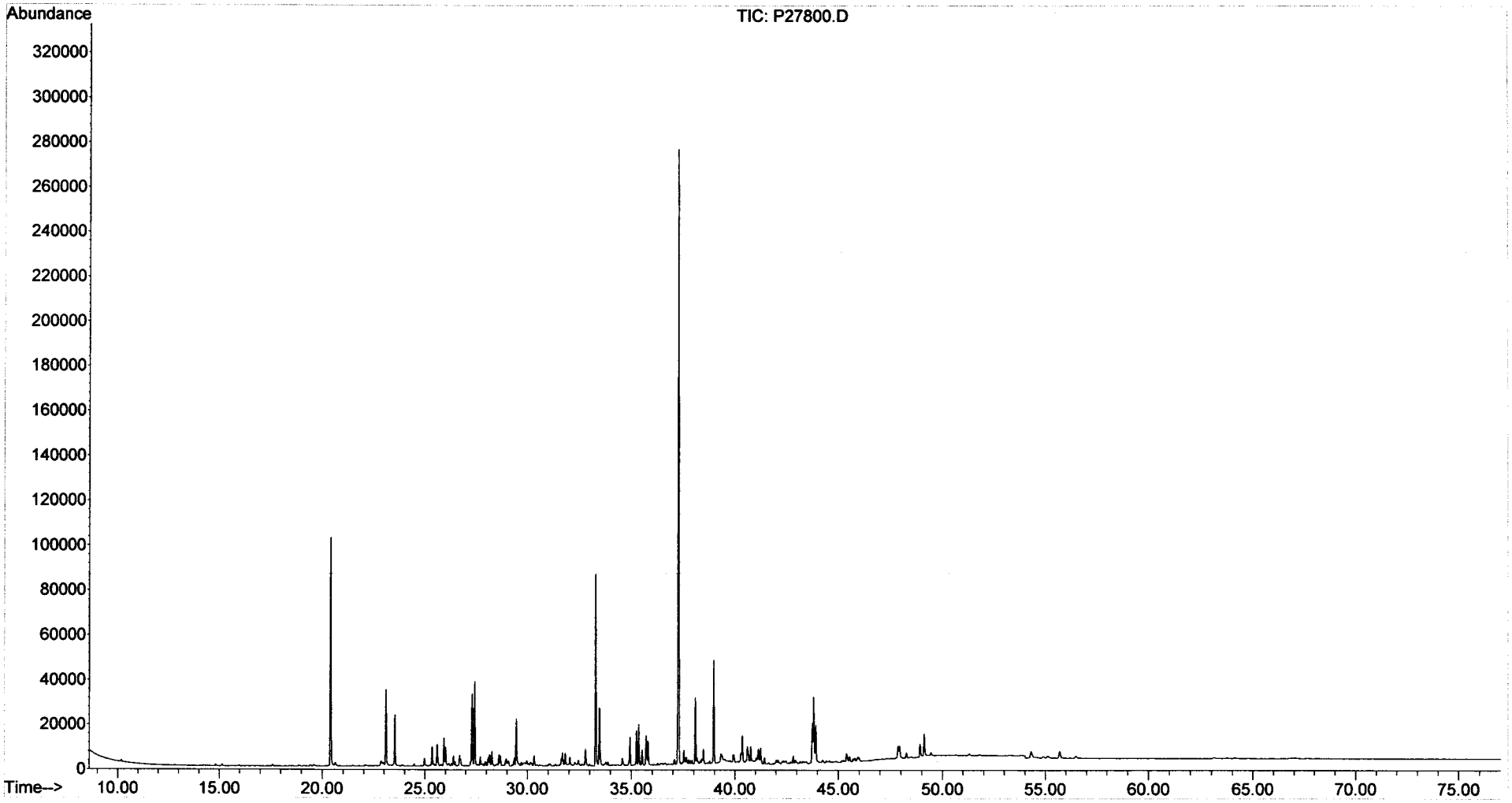
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	38478m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	60727m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	805	10.18	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.02%#			
58) Pyrene-d10	38.90	212	1794m	11.03	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.10%#			
81) Benzo[b]fluoranthene-d12	47.77	264	1314m	10.55	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.05%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	20.39	128	253278m	1463.45	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 : P27800.D
Acq On : 20 Jan 2006 3:34 pm
Operator : AC
Sample : 0512128-04-RE
Misc : 100X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 05:20:30 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-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/19/06	60.2	5.29	6.25	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**930**	30,31-Bishomohopane-22S	**1100**
C24 Tricyclic Terpane	**720**	30,31-Bishomohopane-22R	**750**
C25 Tricyclic Terpane	**780**	30,31-Trishomohopane-22S	**620**
C24 Tetracyclic Terpane	**440**	30,31-Trishomohopane-22R	**380**
C26 Tricyclic Terpane-22S	**340**	Tetrakishomohopane-22S	**360**
C26 Tricyclic Terpane-22R	**340**	Tetrakishomohopane-22R	**250**
C28 Tricyclic Terpane-22S	**450**	Pentakishomohopane-22S	**280**
C28 Tricyclic Terpane-22R	**470**	Pentakishomohopane-22R	**260**
C29 Tricyclic Terpane-22S	**540**	13b(H),17a(H)-20S-Diacholestane	**1500**
C29 Tricyclic Terpane-22R	**550**	13b(H),17a(H)-20R-Diacholestane	**800**
18a-22,29,30-Trisnorneohopane-TS	**1400**	13b,17a-20S-Methyldiacholestane	**650**
C30 Tricyclic Terpane-22S	**500**	14a(H),17a(H)-20S-Cholestane	**910**
C30 Tricyclic Terpane-22R	**380**	14a(H),17a(H)-20R-Cholestane	**3000**
17a(H)-22,29,30-Trisnorhopane-TM	**1500**	13b,17a-20R-Ethyldiacholestane	**430**
17a/b,21b/a 28,30-Bisnorhopane	**520**	13a,17b-20S-Ethyldiacholestane	**150**
17a(H),21b(H)-25-Norhopane	**260**	14a,17a-20S-Methylcholestane	**560**
30-Norhopane	**3600**	14a,17a-20R-Methylcholestane	**1500**
18a(H)-30-Norneohopane-C29Ts	**1100**	14a(H),17a(H)-20S-Ethylcholestane	**950**
17a(H)-Diahopane	**380**	14a(H),17a(H)-20R-Ethylcholestane	**1300**
30-Normoretane	**810**	14b(H),17b(H)-20R-Cholestane	**1500**
18a(H)&18b(H)-Oleananes	**560**	14b(H),17b(H)-20S-Cholestane	**1500**
Hopane	**6200**	14b,17b-20R-Methylcholestane	**1500**
Moretane	**880**	14b,17b-20S-Methylcholestane	**1800**
30-Homohopane-22S	**1700**	14b(H),17b(H)-20R-Ethylcholestane	**2200**
30-Homohopane-22R	**1700**	14b(H),17b(H)-20S-Ethylcholestane	**1300**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	91	50-130

N/A - Not Applicable

02/01/06 13:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34817.D
Acq On : 19 Jan 2006 9:30 pm
Operator : AC
Sample : 0512128-04
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 20 11:42:26 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 1/20/06

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	83811	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	102510	2910.26	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 291.03%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	227487m	3158.54	ng/mL	
84) Hopane (T19)	52.49	191	228115m	3167.26	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	34060m	472.91	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	26300	365.16	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	28584m	396.87	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	16076m	223.21	ng/ml	
89) C26 Tricyclic Terpane-22S	44.21	191	12467	173.10	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	12328m	171.17	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	16585m	230.27	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	17138m	237.95	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	19682	273.27	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	20262m	281.33	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	49654	689.42	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	18168m	252.25	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	14064m	195.27	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	54768	760.43	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	19088m	265.03	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	9350	129.82	ng/ml	100
101) 30-Norhopane (T15)	51.10	191	131249m	1822.33	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.21	191	41724m	579.32	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	13819m	191.87	ng/ml	
104) 30-Normoretane (T17)	51.88	191	29774	413.40	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	20555m	285.40	ng/ml	
106) Moretane (T20)	53.19	191	32194m	447.00	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	62054	861.59	ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	61262	850.59	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	39148	543.55	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	27662	384.07	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	22580m	313.51	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	14115m	195.98	ng/ml	
113) Tetrakishomohopane-22S (T3	60.77	191	13379m	185.76	ng/ml	
114) Tetrakishomohopane-22R (T3	61.70	191	9184	127.52	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	10249	142.30	ng/ml	100
116) Pentakishomohopane-22R (T3	65.31	191	9737m	135.19	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	26523	752.99	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	14327m	406.74	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	11660m	331.03	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	16314m	463.15	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	54156	1537.49	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.24	217	7752m	220.08	ng/ml	

2nd ✓ MS for WO 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34817.D
Acq On : 19 Jan 2006 9:30 pm
Operator : AC
Sample : 0512128-04
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 20 11:42:26 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

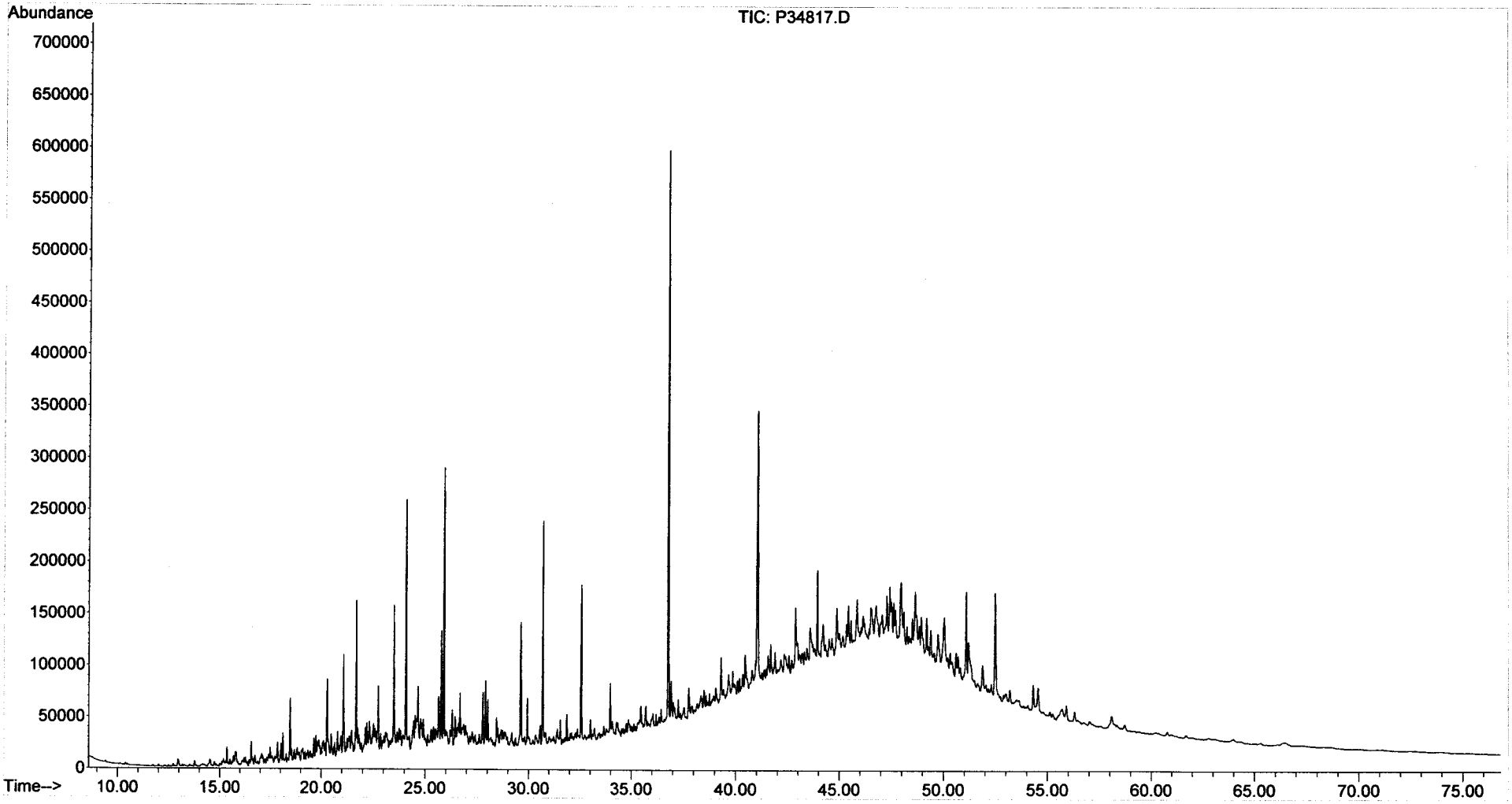
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	2768	78.58	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	10084m	286.28	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	26204m	743.93	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	17044m	483.88	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	24146m	685.50	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	26255m	745.38	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	26345m	747.93	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	27039m	767.64	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	32938m	935.11	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.01	218	38813	1101.90	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	22787m	646.92	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 : P34817.D
Acq On : 19 Jan 2006 9:30 pm
Operator : AC
Sample : 0512128-04
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 20 11:42:26 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-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	60.2	5.54	21.99	10	AC

Parameter	Result	Parameter	Result
Naphthalene	820000 E	Fluoranthene	210000
C1-Naphthalenes	510000	Pyrene	300000
C2-Naphthalenes	330000	C1-Fluoranthenes/Pyrenes	260000
C3-Naphthalenes	120000	C2-Fluoranthenes/Pyrenes	75000
C4-Naphthalenes	32000	C3-Fluoranthenes/Pyrenes	20000
Biphenyl	36000	C4-Fluoranthenes/Pyrenes	5700
Dibenzofuran	18000	Naphthobenzothiophenes	31000
Acenaphthylene	28000	C1-Naphthobenzothiophenes	25000
Acenaphthene	290000	C2-Naphthobenzothiophenes	11000
Fluorene	150000	C3-Naphthobenzothiophenes	5400
C1-Fluorenes	88000	C4-Naphthobenzothiophenes	2100
C2-Fluorenes	45000	Benz[a]anthracene	110000
C3-Fluorenes	22000	Chrysene/Triphenylene	110000
Anthracene	200000	C1-Chrysenes	75000
Phenanthrene	550000	C2-Chrysenes	25000
C1-Phenanthrenes/Anthracenes	400000	C3-Chrysenes	10000
C2-Phenanthrenes/Anthracenes	140000	C4-Chrysenes	4100
C3-Phenanthrenes/Anthracenes	39000	Benzo[b]fluoranthene	46000
C4-Phenanthrenes/Anthracenes	8300	Benzo[k]fluoranthene	54000
Retene	4200	Benzo[a]fluoranthene	21000
Dibenzothiophene	64000	Benzo[e]pyrene	44000
C1-Dibenzothiophenes	79000	Benzo[a]pyrene	84000
C2-Dibenzothiophenes	54000	Perylene	14000
C3-Dibenzothiophenes	21000	Indeno[1,2,3-cd]pyrene	40000
C4-Dibenzothiophenes	6300	Dibenz[a,h]anthracene	11000
Benzo(b)fluorene	54000	Benzo[g,h,i]perylene	38000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	98	50-130

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

02/02/06 08:52

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	60.2	5.54	21.99	10	AC

Parameter	Result
Carbazole	6600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

02/02/06 08:53

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17766.D
Acq On : 26 Jan 2006 8:28 am
Operator : AC
Sample : 0512128-04X
Misc : 10X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 30 10:39:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WW 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	44905m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	75379m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	7727	80.27	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.03%#			
58) Pyrene-d10	38.08	212	18440m	93.16	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.32%#			
81) Benzo[b]fluoranthene-d12	46.92	264	13417m	89.38	ng/mL	0.00
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	19.67	128	2865522m	12495.49	ng/mL E	
10) C1-Naphthalenes	22.36	142	1789376m	7802.81	ng/mL	
11) C2-Naphthalenes	25.19	156	1140729m	4974.30	ng/mL	
12) C3-Naphthalenes	27.53	170	418521m	1825.02	ng/mL	
13) C4-Naphthalenes	30.29	184	112766m	491.73	ng/mL	
15) 2-Methylnaphthalene	22.36	142	1086132	7481.35	ng/mL#	100
16) 1-Methylnaphthalene	22.78	142	701336	5131.35	ng/mL#	100
22) Biphenyl	24.24	154	99690m	552.32	ng/mL	
23) 2,6-Dimethylnaphthalene	24.86	156	208224m	1728.23	ng/mL	
24) Dibenzofuran	27.31	168	55172m	272.10	ng/mL	
25) Acenaphthylene	25.94	152	93758m	426.40	ng/mL	
26) Acenaphthene	26.67	153	593471m	4345.07	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.23	170	33204m	307.00	ng/mL	
28) Fluorene	28.68	166	351619m	2295.44	ng/mL	
29) C1-Fluorenes	30.91	180	204096m	1332.38	ng/mL	
30) C2-Fluorenes	33.09	194	105256m	687.13	ng/mL	
31) C3-Fluorenes	35.74	208	52024m	339.62	ng/mL	
32) Dibenzothiophene	32.00	184	218072m	965.35	ng/mL	
36) OTP	34.17	198	2076m	9.19	ng/mL	
37) C1-Dibenzothiophenes	33.79	198	273266m	1209.68	ng/mL	
38) C2-Dibenzothiophenes	35.83	212	183252m	811.21	ng/mL	
39) C3-Dibenzothiophenes	37.28	226	70997m	314.29	ng/mL	
40) C4-Dibenzothiophenes	38.96	240	21506m	95.20	ng/mL	
41) Phenanthrene	32.51	178	1907938	8399.75	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.58	192	1369365m	6028.67	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.75	206	524405m	2308.71	ng/mL	
49) 5AA IS BKGD	36.51	206	36027	158.61	ng/mL	100
50) C3-Phenanthrenes/Anthracen	38.58	220	133819m	589.14	ng/mL	
51) C4-Phenanthrenes/Anthracen	39.51	234	28487m	125.41	ng/mL	
52) Retene	39.51	234	3004m	63.25	ng/mL	
53) Anthracene	32.68	178	644000m	3064.37	ng/mL	
54) Carbazole	33.34	167	19394	99.71	ng/mL	95
55) 1-Methylphenanthrene	35.01	192	215731m	1387.07	ng/mL	
56) Fluoranthene	37.28	202	783324m	3238.91	ng/mL	
57) Benzo(b)fluorene	39.81	216	116703m	826.84	ng/mL	
59) Pyrene	38.16	202	1107235	4501.41	ng/mL	98
60) C1-Fluoranthenes/Pyrenes	39.56	216	952378m	3871.85	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.29	230	278633m	1132.77	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.50	244	73503m	298.82	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.75	258	21362m	86.85	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17766.D
Acq On : 26 Jan 2006 8:28 am
Operator : AC
Sample : 0512128-04X
Misc : 10X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 30 10:39:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

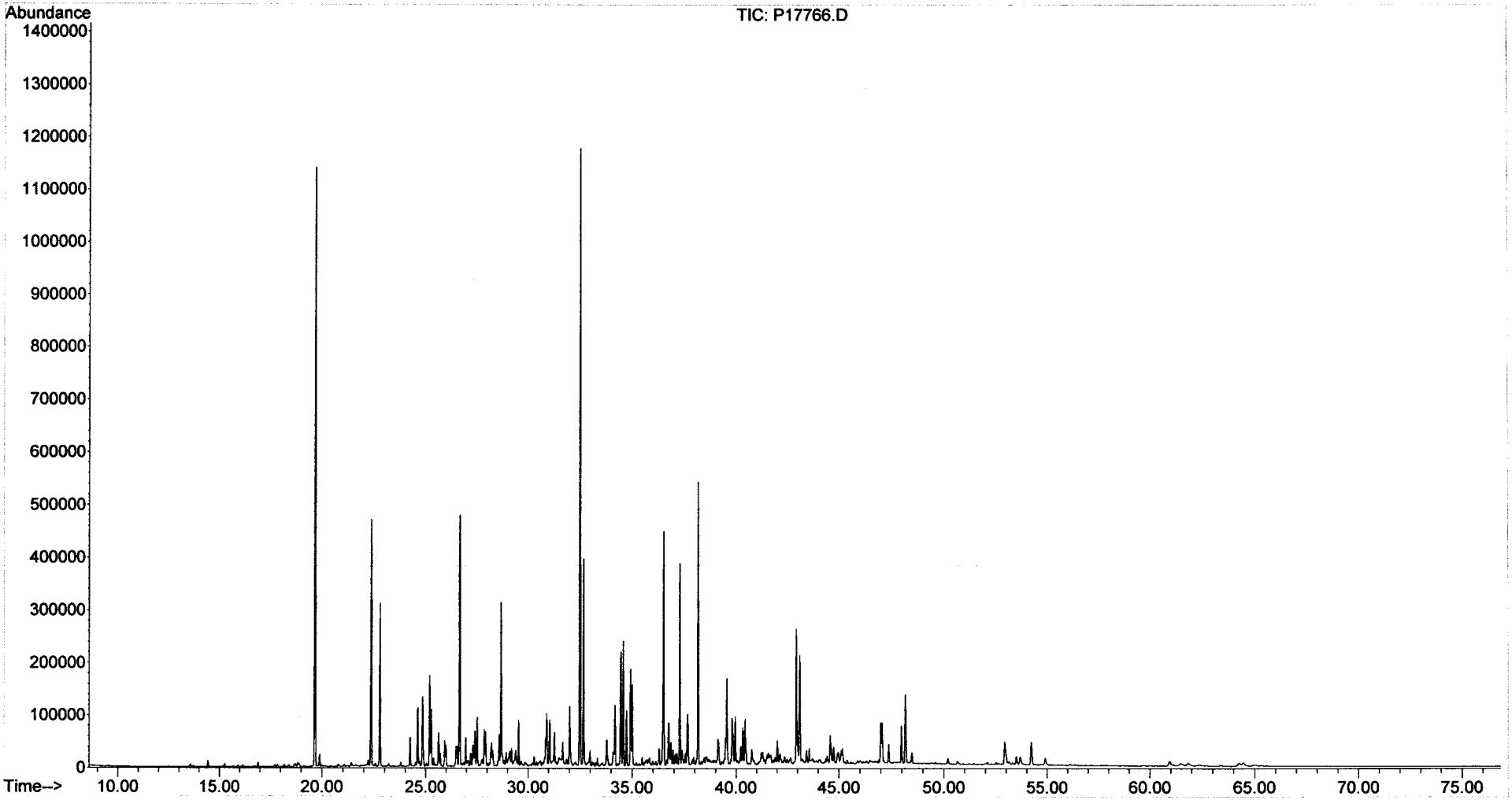
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
64) Naphthobenzothiophene	42.01	234	66752m	290.08	ng/ml	
65) Naphthobenzothiophene-2,1-	42.01	234	66923m	290.82	ng/mL	
66) Naphthobenzothiophene-1,2-	42.36	234	19022	82.66	ng/mL#	26
67) Naphthobenzothiophene-2,3-	42.66	234	20815m	90.45	ng/mL	
68) C1-Naphthobenzothiophenes	43.41	248	85906m	373.32	ng/ml	
69) C2-Naphthobenzothiophenes	44.92	262	39086m	169.85	ng/ml	
70) C3-Naphthobenzothiophenes	46.66	276	18778m	81.60	ng/ml	
71) C4-Naphthobenzothiophenes	48.22	290	7406m	32.18	ng/mL	
73) Benz[a]anthracene	42.94	228	391126m	1704.55	ng/mL	
74) Chrysene	43.10	228	381737m	1628.13	ng/mL	
75) Chrysene/Triphenylene	43.10	228	379734m	1619.59	ng/mL	
76) C1-Chrysenes	44.59	242	265455m	1132.18	ng/mL	- RFT RPT conc 2nd cw 2/3/06
77) C2-Chrysenes	46.30	256	90287m	385.08	ng/mL	
78) BBF-d12 Surr BKGD	46.90	256	1371	5.85	ng/mL	100
79) C3-Chrysenes	47.88	270	35545m	151.60	ng/mL	
80) C4-Chrysenes	48.89	284	14431m	61.55	ng/mL	
82) Benzo[b]fluoranthene	46.99	252	165730	703.27	ng/mL	100
83) Benzo[k]fluoranthene	47.07	252	200282m	816.94	ng/mL	
84) Benzo[a]fluoranthene	47.37	252	77243	315.07	ng/mL#	1
85) Benzo[e]pyrene	47.98	252	151887m	665.71	ng/mL	
86) Benzo[a]pyrene	48.17	252	285915m	1266.55	ng/mL	
87) Perylene	48.48	252	45883	207.93	ng/mL	93
88) Indeno[1,2,3-cd]pyrene	52.93	276	120625m	607.20	ng/mL	
89) Dibenz[a,h]anthracene	52.99	278	32754m	161.75	ng/mL	
90) Benzo[g,h,i]perylene	54.21	276	130330	569.33	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17766.D
Acq On : 26 Jan 2006 8:28 am
Operator : AC
Sample : 0512128-04X
Misc : 10X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 30 10:39:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04EX**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	60.2	5.54	21.99	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**920000**		Fluoranthene	670	U
C1-Naphthalenes	1100	U	Pyrene	590	U
C2-Naphthalenes	1100	U	C1-Fluoranthenes/Pyrenes	590	U
C3-Naphthalenes	1100	U	C2-Fluoranthenes/Pyrenes	590	U
C4-Naphthalenes	1100	U	C3-Fluoranthenes/Pyrenes	590	U
Biphenyl	600	U	C4-Fluoranthenes/Pyrenes	590	U
Dibenzofuran	780	U	Naphthobenzothiophenes	800	U
Acenaphthylene	1200	U	C1-Naphthobenzothiophenes	800	U
Acenaphthene	760	U	C2-Naphthobenzothiophenes	800	U
Fluorene	760	U	C3-Naphthobenzothiophenes	800	U
C1-Fluorenes	760	U	C4-Naphthobenzothiophenes	800	U
C2-Fluorenes	760	U	Benz[a]anthracene	1000	U
C3-Fluorenes	760	U	Chrysene/Triphenylene	710	U
Anthracene	880	U	C1-Chrysenes	710	U
Phenanthrene	960	U	C2-Chrysenes	710	U
C1-Phenanthrenes/Anthracenes	960	U	C3-Chrysenes	710	U
C2-Phenanthrenes/Anthracenes	960	U	C4-Chrysenes	710	U
C3-Phenanthrenes/Anthracenes	960	U	Benzo[b]fluoranthene	700	U
C4-Phenanthrenes/Anthracenes	960	U	Benzo[k]fluoranthene	1300	U
Retene	960	U	Benzo[a]fluoranthene	1300	U
Dibenzothiophene	730	U	Benzo[e]pyrene	900	U
C1-Dibenzothiophenes	730	U	Benzo[a]pyrene	920	U
C2-Dibenzothiophenes	730	U	Perylene	1200	U
C3-Dibenzothiophenes	730	U	Indeno[1,2,3-cd]pyrene	1600	U
C4-Dibenzothiophenes	730	U	Dibenz[a,h]anthracene	1200	U
Benzo(b)fluorene	670	U	Benzo[g,h,i]perylene	1200	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	97	50-130
Pyrene-d10	96	50-130
Benzo[b]fluoranthene-d12	100	50-130

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

02/02/06 09:12

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17776.D
Acq On : 26 Jan 2006 4:50 pm
Operator : AC
Sample : 0512128-04-RE X
Misc : 100X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 30 10:41:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

mg for WW
2/1/06

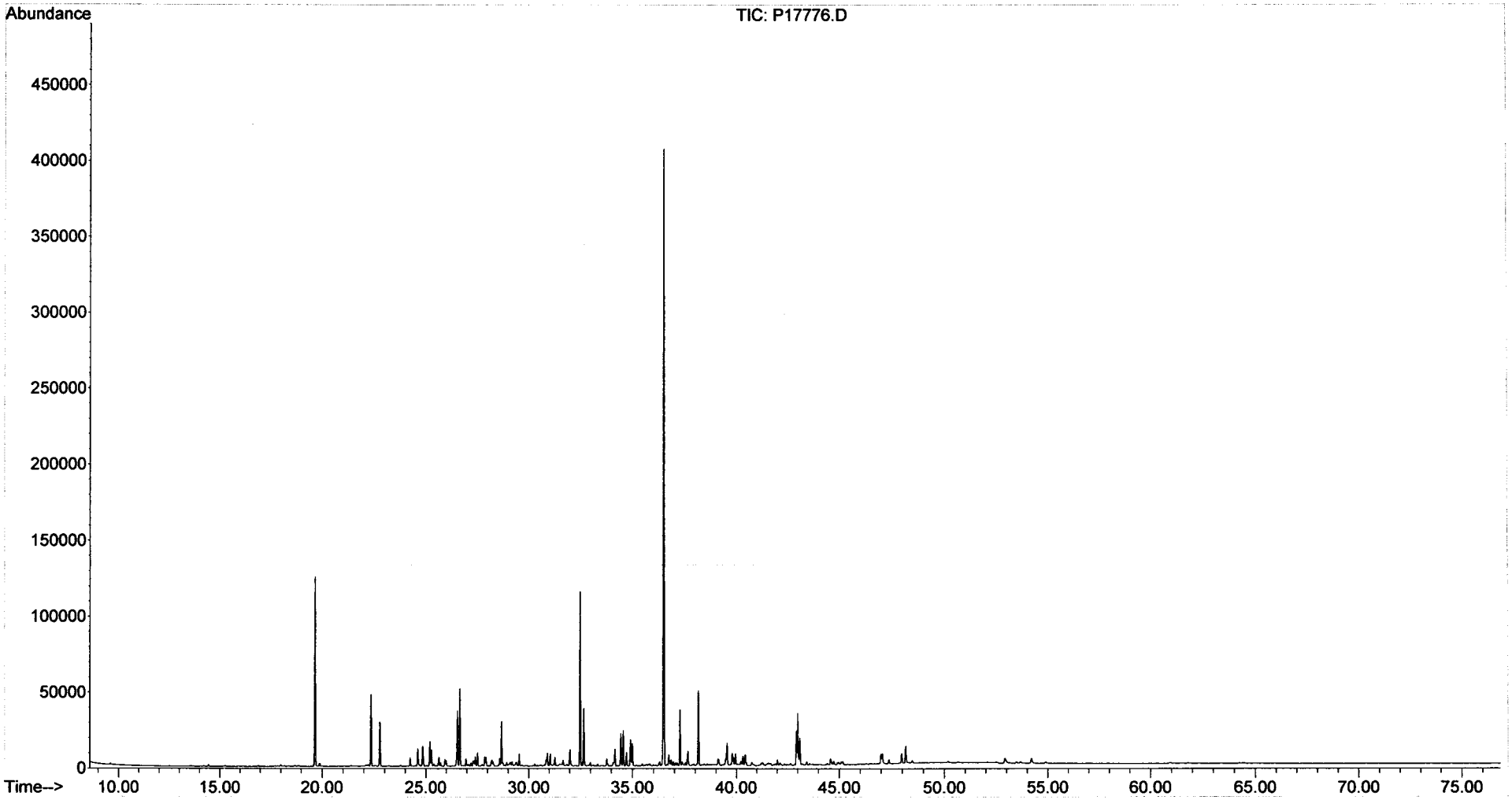
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	40254m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	64279m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	762m	8.83	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.88%#	
58) Pyrene-d10	38.08	212	1548m	8.72	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.87%#	
81) Benzo[b]fluoranthene-d12	46.90	264	1163m	9.09	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.91%#	
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	19.66	128	285365m	1388.15	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17776.D
Acq On : 26 Jan 2006 4:50 pm
Operator : AC
Sample : 0512128-04-RE X
Misc : 100X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 30 10:41:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04X**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	60.2	5.54	5	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**980**	30,31-Bishomohopane-22S	**1100**
C24 Tricyclic Terpane	**790**	30,31-Bishomohopane-22R	**730**
C25 Tricyclic Terpane	**850**	30,31-Trishomohopane-22S	**620**
C24 Tetracyclic Terpane	**440**	30,31-Trishomohopane-22R	**390**
C26 Tricyclic Terpane-22S	**370**	Tetrakishomohopane-22S	**370**
C26 Tricyclic Terpane-22R	**370**	Tetrakishomohopane-22R	**220**
C28 Tricyclic Terpane-22S	**460**	Pentakishomohopane-22S	**240**
C28 Tricyclic Terpane-22R	**480**	Pentakishomohopane-22R	**260**
C29 Tricyclic Terpane-22S	**580**	13b(H),17a(H)-20S-Diacholestane	**1600**
C29 Tricyclic Terpane-22R	**540**	13b(H),17a(H)-20R-Diacholestane	**840**
18a-22,29,30-Trisnorneohopane-TS	**1300**	13b,17a-20S-Methyldiacholestane	**810**
C30 Tricyclic Terpane-22S	**460**	14a(H),17a(H)-20S-Cholestane	**1000**
C30 Tricyclic Terpane-22R	**400**	14a(H),17a(H)-20R-Cholestane	**3100**
17a(H)-22,29,30-Trisnorhopane-TM	**1500**	13b,17a-20R-Ethyldiacholestane	**480**
17a/b,21b/a 28,30-Bisnorhopane	**420**	13a,17b-20S-Ethyldiacholestane	**140**
17a(H),21b(H)-25-Norhopane	**270**	14a,17a-20S-Methylcholestane	**630**
30-Norhopane	**3600**	14a,17a-20R-Methylcholestane	**1500**
18a(H)-30-Norneohopane-C29Ts	**1200**	14a(H),17a(H)-20S-Ethylcholestane	**1000**
17a(H)-Diahopane	**360**	14a(H),17a(H)-20R-Ethylcholestane	**1400**
30-Normoretane	**800**	14b(H),17b(H)-20R-Cholestane	**1500**
18a(H)&18b(H)-Oleananes	**540**	14b(H),17b(H)-20S-Cholestane	**1500**
Hopane	**6200**	14b,17b-20R-Methylcholestane	**1600**
Moretane	**930**	14b,17b-20S-Methylcholestane	**2000**
30-Homohopane-22S	**1700**	14b(H),17b(H)-20R-Ethylcholestane	**2200**
30-Homohopane-22R	**1600**	14b(H),17b(H)-20S-Ethylcholestane	**1300**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	102	50-130

N/A - Not Applicable

02/01/06 13:49

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34876.D
Acq On : 26 Jan 2006 9:53 pm
Operator : AC
Sample : 0512128-04 X
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 30 12:55:37 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 1/30/06

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	86451	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	43.93	217	148377	4083.79 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	408.38%#	

Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	305827m	4116.58 ng/mL	
84) Hopane (T19)	52.49	191	305898m	4117.54 ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	48544m	653.43 ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	39262	528.49 ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	42122m	566.98 ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	21975m	295.79 ng/ml	
89) C26 Tricyclic Terpane-22S	44.21	191	18333m	246.77 ng/ml	
90) C26 Tricyclic Terpane-22R	44.32	191	18173m	244.62 ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	23055m	310.33 ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	23613m	317.84 ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	29011	390.50 ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	26919m	362.34 ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	66229m	891.48 ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	22582m	303.96 ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	19872m	267.49 ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	76122m	1024.64 ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	20595m	277.22 ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	13199	177.67 ng/ml	100
101) 30-Norhopane (T15)	51.10	191	178170m	2398.26 ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	59438m	800.07 ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	17816m	239.81 ng/ml	
104) 30-Normoretane (T17)	51.89	191	39882	536.83 ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	26995m	363.37 ng/ml	
106) Moretane (T20)	53.20	191	46033m	619.63 ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	82302	1107.83 ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	80868	1088.52 ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	54174	729.21 ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	36187	487.10 ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	30609m	412.01 ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	19214m	258.63 ng/ml	
113) Tetrakishomohopane-22S (T3	60.77	191	18176	244.66 ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	11108m	149.52 ng/ml	
115) Pentakishomohopane-22S (T3	63.97	191	12062m	162.36 ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	12719m	171.20 ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	39000m	1073.40 ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	20500m	564.22 ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	19634m	540.39 ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	24541m	675.44 ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	74952m	2062.91 ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	11684m	321.58 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34876.D
Acq On : 26 Jan 2006 9:53 pm
Operator : AC
Sample : 0512128-04X
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 30 12:55:37 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

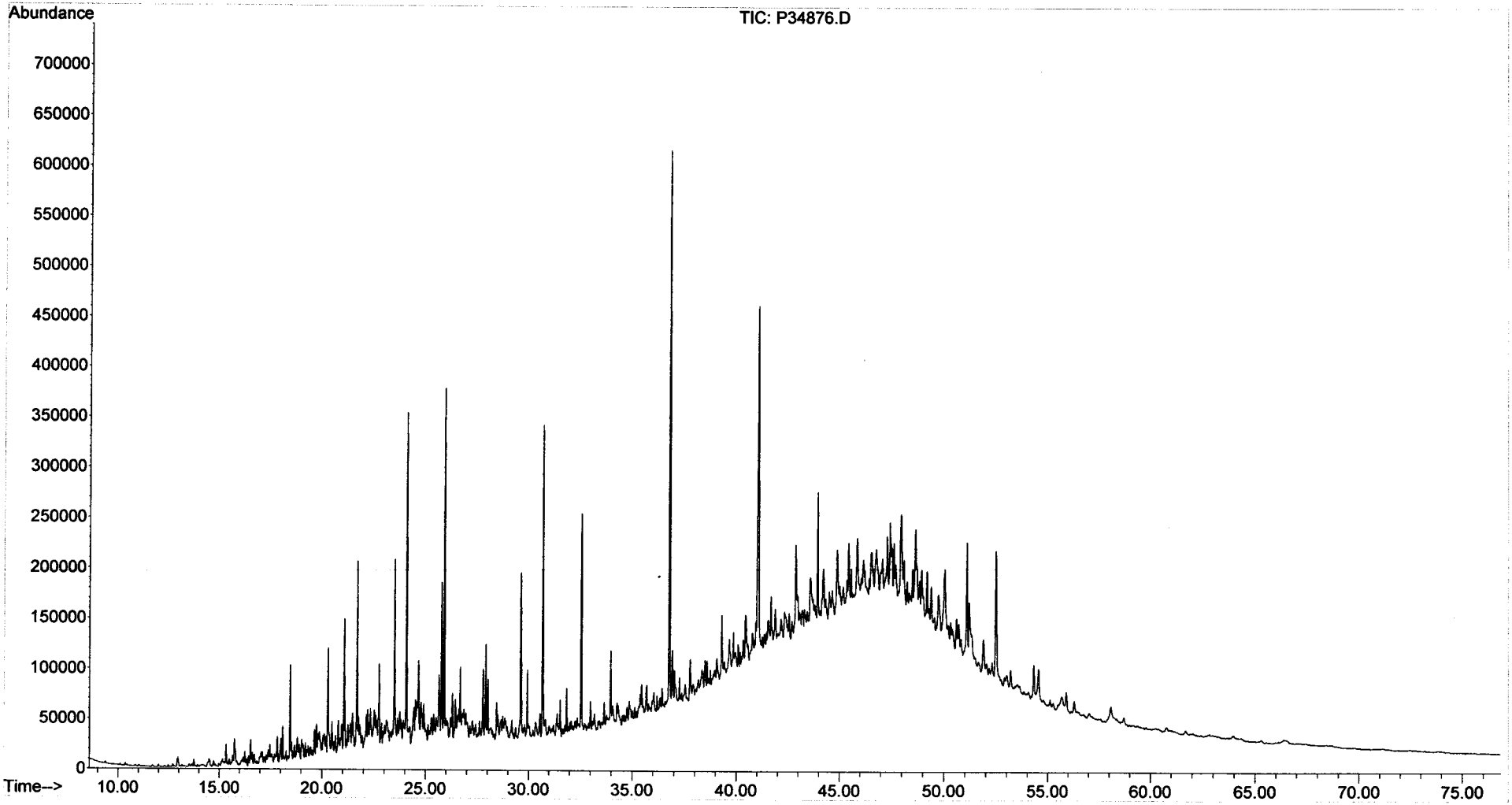
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	3304	90.94	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	15312m	421.43	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	36530m	1005.42	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	24584m	676.63	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	33629m	925.57	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	36841m	1013.98	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	36662	1009.05	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	38453m	1058.34	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	47174m	1298.37	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	53333	1467.89	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	31952m	879.42	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34876.D
Acq On : 26 Jan 2006 9:53 pm
Operator : AC
Sample : 0512128-04X
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 30 12:55:37 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-RM 039**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-05**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/10/06	01/16/06	100	0.094	16.7	10	NLJr

Parameter	Result		Parameter	Result
Naphthalene	52000	E	Fluoranthene	8800
C1-Naphthalenes	32000	E	Pyrene	13000
C2-Naphthalenes	18000		C1-Fluoranthenes/Pyrenes	11000
C3-Naphthalenes	6100		C2-Fluoranthenes/Pyrenes	3300
C4-Naphthalenes	1700		C3-Fluoranthenes/Pyrenes	890
Biphenyl	3400		C4-Fluoranthenes/Pyrenes	220
Dibenzofuran	890		Naphthobenzothiophenes	1200
Acenaphthylene	9300		C1-Naphthobenzothiophenes	970
Acenaphthene	11000		C2-Naphthobenzothiophenes	430
Fluorene	8100		C3-Naphthobenzothiophenes	160
C1-Fluorenes	4400		C4-Naphthobenzothiophenes	46
C2-Fluorenes	2700		Benz[a]anthracene	4800
C3-Fluorenes	1200		Chrysene/Triphenylene	4600
Anthracene	9300		C1-Chrysenes	3300
Phenanthrene	28000	E	C2-Chrysenes	1000
C1-Phenanthrenes/Anthracenes	17000		C3-Chrysenes	420
C2-Phenanthrenes/Anthracenes	6700		C4-Chrysenes	140
C3-Phenanthrenes/Anthracenes	1900		Benzo[b]fluoranthene	1400
C4-Phenanthrenes/Anthracenes	420		Benzo[k]fluoranthene	2000
Retene	2.6	U	Benzo[a]fluoranthene	940
Dibenzothiophene	3200		Benzo[e]pyrene	1800
C1-Dibenzothiophenes	3100		Benzo[a]pyrene	3500
C2-Dibenzothiophenes	2100		Perylene	500
C3-Dibenzothiophenes	930		Indeno[1,2,3-cd]pyrene	1100
C4-Dibenzothiophenes	250		Dibenz[a,h]anthracene	320
Benzo(b)fluorene	1900		Benzo[g,h,i]perylene	1300

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	63	50-130
Pyrene-d10	69	50-130
Benzo[b]fluoranthene-d12	63	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.

02/02/06 08:20

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-RM 039**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-05**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/10/06	01/16/06	100	0.094	16.7	10	NLJr

Parameter	Result
Carbazole	**250**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	63	50-130
Pyrene-d10	69	50-130
Benzo[b]fluoranthene-d12	63	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\JAN13\
Data File : P27698.D
Acq On : 16 Jan 2006 12:55 am
Operator : NLJr
Sample : 0512128-05
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 30 04:42:32 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

MS for WB 2/1/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	57827m	500.00 ng/mL	0.00
72) Chrysene-d12	43.86	240	89994m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.00	152	7518m	63.26 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	6.33%#	
58) Pyrene-d10	38.94	212	16776m	68.63 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	6.86%#	
81) Benzo[b]fluoranthene-d12	47.81	264	11597m	62.86 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	6.29%#	
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	20.44	128	7588323m	29174.81 ng/mL E	
10) C1-Naphthalenes	23.14	142	4675256m	17974.95 ng/mL E	
11) C2-Naphthalenes	25.98	156	2623378m	10086.10 ng/mL	
12) C3-Naphthalenes	28.33	170	892588m	3431.73 ng/mL	
13) C4-Naphthalenes	31.09	184	245475m	943.78 ng/mL	
15) 2-Methylnaphthalene	23.14	142	2856146	17251.04 ng/mL# E	100
16) 1-Methylnaphthalene	23.56	142	1813043	11505.12 ng/mL# E	100
22) Biphenyl	25.01	154	393351m	1887.27 ng/mL	
23) 2,6-Dimethylnaphthalene	25.64	156	381463m	2674.68 ng/mL	
24) Dibenzofuran	28.11	168	115437m	501.74 ng/mL	
25) Acenaphthylene	26.74	152	1349921m	5230.97 ng/mL	
26) Acenaphthene	27.47	153	955084m	6037.79 ng/mL	
27) 2,3,5-Trimethylnaphthalene	29.02	170	68967m	554.11 ng/mL	
28) Fluorene	29.50	166	840208m	4542.68 ng/mL	
29) C1-Fluorenes	31.73	180	452581m	2446.93 ng/mL	
30) C2-Fluorenes	33.91	194	276710m	1496.07 ng/mL	
31) C3-Fluorenes	35.89	208	124761m	674.54 ng/mL	
32) Dibenzothiophene	32.83	184	447217m	1808.32 ng/mL	
37) C1-Dibenzothiophenes	34.60	198	429917m	1738.37 ng/mL	
38) C2-Dibenzothiophenes	36.30	212	294233m	1189.73 ng/mL	
39) C3-Dibenzothiophenes	38.10	226	129622m	524.13 ng/mL	
40) C4-Dibenzothiophenes	39.78	240	34480m	139.42 ng/mL	
41) Phenanthrene	33.34	178	4117556	15602.29 ng/mL E	98
47) C1-Phenanthrenes/Anthracen	35.41	192	2523114m	9560.61 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.56	206	997280m	3778.90 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.40	220	279373m	1058.60 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.58	234	62350m	236.26 ng/mL	
53) Anthracene	33.51	178	1275944m	5205.80 ng/mL	
54) Carbazole	34.18	167	33298m	142.54 ng/mL	
55) 1-Methylphenanthrene	35.84	192	378518	2067.46 ng/mL	100
56) Fluoranthene	38.12	202	1389751m	4933.97 ng/mL	
57) Benzo(b)fluorene	40.64	216	185063m	1068.76 ng/mL	
59) Pyrene	39.01	202	2136677	7407.94 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.40	216	1799206m	6237.92 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.13	230	527618m	1829.27 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.94	244	144451m	500.82 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.58	258	35187m	121.99 ng/mL	
64) Naphthobenzothiophene	42.87	234	119676	447.44 ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.87	234	119623m	447.24 ng/mL	
66) Naphthobenzothiophene-1,2-	43.21	234	31846m	119.06 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27698.D
Acq On : 16 Jan 2006 12:55 am
Operator : NLJr
Sample : 0512128-05
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 30 04:42:32 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

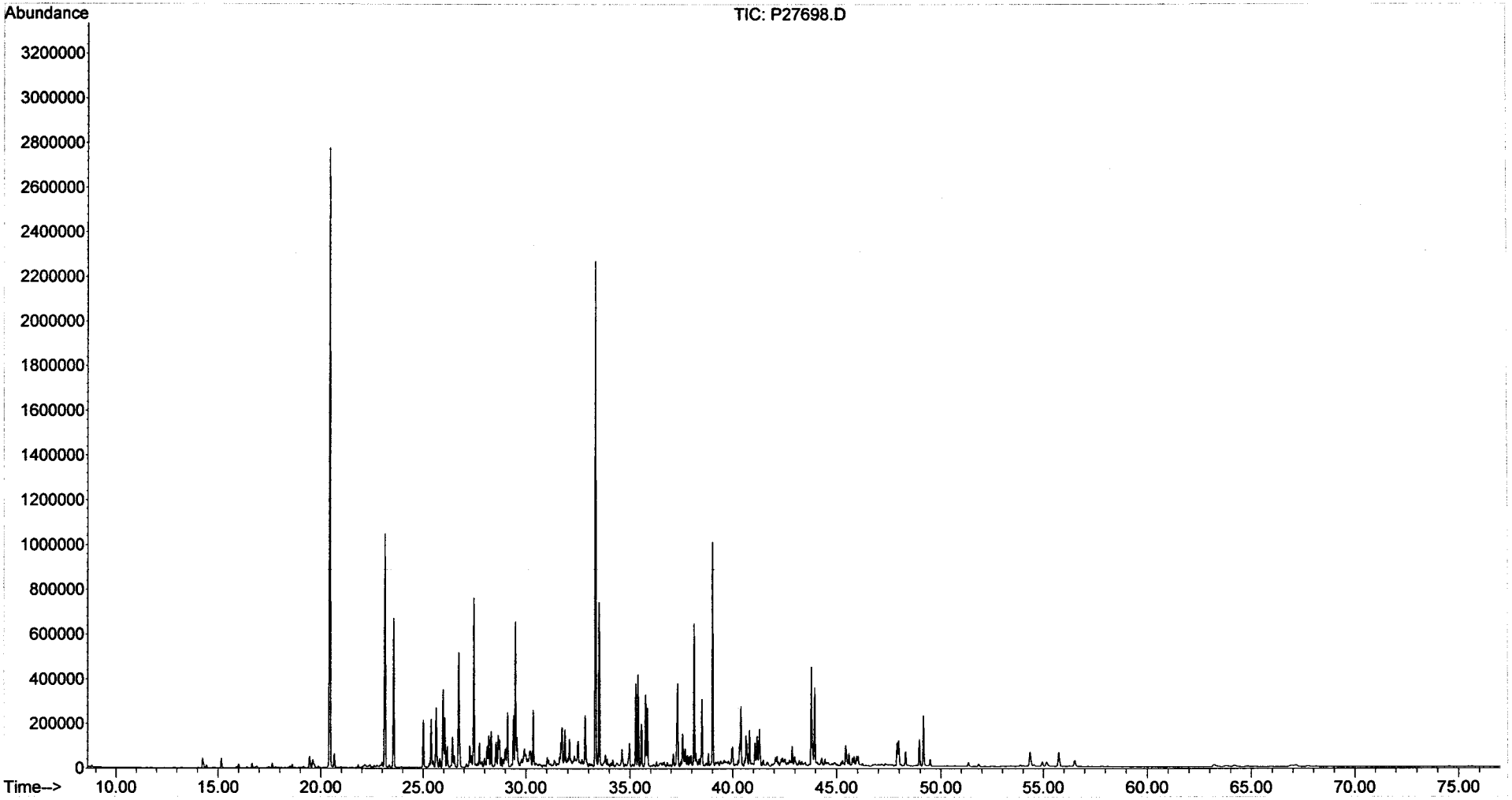
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
67) Naphthobenzothiophene-2,3-	43.51	234	33296m	124.49	ng/mL	
68) C1-Naphthobenzothiophenes	44.27	248	145743m	544.90	ng/ml	
69) C2-Naphthobenzothiophenes	45.76	262	64329m	240.51	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	23372m	87.38	ng/ml	
71) C4-Naphthobenzothiophenes	49.03	290	6838m	25.57	ng/mL	
73) Benz[a]anthracene	43.79	228	689215m	2681.78	ng/mL	
74) Chrysene	43.96	228	657497m	2547.20	ng/mL	
75) Chrysene/Triphenylene	43.96	228	661512m	2562.75	ng/mL	
76) C1-Chrysenes	45.43	242	472151m	1829.15	ng/mL	
77) C2-Chrysenes	47.14	256	151660m	587.54	ng/mL	
78) BBF-d12 Surr BKGD	47.77	256	2399	9.29	ng/mL	100
79) C3-Chrysenes	48.82	270	61033m	236.45	ng/mL	
80) C4-Chrysenes	49.90	284	19784m	76.64	ng/mL	
82) Benzo[b]fluoranthene	47.89	252	221761	803.43	ng/mL	100
83) Benzo[k]fluoranthene	47.96	252	330036	1143.43	ng/mL	98
84) Benzo[a]fluoranthene	48.30	252	152790m	529.35	ng/mL	
85) Benzo[e]pyrene	48.96	252	263126m	988.89	ng/mL	
86) Benzo[a]pyrene	49.16	252	528291m	1985.94	ng/mL	
87) Perylene	49.49	252	75239	283.70	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	54.35	276	168094m	637.54	ng/mL	
89) Dibenz[a,h]anthracene	54.39	278	44227m	178.37	ng/mL	
90) Benzo[g,h,i]perylene	55.76	276	199988m	727.47	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 : P27698.D
Acq On : 16 Jan 2006 12:55 am
Operator : NLJr
Sample : 0512128-05
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 30 04:42:32 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 I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-RM 039**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-05E**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/10/06	01/20/06	100	0.094	16.7	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**59000**		Fluoranthene	18	U
C1-Naphthalenes	**36000**		Pyrene	16	U
C2-Naphthalenes	29	U	C1-Fluoranthenes/Pyrenes	16	U
C3-Naphthalenes	29	U	C2-Fluoranthenes/Pyrenes	16	U
C4-Naphthalenes	29	U	C3-Fluoranthenes/Pyrenes	16	U
Biphenyl	16	U	C4-Fluoranthenes/Pyrenes	16	U
Dibenzofuran	21	U	Naphthobenzothiophenes	22	U
Acenaphthylene	32	U	C1-Naphthobenzothiophenes	22	U
Acenaphthene	20	U	C2-Naphthobenzothiophenes	22	U
Fluorene	20	U	C3-Naphthobenzothiophenes	22	U
C1-Fluorenes	20	U	C4-Naphthobenzothiophenes	22	U
C2-Fluorenes	20	U	Benz[a]anthracene	28	U
C3-Fluorenes	20	U	Chrysene/Triphenylene	19	U
Anthracene	24	U	C1-Chrysenes	19	U
Phenanthrene	**32000**		C2-Chrysenes	19	U
C1-Phenanthrenes/Anthracenes	26	U	C3-Chrysenes	19	U
C2-Phenanthrenes/Anthracenes	26	U	C4-Chrysenes	19	U
C3-Phenanthrenes/Anthracenes	26	U	Benzo[b]fluoranthene	19	U
C4-Phenanthrenes/Anthracenes	26	U	Benzo[k]fluoranthene	36	U
Retene	26	U	Benzo[a]fluoranthene	36	U
Dibenzothiophene	20	U	Benzo[e]pyrene	24	U
C1-Dibenzothiophenes	20	U	Benzo[a]pyrene	25	U
C2-Dibenzothiophenes	20	U	Perylene	31	U
C3-Dibenzothiophenes	20	U	Indeno[1,2,3-cd]pyrene	43	U
C4-Dibenzothiophenes	20	U	Dibenz[a,h]anthracene	34	U
Benzo(b)fluorene	18	U	Benzo[g,h,i]perylene	31	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	66	50-130
Pyrene-d10	71	50-130
Benzo[b]fluoranthene-d12	61	50-130

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

02/02/06 08:26

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27802.D
Acq On : 20 Jan 2006 5:14 pm
Operator : AC
Sample : 0512128-05-RE
Misc : 100X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 30 05:22:06 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 MW 2/1/06

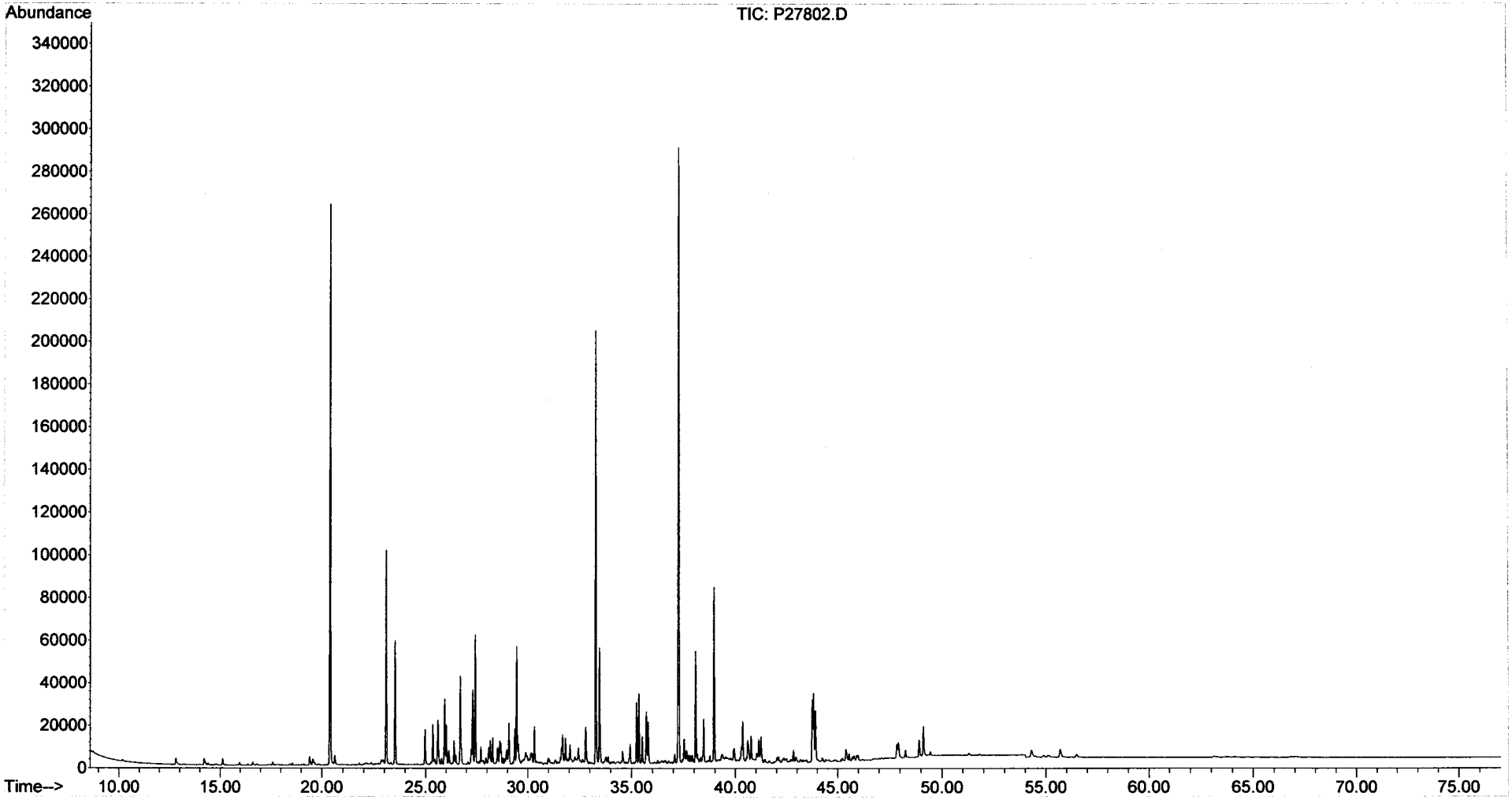
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	42265m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	66109	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	574m	6.61	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.66%#	
58) Pyrene-d10	38.89	212	1271m	7.11	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.71%#	
81) Benzo[b]fluoranthene-d12	47.77	264	832m	6.14	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.61%#	
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	631478	3321.78	ng/mL#	100
10) C1-Naphthalenes	23.09	142	383794m	2018.88	ng/mL	
15) 2-Methylnaphthalene	23.09	142	235135	1943.13	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	147059	1276.80	ng/mL#	100
41) Phenanthrene	33.28	178	345603	1791.74	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 : P27802.D
Acq On : 20 Jan 2006 5:14 pm
Operator : AC
Sample : 0512128-05-RE
Misc : 100X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 30 05:22:06 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

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-RM 039**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-05**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/10/06	01/23/06	100	0.094	2.66	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**4.2**		30,31-Bishomohopane-22S	**0.80**	
C24 Tricyclic Terpane	**2.5**		30,31-Bishomohopane-22R	**0.60**	
C25 Tricyclic Terpane	**1.9**		30,31-Trishomohopane-22S	**0.51**	
C24 Tetracyclic Terpane	**0.74**		30,31-Trishomohopane-22R	**0.26**	J
C26 Tricyclic Terpane-22S	**0.82**		Tetrakishomohopane-22S	0.080	U
C26 Tricyclic Terpane-22R	**0.83**		Tetrakishomohopane-22R	0.080	U
C28 Tricyclic Terpane-22S	**0.85**		Pentakishomohopane-22S	0.080	U
C28 Tricyclic Terpane-22R	**0.87**		Pentakishomohopane-22R	0.080	U
C29 Tricyclic Terpane-22S	**0.73**		13b(H),17a(H)-20S-Diacholestane	**2.4**	
C29 Tricyclic Terpane-22R	**0.67**		13b(H),17a(H)-20R-Diacholestane	**1.4**	
18a-22,29,30-Trisnorneohopane-TS	**1.3**		13b,17a-20S-Methyldiacholestane	**0.78**	
C30 Tricyclic Terpane-22S	**0.56**		14a(H),17a(H)-20S-Cholestane	**1.3**	
C30 Tricyclic Terpane-22R	**0.50**		14a(H),17a(H)-20R-Cholestane	**3.9**	
17a(H)-22,29,30-Trisnorhopane-TM	**1.7**		13b,17a-20R-Ethyldiacholestane	**0.61**	
17a/b,21b/a 28,30-Bisnorhopane	**0.78**		13a,17b-20S-Ethyldiacholestane	**0.10**	J
17a(H),21b(H)-25-Norhopane	**0.37**		14a,17a-20S-Methylcholestane	**0.63**	
30-Norhopane	**3.2**		14a,17a-20R-Methylcholestane	**1.8**	
18a(H)-30-Norneohopane-C29Ts	**1.1**		14a(H),17a(H)-20S-Ethylcholestane	**1.3**	
17a(H)-Diahopane	**0.42**		14a(H),17a(H)-20R-Ethylcholestane	**1.5**	
30-Normoretane	**0.65**		14b(H),17b(H)-20R-Cholestane	**1.7**	
18a(H)&18b(H)-Oleananes	**0.65**		14b(H),17b(H)-20S-Cholestane	**1.7**	
Hopane	**5.1**		14b,17b-20R-Methylcholestane	**1.4**	
Moretane	**0.63**		14b,17b-20S-Methylcholestane	**1.7**	
30-Homohopane-22S	**1.3**		14b(H),17b(H)-20R-Ethylcholestane	**2.1**	
30-Homohopane-22R	**1.2**		14b(H),17b(H)-20S-Ethylcholestane	**1.6**	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	98	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.

02/01/06 13:48

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34861.D
Acq On : 23 Jan 2006 5:53 pm
Operator : AC
Sample : 0512128-05
Misc : 1X RERUN
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 24 12:27:35 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	93323	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	76885	1960.29	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 196.03%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	14491	180.69	ng/mL#	95
84) Hopane (T19)	52.48	191	14491	180.69	ng/mL#	95
85) C23 Tricyclic Terpane (T4)	40.94	191	11725m	146.20	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	7029	87.65	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	5313m	66.25	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	2100	26.19	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	2329m	29.04	ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	2346m	29.25	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	2410m	30.05	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	2450	30.55	ng/ml	100
93) C29 Tricyclic Terpane-22S	47.27	191	2053	25.60	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	1909m	23.80	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	3772	47.03	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.72	191	1576	19.65	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.97	191	1406m	17.53	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	4820m	60.10	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	2214m	27.61	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	1036	12.92	ng/ml	100
101) 30-Norhopane (T15)	51.08	191	9010m	112.35	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	3050m	38.03	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	1187m	14.80	ng/ml	
104) 30-Normoretane (T17)	51.87	191	1851m	23.08	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	1839	22.93	ng/ml	100
106) Moretane (T20)	53.18	191	1774m	22.12	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	3695m	46.07	ng/ml	
108) 30-Homohopane-22R (T22)	54.54	191	3238m	40.38	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.89	191	2266	28.26	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.29	191	1707m	21.29	ng/ml	
111) 30,31-Trishomohopane-22S (	58.07	191	1428m	17.81	ng/ml	
112) 30,31-Trishomohopane-22R (	58.72	191	731m	9.12	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	3261m	83.14	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	1907m	48.62	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	1083m	27.61	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	1812m	46.20	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	5384	137.27	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	838m	21.37	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	48.49	217	139	3.54	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	876m	22.33	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	2471	63.00	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	1749m	44.59	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34861.D
Acq On : 23 Jan 2006 5:53 pm
Operator : AC
Sample : 0512128-05
Misc : 1X RERUN
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 24 12:27:35 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

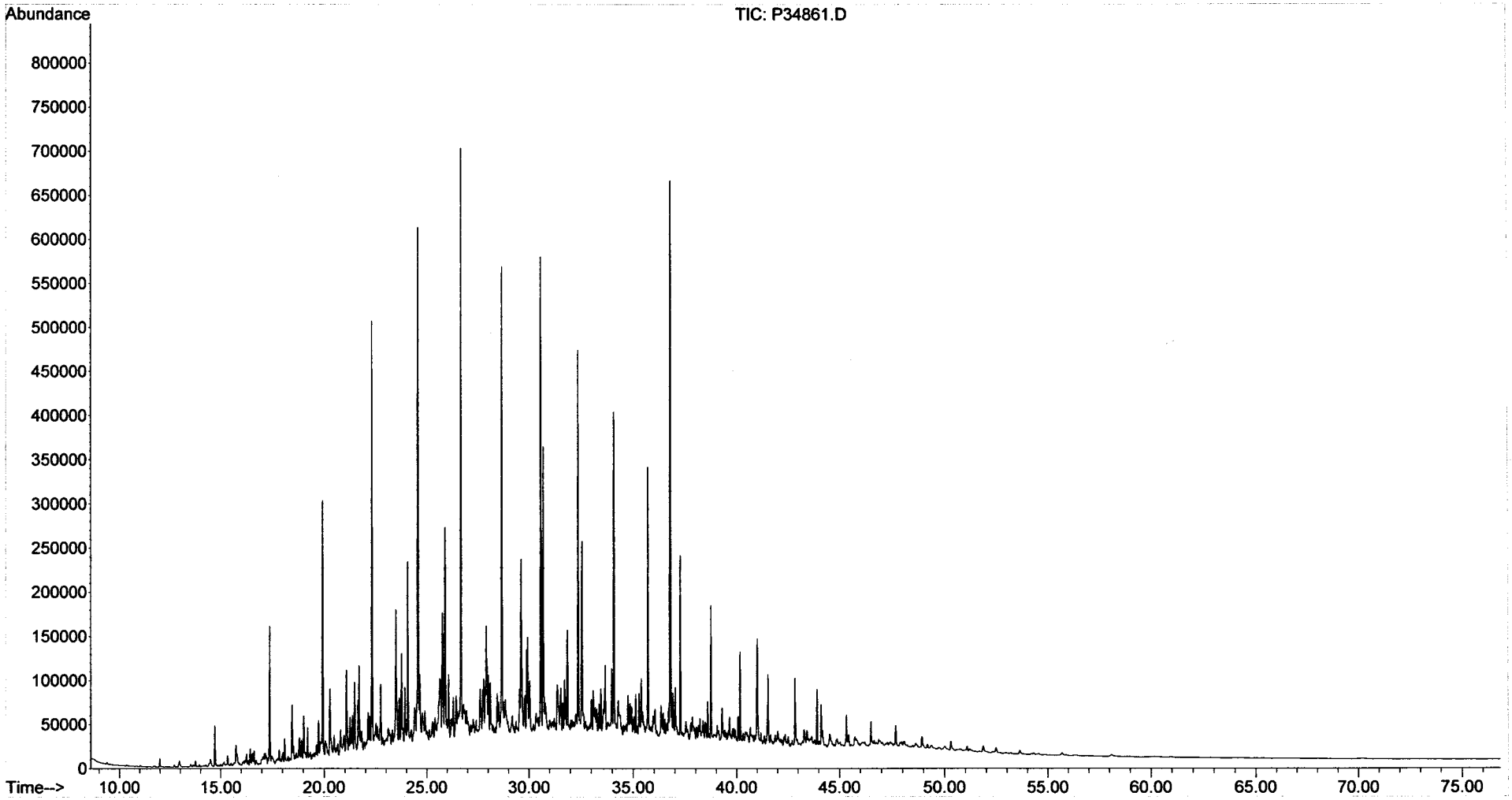
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	2127	54.23	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	2324m	59.25	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	2291m	58.41	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	1863m	47.50	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	2318m	59.10	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	2923m	74.53	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	2274m	57.98	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 : P34861.D
Acq On : 23 Jan 2006 5:53 pm
Operator : AC
Sample : 0512128-05
Misc : 1X RERUN
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 24 12:27:35 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: **0512128**
Lab ID: **SS010606B04**
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	01/06/06	01/19/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.13**	J	Fluoranthene	**1.3**	
C1-Naphthalenes	**0.068**	J	Pyrene	**10**	
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	**25**	
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	**7.7**	
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	**0.86**	
Biphenyl	**0.097**	J	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	**0.34**	J
Acenaphthylene	0.12	U	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	**1.0**		Benz[a]anthracene	**0.047**	J
C3-Fluorenes	**4.4**		Chrysene/Triphenylene	**0.075**	J
Anthracene	0.089	U	C1-Chrysenes	0.072	U
Phenanthrene	**0.81**		C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	**12**		C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	**41**		C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	**52**		Benzo[b]fluoranthene	0.071	U
C4-Phenanthrenes/Anthracenes	**22**		Benzo[k]fluoranthene	0.14	U
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	**0.096**	J	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	**1.0**		Benzo[a]pyrene	0.093	U
C2-Dibenzothiophenes	**9.2**		Perylene	0.12	U
C3-Dibenzothiophenes	**16**		Indeno[1,2,3-cd]pyrene	0.16	U
C4-Dibenzothiophenes	**11**		Dibenz[a,h]anthracene	0.13	U
Benzo(b)fluorene	**1.6**		Benzo[g,h,i]perylene	0.12	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

02/02/06 07:52

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: **0512128**
Lab ID: **SS010606B04**
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	01/06/06	01/19/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

02/02/06 07:53

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27776.D
Acq On : 19 Jan 2006 7:43 pm
Operator : AC
Sample : SS010606B04
Misc : 1X ETR0512128 RERUN
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 30 04:07:40 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 MW 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	25090m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	43537m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	21416m	415.34	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 41.53%#			
58) Pyrene-d10	38.90	212	53230m	501.89	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.19%			
81) Benzo[b]fluoranthene-d12	47.77	264	39567m	443.29	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.33%#			
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	20.42	128	224m	1.98	ng/mL	
10) C1-Naphthalenes	23.09	142	115m	1.02	ng/mL	
15) 2-Methylnaphthalene	23.09	142	80m	1.11	ng/mL	
16) 1-Methylnaphthalene	23.52	142	27m	0.39	ng/mL	
22) Biphenyl	25.02	154	131	1.45	ng/mL#	100
30) C2-Fluorenes	34.05	194	1251m	15.59	ng/mL	
31) C3-Fluorenes	35.87	208	5268m	65.64	ng/mL	
32) Dibenzothiophene	32.85	184	155m	1.44	ng/mL	
36) OTP	34.95	198	8248	76.87	ng/mL#	100
37) C1-Dibenzothiophenes	34.95	198	9932m	92.56	ng/mL	
38) C2-Dibenzothiophenes	36.62	212	14812m	138.04	ng/mL	
39) C3-Dibenzothiophenes	38.06	226	25611m	238.68	ng/mL	
40) C4-Dibenzothiophenes	39.74	240	17215m	160.43	ng/mL	
41) Phenanthrene	33.33	178	1395m	12.18	ng/mL	
47) C1-Phenanthrenes/Anthracen	35.37	192	21450m	187.33	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.53	206	79037m	690.25	ng/mL	
49) 5AA IS BKGD	37.30	206	8304	72.52	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.36	220	88914m	776.51	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.58	234	37474m	327.27	ng/mL	
55) 1-Methylphenanthrene	35.81	192	3794	47.76	ng/mL	99
56) Fluoranthene	38.08	202	2376m	19.44	ng/mL	
57) Benzo(b)fluorene	40.61	216	1759m	23.41	ng/mL	
59) Pyrene	38.96	202	18839m	150.54	ng/mL	
60) C1-Fluoranthenes/Pyrenes	40.77	216	46675m	372.97	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.72	230	14508m	115.93	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.66	244	1620m	12.95	ng/mL	
64) Naphthobenzothiophene	42.85	234	477m	4.11	ng/ml	
65) Naphthobenzothiophene-2,1-	42.85	234	493m	4.25	ng/mL	
66) Naphthobenzothiophene-1,2-	43.19	234	105	0.90	ng/mL#	12
73) Benz[a]anthracene	43.76	228	87m	0.70	ng/mL	
74) Chrysene	43.92	228	134m	1.07	ng/mL	
75) Chrysene/Triphenylene	43.92	228	140m	1.12	ng/mL	

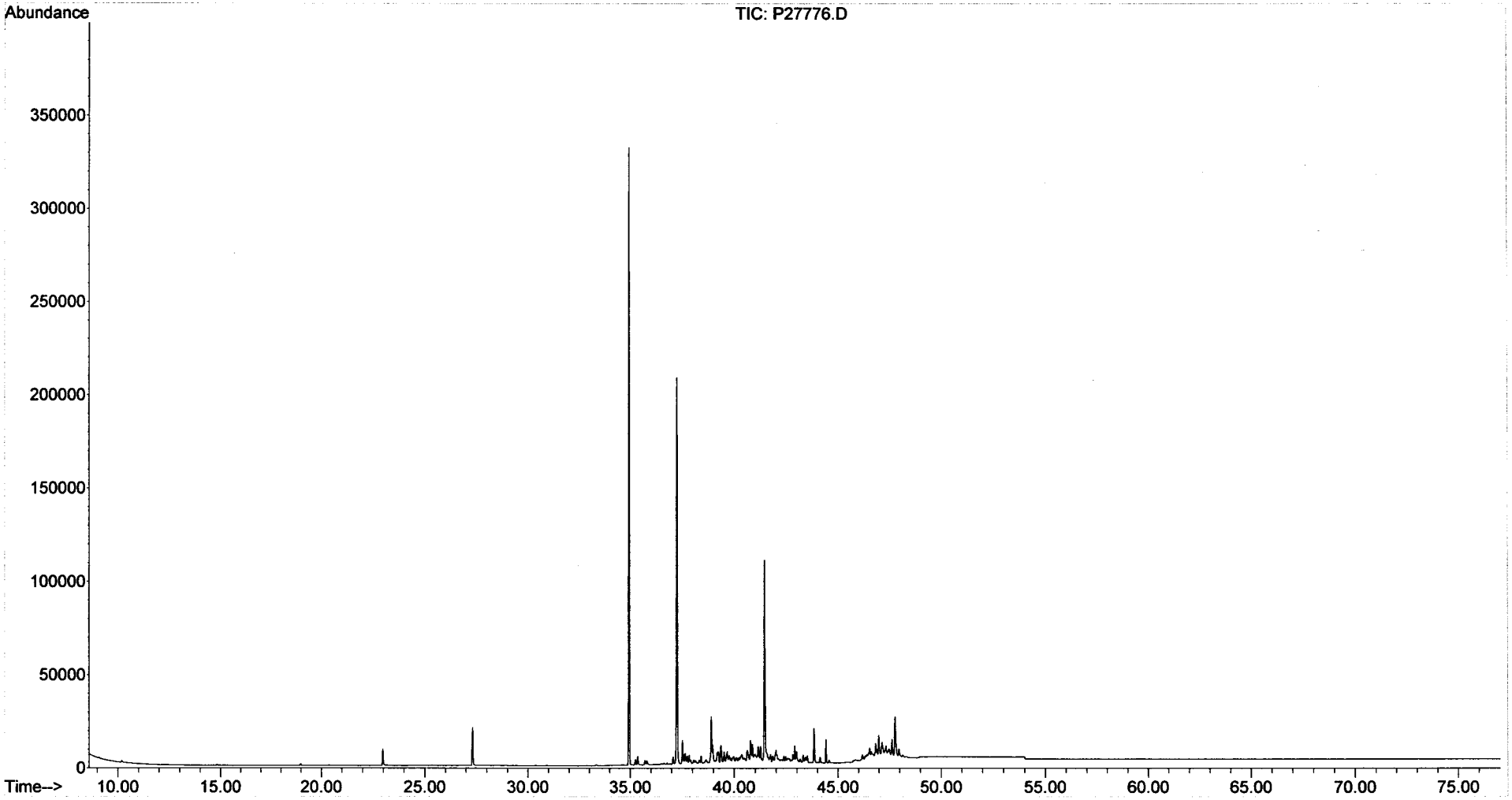
✓ MS 2/1/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27776.D
Acq On : 19 Jan 2006 7:43 pm
Operator : AC
Sample : SS010606B04
Misc : 1X ETR0512128 RERUN
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 30 04:07:40 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: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS010606B04**
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	01/06/06	01/19/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.19	U	30,31-Bishomohopane-22S	0.19	U
C24 Tricyclic Terpane	0.19	U	30,31-Bishomohopane-22R	0.19	U
C25 Tricyclic Terpane	0.19	U	30,31-Trishomohopane-22S	0.19	U
C24 Tetracyclic Terpane	0.19	U	30,31-Trishomohopane-22R	0.19	U
C26 Tricyclic Terpane-22S	0.19	U	Tetrakishomohopane-22S	0.19	U
C26 Tricyclic Terpane-22R	0.19	U	Tetrakishomohopane-22R	0.19	U
C28 Tricyclic Terpane-22S	0.19	U	Pentakishomohopane-22S	0.19	U
C28 Tricyclic Terpane-22R	0.19	U	Pentakishomohopane-22R	0.19	U
C29 Tricyclic Terpane-22S	0.19	U	13b(H),17a(H)-20S-Diacholestane	0.19	U
C29 Tricyclic Terpane-22R	0.19	U	13b(H),17a(H)-20R-Diacholestane	0.19	U
18a-22,29,30-Trisnorneohopane-TS	0.19	U	13b,17a-20S-Methyldiacholestane	0.19	U
C30 Tricyclic Terpane-22S	0.19	U	14a(H),17a(H)-20S-Cholestane	0.19	U
C30 Tricyclic Terpane-22R	0.19	U	14a(H),17a(H)-20R-Cholestane	0.19	U
17a(H)-22,29,30-Trisnorhopane-TM	0.19	U	13b,17a-20R-Ethyldiacholestane	0.19	U
17a/b,21b/a 28,30-Bisnorhopane	0.19	U	13a,17b-20S-Ethyldiacholestane	0.19	U
17a(H),21b(H)-25-Norhopane	0.19	U	14a,17a-20S-Methylcholestane	0.19	U
30-Norhopane	0.19	U	14a,17a-20R-Methylcholestane	0.19	U
18a(H)-30-Norneohopane-C29Ts	0.19	U	14a(H),17a(H)-20S-Ethylcholestane	0.19	U
17a(H)-Diahopane	0.19	U	14a(H),17a(H)-20R-Ethylcholestane	0.19	U
30-Normoretane	0.19	U	14b(H),17b(H)-20R-Cholestane	0.19	U
18a(H)&18b(H)-Oleananes	0.19	U	14b(H),17b(H)-20S-Cholestane	0.19	U
Hopane	0.19	U	14b,17b-20R-Methylcholestane	0.19	U
Moretane	0.19	U	14b,17b-20S-Methylcholestane	0.19	U
30-Homohopane-22S	0.19	U	14b(H),17b(H)-20R-Ethylcholestane	0.19	U
30-Homohopane-22R	0.19	U	14b(H),17b(H)-20S-Ethylcholestane	0.19	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	107	50-130

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

02/01/06 13:36

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34811.D
Acq On : 19 Jan 2006 12:35 pm
Operator : AC
Sample : SS010606B04
Misc : 1X ETR0512128
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 20 11:11:23 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 1/20/06

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	43.45	240	59482	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	26632	1065.33	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	106.53%	

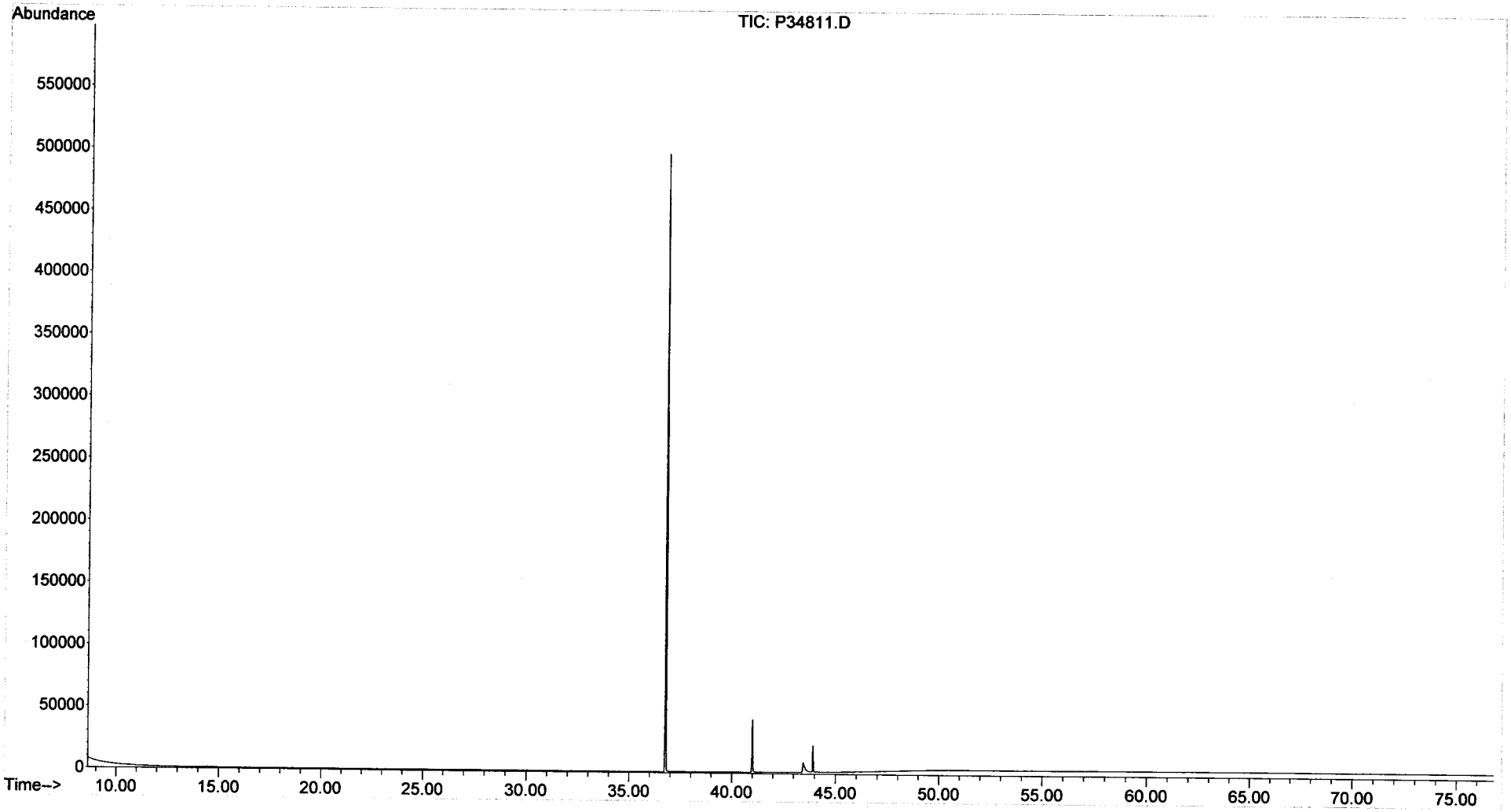
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34811.D
Acq On : 19 Jan 2006 12:35 pm
Operator : AC
Sample : SS010606B04
Misc : 1X ETR0512128
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 20 11:11:23 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: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006B01**
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	01/10/06	01/19/06	100	0.10	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.084**	J	Fluoranthene	**0.0080**	J
C1-Naphthalenes	**0.026**	J	Pyrene	**0.015**	J
C2-Naphthalenes	0.033	U	C1-Fluoranthenes/Pyrenes	0.018	U
C3-Naphthalenes	0.033	U	C2-Fluoranthenes/Pyrenes	0.018	U
C4-Naphthalenes	0.033	U	C3-Fluoranthenes/Pyrenes	0.018	U
Biphenyl	**0.025**	J	C4-Fluoranthenes/Pyrenes	0.018	U
Dibenzofuran	0.024	U	Naphthobenzothiophenes	0.024	U
Acenaphthylene	0.036	U	C1-Naphthobenzothiophenes	0.024	U
Acenaphthene	0.023	U	C2-Naphthobenzothiophenes	0.024	U
Fluorene	0.023	U	C3-Naphthobenzothiophenes	0.024	U
C1-Fluorenes	0.023	U	C4-Naphthobenzothiophenes	0.024	U
C2-Fluorenes	0.023	U	Benz[a]anthracene	0.031	U
C3-Fluorenes	0.023	U	Chrysene/Triphenylene	0.022	U
Anthracene	0.027	U	C1-Chrysenes	0.022	U
Phenanthrene	**0.020**	J	C2-Chrysenes	0.022	U
C1-Phenanthrenes/Anthracenes	0.029	U	C3-Chrysenes	0.022	U
C2-Phenanthrenes/Anthracenes	0.029	U	C4-Chrysenes	0.022	U
C3-Phenanthrenes/Anthracenes	0.029	U	Benzo[b]fluoranthene	0.021	U
C4-Phenanthrenes/Anthracenes	0.029	U	Benzo[k]fluoranthene	0.041	U
Retene	0.029	U	Benzo[a]fluoranthene	0.041	U
Dibenzothiophene	0.022	U	Benzo[e]pyrene	0.027	U
C1-Dibenzothiophenes	0.022	U	Benzo[a]pyrene	0.028	U
C2-Dibenzothiophenes	0.022	U	Perylene	0.035	U
C3-Dibenzothiophenes	0.022	U	Indeno[1,2,3-cd]pyrene	0.048	U
C4-Dibenzothiophenes	0.022	U	Dibenz[a,h]anthracene	0.038	U
Benzo(b)fluorene	0.020	U	Benzo[g,h,i]perylene	0.035	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	107	50-130
Benzo[b]fluoranthene-d12	99	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.

02/02/06 07:58

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006B01**
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	01/10/06	01/19/06	100	0.10	2	1	AC

Parameter	Result
Carbazole	0.026 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	107	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

02/02/06 07:59

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27778.D
Acq On : 19 Jan 2006 9:19 pm
Operator : AC
Sample : SO011006B01
Misc : 1X ETR0512128
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 12:07:43 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
2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	29118m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	42830m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	30112m	503.20	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.32%			
58) Pyrene-d10	38.90	212	65653m	533.39	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.34%			
81) Benzo[b]fluoranthene-d12	47.77	264	43569m	496.18	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.62%#			
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	20.44	128	549m	4.19	ng/mL	
10) C1-Naphthalenes	23.10	142	173m	1.32	ng/mL	
15) 2-Methylnaphthalene	23.10	142	111m	1.33	ng/mL	
16) 1-Methylnaphthalene	23.53	142	69m	0.87	ng/mL	
22) Biphenyl	25.01	154	131m	1.25	ng/mL	
41) Phenanthrene	33.34	178	133m	1.00	ng/mL	
56) Fluoranthene	38.12	202	57m	0.40	ng/mL	
59) Pyrene	38.98	202	112m	0.77	ng/mL	

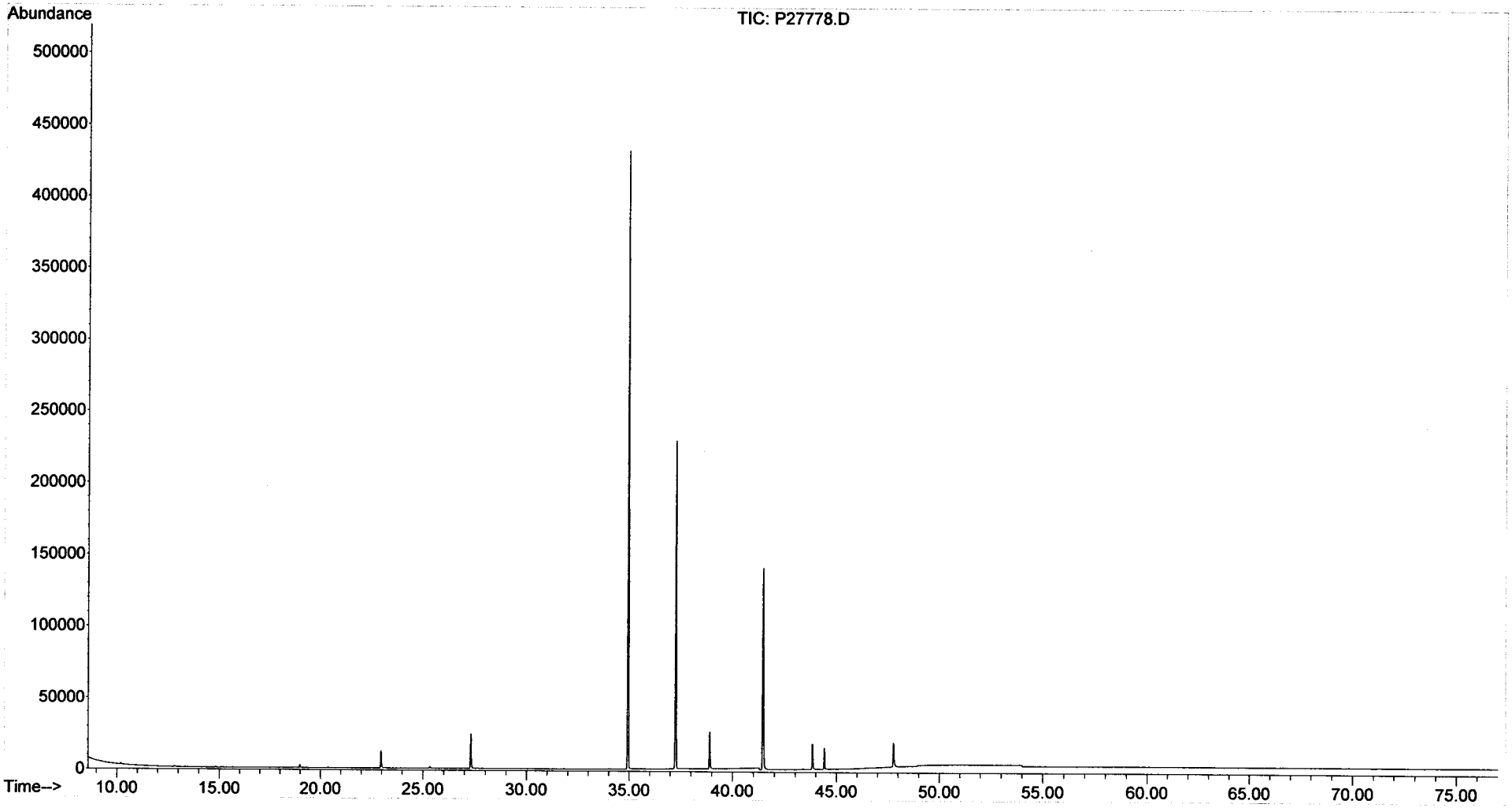
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓ MS
2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27778.D
Acq On : 19 Jan 2006 9:19 pm
Operator : AC
Sample : SO011006B01
Misc : 1X ETR0512128
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 12:07:43 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: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006B01**
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	01/10/06	01/19/06	100	0.10	2	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.056	U	30,31-Bishomohopane-22S	0.056	U
C24 Tricyclic Terpane	0.056	U	30,31-Bishomohopane-22R	0.056	U
C25 Tricyclic Terpane	0.056	U	30,31-Trishomohopane-22S	0.056	U
C24 Tetracyclic Terpane	0.056	U	30,31-Trishomohopane-22R	0.056	U
C26 Tricyclic Terpane-22S	0.056	U	Tetrakishomohopane-22S	0.056	U
C26 Tricyclic Terpane-22R	0.056	U	Tetrakishomohopane-22R	0.056	U
C28 Tricyclic Terpane-22S	0.056	U	Pentakishomohopane-22S	0.056	U
C28 Tricyclic Terpane-22R	0.056	U	Pentakishomohopane-22R	0.056	U
C29 Tricyclic Terpane-22S	0.056	U	13b(H),17a(H)-20S-Diacholestane	0.056	U
C29 Tricyclic Terpane-22R	0.056	U	13b(H),17a(H)-20R-Diacholestane	0.056	U
18a-22,29,30-Trisnorneohopane-TS	0.056	U	13b,17a-20S-Methyldiacholestane	0.056	U
C30 Tricyclic Terpane-22S	0.056	U	14a(H),17a(H)-20S-Cholestane	0.056	U
C30 Tricyclic Terpane-22R	0.056	U	14a(H),17a(H)-20R-Cholestane	0.056	U
17a(H)-22,29,30-Trisnorhopane-TM	0.056	U	13b,17a-20R-Ethyldiacholestane	0.056	U
17a/b,21b/a 28,30-Bisnorhopane	0.056	U	13a,17b-20S-Ethyldiacholestane	0.056	U
17a(H),21b(H)-25-Norhopane	0.056	U	14a,17a-20S-Methylcholestane	0.056	U
30-Norhopane	0.056	U	14a,17a-20R-Methylcholestane	0.056	U
18a(H)-30-Norneohopane-C29Ts	0.056	U	14a(H),17a(H)-20S-Ethylcholestane	0.056	U
17a(H)-Diahopane	0.056	U	14a(H),17a(H)-20R-Ethylcholestane	0.056	U
30-Normoretane	0.056	U	14b(H),17b(H)-20R-Cholestane	0.056	U
18a(H)&18b(H)-Oleananes	0.056	U	14b(H),17b(H)-20S-Cholestane	0.056	U
Hopane	0.056	U	14b,17b-20R-Methylcholestane	0.056	U
Moretane	0.056	U	14b,17b-20S-Methylcholestane	0.056	U
30-Homohopane-22S	0.056	U	14b(H),17b(H)-20R-Ethylcholestane	0.056	U
30-Homohopane-22R	0.056	U	14b(H),17b(H)-20S-Ethylcholestane	0.056	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	113	50-130

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

02/01/06 13:37

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34812.D
Acq On : 19 Jan 2006 2:04 pm
Operator : AC
Sample : SO011006B01
Misc : 1X ETR0512128
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 20 11:12:12 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 1/20/06

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	43.45	240	60465	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	28813	1133.84	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 113.38%			

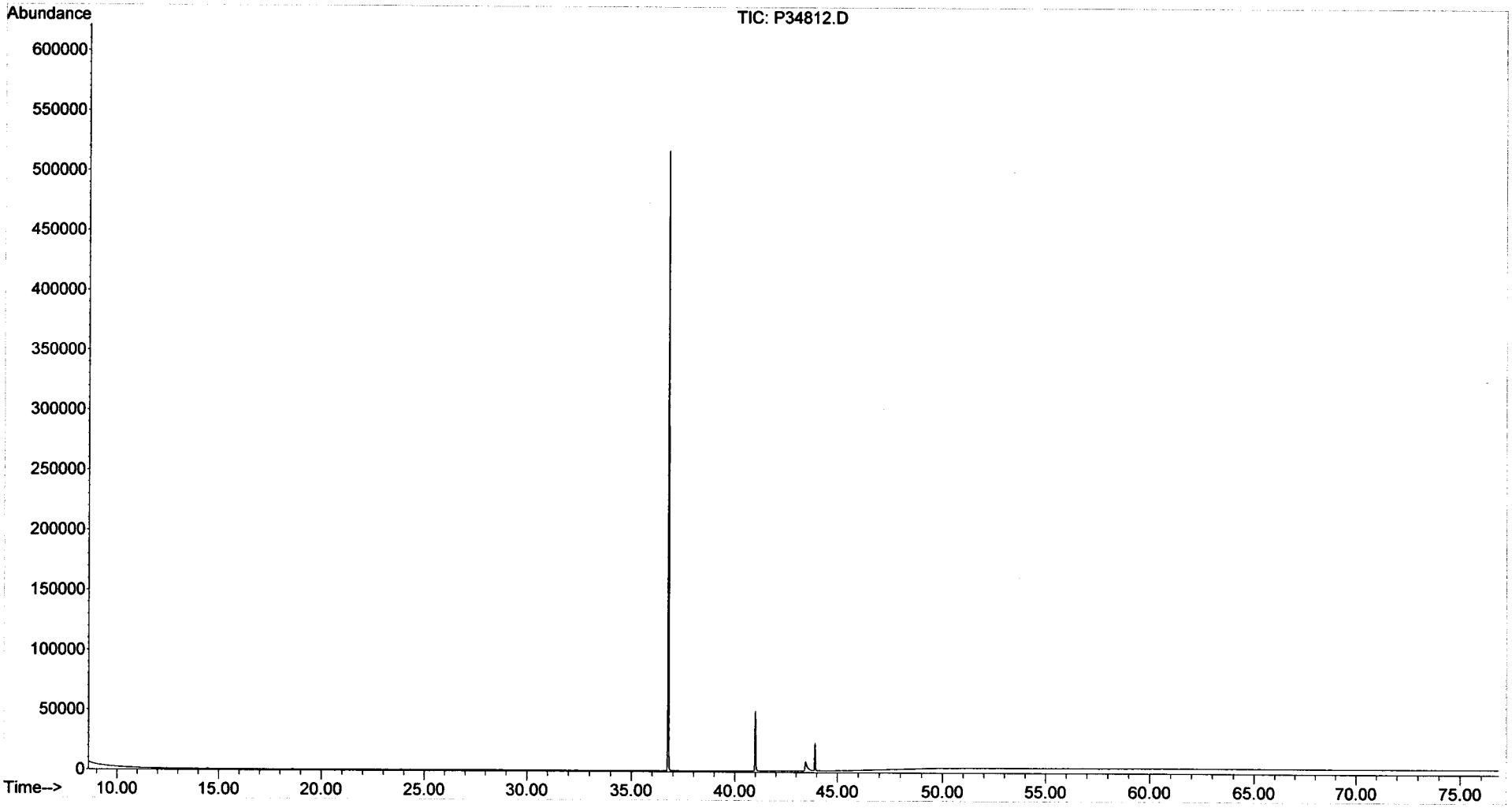
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.43	191	153	2.94	ng/mL#	77

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34812.D
Acq On : 19 Jan 2006 2:04 pm
Operator : AC
Sample : SO011006B01
Misc : 1X ETR0512128
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 20 11:12:12 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: **0512128**
Lab ID: **SS011906B04**
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	01/19/06	01/25/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1.4**		Fluoranthene	**0.14**	J
C1-Naphthalenes	**1.2**	J	Pyrene	**0.25**	J
C2-Naphthalenes	**0.83**	J	C1-Fluoranthenes/Pyrenes	**0.55**	J
C3-Naphthalenes	**0.33**	J	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	**0.25**	J	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	**0.081**	J	Naphthobenzothiophenes	**0.13**	J
Acenaphthylene	**0.43**	J	C1-Naphthobenzothiophenes	**0.31**	J
Acenaphthene	**0.23**	J	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**0.27**	J	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	**0.27**	J	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**0.14**	J
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**0.16**	J
Anthracene	**0.41**	J	C1-Chrysenes	**0.42**	J
Phenanthrene	**0.75**	J	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	**0.73**	J	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	**0.50**	J	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**0.14**	J
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**0.15**	J
Retene	**0.17**	J	Benzo[a]fluoranthene	**0.15**	J
Dibenzothiophene	**0.14**	J	Benzo[e]pyrene	**0.14**	J
C1-Dibenzothiophenes	**0.20**	J	Benzo[a]pyrene	**0.22**	J
C2-Dibenzothiophenes	**0.23**	J	Perylene	**0.081**	J
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**0.23**	J
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	0.25	U
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**0.28**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	71	50-130
Pyrene-d10	80	50-130
Benzo[b]fluoranthene-d12	78	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.

