ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0601045
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**
Project: **Gowanus Canal**

Lab Code: **MA00030**
ETR: **0601045**

Lab Sample ID	Client Sample ID
0601045-01	GC-SED-25 (9-10)
0601045-02	GC-SED-30 (3.5-5.5)
0601045-03	GC-SED-29 (7.4-8.4)
0601045-04	GC-SED-28 (4.9-5.8)
0601045-05	GC-SED-27 (4.9-5.4)
0601045-06	GC-SED-26 (5.3-5.8)
0601045-07	GC-SED-35 (15.3-17.3)
0601045-08	GC-SED-34B (2-3)

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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: 0601045
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. Concentrations for compounds flagged with "G" qualifiers may be biased high due to matrix interference included in the quantitation.

Total Petroleum Hydrocarbons by GC/FID

Samples for Total Petroleum Hydrocarbons were analyzed following the procedures in Alpha Woods Hole Lab *Total Petroleum Hydrocarbons by Gas Chromatography/Flame Ionization Detector (Revision 1.1)* Method 8100/8015mod and SOP *Addendum for Saturated Hydrocarbons, Rev. 1.0, 2004.* Samples were prepared as stated above for the PAH analysis. A portion of the final extract was aliquoted for GC/FID analysis. Extracts are analyzed by gas chromatography with flame

ionization detection (FID). A multi-level initial calibration over the n-alkane range from C9-C40 was evaluated and quantified using internal standard techniques prior to sample analysis.

1. All quality control parameters met the specified criteria.

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

Approved by: 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	

✓ ✓ 2nd 2/8/06

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: ALK-PAH/SHC (High)

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

LFB / *Other* _____

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

Test: BIOMARKERS.

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other High.

ID# WHAC15.
Conc. 100ug/ml.

Test: BIOMARKERS.

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low.

ID# WHAB14.
Conc. 10ug/ml.

Test: PAH/SHC.

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____.

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

Pre-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 1/23/06

BATCH: 0601045

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%
0601045	1		10000	50	N/A	3.130	N/A	626.00	130	8.14	76.92	
0601045	2		10000	50	N/A	0.512	N/A	102.40	800	8.19	12.50	
0601045	3		10000	50	N/A	0.293	N/A	58.60	1400	8.20	7.14	
0601045	4		10000	50	N/A	0.253	N/A	50.60	1600	8.10	6.25	
0601045	5		10000	50	N/A	1.267	N/A	253.40	320	8.11	31.25	
0601045	6		10000	50	N/A	0.225	N/A	45.00	1800	8.10	5.56	
0601045	7		10000	50	N/A	1.234	N/A	246.80	330	8.14	30.30	
0601045	8	D	10000	50	N/A	0.824	N/A	164.80	500	8.24	20.00	12%
0601045	8		10000	50	N/A	0.730	N/A	146.00	500	7.30	20.00	

VMS 2/8/06

2nd 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)

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

Gravimetric Determination for Column

Analyst: DMP
Date: 1-23-06

BATCH: 0601045

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%
0601045	1		10000	50	N/A	3.130	N/A					
0601045	2		10000	50	N/A	0.512	N/A					
0601045	3		10000	50	N/A	0.793	N/A					
0601045	4		10000	50	N/A	0.253	N/A					
0601045	5		10000	50	N/A	1.267	N/A					
0601045	6		10000	50	N/A	0.225	N/A					
0601045	7		10000	50	N/A	1.234	N/A					
0601045	8	D	10000	50	N/A	0.824	N/A					#VALUE!
0601045	8		10000	50	N/A	0.730	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.	Prefractionation 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

2nd 2/8/06

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: 0601045

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%
0601045	1		1000	50	N/A	0.334	N/A	6.68	750	5.01	1.33	
0601045	2		1000	50	N/A	0.277	N/A	5.54	800	4.43	1.25	
0601045	3		1000	50	N/A	0.355	N/A	7.10	600	4.26	1.67	
0601045	4		1000	50	N/A	0.166	N/A	3.32	950	3.15	1.05	
0601045	5		1000	50	N/A	0.304	N/A	6.08	800	4.86	1.25	
0601045	6		1000	50	N/A	0.366	N/A	7.32	600	4.39	1.67	
0601045	7		1000	50	N/A	0.341	N/A	6.82	750	5.12	1.33	
0601045	8	D	1000	50	N/A	0.314	N/A	6.28	800	5.02	1.25	10%
0601045	8		1000	50	N/A	0.284	N/A	5.68	800	4.54	1.25	

KMS 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)

2nd ck 2/8/06

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

Post-Alumina Column Gravimetric Determination

Analyst: MAL
Date: 1/26/06

BATCH: 0601045

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%
0601045	1		1000	50	N/A	0.334	N/A					
0601045	2		1000	50	N/A	0.277	N/A					
0601045	3		1000	50	N/A	0.355	N/A					
0601045	4		1000	50	N/A	0.166	N/A					
0601045	5		1000	50	N/A	0.304	N/A					
0601045	6		1000	50	N/A	0.366	N/A					
0601045	7		1000	50	N/A	0.341	N/A					
0601045	8	D	1000	50	N/A	0.314	N/A					#VALUE!
0601045	8		1000	50	N/A	0.284	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: 0601045ST

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
0601045-01	900	WHAC12 2OF5	100	1000	102.30 ✓	MAL	150	150	1/27/06
0601045-02	900	WHAC12 2OF5	100	1000	15.63 ✓	MAL	150	150	1/27/06
0601045-03	900	WHAC12 2OF5	100	1000	11.92	MAL	150	150	1/27/06
0601045-04	900	WHAC12 2OF5	100	1000	6.56	MAL	150	150	1/27/06
0601045-05	900	WHAC12 2OF5	100	1000	39.06 ✓	MAL	150	150	1/27/06
0601045-06	900	WHAC12 2OF5	100	1000	9.29	MAL	150	150	1/27/06
0601045-07	900	WHAC12 2OF5	100	1000	40.30	MAL	150	150	1/27/06
0601045-08DUP	900	WHAC12 2OF5	100	1000	25 ✓	MAL	150	150	1/27/06
0601045-08	900	WHAC12 2OF5	100	1000	25 ✓	MAL	150	150	1/27/06
SS011906B05	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

✓ MAL 2/8/06

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 0601045 Client: Newfie Project: Gowanus Canal

Workplan Present	NA

Workplan Reviewed With Project Manager	NA

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

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

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

Other: Used 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

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 RAR ✓ 2nd ✓ 2nd 1/28/06

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: 1/23/06

BATCH: 0601045

Entered by: DMP
Verified by: DMP

Batch #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed for Column (ul)	Oil to Column (mg)	Dilution Factor	DE % RPD
		LCS	10000	50	N/A	0.253	N/A	50.60	N/A	N/A	N/A	101%
0601045	1		10000	50	N/A	3.130	N/A	626.00	800	50.08	12.50	
0601045	2		10000	50	N/A	0.512	N/A	102.40	5000	51.20	2.00	
0601045	3		10000	50	N/A	0.293	N/A	58.60	8550	50.10	1.17	
0601045	4		10000	50	N/A	0.253	N/A	50.60	8350	42.25	1.20	
0601045	5		10000	50	N/A	1.267	N/A	253.40	2000	50.68	5.00	
0601045	6		10000	50	N/A	0.225	N/A	45.00	8150	36.68	1.23	
0601045	7		10000	50	N/A	1.234	N/A	246.80	2000	49.36	5.00	
0601045	8	D	10000	50	N/A	0.824	N/A	164.80	3000	49.44	3.33	12%
0601045	8		10000	50	N/A	0.730	N/A	146.00	3000	43.80	3.33	

MJS 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)

✓ 2nd CW 2/8/06

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

Alpha Woods Hole Laboratories Raynham, MA

0601045ST

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 2/8/06

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 RR

Post-Silica Column Gravimetric Determination

Analyst: DMP
Date: 1/25/06

BATCH: 0601045

Entered by: DMP
Verified by: DMP

[illegible]	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.250	N/A	50.00	N/A	N/A	N/A	100%
0601045	1		1000	50	N/A	0.213	N/A	4.26	950	4.05	1.05	
0601045	2		1000	50	N/A	0.720	N/A	14.40	350	5.04	2.86	
0601045	3		1000	50	N/A	0.174	N/A	3.48	950	3.31	1.05	
0601045	4		1000	50	N/A	0.204	N/A	4.08	950	3.88	1.05	
0601045	5		1000	50	N/A	0.538	N/A	10.76	450	4.84	2.22	
0601045	6		1000	50	N/A	0.183	N/A	3.66	950	3.48	1.05	
0601045	7		1000	50	N/A	0.139	N/A	2.78	950	2.64	1.05	
0601045	8	D	1000	50	N/A	0.732	N/A	14.64	300	4.39	3.33	4%
0601045	8		1000	50	N/A	0.701	N/A	14.02	300	4.21	3.33	

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)

2nd
2/8/06

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

Alpha Woods Hole Laboratories Raynham, MA

0601045ST.xls

Post-Silica Column Gravimetric Determination

Analyst: DMP
Date: 1-25-06

BATCH: 0601045

Entered by: DMP
Verified by: ——

Test #	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%
0601045	1		1000	50	N/A	0.213	N/A					
0601045	2		1000	50	N/A	0.720	N/A					
0601045	3		1000	50	N/A	0.174	N/A					
0601045	4		1000	50	N/A	0.204	N/A					
0601045	5		1000	50	N/A	0.538	N/A					
0601045	6		1000	50	N/A	0.183	N/A					
0601045	7		1000	50	N/A	0.139	N/A					
0601045	8	D	1000	50	N/A	0.732	N/A					#VALUE!
0601045	8		1000	50	N/A	0.701	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

0601045ST.xls

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE GOWANUS CANAL
ETR: 0601045ST

BIOMARKERS

Lab ID	Extract Vol (uL)	[illegible]	Vol. Added (uL)	Pre-Injection Vol (uL)	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0601045-01-F1	900	WHAC12 2OF5	100	1000	13.13	KLA	150	NA	1/26/2006
0601045-02-F1	900	WHAC12 2OF5	100	1000	5.72	KLA	150	NA	1/26/2006
0601045-03-F1	900	WHAC12 2OF5	100	1000	1.23	KLA	150	NA	1/26/2006
0601045-04-F1	900	WHAC12 2OF5	100	1000	1.26	KLA	150	NA	1/26/2006
0601045-05-F1	900	WHAC12 2OF5	100	1000	11.10	KLA	150	NA	1/26/2006
0601045-06-F1	900	WHAC12 2OF5	100	1000	1.29	KLA	150	NA	1/26/2006
0601045-07-F1	900	WHAC12 2OF5	100	1000	5.25	KLA	150	NA	1/26/2006
0601045-08D-F1	900	WHAC12 2OF5	100	1000	11.09	KLA	150	NA	1/26/2006
0601045-08-F1	900	WHAC12 2OF5	100	1000	11.09	KLA	150	NA	1/26/2006
SS011906B05-F1	900	WHAC12 2OF5	100	1000	4.00	KLA	150	NA	1/26/2006

[1] Includes Internal Std

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: CK
Date: 2/8/06

Alpha Woods Hole Lab
Batch Weight Report
01/17/2006

Lab ID	QC Type	PS011706 - Pan Weight	PS011706 - Wet Weight	PS011706 - Dry Weight	PS011706 - Dry Weight #2	PS011706 - Dry Weight #3	Percent Solid	RPD
0601045-01	D	1.04	5.29	3.2	3.2		50.82	1.91%
0601045-01	SAM	0.99	5.99	3.58	3.58		51.8	
0601045-02	SAM	0.99	9.41	5.84	5.84		57.6	
0601045-03	SAM	0.98	8.51	6.93	6.93		79.02	
0601045-04	SAM	0.99	11.63	10.4	10.39		88.35	
0601045-05	SAM	0.99	7.92	4.44	4.44		49.78	
0601045-06	SAM	1	8.2	6.88	6.88		81.67	
0601045-07	SAM	1.04	9.96	8.76	8.76		86.55	
0601045-08	SAM	0.99	7.56	4.27	4.26		49.77	
PSS011706B07	B	1	1	1	1		100	

Initial: 1/17/2006 4:34:47 PM KJB
Weight #1: 1/18/2006 9:41:01 AM KJB
Weight #2: 1/18/2006 11:17:13 AM KJB

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

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-25 (9-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-01**
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
01/12/06	01/17/06	01/19/06	01/28/06	51.8	5.42	102.3	10	AC

Parameter	Result		Parameter	Result
Naphthalene	7400000	E	Fluoranthene	1600000
C1-Naphthalenes	6100000	E	Pyrene	2400000
C2-Naphthalenes	4000000		C1-Fluoranthenes/Pyrenes	2000000
C3-Naphthalenes	1400000		C2-Fluoranthenes/Pyrenes	600000
C4-Naphthalenes	380000		C3-Fluoranthenes/Pyrenes	150000
Biphenyl	600000		C4-Fluoranthenes/Pyrenes	43000
Dibenzofuran	170000		Naphthobenzothiophenes	220000
Acenaphthylene	290000		C1-Naphthobenzothiophenes	180000
Acenaphthene	3500000		C2-Naphthobenzothiophenes	78000
Fluorene	1600000		C3-Naphthobenzothiophenes	32000
C1-Fluorenes	850000		C4-Naphthobenzothiophenes	12000
C2-Fluorenes	490000		Benz[a]anthracene	840000
C3-Fluorenes	210000		Chrysene/Triphenylene	800000
Anthracene	1900000		C1-Chrysenes	560000
Phenanthrene	5100000	E	C2-Chrysenes	190000
C1-Phenanthrenes/Anthracenes	3200000		C3-Chrysenes	72000
C2-Phenanthrenes/Anthracenes	1100000		C4-Chrysenes	29000
C3-Phenanthrenes/Anthracenes	330000		Benzo[b]fluoranthene	250000
C4-Phenanthrenes/Anthracenes	68000		Benzo[k]fluoranthene	380000
Retene	17000		Benzo[a]fluoranthene	160000
Dibenzothiophene	610000		Benzo[e]pyrene	300000
C1-Dibenzothiophenes	620000		Benzo[a]pyrene	620000
C2-Dibenzothiophenes	400000		Perylene	92000
C3-Dibenzothiophenes	180000		Indeno[1,2,3-cd]pyrene	220000
C4-Dibenzothiophenes	49000		Dibenz[a,h]anthracene	60000
Benzo(b)fluorene	350000		Benzo[g,h,i]perylene	220000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	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.

02/07/06 17:08

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-25 (9-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-01**
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
01/12/06	01/17/06	01/19/06	01/28/06	51.8	5.42	102.3	10	AC

Parameter	Result
Carbazole	**44000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	96	50-130

N/A - Not Applicable

02/07/06 17:09

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27954.D
Acq On : 28 Jan 2006 12:42 am
Operator : AC
Sample : 0601045-01-~~RE~~
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

MAL for WW 2/4/06

Quant Time: Feb 01 13:09:28 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	35868m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.63	240	56999m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	1459m	19.79 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.98%#	
58) Pyrene-d10	38.70	212	3051m	20.12 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.01%#	
81) Benzo[b]fluoranthene-d12	47.56	264	2202m	18.84 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.88%#	
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	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	20.21	128	3295386m	20426.41 ng/mL E	
10) C1-Naphthalenes	22.91	142	2705993m	16773.06 ng/mL E	
11) C2-Naphthalenes	25.76	156	1761722m	10920.01 ng/mL	
12) C3-Naphthalenes	28.10	170	629343m	3900.97 ng/mL	
13) C4-Naphthalenes	30.86	184	166804m	1033.93 ng/mL	
15) 2-Methylnaphthalene	22.91	142	1674633	16307.15 ng/mL#E	100
16) 1-Methylnaphthalene	23.35	142	1024486	10481.23 ng/mL#E	100
22) Biphenyl	24.80	154	213580	1652.10 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	235362m	2660.60 ng/mL	
24) Dibenzofuran	27.89	168	65752m	460.75 ng/mL	
25) Acenaphthylene	26.52	152	125687m	785.21 ng/mL	
26) Acenaphthene	27.25	153	949593m	9678.27 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	47024m	609.12 ng/mL	
28) Fluorene	29.27	166	497519m	4336.70 ng/mL	
29) C1-Fluorenes	31.50	180	267283m	2329.81 ng/mL	
30) C2-Fluorenes	33.69	194	153906m	1341.54 ng/mL	
31) C3-Fluorenes	35.67	208	66673m	581.16 ng/mL	
32) Dibenzothiophene	32.61	184	256966	1675.16 ng/mL#	92
37) C1-Dibenzothiophenes	34.38	198	258722m	1686.61 ng/mL	
38) C2-Dibenzothiophenes	36.07	212	169472m	1104.79 ng/mL	
39) C3-Dibenzothiophenes	37.87	226	76407m	498.10 ng/mL	
40) C4-Dibenzothiophenes	39.56	240	20451m	133.32 ng/mL	
41) Phenanthrene	33.11	178	2280558	13932.00 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.17	192	1437597m	8782.32 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	528942m	3231.32 ng/mL	
49) 5AA IS BKGD	37.11	206	25922m	158.36 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	149667m	914.32 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.35	234	30559m	186.69 ng/mL	
52) Retene	40.09	234	1728m	46.52 ng/mL	
53) Anthracene	33.28	178	791648m	5207.28 ng/mL	
54) Carbazole	33.96	167	17383m	119.97 ng/mL	
55) 1-Methylphenanthrene	35.61	192	223399	1967.23 ng/mL	100
56) Fluoranthene	37.89	202	757320	4334.74 ng/mL	100
57) Benzo(b)fluorene	40.41	216	103374m	962.49 ng/mL	
59) Pyrene	38.78	202	1163135	6501.48 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.17	216	1007390m	5630.92 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.84	230	293113m	1638.39 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.10	244	75457m	421.78 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	21274m	118.91 ng/mL	
64) Naphthobenzothiophene	42.63	234	63094m	380.31 ng/ml	

RF + Rpt conc 2nd on 2/8/06

2/7/06

Quantitation Report (QT Reviewed)

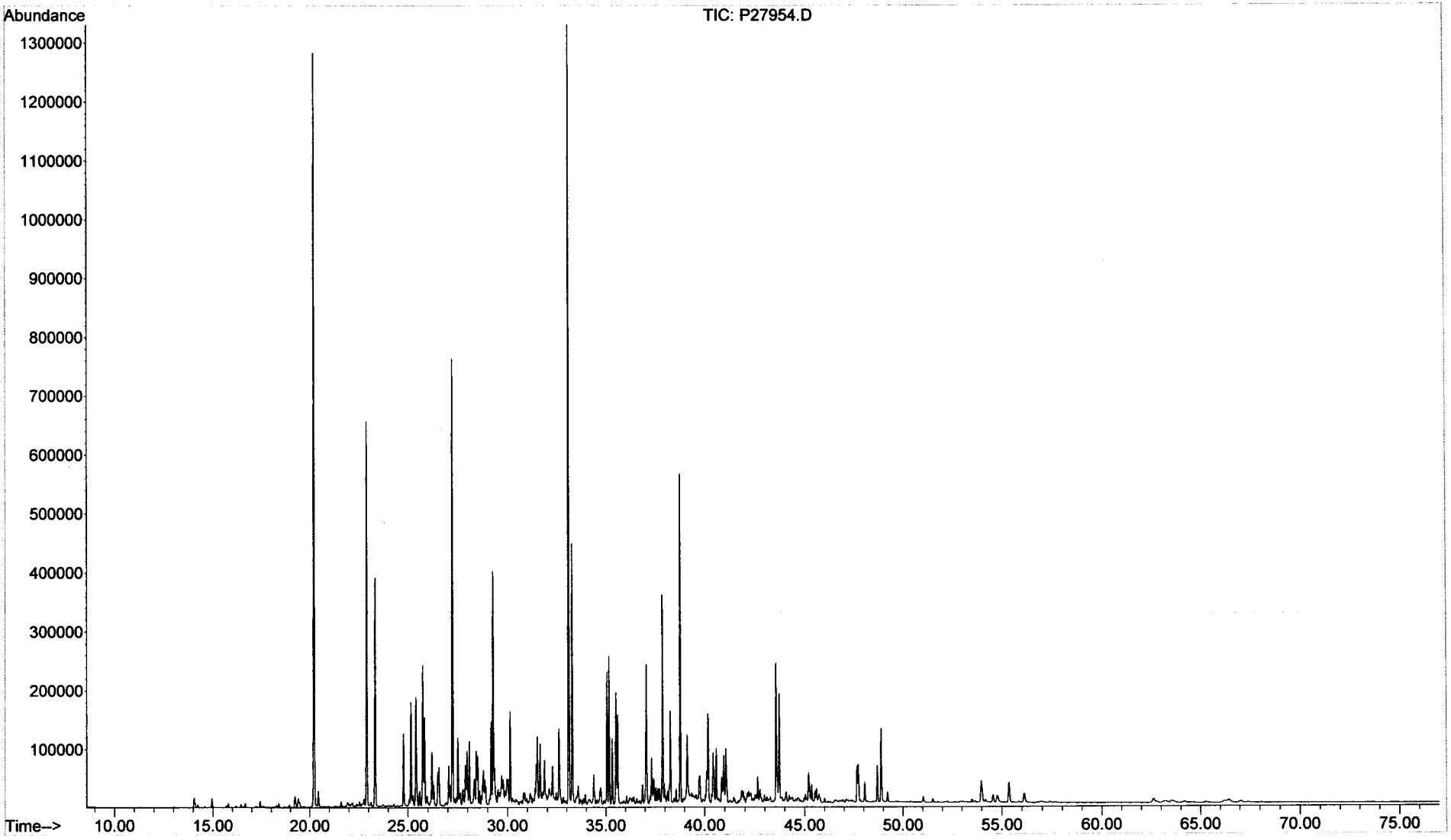
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27954.D
Acq On : 28 Jan 2006 12:42 am
Operator : AC
Sample : 0601045-01-~~RE~~
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 13:09:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.63	234	63157m	380.69	ng/mL	
66) Naphthobenzothiophene-1,2-	42.98	234	17372m	104.71	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	20155m	121.49	ng/mL	
68) C1-Naphthobenzothiophenes	44.03	248	80052m	482.53	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	35747m	215.47	ng/ml	
70) C3-Naphthobenzothiophenes	47.44	276	14786m	89.13	ng/ml	
71) C4-Naphthobenzothiophenes	48.79	290	5344m	32.21	ng/mL	
73) Benz[a]anthracene	43.56	228	373890m	2296.99	ng/mL	
74) Chrysene	43.73	228	358953m	2195.60	ng/mL	
75) Chrysene/Triphenylene	43.73	228	359233m	2197.31	ng/mL	
76) C1-Chrysenes	45.21	242	253426m	1550.12	ng/mL	
77) C2-Chrysenes	46.92	256	86008m	526.08	ng/mL	
79) C3-Chrysenes	48.56	270	32197m	196.94	ng/mL	
80) C4-Chrysenes	49.63	284	13148m	80.42	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	120929	691.74	ng/mL	100
83) Benzo[k]fluoranthene	47.72	252	189901	1038.78	ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	82177m	449.52	ng/mL	
85) Benzo[e]pyrene	48.70	252	138974	824.64	ng/mL	98
86) Benzo[a]pyrene	48.90	252	286597m	1701.02	ng/mL	
87) Perylene	49.22	252	42349	252.12	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.97	276	98579m	590.31	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	26001m	165.57	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	106078	609.23	ng/mL	99

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27954.D
Operator : AC
Acquired : 28 Jan 2006 12:42 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-01-~~RE~~
Misc Info : 10X
Vial Number: 18



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-25 (9-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-01E**
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
01/12/06	01/17/06	01/19/06	01/31/06	51.8	5.42	102.3	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**8400000**		Fluoranthene	3700	U
C1-Naphthalenes	**6800000**		Pyrene	3200	U
C2-Naphthalenes	6000	U	C1-Fluoranthenes/Pyrenes	3200	U
C3-Naphthalenes	6000	U	C2-Fluoranthenes/Pyrenes	3200	U
C4-Naphthalenes	6000	U	C3-Fluoranthenes/Pyrenes	3200	U
Biphenyl	3300	U	C4-Fluoranthenes/Pyrenes	3200	U
Dibenzofuran	4300	U	Naphthobenzothiophenes	4400	U
Acenaphthylene	6600	U	C1-Naphthobenzothiophenes	4400	U
Acenaphthene	4200	U	C2-Naphthobenzothiophenes	4400	U
Fluorene	4200	U	C3-Naphthobenzothiophenes	4400	U
C1-Fluorenes	4200	U	C4-Naphthobenzothiophenes	4400	U
C2-Fluorenes	4200	U	Benz[a]anthracene	5700	U
C3-Fluorenes	4200	U	Chrysene/Triphenylene	3900	U
Anthracene	4900	U	C1-Chrysenes	3900	U
Phenanthrene	**5900000**		C2-Chrysenes	3900	U
C1-Phenanthrenes/Anthracenes	5300	U	C3-Chrysenes	3900	U
C2-Phenanthrenes/Anthracenes	5300	U	C4-Chrysenes	3900	U
C3-Phenanthrenes/Anthracenes	5300	U	Benzo[b]fluoranthene	3900	U
C4-Phenanthrenes/Anthracenes	5300	U	Benzo[k]fluoranthene	7400	U
Retene	5300	U	Benzo[a]fluoranthene	7400	U
Dibenzothiophene	4000	U	Benzo[e]pyrene	5000	U
C1-Dibenzothiophenes	4000	U	Benzo[a]pyrene	5100	U
C2-Dibenzothiophenes	4000	U	Perylene	6300	U
C3-Dibenzothiophenes	4000	U	Indeno[1,2,3-cd]pyrene	8700	U
C4-Dibenzothiophenes	4000	U	Dibenz[a,h]anthracene	6900	U
Benzo(b)fluorene	3700	U	Benzo[g,h,i]perylene	6400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	87	50-130

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

02/07/06 17:12

Quantitation Report (QT Reviewed)

MAL for WW
2/4/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28016.D
Acq On : 31 Jan 2006 1:05 am
Operator : AC
Sample : 0601045-01-RE2
Misc : 100X
ALS Vial : 9 Sample Multiplier: 1

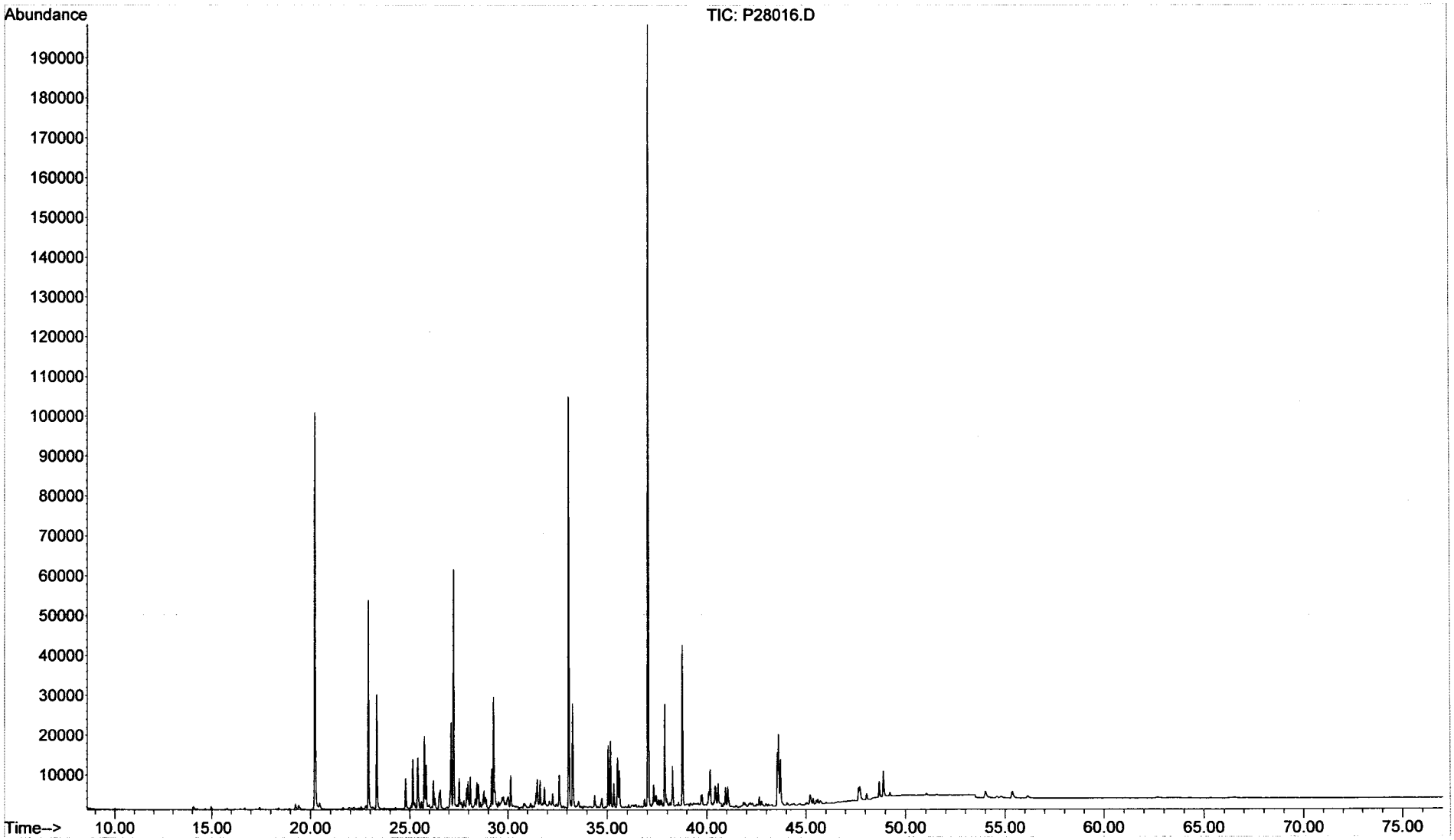
Quant Time: Feb 01 14:23:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	24231m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	38029m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	87m	1.75	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.18%#	
58) Pyrene-d10	38.69	212	209m	2.04	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.20%#	
81) Benzo[b]fluoranthene-d12	47.57	264	133m	1.71	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.17%#	
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	20.20	128	252170m	2313.74	ng/mL	
10) C1-Naphthalenes	22.90	142	203694m	1868.96	ng/mL	
15) 2-Methylnaphthalene	22.90	142	124780	1798.62	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	76215	1154.20	ng/mL#	100
41) Phenanthrene	33.08	178	179209	1620.57	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28016.D
Operator : AC
Acquired : 31 Jan 2006 1:05 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-01-RE~~2~~
Misc Info : 100X
Vial Number: 9



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-25 (9-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-01**
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
01/12/06	01/17/06	01/19/06	01/27/06	51.8	5.42	13.13	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1400**	30,31-Bishomohopane-22S	**630**
C24 Tricyclic Terpane	**890**	30,31-Bishomohopane-22R	**410**
C25 Tricyclic Terpane	**790**	30,31-Trishomohopane-22S	**340**
C24 Tetracyclic Terpane	**400**	30,31-Trishomohopane-22R	**190**
C26 Tricyclic Terpane-22S	**330**	Tetrakishomohopane-22S	**180**
C26 Tricyclic Terpane-22R	**320**	Tetrakishomohopane-22R	**130**
C28 Tricyclic Terpane-22S	**370**	Pentakishomohopane-22S	**140**
C28 Tricyclic Terpane-22R	**380**	Pentakishomohopane-22R	**100**
C29 Tricyclic Terpane-22S	**360**	13b(H),17a(H)-20S-Diacholestane	**1200**
C29 Tricyclic Terpane-22R	**320**	13b(H),17a(H)-20R-Diacholestane	**630**
18a-22,29,30-Trisnorneohopane-TS	**860**	13b,17a-20S-Methyldiacholestane	**450**
C30 Tricyclic Terpane-22S	**260**	14a(H),17a(H)-20S-Cholestane	**500**
C30 Tricyclic Terpane-22R	**210**	14a(H),17a(H)-20R-Cholestane	**2200**
17a(H)-22,29,30-Trisnorhopane-TM	**1200**	13b,17a-20R-Ethyldiacholestane	**310**
17a/b,21b/a 28,30-Bisnorhopane	**430**	13a,17b-20S-Ethyldiacholestane	**58**
17a(H),21b(H)-25-Norhopane	**150**	14a,17a-20S-Methylcholestane	**330**
30-Norhopane	**2200**	14a,17a-20R-Methylcholestane	**1200**
18a(H)-30-Norneohopane-C29Ts	**730**	14a(H),17a(H)-20S-Ethylcholestane	**660**
17a(H)-Diahopane	**220**	14a(H),17a(H)-20R-Ethylcholestane	**910**
30-Normoretane	**520**	14b(H),17b(H)-20R-Cholestane	**980**
18a(H)&18b(H)-Oleananes	**400**	14b(H),17b(H)-20S-Cholestane	**900**
Hopane	**3600**	14b,17b-20R-Methylcholestane	**850**
Moretane	**560**	14b,17b-20S-Methylcholestane	**1100**
30-Homohopane-22S	**930**	14b(H),17b(H)-20R-Ethylcholestane	**1300**
30-Homohopane-22R	**880**	14b(H),17b(H)-20S-Ethylcholestane	**780**

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

N/A - Not Applicable

02/07/06 16:02

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34880.D
Acq On : 27 Jan 2006 3:50 am
Operator : AC
Sample : 0601045-01
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 06 11:49:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 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	85142	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.91	217	52233	1459.71	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 145.97%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	55565m	759.43	ng/mL	
84) Hopane (T19)	52.47	191	55627m	760.28	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	21327m	291.49	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	13878	189.68	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.14	191	12318m	168.36	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	6202	84.77	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.20	191	5174	70.72	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	5077m	69.39	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	5780m	79.00	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	5896m	80.58	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	5642m	77.11	ng/ml	
94) C29 Tricyclic Terpane-22R	47.47	191	4969m	67.91	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	13464	184.02	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.71	191	4061m	55.50	ng/mL	
97) C30 Tricyclic Terpane-22R	48.96	191	3323m	45.42	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.17	191	18715	255.79	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	6760m	92.39	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.17	191	2320	31.71	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	34501m	471.54	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.18	191	11429m	156.21	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	3520m	48.11	ng/ml	
104) 30-Normoretane (T17)	51.86	191	8103	110.75	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	6301m	86.12	ng/ml	
106) Moretane (T20)	53.17	191	8746m	119.54	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	14521	198.46	ng/ml	100
108) 30-Homohopane-22R (T22)	54.52	191	13806	188.69	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	9826	134.30	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	6346	86.73	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	5340m	72.98	ng/ml	
112) 30,31-Trishomohopane-22R (	58.67	191	2966m	40.54	ng/ml	
113) Tetrakishomohopane-22S (T3	60.74	191	2814m	38.46	ng/ml	
114) Tetrakishomohopane-22R (T3	61.66	191	2065	28.22	ng/ml	100
115) Pentakishomohopane-22S (T3	63.96	191	2214m	30.26	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	1589m	21.72	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	8863m	247.69	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	4808	134.37	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.54	217	3447m	96.33	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	3828m	106.98	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	17049	476.45	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	2384m	66.62	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34880.D
Acq On : 27 Jan 2006 3:50 am
Operator : AC
Sample : 0601045-01
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 06 11:49:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	442	12.35	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	2556m	71.43	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.38	217	8841	247.07	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	5043m	140.93	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	6944m	194.06	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	7463m	208.56	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	6914	193.22	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.83	218	6527m	182.40	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	8133m	227.29	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	10130m	283.09	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	5943m	166.08	ng/ml	

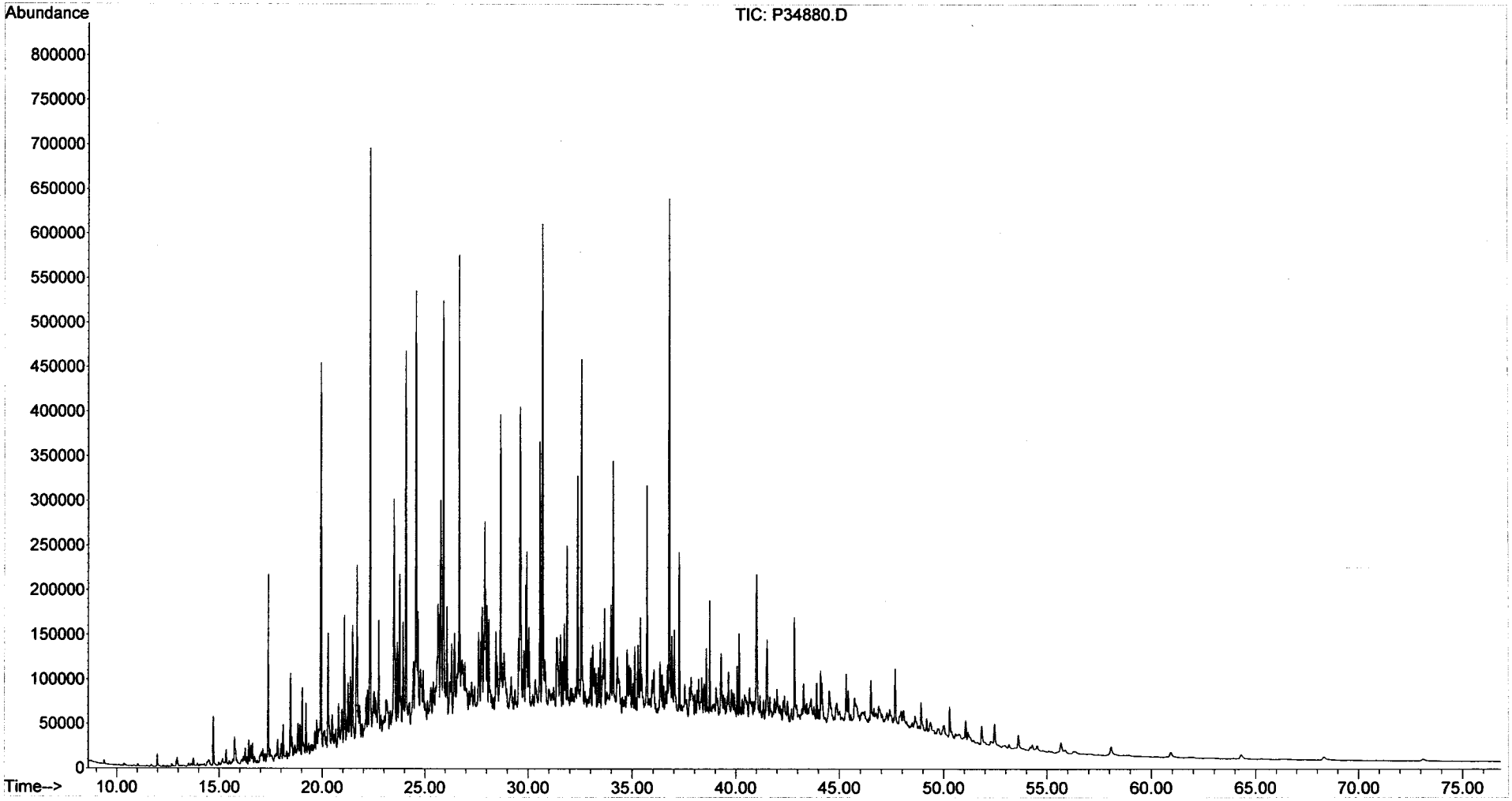
- RF + Rpt conc and cw 2/8/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34880.D
Acq On : 27 Jan 2006 3:50 am
Operator : AC
Sample : 0601045-01
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 06 11:49:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-30 (3.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-02**
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
01/12/06	01/17/06	01/19/06	01/31/06	57.6	5.69	15.63	1	AC

Parameter	Result	Parameter	Result
Naphthalene	16000	Fluoranthene	28000
C1-Naphthalenes	13000	Pyrene	36000
C2-Naphthalenes	17000	C1-Fluoranthenes/Pyrenes	36000
C3-Naphthalenes	21000	C2-Fluoranthenes/Pyrenes	17000
C4-Naphthalenes	16000	C3-Fluoranthenes/Pyrenes	7100
Biphenyl	1700	C4-Fluoranthenes/Pyrenes	3200
Dibenzofuran	1200	Naphthobenzothiophenes	5000
Acenaphthylene	5500	C1-Naphthobenzothiophenes	5700
Acenaphthene	11000	C2-Naphthobenzothiophenes	4200
Fluorene	4800	C3-Naphthobenzothiophenes	2700
C1-Fluorenes	7400	C4-Naphthobenzothiophenes	1400
C2-Fluorenes	13000	Benz[a]anthracene	15000
C3-Fluorenes	11000	Chrysene/Triphenylene	17000
Anthracene	15000	C1-Chrysenes	14000
Phenanthrene	28000	C2-Chrysenes	7400
C1-Phenanthrenes/Anthracenes	42000	C3-Chrysenes	4400
C2-Phenanthrenes/Anthracenes	34000	C4-Chrysenes	1500
C3-Phenanthrenes/Anthracenes	16000	Benzo[b]fluoranthene	8100
C4-Phenanthrenes/Anthracenes	5300	Benzo[k]fluoranthene	8100
Retene	3200	Benzo[a]fluoranthene	2900
Dibenzothiophene	4000	Benzo[e]pyrene	7800
C1-Dibenzothiophenes	9600	Benzo[a]pyrene	13000
C2-Dibenzothiophenes	12000	Perylene	2300
C3-Dibenzothiophenes	8500	Indeno[1,2,3-cd]pyrene	6100
C4-Dibenzothiophenes	3600	Dibenz[a,h]anthracene	1700
Benzo(b)fluorene	5500	Benzo[g,h,i]perylene	6600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	98	50-130
Benzo[b]fluoranthene-d12	100	50-130

N/A - Not Applicable

02/06/06 17:54

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-30 (3.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-02**
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
01/12/06	01/17/06	01/19/06	01/31/06	57.6	5.69	15.63	1	AC

Parameter	Result
Carbazole	690

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	98	50-130
Benzo[b]fluoranthene-d12	100	50-130

N/A - Not Applicable

02/06/06 17:54

Quantitation Report (QT Reviewed)

MAL for WW 2/4/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28034.D
Acq On : 31 Jan 2006 8:02 pm
Operator : AC
Sample : 0601045-02
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 16:26:50 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	27.10	164	42544m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.61	240	71468m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.77	152	96731m	1106.34 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 110.63%		
58) Pyrene-d10	38.69	212	225864	1255.92 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 125.59%		
81) Benzo[b]fluoranthene-d12	47.55	264	186813m	1275.00 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 127.50%		
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	657244	3434.64 ng/mL#	100
10) C1-Naphthalenes	22.89	142	538199m	2812.53 ng/mL	
11) C2-Naphthalenes	25.74	156	696521m	3639.89 ng/mL	
12) C3-Naphthalenes	28.08	170	846834m	4425.40 ng/mL	
13) C4-Naphthalenes	30.84	184	632498m	3305.32 ng/mL	
15) 2-Methylnaphthalene	22.89	142	293425	2408.93 ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	244584	2109.62 ng/mL#	100
22) Biphenyl	24.77	154	53321m	347.73 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	102045m	972.53 ng/mL	
24) Dibenzofuran	27.87	168	44425m	262.45 ng/mL	
25) Acenaphthylene	26.49	152	218449m	1150.58 ng/mL	
26) Acenaphthene	27.22	153	276049	2372.00 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	64230m	701.43 ng/mL	
28) Fluorene	29.24	166	137468m	1010.23 ng/mL	
29) C1-Fluorenes	31.47	180	211156m	1551.75 ng/mL	
30) C2-Fluorenes	33.66	194	359066m	2638.71 ng/mL	
31) C3-Fluorenes	35.66	208	301794m	2217.83 ng/mL	
32) Dibenzothiophene	32.59	184	154522m	849.26 ng/mL	
36) OTP	34.77	198	19868m	109.20 ng/mL	
37) C1-Dibenzothiophenes	34.36	198	386573m	2124.62 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	464870m	2554.95 ng/mL	
39) C3-Dibenzothiophenes	37.85	226	323748m	1779.33 ng/mL	
40) C4-Dibenzothiophenes	39.53	240	136940m	752.63 ng/mL	
41) Phenanthrene	33.08	178	1129627	5818.03 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.04	192	1709517m	8804.70 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.32	206	1363401m	7022.06 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.15	220	668265m	3441.83 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.08	234	215117m	1107.94 ng/mL	
52) Retene	40.08	234	29512m	669.88 ng/mL	
53) Anthracene	33.25	178	563956m	3127.47 ng/mL	
54) Carbazole	33.94	167	24901m	144.89 ng/mL	
55) 1-Methylphenanthrene	35.60	192	278563m	2068.07 ng/mL	
56) Fluoranthene	37.87	202	1206023m	5819.79 ng/mL	
57) Benzo(b)fluorene	40.39	216	147110m	1154.77 ng/mL	
59) Pyrene	38.77	202	1595366	7518.15 ng/mL	96
60) C1-Fluoranthenes/Pyrenes	40.15	216	1578686m	7439.55 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	750099m	3534.84 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	317606m	1496.72 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.33	258	140075m	660.10 ng/mL	
64) Naphthobenzothiophene	42.62	234	133854m	680.22 ng/ml	

RPT wrong and 2/8/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28034.D
Acq On : 31 Jan 2006 8:02 pm
Operator : AC
Sample : 0601045-02
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 01 16:26:50 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)
65) Naphthobenzothiophene-2,1-	42.62	234	134153m	681.74	ng/mL	
66) Naphthobenzothiophene-1,2-	42.96	234	35482	180.31	ng/mL#	27
67) Naphthobenzothiophene-2,3-	43.26	234	38756m	196.95	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	234860m	1193.52	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	171797m	873.04	ng/ml	
70) C3-Naphthobenzothiophenes	47.65	276	110010m	559.05	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	57924m	294.36	ng/mL	
73) Benz[a]anthracene	43.55	228	646821m	3169.23	ng/mL	
74) Chrysene	43.71	228	710769m	3467.36	ng/mL	
75) Chrysene/Triphenylene	43.71	228	711911m	3472.94	ng/mL	
76) C1-Chrysenes	45.19	242	602301m	2938.22	ng/mL	
77) C2-Chrysenes	46.90	256	327271m	1596.54	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	9747	47.55	ng/mL	100
79) C3-Chrysenes	48.55	270	187858m	916.43	ng/mL	
80) C4-Chrysenes	50.19	284	64472m	314.52	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	372217	1698.10	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	389469	1699.12	ng/mL	99
84) Benzo[a]fluoranthene	48.04	252	139063m	606.68	ng/mL	
85) Benzo[e]pyrene	48.68	252	347408	1644.10	ng/mL	98
86) Benzo[a]pyrene	48.87	252	569789m	2697.17	ng/mL	
87) Perylene	49.21	252	99770	473.72	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.95	276	268910m	1284.29	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	71691m	364.09	ng/mL	
90) Benzo[g,h,i]perylene	55.33	276	303599	1390.63	ng/mL	100

