ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0601019
Report Date:	February 01, 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: **0601019**

Lab Sample ID	Client Sample ID
0601019-01	GC-SED-11 (1-3)
0601019-02	GC-SED-18 (7-8)
0601019-03	GC-SED-15 (0-0.75)
0601019-04	GC-SED-14 (5.5-6.5)
0601019-05	GC-SED-13B (14.6-15.6)
0601019-06	GC-SED-39 (4.5-5.5)
0601019-07	GC-SED-17 (0-2)
0601019-08	GC-SED-16 (0-2)
0601019-09	GC-SED-22B (19.3-20)
0601019-10	GC-SED-21B (7-8)
0601019-11	GC-SED-19C (1.5-2)

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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.

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CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0601019
Project: Gowanus Canal

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

Alkylated Polynuclear Aromatic Hydrocarbons
Steranes and Triterpanes

Polynuclear aromatic hydrocarbons and Geochemical Biomarkers were analyzed following Alpha Woods Hole Lab *Analysis of Parent and Alkylated Polynuclear Aromatic Hydrocarbons and Selected Heterocyclic Compounds by Gas Chromatography/Mass Spectrometry with Selected Ion Monitoring (Revision 2.0, 06/28/02).* Sediment samples (approximately 5-30g) are spiked with surrogate compounds and extracted by *Shaker Table Extraction (Revision 0.0, 02/20/02).* Solvent extracts are dried over sodium sulfate and concentrated to an appropriate final volume based on oil content as determined by gravimetric weighing. A pre-determined volume of the extract was alumina cleaned (*Alumina Column Cleanup of Organic Extracts, Revision 0.0, 02/21/1999*) and again concentrated to a final effective volume determined by a post alumina gravimetric weight. All extracts were treated with activated copper to remove sulfur interferences. A portion of the remaining archive extract portion to equal approximately 50mg was silica fractionated for Biomarker analysis and again concentrated to a final effective volume determined by a post silica gravimetric weight. Qualitative identifications are confirmed by analyzing standards under the same conditions used for samples, comparing mass spectra, GC retention times, and patterns generated from reference oils. Quantification is based on response factors derived from a multi-level initial calibration using internal standard techniques. Alkyl homologues are quantified using the response factor of the parent PAH compound. Target triterpane biomarker concentrations are quantified using the response factor of 17α(H),21β(H)-hopane and the steranes are quantified using the response factor of 5β(H)-cholane.

1. The sediment method blank SS011106B01 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.

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

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: 2/1/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
01/11/2006 0601019ST - 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
0601019-01	SAM	Shaker	GJP	1/11/2006	1/16/2006		11.86	26.32	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-02	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.76	16	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-03	D	Shaker	GJP	1/11/2006	1/16/2006		32.56	26.32	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-03	SAM	Shaker	GJP	1/11/2006	1/16/2006		31.13	26.32	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-04	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.48	66.67	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-05	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.76	80	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-06	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.48	156.25	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-07	SAM	Shaker	GJP	1/11/2006	1/16/2006		10.31	12.38	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-08	SAM	Shaker	GJP	1/11/2006	1/16/2006		30.24	26.32	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-09	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.82	2.11	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-10	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.63	14.04	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
0601019-11	SAM	Shaker	GJP	1/11/2006	1/16/2006		10.6	26.32	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
SS011106B01	B	Shaker	GJP	1/11/2006	1/16/2006		30	2	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
SS011106LCS01	LCS	Shaker	GJP	1/11/2006	1/16/2006		30	2	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	
SS011106LCSD01	LCSD	Shaker	GJP	1/11/2006	1/16/2006		30	2	False	RPR	1/12/2006	KD Flask	0.15	MAL	1/16/2006	

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aw 2/1/06

Alpha Woods Hole Lab
Batch Prep Report
01/11/2006 0601019ST - OP NEWFIE

Lab ID	Notes
0601019-01	1st Prep
0601019-02	1st Prep
0601019-03	1st Prep
0601019-03	1st Prep
0601019-04	1st Prep
0601019-05	1st Prep
0601019-06	1st Prep
0601019-07	1st Prep
0601019-08	1st Prep
0601019-09	1st Prep
0601019-10	1st Prep
0601019-11	1st Prep
SS011106B01	1st Prep
SS011106LCS01	1st Prep
SS011106LCSD01	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
01/11/2006

Lab ID	QC Type	0601019ST - Sample
0601019-01	SAM	11.86
0601019-02	SAM	5.76
0601019-03	D	32.56
0601019-03	SAM	31.13
0601019-04	SAM	5.48
0601019-05	SAM	5.76
0601019-06	SAM	5.48
0601019-07	SAM	10.31
0601019-08	SAM	30.24
0601019-09	SAM	5.82
0601019-10	SAM	5.63
0601019-11	SAM	10.6
SS011106B01	B	30
SS011106LCS01LCS	OP NEWFIE	30
SS011106LCS01LCS	OP SHC	30
SS011106LCS01LCS	OP Steranes/Triterpanes	30
SS011106LCSD01LCSD	NEWFIE	30
SS011106LCSD01LCSD	SHC	30
SS011106LCSD01LCSD	Steranes/Triterpanes	30

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

Alpha Woods Hole Lab
Batch Prep Spike Report

01/11/2006 0601019ST - OP NEWFIE Analyst: RPR Witness: KLA

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
0601019-01	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-02	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-03	D	WHAB63	100	µl				WHAB14	200	µl
0601019-03	SAM	WHAB63	100	µl				WHAB14	200	µl
0601019-04	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-05	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-06	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-07	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-08	SAM	WHAB63	100	µl				WHAB14	200	µl
0601019-09	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-10	SAM	WHAC11	200	µl				WHAC05	200	µl
0601019-11	SAM	WHAC11	200	µl				WHAC05	200	µl
SS011106B01	B	WHAB63	100	µl				WHAB14	200	µl
SS011106LCS01	LCS	WHAB63	100	µl	WHAB85	100	µl	WHAB14	200	µl
SS011106LCSD01	LCSD	WHAB63	100	µl	WHAB85	100	µl	WHAB14	200	µl

Test: ALK-PAH/SHC (High)

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

LFB / *Other* _____

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

Test: 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# WHAB63
Conc. 10ug/ml 500ug/ml

Test: BIOMARKER HIGH

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

LFB / *Other* _____

ID# WHAC05
Conc. 100ug/ml

Test: ALK-PAH/SHC

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

LFB / *Other* _____

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

Gravimetric Determination for Column

Analyst: DMP
Date: 1/12/06

BATCH: 0601019

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	0.247	N/A	49.40	N/A	N/A	N/A	99%
0601019	01		10000	50	N/A	0.951	N/A	190.20	400	7.61	25.00	
0601019	02		10000	50	N/A	0.408	N/A	81.60	1000	8.16	10.00	
0601019	03	D	25000	50	N/A	0.397	N/A	198.50	1000	7.94	25.00	4%
0601019	03		25000	50	N/A	0.381	N/A	190.50	1000	7.62	25.00	
0601019	04		25000	50	N/A	0.708	N/A	354.00	600	8.50	41.67	
0601019	05		10000	50	N/A	2.228	N/A	445.60	200	8.91	50.00	
0601019	06		25000	50	N/A	1.865	N/A	932.50	200	7.46	125.00	
0601019	07		10000	50	N/A	0.485	N/A	97.00	850	8.25	11.76	
0601019	08		10000	50	N/A	1.034	N/A	206.80	400	8.27	25.00	
0601019	09		2000	50	N/A	0.116	N/A	4.64	1000	2.32	2.00	
0601019	10		10000	50	N/A	0.533	N/A	106.60	750	8.00	13.33	
0601019	11		10000	50	N/A	1.018	N/A	203.60	400	8.14	25.00	

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

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

2nd 2/1/06

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

Gravimetric Determination for Column

Analyst: [illegible]
Date: 1-17-06

BATCH: 0601019

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	0.247	N/A					0%
0601019	01		10000	50	N/A	0.951	N/A					
0601019	02		10000	50	N/A	0.408	N/A					
0601019	03	D	25000	50	N/A	0.347	N/A					#VALUE!
0601019	03		25000	50	N/A	0.381	N/A					
0601019	04		25000	50	N/A	0.708	N/A					
0601019	05		10000	50	N/A	2.228	N/A					
0601019	06		25000	50	N/A	1.865	N/A					
0601019	07		10000	50	N/A	0.485	N/A					
0601019	08		10000	50	N/A	1.034	N/A					
0601019	09		25000 ~~10000~~	50	N/A	0.116	N/A					
0601019	10		10000	50	N/A	0.533	N/A					
0601019	11		10000	50	N/A	1.018	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
01/11/2006 0601019ST - 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
0601019-01	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	0.4	0	0.15
0601019-02	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	1	0	0.15
0601019-03	D	3610	DMP	1/13/2006				DMP	1/13/2006	False	25	1	0	0.15
0601019-03	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	25	1	0	0.15
0601019-04	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	25	0.6	0	0.15
0601019-05	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	0.2	0	0.15
0601019-06	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	25	0.2	0	0.15
0601019-07	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	0.85	0	0.15
0601019-08	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	0.4	0	0.15
0601019-09	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	2	1	0	0.15
0601019-10	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	0.75	0	0.15
0601019-11	SAM	3610	DMP	1/13/2006				DMP	1/13/2006	False	10	0.4	0	0.15
SS011106B01	B	3610	DMP	1/13/2006				DMP	1/13/2006	False	2	1	0	0.15
SS011106LCS01	LCS	3610	DMP	1/13/2006				DMP	1/13/2006	False	2	1	0	0.15
SS011106LCSD01	LCSD	3610	DMP	1/13/2006				DMP	1/13/2006	False	2	1	0	0.15

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Alpha Woods Hole Lab
Batch Clean Up Report
01/11/2006 0601019ST - OP NEWFIE

Lab ID	Notes
0601019-01	
0601019-02	
0601019-03	
0601019-03	
0601019-04	
0601019-05	
0601019-06	
0601019-07	
0601019-08	
0601019-09	
0601019-10	
0601019-11	
SS011106B01	
SS011106LCS01	
SS011106LCSD01	

Post-Alumina Column Gravimetric Determination

Analyst: RPR
Date: 1/16/06

BATCH: 0601019

Entered by: RPR
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 Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.244	NA	48.80	NA	NA	NA	98%
0601019	01		1000	50	NA	0.266	NA	5.32	950	5.05	1.05	
0601019	02		1000	50	NA	0.351	NA	7.02	625	4.39	1.60	
0601019	03	D	1000	50	NA	0.237	NA	4.74	950	4.50	1.05	6%
0601019	03		1000	50	NA	0.223	NA	4.46	950	4.24	1.05	
0601019	04		1000	50	NA	0.343	NA	6.86	625	4.29	1.60	
0601019	05		1000	50	NA	0.39	NA	7.80	625	4.88	1.60	
0601019	06		1000	50	NA	0.315	NA	6.30	800	5.04	1.25	
0601019	07		1000	50	NA	0.263	NA	5.26	950	5.00	1.05	
0601019	08		1000	50	NA	0.227	NA	4.54	950	4.31	1.05	
0601019	09		1000	50	NA	0.091	NA	1.82	950	1.73	1.05	
0601019	10		1000	50	NA	0.221	NA	4.42	950	4.20	1.05	
0601019	11		1000	50	NA	0.247	NA	4.94	950	4.69	1.05	

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

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

✓ 2nd 1/1/06

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

Post-Alumina Column Gravimetric Determination

Analyst: RPR
Date: 1/16/06

BATCH: 0601019

Entered by: RPR
Verified by: —

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.244						0%
0601019	01		1000	50		0.266						
0601019	02		1000	50		0.351						
0601019	03	D	1000	50		0.237						#VALUE!
0601019	03		1000	50		0.223						
0601019	04		1000	50		0.343						
0601019	05		1000	50		0.390						
0601019	06		1000	50		0.315						
0601019	07		1000	50		0.263						
0601019	08		1000	50		0.227						
0601019	09		1000	50		0.091						
0601019	10		1000	50		0.221						
0601019	11		1000	50		0.247						

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

✓ 2nd 5/1/06

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: Gowanus Canal Newfie
ETR: 0601019

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
0601019-01	900	WHAC12 2OF5	100	1000	26.32	MAL	150	150	1/16/06
0601019-02	900	WHAC12 2OF5	100	1000	16.00	MAL	150	150	1/16/06
0601019-03D	900	WHAC12 2OF5	100	1000	26.32	MAL	150	150	1/16/06
0601019-03	900	WHAC12 2OF5	100	1000	26.32	MAL	150	150	1/16/06
0601019-04	900	WHAC12 2OF5	100	1000	66.67	MAL	150	150	1/16/06
0601019-05	900	WHAC12 2OF5	100	1000	80.00	MAL	150	150	1/16/06
0601019-06	900	WHAC12 2OF5	100	1000	156.25	MAL	150	150	1/16/06
0601019-07	900	WHAC12 2OF5	100	1000	12.38	MAL	150	150	1/16/06
0601019-08	900	WHAC12 2OF5	100	1000	26.32	MAL	150	150	1/16/06
0601019-09	900	WHAC12 2OF5	100	1000	2.11	MAL	150	150	1/16/06
0601019-10	900	WHAC12 2OF5	100	1000	14.04	MAL	150	150	1/16/06
0601019-11	900	WHAC12 2OF5	100	1000	26.32	MAL	150	150	1/16/06
SS011106B01	900	WHAC12 2OF5	100	1000	2	MAL	150	150	1/16/06
SS011106LCS01	900	WHAC12 2OF5	100	1000	2	MAL	150	150	1/16/06
SS011106LCSD01	900	WHAC12 2OF5	100	1000	2	MAL	150	150	1/16/06

[1] Includes Internal Std

2nd
LW
2/1/06

Forensic Preparation Checklist

ETR: 060109 **Client:** Newfields **Project:** Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

Test Requested	
ALK-PAH	✓
CHROMATOGRAM	
DENSITY	
HOMOLOG	
Pb	
SHC	✓
TPH	
WHOLE OIL	
BIOMARKER	✓
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	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target Analytes	
Lesser Amount Used - Strong Hydrocarbon Odor	X	Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	

Other: Samples 01, 02, 04-07, 9-11 weighed low and Spiked High.

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

Other:

Identify Matrix - Circle One

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

	Date	Initials
1st Extraction	1-4-06	DMP
2nd Extraction	1/12/06	RPR
3rd Extraction	↓	↓

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

Other: Samples -07 + -10 were blown to near dryness after columns were performed. 1/16/06 RPR

Batch Completed

Analyst: MAL

Date: 1/11/5

Forensic Dilution Sheet

Client Name:	NewFields
Project	Gowanus Canal
ETR # :	0601019
Matrix :	Sediment
Analysis Type :	GC/MS

Relinquished By: DMP
Date: 1/20/06 3:10 PM

Received By: CW
Date: 1/20/06

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0601019-01		700	10	1000	0601019-01-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-02		700	10	1000	0601019-02-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-03D		700	10	1000	0601019-03D-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-03		700	10	1000	0601019-03-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-04		700	10	1000	0601019-04-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-05		700	10	1000	0601019-05-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-06		700	10	1000	0601019-06-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-07		700	10	1000	0601019-07-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-08		700	10	1000	0601019-08-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-09		700	10	1000	0601019-09-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-10		700	10	1000	0601019-10-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-11		700	10	1000	0601019-11-RE2	WHAC12 99UL	1/18/2006	100	100
0601019-01		700	100	1000	0601019-01-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-02		700	100	1000	0601019-02-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-03D		700	100	1000	0601019-03D-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-03		700	100	1000	0601019-03-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-04		700	100	1000	0601019-04-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-05		700	100	1000	0601019-05-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-06		700	100	1000	0601019-06-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-07		700	100	1000	0601019-07-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-08		700	100	1000	0601019-08-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-09		700	100	1000	0601019-09-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-10		700	100	1000	0601019-10-RE1	WHAC12 90UL	1/18/2006	10	10
0601019-11		700	100	1000	0601019-11-RE1	WHAC12 90UL	1/18/2006	10	10

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

Alpha Woods Hole Lab
Batch Prep Report
01/11/2006 0601019ST - 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
0601019-01	SAM	Shaker	GJP	1/11/2006	1/16/2006		11.86	4.2	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-02	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.76	1.75	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-03	D	Shaker	GJP	1/11/2006	1/16/2006		32.56	7.59	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-03	SAM	Shaker	GJP	1/11/2006	1/16/2006		31.13	5.96	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-04	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.48	7.5	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-05	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.76	10.5	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-06	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.48	21	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-07	SAM	Shaker	GJP	1/11/2006	1/16/2006		10.31	3.34	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-08	SAM	Shaker	GJP	1/11/2006	1/16/2006		30.24	7.28	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-09	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.82	2.22	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-10	SAM	Shaker	GJP	1/11/2006	1/16/2006		5.63	4.55	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
0601019-11	SAM	Shaker	GJP	1/11/2006	1/16/2006		10.6	8	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
SS011106B01	B	Shaker	GJP	1/11/2006	1/16/2006		30	4	False	DMP	1/12/2006	KD Flask	0.15	DMP	1/20/2006	
① ~~SS011106LCS01~~	~~LCS~~	~~Shaker~~	~~GJP~~	~~1/11/2006~~	~~1/16/2006~~		~~30~~	~~4~~	~~False~~	~~DMP~~	~~1/12/2006~~	~~KD Flask~~	~~0.15~~	~~DMP~~	~~1/20/2006~~	
~~SS011106LCSD01~~	~~LCSD~~	~~Shaker~~	~~GJP~~	~~1/11/2006~~	~~1/16/2006~~		~~30~~	~~4~~	~~False~~	~~DMP~~	~~1/12/2006~~	~~KD Flask~~	~~0.15~~	~~DMP~~	~~1/20/2006~~	

① Samples not processed for biomarker 1/23/06 RPR

✓ 2nd CW 2/1/06

Alpha Woods Hole Lab
Batch Prep Report
01/11/2006 0601019ST - OP Steranes/Triterpanes

Lab ID	Notes
0601019-01	1st Prep
0601019-02	1st Prep
0601019-03	1st Prep
0601019-03	1st Prep
0601019-04	1st Prep
0601019-05	1st Prep
0601019-06	1st Prep
0601019-07	1st Prep
0601019-08	1st Prep
0601019-09	1st Prep
0601019-10	1st Prep
0601019-11	1st Prep
SS011106B01	1st Prep
~~SS011106LCS01~~	~~1st Prep~~
① ~~SS011106LCSD01~~	~~1st Prep~~

① Samples not processed for biomarker 1/23/06 RPA

Pre Silica Gel Gravimetric Determination

Analyst: DMP
Date: 1/12/2006

BATCH: 0601019

Entered by: DMP
Verified by: DMP

[illegible]	[illegible]	QC [illegible] (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	[illegible]
		LCS	10000	50	N/A	0.247	N/A	49.40	N/A	N/A	N/A	99%
0601019	01		10000	50	N/A	0.951	N/A	190.20	2500	47.55	4.00	
0601019	02		10000	50	N/A	0.408	N/A	81.60	6000	48.96	1.67	
0601019	03	D	25000	50	N/A	0.397	N/A	198.50	6000	47.64	4.17	4%
0601019	03		25000	50	N/A	0.381	N/A	190.50	6000	45.72	4.17	
0601019	04		25000	50	N/A	0.708	N/A	354.00	3500	49.56	7.14	
0601019	05		10000	50	N/A	2.228	N/A	445.60	1000	44.56	10.00	
0601019	06		25000	50	N/A	1.865	N/A	932.50	1250	46.63	20.00	
0601019	07		10000	50	N/A	0.485	N/A	97.00	5000	48.50	2.00	
0601019	08		10000	50	N/A	1.034	N/A	206.80	2500	51.70	4.00	
0601019	09		2000	50	N/A	0.116	N/A	4.64	950	2.20	2.11	
0601019	10		10000	50	N/A	0.533	N/A	106.60	4000	42.64	2.50	
0601019	11		10000	50	N/A	1.018	N/A	203.60	2500	50.90	4.00	

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

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

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

2nd

2nd 2/1/06

Alpha Woods Hole Lab
Batch Clean Up Report
01/11/2006 0601019ST - OP Steranes/Triterpanes

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0601019-01	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	2.5	0	0.15
0601019-02	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	6	0	0.15
0601019-03	D	3630	DMP	1/19/2006				DMP	1/19/2006	True	25	6	0	0.15
0601019-03	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	25	6	0	0.15
0601019-04	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	25	3.5	0	0.15
0601019-05	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	1	0	0.15
0601019-06	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	25	1.25	0	0.15
0601019-07	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	5	0	0.15
0601019-08	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	2.5	0	0.15
0601019-09	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	2	0.95	0	0.15
0601019-10	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	4	0	0.15
0601019-11	SAM	3630	DMP	1/19/2006				DMP	1/19/2006	True	10	2.5	0	0.15
SS011106B01	B	3630	DMP	1/19/2006				DMP	1/19/2006	True	2	0.5	0	0.15
① ~~SS011106LCS01~~	~~LCS~~	~~3630~~	~~DMP~~	~~1/19/2006~~				~~DMP~~	~~1/19/2006~~	~~True~~				
~~SS011106LCSD01~~	~~LCSD~~	~~3630~~	~~DMP~~	~~1/19/2006~~				~~DMP~~	~~1/19/2006~~	~~True~~				

① Samples not processed for bromalkw 1/23/06 KM

✓ CW 2/1/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/11/2006 0601019ST - OP Steranes/Triterpanes

Lab ID	Notes
0601019-01	Samples were copper cleaned post column 1/19/06 DMP
0601019-02	Samples were copper cleaned post column 1/19/06 DMP
0601019-03	Samples were copper cleaned post column 1/19/06 DMP
0601019-03	Samples were copper cleaned post column 1/19/06 DMP
0601019-04	Samples were copper cleaned post column 1/19/06 DMP
0601019-05	Samples were copper cleaned post column 1/19/06 DMP
0601019-06	Samples were copper cleaned post column 1/19/06 DMP
0601019-07	Samples were copper cleaned post column 1/19/06 DMP
0601019-08	Samples were copper cleaned post column 1/19/06 DMP
0601019-09	Samples were copper cleaned post column 1/19/06 DMP
0601019-10	Samples were copper cleaned post column 1/19/06 DMP
0601019-11	Samples were copper cleaned post column 1/19/06 DMP
SS011106B01	Samples were copper cleaned post column 1/19/06 DMP
~~SS011106LCS01~~	
~~SS011106LCSD01~~	

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

Post-Silica Gel Column Gravimetric Determination

Analyst: DMP
Date: 1/20/2006

BATCH: 0601019

Entered by: DMP
Verified by: DMP

[illegible]	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%RPD)
		LCS	10000	50	N/A	0.251	N/A	50.20	N/A	N/A	N/A	100%
0601019	1		1000	50	N/A	0.081	N/A	1.62	950	1.54	1.05	
0601019	2		1000	50	N/A	0.223	N/A	4.46	950	4.24	1.05	
0601019	3	D	1000	50	N/A	0.455	N/A	9.10	550	5.01	1.82	23%
0601019	3		1000	50	N/A	0.360	N/A	7.20	700	5.04	1.43	
0601019	4		1000	50	N/A	0.181	N/A	3.62	950	3.44	1.05	
0601019	5		1000	50	N/A	0.141	N/A	2.82	950	2.68	1.05	
0601019	6		1000	50	N/A	0.139	N/A	2.78	950	2.64	1.05	
0601019	7		1000	50	N/A	0.400	N/A	8.00	600	4.80	1.67	
0601019	8		1000	50	N/A	0.451	N/A	9.02	550	4.96	1.82	
0601019	9		1000	50	N/A	0.026	N/A	0.52	950	0.49	1.05	
0601019	10		1000	50	N/A	0.434	N/A	8.68	550	4.77	1.82	
0601019	11		1000	50	N/A	0.463	N/A	9.26	500	4.63	2.00	

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

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

2nd ew 2/1/06

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

Gravimetric Determination for Column

Analyst: DMP
Date: 1-20-06

BATCH: 0601019

Entered by: DMP
Verified by:

POST SILICA COLUMN

Batch #	Sample #	Type of Sample (LCS, D)	Final Volume of Extract (ml)	Aliquot Removed #1 (ml)	Aliquot Removed #2 (ml)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	% Diff.
		LCS	10000	50	N/A	0.251	N/A					0%
0601019	1		1000	50	N/A	0.081	N/A					
0601019	2		1000	50	N/A	0.223	N/A					
0601019	3	D	1000	50	N/A	0.455	N/A					#VALUE!
0601019	3		1000	50	N/A	0.360	N/A					
0601019	4		1000	50	N/A	0.181	N/A					
0601019	5		1000	50	N/A	0.141	N/A					
0601019	6		1000	50	N/A	0.139	N/A					
0601019	7		1000	50	N/A	0.400	N/A					
0601019	8		1000	50	N/A	0.451	N/A					
0601019	9		1000	50	N/A	0.026	N/A					
0601019	10		1000	50	N/A	0.434	N/A					
0601019	11		1000	50	N/A	0.463	N/A					

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: Gowanus Canal
ETR: 0601019ST

-F1 Biomarker Fractions

Sample	Sample Wt (g)	Internal Std	Volume (ml)	Dilution Volume (ml)	Concentration	Solvent	Volume (ml)	Dilution Volume (ml)	Date
0601019-01-F1	900	WHAC12 2OF5	100	1000	4.20	DMP	150	NA	1/20/2006
0601019-02-F1	900	WHAC12 2OF5	100	1000	1.75	DMP	150	NA	1/20/2006
0601019-03D-F1	900	WHAC12 2OF5	100	1000	7.59	DMP	150	NA	1/20/2006
0601019-03-F1	900	WHAC12 2OF5	100	1000	5.96	DMP	150	NA	1/20/2006
0601019-04-F1	900	WHAC12 2OF5	100	1000	7.50	DMP	150	NA	1/20/2006
0601019-05-F1	900	WHAC12 2OF5	100	1000	10.50	DMP	150	NA	1/20/2006
0601019-06-F1	900	WHAC12 2OF5	100	1000	21.00	DMP	150	NA	1/20/2006
0601019-07-F1	900	WHAC12 2OF5	100	1000	3.34	DMP	150	NA	1/20/2006
0601019-08-F1	900	WHAC12 2OF5	100	1000	7.28	DMP	150	NA	1/20/2006
0601019-09-F1	900	WHAC12 2OF5	100	1000	2.22	DMP	150	NA	1/20/2006
0601019-10-F1	900	WHAC12 2OF5	100	1000	4.55	DMP	150	NA	1/20/2006
0601019-11-F1	900	WHAC12 2OF5	100	1000	8.00	DMP	150	NA	1/20/2006
SS011106B01-F1	900	WHAC12 2OF5	100	1000	4	DMP	150	NA	1/20/2006

[1] Includes Internal Std

✓ 2nd cm 2/1/06

Alpha Woods Hole Lab
Batch Weight Report
01/11/2006

Lab ID	QC Type	PS011106 - Pan Weight	PS011106 - Wet Weight	PS011106 - Dry Weight	PS011106 - Dry Weight #2	PS011106 - Dry Weight #3	Percent Solid	RPD
0601019-01	D	1	6.31	2.82	2.82		34.27	0.61%
0601019-01	SAM	1.04	7.16	3.15	3.15		34.48	
0601019-02	SAM	0.99	6.12	5.35	5.35		84.99	
0601019-03	SAM	1	7.87	3.51	3.51		36.54	
0601019-04	SAM	1.02	7.65	4.53	4.54		53.09	
0601019-05	SAM	1.01	6.2	5.54	5.54		87.28	
0601019-06	SAM	1.02	6.76	4.75	4.75		64.98	
0601019-07	SAM	1.01	8.24	3.56	3.56		35.27	
0601019-08	SAM	0.98	7.99	3.55	3.54		36.52	
0601019-09	SAM	0.99	9.5	7.98	7.98		82.14	
0601019-10	SAM	1.03	7.22	5.4	5.4		70.6	
0601019-11	SAM	1.03	7	3.84	3.85		47.24	
PSS011106B02	B	1	1	1	1		100	

Initial: 1/11/2006 1:58:58 PM KJB
Weight #1: 1/12/2006 8:21:00 AM KJB
Weight #2: 1/12/2006 1:59:42 PM KJB

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

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-11 (1-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-01**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/05/06	01/10/06	01/11/06	01/27/06	34.5	11.86	26.32	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	38000		Fluoranthene	100000	E
C1-Naphthalenes	33000		Pyrene	140000	E
C2-Naphthalenes	35000		C1-Fluoranthenes/Pyrenes	130000	
C3-Naphthalenes	36000		C2-Fluoranthenes/Pyrenes	42000	
C4-Naphthalenes	19000		C3-Fluoranthenes/Pyrenes	13000	
Biphenyl	4300		C4-Fluoranthenes/Pyrenes	4000	
Dibenzofuran	4100		Naphthobenzothiophenes	16000	
Acenaphthylene	34000		C1-Naphthobenzothiophenes	13000	
Acenaphthene	53000		C2-Naphthobenzothiophenes	7200	
Fluorene	14000		C3-Naphthobenzothiophenes	3700	
C1-Fluorenes	25000		C4-Naphthobenzothiophenes	1800	
C2-Fluorenes	28000		Benz[a]anthracene	54000	
C3-Fluorenes	15000		Chrysene/Triphenylene	53000	
Anthracene	46000		C1-Chrysenes	39000	
Phenanthrene	79000	E	C2-Chrysenes	14000	
C1-Phenanthrenes/Anthracenes	120000		C3-Chrysenes	5700	
C2-Phenanthrenes/Anthracenes	75000		C4-Chrysenes	1800	
C3-Phenanthrenes/Anthracenes	27000		Benzo[b]fluoranthene	20000	
C4-Phenanthrenes/Anthracenes	5900		Benzo[k]fluoranthene	28000	
Retene	1300		Benzo[a]fluoranthene	12000	
Dibenzothiophene	20000		Benzo[e]pyrene	24000	
C1-Dibenzothiophenes	29000		Benzo[a]pyrene	45000	
C2-Dibenzothiophenes	25000		Perylene	7200	
C3-Dibenzothiophenes	14000		Indeno[1,2,3-cd]pyrene	19000	
C4-Dibenzothiophenes	4600		Dibenz[a,h]anthracene	5000	
Benzo(b)fluorene	22000		Benzo[g,h,i]perylene	20000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

01/31/06 16:10

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-11 (1-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-01**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/05/06	01/10/06	01/11/06	01/27/06	34.5	11.86	26.32	1	AC

Parameter	Result
Carbazole	610

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	101	50-130

N/A - Not Applicable

01/31/06 16:10

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27932.D
Acq On : 27 Jan 2006 1:47 am
Operator : AC
Sample : 0601019-01
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 13:34:16 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

DMS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	35050m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	60482m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	47029m	652.89	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 65.29%			
58) Pyrene-d10	38.72	212	112476m	759.15	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 75.91%			
81) Benzo[b]fluoranthene-d12	47.57	264	94861m	765.03	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 76.50%			
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	20.21	128	944220m	5989.33	ng/mL	
10) C1-Naphthalenes	22.91	142	814434m	5166.08	ng/mL	
11) C2-Naphthalenes	25.76	156	864404m	5483.04	ng/mL	
12) C3-Naphthalenes	28.10	170	870080m	5519.05	ng/mL	
13) C4-Naphthalenes	30.86	184	465556m	2953.09	ng/mL	
15) 2-Methylnaphthalene	22.91	142	458519m	4569.15	ng/mL	
16) 1-Methylnaphthalene	23.33	142	357049	3738.12	ng/mL#	100
22) Biphenyl	24.80	154	85283m	675.08	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	87968m	1017.62	ng/mL	
24) Dibenzofuran	27.89	168	89408m	641.14	ng/mL	
25) Acenaphthylene	26.52	152	827383m	5289.60	ng/mL	
26) Acenaphthene	27.25	153	786791	8206.14	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.80	170	64325m	852.67	ng/mL	
28) Fluorene	29.27	166	234324m	2090.19	ng/mL	
29) C1-Fluorenes	31.87	180	431165m	3846.02	ng/mL	
30) C2-Fluorenes	33.69	194	483651m	4314.20	ng/mL	
31) C3-Fluorenes	35.67	208	260645m	2324.97	ng/mL	
32) Dibenzothiophene	32.61	184	461612m	3079.48	ng/mL	
36) OTP	34.77	198	9846m	65.68	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	681539m	4546.65	ng/mL	
38) C2-Dibenzothiophenes	36.07	212	589597m	3933.29	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	321578m	2145.29	ng/mL	
40) C4-Dibenzothiophenes	39.56	240	108241m	722.09	ng/mL	
41) Phenanthrene	33.11	178	1968935m	12309.00	ng/mL	E
47) C1-Phenanthrenes/Anthracen	35.06	192	2953147m	18461.90	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	1862370m	11642.80	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	678790m	4243.53	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	147457m	921.84	ng/mL	
52) Retene	40.10	234	7441m	205.01	ng/mL	
53) Anthracene	33.29	178	1073435m	7225.60	ng/mL	
54) Carbazole	33.96	167	13366	94.40	ng/mL#	82
55) 1-Methylphenanthrene	35.62	192	526364m	4743.28	ng/mL	
56) Fluoranthene	37.91	202	2671810m	15649.77	ng/mL	E
57) Benzo(b)fluorene	40.43	216	355864m	3390.68	ng/mL	
59) Pyrene	38.80	202	3935639	22512.12	ng/mL	E 94
60) C1-Fluoranthenes/Pyrenes	40.18	216	3482840m	19922.08	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.91	230	1135597m	6495.69	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.10	244	365182m	2088.87	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	108493m	620.59	ng/mL	
64) Naphthobenzothiophene	42.64	234	254330	1568.80	ng/ml#	67

RE + rept zone 2nd 2/1/06 ew

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27932.D
Acq On : 27 Jan 2006 1:47 am
Operator : AC
Sample : 0601019-01
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 13:34:16 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

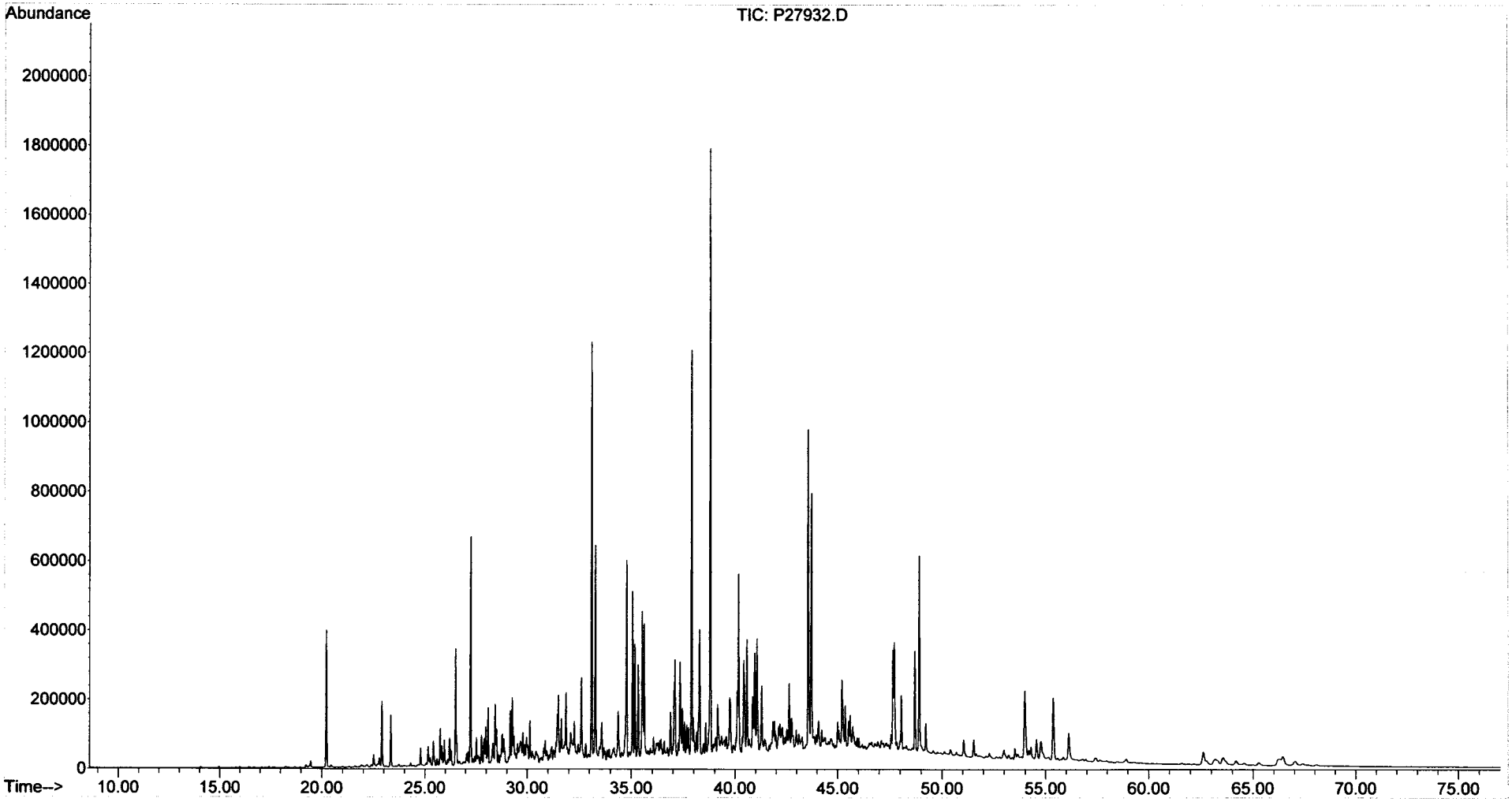
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.64	234	253778m	1565.40	ng/mL	
66) Naphthobenzothiophene-1,2-	42.98	234	67188m	414.44	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	85205m	525.58	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	334775m	2065.02	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	181632m	1120.38	ng/ml	
70) C3-Naphthobenzothiophenes	47.67	276	93491m	576.69	ng/ml	
71) C4-Naphthobenzothiophenes	48.79	290	44971m	277.40	ng/mL	
73) Benz[a]anthracene	43.58	228	1437372m	8321.95	ng/mL	
74) Chrysene	43.75	228	1407816m	8115.26	ng/mL	
75) Chrysene/Triphenylene	43.75	228	1417003m	8168.22	ng/mL	
76) C1-Chrysenes	45.21	242	1048168m	6042.09	ng/mL	
77) C2-Chrysenes	46.92	256	392155m	2260.55	ng/mL	
78) BBF-d12 Surr BKGD	47.56	256	7756	44.71	ng/mL	100
79) C3-Chrysenes	48.58	270	153741m	886.23	ng/mL	
80) C4-Chrysenes	49.62	284	49523m	285.47	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	590478	3183.15	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	854887	4407.01	ng/mL	99
84) Benzo[a]fluoranthene	48.06	252	350135m	1804.97	ng/mL	
85) Benzo[e]pyrene	48.71	252	660397	3693.00	ng/mL	98
86) Benzo[a]pyrene	48.91	252	1252093m	7003.52	ng/mL	
87) Perylene	49.22	252	199036	1116.71	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.99	276	510893m	2883.17	ng/mL	
89) Dibenz[a,h]anthracene	54.03	278	128371m	770.36	ng/mL	
90) Benzo[g,h,i]perylene	55.38	276	564859	3057.30	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27932.D
Acq On : 27 Jan 2006 1:47 am
Operator : AC
Sample : 0601019-01
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 13:34:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-11 (1-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-01E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/05/06	01/10/06	01/11/06	01/24/06	34.5	11.86	26.32	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	110	U	Fluoranthene	**95000**	
C1-Naphthalenes	110	U	Pyrene	**140000**	
C2-Naphthalenes	110	U	C1-Fluoranthenes/Pyrenes	57	U
C3-Naphthalenes	110	U	C2-Fluoranthenes/Pyrenes	57	U
C4-Naphthalenes	110	U	C3-Fluoranthenes/Pyrenes	57	U
Biphenyl	59	U	C4-Fluoranthenes/Pyrenes	57	U
Dibenzofuran	77	U	Naphthobenzothiophenes	78	U
Acenaphthylene	120	U	C1-Naphthobenzothiophenes	78	U
Acenaphthene	74	U	C2-Naphthobenzothiophenes	78	U
Fluorene	74	U	C3-Naphthobenzothiophenes	78	U
C1-Fluorenes	74	U	C4-Naphthobenzothiophenes	78	U
C2-Fluorenes	74	U	Benz[a]anthracene	100	U
C3-Fluorenes	74	U	Chrysene/Triphenylene	70	U
Anthracene	86	U	C1-Chrysenes	70	U
Phenanthrene	**73000**		C2-Chrysenes	70	U
C1-Phenanthrenes/Anthracenes	93	U	C3-Chrysenes	70	U
C2-Phenanthrenes/Anthracenes	93	U	C4-Chrysenes	70	U
C3-Phenanthrenes/Anthracenes	93	U	Benzo[b]fluoranthene	68	U
C4-Phenanthrenes/Anthracenes	93	U	Benzo[k]fluoranthene	130	U
Retene	93	U	Benzo[a]fluoranthene	130	U
Dibenzothiophene	71	U	Benzo[e]pyrene	88	U
C1-Dibenzothiophenes	71	U	Benzo[a]pyrene	90	U
C2-Dibenzothiophenes	71	U	Perylene	110	U
C3-Dibenzothiophenes	71	U	Indeno[1,2,3-cd]pyrene	150	U
C4-Dibenzothiophenes	71	U	Dibenz[a,h]anthracene	120	U
Benzo(b)fluorene	65	U	Benzo[g,h,i]perylene	110	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	74	50-130
Pyrene-d10	88	50-130
Benzo[b]fluoranthene-d12	79	50-130

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

01/31/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27860.D
Acq On : 24 Jan 2006 9:08 am
Operator : AC
Sample : 0601019-01-RE
Misc : 10X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 30 15:27:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WD 1/31/06

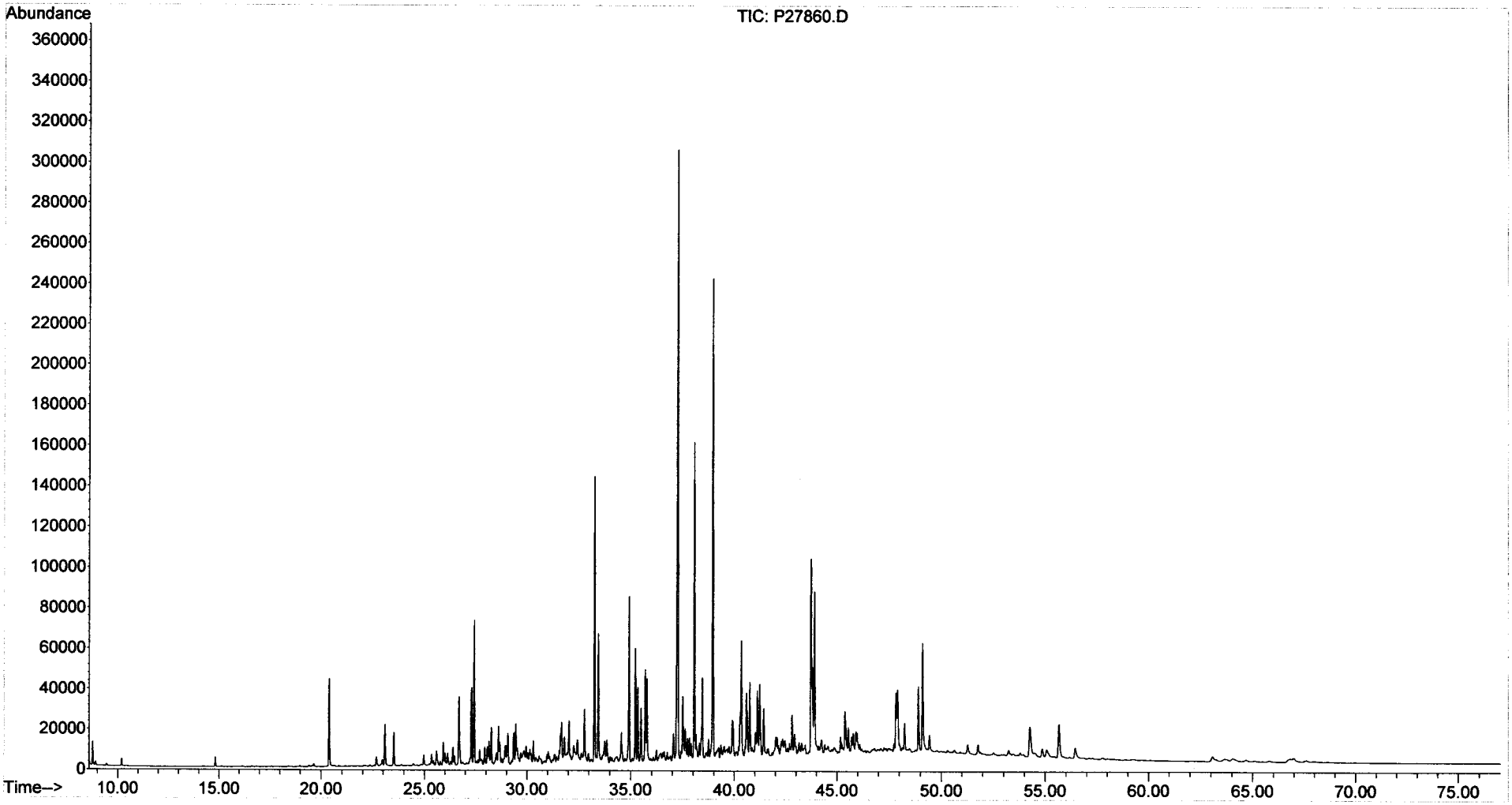
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.30	164	46649m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.79	240	78701	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	5370	56.01	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.60%#			
58) Pyrene-d10	38.88	212	13158m	66.73	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.67%#			
81) Benzo[b]fluoranthene-d12	47.75	264	9653m	59.83	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.98%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
41) Phenanthrene	33.27	178	240657	1130.41	ng/mL	100
56) Fluoranthene	38.06	202	334377m	1471.58	ng/mL	
59) Pyrene	38.95	202	503624	2164.48	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27860.D
Acq On : 24 Jan 2006 9:08 am
Operator : AC
Sample : 0601019-01-RE
Misc : 10X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 30 15:27:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-11 (1-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-01**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/05/06	01/10/06	01/11/06	01/25/06	34.5	11.86	4.2	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**680**	30,31-Bishomohopane-22S	**1200**
C24 Tricyclic Terpane	**380**	30,31-Bishomohopane-22R	**710**
C25 Tricyclic Terpane	**420**	30,31-Trishomohopane-22S	**650**
C24 Tetracyclic Terpane	**430**	30,31-Trishomohopane-22R	**400**
C26 Tricyclic Terpane-22S	**180**	Tetrakishomohopane-22S	**400**
C26 Tricyclic Terpane-22R	**180**	Tetrakishomohopane-22R	**280**
C28 Tricyclic Terpane-22S	**220**	Pentakishomohopane-22S	**380**
C28 Tricyclic Terpane-22R	**220**	Pentakishomohopane-22R	**270**
C29 Tricyclic Terpane-22S	**260**	13b(H),17a(H)-20S-Diacholestane	**820**
C29 Tricyclic Terpane-22R	**270**	13b(H),17a(H)-20R-Diacholestane	**450**
18a-22,29,30-Trisnorneohopane-TS	**1000**	13b,17a-20S-Methyldiacholestane	**340**
C30 Tricyclic Terpane-22S	**220**	14a(H),17a(H)-20S-Cholestane	**530**
C30 Tricyclic Terpane-22R	**200**	14a(H),17a(H)-20R-Cholestane	**1500**
17a(H)-22,29,30-Trisnorhopane-TM	**1000**	13b,17a-20R-Ethyldiacholestane	**240**
17a/b,21b/a 28,30-Bisnorhopane	**260**	13a,17b-20S-Ethyldiacholestane	**87**
17a(H),21b(H)-25-Norhopane	**97**	14a,17a-20S-Methylcholestane	**290**
30-Norhopane	**3300**	14a,17a-20R-Methylcholestane	**600**
18a(H)-30-Norneohopane-C29Ts	**760**	14a(H),17a(H)-20S-Ethylcholestane	**570**
17a(H)-Diahopane	**160**	14a(H),17a(H)-20R-Ethylcholestane	**760**
30-Normoretane	**480**	14b(H),17b(H)-20R-Cholestane	**790**
18a(H)&18b(H)-Oleananes	**330**	14b(H),17b(H)-20S-Cholestane	**780**
Hopane	**4300**	14b,17b-20R-Methylcholestane	**760**
Moretane	**480**	14b,17b-20S-Methylcholestane	**900**
30-Homohopane-22S	**1600**	14b(H),17b(H)-20R-Ethylcholestane	**1300**
30-Homohopane-22R	**1400**	14b(H),17b(H)-20S-Ethylcholestane	**920**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	60	50-130

N/A - Not Applicable

02/01/06 09:21

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34866.D
Acq On : 25 Jan 2006 1:55 pm
Operator : AC
Sample : 0601019-01
Misc : 1x recleaned
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 30 12:18:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/30/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.42	240	106286	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	127513	2854.60	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 285.46%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.51	191	379933m	4159.70	ng/mL	
84) Hopane (T19)	52.51	191	378991m	4149.39	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	60468	662.03	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.68	191	33792	369.97	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.17	191	36866m	403.63	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	38478	421.28	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	16170	177.04	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.33	191	16248	177.89	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.61	191	19367m	212.04	ng/ml	
92) C28 Tricyclic Terpane-22R	46.78	191	19301m	211.32	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	23549	257.83	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.50	191	23730m	259.81	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.66	191	90661m	992.60	ng/ml	
96) C30 Tricyclic Terpane-22S	48.74	191	19906m	217.94	ng/mL	
97) C30 Tricyclic Terpane-22R	48.99	191	17558m	192.23	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	93350	1022.04	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.43	191	23326m	255.39	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.21	191	8659m	94.80	ng/ml	
101) 30-Norhopane (T15)	51.12	191	296487m	3246.09	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.22	191	67513m	739.17	ng/ml	
103) 17a(H)-Diahopane (X)	51.34	191	14102	154.40	ng/ml	100
104) 30-Normoretane (T17)	51.90	191	43113	472.02	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.32	191	29720m	325.39	ng/ml	
106) Moretane (T20)	53.21	191	42265m	462.74	ng/ml	
107) 30-Homohopane-22S (T21)	54.33	191	141891m	1553.50	ng/ml	
108) 30-Homohopane-22R (T22)	54.57	191	121994	1335.65	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.92	191	106162	1162.32	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.32	191	63409	694.23	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.10	191	58065m	635.73	ng/ml	
112) 30,31-Trishomohopane-22R (	58.74	191	35527m	388.97	ng/ml	
113) Tetrakishomohopane-22S (T3	60.79	191	35482	388.48	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.71	191	24797	271.49	ng/ml	100
115) Pentakishomohopane-22S (T3	64.00	191	33428m	365.99	ng/ml	
116) Pentakishomohopane-22R (T3	65.35	191	23955m	262.27	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	35582m	796.56	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.86	217	19425m	434.86	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.57	217	14695	328.97	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	23223m	519.89	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	65207	1459.77	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.26	217	10202m	228.39	ng/ml	

RETENTION and CV 2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34866.D
Acq On : 25 Jan 2006 1:55 pm
Operator : AC
Sample : 0601019-01
Misc : 1x recleaned
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 30 12:18:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

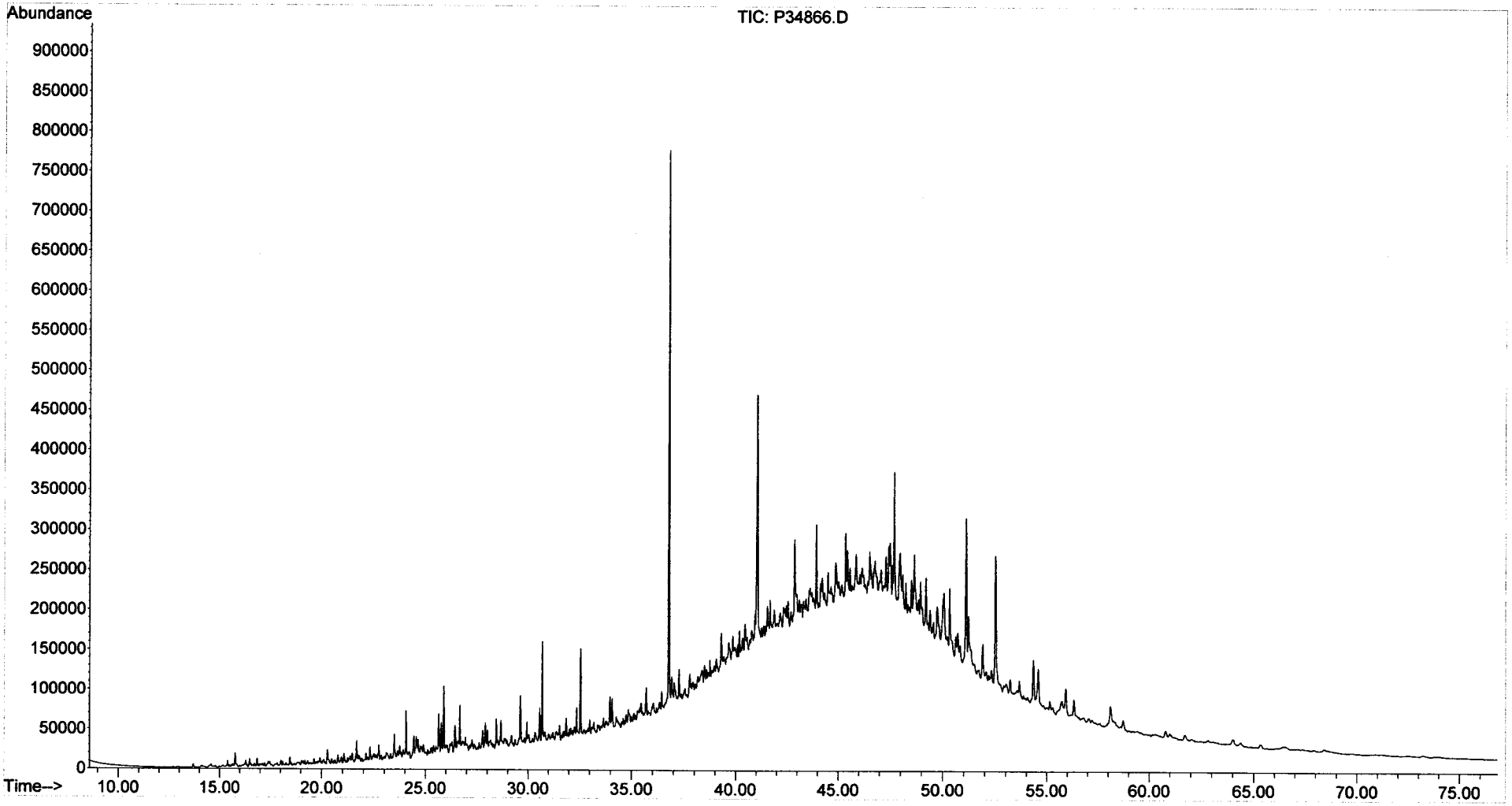
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	3768	84.35 ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	12657m	283.35 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.42	217	25867m	579.08 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	24888m	557.16 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.71	217	33066m	740.24 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	34512m	772.61 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	34046m	762.18 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.86	218	33076m	740.46 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.95	218	39070m	874.65 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.03	218	56633	1267.83 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.07	218	40165m	899.16 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN23\
Data File : P34866.D
Acq On : 25 Jan 2006 1:55 pm
Operator : AC
Sample : 0601019-01
Misc : 1x recleaned
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 30 12:18:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-18 (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-02**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/24/06	85.0	5.76	16	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**690000**	E	Fluoranthene	**140000**
C1-Naphthalenes	**440000**	E	Pyrene	**200000**
C2-Naphthalenes	**260000**		C1-Fluoranthenes/Pyrenes	**140000**
C3-Naphthalenes	**86000**		C2-Fluoranthenes/Pyrenes	**33000**
C4-Naphthalenes	**22000**		C3-Fluoranthenes/Pyrenes	**8500**
Biphenyl	**48000**		C4-Fluoranthenes/Pyrenes	**2300**
Dibenzofuran	**12000**		Naphthobenzothiophenes	**16000**
Acenaphthylene	**32000**		C1-Naphthobenzothiophenes	**11000**
Acenaphthene	**230000**		C2-Naphthobenzothiophenes	**4400**
Fluorene	**120000**		C3-Naphthobenzothiophenes	**1800**
C1-Fluorenes	**56000**		C4-Naphthobenzothiophenes	**510**
C2-Fluorenes	**28000**		Benz[a]anthracene	**67000**
C3-Fluorenes	**13000**		Chrysene/Triphenylene	**63000**
Anthracene	**130000**		C1-Chrysenes	**36000**
Phenanthrene	**410000**	E	C2-Chrysenes	**11000**
C1-Phenanthrenes/Anthracenes	**210000**		C3-Chrysenes	**3800**
C2-Phenanthrenes/Anthracenes	**67000**		C4-Chrysenes	**1600**
C3-Phenanthrenes/Anthracenes	**18000**		Benzo[b]fluoranthene	**20000**
C4-Phenanthrenes/Anthracenes	**3600**		Benzo[k]fluoranthene	**32000**
Retene	**640**		Benzo[a]fluoranthene	**12000**
Dibenzothiophene	**49000**		Benzo[e]pyrene	**25000**
C1-Dibenzothiophenes	**42000**		Benzo[a]pyrene	**51000**
C2-Dibenzothiophenes	**25000**		Perylene	**7600**
C3-Dibenzothiophenes	**10000**		Indeno[1,2,3-cd]pyrene	**18000**
C4-Dibenzothiophenes	**2800**		Dibenz[a,h]anthracene	**4000**
Benzo(b)fluorene	**26000**		Benzo[g,h,i]perylene	**20000**

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

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

01/31/06 16:23

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-18 (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-02**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/24/06	85.0	5.76	16	10	AC

Parameter	Result
Carbazole	2900

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

N/A - Not Applicable

01/31/06 16:23

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27862.D
Acq On : 24 Jan 2006 11:50 am
Operator : AC
Sample : 0601019-02
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 30 12:45:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

CMS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	45837m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	69889m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	9430	100.11	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.01%#			
58) Pyrene-d10	38.90	212	19997m	103.21	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.32%#			
81) Benzo[b]fluoranthene-d12	47.77	264	14404m	100.53	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.05%#			
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	20.41	128	4348312m	21091.01	ng/mL E	
10) C1-Naphthalenes	23.10	142	2757782m	13376.32	ng/mL E	
11) C2-Naphthalenes	25.95	156	1626076m	7887.10	ng/mL	
12) C3-Naphthalenes	28.29	170	544352m	2640.32	ng/mL	
13) C4-Naphthalenes	31.05	184	135880m	659.07	ng/mL	
15) 2-Methylnaphthalene	23.10	142	1726509	13155.83	ng/mL# E	100
16) 1-Methylnaphthalene	23.53	142	1028078	8230.45	ng/mL#	100
22) Biphenyl	24.98	154	242586	1468.36	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.60	156	226978m	2007.78	ng/mL	
24) Dibenzofuran	28.09	168	67226m	368.63	ng/mL	
25) Acenaphthylene	26.70	152	202288m	988.91	ng/mL	
26) Acenaphthene	27.45	153	889800m	7096.49	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.98	170	43751m	443.46	ng/mL	
28) Fluorene	29.46	166	554641m	3783.14	ng/mL	
29) C1-Fluorenes	31.69	180	249063m	1698.83	ng/mL	
30) C2-Fluorenes	33.89	194	124275m	847.66	ng/mL	
31) C3-Fluorenes	36.56	208	57586m	392.79	ng/mL	
32) Dibenzothiophene	32.80	184	292845m	1493.86	ng/mL	
37) C1-Dibenzothiophenes	34.57	198	248738m	1268.86	ng/mL	
38) C2-Dibenzothiophenes	36.26	212	152217m	776.49	ng/mL	
39) C3-Dibenzothiophenes	38.06	226	60999m	311.17	ng/mL	
40) C4-Dibenzothiophenes	39.74	240	16740m	85.39	ng/mL	
41) Phenanthrene	33.30	178	2643351	12636.24	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.36	192	1338906m	6400.49	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.53	206	455786m	2178.83	ng/mL	
49) 5AA IS BKGD	37.30	206	25631	122.53	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.36	220	112911m	539.76	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.57	234	22967m	109.79	ng/mL	
52) Retene	40.29	234	930m	19.59	ng/mL	
53) Anthracene	33.48	178	755875m	3890.63	ng/mL	
54) Carbazole	34.15	167	16596m	89.63	ng/mL	
55) 1-Methylphenanthrene	35.81	192	201950	1391.58	ng/mL	100
56) Fluoranthene	38.08	202	928489m	4158.64	ng/mL	
57) Benzo(b)fluorene	40.60	216	108001m	786.87	ng/mL	
59) Pyrene	38.98	202	1383989	6053.49	ng/mL	98
60) C1-Fluoranthenes/Pyrenes	40.36	216	960025m	4199.09	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.04	230	232905m	1018.71	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.91	244	59448m	260.02	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.53	258	16216m	70.93	ng/mL	
64) Naphthobenzothiophene	42.83	234	65935	311.00	ng/ml#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27862.D
Acq On : 24 Jan 2006 11:50 am
Operator : AC
Sample : 0601019-02
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 30 12:45:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

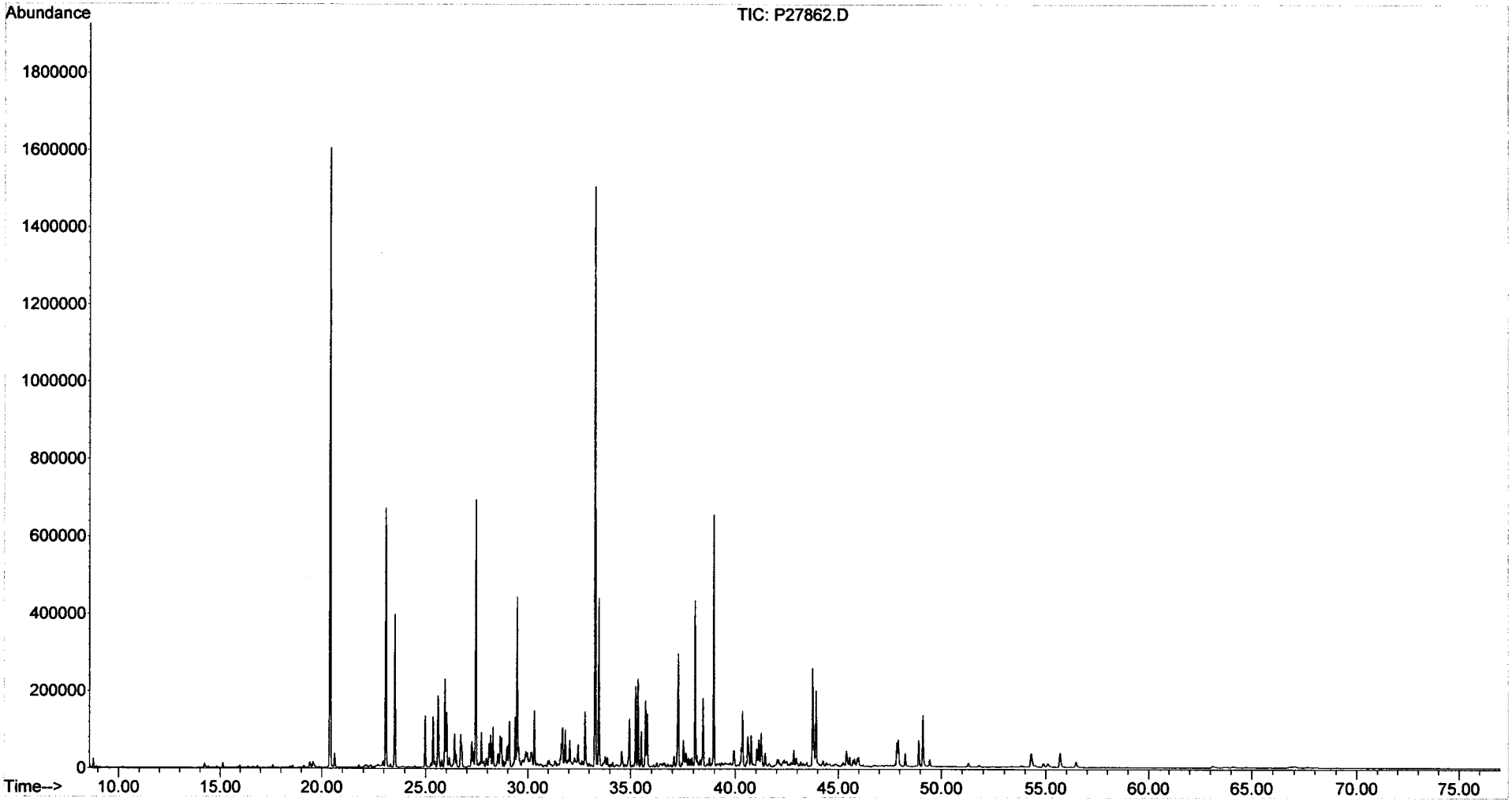
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.83	234	65935	311.00	ng/mL#	67
66) Naphthobenzothiophene-1,2-	43.18	234	18168m	85.69	ng/mL	
67) Naphthobenzothiophene-2,3-	43.47	234	21597m	101.87	ng/mL	
68) C1-Naphthobenzothiophenes	44.23	248	71813m	338.72	ng/ml	
69) C2-Naphthobenzothiophenes	45.73	262	28391m	133.91	ng/ml	
70) C3-Naphthobenzothiophenes	47.63	276	11620m	54.81	ng/ml	
71) C4-Naphthobenzothiophenes	49.11	290	3324m	15.68	ng/mL	
73) Benz[a]anthracene	43.76	228	408902m	2048.77	ng/mL	
74) Chrysene	43.92	228	387769m	1934.40	ng/mL	
75) Chrysene/Triphenylene	43.92	228	388459m	1937.84	ng/mL	
76) C1-Chrysenes	45.40	242	219625m	1095.61	ng/mL	
77) C2-Chrysenes	47.11	256	68015m	339.30	ng/mL	
78) BBF-d12 Surr BKGD	47.77	256	1184	5.91	ng/mL	100
79) C3-Chrysenes	48.79	270	23492m	117.19	ng/mL	
80) C4-Chrysenes	49.86	284	9580m	47.79	ng/mL	
82) Benzo[b]fluoranthene	47.86	252	131648	614.16	ng/mL	99
83) Benzo[k]fluoranthene	47.93	252	217448	970.08	ng/mL	100
84) Benzo[a]fluoranthene	48.27	252	84156m	375.44	ng/mL	
85) Benzo[e]pyrene	48.92	252	158312m	766.13	ng/mL	
86) Benzo[a]pyrene	49.12	252	322011m	1558.72	ng/mL	
87) Perylene	49.46	252	47589m	231.07	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.30	276	111176m	542.96	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	23255m	120.77	ng/mL	
90) Benzo[g,h,i]perylene	55.70	276	127277	596.16	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 : P27862.D
Acq On : 24 Jan 2006 11:50 am
Operator : AC
Sample : 0601019-02
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 30 12:45:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-18 (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-02E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/26/06	85.0	5.76	16	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**770000**		Fluoranthene	330	U
C1-Naphthalenes	**470000**		Pyrene	290	U
C2-Naphthalenes	540	U	C1-Fluoranthenes/Pyrenes	290	U
C3-Naphthalenes	540	U	C2-Fluoranthenes/Pyrenes	290	U
C4-Naphthalenes	540	U	C3-Fluoranthenes/Pyrenes	290	U
Biphenyl	300	U	C4-Fluoranthenes/Pyrenes	290	U
Dibenzofuran	390	U	Naphthobenzothiophenes	400	U
Acenaphthylene	590	U	C1-Naphthobenzothiophenes	400	U
Acenaphthene	380	U	C2-Naphthobenzothiophenes	400	U
Fluorene	380	U	C3-Naphthobenzothiophenes	400	U
C1-Fluorenes	380	U	C4-Naphthobenzothiophenes	400	U
C2-Fluorenes	380	U	Benz[a]anthracene	510	U
C3-Fluorenes	380	U	Chrysene/Triphenylene	350	U
Anthracene	440	U	C1-Chrysenes	350	U
Phenanthrene	**430000**		C2-Chrysenes	350	U
C1-Phenanthrenes/Anthracenes	470	U	C3-Chrysenes	350	U
C2-Phenanthrenes/Anthracenes	470	U	C4-Chrysenes	350	U
C3-Phenanthrenes/Anthracenes	470	U	Benzo[b]fluoranthene	350	U
C4-Phenanthrenes/Anthracenes	470	U	Benzo[k]fluoranthene	660	U
Retene	470	U	Benzo[a]fluoranthene	660	U
Dibenzothiophene	360	U	Benzo[e]pyrene	450	U
C1-Dibenzothiophenes	360	U	Benzo[a]pyrene	450	U
C2-Dibenzothiophenes	360	U	Perylene	570	U
C3-Dibenzothiophenes	360	U	Indeno[1,2,3-cd]pyrene	780	U
C4-Dibenzothiophenes	360	U	Dibenz[a,h]anthracene	620	U
Benzo(b)fluorene	330	U	Benzo[g,h,i]perylene	580	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	80	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

02/01/06 08:18

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27920.D
Acq On : 26 Jan 2006 4:13 pm
Operator : AC
Sample : 0601019-02-RE
Misc : 100X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 30 15:39:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33173m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	50250m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	698	10.24	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.02%#			
58) Pyrene-d10	38.70	212	1396m	9.96	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.00%#			
81) Benzo[b]fluoranthene-d12	47.56	264	1143m	11.09	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.11%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

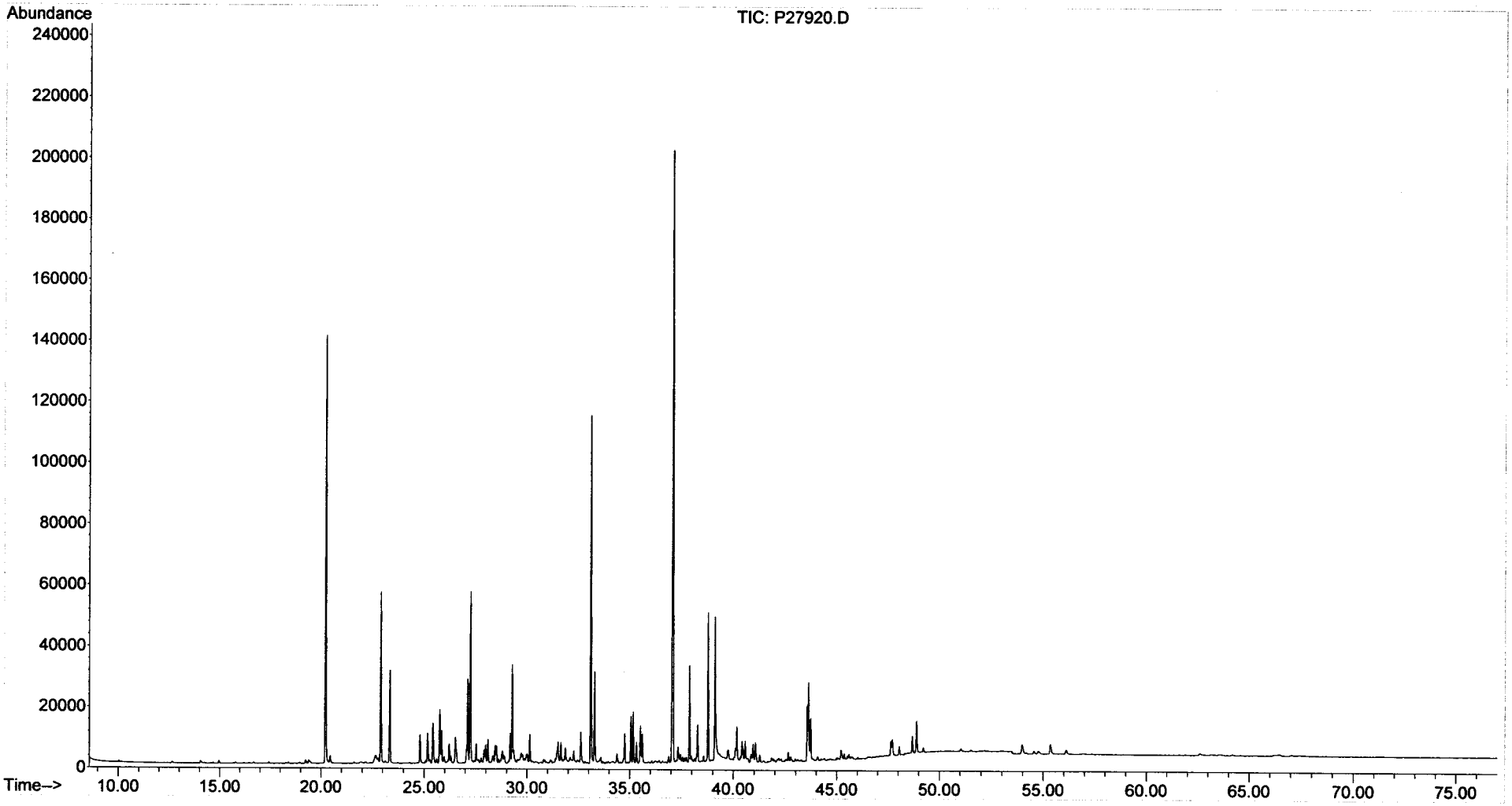
Target Compounds						Qvalue
9) Naphthalene	20.21	128	352465m	2362.24	ng/mL	
10) C1-Naphthalenes	22.91	142	215403m	1443.64	ng/mL	
15) 2-Methylnaphthalene	22.91	142	135348	1425.06	ng/mL#	100
41) Phenanthrene	33.11	178	198718	1312.60	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27920.D
Acq On : 26 Jan 2006 4:13 pm
Operator : AC
Sample : 0601019-02-RE
Misc : 100X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 30 15:39:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-18 (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-02**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/21/06	85.0	5.76	1.75	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**85**	30,31-Bishomohopane-22S	**30**
C24 Tricyclic Terpane	**56**	30,31-Bishomohopane-22R	**22**
C25 Tricyclic Terpane	**48**	30,31-Trishomohopane-22S	**21**
C24 Tetracyclic Terpane	**22**	30,31-Trishomohopane-22R	**12**
C26 Tricyclic Terpane-22S	**20**	Tetrakishomohopane-22S	**12**
C26 Tricyclic Terpane-22R	**19**	Tetrakishomohopane-22R	**6.6**
C28 Tricyclic Terpane-22S	**22**	Pentakishomohopane-22S	**7.4**
C28 Tricyclic Terpane-22R	**24**	Pentakishomohopane-22R	**6.6**
C29 Tricyclic Terpane-22S	**21**	13b(H),17a(H)-20S-Diacholestane	**73**
C29 Tricyclic Terpane-22R	**20**	13b(H),17a(H)-20R-Diacholestane	**41**
18a-22,29,30-Trisnorneohopane-TS	**46**	13b,17a-20S-Methyldiacholestane	**32**
C30 Tricyclic Terpane-22S	**16**	14a(H),17a(H)-20S-Cholestane	**44**
C30 Tricyclic Terpane-22R	**12**	14a(H),17a(H)-20R-Cholestane	**150**
17a(H)-22,29,30-Trisnorhopane-TM	**66**	13b,17a-20R-Ethyldiacholestane	**16**
17a/b,21b/a 28,30-Bisnorhopane	**30**	13a,17b-20S-Ethyldiacholestane	**6.2**
17a(H),21b(H)-25-Norhopane	**9.5**	14a,17a-20S-Methylcholestane	**25**
30-Norhopane	**120**	14a,17a-20R-Methylcholestane	**81**
18a(H)-30-Norneohopane-C29Ts	**44**	14a(H),17a(H)-20S-Ethylcholestane	**41**
17a(H)-Diahopane	**13**	14a(H),17a(H)-20R-Ethylcholestane	**59**
30-Normoretane	**26**	14b(H),17b(H)-20R-Cholestane	**62**
18a(H)&18b(H)-Oleananes	**23**	14b(H),17b(H)-20S-Cholestane	**60**
Hopane	**200**	14b,17b-20R-Methylcholestane	**57**
Moretane	**31**	14b,17b-20S-Methylcholestane	**68**
30-Homohopane-22S	**52**	14b(H),17b(H)-20R-Ethylcholestane	**85**
30-Homohopane-22R	**48**	14b(H),17b(H)-20S-Ethylcholestane	**41**

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

N/A - Not Applicable

02/01/06 09:24

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34835.D
Acq On : 21 Jan 2006 2:18 am
Operator : AC
Sample : 0601019-02
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 24 10:49:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	89573	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	43.93	217	424296	11270.89	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	1127.09%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	42007m	545.73	ng/mL	
84) Hopane (T19)	52.48	191	42008m	545.74	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	18364m	238.57	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	11969	155.49	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	10268m	133.40	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	4855	63.07	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	4415	57.36	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	4145	53.85	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.59	191	4842m	62.90	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	5108m	66.36	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	4590	59.63	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	4317m	56.08	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	9961m	129.41	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	3531	45.87	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	2617	34.00	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.19	191	14226m	184.81	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	6359m	82.61	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	2046m	26.58	ng/ml	
101) 30-Norhopane (T15)	51.08	191	26199m	340.36	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	9448m	122.74	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	2840m	36.90	ng/ml	
104) 30-Normoretane (T17)	51.87	191	5549m	72.09	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	4932m	64.07	ng/ml	
106) Moretane (T20)	53.18	191	6608m	85.85	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	11091	144.09	ng/ml	100
108) 30-Homohopane-22R (T22)	54.53	191	10351	134.47	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	6540	84.96	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	4801	62.37	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.06	191	4597	59.72	ng/ml	100
112) 30,31-Trishomohopane-22R (	58.68	191	2558	33.23	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.74	191	2557	33.22	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	1426	18.53	ng/ml	100
115) Pentakishomohopane-22S (T3	63.96	191	1588	20.63	ng/ml	100
116) Pentakishomohopane-22R (T3	65.27	191	1423m	18.49	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	7662	203.53	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	4364m	115.92	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	3383m	89.87	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	4604m	122.30	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	15653	415.80	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	1712m	45.48	ng/ml	

2nd ✓ MS 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34835.D
Acq On : 21 Jan 2006 2:18 am
Operator : AC
Sample : 0601019-02
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 24 10:49:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

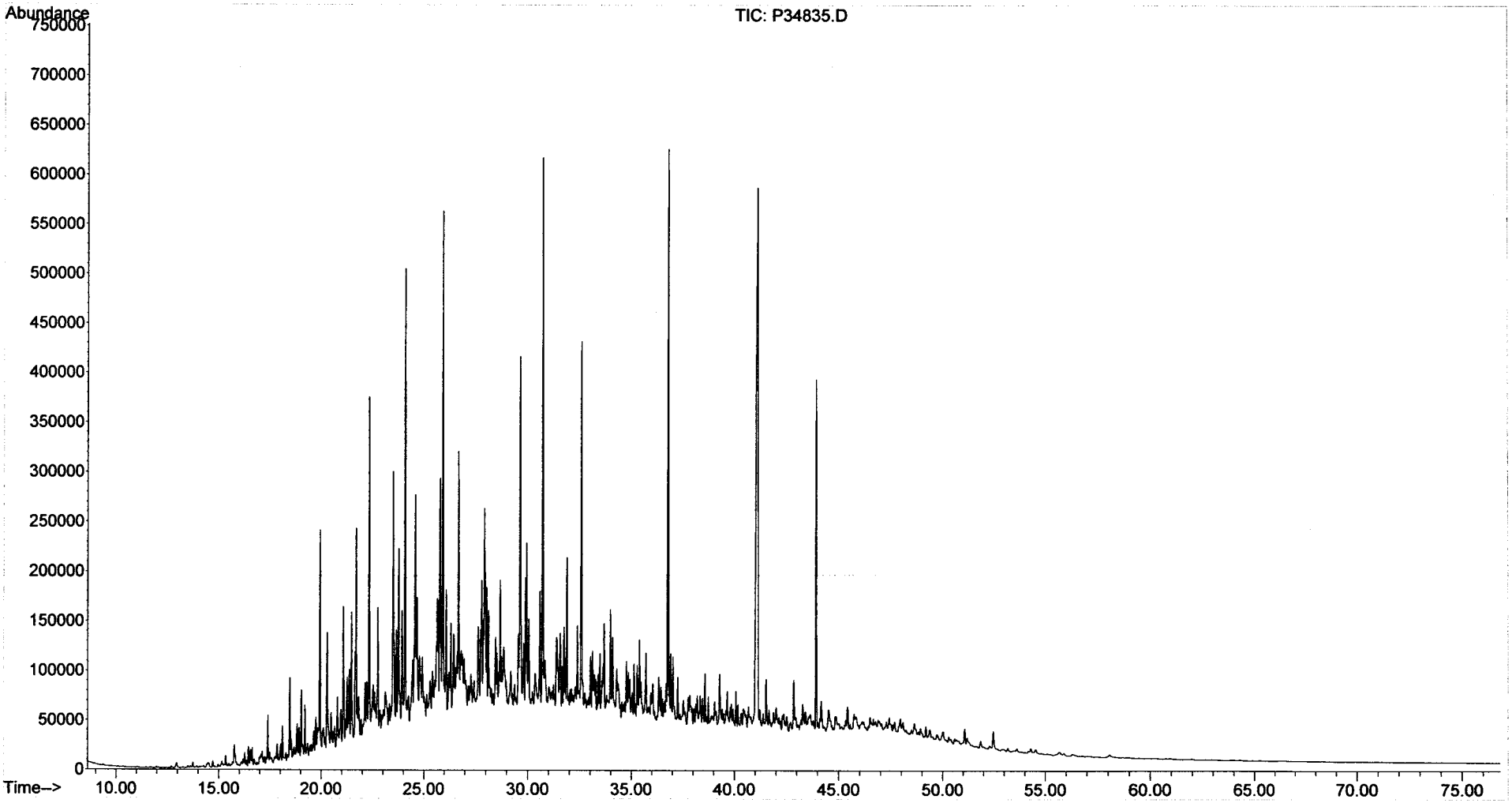
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	652	17.32	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	2610m	69.33	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	8552m	227.17	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	4329m	114.99	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	6253m	166.10	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	6498m	172.61	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	6316	167.78	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.83	218	6039m	160.42	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	7134m	189.51	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	8916m	236.84	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	4342m	115.34	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34835.D
Acq On : 21 Jan 2006 2:18 am
Operator : AC
Sample : 0601019-02
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 24 10:49:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/27/06	36.5	31.13	26.32	1	AC

Parameter	Result	Parameter	Result
Naphthalene	850	Fluoranthene	16000
C1-Naphthalenes	540	Pyrene	22000
C2-Naphthalenes	1700	C1-Fluoranthenes/Pyrenes	22000
C3-Naphthalenes	2700	C2-Fluoranthenes/Pyrenes	8400
C4-Naphthalenes	2300	C3-Fluoranthenes/Pyrenes	3000
Biphenyl	140	C4-Fluoranthenes/Pyrenes	1200
Dibenzofuran	210	Naphthobenzothiophenes	3200
Acenaphthylene	5200	C1-Naphthobenzothiophenes	2800
Acenaphthene	3000	C2-Naphthobenzothiophenes	1800
Fluorene	400	C3-Naphthobenzothiophenes	1100
C1-Fluorenes	1400	C4-Naphthobenzothiophenes	590
C2-Fluorenes	3200	Benz[a]anthracene	10000
C3-Fluorenes	2800	Chrysene/Triphenylene	10000
Anthracene	5900	C1-Chrysenes	7800
Phenanthrene	2800	C2-Chrysenes	3300
C1-Phenanthrenes/Anthracenes	11000	C3-Chrysenes	1500
C2-Phenanthrenes/Anthracenes	12000	C4-Chrysenes	500
C3-Phenanthrenes/Anthracenes	5100	Benzo[b]fluoranthene	5400
C4-Phenanthrenes/Anthracenes	1400	Benzo[k]fluoranthene	5800
Retene	570	Benzo[a]fluoranthene	2300
Dibenzothiophene	770	Benzo[e]pyrene	5500
C1-Dibenzothiophenes	2400	Benzo[a]pyrene	9300
C2-Dibenzothiophenes	3900	Perylene	1700
C3-Dibenzothiophenes	2800	Indeno[1,2,3-cd]pyrene	4100
C4-Dibenzothiophenes	1200	Dibenz[a,h]anthracene	1200
Benzo(b)fluorene	3800	Benzo[g,h,i]perylene	4400

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	120	50-130
Benzo[b]fluoranthene-d12	111	50-130

N/A - Not Applicable

01/31/06 15:28

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/27/06	36.5	31.13	26.32	1	AC

Parameter	Result
Carbazole	**180**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	120	50-130
Benzo[b]fluoranthene-d12	111	50-130

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27934.D
Acq On : 27 Jan 2006 8:36 am
Operator : AC
Sample : 0601019-03
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 08:57:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

ms for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	39318m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.65	240	67079m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	2801	34.66	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	3.47%#		
58) Pyrene-d10	38.72	212	7603m	45.75	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.58%#		
81) Benzo[b]fluoranthene-d12	47.57	264	5787m	42.08	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.21%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		

Target Compounds						Qvalue
9) Naphthalene	20.23	128	64651m	365.58	ng/mL	
10) C1-Naphthalenes	23.35	142	41687m	235.72	ng/mL	
11) C2-Naphthalenes	25.76	156	132980m	751.95	ng/mL	
12) C3-Naphthalenes	28.45	170	208500m	1178.98	ng/mL	
13) C4-Naphthalenes	30.86	184	178002m	1006.53	ng/mL	
15) 2-Methylnaphthalene	22.91	142	20998	186.53	ng/mL#	100
16) 1-Methylnaphthalene	23.35	142	21325	199.03	ng/mL#	100
22) Biphenyl	24.80	154	8502m	59.99	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	16528m	170.44	ng/mL	
24) Dibenzofuran	27.90	168	14162	90.53	ng/mL	99
25) Acenaphthylene	26.52	152	394328m	2247.35	ng/mL	
26) Acenaphthene	27.25	153	138492m	1287.66	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	17320m	204.67	ng/mL	
28) Fluorene	29.28	166	22020m	175.10	ng/mL	
29) C1-Fluorenes	31.87	180	78053m	620.66	ng/mL	
30) C2-Fluorenes	33.59	194	170934m	1359.23	ng/mL	
31) C3-Fluorenes	36.38	208	153340m	1219.33	ng/mL	
32) Dibenzothiophene	32.61	184	56221m	334.35	ng/mL	
36) OTP	34.74	198	3467m	20.62	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	179419m	1067.00	ng/mL	
38) C2-Dibenzothiophenes	36.08	212	280208m	1666.39	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	204073m	1213.62	ng/mL	
40) C4-Dibenzothiophenes	39.57	240	83368m	495.79	ng/mL	
41) Phenanthrene	33.11	178	217380	1211.46	ng/mL	100
47) C1-Phenanthrenes/Anthracen	35.06	192	868306m	4839.06	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	920583m	5130.40	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	394725m	2199.80	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	105617m	588.60	ng/mL	
52) Retene	40.10	234	9968m	244.82	ng/mL	
53) Anthracene	33.29	178	423044m	2538.52	ng/mL	
54) Carbazole	33.96	167	12061	75.94	ng/mL#	90
55) 1-Methylphenanthrene	35.62	192	81763m	656.82	ng/mL	
56) Fluoranthene	37.90	202	1349487	7046.41	ng/mL	98
57) Benzo(b)fluorene	40.43	216	192908m	1638.51	ng/mL	
59) Pyrene	38.79	202	1899840	9687.57	ng/mL	96
60) C1-Fluoranthenes/Pyrenes	40.19	216	1873583m	9553.68	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.91	230	710163m	3621.23	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	255314m	1301.88	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	97637m	497.87	ng/mL	
64) Naphthobenzothiophene	42.64	234	156800m	862.21	ng/ml	

ms 1/31/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27934.D
Acq On : 27 Jan 2006 8:36 am
Operator : AC
Sample : 0601019-03
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 08:57:55 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

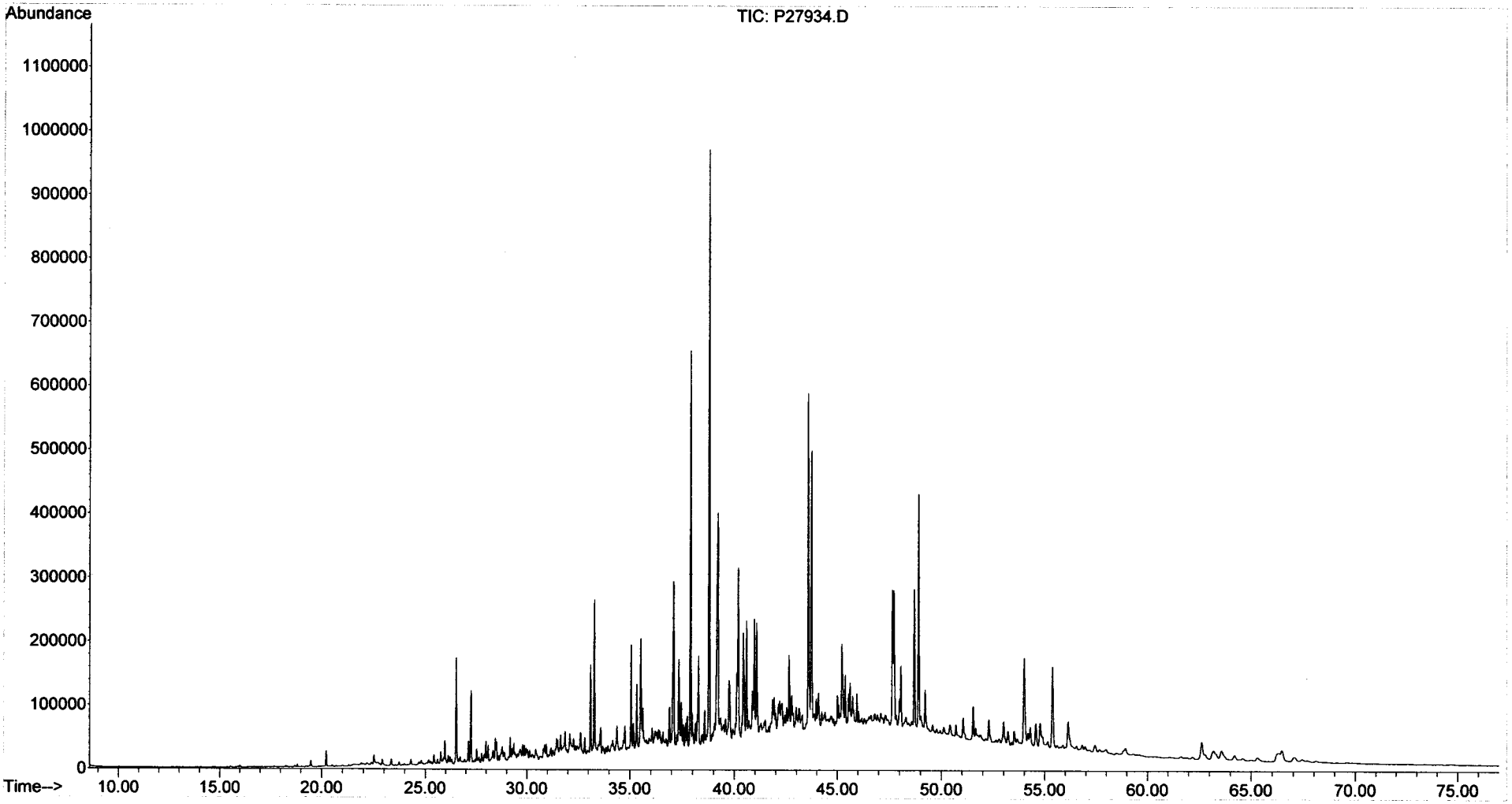
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.64	234	156073m	858.21	ng/mL	
66) Naphthobenzothiophene-1,2-	42.99	234	41389m	227.59	ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	54430m	299.30	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	218563m	1201.83	ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	142033m	781.01	ng/ml	
70) C3-Naphthobenzothiophenes	47.67	276	86290m	474.49	ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	46086m	253.42	ng/mL	
73) Benz[a]anthracene	43.58	228	853230m	4454.12	ng/mL	
74) Chrysene	43.75	228	875898m	4552.50	ng/mL	
75) Chrysene/Triphenylene	43.75	228	871998m	4532.23	ng/mL	
76) C1-Chrysenes	45.22	242	650110m	3378.96	ng/mL	
77) C2-Chrysenes	46.92	256	275098m	1429.83	ng/mL	
79) C3-Chrysenes	48.58	270	121325m	630.59	ng/mL	
80) C4-Chrysenes	49.63	284	41642m	216.44	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	478998	2328.23	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	543899m	2528.09	ng/mL	
84) Benzo[a]fluoranthene	48.07	252	215223m	1000.38	ng/mL	
85) Benzo[e]pyrene	48.71	252	469135	2365.44	ng/mL	100
86) Benzo[a]pyrene	48.91	252	799363m	4031.47	ng/mL	
87) Perylene	49.23	252	143321	725.04	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	54.00	276	349879m	1780.32	ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	92416m	500.05	ng/mL	
90) Benzo[g,h,i]perylene	55.39	276	389945	1903.01	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27934.D
Acq On : 27 Jan 2006 8:36 am
Operator : AC
Sample : 0601019-03
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 08:57:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/21/06	36.5	31.13	5.96	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**360**	30,31-Bishomohopane-22S	**750**
C24 Tricyclic Terpane	**200**	30,31-Bishomohopane-22R	**420**
C25 Tricyclic Terpane	**220**	30,31-Trishomohopane-22S	**410**
C24 Tetracyclic Terpane	**250**	30,31-Trishomohopane-22R	**240**
C26 Tricyclic Terpane-22S	**98**	Tetrakishomohopane-22S	**240**
C26 Tricyclic Terpane-22R	**99**	Tetrakishomohopane-22R	**170**
C28 Tricyclic Terpane-22S	**120**	Pentakishomohopane-22S	**230**
C28 Tricyclic Terpane-22R	**120**	Pentakishomohopane-22R	**160**
C29 Tricyclic Terpane-22S	**150**	13b(H),17a(H)-20S-Diacholestane	**440**
C29 Tricyclic Terpane-22R	**140**	13b(H),17a(H)-20R-Diacholestane	**230**
18a-22,29,30-Trisnorneohopane-TS	**590**	13b,17a-20S-Methyldiacholestane	**190**
C30 Tricyclic Terpane-22S	**130**	14a(H),17a(H)-20S-Cholestane	**280**
C30 Tricyclic Terpane-22R	**100**	14a(H),17a(H)-20R-Cholestane	**820**
17a(H)-22,29,30-Trisnorhopane-TM	**600**	13b,17a-20R-Ethyldiacholestane	**150**
17a/b,21b/a 28,30-Bisnorhopane	**160**	13a,17b-20S-Ethyldiacholestane	**53**
17a(H),21b(H)-25-Norhopane	**62**	14a,17a-20S-Methylcholestane	**170**
30-Norhopane	**2000**	14a,17a-20R-Methylcholestane	**340**
18a(H)-30-Norneohopane-C29Ts	**460**	14a(H),17a(H)-20S-Ethylcholestane	**370**
17a(H)-Diahopane	**87**	14a(H),17a(H)-20R-Ethylcholestane	**460**
30-Normoretane	**280**	14b(H),17b(H)-20R-Cholestane	**450**
18a(H)&18b(H)-Oleananes	**190**	14b(H),17b(H)-20S-Cholestane	**430**
Hopane	**2400**	14b,17b-20R-Methylcholestane	**400**
Moretane	**300**	14b,17b-20S-Methylcholestane	**550**
30-Homohopane-22S	**940**	14b(H),17b(H)-20R-Ethylcholestane	**760**
30-Homohopane-22R	**810**	14b(H),17b(H)-20S-Ethylcholestane	**490**