02/02/06 08:40

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: **0512128**
Lab ID: **SS011906B04**
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	01/19/06	01/25/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	71	50-130
Pyrene-d10	80	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.

02/02/06 08:40

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17752.D
Acq On : 25 Jan 2006 9:30 pm
Operator : AC
Sample : SS011906B04 X
Misc : 1X ETR0512128
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 30 02:38:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WD 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	51809m	500.00	ng/mL	0.00
72) Chrysene-d12	43.01	240	81596	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.23	152	19642m	176.85	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 17.69%#			
58) Pyrene-d10	38.08	212	45464	199.09	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.91%#			
81) Benzo[b]fluoranthene-d12	46.92	264	31577	194.33	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.43%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.66	128	2861m	10.81	ng/mL	
10) C1-Naphthalenes	22.36	142	2366m	8.94	ng/mL	
11) C2-Naphthalenes	24.85	156	1650m	6.24	ng/mL	
12) C3-Naphthalenes	27.52	170	652m	2.46	ng/mL	
15) 2-Methylnaphthalene	22.36	142	1789	10.68	ng/mL#	100
16) 1-Methylnaphthalene	22.78	142	568m	3.60	ng/mL	
22) Biphenyl	24.24	154	395m	1.90	ng/mL	
23) 2,6-Dimethylnaphthalene	24.85	156	332m	2.39	ng/mL	
24) Dibenzofuran	27.31	168	143m	0.61	ng/mL	
25) Acenaphthylene	25.94	152	826m	3.26	ng/mL	
26) Acenaphthene	26.67	153	267m	1.69	ng/mL	
28) Fluorene	28.68	166	354m	2.00	ng/mL	
29) C1-Fluorenes	30.93	180	353m	2.00	ng/mL	
32) Dibenzothiophene	32.00	184	270m	1.04	ng/mL	
36) OTP	34.20	198	6765m	25.96	ng/mL	
37) C1-Dibenzothiophenes	34.20	198	7151m	27.44	ng/mL	
38) C2-Dibenzothiophenes	36.50	212	445m	1.71	ng/mL	
41) Phenanthrene	32.50	178	1480m	5.65	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.58	192	1443m	5.51	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.51	206	9360m	35.72	ng/mL	
49) 5AA IS BKGD	36.51	206	8387m	32.00	ng/mL	
52) Retene	39.51	234	69m	1.26	ng/mL	
53) Anthracene	32.68	178	753m	3.11	ng/mL	
55) 1-Methylphenanthrene	35.01	192	183m	1.02	ng/mL	
56) Fluoranthene	37.28	202	292m	1.05	ng/mL	
59) Pyrene	38.16	202	522m	1.84	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.56	216	1162m	4.09	ng/mL	
65) Naphthobenzothiophene-2,1-	42.02	234	103m	0.39	ng/mL	
67) Naphthobenzothiophene-2,3-	42.68	234	159m	0.60	ng/mL	
68) C1-Naphthobenzothiophenes	43.42	248	611m	2.30	ng/ml	
73) Benz[a]anthracene	42.94	228	267m	1.07	ng/mL	
74) Chrysene	43.11	228	305m	1.20	ng/mL	
75) Chrysene/Triphenylene	43.11	228	305m	1.20	ng/mL	
76) C1-Chrysenes	44.60	242	806m	3.18	ng/mL	
82) Benzo[b]fluoranthene	47.00	252	262m	1.03	ng/mL	
83) Benzo[k]fluoranthene	47.07	252	299m	1.13	ng/mL	
84) Benzo[a]fluoranthene	47.39	252	300m	1.13	ng/mL	
85) Benzo[e]pyrene	47.99	252	251m	1.02	ng/mL	
86) Benzo[a]pyrene	48.18	252	395m	1.62	ng/mL	
87) Perylene	48.48	252	146m	0.61	ng/mL	

✓ MS 2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17752.D
Acq On : 25 Jan 2006 9:30 pm
Operator : AC
Sample : SS011906B04 X
Misc : 1X ETR0512128
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 30 02:38:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

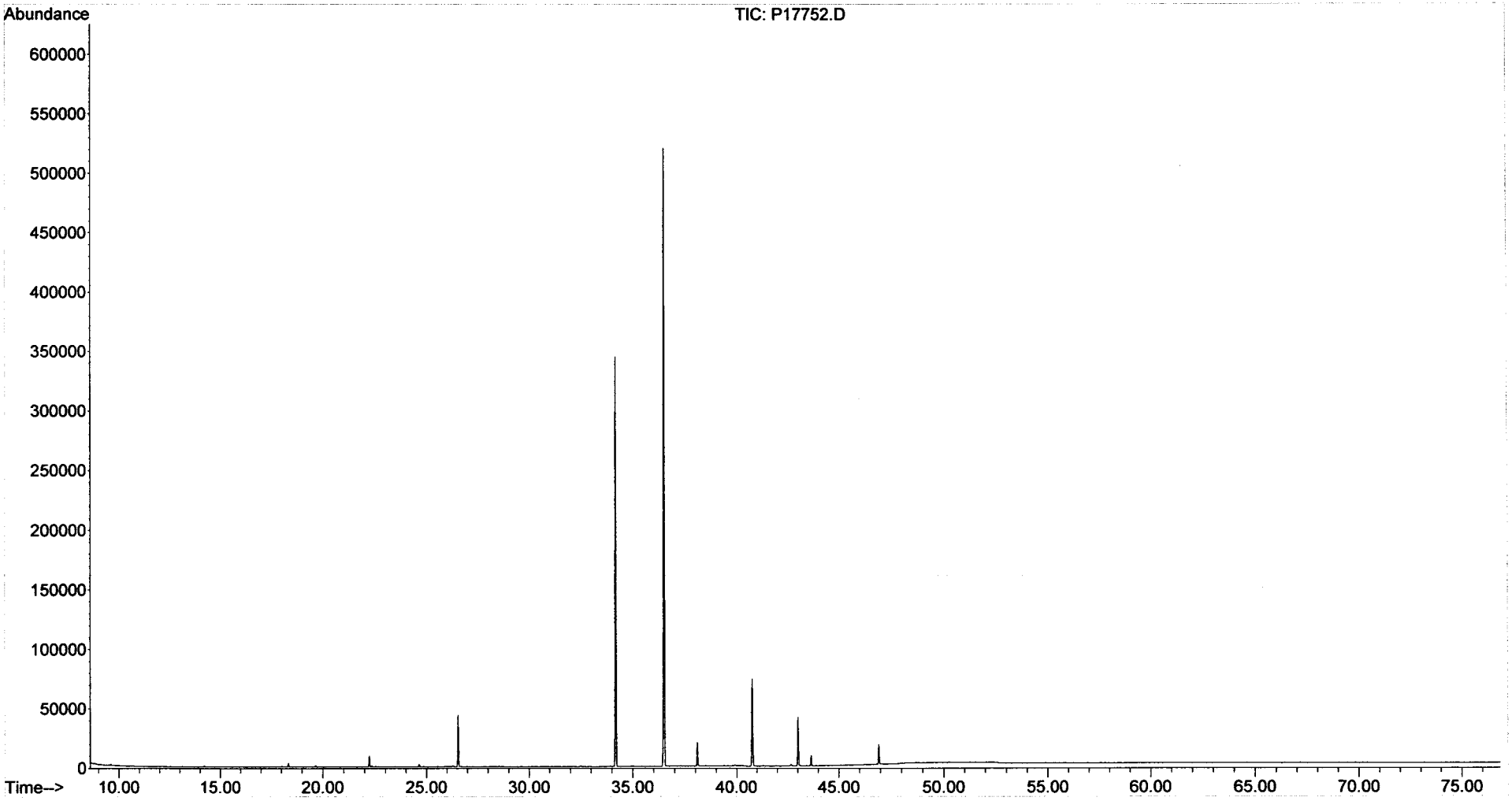
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
88) Indeno[1,2,3-cd]pyrene	52.95	276	369m	1.72 ng/mL	
90) Benzo[g,h,i]perylene	54.21	276	517m	2.09 ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17752.D
Acq On : 25 Jan 2006 9:30 pm
Operator : AC
Sample : SS011906B04 X
Misc : 1X ETR0512128
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 30 02:38:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS011906B04**
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	01/19/06	01/26/06	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	108	50-130

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

02/01/06 13:41

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34871.D
Acq On : 26 Jan 2006 2:25 pm
Operator : AC
Sample : SS011906B04
Misc : 1X ETR0512128
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 12:22:09 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 1/30/06

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	43.45	240	63623	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	14474	541.30	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	54.13%	

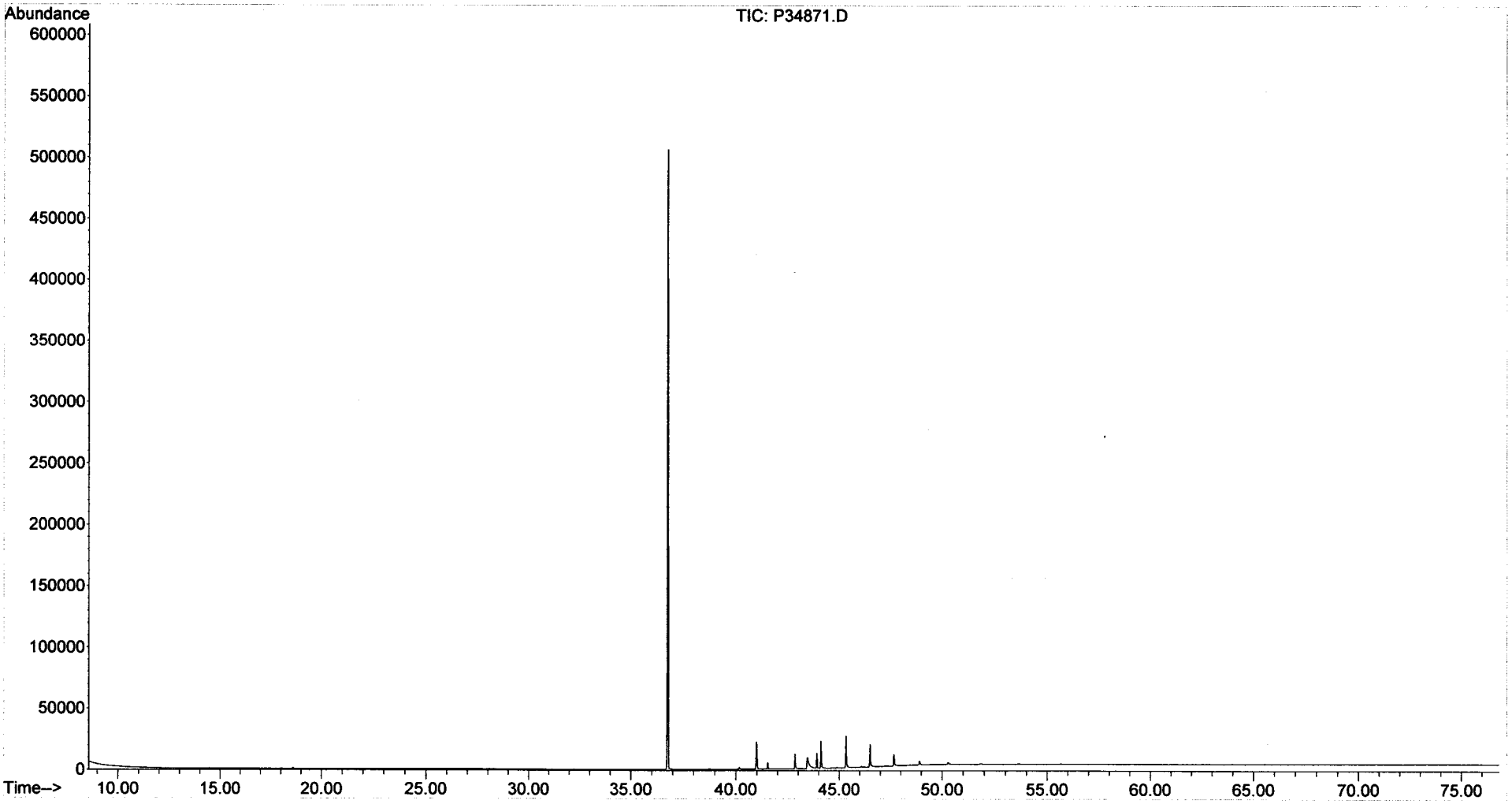
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34871.D
Acq On : 26 Jan 2006 2:25 pm
Operator : AC
Sample : SS011906B04
Misc : 1X ETR0512128
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 12:22:09 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: **0512128**
Lab ID: **See Below**
Associated Blank: **SS010606B04**
Concentration Units: **µg/Kg**

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

Lab ID:	SS010606B04		SS010606LCS04		SS010606LCSD03				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.13		32	97	31	93	4	30	50-130
Acenaphthylene	0.12	U	30	89	28	85	4	30	50-130
Acenaphthene	0.077	U	32	95	30	90	5	30	50-130
Fluorene	0.077	U	31	92	29	88	5	30	50-130
Anthracene	0.089	U	29	88	29	86	2	30	50-130
Phenanthrene	0.81		32	95	30	91	4	30	50-130
Fluoranthene	1.3		33	98	32	95	4	30	50-130
Pyrene	10		34	102	32	97	5	30	50-130
Benz[a]anthracene	0.047		32	96	31	92	4	30	50-130
Chrysene/Triphenylene	0.075		33	99	32	95	4	30	50-130
Benzo[b]fluoranthene	0.071	U	31	93	30	89	5	30	50-130
Benzo[k]fluoranthene	0.14	U	35	106	34	101	5	30	50-130
Benzo[a]pyrene	0.093	U	28	85	27	81	5	30	50-130
Indeno[1,2,3-cd]pyrene	0.16	U	26	77	26	76	0	30	50-130
Dibenz[a,h]anthracene	0.13	U	28	84	27	80	5	30	50-130
Benzo[g,h,i]perylene	0.12	U	28	85	27	80	6	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	87	83	50-130
Pyrene-d10	96	92	50-130
Benzo[b]fluoranthene-d12	90	85	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.

02/01/06 14:43

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: **0512128**
Lab ID: **SS010606LCS04**
Associated Blank: **SS010606B04**
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	01/06/06	01/19/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**32**	S	Fluoranthene	**33**	S
C1-Naphthalenes	0.11	U	Pyrene	**34**	BS
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	**30**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**32**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**31**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**32**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**33**	S
Anthracene	**29**	S	C1-Chrysenes	0.072	U
Phenanthrene	**32**	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	**31**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**35**	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	**28**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**26**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**28**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**28**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	87	50-130
Pyrene-d10	96	50-130
Benzo[b]fluoranthene-d12	90	50-130

N/A - Not Applicable
B - Found in associated blank as well as sample.
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

02/02/06 07:54

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: **0512128**
Lab ID: **SS010606LCS04**
Associated Blank: **SS010606B04**
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	01/06/06	01/19/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	87	50-130
Pyrene-d10	96	50-130
Benzo[b]fluoranthene-d12	90	50-130

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

02/02/06 07:54

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27780.D
Acq On : 19 Jan 2006 10:54 pm
Operator : AC
Sample : SS010606LCS04
Misc : 1X ETR0512128
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 30 03:53:30 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 WD 2/1/06

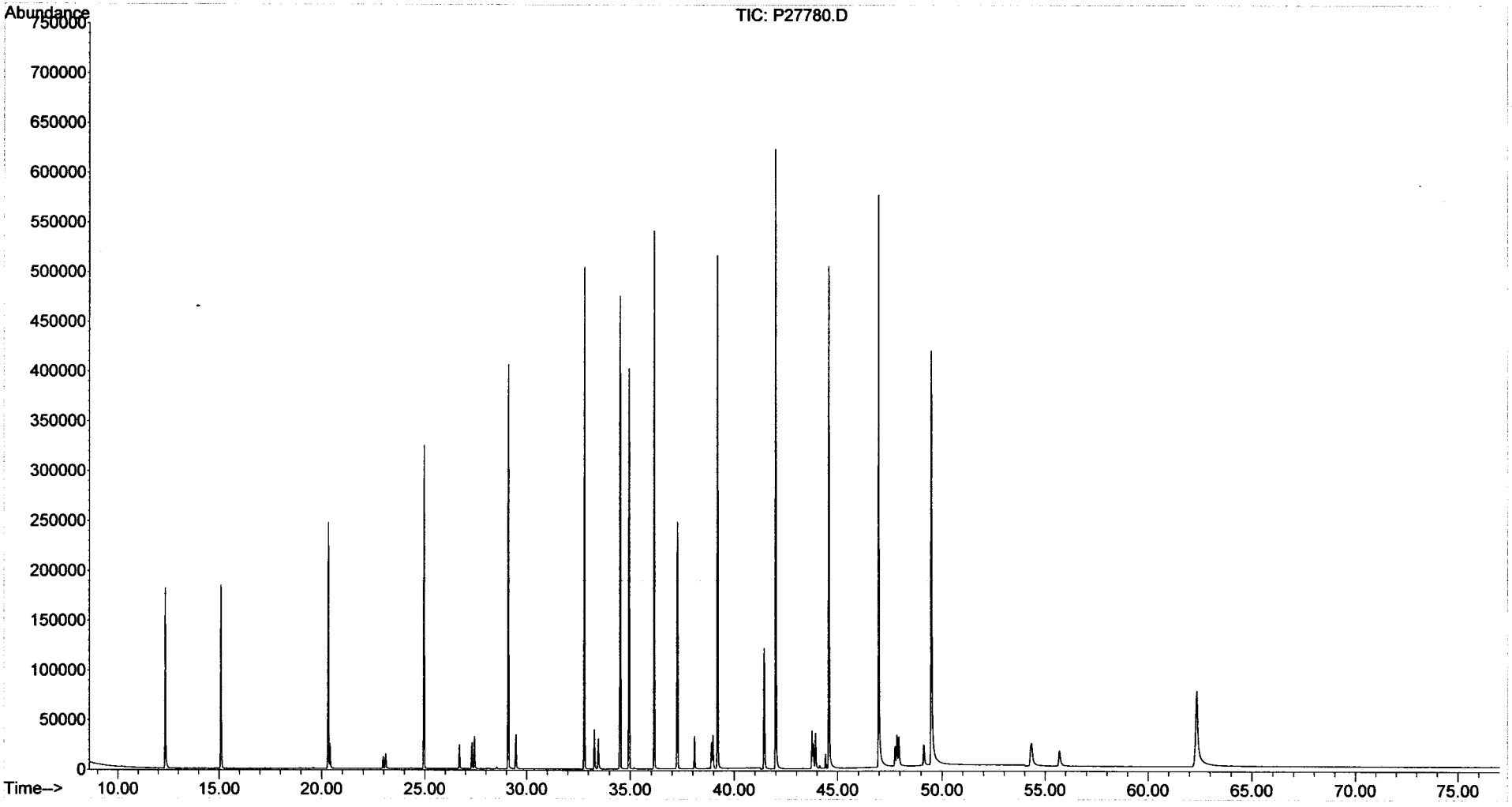
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	30904m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	50571m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	27770m	437.24	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 43.72%#			
58) Pyrene-d10	38.90	212	62565m	478.93	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.89%#			
81) Benzo[b]fluoranthene-d12	47.77	264	46775m	451.16	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.12%#			
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
9) Naphthalene	20.40	128	67454m	485.27	ng/mL	
15) 2-Methylnaphthalene	23.10	142	40816	461.30	ng/mL#	100
25) Acenaphthylene	26.70	152	61123m	443.19	ng/mL	
26) Acenaphthene	27.43	153	40093m	474.27	ng/mL	
28) Fluorene	29.47	166	45645m	461.78	ng/mL	
41) Phenanthrene	33.29	178	67221	476.62	ng/mL	100
53) Anthracene	33.48	178	57792m	441.20	ng/mL	
56) Fluoranthene	38.08	202	74000m	491.59	ng/mL	
59) Pyrene	38.96	202	78585	509.82	ng/mL	99
73) Benz[a]anthracene	43.76	228	69244	479.47	ng/mL	100
74) Chrysene	43.92	228	71619m	493.75	ng/mL	
75) Chrysene/Triphenylene	43.92	228	71851m	495.35	ng/mL	
82) Benzo[b]fluoranthene	47.86	252	72084m	464.75	ng/mL	
83) Benzo[k]fluoranthene	47.94	252	86071m	530.66	ng/mL	
86) Benzo[a]pyrene	49.12	252	63321m	423.60	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	56724m	382.85	ng/mL	
89) Dibenz[a,h]anthracene	54.35	278	58339	418.71	ng/mL	99
90) Benzo[g,h,i]perylene	55.70	276	65805	425.97	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27780.D
Acq On : 19 Jan 2006 10:54 pm
Operator : AC
Sample : SS010606LCS04
Misc : 1X ETR0512128
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 30 03:53:30 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: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS010606LCSD03**
Associated Blank: **SS010606B04**
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	01/06/06	01/20/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**31**	S	Fluoranthene	**32**	S
C1-Naphthalenes	0.11	U	Pyrene	**32**	BS
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	**28**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**30**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**29**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**31**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**32**	S
Anthracene	**29**	S	C1-Chrysenes	0.072	U
Phenanthrene	**30**	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	**30**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**34**	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	**27**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**26**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**27**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**27**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	85	50-130

N/A - Not Applicable
B - Found in associated blank as well as sample.
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

02/02/06 07:54

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: **0512128**
Lab ID: **SS010606LCSD03**
Associated Blank: **SS010606B04**
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	01/06/06	01/20/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	85	50-130

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

02/02/06 07:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27782.D
Acq On : 20 Jan 2006 12:33 am
Operator : AC
Sample : SS010606LCSD03
Misc : 1X ETR0512128
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 30 03:56:26 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 for MW 2/1/06

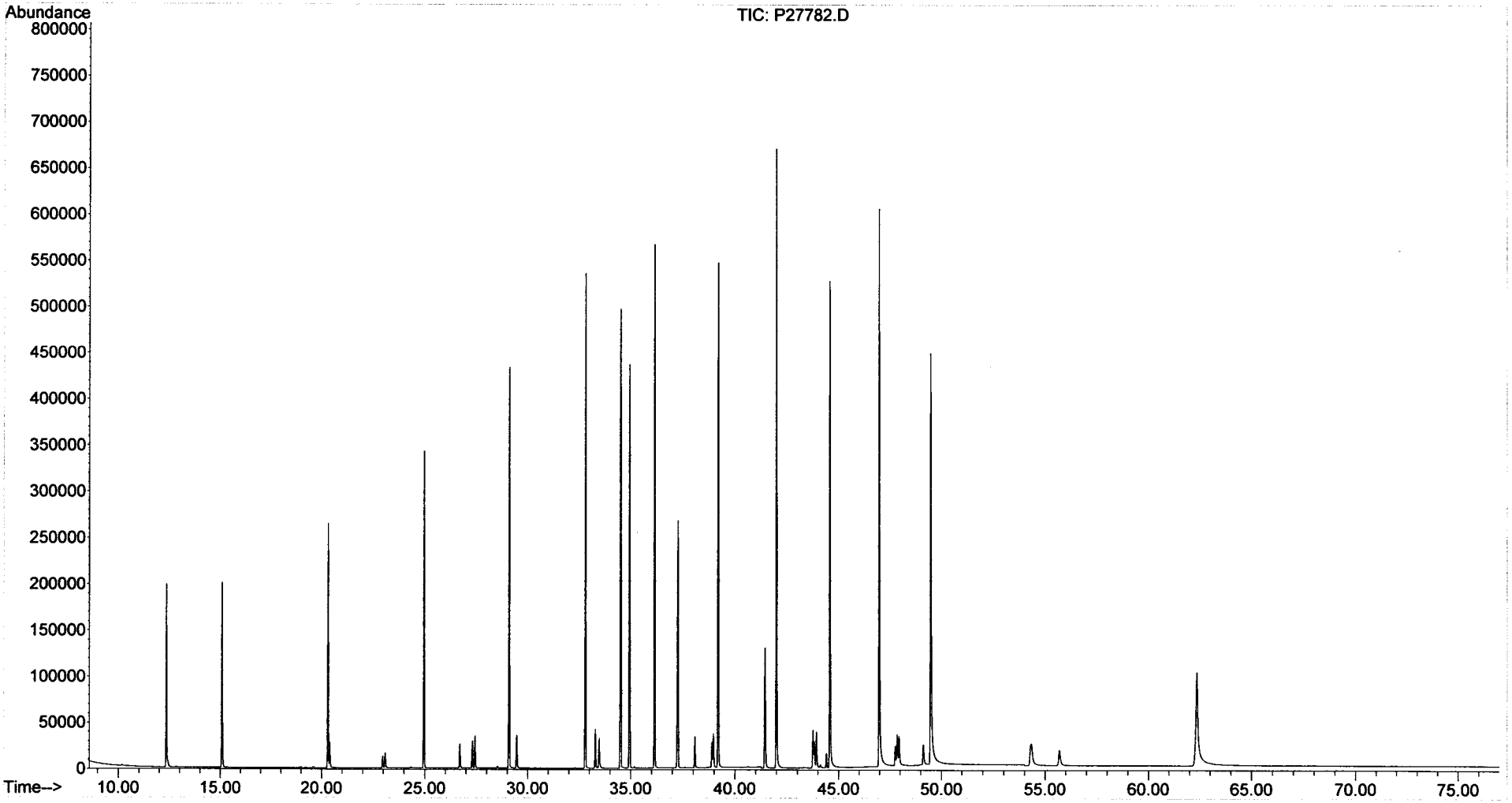
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	34563m	500.00 ng/mL	0.00
72) Chrysene-d12	43.82	240	56431m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.98	152	29632m	417.17 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 41.72%#		
58) Pyrene-d10	38.90	212	67292m	460.58 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.06%#		
81) Benzo[b]fluoranthene-d12	47.77	264	48912m	422.78 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.28%#		
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	72566m	466.78 ng/mL	
15) 2-Methylnaphthalene	23.10	142	43351	438.08 ng/mL#	100
25) Acenaphthylene	26.70	152	65651m	425.63 ng/mL	
26) Acenaphthene	27.43	153	42743m	452.09 ng/mL	
28) Fluorene	29.46	166	48505m	438.76 ng/mL	
41) Phenanthrene	33.29	178	72059	456.83 ng/mL	100
53) Anthracene	33.48	178	63088m	430.65 ng/mL	
56) Fluoranthene	38.08	202	79817m	474.10 ng/mL	
59) Pyrene	38.96	202	83287	483.12 ng/mL	99
73) Benz[a]anthracene	43.76	228	74302	461.07 ng/mL	100
74) Chrysene	43.92	228	77050m	476.03 ng/mL	
75) Chrysene/Triphenylene	43.92	228	77128m	476.52 ng/mL	
82) Benzo[b]fluoranthene	47.86	252	76796m	443.71 ng/mL	
83) Benzo[k]fluoranthene	47.94	252	91552m	505.84 ng/mL	
86) Benzo[a]pyrene	49.12	252	67424m	404.21 ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	63202m	382.28 ng/mL	
89) Dibenz[a,h]anthracene	54.35	278	61983	398.66 ng/mL	99
90) Benzo[g,h,i]perylene	55.70	276	69222	401.56 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 : P27782.D
Acq On : 20 Jan 2006 12:33 am
Operator : AC
Sample : SS010606LCSD03
Misc : 1X ETR0512128
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 30 03:56:26 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



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: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **See Below**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/10/06	100	AC

Lab ID:	SO011006B01		SO011006LCS01		SO011006LCSD01				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.084		9.4	94	10	105	11	30	50-130
Acenaphthylene	0.036	U	8.9	89	9.8	98	10	30	50-130
Acenaphthene	0.023	U	9.4	94	10	103	9	30	50-130
Fluorene	0.023	U	9.2	92	10	100	9	30	50-130
Anthracene	0.027	U	9.0	90	9.8	98	8	30	50-130
Phenanthrene	0.020		9.4	94	10	103	10	30	50-130
Fluoranthene	0.0080		9.8	98	11	107	8	30	50-130
Pyrene	0.015		10	100	11	109	9	30	50-130
Benz[a]anthracene	0.031	U	9.4	94	10	105	11	30	50-130
Chrysene/Triphenylene	0.022	U	9.5	95	11	108	12	30	50-130
Benzo[b]fluoranthene	0.021	U	9.0	90	10	101	11	30	50-130
Benzo[k]fluoranthene	0.041	U	10	100	11	112	11	30	50-130
Benzo[a]pyrene	0.028	U	8.3	83	9.2	92	11	30	50-130
Indeno[1,2,3-cd]pyrene	0.048	U	7.7	77	8.5	85	10	30	50-130
Dibenz[a,h]anthracene	0.038	U	8.2	82	9.1	91	10	30	50-130
Benzo[g,h,i]perylene	0.035	U	8.1	81	9.1	91	11	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	91	103	50-130
Pyrene-d10	101	111	50-130
Benzo[b]fluoranthene-d12	94	104	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.

02/02/06 08:03

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: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006LCS01**
Associated Blank: **SO011006B01**
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	01/10/06	01/20/06	100	0.10	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**9.4**	S	Fluoranthene	**9.8**	S
C1-Naphthalenes	0.033	U	Pyrene	**10**	S
C2-Naphthalenes	0.033	U	C1-Fluoranthenes/Pyrenes	0.018	U
C3-Naphthalenes	0.033	U	C2-Fluoranthenes/Pyrenes	0.018	U
C4-Naphthalenes	0.033	U	C3-Fluoranthenes/Pyrenes	0.018	U
Biphenyl	0.018	U	C4-Fluoranthenes/Pyrenes	0.018	U
Dibenzofuran	0.024	U	Naphthobenzothiophenes	0.024	U
Acenaphthylene	**8.9**	S	C1-Naphthobenzothiophenes	0.024	U
Acenaphthene	**9.4**	S	C2-Naphthobenzothiophenes	0.024	U
Fluorene	**9.2**	S	C3-Naphthobenzothiophenes	0.024	U
C1-Fluorenes	0.023	U	C4-Naphthobenzothiophenes	0.024	U
C2-Fluorenes	0.023	U	Benz[a]anthracene	**9.4**	S
C3-Fluorenes	0.023	U	Chrysene/Triphenylene	**9.5**	S
Anthracene	**9.0**	S	C1-Chrysenes	0.022	U
Phenanthrene	**9.4**	S	C2-Chrysenes	0.022	U
C1-Phenanthrenes/Anthracenes	0.029	U	C3-Chrysenes	0.022	U
C2-Phenanthrenes/Anthracenes	0.029	U	C4-Chrysenes	0.022	U
C3-Phenanthrenes/Anthracenes	0.029	U	Benzo[b]fluoranthene	**9.0**	S
C4-Phenanthrenes/Anthracenes	0.029	U	Benzo[k]fluoranthene	**10**	S
Retene	0.029	U	Benzo[a]fluoranthene	0.041	U
Dibenzothiophene	0.022	U	Benzo[e]pyrene	0.027	U
C1-Dibenzothiophenes	0.022	U	Benzo[a]pyrene	**8.3**	S
C2-Dibenzothiophenes	0.022	U	Perylene	0.035	U
C3-Dibenzothiophenes	0.022	U	Indeno[1,2,3-cd]pyrene	**7.7**	S
C4-Dibenzothiophenes	0.022	U	Dibenz[a,h]anthracene	**8.2**	S
Benzo(b)fluorene	0.020	U	Benzo[g,h,i]perylene	**8.1**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	94	50-130

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

02/02/06 07:59

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006LCS01**
Associated Blank: **SO011006B01**
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	01/10/06	01/20/06	100	0.10	2	1	AC

Parameter	Result
Carbazole	0.026 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	94	50-130

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

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 : P27784.D
Acq On : 20 Jan 2006 2:12 am
Operator : AC
Sample : SO011006LCS01
Misc : 1X ETR0512128
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 03:59:34 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

OMS for WD 2/1/06

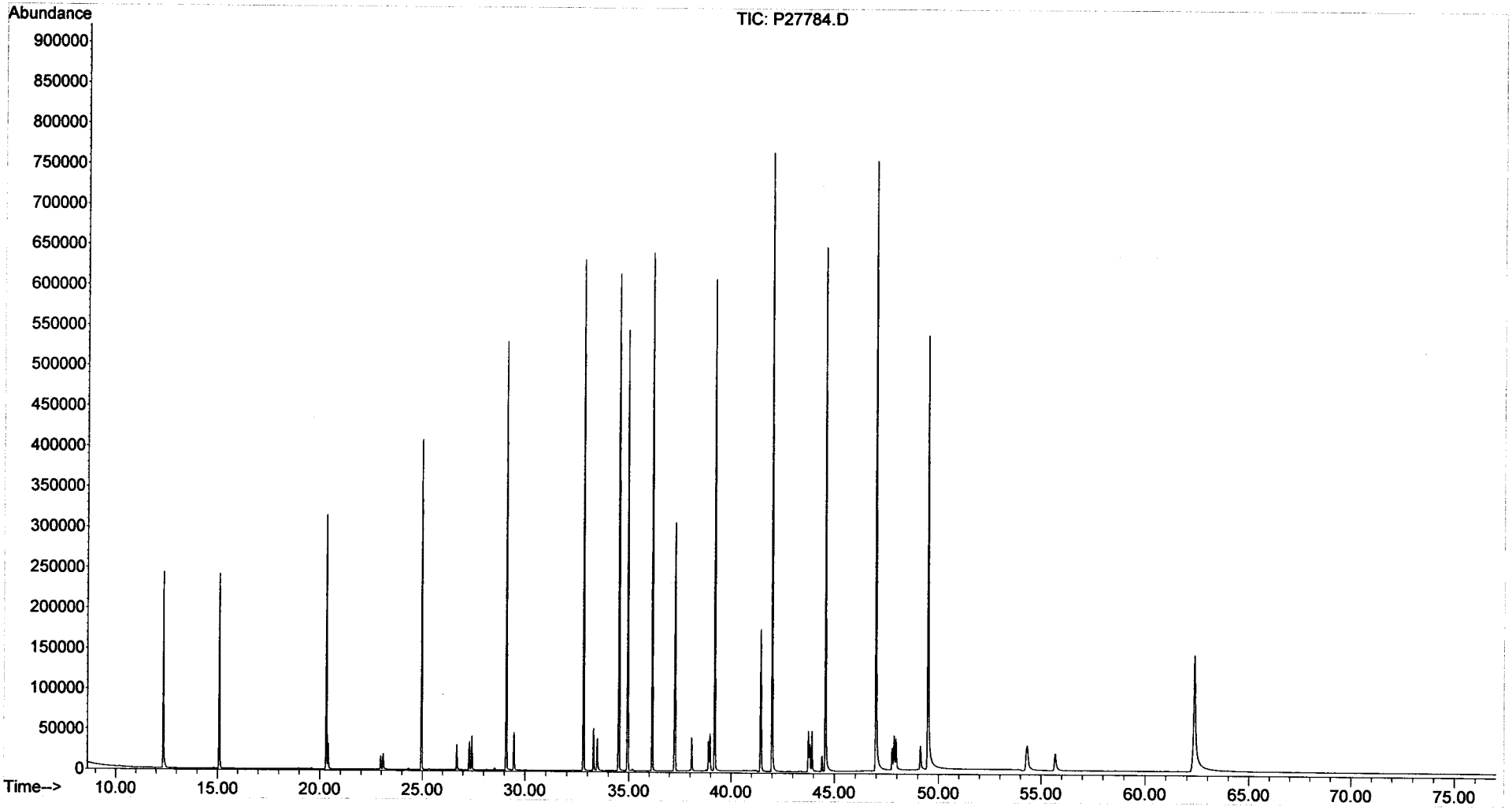
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	41565m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	69206m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	38826m	454.52	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.45%#			
58) Pyrene-d10	38.90	212	88666m	504.64	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.46%			
81) Benzo[b]fluoranthene-d12	47.76	264	66565m	469.15	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.91%#			
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	87772m	469.48	ng/mL	
15) 2-Methylnaphthalene	23.09	142	53866	452.64	ng/mL#	100
25) Acenaphthylene	26.70	152	82343m	443.92	ng/mL	
26) Acenaphthene	27.43	153	53401m	469.67	ng/mL	
28) Fluorene	29.45	166	60841m	457.64	ng/mL	
41) Phenanthrene	33.29	178	89101	469.71	ng/mL	100
53) Anthracene	33.48	178	79352m	450.42	ng/mL	
56) Fluoranthene	38.08	202	99504m	491.48	ng/mL	
59) Pyrene	38.96	202	103921	501.26	ng/mL	98
73) Benz[a]anthracene	43.76	228	92666	468.88	ng/mL	99
74) Chrysene	43.92	228	94733m	477.24	ng/mL	
75) Chrysene/Triphenylene	43.92	228	94521m	476.18	ng/mL	
82) Benzo[b]fluoranthene	47.85	252	96023m	452.39	ng/mL	
83) Benzo[k]fluoranthene	47.94	252	111426m	502.00	ng/mL	
86) Benzo[a]pyrene	49.12	252	84482m	412.98	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	77844m	383.93	ng/mL	
89) Dibenz[a,h]anthracene	54.35	278	78106	409.63	ng/mL	99
90) Benzo[g,h,i]perylene	55.70	276	86088	407.21	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27784.D
Acq On : 20 Jan 2006 2:12 am
Operator : AC
Sample : SO011006LCS01
Misc : 1X ETR0512128
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 03:59:34 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: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006LCSD01**
Associated Blank: **SO011006B01**
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	01/10/06	01/20/06	100	0.10	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**10**	S	Fluoranthene	**11**	S
C1-Naphthalenes	0.033	U	Pyrene	**11**	S
C2-Naphthalenes	0.033	U	C1-Fluoranthenes/Pyrenes	0.018	U
C3-Naphthalenes	0.033	U	C2-Fluoranthenes/Pyrenes	0.018	U
C4-Naphthalenes	0.033	U	C3-Fluoranthenes/Pyrenes	0.018	U
Biphenyl	0.018	U	C4-Fluoranthenes/Pyrenes	0.018	U
Dibenzofuran	0.024	U	Naphthobenzothiophenes	0.024	U
Acenaphthylene	**9.8**	S	C1-Naphthobenzothiophenes	0.024	U
Acenaphthene	**10**	S	C2-Naphthobenzothiophenes	0.024	U
Fluorene	**10**	S	C3-Naphthobenzothiophenes	0.024	U
C1-Fluorenes	0.023	U	C4-Naphthobenzothiophenes	0.024	U
C2-Fluorenes	0.023	U	Benz[a]anthracene	**10**	S
C3-Fluorenes	0.023	U	Chrysene/Triphenylene	**11**	S
Anthracene	**9.8**	S	C1-Chrysenes	0.022	U
Phenanthrene	**10**	S	C2-Chrysenes	0.022	U
C1-Phenanthrenes/Anthracenes	0.029	U	C3-Chrysenes	0.022	U
C2-Phenanthrenes/Anthracenes	0.029	U	C4-Chrysenes	0.022	U
C3-Phenanthrenes/Anthracenes	0.029	U	Benzo[b]fluoranthene	**10**	S
C4-Phenanthrenes/Anthracenes	0.029	U	Benzo[k]fluoranthene	**11**	S
Retene	0.029	U	Benzo[a]fluoranthene	0.041	U
Dibenzothiophene	0.022	U	Benzo[e]pyrene	0.027	U
C1-Dibenzothiophenes	0.022	U	Benzo[a]pyrene	**9.2**	S
C2-Dibenzothiophenes	0.022	U	Perylene	0.035	U
C3-Dibenzothiophenes	0.022	U	Indeno[1,2,3-cd]pyrene	**8.5**	S
C4-Dibenzothiophenes	0.022	U	Dibenz[a,h]anthracene	**9.1**	S
Benzo(b)fluorene	0.020	U	Benzo[g,h,i]perylene	**9.1**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	103	50-130
Pyrene-d10	111	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/02/06 08:00

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006LCSD01**
Associated Blank: **SO011006B01**
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	01/10/06	01/20/06	100	0.10	2	1	AC

Parameter	Result
Carbazole	0.026 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	103	50-130
Pyrene-d10	111	50-130
Benzo[b]fluoranthene-d12	104	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 : P27786.D
Acq On : 20 Jan 2006 3:52 am
Operator : AC
Sample : SO011006LCSD01
Misc : 1X ETR0512128
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 04:02:52 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

MSforwa 2/1/06

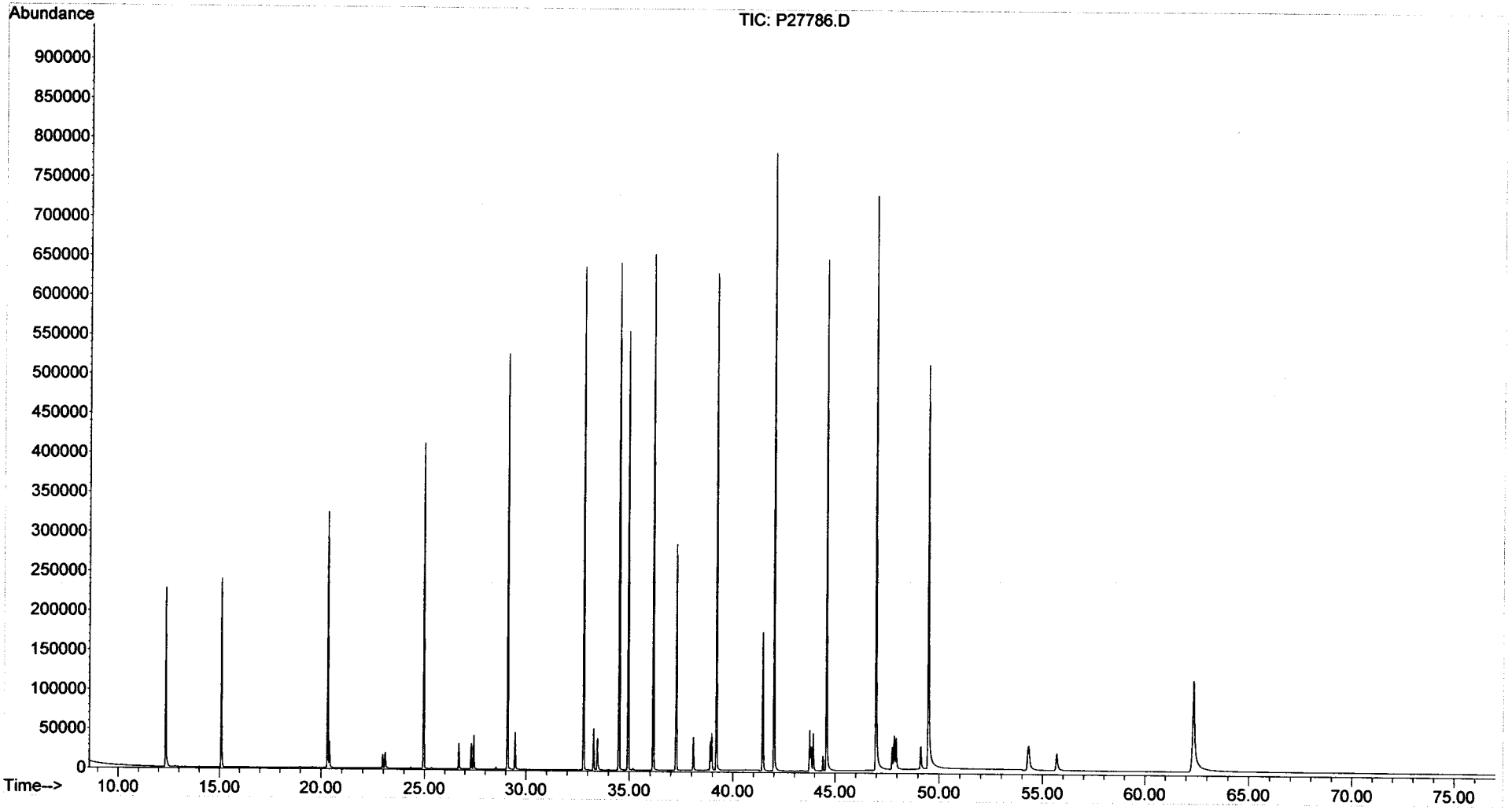
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	38371m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	62747m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	40553m	514.26	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.43%			
58) Pyrene-d10	38.90	212	89654m	552.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.27%			
81) Benzo[b]fluoranthene-d12	47.76	264	66870m	519.82	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.98%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	20.40	128	90411m	523.85	ng/mL	
15) 2-Methylnaphthalene	23.09	142	55276	503.15	ng/mL#	100
25) Acenaphthylene	26.70	152	84300m	492.30	ng/mL	
26) Acenaphthene	27.43	153	54037m	514.82	ng/mL	
28) Fluorene	29.45	166	61513m	501.21	ng/mL	
41) Phenanthrene	33.29	178	90549	517.08	ng/mL	100
53) Anthracene	33.48	178	79522m	488.96	ng/mL	
56) Fluoranthene	38.08	202	99566m	532.72	ng/mL	
59) Pyrene	38.96	202	104712	547.12	ng/mL	99
73) Benz[a]anthracene	43.76	228	93657	522.67	ng/mL	100
74) Chrysene	43.92	228	96173m	534.37	ng/mL	
75) Chrysene/Triphenylene	43.92	228	96856m	538.17	ng/mL	
82) Benzo[b]fluoranthene	47.85	252	97623m	507.27	ng/mL	
83) Benzo[k]fluoranthene	47.94	252	112567m	559.35	ng/mL	
86) Benzo[a]pyrene	49.12	252	85624m	461.65	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	78196m	425.36	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	78393	453.46	ng/mL	100
90) Benzo[g,h,i]perylene	55.70	276	86792	452.80	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN18\
Data File : P27786.D
Acq On : 20 Jan 2006 3:52 am
Operator : AC
Sample : SO011006LCSD01
Misc : 1X ETR0512128
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 04:02:52 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 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: **0512128**
Lab ID: **See Below**
Associated Blank: **SS011906B04**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/19/06	100	AC

Lab ID:	SS011906B04	SS011906LCS03		SS011906LCSD03				
Parameter	**Blank Conc.**	**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	1.4	27	81	27	80	1	30	50-130
Acenaphthylene	0.43	26	77	25	75	2	30	50-130
Acenaphthene	0.23	26	78	25	76	3	30	50-130
Fluorene	0.27	26	77	25	75	2	30	50-130
Anthracene	0.41	25	75	25	74	1	30	50-130
Phenanthrene	0.75	25	75	25	75	1	30	50-130
Fluoranthene	0.14	26	77	25	76	1	30	50-130
Pyrene	0.25	26	79	26	77	3	30	50-130
Benz[a]anthracene	0.14	27	81	27	81	0	30	50-130
Chrysene/Triphenylene	0.16	26	76	25	75	1	30	50-130
Benzo[b]fluoranthene	0.14	27	81	27	80	1	30	50-130
Benzo[k]fluoranthene	0.15	27	80	26	79	1	30	50-130
Benzo[a]pyrene	0.22	25	75	25	74	1	30	50-130
Indeno[1,2,3-cd]pyrene	0.23	29	87	28	85	2	30	50-130
Dibenz[a,h]anthracene	0.25 U	30	91	29	88	4	30	50-130
Benzo[g,h,i]perylene	0.28	28	84	27	82	3	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	76	73	50-130
Pyrene-d10	82	79	50-130
Benzo[b]fluoranthene-d12	77	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.

02/02/06 08:42

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: **0512128**
Lab ID: **SS011906LCS03**
Associated Blank: **SS011906B04**
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	01/19/06	01/25/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**27**	S	Fluoranthene	**26**	S
C1-Naphthalenes	0.22	U	Pyrene	**26**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**26**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**26**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**26**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**27**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**26**	S
Anthracene	**25**	S	C1-Chrysenes	0.14	U
Phenanthrene	**25**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**27**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**27**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**25**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**29**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**30**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**28**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	76	50-130
Pyrene-d10	82	50-130
Benzo[b]fluoranthene-d12	77	50-130

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

02/02/06 08:40

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: **0512128**
Lab ID: **SS011906LCS03**
Associated Blank: **SS011906B04**
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	01/19/06	01/25/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	76	50-130
Pyrene-d10	82	50-130
Benzo[b]fluoranthene-d12	77	50-130

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17754.D
Acq On : 25 Jan 2006 11:04 pm
Operator : AC
Sample : SS011906LCS03 X
Misc : 1X ETR0512128
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 02:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WD 2/1/06

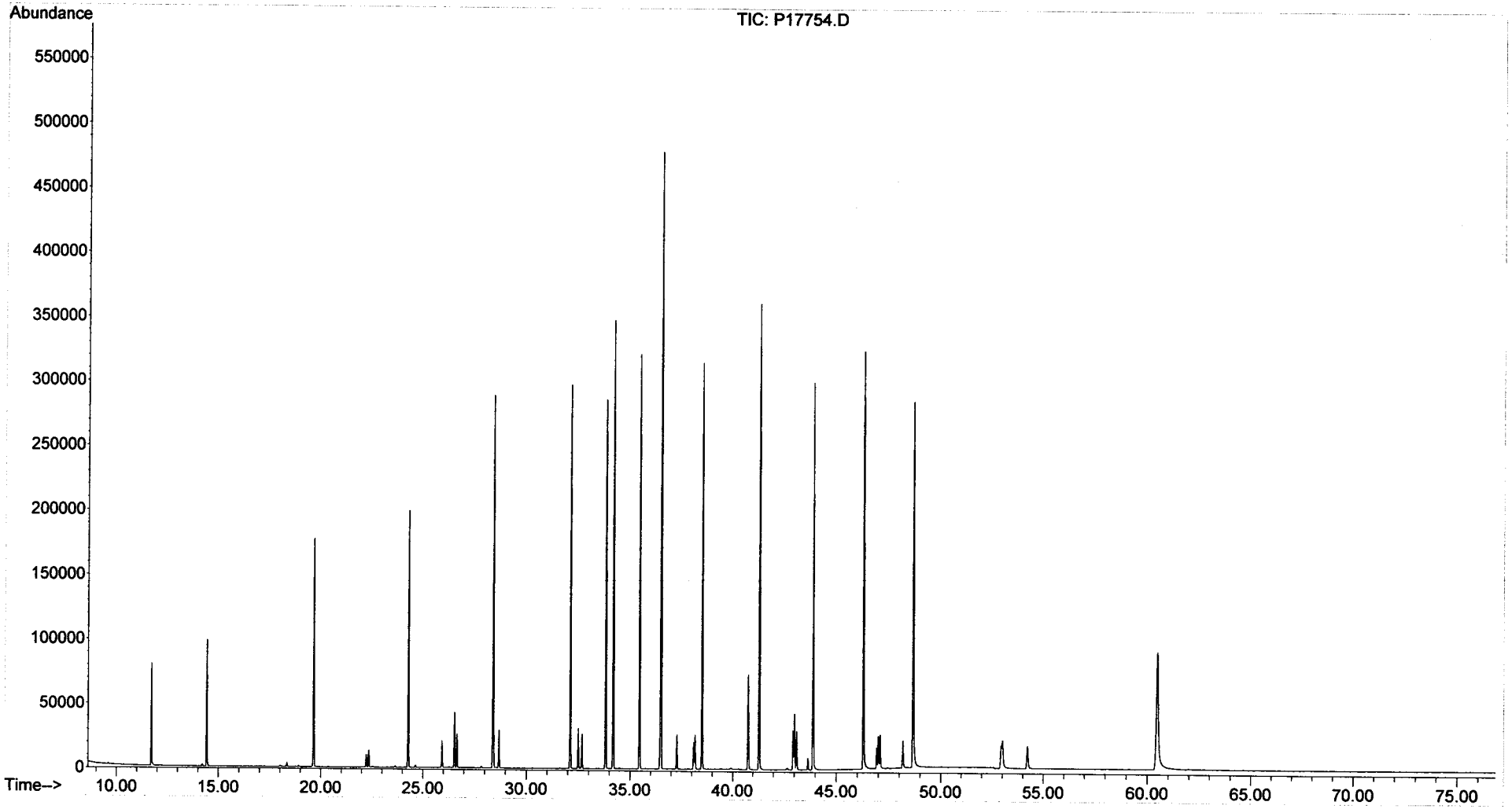
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	51412m	500.00	ng/mL	0.00
72) Chrysene-d12	43.01	240	84211m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.23	152	20931	189.91	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 18.99%#			
58) Pyrene-d10	38.08	212	46387m	204.70	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.47%#			
81) Benzo[b]fluoranthene-d12	46.92	264	32419m	193.32	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.33%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.66	128	53274m	202.91	ng/mL	
15) 2-Methylnaphthalene	22.36	142	31128	187.27	ng/mL#	100
25) Acenaphthylene	25.94	152	48361m	192.10	ng/mL	
26) Acenaphthene	26.67	153	30494m	195.00	ng/mL	
28) Fluorene	28.68	166	33790m	192.67	ng/mL	
41) Phenanthrene	32.50	178	49016m	188.48	ng/mL	
53) Anthracene	32.68	178	44893m	186.58	ng/mL	
56) Fluoranthene	37.28	202	53358m	192.70	ng/mL	
59) Pyrene	38.16	202	55809m	198.17	ng/mL	
73) Benz[a]anthracene	42.94	228	51880	202.38	ng/mL	99
74) Chrysene	43.10	228	50107m	191.30	ng/mL	
75) Chrysene/Triphenylene	43.10	228	50049m	191.07	ng/mL	
82) Benzo[b]fluoranthene	47.00	252	53146m	201.87	ng/mL	
83) Benzo[k]fluoranthene	47.08	252	54678m	199.64	ng/mL	
86) Benzo[a]pyrene	48.18	252	47373m	187.84	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.94	276	48331m	217.77	ng/mL	
89) Dibenz[a,h]anthracene	53.01	278	51535	227.81	ng/mL	97
90) Benzo[g,h,i]perylene	54.21	276	53992	211.12	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17754.D
Acq On : 25 Jan 2006 11:04 pm
Operator : AC
Sample : SS011906LCS03 X
Misc : 1X ETR0512128
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 02:31:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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: **0512128**
Lab ID: **SS011906LCSD03**
Associated Blank: **SS011906B04**
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	01/19/06	01/26/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**27**	S	Fluoranthene	**25**	S
C1-Naphthalenes	0.22	U	Pyrene	**26**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**25**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**25**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**25**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**27**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**25**	S
Anthracene	**25**	S	C1-Chrysenes	0.14	U
Phenanthrene	**25**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**27**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**26**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**25**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**28**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**29**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**27**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	73	50-130
Pyrene-d10	79	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.

02/02/06 08:41

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: **0512128**
Lab ID: **SS011906LCSD03**
Associated Blank: **SS011906B04**
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	01/19/06	01/26/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	73	50-130
Pyrene-d10	79	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.

02/02/06 08:41

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17756.D
Acq On : 26 Jan 2006 12:38 am
Operator : AC
Sample : SS011906LCSD03 X
Misc : 1X ETR0512128
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 30 02:34:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

MS for WD
2/1/06

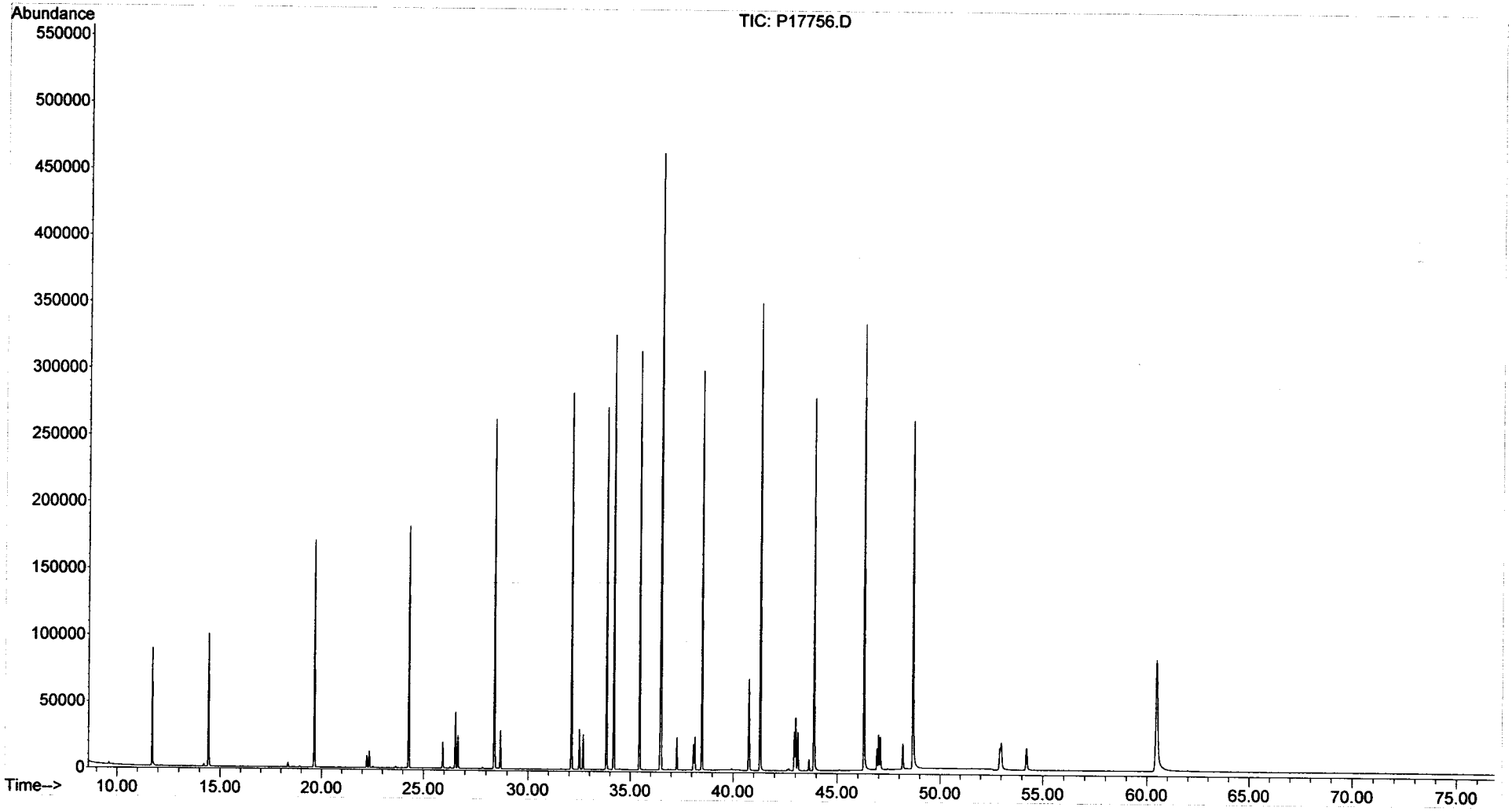
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	50689m	500.00	ng/mL	0.00
72) Chrysene-d12	43.01	240	81246m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.23	152	19954m	183.63	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 18.36%#			
58) Pyrene-d10	38.08	212	44285m	198.21	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.82%#			
81) Benzo[b]fluoranthene-d12	46.92	264	31460m	194.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.44%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.66	128	51924m	200.59	ng/mL	
15) 2-Methylnaphthalene	22.34	142	29850	182.15	ng/mL#	100
25) Acenaphthylene	25.94	152	46590m	187.71	ng/mL	
26) Acenaphthene	26.67	153	29261m	189.79	ng/mL	
28) Fluorene	28.68	166	32628m	188.70	ng/mL	
41) Phenanthrene	32.50	178	47978	187.12	ng/mL	99
53) Anthracene	32.68	178	43731m	184.34	ng/mL	
56) Fluoranthene	37.28	202	51890m	190.07	ng/mL	
59) Pyrene	38.16	202	53509m	192.72	ng/mL	
73) Benz[a]anthracene	42.94	228	49829	201.48	ng/mL	98
74) Chrysene	43.10	228	47647m	188.54	ng/mL	
75) Chrysene/Triphenylene	43.10	228	47636m	188.50	ng/mL	
82) Benzo[b]fluoranthene	46.99	252	50684m	199.54	ng/mL	
83) Benzo[k]fluoranthene	47.08	252	52167m	197.42	ng/mL	
86) Benzo[a]pyrene	48.17	252	45179m	185.68	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.94	276	45764m	213.73	ng/mL	
89) Dibenz[a,h]anthracene	53.01	278	47891	219.43	ng/mL	99
90) Benzo[g,h,i]perylene	54.21	276	50584	205.01	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN24\
Data File : P17756.D
Acq On : 26 Jan 2006 12:38 am
Operator : AC
Sample : SS011906LCSD03 X
Misc : 1X ETR0512128
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 30 02:34:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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: **0512128**
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

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

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: **0512128**
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.

02/02/06 08:32

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: **0512128**
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.

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

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: **0512128**
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

02/02/06 08:33

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

MS 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

-RF 2nd cal 1/20k

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

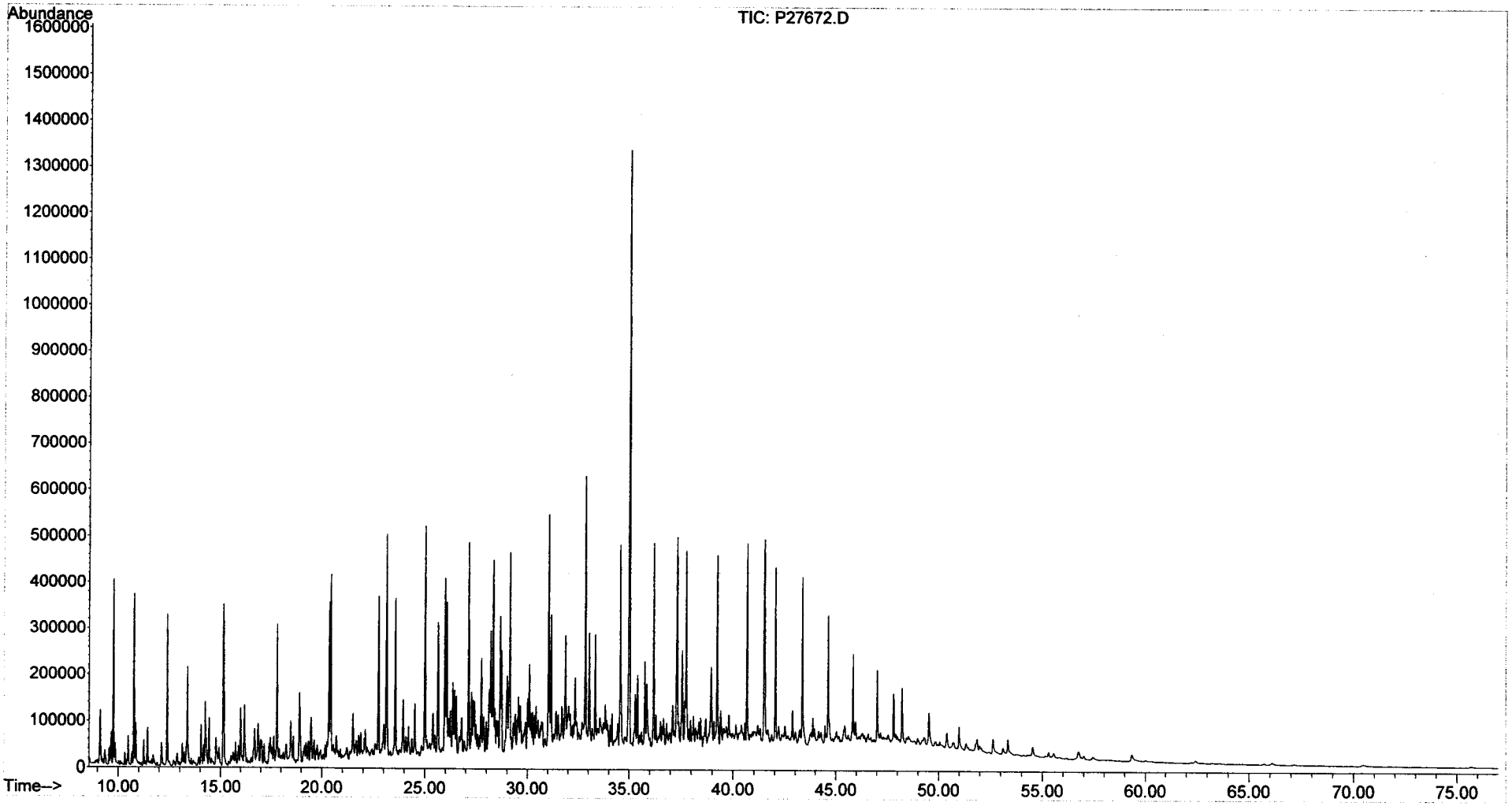
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	51.17	191	2797	28.54	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.89	191	2670m	27.25	ng/ml	
109) 30-Norhopane (T15)	51.87	191	42464m	433.34	ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.98	191	8425m	85.98	ng/ml	
111) 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
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: **0512128**
Lab ID: **SS011106AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Naphthalene	714.43	750	106	65-135
C1-Naphthalenes	1534.53	1500	96	65-135
C2-Naphthalenes	1897.27	1800	92	65-135
C3-Naphthalenes	1436.53	1300	90	65-135
C4-Naphthalenes	773.42	700	91	65-135
Biphenyl	216.49	200	95	65-135
Acenaphthene	15.55	17	112	65-135
Fluorene	87.56	84	96	65-135
C1-Fluorenes	219.89	210	96	65-135
C2-Fluorenes	341.2	320	94	65-135
C3-Fluorenes	299.61	300	99	65-135
Phenanthrene	272.58	270	99	65-135
C1-Phenanthrenes/Anthracenes	564.81	560	99	65-135
C2-Phenanthrenes/Anthracenes	660.43	630	95	65-135
C3-Phenanthrenes/Anthracenes	448.76	430	95	65-135
C4-Phenanthrenes/Anthracenes	175.88	160	93	65-135
Dibenzothiophene	218.8	230	105	65-135
C1-Dibenzothiophenes	434.54	420	97	65-135
C2-Dibenzothiophenes	551.44	570	104	65-135
C3-Dibenzothiophenes	460.96	470	102	65-135
C4-Dibenzothiophenes	236.77	240	102	65-135
Fluoranthene	4.26	4.3	102	65-135
Pyrene	15.56	14	93	65-135
C1-Fluoranthenes/Pyrenes	78.43	78	100	65-135
C2-Fluoranthenes/Pyrenes	132.93	120	91	65-135
C3-Fluoranthenes/Pyrenes	111.33	130	121	65-135
Chrysene/Triphenylene	50.99	46	89	65-135
C1-Chrysenes	81.69	76	93	65-135
C2-Chrysenes	95.93	87	91	65-135
C3-Chrysenes	89.87	90	100	65-135
C4-Chrysenes	51.86	50	96	65-135
Benzo[b]fluoranthene	6.54	5.8	89	65-135
Benzo[e]pyrene	12.88	12	92	65-135

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

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: **0512128**
Lab ID: **SS011106AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Dibenz[a,h]anthracene	1.02	0.89	87	65-135
Benzo[g,h,i]perylene	3.35	3.5	104	65-135
Hopane	118.8	150	122	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.

02/02/06 09:13

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: **0512128**
Lab ID: **SS011106AWS02**
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	01/05/06	100	0.051	10	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	750		Fluoranthene	4.3	
C1-Naphthalenes	1500		Pyrene	14	
C2-Naphthalenes	1800		C1-Fluoranthenes/Pyrenes	78	
C3-Naphthalenes	1300		C2-Fluoranthenes/Pyrenes	120	
C4-Naphthalenes	700		C3-Fluoranthenes/Pyrenes	130	
Biphenyl	200		C4-Fluoranthenes/Pyrenes	100	
Dibenzofuran	69		Naphthobenzothiophenes	65	
Acenaphthylene	7.0		C1-Naphthobenzothiophenes	160	
Acenaphthene	17		C2-Naphthobenzothiophenes	190	
Fluorene	84		C3-Naphthobenzothiophenes	140	
C1-Fluorenes	210		C4-Naphthobenzothiophenes	90	
C2-Fluorenes	320		Benz[a]anthracene	1.8	J
C3-Fluorenes	300		Chrysene/Triphenylene	46	
Anthracene	0.26	U	C1-Chrysenes	76	
Phenanthrene	270		C2-Chrysenes	87	
C1-Phenanthrenes/Anthracenes	560		C3-Chrysenes	90	
C2-Phenanthrenes/Anthracenes	630		C4-Chrysenes	50	
C3-Phenanthrenes/Anthracenes	430		Benzo[b]fluoranthene	5.8	
C4-Phenanthrenes/Anthracenes	160		Benzo[k]fluoranthene	0.40	U
Retene	0.28	U	Benzo[a]fluoranthene	0.78	J
Dibenzothiophene	230		Benzo[e]pyrene	12	
C1-Dibenzothiophenes	420		Benzo[a]pyrene	1.1	J
C2-Dibenzothiophenes	570		Perylene	0.41	J
C3-Dibenzothiophenes	470		Indeno[1,2,3-cd]pyrene	1.1	J
C4-Dibenzothiophenes	240		Dibenz[a,h]anthracene	0.89	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.

02/02/06 09:13

Form I
Alaska North Slope Crude
Carbazole

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS011106AWS02**
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	01/05/06	100	0.051	10	1	AC

Parameter	Result
Carbazole	6.6

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\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration

MMB 1-11-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.60	164	69939m	500.00	ng/mL	0.00
72) Chrysene-d12	43.09	240	121579	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.28	152	149356	996.14	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 99.61%			
58) Pyrene-d10	38.16	212	339594m	1101.61	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 110.16%			
81) Benzo[b]fluoranthene-d12	47.00	264	259580	1072.16	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 107.22%			
125) 5B(H)Cholane - Surr	43.73	217	51605	1080.23	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.02%			

Target Compounds						Qvalue
2) Decalin	16.30	138	163849m	2992.66	ng/mL	
3) trans-Decalin	16.30	138	139502	2308.97	ng/mL	100
4) cis-Decalin	17.51	138	4366m	96.04	ng/mL	
5) C1-Decalins	18.23	152	233049m	3857.32	ng/mL	
6) C2-Decalins	19.56	166	210016m	3476.09	ng/mL	
7) C3-Decalins	22.03	180	106753m	1766.93	ng/mL	
8) C4-Decalins	25.43	194	113003m	1870.37	ng/mL	
9) Naphthalene	19.71	128	1372507	3842.73	ng/mL#	100
10) C1-Naphthalenes	22.41	142	2684101m	7514.91	ng/mL	
11) C2-Naphthalenes	25.25	156	3188535m	8927.22	ng/mL	
12) C3-Naphthalenes	27.60	170	2346032m	6568.39	ng/mL	
13) C4-Naphthalenes	30.36	184	1276753m	3574.64	ng/mL	
15) 2-Methylnaphthalene	22.41	142	1574646	6963.95	ng/mL#	100
16) 1-Methylnaphthalene	22.83	142	1107443	5202.38	ng/mL#	100
17) Benzothiophene	19.93	134	8189m	25.70	ng/mL	
18) C1-Benzo(b)thiophenes	21.97	148	48497m	152.22	ng/mL	
19) C2-Benzo(b)thiophenes	25.45	162	91217m	286.31	ng/mL	
20) C3-Benzo(b)thiophenes	27.42	176	186680m	585.95	ng/mL	
21) C4-Benzo(b)thiophenes	29.17	190	166990m	524.15	ng/mL	
22) Biphenyl	24.29	154	293684m	1044.71	ng/mL	
23) 2,6-Dimethylnaphthalene	24.91	156	451153m	2404.20	ng/mL	
24) Dibenzofuran	27.37	168	111148	351.96	ng/mL#	84
25) Acenaphthylene	26.00	152	12198m	35.62	ng/mL	
26) Acenaphthene	26.75	153	18911m	88.90	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.29	170	163623m	971.32	ng/mL	
28) Fluorene	28.75	166	102550m	429.84	ng/mL	
29) C1-Fluorenes	31.11	180	255440m	1070.68	ng/mL	
30) C2-Fluorenes	33.32	194	387950m	1626.09	ng/mL	
31) C3-Fluorenes	35.15	208	361214m	1514.03	ng/mL	
32) Dibenzothiophene	32.07	184	410428	1166.54	ng/mL#	92
33) 4-Methyldibenzothiophene(4	33.85	198	377380	1072.61	ng/mL#	100
34) 2/3-Methyldibenzothiophene	34.20	198	257980	733.24	ng/mL#	100
35) 1-Methyldibenzothiophene(1	34.62	198	115320	327.77	ng/mL#	100
36) OTP	34.28	198	52349	148.79	ng/mL#	100
37) C1-Dibenzothiophenes	33.85	198	806277m	2291.64	ng/mL	
38) C2-Dibenzothiophenes	35.53	212	1024988m	2913.27	ng/mL	
39) C3-Dibenzothiophenes	37.35	226	840527m	2388.98	ng/mL	
40) C4-Dibenzothiophenes	39.04	240	432496m	1229.26	ng/mL	
41) Phenanthrene	32.56	178	488467	1380.74	ng/mL	95
42) 3-Methylphenanthrene(3MP)	34.53	192	203106	574.12	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2/4-Methylphenanthrene(2MP	34.64	192	233437	659.85	ng/mL	97
44) 2-Methylanthracene(2MA)	34.80	192	5940m	16.79	ng/mL	
45) 9-Methylphenanthrene(9MP)	34.99	192	324353	916.84	ng/mL	99
46) 1-Methylphenanthrene(1MP)	35.08	192	232051m	655.93	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.99	192	1003136m	2835.55	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.81	206	1135756m	3210.42	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.65	220	770944m	2179.21	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.85	234	296394m	837.81	ng/mL	
54) Carbazole	33.42	167	10118m	33.40	ng/mL	
55) 1-Methylphenanthrene	35.08	192	231760m	956.76	ng/mL	
56) Fluoranthene	37.34	202	8303m	22.04	ng/mL	
59) Pyrene	38.23	202	28103m	73.36	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.63	216	153342m	400.26	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.44	230	237184m	619.11	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.46	244	261913m	683.66	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.82	258	200024m	522.12	ng/mL	
64) Naphthobenzothiophene	42.09	234	87648	244.55	ng/ml#	84
65) Naphthobenzothiophene-2,1-	42.09	234	87648	244.55	ng/mL#	84
66) Naphthobenzothiophene-1,2-	42.43	234	22215	61.98	ng/mL#	60
67) Naphthobenzothiophene-2,3-	42.73	234	9564	26.69	ng/mL#	1
68) C1-Naphthobenzothiophenes	43.50	248	288523m	805.03	ng/ml	
69) C2-Naphthobenzothiophenes	45.50	262	344746m	961.90	ng/ml	
70) C3-Naphthobenzothiophenes	47.11	276	260897m	727.95	ng/ml	
71) C4-Naphthobenzothiophenes	48.21	290	163651m	456.61	ng/mL	
73) Benz[a]anthracene	43.01	228	3496m	9.45	ng/mL	
74) Chrysene	43.15	228	87573m	231.57	ng/mL	
75) Chrysene/Triphenylene	43.15	228	87704m	231.92	ng/mL	
76) C1-Chrysenes	44.66	242	146771m	388.11	ng/mL	
77) C2-Chrysenes	47.37	256	180007m	476.00	ng/mL	
78) BBF-d12 Surr BKGD	46.99	256	11987	31.70	ng/mL	100
79) C3-Chrysenes	49.47	270	173205m	458.01	ng/mL	
80) C4-Chrysenes	49.06	284	95936m	253.69	ng/mL	
82) Benzo[b]fluoranthene	47.08	252	11218m	29.51	ng/mL	
84) Benzo[a]fluoranthene	47.45	252	1560m	3.95	ng/mL	
85) Benzo[e]pyrene	48.08	252	22267m	60.51	ng/mL	
86) Benzo[a]pyrene	48.28	252	1967m	5.40	ng/mL	
87) Perylene	48.59	252	738m	2.07	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.12	276	1725m	5.38	ng/mL	
89) Dibenz[a,h]anthracene	53.15	278	1479m	4.53	ng/mL	
90) Benzo[g,h,i]perylene	54.41	276	6535m	17.70	ng/mL	
91) 17a(H),21B(H)-hopane - C30	52.27	191	78105m	731.65	ng/mL	
92) Hopane (T19)	52.27	191	79164m	741.57	ng/mL	
93) C23 Tricyclic Terpane (T4)	40.75	191	32968	308.83	ng/ml	100
94) C24 Tricyclic Terpane (T5)	41.47	191	22038	206.44	ng/ml	100
95) C25 Tricyclic Terpane (T6)	42.96	191	22936	214.85	ng/ml	100
96) C24 Tetracyclic Terpane (T	44.29	191	6991	65.49	ng/ml	100
97) C26 Tricyclic Terpane-22S	44.03	191	9296	87.08	ng/ml	100
98) C26 Tricyclic Terpane-22R	44.12	191	8228	77.08	ng/ml	100
99) C28 Tricyclic Terpane-22S	46.42	191	5998m	56.19	ng/ml	
100) C28 Tricyclic Terpane-22R	46.58	191	8471m	79.35	ng/ml	
101) C29 Tricyclic Terpane-22S	47.10	191	10607	99.36	ng/ml	100
102) C29 Tricyclic Terpane-22R	47.30	191	10309	96.57	ng/ml	100
103) 18a-22,29,30-Trisnorneohop	48.44	191	13999	131.14	ng/ml	100
104) C30 Tricyclic Terpane-22S	48.54	191	6887	64.51	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration

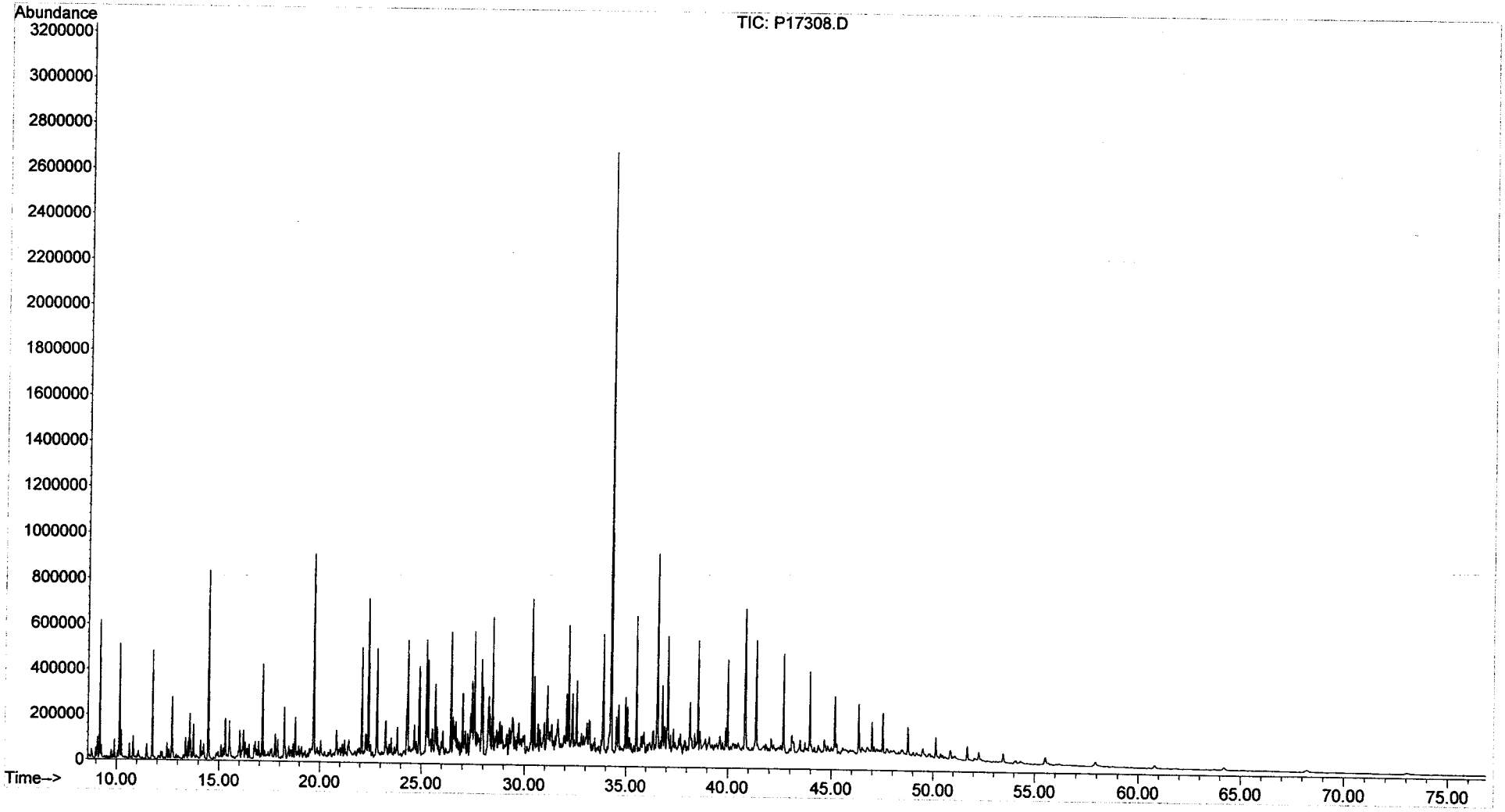
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
105) C30 Tricyclic Terpane-22R	48.79	191	8136m	76.21 ng/mL	
106) 17a(H)-22,29,30-Trisnorhop	48.99	191	15800m	148.01 ng/ml	
107) 17a/b,21b/a 28,30-Bisnorho	50.20	191	3610	33.82 ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.00	191	3915	36.67 ng/ml	100
109) 30-Norhopane (T15)	50.87	191	42626m	399.30 ng/ml	
110) 18a(H)-30-Norneohopane-C29	50.98	191	9988m	93.56 ng/ml	
111) 17a(H)-Diahopane (X)	51.12	191	5756m	53.92 ng/ml	
112) 30-Normoretane (T17)	51.66	191	5261m	49.28 ng/ml	
114) Moretane (T20)	52.96	191	6334m	59.33 ng/ml	
115) 30-Homohopane-22S (T21)	54.09	191	36303	340.07 ng/ml	100
116) 30-Homohopane-22R (T22)	54.33	191	29082	272.43 ng/ml	100
117) 30,31-Bishomohopane-22S (T	55.68	191	25307	237.06 ng/ml	100
118) 30,31-Bishomohopane-22R (T	56.06	191	19574	183.36 ng/ml	100
119) 30,31-Trishomohopane-22S (	57.84	191	21032	197.02 ng/ml	100
120) 30,31-Trishomohopane-22R (	58.48	191	14302	133.97 ng/ml	100
121) Tetrakishomohopane-22S (T3	60.53	191	14453	135.39 ng/ml	100
122) Tetrakishomohopane-22R (T3	61.44	191	11166	104.60 ng/ml	100
123) Pentakishomohopane-22S (T3	63.75	191	16108	150.89 ng/ml	100
124) Pentakishomohopane-22R (T3	65.05	191	12028	112.67 ng/ml	100
126) 13b(H),17a(H)-20S-Diachole	45.24	217	12046m	252.15 ng/ml	
127) 13b(H),17a(H)-20R-Diachole	45.67	217	6741	141.11 ng/ml	100
128) 13b,17a-20S-Methyldiachole	46.37	217	6566m	137.44 ng/ml	
129) 14a(H),17a(H)-20S-Cholesta	47.24	217	6566m	137.44 ng/ml	
130) 14a(H),17a(H)-20R-Cholesta	47.77	217	20341m	425.79 ng/ml	
131) 13b,17a-20R-Ethyldiacholes	48.06	217	5676	118.81 ng/ml	100
132) 13a,17b-20S-Ethyldiacholes	48.32	217	1570	32.86 ng/ml	100
133) 14a,17a-20S-Methylcholesta	48.48	217	4828m	101.06 ng/ml	
134) 14a,17a-20R-Methylcholesta	49.20	217	9561m	200.14 ng/ml	
135) 14a(H),17a(H)-20S-Ethylcho	49.56	217	13425m	281.02 ng/ml	
136) 14a(H),17a(H)-20R-Ethylcho	50.47	217	10942m	229.04 ng/ml	
137) 14b(H),17b(H)-20R-Cholesta	47.34	218	10496m	219.71 ng/ml	
138) 14b(H),17b(H)-20S-Cholesta	47.41	218	11278m	236.08 ng/ml	
139) 14b,17b-20R-Methylcholesta	48.65	218	12015m	251.51 ng/ml	
140) 14b,17b-20S-Methylcholesta	48.73	218	13914m	291.26 ng/ml	
141) 14b(H),17b(H)-20R-Ethylcho	49.80	218	16661	348.76 ng/ml	100
142) 14b(H),17b(H)-20S-Ethylcho	49.85	218	12077m	252.80 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 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: **0512128**
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.

02/01/06 14:02

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: **0512128**
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.

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\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

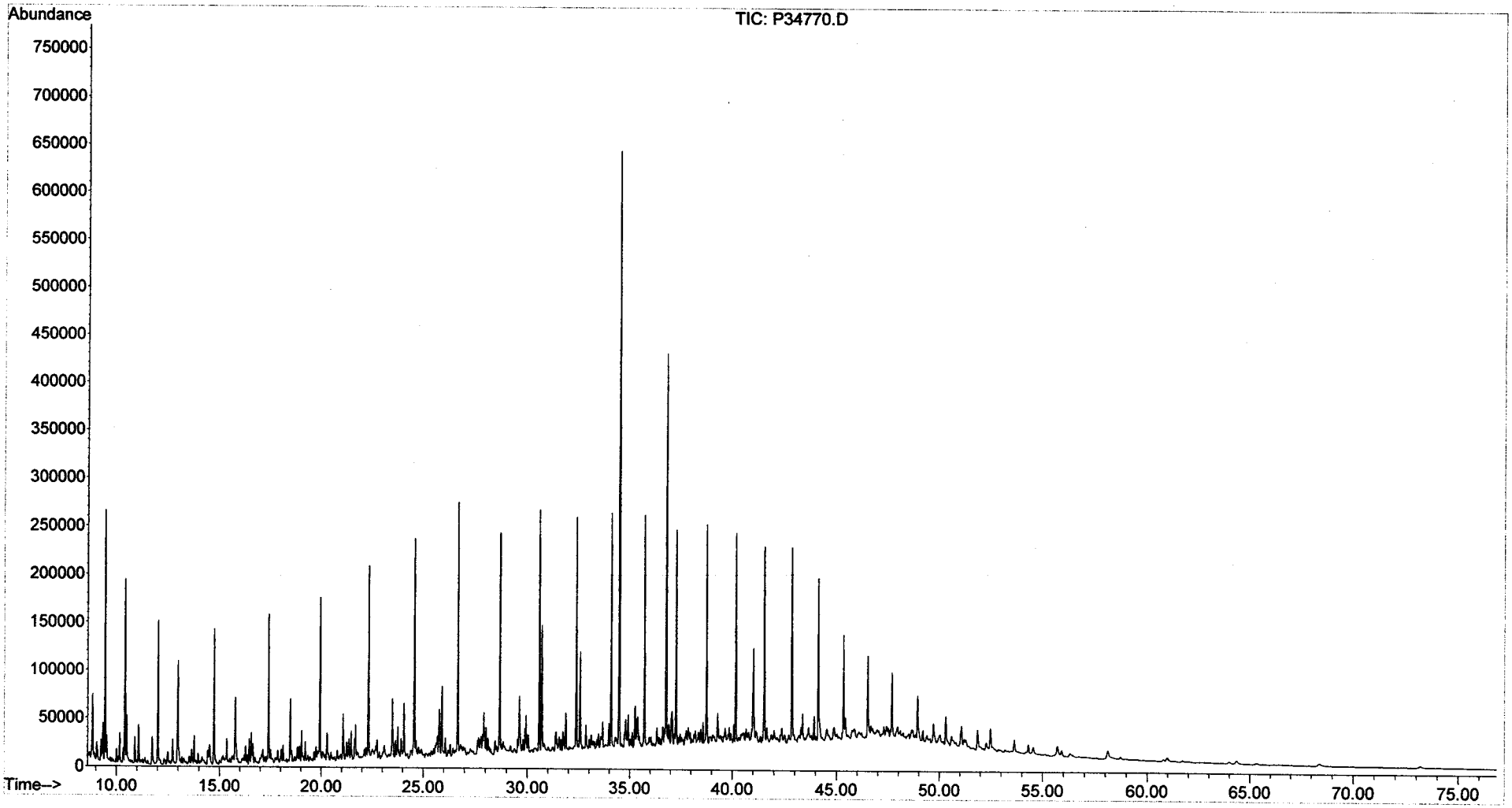
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.68	217	2524m	85.76	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	6356m	215.96	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	8252m	280.38	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	6836m	232.27	ng/ml	
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\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 ✓
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
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
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

Instrument error, sequence re-start 1/13/06

mis-inject, re-analyze 1/17/06

MS 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

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 PASS
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	C201130~~1~~2 PASS
65)	RearSamp	73	P27701	FRNC2B	DCM-AFID
66)	Sample	28	P27702	FRNC2B	DCM
67)	RearSamp	74	P27703	FRNC2B	DCM-AFID did not inject [illegible] 1/17/07

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				✓ run used
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 ✓

MS 1/23/06

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

Sequence Name: C:\MSDChem\1\sequence\S1012401.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN24\

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:

1/20/06.