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

```
File        :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28034.D
Operator    : AC
Acquired    : 31 Jan 2006   8:02 pm using AcqMethod FRNC2B.M
Instrument :   PAHINST2
Sample Name: 0601045-02
Misc Info   : 1X
Vial Number: 18
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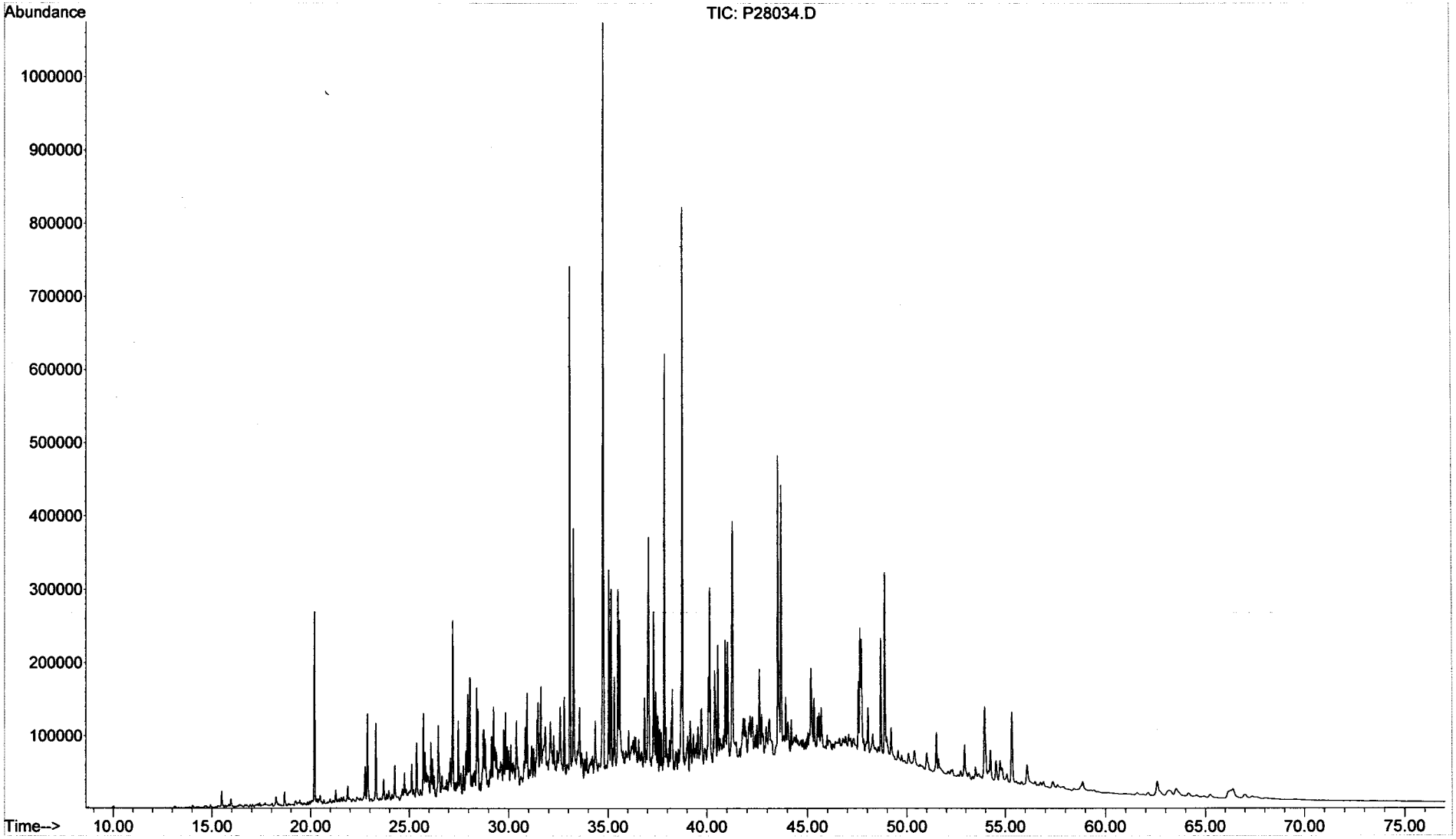


Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-30 (3.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-02**
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
01/12/06	01/17/06	01/19/06	01/27/06	57.6	5.69	5.72	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1100**	30,31-Bishomohopane-22S	**1900**
C24 Tricyclic Terpane	**660**	30,31-Bishomohopane-22R	**1400**
C25 Tricyclic Terpane	**700**	30,31-Trishomohopane-22S	**1200**
C24 Tetracyclic Terpane	**760**	30,31-Trishomohopane-22R	**750**
C26 Tricyclic Terpane-22S	**310**	Tetrakishomohopane-22S	**720**
C26 Tricyclic Terpane-22R	**310**	Tetrakishomohopane-22R	**480**
C28 Tricyclic Terpane-22S	**370**	Pentakishomohopane-22S	**670**
C28 Tricyclic Terpane-22R	**380**	Pentakishomohopane-22R	**480**
C29 Tricyclic Terpane-22S	**450**	13b(H),17a(H)-20S-Diacholestane	**1400**
C29 Tricyclic Terpane-22R	**450**	13b(H),17a(H)-20R-Diacholestane	**760**
18a-22,29,30-Trisnorneohopane-TS	**1800**	13b,17a-20S-Methyldiacholestane	**660**
C30 Tricyclic Terpane-22S	**350**	14a(H),17a(H)-20S-Cholestane	**860**
C30 Tricyclic Terpane-22R	**340**	14a(H),17a(H)-20R-Cholestane	**2600**
17a(H)-22,29,30-Trisnorhopane-TM	**2000**	13b,17a-20R-Ethyldiacholestane	**470**
17a/b,21b/a 28,30-Bisnorhopane	**450**	13a,17b-20S-Ethyldiacholestane	**160**
17a(H),21b(H)-25-Norhopane	**210**	14a,17a-20S-Methylcholestane	**520**
30-Norhopane	**6200**	14a,17a-20R-Methylcholestane	**1100**
18a(H)-30-Norneohopane-C29Ts	**1500**	14a(H),17a(H)-20S-Ethylcholestane	**1100**
17a(H)-Diahopane	**310**	14a(H),17a(H)-20R-Ethylcholestane	**1400**
30-Normoretane	**1000**	14b(H),17b(H)-20R-Cholestane	**1400**
18a(H)&18b(H)-Oleananes	**700**	14b(H),17b(H)-20S-Cholestane	**1400**
Hopane	**8400**	14b,17b-20R-Methylcholestane	**1300**
Moretane	**1000**	14b,17b-20S-Methylcholestane	**1700**
30-Homohopane-22S	**2900**	14b(H),17b(H)-20R-Ethylcholestane	**2100**
30-Homohopane-22R	**2500**	14b(H),17b(H)-20S-Ethylcholestane	**1800**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	97	50-130

N/A - Not Applicable

02/07/06 16:02

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34881.D
Acq On : 27 Jan 2006 5:19 am
Operator : AC
Sample : 0601045-02
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 06 11:54:28 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	87608	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	124626	3384.79	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 338.48%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	363020m	4821.90	ng/mL	
84) Hopane (T19)	52.50	191	363020m	4821.90	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	48477m	643.91	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	28620	380.15	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	30234m	401.59	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	32667	433.91	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	13388	177.83	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	13526m	179.66	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	15977m	212.22	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	16303m	216.55	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	19567	259.90	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	19363m	257.19	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	79807m	1060.05	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	15076m	200.25	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	14713m	195.43	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	85982	1142.08	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	19450m	258.35	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	8939	118.73	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	266835m	3544.30	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	65950m	876.00	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	13255m	176.06	ng/ml	
104) 30-Normoretane (T17)	51.89	191	43223	574.12	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	29979m	398.20	ng/ml	
106) Moretane (T20)	53.19	191	44237m	587.59	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	126383m	1678.71	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	109369	1452.72	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	82856	1100.55	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	58359	775.17	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	49783m	661.25	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	32456m	431.10	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	30862	409.93	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	20871	277.22	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	28890m	383.74	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	20811m	276.43	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	29728m	807.40	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	16099m	437.24	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	13989m	379.94	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	18079m	491.02	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	55244m	1500.40	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	9900m	268.88	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34881.D
Acq On : 27 Jan 2006 5:19 am
Operator : AC
Sample : 0601045-02
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 06 11:54:28 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

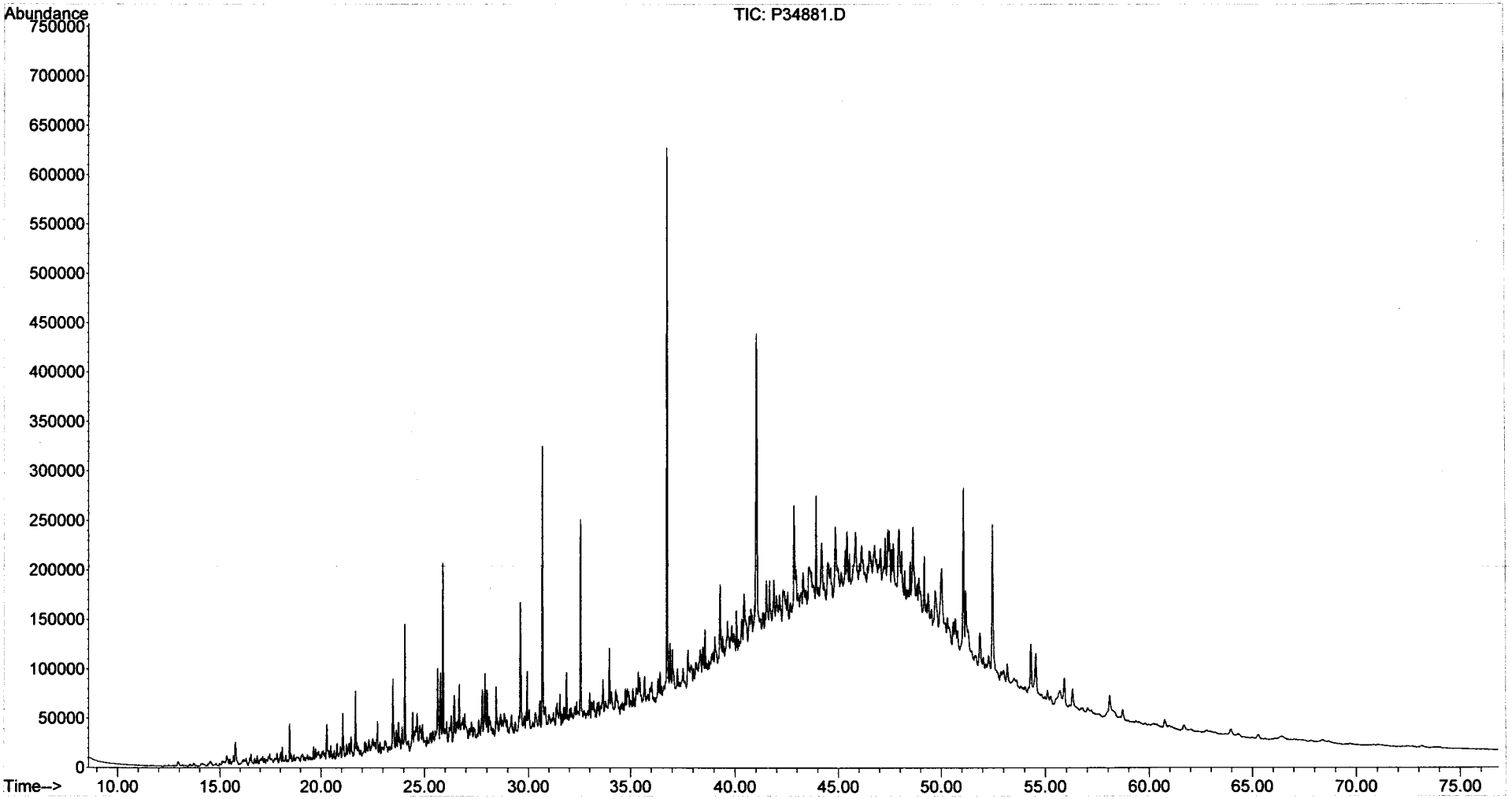
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	3272	88.87	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	10859m	294.93	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	23084m	626.95	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	22540m	612.18	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	29045m	788.85	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	30184	819.78	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	30054m	816.25	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	27303m	741.54	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	35333m	959.63	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	45158m	1226.47	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	38253m	1038.93	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 : P34881.D
Acq On : 27 Jan 2006 5:19 am
Operator : AC
Sample : 0601045-02
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 06 11:54:28 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-29 (7.4-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-03**
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
01/12/06	01/17/06	01/19/06	01/28/06	79.0	5.31	11.92	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**820000**	E	Fluoranthene	**110000**
C1-Naphthalenes	**620000**	E	Pyrene	**160000**
C2-Naphthalenes	**320000**		C1-Fluoranthenes/Pyrenes	**140000**
C3-Naphthalenes	**88000**		C2-Fluoranthenes/Pyrenes	**34000**
C4-Naphthalenes	**20000**		C3-Fluoranthenes/Pyrenes	**7800**
Biphenyl	**55000**		C4-Fluoranthenes/Pyrenes	**1800**
Dibenzofuran	**14000**		Naphthobenzothiophenes	**13000**
Acenaphthylene	**160000**		C1-Naphthobenzothiophenes	**9700**
Acenaphthene	**180000**		C2-Naphthobenzothiophenes	**3900**
Fluorene	**140000**		C3-Naphthobenzothiophenes	**1700**
C1-Fluorenes	**60000**		C4-Naphthobenzothiophenes	**620**
C2-Fluorenes	**26000**		Benz[a]anthracene	**58000**
C3-Fluorenes	**11000**		Chrysene/Triphenylene	**54000**
Anthracene	**130000**		C1-Chrysenes	**34000**
Phenanthrene	**390000**	E	C2-Chrysenes	**10000**
C1-Phenanthrenes/Anthracenes	**210000**		C3-Chrysenes	**3400**
C2-Phenanthrenes/Anthracenes	**64000**		C4-Chrysenes	**1800**
C3-Phenanthrenes/Anthracenes	**16000**		Benzo[b]fluoranthene	**17000**
C4-Phenanthrenes/Anthracenes	**2900**		Benzo[k]fluoranthene	**27000**
Retene	**1100**		Benzo[a]fluoranthene	**11000**
Dibenzothiophene	**46000**		Benzo[e]pyrene	**18000**
C1-Dibenzothiophenes	**41000**		Benzo[a]pyrene	**41000**
C2-Dibenzothiophenes	**23000**		Perylene	**6100**
C3-Dibenzothiophenes	**9300**		Indeno[1,2,3-cd]pyrene	**14000**
C4-Dibenzothiophenes	**2000**		Dibenz[a,h]anthracene	**3900**
Benzo(b)fluorene	**25000**		Benzo[g,h,i]perylene	**14000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	91	50-130
Benzo[b]fluoranthene-d12	93	50-130

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

02/07/06 17:17

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-29 (7.4-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-03**
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
01/12/06	01/17/06	01/19/06	01/28/06	79.0	5.31	11.92	10	AC

Parameter	Result
Carbazole	3600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	91	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable

02/07/06 17:17

Quantitation Report (QT Reviewed)

MAL for WW 2/4/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27958.D
Acq On : 28 Jan 2006 3:53 am
Operator : AC
Sample : 0601045-03-~~RE~~
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 01 13:23:48 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	35305m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.63	240	54850m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	10480m	144.44 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 14.44%#		
58) Pyrene-d10	38.70	212	22783	152.66 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 15.27%#		
81) Benzo[b]fluoranthene-d12	47.56	264	17620	156.69 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 15.67%#		
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	4585490	28876.36 ng/mL# E	100
10) C1-Naphthalenes	22.91	142	3491553m	21987.47 ng/mL E	
11) C2-Naphthalenes	25.76	156	1762318m	11097.90 ng/mL	
12) C3-Naphthalenes	28.10	170	492479m	3101.30 ng/mL	
13) C4-Naphthalenes	30.86	184	110525m	696.01 ng/mL	
15) 2-Methylnaphthalene	22.91	142	2187046	21636.52 ng/mL# E	100
16) 1-Methylnaphthalene	23.35	142	1296784	13478.61 ng/mL# E	100
22) Biphenyl	24.80	154	245765	1931.38 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	268394m	3082.38 ng/mL	
24) Dibenzofuran	27.89	168	71561	509.45 ng/mL	99
25) Acenaphthylene	26.52	152	911966m	5788.24 ng/mL	
26) Acenaphthene	27.25	153	622739m	6448.18 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	39359m	517.96 ng/mL	
28) Fluorene	29.27	166	567127m	5022.28 ng/mL	
29) C1-Fluorenes	31.51	180	237010m	2098.88 ng/mL	
30) C2-Fluorenes	33.69	194	104460m	925.06 ng/mL	
31) C3-Fluorenes	36.38	208	44676m	395.63 ng/mL	
32) Dibenzothiophene	32.61	184	246342m	1631.51 ng/mL	
37) C1-Dibenzothiophenes	34.38	198	217450m	1440.16 ng/mL	
38) C2-Dibenzothiophenes	36.07	212	120782m	799.93 ng/mL	
39) C3-Dibenzothiophenes	37.87	226	49276m	326.35 ng/mL	
40) C4-Dibenzothiophenes	39.56	240	10685m	70.77 ng/mL	
41) Phenanthrene	33.11	178	2207232	13699.07 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.17	192	1198548m	7438.73 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	380577m	2362.03 ng/mL	
49) 5AA IS BKGD	37.11	206	18486m	114.73 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	88972m	552.20 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.09	234	16383m	101.68 ng/mL	
52) Retene	40.09	234	1386m	37.91 ng/mL	
53) Anthracene	33.28	178	678008m	4530.90 ng/mL	
54) Carbazole	33.96	167	18086m	126.81 ng/mL	
55) 1-Methylphenanthrene	35.61	192	188303	1684.62 ng/mL	100
56) Fluoranthene	37.89	202	690259m	4013.90 ng/mL	
57) Benzo(b)fluorene	40.41	216	94678m	895.58 ng/mL	
59) Pyrene	38.78	202	1009199	5730.99 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.17	216	840233m	4771.48 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.84	230	213218m	1210.81 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.71	244	48584m	275.90 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	11093m	62.99 ng/mL	
64) Naphthobenzothiophene	42.63	234	46439	284.38 ng/ml#	66

Quantitation Report (QT Reviewed)

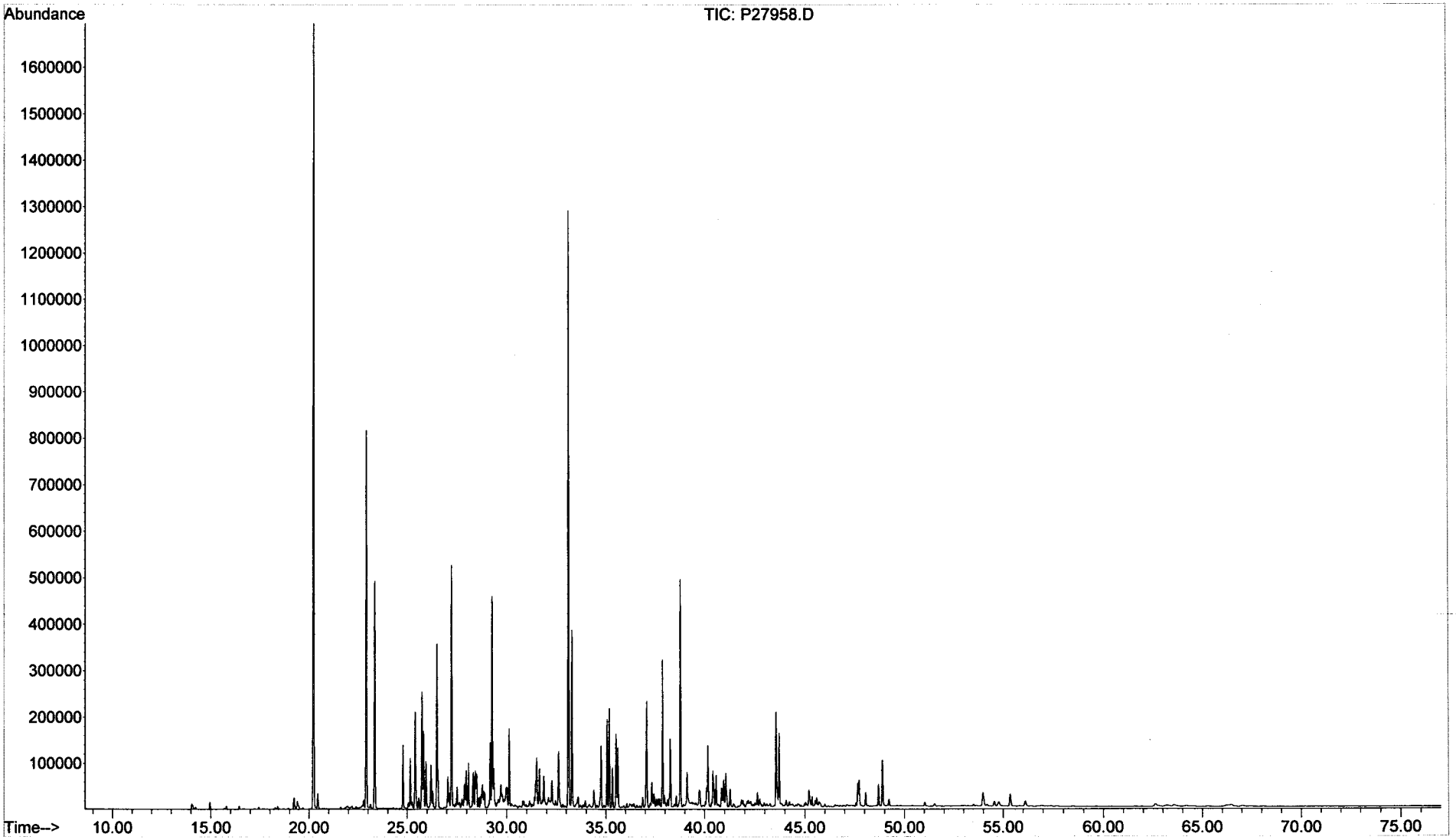
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27958.D
Acq On : 28 Jan 2006 3:53 am
Operator : AC
Sample : 0601045-03-~~B~~E
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 01 13:23:48 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)
65) Naphthobenzothiophene-2,1-	42.63	234	46439	284.38	ng/mL#	66
66) Naphthobenzothiophene-1,2-	42.98	234	13290m	81.39	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	15861m	97.13	ng/mL	
68) C1-Naphthobenzothiophenes	44.03	248	55587m	340.41	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	22371m	137.00	ng/ml	
70) C3-Naphthobenzothiophenes	47.44	276	9603m	58.81	ng/ml	
71) C4-Naphthobenzothiophenes	50.36	290	3542m	21.69	ng/mL	
73) Benz[a]anthracene	43.56	228	319726m	2041.19	ng/mL	
74) Chrysene	43.72	228	298902m	1899.92	ng/mL	
75) Chrysene/Triphenylene	43.72	228	299133m	1901.39	ng/mL	
76) C1-Chrysenes	45.21	242	185929m	1181.83	ng/mL	
77) C2-Chrysenes	46.92	256	58252m	370.27	ng/mL	
78) BBF-d12 Surr BKGD	47.56	256	1432	9.10	ng/mL	100
79) C3-Chrysenes	48.56	270	18564m	118.00	ng/mL	
80) C4-Chrysenes	49.62	284	10157m	64.56	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	100682	598.49	ng/mL	100
83) Benzo[k]fluoranthene	47.72	252	164786	936.71	ng/mL	98
84) Benzo[a]fluoranthene	48.06	252	70804m	402.48	ng/mL	
85) Benzo[e]pyrene	48.69	252	104838	646.46	ng/mL	99
86) Benzo[a]pyrene	48.90	252	232403m	1433.41	ng/mL	
87) Perylene	49.22	252	34573	213.89	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.97	276	80563m	501.33	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	20764m	137.40	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	81848	488.49	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27958.D
Operator : AC
Acquired : 28 Jan 2006 3:53 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-03-~~RE~~
Misc Info : 10X
Vial Number: 20



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-29 (7.4-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-03E**
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
01/12/06	01/17/06	01/19/06	01/31/06	79.0	5.31	11.92	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**930000**		Fluoranthene	290	U
C1-Naphthalenes	**680000**		Pyrene	250	U
C2-Naphthalenes	470	U	C1-Fluoranthenes/Pyrenes	250	U
C3-Naphthalenes	470	U	C2-Fluoranthenes/Pyrenes	250	U
C4-Naphthalenes	470	U	C3-Fluoranthenes/Pyrenes	250	U
Biphenyl	260	U	C4-Fluoranthenes/Pyrenes	250	U
Dibenzofuran	340	U	Naphthobenzothiophenes	340	U
Acenaphthylene	510	U	C1-Naphthobenzothiophenes	340	U
Acenaphthene	330	U	C2-Naphthobenzothiophenes	340	U
Fluorene	330	U	C3-Naphthobenzothiophenes	340	U
C1-Fluorenes	330	U	C4-Naphthobenzothiophenes	340	U
C2-Fluorenes	330	U	Benz[a]anthracene	450	U
C3-Fluorenes	330	U	Chrysene/Triphenylene	310	U
Anthracene	380	U	C1-Chrysenes	310	U
Phenanthrene	**440000**		C2-Chrysenes	310	U
C1-Phenanthrenes/Anthracenes	410	U	C3-Chrysenes	310	U
C2-Phenanthrenes/Anthracenes	410	U	C4-Chrysenes	310	U
C3-Phenanthrenes/Anthracenes	410	U	Benzo[b]fluoranthene	300	U
C4-Phenanthrenes/Anthracenes	410	U	Benzo[k]fluoranthene	580	U
Retene	410	U	Benzo[a]fluoranthene	580	U
Dibenzothiophene	320	U	Benzo[e]pyrene	390	U
C1-Dibenzothiophenes	320	U	Benzo[a]pyrene	400	U
C2-Dibenzothiophenes	320	U	Perylene	490	U
C3-Dibenzothiophenes	320	U	Indeno[1,2,3-cd]pyrene	680	U
C4-Dibenzothiophenes	320	U	Dibenz[a,h]anthracene	540	U
Benzo(b)fluorene	290	U	Benzo[g,h,i]perylene	500	U

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

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

02/07/06 17:28

Quantitation Report (QT Reviewed)

MAL for WW
2/04/06

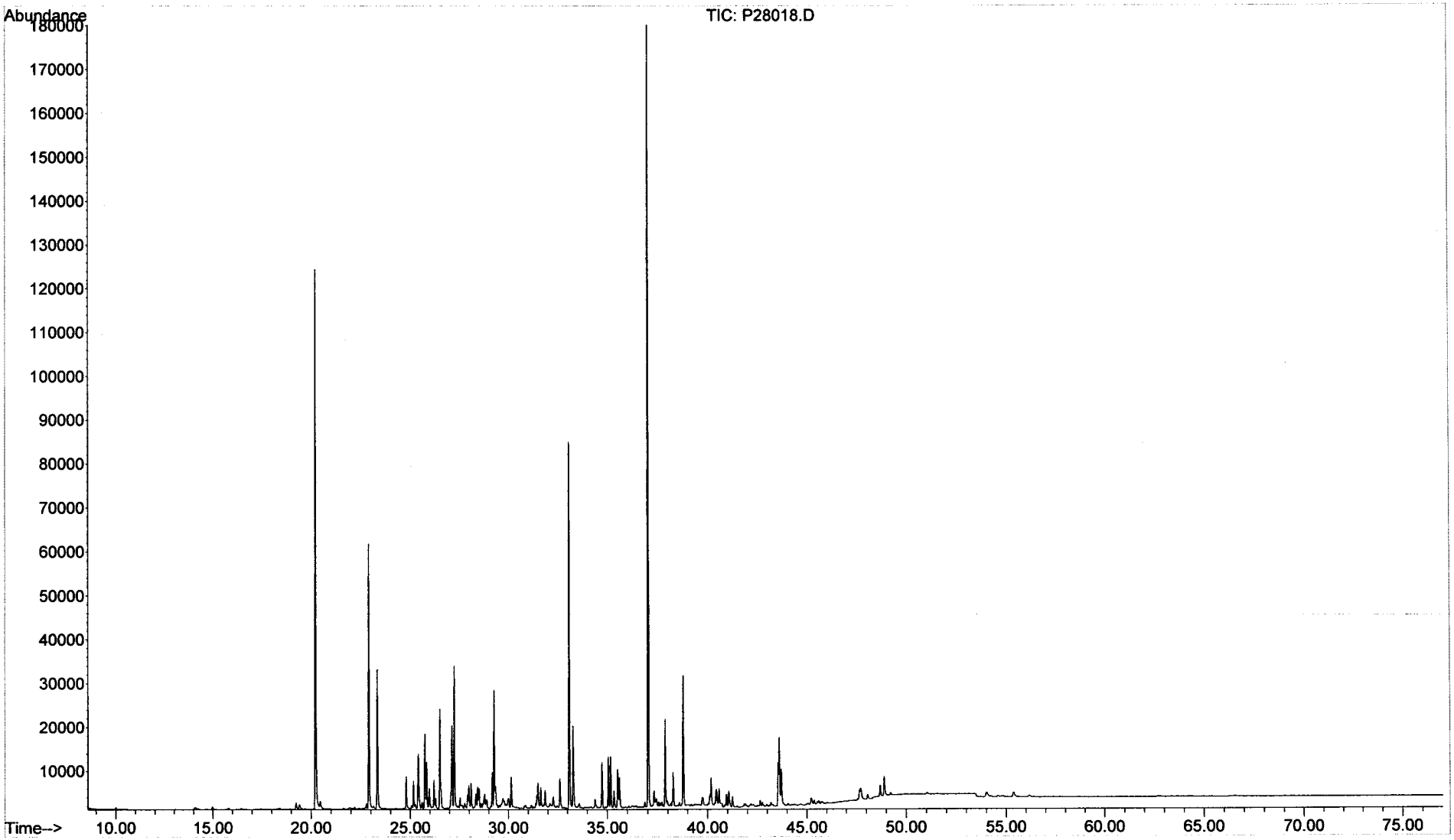
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28018.D
Acq On : 31 Jan 2006 2:40 am
Operator : AC
Sample : 0601045-03-RE2
Misc : 100X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 01 14:25:26 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	21722m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	34035m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	624m	13.98	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.40%#		
58) Pyrene-d10	38.69	212	1411m	15.37	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.54%#		
81) Benzo[b]fluoranthene-d12	47.57	264	977m	14.00	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.40%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						Qvalue
9) Naphthalene	20.20	128	318931m	3264.30	ng/mL	
10) C1-Naphthalenes	22.90	142	235028m	2405.54	ng/mL	
15) 2-Methylnaphthalene	22.90	142	145592	2341.01	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	86583m	1462.67	ng/mL	
41) Phenanthrene	33.09	178	151955	1532.83	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28018.D
Operator : AC
Acquired : 31 Jan 2006 2:40 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-03-RE2
Misc Info : 100X
Vial Number: 10



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-29 (7.4-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-03**
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
01/12/06	01/17/06	01/19/06	01/27/06	79.0	5.31	1.23	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	55		30,31-Bishomohopane-22S	110	G
C24 Tricyclic Terpane	35		30,31-Bishomohopane-22R	14	
C25 Tricyclic Terpane	30		30,31-Trishomohopane-22S	14	G
C24 Tetracyclic Terpane	13		30,31-Trishomohopane-22R	8.6	
C26 Tricyclic Terpane-22S	13		Tetrakishomohopane-22S	4.9	
C26 Tricyclic Terpane-22R	12		Tetrakishomohopane-22R	4.6	
C28 Tricyclic Terpane-22S	15		Pentakishomohopane-22S	0.83	U
C28 Tricyclic Terpane-22R	15		Pentakishomohopane-22R	0.83	U
C29 Tricyclic Terpane-22S	13		13b(H),17a(H)-20S-Diacholestane	43	
C29 Tricyclic Terpane-22R	14		13b(H),17a(H)-20R-Diacholestane	24	
18a-22,29,30-Trisnorneohopane-TS	27		13b,17a-20S-Methyldiacholestane	18	
C30 Tricyclic Terpane-22S	8.2		14a(H),17a(H)-20S-Cholestane	32	
C30 Tricyclic Terpane-22R	8.2		14a(H),17a(H)-20R-Cholestane	96	
17a(H)-22,29,30-Trisnorhopane-TM	39		13b,17a-20R-Ethyldiacholestane	11	
17a/b,21b/a 28,30-Bisnorhopane	17		13a,17b-20S-Ethyldiacholestane	3.3	
17a(H),21b(H)-25-Norhopane	5.5		14a,17a-20S-Methylcholestane	13	
30-Norhopane	77		14a,17a-20R-Methylcholestane	51	
18a(H)-30-Norneohopane-C29Ts	24		14a(H),17a(H)-20S-Ethylcholestane	28	
17a(H)-Diahopane	7.7		14a(H),17a(H)-20R-Ethylcholestane	37	
30-Normoretane	19		14b(H),17b(H)-20R-Cholestane	42	
18a(H)&18b(H)-Oleananes	13		14b(H),17b(H)-20S-Cholestane	37	
Hopane	120		14b,17b-20R-Methylcholestane	39	
Moretane	34		14b,17b-20S-Methylcholestane	42	
30-Homohopane-22S	33		14b(H),17b(H)-20R-Ethylcholestane	45	
30-Homohopane-22R	38		14b(H),17b(H)-20S-Ethylcholestane	34	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	103	50-130

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

02/07/06 16:13

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34882.D
Acq On : 27 Jan 2006 6:49 am
Operator : AC
Sample : 0601045-03
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 06 12:00:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

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	43.43	240	81598	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	43.93	217	571693	16670.54	ng/ml	0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	1667.05%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	29021m	413.87	ng/mL	
84) Hopane (T19)	52.47	191	29133m	415.47	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	13149m	187.52	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	8444	120.42	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.21	191	7158m	102.08	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	3087	44.02	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	3035m	43.28	ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	2934m	41.84	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	3548	50.60	ng/ml	100
92) C28 Tricyclic Terpane-22R	46.75	191	3622m	51.65	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	3151	44.94	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	3386m	48.29	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	6540m	93.27	ng/ml	
96) C30 Tricyclic Terpane-22S	48.71	191	1957m	27.91	ng/mL	
97) C30 Tricyclic Terpane-22R	48.96	191	1970	28.09	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.17	191	9302	132.66	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	4053m	57.80	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.17	191	1310m	18.68	ng/ml	
101) 30-Norhopane (T15)	51.06	191	18359m	261.82	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.18	191	5857m	83.53	ng/ml	
103) 17a(H)-Diahopane (X)	51.30	191	1844m	26.30	ng/ml	
104) 30-Normoretane (T17)	51.86	191	4448m	63.43	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	3199m	45.62	ng/ml	
106) Moretane (T20)	53.16	191	8225m	117.30	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	7916	112.89	ng/ml	100
108) 30-Homohopane-22R (T22)	54.52	191	9131	130.22	ng/ml	100
G 109) 30,31-Bishomohopane-22S (T	55.83	191	26274	374.69	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.25	191	3250m	46.35	ng/ml	
G 111) 30,31-Trishomohopane-22S (	58.09	191	3441m	49.07	ng/ml	
112) 30,31-Trishomohopane-22R (	58.67	191	2055	29.31	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.75	191	1180	16.83	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.64	191	1109m	15.82	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	5056	147.43	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	2766m	80.66	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	2080m	60.65	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.41	217	3714m	108.30	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	11256	328.22	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	1260m	36.74	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	48.49	217	387m	11.28	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.66	217	1525m	44.47	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34882.D
Acq On : 27 Jan 2006 6:49 am
Operator : AC
Sample : 0601045-03
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 06 12:00:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

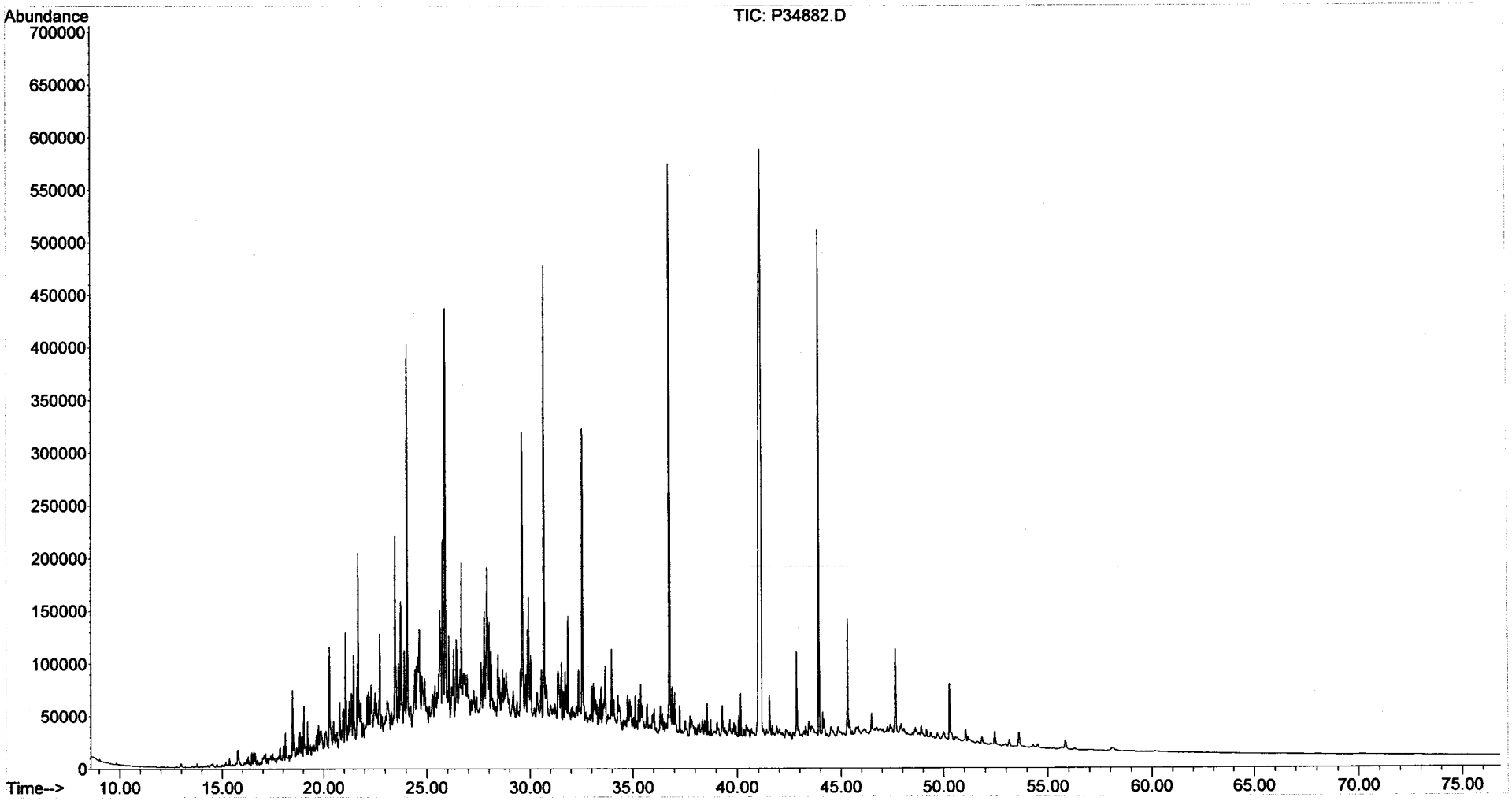
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
126) 14a,17a-20R-Methylcholesta	49.38	217	5986m	174.55	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	3310m	96.52	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.67	217	4306m	125.56	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.50	218	4855m	141.57	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	4353m	126.93	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.82	218	4515m	131.66	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.90	218	4898m	142.83	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.98	218	5235m	152.65	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	4042m	117.86	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 : P34882.D
Acq On : 27 Jan 2006 6:49 am
Operator : AC
Sample : 0601045-03
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 06 12:00:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-28 (4.9-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-04**
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
01/12/06	01/17/06	01/19/06	01/31/06	88.4	5.47	6.56	1	AC

Parameter	Result	Parameter	Result
Naphthalene	3800	Fluoranthene	5400
C1-Naphthalenes	1700	Pyrene	7400
C2-Naphthalenes	1400	C1-Fluoranthenes/Pyrenes	6700
C3-Naphthalenes	1300	C2-Fluoranthenes/Pyrenes	2700
C4-Naphthalenes	1500	C3-Fluoranthenes/Pyrenes	1100
Biphenyl	170	C4-Fluoranthenes/Pyrenes	440
Dibenzofuran	110	Naphthobenzothiophenes	800
Acenaphthylene	610	C1-Naphthobenzothiophenes	850
Acenaphthene	1900	C2-Naphthobenzothiophenes	630
Fluorene	370	C3-Naphthobenzothiophenes	460
C1-Fluorenes	1000	C4-Naphthobenzothiophenes	260
C2-Fluorenes	2200	Benz[a]anthracene	2500
C3-Fluorenes	1800	Chrysene/Triphenylene	2500
Anthracene	1500	C1-Chrysenes	2200
Phenanthrene	1900	C2-Chrysenes	1000
C1-Phenanthrenes/Anthracenes	4700	C3-Chrysenes	620
C2-Phenanthrenes/Anthracenes	5300	C4-Chrysenes	280
C3-Phenanthrenes/Anthracenes	2600	Benzo[b]fluoranthene	1000
C4-Phenanthrenes/Anthracenes	720	Benzo[k]fluoranthene	1100
Retene	250	Benzo[a]fluoranthene	390
Dibenzothiophene	300	Benzo[e]pyrene	1000
C1-Dibenzothiophenes	1200	Benzo[a]pyrene	1800
C2-Dibenzothiophenes	2200	Perylene	310
C3-Dibenzothiophenes	1300	Indeno[1,2,3-cd]pyrene	720
C4-Dibenzothiophenes	540	Dibenz[a,h]anthracene	210
Benzo(b)fluorene	1200	Benzo[g,h,i]perylene	740

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	91	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable

02/06/06 17:55

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-28 (4.9-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-04**
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
01/12/06	01/17/06	01/19/06	01/31/06	88.4	5.47	6.56	1	AC

Parameter	Result
Carbazole	92

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	91	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable

02/06/06 17:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28036.D
Acq On : 31 Jan 2006 9:36 pm
Operator : AC
Sample : 0601045-04
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

MAL for WW 2/4/6

Quant Time: Feb 01 16:36:00 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	40103m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.61	240	68394m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.75	152	205865m	2497.86 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 249.79%#		
58) Pyrene-d10	38.68	212	469346	2768.67 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 276.87%#		
81) Benzo[b]fluoranthene-d12	47.54	264	398751m	2843.79 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 284.38%#		
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	504128m	2794.84 ng/mL	
10) C1-Naphthalenes	23.31	142	229990m	1275.04 ng/mL	
11) C2-Naphthalenes	25.72	156	180772m	1002.18 ng/mL	
12) C3-Naphthalenes	28.41	170	174066m	965.01 ng/mL	
13) C4-Naphthalenes	30.39	184	200728m	1112.82 ng/mL	
15) 2-Methylnaphthalene	22.88	142	85127	741.41 ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	143941	1317.11 ng/mL#	100
22) Biphenyl	24.77	154	18138m	125.49 ng/mL	
23) 2,6-Dimethylnaphthalene	25.39	156	21378m	216.14 ng/mL	
24) Dibenzofuran	27.87	168	13162m	82.49 ng/mL	
25) Acenaphthylene	26.49	152	80607m	450.40 ng/mL	
26) Acenaphthene	27.22	153	155421	1416.77 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.77	170	9871m	114.36 ng/mL	
28) Fluorene	29.24	166	34630m	269.98 ng/mL	
29) C1-Fluorenes	31.84	180	97125m	757.20 ng/mL	
30) C2-Fluorenes	33.65	194	203702m	1588.09 ng/mL	
31) C3-Fluorenes	35.66	208	169070m	1318.09 ng/mL	
32) Dibenzothiophene	32.59	184	37769m	220.22 ng/mL	
36) OTP	34.79	198	40587	236.65 ng/mL#	100
37) C1-Dibenzothiophenes	34.36	198	192572m	1122.81 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	272872m	1591.00 ng/mL	
39) C3-Dibenzothiophenes	37.85	226	169413m	987.78 ng/mL	
40) C4-Dibenzothiophenes	39.53	240	68899m	401.72 ng/mL	
41) Phenanthrene	33.07	178	252994m	1382.33 ng/mL	
47) C1-Phenanthrenes/Anthracen	35.04	192	638243m	3487.29 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.32	206	716510m	3914.94 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.15	220	347666m	1899.61 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.35	234	97413m	532.25 ng/mL	
52) Retene	40.07	234	7518m	181.03 ng/mL	
53) Anthracene	33.25	178	185538m	1091.55 ng/mL	
54) Carbazole	33.94	167	11025m	68.06 ng/mL	
55) 1-Methylphenanthrene	35.60	192	91399m	719.86 ng/mL	
56) Fluoranthene	37.86	202	770445	3944.17 ng/mL	100
57) Benzo(b)fluorene	40.39	216	104075m	866.68 ng/mL	
59) Pyrene	38.75	202	1093873	5468.64 ng/mL	97
60) C1-Fluoranthenes/Pyrenes	40.14	216	990260m	4950.64 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.89	230	395332m	1976.40 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.08	244	157620m	788.00 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.32	258	64873m	324.32 ng/mL	
64) Naphthobenzothiophene	42.62	234	69333m	373.79 ng/ml	

Quantitation Report (QT Reviewed)

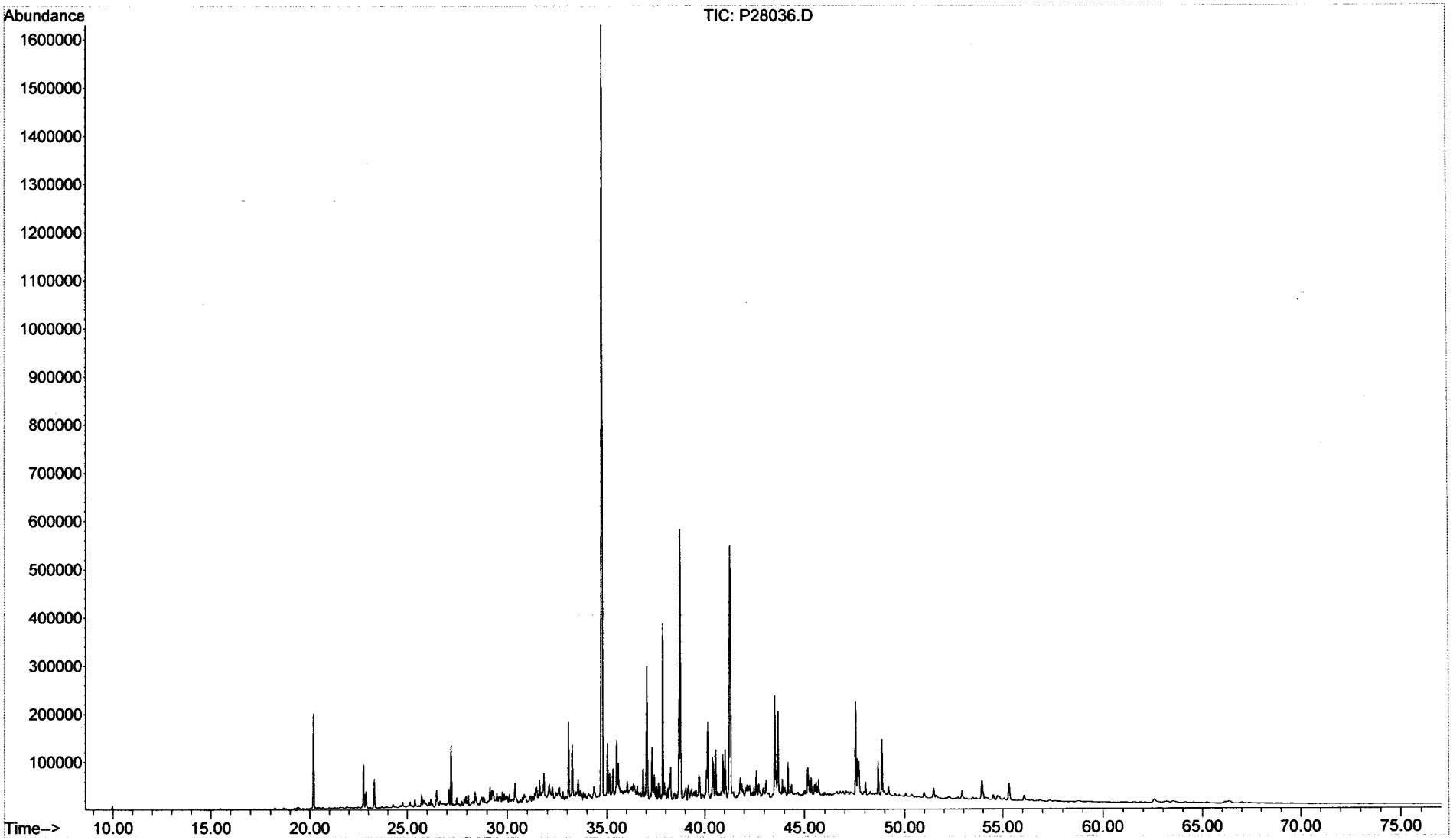
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28036.D
Acq On : 31 Jan 2006 9:36 pm
Operator : AC
Sample : 0601045-04
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 01 16:36:00 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	68909m	371.50	ng/mL	
66) Naphthobenzothiophene-1,2-	42.95	234	19911	107.34	ng/mL#	27
67) Naphthobenzothiophene-2,3-	43.25	234	20625m	111.19	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	115926m	624.98	ng/ml	
69) C2-Naphthobenzothiophenes	46.06	262	86266m	465.07	ng/ml	
70) C3-Naphthobenzothiophenes	47.63	276	62552m	337.23	ng/ml	
71) C4-Naphthobenzothiophenes	48.75	290	35979m	193.97	ng/mL	
73) Benz[a]anthracene	43.55	228	358718m	1836.61	ng/mL	
74) Chrysene	43.71	228	356875m	1819.20	ng/mL	
75) Chrysene/Triphenylene	43.71	228	358507m	1827.52	ng/mL	
76) C1-Chrysenes	45.18	242	311723m	1589.04	ng/mL	
77) C2-Chrysenes	47.54	256	163834m	835.16	ng/mL	
78) BBF-d12 Surr BKGD	47.54	256	15979	81.45	ng/mL	100
79) C3-Chrysenes	48.53	270	90317m	460.40	ng/mL	
80) C4-Chrysenes	50.17	284	40443m	206.16	ng/mL	
82) Benzo[b]fluoranthene	47.62	252	162710m	775.67	ng/mL	
83) Benzo[k]fluoranthene	47.70	252	180198m	821.47	ng/mL	
84) Benzo[a]fluoranthene	48.03	252	63029m	287.33	ng/mL	
85) Benzo[e]pyrene	48.66	252	152109m	752.21	ng/mL	
86) Benzo[a]pyrene	48.86	252	263689m	1304.31	ng/mL	
87) Perylene	49.20	252	45770	227.09	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.93	276	106787m	532.93	ng/mL	
89) Dibenz[a,h]anthracene	53.97	278	29061m	154.22	ng/mL	
90) Benzo[g,h,i]perylene	55.32	276	113492	543.21	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28036.D
Operator : AC
Acquired : 31 Jan 2006 9:36 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-04
Misc Info : 1X
Vial Number: 19



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-28 (4.9-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-04**
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
01/12/06	01/17/06	01/19/06	01/27/06	88.4	5.47	1.26	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	94	30,31-Bishomohopane-22S	230
C24 Tricyclic Terpane	58	30,31-Bishomohopane-22R	170
C25 Tricyclic Terpane	63	30,31-Trishomohopane-22S	160
C24 Tetracyclic Terpane	62	30,31-Trishomohopane-22R	100
C26 Tricyclic Terpane-22S	28	Tetrakishomohopane-22S	100
C26 Tricyclic Terpane-22R	28	Tetrakishomohopane-22R	75
C28 Tricyclic Terpane-22S	38	Pentakishomohopane-22S	120
C28 Tricyclic Terpane-22R	36	Pentakishomohopane-22R	90
C29 Tricyclic Terpane-22S	44	13b(H),17a(H)-20S-Diacholestane	120
C29 Tricyclic Terpane-22R	48	13b(H),17a(H)-20R-Diacholestane	70
18a-22,29,30-Trisnorneohopane-TS	170	13b,17a-20S-Methyldiacholestane	56
C30 Tricyclic Terpane-22S	36	14a(H),17a(H)-20S-Cholestane	70
C30 Tricyclic Terpane-22R	37	14a(H),17a(H)-20R-Cholestane	200
17a(H)-22,29,30-Trisnorhopane-TM	200	13b,17a-20R-Ethyldiacholestane	37
17a/b,21b/a 28,30-Bisnorhopane	55	13a,17b-20S-Ethyldiacholestane	13
17a(H),21b(H)-25-Norhopane	23	14a,17a-20S-Methylcholestane	41
30-Norhopane	600	14a,17a-20R-Methylcholestane	87
18a(H)-30-Norneohopane-C29Ts	160	14a(H),17a(H)-20S-Ethylcholestane	72
17a(H)-Diahopane	32	14a(H),17a(H)-20R-Ethylcholestane	110
30-Normoretane	100	14b(H),17b(H)-20R-Cholestane	70
18a(H)&18b(H)-Oleananes	110	14b(H),17b(H)-20S-Cholestane	77
Hopane	880	14b,17b-20R-Methylcholestane	87
Moretane	130	14b,17b-20S-Methylcholestane	120
30-Homohopane-22S	350	14b(H),17b(H)-20R-Ethylcholestane	140
30-Homohopane-22R	300	14b(H),17b(H)-20S-Ethylcholestane	97

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	76	50-130

N/A - Not Applicable

02/07/06 16:08

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34883.D
Acq On : 27 Jan 2006 8:18 am
Operator : AC
Sample : 0601045-04
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 06 12:08:15 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	81026	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	410248	12047.27	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1204.73%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	234361m	3365.83	ng/mL	
84) Hopane (T19)	52.48	191	234410m	3366.53	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	25156m	361.28	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	15385	220.96	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	16818m	241.54	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	16615	238.62	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	7387	106.09	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	7564m	108.63	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	10019m	143.89	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	9560m	137.30	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	11695	167.96	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	12713m	182.58	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	46184m	663.28	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	9702	139.34	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	9923m	142.51	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	52565	754.92	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	14736m	211.63	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	6074	87.23	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	158845m	2281.29	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	41397m	594.53	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	8613m	123.70	ng/ml	
104) 30-Normoretane (T17)	51.88	191	28117	403.81	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	28466m	408.82	ng/ml	
106) Moretane (T20)	53.18	191	34694	498.27	ng/ml	100
107) 30-Homohopane-22S (T21)	54.29	191	92537	1328.99	ng/ml	100
108) 30-Homohopane-22R (T22)	54.54	191	79108	1136.13	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	62524	897.95	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	44350	636.94	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	41592m	597.33	ng/ml	
112) 30,31-Trishomohopane-22R (	58.69	191	27779	398.95	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.75	191	28153	404.33	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.67	191	20001	287.25	ng/ml	100
115) Pentakishomohopane-22S (T3	63.95	191	30702m	440.93	ng/ml	
116) Pentakishomohopane-22R (T3	65.29	191	23948m	343.93	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	16259	477.46	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	9120	267.82	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.55	217	7342m	215.60	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	9112m	267.58	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	26070	765.57	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	4876m	143.19	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34883.D
Acq On : 27 Jan 2006 8:18 am
Operator : AC
Sample : 0601045-04
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 06 12:08:15 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

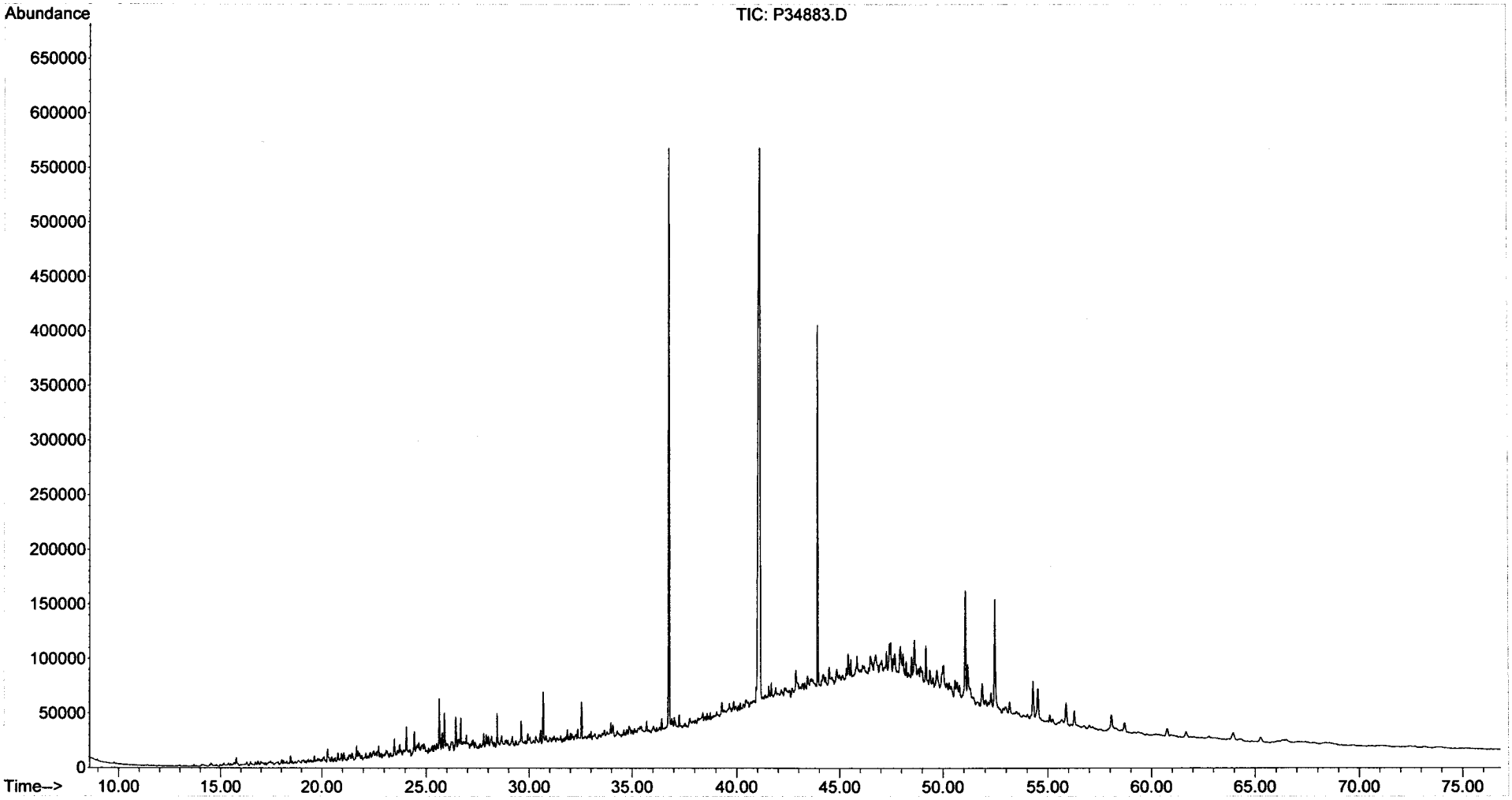
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	1647	48.37 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	5301m	155.67 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	11408m	335.01 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	9407m	276.24 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	14029m	411.97 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	9151m	268.73 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	10022m	294.30 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	11375m	334.04 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	15061m	442.28 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	18017m	529.08 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	12720m	373.53 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 : P34883.D
Acq On : 27 Jan 2006 8:18 am
Operator : AC
Sample : 0601045-04
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 06 12:08:15 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-27 (4.9-5.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-05**
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
01/12/06	01/17/06	01/19/06	01/28/06	49.8	5.68	39.06	10	AC

Parameter	Result		Parameter	Result
Naphthalene	1400000	E	Fluoranthene	350000
C1-Naphthalenes	1400000	E	Pyrene	510000
C2-Naphthalenes	900000		C1-Fluoranthenes/Pyrenes	510000
C3-Naphthalenes	330000		C2-Fluoranthenes/Pyrenes	140000
C4-Naphthalenes	83000		C3-Fluoranthenes/Pyrenes	38000
Biphenyl	110000		C4-Fluoranthenes/Pyrenes	12000
Dibenzofuran	41000		Naphthobenzothiophenes	54000
Acenaphthylene	60000		C1-Naphthobenzothiophenes	47000
Acenaphthene	670000		C2-Naphthobenzothiophenes	22000
Fluorene	360000		C3-Naphthobenzothiophenes	9200
C1-Fluorenes	220000		C4-Naphthobenzothiophenes	4300
C2-Fluorenes	110000		Benz[a]anthracene	190000
C3-Fluorenes	51000		Chrysene/Triphenylene	180000
Anthracene	530000		C1-Chrysenes	140000
Phenanthrene	1100000		C2-Chrysenes	48000
C1-Phenanthrenes/Anthracenes	830000		C3-Chrysenes	19000
C2-Phenanthrenes/Anthracenes	280000		C4-Chrysenes	8600
C3-Phenanthrenes/Anthracenes	77000		Benzo[b]fluoranthene	63000
C4-Phenanthrenes/Anthracenes	13000		Benzo[k]fluoranthene	77000
Retene	5500		Benzo[a]fluoranthene	34000
Dibenzothiophene	160000		Benzo[e]pyrene	59000
C1-Dibenzothiophenes	190000		Benzo[a]pyrene	120000
C2-Dibenzothiophenes	120000		Perylene	18000
C3-Dibenzothiophenes	50000		Indeno[1,2,3-cd]pyrene	41000
C4-Dibenzothiophenes	14000		Dibenz[a,h]anthracene	12000
Benzo(b)fluorene	94000		Benzo[g,h,i]perylene	39000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	89	50-130
Benzo[b]fluoranthene-d12	91	50-130

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

02/08/06 07:42

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-27 (4.9-5.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-05**
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
01/12/06	01/17/06	01/19/06	01/28/06	49.8	5.68	39.06	10	AC

Parameter	Result
Carbazole	7200

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	89	50-130
Benzo[b]fluoranthene-d12	91	50-130

N/A - Not Applicable

02/08/06 07:42

Quantitation Report (QT Reviewed)

MAL for WW 2/4/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27962.D
Acq On : 28 Jan 2006 7:05 am
Operator : AC
Sample : 0601045-05-~~BE~~
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 01 13:42:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	35065m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	54677m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	3072	42.63	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.26%#			
58) Pyrene-d10	38.70	212	6773m	45.69	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.57%#			
81) Benzo[b]fluoranthene-d12	47.56	264	5223m	46.59	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.66%#			
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	1594072	10107.11	ng/mL#E	100
10) C1-Naphthalenes	22.91	142	1607150m	10190.03	ng/mLE	
11) C2-Naphthalenes	25.76	156	1022571m	6483.54	ng/mL	
12) C3-Naphthalenes	28.10	170	372005m	2358.67	ng/mL	
13) C4-Naphthalenes	30.86	184	94434m	598.75	ng/mL	
15) 2-Methylnaphthalene	22.91	142	1001709	9977.77	ng/mL#E	100
16) 1-Methylnaphthalene	23.33	142	598338	6261.61	ng/mL#E	100
22) Biphenyl	24.80	154	97936	774.91	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	142527m	1648.06	ng/mL	
24) Dibenzofuran	27.89	168	41162m	295.04	ng/mL	
25) Acenaphthylene	26.52	152	68457m	437.47	ng/mL	
26) Acenaphthene	27.25	153	465174m	4849.63	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	26290m	348.34	ng/mL	
28) Fluorene	29.27	166	288661m	2573.78	ng/mL	
29) C1-Fluorenes	31.50	180	174470m	1555.62	ng/mL	
30) C2-Fluorenes	33.69	194	89281m	796.05	ng/mL	
31) C3-Fluorenes	36.38	208	41284m	368.10	ng/mL	
32) Dibenzothiophene	32.61	184	169984m	1133.50	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	206545m	1377.30	ng/mL	
38) C2-Dibenzothiophenes	36.07	212	131845m	879.18	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	53859m	359.15	ng/mL	
40) C4-Dibenzothiophenes	39.56	240	15201m	101.36	ng/mL	
41) Phenanthrene	33.11	178	1283727	8021.92	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.17	192	962097m	6012.08	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	347404m	2170.90	ng/mL	
49) 5AA IS BKGD	37.11	206	17181m	107.36	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	89167m	557.20	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.09	234	14945m	93.39	ng/mL	
52) Retene	40.09	234	1437m	39.57	ng/mL	
53) Anthracene	33.28	178	574268m	3863.91	ng/mL	
54) Carbazole	33.96	167	7417m	52.36	ng/mL	
55) 1-Methylphenanthrene	35.61	192	154245	1389.37	ng/mL	100
56) Fluoranthene	37.89	202	434688	2545.04	ng/mL	100
57) Benzo(b)fluorene	40.41	216	71533m	681.28	ng/mL	
59) Pyrene	38.78	202	641863	3669.93	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.17	216	649354m	3712.76	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.91	230	183728m	1050.49	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.10	244	47782m	273.20	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	14564m	83.27	ng/mL	
64) Naphthobenzothiophene	42.64	234	39251	242.01	ng/ml#	66

Quantitation Report (QT Reviewed)

MAL for WW 2/4/6

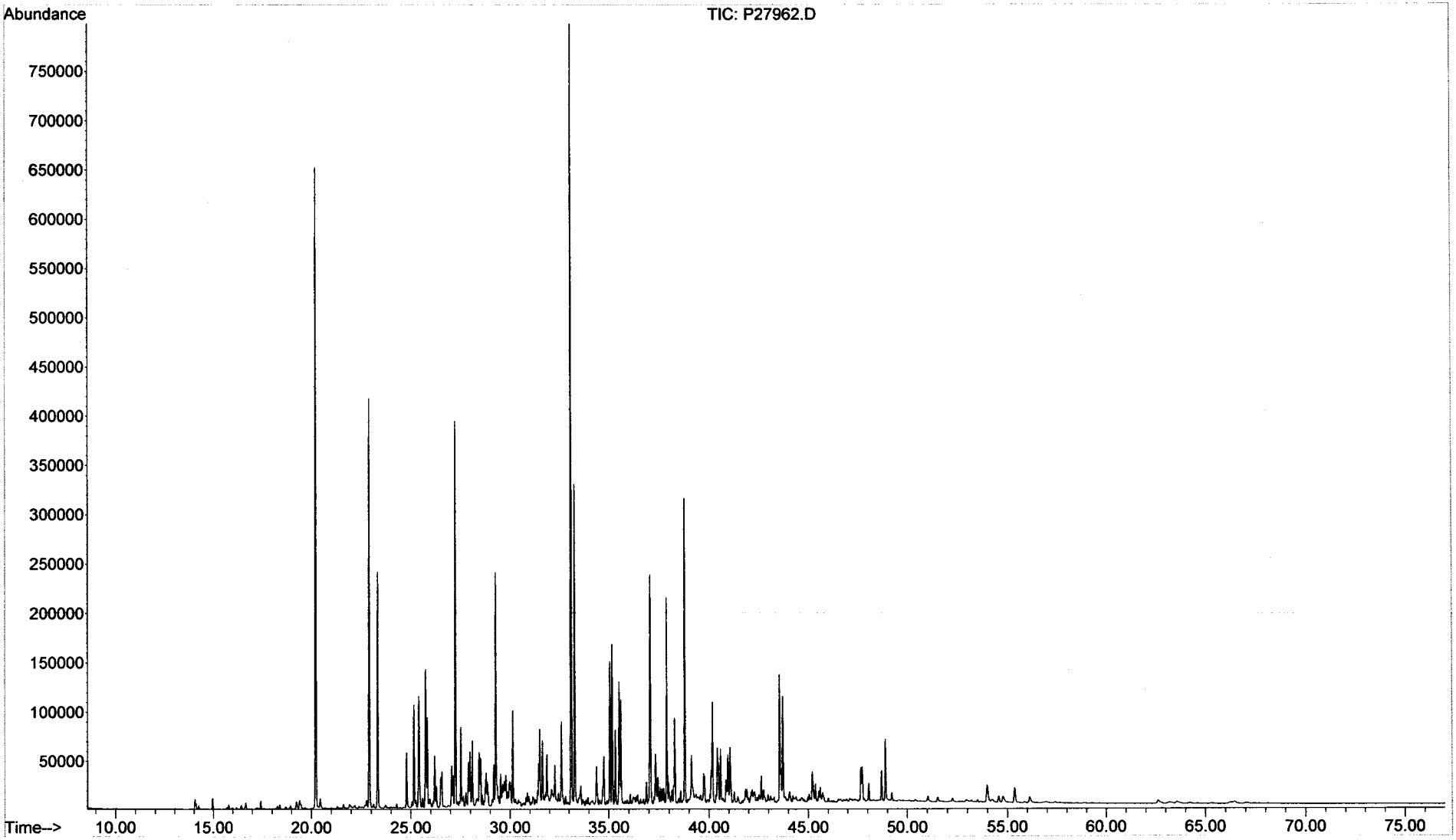
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27962.D
Acq On : 28 Jan 2006 7:05 am
Operator : AC
Sample : 0601045-05-~~RE~~
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 01 13:42:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.64	234	39251	242.01	ng/mL#	66
66) Naphthobenzothiophene-1,2-	42.98	234	11283m	69.57	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	13019m	80.27	ng/mL	
68) C1-Naphthobenzothiophenes	44.03	248	55648m	343.11	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	25193m	155.33	ng/ml	
70) C3-Naphthobenzothiophenes	47.67	276	10805m	66.62	ng/ml	
71) C4-Naphthobenzothiophenes	48.77	290	5068m	31.25	ng/mL	
73) Benz[a]anthracene	43.56	228	217681m	1394.11	ng/mL	
74) Chrysene	43.72	228	211605m	1349.29	ng/mL	
75) Chrysene/Triphenylene	43.72	228	210163m	1340.09	ng/mL	
76) C1-Chrysenes	45.21	242	160435m	1023.00	ng/mL	
77) C2-Chrysenes	46.92	256	55140m	351.60	ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	912	5.82	ng/mL	100
79) C3-Chrysenes	48.56	270	21276m	135.67	ng/mL	
80) C4-Chrysenes	49.62	284	9804m	62.51	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	76374	455.43	ng/mL	100
83) Benzo[k]fluoranthene	47.72	252	98272	560.39	ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	43010m	245.26	ng/mL	
85) Benzo[e]pyrene	48.70	252	68814m	425.67	ng/mL	
86) Benzo[a]pyrene	48.90	252	144230m	892.39	ng/mL	
87) Perylene	49.22	252	20795m	129.06	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.98	276	47727m	297.94	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	13219m	87.75	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	47506	284.43	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27962.D
Operator : AC
Acquired : 28 Jan 2006 7:05 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-05-RE
Misc Info : 10X
Vial Number: 22



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-27 (4.9-5.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-05E**
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
01/12/06	01/17/06	01/19/06	01/31/06	49.8	5.68	39.06	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1600000**		Fluoranthene	1400	U
C1-Naphthalenes	**1600000**		Pyrene	1200	U
C2-Naphthalenes	2300	U	C1-Fluoranthenes/Pyrenes	1200	U
C3-Naphthalenes	2300	U	C2-Fluoranthenes/Pyrenes	1200	U
C4-Naphthalenes	2300	U	C3-Fluoranthenes/Pyrenes	1200	U
Biphenyl	1300	U	C4-Fluoranthenes/Pyrenes	1200	U
Dibenzofuran	1600	U	Naphthobenzothiophenes	1700	U
Acenaphthylene	2500	U	C1-Naphthobenzothiophenes	1700	U
Acenaphthene	1600	U	C2-Naphthobenzothiophenes	1700	U
Fluorene	1600	U	C3-Naphthobenzothiophenes	1700	U
C1-Fluorenes	1600	U	C4-Naphthobenzothiophenes	1700	U
C2-Fluorenes	1600	U	Benz[a]anthracene	2200	U
C3-Fluorenes	1600	U	Chrysene/Triphenylene	1500	U
Anthracene	1800	U	C1-Chrysenes	1500	U
Phenanthrene	2000	U	C2-Chrysenes	1500	U
C1-Phenanthrenes/Anthracenes	2000	U	C3-Chrysenes	1500	U
C2-Phenanthrenes/Anthracenes	2000	U	C4-Chrysenes	1500	U
C3-Phenanthrenes/Anthracenes	2000	U	Benzo[b]fluoranthene	1500	U
C4-Phenanthrenes/Anthracenes	2000	U	Benzo[k]fluoranthene	2800	U
Retene	2000	U	Benzo[a]fluoranthene	2800	U
Dibenzothiophene	1500	U	Benzo[e]pyrene	1900	U
C1-Dibenzothiophenes	1500	U	Benzo[a]pyrene	1900	U
C2-Dibenzothiophenes	1500	U	Perylene	2400	U
C3-Dibenzothiophenes	1500	U	Indeno[1,2,3-cd]pyrene	3300	U
C4-Dibenzothiophenes	1500	U	Dibenz[a,h]anthracene	2600	U
Benzo(b)fluorene	1400	U	Benzo[g,h,i]perylene	2400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	85	50-130

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

02/08/06 07:50

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28020.D
Acq On : 31 Jan 2006 4:16 am
Operator : AC
Sample : 0601045-05-RE
Misc : 100X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 08 07:46:05 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

MS for WW 2/8/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	22346m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	35709m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	188m	4.09	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.41%#	
58) Pyrene-d10	38.70	212	447m	4.73	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.47%#	
81) Benzo[b]fluoranthene-d12	47.59	264	317m	4.33	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.43%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	20.21	128	113425m	1128.50	ng/mL	
10) C1-Naphthalenes	22.90	142	114911m	1143.29	ng/mL	✓

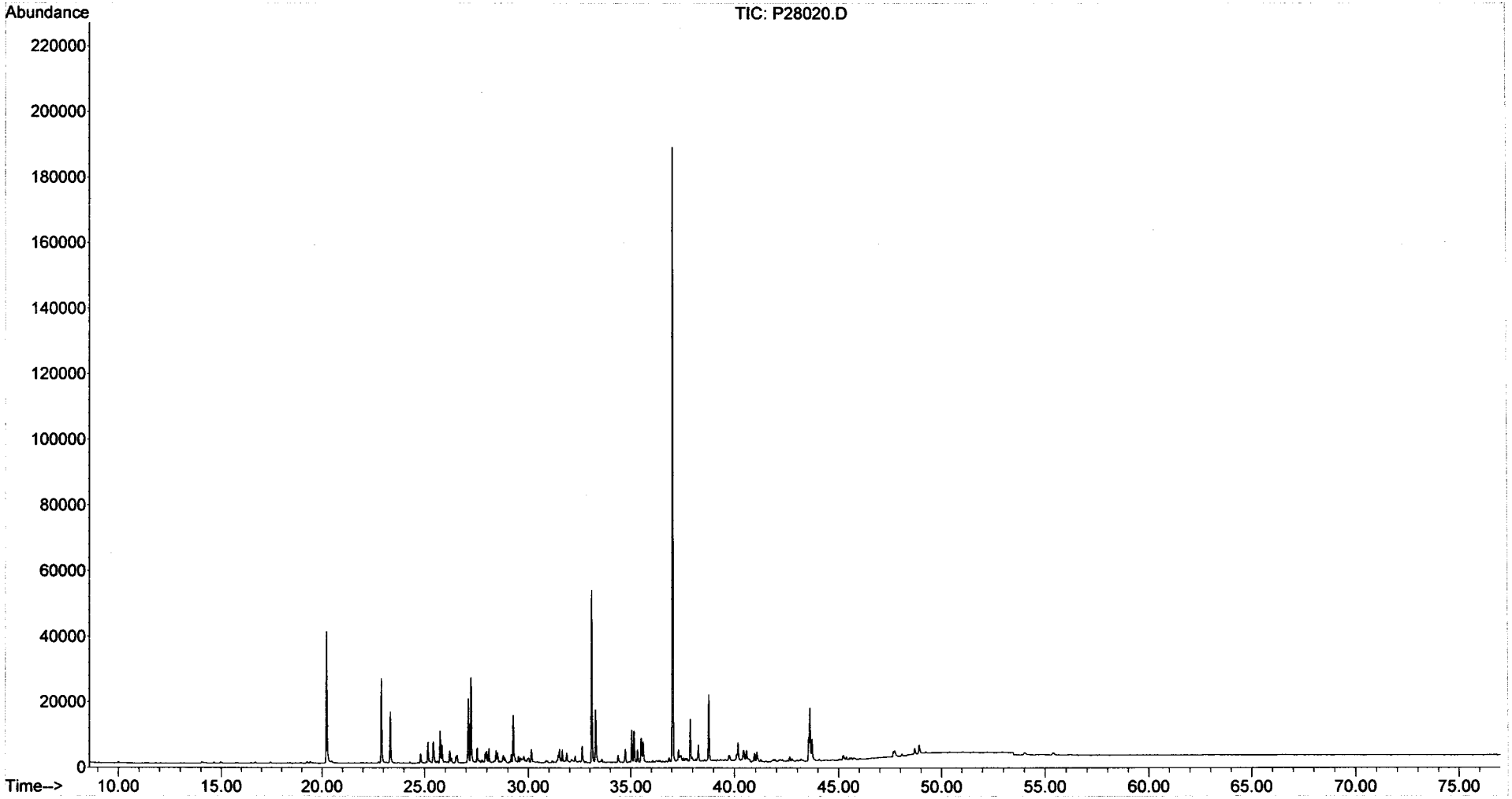
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MS 2/8/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN30\
Data File : P28020.D
Acq On : 31 Jan 2006 4:16 am
Operator : AC
Sample : 0601045-05-RE
Misc : 100X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 08 07:46:05 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-27 (4.9-5.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-05**
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
01/12/06	01/17/06	01/19/06	01/27/06	49.8	5.68	11.1	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2000**	30,31-Bishomohopane-22S	**2800**
C24 Tricyclic Terpane	**1300**	30,31-Bishomohopane-22R	**2000**
C25 Tricyclic Terpane	**1400**	30,31-Trishomohopane-22S	**1700**
C24 Tetracyclic Terpane	**1100**	30,31-Trishomohopane-22R	**1000**
C26 Tricyclic Terpane-22S	**630**	Tetrakishomohopane-22S	**1000**
C26 Tricyclic Terpane-22R	**650**	Tetrakishomohopane-22R	**720**
C28 Tricyclic Terpane-22S	**800**	Pentakishomohopane-22S	**810**
C28 Tricyclic Terpane-22R	**850**	Pentakishomohopane-22R	**660**
C29 Tricyclic Terpane-22S	**980**	13b(H),17a(H)-20S-Diacholestane	**2700**
C29 Tricyclic Terpane-22R	**990**	13b(H),17a(H)-20R-Diacholestane	**1500**
18a-22,29,30-Trisnorneohopane-TS	**3000**	13b,17a-20S-Methyldiacholestane	**1200**
C30 Tricyclic Terpane-22S	**850**	14a(H),17a(H)-20S-Cholestane	**1400**
C30 Tricyclic Terpane-22R	**730**	14a(H),17a(H)-20R-Cholestane	**5300**
17a(H)-22,29,30-Trisnorhopane-TM	**3500**	13b,17a-20R-Ethyldiacholestane	**790**
17a/b,21b/a 28,30-Bisnorhopane	**920**	13a,17b-20S-Ethyldiacholestane	**260**
17a(H),21b(H)-25-Norhopane	**410**	14a,17a-20S-Methylcholestane	**850**
30-Norhopane	**9400**	14a,17a-20R-Methylcholestane	**2500**
18a(H)-30-Norneohopane-C29Ts	**3000**	14a(H),17a(H)-20S-Ethylcholestane	**1900**
17a(H)-Diahopane	**770**	14a(H),17a(H)-20R-Ethylcholestane	**2600**
30-Normoretane	**2000**	14b(H),17b(H)-20R-Cholestane	**2700**
18a(H)&18b(H)-Oleananes	**1600**	14b(H),17b(H)-20S-Cholestane	**2500**
Hopane	**15000**	14b,17b-20R-Methylcholestane	**2600**
Moretane	**2200**	14b,17b-20S-Methylcholestane	**3200**
30-Homohopane-22S	**4200**	14b(H),17b(H)-20R-Ethylcholestane	**3800**
30-Homohopane-22R	**3900**	14b(H),17b(H)-20S-Ethylcholestane	**2700**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	106	50-130

N/A - Not Applicable

02/07/06 16:02

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34884.D
Acq On : 27 Jan 2006 9:47 am
Operator : AC
Sample : 0601045-05
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 06 12:13:31 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

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	84738	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	67843	1904.99	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 190.50%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	280159m	3847.31	ng/mL	
84) Hopane (T19)	52.49	191	280577m	3853.05	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	36332m	498.93	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	24559	337.26	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	26506m	364.00	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	19982	274.40	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	11759	161.48	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	12018m	165.04	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	14747m	202.51	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	15789m	216.82	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	18190	249.80	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	18404m	252.73	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	55409m	760.91	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	15847m	217.62	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	13608m	186.87	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	65309m	896.86	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	17153m	235.56	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	7640m	104.92	ng/ml	
101) 30-Norhopane (T15)	51.08	191	173471m	2382.21	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	54829m	752.95	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	14310m	196.51	ng/ml	
104) 30-Normoretane (T17)	51.88	191	37382	513.35	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	29138m	400.14	ng/ml	
106) Moretane (T20)	53.19	191	41160m	565.23	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	78741m	1081.32	ng/ml	
108) 30-Homohopane-22R (T22)	54.54	191	73063	1003.35	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.89	191	51619m	708.86	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.29	191	36165	496.64	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.07	191	31307m	429.93	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	19492	267.68	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.76	191	18887	259.37	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	13256	182.04	ng/ml	100
115) Pentakishomohopane-22S (T3	63.96	191	14971m	205.59	ng/ml	
116) Pentakishomohopane-22R (T3	65.28	191	12234m	168.00	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	24265	681.35	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	13978	392.49	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.55	217	10925m	306.77	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	12403m	348.27	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	47878m	1344.39	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	7183m	201.69	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34884.D
Acq On : 27 Jan 2006 9:47 am
Operator : AC
Sample : 0601045-05
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 06 12:13:31 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

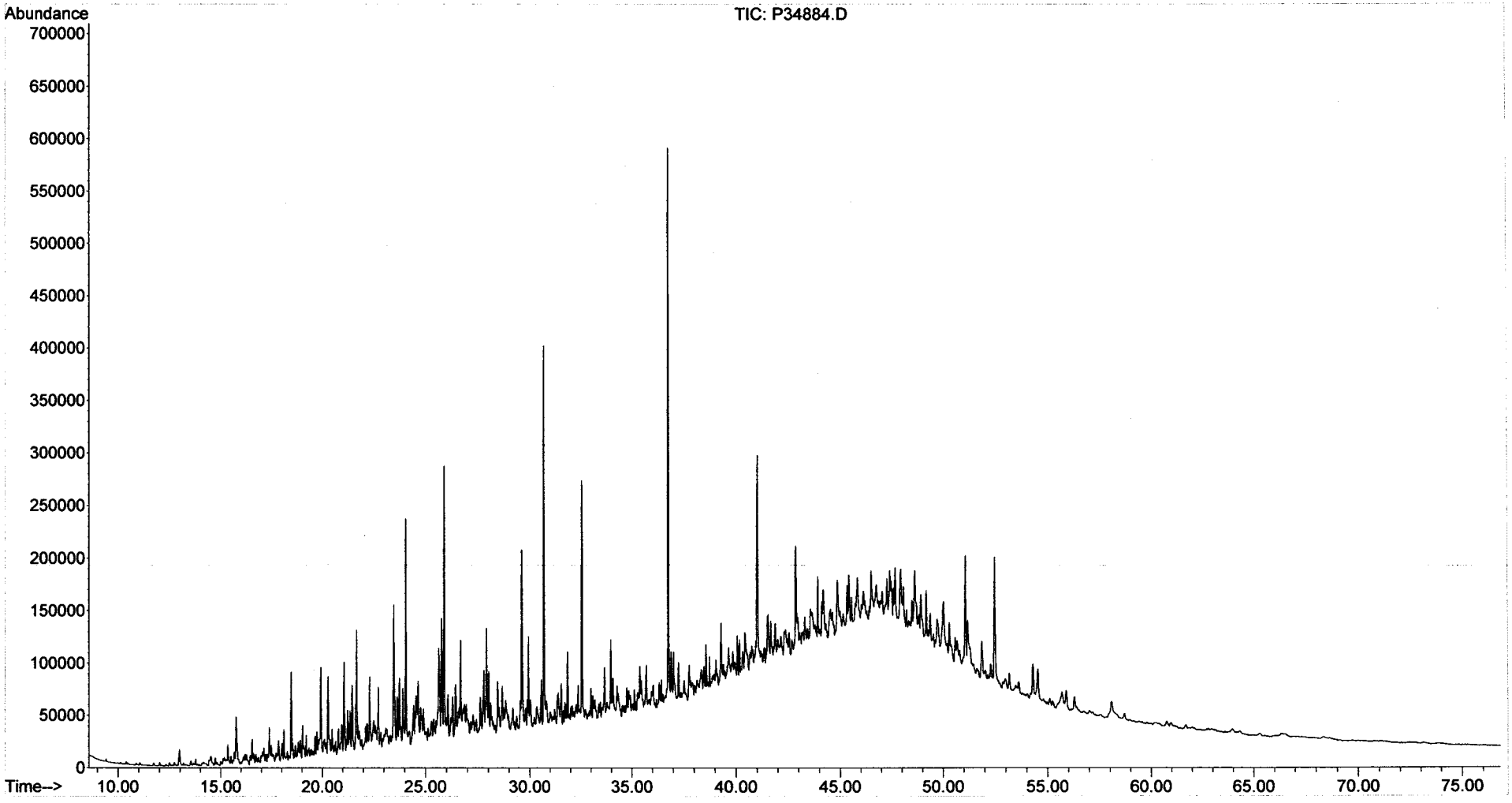
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	2366	66.44	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	7739m	217.31	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	22883m	642.54	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	17517m	491.87	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	24054m	675.42	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	24102m	676.77	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	22676	636.73	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	23570m	661.83	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	28558m	801.89	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.01	218	34667m	973.43	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	24807m	696.57	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 : P34884.D
Acq On : 27 Jan 2006 9:47 am
Operator : AC
Sample : 0601045-05
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 06 12:13:31 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-26 (5.3-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-06**
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
01/12/06	01/17/06	01/19/06	01/28/06	81.7	5.04	9.29	10	AC

Parameter	Result		Parameter	Result
Naphthalene	540000	E	Fluoranthene	85000
C1-Naphthalenes	400000	E	Pyrene	120000
C2-Naphthalenes	210000		C1-Fluoranthenes/Pyrenes	100000
C3-Naphthalenes	65000		C2-Fluoranthenes/Pyrenes	30000
C4-Naphthalenes	16000		C3-Fluoranthenes/Pyrenes	7700
Biphenyl	35000		C4-Fluoranthenes/Pyrenes	1900
Dibenzofuran	9800		Naphthobenzothiophenes	11000
Acenaphthylene	25000		C1-Naphthobenzothiophenes	8300
Acenaphthene	180000		C2-Naphthobenzothiophenes	3500
Fluorene	93000		C3-Naphthobenzothiophenes	1600
C1-Fluorenes	44000		C4-Naphthobenzothiophenes	550
C2-Fluorenes	22000		Benz[a]anthracene	45000
C3-Fluorenes	10000		Chrysene/Triphenylene	42000
Anthracene	90000		C1-Chrysenes	29000
Phenanthrene	270000	E	C2-Chrysenes	9400
C1-Phenanthrenes/Anthracenes	160000		C3-Chrysenes	3400
C2-Phenanthrenes/Anthracenes	56000		C4-Chrysenes	1500
C3-Phenanthrenes/Anthracenes	16000		Benzo[b]fluoranthene	13000
C4-Phenanthrenes/Anthracenes	2800		Benzo[k]fluoranthene	20000
Retene	670		Benzo[a]fluoranthene	8700
Dibenzothiophene	31000		Benzo[e]pyrene	15000
C1-Dibenzothiophenes	30000		Benzo[a]pyrene	31000
C2-Dibenzothiophenes	19000		Perylene	4600
C3-Dibenzothiophenes	8000		Indeno[1,2,3-cd]pyrene	11000
C4-Dibenzothiophenes	2200		Dibenz[a,h]anthracene	3100
Benzo(b)fluorene	19000		Benzo[g,h,i]perylene	11000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	95	50-130

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

02/07/06 17:32

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-26 (5.3-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-06**
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
01/12/06	01/17/06	01/19/06	01/28/06	81.7	5.04	9.29	10	AC

Parameter	Result
Carbazole	2100

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	95	50-130

N/A - Not Applicable

02/07/06 17:32

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27964.D
Acq On : 28 Jan 2006 8:40 am
Operator : AC
Sample : 0601045-06~~RE~~
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

MAL for WW 2/4/6

Quant Time: Feb 01 13:52:00 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	35186m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	55099m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	13939m	192.76	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.28%#			
58) Pyrene-d10	38.70	212	29838m	200.61	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.06%#			
81) Benzo[b]fluoranthene-d12	47.56	264	23012m	203.72	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.37%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) Naphthalene	20.21	128	3767432	23805.01	ng/mL# E	100
10) C1-Naphthalenes	22.91	142	2807883m	17741.98	ng/mL E	
11) C2-Naphthalenes	25.76	156	1481746m	9362.61	ng/mL	
12) C3-Naphthalenes	28.10	170	454110m	2869.35	ng/mL	
13) C4-Naphthalenes	30.86	184	113150m	714.95	ng/mL	
15) 2-Methylnaphthalene	22.91	142	1753627	17407.36	ng/mL# E	100
16) 1-Methylnaphthalene	23.33	142	1046034	10909.11	ng/mL# E	100
22) Biphenyl	24.80	154	197954	1560.91	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	223433m	2574.70	ng/mL	
24) Dibenzofuran	27.89	168	61028m	435.94	ng/mL	
25) Acenaphthylene	26.52	152	175000m	1114.48	ng/mL	
26) Acenaphthene	27.25	153	763301m	7930.37	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	36400m	480.64	ng/mL	
28) Fluorene	29.27	166	463640m	4119.72	ng/mL	
29) C1-Fluorenes	31.50	180	217717m	1934.55	ng/mL	
30) C2-Fluorenes	33.69	194	110830m	984.79	ng/mL	
31) C3-Fluorenes	36.38	208	50588m	449.50	ng/mL	
32) Dibenzothiophene	32.61	184	208197	1383.54	ng/mL#	91
37) C1-Dibenzothiophenes	34.38	198	202743m	1347.30	ng/mL	
38) C2-Dibenzothiophenes	36.07	212	125216m	832.11	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	53306m	354.24	ng/mL	
40) C4-Dibenzothiophenes	39.56	240	14594m	96.98	ng/mL	
41) Phenanthrene	33.11	178	1933616	12041.48	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.17	192	1173053m	7305.12	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	421959m	2627.72	ng/mL	
49) 5AA IS BKGD	37.11	206	21110m	131.46	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	115211m	717.47	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.38	234	20174m	125.63	ng/mL	
52) Retene	40.09	234	1078m	29.59	ng/mL	
53) Anthracene	33.28	178	597659m	4007.47	ng/mL	
54) Carbazole	33.96	167	13471m	94.77	ng/mL	
55) 1-Methylphenanthrene	35.61	192	184040	1652.05	ng/mL	100
56) Fluoranthene	37.89	202	643458	3754.40	ng/mL	100
57) Benzo(b)fluorene	40.41	216	90556m	859.48	ng/mL	
59) Pyrene	38.78	202	941619	5365.31	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.17	216	817902m	4660.37	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.84	230	232849m	1326.76	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.71	244	60080m	342.33	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	15098m	86.03	ng/mL	
64) Naphthobenzothiophene	42.63	234	48417m	297.50	ng/ml	

Quantitation Report (QT Reviewed)

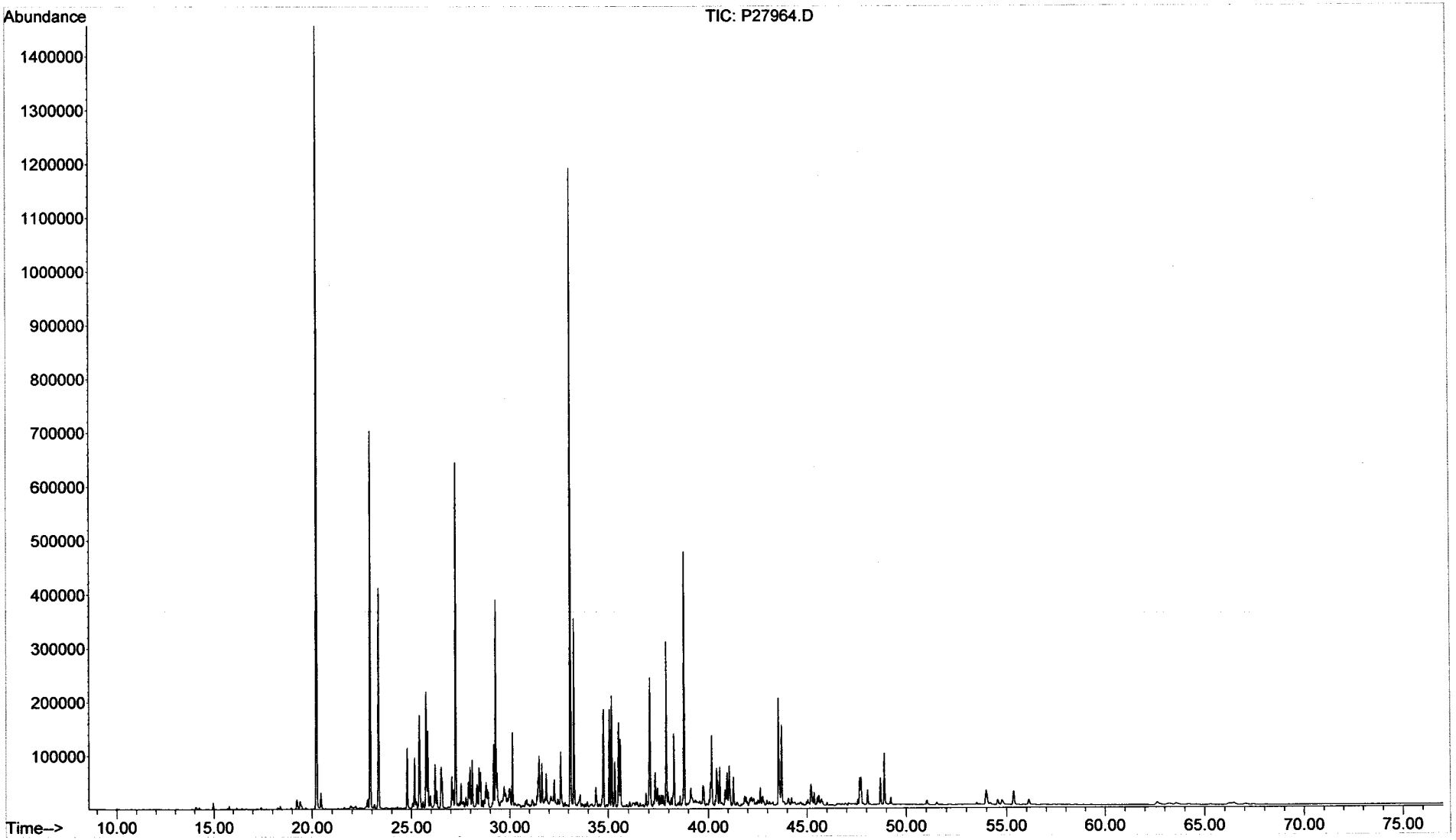
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27964.D
Acq On : 28 Jan 2006 8:40 am
Operator : AC
Sample : 0601045-06-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 01 13:52:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.63	234	48399m	297.39	ng/mL	
66) Naphthobenzothiophene-1,2-	42.98	234	13310m	81.78	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	15794m	97.05	ng/mL	
68) C1-Naphthobenzothiophenes	44.03	248	59977m	368.53	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	25168m	154.65	ng/ml	
70) C3-Naphthobenzothiophenes	47.44	276	11222m	68.95	ng/ml	
71) C4-Naphthobenzothiophenes	49.16	290	3975m	24.42	ng/mL	
73) Benz[a]anthracene	43.56	228	316536m	2011.69	ng/mL	
74) Chrysene	43.72	228	296146m	1873.89	ng/mL	
75) Chrysene/Triphenylene	43.72	228	295912m	1872.41	ng/mL	
76) C1-Chrysenes	45.21	242	205554m	1300.66	ng/mL	
77) C2-Chrysenes	46.92	256	67604m	427.77	ng/mL	
78) BBF-d12 Surr BKGD	47.56	256	1731	10.95	ng/mL	100
79) C3-Chrysenes	48.56	270	23985m	151.77	ng/mL	
80) C4-Chrysenes	49.62	284	10726m	67.87	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	100305	593.55	ng/mL	100
83) Benzo[k]fluoranthene	47.71	252	157233	889.74	ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	67806	383.69	ng/mL#	1
85) Benzo[e]pyrene	48.69	252	109347	671.22	ng/mL	99
86) Benzo[a]pyrene	48.90	252	224540m	1378.66	ng/mL	
87) Perylene	49.22	252	33435	205.92	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.97	276	75742m	469.20	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	21037m	138.58	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	81584m	484.71	ng/mL	

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27964.D
Operator : AC
Acquired : 28 Jan 2006 8:40 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-06-RE
Misc Info : 10X
Vial Number: 23



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-26 (5.3-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-06E**
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
01/12/06	01/17/06	01/19/06	01/31/06	81.7	5.04	9.29	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**620000**		Fluoranthene	230	U
C1-Naphthalenes	**450000**		Pyrene	200	U
C2-Naphthalenes	370	U	C1-Fluoranthenes/Pyrenes	200	U
C3-Naphthalenes	370	U	C2-Fluoranthenes/Pyrenes	200	U
C4-Naphthalenes	370	U	C3-Fluoranthenes/Pyrenes	200	U
Biphenyl	200	U	C4-Fluoranthenes/Pyrenes	200	U
Dibenzofuran	270	U	Naphthobenzothiophenes	270	U
Acenaphthylene	410	U	C1-Naphthobenzothiophenes	270	U
Acenaphthene	260	U	C2-Naphthobenzothiophenes	270	U
Fluorene	260	U	C3-Naphthobenzothiophenes	270	U
C1-Fluorenes	260	U	C4-Naphthobenzothiophenes	270	U
C2-Fluorenes	260	U	Benz[a]anthracene	350	U
C3-Fluorenes	260	U	Chrysene/Triphenylene	240	U
Anthracene	300	U	C1-Chrysenes	240	U
Phenanthrene	**300000**		C2-Chrysenes	240	U
C1-Phenanthrenes/Anthracenes	330	U	C3-Chrysenes	240	U
C2-Phenanthrenes/Anthracenes	330	U	C4-Chrysenes	240	U
C3-Phenanthrenes/Anthracenes	330	U	Benzo[b]fluoranthene	240	U
C4-Phenanthrenes/Anthracenes	330	U	Benzo[k]fluoranthene	460	U
Retene	330	U	Benzo[a]fluoranthene	460	U
Dibenzothiophene	250	U	Benzo[e]pyrene	310	U
C1-Dibenzothiophenes	250	U	Benzo[a]pyrene	310	U
C2-Dibenzothiophenes	250	U	Perylene	390	U
C3-Dibenzothiophenes	250	U	Indeno[1,2,3-cd]pyrene	540	U
C4-Dibenzothiophenes	250	U	Dibenz[a,h]anthracene	430	U
Benzo(b)fluorene	230	U	Benzo[g,h,i]perylene	400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	85	50-130

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

02/07/06 17:33

Quantitation Report (QT Reviewed)

MAL for wu
2/4/6

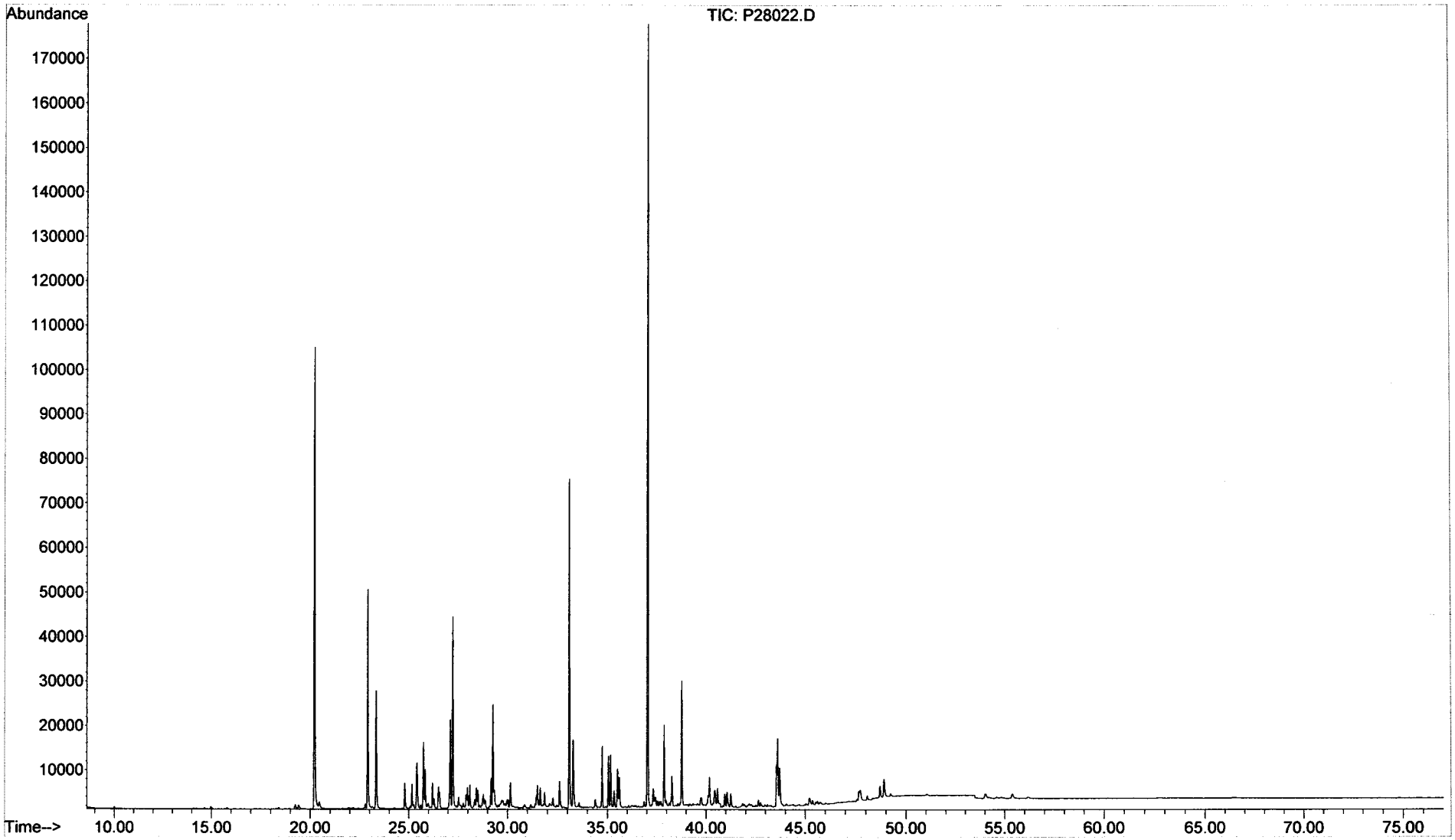
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28022.D
Acq On : 31 Jan 2006 5:51 am
Operator : AC
Sample : 0601045-06-RE2
Misc : 100X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 01 14:28:36 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	27.11	164	22241m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	33078m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	848m	18.55	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.86%#			
58) Pyrene-d10	38.69	212	1903	20.24	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.02%#			
81) Benzo[b]fluoranthene-d12	47.57	264	1240m	18.29	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.83%#			
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	272976m	2728.75	ng/mL	
10) C1-Naphthalenes	22.90	142	198294m	1982.20	ng/mL	
15) 2-Methylnaphthalene	22.90	142	121228	1903.77	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	72605	1197.91	ng/mL#	100
41) Phenanthrene	33.09	178	136659	1346.37	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28022.D