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

N/A - Not Applicable

02/01/06 09:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34836.D
Acq On : 21 Jan 2006 3:48 am
Operator : AC
Sample : 0601019-03
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 24 10:55:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MB 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	103069	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.93	217	10052m	232.05	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.21%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.52	191	410784m	4637.85	ng/mL	
84) Hopane (T19)	52.52	191	409238m	4620.39	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	60298m	680.78	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	34035	384.26	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	38060m	429.71	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	42175	476.17	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	16530	186.63	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.33	191	16797	189.64	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.61	191	19624m	221.56	ng/ml	
92) C28 Tricyclic Terpane-22R	46.78	191	20626m	232.87	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	24657	278.38	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.50	191	24396m	275.44	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.66	191	99214	1120.15	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	22533	254.40	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.99	191	17563m	198.29	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	100540m	1135.12	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.43	191	26363m	297.64	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.21	191	10550	119.11	ng/ml	100
101) 30-Norhopane (T15)	51.12	191	335752	3790.72	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.22	191	78329m	884.35	ng/ml	
103) 17a(H)-Diahopane (X)	51.34	191	14689	165.84	ng/ml	100
104) 30-Normoretane (T17)	51.90	191	47997	541.90	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.32	191	31768m	358.67	ng/ml	
106) Moretane (T20)	53.21	191	50115m	565.81	ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	158854m	1793.50	ng/ml	
108) 30-Homohopane-22R (T22)	54.57	191	137465	1552.01	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.92	191	127060	1434.54	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.32	191	70695	798.16	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.10	191	69851m	788.63	ng/ml	
112) 30,31-Trishomohopane-22R (	58.74	191	40856m	461.27	ng/ml	
113) Tetrakishomohopane-22S (T3	60.79	191	39864	450.07	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.71	191	28024	316.40	ng/ml	100
115) Pentakishomohopane-22S (T3	64.01	191	38814m	438.22	ng/ml	
116) Pentakishomohopane-22R (T3	65.31	191	26867m	303.33	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	36156m	834.68	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.86	217	19294m	445.41	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.57	217	15803	364.82	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	23599m	544.79	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	68119	1572.56	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.25	217	12041m	277.97	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34836.D
Acq On : 21 Jan 2006 3:48 am
Operator : AC
Sample : 0601019-03
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 24 10:55:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

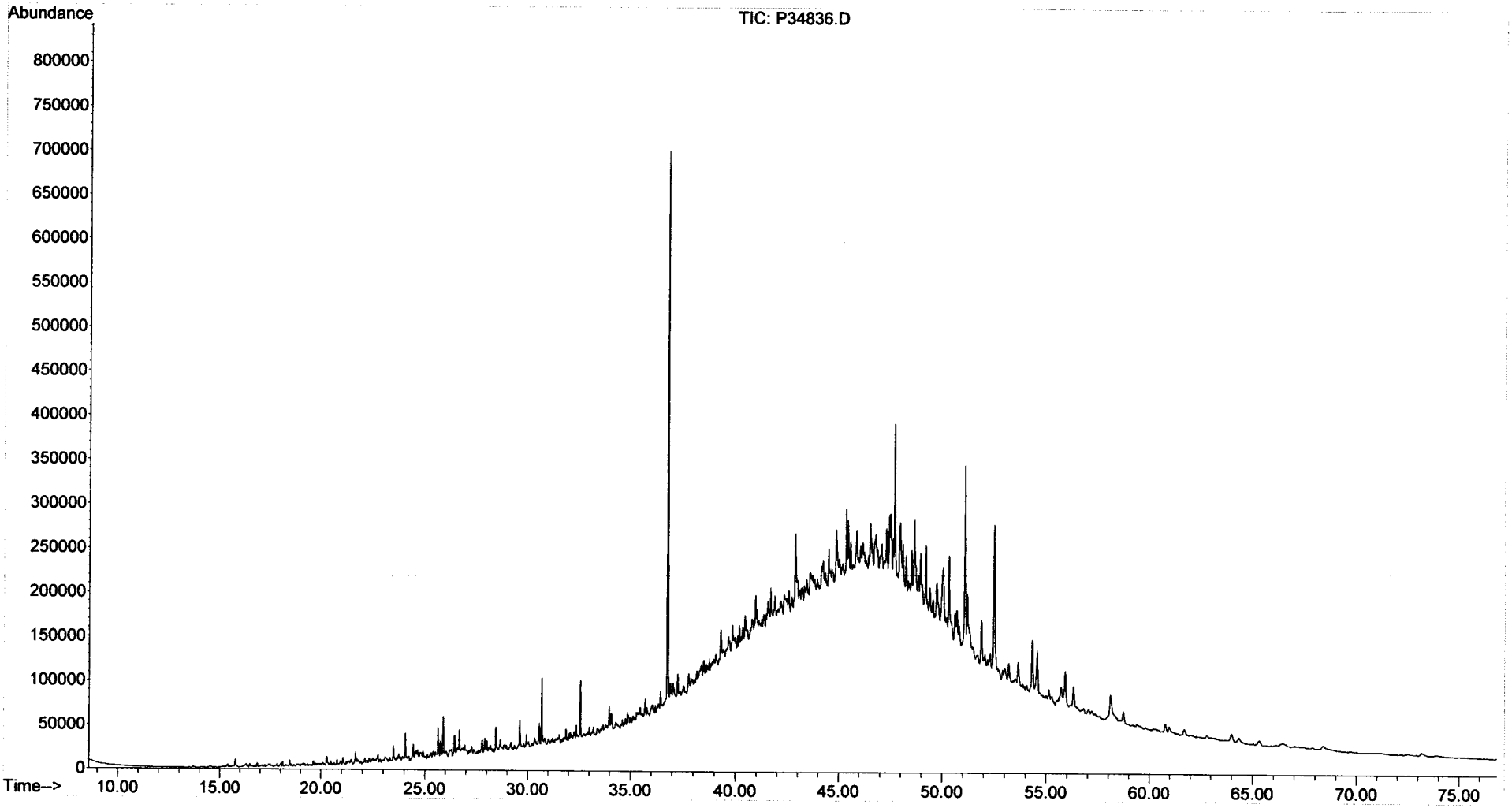
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	4391m	101.37	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.68	217	14134m	326.29	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.42	217	28132m	649.44	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	30580m	705.95	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.71	217	37590m	867.78	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	37158	857.81	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.63	218	35688m	823.87	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.86	218	32995m	761.70	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	45386m	1047.76	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.03	218	62860m	1451.15	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	40482m	934.55	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34836.D
Acq On : 21 Jan 2006 3:48 am
Operator : AC
Sample : 0601019-03
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 24 10:55:38 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-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03 D**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/27/06	36.5	32.56	26.32	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**1000**	Fluoranthene	**15000**
C1-Naphthalenes	**600**	Pyrene	**21000**
C2-Naphthalenes	**1800**	C1-Fluoranthenes/Pyrenes	**18000**
C3-Naphthalenes	**3000**	C2-Fluoranthenes/Pyrenes	**7000**
C4-Naphthalenes	**2800**	C3-Fluoranthenes/Pyrenes	**2600**
Biphenyl	**140**	C4-Fluoranthenes/Pyrenes	**1000**
Dibenzofuran	**200**	Naphthobenzothiophenes	**2700**
Acenaphthylene	**4400**	C1-Naphthobenzothiophenes	**2400**
Acenaphthene	**3400**	C2-Naphthobenzothiophenes	**1700**
Fluorene	**410**	C3-Naphthobenzothiophenes	**1000**
C1-Fluorenes	**1400**	C4-Naphthobenzothiophenes	**590**
C2-Fluorenes	**3300**	Benz[a]anthracene	**8700**
C3-Fluorenes	**2800**	Chrysene/Triphenylene	**8900**
Anthracene	**5800**	C1-Chrysenes	**6700**
Phenanthrene	**2600**	C2-Chrysenes	**2900**
C1-Phenanthrenes/Anthracenes	**10000**	C3-Chrysenes	**1300**
C2-Phenanthrenes/Anthracenes	**11000**	C4-Chrysenes	**500**
C3-Phenanthrenes/Anthracenes	**5200**	Benzo[b]fluoranthene	**4800**
C4-Phenanthrenes/Anthracenes	**1300**	Benzo[k]fluoranthene	**4900**
Retene	**520**	Benzo[a]fluoranthene	**2000**
Dibenzothiophene	**760**	Benzo[e]pyrene	**4700**
C1-Dibenzothiophenes	**2400**	Benzo[a]pyrene	**7900**
C2-Dibenzothiophenes	**3700**	Perylene	**1400**
C3-Dibenzothiophenes	**2700**	Indeno[1,2,3-cd]pyrene	**3500**
C4-Dibenzothiophenes	**1100**	Dibenz[a,h]anthracene	**1000**
Benzo(b)fluorene	**3400**	Benzo[g,h,i]perylene	**3800**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	118	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

01/31/06 15:39

Form I
Duplicate
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03 D**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/27/06	36.5	32.56	26.32	1	AC

Parameter	Result
Carbazole	160

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	118	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

01/31/06 15:40

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27936.D
Acq On : 27 Jan 2006 10:11 am
Operator : AC
Sample : 0601019-03D
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 08:59:48 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

CWS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	39977m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	66993m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	2819m	34.31	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	3.43%#		
58) Pyrene-d10	38.72	212	7551m	44.68	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.47%#		
81) Benzo[b]fluoranthene-d12	47.57	264	5427m	39.51	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	3.95%#		
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	82079m	456.47	ng/mL	
10) C1-Naphthalenes	22.91	142	48630m	270.45	ng/mL	
11) C2-Naphthalenes	25.76	156	142895m	794.69	ng/mL	
12) C3-Naphthalenes	28.44	170	243104m	1351.99	ng/mL	
13) C4-Naphthalenes	30.86	184	223822m	1244.76	ng/mL	
15) 2-Methylnaphthalene	22.91	142	23978m	209.49	ng/mL	
16) 1-Methylnaphthalene	23.33	142	24455	224.48	ng/mL#	100
22) Biphenyl	24.80	154	9445m	65.55	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	19812m	200.94	ng/mL	
24) Dibenzofuran	27.89	168	14436m	90.76	ng/mL	
25) Acenaphthylene	26.52	152	352885	1978.00	ng/mL#	100
26) Acenaphthene	27.25	153	165535m	1513.72	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.80	170	20198m	234.74	ng/mL	
28) Fluorene	29.27	166	23900m	186.91	ng/mL	
29) C1-Fluorenes	31.87	180	82941m	648.66	ng/mL	
30) C2-Fluorenes	33.69	194	188749m	1476.15	ng/mL	
31) C3-Fluorenes	36.38	208	162777m	1273.03	ng/mL	
32) Dibenzothiophene	32.61	184	58922m	344.63	ng/mL	
36) OTP	34.73	198	4767m	27.88	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	191005m	1117.18	ng/mL	
38) C2-Dibenzothiophenes	36.07	212	282804m	1654.11	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	207770m	1215.24	ng/mL	
40) C4-Dibenzothiophenes	39.57	240	83948m	491.01	ng/mL	
41) Phenanthrene	33.11	178	211208	1157.66	ng/mL	100
47) C1-Phenanthrenes/Anthracen	35.06	192	856818m	4696.32	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	887297m	4863.38	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	430799m	2361.26	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	110286m	604.49	ng/mL	
52) Retene	40.10	234	9751m	235.55	ng/mL	
53) Anthracene	33.28	178	448317m	2645.83	ng/mL	
54) Carbazole	33.96	167	11869	73.50	ng/mL	98
55) 1-Methylphenanthrene	35.61	192	73679m	582.12	ng/mL	
56) Fluoranthene	37.90	202	1335591m	6858.89	ng/mL	
57) Benzo(b)fluorene	40.43	216	181013m	1512.13	ng/mL	
59) Pyrene	38.79	202	1867027	9363.31	ng/mL	97
60) C1-Fluoranthenes/Pyrenes	40.18	216	1665899m	8354.64	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.91	230	630604m	3162.54	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	235195m	1179.52	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	91632m	459.54	ng/mL	
64) Naphthobenzothiophene	42.64	234	136551m	738.49	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27936.D
Acq On : 27 Jan 2006 10:11 am
Operator : AC
Sample : 0601019-03D
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 08:59:48 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

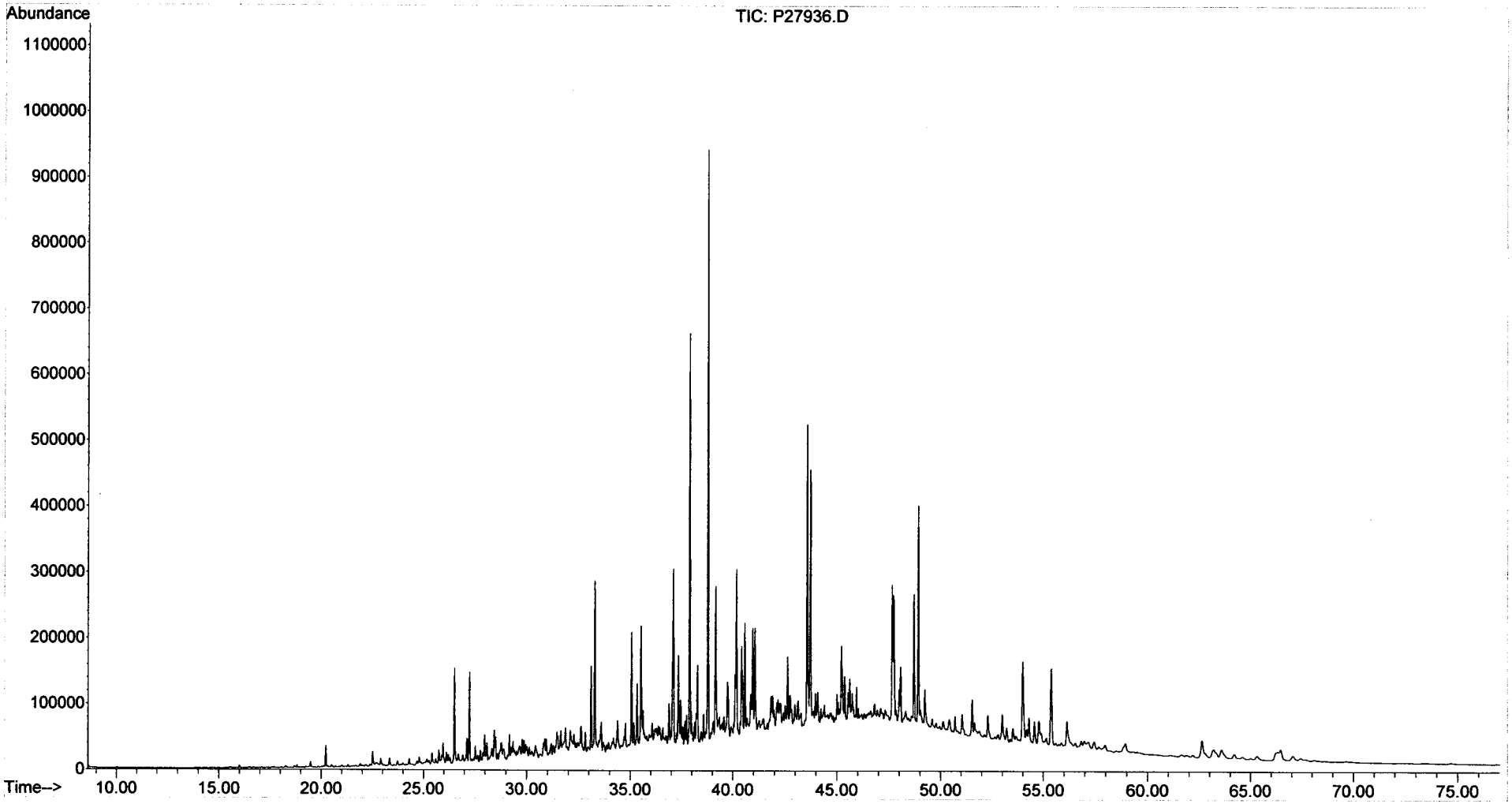
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.64	234	136624m	738.88	ng/mL	
66) Naphthobenzothiophene-1,2-	42.99	234	37160m	200.97	ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	48874m	264.32	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	202374m	1094.47	ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	139465m	754.25	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	83430m	451.20	ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	49064m	265.35	ng/mL	
73) Benz[a]anthracene	43.57	228	752202m	3931.76	ng/mL	
74) Chrysene	43.73	228	777250m	4044.96	ng/mL	
75) Chrysene/Triphenylene	43.73	228	770784m	4011.31	ng/mL	
76) C1-Chrysenes	45.22	242	581615m	3026.84	ng/mL	
77) C2-Chrysenes	46.92	256	251510m	1308.91	ng/mL	
79) C3-Chrysenes	48.58	270	115961m	603.48	ng/mL	
80) C4-Chrysenes	49.63	284	43304m	225.36	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	442617	2154.16	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	476227	2216.39	ng/mL	100
84) Benzo[a]fluoranthene	48.07	252	193440m	900.28	ng/mL	
85) Benzo[e]pyrene	48.71	252	421510	2128.03	ng/mL	99
86) Benzo[a]pyrene	48.91	252	704122m	3555.69	ng/mL	
87) Perylene	49.23	252	122774	621.89	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	54.00	276	308038m	1569.43	ng/mL	
89) Dibenz[a,h]anthracene	54.03	278	85662m	464.10	ng/mL	
90) Benzo[g,h,i]perylene	55.39	276	356459	1741.82	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27936.D
Acq On : 27 Jan 2006 10:11 am
Operator : AC
Sample : 0601019-03D
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 08:59:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03 D**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/21/06	36.5	32.56	7.59	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**420**	30,31-Bishomohopane-22S	**900**
C24 Tricyclic Terpane	**240**	30,31-Bishomohopane-22R	**500**
C25 Tricyclic Terpane	**270**	30,31-Trishomohopane-22S	**480**
C24 Tetracyclic Terpane	**300**	30,31-Trishomohopane-22R	**280**
C26 Tricyclic Terpane-22S	**120**	Tetrakishomohopane-22S	**290**
C26 Tricyclic Terpane-22R	**110**	Tetrakishomohopane-22R	**190**
C28 Tricyclic Terpane-22S	**140**	Pentakishomohopane-22S	**270**
C28 Tricyclic Terpane-22R	**150**	Pentakishomohopane-22R	**200**
C29 Tricyclic Terpane-22S	**180**	13b(H),17a(H)-20S-Diacholestane	**510**
C29 Tricyclic Terpane-22R	**180**	13b(H),17a(H)-20R-Diacholestane	**280**
18a-22,29,30-Trisnorneohopane-TS	**710**	13b,17a-20S-Methyldiacholestane	**230**
C30 Tricyclic Terpane-22S	**160**	14a(H),17a(H)-20S-Cholestane	**360**
C30 Tricyclic Terpane-22R	**120**	14a(H),17a(H)-20R-Cholestane	**1000**
17a(H)-22,29,30-Trisnorhopane-TM	**720**	13b,17a-20R-Ethyldiacholestane	**170**
17a/b,21b/a 28,30-Bisnorhopane	**200**	13a,17b-20S-Ethyldiacholestane	**55**
17a(H),21b(H)-25-Norhopane	**75**	14a,17a-20S-Methylcholestane	**220**
30-Norhopane	**2300**	14a,17a-20R-Methylcholestane	**400**
18a(H)-30-Norneohopane-C29Ts	**560**	14a(H),17a(H)-20S-Ethylcholestane	**450**
17a(H)-Diahopane	**110**	14a(H),17a(H)-20R-Ethylcholestane	**550**
30-Normoretane	**330**	14b(H),17b(H)-20R-Cholestane	**540**
18a(H)&18b(H)-Oleananes	**230**	14b(H),17b(H)-20S-Cholestane	**530**
Hopane	**3000**	14b,17b-20R-Methylcholestane	**490**
Moretane	**360**	14b,17b-20S-Methylcholestane	**650**
30-Homohopane-22S	**1100**	14b(H),17b(H)-20R-Ethylcholestane	**910**
30-Homohopane-22R	**980**	14b(H),17b(H)-20S-Ethylcholestane	**610**

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

N/A - Not Applicable

02/01/06 09:34

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34837.D
Acq On : 21 Jan 2006 5:18 am
Operator : AC
Sample : 0601019-03D
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 01 09:30:00 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

MSH 2/1/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.42	240	100109	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	9658m	229.55	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.96%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.51	191	401781m	4670.33	ng/mL	
84) Hopane (T19)	52.51	191	401310m	4664.85	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	57299m	666.05	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	32171m	373.96	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.16	191	36750m	427.18	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	39883	463.60	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	15580	181.10	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	15061m	175.07	ng/ml	
91) C28 Tricyclic Terpane-22S	46.61	191	18524m	215.32	ng/ml	
92) C28 Tricyclic Terpane-22R	46.78	191	20371m	236.79	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	23840	277.12	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.50	191	23922m	278.07	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.66	191	95186	1106.45	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	21896	254.52	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.99	191	16597m	192.92	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.22	191	96898	1126.35	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.43	191	26570m	308.85	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.21	191	10109	117.51	ng/ml	100
101) 30-Norhopane (T15)	51.12	191	314023m	3650.22	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.22	191	75034m	872.20	ng/ml	
103) 17a(H)-Diahopane (X)	51.34	191	14988	174.22	ng/ml	100
104) 30-Normoretane (T17)	51.90	191	45100	524.25	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.32	191	31603	367.36	ng/ml	100
106) Moretane (T20)	53.21	191	48296m	561.40	ng/ml	
107) 30-Homohopane-22S (T21)	54.33	191	150549m	1749.99	ng/ml	
108) 30-Homohopane-22R (T22)	54.57	191	131762	1531.61	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.92	191	121549	1412.89	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.32	191	67276	782.02	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.10	191	64478m	749.50	ng/ml	
112) 30,31-Trishomohopane-22R (	58.74	191	38402m	446.39	ng/ml	
113) Tetrakishomohopane-22S (T3	60.79	191	38529	447.86	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.71	191	25921	301.31	ng/ml	100
115) Pentakishomohopane-22S (T3	64.00	191	36730m	426.95	ng/ml	
116) Pentakishomohopane-22R (T3	65.33	191	26631m	309.56	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.45	217	33778m	802.84	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.86	217	18356m	436.29	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.57	217	15205m	361.39	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	23783m	565.28	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	67249m	1598.38	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.25	217	11108m	264.02	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34837.D
Acq On : 21 Jan 2006 5:18 am
Operator : AC
Sample : 0601019-03D
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 01 09:30:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

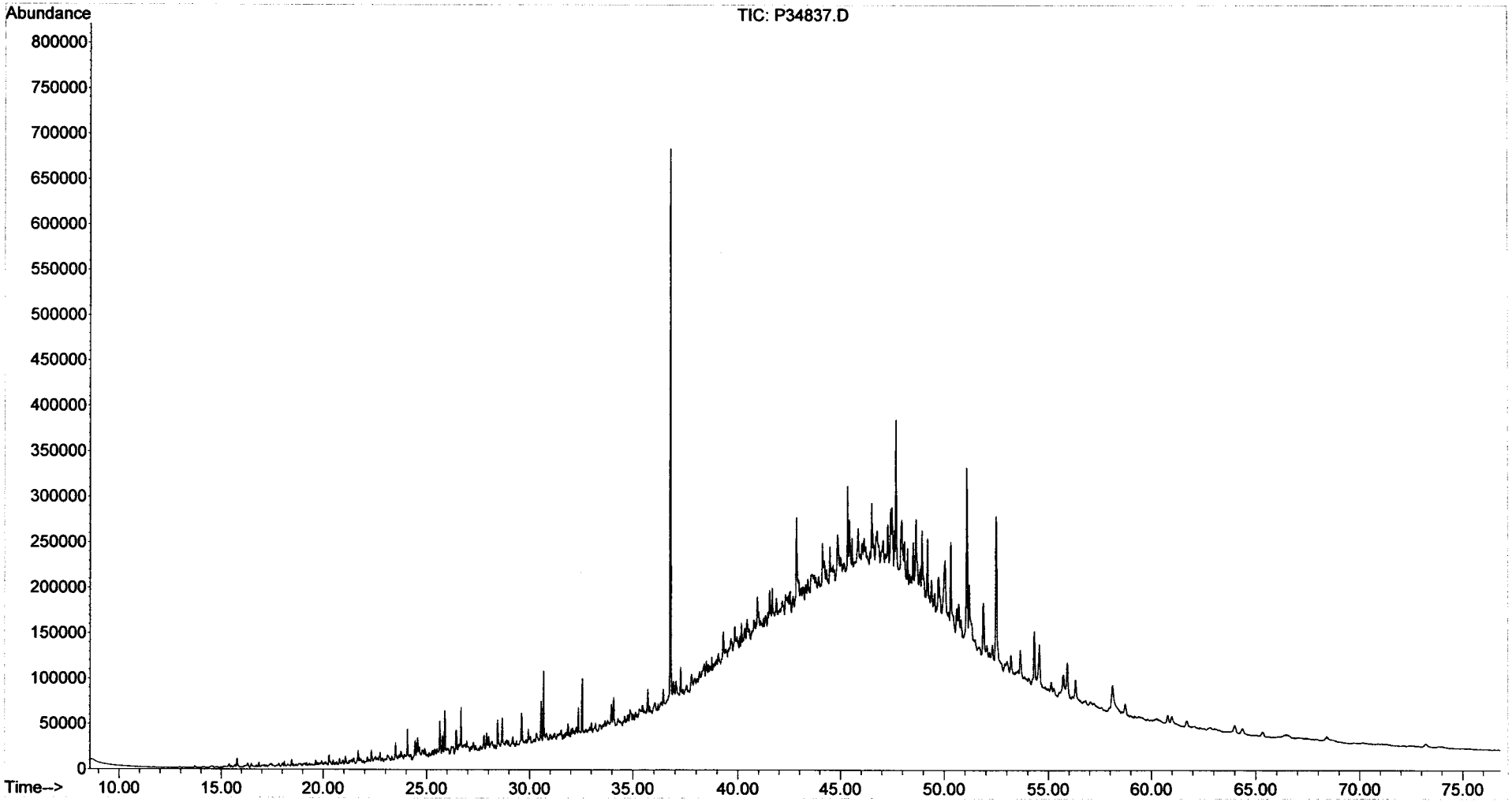
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	3637	86.44	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	14755m	350.70	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	26584m	631.85	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	29560m	702.58	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.71	217	36114m	858.36	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	35848m	852.04	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	34863m	828.63	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.86	218	32401m	770.11	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.95	218	42678m	1014.37	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.03	218	60054	1427.37	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.07	218	40108m	953.29	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34837.D
Acq On : 21 Jan 2006 5:18 am
Operator : AC
Sample : 0601019-03D
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 01 09:30:00 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-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/07/06	01/10/06	01/11/06	36.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	850	1000	18	30
C1-Naphthalenes	540	600	9	30
C2-Naphthalenes	1700	1800	1	30
C3-Naphthalenes	2700	3000	9	30
C4-Naphthalenes	2300	2800	17	30
Biphenyl	140	140	4	30
Dibenzofuran	210	200	4	30
Acenaphthylene	5200	4400	17	30
Acenaphthene	3000	3400	12	30
Fluorene	400	410	2	30
C1-Fluorenes	1400	1400	0	30
C2-Fluorenes	3200	3300	4	30
C3-Fluorenes	2800	2800	0	30
Anthracene	5900	5800	0	30
Phenanthrene	2800	2600	9	30
C1-Phenanthrenes/Anthracenes	11000	10000	7	30
C2-Phenanthrenes/Anthracenes	12000	11000	10	30
C3-Phenanthrenes/Anthracenes	5100	5200	3	30
C4-Phenanthrenes/Anthracenes	1400	1300	2	30
Retene	570	520	8	30
Dibenzothiophene	770	760	1	30
C1-Dibenzothiophenes	2400	2400	0	30
C2-Dibenzothiophenes	3900	3700	5	30
C3-Dibenzothiophenes	2800	2700	4	30
C4-Dibenzothiophenes	1200	1100	5	30
Benzo(b)fluorene	3800	3400	13	30
Fluoranthene	16000	15000	7	30
Pyrene	22000	21000	8	30
C1-Fluoranthenes/Pyrenes	22000	18000	18	30
C2-Fluoranthenes/Pyrenes	8400	7000	18	30
C3-Fluoranthenes/Pyrenes	3000	2600	14	30
C4-Fluoranthenes/Pyrenes	1200	1000	12	30
Naphthobenzothiophenes	3200	2700	18	30
C1-Naphthobenzothiophenes	2800	2400	14	30
C2-Naphthobenzothiophenes	1800	1700	8	30

N/A - Not Applicable

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-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/07/06	01/10/06	01/11/06	36.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	1100	1000	10	30
C4-Naphthobenzothiophenes	590	590	0	30
Benz[a]anthracene	10000	8700	17	30
Chrysene/Triphenylene	10000	8900	17	30
C1-Chrysenes	7800	6700	15	30
C2-Chrysenes	3300	2900	13	30
C3-Chrysenes	1500	1300	9	30
C4-Chrysenes	500	500	0	30
Benzo[b]fluoranthene	5400	4800	12	30
Benzo[k]fluoranthene	5800	4900	18	30
Benzo[a]fluoranthene	2300	2000	15	30
Benzo[e]pyrene	5500	4700	15	30
Benzo[a]pyrene	9300	7900	17	30
Perylene	1700	1400	20	30
Indeno[1,2,3-cd]pyrene	4100	3500	17	30
Dibenz[a,h]anthracene	1200	1000	12	30
Benzo[g,h,i]perylene	4400	3800	13	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	91	90	50-130
Pyrene-d10	120	118	50-130
Benzo[b]fluoranthene-d12	111	104	50-130

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

01/31/06 14:56

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/07/06	01/10/06	01/11/06	36.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	180	160	8	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	91	90	50-130
Pyrene-d10	120	118	50-130
Benzo[b]fluoranthene-d12	111	104	50-130

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

01/31/06 14:57

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/07/06	01/10/06	01/11/06	36.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	360	420	17	30
C24 Tricyclic Terpane	200	240	17	30
C25 Tricyclic Terpane	220	270	19	30
C24 Tetracyclic Terpane	250	300	17	30
C26 Tricyclic Terpane-22S	98	120	17	30
C26 Tricyclic Terpane-22R	99	110	12	30
C28 Tricyclic Terpane-22S	120	140	17	30
C28 Tricyclic Terpane-22R	120	150	21	30
C29 Tricyclic Terpane-22S	150	180	19	30
C29 Tricyclic Terpane-22R	140	180	21	30
18a-22,29,30-Trisnorneohopane-TS	590	710	18	30
C30 Tricyclic Terpane-22S	130	160	20	30
C30 Tricyclic Terpane-22R	100	120	17	30
17a(H)-22,29,30-Trisnorhopane-TM	600	720	19	30
17a/b,21b/a 28,30-Bisnorhopane	160	200	23	30
17a(H),21b(H)-25-Norhopane	62	75	18	30
30-Norhopane	2000	2300	16	30
18a(H)-30-Norneohopane-C29Ts	460	560	18	30
17a(H)-Diahopane	87	110	24	30
30-Normoretane	280	330	16	30
18a(H)&18b(H)-Oleananes	190	230	22	30
Hopane	2400	3000	21	30
Moretane	300	360	19	30
30-Homohopane-22S	940	1100	17	30
30-Homohopane-22R	810	980	18	30
30,31-Bishomohopane-22S	750	900	18	30
30,31-Bishomohopane-22R	420	500	18	30
30,31-Trishomohopane-22S	410	480	15	30
30,31-Trishomohopane-22R	240	280	16	30
Tetrakishomohopane-22S	240	290	19	30
Tetrakishomohopane-22R	170	190	15	30
Pentakishomohopane-22S	230	270	17	30
Pentakishomohopane-22R	160	200	22	30
13b(H),17a(H)-20S-Diacholestane	440	510	16	30
13b(H),17a(H)-20R-Diacholestane	230	280	18	30

N/A - Not Applicable

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Duplicate
•Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/07/06	01/10/06	01/11/06	36.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	190	230	19	30
14a(H),17a(H)-20S-Cholestane	280	360	23	30
14a(H),17a(H)-20R-Cholestane	820	1000	21	30
13b,17a-20R-Ethyldiacholestane	150	170	15	30
13a,17b-20S-Ethyldiacholestane	53	55	4	30
14a,17a-20S-Methylcholestane	170	220	27	30
14a,17a-20R-Methylcholestane	340	400	17	30
14a(H),17a(H)-20S-Ethylcholestane	370	450	19	30
14a(H),17a(H)-20R-Ethylcholestane	460	550	19	30
14b(H),17b(H)-20R-Cholestane	450	540	19	30
14b(H),17b(H)-20S-Cholestane	430	530	20	30
14b,17b-20R-Methylcholestane	400	490	21	30
14b,17b-20S-Methylcholestane	550	650	16	30
14b(H),17b(H)-20R-Ethylcholestane	760	910	18	30
14b(H),17b(H)-20S-Ethylcholestane	490	610	22	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	69	87	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.

02/01/06 09:34

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-14 (5.5-6.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-04**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/24/06	53.1	5.48	66.67	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**5000000**	E	Fluoranthene	**850000**
C1-Naphthalenes	**1700000**		Pyrene	**1200000**
C2-Naphthalenes	**780000**		C1-Fluoranthenes/Pyrenes	**920000**
C3-Naphthalenes	**310000**		C2-Fluoranthenes/Pyrenes	**270000**
C4-Naphthalenes	**110000**		C3-Fluoranthenes/Pyrenes	**79000**
Biphenyl	**220000**		C4-Fluoranthenes/Pyrenes	**21000**
Dibenzofuran	**52000**		Naphthobenzothiophenes	**100000**
Acenaphthylene	**100000**		C1-Naphthobenzothiophenes	**72000**
Acenaphthene	**1500000**		C2-Naphthobenzothiophenes	**31000**
Fluorene	**600000**		C3-Naphthobenzothiophenes	**12000**
C1-Fluorenes	**260000**		C4-Naphthobenzothiophenes	**3600**
C2-Fluorenes	**180000**		Benz[a]anthracene	**460000**
C3-Fluorenes	**95000**		Chrysene/Triphenylene	**420000**
Anthracene	**750000**		C1-Chrysenes	**280000**
Phenanthrene	**2300000**	E	C2-Chrysenes	**100000**
C1-Phenanthrenes/Anthracenes	**1400000**		C3-Chrysenes	**38000**
C2-Phenanthrenes/Anthracenes	**560000**		C4-Chrysenes	**12000**
C3-Phenanthrenes/Anthracenes	**180000**		Benzo[b]fluoranthene	**140000**
C4-Phenanthrenes/Anthracenes	**40000**		Benzo[k]fluoranthene	**200000**
Retene	**8900**		Benzo[a]fluoranthene	**78000**
Dibenzothiophene	**200000**		Benzo[e]pyrene	**180000**
C1-Dibenzothiophenes	**180000**		Benzo[a]pyrene	**330000**
C2-Dibenzothiophenes	**130000**		Perylene	**51000**
C3-Dibenzothiophenes	**63000**		Indeno[1,2,3-cd]pyrene	**120000**
C4-Dibenzothiophenes	**20000**		Dibenz[a,h]anthracene	**29000**
Benzo(b)fluorene	**130000**		Benzo[g,h,i]perylene	**140000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	73	50-130
Pyrene-d10	81	50-130
Benzo[b]fluoranthene-d12	73	50-130

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

02/01/06 08:24

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-14 (5.5-6.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-04**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/24/06	53.1	5.48	66.67	10	AC

Parameter	Result
Carbazole	17000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	73	50-130
Pyrene-d10	81	50-130
Benzo[b]fluoranthene-d12	73	50-130

N/A - Not Applicable

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27868.D
Acq On : 24 Jan 2006 4:35 pm
Operator : AC
Sample : 0601019-04
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 30 12:53:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for QA 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	41637m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	65629m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	1881	21.98	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.20%#			
58) Pyrene-d10	38.90	212	4298m	24.42	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.44%#			
81) Benzo[b]fluoranthene-d12	47.77	264	2962m	22.01	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.20%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	20.40	128	4122621m	22013.39	ng/mL E	
10) C1-Naphthalenes	23.10	142	1409534m	7526.43	ng/mL	
11) C2-Naphthalenes	25.95	156	641913m	3427.60	ng/mL	
12) C3-Naphthalenes	28.29	170	253556m	1353.90	ng/mL	
13) C4-Naphthalenes	31.05	184	89179m	476.19	ng/mL	
15) 2-Methylnaphthalene	23.10	142	870797	7304.71	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	535259	4717.35	ng/mL#	100
22) Biphenyl	24.98	154	143374	955.38	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.60	156	87304m	850.17	ng/mL	
24) Dibenzofuran	28.08	168	37746m	227.85	ng/mL	
25) Acenaphthylene	26.70	152	82203m	442.40	ng/mL	
26) Acenaphthene	27.43	153	743736m	6529.90	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.98	170	26846m	299.56	ng/mL	
28) Fluorene	29.45	166	346280m	2600.19	ng/mL	
29) C1-Fluorenes	31.69	180	152028m	1141.56	ng/mL	
30) C2-Fluorenes	33.87	194	103284m	775.55	ng/mL	
31) C3-Fluorenes	36.56	208	55430m	416.22	ng/mL	
32) Dibenzothiophene	32.80	184	151678m	851.79	ng/mL	
37) C1-Dibenzothiophenes	34.57	198	135993m	763.70	ng/mL	
38) C2-Dibenzothiophenes	36.26	212	102554m	575.92	ng/mL	
39) C3-Dibenzothiophenes	38.06	226	49112m	275.80	ng/mL	
40) C4-Dibenzothiophenes	39.74	240	15172m	85.20	ng/mL	
41) Phenanthrene	33.29	178	1906967	10035.59	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.36	192	1119404m	5890.97	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.53	206	495303m	2606.58	ng/mL	
49) 5AA IS BKGD	37.30	206	27444	144.43	ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.36	220	149322m	785.82	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.55	234	33599m	176.82	ng/mL	
52) Retene	40.28	234	1682m	39.01	ng/mL	
53) Anthracene	33.48	178	579336	3282.75	ng/mL	99
54) Carbazole	34.15	167	12243m	72.79	ng/mL	
55) 1-Methylphenanthrene	35.79	192	170725	1295.08	ng/mL	100
56) Fluoranthene	38.08	202	753765m	3716.61	ng/mL	
57) Benzo(b)fluorene	40.60	216	72547m	581.88	ng/mL	
59) Pyrene	38.98	202	1064966	5127.97	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.35	216	835680m	4023.92	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.02	230	245830m	1183.71	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.29	244	71374m	343.68	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.54	258	19364m	93.24	ng/mL	
64) Naphthobenzothiophene	42.83	234	56587	293.83	ng/ml#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27868.D
Acq On : 24 Jan 2006 4:35 pm
Operator : AC
Sample : 0601019-04
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 30 12:53:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

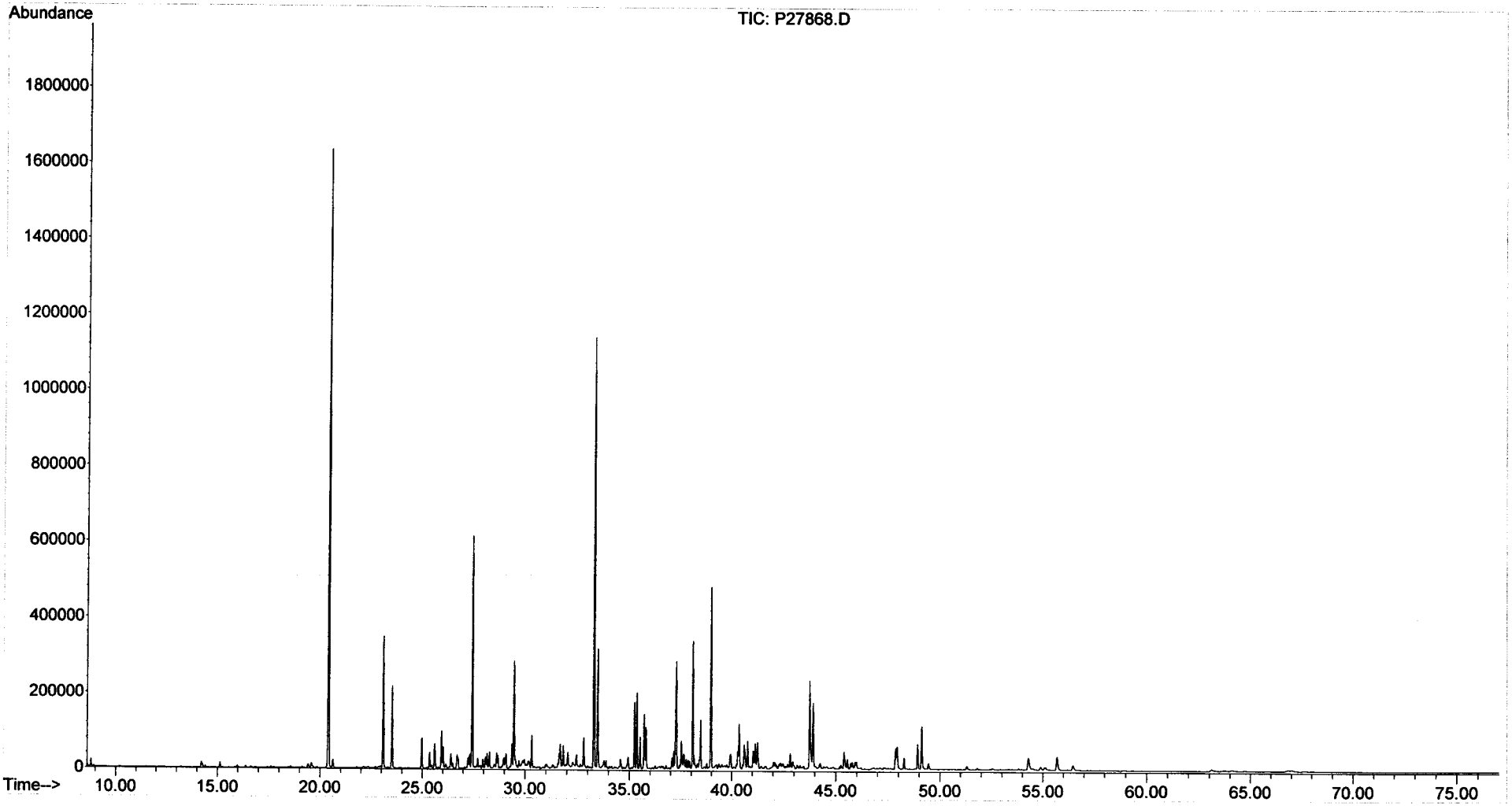
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.83	234	56604	293.92	ng/mL#	67
66) Naphthobenzothiophene-1,2-	43.18	234	13220m	68.65	ng/mL	
67) Naphthobenzothiophene-2,3-	43.47	234	14570m	75.66	ng/mL	
68) C1-Naphthobenzothiophenes	44.23	248	60913m	316.29	ng/ml	
69) C2-Naphthobenzothiophenes	45.73	262	25777m	133.85	ng/ml	
70) C3-Naphthobenzothiophenes	47.63	276	9673m	50.23	ng/ml	
71) C4-Naphthobenzothiophenes	49.02	290	3039m	15.78	ng/mL	
73) Benz[a]anthracene	43.76	228	372616m	1988.14	ng/mL	
74) Chrysene	43.92	228	343079m	1822.56	ng/mL	
75) Chrysene/Triphenylene	43.92	228	344597m	1830.62	ng/mL	
76) C1-Chrysenes	45.39	242	228800m	1215.47	ng/mL	
77) C2-Chrysenes	47.10	256	83326m	442.66	ng/mL	
78) BBF-d12 Surr BKGD	47.73	256	908	4.82	ng/mL	100
79) C3-Chrysenes	48.79	270	31149m	165.47	ng/mL	
80) C4-Chrysenes	49.85	284	10148m	53.91	ng/mL	
82) Benzo[b]fluoranthene	47.86	252	124577	618.90	ng/mL	99
83) Benzo[k]fluoranthene	47.92	252	180714	858.53	ng/mL	99
84) Benzo[a]fluoranthene	48.27	252	72018m	342.14	ng/mL	
85) Benzo[e]pyrene	48.91	252	155669m	802.24	ng/mL	
86) Benzo[a]pyrene	49.12	252	278361m	1434.89	ng/mL	
87) Perylene	49.46	252	43007m	222.37	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	98987m	514.81	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	22740m	125.76	ng/mL	
90) Benzo[g,h,i]perylene	55.69	276	119752m	597.33	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27868.D
Acq On : 24 Jan 2006 4:35 pm
Operator : AC
Sample : 0601019-04
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 30 12:53:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-14 (5.5-6.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-04E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/26/06	53.1	5.48	66.67	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**6000000**		Fluoranthene	2300	U
C1-Naphthalenes	3800	U	Pyrene	2000	U
C2-Naphthalenes	3800	U	C1-Fluoranthenes/Pyrenes	2000	U
C3-Naphthalenes	3800	U	C2-Fluoranthenes/Pyrenes	2000	U
C4-Naphthalenes	3800	U	C3-Fluoranthenes/Pyrenes	2000	U
Biphenyl	2100	U	C4-Fluoranthenes/Pyrenes	2000	U
Dibenzofuran	2700	U	Naphthobenzothiophenes	2800	U
Acenaphthylene	4200	U	C1-Naphthobenzothiophenes	2800	U
Acenaphthene	2600	U	C2-Naphthobenzothiophenes	2800	U
Fluorene	2600	U	C3-Naphthobenzothiophenes	2800	U
C1-Fluorenes	2600	U	C4-Naphthobenzothiophenes	2800	U
C2-Fluorenes	2600	U	Benz[a]anthracene	3600	U
C3-Fluorenes	2600	U	Chrysene/Triphenylene	2500	U
Anthracene	3100	U	C1-Chrysenes	2500	U
Phenanthrene	**2600000**		C2-Chrysenes	2500	U
C1-Phenanthrenes/Anthracenes	3300	U	C3-Chrysenes	2500	U
C2-Phenanthrenes/Anthracenes	3300	U	C4-Chrysenes	2500	U
C3-Phenanthrenes/Anthracenes	3300	U	Benzo[b]fluoranthene	2400	U
C4-Phenanthrenes/Anthracenes	3300	U	Benzo[k]fluoranthene	4600	U
Retene	3300	U	Benzo[a]fluoranthene	4600	U
Dibenzothiophene	2500	U	Benzo[e]pyrene	3100	U
C1-Dibenzothiophenes	2500	U	Benzo[a]pyrene	3200	U
C2-Dibenzothiophenes	2500	U	Perylene	4000	U
C3-Dibenzothiophenes	2500	U	Indeno[1,2,3-cd]pyrene	5500	U
C4-Dibenzothiophenes	2500	U	Dibenz[a,h]anthracene	4400	U
Benzo(b)fluorene	2300	U	Benzo[g,h,i]perylene	4000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	90	50-130

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

02/01/06 08:23

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27922.D
Acq On : 26 Jan 2006 5:50 pm
Operator : AC
Sample : 0601019-04-RE
Misc : 100X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 15:40:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for WD 1/31/06

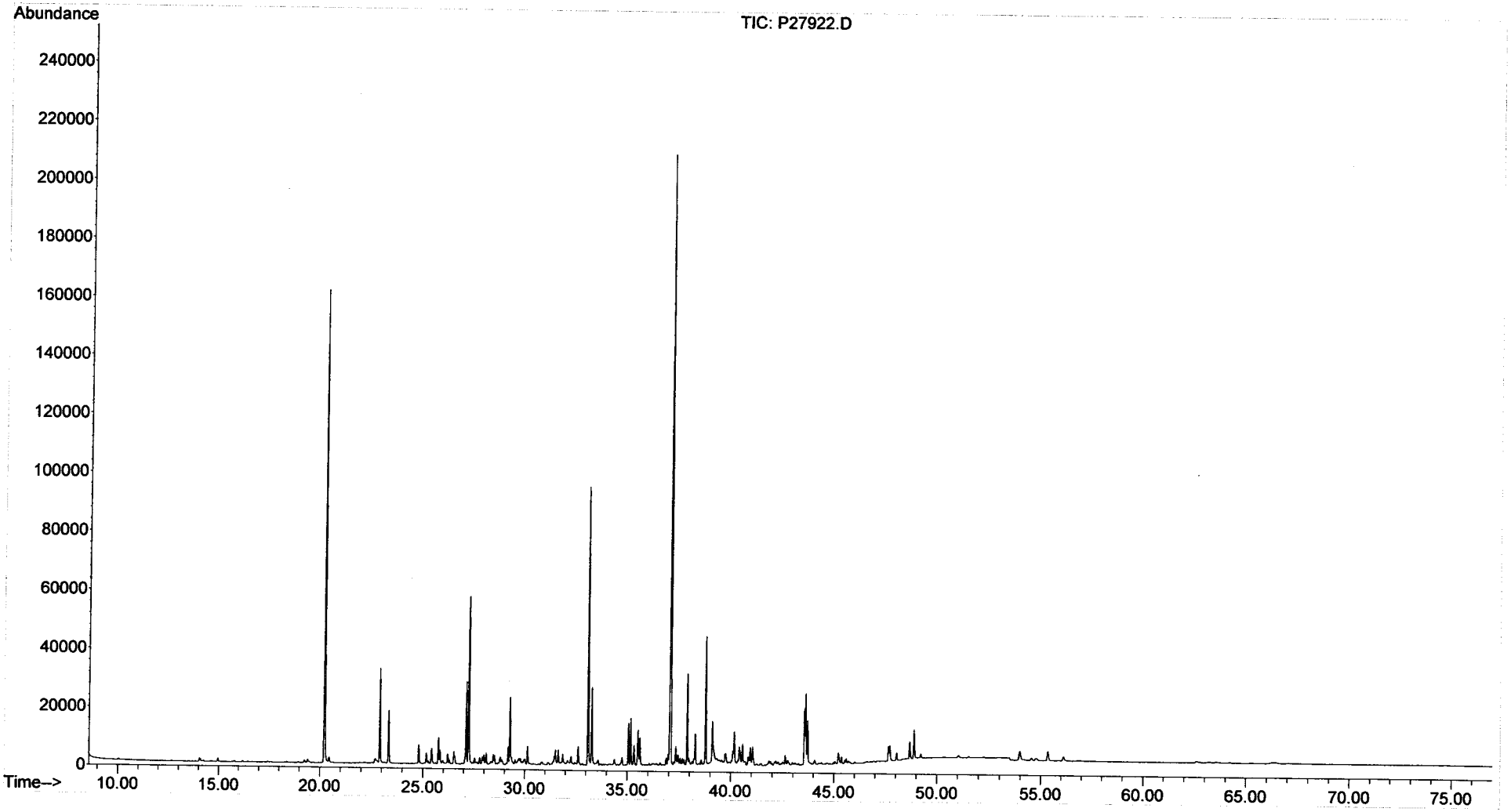
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33267m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	49647m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	168m	2.46	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.25%#	
58) Pyrene-d10	38.70	212	351m	2.50	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.25%#	
81) Benzo[b]fluoranthene-d12	47.56	264	274m	2.69	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.27%#	
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	393649m	2630.80	ng/mL	
41) Phenanthrene	33.09	178	171218	1127.76	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27922.D
Acq On : 26 Jan 2006 5:50 pm
Operator : AC
Sample : 0601019-04-RE
Misc : 100X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 15:40:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-14 (5.5-6.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-04**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/21/06	53.1	5.48	7.5	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	460	30,31-Bishomohopane-22S	220
C24 Tricyclic Terpane	280	30,31-Bishomohopane-22R	140
C25 Tricyclic Terpane	240	30,31-Trishomohopane-22S	100
C24 Tetracyclic Terpane	160	30,31-Trishomohopane-22R	80
C26 Tricyclic Terpane-22S	100	Tetrakishomohopane-22S	76
C26 Tricyclic Terpane-22R	97	Tetrakishomohopane-22R	46
C28 Tricyclic Terpane-22S	99	Pentakishomohopane-22S	50
C28 Tricyclic Terpane-22R	110	Pentakishomohopane-22R	37
C29 Tricyclic Terpane-22S	64	13b(H),17a(H)-20S-Diacholestane	300
C29 Tricyclic Terpane-22R	58	13b(H),17a(H)-20R-Diacholestane	150
18a-22,29,30-Trisnorneohopane-TS	280	13b,17a-20S-Methyldiacholestane	100
C30 Tricyclic Terpane-22S	64	14a(H),17a(H)-20S-Cholestane	130
C30 Tricyclic Terpane-22R	34	14a(H),17a(H)-20R-Cholestane	420
17a(H)-22,29,30-Trisnorhopane-TM	480	13b,17a-20R-Ethyldiacholestane	70
17a/b,21b/a 28,30-Bisnorhopane	120	13a,17b-20S-Ethyldiacholestane	19 J
17a(H),21b(H)-25-Norhopane	22 J	14a,17a-20S-Methylcholestane	53
30-Norhopane	650	14a,17a-20R-Methylcholestane	180
18a(H)-30-Norneohopane-C29Ts	300	14a(H),17a(H)-20S-Ethylcholestane	110
17a(H)-Diahopane	96	14a(H),17a(H)-20R-Ethylcholestane	130
30-Normoretane	190	14b(H),17b(H)-20R-Cholestane	170
18a(H)&18b(H)-Oleananes	150	14b(H),17b(H)-20S-Cholestane	160
Hopane	1100	14b,17b-20R-Methylcholestane	160
Moretane	210	14b,17b-20S-Methylcholestane	200
30-Homohopane-22S	280	14b(H),17b(H)-20R-Ethylcholestane	170
30-Homohopane-22R	270	14b(H),17b(H)-20S-Ethylcholestane	180

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

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

02/01/06 09:20

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34838.D
Acq On : 21 Jan 2006 6:48 am
Operator : AC
Sample : 0601019-04
Misc : 1X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 25 08:48:15 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

AMS 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	43.41	240	99371	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.93	217	87675	2099.34	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 209.93%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	35776m	418.95	ng/mL	
84) Hopane (T19)	52.49	191	35589m	416.76	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	15225	178.29	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.67	191	9284	108.72	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	7793m	91.26	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	5196	60.85	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	3351m	39.24	ng/ml	
90) C26 Tricyclic Terpane-22R	44.32	191	3228m	37.80	ng/ml	
91) C28 Tricyclic Terpane-22S	46.60	191	3278m	38.39	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	3557m	41.65	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	2111m	24.72	ng/ml	
94) C29 Tricyclic Terpane-22R	47.48	191	1920m	22.48	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	9154m	107.20	ng/ml	
96) C30 Tricyclic Terpane-22S	48.73	191	2102m	24.62	ng/mL	
97) C30 Tricyclic Terpane-22R	48.97	191	1141m	13.36	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	16048	187.93	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	4154m	48.64	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	713m	8.35	ng/ml	
101) 30-Norhopane (T15)	51.08	191	21567m	252.56	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	9887m	115.78	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	3190m	37.36	ng/ml	
104) 30-Normoretane (T17)	51.88	191	6174	72.30	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.30	191	5006m	58.62	ng/ml	
106) Moretane (T20)	53.19	191	7064m	82.72	ng/ml	
107) 30-Homohopane-22S (T21)	54.31	191	9452	110.69	ng/ml	100
108) 30-Homohopane-22R (T22)	54.54	191	9092	106.47	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.89	191	7354m	86.12	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.30	191	4531m	53.06	ng/ml	
111) 30,31-Trishomohopane-22S (	58.07	191	3467m	40.60	ng/ml	
112) 30,31-Trishomohopane-22R (	58.73	191	2635m	30.86	ng/ml	
113) Tetrakishomohopane-22S (T3	60.77	191	2506	29.35	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	1528	17.89	ng/ml	100
115) Pentakishomohopane-22S (T3	63.96	191	1640m	19.21	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	1226m	14.36	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	4864m	116.47	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	2491m	59.65	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	1645m	39.39	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.43	217	2113m	50.59	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	6808m	163.01	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.24	217	1138m	27.25	ng/ml	

2nd ✓ MS 1/26/06 1/25/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34838.D
Acq On : 21 Jan 2006 6:48 am
Operator : AC
Sample : 0601019-04
Misc : 1X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 25 08:48:15 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

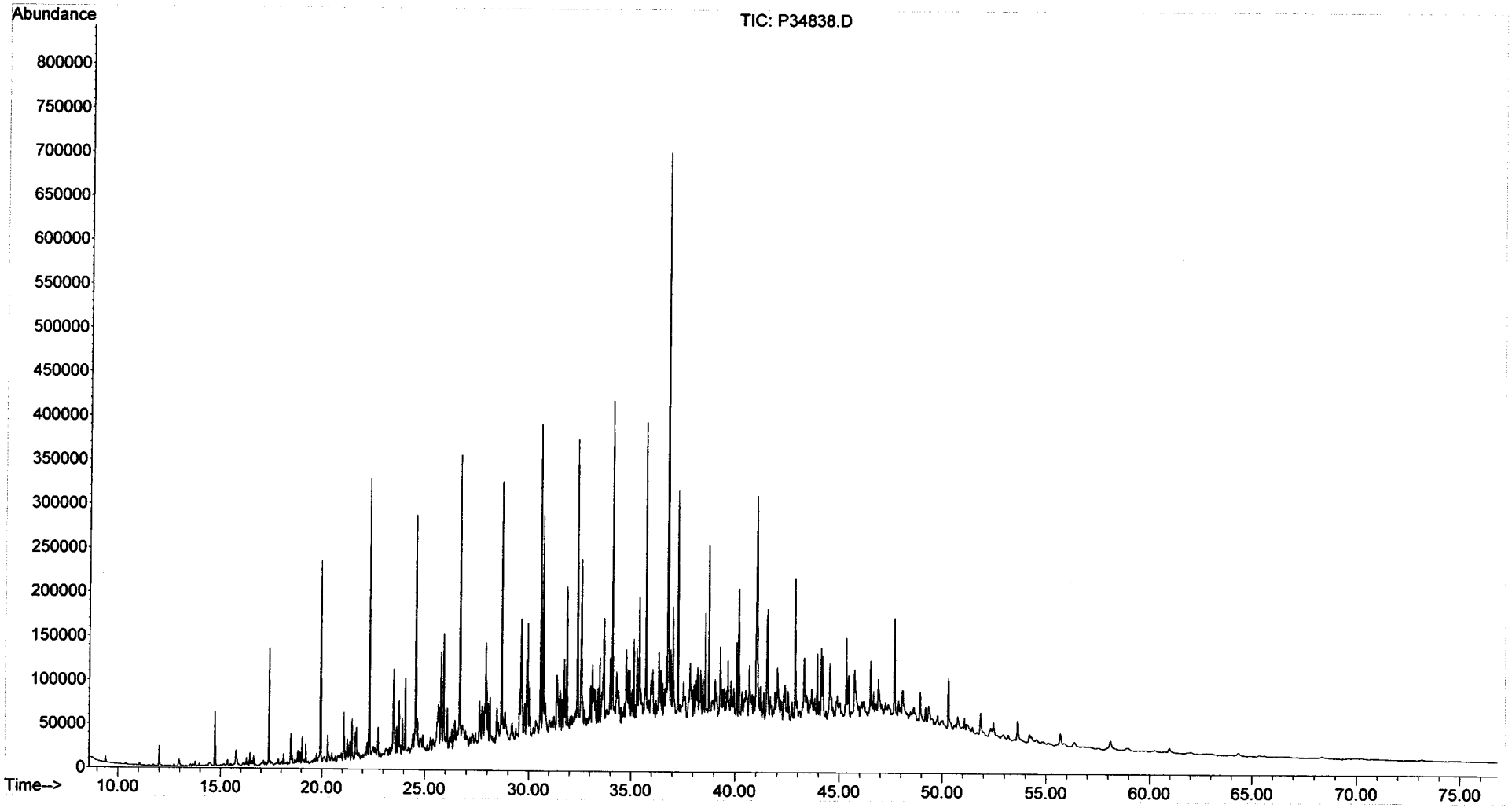
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	303m	7.26	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.68	217	854m	20.45	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	2999m	71.81	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	1805m	43.22	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	2112m	50.57	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	2734m	65.46	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	2614m	62.59	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	2665m	63.81	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	3156m	75.57	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	2776m	66.47	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	2973m	71.19	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34838.D
Acq On : 21 Jan 2006 6:48 am
Operator : AC
Sample : 0601019-04
Misc : 1X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 25 08:48:15 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-13B (14.6-15.6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-05**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/24/06	87.3	5.76	80	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**4300000**	E	Fluoranthene	**830000**
C1-Naphthalenes	**1700000**	E	Pyrene	**1200000**
C2-Naphthalenes	**860000**		C1-Fluoranthenes/Pyrenes	**870000**
C3-Naphthalenes	**300000**		C2-Fluoranthenes/Pyrenes	**230000**
C4-Naphthalenes	**91000**		C3-Fluoranthenes/Pyrenes	**60000**
Biphenyl	**230000**		C4-Fluoranthenes/Pyrenes	**16000**
Dibenzofuran	**55000**		Naphthobenzothiophenes	**99000**
Acenaphthylene	**970000**		C1-Naphthobenzothiophenes	**69000**
Acenaphthene	**340000**		C2-Naphthobenzothiophenes	**27000**
Fluorene	**590000**		C3-Naphthobenzothiophenes	**10000**
C1-Fluorenes	**260000**		C4-Naphthobenzothiophenes	**3100**
C2-Fluorenes	**150000**		Benz[a]anthracene	**440000**
C3-Fluorenes	**74000**		Chrysene/Triphenylene	**400000**
Anthracene	**660000**		C1-Chrysenes	**250000**
Phenanthrene	**2200000**	E	C2-Chrysenes	**77000**
C1-Phenanthrenes/Anthracenes	**1200000**		C3-Chrysenes	**26000**
C2-Phenanthrenes/Anthracenes	**450000**		C4-Chrysenes	**8400**
C3-Phenanthrenes/Anthracenes	**130000**		Benzo[b]fluoranthene	**140000**
C4-Phenanthrenes/Anthracenes	**27000**		Benzo[k]fluoranthene	**190000**
Retene	230	U	Benzo[a]fluoranthene	**77000**
Dibenzothiophene	**210000**		Benzo[e]pyrene	**170000**
C1-Dibenzothiophenes	**180000**		Benzo[a]pyrene	**330000**
C2-Dibenzothiophenes	**130000**		Perylene	**49000**
C3-Dibenzothiophenes	**57000**		Indeno[1,2,3-cd]pyrene	**110000**
C4-Dibenzothiophenes	**16000**		Dibenz[a,h]anthracene	**26000**
Benzo(b)fluorene	**130000**		Benzo[g,h,i]perylene	**130000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	84	50-130
Benzo[b]fluoranthene-d12	75	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.

02/01/06 08:25

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-13B (14.6-15.6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-05**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/24/06	87.3	5.76	80	10	AC

Parameter	Result
Carbazole	**14000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	84	50-130
Benzo[b]fluoranthene-d12	75	50-130

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27870.D
Acq On : 24 Jan 2006 6:11 pm
Operator : AC
Sample : 0601019-05
Misc : 10X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 30 13:02:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

CMS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	38424m	500.00 ng/mL	0.00
72) Chrysene-d12	43.82	240	60269m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.96	152	1571	19.89 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.99%#	
58) Pyrene-d10	38.90	212	3412m	21.01 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.10%#	
81) Benzo[b]fluoranthene-d12	47.77	264	2329m	18.85 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.89%#	
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	20.40	128	4688801m	27130.14 ng/mL E	
10) C1-Naphthalenes	23.10	142	1884708m	10905.22 ng/mL E	
11) C2-Naphthalenes	25.95	156	939326m	5435.09 ng/mL	
12) C3-Naphthalenes	28.29	170	325297m	1882.22 ng/mL	
13) C4-Naphthalenes	31.05	184	99078m	573.28 ng/mL	
15) 2-Methylnaphthalene	23.10	142	1168058	10617.63 ng/mL# E	100
16) 1-Methylnaphthalene	23.52	142	712591	6805.36 ng/mL#	100
22) Biphenyl	24.98	154	196382m	1418.02 ng/mL	
23) 2,6-Dimethylnaphthalene	25.60	156	133116m	1404.68 ng/mL	
24) Dibenzofuran	28.08	168	52635	344.30 ng/mL	100
25) Acenaphthylene	26.70	152	1042356m	6078.80 ng/mL	
26) Acenaphthene	27.43	153	221160m	2104.12 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.98	170	28415m	343.58 ng/mL	
28) Fluorene	29.45	166	455004m	3702.28 ng/mL	
29) C1-Fluorenes	31.68	180	202904m	1650.99 ng/mL	
30) C2-Fluorenes	33.87	194	119268m	970.46 ng/mL	
31) C3-Fluorenes	36.56	208	57397m	467.03 ng/mL	
32) Dibenzothiophene	32.80	184	219311m	1334.59 ng/mL	
37) C1-Dibenzothiophenes	34.57	198	189883m	1155.51 ng/mL	
38) C2-Dibenzothiophenes	36.25	212	130555m	794.47 ng/mL	
39) C3-Dibenzothiophenes	38.06	226	58999m	359.03 ng/mL	
40) C4-Dibenzothiophenes	39.74	240	16062m	97.74 ng/mL	
41) Phenanthrene	33.29	178	2482412	14156.33 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.36	192	1342743m	7657.19 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.53	206	527045m	3005.55 ng/mL	
49) 5AA IS BKGD	37.29	206	28797	164.22 ng/mL	100
50) C3-Phenanthrenes/Anthracen	39.36	220	147047m	838.56 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.57	234	29774m	169.79 ng/mL	
53) Anthracene	33.48	178	678600	4166.75 ng/mL	100
54) Carbazole	34.15	167	13356m	86.05 ng/mL	
55) 1-Methylphenanthrene	35.79	192	205849	1692.10 ng/mL	100
56) Fluoranthene	38.08	202	979063m	5231.17 ng/mL	
57) Benzo(b)fluorene	40.60	216	96010m	834.46 ng/mL	
59) Pyrene	38.98	202	1407059	7341.74 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.35	216	1045797m	5456.75 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.02	230	282037m	1471.61 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.89	244	72120m	376.31 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.53	258	19287m	100.64 ng/mL	
64) Naphthobenzothiophene	42.83	234	73654	414.43 ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.83	234	73654	414.43 ng/mL#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27870.D
Acq On : 24 Jan 2006 6:11 pm
Operator : AC
Sample : 0601019-05
Misc : 10X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 30 13:02:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

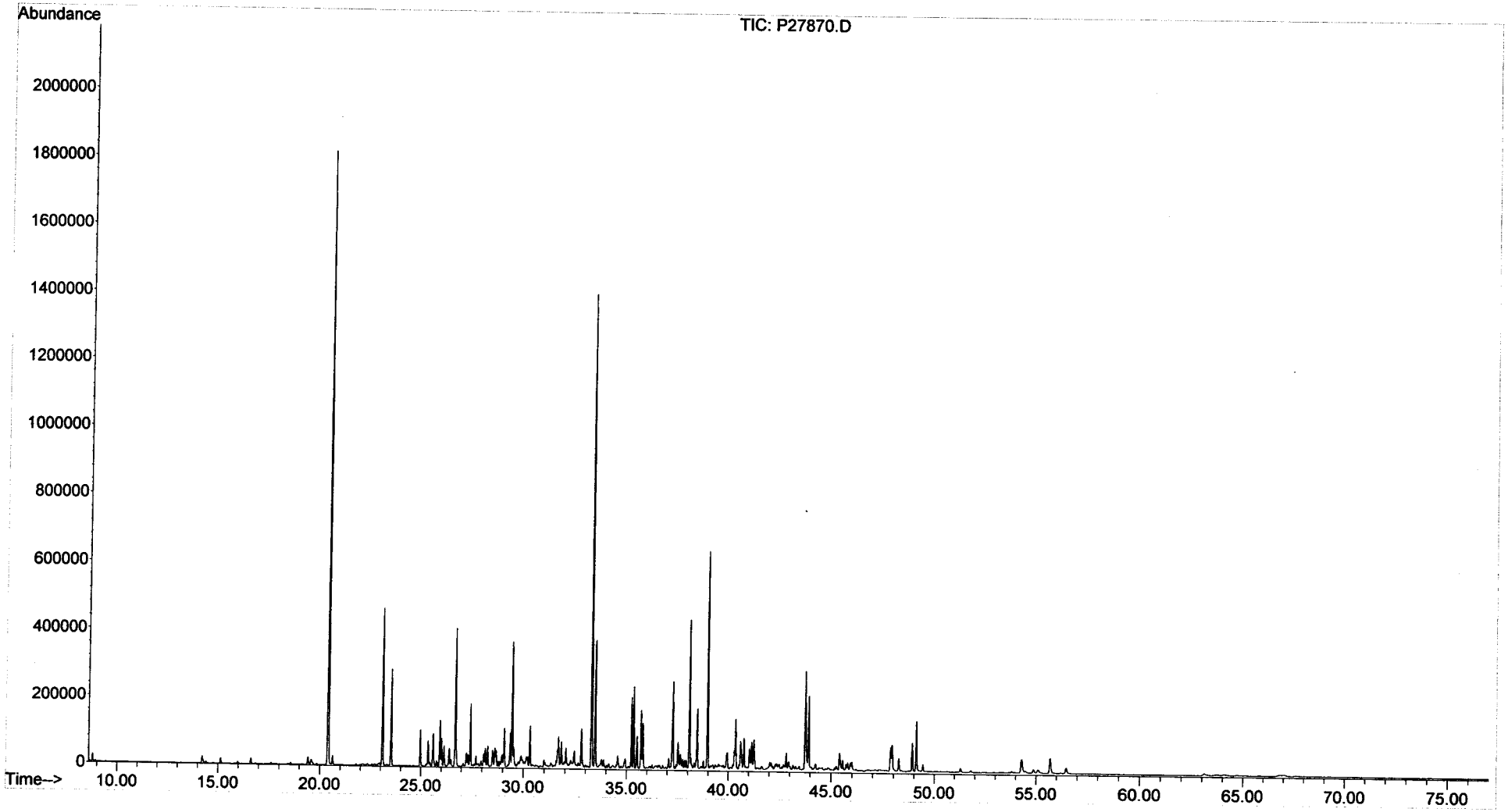
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	43.16	234	17908m	100.76	ng/mL	
67) Naphthobenzothiophene-2,3-	43.47	234	19081m	107.36	ng/mL	
68) C1-Naphthobenzothiophenes	44.23	248	77168m	434.20	ng/ml	
69) C2-Naphthobenzothiophenes	45.73	262	30160m	169.70	ng/ml	
70) C3-Naphthobenzothiophenes	47.63	276	11362m	63.93	ng/ml	
71) C4-Naphthobenzothiophenes	49.02	290	3421m	19.25	ng/mL	
73) Benz[a]anthracene	43.76	228	471410m	2738.97	ng/mL	
74) Chrysene	43.92	228	432109m	2499.67	ng/mL	
75) Chrysene/Triphenylene	43.92	228	434034m	2510.80	ng/mL	
76) C1-Chrysenes	45.39	242	267805m	1549.20	ng/mL	
77) C2-Chrysenes	47.10	256	84904m	491.15	ng/mL	
78) BBF-d12 Surr BKGD	47.73	256	949	5.49	ng/mL	100
79) C3-Chrysenes	48.77	270	27711m	160.30	ng/mL	
80) C4-Chrysenes	49.85	284	9112m	52.71	ng/mL	
82) Benzo[b]fluoranthene	47.85	252	162581	879.54	ng/mL	100
83) Benzo[k]fluoranthene	47.92	252	231383	1197.01	ng/mL	100
84) Benzo[a]fluoranthene	48.25	252	93728m	484.88	ng/mL	
85) Benzo[e]pyrene	48.91	252	194083m	1089.16	ng/mL	
86) Benzo[a]pyrene	49.12	252	366901m	2059.50	ng/mL	
87) Perylene	49.44	252	54367m	306.11	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	126597m	716.96	ng/mL	
89) Dibenz[a,h]anthracene	54.33	278	27422m	165.14	ng/mL	
90) Benzo[g,h,i]perylene	55.70	276	150599m	818.00	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27870.D
Acq On : 24 Jan 2006 6:11 pm
Operator : AC
Sample : 0601019-05
Misc : 10X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 30 13:02:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-13B (14.6-15.6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-05E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/26/06	87.3	5.76	80	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**5200000**		Fluoranthene	1600	U
C1-Naphthalenes	**2000000**		Pyrene	1400	U
C2-Naphthalenes	2600	U	C1-Fluoranthenes/Pyrenes	1400	U
C3-Naphthalenes	2600	U	C2-Fluoranthenes/Pyrenes	1400	U
C4-Naphthalenes	2600	U	C3-Fluoranthenes/Pyrenes	1400	U
Biphenyl	1400	U	C4-Fluoranthenes/Pyrenes	1400	U
Dibenzofuran	1900	U	Naphthobenzothiophenes	1900	U
Acenaphthylene	2900	U	C1-Naphthobenzothiophenes	1900	U
Acenaphthene	1800	U	C2-Naphthobenzothiophenes	1900	U
Fluorene	1800	U	C3-Naphthobenzothiophenes	1900	U
C1-Fluorenes	1800	U	C4-Naphthobenzothiophenes	1900	U
C2-Fluorenes	1800	U	Benz[a]anthracene	2500	U
C3-Fluorenes	1800	U	Chrysene/Triphenylene	1700	U
Anthracene	2100	U	C1-Chrysenes	1700	U
Phenanthrene	**2500000**		C2-Chrysenes	1700	U
C1-Phenanthrenes/Anthracenes	2300	U	C3-Chrysenes	1700	U
C2-Phenanthrenes/Anthracenes	2300	U	C4-Chrysenes	1700	U
C3-Phenanthrenes/Anthracenes	2300	U	Benzo[b]fluoranthene	1700	U
C4-Phenanthrenes/Anthracenes	2300	U	Benzo[k]fluoranthene	3200	U
Retene	2300	U	Benzo[a]fluoranthene	3200	U
Dibenzothiophene	1800	U	Benzo[e]pyrene	2200	U
C1-Dibenzothiophenes	1800	U	Benzo[a]pyrene	2200	U
C2-Dibenzothiophenes	1800	U	Perylene	2800	U
C3-Dibenzothiophenes	1800	U	Indeno[1,2,3-cd]pyrene	3800	U
C4-Dibenzothiophenes	1800	U	Dibenz[a,h]anthracene	3000	U
Benzo(b)fluorene	1600	U	Benzo[g,h,i]perylene	2800	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	88	50-130
Pyrene-d10	90	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

02/01/06 08:25

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27924.D
Acq On : 26 Jan 2006 7:27 pm
Operator : AC
Sample : 0601019-05-RE
Misc : 100X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 15:42:48 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

MS for WW 1/31/06

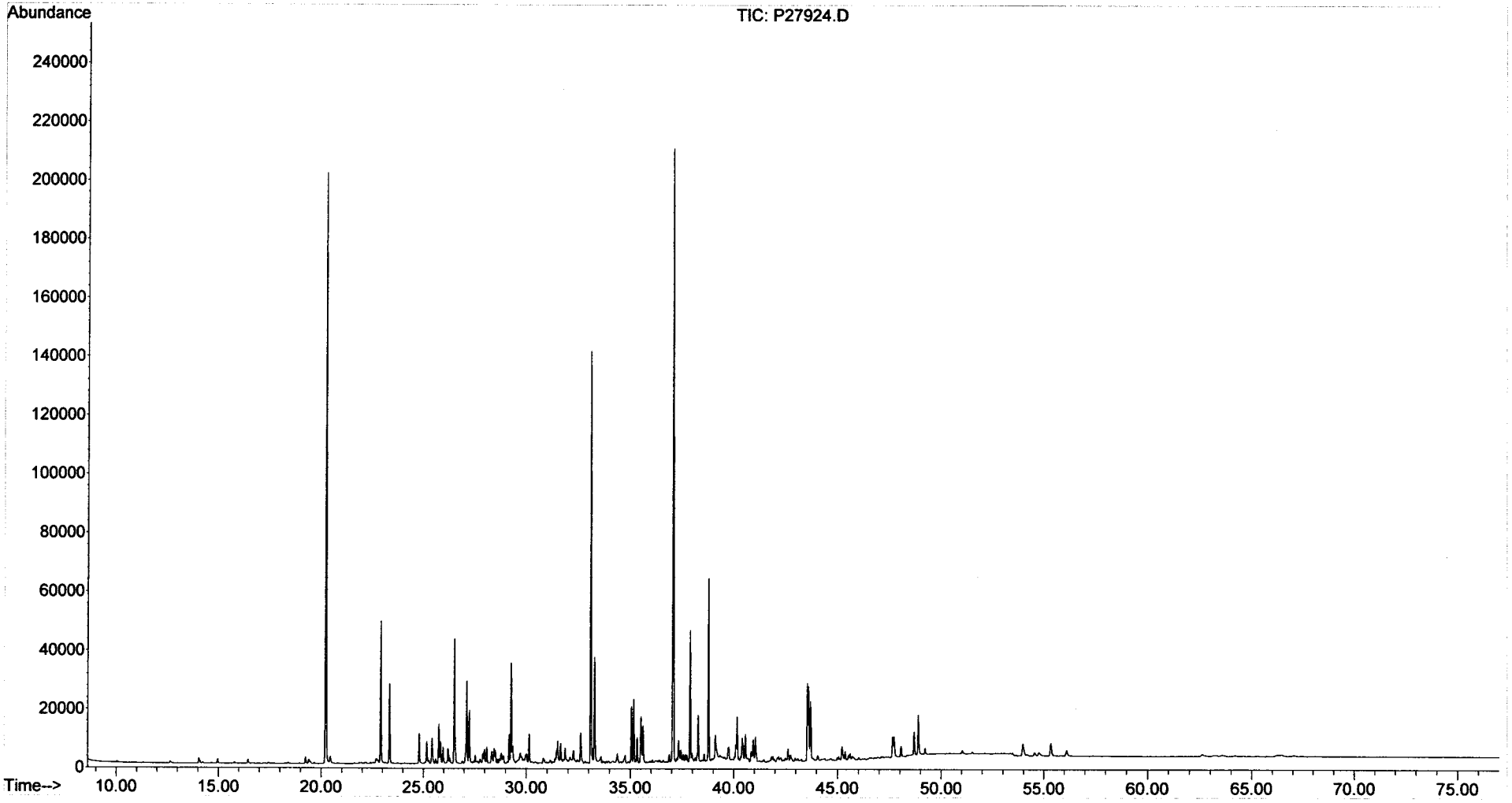
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33578m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	49811m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	152m	2.20	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.22%#	
58) Pyrene-d10	38.70	212	321m	2.26	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.23%#	
81) Benzo[b]fluoranthene-d12	47.56	264	228m	2.23	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.22%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	20.21	128	490311m	3246.46	ng/mL	
10) C1-Naphthalenes	22.91	142	189999m	1258.03	ng/mL	
15) 2-Methylnaphthalene	22.91	142	117241	1219.52	ng/mL#	100
41) Phenanthrene	33.09	178	244364	1594.64	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27924.D
Acq On : 26 Jan 2006 7:27 pm
Operator : AC
Sample : 0601019-05-RE
Misc : 100X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 15:42:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-13B (14.6-15.6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-05**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/21/06	87.3	5.76	10.5	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	340		30,31-Bishomohopane-22S	98	
C24 Tricyclic Terpane	200		30,31-Bishomohopane-22R	74	
C25 Tricyclic Terpane	150		30,31-Trishomohopane-22S	58	
C24 Tetracyclic Terpane	84		30,31-Trishomohopane-22R	37	
C26 Tricyclic Terpane-22S	61		Tetrakishomohopane-22S	35	
C26 Tricyclic Terpane-22R	55		Tetrakishomohopane-22R	18	J
C28 Tricyclic Terpane-22S	64		Pentakishomohopane-22S	5.9	U
C28 Tricyclic Terpane-22R	71		Pentakishomohopane-22R	5.9	U
C29 Tricyclic Terpane-22S	62		13b(H),17a(H)-20S-Diacholestane	220	
C29 Tricyclic Terpane-22R	54		13b(H),17a(H)-20R-Diacholestane	110	
18a-22,29,30-Trisnorneohopane-TS	140		13b,17a-20S-Methyldiacholestane	71	
C30 Tricyclic Terpane-22S	46		14a(H),17a(H)-20S-Cholestane	140	
C30 Tricyclic Terpane-22R	37		14a(H),17a(H)-20R-Cholestane	320	
17a(H)-22,29,30-Trisnorhopane-TM	190		13b,17a-20R-Ethyldiacholestane	59	
17a/b,21b/a 28,30-Bisnorhopane	63		13a,17b-20S-Ethyldiacholestane	8.9	J
17a(H),21b(H)-25-Norhopane	26		14a,17a-20S-Methylcholestane	68	
30-Norhopane	350		14a,17a-20R-Methylcholestane	140	
18a(H)-30-Norneohopane-C29Ts	120		14a(H),17a(H)-20S-Ethylcholestane	100	
17a(H)-Diahopane	46		14a(H),17a(H)-20R-Ethylcholestane	120	
30-Normoretane	82		14b(H),17b(H)-20R-Cholestane	140	
18a(H)&18b(H)-Oleananes	60		14b(H),17b(H)-20S-Cholestane	130	
Hopane	510		14b,17b-20R-Methylcholestane	110	
Moretane	82		14b,17b-20S-Methylcholestane	150	
30-Homohopane-22S	140		14b(H),17b(H)-20R-Ethylcholestane	200	
30-Homohopane-22R	140		14b(H),17b(H)-20S-Ethylcholestane	120	

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	90	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.

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34839.D
Acq On : 21 Jan 2006 8:19 am
Operator : AC
Sample : 0601019-05
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 25 08:48:49 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 1/25/06

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	43.41	240	98541	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	71018	1714.82	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 171.48%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	20861m	246.35	ng/mL	
84) Hopane (T19)	52.48	191	20751m	245.05	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	13961	164.87	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.67	191	7934	93.69	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.15	191	6145m	72.57	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	3387	40.00	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.21	191	2479	29.27	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	2231m	26.35	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	2580m	30.47	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	2875m	33.95	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	2514	29.69	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	2176m	25.70	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	5854	69.13	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.72	191	1874	22.13	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	1506m	17.78	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.19	191	7642	90.24	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	2542	30.02	ng/ml	100
100) 17a(H),21b(H)-25-Norhopane	50.18	191	1043m	12.32	ng/ml	
101) 30-Norhopane (T15)	51.08	191	14195	167.63	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.20	191	4844m	57.20	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	1880m	22.20	ng/ml	
104) 30-Normoretane (T17)	51.87	191	3342	39.47	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	2424m	28.63	ng/ml	
106) Moretane (T20)	53.18	191	3343m	39.48	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	5769m	68.13	ng/ml	
108) 30-Homohopane-22R (T22)	54.54	191	5611	66.26	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.88	191	3951	46.66	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	2995	35.37	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.07	191	2332m	27.54	ng/ml	
112) 30,31-Trishomohopane-22R (	58.71	191	1496m	17.67	ng/ml	
113) Tetrakishomohopane-22S (T3	60.75	191	1432	16.91	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.69	191	744m	8.79	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	4331	104.58	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.85	217	2118m	51.14	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	1405m	33.93	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	2753m	66.47	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	6294	151.98	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.24	217	1171m	28.28	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	48.51	217	176	4.25	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	1350m	32.60	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34839.D
Acq On : 21 Jan 2006 8:19 am
Operator : AC
Sample : 0601019-05
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 25 08:48:49 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

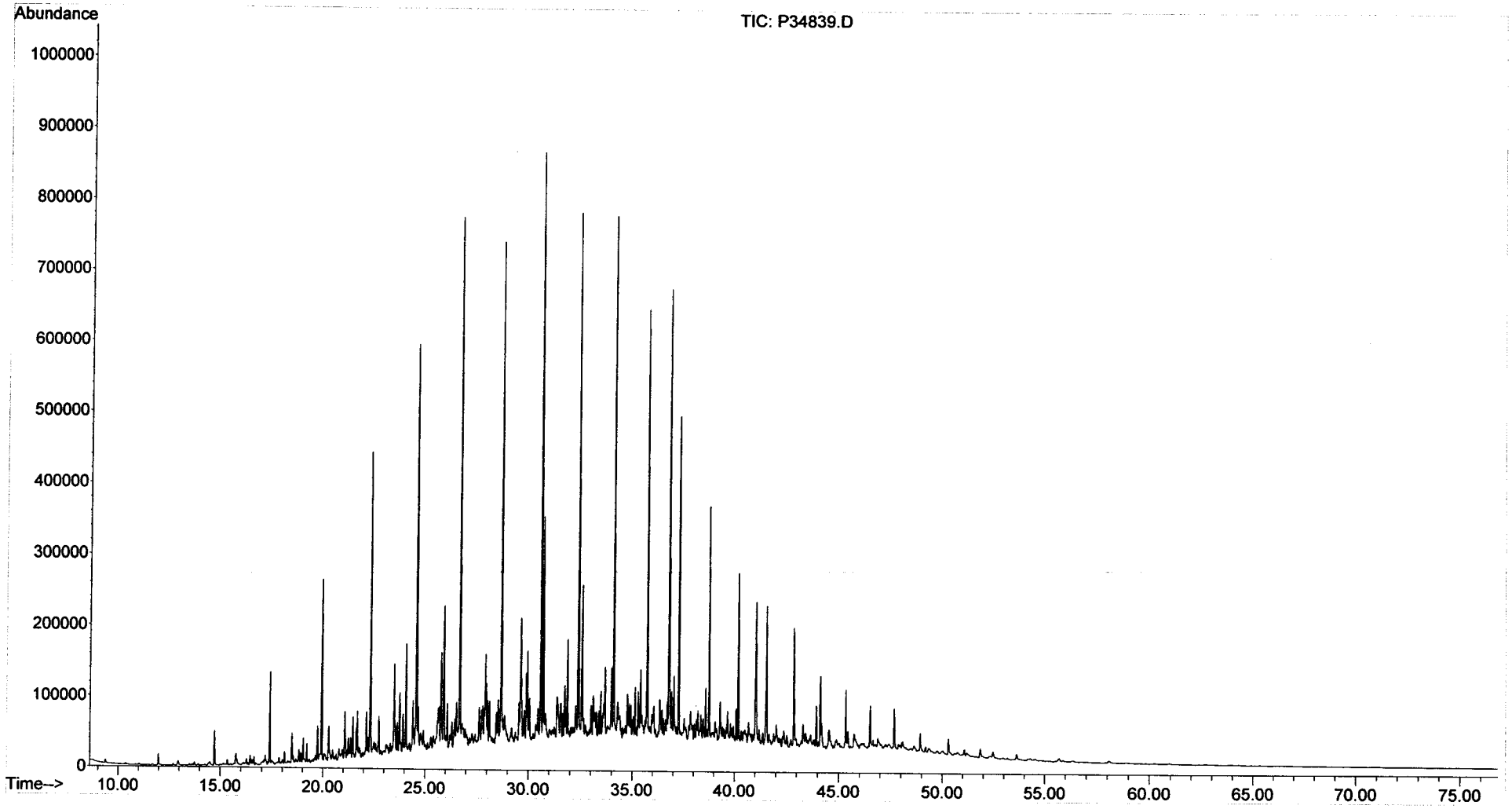
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
126) 14a,17a-20R-Methylcholesta	49.39	217	2759m	66.62 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.76	217	2049m	49.48 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	2364m	57.08 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	2813m	67.92 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	2583m	62.37 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	2196m	53.03 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	3055m	73.77 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	4065m	98.15 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	2289m	55.27 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34839.D
Acq On : 21 Jan 2006 8:19 am
Operator : AC
Sample : 0601019-05
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 25 08:48:49 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 I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-39 (4.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-06**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/24/06	65.0	5.48	156.25	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**4600000**	E	Fluoranthene	**610000**
C1-Naphthalenes	**3400000**		Pyrene	**1000000**
C2-Naphthalenes	**2400000**		C1-Fluoranthenes/Pyrenes	**1600000**
C3-Naphthalenes	**1100000**		C2-Fluoranthenes/Pyrenes	**870000**
C4-Naphthalenes	**390000**		C3-Fluoranthenes/Pyrenes	**410000**
Biphenyl	**240000**		C4-Fluoranthenes/Pyrenes	**140000**
Dibenzofuran	**79000**		Naphthobenzothiophenes	**180000**
Acenaphthylene	**260000**		C1-Naphthobenzothiophenes	**260000**
Acenaphthene	**1300000**		C2-Naphthobenzothiophenes	**190000**
Fluorene	**690000**		C3-Naphthobenzothiophenes	**93000**
C1-Fluorenes	**640000**		C4-Naphthobenzothiophenes	**40000**
C2-Fluorenes	**560000**		Benz[a]anthracene	**400000**
C3-Fluorenes	**310000**		Chrysene/Triphenylene	**480000**
Anthracene	**780000**		C1-Chrysenes	**640000**
Phenanthrene	**2100000**		C2-Chrysenes	**380000**
C1-Phenanthrenes/Anthracenes	**2300000**		C3-Chrysenes	**220000**
C2-Phenanthrenes/Anthracenes	**1400000**		C4-Chrysenes	**79000**
C3-Phenanthrenes/Anthracenes	**640000**		Benzo[b]fluoranthene	**120000**
C4-Phenanthrenes/Anthracenes	**180000**		Benzo[k]fluoranthene	**160000**
Retene	640	U	Benzo[a]fluoranthene	**84000**
Dibenzothiophene	**320000**		Benzo[e]pyrene	**160000**
C1-Dibenzothiophenes	**510000**		Benzo[a]pyrene	**280000**
C2-Dibenzothiophenes	**480000**		Perylene	**48000**
C3-Dibenzothiophenes	**290000**		Indeno[1,2,3-cd]pyrene	**88000**
C4-Dibenzothiophenes	**100000**		Dibenz[a,h]anthracene	**32000**
Benzo(b)fluorene	**180000**		Benzo[g,h,i]perylene	**110000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	79	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.