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

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

Line	Sample Name/Misc Info				
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P17741	FRNC1D	dcm
5)	Sample	1	P17742	FRNC1D	pah chk
6)	RearSamp	52	P17743	FRNC1D	C1012501-AFID
7)	Sample	2	P17744	FRNC1D	C1012501 PASS
8)	RearSamp	53	P17745	FRNC1D	ANS1012501-AFID
9)	Sample	3	P17746	FRNC1D	ANS1012501
10)	RearSamp	54	P17747	FRNC1D	DCM-AFID
11)	Sample	4	P17748	FRNC1D	DCM
12)	RearSamp	55	P17749	FRNC1D	DCM-AFID
13)	Sample	5	P17750	FRNC1D	DCM
14)	RearSamp	56	P17751	FRNC1D	SS011906B04-AFID
15)	Sample	6	P17752	FRNC1D	SS011906B04 ✓
16)	RearSamp	57	P17753	FRNC1D	SS011906LCS03-AFID
17)	Sample	7	P17754	FRNC1D	SS011906LCS03 ✓
18)	RearSamp	58	P17755	FRNC1D	SS011906LCSD03-AFID
19)	Sample	8	P17756	FRNC1D	SS011906LCSD03 ✓
20)	RearSamp	59	P17757	FRNC1D	0512128-01-AFID
21)	Sample	9	P17758	FRNC1D	0512128-01RE ✓
22)	RearSamp	60	P17759	FRNC1D	0512128-02-AFID
23)	Sample	10	P17760	FRNC1D	0512128-02-RE ✓
24)	RearSamp	61	P17761	FRNC1D	0512128-03-AFID
25)	Sample	11	P17762	FRNC1D	0512128-03-RE ✓
26)	RearSamp	62	P17763	FRNC1D	0512128-03D-AFID
27)	Sample	12	P17764	FRNC1D	0512128-03D-RE ✓
28)	RearSamp	63	P17765	FRNC1D	0512128-04-AFID
29)	Sample	13	P17766	FRNC1D	0512128-04-RE ✓
30)	RearSamp	64	P17767	FRNC1D	C1012502-AFID PASS
31)	Sample	14	P17768	FRNC1D	C1012502 PASS
32)	Pause				
33)	RearSamp	65	P17769	FRNC1DF	DCM-AFID
34)	Sample	15	P17770	FRNC1DF	DCM
35)	RearSamp	66	P17771	FRNC1D	
36)	Sample	16	P17772	FRNC1D	0512128-01-RE ✓
37)	RearSamp	67	P17773	FRNC1D	
38)	Sample	17	P17774	FRNC1D	0512128-02-RE ✓
39)	RearSamp	68	P17775	FRNC1D	
40)	Sample	18	P17776	FRNC1D	0512128-04-RE ✓
41)	RearSamp	69	P17777	FRNC1D	
42)	Sample	19	P17778	FRNC1D	0512128-01 not needed
43)	RearSamp	70	P17779	FRNC1D	

✓ run used

Re-extracts 2/3/06

MS 1/27/06

Last Modified: Thu Jan 26 12:09:42 2006

Sequence Name: C:\MSDChem\1\sequence\S1012401.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P17780	FRNC1D	0512128-02 not needed
45)	RearSamp	71	P17781	FRNC1D	
46)	Sample	21	P17782	FRNC1D	0512128-03 ✓
47)	RearSamp	72	P17783	FRNC1D	
48)	Sample	22	P17784	FRNC1D	0512128-03D ✓
49)	RearSamp	73	P17785	FRNC1D	
50)	Sample	23	P17786	FRNC1D	0512128-04 not needed
51)	RearSamp	74	P17787	FRNC1D	
52)	Sample	24	P17788	FRNC1D	C1012503 PASS.
53)	RearSamp	75	P17789	FRNC1D	
54)	Sample	25	P17790	FRNC1D	DCM
55)	RearSamp	75	P17791	FRNC1D	
56)	Sample	26	P17792	FRNC1D	MDL CHECK ✓

✓ run used

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
3)	Sample	3	P34807	FRBIO3A	0512110-14
4)	Sample	4	P34808	FRBIO3A	C3011802 PASS
5)	Sample	4	P34809	FRBIO3B	C3011803 PASS
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 ✓
14)	Sample	13	P34818	FRBIO3B	0512128-05 – see retractionated 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 ✓ low
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

5deg/min
6deg/min

✓ run used

MS
1/23/06

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
52)	Sample	51	P34856	FRBIO3B	C3011807 PASS
53)	Sample	52	P34857	FRBIO3B	DCM

CMS
1/23/06

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

✓ unused

MS
1/26/06

Injection Log

Directory: O:\FORENSICS\DATA\PAH3\January06\JAN26

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	P34869.d	0.	C3012601 PASS	STD	26 Jan 2006 11:26
2		P34870.d	1.	No MS or GC data present		
3	3	P34871.d	0.	SS011906B04 ✓	1X ETR0512128	26 Jan 2006 14:25
4	4	P34872.d	0.	0512128-01	1X	26 Jan 2006 15:54
5	5	P34873.d	0.	0512128-02 ✓	1X	26 Jan 2006 17:24
6	6	P34874.d	0.	0512128-03 ✓	1x	26 Jan 2006 18:54
7	7	P34875.d	0.	0512128-03D ✓	1X	26 Jan 2006 20:24
8	8	P34876.d	0.	0512128-04 ✓	1X	26 Jan 2006 21:53
9	9	P34877.d	0.	C3012602 PASS	1X	26 Jan 2006 23:22
10	10	P34878.d	0.	DCM	1X	27 Jan 2006 00:51
11	11	P34879.d	0.	SS011906B05	1X ETR0601045/50	27 Jan 2006 02:20
12	12	P34880.d	0.	0601045-01	1X	27 Jan 2006 03:50
13	13	P34881.d	0.	0601045-02	1X	27 Jan 2006 05:19
14	14	P34882.d	0.	0601045-03	1X	27 Jan 2006 06:49
15	15	P34883.d	0.	0601045-04	1X	27 Jan 2006 08:18
16	16	P34884.d	0.	0601045-05	1X	27 Jan 2006 09:47
17	17	P34885.d	0.	0601045-06	1X	27 Jan 2006 11:16
18	18	P34886.d	0.	0601045-07	1X	27 Jan 2006 12:46
19	19	P34887.d	0.	0601045-08	1X	27 Jan 2006 14:18
20	20	P34888.d	0.	0601045-08D	1X	27 Jan 2006 15:50
21	21	P34889.d	0.	C3012603 PASS	1X	27 Jan 2006 17:21
22	22	P34890.d	0.	0601050-01	1X	27 Jan 2006 18:52
23	23	P34891.d	0.	0601050-02	1X	27 Jan 2006 20:23
24	24	P34892.d	0.	0601050-03	1X	27 Jan 2006 21:54
25	25	P34893.d	0.	0601050-04	1X	27 Jan 2006 23:25
26	26	P34894.d	0.	0601050-05	1X	28 Jan 2006 00:55
27	27	P34895.d	0.	0601050-06	1X	28 Jan 2006 02:26
28	28	P34896.d	0.	0601050-06D	1X	28 Jan 2006 03:56
29	29	P34897.d	0.	C3012604 PASS	1X	28 Jan 2006 05:27
30	30	P34898.d	0.	C3012605 PASS	1X	30 Jan 2006 09:28
31	31	P34899.d	0.	0512128-01	1X rerun	30 Jan 2006 11:00
32	32	P34900.d	0.	c3012606 PASS	1X rerun	30 Jan 2006 12:33
33	33	P34901.d	0.	c3012607 PASS	std	30 Jan 2006 17:42
34	34	P34902.d	0.	0512128-01	1 rererun	30 Jan 2006 21:54
35	35	P34903.d	0.	c3012608 PASS	std	30 Jan 2006 23:26
36	36	P34904.d	0.	C3012609 PASS	std	31 Jan 2006 09:28
37	37	P34905.d	0.	0512128-01 ✓	1X REXTRACT RTERUN	31 Jan 2006 14:59
38	38	P34906.d	0.	C3012610 PASS	STD	31 Jan 2006 16:30
39	1	P34907.d	0.	DCM	DCM	31 Jan 2006 18:02
40	2	P34908.d	0.	SS012506B01	1X ETR0601064	31 Jan 2006 19:32
41	3	P34909.d	0.	0601064-01	1X	31 Jan 2006 21:02
42	4	P34910.d	0.	0601064-02	1X	31 Jan 2006 22:34
43	5	P34911.d	0.	0601064-03	1X	1 Feb 2006 00:05
44	6	P34912.d	0.	0601064-04	1X	1 Feb 2006 01:36
45	7	P34913.d	0.	0601064-05	1X	1 Feb 2006 03:07
46	8	P34914.d	0.	0601064-05D	1X	1 Feb 2006 04:38
47	9	P34915.d	0.	0601064-06	1X	1 Feb 2006 06:09
48	10	P34916.d	0.	0601064-07	1X	1 Feb 2006 07:40
49	11	P34917.d	0.	C3012611 PASS	STD	1 Feb 2006 09:11
50	12	P34918.d	0.	0601064-08	1X	1 Feb 2006 10:42
51	13	P34919.d	0.	0601064-09	1X	1 Feb 2006 12:15
52	14	P34920.d	0.	0601064-10	1X	1 Feb 2006 13:46
53	15	P34921.d	0.	0601064-11	1X	1 Feb 2006 15:18
54	16	P34922.d	0.	C3012612 PASS	STD	1 Feb 2006 16:50
55	17	P34923.d	0.	dcm	dcm	1 Feb 2006 18:22

✓ Run used

Re-Extracted WJ 2/3/06

MS 2/2/07

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: **0512128**
Lab ID: **SS010606B04**
Date Analyzed: **01/19/06 19:43**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-08 (10.5-11.5)	0512128-01	01/15/06 16:57
GC-SED-09 (6-7)	0512128-02	01/15/06 18:32
GC-SED-05 (0-2)	0512128-03E	01/15/06 20:06
GC-SED-05 (0-2)	0512128-03E D	01/15/06 21:45
GC-SED-04 (10.3-11.3)	0512128-04	01/15/06 23:21
LCS	SS010606LCS04	01/19/06 22:54
LCSD	SS010606LCSD03	01/20/06 00:33
GC-SED-05 (0-2)	0512128-03	01/20/06 05:33
GC-SED-05 (0-2)	0512128-03 D	01/20/06 07:16
GC-SED-08 (10.5-11.5)	0512128-01E	01/20/06 12:09
GC-SED-09 (6-7)	0512128-02E	01/20/06 13:52
GC-SED-04 (10.3-11.3)	0512128-04E	01/20/06 15:34

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: **0512128**
Lab ID: **SS010606B04**
Date Analyzed: **01/19/06 12:35**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-08 (10.5-11.5)	0512128-01	01/19/06 15:32
GC-SED-09 (6-7)	0512128-02	01/19/06 17:02
GC-SED-05 (0-2)	0512128-03	01/19/06 18:31
GC-SED-05 (0-2)	0512128-03 D	01/19/06 20:00
GC-SED-04 (10.3-11.3)	0512128-04	01/19/06 21:30

N/A - Not Applicable

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

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: **0512128**
Lab ID: **SO011006B01**
Date Analyzed: **01/19/06 21:19**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-RM 039	0512128-05	01/16/06 00:55
LCS	SO011006LCS01	01/20/06 02:12
LCSD	SO011006LCSD01	01/20/06 03:52
GC-SED-RM 039	0512128-05E	01/20/06 17:14

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: **0512128**
Lab ID: **SO011006B01**
Date Analyzed: **01/19/06 14:04**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-RM 039	0512128-05	01/23/06 17:53

N/A - Not Applicable

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

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: **0512128**
Lab ID: **SS011906B04**
Date Analyzed: **01/25/06 21:30**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS011906LCS03	01/25/06 23:04
LCSD	SS011906LCSD03	01/26/06 00:38
GC-SED-08 (10.5-11.5)	0512128-01X	01/26/06 02:11
GC-SED-09 (6-7)	0512128-02X	01/26/06 03:45
GC-SED-05 (0-2)	0512128-03EX	01/26/06 05:18
GC-SED-05 (0-2)	0512128-03EX D	01/26/06 06:53
GC-SED-04 (10.3-11.3)	0512128-04X	01/26/06 08:28
GC-SED-08 (10.5-11.5)	0512128-01EX	01/26/06 13:45
GC-SED-09 (6-7)	0512128-02EX	01/26/06 15:18
GC-SED-04 (10.3-11.3)	0512128-04EX	01/26/06 16:50
GC-SED-05 (0-2)	0512128-03X	01/26/06 21:27
GC-SED-05 (0-2)	0512128-03X D	01/26/06 22:58

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: **0512128**
Lab ID: **SS011906B04**
Date Analyzed: **01/26/06 14:25**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-09 (6-7)	0512128-02X	01/26/06 17:24
GC-SED-05 (0-2)	0512128-03X	01/26/06 18:54
GC-SED-05 (0-2)	0512128-03X D	01/26/06 20:24
GC-SED-04 (10.3-11.3)	0512128-04X	01/26/06 21:53
GC-SED-08 (10.5-11.5)	0512128-01X	01/31/06 14:59

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 SO011706AWS01
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

1/15/06

1/17/06

MS 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
	Sample	18	P27682	FRNC2B	DCM
	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 1/17/07

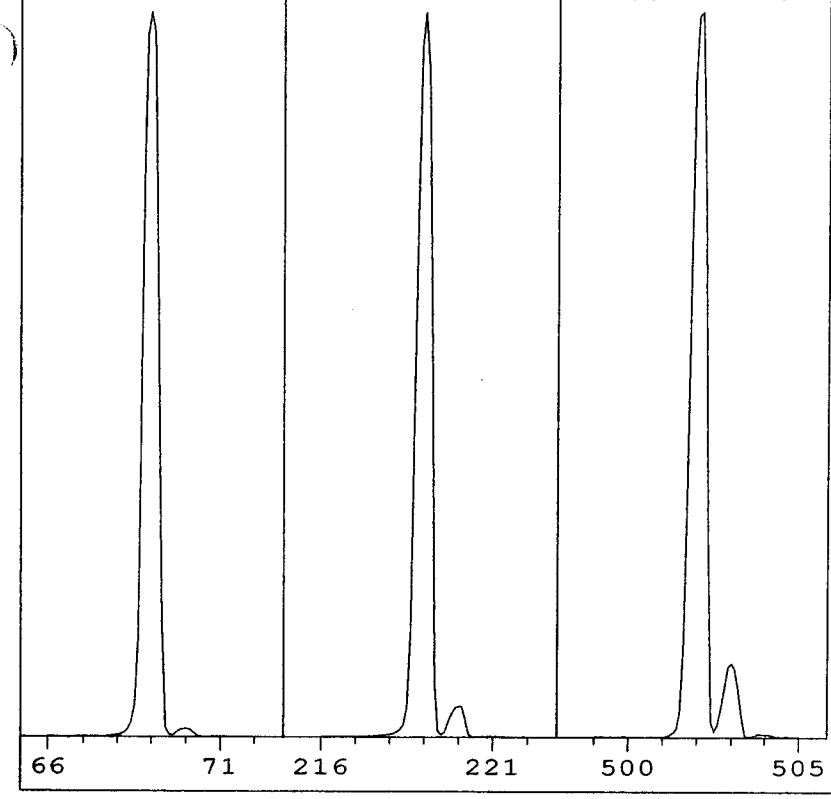
5973 Tune

1/13/06

Fri Jan 13 15:00:29 2006 Instrument: PAHINST2

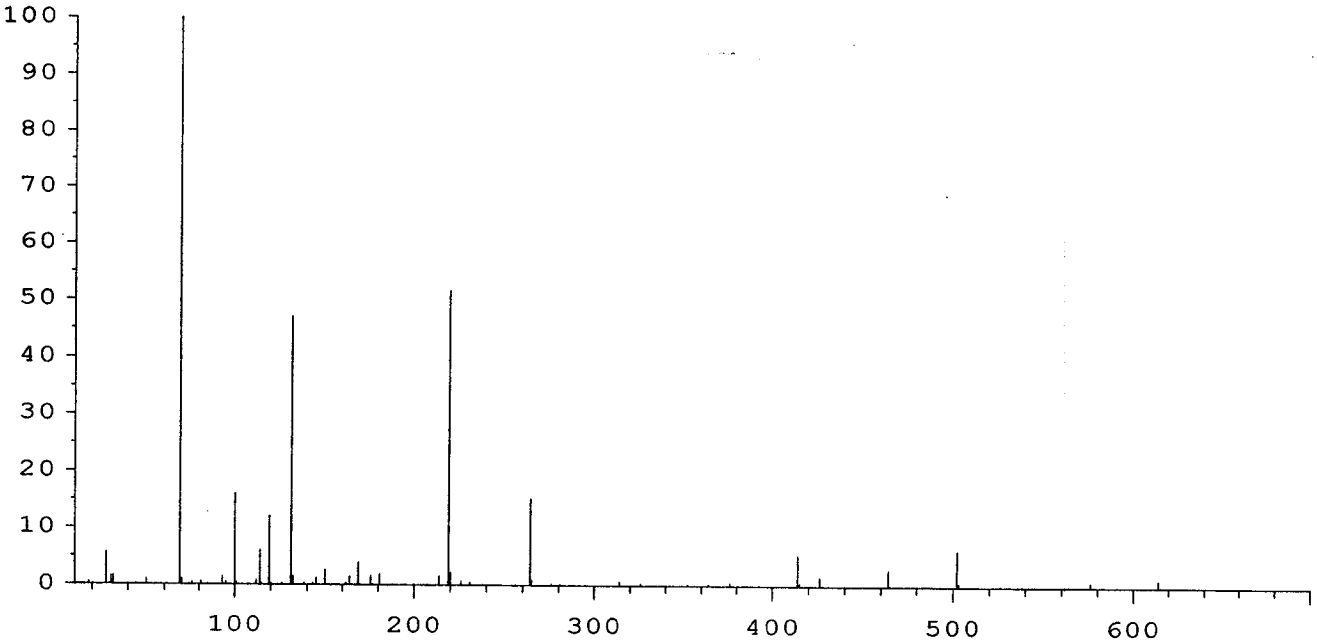
C:\MSDCHEM\1\5973N\PFTBA.U

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 1/20/06

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 CM 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 RE 2nd
92)	A2	Hopane (T19)	0.524	0.494	0.554	0.442	0.533	0.471	0.493	9.37 CM 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

AMS 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%#			

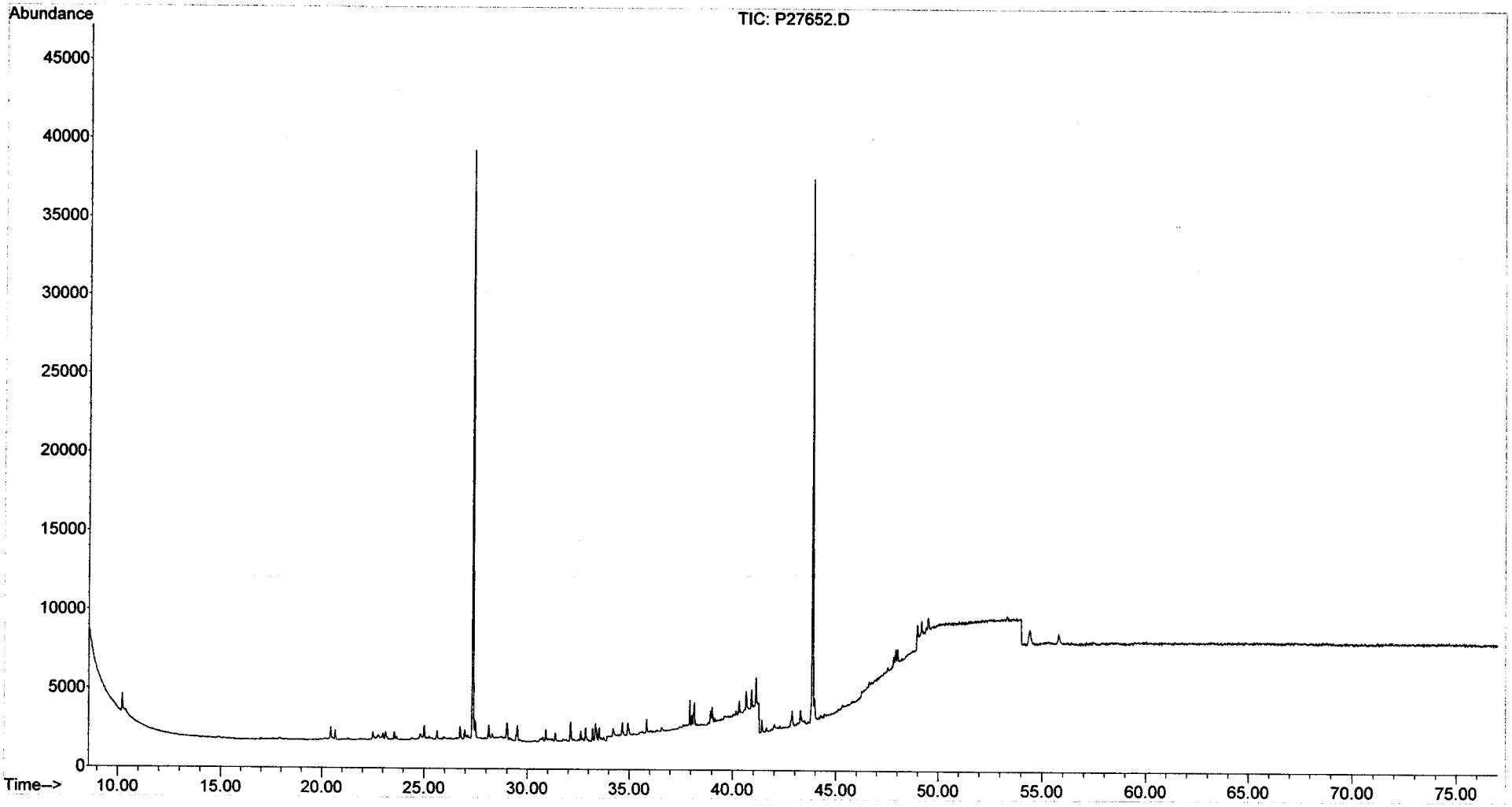
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	215m	5.31	ng/mL	
4) cis-Decalin	18.21	138	155m	4.97	ng/mL	
9) Naphthalene	20.44	128	2374	10.91	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1363	9.30	ng/mL#	100
16) 1-Methylnaphthalene	23.57	142	1361	9.86	ng/mL#	100
17) Benzothiophene	20.66	134	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

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

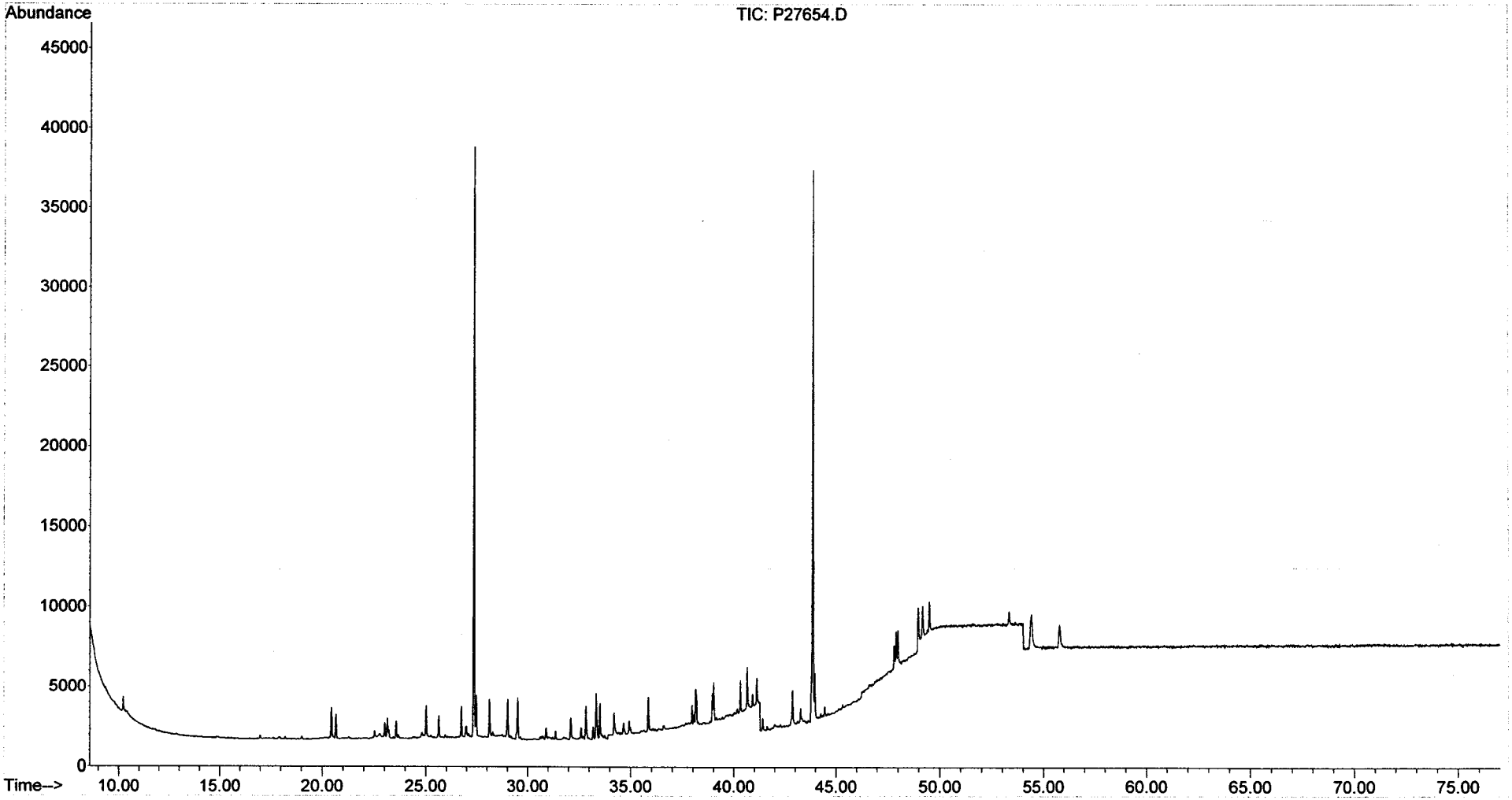
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47740	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	71793	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	2471	24.16	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

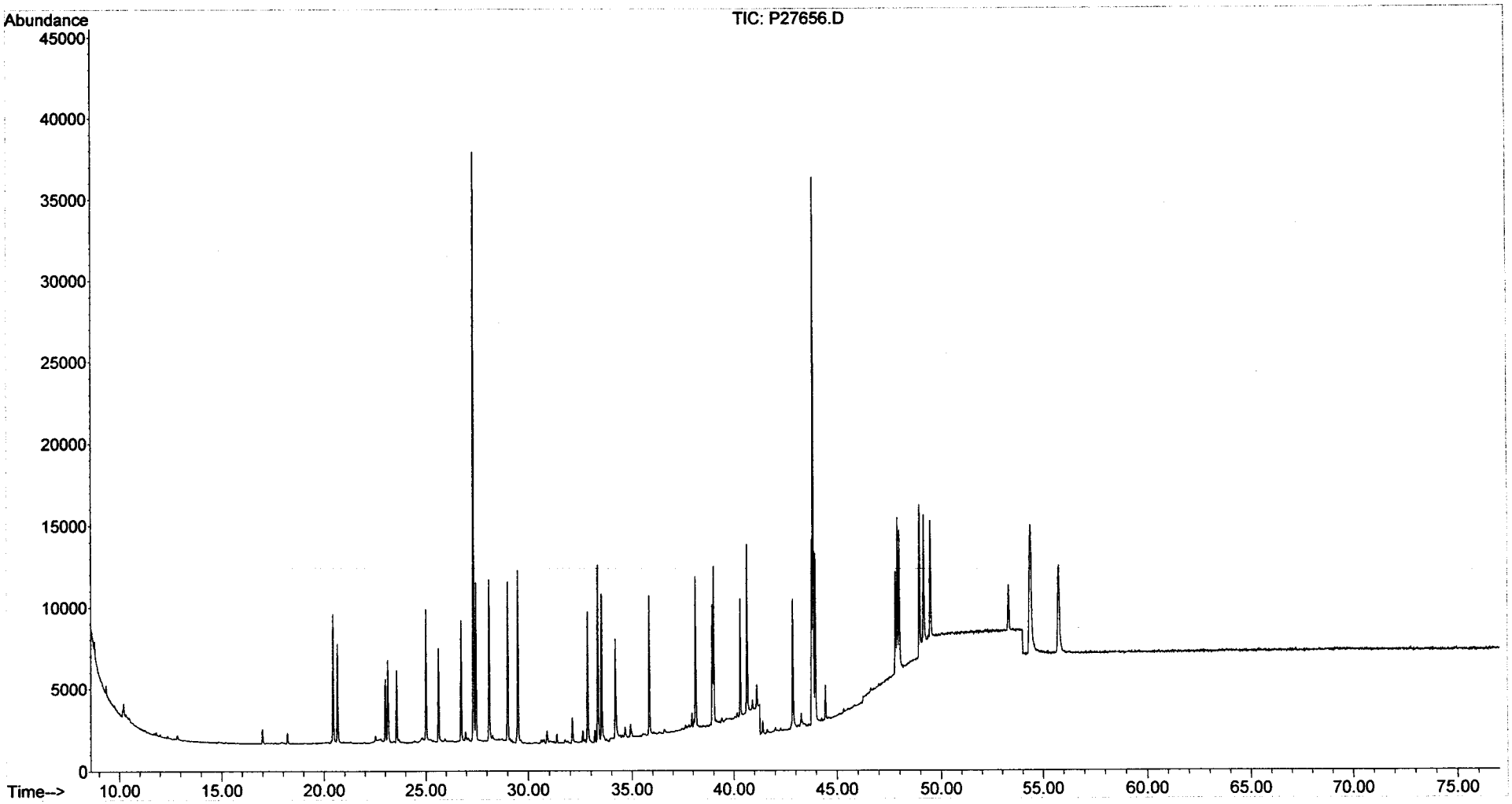
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46810	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	70628	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	9713	96.87	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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%#			

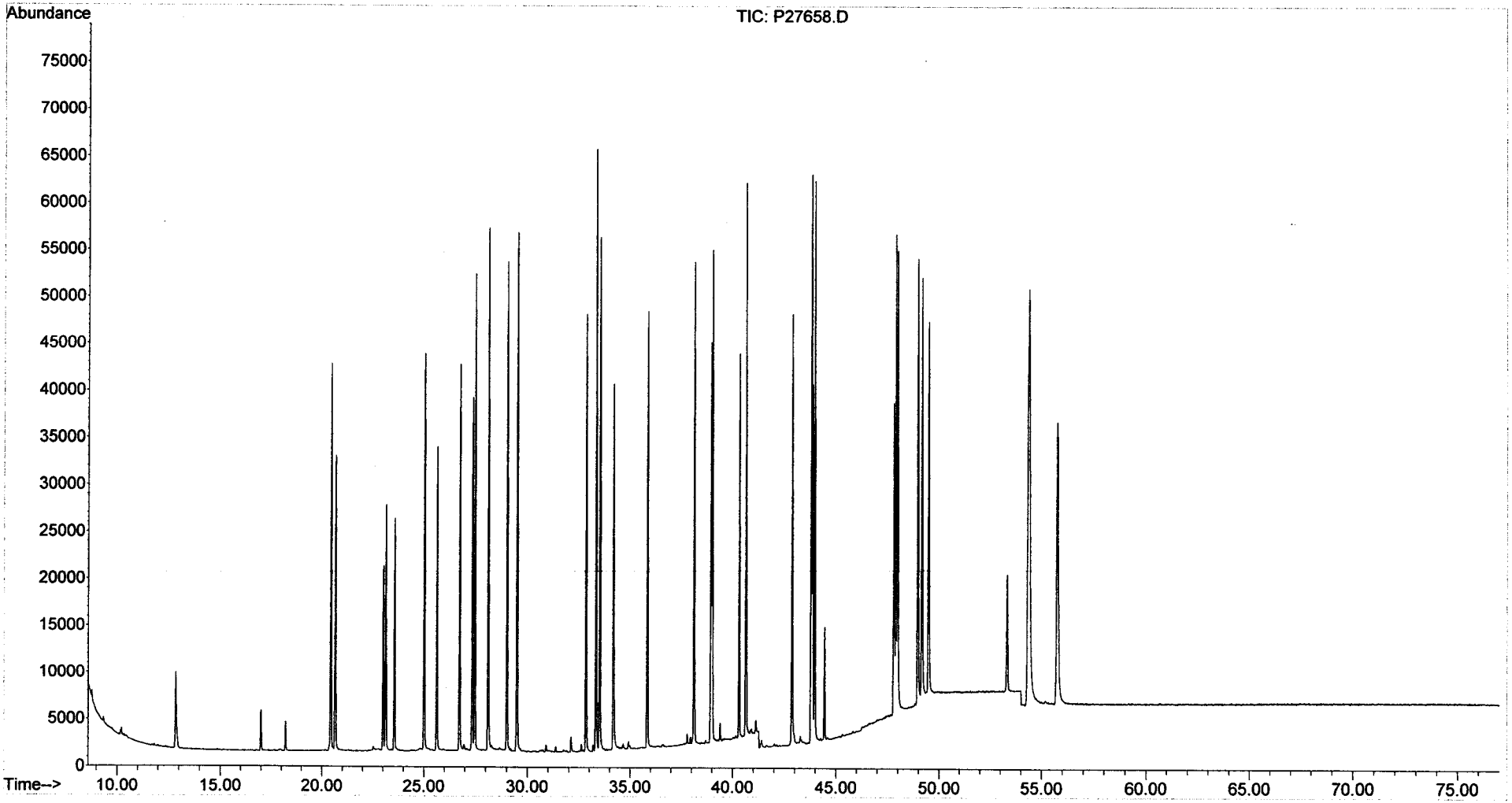
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	9714	228.90	ng/mL	100
4) cis-Decalin	18.21	138	7379	237.07	ng/mL	100
9) Naphthalene	20.44	128	107063	485.52	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	68545	505.09	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	64581	495.98	ng/mL#	100
17) Benzothiophene	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



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

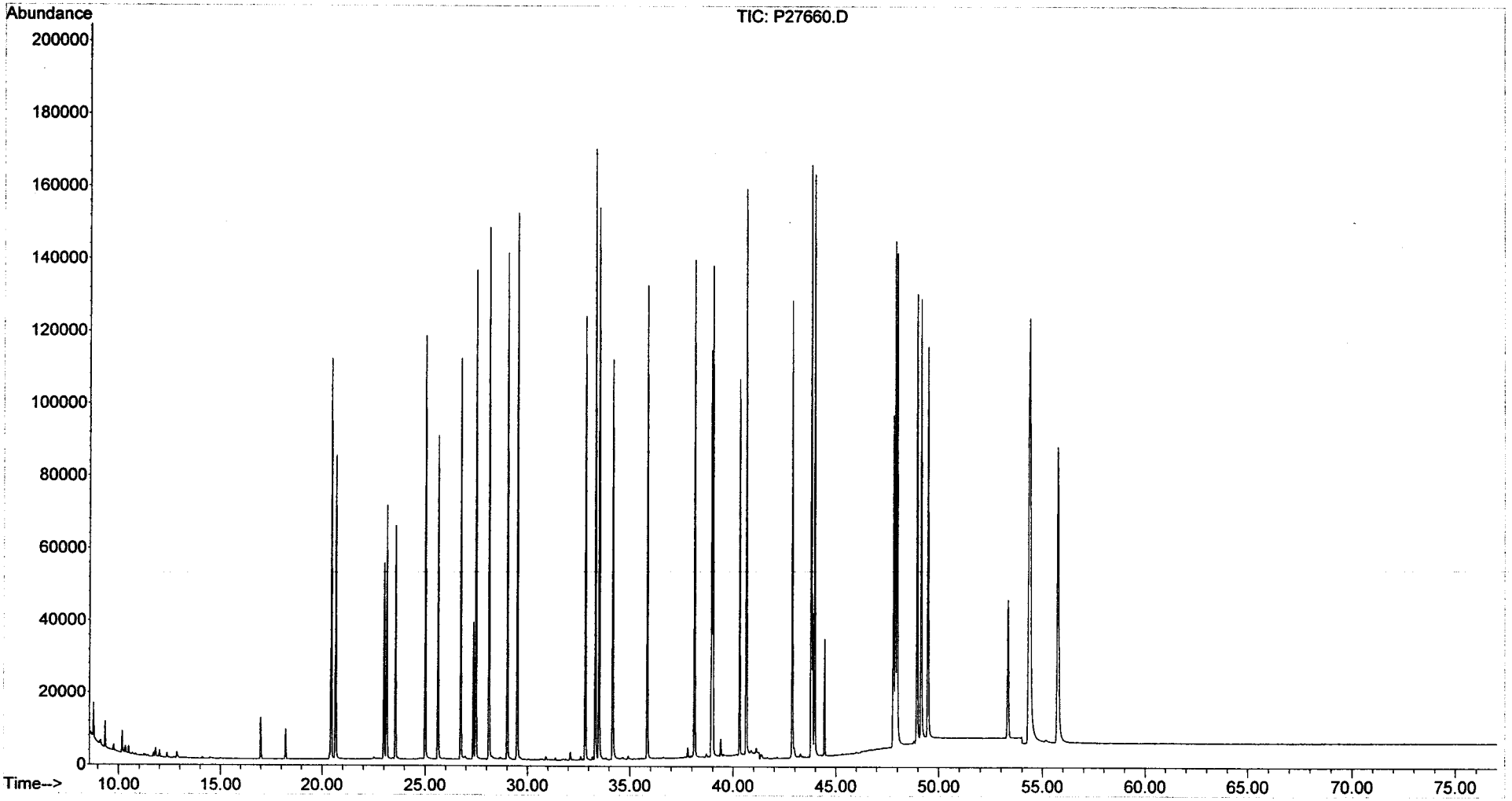
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48512	500.00 ng/mL	0.00
72) Chrysene-d12	43.86	240	76104	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	126002	1268.64 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

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

MS 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%#		

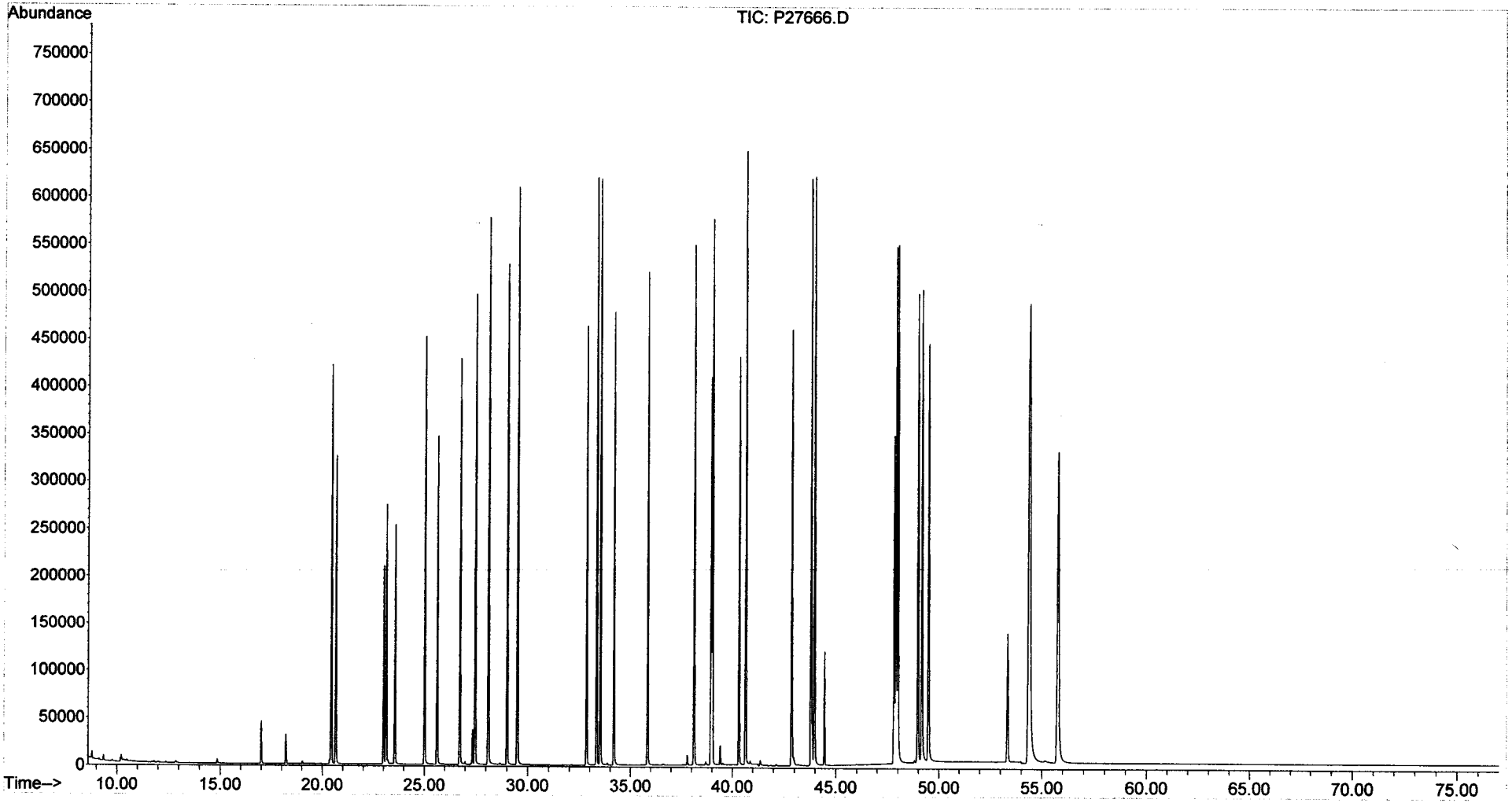
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	95544	2353.44 ng/mL	100
4) cis-Decalin	18.22	138	72265	2426.89 ng/mL	100
9) Naphthalene	20.44	128	1036151	4911.69 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	681031	5245.66 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	646356	5188.91 ng/mL#	100
17) 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

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

AWS 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%#		

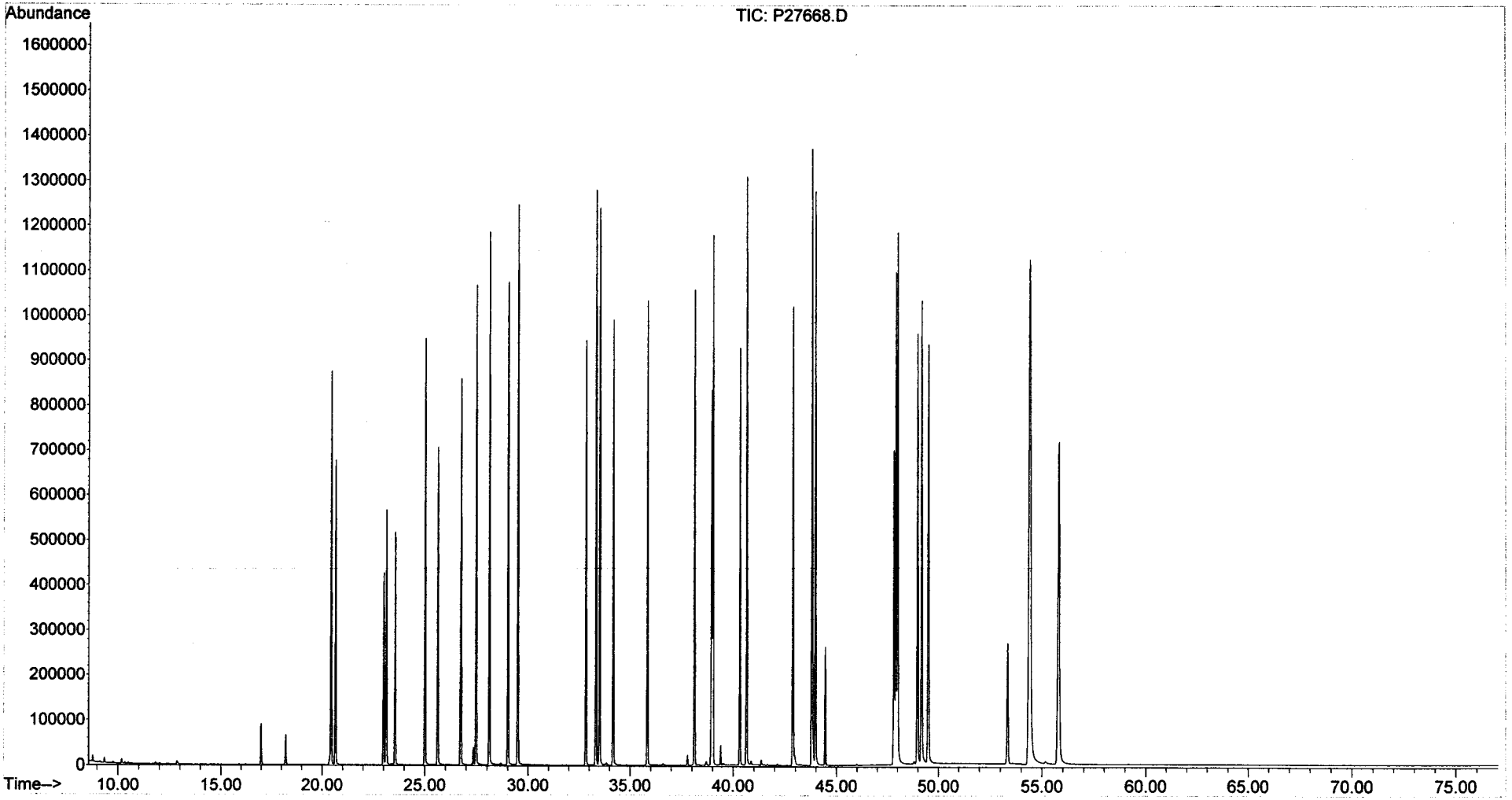
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	197168	4525.83 ng/mL	100
4) cis-Decalin	18.22	138	150854	4721.07 ng/mL	100
9) Naphthalene	20.44	128	2133056	9422.62 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1412575	10139.26 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	1343503	10050.88 ng/mL#	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

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

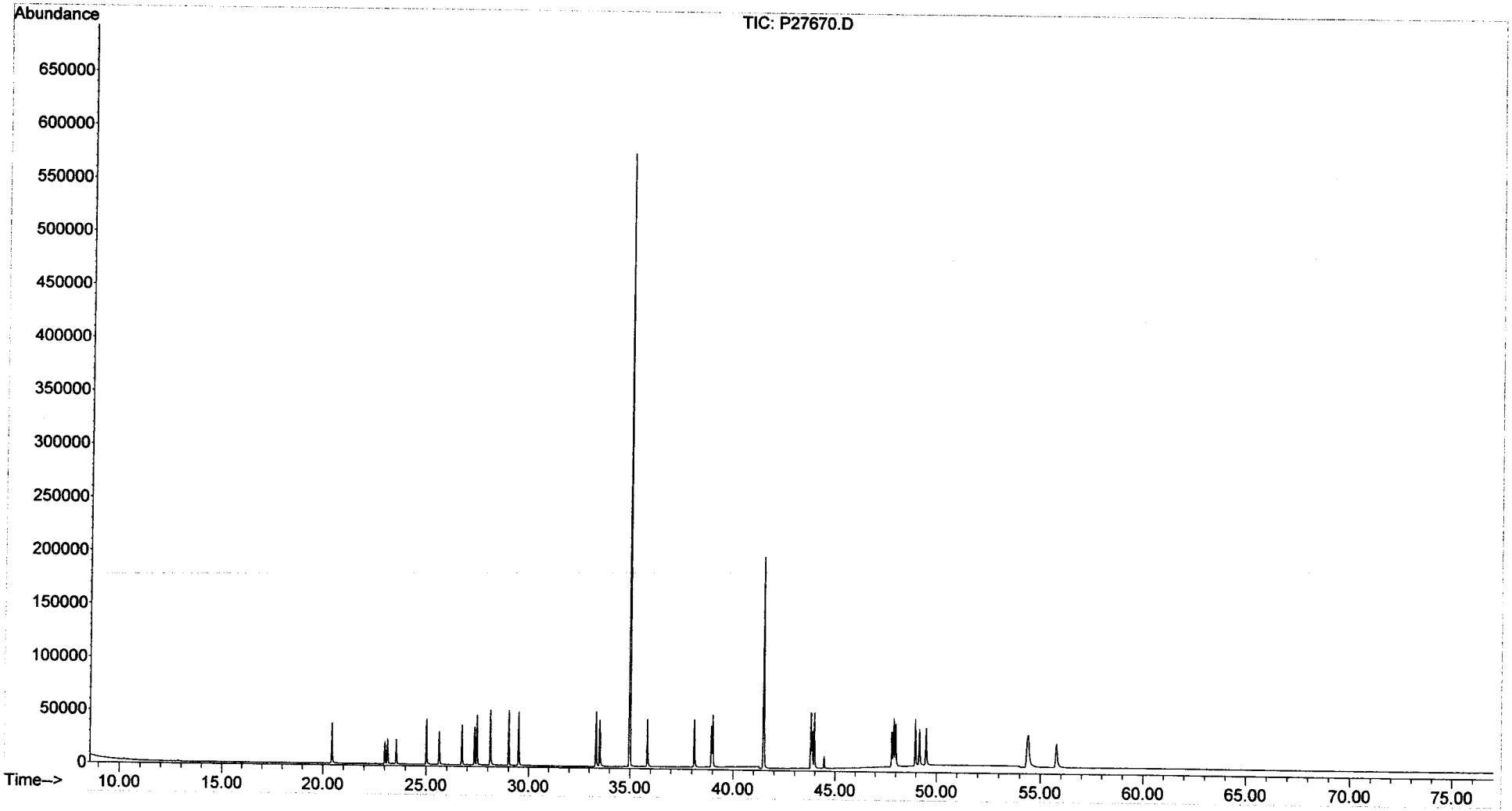
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47092	500.00	ng/mL	0.00
72) Chrysene-d12	43.87	240	72455	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	49721	513.75	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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\S1010401.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN04\

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)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P17268A	FRNC1D	DCM
4)	Sample	1	P17268	FRNC1D	PAH STD
5)	RearSamp	52	P17269	FRNC1D	DCM2
6)	Sample	2	P17270	FRNC1D	DCM
7)	RearSamp	53	P17271	FRNC1D	
8)	Sample	3	P17272	FRNC1D	DCM
9)	RearSamp	54	P17273	FRNC1D	DCM4 * KAL.
10)	Sample	4	P17274	FRNC1D	I1010401*
11)	RearSamp	55	P17275	FRNC1D	C1010401-AFID PAH
12)	Sample	5	P17276	FRNC1D	I1010402 *
13)	RearSamp	56	P17277	FRNC1D	ANS1010401 TS010506 AW502
14)	Sample	6	P17278	FRNC1D	I1010403 *
15)	RearSamp	57	P17279	FRNC1D	DCM IB\010406\01
16)	Sample	7	P17280	FRNC1D	I1010404*
17)	RearSamp	58	P17281	FRNC1D	Alumina check1
18)	Sample	8	P17282	FRNC1D	I1010405*
19)	RearSamp	59	P17283	FRNC1D	Alumina Check2
	Sample	9	P17284	FRNC1D	I1010406*
21)	RearSamp	60	P17285	FRNC1D	SS122105B10
22)	Sample	10	P17286	FRNC1D	I1010407*
23)	RearSamp	61	P17287	FRNC1D	SS122105LCS07
24)	Sample	11	P17288	FRNC1D	DCM
25)	RearSamp	62	P17289	FRNC1D	SS122105LCSD07
26)	Sample	12	P17290	FRNC1D	Q1010401
27)	RearSamp	63	P17291	FRNC1D	0512101-01-AFID
28)	Sample	13	P17292	FRNC1D	ANS1010401
29)	RearSamp	64	P17293	FRNC1D	0512101-02-AFID - sequence stopped. FID to cont on S1010SC
30)	Sample	12	P17294	FRNC1D	Q1010402
31)	RearSamp	65	P17295	FRNC1D	C1010402-AFID
32)	Sample	14	P17296	FRNC1D	SSFS1010401
33)	RearSamp	66	P17297	FRNC1D	DCM-AFID
34)	Sample	16	P17298	FRNC1D	C1010401
35)	RearSamp	67	P17299	FRNC1D	DCM-AFID
36)	Sample	17	P17300	FRNC1D	BaF RT check

PAH #1 Sequence Information

SHC Continuing Calibration: WHAC10 Conc.: 50ug/mL
PAH Continuing Calibration: WHAB52 Conc.: 500ng/mL

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

FID Process Method: HC11005.M PAH Process Method: ~~PAH21701.M~~ PAH10104.M

PAH Calibration IDs

PAH Calibration Level 1: WHAB60 Conc.: 10ng/mL
PAH Calibration Level 2: WHAB59 Conc.: 25ng/mL
PAH Calibration Level 3: WHAB58 Conc.: 100ng/mL
PAH Calibration Level 4 (CC): ~~WHAC12~~ Conc.: 500ng/mL WHAB50
PAH Calibration Level 5: WHAB55 Conc.: 1250ng/mL
PAH Calibration Level 6: WHAB54 Conc.: 5000ng/mL
PAH Calibration Level 7: WHAB53 Conc.: 10000ng/mL
PAH Independent Check Verification: WHAB69 Conc. 500ng/mL

Crude Oil IDs

Alaska North Slope: WHAB79 Conc.: 5.096mg/mL
Largo Agrio Norte: WHAB41 Conc.: 6.15mg/mL
Shushufindi South West: WHAB42 Conc.: 6.25mg/mL
Shushufindi Central: WHAC08 Conc.: 5.48mg/mL
Sasha Central: WHAB46 Conc.: 5.38mg/mL
Shushufindi North: WHAB47 Conc.: 5.74mg/mL
Shushufindi South: WHAB48 Conc.: 5.00mg/mL
Aguarico: WHAC02 Conc.: 6.02mg/mL
Sasha North 2 WHAC09 Conc.: 5.54mg/mL

La

Sequence Name: C:\MSDChem\1\sequence\S1010501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN05\

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

FID Dirty Not Used

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	65	P17301	FRNC1D	C1010402-AFID
4)	Sample	1	P17302	FRNC1D	PAH TEST
5)	RearSamp	66	P17303	FRNC1D	DCM-AFID
6)	Sample	2	P17304	FRNC1D	C1010501 PASS
7)	RearSamp	67	P17305	FRNC1D	DCM-AFID
8)	Sample	3	P17306	FRNC1D	ANS1010501
9)	Pause				
10)	RearSamp	68	P17307	FRNC1D	DCM-AFID
11)	Sample	4	P17308	FRNC1D	~~ANS1010501~~ SS011106 AWS02
12)	RearSamp	69	P17309	FRNC1D	DCM-AFID
13)	Sample	5	P17310	FRNC1D	BaF rt CHECK CN 1/11/06
14)	RearSamp	70	P17311	FRNC1D	DCM-AFID
15)	Sample	6	P17312	FRNC1D	C1010502 PASS.
16)	RearSamp	71	P17313	FRNC1D	DCM-AFID
17)	Sample	7	P17314	FRNC1D	DCM
18)	RearSamp	72	P17315	FRNC1D	DCM
19)	Sample	8	P17316	FRNC1D	ST122805B04 ✓
20)	RearSamp	73	P17317	FRNC1D	DCM
21)	Sample	9	P17318	FRNC1D	SS122805B03 ✓ Run used
22)	RearSamp	74	P17319	FRNC1D	DCM
23)	Sample	10	P17320	FRNC1D	SW122805B02 ✓
24)	RearSamp	75	P17321	FRNC1D	DCM
25)	Sample	11	P17322	FRNC1D	ST122805LCS04 ✓
26)	RearSamp	76	P17323	FRNC1D	DCM
27)	Sample	12	P17324	FRNC1D	ST122805LCSD04 ✓
28)	RearSamp	77	P17325	FRNC1D	DCM
29)	Sample	13	P17326	FRNC1D	SS122805LCS03 ✓
30)	RearSamp	78	P17327	FRNC1D	DCM
31)	Sample	14	P17328	FRNC1D	SS122805LCSD03 ✓
32)	RearSamp	79	P17329	FRNC1D	0511156-02-AFID
33)	Sample	15	P17330	FRNC1D	SW122805LCS02 ✓
34)	RearSamp	80	P17331	FRNC1D	0511156-03-AFID
35)	Sample	16	P17332	FRNC1D	SW122805LCSD02 ✓
36)	RearSamp	81	P17333	FRNC1D	DCM
37)	Sample	17	P17334	FRNC1D	C1010503 PASS
38)	Pause				
39)	RearSamp	82	P17335	FRNC1D	
40)	Sample	18	P17336	FRNC1D	DCM
41)	RearSamp	83	P17337	FRNC1D	
42)	Sample	19	P17338	FRNC1D	0512118-01 ✓
43)	RearSamp	84	P17339	FRNC1D	

MS 1-9-06

PAH #1 Sequence Information

SHC Continuing Calibration: ~~WHAC10~~ Conc.: 50ug/mL
PAH Continuing Calibration: ~~WHAB52~~ WHAB56 Conc.: 500ng/mL
Alaska North Slope Crude Standard: WHAB79 Conc.: 5.096mg/mL

FID Process Method: ~~HC11005.M~~ PAH Process Method: ~~PAH121701.M~~ ✓
NEW ICAL PAH10104.M

Last Modified: Thu Jan 05 12:06:45 2006

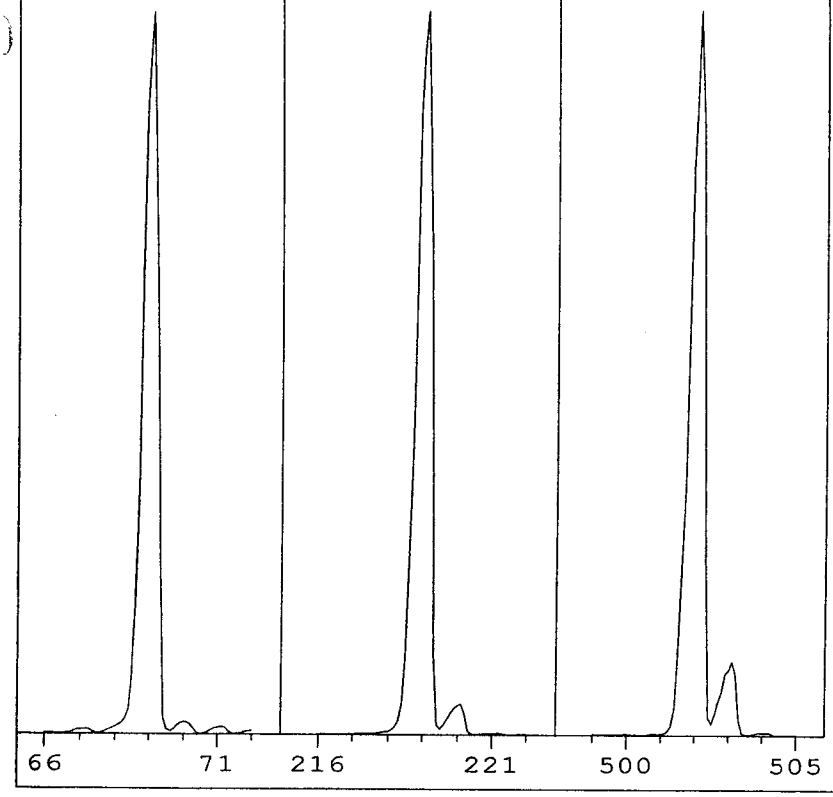
5973 Tune

1/4/06

Wed Jan 04 09:47:59 2006
C:\MSDCHEM\1\5973N\PBTBA.U

Instrument: PAH-1

Mass	69.10	Mass	219.10	Mass	502.10
Ab	440529	Ab	250956	Ab	28818
Pw50	0.50	Pw50	0.50	Pw50	0.49

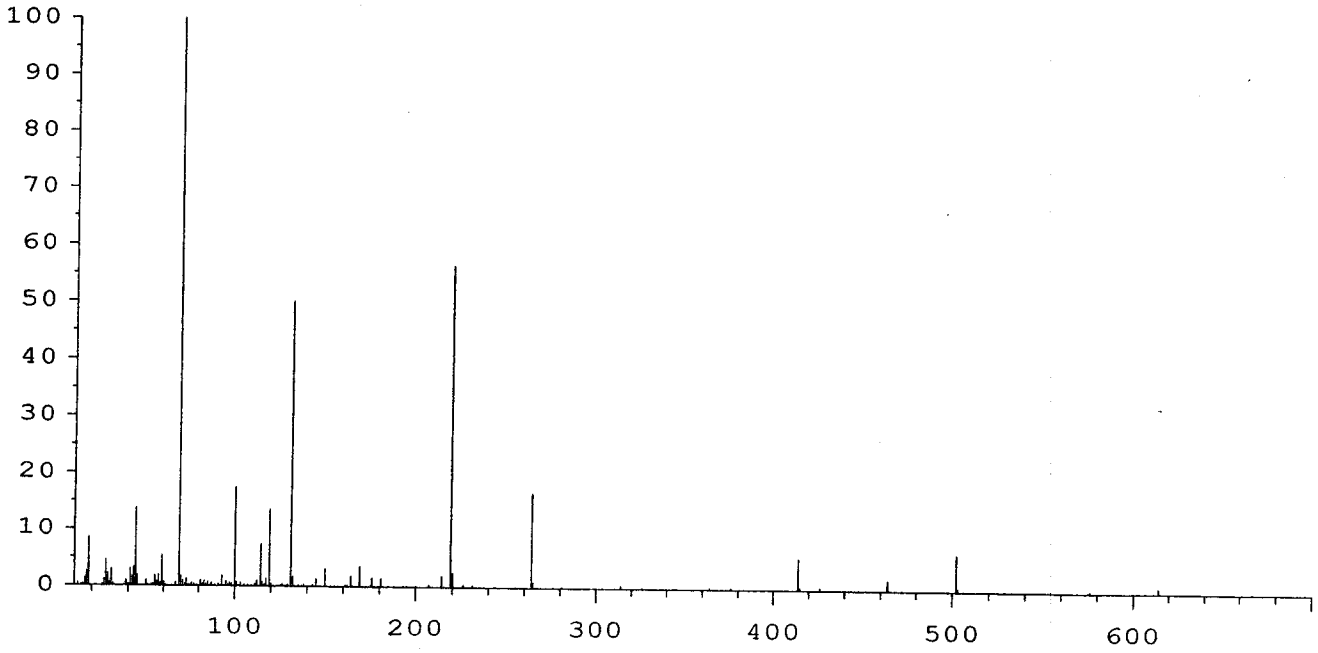


Ion Pol	POS	MassGain	-24
		MassOffs	-11
Emission	34.6	AmuGain	1938
ElEnrgy	69.9	AmuOffs	134
Filament	2	Wid219	-0.019
		DC Pol	NEG
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	1329
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10

Zones:

MS Source	230	Foreline	38
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
269 peaks Base: 69.00 Abundance: 379456



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	379456	100.00	70.00	6407	1.69
219.00	213632	56.30	220.00	9423	4.41
502.00	24432	6.44	503.00	2466	10.09

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	12.3	15.6	18.6	20.3	21.3	26.1
TARGET ABUND(%):	1.0	100.0	50.0	55.0	5.0	6.0
ACTUAL TUNE ABUND(%):	1.0	100.0	50.0	56.3	5.5	6.4

Response Factor Report PAH-1

Method Path : O:\FORENSICS\METHODS\PAH1\JAN2006\
Method File : PAH10104.M
Title : Decalins & Alkylated PAH's
Last Update : Thu Jan 05 07:03:26 2006
Response Via : Initial Calibration

Calibration Files
10 =P17274.D 25 =P17276.D 100 =P17278.D 10000= P17286 MS 1/5/06
500 =P17280.D 1250=P17282.D 5000=P17284.D

		Compound	10	25	100	500	1250	5000	Avg	%RSD
1)	i	Acenaphthene-d10	----------ISTD----------							
2)	t	Decalin	0.394	0.436	0.404	0.368	0.384	0.383	0.391	5.89
3)	A1	trans-Decalin	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
4)	t	cis-Decalin	0.320	0.334	0.329	0.316	0.328	0.329	0.325	2.09
5)	A2	C1-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
6)	A2	C2-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
7)	A2	C3-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
8)	A2	C4-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
9)	A1	Naphthalene	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
10)	A2	C1-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
11)	A2	C2-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
12)	A2	C3-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
13)	A2	C4-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
14)	s	2-Methylnaphthale	1.059	1.069	1.027	1.052	1.079	1.131	1.072	3.04
15)	t	2-Methylnaphthale	1.555	1.565	1.565	1.597	1.660	1.705	1.617	3.74
16)	t	1-Methylnaphthale	1.466	1.472	1.482	1.502	1.571	1.589	1.522	3.47
17)	A1	Benzothiophene	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
18)	A2	C1-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
19)	A2	C2-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
20)	A2	C3-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
21)	A2	C4-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
22)	t	Biphenyl	1.999	1.972	1.960	1.982	2.040	2.071	2.010	2.11
23)	t	2,6-Dimethylnapht	1.279	1.294	1.276	1.316	1.381	1.420	1.342	4.89
24)	t	Dibenzofuran	2.190	2.184	2.184	2.223	2.325	2.355	2.258	3.53
25)	t	Acenaphthylene	2.300	2.313	2.253	2.408	2.539	2.661	2.448	7.07
26)	t	Acenaphthene	1.501	1.451	1.440	1.491	1.555	1.605	1.521	4.45
27)	t	2,3,5-Trimethylna	1.204	1.129	1.104	1.165	1.234	1.290	1.204	6.39
28)	A1	Fluorene	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
29)	A2	C1-Fluorenes	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
30)	A2	C2-Fluorenes	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
31)	A2	C3-Fluorenes	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
32)	A1	Dibenzothiophene	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
33)	A2	4-Methyldibenzoth	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
34)	A2	2/3-Methyldibenzo	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
35)	A2	1-Methyldibenzoth	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
36)	A2	OTP	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
37)	A2	C1-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
38)	A2	C2-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
39)	A2	C3-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
40)	A2	C4-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
41)	A1	Phenanthrene	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
42)	A2	3-Methylphenanthr	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
43)	A2	2/4-Methylphenant	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
44)	A2	2-Methylanthracen	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
45)	A2	9-Methylphenanthr	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
46)	A2	1-Methylphenanthr	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
47)	A2	C1-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
48)	A2	C2-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
49)	A2	5AA IS BKGD	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
50)	A2	C3-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
51)	A2	C4-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
52)	T	Retene	0.518	0.468	0.467	0.504	0.537	0.592	0.529	10.97
53)	t	Anthracene	2.227	2.197	2.142	2.282	2.438	2.545	2.340	7.22
54)	t	Carbazole	1.942	1.958	2.006	2.169	2.272	2.405	2.166	9.35
55)	t	1-Methylphenanthr	1.671	1.625	1.608	1.687	1.763	1.869	1.732	6.67
56)	A1	Fluoranthene	2.550	2.524	2.464	2.636	2.770	2.934	2.693	7.53
57)	T	Benzo(b)fluorene	1.413	1.378	1.355	1.524	1.628	1.816	1.572	13.58

RF checked 1/11/06

Response Factor Report PAH-1

Method Path : O:\FORENSICS\METHODS\PAH1\JAN2006\
Method File : PAH10104.M
Title : Decalins & Alkylated PAH's
Last Update : Thu Jan 05 07:03:26 2006
Response Via : Initial Calibration

Hardcopy checked against computer method on screen

Calibration Files
10 =P17274.D 25 =P17276.D 100 =P17278.D
500 =P17280.D 1250=P17282.D 5000=P17284.D 10000=P17286 CV 1/11/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
58)	s	Pyrene-d10	2.076	2.015	2.022	2.180	2.206	2.433	2.204	8.75
59)	A1	Pyrene	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
60)	A2	C1-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
61)	A2	C2-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
62)	A2	C3-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
63)	A2	C4-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
64)	A1	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
65)	A2	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
66)	A2	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
67)	A2	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
68)	A2	C1-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
69)	A2	C2-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
70)	A2	C3-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
71)	A2	C4-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
72)	i	Chrysene-d12	----------ISTD----------							
73)	t	Benz[a]anthracene	1.415	1.402	1.424	1.494	1.567	1.644	1.522	7.94
74)	A1	Chrysene	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
75)	A2	Chrysene/Tripheny	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
76)	A2	C1-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
77)	A2	C2-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
78)	A2	BBF-d12 Surr BKGD	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
79)	A2	C3-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
80)	A2	C4-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
81)	s	Benzo[b]fluoranth	0.969	0.924	0.918	0.986	0.983	1.068	0.996	7.50
82)	t	Benzo[b]fluoranth	1.418	1.422	1.393	1.549	1.669	1.697	1.563	10.22
83)	A1	Benzo[k]fluoranth	1.480	1.491	1.493	1.648	1.660	1.784	1.626	8.84
84)	A2	Benzo[a]fluoranth	1.480	1.491	1.493	1.648	1.660	1.784	1.626	8.84
85)	t	Benzo[e]pyrene	1.485	1.397	1.391	1.486	1.545	1.612	1.513	7.04
86)	t	Benzo[a]pyrene	1.466	1.285	1.334	1.465	1.548	1.653	1.497	10.74
87)	t	Perylene	1.379	1.273	1.291	1.429	1.534	1.635	1.464	11.40
88)	t	Indeno[1,2,3-cd]p	1.247	1.127	1.118	1.193	1.272	1.557✓	1.318	17.23
89)	t	Dibenz[a,h]anthra	1.125	1.151	1.154	1.329	1.414	1.571	1.343	15.97
90)	t	Benzo[g,h,i]peryl	1.423	1.378	1.339	1.491	1.574	1.679	1.518	10.10
91)	A1	17a(H),21B(H)-hop	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
92)	A2	Hopane (T19)	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
93)	A2	C23 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
94)	A2	C24 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
95)	A2	C25 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
96)	A2	C24 Tetracyclic T	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
97)	A2	C26 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
98)	A2	C26 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
99)	A2	C28 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
100)	A2	C28 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
101)	A2	C29 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
102)	A2	C29 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
103)	A2	18a-22,29,30-Tris	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
104)	A2	C30 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
105)	A2	C30 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
106)	A2	17a(H)-22,29,30-T	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
107)	A2	17a/b,21b/a 28,30	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
108)	A2	17a(H),21b(H)-25-	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
109)	A2	30-Norhopane (T15	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
110)	A2	18a(H)-30-Norneoh	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
111)	A2	17a(H)-Diahopane	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
112)	A2	30-Normoretane (T	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
113)	A2	18a(H)&18b(H)-Ole	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
114)	A2	Moretane (T20)	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66

RF checked CV 1/11/06

Response Factor Report PAH-1

Method Path : O:\FORENSICS\METHODS\PAH1\JAN2006\
Method File : PAH10104.M
Title : Decalins & Alkylated PAH's
Last Update : Thu Jan 05 07:03:26 2006
Response Via : Initial Calibration

Calibration Files
10 =P17274.D 25 =P17276.D 100 =P17278.D
500 =P17280.D 1250=P17282.D 5000=P17284.D 10000= P17286 GT 1/11/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
115)	A2	30-Homohopane-22S	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
116)	A2	30-Homohopane-22R	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
117)	A2	30,31-Bishomohopa	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
118)	A2	30,31-Bishomohopa	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
119)	A2	30,31-Trishomohop	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
120)	A2	30,31-Trishomohop	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
121)	A2	Tetrakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
122)	A2	Tetrakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
123)	A2	Pentakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
124)	A2	Pentakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
125)	SA1	5B(H)Cholane - Su	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
126)	A2	13b(H),17a(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
127)	A2	13b(H),17a(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
128)	A2	13b,17a-20S-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
129)	A2	14a(H),17a(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
130)	A2	14a(H),17a(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
131)	A2	13b,17a-20R-Ethyl	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
132)	A2	13a,17b-20S-Ethyl	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
133)	A2	14a,17a-20S-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
134)	A2	14a,17a-20R-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
135)	A2	14a(H),17a(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
136)	A2	14a(H),17a(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
137)	A2	14b(H),17b(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
138)	A2	14b(H),17b(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
139)	A2	14b,17b-20R-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
140)	A2	14b,17b-20S-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
141)	A2	14b(H),17b(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
142)	A2	14b(H),17b(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17274.D
Acq On : 4 Jan 2006 4:29 pm
Operator : AC
Sample : I1010401
Misc : L1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 06:52:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

CM 1-5-06

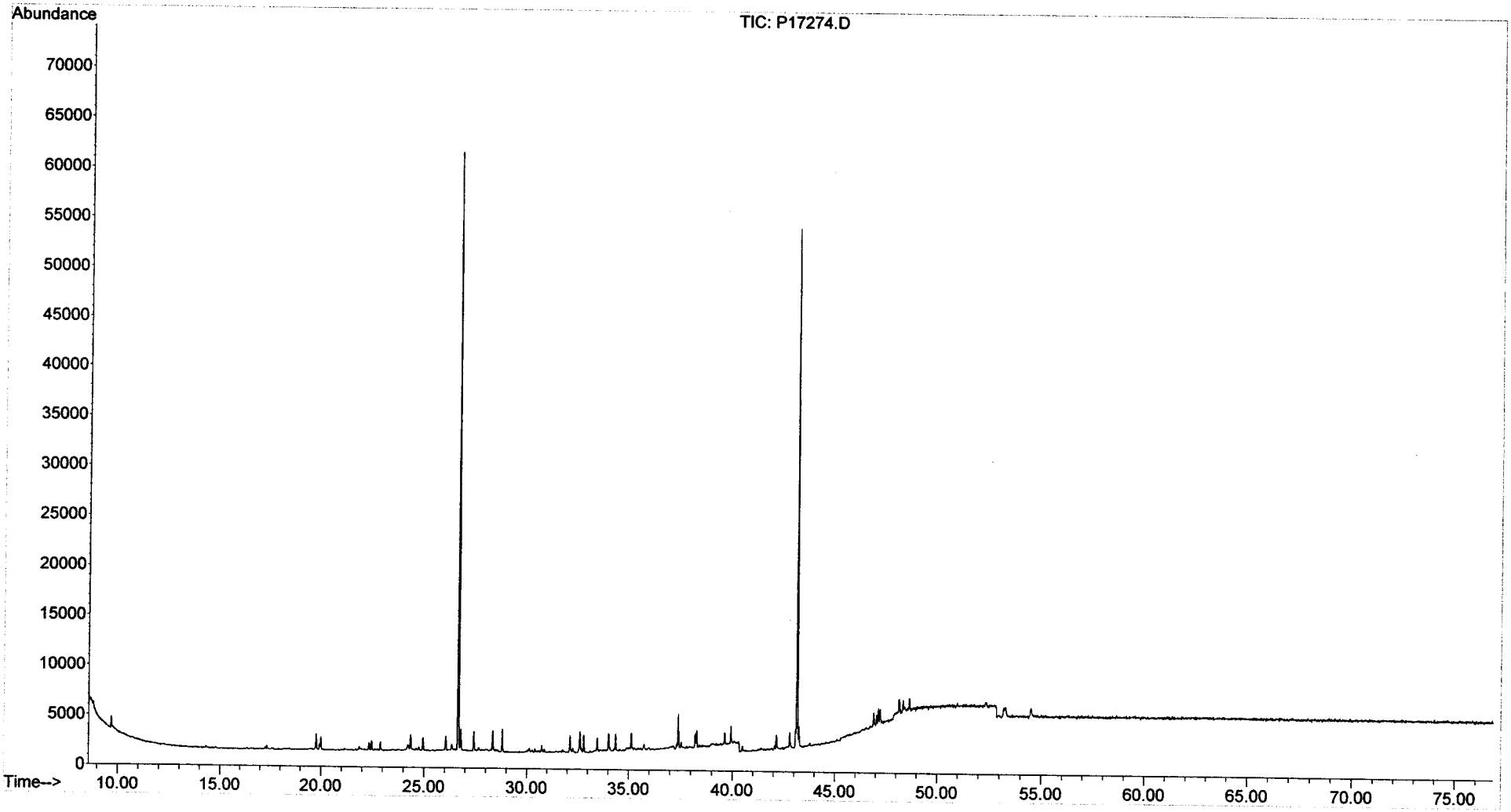
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	68772	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	102778	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	1457	9.82	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.98%#	
58) Pyrene-d10	38.22	212	2855	9.41	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.94%#	
81) Benzo[b]fluoranthene-d12	47.05	264	1991	9.85	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.98%#	
125) 5B(H)Cholane - Surr	43.78	217	398m	9.83	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.98%#	

Target Compounds						Qvalue
2) Decalin	16.36	138	542m	10.25	ng/mL	
3) trans-Decalin	16.36	138	302m	5.05	ng/mL	
4) cis-Decalin	17.58	138	220m	4.87	ng/mL	
9) Naphthalene	19.77	128	3513	9.79	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	2139	9.37	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	2017	9.33	ng/mL#	100
17) Benzothiophene	19.99	134	3114	9.78	ng/mL	100
22) Biphenyl	24.35	154	2750m	9.80	ng/mL	
23) 2,6-Dimethylnaphthalene	24.96	156	1759m	9.26	ng/mL	
24) Dibenzofuran	27.43	168	3012	9.42	ng/mL#	88
25) Acenaphthylene	26.05	152	3163	9.06	ng/mL#	100
26) Acenaphthene	26.79	153	2064	9.65	ng/mL	96
27) 2,3,5-Trimethylnaphthalene	28.35	170	1656	9.76	ng/mL	99
28) Fluorene	28.81	166	2317	9.58	ng/mL	97
32) Dibenzothiophene	32.13	184	3365	9.53	ng/mL#	75
41) Phenanthrene	32.62	178	3468	9.84	ng/mL#	58
52) Retene	39.63	234	712m	9.65	ng/mL	
53) Anthracene	32.81	178	3063m	9.13	ng/mL	
54) Carbazole	33.48	167	2671	8.55	ng/mL#	64
55) 1-Methylphenanthrene	35.14	192	2299	9.48	ng/mL	98
56) Fluoranthene	37.40	202	3507	9.21	ng/mL#	67
57) Benzo(b)fluorene	39.93	216	1944	8.68	ng/mL	99
59) Pyrene	38.28	202	3639	9.31	ng/mL#	64
64) Naphthobenzothiophene	42.15	234	3328	9.23	ng/ml#	74
65) Naphthobenzothiophene-2,1-	42.15	234	3328	9.23	ng/mL#	74
73) Benz[a]anthracene	43.08	228	2908	9.03	ng/mL#	48
74) Chrysene	43.24	228	3120	9.49	ng/mL#	45
75) Chrysene/Triphenylene	43.24	228	3120	9.49	ng/mL#	45
82) Benzo[b]fluoranthene	47.14	252	2914m	8.49	ng/mL	
83) Benzo[k]fluoranthene	47.23	252	3043	8.92	ng/mL#	54
85) Benzo[e]pyrene	48.14	252	3052	9.61	ng/mL#	69
86) Benzo[a]pyrene	48.34	252	3014	9.47	ng/mL#	54
87) Perylene	48.65	252	2835	8.99	ng/mL#	55
88) Indeno[1,2,3-cd]pyrene	53.21	276	2564m	9.14	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	2313	7.96	ng/mL#	55
90) Benzo[g,h,i]perylene	54.52	276	2926	9.04	ng/mL#	52
91) 17a(H),21B(H)-hopane - C30	52.37	191	1147m	13.07	ng/mL	
92) Hopane (T19)	52.37	191	1147m	13.07	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17274.D
Acq On : 4 Jan 2006 4:29 pm
Operator : AC
Sample : I1010401
Misc : L1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 06:52:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17276.D
Acq On : 4 Jan 2006 6:04 pm
Operator : AC
Sample : I1010402
Misc : L2
ALS Vial : 5 Sample Multiplier: 1

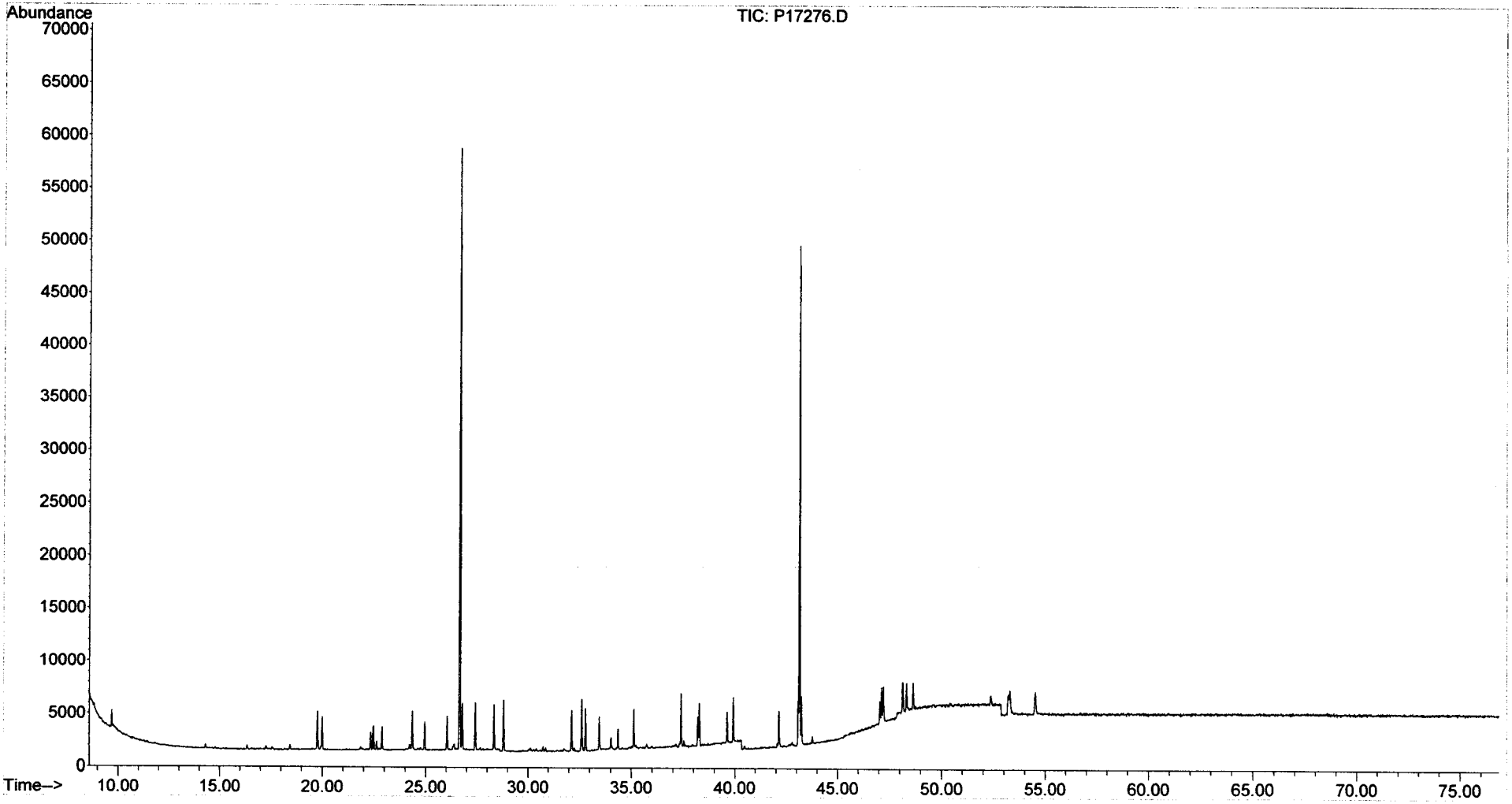
Quant Time: Jan 05 06:54:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M MS 1-5-06
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	65919	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	96617	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	3522	24.76	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.48%#			
58) Pyrene-d10	38.22	212	6640	22.83	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.28%#			
81) Benzo[b]fluoranthene-d12	47.05	264	4463	23.49	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.35%#			
125) 5B(H)Cholane - Surr	43.78	217	869m	22.82	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.28%#			
Target Compounds						Qvalue
2) Decalin	16.36	138	1436m	28.34	ng/mL	
3) trans-Decalin	16.36	138	733m	12.78	ng/mL	
4) cis-Decalin	17.58	138	551m	12.73	ng/mL	
9) Naphthalene	19.77	128	8284	24.08	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	5157	23.57	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	4851	23.41	ng/mL#	100
17) Benzothiophene	19.99	134	7506	24.60	ng/mL	100
22) Biphenyl	24.35	154	6498m	24.16	ng/mL	
23) 2,6-Dimethylnaphthalene	24.96	156	4266	23.43	ng/mL#	100
24) Dibenzofuran	27.43	168	7199	23.49	ng/mL#	92
25) Acenaphthylene	26.05	152	7625	22.78	ng/mL#	100
26) Acenaphthene	26.79	153	4784	23.33	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.35	170	3721	22.88	ng/mL	97
28) Fluorene	28.81	166	5259m	22.68	ng/mL	
32) Dibenzothiophene	32.13	184	8013	23.67	ng/mL#	75
41) Phenanthrene	32.62	178	8192	24.24	ng/mL	100
52) Retene	39.63	234	1542	21.80	ng/mL	99
53) Anthracene	32.80	178	7241m	22.52	ng/mL	
54) Carbazole	33.46	167	6454	21.55	ng/mL	96
55) 1-Methylphenanthrene	35.14	192	5357	23.05	ng/mL	97
56) Fluoranthene	37.40	202	8320	22.78	ng/mL	98
57) Benzo(b)fluorene	39.93	216	4543	21.17	ng/mL	99
59) Pyrene	38.28	202	8272	22.08	ng/mL	98
64) Naphthobenzothiophene	42.15	234	7579	21.92	ng/ml#	74
65) Naphthobenzothiophene-2,1-	42.15	234	7579	21.92	ng/mL#	74
73) Benz[a]anthracene	43.08	228	6774m	22.37	ng/mL	
74) Chrysene	43.24	228	7181	23.23	ng/mL	98
75) Chrysene/Triphenylene	43.24	228	7181	23.23	ng/mL	98
82) Benzo[b]fluoranthene	47.14	252	6868	21.29	ng/mL	94
83) Benzo[k]fluoranthene	47.23	252	7205	22.46	ng/mL	99
85) Benzo[e]pyrene	48.16	252	6748m	22.60	ng/mL	
86) Benzo[a]pyrene	48.34	252	6206m	20.75	ng/mL	
87) Perylene	48.65	252	6150m	20.75	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.20	276	5445m	20.65	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	5560	20.34	ng/mL#	80
90) Benzo[g,h,i]perylene	54.51	276	6658	21.89	ng/mL	97
91) 17a(H),21B(H)-hopane - C30	52.37	191	2111m	25.59	ng/mL	
92) Hopane (T19)	52.37	191	2111m	25.59	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17276.D
Acq On : 4 Jan 2006 6:04 pm
Operator : AC
Sample : I1010402
Misc : L2
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 06:54:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17278.D
Acq On : 4 Jan 2006 7:40 pm
Operator : AC
Sample : I1010403
Misc : L3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 06:55:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

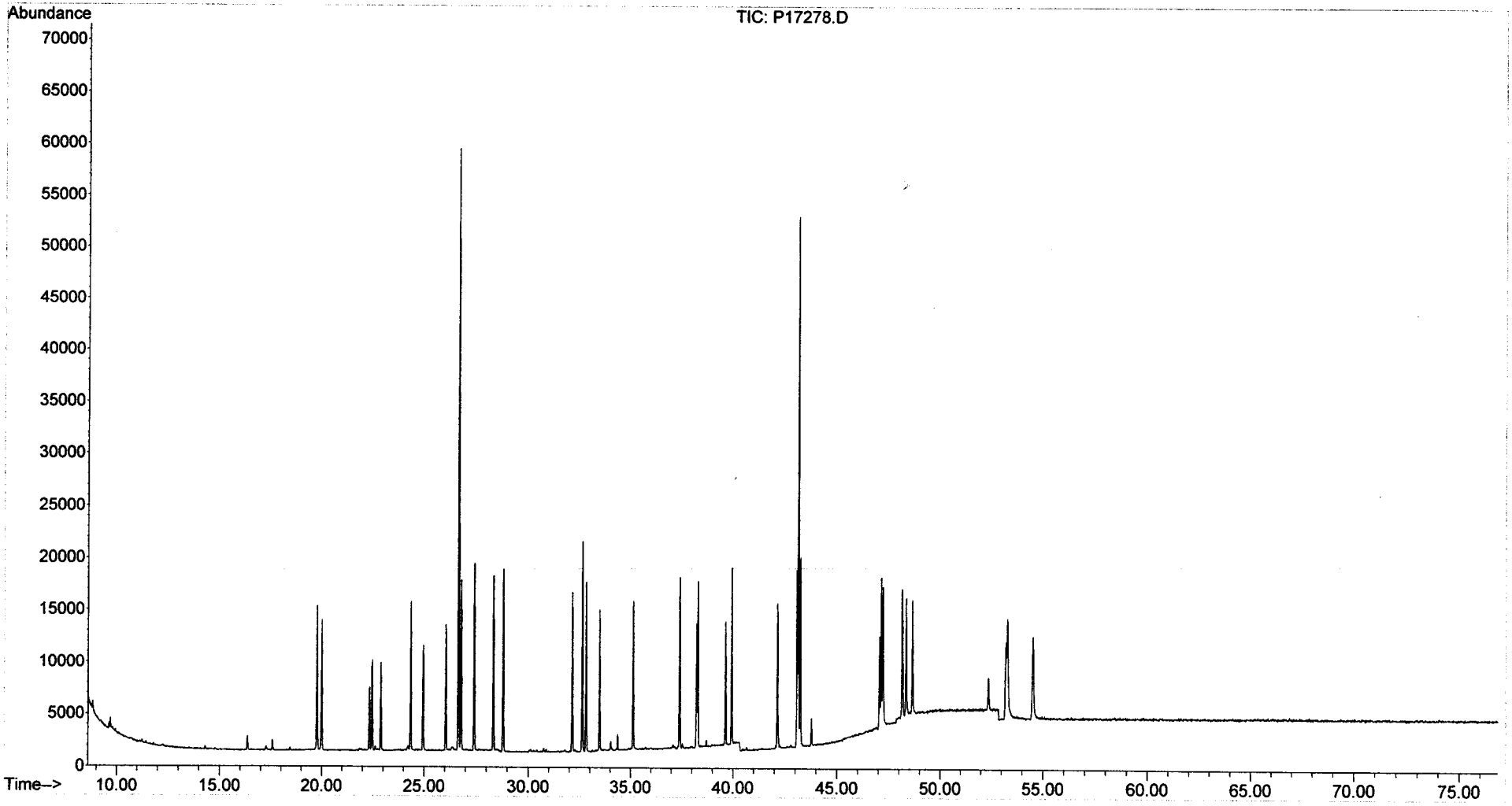
MS 1-5-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	66392	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	99377	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	13633	95.16	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.52%#			
58) Pyrene-d10	38.22	212	26851	91.65	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.17%#			
81) Benzo[b]fluoranthene-d12	47.05	264	18252	93.41	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.34%#			
125) 5B(H)Cholane - Surr	43.78	217	3545	90.52	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.05%#			
Target Compounds						Qvalue
2) Decalin	16.36	138	5359m	104.99	ng/mL	
3) trans-Decalin	16.36	138	2827	48.93	ng/mL	100
4) cis-Decalin	17.58	138	2185	50.11	ng/mL	100
9) Naphthalene	19.77	128	33020	95.29	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	20778	94.27	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	19684	94.33	ng/mL#	100
17) Benzothiophene	19.99	134	29580	96.25	ng/mL	100
22) Biphenyl	24.35	154	26020	96.07	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	16937	92.34	ng/mL#	100
24) Dibenzofuran	27.43	168	28998	93.94	ng/mL	99
25) Acenaphthylene	26.05	152	29916	88.73	ng/mL#	100
26) Acenaphthene	26.79	153	19123	92.59	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	14656	89.47	ng/mL	99
28) Fluorene	28.81	166	21112	90.42	ng/mL	100
32) Dibenzothiophene	32.13	184	31693	92.95	ng/mL	100
41) Phenanthrene	32.62	178	31372	92.16	ng/mL	100
52) Retene	39.63	234	6199	87.01	ng/mL	100
53) Anthracene	32.81	178	28438m	87.83	ng/mL	
54) Carbazole	33.46	167	26632	88.28	ng/mL	100
55) 1-Methylphenanthrene	35.14	192	21352	91.21	ng/mL	99
56) Fluoranthene	37.40	202	32720	88.97	ng/mL	100
57) Benzo(b)fluorene	39.93	216	17994	83.25	ng/mL	99
59) Pyrene	38.28	202	33413	88.55	ng/mL	99
64) Naphthobenzothiophene	42.15	234	30819	88.51	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.15	234	30819	88.51	ng/mL	99
73) Benz[a]anthracene	43.08	228	28302	90.86	ng/mL	99
74) Chrysene	43.24	228	29039	91.35	ng/mL	99
75) Chrysene/Triphenylene	43.24	228	29039	91.35	ng/mL	99
82) Benzo[b]fluoranthene	47.14	252	27689	83.45	ng/mL	96
83) Benzo[k]fluoranthene	47.23	252	29668	89.93	ng/mL	97
85) Benzo[e]pyrene	48.14	252	27649	90.04	ng/mL	97
86) Benzo[a]pyrene	48.34	252	26521	86.19	ng/mL	93
87) Perylene	48.65	252	25658	84.16	ng/mL	95
88) Indeno[1,2,3-cd]pyrene	53.20	276	22228m	81.97	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	22944	81.62	ng/mL	97
90) Benzo[g,h,i]perylene	54.51	276	26619	85.08	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.36	191	8792	103.62	ng/mL#	76
92) Hopane (T19)	52.36	191	8792	103.62	ng/mL#	76

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17278.D
Acq On : 4 Jan 2006 7:40 pm
Operator : AC
Sample : I1010403
Misc : L3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 06:55:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17280.D
Acq On : 4 Jan 2006 9:15 pm
Operator : AC
Sample : I1010404
Misc : L4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 06:56:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:30:56 2006
Response via : Initial Calibration

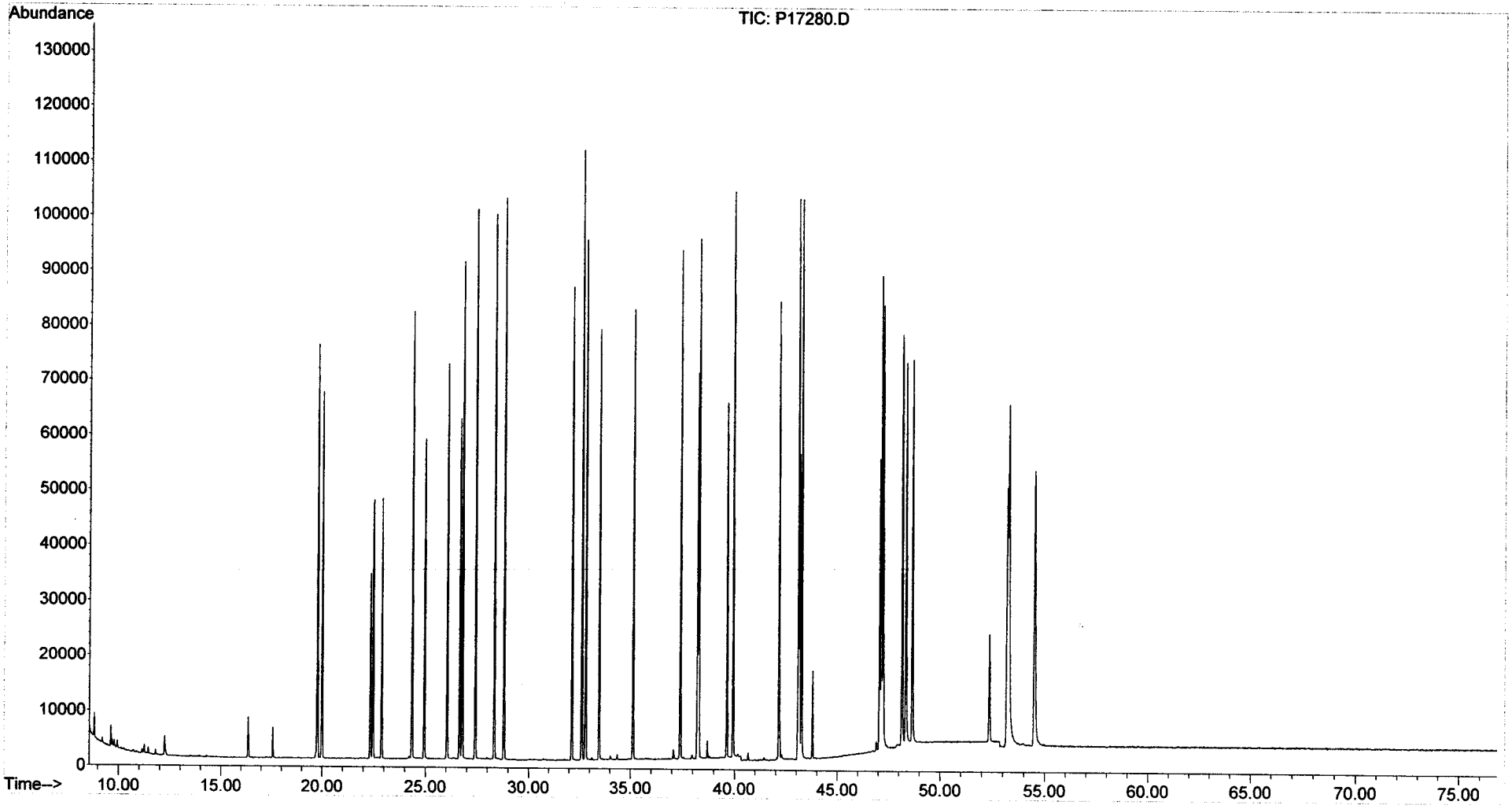
CMS 1-5-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	71275	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	108818	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	74947	496.76	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 49.68%#						
58) Pyrene-d10	38.22	212	155412	524.21	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 52.42%						
81) Benzo[b]fluoranthene-d12	47.05	264	107268	519.66	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 51.97%						
125) 5B(H)Cholane - Surr	43.78	217	20558	504.53	ng/ml	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 50.45%						
Target Compounds						Qvalue
2) Decalin	16.36	138	26230m	454.97	ng/mL	
3) trans-Decalin	16.36	138	14929	240.09	ng/mL	100
4) cis-Decalin	17.58	138	11255	240.77	ng/mL	100
9) Naphthalene	19.77	128	181202	500.27	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	113851	503.54	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	107080	501.44	ng/mL#	100
17) Benzothiophene	19.99	134	161214	498.02	ng/mL	100
22) Biphenyl	24.35	154	141241	497.26	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	93790	503.21	ng/mL#	100
24) Dibenzofuran	27.43	168	158411	500.43	ng/mL	100
25) Acenaphthylene	26.05	152	171655	512.13	ng/mL#	100
26) Acenaphthene	26.79	153	106287	501.45	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	83048	498.97	ng/mL	100
28) Fluorene	28.81	166	118094	499.92	ng/mL	100
32) Dibenzothiophene	32.13	184	175502	500.86	ng/mL	100
41) Phenanthrene	32.62	178	175996	497.18	ng/mL	100
52) Retene	39.63	234	35891	506.37	ng/mL	99
53) Anthracene	32.81	178	162649m	506.89	ng/mL	
54) Carbazole	33.46	167	154616	530.54	ng/mL	100
55) 1-Methylphenanthrene	35.14	192	120214	505.89	ng/mL	99
56) Fluoranthene	37.40	202	187873	511.43	ng/mL	99
57) Benzo(b)fluorene	39.93	216	108641	527.92	ng/mL	100
59) Pyrene	38.28	202	192465	513.68	ng/mL	100
64) Naphthobenzothiophene	42.15	234	177719	516.11	ng/ml	100
65) Naphthobenzothiophene-2,1-	42.15	234	177719	516.11	ng/mL	100
73) Benz[a]anthracene	43.08	228	162619	514.60	ng/mL	99
74) Chrysene	43.24	228	166989	506.06	ng/mL	100
75) Chrysene/Triphenylene	43.24	228	166989	506.06	ng/mL	100
82) Benzo[b]fluoranthene	47.14	252	168523	524.81	ng/mL	100
83) Benzo[k]fluoranthene	47.23	252	179341	538.20	ng/mL	100
85) Benzo[e]pyrene	48.14	252	161659	510.72	ng/mL	99
86) Benzo[a]pyrene	48.34	252	159386	520.00	ng/mL	100
87) Perylene	48.65	252	155452m	521.64	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.20	276	129799m	492.93	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	144587	548.50	ng/mL	99
90) Benzo[g,h,i]perylene	54.51	276	162269	521.85	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	46281	452.27	ng/mL	99
92) Hopane (T19)	52.36	191	46281	452.62	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17280.D
Acq On : 4 Jan 2006 9:15 pm
Operator : AC
Sample : I1010404
Misc : L4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 06:56:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:30:56 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17282.D
Acq On : 4 Jan 2006 10:50 pm
Operator : AC
Sample : I1010405
Misc : L5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 06:58:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:11:09 2006
Response via : Initial Calibration

MS 1-5-06

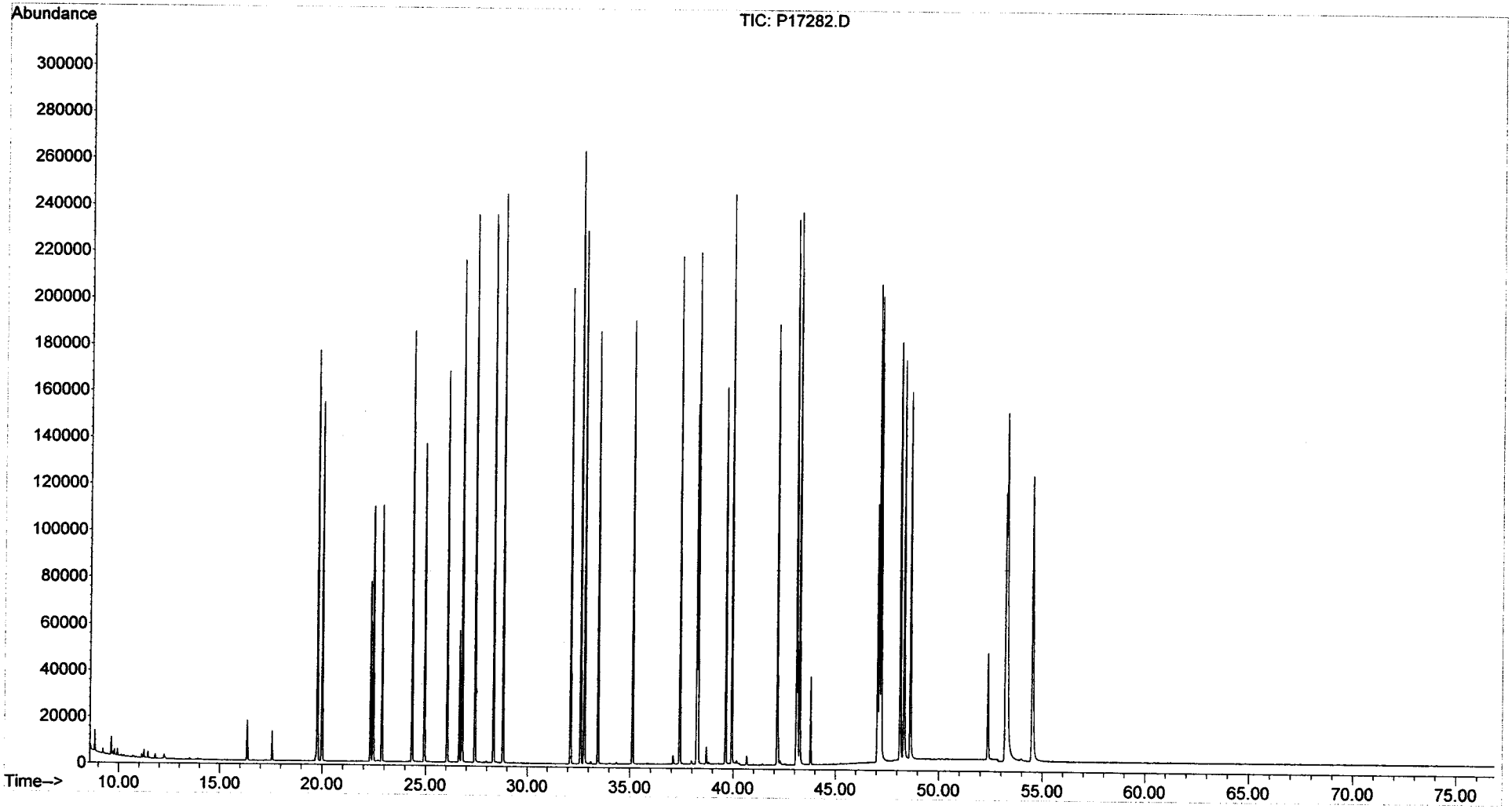
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	63436	500.00 ng/mL	0.00
72) Chrysene-d12	43.14	240	97535	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	171111	1266.33 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 126.63%		
58) Pyrene-d10	38.22	212	349927	1118.11 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 111.81%		
81) Benzo[b]fluoranthene-d12	47.05	264	239709	1282.65 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 128.27%		
125) 5B(H)Cholane - Surr	43.78	217	48045	1200.51 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 120.05%		

