ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0601050
Report Date:	February 08, 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: **0601050**

Lab Sample ID	Client Sample ID
0601050-01	GC-SED-32 (5.9-6.9)
0601050-02	GC-SED-31 (2.5-4.5)
0601050-03	GC-SED-36 (2.5-4.5)
0601050-04	GC-SED-41 (7.3-8.3)
0601050-05	GC-SED-40 (5-6)
0601050-06	GC-SED-33 (1.5-3)

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Certificate Program Summary

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

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

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

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

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

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

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

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

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

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

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

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

CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0601050
Project: Gowanus Canal

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

Alkylated Polynuclear Aromatic Hydrocarbons
Steranes and Triterpanes

Polynuclear aromatic hydrocarbons and Geochemical Biomarkers were analyzed following Alpha Woods Hole Lab *Analysis of Parent and Alkylated Polynuclear Aromatic Hydrocarbons and Selected Heterocyclic Compounds by Gas Chromatography/Mass Spectrometry with Selected Ion Monitoring (Revision 2.0, 06/28/02).* Sediment samples (approximately 5-30g) are spiked with surrogate compounds and extracted by *Shaker Table Extraction (Revision 0.0, 02/20/02).* Solvent extracts are dried over sodium sulfate and concentrated to an appropriate final volume based on oil content as determined by gravimetric weighing. A pre-determined volume of the extract is 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 are treated with activated copper to remove sulfur interferences. A portion of the remaining archive extract portion to equal approximately 50mg is 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 SS011906B05 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.

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

3. Sample GC-SED-33 (1.5-3) (0601050-06) and its duplicate (0601050-06D) have most of the compounds above the 30% relative percent difference QC limit due to potential matrix in-homogeneity. The integrations in the native sample and the duplicate were reviewed and found to be appropriate. It is also noted that the gravimetric determination exhibits a high relative percent difference of 25%.

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. Sample GC-SED-33 (1.5-3) (0601050-06) and its duplicate (0601050-06D) 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 high relative percent difference at 25%.

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: 2/8/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
01/19/2006 0601045_50STBIO - 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
0601045-01	SAM	Shaker	GJP	1/19/06	1/27/06		5.42	102.3	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-02	SAM	Shaker	GJP	1/19/06	1/27/06		5.69	15.63	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-03	SAM	Shaker	GJP	1/19/06	1/27/06		5.31	11.92	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-04	SAM	Shaker	GJP	1/19/06	1/27/06		5.47	6.56	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-05	SAM	Shaker	GJP	1/19/06	1/27/06		5.68	39.06	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-06	SAM	Shaker	GJP	1/19/06	1/27/06		5.04	9.29	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-07	SAM	Shaker	GJP	1/19/06	1/27/06		5.54	40.3	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-08	D	Shaker	GJP	1/19/06	1/27/06		5.3	25	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601045-08	SAM	Shaker	GJP	1/19/06	1/27/06		5.01	25	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-01	SAM	Shaker	GJP	1/19/06	1/27/06		5.15	19.23	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-02	SAM	Shaker	GJP	1/19/06	1/27/06		5.21	16.66	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-03	SAM	Shaker	GJP	1/19/06	1/27/06		5.23	16.24	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-04	SAM	Shaker	GJP	1/19/06	1/27/06		5.37	47.71	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-05	SAM	Shaker	GJP	1/19/06	1/27/06		5.32	55.42	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-06	D	Shaker	GJP	1/19/06	1/27/06		5.51	15.64	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
0601050-06	SAM	Shaker	GJP	1/19/06	1/27/06		5.8	12.35	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
SS011906B05	B	Shaker	GJP	1/19/06	1/27/06		30	4	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
SS011906B05	B	Shaker	GJP	1/19/06	1/27/06		30	4	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
SS011906LCS04	LCS	Shaker	GJP	1/19/06	1/27/06		30	4	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
SS011906LCS04	LCS	Shaker	GJP	1/19/06	1/27/06		30	4	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
SS011906LCSD04	LCSD	Shaker	GJP	1/19/06	1/27/06		30	4	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	
SS011906LCSD04	LCSD	Shaker	GJP	1/19/06	1/27/06		30	4	False	DMP	1/23/06	KD Flask	0.15	MAL	1/27/06	

KMS 2/7/06

Alpha Woods Hole Lab
Batch Prep Report
01/19/2006 0601045_50STBIO - OP NEWFIE

Lab ID	Notes
0601045-01	1st Prep
0601045-02	1st Prep
0601045-03	1st Prep
0601045-04	1st Prep
0601045-05	1st Prep
0601045-06	1st Prep
0601045-07	1st Prep
0601045-08	1st Prep
0601045-08	1st Prep
0601050-01	1st Prep
0601050-02	1st Prep
0601050-03	1st Prep
0601050-04	1st Prep
0601050-05	1st Prep
0601050-06	1st Prep
0601050-06	1st Prep
SS011906B05	1st Prep
SS011906B05	1st Prep
SS011906LCS04	1st Prep
SS011906LCS04	1st Prep
SS011906LCSD04	1st Prep
SS011906LCSD04	1st Prep

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

Lab ID	QC Type	0601045_50STBIO - Sample
0601045-01	SAM	5.42
0601045-02	SAM	5.69
0601045-03	SAM	5.31
0601045-04	SAM	5.47
0601045-05	SAM	5.68
0601045-06	SAM	5.04
0601045-07	SAM	5.54
0601045-08	D	5.3
0601045-08	SAM	5.01
0601050-01	SAM	5.15
0601050-02	SAM	5.21
0601050-03	SAM	5.23
0601050-04	SAM	5.37
0601050-05	SAM	5.32
0601050-06	D	5.51
0601050-06	SAM	5.8
SS011906B05	B	30
SS011906B05	B	30
SS011906LCS04LCS	OP NEWFIE	30
SS011906LCS04LCS	OP NEWFIE	30
SS011906LCS04LCS	OP SHC	30
SS011906LCS04LCS	OP SHC	30
SS011906LCS04LCS	OP Steranes/Triterpanes	30
SS011906LCS04LCS	OP Steranes/Triterpanes	30
SS011906LCSD04LCS	OP NEWFIE	30
SS011906LCSD04LCS	OP NEWFIE	30
SS011906LCSD04LCS	OP SHC	30
SS011906LCSD04LCS	OP SHC	30
SS011906LCSD04LCS	OP Steranes/Triterpanes	30
SS011906LCSD04LCS	OP Steranes/Triterpanes	30

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

Alpha Woods Hole Lab
Batch Prep Spike Report

01/19/2006 0601045_50STBIO - 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
0601045-01	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-02	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-03	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-04	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-05	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-06	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-07	SAM	WHAC11	200	µl				WHAC15	200	µl
0601045-08	D	WHAC11	200	µl				WHAC15	200	µl
0601045-08	SAM	WHAC11	200	µl				WHAC15	200	µl
0601050-01	SAM	WHAC11	200	µl				WHAC15	200	µl
0601050-02	SAM	WHAC11	200	µl				WHAC15	200	µl
0601050-03	SAM	WHAC11	200	µl				WHAC15	200	µl
0601050-04	SAM	WHAC11	200	µl				WHAC15	200	µl
0601050-05	SAM	WHAC11	200	µl				WHAC15	200	µl
0601050-06	D	WHAC11	200	µl				WHAC15	200	µl
0601050-06	SAM	WHAC11	200	µl				WHAC15	200	µl
SS011906B05	B	WHAB63	100	µl				WHAB14	200	µl
SS011906B05	B	WHAB63	100	µl				WHAB14	200	µl
SS011906LCS04	LCS	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl
SS011906LCS04	LCS	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl
SS011906LCSD04	LCSD	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl
SS011906LCSD04	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: 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

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

Pre-Alumina Gravimetric Determination

Analyst: DMP
Date: 1/23/2006

BATCH: 0601050

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%
0601050	1		10000	50	N/A	0.613	N/A	122.60	650	7.97	15.38	
0601050	2		10000	50	N/A	0.534	N/A	106.80	750	8.01	13.33	
0601050	3		10000	50	N/A	0.521	N/A	104.20	770	8.02	12.99	
0601050	4		10000	50	N/A	1.156	N/A	231.20	350	8.09	28.57	
0601050	5		10000	50	N/A	1.700	N/A	340.00	240	8.16	41.67	
0601050	6	D	10000	50	N/A	0.513	N/A	102.60	850	8.72	11.76	25%
0601050	6		10000	50	N/A	0.401	N/A	80.20	850	6.82	11.76	

KMS 2/7/06

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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: DMP
Date: 1-23-06

BATCH: 0601050

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%
0601050	1		10000	50	N/A	0.613	N/A					
0601050	2		10000	50	N/A	0.534	N/A					
0601050	3		10000	50	N/A	0.521	N/A					
0601050	4		10000	50	N/A	1.156	N/A					
0601050	5		10000	50	N/A	1.700	N/A					
0601050	6	D	10000	50	N/A	0.513	N/A					#VALUE!
0601050	6		10000	50	N/A	0.401	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
01/19/2006 0601045_50STBIO - 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
0601045-01	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.13	0	0.15
0601045-02	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.8	0	0.15
0601045-03	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	1.4	0	0.15
0601045-04	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	1.6	0	0.15
0601045-05	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.32	0	0.15
0601045-06	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	1.8	0	0.15
0601045-07	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.33	0	0.15
0601045-08	D	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.5	0	0.15
0601045-08	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.5	0	0.15
0601050-01	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.65	0	0.15
0601050-02	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.75	0	0.15
0601050-03	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.77	0	0.15
0601050-04	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.35	0	0.15
0601050-05	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.24	0	0.15
0601050-06	D	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.85	0	0.15
0601050-06	SAM	3610	DMP	1/26/06				MAL	1/27/06	False	10	0.85	0	0.15
SS011906B05	B	3610	DMP	1/26/06				MAL	1/27/06	False	2	0.5	0	0.15
SS011906B05	B	3610	DMP	1/26/06				MAL	1/27/06	False	2	0.5	0	0.15
SS011906LCS04	LCS	3610	DMP	1/26/06				MAL	1/27/06	False	2	0.5	0	0.15
SS011906LCS04	LCS	3610	DMP	1/26/06				MAL	1/27/06	False	2	0.5	0	0.15
SS011906LCSD04	LCSD	3610	DMP	1/26/06				MAL	1/27/06	False	2	0.5	0	0.15
SS011906LCSD04	LCSD	3610	DMP	1/26/06				MAL	1/27/06	False	2	0.5	0	0.15

KDS 2/1/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/19/2006 0601045_50STBIO - OP NEWFIE

Lab ID	Notes
0601045-01	
0601045-02	
0601045-03	
0601045-04	
0601045-05	
0601045-06	
0601045-07	
0601045-08	
0601045-08	
0601050-01	
0601050-02	
0601050-03	
0601050-04	
0601050-05	
0601050-06	
0601050-06	
SS011906B05	
SS011906B05	
SS011906LCS04	
SS011906LCS04	
SS011906LCSD04	
SS011906LCSD04	

Post-Alumina Column Gravimetric Determination

Analyst: MAL
Date: 1/26/2006

BATCH: 0601050

Entered by: MAL
Verified by: MAL

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.249	N/A	49.80	N/A	N/A	N/A	100%
0601050	1		1000	50	N/A	0.294	N/A	5.88	800	4.70	1.25	
0601050	2		1000	50	N/A	0.299	N/A	5.98	800	4.78	1.25	
0601050	3		1000	50	N/A	0.313	N/A	6.26	800	5.01	1.25	
0601050	4		1000	50	N/A	0.359	N/A	7.18	600	4.31	1.67	
0601050	5		1000	50	N/A	0.330	N/A	6.60	750	4.95	1.33	
0601050	6	D	1000	50	N/A	0.330	N/A	6.60	750	4.95	1.33	26%
0601050	6		1000	50	N/A	0.254	N/A	5.08	950	4.83	1.05	

✓ mg 2/7/06

✓ 2nd cr 2/8/06

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

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

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

Post-Alumina Column Gravimetric Determination

Analyst: MAL
Date: 1/26/00

BATCH: 0601050

Entered by:
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.249	N/A		N/A	N/A	N/A	0%
0601050	1		1000	50	N/A	0.294	N/A					
0601050	2		1000	50	N/A	0.299	N/A					
0601050	3		1000	50	N/A	0.313	N/A					
0601050	4		1000	50	N/A	0.359	N/A					
0601050	5		1000	50	N/A	0.330	N/A					
0601050	6	D	1000	50	N/A	0.330	N/A					#VALUE!
0601050	6		1000	50	N/A	0.254	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: 0601050ST

ALK-PAH/SHC

2/7/06

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
0601050-01	900	WHAC12 2OF5	100	1000	19.23	MAL	150	150	1/27/06
0601050-02	900	WHAC12 2OF5	100	1000	16.66	MAL	150	150	1/27/06
0601050-03	900	WHAC12 2OF5	100	1000	16.24	MAL	150	150	1/27/06
0601050-04	900	WHAC12 2OF5	100	1000	47.71	MAL	150	150	1/27/06
0601050-05	900	WHAC12 2OF5	100	1000	55.42	MAL	150	150	1/27/06
0601050-06DUP	900	WHAC12 2OF5	100	1000	15.64	MAL	150	150	1/27/06
0601050-06	900	WHAC12 2OF5	100	1000	12.35	MAL	150	150	1/27/06
SS011906-B05	900	WHAC12 2OF5	100	1000	4	MAL	150	150	1/27/06
SS011906LCS04	900	WHAC12 2OF5	100	1000	4	MAL	150	150	1/27/06
SS011906LCSD04	900	WHAC12 2OF5	100	1000	4	MAL	150	150	1/27/06

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 0601050 **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	
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 a 5g weight due to strong naphthalene odor.

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	1/26/06	KLA
3rd Extraction	↓	↓

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

Other:

KLA
1/26/06
Biomarkers

Batch Completed

Analyst: MAL

Date: 1/27/06

SHC/PAH

Forensic Dilution Sheet

Client Name: NewFields
Project: Gowanus Canal
ETR # : 0601045, 0601050
Matrix : Sediment
Analysis Type : GC/MS

Relinquished By: KLA
Date: CW FOR MAL 1/27/06

Received By: CW FOR MAL
Date: 1/27/06

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
0601045-01	700	700	100	1000	0601045-01-RE	WHAC12 90UL		10	10
0601045-02	700	700	100	1000	0601045-02-RE	WHAC12 90UL		10	10
0601045-03	700	700	100	1000	0601045-03-RE	WHAC12 90UL		10	10
0601045-04	700	700	100	1000	0601045-04-RE	WHAC12 90UL		10	10
0601045-05	700	700	100	1000	0601045-05-RE	WHAC12 90UL		10	10
0601045-06	700	700	100	1000	0601045-06-RE	WHAC12 90UL		10	10
0601045-07	700	700	100	1000	0601045-07-RE	WHAC12 90UL		10	10
0601045-08D	700	700	100	1000	0601045-08D-RE	WHAC12 90UL		10	10
0601045-08	700	700	100	1000	0601045-08-RE	WHAC12 90UL		10	10
0601050-01	700	700	100	1000	0601050-01RE	WHAC12 90UL		10	10
0601050-02	700	700	100	1000	0601050-02RE	WHAC12 90UL		10	10
0601050-03	700	700	100	1000	0601050-03RE	WHAC12 90UL		10	10
0601050-04	700	700	100	1000	0601050-04RE	WHAC12 90UL		10	10
0601050-05	700	700	100	1000	0601050-05RE	WHAC12 90UL		10	10
0601050-06D	700	700	100	1000	0601050-06DRE	WHAC12 90UL		10	10
0601050-06	700	700	100	1000	0601050-06RE	WHAC12 90UL		10	10
0601045-01	600	600	10	1000	0601045-01-RE2	WHAC12 99UL		100	100
0601045-02	600	600	10	1000	0601045-02-RE2	WHAC12 99UL		100	100
0601045-03	600	600	10	1000	0601045-03-RE2	WHAC12 99UL		100	100
0601045-04	600	600	10	1000	0601045-04-RE2	WHAC12 99UL		100	100
0601045-05	600	600	10	1000	0601045-05-RE2	WHAC12 99UL		100	100
0601045-06	600	600	10	1000	0601045-06-RE2	WHAC12 99UL		100	100
0601045-07	600	600	10	1000	0601045-07-RE2	WHAC12 99UL		100	100
0601045-08D	600	600	10	1000	0601045-08D-RE2	WHAC12 99UL		100	100
0601045-08	600	600	10	1000	0601045-08-RE2	WHAC12 99UL		100	100
0601050-01	600	600	10	1000	0601050-01RE2	WHAC12 99UL		100	100
0601050-02	600	600	10	1000	0601050-02RE2	WHAC12 99UL		100	100
0601050-03	600	600	10	1000	0601050-03RE2	WHAC12 99UL		100	100
0601050-04	600	600	10	1000	0601050-04RE2	WHAC12 99UL		100	100
0601050-05	600	600	10	1000	0601050-05RE2	WHAC12 99UL		100	100
0601050-06D	600	600	10	1000	0601050-06DRE2	WHAC12 99UL		100	100
0601050-06	600	600	10	1000	0601050-06RE2	WHAC12 99UL		100	100

Dilution Calculations Validated by: CA
Date: 2/8/06

Alpha Woods Hole Lab
Batch Prep Report
01/19/2006 0601045_50STBIO - 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
0601045-01	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.42	13.13	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-02	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.69	5.72	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-03	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.31	1.23	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-04	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.47	1.26	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-05	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.68	11.1	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-06	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.04	1.29	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-07	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.54	5.25	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-08	D	Shaker	GJP	1/19/2006	1/26/2006		5.3	11.09	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601045-08	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.01	11.09	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-01	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.15	16.68	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-02	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.21	7.15	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-03	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.23	7.15	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-04	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.37	5.25	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-05	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.32	19.08	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-06	D	Shaker	GJP	1/19/2006	1/26/2006		5.51	8.88	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
0601050-06	SAM	Shaker	GJP	1/19/2006	1/26/2006		5.8	6.68	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
SS011906B05	B	Shaker	GJP	1/19/2006	1/26/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
① ~~SS011906B05~~	~~B~~	~~Shaker~~	~~GJP~~	~~1/19/2006~~	~~1/26/2006~~		~~30~~	~~4~~	~~False~~	~~DMP~~	~~1/23/2006~~	~~KD Flask~~	~~0.15~~	~~KLA~~	~~1/26/2006~~	
~~SS011906LCS04~~	~~LCS~~	~~Shaker~~	~~GJP~~	~~1/19/2006~~	~~1/26/2006~~		~~30~~	~~4~~	~~False~~	~~DMP~~	~~1/23/2006~~	~~KD Flask~~	~~0.15~~	~~KLA~~	~~1/26/2006~~	
~~SS011906LCS04~~	~~LCS~~	~~Shaker~~	~~GJP~~	~~1/19/2006~~	~~1/26/2006~~		~~30~~	~~4~~	~~False~~	~~DMP~~	~~1/23/2006~~	~~KD Flask~~	~~0.15~~	~~KLA~~	~~1/26/2006~~	
SS011906LCSD04	LCSD	Shaker	GJP	1/19/2006	1/26/2006		30	4	False	DMP	1/23/2006	KD Flask	0.15	KLA	1/26/2006	
~~SS011906LCSD04~~	~~LCSD~~	~~Shaker~~	~~GJP~~	~~1/19/2006~~	~~1/26/2006~~		~~30~~	~~4~~	~~False~~	~~DMP~~	~~1/23/2006~~	~~KD Flask~~	~~0.15~~	~~KLA~~	~~1/26/2006~~	

① Samples not processed for biomarkers 1/27/06 RPR

JPD 2/8/06

Alpha Woods Hole Lab
Batch Prep Report

01/19/2006 0601045_50STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0601045-01	1st Prep
0601045-02	1st Prep
0601045-03	1st Prep
0601045-04	1st Prep
0601045-05	1st Prep
0601045-06	1st Prep
0601045-07	1st Prep
0601045-08	1st Prep
0601045-08	1st Prep
0601050-01	1st Prep
0601050-02	1st Prep
0601050-03	1st Prep
0601050-04	1st Prep
0601050-05	1st Prep
0601050-06	1st Prep
0601050-06	1st Prep
SS011906B05	1st Prep
~~SS011906B05~~	~~1st Prep~~ ①
~~SS011906LCS04~~	~~1st Prep~~
~~SS011906LCS04~~	~~1st Prep~~
~~SS011906LCSD04~~	~~1st Prep~~
~~SS011906LCSD04~~	~~1st Prep~~

① Samples not processed for biomarkers 1/27/06 RAR

Pre-Silica Column Gravimetric Determination

Analyst: DMP
Date: 1/23/2006

BATCH: 0601050

Entered by: DMP
Verified by: DMP

		LCS	10000	50	N/A	0.253	N/A	50.60	N/A	N/A	N/A	101%
0601050	1		10000	50	N/A	0.613	N/A	122.60	4000	49.04	2.50	
0601050	2		10000	50	N/A	0.534	N/A	106.80	4000	42.72	2.50	
0601050	3		10000	50	N/A	0.521	N/A	104.20	4000	41.68	2.50	
0601050	4		10000	50	N/A	1.156	N/A	231.20	2000	46.24	5.00	
0601050	5		10000	50	N/A	1.700	N/A	340.00	1500	51.00	6.67	
0601050	6	D	10000	50	N/A	0.513	N/A	102.60	4500	46.17	2.22	25%
0601050	6		10000	50	N/A	0.401	N/A	80.20	6000	48.12	1.67	

KWS 2/7/06

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)

2nd 1/18/06

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

Alpha Woods Hole Lab
Batch Clean Up Report
01/19/2006 0601045_50STBIO - 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
0601045-01	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	0.8	0	0.15
0601045-02	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	5	0	0.15
0601045-03	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	8.55	0	0.15
0601045-04	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	8.35	0	0.15
0601045-05	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	2	0	0.15
0601045-06	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	8.15	0	0.15
0601045-07	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	2	0	0.15
0601045-08	D	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	3	0	0.15
0601045-08	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	3	0	0.15
0601050-01	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	4	0	0.15
0601050-02	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	4	0	0.15
0601050-03	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	4	0	0.15
0601050-04	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	2	0	0.15
0601050-05	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	1.5	0	0.15
0601050-06	D	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	4.5	0	0.15
0601050-06	SAM	3630	MAL	1/25/2006				DMP	1/25/2006	True	10	6	0	0.15
SS011906B05	B	3630	MAL	1/25/2006				DMP	1/25/2006	True	2	0.5	0	0.15
① ~~SS011906B05~~	~~B~~	~~3630~~	~~MAL~~	~~1/25/2006~~				~~DMP~~	~~1/25/2006~~	~~True~~	~~2~~	~~0.5~~	~~0~~	~~0.15~~
~~SS011906LCS04~~	~~LCS~~	~~3630~~	~~MAL~~	~~1/25/2006~~				~~DMP~~	~~1/25/2006~~	~~True~~	~~2~~	~~0.5~~	~~0~~	~~0.15~~
~~SS011906LCS04~~	~~LCS~~	~~3630~~	~~MAL~~	~~1/25/2006~~				~~DMP~~	~~1/25/2006~~	~~True~~	~~2~~	~~0.5~~	~~0~~	~~0.15~~
~~SS011906LCSD04~~	~~LCSD~~	~~3630~~	~~MAL~~	~~1/25/2006~~				~~DMP~~	~~1/25/2006~~	~~True~~	~~2~~	~~0.5~~	~~0~~	~~0.15~~
~~SS011906LCSD04~~	~~LCSD~~	~~3630~~	~~MAL~~	~~1/25/2006~~				~~DMP~~	~~1/25/2006~~	~~True~~	~~2~~	~~0.5~~	~~0~~	~~0.15~~

① Samples not processed for biomarkers 1/27/06 RAR

✓ 2nd 3/8/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/19/2006 0601045_50STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0601045-01	Silica columns eluted with 20ml Pentane
0601045-02	
0601045-03	
0601045-04	
0601045-05	
0601045-06	
0601045-07	
0601045-08	
0601045-08	
0601050-01	
0601050-02	
0601050-03	
0601050-04	
0601050-05	
0601050-06	
0601050-06	
SS011906B05	
~~SS011906B05~~	①
~~SS011906LCS04~~	
~~SS011906LCS04~~	
~~SS011906LCSD04~~	
~~SS011906LCSD04~~	

① Samples not processed for biomarkers 1/27/06 RAR

Post-Silica Column Gravimetric Determination

Analyst: DMP
Date: 1/25/06

BATCH: 0601050

Entered by: DMP
Verified by: DMP

Batch #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Column (mg)	Dilution Factor	% Recovery
		LCS	10000	50	N/A	0.250	N/A	50.00	N/A	N/A	N/A	100%
0601050	1		1000	50	N/A	1.470	N/A	29.40	150	4.41	6.67	
0601050	2		1000	50	N/A	0.700	N/A	14.00	350	4.90	2.86	
0601050	3		1000	50	N/A	0.675	N/A	13.50	350	4.73	2.86	
0601050	4		1000	50	N/A	0.132	N/A	2.64	950	2.51	1.05	
0601050	5		1000	50	N/A	0.657	N/A	13.14	350	4.60	2.86	
0601050	6	D	1000	50	N/A	0.822	N/A	16.44	250	4.11	4.00	7%
0601050	6		1000	50	N/A	0.880	N/A	17.60	250	4.40	4.00	

✓ MJS 2/7/06

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)

2nd 2/8/06

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

Alpha Woods Hole Laboratories Raynham, MA

0601050ST.xls

Post ~~Pre~~-Silica Column Gravimetric Determination

(JP) 1-25-06

Analyst: DMP
Date: 1-25-06

BATCH: 0601050

Entered by: DMP
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC % RPD
		LCS	10000	50	N/A	0.250	N/A		N/A	N/A	N/A	0%
0601050	1		1000	50	N/A	1.470	N/A					
0601050	2		1000	50	N/A	0.700	N/A					
0601050	3		1000	50	N/A	0.675	N/A					
0601050	4		1000	50	N/A	0.132	N/A					
0601050	5		1000	50	N/A	0.657	N/A					
0601050	6	D	1000	50	N/A	0.822	N/A					#VALUE!
0601050	6		1000	50	N/A	0.880	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

0601050ST.xls

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE GOWANUS CANAL
ETR: 0601050ST

BIOMARKERS

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0601050-01-F1	900	WHAC12 2OF5	100	1000	16.68	KLA	150	NA	1/26/2006
0601050-02-F1	900	WHAC12 2OF5	100	1000	7.15	KLA	150	NA	1/26/2006
0601050-03-F1	900	WHAC12 2OF5	100	1000	7.15	KLA	150	NA	1/26/2006
0601050-04-F1	900	WHAC12 2OF5	100	1000	5.25	KLA	150	NA	1/26/2006
0601050-05-F1	900	WHAC12 2OF5	100	1000	19.08	KLA	150	NA	1/26/2006
0601050-06D-F1	900	WHAC12 2OF5	100	1000	8.88	KLA	150	NA	1/26/2006
0601050-06-F1	900	WHAC12 2OF5	100	1000	6.68	KLA	150	NA	1/26/2006
SS011906B05-F1	900	WHAC12 2OF5	100	1000	4.00	KLA	150	NA	1/26/2006

MS 2/9/06

[1] Includes Internal Std

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

Lab ID	QC Type	PS011906 - Pan Weight	PS011906 - Wet Weight	PS011906 - Dry Weight	PS011906 - Dry Weight #2	PS011906 - Dry Weight #3	Percent Solid	RPD
0601050-01	D	1.01	6.43	3.19	3.19		40.22	7.65%
0601050-01	SAM	0.99	7.3	3.73	3.73		43.42	
0601050-02	SAM	0.99	6.52	3.98	3.98		54.07	
0601050-03	SAM	1	6.88	3.71	3.71		46.09	
0601050-04	SAM	0.99	7.04	6.26	6.26		87.11	
0601050-05	SAM	1	7.68	4.97	4.97		59.43	
0601050-06	SAM	1.02	6.61	3.64	3.63		46.69	
PSS011906B02	B	1.01	1.01	1.01	1.01		100	

Initial: 1/19/2006 11:40:01 AM KJB
Weight #1: 1/20/2006 11:54:37 AM KJB
Weight #2: 1/20/2006 1:23:15 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-32 (5.9-6.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-01**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	02/01/06	43.4	5.15	19.23	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**110000**	E	Fluoranthene	**77000**	
C1-Naphthalenes	**110000**	E	Pyrene	**110000**	E
C2-Naphthalenes	**130000**		C1-Fluoranthenes/Pyrenes	**120000**	
C3-Naphthalenes	**94000**		C2-Fluoranthenes/Pyrenes	**54000**	
C4-Naphthalenes	**49000**		C3-Fluoranthenes/Pyrenes	**24000**	
Biphenyl	**3200**		C4-Fluoranthenes/Pyrenes	**9800**	
Dibenzofuran	**5900**		Naphthobenzothiophenes	**16000**	
Acenaphthylene	**16000**		C1-Naphthobenzothiophenes	**18000**	
Acenaphthene	**68000**		C2-Naphthobenzothiophenes	**13000**	
Fluorene	**40000**		C3-Naphthobenzothiophenes	**7900**	
C1-Fluorenes	**37000**		C4-Naphthobenzothiophenes	**3300**	
C2-Fluorenes	**42000**		Benz[a]anthracene	**41000**	
C3-Fluorenes	**28000**		Chrysene/Triphenylene	**44000**	
Anthracene	**66000**		C1-Chrysenes	**42000**	
Phenanthrene	**160000**	E	C2-Chrysenes	**22000**	
C1-Phenanthrenes/Anthracenes	**170000**		C3-Chrysenes	**13000**	
C2-Phenanthrenes/Anthracenes	**110000**		C4-Chrysenes	**4700**	
C3-Phenanthrenes/Anthracenes	**46000**		Benzo[b]fluoranthene	**19000**	
C4-Phenanthrenes/Anthracenes	**14000**		Benzo[k]fluoranthene	**20000**	
Retene	**6800**		Benzo[a]fluoranthene	**8400**	
Dibenzothiophene	**22000**		Benzo[e]pyrene	**19000**	
C1-Dibenzothiophenes	**39000**		Benzo[a]pyrene	**33000**	
C2-Dibenzothiophenes	**41000**		Perylene	**5100**	
C3-Dibenzothiophenes	**25000**		Indeno[1,2,3-cd]pyrene	**15000**	
C4-Dibenzothiophenes	**9800**		Dibenz[a,h]anthracene	**4500**	
Benzo(b)fluorene	**20000**		Benzo[g,h,i]perylene	**16000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	106	50-130

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

02/06/06 21:25

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-32 (5.9-6.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-01**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	02/01/06	43.4	5.15	19.23	1	AC

Parameter	Result
Carbazole	**2100**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	106	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)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28042.D
Acq On : 1 Feb 2006 2:21 am
Operator : AC
Sample : 0601050-01
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 01 17:08:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	38409m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.61	240	66316m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	76037m	963.28	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 96.33%			
58) Pyrene-d10	38.69	212	176698	1088.31	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.83%			
81) Benzo[b]fluoranthene-d12	47.55	264	150299	1105.48	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 110.55%			
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	20.19	128	2189045	12671.11	ng/mL#E	100
10) C1-Naphthalenes	22.89	142	2299368m	13309.70	ng/mLE	
11) C2-Naphthalenes	25.74	156	2553809m	14782.51	ng/mL	
12) C3-Naphthalenes	28.08	170	1887282m	10924.38	ng/mL	
13) C4-Naphthalenes	30.84	184	993063m	5748.26	ng/mL	
15) 2-Methylnaphthalene	22.89	142	1364321	12406.50	ng/mL#E	100
16) 1-Methylnaphthalene	23.31	142	933407	8917.67	ng/mL#	100
22) Biphenyl	24.77	154	51152m	369.50	ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	396577m	4186.43	ng/mL	
24) Dibenzofuran	27.87	168	104521m	683.97	ng/mL	
25) Acenaphthylene	26.49	152	317861m	1854.42	ng/mL	
26) Acenaphthene	27.22	153	830346	7903.03	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	143857m	1740.15	ng/mL	
28) Fluorene	29.24	166	566227m	4609.08	ng/mL	
29) C1-Fluorenes	31.62	180	523744m	4263.27	ng/mL	
30) C2-Fluorenes	33.66	194	594871m	4842.24	ng/mL	
31) C3-Fluorenes	35.66	208	398422m	3243.15	ng/mL	
32) Dibenzothiophene	32.59	184	417622	2542.37	ng/mL#	82
36) OTP	34.77	198	11146m	67.85	ng/mL	
37) C1-Dibenzothiophenes	34.36	198	757631m	4612.25	ng/mL	
38) C2-Dibenzothiophenes	36.41	212	786174m	4786.02	ng/mL	
39) C3-Dibenzothiophenes	37.85	226	481947m	2933.96	ng/mL	
40) C4-Dibenzothiophenes	39.55	240	187640m	1142.30	ng/mL	
41) Phenanthrene	33.09	178	3269427m	18651.68	ng/mLE	
47) C1-Phenanthrenes/Anthracen	35.16	192	3400217m	19397.82	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	2152296m	12278.59	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.16	220	929356m	5301.86	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.08	234	296393m	1690.89	ng/mL	
52) Retene	40.08	234	31695m	796.88	ng/mL	
53) Anthracene	33.27	178	1245250m	7649.09	ng/mL	
54) Carbazole	33.94	167	37357m	240.77	ng/mL	
55) 1-Methylphenanthrene	35.60	192	546270m	4492.16	ng/mL	
56) Fluoranthene	37.87	202	1679992	8979.76	ng/mL	96
57) Benzo(b)fluorene	40.40	216	264324m	2298.23	ng/mL	
59) Pyrene	38.77	202	2395606	12504.65	ng/mLE	97
60) C1-Fluoranthenes/Pyrenes	40.15	216	2611331m	13630.70	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	1202491m	6276.80	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	534280m	2788.85	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.33	258	219512m	1145.81	ng/mL	
64) Naphthobenzothiophene	42.62	234	201784m	1135.83	ng/ml	

REPORT conc 2nd ca 2/8/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28042.D
Acq On : 1 Feb 2006 2:21 am
Operator : AC
Sample : 0601050-01
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 01 17:08:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

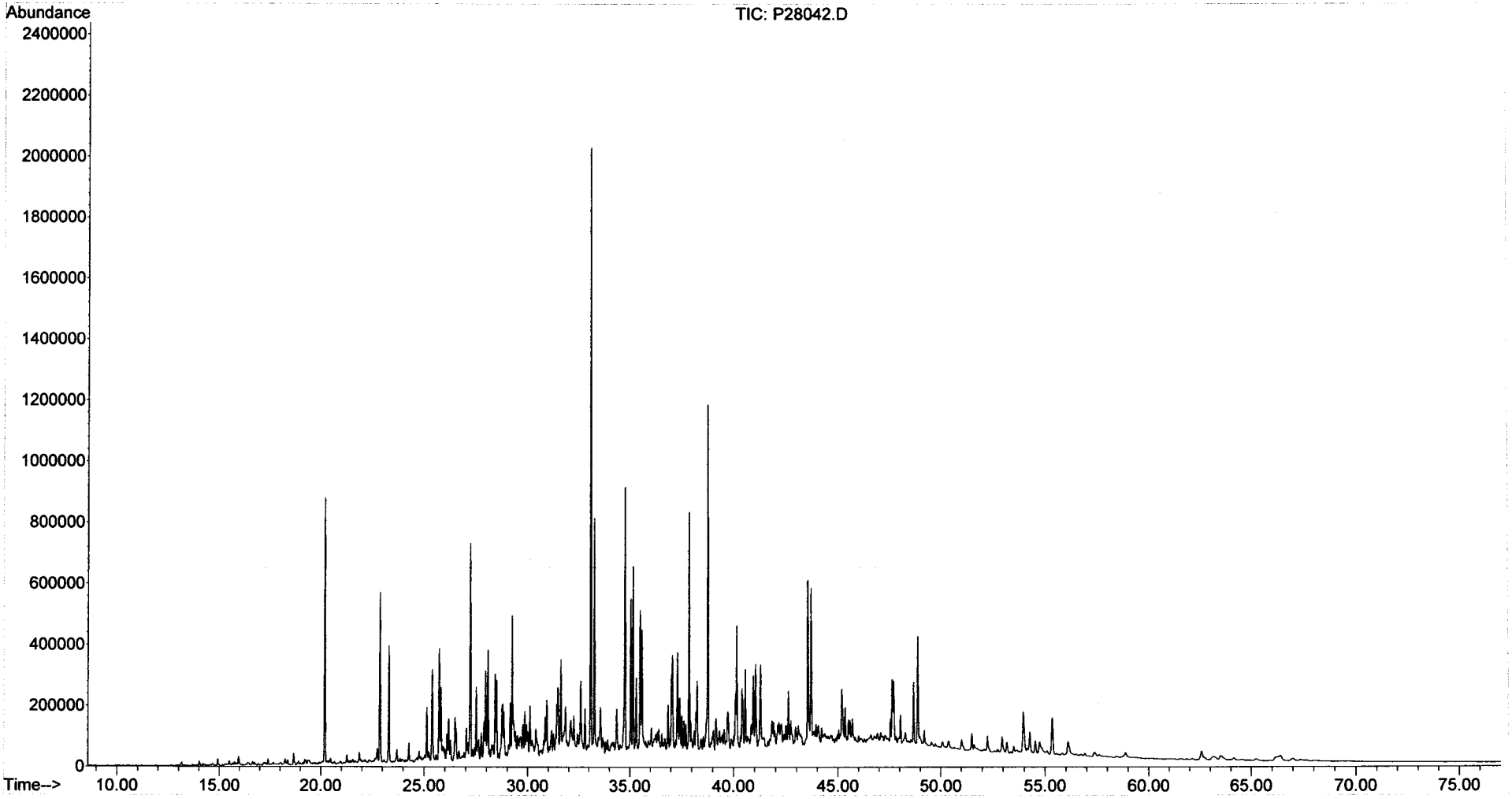
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.62	234	200809m	1130.34	ng/mL	
66) Naphthobenzothiophene-1,2-	42.96	234	56749	319.44	ng/mL#	28
67) Naphthobenzothiophene-2,3-	43.26	234	67453m	379.69	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	377388m	2124.29	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	276433m	1556.02	ng/ml	
70) C3-Naphthobenzothiophenes	47.65	276	162277m	913.45	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	68919m	387.94	ng/mL	
73) Benz[a]anthracene	43.55	228	893355m	4717.24	ng/mL	
74) Chrysene	43.72	228	973780m	5119.47	ng/mL	
75) Chrysene/Triphenylene	43.72	228	970412m	5101.77	ng/mL	
76) C1-Chrysenes	45.19	242	930314m	4890.96	ng/mL	
77) C2-Chrysenes	46.90	256	502853m	2643.66	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	11361	59.73	ng/mL	100
79) C3-Chrysenes	48.54	270	279468m	1469.25	ng/mL	
80) C4-Chrysenes	50.09	284	104049m	547.02	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	455624	2240.10	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	489726	2302.48	ng/mL	99
84) Benzo[a]fluoranthene	48.03	252	208046m	978.14	ng/mL	
85) Benzo[e]pyrene	48.69	252	433709	2211.97	ng/mL	98
86) Benzo[a]pyrene	48.89	252	751318m	3832.76	ng/mL	
87) Perylene	49.21	252	114875	587.82	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.95	276	333226m	1715.09	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	95476m	522.55	ng/mL	
90) Benzo[g,h,i]perylene	55.34	276	369088	1821.95	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28042.D
Acq On : 1 Feb 2006 2:21 am
Operator : AC
Sample : 0601050-01
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 01 17:08:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-32 (5.9-6.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-01E**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/28/06	43.4	5.15	19.23	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**110000**		Fluoranthene	87	U
C1-Naphthalenes	**110000**		Pyrene	**110000**	
C2-Naphthalenes	140	U	C1-Fluoranthenes/Pyrenes	76	U
C3-Naphthalenes	140	U	C2-Fluoranthenes/Pyrenes	76	U
C4-Naphthalenes	140	U	C3-Fluoranthenes/Pyrenes	76	U
Biphenyl	78	U	C4-Fluoranthenes/Pyrenes	76	U
Dibenzofuran	100	U	Naphthobenzothiophenes	100	U
Acenaphthylene	160	U	C1-Naphthobenzothiophenes	100	U
Acenaphthene	99	U	C2-Naphthobenzothiophenes	100	U
Fluorene	99	U	C3-Naphthobenzothiophenes	100	U
C1-Fluorenes	99	U	C4-Naphthobenzothiophenes	100	U
C2-Fluorenes	99	U	Benz[a]anthracene	140	U
C3-Fluorenes	99	U	Chrysene/Triphenylene	93	U
Anthracene	120	U	C1-Chrysenes	93	U
Phenanthrene	**160000**		C2-Chrysenes	93	U
C1-Phenanthrenes/Anthracenes	120	U	C3-Chrysenes	93	U
C2-Phenanthrenes/Anthracenes	120	U	C4-Chrysenes	93	U
C3-Phenanthrenes/Anthracenes	120	U	Benzo[b]fluoranthene	91	U
C4-Phenanthrenes/Anthracenes	120	U	Benzo[k]fluoranthene	180	U
Retene	120	U	Benzo[a]fluoranthene	180	U
Dibenzothiophene	96	U	Benzo[e]pyrene	120	U
C1-Dibenzothiophenes	96	U	Benzo[a]pyrene	120	U
C2-Dibenzothiophenes	96	U	Perylene	150	U
C3-Dibenzothiophenes	96	U	Indeno[1,2,3-cd]pyrene	210	U
C4-Dibenzothiophenes	96	U	Dibenz[a,h]anthracene	160	U
Benzo(b)fluorene	87	U	Benzo[g,h,i]perylene	150	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	95	50-130

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

02/06/06 21:21

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27976.D
Acq On : 28 Jan 2006 6:18 pm
Operator : AC
Sample : 0601050-01-RE
Misc : 10X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 01 17:21:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

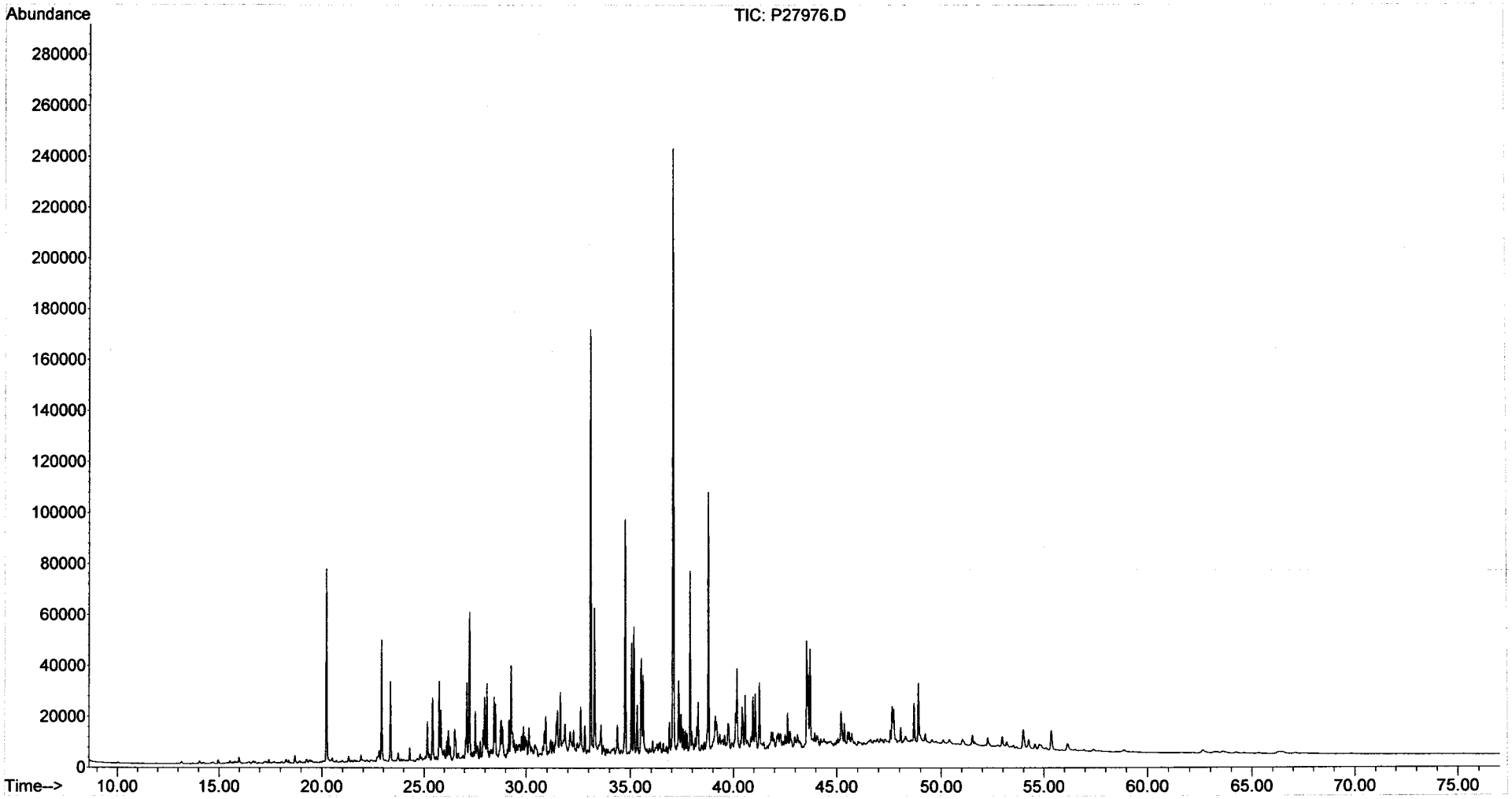
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33653m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	54580	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	6067m	87.72	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.77%#			
58) Pyrene-d10	38.70	212	14750	103.69	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.37%#			
81) Benzo[b]fluoranthene-d12	47.57	264	11007m	98.37	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.84%#			
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	20.21	128	189253m	1250.29	ng/mL	
10) C1-Naphthalenes	22.91	142	196572m	1298.65	ng/mL	
15) 2-Methylnaphthalene	22.91	142	115808	1201.93	ng/mL#	100
41) Phenanthrene	33.09	178	291024	1894.89	ng/mL	100
59) Pyrene	38.78	202	215009	1280.92	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27976.D
Acq On : 28 Jan 2006 6:18 pm
Operator : AC
Sample : 0601050-01-RE
Misc : 10X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 01 17:21:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-32 (5.9-6.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-01**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/27/06	43.4	5.15	16.68	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2000**	30,31-Bishomohopane-22S	**3900**
C24 Tricyclic Terpane	**1300**	30,31-Bishomohopane-22R	**2800**
C25 Tricyclic Terpane	**1400**	30,31-Trishomohopane-22S	**2300**
C24 Tetracyclic Terpane	**1400**	30,31-Trishomohopane-22R	**1500**
C26 Tricyclic Terpane-22S	**640**	Tetrakishomohopane-22S	**1500**
C26 Tricyclic Terpane-22R	**640**	Tetrakishomohopane-22R	**1000**
C28 Tricyclic Terpane-22S	**840**	Pentakishomohopane-22S	**1200**
C28 Tricyclic Terpane-22R	**900**	Pentakishomohopane-22R	**970**
C29 Tricyclic Terpane-22S	**1000**	13b(H),17a(H)-20S-Diacholestane	**3400**
C29 Tricyclic Terpane-22R	**1000**	13b(H),17a(H)-20R-Diacholestane	**2000**
18a-22,29,30-Trisnorneohopane-TS	**4100**	13b,17a-20S-Methyldiacholestane	**1600**
C30 Tricyclic Terpane-22S	**740**	14a(H),17a(H)-20S-Cholestane	**2000**
C30 Tricyclic Terpane-22R	**760**	14a(H),17a(H)-20R-Cholestane	**6300**
17a(H)-22,29,30-Trisnorhopane-TM	**4700**	13b,17a-20R-Ethyldiacholestane	**960**
17a/b,21b/a 28,30-Bisnorhopane	**1100**	13a,17b-20S-Ethyldiacholestane	**260**
17a(H),21b(H)-25-Norhopane	**540**	14a,17a-20S-Methylcholestane	**1100**
30-Norhopane	**13000**	14a,17a-20R-Methylcholestane	**2800**
18a(H)-30-Norneohopane-C29Ts	**4200**	14a(H),17a(H)-20S-Ethylcholestane	**2200**
17a(H)-Diahopane	**1000**	14a(H),17a(H)-20R-Ethylcholestane	**3300**
30-Normoretane	**2800**	14b(H),17b(H)-20R-Cholestane	**2800**
18a(H)&18b(H)-Oleananes	**2000**	14b(H),17b(H)-20S-Cholestane	**2900**
Hopane	**21000**	14b,17b-20R-Methylcholestane	**2800**
Moretane	**3200**	14b,17b-20S-Methylcholestane	**3500**
30-Homohopane-22S	**6200**	14b(H),17b(H)-20R-Ethylcholestane	**4300**
30-Homohopane-22R	**5400**	14b(H),17b(H)-20S-Ethylcholestane	**3200**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	119	50-130

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34890.D
Acq On : 27 Jan 2006 6:52 pm
Operator : AC
Sample : 0601050-01
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 06 12:57:47 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

CMS 2/6/06

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	83532	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	49926	1422.13	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	142.21%#		

% rec 2nd

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	206201m	2872.56	ng/mL	
84) Hopane (T19)	52.48	191	206318m	2874.19	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	19324m	269.20	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	12159m	169.39	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.15	191	13443m	187.27	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	13602	189.49	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.20	191	6190	86.23	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	6150	85.67	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.59	191	8095m	112.77	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	8653m	120.54	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	9634	134.21	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	9584m	133.51	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	39520m	550.55	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	7102	98.94	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.97	191	7363m	102.57	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	45155m	629.05	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	10710m	149.20	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	5208	72.55	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	128833m	1794.76	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	39908m	555.95	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	9768m	136.08	ng/ml	
104) 30-Normoretane (T17)	51.87	191	26802	373.38	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	18944m	263.91	ng/ml	
106) Moretane (T20)	53.18	191	30483m	424.65	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	59669	831.24	ng/ml	100
108) 30-Homohopane-22R (T22)	54.53	191	52390	729.84	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	37388	520.85	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	27251	379.63	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	22163m	308.75	ng/ml	
112) 30,31-Trishomohopane-22R (	58.69	191	14342m	199.80	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	14262	198.68	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.66	191	10036	139.81	ng/ml	100
115) Pentakishomohopane-22S (T3	63.95	191	11842	164.97	ng/ml	100
116) Pentakishomohopane-22R (T3	65.29	191	9357m	130.35	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	15768m	449.15	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	9370m	266.90	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	7729m	220.16	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	9328m	265.71	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	29545m	841.58	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	4542m	129.38	ng/ml	

Approx conc 2nd CMS 2/8/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34890.D
Acq On : 27 Jan 2006 6:52 pm
Operator : AC
Sample : 0601050-01
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 06 12:57:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

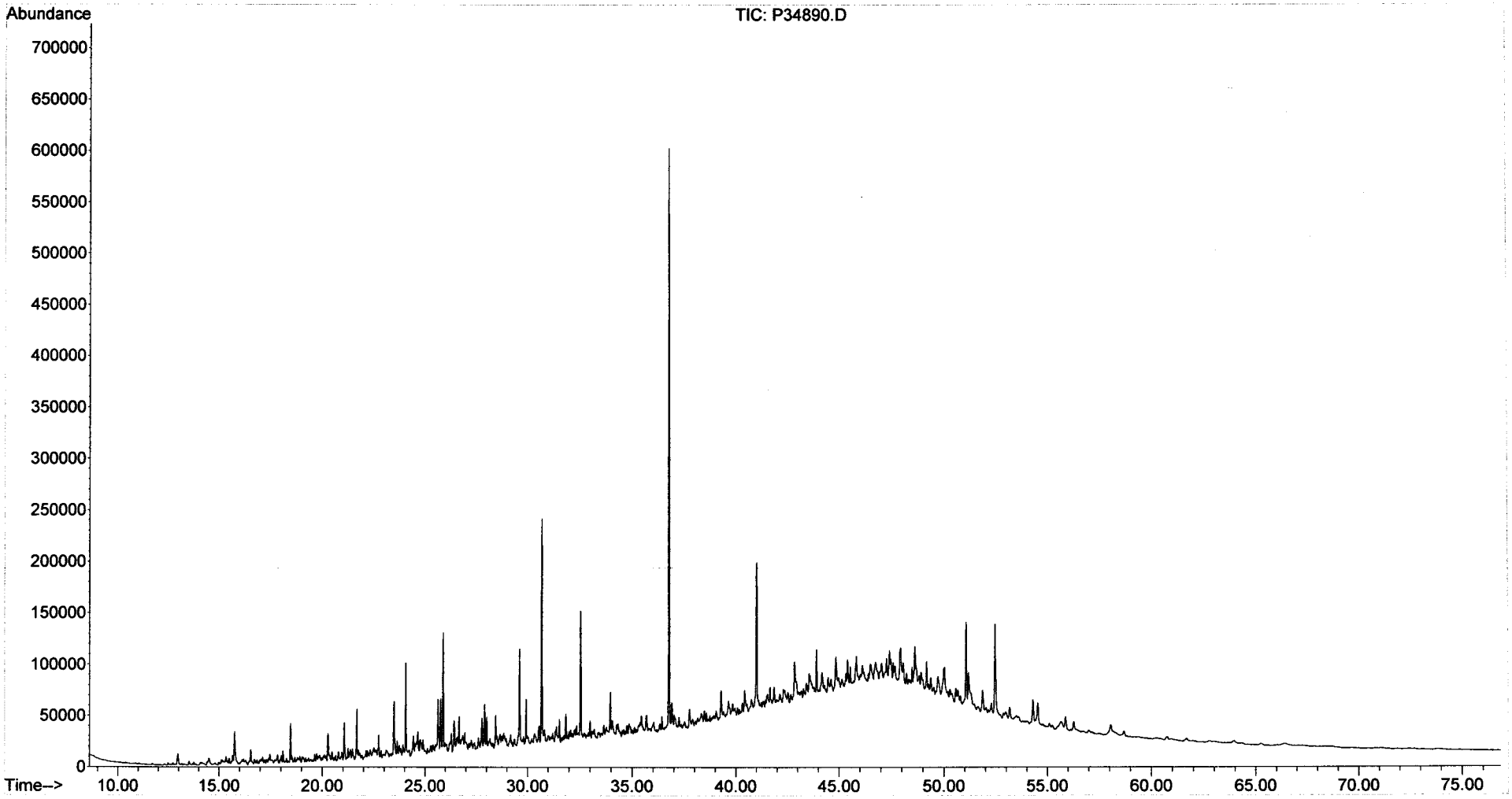
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	1245	35.46 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	5035m	143.42 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	13353m	380.36 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	10414m	296.64 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	15331m	436.70 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	13361m	380.59 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	13733m	391.18 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	12950m	368.88 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	16680m	475.13 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	20298m	578.18 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	15201m	433.00 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 : P34890.D
Acq On : 27 Jan 2006 6:52 pm
Operator : AC
Sample : 0601050-01
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 06 12:57:47 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-31 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-02**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	02/01/06	54.1	5.21	16.66	1	AC

Parameter	Result	Parameter	Result
Naphthalene	8800	Fluoranthene	37000
C1-Naphthalenes	13000	Pyrene	52000
C2-Naphthalenes	32000	C1-Fluoranthenes/Pyrenes	57000
C3-Naphthalenes	39000	C2-Fluoranthenes/Pyrenes	28000
C4-Naphthalenes	27000	C3-Fluoranthenes/Pyrenes	13000
Biphenyl	2000	C4-Fluoranthenes/Pyrenes	5400
Dibenzofuran	1500	Naphthobenzothiophenes	8100
Acenaphthylene	8500	C1-Naphthobenzothiophenes	9900
Acenaphthene	12000	C2-Naphthobenzothiophenes	7900
Fluorene	8600	C3-Naphthobenzothiophenes	4700
C1-Fluorenes	13000	C4-Naphthobenzothiophenes	2300
C2-Fluorenes	21000	Benz[a]anthracene	22000
C3-Fluorenes	17000	Chrysene/Triphenylene	23000
Anthracene	21000	C1-Chrysenes	23000
Phenanthrene	49000	C2-Chrysenes	13000
C1-Phenanthrenes/Anthracenes	71000	C3-Chrysenes	7500
C2-Phenanthrenes/Anthracenes	56000	C4-Chrysenes	2700
C3-Phenanthrenes/Anthracenes	27000	Benzo[b]fluoranthene	11000
C4-Phenanthrenes/Anthracenes	9400	Benzo[k]fluoranthene	11000
Retene	6400	Benzo[a]fluoranthene	4700
Dibenzothiophene	6200	Benzo[e]pyrene	11000
C1-Dibenzothiophenes	16000	Benzo[a]pyrene	18000
C2-Dibenzothiophenes	20000	Perylene	3000
C3-Dibenzothiophenes	14000	Indeno[1,2,3-cd]pyrene	8600
C4-Dibenzothiophenes	5800	Dibenz[a,h]anthracene	2700
Benzo(b)fluorene	9700	Benzo[g,h,i]perylene	9100

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

02/06/06 21:26

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-31 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-02**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	02/01/06	54.1	5.21	16.66	1	AC

Parameter	Result
Carbazole	**780**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

02/06/06 21:26

Quantitation Report (QT Reviewed)

MAL for ww 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28044.D
Acq On : 1 Feb 2006 3:57 am
Operator : AC
Sample : 0601050-02
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 17:16:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	38547m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.62	240	66484m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	88151m	1112.75 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 111.27%		
58) Pyrene-d10	38.69	212	198146m	1216.04 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 121.60%		
81) Benzo[b]fluoranthene-d12	47.55	264	172325	1264.29 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 126.43%		
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	20.19	128	256705m	1480.60 ng/mL	
10) C1-Naphthalenes	22.89	142	390985m	2255.08 ng/mL ✓	
11) C2-Naphthalenes	25.74	156	923236m	5324.94 ng/mL	
12) C3-Naphthalenes	28.08	170	1141052m	6581.24 ng/mL	
13) C4-Naphthalenes	30.84	184	792537m	4571.11 ng/mL	
15) 2-Methylnaphthalene	22.89	142	213947	1938.57 ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	177178	1686.68 ng/mL#	100
22) Biphenyl	24.77	154	47533m	342.13 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	150348m	1581.45 ng/mL	
24) Dibenzofuran	27.87	168	38828m	253.17 ng/mL	
25) Acenaphthylene	26.49	152	246992m	1435.81 ng/mL	
26) Acenaphthene	27.22	153	218628	2073.40 ng/mL	97
27) 2,3,5-Trimethylnaphthalene	28.77	170	85854m	1034.80 ng/mL	
28) Fluorene	29.24	166	178501m	1447.79 ng/mL	
29) C1-Fluorenes	31.62	180	278962m	2262.62 ng/mL	
30) C2-Fluorenes	33.66	194	441420m	3580.29 ng/mL	
31) C3-Fluorenes	35.66	208	363165m	2945.57 ng/mL	
32) Dibenzothiophene	32.59	184	174327m	1057.46 ng/mL	
36) OTP	34.77	198	13673m	82.94 ng/mL	
37) C1-Dibenzothiophenes	34.36	198	448674m	2721.63 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	564218m	3422.51 ng/mL	
39) C3-Dibenzothiophenes	37.85	226	389747m	2364.18 ng/mL	
40) C4-Dibenzothiophenes	39.55	240	161256m	978.17 ng/mL	
41) Phenanthrene	33.08	178	1466973	8338.94 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.16	192	2109856m	11993.38 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	1652487m	9393.49 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.15	220	801139m	4554.04 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.08	234	278028m	1580.44 ng/mL	
52) Retene	40.08	234	42834m	1073.08 ng/mL	
53) Anthracene	33.27	178	587464m	3595.65 ng/mL	
54) Carbazole	33.94	167	20394m	130.97 ng/mL	
55) 1-Methylphenanthrene	35.60	192	338088m	2770.25 ng/mL	
56) Fluoranthene	37.87	202	1173710m	6251.16 ng/mL	
57) Benzo(b)fluorene	40.40	216	190004m	1646.13 ng/mL	
59) Pyrene	38.77	202	1697739	8830.18 ng/mL	97
60) C1-Fluoranthenes/Pyrenes	40.15	216	1859732m	9672.73 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	892840m	4643.79 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	420251m	2185.78 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	174668m	908.47 ng/mL	
64) Naphthobenzothiophene	42.62	234	150489m	844.06 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28044.D
Acq On : 1 Feb 2006 3:57 am
Operator : AC
Sample : 0601050-02
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 17:16:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.62	234	151039m	847.15	ng/mL	
66) Naphthobenzothiophene-1,2-	42.96	234	40694	228.24	ng/mL#	29
67) Naphthobenzothiophene-2,3-	43.26	234	52645m	295.27	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	297180m	1666.82	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	236894m	1328.69	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	140781m	789.61	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	68965m	386.81	ng/mL	
73) Benz[a]anthracene	43.55	228	702283m	3698.94	ng/mL	
74) Chrysene	43.72	228	747232m	3918.51	ng/mL	
75) Chrysene/Triphenylene	43.72	228	752546m	3946.38	ng/mL	
76) C1-Chrysenes	45.19	242	748422m	3924.75	ng/mL	
77) C2-Chrysenes	46.90	256	429319m	2251.36	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	10360	54.33	ng/mL	100
79) C3-Chrysenes	48.55	270	241039m	1264.02	ng/mL	
80) C4-Chrysenes	50.19	284	86197m	452.02	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	370536	1817.16	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	409133	1918.71	ng/mL	100
84) Benzo[a]fluoranthene	48.04	252	167908m	787.44	ng/mL	
85) Benzo[e]pyrene	48.69	252	364973	1856.71	ng/mL	99
86) Benzo[a]pyrene	48.89	252	614645m	3127.61	ng/mL	
87) Perylene	49.21	252	97793	499.15	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.95	276	282710m	1451.41	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	83614m	456.47	ng/mL	
90) Benzo[g,h,i]perylene	55.34	276	312357	1538.01	ng/mL	100

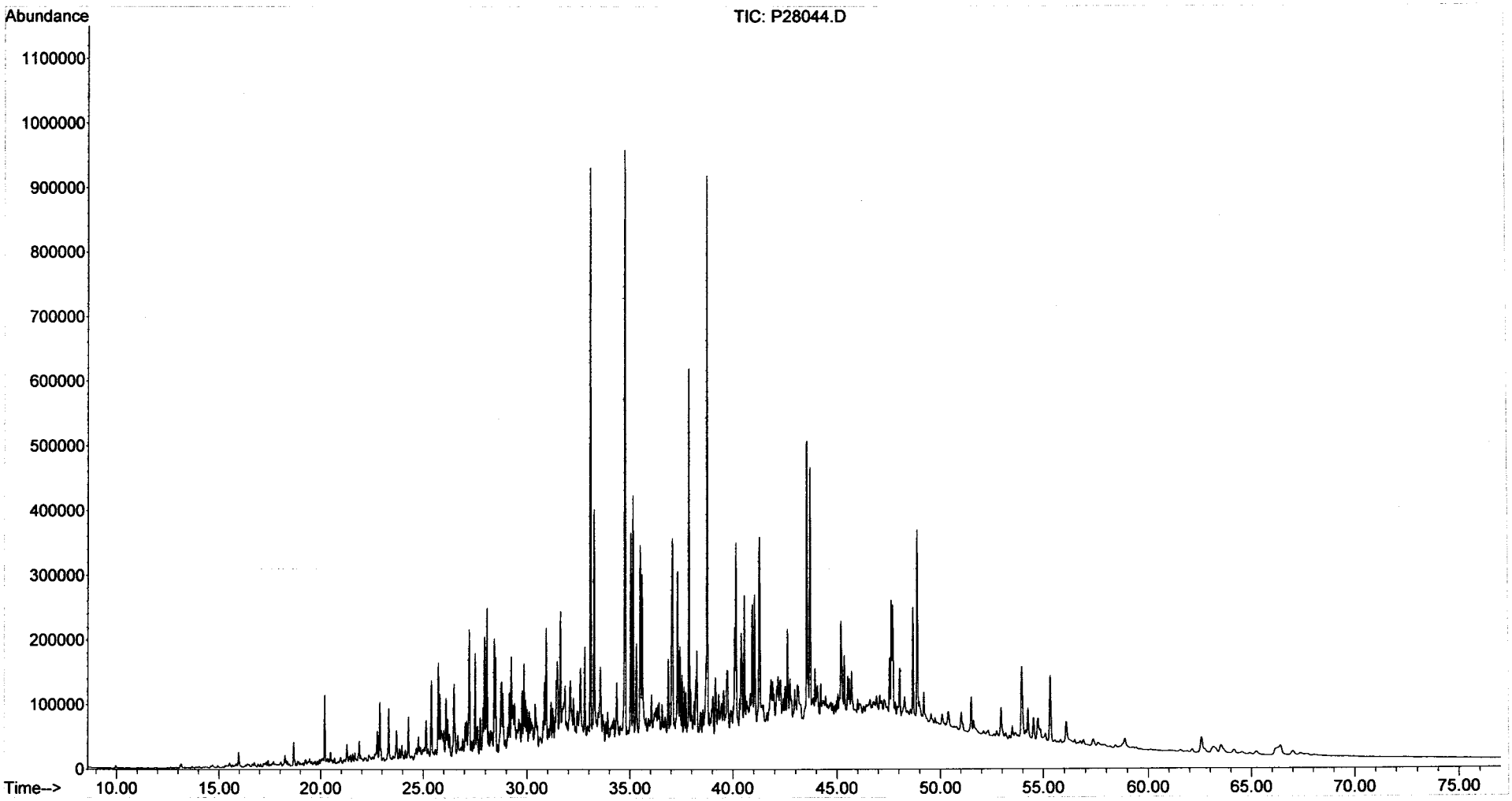
Heptcone 2nd [illegible] 2/8/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28044.D
Acq On : 1 Feb 2006 3:57 am
Operator : AC
Sample : 0601050-02
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 17:16:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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-31 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-02**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/27/06	54.1	5.21	7.15	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1500**	30,31-Bishomohopane-22S	**2600**
C24 Tricyclic Terpane	**920**	30,31-Bishomohopane-22R	**1800**
C25 Tricyclic Terpane	**1000**	30,31-Trishomohopane-22S	**1600**
C24 Tetracyclic Terpane	**970**	30,31-Trishomohopane-22R	**1000**
C26 Tricyclic Terpane-22S	**420**	Tetrakishomohopane-22S	**990**
C26 Tricyclic Terpane-22R	**410**	Tetrakishomohopane-22R	**690**
C28 Tricyclic Terpane-22S	**490**	Pentakishomohopane-22S	**940**
C28 Tricyclic Terpane-22R	**540**	Pentakishomohopane-22R	**680**
C29 Tricyclic Terpane-22S	**610**	13b(H),17a(H)-20S-Diacholestane	**2000**
C29 Tricyclic Terpane-22R	**640**	13b(H),17a(H)-20R-Diacholestane	**1100**
18a-22,29,30-Trisnorneohopane-TS	**2600**	13b,17a-20S-Methyldiacholestane	**910**
C30 Tricyclic Terpane-22S	**520**	14a(H),17a(H)-20S-Cholestane	**1300**
C30 Tricyclic Terpane-22R	**470**	14a(H),17a(H)-20R-Cholestane	**3700**
17a(H)-22,29,30-Trisnorhopane-TM	**2700**	13b,17a-20R-Ethyldiacholestane	**590**
17a/b,21b/a 28,30-Bisnorhopane	**630**	13a,17b-20S-Ethyldiacholestane	**210**
17a(H),21b(H)-25-Norhopane	**270**	14a,17a-20S-Methylcholestane	**660**
30-Norhopane	**8300**	14a,17a-20R-Methylcholestane	**1500**
18a(H)-30-Norneohopane-C29Ts	**2300**	14a(H),17a(H)-20S-Ethylcholestane	**1400**
17a(H)-Diahopane	**490**	14a(H),17a(H)-20R-Ethylcholestane	**1900**
30-Normoretane	**1400**	14b(H),17b(H)-20R-Cholestane	**1900**
18a(H)&18b(H)-Oleananes	**1000**	14b(H),17b(H)-20S-Cholestane	**1900**
Hopane	**12000**	14b,17b-20R-Methylcholestane	**1800**
Moretane	**1500**	14b,17b-20S-Methylcholestane	**2200**
30-Homohopane-22S	**4000**	14b(H),17b(H)-20R-Ethylcholestane	**3400**
30-Homohopane-22R	**3500**	14b(H),17b(H)-20S-Ethylcholestane	**1800**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	101	50-130

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34891.D
Acq On : 27 Jan 2006 8:23 pm
Operator : AC
Sample : 0601050-02
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 13:15:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 2/6/06

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	89379	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	106399	2832.49	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 283.25%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	359093m	4675.23	ng/mL	
84) Hopane (T19)	52.50	191	358891m	4672.60	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	46522m	605.70	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	27724	360.95	ng/ml ✓	100
87) C25 Tricyclic Terpane (T6)	43.16	191	30226m	393.53	ng/ml ✓	
88) C24 Tetracyclic Terpane (T	44.48	191	29351	382.14	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	12640	164.57	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	12330	160.53	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	14955m	194.71	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	16180m	210.66	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	18371	239.18	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	19350m	251.93	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	79315m	1032.64	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	15697m	204.37	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	14096m	183.52	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	81236	1057.66	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	19004m	247.42	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	8232	107.18	ng/ml	100
101) 30-Norhopane (T15)	51.10	191	251477m	3274.12	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	69116m	899.86	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	14891m	193.87	ng/ml	
104) 30-Normoretane (T17)	51.89	191	43116	561.35	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	31003m	403.64	ng/ml	
106) Moretane (T20)	53.20	191	46306m	602.88	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	121202m	1577.99	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	105323m	1371.26	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.90	191	78036m	1015.99	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.30	191	54868m	714.36	ng/ml	
111) 30,31-Trishomohopane-22S (	58.08	191	47081m	612.97	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	30294m	394.41	ng/ml	
113) Tetrakishomohopane-22S (T3	60.77	191	30084	391.68	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	20986	273.23	ng/ml	100
115) Pentakishomohopane-22S (T3	63.98	191	28563m	371.88	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	20524m	267.21	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	28833m	767.57	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	16704m	444.68	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	13402m	356.78	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	18600m	495.16	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	54313m	1445.89	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	8776m	233.63	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34891.D
Acq On : 27 Jan 2006 8:23 pm
Operator : AC
Sample : 0601050-02
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 13:15:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