02/01/06 08:28

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-39 (4.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-06**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/24/06	65.0	5.48	156.25	10	AC

Parameter	Result
Carbazole	**28000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	79	50-130

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27872.D
Acq On : 24 Jan 2006 7:41 pm
Operator : AC
Sample : 0601019-06
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 30 13:11:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

ans for ND 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	43064m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	69632m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	960m	10.85	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.09%#		
58) Pyrene-d10	38.90	212	2423m	13.31	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.33%#		
81) Benzo[b]fluoranthene-d12	47.77	264	1445m	10.12	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.01%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		

Target Compounds						Qvalue
9) Naphthalene	20.40	128	2023525	10446.89	ng/mL# E	100
10) C1-Naphthalenes	23.10	142	1479610m	7638.81	ng/mL	
11) C2-Naphthalenes	25.94	156	1054127m	5442.16	ng/mL	
12) C3-Naphthalenes	28.29	170	490104m	2530.27	ng/mL	
13) C4-Naphthalenes	31.05	184	170234m	878.87	ng/mL	
15) 2-Methylnaphthalene	23.10	142	872238	7074.35	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	604319	5149.50	ng/mL#	100
22) Biphenyl	24.98	154	86453m	556.99	ng/mL	
23) 2,6-Dimethylnaphthalene	25.60	156	148599m	1399.11	ng/mL	
24) Dibenzofuran	28.08	168	31022m	181.06	ng/mL	
25) Acenaphthylene	26.70	152	116189m	604.58	ng/mL	
26) Acenaphthene	27.43	153	353022	2996.78	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.98	170	38597m	416.42	ng/mL	
28) Fluorene	29.45	166	217333m	1577.86	ng/mL	
29) C1-Fluorenes	31.83	180	201803m	1465.11	ng/mL	
30) C2-Fluorenes	33.87	194	176696m	1282.83	ng/mL	
31) C3-Fluorenes	35.86	208	95979m	696.82	ng/mL	
32) Dibenzothiophene	32.80	184	133948m	727.29	ng/mL	
37) C1-Dibenzothiophenes	34.57	198	212320m	1152.83	ng/mL	
38) C2-Dibenzothiophenes	36.62	212	203523m	1105.06	ng/mL	
39) C3-Dibenzothiophenes	38.06	226	120699m	655.36	ng/mL	
40) C4-Dibenzothiophenes	39.74	240	43164m	234.37	ng/mL	
41) Phenanthrene	33.29	178	941030	4788.16	ng/mL	100
47) C1-Phenanthrenes/Anthracen	35.36	192	1018189m	5180.76	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.53	206	660076m	3358.61	ng/mL	
49) 5AA IS BKGD	37.29	206	38327m	195.02	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.36	220	286545m	1458.00	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.57	234	78636m	400.12	ng/mL	
53) Anthracene	33.48	178	322517m	1766.95	ng/mL	
54) Carbazole	34.15	167	11090m	63.75	ng/mL	
55) 1-Methylphenanthrene	35.79	192	174284m	1278.27	ng/mL	
56) Fluoranthene	38.07	202	292978m	1396.73	ng/mL	
57) Benzo(b)fluorene	40.60	216	53308m	413.40	ng/mL	
59) Pyrene	38.96	202	501713	2335.77	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	40.35	216	775666m	3611.18	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.83	230	427704m	1991.22	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.29	244	198570m	924.46	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.54	258	66455m	309.39	ng/mL	
64) Naphthobenzothiophene	42.83	234	53229	267.23	ng/ml#	70
65) Naphthobenzothiophene-2,1-	42.83	234	53229	267.23	ng/mL#	70

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27872.D
Acq On : 24 Jan 2006 7:41 pm
Operator : AC
Sample : 0601019-06
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 30 13:11:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

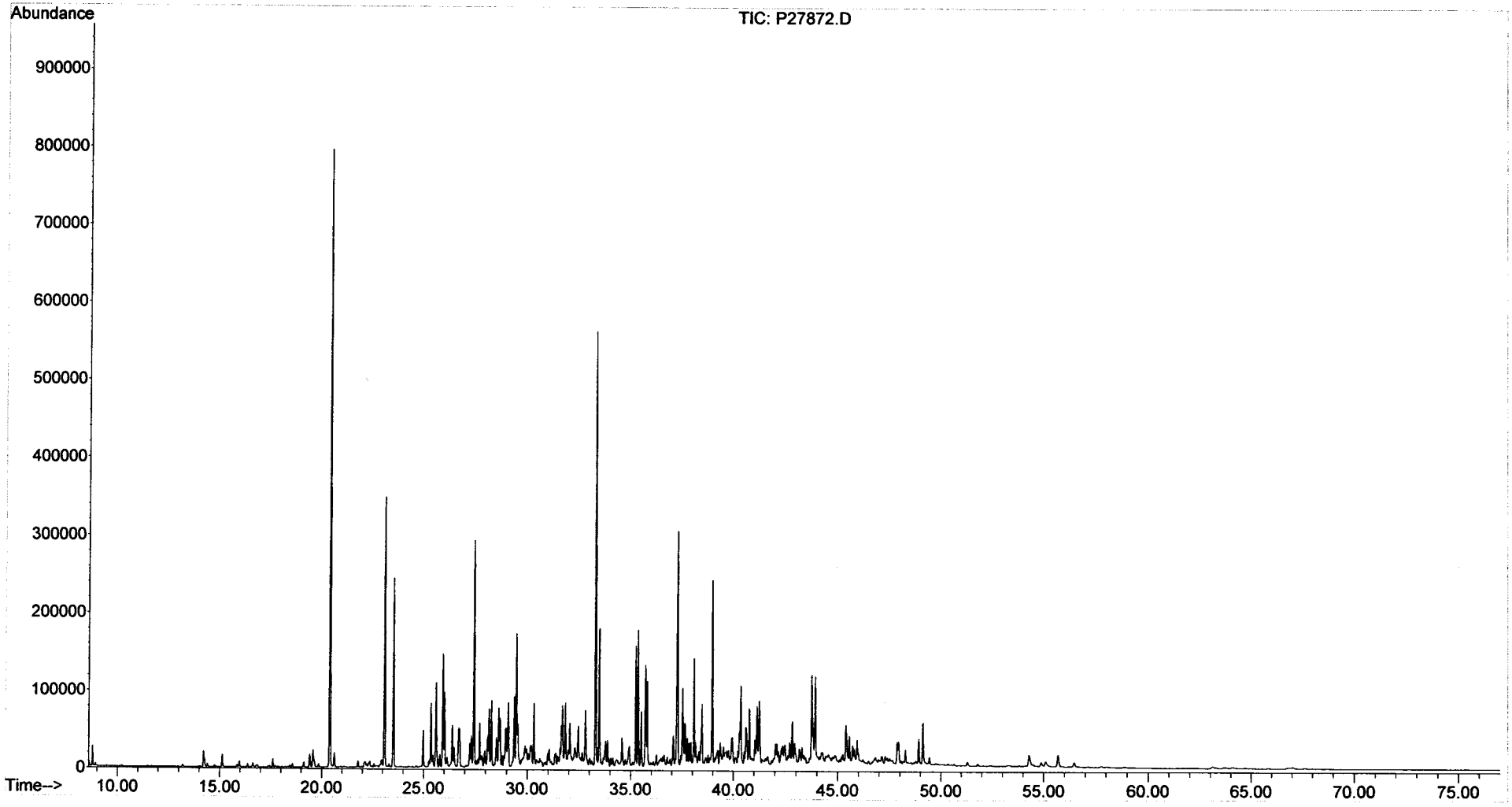
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	43.16	234	15621m	78.42	ng/mL	
67) Naphthobenzothiophene-2,3-	43.47	234	14151m	71.04	ng/mL	
68) C1-Naphthobenzothiophenes	44.23	248	119002m	597.45	ng/ml	
69) C2-Naphthobenzothiophenes	46.27	262	84716m	425.31	ng/ml	
70) C3-Naphthobenzothiophenes	47.87	276	42136m	211.54	ng/ml	
71) C4-Naphthobenzothiophenes	49.00	290	18000m	90.37	ng/mL	
73) Benz[a]anthracene	43.76	228	181868m	914.60	ng/mL	
74) Chrysene	43.92	228	213485m	1068.91	ng/mL	
75) Chrysene/Triphenylene	43.92	228	217630m	1089.66	ng/mL	
76) C1-Chrysenes	45.39	242	289657m	1450.30	ng/mL	
77) C2-Chrysenes	47.10	256	175284m	877.64	ng/mL	
78) BBF-d12 Surr BKGD	47.73	256	2488	12.46	ng/mL	100
79) C3-Chrysenes	48.77	270	100056m	500.98	ng/mL	
80) C4-Chrysenes	50.45	284	35767m	179.08	ng/mL	
82) Benzo[b]fluoranthene	47.86	252	59213	277.26	ng/mL	99
83) Benzo[k]fluoranthene	47.92	252	82494m	369.38	ng/mL	
84) Benzo[a]fluoranthene	48.27	252	42873m	191.97	ng/mL	
85) Benzo[e]pyrene	48.91	252	74627	362.48	ng/mL	100
86) Benzo[a]pyrene	49.12	252	129209m	627.75	ng/mL	
87) Perylene	49.44	252	22574m	110.01	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.29	276	40827m	200.13	ng/mL	
89) Dibenz[a,h]anthracene	54.34	278	13883m	72.36	ng/mL	
90) Benzo[g,h,i]perylene	55.70	276	51325	241.29	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27872.D
Acq On : 24 Jan 2006 7:41 pm
Operator : AC
Sample : 0601019-06
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 30 13:11:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-39 (4.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-06E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/26/06	65.0	5.48	156.25	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**5500000**		Fluoranthene	4400	U
C1-Naphthalenes	7200	U	Pyrene	3900	U
C2-Naphthalenes	7200	U	C1-Fluoranthenes/Pyrenes	3900	U
C3-Naphthalenes	7200	U	C2-Fluoranthenes/Pyrenes	3900	U
C4-Naphthalenes	7200	U	C3-Fluoranthenes/Pyrenes	3900	U
Biphenyl	4000	U	C4-Fluoranthenes/Pyrenes	3900	U
Dibenzofuran	5200	U	Naphthobenzothiophenes	5300	U
Acenaphthylene	7900	U	C1-Naphthobenzothiophenes	5300	U
Acenaphthene	5000	U	C2-Naphthobenzothiophenes	5300	U
Fluorene	5000	U	C3-Naphthobenzothiophenes	5300	U
C1-Fluorenes	5000	U	C4-Naphthobenzothiophenes	5300	U
C2-Fluorenes	5000	U	Benz[a]anthracene	6900	U
C3-Fluorenes	5000	U	Chrysene/Triphenylene	4700	U
Anthracene	5900	U	C1-Chrysenes	4700	U
Phenanthrene	6400	U	C2-Chrysenes	4700	U
C1-Phenanthrenes/Anthracenes	6400	U	C3-Chrysenes	4700	U
C2-Phenanthrenes/Anthracenes	6400	U	C4-Chrysenes	4700	U
C3-Phenanthrenes/Anthracenes	6400	U	Benzo[b]fluoranthene	4600	U
C4-Phenanthrenes/Anthracenes	6400	U	Benzo[k]fluoranthene	8900	U
Retene	6400	U	Benzo[a]fluoranthene	8900	U
Dibenzothiophene	4900	U	Benzo[e]pyrene	6000	U
C1-Dibenzothiophenes	4900	U	Benzo[a]pyrene	6100	U
C2-Dibenzothiophenes	4900	U	Perylene	7600	U
C3-Dibenzothiophenes	4900	U	Indeno[1,2,3-cd]pyrene	10000	U
C4-Dibenzothiophenes	4900	U	Dibenz[a,h]anthracene	8300	U
Benzo(b)fluorene	4400	U	Benzo[g,h,i]perylene	7700	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	76	50-130

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

02/01/06 08:27

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27926.D
Acq On : 26 Jan 2006 9:02 pm
Operator : AC
Sample : 0601019-06-RE
Misc : 100X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 30 15:44:20 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

CMS forwd 1/31/06

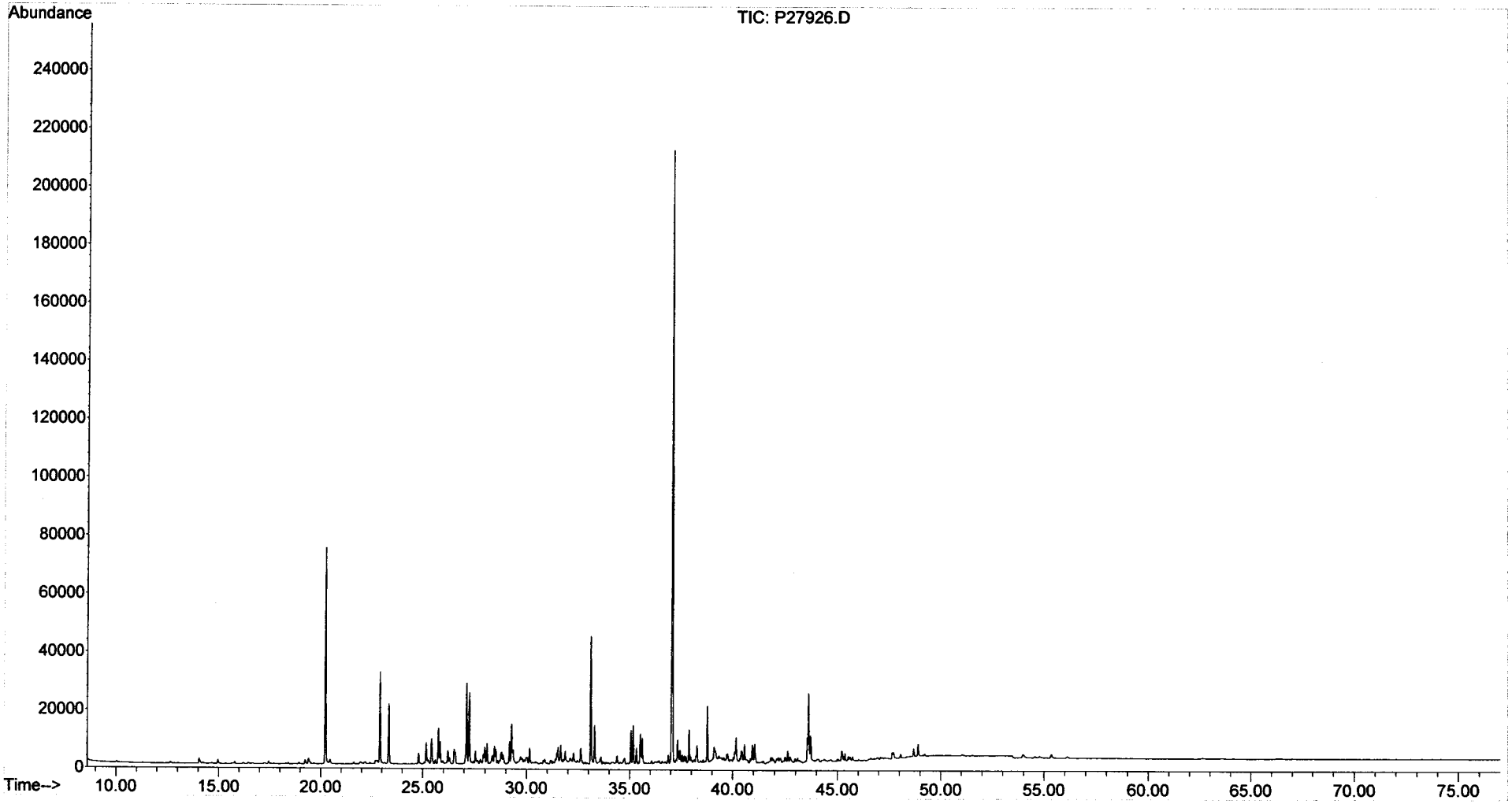
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33181m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	48540m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	83m	1.22	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.12%#	
58) Pyrene-d10	38.70	212	191m	1.36	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.14%#	
81) Benzo[b]fluoranthene-d12	47.56	264	97m	0.97	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.10%#	
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	186704m	1251.00	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27926.D
Acq On : 26 Jan 2006 9:02 pm
Operator : AC
Sample : 0601019-06-RE
Misc : 100X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 30 15:44:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-39 (4.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-06**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/21/06	65.0	5.48	21	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1200**	30,31-Bishomohopane-22S	**1900**
C24 Tricyclic Terpane	**800**	30,31-Bishomohopane-22R	**1400**
C25 Tricyclic Terpane	**820**	30,31-Trishomohopane-22S	**960**
C24 Tetracyclic Terpane	**1300**	30,31-Trishomohopane-22R	**630**
C26 Tricyclic Terpane-22S	**330**	Tetrakishomohopane-22S	**630**
C26 Tricyclic Terpane-22R	**340**	Tetrakishomohopane-22R	**390**
C28 Tricyclic Terpane-22S	**410**	Pentakishomohopane-22S	**350**
C28 Tricyclic Terpane-22R	**460**	Pentakishomohopane-22R	**320**
C29 Tricyclic Terpane-22S	**470**	13b(H),17a(H)-20S-Diacholestane	**1700**
C29 Tricyclic Terpane-22R	**540**	13b(H),17a(H)-20R-Diacholestane	**1000**
18a-22,29,30-Trisnorneohopane-TS	**4500**	13b,17a-20S-Methyldiacholestane	**720**
C30 Tricyclic Terpane-22S	**440**	14a(H),17a(H)-20S-Cholestane	**1100**
C30 Tricyclic Terpane-22R	**250**	14a(H),17a(H)-20R-Cholestane	**2800**
17a(H)-22,29,30-Trisnorhopane-TM	**2800**	13b,17a-20R-Ethyldiacholestane	**400**
17a/b,21b/a 28,30-Bisnorhopane	**640**	13a,17b-20S-Ethyldiacholestane	**120**
17a(H),21b(H)-25-Norhopane	**330**	14a,17a-20S-Methylcholestane	**660**
30-Norhopane	**8000**	14a,17a-20R-Methylcholestane	**1400**
18a(H)-30-Norneohopane-C29Ts	**4300**	14a(H),17a(H)-20S-Ethylcholestane	**890**
17a(H)-Diahopane	**1100**	14a(H),17a(H)-20R-Ethylcholestane	**1300**
30-Normoretane	**1600**	14b(H),17b(H)-20R-Cholestane	**1300**
18a(H)&18b(H)-Oleananes	**2100**	14b(H),17b(H)-20S-Cholestane	**1200**
Hopane	**14000**	14b,17b-20R-Methylcholestane	**1300**
Moretane	**1900**	14b,17b-20S-Methylcholestane	**1400**
30-Homohopane-22S	**3200**	14b(H),17b(H)-20R-Ethylcholestane	**1800**
30-Homohopane-22R	**2700**	14b(H),17b(H)-20S-Ethylcholestane	**1200**

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

N/A - Not Applicable

02/01/06 09:20

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34840.D
Acq On : 21 Jan 2006 9:51 am
Operator : AC
Sample : 0601019-06
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 24 11:16:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

AMS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	99814	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	37462	893.03	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 89.30%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	201766m	2352.27	ng/mL	
84) Hopane (T19)	52.49	191	201903m	2353.87	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	18048m	210.41	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	11626m	135.54	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.15	191	11894m	138.67	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	18947m	220.89	ng/ml	
89) C26 Tricyclic Terpane-22S	44.21	191	4862	56.68	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	4975	58.00	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	5986m	69.79	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	6724m	78.39	ng/ml	
93) C29 Tricyclic Terpane-22S	47.29	191	6878	80.19	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.48	191	7801m	90.95	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	65975	769.16	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.73	191	6348	74.01	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.97	191	3636	42.39	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.20	191	40829	476.00	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.41	191	9265m	108.02	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.19	191	4829	56.30	ng/ml	100
101) 30-Norhopane (T15)	51.08	191	116718m	1360.75	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.20	191	62525m	728.94	ng/ml	
103) 17a(H)-Diahopane (X)	51.32	191	15477m	180.44	ng/ml	
104) 30-Normoretane (T17)	51.88	191	23645	275.66	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	30145m	351.44	ng/ml	
106) Moretane (T20)	53.19	191	27206m	317.18	ng/ml	
107) 30-Homohopane-22S (T21)	54.30	191	45979	536.04	ng/ml	100
108) 30-Homohopane-22R (T22)	54.54	191	39698	462.82	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.90	191	27461	320.15	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.30	191	20056	233.82	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.07	191	14015m	163.39	ng/ml	
112) 30,31-Trishomohopane-22R (	58.70	191	9117m	106.29	ng/ml	
113) Tetrakishomohopane-22S (T3	60.76	191	9110	106.21	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.68	191	5730	66.80	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	5153m	60.08	ng/ml	
116) Pentakishomohopane-22R (T3	65.30	191	4621m	53.87	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	12164m	289.97	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	7096m	169.16	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	5112m	121.86	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	7553m	180.05	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	19852	473.24	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.24	217	2878m	68.61	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34840.D
Acq On : 21 Jan 2006 9:51 am
Operator : AC
Sample : 0601019-06
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 24 11:16:44 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

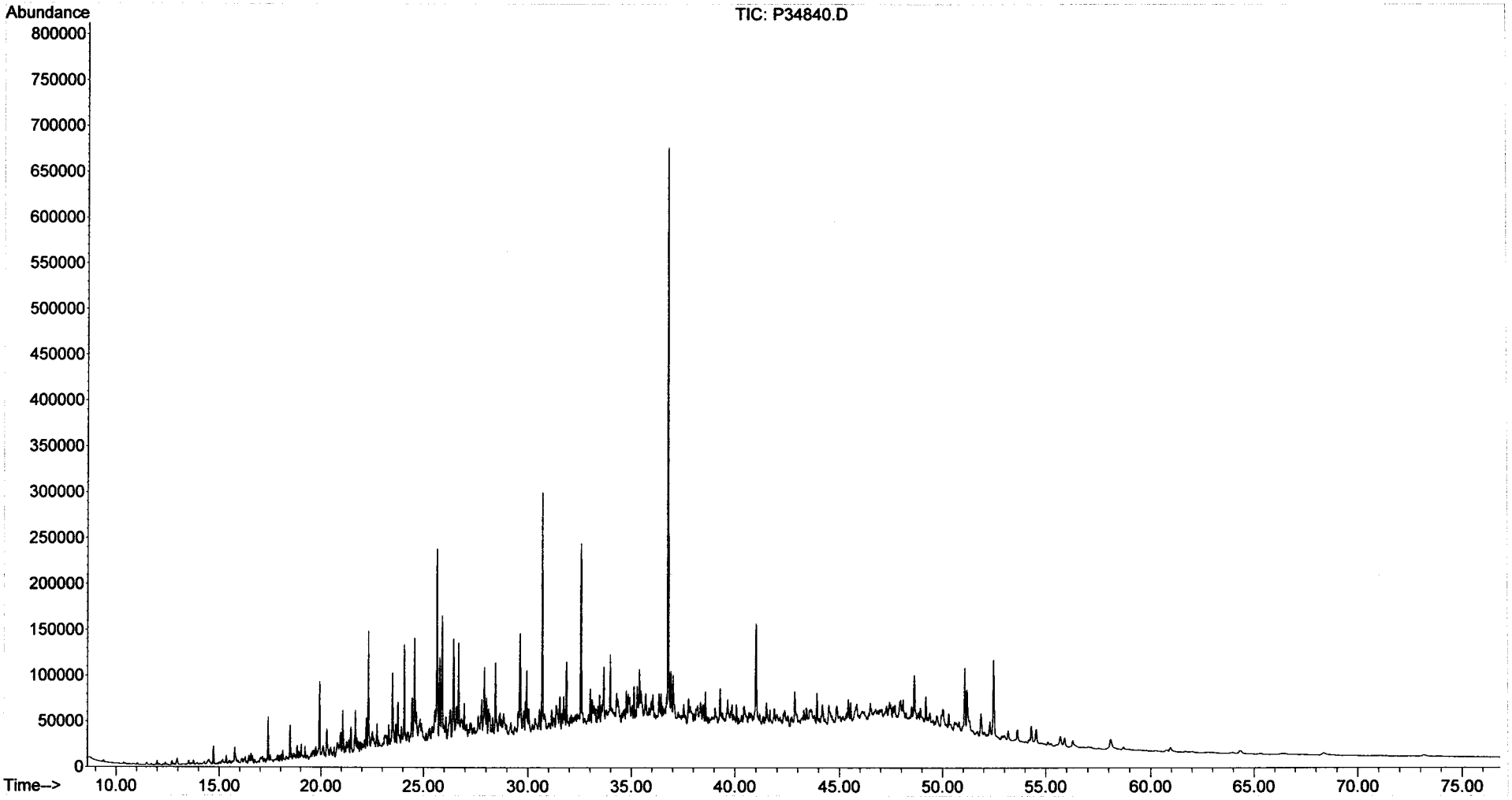
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	885	21.10	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	4686m	111.71	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	9602m	228.90	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	6332m	150.94	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	8965m	213.71	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.52	218	9215m	219.67	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.61	218	8779	209.28	ng/ml	100
131) 14b,17b-20R-Methylcholesta	48.84	218	9563m	227.97	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.93	218	10289m	245.27	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	12468m	297.22	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	8246m	196.57	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34840.D
Acq On : 21 Jan 2006 9:51 am
Operator : AC
Sample : 0601019-06
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 24 11:16:44 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-17 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-07**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/27/06	35.3	10.31	12.38	1	AC

Parameter	Result		Parameter	Result
Naphthalene	15000		Fluoranthene	19000
C1-Naphthalenes	16000		Pyrene	27000
C2-Naphthalenes	25000		C1-Fluoranthenes/Pyrenes	22000
C3-Naphthalenes	9900		C2-Fluoranthenes/Pyrenes	7500
C4-Naphthalenes	4600		C3-Fluoranthenes/Pyrenes	2800
Biphenyl	2800		C4-Fluoranthenes/Pyrenes	1100
Dibenzofuran	1500		Naphthobenzothiophenes	2900
Acenaphthylene	5700		C1-Naphthobenzothiophenes	2500
Acenaphthene	35000	E	C2-Naphthobenzothiophenes	1800
Fluorene	12000		C3-Naphthobenzothiophenes	1200
C1-Fluorenes	5200		C4-Naphthobenzothiophenes	700
C2-Fluorenes	4800		Benz[a]anthracene	9600
C3-Fluorenes	3500		Chrysene/Triphenylene	9700
Anthracene	14000		C1-Chrysenes	6800
Phenanthrene	36000	E	C2-Chrysenes	3100
C1-Phenanthrenes/Anthracenes	24000		C3-Chrysenes	1600
C2-Phenanthrenes/Anthracenes	14000		C4-Chrysenes	670
C3-Phenanthrenes/Anthracenes	5500		Benzo[b]fluoranthene	4400
C4-Phenanthrenes/Anthracenes	1500		Benzo[k]fluoranthene	5600
Retene	520		Benzo[a]fluoranthene	2000
Dibenzothiophene	5100		Benzo[e]pyrene	4800
C1-Dibenzothiophenes	4800		Benzo[a]pyrene	8300
C2-Dibenzothiophenes	4600		Perylene	1700
C3-Dibenzothiophenes	3000		Indeno[1,2,3-cd]pyrene	3800
C4-Dibenzothiophenes	1300		Dibenz[a,h]anthracene	1000
Benzo(b)fluorene	4000		Benzo[g,h,i]perylene	4000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	69	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	106	50-130

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

02/01/06 08:30

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-17 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-07**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/27/06	35.3	10.31	12.38	1	AC

Parameter	Result
Carbazole	**430**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	69	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	106	50-130

N/A - Not Applicable

02/01/06 08:30

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27940.D
Acq On : 27 Jan 2006 1:25 pm
Operator : AC
Sample : 0601019-07
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 14:31:12 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 for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	43646m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.63	240	74398m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	99402m	1108.19 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 110.82%		
58) Pyrene-d10	38.72	212	301302m	1633.10 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 163.31%#		
81) Benzo[b]fluoranthene-d12	47.57	264	260585m	1708.45 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 170.85%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	20.21	128	863544m	4398.79 ng/mL	
10) C1-Naphthalenes	23.33	142	932772m	4751.43 ng/mL	
11) C2-Naphthalenes	25.76	156	1440014m	7335.25 ng/mL	
12) C3-Naphthalenes	28.10	170	568623m	2896.50 ng/mL	
13) C4-Naphthalenes	30.86	184	264230m	1345.96 ng/mL	
15) 2-Methylnaphthalene	22.91	142	345711	2766.52 ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	584879	4917.40 ng/mL#	100
22) Biphenyl	24.80	154	130544m	829.84 ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	205970m	1913.41 ng/mL	
24) Dibenzofuran	27.89	168	74797m	430.73 ng/mL	
25) Acenaphthylene	26.52	152	324170m	1664.30 ng/mL	
26) Acenaphthene	27.26	153	1230640m	10307.51 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.80	170	43938m	467.72 ng/mL	
28) Fluorene	29.27	166	485445m	3477.38 ng/mL	
29) C1-Fluorenes	31.51	180	214332m	1535.32 ng/mL	
30) C2-Fluorenes	33.69	194	196160m	1405.15 ng/mL	
31) C3-Fluorenes	36.38	208	143774m	1029.89 ng/mL	
32) Dibenzothiophene	32.61	184	279267m	1496.11 ng/mL	
36) OTP	34.80	198	28055m	150.30 ng/mL	
37) C1-Dibenzothiophenes	34.38	198	293164m	1570.56 ng/mL	
38) C2-Dibenzothiophenes	36.08	212	255122m	1366.76 ng/mL	
39) C3-Dibenzothiophenes	37.87	226	166922m	894.25 ng/mL	
40) C4-Dibenzothiophenes	39.56	240	69370m	371.63 ng/mL	
41) Phenanthrene	33.11	178	2128037	10683.51 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.07	192	1373987m	6897.91 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	787251m	3952.28 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	322019m	1616.65 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	89545m	449.55 ng/mL	
52) Retene	40.10	234	6923m	153.17 ng/mL	
53) Anthracene	33.28	178	773785m	4182.75 ng/mL	
54) Carbazole	33.96	167	22209m	125.96 ng/mL	
55) 1-Methylphenanthrene	35.62	192	221292	1601.41 ng/mL	100
56) Fluoranthene	37.90	202	1201773m	5652.86 ng/mL	
57) Benzo(b)fluorene	40.41	216	154498m	1182.14 ng/mL	
59) Pyrene	38.79	202	1722481	7912.24 ng/mL	98
60) C1-Fluoranthenes/Pyrenes	40.18	216	1375442m	6318.11 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.64	230	481312m	2210.91 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	180564m	829.42 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	72081m	331.10 ng/mL	
64) Naphthobenzothiophene	42.64	234	105088m	520.56 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27940.D
Acq On : 27 Jan 2006 1:25 pm
Operator : AC
Sample : 0601019-07
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 14:31:12 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

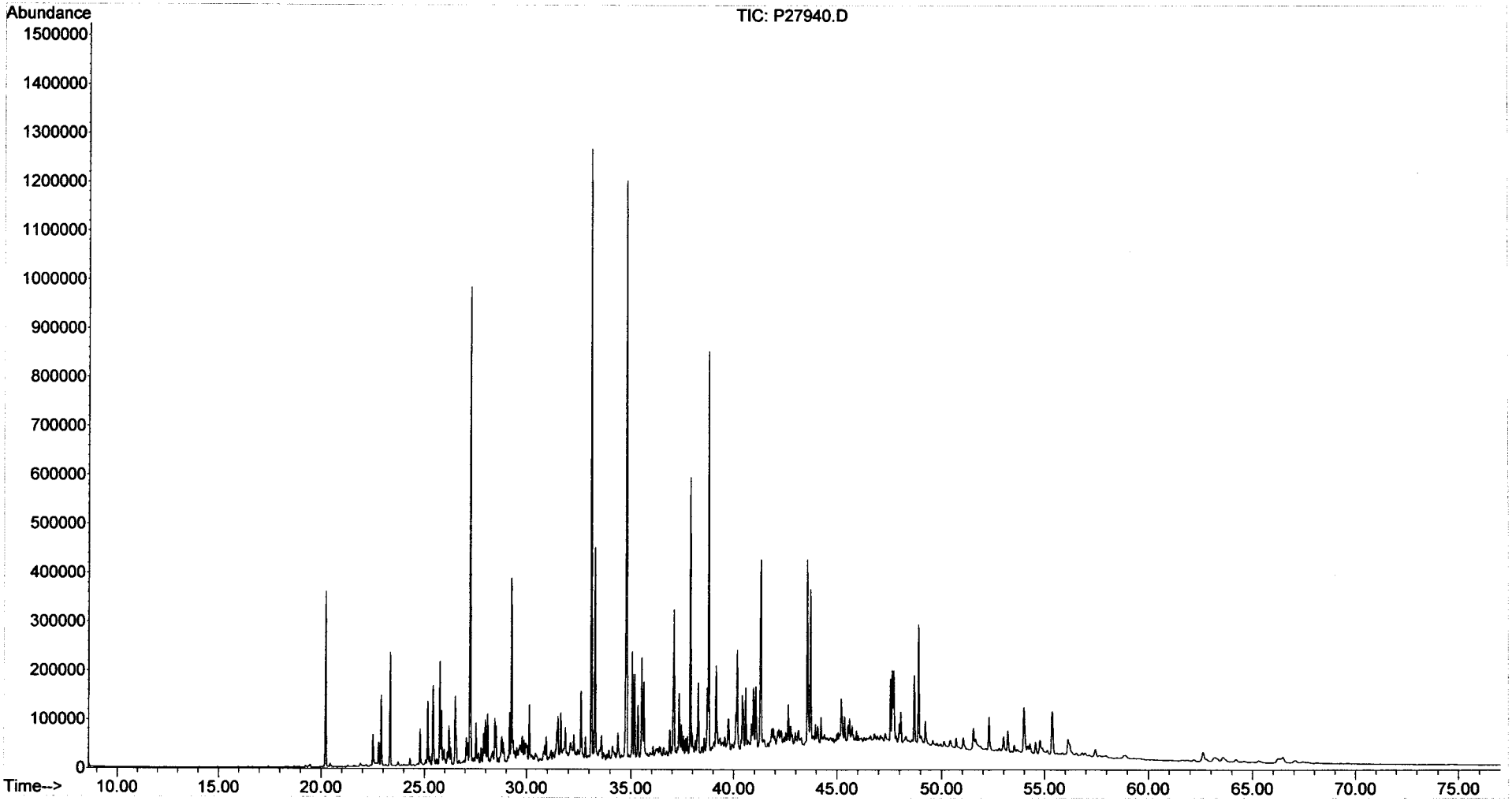
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.64	234	104994m	520.09	ng/mL	
66) Naphthobenzothiophene-1,2-	42.98	234	28351m	140.44	ng/mL	
67) Naphthobenzothiophene-2,3-	43.27	234	38260m	189.52	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	149239m	739.26	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	109504m	542.43	ng/ml	
70) C3-Naphthobenzothiophenes	47.67	276	71462m	353.99	ng/ml	
71) C4-Naphthobenzothiophenes	48.79	290	41696m	206.54	ng/mL	
73) Benz[a]anthracene	43.57	228	599529m	2821.83	ng/mL	
74) Chrysene	43.73	228	607310m	2845.98	ng/mL	
75) Chrysene/Triphenylene	43.73	228	605998m	2839.83	ng/mL	
76) C1-Chrysenes	45.21	242	426745m	1999.82	ng/mL	
77) C2-Chrysenes	46.92	256	206488m	967.65	ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	11509	53.93	ng/mL	100
79) C3-Chrysenes	48.56	270	99081m	464.31	ng/mL	
80) C4-Chrysenes	49.63	284	42249m	197.99	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	297062	1301.86	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	390884	1638.13	ng/mL	100
84) Benzo[a]fluoranthene	48.06	252	141136m	591.48	ng/mL	
85) Benzo[e]pyrene	48.70	252	307994	1400.17	ng/mL	100
86) Benzo[a]pyrene	48.90	252	538528m	2448.80	ng/mL	
87) Perylene	49.22	252	110840	505.56	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.99	276	241382m	1107.41	ng/mL	
89) Dibenz[a,h]anthracene	54.03	278	62002m	302.48	ng/mL	
90) Benzo[g,h,i]perylene	55.38	276	264977	1165.93	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27940.D
Acq On : 27 Jan 2006 1:25 pm
Operator : AC
Sample : 0601019-07
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 14:31:12 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-17 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-07E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/24/06	35.3	10.31	12.38	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	56	U	Fluoranthene	34	U
C1-Naphthalenes	56	U	Pyrene	30	U
C2-Naphthalenes	56	U	C1-Fluoranthenes/Pyrenes	30	U
C3-Naphthalenes	56	U	C2-Fluoranthenes/Pyrenes	30	U
C4-Naphthalenes	56	U	C3-Fluoranthenes/Pyrenes	30	U
Biphenyl	31	U	C4-Fluoranthenes/Pyrenes	30	U
Dibenzofuran	40	U	Naphthobenzothiophenes	41	U
Acenaphthylene	62	U	C1-Naphthobenzothiophenes	41	U
Acenaphthene	**31000**		C2-Naphthobenzothiophenes	41	U
Fluorene	39	U	C3-Naphthobenzothiophenes	41	U
C1-Fluorenes	39	U	C4-Naphthobenzothiophenes	41	U
C2-Fluorenes	39	U	Benz[a]anthracene	54	U
C3-Fluorenes	39	U	Chrysene/Triphenylene	37	U
Anthracene	46	U	C1-Chrysenes	37	U
Phenanthrene	**32000**		C2-Chrysenes	37	U
C1-Phenanthrenes/Anthracenes	49	U	C3-Chrysenes	37	U
C2-Phenanthrenes/Anthracenes	49	U	C4-Chrysenes	37	U
C3-Phenanthrenes/Anthracenes	49	U	Benzo[b]fluoranthene	36	U
C4-Phenanthrenes/Anthracenes	49	U	Benzo[k]fluoranthene	69	U
Retene	49	U	Benzo[a]fluoranthene	69	U
Dibenzothiophene	38	U	Benzo[e]pyrene	47	U
C1-Dibenzothiophenes	38	U	Benzo[a]pyrene	47	U
C2-Dibenzothiophenes	38	U	Perylene	59	U
C3-Dibenzothiophenes	38	U	Indeno[1,2,3-cd]pyrene	82	U
C4-Dibenzothiophenes	38	U	Dibenz[a,h]anthracene	65	U
Benzo(b)fluorene	34	U	Benzo[g,h,i]perylene	60	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	57	50-130
Pyrene-d10	85	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.

02/01/06 08:29

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27874.D
Acq On : 24 Jan 2006 9:21 pm
Operator : AC
Sample : 0601019-07-RE
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 15:29:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WD 1/31/06

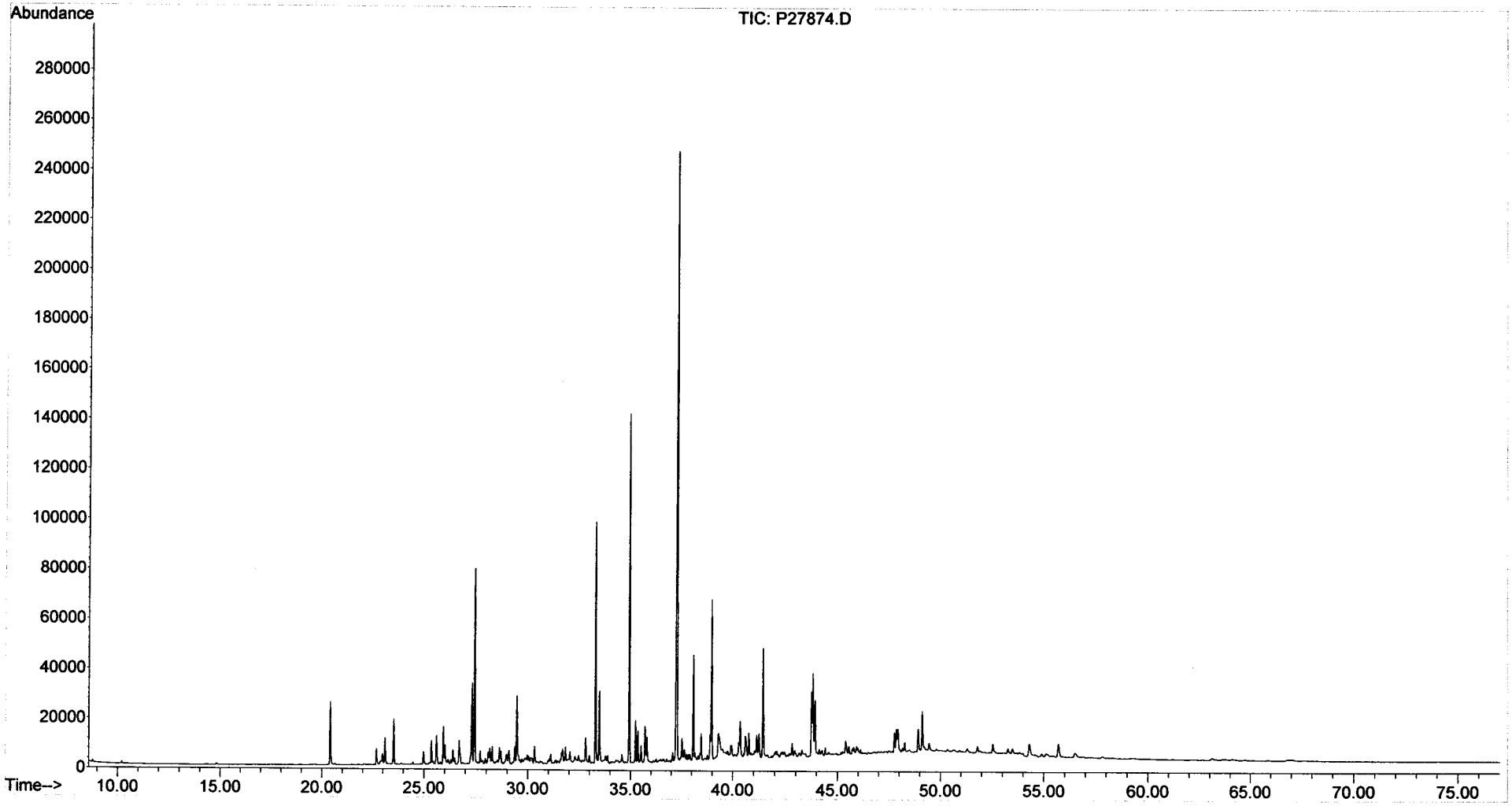
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	39512m	500.00 ng/mL	0.00
72) Chrysene-d12	43.82	240	64111m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.98	152	7459m	91.86 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.19%#	
58) Pyrene-d10	38.90	212	23047m	137.99 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	13.80%#	
81) Benzo[b]fluoranthene-d12	47.77	264	18104m	137.74 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	13.77%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	
Target Compounds					Qvalue
26) Acenaphthene	27.43	153	97305m	900.27 ng/mL	
41) Phenanthrene	33.29	178	171031	948.47 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27874.D
Acq On : 24 Jan 2006 9:21 pm
Operator : AC
Sample : 0601019-07-RE
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 30 15:29:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-17 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-07**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/21/06	35.3	10.31	3.34	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**360**	30,31-Bishomohopane-22S	**810**
C24 Tricyclic Terpane	**200**	30,31-Bishomohopane-22R	**460**
C25 Tricyclic Terpane	**230**	30,31-Trishomohopane-22S	**430**
C24 Tetracyclic Terpane	**240**	30,31-Trishomohopane-22R	**250**
C26 Tricyclic Terpane-22S	**95**	Tetrakishomohopane-22S	**260**
C26 Tricyclic Terpane-22R	**97**	Tetrakishomohopane-22R	**180**
C28 Tricyclic Terpane-22S	**120**	Pentakishomohopane-22S	**240**
C28 Tricyclic Terpane-22R	**130**	Pentakishomohopane-22R	**180**
C29 Tricyclic Terpane-22S	**150**	13b(H),17a(H)-20S-Diacholestane	**460**
C29 Tricyclic Terpane-22R	**160**	13b(H),17a(H)-20R-Diacholestane	**250**
18a-22,29,30-Trisnorneohopane-TS	**600**	13b,17a-20S-Methyldiacholestane	**200**
C30 Tricyclic Terpane-22S	**130**	14a(H),17a(H)-20S-Cholestane	**230**
C30 Tricyclic Terpane-22R	**120**	14a(H),17a(H)-20R-Cholestane	**900**
17a(H)-22,29,30-Trisnorhopane-TM	**640**	13b,17a-20R-Ethyldiacholestane	**150**
17a/b,21b/a 28,30-Bisnorhopane	**170**	13a,17b-20S-Ethyldiacholestane	**50**
17a(H),21b(H)-25-Norhopane	**69**	14a,17a-20S-Methylcholestane	**150**
30-Norhopane	**2100**	14a,17a-20R-Methylcholestane	**360**
18a(H)-30-Norneohopane-C29Ts	**490**	14a(H),17a(H)-20S-Ethylcholestane	**370**
17a(H)-Diahopane	**100**	14a(H),17a(H)-20R-Ethylcholestane	**510**
30-Normoretane	**320**	14b(H),17b(H)-20R-Cholestane	**470**
18a(H)&18b(H)-Oleananes	**200**	14b(H),17b(H)-20S-Cholestane	**460**
Hopane	**2700**	14b,17b-20R-Methylcholestane	**430**
Moretane	**340**	14b,17b-20S-Methylcholestane	**540**
30-Homohopane-22S	**1000**	14b(H),17b(H)-20R-Ethylcholestane	**740**
30-Homohopane-22R	**860**	14b(H),17b(H)-20S-Ethylcholestane	**560**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	74	50-130

N/A - Not Applicable

02/01/06 09:20

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34841.D
Acq On : 21 Jan 2006 11:20 am
Operator : AC
Sample : 0601019-07
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 24 11:21:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	109605	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.93	217	205082	4452.09	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 445.21%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.50	191	273986m	2908.90	ng/mL	
84) Hopane (T19)	52.50	191	273753m	2906.43	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	36533m	387.87	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	20168m	214.12	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.16	191	23425m	248.70	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	24879	264.14	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	9760	103.62	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	9933	105.46	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.60	191	12098m	128.44	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	13271m	140.90	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	15440	163.93	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	16033m	170.22	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.65	191	61898	657.17	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	13093m	139.01	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	12021m	127.63	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	65081m	690.96	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.42	191	17708m	188.01	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	7101	75.39	ng/ml	100
101) 30-Norhopane (T15)	51.11	191	215976m	2293.01	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.21	191	50609m	537.31	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	10239	108.71	ng/ml	100
104) 30-Normoretane (T17)	51.90	191	32281	342.73	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	20843m	221.29	ng/ml	
106) Moretane (T20)	53.20	191	34696m	368.37	ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	102359m	1086.74	ng/ml	
108) 30-Homohopane-22R (T22)	54.56	191	88682	941.53	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.91	191	83451	886.00	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.31	191	46796	496.83	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.09	191	44098m	468.19	ng/ml	
112) 30,31-Trishomohopane-22R (	58.73	191	26031m	276.37	ng/ml	
113) Tetrakishomohopane-22S (T3	60.79	191	26390	280.18	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.70	191	18135	192.54	ng/ml	100
115) Pentakishomohopane-22S (T3	63.99	191	25020m	265.64	ng/ml	
116) Pentakishomohopane-22R (T3	65.33	191	17983m	190.93	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	23200	503.64	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.86	217	12520m	271.79	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	10206m	221.56	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	11521m	250.11	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	45115	979.39	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.25	217	7739m	168.00	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34841.D
Acq On : 21 Jan 2006 11:20 am
Operator : AC
Sample : 0601019-07
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 24 11:21:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

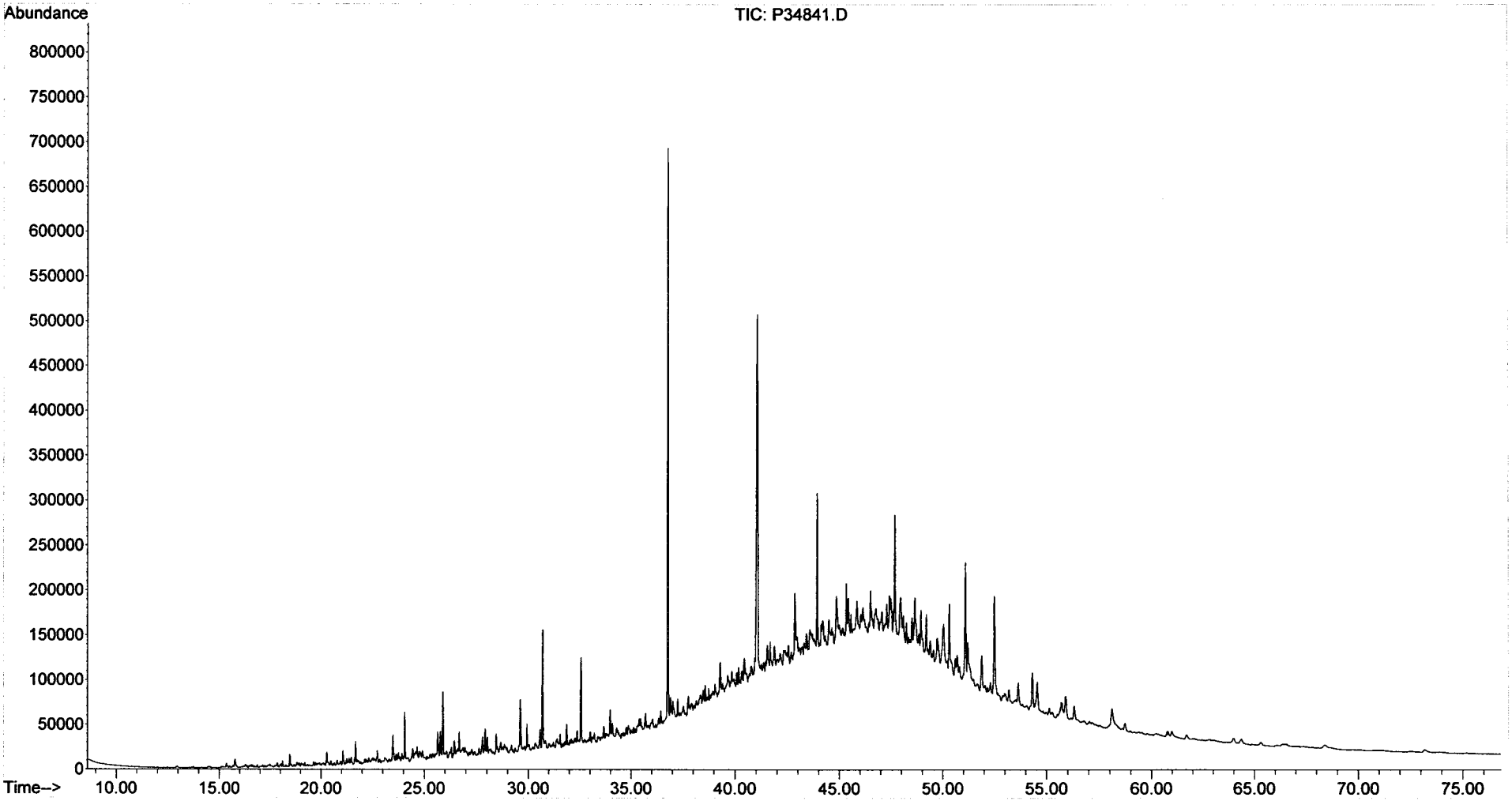
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.51	217	2501	54.29	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	7404m	160.73	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	18315m	397.60	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	18399m	399.42	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	25726m	558.48	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	23544m	511.11	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	23010m	499.52	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.85	218	21512m	467.00	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	27053m	587.29	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	37125	805.94	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	28099m	610.00	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34841.D
Acq On : 21 Jan 2006 11:20 am
Operator : AC
Sample : 0601019-07
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jan 24 11:21:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-16 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-08**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/27/06	36.5	30.24	26.32	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	31000	E	Fluoranthene	19000	
C1-Naphthalenes	14000		Pyrene	25000	E
C2-Naphthalenes	14000		C1-Fluoranthenes/Pyrenes	21000	
C3-Naphthalenes	8000		C2-Fluoranthenes/Pyrenes	7700	
C4-Naphthalenes	4000		C3-Fluoranthenes/Pyrenes	2800	
Biphenyl	2100		C4-Fluoranthenes/Pyrenes	1100	
Dibenzofuran	940		Naphthobenzothiophenes	2800	
Acenaphthylene	7100		C1-Naphthobenzothiophenes	2600	
Acenaphthene	11000		C2-Naphthobenzothiophenes	1700	
Fluorene	6200		C3-Naphthobenzothiophenes	1100	
C1-Fluorenes	4400		C4-Naphthobenzothiophenes	640	
C2-Fluorenes	4700		Benz[a]anthracene	9900	
C3-Fluorenes	3300		Chrysene/Triphenylene	10000	
Anthracene	11000		C1-Chrysenes	7200	
Phenanthrene	25000	E	C2-Chrysenes	3000	
C1-Phenanthrenes/Anthracenes	21000		C3-Chrysenes	1400	
C2-Phenanthrenes/Anthracenes	13000		C4-Chrysenes	650	
C3-Phenanthrenes/Anthracenes	5300		Benzo[b]fluoranthene	5200	
C4-Phenanthrenes/Anthracenes	1300		Benzo[k]fluoranthene	5800	
Retene	500		Benzo[a]fluoranthene	2200	
Dibenzothiophene	3600		Benzo[e]pyrene	5300	
C1-Dibenzothiophenes	4200		Benzo[a]pyrene	8900	
C2-Dibenzothiophenes	4300		Perylene	1700	
C3-Dibenzothiophenes	2700		Indeno[1,2,3-cd]pyrene	4200	
C4-Dibenzothiophenes	1100		Dibenz[a,h]anthracene	1100	
Benzo(b)fluorene	3600		Benzo[g,h,i]perylene	4500	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	89	50-130
Pyrene-d10	111	50-130
Benzo[b]fluoranthene-d12	98	50-130

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

01/31/06 15:46

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-16 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-08**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/27/06	36.5	30.24	26.32	1	AC

Parameter	Result
Carbazole	**520**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	89	50-130
Pyrene-d10	111	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

01/31/06 15:47

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27942.D
Acq On : 27 Jan 2006 3:03 pm
Operator : AC
Sample : 0601019-08
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 14:38:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

MS for MD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	47670m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.65	240	81131m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	3326	33.95	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.40%#			
58) Pyrene-d10	38.72	212	8483m	42.10	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.21%#			
81) Benzo[b]fluoranthene-d12	47.57	264	6211m	37.34	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.73%#			
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	2809267m	13102.09	ng/mL E	
10) C1-Naphthalenes	23.33	142	1211207m	5648.93	ng/mL	
11) C2-Naphthalenes	25.76	156	1267614m	5912.00	ng/mL	
12) C3-Naphthalenes	28.10	170	721489m	3364.94	ng/mL	
13) C4-Naphthalenes	30.86	184	360845m	1682.94	ng/mL	
15) 2-Methylnaphthalene	22.91	142	510032	3736.96	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	698360	5375.86	ng/mL#	100
22) Biphenyl	24.80	154	149386m	869.46	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	177955m	1513.61	ng/mL	
24) Dibenzofuran	27.89	168	74606	393.36	ng/mL	99
25) Acenaphthylene	26.52	152	630998m	2966.11	ng/mL	
26) Acenaphthene	27.25	153	593599	4552.14	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.80	170	57638m	561.76	ng/mL	
28) Fluorene	29.28	166	397163m	2604.83	ng/mL	
29) C1-Fluorenes	31.51	180	284180m	1863.82	ng/mL	
30) C2-Fluorenes	33.69	194	299593m	1964.91	ng/mL	
31) C3-Fluorenes	36.38	208	210786m	1382.46	ng/mL	
32) Dibenzothiophene	32.61	184	305336m	1497.69	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	358324m	1757.60	ng/mL	
38) C2-Dibenzothiophenes	36.08	212	364622m	1788.49	ng/mL	
39) C3-Dibenzothiophenes	37.87	226	234692m	1151.18	ng/mL	
40) C4-Dibenzothiophenes	39.57	240	93915m	460.66	ng/mL	
41) Phenanthrene	33.12	178	2296249	10554.88	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	35.06	192	1937775m	8907.13	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.35	206	1206729m	5546.82	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	479733m	2205.13	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	118615m	545.22	ng/mL	
52) Retene	40.10	234	10305m	208.76	ng/mL	
53) Anthracene	33.29	178	934690m	4626.03	ng/mL	
54) Carbazole	33.96	167	41852m	217.34	ng/mL	
55) 1-Methylphenanthrene	35.62	192	299365m	1983.52	ng/mL	
56) Fluoranthene	37.90	202	1836323m	7908.50	ng/mL	
57) Benzo(b)fluorene	40.43	216	216817m	1518.93	ng/mL	
59) Pyrene	38.79	202	2527226	10628.90	ng/mL E	97
60) C1-Fluoranthenes/Pyrenes	40.18	216	2127644m	8948.35	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.92	230	767973m	3229.91	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	276231m	1161.76	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	108571m	456.62	ng/mL	
64) Naphthobenzothiophene	42.64	234	169658	769.46	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.64	234	169658	769.46	ng/mL#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27942.D
Acq On : 27 Jan 2006 3:03 pm
Operator : AC
Sample : 0601019-08
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 14:38:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

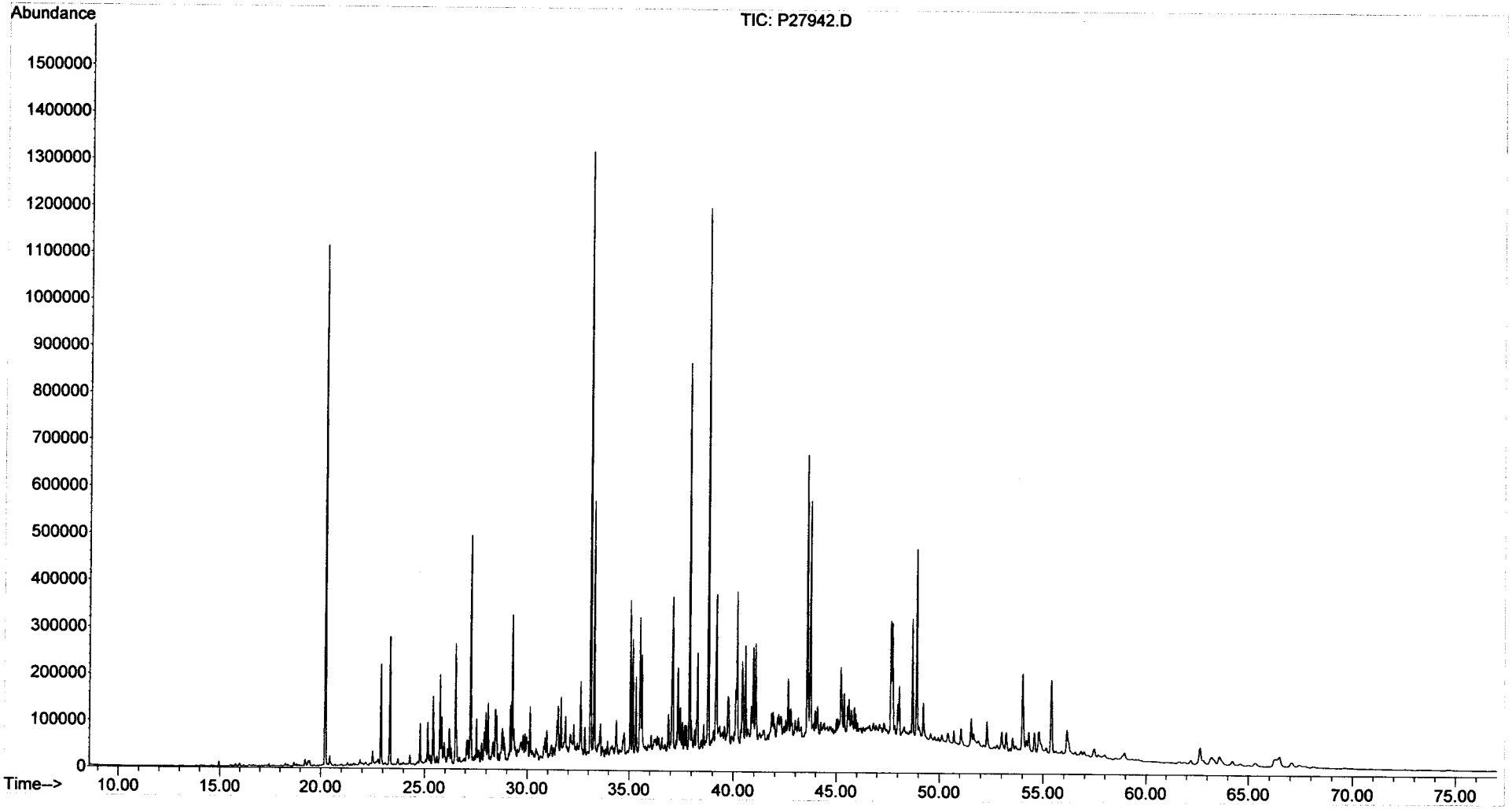
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.99	234	44802m	203.19 ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	49149m	222.91 ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	235837m	1069.61 ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	158818m	720.30 ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	98318m	445.91 ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	58814m	266.74 ng/mL	
73) Benz[a]anthracene	43.58	228	966355m	4170.92 ng/mL	
74) Chrysene	43.74	228	990098m	4254.75 ng/mL	
75) Chrysene/Triphenylene	43.74	228	986828m	4240.70 ng/mL	
76) C1-Chrysenes	45.22	242	702371m	3018.30 ng/mL	
77) C2-Chrysenes	46.93	256	292837m	1258.41 ng/mL	
78) BBF-d12 Surr BKGD	47.55	256	3331	14.31 ng/mL	100
79) C3-Chrysenes	48.58	270	136515m	586.65 ng/mL	
80) C4-Chrysenes	49.63	284	63281m	271.94 ng/mL	
82) Benzo[b]fluoranthene	47.67	252	541246	2175.14 ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	633225	2433.51 ng/mL	99
84) Benzo[a]fluoranthene	48.07	252	239777m	921.47 ng/mL	
85) Benzo[e]pyrene	48.71	252	531639	2216.31 ng/mL	99
86) Benzo[a]pyrene	48.91	252	894907m	3731.62 ng/mL	
87) Perylene	49.23	252	168134	703.24 ng/mL	98
88) Indeno[1,2,3-cd]pyrene	54.00	276	420833m	1770.47 ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	106976m	478.58 ng/mL	
90) Benzo[g,h,i]perylene	55.39	276	468240	1889.32 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27942.D
Acq On : 27 Jan 2006 3:03 pm
Operator : AC
Sample : 0601019-08
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 14:38:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-16 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-08E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/24/06	36.5	30.24	26.32	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**28000**		Fluoranthene	24	U
C1-Naphthalenes	39	U	Pyrene	**23000**	
C2-Naphthalenes	39	U	C1-Fluoranthenes/Pyrenes	21	U
C3-Naphthalenes	39	U	C2-Fluoranthenes/Pyrenes	21	U
C4-Naphthalenes	39	U	C3-Fluoranthenes/Pyrenes	21	U
Biphenyl	22	U	C4-Fluoranthenes/Pyrenes	21	U
Dibenzofuran	28	U	Naphthobenzothiophenes	29	U
Acenaphthylene	43	U	C1-Naphthobenzothiophenes	29	U
Acenaphthene	27	U	C2-Naphthobenzothiophenes	29	U
Fluorene	27	U	C3-Naphthobenzothiophenes	29	U
C1-Fluorenes	27	U	C4-Naphthobenzothiophenes	29	U
C2-Fluorenes	27	U	Benz[a]anthracene	37	U
C3-Fluorenes	27	U	Chrysene/Triphenylene	26	U
Anthracene	32	U	C1-Chrysenes	26	U
Phenanthrene	**23000**		C2-Chrysenes	26	U
C1-Phenanthrenes/Anthracenes	35	U	C3-Chrysenes	26	U
C2-Phenanthrenes/Anthracenes	35	U	C4-Chrysenes	26	U
C3-Phenanthrenes/Anthracenes	35	U	Benzo[b]fluoranthene	25	U
C4-Phenanthrenes/Anthracenes	35	U	Benzo[k]fluoranthene	48	U
Retene	35	U	Benzo[a]fluoranthene	48	U
Dibenzothiophene	26	U	Benzo[e]pyrene	33	U
C1-Dibenzothiophenes	26	U	Benzo[a]pyrene	33	U
C2-Dibenzothiophenes	26	U	Perylene	42	U
C3-Dibenzothiophenes	26	U	Indeno[1,2,3-cd]pyrene	57	U
C4-Dibenzothiophenes	26	U	Dibenz[a,h]anthracene	45	U
Benzo(b)fluorene	24	U	Benzo[g,h,i]perylene	42	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	69	50-130
Pyrene-d10	98	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.

02/01/06 08:38

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27876.D
Acq On : 24 Jan 2006 10:57 pm
Operator : AC
Sample : 0601019-08-RE
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 15:31:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WD 1/31/06

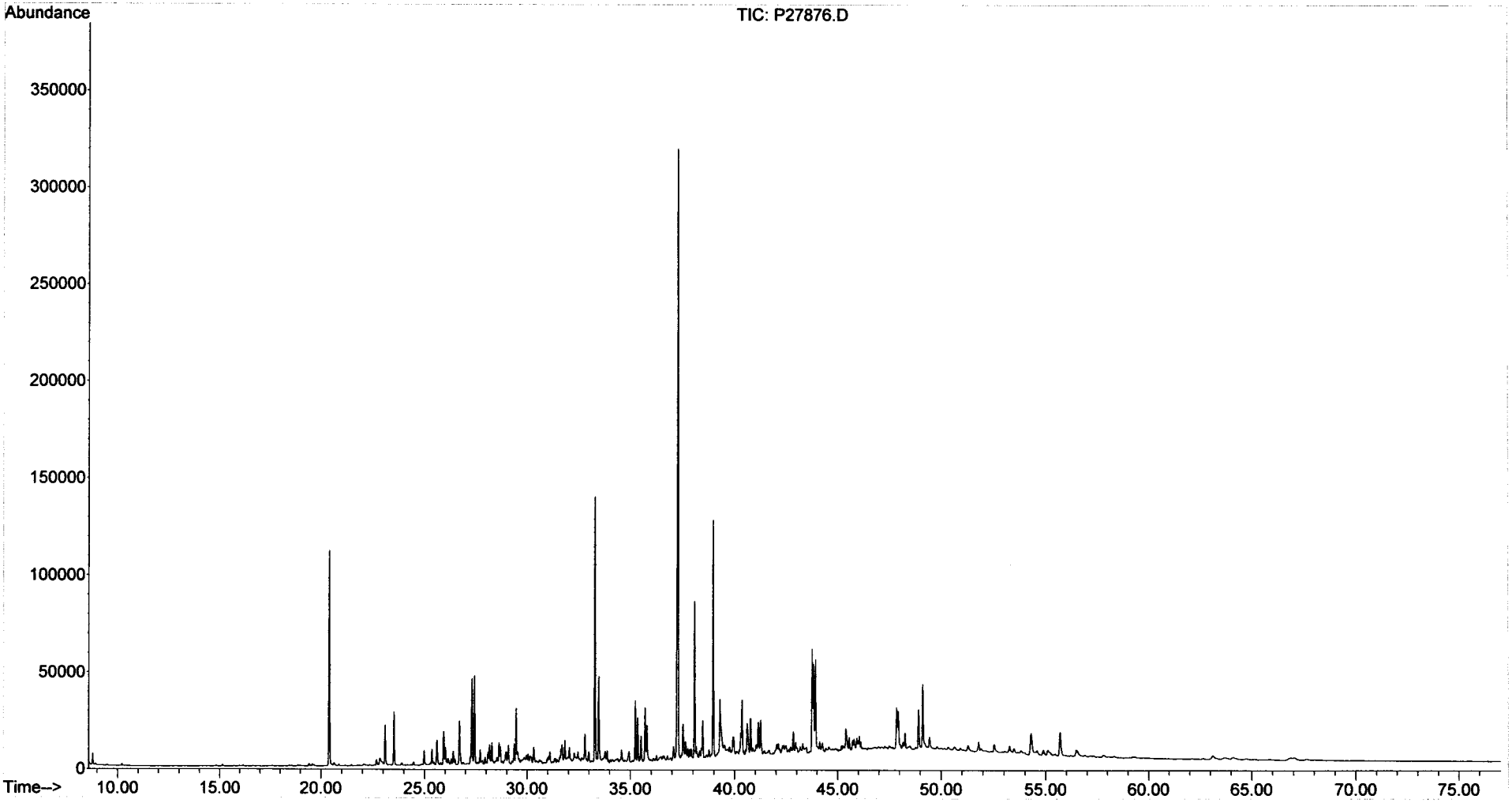
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	52940m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	86291	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	286m	2.63	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.26%#	
58) Pyrene-d10	38.90	212	831m	3.71	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.37%#	
81) Benzo[b]fluoranthene-d12	47.77	264	527m	2.98	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.30%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	20.40	128	281820m	1183.53	ng/mL	
41) Phenanthrene	33.29	178	232289	961.44	ng/mL	100
59) Pyrene	38.96	202	259112	981.28	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27876.D
Acq On : 24 Jan 2006 10:57 pm
Operator : AC
Sample : 0601019-08-RE
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 30 15:31:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-16 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-08**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/21/06	36.5	30.24	7.28	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	370	30,31-Bishomohopane-22S	860
C24 Tricyclic Terpane	210	30,31-Bishomohopane-22R	480
C25 Tricyclic Terpane	240	30,31-Trishomohopane-22S	460
C24 Tetracyclic Terpane	270	30,31-Trishomohopane-22R	270
C26 Tricyclic Terpane-22S	110	Tetrakishomohopane-22S	270
C26 Tricyclic Terpane-22R	110	Tetrakishomohopane-22R	190
C28 Tricyclic Terpane-22S	130	Pentakishomohopane-22S	270
C28 Tricyclic Terpane-22R	140	Pentakishomohopane-22R	190
C29 Tricyclic Terpane-22S	150	13b(H),17a(H)-20S-Diacholestane	480
C29 Tricyclic Terpane-22R	170	13b(H),17a(H)-20R-Diacholestane	250
18a-22,29,30-Trisnorneohopane-TS	630	13b,17a-20S-Methyldiacholestane	260
C30 Tricyclic Terpane-22S	140	14a(H),17a(H)-20S-Cholestane	380
C30 Tricyclic Terpane-22R	110	14a(H),17a(H)-20R-Cholestane	950
17a(H)-22,29,30-Trisnorhopane-TM	650	13b,17a-20R-Ethyldiacholestane	160
17a/b,21b/a 28,30-Bisnorhopane	150	13a,17b-20S-Ethyldiacholestane	57
17a(H),21b(H)-25-Norhopane	67	14a,17a-20S-Methylcholestane	170
30-Norhopane	2200	14a,17a-20R-Methylcholestane	370
18a(H)-30-Norneohopane-C29Ts	520	14a(H),17a(H)-20S-Ethylcholestane	390
17a(H)-Diahopane	92	14a(H),17a(H)-20R-Ethylcholestane	550
30-Normoretane	300	14b(H),17b(H)-20R-Cholestane	510
18a(H)&18b(H)-Oleananes	200	14b(H),17b(H)-20S-Cholestane	500
Hopane	2700	14b,17b-20R-Methylcholestane	460
Moretane	300	14b,17b-20S-Methylcholestane	610
30-Homohopane-22S	1100	14b(H),17b(H)-20R-Ethylcholestane	920
30-Homohopane-22R	920	14b(H),17b(H)-20S-Ethylcholestane	480

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	82	50-130

N/A - Not Applicable

02/01/06 09:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34842.D
Acq On : 21 Jan 2006 12:55 pm
Operator : AC
Sample : 0601019-08
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 24 11:26:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

AMS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.42	240	115678	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	43.94	217	10913m	224.47	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.45%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.52	191	402383m	4047.81	ng/mL	
84) Hopane (T19)	52.52	191	402150m	4045.47	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	56286m	566.21	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	31644	318.33	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	35979m	361.93	ng/ml	
88) C24 Tetracyclic Terpane (T	44.50	191	40432	406.73	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	16480	165.78	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.33	191	16530m	166.29	ng/ml	
91) C28 Tricyclic Terpane-22S	46.61	191	19241m	193.56	ng/ml	
92) C28 Tricyclic Terpane-22R	46.78	191	20780m	209.04	ng/ml	
93) C29 Tricyclic Terpane-22S	47.31	191	23214	233.52	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.50	191	26093m	262.48	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.67	191	94918	954.84	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.75	191	20925m	210.50	ng/mL	
97) C30 Tricyclic Terpane-22R	48.99	191	17199m	173.01	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.22	191	97641	982.23	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.44	191	22874m	230.10	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.21	191	10113	101.73	ng/ml	100
101) 30-Norhopane (T15)	51.12	191	329902m	3318.68	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.22	191	78896	793.66	ng/ml	100
103) 17a(H)-Diahopane (X)	51.34	191	13808	138.90	ng/ml	100
104) 30-Normoretane (T17)	51.90	191	44848	451.15	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.32	191	30815m	309.99	ng/ml	
106) Moretane (T20)	53.21	191	45676m	459.48	ng/ml	
107) 30-Homohopane-22S (T21)	54.33	191	160902m	1618.61	ng/ml	
108) 30-Homohopane-22R (T22)	54.57	191	137918	1387.40	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.92	191	128885	1296.53	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.32	191	71659	720.86	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.10	191	68958m	693.69	ng/ml	
112) 30,31-Trishomohopane-22R (	58.75	191	40620m	408.62	ng/ml	
113) Tetrakishomohopane-22S (T3	60.81	191	40775	410.18	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.71	191	28183	283.51	ng/ml	100
115) Pentakishomohopane-22S (T3	64.02	191	40580m	408.22	ng/ml	
116) Pentakishomohopane-22R (T3	65.34	191	28841m	290.13	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.45	217	35187	723.77	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.87	217	18281m	376.02	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.57	217	18982m	390.44	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	28359m	583.32	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.98	217	69966	1439.14	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.26	217	12156m	250.04	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34842.D
Acq On : 21 Jan 2006 12:55 pm
Operator : AC
Sample : 0601019-08
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 24 11:26:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

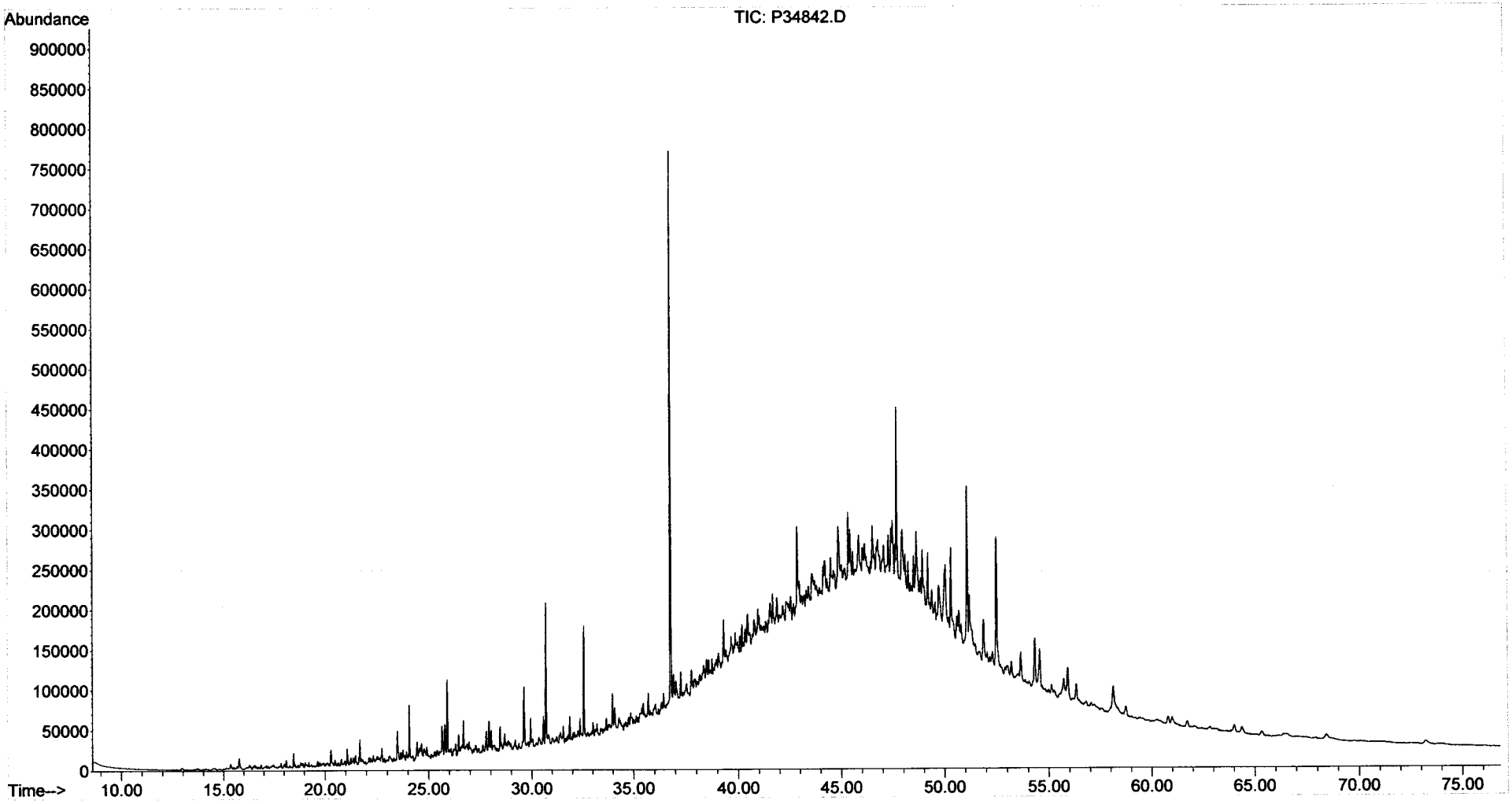
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	4176	85.90	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.69	217	12790m	263.08	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.42	217	27545m	566.58	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.78	217	28931m	595.09	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.71	217	40832m	839.88	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.54	218	37332	767.89	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.63	218	37006m	761.18	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.86	218	33649m	692.13	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.95	218	44715m	919.75	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.04	218	68080m	1400.35	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.07	218	35536m	730.94	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34842.D
Acq On : 21 Jan 2006 12:55 pm
Operator : AC
Sample : 0601019-08
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 24 11:26:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-22B (19.3-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-09**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/27/06	82.1	5.82	2.11	1	AC

Parameter	Result	
Naphthalene	5300	E
C1-Naphthalenes	7800	E
C2-Naphthalenes	6700	
C3-Naphthalenes	3200	
C4-Naphthalenes	920	
Biphenyl	960	
Dibenzofuran	310	
Acenaphthylene	660	
Acenaphthene	6000	E
Fluorene	2900	
C1-Fluorenes	2000	
C2-Fluorenes	1200	
C3-Fluorenes	500	
Anthracene	4400	E
Phenanthrene	10000	E
C1-Phenanthrenes/Anthracenes	7700	
C2-Phenanthrenes/Anthracenes	2900	
C3-Phenanthrenes/Anthracenes	810	
C4-Phenanthrenes/Anthracenes	150	
Retene	38	
Dibenzothiophene	1500	
C1-Dibenzothiophenes	1600	
C2-Dibenzothiophenes	1100	
C3-Dibenzothiophenes	470	
C4-Dibenzothiophenes	160	G
Benzo(b)fluorene	900	

Parameter	Result	
Fluoranthene	3800	
Pyrene	5700	E
C1-Fluoranthenes/Pyrenes	5100	
C2-Fluoranthenes/Pyrenes	1500	
C3-Fluoranthenes/Pyrenes	410	
C4-Fluoranthenes/Pyrenes	110	
Naphthobenzothiophenes	590	
C1-Naphthobenzothiophenes	490	
C2-Naphthobenzothiophenes	220	
C3-Naphthobenzothiophenes	97	
C4-Naphthobenzothiophenes	32	
Benz[a]anthracene	1900	
Chrysene/Triphenylene	1900	
C1-Chrysenes	1300	
C2-Chrysenes	440	
C3-Chrysenes	190	
C4-Chrysenes	50	
Benzo[b]fluoranthene	630	
Benzo[k]fluoranthene	870	
Benzo[a]fluoranthene	390	
Benzo[e]pyrene	710	
Benzo[a]pyrene	1400	
Perylene	220	
Indeno[1,2,3-cd]pyrene	540	
Dibenz[a,h]anthracene	160	
Benzo[g,h,i]perylene	550	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

02/01/06 09:54

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-22B (19.3-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-09**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/27/06	82.1	5.82	2.11	1	AC

Parameter	Result
Carbazole	58

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	103	50-130

N/A - Not Applicable

02/01/06 09:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27944.D
Acq On : 27 Jan 2006 4:42 pm
Operator : AC
Sample : 0601019-09
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 30 15:01:26 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

QNS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	43623m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.65	240	76899m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	773490m	8627.83 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 862.78%#		
58) Pyrene-d10	38.73	212	1777249m	9638.01 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 963.80%#		
81) Benzo[b]fluoranthene-d12	47.59	264	1538852m	9760.91 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 976.09%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	20.21	128	2352575m	11990.05 ng/mL E	
10) C1-Naphthalenes	22.93	142	3489299m	17783.43 ng/mL E	
11) C2-Naphthalenes	25.76	156	2962053m	15096.29 ng/mL	
12) C3-Naphthalenes	28.10	170	1428867m	7282.31 ng/mL	
13) C4-Naphthalenes	30.86	184	406663m	2072.58 ng/mL	
15) 2-Methylnaphthalene	22.93	142	2114674	16931.43 ng/mL# E	100
16) 1-Methylnaphthalene	23.35	142	1366317	11493.43 ng/mL# E	100
22) Biphenyl	24.80	154	342676m	2179.47 ng/mL	
23) 2,6-Dimethylnaphthalene	25.43	156	507730m	4719.18 ng/mL	
24) Dibenzofuran	27.89	168	122821m	707.66 ng/mL	
25) Acenaphthylene	26.52	152	289351m	1486.33 ng/mL	
26) Acenaphthene	27.26	153	1635820m	13708.42 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.80	170	113790m	1211.93 ng/mL	
28) Fluorene	29.28	166	910625m	6526.50 ng/mL	
29) C1-Fluorenes	31.51	180	616975m	4421.90 ng/mL	
30) C2-Fluorenes	33.69	194	364744m	2614.14 ng/mL	
31) C3-Fluorenes	36.38	208	157256m	1127.06 ng/mL	
32) Dibenzothiophene	32.61	184	618530m	3315.38 ng/mL	
36) OTP	34.91	198	131306m	703.81 ng/mL	
37) C1-Dibenzothiophenes	34.38	198	805593m	4318.06 ng/mL	
38) C2-Dibenzothiophenes	36.08	212	458731m	2458.84 ng/mL	
39) C3-Dibenzothiophenes	37.87	226	197571m	1059.00 ng/mL	
40) C4-Dibenzothiophenes	41.42	240	69840m	374.35 ng/mL	
41) Phenanthrene	33.13	178	4643986	23326.78 ng/mL E	97
47) C1-Phenanthrenes/Anthracen	35.57	192	3471496m	17437.35 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.34	206	1320325m	6632.00 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.17	220	364523m	1831.00 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.35	234	67271m	337.90 ng/mL	
52) Retene	40.10	234	3895m	86.22 ng/mL	
53) Anthracene	33.29	178	1855128m	10033.32 ng/mL E	
54) Carbazole	33.96	167	23018m	130.62 ng/mL	
55) 1-Methylphenanthrene	35.64	192	537640m	3892.75 ng/mL	
56) Fluoranthene	37.90	202	1848585	8699.90 ng/mL	99
57) Benzo(b)fluorene	40.41	216	267802m	2050.17 ng/mL	
59) Pyrene	38.80	202	2828504m	12999.62 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	40.18	216	2531352m	11633.92 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.85	230	757544m	3481.62 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.72	244	203213m	933.95 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.36	258	53310m	245.01 ng/mL	
64) Naphthobenzothiophene	42.64	234	172270	853.79 ng/ml#	67

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27944.D
Acq On : 27 Jan 2006 4:42 pm
Operator : AC
Sample : 0601019-09
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 30 15:01:26 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

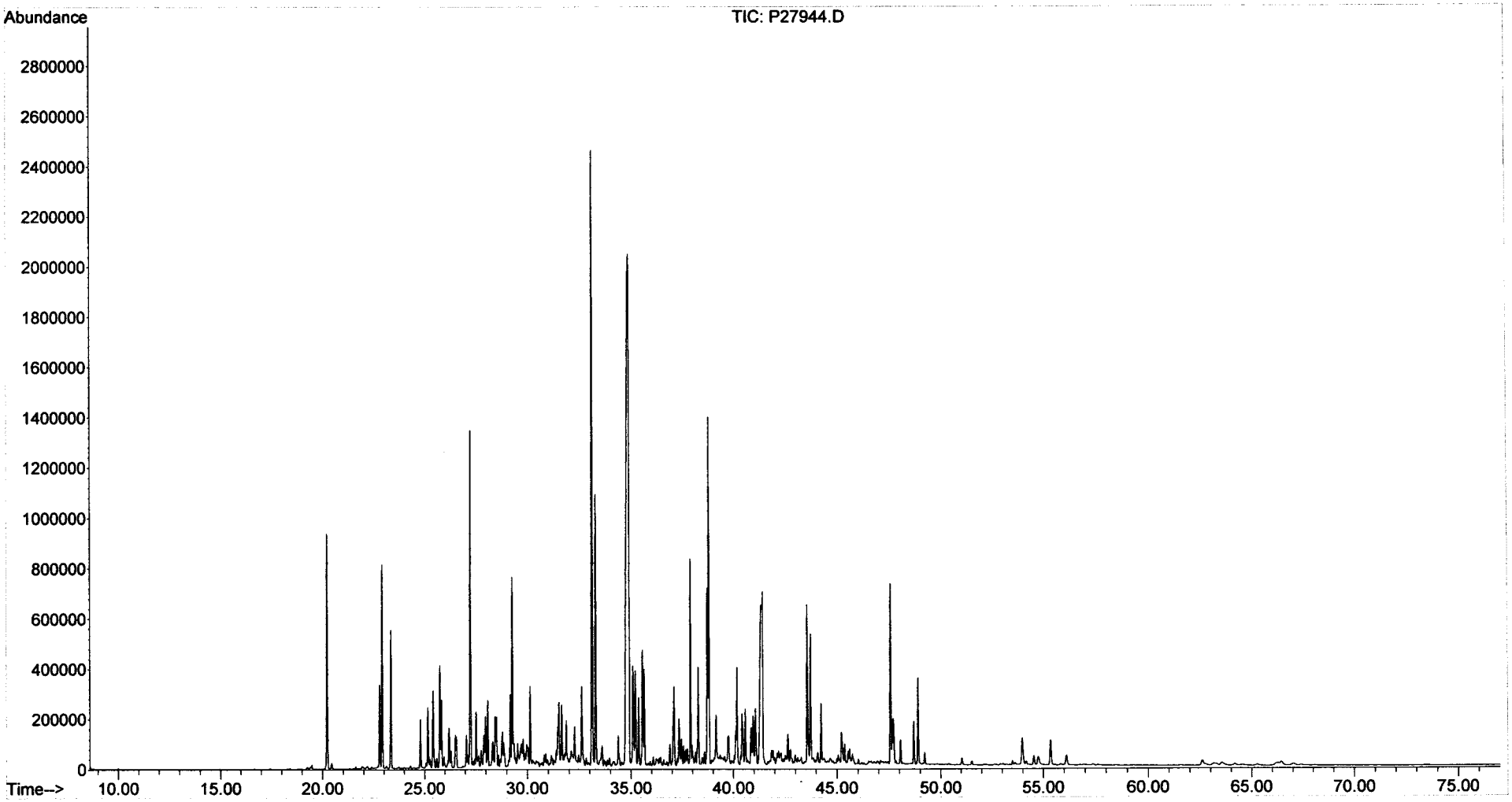
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.64	234	171801m	851.47	ng/mL	
66) Naphthobenzothiophene-1,2-	42.99	234	46520m	230.56	ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	52307m	259.24	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	225848m	1119.33	ng/ml	
69) C2-Naphthobenzothiophenes	45.54	262	101302m	502.07	ng/ml	
70) C3-Naphthobenzothiophenes	47.45	276	44226m	219.19	ng/ml	
71) C4-Naphthobenzothiophenes	48.79	290	14858m	73.64	ng/mL	
73) Benz[a]anthracene	43.58	228	954399m	4346.01	ng/mL	
74) Chrysene	43.74	228	948994m	4302.55	ng/mL	
75) Chrysene/Triphenylene	43.74	228	948146m	4298.70	ng/mL	
76) C1-Chrysenes	45.21	242	664138m	3011.07	ng/mL	
77) C2-Chrysenes	47.59	256	287172m	1301.98	ng/mL	
78) BBF-d12 Surr BKGD	47.59	256	66296	300.57	ng/mL	100
79) C3-Chrysenes	48.56	270	94551m	428.67	ng/mL	
80) C4-Chrysenes	49.62	284	24874m	112.77	ng/mL	
82) Benzo[b]fluoranthene	47.66	252	336745m	1427.77	ng/mL	
83) Benzo[k]fluoranthene	47.73	252	486156m	1971.14	ng/mL	
84) Benzo[a]fluoranthene	48.06	252	217586m	882.21	ng/mL	
85) Benzo[e]pyrene	48.70	252	363912	1600.57	ng/mL	99
86) Benzo[a]pyrene	48.90	252	747527m	3288.61	ng/mL	
87) Perylene	49.22	252	110361	487.00	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.98	276	275445m	1222.59	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	76533m	361.23	ng/mL	
90) Benzo[g,h,i]perylene	55.35	276	291538	1241.08	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27944.D
Acq On : 27 Jan 2006 4:42 pm
Operator : AC
Sample : 0601019-09
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 30 15:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-22B (19.3-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-09E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/25/06	82.1	5.82	2.11	10	AC

Parameter	Result	
Naphthalene	**4600**	
C1-Naphthalenes	**6800**	
C2-Naphthalenes	7.3	U
C3-Naphthalenes	7.3	U
C4-Naphthalenes	7.3	U
Biphenyl	4.0	U
Dibenzofuran	5.2	U
Acenaphthylene	8.0	U
Acenaphthene	**5100**	
Fluorene	5.1	U
C1-Fluorenes	5.1	U
C2-Fluorenes	5.1	U
C3-Fluorenes	5.1	U
Anthracene	**3600**	
Phenanthrene	**9100**	
C1-Phenanthrenes/Anthracenes	6.4	U
C2-Phenanthrenes/Anthracenes	6.4	U
C3-Phenanthrenes/Anthracenes	6.4	U
C4-Phenanthrenes/Anthracenes	6.4	U
Retene	6.4	U
Dibenzothiophene	4.9	U
C1-Dibenzothiophenes	4.9	U
C2-Dibenzothiophenes	4.9	U
C3-Dibenzothiophenes	4.9	U
C4-Dibenzothiophenes	4.9	U
Benzo(b)fluorene	4.5	U

