ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0601073
Report Date:	February 17, 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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Sample ID Cross Reference

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**

Lab Code: **MA00030**
ETR: **0601073**

Lab Sample ID	Client Sample ID
0601073-01	GC-SED-50 (2-5)
0601073-02	GC-SED-56 (5.8-6.2)
0601073-03	GC-SED-57 (7-9)
0601073-04	GC-SED-51 (0-1.5)

Certificate Program Summary

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

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

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

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

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

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

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

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

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

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

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

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

CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0601073
Project: Gowanus Canal

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

Alkylated Polynuclear Aromatic Hydrocarbons
Steranes and Triterpanes

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

1. The sediment method blank SS013006B05 contained low-level target compounds detected below the reporting limit. Associated field sample results would be flagged with "B" qualifiers if the concentration of the analyte in the sample is less than 5X the concentration in the blank. Please note that no "B" qualifiers were utilized.

2. Sample GC-SED-56 (5.8-6.2) (0601073-02) recovered the surrogate Pyrene-d10 above the 130% QC limit potentially due to matrix interference. Please note that the most diluted analysis of this sample exhibited acceptable recoveries for this surrogate.

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

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: 2/17/06

Elizabeth Porta **Quality Assurance Manager**

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Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
01/30/2006 0601073 - 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
0601073-01	SAM	Shaker	GJP	1/30/2006	2/2/2006		5	61.6	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
0601073-02	SAM	Shaker	GJP	1/30/2006	2/2/2006		4.98	104.38	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
0601073-03	SAM	Shaker	GJP	1/30/2006	2/2/2006		10.04	27.75	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
0601073-04	D	Shaker	GJP	1/30/2006	2/2/2006		10.05	51.33	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
0601073-04	SAM	Shaker	GJP	1/30/2006	2/2/2006		9.99	48.13	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
SS013006B05	B	Shaker	GJP	1/30/2006	2/2/2006		30	4	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
SS013006LCS03	LCS	Shaker	GJP	1/30/2006	2/2/2006		30	4	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	
SS013006LCSD04	LCSD	Shaker	GJP	1/30/2006	2/2/2006		30	4	False	KLA	1/31/2006	KD Flask	0.15	KLA	2/2/2006	

✓ 2nd vr 2/17/06

Alpha Woods Hole Lab
Batch Prep Report
01/30/2006 0601073 - OP NEWFIE

Lab ID	Notes
0601073-01	1st Prep
0601073-02	1st Prep
0601073-03	1st Prep
0601073-04	1st Prep
0601073-04	1st Prep
SS013006B05	1st Prep
SS013006LCS03	1st Prep
SS013006LCSD04	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
01/30/2006

Lab ID	QC Type	0601073 - Sample
0601073-01	SAM	5
0601073-02	SAM	4.98
0601073-03	SAM	10.04
0601073-04	D	10.05
0601073-04	SAM	9.99
SS013006B05	B	30
SS013006LCS03LCS	OP NEWFIE	30
SS013006LCS03LCS	OP SHC	30
SS013006LCSD04LCSD	NEWFIE	30
SS013006LCSD04LCSD	SHC	30

METHYLENE CHLORIDE B52E28 (tank) B07E30(bottle)
ACETONE: A05E31 HEXANE: B45E60

COPPER: B42625 SULFURIC ACID: 3103091

GLASS WOOL: 4303309989 SODIUM SULFATE: B42602

PENTANE: B11E31 HYDROCHLORIC ACID: 4105030

Alpha Woods Hole Lab
Batch Prep Spike Report

01/30/2006 0601073 - OP NEWFIE Analyst: GJP Witness: RPR

Lab ID	QC Type	OP NEWFIE - surr	Vol OP NEWFIE - surr	Units OP NEWFIE - surr	OP NEWFIE - spk 1	Vol OP NEWFIE - spk 1	Units OP NEWFIE - spk 1	OP NEWFIE - spk 2	Vol OP NEWFIE - spk 2	Units OP NEWFIE - spk 2
0601073-01	SAM	WHAB99	200	µl				WHAB14	2	ml
0601073-02	SAM	WHAB99	200	µl				WHAB14	2	ml
0601073-03	SAM	WHAB99	200	µl				WHAB14	2	ml
0601073-04	D	WHAB99	200	µl				WHAC15	200	µl
0601073-04	SAM	WHAB99	200	µl				WHAC15	200	µl
SS013006B05	B	WHAB63	100	µl				WHAB14	200	µl
SS013006LCS03	LCS	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl
SS013006LCSD04	LCSD	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____