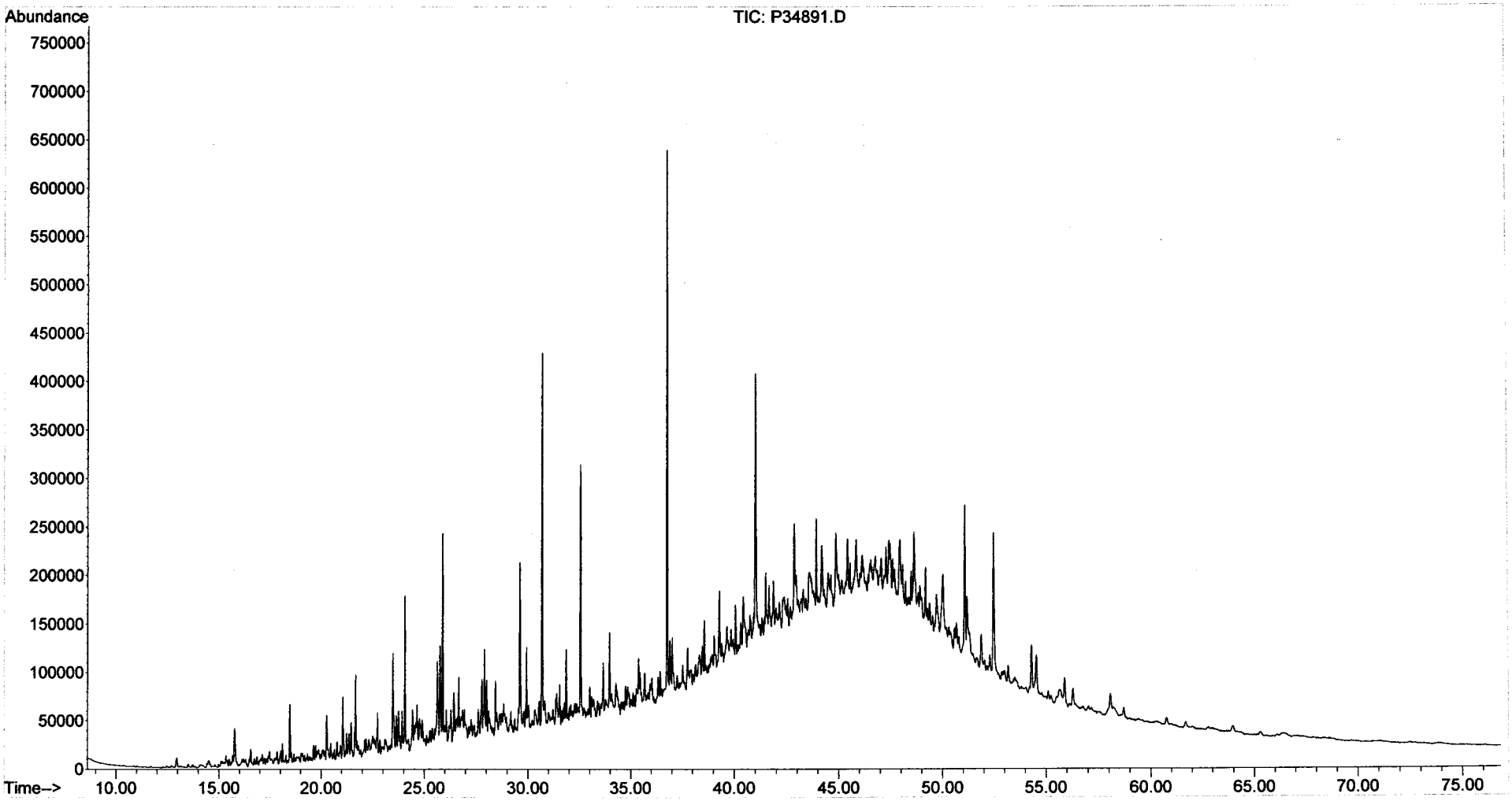
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	3086	82.15 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	9821m	261.45 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	21723m	578.30 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	20519m	546.24 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	28777m	766.08 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	28112m	748.38 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	27952	744.12 ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	25972m	691.41 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	32691m	870.28 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	50155m	1335.20 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	27107m	721.63 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 : P34891.D
Acq On : 27 Jan 2006 8:23 pm
Operator : AC
Sample : 0601050-02
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 13:15:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-36 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-03**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	02/01/06	46.1	5.23	16.24	1	AC

Parameter	Result	Parameter	Result
Naphthalene	14000	Fluoranthene	47000
C1-Naphthalenes	19000	Pyrene	67000
C2-Naphthalenes	35000	C1-Fluoranthenes/Pyrenes	90000
C3-Naphthalenes	39000	C2-Fluoranthenes/Pyrenes	46000
C4-Naphthalenes	26000	C3-Fluoranthenes/Pyrenes	22000
Biphenyl	2400	C4-Fluoranthenes/Pyrenes	8800
Dibenzofuran	1700	Naphthobenzothiophenes	12000
Acenaphthylene	14000	C1-Naphthobenzothiophenes	15000
Acenaphthene	18000	C2-Naphthobenzothiophenes	11000
Fluorene	12000	C3-Naphthobenzothiophenes	6700
C1-Fluorenes	17000	C4-Naphthobenzothiophenes	3200
C2-Fluorenes	26000	Benz[a]anthracene	30000
C3-Fluorenes	20000	Chrysene/Triphenylene	32000
Anthracene	30000	C1-Chrysenes	36000
Phenanthrene	62000	C2-Chrysenes	20000
C1-Phenanthrenes/Anthracenes	97000	C3-Chrysenes	12000
C2-Phenanthrenes/Anthracenes	76000	C4-Chrysenes	4400
C3-Phenanthrenes/Anthracenes	38000	Benzo[b]fluoranthene	13000
C4-Phenanthrenes/Anthracenes	12000	Benzo[k]fluoranthene	15000
Retene	2300	Benzo[a]fluoranthene	6700
Dibenzothiophene	8400	Benzo[e]pyrene	14000
C1-Dibenzothiophenes	21000	Benzo[a]pyrene	24000
C2-Dibenzothiophenes	27000	Perylene	4000
C3-Dibenzothiophenes	18000	Indeno[1,2,3-cd]pyrene	10000
C4-Dibenzothiophenes	7300	Dibenz[a,h]anthracene	3500
Benzo(b)fluorene	14000	Benzo[g,h,i]perylene	11000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	87	50-130
Pyrene-d10	97	50-130
Benzo[b]fluoranthene-d12	101	50-130

N/A - Not Applicable

02/06/06 21:26

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-36 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-03**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	02/01/06	46.1	5.23	16.24	1	AC

Parameter	Result
Carbazole	500

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	87	50-130
Pyrene-d10	97	50-130
Benzo[b]fluoranthene-d12	101	50-130

N/A - Not Applicable

02/06/06 21:27

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28046.D
Acq On : 1 Feb 2006 5:34 am
Operator : AC
Sample : 0601050-03
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 02 11:18:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	38521m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.62	240	67385m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	85036m	1074.16 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 107.42%		
58) Pyrene-d10	38.69	212	194452m	1194.18 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 119.42%		
81) Benzo[b]fluoranthene-d12	47.56	264	171607m	1242.18 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 124.22%		
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	20.19	128	374000m	2158.57 ng/mL	
10) C1-Naphthalenes	22.89	142	487285m	2812.41 ng/mL	
11) C2-Naphthalenes	25.74	156	908592m	5244.02 ng/mL	
12) C3-Naphthalenes	28.08	170	993443m	5733.74 ng/mL	
13) C4-Naphthalenes	30.84	184	681909m	3935.70 ng/mL	
15) 2-Methylnaphthalene	22.89	142	259653	2354.30 ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	229615	2187.34 ng/mL#	100
22) Biphenyl	24.77	154	49903m	359.43 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	142152m	1496.25 ng/mL	
24) Dibenzofuran	27.87	168	39094m	255.08 ng/mL	
25) Acenaphthylene	26.49	152	365348m	2125.27 ng/mL	
26) Acenaphthene	27.22	153	273612	2596.60 ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.77	170	74931m	903.76 ng/mL	
28) Fluorene	29.24	166	212879m	1727.79 ng/mL	
29) C1-Fluorenes	31.48	180	310666m	2521.46 ng/mL	
30) C2-Fluorenes	33.66	194	473628m	3844.11 ng/mL	
31) C3-Fluorenes	35.66	208	362075m	2938.71 ng/mL	
32) Dibenzothiophene	32.59	184	205961m	1250.19 ng/mL	
36) OTP	34.77	198	12534m	76.08 ng/mL	
37) C1-Dibenzothiophenes	34.36	198	525766m	3191.42 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	655908m	3981.38 ng/mL	
39) C3-Dibenzothiophenes	37.85	226	448931m	2725.03 ng/mL	
40) C4-Dibenzothiophenes	39.55	240	178824m	1085.47 ng/mL	
41) Phenanthrene	33.08	178	1606894m	9140.48 ng/mL	
47) C1-Phenanthrenes/Anthracen	35.16	192	2521204m	14341.34 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	1989561m	11317.20 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.16	220	987892m	5619.42 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.37	234	302013m	1717.94 ng/mL	
52) Retene	40.08	234	13601m	340.96 ng/mL	
53) Anthracene	33.27	178	730160m	4472.05 ng/mL	
54) Carbazole	33.94	167	11671m	75.00 ng/mL	
55) 1-Methylphenanthrene	35.60	192	404944m	3320.30 ng/mL	
56) Fluoranthene	37.87	202	1316150m	7014.52 ng/mL	
57) Benzo(b)fluorene	40.40	216	248402m	2153.52 ng/mL	
59) Pyrene	38.77	202	1910839	9945.25 ng/mL	97
60) C1-Fluoranthenes/Pyrenes	40.15	216	2558746m	13317.38 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.63	230	1303815m	6785.90 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	634552m	3302.62 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	250265m	1302.54 ng/mL	
64) Naphthobenzothiophene	42.62	234	193068m	1083.61 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28046.D
Acq On : 1 Feb 2006 5:34 am
Operator : AC
Sample : 0601050-03
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 02 11:18:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

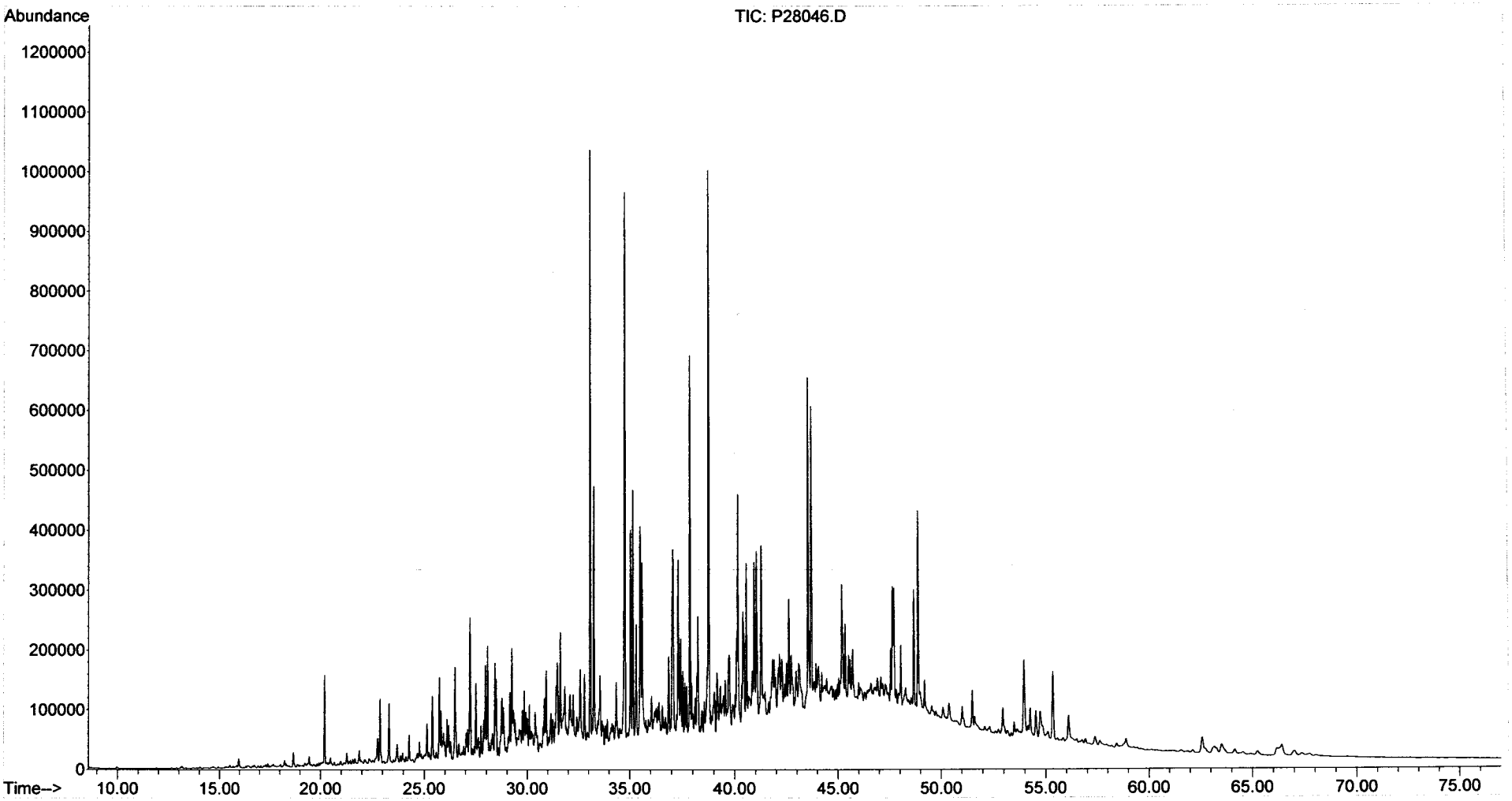
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.62	234	192788m	1082.04	ng/mL	
66) Naphthobenzothiophene-1,2-	42.96	234	53729	301.56	ng/mL#	31
67) Naphthobenzothiophene-2,3-	43.26	234	61988m	347.91	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	393973m	2211.20	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	302603m	1698.38	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	176730m	991.91	ng/ml	
71) C4-Naphthobenzothiophenes	48.77	290	84017m	471.55	ng/mL	
73) Benz[a]anthracene	43.56	228	845980m	4396.21	ng/mL	
74) Chrysene	43.72	228	923031m	4775.69	ng/mL	
75) Chrysene/Triphenylene	43.72	228	917674m	4747.97	ng/mL	
76) C1-Chrysenes	45.19	242	1022307m	5289.33	ng/mL	
77) C2-Chrysenes	46.90	256	589822m	3051.69	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	13711	70.94	ng/mL	100
79) C3-Chrysenes	48.55	270	347302m	1796.91	ng/mL	
80) C4-Chrysenes	50.10	284	125564m	649.66	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	394788	1910.20	ng/mL	99
83) Benzo[k]fluoranthene	47.72	252	482942	2234.57	ng/mL	100
84) Benzo[a]fluoranthene	48.04	252	216331m	1000.96	ng/mL	
85) Benzo[e]pyrene	48.69	252	417644	2096.25	ng/mL	99
86) Benzo[a]pyrene	48.89	252	722085m	3625.19	ng/mL	
87) Perylene	49.21	252	117073m	589.56	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.97	276	308639m	1563.34	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	97135m	523.20	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	348414	1692.61	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28046.D
Acq On : 1 Feb 2006 5:34 am
Operator : AC
Sample : 0601050-03
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 02 11:18:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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-36 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-03**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/27/06	46.1	5.23	7.15	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1900**	30,31-Bishomohopane-22S	**2700**
C24 Tricyclic Terpane	**1100**	30,31-Bishomohopane-22R	**1900**
C25 Tricyclic Terpane	**1200**	30,31-Trishomohopane-22S	**1500**
C24 Tetracyclic Terpane	**1300**	30,31-Trishomohopane-22R	**1000**
C26 Tricyclic Terpane-22S	**510**	Tetrakishomohopane-22S	**990**
C26 Tricyclic Terpane-22R	**500**	Tetrakishomohopane-22R	**660**
C28 Tricyclic Terpane-22S	**630**	Pentakishomohopane-22S	**890**
C28 Tricyclic Terpane-22R	**670**	Pentakishomohopane-22R	**680**
C29 Tricyclic Terpane-22S	**760**	13b(H),17a(H)-20S-Diacholestane	**2300**
C29 Tricyclic Terpane-22R	**750**	13b(H),17a(H)-20R-Diacholestane	**1200**
18a-22,29,30-Trisnorneohopane-TS	**2900**	13b,17a-20S-Methyldiacholestane	**1000**
C30 Tricyclic Terpane-22S	**550**	14a(H),17a(H)-20S-Cholestane	**1100**
C30 Tricyclic Terpane-22R	**530**	14a(H),17a(H)-20R-Cholestane	**4100**
17a(H)-22,29,30-Trisnorhopane-TM	**3000**	13b,17a-20R-Ethyldiacholestane	**660**
17a/b,21b/a 28,30-Bisnorhopane	**630**	13a,17b-20S-Ethyldiacholestane	**240**
17a(H),21b(H)-25-Norhopane	**310**	14a,17a-20S-Methylcholestane	**650**
30-Norhopane	**9300**	14a,17a-20R-Methylcholestane	**1700**
18a(H)-30-Norneohopane-C29Ts	**2400**	14a(H),17a(H)-20S-Ethylcholestane	**1500**
17a(H)-Diahopane	**490**	14a(H),17a(H)-20R-Ethylcholestane	**2100**
30-Normoretane	**1400**	14b(H),17b(H)-20R-Cholestane	**2400**
18a(H)&18b(H)-Oleananes	**970**	14b(H),17b(H)-20S-Cholestane	**2300**
Hopane	**12000**	14b,17b-20R-Methylcholestane	**2000**
Moretane	**1300**	14b,17b-20S-Methylcholestane	**2600**
30-Homohopane-22S	**4200**	14b(H),17b(H)-20R-Ethylcholestane	**3500**
30-Homohopane-22R	**3700**	14b(H),17b(H)-20S-Ethylcholestane	**2600**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	92	50-130

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34892.D
Acq On : 27 Jan 2006 9:54 pm
Operator : AC
Sample : 0601050-03
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 06 13:19:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 2/6/06

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	92563	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	100605	2586.12	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 258.61%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	323128m	4062.27	ng/mL	
84) Hopane (T19)	52.50	191	322113m	4049.51	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	51228m	644.02	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	29426	369.93	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	32982m	414.64	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	34649	435.60	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	13610	171.10	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	13350	167.83	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.61	191	16980m	213.47	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	18047m	226.88	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	20297	255.17	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	20225m	254.26	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	77771	977.71	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	14677m	184.51	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	14327m	180.11	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	79117	994.63	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	16803m	211.24	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	8198m	103.06	ng/ml	
101) 30-Norhopane (T15)	51.11	191	249449m	3136.00	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.21	191	63777m	801.78	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	13144m	165.24	ng/ml	
104) 30-Normoretane (T17)	51.89	191	36988	465.00	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	25953m	326.27	ng/ml	
106) Moretane (T20)	53.20	191	35154m	441.95	ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	112642m	1416.10	ng/ml	
108) 30-Homohopane-22R (T22)	54.56	191	98070	1232.91	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	71982	904.94	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	50434	634.04	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.09	191	41363m	520.00	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	27422m	344.74	ng/ml	
113) Tetrakishomohopane-22S (T3	60.77	191	26571	334.04	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	17576	220.96	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	23892m	300.36	ng/ml	
116) Pentakishomohopane-22R (T3	65.31	191	18105m	227.61	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	29576	760.27	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.86	217	16400m	421.57	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	13560m	348.57	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	13945m	358.47	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	53300m	1370.11	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	8635m	221.97	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34892.D
Acq On : 27 Jan 2006 9:54 pm
Operator : AC
Sample : 0601050-03
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 06 13:19:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

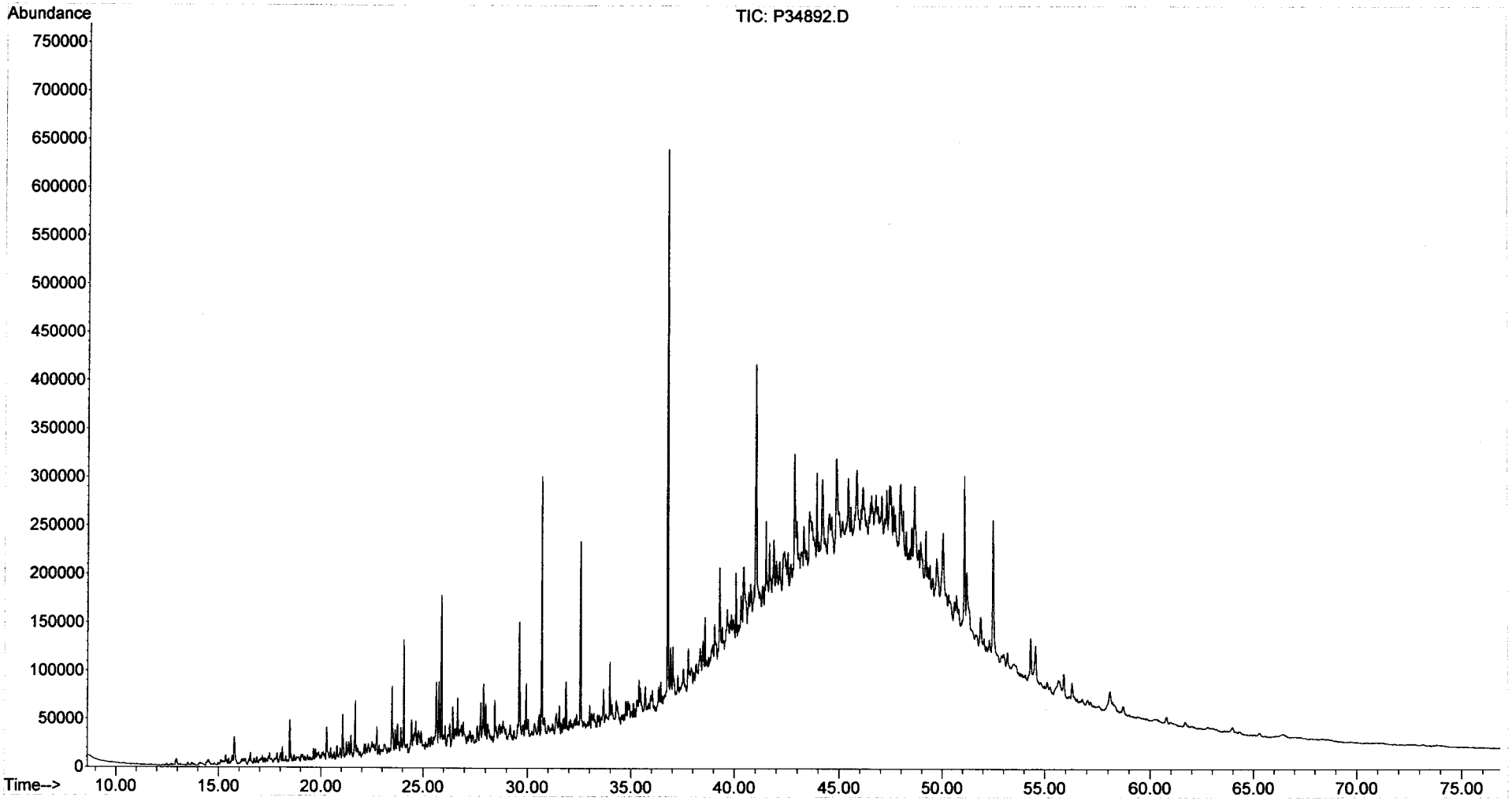
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	3104	79.79	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	8571m	220.32	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	21775m	559.74	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	20240m	520.28	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	27327m	702.46	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	31181m	801.53	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	30517m	784.46	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.85	218	26497m	681.12	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	34316m	882.12	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	46067	1184.18	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	34681m	891.50	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 : P34892.D
Acq On : 27 Jan 2006 9:54 pm
Operator : AC
Sample : 0601050-03
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 06 13:19:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-41 (7.3-8.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-04**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/28/06	87.1	5.37	47.71	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**2100000**	E	Fluoranthene	**220000**
C1-Naphthalenes	**1400000**	E	Pyrene	**350000**
C2-Naphthalenes	**710000**		C1-Fluoranthenes/Pyrenes	**450000**
C3-Naphthalenes	**280000**		C2-Fluoranthenes/Pyrenes	**210000**
C4-Naphthalenes	**88000**		C3-Fluoranthenes/Pyrenes	**86000**
Biphenyl	**100000**		C4-Fluoranthenes/Pyrenes	**33000**
Dibenzofuran	**29000**		Naphthobenzothiophenes	**48000**
Acenaphthylene	**440000**		C1-Naphthobenzothiophenes	**58000**
Acenaphthene	**210000**		C2-Naphthobenzothiophenes	**39000**
Fluorene	**280000**		C3-Naphthobenzothiophenes	**20000**
C1-Fluorenes	**190000**		C4-Naphthobenzothiophenes	**8900**
C2-Fluorenes	**140000**		Benz[a]anthracene	**130000**
C3-Fluorenes	**76000**		Chrysene/Triphenylene	**140000**
Anthracene	**280000**		C1-Chrysenes	**160000**
Phenanthrene	**780000**		C2-Chrysenes	**88000**
C1-Phenanthrenes/Anthracenes	**660000**		C3-Chrysenes	**49000**
C2-Phenanthrenes/Anthracenes	**330000**		C4-Chrysenes	**16000**
C3-Phenanthrenes/Anthracenes	**140000**		Benzo[b]fluoranthene	**42000**
C4-Phenanthrenes/Anthracenes	**38000**		Benzo[k]fluoranthene	**49000**
Retene	150	U	Benzo[a]fluoranthene	**26000**
Dibenzothiophene	**110000**		Benzo[e]pyrene	**45000**
C1-Dibenzothiophenes	**140000**		Benzo[a]pyrene	**87000**
C2-Dibenzothiophenes	**110000**		Perylene	**14000**
C3-Dibenzothiophenes	**62000**		Indeno[1,2,3-cd]pyrene	**28000**
C4-Dibenzothiophenes	**21000**		Dibenz[a,h]anthracene	**8700**
Benzo(b)fluorene	**65000**		Benzo[g,h,i]perylene	**30000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	96	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.

02/07/06 09:14

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-41 (7.3-8.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-04**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/28/06	87.1	5.37	47.71	10	AC

Parameter	Result
Carbazole	**8900**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	96	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)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27982.D
Acq On : 28 Jan 2006 11:07 pm
Operator : AC
Sample : 0601050-04~~-RE~~
Misc : 10X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 02 11:57:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	34486m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.62	240	54723m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	2944m	41.54 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.15%#	
58) Pyrene-d10	38.70	212	6304m	43.24 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.32%#	
81) Benzo[b]fluoranthene-d12	47.56	264	4509m	40.19 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.02%#	
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	20.21	128	3198515m	20620.46 ng/mL E	
10) C1-Naphthalenes	22.91	142	2050338m	13218.30 ng/mL E	
11) C2-Naphthalenes	25.76	156	1085563m	6998.50 ng/mL	
12) C3-Naphthalenes	28.10	170	422576m	2724.30 ng/mL	
13) C4-Naphthalenes	30.86	184	134292m	865.77 ng/mL	
15) 2-Methylnaphthalene	22.91	142	1256440	12725.20 ng/mL# E	100
16) 1-Methylnaphthalene	23.33	142	789671	8402.66 ng/mL#	100
22) Biphenyl	24.80	154	124049m	998.01 ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	162858m	1914.77 ng/mL	
24) Dibenzofuran	27.89	168	39406	287.20 ng/mL	99
25) Acenaphthylene	26.52	152	662874m	4307.18 ng/mL	
26) Acenaphthene	27.25	153	198111	2100.07 ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.80	170	42842m	577.18 ng/mL	
28) Fluorene	29.27	166	306667m	2780.23 ng/mL	
29) C1-Fluorenes	31.50	180	207546m	1881.60 ng/mL	
30) C2-Fluorenes	33.69	194	151124m	1370.08 ng/mL	
31) C3-Fluorenes	35.67	208	81909m	742.58 ng/mL	
32) Dibenzothiophene	32.60	184	155893	1056.99 ng/mL#	86
37) C1-Dibenzothiophenes	34.38	198	197991m	1342.43 ng/mL	
38) C2-Dibenzothiophenes	36.07	212	160874m	1090.77 ng/mL	
39) C3-Dibenzothiophenes	37.87	226	89663m	607.94 ng/mL	
40) C4-Dibenzothiophenes	39.56	240	30344m	205.74 ng/mL	
41) Phenanthrene	33.11	178	1211947	7700.52 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.17	192	1012436m	6432.86 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	546328m	3471.28 ng/mL	
49) 5AA IS BKGD	37.11	206	30878m	196.19 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	223417m	1419.56 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.38	234	59188m	376.07 ng/mL	
53) Anthracene	33.28	178	407140m	2785.40 ng/mL	
54) Carbazole	33.96	167	12143m	87.17 ng/mL	
55) 1-Methylphenanthrene	35.61	192	163647m	1498.81 ng/mL	
56) Fluoranthene	37.89	202	366484	2181.74 ng/mL	100
57) Benzo(b)fluorene	40.41	216	65426m	633.58 ng/mL	
59) Pyrene	38.78	202	592005	3441.69 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.17	216	764267m	4443.16 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.63	230	359454m	2089.73 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.10	244	145466m	845.68 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	55864m	324.77 ng/mL	
64) Naphthobenzothiophene	42.63	234	46575m	291.99 ng/ml	
65) Naphthobenzothiophene-2,1-	42.63	234	46672m	292.60 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27982.D
Acq On : 28 Jan 2006 11:07 pm
Operator : AC
Sample : 0601050-04-RE
Misc : 10X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 02 11:57:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

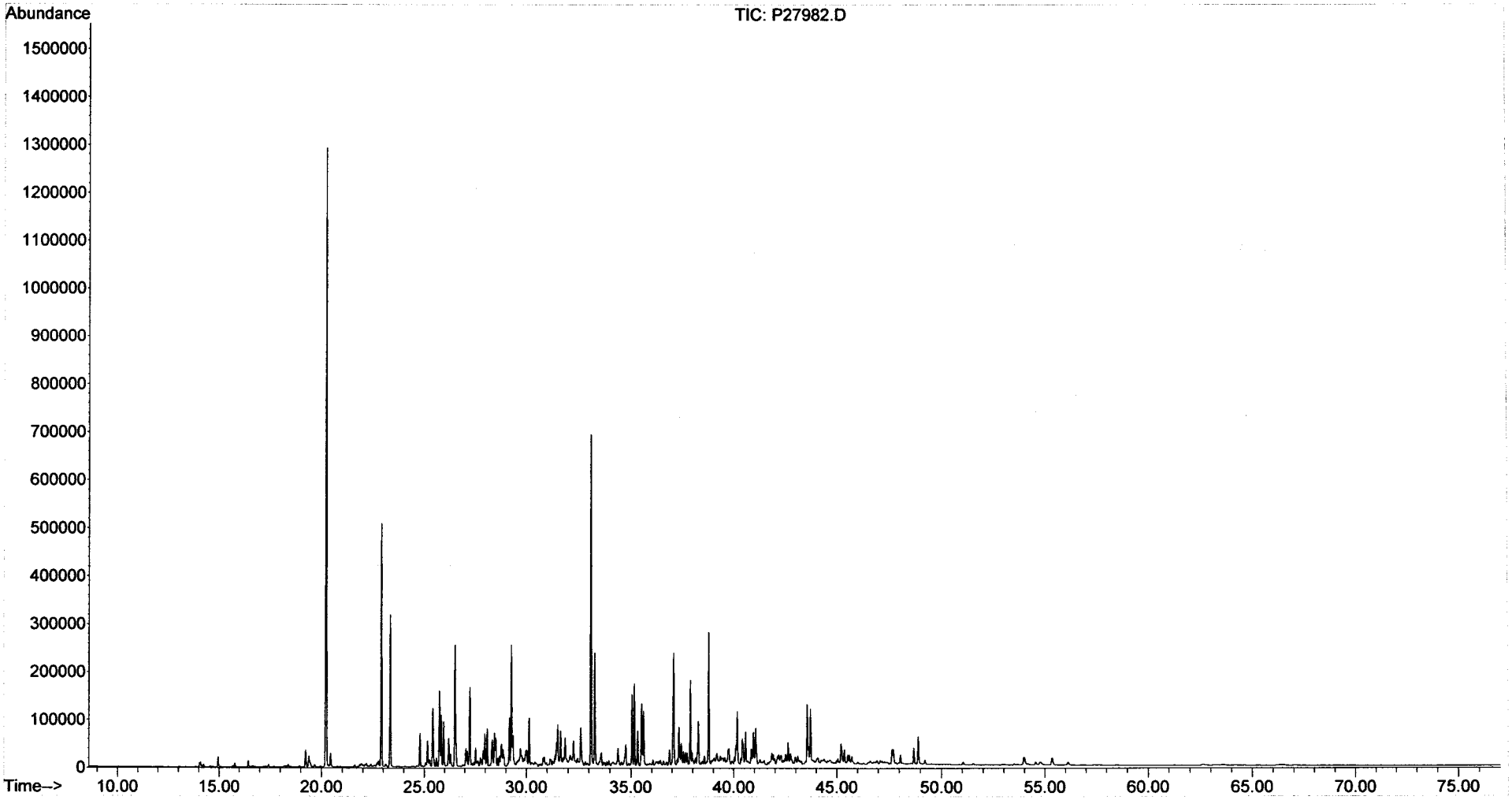
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.98	234	13552m	84.96	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	14364m	90.05	ng/mL	
68) C1-Naphthobenzothiophenes	44.03	248	90814m	569.34	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	60534m	379.50	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	31057m	194.70	ng/ml	
71) C4-Naphthobenzothiophenes	48.79	290	13910m	87.21	ng/mL	
73) Benz[a]anthracene	43.56	228	201233m	1287.69	ng/mL	
74) Chrysene	43.72	228	216907m	1381.93	ng/mL	
75) Chrysene/Triphenylene	43.72	228	218107m	1389.58	ng/mL	
76) C1-Chrysenes	45.21	242	244479m	1557.59	ng/mL	
77) C2-Chrysenes	46.92	256	137975m	879.05	ng/mL	
78) BBF-d12 Surr BKGD	47.54	256	2049	13.05	ng/mL	100
79) C3-Chrysenes	48.55	270	75347m	480.04	ng/mL	
80) C4-Chrysenes	50.10	284	24321m	154.95	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	68742	409.57	ng/mL	94
83) Benzo[k]fluoranthene	47.72	252	84693	482.55	ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	44465m	253.34	ng/mL	
85) Benzo[e]pyrene	48.69	252	71538	442.15	ng/mL	99
86) Benzo[a]pyrene	48.90	252	137502m	850.05	ng/mL	
87) Perylene	49.22	252	22095m	137.01	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.98	276	43606m	271.98	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	12868m	85.35	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	48998m	293.11	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27982.D
Acq On : 28 Jan 2006 11:07 pm
Operator : AC
Sample : 0601050-04-RE
Misc : 10X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 02 11:57:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-41 (7.3-8.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-04E**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/31/06	87.1	5.37	47.71	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**2300000**		Fluoranthene	1000	U
C1-Naphthalenes	**1400000**		Pyrene	910	U
C2-Naphthalenes	1700	U	C1-Fluoranthenes/Pyrenes	910	U
C3-Naphthalenes	1700	U	C2-Fluoranthenes/Pyrenes	910	U
C4-Naphthalenes	1700	U	C3-Fluoranthenes/Pyrenes	910	U
Biphenyl	930	U	C4-Fluoranthenes/Pyrenes	910	U
Dibenzofuran	1200	U	Naphthobenzothiophenes	1200	U
Acenaphthylene	1800	U	C1-Naphthobenzothiophenes	1200	U
Acenaphthene	1200	U	C2-Naphthobenzothiophenes	1200	U
Fluorene	1200	U	C3-Naphthobenzothiophenes	1200	U
C1-Fluorenes	1200	U	C4-Naphthobenzothiophenes	1200	U
C2-Fluorenes	1200	U	Benz[a]anthracene	1600	U
C3-Fluorenes	1200	U	Chrysene/Triphenylene	1100	U
Anthracene	1400	U	C1-Chrysenes	1100	U
Phenanthrene	1500	U	C2-Chrysenes	1100	U
C1-Phenanthrenes/Anthracenes	1500	U	C3-Chrysenes	1100	U
C2-Phenanthrenes/Anthracenes	1500	U	C4-Chrysenes	1100	U
C3-Phenanthrenes/Anthracenes	1500	U	Benzo[b]fluoranthene	1100	U
C4-Phenanthrenes/Anthracenes	1500	U	Benzo[k]fluoranthene	2100	U
Retene	1500	U	Benzo[a]fluoranthene	2100	U
Dibenzothiophene	1100	U	Benzo[e]pyrene	1400	U
C1-Dibenzothiophenes	1100	U	Benzo[a]pyrene	1400	U
C2-Dibenzothiophenes	1100	U	Perylene	1800	U
C3-Dibenzothiophenes	1100	U	Indeno[1,2,3-cd]pyrene	2400	U
C4-Dibenzothiophenes	1100	U	Dibenz[a,h]anthracene	1900	U
Benzo(b)fluorene	1000	U	Benzo[g,h,i]perylene	1800	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	76	50-130

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

02/07/06 09:16

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28026.D
Acq On : 31 Jan 2006 9:06 am
Operator : AC
Sample : 0601050-04-RE~~2~~
Misc : 100X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 02 12:02:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

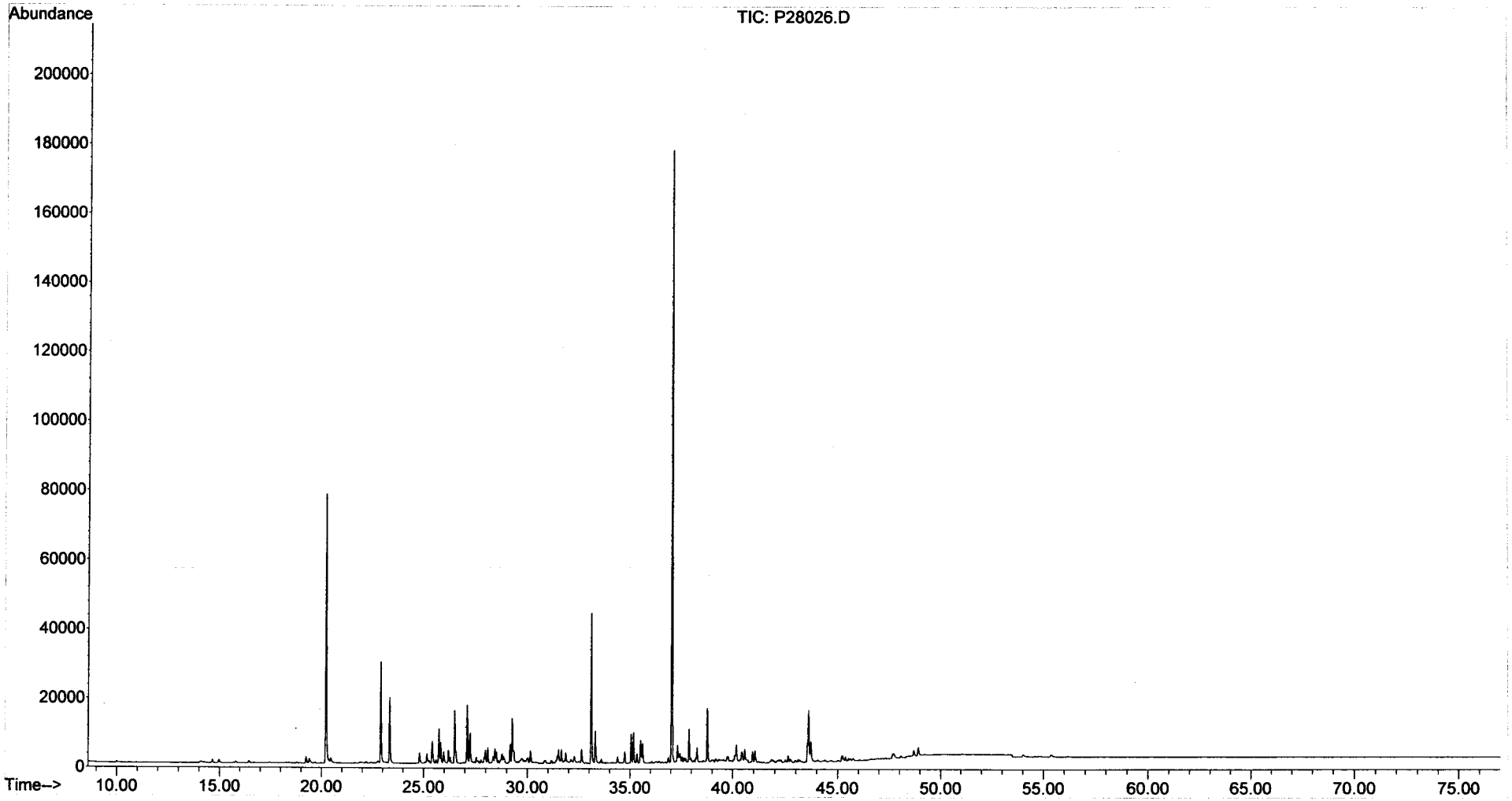
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	21342m	500.00	ng/mL	0.01
72) Chrysene-d12	43.62	240	32684m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	161m	3.67	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.37%#	
58) Pyrene-d10	38.70	212	394m	4.37	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.44%#	
81) Benzo[b]fluoranthene-d12	47.59	264	213m	3.18	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.32%#	
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	20.20	128	216043m	2250.60	ng/mL	
10) C1-Naphthalenes	22.90	142	132791m	1383.33	ng/mL	
15) 2-Methylnaphthalene	22.90	142	79227	1296.59	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28026.D
Acq On : 31 Jan 2006 9:06 am
Operator : AC
Sample : 0601050-04-RE2
Misc : 100X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 02 12:02:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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-41 (7.3-8.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-04**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/27/06	87.1	5.37	5.25	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	200	30,31-Bishomohopane-22S	350
C24 Tricyclic Terpane	130	30,31-Bishomohopane-22R	230
C25 Tricyclic Terpane	130	30,31-Trishomohopane-22S	150
C24 Tetracyclic Terpane	230	30,31-Trishomohopane-22R	96
C26 Tricyclic Terpane-22S	54	Tetrakishomohopane-22S	92
C26 Tricyclic Terpane-22R	52	Tetrakishomohopane-22R	64
C28 Tricyclic Terpane-22S	58	Pentakishomohopane-22S	49
C28 Tricyclic Terpane-22R	64	Pentakishomohopane-22R	44
C29 Tricyclic Terpane-22S	68	13b(H),17a(H)-20S-Diacholestane	280
C29 Tricyclic Terpane-22R	66	13b(H),17a(H)-20R-Diacholestane	160
18a-22,29,30-Trisnorneohopane-TS	830	13b,17a-20S-Methyldiacholestane	130
C30 Tricyclic Terpane-22S	60	14a(H),17a(H)-20S-Cholestane	170
C30 Tricyclic Terpane-22R	25	14a(H),17a(H)-20R-Cholestane	400
17a(H)-22,29,30-Trisnorhopane-TM	470	13b,17a-20R-Ethyldiacholestane	64
17a/b,21b/a 28,30-Bisnorhopane	110	13a,17b-20S-Ethyldiacholestane	21
17a(H),21b(H)-25-Norhopane	47	14a,17a-20S-Methylcholestane	140
30-Norhopane	1400	14a,17a-20R-Methylcholestane	200
18a(H)-30-Norneohopane-C29Ts	830	14a(H),17a(H)-20S-Ethylcholestane	110
17a(H)-Diahopane	190	14a(H),17a(H)-20R-Ethylcholestane	170
30-Normoretane	290	14b(H),17b(H)-20R-Cholestane	190
18a(H)&18b(H)-Oleananes	360	14b(H),17b(H)-20S-Cholestane	190
Hopane	2400	14b,17b-20R-Methylcholestane	190
Moretane	320	14b,17b-20S-Methylcholestane	200
30-Homohopane-22S	540	14b(H),17b(H)-20R-Ethylcholestane	260
30-Homohopane-22R	460	14b(H),17b(H)-20S-Ethylcholestane	150

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

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34893.D
Acq On : 27 Jan 2006 11:25 pm
Operator : AC
Sample : 0601050-04
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 06 13:26:31 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 2/6/06

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	93836	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	144093	3653.76	ng/ml	0.00
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	365.38%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	174956m	2169.65	ng/mL	
84) Hopane (T19)	52.48	191	174982m	2169.98	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	14414m	178.75	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	9356m	116.03	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.15	191	9414m	116.74	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	16749	207.71	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.20	191	3870	47.99	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	3752	46.53	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.59	191	4185m	51.90	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	4591m	56.93	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	4922	61.04	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	4758m	59.00	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	59647	739.69	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.71	191	4286m	53.15	ng/mL	
97) C30 Tricyclic Terpane-22R	48.96	191	1822m	22.59	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	33792m	419.06	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	7616m	94.45	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	3348	41.52	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	101047m	1253.10	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	59561m	738.62	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	13897m	172.34	ng/ml	
104) 30-Normoretane (T17)	51.87	191	20571	255.10	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	26169m	324.53	ng/ml	
106) Moretane (T20)	53.17	191	22852m	283.39	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	38887m	482.24	ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	32961	408.75	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	24885	308.60	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.26	191	16639	206.34	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	10862m	134.70	ng/ml	
112) 30,31-Trishomohopane-22R (	58.68	191	6924m	85.87	ng/ml	
113) Tetrakishomohopane-22S (T3	60.75	191	6604m	81.90	ng/ml	
114) Tetrakishomohopane-22R (T3	61.66	191	4578	56.77	ng/ml	100
115) Pentakishomohopane-22S (T3	63.96	191	3489m	43.27	ng/ml	
116) Pentakishomohopane-22R (T3	65.28	191	3155m	39.13	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	9651	244.72	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	5792m	146.87	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	4439m	112.56	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.41	217	5884m	149.20	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	14205m	360.20	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	2241m	56.82	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34893.D
Acq On : 27 Jan 2006 11:25 pm
Operator : AC
Sample : 0601050-04
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 06 13:26:31 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

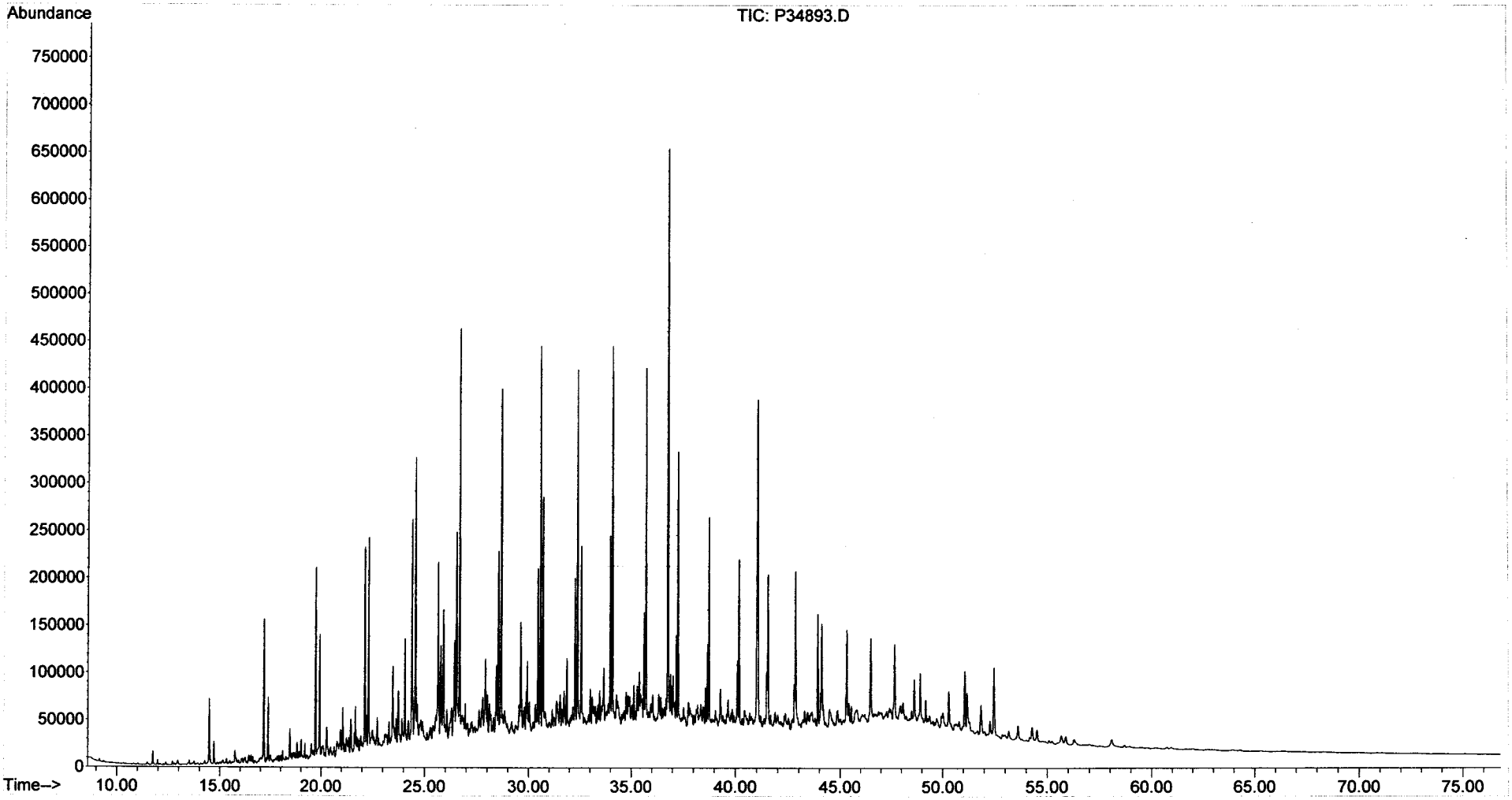
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	741	18.79	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.63	217	4948m	125.47	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.38	217	6839m	173.42	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	4023m	102.01	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	6131m	155.46	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	6727m	170.58	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	6591m	167.13	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	6676m	169.28	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.90	218	7043m	178.59	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	9029m	228.95	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.02	218	5338m	135.36	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 : P34893.D
Acq On : 27 Jan 2006 11:25 pm
Operator : AC
Sample : 0601050-04
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 06 13:26:31 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-40 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-05**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	02/01/06	59.4	5.32	55.42	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	1200000	E	Fluoranthene	210000	E
C1-Naphthalenes	670000	E	Pyrene	310000	E
C2-Naphthalenes	470000		C1-Fluoranthenes/Pyrenes	360000	
C3-Naphthalenes	220000		C2-Fluoranthenes/Pyrenes	160000	
C4-Naphthalenes	100000		C3-Fluoranthenes/Pyrenes	69000	
Biphenyl	70000		C4-Fluoranthenes/Pyrenes	27000	
Dibenzofuran	25000		Naphthobenzothiophenes	44000	
Acenaphthylene	96000		C1-Naphthobenzothiophenes	53000	
Acenaphthene	360000	E	C2-Naphthobenzothiophenes	37000	
Fluorene	170000		C3-Naphthobenzothiophenes	19000	
C1-Fluorenes	120000		C4-Naphthobenzothiophenes	9600	
C2-Fluorenes	110000		Benz[a]anthracene	120000	
C3-Fluorenes	66000		Chrysene/Triphenylene	120000	
Anthracene	220000	E	C1-Chrysenes	130000	
Phenanthrene	540000	E	C2-Chrysenes	67000	
C1-Phenanthrenes/Anthracenes	500000		C3-Chrysenes	37000	
C2-Phenanthrenes/Anthracenes	290000		C4-Chrysenes	14000	
C3-Phenanthrenes/Anthracenes	130000		Benzo[b]fluoranthene	48000	
C4-Phenanthrenes/Anthracenes	33000		Benzo[k]fluoranthene	54000	
Retene	6400		Benzo[a]fluoranthene	25000	
Dibenzothiophene	79000		Benzo[e]pyrene	50000	
C1-Dibenzothiophenes	110000		Benzo[a]pyrene	93000	
C2-Dibenzothiophenes	110000		Perylene	16000	
C3-Dibenzothiophenes	62000		Indeno[1,2,3-cd]pyrene	39000	
C4-Dibenzothiophenes	22000		Dibenz[a,h]anthracene	12000	
Benzo(b)fluorene	58000		Benzo[g,h,i]perylene	39000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/06/06 21:27

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-40 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-05**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	02/01/06	59.4	5.32	55.42	1	AC

Parameter	Result
Carbazole	6800

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/06/06 21:27

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28048.D
Acq On : 1 Feb 2006 7:12 am
Operator : AC
Sample : 0601050-05
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 02 11:26:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	38058m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.62	240	66430m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	26905	343.99 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 34.40%#		
58) Pyrene-d10	38.69	212	60872m	378.38 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 37.84%#		
81) Benzo[b]fluoranthene-d12	47.55	264	51116	375.32 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 37.53%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	20.21	128	12118090	70791.50 ng/mL#E	100
10) C1-Naphthalenes	23.32	142	6507657m	38016.45 ng/mL E	
11) C2-Naphthalenes	25.74	156	4571625m	26706.53 ng/mL	
12) C3-Naphthalenes	28.08	170	2171199m	12683.72 ng/mL	
13) C4-Naphthalenes	30.84	184	1023574m	5979.52 ng/mL	
15) 2-Methylnaphthalene	22.90	142	3214788	29503.40 ng/mL#E	100
16) 1-Methylnaphthalene	23.32	142	3283610	31660.60 ng/mL#E	100
22) Biphenyl	24.77	154	547579m	3991.94 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	596403m	6353.95 ng/mL	
24) Dibenzofuran	27.87	168	216966m	1432.88 ng/mL	
25) Acenaphthylene	26.49	152	931642m	5485.39 ng/mL	
26) Acenaphthene	27.24	153	2166517	20810.55 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	178207m	2175.54 ng/mL	
28) Fluorene	29.25	166	1187165m	9752.62 ng/mL	
29) C1-Fluorenes	31.48	180	810734m	6660.22 ng/mL	
30) C2-Fluorenes	33.66	194	781305m	6418.46 ng/mL	
31) C3-Fluorenes	35.66	208	457948m	3762.07 ng/mL	
32) Dibenzothiophene	32.59	184	730414m	4487.57 ng/mL	
37) C1-Dibenzothiophenes	34.36	198	1033777m	6351.40 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	990863m	6087.74 ng/mL	
39) C3-Dibenzothiophenes	37.86	226	576410m	3541.39 ng/mL	
40) C4-Dibenzothiophenes	39.55	240	206015m	1265.73 ng/mL	
41) Phenanthrene	33.11	178	5400500	31093.34 ng/mL E	97
47) C1-Phenanthrenes/Anthracen	35.16	192	4939678m	28440.16 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	2896067m	16674.09 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.16	220	1256337m	7233.35 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.37	234	325004m	1871.21 ng/mL	
52) Retene	40.08	234	14443m	366.48 ng/mL	
53) Anthracene	33.28	178	2057018m	12752.00 ng/mL E	
54) Carbazole	33.94	167	60000m	390.27 ng/mL	
55) 1-Methylphenanthrene	35.61	192	808790	6712.28 ng/mL	100
56) Fluoranthene	37.89	202	2208380m	11912.92 ng/mL E	
57) Benzo(b)fluorene	40.40	216	379384m	3329.08 ng/mL	
59) Pyrene	38.78	202	3324974	17515.86 ng/mL E	96
60) C1-Fluoranthenes/Pyrenes	40.15	216	3881264m	20446.38 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	1741606m	9174.73 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	751133m	3956.95 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.33	258	288246m	1518.47 ng/mL	
64) Naphthobenzothiophene	42.62	234	281176m	1597.32 ng/ml	
65) Naphthobenzothiophene-2,1-	42.62	234	280678m	1594.49 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28048.D
Acq On : 1 Feb 2006 7:12 am
Operator : AC
Sample : 0601050-05
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 02 11:26:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

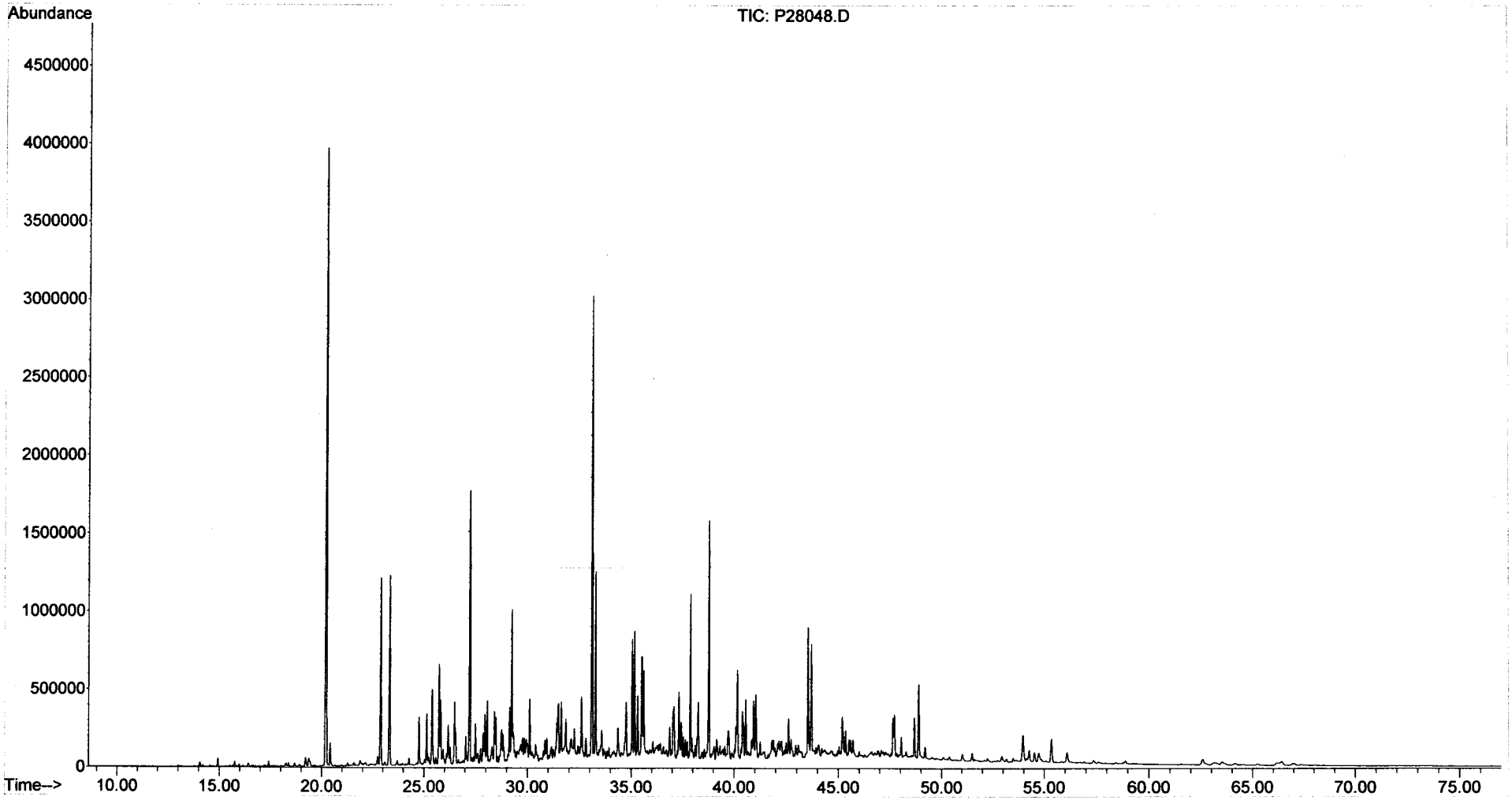
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.96	234	79766	453.14	ng/mL#	28
67) Naphthobenzothiophene-2,3-	43.26	234	80277m	456.04	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	531320m	3018.35	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	368928m	2095.82	ng/ml	
70) C3-Naphthobenzothiophenes	47.65	276	192474m	1093.42	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	96102m	545.94	ng/mL	
73) Benz[a]anthracene	43.56	228	1274116m	6716.25	ng/mL	
74) Chrysene	43.72	228	1340137m	7033.44	ng/mL	
75) Chrysene/Triphenylene	43.72	228	1346237m	7065.45	ng/mL	
76) C1-Chrysenes	45.19	242	1419528m	7450.10	ng/mL	
77) C2-Chrysenes	46.89	256	740688m	3887.35	ng/mL	
78) BBF-d12 Surr BKGD	47.52	256	12507m	65.64	ng/mL	
79) C3-Chrysenes	48.55	270	401549m	2107.45	ng/mL	
80) C4-Chrysenes	50.09	284	148671m	780.27	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	559668	2746.91	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	656270	3080.21	ng/mL	99
84) Benzo[a]fluoranthene	48.04	252	300948m	1412.50	ng/mL	
85) Benzo[e]pyrene	48.69	252	558309	2842.56	ng/mL	98
86) Benzo[a]pyrene	48.89	252	1041818m	5305.59	ng/mL	
87) Perylene	49.20	252	175757m	897.81	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.95	276	429238m	2205.46	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	126437m	690.82	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	451289	2223.90	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28048.D
Acq On : 1 Feb 2006 7:12 am
Operator : AC
Sample : 0601050-05
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 02 11:26:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-40 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-05E**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/29/06	59.4	5.32	55.42	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1300000**		Fluoranthene	**210000**	
C1-Naphthalenes	**660000**		Pyrene	**310000**	
C2-Naphthalenes	290	U	C1-Fluoranthenes/Pyrenes	160	U
C3-Naphthalenes	290	U	C2-Fluoranthenes/Pyrenes	160	U
C4-Naphthalenes	290	U	C3-Fluoranthenes/Pyrenes	160	U
Biphenyl	160	U	C4-Fluoranthenes/Pyrenes	160	U
Dibenzofuran	210	U	Naphthobenzothiophenes	210	U
Acenaphthylene	320	U	C1-Naphthobenzothiophenes	210	U
Acenaphthene	**350000**		C2-Naphthobenzothiophenes	210	U
Fluorene	200	U	C3-Naphthobenzothiophenes	210	U
C1-Fluorenes	200	U	C4-Naphthobenzothiophenes	210	U
C2-Fluorenes	200	U	Benz[a]anthracene	280	U
C3-Fluorenes	200	U	Chrysene/Triphenylene	190	U
Anthracene	**220000**		C1-Chrysenes	190	U
Phenanthrene	**540000**		C2-Chrysenes	190	U
C1-Phenanthrenes/Anthracenes	250	U	C3-Chrysenes	190	U
C2-Phenanthrenes/Anthracenes	250	U	C4-Chrysenes	190	U
C3-Phenanthrenes/Anthracenes	250	U	Benzo[b]fluoranthene	190	U
C4-Phenanthrenes/Anthracenes	250	U	Benzo[k]fluoranthene	360	U
Retene	250	U	Benzo[a]fluoranthene	360	U
Dibenzothiophene	200	U	Benzo[e]pyrene	240	U
C1-Dibenzothiophenes	200	U	Benzo[a]pyrene	240	U
C2-Dibenzothiophenes	200	U	Perylene	300	U
C3-Dibenzothiophenes	200	U	Indeno[1,2,3-cd]pyrene	420	U
C4-Dibenzothiophenes	200	U	Dibenz[a,h]anthracene	330	U
Benzo(b)fluorene	180	U	Benzo[g,h,i]perylene	310	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	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.