Target Compounds					Qvalue
2) Decalin	16.36	138	60963m	1237.90 ng/mL	
3) trans-Decalin	16.36	138	34499	656.48 ng/mL	100
4) cis-Decalin	17.58	138	26038	681.25 ng/mL	100
9) Naphthalene	19.77	128	413849	1486.68 ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	263234	1413.70 ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	249223	1396.07 ng/mL#	100
17) Benzothiophene	19.99	134	367033	1587.74 ng/mL	100
22) Biphenyl	24.35	154	323478	1369.67 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	219055	1364.05 ng/mL#	100
24) Dibenzofuran	27.43	168	368661	1360.67 ng/mL	99
25) Acenaphthylene	26.05	152	402699	1434.84 ng/mL#	100
26) Acenaphthene	26.79	153	246674	1404.11 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.35	170	195648	1301.33 ng/mL	98
28) Fluorene	28.81	166	278871	1378.56 ng/mL	99
32) Dibenzothiophene	32.13	184	407250	1379.15 ng/mL	97
41) Phenanthrene	32.62	178	406544	1319.60 ng/mL	100
52) Retene	39.63	234	85089	1165.62 ng/mL	100
53) Anthracene	32.81	178	386697m	1385.76 ng/mL	
54) Carbazole	33.46	167	360312	1466.50 ng/mL	100
55) 1-Methylphenanthrene	35.14	192	279607	1288.50 ng/mL	100
56) Fluoranthene	37.40	202	439252	1291.16 ng/mL#	91
57) Benzo(b)fluorene	39.93	216	258137	1307.54 ng/mL	99
59) Pyrene	38.28	202	450682	1300.19 ng/mL#	87
64) Naphthobenzothiophene	42.15	234	415859	1320.50 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.15	234	415859	1320.50 ng/mL	99
73) Benz[a]anthracene	43.08	228	382138	1444.75 ng/mL	100
74) Chrysene	43.24	228	390005	1443.10 ng/mL	99
75) Chrysene/Triphenylene	43.24	228	390005	1443.10 ng/mL	99
82) Benzo[b]fluoranthene	47.14	252	407057	1490.87 ng/mL#	89
83) Benzo[k]fluoranthene	47.23	252	404748	1520.92 ng/mL#	88
85) Benzo[e]pyrene	48.16	252	376712	1432.43 ng/mL#	85
86) Benzo[a]pyrene	48.34	252	377493m	1511.86 ng/mL	
87) Perylene	48.65	252	374032	1521.84 ng/mL#	83
88) Indeno[1,2,3-cd]pyrene	53.20	276	310220m	1416.85 ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	344868	1576.15 ng/mL#	92
90) Benzo[g,h,i]perylene	54.52	276	383819	1566.79 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	102270m	1196.99 ng/mL	
92) Hopane (T19)	52.36	191	102318m	1197.55 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17282.D
Acq On : 4 Jan 2006 10:50 pm
Operator : AC
Sample : I1010405
Misc : L5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 06:58:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:11:09 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17284.D
Acq On : 5 Jan 2006 12:26 am
Operator : AC
Sample : I1010406
Misc : L6
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 06:40:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:35:34 2006
Response via : Initial Calibration

MS 1-5-06

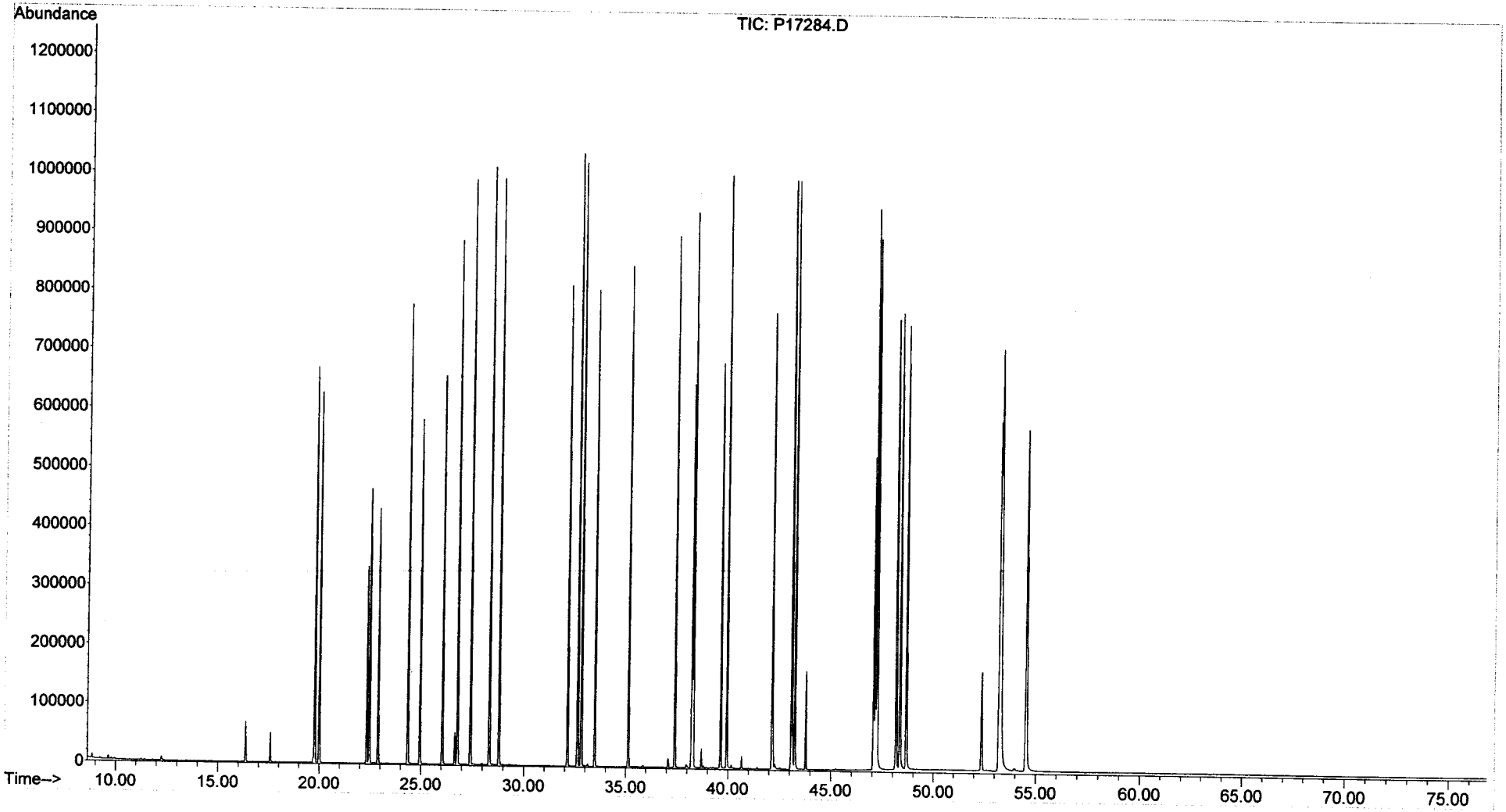
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	62439	500.00 ng/mL	0.00
72) Chrysene-d12	43.15	240	101542	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	705944	5348.16 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 534.82%#		
58) Pyrene-d10	38.22	212	1518835	5792.03 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 579.20%#		
81) Benzo[b]fluoranthene-d12	47.07	264	1084005	5583.86 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 558.39%#		
125) 5B(H)Cholane - Surr	43.78	217	217417	5707.76 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 570.78%#		

Target Compounds					Qvalue
2) Decalin	16.36	138	239149m	4822.02 ng/mL	
3) trans-Decalin	16.36	138	136458	2525.13 ng/mL	100
4) cis-Decalin	17.58	138	102583	2523.64 ng/mL	100
9) Naphthalene	19.77	128	1628939	5133.07 ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	1064587	5367.20 ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	992011	5299.78 ng/mL#	100
17) Benzothiophene	19.99	134	1451976	5124.25 ng/mL	100
22) Biphenyl	24.35	154	1293365	5203.60 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	886644	5423.33 ng/mL#	100
24) Dibenzofuran	27.43	168	1470635	5302.36 ng/mL	100
25) Acenaphthylene	26.06	152	1661396	5630.84 ng/mL#	100
26) Acenaphthene	26.79	153	1001896	5392.60 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.35	170	805368	5525.83 ng/mL	99
28) Fluorene	28.81	166	1141408	5515.83 ng/mL	100
32) Dibenzothiophene	32.13	184	1653968	5386.32 ng/mL	100
41) Phenanthrene	32.62	178	1644272	5308.33 ng/mL	100
52) Retene	39.63	234	369364	5933.54 ng/mL	100
53) Anthracene	32.81	178	1589145m	5637.84 ng/mL	
54) Carbazole	33.48	167	1501779	5811.33 ng/mL	100
55) 1-Methylphenanthrene	35.14	192	1166892	5592.33 ng/mL	100
56) Fluoranthene	37.40	202	1832130m	5667.32 ng/mL	
57) Benzo(b)fluorene	39.94	216	1134172	6221.73 ng/mL	100
59) Pyrene	38.30	202	1852431	5613.00 ng/mL	99
64) Naphthobenzothiophene	42.16	234	1776519	5851.58 ng/ml	100
65) Naphthobenzothiophene-2,1-	42.16	234	1776496	5851.51 ng/mL	100
73) Benz[a]anthracene	43.09	228	1669392	5628.35 ng/mL	99
74) Chrysene	43.25	228	1638682	5308.97 ng/mL	100
75) Chrysene/Triphenylene	43.25	228	1639339	5311.10 ng/mL	100
82) Benzo[b]fluoranthene	47.15	252	1722706	5692.73 ng/mL	100
83) Benzo[k]fluoranthene	47.24	252	1811486	5738.09 ng/mL	100
85) Benzo[e]pyrene	48.17	252	1637175	5519.17 ng/mL	100
86) Benzo[a]pyrene	48.35	252	1678359	5821.51 ng/mL	100
87) Perylene	48.66	252	1660598	5920.41 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.22	276	1580959m	6453.98 ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	1595379	6362.37 ng/mL	100
90) Benzo[g,h,i]perylene	54.55	276	1704807	5824.52 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.37	191	402599	4298.25 ng/mL	99
92) Hopane (T19)	52.37	191	402599	4300.95 ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17284.D
Acq On : 5 Jan 2006 12:26 am
Operator : AC
Sample : I1010406
Misc : L6
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 06:40:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:35:34 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17286.D
Acq On : 5 Jan 2006 2:00 am
Operator : AC
Sample : I1010407
Misc : L7
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 07:00:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:40:19 2006
Response via : Initial Calibration

MS 1-5-06

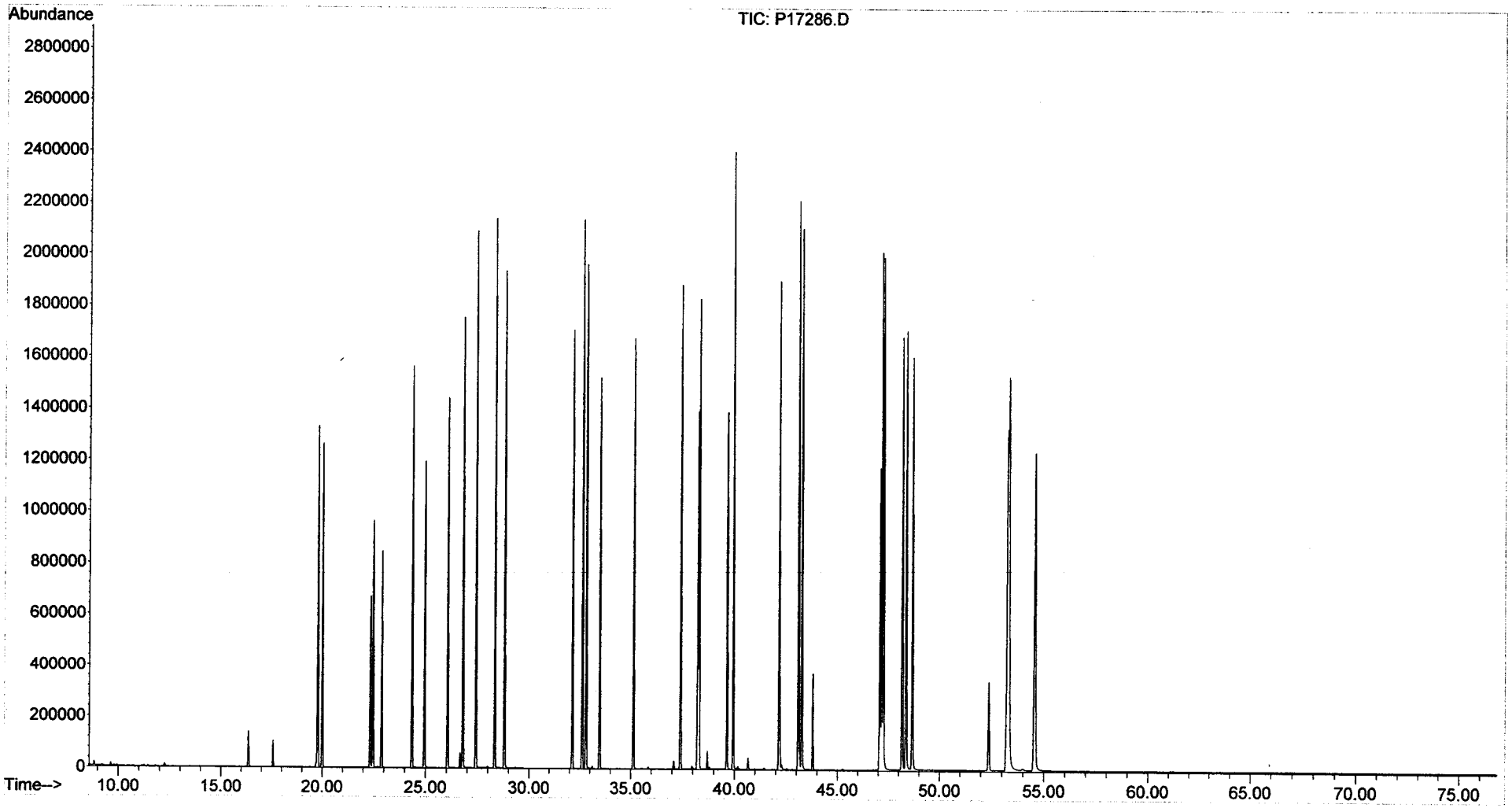
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	65362	500.00 ng/mL	0.00
72) Chrysene-d12	43.15	240	106253	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	1421793	10171.62 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1017.16%#		
58) Pyrene-d10	38.23	212	3261697	11576.49 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1157.65%#		
81) Benzo[b]fluoranthene-d12	47.08	264	2385707	11520.04 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1152.00%#		
125) 5B(H)Cholane - Surr	43.79	217	474573	11631.96 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1163.20%#		

Target Compounds					Qvalue
2) Decalin	16.36	138	485177m	9401.02 ng/mL	
3) trans-Decalin	16.36	138	276285	4875.80 ng/mL	100
4) cis-Decalin	17.58	138	208434	4890.66 ng/mL	100
9) Naphthalene	19.78	128	3345433	10026.13 ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	2181497	10379.31 ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	2051899	10368.36 ng/mL#	100
17) Benzothiophene	19.99	134	2971108	9975.27 ng/mL	100
22) Biphenyl	24.35	154	2673051	10204.30 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	1862705	10732.63 ng/mL#	100
24) Dibenzofuran	27.43	168	3063405	10445.85 ng/mL	100
25) Acenaphthylene	26.06	152	3482207	11041.99 ng/mL#	100
26) Acenaphthene	26.79	153	2094541	10630.38 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	1705543	10986.27 ng/mL	98
28) Fluorene	28.81	166	2386821	10832.19 ng/mL	99
32) Dibenzothiophene	32.14	184	3481728	10693.84 ng/mL	100
41) Phenanthrene	32.64	178	3488197	10648.18 ng/mL	100
52) Retene	39.65	234	807383	12016.04 ng/mL	99
53) Anthracene	32.81	178	3332392m	11058.57 ng/mL	
54) Carbazole	33.48	167	3147812	11329.73 ng/mL	100
55) 1-Methylphenanthrene	35.14	192	2482402	11144.84 ng/mL	99
56) Fluoranthene	37.42	202	3885280m	11231.04 ng/mL	
57) Benzo(b)fluorene	39.94	216	2465221	12413.17 ng/mL	100
59) Pyrene	38.31	202	3910182	11091.64 ng/mL	100
64) Naphthobenzothiophene	42.16	234	3836418	11738.26 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.16	234	3836745	11739.29 ng/mL	99
73) Benz[a]anthracene	43.09	228	3629131	11453.21 ng/mL	100
74) Chrysene	43.26	228	3556151	10898.09 ng/mL	100
75) Chrysene/Triphenylene	43.26	228	3556402	10898.09 ng/mL	100
82) Benzo[b]fluoranthene	47.16	252	3814487	11774.32 ng/mL	100
83) Benzo[k]fluoranthene	47.25	252	3882179	11469.83 ng/mL	99
85) Benzo[e]pyrene	48.17	252	3566344	11294.18 ng/mL	100
86) Benzo[a]pyrene	48.37	252	3677925	11866.57 ng/mL	100
87) Perylene	48.68	252	3622735	11975.80 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.25	276	3632266m	13515.58 ng/mL	
89) Dibenz[a,h]anthracene	53.32	278	3522142	12840.41 ng/mL	100
90) Benzo[g,h,i]perylene	54.57	276	3706058	11776.78 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.37	191	838594	8761.02 ng/mL	100
92) Hopane (T19)	52.37	191	838594	8765.72 ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17286.D
Acq On : 5 Jan 2006 2:00 am
Operator : AC
Sample : I1010407
Misc : L7
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 07:00:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:40:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration

MB 1-5-06

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	107	0.00
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.36#
3	A1	trans-Decalin	0.432	0.000#	100.0#	0#	-16.36#
4	t	cis-Decalin	0.325	0.000#	100.0#	0#	-17.58#
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.29#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.62#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-22.10#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.49#
9	A1	Naphthalene	2.553	2.387	6.5	100	0.00
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.47#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.32#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.66#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.43#
14	s	2-Methylnaphthalene-d10	1.072	1.084	-1.1	110	0.00
15	t	2-Methylnaphthalene	1.617	1.475	8.8	99	0.00
16	t	1-Methylnaphthalene	1.522	1.465	3.7	104	0.00
17	A1	Benzothiophene	2.278	0.000#	100.0#	0#	-19.99#
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-22.03#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.51#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.48#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.25#
22	t	Biphenyl	2.010	1.938	3.6	104	0.00
23	t	2,6-Dimethylnaphthalene	1.342	1.321	1.6	107	0.00
24	t	Dibenzofuran	2.258	2.216	1.9	106	0.00
25	t	Acenaphthylene	2.448	2.311	5.6	102	0.00
26	t	Acenaphthene	1.521	1.451	4.6	104	0.00
27	t	2,3,5-Trimethylnaphthalene	1.204	1.207	-0.2	110	0.00
28	A1	Fluorene	1.706	1.559	8.6	100	0.00
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.19#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.38#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.21#
32	A1	Dibenzothiophene	2.515	0.000#	100.0#	0#	-32.13#
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.91#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.26#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.68#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.34#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.92#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.61#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.42#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.31#
41	A1	Phenanthrene	2.529	2.268	10.3	98	0.00
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.59#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.70#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.86#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-35.05#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-35.15#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-35.05#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.87#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.65#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.72#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 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	2.529	0.000#	100.0#	0#	-40.91#
52	T	Retene	0.529	0.000#	100.0#	0#	-39.63#
53	t	Anthracene	2.340	2.177	7.0	102	0.00
54	t	Carbazole	2.166	0.000#	100.0#	0#	-33.46#
55	t	1-Methylphenanthrene	1.732	1.711	1.2	108	0.00
56	A1	Fluoranthene	2.693	2.448	9.1	99	0.00
57	T	Benzo(b)fluorene	1.572	0.000#	100.0#	0#	-39.93#
58	s	Pyrene-d10	2.204	2.214	-0.5	108	0.00
59	A1	Pyrene	2.739	2.608	4.8	103	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.68#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.50#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.52#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.88#
64	A1	Naphthobenzothiophene	2.562	0.000#	100.0#	0#	-42.15#
65	A2	Naphthobenzothiophene-2,1-D	2.562	0.000#	100.0#	0#	-42.15#
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.49#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.79#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.56#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.58#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.19#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.28#
72	i	Chrysene-d12	1.000	1.000	0.0	113	0.00
73	t	Benz[a]anthracene	1.522	1.531	-0.6	116	0.00
74	A1	Chrysene	1.555	1.468	5.6	108	0.00
75	A2	Chrysene/Triphenylene	1.555	1.468	5.6	108	0.00
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.72#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-46.81#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-47.07#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.57#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-49.16#
81	s	Benzo[b]fluoranthene-d12	0.996	1.108	-11.2	127	0.00
82	t	Benzo[b]fluoranthene	1.563	1.580	-1.1	115	0.00
83	A1	Benzo[k]fluoranthene	1.626	1.654	-1.7	114	0.00
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.58#
85	t	Benzo[e]pyrene	1.513	1.559	-3.0	119	0.00
86	t	Benzo[a]pyrene	1.497	1.467	2.0	113	0.00
87	t	Perylene	1.464	1.608	-9.8	127	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.542	-17.0	146	0.01
89	t	Dibenz[a,h]anthracene	1.343	1.499	-11.6	128	0.00
90	t	Benzo[g,h,i]perylene	1.518	1.591	-4.8	121	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.000#	100.0#	0#	-52.36#
92	A2	Hopane (T19)	0.439	0.000#	100.0#	0#	-52.36#
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.81#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.54#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-43.03#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.35#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-44.09#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.18#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.48#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 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 (	0.439	0.000#	100.0#	0#	-46.64#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-47.18#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.37#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.51#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.61#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.86#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-49.07#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.27#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-50.09#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.97#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-51.08#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-51.22#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.76#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-52.18#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-53.07#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-54.20#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.44#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.80#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-56.20#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.99#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.64#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.72#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.63#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.95#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-65.28#
125	SA1	5B(H)Cholane - Surr	0.196	0.202	-3.1	121	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.31#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.74#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.43#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.31#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.83#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.13#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.39#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.55#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.28#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.63#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.57#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.40#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.49#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.73#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.81#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.89#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.94#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration

MS 1/5/06

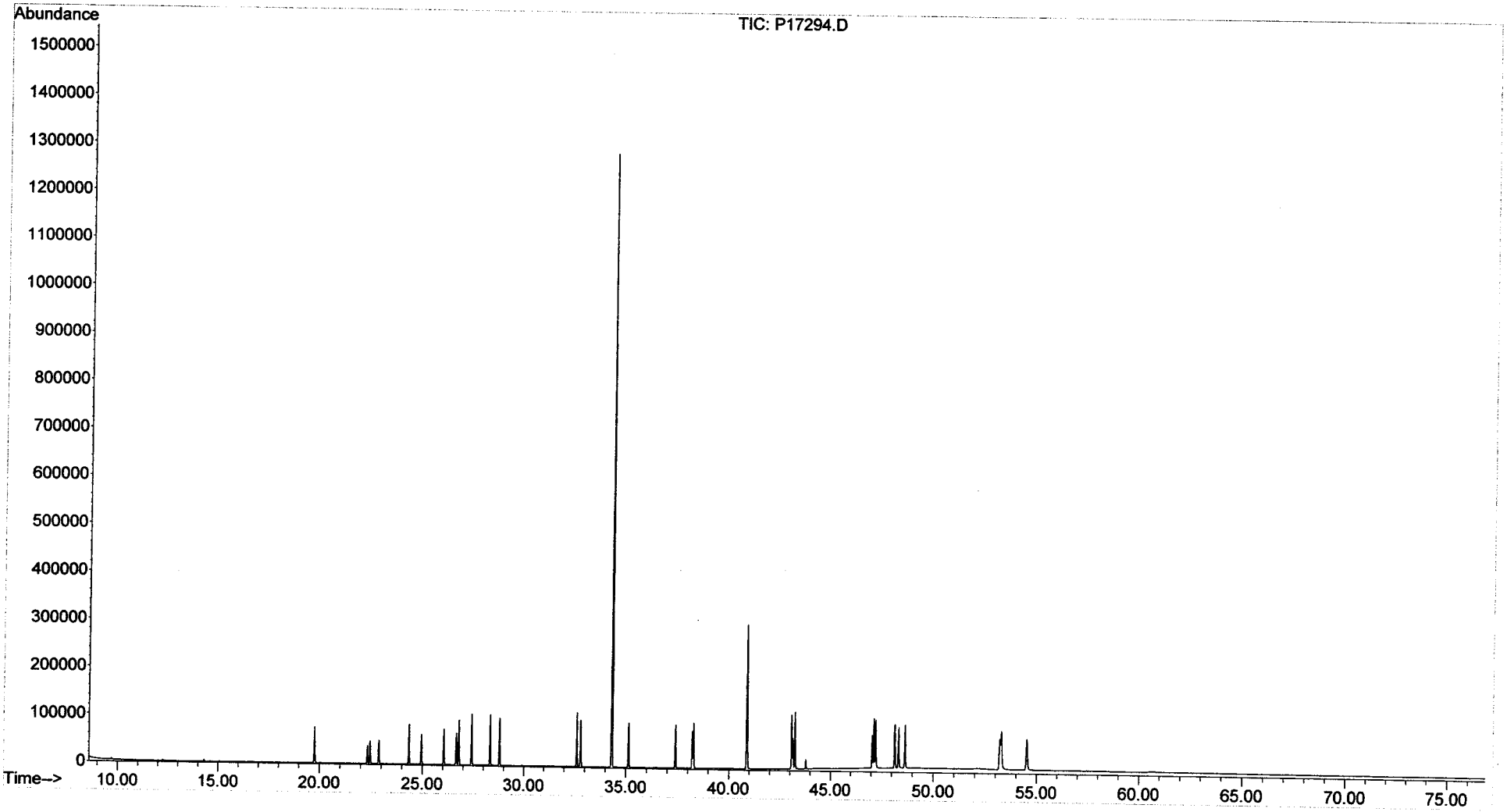
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	76009	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	123105	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	82356	505.41	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.54%			
58) Pyrene-d10	38.22	212	168248	502.19	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.22%			
81) Benzo[b]fluoranthene-d12	47.05	264	136420	556.48	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.65%			
125) 5B(H)Cholane - Surr	43.78	217	24889	514.53	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.45%			
Target Compounds						Qvalue
9) Naphthalene	19.77	128	181434	467.41	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	112145	456.36	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	111328	481.22	ng/mL#	100
22) Biphenyl	24.35	154	147302	482.15	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	100381	492.21	ng/mL#	100
24) Dibenzofuran	27.43	168	168442	490.79	ng/mL	98
25) Acenaphthylene	26.05	152	175623	471.86	ng/mL#	100
26) Acenaphthene	26.79	153	110286	477.03	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	91737	501.09	ng/mL	99
28) Fluorene	28.81	166	118511	457.07	ng/mL	100
41) Phenanthrene	32.62	178	172384	448.36	ng/mL	100
53) Anthracene	32.81	178	165450	465.11	ng/mL	100
55) 1-Methylphenanthrene	35.14	192	130049	494.00	ng/mL	99
56) Fluoranthene	37.40	202	186103	454.61	ng/mL	100
59) Pyrene	38.28	202	198222	476.09	ng/mL	100
73) Benz[a]anthracene	43.08	228	188511	503.04	ng/mL	99
74) Chrysene	43.24	228	180758	472.06	ng/mL	99
75) Chrysene/Triphenylene	43.24	228	180758	472.06	ng/mL	99
82) Benzo[b]fluoranthene	47.14	252	194457	505.26	ng/mL	99
83) Benzo[k]fluoranthene	47.23	252	203645	508.62	ng/mL	99
85) Benzo[e]pyrene	48.16	252	191976	515.21	ng/mL	100
86) Benzo[a]pyrene	48.34	252	180573	489.79	ng/mL	99
87) Perylene	48.65	252	198010	549.45	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.21	276	189851m	585.17	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	184491	557.88	ng/mL	99
90) Benzo[g,h,i]perylene	54.51	276	195830	523.81	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 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 B10301111.

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.

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

CM 2/3/06

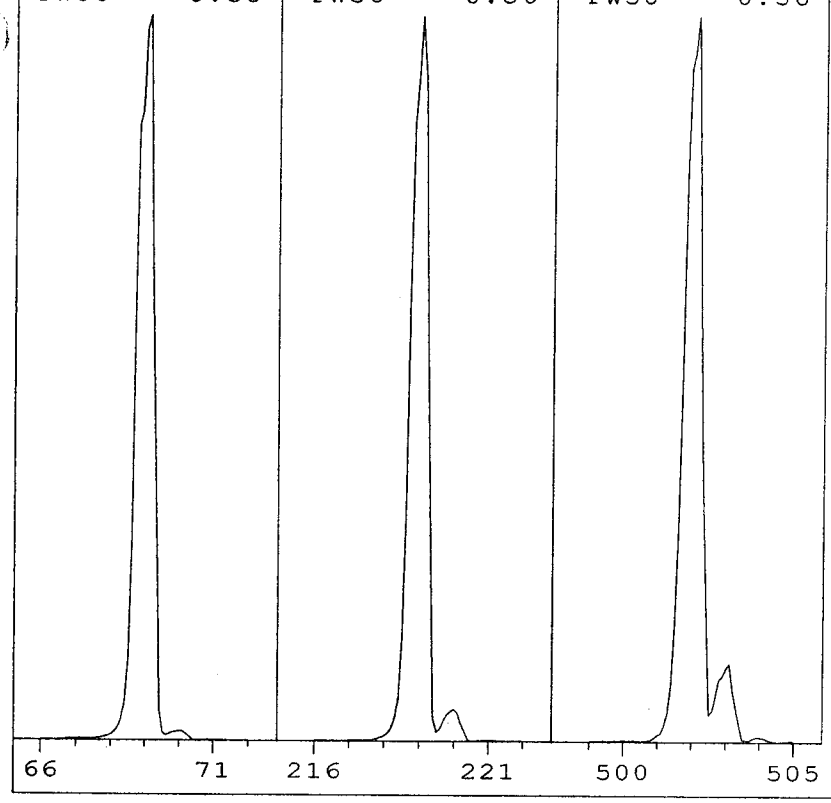
5973

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

11166

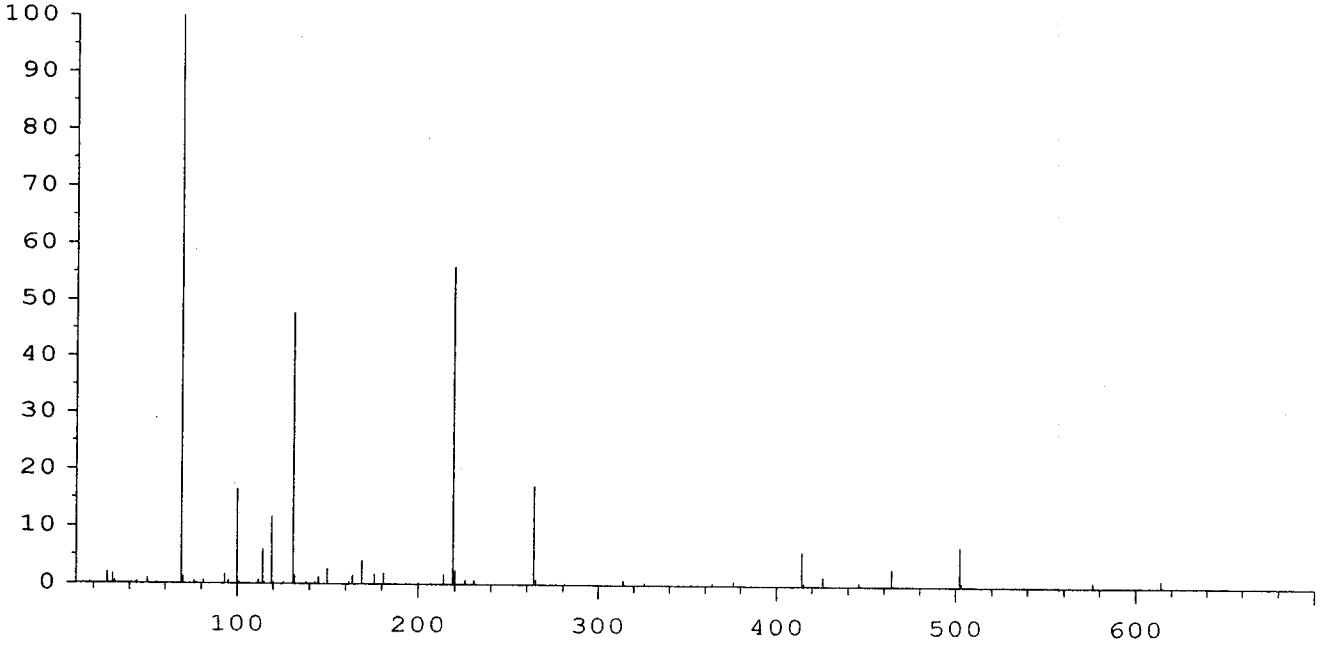
Instrument: PAH-3

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 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

AMS 1-13-06

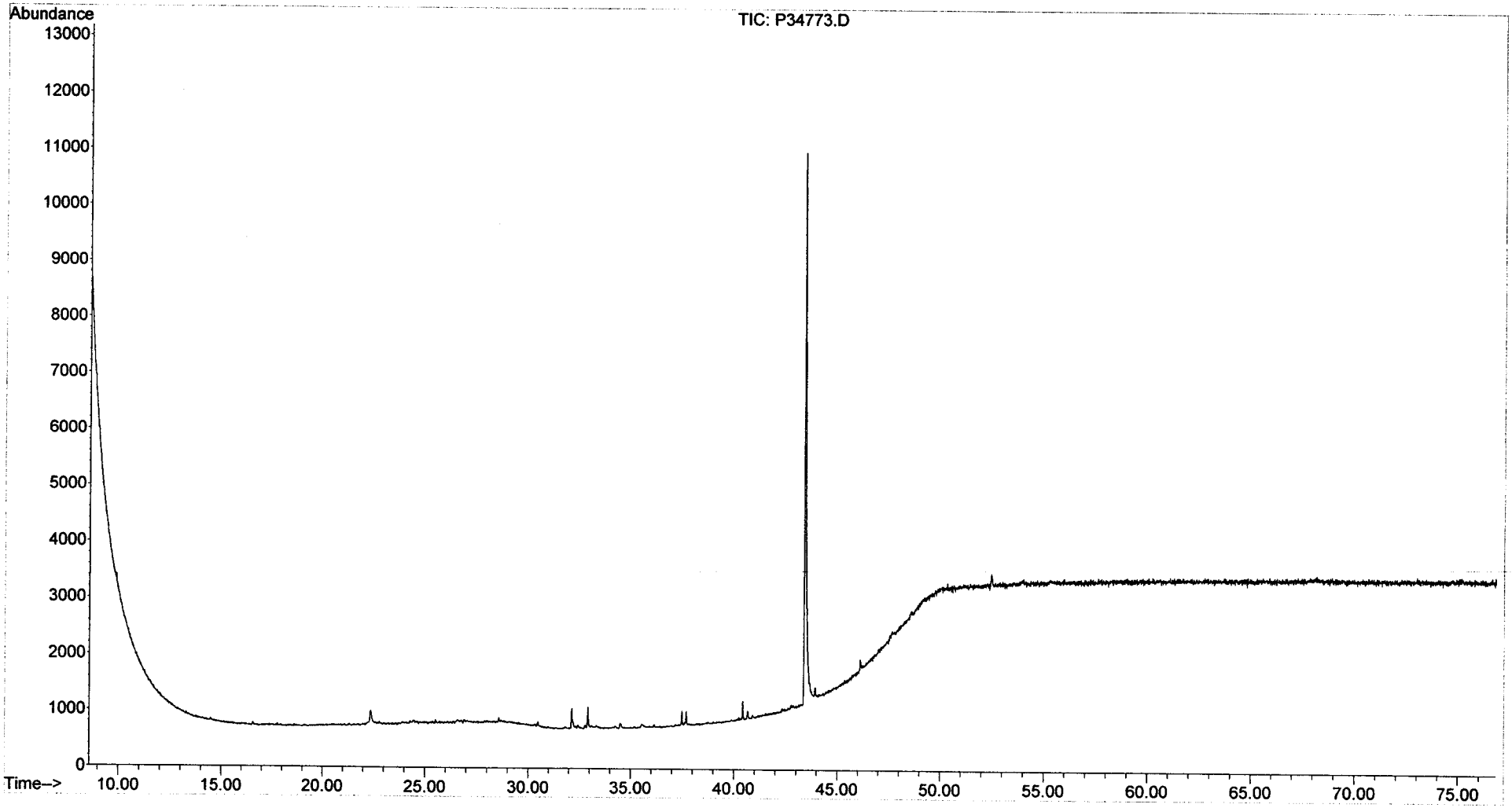
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	50898m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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

MS 1-13-06

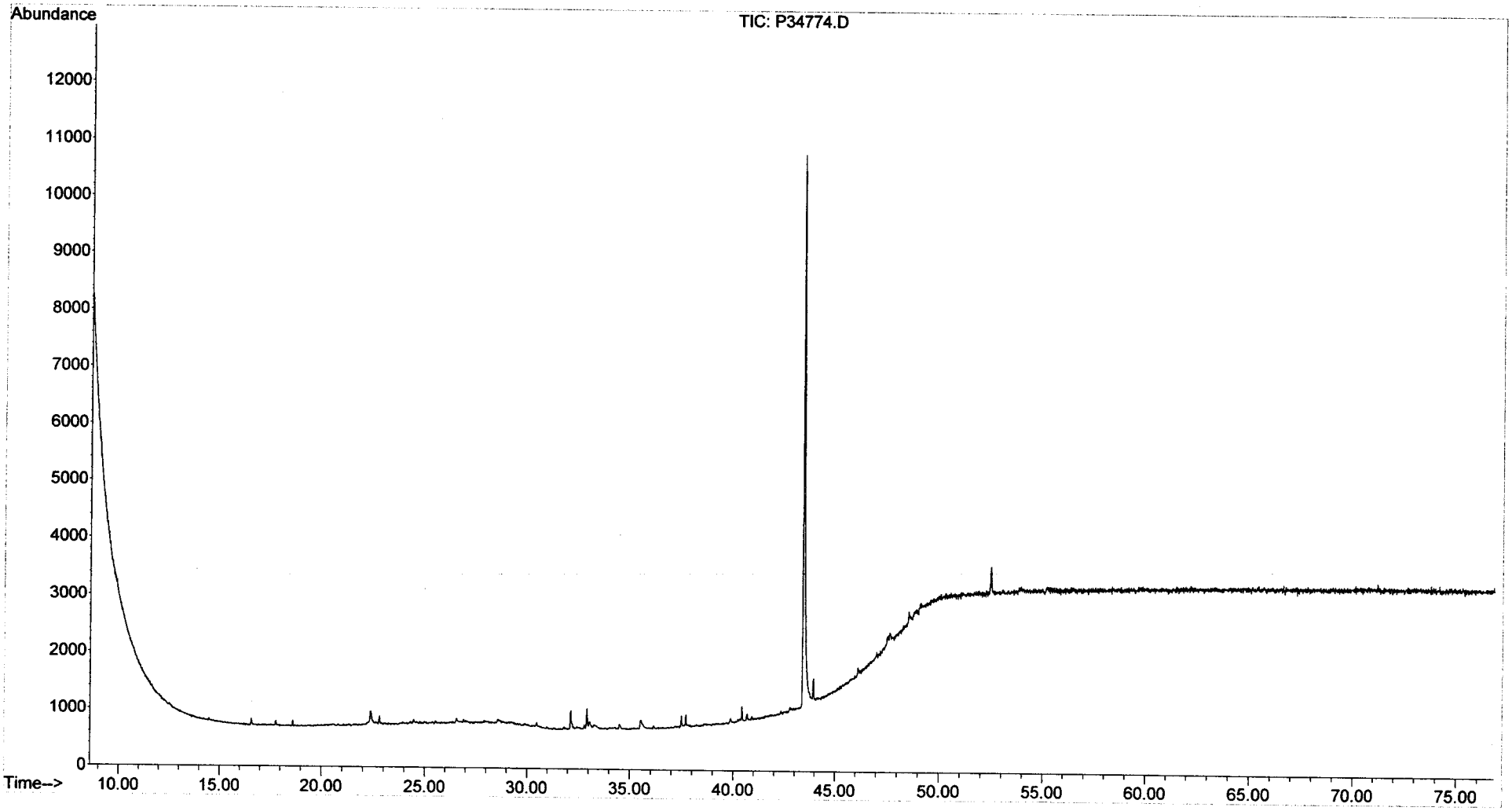
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	49829	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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

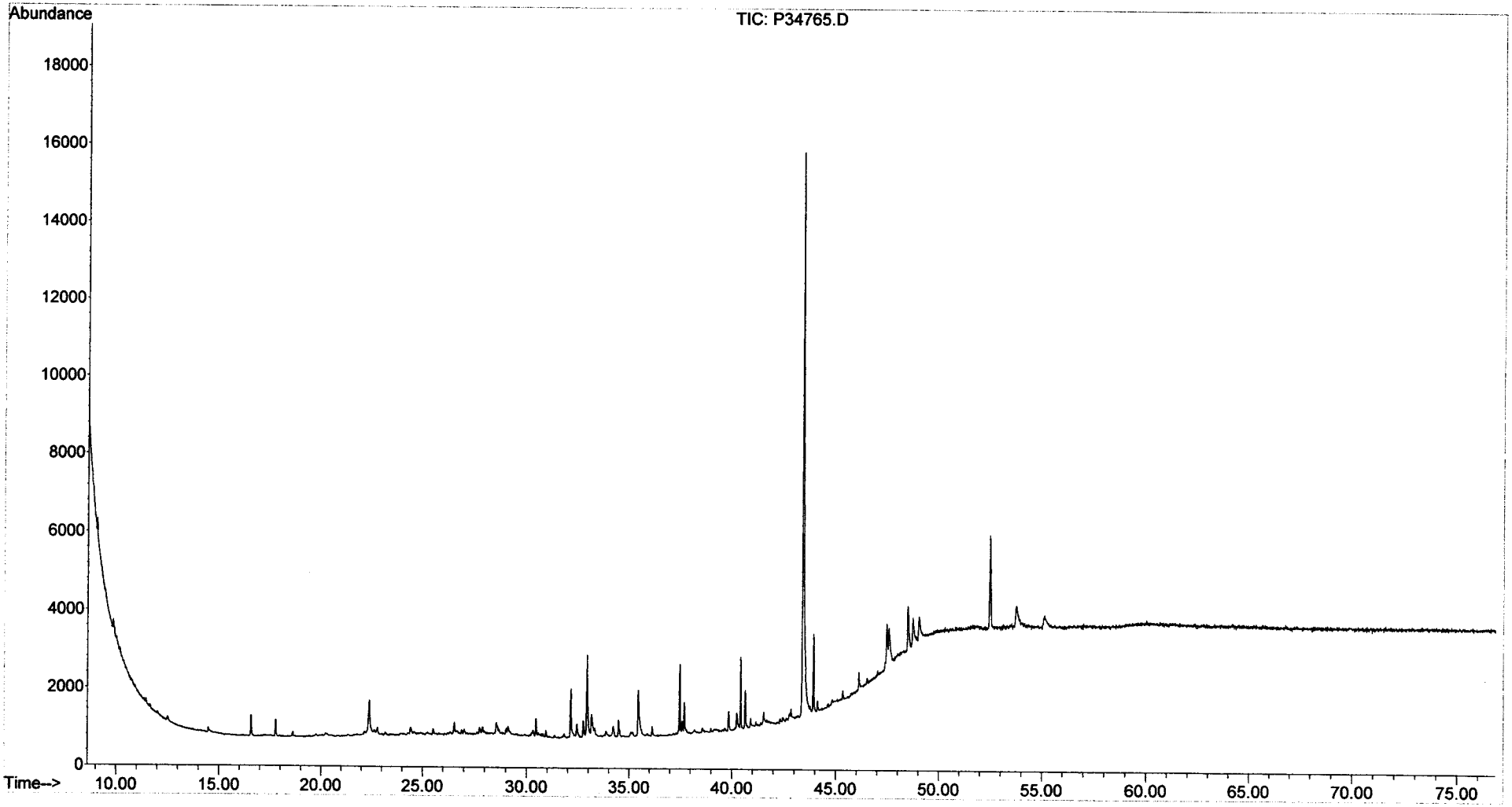
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.40	240	63328	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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

CMS 1-13-06

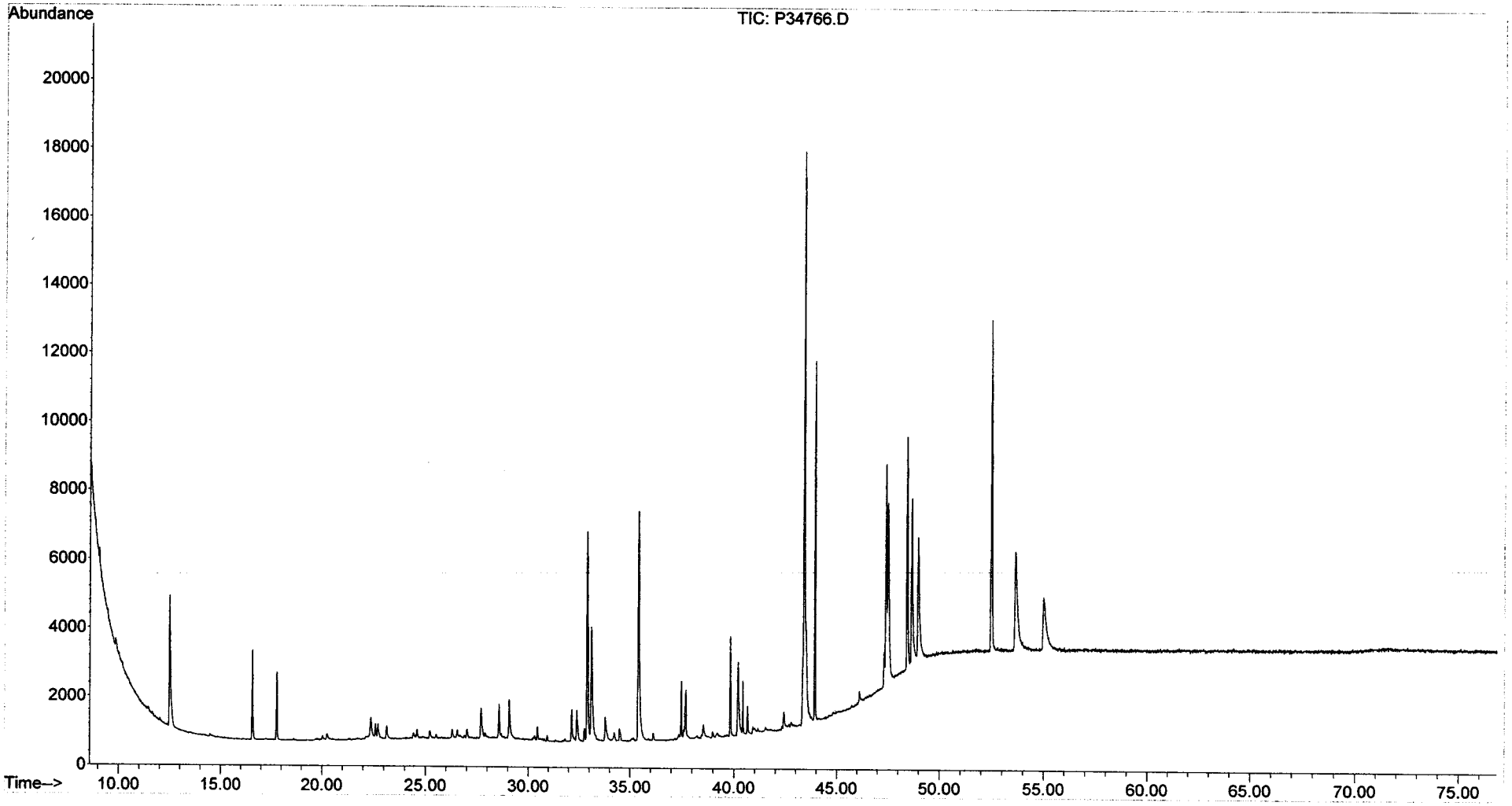
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	61149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) 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

MS 1-13-06

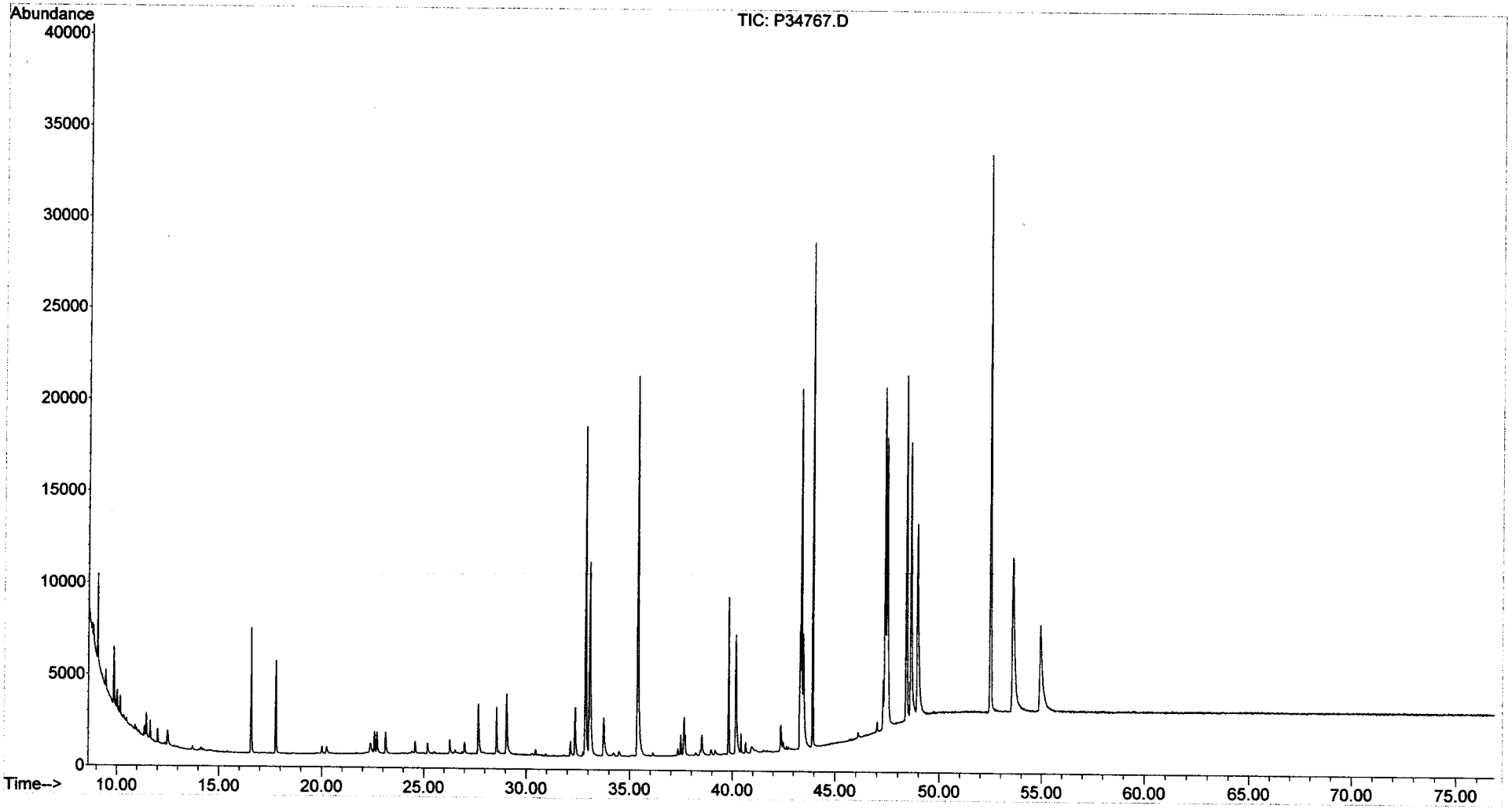
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.36	240	62167	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

MS 1-13-06

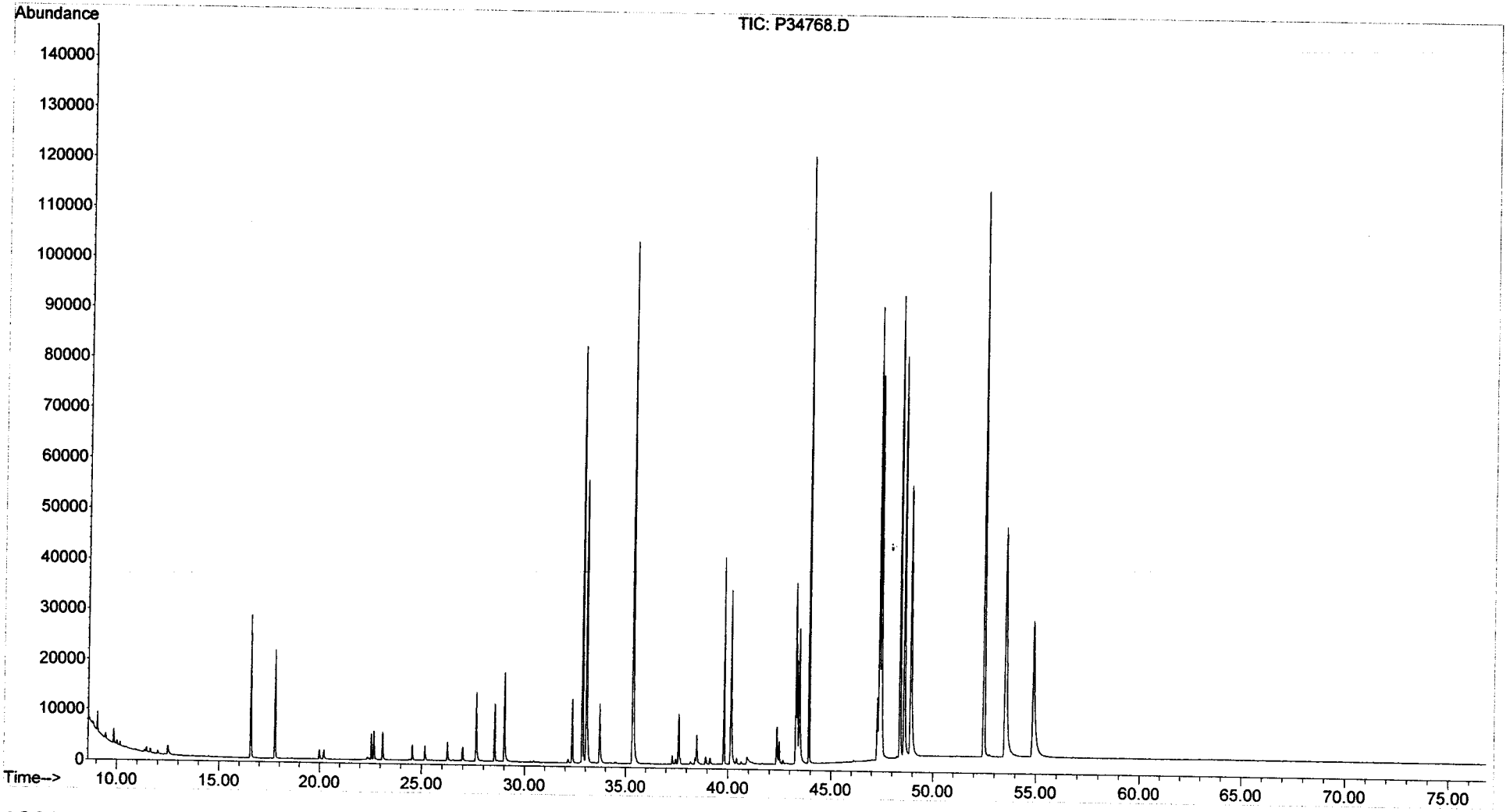
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.35	240	62301	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

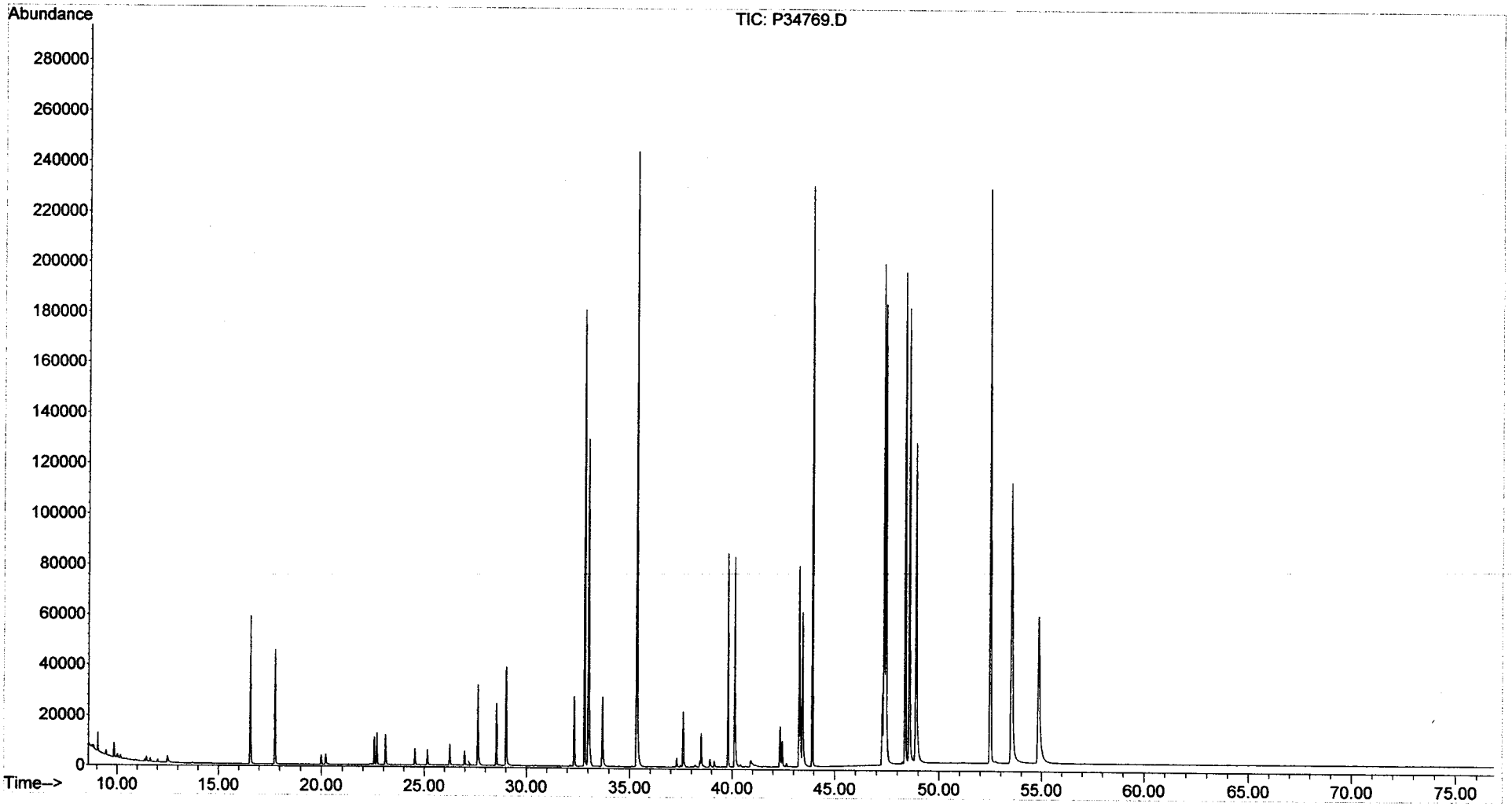
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.34	240	64774	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27684.D
Acq On : 15 Jan 2006 1:46 pm
Operator : NLJr
Sample : C2011301
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 17 12:46:49 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

MJ 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	103	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.411	2.6	105	0.00
4	t	cis-Decalin	0.315	0.314	0.3	106	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.48#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.26#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.74#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.15#
9	A1	Naphthalene	2.249	2.235	0.6	104	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.14#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.98#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.33#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.10#
14	s	2-Methylnaphthalene-d10	1.028	1.025	0.3	104	0.00
15	t	2-Methylnaphthalene	1.432	1.424	0.6	103	0.00
16	t	1-Methylnaphthalene	1.363	1.352	0.8	104	0.00
17	A1	Benzothiophene	1.810	1.816	-0.3	104	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.69#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.18#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.16#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-30.27#
22	t	Biphenyl	1.802	1.720	4.6	102	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.215	1.5	103	0.00
24	t	Dibenzofuran	1.989	1.969	1.0	102	0.01
25	t	Acenaphthylene	2.231	2.255	-1.1	105	0.00
26	t	Acenaphthene	1.368	1.362	0.4	104	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.068	0.7	104	0.00
28	A1	Fluorene	1.599	1.576	1.4	104	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.88#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.07#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.90#
32	A1	Dibenzothiophene	2.138	2.123	0.7	102	0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.62#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.96#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.40#
36	A2	OTP	2.138	0.000#	100.0#	0#	-35.00#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.62#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.30#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.11#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.79#
41	A1	Phenanthrene	2.282	2.203	3.5	101	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.30#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.42#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.57#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.76#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.86#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.76#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.58#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.34#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.41#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27684.D
Acq On : 15 Jan 2006 1:46 pm
Operator : NLJr
Sample : C2011301
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 17 12:46:49 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

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#	-41.59#
52	t	Retene	0.518	0.496	4.2	104	0.00
53	t	Anthracene	2.119	2.108	0.5	103	0.00
54	t	Carbazole	2.020	1.990	1.5	101	0.00
55	t	1-Methylphenanthrene	1.583	1.565	1.1	102	0.00
56	A1	Fluoranthene	2.435	2.426	0.4	102	0.00
57	t	Benzo(b)fluorene	1.497	1.509	-0.8	105	0.00
58	s	Pyrene-d10	2.114	2.119	-0.2	102	0.00
59	A1	Pyrene	2.494	2.452	1.7	102	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.41#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.22#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.23#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.59#
64	A1	Naphthobenzothiophene	2.313	2.331	-0.8	105	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.331	-0.8	105	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.22#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.52#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.28#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.28#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.92#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.06#
72	i	Chrysene-d12	1.000	1.000	0.0	103	0.00
73	t	Benz[a]anthracene	1.428	1.444	-1.1	105	0.00
74	A1	Chrysene	1.434	1.448	-1.0	104	0.00
75	A2	Chrysene/Triphenylene	1.434	1.448	-1.0	104	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.44#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.88#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.82#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.42#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-50.51#
81	s	Benzo[b]fluoranthene-d12	1.025	1.068	-4.2	107	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.611	-5.0	110	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.646	-2.6	107	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.542	-4.3	108	-0.01
86	t	Benzo[a]pyrene	1.478	1.568	-6.1	110	0.00
87	t	Perylene	1.473	1.558	-5.8	110	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.501	-2.5	109	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.486	-7.8	111	0.00
90	t	Benzo[g,h,i]perylene	1.527	1.593	-4.3	111	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.467	5.3	109	0.00
92	A2	Hopane (T19)	0.493	0.467	5.3	109	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.48#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.20#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.73#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.03#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.75#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.83#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.13#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27684.D
Acq On : 15 Jan 2006 1:46 pm
Operator : NLJr
Sample : C2011301
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 17 12:46:49 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

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#	-47.30#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.85#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.06#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.29#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.34#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.60#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.88#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.17#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.89#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.87#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.98#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.11#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.73#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.15#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.11#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.30#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.56#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-57.01#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.43#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.35#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-60.04#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.25#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.24#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.71#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.13#
125	SA1	5B(H)Cholane - Surr	0.230	0.220	4.3	103	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.96#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.38#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.09#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.01#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.55#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.85#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.13#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.08#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.45#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.43#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.09#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.19#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.48#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.57#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.72#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.74#

(#) = 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 : P27684.D
Acq On : 15 Jan 2006 1:46 pm
Operator : NLJr
Sample : C2011301
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 17 12:46:49 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

AMS 1/17/06

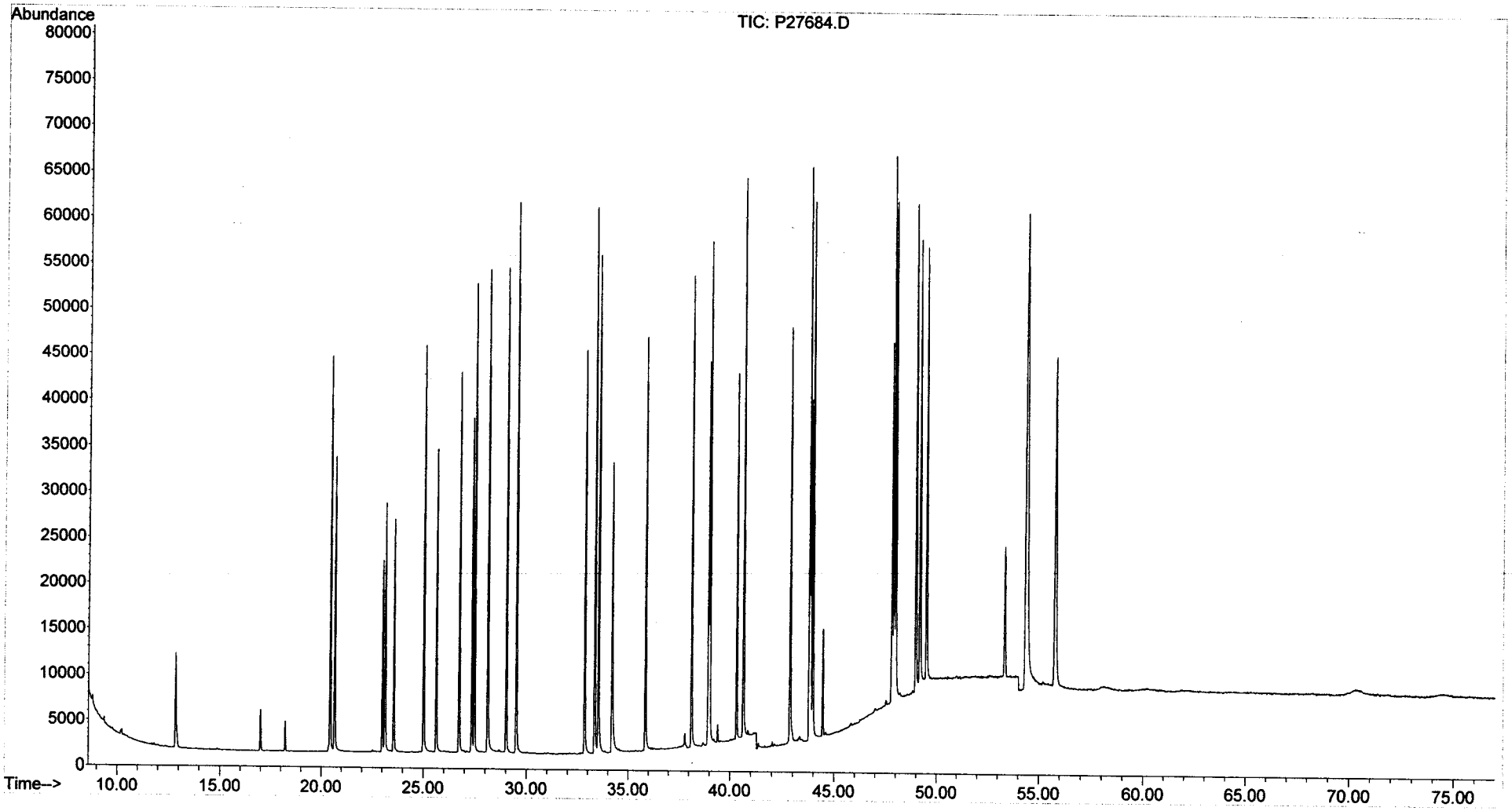
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	49590	500.00	ng/mL	0.00
72) Chrysene-d12	43.87	240	76862	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	50835	498.81	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.88%#			
58) Pyrene-d10	38.94	212	105080	501.28	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.13%			
81) Benzo[b]fluoranthene-d12	47.81	264	82115	521.10	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.11%			
125) 5B(H)Cholane - Surr	44.45	217	16878	477.64	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.76%#			
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	10187	243.63	ng/mL	100
4) cis-Decalin	18.22	138	7785	248.83	ng/mL	100
9) Naphthalene	20.44	128	110839	496.93	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	70619	497.39	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	67044	496.11	ng/mL#	100
17) Benzothiophene	20.66	134	90080	501.74	ng/mL	100
22) Biphenyl	25.02	154	85314	477.32	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	60275	492.82	ng/mL#	100
24) Dibenzofuran	28.13	168	97649	494.92	ng/mL	98
25) Acenaphthylene	26.74	152	111835m	505.35	ng/mL	
26) Acenaphthene	27.47	153	67546	497.94	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.02	170	52983	496.40	ng/mL	99
28) Fluorene	29.50	166	78167	492.82	ng/mL	100
32) Dibenzothiophene	32.85	184	105278	496.40	ng/mL	99
41) Phenanthrene	33.33	178	109240	482.69	ng/mL	99
52) Retene	40.33	234	24609	479.22	ng/mL	99
53) Anthracene	33.51	178	104533m	497.33	ng/mL	
54) Carbazole	34.18	167	98700	492.70	ng/mL	99
55) 1-Methylphenanthrene	35.84	192	77591	494.19	ng/mL	99
56) Fluoranthene	38.12	202	120315	498.10	ng/mL	100
57) Benzo(b)fluorene	40.65	216	74824	503.89	ng/mL	100
59) Pyrene	39.01	202	121608	491.65	ng/mL	98
64) Naphthobenzothiophene	42.88	234	115591	503.95	ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.88	234	115591	503.95	ng/mL#	66
73) Benz[a]anthracene	43.79	228	110963	505.53	ng/mL	99
74) Chrysene	43.97	228	111285	504.79	ng/mL	99
75) Chrysene/Triphenylene	43.97	228	111285	504.79	ng/mL	99
82) Benzo[b]fluoranthene	47.89	252	123836	525.31	ng/mL	100
83) Benzo[k]fluoranthene	47.98	252	126478	513.06	ng/mL	99
85) Benzo[e]pyrene	48.96	252	118498	521.43	ng/mL	100
86) Benzo[a]pyrene	49.17	252	120511	530.42	ng/mL	100
87) Perylene	49.49	252	119750	528.69	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.35	276	115345m	512.22	ng/mL	
89) Dibenz[a,h]anthracene	54.41	278	114193	539.24	ng/mL	98
90) Benzo[g,h,i]perylene	55.77	276	122425	521.41	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.35	191	35891	473.52	ng/mL	98
92) Hopane (T19)	53.35	191	35891	473.52	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27684.D
Acq On : 15 Jan 2006 1:46 pm
Operator : NLJr
Sample : C2011301
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 17 12:46:49 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



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27700.D
Acq On : 16 Jan 2006 2:30 am
Operator : NLJr
Sample : C2011302
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 17 12:50:22 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

NLS 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	102	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.411	2.6	104	0.00
4	t	cis-Decalin	0.315	0.312	1.0	104	-0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.48#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.26#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.74#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.15#
9	A1	Naphthalene	2.249	2.264	-0.7	104	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.14#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.98#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.33#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.10#
14	s	2-Methylnaphthalene-d10	1.028	1.020	0.8	102	0.00
15	t	2-Methylnaphthalene	1.432	1.447	-1.0	104	0.00
16	t	1-Methylnaphthalene	1.363	1.371	-0.6	104	0.00
17	A1	Benzothiophene	1.810	1.856	-2.5	105	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.69#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.18#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.16#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-30.27#
22	t	Biphenyl	1.802	1.757	2.5	103	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.224	0.7	103	0.00
24	t	Dibenzofuran	1.989	1.995	-0.3	102	0.00
25	t	Acenaphthylene	2.231	2.355	-5.6	108	0.00
26	t	Acenaphthene	1.368	1.380	-0.9	104	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.059	1.6	102	0.00
28	A1	Fluorene	1.599	1.583	1.0	103	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.88#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.07#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.90#
32	A1	Dibenzothiophene	2.138	2.148	-0.5	103	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.62#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.96#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.40#
36	A2	OTP	2.138	0.000#	100.0#	0#	-35.00#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.62#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.30#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.11#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.79#
41	A1	Phenanthrene	2.282	2.208	3.2	100	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.30#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.42#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.57#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.76#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.86#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.76#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.58#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.34#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.41#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27700.D
Acq On : 16 Jan 2006 2:30 am
Operator : NLJr
Sample : C2011302
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 17 12:50:22 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

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#	-41.59#
52	t	Retene	0.518	0.490	5.4	101	-0.01
53	t	Anthracene	2.119	2.124	-0.2	103	0.00
54	t	Carbazole	2.020	2.002	0.9	101	0.00
55	t	1-Methylphenanthrene	1.583	1.569	0.9	101	0.00
56	A1	Fluoranthene	2.435	2.408	1.1	100	0.00
57	t	Benzo(b)fluorene	1.497	1.497	0.0	103	-0.01
58	s	Pyrene-d10	2.114	2.086	1.3	99	0.00
59	A1	Pyrene	2.494	2.467	1.1	101	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.41#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.22#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.23#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.59#
64	A1	Naphthobenzothiophene	2.313	2.305	0.3	103	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.303	0.4	103	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.22#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.52#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.28#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.28#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.92#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.06#
72	i	Chrysene-d12	1.000	1.000	0.0	98	-0.01
73	t	Benz[a]anthracene	1.428	1.460	-2.2	102	0.00
74	A1	Chrysene	1.434	1.468	-2.4	101	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.468	-2.4	101	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.44#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.88#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.82#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.42#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-50.51#
81	s	Benzo[b]fluoranthene-d12	1.025	1.031	-0.6	99	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.555	-1.4	102	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.642	-2.4	102	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.508	-2.0	101	-0.01
86	t	Benzo[a]pyrene	1.478	1.520	-2.8	102	-0.01
87	t	Perylene	1.473	1.505	-2.2	102	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.444	1.4	100	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.393	-1.1	100	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.506	1.4	100	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.448	9.1	100	-0.01
92	A2	Hopane (T19)	0.493	0.448	9.1	100	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.48#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.20#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.73#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.03#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.75#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.83#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.13#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27700.D
Acq On : 16 Jan 2006 2:30 am
Operator : NLJr
Sample : C2011302
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 17 12:50:22 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

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#	-47.30#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.85#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.06#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.29#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.34#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.60#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.88#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.17#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.89#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.87#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.98#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.11#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.73#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.15#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.11#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.30#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.56#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-57.01#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.43#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.35#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-60.04#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.25#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.24#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.71#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.13#
125	SA1	5B(H)Cholane - Surr	0.230	0.215	6.5	97	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.96#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.38#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.09#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.01#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.55#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.85#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.13#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.08#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.45#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.43#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.09#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.19#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.48#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.57#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.72#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.74#

(#) = 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 : P27700.D
Acq On : 16 Jan 2006 2:30 am
Operator : NLJr
Sample : C2011302
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 17 12:50:22 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

CWS 1/17/06

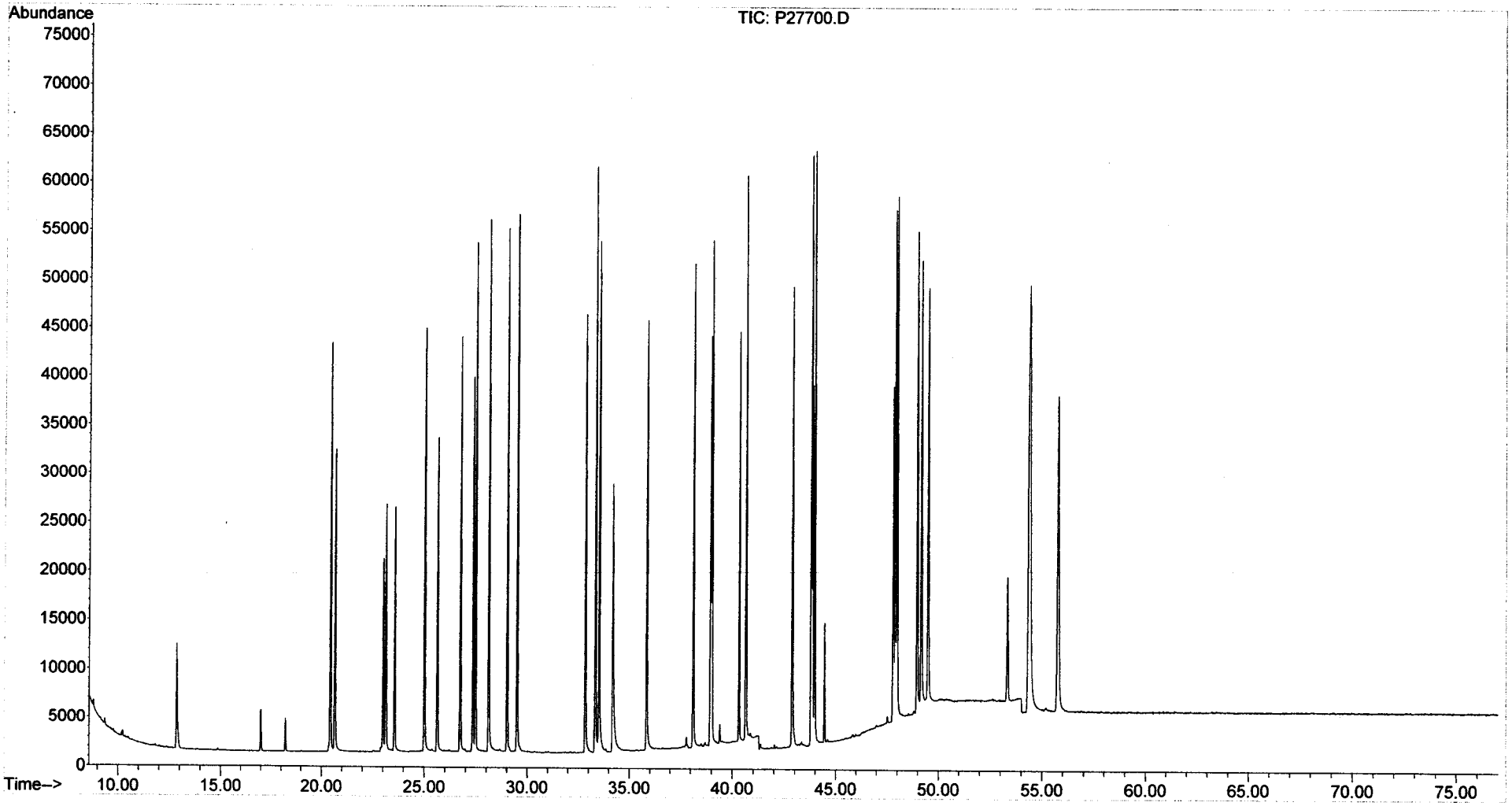
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	49037	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	73627	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	50036	496.50	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.65%#			
58) Pyrene-d10	38.94	212	102272	493.39	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.34%#			
81) Benzo[b]fluoranthene-d12	47.81	264	75902	502.84	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.28%			
125) 5B(H)Cholane - Surr	44.45	217	15795	466.63	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.66%#			
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	10070	243.55	ng/mL	100
4) cis-Decalin	18.21	138	7639	246.91	ng/mL	100
9) Naphthalene	20.44	128	111035	503.42	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	70980	505.57	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	67208	502.93	ng/mL#	100
17) Benzothiophene	20.66	134	90989	512.52	ng/mL	100
22) Biphenyl	25.02	154	86158	487.48	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	60034	496.39	ng/mL#	100
24) Dibenzofuran	28.12	168	97825	501.41	ng/mL	99
25) Acenaphthylene	26.74	152	115480	527.70	ng/mL#	100
26) Acenaphthene	27.47	153	67694	504.65	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	29.02	170	51940	492.11	ng/mL	100
28) Fluorene	29.50	166	77649	495.07	ng/mL	100
32) Dibenzothiophene	32.83	184	105347	502.33	ng/mL	100
41) Phenanthrene	33.33	178	108263	483.77	ng/mL	100
52) Retene	40.31	234	24011	472.85	ng/mL	98
53) Anthracene	33.51	178	104163m	501.16	ng/mL	
54) Carbazole	34.18	167	98150	495.48	ng/mL	100
55) 1-Methylphenanthrene	35.84	192	76935	495.54	ng/mL	100
56) Fluoranthene	38.12	202	118068m	494.31	ng/mL	
57) Benzo(b)fluorene	40.64	216	73409	499.94	ng/mL	100
59) Pyrene	39.00	202	120988	494.66	ng/mL	99
64) Naphthobenzothiophene	42.87	234	113028	498.34	ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.87	234	112953	498.00	ng/mL#	66
73) Benz[a]anthracene	43.79	228	107461	511.09	ng/mL	99
74) Chrysene	43.96	228	108073	511.76	ng/mL	100
75) Chrysene/Triphenylene	43.96	228	108073	511.76	ng/mL	100
82) Benzo[b]fluoranthene	47.89	252	114515	507.11	ng/mL	100
83) Benzo[k]fluoranthene	47.98	252	120860	511.81	ng/mL	99
85) Benzo[e]pyrene	48.96	252	111010	509.95	ng/mL	99
86) Benzo[a]pyrene	49.16	252	111885	514.09	ng/mL	99
87) Perylene	49.49	252	110792	510.63	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.35	276	106313m	492.85	ng/mL	
89) Dibenz[a,h]anthracene	54.40	278	102559	505.58	ng/mL	100
90) Benzo[g,h,i]perylene	55.76	276	110848	492.85	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.33	191	32952	453.84	ng/mL	99
92) Hopane (T19)	53.33	191	32952	453.84	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN13\
Data File : P27700.D
Acq On : 16 Jan 2006 2:30 am
Operator : NLJr
Sample : C2011302
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 17 12:50:22 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



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27772.D
Acq On : 19 Jan 2006 2:36 pm
Operator : AC
Sample : C2011803
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 20 07:18:02 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

CMS 1/20/06

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	66	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.404	4.3	66	0.00
4	t	cis-Decalin	0.315	0.310	1.6	67	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	2.269	-0.9	67	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	1.022	0.6	66	0.00
15	t	2-Methylnaphthalene	1.432	1.452	-1.4	67	0.00
16	t	1-Methylnaphthalene	1.363	1.367	-0.3	67	0.00
17	A1	Benzothiophene	1.810	1.838	-1.5	67	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	1.776	1.4	67	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.200	2.7	65	0.00
24	t	Dibenzofuran	1.989	2.018	-1.5	67	0.00
25	t	Acenaphthylene	2.231	2.149	3.7	64	0.00
26	t	Acenaphthene	1.368	1.393	-1.8	68	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.092	-1.5	68	-0.01
28	A1	Fluorene	1.599	1.571	1.8	66	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	2.169	-1.4	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	2.312	-1.3	68	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 : P27772.D
Acq On : 19 Jan 2006 2:36 pm
Operator : AC
Sample : C2011803
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 20 07:18:02 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	0.468	9.7	62	0.00
53	t	Anthracene	2.119	2.054	3.1	64	0.00
54	t	Carbazole	2.020	1.998	1.1	65	0.00
55	t	1-Methylphenanthrene	1.583	1.588	-0.3	66	0.00
56	A1	Fluoranthene	2.435	2.466	-1.3	66	0.00
57	t	Benzo(b)fluorene	1.497	1.413	5.6	63	0.00
58	s	Pyrene-d10	2.114	2.161	-2.2	66	0.00
59	A1	Pyrene	2.494	2.563	-2.8	68	-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	2.290	1.0	66	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.290	1.0	66	-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	65	-0.01
73	t	Benz[a]anthracene	1.428	1.376	3.6	64	0.00
74	A1	Chrysene	1.434	1.472	-2.6	68	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.472	-2.6	68	-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	0.971	5.3	62	0.00
82	t	Benzo[b]fluoranthene	1.534	1.490	2.9	65	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.581	1.4	65	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.449	2.0	65	0.00
86	t	Benzo[a]pyrene	1.478	1.356	8.3	61	-0.01
87	t	Perylene	1.473	1.398	5.1	63	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.285	12.3	59	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.203	12.7	57	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.377	9.8	61	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.411	16.6	61	-0.01
92	A2	Hopane (T19)	0.493	0.411	16.6	61	-0.01
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 : P27772.D
Acq On : 19 Jan 2006 2:36 pm
Operator : AC
Sample : C2011803
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 20 07:18:02 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	0.202	12.2	61	-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\JAN18\
Data File : P27772.D
Acq On : 19 Jan 2006 2:36 pm
Operator : AC
Sample : C2011803
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 20 07:18:02 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 1/20/06

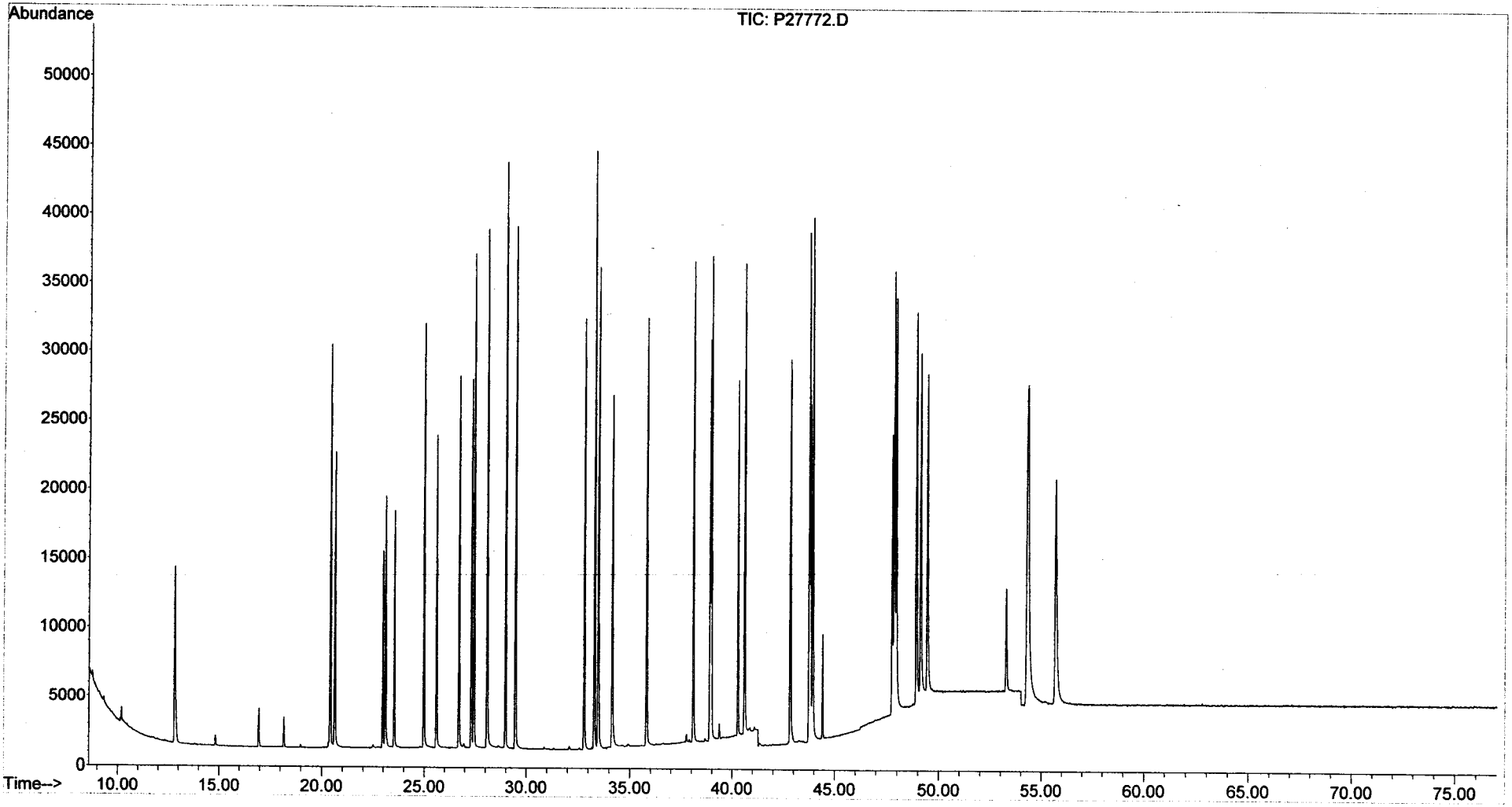
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	31715	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	48981	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	32423	497.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.74%#			
58) Pyrene-d10	38.90	212	68524	511.13	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.11%			
81) Benzo[b]fluoranthene-d12	47.77	264	47538	473.40	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.34%#			
125) 5B(H)Cholane - Surr	44.41	217	9897	439.51	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 43.95%#			
Target Compounds						Qvalue
3) trans-Decalin	16.96	138	6404	239.48	ng/mL	100
4) cis-Decalin	18.17	138	4920	245.89	ng/mL	100
9) Naphthalene	20.40	128	71954	504.41	ng/mL#	100
15) 2-Methylnaphthalene	23.10	142	46035	506.98	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	43344	501.51	ng/mL#	100
17) Benzothiophene	20.62	134	58284	507.61	ng/mL	100
22) Biphenyl	24.98	154	56316	492.66	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	38057	486.54	ng/mL#	100
24) Dibenzofuran	28.08	168	64009	507.27	ng/mL	99
25) Acenaphthylene	26.70	152	68145m	481.47	ng/mL	
26) Acenaphthene	27.43	153	44178	509.22	ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.98	170	34622	507.19	ng/mL	99
28) Fluorene	29.46	166	49813	491.06	ng/mL	99
32) Dibenzothiophene	32.80	184	68801	507.25	ng/mL	100
41) Phenanthrene	33.29	178	73336	506.68	ng/mL	100
52) Retene	40.29	234	14828	451.50	ng/mL	98
53) Anthracene	33.48	178	65148m	484.64	ng/mL	
54) Carbazole	34.15	167	63380	494.71	ng/mL	99
55) 1-Methylphenanthrene	35.81	192	50356	501.50	ng/mL	100
56) Fluoranthene	38.08	202	78224m	506.37	ng/mL	
57) Benzo(b)fluorene	40.61	216	44812	471.87	ng/mL	99
59) Pyrene	38.96	202	81279	513.81	ng/mL	99
64) Naphthobenzothiophene	42.83	234	72640	495.19	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.83	234	72620	495.05	ng/mL#	67
73) Benz[a]anthracene	43.76	228	67411	481.93	ng/mL	99
74) Chrysene	43.92	228	72110	513.28	ng/mL	100
75) Chrysene/Triphenylene	43.92	228	72110	513.28	ng/mL	100
82) Benzo[b]fluoranthene	47.86	252	72979	485.79	ng/mL	99
83) Benzo[k]fluoranthene	47.94	252	77456	493.05	ng/mL	100
85) Benzo[e]pyrene	48.92	252	70961	490.00	ng/mL	98
86) Benzo[a]pyrene	49.12	252	66415	458.72	ng/mL	99
87) Perylene	49.46	252	68479	474.42	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.30	276	62921m	438.46	ng/mL	
89) Dibenz[a,h]anthracene	54.35	278	58905	436.49	ng/mL	99
90) Benzo[g,h,i]perylene	55.70	276	67424	450.62	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.28	191	20127	416.69	ng/mL#	95
92) Hopane (T19)	53.28	191	20127	416.69	ng/mL#	95

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27772.D
Acq On : 19 Jan 2006 2:36 pm
Operator : AC
Sample : C2011803
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 20 07:18:02 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 : P27792.D
Acq On : 20 Jan 2006 8:54 am
Operator : AC
Sample : C2011804
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 10:21:17 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

01/20/06.