Parameter	Result	
Fluoranthene	4.5	U
Pyrene	**4900**	
C1-Fluoranthenes/Pyrenes	3.9	U
C2-Fluoranthenes/Pyrenes	3.9	U
C3-Fluoranthenes/Pyrenes	3.9	U
C4-Fluoranthenes/Pyrenes	3.9	U
Naphthobenzothiophenes	5.3	U
C1-Naphthobenzothiophenes	5.3	U
C2-Naphthobenzothiophenes	5.3	U
C3-Naphthobenzothiophenes	5.3	U
C4-Naphthobenzothiophenes	5.3	U
Benz[a]anthracene	6.9	U
Chrysene/Triphenylene	4.8	U
C1-Chrysenes	4.8	U
C2-Chrysenes	4.8	U
C3-Chrysenes	4.8	U
C4-Chrysenes	4.8	U
Benzo[b]fluoranthene	4.7	U
Benzo[k]fluoranthene	9.0	U
Benzo[a]fluoranthene	9.0	U
Benzo[e]pyrene	6.0	U
Benzo[a]pyrene	6.1	U
Perylene	7.7	U
Indeno[1,2,3-cd]pyrene	11	U
Dibenz[a,h]anthracene	8.4	U
Benzo[g,h,i]perylene	7.8	U

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

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

02/01/06 09:38

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27878.D
Acq On : 25 Jan 2006 12:33 am
Operator : AC
Sample : 0601019-09-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 31 14:56:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WW 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	39940m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	63149	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	59475m	724.58	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 72.46%			
58) Pyrene-d10	38.90	212	134804	798.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.84%			
81) Benzo[b]fluoranthene-d12	47.77	264	102568m	792.25	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.22%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	20.40	128	185292m	1031.43	ng/mL	
10) C1-Naphthalenes	23.10	142	275842m	1535.48	ng/mL	
15) 2-Methylnaphthalene	23.10	142	167836	1467.72	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	106195	975.68	ng/mL#	100
26) Acenaphthene	27.43	153	126575m	1158.53	ng/mL	
41) Phenanthrene	33.29	178	374071	2052.23	ng/mL	100
53) Anthracene	33.48	178	136158m	804.31	ng/mL	
59) Pyrene	38.96	202	222077	1114.77	ng/mL	100

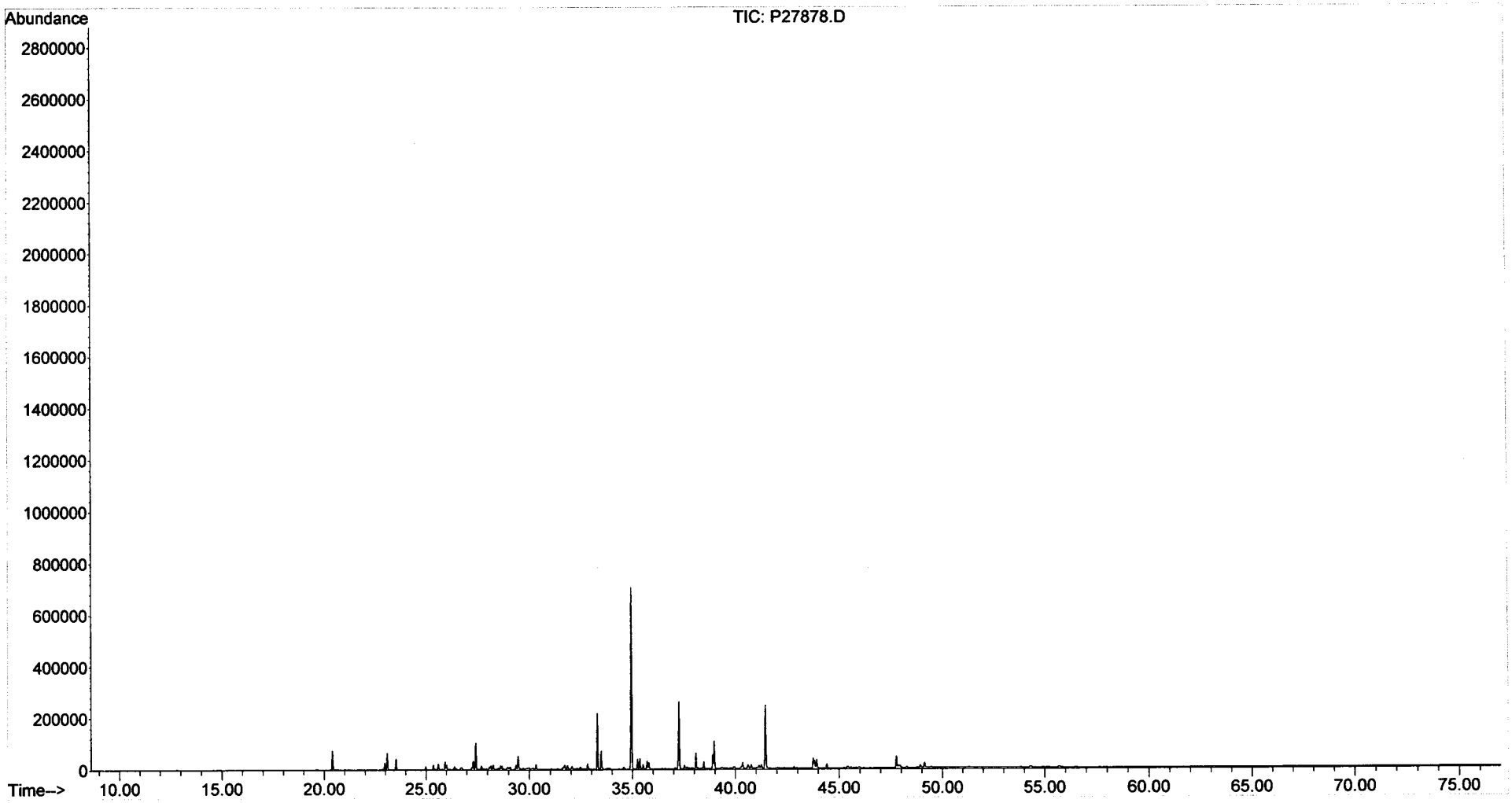
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MS 1/31/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27878.D
Acq On : 25 Jan 2006 12:33 am
Operator : AC
Sample : 0601019-09-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 31 14:56:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-22B (19.3-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-09**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/21/06	82.1	5.82	2.22	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**3.8**	J	30,31-Bishomohopane-22S	1.3	U
C24 Tricyclic Terpane	**2.9**	J	30,31-Bishomohopane-22R	1.3	U
C25 Tricyclic Terpane	**2.6**	J	30,31-Trishomohopane-22S	1.3	U
C24 Tetracyclic Terpane	**0.91**	J	30,31-Trishomohopane-22R	1.3	U
C26 Tricyclic Terpane-22S	**1.5**	J	Tetrakishomohopane-22S	1.3	U
C26 Tricyclic Terpane-22R	**1.5**	J	Tetrakishomohopane-22R	1.3	U
C28 Tricyclic Terpane-22S	1.3	U	Pentakishomohopane-22S	1.3	U
C28 Tricyclic Terpane-22R	1.3	U	Pentakishomohopane-22R	1.3	U
C29 Tricyclic Terpane-22S	1.3	U	13b(H),17a(H)-20S-Diacholestane	**3.2**	J
C29 Tricyclic Terpane-22R	**2.0**	J	13b(H),17a(H)-20R-Diacholestane	**1.8**	J
18a-22,29,30-Trisnorneohopane-TS	**2.5**	J	13b,17a-20S-Methyldiacholestane	**1.3**	J
C30 Tricyclic Terpane-22S	1.3	U	14a(H),17a(H)-20S-Cholestane	**1.9**	J
C30 Tricyclic Terpane-22R	1.3	U	14a(H),17a(H)-20R-Cholestane	**7.0**	
17a(H)-22,29,30-Trisnorhopane-TM	**2.7**	J	13b,17a-20R-Ethyldiacholestane	1.3	U
17a/b,21b/a 28,30-Bisnorhopane	1.3	U	13a,17b-20S-Ethyldiacholestane	1.3	U
17a(H),21b(H)-25-Norhopane	1.3	U	14a,17a-20S-Methylcholestane	**0.60**	J
30-Norhopane	**6.0**		14a,17a-20R-Methylcholestane	**3.6**	J
18a(H)-30-Norneohopane-C29Ts	**2.2**	J	14a(H),17a(H)-20S-Ethylcholestane	**2.0**	J
17a(H)-Diahopane	1.3	U	14a(H),17a(H)-20R-Ethylcholestane	**2.3**	J
30-Normoretane	**2.1**	J	14b(H),17b(H)-20R-Cholestane	**3.1**	J
18a(H)&18b(H)-Oleananes	1.3	U	14b(H),17b(H)-20S-Cholestane	**2.7**	J
Hopane	**11**		14b,17b-20R-Methylcholestane	**2.4**	J
Moretane	**1.3**	J	14b,17b-20S-Methylcholestane	**2.7**	J
30-Homohopane-22S	**2.6**	J	14b(H),17b(H)-20R-Ethylcholestane	**3.4**	J
30-Homohopane-22R	**4.0**	J	14b(H),17b(H)-20S-Ethylcholestane	**3.2**	J

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

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

02/01/06 09:21

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34843.D
Acq On : 21 Jan 2006 2:32 pm
Operator : AC
Sample : 0601019-09
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 24 11:58:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	105224	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	43.93	217	386772	8745.94	ng/ml	0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	874.59%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	2022m	22.36	ng/mL	
84) Hopane (T19)	52.48	191	2074m	22.94	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.94	191	735m	8.13	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.67	191	569m	6.29	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.17	191	504m	5.57	ng/ml	
88) C24 Tetracyclic Terpane (T	44.48	191	177m	1.96	ng/ml	
89) C26 Tricyclic Terpane-22S	44.22	191	293m	3.24	ng/ml	
90) C26 Tricyclic Terpane-22R	44.31	191	297m	3.28	ng/ml	
94) C29 Tricyclic Terpane-22R	47.48	191	400m	4.42	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.63	191	484m	5.35	ng/ml	
98) 17a(H)-22,29,30-Trisnorhop	49.19	191	519m	5.74	ng/ml	
101) 30-Norhopane (T15)	51.07	191	1178m	13.03	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.18	191	426	4.71	ng/ml	100
104) 30-Normoretane (T17)	51.87	191	415m	4.59	ng/ml	
106) Moretane (T20)	53.19	191	251m	2.78	ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	507m	5.61	ng/ml	
108) 30-Homohopane-22R (T22)	54.55	191	789m	8.73	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	309m	6.99	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.85	217	167m	3.78	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.56	217	120m	2.71	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	179m	4.05	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.96	217	668m	15.11	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.67	217	57m	1.29	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	347m	7.85	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.75	217	192m	4.34	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	217m	4.91	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	297	6.72	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	255m	5.77	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.84	218	230m	5.20	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	260m	5.88	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	323m	7.30	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.05	218	300m	6.78	ng/ml	

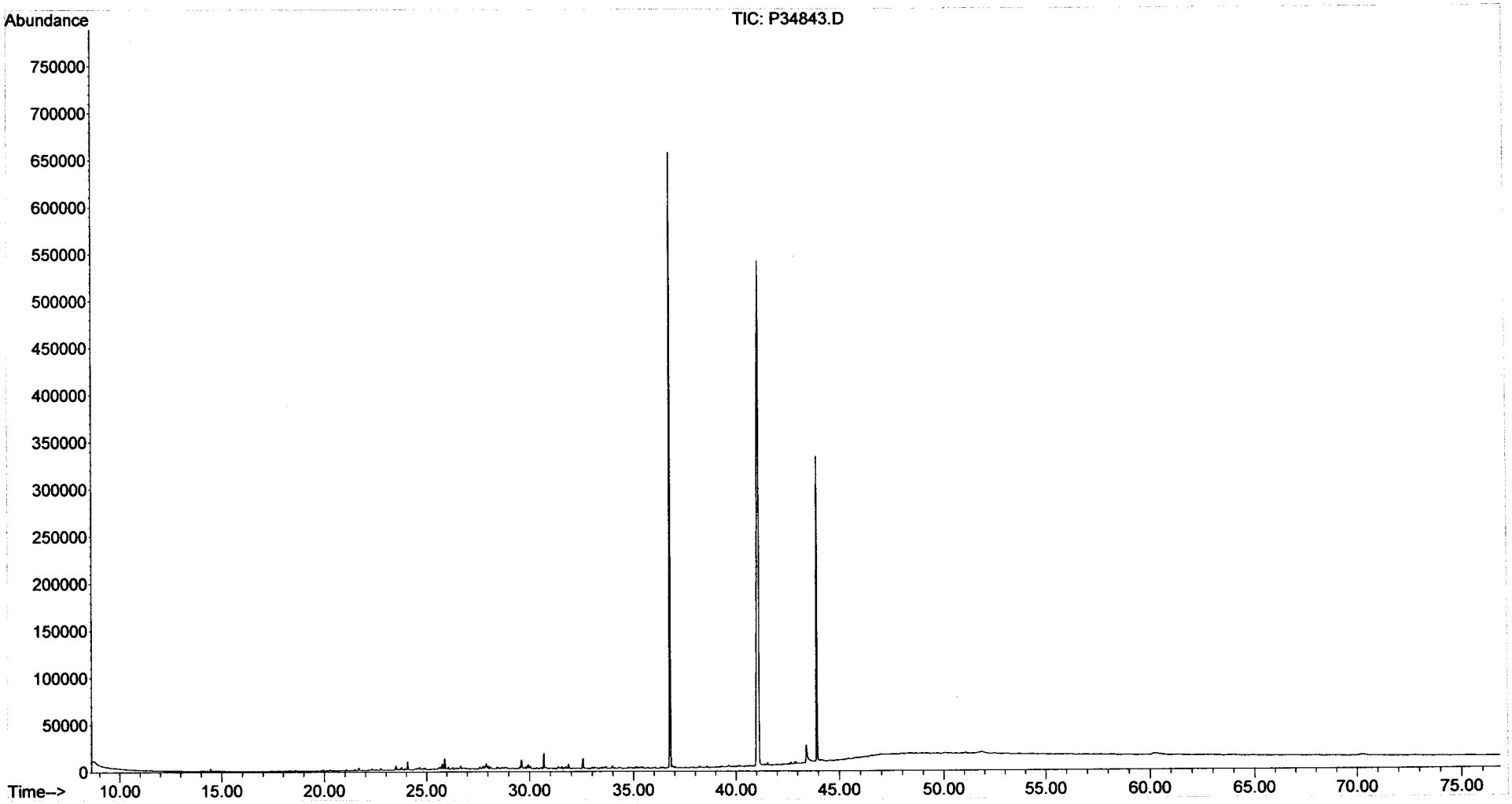
2nd ✓ MS for MD 1/24/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34843.D
Acq On : 21 Jan 2006 2:32 pm
Operator : AC
Sample : 0601019-09
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 24 11:58:13 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-21B (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-10**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/27/06	70.6	5.63	14.04	1	AC

Parameter	Result	Parameter	Result
Naphthalene	3600	Fluoranthene	28000
C1-Naphthalenes	3900	Pyrene	39000 E
C2-Naphthalenes	13000	C1-Fluoranthenes/Pyrenes	44000
C3-Naphthalenes	22000	C2-Fluoranthenes/Pyrenes	19000
C4-Naphthalenes	16000	C3-Fluoranthenes/Pyrenes	8300
Biphenyl	910	C4-Fluoranthenes/Pyrenes	3400
Dibenzofuran	980	Naphthobenzothiophenes	5700
Acenaphthylene	7100	C1-Naphthobenzothiophenes	6300
Acenaphthene	11000	C2-Naphthobenzothiophenes	4500
Fluorene	4200	C3-Naphthobenzothiophenes	2700
C1-Fluorenes	7900	C4-Naphthobenzothiophenes	1300
C2-Fluorenes	13000	Benz[a]anthracene	18000
C3-Fluorenes	10000	Chrysene/Triphenylene	18000
Anthracene	15000	C1-Chrysenes	17000
Phenanthrene	26000	C2-Chrysenes	8400
C1-Phenanthrenes/Anthracenes	43000	C3-Chrysenes	4400
C2-Phenanthrenes/Anthracenes	35000	C4-Chrysenes	1800
C3-Phenanthrenes/Anthracenes	16000	Benzo[b]fluoranthene	8000
C4-Phenanthrenes/Anthracenes	4800	Benzo[k]fluoranthene	9800
Retene	1700	Benzo[a]fluoranthene	4100
Dibenzothiophene	4200	Benzo[e]pyrene	8800
C1-Dibenzothiophenes	10000	Benzo[a]pyrene	16000
C2-Dibenzothiophenes	13000	Perylene	2600
C3-Dibenzothiophenes	8800	Indeno[1,2,3-cd]pyrene	7000
C4-Dibenzothiophenes	3500	Dibenz[a,h]anthracene	2100
Benzo(b)fluorene	8100	Benzo[g,h,i]perylene	7200

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	75	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	106	50-130

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

02/01/06 08:33

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-21B (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-10**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/27/06	70.6	5.63	14.04	1	AC

Parameter	Result
Carbazole	640

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	75	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	106	50-130

N/A - Not Applicable

02/01/06 08:34

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27946.D
Acq On : 27 Jan 2006 6:19 pm
Operator : AC
Sample : 0601019-10
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 30 15:10:32 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

DMB for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	46547m	500.00 ng/mL	-0.01
72) Chrysene-d12	43.65	240	79158m	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.79	152	102374m	1070.19 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 107.02%		
58) Pyrene-d10	38.72	212	282325m	1434.87 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 143.49%#		
81) Benzo[b]fluoranthene-d12	47.59	264	246048m	1516.14 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 151.61%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	20.21	128	214412	1024.12 ng/mL#	100
10) C1-Naphthalenes	23.33	142	230348m	1100.24 ng/mL	
11) C2-Naphthalenes	25.76	156	779184m	3721.70 ng/mL	
12) C3-Naphthalenes	28.10	170	1293886m	6180.12 ng/mL	
13) C4-Naphthalenes	30.88	184	951383m	4544.19 ng/mL	
15) 2-Methylnaphthalene	22.91	142	69917m	524.63 ng/mL	
16) 1-Methylnaphthalene	23.33	142	160331	1263.98 ng/mL#	100
22) Biphenyl	24.80	154	43403m	258.71 ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	104684m	911.88 ng/mL	
24) Dibenzofuran	27.89	168	51258	276.78 ng/mL	94
25) Acenaphthylene	26.52	152	417703m	2010.85 ng/mL	
26) Acenaphthene	27.25	153	381864	2999.05 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.80	170	105386m	1051.91 ng/mL	
28) Fluorene	29.28	166	177157m	1189.93 ng/mL	
29) C1-Fluorenes	31.51	180	334784m	2248.69 ng/mL	
30) C2-Fluorenes	33.69	194	550599m	3698.28 ng/mL	
31) C3-Fluorenes	35.68	208	430317m	2890.37 ng/mL	
32) Dibenzothiophene	32.61	184	237149m	1191.29 ng/mL	
36) OTP	34.80	198	22205m	111.54 ng/mL	
37) C1-Dibenzothiophenes	34.38	198	598014m	3004.06 ng/mL	
38) C2-Dibenzothiophenes	36.08	212	756244m	3798.91 ng/mL	
39) C3-Dibenzothiophenes	37.89	226	498752m	2505.43 ng/mL	
40) C4-Dibenzothiophenes	39.57	240	196617m	987.68 ng/mL	
41) Phenanthrene	33.12	178	1552462	7308.17 ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.07	192	2593503m	12208.84 ng/mL	
48) C2-Phenanthrenes/Anthracen	37.35	206	2111287m	9938.82 ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	975708m	4593.12 ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	285753m	1345.17 ng/mL	
52) Retene	40.12	234	23563m	488.85 ng/mL	
53) Anthracene	33.29	178	826489m	4189.20 ng/mL	
54) Carbazole	33.96	167	33837m	179.95 ng/mL	
55) 1-Methylphenanthrene	35.63	192	454690	3085.35 ng/mL	100
56) Fluoranthene	37.91	202	1769073	7802.69 ng/mL	99
57) Benzo(b)fluorene	40.43	216	320620m	2300.33 ng/mL	
59) Pyrene	38.80	202	2555320	11006.34 ng/mL E	97
60) C1-Fluoranthenes/Pyrenes	40.19	216	2885561m	12428.76 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.66	230	1244300m	5359.48 ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	545014m	2347.50 ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.37	258	226956m	977.55 ng/mL	
64) Naphthobenzothiophene	42.66	234	221617m	1029.37 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27946.D
Acq On : 27 Jan 2006 6:19 pm
Operator : AC
Sample : 0601019-10
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 30 15:10:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

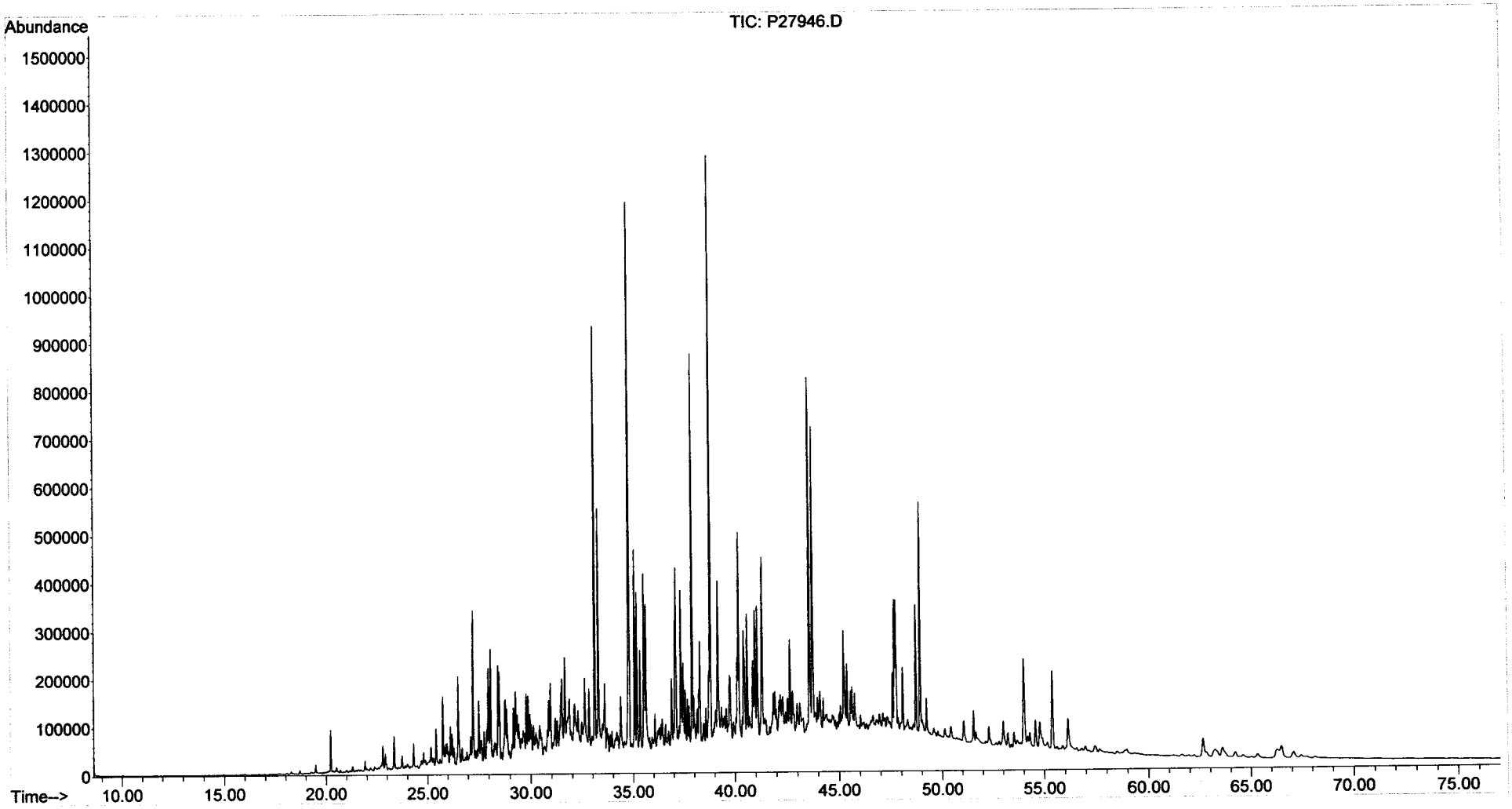
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.66	234	221038m	1026.68 ng/mL	
66) Naphthobenzothiophene-1,2-	42.99	234	57856m	268.73 ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	68742m	319.29 ng/mL	
68) C1-Naphthobenzothiophenes	44.05	248	383713m	1782.27 ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	271863m	1262.75 ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	165837m	770.28 ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	79522m	369.36 ng/mL	
73) Benz[a]anthracene	43.58	228	1146303m	5070.92 ng/mL	
74) Chrysene	43.75	228	1191017m	5245.73 ng/mL	
75) Chrysene/Triphenylene	43.75	228	1184750m	5218.13 ng/mL	
76) C1-Chrysenes	45.22	242	1078799m	4751.47 ng/mL	
77) C2-Chrysenes	46.93	256	553831m	2439.30 ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	15492	68.23 ng/mL	100
79) C3-Chrysenes	48.58	270	285974m	1259.55 ng/mL	
80) C4-Chrysenes	50.13	284	117663m	518.24 ng/mL	
82) Benzo[b]fluoranthene	47.67	252	550164	2266.09 ng/mL	99
83) Benzo[k]fluoranthene	47.75	252	707818m	2787.97 ng/mL	
84) Benzo[a]fluoranthene	48.07	252	296754m	1168.86 ng/mL	
85) Benzo[e]pyrene	48.71	252	579671	2476.78 ng/mL	99
86) Benzo[a]pyrene	48.92	252	1059380m	4527.55 ng/mL	
87) Perylene	49.23	252	171269	734.21 ng/mL	98
88) Indeno[1,2,3-cd]pyrene	54.00	276	459478m	1981.24 ng/mL	
89) Dibenz[a,h]anthracene	54.04	278	127667m	585.38 ng/mL	
90) Benzo[g,h,i]perylene	55.39	276	494405m	2044.62 ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27946.D
Acq On : 27 Jan 2006 6:19 pm
Operator : AC
Sample : 0601019-10
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 30 15:10:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-21B (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-10E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/25/06	70.6	5.63	14.04	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	58	U	Fluoranthene	36	U
C1-Naphthalenes	58	U	Pyrene	**37000**	
C2-Naphthalenes	58	U	C1-Fluoranthenes/Pyrenes	31	U
C3-Naphthalenes	58	U	C2-Fluoranthenes/Pyrenes	31	U
C4-Naphthalenes	58	U	C3-Fluoranthenes/Pyrenes	31	U
Biphenyl	32	U	C4-Fluoranthenes/Pyrenes	31	U
Dibenzofuran	42	U	Naphthobenzothiophenes	43	U
Acenaphthylene	64	U	C1-Naphthobenzothiophenes	43	U
Acenaphthene	41	U	C2-Naphthobenzothiophenes	43	U
Fluorene	41	U	C3-Naphthobenzothiophenes	43	U
C1-Fluorenes	41	U	C4-Naphthobenzothiophenes	43	U
C2-Fluorenes	41	U	Benz[a]anthracene	56	U
C3-Fluorenes	41	U	Chrysene/Triphenylene	38	U
Anthracene	47	U	C1-Chrysenes	38	U
Phenanthrene	51	U	C2-Chrysenes	38	U
C1-Phenanthrenes/Anthracenes	51	U	C3-Chrysenes	38	U
C2-Phenanthrenes/Anthracenes	51	U	C4-Chrysenes	38	U
C3-Phenanthrenes/Anthracenes	51	U	Benzo[b]fluoranthene	37	U
C4-Phenanthrenes/Anthracenes	51	U	Benzo[k]fluoranthene	72	U
Retene	51	U	Benzo[a]fluoranthene	72	U
Dibenzothiophene	39	U	Benzo[e]pyrene	48	U
C1-Dibenzothiophenes	39	U	Benzo[a]pyrene	49	U
C2-Dibenzothiophenes	39	U	Perylene	62	U
C3-Dibenzothiophenes	39	U	Indeno[1,2,3-cd]pyrene	85	U
C4-Dibenzothiophenes	39	U	Dibenz[a,h]anthracene	67	U
Benzo(b)fluorene	36	U	Benzo[g,h,i]perylene	62	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	60	50-130
Pyrene-d10	87	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.

02/01/06 08:35

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27882.D
Acq On : 25 Jan 2006 3:46 am
Operator : AC
Sample : 0601019-10-RE
Misc : 10X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 30 15:35:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS 1/31/06

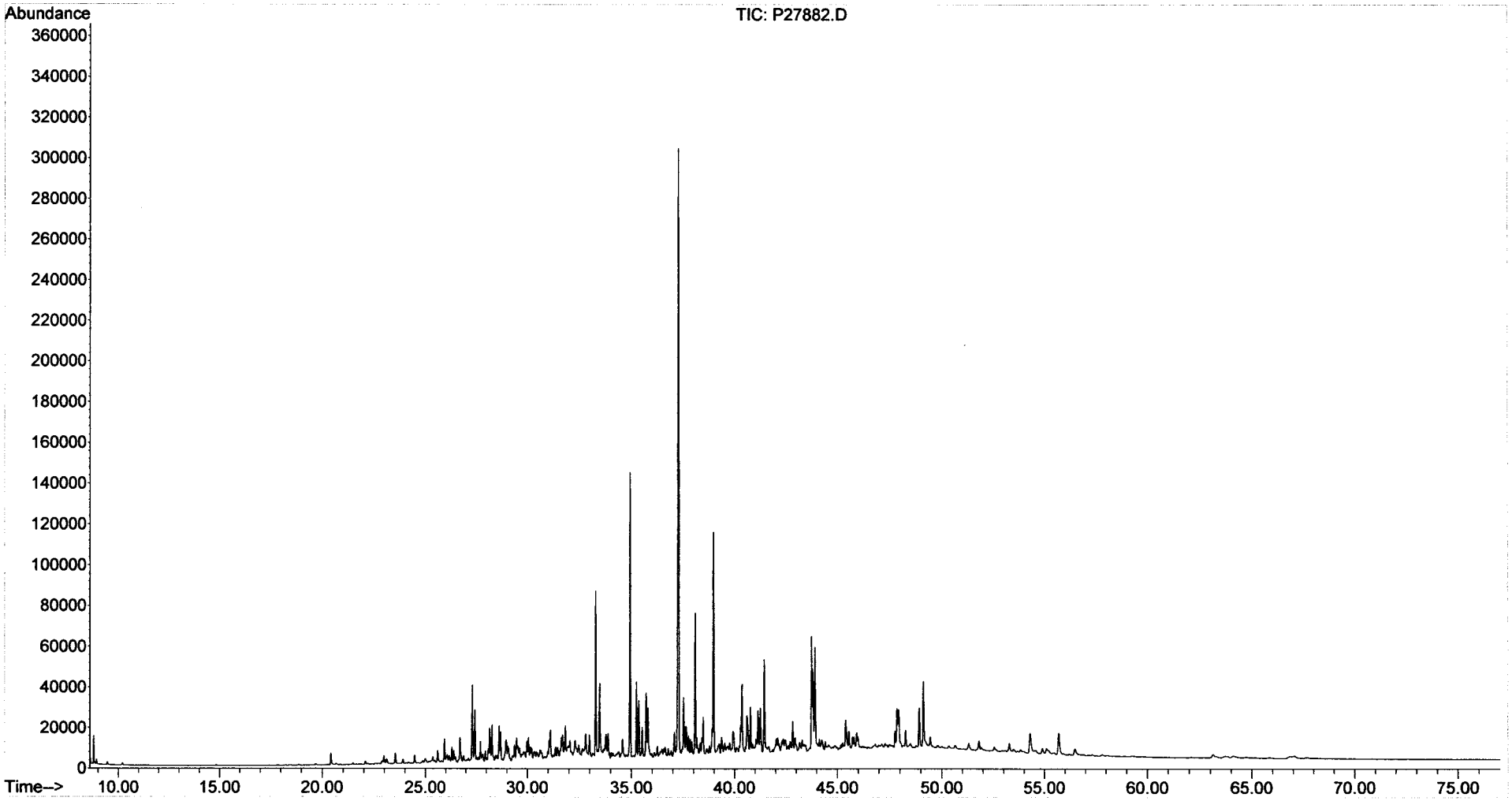
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	45177m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	75868	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.99	152	7896m	85.05	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.51%#			
58) Pyrene-d10	38.90	212	23748m	124.36	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 12.44%#			
81) Benzo[b]fluoranthene-d12	47.77	264	18400m	118.30	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.83%#			
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
59) Pyrene	38.96	202	233606	1036.71	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27882.D
Acq On : 25 Jan 2006 3:46 am
Operator : AC
Sample : 0601019-10-RE
Misc : 10X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 30 15:35:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-21B (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-10**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/21/06	70.6	5.63	4.55	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**600**	30,31-Bishomohopane-22S	**940**
C24 Tricyclic Terpane	**360**	30,31-Bishomohopane-22R	**690**
C25 Tricyclic Terpane	**370**	30,31-Trishomohopane-22S	**580**
C24 Tetracyclic Terpane	**340**	30,31-Trishomohopane-22R	**360**
C26 Tricyclic Terpane-22S	**160**	Tetrakishomohopane-22S	**370**
C26 Tricyclic Terpane-22R	**170**	Tetrakishomohopane-22R	**250**
C28 Tricyclic Terpane-22S	**210**	Pentakishomohopane-22S	**320**
C28 Tricyclic Terpane-22R	**220**	Pentakishomohopane-22R	**250**
C29 Tricyclic Terpane-22S	**270**	13b(H),17a(H)-20S-Diacholestane	**730**
C29 Tricyclic Terpane-22R	**270**	13b(H),17a(H)-20R-Diacholestane	**430**
18a-22,29,30-Trisnorneohopane-TS	**950**	13b,17a-20S-Methyldiacholestane	**290**
C30 Tricyclic Terpane-22S	**230**	14a(H),17a(H)-20S-Cholestane	**390**
C30 Tricyclic Terpane-22R	**210**	14a(H),17a(H)-20R-Cholestane	**1400**
17a(H)-22,29,30-Trisnorhopane-TM	**1100**	13b,17a-20R-Ethyldiacholestane	**230**
17a/b,21b/a 28,30-Bisnorhopane	**290**	13a,17b-20S-Ethyldiacholestane	**72**
17a(H),21b(H)-25-Norhopane	**120**	14a,17a-20S-Methylcholestane	**240**
30-Norhopane	**3200**	14a,17a-20R-Methylcholestane	**620**
18a(H)-30-Norneohopane-C29Ts	**900**	14a(H),17a(H)-20S-Ethylcholestane	**540**
17a(H)-Diahopane	**220**	14a(H),17a(H)-20R-Ethylcholestane	**740**
30-Normoretane	**630**	14b(H),17b(H)-20R-Cholestane	**700**
18a(H)&18b(H)-Oleananes	**530**	14b(H),17b(H)-20S-Cholestane	**690**
Hopane	**4800**	14b,17b-20R-Methylcholestane	**660**
Moretane	**660**	14b,17b-20S-Methylcholestane	**820**
30-Homohopane-22S	**1500**	14b(H),17b(H)-20R-Ethylcholestane	**1200**
30-Homohopane-22R	**1300**	14b(H),17b(H)-20S-Ethylcholestane	**640**

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

N/A - Not Applicable

02/01/06 09:21

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34844.D
Acq On : 21 Jan 2006 4:10 pm
Operator : AC
Sample : 0601019-10
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 25 08:49:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

AMS 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	43.41	240	107014	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.93	217	155699	3461.88	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 346.19%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.51	191	392531m	4268.39	ng/mL	
84) Hopane (T19)	52.51	191	389755m	4238.21	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	48073m	522.75	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	28640	311.43	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.16	191	29878m	324.89	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	27700m	301.21	ng/ml	
89) C26 Tricyclic Terpane-22S	44.22	191	13066	142.08	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.32	191	13484m	146.63	ng/ml	
91) C28 Tricyclic Terpane-22S	46.61	191	16736m	181.99	ng/ml	
92) C28 Tricyclic Terpane-22R	46.77	191	17864m	194.25	ng/ml	
93) C29 Tricyclic Terpane-22S	47.30	191	21562	234.47	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.49	191	21875m	237.87	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.64	191	76469m	831.53	ng/ml	
96) C30 Tricyclic Terpane-22S	48.74	191	18714m	203.50	ng/mL	
97) C30 Tricyclic Terpane-22R	48.98	191	16883m	183.59	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.21	191	88652	964.00	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.42	191	23240m	252.71	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	9887	107.51	ng/ml	100
101) 30-Norhopane (T15)	51.11	191	254668m	2769.27	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.21	191	72729m	790.86	ng/ml	
103) 17a(H)-Diahopane (X)	51.33	191	17326m	188.40	ng/ml	
104) 30-Normoretane (T17)	51.90	191	50770	552.07	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.31	191	42709m	464.42	ng/ml	
106) Moretane (T20)	53.20	191	52701m	573.07	ng/ml	
107) 30-Homohopane-22S (T21)	54.32	191	120710	1312.60	ng/ml	100
108) 30-Homohopane-22R (T22)	54.57	191	107487	1168.82	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.91	191	75386m	819.75	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.31	191	55183	600.06	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.09	191	46562m	506.32	ng/ml	
112) 30,31-Trishomohopane-22R (	58.72	191	29230m	317.85	ng/ml	
113) Tetrakishomohopane-22S (T3	60.78	191	29894	325.07	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.71	191	20044	217.96	ng/ml	100
115) Pentakishomohopane-22S (T3	64.01	191	26066m	283.44	ng/ml	
116) Pentakishomohopane-22R (T3	65.33	191	20173m	219.36	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.44	217	28749m	639.22	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.86	217	16792	373.36	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.56	217	11341	252.16	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	15473m	344.03	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	56176	1249.04	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.25	217	9195m	204.45	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34844.D
Acq On : 21 Jan 2006 4:10 pm
Operator : AC
Sample : 0601019-10
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 25 08:49:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

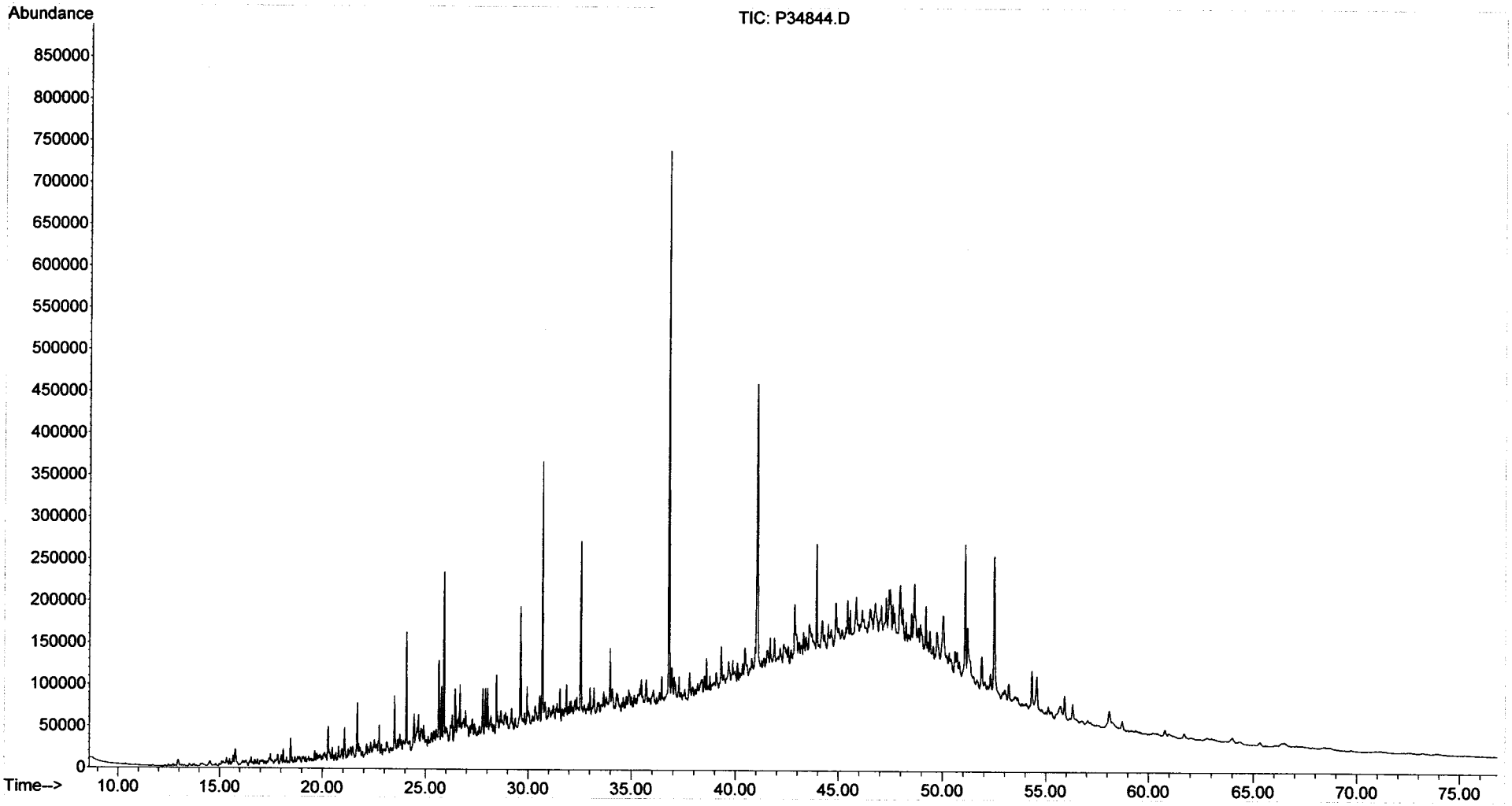
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	2849m	63.35 ng/ml	
125) 14a,17a-20S-Methylcholesta	48.68	217	9236m	205.36 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	24498m	544.70 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	21148m	470.21 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.70	217	29167m	648.51 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	27350	608.11 ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	26980m	599.88 ng/ml	
131) 14b,17b-20R-Methylcholesta	48.85	218	26089m	580.07 ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	32237m	716.77 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	48043m	1068.21 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.06	218	24947m	554.68 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34844.D
Acq On : 21 Jan 2006 4:10 pm
Operator : AC
Sample : 0601019-10
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 25 08:49:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-19C (1.5-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-11**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/27/06	47.2	10.60	26.32	1	AC

Parameter	Result	Parameter	Result
Naphthalene	3700	Fluoranthene	49000
C1-Naphthalenes	2400	Pyrene	65000 E
C2-Naphthalenes	7000	C1-Fluoranthenes/Pyrenes	66000
C3-Naphthalenes	13000	C2-Fluoranthenes/Pyrenes	26000
C4-Naphthalenes	12000	C3-Fluoranthenes/Pyrenes	9800
Biphenyl	430	C4-Fluoranthenes/Pyrenes	3900
Dibenzofuran	870	Naphthobenzothiophenes	9500
Acenaphthylene	15000	C1-Naphthobenzothiophenes	9000
Acenaphthene	12000	C2-Naphthobenzothiophenes	5600
Fluorene	1800	C3-Naphthobenzothiophenes	3200
C1-Fluorenes	6400	C4-Naphthobenzothiophenes	1500
C2-Fluorenes	13000	Benz[a]anthracene	30000
C3-Fluorenes	11000	Chrysene/Triphenylene	31000
Anthracene	18000	C1-Chrysenes	25000
Phenanthrene	16000	C2-Chrysenes	10000
C1-Phenanthrenes/Anthracenes	45000	C3-Chrysenes	5400
C2-Phenanthrenes/Anthracenes	41000	C4-Chrysenes	1800
C3-Phenanthrenes/Anthracenes	18000	Benzo[b]fluoranthene	15000
C4-Phenanthrenes/Anthracenes	4800	Benzo[k]fluoranthene	19000
Retene	1500	Benzo[a]fluoranthene	7100
Dibenzothiophene	2900	Benzo[e]pyrene	16000
C1-Dibenzothiophenes	9800	Benzo[a]pyrene	28000
C2-Dibenzothiophenes	14000	Perylene	4700
C3-Dibenzothiophenes	9700	Indeno[1,2,3-cd]pyrene	13000
C4-Dibenzothiophenes	3600	Dibenz[a,h]anthracene	3800
Benzo(b)fluorene	12000	Benzo[g,h,i]perylene	14000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	97	50-130

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

02/01/06 08:34

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-19C (1.5-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-11**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/27/06	47.2	10.60	26.32	1	AC

Parameter	Result
Carbazole	**1000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	97	50-130

N/A - Not Applicable

02/01/06 08:34

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27948.D
Acq On : 27 Jan 2006 7:57 pm
Operator : AC
Sample : 0601019-11
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 30 15:24:58 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

ons for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	44585m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.65	240	77264m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	58702m	640.66	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 64.07%			
58) Pyrene-d10	38.72	212	134139m	711.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 71.17%			
81) Benzo[b]fluoranthene-d12	47.59	264	116731	736.92	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 73.69%			
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	140689m	701.56	ng/mL	
10) C1-Naphthalenes	23.35	142	90295m	450.26	ng/mL	
11) C2-Naphthalenes	25.76	156	266132m	1327.09	ng/mL	
12) C3-Naphthalenes	27.99	170	502770m	2507.11	ng/mL	
13) C4-Naphthalenes	30.88	184	448565m	2236.81	ng/mL	
15) 2-Methylnaphthalene	22.91	142	38893m	304.68	ng/mL	
16) 1-Methylnaphthalene	23.35	142	51960	427.66	ng/mL#	100
22) Biphenyl	24.80	154	13188m	82.07	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	33234m	302.23	ng/mL	
24) Dibenzofuran	27.89	168	29292	165.13	ng/mL	98
25) Acenaphthylene	26.52	152	566505m	2847.21	ng/mL	
26) Acenaphthene	27.25	153	287965	2361.12	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.80	170	44783m	466.67	ng/mL	
28) Fluorene	29.28	166	49395m	346.38	ng/mL	
29) C1-Fluorenes	31.51	180	173063m	1213.59	ng/mL	
30) C2-Fluorenes	33.69	194	355808m	2495.07	ng/mL	
31) C3-Fluorenes	36.38	208	298767m	2095.08	ng/mL	
32) Dibenzothiophene	32.61	184	104186m	546.40	ng/mL	
36) OTP	34.77	198	11674m	61.22	ng/mL	
37) C1-Dibenzothiophenes	34.38	198	365806m	1918.45	ng/mL	
38) C2-Dibenzothiophenes	36.08	212	515211m	2702.00	ng/mL	
39) C3-Dibenzothiophenes	37.89	226	350731m	1839.39	ng/mL	
40) C4-Dibenzothiophenes	39.57	240	130972m	686.88	ng/mL	
41) Phenanthrene	33.11	178	638058	3135.82	ng/mL	100
47) C1-Phenanthrenes/Anthracen	35.07	192	1736494m	8534.22	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.35	206	1572361m	7727.57	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.19	220	697783m	3429.34	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.39	234	187043m	919.25	ng/mL	
52) Retene	40.12	234	13259m	287.18	ng/mL	
53) Anthracene	33.29	178	629843m	3332.96	ng/mL	
54) Carbazole	33.96	167	34443m	191.24	ng/mL	
55) 1-Methylphenanthrene	35.62	192	258418m	1830.69	ng/mL	
56) Fluoranthene	37.91	202	2040788m	9397.22	ng/mL	
57) Benzo(b)fluorene	40.43	216	310666m	2327.00	ng/mL	
59) Pyrene	38.80	202	2766347	12439.62	ng/mL E	96
60) C1-Fluoranthenes/Pyrenes	40.19	216	2785930m	12527.68	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.66	230	1106236m	4974.49	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.12	244	415347m	1867.72	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.37	258	164186m	738.31	ng/mL	
64) Naphthobenzothiophene	42.66	234	235378m	1141.40	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27948.D
Acq On : 27 Jan 2006 7:57 pm
Operator : AC
Sample : 0601019-11
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 30 15:24:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

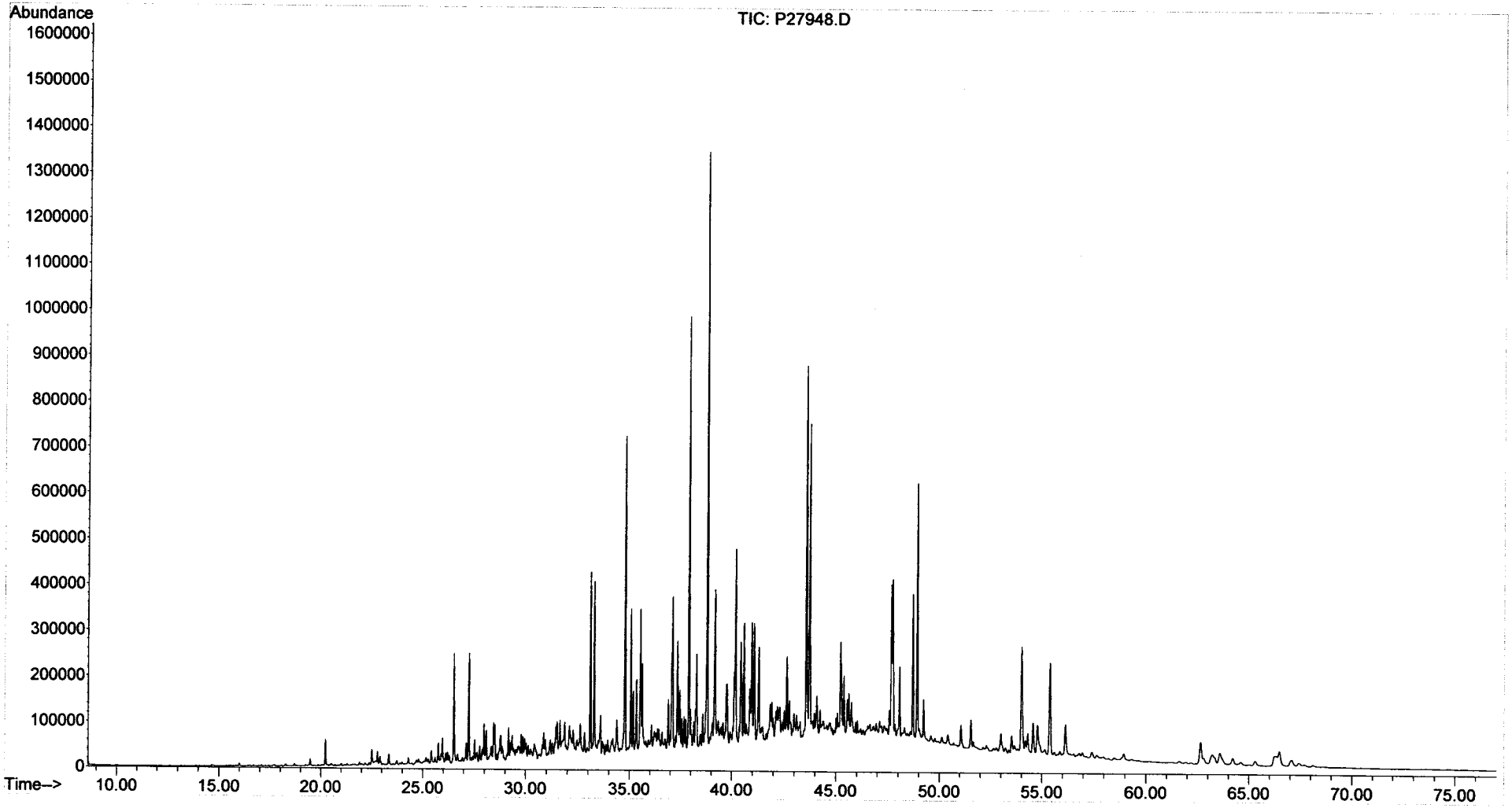
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.66	234	235272m	1140.88	ng/mL	
66) Naphthobenzothiophene-1,2-	42.99	234	60520m	293.47	ng/mL	
67) Naphthobenzothiophene-2,3-	43.29	234	76498m	370.95	ng/mL	
68) C1-Naphthobenzothiophenes	44.04	248	352223m	1708.00	ng/ml	
69) C2-Naphthobenzothiophenes	45.55	262	218031m	1057.28	ng/ml	
70) C3-Naphthobenzothiophenes	47.68	276	125884m	610.44	ng/ml	
71) C4-Naphthobenzothiophenes	48.80	290	60422m	293.00	ng/mL	
73) Benz[a]anthracene	43.58	228	1277489m	5789.78	ng/mL	
74) Chrysene	43.74	228	1298012m	5857.12	ng/mL	
75) Chrysene/Triphenylene	43.74	228	1301154m	5871.30	ng/mL	
76) C1-Chrysenes	45.22	242	1047938m	4728.69	ng/mL	
77) C2-Chrysenes	46.93	256	450753m	2033.97	ng/mL	
78) BBF-d12 Surr BKGD	47.57	256	8899	40.16	ng/mL	100
79) C3-Chrysenes	48.58	270	227573m	1026.90	ng/mL	
80) C4-Chrysenes	49.63	284	75973m	342.82	ng/mL	
82) Benzo[b]fluoranthene	47.67	252	682737	2881.08	ng/mL	99
83) Benzo[k]fluoranthene	47.75	252	886636	3577.91	ng/mL	99
84) Benzo[a]fluoranthene	48.07	252	336246m	1356.88	ng/mL	
85) Benzo[e]pyrene	48.72	252	699262	3061.00	ng/mL	97
86) Benzo[a]pyrene	48.92	252	1216666m	5327.21	ng/mL	
87) Perylene	49.23	252	204693	899.01	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	54.00	276	577640m	2551.80	ng/mL	-RF+RF+conc
89) Dibenz[a,h]anthracene	54.04	278	153306m	720.17	ng/mL	2nd
90) Benzo[g,h,i]perylene	55.40	276	606669	2570.39	ng/mL	100 AV 2/1/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27948.D
Acq On : 27 Jan 2006 7:57 pm
Operator : AC
Sample : 0601019-11
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 30 15:24:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-19C (1.5-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-11E**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/25/06	47.2	10.60	26.32	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	87	U	Fluoranthene	53	U
C1-Naphthalenes	87	U	Pyrene	**64000**	
C2-Naphthalenes	87	U	C1-Fluoranthenes/Pyrenes	47	U
C3-Naphthalenes	87	U	C2-Fluoranthenes/Pyrenes	47	U
C4-Naphthalenes	87	U	C3-Fluoranthenes/Pyrenes	47	U
Biphenyl	48	U	C4-Fluoranthenes/Pyrenes	47	U
Dibenzofuran	62	U	Naphthobenzothiophenes	64	U
Acenaphthylene	95	U	C1-Naphthobenzothiophenes	64	U
Acenaphthene	60	U	C2-Naphthobenzothiophenes	64	U
Fluorene	60	U	C3-Naphthobenzothiophenes	64	U
C1-Fluorenes	60	U	C4-Naphthobenzothiophenes	64	U
C2-Fluorenes	60	U	Benz[a]anthracene	82	U
C3-Fluorenes	60	U	Chrysene/Triphenylene	57	U
Anthracene	70	U	C1-Chrysenes	57	U
Phenanthrene	76	U	C2-Chrysenes	57	U
C1-Phenanthrenes/Anthracenes	76	U	C3-Chrysenes	57	U
C2-Phenanthrenes/Anthracenes	76	U	C4-Chrysenes	57	U
C3-Phenanthrenes/Anthracenes	76	U	Benzo[b]fluoranthene	56	U
C4-Phenanthrenes/Anthracenes	76	U	Benzo[k]fluoranthene	110	U
Retene	76	U	Benzo[a]fluoranthene	110	U
Dibenzothiophene	58	U	Benzo[e]pyrene	72	U
C1-Dibenzothiophenes	58	U	Benzo[a]pyrene	73	U
C2-Dibenzothiophenes	58	U	Perylene	92	U
C3-Dibenzothiophenes	58	U	Indeno[1,2,3-cd]pyrene	130	U
C4-Dibenzothiophenes	58	U	Dibenz[a,h]anthracene	100	U
Benzo(b)fluorene	53	U	Benzo[g,h,i]perylene	92	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	74	50-130
Pyrene-d10	84	50-130
Benzo[b]fluoranthene-d12	80	50-130

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

02/01/06 08:36

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27884.D
Acq On : 25 Jan 2006 5:22 am
Operator : AC
Sample : 0601019-11-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 30 15:37:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WD 1/31/06

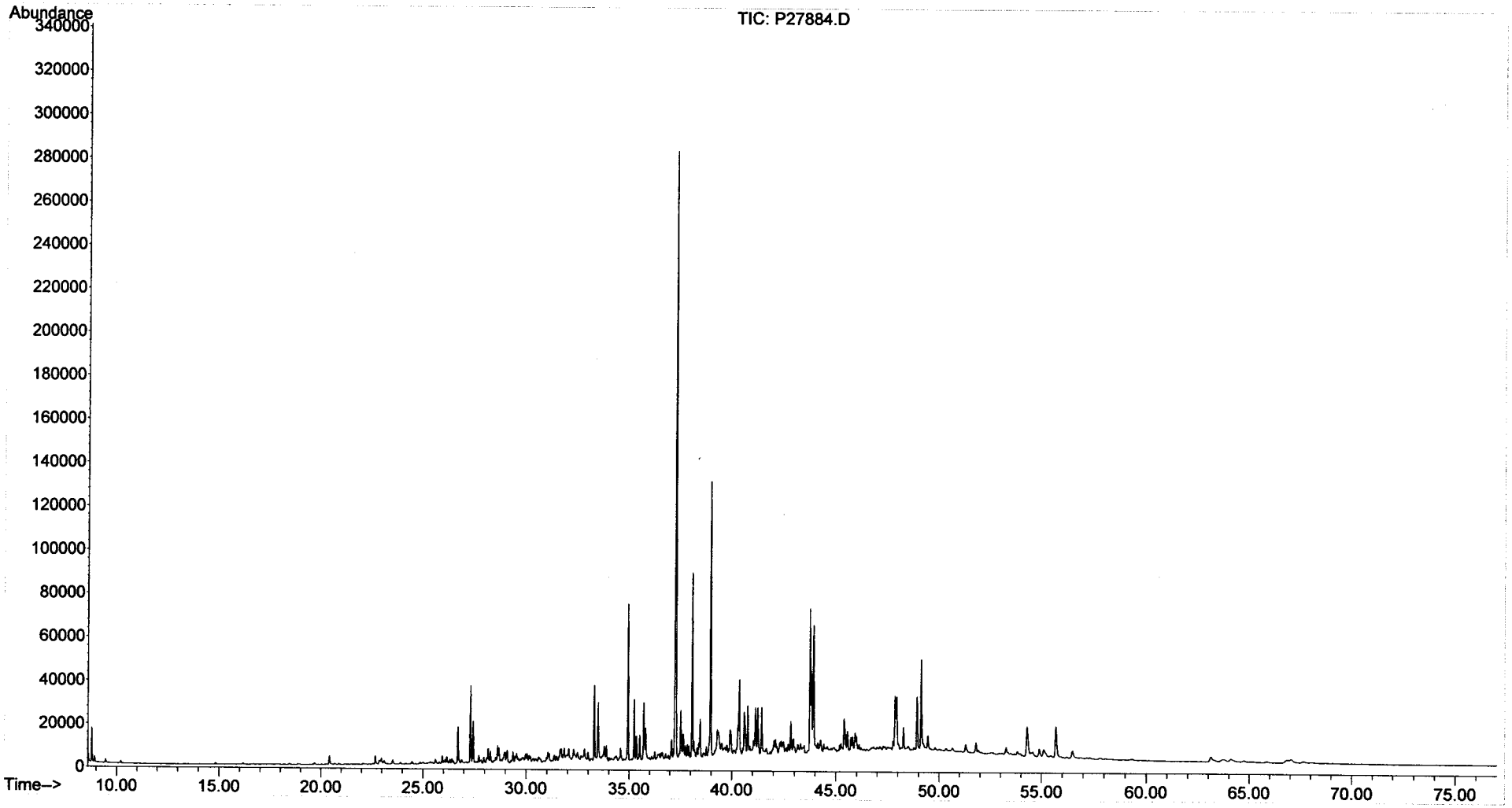
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	43710m	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	70806m	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.99	152	5051	56.23	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.62%#			
58) Pyrene-d10	38.90	212	11862m	64.20	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.42%#			
81) Benzo[b]fluoranthene-d12	47.77	264	8833m	60.85	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.09%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
59) Pyrene	38.96	202	266453	1222.16	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27884.D
Acq On : 25 Jan 2006 5:22 am
Operator : AC
Sample : 0601019-11-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 30 15:37:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-19C (1.5-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-11**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/21/06	47.2	10.60	8	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**980**	30,31-Bishomohopane-22S	**1700**
C24 Tricyclic Terpane	**570**	30,31-Bishomohopane-22R	**1100**
C25 Tricyclic Terpane	**620**	30,31-Trishomohopane-22S	**980**
C24 Tetracyclic Terpane	**660**	30,31-Trishomohopane-22R	**600**
C26 Tricyclic Terpane-22S	**270**	Tetrakishomohopane-22S	**610**
C26 Tricyclic Terpane-22R	**270**	Tetrakishomohopane-22R	**440**
C28 Tricyclic Terpane-22S	**320**	Pentakishomohopane-22S	**570**
C28 Tricyclic Terpane-22R	**340**	Pentakishomohopane-22R	**420**
C29 Tricyclic Terpane-22S	**390**	13b(H),17a(H)-20S-Diacholestane	**1200**
C29 Tricyclic Terpane-22R	**410**	13b(H),17a(H)-20R-Diacholestane	**680**
18a-22,29,30-Trisnorneohopane-TS	**1600**	13b,17a-20S-Methyldiacholestane	**560**
C30 Tricyclic Terpane-22S	**340**	14a(H),17a(H)-20S-Cholestane	**800**
C30 Tricyclic Terpane-22R	**280**	14a(H),17a(H)-20R-Cholestane	**2200**
17a(H)-22,29,30-Trisnorhopane-TM	**1600**	13b,17a-20R-Ethyldiacholestane	**390**
17a/b,21b/a 28,30-Bisnorhopane	**370**	13a,17b-20S-Ethyldiacholestane	**130**
17a(H),21b(H)-25-Norhopane	**170**	14a,17a-20S-Methylcholestane	**440**
30-Norhopane	**5200**	14a,17a-20R-Methylcholestane	**910**
18a(H)-30-Norneohopane-C29Ts	**1200**	14a(H),17a(H)-20S-Ethylcholestane	**840**
17a(H)-Diahopane	**260**	14a(H),17a(H)-20R-Ethylcholestane	**1200**
30-Normoretane	**780**	14b(H),17b(H)-20R-Cholestane	**1200**
18a(H)&18b(H)-Oleananes	**630**	14b(H),17b(H)-20S-Cholestane	**1200**
Hopane	**6700**	14b,17b-20R-Methylcholestane	**1100**
Moretane	**790**	14b,17b-20S-Methylcholestane	**1400**
30-Homohopane-22S	**2400**	14b(H),17b(H)-20R-Ethylcholestane	**2000**
30-Homohopane-22R	**2100**	14b(H),17b(H)-20S-Ethylcholestane	**1300**

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

N/A - Not Applicable

02/01/06 09:21

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34845.D
Acq On : 21 Jan 2006 5:47 pm
Operator : AC
Sample : 0601019-11
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 24 12:07:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	112093	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.94	217	101071	2145.43	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 214.54%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.51	191	401710m	4170.28	ng/mL	
84) Hopane (T19)	52.51	191	402798m	4181.58	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.95	191	59256m	615.16	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.68	191	34424	357.37	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.17	191	37136m	385.52	ng/ml	
88) C24 Tetracyclic Terpane (T	44.49	191	39560	410.69	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.22	191	16340	169.63	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.33	191	16131	167.46	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.61	191	19527m	202.72	ng/ml	
92) C28 Tricyclic Terpane-22R	46.78	191	20502m	212.84	ng/ml	
93) C29 Tricyclic Terpane-22S	47.31	191	23412	243.05	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.50	191	24504m	254.38	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.66	191	93838	974.16	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.74	191	20169m	209.38	ng/mL	
97) C30 Tricyclic Terpane-22R	48.99	191	17214m	178.70	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.22	191	98531	1022.88	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.42	191	22190m	230.36	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.20	191	10399	107.96	ng/ml	100
101) 30-Norhopane (T15)	51.12	191	312068m	3239.68	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.22	191	74999m	778.59	ng/ml	
103) 17a(H)-Diahopane (X)	51.34	191	15507m	160.98	ng/ml	
104) 30-Normoretane (T17)	51.92	191	46874	486.61	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.32	191	37715	391.53	ng/ml	100
106) Moretane (T20)	53.21	191	47707m	495.26	ng/ml	
107) 30-Homohopane-22S (T21)	54.33	191	145700m	1512.56	ng/ml	
108) 30-Homohopane-22R (T22)	54.57	191	127160	1320.09	ng/ml	100
109) 30,31-Bishomohopane-22S (T	55.91	191	103094	1070.25	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.31	191	65299	677.89	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.10	191	58874m	611.19	ng/ml	
112) 30,31-Trishomohopane-22R (	58.74	191	36161m	375.40	ng/ml	
113) Tetrakishomohopane-22S (T3	60.79	191	36553	379.47	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.71	191	26308	273.11	ng/ml	100
115) Pentakishomohopane-22S (T3	64.00	191	34115m	354.16	ng/ml	
116) Pentakishomohopane-22R (T3	65.33	191	25211m	261.72	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.45	217	36411	772.90	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.86	217	19949m	423.46	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.57	217	16394m	347.99	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.44	217	23484m	498.49	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.97	217	64777m	1375.02	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.26	217	11576m	245.72	ng/ml	

2nd ✓ MS 1/26/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34845.D
Acq On : 21 Jan 2006 5:47 pm
Operator : AC
Sample : 0601019-11
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 24 12:07:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.52	217	3919	83.19	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.68	217	13059m	277.20	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	26951m	572.09	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	24644m	523.12	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.71	217	35465m	752.81	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.53	218	34918	741.20	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.62	218	34954m	741.97	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.85	218	31329m	665.02	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.94	218	41937m	890.20	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.02	218	59117m	1254.87	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.07	218	38826m	824.16	ng/ml	- RF+Rpt conc 2nd

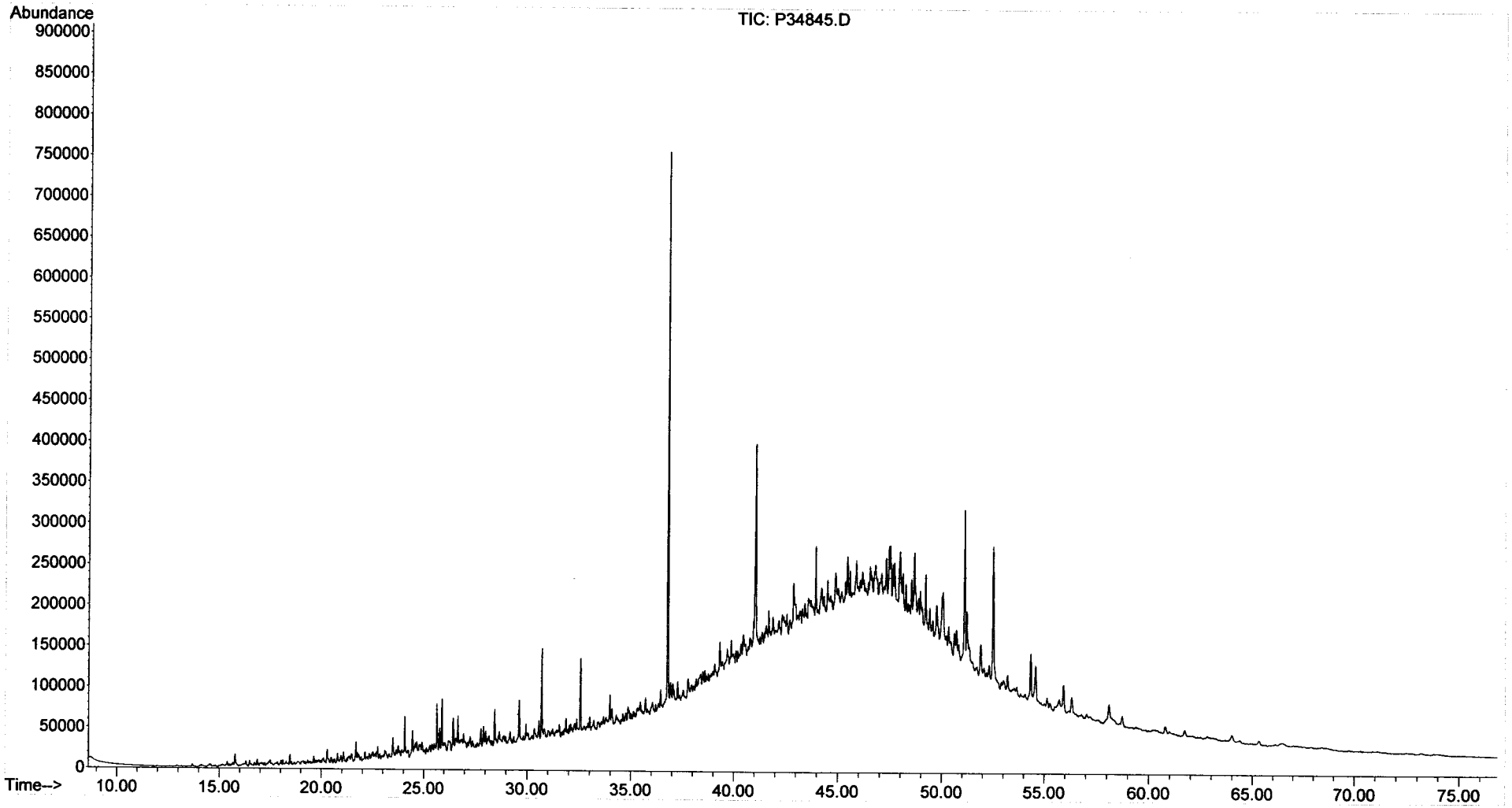
(#) = qualifier out of range (m) = manual integration (+) = signals summed

cr 2/1/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34845.D
Acq On : 21 Jan 2006 5:47 pm
Operator : AC
Sample : 0601019-11
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 24 12:07:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **SS011106B01**
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	01/11/06	01/23/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.14**	J	Fluoranthene	**0.066**	J
C1-Naphthalenes	**0.088**	J	Pyrene	**0.12**	J
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**0.029**	J	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	0.077	U	C2-Naphthobenzothiophenes	0.081	U
Fluorene	0.077	U	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**0.041**	J
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**0.041**	J
Anthracene	0.089	U	C1-Chrysenes	0.072	U
Phenanthrene	**0.14**	J	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	**0.15**	J	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	0.071	U
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	0.14	U
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	0.093	U
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	0.16	U
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	0.13	U
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**0.063**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	89	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

01/31/06 15:00

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: **0601019**
Lab ID: **SS011106B01**
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	01/11/06	01/23/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	89	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

01/31/06 15:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27848.D
Acq On : 23 Jan 2006 11:22 pm
Operator : AC
Sample : SS011106B01
Misc : 1X ETR0601019
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 08:46:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for MW 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.30	164	26654m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.81	240	38793m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	24399m	445.42	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.54%#			
58) Pyrene-d10	38.89	212	57283m	508.41	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.84%			
81) Benzo[b]fluoranthene-d12	47.76	264	39360m	494.90	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.49%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

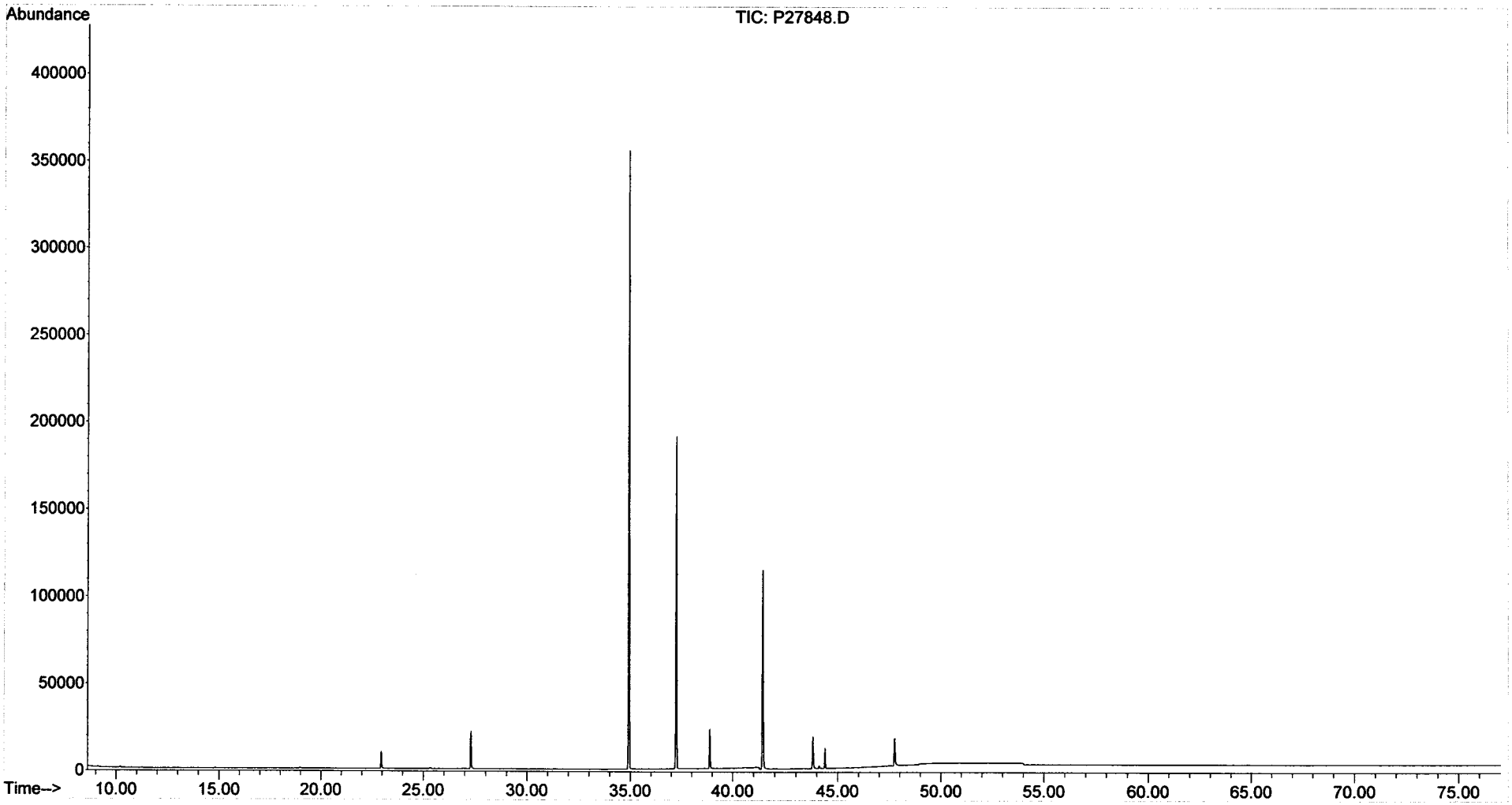
Target Compounds						Qvalue
9) Naphthalene	20.40	128	255m	2.13	ng/mL	
10) C1-Naphthalenes	23.10	142	158m	1.32	ng/mL	
15) 2-Methylnaphthalene	23.10	142	110	1.44	ng/mL#	100
16) 1-Methylnaphthalene	23.52	142	71m	0.98	ng/mL	
25) Acenaphthylene	26.70	152	51m	0.43	ng/mL	
41) Phenanthrene	33.30	178	251m	2.06	ng/mL	
47) C1-Phenanthrenes/Anthracen	35.71	192	271m	2.23	ng/mL	
56) Fluoranthene	38.08	202	129m	0.99	ng/mL	
59) Pyrene	38.95	202	243	1.83	ng/mL#	60
73) Benz[a]anthracene	43.75	228	68m	0.61	ng/mL	
74) Chrysene	43.89	228	75m	0.67	ng/mL	
75) Chrysene/Triphenylene	43.89	228	69m	0.62	ng/mL	
90) Benzo[g,h,i]perylene	55.76	276	113	0.95	ng/mL#	52

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27848.D
Acq On : 23 Jan 2006 11:22 pm
Operator : AC
Sample : SS011106B01
Misc : 1X ETR0601019
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 08:46:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **SS011106B01**
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	01/11/06	01/20/06	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	90	50-130

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

02/01/06 09:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34833.D
Acq On : 20 Jan 2006 11:17 pm
Operator : AC
Sample : SS011106B01
Misc : 1X ETR0601019
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 24 10:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.43	240	75849	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	14404	451.86	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	45.19%#	

Target Compounds Qvalue

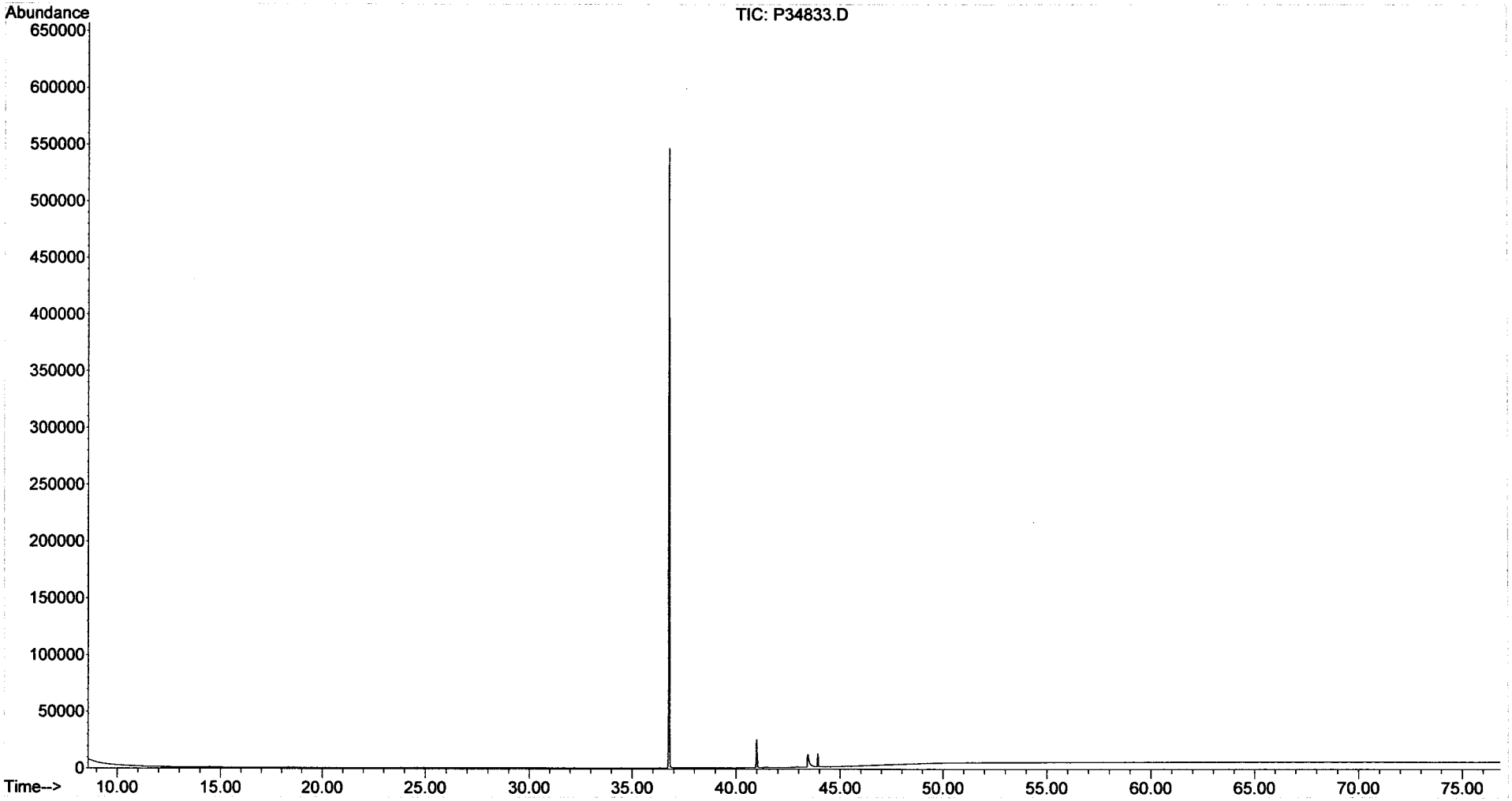
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2nd ✓ MS for WW 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34833.D
Acq On : 20 Jan 2006 11:17 pm
Operator : AC
Sample : SS011106B01
Misc : 1X ETR0601019
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 24 10:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Form 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: **0601019**
Lab ID: **See Below**
Associated Blank: **SS011106B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/11/06	100	AC

Lab ID:	SS011106B01		SS011106LCS01		SS011106LCSD01				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.14		33	99	33	98	1	30	50-130
Acenaphthylene	0.029		31	94	31	94	0	30	50-130
Acenaphthene	0.077	U	33	99	33	99	1	30	50-130
Fluorene	0.077	U	32	95	32	96	1	30	50-130
Anthracene	0.089	U	31	92	31	93	1	30	50-130
Phenanthrene	0.14		32	98	32	98	0	30	50-130
Fluoranthene	0.066		33	100	34	100	1	30	50-130
Pyrene	0.12		34	103	34	103	0	30	50-130
Benz[a]anthracene	0.041		34	101	34	102	1	30	50-130
Chrysene/Triphenylene	0.041		34	101	35	104	2	30	50-130
Benzo[b]fluoranthene	0.071	U	32	97	33	100	3	30	50-130
Benzo[k]fluoranthene	0.14	U	35	105	36	109	4	30	50-130
Benzo[a]pyrene	0.093	U	30	90	31	92	2	30	50-130
Indeno[1,2,3-cd]pyrene	0.16	U	30	92	32	97	6	30	50-130
Dibenz[a,h]anthracene	0.13	U	30	91	31	93	2	30	50-130
Benzo[g,h,i]perylene	0.063		30	90	30	92	2	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98	97	50-130
Pyrene-d10	106	105	50-130
Benzo[b]fluoranthene-d12	99	102	50-130

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

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

01/31/06 14:56

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: **0601019**
Lab ID: **SS011106LCS01**
Associated Blank: **SS011106B01**
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	01/11/06	01/24/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**33**	S	Fluoranthene	**33**	S
C1-Naphthalenes	0.11	U	Pyrene	**34**	S
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**31**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**33**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**32**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**34**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**34**	S
Anthracene	**31**	S	C1-Chrysenes	0.072	U
Phenanthrene	**32**	S	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**32**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**35**	S
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	**30**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**30**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**30**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**30**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

01/31/06 15:17

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: **0601019**
Lab ID: **SS011106LCS01**
Associated Blank: **SS011106B01**
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	01/11/06	01/24/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

01/31/06 15:17

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27854.D
Acq On : 24 Jan 2006 4:16 am
Operator : AC
Sample : SS011106LCS01
Misc : 1X ETR0601019
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 12:28:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.30	164	26371m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.81	240	42488m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	26636m	491.48	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.15%#			
58) Pyrene-d10	38.88	212	58829m	527.74	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.77%			
81) Benzo[b]fluoranthene-d12	47.75	264	43056m	494.29	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.43%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

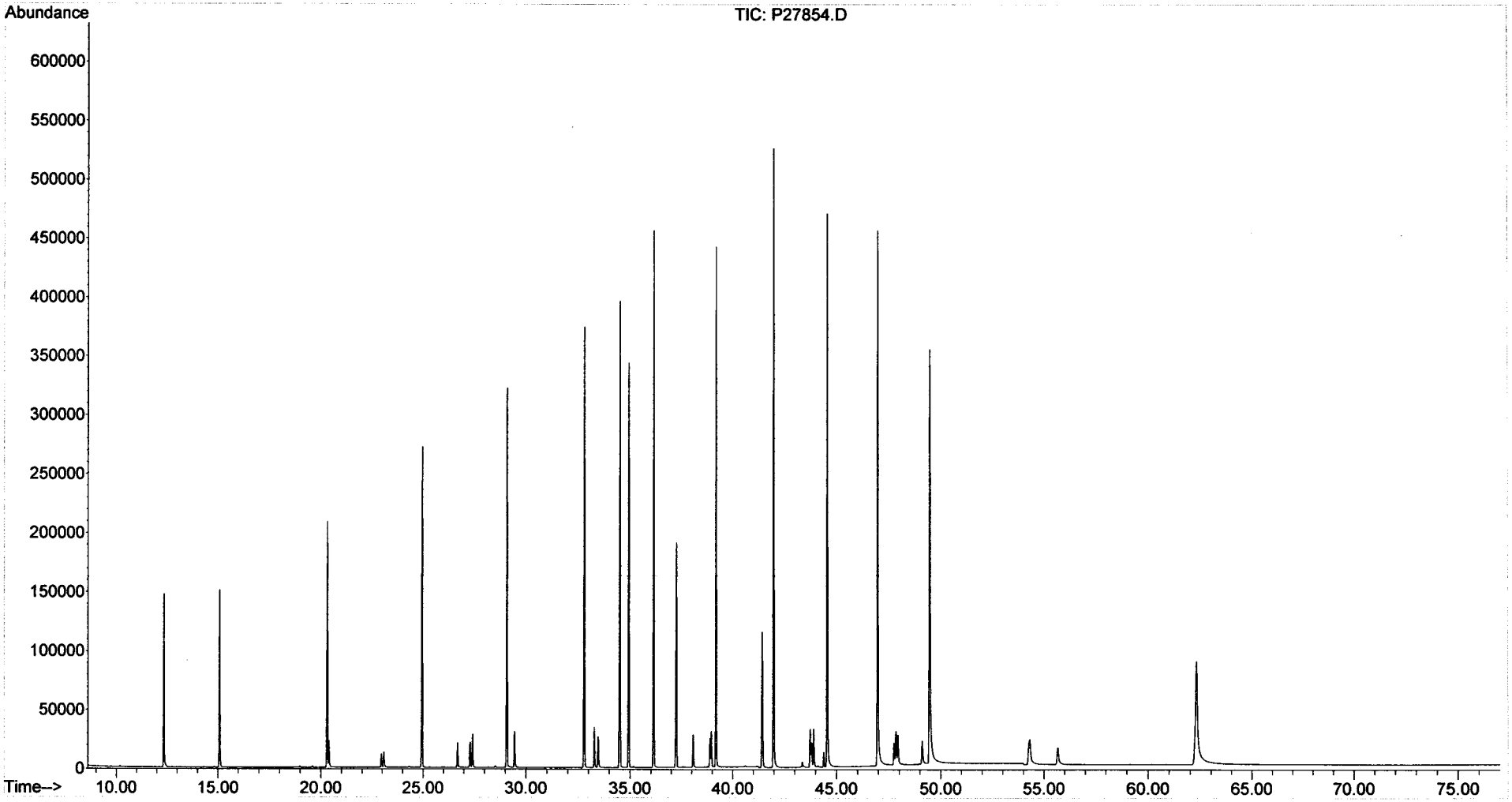
Target Compounds						Qvalue
9) Naphthalene	20.39	128	58874m	496.35	ng/mL	
15) 2-Methylnaphthalene	23.09	142	35667	472.40	ng/mL#	100
25) Acenaphthylene	26.69	152	55379m	470.57	ng/mL	
26) Acenaphthene	27.42	153	35610m	493.64	ng/mL	
28) Fluorene	29.44	166	40041m	474.72	ng/mL	
41) Phenanthrene	33.28	178	58685	487.62	ng/mL	99
53) Anthracene	33.46	178	51593m	461.58	ng/mL	
56) Fluoranthene	38.06	202	64174m	499.60	ng/mL	
59) Pyrene	38.95	202	67714m	514.80	ng/mL	
73) Benz[a]anthracene	43.74	228	61517	507.00	ng/mL	100
74) Chrysene	43.91	228	61736m	506.59	ng/mL	
75) Chrysene/Triphenylene	43.91	228	61840m	507.44	ng/mL	
82) Benzo[b]fluoranthene	47.83	252	63205m	485.02	ng/mL	
83) Benzo[k]fluoranthene	47.92	252	71233m	522.73	ng/mL	
86) Benzo[a]pyrene	49.11	252	56571m	450.44	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.26	276	57015m	458.02	ng/mL	
89) Dibenz[a,h]anthracene	54.31	278	53221	454.64	ng/mL	99
90) Benzo[g,h,i]perylene	55.68	276	58233	448.67	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27854.D
Acq On : 24 Jan 2006 4:16 am
Operator : AC
Sample : SS011106LCS01
Misc : 1X ETR0601019
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 30 12:28:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **SS011106LCSD01**
Associated Blank: **SS011106B01**
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	01/11/06	01/24/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**33**	S	Fluoranthene	**34**	S
C1-Naphthalenes	0.11	U	Pyrene	**34**	S
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**31**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**33**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**32**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**34**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**35**	S
Anthracene	**31**	S	C1-Chrysenes	0.072	U
Phenanthrene	**32**	S	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**33**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**36**	S
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	**31**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**32**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**31**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**30**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	97	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	102	50-130

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

01/31/06 15:19

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: **0601019**
Lab ID: **SS011106LCSD01**
Associated Blank: **SS011106B01**
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	01/11/06	01/24/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	97	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	102	50-130

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

01/31/06 15:20

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27856.D
Acq On : 24 Jan 2006 5:54 am
Operator : AC
Sample : SS011106LCSD01
Misc : 1X ETR0601019
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 12:32:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for WD 1/31/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.30	164	28680m	500.00	ng/mL	-0.01
72) Chrysene-d12	43.81	240	45046m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	28650m	486.08	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.61%#			
58) Pyrene-d10	38.88	212	63418m	523.10	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.31%			
81) Benzo[b]fluoranthene-d12	47.75	264	46994m	508.86	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.89%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

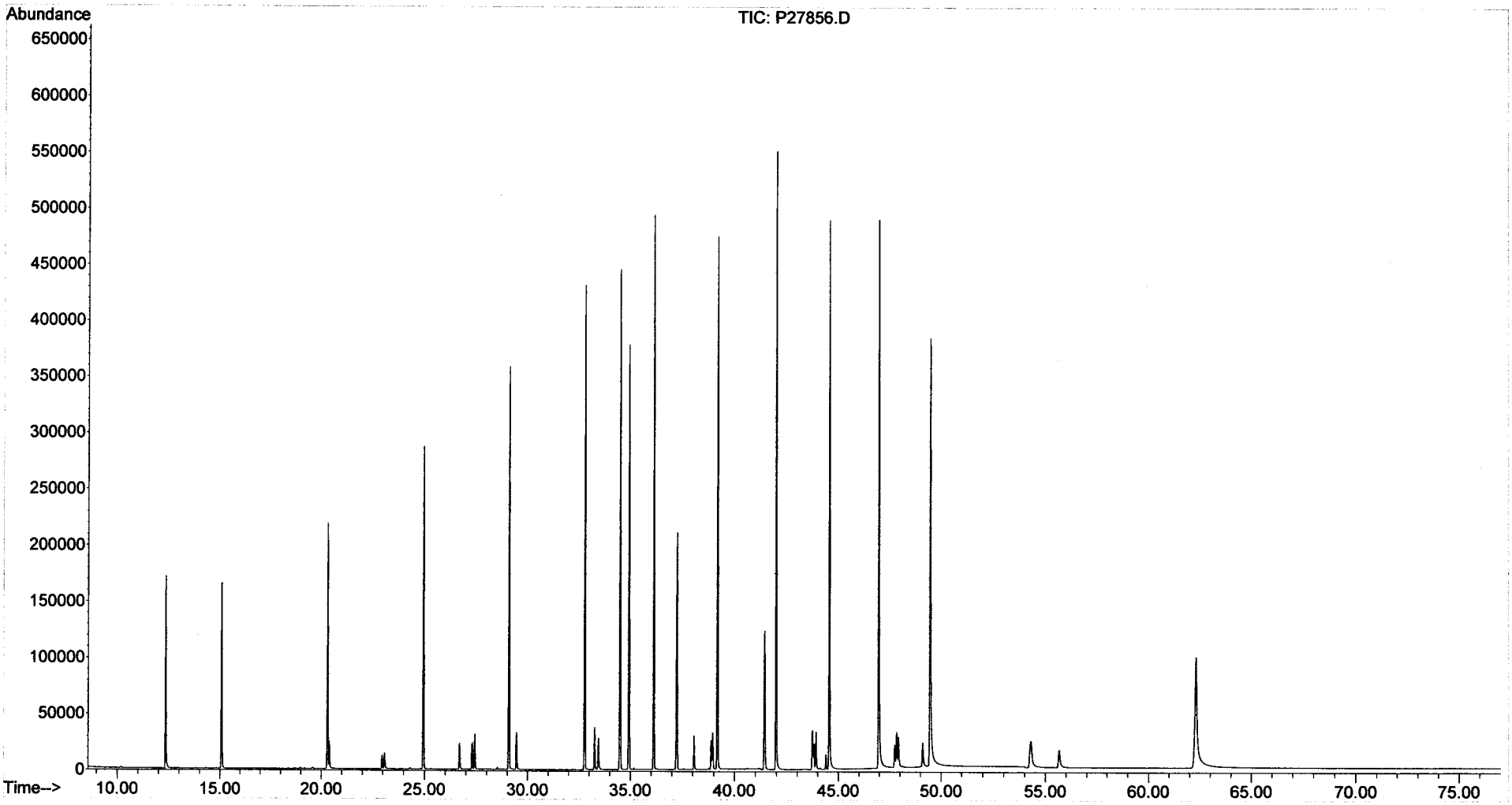
Target Compounds						Qvalue
9) Naphthalene	20.39	128	63384m	491.35	ng/mL	
15) 2-Methylnaphthalene	23.09	142	39099	476.16	ng/mL#	100
25) Acenaphthylene	26.69	152	60190m	470.27	ng/mL	
26) Acenaphthene	27.42	153	38951m	496.49	ng/mL	
28) Fluorene	29.44	166	43850m	478.02	ng/mL	
41) Phenanthrene	33.28	178	63856	487.87	ng/mL	100
53) Anthracene	33.46	178	56627m	465.83	ng/mL	
56) Fluoranthene	38.06	202	70143m	502.11	ng/mL	
59) Pyrene	38.95	202	73712	515.29	ng/mL	99
73) Benz[a]anthracene	43.75	228	65868	512.04	ng/mL	100
74) Chrysene	43.91	228	67178m	519.94	ng/mL	
75) Chrysene/Triphenylene	43.91	228	67067m	519.08	ng/mL	
82) Benzo[b]fluoranthene	47.83	252	68808m	498.04	ng/mL	
83) Benzo[k]fluoranthene	47.93	252	78839m	545.69	ng/mL	
86) Benzo[a]pyrene	49.11	252	61347m	460.73	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.26	276	63908m	484.25	ng/mL	
89) Dibenz[a,h]anthracene	54.31	278	57683	464.78	ng/mL	99
90) Benzo[g,h,i]perylene	55.68	276	62980	457.69	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27856.D
Acq On : 24 Jan 2006 5:54 am
Operator : AC
Sample : SS011106LCSD01
Misc : 1X ETR0601019
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 30 12:32:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Form III
Spike Recovery Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601019**
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

02/01/06 08:39

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: **0601019**
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.