02/06/06 21:22

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27984.D
Acq On : 29 Jan 2006 12:41 am
Operator : AC
Sample : 0601050-05-RE
Misc : 10X
ALS Vial : 33 Sample Multiplier: 1

MAL for WW 2/6/6

Quant Time: Feb 02 12:00:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	35181m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	54587m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	2207	30.53	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.05%#			
58) Pyrene-d10	38.70	212	5165m	34.73	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.47%#			
81) Benzo[b]fluoranthene-d12	47.57	264	3637m	32.50	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.25%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

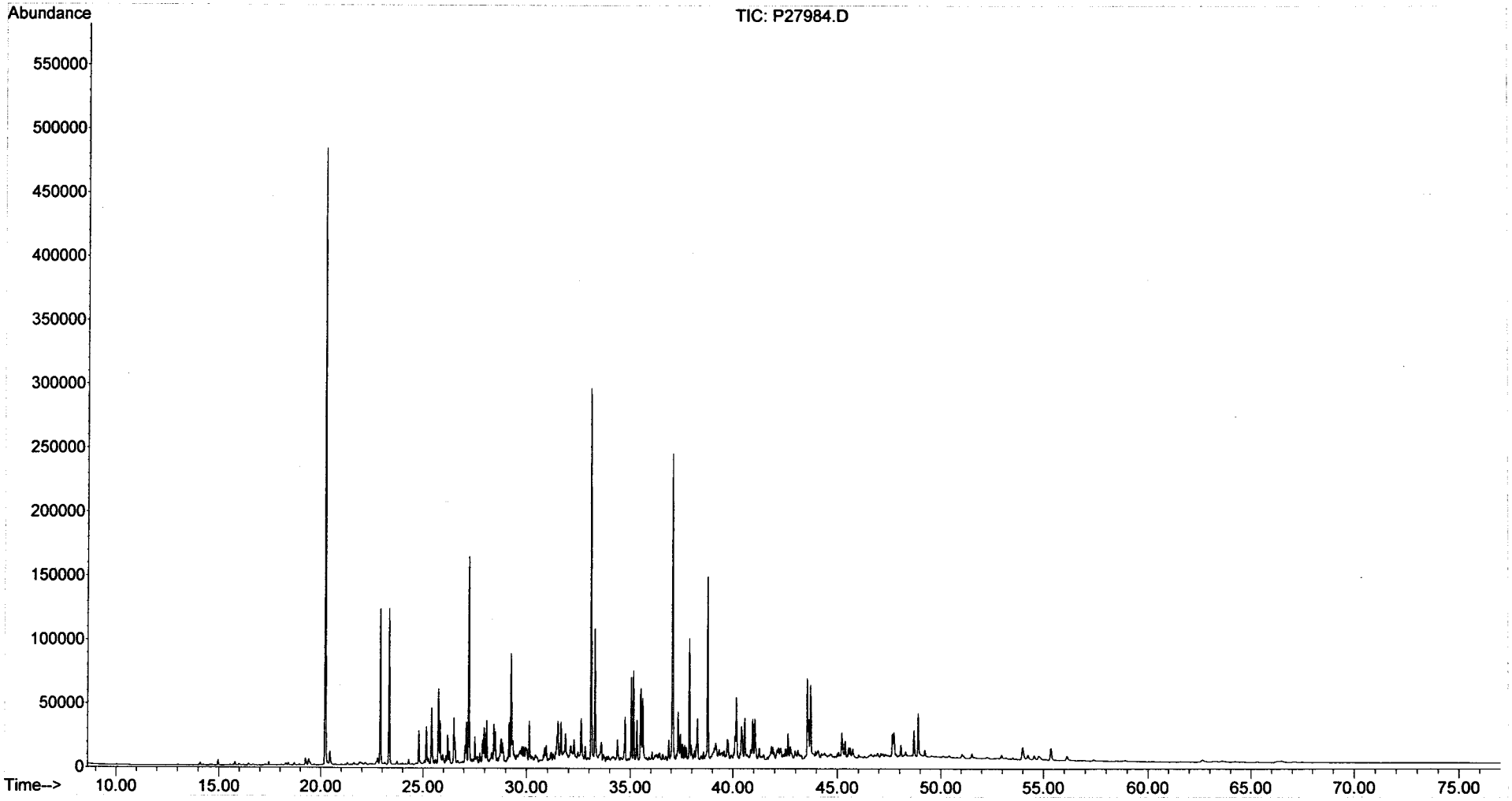
Target Compounds						Qvalue
9) Naphthalene	20.21	128	1173781m	7417.74	ng/mL	
10) C1-Naphthalenes	22.91	142	591571m	3738.45	ng/mL	
15) 2-Methylnaphthalene	22.91	142	290628	2885.33	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	298630	3114.86	ng/mL#	100
26) Acenaphthene	27.25	153	192055m	1995.65	ng/mL	
41) Phenanthrene	33.09	178	499534	3111.26	ng/mL	100
53) Anthracene	33.28	178	183823m	1232.76	ng/mL	
56) Fluoranthene	37.89	202	200914m	1172.44	ng/mL	
59) Pyrene	38.78	202	308584	1758.55	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27984.D
Acq On : 29 Jan 2006 12:41 am
Operator : AC
Sample : 0601050-05-RE
Misc : 10X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 02 12:00:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-40 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-05**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/28/06	59.4	5.32	19.08	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2800**	30,31-Bishomohopane-22S	**5300**
C24 Tricyclic Terpane	**1700**	30,31-Bishomohopane-22R	**3800**
C25 Tricyclic Terpane	**1800**	30,31-Trishomohopane-22S	**3200**
C24 Tetracyclic Terpane	**1800**	30,31-Trishomohopane-22R	**2100**
C26 Tricyclic Terpane-22S	**800**	Tetrakishomohopane-22S	**2000**
C26 Tricyclic Terpane-22R	**810**	Tetrakishomohopane-22R	**1400**
C28 Tricyclic Terpane-22S	**1000**	Pentakishomohopane-22S	**1700**
C28 Tricyclic Terpane-22R	**1100**	Pentakishomohopane-22R	**1500**
C29 Tricyclic Terpane-22S	**1200**	13b(H),17a(H)-20S-Diacholestane	**3900**
C29 Tricyclic Terpane-22R	**1300**	13b(H),17a(H)-20R-Diacholestane	**2200**
18a-22,29,30-Trisnorneohopane-TS	**5000**	13b,17a-20S-Methyldiacholestane	**1900**
C30 Tricyclic Terpane-22S	**1000**	14a(H),17a(H)-20S-Cholestane	**2400**
C30 Tricyclic Terpane-22R	**960**	14a(H),17a(H)-20R-Cholestane	**7500**
17a(H)-22,29,30-Trisnorhopane-TM	**5800**	13b,17a-20R-Ethyldiacholestane	**1200**
17a/b,21b/a 28,30-Bisnorhopane	**1400**	13a,17b-20S-Ethyldiacholestane	**350**
17a(H),21b(H)-25-Norhopane	**660**	14a,17a-20S-Methylcholestane	**1300**
30-Norhopane	**17000**	14a,17a-20R-Methylcholestane	**3400**
18a(H)-30-Norneohopane-C29Ts	**5000**	14a(H),17a(H)-20S-Ethylcholestane	**2700**
17a(H)-Diahopane	**1200**	14a(H),17a(H)-20R-Ethylcholestane	**3900**
30-Normoretane	**3400**	14b(H),17b(H)-20R-Cholestane	**3600**
18a(H)&18b(H)-Oleananes	**3200**	14b(H),17b(H)-20S-Cholestane	**3600**
Hopane	**27000**	14b,17b-20R-Methylcholestane	**3400**
Moretane	**3900**	14b,17b-20S-Methylcholestane	**4400**
30-Homohopane-22S	**8000**	14b(H),17b(H)-20R-Ethylcholestane	**6000**
30-Homohopane-22R	**7100**	14b(H),17b(H)-20S-Ethylcholestane	**3400**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	105	50-130

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34894.D
Acq On : 28 Jan 2006 12:55 am
Operator : AC
Sample : 0601050-05
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 06 13:31:20 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 2/6/04

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	104268	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	48395	1104.37	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 110.44%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	394277m	4400.29	ng/mL	
84) Hopane (T19)	52.50	191	394815m	4406.30	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	41881m	467.41	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	24904	277.94	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	26191m	292.30	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	26513	295.90	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	11854	132.30	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	12060m	134.59	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	15105m	168.58	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	16615m	185.43	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	18283	204.05	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	19191m	214.18	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	74666m	833.30	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	15586m	173.95	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	14294m	159.53	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	86467m	965.01	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	21037m	234.78	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	9840	109.82	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	253841m	2832.97	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.21	191	74877m	835.66	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	17670m	197.20	ng/ml	
104) 30-Normoretane (T17)	51.89	191	50890	567.95	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	46787m	522.16	ng/ml	
106) Moretane (T20)	53.19	191	57906m	646.25	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	119274	1331.15	ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	105870	1181.55	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	78089	871.51	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	56412	629.58	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	47332m	528.24	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	31373	350.14	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.77	191	29816m	332.76	ng/ml	
114) Tetrakishomohopane-22R (T3	61.70	191	21271	237.39	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	25867m	288.69	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	21711m	242.30	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	28154m	642.47	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	16184m	369.32	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	13617m	310.74	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	17499m	399.33	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	54466	1242.91	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.24	217	8408m	191.87	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34894.D
Acq On : 28 Jan 2006 12:55 am
Operator : AC
Sample : 0601050-05
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 06 13:31:20 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

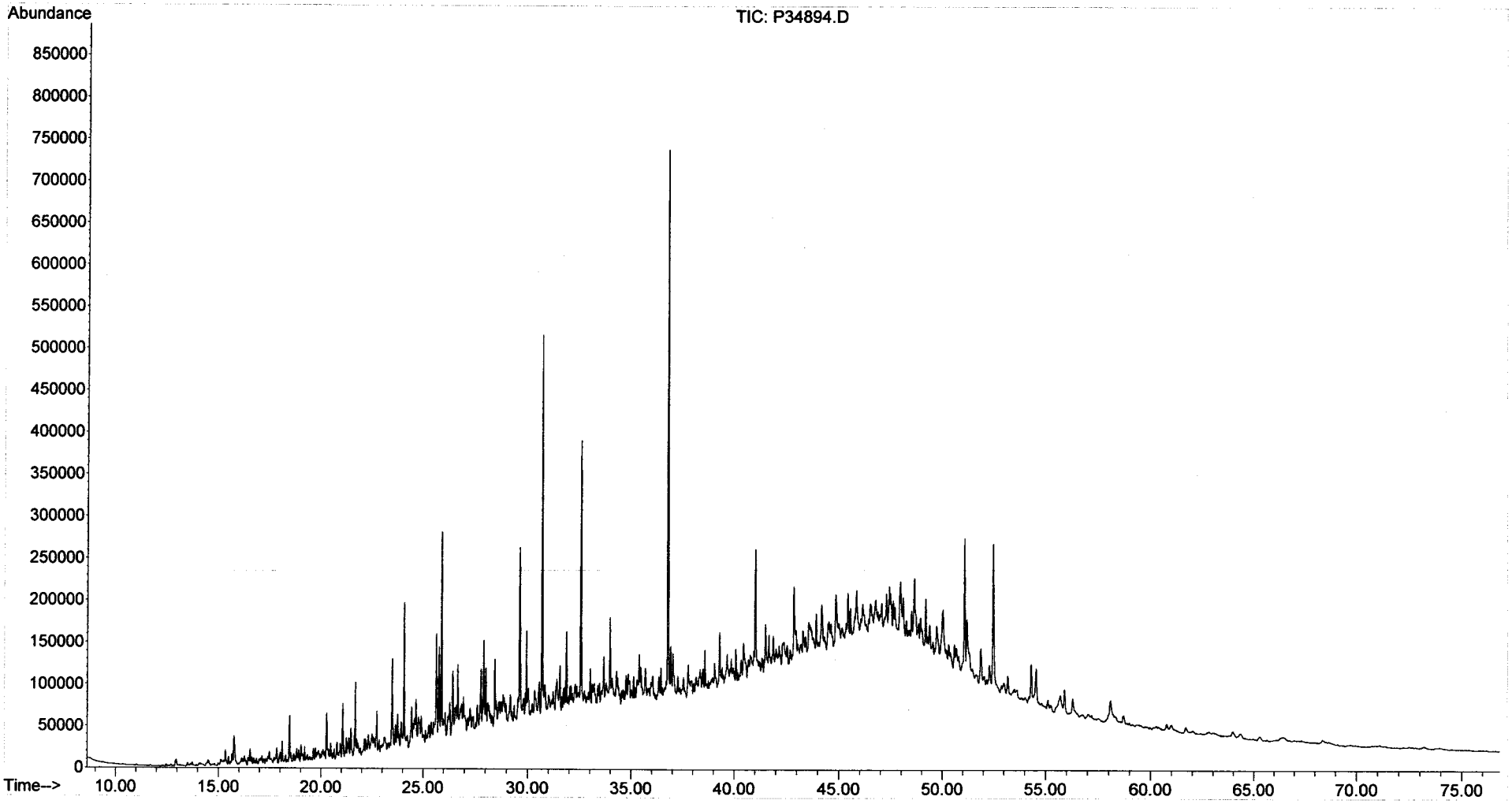
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	2526	57.64	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	9559m	218.14	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	24759m	565.00	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	19775m	451.27	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	28150m	642.38	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	25750m	587.61	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	25912m	591.31	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	25073m	572.17	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	31646m	722.16	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	43308m	988.29	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	25011m	570.75	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 : P34894.D
Acq On : 28 Jan 2006 12:55 am
Operator : AC
Sample : 0601050-05
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 06 13:31:20 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-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	02/01/06	46.7	5.80	12.35	1	AC

Parameter	Result	Parameter	Result
Naphthalene	4000	Fluoranthene	28000
C1-Naphthalenes	5700	Pyrene	38000
C2-Naphthalenes	15000	C1-Fluoranthenes/Pyrenes	41000
C3-Naphthalenes	22000	C2-Fluoranthenes/Pyrenes	20000
C4-Naphthalenes	17000	C3-Fluoranthenes/Pyrenes	9300
Biphenyl	960	C4-Fluoranthenes/Pyrenes	3800
Dibenzofuran	970	Naphthobenzothiophenes	5700
Acenaphthylene	6000	C1-Naphthobenzothiophenes	6800
Acenaphthene	7400	C2-Naphthobenzothiophenes	5200
Fluorene	4600	C3-Naphthobenzothiophenes	3200
C1-Fluorenes	8200	C4-Naphthobenzothiophenes	1800
C2-Fluorenes	15000	Benz[a]anthracene	16000
C3-Fluorenes	12000	Chrysene/Triphenylene	17000
Anthracene	14000	C1-Chrysenes	16000
Phenanthrene	30000	C2-Chrysenes	8900
C1-Phenanthrenes/Anthracenes	47000	C3-Chrysenes	5500
C2-Phenanthrenes/Anthracenes	39000	C4-Chrysenes	2300
C3-Phenanthrenes/Anthracenes	20000	Benzo[b]fluoranthene	8100
C4-Phenanthrenes/Anthracenes	6800	Benzo[k]fluoranthene	8300
Retene	3700	Benzo[a]fluoranthene	3300
Dibenzothiophene	4000	Benzo[e]pyrene	8200
C1-Dibenzothiophenes	10000	Benzo[a]pyrene	14000
C2-Dibenzothiophenes	14000	Perylene	2100
C3-Dibenzothiophenes	10000	Indeno[1,2,3-cd]pyrene	6500
C4-Dibenzothiophenes	4300	Dibenz[a,h]anthracene	1900
Benzo(b)fluorene	7300	Benzo[g,h,i]perylene	6900

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

02/06/06 21:28

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	02/01/06	46.7	5.80	12.35	1	AC

Parameter	Result
Carbazole	**500**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

02/06/06 21:29

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28052.D
Acq On : 1 Feb 2006 10:24 am
Operator : AC
Sample : 0601050-06
Misc : 1x
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 02 11:49:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	38456m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.62	240	66866m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	107182m	1356.19 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 135.62%#		
58) Pyrene-d10	38.69	212	245365	1509.40 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 150.94%#		
81) Benzo[b]fluoranthene-d12	47.55	264	217808	1588.85 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 158.88%#		
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	20.19	128	152399m	881.07 ng/mL	
10) C1-Naphthalenes	23.31	142	217321m	1256.41 ng/mL	
11) C2-Naphthalenes	25.74	156	573756m	3317.08 ng/mL	
12) C3-Naphthalenes	28.08	170	826955m	4780.91 ng/mL	
13) C4-Naphthalenes	30.84	184	643744m	3721.71 ng/mL	
15) 2-Methylnaphthalene	22.89	142	109983	998.91 ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	107724	1027.93 ng/mL#	100
22) Biphenyl	24.77	154	29269m	211.17 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	93650m	987.40 ng/mL	
24) Dibenzofuran	27.87	168	32472	212.23 ng/mL#	91
25) Acenaphthylene	26.49	152	224165m	1306.20 ng/mL	
26) Acenaphthene	27.22	153	170389	1619.74 ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.77	170	61369m	741.43 ng/mL	
28) Fluorene	29.24	166	123977m	1007.94 ng/mL	
29) C1-Fluorenes	31.48	180	221317m	1799.31 ng/mL	
30) C2-Fluorenes	33.66	194	393559m	3199.65 ng/mL	
31) C3-Fluorenes	35.66	208	322918m	2625.33 ng/mL	
32) Dibenzothiophene	32.59	184	143081	869.97 ng/mL#	65
36) OTP	34.78	198	17448m	106.09 ng/mL	
37) C1-Dibenzothiophenes	34.36	198	388340m	2361.22 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	505629m	3074.37 ng/mL	
39) C3-Dibenzothiophenes	37.85	226	358785m	2181.52 ng/mL	
40) C4-Dibenzothiophenes	39.55	240	155857m	947.66 ng/mL	
41) Phenanthrene	33.08	178	1140895	6500.71 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.16	192	1800323m	10258.07 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	1493131m	8507.72 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.15	220	768911m	4381.18 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.08	234	261538m	1490.22 ng/mL	
52) Retene	40.08	234	32271m	810.37 ng/mL	
53) Anthracene	33.27	178	490221m	3007.56 ng/mL	
54) Carbazole	33.94	167	16994m	109.39 ng/mL	
55) 1-Methylphenanthrene	35.60	192	290404m	2385.17 ng/mL	
56) Fluoranthene	37.87	202	1134112m	6054.55 ng/mL	
57) Benzo(b)fluorene	40.40	216	183888m	1596.91 ng/mL	
59) Pyrene	38.77	202	1576107	8216.95 ng/mL	97
60) C1-Fluoranthenes/Pyrenes	40.15	216	1736853m	9054.99 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	834286m	4349.51 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	391888m	2043.09 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	161792m	843.49 ng/mL	
64) Naphthobenzothiophene	42.62	234	140758m	791.35 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28052.D
Acq On : 1 Feb 2006 10:24 am
Operator : AC
Sample : 0601050-06
Misc : 1x
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 02 11:49:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

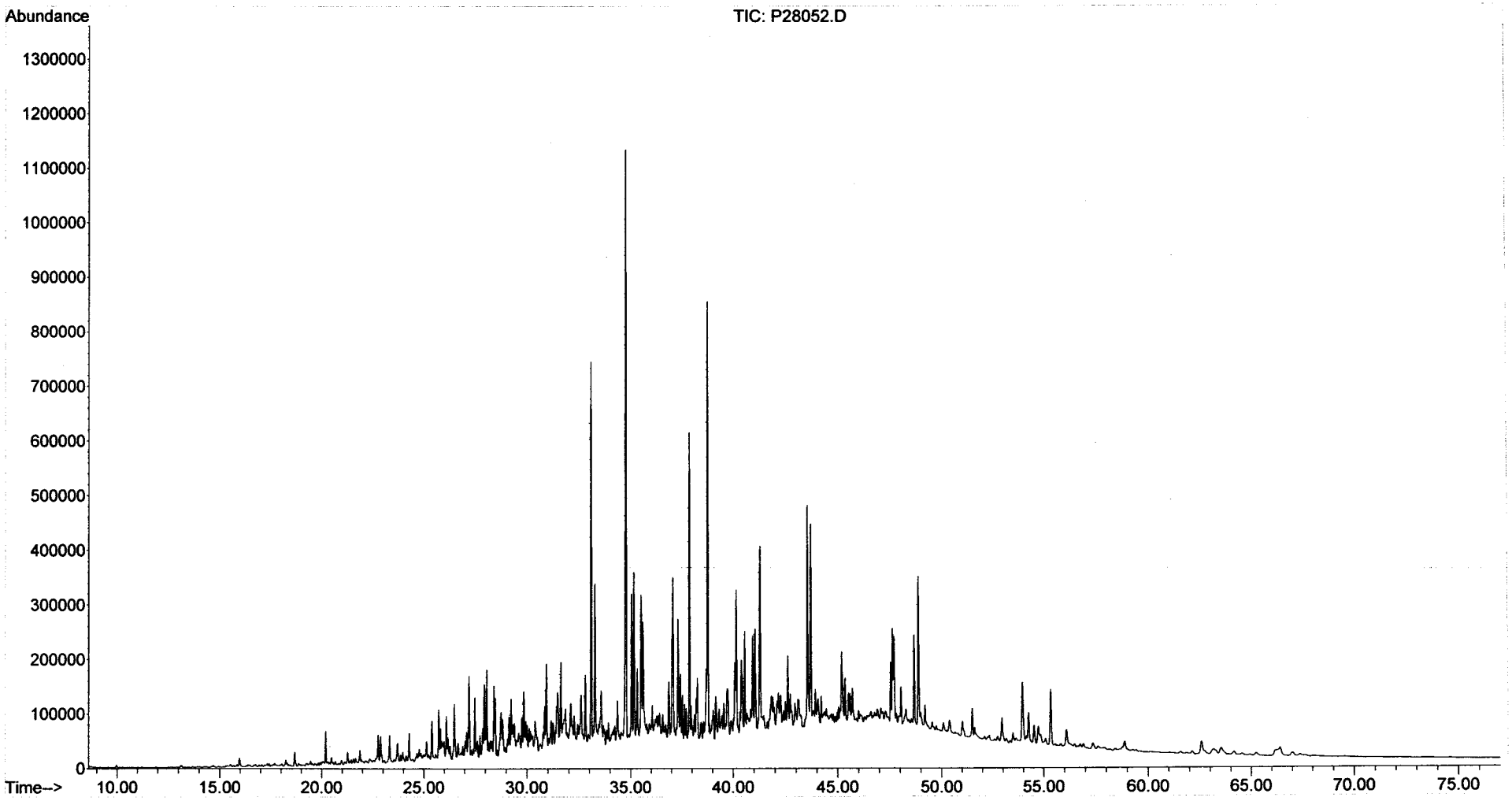
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.62	234	141431m	795.13	ng/mL	
66) Naphthobenzothiophene-1,2-	42.96	234	38123	214.33	ng/mL#	28
67) Naphthobenzothiophene-2,3-	43.26	234	41109m	231.12	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	266721m	1499.52	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	204090m	1147.41	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	126405m	710.66	ng/ml	
71) C4-Naphthobenzothiophenes	48.77	290	69993m	393.50	ng/mL	
73) Benz[a]anthracene	43.55	228	671418m	3516.17	ng/mL	
74) Chrysene	43.72	228	721292m	3760.87	ng/mL	
75) Chrysene/Triphenylene	43.72	228	723005m	3769.80	ng/mL	
76) C1-Chrysenes	45.19	242	688406m	3589.40	ng/mL	
77) C2-Chrysenes	46.90	256	386350m	2014.46	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	11975m	62.44	ng/mL	
79) C3-Chrysenes	48.55	270	229903m	1198.73	ng/mL	
80) C4-Chrysenes	50.19	284	96775m	504.59	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	364004	1774.92	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	389880	1817.97	ng/mL	100
84) Benzo[a]fluoranthene	48.04	252	153849m	717.38	ng/mL	
85) Benzo[e]pyrene	48.69	252	357569	1808.65	ng/mL	99
86) Benzo[a]pyrene	48.89	252	587646m	2973.15	ng/mL	
87) Perylene	49.21	252	92526	469.56	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.95	276	279255m	1425.48	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	76093m	413.04	ng/mL	
90) Benzo[g,h,i]perylene	55.34	276	309988	1517.62	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28052.D
Acq On : 1 Feb 2006 10:24 am
Operator : AC
Sample : 0601050-06
Misc : 1x
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 02 11:49:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/28/06	46.7	5.80	6.68	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1500**	30,31-Bishomohopane-22S	**2500**
C24 Tricyclic Terpane	**860**	30,31-Bishomohopane-22R	**1700**
C25 Tricyclic Terpane	**930**	30,31-Trishomohopane-22S	**1500**
C24 Tetracyclic Terpane	**960**	30,31-Trishomohopane-22R	**900**
C26 Tricyclic Terpane-22S	**380**	Tetrakishomohopane-22S	**910**
C26 Tricyclic Terpane-22R	**390**	Tetrakishomohopane-22R	**650**
C28 Tricyclic Terpane-22S	**470**	Pentakishomohopane-22S	**870**
C28 Tricyclic Terpane-22R	**490**	Pentakishomohopane-22R	**610**
C29 Tricyclic Terpane-22S	**560**	13b(H),17a(H)-20S-Diacholestane	**1800**
C29 Tricyclic Terpane-22R	**600**	13b(H),17a(H)-20R-Diacholestane	**1000**
18a-22,29,30-Trisnorneohopane-TS	**2400**	13b,17a-20S-Methyldiacholestane	**890**
C30 Tricyclic Terpane-22S	**430**	14a(H),17a(H)-20S-Cholestane	**1200**
C30 Tricyclic Terpane-22R	**440**	14a(H),17a(H)-20R-Cholestane	**3400**
17a(H)-22,29,30-Trisnorhopane-TM	**2500**	13b,17a-20R-Ethyldiacholestane	**630**
17a/b,21b/a 28,30-Bisnorhopane	**620**	13a,17b-20S-Ethyldiacholestane	**180**
17a(H),21b(H)-25-Norhopane	**250**	14a,17a-20S-Methylcholestane	**650**
30-Norhopane	**7700**	14a,17a-20R-Methylcholestane	**1400**
18a(H)-30-Norneohopane-C29Ts	**2000**	14a(H),17a(H)-20S-Ethylcholestane	**1300**
17a(H)-Diahopane	**400**	14a(H),17a(H)-20R-Ethylcholestane	**1800**
30-Normoretane	**1200**	14b(H),17b(H)-20R-Cholestane	**1800**
18a(H)&18b(H)-Oleananes	**950**	14b(H),17b(H)-20S-Cholestane	**1800**
Hopane	**10000**	14b,17b-20R-Methylcholestane	**1600**
Moretane	**1300**	14b,17b-20S-Methylcholestane	**2200**
30-Homohopane-22S	**3700**	14b(H),17b(H)-20R-Ethylcholestane	**2600**
30-Homohopane-22R	**3200**	14b(H),17b(H)-20S-Ethylcholestane	**2400**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	115	50-130

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34895.D
Acq On : 28 Jan 2006 2:26 am
Operator : AC
Sample : 0601050-06
Misc : 1X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 06 13:36:10 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 2/6/06

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	89319	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	128933	3434.68	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 343.47%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	325632m	4242.43	ng/mL	
84) Hopane (T19)	52.50	191	325675m	4242.99	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	46702m	608.45	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	26713	348.02	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	29017m	378.04	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	30024	391.16	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	11762	153.24	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	12061	157.13	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	14667m	191.09	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	15211m	198.17	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	17408	226.80	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	18708m	243.73	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	75598	984.91	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	13480m	175.62	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	13702m	178.51	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	77874	1014.56	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	19331m	251.85	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	7847	102.23	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	240991m	3139.70	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	61219m	797.58	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	12443	162.11	ng/ml	100
104) 30-Normoretane (T17)	51.89	191	38631	503.30	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	29560	385.12	ng/ml	100
106) Moretane (T20)	53.20	191	40999m	534.15	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	115546m	1505.37	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	101120	1317.42	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	76452	996.04	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.31	191	52257	680.82	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	45674m	595.05	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	27958m	364.24	ng/ml	
113) Tetrakishomohopane-22S (T3	60.77	191	28256	368.13	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	20121	262.14	ng/ml	100
115) Pentakishomohopane-22S (T3	63.98	191	27160m	353.85	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	19039m	248.05	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	27572m	734.50	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	15476m	412.27	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	13592m	362.08	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	18171m	484.06	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	51639m	1375.63	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	9604m	255.84	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34895.D
Acq On : 28 Jan 2006 2:26 am
Operator : AC
Sample : 0601050-06
Misc : 1X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 06 13:36:10 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

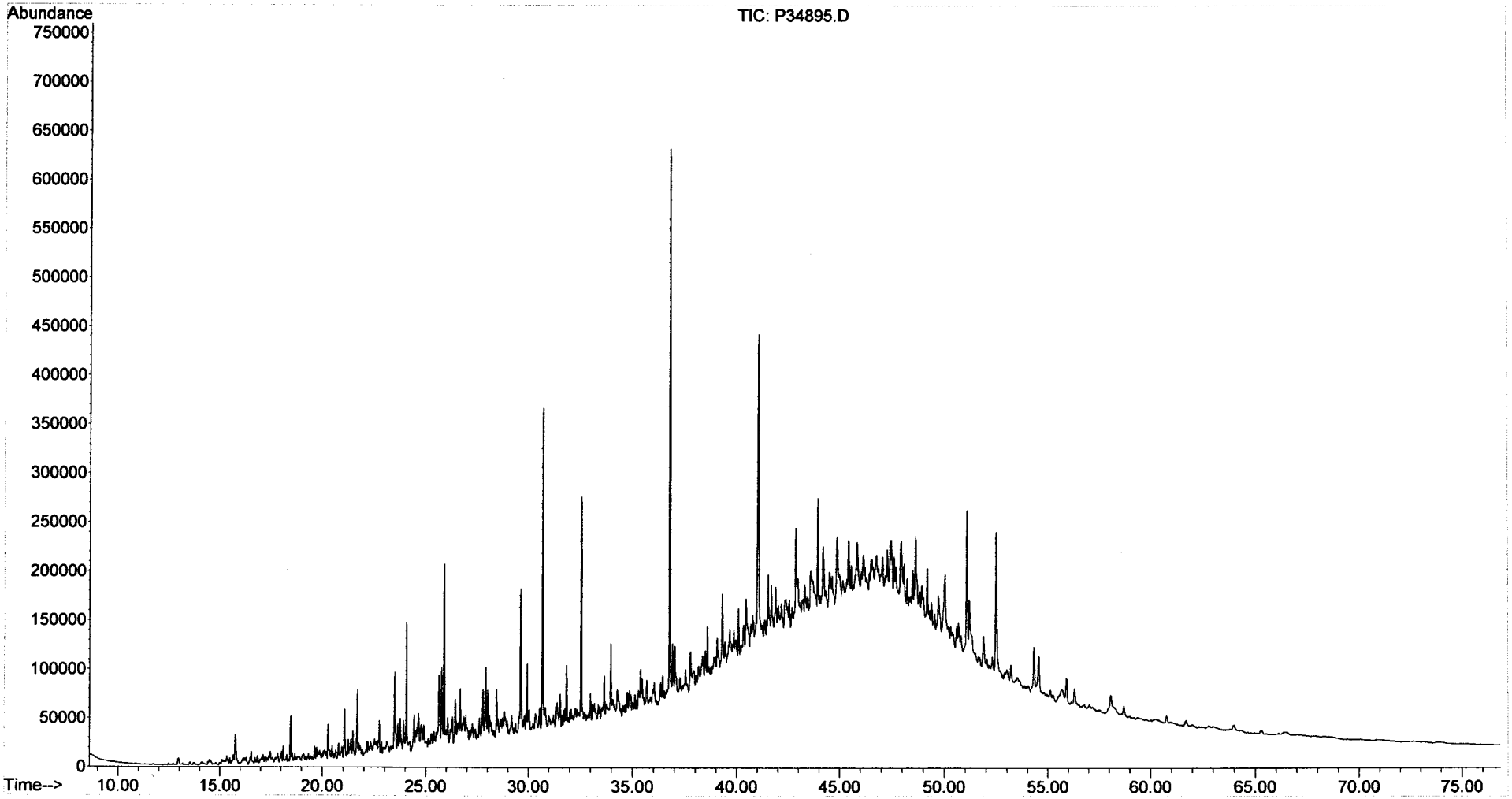
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	2747	73.18	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	9951m	265.09	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	21320m	567.95	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	20194m	537.95	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	26620m	709.14	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	27732m	738.76	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	27611m	735.54	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	25169m	670.48	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	33785m	900.01	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.01	218	40290	1073.30	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	36345m	968.20	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 : P34895.D
Acq On : 28 Jan 2006 2:26 am
Operator : AC
Sample : 0601050-06
Misc : 1X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 06 13:36:10 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-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06 D**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	02/01/06	46.7	5.51	15.64	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**6100**	Fluoranthene	**38000**
C1-Naphthalenes	**8200**	Pyrene	**51000**
C2-Naphthalenes	**21000**	C1-Fluoranthenes/Pyrenes	**58000**
C3-Naphthalenes	**30000**	C2-Fluoranthenes/Pyrenes	**28000**
C4-Naphthalenes	**23000**	C3-Fluoranthenes/Pyrenes	**13000**
Biphenyl	**1400**	C4-Fluoranthenes/Pyrenes	**5600**
Dibenzofuran	**1400**	Naphthobenzothiophenes	**7900**
Acenaphthylene	**8900**	C1-Naphthobenzothiophenes	**9700**
Acenaphthene	**10000**	C2-Naphthobenzothiophenes	**7700**
Fluorene	**6300**	C3-Naphthobenzothiophenes	**4800**
C1-Fluorenes	**11000**	C4-Naphthobenzothiophenes	**2600**
C2-Fluorenes	**20000**	Benz[a]anthracene	**22000**
C3-Fluorenes	**16000**	Chrysene/Triphenylene	**24000**
Anthracene	**19000**	C1-Chrysenes	**23000**
Phenanthrene	**40000**	C2-Chrysenes	**12000**
C1-Phenanthrenes/Anthracenes	**64000**	C3-Chrysenes	**8100**
C2-Phenanthrenes/Anthracenes	**54000**	C4-Chrysenes	**3200**
C3-Phenanthrenes/Anthracenes	**28000**	Benzo[b]fluoranthene	**11000**
C4-Phenanthrenes/Anthracenes	**9300**	Benzo[k]fluoranthene	**12000**
Retene	**5200**	Benzo[a]fluoranthene	**4900**
Dibenzothiophene	**5400**	Benzo[e]pyrene	**12000**
C1-Dibenzothiophenes	**14000**	Benzo[a]pyrene	**20000**
C2-Dibenzothiophenes	**19000**	Perylene	**3200**
C3-Dibenzothiophenes	**14000**	Indeno[1,2,3-cd]pyrene	**9300**
C4-Dibenzothiophenes	**5800**	Dibenz[a,h]anthracene	**2800**
Benzo(b)fluorene	**9800**	Benzo[g,h,i]perylene	**9800**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/06/06 21:28

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06 D**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	02/01/06	46.7	5.51	15.64	1	AC

Parameter	Result
Carbazole	680

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/06/06 21:28

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28050.D
Acq On : 1 Feb 2006 8:47 am
Operator : AC
Sample : 0601050-06D
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 02 11:36:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	37809m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.62	240	65549m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.76	152	89785m	1155.50 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 115.55%		
58) Pyrene-d10	38.69	212	202565m	1267.43 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 126.74%		
81) Benzo[b]fluoranthene-d12	47.55	264	178994	1331.95 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 133.19%#		
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	20.19	128	170984m	1005.43 ng/mL	
10) C1-Naphthalenes	22.89	142	229791m	1351.23 ng/mL	
11) C2-Naphthalenes	25.74	156	584479m	3436.90 ng/mL	
12) C3-Naphthalenes	28.08	170	828387m	4871.14 ng/mL	
13) C4-Naphthalenes	30.84	184	649616m	3819.92 ng/mL	
15) 2-Methylnaphthalene	22.89	142	120159	1110.01 ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	110295	1070.47 ng/mL#	100
22) Biphenyl	24.77	154	31987m	234.73 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	93015m	997.49 ng/mL	
24) Dibenzofuran	27.87	168	33439m	222.29 ng/mL	
25) Acenaphthylene	26.49	152	247072m	1464.31 ng/mL	
26) Acenaphthene	27.22	153	171262	1655.90 ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.77	170	60752m	746.54 ng/mL	
28) Fluorene	29.24	166	124436m	1028.98 ng/mL	
29) C1-Fluorenes	31.48	180	220106m	1820.09 ng/mL	
30) C2-Fluorenes	33.66	194	397048m	3283.25 ng/mL	
31) C3-Fluorenes	35.66	208	324580m	2684.00 ng/mL	
32) Dibenzothiophene	32.59	184	143753m	889.02 ng/mL	
36) OTP	34.77	198	13625m	84.26 ng/mL	
37) C1-Dibenzothiophenes	34.36	198	391024m	2418.22 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	510385m	3156.39 ng/mL	
39) C3-Dibenzothiophenes	37.86	226	368870m	2281.22 ng/mL	
40) C4-Dibenzothiophenes	39.55	240	152960m	945.96 ng/mL	
41) Phenanthrene	33.08	178	1141802	6617.21 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.16	192	1825758m	10581.02 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	1518939m	8802.87 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.16	220	786366m	4557.31 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.08	234	263284m	1525.84 ng/mL	
52) Retene	40.08	234	33685m	860.35 ng/mL	
53) Anthracene	33.27	178	503299m	3140.63 ng/mL	
54) Carbazole	33.94	167	17204m	112.64 ng/mL	
55) 1-Methylphenanthrene	35.59	192	293936	2455.49 ng/mL	100
56) Fluoranthene	37.87	202	1145078m	6217.71 ng/mL	
57) Benzo(b)fluorene	40.40	216	182886m	1615.38 ng/mL	
59) Pyrene	38.77	202	1590091	8431.72 ng/mL	97
60) C1-Fluoranthenes/Pyrenes	40.15	216	1788737m	9485.07 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	872825m	4628.30 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	415719m	2204.42 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	173914m	922.21 ng/mL	
64) Naphthobenzothiophene	42.62	234	146754	839.18 ng/ml#	69

✓ JMS 2/7/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28050.D
Acq On : 1 Feb 2006 8:47 am
Operator : AC
Sample : 0601050-06D
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 02 11:36:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

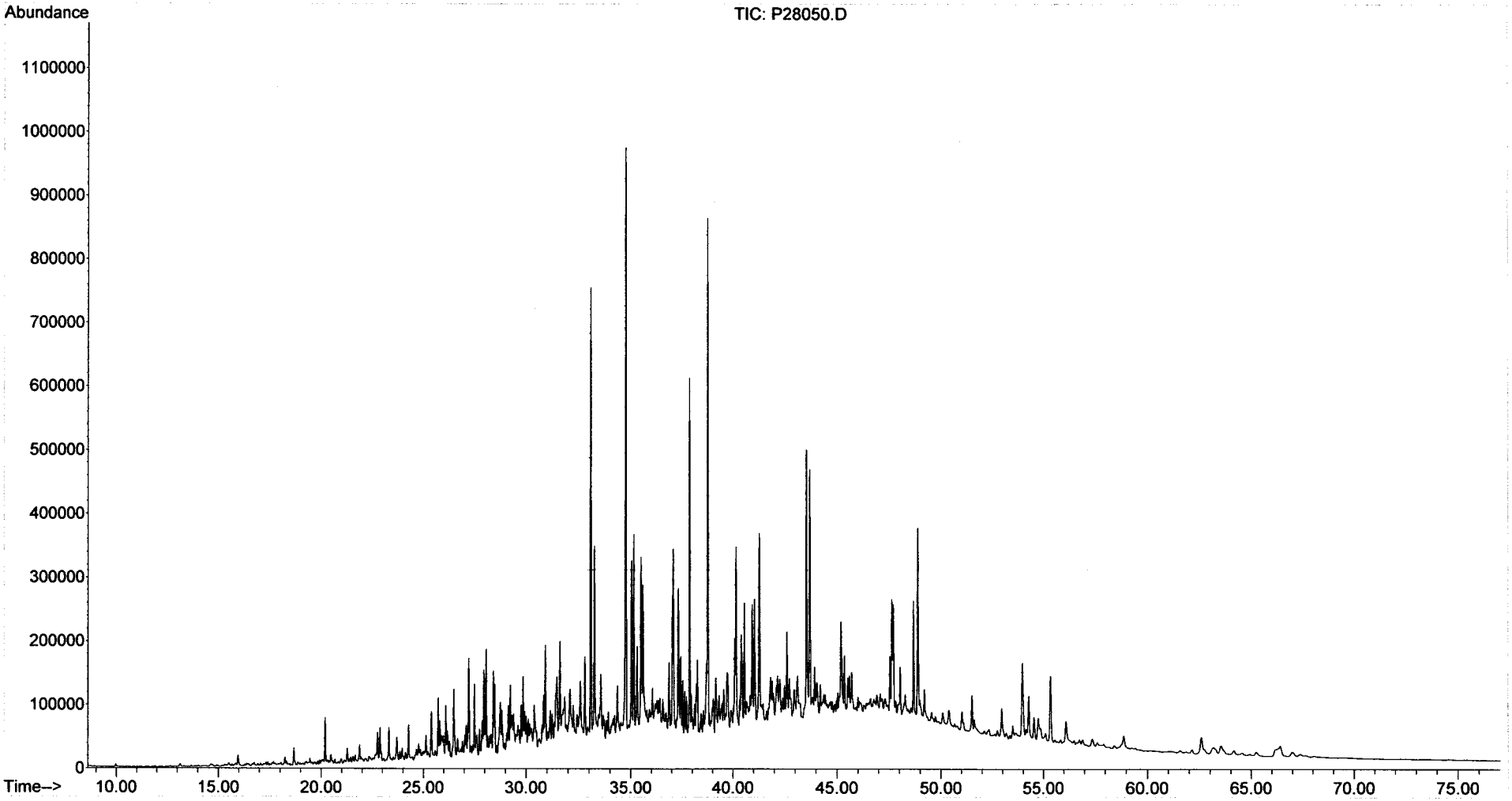
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.62	234	146754	839.18	ng/mL#	69
66) Naphthobenzothiophene-1,2-	42.96	234	39430	225.47	ng/mL#	28
67) Naphthobenzothiophene-2,3-	43.26	234	41667m	238.26	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	278103m	1590.27	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	222637m	1273.10	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	137543m	786.51	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	73775m	421.86	ng/mL	
73) Benz[a]anthracene	43.55	228	693495m	3704.75	ng/mL	
74) Chrysene	43.72	228	750621m	3992.43	ng/mL	
75) Chrysene/Triphenylene	43.72	228	753380m	4007.10	ng/mL	
76) C1-Chrysenes	45.19	242	722854m	3844.74	ng/mL	
77) C2-Chrysenes	46.90	256	390171m	2075.26	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	10484	55.76	ng/mL	100
79) C3-Chrysenes	48.55	270	251685m	1338.67	ng/mL	
80) C4-Chrysenes	50.19	284	98741m	525.19	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	378150	1880.95	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	418946	1992.75	ng/mL	100
84) Benzo[a]fluoranthene	48.04	252	168751m	802.68	ng/mL	
85) Benzo[e]pyrene	48.69	252	370091	1909.60	ng/mL	99
86) Benzo[a]pyrene	48.89	252	620644m	3203.19	ng/mL	
87) Perylene	49.21	252	101492	525.41	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.95	276	292673m	1523.99	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	82474m	456.67	ng/mL	
90) Benzo[g,h,i]perylene	55.34	276	321024	1603.23	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28050.D
Acq On : 1 Feb 2006 8:47 am
Operator : AC
Sample : 0601050-06D
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 02 11:36:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06 D**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/28/06	46.7	5.51	8.88	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1900**	30,31-Bishomohopane-22S	**3100**
C24 Tricyclic Terpane	**1100**	30,31-Bishomohopane-22R	**2100**
C25 Tricyclic Terpane	**1200**	30,31-Trishomohopane-22S	**1900**
C24 Tetracyclic Terpane	**1200**	30,31-Trishomohopane-22R	**1200**
C26 Tricyclic Terpane-22S	**510**	Tetrakishomohopane-22S	**1100**
C26 Tricyclic Terpane-22R	**520**	Tetrakishomohopane-22R	**810**
C28 Tricyclic Terpane-22S	**630**	Pentakishomohopane-22S	**1100**
C28 Tricyclic Terpane-22R	**660**	Pentakishomohopane-22R	**840**
C29 Tricyclic Terpane-22S	**700**	13b(H),17a(H)-20S-Diacholestane	**2300**
C29 Tricyclic Terpane-22R	**780**	13b(H),17a(H)-20R-Diacholestane	**1300**
18a-22,29,30-Trisnorneohopane-TS	**3000**	13b,17a-20S-Methyldiacholestane	**1100**
C30 Tricyclic Terpane-22S	**620**	14a(H),17a(H)-20S-Cholestane	**1400**
C30 Tricyclic Terpane-22R	**530**	14a(H),17a(H)-20R-Cholestane	**4300**
17a(H)-22,29,30-Trisnorhopane-TM	**3100**	13b,17a-20R-Ethyldiacholestane	**740**
17a/b,21b/a 28,30-Bisnorhopane	**710**	13a,17b-20S-Ethyldiacholestane	**250**
17a(H),21b(H)-25-Norhopane	**330**	14a,17a-20S-Methylcholestane	**720**
30-Norhopane	**9900**	14a,17a-20R-Methylcholestane	**1800**
18a(H)-30-Norneohopane-C29Ts	**2600**	14a(H),17a(H)-20S-Ethylcholestane	**1700**
17a(H)-Diahopane	**540**	14a(H),17a(H)-20R-Ethylcholestane	**2200**
30-Normoretane	**1600**	14b(H),17b(H)-20R-Cholestane	**2400**
18a(H)&18b(H)-Oleananes	**1100**	14b(H),17b(H)-20S-Cholestane	**2200**
Hopane	**13000**	14b,17b-20R-Methylcholestane	**2100**
Moretane	**1600**	14b,17b-20S-Methylcholestane	**2700**
30-Homohopane-22S	**4800**	14b(H),17b(H)-20R-Ethylcholestane	**3600**
30-Homohopane-22R	**4100**	14b(H),17b(H)-20S-Ethylcholestane	**2900**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	109	50-130

N/A - Not Applicable

02/06/06 20:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34896.D
Acq On : 28 Jan 2006 3:56 am
Operator : AC
Sample : 0601050-06D
Misc : 1X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 06 13:41:33 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 2/6/06

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	90922	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	93653	2450.86	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 245.09%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	302789m	3875.27	ng/mL	
84) Hopane (T19)	52.49	191	302139m	3866.95	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	42355m	542.08	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	24727	316.47	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	27020m	345.82	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	27886	356.90	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	11544	147.75	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	11873	151.96	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	14272m	182.66	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	14861m	190.20	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	15955m	204.20	ng/ml	
94) C29 Tricyclic Terpane-22R	47.48	191	17780m	227.56	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	69097m	884.34	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	14086m	180.28	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	12008m	153.69	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	70539	902.80	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	16161m	206.84	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	7404	94.76	ng/ml	100
101) 30-Norhopane (T15)	51.10	191	224725m	2876.16	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	59600m	762.80	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	12144m	155.43	ng/ml	
104) 30-Normoretane (T17)	51.88	191	35945	460.05	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	24768m	317.00	ng/ml	
106) Moretane (T20)	53.20	191	35965m	460.30	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	108576m	1389.62	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	92480	1183.61	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	69186m	885.48	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.30	191	47472m	607.57	ng/ml	
111) 30,31-Trishomohopane-22S (	58.08	191	42265m	540.93	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	27207	348.21	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.76	191	25886	331.30	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	18272	233.86	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	25346	324.39	ng/ml	100
116) Pentakishomohopane-22R (T3	65.30	191	18892m	241.79	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	25560	668.90	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	14337m	375.19	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	12223m	319.87	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	15918m	416.57	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	47934m	1254.41	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	8156m	213.44	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34896.D
Acq On : 28 Jan 2006 3:56 am
Operator : AC
Sample : 0601050-06D
Misc : 1X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 06 13:41:33 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	2752	72.02	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	7955m	208.18	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	20125m	526.66	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	18817m	492.43	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	24782m	648.54	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	26039m	681.43	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	24875m	650.97	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	23082m	604.05	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	29484m	771.59	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.01	218	39401m	1031.11	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	31677m	828.98	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 : P34896.D
Acq On : 28 Jan 2006 3:56 am
Operator : AC
Sample : 0601050-06D
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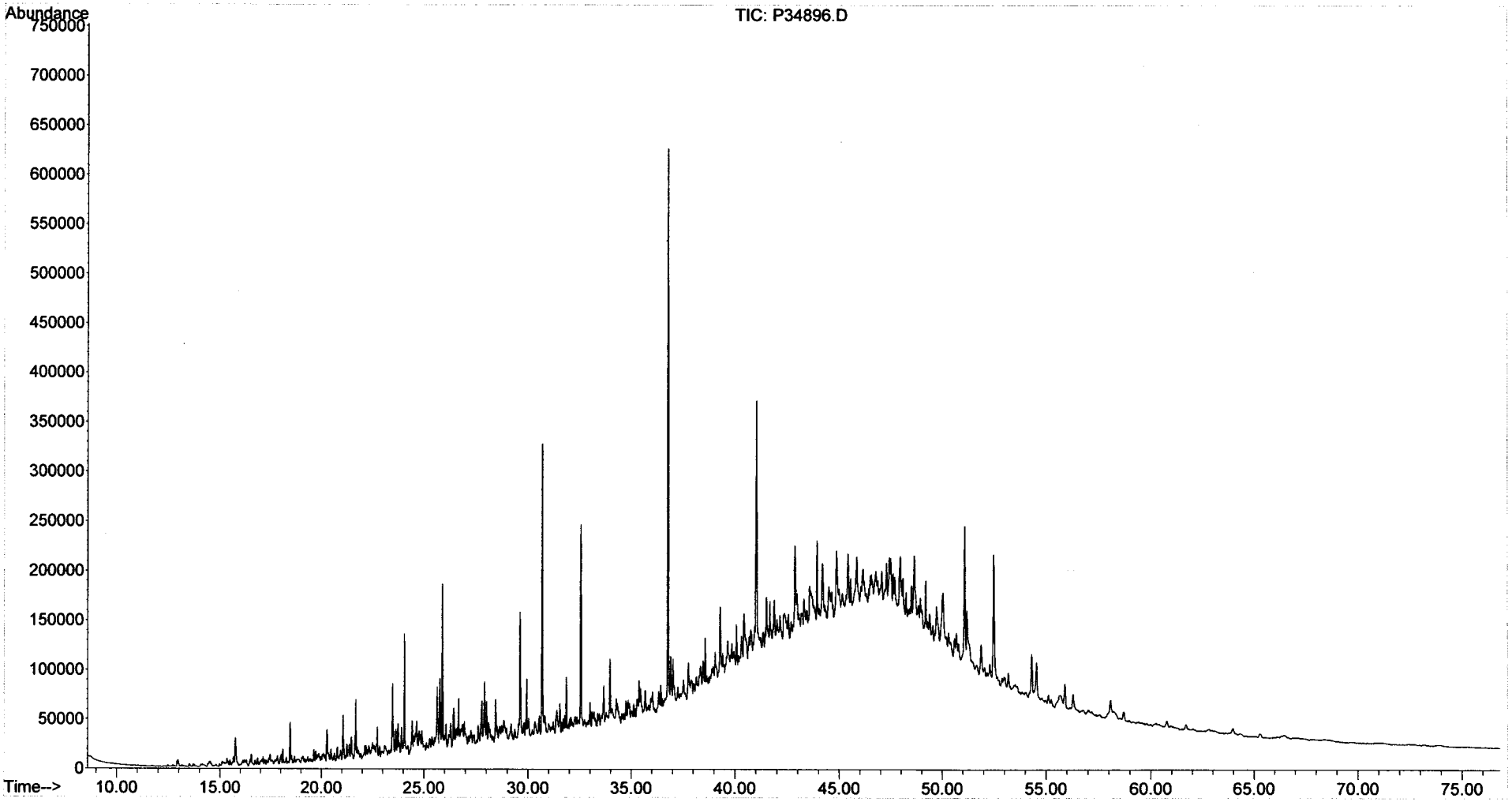
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/17/06	01/18/06	01/19/06	46.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	4000	6100	41[a]	30
C1-Naphthalenes	5700	8200	36[a]	30
C2-Naphthalenes	15000	21000	32[a]	30
C3-Naphthalenes	22000	30000	30	30
C4-Naphthalenes	17000	23000	31[a]	30
Biphenyl	960	1400	39[a]	30
Dibenzofuran	970	1400	33[a]	30
Acenaphthylene	6000	8900	40[a]	30
Acenaphthene	7400	10000	31[a]	30
Fluorene	4600	6300	31[a]	30
C1-Fluorenes	8200	11000	30	30
C2-Fluorenes	15000	20000	31[a]	30
C3-Fluorenes	12000	16000	31[a]	30
Anthracene	14000	19000	33[a]	30
Phenanthrene	30000	40000	30	30
C1-Phenanthrenes/Anthracenes	47000	64000	32[a]	30
C2-Phenanthrenes/Anthracenes	39000	54000	32[a]	30
C3-Phenanthrenes/Anthracenes	20000	28000	32[a]	30
C4-Phenanthrenes/Anthracenes	6800	9300	31[a]	30
Retene	3700	5200	34[a]	30
Dibenzothiophene	4000	5400	31[a]	30
C1-Dibenzothiophenes	10000	14000	32[a]	30
C2-Dibenzothiophenes	14000	19000	31[a]	30
C3-Dibenzothiophenes	10000	14000	33[a]	30
C4-Dibenzothiophenes	4300	5800	28	30
Benzo(b)fluorene	7300	9800	30	30
Fluoranthene	28000	38000	31[a]	30
Pyrene	38000	51000	31[a]	30
C1-Fluoranthenes/Pyrenes	41000	58000	33[a]	30
C2-Fluoranthenes/Pyrenes	20000	28000	35[a]	30
C3-Fluoranthenes/Pyrenes	9300	13000	36[a]	30
C4-Fluoranthenes/Pyrenes	3800	5600	37[a]	30
Naphthobenzothiophenes	5700	7900	33[a]	30
C1-Naphthobenzothiophenes	6800	9700	34[a]	30
C2-Naphthobenzothiophenes	5200	7700	39[a]	30

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

02/06/06 21:45

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/17/06	01/18/06	01/19/06	46.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	3200	4800	38[a]	30
C4-Naphthobenzothiophenes	1800	2600	35[a]	30
Benz[a]anthracene	16000	22000	34[a]	30
Chrysene/Triphenylene	17000	24000	35[a]	30
C1-Chrysenes	16000	23000	35[a]	30
C2-Chrysenes	8900	12000	32[a]	30
C3-Chrysenes	5500	8100	39[a]	30
C4-Chrysenes	2300	3200	32[a]	30
Benzo[b]fluoranthene	8100	11000	34[a]	30
Benzo[k]fluoranthene	8300	12000	37[a]	30
Benzo[a]fluoranthene	3300	4900	39[a]	30
Benzo[e]pyrene	8200	12000	34[a]	30
Benzo[a]pyrene	14000	20000	36[a]	30
Perylene	2100	3200	39[a]	30
Indeno[1,2,3-cd]pyrene	6500	9300	35[a]	30
Dibenz[a,h]anthracene	1900	2800	38[a]	30
Benzo[g,h,i]perylene	6900	9800	34[a]	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	84	90	50-130
Pyrene-d10	93	99	50-130
Benzo[b]fluoranthene-d12	98	104	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.

02/06/06 21:45

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/17/06	01/18/06	01/19/06	46.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	500	680	31[a]	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	84	90	50-130
Pyrene-d10	93	99	50-130
Benzo[b]fluoranthene-d12	98	104	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.

02/06/06 21:46

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/17/06	01/18/06	01/19/06	46.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	1500	1900	22	30
C24 Tricyclic Terpane	860	1100	24	30
C25 Tricyclic Terpane	930	1200	25	30
C24 Tetracyclic Terpane	960	1200	24	30
C26 Tricyclic Terpane-22S	380	510	30	30
C26 Tricyclic Terpane-22R	390	520	30	30
C28 Tricyclic Terpane-22S	470	630	29	30
C28 Tricyclic Terpane-22R	490	660	29	30
C29 Tricyclic Terpane-22S	560	700	23	30
C29 Tricyclic Terpane-22R	600	780	27	30
18a-22,29,30-Trisnorneohopane-TS	2400	3000	23	30
C30 Tricyclic Terpane-22S	430	620	36[a]	30
C30 Tricyclic Terpane-22R	440	530	19	30
17a(H)-22,29,30-Trisnorhopane-TM	2500	3100	22	30
17a/b,21b/a 28,30-Bisnorhopane	620	710	14	30
17a(H),21b(H)-25-Norhopane	250	330	26	30
30-Norhopane	7700	9900	25	30
18a(H)-30-Norneohopane-C29Ts	2000	2600	29	30
17a(H)-Diahopane	400	540	29	30
30-Normoretane	1200	1600	24	30
18a(H)&18b(H)-Oleananes	950	1100	14	30
Hopane	10000	13000	24	30
Moretane	1300	1600	19	30
30-Homohopane-22S	3700	4800	25	30
30-Homohopane-22R	3200	4100	23	30
30,31-Bishomohopane-22S	2500	3100	22	30
30,31-Bishomohopane-22R	1700	2100	22	30
30,31-Trishomohopane-22S	1500	1900	24	30
30,31-Trishomohopane-22R	900	1200	29	30
Tetrakishomohopane-22S	910	1100	23	30
Tetrakishomohopane-22R	650	810	22	30
Pentakishomohopane-22S	870	1100	25	30
Pentakishomohopane-22R	610	840	31[a]	30
13b(H),17a(H)-20S-Diacholestane	1800	2300	24	30
13b(H),17a(H)-20R-Diacholestane	1000	1300	24	30

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

02/06/06 20:44

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/17/06	01/18/06	01/19/06	46.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	890	1100	21	30
14a(H),17a(H)-20S-Cholestane	1200	1400	19	30
14a(H),17a(H)-20R-Cholestane	3400	4300	24	30
13b,17a-20R-Ethyldiacholestane	630	740	15	30
13a,17b-20S-Ethyldiacholestane	180	250	32[a]	30
14a,17a-20S-Methylcholestane	650	720	9	30
14a,17a-20R-Methylcholestane	1400	1800	26	30
14a(H),17a(H)-20S-Ethylcholestane	1300	1700	25	30
14a(H),17a(H)-20R-Ethylcholestane	1800	2200	25	30
14b(H),17b(H)-20R-Cholestane	1800	2400	25	30
14b(H),17b(H)-20S-Cholestane	1800	2200	21	30
14b,17b-20R-Methylcholestane	1600	2100	23	30
14b,17b-20S-Methylcholestane	2200	2700	18	30
14b(H),17b(H)-20R-Ethylcholestane	2600	3600	29	30
14b(H),17b(H)-20S-Ethylcholestane	2400	2900	18	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	115	109	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.

02/06/06 20:44

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: **0601050**
Lab ID: **SS011906B05**
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	01/30/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.33**	J	Fluoranthene	0.13	U
C1-Naphthalenes	**0.30**	J	Pyrene	**0.15**	J
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	**0.11**	J	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	0.15	U	C2-Naphthobenzothiophenes	0.16	U
Fluorene	0.15	U	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	0.21	U
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	0.14	U
Anthracene	0.18	U	C1-Chrysenes	0.14	U
Phenanthrene	**0.15**	J	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	0.14	U
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	0.27	U
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	0.19	U
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	0.32	U
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	0.25	U
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	0.23	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	69	50-130
Pyrene-d10	87	50-130
Benzo[b]fluoranthene-d12	88	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.

02/06/06 21:49

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: **0601050**
Lab ID: **SS011906B05**
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	01/30/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	69	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.

02/06/06 21:50

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28010.D
Acq On : 30 Jan 2006 8:11 pm
Operator : AC
Sample : SS011906B05
Misc : 1X ETR0601045
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 01 14:05:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	25807m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	39647m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	9152m	172.56	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 17.26%#			
58) Pyrene-d10	38.70	212	23844	218.57	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.86%#			
81) Benzo[b]fluoranthene-d12	47.56	264	17925m	220.53	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.05%#			
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	20.29	128	287m	2.47	ng/mL	
10) C1-Naphthalenes	22.93	142	258m	2.22	ng/mL	
15) 2-Methylnaphthalene	22.93	142	141	1.91	ng/mL#	100
16) 1-Methylnaphthalene	23.36	142	62m	0.88	ng/mL	
25) Acenaphthylene	26.55	152	95m	0.82	ng/mL	
41) Phenanthrene	33.17	178	130m	1.10	ng/mL	
59) Pyrene	38.77	202	143	1.11	ng/mL#	60

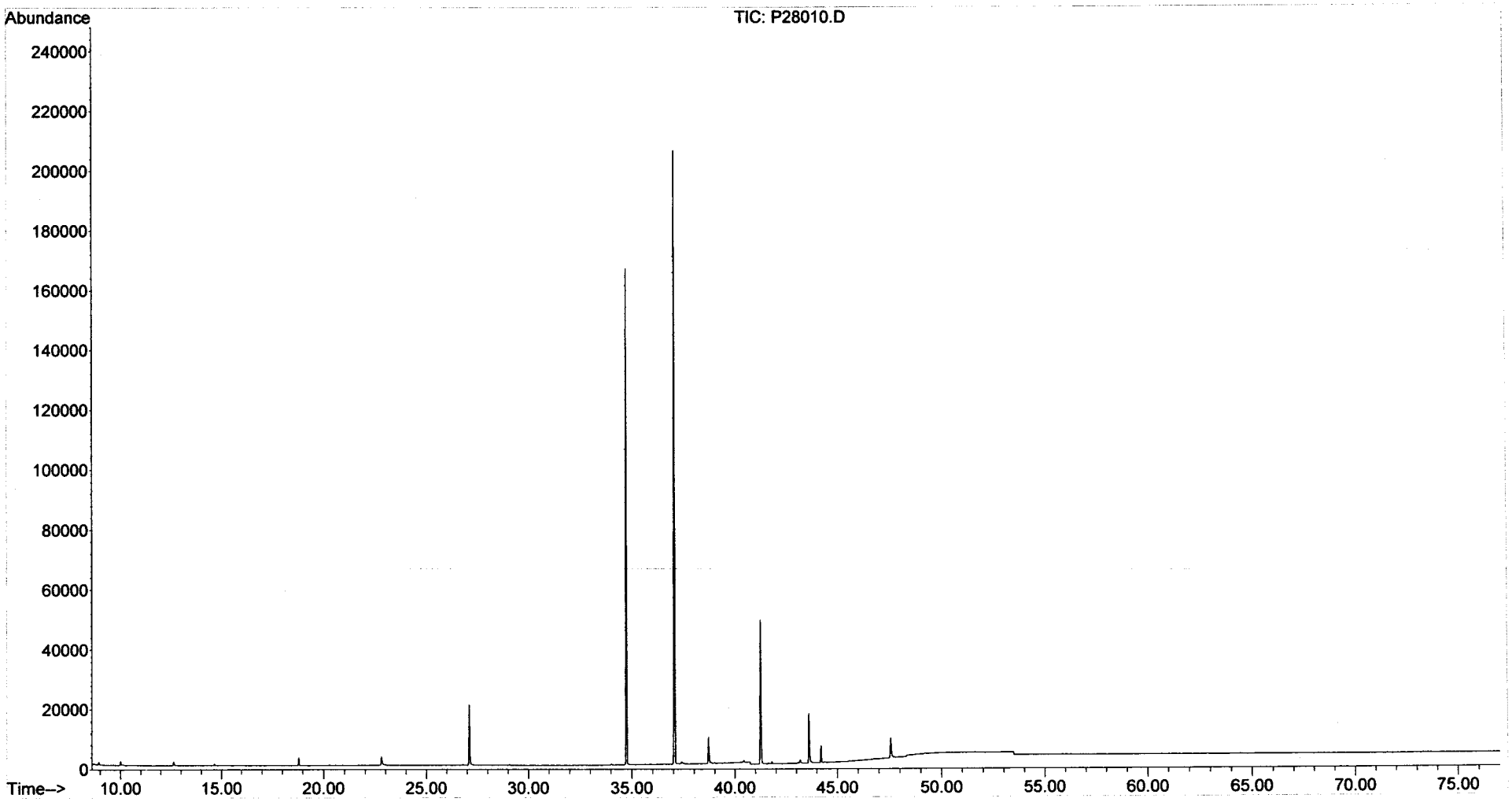
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KMS 2/7/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28010.D
Acq On : 30 Jan 2006 8:11 pm
Operator : AC
Sample : SS011906B05
Misc : 1X ETR0601045
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 01 14:05:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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: **0601050**
Lab ID: **SS011906B05**
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	01/27/06	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.

02/07/06 09:34

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34879.D
Acq On : 27 Jan 2006 2:20 am
Operator : AC
Sample : SS011906B05
Misc : 1X ETR0601045/50
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 06 11:44:06 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 2/6/06

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	43.44	240	67835	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	15466	542.49	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	54.25%	

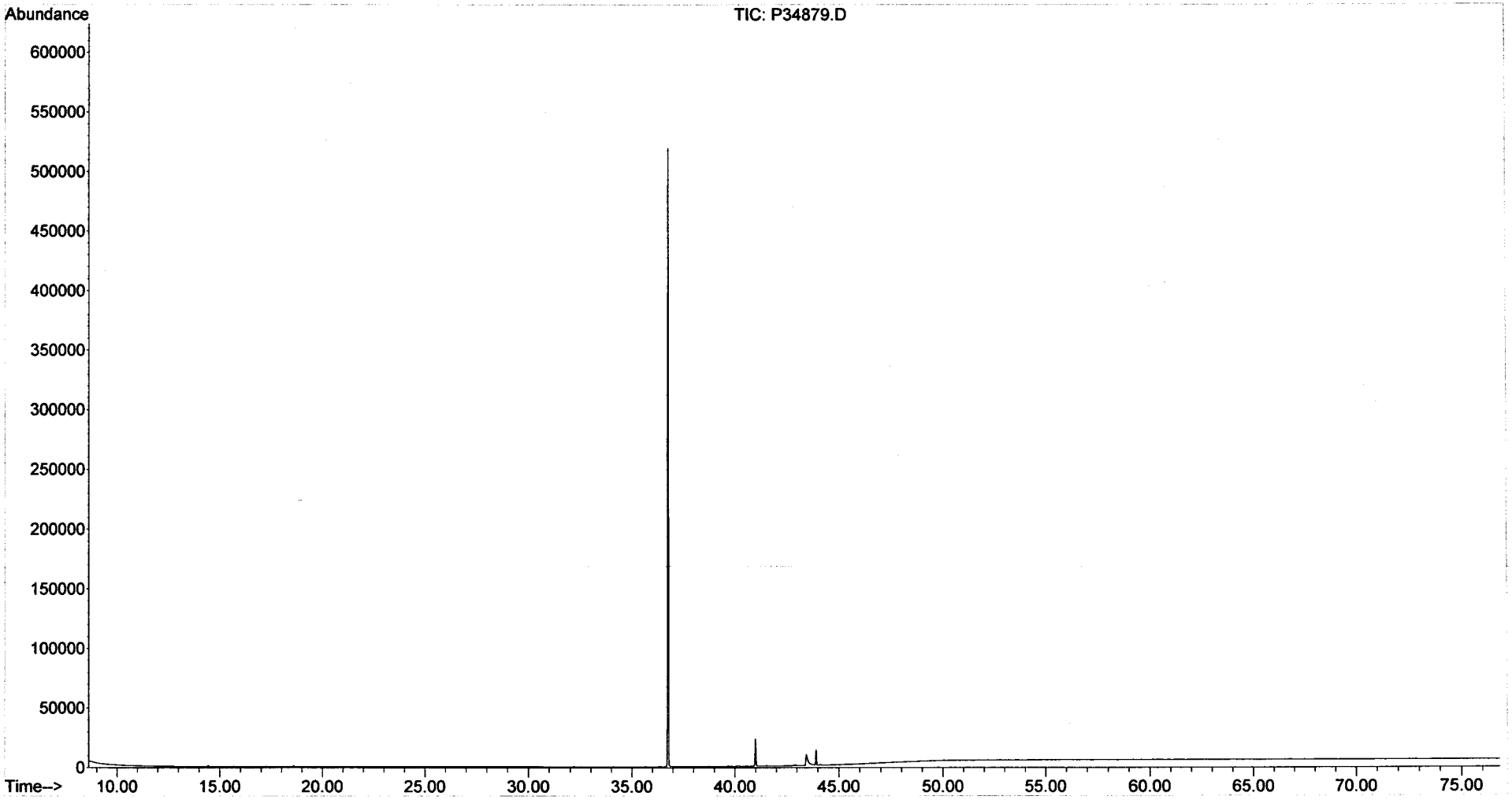
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34879.D
Acq On : 27 Jan 2006 2:20 am
Operator : AC
Sample : SS011906B05
Misc : 1X ETR0601045/50
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 06 11:44:06 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: **0601050**
Lab ID: **See Below**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/19/06	100	AC

Lab ID:	SS011906B05		SS011906LCS04		SS011906LCSD04				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.33		29	88	31	92	4	30	50-130
Acenaphthylene	0.11		29	87	29	88	1	30	50-130
Acenaphthene	0.15	U	30	90	31	94	4	30	50-130
Fluorene	0.15	U	28	84	29	86	2	30	50-130
Anthracene	0.18	U	26	79	27	80	1	30	50-130
Phenanthrene	0.15		29	87	30	89	3	30	50-130
Fluoranthene	0.13	U	31	92	32	96	4	30	50-130
Pyrene	0.15		32	96	33	99	3	30	50-130
Benz[a]anthracene	0.21	U	31	93	31	94	1	30	50-130
Chrysene/Triphenylene	0.14	U	32	95	33	98	3	30	50-130
Benzo[b]fluoranthene	0.14	U	32	95	32	97	1	30	50-130
Benzo[k]fluoranthene	0.27	U	34	103	35	106	3	30	50-130
Benzo[a]pyrene	0.19	U	30	89	30	90	1	30	50-130
Indeno[1,2,3-cd]pyrene	0.32	U	30	90	30	90	0	30	50-130
Dibenz[a,h]anthracene	0.25	U	30	92	30	91	1	30	50-130
Benzo[g,h,i]perylene	0.23	U	31	92	30	92	0	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	82	85	50-130
Pyrene-d10	92	95	50-130
Benzo[b]fluoranthene-d12	93	95	50-130

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

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

02/06/06 21:52

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: **0601050**
Lab ID: **SS011906LCS04**
Associated Blank: **SS011906B05**
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	01/30/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**29**	S	Fluoranthene	**31**	S
C1-Naphthalenes	0.22	U	Pyrene	**32**	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	**29**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**30**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**28**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**31**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**32**	S
Anthracene	**26**	S	C1-Chrysenes	0.14	U
Phenanthrene	**29**	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	**32**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**34**	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	**30**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**30**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**30**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**31**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	93	50-130

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

02/06/06 21:50

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: **0601050**
Lab ID: **SS011906LCS04**
Associated Blank: **SS011906B05**
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	01/30/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	93	50-130

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

02/06/06 21:51

Quantitation Report (QT Reviewed)

MAL for WW 2/6/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28012.D
Acq On : 30 Jan 2006 9:50 pm
Operator : AC
Sample : SS011906LCS04
Misc : 1X ETR0601045
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 01 14:08:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	26592m	500.00	ng/mL	0.00
72) Chrysene-d12	43.61	240	42949m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	11260m	206.04	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.60%#			
58) Pyrene-d10	38.69	212	25841m	229.89	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.99%#			
81) Benzo[b]fluoranthene-d12	47.55	264	20404m	231.73	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.17%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

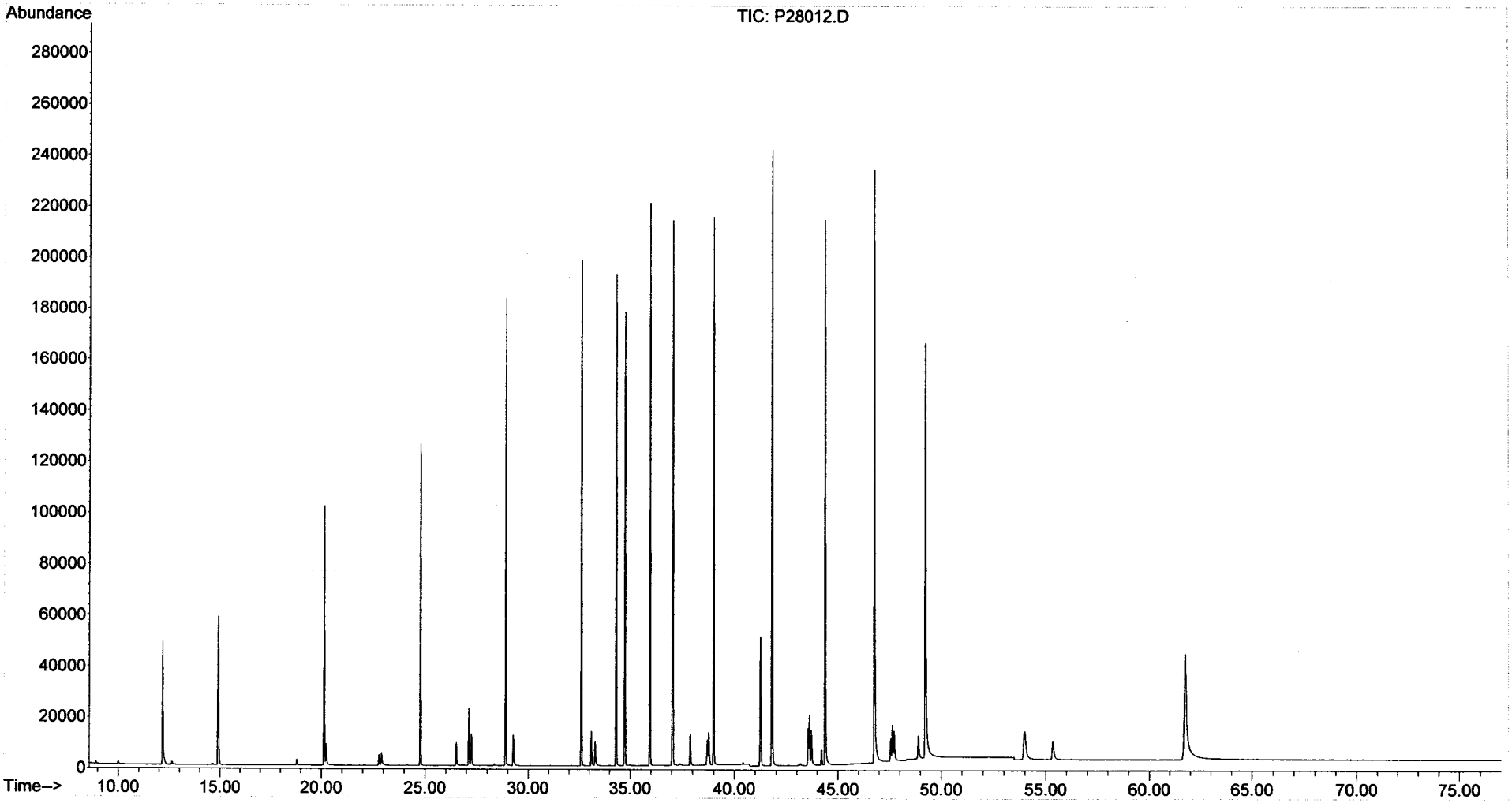
Target Compounds						Qvalue
9) Naphthalene	20.23	128	26296m	219.85	ng/mL	
15) 2-Methylnaphthalene	22.91	142	15868	208.42	ng/mL#	100
25) Acenaphthylene	26.51	152	25939m	218.58	ng/mL	
26) Acenaphthene	27.24	153	16431m	225.88	ng/mL	
28) Fluorene	29.27	166	17961m	211.17	ng/mL	
41) Phenanthrene	33.09	178	26394	217.49	ng/mL	100
53) Anthracene	33.29	178	22306m	197.91	ng/mL	
56) Fluoranthene	37.89	202	29712m	229.39	ng/mL	
59) Pyrene	38.77	202	31776	239.57	ng/mL	100
73) Benz[a]anthracene	43.55	228	28428	231.78	ng/mL	100
74) Chrysene	43.72	228	29831m	242.16	ng/mL	
75) Chrysene/Triphenylene	43.72	228	29384m	238.53	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	31385m	238.26	ng/mL	
83) Benzo[k]fluoranthene	47.72	252	35305m	256.30	ng/mL	
86) Benzo[a]pyrene	48.90	252	28109m	221.41	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.95	276	28234m	224.38	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	27078	228.83	ng/mL	99
90) Benzo[g,h,i]perylene	55.34	276	30104	229.45	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28012.D
Acq On : 30 Jan 2006 9:50 pm
Operator : AC
Sample : SS011906LCS04
Misc : 1X ETR0601045
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 01 14:08:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **SS011906LCSD04**
Associated Blank: **SS011906B05**
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	01/30/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**31**	S	Fluoranthene	**32**	S
C1-Naphthalenes	0.22	U	Pyrene	**33**	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	**29**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**31**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**29**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**31**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**33**	S
Anthracene	**27**	S	C1-Chrysenes	0.14	U
Phenanthrene	**30**	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	**32**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**35**	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	**30**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**30**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**30**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**30**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	95	50-130

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

02/06/06 21:51

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: **0601050**
Lab ID: **SS011906LCSD04**
Associated Blank: **SS011906B05**
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	01/30/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	95	50-130

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

02/06/06 21:51

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28014.D
Acq On : 30 Jan 2006 11:28 pm
Operator : AC
Sample : SS011906LCSD04
Misc : 1X ETR0601045
ALS Vial : 8 Sample Multiplier: 1

MAL for WW 2/6/6

Quant Time: Feb 01 14:11:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

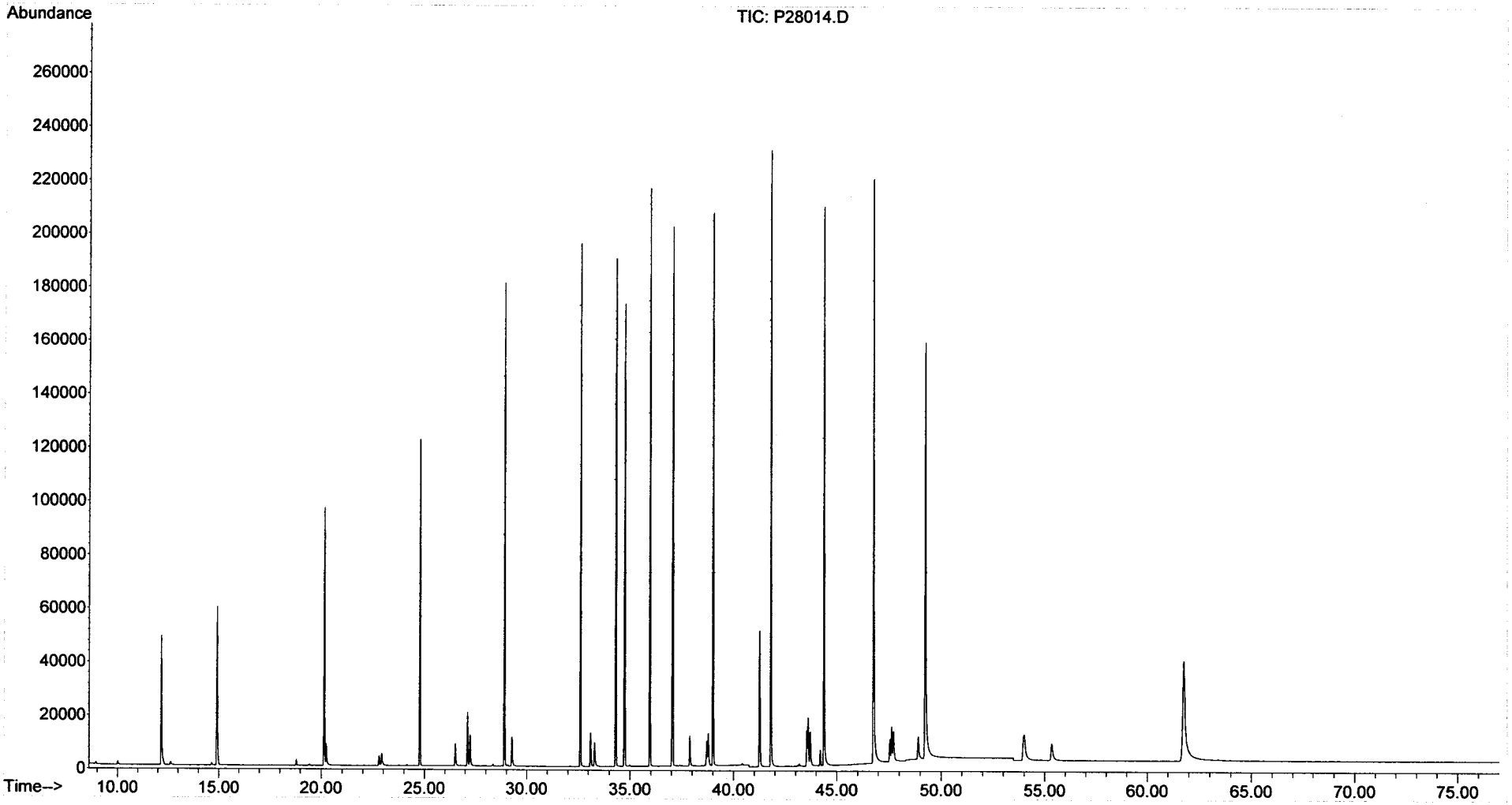
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	24716m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	40360m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	10768m	211.99	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.20%#			
58) Pyrene-d10	38.69	212	24688m	236.30	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.63%#			
81) Benzo[b]fluoranthene-d12	47.55	264	19682m	237.87	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.79%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	20.23	128	25480m	229.20	ng/mL	
15) 2-Methylnaphthalene	22.93	142	15038	212.51	ng/mL#	100
25) Acenaphthylene	26.52	152	24328m	220.56	ng/mL	
26) Acenaphthene	27.24	153	15828m	234.11	ng/mL	
28) Fluorene	29.28	166	16961m	214.55	ng/mL	
41) Phenanthrene	33.11	178	25193	223.35	ng/mL	100
53) Anthracene	33.29	178	20946m	199.94	ng/mL	
56) Fluoranthene	37.89	202	28758m	238.88	ng/mL	
59) Pyrene	38.77	202	30373m	246.38	ng/mL	
73) Benz[a]anthracene	43.55	228	26996	234.22	ng/mL	99
74) Chrysene	43.72	228	28273m	244.23	ng/mL	
75) Chrysene/Triphenylene	43.72	228	28356m	244.95	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	29871	241.31	ng/mL	98
83) Benzo[k]fluoranthene	47.73	252	34164m	263.92	ng/mL	
86) Benzo[a]pyrene	48.90	252	26805	224.68	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.97	276	26480m	223.94	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	25175	226.40	ng/mL	99
90) Benzo[g,h,i]perylene	55.34	276	28247	229.11	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28014.D
Acq On : 30 Jan 2006 11:28 pm
Operator : AC
Sample : SS011906LCSD04
Misc : 1X ETR0601045
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 01 14:11:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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: **0601050**
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

02/06/06 21:38

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: **0601050**
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.