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	88	0.00
2	t	Decalin	0.000	0.356	0.0	0#	-0.01
3	A1	trans-Decalin	0.422	0.406	3.8	89	-0.01
4	t	cis-Decalin	0.315	0.307	2.5	89	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	2.257	-0.4	90	-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	1.037	-0.9	90	-0.01
15	t	2-Methylnaphthalene	1.432	1.452	-1.4	90	-0.01
16	t	1-Methylnaphthalene	1.363	1.381	-1.3	91	0.00
17	A1	Benzothiophene	1.810	1.852	-2.3	91	-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	1.765	2.1	90	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.239	-0.5	90	0.00
24	t	Dibenzofuran	1.989	2.007	-0.9	89	0.00
25	t	Acenaphthylene	2.231	2.414	-8.2	96	-0.01
26	t	Acenaphthene	1.368	1.380	-0.9	90	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.131	-5.1	95	-0.01
28	A1	Fluorene	1.599	1.582	1.1	89	-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	2.167	-1.4	90	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	2.285	-0.1	90	-0.01
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 : P27792.D
Acq On : 20 Jan 2006 8:54 am
Operator : AC
Sample : C2011804
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 10:21:17 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	0.537	-3.7	96	-0.01
53	t	Anthracene	2.119	2.183	-3.0	91	-0.01
54	t	Carbazole	2.020	2.127	-5.3	93	-0.01
55	t	1-Methylphenanthrene	1.583	1.624	-2.6	91	-0.01
56	A1	Fluoranthene	2.435	2.491	-2.3	90	-0.01
57	t	Benzo(b)fluorene	1.497	1.618	-8.1	97	-0.01
58	s	Pyrene-d10	2.114	2.152	-1.8	89	-0.01
59	A1	Pyrene	2.494	2.539	-1.8	90	-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	2.437	-5.4	94	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.437	-5.4	94	-0.02
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	90	-0.01
73	t	Benz[a]anthracene	1.428	1.479	-3.6	94	-0.01
74	A1	Chrysene	1.434	1.461	-1.9	92	-0.02
75	A2	Chrysene/Triphenylene	1.434	1.461	-1.9	92	-0.02
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	1.045	-2.0	92	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.632	-6.4	97	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.609	-0.3	91	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.556	-5.3	95	-0.01
86	t	Benzo[a]pyrene	1.478	1.584	-7.2	98	-0.02
87	t	Perylene	1.473	1.553	-5.4	96	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.588	-8.4	101	-0.04
89	t	Dibenz[a,h]anthracene	1.378	1.475	-7.0	96	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.581	-3.5	96	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.455	7.7	93	-0.02
92	A2	Hopane (T19)	0.493	0.455	7.7	93	-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 : P27792.D
Acq On : 20 Jan 2006 8:54 am
Operator : AC
Sample : C2011804
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 10:21:17 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	0.221	3.9	91	-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 : P27792.D
Acq On : 20 Jan 2006 8:54 am
Operator : AC
Sample : C2011804
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 10:21:17 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

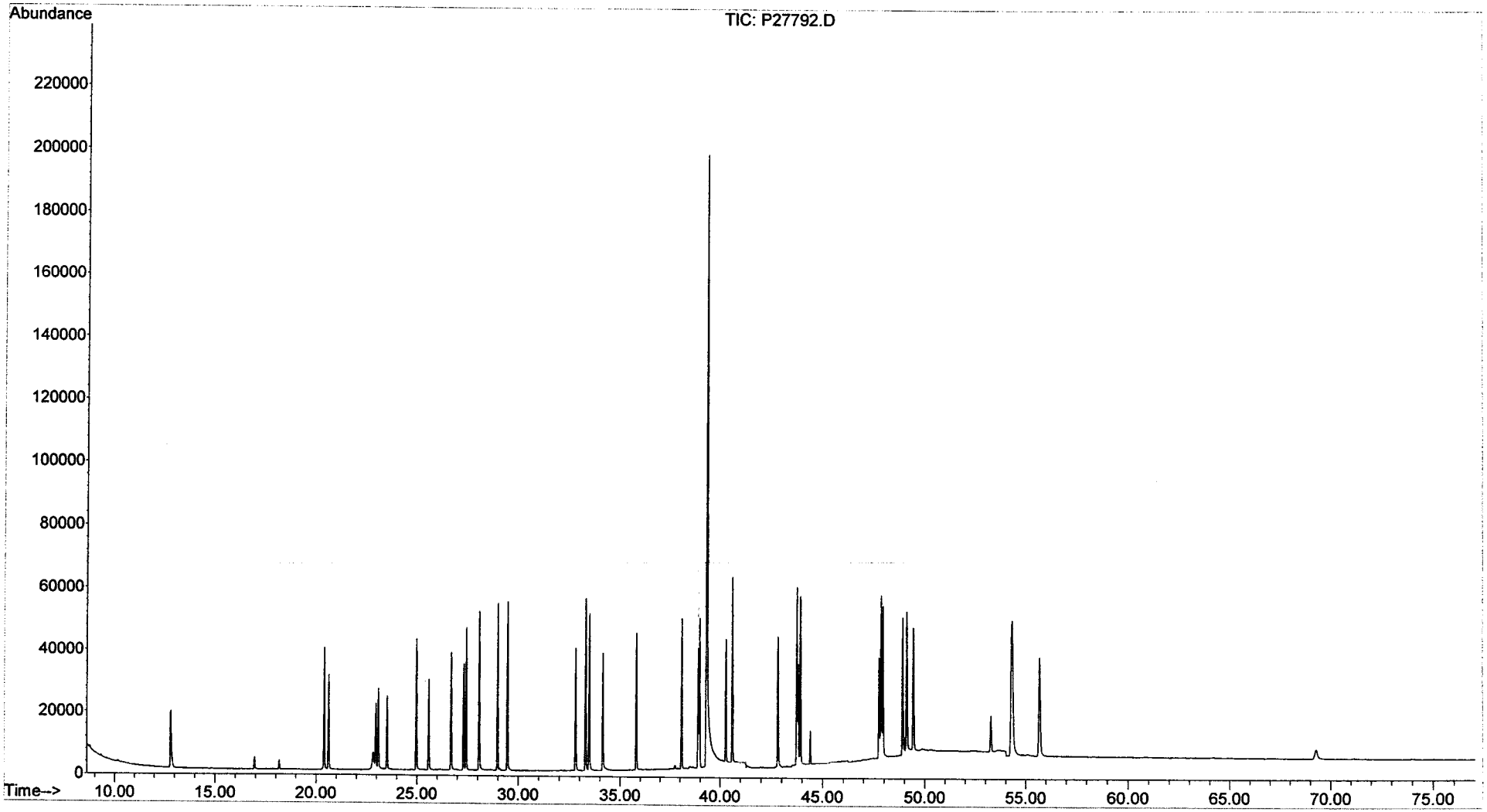
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	42552	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	67286	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	44142	504.77	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.48%			
58) Pyrene-d10	38.89	212	91584	509.16	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.92%			
81) Benzo[b]fluoranthene-d12	47.76	264	70303	509.64	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.96%			
125) 5B(H)Cholane - Surr	44.40	217	14865	480.54	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.05%#			
Target Compounds						Qvalue
3) trans-Decalin	16.94	138	8638	240.76	ng/mL	100
4) cis-Decalin	18.17	138	6534	243.38	ng/mL	100
9) Naphthalene	20.39	128	96047	501.83	ng/mL#	100
15) 2-Methylnaphthalene	23.09	142	61792	507.20	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	58773	506.84	ng/mL#	100
17) Benzothiophene	20.61	134	78826	511.68	ng/mL	100
22) Biphenyl	24.97	154	75116	489.77	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.59	156	52742	502.56	ng/mL#	100
24) Dibenzofuran	28.08	168	85422	504.56	ng/mL	100
25) Acenaphthylene	26.69	152	102702	540.83	ng/mL#	100
26) Acenaphthene	27.43	153	58743	504.67	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.98	170	48113	525.33	ng/mL	99
28) Fluorene	29.45	166	67328	494.69	ng/mL	99
32) Dibenzothiophene	32.80	184	92214	506.72	ng/mL	100
41) Phenanthrene	33.28	178	97233	500.69	ng/mL	100
52) Retene	40.28	234	22833	518.18	ng/mL	99
53) Anthracene	33.46	178	92911m	515.15	ng/mL	
54) Carbazole	34.13	167	90528	526.65	ng/mL	100
55) 1-Methylphenanthrene	35.79	192	69122	513.07	ng/mL	100
56) Fluoranthene	38.07	202	105988m	511.36	ng/mL	
57) Benzo(b)fluorene	40.60	216	68833	540.22	ng/mL	99
59) Pyrene	38.96	202	108050	509.09	ng/mL	100
64) Naphthobenzothiophene	42.82	234	103678	526.78	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.82	234	103678	526.78	ng/mL#	67
73) Benz[a]anthracene	43.74	228	99543	518.05	ng/mL	97
74) Chrysene	43.91	228	98300	509.34	ng/mL	100
75) Chrysene/Triphenylene	43.91	228	98292m	509.30	ng/mL	
82) Benzo[b]fluoranthene	47.85	252	109834	532.22	ng/mL	99
83) Benzo[k]fluoranthene	47.93	252	108233	501.53	ng/mL	98
85) Benzo[e]pyrene	48.91	252	104707	526.32	ng/mL	100
86) Benzo[a]pyrene	49.11	252	106564m	535.79	ng/mL	
87) Perylene	49.43	252	104488m	526.96	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.28	276	106839m	541.97	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	99229	535.26	ng/mL	99
90) Benzo[g,h,i]perylene	55.69	276	106349	517.41	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	53.27	191	30597	461.12	ng/mL	99
92) Hopane (T19)	53.27	191	30597	461.12	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18\
Data File : P27792.D
Acq On : 20 Jan 2006 8:54 am
Operator : AC
Sample : C2011804
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 20 10:21:17 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 : 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

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

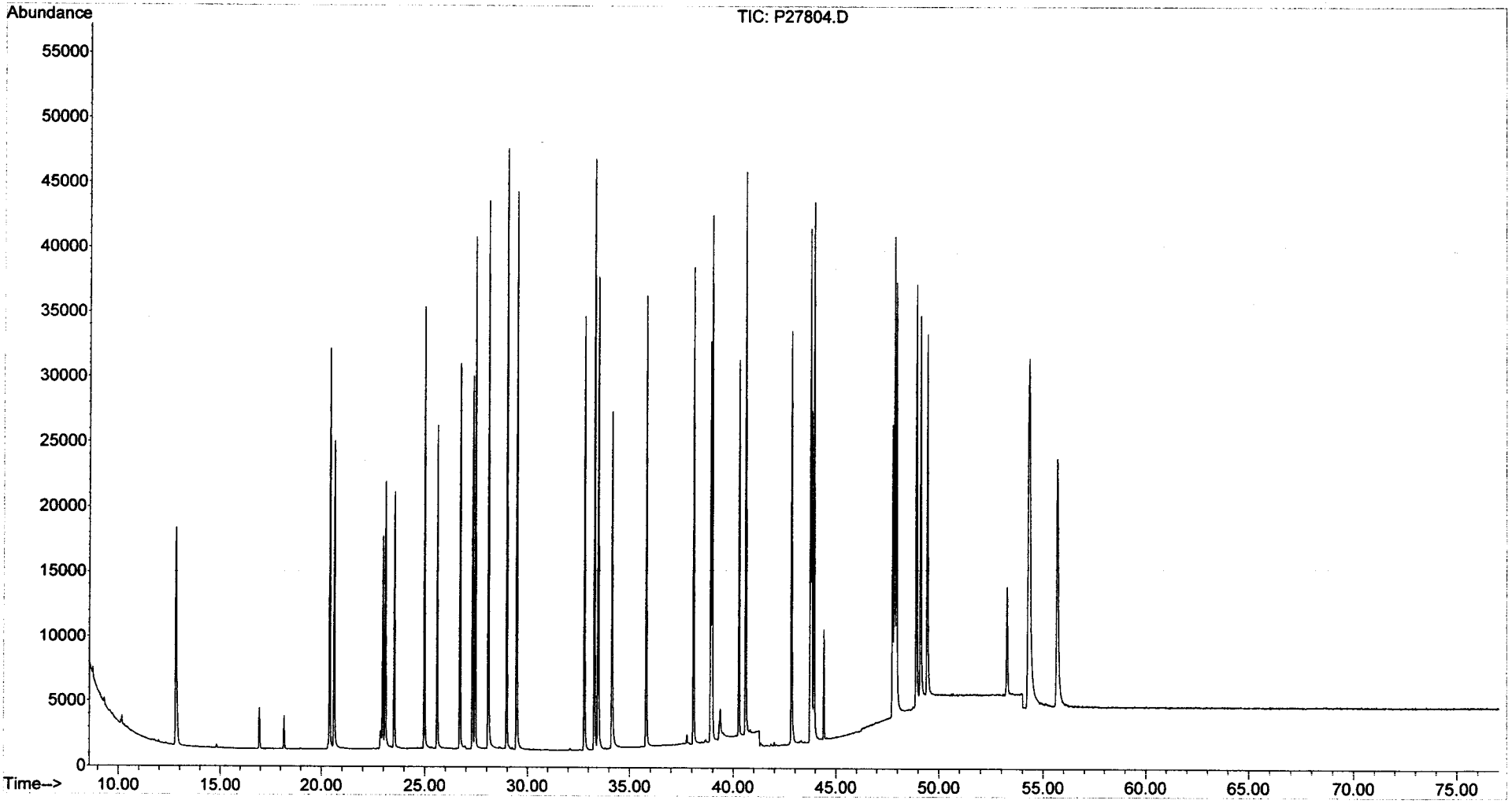
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	35572	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	53209	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	36962	505.60	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

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\PAH1\January06\JAN24\
Data File : P17744.D
Acq On : 25 Jan 2006 3:11 pm
Operator : AC
Sample : C1012501
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

1/25/06.

Quant Time: Jan 25 17:09:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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	60	0.00
2	t	Decalin	0.391	0.370	5.4	60	-0.01
3	A1	trans-Decalin	0.432	0.417	3.5	59	-0.01
4	t	cis-Decalin	0.325	0.319	1.8	60	-0.01
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.20#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.52#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.99#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.38#
9	A1	Naphthalene	2.553	2.543	0.4	60	-0.01
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.36#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.21#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.54#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.30#
14	s	2-Methylnaphthalene-d10	1.072	1.044	2.6	59	-0.01
15	t	2-Methylnaphthalene	1.617	1.615	0.1	60	0.00
16	t	1-Methylnaphthalene	1.522	1.509	0.9	60	-0.01
17	A1	Benzothiophene	2.278	2.242	1.6	59	-0.01
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.93#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.41#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.38#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.13#
22	t	Biphenyl	2.010	1.994	0.8	60	-0.01
23	t	2,6-Dimethylnaphthalene	1.342	1.316	1.9	60	-0.01
24	t	Dibenzofuran	2.258	2.178	3.5	58	-0.01
25	t	Acenaphthylene	2.448	2.464	-0.7	61	-0.01
26	t	Acenaphthene	1.521	1.497	1.6	60	0.00
27	t	2,3,5-Trimethylnaphthalene	1.204	1.149	4.6	59	-0.01
28	A1	Fluorene	1.706	1.645	3.6	59	-0.01
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.07#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.27#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.11#
32	A1	Dibenzothiophene	2.515	2.366	5.9	57	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.80#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.15#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.57#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.23#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.80#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.48#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.29#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.99#
41	A1	Phenanthrene	2.529	2.385	5.7	58	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.48#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.59#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.75#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.94#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-35.04#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.94#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.76#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.54#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.59#

2nd ✓ MS 1/26/06

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17744.D
Acq On : 25 Jan 2006 3:11 pm
Operator : AC
Sample : C1012501
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 17:09:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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	2.529	0.000#	100.0#	0#	-40.80#
52	T	Retene	0.529	0.512	3.2	61	0.00
53	t	Anthracene	2.340	2.262	3.3	59	-0.01
54	t	Carbazole	2.166	2.182	-0.7	60	0.00
55	t	1-Methylphenanthrene	1.732	1.657	4.3	59	0.00
56	A1	Fluoranthene	2.693	2.544	5.5	58	0.00
57	T	Benzo(b)fluorene	1.572	1.576	-0.3	62	0.00
58	s	Pyrene-d10	2.204	2.102	4.6	57	0.00
59	A1	Pyrene	2.739	2.583	5.7	57	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.57#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.38#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.40#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.76#
64	A1	Naphthobenzothiophene	2.562	2.443	4.6	58	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.443	4.6	58	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.37#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.68#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.44#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.44#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.04#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.12#
72	i	Chrysene-d12	1.000	1.000	0.0	57	0.00
73	t	Benz[a]anthracene	1.522	1.560	-2.5	60	0.00
74	A1	Chrysene	1.555	1.523	2.1	57	0.00
75	A2	Chrysene/Triphenylene	1.555	1.523	2.1	57	0.00
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.60#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.31#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.92#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.40#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.99#
81	s	Benzo[b]fluoranthene-d12	0.996	1.004	-0.8	58	0.00
82	t	Benzo[b]fluoranthene	1.563	1.586	-1.5	59	0.00
83	A1	Benzo[k]fluoranthene	1.626	1.707	-5.0	59	0.01
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.45#
85	t	Benzo[e]pyrene	1.513	1.526	-0.9	59	0.00
86	t	Benzo[a]pyrene	1.497	1.578	-5.4	62	0.00
87	t	Perylene	1.464	1.550	-5.9	62	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.508	-14.4	72	0.01
89	t	Dibenz[a,h]anthracene	1.343	1.542	-14.8	66	0.01
90	t	Benzo[g,h,i]perylene	1.518	1.651	-8.8	63	0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.354	19.4	48	0.01
92	A2	Hopane (T19)	0.439	0.354	19.4	48	0.01
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.69#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.42#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.90#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.22#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.97#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.05#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.35#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17744.D
Acq On : 25 Jan 2006 3:11 pm
Operator : AC
Sample : C1012501
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 17:09:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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 (	0.439	0.000#	100.0#	0#	-46.51#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-47.03#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.23#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.34#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.45#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.69#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.89#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.08#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.89#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.76#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.86#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.99#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.54#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.93#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.80#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.90#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.14#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.47#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.85#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.60#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.22#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.22#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.11#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.37#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.66#
125	SA1	5B(H)Cholane - Surr	0.196	0.184	6.1	56	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.18#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.60#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.31#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.16#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.68#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.97#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.23#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.39#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.10#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.46#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.36#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.26#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.34#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.55#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.64#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.70#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.74#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17744.D
Acq On : 25 Jan 2006 3:11 pm
Operator : AC
Sample : C1012501
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

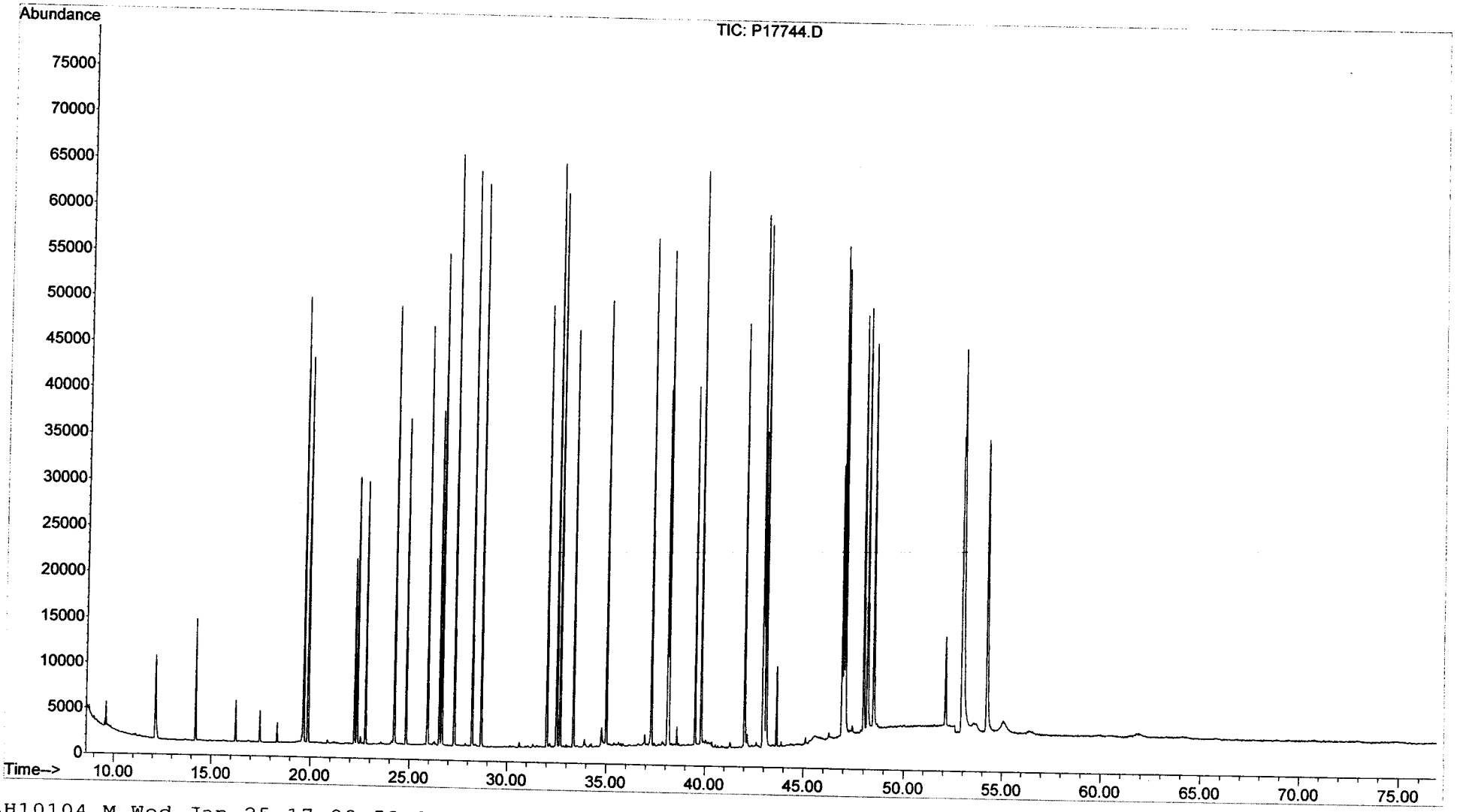
Quant Time: Jan 25 17:09:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.55	164	42497	500.00	ng/mL	0.00
72) Chrysene-d12	43.01	240	62233	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.23	152	44354	486.84	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.68%#			
58) Pyrene-d10	38.10	212	89325	476.87	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.69%#			
81) Benzo[b]fluoranthene-d12	46.92	264	62493	504.27	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.43%			
125) 5B(H)Cholane - Surr	43.66	217	11462	468.73	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.87%#			
Target Compounds						Qvalue
2) Decalin	16.25	138	15707m	472.14	ng/mL	
3) trans-Decalin	16.25	138	8851	241.10	ng/mL	100
4) cis-Decalin	17.46	138	6788	245.73	ng/mL	100
9) Naphthalene	19.66	128	108076	497.98	ng/mL#	100
15) 2-Methylnaphthalene	22.36	142	68645	499.62	ng/mL#	100
16) 1-Methylnaphthalene	22.78	142	64119	495.71	ng/mL#	100
17) Benzothiophene	19.88	134	95270	492.13	ng/mL	100
22) Biphenyl	24.24	154	84757	496.20	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.85	156	55932	490.53	ng/mL#	100
24) Dibenzofuran	27.31	168	92550	482.31	ng/mL	99
25) Acenaphthylene	25.94	152	104721	503.24	ng/mL#	100
26) Acenaphthene	26.68	153	63611	492.11	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.23	170	48843	477.18	ng/mL	98
28) Fluorene	28.68	166	69910	482.25	ng/mL	100
32) Dibenzothiophene	32.00	184	100564	470.40	ng/mL	100
41) Phenanthrene	32.50	178	101362	471.53	ng/mL	100
52) Retene	39.51	234	21775	484.48	ng/mL	96
53) Anthracene	32.68	178	96141	483.39	ng/mL	100
54) Carbazole	33.35	167	92719	503.70	ng/mL	100
55) 1-Methylphenanthrene	35.01	192	70410	478.36	ng/mL	100
56) Fluoranthene	37.28	202	108128	472.42	ng/mL	96
57) Benzo(b)fluorene	39.81	216	66958	501.28	ng/mL	99
59) Pyrene	38.16	202	109760	471.51	ng/mL	96
64) Naphthobenzothiophene	42.02	234	103815	476.71	ng/ml	100
65) Naphthobenzothiophene-2,1-	42.02	234	103815	476.71	ng/mL	100
73) Benz[a]anthracene	42.95	228	97087	512.49	ng/mL	99
74) Chrysene	43.11	228	94757	489.51	ng/mL	99
75) Chrysene/Triphenylene	43.11	228	94757	489.51	ng/mL	99
82) Benzo[b]fluoranthene	47.00	252	98686	507.23	ng/mL	100
83) Benzo[k]fluoranthene	47.09	252	106243	524.90	ng/mL	100
85) Benzo[e]pyrene	47.99	252	94977	504.21	ng/mL	99
86) Benzo[a]pyrene	48.18	252	98234	527.08	ng/mL	100
87) Perylene	48.49	252	96483	529.60	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	52.95	276	93853m	572.23	ng/mL	
89) Dibenz[a,h]anthracene	53.03	278	95974	574.08	ng/mL	99
90) Benzo[g,h,i]perylene	54.23	276	102747	543.65	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.12	191	22048	403.49	ng/mL	99
92) Hopane (T19)	52.12	191	22048	403.49	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17744.D
Acq On : 25 Jan 2006 3:11 pm
Operator : AC
Sample : C1012501
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 25 17:09:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17768.D
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

1/26/06

Quant Time: Jan 26 11:57:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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	63	-0.01
2	t	Decalin	0.391	0.372	4.9	64	-0.01
3	A1	trans-Decalin	0.432	0.412	4.6	62	-0.01
4	t	cis-Decalin	0.325	0.309	4.9	62	-0.01
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.20#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.52#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.99#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.38#
9	A1	Naphthalene	2.553	2.407	5.7	60	-0.01
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.36#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.21#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.54#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.30#
14	s	2-Methylnaphthalene-d10	1.072	1.035	3.5	62	-0.02
15	t	2-Methylnaphthalene	1.617	1.557	3.7	62	-0.01
16	t	1-Methylnaphthalene	1.522	1.459	4.1	61	-0.01
17	A1	Benzothiophene	2.278	2.126	6.7	59	-0.01
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.93#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.41#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.38#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.13#
22	t	Biphenyl	2.010	1.923	4.3	61	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.290	3.9	62	-0.02
24	t	Dibenzofuran	2.258	2.167	4.0	62	-0.01
25	t	Acenaphthylene	2.448	2.380	2.8	62	-0.01
26	t	Acenaphthene	1.521	1.461	3.9	62	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.204	1.148	4.7	62	-0.01
28	A1	Fluorene	1.706	1.618	5.2	62	-0.01
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.07#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.27#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.11#
32	A1	Dibenzothiophene	2.515	2.354	6.4	60	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.80#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.15#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.57#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.23#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.80#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.48#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.29#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.99#
41	A1	Phenanthrene	2.529	2.406	4.9	62	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.48#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.59#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.75#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.94#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-35.04#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.94#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.76#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.54#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.59#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17768.D
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 11:57:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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	2.529	0.000#	100.0#	0#	-40.80#
52	T	Retene	0.529	0.536	-1.3	67	-0.01
53	t	Anthracene	2.340	2.220	5.1	61	-0.02
54	t	Carbazole	2.166	2.124	1.9	62	-0.01
55	t	1-Methylphenanthrene	1.732	1.637	5.5	61	-0.01
56	A1	Fluoranthene	2.693	2.528	6.1	61	-0.01
57	T	Benzo(b)fluorene	1.572	1.564	0.5	65	-0.01
58	s	Pyrene-d10	2.204	2.181	1.0	63	-0.01
59	A1	Pyrene	2.739	2.593	5.3	61	-0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.57#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.38#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.40#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.76#
64	A1	Naphthobenzothiophene	2.562	2.440	4.8	62	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.440	4.8	62	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.37#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.68#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.44#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.44#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.04#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.12#
72	i	Chrysene-d12	1.000	1.000	0.0	64	-0.01
73	t	Benz[a]anthracene	1.522	1.491	2.0	64	-0.01
74	A1	Chrysene	1.555	1.479	4.9	62	-0.01
75	A2	Chrysene/Triphenylene	1.555	1.482	4.7	62	-0.01
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.60#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.31#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.92#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.40#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.99#
81	s	Benzo[b]fluoranthene-d12	0.996	0.987	0.9	64	-0.01
82	t	Benzo[b]fluoranthene	1.563	1.542	1.3	64	-0.01
83	A1	Benzo[k]fluoranthene	1.626	1.625	0.1	63	0.00
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.45#
85	t	Benzo[e]pyrene	1.513	1.468	3.0	63	-0.01
86	t	Benzo[a]pyrene	1.497	1.507	-0.7	66	-0.01
87	t	Perylene	1.464	1.460	0.3	65	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.394	-5.8	75	-0.01
89	t	Dibenz[a,h]anthracene	1.343	1.490	-10.9	72	-0.01
90	t	Benzo[g,h,i]perylene	1.518	1.580	-4.1	68	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.339	22.8	51	-0.01
92	A2	Hopane (T19)	0.439	0.339	22.8	51	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.69#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.42#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.90#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.22#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.97#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.05#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.35#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17768.D
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 11:57:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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 (	0.439	0.000#	100.0#	0#	-46.51#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-47.03#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.23#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.34#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.45#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.69#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.89#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.08#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.89#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.76#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.86#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.99#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.54#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.93#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.80#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.90#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.14#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.47#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.85#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.60#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.22#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.22#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.11#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.37#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.66#
125	SA1	5B(H)Cholane - Surr	0.196	0.179	8.7	61	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.18#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.60#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.31#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.16#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.68#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.97#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.23#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.39#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.10#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.46#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.36#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.26#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.34#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.55#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.64#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.70#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.74#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17768.D
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 11:57:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	45054	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	69699	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	46652	483.01	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.30%#			
58) Pyrene-d10	38.09	212	98261	494.81	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.48%#			
81) Benzo[b]fluoranthene-d12	46.90	264	68792	495.63	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.56%#			
125) 5B(H)Cholane - Surr	43.65	217	12487	455.95	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.59%#			
Target Compounds						Qvalue
2) Decalin	16.25	138	16763m	475.28	ng/mL	
3) trans-Decalin	16.25	138	9277	238.36	ng/mL	100
4) cis-Decalin	17.46	138	6968	237.93	ng/mL	100
9) Naphthalene	19.66	128	108428	471.25	ng/mL#	100
15) 2-Methylnaphthalene	22.34	142	70132	481.48	ng/mL#	100
16) 1-Methylnaphthalene	22.78	142	65740	479.40	ng/mL#	100
17) Benzothiophene	19.88	134	95777	466.67	ng/mL	100
22) Biphenyl	24.23	154	86641	478.44	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.83	156	58098	480.61	ng/mL#	100
24) Dibenzofuran	27.31	168	97616	479.84	ng/mL	98
25) Acenaphthylene	25.94	152	107208	485.95	ng/mL#	100
26) Acenaphthene	26.67	153	65813	480.25	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.23	170	51739	476.78	ng/mL	99
28) Fluorene	28.68	166	72895	474.30	ng/mL	100
32) Dibenzothiophene	32.00	184	106069	467.99	ng/mL	100
41) Phenanthrene	32.50	178	108394	475.63	ng/mL	100
52) Retene	39.50	234	24139	506.60	ng/mL	96
53) Anthracene	32.67	178	100005	474.28	ng/mL	100
54) Carbazole	33.34	167	95707	490.43	ng/mL	99
55) 1-Methylphenanthrene	35.00	192	73774	472.77	ng/mL	100
56) Fluoranthene	37.27	202	113887	469.35	ng/mL	99
57) Benzo(b)fluorene	39.79	216	70486	497.74	ng/mL	99
59) Pyrene	38.15	202	116825	473.38	ng/mL	99
64) Naphthobenzothiophene	42.01	234	109927	476.13	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.01	234	109927	476.13	ng/mL	99
73) Benz[a]anthracene	42.94	228	103921m	489.80	ng/mL	
74) Chrysene	43.10	228	103102m	475.57	ng/mL	
75) Chrysene/Triphenylene	43.10	228	103278m	476.38	ng/mL	
82) Benzo[b]fluoranthene	46.99	252	107471	493.21	ng/mL	99
83) Benzo[k]fluoranthene	47.08	252	113271	499.68	ng/mL	99
85) Benzo[e]pyrene	47.98	252	102303	484.93	ng/mL	99
86) Benzo[a]pyrene	48.17	252	105029m	503.17	ng/mL	
87) Perylene	48.48	252	101769m	498.78	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.93	276	97191m	529.11	ng/mL	
89) Dibenz[a,h]anthracene	53.00	278	103834	554.56	ng/mL	98
90) Benzo[g,h,i]perylene	54.20	276	110129	520.29	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.10	191	23631	386.13	ng/mL	96
92) Hopane (T19)	52.10	191	23631	386.13	ng/mL	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17768.D
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 11:57:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

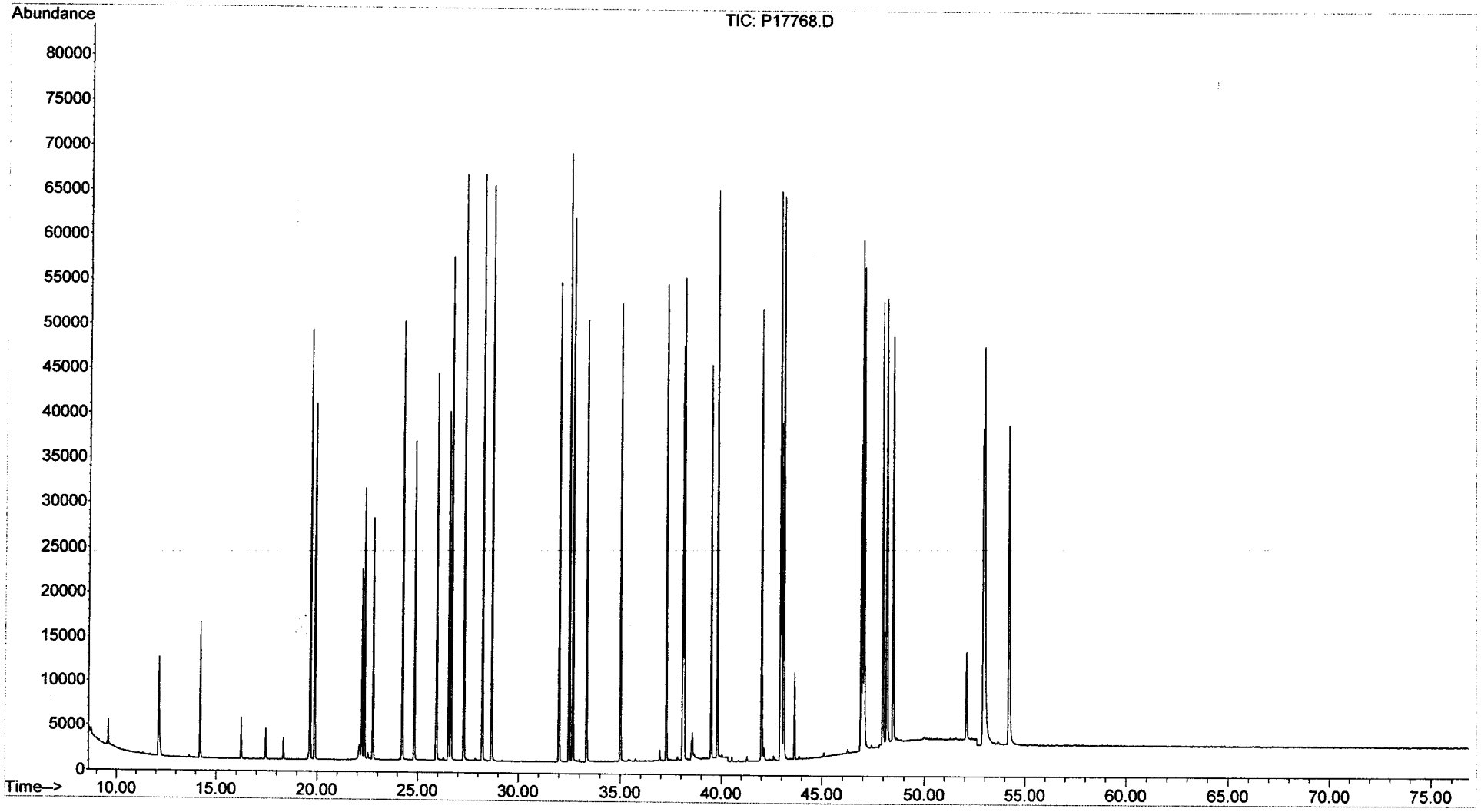
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17768.D
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 11:57:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17788.D
Acq On : 27 Jan 2006 2:03 am
Operator : AC
Sample : C1012503
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

1/27/06

Quant Time: Jan 27 09:24:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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	59	-0.01
2	t	Decalin	0.391	0.359	8.2	58	-0.01
3	A1	trans-Decalin	0.432	0.404	6.5	57	-0.01
4	t	cis-Decalin	0.325	0.303	6.8	57	-0.01
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.20#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.52#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.99#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.38#
9	A1	Naphthalene	2.553	2.285	10.5	53	-0.01
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.36#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.21#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.54#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.30#
14	s	2-Methylnaphthalene-d10	1.072	1.007	6.1	57	-0.02
15	t	2-Methylnaphthalene	1.617	1.497	7.4	55	-0.01
16	t	1-Methylnaphthalene	1.522	1.414	7.1	56	-0.01
17	A1	Benzothiophene	2.278	2.014	11.6	53	-0.01
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.93#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.41#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.38#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.13#
22	t	Biphenyl	2.010	1.823	9.3	54	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.273	5.1	57	-0.02
24	t	Dibenzofuran	2.258	2.073	8.2	55	-0.01
25	t	Acenaphthylene	2.448	2.448	0.0	60	-0.01
26	t	Acenaphthene	1.521	1.419	6.7	56	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.204	1.136	5.6	58	-0.01
28	A1	Fluorene	1.706	1.570	8.0	56	-0.01
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.07#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.27#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.11#
32	A1	Dibenzothiophene	2.515	2.260	10.1	54	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.80#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.15#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.57#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.23#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.80#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.48#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.29#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.99#
41	A1	Phenanthrene	2.529	2.308	8.7	55	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.48#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.59#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.75#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.94#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-35.04#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.94#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.76#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.54#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.59#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17788.D
Acq On : 27 Jan 2006 2:03 am
Operator : AC
Sample : C1012503
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 09:24:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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	2.529	0.000#	100.0#	0#	-40.80#
52	T	Retene	0.529	0.566	-7.0	66	-0.01
53	t	Anthracene	2.340	2.241	4.2	58	-0.02
54	t	Carbazole	2.166	2.080	4.0	57	-0.01
55	t	1-Methylphenanthrene	1.732	1.658	4.3	58	-0.01
56	A1	Fluoranthene	2.693	2.521	6.4	57	-0.01
57	T	Benzo(b)fluorene	1.572	1.689	-7.4	66	-0.01
58	s	Pyrene-d10	2.204	2.202	0.1	60	-0.01
59	A1	Pyrene	2.739	2.554	6.8	56	-0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.57#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.38#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.40#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.76#
64	A1	Naphthobenzothiophene	2.562	2.544	0.7	60	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.544	0.7	60	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.37#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.68#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.44#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.44#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.04#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.12#
72	i	Chrysene-d12	1.000	1.000	0.0	62	-0.01
73	t	Benz[a]anthracene	1.522	1.606	-5.5	67	-0.01
74	A1	Chrysene	1.555	1.481	4.8	60	-0.01
75	A2	Chrysene/Triphenylene	1.555	1.536	1.2	62	-0.01
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.60#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.31#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.92#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.40#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.99#
81	s	Benzo[b]fluoranthene-d12	0.996	1.015	-1.9	64	0.00
82	t	Benzo[b]fluoranthene	1.563	1.599	-2.3	64	-0.01
83	A1	Benzo[k]fluoranthene	1.626	1.634	-0.5	62	0.00
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.45#
85	t	Benzo[e]pyrene	1.513	1.483	2.0	62	-0.01
86	t	Benzo[a]pyrene	1.497	1.586	-5.9	67	-0.01
87	t	Perylene	1.464	1.507	-2.9	65	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.607	-21.9	84	-0.01
89	t	Dibenz[a,h]anthracene	1.343	1.563	-16.4	73	-0.01
90	t	Benzo[g,h,i]perylene	1.518	1.604	-5.7	67	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.364	17.1	53	-0.01
92	A2	Hopane (T19)	0.439	0.364	17.1	53	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.69#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.42#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.90#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.22#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.97#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.05#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.35#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17788.D
Acq On : 27 Jan 2006 2:03 am
Operator : AC
Sample : C1012503
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 09:24:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 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 (	0.439	0.000#	100.0#	0#	-46.51#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-47.03#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.23#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.34#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.45#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.69#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.89#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.08#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.89#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.76#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.86#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.99#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.54#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.93#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.80#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.90#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.14#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.47#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.85#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.60#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.22#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.22#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.11#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.37#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.66#
125	SA1	5B(H)Cholane - Surr	0.196	0.185	5.6	61	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.18#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.60#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.31#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.16#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.68#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.97#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.23#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.39#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.10#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.46#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.36#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.26#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.34#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.55#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.64#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.70#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.74#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17788.D
Acq On : 27 Jan 2006 2:03 am
Operator : AC
Sample : C1012503
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

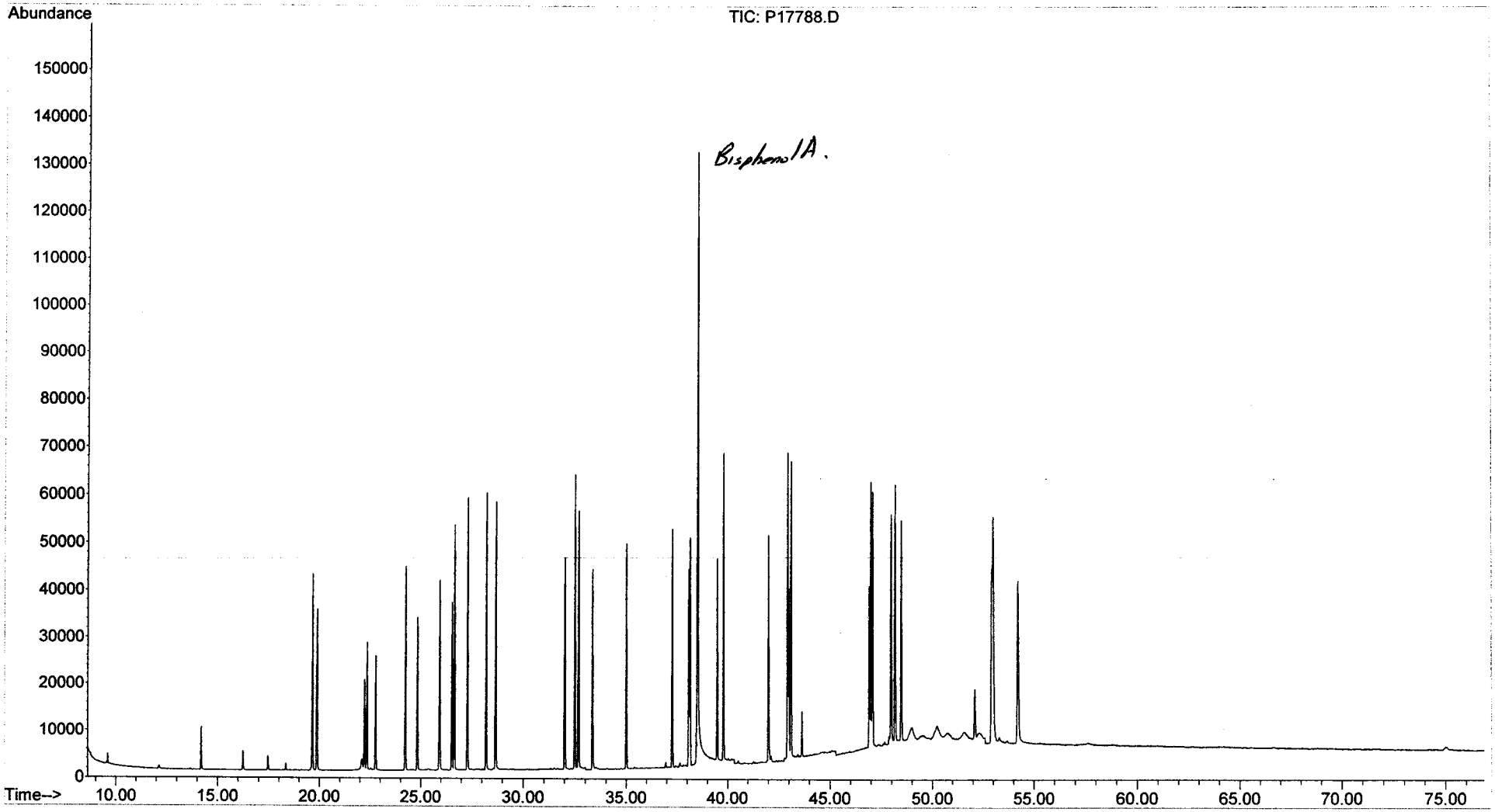
Quant Time: Jan 27 09:24:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.54	164	42134	500.00	ng/mL	-0.01
72) Chrysene-d12	43.00	240	67551	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.22	152	42428	469.72	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.97%#			
58) Pyrene-d10	38.08	212	92765	499.50	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.95%#			
81) Benzo[b]fluoranthene-d12	46.92	264	68583	509.84	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.98%			
125) 5B(H)Cholane - Surr	43.65	217	12464	469.58	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.96%#			
Target Compounds						Qvalue
2) Decalin	16.25	138	15108m	458.04	ng/mL	
3) trans-Decalin	16.25	138	8517	234.00	ng/mL	100
4) cis-Decalin	17.46	138	6393	233.43	ng/mL	100
9) Naphthalene	19.66	128	96276	447.43	ng/mL#	100
15) 2-Methylnaphthalene	22.34	142	63054	462.88	ng/mL#	100
16) 1-Methylnaphthalene	22.78	142	59595	464.70	ng/mL#	100
17) Benzothiophene	19.88	134	84867	442.17	ng/mL	100
22) Biphenyl	24.23	154	76820	453.60	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.83	156	53650	474.57	ng/mL#	100
24) Dibenzofuran	27.31	168	87333	459.04	ng/mL	98
25) Acenaphthylene	25.94	152	103125	499.84	ng/mL#	100
26) Acenaphthene	26.67	153	59777	466.44	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.23	170	47867	471.67	ng/mL	98
28) Fluorene	28.68	166	66171	460.39	ng/mL	99
32) Dibenzothiophene	32.00	184	95223	449.25	ng/mL	99
41) Phenanthrene	32.50	178	97266	456.38	ng/mL	100
52) Retene	39.50	234	23834	534.86	ng/mL	96
53) Anthracene	32.67	178	94432m	478.89	ng/mL	
54) Carbazole	33.34	167	87618	480.09	ng/mL	99
55) 1-Methylphenanthrene	35.00	192	69852	478.66	ng/mL	99
56) Fluoranthene	37.27	202	106200	468.00	ng/mL	99
57) Benzo(b)fluorene	39.79	216	71168	537.38	ng/mL	98
59) Pyrene	38.15	202	107612	466.26	ng/mL	100
64) Naphthobenzothiophene	42.01	234	107170	496.35	ng/ml	100
65) Naphthobenzothiophene-2,1-	42.01	234	107170	496.35	ng/mL	100
73) Benz[a]anthracene	42.94	228	108499	527.64	ng/mL	97
74) Chrysene	43.10	228	100023m	476.04	ng/mL	
75) Chrysene/Triphenylene	43.10	228	103738m	493.72	ng/mL	
82) Benzo[b]fluoranthene	46.99	252	107993	511.37	ng/mL	99
83) Benzo[k]fluoranthene	47.08	252	110405	502.52	ng/mL	99
85) Benzo[e]pyrene	47.98	252	100155	489.84	ng/mL	99
86) Benzo[a]pyrene	48.17	252	107115m	529.48	ng/mL	
87) Perylene	48.48	252	101785	514.72	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.93	276	108565m	609.82	ng/mL	
89) Dibenz[a,h]anthracene	53.00	278	105587	581.86	ng/mL	99
90) Benzo[g,h,i]perylene	54.21	276	108338	528.10	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.10	191	24621	415.10	ng/mL	98
92) Hopane (T19)	52.10	191	24621	415.10	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24\
Data File : P17788.D
Acq On : 27 Jan 2006 2:03 am
Operator : AC
Sample : C1012503
Misc : PAH STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 09:24:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 24 07:37:56 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34809.D
Acq On : 19 Jan 2006 9:32 am
Operator : AC
Sample : C3011803
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 20 08:18:22 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

MJ 1/20/06

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 : P34809.D
Acq On : 19 Jan 2006 9:32 am
Operator : AC
Sample : C3011803
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 20 08:18:22 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	128	-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	0.417	3.0	143	-0.01
84	A2	Hopane (T19)	0.430	0.417	3.0	143	-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 : P34809.D
Acq On : 19 Jan 2006 9:32 am
Operator : AC
Sample : C3011803
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 20 08:18:22 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	0.213	-1.4	132	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 : P34809.D
Acq On : 19 Jan 2006 9:32 am
Operator : AC
Sample : C3011803
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 20 08:18:22 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 1/20/06

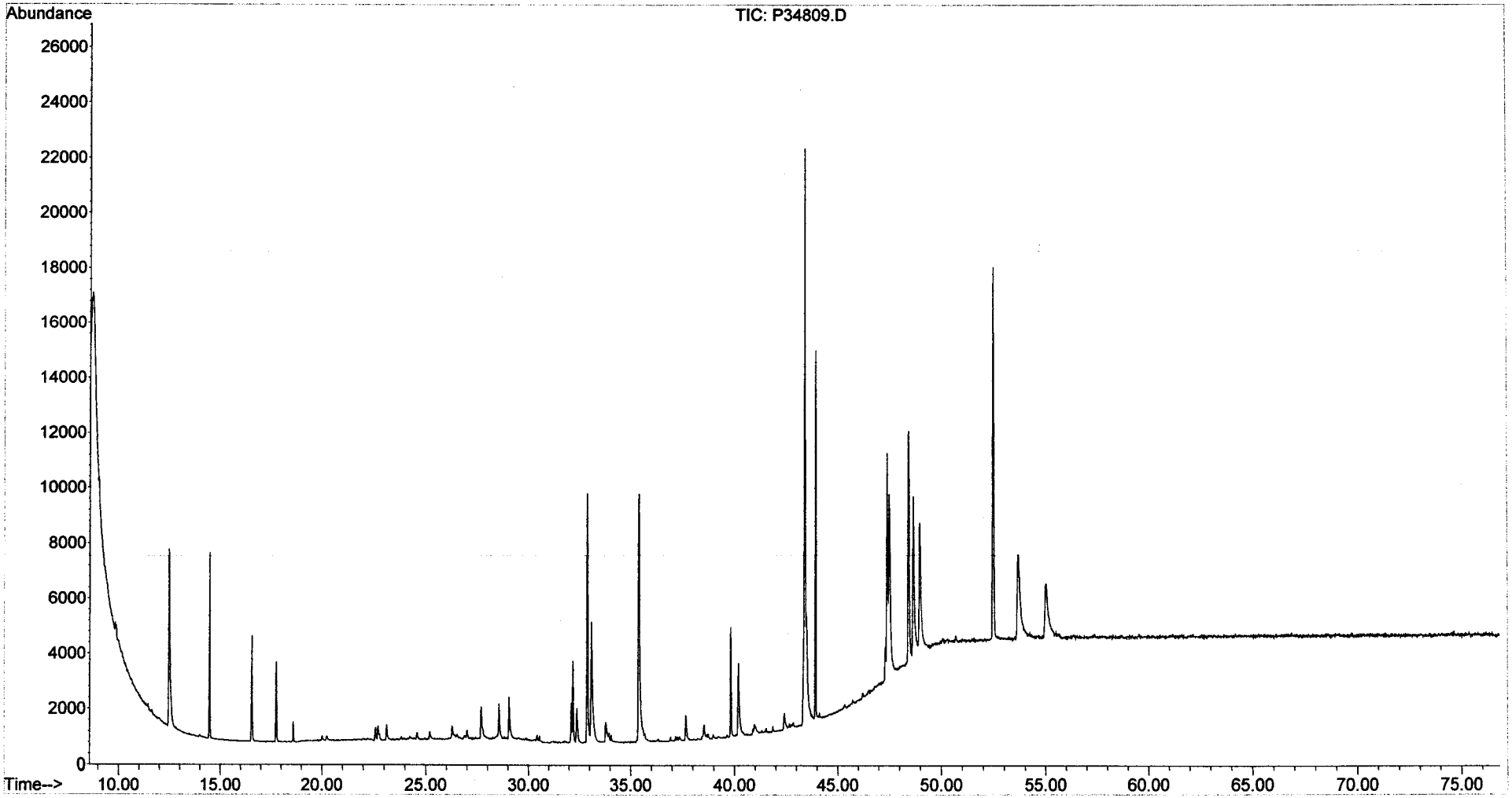
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	78465	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	16713	506.81	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	50.68%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	32709	485.09	ng/mL	100
84) Hopane (T19)	52.48	191	32709	485.09	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 : P34809.D
Acq On : 19 Jan 2006 9:32 am
Operator : AC
Sample : C3011803
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 20 08:18:22 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 : P34819.D
Acq On : 20 Jan 2006 12:30 am
Operator : AC
Sample : C3011804
Misc : STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 20 08:24:41 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 1/20/06

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 : P34819.D
Acq On : 20 Jan 2006 12:30 am
Operator : AC
Sample : C3011804
Misc : STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 20 08:24:41 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	144	-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	0.453	-5.3	174	-0.01
84	A2	Hopane (T19)	0.430	0.453	-5.3	174	-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 : P34819.D
Acq On : 20 Jan 2006 12:30 am
Operator : AC
Sample : C3011804
Misc : STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 20 08:24:41 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	0.221	-5.2	154	-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 : P34819.D
Acq On : 20 Jan 2006 12:30 am
Operator : AC
Sample : C3011804
Misc : STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 20 08:24:41 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 1/20/06

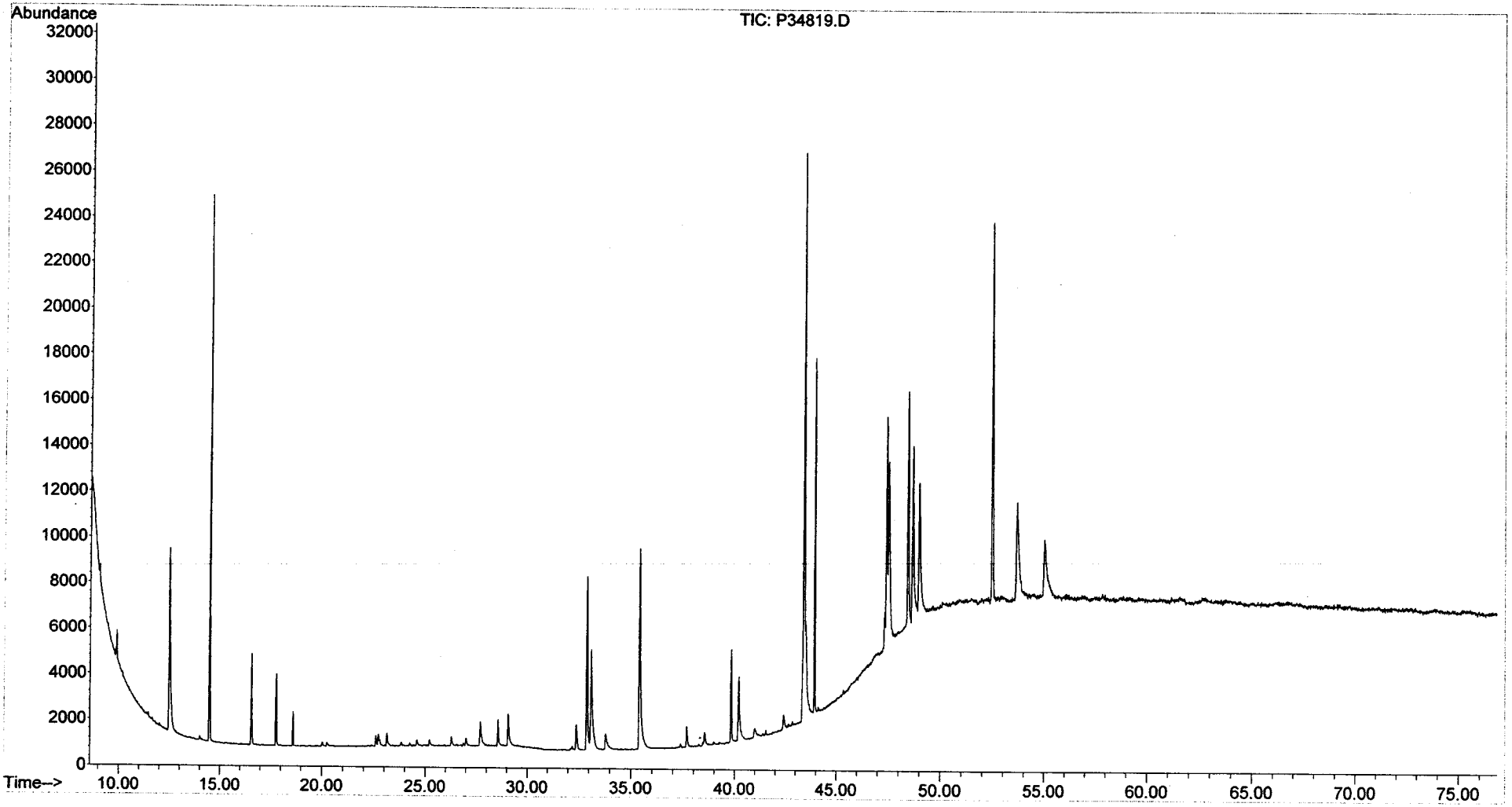
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	88119	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	19457	525.38	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	52.54%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	39896	526.85	ng/mL	99
84) Hopane (T19)	52.48	191	39896	526.85	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34819.D
Acq On : 20 Jan 2006 12:30 am
Operator : AC
Sample : C3011804
Misc : STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 20 08:24:41 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 : P34858.D
Acq On : 23 Jan 2006 12:15 pm
Operator : AC
Sample : C3012301
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 24 06:38:21 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

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 : P34858.D
Acq On : 23 Jan 2006 12:15 pm
Operator : AC
Sample : C3012301
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 24 06:38:21 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	202#	-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	0.445	-3.5	239#	-0.01
84	A2	Hopane (T19)	0.430	0.445	-3.5	239#	-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 : P34858.D
Acq On : 23 Jan 2006 12:15 pm
Operator : AC
Sample : C3012301
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 24 06:38:21 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	219#	-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 : P34858.D
Acq On : 23 Jan 2006 12:15 pm
Operator : AC
Sample : C3012301
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 24 06:38:21 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

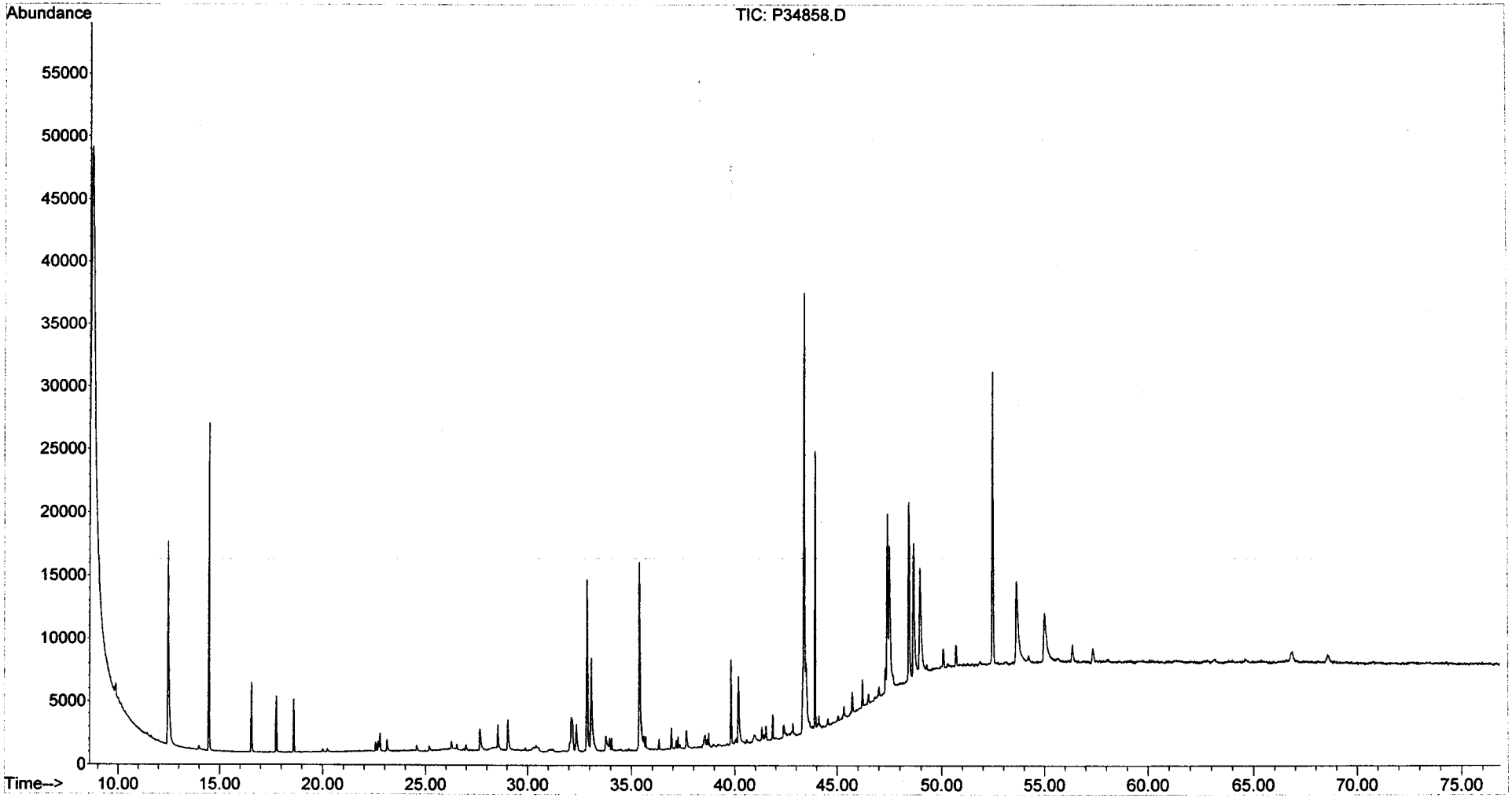
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.37	240	123281	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	27749	535.57	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	53.56%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	54812	517.38	ng/mL	100
84) Hopane (T19)	52.48	191	54812	517.38	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 : P34858.D
Acq On : 23 Jan 2006 12:15 pm
Operator : AC
Sample : C3012301
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 24 06:38:21 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 : P34862.D
Acq On : 23 Jan 2006 7:22 pm
Operator : AC
Sample : C3012302
Misc : STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 24 06:40:02 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

1/24/06

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 : P34862.D
Acq On : 23 Jan 2006 7:22 pm
Operator : AC
Sample : C3012302
Misc : STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 24 06:40:02 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	198	-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	0.455	-5.8	241#	-0.01
84	A2	Hopane (T19)	0.430	0.455	-5.8	241#	-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 : P34862.D
Acq On : 23 Jan 2006 7:22 pm
Operator : AC
Sample : C3012302
Misc : STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 24 06:40:02 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	215#	-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 : P34862.D
Acq On : 23 Jan 2006 7:22 pm
Operator : AC
Sample : C3012302
Misc : STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 24 06:40:02 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

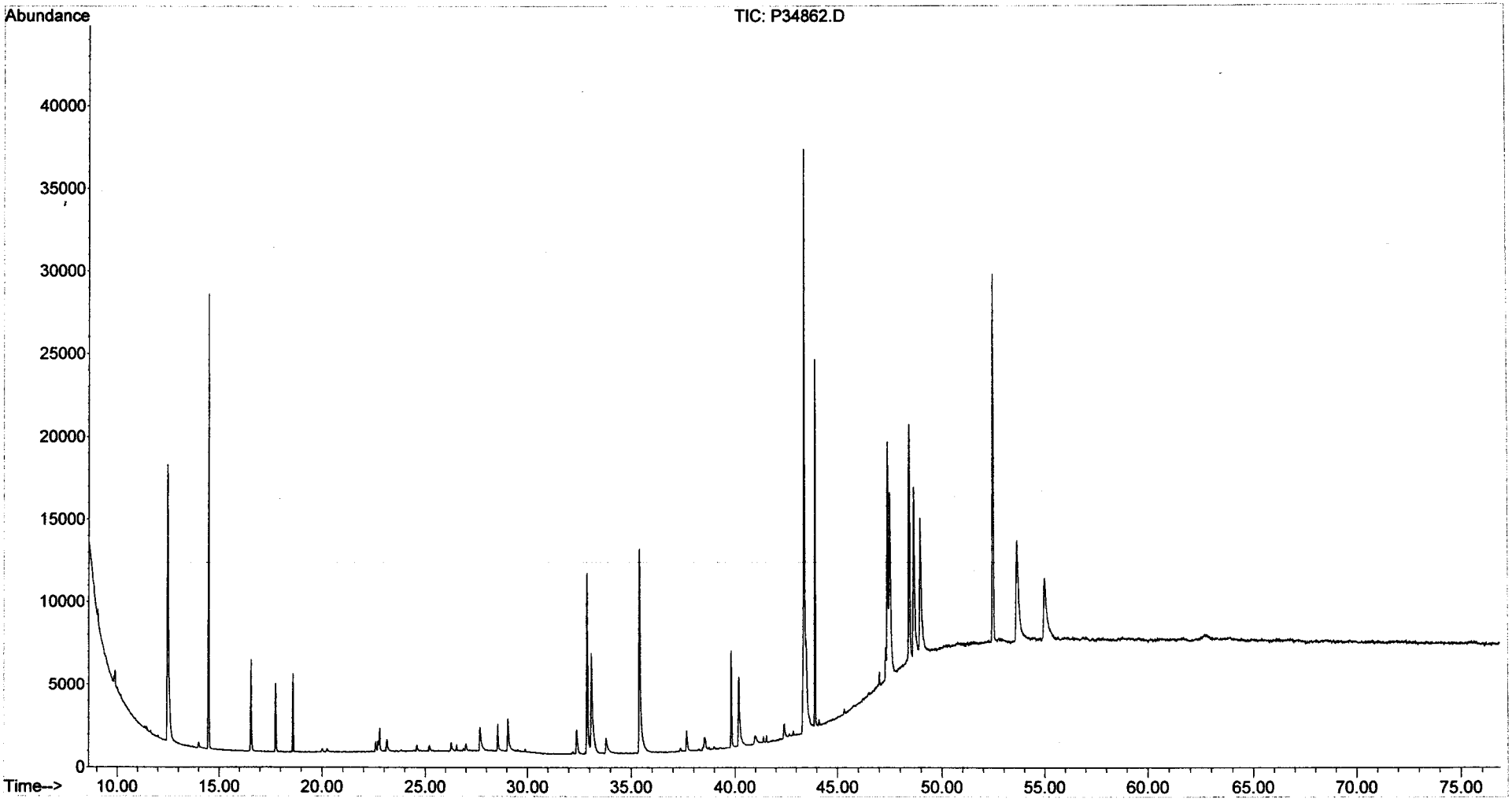
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	121128	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
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	27209	534.48	ng/ml	-0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	53.45%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	55164	529.96	ng/mL	100
84) Hopane (T19)	52.48	191	55164	529.96	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 : P34862.D
Acq On : 23 Jan 2006 7:22 pm
Operator : AC
Sample : C3012302
Misc : STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 24 06:40:02 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\JAN26\
Data File : P34869.D
Acq On : 26 Jan 2006 11:26 am
Operator : AC
Sample : C3012601
Misc : STD
ALS Vial : 1 Sample Multiplier: 1

1/26/06

Quant Time: Jan 26 13:54:55 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)
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\JAN26\
Data File : P34869.D
Acq On : 26 Jan 2006 11:26 am
Operator : AC
Sample : C3012601
Misc : STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 26 13:54:55 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	136	-0.02
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	162	-0.01
84	A2	Hopane (T19)	0.430	0.446	-3.7	162	-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\JAN26\
Data File : P34869.D
Acq On : 26 Jan 2006 11:26 am
Operator : AC
Sample : C3012601
Misc : STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 26 13:54:55 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	0.226	-7.6	149	-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\JAN26\
Data File : P34869.D
Acq On : 26 Jan 2006 11:26 am
Operator : AC
Sample : C3012601
Misc : STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 26 13:54:55 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

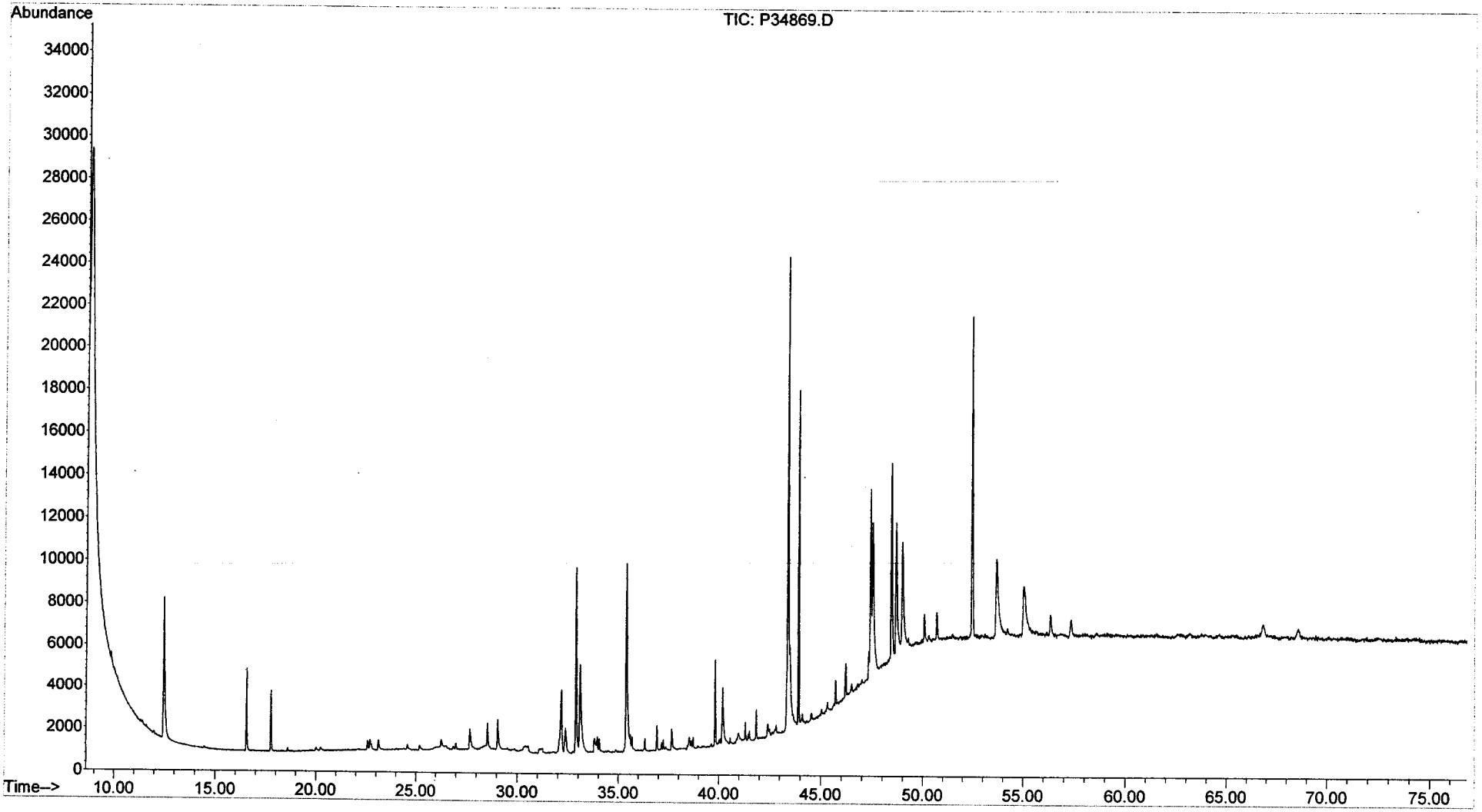
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	83358	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.91	217	18824	537.32	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.73%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	37164	518.81	ng/mL	100
84) Hopane (T19)	52.48	191	37164	518.81	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34869.D
Acq On : 26 Jan 2006 11:26 am
Operator : AC
Sample : C3012601
Misc : STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 26 13:54:55 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\JAN26\
Data File : P34877.D
Acq On : 26 Jan 2006 11:22 pm
Operator : AC
Sample : C3012602
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

1/27/06

Quant Time: Jan 27 09:30:48 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)
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\JAN26\
Data File : P34877.D
Acq On : 26 Jan 2006 11:22 pm
Operator : AC
Sample : C3012602
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 09:30:48 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	141	-0.02
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	0.452	-5.1	171	-0.02
84	A2	Hopane (T19)	0.430	0.452	-5.1	171	-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\JAN26\
Data File : P34877.D
Acq On : 26 Jan 2006 11:22 pm
Operator : AC
Sample : C3012602
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 09:30:48 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	0.233	-11.0	159	-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\JAN26\
Data File : P34877.D
Acq On : 26 Jan 2006 11:22 pm
Operator : AC
Sample : C3012602
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 09:30:48 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

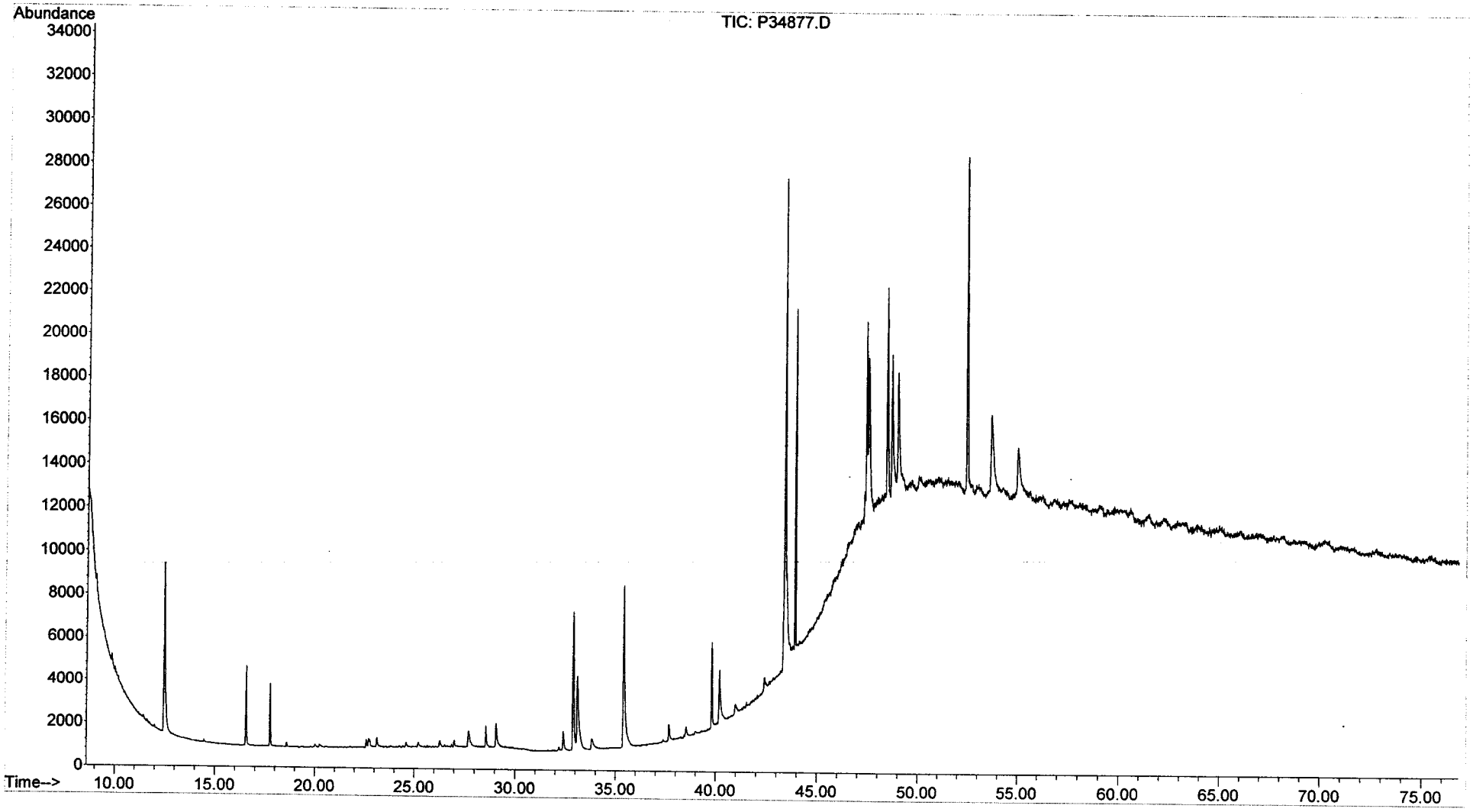
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	86518	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.91	217	20155	554.30	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.43%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	39099	525.88	ng/mL	100
84) Hopane (T19)	52.47	191	39099	525.88	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34877.D
Acq On : 26 Jan 2006 11:22 pm
Operator : AC
Sample : C3012602
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 09:30:48 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\JAN26\
Data File : P34904.D
Acq On : 31 Jan 2006 9:28 am
Operator : AC
Sample : C3012609
Misc : std
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 01 06:16:47 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

MJ 2/1/06

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\JAN26\
Data File : P34904.D
Acq On : 31 Jan 2006 9:28 am
Operator : AC
Sample : C3012609
Misc : std
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 01 06:16:47 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	196	-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	0.442	-2.8	232#	-0.02
84	A2	Hopane (T19)	0.430	0.442	-2.8	232#	-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\JAN26\
Data File : P34904.D
Acq On : 31 Jan 2006 9:28 am
Operator : AC
Sample : C3012609
Misc : std
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 01 06:16:47 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	0.224	-6.7	212#	-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\JAN26\
Data File : P34904.D
Acq On : 31 Jan 2006 9:28 am
Operator : AC
Sample : C3012609
Misc : std
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 01 06:16:47 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 2/1/06

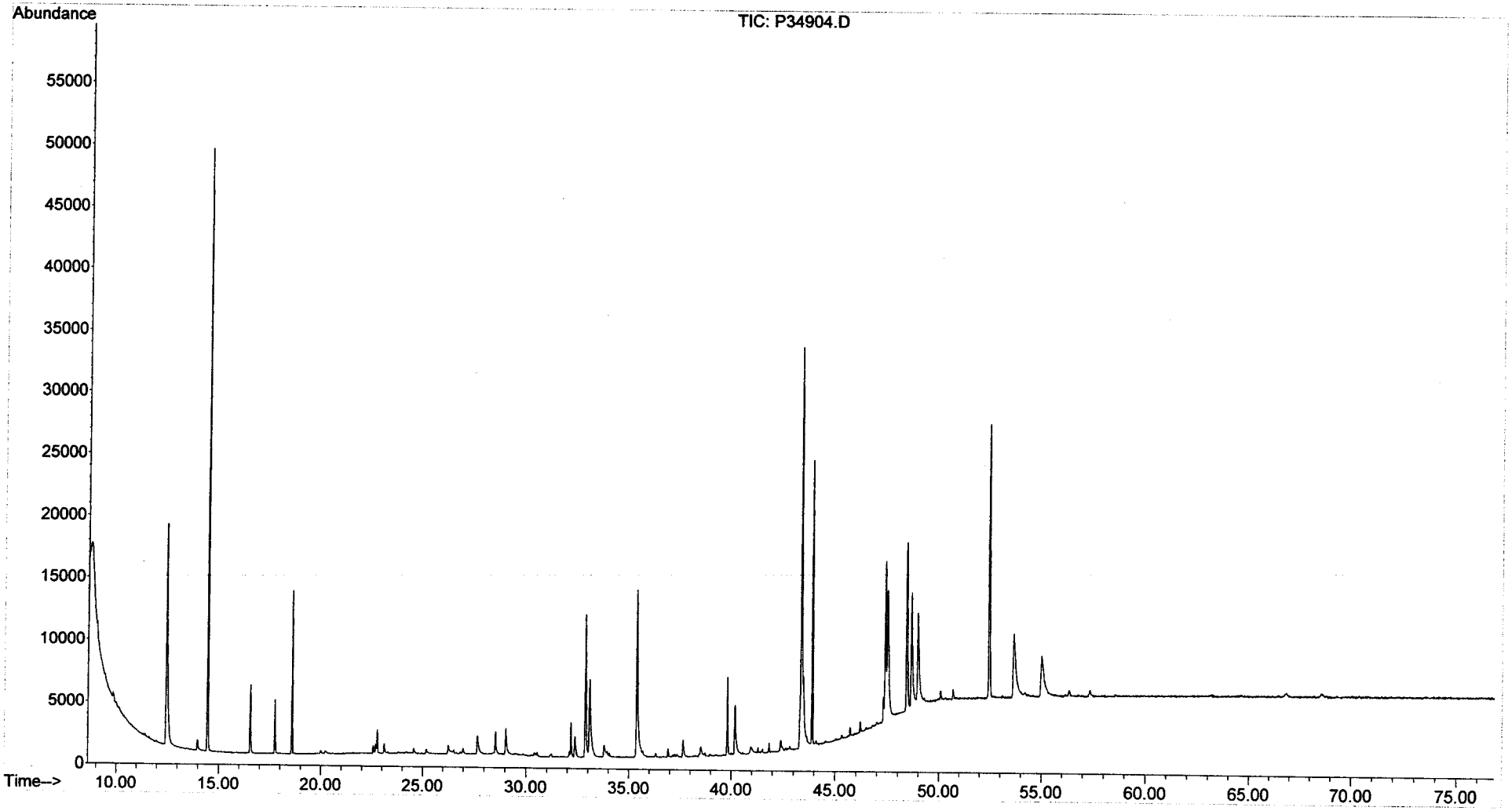
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	120104	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	26847	531.87	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.19%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	53063	514.12	ng/mL	100
84) Hopane (T19)	52.47	191	53063	514.12	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34904.D
Acq On : 31 Jan 2006 9:28 am
Operator : AC
Sample : C3012609
Misc : std
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 01 06:16:47 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\JAN26\
Data File : P34906.D
Acq On : 31 Jan 2006 4:30 pm
Operator : AC
Sample : C3012610
Misc : STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 01 06:21:07 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 2/1/06

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\JAN26\
Data File : P34906.D
Acq On : 31 Jan 2006 4:30 pm
Operator : AC
Sample : C3012610
Misc : STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 01 06:21:07 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	181	-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	0.463	-7.7	224#	-0.02
84	A2	Hopane (T19)	0.430	0.463	-7.7	224#	-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\JAN26\
Data File : P34906.D
Acq On : 31 Jan 2006 4:30 pm
Operator : AC
Sample : C3012610
Misc : STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 01 06:21:07 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	197	-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\JAN26\
Data File : P34906.D
Acq On : 31 Jan 2006 4:30 pm
Operator : AC
Sample : C3012610
Misc : STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 01 06:21:07 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 2/1/06

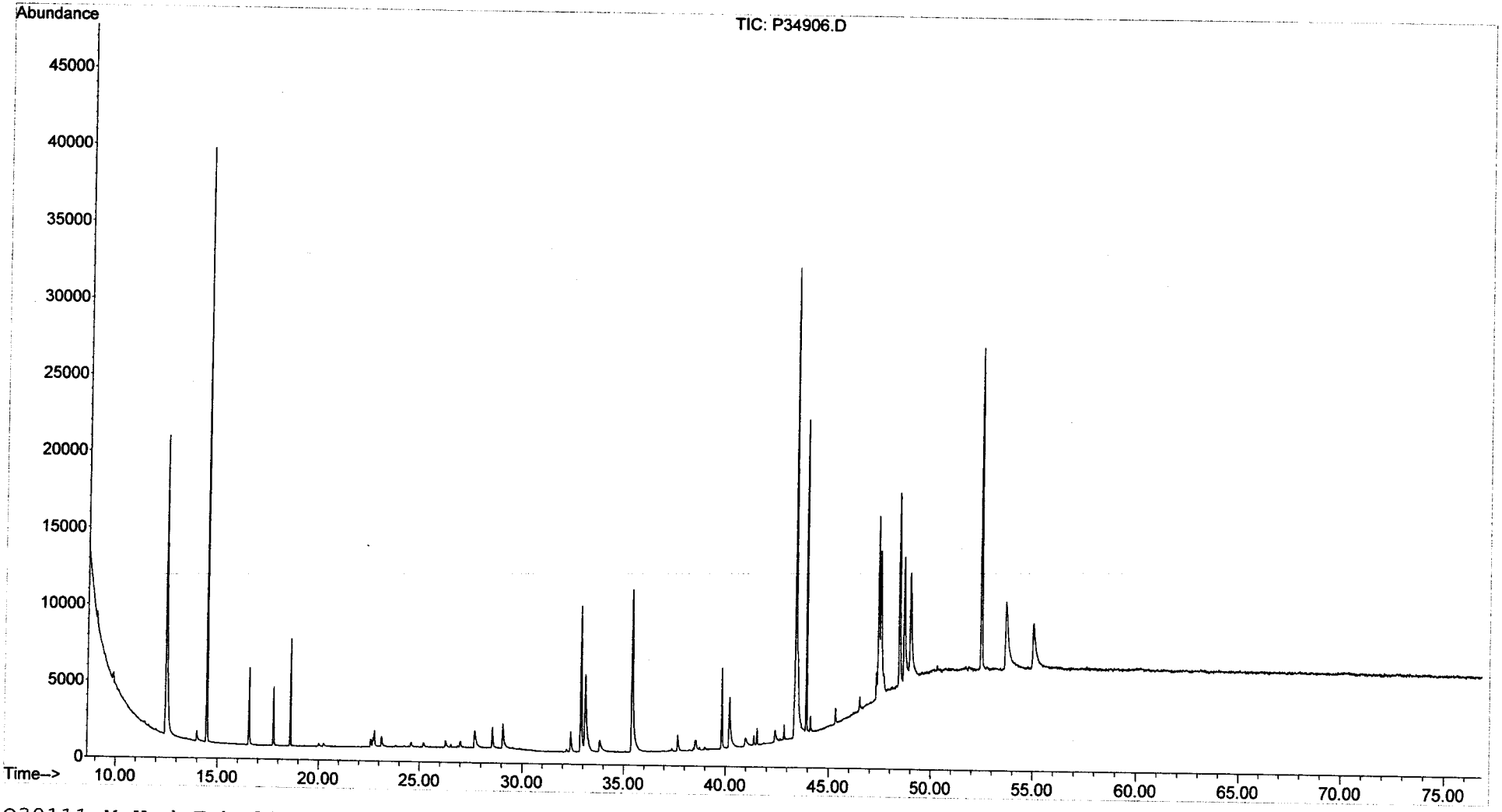
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	110806	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	24883	534.33	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.43%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	51308	538.83	ng/mL	100
84) Hopane (T19)	52.47	191	51308	538.83	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34906.D
Acq On : 31 Jan 2006 4:30 pm
Operator : AC
Sample : C3012610
Misc : STD
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 01 06:21:07 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

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C2011301**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		49590	27.35	76862	43.87
Upper Limit:		99180	27.85	153724	44.37
Lower Limit:		24795	26.85	38431	43.37
Client ID	**Lab ID**				
GC-SED-08 (10.5-11.5)	0512128-01	60760	27.35	98302	43.86
GC-SED-09 (6-7)	0512128-02	65412	27.35	104040	43.86
GC-SED-05 (0-2)	0512128-03E	57390	27.35	94075	43.86
GC-SED-05 (0-2)	0512128-03E D	67320	27.35	109458	43.86
GC-SED-04 (10.3-11.3)	0512128-04	54197	27.35	87388	43.86
GC-SED-RM 039	0512128-05	57827	27.35	89994	43.86
CCV	C2011302	49037	27.35	73627	43.86

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C2011803**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		31715	27.31	48981	43.82
Upper Limit:		63430	27.81	97962	44.32
Lower Limit:		15858	26.81	24490	43.32
Client ID	**Lab ID**				
Blank	SS010606B04	25090	27.31	43537	43.82
Blank	SO011006B01	29118	27.31	42830	43.82
LCS	SS010606LCS04	30904	27.31	50571	43.82
LCSD	SS010606LCSD03	34563	27.31	56431	43.82
LCS	SO011006LCS01	41565	27.31	69206	43.82
LCSD	SO011006LCSD01	38371	27.31	62747	43.82
GC-SED-05 (0-2)	0512128-03	55431	27.31	96702	43.84
GC-SED-05 (0-2)	0512128-03 D	55383	27.31	94349	43.83
CCV	C2011804	42552	27.31	67286	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.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C2011804**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		42552	27.31	67286	43.82
Upper Limit:		85104	27.81	134572	44.32
Lower Limit:		21276	26.81	33643	43.32
Client ID	**Lab ID**				
GC-SED-08 (10.5-11.5)	0512128-01E	42858	27.31	66357	43.82
GC-SED-09 (6-7)	0512128-02E	42103	27.31	64967	43.82
GC-SED-04 (10.3-11.3)	0512128-04E	38478	27.31	60727	43.82
GC-SED-RM 039	0512128-05E	42265	27.31	66109	43.82
CCV	C2011805	35572	27.31	53209	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.

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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: **0512128**
Lab ID: **C1012501**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		42497	26.55	62233	43.01
Upper Limit:		84994	27.05	124466	43.51
Lower Limit:		21248	26.05	31116	42.51
Client ID	**Lab ID**				
Blank	SS011906B04	51809	26.55	81596	43.01
LCS	SS011906LCS03	51412	26.55	84211	43.01
LCSD	SS011906LCSD03	50689	26.55	81246	43.01
GC-SED-08 (10.5-11.5)	0512128-01X	41472	26.55	71899	43.01
GC-SED-09 (6-7)	0512128-02X	41467	26.54	72338	43.01
GC-SED-05 (0-2)	0512128-03EX	46661	26.54	76459	43.00
GC-SED-05 (0-2)	0512128-03EX D	46914	26.54	75247	43.00
GC-SED-04 (10.3-11.3)	0512128-04X	44905	26.54	75379	43.00
CCV	C1012502	45054	26.54	69699	43.00

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C1012502**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		45054	26.54	69699	43.00
Upper Limit:		90108	27.04	139398	43.50
Lower Limit:		22527	26.04	34850	42.50
Client ID	**Lab ID**				
GC-SED-08 (10.5-11.5)	0512128-01EX	40803	26.54	63707	43.00
GC-SED-09 (6-7)	0512128-02EX	42056	26.54	66626	43.00
GC-SED-04 (10.3-11.3)	0512128-04EX	40254	26.54	64279	43.00
GC-SED-05 (0-2)	0512128-03X	50025	26.55	91131	43.03
GC-SED-05 (0-2)	0512128-03X D	49206	26.55	87336	43.03
CCV	C1012503	42134	26.54	67551	43.00

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

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Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C3011803**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		78465	43.38
Upper Limit:		156930	43.88
Lower Limit:		39232	42.88
Client ID	**Lab ID**		
Blank	SS010606B04	59482	43.45
Blank	SO011006B01	60465	43.45
GC-SED-08 (10.5-11.5)	0512128-01	78277	43.41
GC-SED-09 (6-7)	0512128-02	82625	43.42
GC-SED-05 (0-2)	0512128-03	80886	43.42
GC-SED-05 (0-2)	0512128-03 D	80588	43.42
GC-SED-04 (10.3-11.3)	0512128-04	83811	43.41
CCV	C3011804	88119	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: **0512128**
Lab ID: **C3012301**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		123281	43.37
Upper Limit:		246562	43.87
Lower Limit:		61640	42.87
Client ID	**Lab ID**		
GC-SED-RM 039	0512128-05	93323	43.42
CCV	C3012302	121128	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.

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Form VIII
Internal Standard Summary
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **C3012601**

		Chrysene-d12	
		Area	**RT**
Standard:		83358	43.39
Upper Limit:		166716	43.89
Lower Limit:		41679	42.89
Client ID	**Lab ID**		
Blank	SS011906B04	63623	43.45
GC-SED-09 (6-7)	0512128-02X	85791	43.42
GC-SED-05 (0-2)	0512128-03X	173414 [a]	43.40
GC-SED-05 (0-2)	0512128-03X D	83136	43.43
GC-SED-04 (10.3-11.3)	0512128-04X	86451	43.42
CCV	C3012602	86518	43.39

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.

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

Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C3012609**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		120104	43.38
Upper Limit:		240208	43.88
Lower Limit:		60052	42.88
Client ID	**Lab ID**		
GC-SED-08 (10.5-11.5)	0512128-01X	91498	43.42
CCV	C3012610	110806	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.