Operator : AC
Acquired : 31 Jan 2006 5:51 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-06-RE~~1~~
Misc Info : 100X
Vial Number: 12



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-26 (5.3-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-06**
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
01/12/06	01/17/06	01/19/06	01/27/06	81.7	5.04	1.29	1	AC

Parameter	Result
C23 Tricyclic Terpane	80
C24 Tricyclic Terpane	52
C25 Tricyclic Terpane	45
C24 Tetracyclic Terpane	30
C26 Tricyclic Terpane-22S	19
C26 Tricyclic Terpane-22R	19
C28 Tricyclic Terpane-22S	22
C28 Tricyclic Terpane-22R	25
C29 Tricyclic Terpane-22S	23
C29 Tricyclic Terpane-22R	22
18a-22,29,30-Trisnorneohopane-TS	69
C30 Tricyclic Terpane-22S	17
C30 Tricyclic Terpane-22R	15
17a(H)-22,29,30-Trisnorhopane-TM	79
17a/b,21b/a 28,30-Bisnorhopane	23
17a(H),21b(H)-25-Norhopane	10
30-Norhopane	200
18a(H)-30-Norneohopane-C29Ts	61
17a(H)-Diahopane	16
30-Normoretane	41
18a(H)&18b(H)-Oleananes	30
Hopane	300
Moretane	51
30-Homohopane-22S	94
30-Homohopane-22R	88

Parameter	Result
30,31-Bishomohopane-22S	88
30,31-Bishomohopane-22R	41
30,31-Trishomohopane-22S	36
30,31-Trishomohopane-22R	24
Tetrakishomohopane-22S	21
Tetrakishomohopane-22R	15
Pentakishomohopane-22S	19
Pentakishomohopane-22R	15
13b(H),17a(H)-20S-Diacholestane	79
13b(H),17a(H)-20R-Diacholestane	42
13b,17a-20S-Methyldiacholestane	32
14a(H),17a(H)-20S-Cholestane	39
14a(H),17a(H)-20R-Cholestane	140
13b,17a-20R-Ethyldiacholestane	22
13a,17b-20S-Ethyldiacholestane	6.6
14a,17a-20S-Methylcholestane	21
14a,17a-20R-Methylcholestane	68
14a(H),17a(H)-20S-Ethylcholestane	45
14a(H),17a(H)-20R-Ethylcholestane	63
14b(H),17b(H)-20R-Cholestane	66
14b(H),17b(H)-20S-Cholestane	62
14b,17b-20R-Methylcholestane	61
14b,17b-20S-Methylcholestane	70
14b(H),17b(H)-20R-Ethylcholestane	96
14b(H),17b(H)-20S-Ethylcholestane	58

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

N/A - Not Applicable

02/07/06 16:09

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34885.D
Acq On : 27 Jan 2006 11:16 am
Operator : AC
Sample : 0601045-06
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 06 12:23:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 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	90852	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	595352	15592.14	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1559.21%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	75629m	968.69	ng/mL	
84) Hopane (T19)	52.47	191	75650m	968.96	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	19946m	255.48	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	12888	165.08	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	11317m	144.95	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	7461	95.56	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	4834m	61.92	ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	4832m	61.89	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	5590m	71.60	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	6118m	78.36	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	5807	74.38	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	5617m	71.95	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	17274	221.25	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.71	191	4248	54.41	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	3814m	48.85	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	19644	251.61	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.38	191	5709m	73.12	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	2557	32.75	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	49823m	638.16	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	15250m	195.33	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	4076m	52.21	ng/ml	
104) 30-Normoretane (T17)	51.87	191	10169	130.25	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	7542m	96.60	ng/ml	
106) Moretane (T20)	53.17	191	12735m	163.12	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	23325	298.76	ng/ml	100
108) 30-Homohopane-22R (T22)	54.52	191	21787	279.06	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.87	191	21932	280.91	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.26	191	10192	130.54	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.05	191	9053m	115.95	ng/ml	
112) 30,31-Trishomohopane-22R (	58.68	191	5932	75.98	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.75	191	5341m	68.41	ng/ml	
114) Tetrakishomohopane-22R (T3	61.65	191	3755m	48.10	ng/ml	
115) Pentakishomohopane-22S (T3	63.94	191	4733	60.62	ng/ml	100
116) Pentakishomohopane-22R (T3	65.25	191	3658m	46.85	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	9666	253.15	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	5148	134.83	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.54	217	3846m	100.73	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	4751m	124.43	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	17103	447.92	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	2701m	70.74	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34885.D
Acq On : 27 Jan 2006 11:16 am
Operator : AC
Sample : 0601045-06
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 06 12:23:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

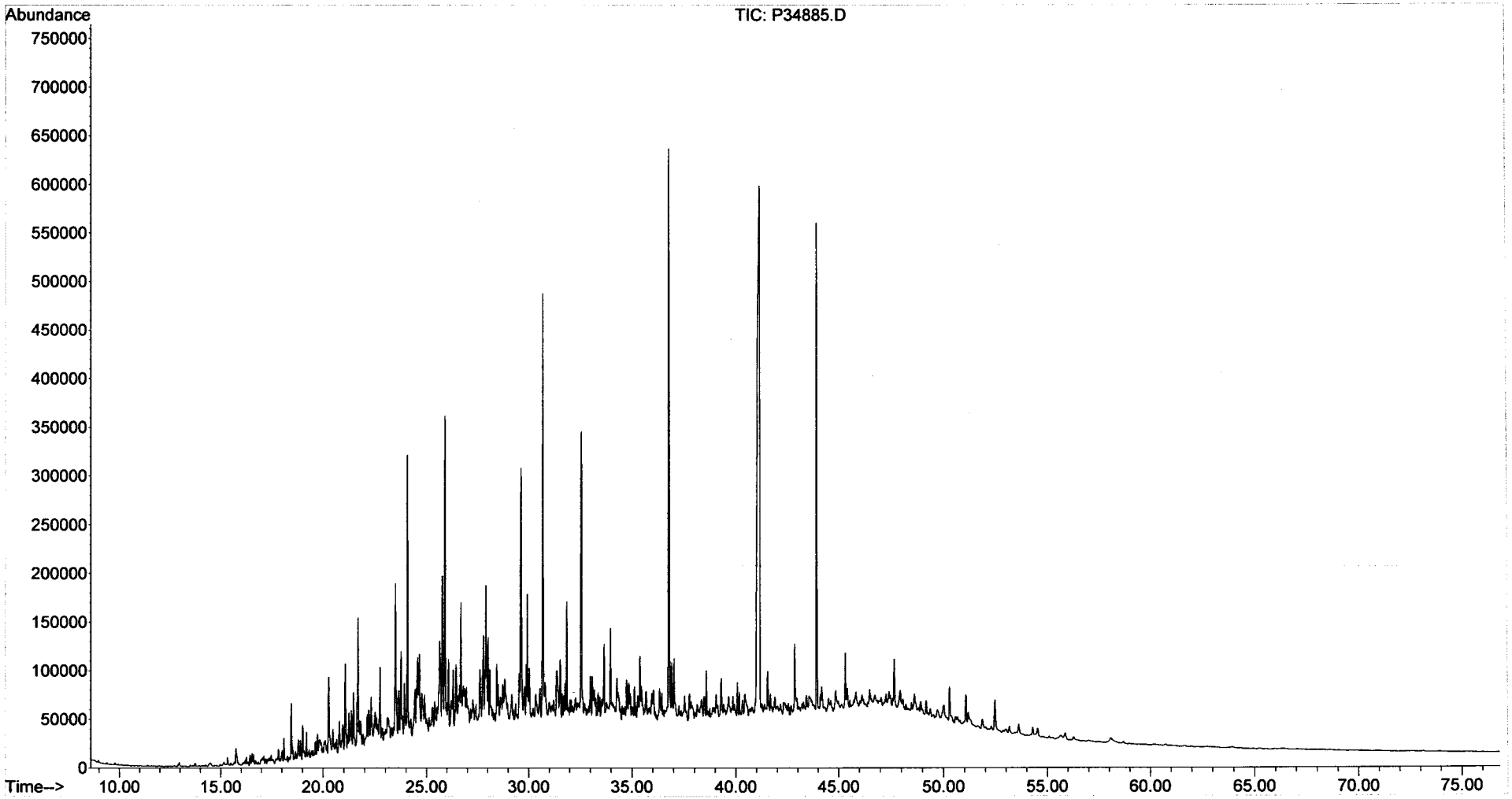
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	805	21.08	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	2541m	66.55	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	8243m	215.88	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	5520m	144.57	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	7699m	201.64	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	8018m	209.99	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	7590	198.78	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.83	218	7429m	194.56	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	8473m	221.91	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	11739m	307.44	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	7097m	185.87	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 : P34885.D
Acq On : 27 Jan 2006 11:16 am
Operator : AC
Sample : 0601045-06
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 06 12:23:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-35 (15.3-17.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-07**
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
01/13/06	01/17/06	01/19/06	01/28/06	86.6	5.54	40.3	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**2100000**	E	Fluoranthene	**250000**
C1-Naphthalenes	**1300000**	E	Pyrene	**380000**
C2-Naphthalenes	**770000**		C1-Fluoranthenes/Pyrenes	**440000**
C3-Naphthalenes	**280000**		C2-Fluoranthenes/Pyrenes	**190000**
C4-Naphthalenes	**83000**		C3-Fluoranthenes/Pyrenes	**76000**
Biphenyl	**110000**		C4-Fluoranthenes/Pyrenes	**27000**
Dibenzofuran	**30000**		Naphthobenzothiophenes	**44000**
Acenaphthylene	**110000**		C1-Naphthobenzothiophenes	**49000**
Acenaphthene	**560000**		C2-Naphthobenzothiophenes	**31000**
Fluorene	**290000**		C3-Naphthobenzothiophenes	**16000**
C1-Fluorenes	**180000**		C4-Naphthobenzothiophenes	**6200**
C2-Fluorenes	**130000**		Benz[a]anthracene	**140000**
C3-Fluorenes	**65000**		Chrysene/Triphenylene	**140000**
Anthracene	**280000**		C1-Chrysenes	**140000**
Phenanthrene	**840000**	E	C2-Chrysenes	**76000**
C1-Phenanthrenes/Anthracenes	**630000**		C3-Chrysenes	**40000**
C2-Phenanthrenes/Anthracenes	**310000**		C4-Chrysenes	**13000**
C3-Phenanthrenes/Anthracenes	**130000**		Benzo[b]fluoranthene	**40000**
C4-Phenanthrenes/Anthracenes	**34000**		Benzo[k]fluoranthene	**60000**
Retene	120	U	Benzo[a]fluoranthene	**29000**
Dibenzothiophene	**100000**		Benzo[e]pyrene	**49000**
C1-Dibenzothiophenes	**120000**		Benzo[a]pyrene	**98000**
C2-Dibenzothiophenes	**95000**		Perylene	**15000**
C3-Dibenzothiophenes	**51000**		Indeno[1,2,3-cd]pyrene	**32000**
C4-Dibenzothiophenes	**17000**		Dibenz[a,h]anthracene	**10000**
Benzo(b)fluorene	**66000**		Benzo[g,h,i]perylene	**34000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	93	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 17:34

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-35 (15.3-17.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-07**
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
01/13/06	01/17/06	01/19/06	01/28/06	86.6	5.54	40.3	10	AC

Parameter	Result
Carbazole	9500

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	93	50-130

N/A - Not Applicable

02/07/06 17:34

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27966.D
Acq On : 28 Jan 2006 10:15 am
Operator : AC
Sample : 0601045-07-~~RE~~
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 14:00:26 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	34989m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	55541m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	3261	45.35	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.54%#		
58) Pyrene-d10	38.70	212	6980m	47.19	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.72%#		
81) Benzo[b]fluoranthene-d12	47.56	264	5233m	45.96	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.60%#		
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	3900127	24782.21	ng/mL#E	100
10) C1-Naphthalenes	22.91	142	2497983m	15872.70	ng/mL E	
11) C2-Naphthalenes	25.76	156	1433835m	9110.88	ng/mL	
12) C3-Naphthalenes	28.10	170	518896m	3297.17	ng/mL	
13) C4-Naphthalenes	30.86	184	155937m	990.86	ng/mL	
15) 2-Methylnaphthalene	22.91	142	1541045	15383.30	ng/mL#E	100
16) 1-Methylnaphthalene	23.33	142	953649	10001.63	ng/mL#E	100
22) Biphenyl	24.80	154	165768m	1314.48	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	208718m	2418.68	ng/mL	
24) Dibenzofuran	27.89	168	48924	351.44	ng/mL	98
25) Acenaphthylene	26.52	152	202112m	1294.39	ng/mL	
26) Acenaphthene	27.25	153	636321m	6648.32	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	41219m	547.34	ng/mL	
28) Fluorene	29.27	166	384998m	3440.20	ng/mL	
29) C1-Fluorenes	31.50	180	234524m	2095.62	ng/mL	
30) C2-Fluorenes	33.69	194	167435m	1496.14	ng/mL	
31) C3-Fluorenes	35.67	208	86182m	770.09	ng/mL	
32) Dibenzothiophene	32.61	184	185653m	1240.68	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	217418m	1452.96	ng/mL	
38) C2-Dibenzothiophenes	36.07	212	169912m	1135.48	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	90751m	606.47	ng/mL	
40) C4-Dibenzothiophenes	39.56	240	30836m	206.07	ng/mL	
41) Phenanthrene	33.11	178	1597708	10005.65	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.17	192	1197069m	7496.65	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	597287m	3740.51	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	244442m	1530.82	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.38	234	65313m	409.02	ng/mL	
53) Anthracene	33.28	178	498032m	3358.24	ng/mL	
54) Carbazole	33.96	167	15969m	112.98	ng/mL	
55) 1-Methylphenanthrene	35.61	192	192812	1740.54	ng/mL	99
56) Fluoranthene	37.89	202	502849	2950.51	ng/mL	100
57) Benzo(b)fluorene	40.41	216	82253m	785.07	ng/mL	
59) Pyrene	38.78	202	785461	4500.72	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.17	216	912907m	5230.99	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.64	230	388217m	2224.50	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.10	244	158812m	910.00	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	56424m	323.31	ng/mL	
64) Naphthobenzothiophene	42.63	234	52973m	327.33	ng/ml	
65) Naphthobenzothiophene-2,1-	42.63	234	52982m	327.38	ng/mL	
66) Naphthobenzothiophene-1,2-	42.98	234	15189m	93.85	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27966.D
Acq On : 28 Jan 2006 10:15 am
Operator : AC
Sample : 0601045-07-~~RE~~
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

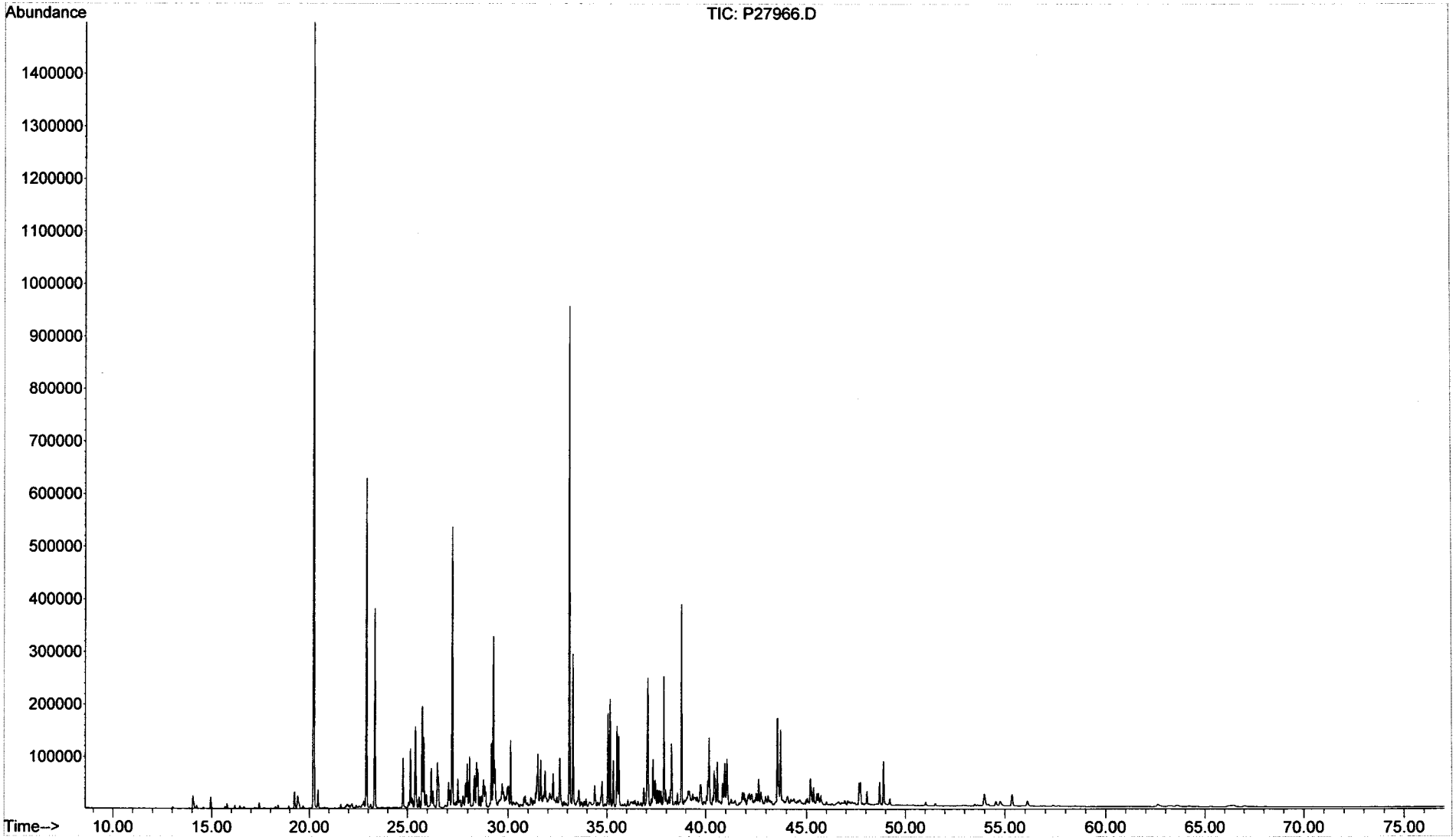
MAL for WW 2/4/6

Quant Time: Feb 01 14:00:26 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)
67) Naphthobenzothiophene-2,3-	43.27	234	16701m	103.20	ng/mL	
68) C1-Naphthobenzothiophenes	44.03	248	93636m	578.59	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	59094m	365.15	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	29803m	184.16	ng/ml	
71) C4-Naphthobenzothiophenes	48.79	290	11920m	73.66	ng/mL	
73) Benz[a]anthracene	43.56	228	263786m	1663.11	ng/mL	
74) Chrysene	43.72	228	270917m	1700.61	ng/mL	
75) Chrysene/Triphenylene	43.72	228	272429m	1710.10	ng/mL	
76) C1-Chrysenes	45.21	242	270611m	1698.69	ng/mL	
77) C2-Chrysenes	46.92	256	145393m	912.67	ng/mL	
78) BBF-d12 Surr BKGD	47.54	256	2078	13.04	ng/mL	100
79) C3-Chrysenes	48.55	270	75011m	470.86	ng/mL	
80) C4-Chrysenes	50.11	284	25401m	159.45	ng/mL	
82) Benzo[b]fluoranthene	47.65	252	81980	481.25	ng/mL	99
83) Benzo[k]fluoranthene	47.72	252	128217	719.77	ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	62360m	350.07	ng/mL	
85) Benzo[e]pyrene	48.70	252	95765	583.17	ng/mL	98
86) Benzo[a]pyrene	48.90	252	191279m	1165.09	ng/mL	
87) Perylene	49.22	252	29838m	182.30	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.98	276	61848m	380.08	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	18401m	120.25	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	68498	403.73	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27966.D
Operator : AC
Acquired : 28 Jan 2006 10:15 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-07-~~BE~~
Misc Info : 10X
Vial Number: 24



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-35 (15.3-17.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-07E**
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
01/13/06	01/17/06	01/19/06	01/31/06	86.6	5.54	40.3	100	AC

Parameter	Result	
Naphthalene	**2400000**	
C1-Naphthalenes	**1500000**	
C2-Naphthalenes	1400	U
C3-Naphthalenes	1400	U
C4-Naphthalenes	1400	U
Biphenyl	760	U
Dibenzofuran	1000	U
Acenaphthylene	1500	U
Acenaphthene	970	U
Fluorene	970	U
C1-Fluorenes	970	U
C2-Fluorenes	970	U
C3-Fluorenes	970	U
Anthracene	1100	U
Phenanthrene	**940000**	
C1-Phenanthrenes/Anthracenes	1200	U
C2-Phenanthrenes/Anthracenes	1200	U
C3-Phenanthrenes/Anthracenes	1200	U
C4-Phenanthrenes/Anthracenes	1200	U
Retene	1200	U
Dibenzothiophene	930	U
C1-Dibenzothiophenes	930	U
C2-Dibenzothiophenes	930	U
C3-Dibenzothiophenes	930	U
C4-Dibenzothiophenes	930	U
Benzo(b)fluorene	850	U

Parameter	Result	
Fluoranthene	850	U
Pyrene	750	U
C1-Fluoranthenes/Pyrenes	750	U
C2-Fluoranthenes/Pyrenes	750	U
C3-Fluoranthenes/Pyrenes	750	U
C4-Fluoranthenes/Pyrenes	750	U
Naphthobenzothiophenes	1000	U
C1-Naphthobenzothiophenes	1000	U
C2-Naphthobenzothiophenes	1000	U
C3-Naphthobenzothiophenes	1000	U
C4-Naphthobenzothiophenes	1000	U
Benz[a]anthracene	1300	U
Chrysene/Triphenylene	910	U
C1-Chrysenes	910	U
C2-Chrysenes	910	U
C3-Chrysenes	910	U
C4-Chrysenes	910	U
Benzo[b]fluoranthene	890	U
Benzo[k]fluoranthene	1700	U
Benzo[a]fluoranthene	1700	U
Benzo[e]pyrene	1200	U
Benzo[a]pyrene	1200	U
Perylene	1500	U
Indeno[1,2,3-cd]pyrene	2000	U
Dibenz[a,h]anthracene	1600	U
Benzo[g,h,i]perylene	1500	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	97	50-130
Benzo[b]fluoranthene-d12	78	50-130

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

02/07/06 17:35

Quantitation Report (QT Reviewed)

MAL for WW
2/4/6

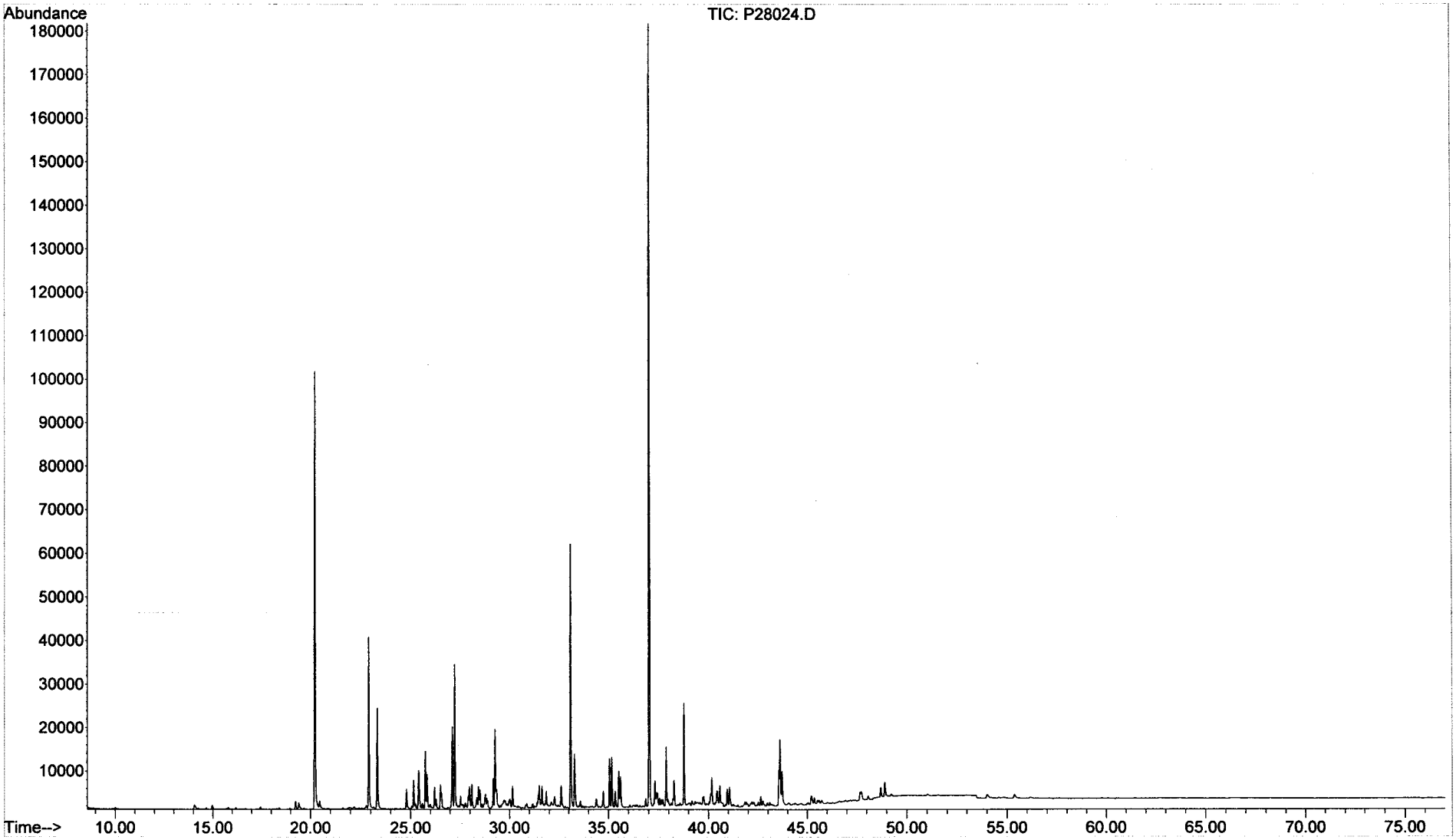
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28024.D
Acq On : 31 Jan 2006 7:28 am
Operator : AC
Sample : 0601045-07-RE
Misc : 100X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 01 14:30:28 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	21236m	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	33343m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	182m	4.17	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.42%#	
58) Pyrene-d10	38.70	212	433m	4.82	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.48%#	
81) Benzo[b]fluoranthene-d12	47.57	264	264m	3.86	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.39%#	
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	267531m	2800.88	ng/mL	
10) C1-Naphthalenes	22.90	142	165611m	1733.84	ng/mL	
15) 2-Methylnaphthalene	22.90	142	100011	1644.90	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	62376	1077.85	ng/mL#	100
41) Phenanthrene	33.09	178	108834	1122.98	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28024.D
Operator : AC
Acquired : 31 Jan 2006 7:28 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-07-RE2
Misc Info : 100X
Vial Number: 13



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-35 (15.3-17.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-07**
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
01/13/06	01/17/06	01/19/06	01/27/06	86.6	5.54	5.25	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	200	30,31-Bishomohopane-22S	290
C24 Tricyclic Terpane	120	30,31-Bishomohopane-22R	210
C25 Tricyclic Terpane	120	30,31-Trishomohopane-22S	140
C24 Tetracyclic Terpane	210	30,31-Trishomohopane-22R	97
C26 Tricyclic Terpane-22S	49	Tetrakishomohopane-22S	89
C26 Tricyclic Terpane-22R	49	Tetrakishomohopane-22R	63
C28 Tricyclic Terpane-22S	55	Pentakishomohopane-22S	47
C28 Tricyclic Terpane-22R	63	Pentakishomohopane-22R	33
C29 Tricyclic Terpane-22S	62	13b(H),17a(H)-20S-Diacholestane	230
C29 Tricyclic Terpane-22R	58	13b(H),17a(H)-20R-Diacholestane	130
18a-22,29,30-Trisnorneohopane-TS	730	13b,17a-20S-Methyldiacholestane	96
C30 Tricyclic Terpane-22S	48	14a(H),17a(H)-20S-Cholestane	140
C30 Tricyclic Terpane-22R	20	14a(H),17a(H)-20R-Cholestane	370
17a(H)-22,29,30-Trisnorhopane-TM	420	13b,17a-20R-Ethyldiacholestane	45
17a/b,21b/a 28,30-Bisnorhopane	89	13a,17b-20S-Ethyldiacholestane	19
17a(H),21b(H)-25-Norhopane	45	14a,17a-20S-Methylcholestane	89
30-Norhopane	1300	14a,17a-20R-Methylcholestane	180
18a(H)-30-Norneohopane-C29Ts	710	14a(H),17a(H)-20S-Ethylcholestane	100
17a(H)-Diahopane	170	14a(H),17a(H)-20R-Ethylcholestane	150
30-Normoretane	270	14b(H),17b(H)-20R-Cholestane	170
18a(H)&18b(H)-Oleananes	310	14b(H),17b(H)-20S-Cholestane	150
Hopane	2200	14b,17b-20R-Methylcholestane	170
Moretane	280	14b,17b-20S-Methylcholestane	170
30-Homohopane-22S	480	14b(H),17b(H)-20R-Ethylcholestane	230
30-Homohopane-22R	420	14b(H),17b(H)-20S-Ethylcholestane	120

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

N/A - Not Applicable

02/07/06 16:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34886.D
Acq On : 27 Jan 2006 12:46 pm
Operator : AC
Sample : 0601045-07
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 06 12:28:46 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	43.41	240	92238	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	139323	3594.01	ng/ml	0.00
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	359.40%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.47	191	160018m	2018.79	ng/mL	
84) Hopane (T19)	52.47	191	159453m	2011.66	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	14417m	181.88	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	8936	112.74	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	8452m	106.63	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	14927	188.32	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.20	191	3552	44.81	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.30	191	3556	44.86	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.58	191	4014m	50.64	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	4578m	57.76	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	4473	56.43	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	4222m	53.26	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	52543	662.88	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.71	191	3474	43.83	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	1426m	17.99	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.17	191	30451m	384.17	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	6450m	81.37	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	3233	40.79	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	91455m	1153.80	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.18	191	51666m	651.82	ng/ml	
103) 17a(H)-Diahopane (X)	51.30	191	12180m	153.66	ng/ml	
104) 30-Normoretane (T17)	51.87	191	19350	244.12	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	22538m	284.34	ng/ml	
106) Moretane (T20)	53.17	191	20059m	253.06	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	35110	442.95	ng/ml	100
108) 30-Homohopane-22R (T22)	54.53	191	30196	380.95	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	21081	265.96	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.26	191	15056	189.95	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.05	191	10476	132.17	ng/ml	100
112) 30,31-Trishomohopane-22R (	58.67	191	7006	88.39	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.74	191	6442	81.27	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.65	191	4534	57.20	ng/ml	100
115) Pentakishomohopane-22S (T3	63.95	191	3394	42.82	ng/ml	100
116) Pentakishomohopane-22R (T3	65.25	191	2417m	30.49	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	8091m	208.72	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	4565m	117.76	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	3391m	87.48	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.41	217	4979m	128.44	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	13161m	339.50	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.22	217	1578m	40.71	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34886.D
Acq On : 27 Jan 2006 12:46 pm
Operator : AC
Sample : 0601045-07
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 06 12:28:46 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

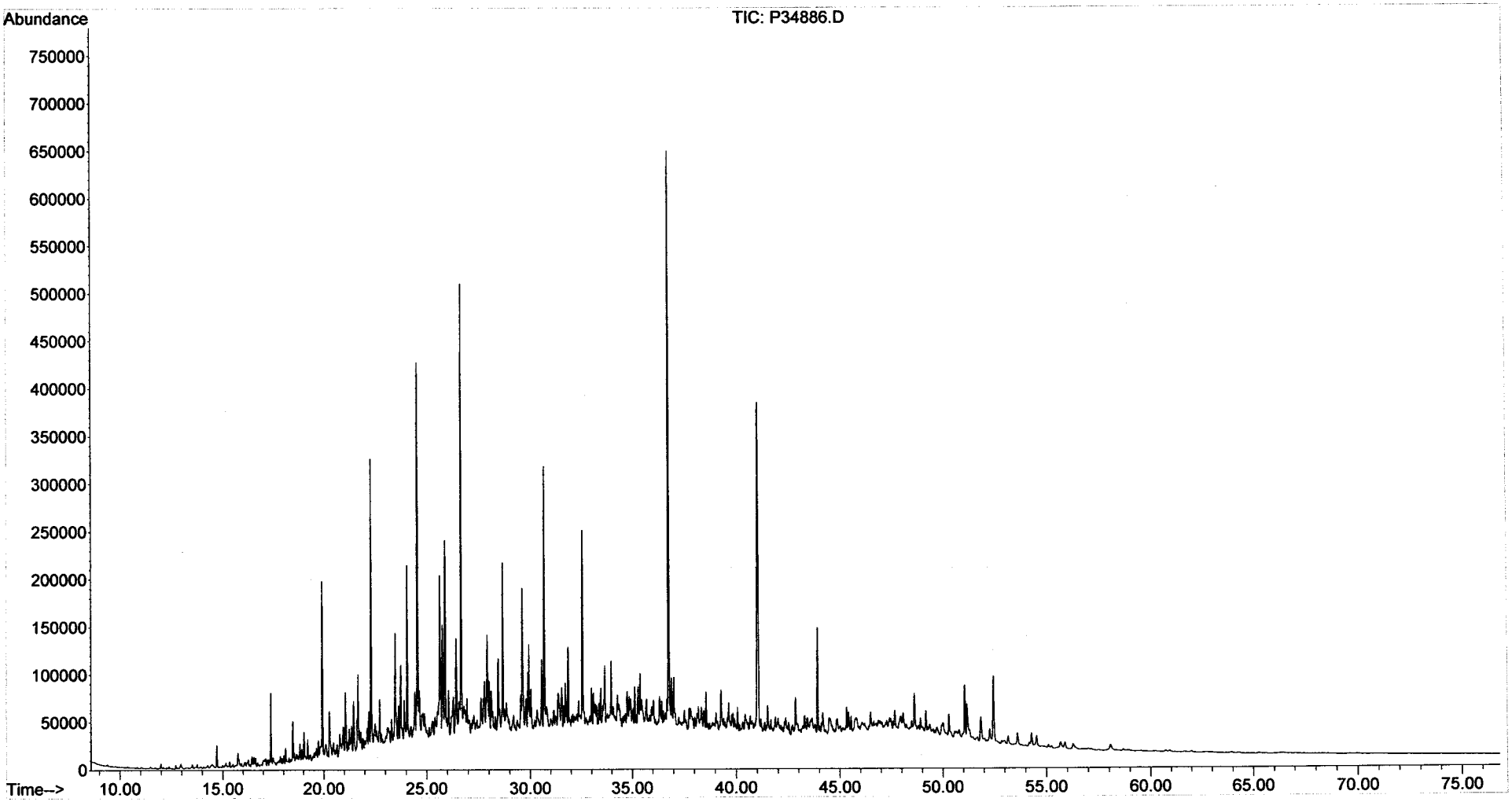
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	660	17.03	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.65	217	3150m	81.26	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.38	217	6432m	165.92	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	3725m	96.09	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.67	217	5340m	137.75	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	5945m	153.36	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	5385	138.91	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.83	218	5939m	153.20	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.90	218	6074m	156.69	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	8124m	209.57	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	4382m	113.04	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 : P34886.D
Acq On : 27 Jan 2006 12:46 pm
Operator : AC
Sample : 0601045-07
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 06 12:28:46 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-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
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
01/13/06	01/17/06	01/19/06	01/31/06	49.8	5.01	25	1	AC

Parameter	Result	
Naphthalene	25000	
C1-Naphthalenes	31000	
C2-Naphthalenes	67000	
C3-Naphthalenes	72000	
C4-Naphthalenes	45000	
Biphenyl	4500	
Dibenzofuran	3000	
Acenaphthylene	21000	
Acenaphthene	34000	
Fluorene	11000	
C1-Fluorenes	29000	
C2-Fluorenes	44000	
C3-Fluorenes	33000	
Anthracene	53000	
Phenanthrene	110000	E
C1-Phenanthrenes/Anthracenes	160000	
C2-Phenanthrenes/Anthracenes	120000	
C3-Phenanthrenes/Anthracenes	58000	
C4-Phenanthrenes/Anthracenes	18000	
Retene	3600	
Dibenzothiophene	16000	
C1-Dibenzothiophenes	37000	
C2-Dibenzothiophenes	44000	
C3-Dibenzothiophenes	29000	
C4-Dibenzothiophenes	11000	
Benzo(b)fluorene	18000	

Parameter	Result	
Fluoranthene	73000	
Pyrene	110000	E
C1-Fluoranthenes/Pyrenes	140000	
C2-Fluoranthenes/Pyrenes	68000	
C3-Fluoranthenes/Pyrenes	32000	
C4-Fluoranthenes/Pyrenes	13000	
Naphthobenzothiophenes	18000	
C1-Naphthobenzothiophenes	23000	
C2-Naphthobenzothiophenes	17000	
C3-Naphthobenzothiophenes	9800	
C4-Naphthobenzothiophenes	4400	
Benz[a]anthracene	46000	
Chrysene/Triphenylene	50000	
C1-Chrysenes	54000	
C2-Chrysenes	29000	
C3-Chrysenes	18000	
C4-Chrysenes	7400	
Benzo[b]fluoranthene	21000	
Benzo[k]fluoranthene	21000	
Benzo[a]fluoranthene	10000	
Benzo[e]pyrene	21000	
Benzo[a]pyrene	38000	
Perylene	5800	
Indeno[1,2,3-cd]pyrene	16000	
Dibenz[a,h]anthracene	4900	
Benzo[g,h,i]perylene	17000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

02/06/06 17:55

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
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
01/13/06	01/17/06	01/19/06	01/31/06	49.8	5.01	25	1	AC

Parameter	Result
Carbazole	**510**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	101	50-130

N/A - Not Applicable

02/06/06 17:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28038.D
Acq On : 31 Jan 2006 11:11 pm
Operator : AC
Sample : 0601045-08
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

MAL for WW 2/4/6

Quant Time: Feb 01 16:46:04 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	39552m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.61	240	67680m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	58587m	720.77	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 72.08%			
58) Pyrene-d10	38.69	212	132665m	793.49	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.35%			
81) Benzo[b]fluoranthene-d12	47.55	264	112190	808.55	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 80.86%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	20.19	128	441157	2479.81	ng/mL#	100
10) C1-Naphthalenes	23.31	142	549797m	3090.49	ng/mL	
11) C2-Naphthalenes	25.74	156	1188331m	6679.78	ng/mL	
12) C3-Naphthalenes	28.08	170	1275234m	7168.27	ng/mL	
13) C4-Naphthalenes	30.84	184	800958m	4502.30	ng/mL	
15) 2-Methylnaphthalene	22.88	142	208248m	1838.98	ng/mL	
16) 1-Methylnaphthalene	23.31	142	338971	3144.91	ng/mL#	100
22) Biphenyl	24.77	154	63982m	448.82	ng/mL	
23) 2,6-Dimethylnaphthalene	25.38	156	184985m	1896.35	ng/mL	
24) Dibenzofuran	27.87	168	46915m	298.13	ng/mL	
25) Acenaphthylene	26.49	152	365725m	2072.00	ng/mL	
26) Acenaphthene	27.22	153	364259	3366.74	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	94871m	1114.43	ng/mL	
28) Fluorene	29.24	166	137091m	1083.67	ng/mL	
29) C1-Fluorenes	31.47	180	368413m	2912.21	ng/mL	
30) C2-Fluorenes	33.66	194	553941m	4378.76	ng/mL	
31) C3-Fluorenes	35.66	208	412801m	3263.09	ng/mL	
32) Dibenzothiophene	32.59	184	271416m	1604.56	ng/mL	
36) OTP	34.74	198	11673m	69.01	ng/mL	
37) C1-Dibenzothiophenes	34.36	198	629068m	3718.93	ng/mL	
38) C2-Dibenzothiophenes	36.05	212	739522m	4371.91	ng/mL	
39) C3-Dibenzothiophenes	37.85	226	482768m	2854.03	ng/mL	
40) C4-Dibenzothiophenes	39.53	240	192849m	1140.09	ng/mL	
41) Phenanthrene	33.08	178	1914902m	10608.59	ng/mL E	
47) C1-Phenanthrenes/Anthracen	35.16	192	2953350m	16361.60	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.32	206	2207786m	12231.17	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.15	220	1043886m	5783.14	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.37	234	328835m	1821.75	ng/mL	
52) Retene	40.08	234	14579m	355.95	ng/mL	
53) Anthracene	33.27	178	882760m	5265.75	ng/mL	
54) Carbazole	33.94	167	8141	50.95	ng/mL#	66
55) 1-Methylphenanthrene	35.60	192	472980m	3777.07	ng/mL	
56) Fluoranthene	37.87	202	1400642m	7270.25	ng/mL	
57) Benzo(b)fluorene	40.39	216	216658m	1829.35	ng/mL	
59) Pyrene	38.77	202	2088813	10588.16	ng/mL E	96
60) C1-Fluoranthenes/Pyrenes	40.15	216	2670206m	13535.23	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	1343982m	6812.62	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	635490m	3221.29	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.33	258	253340m	1284.18	ng/mL	
64) Naphthobenzothiophene	42.62	234	200345m	1095.14	ng/ml	

Quantitation Report (QT Reviewed)

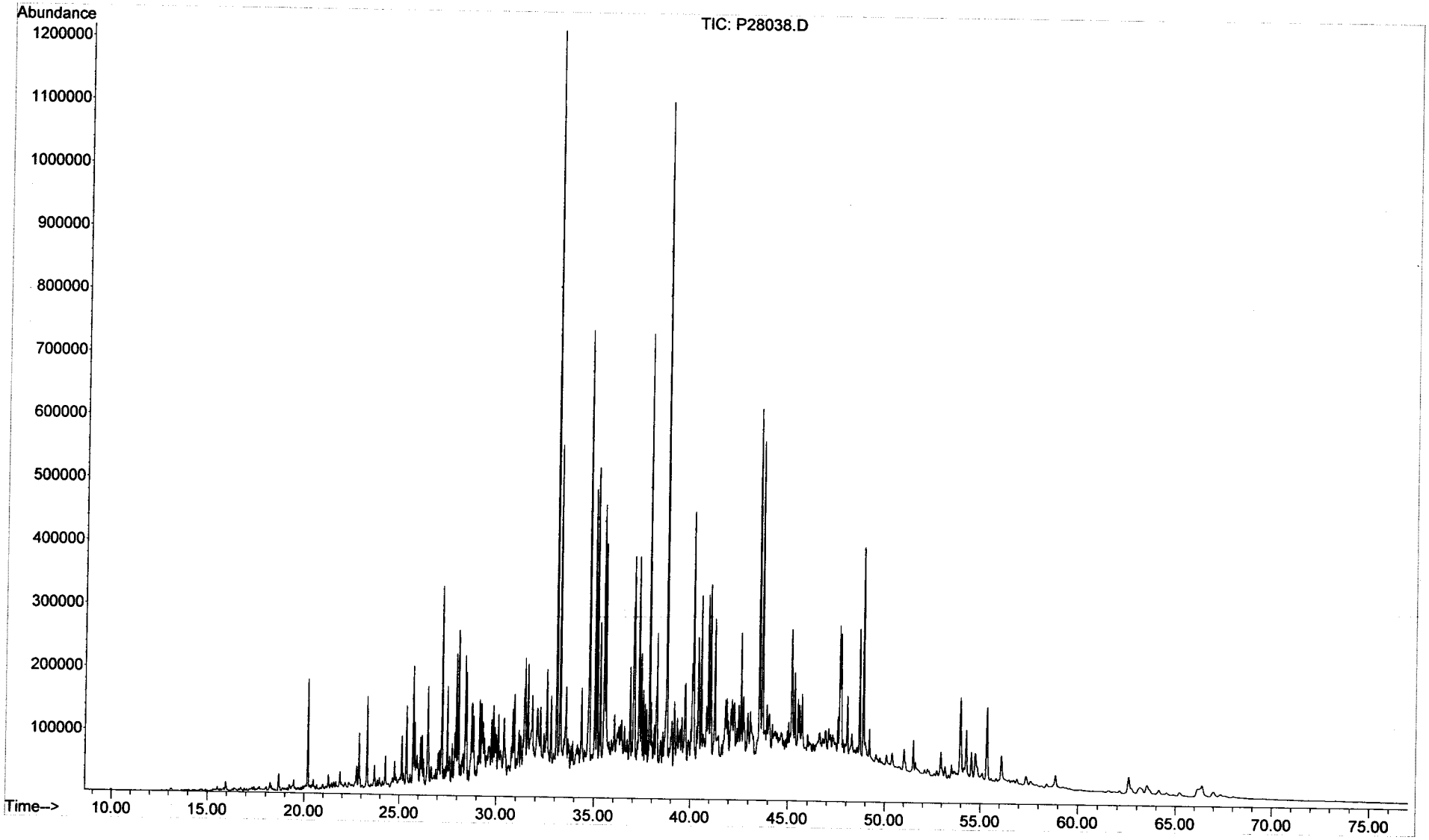
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28038.D
Acq On : 31 Jan 2006 11:11 pm
Operator : AC
Sample : 0601045-08
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 01 16:46:04 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	200510m	1096.04	ng/mL	
66) Naphthobenzothiophene-1,2-	42.95	234	56655m	309.69	ng/mL	
67) Naphthobenzothiophene-2,3-	43.25	234	68521m	374.55	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	418423m	2287.21	ng/ml	
69) C2-Naphthobenzothiophenes	45.52	262	303399m	1658.46	ng/ml	
70) C3-Naphthobenzothiophenes	47.65	276	178440m	975.40	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	80861m	442.01	ng/mL	
73) Benz[a]anthracene	43.55	228	888084m	4594.90	ng/mL	
74) Chrysene	43.71	228	966275m	4977.64	ng/mL	
75) Chrysene/Triphenylene	43.71	228	965127m	4971.72	ng/mL	
76) C1-Chrysenes	45.19	242	1037715m	5345.65	ng/mL	
77) C2-Chrysenes	46.90	256	579871m	2987.13	ng/mL	
78) BBF-d12 Surr BKGD	47.54	256	11314	58.28	ng/mL	100
79) C3-Chrysenes	48.54	270	351373m	1810.05	ng/mL	
80) C4-Chrysenes	50.19	284	143293m	738.15	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	438473	2112.33	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	454402	2093.35	ng/mL	99
84) Benzo[a]fluoranthene	48.03	252	215894m	994.58	ng/mL	
85) Benzo[e]pyrene	48.68	252	426812	2132.93	ng/mL	99
86) Benzo[a]pyrene	48.87	252	750525m	3751.55	ng/mL	
87) Perylene	49.20	252	114623m	574.71	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.95	276	316044m	1593.87	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	90726m	486.55	ng/mL	
90) Benzo[g,h,i]perylene	55.34	276	358791	1735.42	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28038.D
Operator : AC
Acquired : 31 Jan 2006 11:11 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-08
Misc Info : 1X
Vial Number: 20



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08E**
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
01/13/06	01/17/06	01/19/06	01/28/06	49.8	5.01	25	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	160	U	Fluoranthene	100	U
C1-Naphthalenes	160	U	Pyrene	**110000**	
C2-Naphthalenes	160	U	C1-Fluoranthenes/Pyrenes	89	U
C3-Naphthalenes	160	U	C2-Fluoranthenes/Pyrenes	89	U
C4-Naphthalenes	160	U	C3-Fluoranthenes/Pyrenes	89	U
Biphenyl	91	U	C4-Fluoranthenes/Pyrenes	89	U
Dibenzofuran	120	U	Naphthobenzothiophenes	120	U
Acenaphthylene	180	U	C1-Naphthobenzothiophenes	120	U
Acenaphthene	120	U	C2-Naphthobenzothiophenes	120	U
Fluorene	120	U	C3-Naphthobenzothiophenes	120	U
C1-Fluorenes	120	U	C4-Naphthobenzothiophenes	120	U
C2-Fluorenes	120	U	Benz[a]anthracene	160	U
C3-Fluorenes	120	U	Chrysene/Triphenylene	110	U
Anthracene	130	U	C1-Chrysenes	110	U
Phenanthrene	**100000**		C2-Chrysenes	110	U
C1-Phenanthrenes/Anthracenes	140	U	C3-Chrysenes	110	U
C2-Phenanthrenes/Anthracenes	140	U	C4-Chrysenes	110	U
C3-Phenanthrenes/Anthracenes	140	U	Benzo[b]fluoranthene	110	U
C4-Phenanthrenes/Anthracenes	140	U	Benzo[k]fluoranthene	200	U
Retene	140	U	Benzo[a]fluoranthene	200	U
Dibenzothiophene	110	U	Benzo[e]pyrene	140	U
C1-Dibenzothiophenes	110	U	Benzo[a]pyrene	140	U
C2-Dibenzothiophenes	110	U	Perylene	170	U
C3-Dibenzothiophenes	110	U	Indeno[1,2,3-cd]pyrene	240	U
C4-Dibenzothiophenes	110	U	Dibenz[a,h]anthracene	190	U
Benzo(b)fluorene	100	U	Benzo[g,h,i]perylene	180	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	81	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27968.D
Acq On : 28 Jan 2006 11:50 am
Operator : AC
Sample : 0601045-08-RE
Misc : 10X
ALS Vial : 25 Sample Multiplier: 1

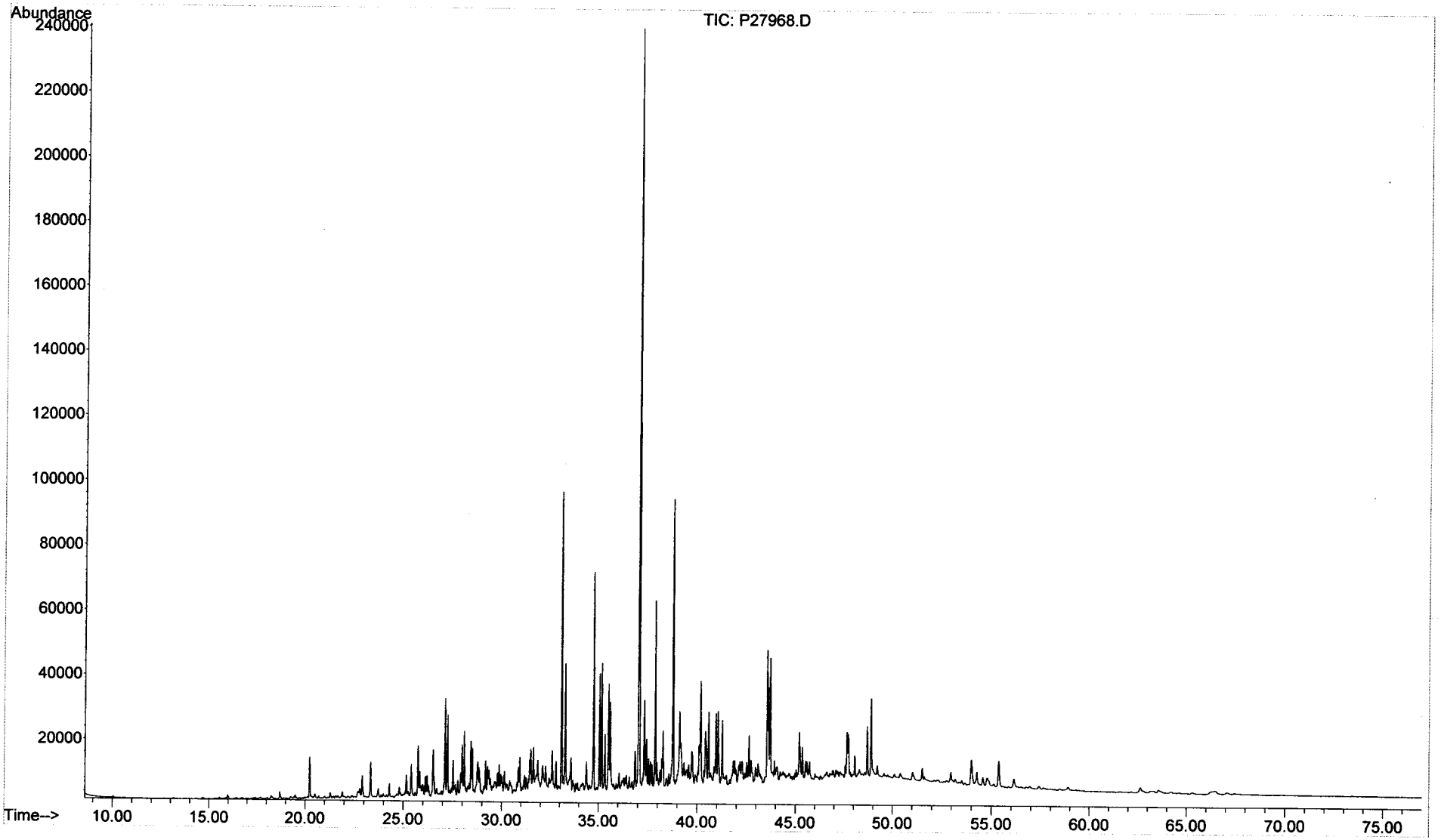
MAL for WW 2/4/6

Quant Time: Feb 01 17:18:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	34216m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	55612	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	4558m	64.82	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.48%#			
58) Pyrene-d10	38.70	212	10794m	74.63	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.46%#			
81) Benzo[b]fluoranthene-d12	47.57	264	8146m	71.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.14%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
41) Phenanthrene	33.11	178	161091	1031.62	ng/mL	100
59) Pyrene	38.78	202	181656	1064.41	ng/mL	99

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27968.D
Operator : AC
Acquired : 28 Jan 2006 11:50 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-08-RE
Misc Info : 10X
Vial Number: 25



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
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
01/13/06	01/17/06	01/19/06	01/27/06	49.8	5.01	11.09	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2300**	30,31-Bishomohopane-22S	**4000**
C24 Tricyclic Terpane	**1400**	30,31-Bishomohopane-22R	**2800**
C25 Tricyclic Terpane	**1500**	30,31-Trishomohopane-22S	**2300**
C24 Tetracyclic Terpane	**1500**	30,31-Trishomohopane-22R	**1500**
C26 Tricyclic Terpane-22S	**640**	Tetrakishomohopane-22S	**1500**
C26 Tricyclic Terpane-22R	**660**	Tetrakishomohopane-22R	**1000**
C28 Tricyclic Terpane-22S	**800**	Pentakishomohopane-22S	**1300**
C28 Tricyclic Terpane-22R	**810**	Pentakishomohopane-22R	**1000**
C29 Tricyclic Terpane-22S	**970**	13b(H),17a(H)-20S-Diacholestane	**3000**
C29 Tricyclic Terpane-22R	**960**	13b(H),17a(H)-20R-Diacholestane	**1600**
18a-22,29,30-Trisnorneohopane-TS	**4000**	13b,17a-20S-Methyldiacholestane	**1400**
C30 Tricyclic Terpane-22S	**720**	14a(H),17a(H)-20S-Cholestane	**1800**
C30 Tricyclic Terpane-22R	**710**	14a(H),17a(H)-20R-Cholestane	**5600**
17a(H)-22,29,30-Trisnorhopane-TM	**4100**	13b,17a-20R-Ethyldiacholestane	**980**
17a/b,21b/a 28,30-Bisnorhopane	**980**	13a,17b-20S-Ethyldiacholestane	**300**
17a(H),21b(H)-25-Norhopane	**470**	14a,17a-20S-Methylcholestane	**980**
30-Norhopane	**12000**	14a,17a-20R-Methylcholestane	**2400**
18a(H)-30-Norneohopane-C29Ts	**3700**	14a(H),17a(H)-20S-Ethylcholestane	**2300**
17a(H)-Diahopane	**840**	14a(H),17a(H)-20R-Ethylcholestane	**2900**
30-Normoretane	**2300**	14b(H),17b(H)-20R-Cholestane	**2800**
18a(H)&18b(H)-Oleananes	**1800**	14b(H),17b(H)-20S-Cholestane	**2700**
Hopane	**19000**	14b,17b-20R-Methylcholestane	**2600**
Moretane	**2400**	14b,17b-20S-Methylcholestane	**3400**
30-Homohopane-22S	**6000**	14b(H),17b(H)-20R-Ethylcholestane	**4200**
30-Homohopane-22R	**5200**	14b(H),17b(H)-20S-Ethylcholestane	**3400**

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

N/A - Not Applicable

02/07/06 16:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34887.D
Acq On : 27 Jan 2006 2:18 pm
Operator : AC
Sample : 0601045-08
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 06 12:36:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

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	101406	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	84403	1980.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 198.04%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	363452m	4170.75	ng/mL	
84) Hopane (T19)	52.49	191	364436m	4182.05	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	45872m	526.40	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	27318	313.48	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	29051m	333.37	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	28879	331.40	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	12568	144.22	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	13025	149.47	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	15615m	179.19	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	15924m	182.73	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	18984	217.85	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	18724m	214.87	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	79164m	908.44	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	14086m	161.64	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	13923m	159.77	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	81086	930.49	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	19197m	220.29	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	9142	104.91	ng/ml	100
101) 30-Norhopane (T15)	51.09	191	242917m	2787.57	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	72852m	836.01	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	16509m	189.45	ng/ml	
104) 30-Normoretane (T17)	51.88	191	44934	515.64	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	35892m	411.87	ng/ml	
106) Moretane (T20)	53.19	191	47744m	547.88	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	117360m	1346.75	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	101326	1162.76	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	77723	891.90	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	54404	624.31	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	45437m	521.41	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	30024m	344.54	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	29223	335.35	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	20202	231.83	ng/ml	100
115) Pentakishomohopane-22S (T3	63.97	191	25985	298.19	ng/ml	100
116) Pentakishomohopane-22R (T3	65.30	191	20009m	229.61	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	28687	673.11	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	15810m	370.97	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	13498m	316.72	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	17229m	404.26	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	53334	1251.43	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.24	217	9363m	219.69	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34887.D
Acq On : 27 Jan 2006 2:18 pm
Operator : AC
Sample : 0601045-08
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 06 12:36:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

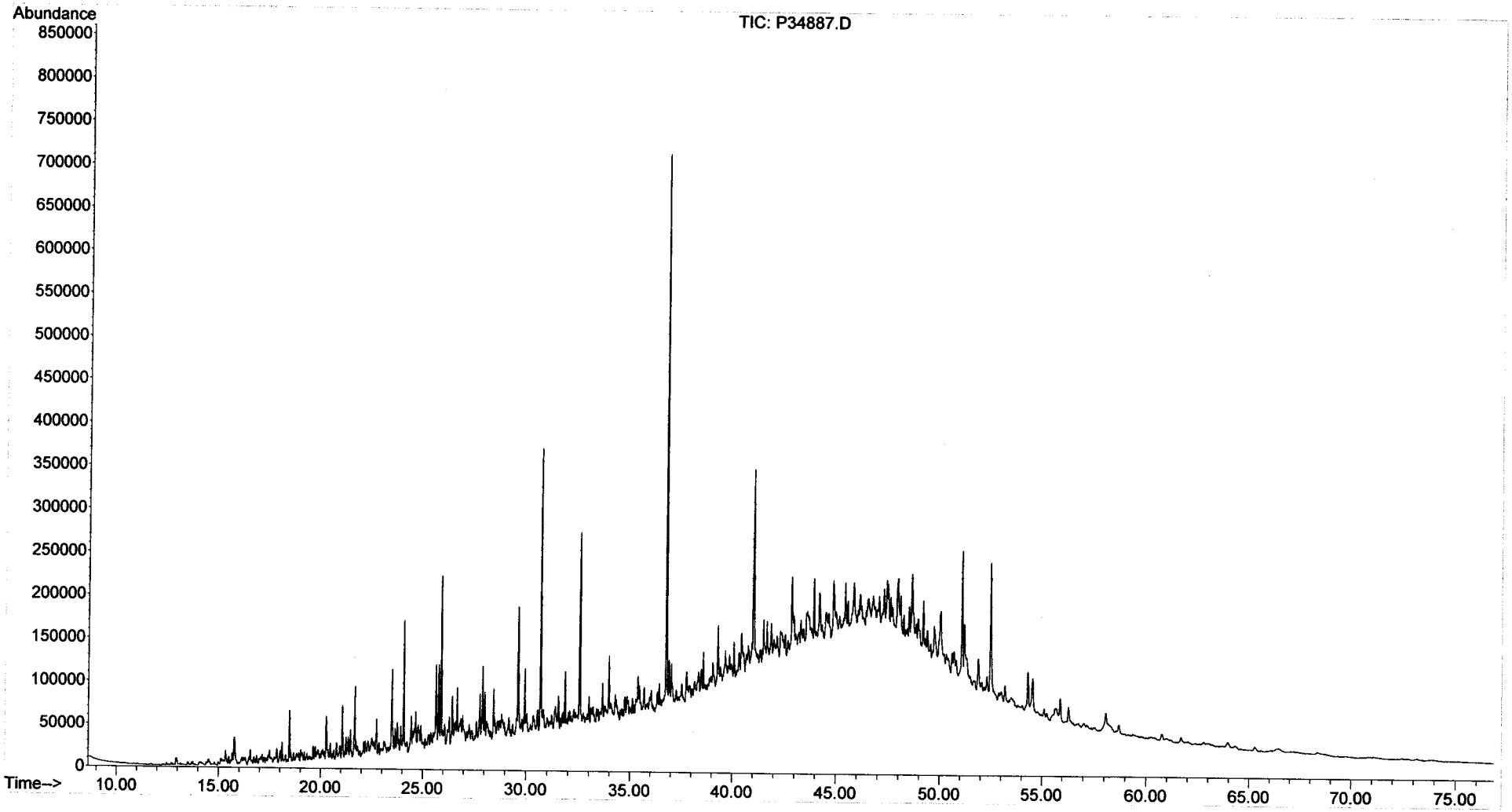
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	2858	67.06	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	9381m	220.12	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	23168m	543.61	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	21777m	510.98	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	27684m	649.58	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	26640m	625.08	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	26133	613.19	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	24646m	578.29	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	32349m	759.04	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.00	218	40403m	948.02	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	32448m	761.36	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 : P34887.D
Acq On : 27 Jan 2006 2:18 pm
Operator : AC
Sample : 0601045-08
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 06 12:36:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08 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
01/13/06	01/17/06	01/19/06	02/01/06	49.8	5.30	25	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	24000		Fluoranthene	75000	
C1-Naphthalenes	29000		Pyrene	110000	E
C2-Naphthalenes	64000		C1-Fluoranthenes/Pyrenes	150000	
C3-Naphthalenes	70000		C2-Fluoranthenes/Pyrenes	80000	
C4-Naphthalenes	44000		C3-Fluoranthenes/Pyrenes	38000	
Biphenyl	4400		C4-Fluoranthenes/Pyrenes	15000	
Dibenzofuran	3000		Naphthobenzothiophenes	19000	
Acenaphthylene	23000		C1-Naphthobenzothiophenes	26000	
Acenaphthene	33000		C2-Naphthobenzothiophenes	20000	
Fluorene	10000		C3-Naphthobenzothiophenes	11000	
C1-Fluorenes	29000		C4-Naphthobenzothiophenes	4700	
C2-Fluorenes	46000		Benz[a]anthracene	50000	
C3-Fluorenes	33000		Chrysene/Triphenylene	54000	
Anthracene	54000		C1-Chrysenes	63000	
Phenanthrene	110000	E	C2-Chrysenes	35000	
C1-Phenanthrenes/Anthracenes	170000		C3-Chrysenes	23000	
C2-Phenanthrenes/Anthracenes	130000		C4-Chrysenes	7600	
C3-Phenanthrenes/Anthracenes	64000		Benzo[b]fluoranthene	22000	
C4-Phenanthrenes/Anthracenes	18000		Benzo[k]fluoranthene	23000	
Retene	3600		Benzo[a]fluoranthene	11000	
Dibenzothiophene	16000		Benzo[e]pyrene	23000	
C1-Dibenzothiophenes	37000		Benzo[a]pyrene	41000	
C2-Dibenzothiophenes	46000		Perylene	6500	
C3-Dibenzothiophenes	31000		Indeno[1,2,3-cd]pyrene	17000	
C4-Dibenzothiophenes	12000		Dibenz[a,h]anthracene	5400	
Benzo(b)fluorene	24000		Benzo[g,h,i]perylene	19000	

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
E - Estimated value, exceeds the upper limit of calibration.

02/06/06 17:56

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08 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
01/13/06	01/17/06	01/19/06	02/01/06	49.8	5.30	25	1	AC

Parameter	Result
Carbazole	620

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

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

Quantitation Report (QT Reviewed)

MAL for WW 2/4/6

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28040.D
Acq On : 1 Feb 2006 12:47 am
Operator : AC
Sample : 0601045-08D
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 01 16:58:02 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	40002m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	68445m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	57036m	693.79	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 69.38%			
58) Pyrene-d10	38.69	212	130979m	774.59	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 77.46%			
81) Benzo[b]fluoranthene-d12	47.55	264	113249	807.06	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 80.71%			
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	448802	2494.40	ng/mL#	100
10) C1-Naphthalenes	23.31	142	556451m	3092.70	ng/mL	
11) C2-Naphthalenes	25.74	156	1224356m	6804.86	ng/mL	
12) C3-Naphthalenes	28.08	170	1323865m	7357.92	ng/mL	
13) C4-Naphthalenes	30.84	184	835109m	4641.46	ng/mL	
15) 2-Methylnaphthalene	22.88	142	210964	1842.01	ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	346002	3174.03	ng/mL#	100
22) Biphenyl	24.77	154	66607m	461.98	ng/mL	
23) 2,6-Dimethylnaphthalene	25.38	156	188150m	1907.09	ng/mL	
24) Dibenzofuran	27.87	168	50990m	320.38	ng/mL	
25) Acenaphthylene	26.49	152	427731m	2396.04	ng/mL	
26) Acenaphthene	27.22	153	381620	3487.52	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	102412m	1189.48	ng/mL	
28) Fluorene	29.24	166	135371m	1058.04	ng/mL	
29) C1-Fluorenes	31.48	180	388542m	3036.78	ng/mL	
30) C2-Fluorenes	33.66	194	622841m	4868.01	ng/mL	
31) C3-Fluorenes	35.66	208	450504m	3521.06	ng/mL	
32) Dibenzothiophene	32.59	184	289722m	1693.51	ng/mL	
36) OTP	34.74	198	11855m	69.30	ng/mL	
37) C1-Dibenzothiophenes	34.36	198	680450m	3977.43	ng/mL	
38) C2-Dibenzothiophenes	36.05	212	833804m	4873.83	ng/mL	
39) C3-Dibenzothiophenes	37.85	226	559169m	3268.51	ng/mL	
40) C4-Dibenzothiophenes	39.55	240	226403m	1323.39	ng/mL	
41) Phenanthrene	33.08	178	2059483m	11281.22	ng/mL E	
47) C1-Phenanthrenes/Anthracen	35.16	192	3255166m	17830.80	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.33	206	2517040m	13787.57	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.16	220	1235669m	6768.62	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.37	234	350986m	1922.59	ng/mL	
52) Retene	40.08	234	15507m	374.35	ng/mL	
53) Anthracene	33.27	178	966254m	5698.96	ng/mL	
54) Carbazole	33.94	167	10619m	65.71	ng/mL	
55) 1-Methylphenanthrene	35.60	192	529170m	4178.25	ng/mL	
56) Fluoranthene	37.87	202	1541357m	7910.65	ng/mL	
57) Benzo(b)fluorene	40.40	216	301553m	2517.52	ng/mL	
59) Pyrene	38.77	202	2312708	11591.20	ng/mL E	96
60) C1-Fluoranthenes/Pyrenes	40.15	216	3161334m	15844.48	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.62	230	1675010m	8395.08	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.09	244	803776m	4028.49	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.34	258	314981m	1578.67	ng/mL	
64) Naphthobenzothiophene	42.62	234	242308m	1309.62	ng/ml	

Quantitation Report (QT Reviewed)

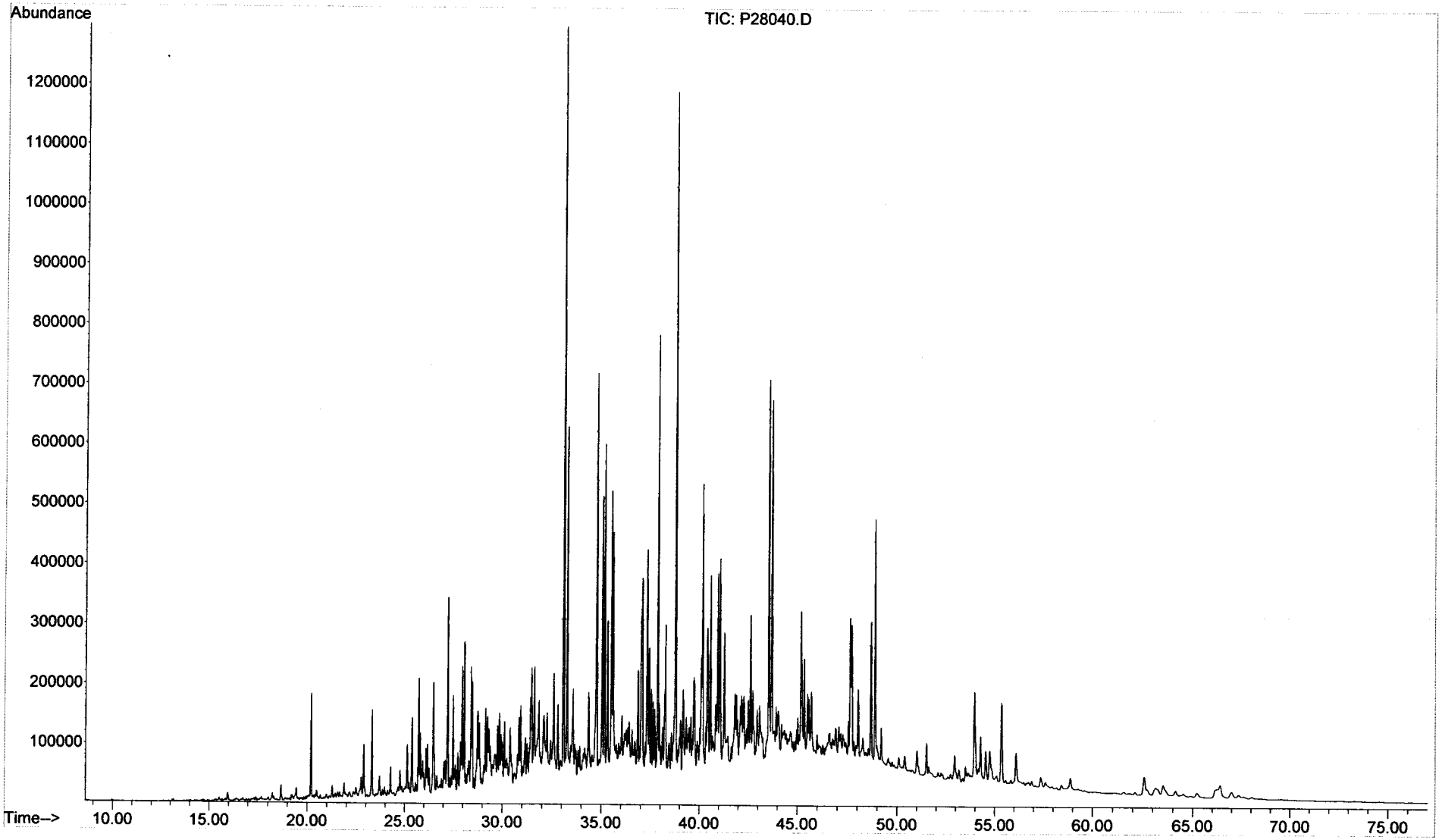
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN30\
Data File : P28040.D
Acq On : 1 Feb 2006 12:47 am
Operator : AC
Sample : 0601045-08D
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 01 16:58:02 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	241236m	1303.83	ng/mL	
66) Naphthobenzothiophene-1,2-	42.96	234	68125	368.20	ng/mL#	29
67) Naphthobenzothiophene-2,3-	43.26	234	66849m	361.30	ng/mL	
68) C1-Naphthobenzothiophenes	44.02	248	517366m	2796.25	ng/ml	
69) C2-Naphthobenzothiophenes	45.53	262	390440m	2110.24	ng/ml	
70) C3-Naphthobenzothiophenes	47.66	276	218878m	1182.99	ng/ml	
71) C4-Naphthobenzothiophenes	48.76	290	92078m	497.66	ng/mL	
73) Benz[a]anthracene	43.56	228	1021145m	5224.29	ng/mL	
74) Chrysene	43.72	228	1123918m	5725.00	ng/mL	
75) Chrysene/Triphenylene	43.72	228	1121564m	5713.01	ng/mL	
76) C1-Chrysenes	45.19	242	1302447m	6634.39	ng/mL	
77) C2-Chrysenes	46.90	256	745223m	3796.01	ng/mL	
78) BBF-d12 Surr BKGD	47.54	256	15329m	78.08	ng/mL	
79) C3-Chrysenes	48.55	270	468364m	2385.75	ng/mL	
80) C4-Chrysenes	50.10	284	157158m	800.53	ng/mL	
82) Benzo[b]fluoranthene	47.63	252	493297	2349.88	ng/mL	99
83) Benzo[k]fluoranthene	47.71	252	537265	2447.42	ng/mL	100
84) Benzo[a]fluoranthene	48.03	252	259326m	1181.32	ng/mL	
85) Benzo[e]pyrene	48.69	252	499074	2466.17	ng/mL	99
86) Benzo[a]pyrene	48.89	252	867676m	4288.66	ng/mL	
87) Perylene	49.20	252	137900m	683.69	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.95	276	360837m	1799.43	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	106779m	566.24	ng/mL	
90) Benzo[g,h,i]perylene	55.34	276	409515	1958.63	ng/mL	100

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28040.D
Operator : AC
Acquired : 1 Feb 2006 12:47 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-08D
Misc Info : 1X
Vial Number: 21



Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08E 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
01/13/06	01/17/06	01/19/06	01/28/06	49.8	5.30	25	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	160	U	Fluoranthene	96	U
C1-Naphthalenes	160	U	Pyrene	**110000**	
C2-Naphthalenes	160	U	C1-Fluoranthenes/Pyrenes	84	U
C3-Naphthalenes	160	U	C2-Fluoranthenes/Pyrenes	84	U
C4-Naphthalenes	160	U	C3-Fluoranthenes/Pyrenes	84	U
Biphenyl	86	U	C4-Fluoranthenes/Pyrenes	84	U
Dibenzofuran	110	U	Naphthobenzothiophenes	120	U
Acenaphthylene	170	U	C1-Naphthobenzothiophenes	120	U
Acenaphthene	110	U	C2-Naphthobenzothiophenes	120	U
Fluorene	110	U	C3-Naphthobenzothiophenes	120	U
C1-Fluorenes	110	U	C4-Naphthobenzothiophenes	120	U
C2-Fluorenes	110	U	Benz[a]anthracene	150	U
C3-Fluorenes	110	U	Chrysene/Triphenylene	100	U
Anthracene	130	U	C1-Chrysenes	100	U
Phenanthrene	**110000**		C2-Chrysenes	100	U
C1-Phenanthrenes/Anthracenes	140	U	C3-Chrysenes	100	U
C2-Phenanthrenes/Anthracenes	140	U	C4-Chrysenes	100	U
C3-Phenanthrenes/Anthracenes	140	U	Benzo[b]fluoranthene	100	U
C4-Phenanthrenes/Anthracenes	140	U	Benzo[k]fluoranthene	190	U
Retene	140	U	Benzo[a]fluoranthene	190	U
Dibenzothiophene	100	U	Benzo[e]pyrene	130	U
C1-Dibenzothiophenes	100	U	Benzo[a]pyrene	130	U
C2-Dibenzothiophenes	100	U	Perylene	160	U
C3-Dibenzothiophenes	100	U	Indeno[1,2,3-cd]pyrene	230	U
C4-Dibenzothiophenes	100	U	Dibenz[a,h]anthracene	180	U
Benzo(b)fluorene	96	U	Benzo[g,h,i]perylene	170	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	79	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	94	50-130

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

02/06/06 17:49

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27970.D
Acq On : 28 Jan 2006 1:27 pm
Operator : AC
Sample : 0601045-08D-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

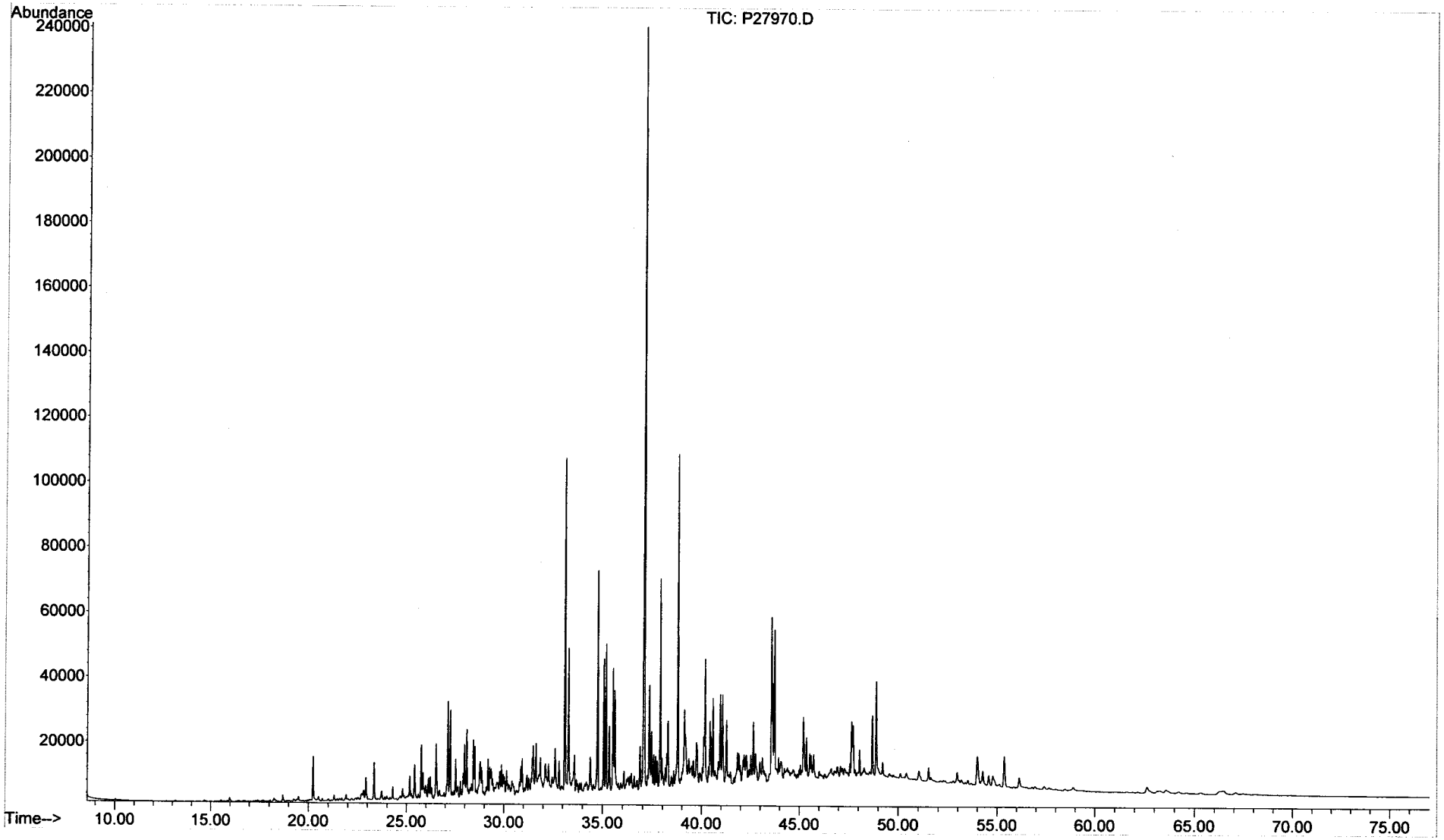
MAL for WW 2/4/6

Quant Time: Feb 01 17:20:04 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	34725m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	55857	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.80	152	4532m	63.51	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.35%#			
58) Pyrene-d10	38.70	212	10863m	74.01	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.40%#			
81) Benzo[b]fluoranthene-d12	47.57	264	8574m	74.87	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.49%#			
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
41) Phenanthrene	33.11	178	180733	1140.45	ng/mL	100
59) Pyrene	38.78	202	205176	1184.60	ng/mL	99

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23\P27970.D
Operator : AC
Acquired : 28 Jan 2006 1:27 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-08D-RE
Misc Info : 10X
Vial Number: 26



Form I
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08 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
01/13/06	01/17/06	01/19/06	01/27/06	49.8	5.30	11.09	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2200**	30,31-Bishomohopane-22S	**3800**
C24 Tricyclic Terpane	**1400**	30,31-Bishomohopane-22R	**2700**
C25 Tricyclic Terpane	**1400**	30,31-Trishomohopane-22S	**2300**
C24 Tetracyclic Terpane	**1500**	30,31-Trishomohopane-22R	**1500**
C26 Tricyclic Terpane-22S	**630**	Tetrakishomohopane-22S	**1400**
C26 Tricyclic Terpane-22R	**640**	Tetrakishomohopane-22R	**980**
C28 Tricyclic Terpane-22S	**780**	Pentakishomohopane-22S	**1300**
C28 Tricyclic Terpane-22R	**800**	Pentakishomohopane-22R	**940**
C29 Tricyclic Terpane-22S	**920**	13b(H),17a(H)-20S-Diacholestane	**2900**
C29 Tricyclic Terpane-22R	**960**	13b(H),17a(H)-20R-Diacholestane	**1700**
18a-22,29,30-Trisnorneohopane-TS	**4000**	13b,17a-20S-Methyldiacholestane	**1300**
C30 Tricyclic Terpane-22S	**720**	14a(H),17a(H)-20S-Cholestane	**1700**
C30 Tricyclic Terpane-22R	**650**	14a(H),17a(H)-20R-Cholestane	**5300**
17a(H)-22,29,30-Trisnorhopane-TM	**4000**	13b,17a-20R-Ethyldiacholestane	**920**
17a/b,21b/a 28,30-Bisnorhopane	**910**	13a,17b-20S-Ethyldiacholestane	**250**
17a(H),21b(H)-25-Norhopane	**430**	14a,17a-20S-Methylcholestane	**950**
30-Norhopane	**12000**	14a,17a-20R-Methylcholestane	**2200**
18a(H)-30-Norneohopane-C29Ts	**3800**	14a(H),17a(H)-20S-Ethylcholestane	**2000**
17a(H)-Diahopane	**780**	14a(H),17a(H)-20R-Ethylcholestane	**2800**
30-Normoretane	**2200**	14b(H),17b(H)-20R-Cholestane	**2800**
18a(H)&18b(H)-Oleananes	**1800**	14b(H),17b(H)-20S-Cholestane	**2800**
Hopane	**18000**	14b,17b-20R-Methylcholestane	**2500**
Moretane	**2500**	14b,17b-20S-Methylcholestane	**3100**
30-Homohopane-22S	**5900**	14b(H),17b(H)-20R-Ethylcholestane	**4200**
30-Homohopane-22R	**5100**	14b(H),17b(H)-20S-Ethylcholestane	**3300**

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

N/A - Not Applicable

02/07/06 16:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34888.D
Acq On : 27 Jan 2006 3:50 pm
Operator : AC
Sample : 0601045-08D
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 06 12:42:18 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	85475	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	73685	2051.19	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 205.12%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	311942m	4246.84	ng/mL	
84) Hopane (T19)	52.49	191	311815m	4245.11	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	39307m	535.13	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	23528	320.31	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.20	191	25086m	341.53	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	25463	346.66	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	11049	150.42	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	11188m	152.32	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	13541m	184.35	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	14064m	191.47	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	16029	218.22	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	16746m	227.98	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	69607m	947.64	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	12572m	171.16	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	11422m	155.50	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	70355	957.83	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	15954m	217.20	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	7577	103.15	ng/ml	100
101) 30-Norhopane (T15)	51.10	191	212422m	2891.96	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	66471m	904.95	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	13664	186.02	ng/ml	100
104) 30-Normoretane (T17)	51.89	191	38638	526.03	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	30955m	421.43	ng/ml	
106) Moretane (T20)	53.19	191	44309m	603.23	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	102946	1401.53	ng/ml	100
108) 30-Homohopane-22R (T22)	54.55	191	88394	1203.41	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	65998	898.51	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	46602	634.45	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.08	191	40782m	555.21	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	26579m	361.85	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	24905	339.06	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	17171	233.77	ng/ml	100
115) Pentakishomohopane-22S (T3	63.98	191	21986m	299.32	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	16483m	224.40	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	24958m	694.76	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	14183m	394.82	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	11413m	317.71	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	14329m	398.88	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	45514m	1266.99	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	7849m	218.50	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34888.D
Acq On : 27 Jan 2006 3:50 pm
Operator : AC
Sample : 0601045-08D
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 06 12:42:18 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

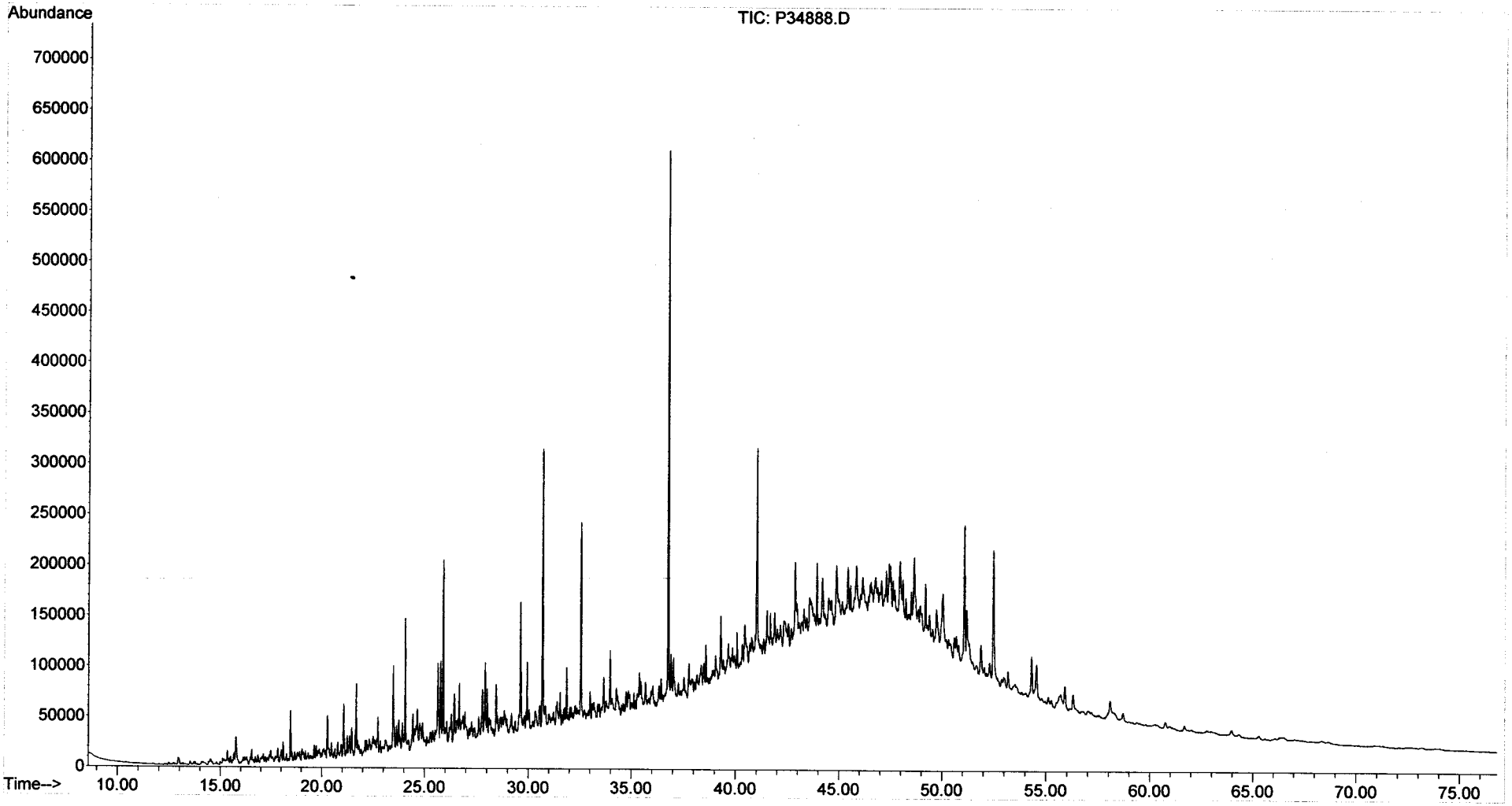
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	2145	59.71	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.67	217	8142m	226.65	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.40	217	18916m	526.57	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	17446m	485.65	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	24085m	670.46	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	23686m	659.35	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	23597m	656.88	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	21297m	592.85	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	26789m	745.73	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.01	218	35862	998.30	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	28345m	789.05	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 : P34888.D
Acq On : 27 Jan 2006 3:50 pm
Operator : AC
Sample : 0601045-08D
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 06 12:42:18 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



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	25000	24000	5	30
C1-Naphthalenes	31000	29000	6	30
C2-Naphthalenes	67000	64000	4	30
C3-Naphthalenes	72000	70000	3	30
C4-Naphthalenes	45000	44000	3	30
Biphenyl	4500	4400	3	30
Dibenzofuran	3000	3000	2	30
Acenaphthylene	21000	23000	9	30
Acenaphthene	34000	33000	2	30
Fluorene	11000	10000	8	30
C1-Fluorenes	29000	29000	1	30
C2-Fluorenes	44000	46000	5	30
C3-Fluorenes	33000	33000	2	30
Anthracene	53000	54000	2	30
Phenanthrene	110000 E	110000 E	1	30
C1-Phenanthrenes/Anthracenes	160000	170000	3	30
C2-Phenanthrenes/Anthracenes	120000	130000	6	30
C3-Phenanthrenes/Anthracenes	58000	64000	10	30
C4-Phenanthrenes/Anthracenes	18000	18000	0	30
Retene	3600	3600	1	30
Dibenzothiophene	16000	16000	0	30
C1-Dibenzothiophenes	37000	37000	1	30
C2-Dibenzothiophenes	44000	46000	5	30
C3-Dibenzothiophenes	29000	31000	8	30
C4-Dibenzothiophenes	11000	12000	9	30
Benzo(b)fluorene	18000	24000	26	30
Fluoranthene	73000	75000	3	30
Pyrene	110000 E	110000 E	3	30
C1-Fluoranthenes/Pyrenes	140000	150000	10	30
C2-Fluoranthenes/Pyrenes	68000	80000	15	30
C3-Fluoranthenes/Pyrenes	32000	38000	17	30
C4-Fluoranthenes/Pyrenes	13000	15000	15	30
Naphthobenzothiophenes	18000	19000	8	30
C1-Naphthobenzothiophenes	23000	26000	14	30
C2-Naphthobenzothiophenes	17000	20000	18	30

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

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	9800	11000	14	30
C4-Naphthobenzothiophenes	4400	4700	6	30
Benz[a]anthracene	46000	50000	7	30
Chrysene/Triphenylene	50000	54000	8	30
C1-Chrysenes	54000	63000	16	30
C2-Chrysenes	29000	35000	18	30
C3-Chrysenes	18000	23000	22	30
C4-Chrysenes	7400	7600	2	30
Benzo[b]fluoranthene	21000	22000	5	30
Benzo[k]fluoranthene	21000	23000	10	30
Benzo[a]fluoranthene	10000	11000	12	30
Benzo[e]pyrene	21000	23000	9	30
Benzo[a]pyrene	38000	41000	8	30
Perylene	5800	6500	12	30
Indeno[1,2,3-cd]pyrene	16000	17000	7	30
Dibenz[a,h]anthracene	4900	5400	10	30
Benzo[g,h,i]perylene	17000	19000	6	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	90	87	50-130
Pyrene-d10	99	97	50-130
Benzo[b]fluoranthene-d12	101	101	50-130

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

02/06/06 17:58

Duplicate
Carbazole

Client:	**NewFields Environmental Forensics Practice**	Lab Code:	**MA00030**
Project:	**Gowanus Canal**	ETR:	**0601045**
Client ID:	**GC-SED-34B (2-3)**	Lab ID:	**0601045-08**
Case:	**N/A** SDG: **N/A**	Associated Blank:	**SS011906B05**
Matrix:	**Sediment**	Concentration Units:	**µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	**510**	**620**	20	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	90	87	50-130
Pyrene-d10	99	97	50-130
Benzo[b]fluoranthene-d12	101	101	50-130

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

02/06/06 17:59

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08E**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	160 U	160 U	N/A	30
C1-Naphthalenes	160 U	160 U	N/A	30
C2-Naphthalenes	160 U	160 U	N/A	30
C3-Naphthalenes	160 U	160 U	N/A	30
C4-Naphthalenes	160 U	160 U	N/A	30
Biphenyl	91 U	86 U	N/A	30
Dibenzofuran	120 U	110 U	N/A	30
Acenaphthylene	180 U	170 U	N/A	30
Acenaphthene	120 U	110 U	N/A	30
Fluorene	120 U	110 U	N/A	30
C1-Fluorenes	120 U	110 U	N/A	30
C2-Fluorenes	120 U	110 U	N/A	30
C3-Fluorenes	120 U	110 U	N/A	30
Anthracene	130 U	130 U	N/A	30
Phenanthrene	**100000**	**110000**	4	30
C1-Phenanthrenes/Anthracenes	140 U	140 U	N/A	30
C2-Phenanthrenes/Anthracenes	140 U	140 U	N/A	30
C3-Phenanthrenes/Anthracenes	140 U	140 U	N/A	30
C4-Phenanthrenes/Anthracenes	140 U	140 U	N/A	30
Retene	140 U	140 U	N/A	30
Dibenzothiophene	110 U	100 U	N/A	30
C1-Dibenzothiophenes	110 U	100 U	N/A	30
C2-Dibenzothiophenes	110 U	100 U	N/A	30
C3-Dibenzothiophenes	110 U	100 U	N/A	30
C4-Dibenzothiophenes	110 U	100 U	N/A	30
Benzo(b)fluorene	100 U	96 U	N/A	30
Fluoranthene	100 U	96 U	N/A	30
Pyrene	**110000**	**110000**	5	30
C1-Fluoranthenes/Pyrenes	89 U	84 U	N/A	30
C2-Fluoranthenes/Pyrenes	89 U	84 U	N/A	30
C3-Fluoranthenes/Pyrenes	89 U	84 U	N/A	30
C4-Fluoranthenes/Pyrenes	89 U	84 U	N/A	30
Naphthobenzothiophenes	120 U	120 U	N/A	30
C1-Naphthobenzothiophenes	120 U	120 U	N/A	30
C2-Naphthobenzothiophenes	120 U	120 U	N/A	30

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08E**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	120 U	120 U	N/A	30
C4-Naphthobenzothiophenes	120 U	120 U	N/A	30
Benz[a]anthracene	160 U	150 U	N/A	30
Chrysene/Triphenylene	110 U	100 U	N/A	30
C1-Chrysenes	110 U	100 U	N/A	30
C2-Chrysenes	110 U	100 U	N/A	30
C3-Chrysenes	110 U	100 U	N/A	30
C4-Chrysenes	110 U	100 U	N/A	30
Benzo[b]fluoranthene	110 U	100 U	N/A	30
Benzo[k]fluoranthene	200 U	190 U	N/A	30
Benzo[a]fluoranthene	200 U	190 U	N/A	30
Benzo[e]pyrene	140 U	130 U	N/A	30
Benzo[a]pyrene	140 U	130 U	N/A	30
Perylene	170 U	160 U	N/A	30
Indeno[1,2,3-cd]pyrene	240 U	230 U	N/A	30
Dibenz[a,h]anthracene	190 U	180 U	N/A	30
Benzo[g,h,i]perylene	180 U	170 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	81	79	50-130
Pyrene-d10	93	93	50-130
Benzo[b]fluoranthene-d12	89	94	50-130

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

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

02/06/06 17:57

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	2300	2200	4	30
C24 Tricyclic Terpane	1400	1400	3	30
C25 Tricyclic Terpane	1500	1400	3	30
C24 Tetracyclic Terpane	1500	1500	1	30
C26 Tricyclic Terpane-22S	640	630	1	30
C26 Tricyclic Terpane-22R	660	640	4	30
C28 Tricyclic Terpane-22S	800	780	3	30
C28 Tricyclic Terpane-22R	810	800	1	30
C29 Tricyclic Terpane-22S	970	920	5	30
C29 Tricyclic Terpane-22R	960	960	0	30
18a-22,29,30-Trisnorneohopane-TS	4000	4000	1	30
C30 Tricyclic Terpane-22S	720	720	0	30
C30 Tricyclic Terpane-22R	710	650	8	30
17a(H)-22,29,30-Trisnorhopane-TM	4100	4000	3	30
17a/b,21b/a 28,30-Bisnorhopane	980	910	7	30
17a(H),21b(H)-25-Norhopane	470	430	7	30
30-Norhopane	12000	12000	2	30
18a(H)-30-Norneohopane-C29Ts	3700	3800	2	30
17a(H)-Diahopane	840	780	7	30
30-Normoretane	2300	2200	4	30
18a(H)&18b(H)-Oleananes	1800	1800	3	30
Hopane	19000	18000	4	30
Moretane	2400	2500	4	30
30-Homohopane-22S	6000	5900	2	30
30-Homohopane-22R	5200	5100	2	30
30,31-Bishomohopane-22S	4000	3800	5	30
30,31-Bishomohopane-22R	2800	2700	4	30
30,31-Trishomohopane-22S	2300	2300	1	30
30,31-Trishomohopane-22R	1500	1500	1	30
Tetrakishomohopane-22S	1500	1400	5	30
Tetrakishomohopane-22R	1000	980	5	30
Pentakishomohopane-22S	1300	1300	5	30
Pentakishomohopane-22R	1000	940	8	30
13b(H),17a(H)-20S-Diacholestane	3000	2900	2	30
13b(H),17a(H)-20R-Diacholestane	1600	1700	1	30

N/A - Not Applicable

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

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
Associated Blank: **SS011906B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	1400	1300	5	30
14a(H),17a(H)-20S-Cholestane	1800	1700	7	30
14a(H),17a(H)-20R-Cholestane	5600	5300	4	30
13b,17a-20R-Ethyldiacholestane	980	920	6	30
13a,17b-20S-Ethyldiacholestane	300	250	17	30
14a,17a-20S-Methylcholestane	980	950	3	30
14a,17a-20R-Methylcholestane	2400	2200	9	30
14a(H),17a(H)-20S-Ethylcholestane	2300	2000	11	30
14a(H),17a(H)-20R-Ethylcholestane	2900	2800	2	30
14b(H),17b(H)-20R-Cholestane	2800	2800	0	30
14b(H),17b(H)-20S-Cholestane	2700	2800	1	30
14b,17b-20R-Methylcholestane	2600	2500	3	30
14b,17b-20S-Methylcholestane	3400	3100	7	30
14b(H),17b(H)-20R-Ethylcholestane	4200	4200	0	30
14b(H),17b(H)-20S-Ethylcholestane	3400	3300	2	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	110	114	50-130

N/A - Not Applicable

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

02/07/06 16:03

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: **0601045**
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.

02/07/06 17:03

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: **0601045**
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.

02/07/06 17:04

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

MAL for
WW
2/4/6

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

✓
CMS
2/7/06