02/06/06 21:38

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: **0601050**
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.

02/06/06 21:34

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: **0601050**
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

02/06/06 21:35

Quantitation Report (QT Reviewed)

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

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

MG 1/17/06

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

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

AF 2nd ck 1/20/06

Quantitation Report (QT Reviewed)

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

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

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

Quantitation Report (QT Reviewed)

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

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

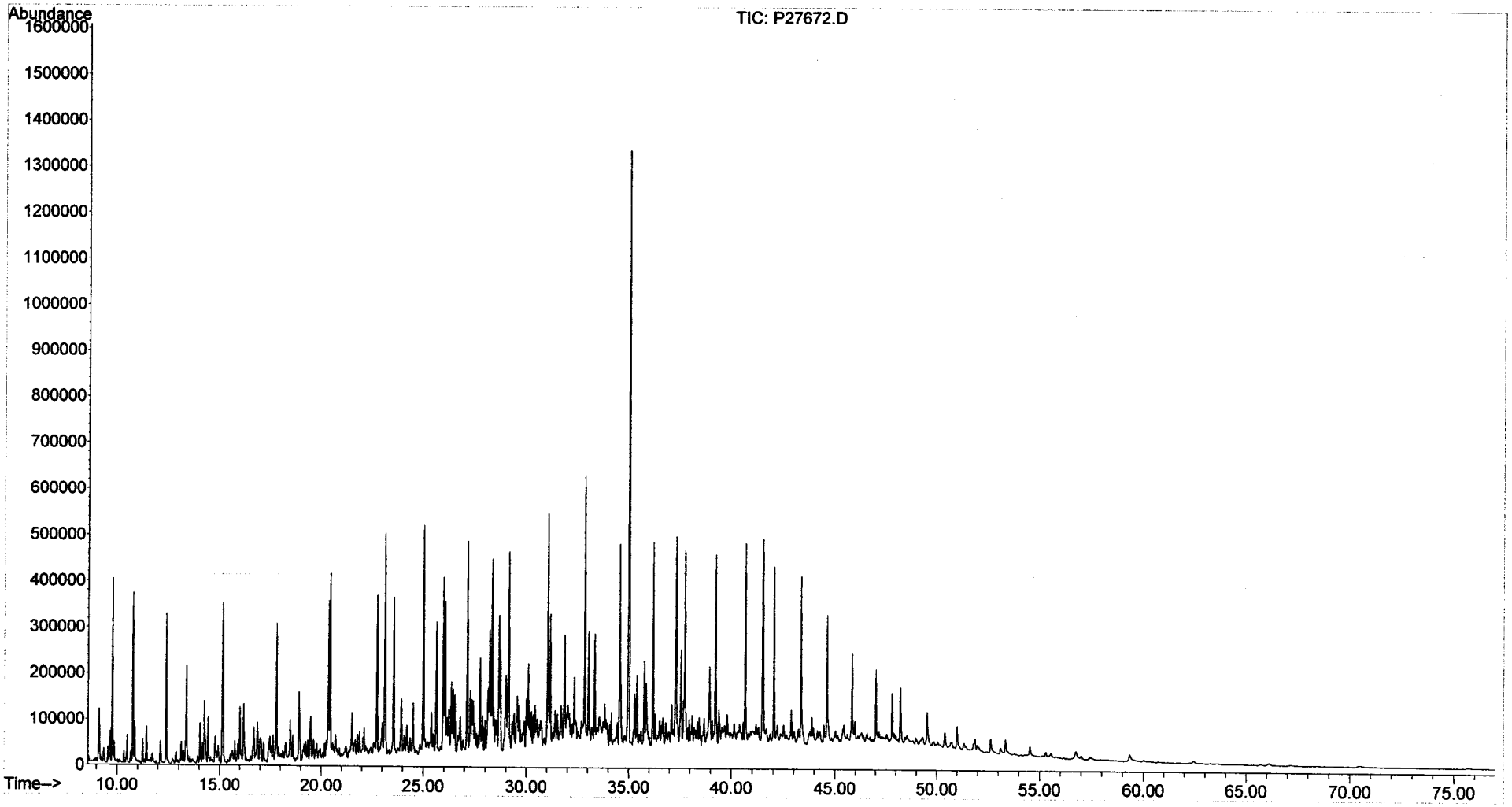
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	51.17	191	2797	28.54	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.89	191	2670m	27.25	ng/ml	
109) 30-Norhopane (T15)	51.87	191	42464m	433.34	ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.98	191	8425m	85.98	ng/ml	
111)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

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

Quantitation Report (QT Reviewed)

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

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



Form III
Spike Recovery Summary
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601050**
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.

02/06/06 20:55

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: **0601050**
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

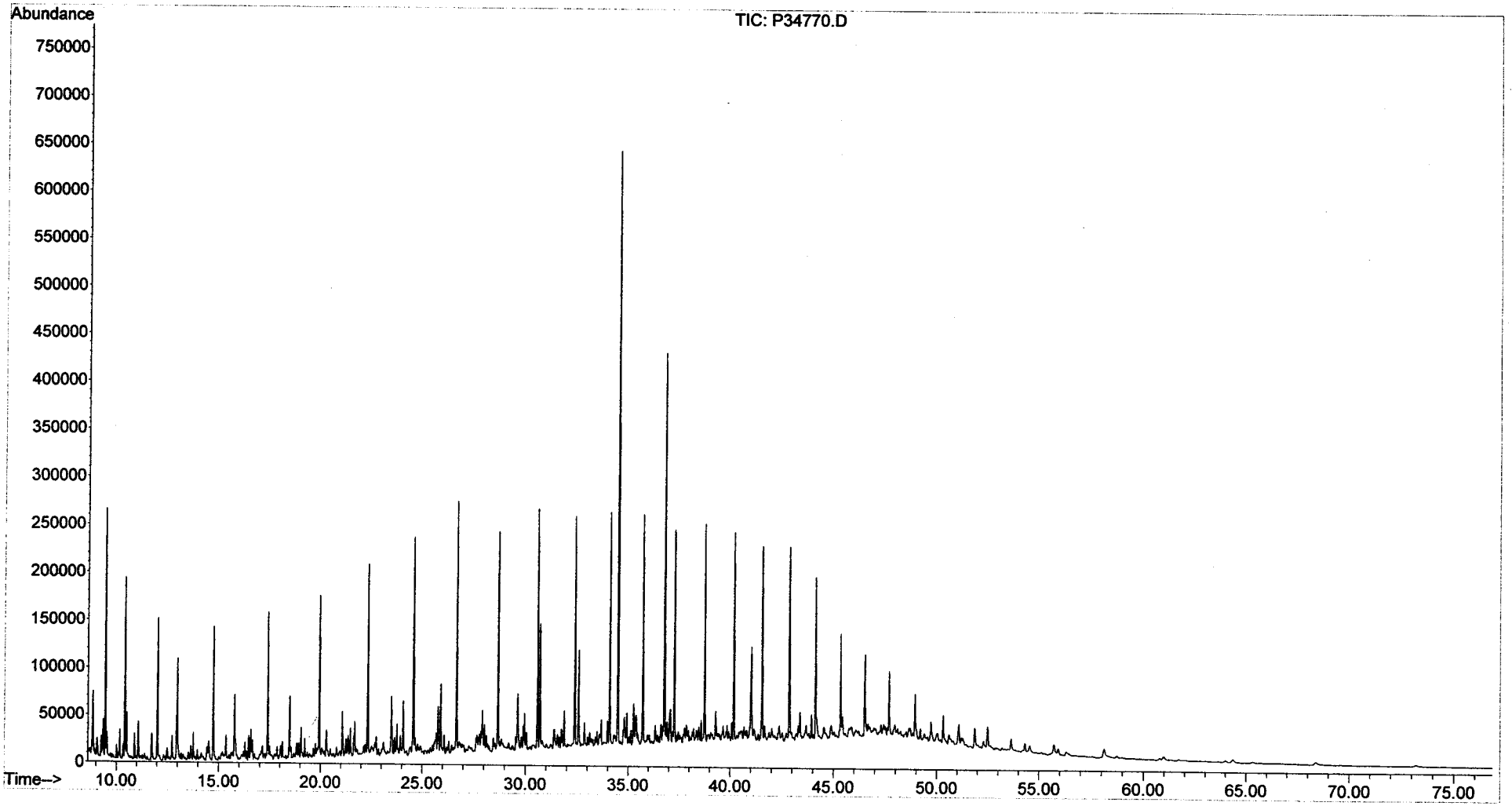
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.68	217	2524m	85.76	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	6356m	215.96	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	8252m	280.38	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	6836m	232.27	ng/ml	
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\S2012301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN23\

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

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

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

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

Line	Sample Name/Misc Info				
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27833	FRNC2B	DCM
5)	Sample	1	P27834	FRNC2B	PAH STD
6)	RearSamp	52	P27835	FRNC2B	dcm
7)	Sample	2	P27836	FRNC2B	PAH STD
8)	RearSamp	53	P27837	FRNC2B	
9)	Sample	3	P27838	FRNC2B	C2012301 PASS
10)	RearSamp	53	P27839	FRNC2B	
11)	Sample	4	P27840	FRNC2B	ANS2012301
12)	RearSamp	53	P27841	FRNC2B	
13)	Sample	5	P27842	FRNC2B	DCM
14)	RearSamp	53	P27843	FRNC2B	
15)	Sample	6	P27844	FRNC2B	DCM
16)	RearSamp	54	P27845	FRNC2B	
17)	Sample	7	P27846	FRNC2B	SS011306B04
18)	RearSamp	54	P27847	FRNC2B	
19)	Sample	8	P27848	FRNC2B	SS011106B01 ✓
20)	RearSamp	54	P27849	FRNC2B	
21)	Sample	9	P27850	FRNC2B	SS011306LCS02
22)	RearSamp	54	P27851	FRNC2B	
23)	Sample	10	P27852	FRNC2B	SS011306LCSD02
24)	RearSamp	54	P27853	FRNC2B	
25)	Sample	11	P27854	FRNC2B	SS011106LCS01 ✓
26)	RearSamp	54	P27855	FRNC2B	
27)	Sample	12	P27856	FRNC2B	SS011106LCSD01 ✓
28)	RearSamp	55	P27857	FRNC2B	
29)	Sample	13	P27858	FRNC2B	C2012302 PASS
30)	RearSamp	55	P27859	FRNC2B	
31)	Sample	14	P27860	FRNC2B	0601019-01-RE ✓
32)	Pause				
33)	RearSamp	56	P27861	FRNC2B	
34)	Sample	15	P27862	FRNC2B	0601019-02-RE ✓
35)	RearSamp	58	P27863	FRNC2B	DCM-AFID
36)	Sample	16	P27864	FRNC2B	0601019-03-RE
37)	RearSamp	57	P27865	FRNC2B	
38)	Sample	17	P27866	FRNC2B	0601019-03D-RE
39)	RearSamp	58	P27867	FRNC2B	DCM-AFID
40)	Sample	18	P27868	FRNC2B	0601019-04-RE ✓
41)	RearSamp	59	P27869	FRNC2B	DCM-AFID
42)	Sample	19	P27870	FRNC2B	0601019-05-RE ✓
43)	RearSamp	60	P27871	FRNC2B	C2012401-AFID

✓ run used
PAH20113.M
WJ 1/30/06

MS 1/30/06

Last Modified: Thu Jan 26 12:23:53 2006

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P27872	FRNC2B	0601019-06-RE ✓
45)	RearSamp	61	P27873	FRNC2B	DCM-AFID
46)	Sample	21	P27874	FRNC2B	0601019-07-RE ✓
47)	RearSamp	62	P27875	FRNC2B	DCM-AFID
48)	Sample	22	P27876	FRNC2B	0601019-08-RE ✓
49)	RearSamp	63	P27877	FRNC2B	TO012306B04-AFID
50)	Sample	23	P27878	FRNC2B	0601019-09-RE ✓
51)	RearSamp	64	P27879	FRNC2B	TO012306LCS01
52)	Sample	24	P27880	FRNC2B	C2012303 PASS
53)	RearSamp	65	P27881	FRNC2B	TO012306LCSD01
54)	Sample	25	P27882	FRNC2B	0601019-10-RE ✓
55)	RearSamp	66	P27883	FRNC2B	0601054-01-AFID
56)	Sample	26	P27884	FRNC2B	0601019-11-RE ✓
57)	RearSamp	67	P27885	FRNC2B	0601054-01D-AFID
58)	Sample	27	P27886	FRNC2B	0601040-05-RE ✓
59)	RearSamp	68	P27887	FRNC2B	0601054-02-AFID
60)	Sample	28	P27888	FRNC2B	C2012304 PASS
61)	Pause				
62)	RearSamp	69	P27889	FRNC2B	C2012402-AFID
63)	Sample	29	P27890	FRNC2B	DCM
64)	RearSamp	70	P27891	FRNC2B	ANS2012401-AFID
65)	Sample	30	P27892	FRNC2B	SS011306B04
66)	RearSamp	99	P27892A	FRNC2B	DCM
67)	Sample	100	P27892B	FRNC2B	PAH STD RT CHECK
68)	RearSamp	99	P27892C	FRNC2B	DCM
69)	Sample	100	P27892D	FRNC2B	C3012304A PASS
70)	Pause				
71)	RearSamp	71	P27893	FRNC2B	LD70212401-AFID
72)	Sample	31	P27894	FRNC2B	DCM
73)	RearSamp	72	P27895	FRNC2B	C2042403-AFID
74)	Sample	32	P27896	FRNC2B	SS011306B04 ✓
75)	RearSamp	73	P27897	FRNC2B	DCM-AFID
76)	Sample	33	P27898	FRNC2B	SS011306LCS02 ✓
77)	RearSamp	74	P27899	FRNC2B	DCM-AFID
78)	Sample	34	P27900	FRNC2B	SS011306LCSD02 ✓
79)	RearSamp	75	P27901	FRNC2B	SS011306B041-AFID
80)	Sample	35	P27902	FRNC2B	C2012305 PASS not needed
81)	RearSamp	76	P27903	FRNC2B	SS011306LCS02-AFID
82)	Sample	36	P27904	FRNC2B	0601040-01 ✓
83)	RearSamp	77	P27905	FRNC2B	SS011306LCSD-AFID
84)	Sample	37	P27906	FRNC2B	0601040-02 ✓
85)	RearSamp	78	P27907	FRNC2B	C2042404-AFID
86)	Sample	38	P27908	FRNC2B	0601040-03 ✓
87)	RearSamp	79	P27909	FRNC2B	DCM-AFID
88)	Sample	39	P27910	FRNC2B	0601040-04 ✓
89)	RearSamp	80	P27911	FRNC2B	TS012306B06-AFID
90)	Sample	40	P27912	FRNC2B	0601040-04D ✓
91)	RearSamp	81	P27913	FRNC2B	TS012306LCS03-AFID
92)	Sample	41	P27914	FRNC2B	C2012306 PASS
93)	Pause				
94)	RearSamp	82	P27915	FRNC2B	0601056-01-AFID
95)	Sample	42	P27916	FRNC2B	ANS2012302
96)	RearSamp	83	P27917	FRNC2BF	C2042404-AFID

✓ run used

MS 1/30/06

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
97)	Sample	43	P27918	FRNC2BF	DCM
98)	Pause				
99)	RearSamp	51	P27919	FRNC2B	DCM-AFID
100)	Sample	1	P27920	FRNC2B	0601019-01-RE ✓
101)	RearSamp	52	P27921	FRNC2B	TO012306B04-AFID
102)	Sample	2	P27922	FRNC2B	0601019-04-RE ✓
103)	RearSamp	53	P27923	FRNC2B	TO012306LCS01-AFID
104)	Sample	3	P27924	FRNC2B	0601019-05-RE ✓
105)	RearSamp	54	P27925	FRNC2B	TO012306LCSD01-AFID
106)	Sample	4	P27926	FRNC2B	0601019-06-RE ✓
107)	RearSamp	55	P27927	FRNC2B	0601054-01-AFID
108)	Sample	5	P27928	FRNC2B	C2012307 PASS
109)	RearSamp	56	P27929	FRNC2B	0601054-01D-AFID
110)	Sample	6	P27930	FRNC2B	DCM
111)	RearSamp	57	P27931	FRNC2B	0601054-02-AFID
112)	Sample	7	P27932	FRNC2B	0601019-01 ✓
113)	RearSamp	58	P27933	FRNC2B	LD7012601-AFID
114)	Sample	8	P27934	FRNC2B	0601019-03 ✓
115)	RearSamp	59	P27935	FRNC2B	ANS7012601
116)	Sample	9	P27936	FRNC2B	0601019-03D ✓
117)	RearSamp	60	P27937	FRNC2B	C2042405-AFID
118)	Sample	10	P27938	FRNC2B	C2012307A PASS
119)	RearSamp	61	P27939	FRNC2B	DCM
120)	Sample	11	P27940	FRNC2B	0601019-07 ✓
121)	RearSamp	62	P27941	FRNC2B	DCM
122)	Sample	12	P27942	FRNC2B	0601019-08 ✓
123)	RearSamp	62	P27943	FRNC2B	DCM-AFID
124)	Sample	13	P27944	FRNC2B	0601019-09 ✓
125)	RearSamp	63	P27945	FRNC2B	DCM-AFID
126)	Sample	14	P27946	FRNC2B	0601019-10 ✓
127)	RearSamp	64	P27947	FRNC2B	SS011906B05-AFID
128)	Sample	15	P27948	FRNC2B	0601019-11 ✓
129)	RearSamp	65	P27949	FRNC2B	SS011906LCS04-AFID
130)	Sample	16	P27950	FRNC2B	C2012308 PASS
131)	RearSamp	66	P27951	FRNC2B	SS011906LCSD04-AFID
132)	Sample	17	P27952	FRNC2B	DCM
133)	RearSamp	67	P27953	FRNC2B	0601045-01-AFID
134)	Sample	18	P27954	FRNC2B	0601045-01-RE ✓
135)	RearSamp	68	P27955	FRNC2B	0601045-02-AFID
136)	Sample	19	P27956	FRNC2B	0601045-02-RE
137)	RearSamp	69	P27957	FRNC2B	0601045-03-AFID
138)	Sample	20	P27958	FRNC2B	0601045-03-RE ✓
139)	RearSamp	70	P27959	FRNC2B	0601045-04-AFID
140)	Sample	21	P27960	FRNC2B	0601045-04-RE
141)	RearSamp	71	P27961	FRNC2B	0601045-05-AFID
142)	Sample	22	P27962	FRNC2B	0601045-05-RE ✓
143)	RearSamp	72	P27963	FRNC2B	0601045-06-AFID
144)	Sample	23	P27964	FRNC2B	0601045-06-RE ✓
145)	RearSamp	73	P27965	FRNC2B	0601045-07-AFID
146)	Sample	24	P27966	FRNC2B	0601045-07-RE ✓
147)	RearSamp	74	P27967	FRNC2B	0601045-08-AFID
148)	Sample	25	P27968	FRNC2B	0601045-08-RE ✓
149)	RearSamp	75	P27969	FRNC2B	0601045-08D-AFID

✓ run used

✓ MS 1/30/06

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
150)	Sample	26	P27970	FRNC2B	0601045-08D-RE ✓
151)	RearSamp	76	P27971	FRNC2B	C2012406-AFID
152)	Sample	27	P27972	FRNC2B	C2012309 PASS
153)	RearSamp	77	P27973	FRNC2B	DCM -AFID
154)	Sample	28	P27974	FRNC2B	DCM
155)	RearSamp	78	P27975	FRNC2B	0601050-01-AFID
156)	Sample	29	P27976	FRNC2B	0601050-01-RE ✓
157)	RearSamp	79	P27977	FRNC2B	0601050-02-AFID
158)	Sample	30	P27978	FRNC2B	0601050-02-RE
159)	RearSamp	80	P27979	FRNC2B	0601050-03-AFID
160)	Sample	31	P27980	FRNC2B	0601050-03-RE
161)	RearSamp	81	P27981	FRNC2B	0601050-04-AFID
162)	Sample	32	P27982	FRNC2B	0601050-04-RE ✓
163)	RearSamp	82	P27983	FRNC2B	0601050-05-AFID
164)	Sample	33	P27984	FRNC2B	0601050-05-RE ✓
165)	RearSamp	83	P27985	FRNC2B	0601050-06-AFID
166)	Sample	34	P27986	FRNC2B	0601050-06-RE
167)	RearSamp	84	P27987	FRNC2B	0601050-06D-AFID
168)	Sample	35	P27988	FRNC2B	0601050-06D-RE
169)	RearSamp	85	P27989	FRNC2B	C2012407-AFID
170)	Sample	36	P27990	FRNC2B	C2012310 PASS
171)	RearSamp	86	P27991	FRNC2B	DCM-AFID
172)	Sample	37	P27992	FRNC2B	DCM
173)	RearSamp	87	P27993	FRNC2B	
174)	Sample	38	P27994	FRNC2B	DCM
175)	RearSamp	87	P27995	FRNC2B	
176)	Sample	39	P27996	FRNC2B	DCM
177)	RearSamp	87	P27997	FRNC2B	
178)	Sample	40	P27998	FRNC2B	DCM

✓ run used

MS 1/30/06

Sequence Name: C:\MSDChem\1\sequence\S2013001.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN30\

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	P27999	FRNC2B	DCM
5)	Sample	1	P28000	FRNC2B	pah std
6)	RearSamp	52	P28001	FRNC2B	c2013001-afid PASS
7)	Sample	2	P28002	FRNC2B	C2013001 PASS.
8)	RearSamp	53	P28003	FRNC2B	ANS2013001-AFID
9)	Sample	3	P28004	FRNC2B	ANS2013003
10)	RearSamp	54	P28005	FRNC2B	DCM-AFID
11)	Sample	4	P28006	FRNC2B	DCM
12)	RearSamp	55	P28007	FRNC2B	DCM-AFID
13)	Sample	5	P28008	FRNC2B	DCM
14)	RearSamp	56	P28009	FRNC2B	SS012506B01-AFID
15)	Sample	6	P28010	FRNC2B	SS011906B05 ✓
16)	RearSamp	57	P28011	FRNC2B	SS012506LCS01-AFID
17)	Sample	7	P28012	FRNC2B	SS011906LCS04 ✓
18)	RearSamp	58	P28013	FRNC2B	SS012506LCSD01-AFID
[illegible])	Sample	8	P28014	FRNC2B	SS011906LCSD04 ✓
[illegible])	RearSamp	59	P28015	FRNC2B	0601064-01-AFID
21)	Sample	9	P28016	FRNC2B	0601045-01-RE2 ✓
22)	RearSamp	60	P28017	FRNC2B	0601064-02-AFID
23)	Sample	10	P28018	FRNC2B	0601045-03-RE2 ✓
24)	RearSamp	61	P28019	FRNC2B	0601064-03-AFID
25)	Sample	11	P28020	FRNC2B	0601045-05-RE2 ✓
26)	RearSamp	62	P28021	FRNC2B	0601064-04-AFID
27)	Sample	12	P28022	FRNC2B	0601045-06-RE2 ✓
28)	RearSamp	63	P28023	FRNC2B	0601064-05-AFID
29)	Sample	13	P28024	FRNC2B	0601045-07-RE2 ✓
30)	RearSamp	64	P28025	FRNC2B	0601064-05D-AFID
31)	Sample	14	P28026	FRNC2B	0601050-04-RE2 ✓
32)	RearSamp	65	P28027	FRNC2B	0601064-06-AFID
33)	Sample	15	P28028	FRNC2B	LCS test
34)	RearSamp	66	P28029	FRNC2B	C2013002-AFID PASS.
35)	Sample	16	P28030	FRNC2B	C2013002 PASS.
36)	RearSamp	67	P28031	FRNC2B	DCM-AFID
37)	Sample	17	P28032	FRNC2B	0601072-01
38)	RearSamp	96	P28032A	FRNC2B	DCM-AFID
39)	Sample	97	P28032B	FRNC2B	PAH STD
40)	RearSamp	98	P28032C	FRNC2B	DCM-AFID
41)	Sample	99	P28032D	FRNC2B	C2013002A PASS
42)	RearSamp	68	P28033	FRNC2B	0601064-07-AFID
43)	Sample	18	P28034	FRNC2B	0601045-02 ✓

✓ run used

PAH20113.M
2/8/06

ms 2/1/06

Last Modified: Tue Jan 31 16:22:17 2006

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2013001.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	69	P28035	FRNC2B	0601064-08-AFID
45)	Sample	19	P28036	FRNC2B	0601045-04 ✓
46)	RearSamp	70	P28037	FRNC2B	0601064-09-AFID
[illegible]	Sample	20	P28038	FRNC2B	0601045-08 ✓
[illegible]	RearSamp	71	P28039	FRNC2B	0601064-10-AFID
49)	Sample	21	P28040	FRNC2B	0601045-08D ✓
50)	RearSamp	72	P28041	FRNC2B	0601064-11-AFID
51)	Sample	22	P28042	FRNC2B	0601050-01 ✓
52)	RearSamp	73	P28043	FRNC2B	C2013003-AFID PASS
53)	Sample	23	P28044	FRNC2B	0601050-02 ✓
54)	RearSamp	74	P28045	FRNC2B	DCM
55)	Sample	24	P28046	FRNC2B	0601050-03 ✓
56)	RearSamp	75	P28047	FRNC2B	ALUMINA CHECK
57)	Sample	25	P28048	FRNC2B	0601050-05 ✓
58)	RearSamp	74	P28049	FRNC2B	
59)	Sample	26	P28050	FRNC2B	0601050-06D ✓
60)	RearSamp	74	P28051	FRNC2B	
61)	Sample	27	P28052	FRNC2B	0601050-06D ✓
62)	RearSamp	74	P28053	FRNC2B	
63)	Sample	28	P28054	FRNC2B	C2013003 PASS
64)	RearSamp	74	P28055	FRNC2B	
65)	Sample	29	P28056	FRNC2B	DCM
66)	RearSamp	76	P28057	FRNC2B	
67)	Sample	30	P28058	FRNC2B	0601072-01-RE ✓
68)	RearSamp	76	P28059	FRNC2B	
69)	Sample	31	P28060	FRNC2B	0601072-01D-RE ✓
70)	RearSamp	77	P28061	FRNC2B	QA WHAC40
71)	Sample	32	P28062	FRNC2B	0601072-01TRP-RE ✓
72)	RearSamp	78	P28063	FRNC2B	QA WHAC41
73)	Sample	33	P28064	FRNC2B	0601072-02-RE ✓
74)	RearSamp	76	P28065	FRNC2B	
75)	Sample	34	P28066	FRNC2B	0601072-02D-RE ✓
[illegible]	RearSamp	76	P28067	FRNC2B	
[illegible]	Sample	35	P28068	FRNC2B	0601072-03-RE ✓
78)	RearSamp	76	P28069	FRNC2B	
79)	Sample	36	P28070	FRNC2B	0601072-04-RE ✓
80)	RearSamp	76	P28071	FRNC2B	
81)	Sample	37	P28072	FRNC2B	0601072-13-RE ✓
82)	RearSamp	76	P28073	FRNC2B	
83)	Sample	38	P28074	FRNC2B	0601072-18-RE ✓
84)	RearSamp	76	P28075	FRNC2B	
85)	Sample	39	P28076	FRNC2B	C2013004 PASS
86)	RearSamp	76	P28077	FRNC2B	
87)	Sample	40	P28078	FRNC2B	0601064-01-RE ✓
88)	RearSamp	76	P28079	FRNC2B	
89)	Sample	41	P28080	FRNC2B	0601064-02-RE ✓
90)	RearSamp	99	P28080A	FRNC2B	
91)	Sample	100	P28080B	FRNC2B	0601050-06 - TEST.
92)	RearSamp	76	P28081	FRNC2B	
93)	Sample	42	P28082	FRNC2B	0601070-04 - TEST.
94)	RearSamp	99	P28082A	FRNC2B	
95)	Sample	100	P28082B	FRNC2B	QA WHAC41
96)	RearSamp	76	P28083	FRNC2B	

✓ Run Used.

✓ run used

MS 2/6/06

Sequence Name: C:\MSDChem\1\sequence\S2013001.S

	Line Type	Vial	DataFile	Method	Sample Name
97)	Sample	43	P28084	FRNC2B	0601064-03-RE ✓
98)	RearSamp	76	P28085	FRNC2B	
99)	Sample	44	P28086	FRNC2B	0601064-04-RE ✓
1[illegible])	RearSamp	76	P28087	FRNC2B	
1[illegible])	Sample	45	P28088	FRNC2B	0601064-05-RE ✓
102)	RearSamp	76	P28089	FRNC2B	
103)	Sample	46	P28090	FRNC2B	0601064-05D-RE ✓
104)	RearSamp	76	P28091	FRNC2B	
105)	Sample	47	P28092	FRNC2B	0601064-06-RE ✓
106)	RearSamp	76	P28093	FRNC2B	
107)	Sample	48	P28094	FRNC2B	0601064-07-RE ✓
108)	RearSamp	76	P28095	FRNC2B	
109)	Sample	49	P28096	FRNC2B	0601064-08-RE ✓
110)	RearSamp	76	P28097	FRNC2B	
111)	Sample	50	P28098	FRNC2B	0601064-09-RE ✓
112)	RearSamp	76	P28099	FRNC2B	
113)	Sample	1	P28100	FRNC2B	C2013005 PASS
114)	RearSamp	76	P28101	FRNC2B	
115)	Sample	2	P28102	FRNC2B	0601064-10-RE ✓
116)	RearSamp	76	P28103	FRNC2B	
117)	Sample	3	P28104	FRNC2B	0601064-11-RE ✓
118)	RearSamp	76	P28105	FRNC2B	
119)	Sample	1	P28106	FRNC2B	C2013006 PASS.
120)	Pause				
121)	RearSamp	76	P28107	FRNC2B	
122)	Sample	4	P28108	FRNC2B	DCM
123)	RearSamp	76	P28109	FRNC2B	
124)	Sample	5	P28110	FRNC2B	WHAC41

✓ run used

MS 2/6/06

Sequence Name: C:\MSDChem\1\sequence\S3012601.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN26\

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

2/3/06.

Line			Sample Name/Misc Info		
1)	Sample	1	P34869	FRBIO3B	C3012601 PASS
2)	Sample	2	P34870	FRBIO3B	DCM
3)	Sample	3	P34871	FRBIO3B	SS011906B04 ✓
4)	Sample	4	P34872	FRBIO3B	0512128-01 ✓
5)	Sample	5	P34873	FRBIO3B	0512128-02 ✓
6)	Sample	6	P34874	FRBIO3B	0512128-03 ✓
7)	Sample	7	P34875	FRBIO3B	0512128-03D ✓
8)	Sample	8	P34876	FRBIO3B	0512128-04 ✓
9)	Sample	9	P34877	FRBIO3B	C3012602 PASS
10)	Sample	10	P34878	FRBIO3B	DCM
11)	Sample	11	P34879	FRBIO3B	SS011906B05 ✓
12)	Sample	12	P34880	FRBIO3B	0601045-01 ✓
13)	Sample	13	P34881	FRBIO3B	0601045-02 ✓
14)	Sample	14	P34882	FRBIO3B	0601045-03 ✓
15)	Sample	15	P34883	FRBIO3B	0601045-04 ✓
16)	Sample	16	P34884	FRBIO3B	0601045-05 ✓
17)	Sample	17	P34885	FRBIO3B	0601045-06 ✓
18)	Sample	18	P34886	FRBIO3B	0601045-07 ✓
[illegible]	Sample	19	P34887	FRBIO3B	0601045-08 ✓
[illegible]	Sample	20	P34888	FRBIO3B	0601045-08D ✓
21)	Sample	21	P34889	FRBIO3B	C3012603 PASS
22)	Sample	22	P34890	FRBIO3B	0601050-01 ✓
23)	Sample	23	P34891	FRBIO3B	0601050-02 ✓
24)	Sample	24	P34892	FRBIO3B	0601050-03 ✓
25)	Sample	25	P34893	FRBIO3B	0601050-04 ✓
26)	Sample	26	P34894	FRBIO3B	0601050-05 ✓
27)	Sample	27	P34895	FRBIO3B	0601050-06 ✓
28)	Sample	28	P34896	FRBIO3B	0601050-06D ✓
29)	Sample	29	P34897	FRBIO3B	C3012604 PASS
30)	Sample	30	P34898	FRBIO3B	C3012605 PASS
31)	Sample	31	P34899	FRBIO3B	0512128-01 ✓
32)	Sample	32	P34900	FRBIO3B	C3012606 PASS
33)	Sample	33	P34901	FRBIO3B	C3012607 PASS
34)	Sample	34	P34902	FRBIO3B	0512128-01 ✓
35)	Sample	35	P34903	FRBIO3B	C3012608 PASS
36)	Sample	36	P34904	FRBIO3B	C3012609 PASS
37)	Sample	37	P34905	FRBIO3B	0512128-01 ✓
38)	Sample	38	P34906	FRBIO3B	C3012610 PASS
39)	Sample	1	P34907	FRBIO3B	DCM
40)	Sample	2	P34908	FRBIO3B	SS012506B01 ✓
41)	Sample	3	P34909	FRBIO3B	0601064-01 ✓
42)	Sample	4	P34910	FRBIO3B	0601064-02 ✓
43)	Sample	5	P34911	FRBIO3B	0601064-03 ✓

PAH #3 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: ~~HC31213.M~~ PAH Process Method: ~~PAH31110.M~~

B1030111.M 2/3/06

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

Sequence Name: C:\MSDChem\1\sequence\S3012601.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	6	P34912	FRBIO3B	0601064-04 ✓
45)	Sample	7	P34913	FRBIO3B	0601064-05 ✓
46)	Sample	8	P34914	FRBIO3B	0601064-05D ✓
	Sample	9	P34915	FRBIO3B	0601064-06 ✓
	Sample	10	P34916	FRBIO3B	0601064-07 ✓
49)	Sample	11	P34917	FRBIO3B	C3012611 PASS
50)	Sample	12	P34918	FRBIO3B	0601064-08 ✓
51)	Sample	13	P34919	FRBIO3B	0601064-09 ✓
52)	Sample	14	P34920	FRBIO3B	0601064-10 ✓
53)	Sample	15	P34921	FRBIO3B	0601064-11 ✓
54)	Sample	16	P34922	FRBIO3B	C3012612 PASS
55)	Sample	17	P34923	FRBIO3B	dcm
56)	Sample	18	P34924	FRBIO3B	SS012606B19 ✓
57)	Sample	19	P34925	FRBIO3B	0601070-01 ✓
58)	Sample	20	P34926	FRBIO3B	0601070-02 ✓
59)	Sample	21	P34927	FRBIO3B	0601070-03 ✓
60)	Sample	22	P34928	FRBIO3B	0601070-04 ✓
61)	Sample	23	P34929	FRBIO3B	0601070-05 ✓
62)	Sample	24	P34930	FRBIO3B	0601070-06 ✓
63)	Sample	25	P34931	FRBIO3B	0601070-07 ✓
64)	Sample	26	P34932	FRBIO3B	0601070-08 ✓
65)	Sample	27	P34933	FRBIO3B	0601070-09 ✓
66)	Sample	28	P34934	FRBIO3B	0601070-09D ✓
67)	Sample	29	P34935	FRBIO3B	C3012613 PASS
68)	Sample	30	P34936	FRBIO3B	dcm
69)	Sample	31	P34937	FRBIO3B	SS013006B05 ✓
70)	Sample	32	P34938	FRBIO3B	0601073-01 ✓
71)	Sample	33	P34939	FRBIO3B	0601073-02 ✓
72)	Sample	34	P34940	FRBIO3B	0601073-03 ✓
73)	Sample	35	P34941	FRBIO3B	0601073-04 ✓
74)	Sample	36	P34942	FRBIO3B	0601073-04D ✓
75)	Sample	37	P34943	FRBIO3B	C3012614 PASS.

CW 2/8/06

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: **0601050**
Lab ID: **SS011906B05**
Date Analyzed: **01/30/06 20:11**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-32 (5.9-6.9)	0601050-01E	01/28/06 18:18
GC-SED-41 (7.3-8.3)	0601050-04	01/28/06 23:07
GC-SED-40 (5-6)	0601050-05E	01/29/06 00:41
LCS	SS011906LCS04	01/30/06 21:50
LCSD	SS011906LCSD04	01/30/06 23:28
GC-SED-41 (7.3-8.3)	0601050-04E	01/31/06 09:06
GC-SED-32 (5.9-6.9)	0601050-01	02/01/06 02:21
GC-SED-31 (2.5-4.5)	0601050-02	02/01/06 03:57
GC-SED-36 (2.5-4.5)	0601050-03	02/01/06 05:34
GC-SED-40 (5-6)	0601050-05	02/01/06 07:12
GC-SED-33 (1.5-3)	0601050-06 D	02/01/06 08:47
GC-SED-33 (1.5-3)	0601050-06	02/01/06 10:24

N/A - Not Applicable

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

Form IV
Method Blank Summary
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **SS011906B05**
Date Analyzed: **01/27/06 02:20**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-32 (5.9-6.9)	0601050-01	01/27/06 18:52
GC-SED-31 (2.5-4.5)	0601050-02	01/27/06 20:23
GC-SED-36 (2.5-4.5)	0601050-03	01/27/06 21:54
GC-SED-41 (7.3-8.3)	0601050-04	01/27/06 23:25
GC-SED-40 (5-6)	0601050-05	01/28/06 00:55
GC-SED-33 (1.5-3)	0601050-06	01/28/06 02:26
GC-SED-33 (1.5-3)	0601050-06 D	01/28/06 03:56

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 ✓
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 1/15/06

mis-inject, re-analyze 1/17/06

SO011706ANS01

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: ~~PAH21207~~.M

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

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

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

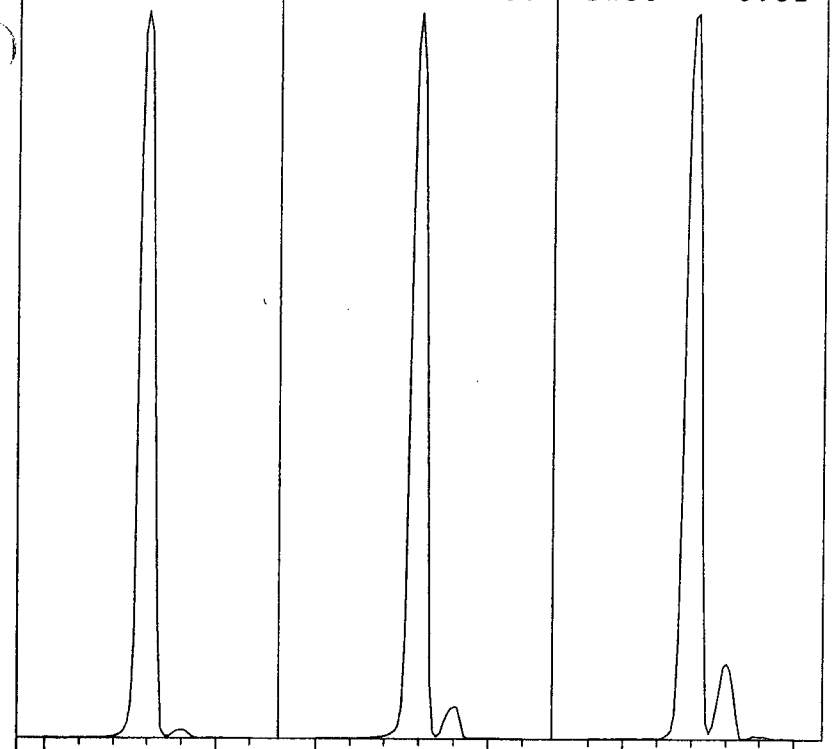
5973 Tune

1/13/06

Fri Jan 13 15:00:29 2006
C:\MSDCHEM\1\5973N\PFTBA.U

Instrument: PAHINST2

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

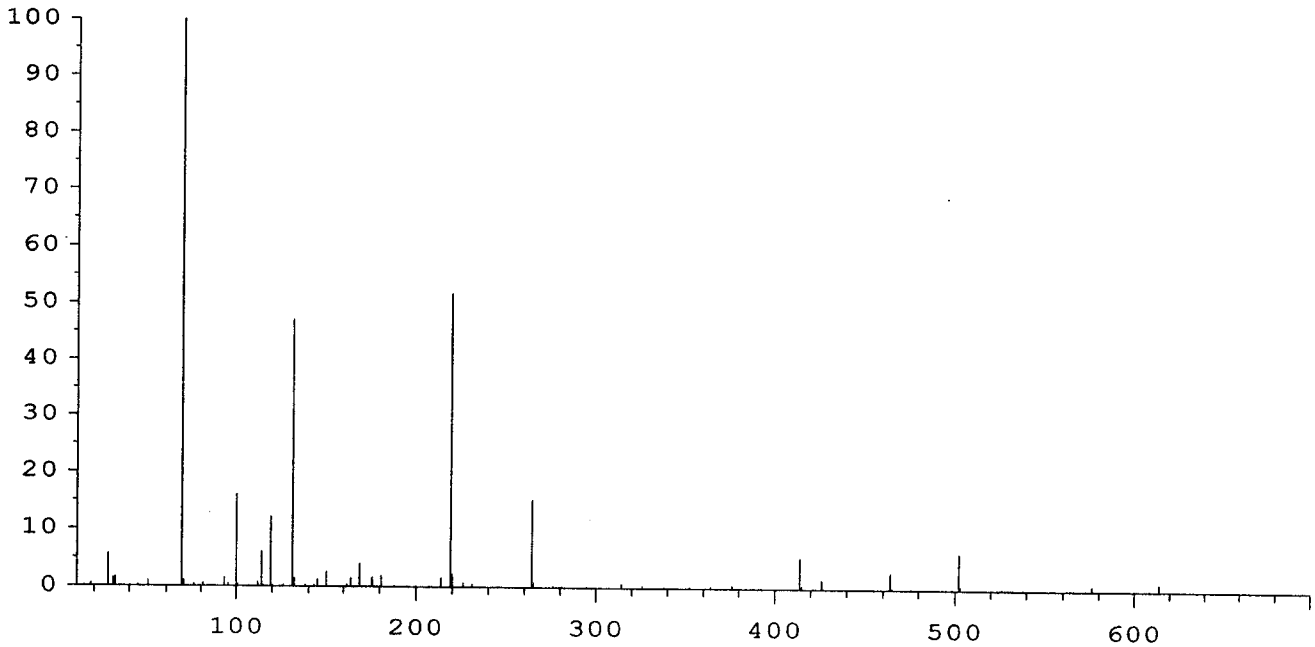


Ion Pol	POS	MassGain	132
		MassOffs	-12
Emission	34.6	AmuGain	2591
ElEnrgy	69.9	AmuOffs	131
Filament	1	Wid219	-0.038
		DC Pol	POS
Repeller	28.45		
IonFcus	81.6	HEDEnab	ON
EntLens	0.0	EMVolts	1553
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10

Zones:

MS Source	230	Foreline	47
MS Quad	150		

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



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

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

Response Factor Report PAHINST2

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

ans 1-17-06

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

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

RF 2nd CV 1/2010

Response Factor Report PAHINST2

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

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

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

RF 2nd CT 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 10000=P27668 CN,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

OWS 1/17/06

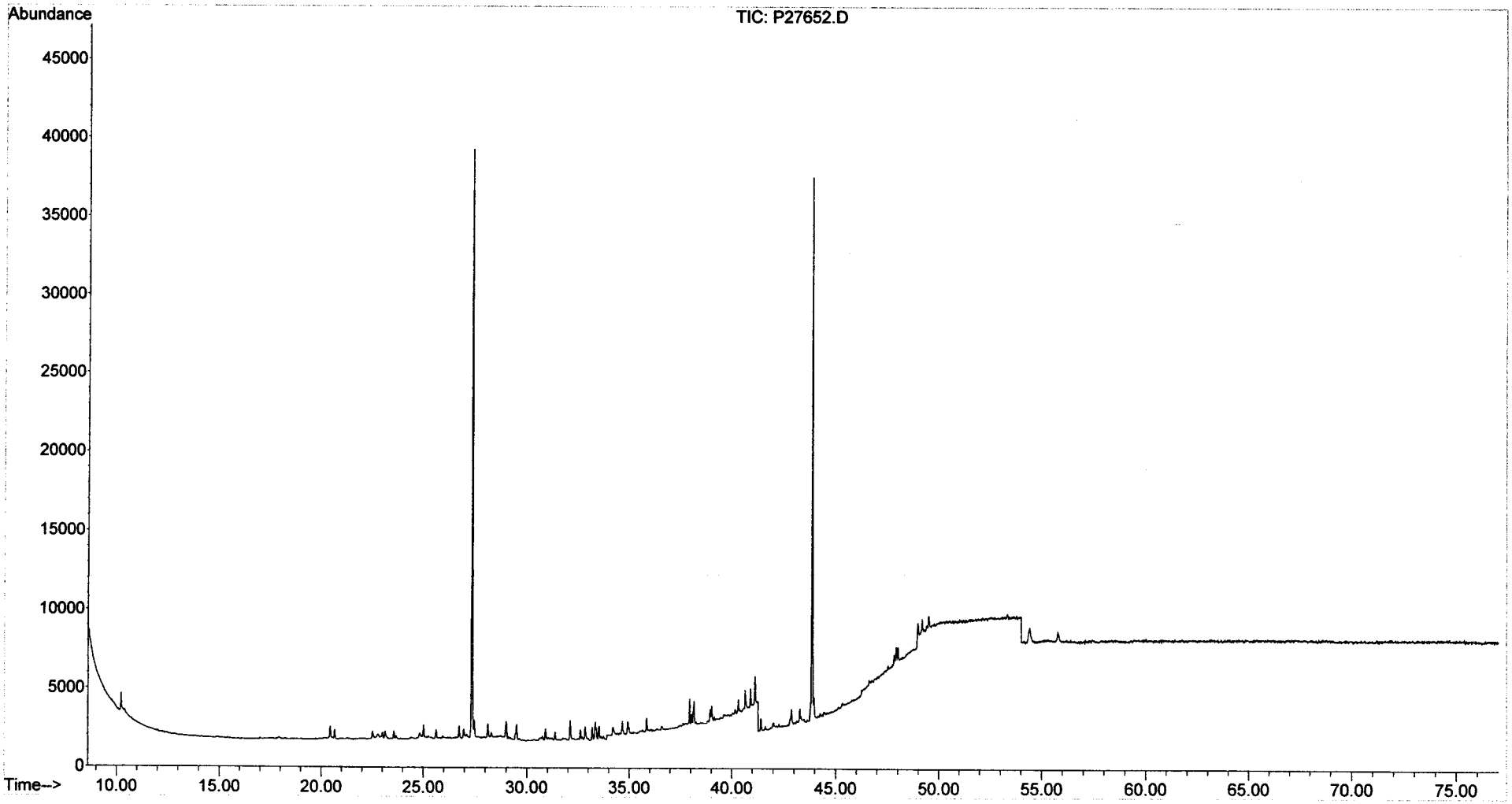
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48581	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	73691	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	970	9.32	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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%#			

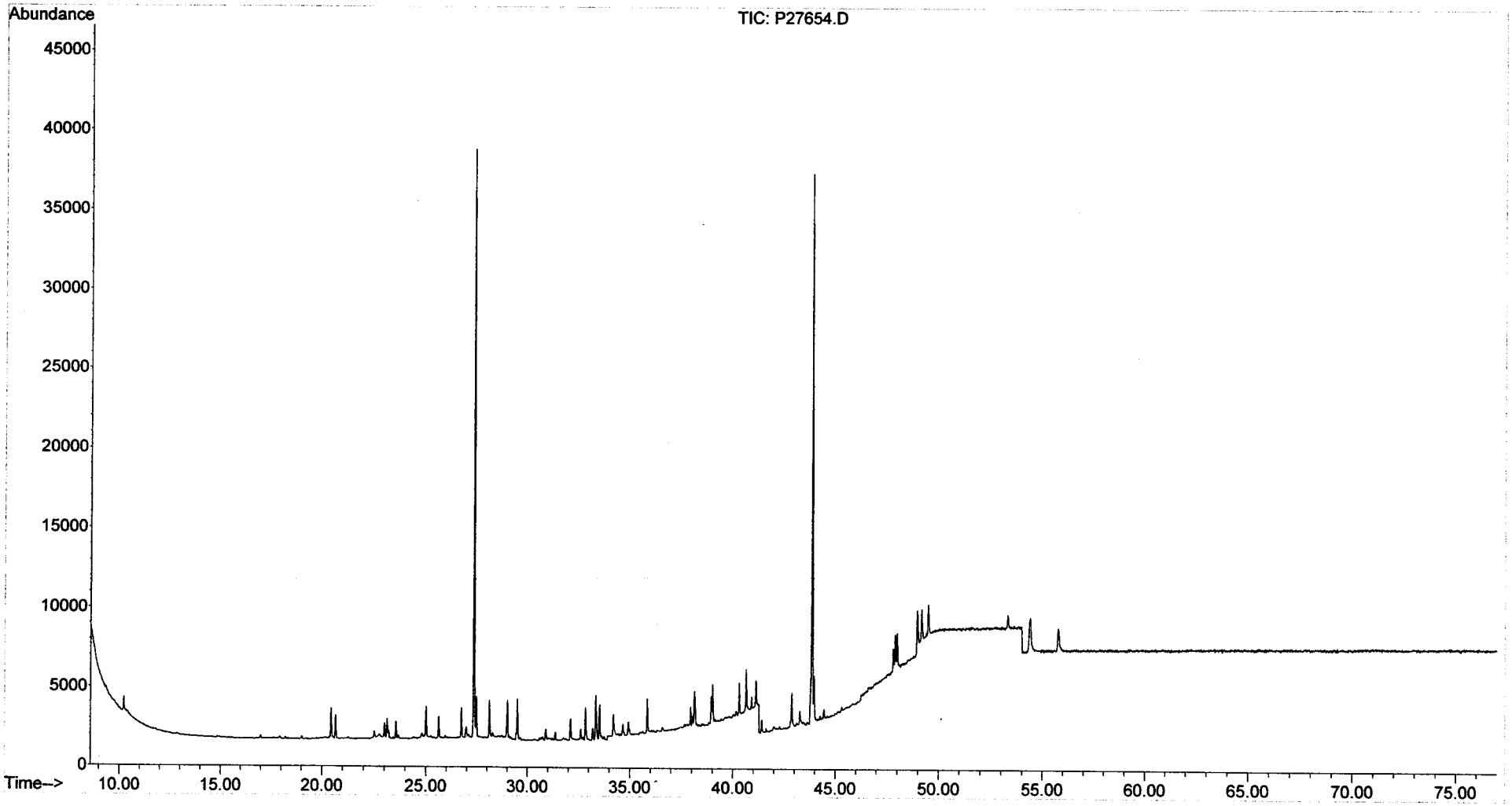
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	542	13.63	ng/mL	100
4) cis-Decalin	18.21	138	392	12.79	ng/mL	100
9) Naphthalene	20.44	128	5305	24.80	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	3404	23.64	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	3187	23.50	ng/mL#	100
17) Benzothiophene	20.66	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

MS 1-17-06

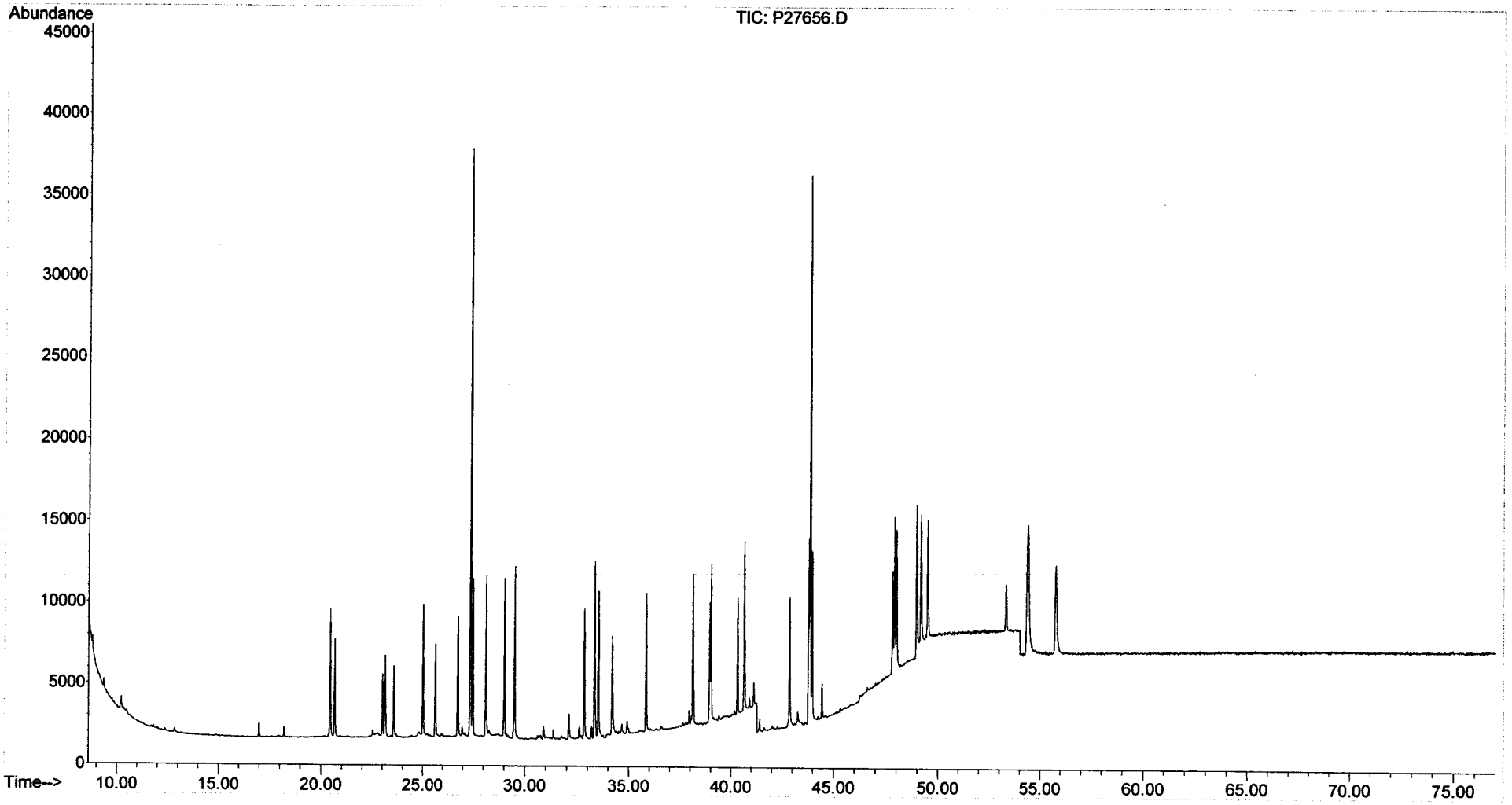
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46810	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	70628	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	9713	96.87	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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%#			

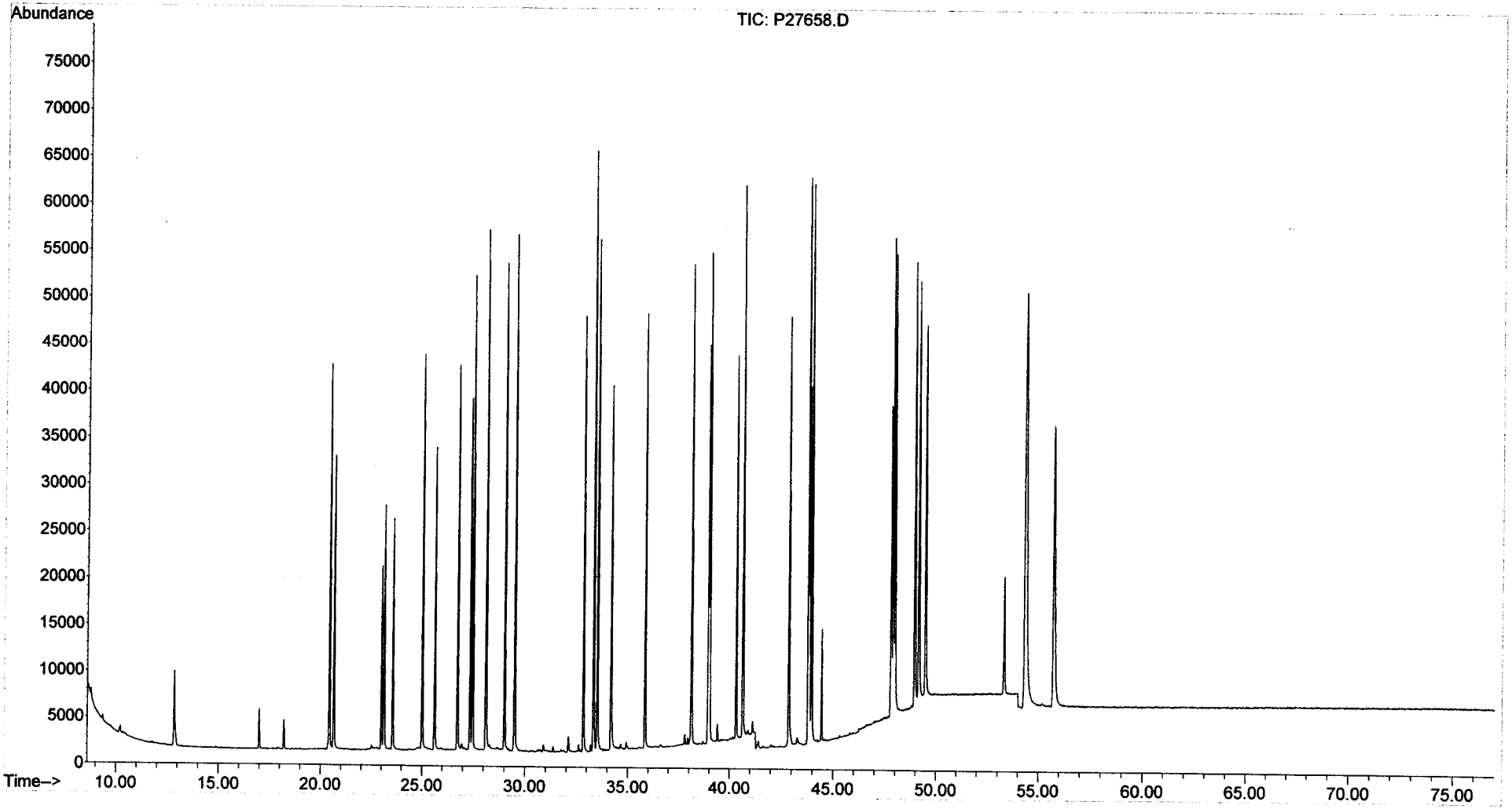
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	9714	228.90	ng/mL	100
4) cis-Decalin	18.21	138	7379	237.07	ng/mL	100
9) Naphthalene	20.44	128	107063	485.52	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	68545	505.09	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	64581	495.98	ng/mL#	100
17) Benzothiophene	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%			

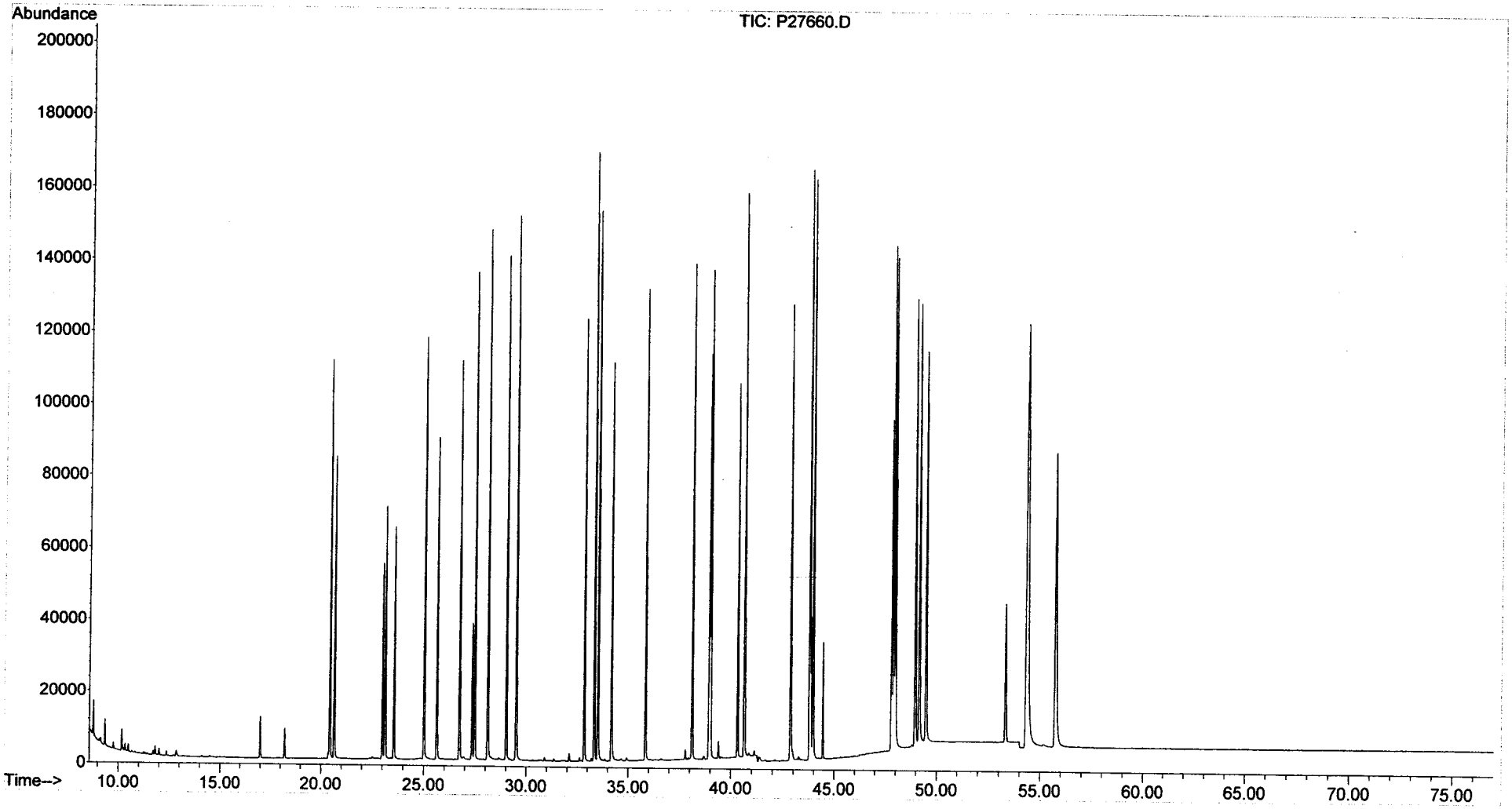
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	24976	584.15	ng/mL	100
4) cis-Decalin	18.22	138	18985	605.39	ng/mL	100
9) Naphthalene	20.44	128	271952	1224.06	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	177332	1296.95	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	167142	1274.07	ng/mL#	100
17) 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

CMS 1-17-06

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

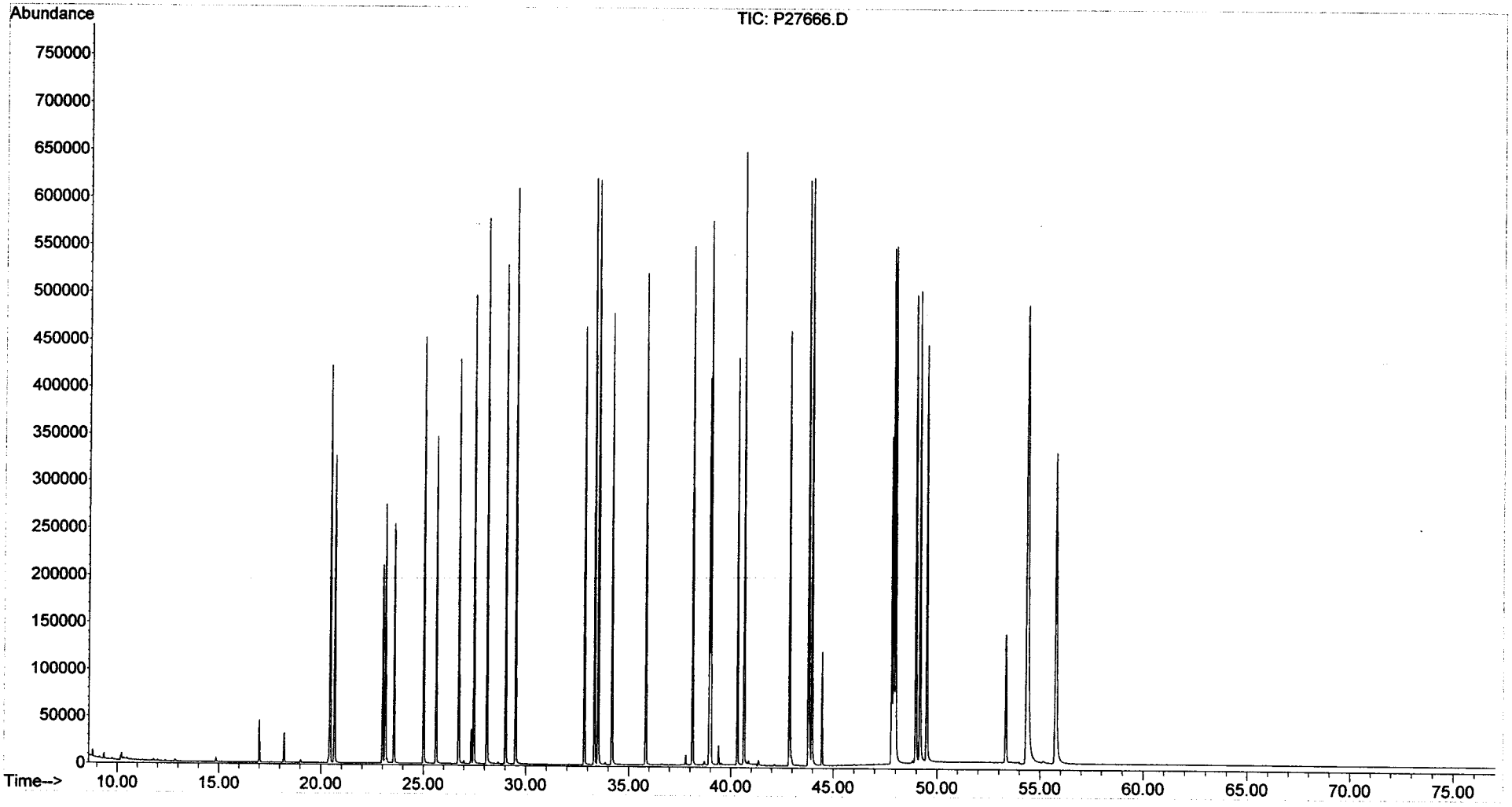
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	95544	2353.44 ng/mL	100
4) cis-Decalin	18.22	138	72265	2426.89 ng/mL	100
9) Naphthalene	20.44	128	1036151	4911.69 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	681031	5245.66 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	646356	5188.91 ng/mL#	100
17)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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

CWS 1/17/06

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

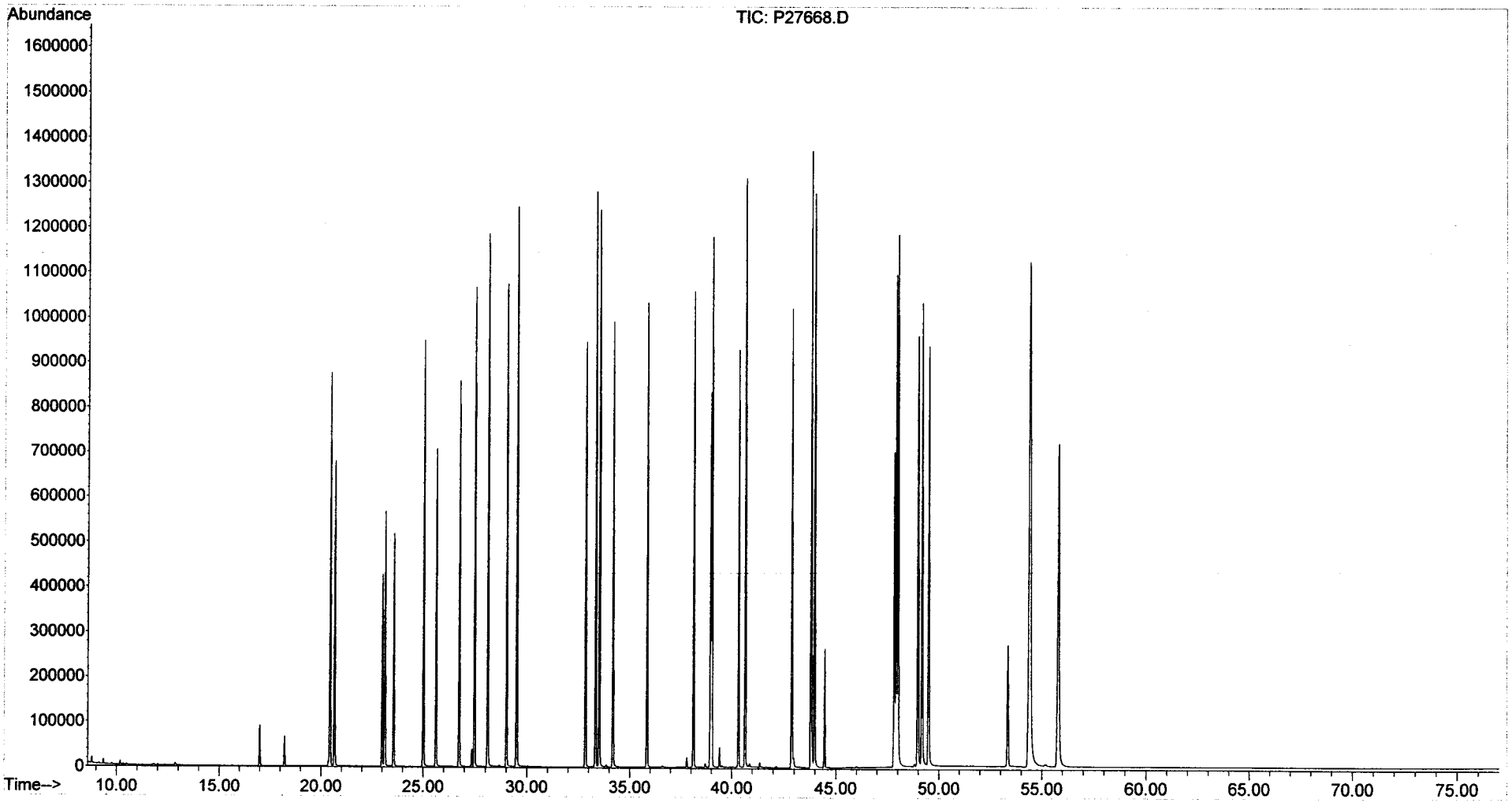
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	197168	4525.83 ng/mL	100
4) cis-Decalin	18.22	138	150854	4721.07 ng/mL	100
9) Naphthalene	20.44	128	2133056	9422.62 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1412575	10139.26 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	1343503	10050.88 ng/mL#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

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

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

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

MS 1-17-06

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	98	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.000#	100.0#	0#	-16.99#
4	t	cis-Decalin	0.315	0.000#	100.0#	0#	-18.22#
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.165	3.7	95	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.05#
14	s	2-Methylnaphthalene-d10	1.028	1.056	-2.7	102	0.00
15	t	2-Methylnaphthalene	1.432	1.350	5.7	93	0.00
16	t	1-Methylnaphthalene	1.363	1.352	0.8	99	0.00
17	A1	Benzothiophene	1.810	0.000#	100.0#	0#	-20.66#
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.86#
22	t	Biphenyl	1.802	1.747	3.1	98	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.213	1.6	98	0.00
24	t	Dibenzofuran	1.989	1.984	0.3	97	0.01
25	t	Acenaphthylene	2.231	2.101	5.8	93	0.00
26	t	Acenaphthene	1.368	1.324	3.2	96	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.087	-1.0	101	0.00
28	A1	Fluorene	1.599	1.450	9.3	90	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.02#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.85#
32	A1	Dibenzothiophene	2.138	0.000#	100.0#	0#	-32.83#
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.57#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.91#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.95#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.57#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.25#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.06#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.74#
41	A1	Phenanthrene	2.282	2.049	10.2	89	0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.25#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.52#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.71#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.81#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.71#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.53#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.29#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.36#