ID# WHAB63

Conc. 10ug/ml 500ug/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other High

ID# WHAC15

Conc. 100ug/ml

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other High

ID# WHAB99

Conc. 100ug/ml 5mg/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAB14

Conc. 10ug/ml

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other _____

ID# WHAC14

Conc. 10ug/ml 500ug/ml

Pre-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 1/31/06

BATCH: 0601073

Entered by: KLA
Verified by: KLA

ETR #	Sample #1	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.251	NA	NA	NA	NA	NA	100%
0601073	1		10000	50	NA	1.756	NA	351.20	250	8.78	40.00	
0601073	2		25000	50	NA	1.178	NA	589.00	400	9.42	62.50	
0601073	3		25000	50	NA	0.424	NA	212.00	1000	8.48	25.00	
0601073	4	D	10000	50	NA	1.575	NA	315.00	300	9.45	33.33	12%
0601073	4		25000	50	NA	0.556	NA	278.00	800	8.90	31.25	

✓ TMS 2/16/06

✓ 2nd 2/17/06

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

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

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

Pre-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 1/31/06

BATCH: 0601073

Entered by: KLA
Verified by: ↓

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.251	NA	NA	NA	NA	NA	0%
0601073	1		10000	50	↓	1.756	↓					
0601073	2		25000	50		1.178						
0601073	3		25000	50		0.424						
0601073	4	D	10000	50		1.575						#VALUE!
0601073	4		25000	50		0.556						

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

01/30/2006 0601073 - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction ation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0601073-01	SAM	3610	GJP	2/1/2006				DMP	2/1/2006	False	10	0.25	0	0.15
0601073-02	SAM	3610	GJP	2/1/2006				DMP	2/1/2006	False	25	0.4	0	0.15
0601073-03	SAM	3610	GJP	2/1/2006				DMP	2/1/2006	False	25	1	0	0.15
0601073-04	D	3610	GJP	2/1/2006				DMP	2/1/2006	False	10	0.3	0	0.15
0601073-04	SAM	3610	GJP	2/1/2006				DMP	2/1/2006	False	25	0.8	0	0.15
SS013006B05	B	3610	GJP	2/1/2006				DMP	2/1/2006	False	2	0.5	0	0.15
SS013006LCS03	LCS	3610	GJP	2/1/2006				DMP	2/1/2006	False	2	0.5	0	0.15
SS013006LCSD04	LCSD	3610	GJP	2/1/2006				DMP	2/1/2006	False	2	0.5	0	0.15

✓ 2nd 2/17/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/30/2006 0601073 - OP NEWFIE

Lab ID	Notes
0601073-01	
0601073-02	
0601073-03	
0601073-04	
0601073-04	
SS013006B05	
SS013006LCS03	
SS013006LCSD04	

Post-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 2/1/06

BATCH: 0601073

Entered by: DMP
Verified by: DMP

Sample #	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	0.254	N/A	50.80	N/A	N/A	N/A	102%
0601073	1		1000	50	N/A	0.381	N/A	7.62	650	4.95	1.54	
0601073	2		1000	50	N/A	0.399	N/A	7.98	600	4.79	1.67	
0601073	3		1000	50	N/A	0.277	N/A	5.54	900	4.99	1.11	
0601073	4	D	1000	50	N/A	0.372	N/A	7.44	650	4.84	1.54	15%
0601073	4		1000	50	N/A	0.321	N/A	6.42	650	4.17	1.54	

VMS 2/10/06

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

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

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

Post-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 2-1-06

BATCH: 0601073

Entered by: DMP
Verified by:

Batch #	Sample #	QC (Blk, 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	0.254	N/A		N/A	N/A	N/A	0%
0601073	1		1000	50	N/A	0.381	N/A					
0601073	2		1000	50	N/A	0.399	N/A					
0601073	3		1000	50	N/A	0.277	N/A					
0601073	4	D	1000	50	N/A	0.372	N/A					#VALUE!
0601073	4		1000	50	N/A	0.321	N/A					