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TOTAL PETROLEUM HYDROCARBON (TPH)

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	47.6	5.21	60.61	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**110000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	92	50-130
d50-Tetracosane	90	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27673.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 5:44 am
Operator : NLJr
Sample : 0512128-01-AFID
Misc : 1X
ALS Vial : 64 Sample Multiplier: 1

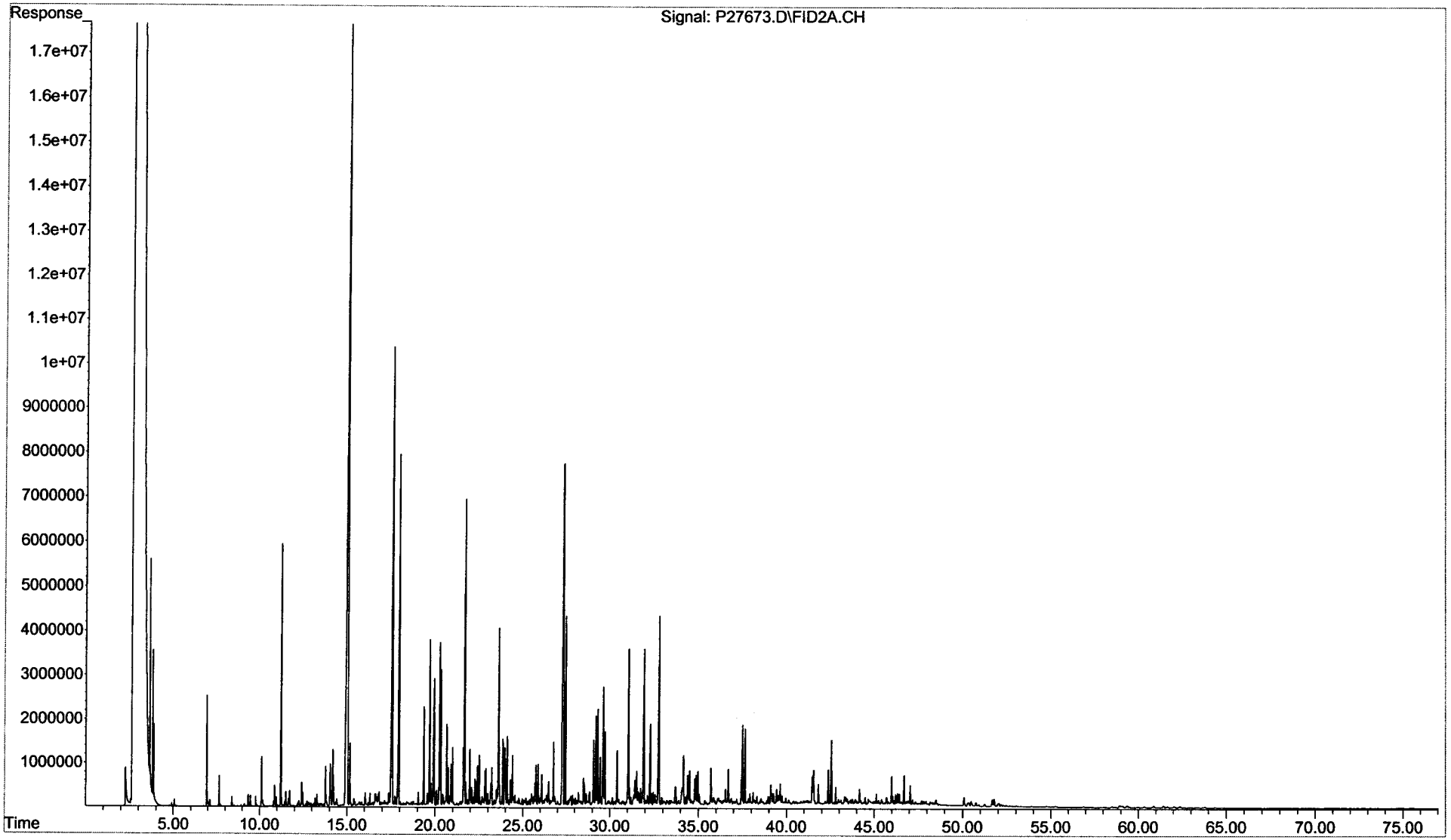
Integration File: SHCINT1.E
Quant Time: Jan 18 19:28:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	86993131	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	28200516	15.208 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	30.42%#
24) s d50-Tetracosane	35.70	24289233	14.831 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	29.66%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	7923343148	4656.545 ug/mL
44) h Total Resolved Hydrocarbon	40.84	5456974429	3207.061 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27673.D
Operator : NLJr
Acquired : 15 Jan 2006 5:44 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512128-01-AFID
Misc Info : 1X
Vial Number: 64



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-08 (10.5-11.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-01X**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	47.6	5.29	63.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**90000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	80	50-130
d50-Tetracosane	80	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17757.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 2:11 am
Operator : AC
Sample : 0512128-01-AFID
Misc : 1X
ALS Vial : 59 Sample Multiplier: 1

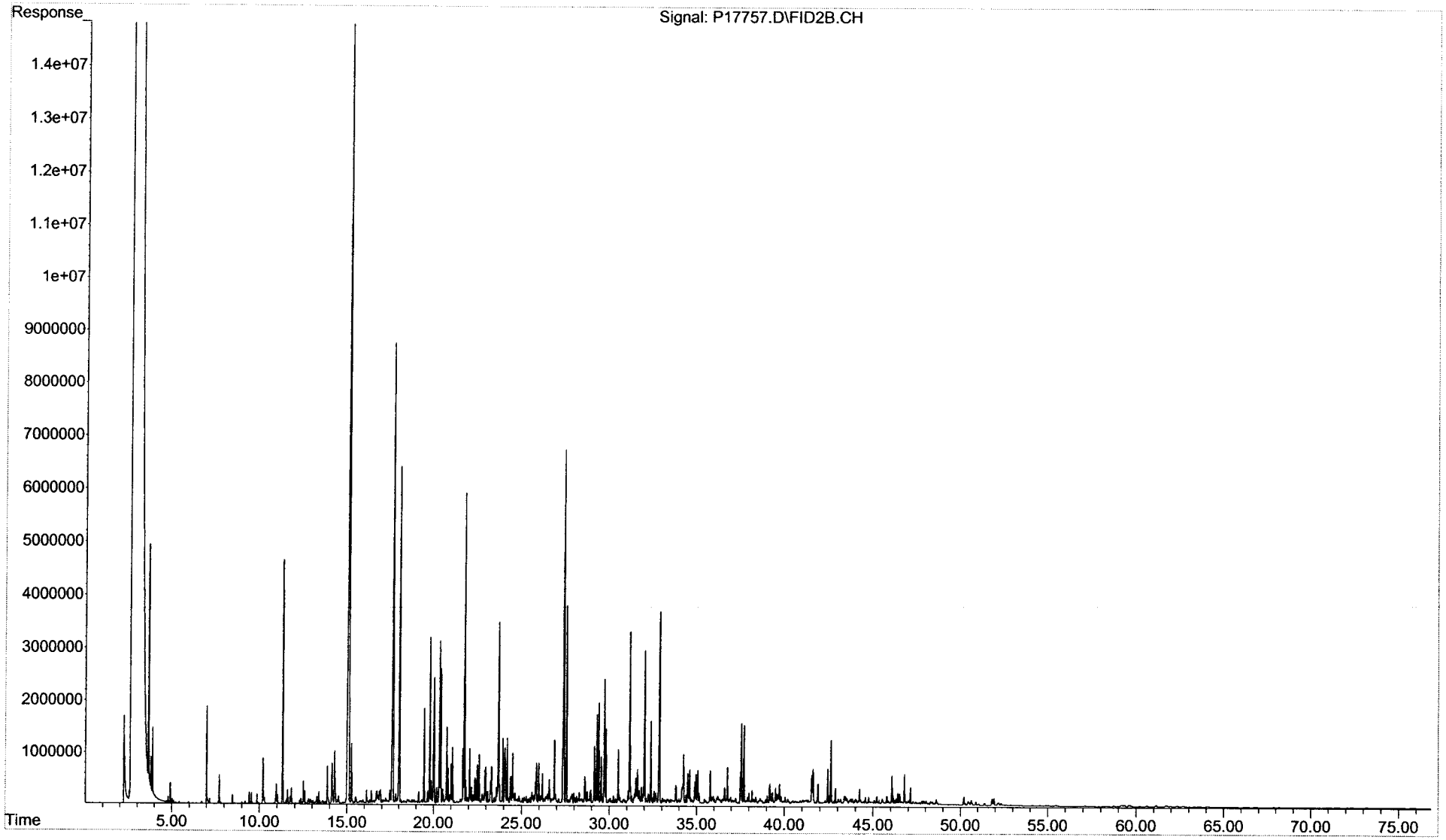
Integration File: SHCINT1.E
Quant Time: Jan 30 21:14:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.17	79476847	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	21763394	12.633 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	25.27%#
24) s d50-Tetracosane	35.78	19594310	12.691 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	25.38%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6089387496	3826.017 ug/mL
44) h Total Resolved Hydrocarbon	40.94	4670652964	2934.614 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17757.D
Operator : AC
Acquired : 26 Jan 2006 2:11 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0512128-01-AFID
Misc Info : 1X
Vial Number: 59



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	39.8	4.99	42.11	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**87000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	82	50-130
d50-Tetracosane	80	50-130

01/30/06 22:56

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27675.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 7:21 am
Operator : NLJr
Sample : 0512128-02-AFID
Misc : 1X
ALS Vial : 65 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 18 19:32:01 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

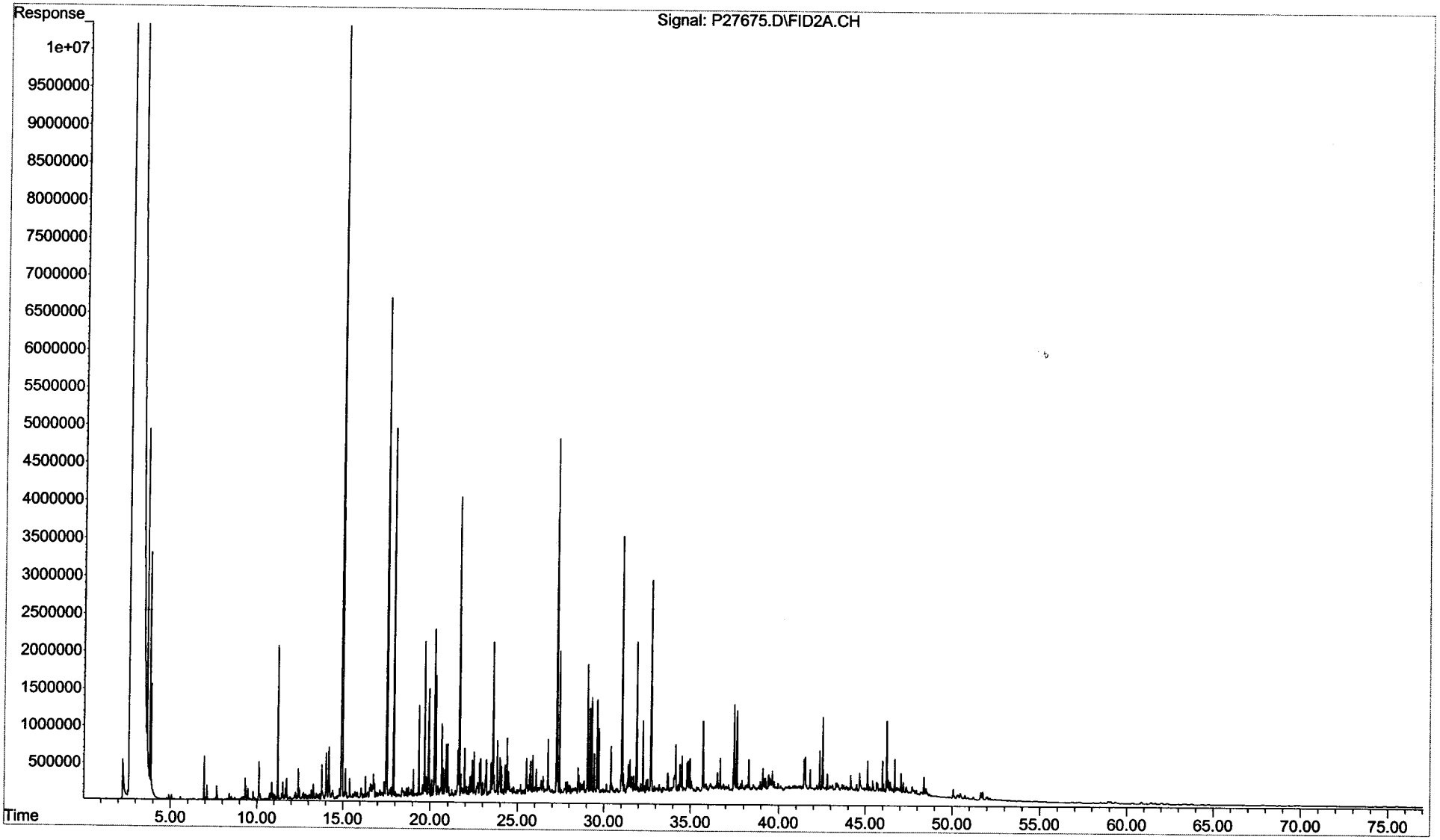
1/18/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	81402247	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	33641244	19.389 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	38.78%#
24) s d50-Tetracosane	35.70	29183332	19.043 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	38.09%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	6877087768	4319.251 ug/mL
44) h Total Resolved Hydrocarbon	40.84	3032819890	1904.805 ug/L

-Reject conc 2nd 2/3/06

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27675.D
Operator : NLJr
Acquired : 15 Jan 2006 7:21 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512128-02-AFID
Misc Info : 1X
Vial Number: 65



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-09 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-02X**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	39.8	5.12	39.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**70000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	77	50-130
d50-Tetracosane	75	50-130

01/30/06 22:05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17759.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 3:45 am
Operator : AC
Sample : 0512128-02-AFID
Misc : 1X
ALS Vial : 60 Sample Multiplier: 1

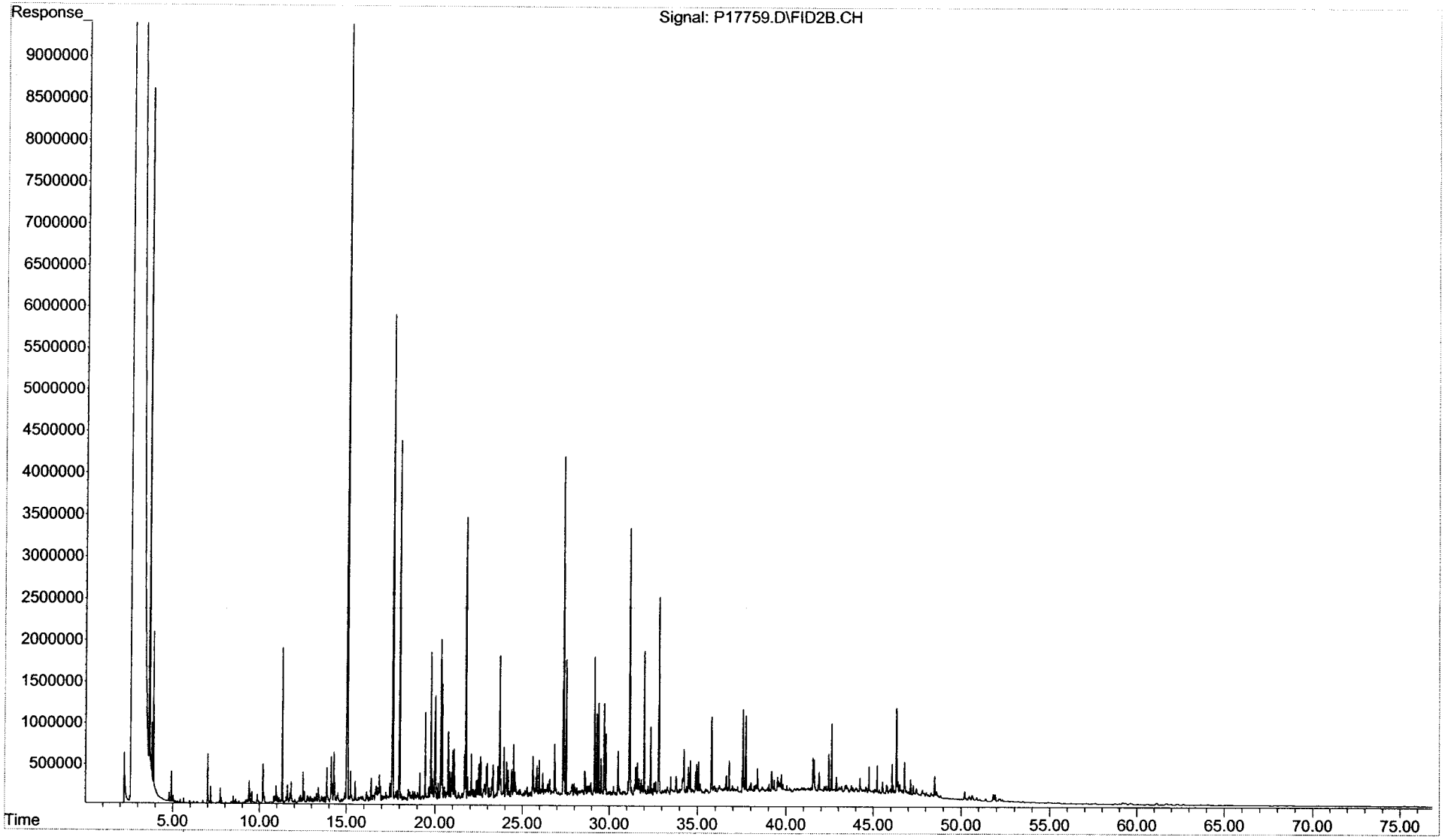
Integration File: SHCINT1.E
Quant Time: Jan 30 21:30:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.18	78190677	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	33163508	19.568 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	39.14%#
24) s d50-Tetracosane	35.78	28975871	19.076 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	38.15%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6069565807	3876.293 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2596001373	1657.921 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17759.D
Operator : AC
Acquired : 26 Jan 2006 3:45 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0512128-02-AFID
Misc Info : 1X
Vial Number: 60



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	34.7	10.51	9.26	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**5700**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	90	50-130
d50-Tetracosane	88	50-130

01/30/06 22:56

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27677.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 8:57 am
Operator : NLJr
Sample : 0512128-03-AFID
Misc : 1X
ALS Vial : 66 Sample Multiplier: 1

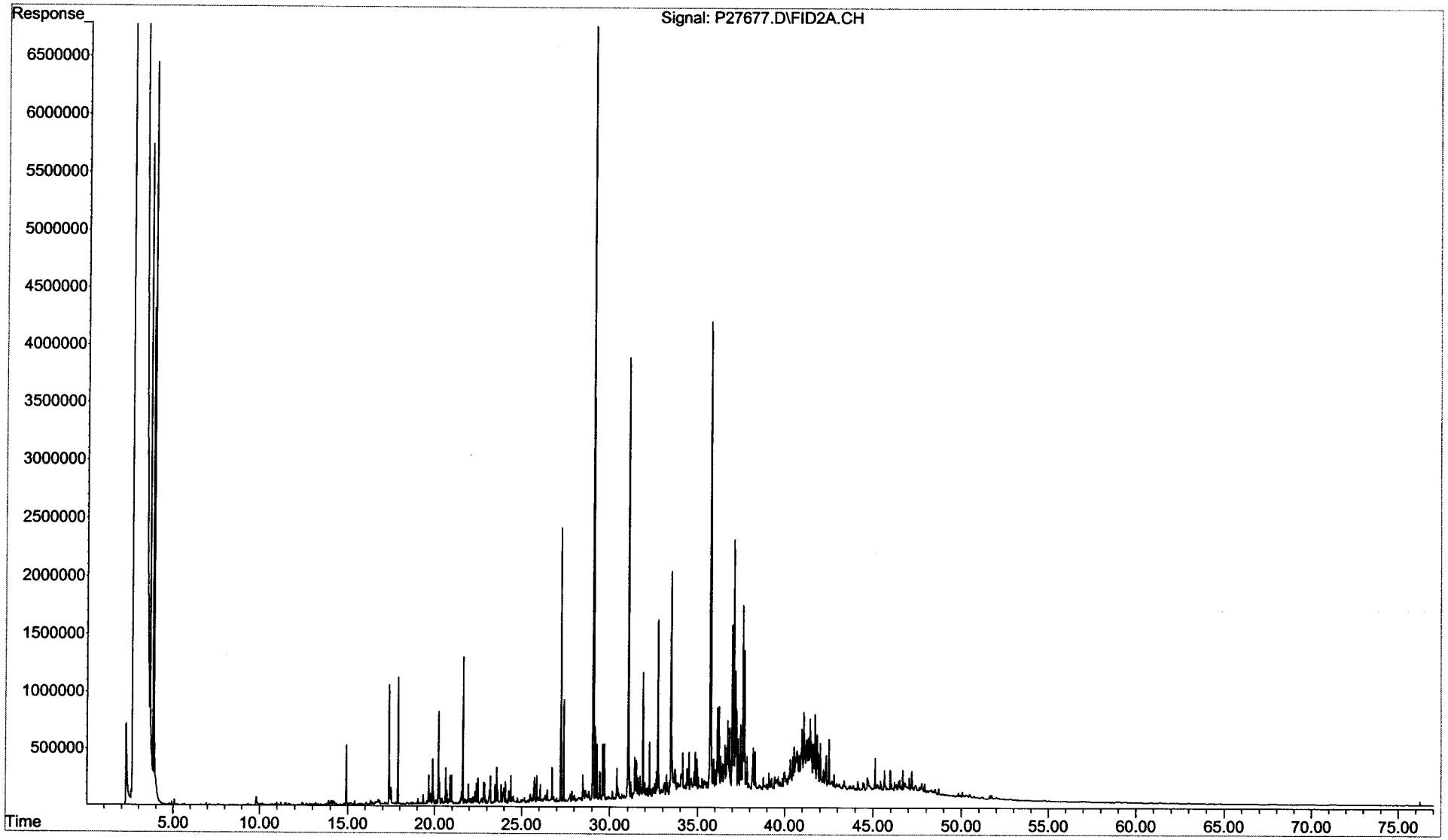
Integration File: SHCINT1.E
Quant Time: Jan 18 19:34:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	94074023	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.09	195185821	97.340 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 194.68%#
24) s d50-Tetracosane	35.74	167821898	94.756 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 189.51%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4466679458	2427.478 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1615017064	877.703 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27677.D
Operator : NLJr
Acquired : 15 Jan 2006 8:57 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512128-03-AFID
Misc Info : 1X
Vial Number: 66



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.24	3.96	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**2300**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	72	50-130
d50-Tetracosane	68	50-130

01/30/06 22:05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17761.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 5:18 am
Operator : AC X 2/3/06
Sample : 0512128-03-AFID
Misc : 1X
ALS Vial : 61 Sample Multiplier: 1

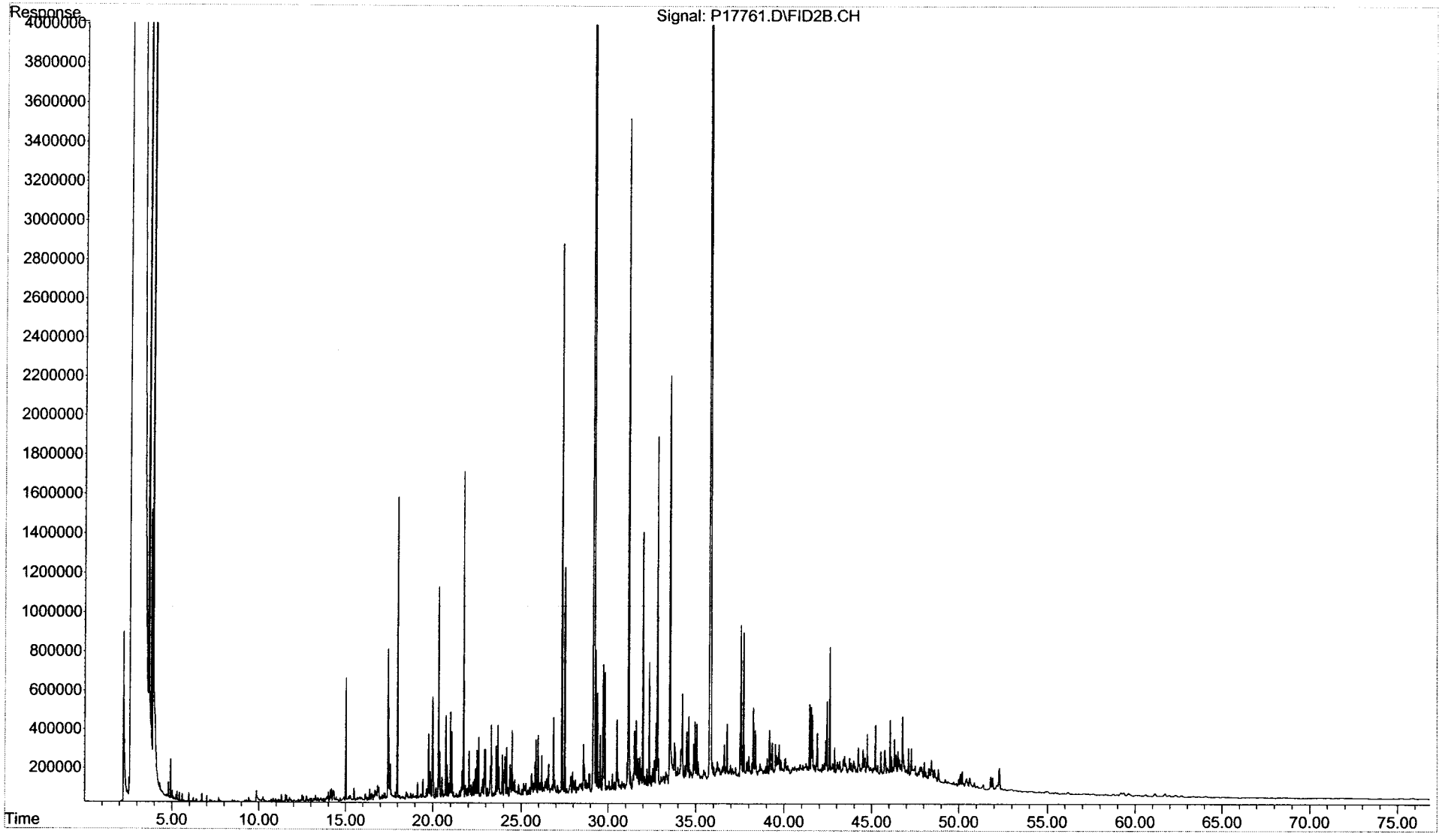
Integration File: SHCINT1.E
Quant Time: Jan 30 21:35:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.18	86077834	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.22	340257670	182.369 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 364.74%#	
24) s d50-Tetracosane	35.85	288934535	172.787 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 345.57%#	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4002674232	2322.057 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1402067387	813.376 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17761.D
Operator : AC
Acquired : 26 Jan 2006 5:18 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0512128-03-AFID
Misc Info : 1X
Vial Number: 61



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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03 D**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	34.7	10.28	9.26	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**4200**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	76	50-130
d50-Tetracosane	71	50-130

01/30/06 22:57

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27679.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 10:33 am
Operator : NLJr
Sample : 0512128-03D-AFID
Misc : 1X
ALS Vial : 67 Sample Multiplier: 1

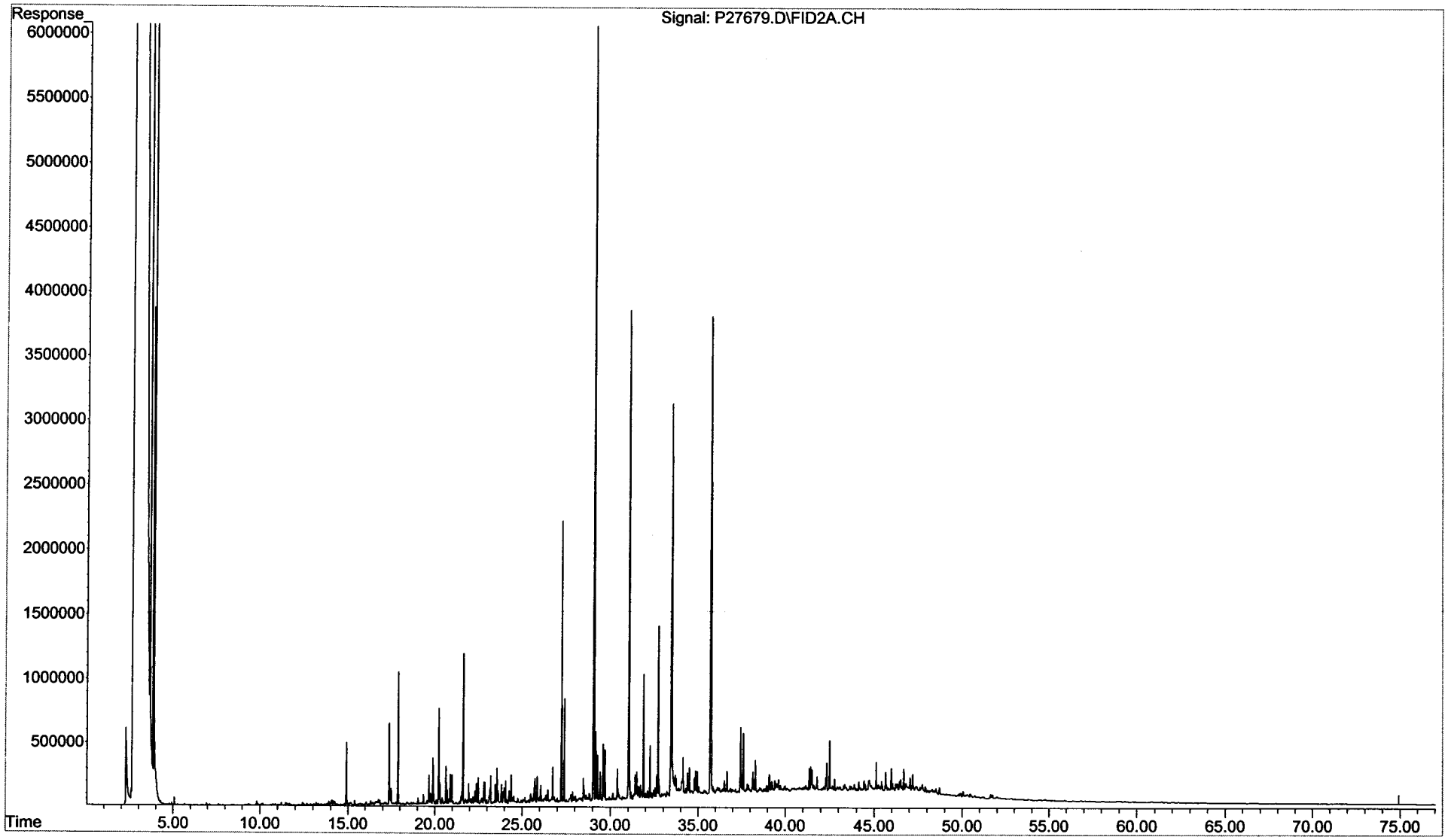
Integration File: SHCINT1.E
Quant Time: Jan 18 19:37:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	94532334	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.08	165384829	82.078 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	164.16%#
24) s d50-Tetracosane	35.73	137270074	77.130 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	154.26%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	3278334272	1773.018 ug/mL
44) h Total Resolved Hydrocarbon	40.84	953250657	515.545 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27679.D
Operator : NLJr
Acquired : 15 Jan 2006 10:33 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512128-03D-AFID
Misc Info : 1X
Vial Number: 67



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-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X D**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	34.7	10.60	3.75	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**1600**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	70	50-130
d50-Tetracosane	68	50-130

01/30/06 22:05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17763.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 6:53 am
Operator : AC
Sample : 0512128-03D-AFID X 2/3/06
Misc : 1X
ALS Vial : 62 Sample Multiplier: 1

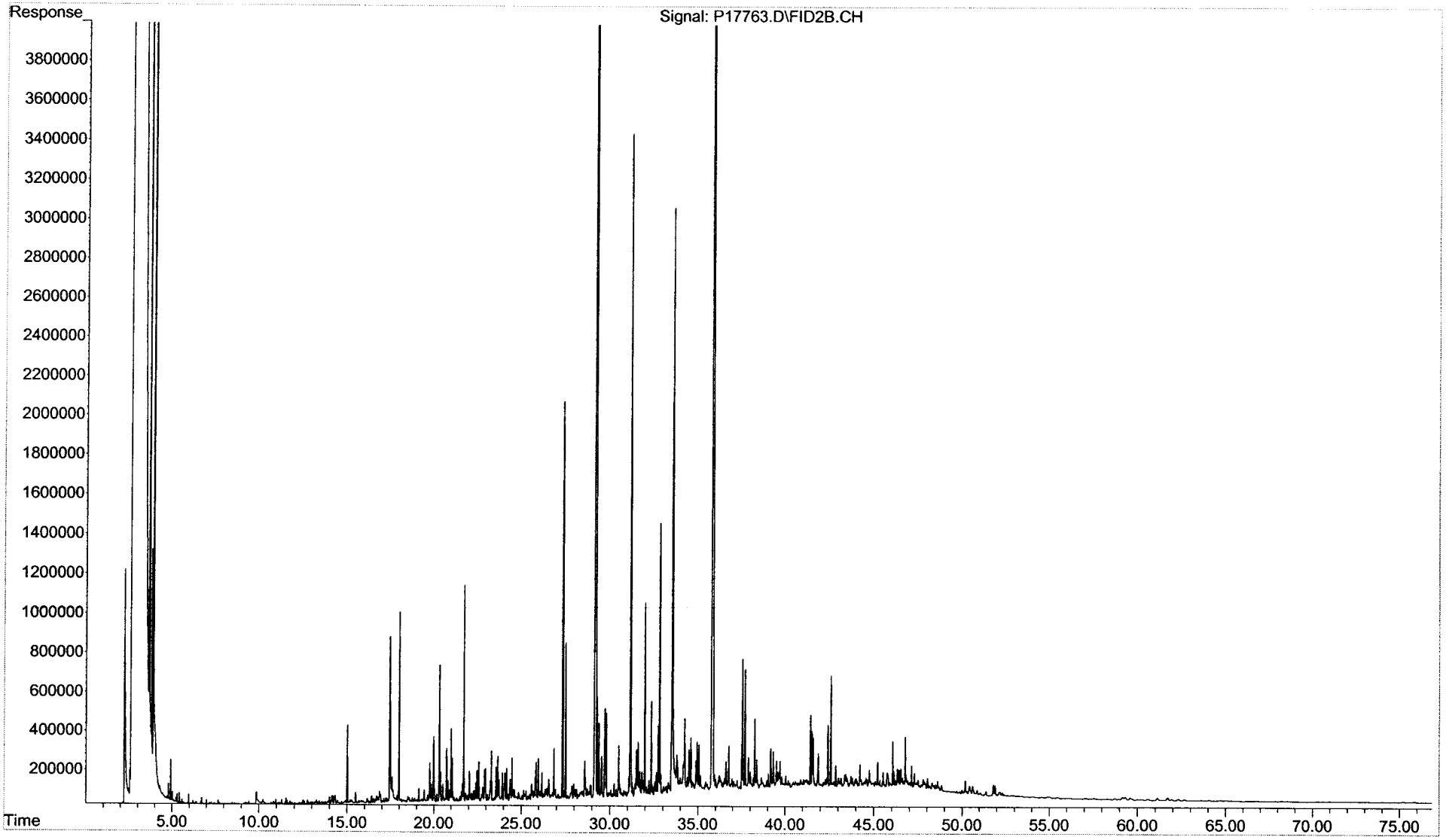
Integration File: SHCINT1.E
Quant Time: Jan 30 21:42:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.18	84234637	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.22	341144627	186.846 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 373.69%#	
24) s d50-Tetracosane	35.85	297353353	181.713 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 363.43%#	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	3001498102	1779.350 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1055628985	625.799 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17763.D
Operator : AC
Acquired : 26 Jan 2006 6:53 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0512128-03D-AFID
Misc Info : 1X
Vial Number: 62



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/06/06	34.7	NLJr

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**5700**	**4200**	32[a]	30

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	90	76	50-130
d50-Tetracosane	88	71	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.

01/30/06 22:57

Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-05 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-03X**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/23/05	12/28/05	01/19/06	34.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	2300	1600	39[a]	30

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	72	70	50-130
d50-Tetracosane	68	68	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.

01/30/06 22:05

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/06/06	01/15/06	60.2	5.29	19.23	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**27000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	91	50-130
d50-Tetracosane	86	50-130

01/30/06 22:57

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27681.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 12:08 pm
Operator : NLJr
Sample : 0512128-04-AFID
Misc : 1X
ALS Vial : 68 Sample Multiplier: 1

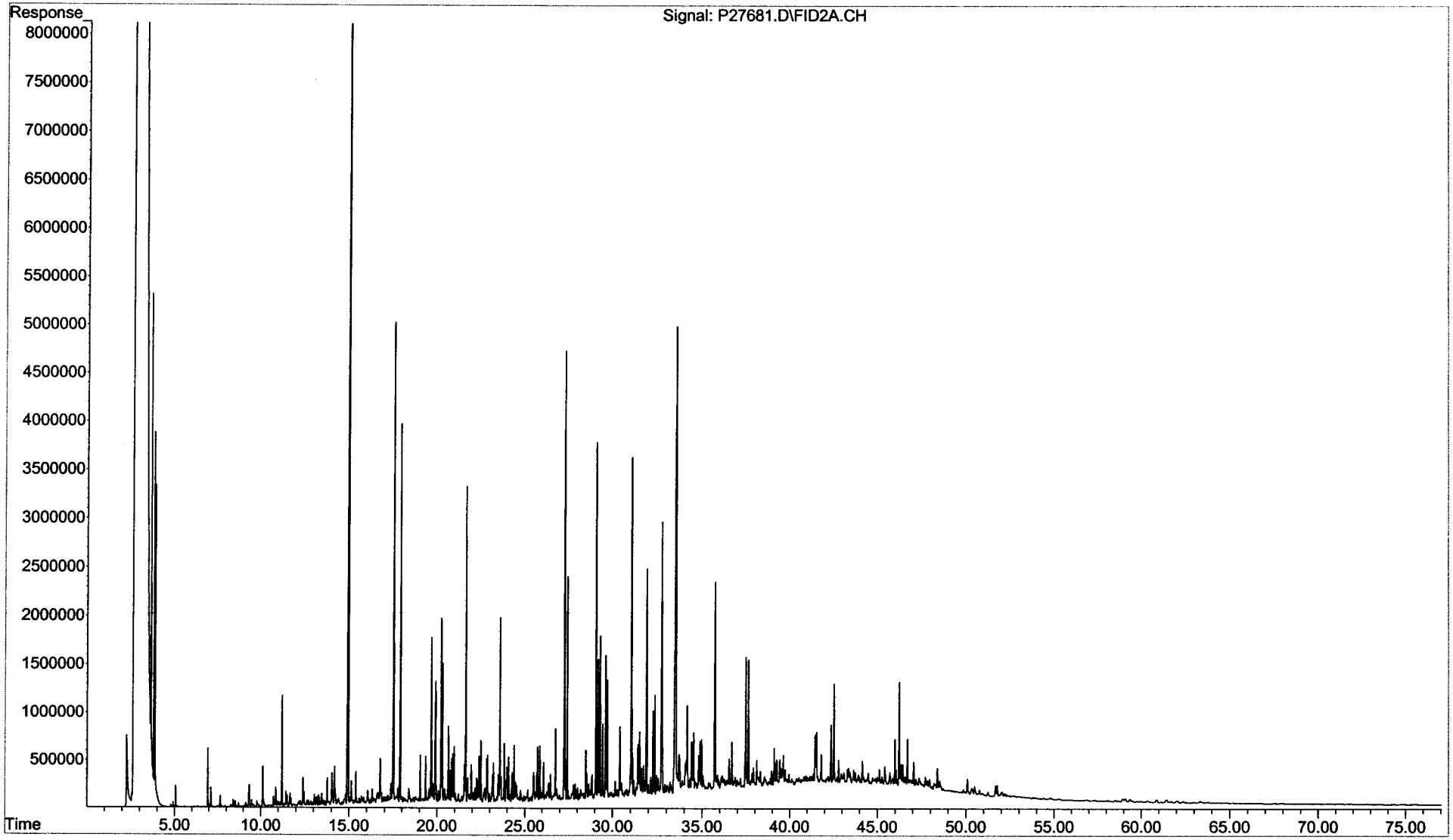
Integration File: SHCINT1.E
Quant Time: Jan 18 19:40:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	82914196	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.07	83663932	47.339 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	94.68%
24) s d50-Tetracosane	35.72	70219848	44.984 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	89.97%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	7614515020	4695.195 ug/mL
44) h Total Resolved Hydrocarbon	40.84	3080344720	1899.375 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27681.D
Operator : NLJr
Acquired : 15 Jan 2006 12:08 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512128-04-AFID
Misc Info : 1X
Vial Number: 68



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-04 (10.3-11.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-04X**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/19/06	01/26/06	60.2	5.54	21.99	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**23000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	79	50-130
d50-Tetracosane	74	50-130

01/30/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17765.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 8:28 am
Operator : AC
Sample : 0512128-04-AFID
Misc : 1X
ALS Vial : 63 Sample Multiplier: 1

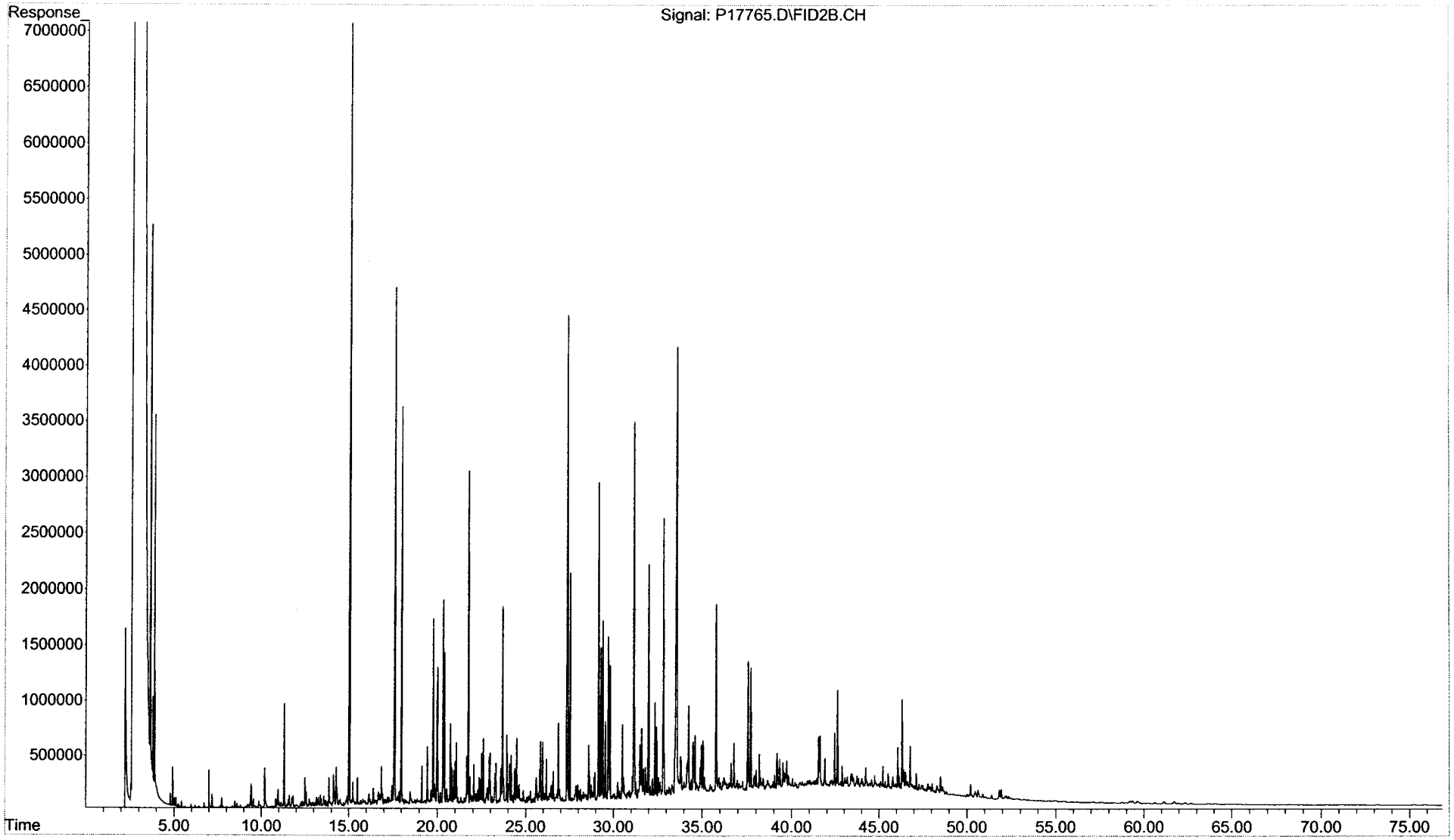
Integration File: SHCINT1.E
Quant Time: Jan 30 21:46:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.17	80968273	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	62733860	35.746 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	71.49%
24) s d50-Tetracosane	35.79	52695421	33.501 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	67.00%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6013796833	3708.923 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2687669727	1657.582 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17765.D
Operator : AC
Acquired : 26 Jan 2006 8:28 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0512128-04-AFID
Misc Info : 1X
Vial Number: 63



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-RM 039**
Case: **N/A** SDG: **N/A**
Matrix: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **0512128-05**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/23/05	12/28/05	01/10/06	01/15/06	100	0.094	16.7	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**830000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	123	50-130
d50-Tetracosane	120	50-130

01/30/06 22:56

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27683.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 1:46 pm
Operator : NLJr
Sample : 0512128-05-AFID
Misc : 1X
ALS Vial : 69 Sample Multiplier: 1

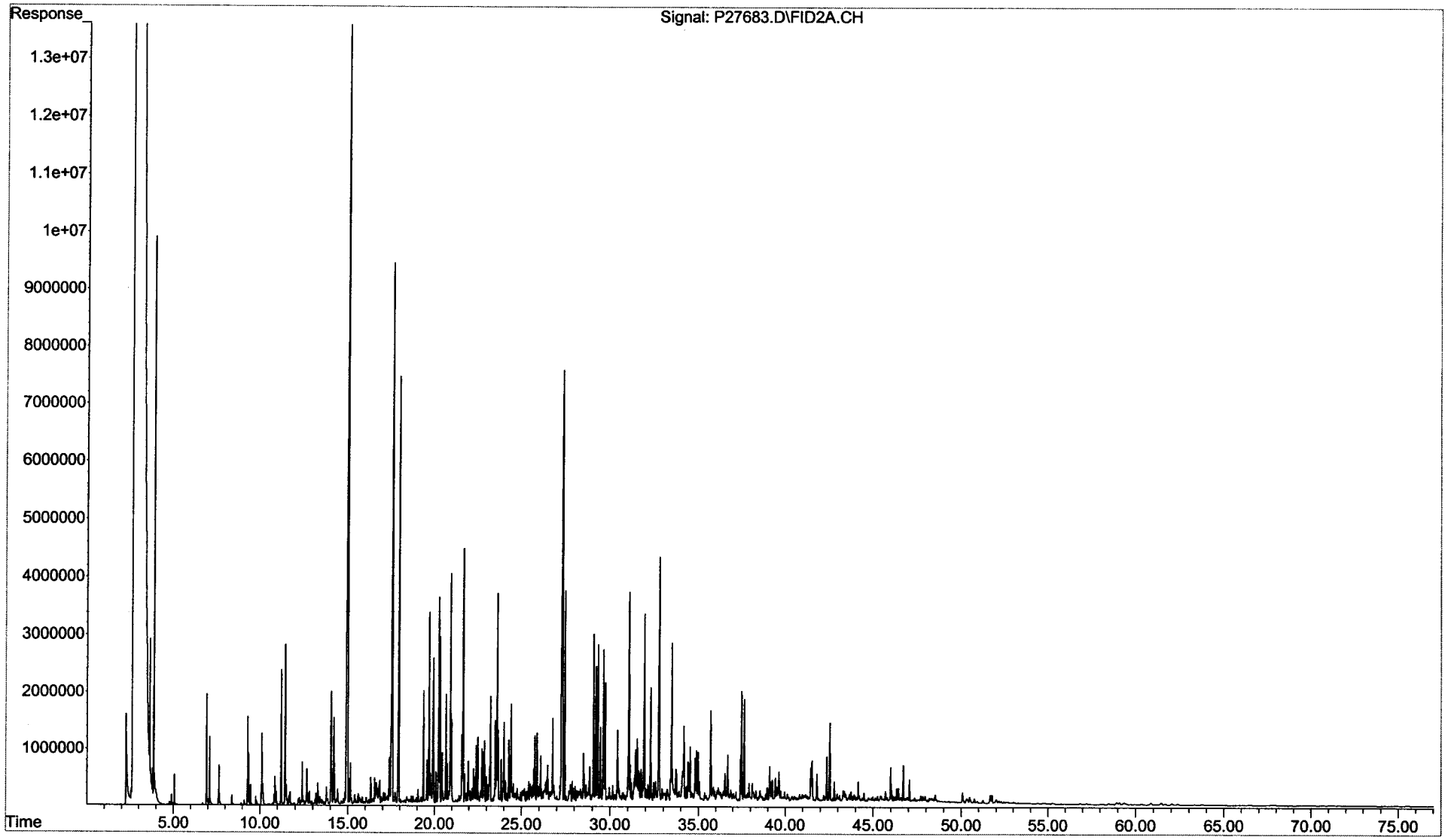
Integration File: SHCINT1.E
Quant Time: Jan 18 21:09:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.07	91566210	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.07	60129714	30.808 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	61.62%
24) s d50-Tetracosane	35.71	51620399	29.944 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	59.89%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	8689714065	4851.885 ug/mL
44) h Total Resolved Hydrocarbon	40.84	5701614708	3183.486 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27683.D
Operator : NLJr
Acquired : 15 Jan 2006 1:46 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512128-05-AFID
Misc Info : 1X
Vial Number: 69



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS010606B04**
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	01/06/06	01/13/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	11

N/A - Not Applicable

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

01/30/06 22:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27653.D
Signal(s) : FID2A.CH
Acq On : 13 Jan 2006 9:50 pm
Operator : AC
Sample : SS010606B04
Misc :
ALS Vial : 56 Sample Multiplier: 1

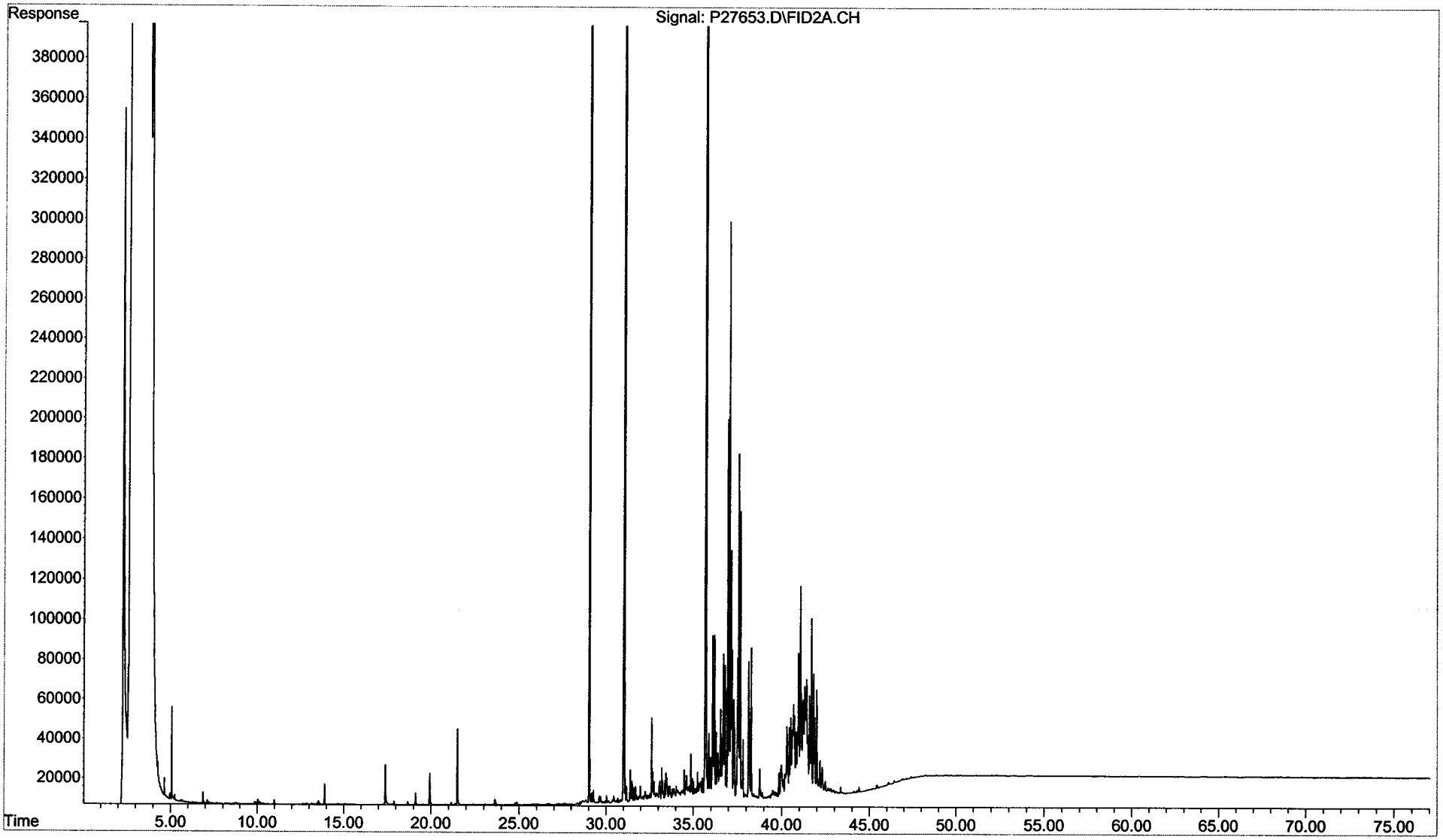
Integration File: SHCINT1.E
Quant Time: Jan 18 17:57:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.04f	77250901	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03f	35544662	21.586 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	43.17%#
24) s d50-Tetracosane	35.68f	29456301	20.254 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	40.51%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	570815557	377.774 ug/mL
44) h Total Resolved Hydrocarbon	40.84	168471549	111.497 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27653.D
Operator : AC
Acquired : 13 Jan 2006 9:50 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS010606B04
Misc Info :
Vial Number: 56



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006B01**
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	01/10/06	01/13/06	100	0.10	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**1800**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	100	50-130
d50-Tetracosane	95	50-130

01/30/06 22:55

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27655.D
Signal(s) : FID2A.CH
Acq On : 13 Jan 2006 11:51 pm
Operator : AC
Sample : SO011006B01
Misc :
ALS Vial : 57 Sample Multiplier: 1

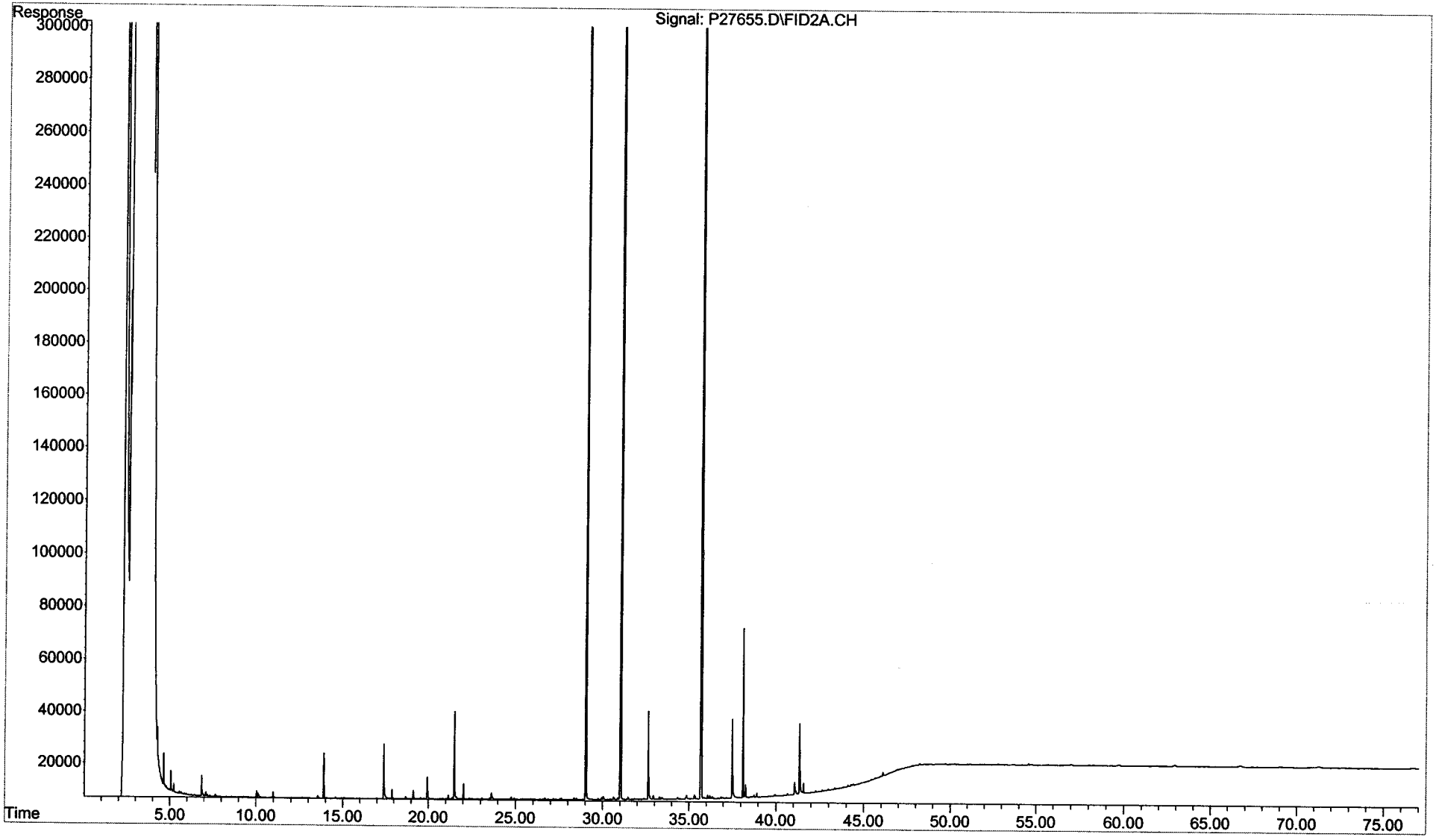
Integration File: SHCINT1.E
Quant Time: Jan 18 18:01:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.04f	69309032	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03f	36918579	24.990 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	49.98%#
24) s d50-Tetracosane	35.69f	31103871	23.837 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	47.67%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	436537042	322.012 ug/mL
44) h Total Resolved Hydrocarbon	40.84	78544403	57.938 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27655.D
Operator : AC
Acquired : 13 Jan 2006 11:51 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SO011006B01
Misc Info :
Vial Number: 57



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS011906B04**
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	01/19/06	01/25/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	4.4 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	75	50-130
d50-Tetracosane	69	50-130

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

01/30/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17751.D
Signal(s) : FID2B.CH
Acq On : 25 Jan 2006 9:30 pm
Operator : AC
Sample : SS011906B04-AFID
Misc : 1X ETR0512128
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 30 20:52:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

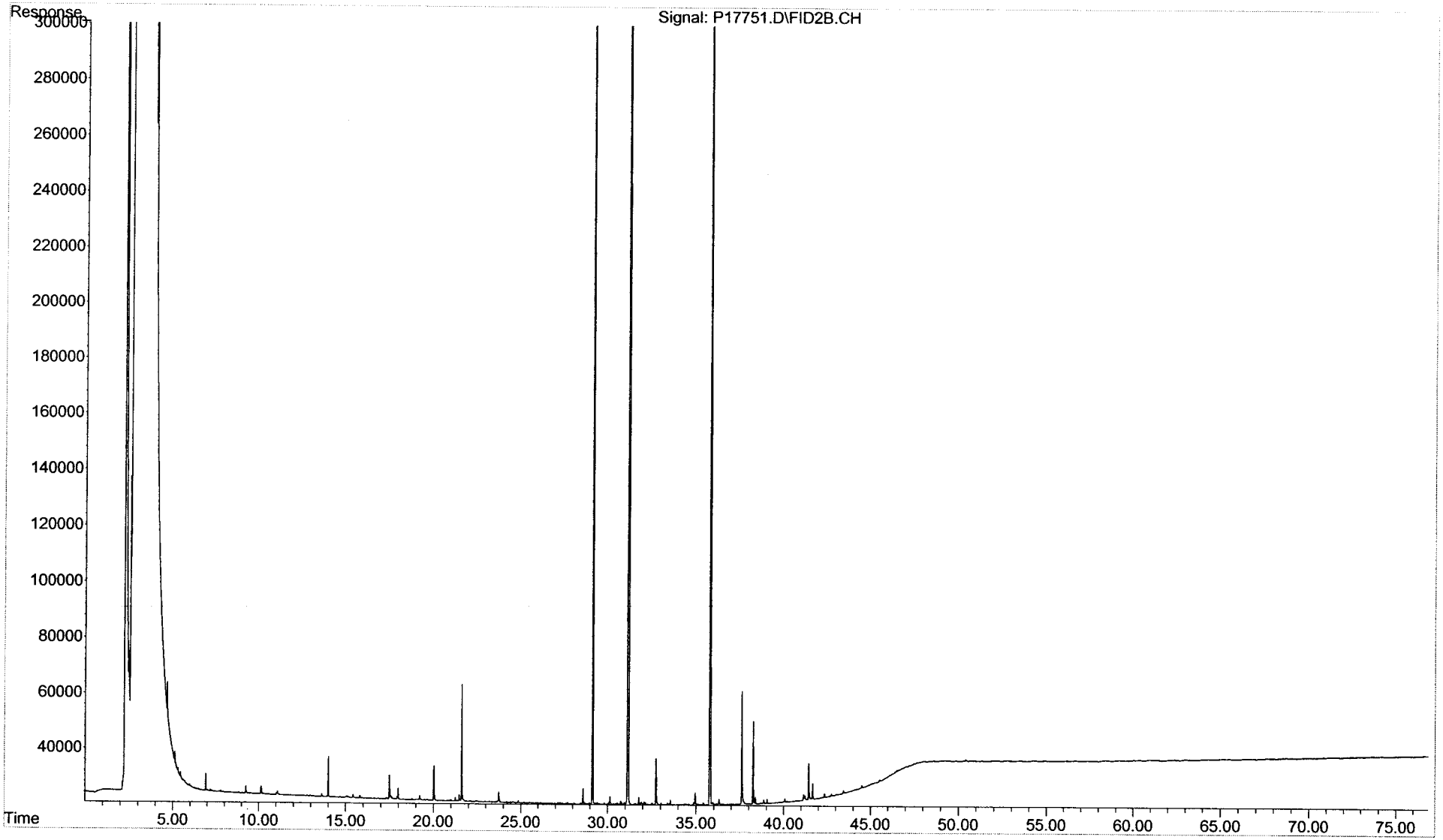
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/30/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	80194098	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.13	16217332	9.330 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	18.66%#
24) s d50-Tetracosane	35.77	13360637	8.576 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	17.15%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	333308380	207.548 ug/mL
44) h Total Resolved Hydrocarbon	40.94	9246460	5.758 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17751.D
Operator : AC
Acquired : 25 Jan 2006 9:30 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS011906B04-AFID
Misc Info : 1X ETR0512128
Vial Number: 56



Form III
Spike Recovery Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **See Below**
Associated Blank: **SS010606B04**
Concentration Units: **mg/Kg**

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

Lab ID:	SS010606B04		SS010606LCS04		SS010606LCSD03				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.10	U	1.9	75	1.8	73	3	30	50-130
n-Decane (C10)	0.10	U	2.2	89	2.1	84	6	30	50-130
n-Dodecane (C12)	0.10	U	2.3	93	2.2	87	7	30	50-130
n-Tetradecane (C14)	0.10	U	2.3	93	2.2	87	7	30	50-130
n-Hexadecane (C16)	0.10	U	2.4	96	2.2	90	6	30	50-130
n-Octadecane (C18)	0.10	U	2.4	95	2.2	89	7	30	50-130
n-Nonadecane (C19)	0.10	U	2.4	96	2.2	90	7	30	50-130
n-Eicosane (C20)	0.10	U	2.4	97	2.3	91	7	30	50-130
n-Docosane (C22)	0.10	U	2.4	96	2.2	90	7	30	50-130
n-Tetracosane (C24)	0.10	U	2.4	95	2.2	89	7	30	50-130
n-Hexacosane (C26)	0.10	U	2.4	97	2.3	91	7	30	50-130
n-Octacosane (C28)	0.10	U	2.4	96	2.2	90	7	30	50-130
n-Triacontane (C30)	0.10	U	2.4	94	2.2	89	6	30	50-130
n-Hexatriacontane (C36)	0.10	U	2.1	83	2.2	88	6	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	87	82	50-130
d50-Tetracosane	80	75	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.

01/18/06 21:51

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: **0512128**
Lab ID: **SS010606LCS04**
Associated Blank: **SS010606B04**
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	01/06/06	01/14/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**21** B

N/A - Not Applicable
B - Found in associated blank as well as sample.

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	87	50-130
d50-Tetracosane	80	50-130

01/30/06 22:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27657.D
Signal(s) : FID2A.CH
Acq On : 14 Jan 2006 2:04 am
Operator : AC
Sample : SS010606LCS04
Misc :
ALS Vial : 58 Sample Multiplier: 1

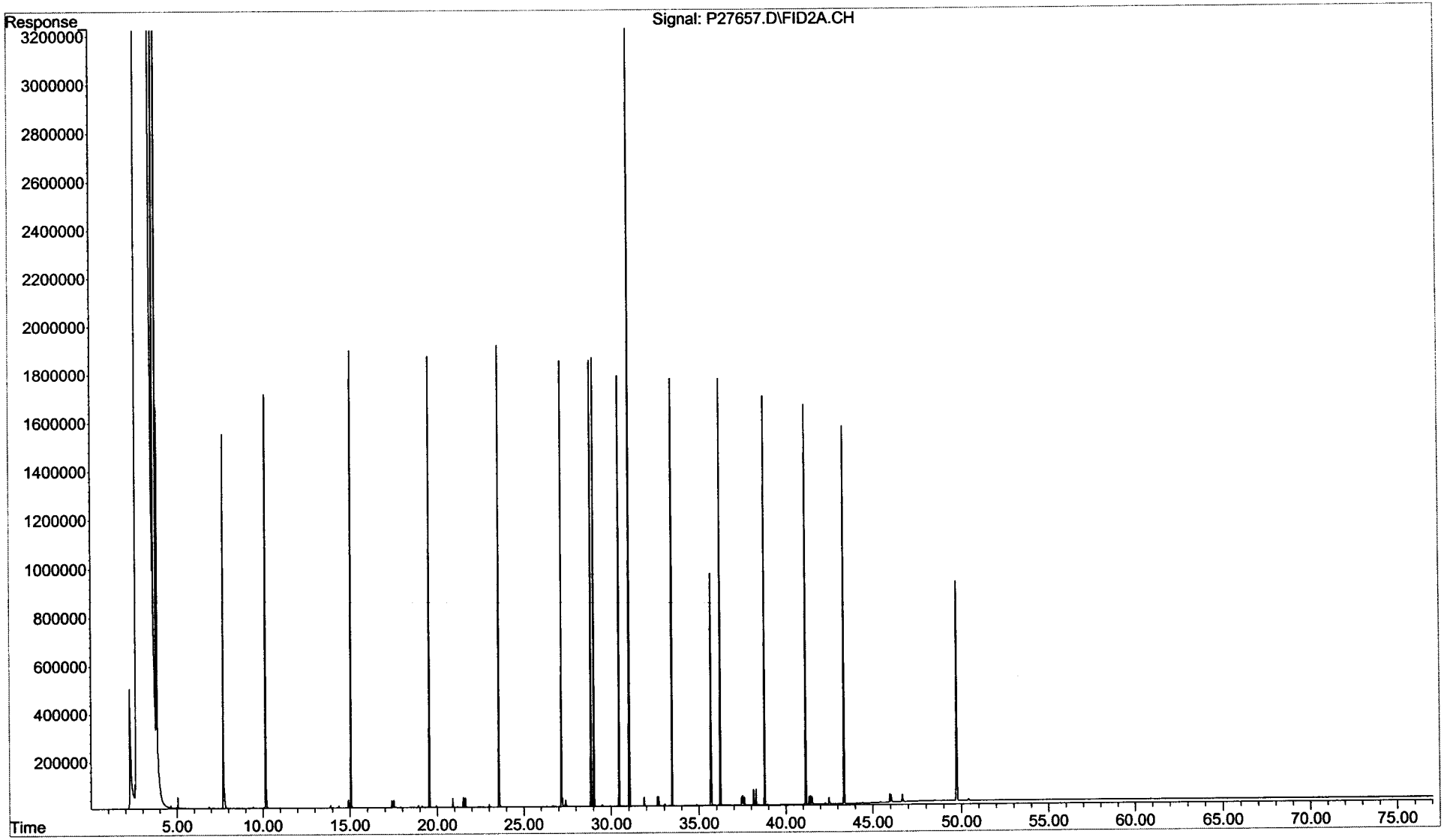
Integration File: SHCINT1.E
Quant Time: Jan 18 18:05:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:02:33 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	75167960	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	34992784	21.840 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	43.68%#
24) s d50-Tetracosane	35.69	28277440	19.982 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	39.96%#
Target Compounds			
3) t n-Nonane (C9)	7.70	25087933	18.738 ug/mL
4) t n-Decane (C10)	10.15	30353283	22.185 ug/mLm
6) t n-Dodecane (C12)	15.07	32624984	23.311 ug/mL
9) t n-Tetradecane (C14)	19.54	33472502	23.336 ug/mL
12) t n-Hexadecane (C16)	23.56	34970873	23.979 ug/mL
16) t n-Octadecane (C18)	27.17	35330575	23.872 ug/mL
18) t n-Nonadecane (C19)	28.86	35482668	24.066 ug/mLm
20) t n-Eicosane (C20)	30.46	35675189	24.283 ug/mL
22) t n-Docosane (C22)	33.46	35871517	23.983 ug/mL
25) t n-Tetracosane (C24)	36.22	35953985	23.725 ug/mL
27) t n-Hexacosane (C26)	38.78	36188610	24.276 ug/mL
29) t n-Octacosane (C28)	41.15	36117790	24.013 ug/mL
31) t n-Triacontane (C30)	43.37	35641382	23.575 ug/mL
37) t n-Hexatriacontane (C36)	49.75	31001330	20.821 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.84	781626947	531.627 ug/mL
44) h Total Resolved Hydrocarbon	40.84	471998571	321.032 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27657.D
Operator : AC
Acquired : 14 Jan 2006 2:04 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS010606LCS04
Misc Info :
Vial Number: 58



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: **0512128**
Lab ID: **SS010606LCSD03**
Associated Blank: **SS010606B04**
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	01/06/06	01/14/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**20** B

N/A - Not Applicable
B - Found in associated blank as well as sample.

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	82	50-130
d50-Tetracosane	75	50-130

01/30/06 22:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27659.D
Signal(s) : FID2A.CH
Acq On : 14 Jan 2006 4:49 am
Operator : AC
Sample : SS010606LCSD03
Misc :
ALS Vial : 59 Sample Multiplier: 1

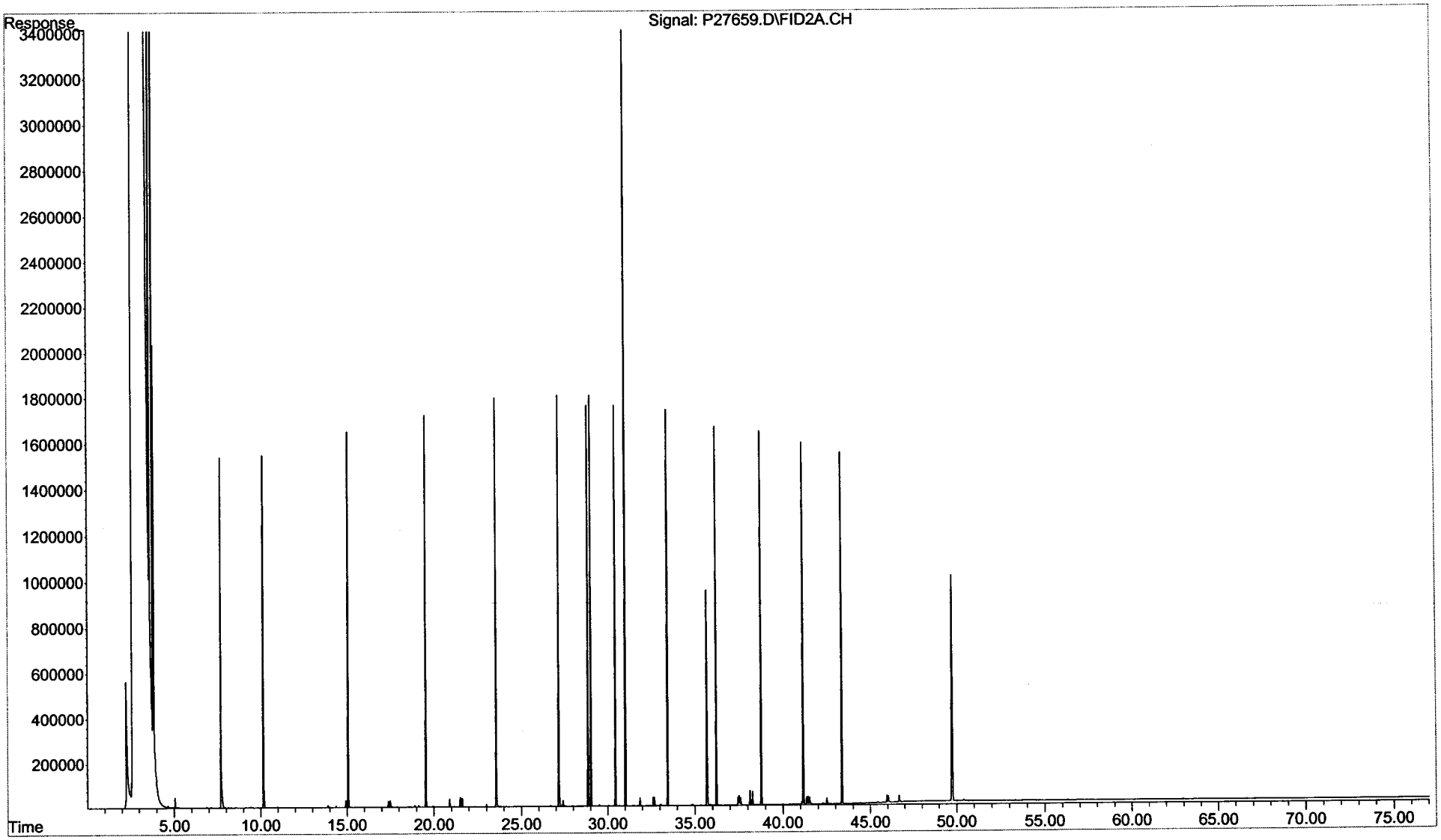
Integration File: SHCINT1.E
Quant Time: Jan 18 18:09:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	77487749	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	33907725	20.529 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	41.06%#
24) s d50-Tetracosane	35.69	27402546	18.784 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	37.57%#
Target Compounds			
3) t n-Nonane (C9)	7.69	25067347	18.162 ug/mL
4) t n-Decane (C10)	10.15	29517818	20.928 ug/mLm
6) t n-Dodecane (C12)	15.06	31304881	21.698 ug/mL
9) t n-Tetradecane (C14)	19.54	32322757	21.860 ug/mL
12) t n-Hexadecane (C16)	23.56	33871969	22.531 ug/mL
16) t n-Octadecane (C18)	27.17	34053701	22.320 ug/mL
18) t n-Nonadecane (C19)	28.86	34166279	22.480 ug/mLm
20) t n-Eicosane (C20)	30.46	34357463	22.686 ug/mL
22) t n-Docosane (C22)	33.46	34550673	22.409 ug/mL
25) t n-Tetracosane (C24)	36.22	34645227	22.177 ug/mL
27) t n-Hexacosane (C26)	38.78	34847369	22.677 ug/mL
29) t n-Octacosane (C28)	41.15	34870208	22.489 ug/mL
31) t n-Triacontane (C30)	43.37	34745866	22.294 ug/mL
37) t n-Hexatriacontane (C36)	49.76	33786020	22.012 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.84	768554283	507.086 ug/mL
44) h Total Resolved Hydrocarbon	40.84	485387043	320.255 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27659.D
Operator : AC
Acquired : 14 Jan 2006 4:49 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS010606LCSD03
Misc Info :
Vial Number: 59



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: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **See Below**
Associated Blank: **SO011006B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/10/06	100	NLJr

Lab ID:	SO011006B01		SO011006LCS01		SO011006LCSD01				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	20	U	390	79	400	81	3	30	50-130
n-Decane (C10)	20	U	430	85	460	93	8	30	50-130
n-Dodecane (C12)	20	U	440	88	490	98	12	30	50-130
n-Tetradecane (C14)	20	U	440	88	500	99	12	30	50-130
n-Hexadecane (C16)	20	U	460	91	510	102	12	30	50-130
n-Octadecane (C18)	20	U	450	91	510	102	11	30	50-130
n-Nonadecane (C19)	20	U	460	92	510	102	11	30	50-130
n-Eicosane (C20)	20	U	460	92	520	103	11	30	50-130
n-Docosane (C22)	20	U	460	92	510	102	11	30	50-130
n-Tetracosane (C24)	20	U	450	90	500	101	11	30	50-130
n-Hexacosane (C26)	20	U	460	92	520	103	11	30	50-130
n-Octacosane (C28)	20	U	460	91	510	102	11	30	50-130
n-Triacontane (C30)	20	U	460	91	510	102	11	30	50-130
n-Hexatriacontane (C36)	20	U	460	91	510	102	12	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	89	99	50-130
d50-Tetracosane	83	93	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.

01/19/06 20:10

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: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006LCS01**
Associated Blank: **SO011006B01**
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	01/10/06	01/19/06	100	0.10	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**6400** B

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	89	50-130
d50-Tetracosane	83	50-130

N/A - Not Applicable
B - Found in associated blank as well as sample.

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 : P27757.D
Signal(s) : FID2A.CH
Acq On : 19 Jan 2006 3:23 am
Operator : AC
Sample : SO011006LCS01
Misc : LCS
ALS Vial : 58 Sample Multiplier: 1

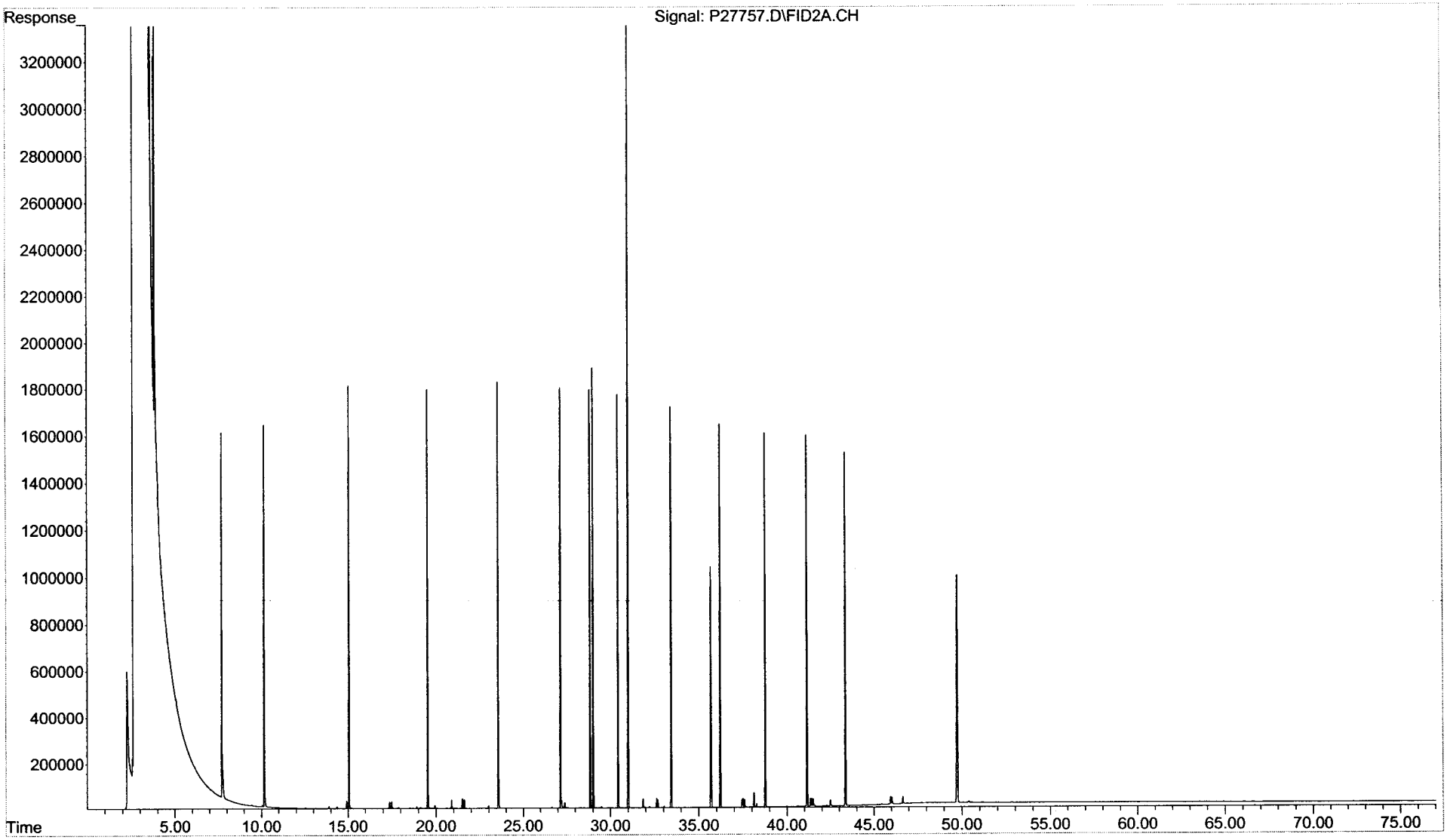
Integration File: SHCINT1.E
Quant Time: Jan 19 19:35:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.03	75501836	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02	35812848	22.253 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	44.51%#
24) s d50-Tetracosane	35.68	29600716	20.825 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	41.65%#
Target Compounds			
3) t n-Nonane (C9)	7.71	26414739	19.641 ug/mLm
4) t n-Decane (C10)	10.15	29276262	21.303 ug/mLm
6) t n-Dodecane (C12)	15.06	30783007	21.898 ug/mL
9) t n-Tetradecane (C14)	19.53	31662889	21.977 ug/mL
12) t n-Hexadecane (C16)	23.55	33321189	22.747 ug/mL
16) t n-Octadecane (C18)	27.16	33694450	22.666 ug/mLm
18) t n-Nonadecane (C19)	28.85	33879272	22.877 ug/mLm
20) t n-Eicosane (C20)	30.45	34084923	23.098 ug/mL
22) t n-Docosane (C22)	33.45	34388829	22.890 ug/mL
25) t n-Tetracosane (C24)	36.21	34329254	22.553 ug/mL
27) t n-Hexacosane (C26)	38.77	34545380	23.071 ug/mL
29) t n-Octacosane (C28)	41.15	34556939	22.874 ug/mL
31) t n-Triacontane (C30)	43.36	34529948	22.738 ug/mL
37) t n-Hexatriacontane (C36)	49.75	34040508	22.761 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.84	885199900	599.410 ug/mL
44) h Total Resolved Hydrocarbon	40.84	481787111	326.241 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27757.D
Operator : AC
Acquired : 19 Jan 2006 3:23 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SO011006LCS01
Misc Info : LCS
Vial Number: 58



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: **Oil**

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SO011006LCSD01**
Associated Blank: **SO011006B01**
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	01/10/06	01/15/06	100	0.10	2	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**6500** B

N/A - Not Applicable
B - Found in associated blank as well as sample.

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	93	50-130

01/30/06 22:55

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27667.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 12:36 am
Operator : NLJr
Sample : SO011006LCSD01
Misc : 1X
ALS Vial : 61 Sample Multiplier: 1

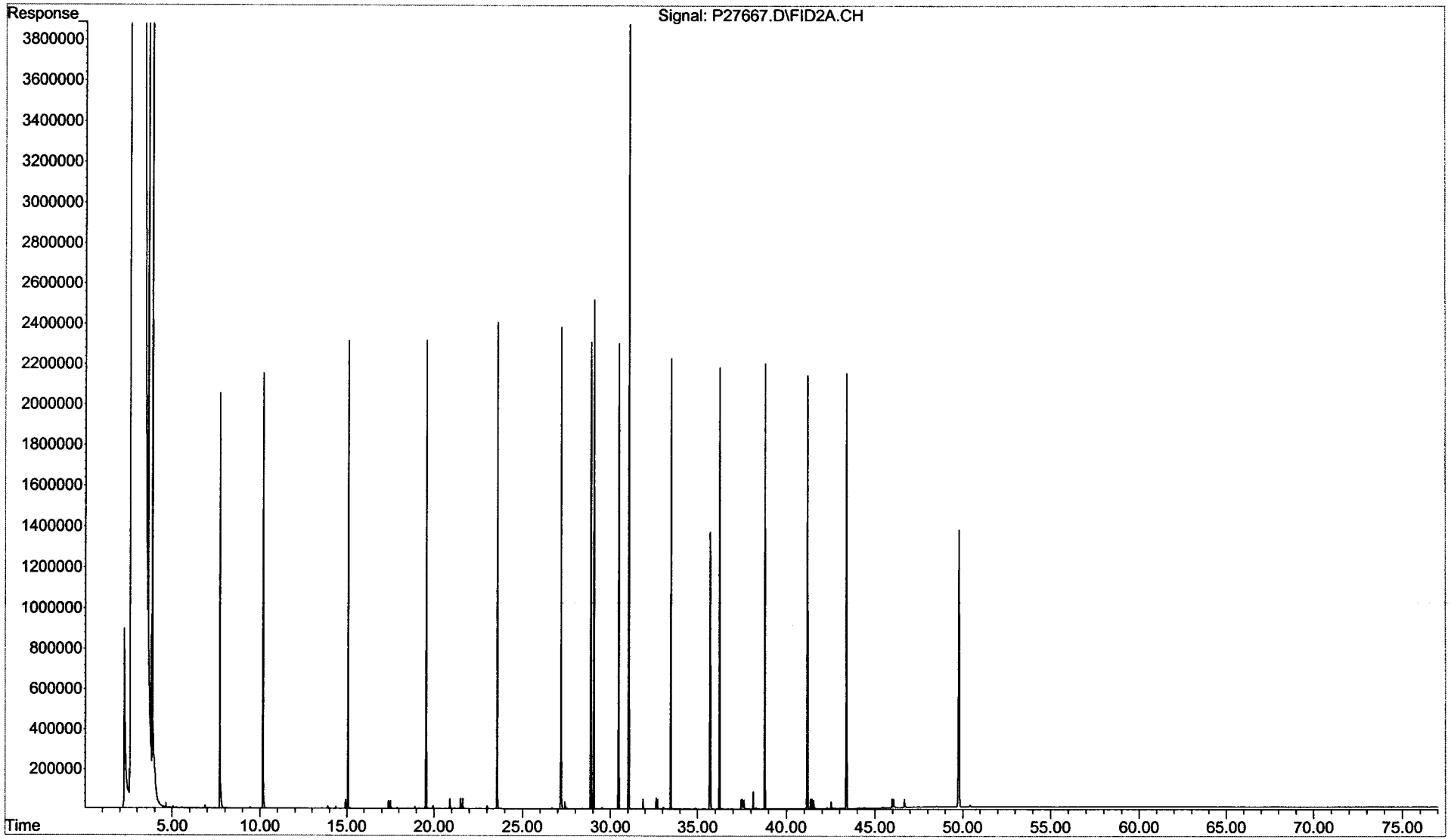
Integration File: SHCINT1.E
Quant Time: Jan 18 19:23:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	93310187	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.05	49386426	24.831 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 49.66%#
24) s	d50-Tetracosane	35.70	40966821	23.320 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 46.64%#
	Target Compounds			
3) t	n-Nonane (C9)	7.70	33475870	20.141 ug/mL
4) t	n-Decane (C10)	10.15	39283458	23.129 ug/mLm
6) t	n-Dodecane (C12)	15.07	42726378	24.593 ug/mL
9) t	n-Tetradecane (C14)	19.55	44125570	24.782 ug/mL
12) t	n-Hexadecane (C16)	23.57	46368565	25.613 ug/mL
16) t	n-Octadecane (C18)	27.19	46694992	25.416 ug/mL
18) t	n-Nonadecane (C19)	28.87	46825872	25.585 ug/mLm
20) t	n-Eicosane (C20)	30.48	47086200	25.819 ug/mL
22) t	n-Docosane (C22)	33.48	47315773	25.484 ug/mL
25) t	n-Tetracosane (C24)	36.24	47401578	25.198 ug/mL
27) t	n-Hexacosane (C26)	38.80	47683567	25.768 ug/mL
29) t	n-Octacosane (C28)	41.17	47695807	25.545 ug/mL
31) t	n-Triacontane (C30)	43.39	47687374	25.410 ug/mL
37) t	n-Hexatriacontane (C36)	49.79	47329546	25.607 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.84	912851641	500.163 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	660724138	362.019 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27667.D
Operator : NLJr
Acquired : 15 Jan 2006 12:36 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SO011006LCSD01
Misc Info : 1X
Vial Number: 61



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: **0512128**
Lab ID: **See Below**
Associated Blank: **SS011906B04**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/19/06	100	AC

Lab ID:	SS011906B04		SS011906LCS03		SS011906LCSD03				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.13	U	0.73	44[a]	0.83	50	13	30	50-130
n-Decane (C10)	0.13	U	1.0	60	1.1	63	5	30	50-130
n-Dodecane (C12)	0.13	U	1.2	72	1.2	72	0	30	50-130
n-Tetradecane (C14)	0.13	U	1.2	74	1.2	73	1	30	50-130
n-Hexadecane (C16)	0.13	U	1.3	76	1.3	75	1	30	50-130
n-Octadecane (C18)	0.13	U	1.2	75	1.2	75	1	30	50-130
n-Nonadecane (C19)	0.13	U	1.3	76	1.3	76	1	30	50-130
n-Eicosane (C20)	0.13	U	1.3	77	1.3	76	1	30	50-130
n-Docosane (C22)	0.13	U	1.3	76	1.3	76	1	30	50-130
n-Tetracosane (C24)	0.13	U	1.2	75	1.2	74	1	30	50-130
n-Hexacosane (C26)	0.13	U	1.3	77	1.3	76	1	30	50-130
n-Octacosane (C28)	0.13	U	1.3	76	1.2	75	1	30	50-130
n-Triacontane (C30)	0.13	U	1.3	76	1.2	75	1	30	50-130
n-Hexatriacontane (C36)	0.13	U	1.3	76	1.2	75	1	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	75	75	50-130
d50-Tetracosane	69	69	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.

01/30/06 22:14

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: **0512128**
Lab ID: **SS011906LCS03**
Associated Blank: **SS011906B04**
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	01/19/06	01/25/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**12**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	75	50-130
d50-Tetracosane	69	50-130

01/30/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17753.D
Signal(s) : FID2B.CH
Acq On : 25 Jan 2006 11:04 pm
Operator : AC
Sample : SS011906LCS03-AFID
Misc : 1X ETR0512128
ALS Vial : 57 Sample Multiplier: 1

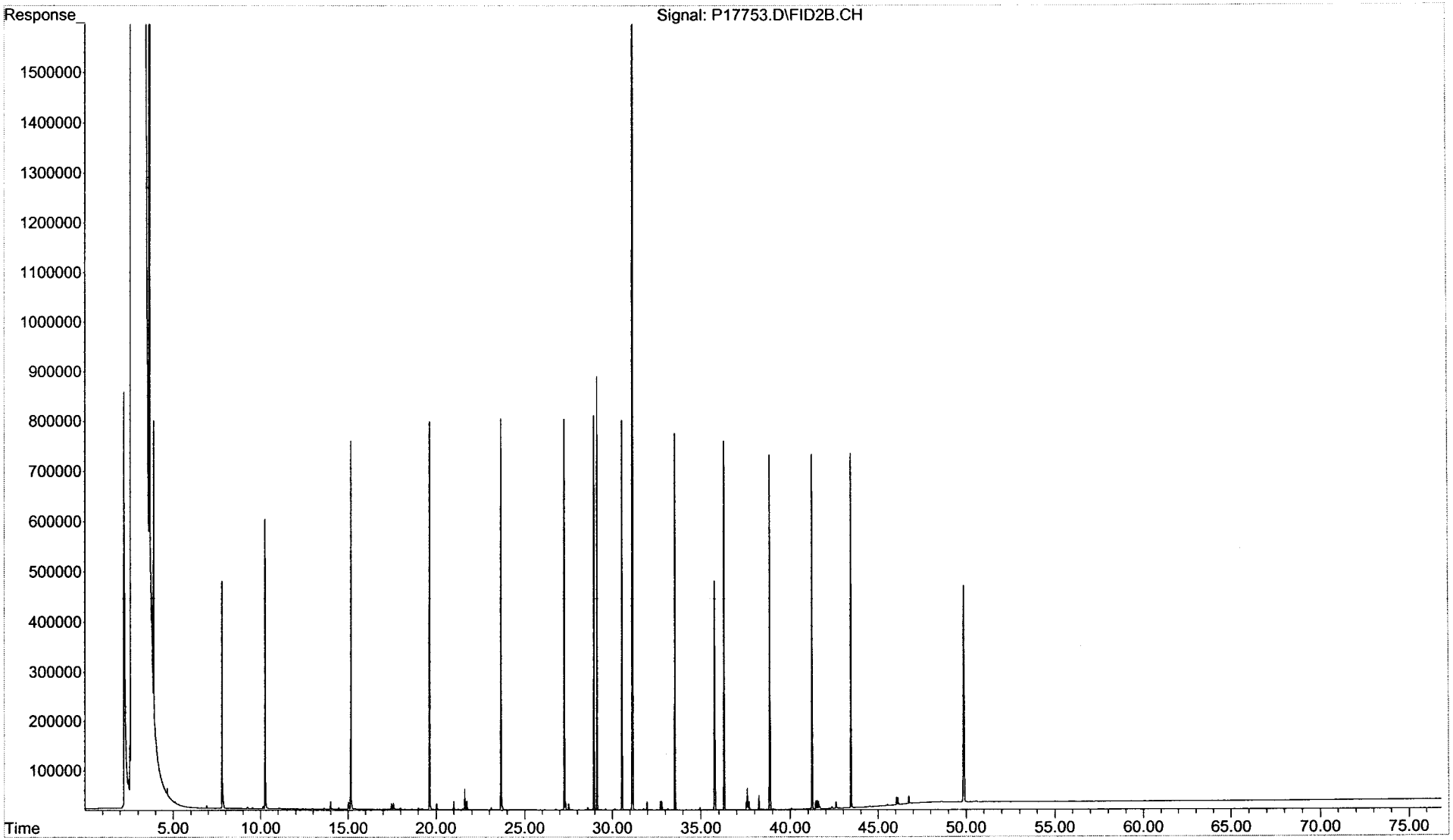
Integration File: SHCINT1.E
Quant Time: Jan 30 20:57:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.17	77779461	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.13	15874561	9.416 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 18.83%#
24) s	d50-Tetracosane	35.77	13096182	8.667 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 17.33%#
Target Compounds				
3) t	n-Nonane (C9)	7.79	7560210	5.467 ug/mL
4) t	n-Decane (C10)	10.25	10642961	7.508 ug/mLm
6) t	n-Dodecane (C12)	15.16	13143468	8.986 ug/mLm
9) t	n-Tetradecane (C14)	19.64	13841827	9.192 ug/mL
12) t	n-Hexadecane (C16)	23.65	14649007	9.520 ug/mLm
16) t	n-Octadecane (C18)	27.26	14661585	9.385 ug/mL
18) t	n-Nonadecane (C19)	28.94	14779982	9.522 ug/mLm
20) t	n-Eicosane (C20)	30.54	14906972	9.632 ug/mL
22) t	n-Docosane (C22)	33.54	15001208	9.512 ug/mL
25) t	n-Tetracosane (C24)	36.30	15076754	9.379 ug/mL
27) t	n-Hexacosane (C26)	38.85	15174941	9.578 ug/mL
29) t	n-Octacosane (C28)	41.23	15196191	9.474 ug/mL
31) t	n-Triacontane (C30)	43.44	15197252	9.454 ug/mLm
37) t	n-Hexatriacontane (C36)	49.88	15145917	9.490 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	519956776	333.823 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	207971266	133.522 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17753.D
Operator : AC
Acquired : 25 Jan 2006 11:04 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS011906LCS03-AFID
Misc Info : 1X ETR0512128
Vial Number: 57



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS011906LCSD03**
Associated Blank: **SS011906B04**
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	01/19/06	01/26/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	9.9

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	75	50-130
d50-Tetracosane	69	50-130

01/30/06 22:11

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17755.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 12:38 am
Operator : AC
Sample : SS011906LCSD03-AFID
Misc : 1X ETR0512128
ALS Vial : 58 Sample Multiplier: 1

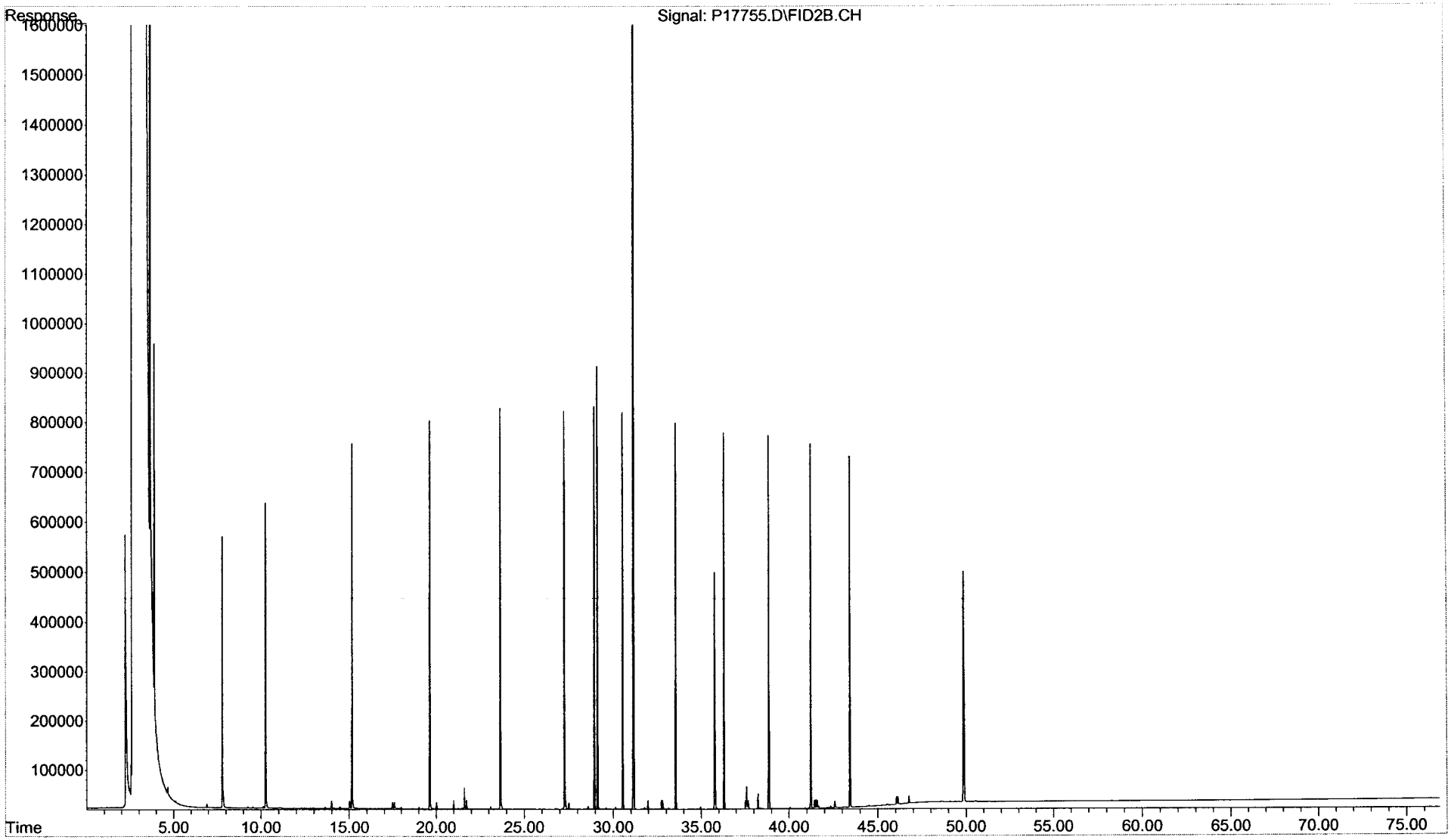
Integration File: SHCINT1.E
Quant Time: Jan 30 21:10:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.17	80892865	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.12	16390166	9.348 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	18.70%#
24) s	d50-Tetracosane	35.77	13515816	8.601 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	17.20%#
	Target Compounds			
3) t	n-Nonane (C9)	7.79	8983209	6.246 ug/mL
4) t	n-Decane (C10)	10.25	11671105	7.916 ug/mLm
6) t	n-Dodecane (C12)	15.16	13647518	8.972 ug/mLm
9) t	n-Tetradecane (C14)	19.64	14231907	9.088 ug/mL
12) t	n-Hexadecane (C16)	23.65	15087547	9.427 ug/mL
16) t	n-Octadecane (C18)	27.26	15170237	9.337 ug/mL
18) t	n-Nonadecane (C19)	28.94	15260471	9.453 ug/mLm
20) t	n-Eicosane (C20)	30.54	15389642	9.561 ug/mL
22) t	n-Docosane (C22)	33.54	15483944	9.440 ug/mL
25) t	n-Tetracosane (C24)	36.30	15557997	9.306 ug/mL
27) t	n-Hexacosane (C26)	38.85	15653924	9.500 ug/mLm
29) t	n-Octacosane (C28)	41.23	15679630	9.399 ug/mL
31) t	n-Triacontane (C30)	43.44	15671452	9.374 ug/mLm
37) t	n-Hexatriacontane (C36)	49.87	15555537	9.371 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	505956374	312.332 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	216749658	133.802 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17755.D
Operator : AC
Acquired : 26 Jan 2006 12:38 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS011906LCSD03-AFID
Misc Info : 1X ETR0512128
Vial Number: 58



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: **0512128**
Lab ID: **TS011806AWS01**
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	01/13/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**610000**

N/A - Not Applicable

01/18/06 22:24

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27645.D
Signal(s) : FID2A.CH
Acq On : 13 Jan 2006 3:05 pm
Operator : AC
Sample : TS011806AWS01
Misc : 1X ANS STD
ALS Vial : 52 Sample Multiplier: 1

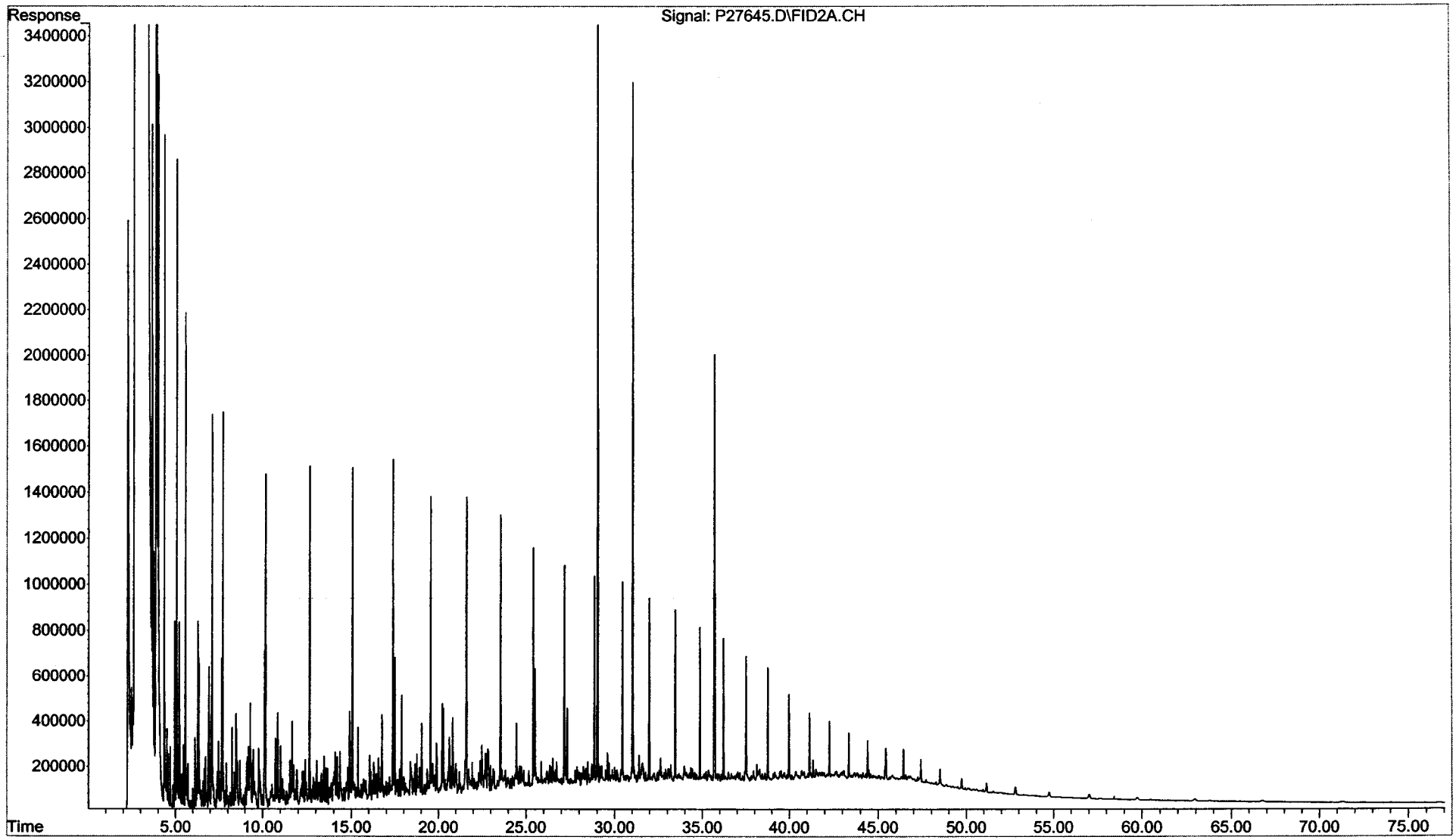
Integration File: SHCINT1.E
Quant Time: Jan 18 17:42:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.04f	70313510	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05f	74335431	49.598 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.20%
24) s d50-Tetracosane	35.70f	61015844	46.093 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	92.19%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4612567542	3353.855 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1319795903	959.640 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27645.D
Operator : AC
Acquired : 13 Jan 2006 3:05 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: TS011806AWS01
Misc Info : 1X ANS STD
Vial Number: 52