Evaluate Continuing Calibration Report

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

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

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.54#
52	t	Retene	0.518	0.000#	100.0#	0#	-40.33#
53	t	Anthracene	2.119	1.927	9.1	89	0.00
54	t	Carbazole	2.020	0.000#	100.0#	0#	-34.18#
55	t	1-Methylphenanthrene	1.583	1.575	0.5	98	0.00
56	A1	Fluoranthene	2.435	2.226	8.6	89	0.00
57	t	Benzo(b)fluorene	1.497	0.000#	100.0#	0#	-40.65#
58	s	Pyrene-d10	2.114	2.046	3.2	93	0.00
59	A1	Pyrene	2.494	2.357	5.5	93	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.35#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.16#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.17#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.53#
64	A1	Naphthobenzothiophene	2.313	0.000#	100.0#	0#	-42.88#
65	A2	Naphthobenzothiophene-2,1-D	2.313	0.000#	100.0#	0#	-42.88#
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.16#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.46#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.22#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.22#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.86#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.98#
72	i	Chrysene-d12	1.000	1.000	0.0	97	0.00
73	t	Benz[a]anthracene	1.428	1.363	4.6	94	0.00
74	A1	Chrysene	1.434	1.407	1.9	96	0.00
75	A2	Chrysene/Triphenylene	1.434	1.407	1.9	96	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.38#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.82#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.75#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.34#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-50.43#
81	s	Benzo[b]fluoranthene-d12	1.025	1.049	-2.3	99	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.391	9.3	89	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.521	5.2	93	0.00
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.24#
85	t	Benzo[e]pyrene	1.478	1.425	3.6	94	-0.01
86	t	Benzo[a]pyrene	1.478	1.276	13.7	85	0.00
87	t	Perylene	1.473	1.409	4.3	94	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.199	18.2	82	0.00
89	t	Dibenz[a,h]anthracene	1.378	1.137	17.5	80	0.01
90	t	Benzo[g,h,i]perylene	1.527	1.264	17.2	83	0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.000#	100.0#	0#	-53.35#
92	A2	Hopane (T19)	0.493	0.000#	100.0#	0#	-53.35#
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.43#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.15#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.63#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.98#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.69#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.79#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.08#

Evaluate Continuing Calibration Report

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

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

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.24#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.78#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.99#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.22#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.28#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.54#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.80#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.07#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.81#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.79#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.90#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.02#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.63#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.04#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.00#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.19#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.44#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.89#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.30#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.21#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.89#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.09#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.08#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.54#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.97#
125	SA1	5B(H)Cholane - Surr	0.230	0.214	7.0	95	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.91#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.33#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.03#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.93#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.49#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.77#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.06#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.23#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.99#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.36#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.34#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.03#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.12#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.42#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.49#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.63#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#

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

Quantitation Report (QT Reviewed)

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

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

MS 1/17/06

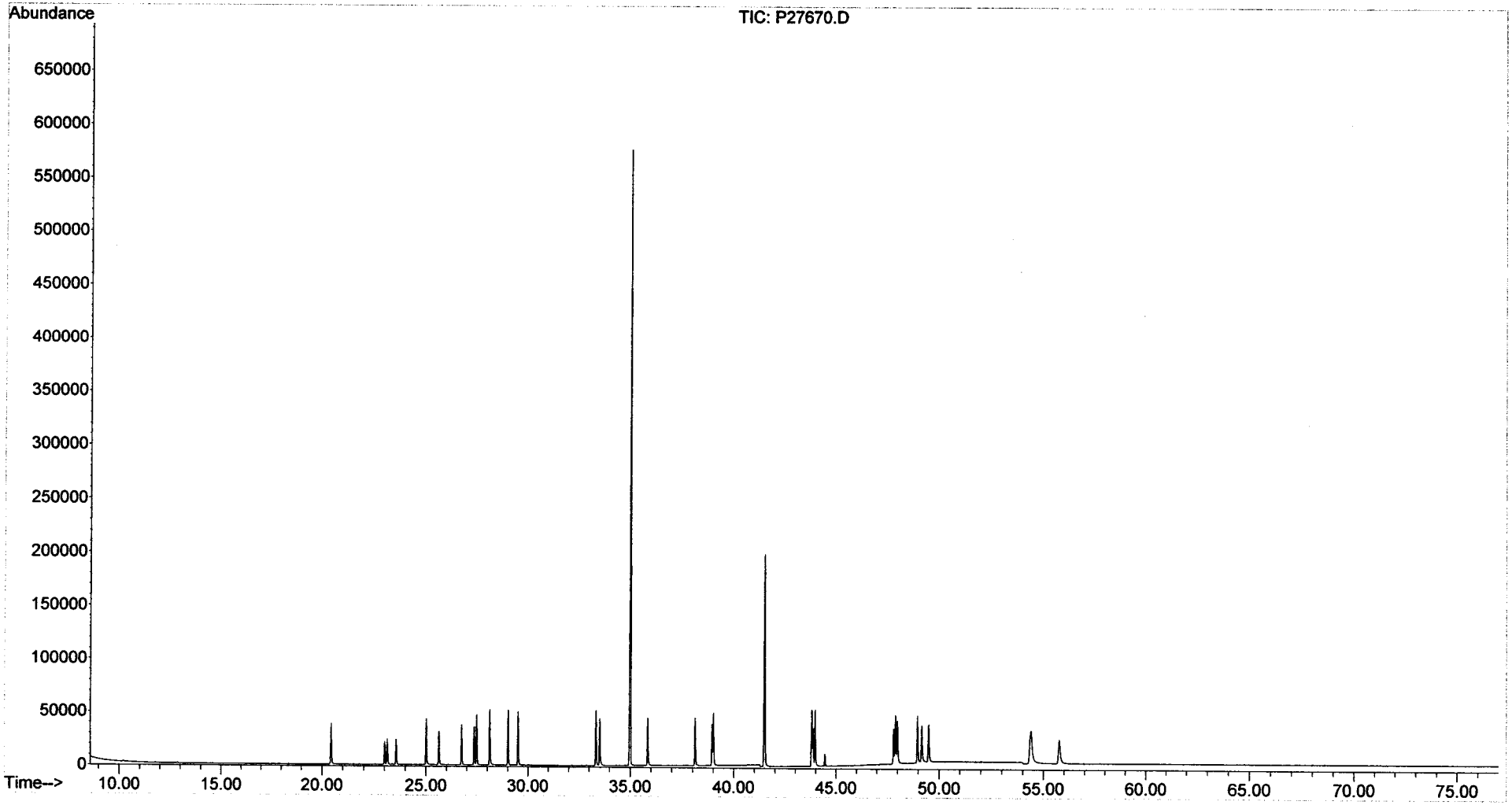
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47092	500.00	ng/mL	0.00
72) Chrysene-d12	43.87	240	72455	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	49721	513.75	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.38%			
58) Pyrene-d10	38.94	212	96367	484.10	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.41%#			
81) Benzo[b]fluoranthene-d12	47.81	264	75992	511.58	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.16%			
125) 5B(H)Cholane - Surr	44.45	217	15474	464.55	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.45%#			
Target Compounds						Qvalue
9) Naphthalene	20.44	128	101937	481.26	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	63568	471.47	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	63677	496.19	ng/mL#	100
22) Biphenyl	25.02	154	82264	484.67	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	57120	491.80	ng/mL#	100
24) Dibenzofuran	28.13	168	93440	498.71	ng/mL	100
25) Acenaphthylene	26.74	152	98956m	470.87	ng/mL	
26) Acenaphthene	27.47	153	62330	483.86	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	29.02	170	51189	505.03	ng/mL	100
28) Fluorene	29.50	166	68274	453.28	ng/mL	99
41) Phenanthrene	33.34	178	96471	448.88	ng/mL	99
53) Anthracene	33.51	178	90748m	454.65	ng/mL	
55) 1-Methylphenanthrene	35.84	192	74185	497.56	ng/mL	100
56) Fluoranthene	38.12	202	104842	457.07	ng/mL	99
59) Pyrene	39.01	202	111007	472.60	ng/mL	98
73) Benz[a]anthracene	43.79	228	98771	477.36	ng/mL	100
74) Chrysene	43.97	228	101958	490.61	ng/mL	99
75) Chrysene/Triphenylene	43.97	228	101958	490.61	ng/mL	99
82) Benzo[b]fluoranthene	47.89	252	100767	453.45	ng/mL	98
83) Benzo[k]fluoranthene	47.99	252	110190	474.17	ng/mL	99
85) Benzo[e]pyrene	48.96	252	103237	481.91	ng/mL	99
86) Benzo[a]pyrene	49.17	252	92418m	431.51	ng/mL	
87) Perylene	49.51	252	102074	478.06	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	54.36	276	86850m	409.14	ng/mL	
89) Dibenz[a,h]anthracene	54.42	278	82352	412.53	ng/mL	99
90) Benzo[g,h,i]perylene	55.79	276	91594	413.83	ng/mL	100

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

Quantitation Report (QT Reviewed)

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

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



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

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

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

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

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

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

cw 2/8/06

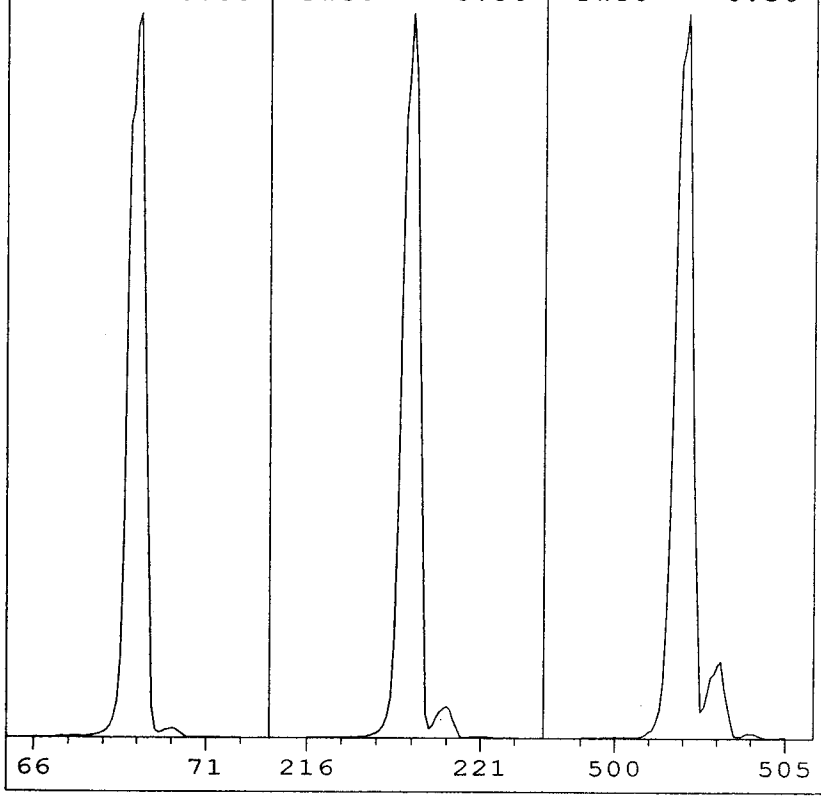
5973

11166

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

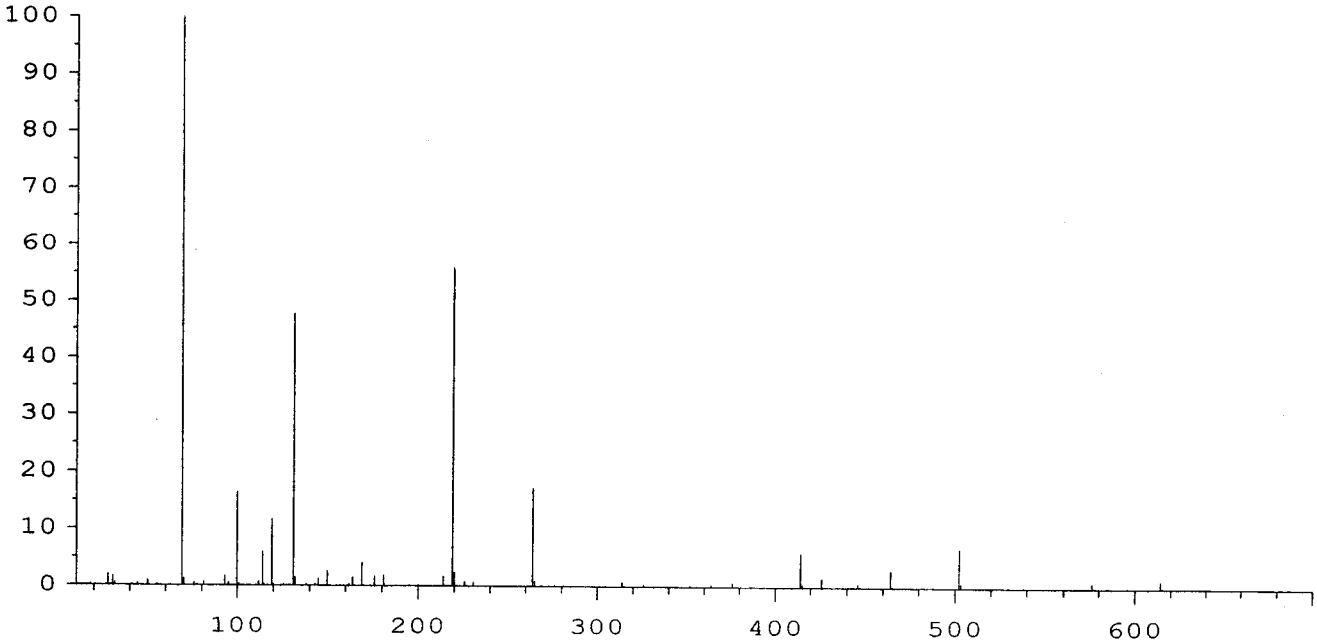
Instrument: PAH-3

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

Rif 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

CMS 1-13-06

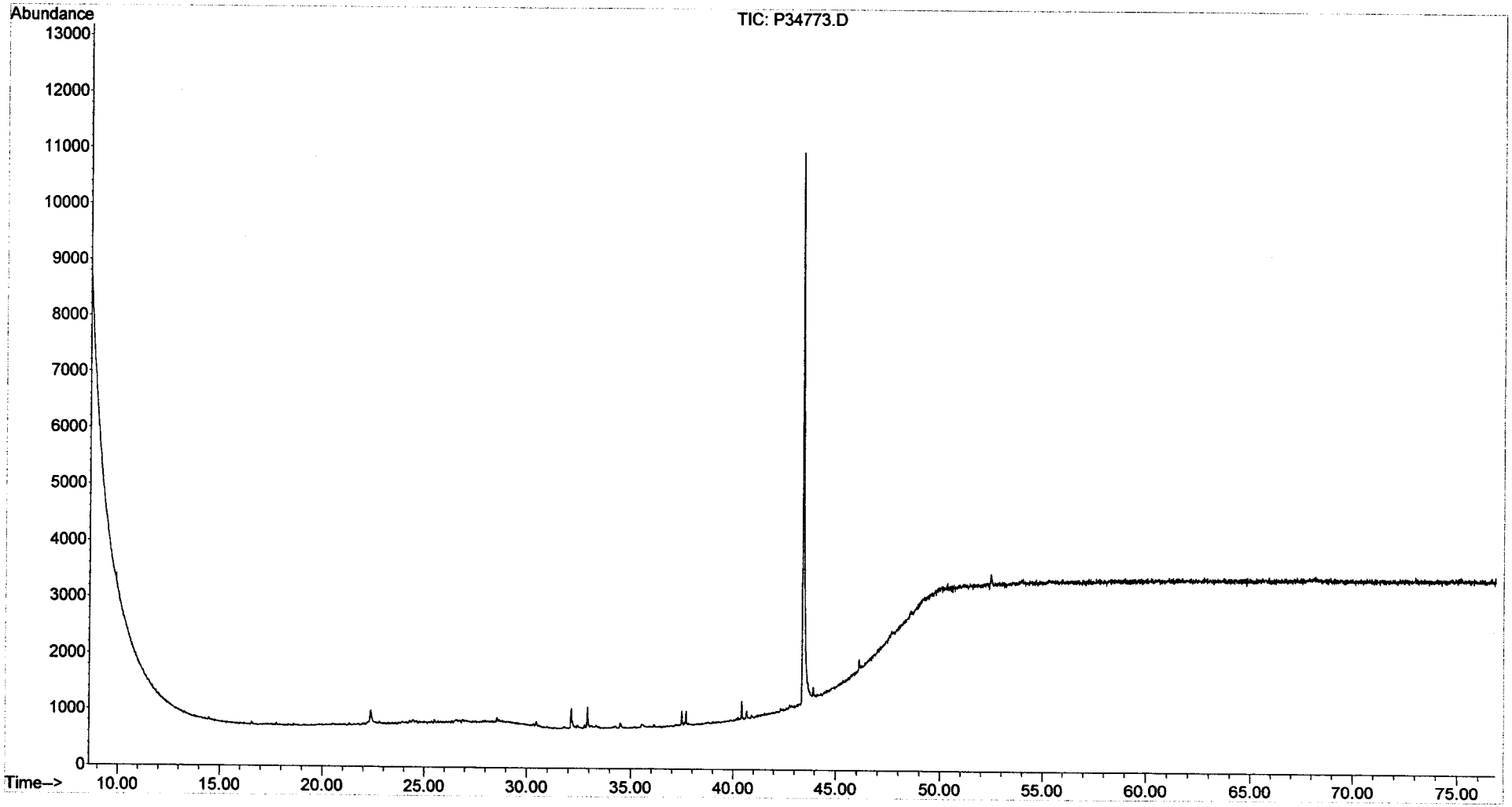
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	50898m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	43.92	217	199m	9.14	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.91%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	441m	9.86	ng/mL	
84) Hopane (T19)	52.50	191	446m	9.97	ng/mL	

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

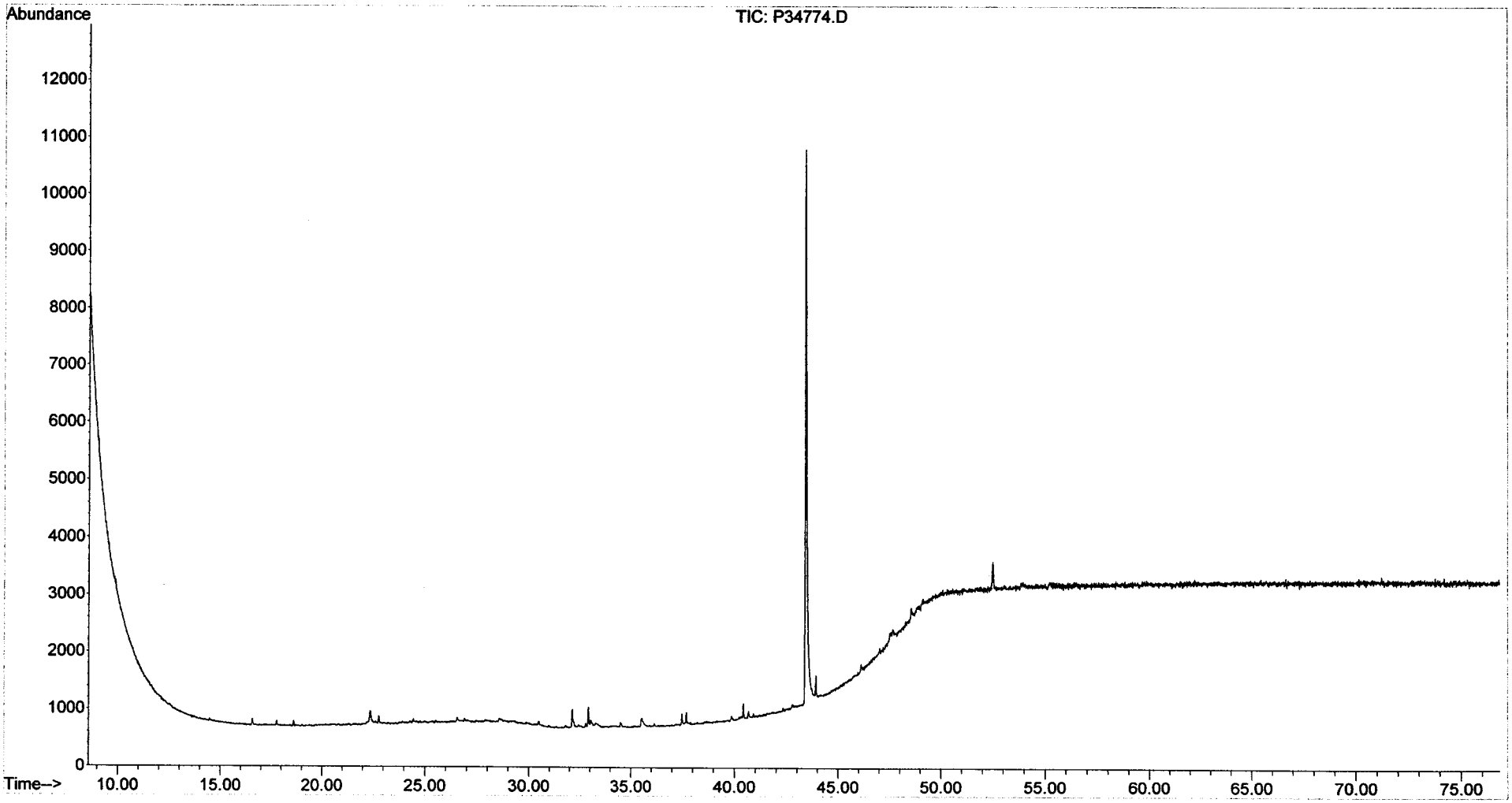
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	49829	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.92	217	466m	21.81	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.18%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	1068m	24.77	ng/mL	
84) Hopane (T19)	52.49	191	1040m	23.00	ng/mL	

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MB 1-13-06

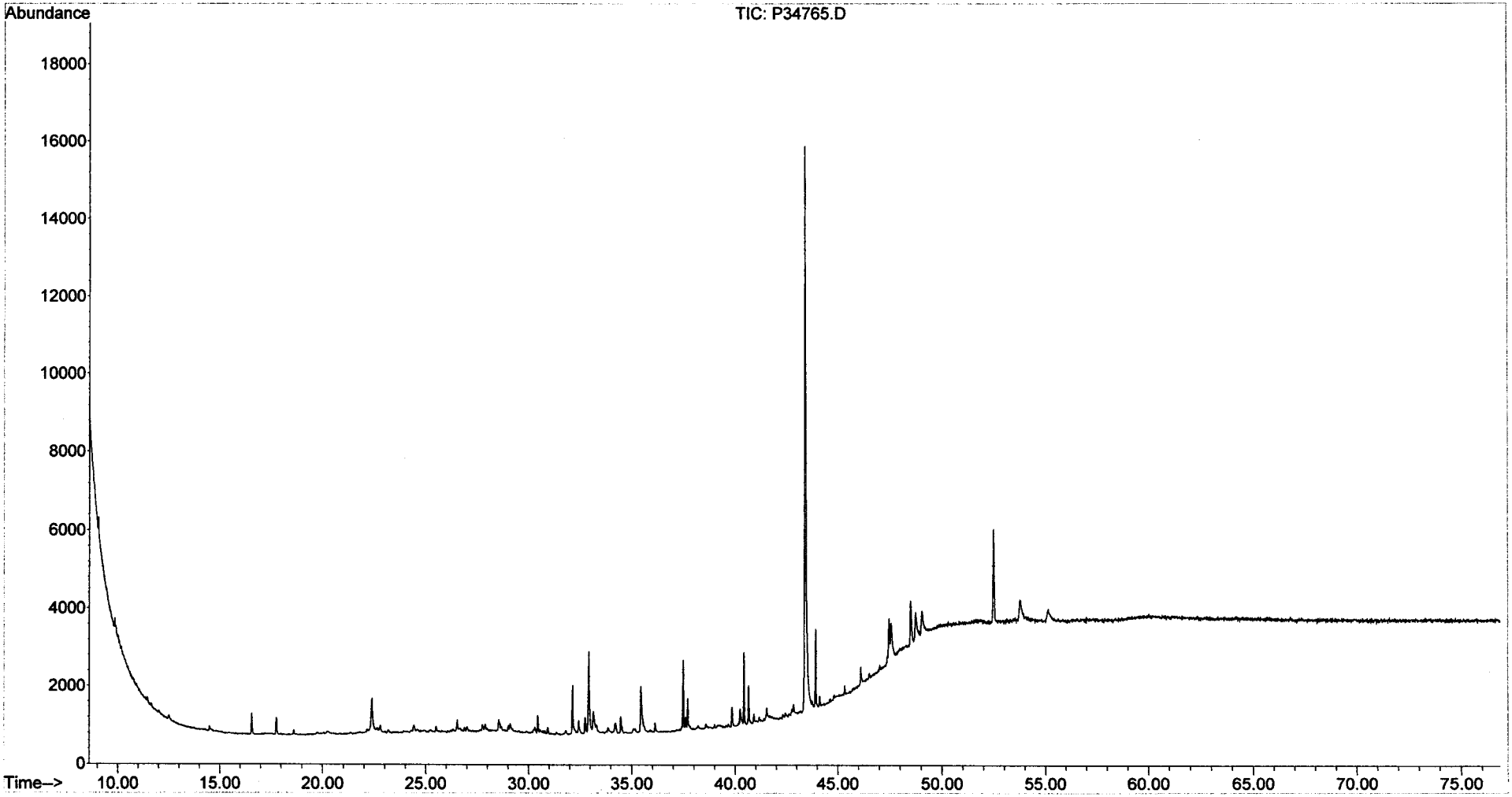
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.40	240	63328	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
117) 5B(H)Cholane - Surr	43.92	217	2693	91.76	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.18%#		
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	5860m	91.41	ng/mL	
84) Hopane (T19)	52.49	191	5878m	91.69	ng/mL	

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-13-06

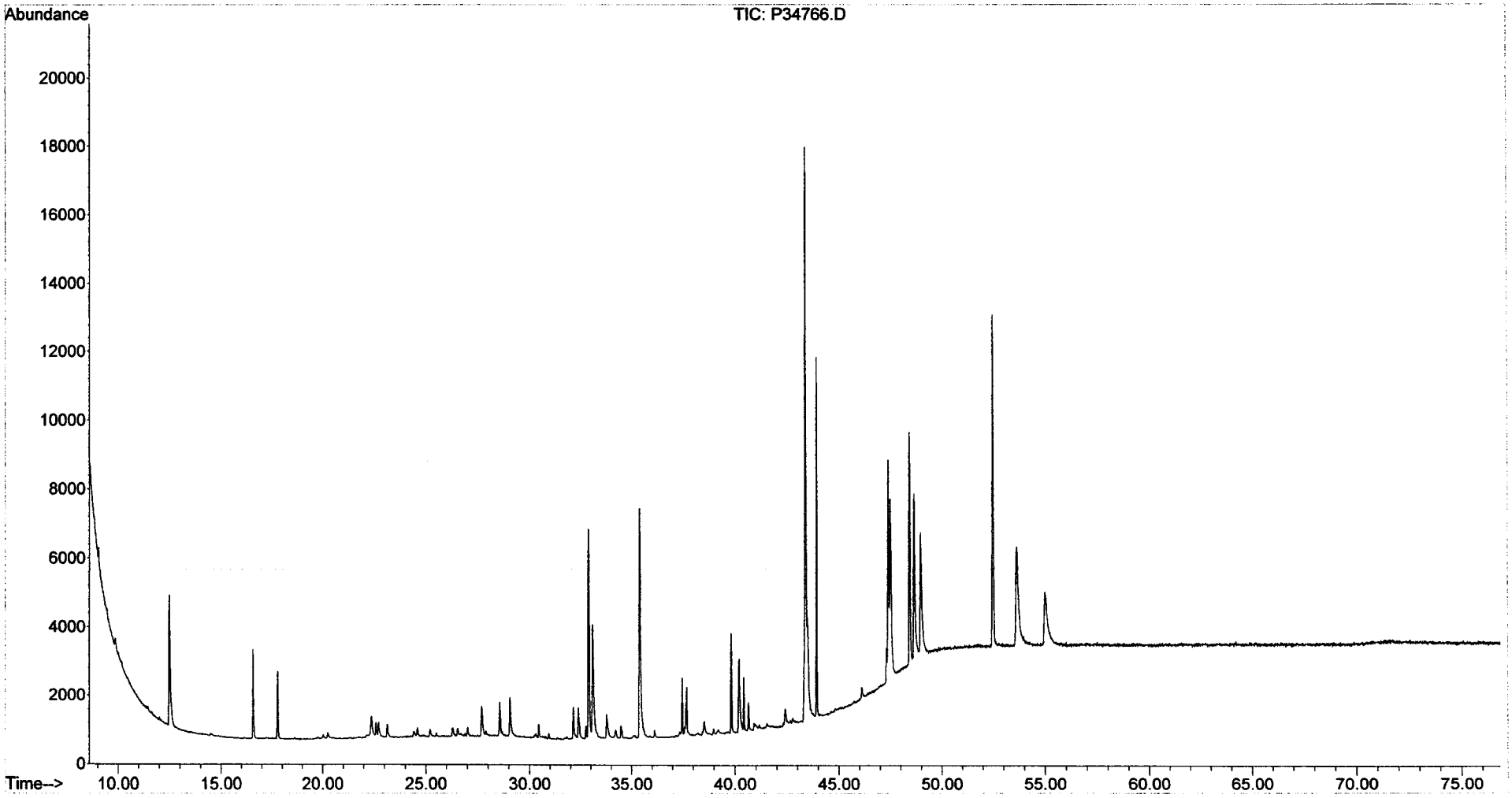
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	61149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.92	217	12651	446.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.64%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	22905	370.02	ng/mL#	86
84) Hopane (T19)	52.49	191	22905	370.02	ng/mL#	86

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

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

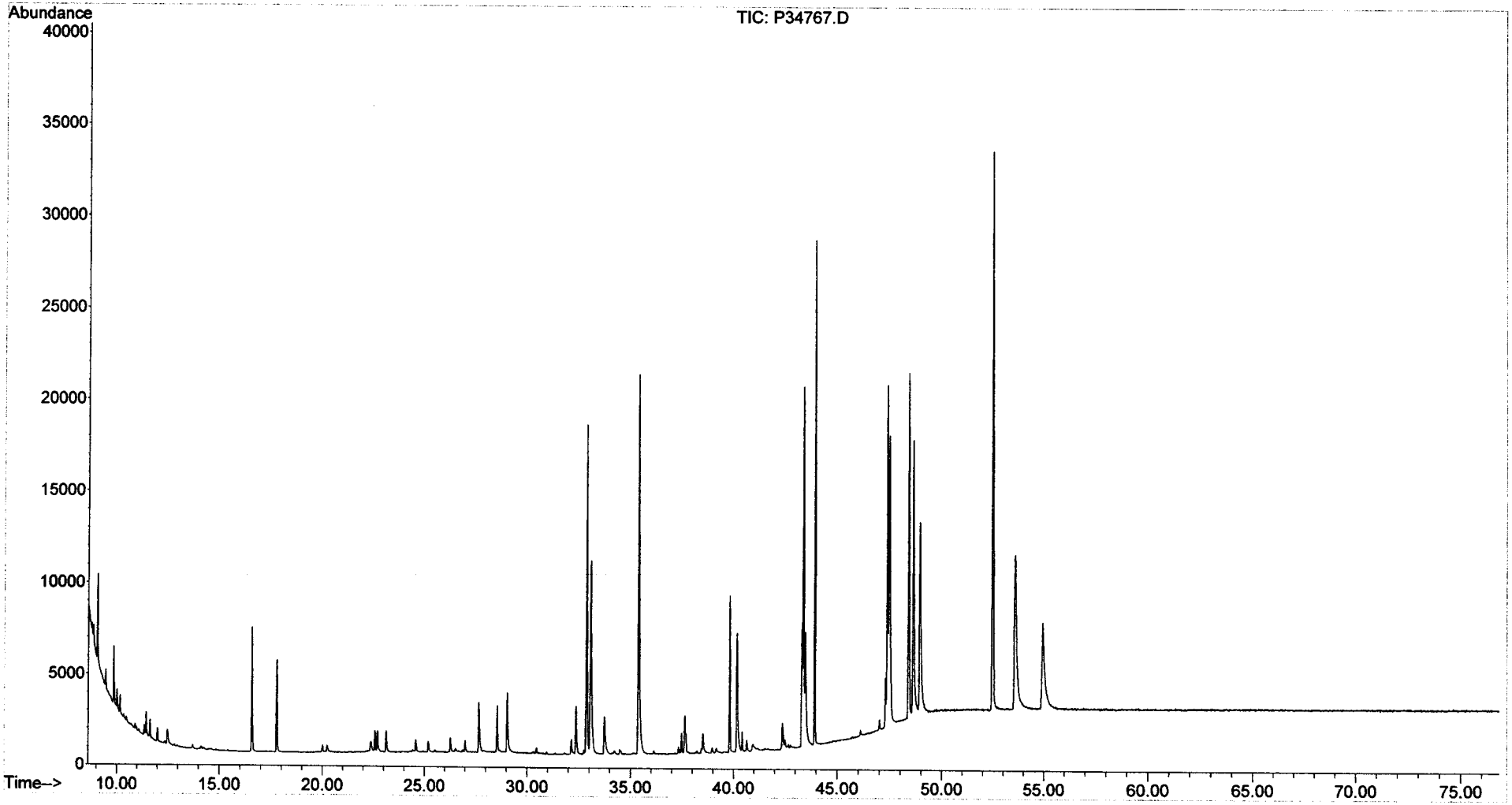
						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	74177	1178.67	ng/mL#	84
84) Hopane (T19)	52.49	191	74177	1178.67	ng/mL#	84

(#) = 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

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	43.35	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%#	

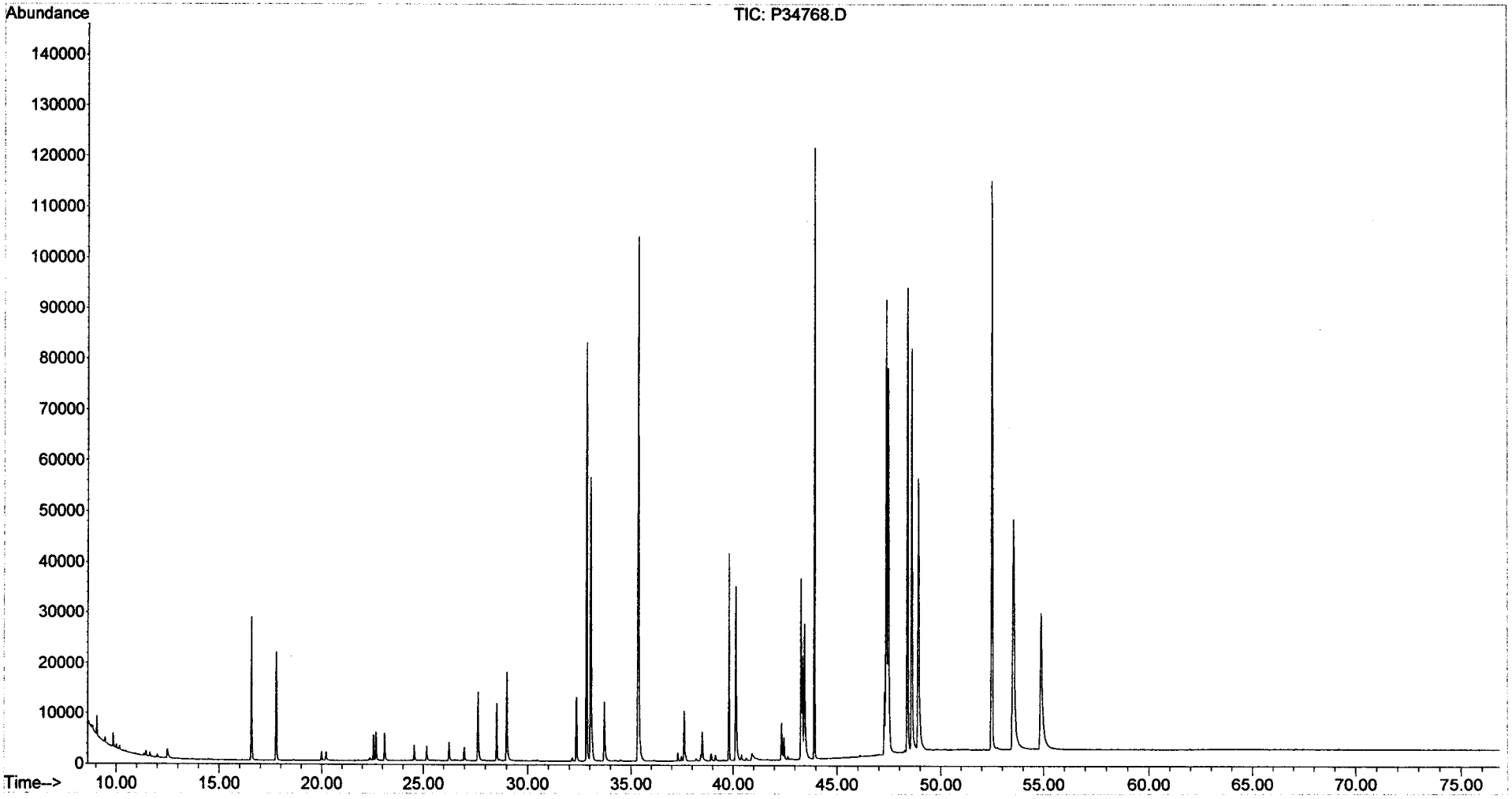
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	264591	4195.30	ng/mL#	83
84) Hopane (T19)	52.49	191	264591	4195.30	ng/mL#	83

(#) = 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

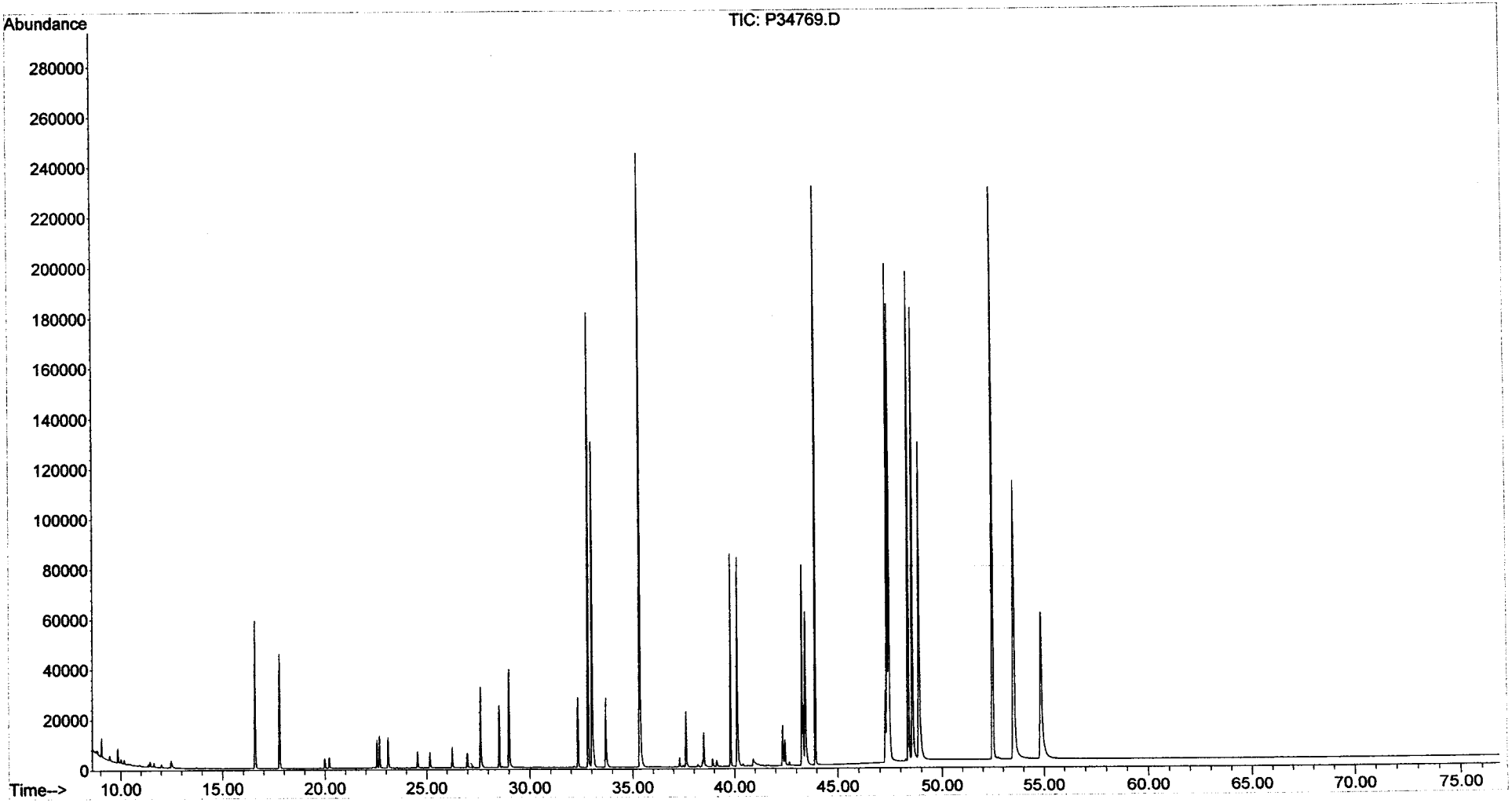
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.34	240	64774	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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\JAN23\
Data File : P27972.D
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012309
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 06:47:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

AMS 1/30/06

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	-0.01
2	t	Decalin	0.000	0.000#	0.0	0#	-16.78#
3	A1	trans-Decalin	0.422	0.420	0.5	69	-0.01
4	t	cis-Decalin	0.315	0.317	-0.6	68	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.33#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.10#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.56#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.94#
9	A1	Naphthalene	2.249	2.312	-2.8	69	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.95#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.78#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.11#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.87#
14	s	2-Methylnaphthalene-d10	1.028	1.041	-1.3	68	-0.01
15	t	2-Methylnaphthalene	1.432	1.461	-2.0	68	-0.01
16	t	1-Methylnaphthalene	1.363	1.385	-1.6	68	0.00
17	A1	Benzothiophene	1.810	1.901	-5.0	70	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.51#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.98#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.95#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.68#
22	t	Biphenyl	1.802	1.755	2.6	67	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.213	1.6	66	0.00
24	t	Dibenzofuran	1.989	1.986	0.2	66	0.00
25	t	Acenaphthylene	2.231	2.322	-4.1	69	-0.01
26	t	Acenaphthene	1.368	1.374	-0.4	67	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.099	-2.1	69	0.00
28	A1	Fluorene	1.599	1.547	3.3	65	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.079	2.8	64	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.127	6.8	63	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.04#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.15#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.31#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.49#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.49#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.30#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.07#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.12#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27972.D
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012309
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 06:47:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.489	5.6	65	-0.01
53	t	Anthracene	2.119	2.055	3.0	64	0.00
54	t	Carbazole	2.020	1.935	4.2	63	0.00
55	t	1-Methylphenanthrene	1.583	1.520	4.0	64	0.00
56	A1	Fluoranthene	2.435	2.370	2.7	64	-0.01
57	t	Benzo(b)fluorene	1.497	1.422	5.0	64	-0.01
58	s	Pyrene-d10	2.114	1.990	5.9	61	-0.01
59	A1	Pyrene	2.494	2.420	3.0	64	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.12#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.92#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.91#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.26#
64	A1	Naphthobenzothiophene	2.313	2.258	2.4	65	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.257	2.4	65	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	62	0.00
73	t	Benz[a]anthracene	1.428	1.458	-2.1	64	-0.01
74	A1	Chrysene	1.434	1.472	-2.6	64	0.00
75	A2	Chrysene/Triphenylene	1.434	1.472	-2.6	64	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	1.001	2.3	60	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.516	1.2	62	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.587	1.1	62	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.456	1.5	61	0.00
86	t	Benzo[a]pyrene	1.478	1.450	1.9	61	0.00
87	t	Perylene	1.473	1.461	0.8	62	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.379	5.9	60	0.00
89	t	Dibenz[a,h]anthracene	1.378	1.315	4.6	59	0.00
90	t	Benzo[g,h,i]perylene	1.527	1.416	7.3	59	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.481	2.4	67	-0.01
92	A2	Hopane (T19)	0.493	0.481	2.4	67	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27972.D
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012309
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 06:47:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.05#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.80#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.02#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.10#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.34#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.60#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.87#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.63#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.59#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.70#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.83#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.43#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.87#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.81#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.99#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.25#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.69#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.11#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.01#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.68#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.90#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.88#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.33#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.74#
125	SA1	5B(H)Cholane - Surr	0.230	0.226	1.7	64	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27972.D
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012309
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 06:47:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS 1/30/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	31831	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	46253	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	33121	506.31	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.63%			
58) Pyrene-d10	38.70	212	63333	470.69	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.07%#			
81) Benzo[b]fluoranthene-d12	47.56	264	46303	488.30	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.83%#			
125) 5B(H)Cholane - Surr	44.22	217	10446	491.25	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.13%#			

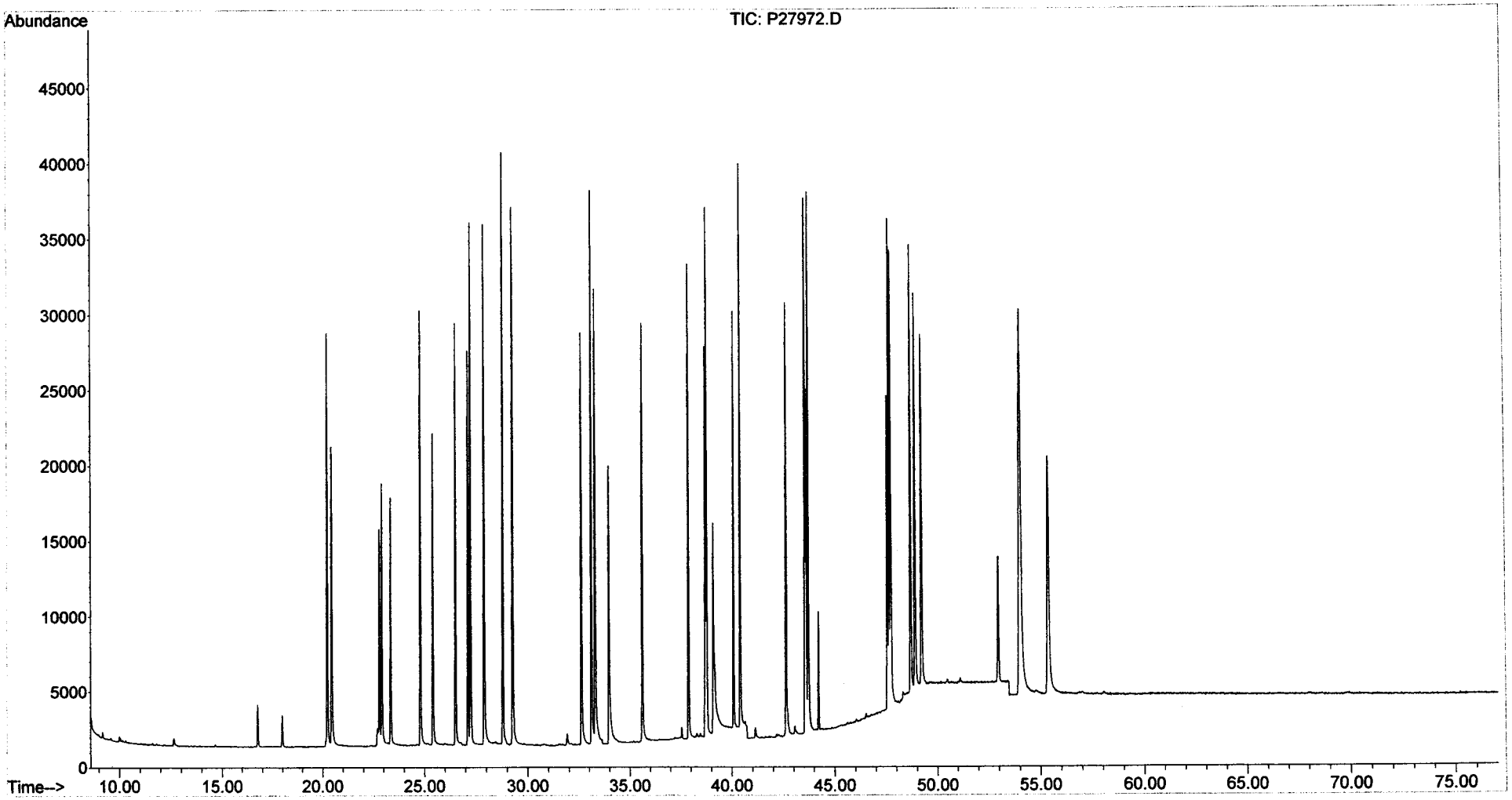
Target Compounds						Qvalue
3) trans-Decalin	16.77	138	6683	249.00	ng/mL	100
4) cis-Decalin	18.00	138	5040	250.96	ng/mL	100
9) Naphthalene	20.21	128	73589	513.99	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	46506	510.30	ng/mL#	100
16) 1-Methylnaphthalene	23.35	142	44071	508.06	ng/mL#	100
17) Benzothiophene	20.44	134	60525	525.21	ng/mL	100
22) Biphenyl	24.80	154	55874	487.02	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	38617	491.90	ng/mL#	100
24) Dibenzofuran	27.90	168	63217	499.17	ng/mL	99
25) Acenaphthylene	26.52	152	73918m	520.36	ng/mL	
26) Acenaphthene	27.25	153	43732	502.25	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.81	170	34976	510.51	ng/mL	100
28) Fluorene	29.28	166	49239	483.63	ng/mL	99
32) Dibenzothiophene	32.61	184	66171	486.08	ng/mL	100
41) Phenanthrene	33.11	178	67695	466.00	ng/mL	100
52) Retene	40.09	234	15560	472.06	ng/mL	97
53) Anthracene	33.29	178	65417m	484.87	ng/mL	
54) Carbazole	33.97	167	61608	479.12	ng/mL	100
55) 1-Methylphenanthrene	35.62	192	48394	480.20	ng/mL	100
56) Fluoranthene	37.89	202	75455	486.66	ng/mL	100
57) Benzo(b)fluorene	40.41	216	45265	474.90	ng/mL	99
59) Pyrene	38.78	202	77040	485.24	ng/mL	99
64) Naphthobenzothiophene	42.64	234	71884	488.25	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.64	234	71851	488.02	ng/mL#	67
73) Benz[a]anthracene	43.56	228	67429	510.49	ng/mL	99
74) Chrysene	43.73	228	68089	513.24	ng/mL	100
75) Chrysene/Triphenylene	43.73	228	68089	513.24	ng/mL	100
82) Benzo[b]fluoranthene	47.65	252	70124	494.32	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	73415	494.89	ng/mL	100
85) Benzo[e]pyrene	48.70	252	67359	492.56	ng/mL	99
86) Benzo[a]pyrene	48.90	252	67068	490.55	ng/mL	100
87) Perylene	49.22	252	67585	495.85	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.99	276	63772m	470.60	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	60817	477.24	ng/mL	99
90) Benzo[g,h,i]perylene	55.37	276	65487	463.49	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.98	191	22232	487.42	ng/mL	97
92) Hopane (T19)	52.98	191	22232	487.42	ng/mL	97

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27972.D
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012309
Misc : PAH STD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 30 06:47:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27990.D
Acq On : 29 Jan 2006 5:25 am
Operator : AC
Sample : C2012310
Misc : PAH STD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 30 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MNS 1/30/06

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	-0.01
2	t	Decalin	0.000	0.000#	0.0	0#	-16.78#
3	A1	trans-Decalin	0.422	0.425	-0.7	69	-0.01
4	t	cis-Decalin	0.315	0.318	-1.0	68	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.33#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.10#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.56#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.94#
9	A1	Naphthalene	2.249	2.304	-2.4	68	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.95#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.78#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.11#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.87#
14	s	2-Methylnaphthalene-d10	1.028	1.029	-0.1	66	-0.01
15	t	2-Methylnaphthalene	1.432	1.449	-1.2	67	-0.01
16	t	1-Methylnaphthalene	1.363	1.377	-1.0	67	0.00
17	A1	Benzothiophene	1.810	1.896	-4.8	69	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.51#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.98#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.95#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.68#
22	t	Biphenyl	1.802	1.733	3.8	65	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.193	3.2	64	0.00
24	t	Dibenzofuran	1.989	1.949	2.0	64	0.00
25	t	Acenaphthylene	2.231	2.267	-1.6	67	-0.01
26	t	Acenaphthene	1.368	1.379	-0.8	67	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.085	-0.8	67	0.00
28	A1	Fluorene	1.599	1.525	4.6	64	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.043	4.4	63	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.053	10.0	60	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.04#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.15#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.31#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.49#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.49#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.30#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.07#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.12#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27990.D
Acq On : 29 Jan 2006 5:25 am
Operator : AC
Sample : C2012310
Misc : PAH STD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 30 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.471	9.1	62	-0.01
53	t	Anthracene	2.119	2.059	2.8	64	0.00
54	t	Carbazole	2.020	1.874	7.2	61	0.00
55	t	1-Methylphenanthrene	1.583	1.471	7.1	61	0.00
56	A1	Fluoranthene	2.435	2.319	4.8	62	0.00
57	t	Benzo(b)fluorene	1.497	1.314	12.2	58	-0.01
58	s	Pyrene-d10	2.114	1.946	7.9	60	-0.01
59	A1	Pyrene	2.494	2.369	5.0	62	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.12#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.92#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.91#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.26#
64	A1	Naphthobenzothiophene	2.313	2.165	6.4	62	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.165	6.4	62	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	59	0.00
73	t	Benz[a]anthracene	1.428	1.452	-1.7	60	0.00
74	A1	Chrysene	1.434	1.492	-4.0	61	0.00
75	A2	Chrysene/Triphenylene	1.434	1.492	-4.0	61	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	0.983	4.1	56	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.458	5.0	57	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.648	-2.7	61	0.00
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.457	1.4	58	0.00
86	t	Benzo[a]pyrene	1.478	1.399	5.3	56	0.00
87	t	Perylene	1.473	1.445	1.9	58	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.277	12.8	53	0.00
89	t	Dibenz[a,h]anthracene	1.378	1.221	11.4	52	0.01
90	t	Benzo[g,h,i]perylene	1.527	1.374	10.0	54	0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.504	-2.2	67	-0.02
92	A2	Hopane (T19)	0.493	0.504	-2.2	67	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27990.D
Acq On : 29 Jan 2006 5:25 am
Operator : AC
Sample : C2012310
Misc : PAH STD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 30 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.05#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.80#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.02#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.10#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.34#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.60#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.87#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.63#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.59#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.70#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.83#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.43#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.87#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.81#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.99#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.25#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.69#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.11#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.01#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.68#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.90#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.88#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.33#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.74#
125	SA1	5B(H)Cholane - Surr	0.230	0.229	0.4	62	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27990.D
Acq On : 29 Jan 2006 5:25 am
Operator : AC
Sample : C2012310
Misc : PAH STD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 30 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

QMS 1/30/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	31570	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	43786	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	32495	500.85	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.09%			
58) Pyrene-d10	38.70	212	61422	460.26	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.03%#			
81) Benzo[b]fluoranthene-d12	47.56	264	43038	479.44	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.94%#			
125) 5B(H)Cholane - Surr	44.22	217	10047	499.11	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.91%#			

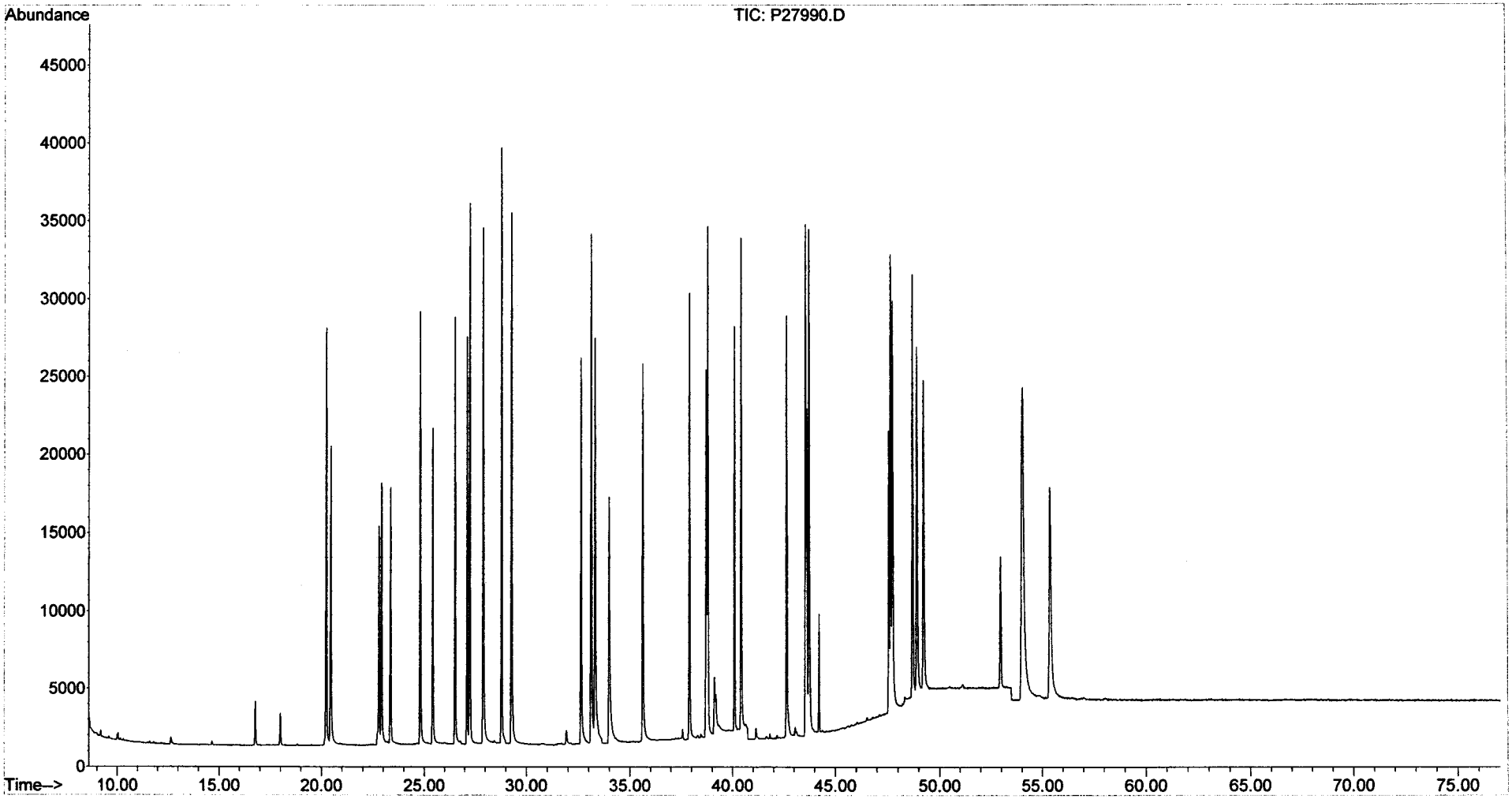
Target Compounds						Qvalue
3) trans-Decalin	16.77	138	6709	252.04	ng/mL	100
4) cis-Decalin	18.00	138	5019	251.99	ng/mL	100
9) Naphthalene	20.23	128	72749	512.32	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	45734	505.98	ng/mL#	100
16) 1-Methylnaphthalene	23.35	142	43473	505.31	ng/mL#	100
17) Benzothiophene	20.45	134	59863	523.76	ng/mL	100
22) Biphenyl	24.80	154	54706	480.78	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	37672	483.83	ng/mL#	100
24) Dibenzofuran	27.90	168	61525	489.83	ng/mL	100
25) Acenaphthylene	26.52	152	71567m	507.98	ng/mL	
26) Acenaphthene	27.25	153	43549	504.28	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.81	170	34262	504.23	ng/mL	100
28) Fluorene	29.28	166	48135	476.70	ng/mL	99
32) Dibenzothiophene	32.61	184	64508	477.78	ng/mL	100
41) Phenanthrene	33.11	178	64798	449.75	ng/mL	100
52) Retene	40.09	234	14856	454.43	ng/mL	97
53) Anthracene	33.29	178	65005m	485.80	ng/mL	
54) Carbazole	33.97	167	59167	463.94	ng/mL	99
55) 1-Methylphenanthrene	35.62	192	46432	464.54	ng/mL	100
56) Fluoranthene	37.90	202	73217	476.13	ng/mL	99
57) Benzo(b)fluorene	40.41	216	41491	438.90	ng/mL	100
59) Pyrene	38.78	202	74805	475.06	ng/mL	99
64) Naphthobenzothiophene	42.64	234	68357	468.13	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.64	234	68357	468.13	ng/mL#	67
73) Benz[a]anthracene	43.57	228	63577	508.45	ng/mL	99
74) Chrysene	43.73	228	65331	520.20	ng/mL	100
75) Chrysene/Triphenylene	43.73	228	65343	520.29	ng/mL	100
82) Benzo[b]fluoranthene	47.65	252	63861	475.53	ng/mL	100
83) Benzo[k]fluoranthene	47.75	252	72166	513.88	ng/mL	98
85) Benzo[e]pyrene	48.70	252	63796	492.79	ng/mL	100
86) Benzo[a]pyrene	48.90	252	61266	473.36	ng/mL	100
87) Perylene	49.23	252	63265	490.30	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.99	276	55903m	435.78	ng/mL	
89) Dibenz[a,h]anthracene	54.05	278	53479	443.30	ng/mL	98
90) Benzo[g,h,i]perylene	55.38	276	60176	449.90	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.96	191	22074	511.22	ng/mL	100
92) Hopane (T19)	52.96	191	22074	511.22	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27990.D
Acq On : 29 Jan 2006 5:25 am
Operator : AC
Sample : C2012310
Misc : PAH STD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 30 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28002.D
Acq On : 30 Jan 2006 1:22 pm
Operator : AC
Sample : C2013001
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

1/30/06

Quant Time: Jan 30 15:04:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	72	-0.02
2	t	Decalin	0.000	0.376	0.0	0#	-0.02
3	A1	trans-Decalin	0.422	0.423	-0.2	75	-0.02
4	t	cis-Decalin	0.315	0.320	-1.6	75	-0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.33#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.10#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.56#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.94#
9	A1	Naphthalene	2.249	2.341	-4.1	75	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.95#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.78#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.11#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.87#
14	s	2-Methylnaphthalene-d10	1.028	1.031	-0.3	73	-0.02
15	t	2-Methylnaphthalene	1.432	1.474	-2.9	74	-0.02
16	t	1-Methylnaphthalene	1.363	1.397	-2.5	75	-0.01
17	A1	Benzothiophene	1.810	1.921	-6.1	76	-0.02
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.51#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.98#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.95#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.68#
22	t	Biphenyl	1.802	1.776	1.4	73	-0.02
23	t	2,6-Dimethylnaphthalene	1.233	1.229	0.3	72	-0.01
24	t	Dibenzofuran	1.989	2.003	-0.7	72	-0.01
25	t	Acenaphthylene	2.231	2.279	-2.2	74	-0.02
26	t	Acenaphthene	1.368	1.394	-1.9	74	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.076	1.125	-4.6	76	-0.02
28	A1	Fluorene	1.599	1.569	1.9	72	-0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.146	-0.4	72	-0.02
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.269	0.6	72	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.04#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.15#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.31#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.49#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.49#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.30#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.07#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.12#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28002.D
Acq On : 30 Jan 2006 1:22 pm
Operator : AC
Sample : C2013001
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 15:04:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.499	3.7	72	-0.02
53	t	Anthracene	2.119	2.086	1.6	71	-0.01
54	t	Carbazole	2.020	2.035	-0.7	72	-0.02
55	t	1-Methylphenanthrene	1.583	1.605	-1.4	73	-0.02
56	A1	Fluoranthene	2.435	2.505	-2.9	73	-0.02
57	t	Benzo(b)fluorene	1.497	1.485	0.8	72	-0.02
58	s	Pyrene-d10	2.114	2.138	-1.1	71	-0.02
59	A1	Pyrene	2.494	2.585	-3.6	74	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.12#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.92#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.91#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.26#
64	A1	Naphthobenzothiophene	2.313	2.412	-4.3	76	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.410	-4.2	76	-0.02
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	72	-0.02
73	t	Benz[a]anthracene	1.428	1.470	-2.9	75	-0.02
74	A1	Chrysene	1.434	1.486	-3.6	75	-0.02
75	A2	Chrysene/Triphenylene	1.434	1.486	-3.6	75	-0.02
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	1.077	-5.1	76	-0.02
82	t	Benzo[b]fluoranthene	1.534	1.645	-7.2	79	-0.04
83	A1	Benzo[k]fluoranthene	1.604	1.752	-9.2	80	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.617	-9.4	79	-0.02
86	t	Benzo[a]pyrene	1.478	1.628	-10.1	80	-0.02
87	t	Perylene	1.473	1.637	-11.1	81	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.538	-5.0	78	-0.05
89	t	Dibenz[a,h]anthracene	1.378	1.530	-11.0	80	-0.05
90	t	Benzo[g,h,i]perylene	1.527	1.648	-7.9	80	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.493	0.0	80	-0.06
92	A2	Hopane (T19)	0.493	0.493	0.0	80	-0.06
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28002.D
Acq On : 30 Jan 2006 1:22 pm
Operator : AC
Sample : C2013001
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 15:04:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.05#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.80#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.02#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.10#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.34#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.60#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.87#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.63#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.59#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.70#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.83#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.43#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.87#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.81#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.99#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.25#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.69#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.11#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.01#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.68#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.90#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.88#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.33#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.74#
125	SA1	5B(H)Cholane - Surr	0.230	0.223	3.0	74	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28002.D
Acq On : 30 Jan 2006 1:22 pm
Operator : AC
Sample : C2013001
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 15:04:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

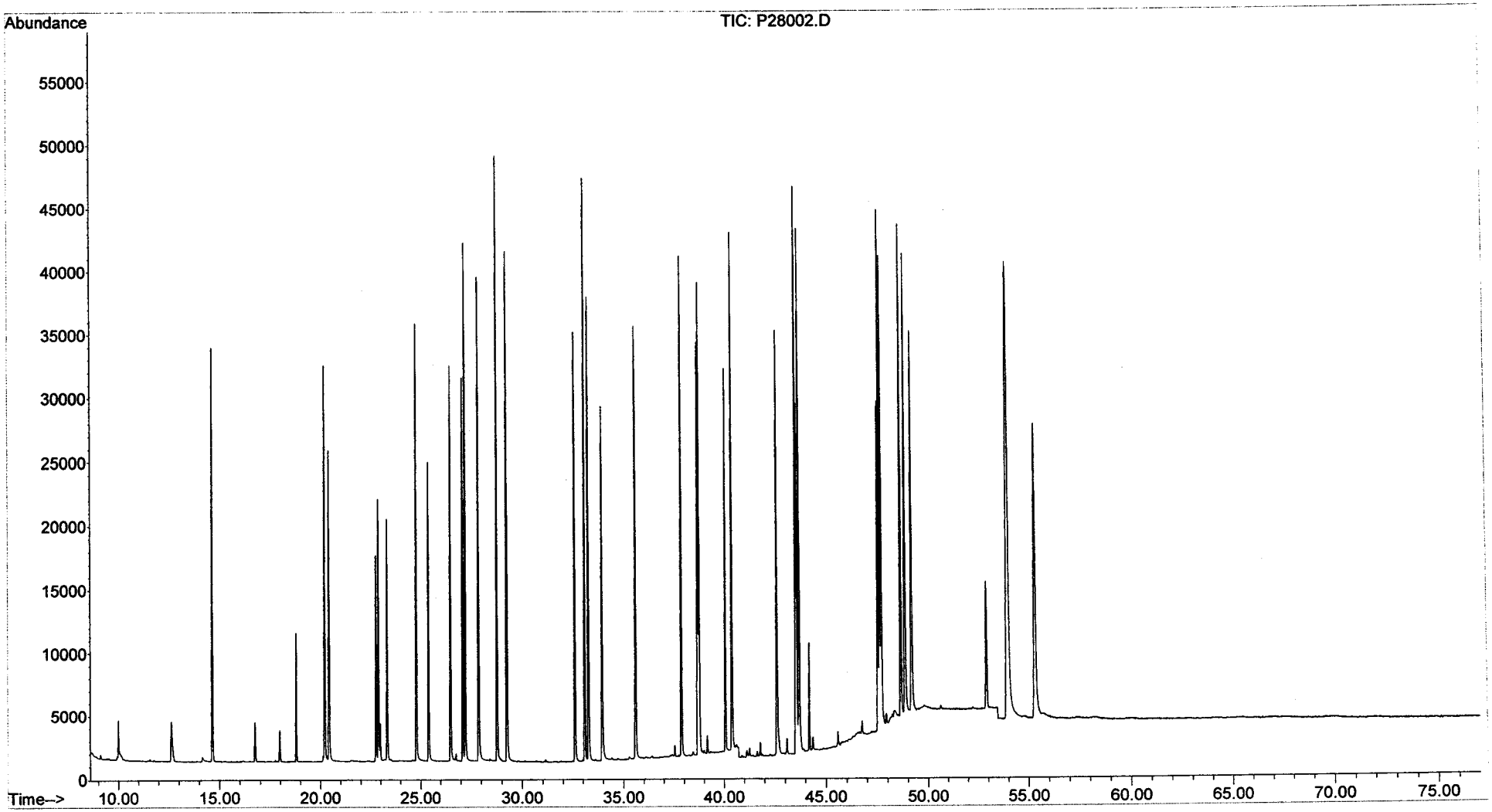
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	34456	500.00	ng/mL	-0.02
72) Chrysene-d12	43.61	240	53949	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.78	152	35537	501.86	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.19%			
58) Pyrene-d10	38.69	212	73664	505.76	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.58%			
81) Benzo[b]fluoranthene-d12	47.55	264	58102	525.32	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.53%			
125) 5B(H)Cholane - Surr	44.20	217	12020	484.64	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.46%#			
Target Compounds						Qvalue
3) trans-Decalin	16.76	138	7288	250.86	ng/mL	100
4) cis-Decalin	17.98	138	5519	253.88	ng/mL	100
9) Naphthalene	20.21	128	80656	520.43	ng/mL#	100
15) 2-Methylnaphthalene	22.90	142	50798	514.93	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	48142	512.71	ng/mL#	100
17) Benzothiophene	20.42	134	66196	530.66	ng/mL	100
22) Biphenyl	24.78	154	61178	492.62	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.40	156	42363	498.51	ng/mL#	100
24) Dibenzofuran	27.89	168	69000	503.33	ng/mL	100
25) Acenaphthylene	26.51	152	78530m	510.71	ng/mL	
26) Acenaphthene	27.24	153	48029	509.57	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.78	170	38776	522.86	ng/mL	99
28) Fluorene	29.27	166	54055	490.49	ng/mL	99
32) Dibenzothiophene	32.60	184	73944	501.80	ng/mL	100
41) Phenanthrene	33.09	178	78181	497.18	ng/mL	100
52) Retene	40.08	234	17206	482.23	ng/mL	96
53) Anthracene	33.28	178	71859m	492.04	ng/mL	
54) Carbazole	33.95	167	70135	503.88	ng/mL	100
55) 1-Methylphenanthrene	35.60	192	55298	506.90	ng/mL	100
56) Fluoranthene	37.87	202	86299	514.20	ng/mL	99
57) Benzo(b)fluorene	40.40	216	51173	495.98	ng/mL	99
59) Pyrene	38.77	202	89060	518.21	ng/mL	99
64) Naphthobenzothiophene	42.62	234	83100	521.43	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.62	234	83049	521.11	ng/mL#	68
73) Benz[a]anthracene	43.55	228	79307	514.77	ng/mL	100
74) Chrysene	43.71	228	80162	518.05	ng/mL	99
75) Chrysene/Triphenylene	43.71	228	80176	518.14	ng/mL	99
82) Benzo[b]fluoranthene	47.62	252	88744	536.33	ng/mL	100
83) Benzo[k]fluoranthene	47.72	252	94542	546.39	ng/mL	99
85) Benzo[e]pyrene	48.68	252	87247	546.97	ng/mL	99
86) Benzo[a]pyrene	48.87	252	87830m	550.76	ng/mL	
87) Perylene	49.20	252	88340m	555.66	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.94	276	82969m	524.93	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	82529	555.23	ng/mL	99
90) Benzo[g,h,i]perylene	55.33	276	88882	539.33	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.93	191	26616	500.29	ng/mL	99
92) Hopane (T19)	52.93	191	26616	500.29	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28002.D
Acq On : 30 Jan 2006 1:22 pm
Operator : AC
Sample : C2013001
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 15:04:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28030.D
Acq On : 31 Jan 2006 12:22 pm
Operator : AC
Sample : C2013002
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 07:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

dwg 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	54	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.76#
3	A1	trans-Decalin	0.422	0.432	-2.4	58	0.00
4	t	cis-Decalin	0.315	0.324	-2.9	57	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.251	-0.1	55	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.004	2.3	54	0.01
15	t	2-Methylnaphthalene	1.432	1.376	3.9	52	0.01
16	t	1-Methylnaphthalene	1.363	1.338	1.8	54	0.00
17	A1	Benzothiophene	1.810	1.849	-2.2	56	0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.620	10.1	51	0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.133	8.1	51	0.00
24	t	Dibenzofuran	1.989	1.851	6.9	50	0.01
25	t	Acenaphthylene	2.231	2.180	2.3	54	0.00
26	t	Acenaphthene	1.368	1.376	-0.6	55	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.091	-1.4	56	0.01
28	A1	Fluorene	1.599	1.473	7.9	51	0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.085	2.5	53	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.175	4.7	53	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28030.D
Acq On : 31 Jan 2006 12:22 pm
Operator : AC
Sample : C2013002
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 07:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.440	15.1	48	0.00
53	t	Anthracene	2.119	1.912	9.8	49	0.01
54	t	Carbazole	2.020	1.652	18.2	44	0.02
55	t	1-Methylphenanthrene	1.583	1.492	5.7	51	0.01
56	A1	Fluoranthene	2.435	2.355	3.3	52	0.01
57	t	Benzo(b)fluorene	1.497	1.149	23.2	42	0.01
58	s	Pyrene-d10	2.114	2.006	5.1	51	0.00
59	A1	Pyrene	2.494	2.445	2.0	53	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.171	6.1	52	0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.169	6.2	52	0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	52	0.01
73	t	Benz[a]anthracene	1.428	1.295	9.3	47	0.00
74	A1	Chrysene	1.434	1.506	-5.0	55	0.01
75	A2	Chrysene/Triphenylene	1.434	1.506	-5.0	55	0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	0.979	4.5	49	0.00
82	t	Benzo[b]fluoranthene	1.534	1.442	6.0	49	0.01
83	A1	Benzo[k]fluoranthene	1.604	1.628	-1.5	53	0.00
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.462	1.1	51	0.00
86	t	Benzo[a]pyrene	1.478	1.286	13.0	46	0.01
87	t	Perylene	1.473	1.367	7.2	48	0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.116	23.8	41	0.02
89	t	Dibenz[a,h]anthracene	1.378	1.043	24.3	39	0.02
90	t	Benzo[g,h,i]perylene	1.527	1.274	16.6	45	0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.459	6.9	54	0.00
92	A2	Hopane (T19)	0.493	0.459	6.9	54	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28030.D
Acq On : 31 Jan 2006 12:22 pm
Operator : AC
Sample : C2013002
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 07:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.217	5.7	51	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28030.D
Acq On : 31 Jan 2006 12:22 pm
Operator : AC
Sample : C2013002
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 07:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	26132	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	38649	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	26227	488.36	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.84%#			
58) Pyrene-d10	38.69	212	52412	474.47	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.45%#			
81) Benzo[b]fluoranthene-d12	47.55	264	37838	477.53	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.75%#			
125) 5B(H)Cholane - Surr	44.20	217	8375	471.35	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.14%#			