```
File        :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28010.D
Operator    : AC
Acquired    : 30 Jan 2006   8:11 pm using AcqMethod FRNC2B.M
Instrument :   PAHINST2
Sample Name: SS011906B05
Misc Info   : 1X ETR0601045
Vial Number: 6
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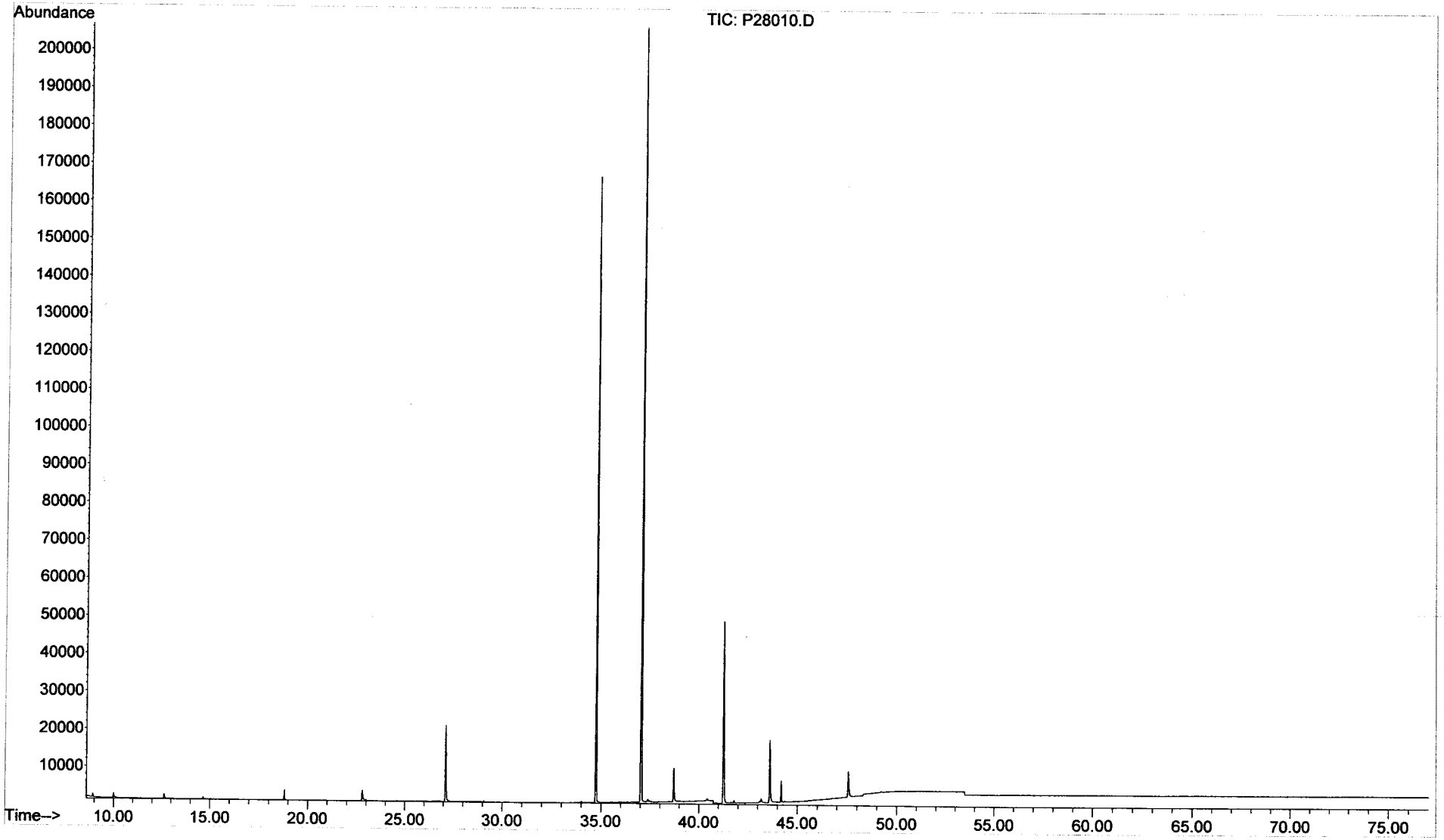