Form I
Alaska North Slope Crude
Total Saturated Hydrocarbons by GC/FID

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: **0512128**
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

01/19/06 20:08

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

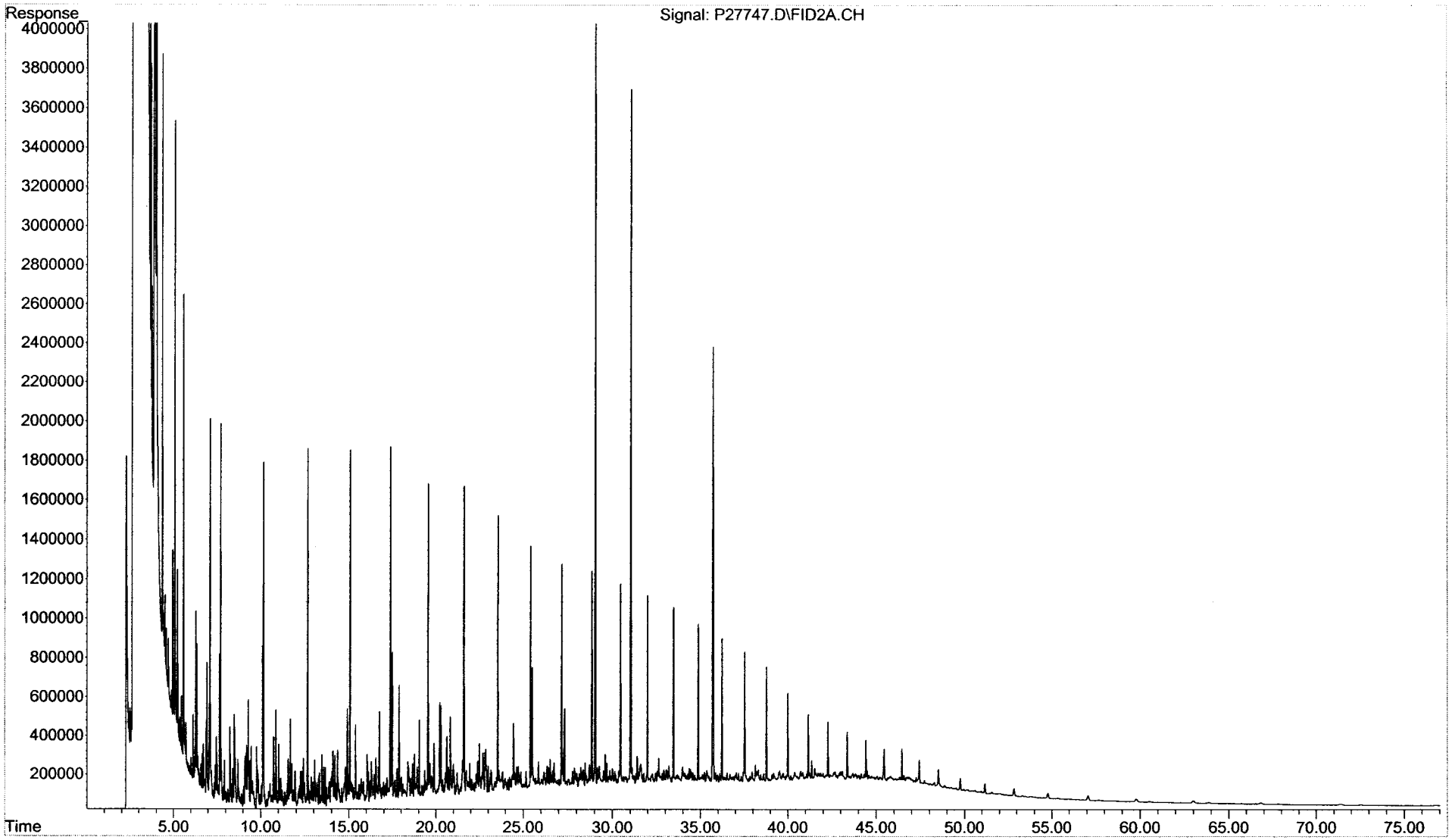
Integration File: SHCINT1.E
Quant Time: Jan 19 19:20:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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: **0512128**
Lab ID: **TS013006AWS02**
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	**580000**

N/A - Not Applicable

01/30/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17745.D
Signal(s) : FID2B.CH
Acq On : 25 Jan 2006 4:47 pm
Operator : AC
Sample : TS013006AWS02
Misc : 1X ANS STD
ALS Vial : 53 Sample Multiplier: 1

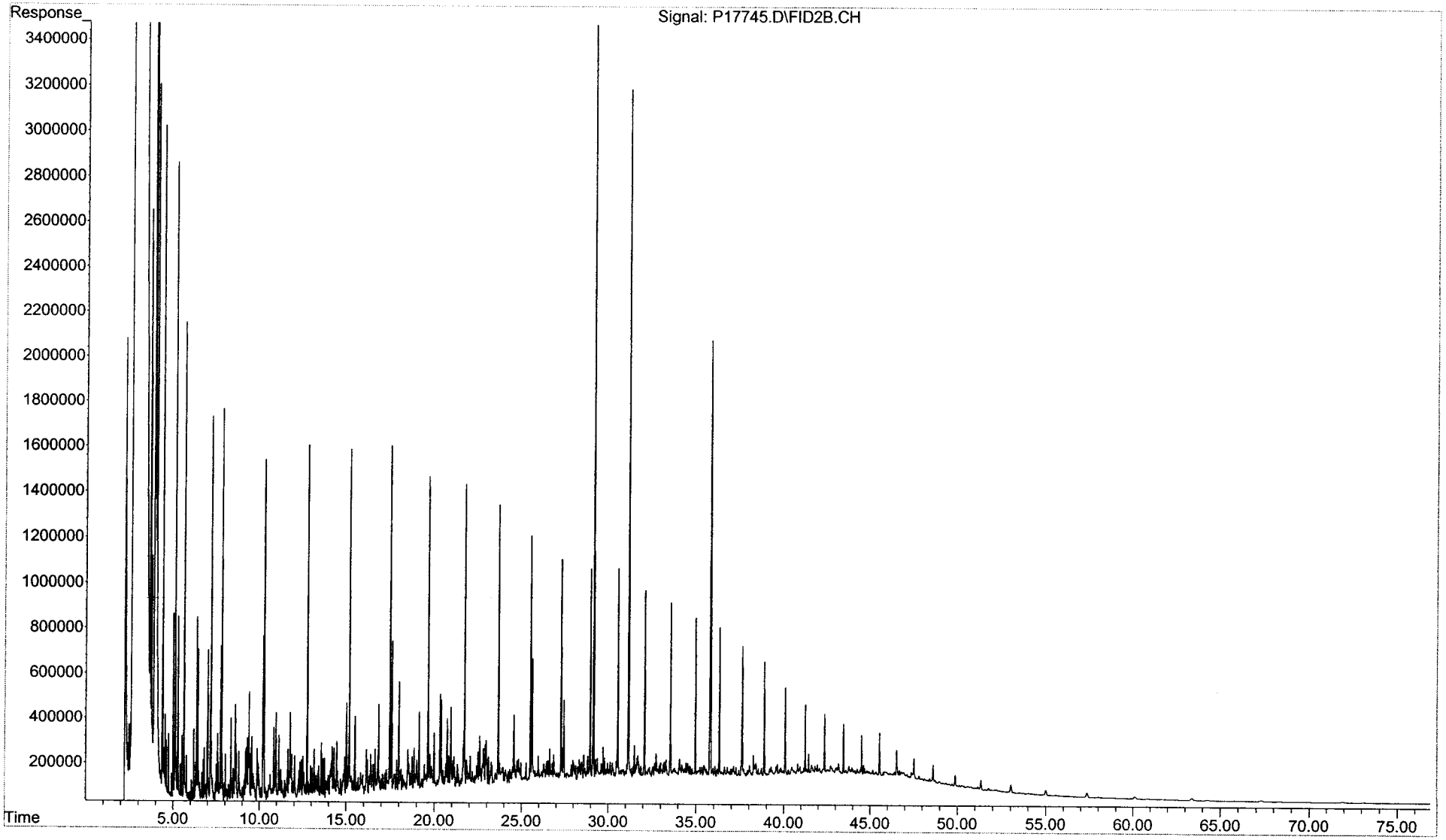
Integration File: SHCINT1.E
Quant Time: Jan 30 20:44:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.17	71711878	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	75043951	48.279 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	96.56%
24) s d50-Tetracosane	35.80	62911832	45.159 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	90.32%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4600130794	3203.266 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1373993482	956.770 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17745.D
Operator : AC
Acquired : 25 Jan 2006 4:47 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TS013006AWS02
Misc Info : 1X ANS STD
Vial Number: 53



Instrument Blank Association

ETR: 0512128

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	Laboratory ID	File ID
0512128-01	IB201130601	P27651.D
0512128-02	IB201130601	P27651.D
0512128-03	IB201130601	P27651.D
0512128-03 D	IB201130601	P27651.D
0512128-04	IB201130601	P27651.D
0512128-05	IB201130601	P27651.D
SS010606B04	IB201130601	P27651.D
SS010606LCS04	IB201130601	P27651.D
SS010606LCSD03	IB201130601	P27651.D
SS011306LCSD02	IB201130601	P27651.D
SO011006B01	IB201130601	P27651.D
SO011006LCSD01	IB201130601	P27651.D
TS011806AWS01	IB201130601	P27651.D
SO011006LCS01	IB201180601	P27755.D
TO011906AWS01	IB201180601	P27755.D
0512128-01X	IB101250601	P17749.D
0512128-02X	IB101250601	P17749.D
0512128-03X	IB101250601	P17749.D
0512128-03 DX	IB101250601	P17749.D
0512128-04X	IB101250601	P17749.D
SS011906B04	IB101250601	P17749.D
SS011906LCS03	IB101250601	P17749.D
SS011906LCSD03	IB101250601	P17749.D
TS013006AWS02	IB101250601	P17749.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27651.D
Signal(s) : FID2A.CH
Acq On : 13 Jan 2006 7:59 pm
Operator : AC
Sample : IB201130601
Misc : DCM
ALS Vial : 55 Sample Multiplier: 1

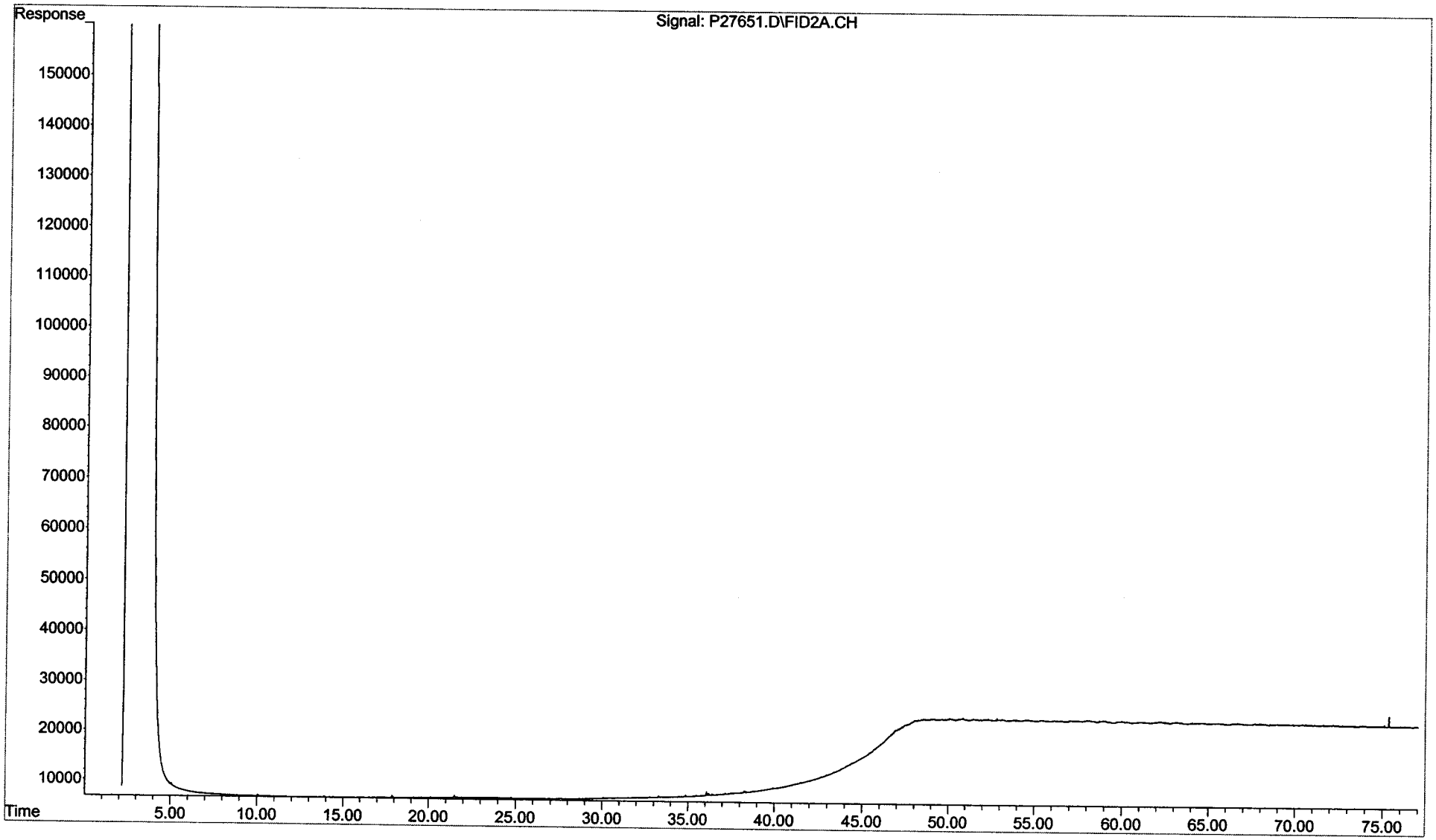
Integration File: SHCINT1.E
Quant Time: Jan 18 17:38:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.02f	16	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	317722121	1034129959.776 ug/mL 6,500

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27651.D
Operator : AC
Acquired : 13 Jan 2006 7:59 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201130601
Misc Info : DCM
Vial Number: 55



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

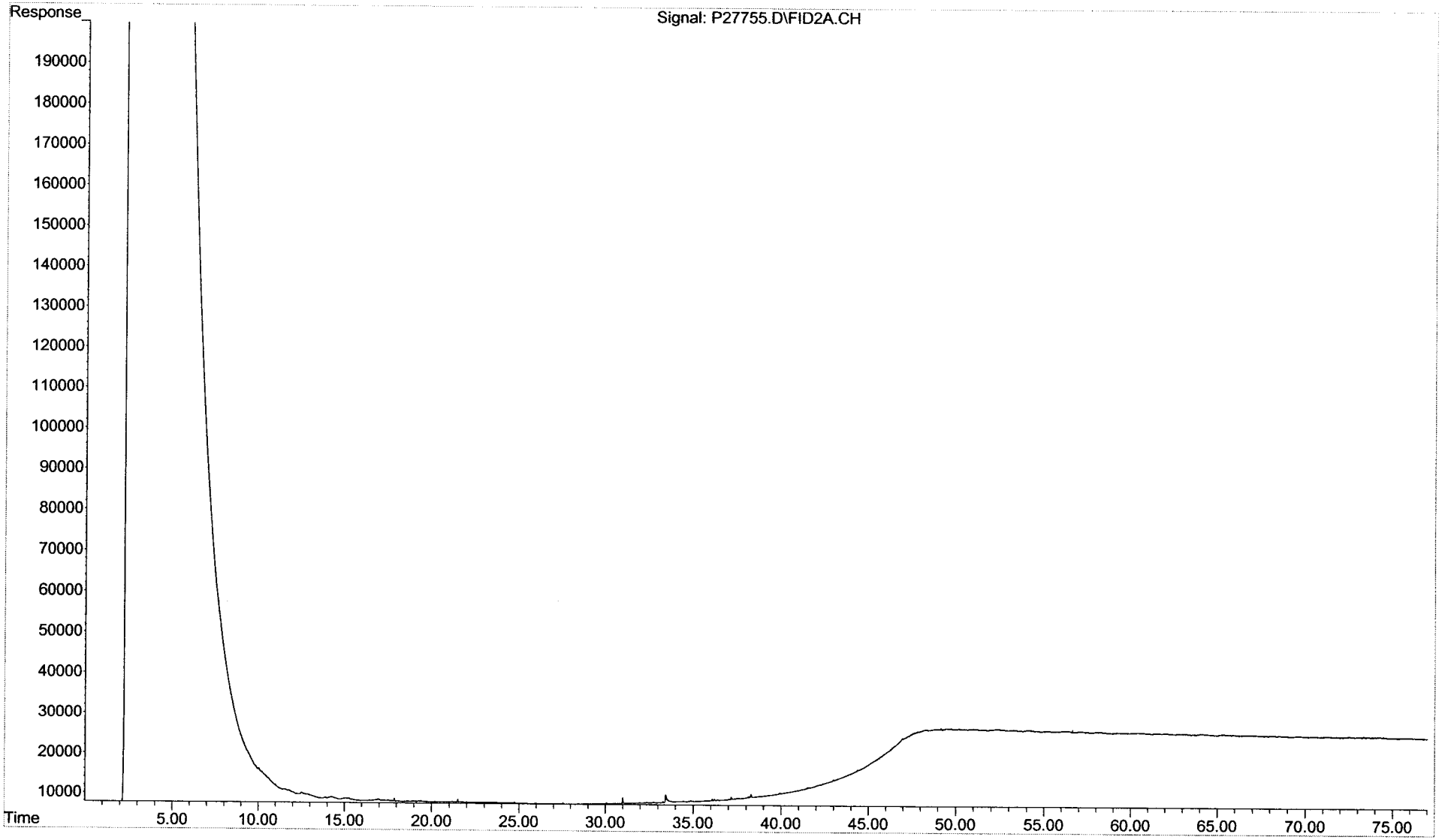
Integration File: SHCINT1.E
Quant Time: Jan 19 19:06:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Jan 18 18:06:55 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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\PAH1\January06\JAN24.SEC\
Data File : P17749.D
Signal(s) : FID2B.CH
Acq On : 25 Jan 2006 7:56 pm
Operator : AC
Sample : IB101250601
Misc : DCM
ALS Vial : 55 Sample Multiplier: 1

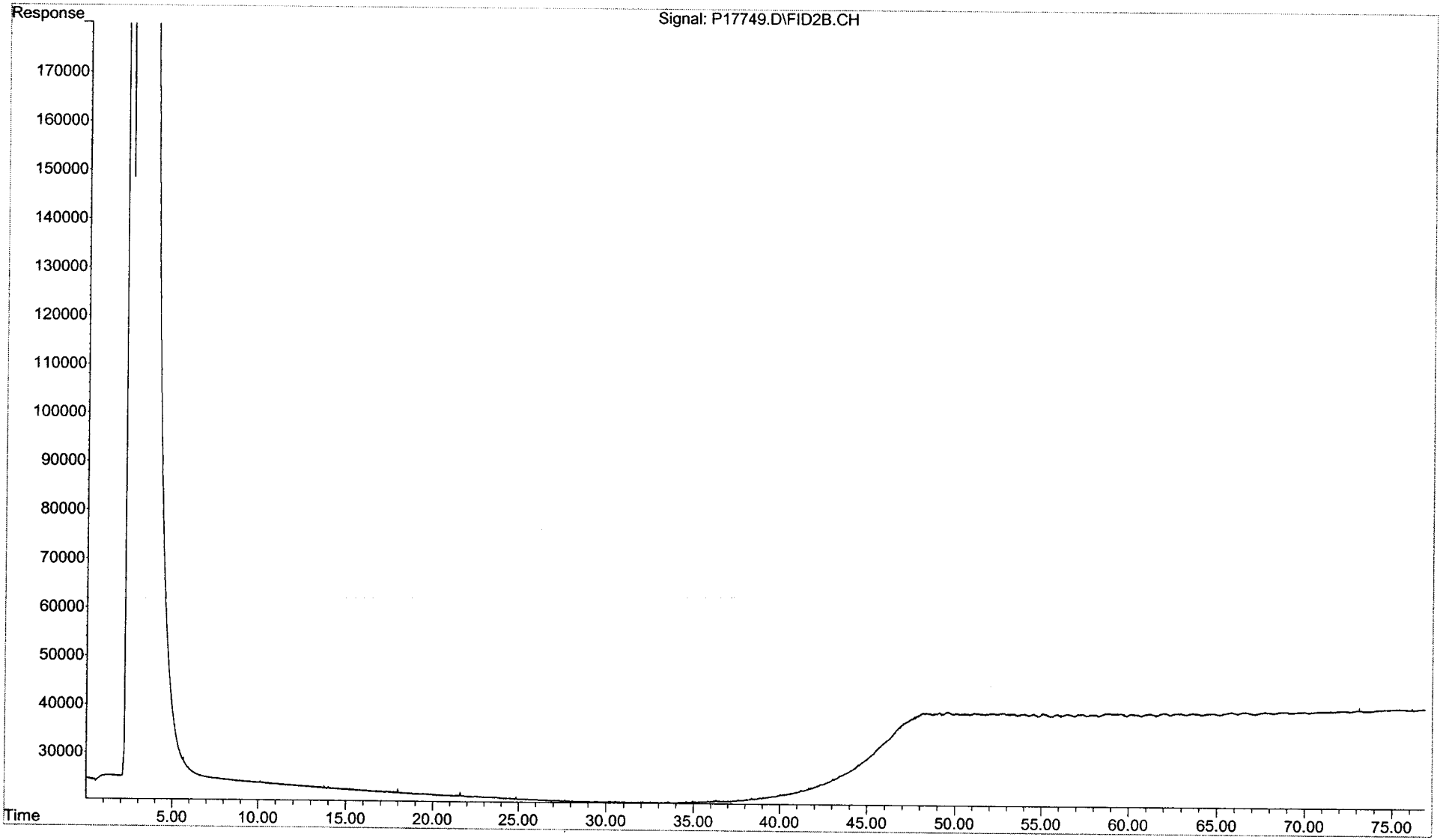
Integration File: SHCINT1.E
Quant Time: Jan 30 20:40:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.00f	184	50.000 ug/mLm
System Monitoring Compounds				
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.94	385248664	104674642.731 ug/mL

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

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17749.D
Operator : AC
Acquired : 25 Jan 2006 7:56 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB101250601
Misc Info : DCM
Vial Number: 55



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 PASS 1/16/06
7)	Sample	1	P27644	FRNC2B	C2011301
8)	RearSamp	52	P27645	FRNC2B	ANS2011301-AFID TS011806AWS01 1/18/06
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 *ICAL PAH20113.M
14)	Sample	4	P27650	FRNC2B	DCM
15)	RearSamp	55	P27651	FRNC2B	DCM IB20430601 1/18/06
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-starte
25)	RearSamp	50	P27661	FRNC2B	PRIMER-AFID
26)	Sample	49	P27662	FRNC2B	DCM
27)	RearSamp	50	P27663	FRNC2B	C2011302-AFID PASS 1/18/06 1/15/06
28)	Sample	10	P27664	FRNC2B	PRIMER
29)	RearSamp	60	P27665	FRNC2B	SO011006LCS01 - mis-inject, re-analyze 1/17/06
30)	Sample	10	P27666	FRNC2B	*I2011306 ✓
31)	RearSamp	61	P27667	FRNC2B	SO0111006LCSD01 - ~~mis-inject re-analyze~~ 1/15/06
32)	Sample	11	P27668	FRNC2B	*I2011307 ✓
33)	RearSamp	62	P27669	FRNC2B	C2011303-AFID PASS 1/18/06
34)	Sample	12	P27670	FRNC2B	*Q2011301
35)	RearSamp	63	P27671	FRNC2B	DCM-AFID
36)	Sample	13	P27672	FRNC2B	*ANS2011301
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

MS 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 Page: 1

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 PASS
49)		RearSamp	70	P27685	FRNC2B	C2011304-AFID PASS [illegible] 1/18/06
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	C201130~~1~~2 PASS
65)		RearSamp	73	P27701	FRNC2B	DCM-AFID
66)		Sample	28	P27702	FRNC2B	DCM
67)		RearSamp	74	P27703	FRNC2B	DCM-AFID did not inject [illegible] 1/17/07

)

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

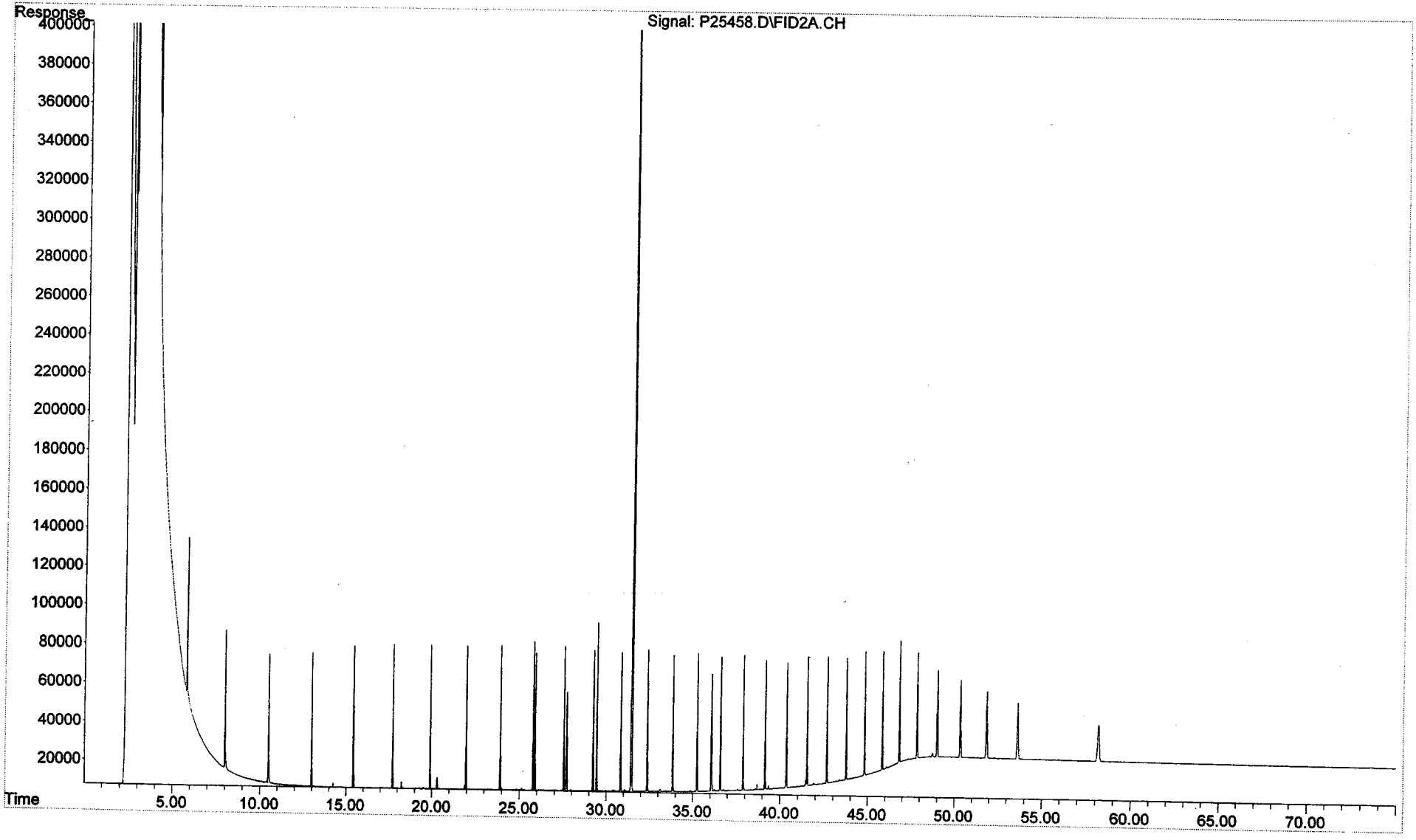
Integration File: SHCINT1.E
Quant Time: Sep 05 21:05:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Aug 30 10:50:27 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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)

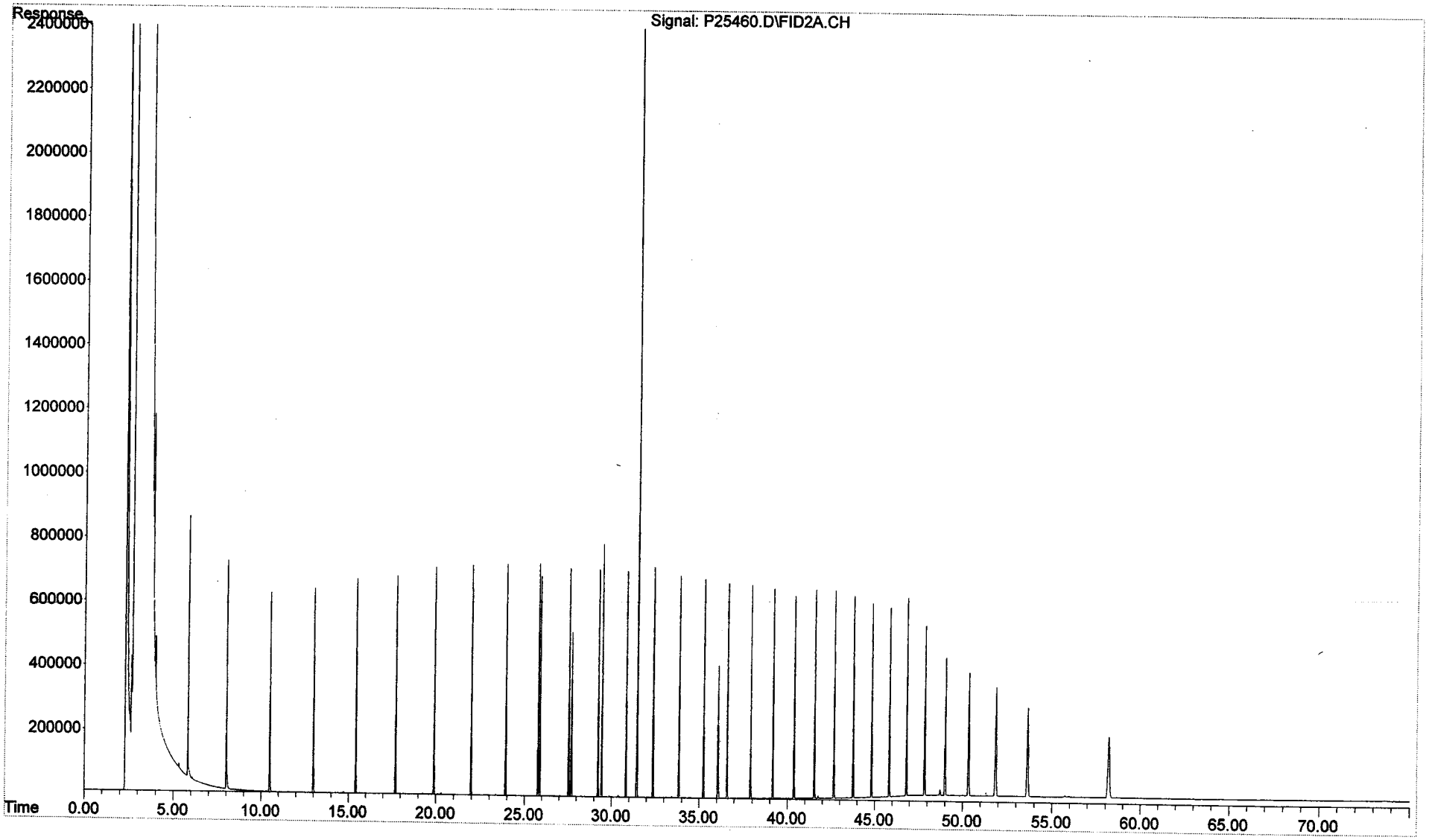
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25460.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 5:38 pm
Operator : AC
Sample : I2090102
Misc : WHAB30
ALS Vial : 53 Sample Multiplier: 1

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

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)

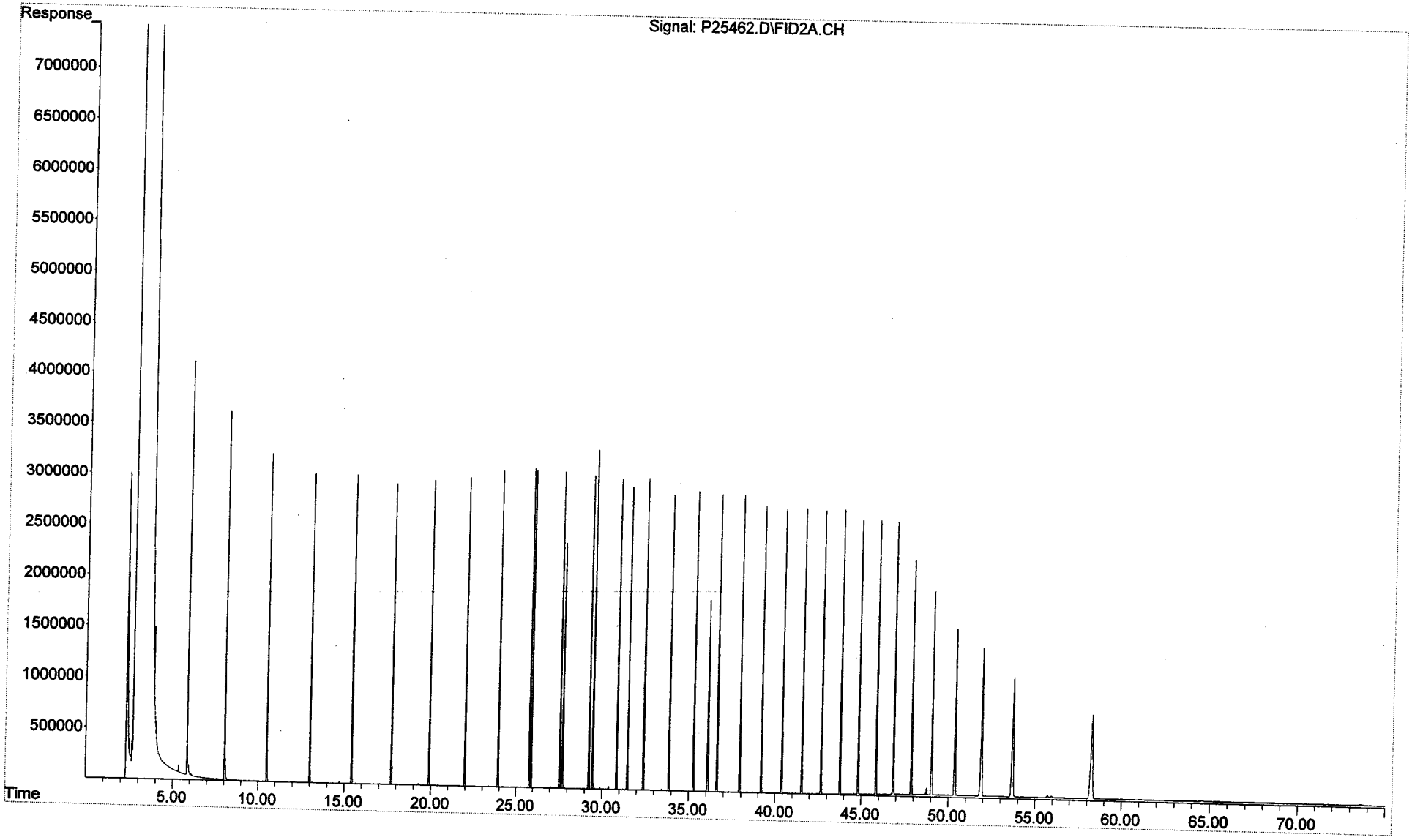
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25462.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 7:09 pm
Operator : AC
Sample : I2090103
Misc : WHAB31
ALS Vial : 54 Sample Multiplier: 1

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

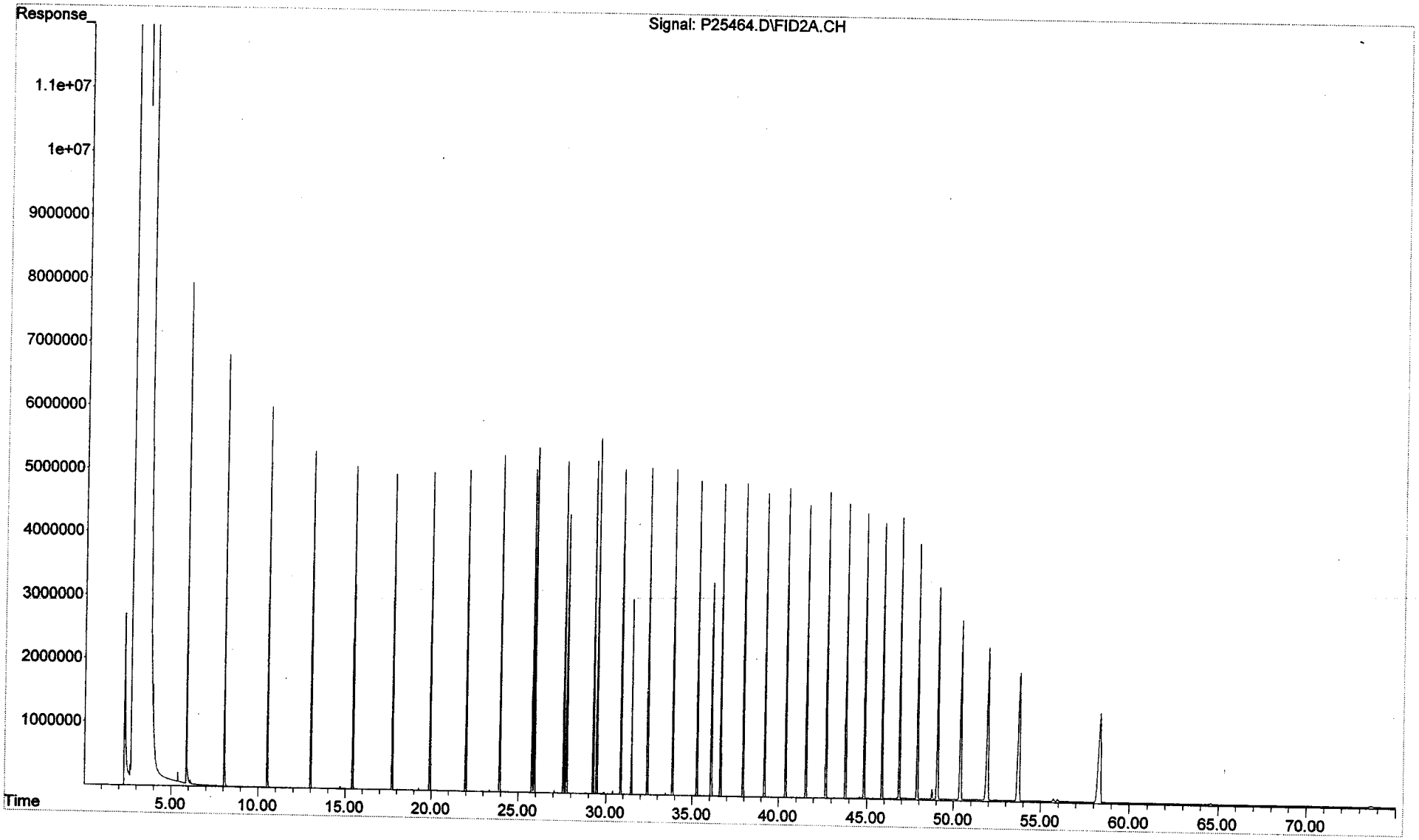
Integration File: SHCINT1.E
Quant Time: Sep 05 21:28:16 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:19:05 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Jablos

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

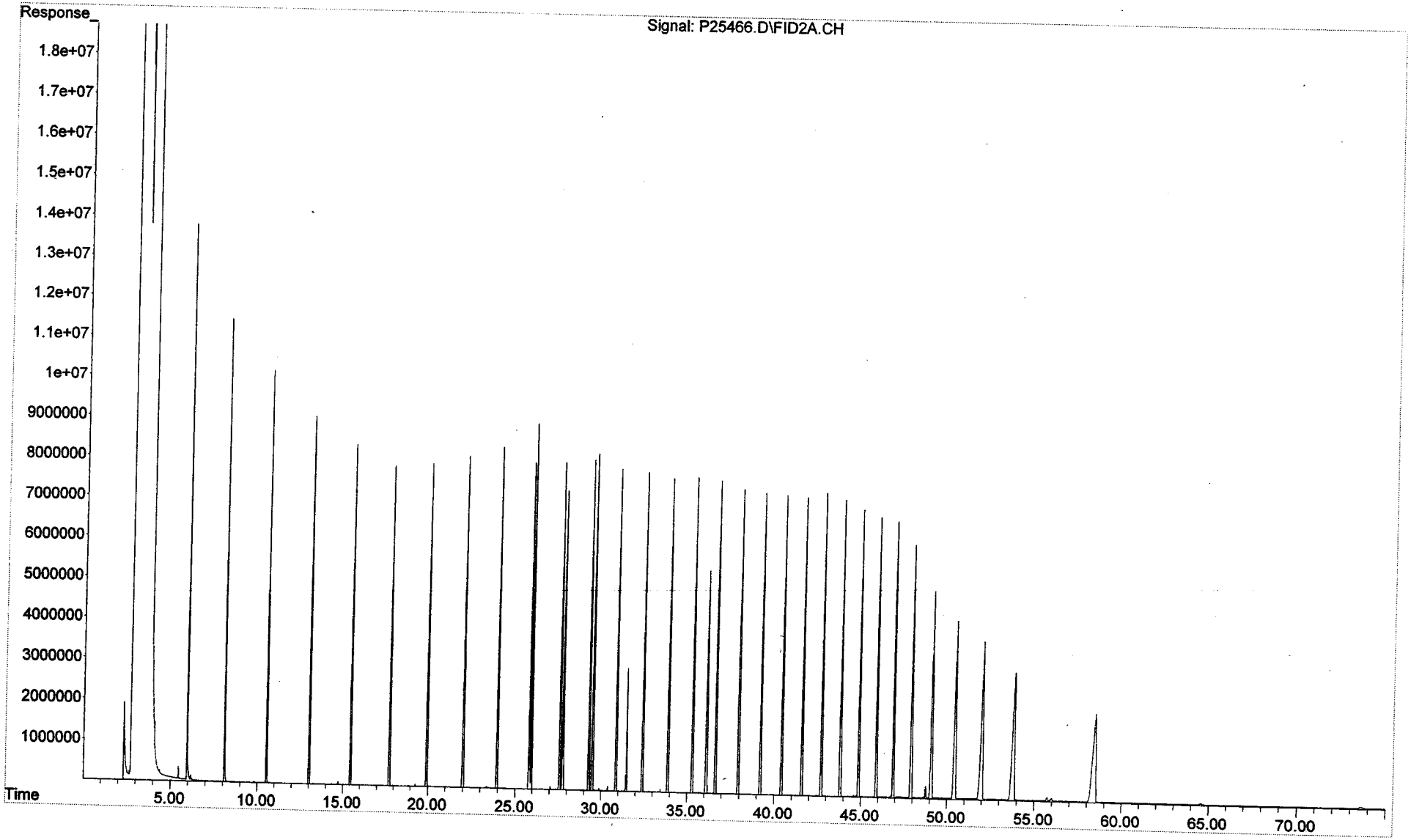
Integration File: SHCINT1.E
Quant Time: Sep 05 21:27:55 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:23:02 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

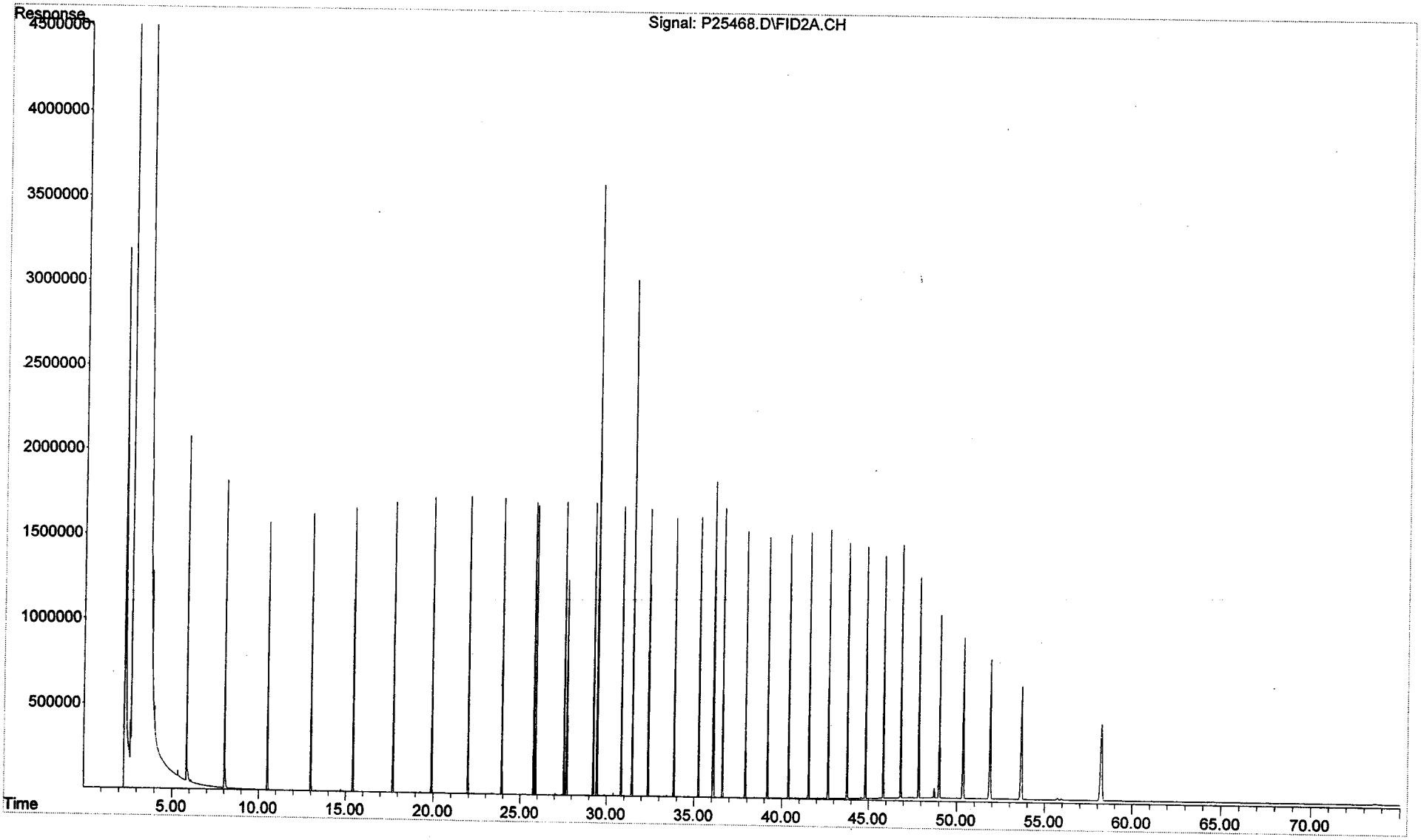
Integration File: SHCINT1.E
Quant Time: Sep 06 10:37:41 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

6/7/05

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

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

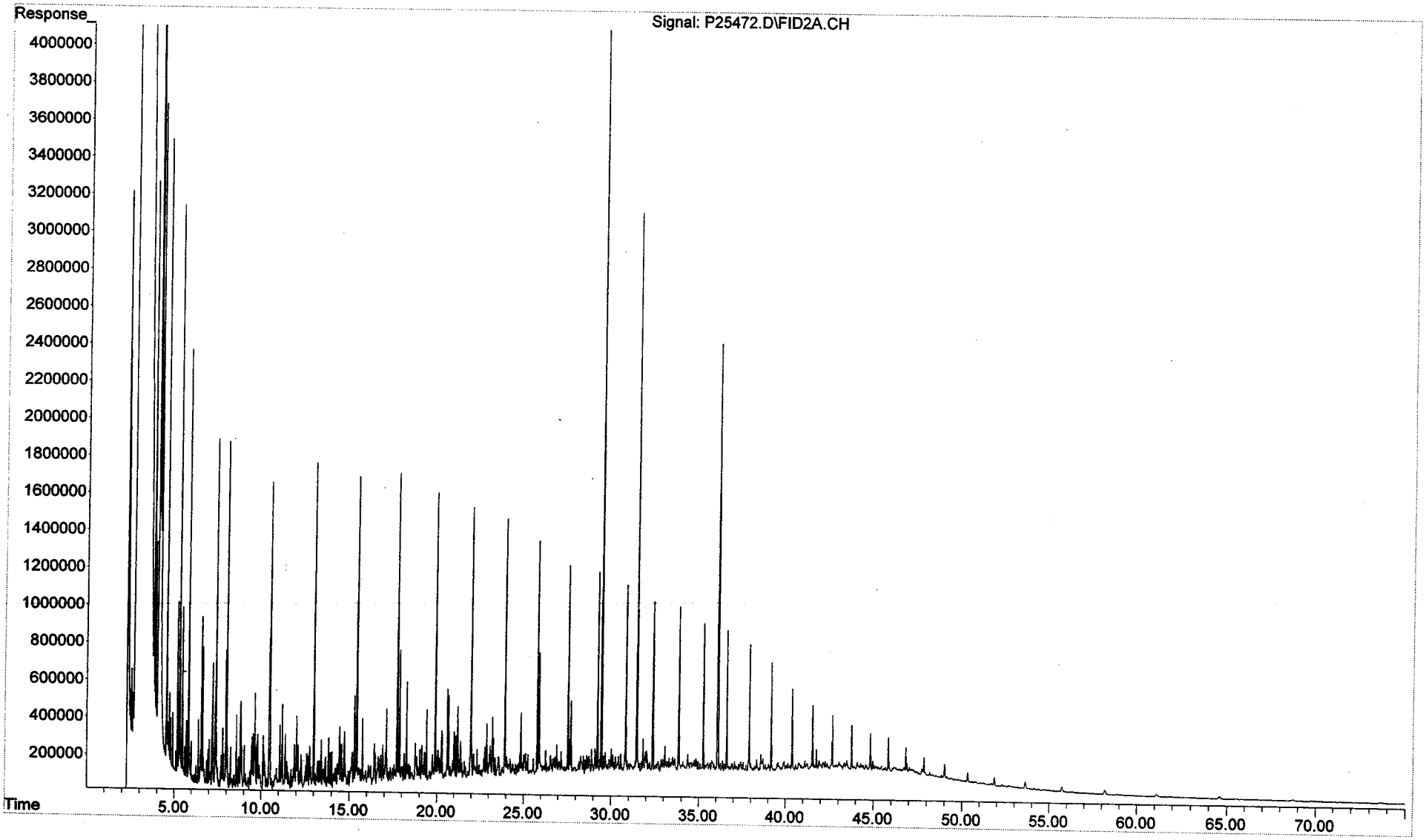
Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		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



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 T0011906AWS01
9)	Sample	3	P27748	FRNC2B	ANS2011801
10)	Pause				
11)	RearSamp	54	P27749	FRNC2B	~~LCS CHECK-AFID~~ DCM
12)	Sample	4	P27750	FRNC2B	DCM
13)	RearSamp	55	P27751	FRNC2B	~~BIO CHECK-AFID~~ LCS Check
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	~~S0011006LCS01-AFID~~ I B20118060I
18)	Sample	7	P27756	FRNC2B	0512128-04-RE2
19)	RearSamp	58	P27757	FRNC2B	~~C2011802-AFID PASS~~ S0011006LCS01
[illegible])	Sample	8	P27758	FRNC2B	0512128-05-RE2
[illegible])	RearSamp	59	P27759	FRNC2B	~~DCM-AFID~~ C2011802-AFID PASS
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 I B20118060 2
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

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

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
[illegible])	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
[illegible])	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

OK 2/3/06

Sequence Name: O:\Forensics\Data\PAH1\January06\JAN24.SEC\S1012401.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN24\

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	P17741	FRNC1D	dcm
5)	Sample	1	P17742	FRNC1D	pah chk
6)	RearSamp	52	P17743	FRNC1D	C1012501-AFID PASS
7)	Sample	2	P17744	FRNC1D	C1012501
8)	RearSamp	53	P17745	FRNC1D	ANS1012501-AFID T S013006AWS02
9)	Sample	3	P17746	FRNC1D	ANS1012501
10)	RearSamp	54	P17747	FRNC1D	DCM-AFID
11)	Sample	4	P17748	FRNC1D	DCM
12)	RearSamp	55	P17749	FRNC1D	DCM-AFID I8\012506 01
13)	Sample	5	P17750	FRNC1D	DCM
14)	RearSamp	56	P17751	FRNC1D	SS011906B04-AFID
15)	Sample	6	P17752	FRNC1D	SS011906B04
16)	RearSamp	57	P17753	FRNC1D	SS011906LCS03-AFID
17)	Sample	7	P17754	FRNC1D	SS011906LCS03
18)	RearSamp	58	P17755	FRNC1D	SS011906LCSD03-AFID
19)	Sample	8	P17756	FRNC1D	SS011906LCSD03
20)	RearSamp	59	P17757	FRNC1D	0512128-01-AFID
21)	Sample	9	P17758	FRNC1D	0512128-01RE
22)	RearSamp	60	P17759	FRNC1D	0512128-02-AFID
23)	Sample	10	P17760	FRNC1D	0512128-02-RE
24)	RearSamp	61	P17761	FRNC1D	0512128-03-AFID
25)	Sample	11	P17762	FRNC1D	0512128-03-RE
26)	RearSamp	62	P17763	FRNC1D	0512128-03D-AFID
27)	Sample	12	P17764	FRNC1D	0512128-03D-RE
28)	RearSamp	63	P17765	FRNC1D	0512128-04-AFID
29)	Sample	13	P17766	FRNC1D	0512128-04-RE
30)	RearSamp	64	P17767	FRNC1D	C1012502-AFID PASS
31)	Sample	14	P17768	FRNC1D	C1012502
32)	Pause				
33)	RearSamp	65	P17769	FRNC1DF	DCM-AFID
34)	Sample	15	P17770	FRNC1DF	DCM
35)	RearSamp	66	P17771	FRNC1D	
36)	Sample	16	P17772	FRNC1D	0512128-01-RE
37)	RearSamp	67	P17773	FRNC1D	
38)	Sample	17	P17774	FRNC1D	0512128-02-RE
39)	RearSamp	68	P17775	FRNC1D	
40)	Sample	18	P17776	FRNC1D	0512128-04-RE
41)	RearSamp	69	P17777	FRNC1D	
42)	Sample	19	P17778	FRNC1D	0512128-01
43)	RearSamp	70	P17779	FRNC1D	

PAH #1 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: HC11005.M PAH Process Method: PAH10104.M

Last Modified: Fri Jan 27 11:26:14 2006

Sequence Name: O:\Forensics\Data\PAH1\January06\JAN24.SEC\S1012401.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P17780	FRNC1D	0512128-02
45)	RearSamp	71	P17781	FRNC1D	
46)	Sample	21	P17782	FRNC1D	0512128-03
47)	RearSamp	72	P17783	FRNC1D	
48)	Sample	22	P17784	FRNC1D	0512128-03D
49)	RearSamp	73	P17785	FRNC1D	
50)	Sample	23	P17786	FRNC1D	0512128-04
51)	RearSamp	74	P17787	FRNC1D	
52)	Sample	24	P17788	FRNC1D	C1012503
53)	RearSamp	75	P17789	FRNC1D	
54)	Sample	25	P17790	FRNC1D	DCM
55)	RearSamp	75	P17791	FRNC1D	
56)	Sample	26	P17792	FRNC1D	MDL CHECK

CW 2/3/06

QUALITY CONTROL RESULTS

Form IV
Method Blank Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512128**
Lab ID: **SS010606B04**
Date Analyzed: **01/13/06 21:50**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS010606LCS04	01/14/06 02:04
LCSD	SS010606LCSD03	01/14/06 04:49
GC-SED-08 (10.5-11.5)	0512128-01	01/15/06 05:44
GC-SED-09 (6-7)	0512128-02	01/15/06 07:21
GC-SED-05 (0-2)	0512128-03	01/15/06 08:57
GC-SED-05 (0-2)	0512128-03 D	01/15/06 10:33
GC-SED-04 (10.3-11.3)	0512128-04	01/15/06 12:08

N/A - Not Applicable

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

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: **0512128**
Lab ID: **SO011006B01**
Date Analyzed: **01/13/06 23:51**

Client ID	Lab ID	Date/Time Analyzed
LCSD	SO011006LCSD01	01/15/06 00:36
GC-SED-RM 039	0512128-05	01/15/06 13:46
LCS	SO011006LCS01	01/19/06 03:23

N/A - Not Applicable

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

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: **0512128**
Lab ID: **SS011906B04**
Date Analyzed: **01/25/06 21:30**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS011906LCS03	01/25/06 23:04
LCSD	SS011906LCSD03	01/26/06 00:38
GC-SED-08 (10.5-11.5)	0512128-01X	01/26/06 02:11
GC-SED-09 (6-7)	0512128-02X	01/26/06 03:45
GC-SED-05 (0-2)	0512128-03X	01/26/06 05:18
GC-SED-05 (0-2)	0512128-03X D	01/26/06 06:53
GC-SED-04 (10.3-11.3)	0512128-04X	01/26/06 08:28

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\S1100501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\October\OCT05\

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)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P15860	FRNC1D	C1100501-AFID
4)	Sample	1	P15861	FRNC1D	C1100501
5)	RearSamp	99	P15861A	FRNC1D	QC WHAB68-AFID
6)	Sample	100	P15861B	FRNC1D	QC WHAB68
7)	RearSamp	52	P15862	FRNC1D	ANS1100501-AFID TO101705AWS01
8)	Sample	2	P15863	FRNC1D	ANS1100501
9)	RearSamp	53	P15864	FRNC1D	DCM-AFID
10)	Sample	3	P15865	FRNC1D	DCM-AFID
11)	RearSamp	54	P15866	FRNC1D	I1100501-AFID
12)	Sample	4	P15867	FRNC1D	SO100505B02
13)	RearSamp	55	P15868	FRNC1D	I1100502-AFID
14)	Sample	5	P15869	FRNC1D	SO100505LCS01
15)	RearSamp	56	P15870	FRNC1D	I1100503-AFID
16)	Sample	6	P15871	FRNC1D	SO100505LCSD01
17)	RearSamp	57	P15872	FRNC1D	I1100504-AFID
18)	Sample	7	P15873	FRNC1D	0509124-01
19)	RearSamp	58	P15874	FRNC1D	I1100505-AFID
	Sample	8	P15875	FRNC1D	0509124-02
21)	RearSamp	59	P15876	FRNC1D	Q1100501-AFID
22)	Sample	9	P15877	FRNC1D	0509124-02D
23)	RearSamp	60	P15878	FRNC1D	DCM-AFID IB110050501
24)	Sample	10	P15879	FRNC1D	0509124-03
25)	RearSamp	61	P15880	FRNC1D	SO100505B02-AFID
26)	Sample	11	P15881	FRNC1D	0509124-04
27)	RearSamp	62	P15882	FRNC1D	SO100505LCS01-AFID
28)	Sample	12	P15883	FRNC1D	0509124-05
29)	RearSamp	63	P15884	FRNC1D	SO100505LCSD01-AFID
30)	Sample	15	P15885	FRNC1D	C1100502
31)	Pause				
32)	RearSamp	64	P15886	FRNC1D	0509124-01-AFID
33)	Sample	13	P15887	FRNC1D	0509124-06
34)	RearSamp	65	P15888	FRNC1D	0509124-02-AFID re-analyze flame-out
35)	Sample	14	P15889	FRNC1D	0509124-09

FID Process Method: HC11005.M

Last Modified: Wed Oct 05 11:59:52 2005

Response Factor Report PAH-1

Method Path : C:\MSDCHEM\1\METHODS\
Method File : HC11005.M
Title : FID Forensics
Last Update : Fri Oct 14 16:49:01 2005
Response Via : Initial Calibration

Calibration Files
1 =P15866.D 10 =P15868.D 50 =P15870.D
100 =P15872.D 200 =P15874.D

10/17/05

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.806	0.820	0.805	0.797	0.802	0.806	1.04
3)	t	n-Nonane (C9)	0.949	0.897	0.876	0.860	0.862	0.889	4.12
4)	t	n-Decane (C10)	0.968	0.916	0.899	0.886	0.888	0.911	3.74
5)	t	n-Undecane (C11)	0.983	0.925	0.908	0.898	0.899	0.923	3.86
6)	t	n-Dodecane (C12)	0.987	0.945	0.930	0.920	0.920	0.940	2.97
7)	t	n-Tridecane (C13)	1.003	0.959	0.940	0.931	0.929	0.953	3.20
8)	t	1380	1.022	0.977	0.954	0.945	0.942	0.968	3.44
9)	t	n-Tetradecane (C14)	1.022	0.977	0.954	0.945	0.942	0.968	3.44
10)	t	1470	1.051	0.988	0.960	0.953	0.948	0.980	4.33
11)	t	n-Pentadecane (C15)	1.051	0.988	0.960	0.953	0.948	0.980	4.33
12)	t	n-Hexadecane (C16)	1.068	0.998	0.966	0.961	0.953	0.989	4.79
13)	t	1650	1.088	1.010	0.976	0.971	0.963	1.002	5.17
14)	t	n-Heptadecane (C17)	1.088	1.010	0.976	0.971	0.963	1.002	5.17
15)	t	Pristane	1.035	0.968	0.934	0.928	0.919	0.957	4.98
16)	t	n-Octadecane (C18)	1.085	1.015	0.980	0.975	0.966	1.004	4.87
17)	t	Phytane	1.071	1.010	0.973	0.967	0.956	0.996	4.70
18)	t	n-Nonadecane (C19)	1.075	1.009	0.975	0.970	0.960	0.998	4.71
19)	s	ortho-terphenyl	1.230	1.080	1.044	1.036	1.029	1.084	7.74
20)	t	n-Eicosane (C20)	1.076	1.007	0.971	0.966	0.955	0.995	4.94
21)	t	n-Heneicosane (C21)	1.108	1.038	1.003	0.998	0.987	1.027	4.82
22)	t	n-Docosane (C22)	1.096	1.026	0.989	0.985	0.974	1.014	4.92
23)	t	n-Tricosane (C23)	1.103	1.033	0.996	0.992	0.981	1.021	4.90
24)	s	d50-Tetracosane	1.370	0.906	0.871	0.860	0.850	0.971	23.02
25)	t	n-Tetracosane (C24)	1.134	1.042	1.003	1.000	0.988	1.033	5.77
26)	t	n-Pentacosane (C25)	1.195	1.039	1.001	0.997	0.982	1.043	8.41
27)	t	n-Hexacosane (C26)	1.104	1.031	0.993	0.988	0.976	1.018	5.12
28)	t	n-Heptacosane (C27)	1.095	1.028	0.990	0.986	0.974	1.015	4.87
29)	t	n-Octacosane (C28)	1.126	1.042	1.003	0.999	0.986	1.031	5.51
30)	t	n-Nonacosane (C29)	1.146	1.066	1.027	1.022	1.009	1.054	5.27
31)	t	n-Triacontane (C30)	1.111	1.047	1.010	1.006	0.992	1.033	4.63
32)	t	n-Hentriacontane (C31	1.068	1.014	0.980	0.975	0.962	1.000	4.28
33)	t	n-Dotriacontane (C32)	1.083	1.022	0.988	0.982	0.968	1.009	4.57
34)	t	n-Tritriacontane (C33	1.075	1.037	1.004	0.997	0.983	1.019	3.63
35)	t	n-tetratriacontane (C	1.100	1.051	1.020	1.011	0.997	1.035	3.96
36)	t	n-Pentatriacontane (C	1.058	1.011	0.981	0.971	0.958	0.996	4.00
37)	t	n-Hexatriacontane (C3	1.109	1.037	1.006	0.996	0.983	1.026	4.91
38)	t	n-Heptatriacontane (C	1.207	1.106	1.076	1.066	1.052	1.101	5.65
39)	t	n-Octatriacontane (C3	1.108	1.046	1.019	1.008	0.996	1.035	4.32
40)	t	n-Nonatriacontane (C3	1.125	1.032	1.004	0.993	0.981	1.027	5.63
41)	t	n-Tetracontane (C40)	1.125	1.032	1.004	0.993	0.981	1.027	5.63
42)	h	C9-C40 Total Petroleu	1.079	1.011	0.980	0.973	0.963	1.001	4.71
43)	h	C10-C28 DRO	1.079	1.011	0.980	0.973	0.963	1.001	4.71
44)	h	Total Resolved Hydroc	1.079	1.011	0.980	0.973	0.963	1.001	4.71

(#) = Out of Range

ICAL ID: HC11005.M

Component	Responses				
	Level 1	Level 2	Level 3	Level 4	Level 5
n-Nonane (C9)	1132015	10498459	52246830	102781405	202095631
n-Decane (C10)	1155072	10723181	53586773	105828639	208061331
n-Undecane (C11)	1173119	10830002	54155791	107262086	210776366
n-Dodecane (C12)	1177197	11057060	55435782	109922584	215654778
n-Tridecane (C13)	1196618	11218029	56082608	111269393	217880200
n-Tetradecane (C14)	1219535	11427634	56897814	112957898	220715268
n-Pentadecane (C15)	1253265	11564851	57257602	113904133	222156659
n-Hexadecane (C16)	1274311	11678982	57598544	114781277	223476831
n-Heptadecane (C17)	1298169	11824086	58193939	115955930	225671657
Pristane	1235036	11330485	55683946	110888857	215367907
n-Octadecane (C18)	1294491	11874715	58446412	116514868	226439101
Phytane	1277504	11821363	58043709	115535600	224131538
n-Nonadecane (C19)	1282336	11812345	58140407	115911503	224970843
n-Eicosane (C20)	1283179	11781964	57889024	115449228	223880202
n-Heneicosane (C21)	1322085	12145610	59789282	119222290	231304721
n-Docosane (C22)	1307258	12005057	58983404	117660808	228237623
n-Tricosane (C23)	1316106	12085831	59391641	118506145	229853494
n-Tetracosane (C24)	1352536	12189791	59836684	119466359	231618014
n-Pentacosane (C25)	1425786	12158420	59689553	119085255	230257861
n-Hexacosane (C26)	1317424	12060114	59206913	118092843	228835118
n-Heptacosane (C27)	1306656	12032957	59061691	117826940	228244100
n-Octacosane (C28)	1342650	12196722	59812490	119359729	231104479
n-Nonacosane (C29)	1366537	12473008	61236479	122129756	236435398
n-Triacontane (C30)	1325208	12252816	60258513	120202182	232590130
n-Hentriacontane (C31)	1274172	11869820	58452135	116492164	225434305
n-Dotriacontane (C32)	1291994	11960160	58925133	117329937	226936670
n-Tritriacontane (C33)	1282666	12138837	59891857	119115966	230463854
n-tetratriacontane (C34)	1311738	12298617	60797520	120764189	233629218
n-Pentatriacontane (C35)	1262402	11832639	58493593	116069115	224668006
n-Hexatriacontane (C36)	1322662	12132652	59965402	118986963	230449861
n-Heptatriacontane (C37)	1439482	12938023	64168897	127310647	246520015
n-Octatriacontane (C38)	1321938	12243108	60781159	120446610	233388724
n-Tetracontane (C40)	1341970	12077082	59895920	118679810	230023588

Range	Average Response				
	Level 1	Level 2	Level 3	Level 4	Level 5
C9-C40 Total Petroleum Hydrocarbons	1287367	11834376	58433256	116233670	225796166
C10-C28 DRO	1287367	11834376	58433256	116233670	225796166
Total Resolved Hydrocarbons	1287367	11834376	58433256	116233670	225796166

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15866.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 5:25 pm
Operator : AC
Sample : I1100501-AFID
Misc : WHAB29
ALS Vial : 54 Sample Multiplier: 1

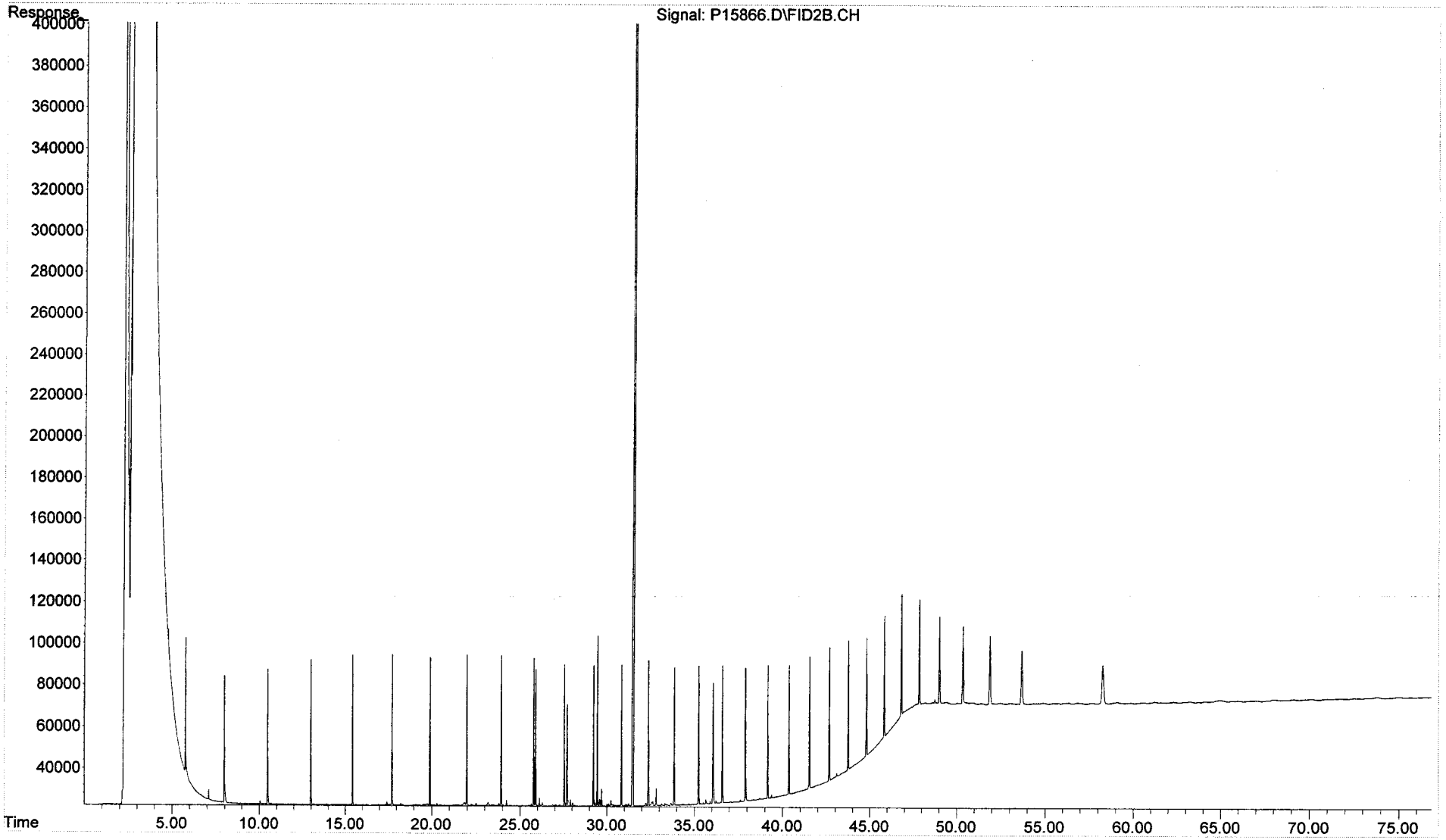
Integration File: SHCINT1.E
Quant Time: Oct 10 21:14:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:02:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

10/14/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.50	59645108	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.46	1466887	1.136 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	2.27%#
24) s d50-Tetracosane	36.07	1633831	1.417 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	2.83%#
Target Compounds			
2) t n-Octane (C8)	5.76f	961986	0.936 ug/mLm
3) t n-Nonane (C9)	7.99	1132015	1.028 ug/mL
4) t n-Decane (C10)	10.48	1155072	1.033 ug/mLm
5) t n-Undecane (C11)	13.00	1173119	1.045 ug/mLm
6) t n-Dodecane (C12)	15.42	1177197	1.032 ug/mLm
7) t n-Tridecane (C13)	17.73	1196618	1.041 ug/mLm
9) t n-Tetradecane (C14)	19.91	1219535	1.045 ug/mLm
11) t n-Pentadecane (C15)	21.98	1253265	1.065 ug/mLm
12) t n-Hexadecane (C16)	23.93	1274311	1.078 ug/mLm
14) t n-Heptadecane (C17)	25.79	1298169	1.086 ug/mLm
15) t Pristane	25.90	1235036	1.082 ug/mLm
16) t n-Octadecane (C18)	27.55	1294491	1.079 ug/mL
17) t Phytane	27.71	1277504	1.075 ug/mL
18) t n-Nonadecane (C19)	29.24	1282336	1.080 ug/mL
20) t n-Eicosane (C20)	30.84	1283179	1.085 ug/mL
21) t n-Heneicosane (C21)	32.37	1322085	1.085 ug/mLm
22) t n-Docosane (C22)	33.84f	1307258	1.084 ug/mLm
23) t n-Tricosane (C23)	35.25	1316106	1.084 ug/mLm
25) t n-Tetracosane (C24)	36.61	1352536	1.102 ug/mL
26) t n-Pentacosane (C25)	37.91	1425786	1.163 ug/mLm
27) t n-Hexacosane (C26)	39.16	1317424	1.091 ug/mLm
28) t n-Heptacosane (C27)	40.37	1306656	1.086 ug/mLm
29) t n-Octacosane (C28)	41.54	1342650	1.103 ug/mLm
30) t n-Nonacosane (C29)	42.66	1366537	1.096 ug/mLm
31) t n-Triacontane (C30)	43.75	1325208	1.084 ug/mLm
32) t n-Hentriacontane (C31)	44.81	1274172	1.076 ug/mLm
33) t n-Dotriacontane (C32)	45.83	1291994	1.087 ug/mLm
34) t n-Tritriacontane (C33)	46.83	1282666	1.064 ug/mLm
35) t n-tetratriacontane (C34)	47.85	1311738	1.079 ug/mLm
36) t n-Pentatriacontane (C35)	49.02	1262402	1.079 ug/mLm
37) t n-Hexatriacontane (C36)	50.35	1322662	1.106 ug/mLm
38) t n-Heptatriacontane (C37)	51.88	1439482	1.125 ug/mL
39) t n-Octatriacontane (C38)	53.68	1321938	1.096 ug/mLm
41) t n-Tetracontane (C40)	58.28	1341970	1.134 ug/mLm

File :C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\P15866.D
Operator : AC
Acquired : 05 Oct 2005 5:25 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100501-AFID
Misc Info : WHAB29
Vial Number: 54



Quantitation Report (QT Reviewed)

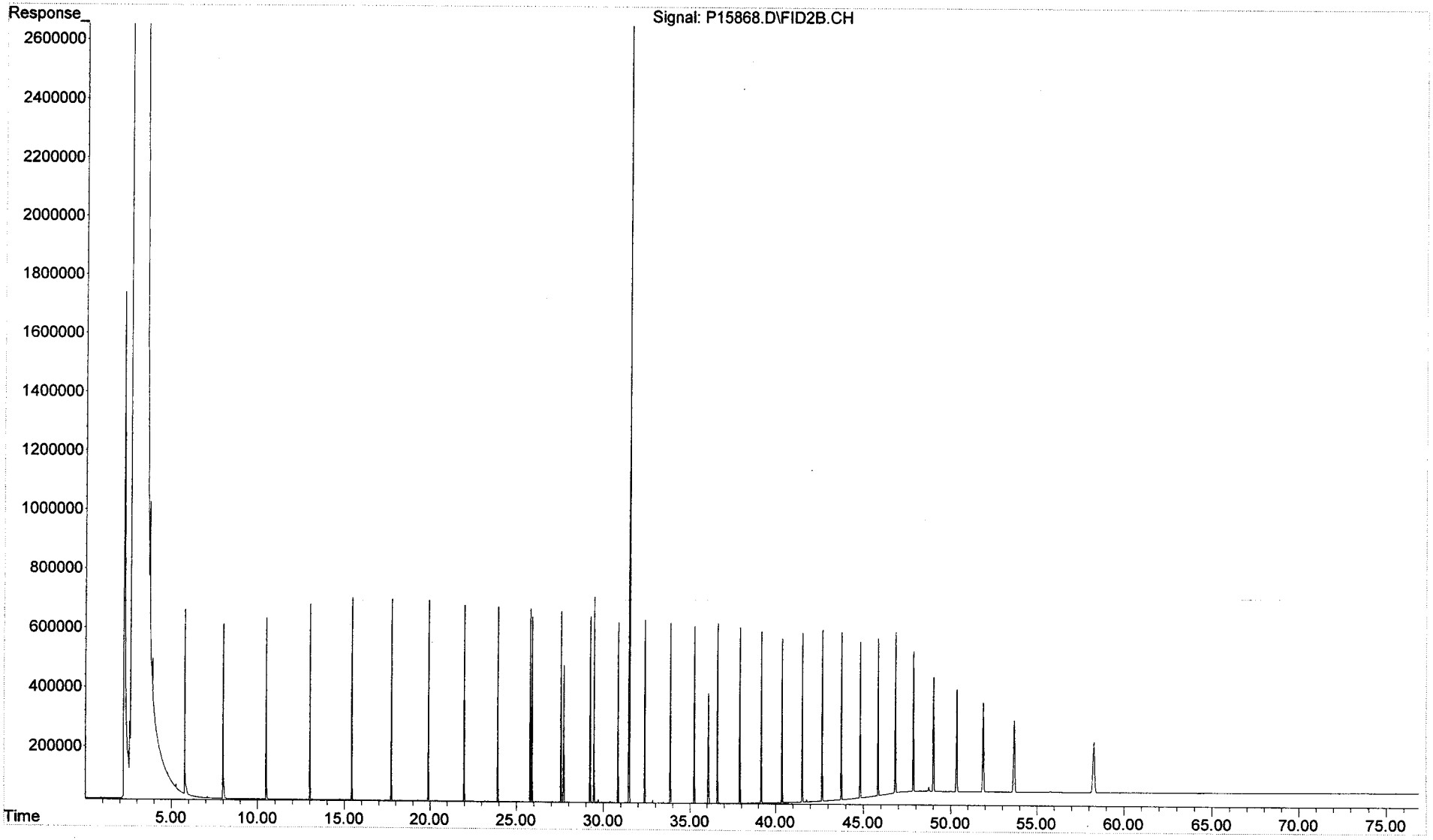
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15868.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 7:02 pm
Operator : AC
Sample : I1100502-AFID
Misc : WHAB30
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:13:37 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:07:37 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	31.50	58512810	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.47	12641342	9.966 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	19.93%#
24) s d50-Tetracosane	36.08	10600586	9.339 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	18.68%#
Target Compounds			
2) t n-Octane (C8)	5.77f	9591339	9.752 ug/mLm
3) t n-Nonane (C9)	8.00	10498459	9.810 ug/mL
4) t n-Decane (C10)	10.49	10723181	9.826 ug/mLm
5) t n-Undecane (C11)	13.00	10830002	9.859 ug/mLm
6) t n-Dodecane (C12)	15.43	11057060	9.916 ug/mLm
7) t n-Tridecane (C13)	17.74	11218029	9.969 ug/mLm
9) t n-Tetradecane (C14)	19.92	11427634	10.015 ug/mLm
11) t n-Pentadecane (C15)	21.98	11564851	10.029 ug/mL
12) t n-Hexadecane (C16)	23.94	11678982	10.049 ug/mLm
14) t n-Heptadecane (C17)	25.80	11824086	10.061 ug/mLm
15) t Pristane	25.90	11330485	10.100 ug/mLm
16) t n-Octadecane (C18)	27.56	11874715	10.093 ug/mL
17) t Phytane	27.72	11821363	10.132 ug/mLm
18) t n-Nonadecane (C19)	29.24	11812345	10.116 ug/mLm
20) t n-Eicosane (C20)	30.85	11781964	10.126 ug/mLm
21) t n-Heneicosane (C21)	32.38	12145610	10.118 ug/mL
22) t n-Docosane (C22)	33.85f	12005057	0.950 ug/mLm
23) t n-Tricosane (C23)	35.26	12085831	10.125 ug/mL
25) t n-Tetracosane (C24)	36.61	12189791	10.092 ug/mLm
26) t n-Pentacosane (C25)	37.92	12158420	9.975 ug/mLm
27) t n-Hexacosane (C26)	39.17	12060114	10.142 ug/mLm
28) t n-Heptacosane (C27)	40.38	12032957	10.155 ug/mLm
29) t n-Octacosane (C28)	41.54	12196722	10.138 ug/mLm
30) t n-Nonacosane (C29)	42.67	12473008	10.146 ug/mL
31) t n-Triacontane (C30)	43.76	12252816	10.169 ug/mLm
32) t n-Hentriacontane (C31)	44.82	11869820	10.185 ug/mL
33) t n-Dotriacontane (C32)	45.84	11960160	10.186 ug/mLm
34) t n-Tritriacontane (C33)	46.83	12138837	10.236 ug/mLm
35) t n-tetratriacontane (C34)	47.86	12298617	10.242 ug/mLm
36) t n-Pentatriacontane (C35)	49.03	11832639	10.243 ug/mLm
37) t n-Hexatriacontane (C36)	50.36	12132652	10.225 ug/mL
38) t n-Heptatriacontane (C37)	51.90	12938023	10.174 ug/mL
39) t n-Octatriacontane (C38)	53.69	12243108	10.251 ug/mLm
41) t n-Tetracontane (C40)	58.30	12077082	10.248 ug/mL

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15868.D
Operator : AC
Acquired : 05 Oct 2005 7:02 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100502-AFID
Misc Info : WHAB30
Vial Number: 55



Quantitation Report (QT Reviewed)

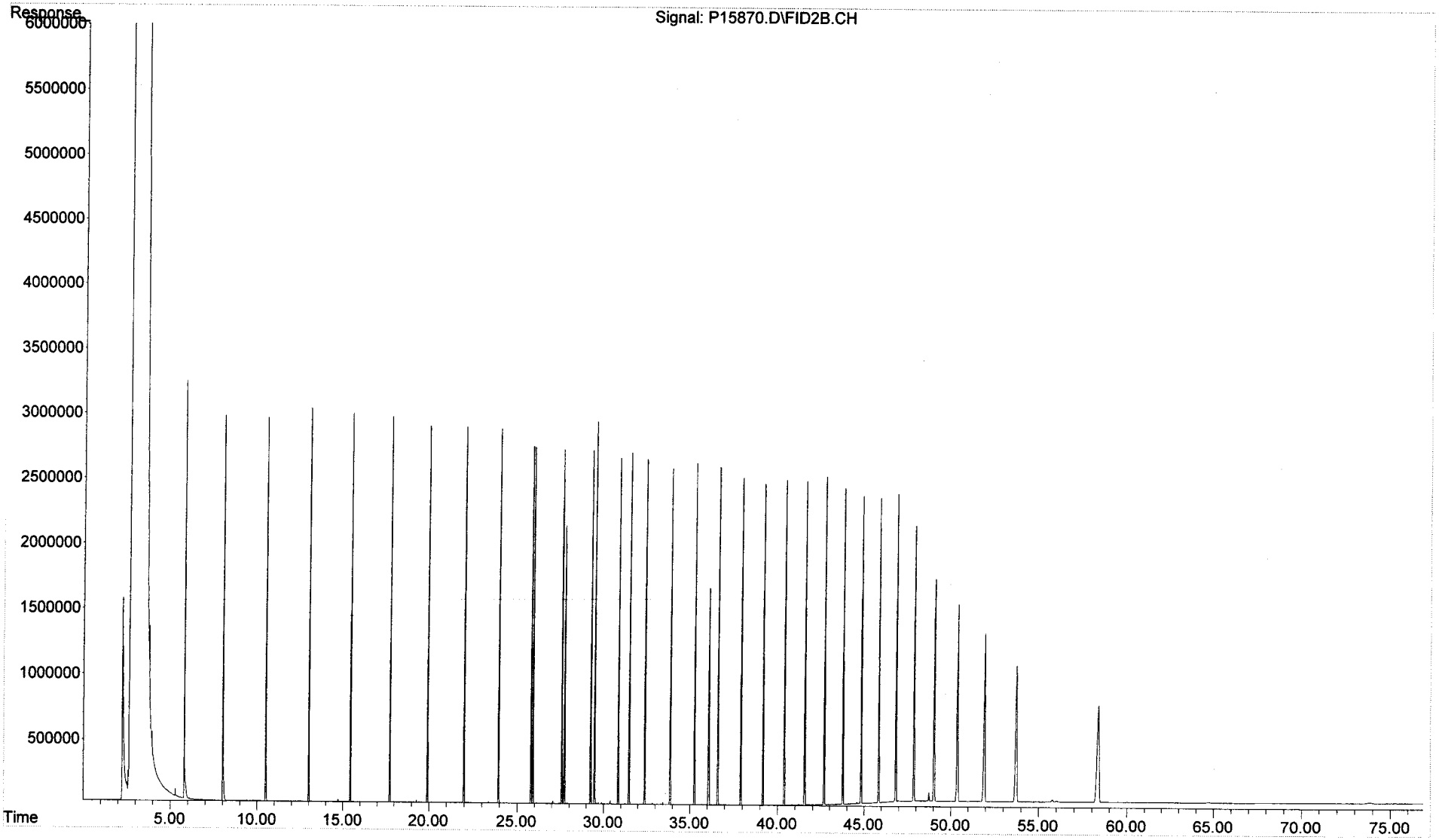
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15870.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 8:37 pm
Operator : AC
Sample : I1100503-AFID
Misc : WHAB31
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:18:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:15:17 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	31.50	59634355	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.49	62270271	48.155 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	96.31%
24) s d50-Tetracosane	36.10	51941629	44.865 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	89.73%
Target Compounds			
2) t n-Octane (C8)	5.80	48029027	48.471 ug/mLm
3) t n-Nonane (C9)	8.02	52246830	48.231 ug/mL
4) t n-Decane (C10)	10.51	53586773	48.475 ug/mLm
5) t n-Undecane (C11)	13.02	54155791	48.595 ug/mLm
6) t n-Dodecane (C12)	15.45	55435782	48.969 ug/mL
7) t n-Tridecane (C13)	17.76	56082608	49.037 ug/mLm
9) t n-Tetradecane (C14)	19.94	56897814	49.039 ug/mL
11) t n-Pentadecane (C15)	22.00	57257602	48.800 ug/mL
12) t n-Hexadecane (C16)	23.96	57598544	48.675 ug/mL
14) t n-Heptadecane (C17)	25.82	58193939	48.603 ug/mL
15) t Pristane	25.93	55683946	48.723 ug/mL
16) t n-Octadecane (C18)	27.58	58446412	48.754 ug/mL
17) t Phytane	27.75	58043709	48.818 ug/mL
18) t n-Nonadecane (C19)	29.27	58140407	48.834 ug/mL
20) t n-Eicosane (C20)	30.87	57889024	48.802 ug/mL
21) t n-Heneicosane (C21)	32.40	59789282	48.853 ug/mL
22) t n-Docosane (C22)	33.87	58983404	48.789 ug/mL
23) t n-Tricosane (C23)	35.28	59391641	48.802 ug/mL
25) t n-Tetracosane (C24)	36.64	59836684	48.580 ug/mL
26) t n-Pentacosane (C25)	37.94	59689553	48.016 ug/mL
27) t n-Hexacosane (C26)	39.19	59206913	48.796 ug/mL
28) t n-Heptacosane (C27)	40.40	59061691	48.850 ug/mL
29) t n-Octacosane (C28)	41.57	59812490	48.701 ug/mLm
30) t n-Nonacosane (C29)	42.70	61236479	48.800 ug/mL
31) t n-Triacontane (C30)	43.79	60258513	48.989 ug/mL
32) t n-Hentriacontane (C31)	44.84	58452135	49.127 ug/mL
33) t n-Dotriacontane (C32)	45.86	58925133	49.130 ug/mLm
34) t n-Tritriacontane (C33)	46.85	59891857	49.445 ug/mLm
35) t n-tetratriacontane (C34)	47.89	60797520	49.497 ug/mL
36) t n-Pentatriacontane (C35)	49.06	58493593	49.541 ug/mL
37) t n-Hexatriacontane (C36)	50.40	59965402	49.393 ug/mL
38) t n-Heptatriacontane (C37)	51.95	64168897	49.328 ug/mL
39) t n-Octatriacontane (C38)	53.75	60781159	49.743 ug/mLm
41) t n-Tetracontane (C40)	58.37	59895920	49.594 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15870.D
Operator : AC
Acquired : 05 Oct 2005 8:37 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100503-AFID
Misc Info : WHAB31
Vial Number: 56



Quantitation Report (QT Reviewed)

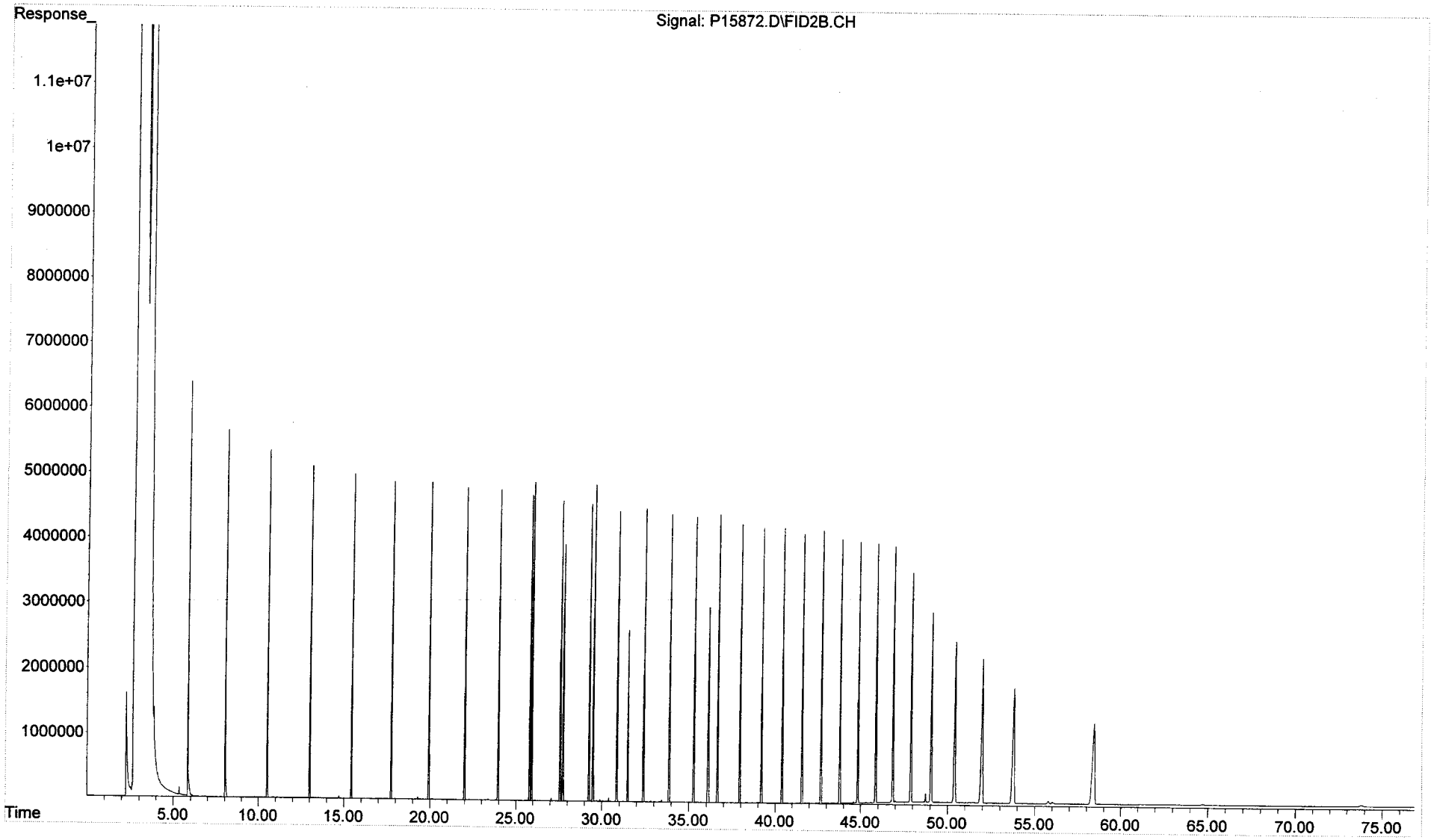
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15872.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 10:13 pm
Operator : AC
Sample : I1100504-AFID
Misc : WHAB32
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:23:58 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:18:21 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	31.51	59738614	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.52	123784026	95.563 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	191.13%#
24) s d50-Tetracosane	36.11	102765324	88.576 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	177.15%#
Target Compounds			
2) t n-Octane (C8)	5.84	95213258	97.028 ug/mL
3) t n-Nonane (C9)	8.05	102781405	95.337 ug/mLm
4) t n-Decane (C10)	10.53	105828639	96.006 ug/mLm
5) t n-Undecane (C11)	13.03	107262086	96.383 ug/mLm
6) t n-Dodecane (C12)	15.46	109922584	97.125 ug/mLm
7) t n-Tridecane (C13)	17.77	111269393	97.224 ug/mLm
9) t n-Tetradecane (C14)	19.95	112957898	97.245 ug/mLm
11) t n-Pentadecane (C15)	22.02	113904133	96.961 ug/mLm
12) t n-Hexadecane (C16)	23.98	114781277	96.873 ug/mLm
14) t n-Heptadecane (C17)	25.84	115955930	96.694 ug/mLm
15) t Pristane	25.95	110888857	96.889 ug/mLm
16) t n-Octadecane (C18)	27.60	116514868	97.015 ug/mLm
17) t Phytane	27.77	115535600	97.017 ug/mLm
18) t n-Nonadecane (C19)	29.29	115911503	97.174 ug/mLm
20) t n-Eicosane (C20)	30.89	115449228	97.123 ug/mLm
21) t n-Heneicosane (C21)	32.42	119222290	97.208 ug/mLm
22) t n-Docosane (C22)	33.89	117660808	97.131 ug/mLm
23) t n-Tricosane (C23)	35.30	118506145	97.186 ug/mLm
25) t n-Tetracosane (C24)	36.66	119466359	96.808 ug/mL
26) t n-Pentacosane (C25)	37.96	119085255	95.589 ug/mLm
27) t n-Hexacosane (C26)	39.21	118092843	97.108 ug/mL
28) t n-Heptacosane (C27)	40.42	117826940	97.244 ug/mL
29) t n-Octacosane (C28)	41.59	119359729	96.965 ug/mLm
30) t n-Nonacosane (C29)	42.72	122129756	97.088 ug/mL
31) t n-Triacontane (C30)	43.81	120202182	97.473 ug/mL
32) t n-Hentriacontane (C31)	44.86	116492164	97.639 ug/mL
33) t n-Dotriacontane (C32)	45.89	117329937	97.516 ug/mLm
34) t n-Tritriacontane (C33)	46.88	119115966	98.013 ug/mLm
35) t n-tetratriacontane (C34)	47.92	120764189	97.896 ug/mLm
36) t n-Pentatriacontane (C35)	49.09	116069115	97.894 ug/mLm
37) t n-Hexatriacontane (C36)	50.44	118986963	97.518 ug/mLm
38) t n-Heptatriacontane (C37)	51.99	127310647	97.338 ug/mLm
39) t n-Octatriacontane (C38)	53.80	120446610	97.994 ug/mLm
41) t n-Tetracontane (C40)	58.46	118679810	97.565 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15872.D
Operator : AC
Acquired : 05 Oct 2005 10:13 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100504-AFID
Misc Info : WHAB32
Vial Number: 57



Quantitation Report (QT Reviewed)