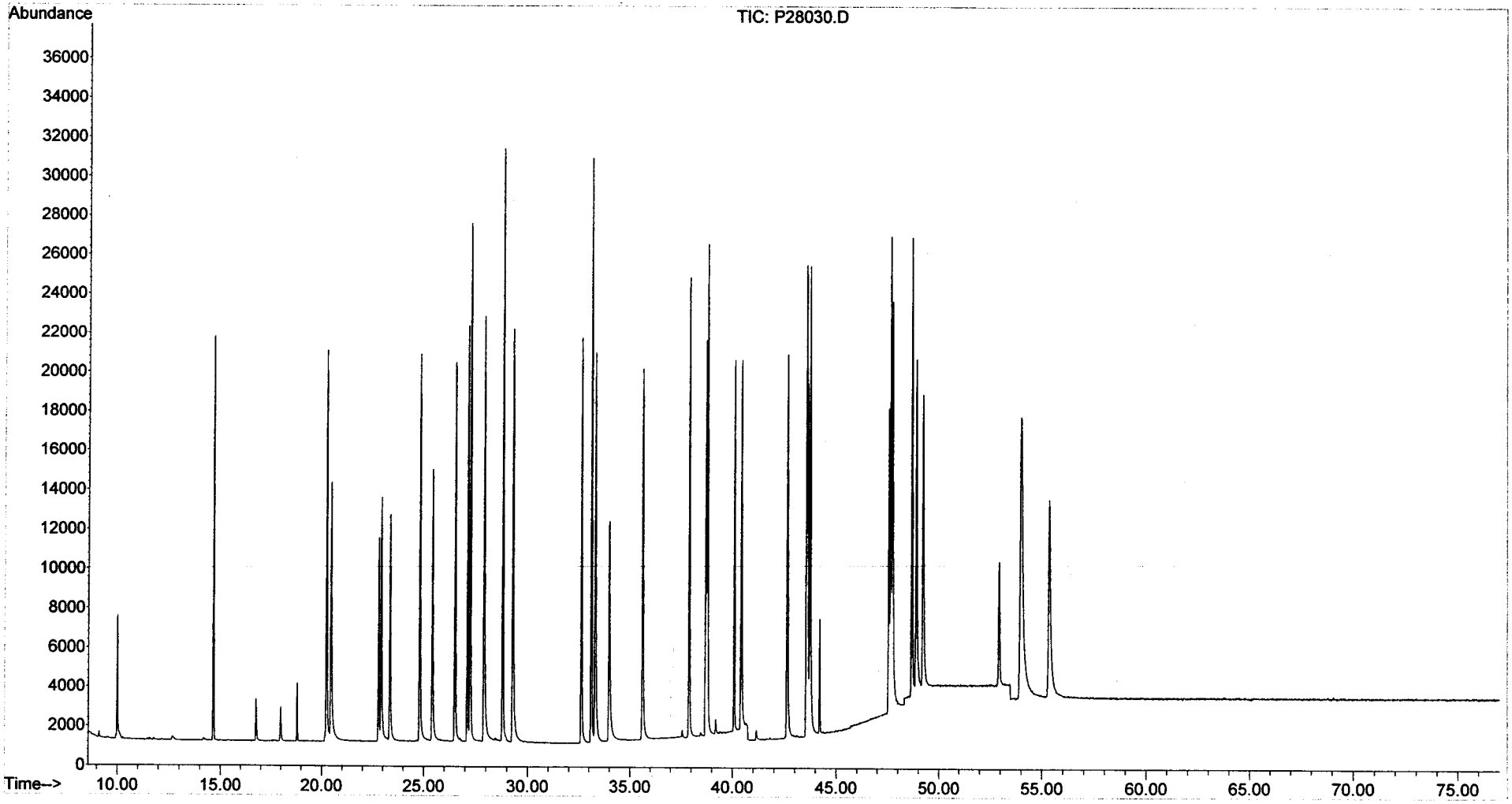
Target Compounds						Qvalue
3) trans-Decalin	16.76	138	5647	256.29	ng/mL	100
4) cis-Decalin	17.98	138	4231	256.63	ng/mL	100
9) Naphthalene	20.21	128	58825	500.47	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	35958	480.61	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	34963	490.96	ng/mL#	100
17) Benzothiophene	20.44	134	48325	510.79	ng/mL	100
22) Biphenyl	24.80	154	42325	449.37	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.40	156	29597	459.22	ng/mL#	100
24) Dibenzofuran	27.90	168	48360	465.13	ng/mL	99
25) Acenaphthylene	26.51	152	56963m	488.46	ng/mL	
26) Acenaphthene	27.24	153	35965	503.12	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.80	170	28504	506.78	ng/mL	99
28) Fluorene	29.28	166	38498	460.60	ng/mL	100
32) Dibenzothiophene	32.60	184	54486	487.53	ng/mL	100
41) Phenanthrene	33.09	178	56837	476.58	ng/mL	100
52) Retene	40.08	234	11508	425.27	ng/mL	97
53) Anthracene	33.29	178	49973m	451.18	ng/mL	
54) Carbazole	33.97	167	43160	408.85	ng/mL	100
55) 1-Methylphenanthrene	35.61	192	38990	471.26	ng/mL	100
56) Fluoranthene	37.89	202	61536	483.44	ng/mL	99
57) Benzo(b)fluorene	40.41	216	30013	383.55	ng/mL	99
59) Pyrene	38.77	202	63899	490.24	ng/mL	99
64) Naphthobenzothiophene	42.63	234	56720	469.27	ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.63	234	56688	469.01	ng/mL#	66
73) Benz[a]anthracene	43.55	228	50058	453.54	ng/mL	99
74) Chrysene	43.72	228	58215	525.15	ng/mL	99
75) Chrysene/Triphenylene	43.72	228	58215	525.15	ng/mL	99
82) Benzo[b]fluoranthene	47.63	252	55729	470.13	ng/mL	100
83) Benzo[k]fluoranthene	47.72	252	62918	507.57	ng/mL	98
85) Benzo[e]pyrene	48.68	252	56515	494.57	ng/mL	99
86) Benzo[a]pyrene	48.89	252	49721	435.22	ng/mL	98
87) Perylene	49.21	252	52832	463.87	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.97	276	43125m	380.85	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	40320	378.65	ng/mL	98
90) Benzo[g,h,i]perylene	55.34	276	49253	417.18	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.93	191	17734	465.30	ng/mL	99
92) Hopane (T19)	52.93	191	17734	465.30	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28030.D
Acq On : 31 Jan 2006 12:22 pm
Operator : AC
Sample : C2013002
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 01 07:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28032D.D
Acq On : 31 Jan 2006 6:27 pm
Operator : AC
Sample : C2013002A
Misc : PAH STD
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Feb 01 06:58:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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	71	-0.01
2	t	Decalin	0.000	0.000#	0.0	0#	-16.76#
3	A1	trans-Decalin	0.422	0.406	3.8	71	-0.01
4	t	cis-Decalin	0.315	0.310	1.6	72	-0.02
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.317	-3.0	74	-0.02
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.028	0.0	72	-0.01
15	t	2-Methylnaphthalene	1.432	1.474	-2.9	74	-0.01
16	t	1-Methylnaphthalene	1.363	1.388	-1.8	73	-0.02
17	A1	Benzothiophene	1.810	1.893	-4.6	74	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.817	-0.8	74	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.255	-1.8	73	-0.02
24	t	Dibenzofuran	1.989	2.059	-3.5	73	-0.02
25	t	Acenaphthylene	2.231	2.267	-1.6	73	-0.01
26	t	Acenaphthene	1.368	1.389	-1.5	73	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.148	-6.7	77	-0.01
28	A1	Fluorene	1.599	1.642	-2.7	74	-0.02
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.228	-4.2	74	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.348	-2.9	74	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28032D.D
Acq On : 31 Jan 2006 6:27 pm
Operator : AC
Sample : C2013002A
Misc : PAH STD
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Feb 01 06:58:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.509	1.7	73	-0.01
53	t	Anthracene	2.119	2.146	-1.3	72	-0.02
54	t	Carbazole	2.020	2.179	-7.9	77	-0.01
55	t	1-Methylphenanthrene	1.583	1.658	-4.7	75	-0.01
56	A1	Fluoranthene	2.435	2.569	-5.5	74	-0.01
57	t	Benzo(b)fluorene	1.497	1.556	-3.9	75	-0.01
58	s	Pyrene-d10	2.114	2.177	-3.0	72	-0.01
59	A1	Pyrene	2.494	2.597	-4.1	74	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.436	-5.3	76	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.436	-5.3	76	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	71	0.00
73	t	Benz[a]anthracene	1.428	1.486	-4.1	74	-0.01
74	A1	Chrysene	1.434	1.495	-4.3	74	0.00
75	A2	Chrysene/Triphenylene	1.434	1.495	-4.3	74	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	1.024	0.1	71	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.554	-1.3	73	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.669	-4.1	75	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.520	-2.8	73	-0.01
86	t	Benzo[a]pyrene	1.478	1.515	-2.5	73	0.00
87	t	Perylene	1.473	1.520	-3.2	74	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.420	3.1	71	0.00
89	t	Dibenz[a,h]anthracene	1.378	1.365	0.9	70	0.00
90	t	Benzo[g,h,i]perylene	1.527	1.482	2.9	71	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.443	10.1	71	0.00
92	A2	Hopane (T19)	0.493	0.443	10.1	71	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28032D.D
Acq On : 31 Jan 2006 6:27 pm
Operator : AC
Sample : C2013002A
Misc : PAH STD
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Feb 01 06:58:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.221	3.9	72	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28032D.D
Acq On : 31 Jan 2006 6:27 pm
Operator : AC
Sample : C2013002A
Misc : PAH STD
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Feb 01 06:58:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

CMS 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	34186	500.00	ng/mL	-0.01
72) Chrysene-d12	43.61	240	52922	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	35152	500.34	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.03%			
58) Pyrene-d10	38.68	212	74427	515.03	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.50%			
81) Benzo[b]fluoranthene-d12	47.54	264	54185	499.41	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.94%#			
125) 5B(H)Cholane - Surr	44.19	217	11695m	480.68	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.07%#			
Target Compounds						Qvalue
3) trans-Decalin	16.75	138	6932	240.49	ng/mL	100
4) cis-Decalin	17.96	138	5306	246.01	ng/mL	100
9) Naphthalene	20.19	128	79217	515.18	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	50383	514.76	ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	47457	509.41	ng/mL#	100
17) Benzothiophene	20.41	134	64698	522.74	ng/mL	100
22) Biphenyl	24.77	154	62109	504.07	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	42888	508.67	ng/mL#	100
24) Dibenzofuran	27.87	168	70373	517.40	ng/mL	99
25) Acenaphthylene	26.49	152	77509	508.05	ng/mL#	100
26) Acenaphthene	27.22	153	47497	507.91	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	39236	533.24	ng/mL	99
28) Fluorene	29.24	166	56140	513.43	ng/mL	100
32) Dibenzothiophene	32.59	184	76152	520.86	ng/mL	100
41) Phenanthrene	33.08	178	80260	514.43	ng/mL	100
52) Retene	40.07	234	17416	491.97	ng/mL	97
53) Anthracene	33.25	178	73362	506.30	ng/mL	100
54) Carbazole	33.94	167	74498	539.46	ng/mL	100
55) 1-Methylphenanthrene	35.58	192	56689	523.76	ng/mL	100
56) Fluoranthene	37.86	202	87839	527.51	ng/mL	98
57) Benzo(b)fluorene	40.39	216	53210	519.80	ng/mL	99
59) Pyrene	38.75	202	88790	520.72	ng/mL	99
64) Naphthobenzothiophene	42.62	234	83265	526.59	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.62	234	83265	526.59	ng/mL#	68
73) Benz[a]anthracene	43.53	228	78664	520.50	ng/mL	100
74) Chrysene	43.71	228	79111	521.17	ng/mL	100
75) Chrysene/Triphenylene	43.71	228	79111	521.17	ng/mL	100
82) Benzo[b]fluoranthene	47.62	252	82255	506.76	ng/mL	100
83) Benzo[k]fluoranthene	47.71	252	88308	520.27	ng/mL	98
85) Benzo[e]pyrene	48.66	252	80464	514.24	ng/mL	100
86) Benzo[a]pyrene	48.87	252	80179	512.54	ng/mL	99
87) Perylene	49.20	252	80442	515.80	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.94	276	75153m	484.70	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	72247	495.49	ng/mL	98
90) Benzo[g,h,i]perylene	55.32	276	78449	485.26	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.93	191	23463	449.58	ng/mL#	95
92) Hopane (T19)	52.93	191	23463	449.58	ng/mL#	95

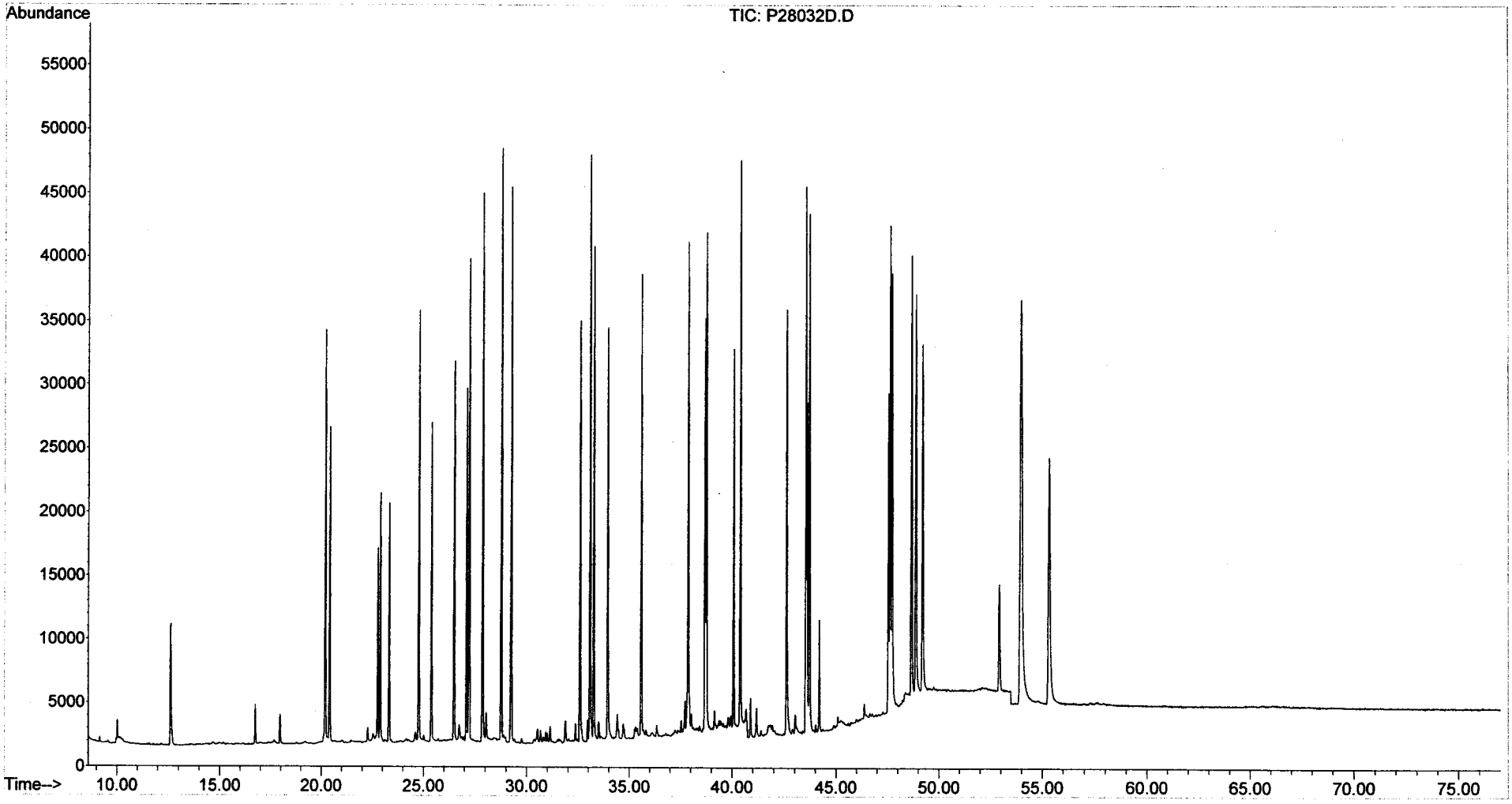
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Wed Feb 01 07:00:49 2006

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28032D.D
Acq On : 31 Jan 2006 6:27 pm
Operator : AC
Sample : C2013002A
Misc : PAH STD
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Feb 01 06:58:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28054.D
Acq On : 1 Feb 2006 12:49 pm
Operator : AC
Sample : C2013003
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

2/1/06

Quant Time: Feb 01 14:47:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	81	-0.01
2	t	Decalin	0.000	0.360	0.0	0#	-0.01
3	A1	trans-Decalin	0.422	0.409	3.1	82	-0.01
4	t	cis-Decalin	0.315	0.311	1.3	82	-0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.257	-0.4	82	-0.02
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.023	0.5	82	-0.01
15	t	2-Methylnaphthalene	1.432	1.443	-0.8	82	-0.01
16	t	1-Methylnaphthalene	1.363	1.370	-0.5	83	-0.02
17	A1	Benzothiophene	1.810	1.841	-1.7	83	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.750	2.9	82	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.224	0.7	82	-0.02
24	t	Dibenzofuran	1.989	2.014	-1.3	82	-0.02
25	t	Acenaphthylene	2.231	2.311	-3.6	85	-0.01
26	t	Acenaphthene	1.368	1.367	0.1	82	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.127	-4.7	87	-0.01
28	A1	Fluorene	1.599	1.603	-0.3	83	-0.02
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.162	-1.1	82	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.264	0.8	82	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28054.D
Acq On : 1 Feb 2006 12:49 pm
Operator : AC
Sample : C2013003
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 14:47:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.544	-5.0	89	-0.01
53	t	Anthracene	2.119	2.170	-2.4	83	-0.02
54	t	Carbazole	2.020	2.107	-4.3	85	-0.01
55	t	1-Methylphenanthrene	1.583	1.603	-1.3	82	-0.01
56	A1	Fluoranthene	2.435	2.492	-2.3	82	-0.01
57	t	Benzo(b)fluorene	1.497	1.609	-7.5	89	-0.01
58	s	Pyrene-d10	2.114	2.135	-1.0	81	-0.01
59	A1	Pyrene	2.494	2.520	-1.0	82	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.468	-6.7	88	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.468	-6.7	88	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	85	0.00
73	t	Benz[a]anthracene	1.428	1.469	-2.9	88	-0.01
74	A1	Chrysene	1.434	1.446	-0.8	86	0.00
75	A2	Chrysene/Triphenylene	1.434	1.437	-0.2	86	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	1.083	-5.7	90	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.677	-9.3	95	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.651	-2.9	89	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.563	-5.8	91	-0.01
86	t	Benzo[a]pyrene	1.478	1.617	-9.4	94	-0.01
87	t	Perylene	1.473	1.574	-6.9	92	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.658	-13.2	99	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.542	-11.9	95	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.615	-5.8	93	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.490	0.6	94	0.00
92	A2	Hopane (T19)	0.493	0.490	0.6	94	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28054.D
Acq On : 1 Feb 2006 12:49 pm
Operator : AC
Sample : C2013003
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 14:47:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.228	0.9	89	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28054.D
Acq On : 1 Feb 2006 12:49 pm
Operator : AC
Sample : C2013003
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 14:47:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	39044	500.00	ng/mL	-0.01
72) Chrysene-d12	43.61	240	63609	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	39954	497.93	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.79%#			
58) Pyrene-d10	38.68	212	83364	505.10	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.51%			
81) Benzo[b]fluoranthene-d12	47.54	264	68887	528.24	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.82%			
125) 5B(H)Cholane - Surr	44.19	217	14534	497.00	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.70%#			

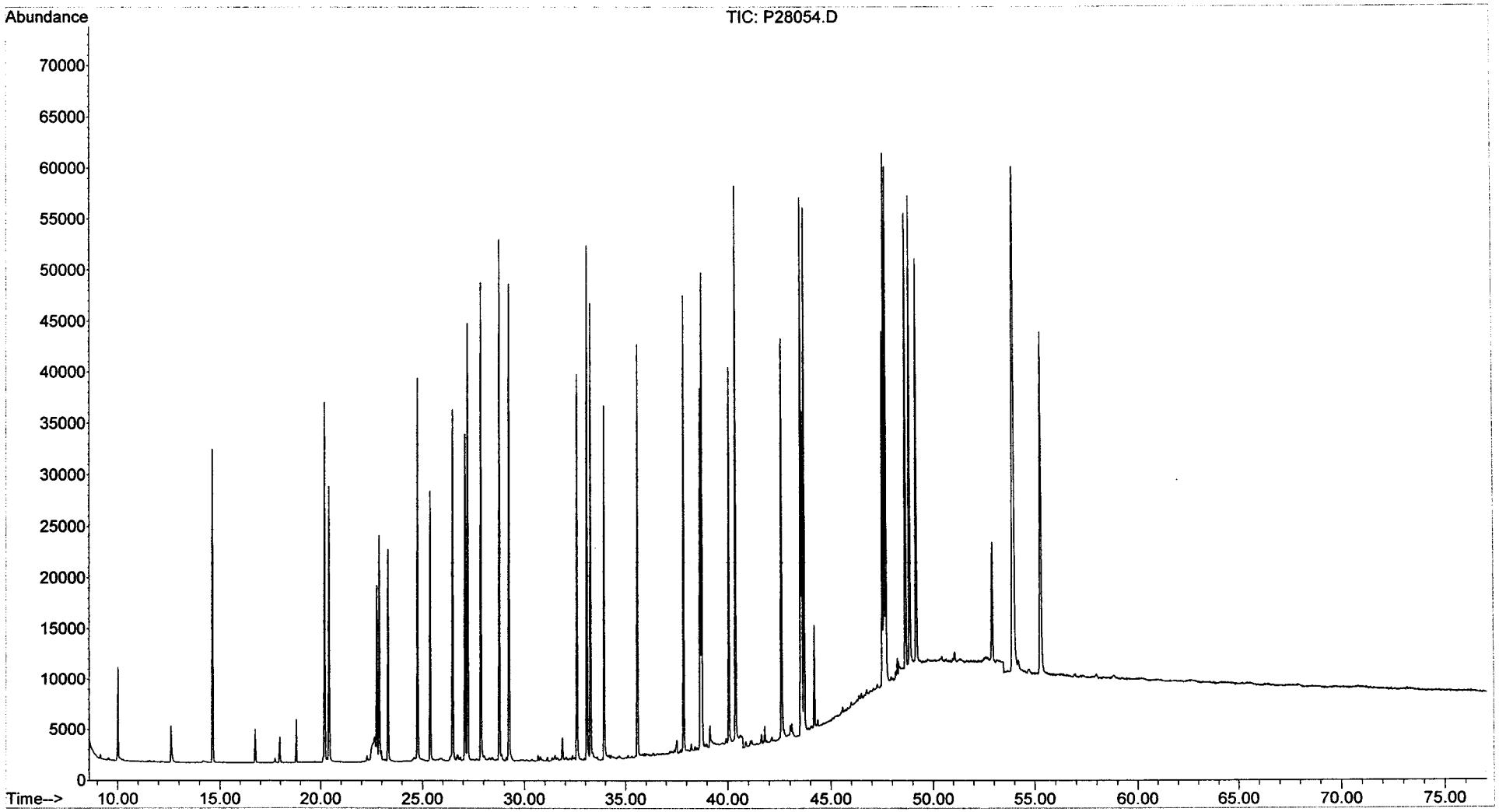
Target Compounds						Qvalue
3) trans-Decalin	16.75	138	7992	242.76	ng/mL	100
4) cis-Decalin	17.97	138	6067	246.29	ng/mL	100
9) Naphthalene	20.19	128	88128	501.83	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	56338	503.98	ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	53505	502.87	ng/mL#	100
17) Benzothiophene	20.41	134	71892	508.60	ng/mL	100
22) Biphenyl	24.77	154	68320	485.49	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	47792	496.31	ng/mL#	100
24) Dibenzofuran	27.87	168	78619	506.10	ng/mL	98
25) Acenaphthylene	26.49	152	90246m	517.94	ng/mL	
26) Acenaphthene	27.22	153	53365	499.65	ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.77	170	43991	523.48	ng/mL	99
28) Fluorene	29.24	166	62595	501.24	ng/mL	99
32) Dibenzothiophene	32.59	184	84397	505.43	ng/mL	99
41) Phenanthrene	33.08	178	88407	496.15	ng/mL	99
52) Retene	40.07	234	21250	525.58	ng/mL	98
53) Anthracene	33.25	178	84734m	512.02	ng/mL	
54) Carbazole	33.94	167	82284	521.70	ng/mL	99
55) 1-Methylphenanthrene	35.58	192	62603	506.43	ng/mL	99
56) Fluoranthene	37.86	202	97295	511.60	ng/mL	100
57) Benzo(b)fluorene	40.39	216	62830	537.41	ng/mL	99
59) Pyrene	38.75	202	98397	505.26	ng/mL	100
64) Naphthobenzothiophene	42.62	234	96360	533.58	ng/ml#	66
65) Naphthobenzothiophene-2,1-	42.62	234	96360	533.58	ng/mL#	66
73) Benz[a]anthracene	43.53	228	93427	514.32	ng/mL	96
74) Chrysene	43.71	228	92008m	504.30	ng/mL	
75) Chrysene/Triphenylene	43.71	228	91409	501.02	ng/mL	100
82) Benzo[b]fluoranthene	47.62	252	106665	546.74	ng/mL	100
83) Benzo[k]fluoranthene	47.71	252	105011	514.73	ng/mL	99
85) Benzo[e]pyrene	48.66	252	99409	528.58	ng/mL	99
86) Benzo[a]pyrene	48.86	252	102863	547.07	ng/mL	99
87) Perylene	49.18	252	100108	534.06	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.93	276	105432m	565.74	ng/mL	
89) Dibenz[a,h]anthracene	53.98	278	98087	559.69	ng/mL	98
90) Benzo[g,h,i]perylene	55.32	276	102755	528.82	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.93	191	31159	496.74	ng/mL	100
92) Hopane (T19)	52.93	191	31159	496.74	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28054.D
Acq On : 1 Feb 2006 12:49 pm
Operator : AC
Sample : C2013003
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 14:47:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 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

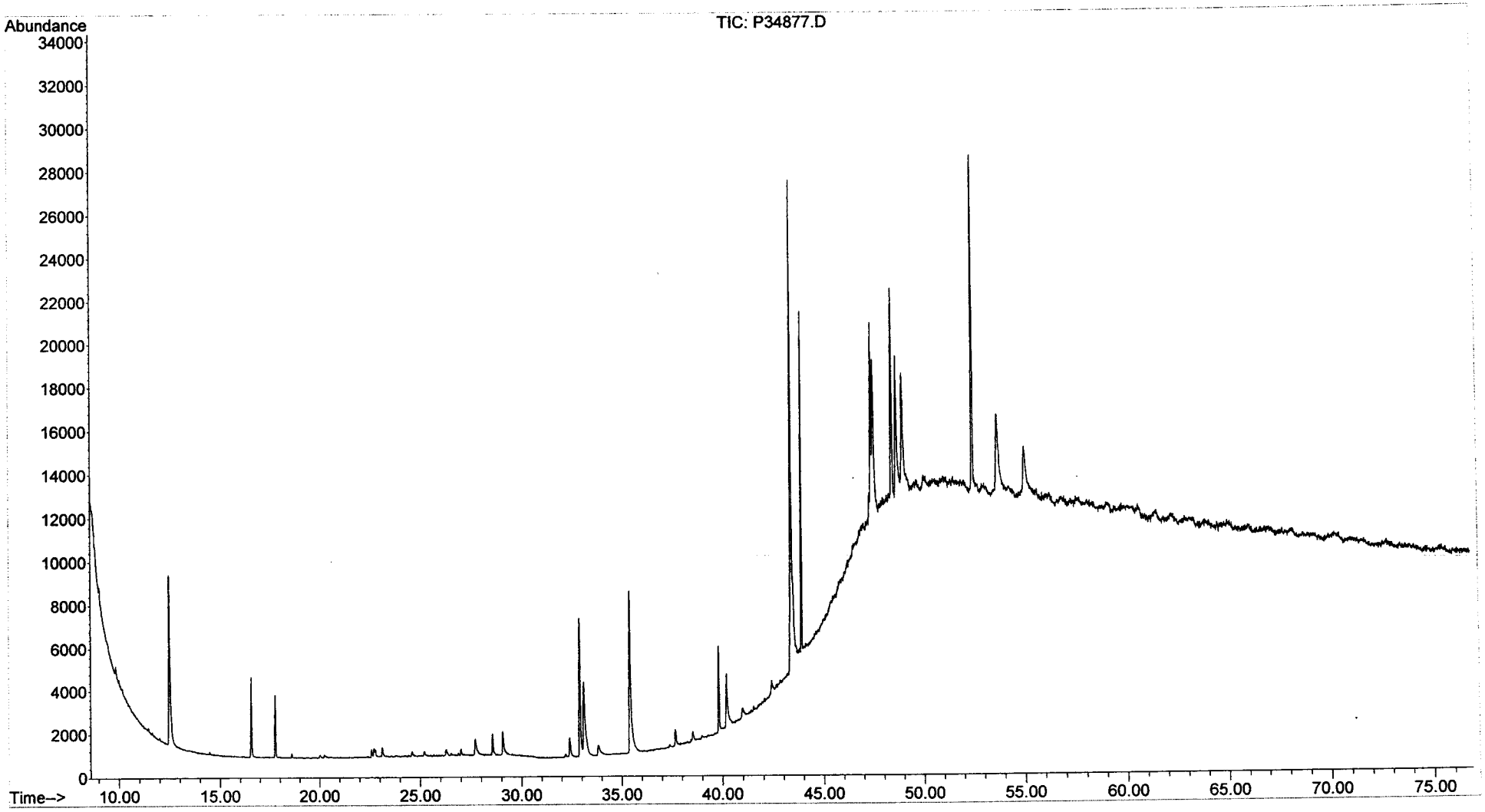
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	86518	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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 : P34889.D
Acq On : 27 Jan 2006 5:21 pm
Operator : AC
Sample : C3012603
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 06:59:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/30/06

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 : P34889.D
Acq On : 27 Jan 2006 5:21 pm
Operator : AC
Sample : C3012603
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 06:59:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	144	-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	0.450	-4.7	173	-0.02
84	A2	Hopane (T19)	0.430	0.450	-4.7	173	-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 : P34889.D
Acq On : 27 Jan 2006 5:21 pm
Operator : AC
Sample : C3012603
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 06:59:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.232	-10.5	161	-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 : P34889.D
Acq On : 27 Jan 2006 5:21 pm
Operator : AC
Sample : C3012603
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 06:59:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/30/06

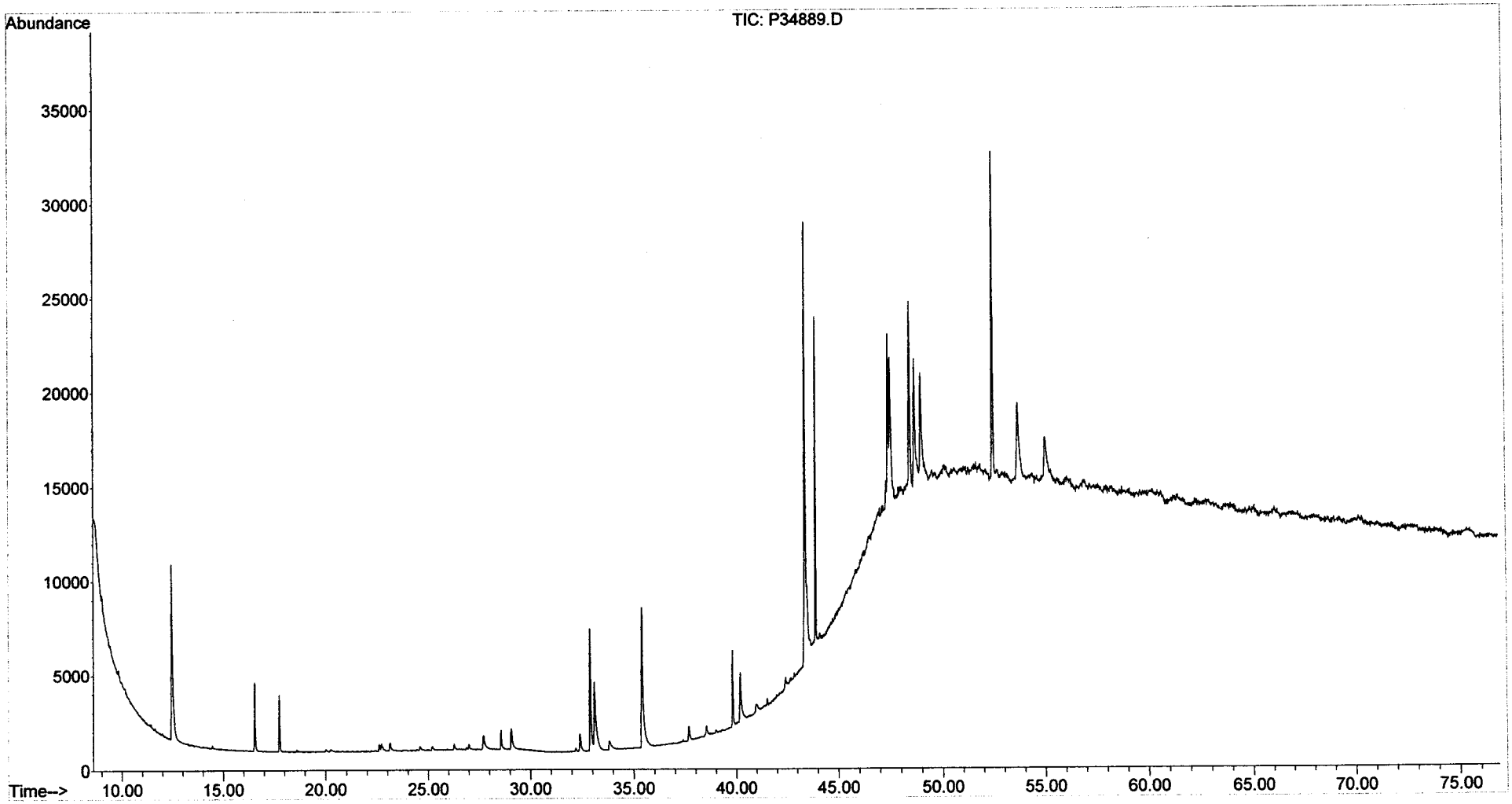
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	87909	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	20407	552.35	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.23%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	39549	523.52	ng/mL	99
84) Hopane (T19)	52.47	191	39549	523.52	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34889.D
Acq On : 27 Jan 2006 5:21 pm
Operator : AC
Sample : C3012603
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 06:59:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34897.D
Acq On : 28 Jan 2006 5:27 am
Operator : AC
Sample : C3012604
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 07:01:32 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

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 : P34897.D
Acq On : 28 Jan 2006 5:27 am
Operator : AC
Sample : C3012604
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 07:01:32 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	146	-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	0.456	-6.0	178	-0.02
84	A2	Hopane (T19)	0.430	0.456	-6.0	178	-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 : P34897.D
Acq On : 28 Jan 2006 5:27 am
Operator : AC
Sample : C3012604
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 07:01:32 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	0.234	-11.4	165	-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 : P34897.D
Acq On : 28 Jan 2006 5:27 am
Operator : AC
Sample : C3012604
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 07:01:32 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

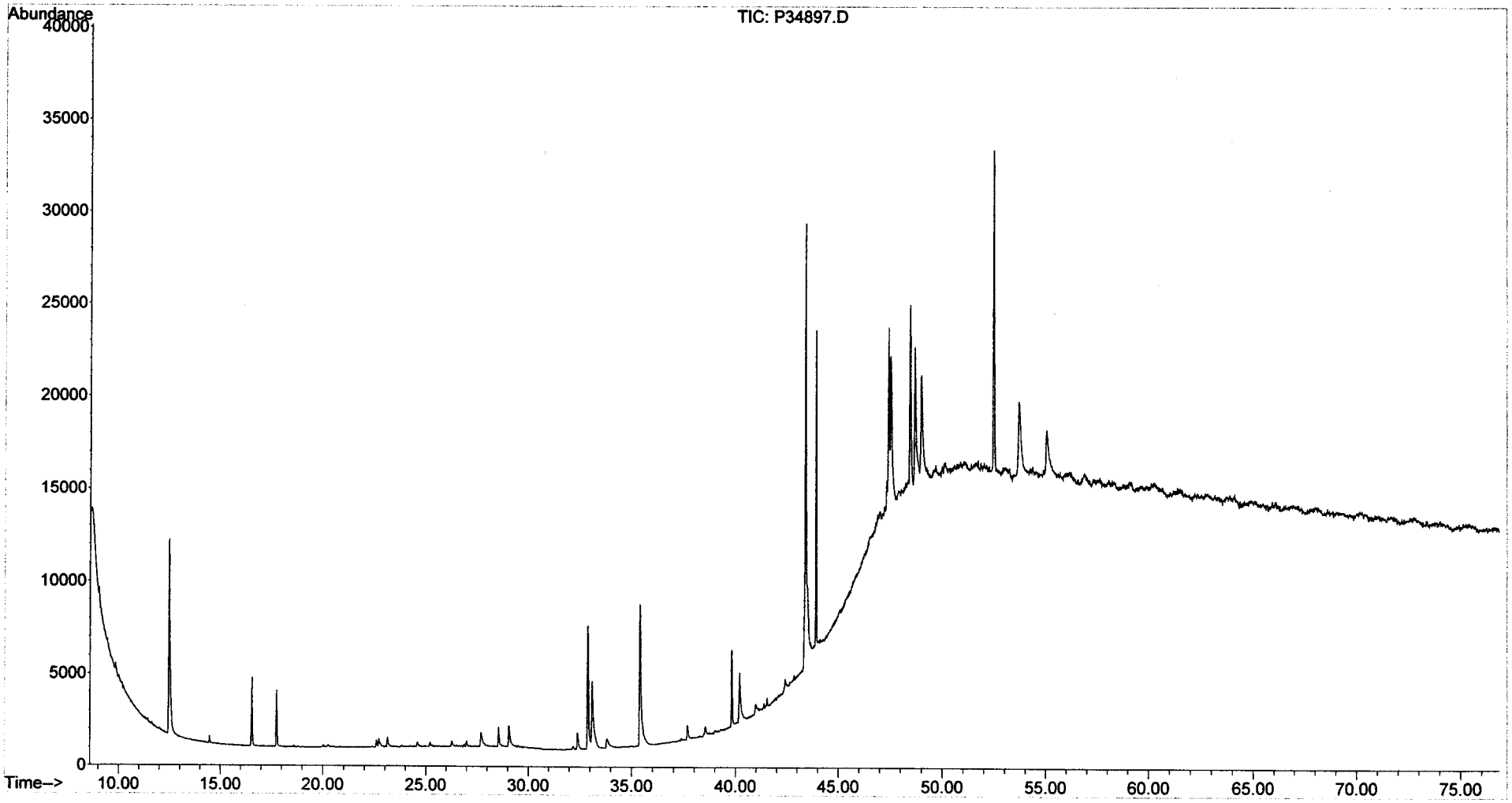
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.39	240	89543	500.00 ng/mL	-0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	
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	20914	555.74 ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	55.57%	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	40810	530.35 ng/mL	99
84) Hopane (T19)	52.47	191	40810	530.35 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34897.D
Acq On : 28 Jan 2006 5:27 am
Operator : AC
Sample : C3012604
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 30 07:01:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601050**
Lab ID: **C2012309**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		31831	27.12	46253	43.63
Upper Limit:		63662	27.62	92506	44.13
Lower Limit:		15916	26.62	23126	43.13
Client ID	**Lab ID**				
GC-SED-32 (5.9-6.9)	0601050-01E	33653	27.12	54580	43.63
GC-SED-41 (7.3-8.3)	0601050-04	34486	27.12	54723	43.62
GC-SED-40 (5-6)	0601050-05E	35181	27.12	54587	43.63
CCV	C2012310	31570	27.12	43786	43.63

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

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

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601050**
Lab ID: **C2013001**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		34456	27.11	53949	43.61
Upper Limit:		68912	27.61	107898	44.11
Lower Limit:		17228	26.61	26974	43.11
Client ID	**Lab ID**				
Blank	SS011906B05	25807	27.11	39647	43.62
LCS	SS011906LCS04	26592	27.11	42949	43.61
LCSD	SS011906LCSD04	24716	27.11	40360	43.62
GC-SED-41 (7.3-8.3)	0601050-04E	21342	27.12	32684	43.62
CCV	C2013002	26132	27.11	38649	43.62

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

02/07/06 09:03

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: **0601050**
Lab ID: **C2013002A**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		34186	27.10	52922	43.61
Upper Limit:		68372	27.60	105844	44.11
Lower Limit:		17093	26.60	26461	43.11
Client ID	**Lab ID**				
GC-SED-32 (5.9-6.9)	0601050-01	38409	27.10	66316	43.61
GC-SED-31 (2.5-4.5)	0601050-02	38547	27.10	66484	43.62
GC-SED-36 (2.5-4.5)	0601050-03	38521	27.10	67385	43.62
GC-SED-40 (5-6)	0601050-05	38058	27.10	66430	43.62
GC-SED-33 (1.5-3)	0601050-06 D	37809	27.10	65549	43.62
GC-SED-33 (1.5-3)	0601050-06	38456	27.10	66866	43.62
CCV	C2013003	39044	27.10	63609	43.61

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.

02/07/06 09:03

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: **0601050**
Lab ID: **C3012602**

		Chrysene-d12	
		Area	**RT**
Standard:		86518	43.39
Upper Limit:		173036	43.89
Lower Limit:		43259	42.89
Client ID	**Lab ID**		
Blank	SS011906B05	67835	43.44
CCV	C3012603	87909	43.39

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.

02/06/06 20:44

Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601050**
Lab ID: **C3012603**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		87909	43.39
Upper Limit:		175818	43.89
Lower Limit:		43954	42.89
Client ID	**Lab ID**		
GC-SED-32 (5.9-6.9)	0601050-01	83532	43.42
GC-SED-31 (2.5-4.5)	0601050-02	89379	43.42
GC-SED-36 (2.5-4.5)	0601050-03	92563	43.42
GC-SED-41 (7.3-8.3)	0601050-04	93836	43.41
GC-SED-40 (5-6)	0601050-05	104268	43.41
GC-SED-33 (1.5-3)	0601050-06	89319	43.42
GC-SED-33 (1.5-3)	0601050-06 D	90922	43.42
CCV	C3012604	89543	43.39

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.

02/06/06 20:44

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-32 (5.9-6.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-01**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/28/06	43.4	5.15	19.23	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**31000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	92	50-130
d50-Tetracosane	86	50-130

02/06/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27975.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 6:18 pm
Operator : AC
Sample : 0601050-01-AFID
Misc : 1X
ALS Vial : 78 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 21:30:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

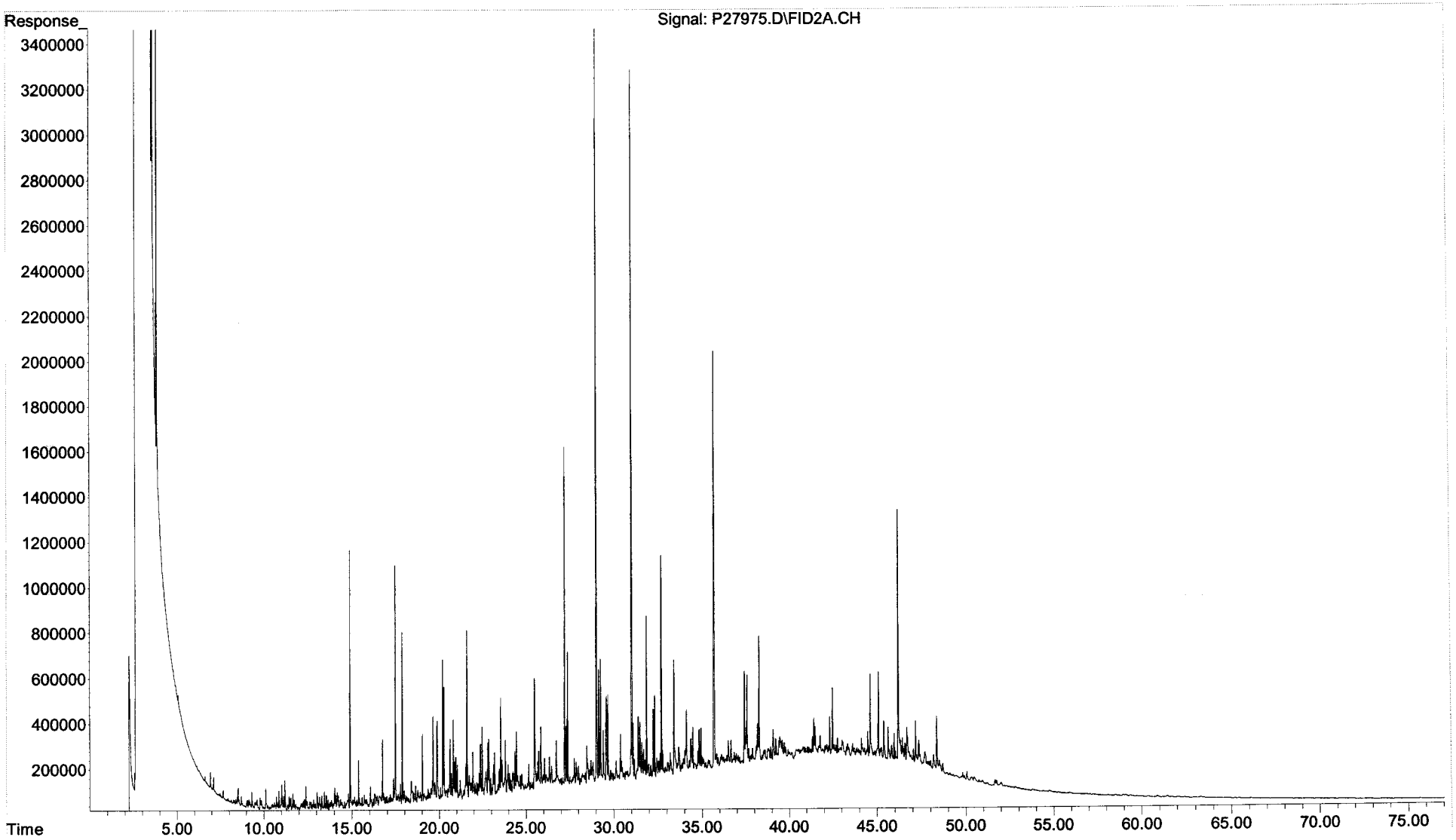
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/6/01

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	70586992	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	71648394	47.620 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	95.24%
24) s d50-Tetracosane	35.71	59587232	44.839 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	89.68%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5295218885	3835.301 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1153662749	835.592 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27975.D
Operator : AC
Acquired : 28 Jan 2006 6:18 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601050-01-AFID
Misc Info : 1X
Vial Number: 78



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-31 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-02**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/28/06	54.1	5.21	16.66	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**22000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	89	50-130
d50-Tetracosane	84	50-130

02/06/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27977.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 7:56 pm
Operator : AC
Sample : 0601050-02-AFID
Misc : 1X
ALS Vial : 79 Sample Multiplier: 1

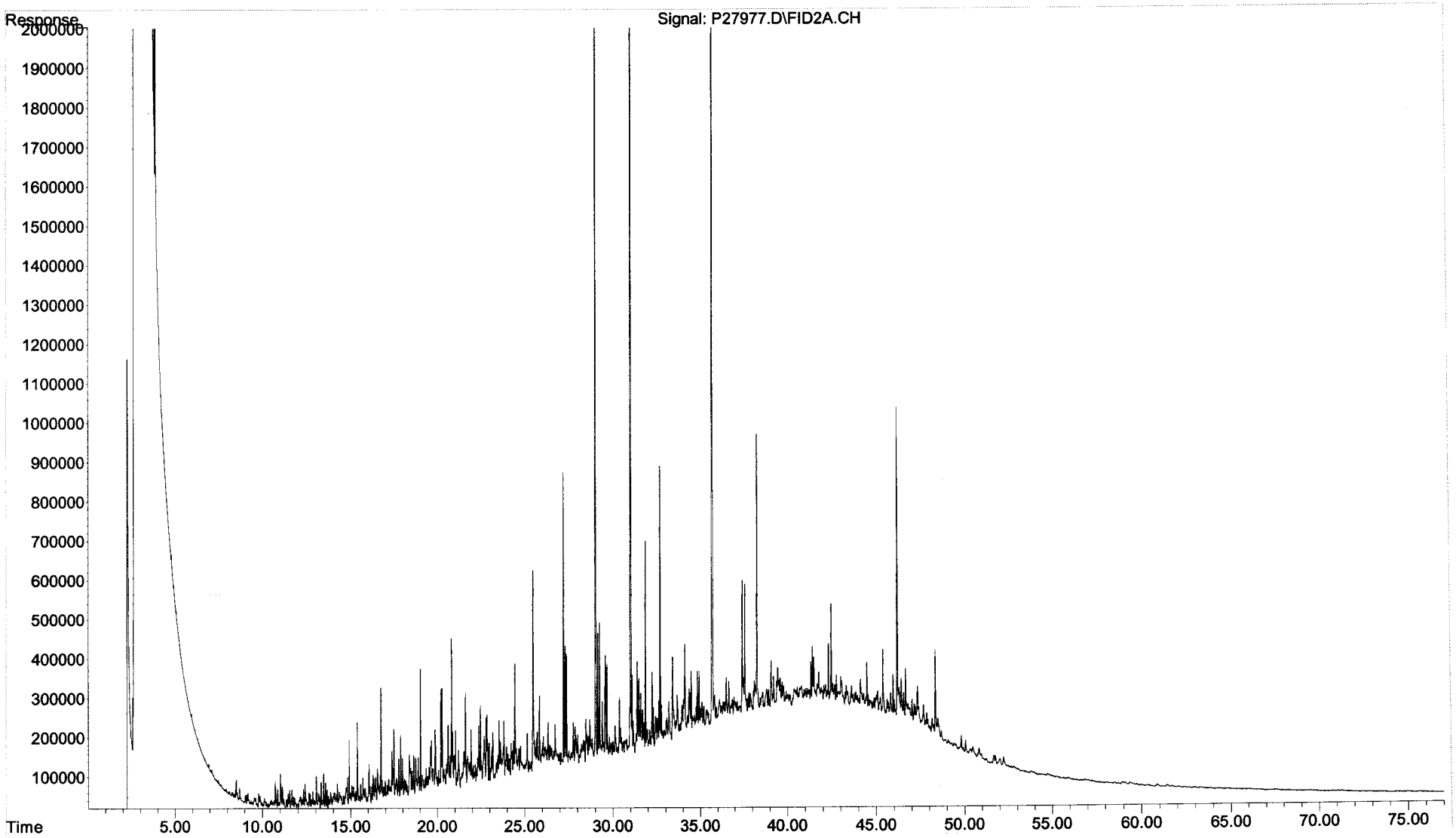
Integration File: SHCINT1.E
Quant Time: Feb 06 21:35:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	72831132	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	83036499	53.489 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 106.98%
24) s d50-Tetracosane	35.71	69503748	50.690 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	= 101.38%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5510849291	3868.492 ug/mL
44) h Total Resolved Hydrocarbon	40.84	907979089	637.381 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27977.D
Operator : AC
Acquired : 28 Jan 2006 7:56 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601050-02-AFID
Misc Info : 1X
Vial Number: 79



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-36 (2.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-03**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/16/06	01/18/06	01/19/06	01/28/06	46.1	5.23	16.24	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**26000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	81	50-130

02/06/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27979.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 9:33 pm
Operator : AC
Sample : 0601050-03-AFID
Misc : 1X
ALS Vial : 80 Sample Multiplier: 1

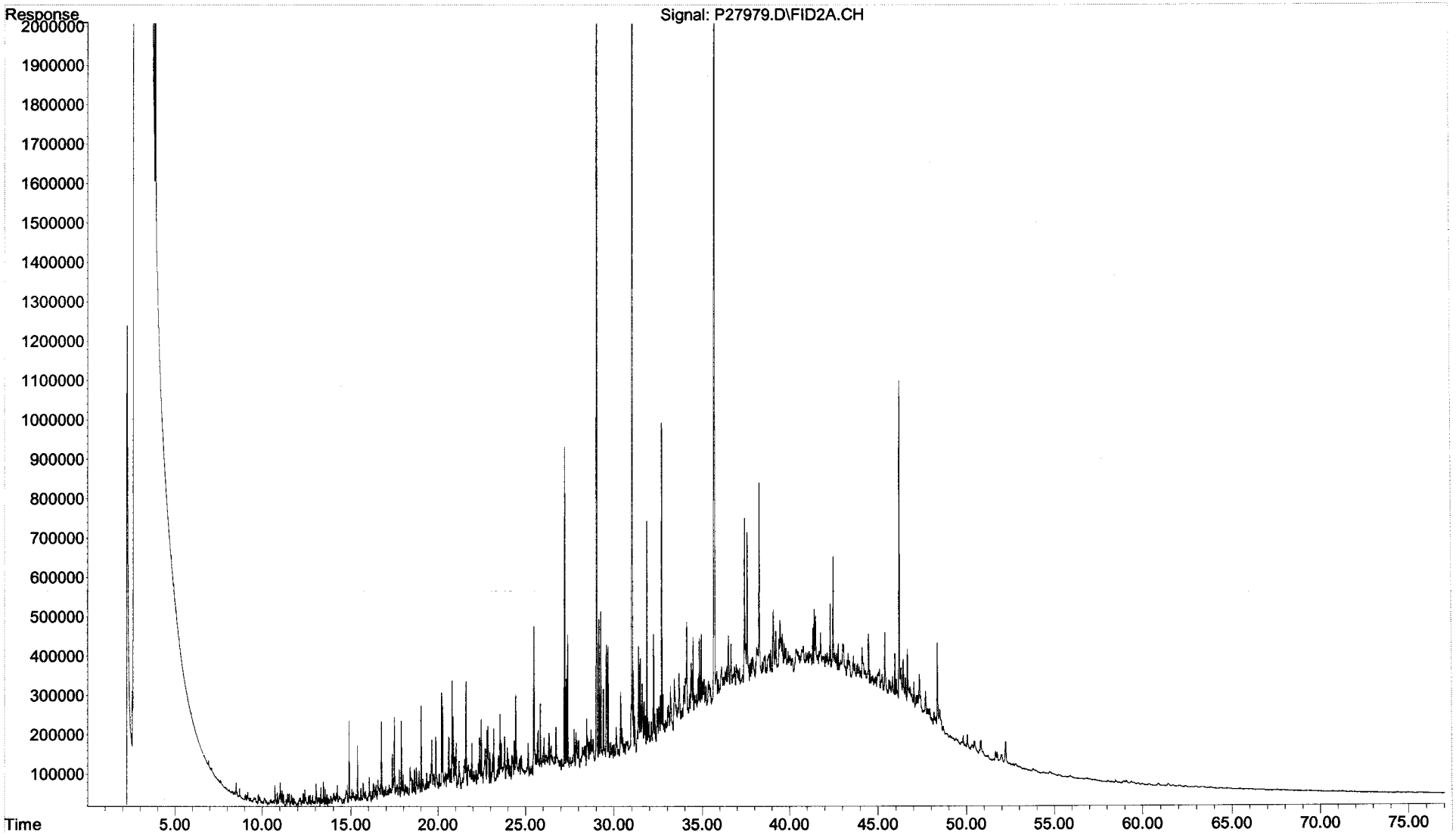
Integration File: SHCINT1.E
Quant Time: Feb 06 21:38:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	73148628	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	81495927	52.269 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 104.54%	
24) s d50-Tetracosane	35.71	69065276	50.151 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery = 100.30%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5932166278	4146.173 ug/mL
44) h Total Resolved Hydrocarbon	40.84	875230204	611.725 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27979.D
Operator : AC
Acquired : 28 Jan 2006 9:33 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601050-03-AFID
Misc Info : 1X
Vial Number: 80



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-41 (7.3-8.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-04**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/28/06	87.1	5.37	47.71	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	40000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	94	50-130
d50-Tetracosane	98	50-130

02/06/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27981.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 11:07 pm
Operator : AC
Sample : 0601050-04-AFID
Misc : 1X
ALS Vial : 81 Sample Multiplier: 1

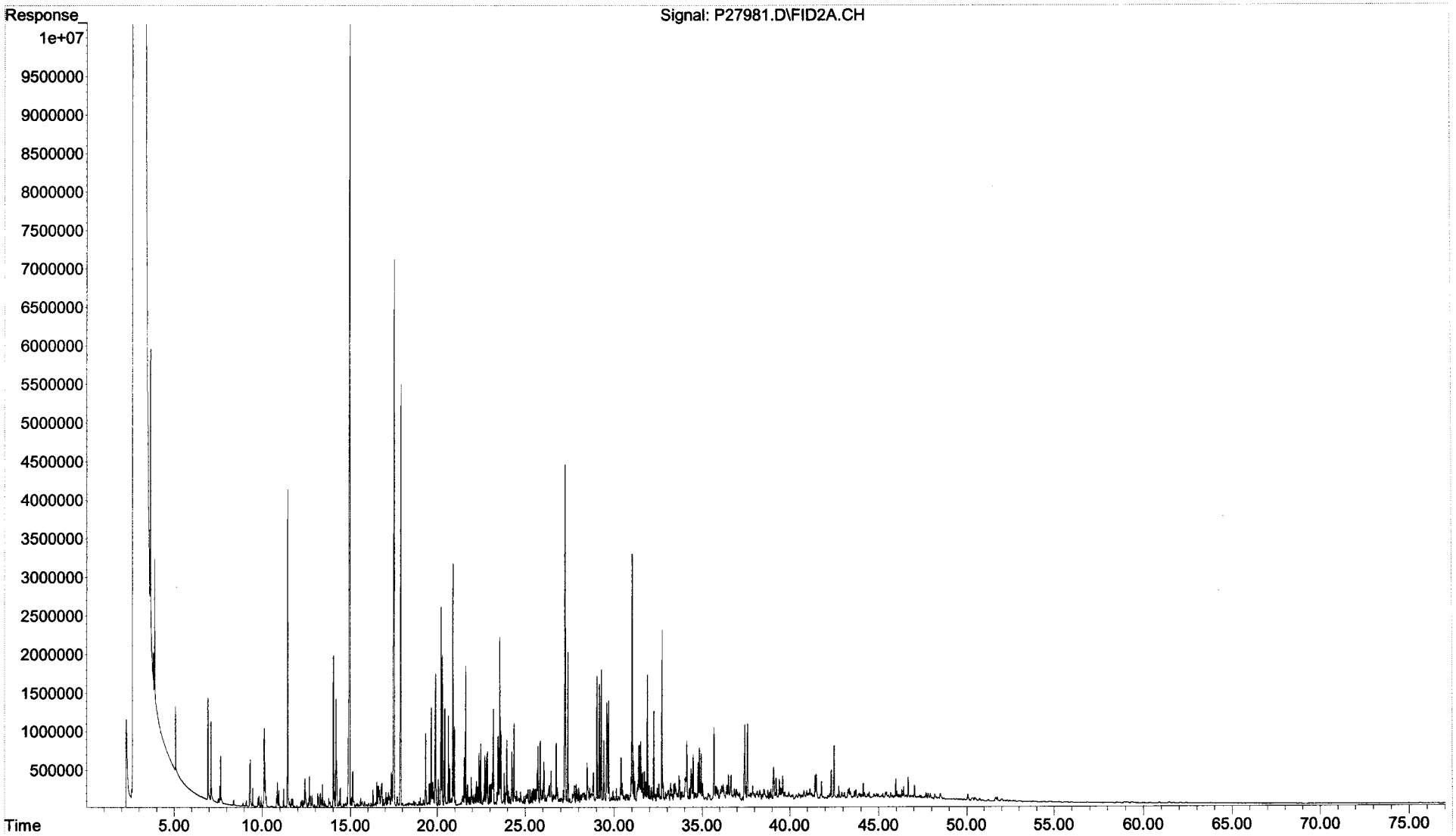
Integration File: SHCINT1.E
Quant Time: Feb 06 21:40:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	75338553	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	31791638	19.797 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	39.59%#
24) s d50-Tetracosane	35.69	29109270	20.523 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	41.05%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	6123526570	4155.513 ug/mL
44) h Total Resolved Hydrocarbon	40.84	3404141768	2310.099 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27981.D
Operator : AC
Acquired : 28 Jan 2006 11:07 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601050-04-AFID
Misc Info : 1X
Vial Number: 81



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-40 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-05**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/29/06	59.4	5.32	55.42	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**64000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	92	50-130
d50-Tetracosane	91	50-130

02/06/06 22:06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27983.D
Signal(s) : FID2A.CH
Acq On : 29 Jan 2006 12:41 am
Operator : AC
Sample : 0601050-05-AFID
Misc : 1X
ALS Vial : 82 Sample Multiplier: 1

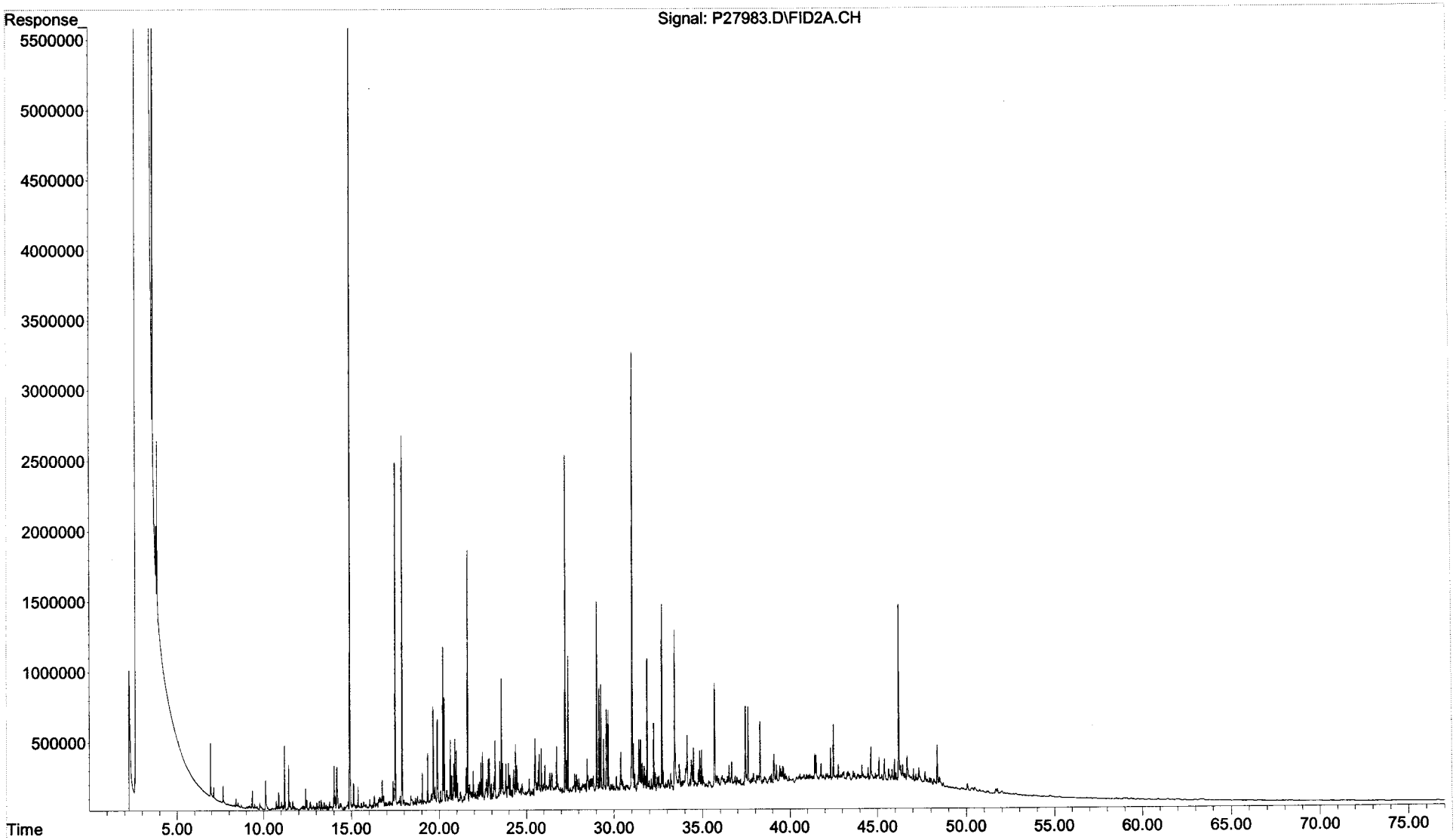
Integration File: SHCINT1.E
Quant Time: Feb 06 21:44:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	74024356	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	26069552	16.522 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	33.04%#
24) s d50-Tetracosane	35.69	22766670	16.336 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	32.67%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5623407422	3883.874 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1542566173	1065.392 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27983.D
Operator : AC
Acquired : 29 Jan 2006 12:41 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601050-05-AFID
Misc Info : 1X
Vial Number: 82



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/29/06	46.7	5.80	12.35	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**16000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	83	50-130
d50-Tetracosane	78	50-130

02/06/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27985.D
Signal(s) : FID2A.CH
Acq On : 29 Jan 2006 2:16 am
Operator : AC
Sample : 0601050-06-AFID
Misc : 1X
ALS Vial : 83 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 21:48:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 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	72975410	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	104274551	67.037 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	134.07%#
24) s d50-Tetracosane	35.72	86766978	63.155 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	126.31%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5340380761	3741.416 ug/mL
44) h Total Resolved Hydrocarbon	40.84	806604208	565.099 ug/L