02/01/06 08:39

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: **0601019**
Lab ID: **SO011706AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	01/15/06	100	0.051	10	1	NLJr

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

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

02/01/06 08:39

Form I
Alaska North Slope Crude
Carbazole

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

Lab Code: **MA00030**
ETR: **0601019**
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

02/01/06 08:40

Quantitation Report (QT Reviewed)

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

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

MS 1/17/06

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

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

AF 2nd 01/20/06

Quantitation Report (QT Reviewed)

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

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

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

Quantitation Report (QT Reviewed)

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

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

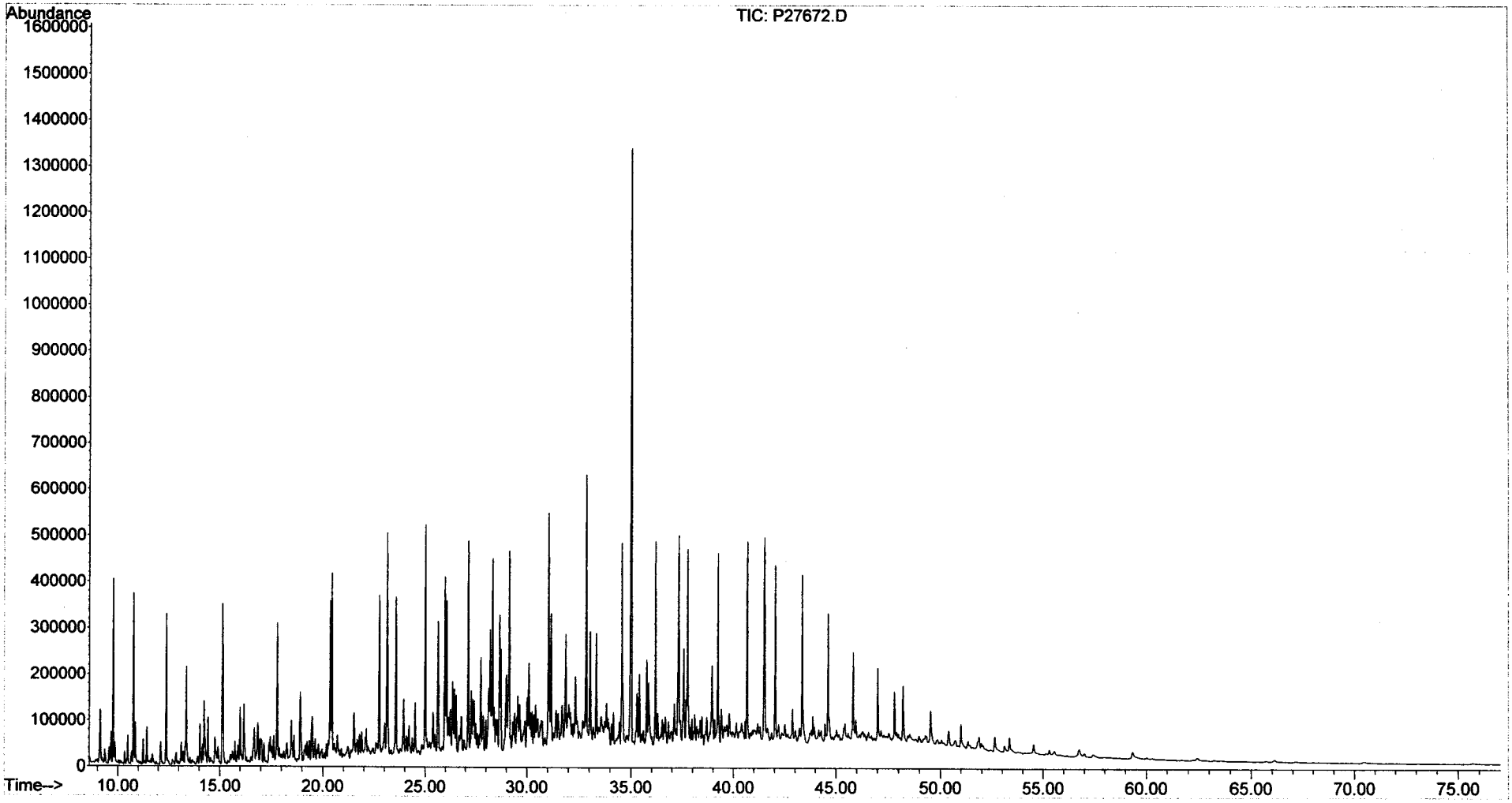
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	51.17	191	2797	28.54	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.89	191	2670m	27.25	ng/ml	
109) 30-Norhopane (T15)	51.87	191	42464m	433.34	ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.98	191	8425m	85.98	ng/ml	
111)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

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

Quantitation Report (QT Reviewed)

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

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



Form III
Spike Recovery Summary
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **SS012506AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Hopane	118.8	160	134	65-135

N/A - Not Applicable

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

02/01/06 09:25

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: **0601019**
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.

02/01/06 09:25

Quantitation Report (QT Reviewed)

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

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

MS 1/25/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.37	240	70030	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.93	217	33089m	1124.26	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 112.43%			

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

Quantitation Report (QT Reviewed)

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

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

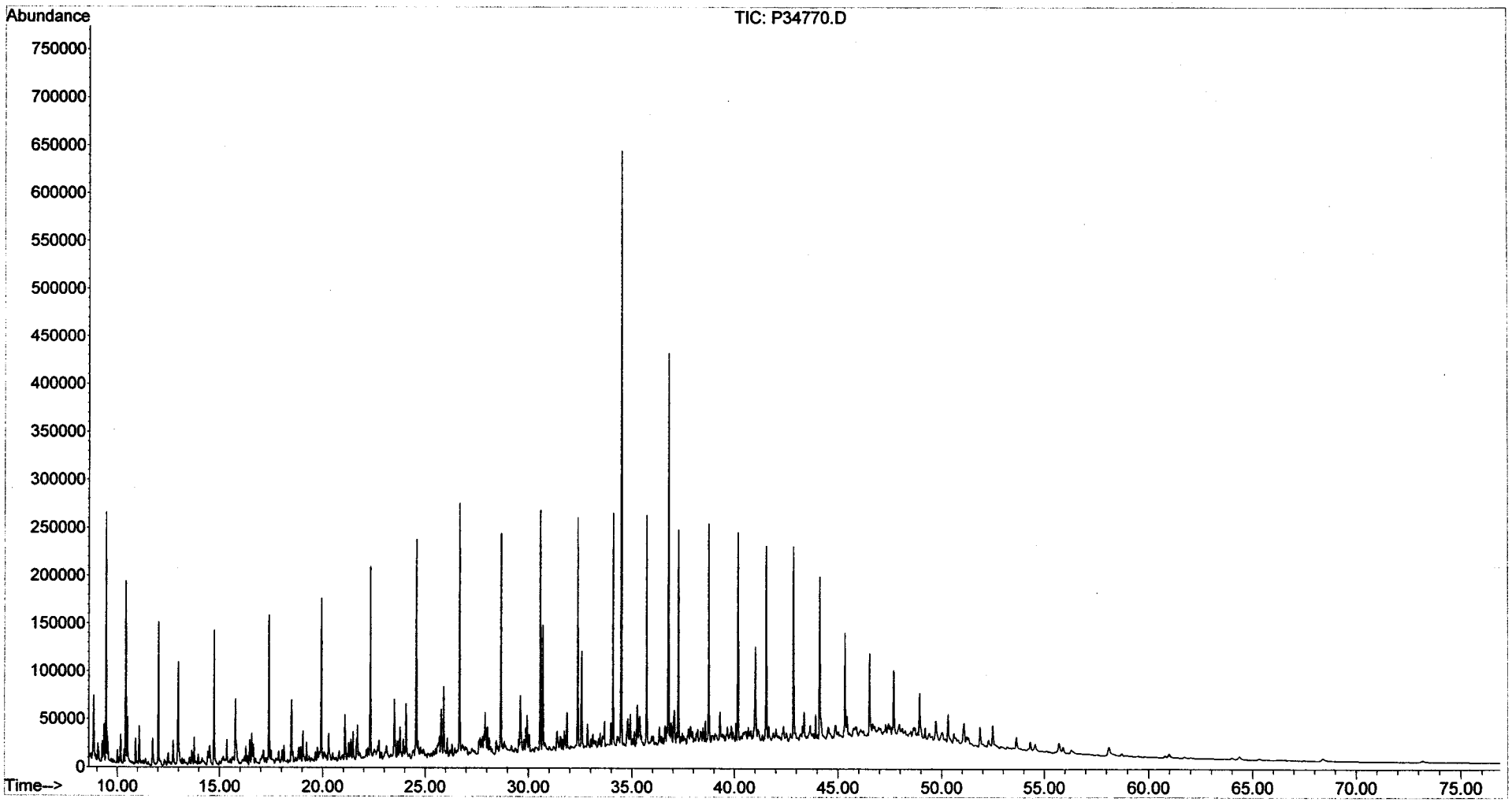
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.68	217	2524m	85.76	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	6356m	215.96	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	8252m	280.38	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	6836m	232.27	ng/ml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

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

Quantitation Report (QT Reviewed)

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

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



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

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

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

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

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

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

✓ run used

MS 1/30/06

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 ✓ Run used
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

MS 1/30/06

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

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

✓ run used

✓ MS 1/30/06

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

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

✓ run used

MS 1/30/06

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

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

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

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

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

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

MS 1/23/06

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

	Line	Type	Vial	DataFile	Method	Sample Name
44)		Sample	43	P34848	FRBIO3B	DCM
45)		Sample	44	P34849	FRBIO3B	SS011306B04 ✓
46)		Sample	45	P34850	FRBIO3B	0601040-01 ✓
47)		Sample	46	P34851	FRBIO3B	0601040-02 ✓
48)		Sample	47	P34852	FRBIO3B	0601040-03 ✓
49)		Sample	48	P34853	FRBIO3B	0601040-04 ✓
50)		Sample	49	P34854	FRBIO3B	0601040-04D ✓
51)		Sample	50	P34855	FRBIO3B	0601040-~~040~~ 05 SS High Cerebrat.
52)		Sample	51	P34856	FRBIO3B	C3011807 PASS
53)		Sample	52	P34857	FRBIO3B	DCM

NW 1/31/06

ms 1/23/06

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

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

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

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

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

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

✓ unused

MS
1/26/06

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: **0601019**
Lab ID: **SS011106B01**
Date Analyzed: **01/23/06 23:22**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS011106LCS01	01/24/06 04:16
LCSD	SS011106LCSD01	01/24/06 05:54
GC-SED-11 (1-3)	0601019-01E	01/24/06 09:08
GC-SED-18 (7-8)	0601019-02	01/24/06 11:50
GC-SED-14 (5.5-6.5)	0601019-04	01/24/06 16:35
GC-SED-13B (14.6-15.6)	0601019-05	01/24/06 18:11
GC-SED-39 (4.5-5.5)	0601019-06	01/24/06 19:41
GC-SED-17 (0-2)	0601019-07E	01/24/06 21:21
GC-SED-16 (0-2)	0601019-08E	01/24/06 22:57
GC-SED-22B (19.3-20)	0601019-09E	01/25/06 00:33
GC-SED-21B (7-8)	0601019-10E	01/25/06 03:46
GC-SED-19C (1.5-2)	0601019-11E	01/25/06 05:22
GC-SED-18 (7-8)	0601019-02E	01/26/06 16:13
GC-SED-14 (5.5-6.5)	0601019-04E	01/26/06 17:50
GC-SED-13B (14.6-15.6)	0601019-05E	01/26/06 19:27
GC-SED-39 (4.5-5.5)	0601019-06E	01/26/06 21:02
GC-SED-11 (1-3)	0601019-01	01/27/06 01:47
GC-SED-15 (0-0.75)	0601019-03	01/27/06 08:36
GC-SED-15 (0-0.75)	0601019-03 D	01/27/06 10:11
GC-SED-17 (0-2)	0601019-07	01/27/06 13:25
GC-SED-16 (0-2)	0601019-08	01/27/06 15:03
GC-SED-22B (19.3-20)	0601019-09	01/27/06 16:42
GC-SED-21B (7-8)	0601019-10	01/27/06 18:19
GC-SED-19C (1.5-2)	0601019-11	01/27/06 19:57

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: **0601019**
Lab ID: **SS011106B01**
Date Analyzed: **01/20/06 23:17**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-18 (7-8)	0601019-02	01/21/06 02:18
GC-SED-15 (0-0.75)	0601019-03	01/21/06 03:48
GC-SED-15 (0-0.75)	0601019-03 D	01/21/06 05:18
GC-SED-14 (5.5-6.5)	0601019-04	01/21/06 06:48
GC-SED-13B (14.6-15.6)	0601019-05	01/21/06 08:19
GC-SED-39 (4.5-5.5)	0601019-06	01/21/06 09:51
GC-SED-17 (0-2)	0601019-07	01/21/06 11:20
GC-SED-16 (0-2)	0601019-08	01/21/06 12:55
GC-SED-22B (19.3-20)	0601019-09	01/21/06 14:32
GC-SED-21B (7-8)	0601019-10	01/21/06 16:10
GC-SED-19C (1.5-2)	0601019-11	01/21/06 17:47
GC-SED-11 (1-3)	0601019-01	01/25/06 13:55

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 * ICAL PAH20113.M
14)	Sample	4	P27650	FRNC2B	DCM
15)	RearSamp	55	P27651	FRNC2B	DCM
16)	Sample	5	P27652	FRNC2B	*I2011301 ✓
17)	RearSamp	56	P27653	FRNC2B	SS010606B04
18)	Sample	6	P27654	FRNC2B	*I2011302 ✓
19)	RearSamp	57	P27655	FRNC2B	SO011006B01
20)	Sample	7	P27656	FRNC2B	*I2011303 ✓
21)	RearSamp	58	P27657	FRNC2B	SS010606LCS04
22)	Sample	8	P27658	FRNC2B	*I2011304 ✓
23)	RearSamp	59	P27659	FRNC2B	SS010606LCSD03
24)	Sample	9	P27660	FRNC2B	*I2011305 ✓ → Instrument error, sequence re-start
25)	RearSamp	50	P27661	FRNC2B	PRIMER-AFID
26)	Sample	49	P27662	FRNC2B	DCM
27)	RearSamp	50	P27663	FRNC2B	C2011302-AFID
28)	Sample	10	P27664	FRNC2B	PRIMER
29)	RearSamp	60	P27665	FRNC2B	SO011006LCS01 - mis-inject, re-analyze
30)	Sample	10	P27666	FRNC2B	*I2011306 ✓
31)	RearSamp	61	P27667	FRNC2B	SO0111006LCSD01
32)	Sample	11	P27668	FRNC2B	*I2011307 ✓
33)	RearSamp	62	P27669	FRNC2B	C2011303-AFID
34)	Sample	12	P27670	FRNC2B	*Q2011301
35)	RearSamp	63	P27671	FRNC2B	DCM-AFID
36)	Sample	13	P27672	FRNC2B	*ANS2011301 SO011706AWS01
37)	RearSamp	64	P27673	FRNC2B	0512128-01-AFID
38)	Sample	14	P27674	FRNC2B	LA2011301
39)	RearSamp	65	P27675	FRNC2B	0512128-02-AFID
40)	Sample	15	P27676	FRNC2B	SOURCE01
41)	RearSamp	66	P27677	FRNC2B	0512128-03-AFID
42)	Sample	16	P27678	FRNC2B	SFFS2011301
43)	RearSamp	67	P27679	FRNC2B	0512128-03D-AFID

MS 1/17/06

PAH #2 Sequence Information

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

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

FID Process Method: HC20901.M PAH Process Method: ~~PAH21207~~.M

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

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

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	17	P27680	FRNC2B	SFFCO2011301
45)	RearSamp	68	P27681	FRNC2B	0512128-04-AFID
)	Sample	18	P27682	FRNC2B	DCM
)	RearSamp	69	P27683	FRNC2B	0512128-05-AFID
48)	Sample	19	P27684	FRNC2B	C2011301
49)	RearSamp	70	P27685	FRNC2B	C2011304-AFID
50)	Sample	20	P27686	FRNC2B	DCM
51)	RearSamp	71	P27687	FRNC2B	DCM-AFID
52)	Sample	21	P27688	FRNC2B	0512128-01-RE
53)	RearSamp	72	P27689	FRNC2B	DCM-AFID
54)	Sample	22	P27690	FRNC2B	0512128-02-RE
55)	RearSamp	71	P27691	FRNC2B	DCM-AFID
56)	Sample	23	P27692	FRNC2B	0512128-03-RE
57)	RearSamp	72	P27693	FRNC2B	DCM-AFID
58)	Sample	24	P27694	FRNC2B	0512128-03D-RE
59)	RearSamp	71	P27695	FRNC2B	DCM-AFID
60)	Sample	25	P27696	FRNC2B	0512128-04-RE
61)	RearSamp	72	P27697	FRNC2B	DCM-AFID
62)	Sample	26	P27698	FRNC2B	0512128-05-RE
63)	RearSamp	73	P27699	FRNC2B	DCM-AFID
64)	Sample	27	P27700	FRNC2B	C2011304
65)	RearSamp	73	P27701	FRNC2B	DCM-AFID
66)	Sample	28	P27702	FRNC2B	DCM
67)	RearSamp	74	P27703	FRNC2B	DCM-AFID did not inject [illegible]/12/07

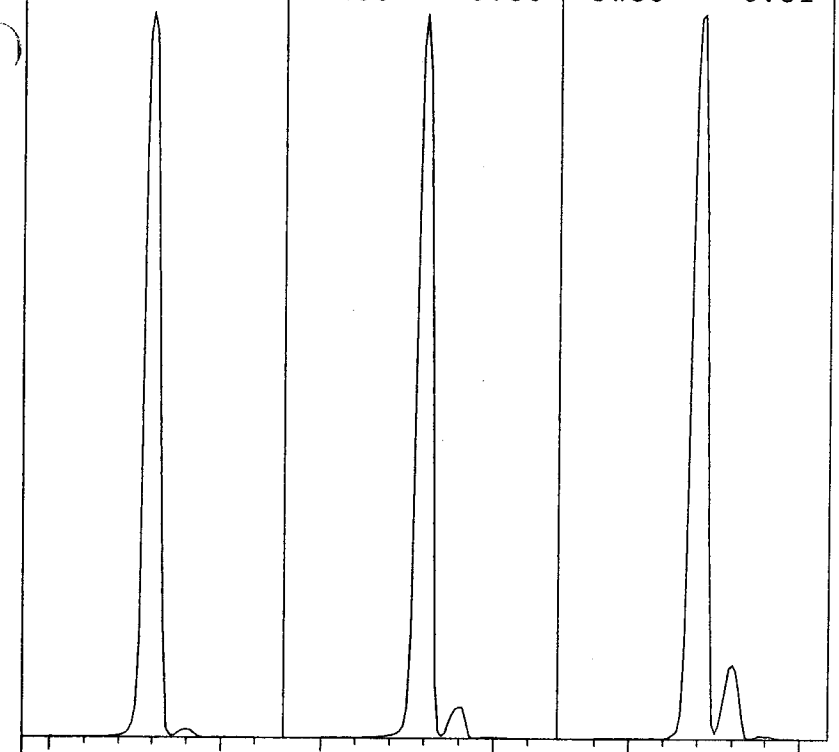
5973 Tune

1/13/06

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

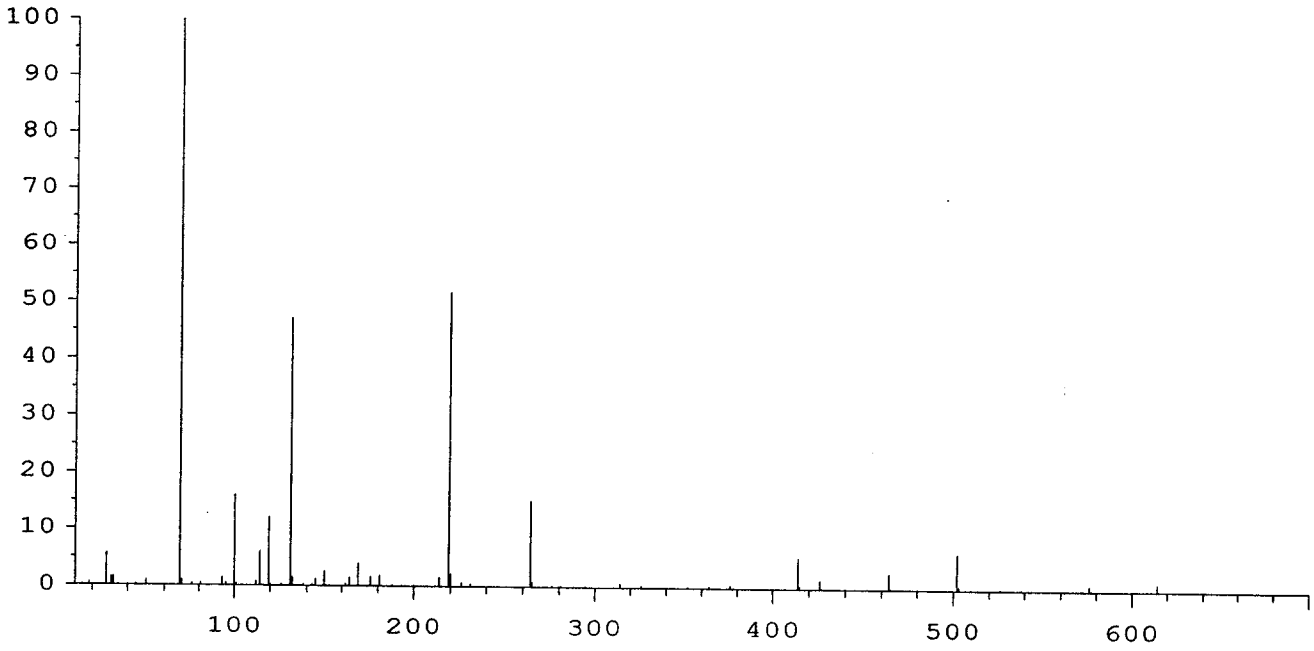
Instrument: PAHINST2

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



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

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



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

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

Response Factor Report PAHINST2

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

ms 1-17-06

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

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

RF 2nd CV 1/20/06

Response Factor Report PAHINST2

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

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

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

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

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

Quantitation Report (QT Reviewed)

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

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

AMG 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%#			

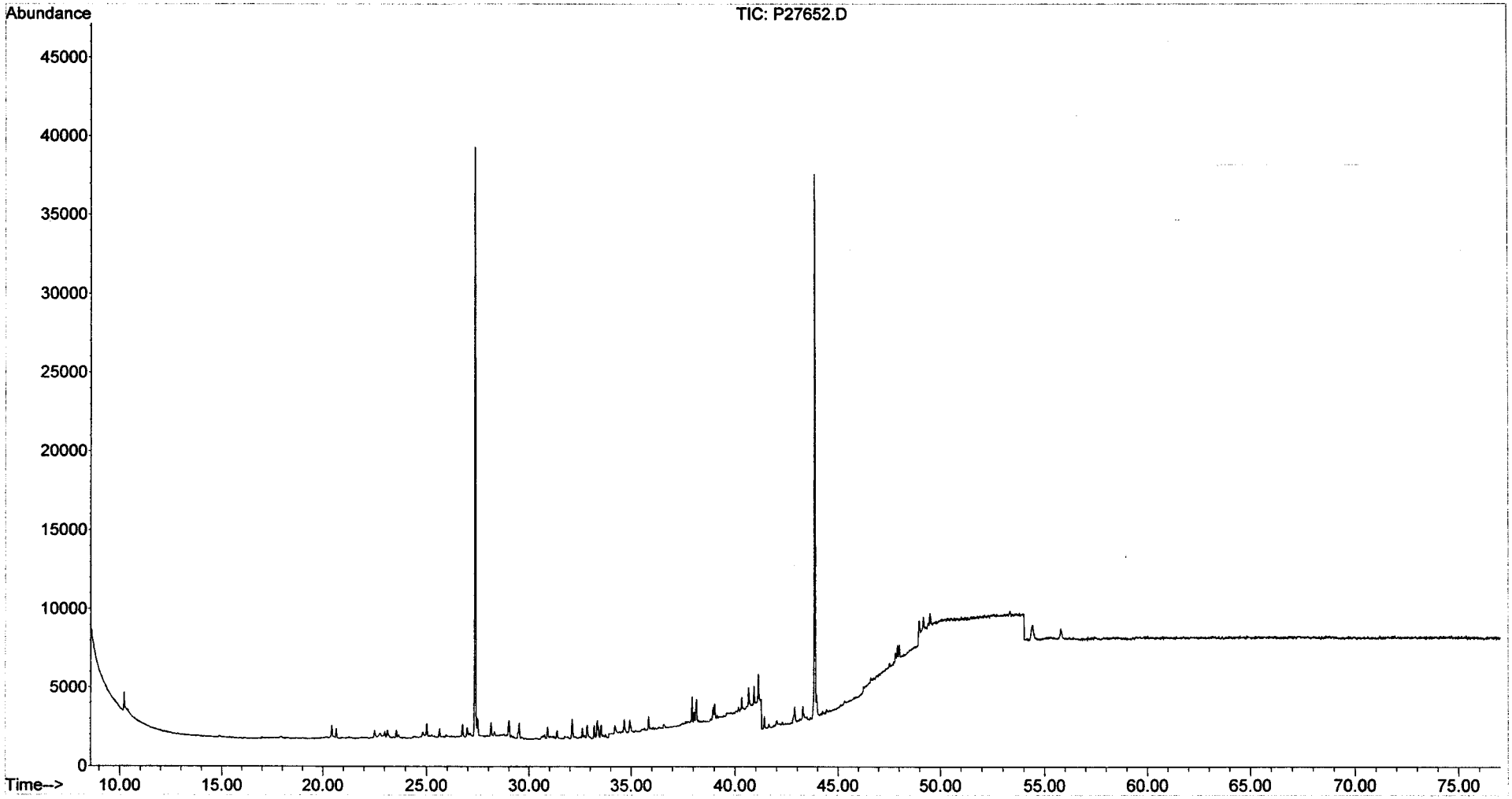
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	215m	5.31	ng/mL	
4) cis-Decalin	18.21	138	155m	4.97	ng/mL	
9) Naphthalene	20.44	128	2374	10.91	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1363	9.30	ng/mL#	100
16) 1-Methylnaphthalene	23.57	142	1361	9.86	ng/mL#	100
17) Benzothiophene	20.66	134	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

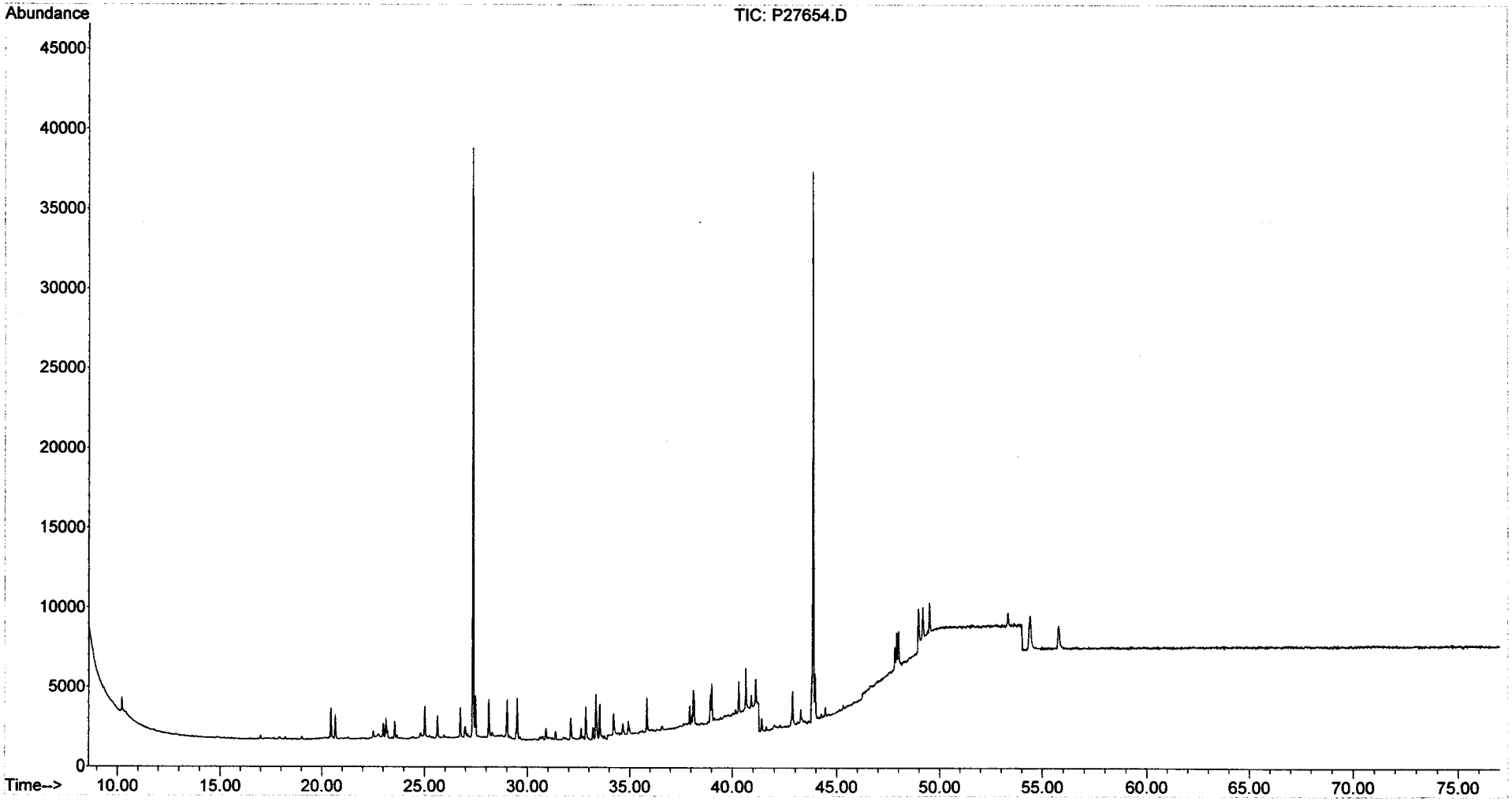
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47740	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	71793	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	2471	24.16	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

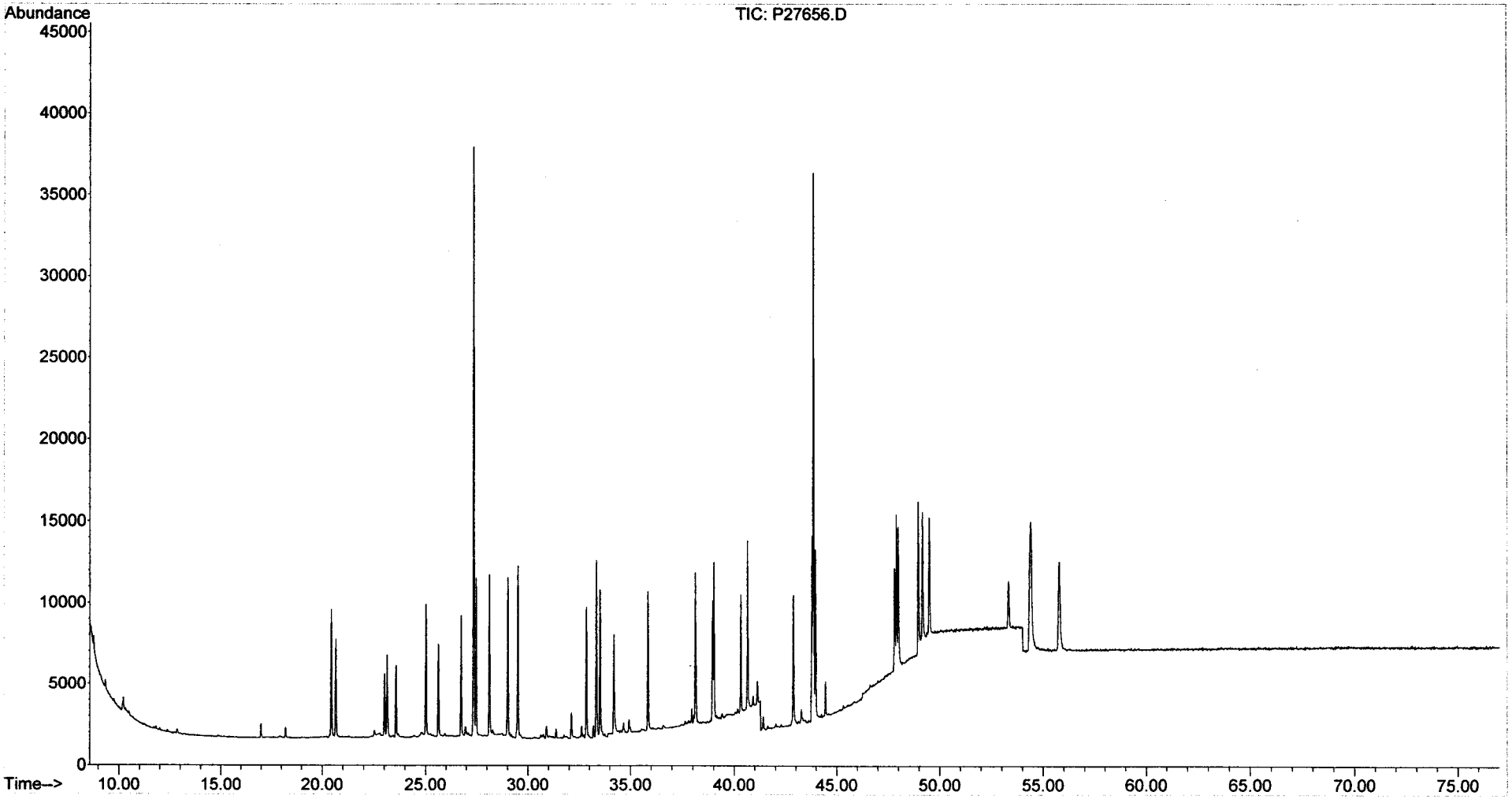
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46810	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	70628	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	9713	96.87	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

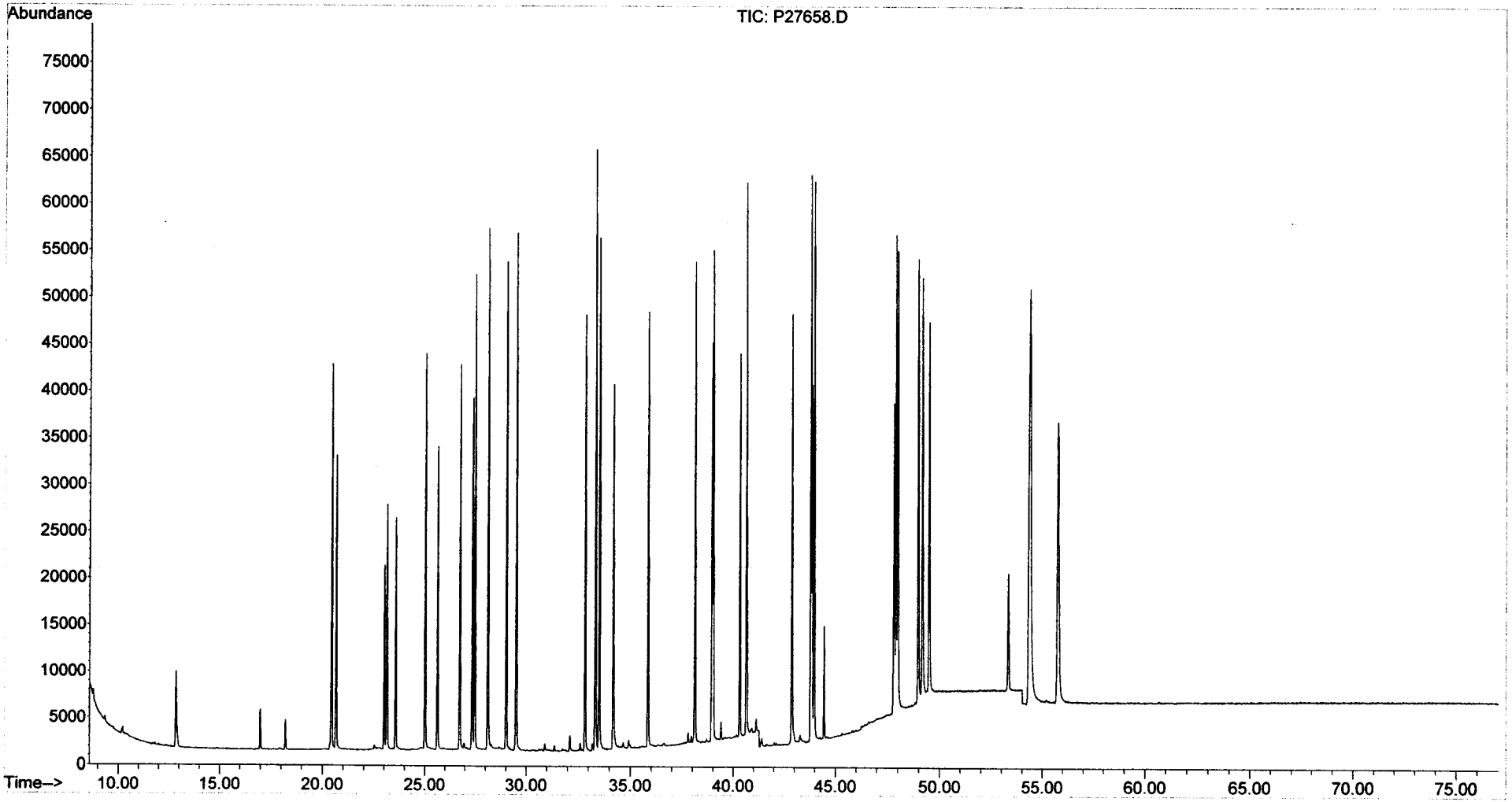
Target Compounds						Qvalue
3) trans-Decalin	16.99	138	9714	228.90	ng/mL	100
4) cis-Decalin	18.21	138	7379	237.07	ng/mL	100
9) Naphthalene	20.44	128	107063	485.52	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	68545	505.09	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	64581	495.98	ng/mL#	100
17) Benzothiophene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

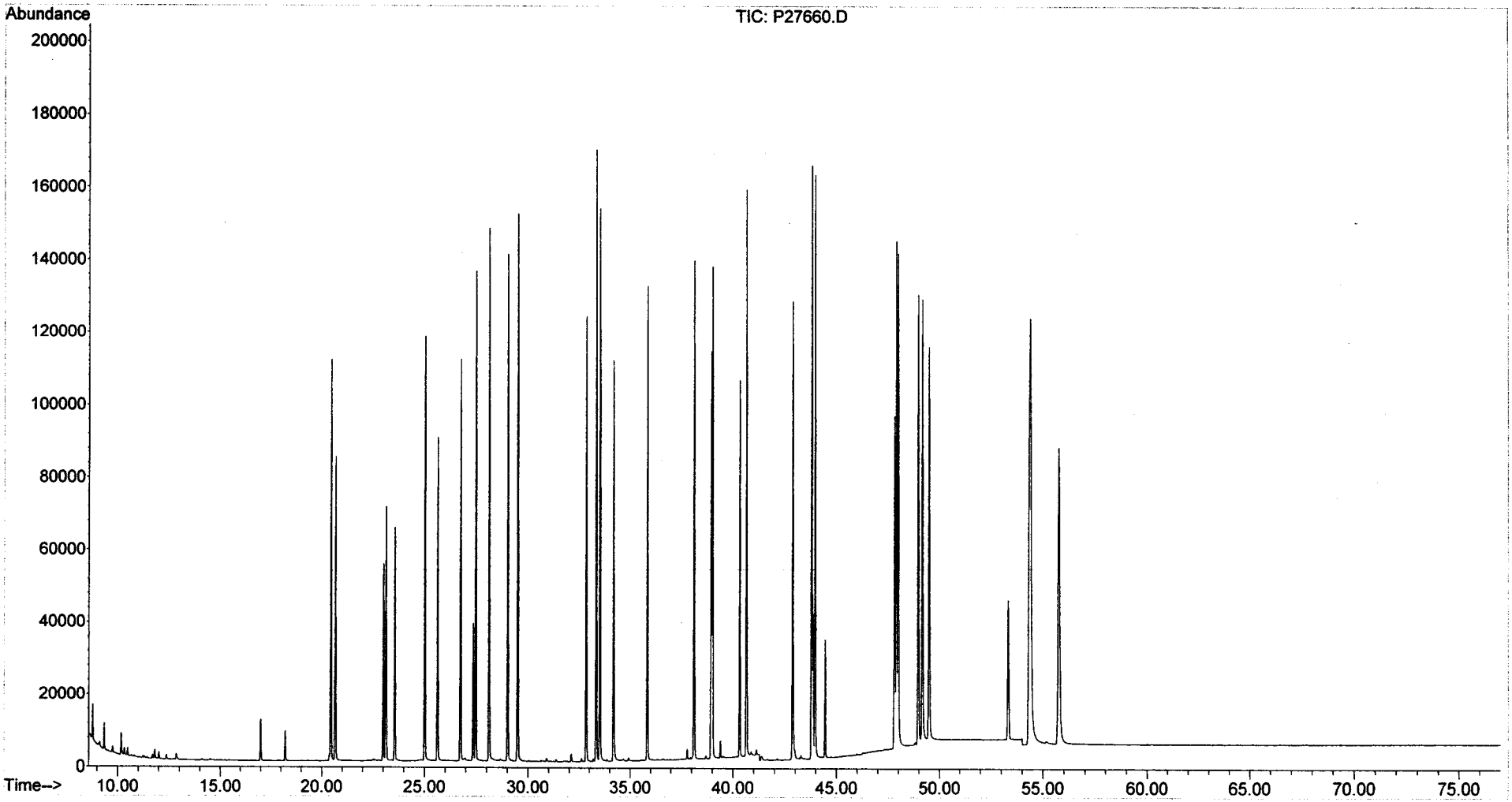
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48512	500.00 ng/mL	0.00
72) Chrysene-d12	43.86	240	76104	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	126002	1268.64 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

CMS 1-17-06

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

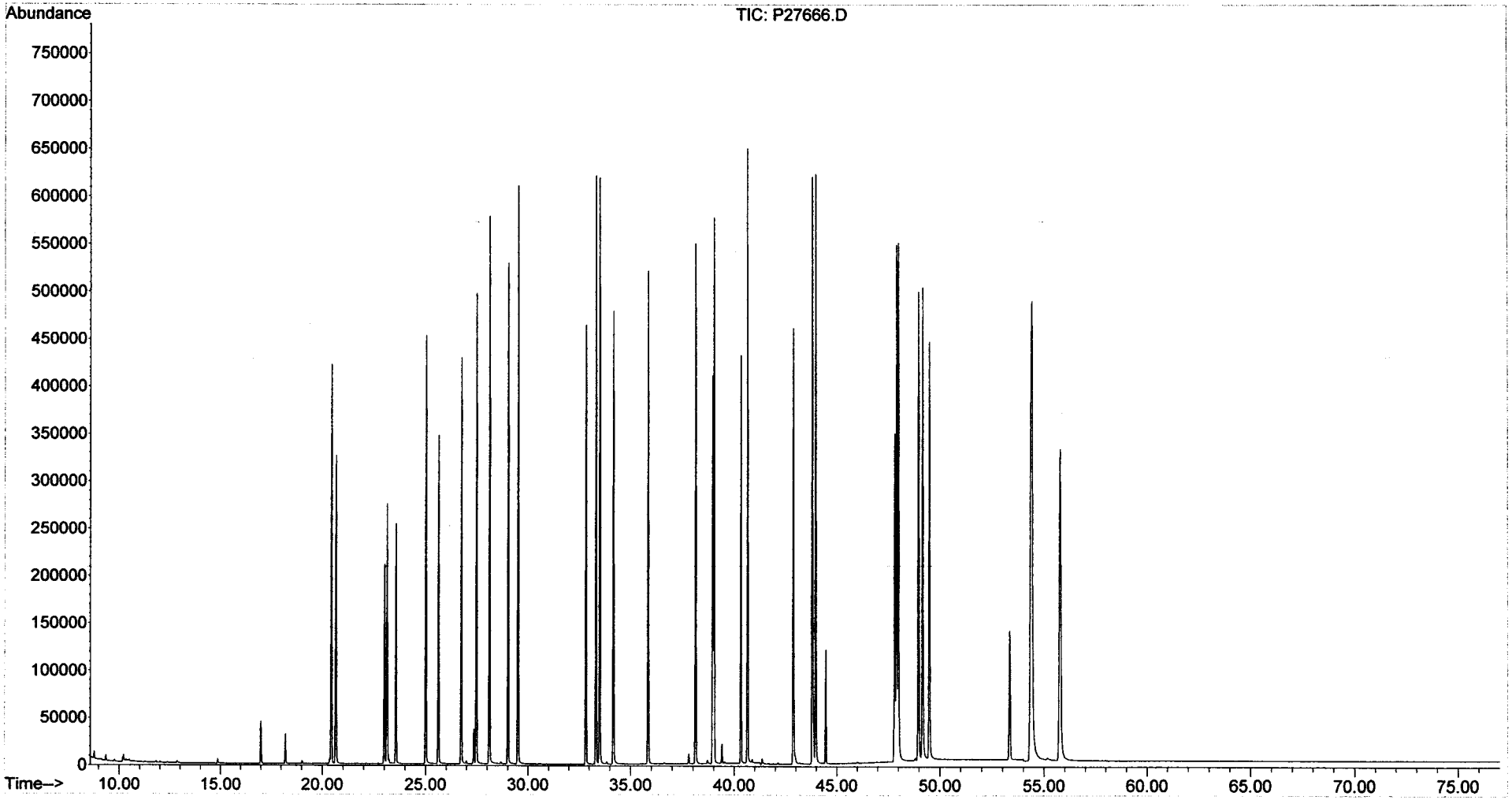
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	95544	2353.44 ng/mL	100
4) cis-Decalin	18.22	138	72265	2426.89 ng/mL	100
9) Naphthalene	20.44	128	1036151	4911.69 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	681031	5245.66 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	646356	5188.91 ng/mL#	100
17)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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

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%#		

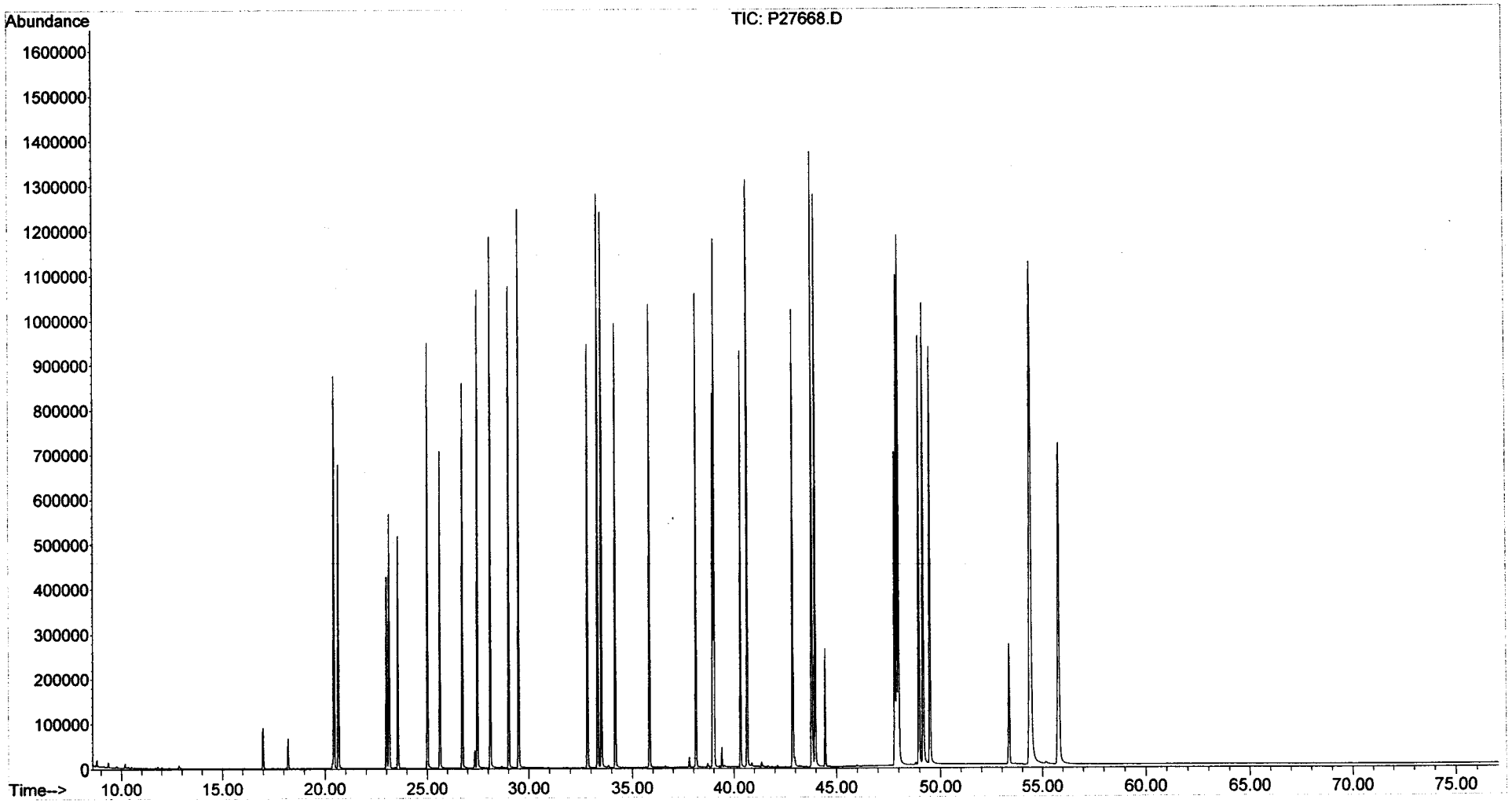
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	197168	4525.83 ng/mL	100
4) cis-Decalin	18.22	138	150854	4721.07 ng/mL	100
9) Naphthalene	20.44	128	2133056	9422.62 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	1412575	10139.26 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	1343503	10050.88 ng/mL#	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

mg 1/17/06

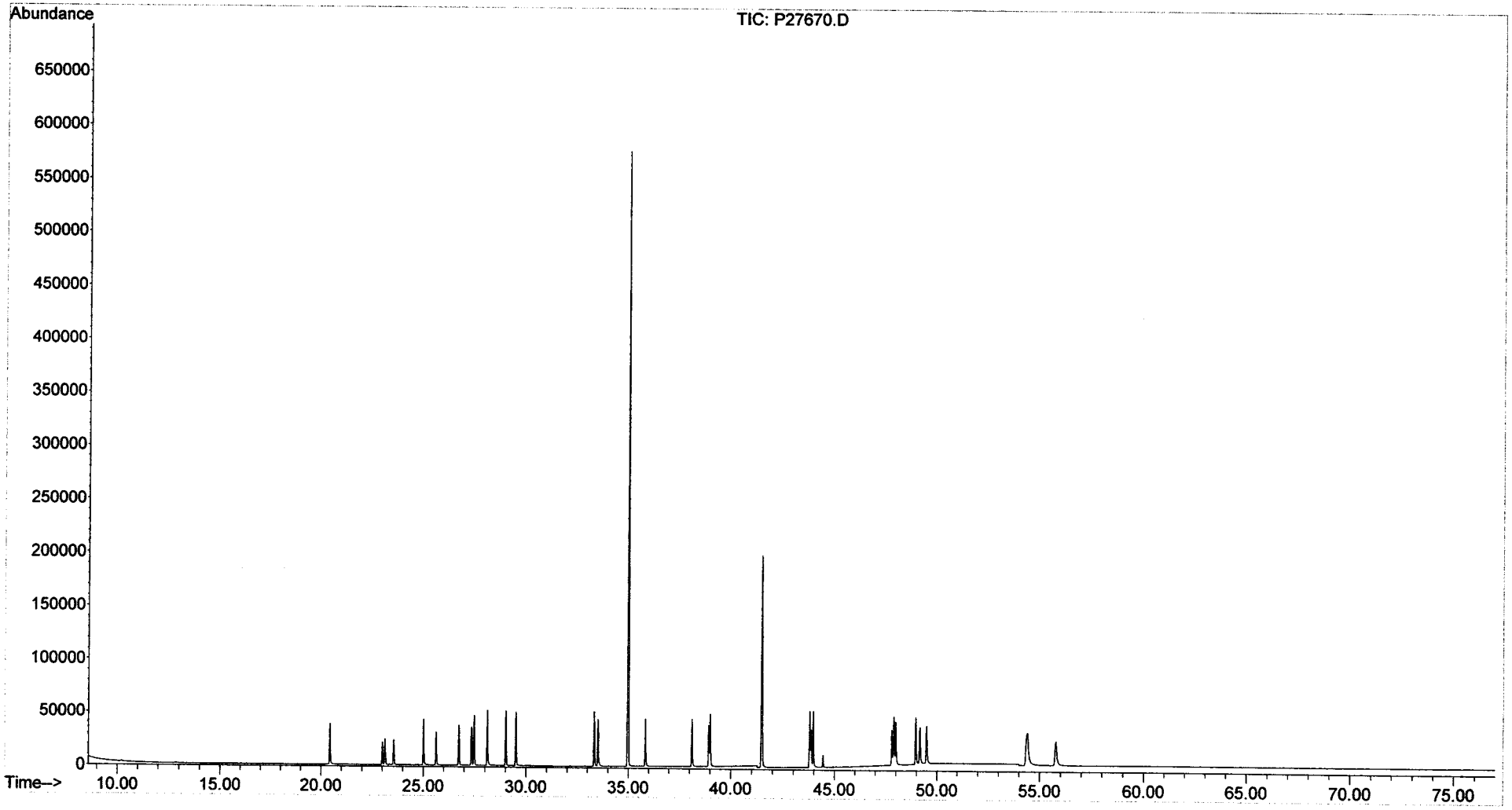
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47092	500.00	ng/mL	0.00
72) Chrysene-d12	43.87	240	72455	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	49721	513.75	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



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

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

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

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

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

6 deg/min runs.
posted 1/18/06
MS
w/method B10301111.

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

B1030111.M
cw 1/24/06
MS 1/25/06

no quant - just post.

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

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

CW 2/1/06

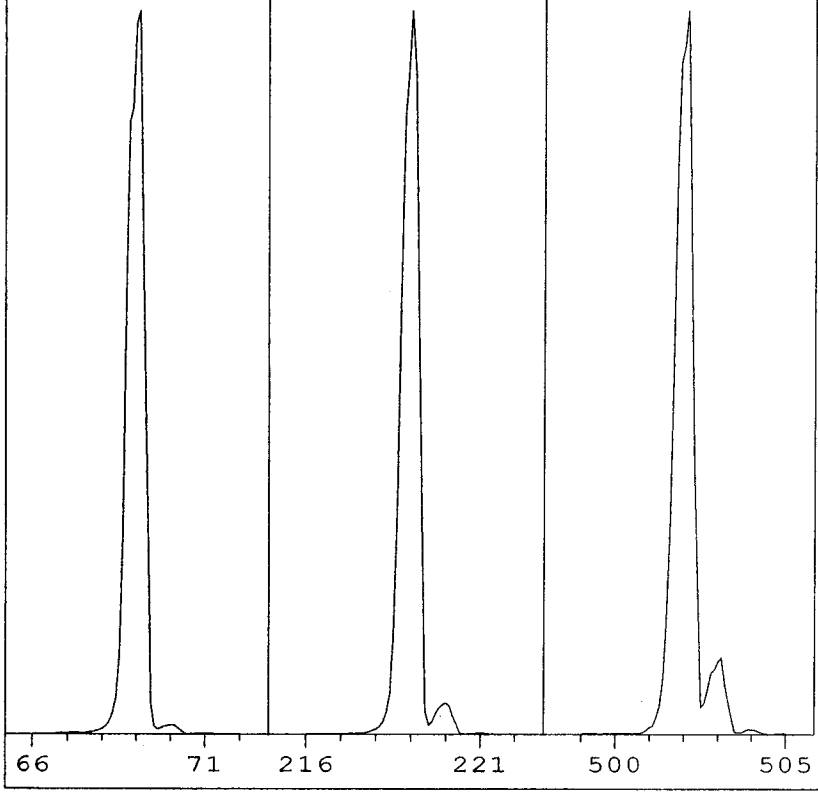
5973

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

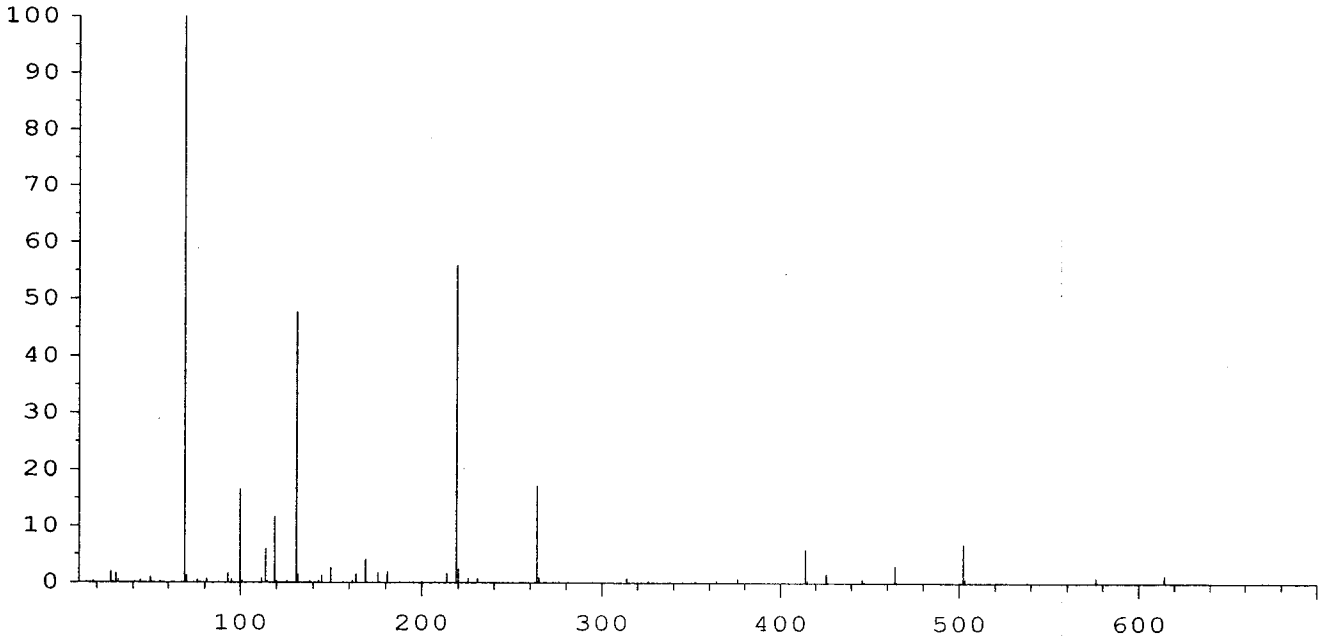


Ion Pol	POS	MassGain	63
		MassOffs	-12
Emission	34.6	AmuGain	2443
ElEnrgy	69.9	AmuOffs	127
Filament	1	Wid219	-0.043
		DC Pol	POS
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	1588
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10

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 4/24/06

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

Response Factor Report PAH-3

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

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

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

RF and 1/24/01

Response Factor Report PAH-3

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

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

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

RSnd 1/24/06

(#) = 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

RF and 1/24/06

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

Quantitation Report (QT Reviewed)

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

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

CMS 1-13-06

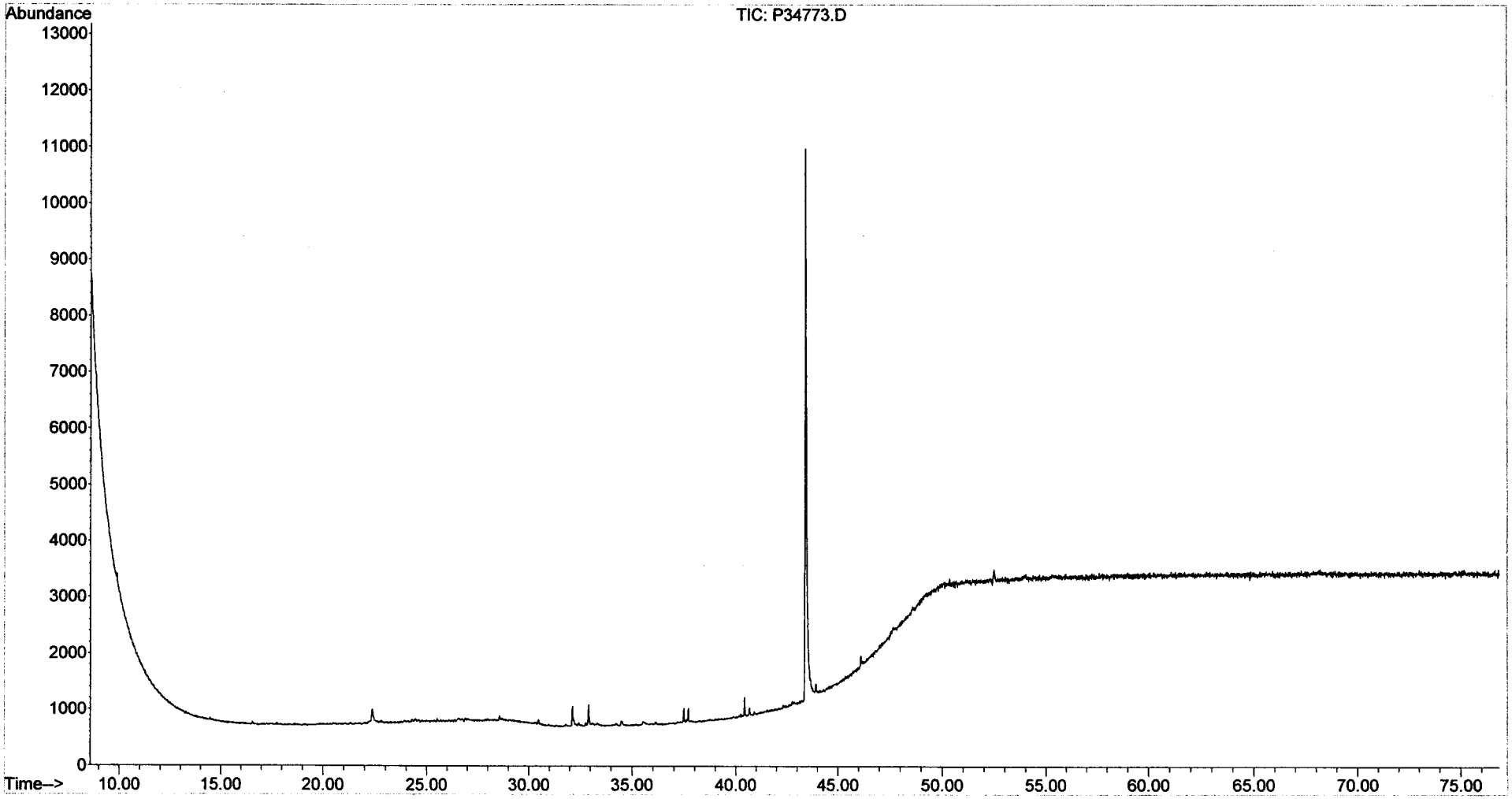
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	50898m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MG 1-13-06

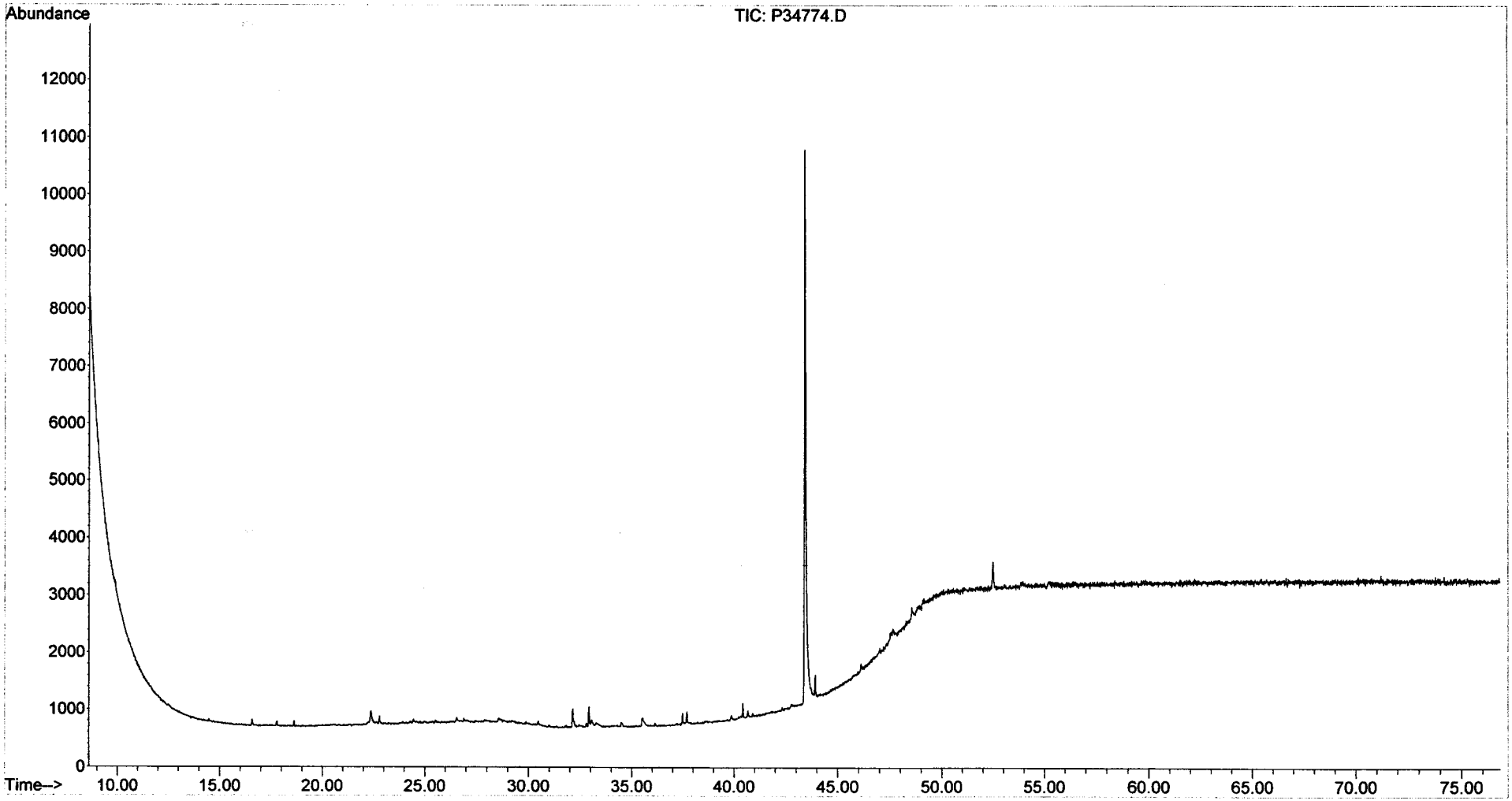
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	49829	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

MS 1-13-06

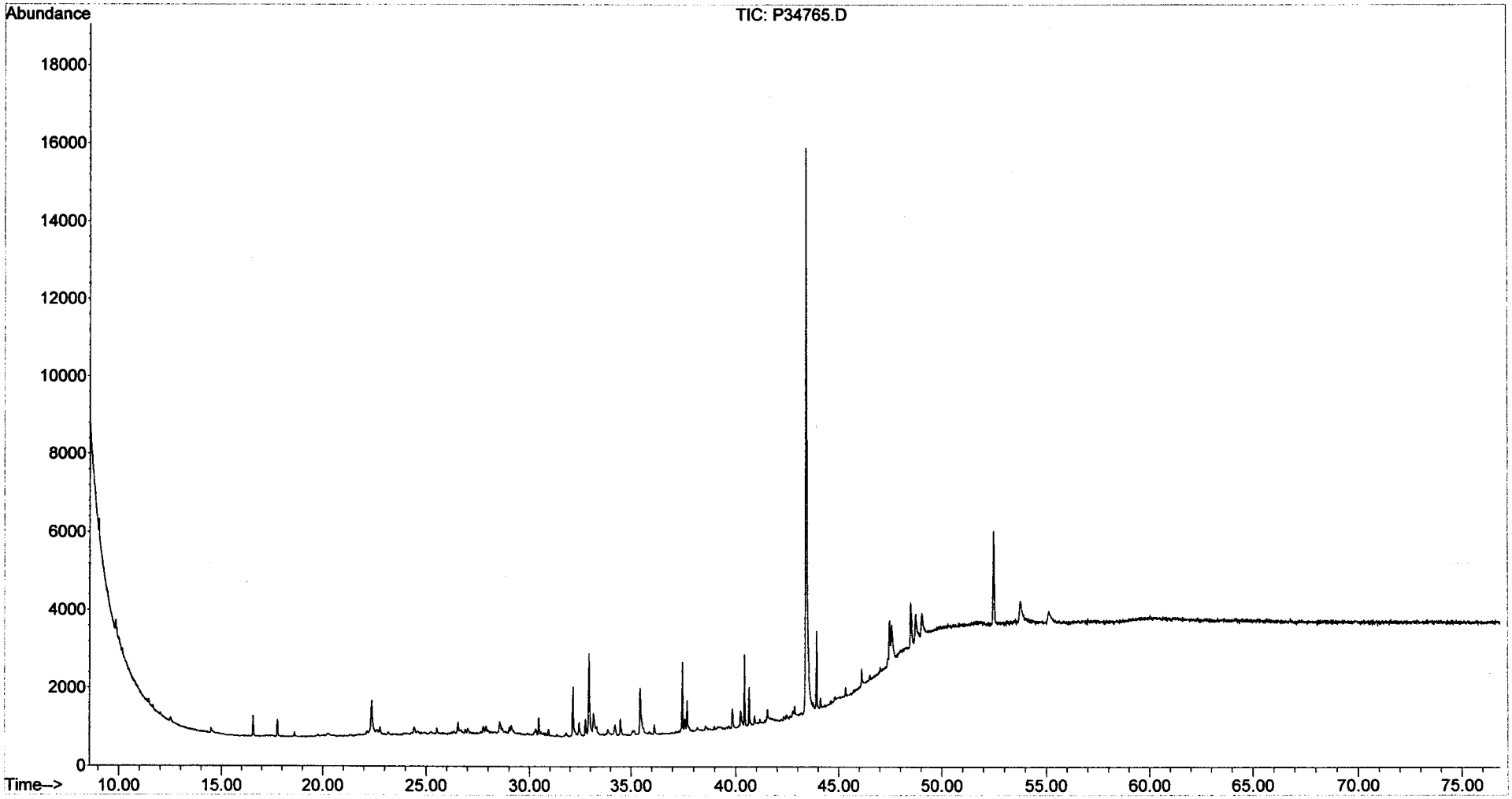
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.40	240	63328	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#	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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1/13/06

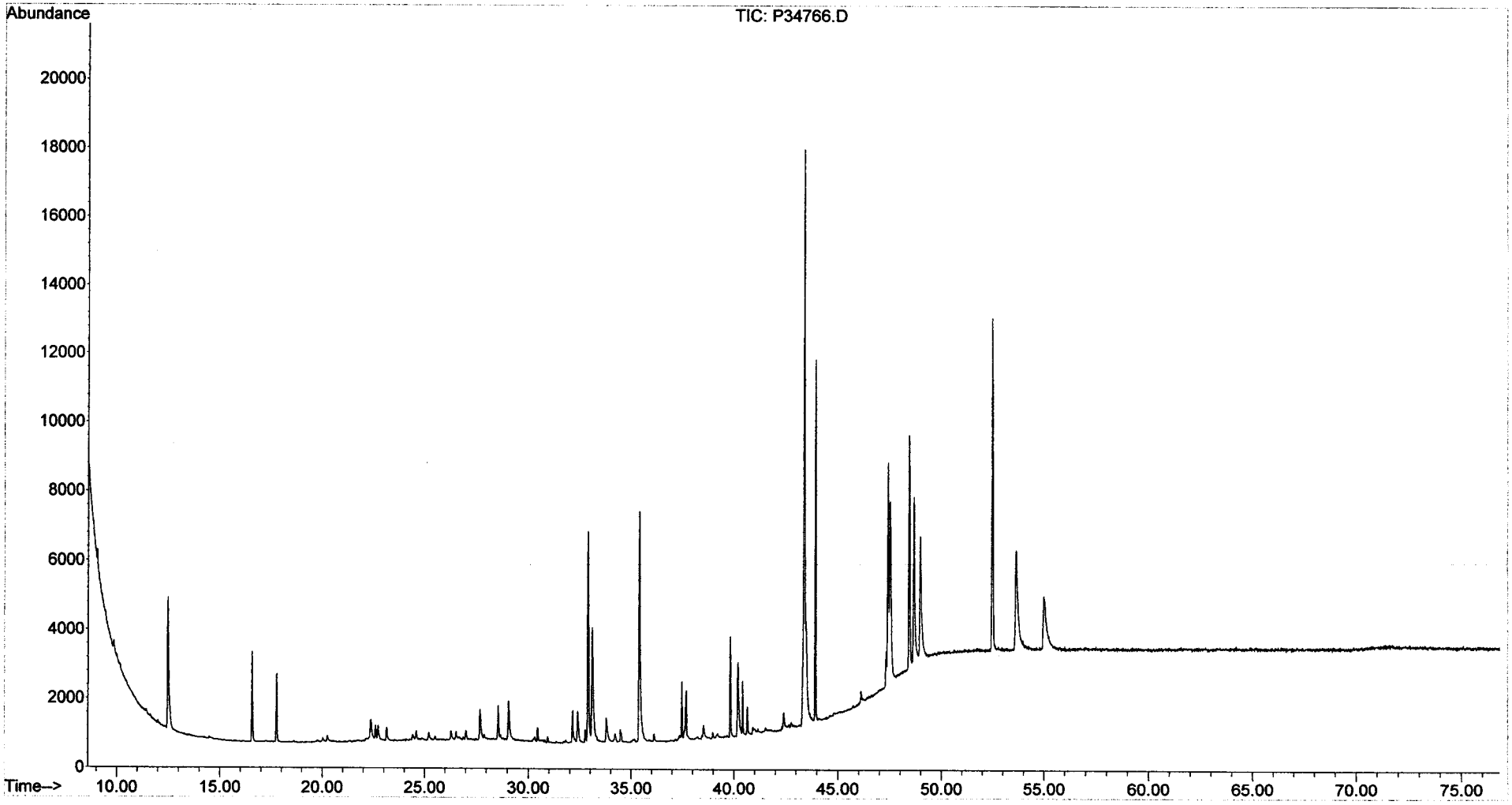
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	61149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-13-06

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

System Monitoring Compounds

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

Target Compounds

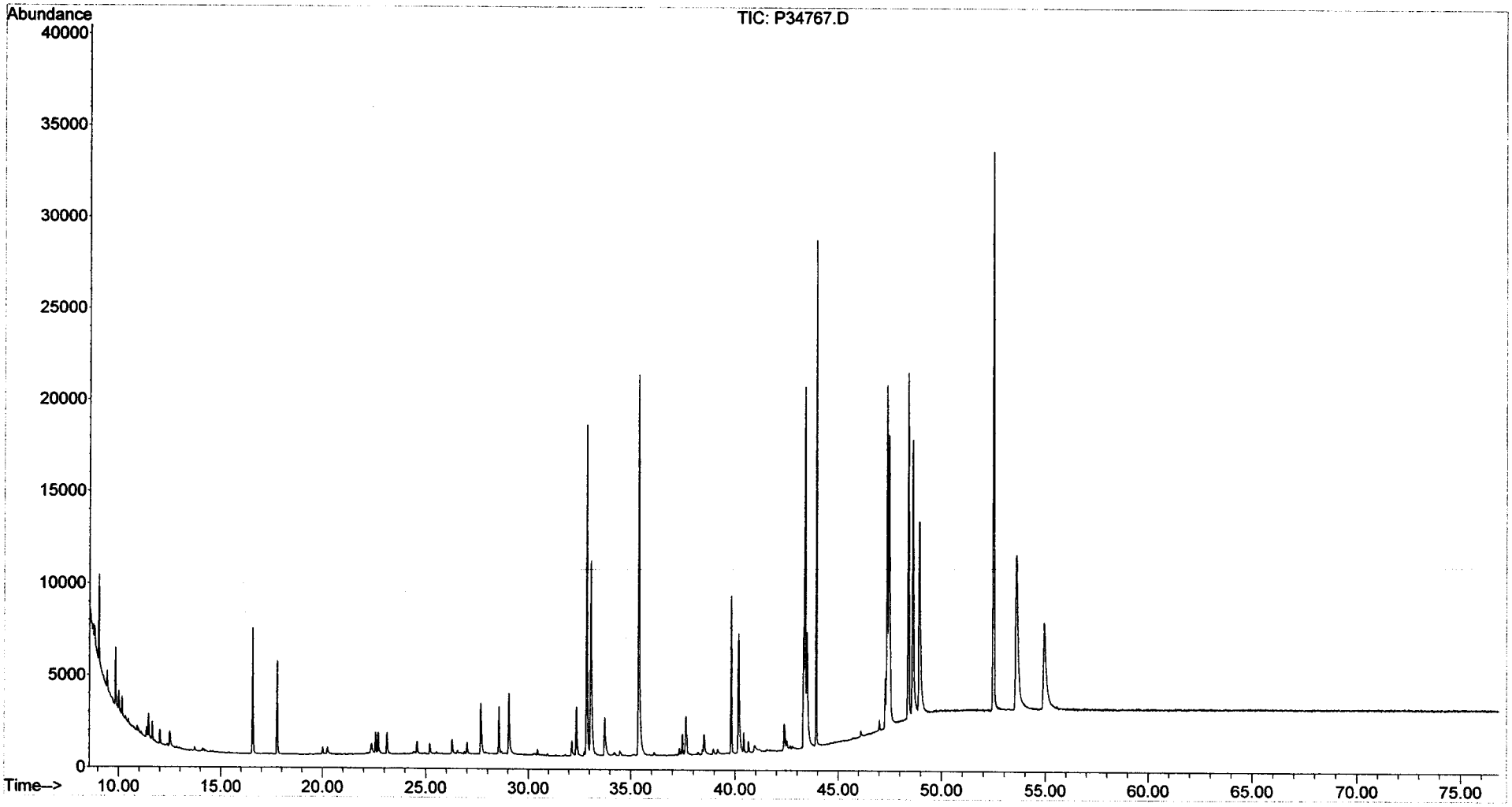
						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	74177	1178.67	ng/mL#	84
84) Hopane (T19)	52.49	191	74177	1178.67	ng/mL#	84

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMS 1-13-06

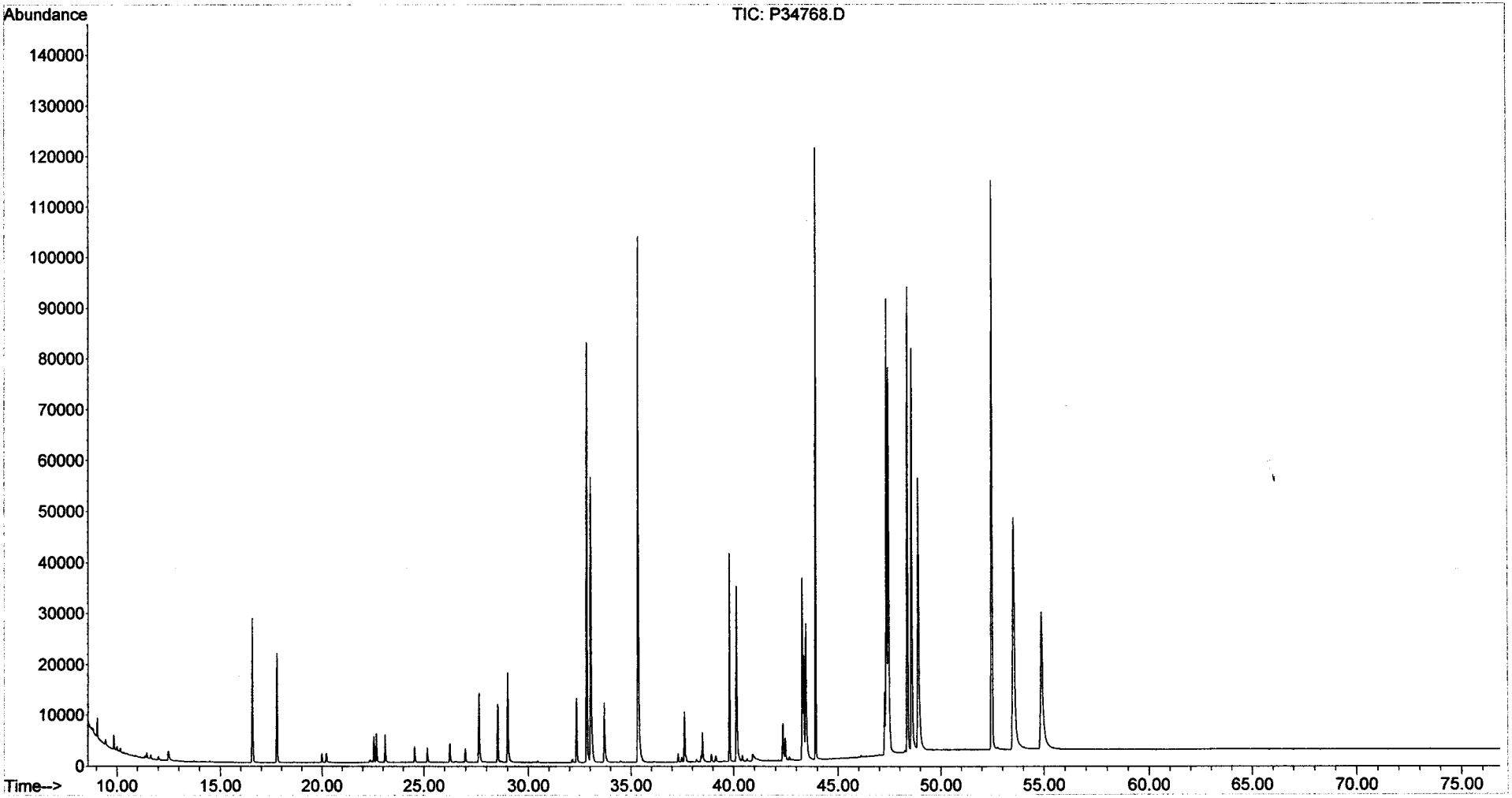
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.35	240	62301	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	43.92	217	142826	4946.93	ng/ml	0.00
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	494.69%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	264591	4195.30	ng/mL#	83
84) Hopane (T19)	52.49	191	264591	4195.30	ng/mL#	83

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MG 1-13-06

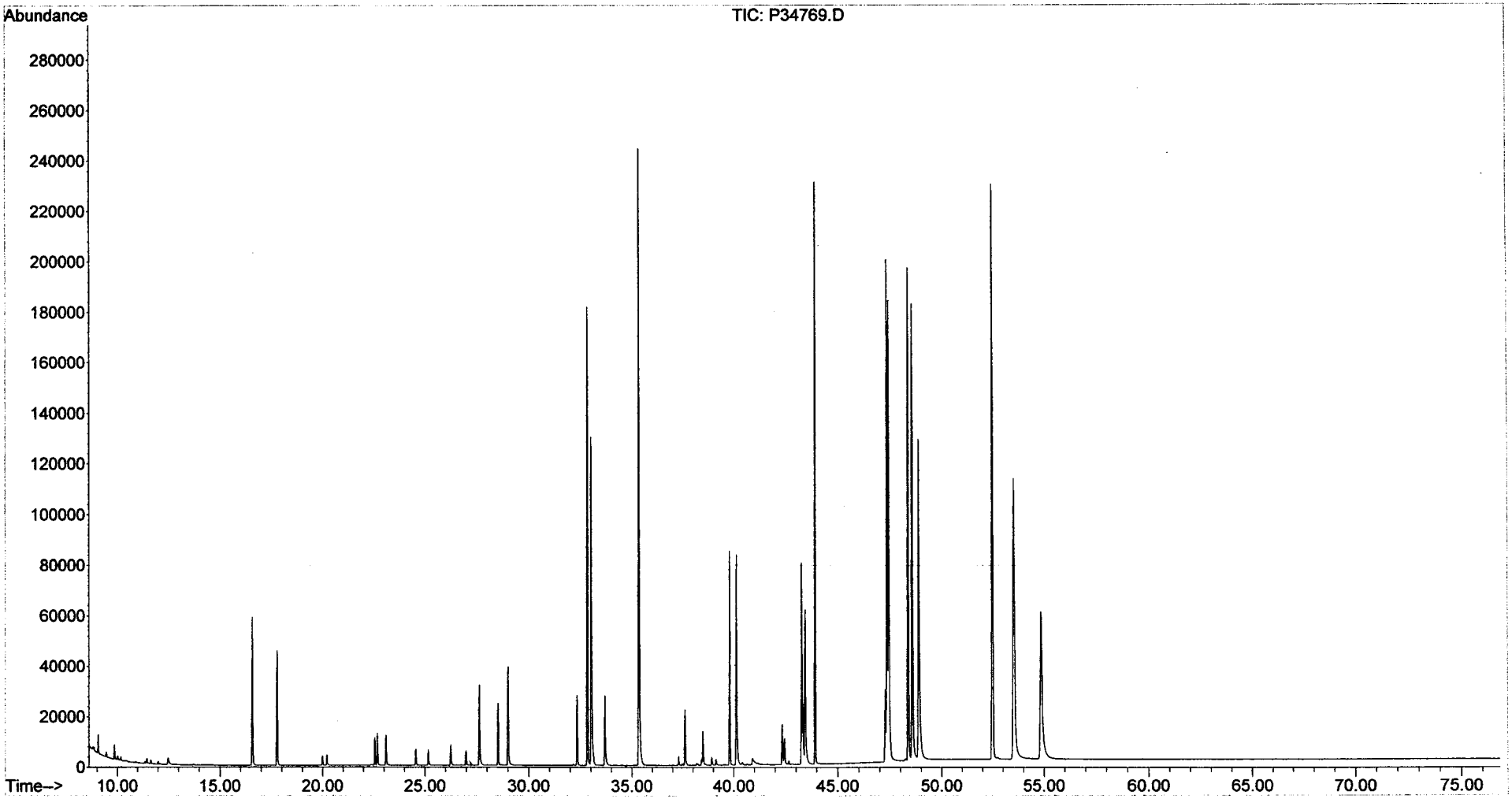
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.34	240	64774	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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 : P27838.D
Acq On : 23 Jan 2006 3:16 pm
Operator : AC
Sample : C2012301
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 24 07:50:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS 1/24/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	74	-0.02
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.420	0.5	77	-0.02
4	t	cis-Decalin	0.315	0.319	-1.3	77	-0.02
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	2.280	-1.4	76	-0.02
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.037	-0.9	75	-0.02
15	t	2-Methylnaphthalene	1.432	1.454	-1.5	75	-0.02
16	t	1-Methylnaphthalene	1.363	1.361	0.1	75	-0.02
17	A1	Benzothiophene	1.810	1.826	-0.9	75	-0.02
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.769	1.8	75	-0.02
23	t	2,6-Dimethylnaphthalene	1.233	1.217	1.3	74	-0.02
24	t	Dibenzofuran	1.989	1.969	1.0	73	-0.02
25	t	Acenaphthylene	2.231	2.191	1.8	73	-0.02
26	t	Acenaphthene	1.368	1.351	1.2	74	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.076	1.100	-2.2	77	-0.04
28	A1	Fluorene	1.599	1.546	3.3	73	-0.02
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.068	3.3	71	-0.02
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.241	1.8	73	-0.02
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27838.D
Acq On : 23 Jan 2006 3:16 pm
Operator : AC
Sample : C2012301
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 24 07:50:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.507	2.1	76	-0.04
53	t	Anthracene	2.119	2.039	3.8	71	-0.02
54	t	Carbazole	2.020	2.066	-2.3	75	-0.02
55	t	1-Methylphenanthrene	1.583	1.616	-2.1	75	-0.04
56	A1	Fluoranthene	2.435	2.499	-2.6	75	-0.04
57	t	Benzo(b)fluorene	1.497	1.491	0.4	75	-0.04
58	s	Pyrene-d10	2.114	2.158	-2.1	74	-0.02
59	A1	Pyrene	2.494	2.678	-7.4	79	-0.04
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.304	0.4	74	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.303	0.4	74	-0.04
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	69	-0.04
73	t	Benz[a]anthracene	1.428	1.513	-6.0	74	-0.02
74	A1	Chrysene	1.434	1.539	-7.3	74	-0.04
75	A2	Chrysene/Triphenylene	1.434	1.539	-7.3	74	-0.04
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	1.042	-1.7	70	-0.04
82	t	Benzo[b]fluoranthene	1.534	1.523	0.7	69	-0.04
83	A1	Benzo[k]fluoranthene	1.604	1.775	-10.7	77	-0.04
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.525	-3.2	71	-0.04
86	t	Benzo[a]pyrene	1.478	1.488	-0.7	70	-0.05
87	t	Perylene	1.473	1.534	-4.1	72	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.342	8.4	65	-0.06
89	t	Dibenz[a,h]anthracene	1.378	1.274	7.5	63	-0.06
90	t	Benzo[g,h,i]perylene	1.527	1.429	6.4	66	-0.07
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.432	12.4	67	-0.06
92	A2	Hopane (T19)	0.493	0.432	12.4	67	-0.06
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27838.D
Acq On : 23 Jan 2006 3:16 pm
Operator : AC
Sample : C2012301
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 24 07:50:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.215	6.5	68	-0.04
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27838.D
Acq On : 23 Jan 2006 3:16 pm
Operator : AC
Sample : C2012301
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 24 07:50:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

CW 1/24/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.29	164	35491	500.00	ng/mL	-0.02
72) Chrysene-d12	43.79	240	51309	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.95	152	36811	504.69	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.47%			
58) Pyrene-d10	38.88	212	76579	510.44	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.04%			
81) Benzo[b]fluoranthene-d12	47.73	264	53481	508.42	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.84%			
125) 5B(H)Cholane - Surr	44.39	217	11035	467.81	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.78%#			