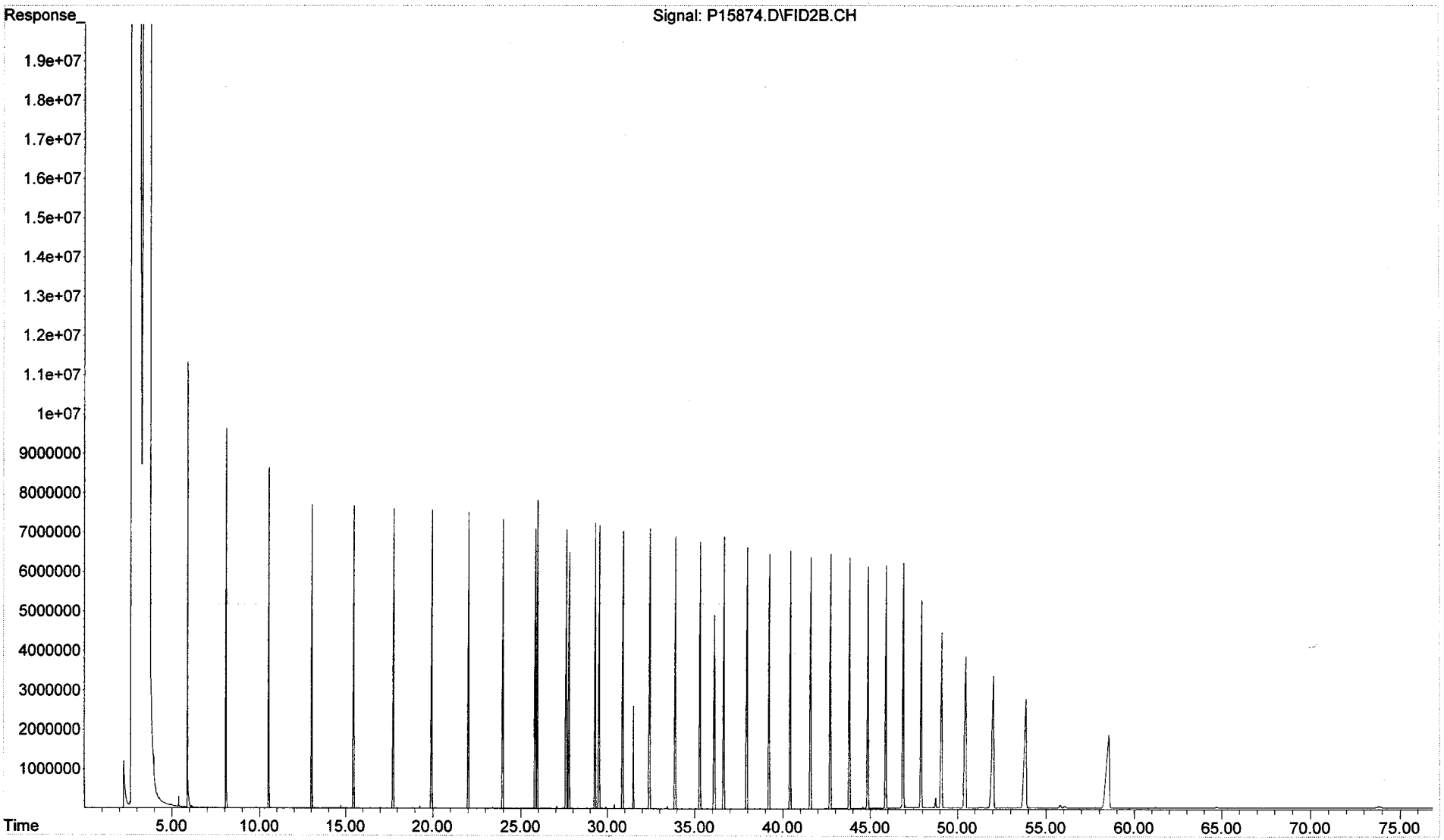
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15874.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 11:47 pm
Operator : AC
Sample : I1100505-AFID
Misc : WHAB33
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:27:28 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:24:19 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	31.51	58603173	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.55	241133077	189.819 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 379.64%#	
24) s d50-Tetracosane	36.14	199264629	175.235 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery = 350.47%#	
Target Compounds			
2) t n-Octane (C8)	5.91f	188106199	193.077 ug/mLm
3) t n-Nonane (C9)	8.09	202095631	190.139 ug/mLm
4) t n-Decane (C10)	10.56	208061331	191.696 ug/mLm
5) t n-Undecane (C11)	13.06	210776366	192.644 ug/mLm
6) t n-Dodecane (C12)	15.49	215654778	193.955 ug/mLm
7) t n-Tridecane (C13)	17.80	217880200	193.979 ug/mLm
9) t n-Tetradecane (C14)	19.98	220715268	193.647 ug/mLm
11) t n-Pentadecane (C15)	22.05	222156659	192.733 ug/mLm
12) t n-Hexadecane (C16)	24.00	223476831	192.247 ug/mLm
14) t n-Heptadecane (C17)	25.86	225671657	191.915 ug/mLm
15) t Pristane	25.98	215367907	191.861 ug/mLm
16) t n-Octadecane (C18)	27.63	226439101	192.251 ug/mL
17) t Phytane	27.80	224131538	191.910 ug/mL
18) t n-Nonadecane (C19)	29.32	224970843	192.413 ug/mL
20) t n-Eicosane (C20)	30.92	223880202	192.088 ug/mL
21) t n-Heneicosane (C21)	32.45	231304721	192.356 ug/mL
22) t n-Docosane (C22)	33.92	228237623	18.041 ug/mL
23) t n-Tricosane (C23)	35.33	229853494	192.197 ug/mL
25) t n-Tetracosane (C24)	36.69	231618014	191.375 ug/mL
26) t n-Pentacosane (C25)	37.99	230257861	188.520 ug/mL
27) t n-Hexacosane (C26)	39.24	228835118	192.044 ug/mL
28) t n-Heptacosane (C27)	40.45	228244100	192.224 ug/mL
29) t n-Octacosane (C28)	41.62	231104479	191.673 ug/mLm
30) t n-Nonacosane (C29)	42.75	236435398	191.874 ug/mL
31) t n-Triacontane (C30)	43.84	232590130	192.562 ug/mL
32) t n-Hentriacontane (C31)	44.90	225434305	192.958 ug/mL
33) t n-Dotriacontane (C32)	45.92	226936670	192.745 ug/mL
34) t n-Tritriacontane (C33)	46.91	230463854	193.762 ug/mLm
35) t n-tetratriacontane (C34)	47.96	233629218	193.923 ug/mLm
36) t n-Pentatriacontane (C35)	49.14	224668006	193.792 ug/mLm
37) t n-Hexatriacontane (C36)	50.49	230449861	193.411 ug/mLm
38) t n-Heptatriacontane (C37)	52.07f	246520015	192.968 ug/mLm
39) t n-Octatriacontane (C38)	53.89f	233388724	194.475 ug/mLm
41) t n-Tetracontane (C40)	58.57f	230023588	194.013 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15874.D
Operator : AC
Acquired : 05 Oct 2005 11:47 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100505-AFID
Misc Info : WHAB33
Vial Number: 58



Quantitation Report (QT Reviewed)

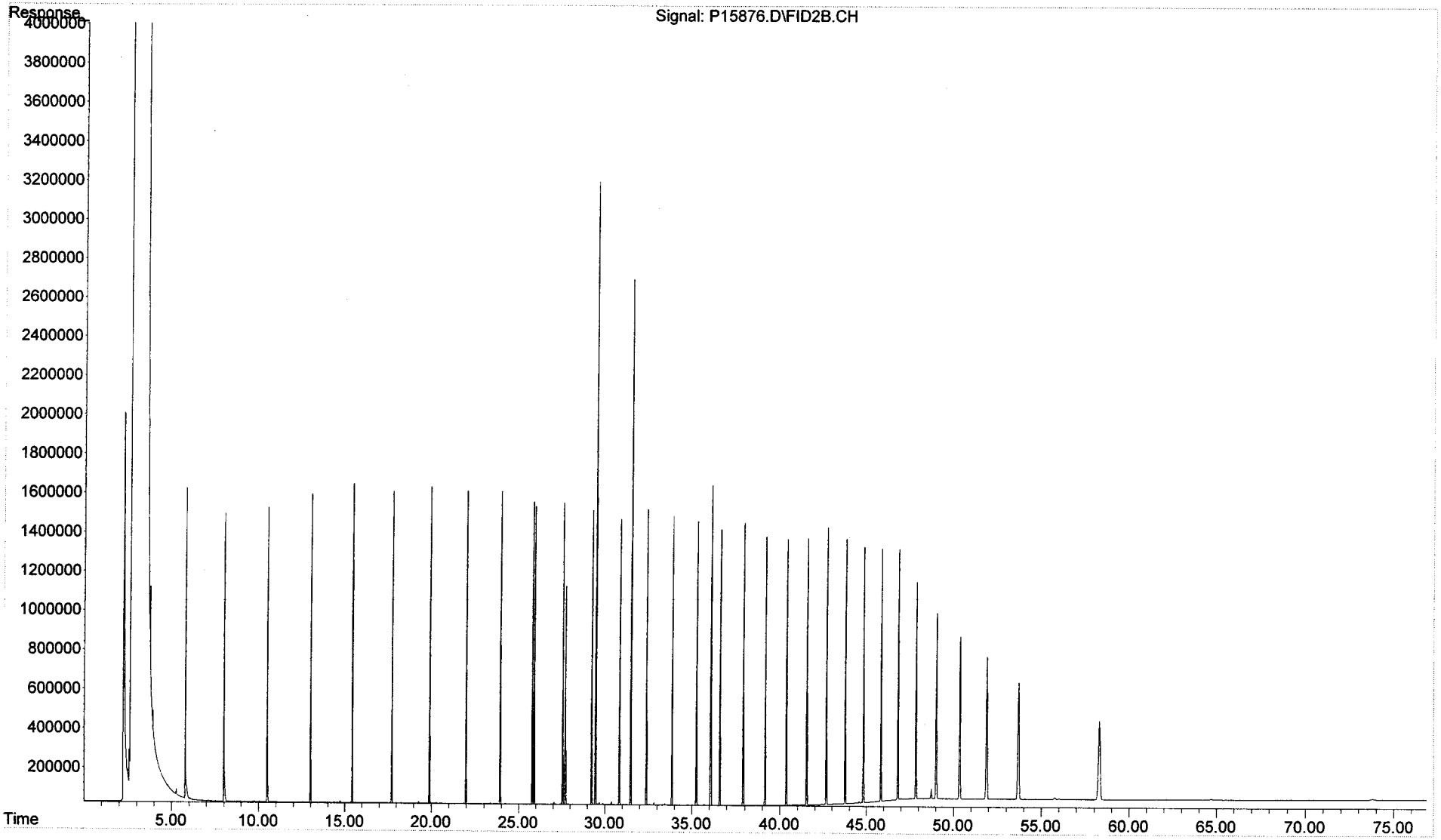
Data Path : C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\
Data File : P15876.D
Signal(s) : FID2B.CH
Acq On : 06 Oct 2005 1:20 am
Operator : AC
Sample : Q1100501-AFID
Misc : WHAB34
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 14 17:48:23 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 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	31.50	59317706	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	69329670	53.923 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	107.85%
24) s	d50-Tetracosane	36.09	51829846	44.978 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	89.96%
	Target Compounds			
2) t	n-Octane (C8)	5.79	23829230	24.916 ug/mL 99.7 %
3) t	n-Nonane (C9)	8.01	25967905	24.624 ug/mLm
4) t	n-Decane (C10)	10.50	26642537	24.643 ug/mLm
5) t	n-Undecane (C11)	13.01	26920944	24.591 ug/mLm
6) t	n-Dodecane (C12)	15.44	27543858	24.692 ug/mLm
7) t	n-Tridecane (C13)	17.74	27946438	24.729 ug/mLm
9) t	n-Tetradecane (C14)	19.92	28440857	24.766 ug/mLm
11) t	n-Pentadecane (C15)	21.99	28749024	24.727 ug/mLm
12) t	n-Hexadecane (C16)	23.94	29010740	24.720 ug/mLm
14) t	n-Heptadecane (C17)	25.80	29343979	24.696 ug/mLm
15) t	Pristane	25.91	28116497	24.769 ug/mLm
16) t	n-Octadecane (C18)	27.57	29501306	24.762 ug/mLm
17) t	Phytane	27.73	29343185	24.845 ug/mLm
18) t	n-Nonadecane (C19)	29.25	29361033	24.803 ug/mLm
20) t	n-Eicosane (C20)	30.85	29253994	24.785 ug/mLm
21) t	n-Heneicosane (C21)	32.39	30178589	24.777 ug/mLm
22) t	n-Docosane (C22)	33.86	29823066	24.795 ug/mLm
23) t	n-Tricosane (C23)	35.26	30040715	24.804 ug/mL
25) t	n-Tetracosane (C24)	36.62	30254682	24.679 ug/mLm
26) t	n-Pentacosane (C25)	37.92	30252551	24.453 ug/mLm 97.8 %
27) t	n-Hexacosane (C26)	39.17	29926696	24.768 ug/mLm
28) t	n-Heptacosane (C27)	40.38	29867556	24.809 ug/mLm
29) t	n-Octacosane (C28)	41.55	30257088	24.734 ug/mLm
30) t	n-Nonacosane (C29)	42.68	30946072	24.753 ug/mLm
31) t	n-Triacontane (C30)	43.77	30442466	24.833 ug/mL
32) t	n-Hentriacontane (C31)	44.82	29519658	24.886 ug/mL
33) t	n-Dotriacontane (C32)	45.84	29714031	24.831 ug/mLm
34) t	n-Tritriacontane (C33)	46.84	30199051	24.971 ug/mLm
35) t	n-tetratriacontane (C34)	47.87	30588393	24.900 ug/mLm
36) t	n-Pentatriacontane (C35)	49.04	29447904	24.921 ug/mLm
37) t	n-Hexatriacontane (C36)	50.37	30202985	24.813 ug/mLm
38) t	n-Heptatriacontane (C37)	51.91	32061859	24.544 ug/mLm
39) t	n-Octatriacontane (C38)	53.71	30583922	24.897 ug/mL
41) t	n-Tetracontane (C40)	58.31	30158389	24.748 ug/mL

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15876.D
Operator : AC
Acquired : 06 Oct 2005 1:20 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: Q1100501-AFID
Misc Info : WHAB34
Vial Number: 59



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15862.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 1:38 pm
Operator : AC
Sample : TO101705AWS01
Misc : !X WHAB40
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 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	31.51	61467439	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.50	77058252	57.838 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 115.68%	
24) s d50-Tetracosane	36.11	65286454	54.674 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 109.35%	
Target Compounds			
2) t n-Octane (C8)	5.77	31610910	31.896 ug/mLm
3) t n-Nonane (C9)	8.00	28798050	26.353 ug/mL — RF 2nd cu 10/18/05
4) t n-Decane (C10)	10.50	28790402	25.698 ug/mLm
5) t n-Undecane (C11)	13.01	27885870	24.582 ug/mLm
6) t n-Dodecane (C12)	15.44	26532784	22.954 ug/mLm
7) t n-Tridecane (C13)	17.75	27674278	23.632 ug/mLm
8) t 1380	19.42	6968228	5.856 ug/mL
9) t n-Tetradecane (C14)	19.93	24867330	20.897 ug/mLm
10) t 1470	21.21	9432308	7.829 ug/mLm
11) t n-Pentadecane (C15)	21.99	26467136	21.969 ug/mLm
12) t n-Hexadecane (C16)	23.95	22947096	18.869 ug/mLm
13) t 1650	24.85	6837175	5.553 ug/mLm
14) t n-Heptadecane (C17)	25.80	19606240	15.924 ug/mLm
15) t Pristane	25.90	15123887	12.857 ug/mLm
16) t n-Octadecane (C18)	27.57	17767739	14.392 ug/mLm
17) t Phytane	27.73	12372781	10.110 ug/mLm
18) t n-Nonadecane (C19)	29.25	18045978	14.711 ug/mLm
20) t n-Eicosane (C20)	30.86	17910248	14.643 ug/mLm
21) t n-Heneicosane (C21)	32.39	17175084	13.608 ug/mLm
22) t n-Docosane (C22)	33.86	15579762	12.500 ug/mL
23) t n-Tricosane (C23)	35.27	14062637	11.205 ug/mLm
25) t n-Tetracosane (C24)	36.62	13687084	10.774 ug/mLm
26) t n-Pentacosane (C25)	37.92	13503614	10.533 ug/mLm
27) t n-Hexacosane (C26)	39.17	11280982	9.010 ug/mLm
28) t n-Heptacosane (C27)	40.38	8995736	7.211 ug/mLm
29) t n-Octacosane (C28)	41.55	6356096	5.014 ug/mLm
30) t n-Nonacosane (C29)	42.67	6732194	5.197 ug/mLm
31) t n-Triacontane (C30)	43.76	4936578	3.886 ug/mLm
32) t n-Hentriacontane (C31)	44.82	4704885	3.828 ug/mLm
33) t n-Dotriacontane (C32)	45.84	3091860	2.493 ug/mLm
34) t n-Tritriacontane (C33)	46.83	2589140	2.066 ug/mLm
35) t n-tetratriacontane (C34)	47.86	2242026	1.761 ug/mLm
36) t n-Pentatriacontane (C35)	49.02	2610459	2.132 ug/mLm
37) t n-Hexatriacontane (C36)	50.36	1615213	1.281 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15862.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 1:38 pm
Operator : AC
Sample : TO101705AWS01
Misc : !X WHAB40
ALS Vial : 52 Sample Multiplier: 1

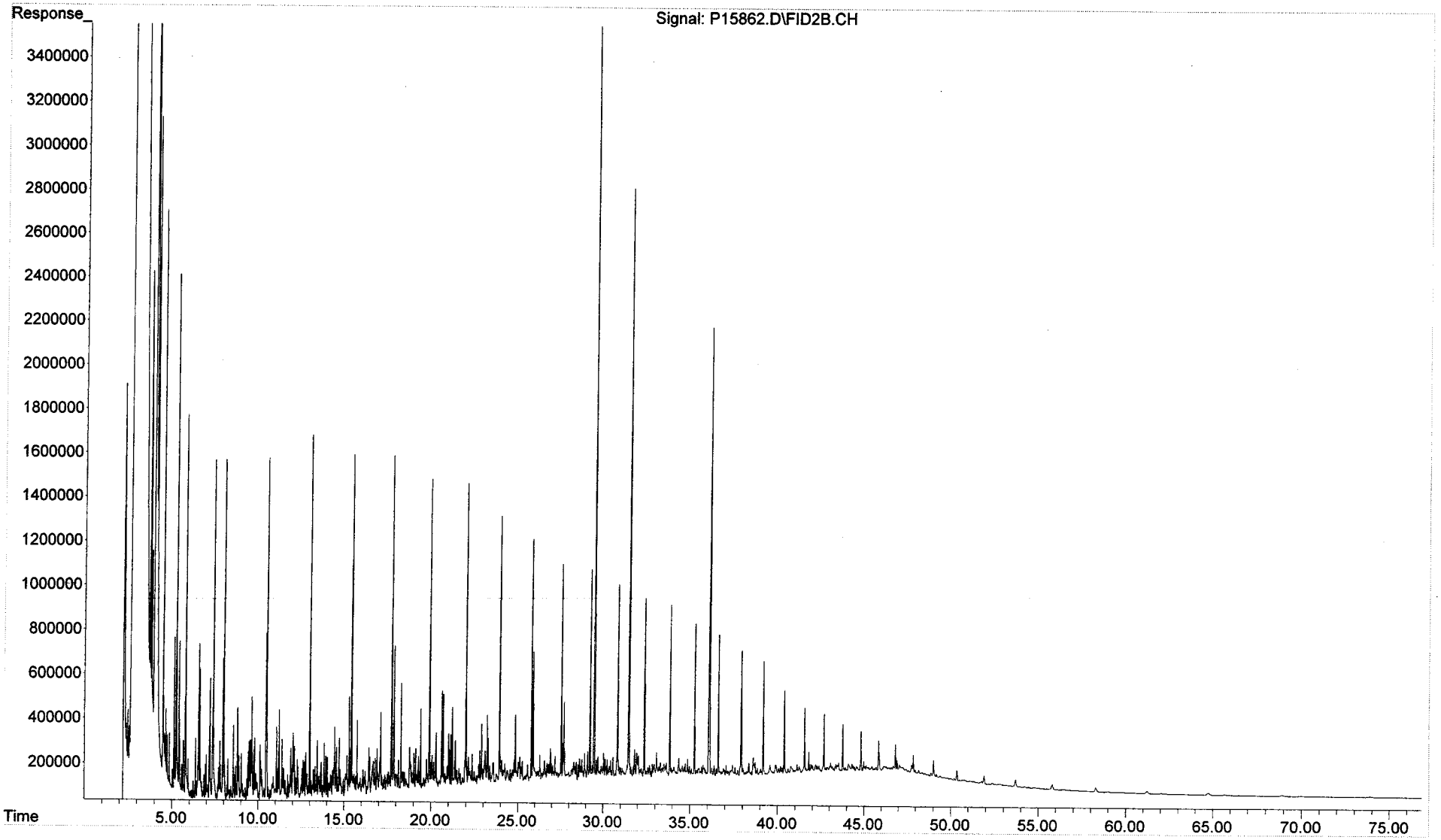
Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.90	1628785	1.203	ug/mLm
39)	t	n-Octatriacontane (C38)	53.70	1695478	1.332	ug/mLm
40)	t	n-Nonatriacontane (C39)	55.80	1205165	0.954	ug/mLm
41)	t	n-Tetracontane (C40)	58.29	1268324	1.004	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.94	5151183122	4184.811	ug/mL
44)	h	Total Resolved Hydrocarbon	37.93	1623832280	1319.198	ug/L

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

File :C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\P15862.D
Operator : AC
Acquired : 05 Oct 2005 1:38 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TO101705AWS01
Misc Info : !X WHAB40
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C2011301**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	50.29	0.6	25
n-Decane (C10)	50.00	50.64	1.3	25
n-Undecane (C11)	50.00	50.78	1.6	25
n-Dodecane (C12)	50.00	50.85	1.7	25
n-Tridecane (C13)	50.00	50.64	1.3	25
n-Tetradecane (C14)	50.00	50.51	1.0	25
n-Pentadecane (C15)	50.00	50.32	0.6	25
n-Hexadecane (C16)	50.00	50.07	0.1	25
n-Heptadecane (C17)	50.00	50.15	0.3	25
Pristane	50.00	50.16	0.3	25
n-Octadecane (C18)	50.00	50.08	0.2	25
Phytane	50.00	50.39	0.8	25
n-Nonadecane (C19)	50.00	49.99	0.0	25
n-Eicosane (C20)	50.00	50.31	0.6	25
n-Heneicosane (C21)	50.00	49.81	0.4	25
n-Docosane (C22)	50.00	48.34	3.3	25
n-Tricosane (C23)	50.00	49.92	0.2	25
n-Tetracosane (C24)	50.00	49.32	1.4	25
n-Pentacosane (C25)	50.00	49.85	0.3	25
n-Hexacosane (C26)	50.00	50.75	1.5	25
n-Heptacosane (C27)	50.00	50.22	0.4	25
n-Octacosane (C28)	50.00	50.30	0.6	25
n-Nonacosane (C29)	50.00	50.20	0.4	25
n-Triacontane (C30)	50.00	50.19	0.4	25
n-Hentriacontane (C31)	50.00	52.41	4.8	25
n-Dotriacontane (C32)	50.00	50.15	0.3	25
n-Tritriacontane (C33)	50.00	50.44	0.9	25
n-Tetratriacontane (C34)	50.00	50.35	0.7	25
n-Pentatriacontane (C35)	50.00	50.37	0.7	25
n-Hexatriacontane (C36)	50.00	50.53	1.1	25
n-Heptatriacontane (C37)	50.00	48.69	2.6	25
n-Octatriacontane (C38)	50.00	50.43	0.9	25
n-Tetracontane (C40)	50.00	50.96	1.9	25
ortho-Terphenyl	50.00	49.71	0.6	25
d50-Tetracosane	50.00	46.56	6.9	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/18/06 21:51

Quantitation Report (QT Reviewed)

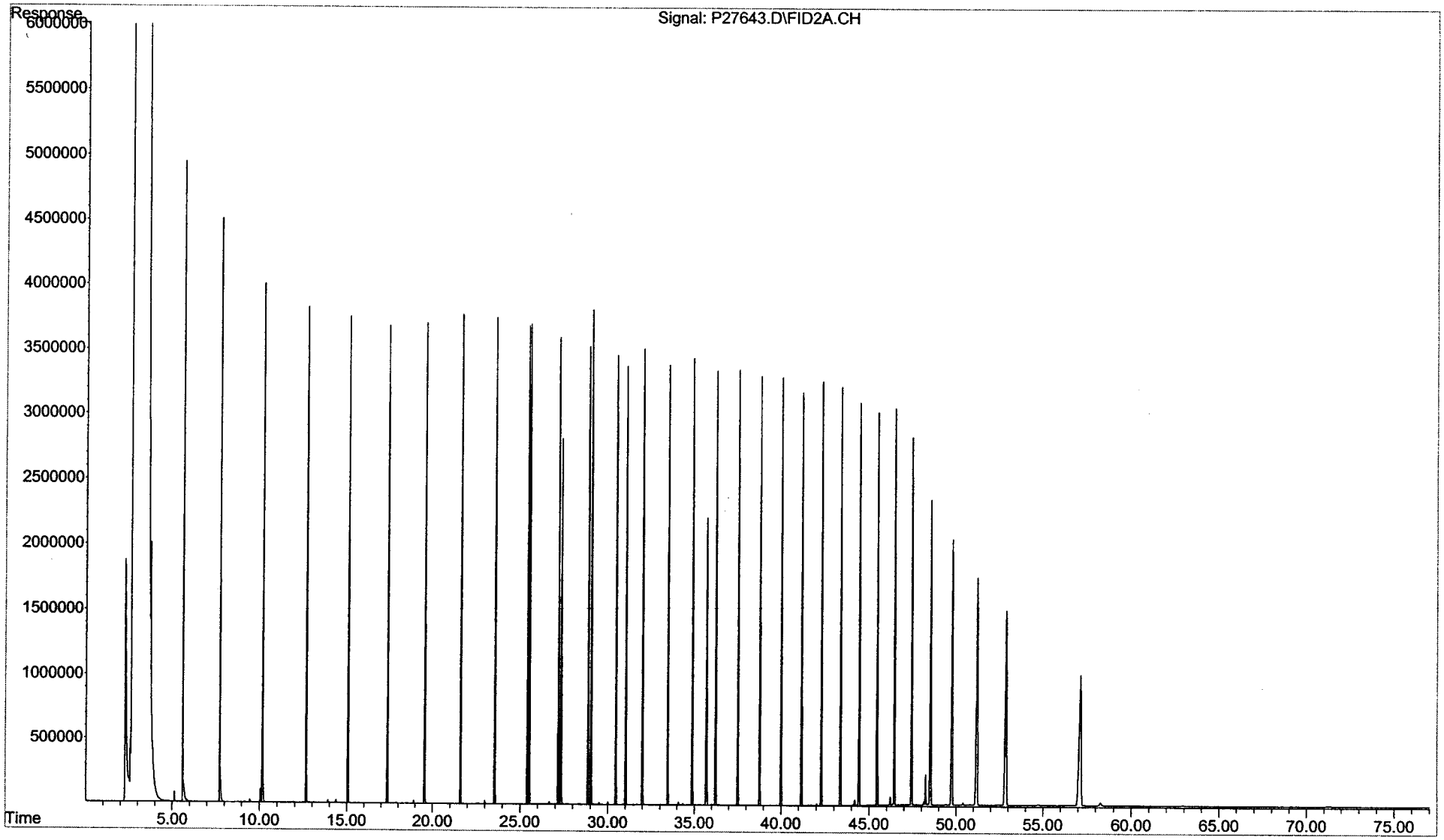
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27643.D
Signal(s) : FID2A.CH
Acq On : 13 Jan 2006 12:46 pm
Operator : AC
Sample : C2011301-AFID
Misc : ALK STD
ALS Vial : 51 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 17 11:17:36 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 16 21:44:22 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	81032114	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	85859605	49.710 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 99.42%	
24) s d50-Tetracosane	35.70	71031292	46.561 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery = 93.12%	
Target Compounds			
2) t n-Octane (C8)	5.60	65621889	49.085 ug/mL
3) t n-Nonane (C9)	7.74	72583975	50.289 ug/mL
4) t n-Decane (C10)	10.17	74688666	50.638 ug/mLm
5) t n-Undecane (C11)	12.66	75130534	50.784 ug/mL
6) t n-Dodecane (C12)	15.08	76719036	50.850 ug/mL
7) t n-Tridecane (C13)	17.38	77153907	50.643 ug/mL
9) t n-Tetradecane (C14)	19.56	78106652	50.513 ug/mL
11) t n-Pentadecane (C15)	21.62	78451347	50.318 ug/mL
12) t n-Hexadecane (C16)	23.57	78715552	50.069 ug/mL
14) t n-Heptadecane (C17)	25.43	79700955	50.146 ug/mL
15) t Pristane	25.54	76197191	50.157 ug/mL
16) t n-Octadecane (C18)	27.19	79897008	50.078 ug/mL
17) t Phytane	27.36	79601258	50.386 ug/mL
18) t n-Nonadecane (C19)	28.88	79453232	49.990 ug/mLm
20) t n-Eicosane (C20)	30.48	79679576	50.311 ug/mL
21) t n-Heneicosane (C21)	32.01	81413650	49.814 ug/mL
22) t n-Docosane (C22)	33.48	77937620	48.337 ug/mL
23) t n-Tricosane (C23)	34.89	80974074	49.924 ug/mL
25) t n-Tetracosane (C24)	36.24	80569742	49.319 ug/mL
26) t n-Pentacosane (C25)	37.54	81026278	49.849 ug/mL
27) t n-Hexacosane (C26)	38.80	81550071	50.747 ug/mL
28) t n-Heptacosane (C27)	40.00	80467633	50.217 ug/mL
29) t n-Octacosane (C28)	41.17	81564726	50.304 ug/mL
30) t n-Nonacosane (C29)	42.30	83219230	50.197 ug/mL
31) t n-Triacontane (C30)	43.39	81807048	50.194 ug/mL
32) t n-Hentriacontane (C31)	44.45	82960748	52.409 ug/mL
33) t n-Dotriacontane (C32)	45.47	79663777	50.147 ug/mL
34) t n-Tritriacontane (C33)	46.46	81394825	50.438 ug/mL
35) t n-tetratriacontane (C34)	47.45	82164048	50.348 ug/mLm
36) t n-Pentatriacontane (C35)	48.54	79000380	50.372 ug/mL
37) t n-Hexatriacontane (C36)	49.78	81113179	50.535 ug/mL
38) t n-Heptatriacontane (C37)	51.22	83130824	48.694 ug/mL
39) t n-Octatriacontane (C38)	52.88	81439224	50.426 ug/mL
41) t n-Tetracontane (C40)	57.14	80508475	50.957 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27643.D
Operator : AC
Acquired : 13 Jan 2006 12:46 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011301-AFID
Misc Info : ALK STD
Vial Number: 51



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: **0512128**
Lab ID: **C2011302**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	50.57	1.1	25
n-Decane (C10)	50.00	50.32	0.6	25
n-Undecane (C11)	50.00	50.37	0.7	25
n-Dodecane (C12)	50.00	50.52	1.0	25
n-Tridecane (C13)	50.00	50.40	0.8	25
n-Tetradecane (C14)	50.00	50.32	0.6	25
n-Pentadecane (C15)	50.00	50.21	0.4	25
n-Hexadecane (C16)	50.00	49.98	0.0	25
n-Heptadecane (C17)	50.00	50.08	0.2	25
Pristane	50.00	50.11	0.2	25
n-Octadecane (C18)	50.00	50.06	0.1	25
Phytane	50.00	50.38	0.8	25
n-Nonadecane (C19)	50.00	50.00	0.0	25
n-Eicosane (C20)	50.00	50.32	0.6	25
n-Heneicosane (C21)	50.00	49.83	0.3	25
n-Docosane (C22)	50.00	48.37	3.3	25
n-Tricosane (C23)	50.00	49.96	0.1	25
n-Tetracosane (C24)	50.00	49.38	1.2	25
n-Pentacosane (C25)	50.00	49.93	0.1	25
n-Hexacosane (C26)	50.00	50.84	1.7	25
n-Heptacosane (C27)	50.00	50.35	0.7	25
n-Octacosane (C28)	50.00	50.42	0.8	25
n-Nonacosane (C29)	50.00	50.32	0.6	25
n-Triacontane (C30)	50.00	50.33	0.7	25
n-Hentriacontane (C31)	50.00	52.56	5.1	25
n-Dotriacontane (C32)	50.00	50.27	0.5	25
n-Tritriacontane (C33)	50.00	50.57	1.1	25
n-Tetratriacontane (C34)	50.00	50.49	1.0	25
n-Pentatriacontane (C35)	50.00	50.59	1.2	25
n-Hexatriacontane (C36)	50.00	50.73	1.5	25
n-Heptatriacontane (C37)	50.00	49.04	1.9	25
n-Octatriacontane (C38)	50.00	50.75	1.5	25
n-Tetracontane (C40)	50.00	51.94	3.9	25
ortho-Terphenyl	50.00	49.65	0.7	25
d50-Tetracosane	50.00	46.59	6.8	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/18/06 21:51

Quantitation Report (QT Reviewed)

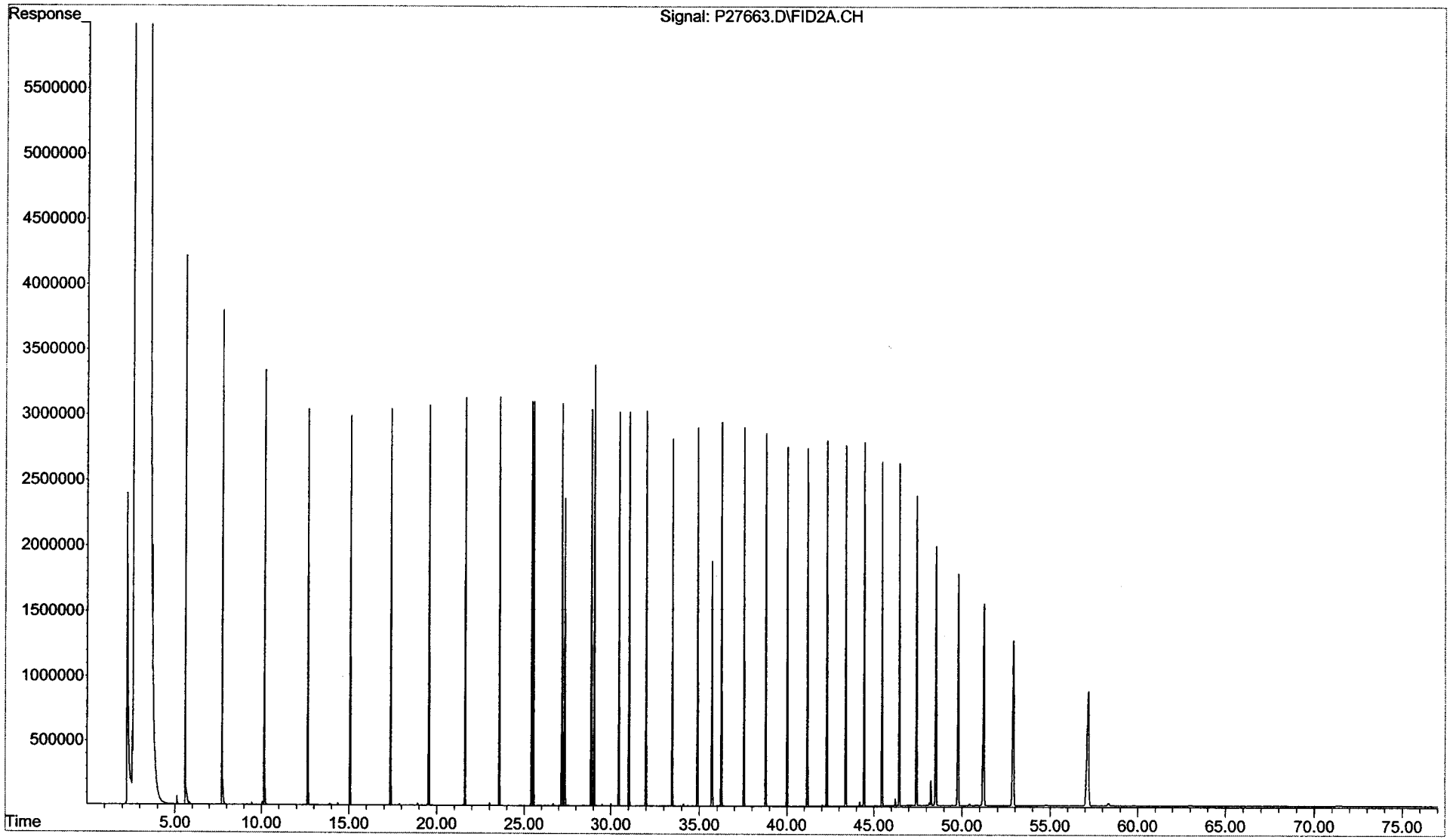
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27663.D
Signal(s) : FID2A.CH
Acq On : 14 Jan 2006 8:20 pm
Operator : NLJr
Sample : C2011302-AFID
Misc : ALK STD
ALS Vial : 50 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 17 11:30:24 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 16 21:44:22 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	66579279	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.06	70464811	49.653 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	99.31%
24) s	d50-Tetracosane	35.71	58393504	46.586 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	93.17%
Target Compounds				
2) t	n-Octane (C8)	5.59	56170969	51.137 ug/mL
3) t	n-Nonane (C9)	7.73	59973294	50.571 ug/mL
4) t	n-Decane (C10)	10.17	60979756	50.319 ug/mLm
5) t	n-Undecane (C11)	12.66	61226992	50.370 ug/mL
6) t	n-Dodecane (C12)	15.08	62623122	50.517 ug/mL
7) t	n-Tridecane (C13)	17.38	63086187	50.398 ug/mL
9) t	n-Tetradecane (C14)	19.56	63934989	50.323 ug/mL
11) t	n-Pentadecane (C15)	21.62	64317492	50.207 ug/mL
12) t	n-Hexadecane (C16)	23.58	64566913	49.984 ug/mL
14) t	n-Heptadecane (C17)	25.43	65405211	50.085 ug/mL
15) t	Pristane	25.54	62550299	50.112 ug/mL
16) t	n-Octadecane (C18)	27.20	65619730	50.057 ug/mL
17) t	Phytane	27.36	65394832	50.379 ug/mL
18) t	n-Nonadecane (C19)	28.88	65292787	49.998 ug/mLm
20) t	n-Eicosane (C20)	30.48	65479624	50.320 ug/mL
21) t	n-Heneicosane (C21)	32.01	66921199	49.835 ug/mL
22) t	n-Docosane (C22)	33.48	64080882	48.370 ug/mL
23) t	n-Tricosane (C23)	34.89	66586398	49.965 ug/mL
25) t	n-Tetracosane (C24)	36.25	66283915	49.382 ug/mL
26) t	n-Pentacosane (C25)	37.55	66683159	49.930 ug/mL
27) t	n-Hexacosane (C26)	38.80	67124981	50.838 ug/mL
28) t	n-Heptacosane (C27)	40.01	66297329	50.355 ug/mL
29) t	n-Octacosane (C28)	41.18	67173103	50.421 ug/mL
30) t	n-Nonacosane (C29)	42.31	68550111	50.325 ug/mL
31) t	n-Triacontane (C30)	43.40	67395839	50.329 ug/mL
32) t	n-Hentriacontane (C31)	44.46	68356620	52.558 ug/mL
33) t	n-Dotriacontane (C32)	45.48	65611979	50.267 ug/mL
34) t	n-Tritriacontane (C33)	46.47	67057364	50.573 ug/mL
35) t	n-tetratriacontane (C34)	47.46	67702536	50.492 ug/mLm
36) t	n-Pentatriacontane (C35)	48.55	65192373	50.591 ug/mL
37) t	n-Hexatriacontane (C36)	49.80	66905146	50.731 ug/mLm
38) t	n-Heptatriacontane (C37)	51.24	68791919	49.042 ug/mL
39) t	n-Octatriacontane (C38)	52.91	67346571	50.752 ug/mL
41) t	n-Tetracontane (C40)	57.18	67424090	51.939 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27663.D
Operator : NLJr
Acquired : 14 Jan 2006 8:20 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011302-AFID
Misc Info : ALK STD
Vial Number: 50



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C2011303**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.49	1.0	25
n-Decane (C10)	50.00	50.32	0.6	25
n-Undecane (C11)	50.00	50.64	1.3	25
n-Dodecane (C12)	50.00	48.40	3.2	25
n-Tridecane (C13)	50.00	50.56	1.1	25
n-Tetradecane (C14)	50.00	50.43	0.9	25
n-Pentadecane (C15)	50.00	50.26	0.5	25
n-Hexadecane (C16)	50.00	50.03	0.1	25
n-Heptadecane (C17)	50.00	50.10	0.2	25
Pristane	50.00	50.12	0.2	25
n-Octadecane (C18)	50.00	50.04	0.1	25
Phytane	50.00	50.35	0.7	25
n-Nonadecane (C19)	50.00	49.96	0.1	25
n-Eicosane (C20)	50.00	50.27	0.5	25
n-Heneicosane (C21)	50.00	49.79	0.4	25
n-Docosane (C22)	50.00	48.28	3.4	25
n-Tricosane (C23)	50.00	49.88	0.2	25
n-Tetracosane (C24)	50.00	49.29	1.4	25
n-Pentacosane (C25)	50.00	49.82	0.4	25
n-Hexacosane (C26)	50.00	50.71	1.4	25
n-Heptacosane (C27)	50.00	50.18	0.4	25
n-Octacosane (C28)	50.00	50.28	0.6	25
n-Nonacosane (C29)	50.00	50.17	0.3	25
n-Triacontane (C30)	50.00	50.16	0.3	25
n-Hentriacontane (C31)	50.00	52.36	4.7	25
n-Dotriacontane (C32)	50.00	50.11	0.2	25
n-Tritriacontane (C33)	50.00	50.41	0.8	25
n-Tetratriacontane (C34)	50.00	50.39	0.8	25
n-Pentatriacontane (C35)	50.00	50.40	0.8	25
n-Hexatriacontane (C36)	50.00	50.53	1.1	25
n-Heptatriacontane (C37)	50.00	48.84	2.3	25
n-Octatriacontane (C38)	50.00	50.53	1.1	25
n-Tetracontane (C40)	50.00	51.67	3.3	25
ortho-Terphenyl	50.00	49.69	0.6	25
d50-Tetracosane	50.00	46.54	6.9	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/18/06 21:51

Quantitation Report (QT Reviewed)

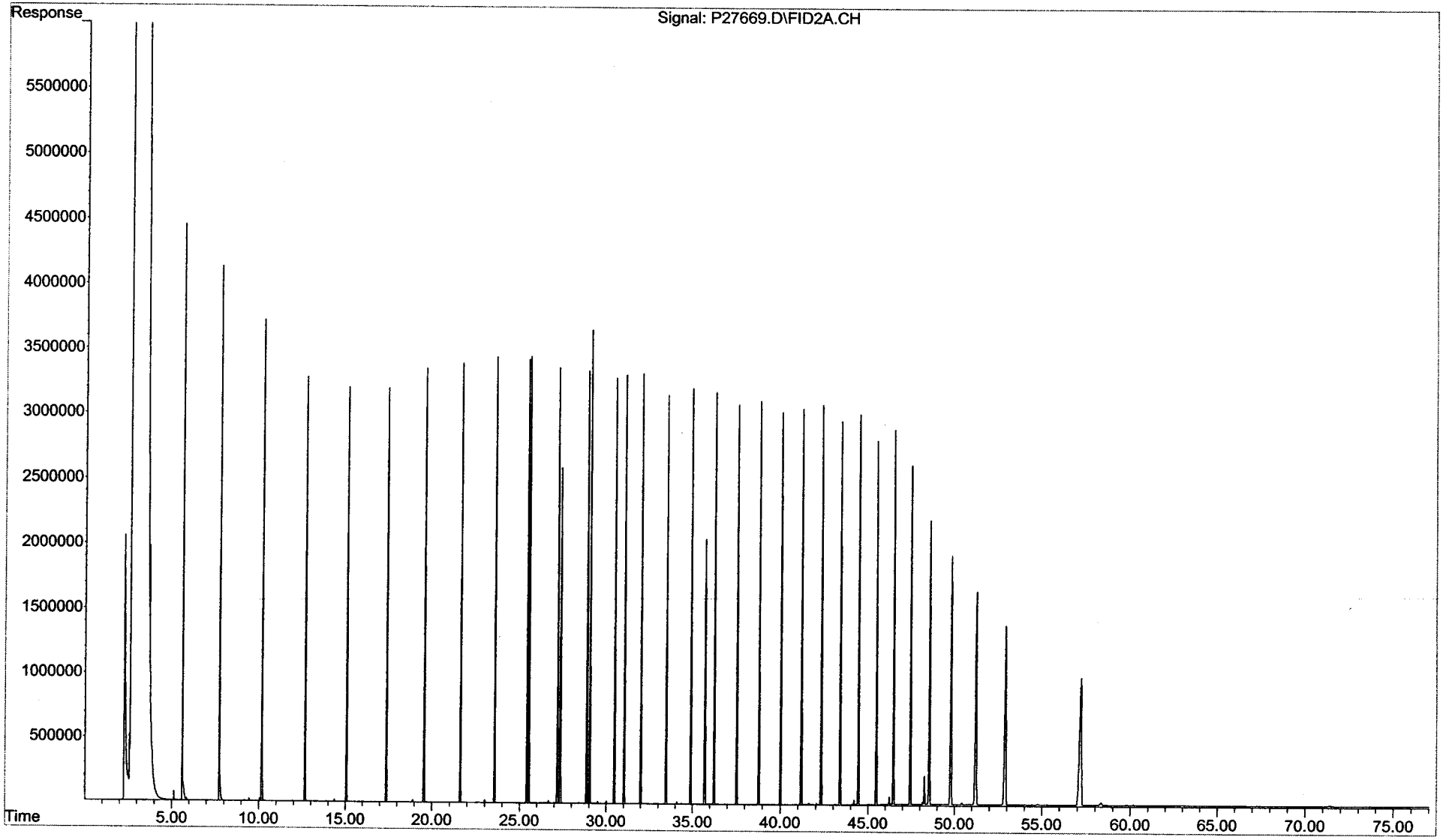
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27669.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 2:20 am
Operator : NLJr
Sample : C2011303-AFID
Misc : 1X
ALS Vial : 62 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 17 11:35:15 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 16 21:44:22 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	74489563	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.06	78894360	49.689 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	99.38%
24) s	d50-Tetracosane	35.71	65266265	46.540 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	93.08%
Target Compounds				
2) t	n-Octane (C8)	5.59	59235143	48.200 ug/mL
3) t	n-Nonane (C9)	7.73	65669193	49.494 ug/mL
4) t	n-Decane (C10)	10.17	68227449	50.321 ug/mLm
5) t	n-Undecane (C11)	12.66	68866279	50.638 ug/mL
6) t	n-Dodecane (C12)	15.08	67132855	48.404 ug/mL
7) t	n-Tridecane (C13)	17.38	70806515	50.559 ug/mL
9) t	n-Tetradecane (C14)	19.56	71687012	50.433 ug/mL
11) t	n-Pentadecane (C15)	21.62	72036080	50.261 ug/mL
12) t	n-Hexadecane (C16)	23.58	72297872	50.026 ug/mL
14) t	n-Heptadecane (C17)	25.43	73199951	50.101 ug/mL
15) t	Pristane	25.54	69988847	50.117 ug/mL
16) t	n-Octadecane (C18)	27.20	73386546	50.037 ug/mL
17) t	Phytane	27.36	73120511	50.349 ug/mL
18) t	n-Nonadecane (C19)	28.88	72992161	49.958 ug/mLm
20) t	n-Eicosane (C20)	30.48	73190811	50.273 ug/mL
21) t	n-Heneicosane (C21)	32.02	74803306	49.789 ug/mL
22) t	n-Docosane (C22)	33.49	71567328	48.285 ug/mL
23) t	n-Tricosane (C23)	34.90	74372158	49.881 ug/mL
25) t	n-Tetracosane (C24)	36.25	74015178	49.286 ug/mL
26) t	n-Pentacosane (C25)	37.55	74434917	49.816 ug/mLm
27) t	n-Hexacosane (C26)	38.81	74915043	50.713 ug/mL
28) t	n-Heptacosane (C27)	40.02	73918994	50.182 ug/mL
29) t	n-Octacosane (C28)	41.18	74940670	50.278 ug/mL
30) t	n-Nonacosane (C29)	42.31	76454845	50.168 ug/mL
31) t	n-Triacontane (C30)	43.40	75152083	50.161 ug/mL
32) t	n-Hentriacontane (C31)	44.46	76190700	52.360 ug/mL
33) t	n-Dotriacontane (C32)	45.48	73172617	50.107 ug/mL
34) t	n-Tritriacontane (C33)	46.48	74778720	50.408 ug/mL
35) t	n-tetratriacontane (C34)	47.46	75587319	50.386 ug/mL
36) t	n-Pentatriacontane (C35)	48.56	72664209	50.401 ug/mL
37) t	n-Hexatriacontane (C36)	49.81	74560089	50.532 ug/mLm
38) t	n-Heptatriacontane (C37)	51.24	76648103	48.840 ug/mL
39) t	n-Octatriacontane (C38)	52.91	75020213	50.531 ug/mL
41) t	n-Tetracontane (C40)	57.19	75047772	51.673 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27669.D
Operator : NLJr
Acquired : 15 Jan 2006 2:20 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011303-AFID
Misc Info : 1X
Vial Number: 62



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: **0512128**
Lab ID: **C2011304**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	51.19	2.4	25
n-Decane (C10)	50.00	52.66	5.3	25
n-Undecane (C11)	50.00	51.90	3.8	25
n-Dodecane (C12)	50.00	51.19	2.4	25
n-Tridecane (C13)	50.00	50.71	1.4	25
n-Tetradecane (C14)	50.00	50.51	1.0	25
n-Pentadecane (C15)	50.00	50.31	0.6	25
n-Hexadecane (C16)	50.00	50.04	0.1	25
n-Heptadecane (C17)	50.00	50.11	0.2	25
Pristane	50.00	50.09	0.2	25
n-Octadecane (C18)	50.00	50.04	0.1	25
Phytane	50.00	50.33	0.7	25
n-Nonadecane (C19)	50.00	49.97	0.1	25
n-Eicosane (C20)	50.00	50.24	0.5	25
n-Heneicosane (C21)	50.00	49.78	0.4	25
n-Docosane (C22)	50.00	51.02	2.0	25
n-Tricosane (C23)	50.00	49.80	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	50.60	1.2	25
n-Heptacosane (C27)	50.00	50.06	0.1	25
n-Octacosane (C28)	50.00	50.16	0.3	25
n-Nonacosane (C29)	50.00	50.06	0.1	25
n-Triacontane (C30)	50.00	50.09	0.2	25
n-Hentriacontane (C31)	50.00	52.27	4.5	25
n-Dotriacontane (C32)	50.00	50.05	0.1	25
n-Tritriacontane (C33)	50.00	50.33	0.7	25
n-Tetratriacontane (C34)	50.00	50.26	0.5	25
n-Pentatriacontane (C35)	50.00	50.40	0.8	25
n-Hexatriacontane (C36)	50.00	50.47	0.9	25
n-Heptatriacontane (C37)	50.00	48.81	2.4	25
n-Octatriacontane (C38)	50.00	50.55	1.1	25
n-Tetracontane (C40)	50.00	51.86	3.7	25
ortho-Terphenyl	50.00	49.76	0.5	25
d50-Tetracosane	50.00	46.39	7.2	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/18/06 21:52

Quantitation Report (QT Reviewed)

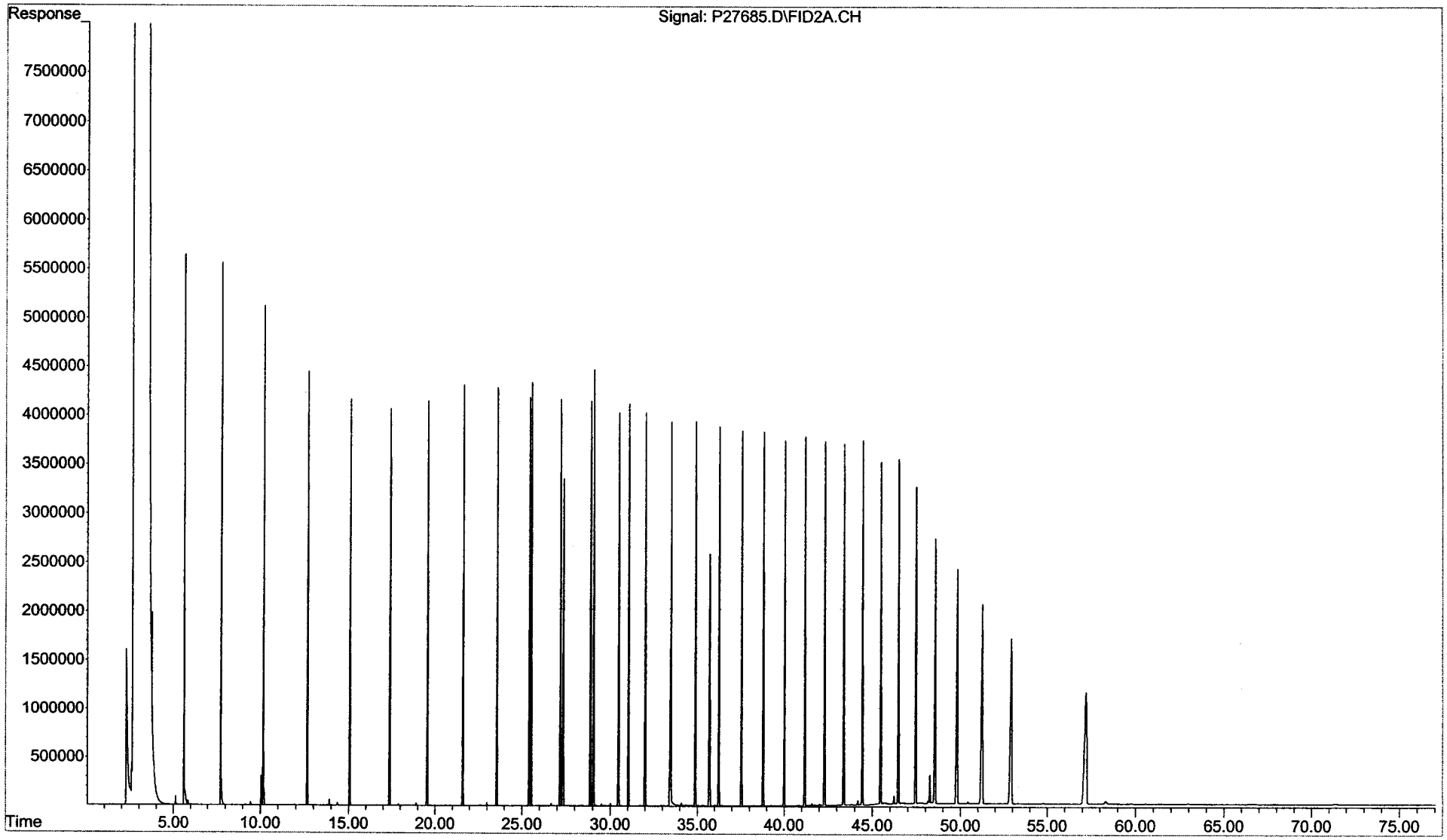
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\
Data File : P27685.D
Signal(s) : FID2A.CH
Acq On : 15 Jan 2006 3:22 pm
Operator : NLJr
Sample : C2011304-AFID
Misc : ALK STD
ALS Vial : 70 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 17 11:39:30 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 16 21:44:22 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	99991917	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.06	106051948	49.758 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	99.52%
24) s	d50-Tetracosane	35.71	87325532	46.388 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	92.78%
	Target Compounds			
2) t	n-Octane (C8)	5.61	75930870	46.027 ug/mL
3) t	n-Nonane (C9)	7.74	91176053	51.192 ug/mL
4) t	n-Decane (C10)	10.18	95844125	52.660 ug/mLm
5) t	n-Undecane (C11)	12.66	94741155	51.897 ug/mL
6) t	n-Dodecane (C12)	15.08	95309885	51.194 ug/mL
7) t	n-Tridecane (C13)	17.38	95324280	50.706 ug/mL
9) t	n-Tetradecane (C14)	19.56	96375358	50.509 ug/mL
11) t	n-Pentadecane (C15)	21.63	96784326	50.306 ug/mLm
12) t	n-Hexadecane (C16)	23.58	97080068	50.041 ug/mL
14) t	n-Heptadecane (C17)	25.44	98271503	50.107 ug/mL
15) t	Pristane	25.55	93906419	50.094 ug/mL
16) t	n-Octadecane (C18)	27.20	98507950	50.035 ug/mL
17) t	Phytane	27.37	98112091	50.328 ug/mL
18) t	n-Nonadecane (C19)	28.89	97996080	49.965 ug/mLm
20) t	n-Eicosane (C20)	30.49	98190722	50.244 ug/mL
21) t	n-Heneicosane (C21)	32.02	100400281	49.783 ug/mL
22) t	n-Docosane (C22)	33.49	101519540	51.024 ug/mLm
23) t	n-Tricosane (C23)	34.90	99675585	49.801 ug/mL
25) t	n-Tetracosane (C24)	36.26	99217470	49.218 ug/mL
26) t	n-Pentacosane (C25)	37.56	99728147	49.721 ug/mL
27) t	n-Hexacosane (C26)	38.81	100342414	50.601 ug/mL
28) t	n-Heptacosane (C27)	40.02	98994302	50.064 ug/mL
29) t	n-Octacosane (C28)	41.19	100364911	50.162 ug/mL
30) t	n-Nonacosane (C29)	42.32	102418328	50.064 ug/mL
31) t	n-Triacontane (C30)	43.41	100739173	50.091 ug/mLm
32) t	n-Hentriacontane (C31)	44.47	102090782	52.266 ug/mL
33) t	n-Dotriacontane (C32)	45.49	98107183	50.047 ug/mLm
34) t	n-Tritriacontane (C33)	46.48	100226437	50.331 ug/mL
35) t	n-tetratriacontane (C34)	47.47	101206924	50.258 ug/mLm
36) t	n-Pentatriacontane (C35)	48.56	97546327	50.404 ug/mLm
37) t	n-Hexatriacontane (C36)	49.82	99955822	50.466 ug/mLm
38) t	n-Heptatriacontane (C37)	51.26	102830117	48.812 ug/mL
39) t	n-Octatriacontane (C38)	52.93	100739476	50.549 ug/mL
41) t	n-Tetracontane (C40)	57.21	101115358	51.865 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN13.SEC\P27685.D
Operator : NLJr
Acquired : 15 Jan 2006 3:22 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011304-AFID
Misc Info : ALK STD
Vial Number: 70



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: **0512128**
Lab ID: **C2011801**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.99	0.0	25
n-Decane (C10)	50.00	50.39	0.8	25
n-Undecane (C11)	50.00	50.42	0.8	25
n-Dodecane (C12)	50.00	50.59	1.2	25
n-Tridecane (C13)	50.00	50.41	0.8	25
n-Tetradecane (C14)	50.00	50.31	0.6	25
n-Pentadecane (C15)	50.00	50.12	0.2	25
n-Hexadecane (C16)	50.00	49.91	0.2	25
n-Heptadecane (C17)	50.00	49.99	0.0	25
Pristane	50.00	50.01	0.0	25
n-Octadecane (C18)	50.00	49.94	0.1	25
Phytane	50.00	50.25	0.5	25
n-Nonadecane (C19)	50.00	49.85	0.3	25
n-Eicosane (C20)	50.00	50.17	0.3	25
n-Heneicosane (C21)	50.00	49.69	0.6	25
n-Docosane (C22)	50.00	48.28	3.4	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	49.70	0.6	25
n-Hexacosane (C26)	50.00	50.59	1.2	25
n-Heptacosane (C27)	50.00	50.09	0.2	25
n-Octacosane (C28)	50.00	50.18	0.4	25
n-Nonacosane (C29)	50.00	50.07	0.1	25
n-Triacontane (C30)	50.00	50.05	0.1	25
n-Hentriacontane (C31)	50.00	52.24	4.5	25
n-Dotriacontane (C32)	50.00	49.99	0.0	25
n-Tritriacontane (C33)	50.00	50.28	0.6	25
n-Tetratriacontane (C34)	50.00	50.23	0.5	25
n-Pentatriacontane (C35)	50.00	50.27	0.5	25
n-Hexatriacontane (C36)	50.00	50.42	0.8	25
n-Heptatriacontane (C37)	50.00	48.72	2.6	25
n-Octatriacontane (C38)	50.00	50.44	0.9	25
n-Tetracontane (C40)	50.00	51.46	2.9	25
ortho-Terphenyl	50.00	49.70	0.6	25
d50-Tetracosane	50.00	46.43	7.1	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/19/06 20:15

Quantitation Report (QT Reviewed)

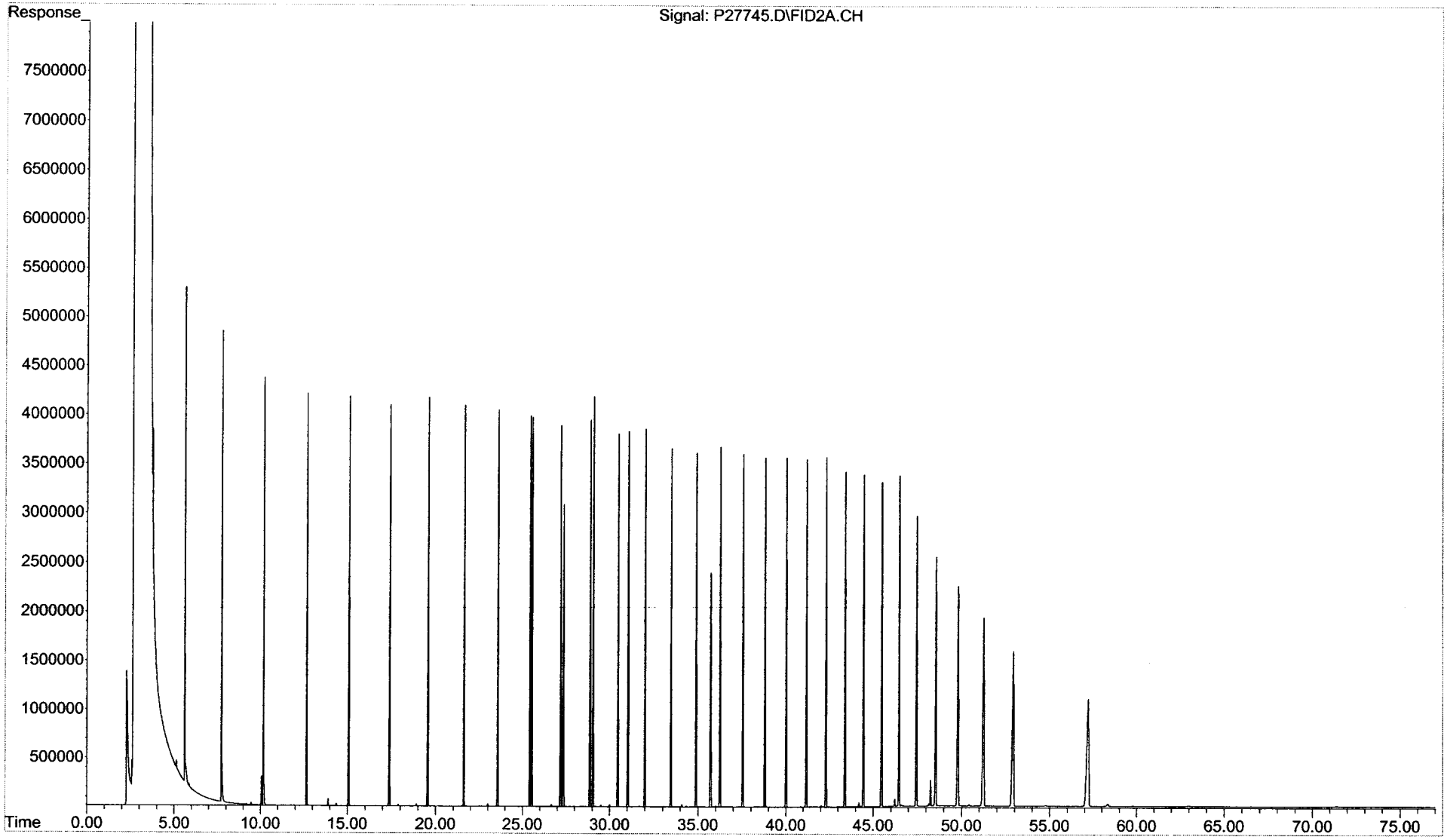
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27745.D
Signal(s) : FID2A.CH
Acq On : 18 Jan 2006 5:40 pm
Operator : AC
Sample : C2011801-AFID
Misc : ALK STD
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 19 09:51:44 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	90571557	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	95943032	49.697 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	99.39%
24) s d50-Tetracosane	35.71	79171320	46.431 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	92.86%
Target Compounds			
2) t n-Octane (C8)	5.60	70615279	47.257 ug/mLm
3) t n-Nonane (C9)	7.74	80643863	49.988 ug/mLm
4) t n-Decane (C10)	10.18	83065062	50.386 ug/mLm
5) t n-Undecane (C11)	12.66	83371651	50.419 ug/mLm
6) t n-Dodecane (C12)	15.08	85306238	50.586 ug/mLm
7) t n-Tridecane (C13)	17.38	85839433	50.410 ug/mLm
9) t n-Tetradecane (C14)	19.56	86943272	50.305 ug/mLm
11) t n-Pentadecane (C15)	21.62	87350850	50.125 ug/mLm
12) t n-Hexadecane (C16)	23.58	87705692	49.911 ug/mL
14) t n-Heptadecane (C17)	25.43	88804227	49.989 ug/mLm
15) t Pristane	25.54	84918806	50.011 ug/mL
16) t n-Octadecane (C18)	27.19	89055891	49.939 ug/mLm
17) t Phytane	27.36	88728114	50.248 ug/mL
18) t n-Nonadecane (C19)	28.88	88557281	49.849 ug/mLm
20) t n-Eicosane (C20)	30.48	88809552	50.170 ug/mLm
21) t n-Heneicosane (C21)	32.02	90765075	49.686 ug/mLm
22) t n-Docosane (C22)	33.48	87015437	48.283 ug/mLm
23) t n-Tricosane (C23)	34.90	90295449	49.807 ug/mLm
25) t n-Tetracosane (C24)	36.25	89882264	49.225 ug/mLm
26) t n-Pentacosane (C25)	37.55	90301298	49.703 ug/mLm
27) t n-Hexacosane (C26)	38.81	90872912	50.592 ug/mLm
28) t n-Heptacosane (C27)	40.02	89713717	50.090 ug/mLm
29) t n-Octacosane (C28)	41.18	90941782	50.180 ug/mLm
30) t n-Nonacosane (C29)	42.31	92786757	50.073 ug/mLm
31) t n-Triacontane (C30)	43.40	91166906	50.046 ug/mLm
32) t n-Hentriacontane (C31)	44.46	92422333	52.237 ug/mLm
33) t n-Dotriacontane (C32)	45.48	88768436	49.993 ug/mLm
34) t n-Tritriacontane (C33)	46.48	90690449	50.279 ug/mLm
35) t n-tetratriacontane (C34)	47.47	91613177	50.225 ug/mLm
36) t n-Pentatriacontane (C35)	48.56	88129473	50.274 ug/mLm
37) t n-Hexatriacontane (C36)	49.81	90454369	50.419 ug/mLm
38) t n-Heptatriacontane (C37)	51.25	92962467	48.717 ug/mLm
39) t n-Octatriacontane (C38)	52.93	91045670	50.436 ug/mLm
41) t n-Tetracontane (C40)	57.20	90882116	51.465 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27745.D
Operator : AC
Acquired : 18 Jan 2006 5:40 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011801-AFID
Misc Info : ALK STD
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C2011802**
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	51.37	2.7	25
n-Undecane (C11)	50.00	50.88	1.8	25
n-Dodecane (C12)	50.00	50.76	1.5	25
n-Tridecane (C13)	50.00	50.44	0.9	25
n-Tetradecane (C14)	50.00	50.33	0.7	25
n-Pentadecane (C15)	50.00	50.13	0.3	25
n-Hexadecane (C16)	50.00	49.89	0.2	25
n-Heptadecane (C17)	50.00	49.97	0.1	25
Pristane	50.00	50.00	0.0	25
n-Octadecane (C18)	50.00	49.93	0.1	25
Phytane	50.00	50.22	0.4	25
n-Nonadecane (C19)	50.00	49.84	0.3	25
n-Eicosane (C20)	50.00	50.17	0.3	25
n-Heneicosane (C21)	50.00	49.72	0.6	25
n-Docosane (C22)	50.00	48.29	3.4	25
n-Tricosane (C23)	50.00	49.81	0.4	25
n-Tetracosane (C24)	50.00	49.24	1.5	25
n-Pentacosane (C25)	50.00	49.72	0.6	25
n-Hexacosane (C26)	50.00	50.61	1.2	25
n-Heptacosane (C27)	50.00	50.08	0.2	25
n-Octacosane (C28)	50.00	50.16	0.3	25
n-Nonacosane (C29)	50.00	50.06	0.1	25
n-Triacontane (C30)	50.00	50.05	0.1	25
n-Hentriacontane (C31)	50.00	52.24	4.5	25
n-Dotriacontane (C32)	50.00	49.98	0.0	25
n-Tritriacontane (C33)	50.00	50.28	0.6	25
n-Tetratriacontane (C34)	50.00	50.22	0.4	25
n-Pentatriacontane (C35)	50.00	50.29	0.6	25
n-Hexatriacontane (C36)	50.00	50.46	0.9	25
n-Heptatriacontane (C37)	50.00	48.72	2.6	25
n-Octatriacontane (C38)	50.00	50.43	0.9	25
n-Tetracontane (C40)	50.00	51.52	3.0	25
ortho-Terphenyl	50.00	49.68	0.6	25
d50-Tetracosane	50.00	46.42	7.2	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/19/06 20:15

Quantitation Report (QT Reviewed)

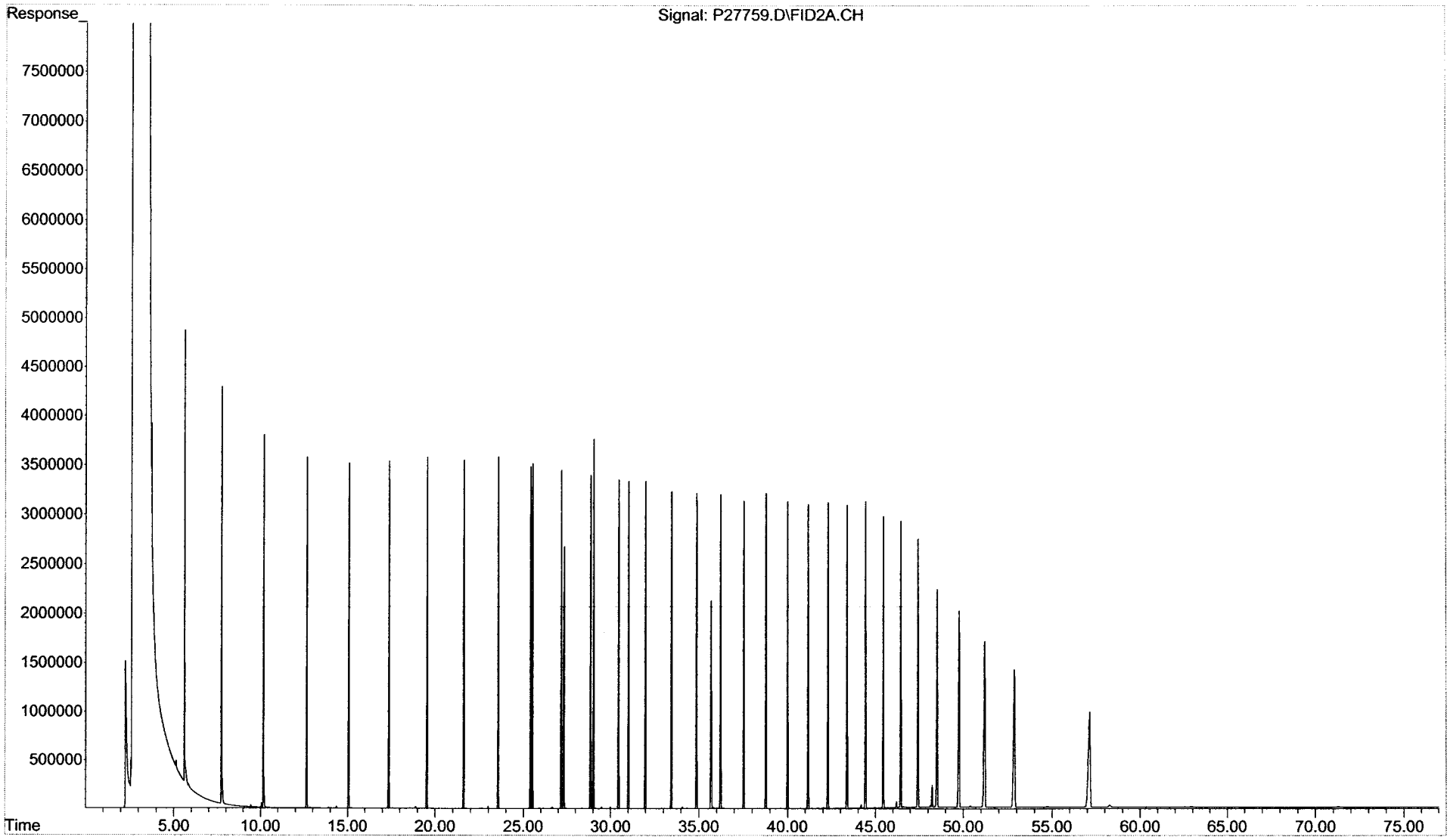
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\
Data File : P27759.D
Signal(s) : FID2A.CH
Acq On : 19 Jan 2006 4:59 am
Operator : AC
Sample : C2011802-AFID
Misc : ALK STD
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 19 10:02:52 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	31.03	77087039	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	81622436	49.675 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	99.35%
24) s d50-Tetracosane	35.69	67371482	46.422 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	92.84%
Target Compounds			
2) t n-Octane (C8)	5.60	65291692	51.338 ug/mLm
3) t n-Nonane (C9)	7.73	70965251	51.683 ug/mLm
4) t n-Decane (C10)	10.17	72085267	51.375 ug/mLm
5) t n-Undecane (C11)	12.65	71607930	50.880 ug/mLm
6) t n-Dodecane (C12)	15.07	72860553	50.764 ug/mLm
7) t n-Tridecane (C13)	17.37	73105772	50.442 ug/mLm
9) t n-Tetradecane (C14)	19.55	74028415	50.325 ug/mLm
11) t n-Pentadecane (C15)	21.61	74352307	50.129 ug/mLm
12) t n-Hexadecane (C16)	23.56	74621042	49.893 ug/mL
14) t n-Heptadecane (C17)	25.42	75559383	49.974 ug/mLm
15) t Pristane	25.53	72260681	50.000 ug/mL
16) t n-Octadecane (C18)	27.18	75782597	49.930 ug/mLm
17) t Phytane	27.34	75483408	50.225 ug/mLm
18) t n-Nonadecane (C19)	28.86	75359615	49.841 ug/mLm
20) t n-Eicosane (C20)	30.46	75583112	50.167 ug/mLm
21) t n-Heneicosane (C21)	32.00	77302633	49.719 ug/mLm
22) t n-Docosane (C22)	33.47	74069451	48.289 ug/mLm
23) t n-Tricosane (C23)	34.88	76858765	49.811 ug/mLm
25) t n-Tetracosane (C24)	36.23	76528931	49.243 ug/mLm
26) t n-Pentacosane (C25)	37.53	76886665	49.723 ug/mLm
27) t n-Hexacosane (C26)	38.79	77373665	50.612 ug/mL
28) t n-Heptacosane (C27)	40.00	76346488	50.083 ug/mLm
29) t n-Octacosane (C28)	41.16	77371891	50.160 ug/mLm
30) t n-Nonacosane (C29)	42.29	78946290	50.057 ug/mLm
31) t n-Triacontane (C30)	43.38	77593944	50.046 ug/mLm
32) t n-Hentriacontane (C31)	44.44	78670080	52.242 ug/mLm
33) t n-Dotriacontane (C32)	45.46	75533922	49.981 ug/mLm
34) t n-Tritriacontane (C33)	46.45	77182483	50.275 ug/mLm
35) t n-tetratriacontane (C34)	47.44	77965343	50.220 ug/mLm
36) t n-Pentatriacontane (C35)	48.53	75030904	50.289 ug/mL
37) t n-Hexatriacontane (C36)	49.78	77045985	50.457 ug/mLm
38) t n-Heptatriacontane (C37)	51.21	79118598	48.715 ug/mLm
39) t n-Octatriacontane (C38)	52.87	77488102	50.435 ug/mLm
41) t n-Tetracontane (C40)	57.14	77441960	51.525 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN18.SEC\P27759.D
Operator : AC
Acquired : 19 Jan 2006 4:59 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011802-AFID
Misc Info : ALK STD
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: **0512128**
Lab ID: **C1012501**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	50.58	1.2	25
n-Decane (C10)	50.00	50.59	1.2	25
n-Undecane (C11)	50.00	50.21	0.4	25
n-Dodecane (C12)	50.00	50.28	0.6	25
n-Tridecane (C13)	50.00	49.87	0.3	25
n-Tetradecane (C14)	50.00	49.71	0.6	25
n-Pentadecane (C15)	50.00	49.33	1.3	25
n-Hexadecane (C16)	50.00	49.05	1.9	25
n-Heptadecane (C17)	50.00	49.09	1.8	25
Pristane	50.00	49.16	1.7	25
n-Octadecane (C18)	50.00	49.11	1.8	25
Phytane	50.00	49.49	1.0	25
n-Nonadecane (C19)	50.00	49.17	1.7	25
n-Eicosane (C20)	50.00	49.48	1.0	25
n-Heneicosane (C21)	50.00	49.02	2.0	25
n-Docosane (C22)	50.00	47.58	4.8	25
n-Tricosane (C23)	50.00	49.17	1.7	25
n-Tetracosane (C24)	50.00	48.36	3.3	25
n-Pentacosane (C25)	50.00	48.16	3.7	25
n-Hexacosane (C26)	50.00	49.67	0.7	25
n-Heptacosane (C27)	50.00	49.19	1.6	25
n-Octacosane (C28)	50.00	49.15	1.7	25
n-Nonacosane (C29)	50.00	49.08	1.8	25
n-Triacontane (C30)	50.00	49.24	1.5	25
n-Hentriacontane (C31)	50.00	51.63	3.3	25
n-Dotriacontane (C32)	50.00	49.18	1.6	25
n-Tritriacontane (C33)	50.00	49.73	0.5	25
n-Tetratriacontane (C34)	50.00	49.50	1.0	25
n-Pentatriacontane (C35)	50.00	49.65	0.7	25
n-Hexatriacontane (C36)	50.00	49.58	0.8	25
n-Heptatriacontane (C37)	50.00	47.50	5.0	25
n-Octatriacontane (C38)	50.00	49.67	0.7	25
n-Tetracontane (C40)	50.00	50.25	0.5	25
ortho-Terphenyl	50.00	48.71	2.6	25
d50-Tetracosane	50.00	45.61	8.8	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/30/06 22:15

Quantitation Report (QT Reviewed)

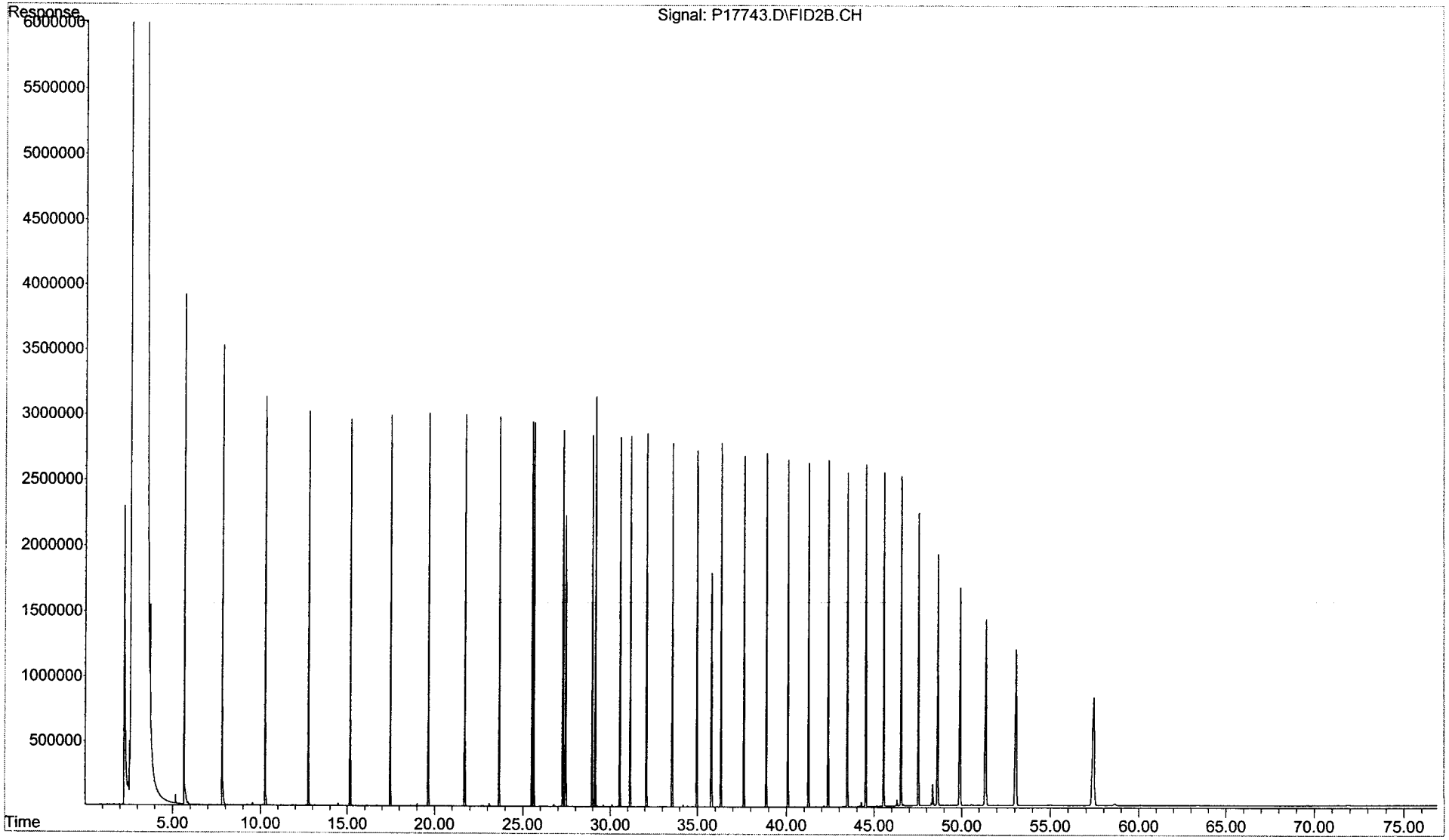
Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17743.D
Signal(s) : FID2B.CH
Acq On : 25 Jan 2006 3:11 pm
Operator : AC
Sample : C1012501-AFID
Misc : ALK STD
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 30 20:23:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 18:10:17 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	31.17	63233266	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	66757393	48.707 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	97.41%
24) s d50-Tetracosane	35.79	56025721	45.608 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.22%
Target Compounds			
2) t n-Octane (C8)	5.65	52357962	51.356 ug/mL
3) t n-Nonane (C9)	7.81	56865450	50.584 ug/mL
4) t n-Decane (C10)	10.26	58308101	50.593 ug/mLm
5) t n-Undecane (C11)	12.76	58598286	50.212 ug/mL
6) t n-Dodecane (C12)	15.18	59788089	50.280 ug/mL
7) t n-Tridecane (C13)	17.48	60082215	49.873 ug/mL
9) t n-Tetradecane (C14)	19.66	60854948	49.711 ug/mL
11) t n-Pentadecane (C15)	21.72	61134016	49.326 ug/mL
12) t n-Hexadecane (C16)	23.67	61365422	49.051 ug/mL
14) t n-Heptadecane (C17)	25.52	62178879	49.091 ug/mL
15) t Pristane	25.63	59481562	49.155 ug/mL
16) t n-Octadecane (C18)	27.29	62371217	49.111 ug/mL
17) t Phytane	27.45	62312840	49.494 ug/mL
18) t n-Nonadecane (C19)	28.97	62052537	49.173 ug/mLm
20) t n-Eicosane (C20)	30.57	62255903	49.479 ug/mL
21) t n-Heneicosane (C21)	32.10	63649294	49.021 ug/mL
22) t n-Docosane (C22)	33.57	61012427	47.585 ug/mL
23) t n-Tricosane (C23)	34.98	63485149	49.173 ug/mLm
25) t n-Tetracosane (C24)	36.33	63198953	48.359 ug/mL
26) t n-Pentacosane (C25)	37.63	63517473	48.162 ug/mLm
27) t n-Hexacosane (C26)	38.89	63977363	49.671 ug/mL
28) t n-Heptacosane (C27)	40.09	63126920	49.189 ug/mL
29) t n-Octacosane (C28)	41.26	64089104	49.147 ug/mL
30) t n-Nonacosane (C29)	42.39	65414795	49.083 ug/mL
31) t n-Triacontane (C30)	43.48	64349258	49.241 ug/mL
32) t n-Hentriacontane (C31)	44.53	65279982	51.626 ug/mL
33) t n-Dotriacontane (C32)	45.55	62732918	49.178 ug/mL
34) t n-Tritriacontane (C33)	46.55	64110510	49.729 ug/mL
35) t n-tetratriacontane (C34)	47.54	64824754	49.501 ug/mLm
36) t n-Pentatriacontane (C35)	48.66	62543823	49.652 ug/mL
37) t n-Hexatriacontane (C36)	49.93	64329058	49.577 ug/mLm
38) t n-Heptatriacontane (C37)	51.39	66143143	47.499 ug/mL
39) t n-Octatriacontane (C38)	53.09	65041032	49.668 ug/mLm
41) t n-Tetracontane (C40)	57.45	65274194	50.248 ug/mL

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17743.D
Operator : AC
Acquired : 25 Jan 2006 3:11 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1012501-AFID
Misc Info : ALK STD
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512128**
Lab ID: **C1012502**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	50.45	0.9	25
n-Decane (C10)	50.00	50.80	1.6	25
n-Undecane (C11)	50.00	50.40	0.8	25
n-Dodecane (C12)	50.00	50.42	0.8	25
n-Tridecane (C13)	50.00	49.98	0.0	25
n-Tetradecane (C14)	50.00	49.76	0.5	25
n-Pentadecane (C15)	50.00	49.36	1.3	25
n-Hexadecane (C16)	50.00	49.07	1.9	25
n-Heptadecane (C17)	50.00	49.10	1.8	25
Pristane	50.00	49.18	1.6	25
n-Octadecane (C18)	50.00	49.12	1.8	25
Phytane	50.00	49.48	1.0	25
n-Nonadecane (C19)	50.00	49.17	1.7	25
n-Eicosane (C20)	50.00	49.48	1.0	25
n-Heneicosane (C21)	50.00	49.05	1.9	25
n-Docosane (C22)	50.00	44.36	11.3	25
n-Tricosane (C23)	50.00	49.24	1.5	25
n-Tetracosane (C24)	50.00	48.45	3.1	25
n-Pentacosane (C25)	50.00	48.20	3.6	25
n-Hexacosane (C26)	50.00	49.67	0.7	25
n-Heptacosane (C27)	50.00	49.23	1.5	25
n-Octacosane (C28)	50.00	49.15	1.7	25
n-Nonacosane (C29)	50.00	49.08	1.8	25
n-Triacontane (C30)	50.00	49.21	1.6	25
n-Hentriacontane (C31)	50.00	51.61	3.2	25
n-Dotriacontane (C32)	50.00	49.11	1.8	25
n-Tritriacontane (C33)	50.00	49.69	0.6	25
n-Tetratriacontane (C34)	50.00	49.45	1.1	25
n-Pentatriacontane (C35)	50.00	49.62	0.8	25
n-Hexatriacontane (C36)	50.00	49.53	0.9	25
n-Heptatriacontane (C37)	50.00	47.58	4.8	25
n-Octatriacontane (C38)	50.00	49.70	0.6	25
n-Tetracontane (C40)	50.00	50.38	0.8	25
ortho-Terphenyl	50.00	48.74	2.5	25
d50-Tetracosane	50.00	45.58	8.8	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/30/06 22:15

Quantitation Report (QT Reviewed)

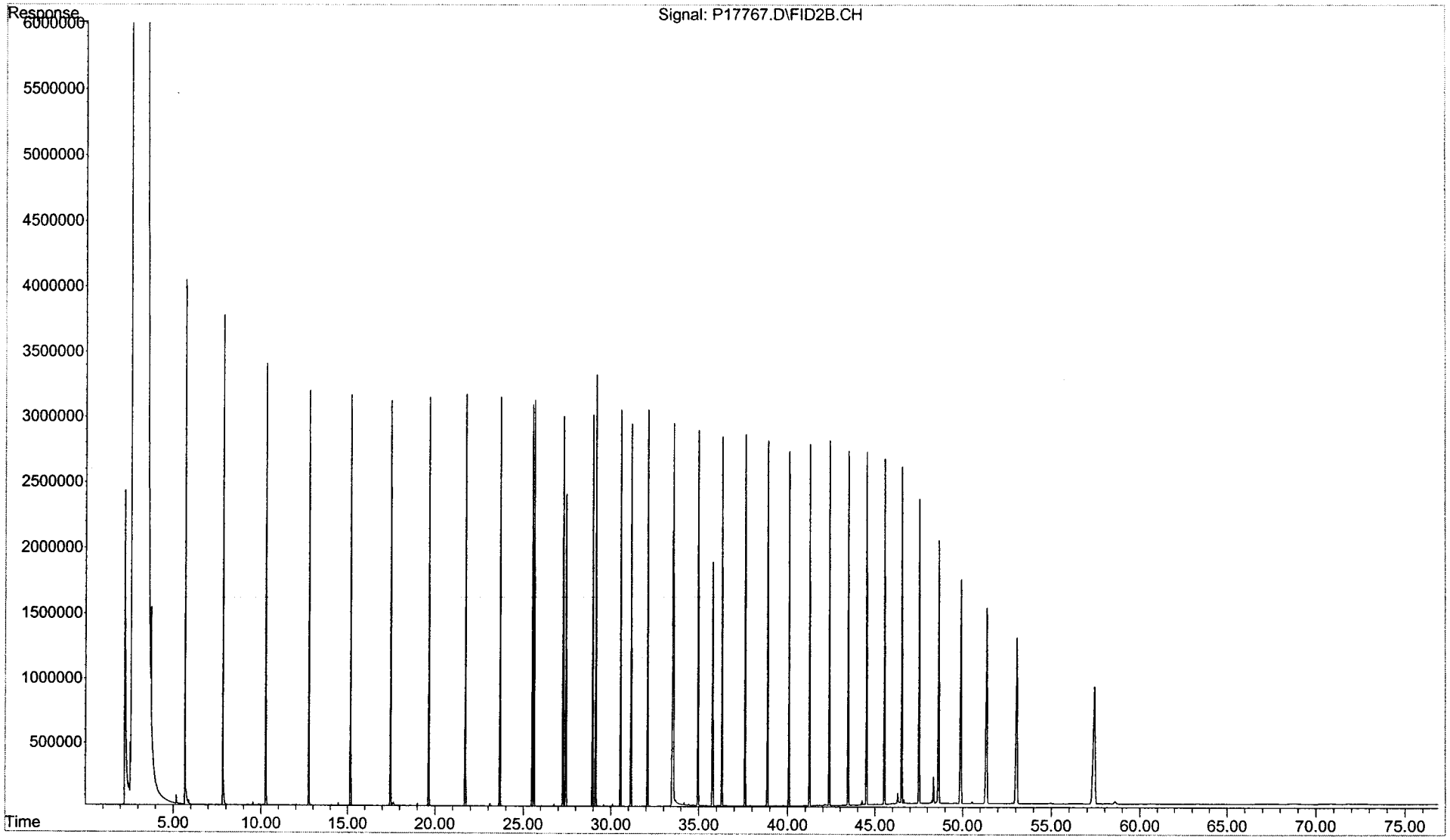
Data Path : O:\Forensics\Data\PAH1\January06\JAN24.SEC\
Data File : P17767.D
Signal(s) : FID2B.CH
Acq On : 26 Jan 2006 10:02 am
Operator : AC
Sample : C1012502-AFID
Misc : ALK STD
ALS Vial : 64 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 30 20:25:17 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 18:10:17 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	31.16	67354020	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.15	71162419	48.744 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 97.49%
24) s	d50-Tetracosane	35.79	59640140	45.580 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.16%
	Target Compounds			
2) t	n-Octane (C8)	5.66	54545445	50.228 ug/mLm
3) t	n-Nonane (C9)	7.82	60407349	50.447 ug/mLm
4) t	n-Decane (C10)	10.27	62367569	50.804 ug/mLm
5) t	n-Undecane (C11)	12.76	62646573	50.397 ug/mL
6) t	n-Dodecane (C12)	15.18	63866886	50.424 ug/mL
7) t	n-Tridecane (C13)	17.48	64136570	49.981 ug/mLm
9) t	n-Tetradecane (C14)	19.65	64888279	49.763 ug/mLm
11) t	n-Pentadecane (C15)	21.72	65165933	49.362 ug/mLm
12) t	n-Hexadecane (C16)	23.67	65383183	49.066 ug/mLm
14) t	n-Heptadecane (C17)	25.52	66241596	49.098 ug/mLm
15) t	Pristane	25.63	63388605	49.179 ug/mLm
16) t	n-Octadecane (C18)	27.28	66451958	49.123 ug/mLm
17) t	Phytane	27.45	66356955	49.482 ug/mLm
18) t	n-Nonadecane (C19)	28.97	66093046	49.170 ug/mLm
20) t	n-Eicosane (C20)	30.56	66316300	49.482 ug/mLm
21) t	n-Heneicosane (C21)	32.10	67836971	49.050 ug/mLm
22) t	n-Docosane (C22)	33.56	60579445	44.357 ug/mLm
23) t	n-Tricosane (C23)	34.97	67715529	49.240 ug/mL
25) t	n-Tetracosane (C24)	36.33	67448620	48.453 ug/mL
26) t	n-Pentacosane (C25)	37.62	67703665	48.196 ug/mLm
27) t	n-Hexacosane (C26)	38.88	68143012	49.668 ug/mLm
28) t	n-Heptacosane (C27)	40.08	67295820	49.230 ug/mLm
29) t	n-Octacosane (C28)	41.25	68268532	49.149 ug/mLm
30) t	n-Nonacosane (C29)	42.38	69676285	49.082 ug/mLm
31) t	n-Triacontane (C30)	43.47	68493862	49.206 ug/mLm
32) t	n-Hentriacontane (C31)	44.52	69516827	51.613 ug/mLm
33) t	n-Dotriacontane (C32)	45.54	66727413	49.109 ug/mLm
34) t	n-Tritriacontane (C33)	46.53	68237826	49.692 ug/mLm
35) t	n-tetratriacontane (C34)	47.53	68975081	49.448 ug/mLm
36) t	n-Pentatriacontane (C35)	48.64	66573099	49.617 ug/mLm
37) t	n-Hexatriacontane (C36)	49.91	68456845	49.530 ug/mLm
38) t	n-Heptatriacontane (C37)	51.37	70568243	47.576 ug/mL
39) t	n-Octatriacontane (C38)	53.07	69322411	49.699 ug/mL
41) t	n-Tetracontane (C40)	57.42	69717368	50.384 ug/mLm

File :O:\Forensics\Data\PAH1\January06\JAN24.SEC\P17767.D
Operator : AC
Acquired : 26 Jan 2006 10:02 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1012502-AFID
Misc Info : ALK STD
Vial Number: 64



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: 0512128

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-08 ~~(15.5-16.5)~~ (10.5-16.5)	12/23/2005	15:55	Sediment	☑
-2 GC-SED-09 (6-7)	12/23/2005	13:30	Sediment	☑
-3 GC-SED-05 (0-2)	12/23/2005	15:00	Sediment	☑
-4 GC-SED-04 (10.3-11.3)	12/23/2005	11:15	Sediment	☑

"PASSED RAD SCREEN"

Coolers = 1) - 6.7°C
2) - 4.8°C
3) - 1.2°C
4) - 2.8°C

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: James L. Jones	12/23/05	0805PM	1. Received by: David Madumadu	12/23/05	2005
2. Relinquished by: K Blocker	12/27/05	1400	2. Received by: FED EX		
3. Relinquished by: FED EX	12/28/05	0950	3. Received by: [signature]	12/28/05	0950

COMMENTS

ORIGINAL

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: 0512128

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)
GC-SED-94 (19-20)	12/20/2005	13:35	Sediment	☑

Sample ID	date	time	matrix	tests:
*Rec'd 1-8oz jar labeled: GC-SED-RM 039	12/23/05	1255	*Liquid*	Forensics

not on any of the COC'S.
KB 12/24/05

"PASSED RAD SCREEN"

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: Jamie L. Jack	12/23/05	8:05PM	1. Received by: David Mordumadu	12/23/05 8:05PM
2. Relinquished by: KBlue	12/27/05	1400	2. Received by: FED EX	
3. Relinquished by: FED EX	12/28/05	0950	3. Received by: [illegible]	12/28/05 0950
COMMENTS				

ORIGINAL

Sample Receipt Checklist

Client: NEWGE		**Receipt Date:** 12/28/05	
Project: Gowanus Canal		**Log-in Date:**	
ETR #: 05 12/28		**Inspection by:** MR	**Login by:** MM

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? (Yes, FedEx) / UPS / Other:_____
No, WHG Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: Attached
No, Unavailable / NA

Number of coolers received for this project delivery: _____1_____

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 2° IR Gun, 2° 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 custody tape
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: BMP Date: 12/28/05

Sample storage refrigerator #: 03

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?

Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

ORIGIN ID: OXCA
SHIPPING DEPT
SEVERN TRENT SERVICES
128 LONG HILL CROSS RD

SHELTON, CT 06484
UNITED STATES US

Ship Date: 27DEC05
Actual Wgt: 27.0 LB MAN
System#: 509960/CAFE2285
Account: S *********

TO ATTN: SAMPLES / TED HEALY / LIZ
ALPHA WOODS HOLE LABS
375 PARAMOUNT DRIVE

RAYNHAM, MA 02767

FedEx
Express

REF:

Delivery Address
Barcode

BILL SENDER

PRIORITY OVERNIGHT

WED
Deliver By:
28DEC05

TRK# 7278 8661 0147 Form 0201

BOS AA

02767 -MA-US 01 PYMA

Part # 156148-434 NRIT 7-05