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

```
File        :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27985.D
Operator    : AC
Acquired    : 29 Jan 2006   2:16 am using AcqMethod FRNC2B.M
Instrument :   PAHINST2
Sample Name: 0601050-06-AFID
Misc Info   : 1X
Vial Number: 83
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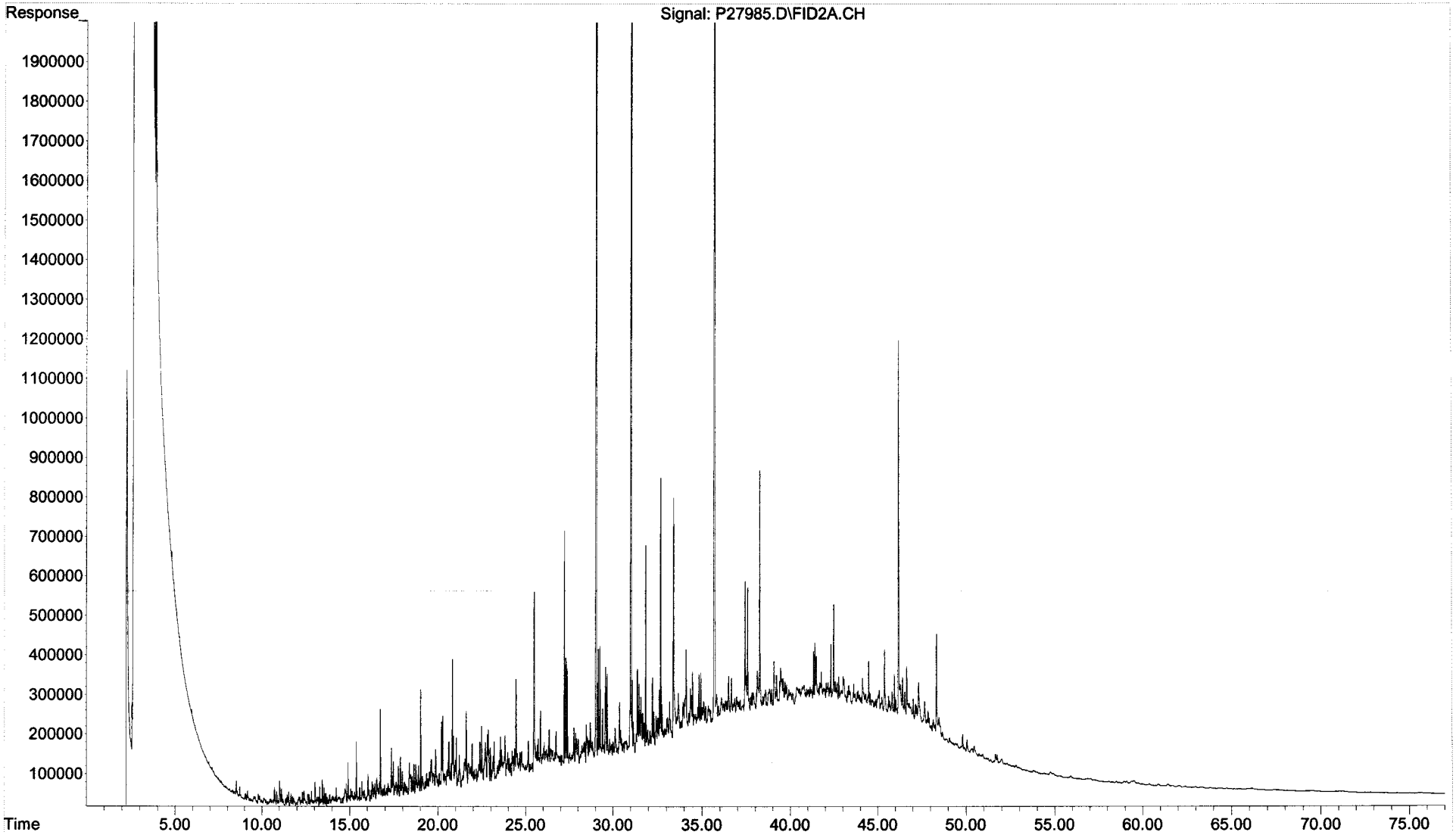


Form I
Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06 D**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/17/06	01/18/06	01/19/06	01/29/06	46.7	5.51	15.64	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**23000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	83	50-130

02/06/06 22:07

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27987.D
Signal(s) : FID2A.CH
Acq On : 29 Jan 2006 3:50 am
Operator : AC
Sample : 0601050-06D-AFID
Misc : 1X
ALS Vial : 84 Sample Multiplier: 1

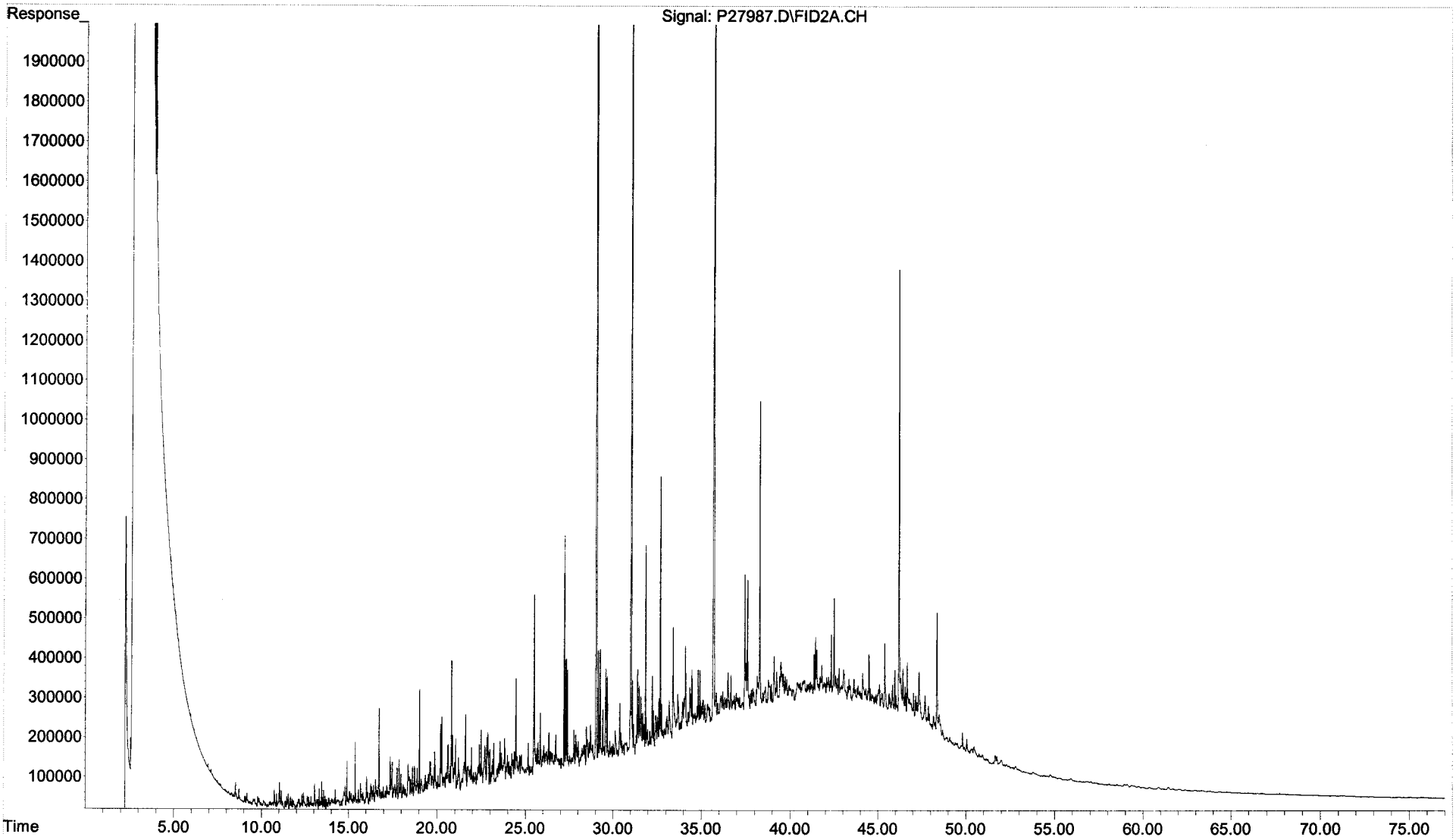
Integration File: SHCINT1.E
Quant Time: Feb 06 21:55:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	72092326	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	86160272	56.070 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 112.14%	
24) s d50-Tetracosane	35.71	72178745	53.180 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 106.36%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5606810870	3976.190 ug/mL
44) h Total Resolved Hydrocarbon	40.84	839521396	595.365 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27987.D
Operator : AC
Acquired : 29 Jan 2006 3:50 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601050-06D-AFID
Misc Info : 1X
Vial Number: 84



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-33 (1.5-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **0601050-06**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/17/06	01/18/06	01/19/06	46.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**16000**	**23000**	35[a]	30

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	83	88	50-130
d50-Tetracosane	78	83	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.

02/06/06 22:07

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: **0601050**
Lab ID: **SS011906B05**
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	01/27/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	4.4 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	83	50-130
d50-Tetracosane	76	50-130

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

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27947.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 7:57 pm
Operator : AC
Sample : SS011906B05-AFID
Misc : 1X ETR0601045/50
ALS Vial : 64 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 19:36:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

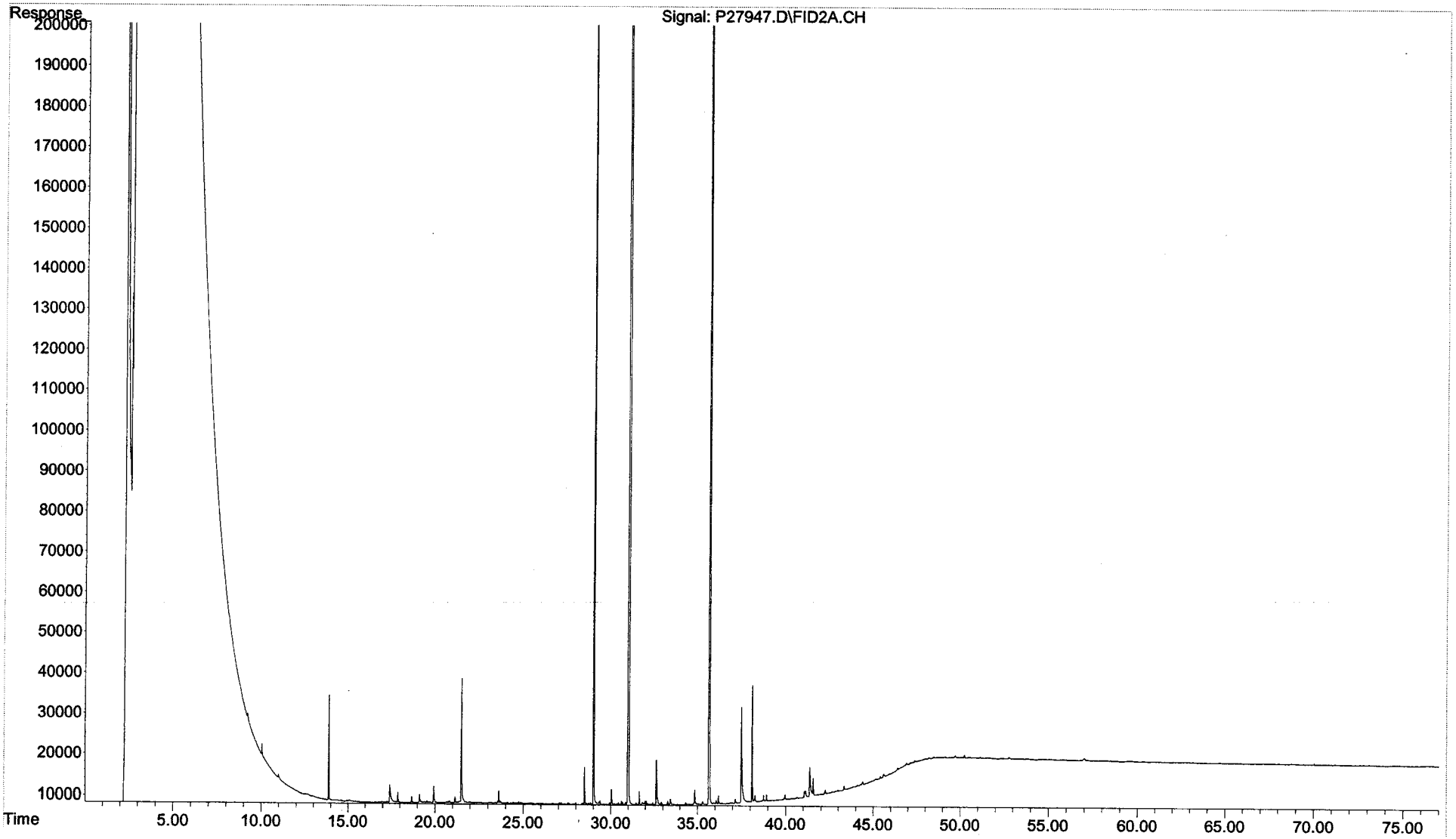
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/6/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.03	71242340	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.01	15786894	10.396 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	20.79%#
24) s d50-Tetracosane	35.67	12758234	9.512 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	19.02%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	323078877	231.852 ug/mL
44) h Total Resolved Hydrocarbon	40.84	6819065	4.894 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27947.D
Operator : AC
Acquired : 27 Jan 2006 7:57 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011906B05-AFID
Misc Info : 1X ETR0601045/50
Vial Number: 64



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: **0601050**
Lab ID: **See Below**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/19/06	100	AC

Lab ID:	SS011906B05		SS011906LCS04		SS011906LCSD04				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.13	U	0.96	58	1.0	62	7	30	50-130
n-Decane (C10)	0.13	U	1.2	73	1.3	76	3	30	50-130
n-Dodecane (C12)	0.13	U	1.4	82	1.4	84	2	30	50-130
n-Tetradecane (C14)	0.13	U	1.4	82	1.4	85	3	30	50-130
n-Hexadecane (C16)	0.13	U	1.4	86	1.5	88	3	30	50-130
n-Octadecane (C18)	0.13	U	1.4	85	1.4	87	2	30	50-130
n-Nonadecane (C19)	0.13	U	1.4	86	1.5	88	2	30	50-130
n-Eicosane (C20)	0.13	U	1.4	87	1.5	89	2	30	50-130
n-Docosane (C22)	0.13	U	1.4	86	1.5	88	2	30	50-130
n-Tetracosane (C24)	0.13	U	1.4	85	1.4	87	2	30	50-130
n-Hexacosane (C26)	0.13	U	1.4	87	1.5	89	2	30	50-130
n-Octacosane (C28)	0.13	U	1.4	86	1.5	88	2	30	50-130
n-Triacontane (C30)	0.13	U	1.4	85	1.4	86	2	30	50-130
n-Hexatriacontane (C36)	0.13	U	1.4	81	1.4	83	3	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	86	88	50-130
d50-Tetracosane	79	80	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.

02/06/06 22:10

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: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **SS011906LCS04**
Associated Blank: **SS011906B05**
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	01/27/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**18**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	86	50-130
d50-Tetracosane	79	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27949.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 9:32 pm
Operator : AC
Sample : SS011906LCS04-AFID
Misc : 1X ETR0601045/50
ALS Vial : 65 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 20:48:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

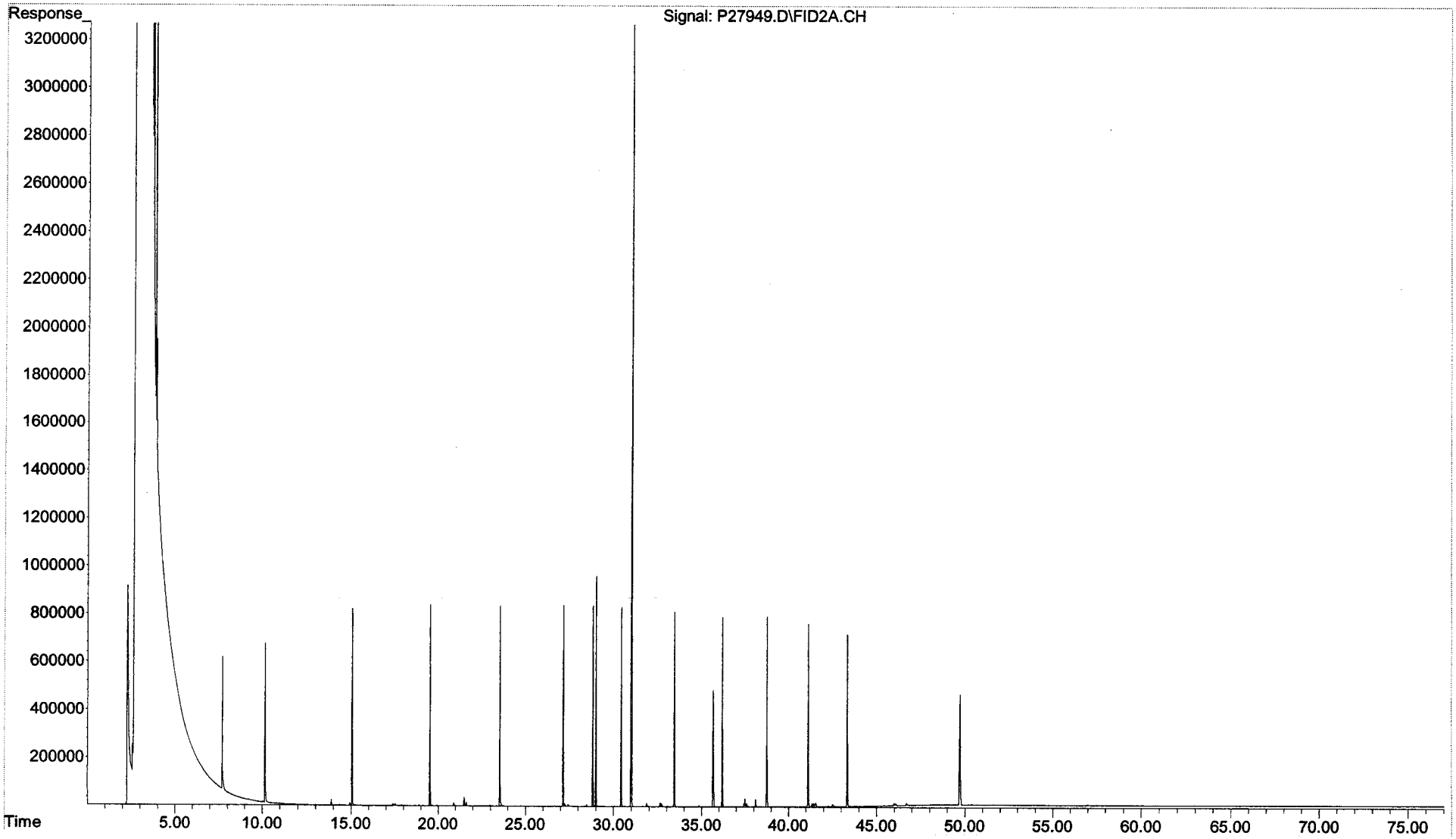
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/6/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.03	73077938	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.01	16751849	10.754 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	21.51%#
24) s d50-Tetracosane	35.67	13527974	9.833 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	19.67%#
Target Compounds			
3) t n-Nonane (C9)	7.72	9354334	7.186 ug/mLm
4) t n-Decane (C10)	10.16	12170460	9.150 ug/mLm
6) t n-Dodecane (C12)	15.06	13967298	10.265 ug/mLm
9) t n-Tetradecane (C14)	19.53	14325503	10.273 ug/mLm
12) t n-Hexadecane (C16)	23.54	15186392	10.711 ug/mL
16) t n-Octadecane (C18)	27.16	15295905	10.631 ug/mL
18) t n-Nonadecane (C19)	28.84	15448734	10.778 ug/mLm
20) t n-Eicosane (C20)	30.44	15570049	10.901 ug/mL
22) t n-Docosane (C22)	33.44	15676198	10.781 ug/mLm
25) t n-Tetracosane (C24)	36.21	15702440	10.658 ug/mLm
27) t n-Hexacosane (C26)	38.76	15771530	10.883 ug/mL
29) t n-Octacosane (C28)	41.13	15725870	10.754 ug/mLm
31) t n-Triacontane (C30)	43.35	15593773	10.609 ug/mLm
37) t n-Hexatriacontane (C36)	49.73	14696096	10.152 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.84	524412550	366.883 ug/mL
44) h Total Resolved Hydrocarbon	40.84	205297036	143.627 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27949.D
Operator : AC
Acquired : 27 Jan 2006 9:32 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011906LCS04-AFID
Misc Info : 1X ETR0601045/50
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: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **SS011906LCSD04**
Associated Blank: **SS011906B05**
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	01/27/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	17

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	80	50-130

02/06/06 22:09

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27951.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 11:07 pm
Operator : AC
Sample : SS011906LCSD04-AFID
Misc : 1X ETR0601045/50
ALS Vial : 66 Sample Multiplier: 1

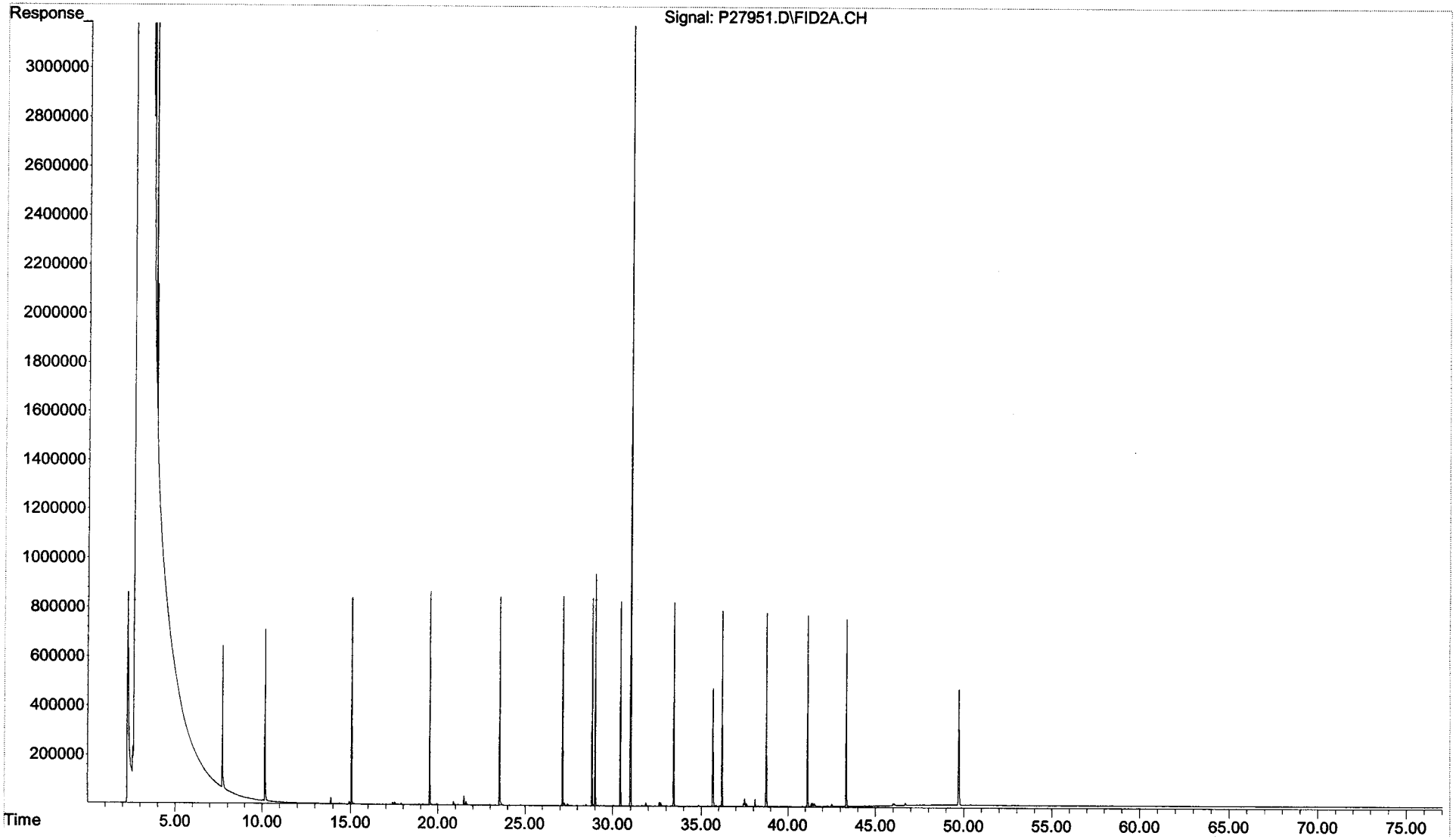
Integration File: SHCINT1.E
Quant Time: Feb 06 20:48:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	71998127	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.01	16835213	10.970 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	21.94%#
24) s	d50-Tetracosane	35.67	13572662	10.013 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	20.03%#
	Target Compounds			
3) t	n-Nonane (C9)	7.72	9883257	7.707 ug/mLm
4) t	n-Decane (C10)	10.16	12385141	9.451 ug/mLm
6) t	n-Dodecane (C12)	15.06	14036400	10.471 ug/mLm
9) t	n-Tetradecane (C14)	19.53	14567093	10.603 ug/mL
12) t	n-Hexadecane (C16)	23.54	15434359	11.049 ug/mLm
16) t	n-Octadecane (C18)	27.16	15436677	10.889 ug/mL
18) t	n-Nonadecane (C19)	28.84	15557578	11.017 ug/mLm
20) t	n-Eicosane (C20)	30.44	15660999	11.129 ug/mL
22) t	n-Docosane (C22)	33.44	15765633	11.005 ug/mLm
25) t	n-Tetracosane (C24)	36.21	15785122	10.875 ug/mL
27) t	n-Hexacosane (C26)	38.76	15845927	11.098 ug/mL
29) t	n-Octacosane (C28)	41.14	15786163	10.957 ug/mLm
31) t	n-Triacontane (C30)	43.35	15660255	10.814 ug/mL
37) t	n-Hexatriacontane (C36)	49.73	14846776	10.410 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.84	515928919	366.361 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	206938478	146.947 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27951.D
Operator : AC
Acquired : 27 Jan 2006 11:07 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011906LCSD04-AFID
Misc Info : 1X ETR0601045/50
Vial Number: 66



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: **0601050**
Lab ID: **TO013006AWS01**
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	01/27/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**580000**

N/A - Not Applicable

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27935.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 10:11 am
Operator : AC
Sample : TO013006AWS01
Misc : 1X ANS STD
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 30 17:53:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 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	31.05	111176628	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.06	116856416	49.312 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 98.62%
24) s	d50-Tetracosane	35.71	95647292	45.697 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.39%
	Target Compounds			
2) t	n-Octane (C8)	5.58	47147987	25.704 ug/mL
3) t	n-Nonane (C9)	7.72	43565497	22.000 ug/mLm
4) t	n-Decane (C10)	10.16	45382856	22.426 ug/mL
5) t	n-Undecane (C11)	12.65	44047617	21.701 ug/mLm
6) t	n-Dodecane (C12)	15.07	42856095	20.703 ug/mLm
7) t	n-Tridecane (C13)	17.37	42459614	20.313 ug/mLm
8) t	1380	19.03f	10145305	4.782 ug/mLm
9) t	n-Tetradecane (C14)	19.55	38905287	18.339 ug/mLm
10) t	1470	20.82f	14529277	6.792 ug/mLm
11) t	n-Pentadecane (C15)	21.61	39704487	18.561 ug/mLm
12) t	n-Hexadecane (C16)	23.56	34210541	15.860 ug/mLm
13) t	1650	24.45f	11163995	5.120 ug/mLm
14) t	n-Heptadecane (C17)	25.41	30770465	14.111 ug/mL
15) t	Pristane	25.50	22464488	10.778 ug/mLm
16) t	n-Octadecane (C18)	27.17	28041780	12.810 ug/mL
17) t	Phytane	27.33	14372746	6.631 ug/mLm
18) t	n-Nonadecane (C19)	28.85	27073400	12.415 ug/mLm
20) t	n-Eicosane (C20)	30.46	26676827	12.277 ug/mLm
21) t	n-Heneicosane (C21)	31.99	24047110	10.724 ug/mLm
22) t	n-Docosane (C22)	33.45	23576352	10.657 ug/mLm
23) t	n-Tricosane (C23)	34.86	20688263	9.297 ug/mLm
25) t	n-Tetracosane (C24)	36.22	19831550	8.848 ug/mLm
26) t	n-Pentacosane (C25)	37.51	19439864	8.717 ug/mLm
27) t	n-Hexacosane (C26)	38.77	17144272	7.776 ug/mL
28) t	n-Heptacosane (C27)	39.98	13333306	6.065 ug/mLm
29) t	n-Octacosane (C28)	41.14	9261334	4.163 ug/mLm
30) t	n-Nonacosane (C29)	42.27	8372369	3.681 ug/mLm
31) t	n-Triacontane (C30)	43.35	7192297	3.216 ug/mLm
32) t	n-Hentriacontane (C31)	44.41	5906694	2.720 ug/mLm
33) t	n-Dotriacontane (C32)	45.43	4913117	2.254 ug/mLm
34) t	n-Tritriacontane (C33)	46.42	4600775	2.078 ug/mLm
35) t	n-tetratriacontane (C34)	47.41	4445939	1.986 ug/mLm
36) t	n-Pentatriacontane (C35)	48.49	3547967	1.649 ug/mLm
37) t	n-Hexatriacontane (C36)	49.73	2790887	1.267 ug/mLm

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27935.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 10:11 am
Operator : AC
Sample : TO013006AWS01
Misc : 1X ANS STD
ALS Vial : 59 Sample Multiplier: 1

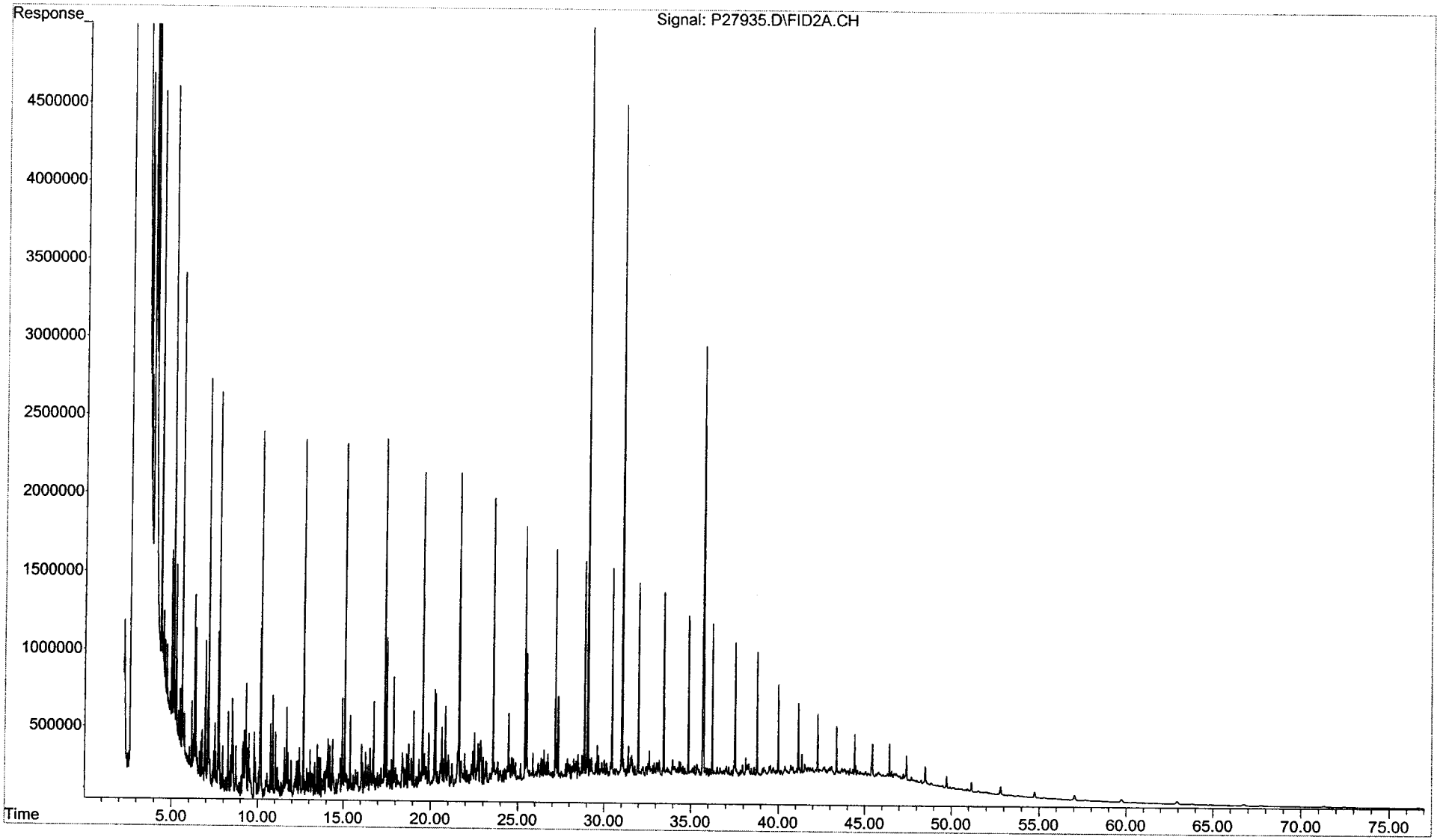
Integration File: SHCINT1.E
Quant Time: Jan 30 17:53:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.15	2407280	1.028	ug/mLm
39)	t	n-Octatriacontane (C38)	52.80	2415647	1.090	ug/mLm
40)	t	n-Nonatriacontane (C39)	54.74f	1838445	0.848	ug/mLm
41)	t	n-Tetracontane (C40)	57.03f	1944834	0.897	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.84	6839321722	3145.139	ug/mL
44)	h	Total Resolved Hydrocarbon	40.84	2060296431	947.450	ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27935.D
Operator : AC
Acquired : 27 Jan 2006 10:11 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: TO013006AWS01
Misc Info : 1X ANS STD
Vial Number: 59



Instrument Blank Association

ETR: 0601050

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
TO013006AWS01	IB201230603	P27939.D
SS011906B05	IB201230604	P27943.D
SS011906LCS04	IB201230604	P27943.D
SS011906LCSD04	IB201230604	P27943.D
0601050-01	IB201230604	P27943.D
0601050-02	IB201230604	P27943.D
0601050-03	IB201230604	P27943.D
0601050-04	IB201230604	P27943.D
0601050-05	IB201230604	P27943.D
0601050-06	IB201230604	P27943.D
0601050-06 D	IB201230604	P27943.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27939.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 1:25 pm
Operator : AC
Sample : IB201230603
Misc : DCM
ALS Vial : 61 Sample Multiplier: 1

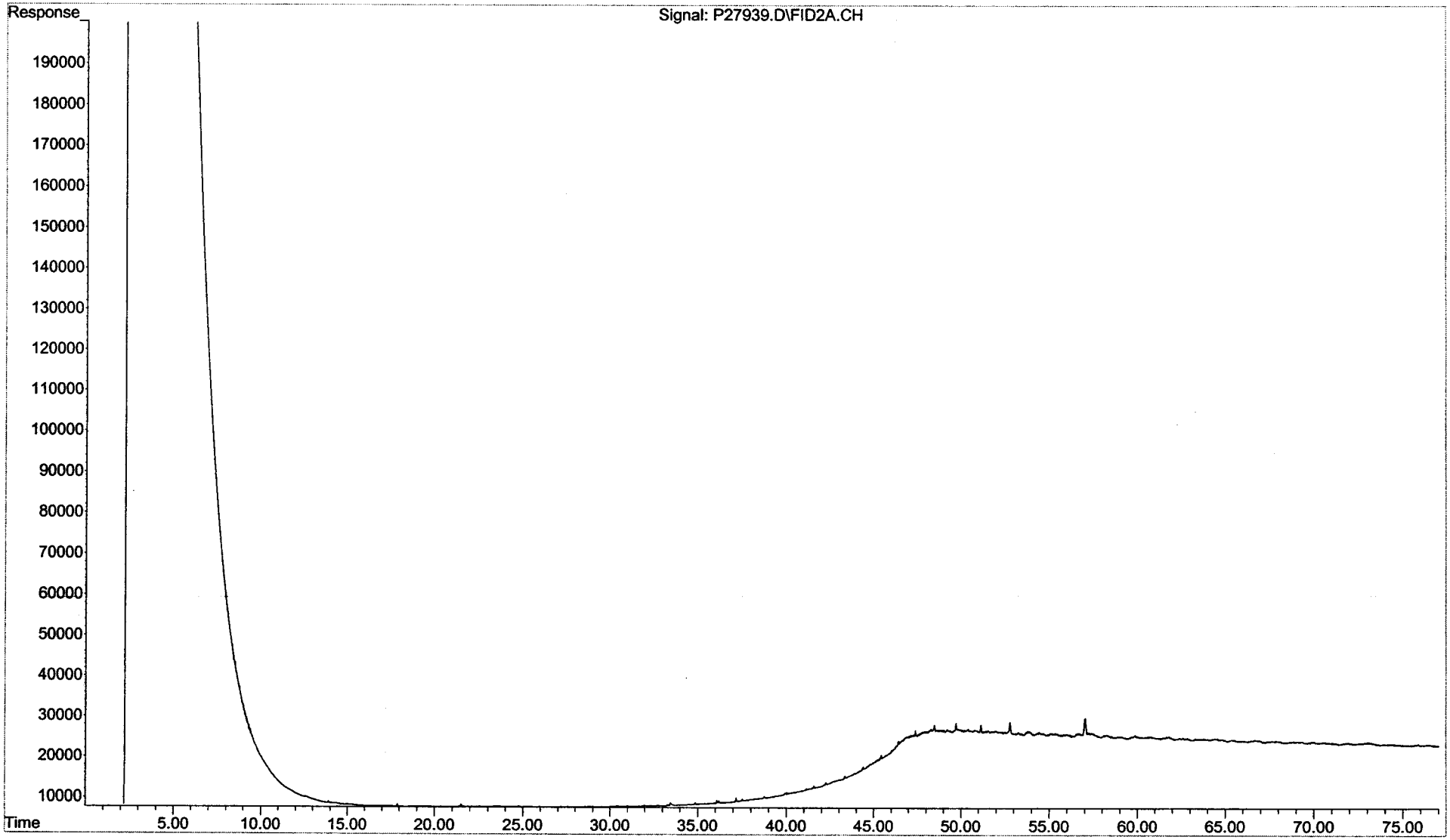
Integration File: SHCINT1.E
Quant Time: Jan 27 19:17:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.01	6310	50.000 ug/mL
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	415965108	3370253.690 ug/mL

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27939.D
Operator : AC
Acquired : 27 Jan 2006 1:25 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201230603
Misc Info : DCM
Vial Number: 61



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27943.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 4:42 pm
Operator : AC
Sample : IB201230604
Misc : DCM
ALS Vial : 62 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 19:33:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

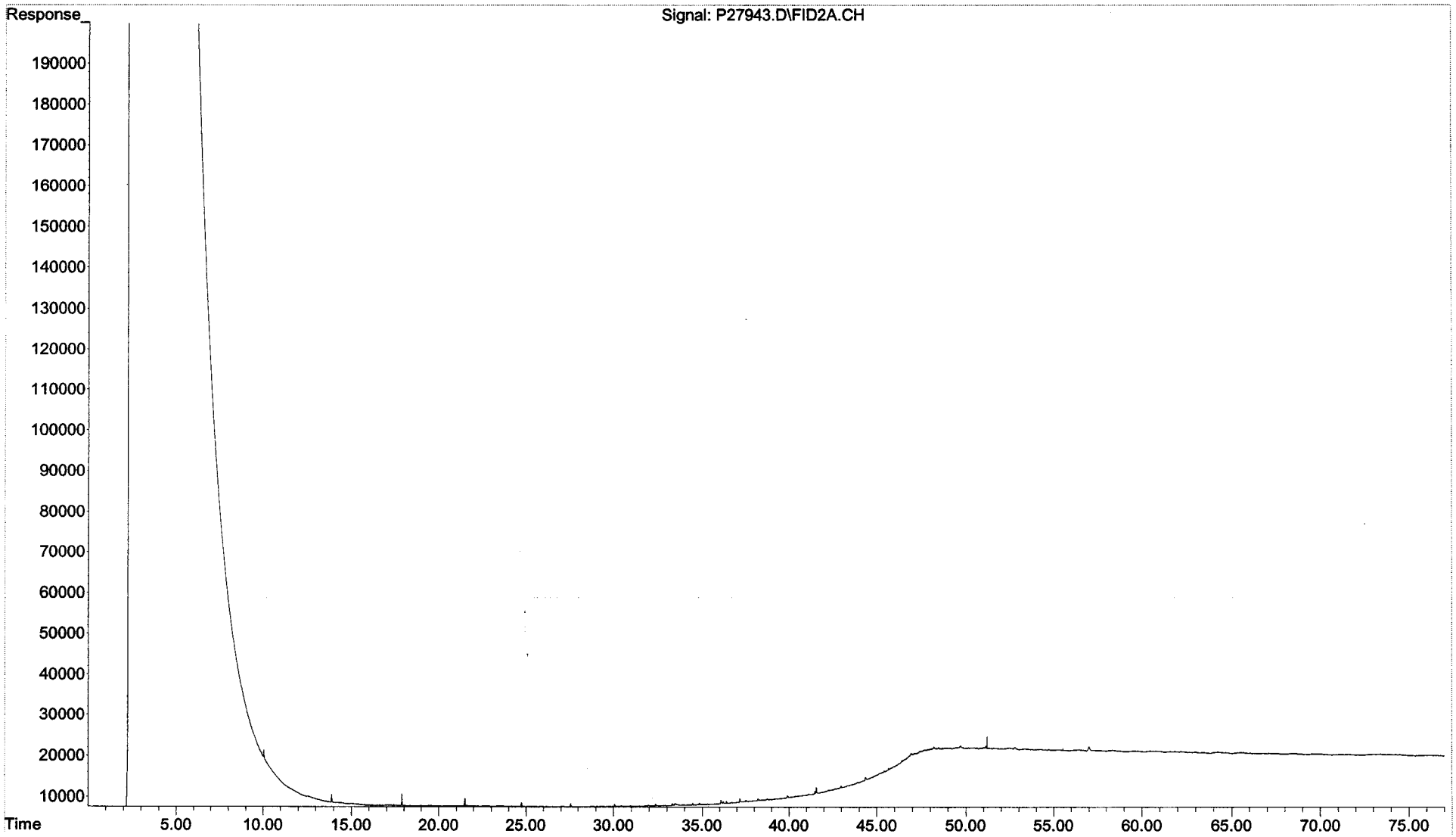
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/6/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	30.45f	4133	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	333287085	4122353.814 ug/mL

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27943.D
Operator : AC
Acquired : 27 Jan 2006 4:42 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201230604
Misc Info : DCM
Vial Number: 62



Sequence Name: C:\MSDChem\1\sequence\S2012301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN23\

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

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

1/26/06

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

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

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27833	FRNC2B	DCM
5)	Sample	1	P27834	FRNC2B	PAH STD
6)	RearSamp	52	P27835	FRNC2B	dcm
7)	Sample	2	P27836	FRNC2B	PAH STD
8)	RearSamp	53	P27837	FRNC2B	
9)	Sample	3	P27838	FRNC2B	C2012301 pasi
10)	RearSamp	53	P27839	FRNC2B	
11)	Sample	4	P27840	FRNC2B	ANS2012301
12)	RearSamp	53	P27841	FRNC2B	
13)	Sample	5	P27842	FRNC2B	DCM
14)	RearSamp	53	P27843	FRNC2B	
15)	Sample	6	P27844	FRNC2B	DCM
16)	RearSamp	54	P27845	FRNC2B	
17)	Sample	7	P27846	FRNC2B	SS011306B04
18)	RearSamp	54	P27847	FRNC2B	
19)	Sample	8	P27848	FRNC2B	SS011106B01 ✓
20)	RearSamp	54	P27849	FRNC2B	
21)	Sample	9	P27850	FRNC2B	SS011306LCS02
22)	RearSamp	54	P27851	FRNC2B	
23)	Sample	10	P27852	FRNC2B	SS011306LCSD02
24)	RearSamp	54	P27853	FRNC2B	
25)	Sample	11	P27854	FRNC2B	SS011106LCS01 ✓
26)	RearSamp	54	P27855	FRNC2B	
27)	Sample	12	P27856	FRNC2B	SS011106LCSD01 ✓
28)	RearSamp	55	P27857	FRNC2B	
29)	Sample	13	P27858	FRNC2B	C2012302
30)	RearSamp	55	P27859	FRNC2B	
31)	Sample	14	P27860	FRNC2B	0601019-01-RE ✓
32)	Pause				
33)	RearSamp	56	P27861	FRNC2B	
34)	Sample	15	P27862	FRNC2B	0601019-02-RE ✓
35)	RearSamp	58	P27863	FRNC2B	DCM-AFID
36)	Sample	16	P27864	FRNC2B	0601019-03-RE
37)	RearSamp	57	P27865	FRNC2B	
38)	Sample	17	P27866	FRNC2B	0601019-03D-RE
39)	RearSamp	58	P27867	FRNC2B	DCM-AFID
40)	Sample	18	P27868	FRNC2B	0601019-04-RE ✓
41)	RearSamp	59	P27869	FRNC2B	DCM-AFID
42)	Sample	19	P27870	FRNC2B	0601019-05-RE ✓
43)	RearSamp	60	P27871	FRNC2B	C2012401-AFID - PAH standard

PAH #2 Sequence Information

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

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

FID Process Method: HC20901.M PAH Process Method: PAH20113.M

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P27872	FRNC2B	0601019-06-RE ✓
45)	RearSamp	61	P27873	FRNC2B	DCM-AFID
[illegible]	Sample	21	P27874	FRNC2B	0601019-07-RE ✓
[illegible]	RearSamp	62	P27875	FRNC2B	DCM-AFID
48)	Sample	22	P27876	FRNC2B	0601019-08-RE ✓
49)	RearSamp	63	P27877	FRNC2B	TO012306B04-AFID
50)	Sample	23	P27878	FRNC2B	0601019-09-RE ✓
51)	RearSamp	64	P27879	FRNC2B	TO012306LCS01
52)	Sample	24	P27880	FRNC2B	C2012303
53)	RearSamp	65	P27881	FRNC2B	TO012306LCSD01
54)	Sample	25	P27882	FRNC2B	0601019-10-RE ✓
55)	RearSamp	66	P27883	FRNC2B	0601054-01-AFID
56)	Sample	26	P27884	FRNC2B	0601019-11-RE ✓
57)	RearSamp	67	P27885	FRNC2B	0601054-01D-AFID
58)	Sample	27	P27886	FRNC2B	0601040-05-RE ✓
59)	RearSamp	68	P27887	FRNC2B	0601054-02-AFID
60)	Sample	28	P27888	FRNC2B	C2012304 PASS
61)	Pause				
62)	RearSamp	69	P27889	FRNC2B	C2012402-AFID PASS
63)	Sample	29	P27890	FRNC2B	DCM
64)	RearSamp	70	P27891	FRNC2B	ANS2012401-AFID TS012606AWS01 [illegible] 1/26/06
65)	Sample	30	P27892	FRNC2B	SS011306B04
66)	RearSamp	99	P27892A	FRNC2B	DCM
67)	Sample	100	P27892B	FRNC2B	PAH STD RT CHECK * R.T. change [illegible] 1/26/06
68)	RearSamp	99	P27892C	FRNC2B	DCM
69)	Sample	100	P27892D	FRNC2B	C3012304A PASS
70)	Pause				
71)	RearSamp	71	P27893	FRNC2B	LD70212401-AFID
72)	Sample	31	P27894	FRNC2B	DCM [illegible]
73)	RearSamp	72	P27895	FRNC2B	C20~~1~~2403-AFID PASS
74)	Sample	32	P27896	FRNC2B	SS011306B04 ✓
75)	RearSamp	73	P27897	FRNC2B	DCM-AFID
76)	Sample	33	P27898	FRNC2B	SS011306LCS02 ✓
[illegible]	RearSamp	74	P27899	FRNC2B	DCM-AFID IB201230602
78)	Sample	34	P27900	FRNC2B	SS011306LCSD02 ✓
79)	RearSamp	75	P27901	FRNC2B	SS011306B04~~1~~-AFID
80)	Sample	35	P27902	FRNC2B	C2012305 PASS [illegible] 1/26/06
81)	RearSamp	76	P27903	FRNC2B	SS011306LCS02-AFID
82)	Sample	36	P27904	FRNC2B	0601040-01 ✓
83)	RearSamp	77	P27905	FRNC2B	SS011306LCSD02-AFID
84)	Sample	37	P27906	FRNC2B	0601040-02 ✓ [illegible]
85)	RearSamp	78	P27907	FRNC2B	C20~~1~~2404-AFID PASS [illegible] 1/26/06
86)	Sample	38	P27908	FRNC2B	0601040-03 ✓
87)	RearSamp	79	P27909	FRNC2B	DCM-AFID IB201260601 [illegible] 1/26/06
88)	Sample	39	P27910	FRNC2B	0601040-04 ✓
89)	RearSamp	80	P27911	FRNC2B	TS012306B06-AFID
90)	Sample	40	P27912	FRNC2B	0601040-04D ✓
91)	RearSamp	81	P27913	FRNC2B	TS012306LCS03-AFID
92)	Sample	41	P27914	FRNC2B	C2012306 PASS
93)	Pause				
94)	RearSamp	82	P27915	FRNC2BF	0601056-01-AFID
95)	Sample	42	P27916	FRNC2BF	ANS2012302
96)	RearSamp	83	P27917	FRNC2B	C20~~1~~240~~1~~-AFID PASS

1 [illegible] 5 [illegible] 1/26/06

re-analyze FID due to failing opening CCV

✓ = run used

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
97)	Sample	43	P27918	FRNC2BF	DCM
98)	Pause				
99)	RearSamp	51	P27919	FRNC2B	DCM-AFID
1[illegible])	Sample	1	P27920	FRNC2B	0601019-01-RE ✓
1[illegible])	RearSamp	52	P27921	FRNC2B	TO012306B04-AFID
102)	Sample	2	P27922	FRNC2B	0601019-04-RE ✓
103)	RearSamp	53	P27923	FRNC2B	TO012306LCS01-AFID
104)	Sample	3	P27924	FRNC2B	0601019-05-RE ✓
105)	RearSamp	54	P27925	FRNC2B	TO012306LCSD01-AFID
106)	Sample	4	P27926	FRNC2B	0601019-06-RE ✓
107)	RearSamp	55	P27927	FRNC2B	0601054-01-AFID
108)	Sample	5	P27928	FRNC2B	C201230~~6~~7 PASS
109)	RearSamp	56	P27929	FRNC2B	0601054-01D-AFID
110)	Sample	6	P27930	FRNC2B	DCM
111)	RearSamp	57	P27931	FRNC2B	0601054-02-AFID
112)	Sample	7	P27932	FRNC2B	0601019-01 ✓
113)	RearSamp	58	P27933	FRNC2B	LD7012601-AFID TO013006LD702 1/31/06
114)	Sample	8	P27934	FRNC2B	0601019-03 ✓
115)	RearSamp	59	P27935	FRNC2B	ANS7012601 TO013006AWS01 1/31/06
116)	Sample	9	P27936	FRNC2B	0601019-03D ✓ ✓ run used
117)	RearSamp	60	P27937	FRNC2B	C20~~1~~2405~~6~~-AFID
118)	Sample	10	P27938	FRNC2B	C2012307A PASS
119)	RearSamp	61	P27939	FRNC2B	DCM IB201230603 1/31/06
120)	Sample	11	P27940	FRNC2B	0601019-07 ✓
121)	RearSamp	62	P27941	FRNC2B	DCM
122)	Sample	12	P27942	FRNC2B	0601019-08 ✓
123)	RearSamp	62	P27943	FRNC2B	DCM-AFID IB201230604
124)	Sample	13	P27944	FRNC2B	0601019-09 ✓
125)	RearSamp	63	P27945	FRNC2B	DCM-AFID
126)	Sample	14	P27946	FRNC2B	0601019-10 ✓
127)	RearSamp	64	P27947	FRNC2B	SS011906B05-AFID
128)	Sample	15	P27948	FRNC2B	0601019-11 ✓
129)	RearSamp	65	P27949	FRNC2B	SS011906LCS04-AFID
1[illegible])	Sample	16	P27950	FRNC2B	C2012308 PASS
131)	RearSamp	66	P27951	FRNC2B	SS011906LCSD04-AFID
132)	Sample	17	P27952	FRNC2B	DCM
133)	RearSamp	67	P27953	FRNC2B	0601045-01-AFID
134)	Sample	18	P27954	FRNC2B	0601045-01-RE ✓
135)	RearSamp	68	P27955	FRNC2B	0601045-02-AFID
136)	Sample	19	P27956	FRNC2B	0601045-02-RE
137)	RearSamp	69	P27957	FRNC2B	0601045-03-AFID
138)	Sample	20	P27958	FRNC2B	0601045-03-RE ✓
139)	RearSamp	70	P27959	FRNC2B	0601045-04-AFID
140)	Sample	21	P27960	FRNC2B	0601045-04-RE
141)	RearSamp	71	P27961	FRNC2B	0601045-05-AFID
142)	Sample	22	P27962	FRNC2B	0601045-05-RE ✓
143)	RearSamp	72	P27963	FRNC2B	0601045-06-AFID
144)	Sample	23	P27964	FRNC2B	0601045-06-RE ✓
145)	RearSamp	73	P27965	FRNC2B	0601045-07-AFID
146)	Sample	24	P27966	FRNC2B	0601045-07-RE ✓
147)	RearSamp	74	P27967	FRNC2B	0601045-08-AFID
148)	Sample	25	P27968	FRNC2B	0601045-08-RE ✓
149)	RearSamp	75	P27969	FRNC2B	0601045-08D-AFID

✓ MS 1/30/06

Sequence Name: C:\MSDChem\1\sequence\S2012301.S

	Line Type	Vial	DataFile	Method	Sample Name
150)	Sample	26	P27970	FRNC2B	0601045-08D-RE ✓
151)	RearSamp	76	P27971	FRNC2B	C2012407 AFID
152)	Sample	27	P27972	FRNC2B	C2012309 PASS
1[illegible])	RearSamp	77	P27973	FRNC2B	DCM -AFID
1[illegible])	Sample	28	P27974	FRNC2B	DCM
155)	RearSamp	78	P27975	FRNC2B	0601050-01-AFID
156)	Sample	29	P27976	FRNC2B	0601050-01-RE ✓
157)	RearSamp	79	P27977	FRNC2B	0601050-02-AFID
158)	Sample	30	P27978	FRNC2B	0601050-02-RE
159)	RearSamp	80	P27979	FRNC2B	0601050-03-AFID
160)	Sample	31	P27980	FRNC2B	0601050-03-RE
161)	RearSamp	81	P27981	FRNC2B	0601050-04-AFID
162)	Sample	32	P27982	FRNC2B	0601050-04-RE ✓
163)	RearSamp	82	P27983	FRNC2B	0601050-05-AFID
164)	Sample	33	P27984	FRNC2B	0601050-05-RE ✓
165)	RearSamp	83	P27985	FRNC2B	0601050-06-AFID
166)	Sample	34	P27986	FRNC2B	0601050-06-RE
167)	RearSamp	84	P27987	FRNC2B	0601050-06D-AFID
168)	Sample	35	P27988	FRNC2B	0601050-06D-RE
169)	RearSamp	85	P27989	FRNC2B	C2012408 AFID
170)	Sample	36	P27990	FRNC2B	C2012310 PASS
171)	RearSamp	86	P27991	FRNC2B	DCM-AFID
172)	Sample	37	P27992	FRNC2B	DCM
173)	RearSamp	87	P27993	FRNC2B	
174)	Sample	38	P27994	FRNC2B	DCM
175)	RearSamp	87	P27995	FRNC2B	
176)	Sample	39	P27996	FRNC2B	DCM
177)	RearSamp	87	P27997	FRNC2B	
178)	Sample	40	P27998	FRNC2B	DCM

✓ run used

MS 1/30/06

QUALITY CONTROL RESULTS

Form IV
Method Blank Summary
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0601050**
Lab ID: **SS011906B05**
Date Analyzed: **01/27/06 19:57**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS011906LCS04	01/27/06 21:32
LCSD	SS011906LCSD04	01/27/06 23:07
GC-SED-32 (5.9-6.9)	0601050-01	01/28/06 18:18
GC-SED-31 (2.5-4.5)	0601050-02	01/28/06 19:56
GC-SED-36 (2.5-4.5)	0601050-03	01/28/06 21:33
GC-SED-41 (7.3-8.3)	0601050-04	01/28/06 23:07
GC-SED-40 (5-6)	0601050-05	01/29/06 00:41
GC-SED-33 (1.5-3)	0601050-06	01/29/06 02:16
GC-SED-33 (1.5-3)	0601050-06 D	01/29/06 03:50

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\1\sequence\S2090101.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER\SEP01\

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

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

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

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

9/1/05

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P25456	FRNC2B	DCM
4)	Sample	1	P25457	FRNC2B	DCM
5)	RearSamp	52	P25458	FRNC2B	I2090101
6)	Sample	2	P25459	FRNC2B	ALKANE STD
7)	RearSamp	53	P25460	FRNC2B	I2090102
8)	Sample	3	P25461	FRNC2B	PRIME
9)	RearSamp	54	P25462	FRNC2B	I2090103
10)	Sample	1	P25463	FRNC2B	DCM
11)	RearSamp	55	P25464	FRNC2B	I2090104
12)	Sample	2	P25465	FRNC2B	PAH STD
13)	RearSamp	56	P25466	FRNC2B	I2090105
14)	Sample	3	P25467	FRNC2B	PRIME
15)	RearSamp	57	P25468	FRNC2B	Q2090101
16)	Sample	1	P25469	FRNC2B	DCM
17)	RearSamp	58	P25470	FRNC2B	DCM
18)	Sample	2	P25471	FRNC2B	PAH STD
19)	RearSamp	59	P25472	FRNC2B	ANS2090101
20)	Sample	3	P25473	FRNC2B	PRIME
21)	RearSamp	60	P25474	FRNC2B	LA2090101
22)	Sample	1	P25475	FRNC2B	DCM
23)	RearSamp	61	P25476	FRNC2B	SFFSW2090101
24)	Sample	2	P25477	FRNC2B	PAH STD
25)	RearSamp	62	P25478	FRNC2B	SFFCO2090101
26)	Sample	3	P25479	FRNC2B	PRIME
27)	RearSamp	63	P25480	FRNC2B	SA2090101
28)	Sample	1	P25481	FRNC2B	DCM
29)	RearSamp	64	P25482	FRNC2B	SFFN2090101
30)	Sample	2	P25483	FRNC2B	PAH STD
31)	RearSamp	65	P25484	FRNC2B	SFFS2090101
32)	Sample	3	P25485	FRNC2B	PRIME

FID Process Method: HC20901.M

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\
Method File : HC20901.M
Title : FID Forensics
Last Update : Tue Sep 06 10:22:24 2005
Response Via : Initial Calibration

Calibration Files
1 =P25458.D 10 =P25460.D 50 =P25462.D
100 =P25464.D 200 =P25466.D

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.788	0.829	0.834	0.837	0.837	0.825	2.54
3)	t	n-Nonane (C9)	0.891	0.888	0.885	0.895	0.894	0.891	0.45
4)	t	n-Decane (C10)	0.913	0.906	0.904	0.913	0.914	0.910	0.50
5)	t	n-Undecane (C11)	0.907	0.910	0.909	0.918	0.920	0.913	0.63
6)	t	n-Dodecane (C12)	0.924	0.928	0.928	0.936	0.938	0.931	0.65
7)	t	n-Tridecane (C13)	0.936	0.937	0.938	0.944	0.945	0.940	0.46
8)	t	1380	0.954	0.953	0.951	0.957	0.956	0.954	0.26
9)	t	n-Tetradecane (C14)	0.954	0.953	0.951	0.957	0.956	0.954	0.26
10)	t	1470	0.964	0.963	0.958	0.963	0.961	0.962	0.25
11)	t	n-Pentadecane (C15)	0.964	0.963	0.958	0.963	0.961	0.962	0.25
12)	t	n-Hexadecane (C16)	0.976	0.972	0.966	0.970	0.967	0.970	0.44
13)	t	1650	0.988	0.983	0.975	0.979	0.978	0.981	0.48
14)	t	n-Heptadecane (C17)	0.988	0.983	0.975	0.979	0.978	0.981	0.48
15)	t	Pristane	0.946	0.941	0.933	0.936	0.930	0.937	0.67
16)	t	n-Octadecane (C18)	0.991	0.988	0.980	0.983	0.980	0.984	0.49
17)	t	Phytane	0.981	0.979	0.971	0.974	0.970	0.975	0.49
18)	t	n-Nonadecane (C19)	0.990	0.984	0.976	0.979	0.975	0.981	0.66
19)	s	ortho-terphenyl	1.140	1.055	1.046	1.044	1.044	1.066	3.92
20)	t	n-Eicosane (C20)	0.991	0.980	0.971	0.974	0.970	0.977	0.89
21)	t	n-Heneicosane (C21)	1.021	1.012	1.003	1.005	1.001	1.008	0.79
22)	t	n-Docosane (C22)	1.005	0.998	0.990	0.992	0.989	0.995	0.69
23)	t	n-Tricosane (C23)	1.012	1.004	0.996	0.998	0.995	1.001	0.72
24)	s	d50-Tetracosane	1.259	0.869	0.862	0.859	0.857	0.941	18.86
25)	t	n-Tetracosane (C24)	1.024	1.010	1.002	1.003	1.000	1.008	0.98
26)	t	n-Pentacosane (C25)	1.024	1.005	0.996	0.997	0.993	1.003	1.24
27)	t	n-Hexacosane (C26)	1.004	0.994	0.987	0.988	0.985	0.992	0.79
28)	t	n-Heptacosane (C27)	1.005	0.991	0.983	0.983	0.981	0.989	0.99
29)	t	n-Octacosane (C28)	1.016	1.004	0.995	0.995	0.993	1.000	0.96
30)	t	n-Nonacosane (C29)	1.037	1.026	1.018	1.018	1.016	1.023	0.85
31)	t	n-Triacontane (C30)	1.018	1.009	1.002	1.001	0.999	1.006	0.77
32)	t	n-Hentriacontane (C31	0.998	0.978	0.970	0.970	0.968	0.977	1.27
33)	t	n-Dotriacontane (C32)	0.989	0.984	0.977	0.976	0.975	0.980	0.62
34)	t	n-Tritriacontane (C33	1.005	1.000	0.993	0.992	0.989	0.996	0.67
35)	t	n-tetratriacontane (C	1.018	1.010	1.004	1.003	1.001	1.007	0.67
36)	t	n-Pentatriacontane (C	0.982	0.970	0.964	0.963	0.960	0.968	0.88
37)	t	n-Hexatriacontane (C3	1.006	0.992	0.986	0.985	0.983	0.990	0.93
38)	t	n-Heptatriacontane (C	1.061	1.055	1.051	1.051	1.048	1.053	0.46
39)	t	n-Octatriacontane (C3	1.006	0.998	0.994	0.993	0.991	0.997	0.61
40)	t	n-Nonatriacontane (C3	0.983	0.973	0.974	0.973	0.971	0.975	0.49
41)	t	n-Tetracontane (C40)	0.983	0.973	0.974	0.973	0.971	0.975	0.49
42)	h	C9-C40 Total Petroleu	0.987	0.980	0.974	0.976	0.974	0.978	0.56
43)	h	C10-C28 DRO	0.987	0.980	0.974	0.976	0.974	0.978	0.56
44)	h	Total Resolved Hydroc	0.987	0.980	0.974	0.976	0.974	0.978	0.56

(#) = Out of Range

FID TPH RF CALCULATION

	L5	L4	L3	L2	L1
Method ID	FRNC2B.M	FRNC2B.M	FRNC2B.M	FRNC2B.M	FRNC2B.M
Date	Mon Sep 05 21:27:09 2005	Mon Sep 05 21:27:09 2005	Mon Sep 05 21:08:55 2005	Mon Sep 05 21:05:32 2005	Tue Aug 30 10:50:27 2005
File ID	P25466.D	P25464.D	P25462.D	P25460.D	P25458.D

n-Octane (C8)	222197992	111621441	55357660	11047330	1063166
n-Nonane (C9)	237390685	119271616	58745501	11837371	1202863
n-Decane (C10)	242789522	121741910	60010356	12083244	1231334
n-Undecane (C11)	244375644	122338353	60360019	12134854	1223510
n-Dodecane (C12)	249124168	124836563	61620584	12372116	1246543
n-Tridecane (C13)	250959644	125904193	62231550	12496296	1262814
n-Tetradecane (C14)	253891658	127573339	63099832	12703009	1287355
n-Pentadecane (C15)	255267441	128457843	63590343	12842670	1300776
n-Hexadecane (C16)	256742972	129275965	64084175	12960631	1317241
n-Heptadecane (C17)	259771215	130588165	64739328	13099811	1332840
Pristane	247041081	124834324	61938632	12540388	1277059
n-Octadecane (C18)	260200700	131100996	65051952	13173644	1337001
Phytane	257598423	129831456	64429582	13048074	1323351
n-Nonadecane (C19)	258783183	130469466	64775082	13120898	1336318
n-Eicosane (C20)	257595382	129803367	64452491	13069645	1337253
n-Heneicosane (C21)	265904802	134016323	66577835	13487676	1377674
n-Docosane (C22)	262538137	132270977	65715019	13311425	1356292
n-Tricosane (C23)	264122802	133011321	66086647	13385819	1365547
n-Tetracosane (C24)	265619038	133788179	66507982	13462433	1382398
n-Pentacosane (C25)	263680892	132880514	66112269	13403075	1381382
n-Hexacosane (C26)	261479436	131676219	65521218	13257363	1354696
n-Heptacosane (C27)	260490730	131119363	65258410	13215842	1355818
n-Octacosane (C28)	263581351	132661371	66050731	13383477	1370666
n-Nonacosane (C29)	269696287	135721175	67583335	13678131	1399181
n-Triacontane (C30)	265226719	133450262	66478810	13454014	1373270
n-Hentriacontane (C31)	256979309	129312028	64402179	13036096	1346470
n-Dotriacontane (C32)	258813237	130190494	64844061	13117363	1334659
n-Tritriacontane (C33)	262684075	132203159	65888928	13330486	1356572
n-tetratriacontane (C34)	265835468	133722500	66604987	13460354	1373039
n-Pentatriacontane (C35)	255041607	128379572	63975402	12928605	1324543
n-Hexatriacontane (C36)	261018713	131361401	65466917	13219676	1357233
n-Heptatriacontane (C37)	278362887	140156490	69777844	14068486	1431658
n-Octatriacontane (C38)	263048176	132434607	65981882	13311533	1357646
n-Tetracontane (C40)	257774066	129767988	64628739	12976710	1326686

	L5	L4	L3	L2	L1
C9-C40 Total Petroleum Hydrocarbons	258588771	130125803	64624019	13059734	1331566
C10-C28 DRO	258588771	130125803	64624019	13059734	1331566
Total Resolved Hydrocarbons	258588771	130125803	64624019	13059734	1331566

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25458.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 4:06 pm
Operator : AC
Sample : I2090101
Misc : WHAB29
ALS Vial : 52 Sample Multiplier: 1

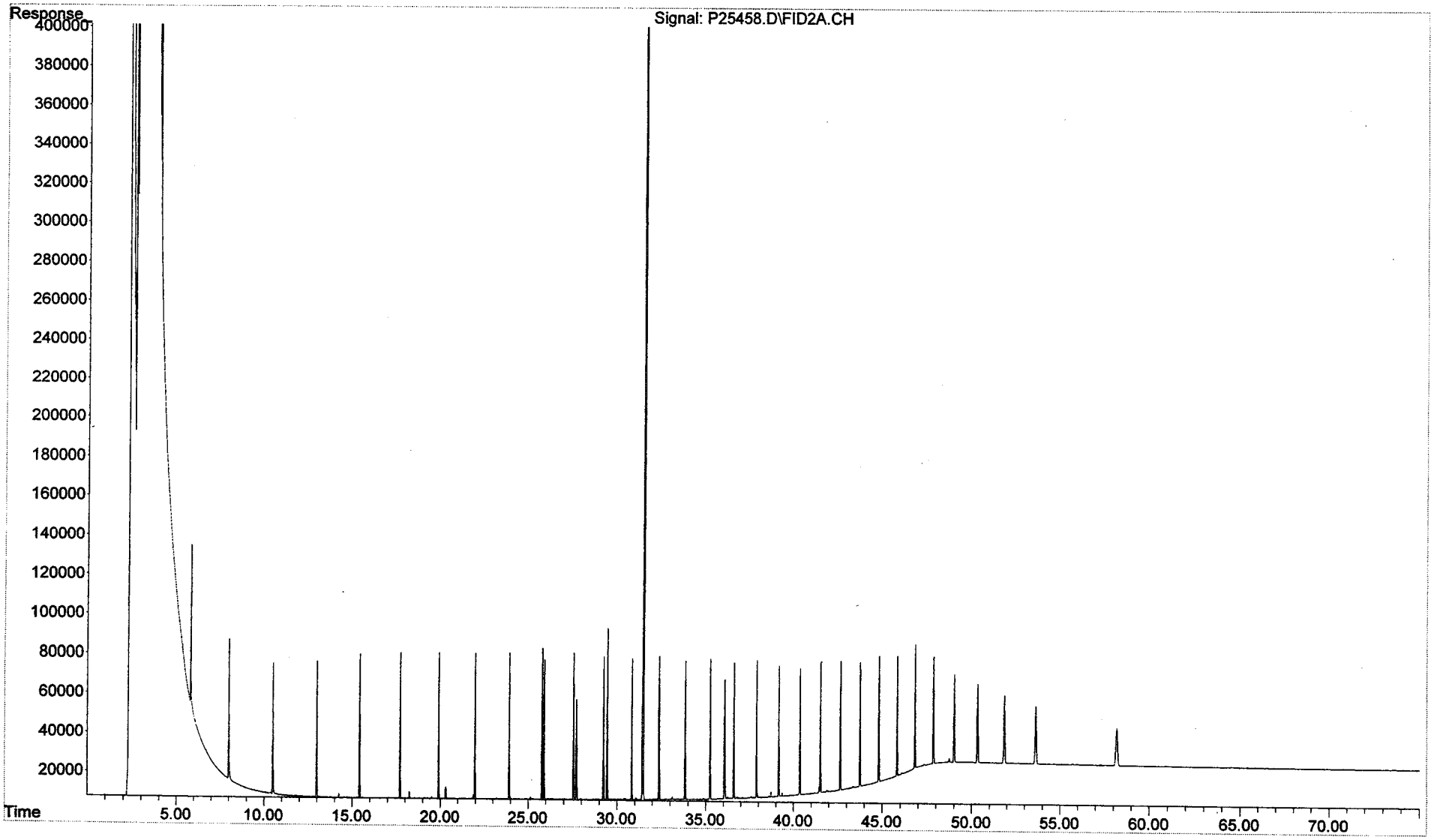
Integration File: SHCINT1.E
Quant Time: Sep 05 21:05:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Aug 30 10:50:27 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/6/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	67468758	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.45	1538387	1.071 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	2.14%#
24) s	d50-Tetracosane	36.08	1698697	1.335 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	2.67%#
	Target Compounds			
2) t	n-Octane (C8)	5.82	1063166	0.992 ug/mLm
3) t	n-Nonane (C9)	8.02	1202863	1.008 ug/mLm
4) t	n-Decane (C10)	10.50	1231334	1.001 ug/mL
5) t	n-Undecane (C11)	13.00	1223510	0.990 ug/mL
6) t	n-Dodecane (C12)	15.43	1246543	0.993 ug/mL
7) t	n-Tridecane (C13)	17.73	1262814	0.999 ug/mLm
9) t	n-Tetradecane (C14)	19.91	1287355	1.005 ug/mL
11) t	n-Pentadecane (C15)	21.98	1300776	1.008 ug/mL
12) t	n-Hexadecane (C16)	23.93	1317241	1.011 ug/mL
14) t	n-Heptadecane (C17)	25.79	1332840	1.010 ug/mL
15) t	Pristane	25.90	1277059	1.008 ug/mLm
16) t	n-Octadecane (C18)	27.55	1337001	1.007 ug/mLm
17) t	Phytane	27.72	1323351	1.004 ug/mLm
18) t	n-Nonadecane (C19)	29.24	1336318	1.009 ug/mLm
20) t	n-Eicosane (C20)	30.84	1337253	1.012 ug/mL
21) t	n-Heneicosane (C21)	32.38	1377674	1.009 ug/mL
22) t	n-Docosane (C22)	33.85	1356292	1.005 ug/mLm
23) t	n-Tricosane (C23)	35.26	1365547	1.006 ug/mL
25) t	n-Tetracosane (C24)	36.61	1382398	1.012 ug/mL
26) t	n-Pentacosane (C25)	37.91	1381382	1.017 ug/mL
27) t	n-Hexacosane (C26)	39.17	1354696	1.010 ug/mLm
28) t	n-Heptacosane (C27)	40.38	1355818	1.013 ug/mLm
29) t	n-Octacosane (C28)	41.55	1370666	1.014 ug/mLm
30) t	n-Nonacosane (C29)	42.67	1399181	1.012 ug/mL
31) t	n-Triacontane (C30)	43.76	1373270	1.010 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	1346470	1.024 ug/mL
33) t	n-Dotriacontane (C32)	45.84	1334659	1.010 ug/mL
34) t	n-Tritriacontane (C33)	46.83	1356572	1.012 ug/mLm