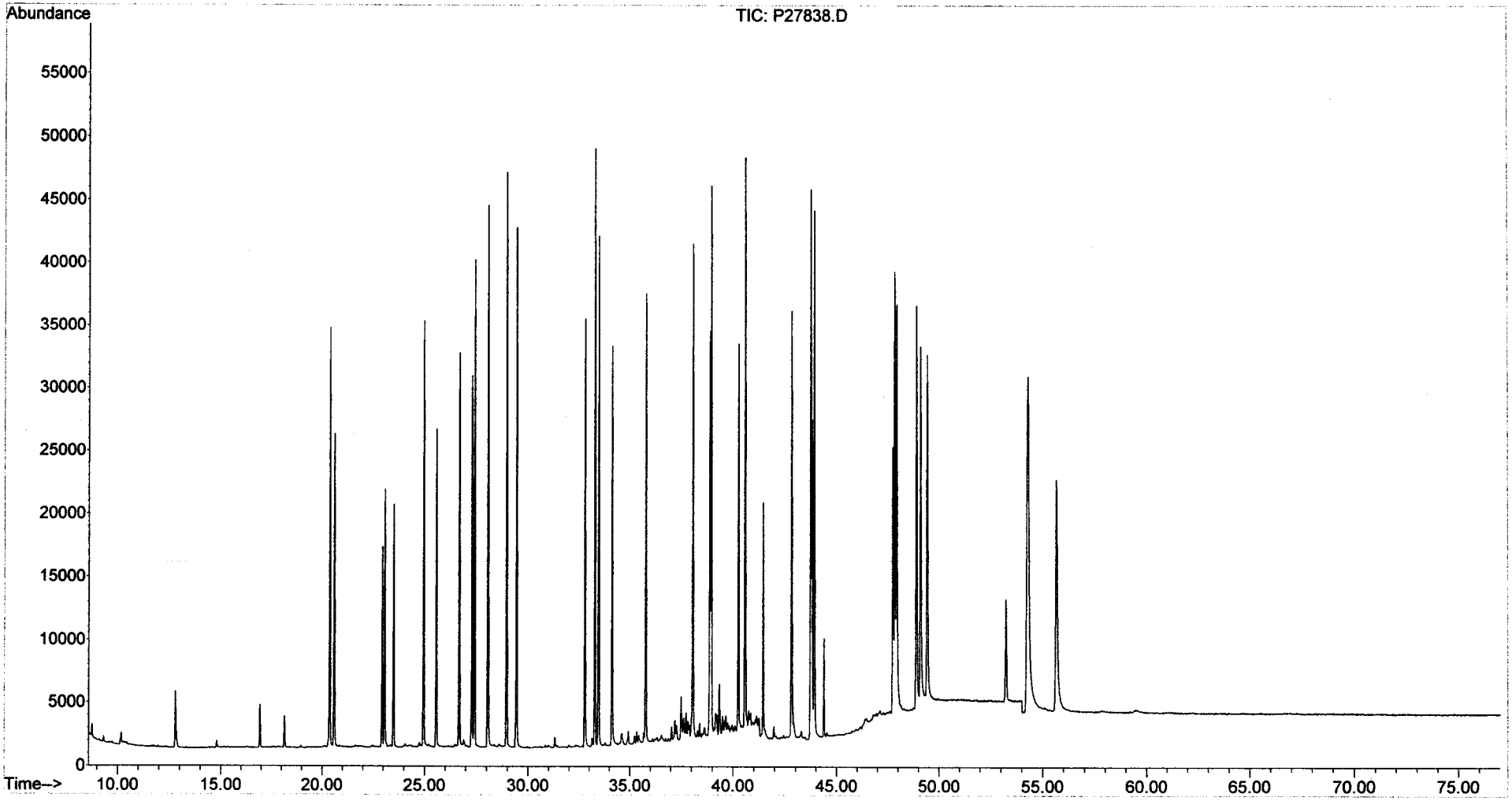
Target Compounds						Qvalue
3) trans-Decalin	16.93	138	7455	249.12	ng/mL	100
4) cis-Decalin	18.15	138	5666	253.04	ng/mL	100
9) Naphthalene	20.37	128	80915	506.88	ng/mL#	100
15) 2-Methylnaphthalene	23.07	142	51599	507.80	ng/mL#	100
16) 1-Methylnaphthalene	23.50	142	48318	499.58	ng/mL#	100
17) Benzothiophene	20.60	134	64818	504.46	ng/mL	100
22) Biphenyl	24.96	154	62799	490.93	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.56	156	43187	493.38	ng/mL#	100
24) Dibenzofuran	28.05	168	69892	494.96	ng/mL	100
25) Acenaphthylene	26.68	152	77749m	490.89	ng/mL	
26) Acenaphthene	27.41	153	47955	493.95	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.96	170	39037	511.03	ng/mL	98
28) Fluorene	29.44	166	54886	483.50	ng/mL	99
32) Dibenzothiophene	32.77	184	73382	483.46	ng/mL	100
41) Phenanthrene	33.27	178	79523	490.97	ng/mL	99
52) Retene	40.25	234	17992	489.55	ng/mL	99
53) Anthracene	33.45	178	72369	481.08	ng/mL	100
54) Carbazole	34.12	167	73326	511.45	ng/mL	99
55) 1-Methylphenanthrene	35.77	192	57337	510.27	ng/mL	100
56) Fluoranthene	38.05	202	88677m	512.96	ng/mL	
57) Benzo(b)fluorene	40.57	216	52904	497.81	ng/mL	100
59) Pyrene	38.94	202	95043	536.90	ng/mL	100
64) Naphthobenzothiophene	42.80	234	81786	498.22	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.80	234	81737	497.92	ng/mL#	68
73) Benz[a]anthracene	43.73	228	77648	529.93	ng/mL	100
74) Chrysene	43.89	228	78954	536.49	ng/mL	99
75) Chrysene/Triphenylene	43.89	228	78954	536.49	ng/mL	99
82) Benzo[b]fluoranthene	47.82	252	78144	496.57	ng/mL	100
83) Benzo[k]fluoranthene	47.92	252	91055	553.31	ng/mL	98
85) Benzo[e]pyrene	48.89	252	78255	515.84	ng/mL	100
86) Benzo[a]pyrene	49.08	252	76323	503.23	ng/mL	100
87) Perylene	49.42	252	78719	520.62	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	54.25	276	68876m	458.18	ng/mL	
89) Dibenz[a,h]anthracene	54.30	278	65345	462.24	ng/mL	99
90) Benzo[g,h,i]perylene	55.65	276	73309	467.72	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.23	191	22183	438.42	ng/mL	98
92) Hopane (T19)	53.23	191	22183	438.42	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 : P27838.D
Acq On : 23 Jan 2006 3:16 pm
Operator : AC
Sample : C2012301
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 24 07:50:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27858.D
Acq On : 24 Jan 2006 7:32 am
Operator : AC
Sample : C2012302
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 24 09:29:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for AC 1/25/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	84	-0.01
2	t	Decalin	0.000	0.385	0.0	0#	-0.01
3	A1	trans-Decalin	0.422	0.432	-2.4	90	-0.01
4	t	cis-Decalin	0.315	0.331	-5.1	90	-0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.354	-4.7	89	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.043	-1.5	86	-0.01
15	t	2-Methylnaphthalene	1.432	1.488	-3.9	88	-0.01
16	t	1-Methylnaphthalene	1.363	1.405	-3.1	88	-0.01
17	A1	Benzothiophene	1.810	1.928	-6.5	90	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.780	1.2	86	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.229	0.3	85	-0.01
24	t	Dibenzofuran	1.989	2.019	-1.5	85	-0.01
25	t	Acenaphthylene	2.231	2.227	0.2	84	-0.01
26	t	Acenaphthene	1.368	1.394	-1.9	87	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.115	-3.6	88	-0.02
28	A1	Fluorene	1.599	1.567	2.0	84	-0.02
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.117	1.0	83	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.212	3.1	82	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27858.D
Acq On : 24 Jan 2006 7:32 am
Operator : AC
Sample : C2012302
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 24 09:29:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.442	14.7	75	-0.02
53	t	Anthracene	2.119	2.038	3.8	81	-0.01
54	t	Carbazole	2.020	1.925	4.7	80	-0.01
55	t	1-Methylphenanthrene	1.583	1.519	4.0	81	-0.02
56	A1	Fluoranthene	2.435	2.380	2.3	81	-0.02
57	t	Benzo(b)fluorene	1.497	1.340	10.5	76	-0.02
58	s	Pyrene-d10	2.114	1.983	6.2	78	-0.02
59	A1	Pyrene	2.494	2.429	2.6	82	-0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.152	7.0	79	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.151	7.0	79	-0.02
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	76	-0.02
73	t	Benz[a]anthracene	1.428	1.434	-0.4	77	-0.02
74	A1	Chrysene	1.434	1.510	-5.3	80	-0.02
75	A2	Chrysene/Triphenylene	1.434	1.510	-5.3	80	-0.02
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.989	3.5	73	-0.02
82	t	Benzo[b]fluoranthene	1.534	1.506	1.8	76	-0.02
83	A1	Benzo[k]fluoranthene	1.604	1.663	-3.7	80	-0.04
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.480	-0.1	76	-0.02
86	t	Benzo[a]pyrene	1.478	1.442	2.4	75	-0.04
87	t	Perylene	1.473	1.465	0.5	76	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.338	8.7	72	-0.05
89	t	Dibenz[a,h]anthracene	1.378	1.266	8.1	70	-0.05
90	t	Benzo[g,h,i]perylene	1.527	1.423	6.8	73	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.440	10.8	75	-0.05
92	A2	Hopane (T19)	0.493	0.440	10.8	75	-0.05
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27858.D
Acq On : 24 Jan 2006 7:32 am
Operator : AC
Sample : C2012302
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 24 09:29:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.209	9.1	73	-0.04
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN23\
Data File : P27858.D
Acq On : 24 Jan 2006 7:32 am
Operator : AC
Sample : C2012302
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 24 09:29:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration

MS for AC 1/25/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.30	164	40324	500.00	ng/mL	-0.01
72) Chrysene-d12	43.81	240	56736	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.96	152	42058	507.51	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.75%			
58) Pyrene-d10	38.88	212	79980	469.22	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.92%#			
81) Benzo[b]fluoranthene-d12	47.75	264	56091	482.22	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.22%#			
125) 5B(H)Cholane - Surr	44.39	217	11869	455.04	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.50%#			

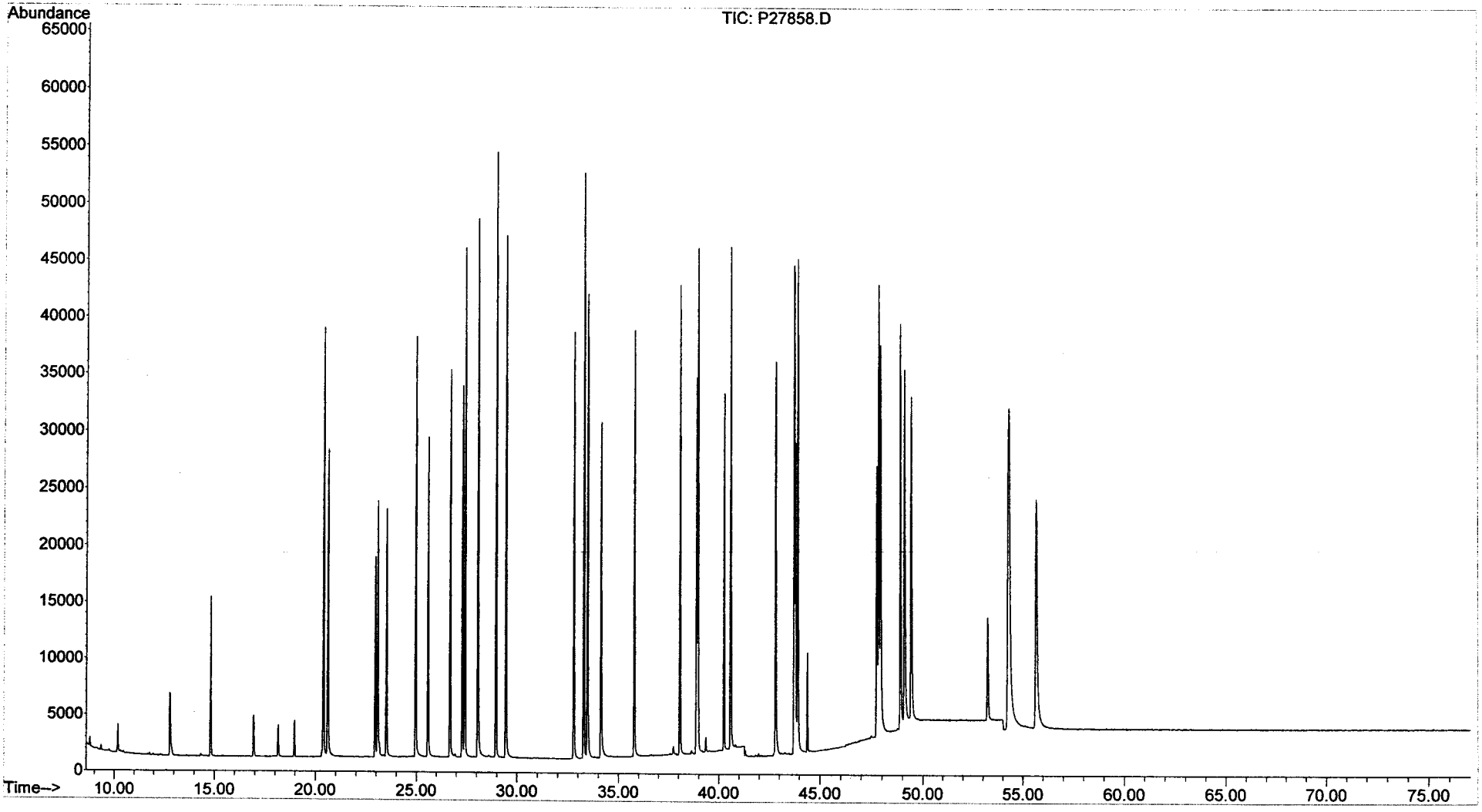
Target Compounds						Qvalue
3) trans-Decalin	16.94	138	8707	256.09	ng/mL	100
4) cis-Decalin	18.16	138	6676	262.41	ng/mL	100
9) Naphthalene	20.39	128	94931	523.40	ng/mL#	100
15) 2-Methylnaphthalene	23.09	142	59982	519.54	ng/mL#	100
16) 1-Methylnaphthalene	23.51	142	56655	515.57	ng/mL#	100
17) Benzothiophene	20.61	134	77746	532.55	ng/mL	100
22) Biphenyl	24.97	154	71784	493.91	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.58	156	49545	498.18	ng/mL#	100
24) Dibenzofuran	28.07	168	81434	507.58	ng/mL	99
25) Acenaphthylene	26.69	152	89815m	499.10	ng/mL	
26) Acenaphthene	27.42	153	56219	509.67	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.97	170	44977	518.22	ng/mL	99
28) Fluorene	29.44	166	63186	489.91	ng/mL	100
32) Dibenzothiophene	32.78	184	85386	495.12	ng/mL	100
41) Phenanthrene	33.28	178	89215	484.79	ng/mL	100
52) Retene	40.26	234	17841	427.26	ng/mL	96
53) Anthracene	33.46	178	82178m	480.82	ng/mL	
54) Carbazole	34.13	167	77618	476.50	ng/mL	99
55) 1-Methylphenanthrene	35.78	192	61251	479.77	ng/mL	100
56) Fluoranthene	38.06	202	95959	488.55	ng/mL	100
57) Benzo(b)fluorene	40.59	216	54021	447.39	ng/mL	99
59) Pyrene	38.95	202	97942	486.96	ng/mL	100
64) Naphthobenzothiophene	42.82	234	86758	465.16	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.82	234	86755	465.15	ng/mL#	67
73) Benz[a]anthracene	43.73	228	81346	502.06	ng/mL	100
74) Chrysene	43.91	228	85657	526.36	ng/mL	100
75) Chrysene/Triphenylene	43.91	228	85657	526.36	ng/mL	100
82) Benzo[b]fluoranthene	47.83	252	85456	491.09	ng/mL	99
83) Benzo[k]fluoranthene	47.92	252	94366	518.58	ng/mL	99
85) Benzo[e]pyrene	48.90	252	83960	500.51	ng/mL	99
86) Benzo[a]pyrene	49.10	252	81806m	487.79	ng/mL	
87) Perylene	49.43	252	83129m	497.20	ng/mL	
88) Indeno[1,2,3-cd]pyrene	54.26	276	75905m	456.64	ng/mL	
89) Dibenz[a,h]anthracene	54.31	278	71828	459.50	ng/mL	98
90) Benzo[g,h,i]perylene	55.66	276	80759	465.97	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	53.25	191	24947	445.88	ng/mL	97
92) Hopane (T19)	53.25	191	24947	445.88	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 : P27858.D
Acq On : 24 Jan 2006 7:32 am
Operator : AC
Sample : C2012302
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 24 09:29:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 19 08:27:04 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

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

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

CMS 1/25/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	80	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.96#
3	A1	trans-Decalin	0.422	0.415	1.7	82	0.00
4	t	cis-Decalin	0.315	0.318	-1.0	83	0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.320	-3.2	83	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.039	-1.1	82	0.00
15	t	2-Methylnaphthalene	1.432	1.484	-3.6	83	0.00
16	t	1-Methylnaphthalene	1.363	1.399	-2.6	83	0.00
17	A1	Benzothiophene	1.810	1.909	-5.5	85	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.793	0.5	82	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.223	0.8	80	0.00
24	t	Dibenzofuran	1.989	2.018	-1.5	81	0.01
25	t	Acenaphthylene	2.231	2.250	-0.9	81	0.00
26	t	Acenaphthene	1.368	1.395	-2.0	83	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.099	-2.1	83	-0.01
28	A1	Fluorene	1.599	1.574	1.6	80	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.139	-0.0	80	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.248	1.5	80	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.457	11.8	74	-0.01
53	t	Anthracene	2.119	2.042	3.6	77	0.00
54	t	Carbazole	2.020	1.970	2.5	78	0.00
55	t	1-Methylphenanthrene	1.583	1.536	3.0	78	0.00
56	A1	Fluoranthene	2.435	2.351	3.4	77	0.00
57	t	Benzo(b)fluorene	1.497	1.399	6.5	76	-0.01
58	s	Pyrene-d10	2.114	2.002	5.3	75	0.00
59	A1	Pyrene	2.494	2.458	1.4	79	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.209	4.5	77	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.209	4.5	77	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	74	-0.01
73	t	Benz[a]anthracene	1.428	1.438	-0.7	75	0.00
74	A1	Chrysene	1.434	1.496	-4.3	78	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.496	-4.3	78	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.995	2.9	72	0.00
82	t	Benzo[b]fluoranthene	1.534	1.498	2.3	73	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.695	-5.7	79	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.505	-1.8	76	-0.01
86	t	Benzo[a]pyrene	1.478	1.452	1.8	73	-0.01
87	t	Perylene	1.473	1.469	0.3	74	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.315	10.2	69	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.317	4.4	71	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.456	4.6	73	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.431	12.6	72	-0.02
92	A2	Hopane (T19)	0.493	0.431	12.6	72	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.211	8.3	71	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

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

Quantitation Report (QT Reviewed)

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

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

MS 1/25/06

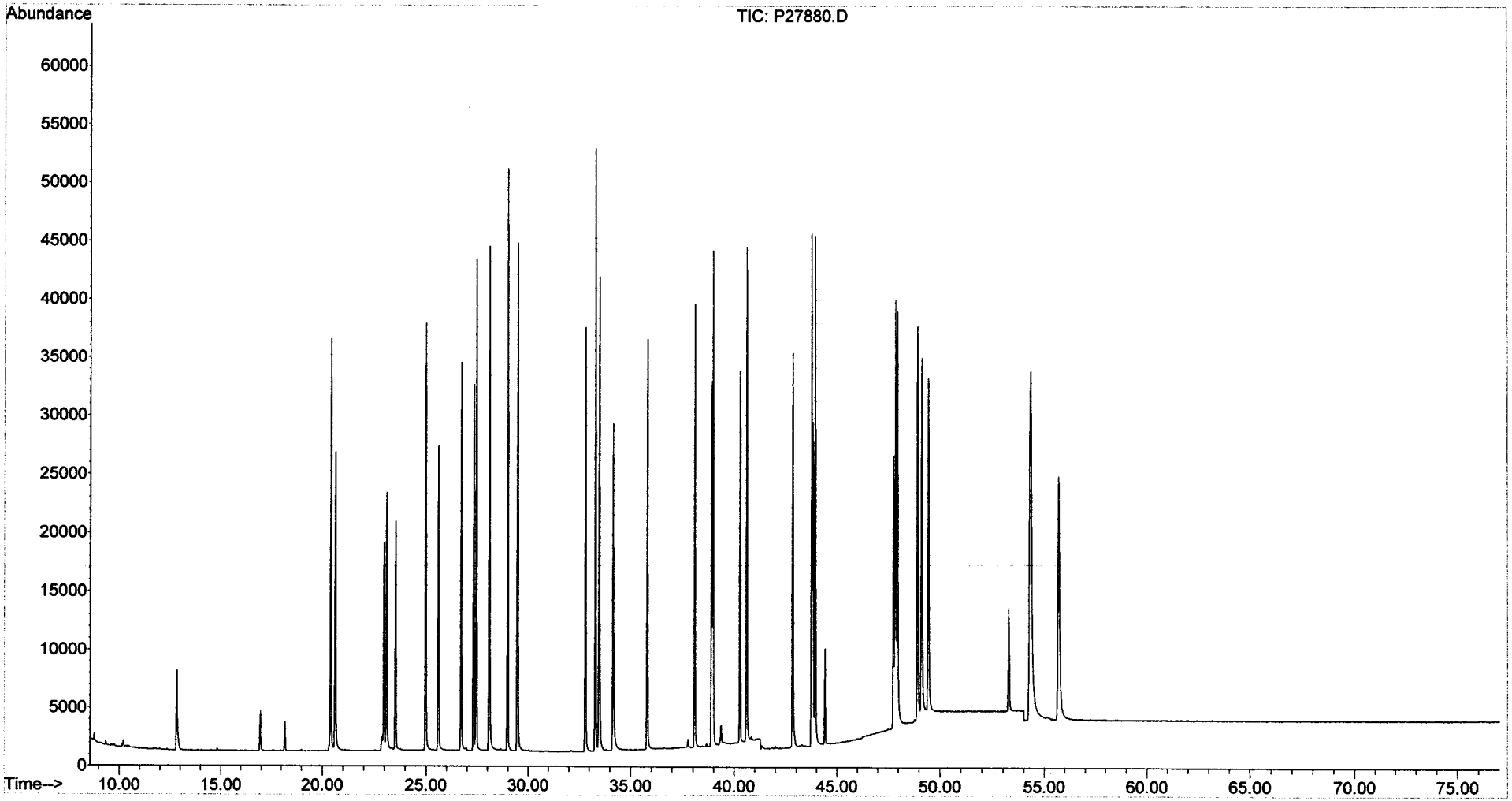
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	38469	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	55244	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	39983	505.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

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

1/25/06.

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	68	0.00
2	t	Decalin	0.000	0.369	0.0	0#	0.00
3	A1	trans-Decalin	0.422	0.425	-0.7	71	0.00
4	t	cis-Decalin	0.315	0.321	-1.9	71	0.01
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.44#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.23#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.70#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-26.11#
9	A1	Naphthalene	2.249	2.341	-4.1	71	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-23.10#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.95#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.29#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-31.06#
14	s	2-Methylnaphthalene-d10	1.028	1.041	-1.3	69	0.00
15	t	2-Methylnaphthalene	1.432	1.485	-3.7	71	0.00
16	t	1-Methylnaphthalene	1.363	1.408	-3.3	71	0.01
17	A1	Benzothiophene	1.810	1.919	-6.0	72	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.65#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-26.15#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-28.13#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.87#
22	t	Biphenyl	1.802	1.787	0.8	70	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.216	1.4	68	0.01
24	t	Dibenzofuran	1.989	2.016	-1.4	68	0.01
25	t	Acenaphthylene	2.231	2.295	-2.9	70	0.00
26	t	Acenaphthene	1.368	1.402	-2.5	70	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.097	-2.0	70	-0.01
28	A1	Fluorene	1.599	1.570	1.8	68	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.83#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-34.03#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.87#
32	A1	Dibenzothiophene	2.138	2.128	0.5	67	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.58#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.93#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.35#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.96#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.58#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.26#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-38.07#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.76#
41	A1	Phenanthrene	2.282	2.228	2.4	67	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.37#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.53#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.72#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.82#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.72#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.54#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.30#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.37#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.55#
52	t	Retene	0.518	0.452	12.7	62	-0.01
53	t	Anthracene	2.119	2.050	3.3	66	0.00
54	t	Carbazole	2.020	1.930	4.5	65	0.00
55	t	1-Methylphenanthrene	1.583	1.515	4.3	65	0.00
56	A1	Fluoranthene	2.435	2.363	3.0	65	0.00
57	t	Benzo(b)fluorene	1.497	1.369	8.6	63	-0.01
58	s	Pyrene-d10	2.114	2.002	5.3	63	0.00
59	A1	Pyrene	2.494	2.453	1.6	67	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.38#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-42.18#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-44.19#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.55#
64	A1	Naphthobenzothiophene	2.313	2.188	5.4	65	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.186	5.5	65	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-43.19#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.48#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.24#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.25#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.89#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-49.02#
72	i	Chrysene-d12	1.000	1.000	0.0	62	-0.01
73	t	Benz[a]anthracene	1.428	1.432	-0.3	63	0.00
74	A1	Chrysene	1.434	1.517	-5.8	66	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.517	-5.8	66	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.40#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.84#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.78#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.37#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.94#
81	s	Benzo[b]fluoranthene-d12	1.025	0.991	3.3	60	0.00
82	t	Benzo[b]fluoranthene	1.534	1.471	4.1	60	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.715	-6.9	67	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.27#
85	t	Benzo[e]pyrene	1.478	1.503	-1.7	63	0.00
86	t	Benzo[a]pyrene	1.478	1.440	2.6	61	-0.01
87	t	Perylene	1.473	1.477	-0.3	63	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.433	2.2	63	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.293	6.2	58	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.435	6.0	60	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.437	11.4	61	-0.02
92	A2	Hopane (T19)	0.493	0.437	11.4	61	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.44#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-42.16#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.70#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-45.00#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.71#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.81#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.10#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.26#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.81#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-48.02#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.25#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.32#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.57#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.83#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-51.10#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.86#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.82#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.93#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-52.07#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.67#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-53.11#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-54.05#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-55.24#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.50#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.95#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.37#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.28#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.95#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-62.18#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-63.17#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.62#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-67.05#
125	SA1	5B(H)Cholane - Surr	0.230	0.210	8.7	59	-0.01
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.92#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.36#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-47.05#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.97#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.51#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.81#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-49.08#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.27#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-50.03#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.40#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.38#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.07#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-48.15#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.44#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.53#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.67#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.71#

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

Quantitation Report (QT Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.31	164	32574	500.00	ng/mL	0.00
72) Chrysene-d12	43.82	240	46271	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.98	152	33911	506.56	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.66%			
58) Pyrene-d10	38.90	212	65199	473.50	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.35%#			
81) Benzo[b]fluoranthene-d12	47.77	264	45834	483.16	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.32%#			
125) 5B(H)Cholane - Surr	44.41	217	9709	456.41	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.64%#			

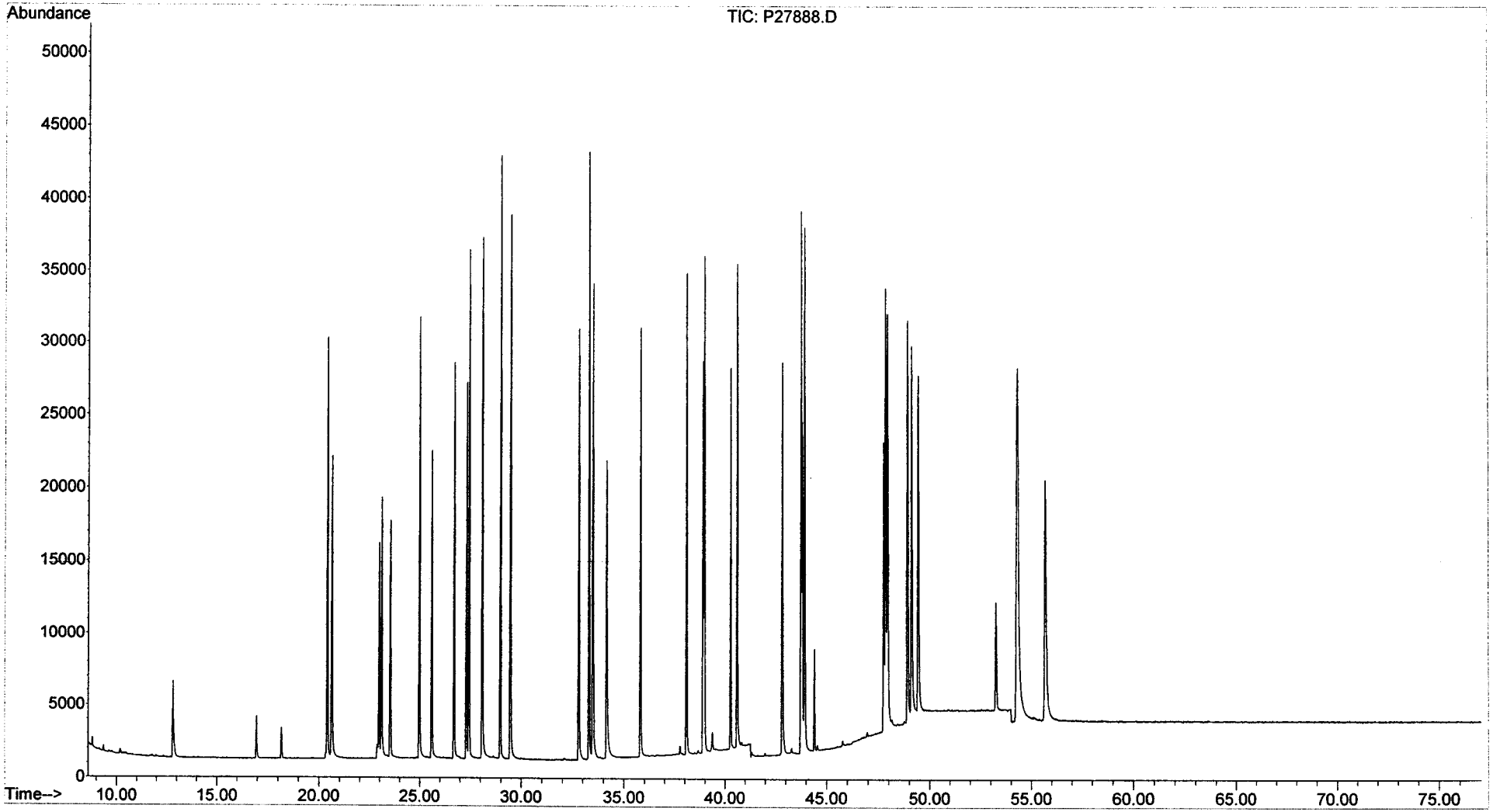
Target Compounds						Qvalue
3) trans-Decalin	16.96	138	6914	251.73	ng/mL	100
4) cis-Decalin	18.18	138	5230	254.49	ng/mL	100
9) Naphthalene	20.40	128	76253	520.45	ng/mL#	100
15) 2-Methylnaphthalene	23.10	142	48368	518.62	ng/mL#	100
16) 1-Methylnaphthalene	23.53	142	45852	516.54	ng/mL#	100
17) Benzothiophene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

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

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

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	70	-0.01
2	t	Decalin	0.000	0.367	0.0	0#	0.00
3	A1	trans-Decalin	0.422	0.410	2.8	71	0.00
4	t	cis-Decalin	0.315	0.306	2.9	70	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.33#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.10#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.56#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.94#
9	A1	Naphthalene	2.249	2.282	-1.5	72	-0.01
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.95#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.78#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.11#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.87#
14	s	2-Methylnaphthalene-d10	1.028	1.025	0.3	71	-0.01
15	t	2-Methylnaphthalene	1.432	1.456	-1.7	72	-0.01
16	t	1-Methylnaphthalene	1.363	1.379	-1.2	72	-0.01
17	A1	Benzothiophene	1.810	1.854	-2.4	72	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.51#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.98#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.95#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.68#
22	t	Biphenyl	1.802	1.759	2.4	71	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.226	0.6	71	-0.01
24	t	Dibenzofuran	1.989	1.996	-0.4	70	-0.01
25	t	Acenaphthylene	2.231	2.467	-10.6	78	-0.01
26	t	Acenaphthene	1.368	1.365	0.2	71	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.112	-3.3	74	-0.01
28	A1	Fluorene	1.599	1.567	2.0	70	-0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.82#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.64#
32	A1	Dibenzothiophene	2.138	2.094	2.1	69	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.211	3.1	69	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.04#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.15#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.31#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.49#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.59#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.49#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.30#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.07#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.12#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.533	-2.9	76	-0.01
53	t	Anthracene	2.119	2.080	1.8	69	-0.01
54	t	Carbazole	2.020	2.038	-0.9	71	-0.01
55	t	1-Methylphenanthrene	1.583	1.573	0.6	70	-0.01
56	A1	Fluoranthene	2.435	2.427	0.3	69	-0.01
57	t	Benzo(b)fluorene	1.497	1.577	-5.3	75	-0.01
58	s	Pyrene-d10	2.114	2.080	1.6	68	-0.01
59	A1	Pyrene	2.494	2.477	0.7	70	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.12#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.92#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.91#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.26#
64	A1	Naphthobenzothiophene	2.313	2.380	-2.9	73	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.380	-2.9	73	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	69	-0.01
73	t	Benz[a]anthracene	1.428	1.515	-6.1	74	-0.01
74	A1	Chrysene	1.434	1.493	-4.1	72	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.482	-3.3	72	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	1.065	-3.9	71	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.631	-6.3	75	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.709	-6.5	74	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.552	-5.0	73	-0.01
86	t	Benzo[a]pyrene	1.478	1.608	-8.8	76	-0.01
87	t	Perylene	1.473	1.580	-7.3	75	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.582	-8.0	77	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.525	-10.7	76	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.581	-3.5	74	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.462	6.3	72	-0.01
92	A2	Hopane (T19)	0.493	0.462	6.3	72	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.05#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.59#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.80#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-49.02#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.10#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.34#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.60#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.87#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.63#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.59#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.70#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.83#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.43#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.87#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.81#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.99#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.25#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.69#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-57.11#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-59.01#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.68#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.90#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.88#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-65.33#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.74#
125	SA1	5B(H)Cholane - Surr	0.230	0.216	6.1	68	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.72#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.15#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.75#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.29#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.59#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.86#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.05#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.80#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.17#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.14#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.85#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.94#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.31#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.44#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.48#

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

Quantitation Report (QT Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	33762	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	51506	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	34597	498.62	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.86%#			
58) Pyrene-d10	38.70	212	70212	491.97	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.20%#			
81) Benzo[b]fluoranthene-d12	47.56	264	54841	519.35	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.93%			
125) 5B(H)Cholane - Surr	44.23	217	11141	470.50	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.05%#			

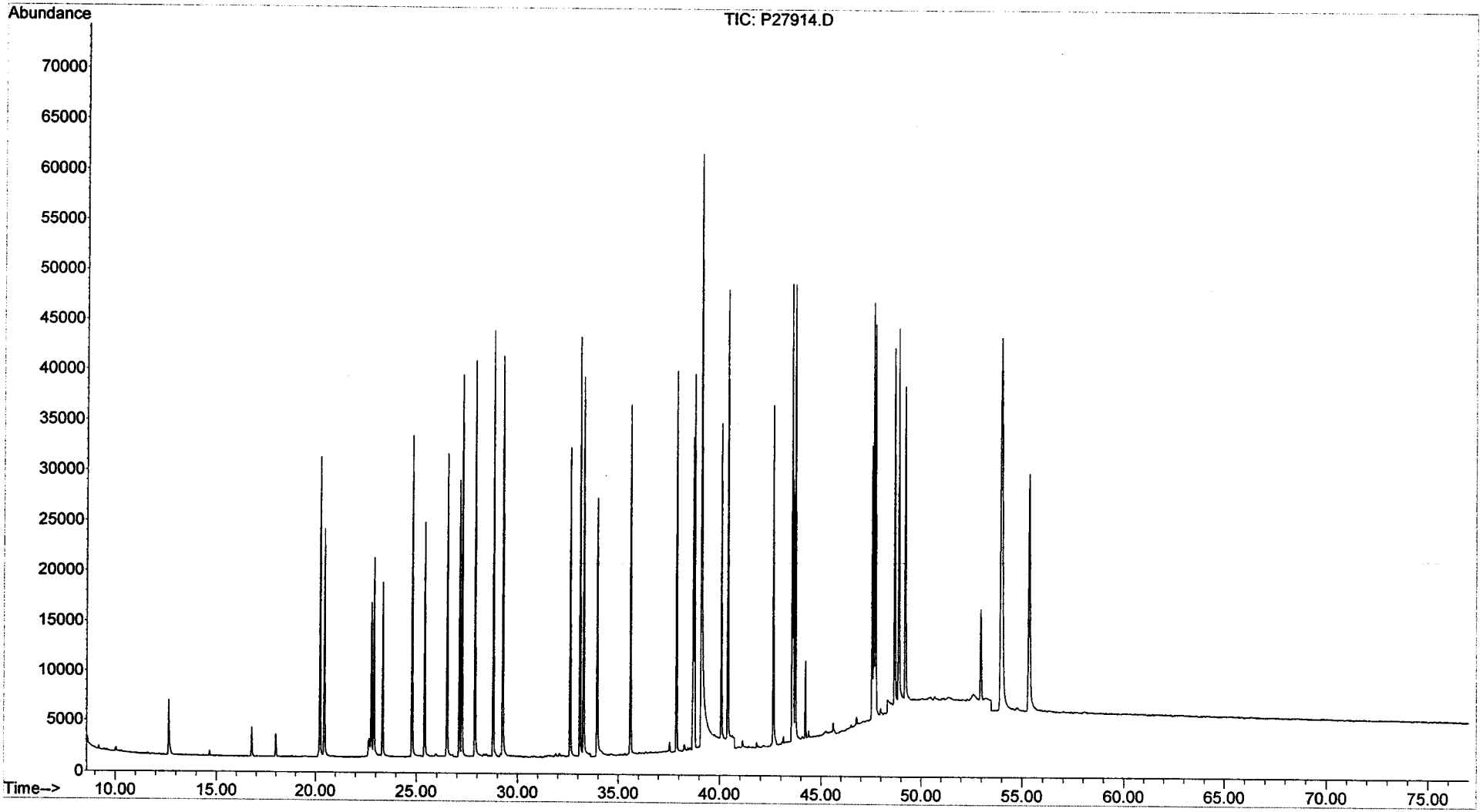
Target Compounds						Qvalue
3) trans-Decalin	16.78	138	6929	243.40	ng/mL	100
4) cis-Decalin	18.00	138	5168	242.62	ng/mL	100
9) Naphthalene	20.21	128	77040	507.32	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	49162	508.59	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	46541	505.85	ng/mL#	100
17) Benzothiophene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

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27928.D
Acq On : 26 Jan 2006 10:36 pm
Operator : AC
Sample : C201230~~6~~7 AM 1/27/06
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:15:33 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

1/27/06.

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	69	-0.01
2	t	Decalin	0.000	0.377	0.0	0#	-0.01
3	A1	trans-Decalin	0.422	0.418	0.9	72	-0.01
4	t	cis-Decalin	0.315	0.317	-0.6	72	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	2.321	-3.2	73	-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	1.029	-0.1	70	-0.01
15	t	2-Methylnaphthalene	1.432	1.474	-2.9	72	-0.01
16	t	1-Methylnaphthalene	1.363	1.412	-3.6	73	0.00
17	A1	Benzothiophene	1.810	1.905	-5.2	73	-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	1.775	1.5	71	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.246	-1.1	71	0.00
24	t	Dibenzofuran	1.989	2.018	-1.5	70	-0.01
25	t	Acenaphthylene	2.231	2.308	-3.5	73	-0.01
26	t	Acenaphthene	1.368	1.393	-1.8	72	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.117	-3.8	73	-0.01
28	A1	Fluorene	1.599	1.565	2.1	69	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	2.110	1.3	69	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.36#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.70#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.12#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.74#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.36#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.03#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.83#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.50#
41	A1	Phenanthrene	2.282	2.171	4.9	67	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 : P27928.D
Acq On : 26 Jan 2006 10:36 pm
Operator : AC
Sample : C201230~~8~~7 MS 1/27/06
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:15:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 26 07:04:54 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.29#
52	t	Retene	0.518	0.471	9.1	66	-0.01
53	t	Anthracene	2.119	2.089	1.4	69	0.00
54	t	Carbazole	2.020	1.961	2.9	67	-0.01
55	t	1-Methylphenanthrene	1.583	1.532	3.2	67	-0.01
56	A1	Fluoranthene	2.435	2.382	2.2	68	-0.01
57	t	Benzo(b)fluorene	1.497	1.429	4.5	67	-0.01
58	s	Pyrene-d10	2.114	2.013	4.8	65	-0.01
59	A1	Pyrene	2.494	2.455	1.6	69	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	2.257	2.4	69	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.256	2.5	69	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	64	-0.01
73	t	Benz[a]anthracene	1.428	1.481	-3.7	67	-0.01
74	A1	Chrysene	1.434	1.520	-6.0	68	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.520	-6.0	68	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	1.003	2.1	63	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.545	-0.7	66	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.690	-5.4	68	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.498	-1.4	65	-0.01
86	t	Benzo[a]pyrene	1.478	1.492	-0.9	65	-0.01
87	t	Perylene	1.473	1.486	-0.9	65	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.435	2.0	65	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.359	1.4	63	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.439	5.8	62	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.459	6.9	66	-0.02
92	A2	Hopane (T19)	0.493	0.459	6.9	66	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27928.D
Acq On : 26 Jan 2006 10:36 pm
Operator : AC
Sample : C2012307 MS 1/27/06
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:15:33 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	0.217	5.7	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 : P27928.D
Acq On : 26 Jan 2006 10:36 pm
Operator : AC
Sample : C201230 7 m 1/27/06
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:15:33 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	33456	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	47811	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	34431	500.77	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.08%			
58) Pyrene-d10	38.70	212	67354	476.26	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.63%#			
81) Benzo[b]fluoranthene-d12	47.56	264	47975	489.44	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.94%#			
125) 5B(H)Cholane - Surr	44.22	217	10392	472.79	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.28%#			

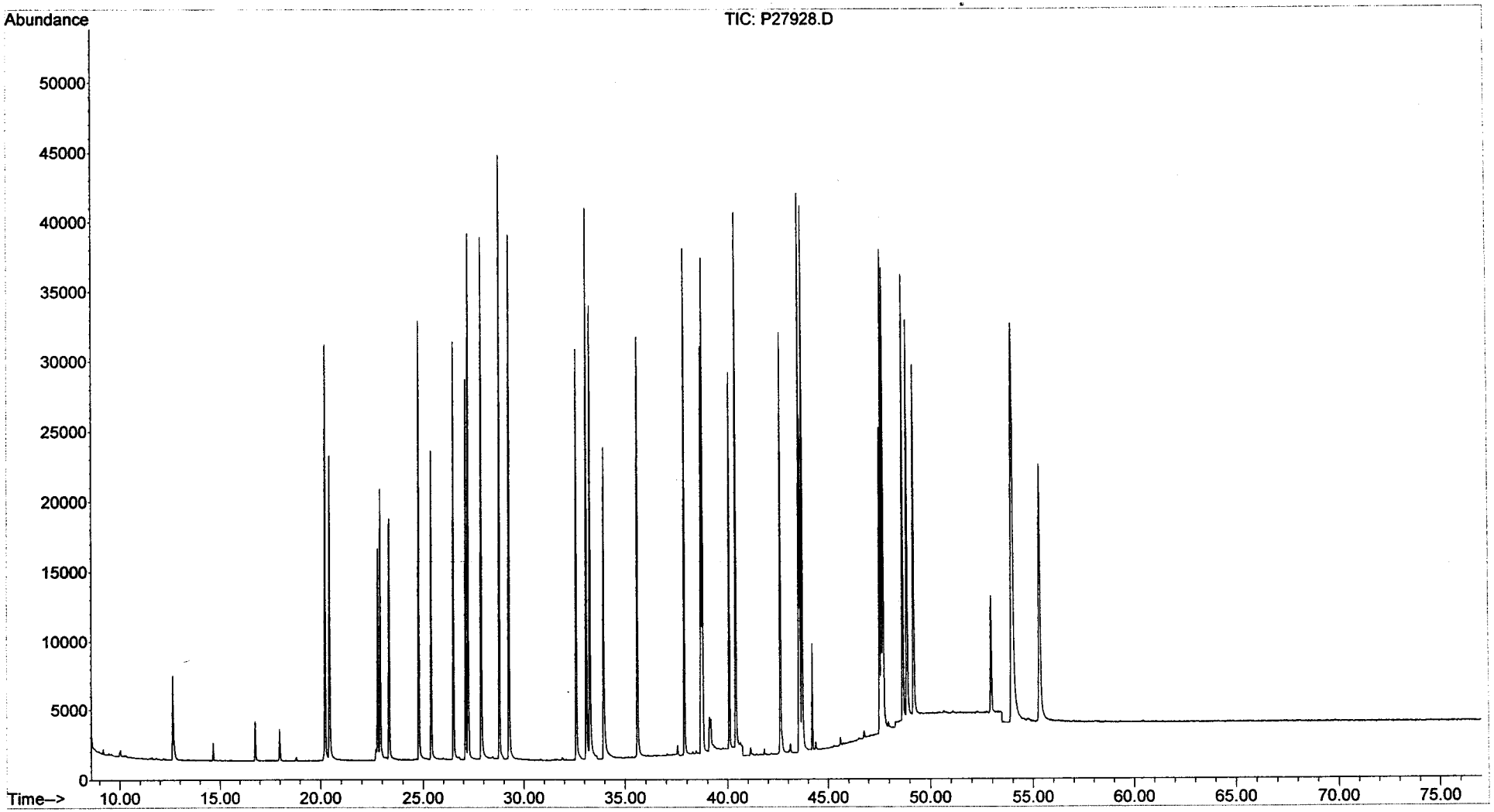
Target Compounds						Qvalue
3) trans-Decalin	16.77	138	6988	247.72	ng/mL	100
4) cis-Decalin	18.00	138	5304	251.28	ng/mL	100
9) Naphthalene	20.21	128	77637	515.93	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	49317	514.86	ng/mL#	100
16) 1-Methylnaphthalene	23.35	142	47229m	518.02	ng/mL	
17) Benzothiophene	20.44	134	63740	526.24	ng/mL	100
22) Biphenyl	24.80	154	59398	492.59	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.42	156	41697m	505.34	ng/mL	
24) Dibenzofuran	27.89	168	67530	507.33	ng/mL	99
25) Acenaphthylene	26.52	152	77232m	517.28	ng/mL	
26) Acenaphthene	27.25	153	46599	509.18	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.80	170	37360	518.82	ng/mL	99
28) Fluorene	29.28	166	52358	489.29	ng/mL	100
32) Dibenzothiophene	32.61	184	70598	493.41	ng/mL	100
41) Phenanthrene	33.11	178	72649	475.81	ng/mL	99
52) Retene	40.09	234	15754	454.73	ng/mL	96
53) Anthracene	33.29	178	69883m	492.81	ng/mL	
54) Carbazole	33.96	167	65618	485.52	ng/mL	99
55) 1-Methylphenanthrene	35.61	192	51239	483.73	ng/mL	99
56) Fluoranthene	37.89	202	79701	489.08	ng/mL	99
57) Benzo(b)fluorene	40.41	216	47818	477.32	ng/mL	100
59) Pyrene	38.78	202	82131	492.18	ng/mL	99
64) Naphthobenzothiophene	42.63	234	75508	487.95	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.63	234	75477	487.75	ng/mL#	67
73) Benz[a]anthracene	43.56	228	70830	518.77	ng/mL	99
74) Chrysene	43.72	228	72663m	529.87	ng/mL	
75) Chrysene/Triphenylene	43.72	228	72672m	529.93	ng/mL	
82) Benzo[b]fluoranthene	47.65 ✓	252	73851	503.63	ng/mL	100
83) Benzo[k]fluoranthene	47.73 ✓	252	80792	526.87	ng/mL	98
85) Benzo[e]pyrene	48.69	252	71614	506.61	ng/mL	100
86) Benzo[a]pyrene	48.89	252	71315m	504.61	ng/mL	
87) Perylene	49.21	252	71051	504.29	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.97	276	68628m	489.94	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	64968	493.20	ng/mL	98
90) Benzo[g,h,i]perylene	55.34	276	68782	470.95	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.96	191	21966	465.89	ng/mL	97
92) Hopane (T19)	52.96	191	21966	465.89	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 : P27928.D
Acq On : 26 Jan 2006 10:36 pm
Operator : AC
Sample : C201230~~6~~7 MS 1/27/06
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:15:33 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 : P27938.D
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012307A
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 06:38:06 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

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	78	-0.01
2	t	Decalin	0.000	0.000#	0.0	0#	-16.78#
3	A1	trans-Decalin	0.422	0.410	2.8	79	-0.01
4	t	cis-Decalin	0.315	0.313	0.6	80	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	2.291	-1.9	81	-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	80	-0.01
15	t	2-Methylnaphthalene	1.432	1.466	-2.4	81	-0.01
16	t	1-Methylnaphthalene	1.363	1.389	-1.9	81	-0.01
17	A1	Benzothiophene	1.810	1.892	-4.5	82	-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	1.764	2.1	79	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.230	0.2	79	-0.01
24	t	Dibenzofuran	1.989	2.011	-1.1	79	-0.01
25	t	Acenaphthylene	2.231	2.400	-7.6	85	-0.01
26	t	Acenaphthene	1.368	1.382	-1.0	80	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.127	-4.7	84	-0.01
28	A1	Fluorene	1.599	1.569	1.9	78	-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	2.133	0.2	78	-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	2.223	2.6	77	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 : P27938.D
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012307A
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 06:38:06 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	0.540	-4.2	86	-0.01
53	t	Anthracene	2.119	2.123	-0.2	79	-0.01
54	t	Carbazole	2.020	2.072	-2.6	80	-0.01
55	t	1-Methylphenanthrene	1.583	1.590	-0.4	79	-0.01
56	A1	Fluoranthene	2.435	2.499	-2.6	80	-0.01
57	t	Benzo(b)fluorene	1.497	1.607	-7.3	85	-0.01
58	s	Pyrene-d10	2.114	2.137	-1.1	78	-0.01
59	A1	Pyrene	2.494	2.547	-2.1	80	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	2.476	-7.0	85	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.476	-7.0	85	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.91#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.21#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.96#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.95#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.59#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.71#
72	i	Chrysene-d12	1.000	1.000	0.0	81	-0.01
73	t	Benz[a]anthracene	1.428	1.495	-4.7	85	-0.01
74	A1	Chrysene	1.434	1.467	-2.3	83	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.459	-1.7	83	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.20#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.63#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.57#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.15#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.71#
81	s	Benzo[b]fluoranthene-d12	1.025	1.071	-4.5	84	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.609	-4.9	86	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.683	-4.9	86	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.05#
85	t	Benzo[e]pyrene	1.478	1.543	-4.4	85	-0.01
86	t	Benzo[a]pyrene	1.478	1.585	-7.2	88	-0.01
87	t	Perylene	1.473	1.567	-6.4	87	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.586	-8.3	90	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.490	-8.1	87	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.561	-2.2	85	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.473	4.1	86	-0.02
92	A2	Hopane (T19)	0.493	0.473	4.1	86	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.25#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.97#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.50#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.79#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.51#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.61#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.89#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27938.D
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012307A
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 06:38:06 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	0.225	2.2	83	-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 : P27938.D
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012307A
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 06:38:06 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

MG 1/30/06

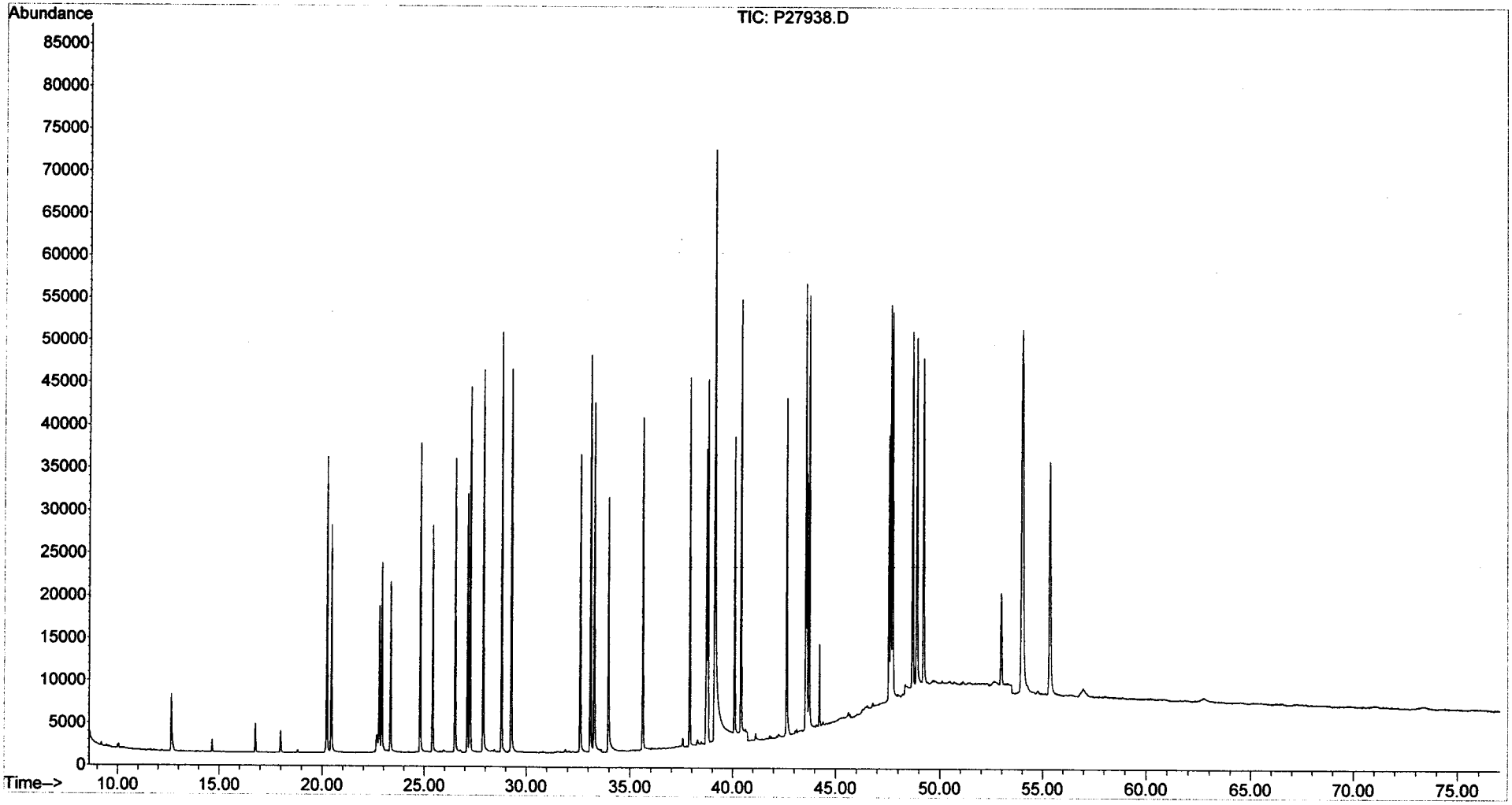
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	37693	500.00	ng/mL	-0.01
72) Chrysene-d12	43.62	240	60316	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	39064	504.29	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.43%			
58) Pyrene-d10	38.70	212	80563	505.63	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.56%			
81) Benzo[b]fluoranthene-d12	47.56	264	64606	522.46	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.25%			
125) 5B(H)Cholane - Surr	44.22	217	13547	488.54	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.85%#			
Target Compounds						Qvalue
3) trans-Decalin	16.77	138	7722	242.97	ng/mL	100
4) cis-Decalin	18.00	138	5901	248.14	ng/mL	100
9) Naphthalene	20.21	128	86336	509.24	ng/mL#	100
15) 2-Methylnaphthalene	22.91	142	55258	512.04	ng/mL#	100
16) 1-Methylnaphthalene	23.33	142	52367	509.81	ng/mL#	100
17) Benzothiophene	20.44	134	71327	522.69	ng/mL	100
22) Biphenyl	24.80	154	66479	489.34	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.40	156	46378	498.89	ng/mL#	100
24) Dibenzofuran	27.89	168	75812	505.52	ng/mL	98
25) Acenaphthylene	26.52	152	90449m	537.71	ng/mL	
26) Acenaphthene	27.25	153	52084	505.14	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.80	170	42496	523.81	ng/mL	98
28) Fluorene	29.27	166	59147	490.60	ng/mL	99
32) Dibenzothiophene	32.61	184	80399	498.74	ng/mL	100
41) Phenanthrene	33.11	178	83784	487.06	ng/mL	100
52) Retene	40.09	234	20354	521.46	ng/mL	100
53) Anthracene	33.28	178	80006m	500.78	ng/mL	
54) Carbazole	33.96	167	78094	512.88	ng/mL	99
55) 1-Methylphenanthrene	35.61	192	59929	502.18	ng/mL	99
56) Fluoranthene	37.89	202	94180	512.97	ng/mL	100
57) Benzo(b)fluorene	40.41	216	60559	536.55	ng/mL	100
59) Pyrene	38.78	202	96007	510.66	ng/mL	100
64) Naphthobenzothiophene	42.63	234	93316	535.25	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.63	234	93316	535.25	ng/mL#	67
73) Benz[a]anthracene	43.56	228	90185	523.58	ng/mL	96
74) Chrysene	43.72	228	88469	511.38	ng/mL	100
75) Chrysene/Triphenylene	43.72	228	88015	508.75	ng/mL	99
82) Benzo[b]fluoranthene	47.65	252	97041	524.57	ng/mL	100
83) Benzo[k]fluoranthene	47.73	252	101491	524.63	ng/mL	98
85) Benzo[e]pyrene	48.69	252	93050	521.78	ng/mL	100
86) Benzo[a]pyrene	48.89	252	95606	536.24	ng/mL	100
87) Perylene	49.21	252	94533	531.85	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.97	276	95639m	541.21	ng/mL	
89) Dibenz[a,h]anthracene	54.02	278	89866	540.77	ng/mL	99
90) Benzo[g,h,i]perylene	55.34	276	94146	510.97	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.96	191	28510	479.32	ng/mL	99
92) Hopane (T19)	52.96	191	28510	479.32	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN23\
Data File : P27938.D
Acq On : 27 Jan 2006 11:48 am
Operator : AC
Sample : C2012307A
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 30 06:38:06 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 : 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

CMS 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

1/30/06

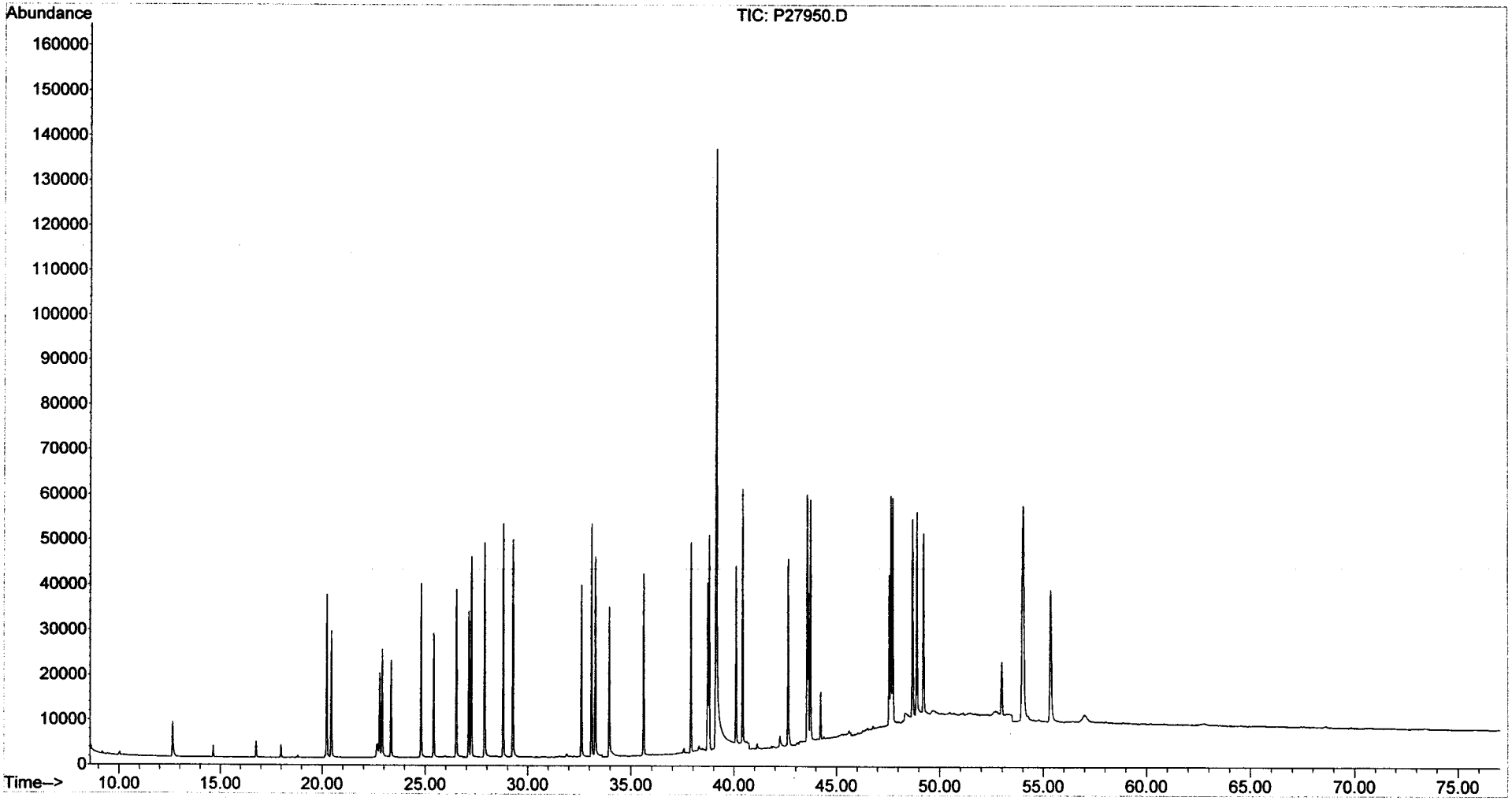
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.12	164	40381	500.00	ng/mL	-0.01
72) Chrysene-d12	43.63	240	65175	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.79	152	41851	504.30	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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\PAH3\JANUARY06\JAN18\
Data File : P34831.D
Acq On : 20 Jan 2006 8:16 pm
Operator : AC
Sample : C3011805
Misc : STD
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 23 06:54:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

MS 1/23/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34831.D
Acq On : 20 Jan 2006 8:16 pm
Operator : AC
Sample : C3011805
Misc : STD
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 23 06:54:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	138	-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	0.459	-6.7	169	-0.01
84	A2	Hopane (T19)	0.430	0.459	-6.7	169	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34831.D
Acq On : 20 Jan 2006 8:16 pm
Operator : AC
Sample : C3011805
Misc : STD
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 23 06:54:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.227	-8.1	152	0.00
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34831.D
Acq On : 20 Jan 2006 8:16 pm
Operator : AC
Sample : C3011805
Misc : STD
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 23 06:54:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration

CMS 1/23/06

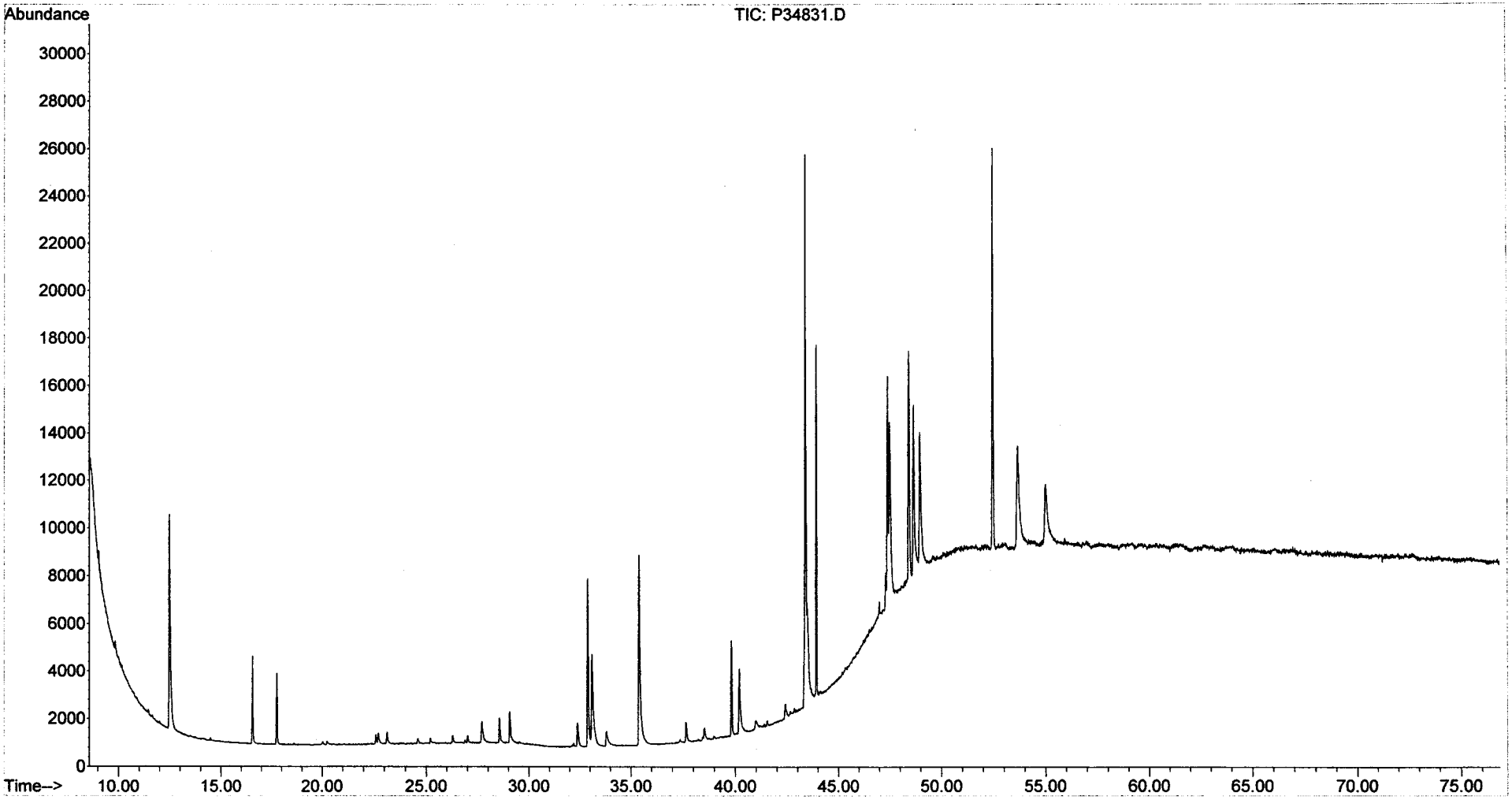
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	84550	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	19233	541.25	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 54.13%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	38776	533.68	ng/mL	98
84) Hopane (T19)	52.48	191	38776	533.68	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN18\
Data File : P34831.D
Acq On : 20 Jan 2006 8:16 pm
Operator : AC
Sample : C3011805
Misc : STD
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 23 06:54:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 13 06:21:10 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

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

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

MS 1/23/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	174	-0.03
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.446	-3.7	208#	-0.01
84	A2	Hopane (T19)	0.430	0.446	-3.7	208#	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.232	-10.5	196	0.00
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

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

Quantitation Report (QT Reviewed)

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

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

MS 1/23/06

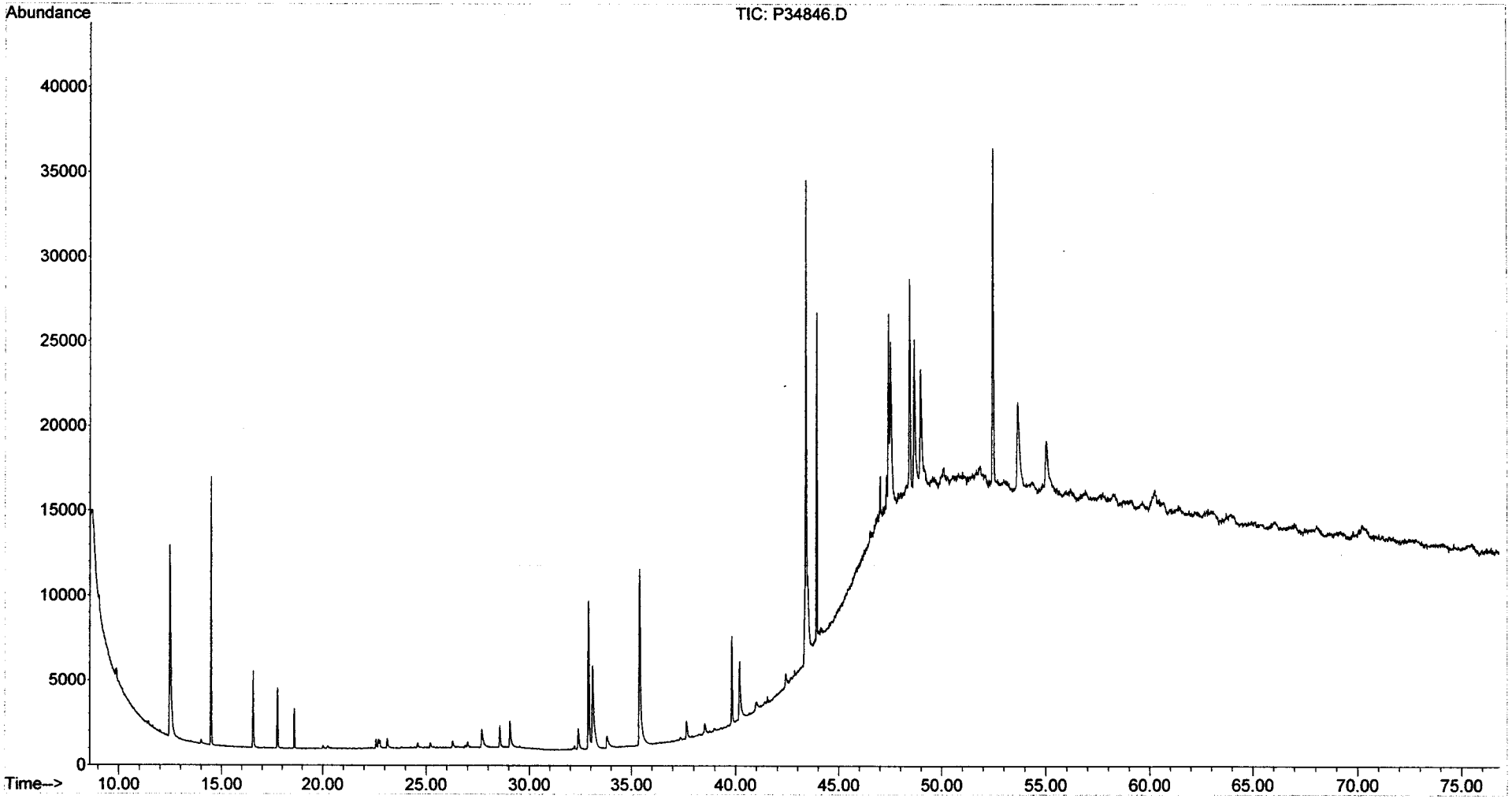
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	106542	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.92	217	24763	553.03	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.30%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	47568	519.55	ng/mL	98
84) Hopane (T19)	52.48	191	47568	519.55	ng/mL	98

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

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

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

CW 2/1/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	233#	-0.04
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.431	-0.2	268#	-0.01
84	A2	Hopane (T19)	0.430	0.431	-0.2	268#	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.225	-7.1	253#	0.00
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

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

Quantitation Report (QT Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.37	240	142354	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.92	217	32017	535.15	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.52%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	61350	501.51	ng/mL	99
84) Hopane (T19)	52.48	191	61350	501.51	ng/mL	99

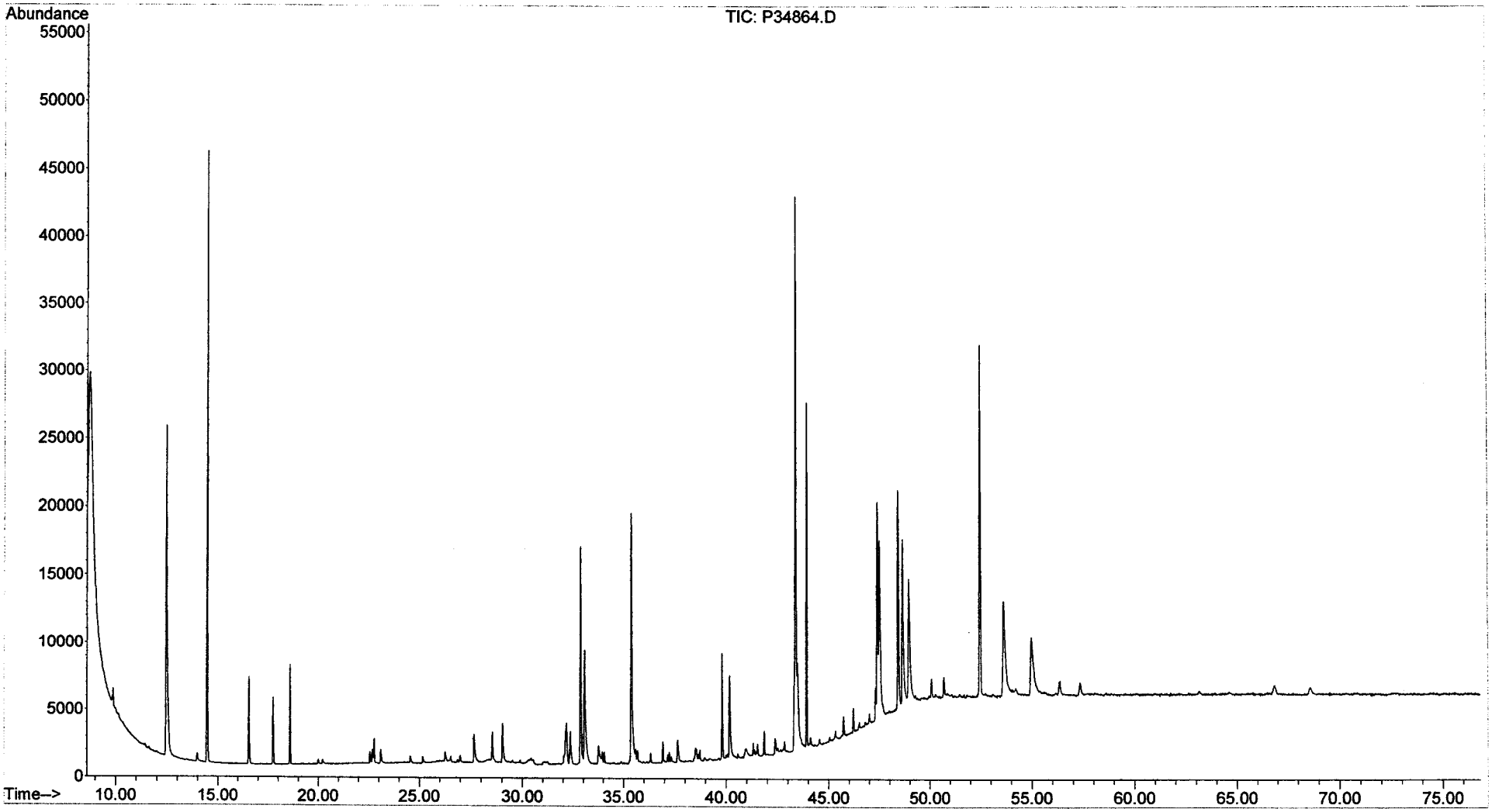
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓ CMS 1/26/06

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

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

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

MS 1/26/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	237#	-0.04
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.451	-4.9	286#	-0.01
84	A2	Hopane (T19)	0.430	0.451	-4.9	286#	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.430	0.000#	100.0#	0#	-50.19#
101	A2	30-Norhopane (T15)	0.430	0.000#	100.0#	0#	-51.10#
102	A2	18a(H)-30-Norneohopane-C29T	0.430	0.000#	100.0#	0#	-51.20#
103	A2	17a(H)-Diahopane (X)	0.430	0.000#	100.0#	0#	-51.33#
104	A2	30-Normoretane (T17)	0.430	0.000#	100.0#	0#	-51.89#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.430	0.000#	100.0#	0#	-52.31#
106	A2	Moretane (T20)	0.430	0.000#	100.0#	0#	-53.20#
107	A2	30-Homohopane-22S (T21)	0.430	0.000#	100.0#	0#	-54.32#
108	A2	30-Homohopane-22R (T22)	0.430	0.000#	100.0#	0#	-54.55#
109	A2	30,31-Bishomohopane-22S (T2	0.430	0.000#	100.0#	0#	-55.91#
110	A2	30,31-Bishomohopane-22R (T2	0.430	0.000#	100.0#	0#	-56.30#
111	A2	30,31-Trishomohopane-22S (T	0.430	0.000#	100.0#	0#	-58.09#
112	A2	30,31-Trishomohopane-22R (T	0.430	0.000#	100.0#	0#	-58.73#
113	A2	Tetrakishomohopane-22S (T32	0.430	0.000#	100.0#	0#	-60.79#
114	A2	Tetrakishomohopane-22R (T33	0.430	0.000#	100.0#	0#	-61.70#
115	A2	Pentakishomohopane-22S (T34	0.430	0.000#	100.0#	0#	-64.01#
116	A2	Pentakishomohopane-22R (T35	0.430	0.000#	100.0#	0#	-65.32#
117	SA1	5B(H)Cholane - Surr	0.210	0.224	-6.7	257#	-0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

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

Quantitation Report (QT Reviewed)

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

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

MLS 1/26/06

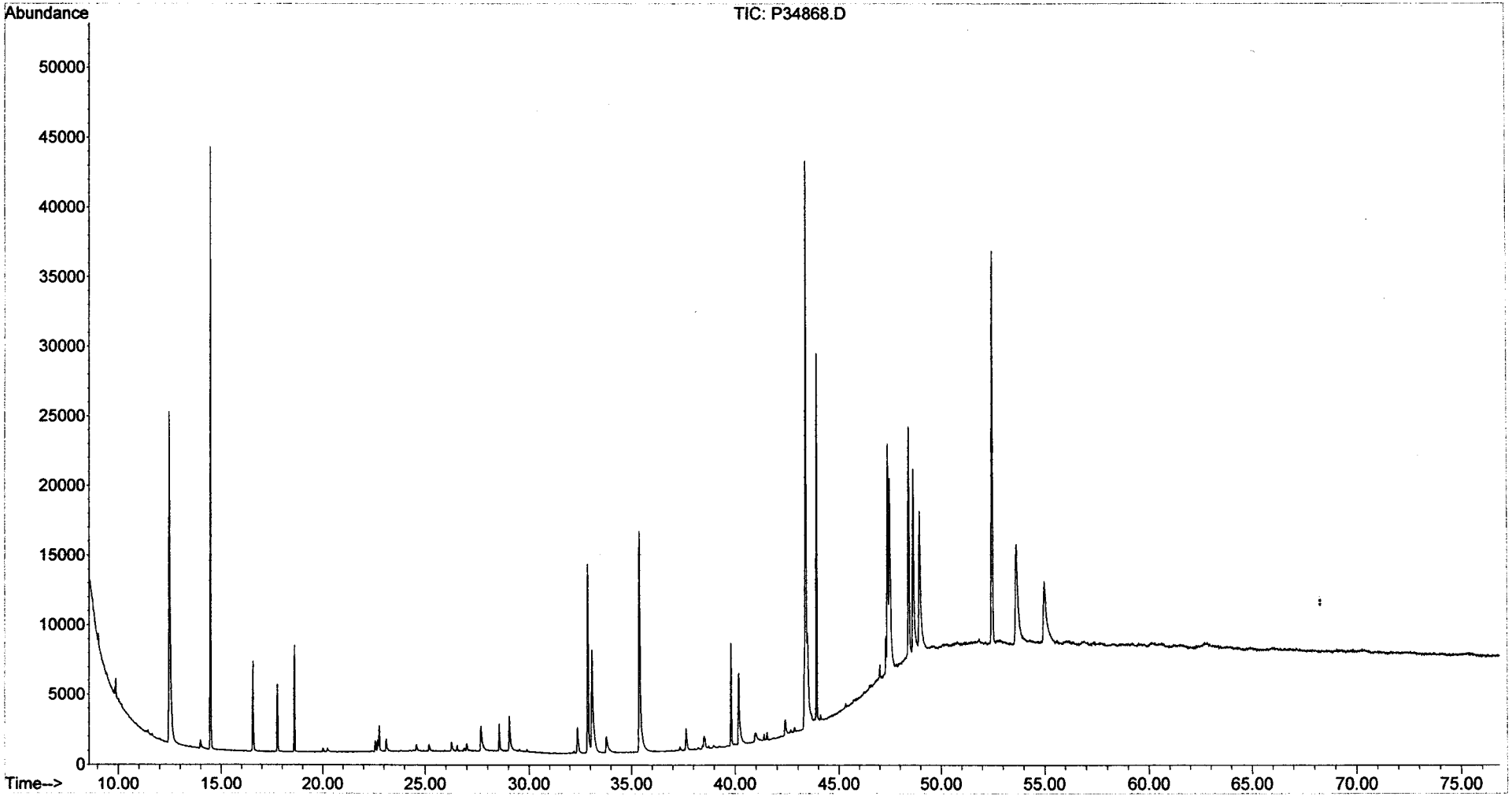
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.37	240	145189	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	43.91	217	32522	532.98	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	53.30%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	65550	525.38	ng/mL	100
84) Hopane (T19)	52.48	191	65550	525.38	ng/mL	100

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

Quantitation Report (QT Reviewed)

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

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



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C2012301**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		35491	27.29	51309	43.79
Upper Limit:		70982	27.79	102618	44.29
Lower Limit:		17746	26.79	25654	43.29
Client ID	**Lab ID**				
Blank	SS011106B01	26654	27.30	38793	43.81
LCS	SS011106LCS01	26371	27.30	42488	43.81
LCSD	SS011106LCSD01	28680	27.30	45046	43.81
CCV	C2012302	40324	27.30	56736	43.81

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.

01/31/06 15:13

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C2012302**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		40324	27.30	56736	43.81
Upper Limit:		80648	27.80	113472	44.31
Lower Limit:		20162	26.80	28368	43.31
Client ID	**Lab ID**				
GC-SED-11 (1-3)	0601019-01E	46649	27.30	78701	43.79
GC-SED-18 (7-8)	0601019-02	45837	27.31	69889	43.82
GC-SED-14 (5.5-6.5)	0601019-04	41637	27.31	65629	43.82
GC-SED-13B (14.6-15.6)	0601019-05	38424	27.31	60269	43.82
GC-SED-39 (4.5-5.5)	0601019-06	43064	27.31	69632	43.82
GC-SED-17 (0-2)	0601019-07E	39512	27.31	64111	43.82
GC-SED-16 (0-2)	0601019-08E	52940	27.31	86291	43.82
GC-SED-22B (19.3-20)	0601019-09E	39940	27.31	63149	43.82
CCV	C2012303	38469	27.31	55244	43.82

N/A - Not Applicable

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

01/31/06 15:14

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **C2012303**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		38469	27.31	55244	43.82
Upper Limit:		76938	27.81	110488	44.32
Lower Limit:		19234	26.81	27622	43.32
Client ID	**Lab ID**				
GC-SED-21B (7-8)	0601019-10E	45177	27.31	75868	43.82
GC-SED-19C (1.5-2)	0601019-11E	43710	27.31	70806	43.82
CCV	C2012304	32574	27.31	46271	43.82

N/A - Not Applicable

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

01/31/06 15:15

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C2012306**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		33762	27.12	51506	43.62
Upper Limit:		67524	27.62	103012	44.12
Lower Limit:		16881	26.62	25753	43.12
Client ID	**Lab ID**				
GC-SED-18 (7-8)	0601019-02E	33173	27.12	50250	43.63
GC-SED-14 (5.5-6.5)	0601019-04E	33267	27.12	49647	43.62
GC-SED-13B (14.6-15.6)	0601019-05E	33578	27.12	49811	43.62
GC-SED-39 (4.5-5.5)	0601019-06E	33181	27.12	48540	43.62
CCV	C2012307	33456	27.12	47811	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.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C2012307**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		33456	27.12	47811	43.62
Upper Limit:		66912	27.62	95622	44.12
Lower Limit:		16728	26.62	23906	43.12
Client ID	**Lab ID**				
GC-SED-11 (1-3)	0601019-01	35050	27.12	60482	43.63
GC-SED-15 (0-0.75)	0601019-03	39318	27.12	67079	43.65
GC-SED-15 (0-0.75)	0601019-03 D	39977	27.12	66993	43.63
CCV	C2012307A	37693	27.12	60316	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.

01/31/06 15:16

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C2012307A**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		37693	27.12	60316	43.62
Upper Limit:		75386	27.62	120632	44.12
Lower Limit:		18846	26.62	30158	43.12
Client ID	**Lab ID**				
GC-SED-17 (0-2)	0601019-07	43646	27.12	74398	43.63
GC-SED-16 (0-2)	0601019-08	47670	27.12	81131	43.65
GC-SED-22B (19.3-20)	0601019-09	43623	27.12	76899	43.65
GC-SED-21B (7-8)	0601019-10	46547	27.12	79158	43.65
GC-SED-19C (1.5-2)	0601019-11	44585	27.12	77264	43.65
CCV	C2012308	40381	27.12	65175	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.