Form I
Steranes and Triterpanes

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: **0601045**
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 15:49

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

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	43.44	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%	

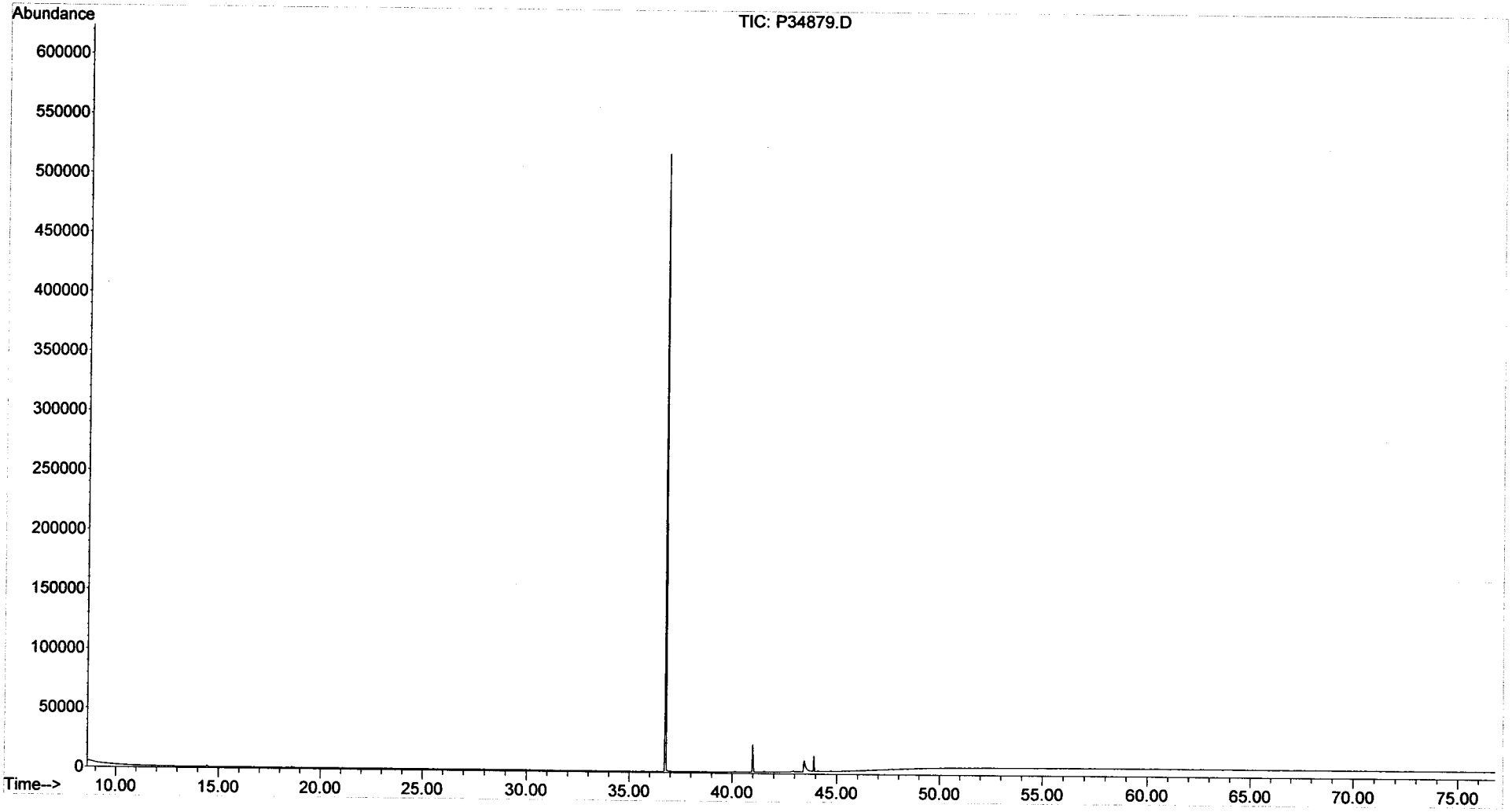
Target Compounds Qvalue

(#) = 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: **0601045**
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 17:20

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: **0601045**
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 17:16

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: **0601045**
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 17:16

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

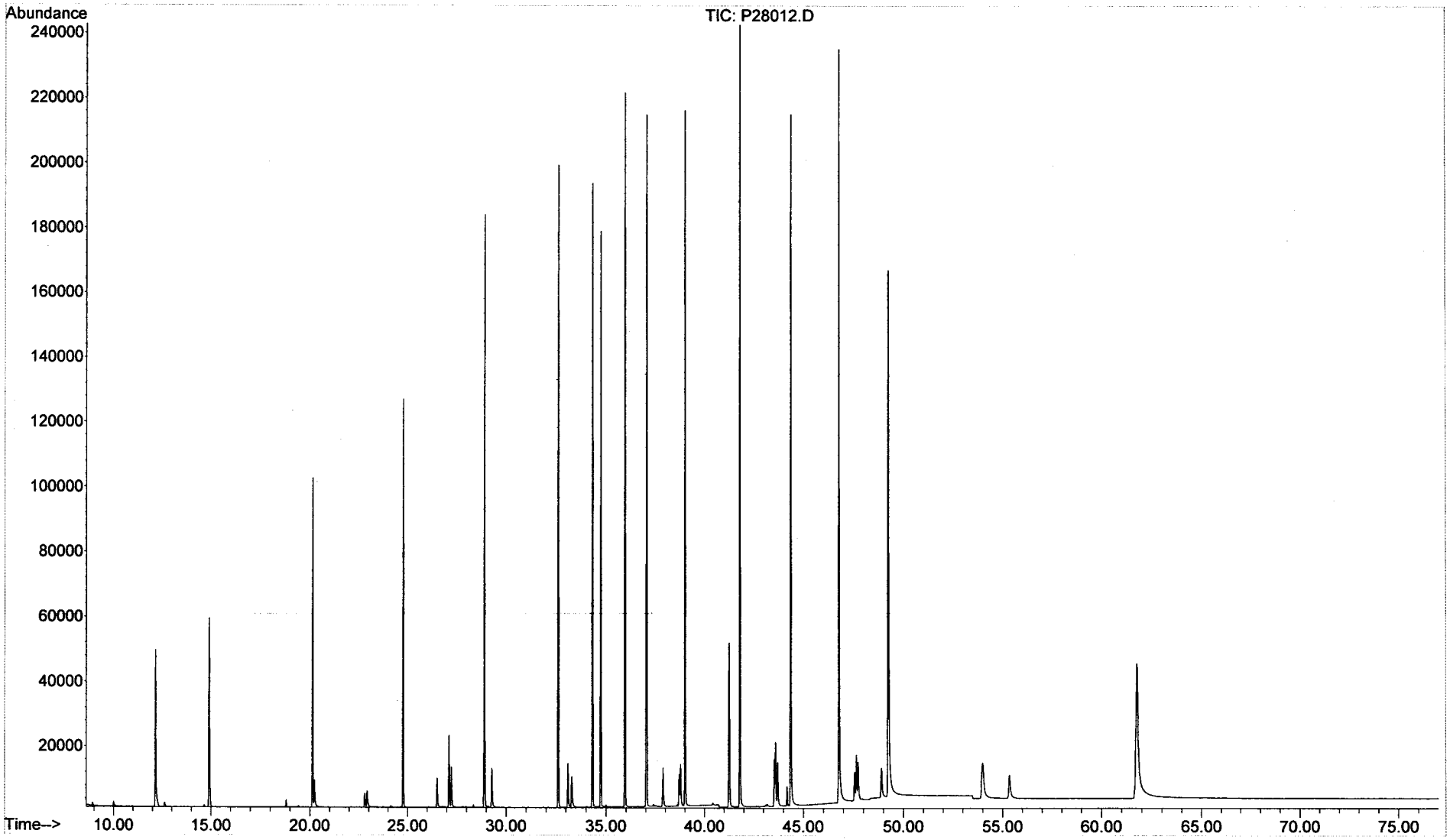
MAL for WW 2/4/6

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28012.D
Operator : AC
Acquired : 30 Jan 2006 9:50 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011906LCS04
Misc Info : 1X ETR0601045
Vial Number: 7



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: **0601045**
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 17:17

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: **0601045**
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 17:17

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

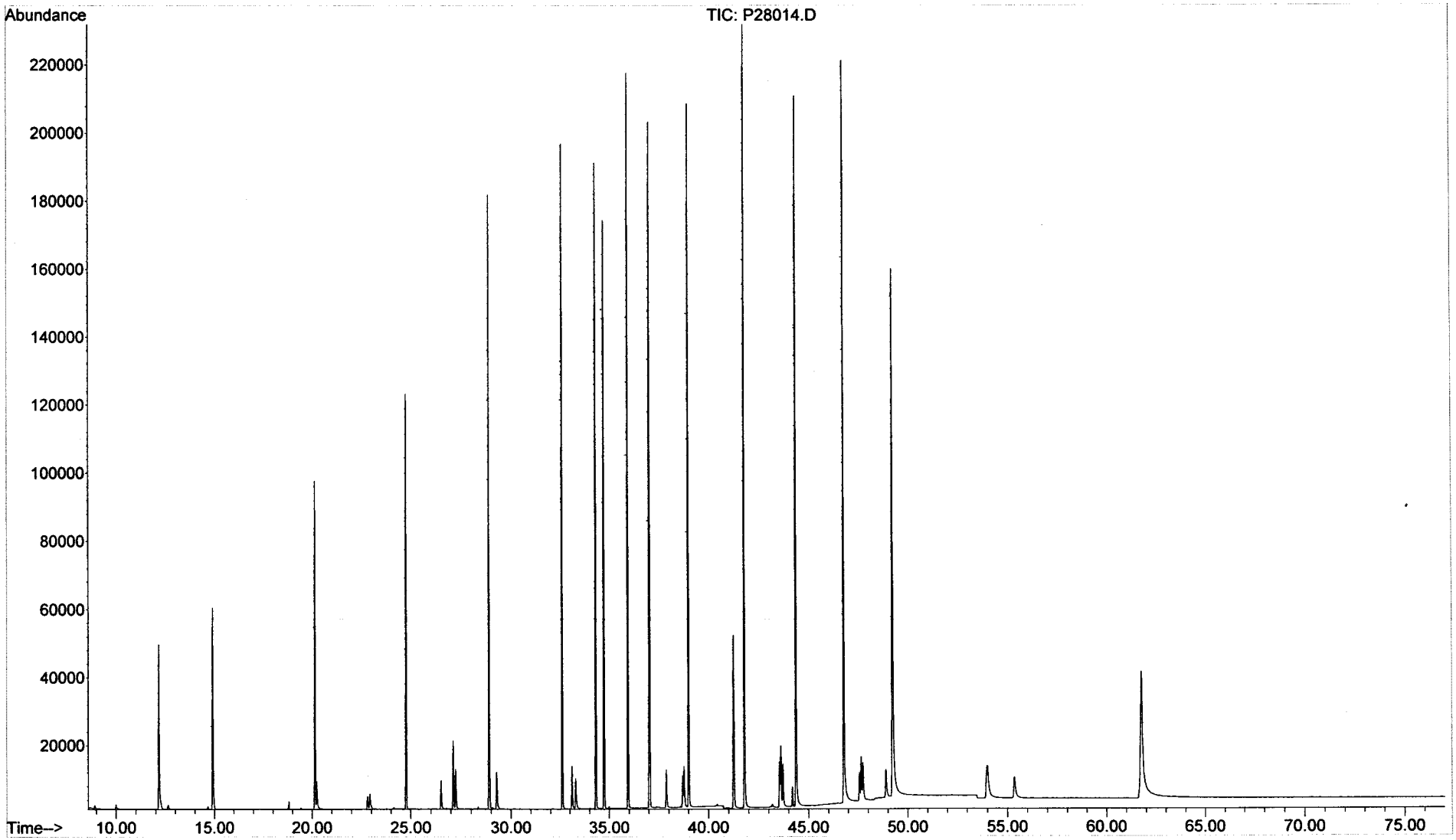
MAL for WW 2/4/6

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN30\P28014.D
Operator : AC
Acquired : 30 Jan 2006 11:28 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS011906LCSD04
Misc Info : 1X ETR0601045
Vial Number: 8



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: **0601045**
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 19:57

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: **0601045**
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 19:57

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: **0601045**
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	
Naphthalene	700	
C1-Naphthalenes	1500	
C2-Naphthalenes	1900	
C3-Naphthalenes	1400	
C4-Naphthalenes	730	
Biphenyl	220	
Dibenzofuran	70	
Acenaphthylene	6.0	
Acenaphthene	18	
Fluorene	88	
C1-Fluorenes	210	
C2-Fluorenes	310	
C3-Fluorenes	290	
Anthracene	0.26	U
Phenanthrene	270	
C1-Phenanthrenes/Anthracenes	560	
C2-Phenanthrenes/Anthracenes	620	
C3-Phenanthrenes/Anthracenes	420	
C4-Phenanthrenes/Anthracenes	150	
Retene	0.28	U
Dibenzothiophene	230	
C1-Dibenzothiophenes	430	
C2-Dibenzothiophenes	560	
C3-Dibenzothiophenes	480	
C4-Dibenzothiophenes	240	
Benzo(b)fluorene	0.20	U

Parameter	Result	
Fluoranthene	3.0	
Pyrene	13	
C1-Fluoranthenes/Pyrenes	71	
C2-Fluoranthenes/Pyrenes	120	
C3-Fluoranthenes/Pyrenes	130	
C4-Fluoranthenes/Pyrenes	100	
Naphthobenzothiophenes	59	
C1-Naphthobenzothiophenes	150	
C2-Naphthobenzothiophenes	190	
C3-Naphthobenzothiophenes	130	
C4-Naphthobenzothiophenes	88	
Benz[a]anthracene	1.2	J
Chrysene/Triphenylene	46	
C1-Chrysenes	80	
C2-Chrysenes	93	
C3-Chrysenes	89	
C4-Chrysenes	55	
Benzo[b]fluoranthene	5.7	
Benzo[k]fluoranthene	0.40	U
Benzo[a]fluoranthene	0.40	U
Benzo[e]pyrene	13	
Benzo[a]pyrene	2.5	
Perylene	0.59	J
Indeno[1,2,3-cd]pyrene	1.1	J
Dibenz[a,h]anthracene	1.1	J
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 19:21

Form I
Alaska North Slope Crude
Carbazole

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601045**
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 19:22

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

MJS 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

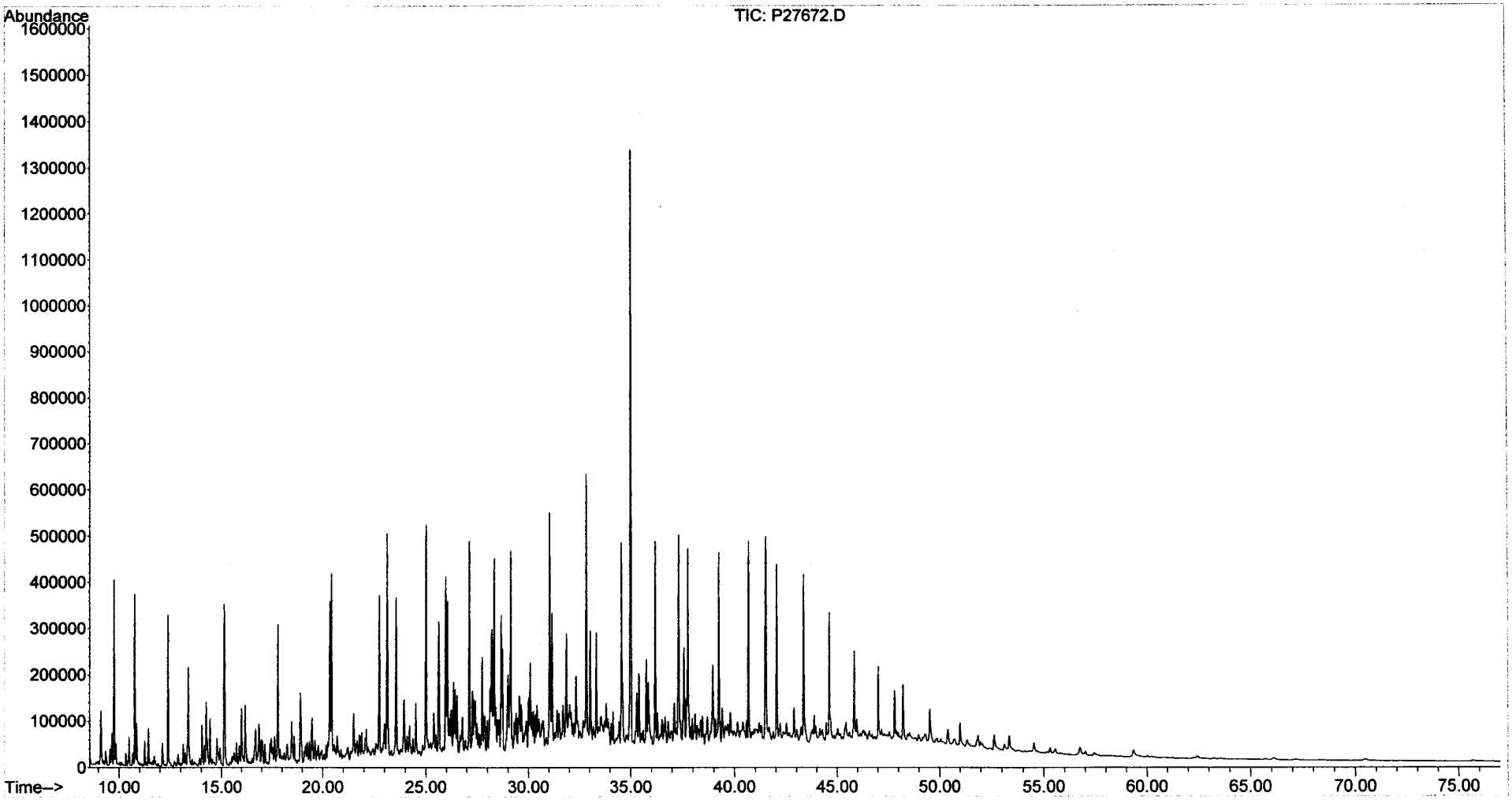
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	51.17	191	2797	28.54	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.89	191	2670m	27.25	ng/ml	
109) 30-Norhopane (T15)	51.87	191	42464m	433.34	ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.98	191	8425m	85.98	ng/ml	
111) 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

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: **0601045**
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 19:57

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: **0601045**
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.

02/06/06 19:19

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

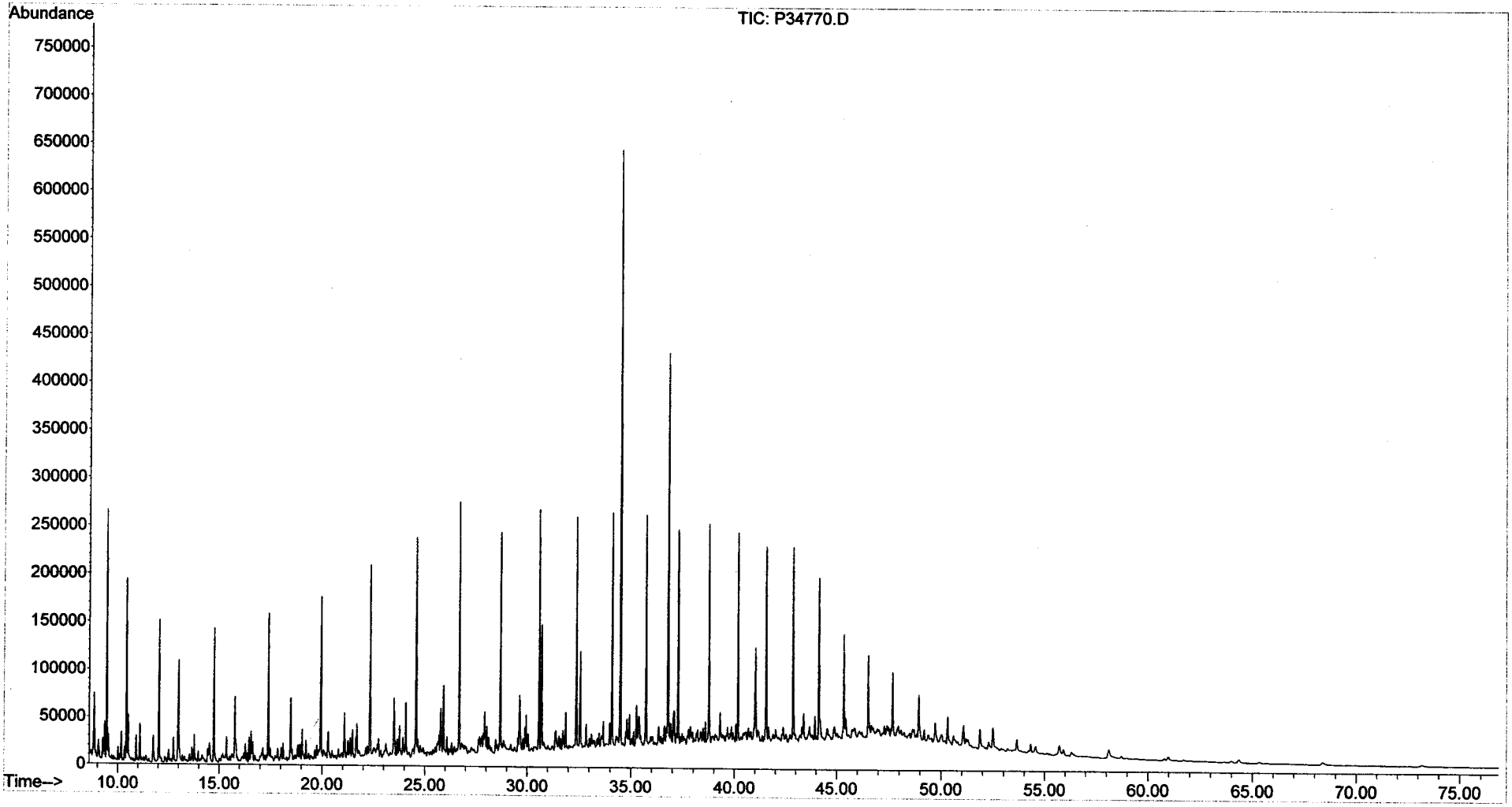
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.68	217	2524m	85.76 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	6356m	215.96 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	8252m	280.38 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	6836m	232.27 ng/ml	
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



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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		✓ run used
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	

PAH 20113.M
cv 2/8/06

ms 1/30/06

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

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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

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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

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ow 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	0601050-06Ø ✓
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:

2/3/06.

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

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

Line			Sample Name/Misc Info		
1)	Sample	1	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
2/8/06

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 ✓
[illegible]	Sample	9	P34915	FRBIO3B	0601064-06 ✓
[illegible]	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.

CM 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: **0601045**
Lab ID: **SS011906B05**
Date Analyzed: **01/30/06 20:11**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-25 (9-10)	0601045-01	01/28/06 00:42
GC-SED-29 (7.4-8.4)	0601045-03	01/28/06 03:53
GC-SED-27 (4.9-5.4)	0601045-05	01/28/06 07:05
GC-SED-26 (5.3-5.8)	0601045-06	01/28/06 08:40
GC-SED-35 (15.3-17.3)	0601045-07	01/28/06 10:15
GC-SED-34B (2-3)	0601045-08E	01/28/06 11:50
GC-SED-34B (2-3)	0601045-08E D	01/28/06 13:27
LCS	SS011906LCS04	01/30/06 21:50
LCSD	SS011906LCSD04	01/30/06 23:28
GC-SED-25 (9-10)	0601045-01E	01/31/06 01:05
GC-SED-29 (7.4-8.4)	0601045-03E	01/31/06 02:40
GC-SED-27 (4.9-5.4)	0601045-05E	01/31/06 04:16
GC-SED-26 (5.3-5.8)	0601045-06E	01/31/06 05:51
GC-SED-35 (15.3-17.3)	0601045-07E	01/31/06 07:28
GC-SED-30 (3.5-5.5)	0601045-02	01/31/06 20:02
GC-SED-28 (4.9-5.8)	0601045-04	01/31/06 21:36
GC-SED-34B (2-3)	0601045-08	01/31/06 23:11
GC-SED-34B (2-3)	0601045-08 D	02/01/06 00:47

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: **0601045**
Lab ID: **SS011906B05**
Date Analyzed: **01/27/06 02:20**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-25 (9-10)	0601045-01	01/27/06 03:50
GC-SED-30 (3.5-5.5)	0601045-02	01/27/06 05:19
GC-SED-29 (7.4-8.4)	0601045-03	01/27/06 06:49
GC-SED-28 (4.9-5.8)	0601045-04	01/27/06 08:18
GC-SED-27 (4.9-5.4)	0601045-05	01/27/06 09:47
GC-SED-26 (5.3-5.8)	0601045-06	01/27/06 11:16
GC-SED-35 (15.3-17.3)	0601045-07	01/27/06 12:46
GC-SED-34B (2-3)	0601045-08	01/27/06 14:18
GC-SED-34B (2-3)	0601045-08 D	01/27/06 15:50

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

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

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

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

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

1/17/07

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

*ICAL PAH20113.M

1/15/06

1/17/06

MS 1/17/06

PAH #2 Sequence Information

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

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

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

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

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

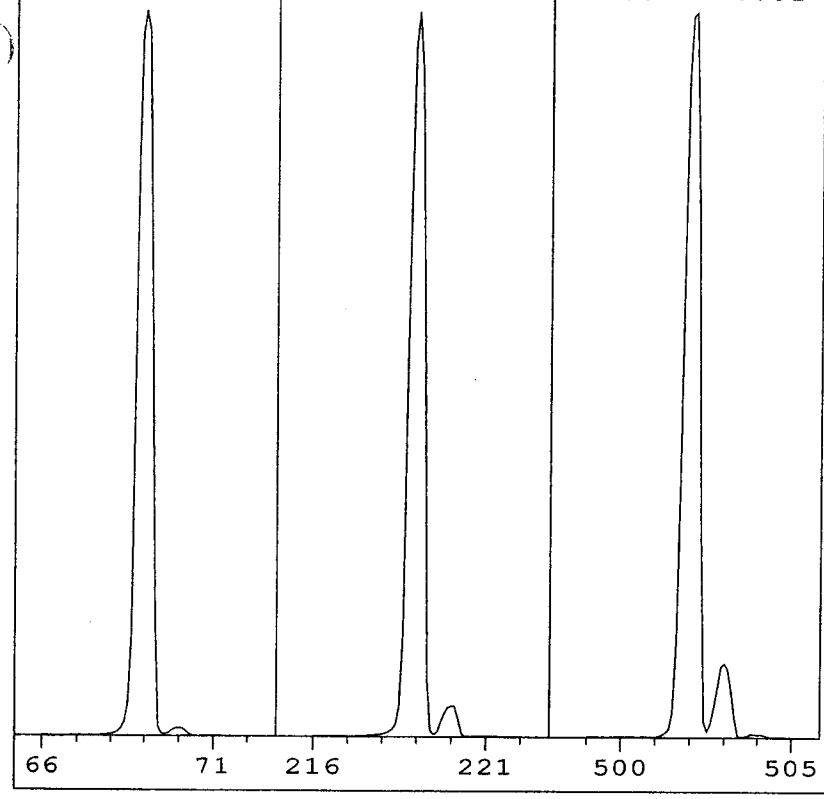
	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	17	P27680	FRNC2B	SFFCO2011301
45)	RearSamp	68	P27681	FRNC2B	0512128-04-AFID
[illegible])	Sample	18	P27682	FRNC2B	DCM
[illegible])	RearSamp	69	P27683	FRNC2B	0512128-05-AFID
48)	Sample	19	P27684	FRNC2B	C2011301
49)	RearSamp	70	P27685	FRNC2B	C2011304-AFID
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] 1/17/07

5973 Tune

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

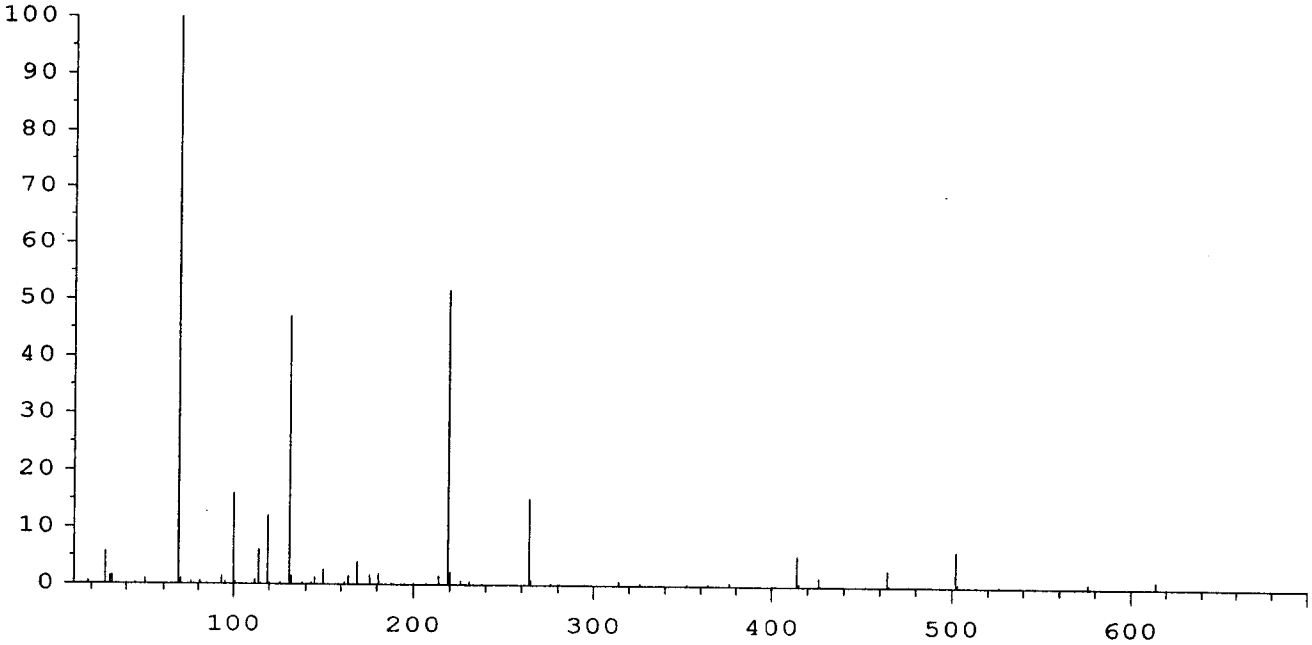
Instrument: PAHINST2

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

MS 1-17-06

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

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

RF 2nd CL 1/2010

Response Factor Report PAHINST2

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

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

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

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 01/20/06

		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

AW 1/17/06

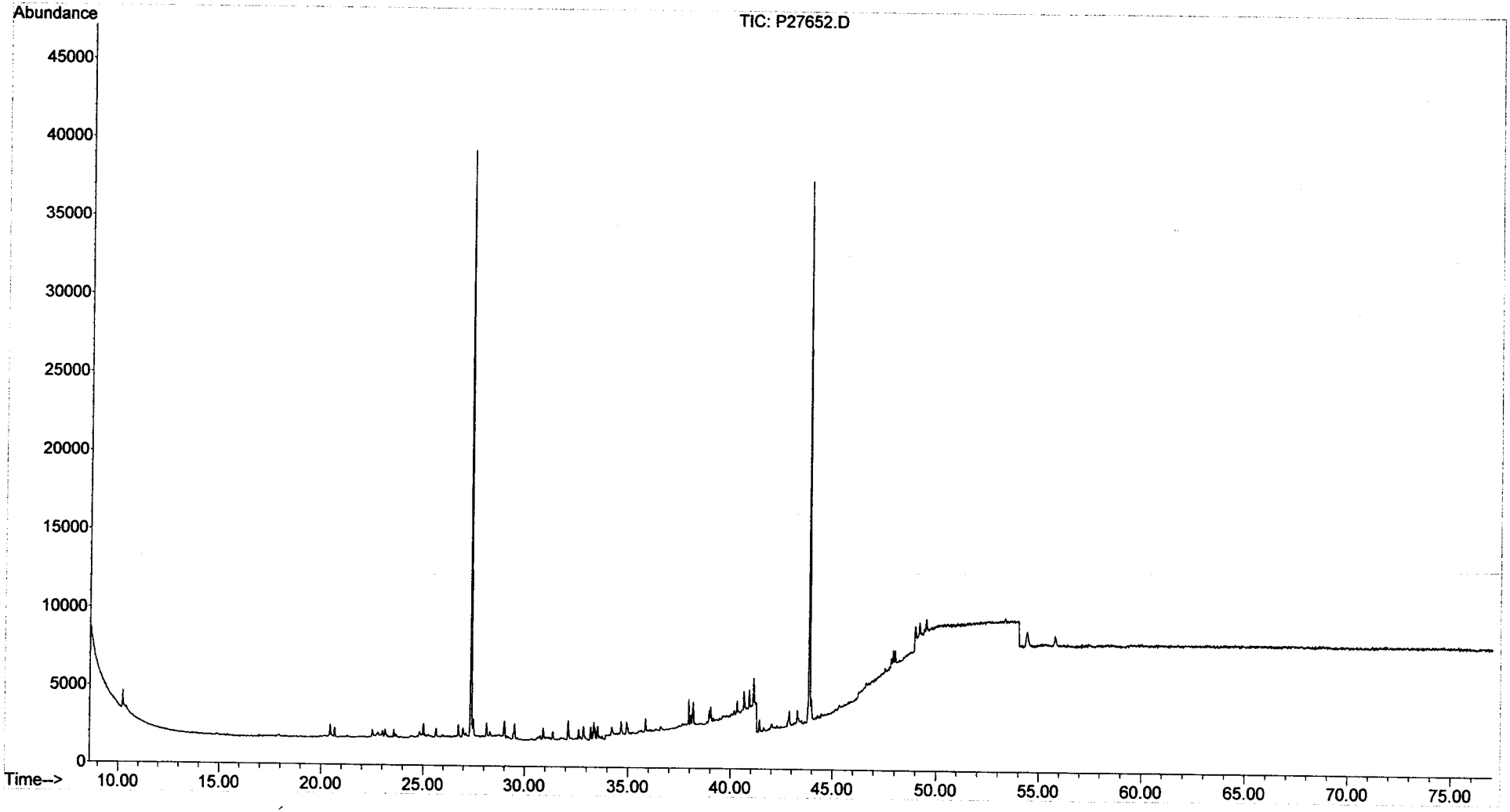
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48581	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	73691	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	970	9.32	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMS 1-17-06

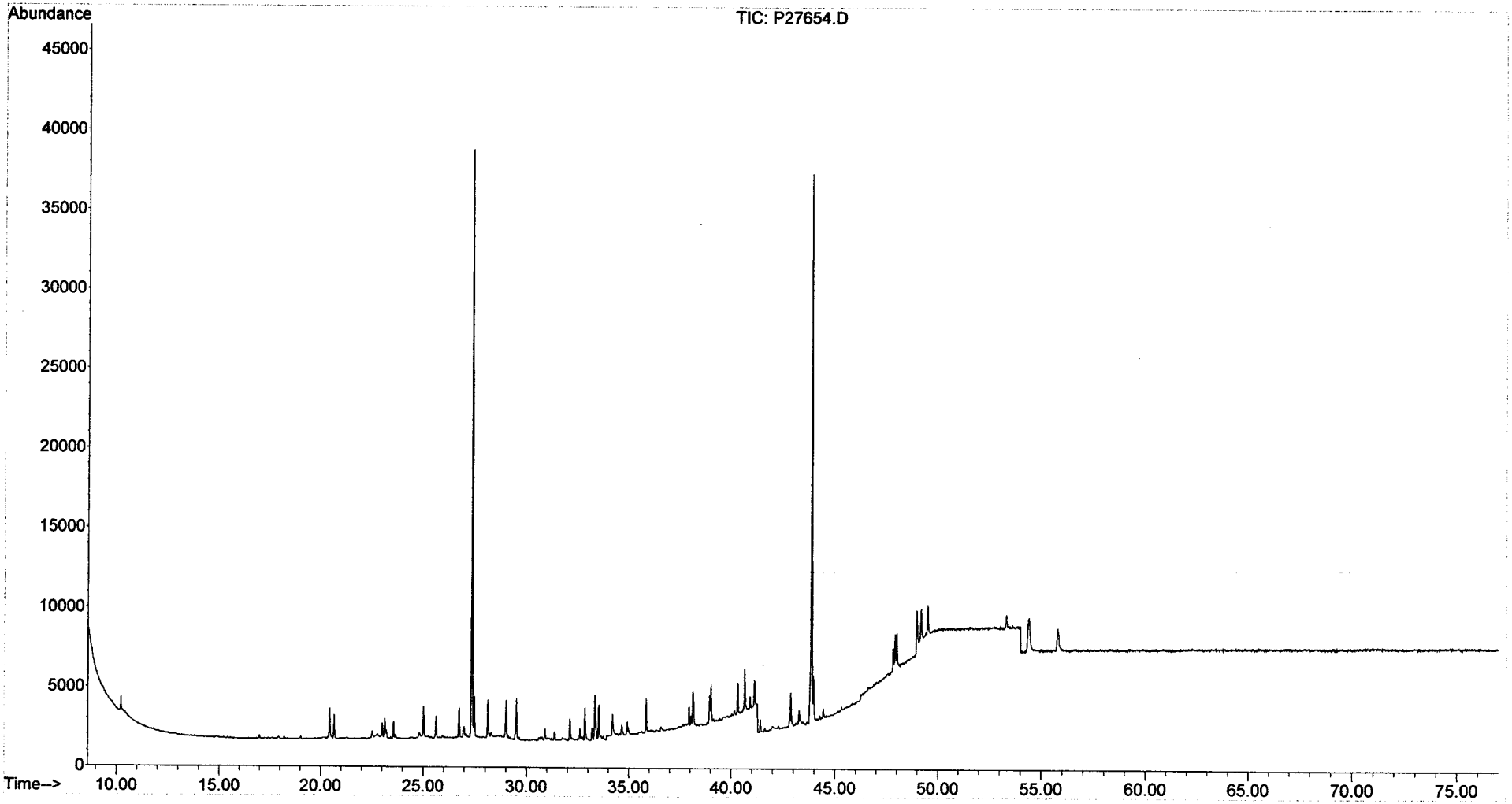
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47740	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	71793	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	2471	24.16	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMS 1-17-06

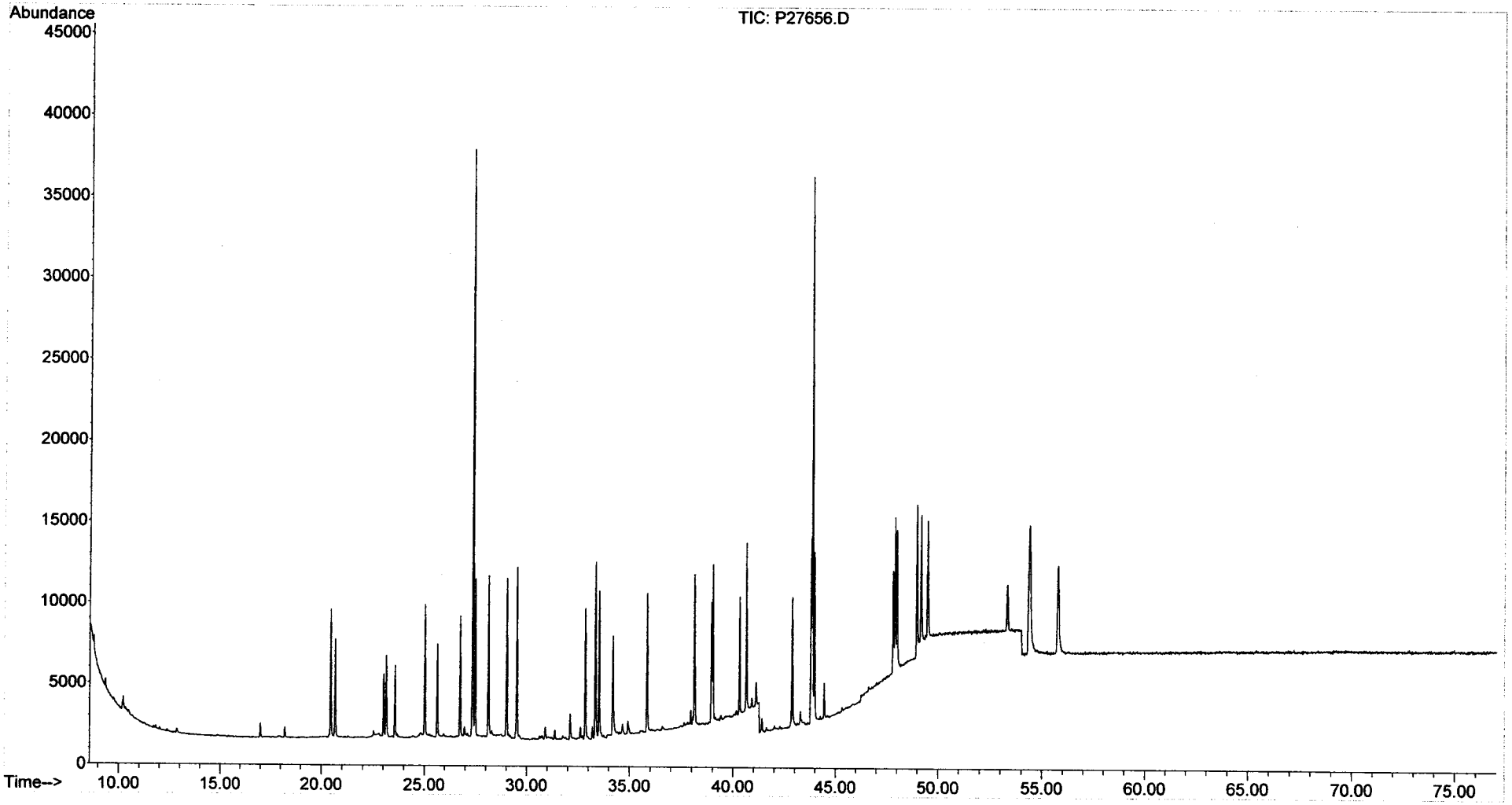
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46810	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	70628	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	9713	96.87	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMS 1-17-06

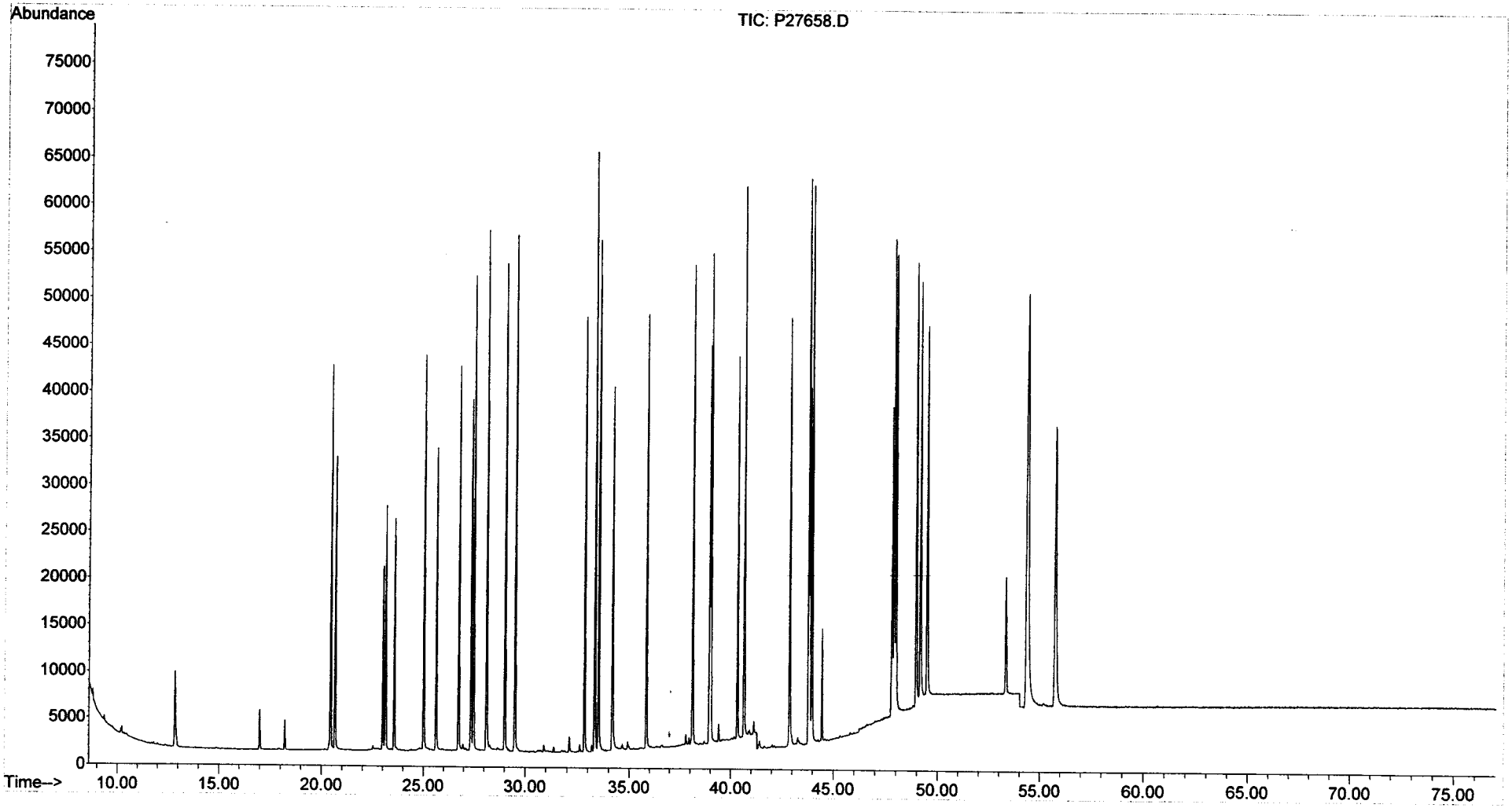
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48150	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	74806	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	48972	496.78	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AWS 1/17/06

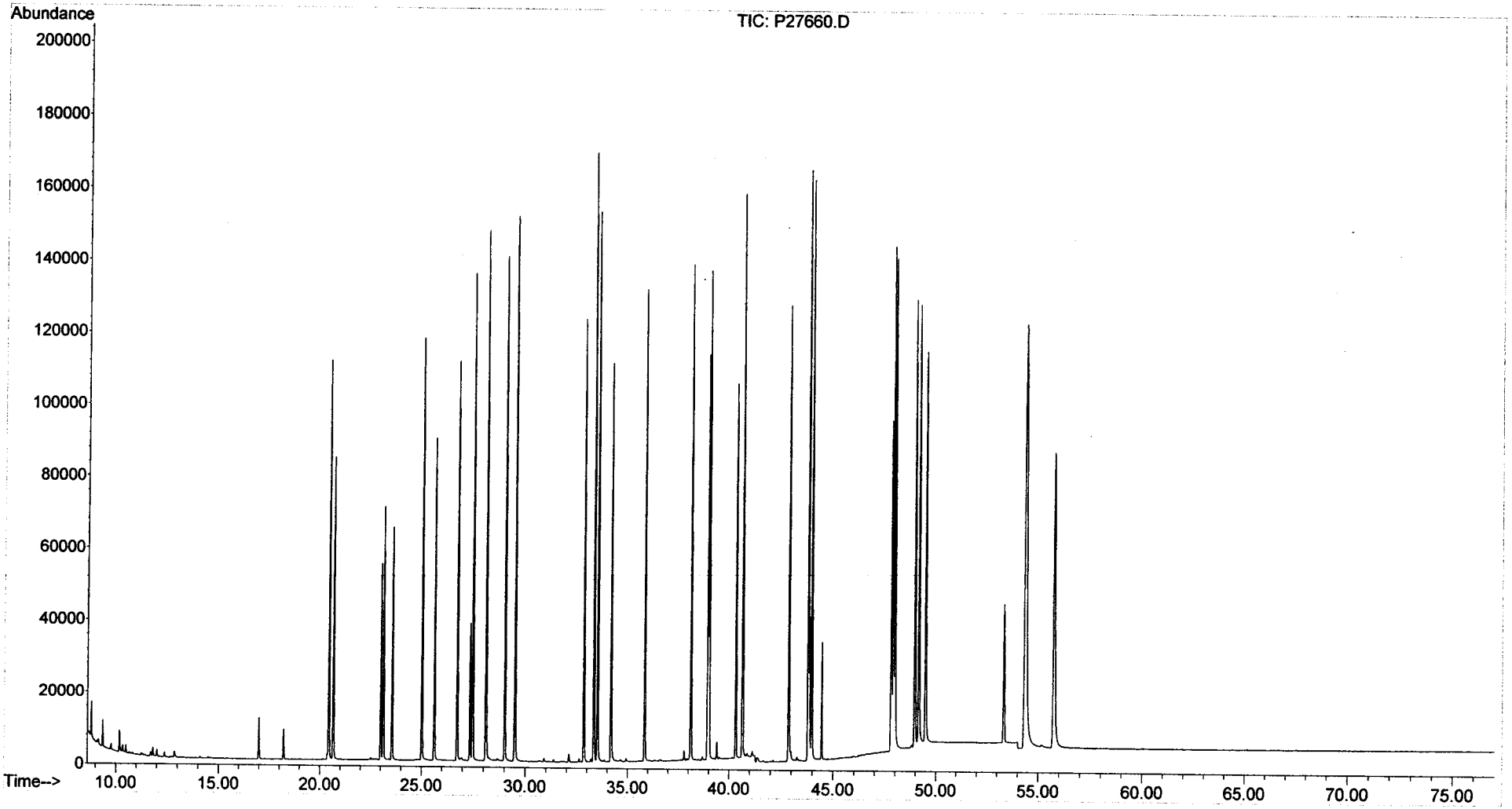
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48512	500.00 ng/mL	0.00
72) Chrysene-d12	43.86	240	76104	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	126002	1268.64 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1/17/06

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

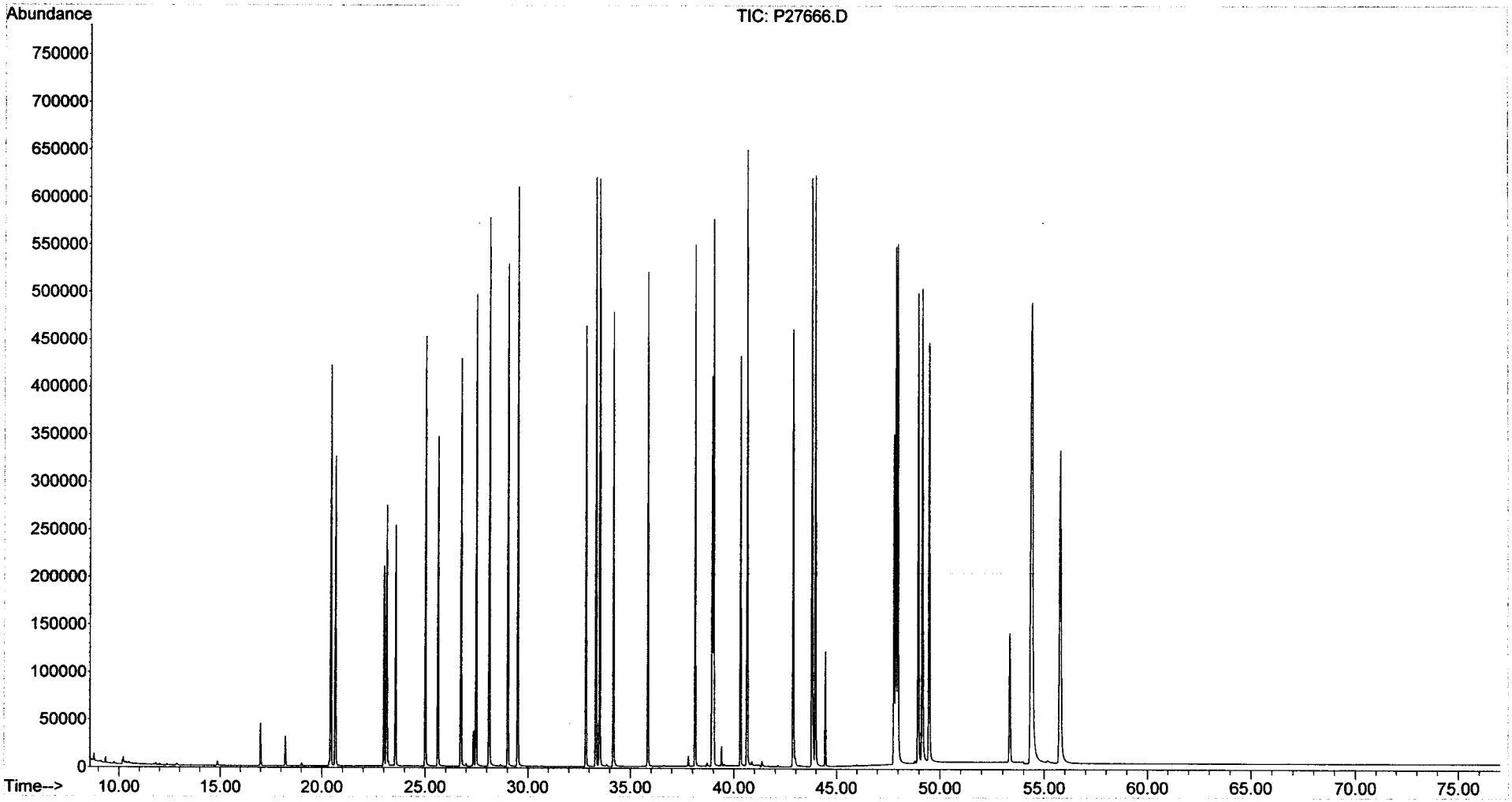
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	95544	2353.44 ng/mL	100
4) cis-Decalin	18.22	138	72265	2426.89 ng/mL	100
9) Naphthalene	20.44	128	1036151	4911.69 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	681031	5245.66 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	646356	5188.91 ng/mL#	100
17)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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AWS 1-17-06

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

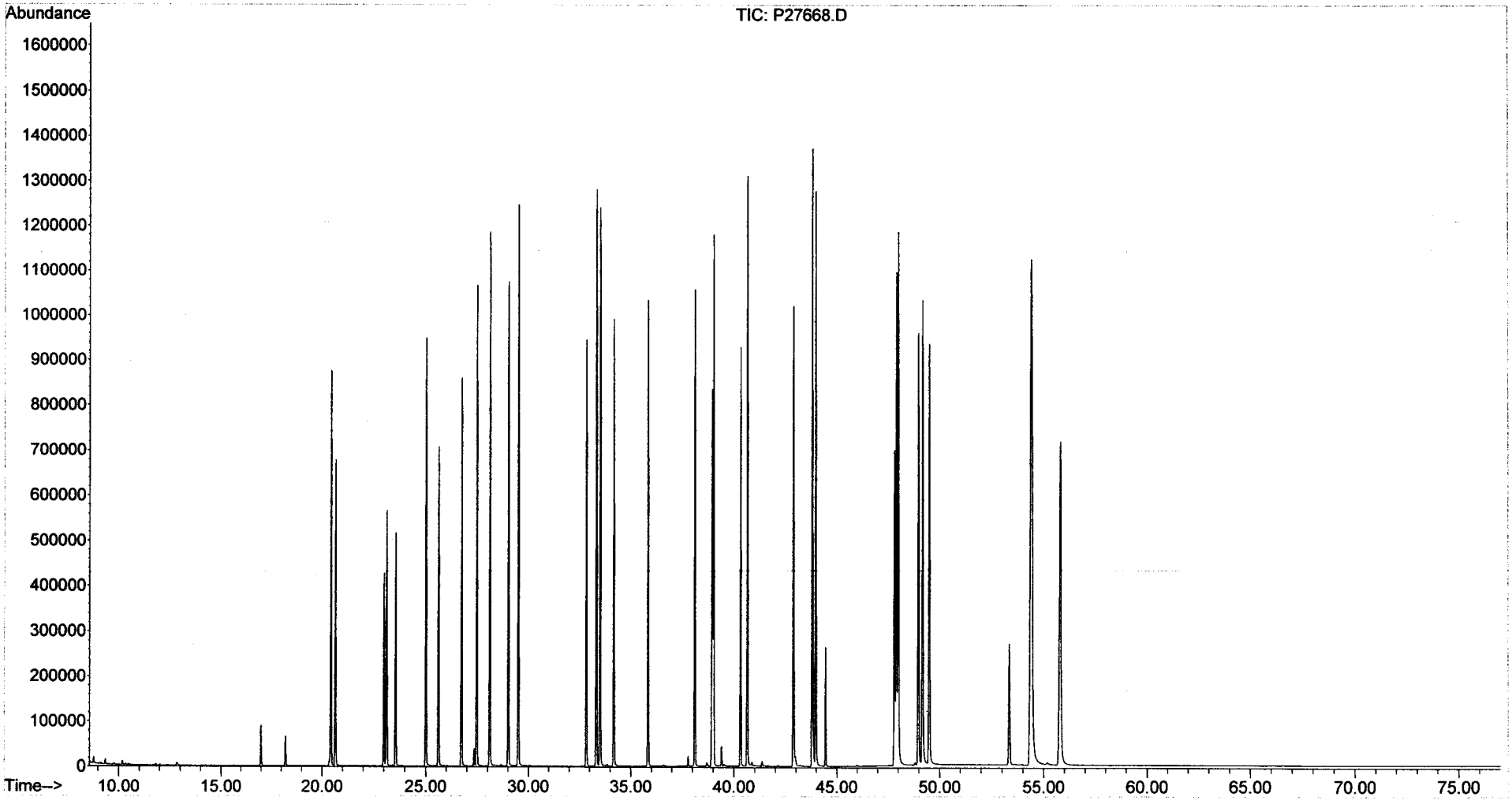
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	197168	4525.83 ng/mL	100
4) cis-Decalin	18.22	138	150854	4721.07 ng/mL	100
9) Naphthalene	20.44	128	2133056	9422.62 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1412575	10139.26 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	1343503	10050.88 ng/mL#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

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

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

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

MS 1-17-06

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

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

Evaluate Continuing Calibration Report

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

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

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

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

Evaluate Continuing Calibration Report

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

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

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

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

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

Quantitation Report (QT Reviewed)

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

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

MJ 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%#			

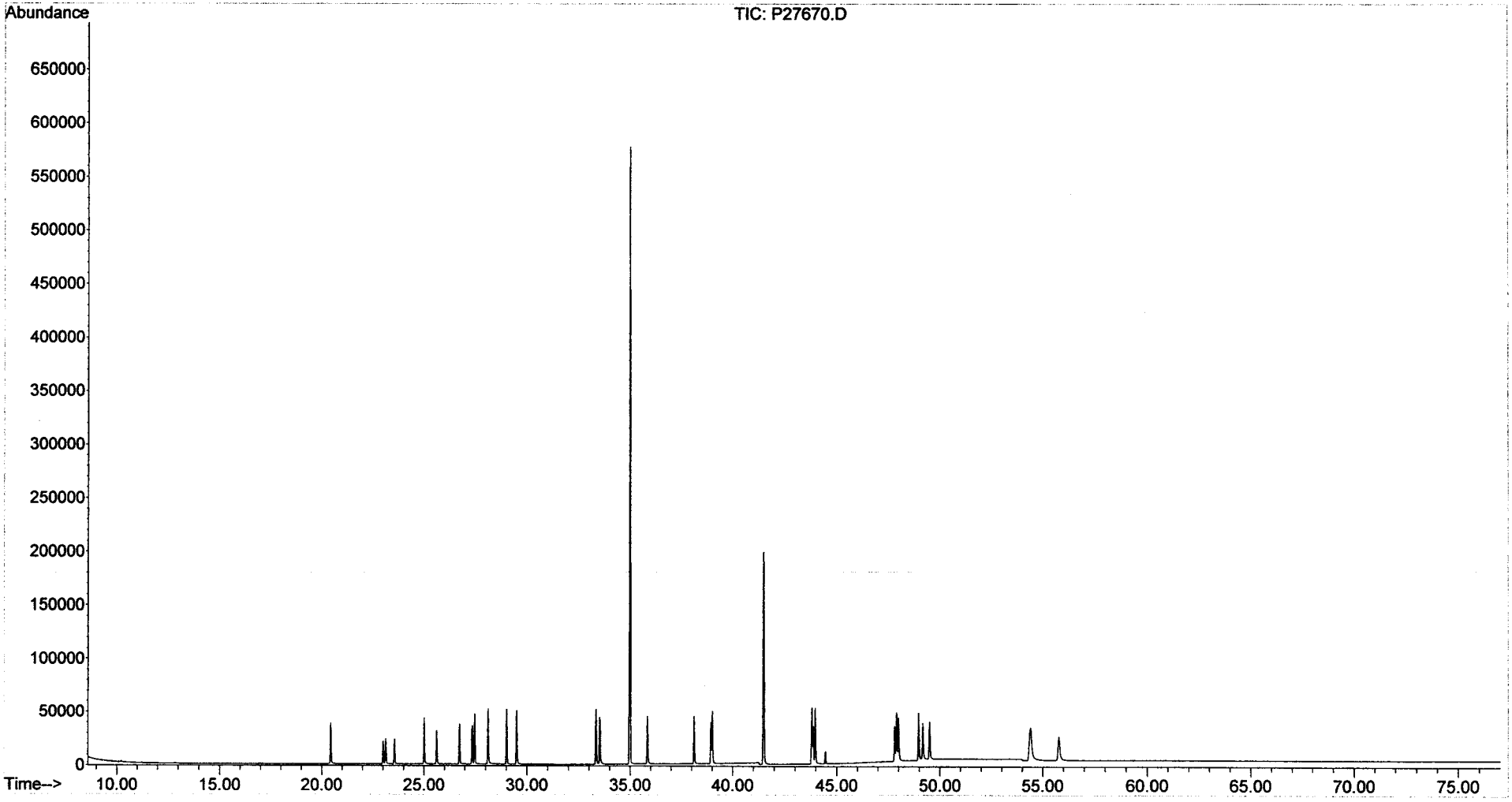
Target Compounds						Qvalue
9) Naphthalene	20.44	128	101937	481.26	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	63568	471.47	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	63677	496.19	ng/mL#	100
22) Biphenyl	25.02	154	82264	484.67	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	57120	491.80	ng/mL#	100
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:

16 deg/min Runs. posted 1/18/06 JMS w/method B1030111.