35) t	n-tetratriacontane (C34)	47.86	1373039	1.013 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	1324543	1.020 ug/mLm
37) t	n-Hexatriacontane (C36)	50.34	1357233	1.032 ug/mLm
38) t	n-Heptatriacontane (C37)	51.86	1431658	1.040 ug/mLm
39) t	n-Octatriacontane (C38)	53.64f	1357646	1.057 ug/mLm
41) t	n-Tetracontane (C40)	58.19f	1326686	1.136 ug/mLm

File :O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\P25458.D
Operator : AC
Acquired : 01 Sep 2005 4:06 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090101
Misc Info : WHAB29
Vial Number: 52



Quantitation Report (QT Reviewed)

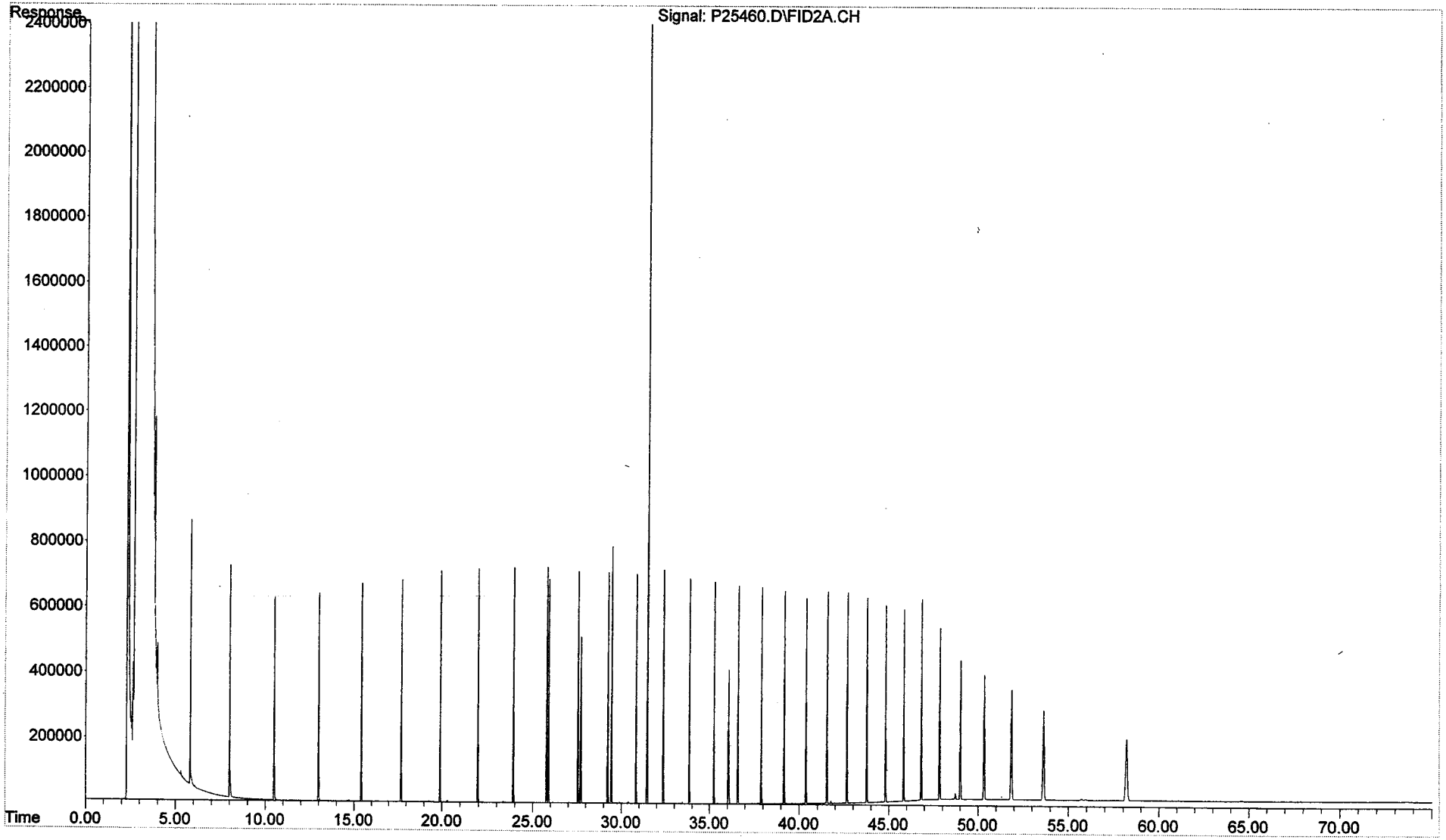
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25460.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 5:38 pm
Operator : AC
Sample : I2090102
Misc : WHAB30
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:08:37 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:05:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	66658750	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.45	14062345	9.904 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	19.81%#
24) s d50-Tetracosane	36.08	11587863	9.211 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	18.42%#
Target Compounds			
2) t n-Octane (C8)	5.82	11047330	10.246 ug/mL
3) t n-Nonane (C9)	8.02	11837371	10.078 ug/mLm
4) t n-Decane (C10)	10.50	12083244	9.970 ug/mL
5) t n-Undecane (C11)	13.00	12134854	9.958 ug/mL
6) t n-Dodecane (C12)	15.43	12372116	9.972 ug/mL
7) t n-Tridecane (C13)	17.73	12496296	9.989 ug/mLm
9) t n-Tetradecane (C14)	19.92	12703009	10.013 ug/mLm
11) t n-Pentadecane (C15)	21.98	12842670	10.043 ug/mL
12) t n-Hexadecane (C16)	23.94	12960631	10.042 ug/mL
14) t n-Heptadecane (C17)	25.79	13099811	10.028 ug/mL
15) t Pristane	25.90	12540388	10.032 ug/mL
16) t n-Octadecane (C18)	27.56	13173644	10.033 ug/mLm
17) t Phytane	27.72	13048074	10.029 ug/mL
18) t n-Nonadecane (C19)	29.24	13120898	10.019 ug/mL
20) t n-Eicosane (C20)	30.85	13069645	10.000 ug/mL
21) t n-Heneicosane (C21)	32.38	13487676	9.992 ug/mLm
22) t n-Docosane (C22)	33.85	13311425	9.994 ug/mLm
23) t n-Tricosane (C23)	35.26	13385819	9.985 ug/mL
25) t n-Tetracosane (C24)	36.62	13462433	9.972 ug/mLm
26) t n-Pentacosane (C25)	37.92	13403075	9.974 ug/mLm
27) t n-Hexacosane (C26)	39.17	13257363	9.988 ug/mLm
28) t n-Heptacosane (C27)	40.38	13215842	9.982 ug/mLm
29) t n-Octacosane (C28)	41.55	13383477	9.999 ug/mL
30) t n-Nonacosane (C29)	42.68	13678131	9.990 ug/mL
31) t n-Triacontane (C30)	43.77	13454014	9.991 ug/mL
32) t n-Hentriacontane (C31)	44.82	13036096	9.965 ug/mL
33) t n-Dotriacontane (C32)	45.85	13117363	9.989 ug/mLm
34) t n-Tritriacontane (C33)	46.84	13330486	10.001 ug/mLm
35) t n-tetratriacontane (C34)	47.87	13460354	9.982 ug/mLm
36) t n-Pentatriacontane (C35)	49.02	12928605	9.970 ug/mLm
37) t n-Hexatriacontane (C36)	50.35	13219676	9.984 ug/mLm
38) t n-Heptatriacontane (C37)	51.87	14068486	10.021 ug/mL
39) t n-Octatriacontane (C38)	53.65	13311533	10.017 ug/mL
41) t n-Tetracontane (C40)	58.21f	12976710	10.081 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25460.D
Operator : AC
Acquired : 01 Sep 2005 5:38 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090102
Misc Info : WHAB30
Vial Number: 53



Quantitation Report (QT Reviewed)

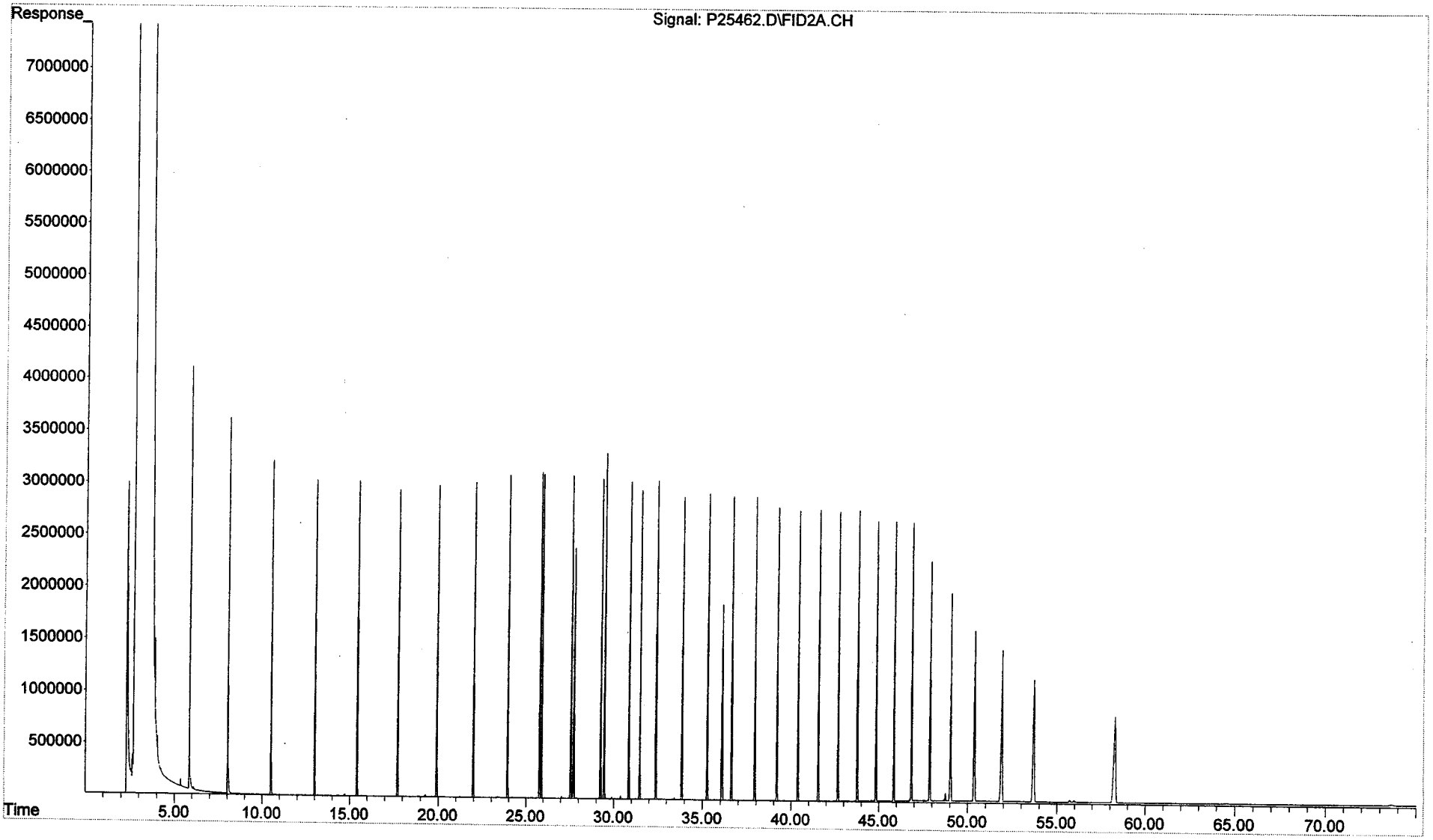
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25462.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 7:09 pm
Operator : AC
Sample : I2090103
Misc : WHAB31
ALS Vial : 54 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:18:22 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:08:55 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.49	66368155	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.48	69435771	49.105 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 98.21%
24) s	d50-Tetracosane	36.10	57218973	45.709 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.42%
Target Compounds				
2) t	n-Octane (C8)	5.86	55357660	51.019 ug/mL
3) t	n-Nonane (C9)	8.04	58745501	49.974 ug/mL
4) t	n-Decane (C10)	10.51	60010356	49.728 ug/mL
5) t	n-Undecane (C11)	13.02	60360019	49.803 ug/mLm
6) t	n-Dodecane (C12)	15.44	61620584	49.912 ug/mL
7) t	n-Tridecane (C13)	17.75	62231550	49.974 ug/mL
9) t	n-Tetradecane (C14)	19.93	63099832	49.940 ug/mLm
11) t	n-Pentadecane (C15)	22.00	63590343	49.901 ug/mL
12) t	n-Hexadecane (C16)	23.96	64084175	49.837 ug/mL
14) t	n-Heptadecane (C17)	25.81	64739328	49.754 ug/mL
15) t	Pristane	25.92	61938632	49.772 ug/mL
16) t	n-Octadecane (C18)	27.58	65051952	49.756 ug/mLm
17) t	Phytane	27.75	64429582	49.755 ug/mL
18) t	n-Nonadecane (C19)	29.27	64775082	49.689 ug/mL
20) t	n-Eicosane (C20)	30.87	64452491	49.563 ug/mL
21) t	n-Heneicosane (C21)	32.41	66577835	49.585 ug/mL
22) t	n-Docosane (C22)	33.88	65715019	49.609 ug/mL
23) t	n-Tricosane (C23)	35.29	66086647	49.573 ug/mL
25) t	n-Tetracosane (C24)	36.64	66507982	49.539 ug/mL
26) t	n-Pentacosane (C25)	37.95	66112269	49.466 ug/mL
27) t	n-Hexacosane (C26)	39.20	65521218	49.640 ug/mL
28) t	n-Heptacosane (C27)	40.41	65258410	49.568 ug/mL
29) t	n-Octacosane (C28)	41.58	66050731	49.614 ug/mL
30) t	n-Nonacosane (C29)	42.70	67583335	49.640 ug/mL
31) t	n-Triacontane (C30)	43.80	66478810	49.656 ug/mL
32) t	n-Hentriacontane (C31)	44.85	64402179	49.516 ug/mL
33) t	n-Dotriacontane (C32)	45.88	64844061	49.674 ug/mLm
34) t	n-Tritriacontane (C33)	46.87	65888928	49.714 ug/mLm
35) t	n-tetratriacontane (C34)	47.90	66604987	49.689 ug/mLm
36) t	n-Pentatriacontane (C35)	49.06	63975402	49.636 ug/mLm
37) t	n-Hexatriacontane (C36)	50.39	65466917	49.696 ug/mLm
38) t	n-Heptatriacontane (C37)	51.93	69777844	49.812 ug/mL
39) t	n-Octatriacontane (C38)	53.71	65981882	49.825 ug/mL
41) t	n-Tetracontane (C40)	58.30	64628739	50.024 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25462.D
Operator : AC
Acquired : 01 Sep 2005 7:09 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090103
Misc Info : WHAB31
Vial Number: 54



Quantitation Report (QT Reviewed)

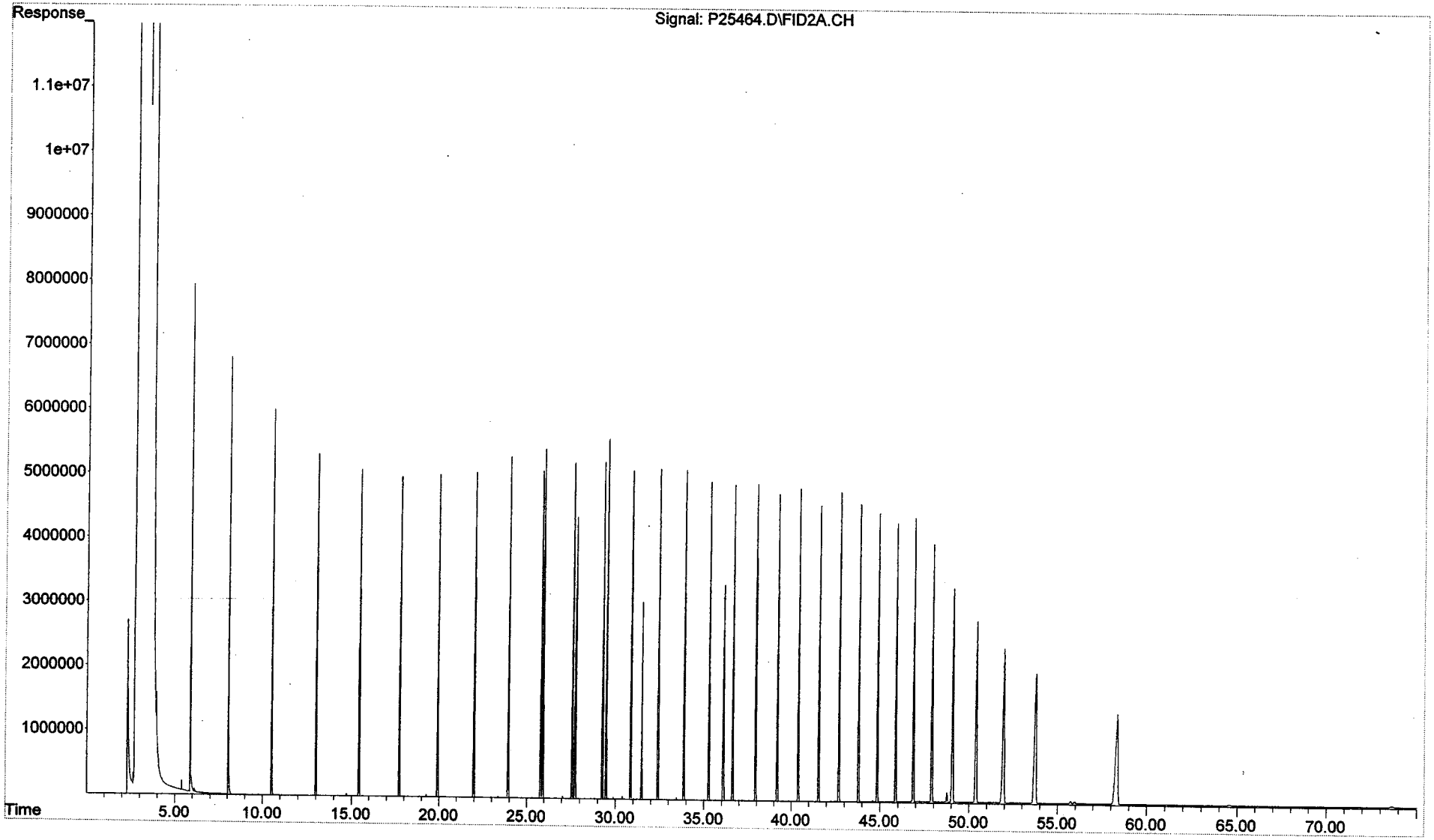
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25464.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 8:41 pm
Operator : AC
Sample : I2090104
Misc : WHAB32
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:28:16 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:19:05 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	66667338	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.50	139218991	97.984 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery	= 195.97%#
24) s	d50-Tetracosane	36.12	114523552	91.120 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 182.24%#
	Target Compounds			
2) t	n-Octane (C8)	5.89	111621441	102.136 ug/mL
3) t	n-Nonane (C9)	8.07	119271616	100.900 ug/mL
4) t	n-Decane (C10)	10.53	121741910	100.411 ug/mLm
5) t	n-Undecane (C11)	13.03	122338353	100.497 ug/mL
6) t	n-Dodecane (C12)	15.46	124836563	100.633 ug/mL
7) t	n-Tridecane (C13)	17.76	125904193	100.580 ug/mL
9) t	n-Tetradecane (C14)	19.95	127573339	100.434 ug/mLm
11) t	n-Pentadecane (C15)	22.02	128457843	100.278 ug/mL
12) t	n-Hexadecane (C16)	23.98	129275965	100.028 ug/mLm
14) t	n-Heptadecane (C17)	25.83	130588165	99.889 ug/mL
15) t	Pristane	25.95	124834324	99.863 ug/mL
16) t	n-Octadecane (C18)	27.60	131100996	99.843 ug/mLm
17) t	Phytane	27.77	129831456	99.845 ug/mL
18) t	n-Nonadecane (C19)	29.29	130469466	99.672 ug/mL
20) t	n-Eicosane (C20)	30.89	129803367	99.451 ug/mL
21) t	n-Heneicosane (C21)	32.43	134016323	99.457 ug/mL
22) t	n-Docosane (C22)	33.90	132270977	99.498 ug/mL
23) t	n-Tricosane (C23)	35.31	133011321	99.434 ug/mL
25) t	n-Tetracosane (C24)	36.67	133788179	99.304 ug/mL
26) t	n-Pentacosane (C25)	37.97	132880514	99.080 ug/mL
27) t	n-Hexacosane (C26)	39.22	131676219	99.377 ug/mL
28) t	n-Heptacosane (C27)	40.43	131119363	99.218 ug/mL
29) t	n-Octacosane (C28)	41.60	132661371	99.258 ug/mL
30) t	n-Nonacosane (C29)	42.73	135721175	99.302 ug/mL
31) t	n-Triacontane (C30)	43.82	133450262	99.303 ug/mL
32) t	n-Hentriacontane (C31)	44.88	129312028	99.060 ug/mL
33) t	n-Dotriacontane (C32)	45.90	130190494	99.383 ug/mL
34) t	n-Tritriacontane (C33)	46.89	132203159	99.373 ug/mL
35) t	n-tetratriacontane (C34)	47.93	133722500	99.400 ug/mLm
36) t	n-Pentatriacontane (C35)	49.09	128379572	99.276 ug/mL
37) t	n-Hexatriacontane (C36)	50.43	131361401	99.324 ug/mL
38) t	n-Heptatriacontane (C37)	51.98	140156490	99.638 ug/mL
39) t	n-Octatriacontane (C38)	53.78	132434607	99.578 ug/mL
41) t	n-Tetracontane (C40)	58.38	129767988	99.860 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25464.D
Operator : AC
Acquired : 01 Sep 2005 8:41 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090104
Misc Info : WHAB32
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25466.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 10:11 pm
Operator : AC
Sample : I2090105
Misc : WHAB33
ALS Vial : 56 Sample Multiplier: 1

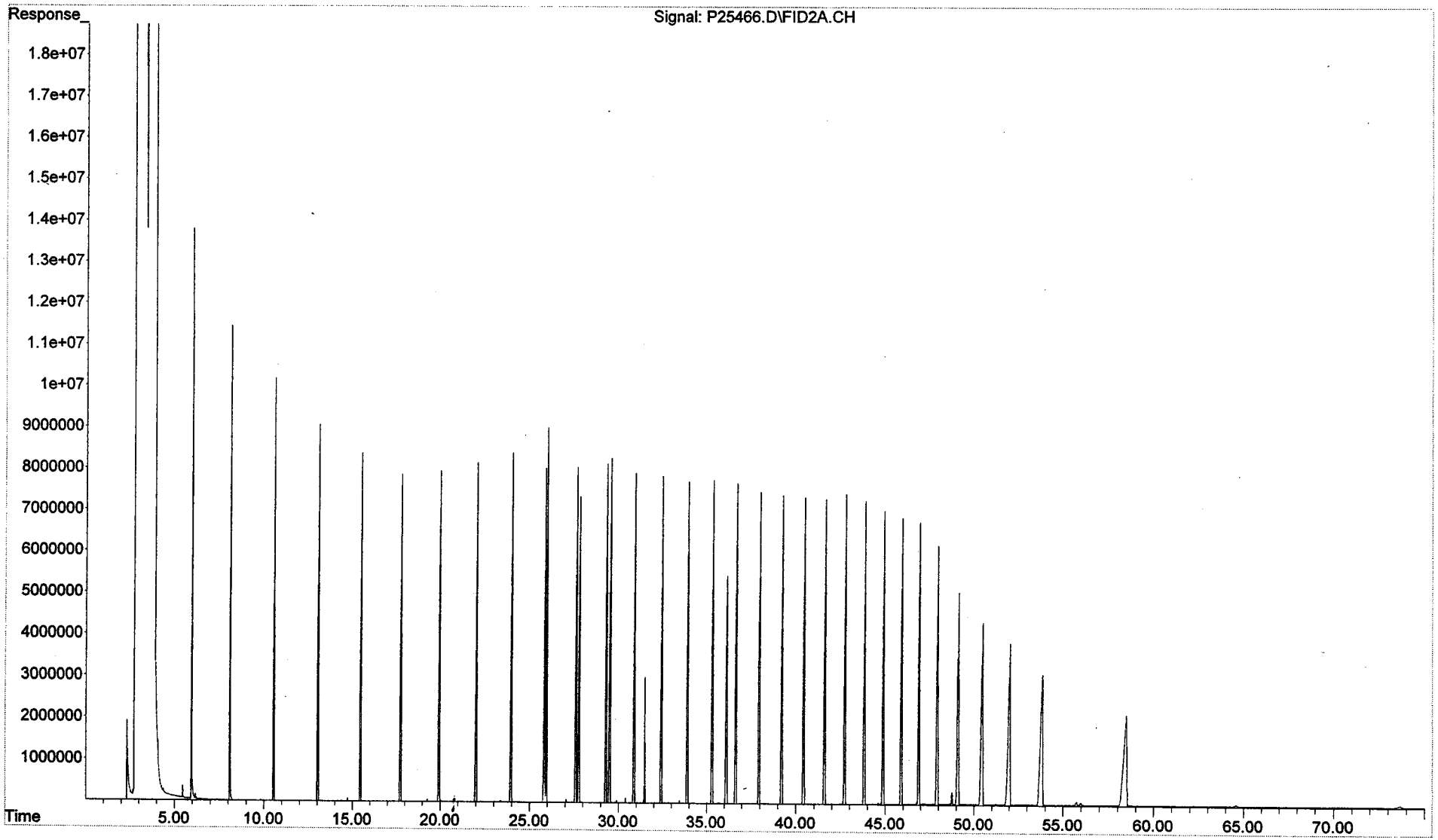
Integration File: SHCINT1.E
Quant Time: Sep 05 21:27:55 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:23:02 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/6/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.50	66383447	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.53	277102081	195.823 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery	= 391.65%#
24) s d50-Tetracosane	36.15	227694395	182.078 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery	= 364.16%#
Target Compounds			
2) t n-Octane (C8)	5.97f	222197992	203.316 ug/mLm
3) t n-Nonane (C9)	8.12	237390685	201.145 ug/mLm
4) t n-Decane (C10)	10.57	242789522	201.004 ug/mLm
5) t n-Undecane (C11)	13.06	244375644	201.656 ug/mL
6) t n-Dodecane (C12)	15.48	249124168	201.651 ug/mL
7) t n-Tridecane (C13)	17.79	250959644	201.234 ug/mL
9) t n-Tetradecane (C14)	19.97	253891658	200.598 ug/mLm
11) t n-Pentadecane (C15)	22.04	255267441	199.995 ug/mLm
12) t n-Hexadecane (C16)	24.00	256742972	199.442 ug/mLm
14) t n-Heptadecane (C17)	25.86	259771215	199.555 ug/mLm
15) t Pristane	25.98	247041081	198.480 ug/mLm
16) t n-Octadecane (C18)	27.63	260200700	199.066 ug/mL
17) t Phytane	27.80	257598423	199.021 ug/mL
18) t n-Nonadecane (C19)	29.32	258783183	198.646 ug/mL
20) t n-Eicosane (C20)	30.92	257595382	198.382 ug/mL
21) t n-Heneicosane (C21)	32.46	265904802	198.387 ug/mL
22) t n-Docosane (C22)	33.93	262538137	198.557 ug/mL
23) t n-Tricosane (C23)	35.34	264122802	198.542 ug/mL
25) t n-Tetracosane (C24)	36.70	265619038	198.256 ug/mL
26) t n-Pentacosane (C25)	38.00	263680892	197.731 ug/mL
27) t n-Hexacosane (C26)	39.25	261479436	198.443 ug/mLm
28) t n-Heptacosane (C27)	40.46	260490730	198.246 ug/mL
29) t n-Octacosane (C28)	41.63	263581351	198.318 ug/mL
30) t n-Nonacosane (C29)	42.76	269696287	198.453 ug/mL
31) t n-Triacontane (C30)	43.85	265226719	198.519 ug/mL
32) t n-Hentriacontane (C31)	44.91	256979309	198.025 ug/mL
33) t n-Dotriacontane (C32)	45.93	258813237	198.758 ug/mL
34) t n-Tritriacontane (C33)	46.93	262684075	198.622 ug/mL
35) t n-tetratriacontane (C34)	47.97	265835468	198.784 ug/mL
36) t n-Pentatriacontane (C35)	49.14	255041607	198.450 ug/mLm
37) t n-Hexatriacontane (C36)	50.49f	261018713	198.511 ug/mLm
38) t n-Heptatriacontane (C37)	52.05f	278362887	199.034 ug/mLm
39) t n-Octatriacontane (C38)	53.86f	263048176	198.885 ug/mLm
41) t n-Tetracontane (C40)	58.49f	257774066	199.321 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25466.D
Operator : AC
Acquired : 01 Sep 2005 10:11 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090105
Misc Info : WHAB33
Vial Number: 56



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25468.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 11:43 pm
Operator : AC
Sample : Q2090101
Misc : WHAB34
ALS Vial : 57 Sample Multiplier: 1

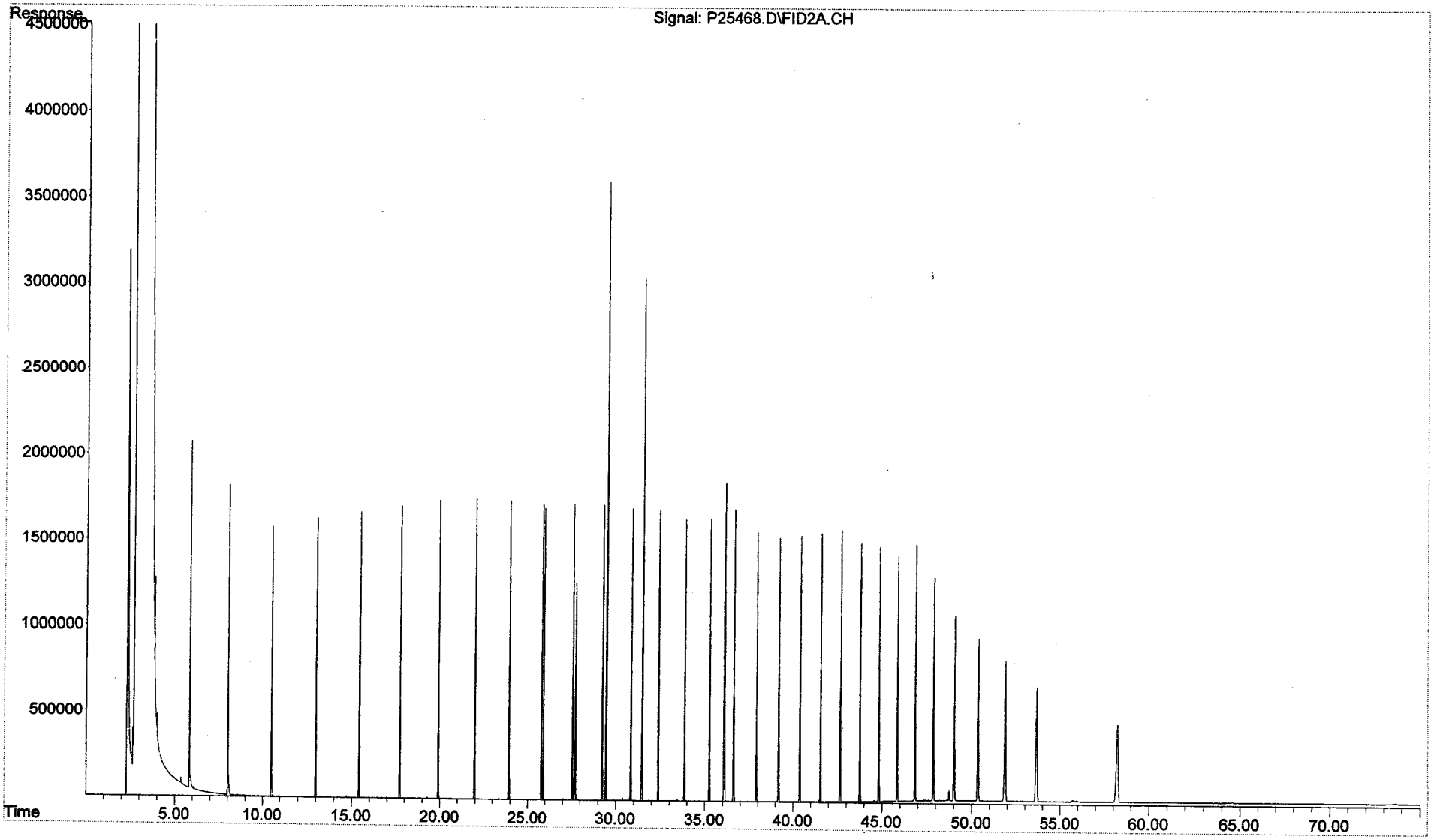
Integration File: SHCINT1.E
Quant Time: Sep 06 10:37:41 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/6/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	66538026	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.48	77961290	54.969 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery = 109.94%	
24) s d50-Tetracosane	36.10	57608656	45.988 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery = 91.98%	
Target Compounds			
2) t n-Octane (C8)	5.84	27653651	25.191 ug/mL 101%
3) t n-Nonane (C9)	8.03	29487539	24.880 ug/mL
4) t n-Decane (C10)	10.50	30160125	24.903 ug/mLm
5) t n-Undecane (C11)	13.01	30324225	24.963 ug/mLm
6) t n-Dodecane (C12)	15.44	30974131	25.002 ug/mL
7) t n-Tridecane (C13)	17.74	31293969	25.016 ug/mL
9) t n-Tetradecane (C14)	19.92	31771245	25.023 ug/mLm
11) t n-Pentadecane (C15)	21.99	32030885	25.019 ug/mLm
12) t n-Hexadecane (C16)	23.94	32291432	25.014 ug/mLm
14) t n-Heptadecane (C17)	25.80	32612740	24.989 ug/mLm
15) t Pristane	25.91	31226578	25.033 ug/mLm
16) t n-Octadecane (C18)	27.57	32780384	25.022 ug/mL
17) t Phytane	27.73	32472660	25.032 ug/mL
18) t n-Nonadecane (C19)	29.25	32626942	25.000 ug/mL
20) t n-Eicosane (C20)	30.85	32510764	25.000 ug/mL
21) t n-Heneicosane (C21)	32.39	33566105	25.011 ug/mL
22) t n-Docosane (C22)	33.86	33139939	25.031 ug/mLm
23) t n-Tricosane (C23)	35.27	33336871	25.031 ug/mL
25) t n-Tetracosane (C24)	36.63	33520818	24.989 ug/mL
26) t n-Pentacosane (C25)	37.93	33370910	25.002 ug/mL
27) t n-Hexacosane (C26)	39.18	33025094	25.027 ug/mL
28) t n-Heptacosane (C27)	40.39	32893878	24.999 ug/mL
29) t n-Octacosane (C28)	41.56	33288759	25.002 ug/mL
30) t n-Nonacosane (C29)	42.69	34039908	25.005 ug/mL
31) t n-Triacontane (C30)	43.78	33474987	25.013 ug/mL
32) t n-Hentriacontane (C31)	44.83	32431256	24.951 ug/mL
33) t n-Dotriacontane (C32)	45.86	32651592	25.031 ug/mLm
34) t n-Tritriacontane (C33)	46.85	33213796	25.065 ug/mL
35) t n-tetratriacontane (C34)	47.88	33577457	25.057 ug/mL
36) t n-Pentatriacontane (C35)	49.04	32255481	25.047 ug/mL
37) t n-Hexatriacontane (C36)	50.36	32979695	25.023 ug/mL
38) t n-Heptatriacontane (C37)	51.89	34873766	24.877 ug/mL 99.5%
39) t n-Octatriacontane (C38)	53.67	33235050	25.061 ug/mL
41) t n-Tetracontane (C40)	58.24	32550041	25.090 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25468.D
Operator : AC
Acquired : 01 Sep 2005 11:43 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: Q2090101
Misc Info : WHAB34
Vial Number: 57



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\September\SEP01.SEC\
Data File : P25472.D
Signal(s) : FID2A.CH
Acq On : 02 Sep 2005 2:41 am
Operator : AC
Sample : ANS2090101
Misc : WHAB40
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/7/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	70098468	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	88297654	59.095 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	118.19%
24) s	d50-Tetracosane	36.11	74137404	56.177 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	112.35%
	Target Compounds			
2) t	n-Octane (C8)	5.82	37921621	32.790 ug/mLm
3) t	n-Nonane (C9)	8.02	29254022	23.429 ug/mLm
4) t	n-Decane (C10)	10.50	32431131	25.418 ug/mLm
5) t	n-Undecane (C11)	13.01	32148864	25.120 ug/mLm
6) t	n-Dodecane (C12)	15.44	29145422	22.331 ug/mLm
7) t	n-Tridecane (C13)	17.74	30742901	23.327 ug/mLm
8) t	1380	19.42	7590330	5.674 ug/mLm
9) t	n-Tetradecane (C14)	19.93	27911894	20.867 ug/mLm
10) t	1470	21.21	10841213	8.038 ug/mLm
11) t	n-Pentadecane (C15)	21.99	30523700	22.631 ug/mLm
12) t	n-Hexadecane (C16)	23.94	26565746	19.533 ug/mLm
13) t	1650	24.85	7939974	5.775 ug/mLm
14) t	n-Heptadecane (C17)	25.80	22214514	16.157 ug/mLm
15) t	Pristane	25.90	16877813	12.843 ug/mLm
16) t	n-Octadecane (C18)	27.57	20227625	14.656 ug/mLm
17) t	Phytane	27.73	10824411	7.920 ug/mLm
18) t	n-Nonadecane (C19)	29.25	20632554	15.006 ug/mLm
20) t	n-Eicosane (C20)	30.86	19831242	14.475 ug/mLm
21) t	n-Heneicosane (C21)	32.39	19009322	13.445 ug/mLm
22) t	n-Docosane (C22)	33.86	17754688	12.729 ug/mLm
23) t	n-Tricosane (C23)	35.27	15790037	11.254 ug/mLm
25) t	n-Tetracosane (C24)	36.62	15148579	10.719 ug/mLm
26) t	n-Pentacosane (C25)	37.92	14860303	10.568 ug/mLm
27) t	n-Hexacosane (C26)	39.18	12790549	9.201 ug/mLm
28) t	n-Heptacosane (C27)	40.39	9564759	6.900 ug/mLm
29) t	n-Octacosane (C28)	41.55	6799210	4.847 ug/mLm
30) t	n-Nonacosane (C29)	42.68	7053938	4.919 ug/mLm
31) t	n-Triacontane (C30)	43.77	5461449	3.874 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	4735164	3.458 ug/mLm
33) t	n-Dotriacontane (C32)	45.85	5405402	3.933 ug/mLm
34) t	n-Tritriacontane (C33)	46.84	2812637	2.015 ug/mLm
35) t	n-tetratriacontane (C34)	47.87	2731192	1.935 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	2861707	2.109 ug/mLm
37) t	n-Hexatriacontane (C36)	50.34	1733362	1.248 ug/mLm

Data Path : O:\Forensics\Data\PAH2\September\SEP01.SEC\
Data File : P25472.D
Signal(s) : FID2A.CH
Acq On : 02 Sep 2005 2:41 am
Operator : AC
Sample : ANS2090101
Misc : WHAB40
ALS Vial : 59 Sample Multiplier: 1

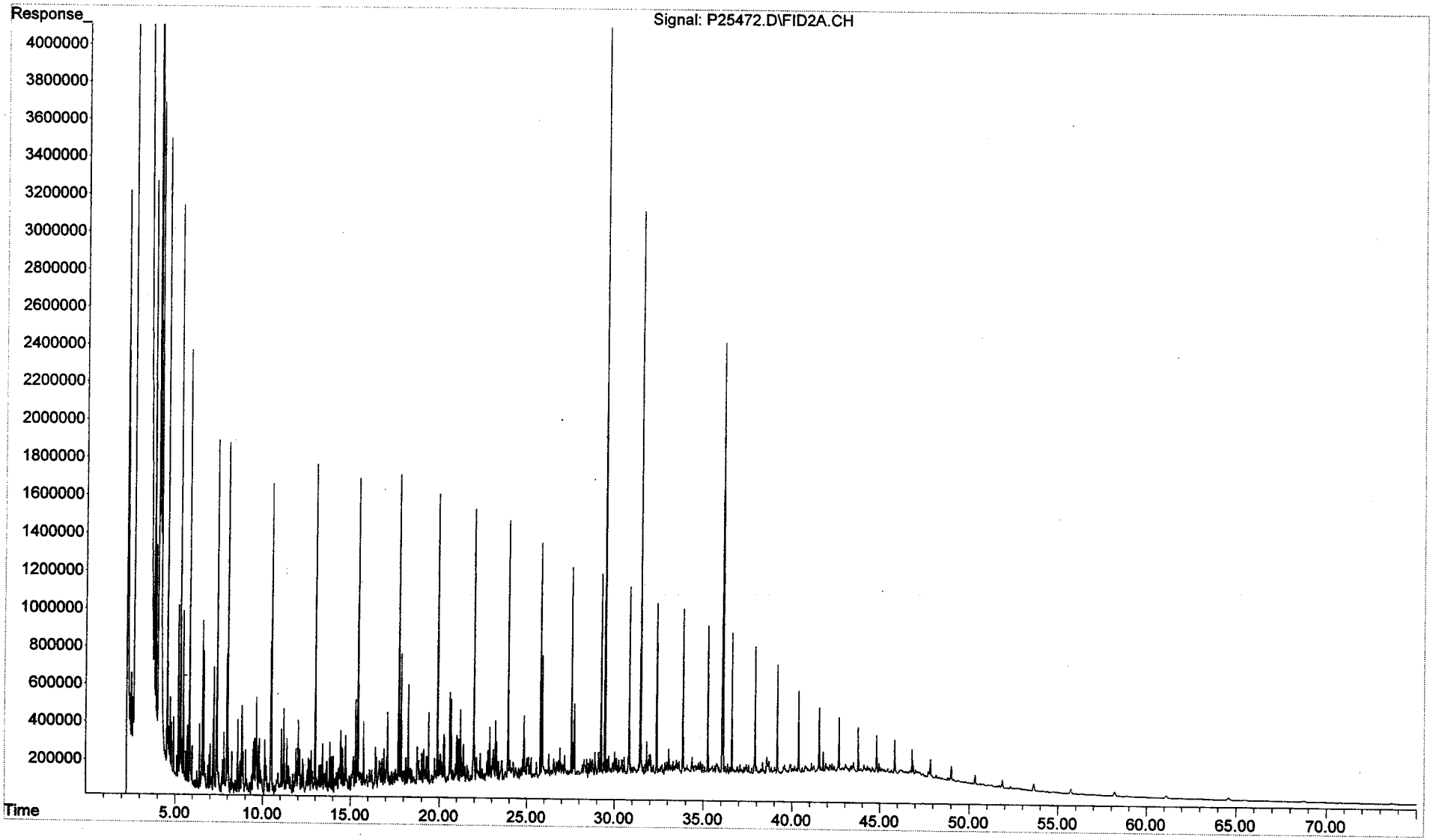
Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.87	1793787	1.215	ug/mLm
39)	t	n-Octatriacontane (C38)	53.64	1770061	1.267	ug/mLm
40)	t	n-Nonatriacontane (C39)	55.72	1456085	1.065	ug/mL
41)	t	n-Tetracontane (C40)	58.18f	1409223	1.031	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.84	5109029529	3726.234	ug/mL
43)	h	C10-C28 DRO	26.05	3241736187	2364.337	ug/mL
44)	h	Total Resolved Hydrocarbon	40.84	1519667622	1108.359	ug/L

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

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25472.D
Operator : AC
Acquired : 02 Sep 2005 2:41 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: ANS2090101
Misc Info : WHAB40
Vial Number: 59



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601050**
Lab ID: **C2012406**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.35	1.3	25
n-Decane (C10)	50.00	50.05	0.1	25
n-Undecane (C11)	50.00	50.44	0.9	25
n-Dodecane (C12)	50.00	50.55	1.1	25
n-Tridecane (C13)	50.00	50.41	0.8	25
n-Tetradecane (C14)	50.00	50.27	0.5	25
n-Pentadecane (C15)	50.00	50.10	0.2	25
n-Hexadecane (C16)	50.00	49.86	0.3	25
n-Heptadecane (C17)	50.00	49.95	0.1	25
Pristane	50.00	49.98	0.0	25
n-Octadecane (C18)	50.00	49.91	0.2	25
Phytane	50.00	50.24	0.5	25
n-Nonadecane (C19)	50.00	49.85	0.3	25
n-Eicosane (C20)	50.00	50.15	0.3	25
n-Heneicosane (C21)	50.00	49.67	0.7	25
n-Docosane (C22)	50.00	48.22	3.6	25
n-Tricosane (C23)	50.00	49.79	0.4	25
n-Tetracosane (C24)	50.00	49.24	1.5	25
n-Pentacosane (C25)	50.00	49.69	0.6	25
n-Hexacosane (C26)	50.00	50.57	1.1	25
n-Heptacosane (C27)	50.00	50.02	0.0	25
n-Octacosane (C28)	50.00	50.10	0.2	25
n-Nonacosane (C29)	50.00	49.97	0.1	25
n-Triacontane (C30)	50.00	49.95	0.1	25
n-Hentriacontane (C31)	50.00	52.13	4.3	25
n-Dotriacontane (C32)	50.00	49.86	0.3	25
n-Tritriacontane (C33)	50.00	50.14	0.3	25
n-Tetratriacontane (C34)	50.00	50.04	0.1	25
n-Pentatriacontane (C35)	50.00	50.01	0.0	25
n-Hexatriacontane (C36)	50.00	50.17	0.3	25
n-Heptatriacontane (C37)	50.00	48.27	3.5	25
n-Octatriacontane (C38)	50.00	49.65	0.7	25
n-Tetracontane (C40)	50.00	49.85	0.3	25
ortho-Terphenyl	50.00	49.72	0.6	25
d50-Tetracosane	50.00	46.35	7.3	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

02/06/06 22:07

Quantitation Report (QT Reviewed)

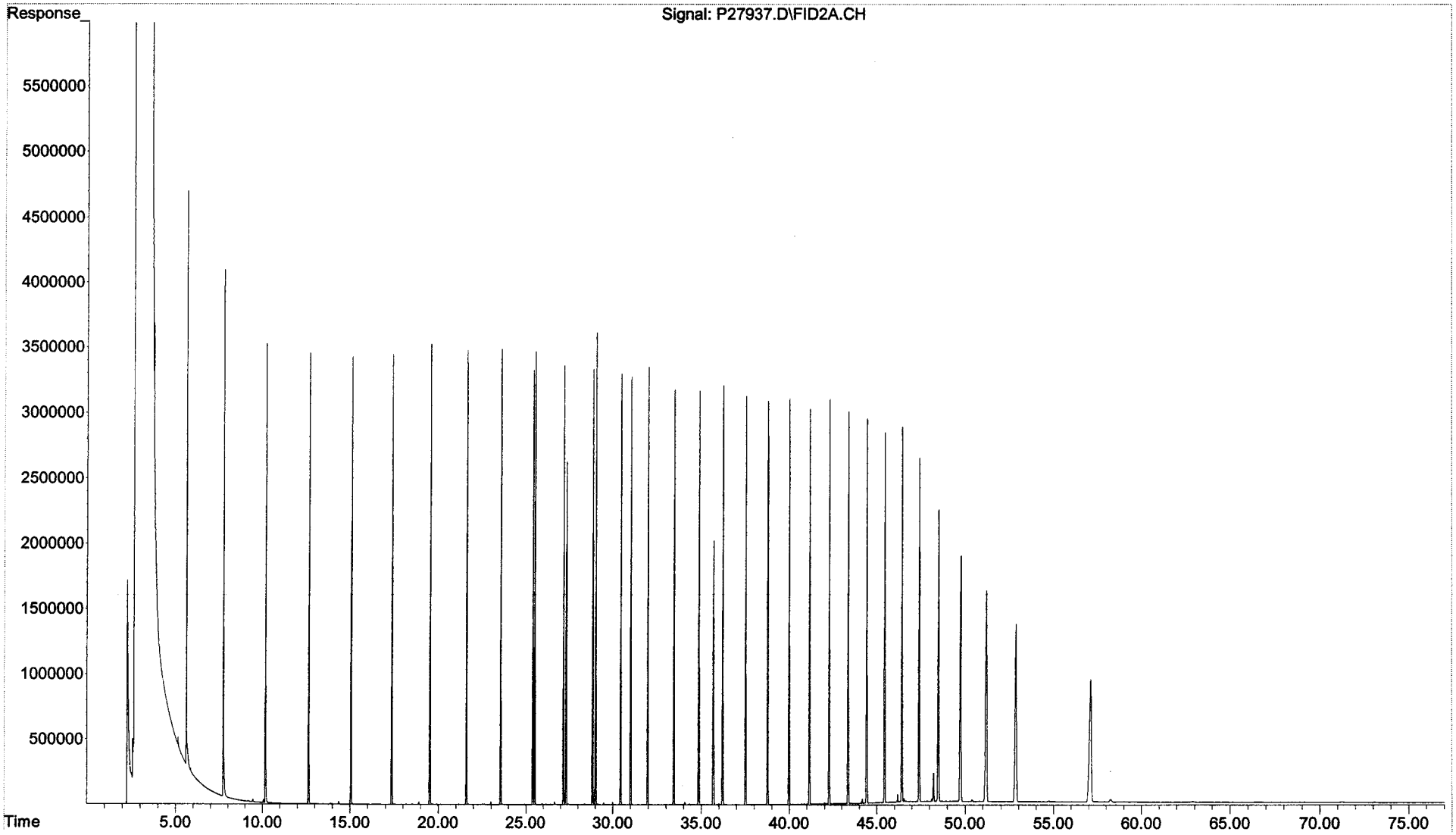
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27937.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012406-AFID
Misc : ALK STD
ALS Vial : 60 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 27 16:02:51 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.04	74808556	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.04	79287539	49.724 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	99.45%
24) s	d50-Tetracosane	35.69	65277487	46.349 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	92.70%
Target Compounds				
2) t	n-Octane (C8)	5.62	59137429	47.915 ug/mL
3) t	n-Nonane (C9)	7.75	65762476	49.353 ug/mLm
4) t	n-Decane (C10)	10.18	68146501	50.047 ug/mLm
5) t	n-Undecane (C11)	12.66	68896109	50.444 ug/mL
6) t	n-Dodecane (C12)	15.08	70404620	50.547 ug/mL
7) t	n-Tridecane (C13)	17.38	70903698	50.412 ug/mL
9) t	n-Tetradecane (C14)	19.55	71768179	50.275 ug/mL
11) t	n-Pentadecane (C15)	21.61	72109677	50.098 ug/mL
12) t	n-Hexadecane (C16)	23.57	72364817	49.859 ug/mL
14) t	n-Heptadecane (C17)	25.42	73287337	49.947 ug/mL
15) t	Pristane	25.53	70099316	49.982 ug/mL
16) t	n-Octadecane (C18)	27.19	73515849	49.912 ug/mL
17) t	Phytane	27.35	73276007	50.241 ug/mL
18) t	n-Nonadecane (C19)	28.87	73149013	49.852 ug/mLm
20) t	n-Eicosane (C20)	30.47	73323750	50.150 ug/mL
21) t	n-Heneicosane (C21)	32.00	74949949	49.674 ug/mL
22) t	n-Docosane (C22)	33.47	71775311	48.219 ug/mL
23) t	n-Tricosane (C23)	34.88	74561924	49.795 ug/mL
25) t	n-Tetracosane (C24)	36.23	74260298	49.239 ug/mL
26) t	n-Pentacosane (C25)	37.53	74557782	49.685 ug/mLm
27) t	n-Hexacosane (C26)	38.79	75028911	50.573 ug/mL
28) t	n-Heptacosane (C27)	40.00	73993609	50.018 ug/mL
29) t	n-Octacosane (C28)	41.16	75001871	50.104 ug/mL
30) t	n-Nonacosane (C29)	42.29	76486341	49.974 ug/mL
31) t	n-Triacontane (C30)	43.38	75163503	49.955 ug/mL
32) t	n-Hentriacontane (C31)	44.44	76176158	52.127 ug/mL
33) t	n-Dotriacontane (C32)	45.46	73123063	49.859 ug/mL
34) t	n-Tritriacontane (C33)	46.46	74693834	50.136 ug/mL
35) t	n-tetratriacontane (C34)	47.44	75384229	50.037 ug/mL
36) t	n-Pentatriacontane (C35)	48.53	72404173	50.007 ug/mLm
37) t	n-Hexatriacontane (C36)	49.78	74339138	50.168 ug/mL
38) t	n-Heptatriacontane (C37)	51.21	76078774	48.270 ug/mL
39) t	n-Octatriacontane (C38)	52.87	74026814	49.649 ug/mL
41) t	n-Tetracontane (C40)	57.12	72705346	49.847 ug/mLm

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27937.D
Operator : AC
Acquired : 27 Jan 2006 11:48 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2012406-AFID
Misc Info : ALK STD
Vial Number: 60



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601050**
Lab ID: **C2012407**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	51.22	2.4	25
n-Decane (C10)	50.00	50.75	1.5	25
n-Undecane (C11)	50.00	50.54	1.1	25
n-Dodecane (C12)	50.00	50.51	1.0	25
n-Tridecane (C13)	50.00	50.34	0.7	25
n-Tetradecane (C14)	50.00	50.15	0.3	25
n-Pentadecane (C15)	50.00	49.98	0.0	25
n-Hexadecane (C16)	50.00	49.75	0.5	25
n-Heptadecane (C17)	50.00	49.82	0.4	25
Pristane	50.00	49.88	0.2	25
n-Octadecane (C18)	50.00	49.81	0.4	25
Phytane	50.00	50.13	0.3	25
n-Nonadecane (C19)	50.00	49.75	0.5	25
n-Eicosane (C20)	50.00	50.07	0.1	25
n-Heneicosane (C21)	50.00	49.61	0.8	25
n-Docosane (C22)	50.00	50.94	1.9	25
n-Tricosane (C23)	50.00	49.79	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	50.59	1.2	25
n-Heptacosane (C27)	50.00	50.04	0.1	25
n-Octacosane (C28)	50.00	50.15	0.3	25
n-Nonacosane (C29)	50.00	50.01	0.0	25
n-Triacontane (C30)	50.00	50.00	0.0	25
n-Hentriacontane (C31)	50.00	52.17	4.3	25
n-Dotriacontane (C32)	50.00	49.95	0.1	25
n-Tritriacontane (C33)	50.00	50.29	0.6	25
n-Tetratriacontane (C34)	50.00	50.16	0.3	25
n-Pentatriacontane (C35)	50.00	50.24	0.5	25
n-Hexatriacontane (C36)	50.00	50.36	0.7	25
n-Heptatriacontane (C37)	50.00	48.66	2.7	25
n-Octatriacontane (C38)	50.00	50.33	0.7	25
n-Tetracontane (C40)	50.00	51.58	3.2	25
ortho-Terphenyl	50.00	49.73	0.5	25
d50-Tetracosane	50.00	46.36	7.3	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

02/06/06 22:07

Quantitation Report (QT Reviewed)

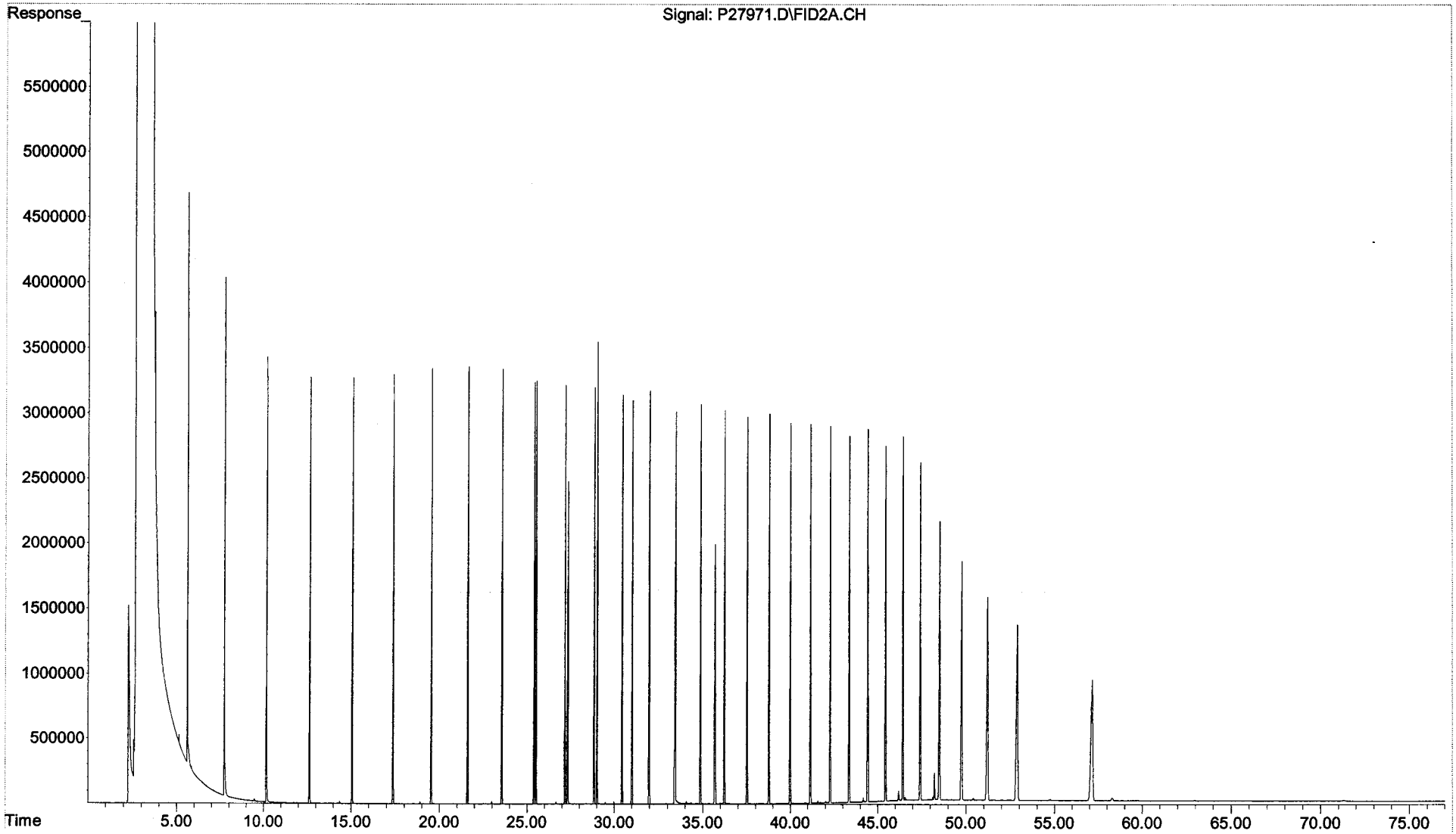
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27971.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012407-AFID
Misc : 1X
ALS Vial : 76 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 19:20:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 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	70794360	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	75040933	49.729 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.46%
24) s d50-Tetracosane	35.70	61784127	46.356 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	92.71%
Target Compounds			
2) t n-Octane (C8)	5.62	58775381	50.322 ug/mL
3) t n-Nonane (C9)	7.74	64586062	51.218 ug/mLm
4) t n-Decane (C10)	10.18	65401307	50.754 ug/mL
5) t n-Undecane (C11)	12.66	65321707	50.539 ug/mL
6) t n-Dodecane (C12)	15.08	66583119	50.514 ug/mLm
7) t n-Tridecane (C13)	17.38	67003269	50.340 ug/mL
9) t n-Tetradecane (C14)	19.56	67749830	50.151 ug/mL
11) t n-Pentadecane (C15)	21.62	68079201	49.980 ug/mL
12) t n-Hexadecane (C16)	23.57	68337196	49.753 ug/mL
14) t n-Heptadecane (C17)	25.43	69177762	49.820 ug/mL
15) t Pristane	25.53	66197359	49.876 ug/mL
16) t n-Octadecane (C18)	27.19	69428197	49.809 ug/mL
17) t Phytane	27.35	69186444	50.127 ug/mL
18) t n-Nonadecane (C19)	28.87	69086707	49.753 ug/mLm
20) t n-Eicosane (C20)	30.47	69282385	50.073 ug/mL
21) t n-Heneicosane (C21)	32.01	70843960	49.615 ug/mL
22) t n-Docosane (C22)	33.48	71754219	50.938 ug/mLm
23) t n-Tricosane (C23)	34.89	70552787	49.789 ug/mL
25) t n-Tetracosane (C24)	36.24	70250998	49.221 ug/mL
26) t n-Pentacosane (C25)	37.54	70610390	49.723 ug/mL
27) t n-Hexacosane (C26)	38.80	71030381	50.593 ug/mL
28) t n-Heptacosane (C27)	40.00	70059302	50.044 ug/mL
29) t n-Octacosane (C28)	41.17	71041862	50.150 ug/mL
30) t n-Nonacosane (C29)	42.30	72428481	50.006 ug/mL
31) t n-Triacontane (C30)	43.39	71198987	50.003 ug/mL
32) t n-Hentriacontane (C31)	44.45	72143475	52.167 ug/mL
33) t n-Dotriacontane (C32)	45.47	69325271	49.950 ug/mL
34) t n-Tritriacontane (C33)	46.46	70908331	50.294 ug/mL
35) t n-tetratriacontane (C34)	47.45	71517916	50.162 ug/mLm
36) t n-Pentatriacontane (C35)	48.54	68839451	50.241 ug/mL
37) t n-Hexatriacontane (C36)	49.79	70622997	50.362 ug/mL
38) t n-Heptatriacontane (C37)	51.23	72572600	48.657 ug/mL
39) t n-Octatriacontane (C38)	52.90	71010428	50.327 ug/mL
41) t n-Tetracontane (C40)	57.16	71191260	51.576 ug/mL

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27971.D
Operator : AC
Acquired : 28 Jan 2006 3:03 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2012407-AFID
Misc Info : 1X
Vial Number: 76



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601050**
Lab ID: **C2012408**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	50.02	0.0	25
n-Decane (C10)	50.00	49.99	0.0	25
n-Undecane (C11)	50.00	50.17	0.3	25
n-Dodecane (C12)	50.00	50.29	0.6	25
n-Tridecane (C13)	50.00	50.15	0.3	25
n-Tetradecane (C14)	50.00	50.08	0.2	25
n-Pentadecane (C15)	50.00	49.93	0.1	25
n-Hexadecane (C16)	50.00	49.71	0.6	25
n-Heptadecane (C17)	50.00	49.82	0.4	25
Pristane	50.00	49.88	0.2	25
n-Octadecane (C18)	50.00	49.83	0.3	25
Phytane	50.00	50.15	0.3	25
n-Nonadecane (C19)	50.00	49.79	0.4	25
n-Eicosane (C20)	50.00	50.10	0.2	25
n-Heneicosane (C21)	50.00	49.64	0.7	25
n-Docosane (C22)	50.00	49.61	0.8	25
n-Tricosane (C23)	50.00	49.79	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	50.60	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	50.05	0.1	25
n-Triacontane (C30)	50.00	50.09	0.2	25
n-Hentriacontane (C31)	50.00	52.26	4.5	25
n-Dotriacontane (C32)	50.00	50.00	0.0	25
n-Tritriacontane (C33)	50.00	50.39	0.8	25
n-Tetratriacontane (C34)	50.00	50.21	0.4	25
n-Pentatriacontane (C35)	50.00	50.35	0.7	25
n-Hexatriacontane (C36)	50.00	50.51	1.0	25
n-Heptatriacontane (C37)	50.00	48.84	2.3	25
n-Octatriacontane (C38)	50.00	50.54	1.1	25
n-Tetracontane (C40)	50.00	51.79	3.6	25
ortho-Terphenyl	50.00	49.75	0.5	25
d50-Tetracosane	50.00	46.36	7.3	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

02/06/06 22:08

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27989.D
Signal(s) : FID2A.CH
Acq On : 29 Jan 2006 5:25 am
Operator : AC
Sample : C2012408-AFID
Misc : ALK STD
ALS Vial : 85 Sample Multiplier: 1

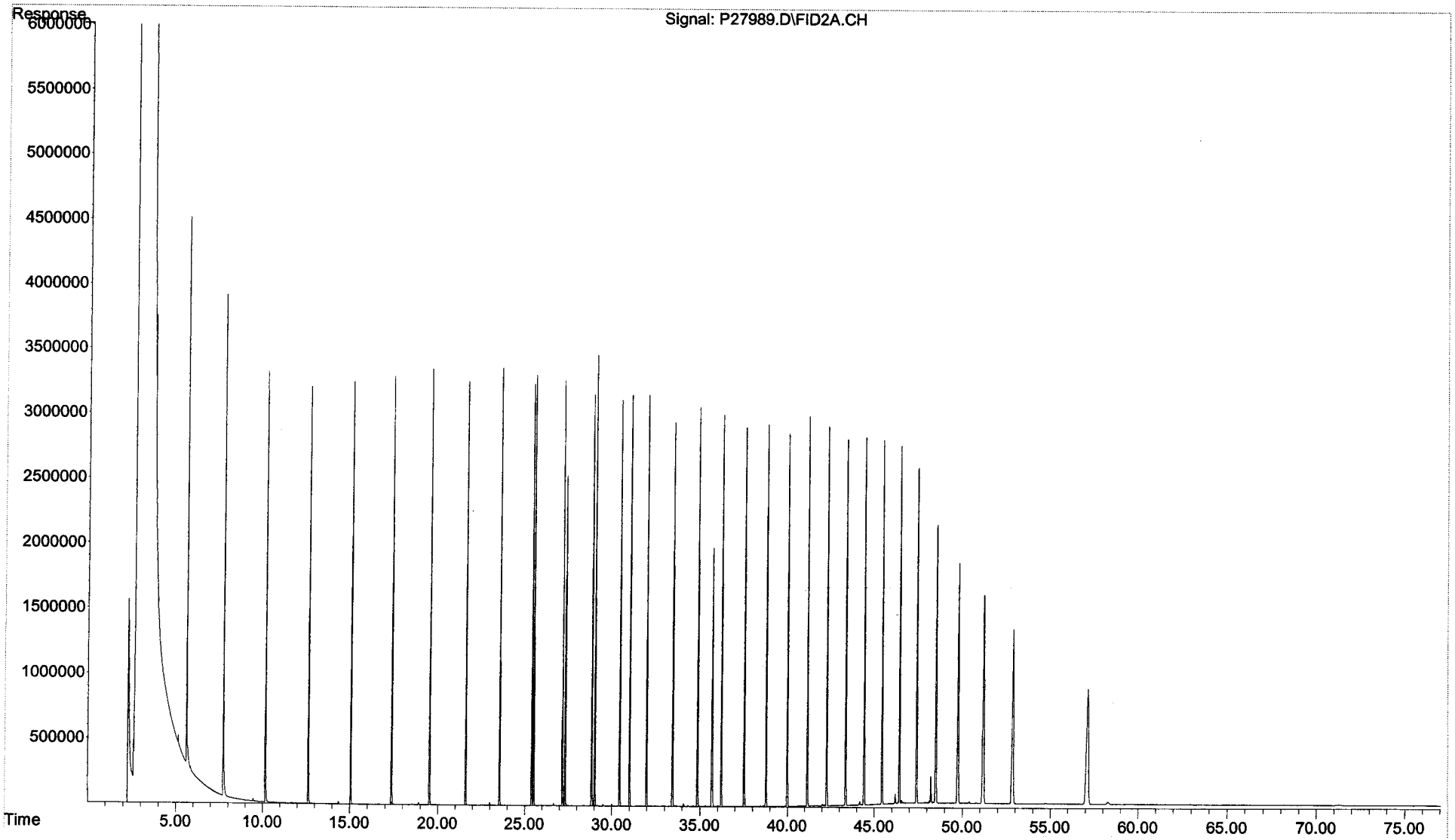
Integration File: SHCINT1.E
Quant Time: Feb 06 19:23:51 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

2/6/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.04	70808789	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.05	75087267	49.750 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 99.50%
24) s	d50-Tetracosane	35.70	61799525	46.358 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 92.72%
	Target Compounds			
2) t	n-Octane (C8)	5.62	57515324	49.233 ug/mL
3) t	n-Nonane (C9)	7.74	63083259	50.016 ug/mLm
4) t	n-Decane (C10)	10.18	64426478	49.987 ug/mL
5) t	n-Undecane (C11)	12.66	64855737	50.168 ug/mL
6) t	n-Dodecane (C12)	15.08	66301335	50.290 ug/mLm
7) t	n-Tridecane (C13)	17.38	66757015	50.145 ug/mL
9) t	n-Tetradecane (C14)	19.56	67668235	50.080 ug/mL
11) t	n-Pentadecane (C15)	21.62	68030129	49.933 ug/mL
12) t	n-Hexadecane (C16)	23.57	68297257	49.714 ug/mL
14) t	n-Heptadecane (C17)	25.42	69194661	49.822 ug/mL
15) t	Pristane	25.53	66221423	49.884 ug/mL
16) t	n-Octadecane (C18)	27.19	69469023	49.828 ug/mL
17) t	Phytane	27.35	69238480	50.154 ug/mL
18) t	n-Nonadecane (C19)	28.87	69151640	49.790 ug/mLm
20) t	n-Eicosane (C20)	30.47	69336084	50.101 ug/mL
21) t	n-Heneicosane (C21)	32.00	70888595	49.636 ug/mL
22) t	n-Docosane (C22)	33.47	69897096	49.609 ug/mL
23) t	n-Tricosane (C23)	34.88	70566886	49.789 ug/mL
25) t	n-Tetracosane (C24)	36.24	70258553	49.217 ug/mL
26) t	n-Pentacosane (C25)	37.54	70597252	49.703 ug/mLm
27) t	n-Hexacosane (C26)	38.79	71050402	50.597 ug/mL
28) t	n-Heptacosane (C27)	40.00	70096228	50.060 ug/mL
29) t	n-Octacosane (C28)	41.17	71064793	50.156 ug/mL
30) t	n-Nonacosane (C29)	42.30	72501695	50.047 ug/mL
31) t	n-Triacontane (C30)	43.39	71343630	50.095 ug/mL
32) t	n-Hentriacontane (C31)	44.45	72280942	52.255 ug/mL
33) t	n-Dotriacontane (C32)	45.47	69403745	49.996 ug/mLm
34) t	n-Tritriacontane (C33)	46.46	71061930	50.392 ug/mL
35) t	n-tetratriacontane (C34)	47.45	71602691	50.211 ug/mLm
36) t	n-Pentatriacontane (C35)	48.54	68997462	50.346 ug/mL
37) t	n-Hexatriacontane (C36)	49.79	70843447	50.509 ug/mL
38) t	n-Heptatriacontane (C37)	51.22	72861753	48.841 ug/mL
39) t	n-Octatriacontane (C38)	52.89	71330861	50.544 ug/mL
41) t	n-Tetracontane (C40)	57.15	71500790	51.790 ug/mL

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27989.D
Operator : AC
Acquired : 29 Jan 2006 5:25 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2012408-AFID
Misc Info : ALK STD
Vial Number: 85



CHAIN OF CUSTODY RECORDS

Newfields
100 Ledgewood Place
Suite 302
Rockland MA

Chain of Custody Record

Project Name Gowanus Canal Investigation
GEI Project No. 982482-34-4403

Client: GEI Consultants Inc.	Project Manager - Dave Terry	Lab Job Number:
455 Winding Brook Dr	Tel: 860-368-5300	0601050
Glastonbury CT 06033	Alt. Contact: Karen Swartz	

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-32 (5.9-6.9) -1	1/16/2006	17:50	Sediment	☑
GC-SED-31 (2.5-4.5) -2	1/16/2006	16:10	Sediment	☑
GC-SED-36 (2.5-4.5) -3	1/16/2006	13:30	Sediment	☑
GC-SED-41 (7.3-8.3) -4	1/17/2006	16:10	Sediment	☑
GC-SED-40 (5-6) -5	1/17/2006	16:25	Sediment	☑
GC-SED-33 (1.5-3) -6	1/17/2006	13:30	Sediment	☑

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable
☐ Skin Irritant ☒ Unknown

Turn Around Time Required (other than standard):

QC Requirements:

	Date	Time		Date	Time
1. Relinquished by: Melissa Fitter	1/17/06	1800	1. Received by: FED EX		
2. Relinquished by: FED EX	1/18/06	0910	2. Received by: [signature]	1/18/06	0910
3. Relinquished by:			3. Received by:		

COMMENTS Fed Ex # 854406002953

ORIGINAL

Page 3 of 3

Sample Receipt Checklist

Client: NEWFIE		**Receipt Date:** 1/18/06	
Project: Gowanus Canal		**Log-in Date:**	
ETR #: 0601050		**Inspection by:** WT	**Login by:** WT

ALL SECTIONS BELOW MUST BE COMPLETED

Were samples shipped? Yes, FedEx / UPS / Other:_____
No, WHG Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: Attached
No, Unavailable / NA

Number of coolers received for this project delivery: 1

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 3° IR Gun, _____Temp. Blank, / NA

Were samples received on ice? Yes / No

Chain-of-Custody present? Yes / No
Complete? Yes / No

Custody seals present on Cooler? Yes / No
on Bottles? Yes / No
Intact? Yes / No / NA
Note: Affix custody seals to back of this page.

Were sample containers intact? Yes / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / NA If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / NA
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
Yes / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / NA
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO NA
If No, why?:

Were samples received within hold time? Yes / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / No If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / NA

Project Manager Acknowledgement: [signature] Date: 1/18/06

Comments / Notes

Sample storage refrigerator #: C1

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?

Yes / No / N/A

If No, list samples below:

Please use back for any additional notes!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

f:\user\qa\forms\chklist\sample receipt.doc 2/4/03 Page 319 of 320

m This portion can be removed for Recipient's records.

te 1-17-06 FedEx Tracking Number 854406002953

nder's me Melissa Fetter Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST

Dept./Floor/Suite/Room

BROOKLYN State NY ZIP 11231

ur Internal Billing Reference 982482-34-4403