01/31/06 15:16

Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C3011805**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		84550	43.39
Upper Limit:		169100	43.89
Lower Limit:		42275	42.89
Client ID	**Lab ID**		
Blank	SS011106B01	75849	43.43
GC-SED-18 (7-8)	0601019-02	89573	43.41
GC-SED-15 (0-0.75)	0601019-03	103069	43.41
GC-SED-15 (0-0.75)	0601019-03 D	100109	43.42
GC-SED-14 (5.5-6.5)	0601019-04	99371	43.41
GC-SED-13B (14.6-15.6)	0601019-05	98541	43.41
GC-SED-39 (4.5-5.5)	0601019-06	99814	43.41
GC-SED-17 (0-2)	0601019-07	109605	43.41
GC-SED-16 (0-2)	0601019-08	115678	43.42
GC-SED-22B (19.3-20)	0601019-09	105224	43.41
GC-SED-21B (7-8)	0601019-10	107014	43.41
GC-SED-19C (1.5-2)	0601019-11	112093	43.41
CCV	C3011806	106542	43.38

N/A - Not Applicable

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

02/01/06 09:01

Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C3012304**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		142354	43.37
Upper Limit:		284708	43.87
Lower Limit:		71177	42.87
Client ID	**Lab ID**		
GC-SED-11 (1-3)	0601019-01	106286	43.42
CCV	C3012305	145189	43.37

N/A - Not Applicable

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

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TOTAL PETROLEUM HYDROCARBON (TPH)

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-11 (1-3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-01**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/05/06	01/10/06	01/11/06	01/18/06	34.5	11.86	26.32	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**15000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	82	50-130
d50-Tetracosane	79	50-130

01/20/06 12:58

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17567.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 12:37 am
Operator : NLJr
Sample : 0601019-01-AFID
Misc : 1X
ALS Vial : 60 Sample Multiplier: 1

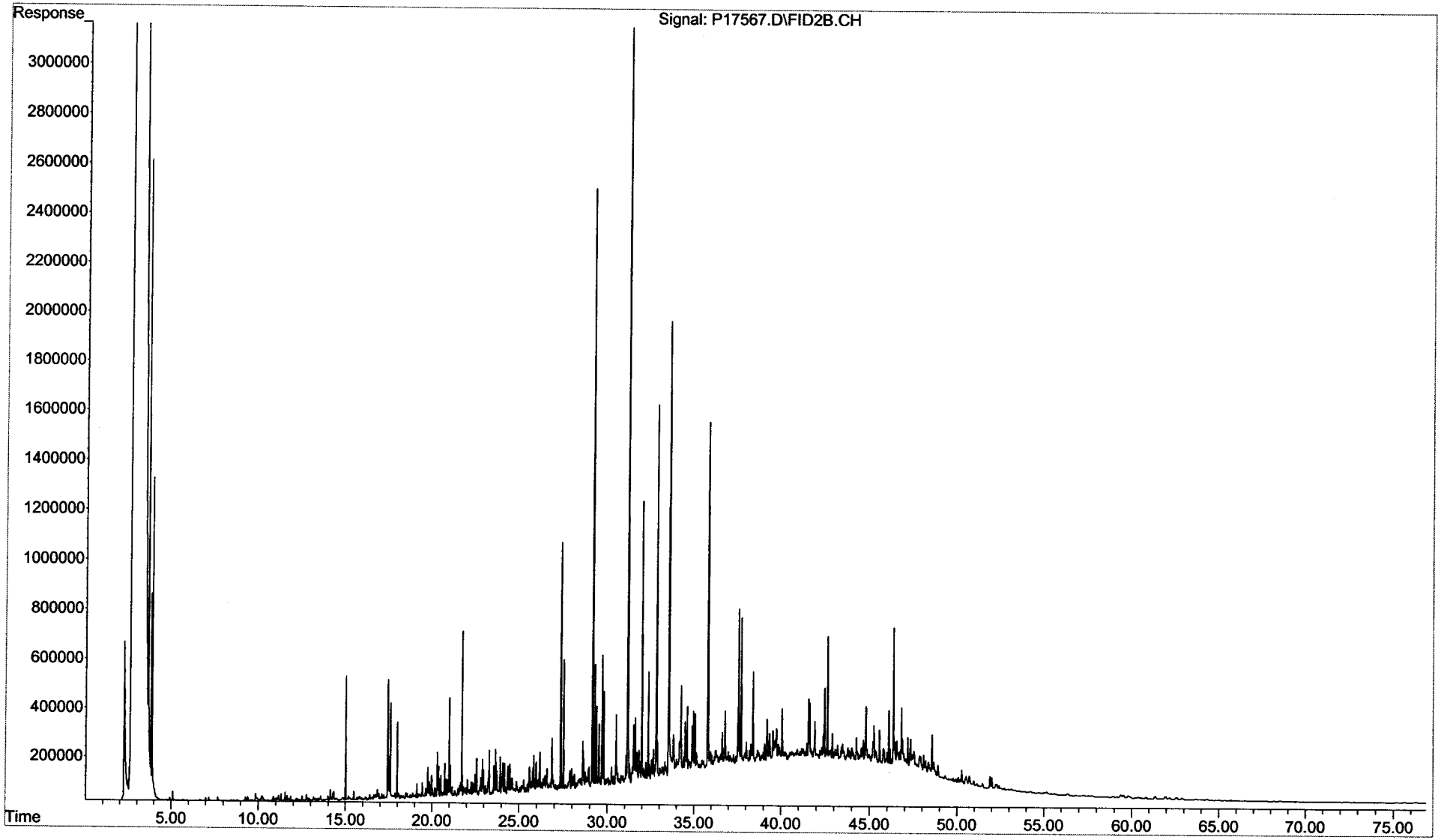
Integration File: SHCINT1.E
Quant Time: Jan 20 11:41:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	73528778	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	49486488	31.050 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	62.10%
24) s d50-Tetracosane	35.80	42614230	29.833 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	59.67%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	3808890218	2586.754 ug/mL
44) h Total Resolved Hydrocarbon	40.94	920533835	625.167 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17567.D
Operator : NLJr
Acquired : 18 Jan 2006 12:37 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-01-AFID
Misc Info : 1X
Vial Number: 60



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-18 (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-02**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/18/06	85.0	5.76	16	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**12000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	87	50-130
d50-Tetracosane	83	50-130

01/20/06 12:58

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17569.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 2:15 am
Operator : NLJr
Sample : 0601019-02-AFID
Misc : 1X
ALS Vial : 61 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 11:45:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

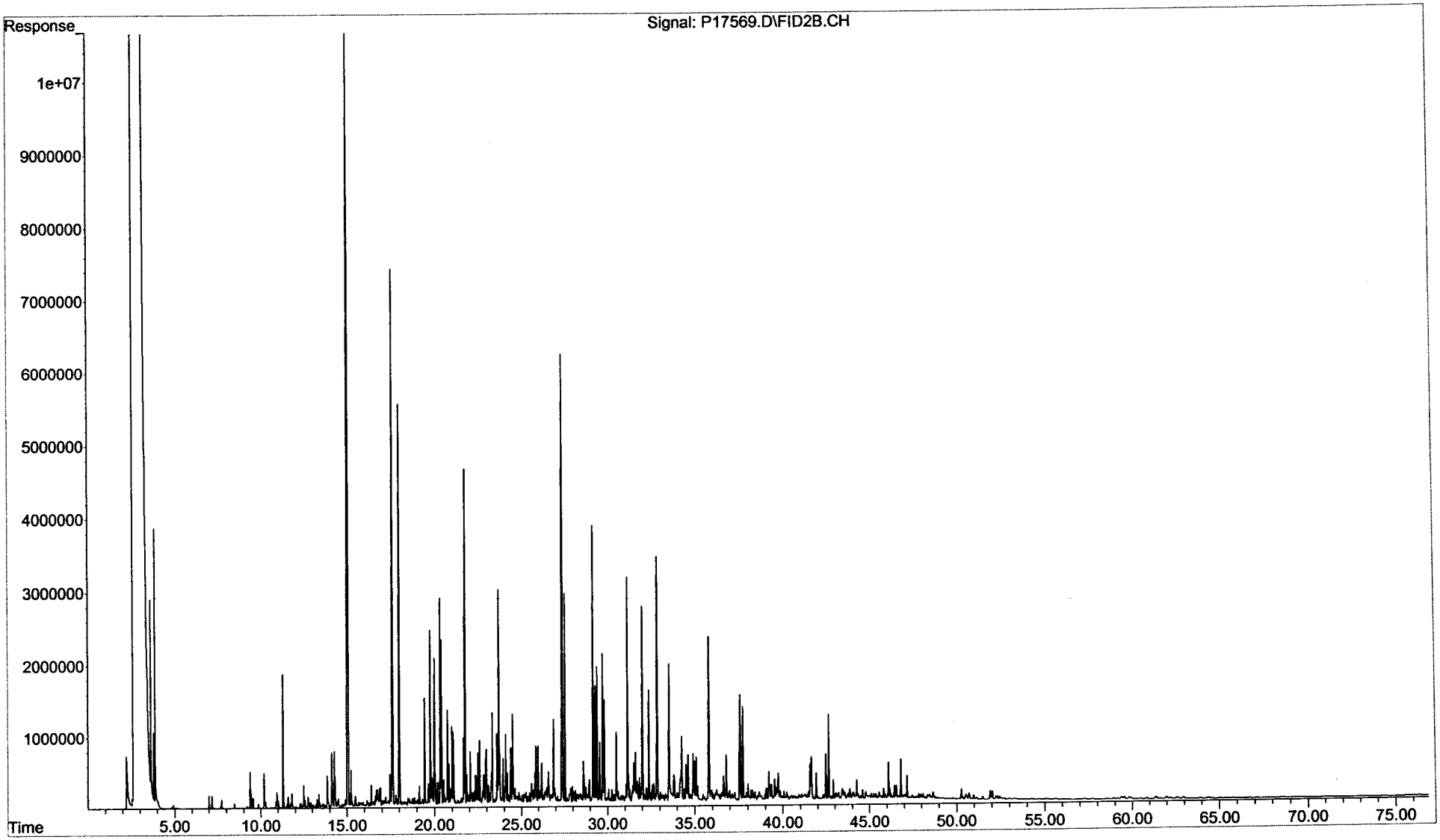
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	75169040	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.18	88593907	54.375 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	108.75%
24) s d50-Tetracosane	35.81	75486896	51.694 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	103.39%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5839940901	3879.568 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3758396713	2496.764 ug/L

-RFt Rpt conc 2nd 2/1/06

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17569.D
Operator : NLJr
Acquired : 18 Jan 2006 2:15 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-02-AFID
Misc Info : 1X
Vial Number: 61



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/18/06	36.5	31.13	26.32	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	5400

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	101	50-130
d50-Tetracosane	106	50-130

01/20/06 14:35

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17575.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 7:15 am
Operator : NLJr
Sample : 0601019-03-AFID
Misc : 1X
ALS Vial : 64 Sample Multiplier: 1

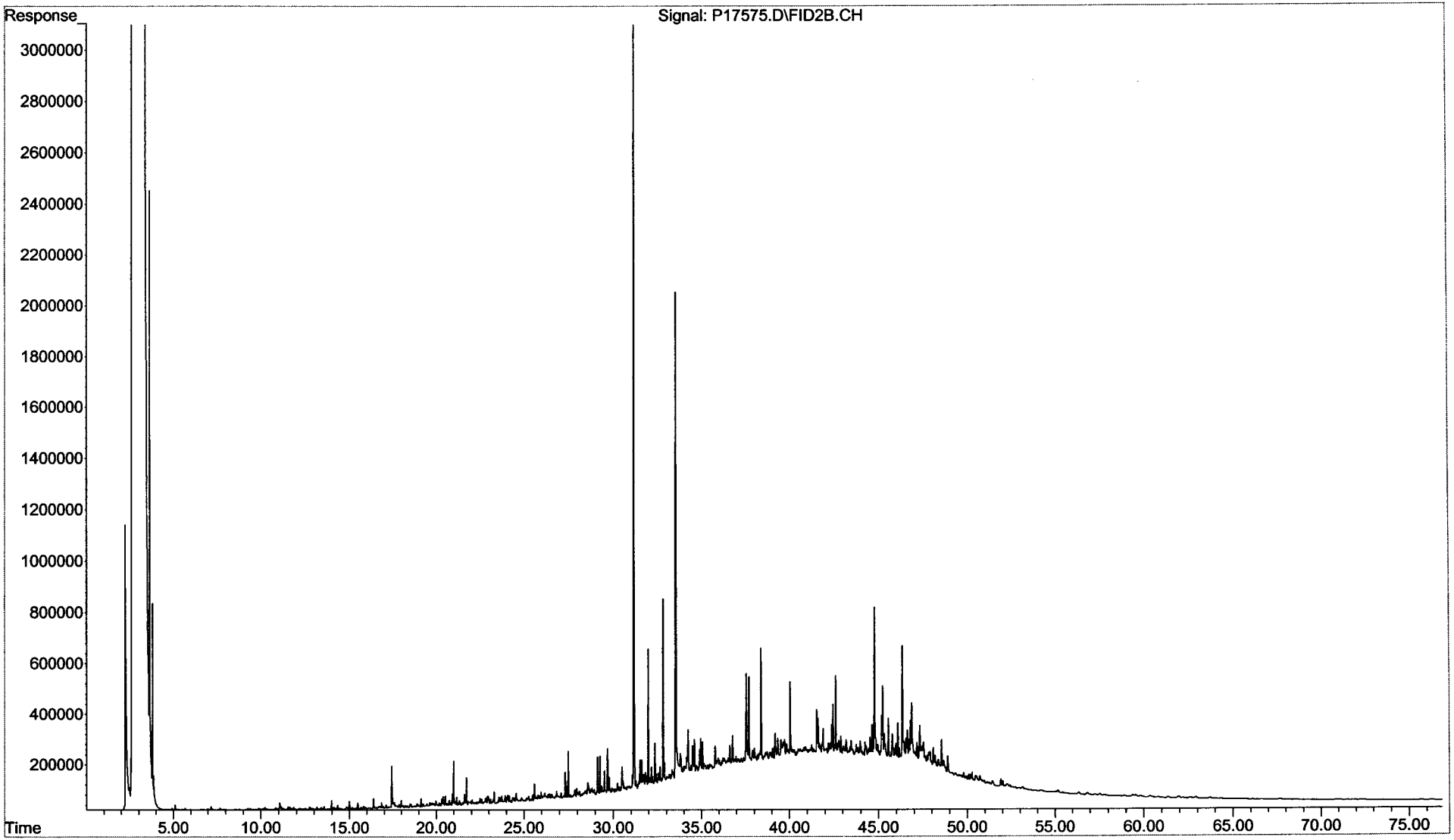
Integration File: SHCINT1.E
Quant Time: Jan 20 11:50:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.17	69357662	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.12	2888237	1.921 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 3.84%#
24) s	d50-Tetracosane	35.77	2725046	2.022 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 4.04%#
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.94	3611922484	2600.506 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	557791992	401.598 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17575.D
Operator : NLJr
Acquired : 18 Jan 2006 7:15 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-03-AFID
Misc Info : 1X
Vial Number: 64



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-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03 D**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/18/06	36.5	32.56	26.32	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**6100**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	103	50-130
d50-Tetracosane	114	50-130

01/20/06 14:36

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17577.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 8:51 am
Operator : NLJr
Sample : 0601019-03D-AFID
Misc : 1X
ALS Vial : 65 Sample Multiplier: 1

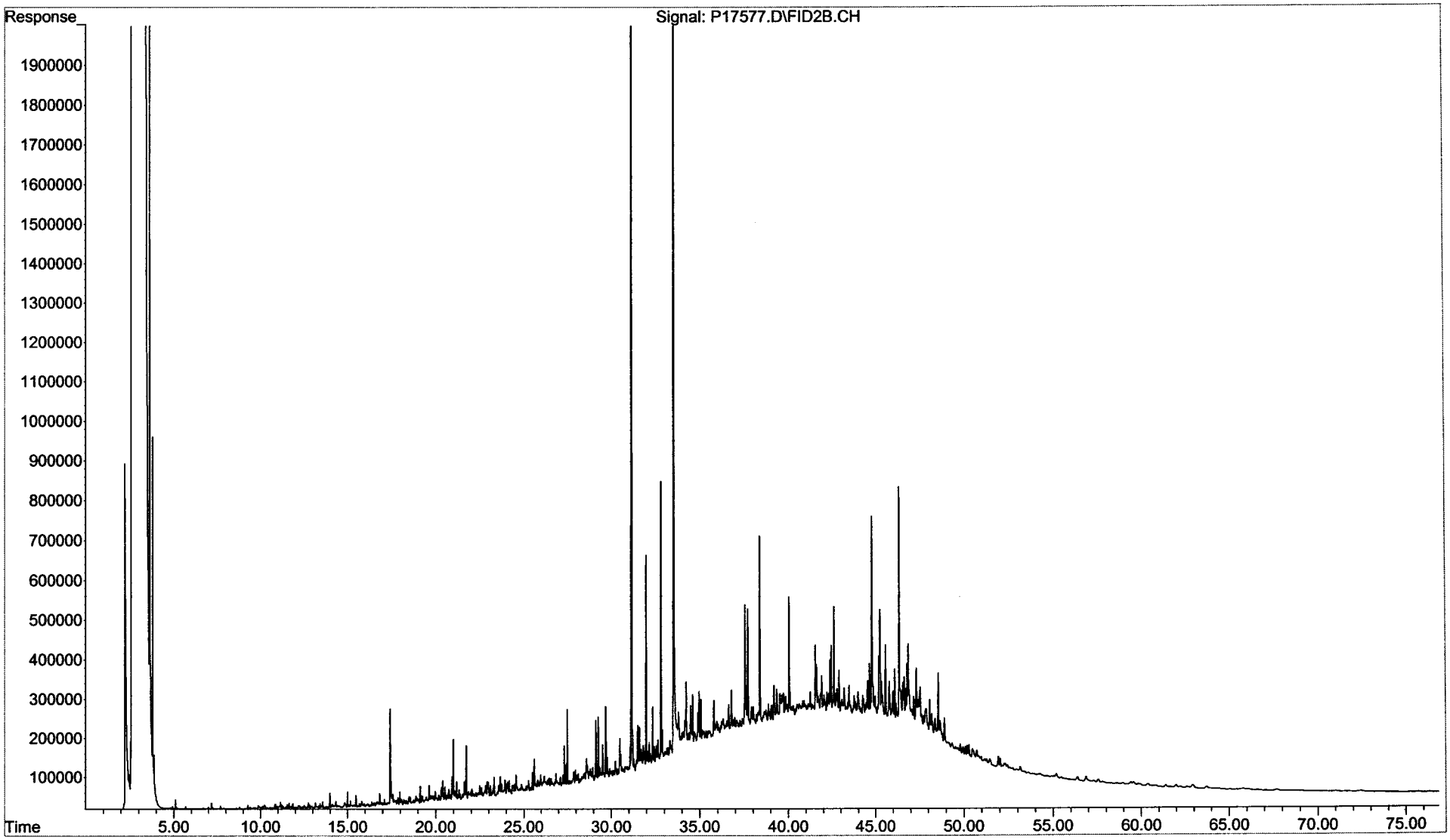
Integration File: SHCINT1.E
Quant Time: Jan 20 11:59:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	69472549	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.12	2956364	1.963 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	3.93%#
24) s d50-Tetracosane	35.78	2927003	2.169 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	4.34%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4204796035	3022.356 ug/mL
44) h Total Resolved Hydrocarbon	40.94	625886621	449.880 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17577.D
Operator : NLJr
Acquired : 18 Jan 2006 8:51 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-03D-AFID
Misc Info : 1X
Vial Number: 65



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-15 (0-0.75)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-03**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/07/06	01/10/06	01/11/06	36.5	NLJr

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	5400	6100	12	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	101	103	50-130
d50-Tetracosane	106	114	50-130

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

01/20/06 14:36

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-14 (5.5-6.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-04**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/18/06	53.1	5.48	66.67	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	80000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	94	50-130
d50-Tetracosane	97	50-130

01/20/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17579.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 8:00 pm
Operator : NLJr
Sample : 0601019-04-AFID
Misc : 1X
ALS Vial : 66 Sample Multiplier: 1

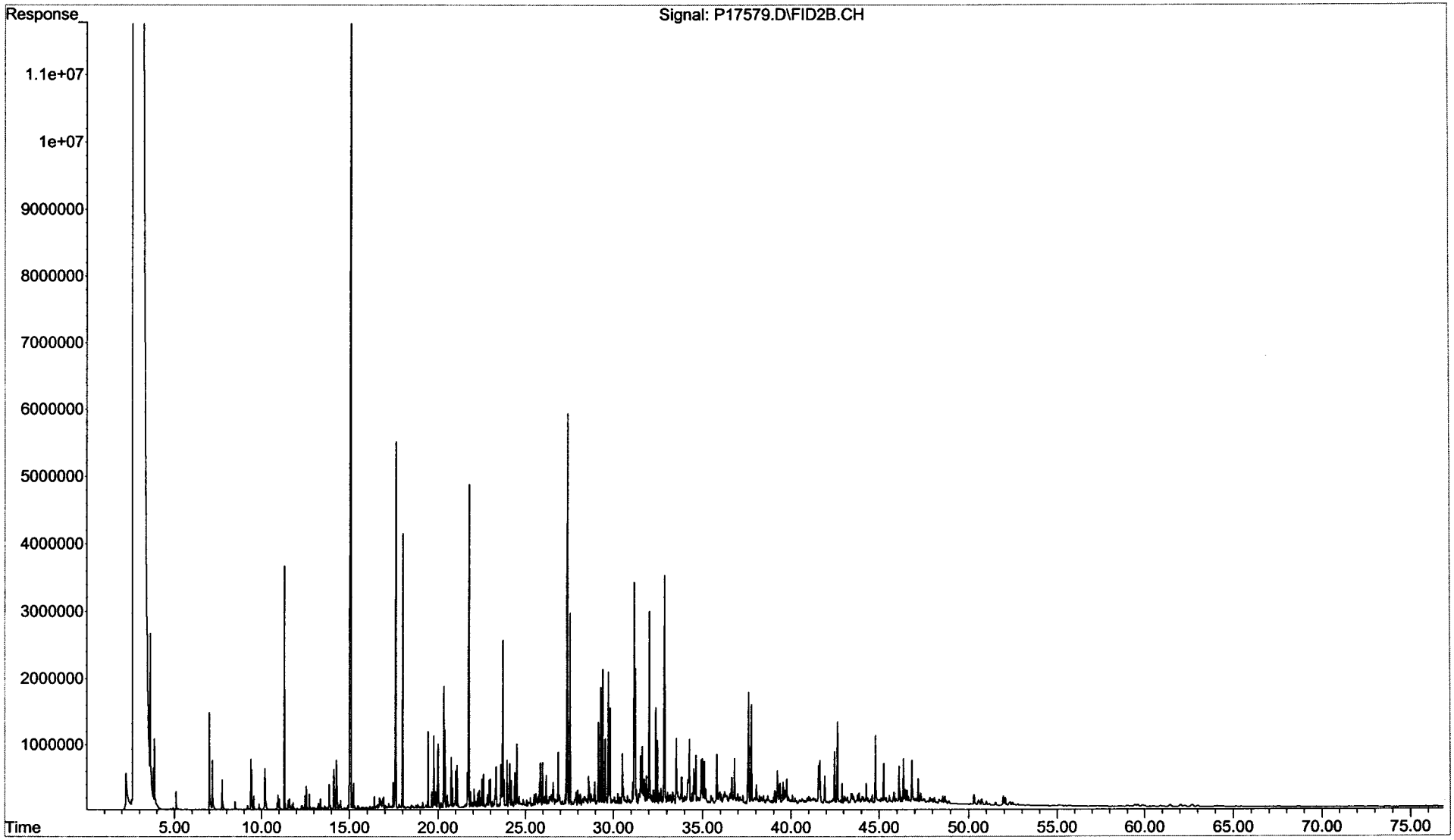
Integration File: SHCINT1.E
Quant Time: Jan 20 12:01:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.19	80372263	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.16	24675277	14.164 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	28.33%#
24) s d50-Tetracosane	35.80	22813125	14.611 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	29.22%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5937517149	3689.034 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3590712918	2230.943 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17579.D
Operator : NLJr
Acquired : 18 Jan 2006 8:00 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-04-AFID
Misc Info : 1X
Vial Number: 66



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-13B (14.6-15.6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-05**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/07/06	01/10/06	01/11/06	01/18/06	87.3	5.76	80	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**66000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	96	50-130
d50-Tetracosane	101	50-130

01/20/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17581.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 9:35 pm
Operator : NLJr
Sample : 0601019-05-AFID
Misc : 1X
ALS Vial : 67 Sample Multiplier: 1

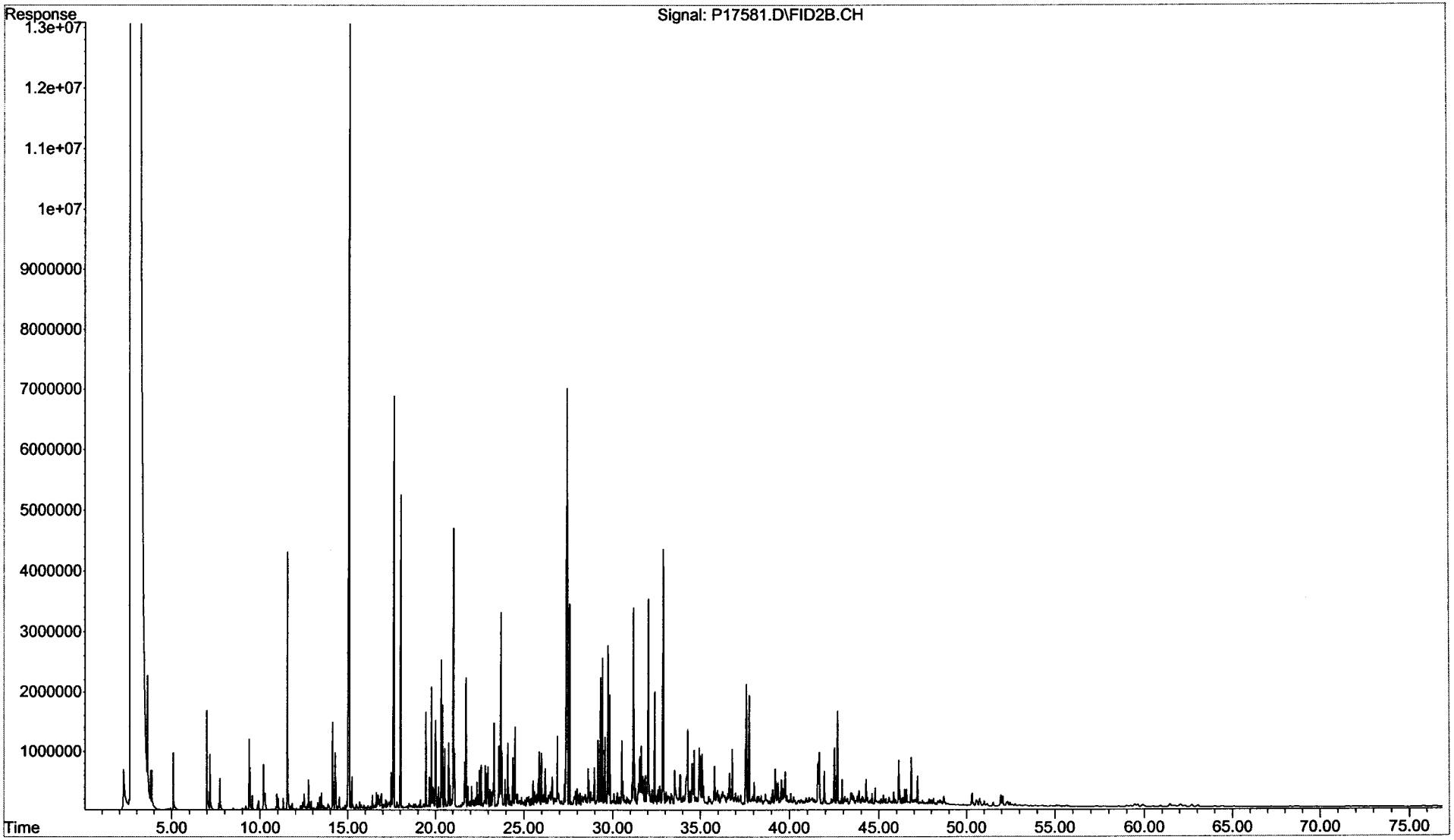
Integration File: SHCINT1.E
Quant Time: Jan 20 12:04:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.19	82334877	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.16	21331742	11.953 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	23.91%#
24) s	d50-Tetracosane	35.80	20099433	12.566 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	25.13%#
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.94	7155301289	4339.683 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	4661949536	2827.468 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17581.D
Operator : NLJr
Acquired : 18 Jan 2006 9:35 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-05-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-39 (4.5-5.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-06**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/18/06	65.0	5.48	156.25	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	170000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	119	50-130

01/20/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17583.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 11:10 pm
Operator : NLJr
Sample : 0601019-06-AFID
Misc : 1X
ALS Vial : 68 Sample Multiplier: 1

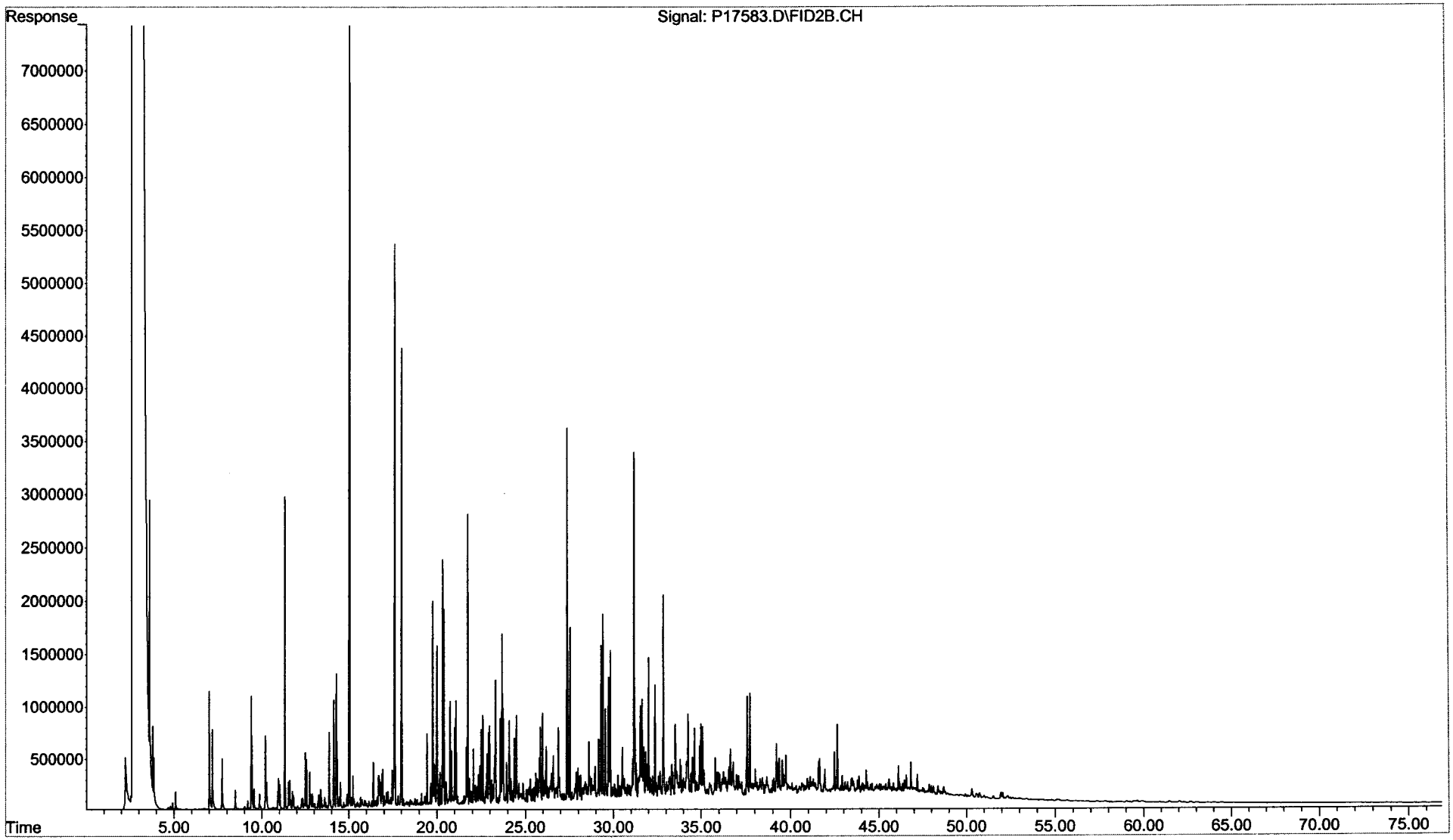
Integration File: SHCINT1.E
Quant Time: Jan 20 12:07:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	80810424	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	11062875	6.316 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	12.63%#
24) s d50-Tetracosane	35.79	11922248	7.594 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	15.19%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6497651091	4015.161 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3157698012	1951.269 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17583.D
Operator : NLJr
Acquired : 18 Jan 2006 11:10 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-06-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-17 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-07**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/19/06	35.3	10.31	12.38	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**7600**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	86	50-130
d50-Tetracosane	82	50-130

01/20/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17585.D
Signal(s) : FID2B.CH
Acq On : 19 Jan 2006 12:46 am
Operator : NLJr
Sample : 0601019-07-AFID
Misc : 1X
ALS Vial : 69 Sample Multiplier: 1

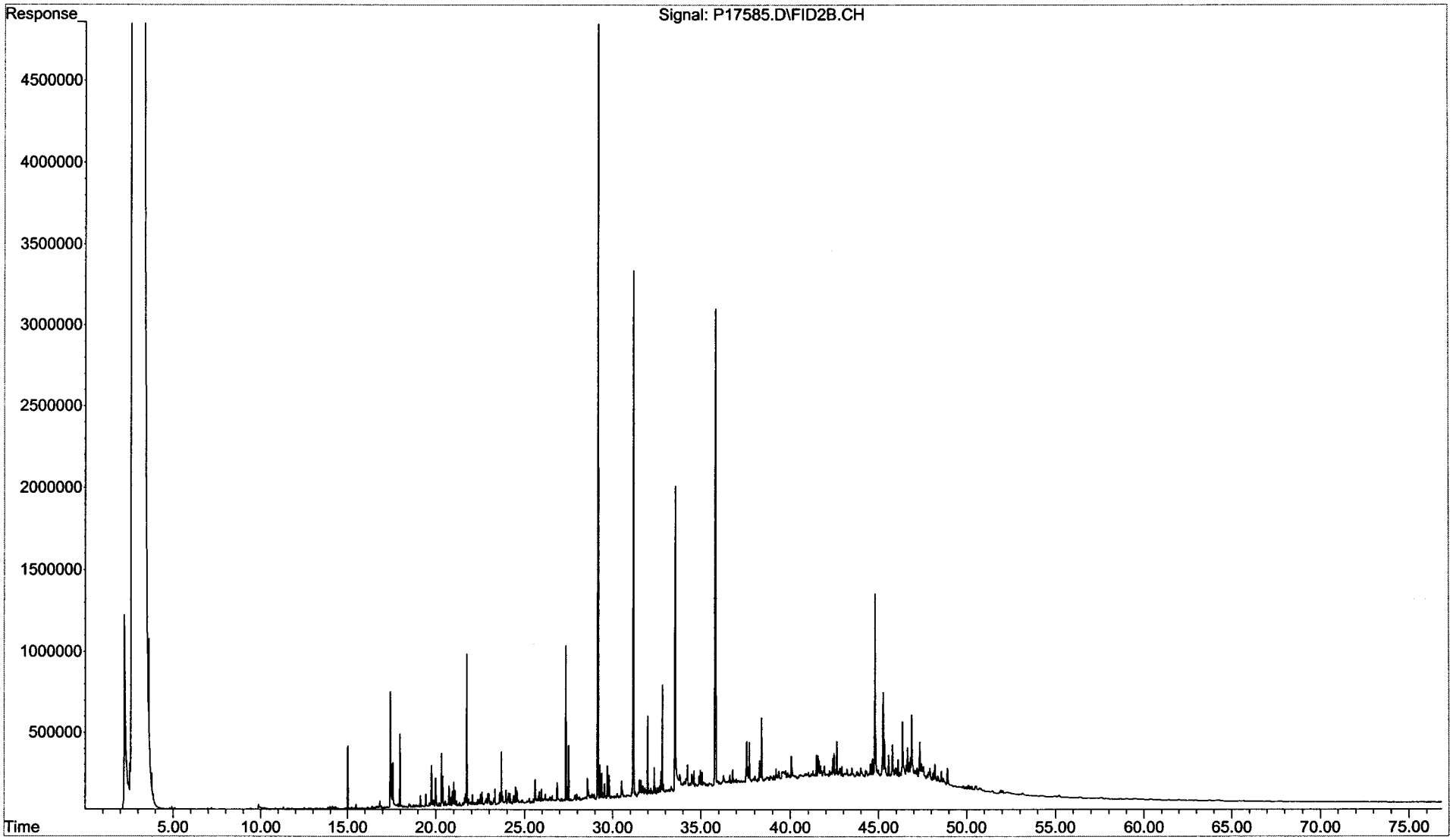
Integration File: SHCINT1.E
Quant Time: Jan 20 12:10:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	79029862	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.18	119414626	69.711 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	139.42%#
24) s d50-Tetracosane	35.82	102166319	66.546 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	133.09%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	3900374879	2464.501 ug/mL
44) h Total Resolved Hydrocarbon	40.94	727502641	459.682 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17585.D
Operator : NLJr
Acquired : 19 Jan 2006 12:46 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-07-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-16 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-08**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/08/06	01/10/06	01/11/06	01/19/06	36.5	30.24	26.32	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	7000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	105	50-130

01/20/06 14:36

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17587.D
Signal(s) : FID2B.CH
Acq On : 19 Jan 2006 2:20 am
Operator : NLJr
Sample : 0601019-08-AFID
Misc : 1X
ALS Vial : 70 Sample Multiplier: 1

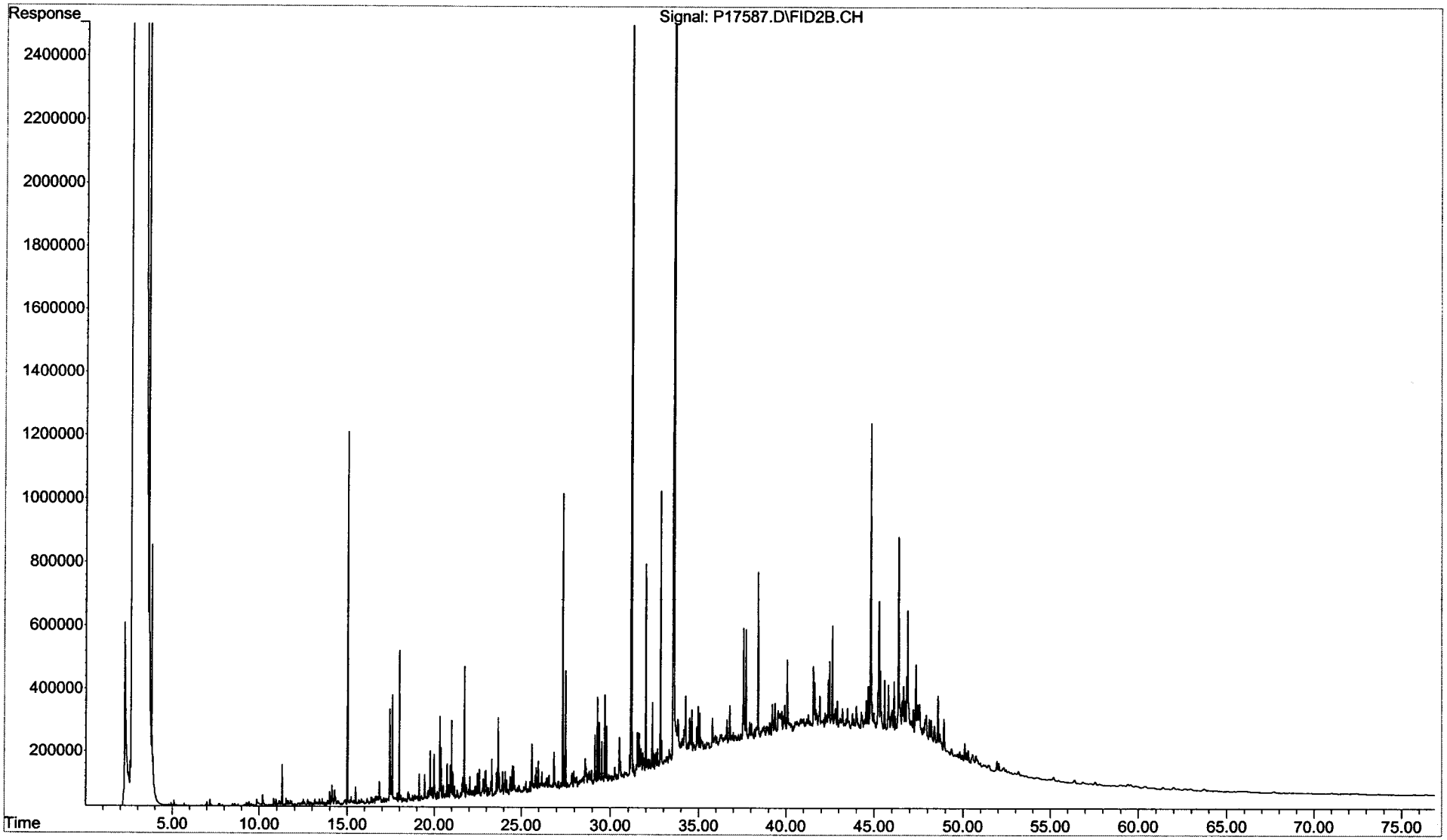
Integration File: SHCINT1.E
Quant Time: Jan 20 12:13:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	76164051	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.13	3107609	1.882 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	3.76%#
24) s d50-Tetracosane	35.78	2938860	1.986 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	3.97%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4805774259	3150.847 ug/mL
44) h Total Resolved Hydrocarbon	40.94	925450255	606.760 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17587.D
Operator : NLJr
Acquired : 19 Jan 2006 2:20 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-08-AFID
Misc Info : 1X
Vial Number: 70



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-22B (19.3-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-09**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/19/06	82.1	5.82	2.11	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	640

N/A - Not Applicable

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

01/20/06 14:33

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17589.D
Signal(s) : FID2B.CH
Acq On : 19 Jan 2006 3:55 am
Operator : NLJr
Sample : 0601019-09-AFID
Misc : 1X
ALS Vial : 71 Sample Multiplier: 1

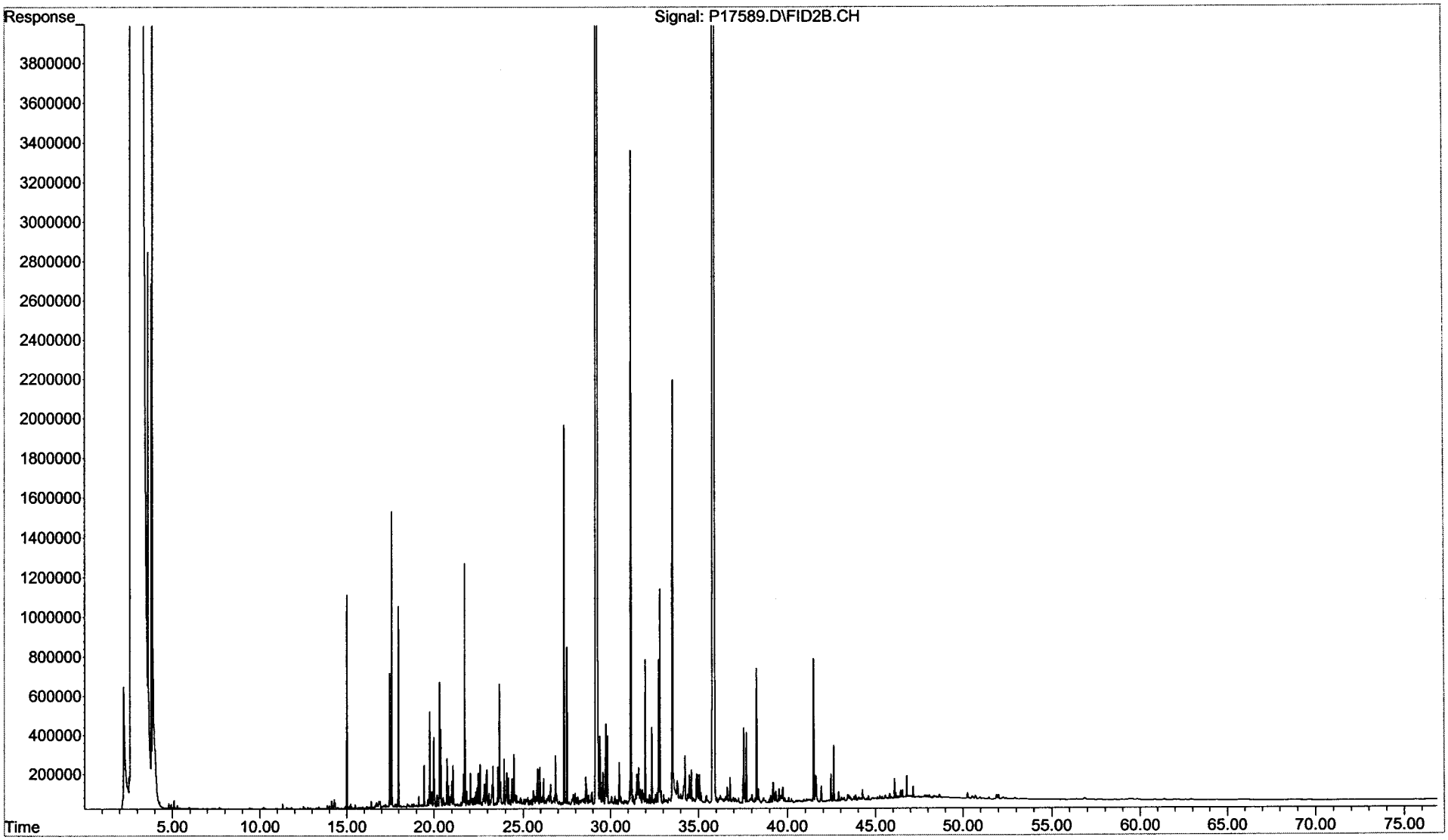
Integration File: SHCINT1.E
Quant Time: Jan 20 12:25:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	80338680	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.27f	722478093	414.892 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 829.78%#	
24) s d50-Tetracosane	35.91	606146737	388.380 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 776.76%#	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	2669547075	1659.307 ug/mL
44) h Total Resolved Hydrocarbon	40.94	804012042	499.749 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17589.D
Operator : NLJr
Acquired : 19 Jan 2006 3:55 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-09-AFID
Misc Info : 1X
Vial Number: 71



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-21B (7-8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-10**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/19/06	70.6	5.63	14.04	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**12000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	87	50-130
d50-Tetracosane	82	50-130

01/20/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17591.D
Signal(s) : FID2B.CH
Acq On : 19 Jan 2006 5:29 am
Operator : NLJr
Sample : 0601019-10-AFID
Misc : 1X
ALS Vial : 72 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 12:29:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 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

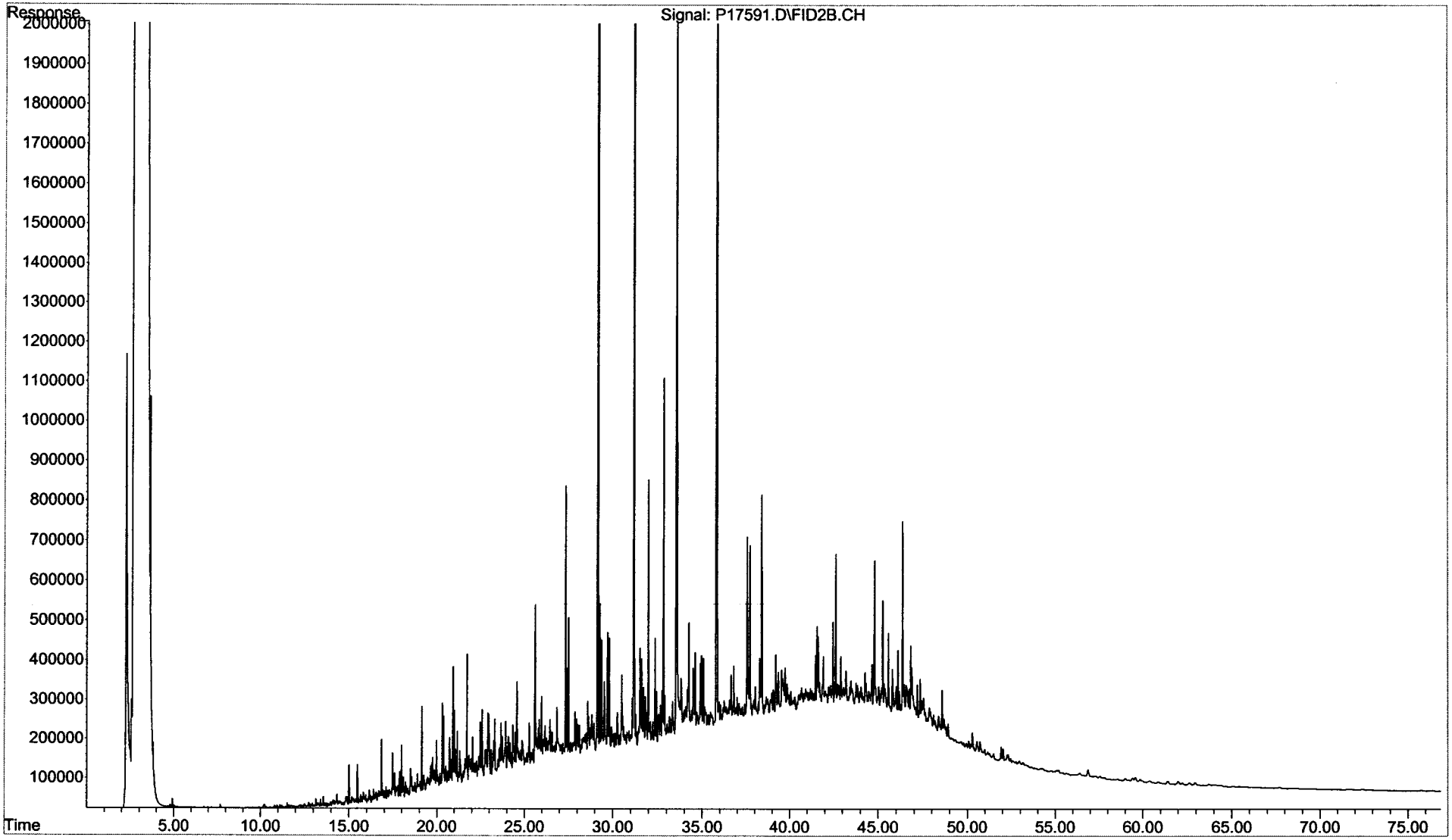
1/20/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.18	77848472	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.17	104078201	61.680 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 123.36%
24) s	d50-Tetracosane	35.82	88061894	58.229 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 116.46%
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.94	5495833333	3525.311 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	911317091	584.566 ug/L

RF+Rpt conc and cc 2/1/06

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17591.D
Operator : NLJr
Acquired : 19 Jan 2006 5:29 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-10-AFID
Misc Info : 1X
Vial Number: 72



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-19C (1.5-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **0601019-11**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/09/06	01/10/06	01/11/06	01/19/06	47.2	10.60	26.32	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**15000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	81	50-130
d50-Tetracosane	78	50-130

01/20/06 13:00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17593.D
Signal(s) : FID2B.CH
Acq On : 19 Jan 2006 7:04 am
Operator : NLJr
Sample : 0601019-11-AFID
Misc : 1X
ALS Vial : 73 Sample Multiplier: 1

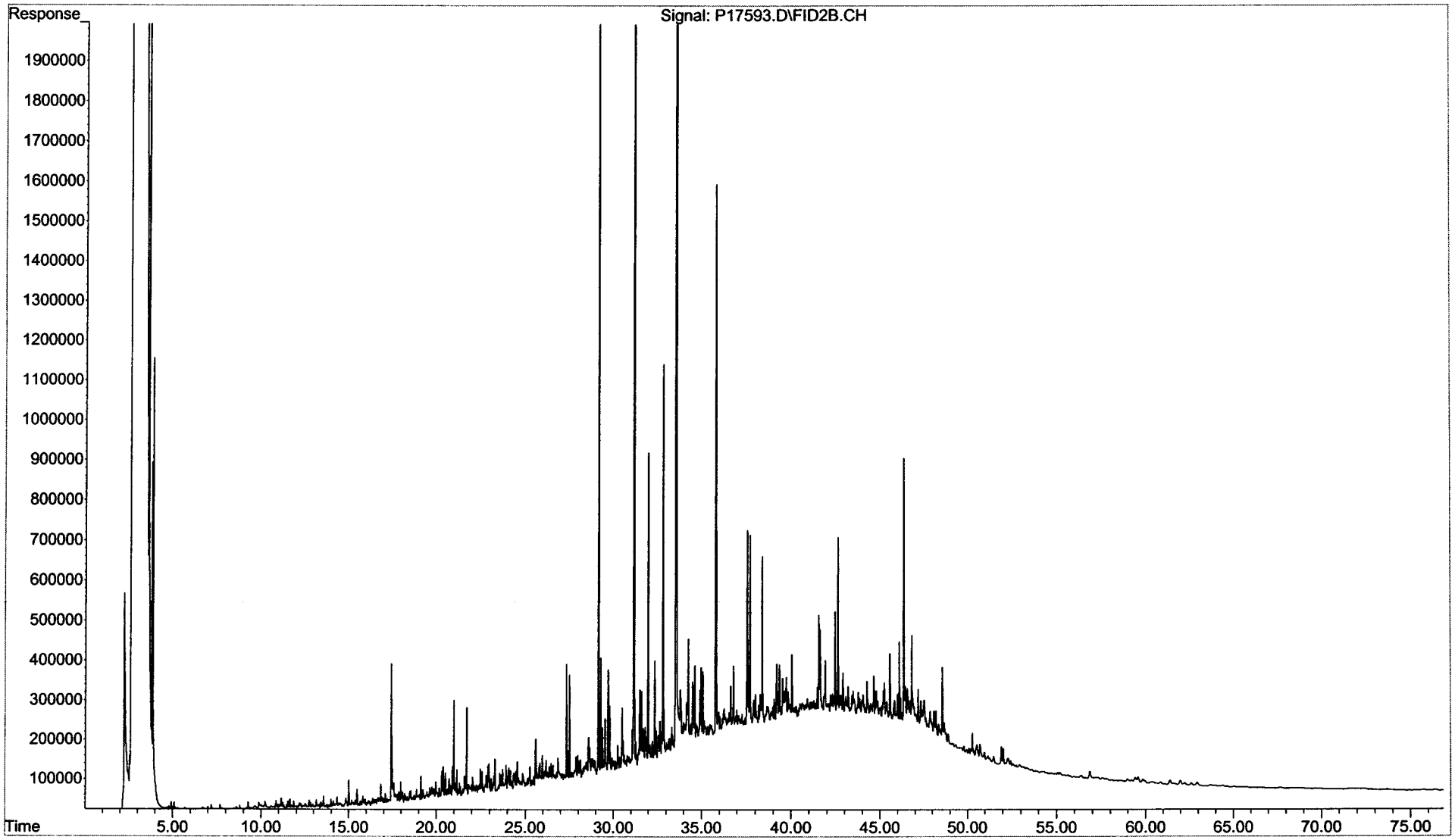
Integration File: SHCINT1.E
Quant Time: Jan 20 12:31:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.18	74714512	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	50004333	30.877 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	61.75%
24) s d50-Tetracosane	35.80	43055381	29.664 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	59.33%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4677955522	3126.548 ug/mL
44) h Total Resolved Hydrocarbon	40.94	761892551	509.217 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17593.D
Operator : NLJr
Acquired : 19 Jan 2006 7:04 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601019-11-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: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **SS011106B01**
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	01/11/06	01/17/06	100	30.00	2	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	2.2 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	95	50-130
d50-Tetracosane	90	50-130

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

01/20/06 14:34

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17561.D
Signal(s) : FID2B.CH
Acq On : 17 Jan 2006 7:46 pm
Operator : NLJr
Sample : SS011106B01-AFID
Misc : 1X ETR 0601019
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 11:29:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

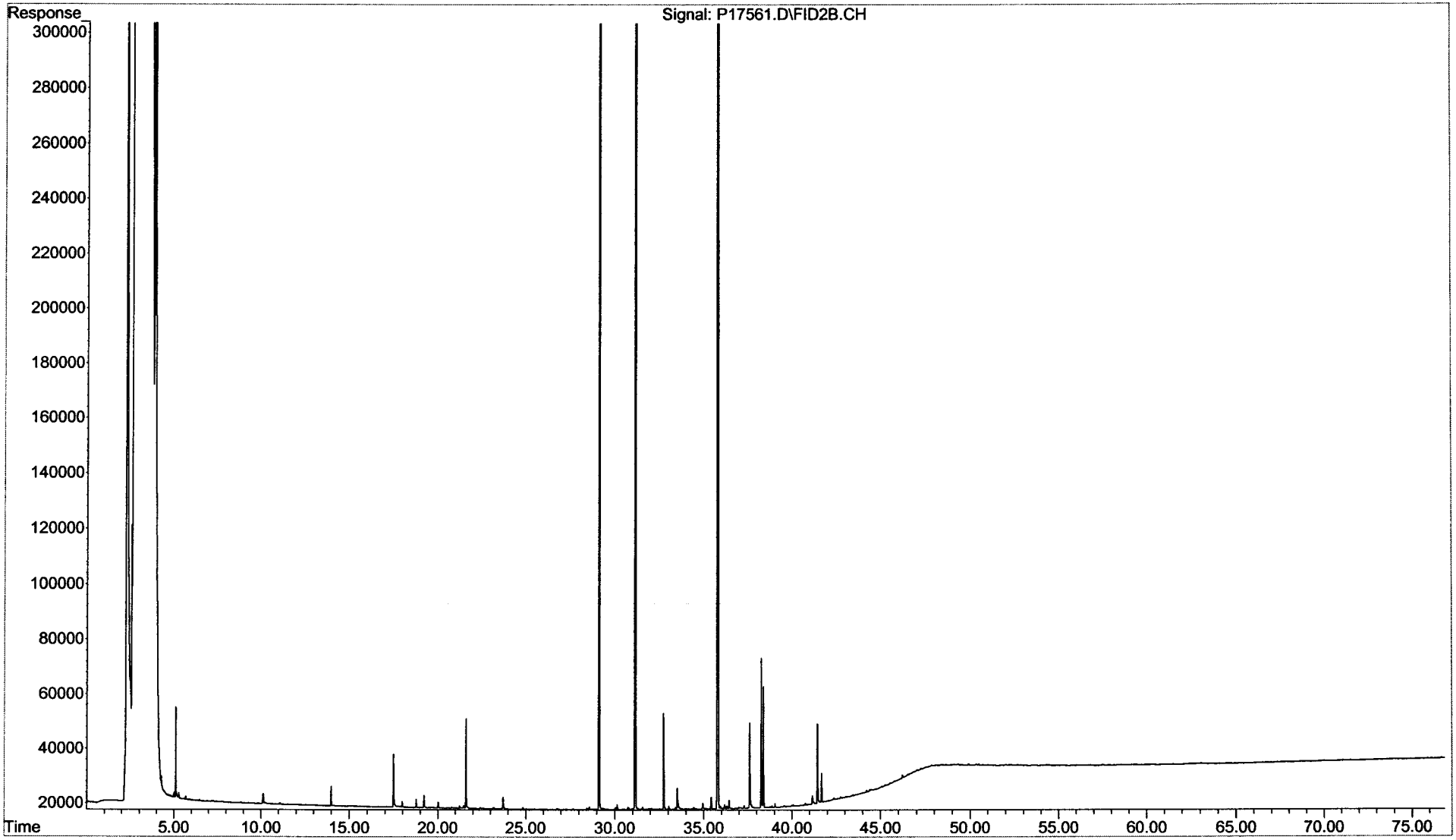
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.16	64842977	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.13	33488659	23.827 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	47.65%#
24) s d50-Tetracosane	35.78	28460474	22.593 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	45.19%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	321401914	247.514 ug/mL
44) h Total Resolved Hydrocarbon	40.94	10491810	8.080 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17561.D
Operator : NLJr
Acquired : 17 Jan 2006 7:46 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS011106B01-AFID
Misc Info : 1X ETR 0601019
Vial Number: 57



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: **0601019**
Lab ID: **See Below**
Associated Blank: **SS011106B01**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/11/06	100	NLJr

Lab ID:	SS011106B01		SS011106LCS01		SS011106LCSD01				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.067	U	1.2	71	1.2	73	3	30	50-130
n-Decane (C10)	0.067	U	1.4	83	1.4	84	2	30	50-130
n-Dodecane (C12)	0.067	U	1.5	89	1.5	90	1	30	50-130
n-Tetradecane (C14)	0.067	U	1.5	90	1.5	91	1	30	50-130
n-Hexadecane (C16)	0.067	U	1.6	94	1.6	96	1	30	50-130
n-Octadecane (C18)	0.067	U	1.6	95	1.6	96	1	30	50-130
n-Nonadecane (C19)	0.067	U	1.6	96	1.6	97	1	30	50-130
n-Eicosane (C20)	0.067	U	1.6	97	1.6	98	1	30	50-130
n-Docosane (C22)	0.067	U	1.6	97	1.6	98	1	30	50-130
n-Tetracosane (C24)	0.067	U	1.6	95	1.6	96	1	30	50-130
n-Hexacosane (C26)	0.067	U	1.6	97	1.6	98	1	30	50-130
n-Octacosane (C28)	0.067	U	1.6	96	1.6	97	1	30	50-130
n-Triacontane (C30)	0.067	U	1.6	95	1.6	97	2	30	50-130
n-Hexatriacontane (C36)	0.067	U	1.5	92	1.6	95	3	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	95	95	50-130
d50-Tetracosane	89	89	50-130

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

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

01/20/06 14:35

Form I
Total Saturated Hydrocarbons by GC/FID

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: **0601019**
Lab ID: **SS011106LCS01**
Associated Blank: **SS011106B01**
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	01/11/06	01/17/06	100	30.00	2	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	19

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	95	50-130
d50-Tetracosane	89	50-130

01/20/06 14:34

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17563.D
Signal(s) : FID2B.CH
Acq On : 17 Jan 2006 9:22 pm
Operator : NLJr
Sample : SS011106LCS01-AFID
Misc : 1X ETR 0601019
ALS Vial : 58 Sample Multiplier: 1

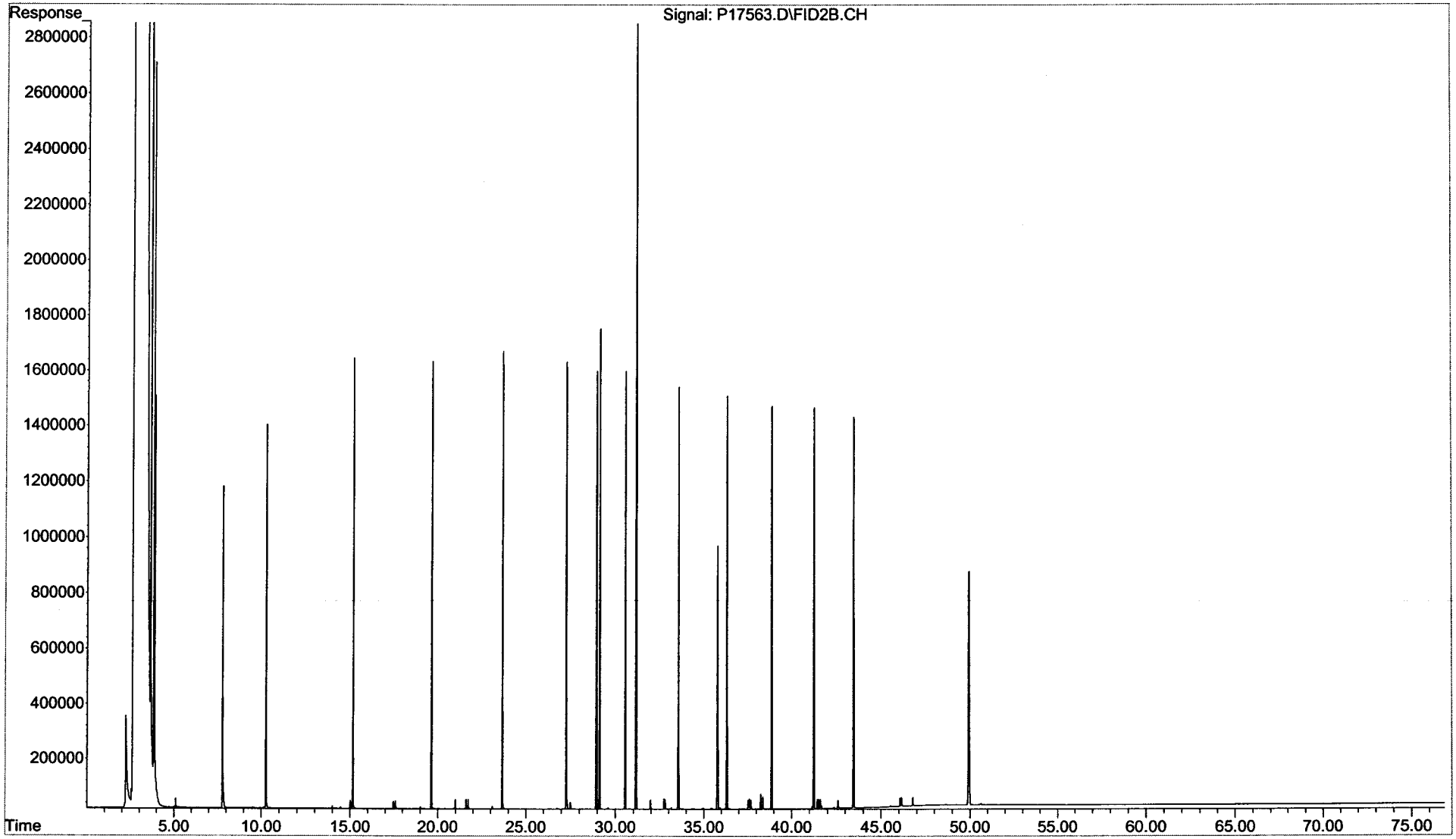
Integration File: SHCINT1.E
Quant Time: Jan 20 11:33:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.16	64444063	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.13	33130211	23.718 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 47.44%#
24) s	d50-Tetracosane	35.78	27993617	22.360 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 44.72%#
	Target Compounds			
3) t	n-Nonane (C9)	7.78	20369968	17.779 ug/mL
4) t	n-Decane (C10)	10.25	24233940	20.632 ug/mLm
6) t	n-Dodecane (C12)	15.16	26911501	22.206 ug/mLm
9) t	n-Tetradecane (C14)	19.64	28124713	22.543 ug/mL
12) t	n-Hexadecane (C16)	23.65	30089608	23.600 ug/mL
16) t	n-Octadecane (C18)	27.27	30615246	23.653 ug/mLm
18) t	n-Nonadecane (C19)	28.95	30856903	23.993 ug/mLm
20) t	n-Eicosane (C20)	30.55	31122746	24.271 ug/mLm
22) t	n-Docosane (C22)	33.55	31623142	24.200 ug/mLm
25) t	n-Tetracosane (C24)	36.32	31601288	23.727 ug/mL
27) t	n-Hexacosane (C26)	38.87	31888042	24.292 ug/mLm
29) t	n-Octacosane (C28)	41.25	31935620	24.030 ug/mL
31) t	n-Triacontane (C30)	43.47	31769062	23.853 ug/mLm
37) t	n-Hexatriacontane (C36)	49.95	30534668	23.090 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	730544176	566.080 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	431987367	334.736 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17563.D
Operator : NLJr
Acquired : 17 Jan 2006 9:22 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS011106LCS01-AFID
Misc Info : 1X ETR 0601019
Vial Number: 58



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **SS011106LCSD01**
Associated Blank: **SS011106B01**
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	01/11/06	01/17/06	100	30.00	2	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**20**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	95	50-130
d50-Tetracosane	89	50-130

01/20/06 14:34

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17565.D
Signal(s) : FID2B.CH
Acq On : 17 Jan 2006 10:58 pm
Operator : NLJr
Sample : SS011106LCSD01-AFID
Misc : 1X ETR 0601019
ALS Vial : 59 Sample Multiplier: 1

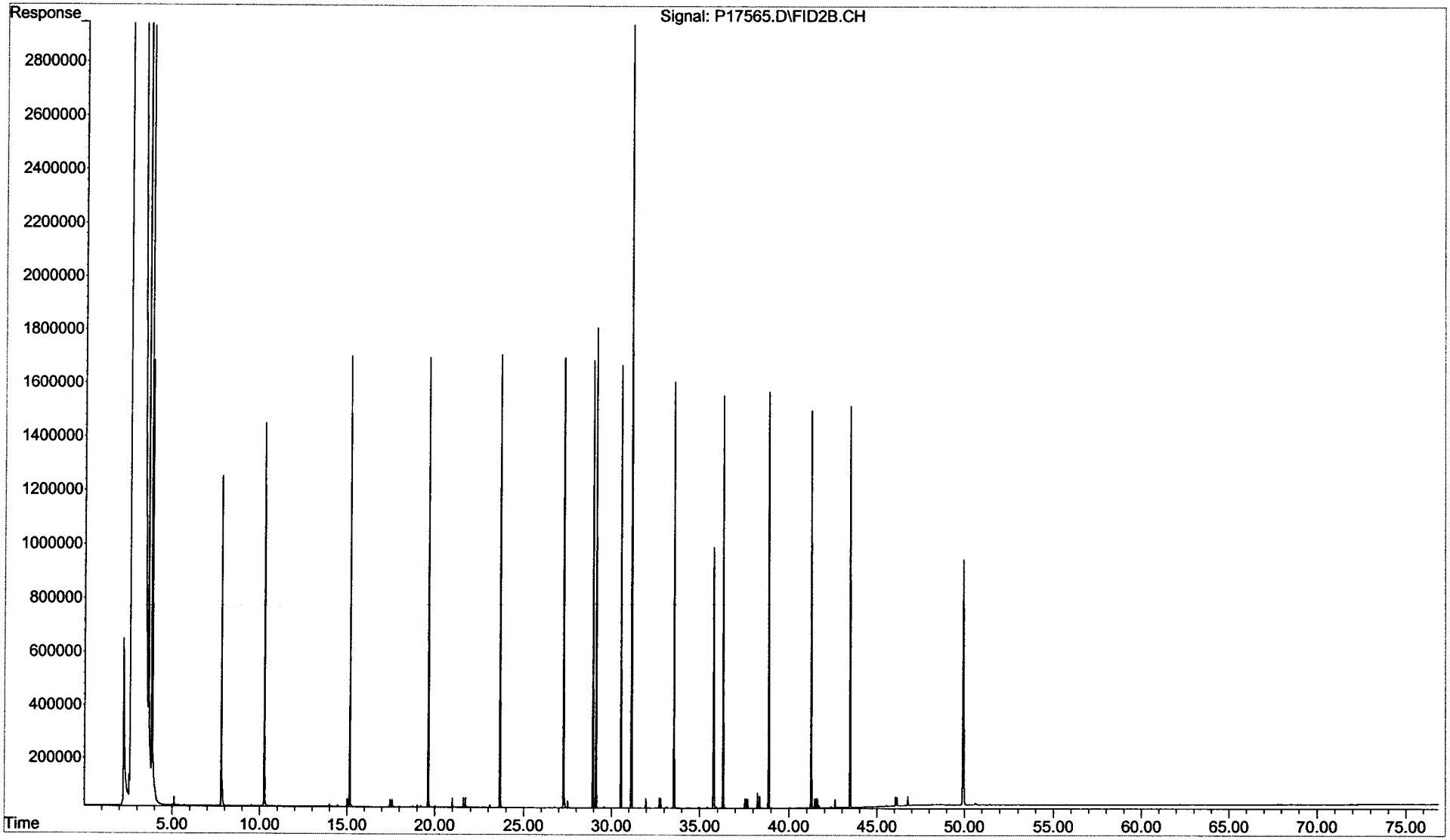
Integration File: SHCINT1.E
Quant Time: Jan 20 11:37:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.16	66416305	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.14	34117852	23.700 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 47.40%#
24) s	d50-Tetracosane	35.78	28859871	22.368 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 44.74%#
Target Compounds				
3) t	n-Nonane (C9)	7.78	21625999	18.315 ug/mL
4) t	n-Decane (C10)	10.25	25473444	21.044 ug/mLm
6) t	n-Dodecane (C12)	15.16	28067299	22.472 ug/mL
9) t	n-Tetradecane (C14)	19.64	29381694	22.851 ug/mL
12) t	n-Hexadecane (C16)	23.65	31379582	23.881 ug/mL
16) t	n-Octadecane (C18)	27.27	31918599	23.928 ug/mLm
18) t	n-Nonadecane (C19)	28.95	32146956	24.254 ug/mLm
20) t	n-Eicosane (C20)	30.55	32442862	24.549 ug/mL
22) t	n-Docosane (C22)	33.55	32947252	24.465 ug/mL
25) t	n-Tetracosane (C24)	36.32	32950753	24.005 ug/mL
27) t	n-Hexacosane (C26)	38.87	33236198	24.567 ug/mLm
29) t	n-Octacosane (C28)	41.25	33297662	24.311 ug/mL
31) t	n-Triacontane (C30)	43.47	33247278	24.222 ug/mLm
37) t	n-Hexatriacontane (C36)	49.96	32415554	23.785 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	750099683	563.973 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	451868329	339.743 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17565.D
Operator : NLJr
Acquired : 17 Jan 2006 10:58 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS011106LCSD01-AFID
Misc Info : 1X ETR 0601019
Vial Number: 59



Form I
Alaska North Slope Crude
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **TS012006AWS01**
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	01/17/06	100	0.051	10	1	NLJr

Parameter	Result
Total Petroleum Hydrocarbons	**550000**

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17555.D
Signal(s) : FID2B.CH
Acq On : 17 Jan 2006 2:59 pm
Operator : NLJr
Sample : TS012006AWS01
Misc : 1X ANS STD
ALS Vial : 54 Sample Multiplier: 1

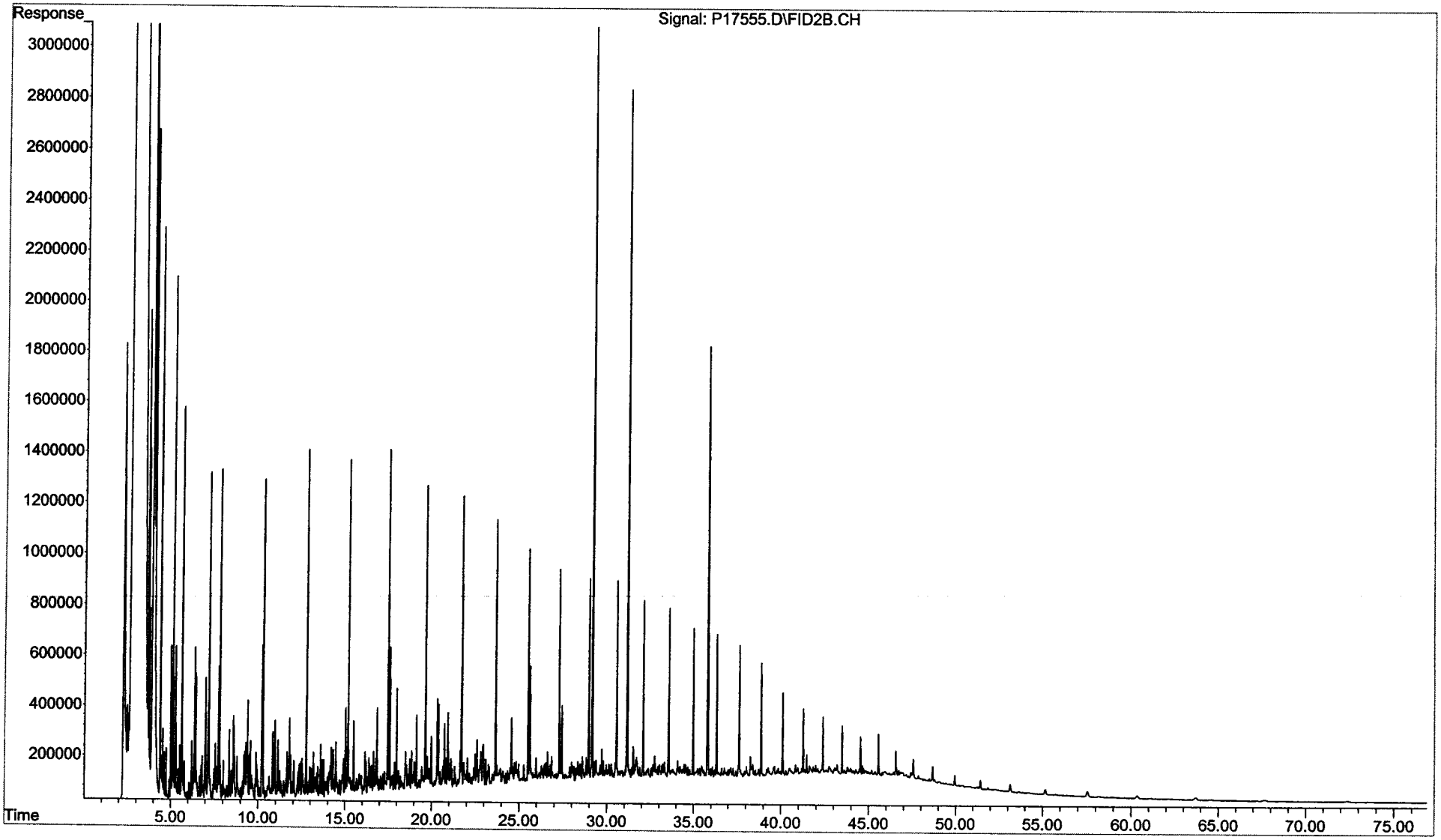
Integration File: SHCINT1.E
Quant Time: Jan 20 11:24:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	61478930	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	64290390	48.245 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	96.49%
24) s d50-Tetracosane	35.80	54184401	45.368 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	90.74%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	3834531900	3114.584 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1110074712	901.654 ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17555.D
Operator : NLJr
Acquired : 17 Jan 2006 2:59 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TS012006AWS01
Misc Info : 1X ANS STD
Vial Number: 54



Instrument Blank Association

ETR: 0601019

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
SS011106B01	IB101170601	P17559.D
SS011106LCS01	IB101170601	P17559.D
SS011106LCSD01	IB101170601	P17559.D
0601019-01	IB101170601	P17559.D
0601019-02	IB101170601	P17559.D
0601019-03	IB101170601	P17559.D
0601019-03 D	IB101170601	P17559.D
0601019-04	IB101170601	P17559.D
0601019-05	IB101170601	P17559.D
0601019-06	IB101170601	P17559.D
0601019-07	IB101170601	P17559.D
0601019-08	IB101170601	P17559.D
0601019-09	IB101170601	P17559.D
0601019-10	IB101170601	P17559.D
0601019-11	IB101170601	P17559.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17559.D
Signal(s) : FID2B.CH
Acq On : 17 Jan 2006 6:10 pm
Operator : NLJr
Sample : IB101170601
Misc : DCM
ALS Vial : 56 Sample Multiplier: 1

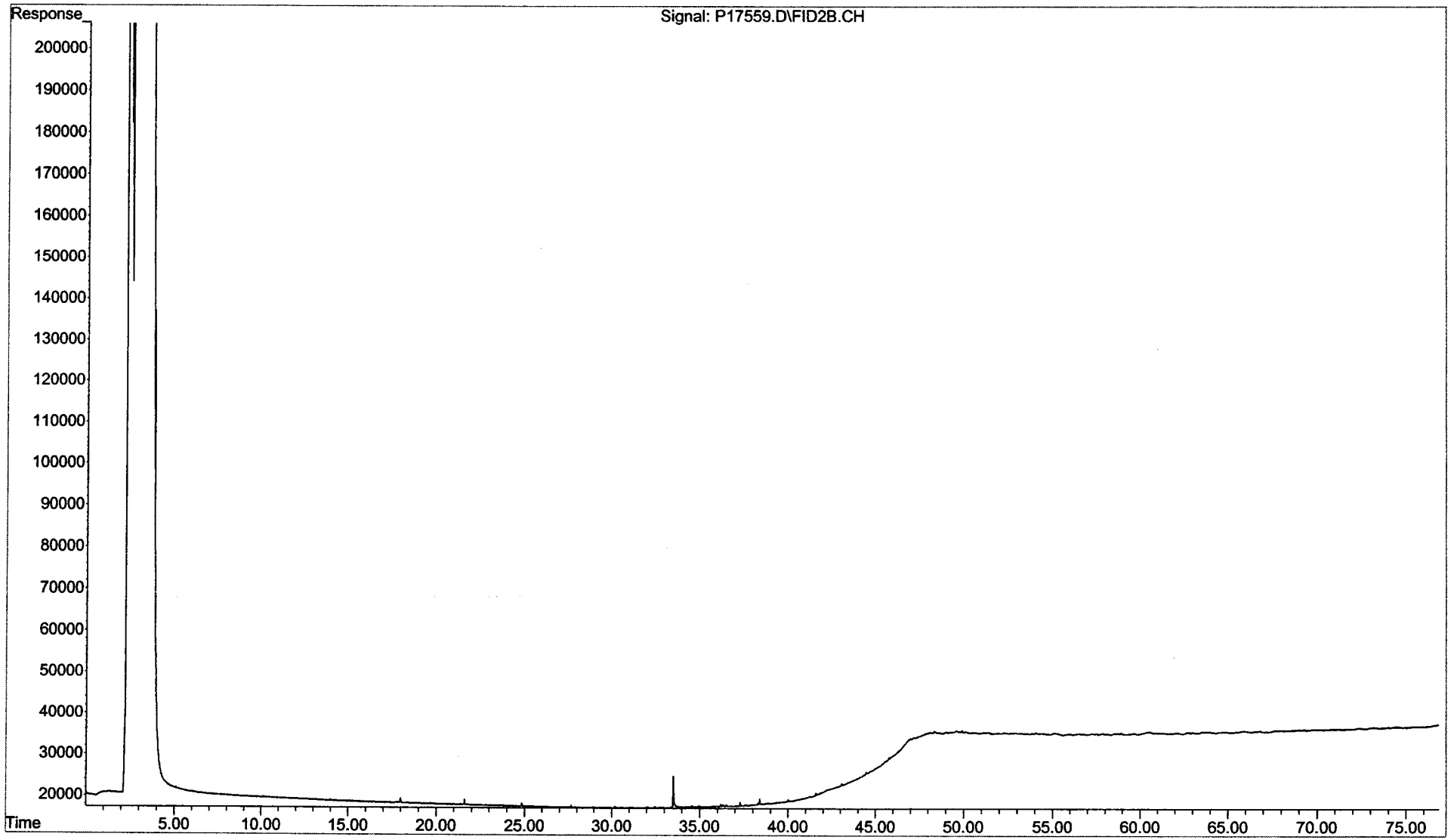
Integration File: SHCINT1.E
Quant Time: Jan 20 10:23:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	33.50f	264061	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	355997366	67321.905 ug/mL 17,000 mv

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

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17559.D
Operator : NLJr
Acquired : 17 Jan 2006 6:10 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB101170601
Misc Info : DCM
Vial Number: 56



Sequence Name: C:\MSDChem\1\sequence\S1011701.S
Comment:
Operator: NLJr
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN17\

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

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

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

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

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P17549	FRNC1D	DCM-AFID
4)	Sample	1	P17550	FRNC1D	DCM
5)	RearSamp	52	P17551	FRNC1D	PRIMER-AFID
6)	Sample	2	P17552	FRNC1D	PRIMER
7)	RearSamp	53	P17553	FRNC1D	C1011701-AFID PASS 1/20/06
8)	Sample	3	P17554	FRNC1D	C1011701
9)	RearSamp	54	P17555	FRNC1D	ANS1011701-AFID TS012006AWS01 1/20/06
10)	Sample	4	P17556	FRNC1D	Q1011701
11)	Pause				
12)	RearSamp	55	P17557	FRNC1D	DCM-AFID
13)	Sample	5	P17558	FRNC1D	ANS1011701
14)	RearSamp	56	P17559	FRNC1D	DCM-AFID IB10117060 1/20/06
15)	Sample	6	P17560	FRNC1D	C1011702 PASS
16)	RearSamp	57	P17561	FRNC1D	SS011106B01-AFID
17)	Sample	7	P17562	FRNC1D	DCM
18)	RearSamp	58	P17563	FRNC1D	SS011106LCS01-AFID
[illegible])	Sample	8	P17564	FRNC1D	0512124-01-RE
[illegible])	RearSamp	59	P17565	FRNC1D	SS011106LCSD01-AFID
21)	Sample	9	P17566	FRNC1D	0512124-02-RE
22)	RearSamp	60	P17567	FRNC1D	0601019-01-AFID
23)	Sample	10	P17568	FRNC1D	C1011703 PASS
24)	RearSamp	61	P17569	FRNC1D	0601019-02-AFID
25)	Sample	11	P17570	FRNC1D	PRIMER
26)	RearSamp	62	P17571	FRNC1D	C1011702-AFID PASS 1/20/06
27)	Sample	12	P17572	FRNC1D	PRIMER
28)	RearSamp	63	P17573	FRNC1D	DCM-AFID
29)	Sample	13	P17574	FRNC1D	PRIMER
30)	RearSamp	64	P17575	FRNC1D	0601019-03-AFID
31)	Sample	14	P17576	FRNC1D	PRIMER
32)	RearSamp	65	P17577	FRNC1D	0601019-03D-AFID
33)	Sample	15	P17578	FRNC1D	PRIMER - POWER OUT
34)	RearSamp	99	P17578A	FRNC1D	DCM
35)	Sample	15	P17578B	FRNC1D	PRIMER GL-RESTARTED 1/18/06
36)	RearSamp	100	P17578C	FRNC1D	C1011702A-AFID PASS.
37)	Sample	15	P17578D	FRNC1D	PRIMER
38)	RearSamp	66	P17579	FRNC1D	0601019-04-AFID
39)	Sample	11	P17580	FRNC1D	PRIMER
40)	RearSamp	67	P17581	FRNC1D	0601019-05-AFID
41)	Sample	12	P17582	FRNC1D	PRIMER
42)	RearSamp	68	P17583	FRNC1D	0601019-06-AFID
43)	Sample	13	P17584	FRNC1D	PRIMER

PAH #1 Sequence Information

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

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

FID Process Method: HC11005.M PAH Process Method: PAH10104.M

Last Modified: Tue Jan 17 16:17:11 2006

Sequence Name: C:\MSDChem\1\sequence\S1011701.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	69	P17585	FRNC1D	0601019-07-AFID
45)	Sample	14	P17586	FRNC1D	PRIMER
)	RearSamp	70	P17587	FRNC1D	0601019-08-AFID
)	Sample	15	P17588	FRNC1D	PRIMER
48)	RearSamp	71	P17589	FRNC1D	0601019-09-AFID
49)	Sample	11	P17590	FRNC1D	PRIMER
50)	RearSamp	72	P17591	FRNC1D	0601019-10-AFID
51)	Sample	12	P17592	FRNC1D	PRIMER
52)	RearSamp	73	P17593	FRNC1D	0601019-11-AFID
53)	Sample	13	P17594	FRNC1D	PRIMER
54)	RearSamp	74	P17595	FRNC1D	C1011703-AFID PASS
55)	Sample	14	P17596	FRNC1D	PRIMER
56)	RearSamp	75	P17597	FRNC1D	DCM-AFID
57)	Sample	15	P17598	FRNC1D	PRIMER

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: **0601019**
Lab ID: **SS011106B01**
Date Analyzed: **01/17/06 19:46**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS011106LCS01	01/17/06 21:22
LCSD	SS011106LCSD01	01/17/06 22:58
GC-SED-11 (1-3)	0601019-01	01/18/06 00:37
GC-SED-18 (7-8)	0601019-02	01/18/06 02:15
GC-SED-15 (0-0.75)	0601019-03	01/18/06 07:15
GC-SED-15 (0-0.75)	0601019-03 D	01/18/06 08:51
GC-SED-14 (5.5-6.5)	0601019-04	01/18/06 20:00
GC-SED-13B (14.6-15.6)	0601019-05	01/18/06 21:35
GC-SED-39 (4.5-5.5)	0601019-06	01/18/06 23:10
GC-SED-17 (0-2)	0601019-07	01/19/06 00:46
GC-SED-16 (0-2)	0601019-08	01/19/06 02:20
GC-SED-22B (19.3-20)	0601019-09	01/19/06 03:55
GC-SED-21B (7-8)	0601019-10	01/19/06 05:29
GC-SED-19C (1.5-2)	0601019-11	01/19/06 07:04

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\1\sequence\S1100501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\October\OCT05\

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

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

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

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

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P15860	FRNC1D	C1100501-AFID
4)	Sample	1	P15861	FRNC1D	C1100501
5)	RearSamp	99	P15861A	FRNC1D	QC WHAB68-AFID
6)	Sample	100	P15861B	FRNC1D	QC WHAB68
7)	RearSamp	52	P15862	FRNC1D	ANS1100501-AFID TO101705AWS01
8)	Sample	2	P15863	FRNC1D	ANS1100501
9)	RearSamp	53	P15864	FRNC1D	DCM-AFID
10)	Sample	3	P15865	FRNC1D	DCM-AFID
11)	RearSamp	54	P15866	FRNC1D	I1100501-AFID
12)	Sample	4	P15867	FRNC1D	SO100505B02
13)	RearSamp	55	P15868	FRNC1D	I1100502-AFID
14)	Sample	5	P15869	FRNC1D	SO100505LCS01
15)	RearSamp	56	P15870	FRNC1D	I1100503-AFID
16)	Sample	6	P15871	FRNC1D	SO100505LCSD01
17)	RearSamp	57	P15872	FRNC1D	I1100504-AFID
18)	Sample	7	P15873	FRNC1D	0509124-01
19)	RearSamp	58	P15874	FRNC1D	I1100505-AFID
	Sample	8	P15875	FRNC1D	0509124-02
21)	RearSamp	59	P15876	FRNC1D	Q1100501-AFID
22)	Sample	9	P15877	FRNC1D	0509124-02D
23)	RearSamp	60	P15878	FRNC1D	DCM-AFID IB110050501
24)	Sample	10	P15879	FRNC1D	0509124-03
25)	RearSamp	61	P15880	FRNC1D	SO100505B02-AFID
26)	Sample	11	P15881	FRNC1D	0509124-04
27)	RearSamp	62	P15882	FRNC1D	SO100505LCS01-AFID
28)	Sample	12	P15883	FRNC1D	0509124-05
29)	RearSamp	63	P15884	FRNC1D	SO100505LCSD01-AFID
30)	Sample	15	P15885	FRNC1D	C1100502
31)	Pause				
32)	RearSamp	64	P15886	FRNC1D	0509124-01-AFID
33)	Sample	13	P15887	FRNC1D	0509124-06
34)	RearSamp	65	P15888	FRNC1D	0509124-02-AFID re-analyze flame-out
35)	Sample	14	P15889	FRNC1D	0509124-09

FID Process Method: HC11005.M

Response Factor Report PAH-1

Method Path : C:\MSDCHEM\1\METHODS\
Method File : HC11005.M
Title : FID Forensics
Last Update : Fri Oct 14 16:49:01 2005
Response Via : Initial Calibration

Calibration Files
1 =P15866.D 10 =P15868.D 50 =P15870.D
100 =P15872.D 200 =P15874.D

10/17/05

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.806	0.820	0.805	0.797	0.802	0.806	1.04
3)	t	n-Nonane (C9)	0.949	0.897	0.876	0.860	0.862	0.889	4.12
4)	t	n-Decane (C10)	0.968	0.916	0.899	0.886	0.888	0.911	3.74
5)	t	n-Undecane (C11)	0.983	0.925	0.908	0.898	0.899	0.923	3.86
6)	t	n-Dodecane (C12)	0.987	0.945	0.930	0.920	0.920	0.940	2.97
7)	t	n-Tridecane (C13)	1.003	0.959	0.940	0.931	0.929	0.953	3.20
8)	t	1380	1.022	0.977	0.954	0.945	0.942	0.968	3.44
9)	t	n-Tetradecane (C14)	1.022	0.977	0.954	0.945	0.942	0.968	3.44
10)	t	1470	1.051	0.988	0.960	0.953	0.948	0.980	4.33
11)	t	n-Pentadecane (C15)	1.051	0.988	0.960	0.953	0.948	0.980	4.33
12)	t	n-Hexadecane (C16)	1.068	0.998	0.966	0.961	0.953	0.989	4.79
13)	t	1650	1.088	1.010	0.976	0.971	0.963	1.002	5.17
14)	t	n-Heptadecane (C17)	1.088	1.010	0.976	0.971	0.963	1.002	5.17
15)	t	Pristane	1.035	0.968	0.934	0.928	0.919	0.957	4.98
16)	t	n-Octadecane (C18)	1.085	1.015	0.980	0.975	0.966	1.004	4.87
17)	t	Phytane	1.071	1.010	0.973	0.967	0.956	0.996	4.70
18)	t	n-Nonadecane (C19)	1.075	1.009	0.975	0.970	0.960	0.998	4.71
19)	s	ortho-terphenyl	1.230	1.080	1.044	1.036	1.029	1.084	7.74
20)	t	n-Eicosane (C20)	1.076	1.007	0.971	0.966	0.955	0.995	4.94
21)	t	n-Heneicosane (C21)	1.108	1.038	1.003	0.998	0.987	1.027	4.82
22)	t	n-Docosane (C22)	1.096	1.026	0.989	0.985	0.974	1.014	4.92
23)	t	n-Tricosane (C23)	1.103	1.033	0.996	0.992	0.981	1.021	4.90
24)	s	d50-Tetracosane	1.370	0.906	0.871	0.860	0.850	0.971	23.02
25)	t	n-Tetracosane (C24)	1.134	1.042	1.003	1.000	0.988	1.033	5.77
26)	t	n-Pentacosane (C25)	1.195	1.039	1.001	0.997	0.982	1.043	8.41
27)	t	n-Hexacosane (C26)	1.104	1.031	0.993	0.988	0.976	1.018	5.12
28)	t	n-Heptacosane (C27)	1.095	1.028	0.990	0.986	0.974	1.015	4.87
29)	t	n-Octacosane (C28)	1.126	1.042	1.003	0.999	0.986	1.031	5.51
30)	t	n-Nonacosane (C29)	1.146	1.066	1.027	1.022	1.009	1.054	5.27
31)	t	n-Triacontane (C30)	1.111	1.047	1.010	1.006	0.992	1.033	4.63
32)	t	n-Hentriacontane (C31	1.068	1.014	0.980	0.975	0.962	1.000	4.28
33)	t	n-Dotriacontane (C32)	1.083	1.022	0.988	0.982	0.968	1.009	4.57
34)	t	n-Tritriacontane (C33	1.075	1.037	1.004	0.997	0.983	1.019	3.63
35)	t	n-tetratriacontane (C	1.100	1.051	1.020	1.011	0.997	1.035	3.96
36)	t	n-Pentatriacontane (C	1.058	1.011	0.981	0.971	0.958	0.996	4.00
37)	t	n-Hexatriacontane (C3	1.109	1.037	1.006	0.996	0.983	1.026	4.91
38)	t	n-Heptatriacontane (C	1.207	1.106	1.076	1.066	1.052	1.101	5.65
39)	t	n-Octatriacontane (C3	1.108	1.046	1.019	1.008	0.996	1.035	4.32
40)	t	n-Nonatriacontane (C3	1.125	1.032	1.004	0.993	0.981	1.027	5.63
41)	t	n-Tetracontane (C40)	1.125	1.032	1.004	0.993	0.981	1.027	5.63
42)	h	C9-C40 Total Petroleu	1.079	1.011	0.980	0.973	0.963	1.001	4.71
43)	h	C10-C28 DRO	1.079	1.011	0.980	0.973	0.963	1.001	4.71
44)	h	Total Resolved Hydroc	1.079	1.011	0.980	0.973	0.963	1.001	4.71

(#) = Out of Range

ICAL ID: HC11005.M

Component	Responses				
	Level 1	Level 2	Level 3	Level 4	Level 5
n-Nonane (C9)	1132015	10498459	52246830	102781405	202095631
n-Decane (C10)	1155072	10723181	53586773	105828639	208061331
n-Undecane (C11)	1173119	10830002	54155791	107262086	210776366
n-Dodecane (C12)	1177197	11057060	55435782	109922584	215654778
n-Tridecane (C13)	1196618	11218029	56082608	111269393	217880200
n-Tetradecane (C14)	1219535	11427634	56897814	112957898	220715268
n-Pentadecane (C15)	1253265	11564851	57257602	113904133	222156659
n-Hexadecane (C16)	1274311	11678982	57598544	114781277	223476831
n-Heptadecane (C17)	1298169	11824086	58193939	115955930	225671657
Pristane	1235036	11330485	55683946	110888857	215367907
n-Octadecane (C18)	1294491	11874715	58446412	116514868	226439101
Phytane	1277504	11821363	58043709	115535600	224131538
n-Nonadecane (C19)	1282336	11812345	58140407	115911503	224970843
n-Eicosane (C20)	1283179	11781964	57889024	115449228	223880202
n-Heneicosane (C21)	1322085	12145610	59789282	119222290	231304721
n-Docosane (C22)	1307258	12005057	58983404	117660808	228237623
n-Tricosane (C23)	1316106	12085831	59391641	118506145	229853494
n-Tetracosane (C24)	1352536	12189791	59836684	119466359	231618014
n-Pentacosane (C25)	1425786	12158420	59689553	119085255	230257861
n-Hexacosane (C26)	1317424	12060114	59206913	118092843	228835118
n-Heptacosane (C27)	1306656	12032957	59061691	117826940	228244100
n-Octacosane (C28)	1342650	12196722	59812490	119359729	231104479
n-Nonacosane (C29)	1366537	12473008	61236479	122129756	236435398
n-Triacontane (C30)	1325208	12252816	60258513	120202182	232590130
n-Hentriacontane (C31)	1274172	11869820	58452135	116492164	225434305
n-Dotriacontane (C32)	1291994	11960160	58925133	117329937	226936670
n-Tritriacontane (C33)	1282666	12138837	59891857	119115966	230463854
n-tetratriacontane (C34)	1311738	12298617	60797520	120764189	233629218
n-Pentatriacontane (C35)	1262402	11832639	58493593	116069115	224668006
n-Hexatriacontane (C36)	1322662	12132652	59965402	118986963	230449861
n-Heptatriacontane (C37)	1439482	12938023	64168897	127310647	246520015
n-Octatriacontane (C38)	1321938	12243108	60781159	120446610	233388724
n-Tetracontane (C40)	1341970	12077082	59895920	118679810	230023588