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

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

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	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 SS012506AW501
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

CMS 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

ew 2/8/06

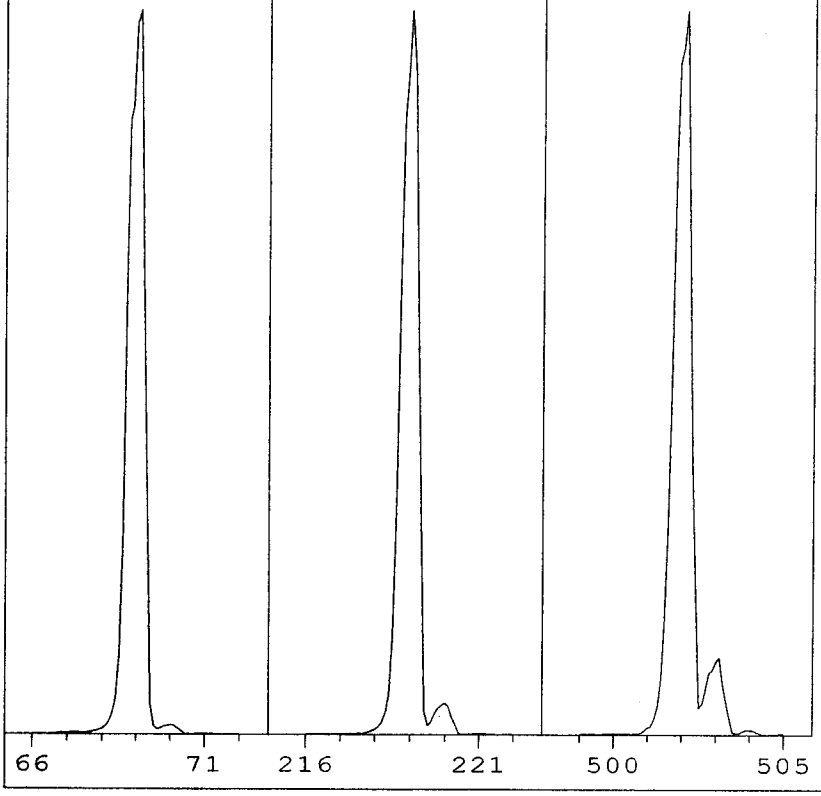
5973

1/11/06

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

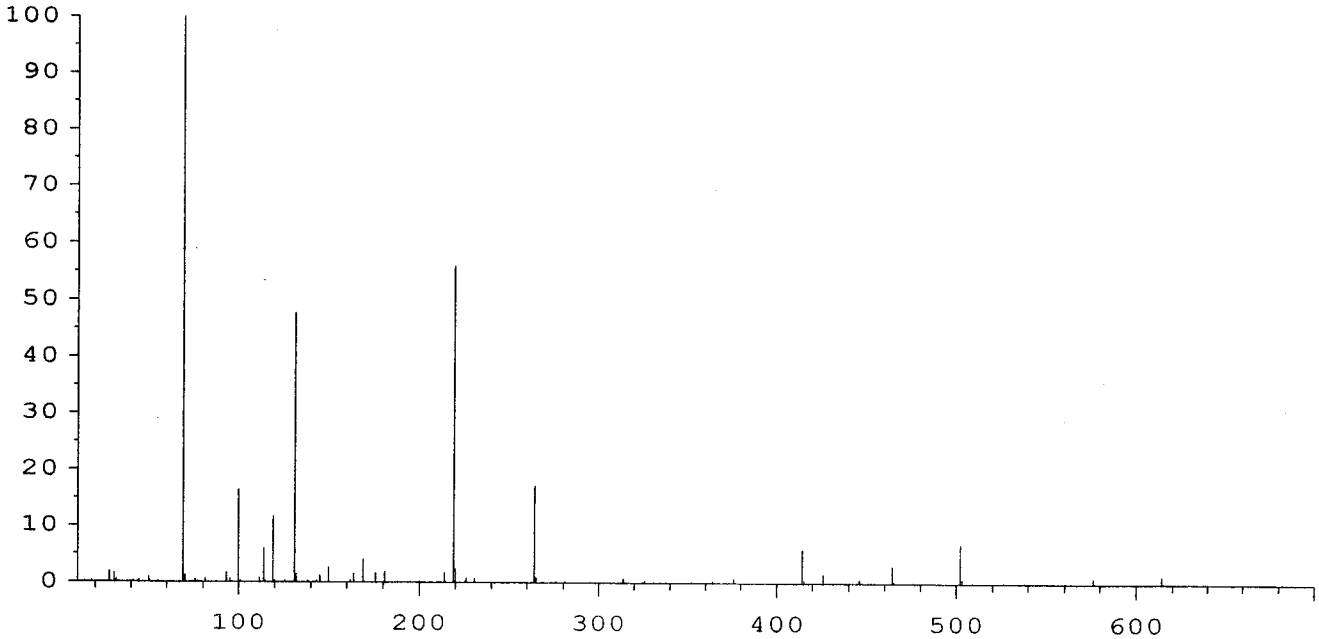
Instrument: PAH-3

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 PAH-3

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

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

MS 1-13-06 1/24/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
1)	i	Acenaphthene-d10				ISTD				
2)	t	Decalin							0.000#	-1.00
3)	A1	trans-Decalin							0.000#	-1.00
4)	t	cis-Decalin							0.000#	-1.00
5)	A2	C1-Decalins							0.000#	-1.00
6)	A2	C2-Decalins							0.000#	-1.00
7)	A2	C3-Decalins							0.000#	-1.00
8)	A2	C4-Decalins							0.000#	-1.00
9)	A1	Naphthalene							0.000#	-1.00
10)	A2	C1-Naphthalenes							0.000#	-1.00
11)	A2	C2-Naphthalenes							0.000#	-1.00
12)	A2	C3-Naphthalenes							0.000#	-1.00
13)	A2	C4-Naphthalenes							0.000#	-1.00
14)	s	2-Methylnaphthale							0.000#	-1.00
15)	t	2-Methylnaphthale							0.000#	-1.00
16)	t	1-Methylnaphthale							0.000#	-1.00
17)	A1	Benzothiophene							0.000#	-1.00
18)	A2	C1-Benzo(b)thioph							0.000#	-1.00
19)	A2	C2-Benzo(b)thioph							0.000#	-1.00
20)	A2	C3-Benzo(b)thioph							0.000#	-1.00
21)	A2	C4-Benzo(b)thioph							0.000#	-1.00
22)	t	Biphenyl							0.000#	-1.00
23)	t	2,6-Dimethylnapht							0.000#	-1.00
24)	t	Dibenzofuran							0.000#	-1.00
25)	t	Acenaphthylene							0.000#	-1.00
26)	t	Acenaphthene							0.000#	-1.00
27)	t	2,3,5-Trimethylna							0.000#	-1.00
28)	A1	Fluorene							0.000#	-1.00
29)	A2	C1-Fluorenes							0.000#	-1.00
30)	A2	C2-Fluorenes							0.000#	-1.00
31)	A2	C3-Fluorenes							0.000#	-1.00
32)	A1	Dibenzothiophene							0.000#	-1.00
33)	A2	OTP							0.000#	-1.00
34)	A2	C1-Dibenzothiophe							0.000#	-1.00
35)	A2	C2-Dibenzothiophe							0.000#	-1.00
36)	A2	C3-Dibenzothiophe							0.000#	-1.00
37)	A2	C4-Dibenzothiophe							0.000#	-1.00
38)	A1	Phenanthrene							0.000#	-1.00
39)	A2	C1-Phenanthrenes/							0.000#	-1.00
40)	A2	C2-Phenanthrenes/							0.000#	-1.00
41)	A2	5AA IS BKGD							0.000#	-1.00
42)	A2	C3-Phenanthrenes/							0.000#	-1.00
43)	A2	C4-Phenanthrenes/							0.000#	-1.00
44)	A2	Retene							0.000#	-1.00
45)	t	Anthracene							0.000#	-1.00
46)	t	Carbazole							0.000#	-1.00
47)	t	1-Methylphenanthr							0.000#	-1.00
48)	A1	Fluoranthene							0.000#	-1.00
49)	A2	Benzo(b)fluorene							0.000#	-1.00
50)	s	Pyrene-d10							0.000#	-1.00
51)	A1	Pyrene							0.000#	-1.00
52)	A2	C1-Fluoranthenes/							0.000#	-1.00
53)	A2	C2-Fluoranthenes/							0.000#	-1.00
54)	A2	C3-Fluoranthenes/							0.000#	-1.00
55)	A2	C4-Fluoranthenes/							0.000#	-1.00
56)	A1	Naphthobenzothiop							0.000#	-1.00
57)	A2	Naphthobenzothiop							0.000#	-1.00

Response Factor Report PAH-3

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

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

		Compound	10	25	100	500	1250	5000	Avg	%RSD
58)	A2	Naphthobenzothiop							0.000#	-1.00
59)	A2	Naphthobenzothiop							0.000#	-1.00
60)	A2	C1-Naphthobenzoth							0.000#	-1.00
61)	A2	C2-Naphthobenzoth							0.000#	-1.00
62)	A2	C3-Naphthobenzoth							0.000#	-1.00
63)	A2	C4-Naphthobenzoth							0.000#	-1.00
64)	i	Chrysene-d12	----------ISTD----------							
65)	t	Benz[a]anthracene							0.000#	-1.00
66)	t	Chrysene							0.000#	-1.00
67)	A1	Chrysene/Tripheny							0.000#	-1.00
68)	A2	C1-Chrysenes							0.000#	-1.00
69)	A2	C2-Chrysenes							0.000#	-1.00
70)	A2	BBF-d12 Surr BKGD							0.000#	-1.00
71)	A2	C3-Chrysenes							0.000#	-1.00
72)	A2	C4-Chrysenes							0.000#	-1.00
73)	s	Benzo[b]fluoranth							0.000#	-1.00
74)	t	Benzo[b]fluoranth							0.000#	-1.00
75)	A1	Benzo[k]fluoranth							0.000#	-1.00
76)	A2	Benzo[a]fluoranth							0.000#	-1.00
77)	t	Benzo[e]pyrene							0.000#	-1.00
78)	t	Benzo[a]pyrene							0.000#	-1.00
79)	t	Perylene							0.000#	-1.00
80)	t	Indeno[1,2,3-cd]p							0.000#	-1.00
81)	t	Dibenz[a,h]anthra							0.000#	-1.00
82)	t	Benzo[g,h,i]peryl							0.000#	-1.00
83)	A1	17a(H),21B(H)-hop	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
84)	A2	Hopane (T19)	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
85)	A2	C23 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
86)	A2	C24 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
87)	A2	C25 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
88)	A2	C24 Tetracyclic T	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
89)	A2	C26 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
90)	A2	C26 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
91)	A2	C28 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
92)	A2	C28 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
93)	A2	C29 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
94)	A2	C29 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
95)	A2	18a-22,29,30-Tris	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
96)	A2	C30 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
97)	A2	C30 Tricyclic Ter	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
98)	A2	17a(H)-22,29,30-T	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
99)	A2	17a/b,21b/a 28,30	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
100)	A2	17a(H),21b(H)-25-	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
101)	A2	30-Norhopane (T15	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
102)	A2	18a(H)-30-Norneoh	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
103)	A2	17a(H)-Diahopane	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
104)	A2	30-Normoretane (T	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
105)	A2	18a(H)&18b(H)-Ole	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
106)	A2	Moretane (T20)	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
107)	A2	30-Homohopane-22S	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
108)	A2	30-Homohopane-22R	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
109)	A2	30,31-Bishomohopa	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
110)	A2	30,31-Bishomohopa	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
111)	A2	30,31-Trishomohop	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
112)	A2	30,31-Trishomohop	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
113)	A2	Tetrakishomohopan	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93
114)	A2	Tetrakishomohopan	0.433	0.429	0.463	0.375	0.477	0.425	0.430	7.93

RF and 1/24/01

Response Factor Report PAH-3

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

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

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

RSnd W 1/24/01

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

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

Rerun 1/24/06

RESPONSE FACTOR REPORT PAH3									
METHOD: O: FORENSICS\METHODS\PAH3\JAN06\BIO30105.M									
INITIAL CALIBRATION									
CALIBRATION FILES	P34773.D	P34774.D	P34765.D	P34766.D	P34767.D	P34768.D	P34769.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
14b,17b-20R-Methylcholestane (S22)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b,17b-20S-Methylcholestane (S23)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b(H),17b(H)-20R-Ethylcholestane (S26)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20
14b(H),17b(H)-20S-Ethylcholestane (S27)	0.195	0.187	0.213	0.207	0.215	0.229	0.225	0.210	7.20

Quantitation Report (QT Reviewed)

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

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

MS 1-13-06

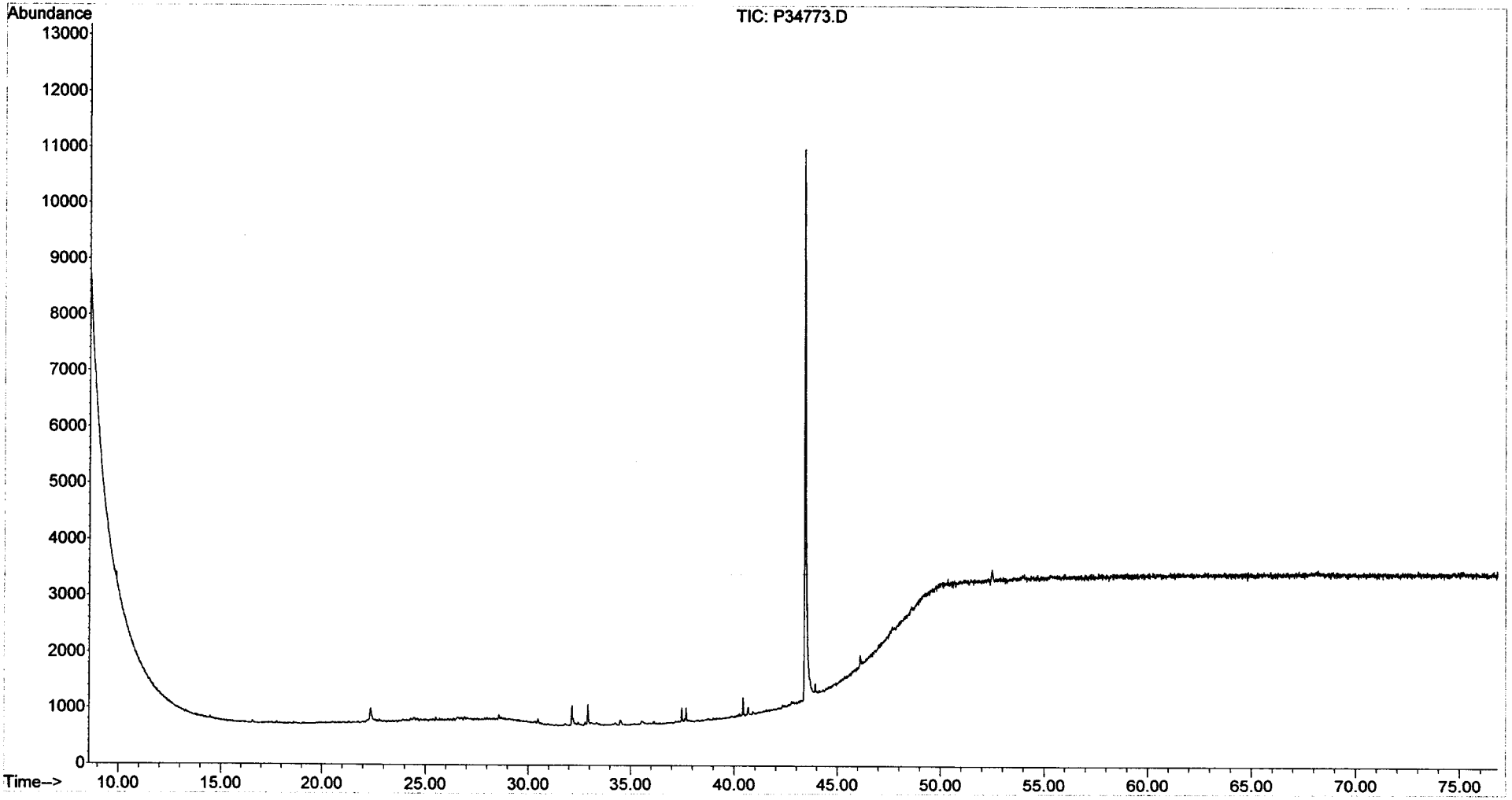
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	50898m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-13-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	49829	500.00	ng/mL	0.00

System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.92	217	466m	21.81	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.18%#			

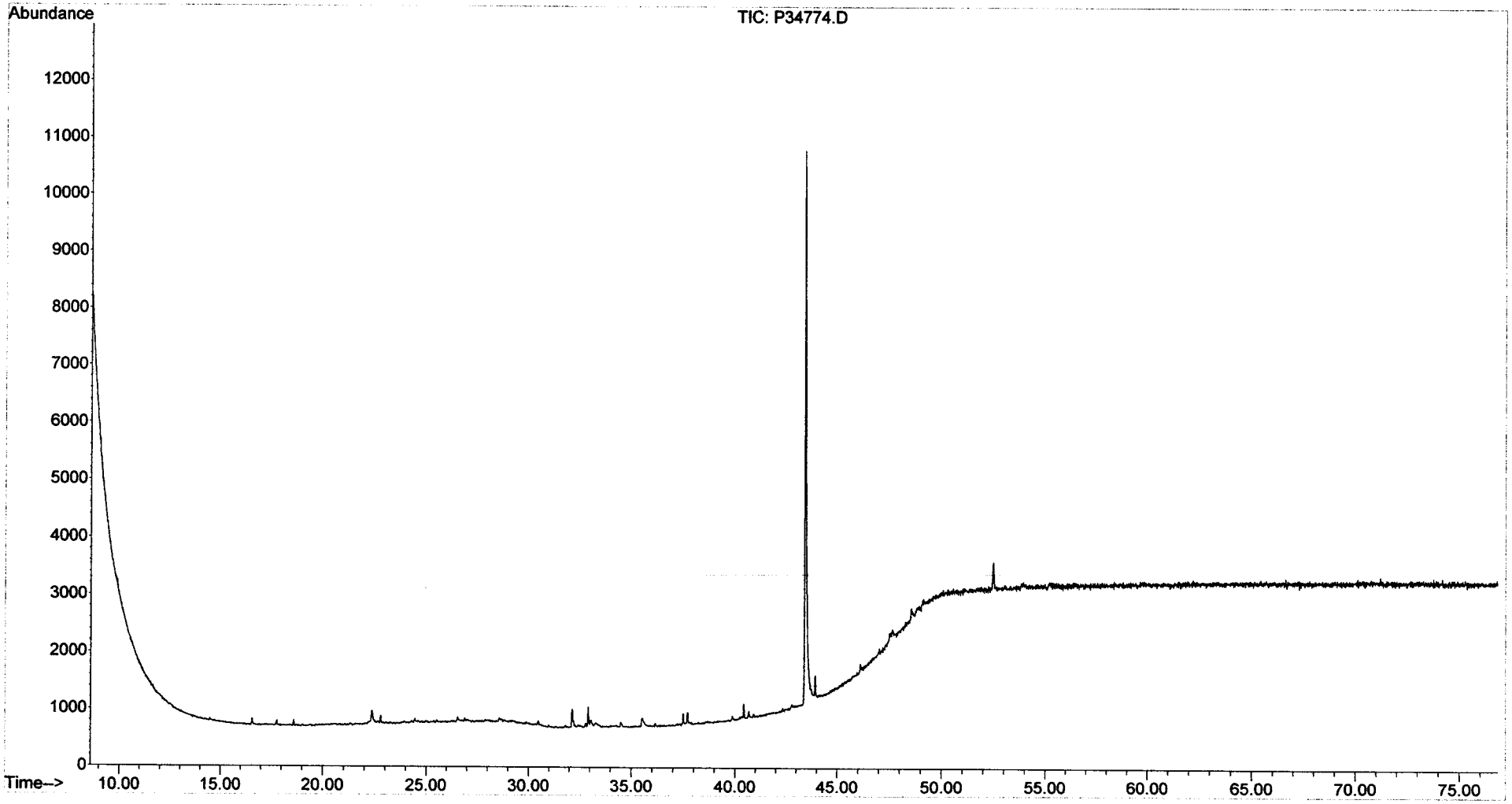
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	1068m	24.77	ng/mL	
84) Hopane (T19)	52.49	191	1040m	23.00	ng/mL	

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MB 1-13-06

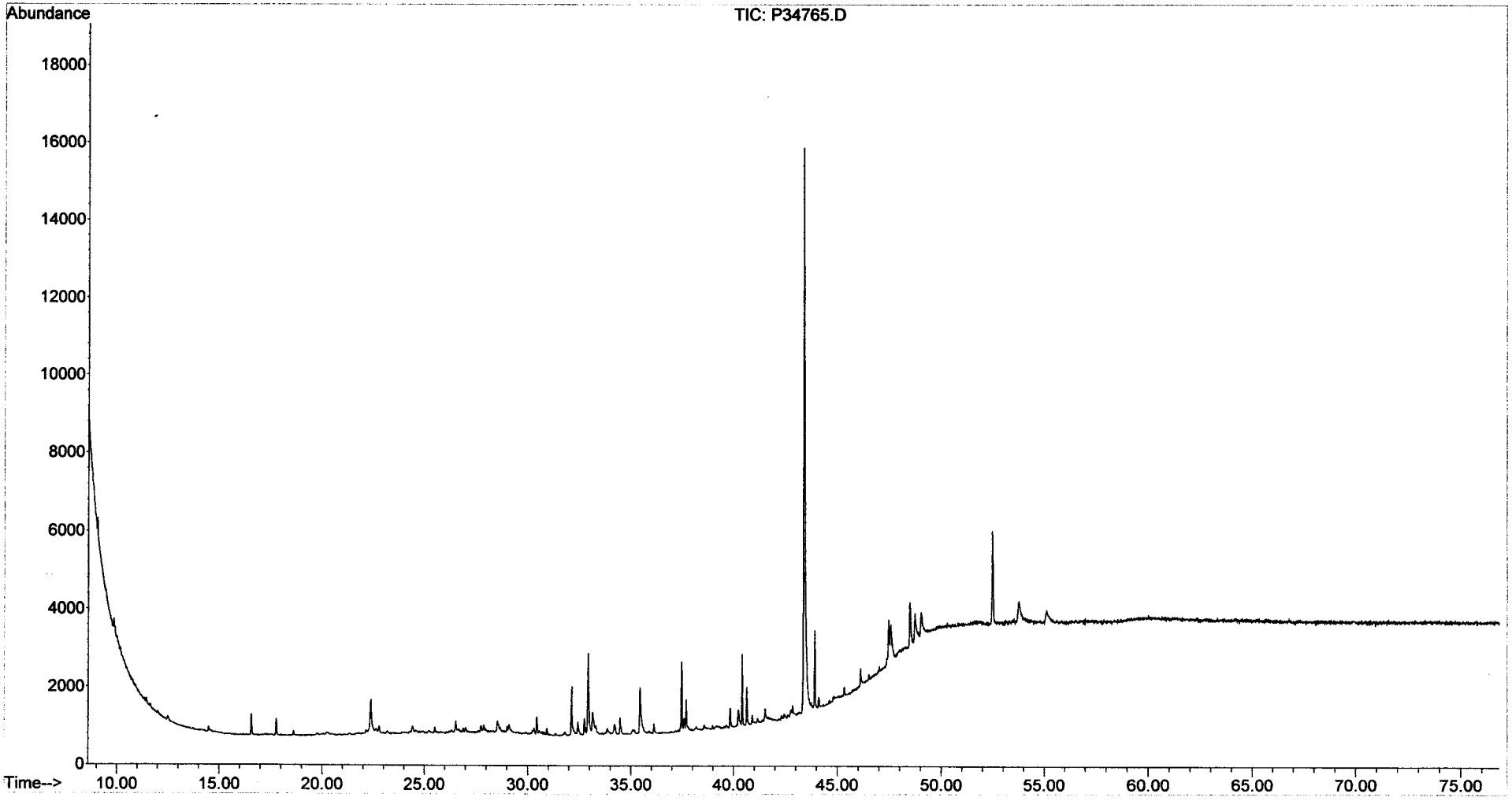
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.40	240	63328	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-13-06

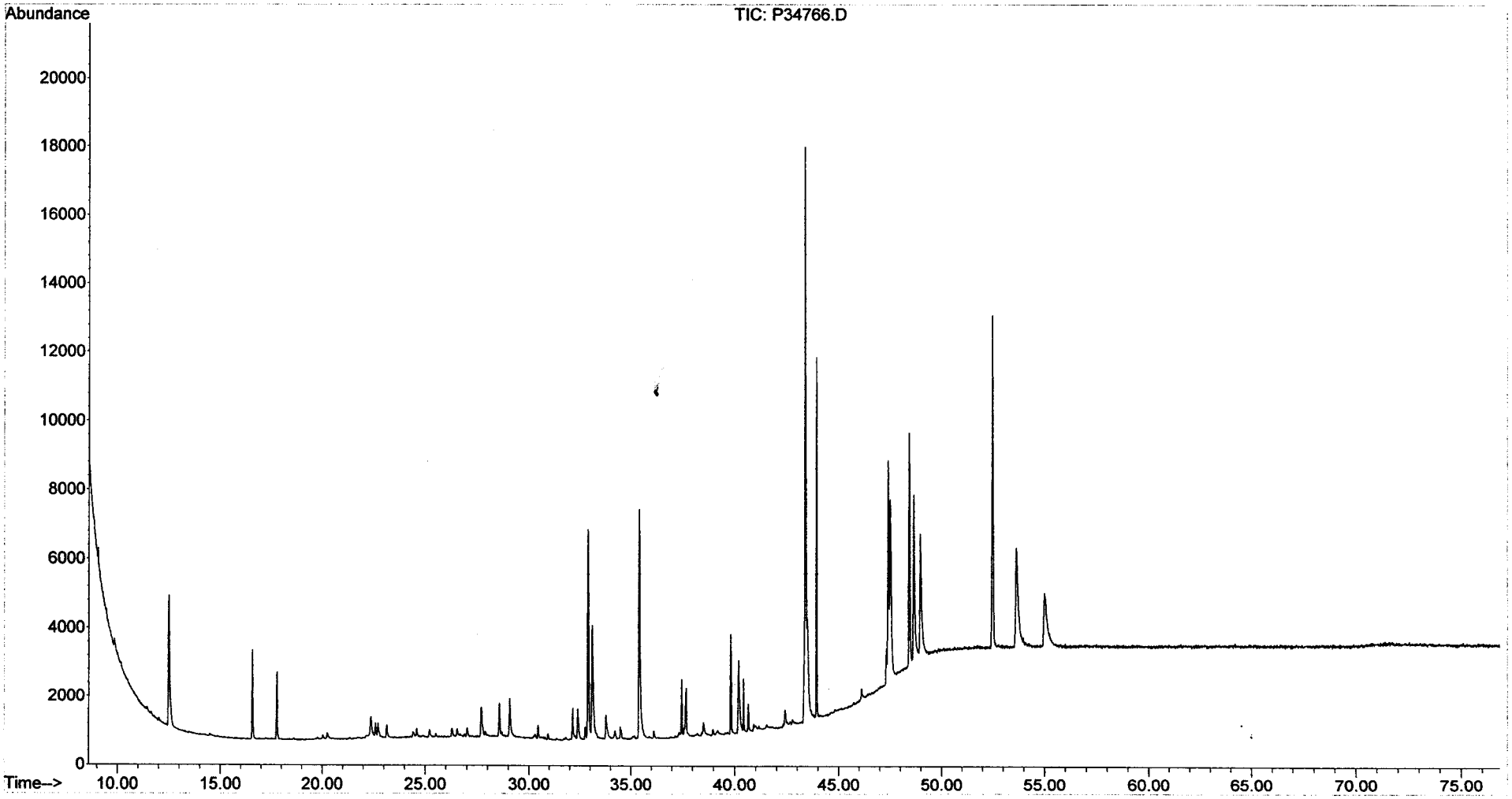
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	61149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#	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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

CMS 1-13-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.36	240	62167	500.00	ng/mL	-0.02

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.92	217	33352	1157.67	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 115.77%			

Target Compounds

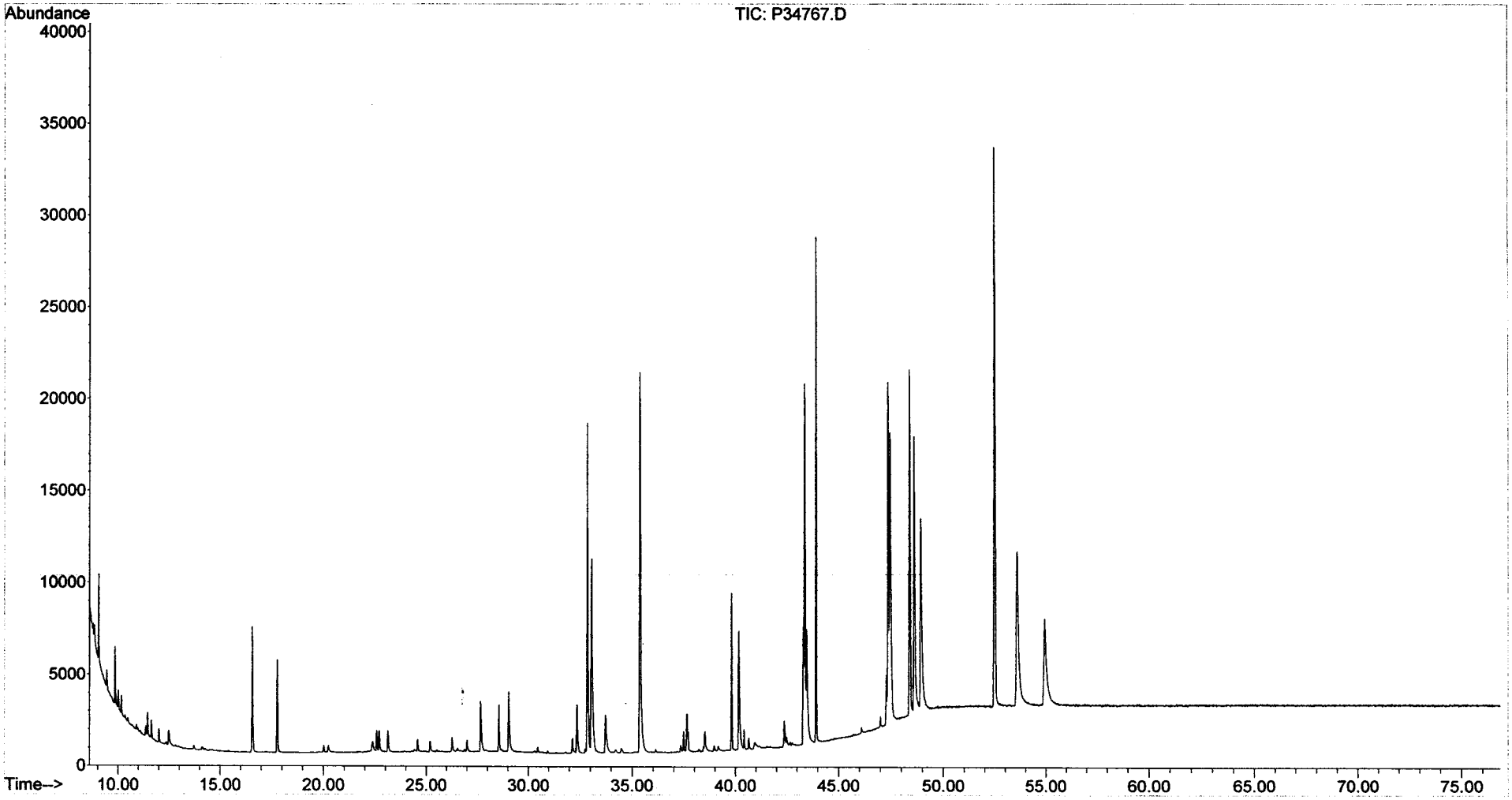
						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	74177	1178.67	ng/mL#	84
84) Hopane (T19)	52.49	191	74177	1178.67	ng/mL#	84

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMG 1-13-06

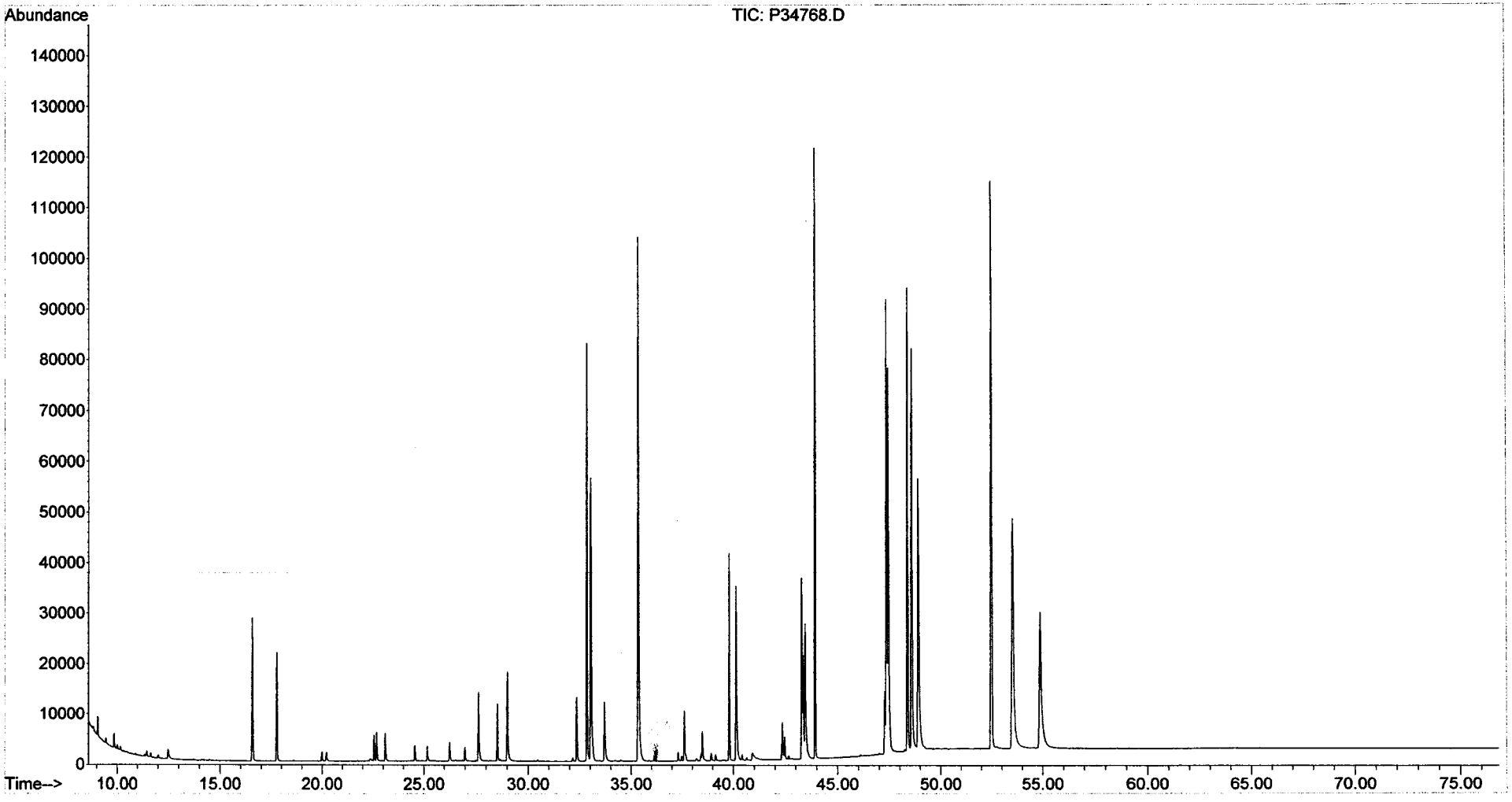
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.35	240	62301	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

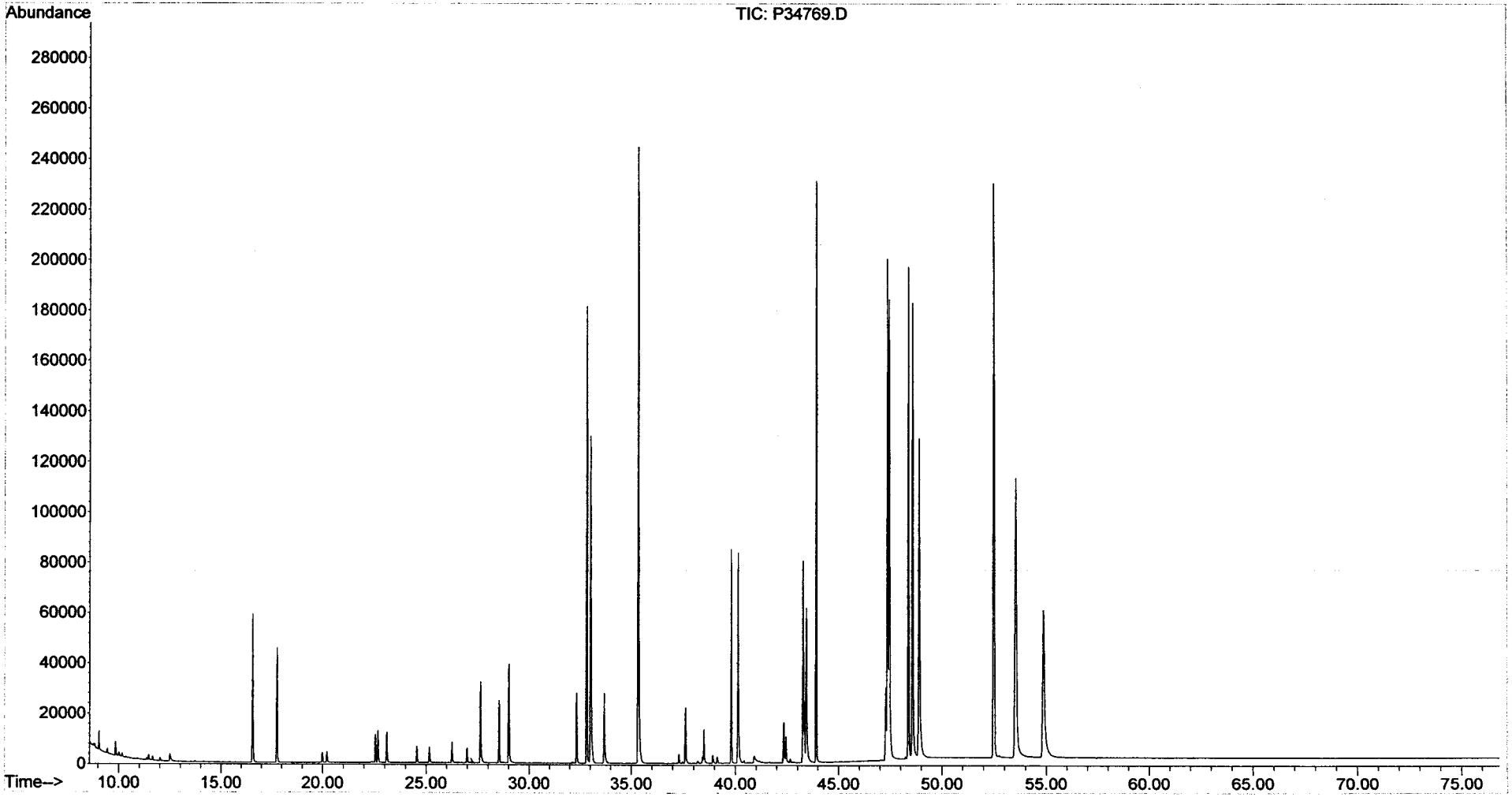
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.34	240	64774	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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 : P27950.D
Acq On : 27 Jan 2006 9:32 pm
Operator : AC
Sample : C2012308
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 06:42:12 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

MJS 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	84	-0.01
2	t	Decalin	0.000	0.000#	0.0	0#	-16.78#
3	A1	trans-Decalin	0.422	0.410	2.8	85	0.00
4	t	cis-Decalin	0.315	0.312	1.0	85	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	2.292	-1.9	86	-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	1.036	-0.8	85	-0.01
15	t	2-Methylnaphthalene	1.432	1.460	-2.0	86	-0.01
16	t	1-Methylnaphthalene	1.363	1.381	-1.3	86	0.00
17	A1	Benzothiophene	1.810	1.871	-3.4	87	-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	1.770	1.8	85	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.235	-0.2	85	0.00
24	t	Dibenzofuran	1.989	2.013	-1.2	85	-0.01
25	t	Acenaphthylene	2.231	2.410	-8.0	91	-0.01
26	t	Acenaphthene	1.368	1.381	-1.0	86	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.129	-4.9	90	-0.01
28	A1	Fluorene	1.599	1.572	1.7	84	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.125	0.6	84	-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	2.222	2.6	83	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 : P27950.D
Acq On : 27 Jan 2006 9:32 pm
Operator : AC
Sample : C2012308
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 06:42:12 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	0.551	-6.4	94	-0.01
53	t	Anthracene	2.119	2.108	0.5	84	0.00
54	t	Carbazole	2.020	2.067	-2.3	86	-0.01
55	t	1-Methylphenanthrene	1.583	1.616	-2.1	86	-0.01
56	A1	Fluoranthene	2.435	2.495	-2.5	85	-0.01
57	t	Benzo(b)fluorene	1.497	1.629	-8.8	93	-0.01
58	s	Pyrene-d10	2.114	2.171	-2.7	85	-0.01
59	A1	Pyrene	2.494	2.551	-2.3	86	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	2.483	-7.3	91	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.483	-7.3	91	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	87	0.00
73	t	Benz[a]anthracene	1.428	1.483	-3.9	91	-0.01
74	A1	Chrysene	1.434	1.462	-2.0	89	0.00
75	A2	Chrysene/Triphenylene	1.434	1.462	-2.0	89	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	1.070	-4.4	91	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.651	-7.6	95	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.630	-1.6	90	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.536	-3.9	91	0.00
86	t	Benzo[a]pyrene	1.478	1.580	-6.9	94	0.00
87	t	Perylene	1.473	1.539	-4.5	92	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.534	-4.7	94	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.489	-8.1	94	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.552	-1.6	91	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.460	6.7	91	-0.01
92	A2	Hopane (T19)	0.493	0.460	6.7	91	-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 : P27950.D
Acq On : 27 Jan 2006 9:32 pm
Operator : AC
Sample : C2012308
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 06:42:12 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	90	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27950.D
Acq On : 27 Jan 2006 9:32 pm
Operator : AC
Sample : C2012308
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 06:42:12 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

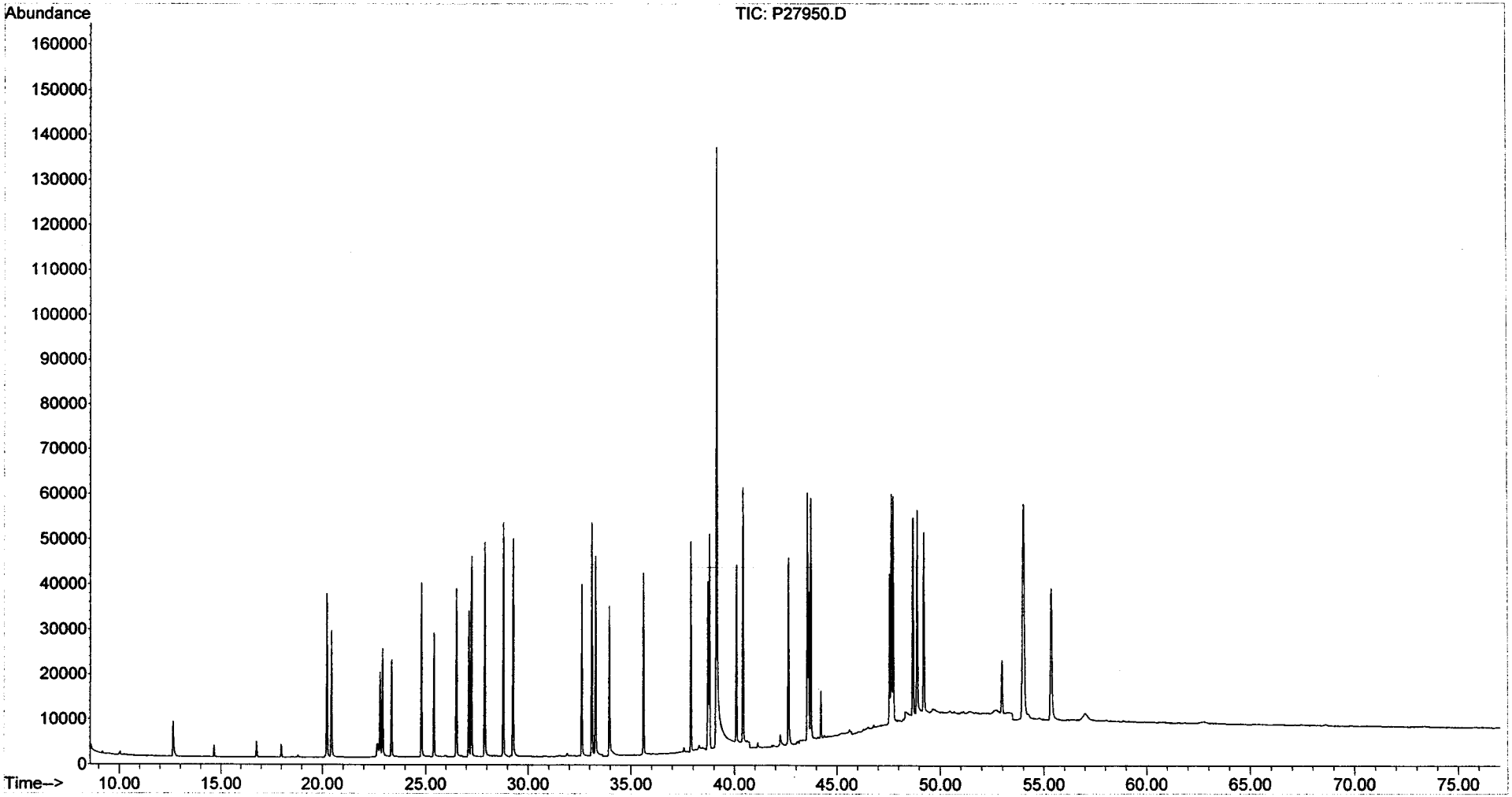
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	40381	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	65175	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	41851	504.30	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.43%			
58) Pyrene-d10	38.70	212	87680	513.66	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.37%			
81) Benzo[b]fluoranthene-d12	47.56	264	69713	521.73	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.17%			
125) 5B(H)Cholane - Surr	44.23	217	14699	490.57	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.06%#			
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	8283	243.27	ng/mL	100
4) cis-Decalin	18.00	138	6309	247.64	ng/mL	100
9) Naphthalene	20.21	128	92548	509.55	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	58949	509.88	ng/mL#	100
16) 1-Methylnaphthalene	23.35	142	55767	506.77	ng/mL#	100
17) Benzothiophene	20.44	134	75561	516.85	ng/mL	100
22) Biphenyl	24.80	154	71474	491.08	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	49880	500.84	ng/mL#	100
24) Dibenzofuran	27.89	168	81302	506.04	ng/mL	98
25) Acenaphthylene	26.52	152	97325m	540.07	ng/mL	
26) Acenaphthene	27.25	153	55766	504.85	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.80	170	45590	524.54	ng/mL	98
28) Fluorene	29.28	166	63468	491.40	ng/mL	99
32) Dibenzothiophene	32.61	184	85820	496.94	ng/mL	99
41) Phenanthrene	33.11	178	89710	486.79	ng/mL	100
52) Retene	40.09	234	22259	532.31	ng/mL	100
53) Anthracene	33.29	178	85135m	497.41	ng/mL	
54) Carbazole	33.96	167	83469	511.69	ng/mL	100
55) 1-Methylphenanthrene	35.61	192	65257	510.42	ng/mL	99
56) Fluoranthene	37.89	202	100758	512.26	ng/mL	100
57) Benzo(b)fluorene	40.41	216	65786	544.06	ng/mL	100
59) Pyrene	38.78	202	103025	511.51	ng/mL	99
64) Naphthobenzothiophene	42.64	234	100250	536.74	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.64	234	100250	536.74	ng/mL#	67
73) Benz[a]anthracene	43.56	228	96635	519.20	ng/mL	95
74) Chrysene	43.73	228	95270	509.63	ng/mL	99
75) Chrysene/Triphenylene	43.73	228	95291	509.75	ng/mL	100
82) Benzo[b]fluoranthene	47.65	252	107625	538.41	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	106265	508.36	ng/mL	98
85) Benzo[e]pyrene	48.70	252	100127	519.60	ng/mL	99
86) Benzo[a]pyrene	48.90	252	103008	534.68	ng/mL	100
87) Perylene	49.22	252	100331	522.38	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.98	276	99969m	523.54	ng/mL	
89) Dibenz[a,h]anthracene	54.03	278	97053	540.48	ng/mL	97
90) Benzo[g,h,i]perylene	55.35	276	101179	508.20	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.98	191	29981	466.47	ng/mL	98
92) Hopane (T19)	52.98	191	29981	466.47	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27950.D
Acq On : 27 Jan 2006 9:32 pm
Operator : AC
Sample : C2012308
Misc : PAH STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 30 06:42:12 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 : 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%#			

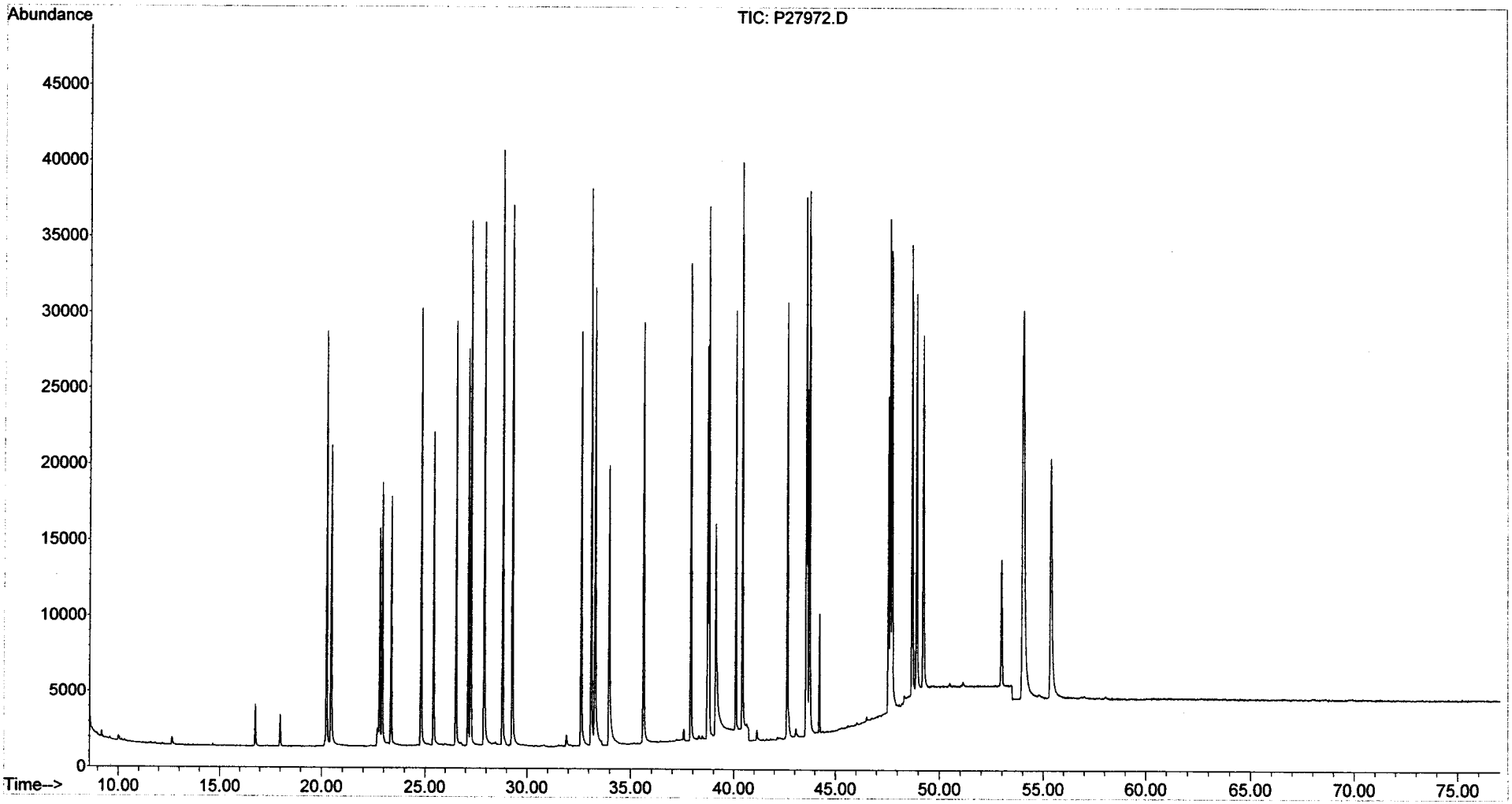
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) trans-Decalin	16.77	138	6683	249.00	ng/mL	100
4) cis-Decalin	18.00	138	5040	250.96	ng/mL	100
9) Naphthalene	20.21	128	73589	513.99	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	46506	510.30	ng/mL#	100
16) 1-Methylnaphthalene	23.35	142	44071	508.06	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\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%#			

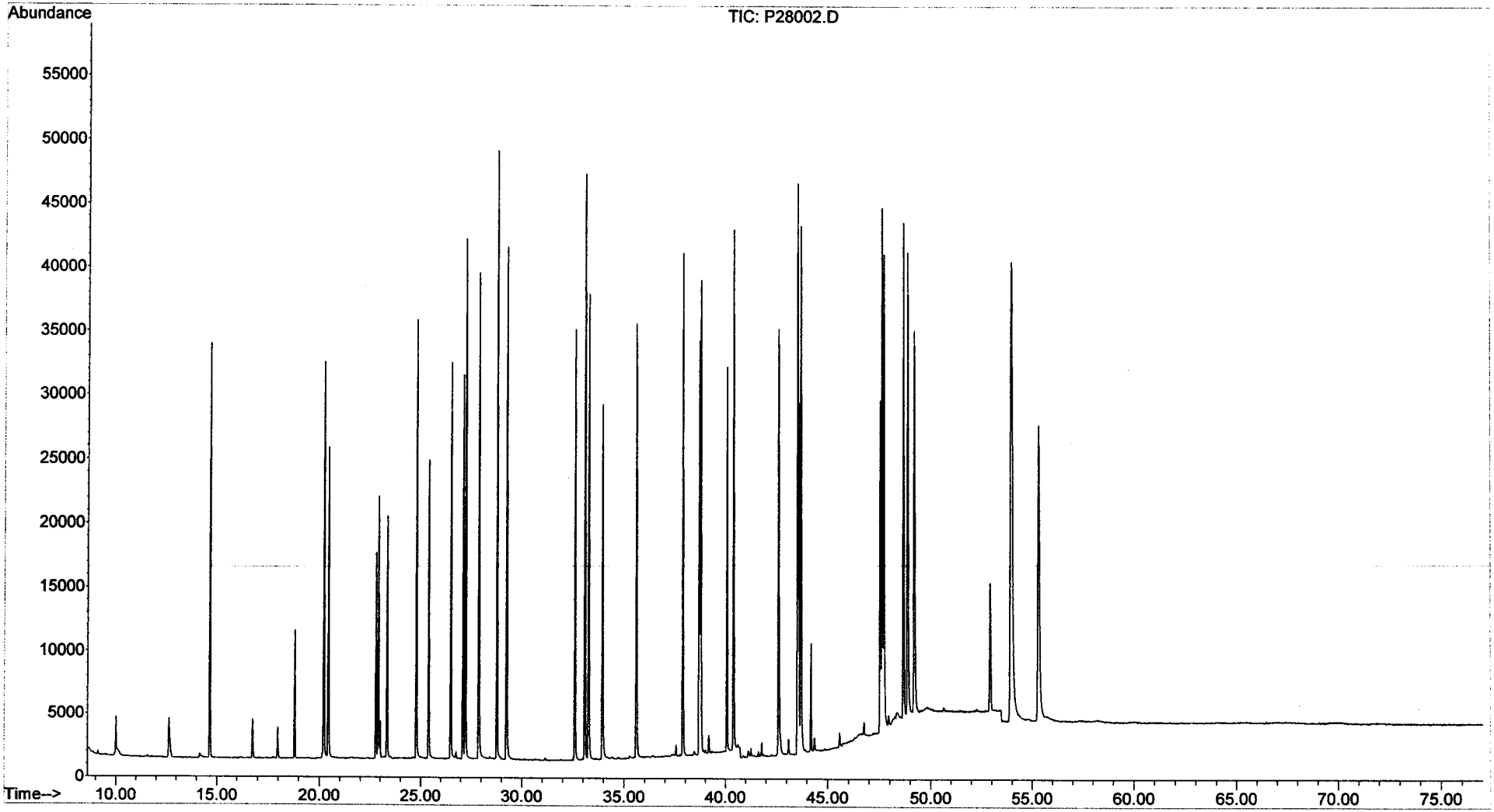
Target Compounds						Qvalue
3) trans-Decalin	16.76	138	7288	250.86	ng/mL	100
4) cis-Decalin	17.98	138	5519	253.88	ng/mL	100
9) Naphthalene	20.21	128	80656	520.43	ng/mL#	100
15) 2-Methylnaphthalene	22.90	142	50798	514.93	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	48142	512.71	ng/mL#	100
17) Benzothiophene	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

AMS 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

MS 2/1/06

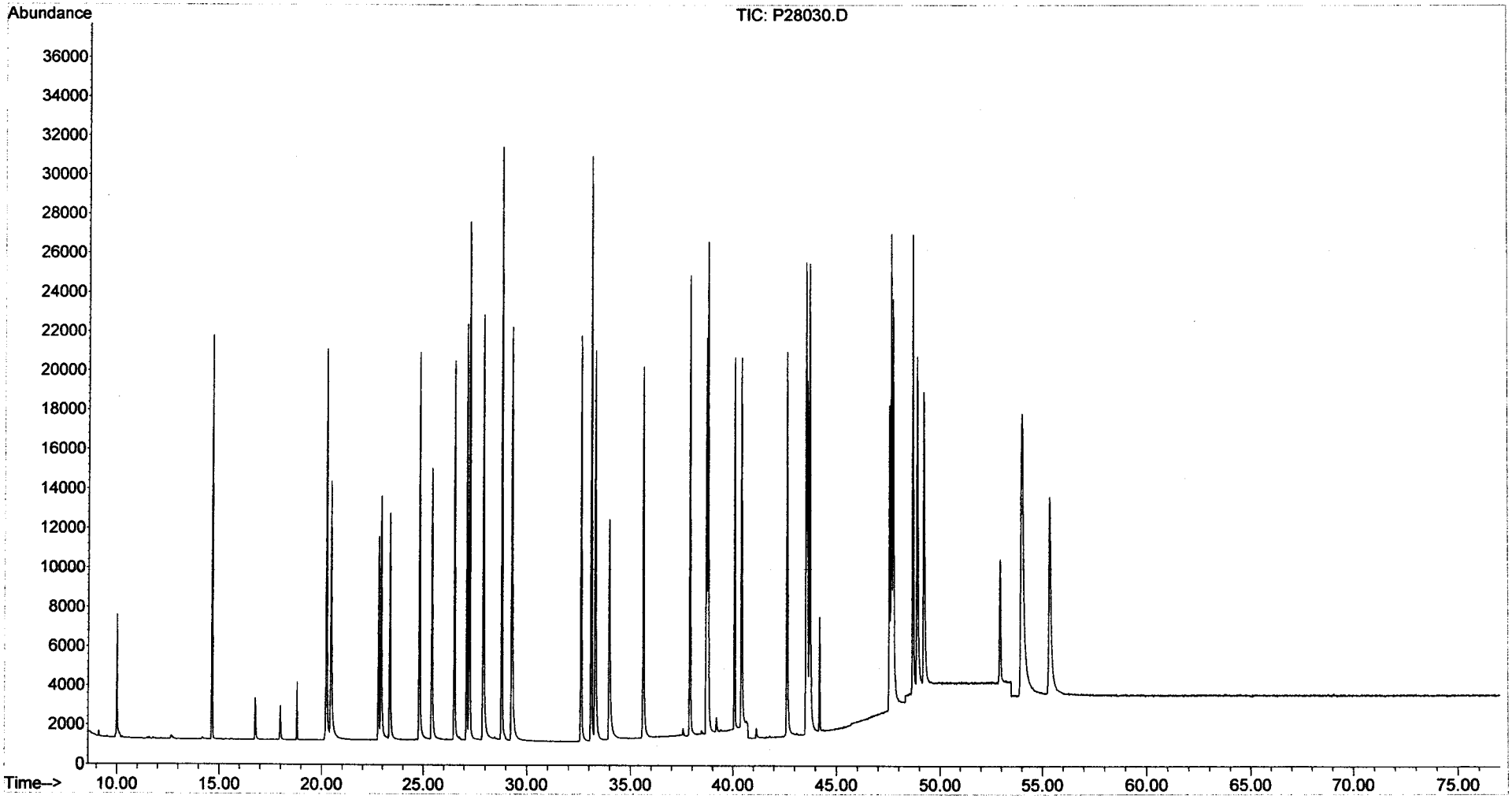
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.11	164	26132	500.00	ng/mL	0.00
72) Chrysene-d12	43.62	240	38649	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	26227	488.36	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

MJS 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%#			

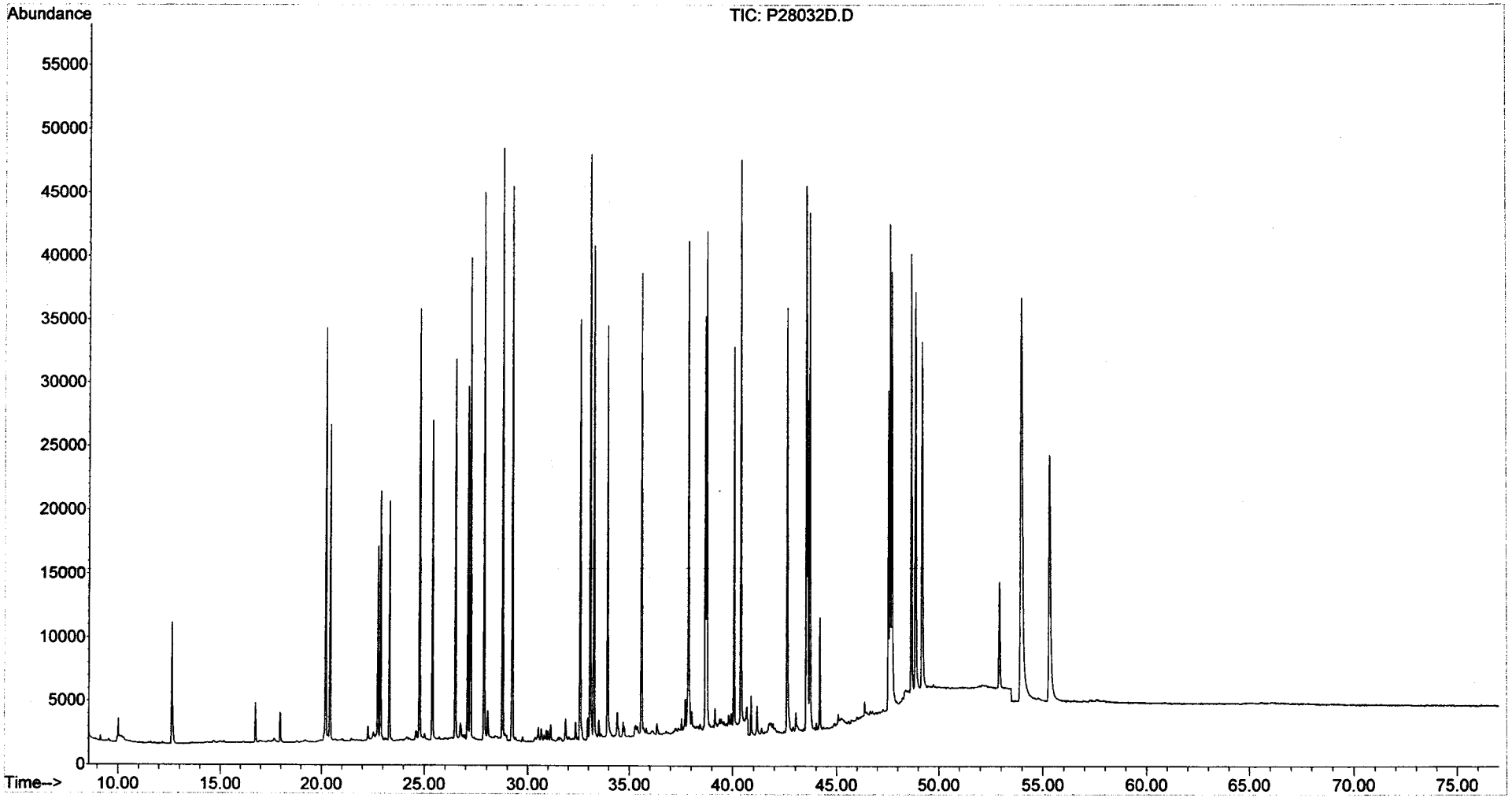
Target Compounds						Qvalue
3) trans-Decalin	16.75	138	6932	240.49	ng/mL	100
4) cis-Decalin	17.96	138	5306	246.01	ng/mL	100
9) Naphthalene	20.19	128	79217	515.18	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	50383	514.76	ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	47457	509.41	ng/mL#	100
17) Benzothiophene	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

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

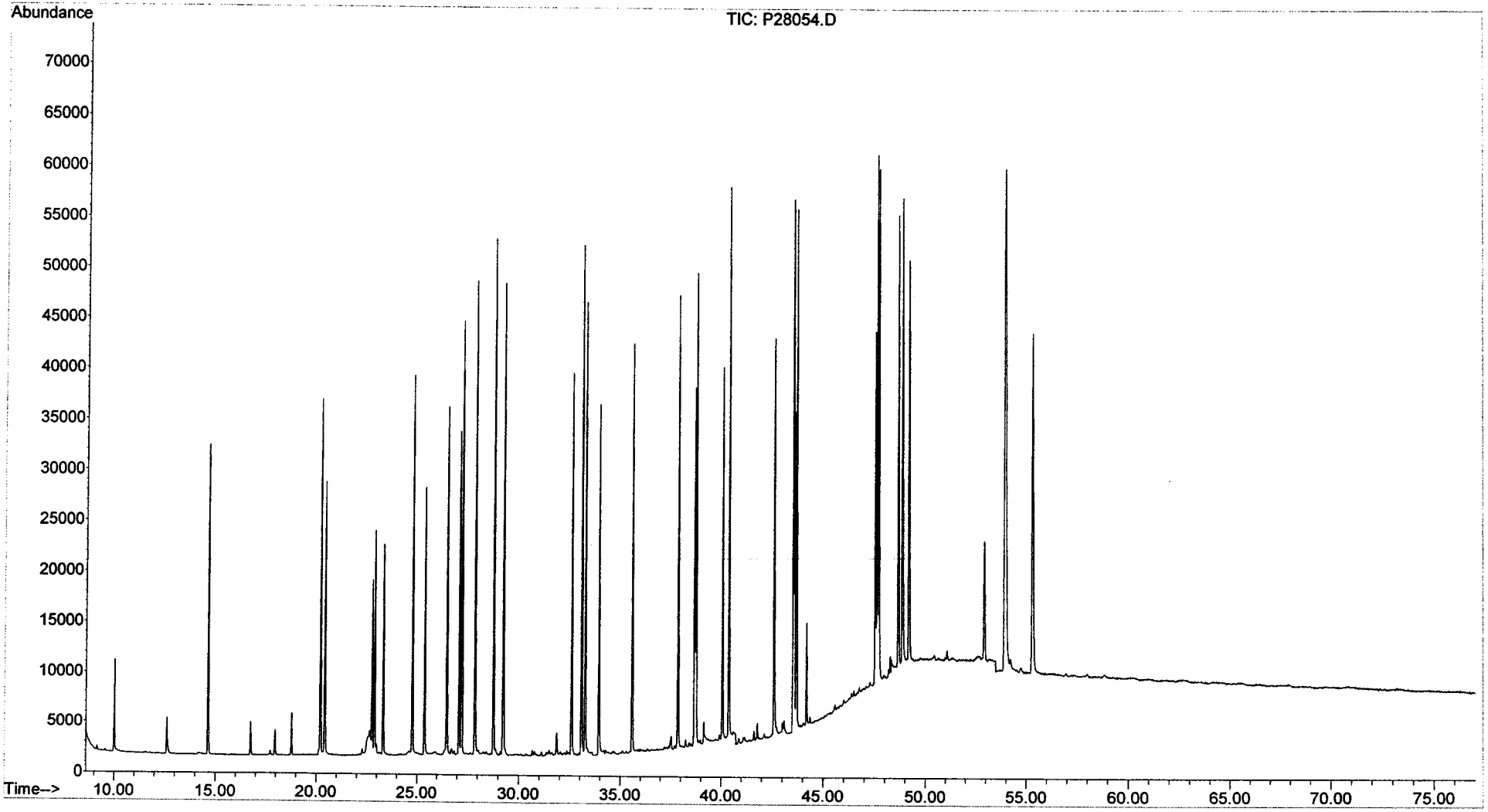
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	39044	500.00	ng/mL	-0.01
72) Chrysene-d12	43.61	240	63609	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	39954	497.93	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

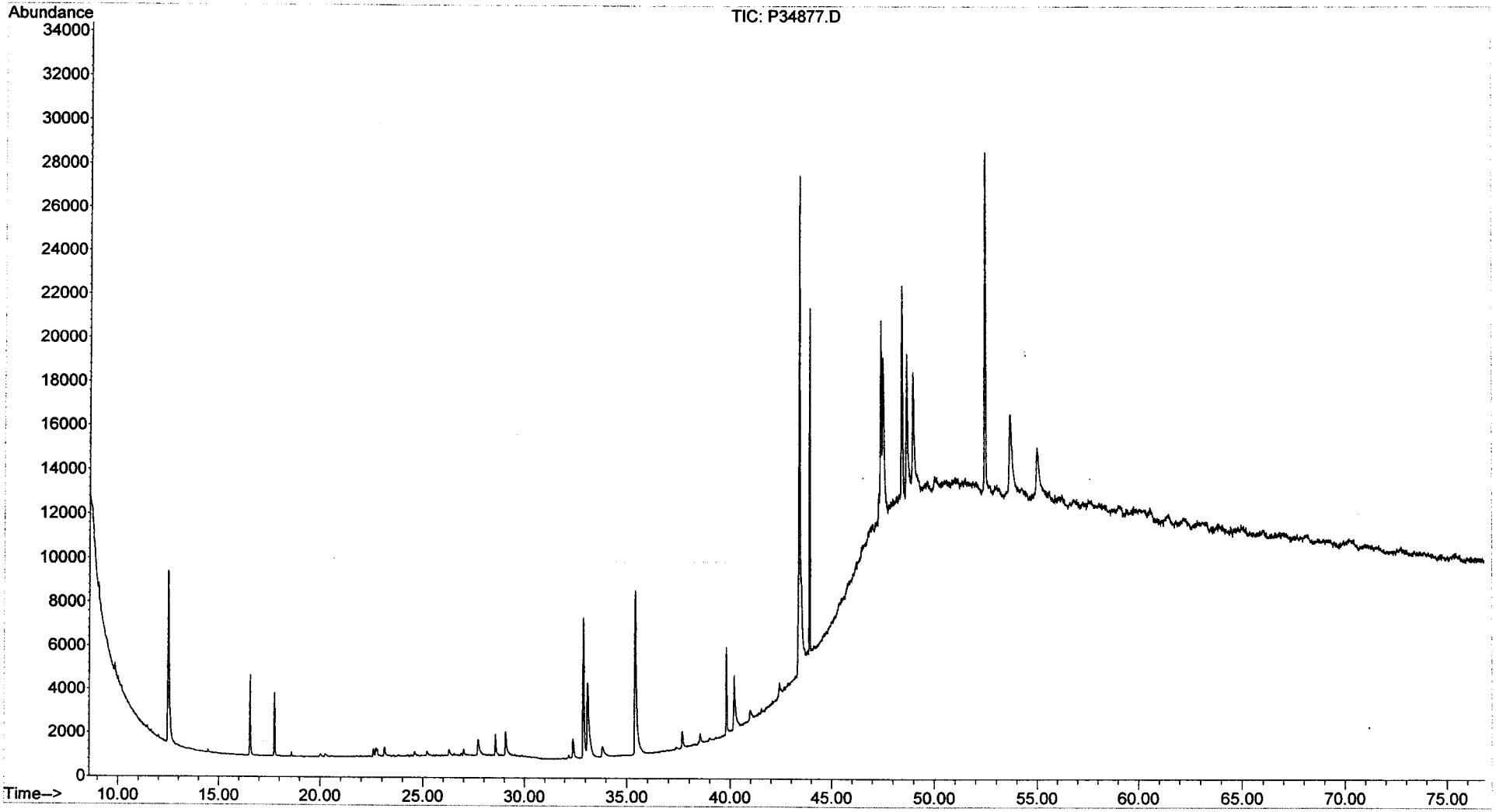
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	86518	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

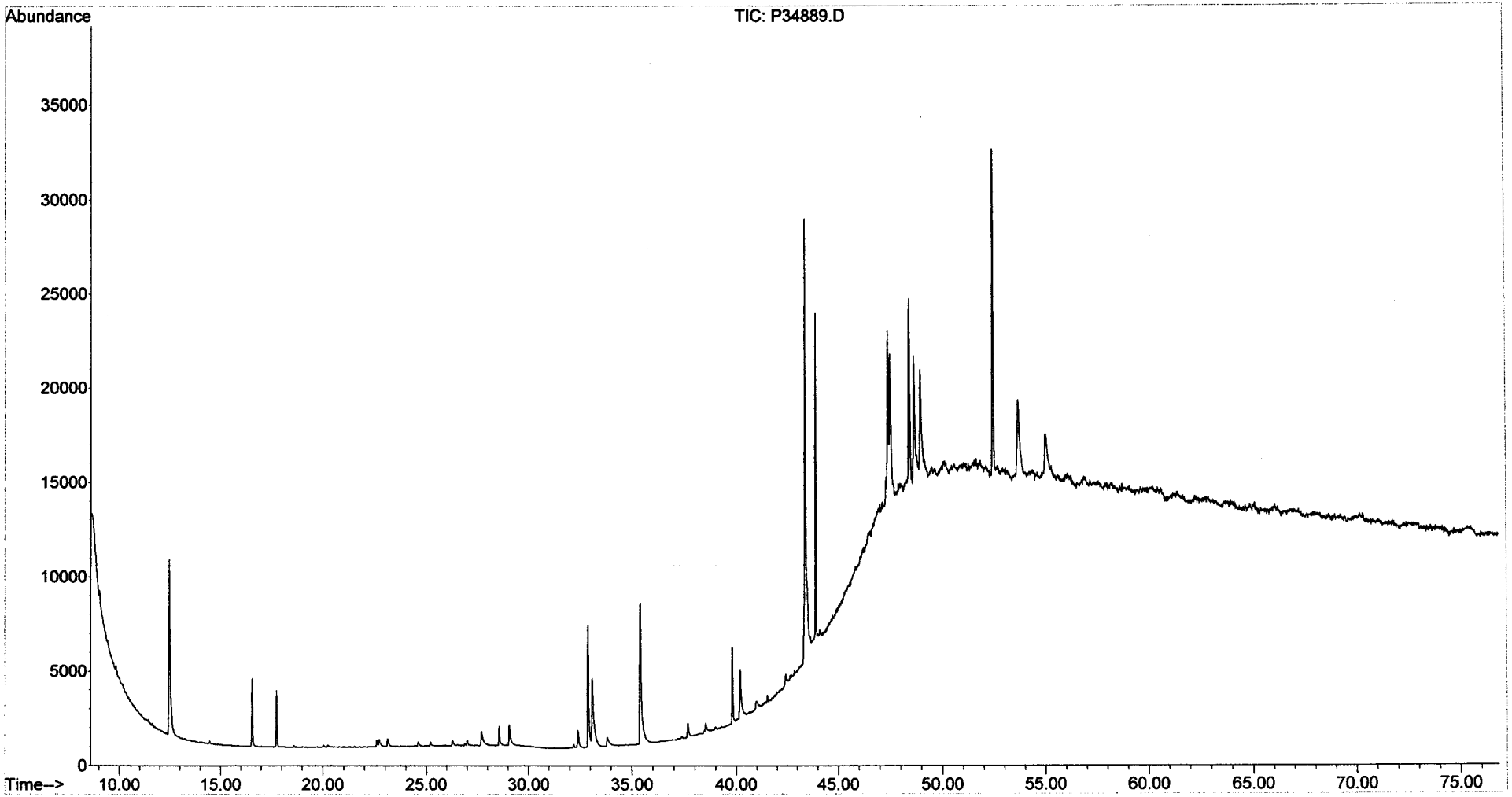
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	87909	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601045**
Lab ID: **C2012308**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		40381	27.12	65175	43.63
Upper Limit:		80762	27.62	130350	44.13
Lower Limit:		20190	26.62	32588	43.13
Client ID	**Lab ID**				
GC-SED-25 (9-10)	0601045-01	35868	27.12	56999	43.63
GC-SED-29 (7.4-8.4)	0601045-03	35305	27.12	54850	43.63
GC-SED-27 (4.9-5.4)	0601045-05	35065	27.12	54677	43.63
GC-SED-26 (5.3-5.8)	0601045-06	35186	27.12	55099	43.62
GC-SED-35 (15.3-17.3)	0601045-07	34989	27.12	55541	43.63
GC-SED-34B (2-3)	0601045-08E	34216	27.12	55612	43.63
GC-SED-34B (2-3)	0601045-08E D	34725	27.12	55857	43.63
CCV	C2012309	31831	27.12	46253	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: **0601045**
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-25 (9-10)	0601045-01E	24231	27.11	38029	43.62
GC-SED-29 (7.4-8.4)	0601045-03E	21722	27.11	34035	43.62
GC-SED-27 (4.9-5.4)	0601045-05E	22346	27.11	35709	43.62
GC-SED-26 (5.3-5.8)	0601045-06E	22241	27.11	33078	43.62
GC-SED-35 (15.3-17.3)	0601045-07E	21236	27.11	33343	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 18:14

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601045**
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-30 (3.5-5.5)	0601045-02	42544	27.10	71468	43.61
GC-SED-28 (4.9-5.8)	0601045-04	40103	27.10	68394	43.61
GC-SED-34B (2-3)	0601045-08	39552	27.10	67680	43.61
GC-SED-34B (2-3)	0601045-08 D	40002	27.10	68445	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 18:14

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: **0601045**
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
GC-SED-25 (9-10)	0601045-01	85142	43.42
GC-SED-30 (3.5-5.5)	0601045-02	87608	43.42
GC-SED-29 (7.4-8.4)	0601045-03	81598	43.43
GC-SED-28 (4.9-5.8)	0601045-04	81026	43.42
GC-SED-27 (4.9-5.4)	0601045-05	84738	43.42
GC-SED-26 (5.3-5.8)	0601045-06	90852	43.42
GC-SED-35 (15.3-17.3)	0601045-07	92238	43.41
GC-SED-34B (2-3)	0601045-08	101406	43.42
GC-SED-34B (2-3)	0601045-08 D	85475	43.42
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.

02/07/06 16:04

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-25 (9-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-01**
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
01/12/06	01/17/06	01/19/06	01/28/06	51.8	5.42	102.3	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**160000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	100	50-130
d50-Tetracosane	103	50-130

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27953.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 12:42 am
Operator : AC
Sample : 0601045-01-AFID
Misc : 1X
ALS Vial : 67 Sample Multiplier: 1

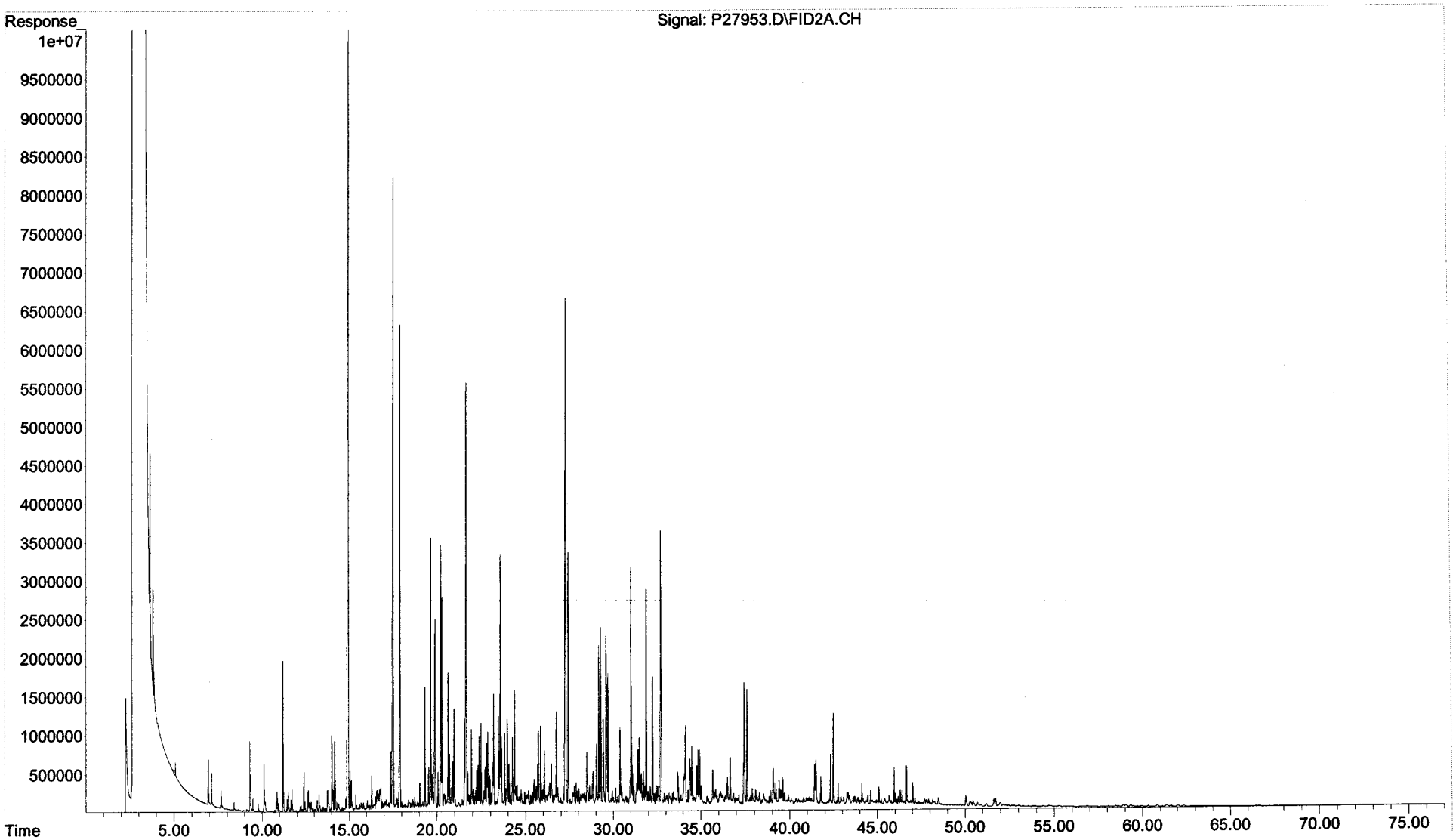
Integration File: SHCINT1.E
Quant Time: Feb 06 19:46:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	74984250	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	15585795	9.751 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	19.50%#
24) s d50-Tetracosane	35.68	14165398	10.034 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	20.07%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	6714176166	4577.865 ug/mL
44) h Total Resolved Hydrocarbon	40.84	4190084668	2856.887 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27953.D
Operator : AC
Acquired : 28 Jan 2006 12:42 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-01-AFID
Misc Info : 1X
Vial Number: 67



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-30 (3.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-02**
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
01/12/06	01/17/06	01/19/06	01/28/06	57.6	5.69	15.63	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**14000**

N/A - Not Applicable

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

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27955.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 2:18 am
Operator : AC
Sample : 0601045-02-AFID
Misc : 1X
ALS Vial : 68 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 19:49:26 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

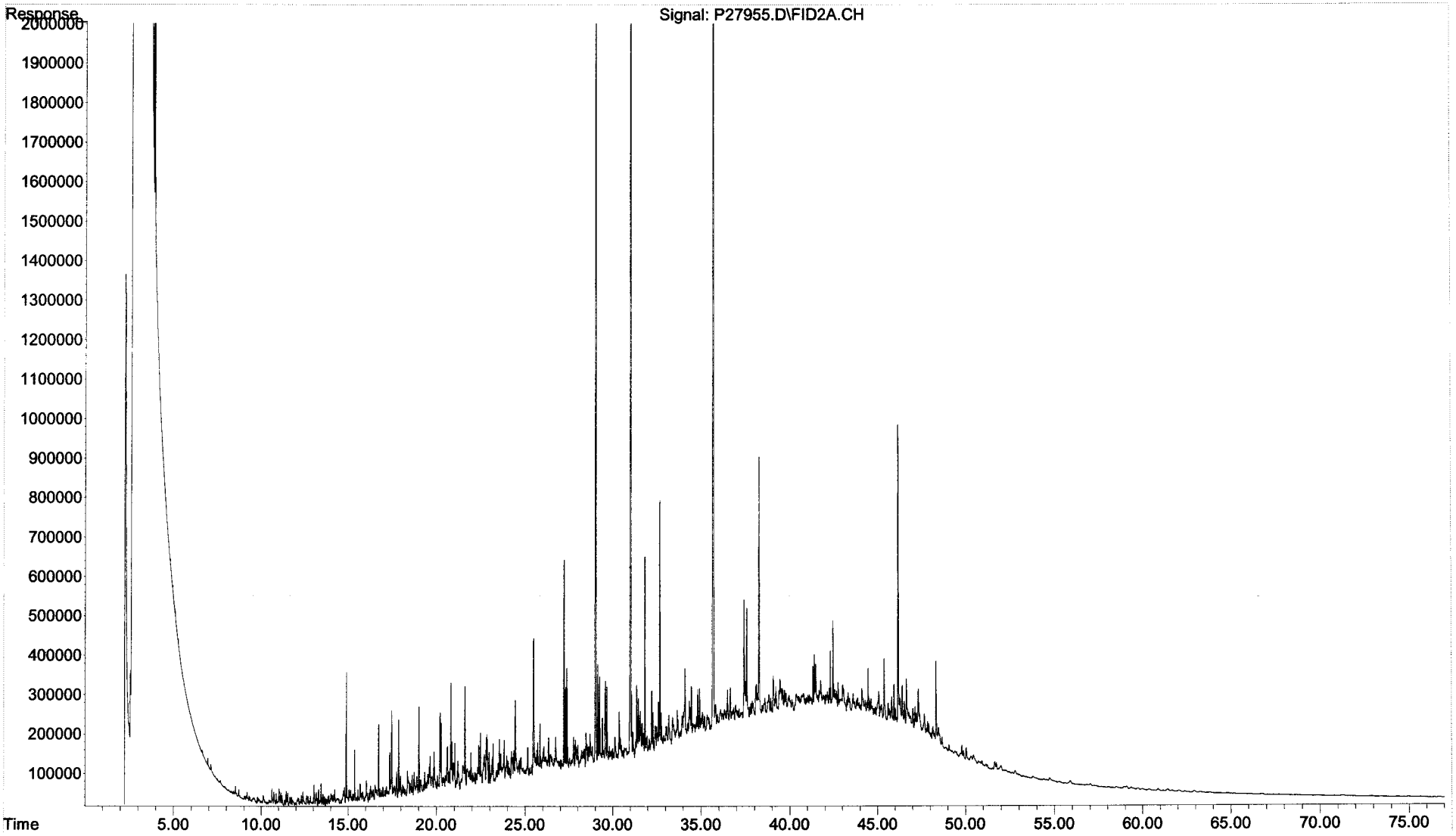
2/6/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	75525237	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	88841852	55.187 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 110.37%	
24) s d50-Tetracosane	35.71	73338006	51.578 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 103.16%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4730975958	3202.572 ug/mL
44) h Total Resolved Hydrocarbon	40.84	717043731	485.393 ug/L

-RF test gmc 2nd cv 2/8/06

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27955.D
Operator : AC
Acquired : 28 Jan 2006 2:18 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-02-AFID
Misc Info : 1X
Vial Number: 68



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-29 (7.4-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-03**
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
01/12/06	01/17/06	01/19/06	01/28/06	79.0	5.31	11.92	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**11000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	82	50-130

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27957.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 3:53 am
Operator : AC
Sample : 0601045-03-AFID
Misc : 1X
ALS Vial : 69 Sample Multiplier: 1

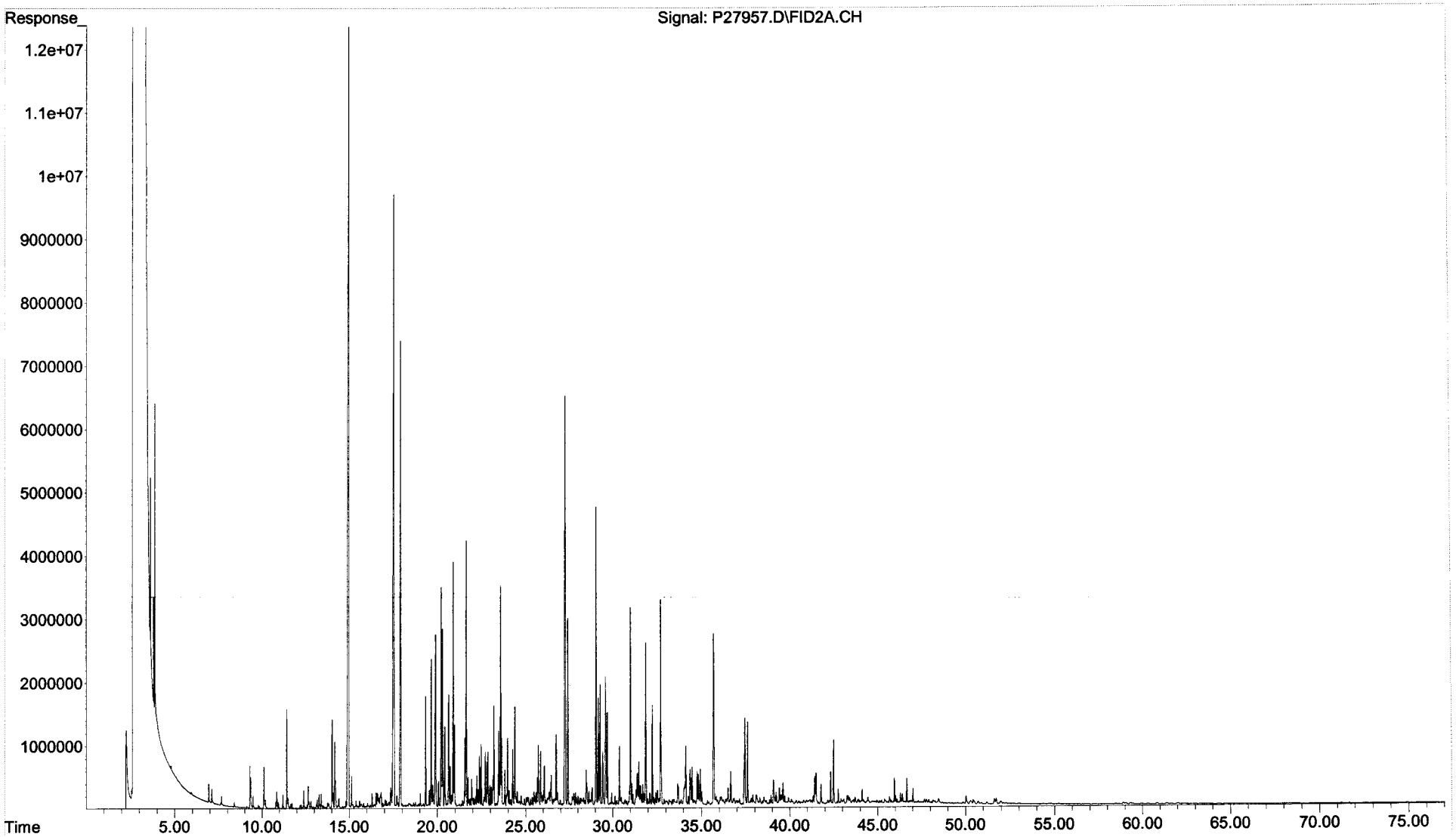
Integration File: SHCINT1.E
Quant Time: Feb 06 19:52:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	72548530	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.07	114083187	73.774 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	147.55%#
24) s d50-Tetracosane	35.71	93610185	68.537 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	137.07%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5903178895	4160.041 ug/mL
44) h Total Resolved Hydrocarbon	40.84	4021734797	2834.165 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27957.D
Operator : AC
Acquired : 28 Jan 2006 3:53 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-03-AFID
Misc Info : 1X
Vial Number: 69



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-28 (4.9-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-04**
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
01/12/06	01/17/06	01/19/06	01/28/06	88.4	5.47	6.56	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**1800**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	81	50-130
d50-Tetracosane	76	50-130

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27959.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 5:29 am
Operator : AC
Sample : 0601045-04-AFID
Misc : 1X
ALS Vial : 70 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 19:55:14 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

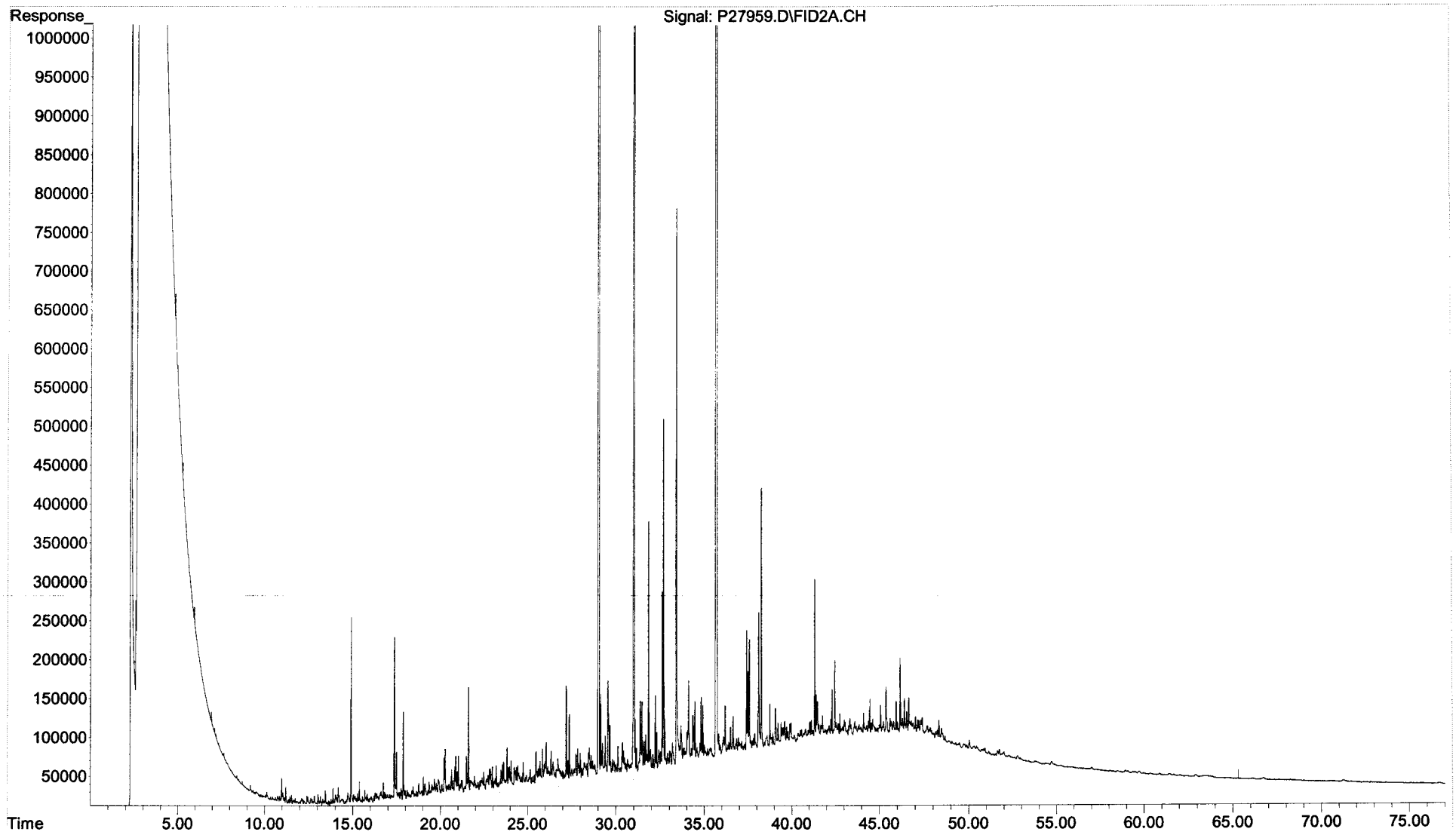
	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.04	72742313	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.08	192307850	124.028 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 248.06%#
24) s	d50-Tetracosane	35.72	158698666	115.882 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 231.76%#
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.84	2258726096	1587.511 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	306017074	215.079 ug/L

2nd Sur 7.rec

RF+Rptime 2nd cr 2/8/06

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27959.D
Operator : AC
Acquired : 28 Jan 2006 5:29 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-04-AFID
Misc Info : 1X
Vial Number: 70



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-27 (4.9-5.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-05**
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
01/12/06	01/17/06	01/19/06	01/28/06	49.8	5.68	39.06	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**55000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	85	50-130

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27961.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 7:05 am
Operator : AC
Sample : 0601045-05-AFID
Misc : 1X
ALS Vial : 71 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 06 19:57:25 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

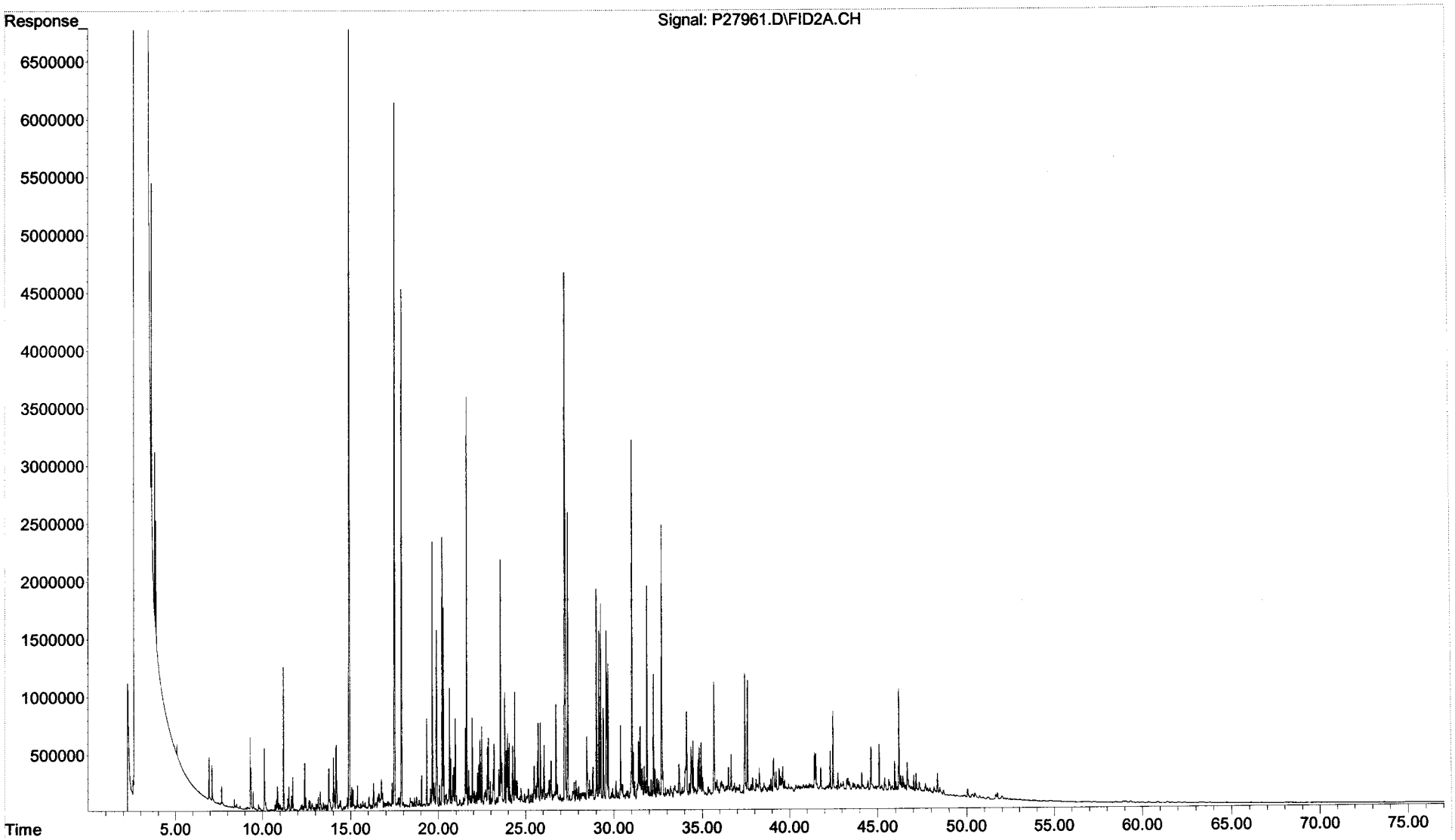
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/6/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	72865094	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	35127967	22.617 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	45.23%#
24) s d50-Tetracosane	35.69	29976549	21.852 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	43.70%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5962183473	4183.368 ug/mL
44) h Total Resolved Hydrocarbon	40.84	2657578853	1864.691 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27961.D
Operator : AC
Acquired : 28 Jan 2006 7:05 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-05-AFID
Misc Info : 1X
Vial Number: 71



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-26 (5.3-5.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-06**
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
01/12/06	01/17/06	01/19/06	01/28/06	81.7	5.04	9.29	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**8700**

N/A - Not Applicable

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

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27963.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 8:40 am
Operator : AC
Sample : 0601045-06-AFID
Misc : 1X
ALS Vial : 72 Sample Multiplier: 1

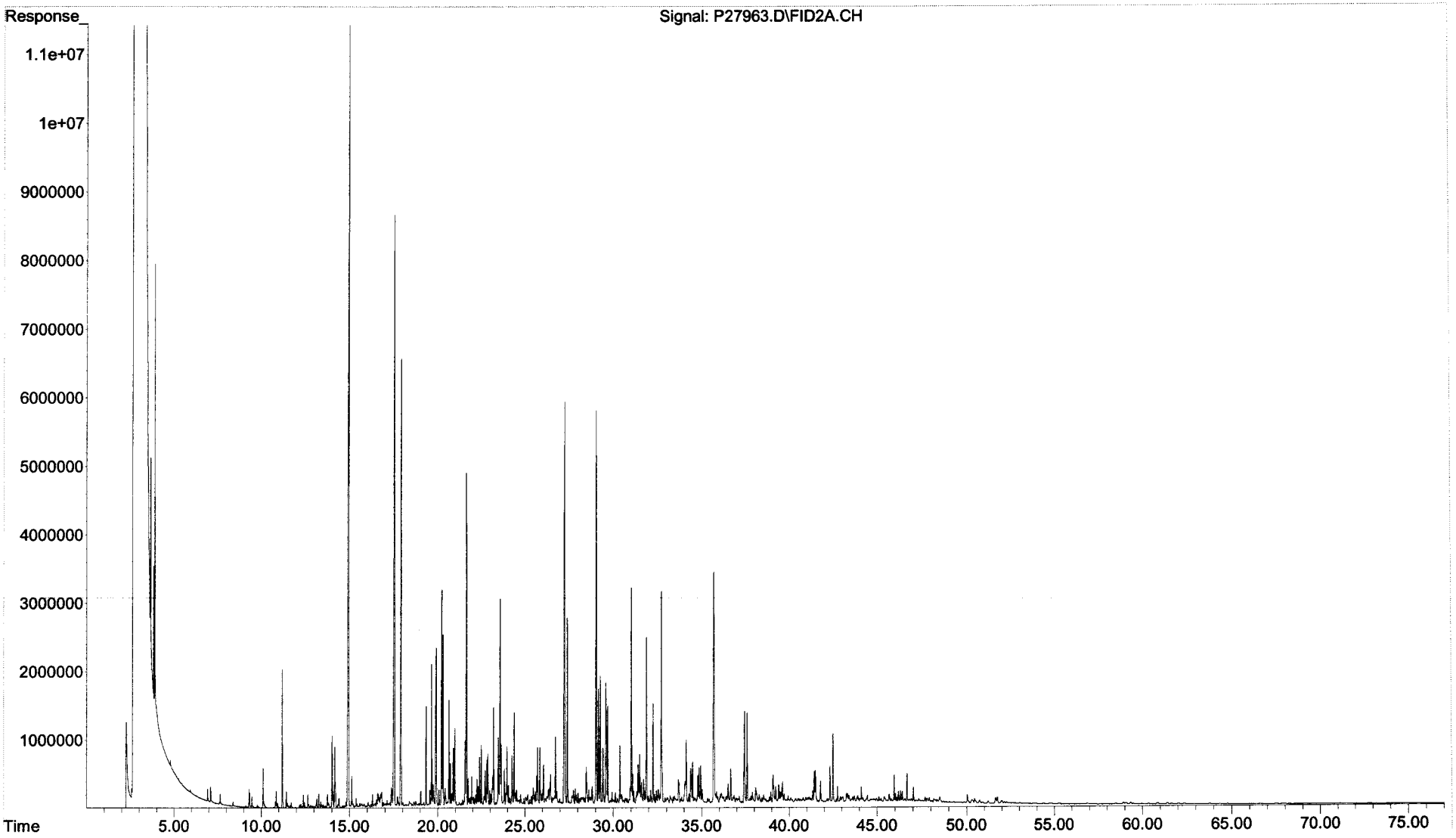
Integration File: SHCINT1.E
Quant Time: Feb 06 19:59:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.05	73414343	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.08	148429870	94.853 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	189.71%#
24) s d50-Tetracosane	35.73	123160771	89.109 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	178.22%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5867497562	4086.131 ug/mL
44) h Total Resolved Hydrocarbon	40.84	3641673187	2536.065 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27963.D
Operator : AC
Acquired : 28 Jan 2006 8:40 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-06-AFID
Misc Info : 1X
Vial Number: 72



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-35 (15.3-17.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-07**
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
01/13/06	01/17/06	01/19/06	01/28/06	86.6	5.54	40.3	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**37000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	89	50-130
d50-Tetracosane	91	50-130

02/06/06 20:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27965.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 10:15 am
Operator : AC
Sample : 0601045-07-AFID
Misc : 1X
ALS Vial : 73 Sample Multiplier: 1

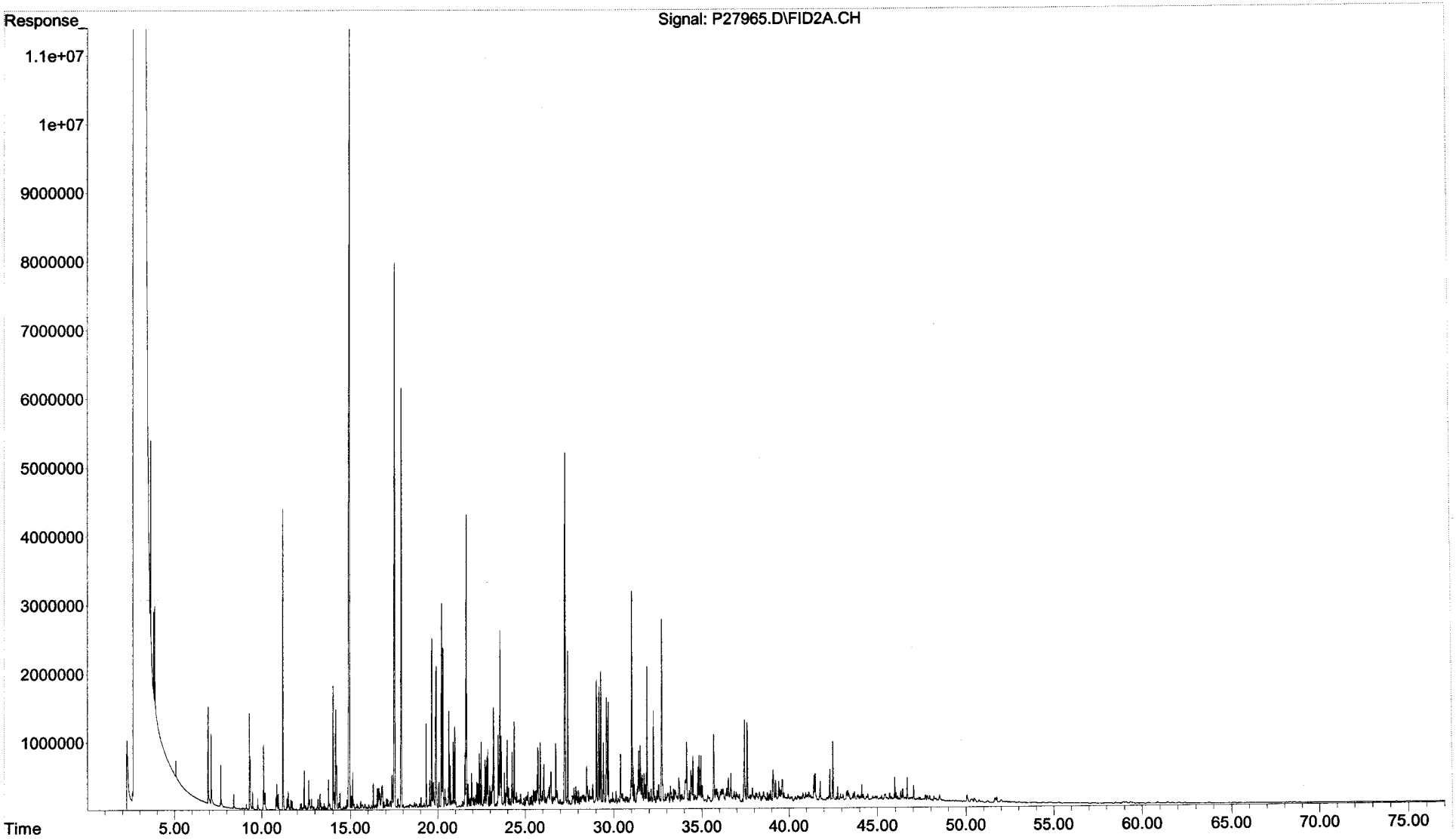
Integration File: SHCINT1.E
Quant Time: Feb 06 20:02:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	73787473	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	34755737	22.098 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	44.20%#
24) s d50-Tetracosane	35.69	31432987	22.627 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	45.25%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	6621122496	4587.639 ug/mL
44) h Total Resolved Hydrocarbon	40.84	3820818258	2647.366 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27965.D
Operator : AC
Acquired : 28 Jan 2006 10:15 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-07-AFID
Misc Info : 1X
Vial Number: 73



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
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
01/13/06	01/17/06	01/19/06	01/28/06	49.8	5.01	25	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**33000**

N/A - Not Applicable

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

02/06/06 20:16

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27967.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 11:50 am
Operator : AC
Sample : 0601045-08-AFID
Misc : 1X
ALS Vial : 74 Sample Multiplier: 1

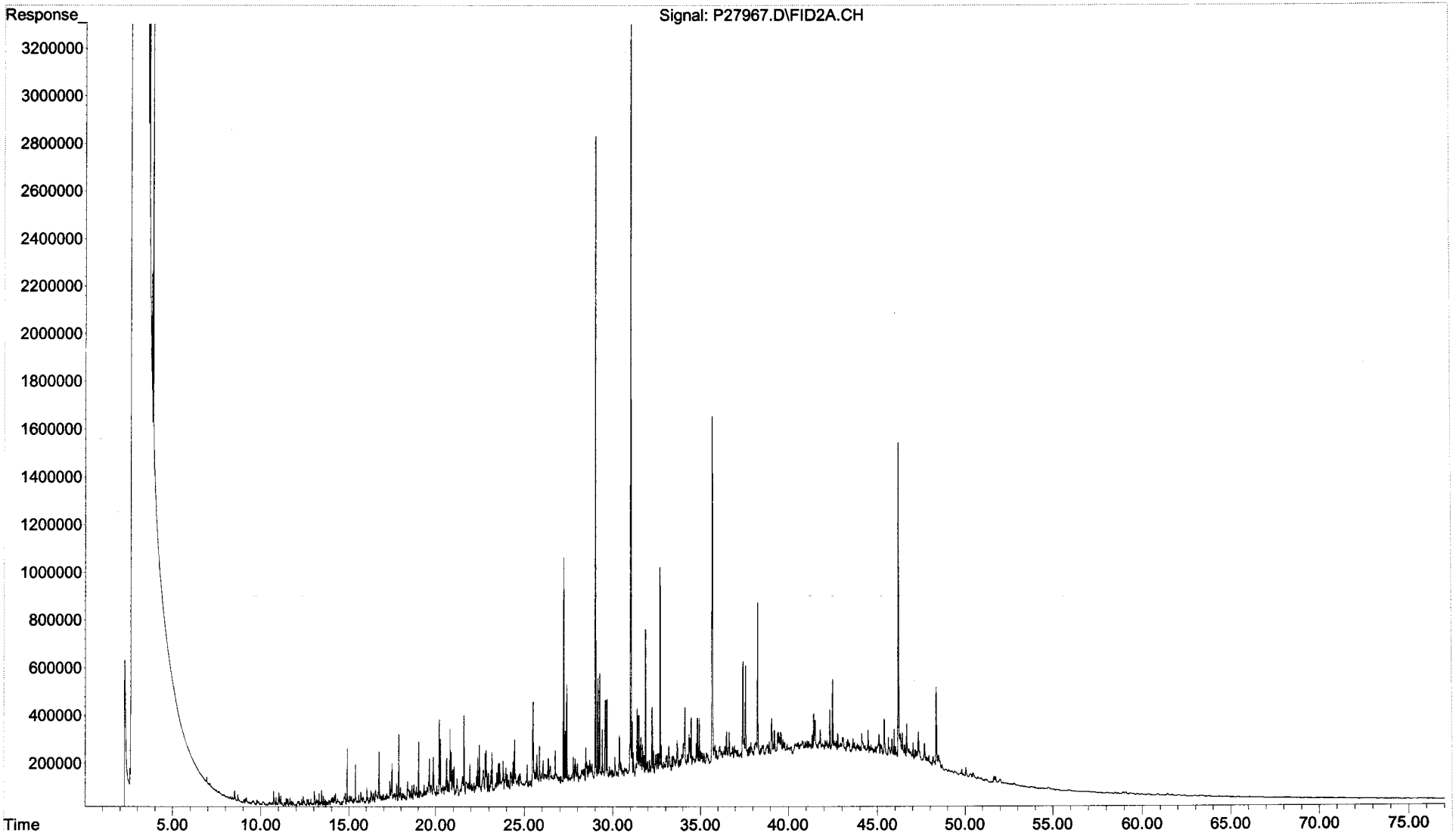
Integration File: SHCINT1.E
Quant Time: Feb 06 20:03:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	73003860	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	55106755	35.414 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	70.83%
24) s d50-Tetracosane	35.70	46021375	33.484 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	66.97%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5035301113	3526.305 ug/mL
44) h Total Resolved Hydrocarbon	40.84	898987585	629.576 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27967.D
Operator : AC
Acquired : 28 Jan 2006 11:50 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-08-AFID
Misc Info : 1X
Vial Number: 74



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-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08 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
01/13/06	01/17/06	01/19/06	01/28/06	49.8	5.30	25	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	33000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	84	50-130

02/06/06 20:16

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27969.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 1:27 pm
Operator : AC
Sample : 0601045-08D-AFID
Misc : 1X
ALS Vial : 75 Sample Multiplier: 1

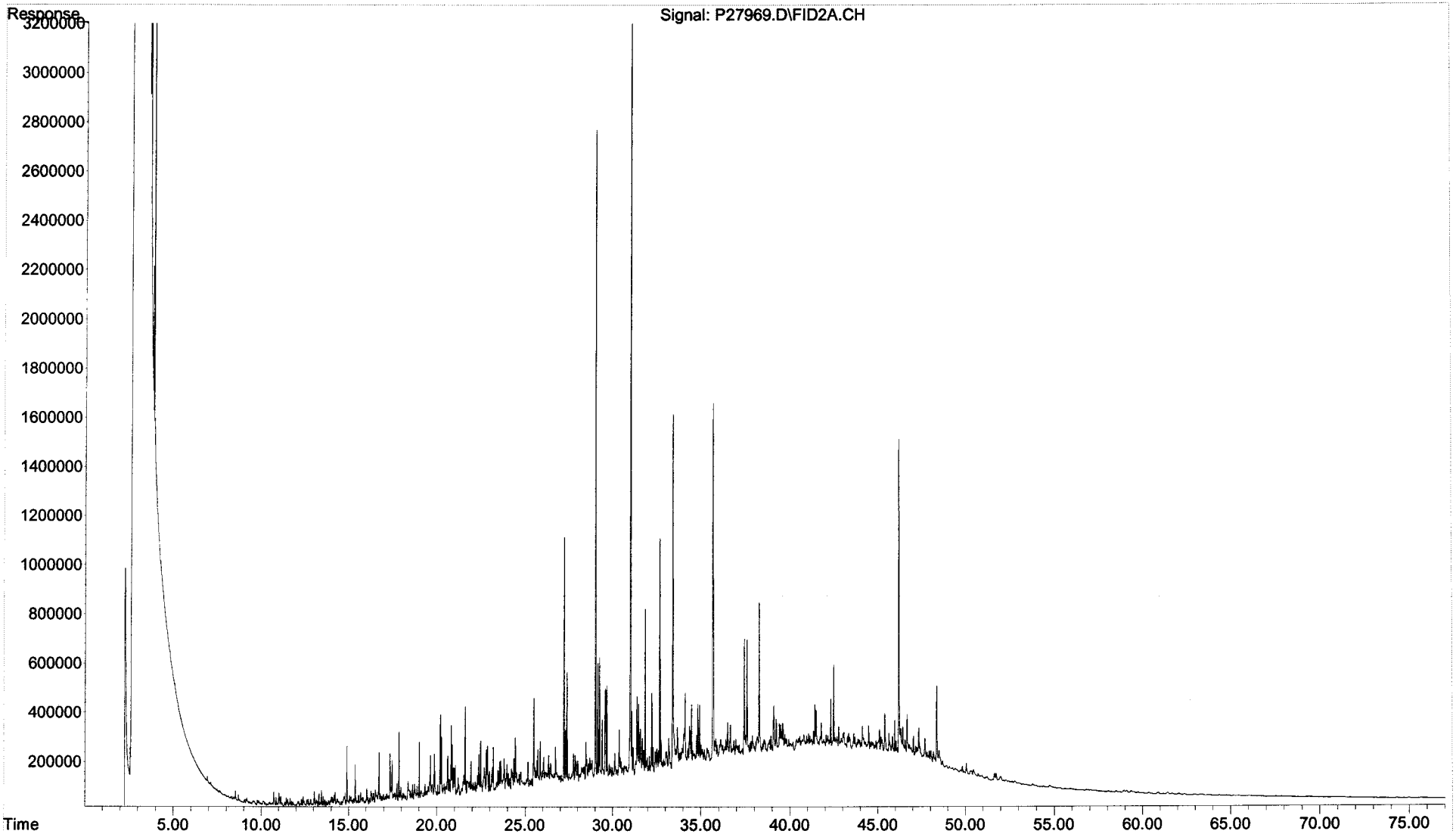
Integration File: SHCINT1.E
Quant Time: Feb 06 20:06:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	72986235	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	54618072	35.108 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	70.22%
24) s d50-Tetracosane	35.70	45992168	33.471 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	66.94%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5299403215	3712.156 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1001499409	701.536 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\P27969.D
Operator : AC
Acquired : 28 Jan 2006 1:27 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0601045-08D-AFID
Misc Info : 1X
Vial Number: 75



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-34B (2-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601045**
Lab ID: **0601045-08**
Associated Blank: **SS011906B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/13/06	01/17/06	01/19/06	49.8	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	33000	33000	0	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	89	88	50-130
d50-Tetracosane	84	84	50-130

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

02/06/06 20:17

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: **0601045**
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.