Range	Average Response				
	Level 1	Level 2	Level 3	Level 4	Level 5
C9-C40 Total Petroleum Hydrocarbons	1287367	11834376	58433256	116233670	225796166
C10-C28 DRO	1287367	11834376	58433256	116233670	225796166
Total Resolved Hydrocarbons	1287367	11834376	58433256	116233670	225796166

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15866.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 5:25 pm
Operator : AC
Sample : I1100501-AFID
Misc : WHAB29
ALS Vial : 54 Sample Multiplier: 1

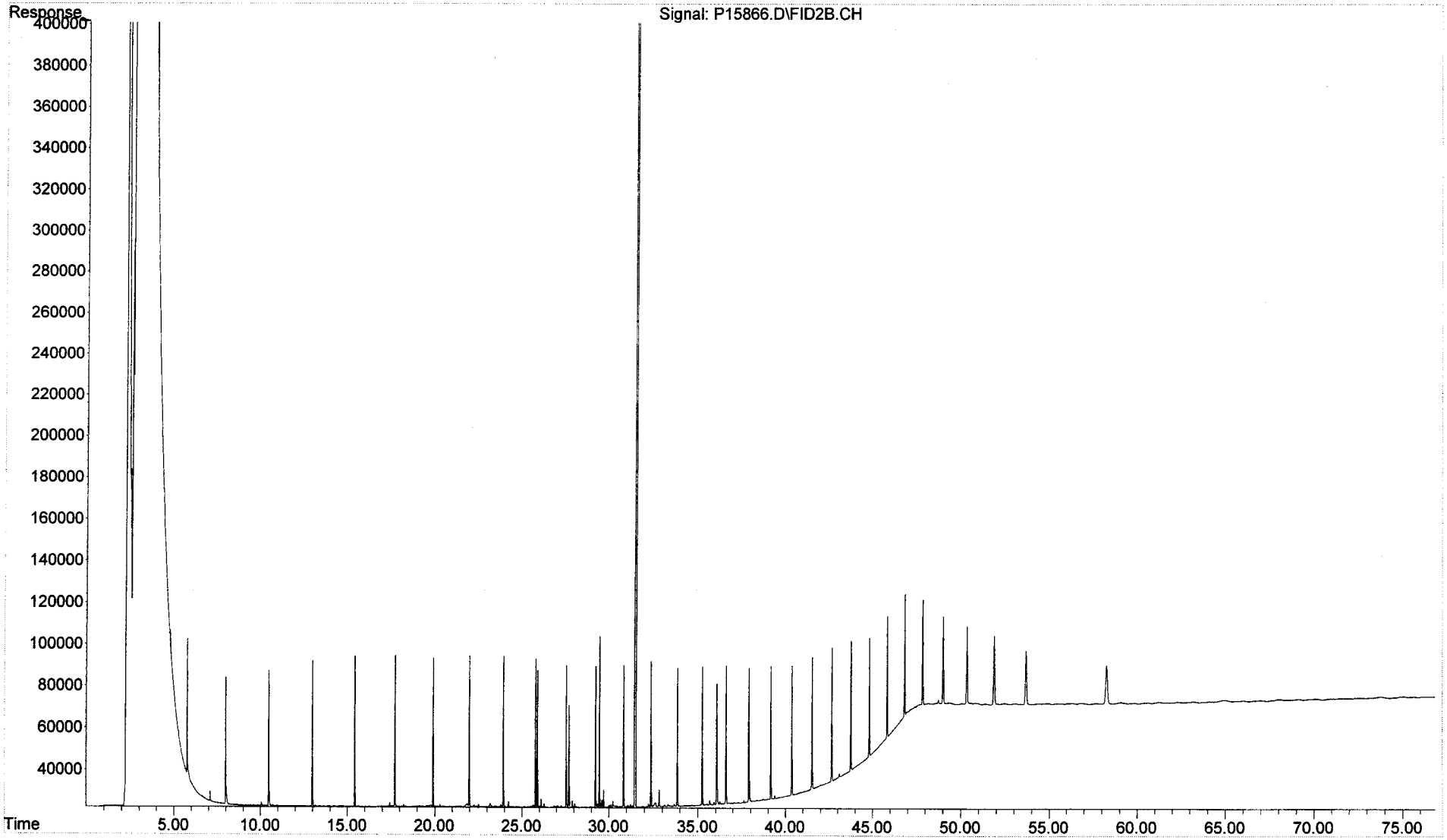
Integration File: SHCINT1.E
Quant Time: Oct 10 21:14:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:02:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

10/14/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	59645108	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.46	1466887	1.136 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 2.27%#
24) s	d50-Tetracosane	36.07	1633831	1.417 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 2.83%#
	Target Compounds			
2) t	n-Octane (C8)	5.76f	961986	0.936 ug/mLm
3) t	n-Nonane (C9)	7.99	1132015	1.028 ug/mL
4) t	n-Decane (C10)	10.48	1155072	1.033 ug/mLm
5) t	n-Undecane (C11)	13.00	1173119	1.045 ug/mLm
6) t	n-Dodecane (C12)	15.42	1177197	1.032 ug/mLm
7) t	n-Tridecane (C13)	17.73	1196618	1.041 ug/mLm
9) t	n-Tetradecane (C14)	19.91	1219535	1.045 ug/mLm
11) t	n-Pentadecane (C15)	21.98	1253265	1.065 ug/mLm
12) t	n-Hexadecane (C16)	23.93	1274311	1.078 ug/mLm
14) t	n-Heptadecane (C17)	25.79	1298169	1.086 ug/mLm
15) t	Pristane	25.90	1235036	1.082 ug/mLm
16) t	n-Octadecane (C18)	27.55	1294491	1.079 ug/mL
17) t	Phytane	27.71	1277504	1.075 ug/mL
18) t	n-Nonadecane (C19)	29.24	1282336	1.080 ug/mL
20) t	n-Eicosane (C20)	30.84	1283179	1.085 ug/mL
21) t	n-Heneicosane (C21)	32.37	1322085	1.085 ug/mLm
22) t	n-Docosane (C22)	33.84f	1307258	1.084 ug/mLm
23) t	n-Tricosane (C23)	35.25	1316106	1.084 ug/mLm
25) t	n-Tetracosane (C24)	36.61	1352536	1.102 ug/mL
26) t	n-Pentacosane (C25)	37.91	1425786	1.163 ug/mLm
27) t	n-Hexacosane (C26)	39.16	1317424	1.091 ug/mLm
28) t	n-Heptacosane (C27)	40.37	1306656	1.086 ug/mLm
29) t	n-Octacosane (C28)	41.54	1342650	1.103 ug/mLm
30) t	n-Nonacosane (C29)	42.66	1366537	1.096 ug/mLm
31) t	n-Triacontane (C30)	43.75	1325208	1.084 ug/mLm
32) t	n-Hentriacontane (C31)	44.81	1274172	1.076 ug/mLm
33) t	n-Dotriacontane (C32)	45.83	1291994	1.087 ug/mLm
34) t	n-Tritriacontane (C33)	46.83	1282666	1.064 ug/mLm
35) t	n-tetratriacontane (C34)	47.85	1311738	1.079 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	1262402	1.079 ug/mLm
37) t	n-Hexatriacontane (C36)	50.35	1322662	1.106 ug/mLm
38) t	n-Heptatriacontane (C37)	51.88	1439482	1.125 ug/mL
39) t	n-Octatriacontane (C38)	53.68	1321938	1.096 ug/mLm
41) t	n-Tetracontane (C40)	58.28	1341970	1.134 ug/mLm

File :C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\P15866.D
Operator : AC
Acquired : 05 Oct 2005 5:25 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100501-AFID
Misc Info : WHAB29
Vial Number: 54



Quantitation Report (QT Reviewed)

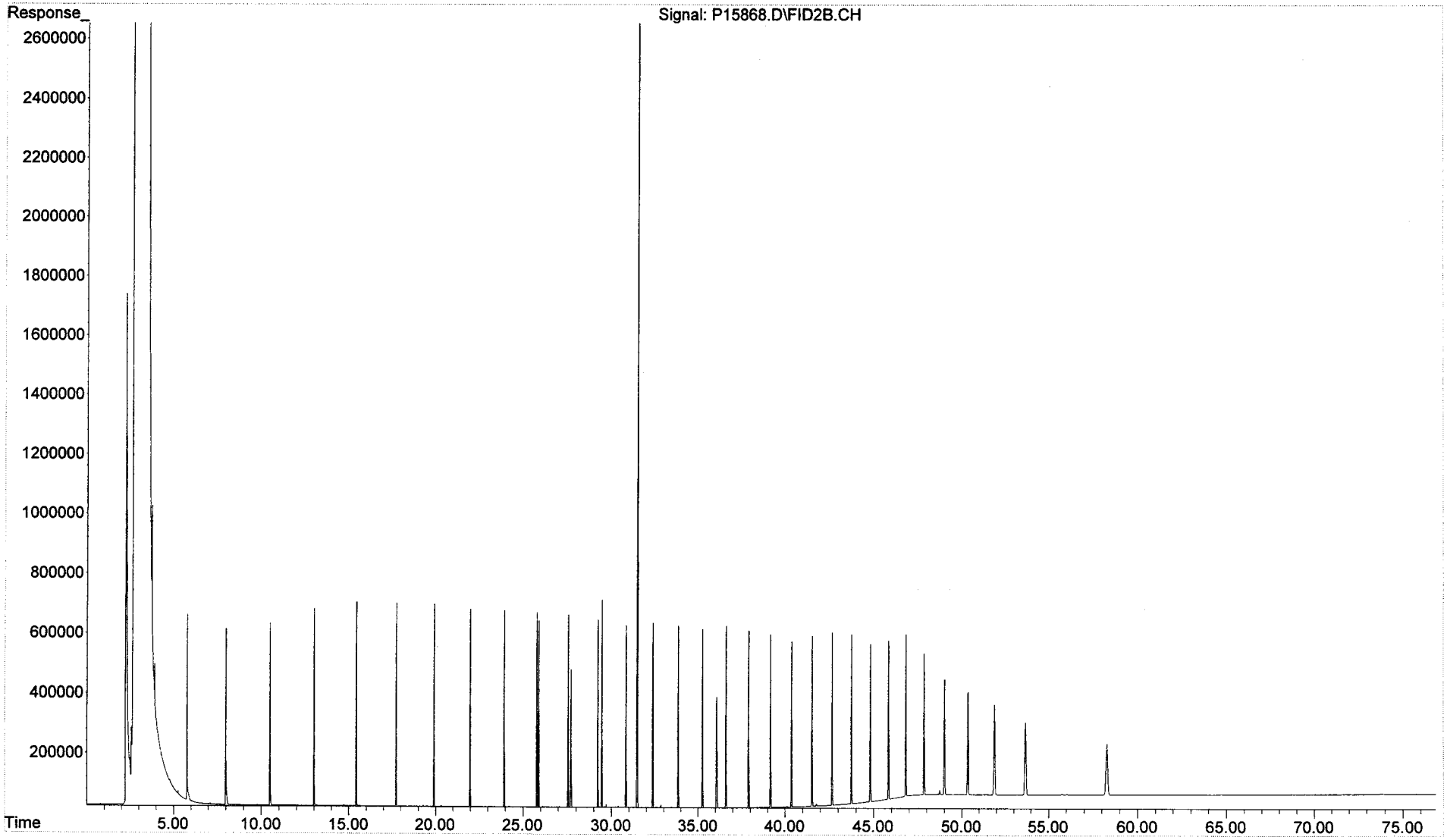
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15868.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 7:02 pm
Operator : AC
Sample : I1100502-AFID
Misc : WHAB30
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:13:37 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:07:37 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	58512810	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.47	12641342	9.966 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery =	19.93%#
24) s	d50-Tetracosane	36.08	10600586	9.339 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	18.68%#
	Target Compounds			
2) t	n-Octane (C8)	5.77f	9591339	9.752 ug/mLm
3) t	n-Nonane (C9)	8.00	10498459	9.810 ug/mL
4) t	n-Decane (C10)	10.49	10723181	9.826 ug/mLm
5) t	n-Undecane (C11)	13.00	10830002	9.859 ug/mLm
6) t	n-Dodecane (C12)	15.43	11057060	9.916 ug/mLm
7) t	n-Tridecane (C13)	17.74	11218029	9.969 ug/mLm
9) t	n-Tetradecane (C14)	19.92	11427634	10.015 ug/mLm
11) t	n-Pentadecane (C15)	21.98	11564851	10.029 ug/mL
12) t	n-Hexadecane (C16)	23.94	11678982	10.049 ug/mLm
14) t	n-Heptadecane (C17)	25.80	11824086	10.061 ug/mLm
15) t	Pristane	25.90	11330485	10.100 ug/mLm
16) t	n-Octadecane (C18)	27.56	11874715	10.093 ug/mL
17) t	Phytane	27.72	11821363	10.132 ug/mLm
18) t	n-Nonadecane (C19)	29.24	11812345	10.116 ug/mLm
20) t	n-Eicosane (C20)	30.85	11781964	10.126 ug/mLm
21) t	n-Heneicosane (C21)	32.38	12145610	10.118 ug/mL
22) t	n-Docosane (C22)	33.85f	12005057	0.950 ug/mLm
23) t	n-Tricosane (C23)	35.26	12085831	10.125 ug/mL
25) t	n-Tetracosane (C24)	36.61	12189791	10.092 ug/mLm
26) t	n-Pentacosane (C25)	37.92	12158420	9.975 ug/mLm
27) t	n-Hexacosane (C26)	39.17	12060114	10.142 ug/mLm
28) t	n-Heptacosane (C27)	40.38	12032957	10.155 ug/mLm
29) t	n-Octacosane (C28)	41.54	12196722	10.138 ug/mLm
30) t	n-Nonacosane (C29)	42.67	12473008	10.146 ug/mL
31) t	n-Triacontane (C30)	43.76	12252816	10.169 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	11869820	10.185 ug/mL
33) t	n-Dotriacontane (C32)	45.84	11960160	10.186 ug/mLm
34) t	n-Tritriacontane (C33)	46.83	12138837	10.236 ug/mLm
35) t	n-tetratriacontane (C34)	47.86	12298617	10.242 ug/mLm
36) t	n-Pentatriacontane (C35)	49.03	11832639	10.243 ug/mLm
37) t	n-Hexatriacontane (C36)	50.36	12132652	10.225 ug/mL
38) t	n-Heptatriacontane (C37)	51.90	12938023	10.174 ug/mL
39) t	n-Octatriacontane (C38)	53.69	12243108	10.251 ug/mLm
41) t	n-Tetracontane (C40)	58.30	12077082	10.248 ug/mL

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15868.D
Operator : AC
Acquired : 05 Oct 2005 7:02 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100502-AFID
Misc Info : WHAB30
Vial Number: 55



Quantitation Report (QT Reviewed)

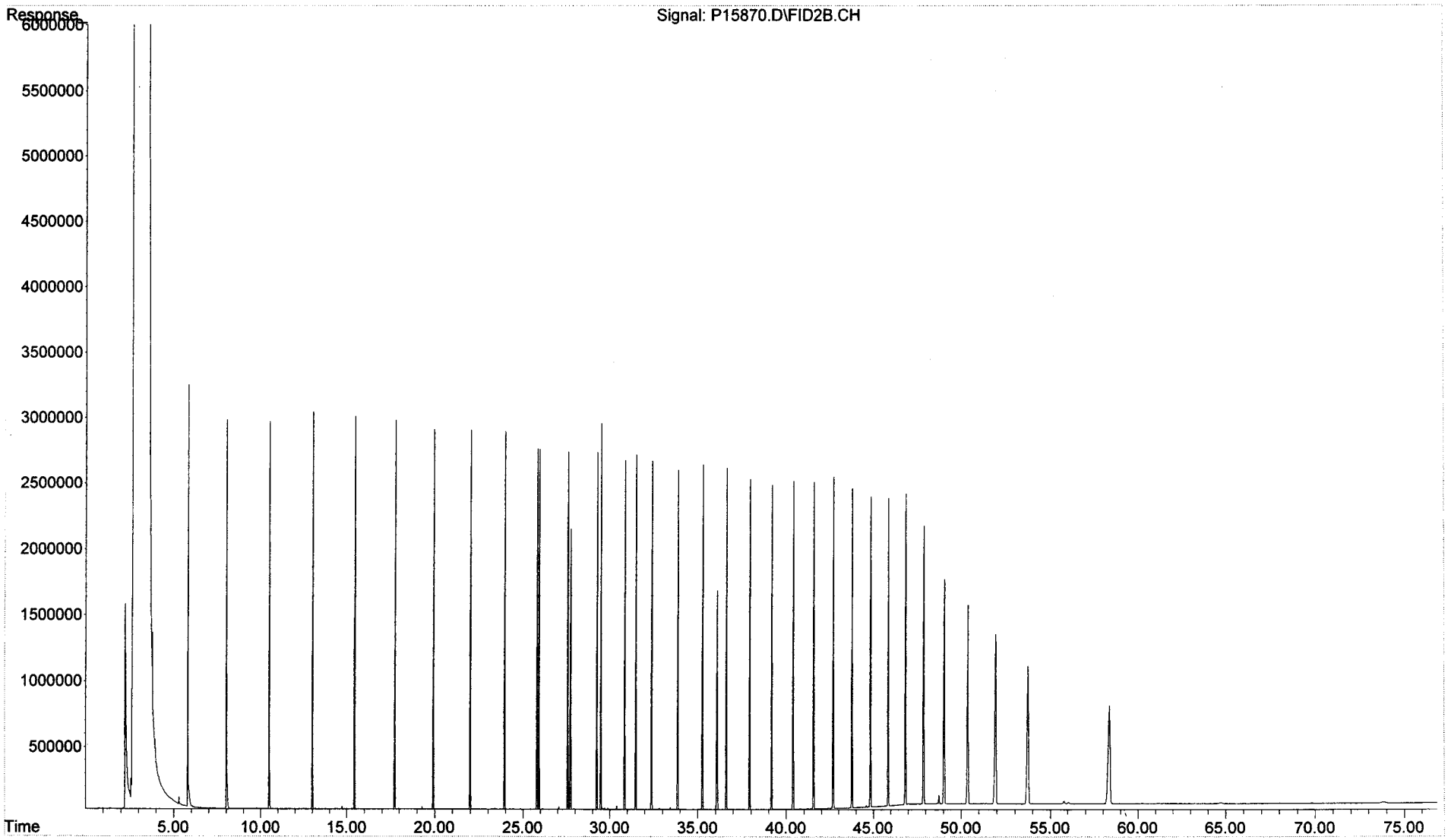
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15870.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 8:37 pm
Operator : AC
Sample : I1100503-AFID
Misc : WHAB31
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:18:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:15:17 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	59634355	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	62270271	48.155 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery =	96.31%
24) s	d50-Tetracosane	36.10	51941629	44.865 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	89.73%
	Target Compounds			
2) t	n-Octane (C8)	5.80	48029027	48.471 ug/mLm
3) t	n-Nonane (C9)	8.02	52246830	48.231 ug/mL
4) t	n-Decane (C10)	10.51	53586773	48.475 ug/mLm
5) t	n-Undecane (C11)	13.02	54155791	48.595 ug/mLm
6) t	n-Dodecane (C12)	15.45	55435782	48.969 ug/mL
7) t	n-Tridecane (C13)	17.76	56082608	49.037 ug/mLm
9) t	n-Tetradecane (C14)	19.94	56897814	49.039 ug/mL
11) t	n-Pentadecane (C15)	22.00	57257602	48.800 ug/mL
12) t	n-Hexadecane (C16)	23.96	57598544	48.675 ug/mL
14) t	n-Heptadecane (C17)	25.82	58193939	48.603 ug/mL
15) t	Pristane	25.93	55683946	48.723 ug/mL
16) t	n-Octadecane (C18)	27.58	58446412	48.754 ug/mL
17) t	Phytane	27.75	58043709	48.818 ug/mL
18) t	n-Nonadecane (C19)	29.27	58140407	48.834 ug/mL
20) t	n-Eicosane (C20)	30.87	57889024	48.802 ug/mL
21) t	n-Heneicosane (C21)	32.40	59789282	48.853 ug/mL
22) t	n-Docosane (C22)	33.87	58983404	48.789 ug/mL
23) t	n-Tricosane (C23)	35.28	59391641	48.802 ug/mL
25) t	n-Tetracosane (C24)	36.64	59836684	48.580 ug/mL
26) t	n-Pentacosane (C25)	37.94	59689553	48.016 ug/mL
27) t	n-Hexacosane (C26)	39.19	59206913	48.796 ug/mL
28) t	n-Heptacosane (C27)	40.40	59061691	48.850 ug/mL
29) t	n-Octacosane (C28)	41.57	59812490	48.701 ug/mLm
30) t	n-Nonacosane (C29)	42.70	61236479	48.800 ug/mL
31) t	n-Triacontane (C30)	43.79	60258513	48.989 ug/mL
32) t	n-Hentriacontane (C31)	44.84	58452135	49.127 ug/mL
33) t	n-Dotriacontane (C32)	45.86	58925133	49.130 ug/mLm
34) t	n-Tritriacontane (C33)	46.85	59891857	49.445 ug/mLm
35) t	n-tetratriacontane (C34)	47.89	60797520	49.497 ug/mL
36) t	n-Pentatriacontane (C35)	49.06	58493593	49.541 ug/mL
37) t	n-Hexatriacontane (C36)	50.40	59965402	49.393 ug/mL
38) t	n-Heptatriacontane (C37)	51.95	64168897	49.328 ug/mL
39) t	n-Octatriacontane (C38)	53.75	60781159	49.743 ug/mLm
41) t	n-Tetracontane (C40)	58.37	59895920	49.594 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15870.D
Operator : AC
Acquired : 05 Oct 2005 8:37 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100503-AFID
Misc Info : WHAB31
Vial Number: 56



Quantitation Report (QT Reviewed)

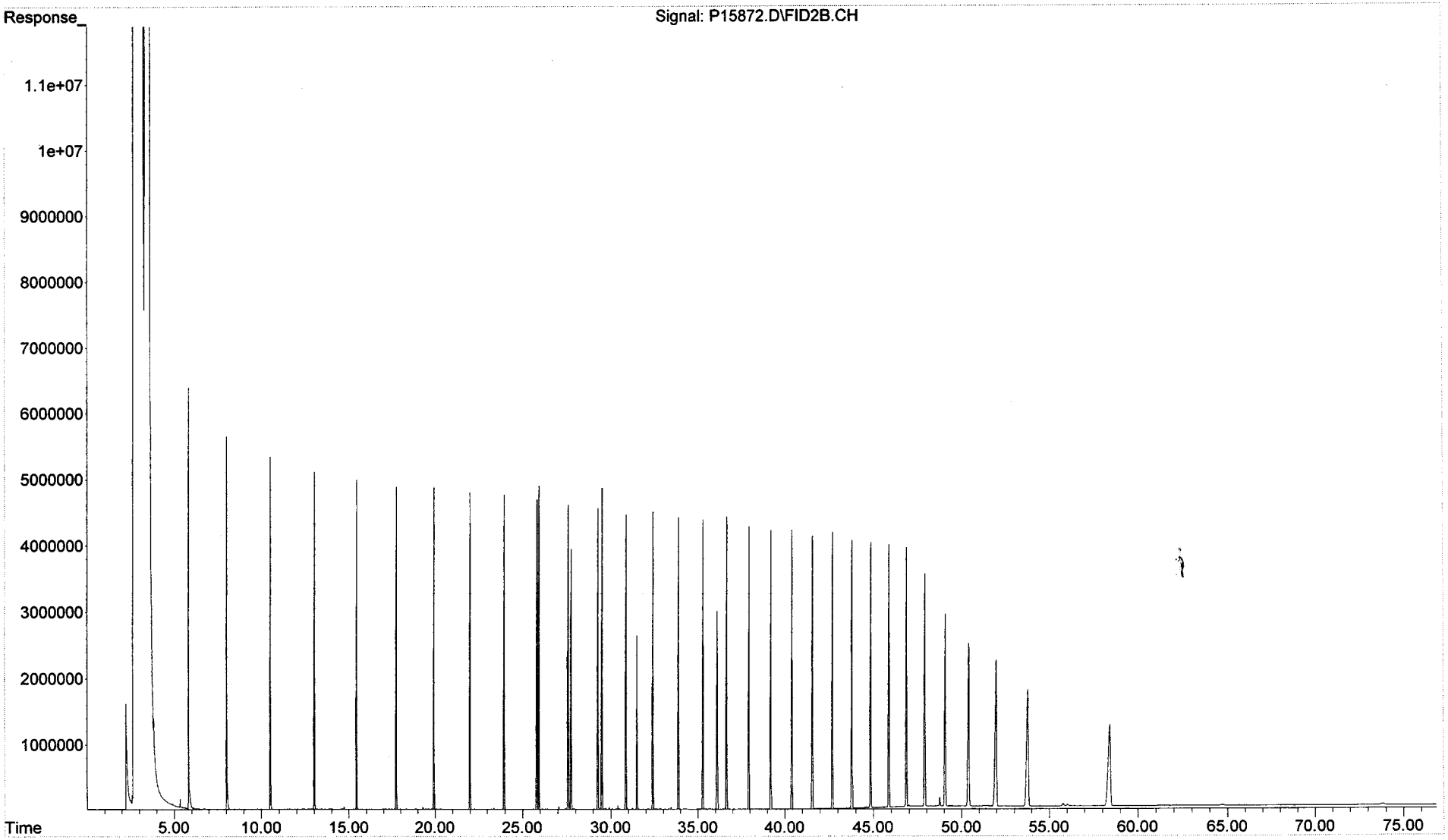
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15872.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 10:13 pm
Operator : AC
Sample : I1100504-AFID
Misc : WHAB32
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:23:58 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:18:21 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.51	59738614	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.52	123784026	95.563 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 191.13%#
24) s	d50-Tetracosane	36.11	102765324	88.576 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 177.15%#
	Target Compounds			
2) t	n-Octane (C8)	5.84	95213258	97.028 ug/mL
3) t	n-Nonane (C9)	8.05	102781405	95.337 ug/mLm
4) t	n-Decane (C10)	10.53	105828639	96.006 ug/mLm
5) t	n-Undecane (C11)	13.03	107262086	96.383 ug/mLm
6) t	n-Dodecane (C12)	15.46	109922584	97.125 ug/mLm
7) t	n-Tridecane (C13)	17.77	111269393	97.224 ug/mLm
9) t	n-Tetradecane (C14)	19.95	112957898	97.245 ug/mLm
11) t	n-Pentadecane (C15)	22.02	113904133	96.961 ug/mLm
12) t	n-Hexadecane (C16)	23.98	114781277	96.873 ug/mLm
14) t	n-Heptadecane (C17)	25.84	115955930	96.694 ug/mLm
15) t	Pristane	25.95	110888857	96.889 ug/mLm
16) t	n-Octadecane (C18)	27.60	116514868	97.015 ug/mLm
17) t	Phytane	27.77	115535600	97.017 ug/mLm
18) t	n-Nonadecane (C19)	29.29	115911503	97.174 ug/mLm
20) t	n-Eicosane (C20)	30.89	115449228	97.123 ug/mLm
21) t	n-Heneicosane (C21)	32.42	119222290	97.208 ug/mLm
22) t	n-Docosane (C22)	33.89	117660808	97.131 ug/mLm
23) t	n-Tricosane (C23)	35.30	118506145	97.186 ug/mLm
25) t	n-Tetracosane (C24)	36.66	119466359	96.808 ug/mL
26) t	n-Pentacosane (C25)	37.96	119085255	95.589 ug/mLm
27) t	n-Hexacosane (C26)	39.21	118092843	97.108 ug/mL
28) t	n-Heptacosane (C27)	40.42	117826940	97.244 ug/mL
29) t	n-Octacosane (C28)	41.59	119359729	96.965 ug/mLm
30) t	n-Nonacosane (C29)	42.72	122129756	97.088 ug/mL
31) t	n-Triacontane (C30)	43.81	120202182	97.473 ug/mL
32) t	n-Hentriacontane (C31)	44.86	116492164	97.639 ug/mL
33) t	n-Dotriacontane (C32)	45.89	117329937	97.516 ug/mLm
34) t	n-Tritriacontane (C33)	46.88	119115966	98.013 ug/mLm
35) t	n-tetratriacontane (C34)	47.92	120764189	97.896 ug/mLm
36) t	n-Pentatriacontane (C35)	49.09	116069115	97.894 ug/mLm
37) t	n-Hexatriacontane (C36)	50.44	118986963	97.518 ug/mLm
38) t	n-Heptatriacontane (C37)	51.99	127310647	97.338 ug/mLm
39) t	n-Octatriacontane (C38)	53.80	120446610	97.994 ug/mLm
41) t	n-Tetracontane (C40)	58.46	118679810	97.565 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15872.D
Operator : AC
Acquired : 05 Oct 2005 10:13 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100504-AFID
Misc Info : WHAB32
Vial Number: 57



Quantitation Report (QT Reviewed)

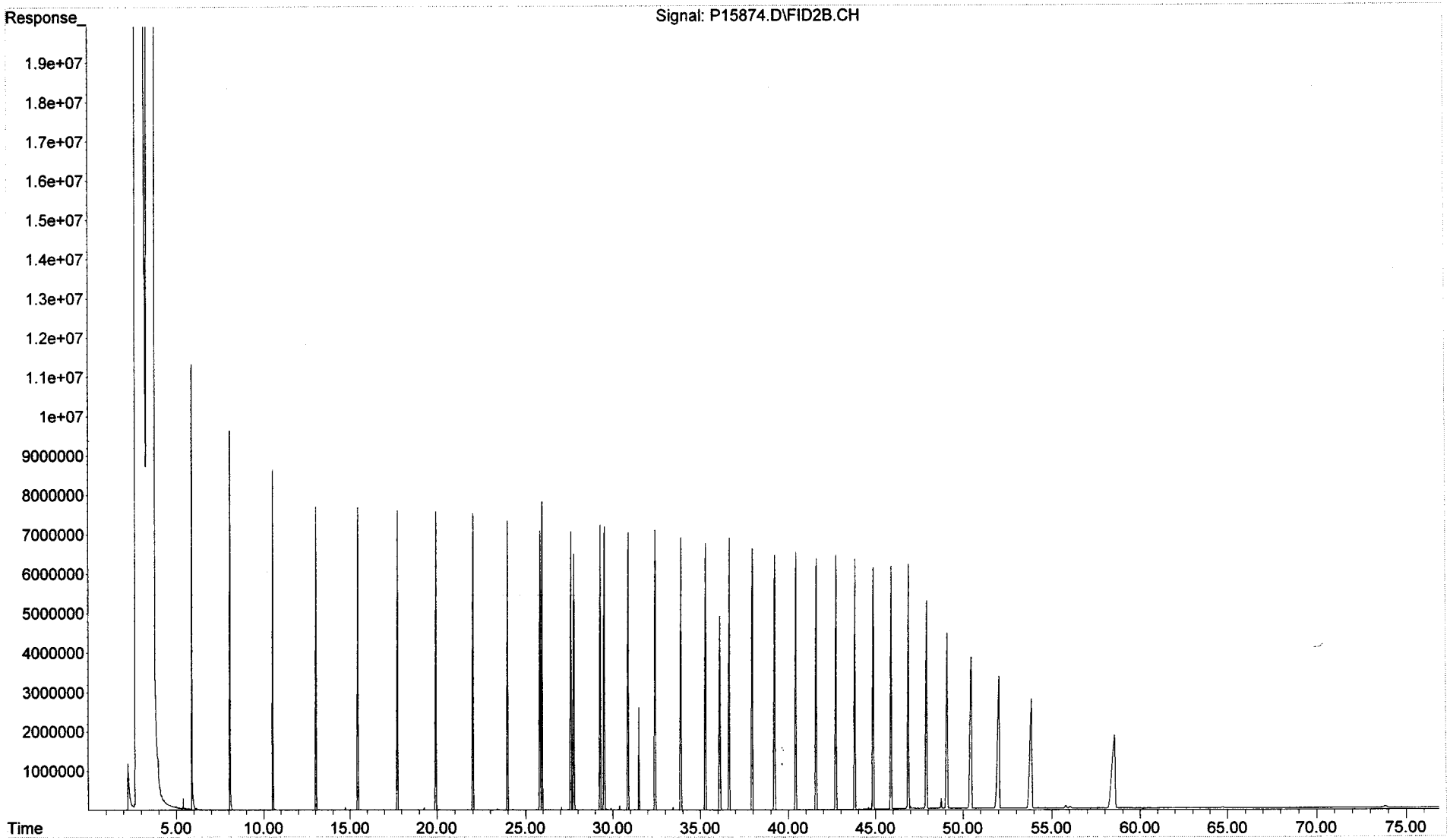
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15874.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 11:47 pm
Operator : AC
Sample : I1100505-AFID
Misc : WHAB33
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:27:28 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:24:19 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.51	58603173	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.55	241133077	189.819 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery	= 379.64%#
24) s	d50-Tetracosane	36.14	199264629	175.235 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery	= 350.47%#
	Target Compounds			
2) t	n-Octane (C8)	5.91f	188106199	193.077 ug/mLm
3) t	n-Nonane (C9)	8.09	202095631	190.139 ug/mLm
4) t	n-Decane (C10)	10.56	208061331	191.696 ug/mLm
5) t	n-Undecane (C11)	13.06	210776366	192.644 ug/mLm
6) t	n-Dodecane (C12)	15.49	215654778	193.955 ug/mLm
7) t	n-Tridecane (C13)	17.80	217880200	193.979 ug/mLm
9) t	n-Tetradecane (C14)	19.98	220715268	193.647 ug/mLm
11) t	n-Pentadecane (C15)	22.05	222156659	192.733 ug/mLm
12) t	n-Hexadecane (C16)	24.00	223476831	192.247 ug/mLm
14) t	n-Heptadecane (C17)	25.86	225671657	191.915 ug/mLm
15) t	Pristane	25.98	215367907	191.861 ug/mLm
16) t	n-Octadecane (C18)	27.63	226439101	192.251 ug/mL
17) t	Phytane	27.80	224131538	191.910 ug/mL
18) t	n-Nonadecane (C19)	29.32	224970843	192.413 ug/mL
20) t	n-Eicosane (C20)	30.92	223880202	192.088 ug/mL
21) t	n-Heneicosane (C21)	32.45	231304721	192.356 ug/mL
22) t	n-Docosane (C22)	33.92	228237623	18.041 ug/mL
23) t	n-Tricosane (C23)	35.33	229853494	192.197 ug/mL
25) t	n-Tetracosane (C24)	36.69	231618014	191.375 ug/mL
26) t	n-Pentacosane (C25)	37.99	230257861	188.520 ug/mL
27) t	n-Hexacosane (C26)	39.24	228835118	192.044 ug/mL
28) t	n-Heptacosane (C27)	40.45	228244100	192.224 ug/mL
29) t	n-Octacosane (C28)	41.62	231104479	191.673 ug/mLm
30) t	n-Nonacosane (C29)	42.75	236435398	191.874 ug/mL
31) t	n-Triacontane (C30)	43.84	232590130	192.562 ug/mL
32) t	n-Hentriacontane (C31)	44.90	225434305	192.958 ug/mL
33) t	n-Dotriacontane (C32)	45.92	226936670	192.745 ug/mL
34) t	n-Tritriacontane (C33)	46.91	230463854	193.762 ug/mLm
35) t	n-tetratriacontane (C34)	47.96	233629218	193.923 ug/mLm
36) t	n-Pentatriacontane (C35)	49.14	224668006	193.792 ug/mLm
37) t	n-Hexatriacontane (C36)	50.49	230449861	193.411 ug/mLm
38) t	n-Heptatriacontane (C37)	52.07f	246520015	192.968 ug/mLm
39) t	n-Octatriacontane (C38)	53.89f	233388724	194.475 ug/mLm
41) t	n-Tetracontane (C40)	58.57f	230023588	194.013 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15874.D
Operator : AC
Acquired : 05 Oct 2005 11:47 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100505-AFID
Misc Info : WHAB33
Vial Number: 58



Quantitation Report (QT Reviewed)

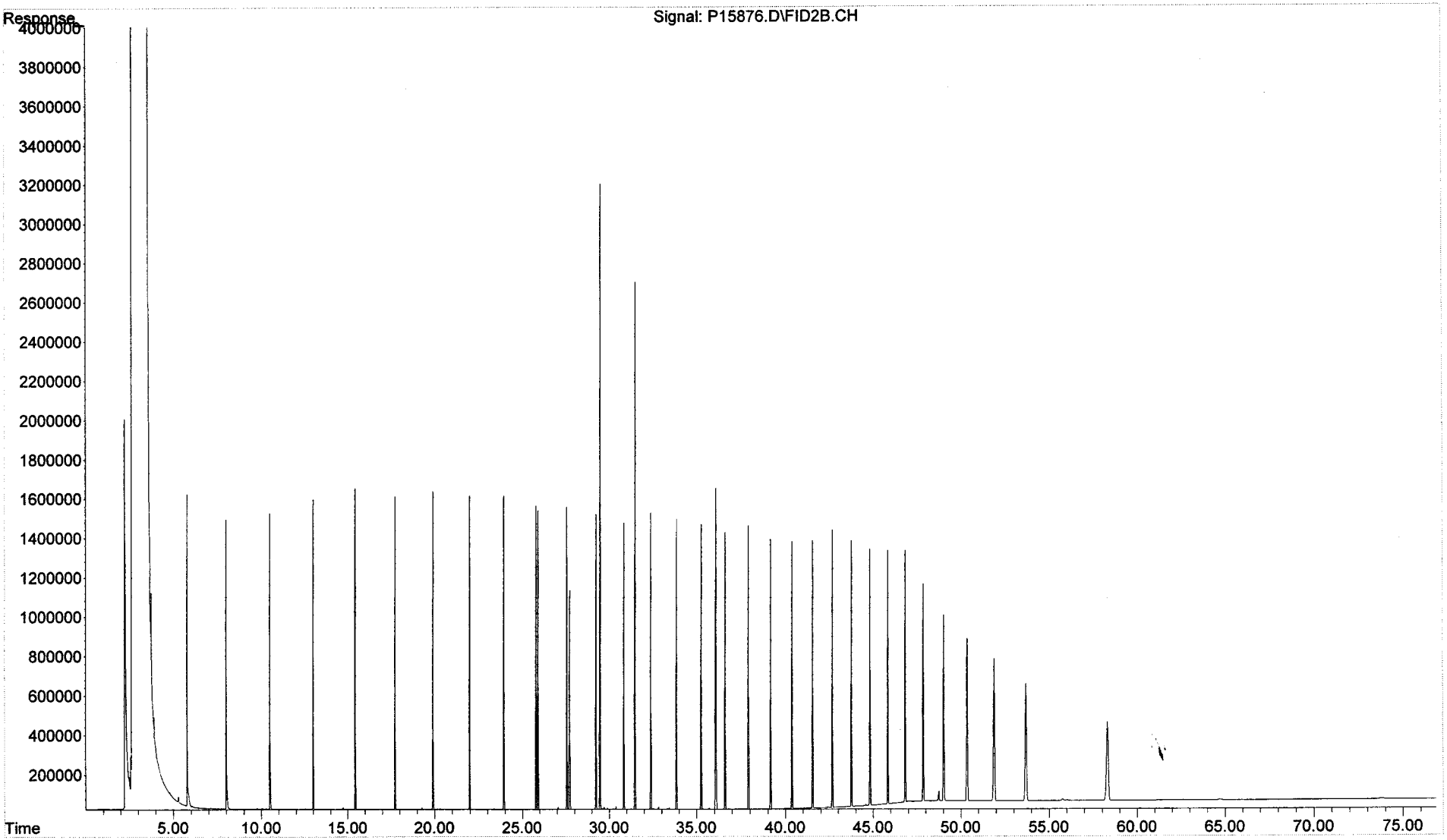
Data Path : C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\
Data File : P15876.D
Signal(s) : FID2B.CH
Acq On : 06 Oct 2005 1:20 am
Operator : AC
Sample : Q1100501-AFID
Misc : WHAB34
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 14 17:48:23 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	59317706	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	69329670	53.923 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	107.85%
24) s	d50-Tetracosane	36.09	51829846	44.978 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	89.96%
	Target Compounds			
2) t	n-Octane (C8)	5.79	23829230	24.916 ug/mL 99.7 %
3) t	n-Nonane (C9)	8.01	25967905	24.624 ug/mLm
4) t	n-Decane (C10)	10.50	26642537	24.643 ug/mLm
5) t	n-Undecane (C11)	13.01	26920944	24.591 ug/mLm
6) t	n-Dodecane (C12)	15.44	27543858	24.692 ug/mLm
7) t	n-Tridecane (C13)	17.74	27946438	24.729 ug/mLm
9) t	n-Tetradecane (C14)	19.92	28440857	24.766 ug/mLm
11) t	n-Pentadecane (C15)	21.99	28749024	24.727 ug/mLm
12) t	n-Hexadecane (C16)	23.94	29010740	24.720 ug/mLm
14) t	n-Heptadecane (C17)	25.80	29343979	24.696 ug/mLm
15) t	Pristane	25.91	28116497	24.769 ug/mLm
16) t	n-Octadecane (C18)	27.57	29501306	24.762 ug/mLm
17) t	Phytane	27.73	29343185	24.845 ug/mLm
18) t	n-Nonadecane (C19)	29.25	29361033	24.803 ug/mLm
20) t	n-Eicosane (C20)	30.85	29253994	24.785 ug/mLm
21) t	n-Heneicosane (C21)	32.39	30178589	24.777 ug/mLm
22) t	n-Docosane (C22)	33.86	29823066	24.795 ug/mLm
23) t	n-Tricosane (C23)	35.26	30040715	24.804 ug/mL
25) t	n-Tetracosane (C24)	36.62	30254682	24.679 ug/mLm
26) t	n-Pentacosane (C25)	37.92	30252551	24.453 ug/mLm 97.8 %
27) t	n-Hexacosane (C26)	39.17	29926696	24.768 ug/mLm
28) t	n-Heptacosane (C27)	40.38	29867556	24.809 ug/mLm
29) t	n-Octacosane (C28)	41.55	30257088	24.734 ug/mLm
30) t	n-Nonacosane (C29)	42.68	30946072	24.753 ug/mLm
31) t	n-Triacontane (C30)	43.77	30442466	24.833 ug/mL
32) t	n-Hentriacontane (C31)	44.82	29519658	24.886 ug/mL
33) t	n-Dotriacontane (C32)	45.84	29714031	24.831 ug/mLm
34) t	n-Tritriacontane (C33)	46.84	30199051	24.971 ug/mLm
35) t	n-tetratriacontane (C34)	47.87	30588393	24.900 ug/mLm
36) t	n-Pentatriacontane (C35)	49.04	29447904	24.921 ug/mLm
37) t	n-Hexatriacontane (C36)	50.37	30202985	24.813 ug/mLm
38) t	n-Heptatriacontane (C37)	51.91	32061859	24.544 ug/mLm
39) t	n-Octatriacontane (C38)	53.71	30583922	24.897 ug/mL
41) t	n-Tetracontane (C40)	58.31	30158389	24.748 ug/mL

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15876.D
Operator : AC
Acquired : 06 Oct 2005 1:20 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: Q1100501-AFID
Misc Info : WHAB34
Vial Number: 59



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15862.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 1:38 pm
Operator : AC
Sample : TO101705AWS01
Misc : !X WHAB40
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.51	61467439	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.50	77058252	57.838 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery	= 115.68%
24) s	d50-Tetracosane	36.11	65286454	54.674 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery	= 109.35%
	Target Compounds			
2) t	n-Octane (C8)	5.77	31610910	31.896 ug/mLm
3) t	n-Nonane (C9)	8.00	28798050	26.353 ug/mL — RF 2nd cc 10/18/05
4) t	n-Decane (C10)	10.50	28790402	25.698 ug/mLm
5) t	n-Undecane (C11)	13.01	27885870	24.582 ug/mLm
6) t	n-Dodecane (C12)	15.44	26532784	22.954 ug/mLm
7) t	n-Tridecane (C13)	17.75	27674278	23.632 ug/mLm
8) t	1380	19.42	6968228	5.856 ug/mL
9) t	n-Tetradecane (C14)	19.93	24867330	20.897 ug/mLm
10) t	1470	21.21	9432308	7.829 ug/mLm
11) t	n-Pentadecane (C15)	21.99	26467136	21.969 ug/mLm
12) t	n-Hexadecane (C16)	23.95	22947096	18.869 ug/mLm
13) t	1650	24.85	6837175	5.553 ug/mLm
14) t	n-Heptadecane (C17)	25.80	19606240	15.924 ug/mLm
15) t	Pristane	25.90	15123887	12.857 ug/mLm
16) t	n-Octadecane (C18)	27.57	17767739	14.392 ug/mLm
17) t	Phytane	27.73	12372781	10.110 ug/mLm
18) t	n-Nonadecane (C19)	29.25	18045978	14.711 ug/mLm
20) t	n-Eicosane (C20)	30.86	17910248	14.643 ug/mLm
21) t	n-Heneicosane (C21)	32.39	17175084	13.608 ug/mLm
22) t	n-Docosane (C22)	33.86	15579762	12.500 ug/mL
23) t	n-Tricosane (C23)	35.27	14062637	11.205 ug/mLm
25) t	n-Tetracosane (C24)	36.62	13687084	10.774 ug/mLm
26) t	n-Pentacosane (C25)	37.92	13503614	10.533 ug/mLm
27) t	n-Hexacosane (C26)	39.17	11280982	9.010 ug/mLm
28) t	n-Heptacosane (C27)	40.38	8995736	7.211 ug/mLm
29) t	n-Octacosane (C28)	41.55	6356096	5.014 ug/mLm
30) t	n-Nonacosane (C29)	42.67	6732194	5.197 ug/mLm
31) t	n-Triacontane (C30)	43.76	4936578	3.886 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	4704885	3.828 ug/mLm
33) t	n-Dotriacontane (C32)	45.84	3091860	2.493 ug/mLm
34) t	n-Tritriacontane (C33)	46.83	2589140	2.066 ug/mLm
35) t	n-tetratriacontane (C34)	47.86	2242026	1.761 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	2610459	2.132 ug/mLm
37) t	n-Hexatriacontane (C36)	50.36	1615213	1.281 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15862.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 1:38 pm
Operator : AC
Sample : TO101705AWS01
Misc : !X WHAB40
ALS Vial : 52 Sample Multiplier: 1

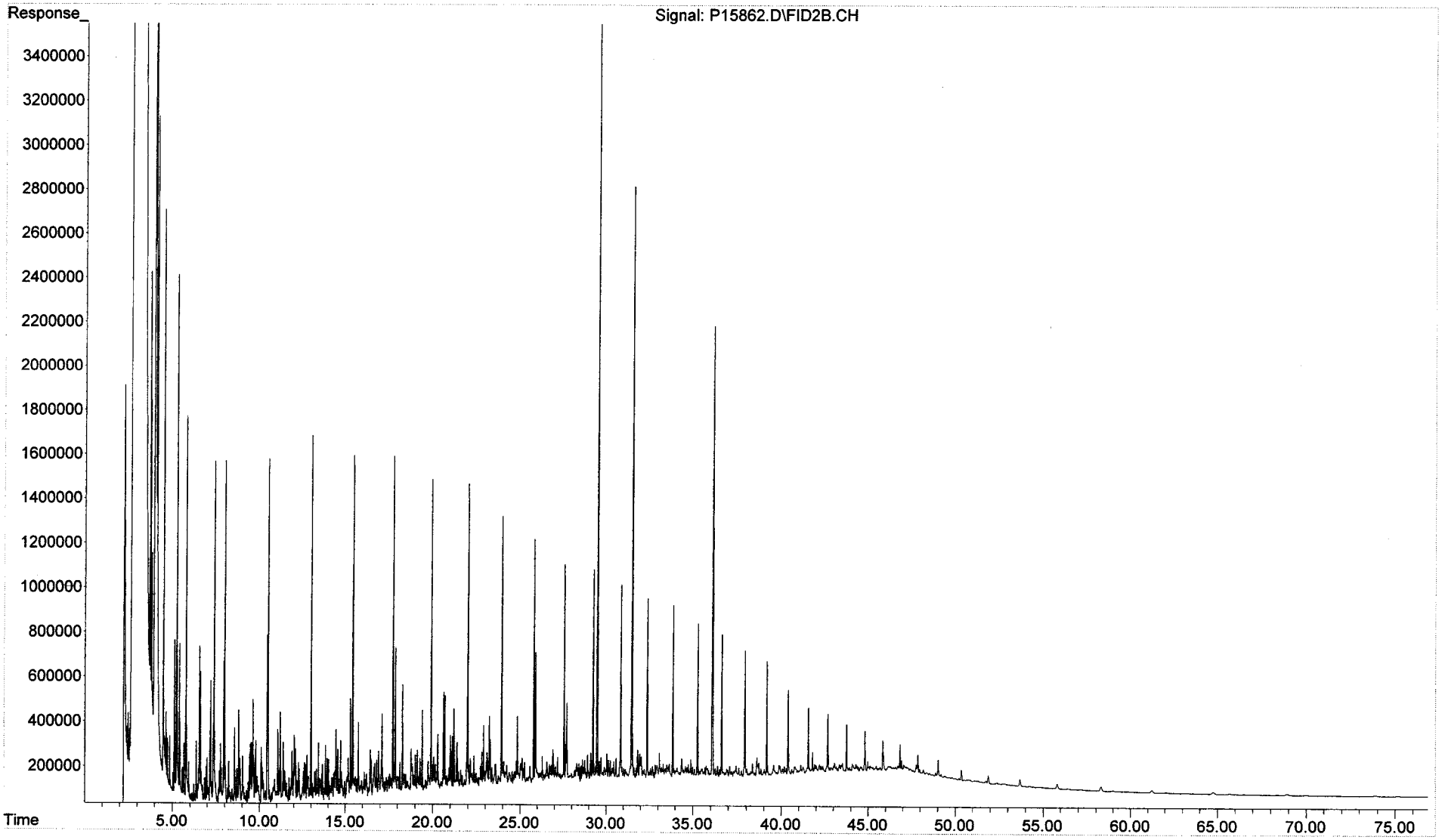
Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.90	1628785	1.203	ug/mLm
39)	t	n-Octatriacontane (C38)	53.70	1695478	1.332	ug/mLm
40)	t	n-Nonatriacontane (C39)	55.80	1205165	0.954	ug/mLm
41)	t	n-Tetracontane (C40)	58.29	1268324	1.004	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.94	5151183122	4184.811	ug/mL
44)	h	Total Resolved Hydrocarbon	37.93	1623832280	1319.198	ug/L

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

File :C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\P15862.D
Operator : AC
Acquired : 05 Oct 2005 1:38 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TO101705AWS01
Misc Info : !X WHAB40
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C1011701**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.02	4.0	25
n-Decane (C10)	50.00	47.83	4.3	25
n-Undecane (C11)	50.00	47.65	4.7	25
n-Dodecane (C12)	50.00	48.35	3.3	25
n-Tridecane (C13)	50.00	48.38	3.2	25
n-Tetradecane (C14)	50.00	48.58	2.8	25
n-Pentadecane (C15)	50.00	48.52	3.0	25
n-Hexadecane (C16)	50.00	48.50	3.0	25
n-Heptadecane (C17)	50.00	48.71	2.6	25
Pristane	50.00	48.83	2.3	25
n-Octadecane (C18)	50.00	48.89	2.2	25
Phytane	50.00	49.24	1.5	25
n-Nonadecane (C19)	50.00	49.07	1.9	25
n-Eicosane (C20)	50.00	49.46	1.1	25
n-Heneicosane (C21)	50.00	49.09	1.8	25
n-Docosane (C22)	50.00	47.89	4.2	25
n-Tricosane (C23)	50.00	49.26	1.5	25
n-Tetracosane (C24)	50.00	48.52	3.0	25
n-Pentacosane (C25)	50.00	48.37	3.3	25
n-Hexacosane (C26)	50.00	49.91	0.2	25
n-Heptacosane (C27)	50.00	49.51	1.0	25
n-Octacosane (C28)	50.00	49.41	1.2	25
n-Nonacosane (C29)	50.00	49.36	1.3	25
n-Triacontane (C30)	50.00	49.50	1.0	25
n-Hentriacontane (C31)	50.00	51.89	3.8	25
n-Dotriacontane (C32)	50.00	49.42	1.2	25
n-Tritriacontane (C33)	50.00	50.00	0.0	25
n-Tetratriacontane (C34)	50.00	49.74	0.5	25
n-Pentatriacontane (C35)	50.00	49.87	0.3	25
n-Hexatriacontane (C36)	50.00	49.71	0.6	25
n-Heptatriacontane (C37)	50.00	47.68	4.6	25
n-Octatriacontane (C38)	50.00	49.62	0.8	25
n-Tetracontane (C40)	50.00	49.91	0.2	25
ortho-Terphenyl	50.00	48.69	2.6	25
d50-Tetracosane	50.00	45.65	8.7	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.04

N/A - Not Applicable

01/20/06 13:01

Quantitation Report (QT Reviewed)

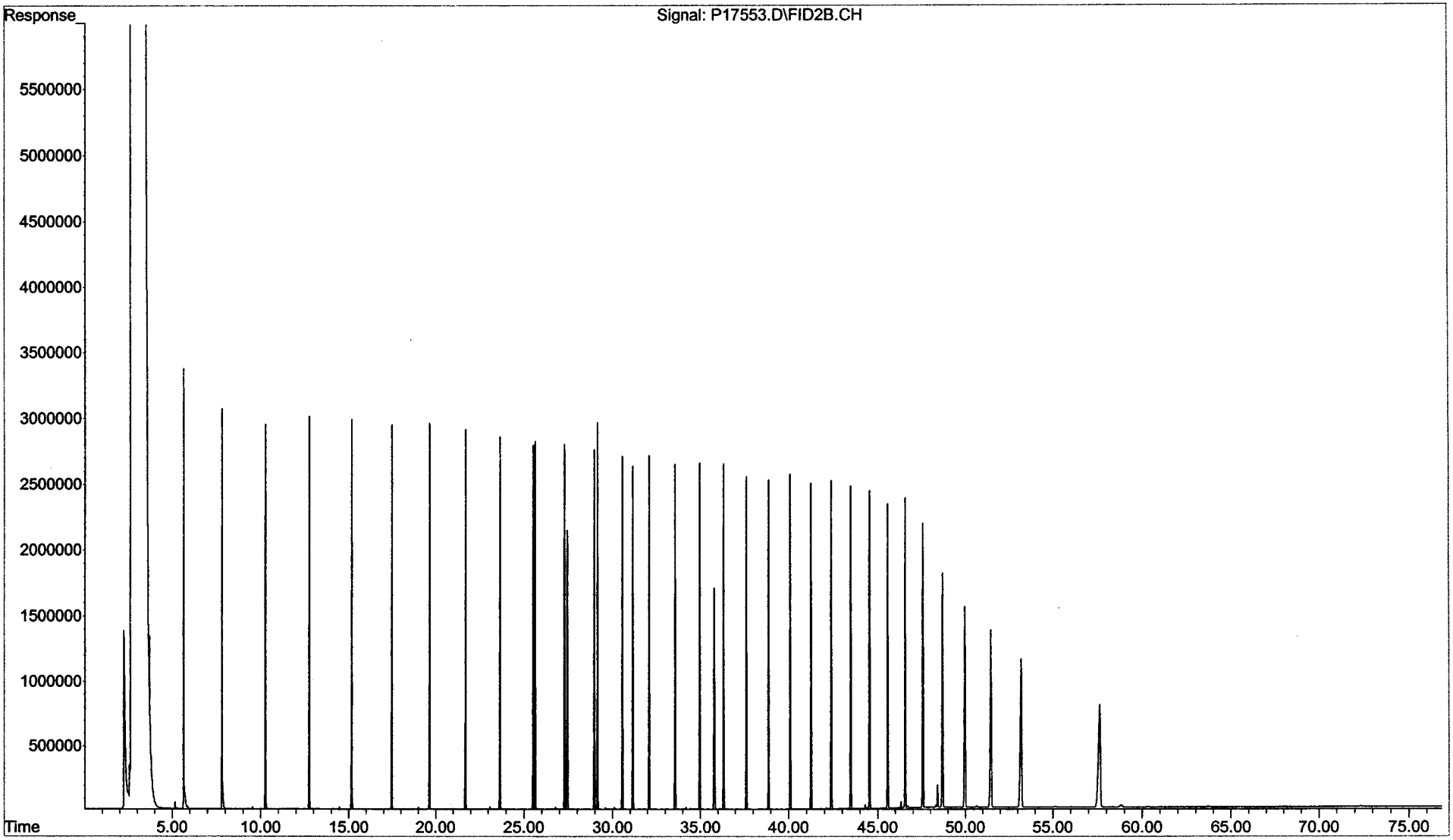
Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17553.D
Signal(s) : FID2B.CH
Acq On : 17 Jan 2006 1:25 pm
Operator : NLJr
Sample : C1011701-AFID
Misc : ALK STD
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 10:08:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.16	59432159	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.15	62718064	48.686 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 97.37%
24) s	d50-Tetracosane	35.79	52710736	45.654 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.31%
Target Compounds				
2) t	n-Octane (C8)	5.64	47000248	49.049 ug/mL
3) t	n-Nonane (C9)	7.81	50736504	48.018 ug/mL
4) t	n-Decane (C10)	10.26	51806079	47.826 ug/mLm
5) t	n-Undecane (C11)	12.76	52263833	47.649 ug/mL
6) t	n-Dodecane (C12)	15.17	54033295	48.346 ug/mL
7) t	n-Tridecane (C13)	17.47	54778095	48.378 ug/mL
9) t	n-Tetradecane (C14)	19.65	55893582	48.578 ug/mL
11) t	n-Pentadecane (C15)	21.71	56514374	48.515 ug/mL
12) t	n-Hexadecane (C16)	23.66	57026284	48.498 ug/mL
14) t	n-Heptadecane (C17)	25.52	57993791	48.715 ug/mL
15) t	Pristane	25.63	55534478	48.829 ug/mL
16) t	n-Octadecane (C18)	27.28	58355145	48.887 ug/mL
17) t	Phytane	27.45	58269739	49.243 ug/mL
18) t	n-Nonadecane (C19)	28.96	58198294	49.068 ug/mLm
20) t	n-Eicosane (C20)	30.56	58492403	49.461 ug/mL
21) t	n-Heneicosane (C21)	32.10	59903339	49.087 ug/mL
22) t	n-Docosane (C22)	33.57	57707561	47.886 ug/mL
23) t	n-Tricosane (C23)	34.98	59770988	49.257 ug/mL
25) t	n-Tetracosane (C24)	36.33	59595664	48.519 ug/mL
26) t	n-Pentacosane (C25)	37.63	59955221	48.369 ug/mLm
27) t	n-Hexacosane (C26)	38.89	60427063	49.915 ug/mL
28) t	n-Heptacosane (C27)	40.10	59717711	49.509 ug/mL
29) t	n-Octacosane (C28)	41.27	60558671	49.410 ug/mL
30) t	n-Nonacosane (C29)	42.40	61834060	49.364 ug/mL
31) t	n-Triacontane (C30)	43.49	60793845	49.495 ug/mL
32) t	n-Hentriacontane (C31)	44.54	61672624	51.892 ug/mL
33) t	n-Dotriacontane (C32)	45.57	59254811	49.423 ug/mL
34) t	n-Tritriacontane (C33)	46.56	60580635	49.997 ug/mL
35) t	n-tetratriacontane (C34)	47.57	61226809	49.744 ug/mLm
36) t	n-Pentatriacontane (C35)	48.70	59041458	49.869 ug/mLm
37) t	n-Hexatriacontane (C36)	49.98	60625246	49.711 ug/mLm
38) t	n-Heptatriacontane (C37)	51.47	62405395	47.681 ug/mL
39) t	n-Octatriacontane (C38)	53.20	61072277	49.620 ug/mL
41) t	n-Tetracontane (C40)	57.63	60938973	49.911 ug/mL

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17553.D
Operator : NLJr
Acquired : 17 Jan 2006 1:25 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1011701-AFID
Misc Info : ALK STD
Vial Number: 53



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **C1011702**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	47.99	4.0	25
n-Decane (C10)	50.00	47.80	4.4	25
n-Undecane (C11)	50.00	47.58	4.8	25
n-Dodecane (C12)	50.00	48.19	3.6	25
n-Tridecane (C13)	50.00	48.22	3.6	25
n-Tetradecane (C14)	50.00	48.48	3.0	25
n-Pentadecane (C15)	50.00	48.44	3.1	25
n-Hexadecane (C16)	50.00	48.48	3.0	25
n-Heptadecane (C17)	50.00	48.71	2.6	25
Pristane	50.00	48.83	2.3	25
n-Octadecane (C18)	50.00	48.93	2.1	25
Phytane	50.00	49.28	1.4	25
n-Nonadecane (C19)	50.00	49.16	1.7	25
n-Eicosane (C20)	50.00	49.60	0.8	25
n-Heneicosane (C21)	50.00	49.27	1.5	25
n-Docosane (C22)	50.00	50.23	0.5	25
n-Tricosane (C23)	50.00	49.50	1.0	25
n-Tetracosane (C24)	50.00	48.82	2.4	25
n-Pentacosane (C25)	50.00	48.71	2.6	25
n-Hexacosane (C26)	50.00	50.27	0.5	25
n-Heptacosane (C27)	50.00	49.85	0.3	25
n-Octacosane (C28)	50.00	49.84	0.3	25
n-Nonacosane (C29)	50.00	49.76	0.5	25
n-Triacontane (C30)	50.00	49.95	0.1	25
n-Hentriacontane (C31)	50.00	52.35	4.7	25
n-Dotriacontane (C32)	50.00	49.88	0.2	25
n-Tritriacontane (C33)	50.00	50.59	1.2	25
n-Tetratriacontane (C34)	50.00	50.24	0.5	25
n-Pentatriacontane (C35)	50.00	50.86	1.7	25
n-Hexatriacontane (C36)	50.00	50.27	0.5	25
n-Heptatriacontane (C37)	50.00	48.19	3.6	25
n-Octatriacontane (C38)	50.00	50.23	0.5	25
n-Tetracontane (C40)	50.00	50.84	1.7	25
ortho-Terphenyl	50.00	48.62	2.8	25
d50-Tetracosane	50.00	45.92	8.2	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.05

N/A - Not Applicable

01/20/06 13:01

Quantitation Report (QT Reviewed)

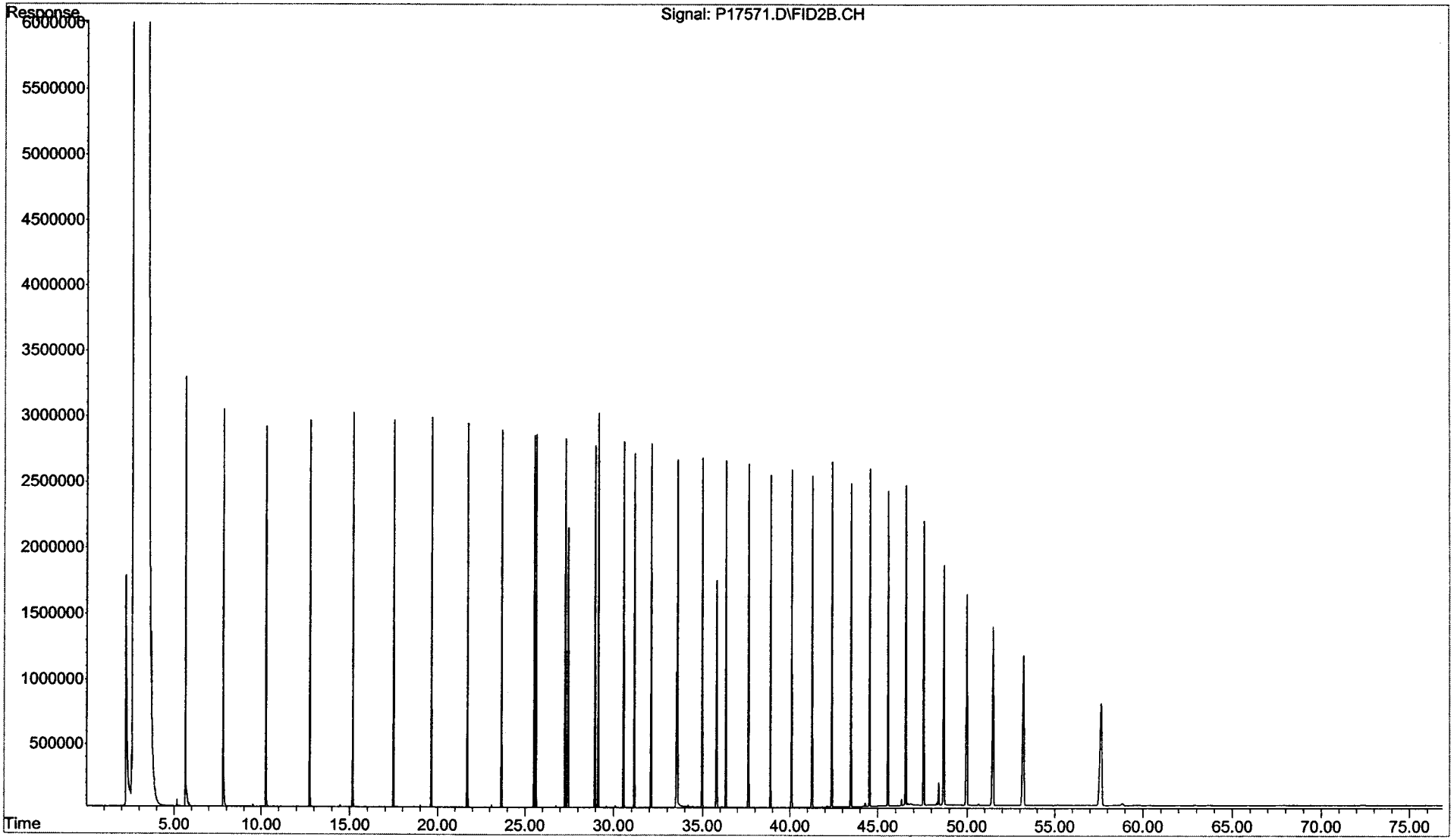
Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17571.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 3:54 am
Operator : NLJr
Sample : C1011702-AFID
Misc : ALK STD
ALS Vial : 62 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 10:14:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	60139169	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	63378877	48.621 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	97.24%
24) s d50-Tetracosane	35.80	53643413	45.916 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.83%
Target Compounds			
2) t n-Octane (C8)	5.64	47084620	48.559 ug/mL
3) t n-Nonane (C9)	7.81	51308158	47.989 ug/mL
4) t n-Decane (C10)	10.26	52393403	47.800 ug/mLm
5) t n-Undecane (C11)	12.76	52806503	47.577 ug/mL
6) t n-Dodecane (C12)	15.17	54493837	48.185 ug/mL
7) t n-Tridecane (C13)	17.47	55249840	48.221 ug/mL
9) t n-Tetradecane (C14)	19.65	56440897	48.477 ug/mLm
11) t n-Pentadecane (C15)	21.71	57103801	48.445 ug/mL
12) t n-Hexadecane (C16)	23.67	57680143	48.478 ug/mL
14) t n-Heptadecane (C17)	25.52	58675884	48.708 ug/mL
15) t Pristane	25.63	56195086	48.829 ug/mL
16) t n-Octadecane (C18)	27.29	59098200	48.928 ug/mLm
17) t Phytane	27.45	59010944	49.283 ug/mLm
18) t n-Nonadecane (C19)	28.97	58996838	49.157 ug/mLm
20) t n-Eicosane (C20)	30.57	59353905	49.600 ug/mL
21) t n-Heneicosane (C21)	32.10	60839486	49.268 ug/mL
22) t n-Docosane (C22)	33.57	61250349	50.228 ug/mLm
23) t n-Tricosane (C23)	34.98	60779863	49.499 ug/mLm
25) t n-Tetracosane (C24)	36.34	60677151	48.818 ug/mL
26) t n-Pentacosane (C25)	37.64	61098502	48.712 ug/mL
27) t n-Hexacosane (C26)	38.89	61578484	50.268 ug/mL
28) t n-Heptacosane (C27)	40.10	60849464	49.854 ug/mL
29) t n-Octacosane (C28)	41.27	61810389	49.838 ug/mL
30) t n-Nonacosane (C29)	42.40	63070775	49.759 ug/mL
31) t n-Triacontane (C30)	43.49	62081411	49.950 ug/mL
32) t n-Hentriacontane (C31)	44.55	62961033	52.353 ug/mL
33) t n-Dotriacontane (C32)	45.57	60518428	49.883 ug/mLm
34) t n-Tritriacontane (C33)	46.57	62033385	50.594 ug/mLm
35) t n-tetratriacontane (C34)	47.58	62570872	50.238 ug/mLm
36) t n-Pentatriacontane (C35)	48.70	60925458	50.856 ug/mLm
37) t n-Hexatriacontane (C36)	49.99	62039300	50.272 ug/mL
38) t n-Heptatriacontane (C37)	51.48	63818556	48.187 ug/mL
39) t n-Octatriacontane (C38)	53.21	62558990	50.230 ug/mL
41) t n-Tetracontane (C40)	57.64	62817248	50.844 ug/mL

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17571.D
Operator : NLJr
Acquired : 18 Jan 2006 3:54 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1011702-AFID
Misc Info : ALK STD
Vial Number: 62



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601019**
Lab ID: **C1011702A**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	46.59	6.8	25
n-Decane (C10)	50.00	46.83	6.3	25
n-Undecane (C11)	50.00	46.72	6.6	25
n-Dodecane (C12)	50.00	47.40	5.2	25
n-Tridecane (C13)	50.00	47.62	4.8	25
n-Tetradecane (C14)	50.00	48.03	3.9	25
n-Pentadecane (C15)	50.00	48.13	3.7	25
n-Hexadecane (C16)	50.00	48.24	3.5	25
n-Heptadecane (C17)	50.00	48.56	2.9	25
Pristane	50.00	48.69	2.6	25
n-Octadecane (C18)	50.00	48.84	2.3	25
Phytane	50.00	49.24	1.5	25
n-Nonadecane (C19)	50.00	49.10	1.8	25
n-Eicosane (C20)	50.00	49.58	0.8	25
n-Heneicosane (C21)	50.00	49.27	1.5	25
n-Docosane (C22)	50.00	49.79	0.4	25
n-Tricosane (C23)	50.00	49.59	0.8	25
n-Tetracosane (C24)	50.00	48.94	2.1	25
n-Pentacosane (C25)	50.00	48.78	2.4	25
n-Hexacosane (C26)	50.00	50.37	0.7	25
n-Heptacosane (C27)	50.00	50.00	0.0	25
n-Octacosane (C28)	50.00	49.97	0.1	25
n-Nonacosane (C29)	50.00	49.91	0.2	25
n-Triacontane (C30)	50.00	50.09	0.2	25
n-Hentriacontane (C31)	50.00	52.55	5.1	25
n-Dotriacontane (C32)	50.00	50.01	0.0	25
n-Tritriacontane (C33)	50.00	50.84	1.7	25
n-Tetratriacontane (C34)	50.00	50.39	0.8	25
n-Pentatriacontane (C35)	50.00	50.61	1.2	25
n-Hexatriacontane (C36)	50.00	50.57	1.1	25
n-Heptatriacontane (C37)	50.00	48.51	3.0	25
n-Octatriacontane (C38)	50.00	50.61	1.2	25
n-Tetracontane (C40)	50.00	51.30	2.6	25
ortho-Terphenyl	50.00	48.55	2.9	25
d50-Tetracosane	50.00	46.13	7.7	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.05

N/A - Not Applicable

01/20/06 13:02

Quantitation Report (QT Reviewed)

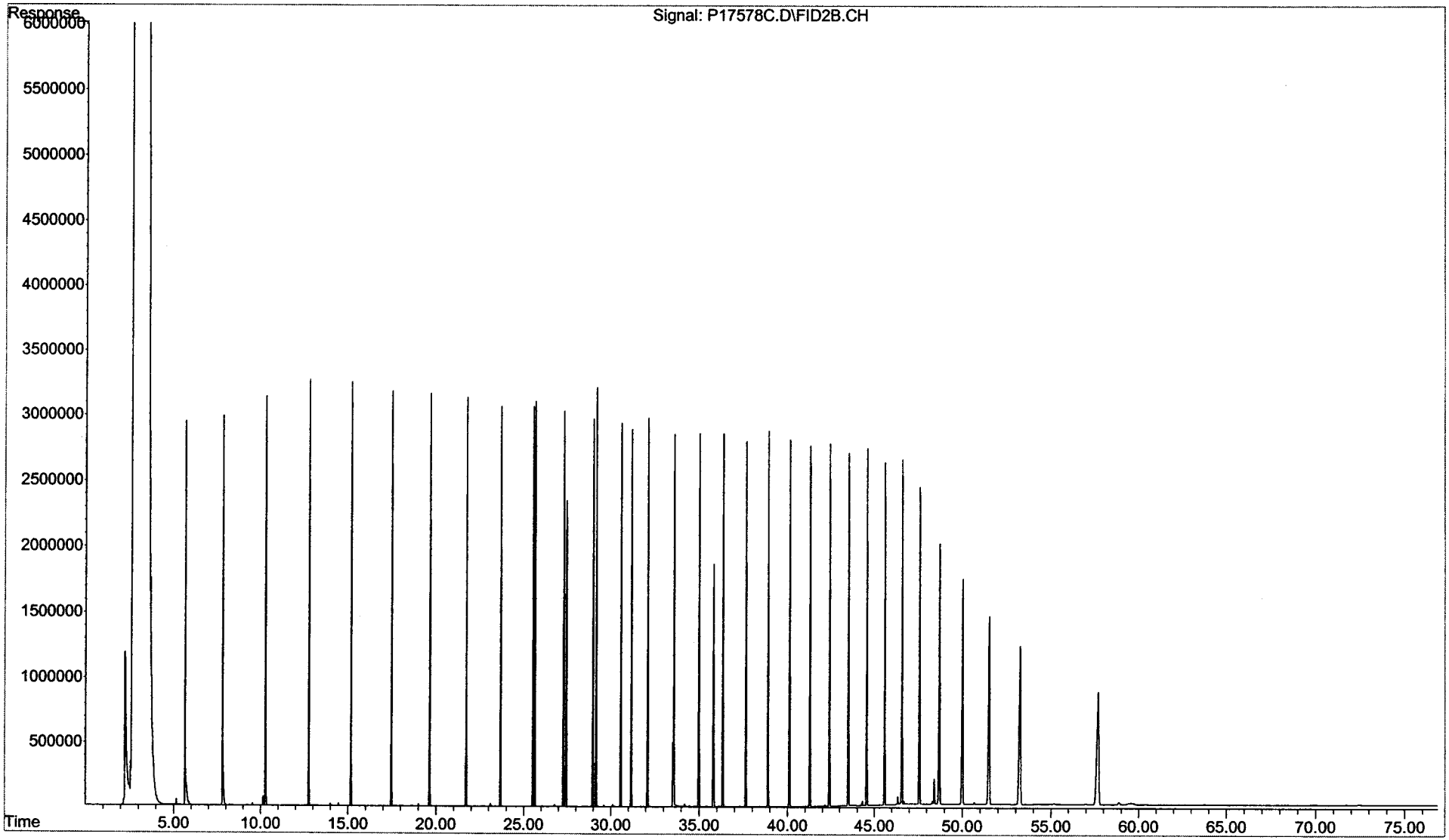
Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17578C.D
Signal(s) : FID2B.CH
Acq On : 18 Jan 2006 6:27 pm
Operator : NLJr
Sample : C1011702A-AFID
Misc : ALK STD
ALS Vial : 100 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 10:24:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.18	65935994	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.16	69383022	48.547 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	97.09%
24) s	d50-Tetracosane	35.81	59089128	46.131 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	92.26%
Target Compounds				
2) t	n-Octane (C8)	5.63	48648095	45.761 ug/mL
3) t	n-Nonane (C9)	7.81	54612945	46.589 ug/mL
4) t	n-Decane (C10)	10.26	56281938	46.833 ug/mLm
5) t	n-Undecane (C11)	12.76	56850192	46.718 ug/mL
6) t	n-Dodecane (C12)	15.18	58776334	47.403 ug/mL
7) t	n-Tridecane (C13)	17.48	59824035	47.623 ug/mL
9) t	n-Tetradecane (C14)	19.66	61306942	48.027 ug/mL
11) t	n-Pentadecane (C15)	21.72	62200497	48.129 ug/mL
12) t	n-Hexadecane (C16)	23.67	62933839	48.243 ug/mL
14) t	n-Heptadecane (C17)	25.53	64130658	48.556 ug/mL
15) t	Pristane	25.64	61434566	48.688 ug/mL
16) t	n-Octadecane (C18)	27.29	64678737	48.840 ug/mL
17) t	Phytane	27.46	64647364	49.244 ug/mL
18) t	n-Nonadecane (C19)	28.98	64614498	49.104 ug/mLm
20) t	n-Eicosane (C20)	30.58	65054108	49.584 ug/mL
21) t	n-Heneicosane (C21)	32.11	66700967	49.266 ug/mL
22) t	n-Docosane (C22)	33.58	66565066	49.787 ug/mLm
23) t	n-Tricosane (C23)	34.99	66758511	49.588 ug/mL
25) t	n-Tetracosane (C24)	36.35	66693711	48.942 ug/mL
26) t	n-Pentacosane (C25)	37.65	67077127	48.777 ug/mL
27) t	n-Hexacosane (C26)	38.91	67649415	50.369 ug/mL
28) t	n-Heptacosane (C27)	40.12	66912974	50.002 ug/mL
29) t	n-Octacosane (C28)	41.28	67954477	49.975 ug/mL
30) t	n-Nonacosane (C29)	42.41	69357719	49.909 ug/mL
31) t	n-Triacontane (C30)	43.51	68259254	50.092 ug/mLm
32) t	n-Hentriacontane (C31)	44.56	69287508	52.549 ug/mL
33) t	n-Dotriacontane (C32)	45.59	66524468	50.013 ug/mLm
34) t	n-Tritriacontane (C33)	46.58	68340722	50.838 ug/mL
35) t	n-tetratriacontane (C34)	47.59	68802771	50.385 ug/mLm
36) t	n-Pentatriacontane (C35)	48.72	66476792	50.611 ug/mL
37) t	n-Hexatriacontane (C36)	50.02	68426727	50.573 ug/mL
38) t	n-Heptatriacontane (C37)	51.51	70435088	48.507 ug/mL
39) t	n-Octatriacontane (C38)	53.25	69100878	50.605 ug/mL
41) t	n-Tetracontane (C40)	57.69	69491588	51.301 ug/mL

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17578C.D
Operator : NLJr
Acquired : 18 Jan 2006 6:27 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1011702A-AFID
Misc Info : ALK STD
Vial Number: 100



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0601019**
Lab ID: **C1011703**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	46.87	6.3	25
n-Decane (C10)	50.00	47.23	5.5	25
n-Undecane (C11)	50.00	46.96	6.1	25
n-Dodecane (C12)	50.00	47.59	4.8	25
n-Tridecane (C13)	50.00	47.75	4.5	25
n-Tetradecane (C14)	50.00	48.11	3.8	25
n-Pentadecane (C15)	50.00	48.15	3.7	25
n-Hexadecane (C16)	50.00	48.22	3.6	25
n-Heptadecane (C17)	50.00	48.52	3.0	25
Pristane	50.00	48.69	2.6	25
n-Octadecane (C18)	50.00	48.78	2.4	25
Phytane	50.00	49.18	1.6	25
n-Nonadecane (C19)	50.00	49.04	1.9	25
n-Eicosane (C20)	50.00	49.54	0.9	25
n-Heneicosane (C21)	50.00	49.22	1.6	25
n-Docosane (C22)	50.00	44.75	10.5	25
n-Tricosane (C23)	50.00	49.58	0.8	25
n-Tetracosane (C24)	50.00	48.95	2.1	25
n-Pentacosane (C25)	50.00	48.73	2.5	25
n-Hexacosane (C26)	50.00	50.31	0.6	25
n-Heptacosane (C27)	50.00	49.91	0.2	25
n-Octacosane (C28)	50.00	49.88	0.2	25
n-Nonacosane (C29)	50.00	49.85	0.3	25
n-Triacontane (C30)	50.00	49.98	0.0	25
n-Hentriacontane (C31)	50.00	52.41	4.8	25
n-Dotriacontane (C32)	50.00	49.97	0.1	25
n-Tritriacontane (C33)	50.00	50.54	1.1	25
n-Tetratriacontane (C34)	50.00	50.36	0.7	25
n-Pentatriacontane (C35)	50.00	50.49	1.0	25
n-Hexatriacontane (C36)	50.00	50.37	0.7	25
n-Heptatriacontane (C37)	50.00	48.38	3.2	25
n-Octatriacontane (C38)	50.00	50.46	0.9	25
n-Tetracontane (C40)	50.00	51.20	2.4	25
ortho-Terphenyl	50.00	48.54	2.9	25
d50-Tetracosane	50.00	46.04	7.9	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.05

N/A - Not Applicable

01/20/06 13:02

Quantitation Report (QT Reviewed)

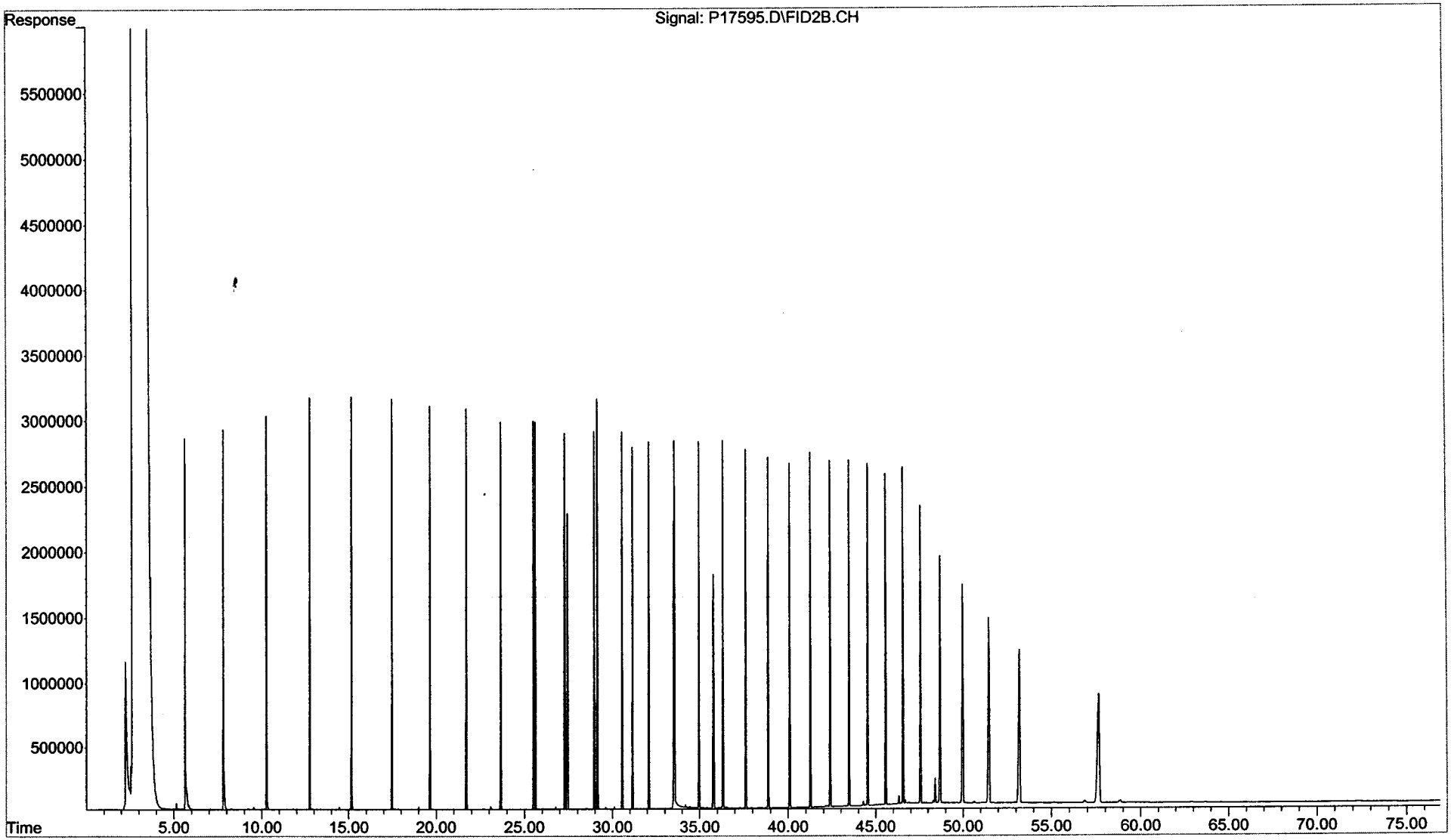
Data Path : O:\Forensics\Data\PAH1\January06\JAN17.SEC\
Data File : P17595.D
Signal(s) : FID2B.CH
Acq On : 19 Jan 2006 8:38 am
Operator : NLJr
Sample : C1011703-AFID
Misc : ALK STD
ALS Vial : 74 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 20 10:19:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Tue Jan 10 11:56:41 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.17	63984075	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.15	67317252	48.539 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	97.08%
24) s d50-Tetracosane	35.79	57227635	46.040 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	92.08%
Target Compounds			
2) t n-Octane (C8)	5.63	47542450	46.085 ug/mLm
3) t n-Nonane (C9)	7.80	53318353	46.872 ug/mLm
4) t n-Decane (C10)	10.26	55079616	47.231 ug/mLm
5) t n-Undecane (C11)	12.76	55447663	46.955 ug/mLm
6) t n-Dodecane (C12)	15.17	57265832	47.594 ug/mLm
7) t n-Tridecane (C13)	17.47	58212673	47.754 ug/mLm
9) t n-Tetradecane (C14)	19.65	59590033	48.106 ug/mLm
11) t n-Pentadecane (C15)	21.71	60384790	48.150 ug/mL
12) t n-Hexadecane (C16)	23.66	61046513	48.224 ug/mLm
14) t n-Heptadecane (C17)	25.52	62185198	48.519 ug/mLm
15) t Pristane	25.63	59622311	48.694 ug/mL
16) t n-Octadecane (C18)	27.28	62690695	48.783 ug/mLm
17) t Phytane	27.45	62646059	49.175 ug/mLm
18) t n-Nonadecane (C19)	28.97	62624861	49.044 ug/mLm
20) t n-Eicosane (C20)	30.57	63069194	49.537 ug/mLm
21) t n-Heneicosane (C21)	32.10	64664961	49.219 ug/mLm
22) t n-Docosane (C22)	33.57	58057726	44.749 ug/mLm
23) t n-Tricosane (C23)	34.98	64767501	49.577 ug/mLm
25) t n-Tetracosane (C24)	36.33	64731096	48.950 ug/mLm
26) t n-Pentacosane (C25)	37.64	65030390	48.731 ug/mLm
27) t n-Hexacosane (C26)	38.89	65569419	50.309 ug/mLm
28) t n-Heptacosane (C27)	40.10	64818472	49.915 ug/mLm
29) t n-Octacosane (C28)	41.27	65812513	49.876 ug/mLm
30) t n-Nonacosane (C29)	42.40	67221068	49.847 ug/mLm
31) t n-Triacontane (C30)	43.49	66087496	49.978 ug/mLm
32) t n-Hentriacontane (C31)	44.55	67063914	52.414 ug/mLm
33) t n-Dotriacontane (C32)	45.57	64504484	49.974 ug/mLm
34) t n-Tritriacontane (C33)	46.56	65934288	50.544 ug/mLm
35) t n-tetratriacontane (C34)	47.57	66729306	50.358 ug/mLm
36) t n-Pentatriacontane (C35)	48.70	64358973	50.493 ug/mLm
37) t n-Hexatriacontane (C36)	49.99	66135909	50.371 ug/mLm
38) t n-Heptatriacontane (C37)	51.48	68168113	48.378 ug/mLm
39) t n-Octatriacontane (C38)	53.21	66863004	50.460 ug/mLm
41) t n-Tetracontane (C40)	57.64	67304303	51.202 ug/mLm

File :O:\Forensics\Data\PAH1\January06\JAN17.SEC\P17595.D
Operator : NLJr
Acquired : 19 Jan 2006 8:38 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1011703-AFID
Misc Info : ALK STD
Vial Number: 74



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 2 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: 0601019

Sample ID	Date	Time	Matrix	Environmental Forensics (Includes Lead-210, Cesium 137, EPA 8015 Modified GC/FID Hydrocarbon Fingerprint, 8270 Modified GC/MS/SIM Extended PAH and Biomarkers)	
1 GC-SED-11 (1-3)	1/5/2006	15:15	Sediment	☑	
2 GC-SED-18 (7-8)	1/7/2006	18:55	Sediment	☑	
-3 GC-SED-15 (0-0.75)	1/7/2006	17:40	Sediment	☑	
4 GC-SED-14 (5.5-6.5)	1/7/2006	15:20	Sediment	☑	
-5 GC-SED-13B (14.6-15.6)	1/7/2006	14:15	Sediment	☑	
-6 GC-SED-39 (4.5-5.5)	1/8/2006	17:15	Sediment	☑	
-7 GC-SED-17 (0-2)	1/8/2006	14:35	Sediment	☑	
-8 GC-SED-16 (~~14.5-15.5~~) (0-2)	1/8/2006	~~15:55~~ 16:00	Sediment	☑	correction by EMP 1/11/06 per Client.
9 GC-SED-22B (19.3-20)	1/9/2006	16:10	Sediment	☑	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable
☐ Skin Irritant ☒ Unknown

Turn Around Time Required (other than standard):

QC Requirements:

	Date	Time		Date	Time
1. Relinquished by: Melissa Fletcher	1/9/06	1930	1. Received by: FED EX		
2. Relinquished by: FED EX	1/10/06	0900	2. Received by: [signature]	1/10/06	0900
3. Relinquished by:			3. Received by:		

COMMENTS Fed Ex # 8544 0600 3191

ORIGINAL

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 2 of 2 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: 0601019

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)
10 GC-SED-21B (7-8)	1/9/2006	14:10	Sediment	☑
11 GC-SED-19C (1.5-2)	1/9/2006	13:25	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: Melissa Fitter	1/9/06	1930	1. Received by: FED EX		
2. Relinquished by: FED EX	1/10/06	0900	2. Received by:	1/10/06	0900
3. Relinquished by:			3. Received by:		

COMMENTS Fed EX # 8544 0600 3191

ORIGINAL

Sample Receipt Checklist

Client: NEWFIE		**Receipt Date:** 1/10/06	
Project: Gowanus Canal		**Log-in Date:**	
ETR #: 0601019		**Inspection by:** MR	**Login by:** MR

ALL SECTIONS BELOW MUST BE COMPLETED

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

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

Number of coolers received for this project delivery: 1

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

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

Cooler 1:
Temperature(s) taken from: 3° IR Gun, 6° 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: 1/10/06

Comments / Notes

Sample storage refrigerator #: C1

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

COC
GC-SED-16(14.5-15.5) 1/8/06 1555
Label
GC-SED-14(0-2) 1/8/06 1600
↑
Use Label ID Per client 1/11/06 EMP

Chemical preservation OK for ALL samples?
Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

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

te 1-9-06 FedEx Tracking Number 854406003191

nder's me Melissa Felter Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST Dept./Floor/Suite/Room

BROOKLYN State NY ZIP 11231

ur Internal Billing Reference 982482-34-4403

Liz Porta

From: "Ted Healey" <ehealey@newfields.com>
To: '"Liz Porta"' <eporta@alphalab.com>
Sent: Wednesday, January 11, 2006 8:35 AM
Subject: Correct Gowanus Canal ID

The correct Gowanus Canal ID should be sample ID GC-SED-16 (0-2) 1/8/06 1600. Please correct the COC and forward back to me the correction so the client has this for their records. Thanks

Ted

corrected 1/11/06

Ted Healey
Staff Scientist
NewFields Environmental Forensics Practice, LLC
100 Ledgewood Place, Suite 302
Rockland, MA 02370
781-681-5040 X 109
781-681-5048 (FAX)
ehealey@newfields.com
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