02/06/06 20:38

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

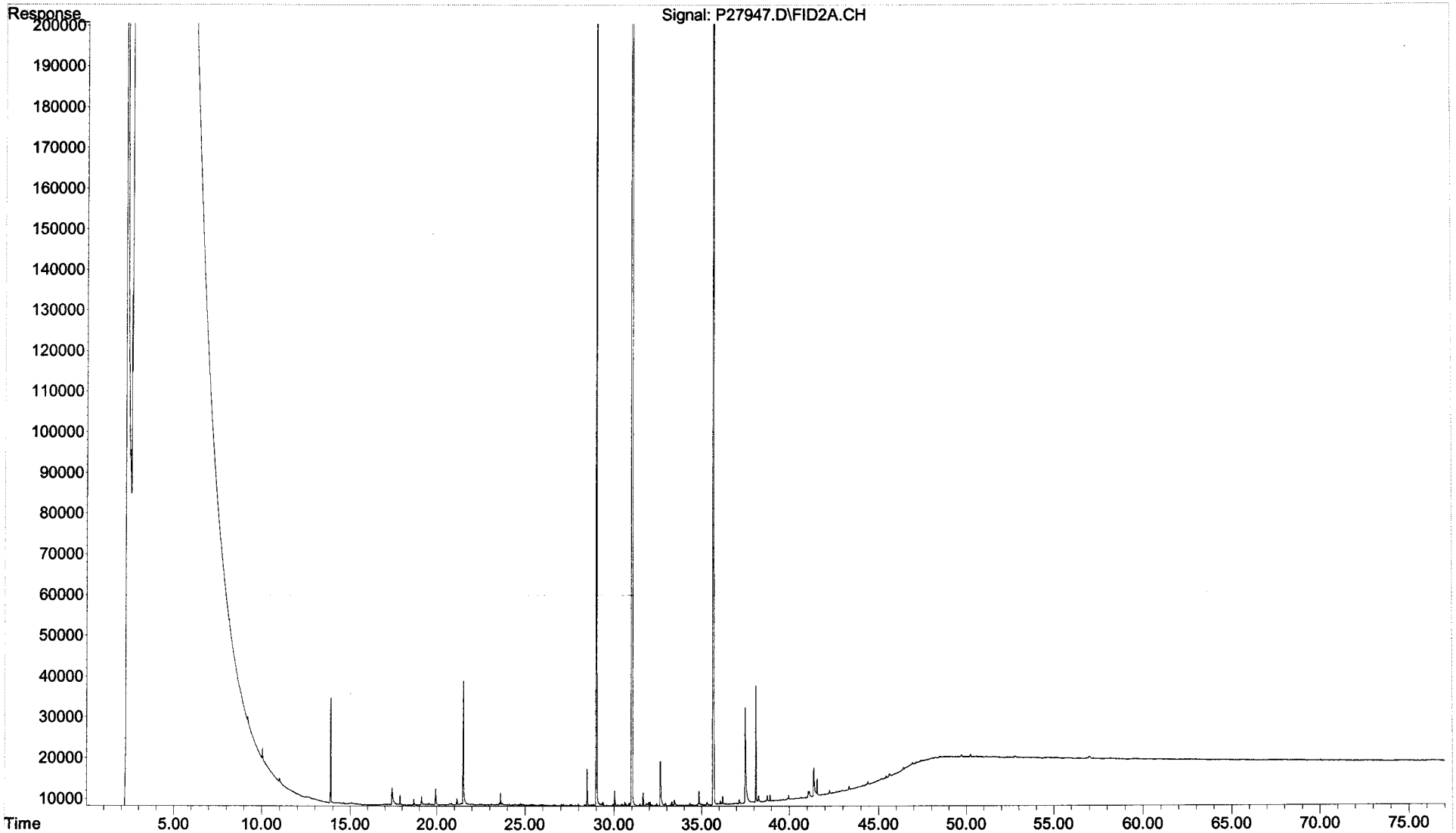
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

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: **0601045**
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 20:52

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: **0601045**
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

02/06/06 20:51

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

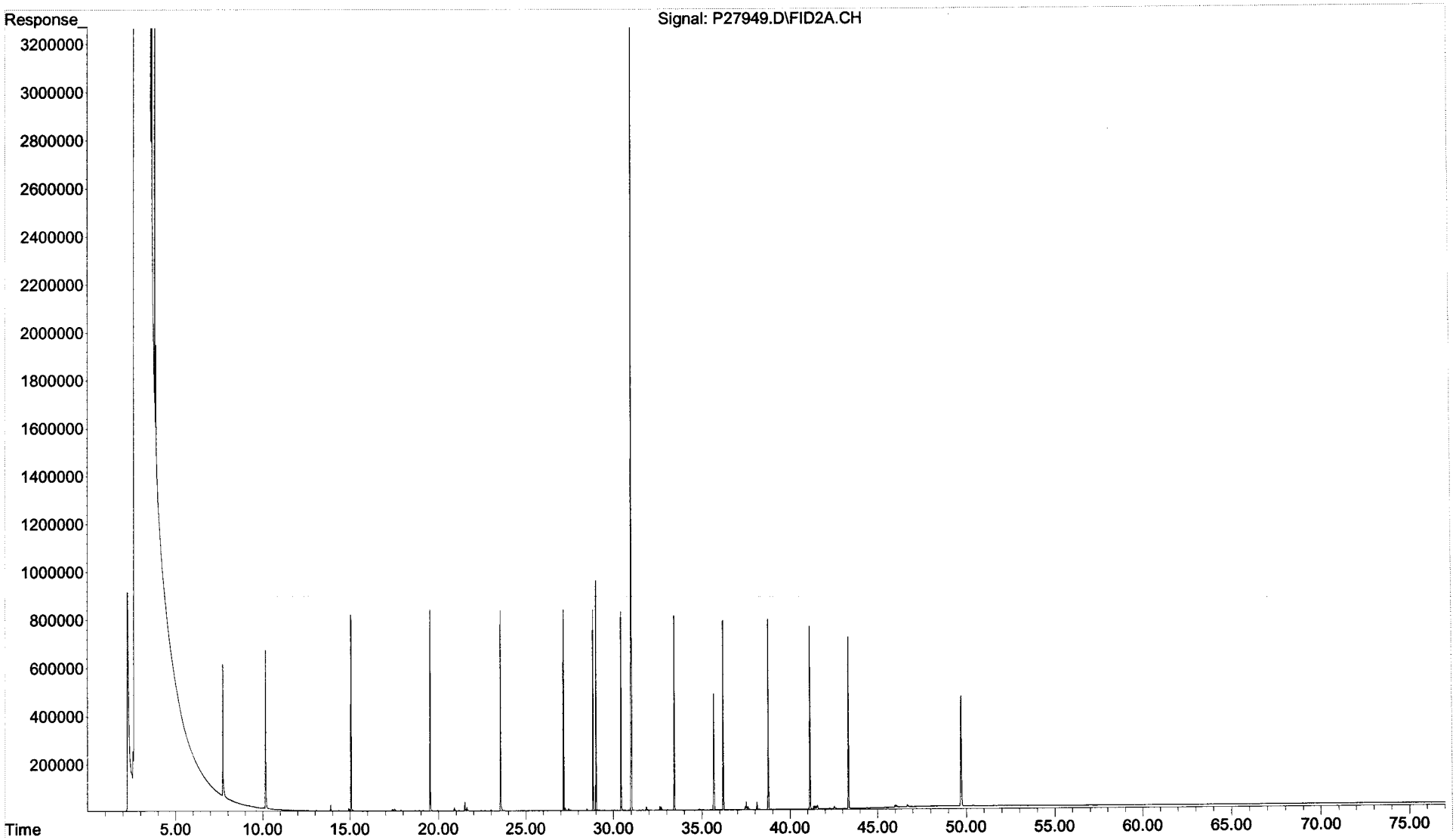
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

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: **0601045**
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 20:51

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

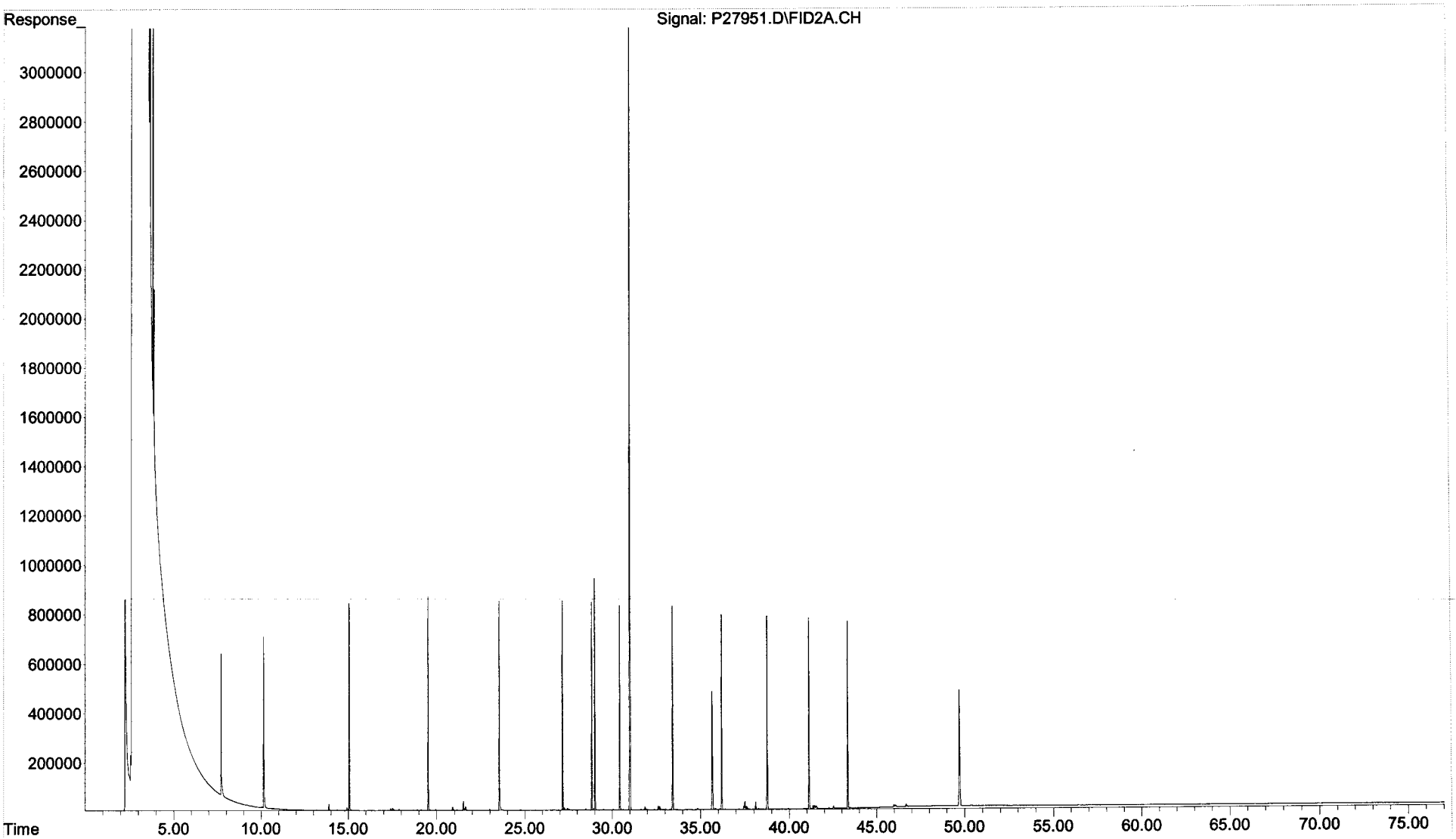
Integration File: SHCINT1.E
Quant Time: Feb 06 20:48:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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: **0601045**
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

02/06/06 20:52

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

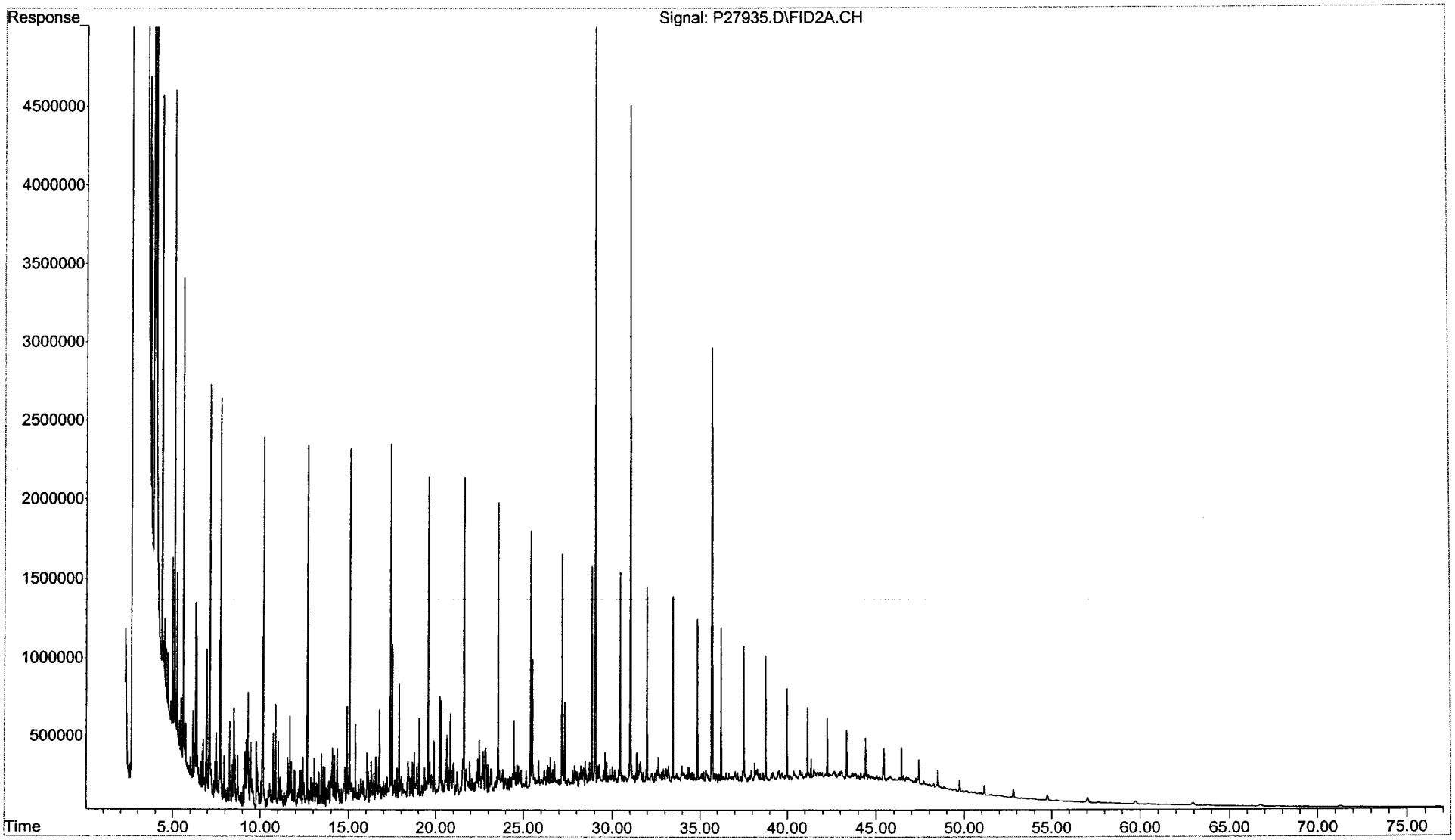
Integration File: SHCINT1.E
Quant Time: Jan 30 17:53:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Fri Jan 27 19:19:30 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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: 0601045

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
0601045-01	IB201230604	P27943.D
0601045-02	IB201230604	P27943.D
0601045-03	IB201230604	P27943.D
0601045-04	IB201230604	P27943.D
0601045-05	IB201230604	P27943.D
0601045-06	IB201230604	P27943.D
0601045-07	IB201230604	P27943.D
0601045-08	IB201230604	P27943.D
0601045-08 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

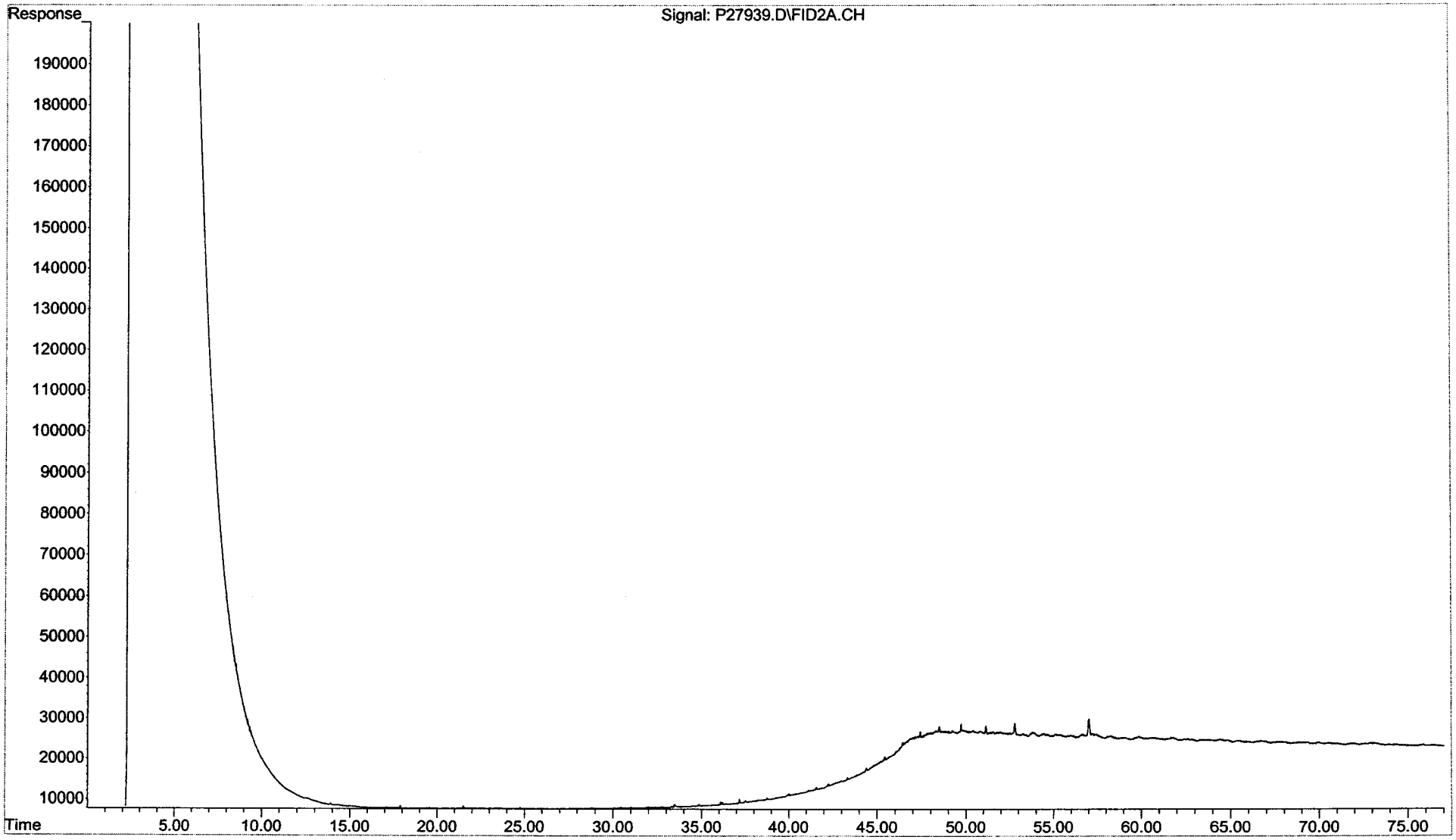
Integration File: SHCINT1.E
Quant Time: Jan 27 19:17:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Jan 23 20:53:58 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

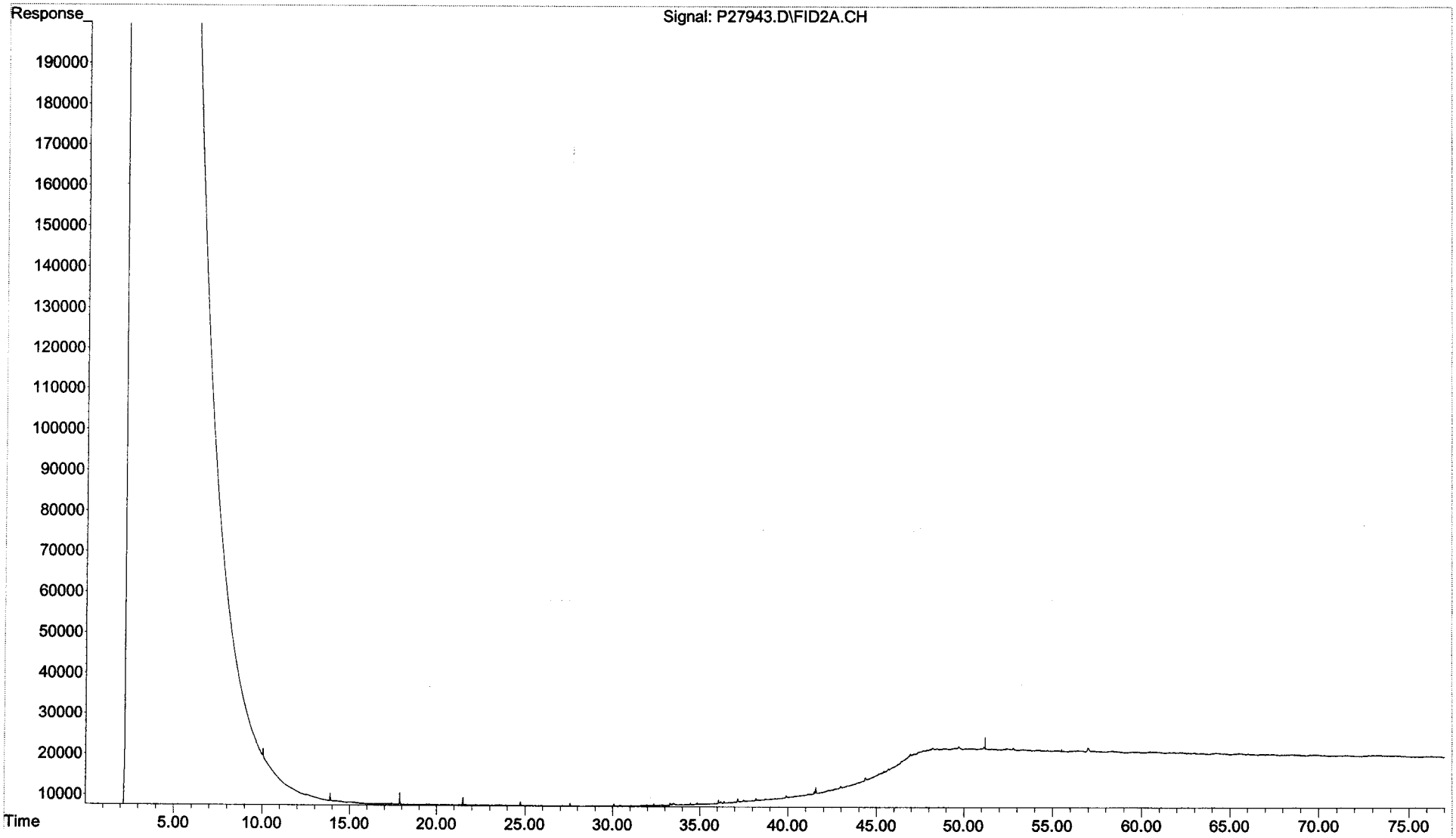
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

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 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
30)	RearSamp	55	P27859	FRNC2B	
31)	Sample	14	P27860	FRNC2B	0601019-01-RE ✓
32)	Pause				
33)	RearSamp	56	P27861	FRNC2B	
34)	Sample	15	P27862	FRNC2B	0601019-02-RE ✓
35)	RearSamp	58	P27863	FRNC2B	DCM-AFID
36)	Sample	16	P27864	FRNC2B	0601019-03-RE
37)	RearSamp	57	P27865	FRNC2B	
38)	Sample	17	P27866	FRNC2B	0601019-03D-RE
39)	RearSamp	58	P27867	FRNC2B	DCM-AFID
40)	Sample	18	P27868	FRNC2B	0601019-04-RE ✓
41)	RearSamp	59	P27869	FRNC2B	DCM-AFID
42)	Sample	19	P27870	FRNC2B	0601019-05-RE ✓
43)	RearSamp	60	P27871	FRNC2B	C2012401-AFID - PAH standard

PAH #2 Sequence Information

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

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

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

Last Modified: Wed Jan 25 15:42:38 2006

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

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	20	P27872	FRNC2B	0601019-06-RE ✓
45)	RearSamp	61	P27873	FRNC2B	DCM-AFID
	Sample	21	P27874	FRNC2B	0601019-07-RE ✓
	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 1/26/06
65)	Sample	30	P27892	FRNC2B	SS011306B04
66)	RearSamp	99	P27892A	FRNC2B	DCM
67)	Sample	100	P27892B	FRNC2B	PAH STD RT CHECK *R.T. change 1/26/06
68)	RearSamp	99	P27892C	FRNC2B	DCM
69)	Sample	100	P27892D	FRNC2B	C3012304A PASS
70)	Pause				
71)	RearSamp	71	P27893	FRNC2B	LD70212401-AFID
72)	Sample	31	P27894	FRNC2B	DCM
73)	RearSamp	72	P27895	FRNC2B	C20~~1~~2403-AFID PASS
74)	Sample	32	P27896	FRNC2B	SS011306B04 ✓
75)	RearSamp	73	P27897	FRNC2B	DCM-AFID
	Sample	33	P27898	FRNC2B	SS011306LCS02 ✓
	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 1/26/06
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	C20~~1~~2404-AFID PASS 1/26/06
86)	Sample	38	P27908	FRNC2B	0601040-03 ✓
87)	RearSamp	79	P27909	FRNC2B	DCM-AFID IB201260601 1/26/06
88)	Sample	39	P27910	FRNC2B	0601040-04 ✓
89)	RearSamp	80	P27911	FRNC2B	TS012306B06-AFID
90)	Sample	40	P27912	FRNC2B	0601040-04D ✓
91)	RearSamp	81	P27913	FRNC2B	TS012306LCS03-AFID
92)	Sample	41	P27914	FRNC2B	C2012306 PASS
93)	Pause				
94)	RearSamp	82	P27915	FRNC2BF	0601056-01-AFID
95)	Sample	42	P27916	FRNC2BF	ANS2012302
96)	RearSamp	83	P27917	FRNC2B	C20~~1~~240~~1~~-AFID PASS

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 ✓ run used
116)	Sample	9	P27936	FRNC2B	0601019-03D ✓
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	C2012408 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

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: **0601045**
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-25 (9-10)	0601045-01	01/28/06 00:42
GC-SED-30 (3.5-5.5)	0601045-02	01/28/06 02:18
GC-SED-29 (7.4-8.4)	0601045-03	01/28/06 03:53
GC-SED-28 (4.9-5.8)	0601045-04	01/28/06 05:29
GC-SED-27 (4.9-5.4)	0601045-05	01/28/06 07:05
GC-SED-26 (5.3-5.8)	0601045-06	01/28/06 08:40
GC-SED-35 (15.3-17.3)	0601045-07	01/28/06 10:15
GC-SED-34B (2-3)	0601045-08	01/28/06 11:50
GC-SED-34B (2-3)	0601045-08 D	01/28/06 13:27

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

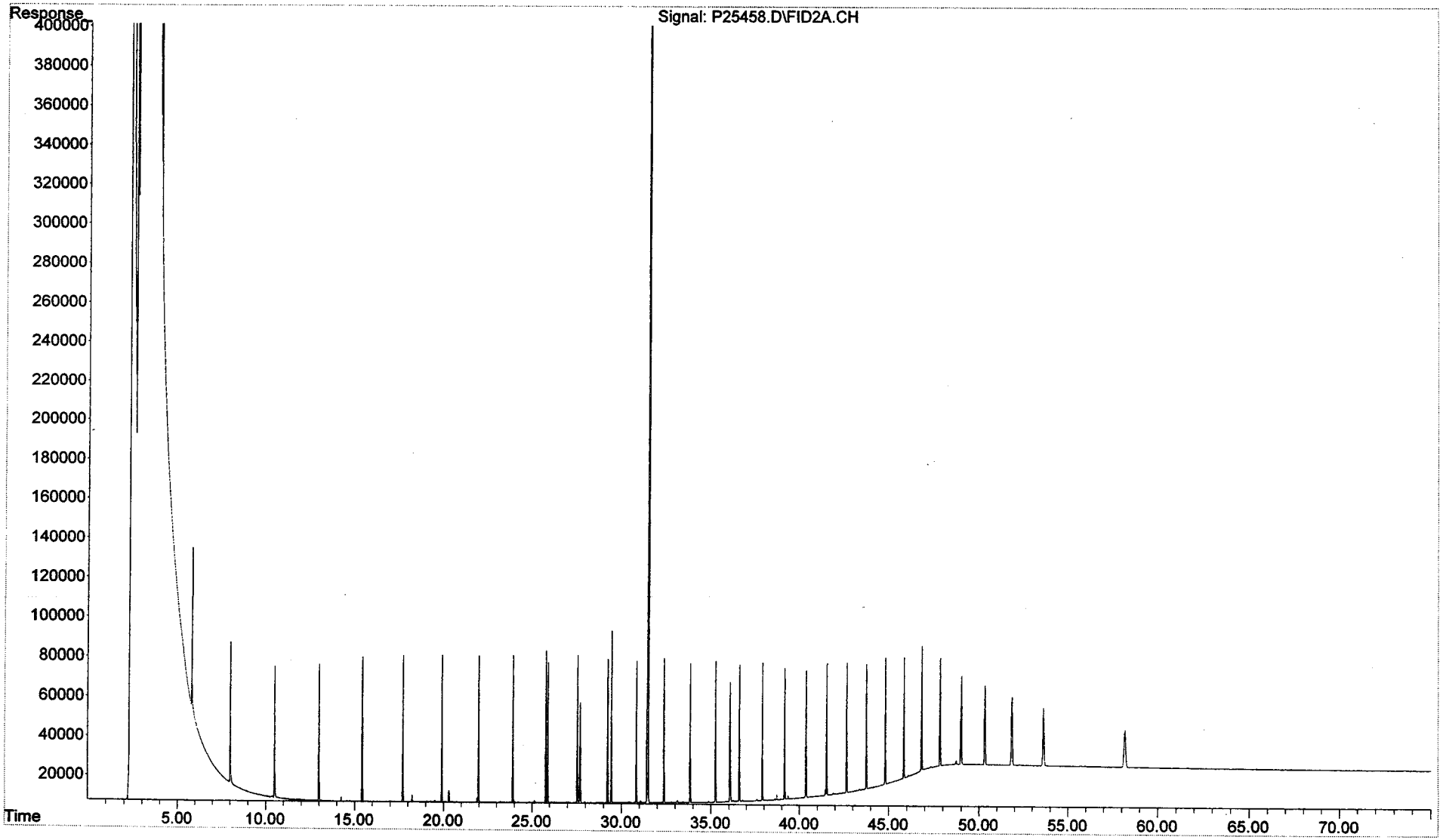
Integration File: SHCINT1.E
Quant Time: Sep 05 21:05:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Aug 30 10:50:27 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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)

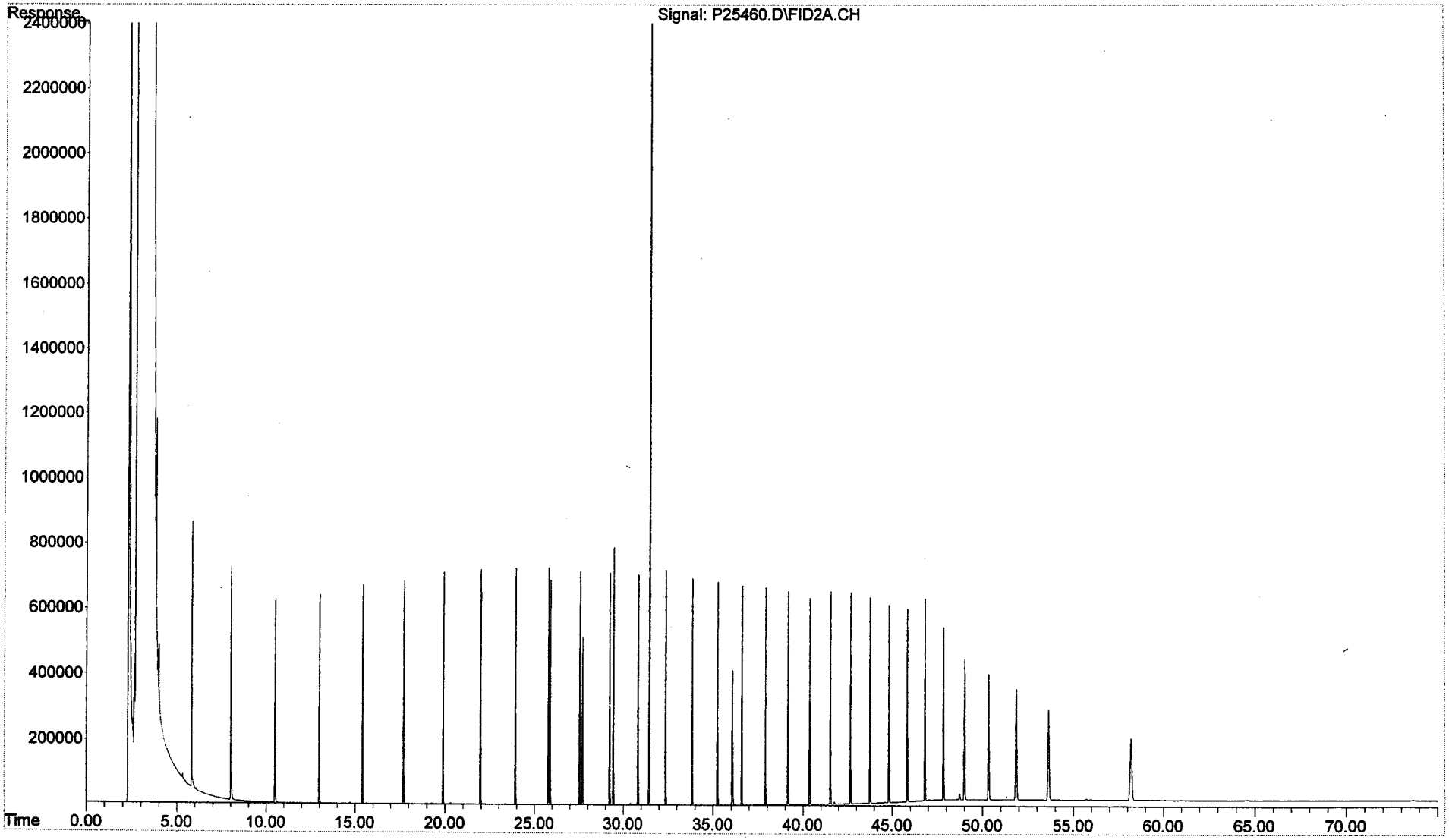
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25460.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 5:38 pm
Operator : AC
Sample : I2090102
Misc : WHAB30
ALS Vial : 53 Sample Multiplier: 1

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)

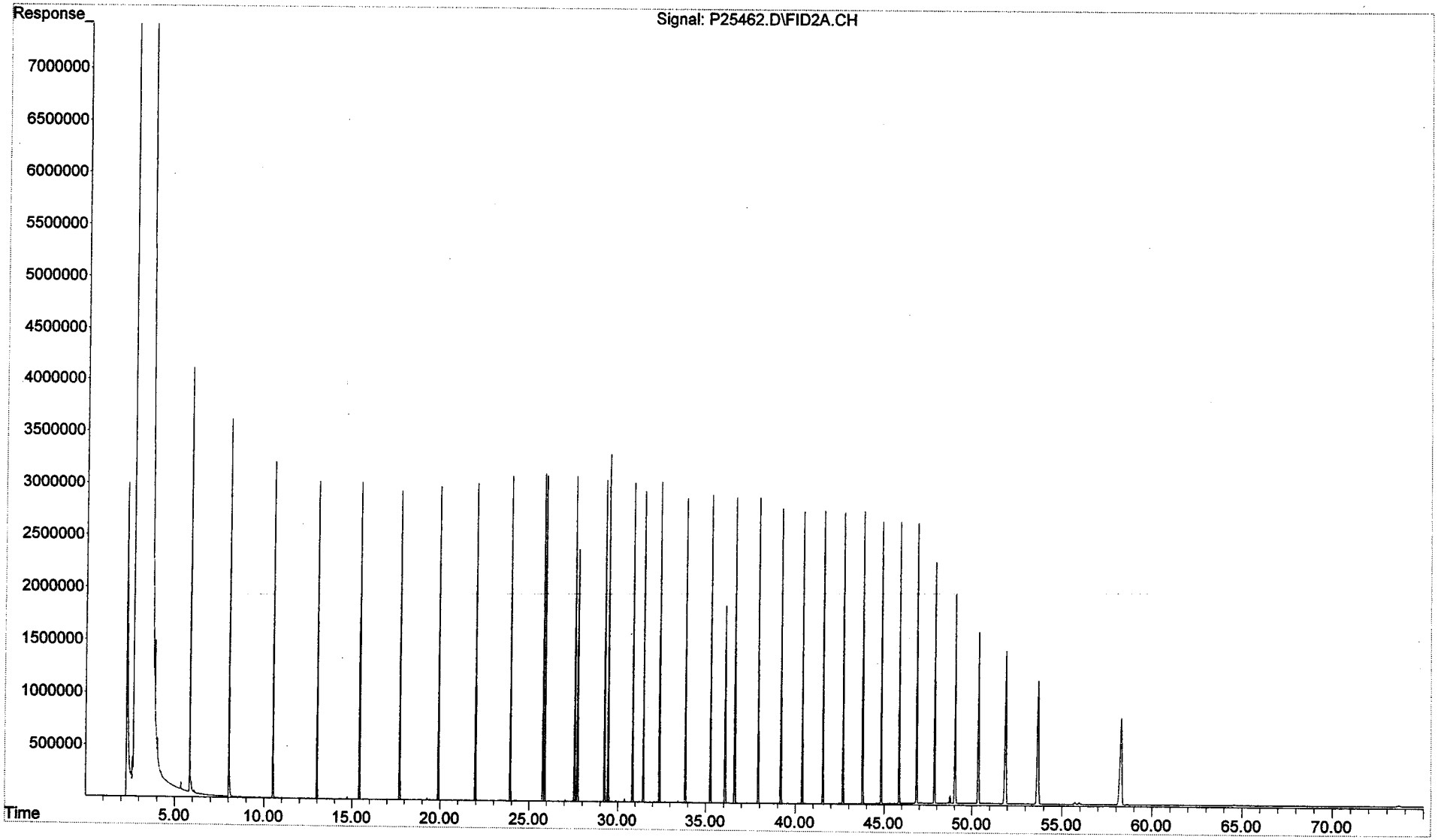
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25462.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 7:09 pm
Operator : AC
Sample : I2090103
Misc : WHAB31
ALS Vial : 54 Sample Multiplier: 1

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)

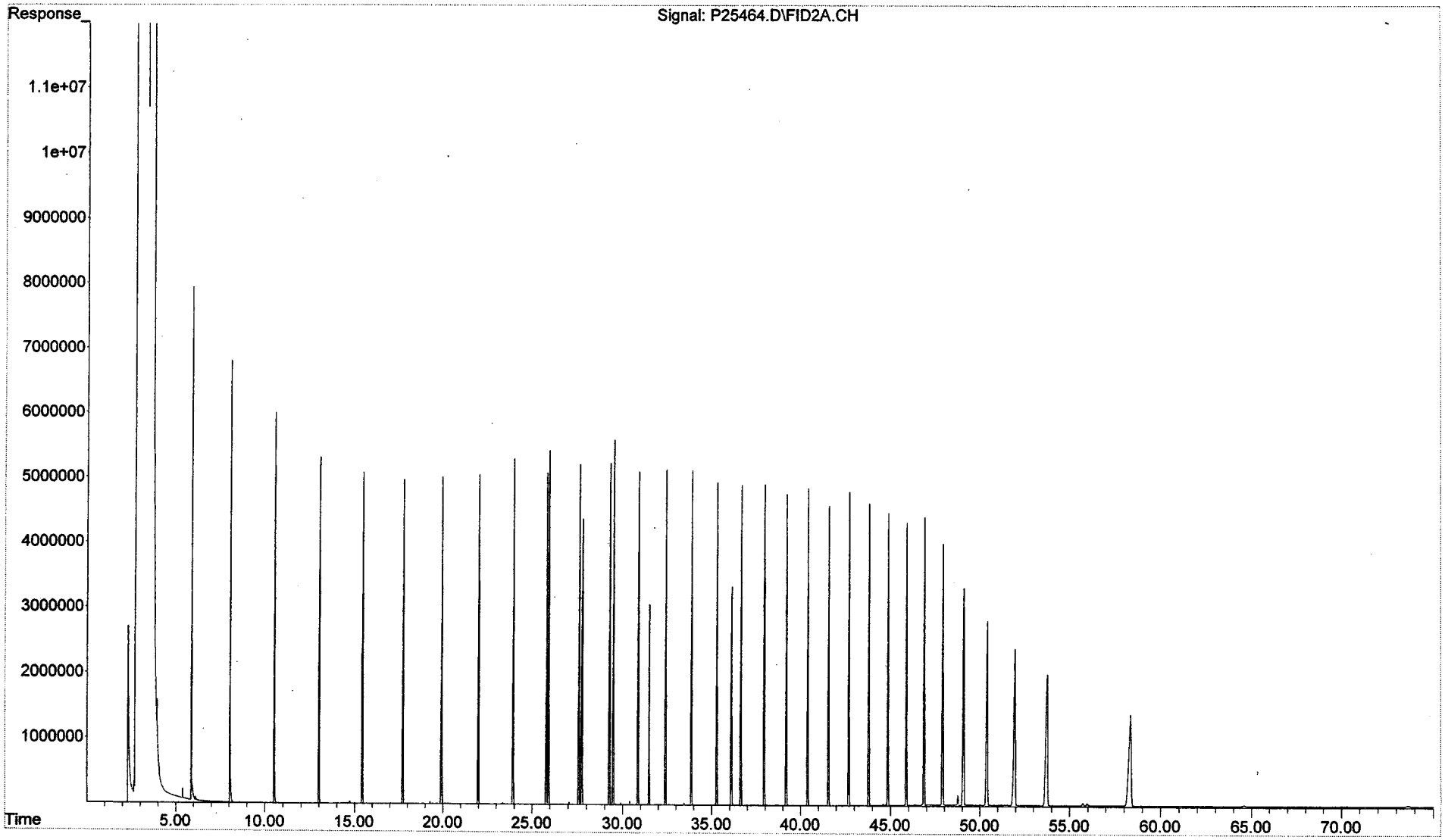
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25464.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 8:41 pm
Operator : AC
Sample : I2090104
Misc : WHAB32
ALS Vial : 55 Sample Multiplier: 1

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

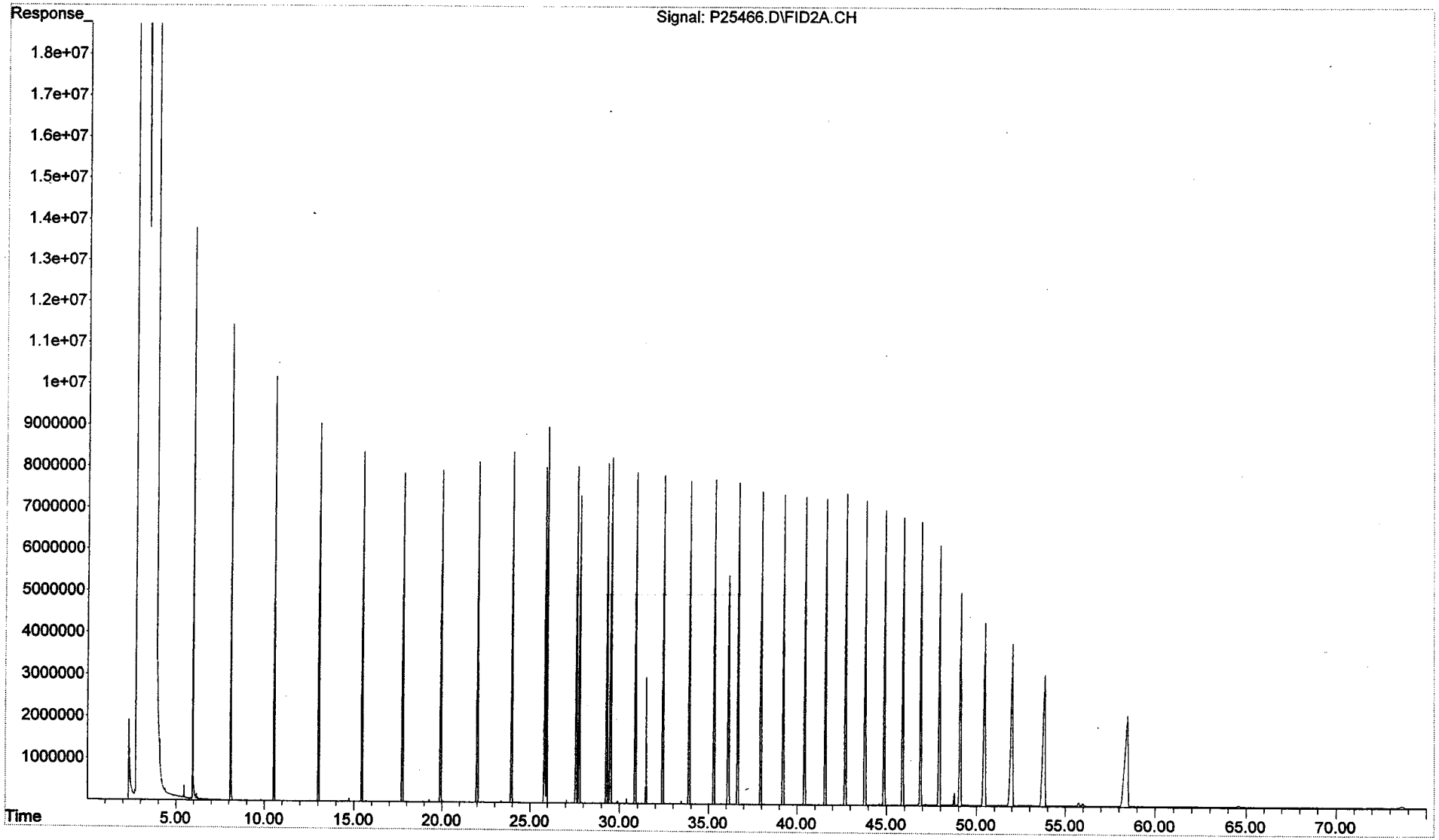
Integration File: SHCINT1.E
Quant Time: Sep 05 21:27:55 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:23:02 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

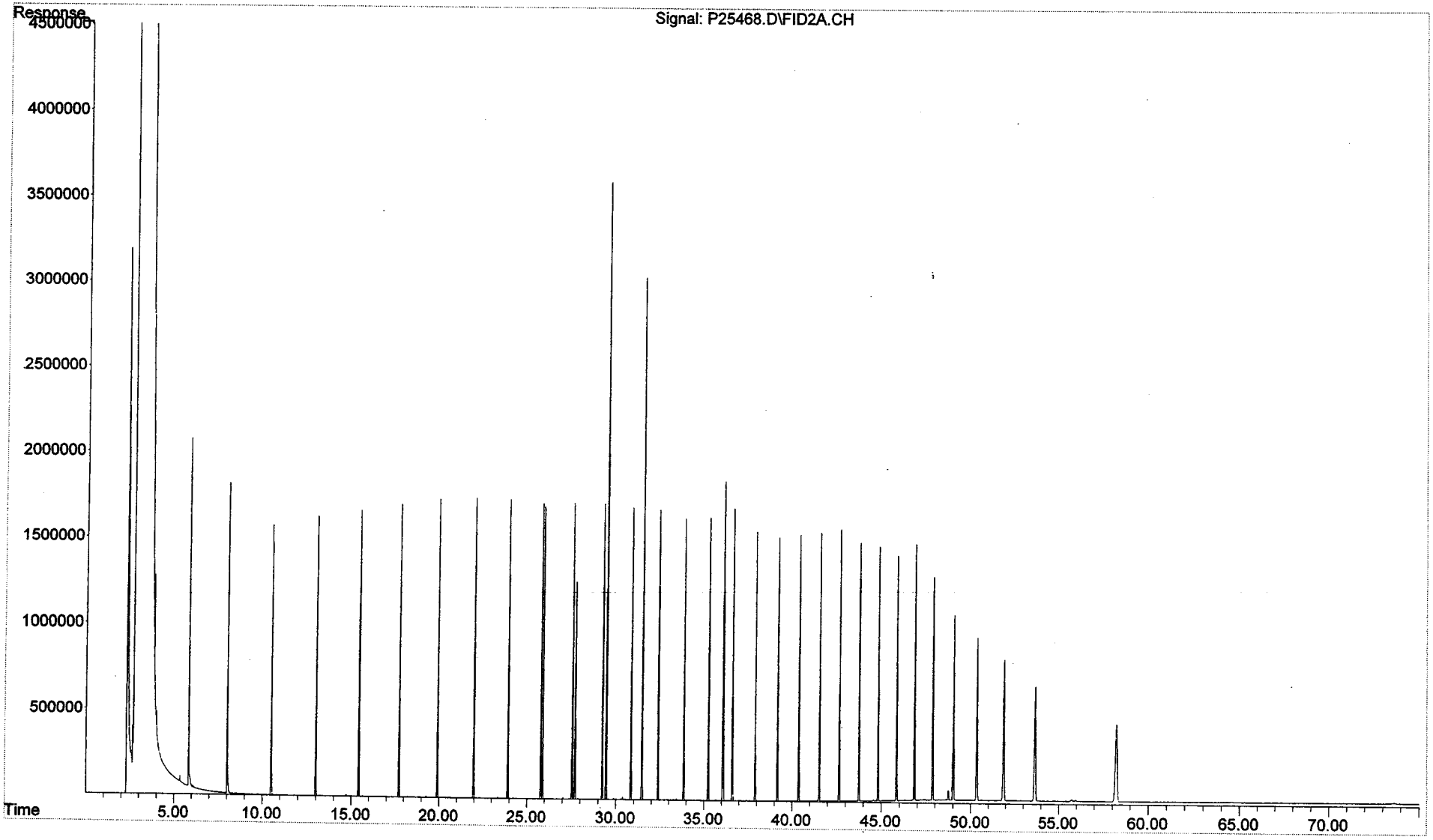
Integration File: SHCINT1.E
Quant Time: Sep 06 10:37:41 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

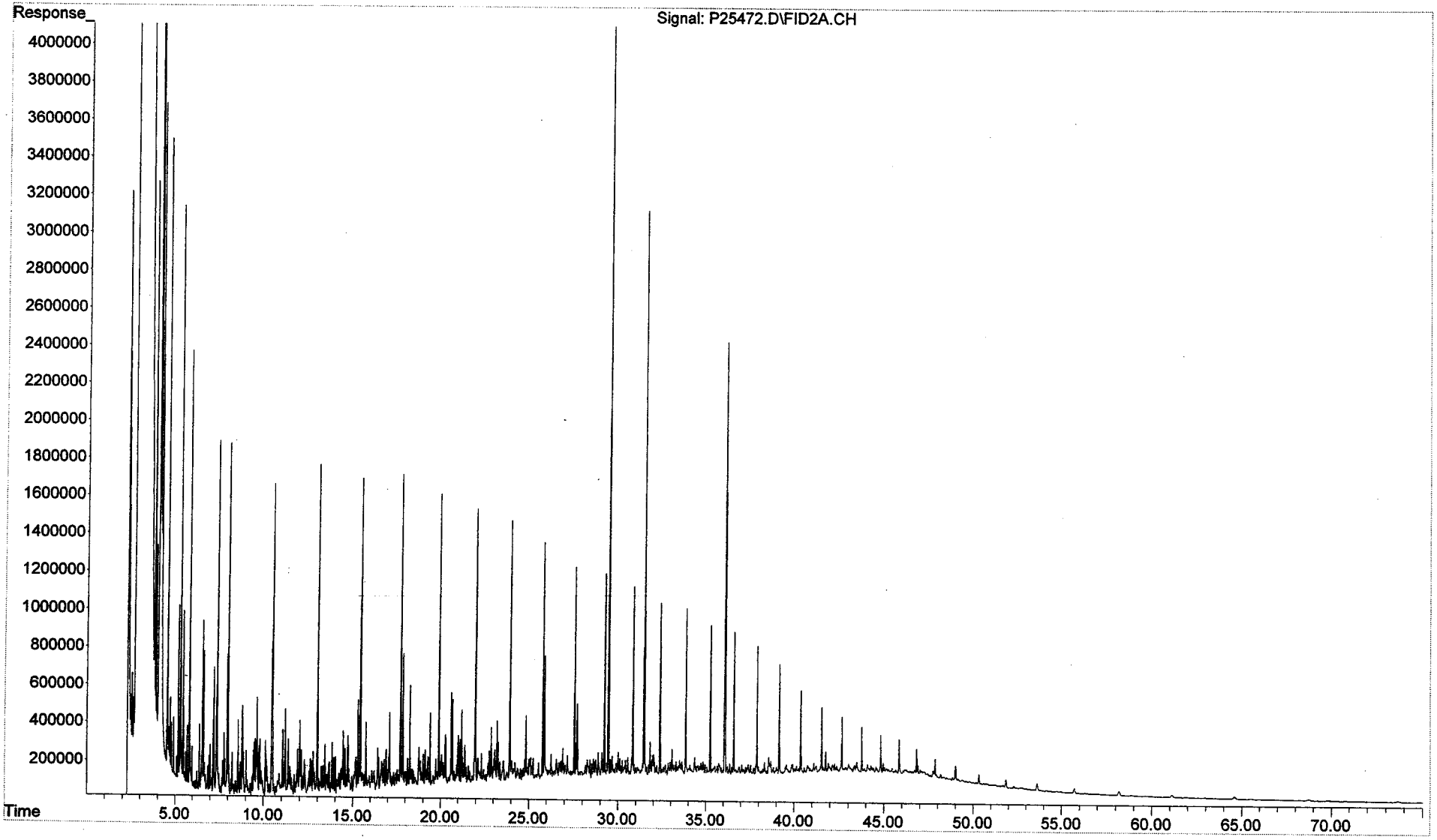
Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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: **0601045**
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 20:47

Quantitation Report (QT Reviewed)

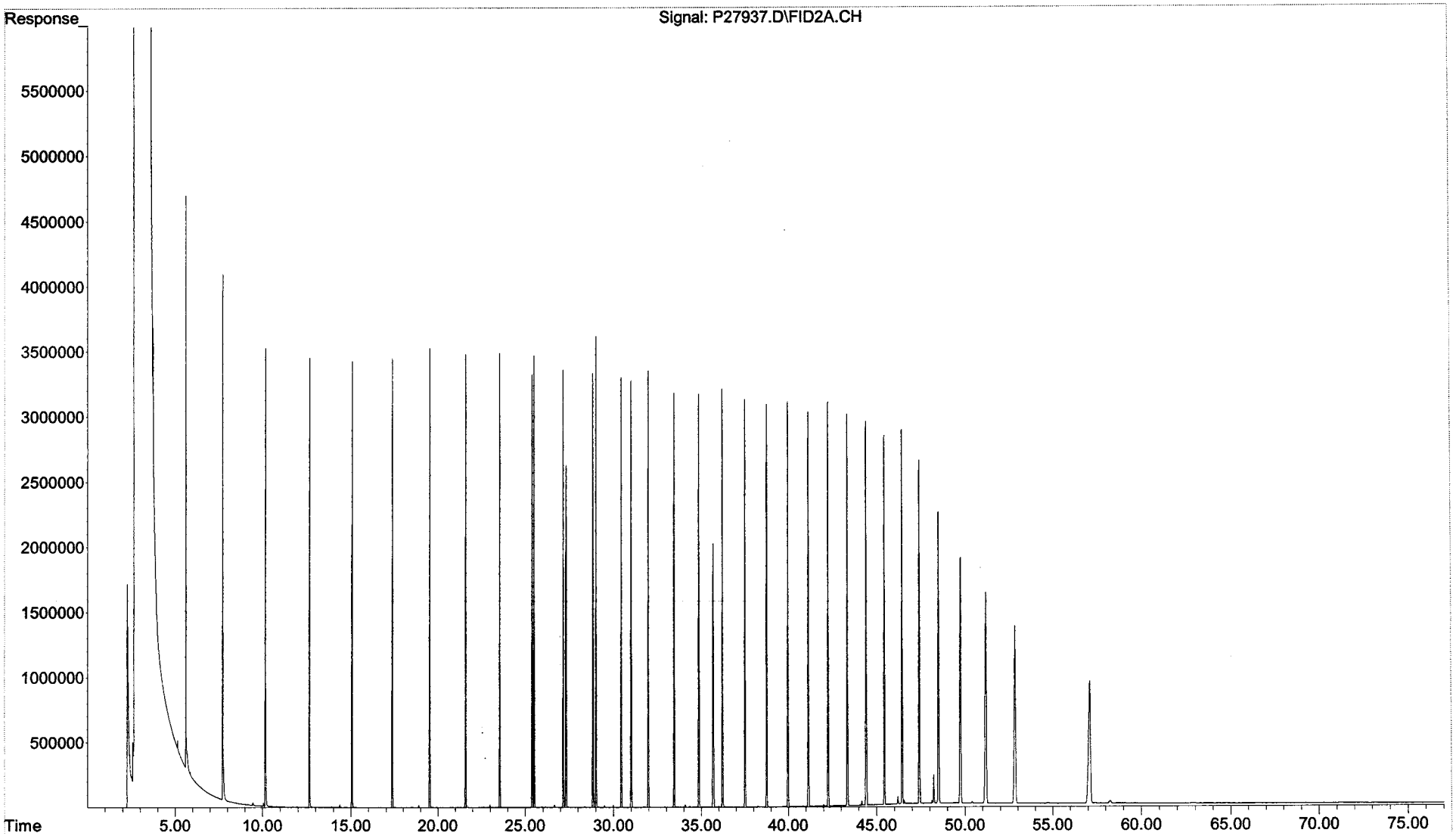
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27937.D
Signal(s) : FID2A.CH
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012406-AFID
Misc : ALK STD
ALS Vial : 60 Sample Multiplier: 1

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

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601045**
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 20:48

Quantitation Report (QT Reviewed)

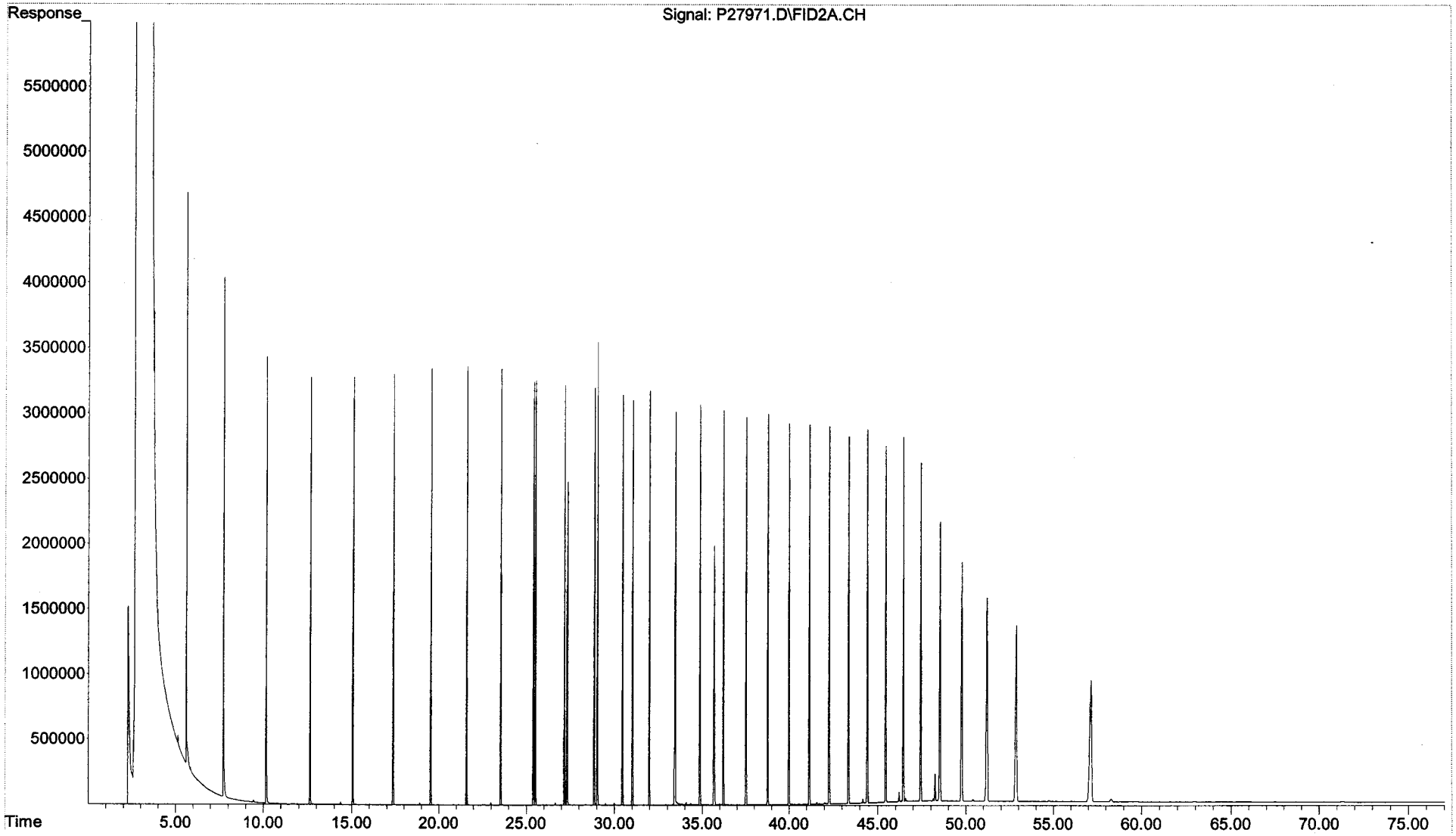
Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23.SEC\
Data File : P27971.D
Signal(s) : FID2A.CH
Acq On : 28 Jan 2006 3:03 pm
Operator : AC
Sample : C2012407-AFID
Misc : 1X
ALS Vial : 76 Sample Multiplier: 1

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



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 1 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0601045

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-25 (9-10) -1	1/12/2006	12:25	Sediment	☑
GC-SED-30 (3.5-5.5) -2	1/12/2006	18:05	Sediment	☑
GC-SED-29 (7.4-8.4) -3	1/12/2006	17:20	Sediment	☑
GC-SED-28 (4.9-5.8) -4	1/12/2006	16:10	Sediment	☑
GC-SED-27 (4.9-5.4) -5	1/12/2006	14:30	Sediment	☑
GC-SED-26 (5.3-5.8) -6	1/12/2006	13:20	Sediment	☑
GC-SED-35 (15.3-17.3) -7	1/13/2006	17:25	Sediment	☑
GC-SED-34B (2-3) 8	1/13/2006	14:50	Sediment	☑

Possible Hazard Identification	Turn Around Time Required (other than standard):			
☐ Non-Hazard ☐ Flammable	QC Requirements:			
☐ Skin Irritant ☒ Unknown	Date	Time	Date	Time
1. Relinquished by: [signature]	1/16/06	1910	1. Received by: FED EX	
2. Relinquished by: FED EX	1/17/06	0905	2. Received by: [signature]	1/17/06 0905
3. Relinquished by:			3. Received by:	

COMMENTS
FED Ex # 8544 — 0600 - 3170

ORIGINAL

Sample Receipt Checklist

Client: NEWFIE		**Receipt Date:** 1/17/06	
Project: Gowanus Canal		**Log-in Date:**	
ETR #: 0601045		**Inspection by:** WR	**Login by:** WR

ALL SECTIONS BELOW MUST BE COMPLETED

Were samples shipped? (Yes, FedEx) / UPS / Other:_____
No, WHG Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: Attached
No, Unavailable / NA

Number of coolers received for this project delivery: 1

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 4° IR Gun, 3.5 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: EMP Date: 1/17/06

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

m This portion can be removed for Recipient's records.

te 01/16/06 FedEx Tracking Number 854406003170

nder's me MATT O'NEIL Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST

Dept./Floor/Suite/Room

y BROOKLYN State NY ZIP 11231

ur Internal Billing Reference 982482-34-4403