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: NEWFIE GOWANUS CANAL
ETR: 0601073

ALK-PAH/SHC

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0601073-01	900	WHAC12 3OF5	100	1000	61.60 ✓	KLA	150	150	2/2/2006
0601073-02	900	WHAC12 3OF5	100	1000	104.38 ✓	KLA	150	150	2/2/2006
0601073-03	900	WHAC12 3OF5	100	1000	27.75 ✓	KLA	150	150	2/2/2006
0601073-04DUP	900	WHAC12 3OF5	100	1000	51.33	KLA	150	150	2/2/2006
0601073-04	900	WHAC12 3OF5	100	1000	48.13	KLA	150	150	2/2/2006
SS013006-B05	900	WHAC12 3OF5	100	1000	4 ✓	KLA	150	150	2/2/2006
SS013006-LCS03	900	WHAC12 3OF5	100	1000	4 ✓	KLA	150	150	2/2/2006
SS013006-LCSD04	900	WHAC12 3OF5	100	1000	4 ✓	KLA	150	150	2/2/2006

MS 2/16/06

[1] Includes Internal Std

Forensic Dilution Sheet

Client Name: NewFields
Project Gowanus Canal
ETR # : 0601072
Matrix : Sediment
Analysis Type : GC/MS

Relinquished By: KLA Signed for by RAR 2/16/06
Date: 2/2/06

Received By: KLA Signed for by RPR 2/16/06
Date: 2/2/06

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial (ul) 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
0601073-01	700	700	100	1000	0601073-01-RE	WHAC12 90uL	KLA 2/2/06	10	10
0601073-02	700	700	100	1000	0601073-02-RE	WHAC12 90uL		10	10
0601073-03	700	700	100	1000	0601073-03-RE	WHAC12 90uL		10	10
0601073-04D	700	700	100	1000	0601073-04D-RE	WHAC12 90uL		10	10
0601073-04	700	700	100	1000	0601073-04-RE	WHAC12 90uL		10	10
0601073-01	600	600	10	1000	0601073-01-RE2	WHAC12 99uL	2/2/06 KLA	100	100
0601073-02	600	600	10	1000	0601073-02-RE2	WHAC12 99uL		100	100
0601073-03	600	600	10	1000	0601073-03-RE2	WHAC12 99uL		100	100
0601073-04D	600	600	10	1000	0601073-04D-RE2	WHAC12 99uL		100	100
0601073-04	600	600	10	1000	0601073-04-RE2	WHAC12 99uL		100	100

Dilution Calculations Validated by: RPR
Date: 2/16/06

Alpha Woods Hole Lab
Batch Prep Report

01/30/2006 0601073 - 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
0601073-01	SAM	Shaker	GJP	1/30/2006	2/1/2006		5	8.07	True	KLA	1/31/2006	KD Flask	0.15	MAL	2/1/2006	
0601073-02	SAM	Shaker	GJP	1/30/2006	2/1/2006		4.98	13.13	True	KLA	1/31/2006	KD Flask	0.15	MAL	2/1/2006	
0601073-03	SAM	Shaker	GJP	1/30/2006	2/1/2006		10.04	7.6	True	KLA	1/31/2006	KD Flask	0.15	MAL	2/1/2006	
0601073-04	D	Shaker	GJP	1/30/2006	2/1/2006		10.05	11.14	True	KLA	1/31/2006	KD Flask	0.15	MAL	2/1/2006	
0601073-04	SAM	Shaker	GJP	1/30/2006	2/1/2006		9.99	9.82	True	KLA	1/31/2006	KD Flask	0.15	MAL	2/1/2006	
SS013006B05	B	Shaker	GJP	1/30/2006	2/1/2006		30	4	True	KLA	1/31/2006	KD Flask	0.15	MAL	2/1/2006	

✓ 2nd 2/17/06

Alpha Woods Hole Lab
Batch Prep Report
01/30/2006 0601073 - OP Steranes/Triterpanes

Lab ID	Notes
0601073-01	1st Prep
0601073-02	1st Prep
0601073-03	1st Prep
0601073-04	1st Prep
0601073-04	1st Prep
SS013006B05	1st Prep

Pre-Silica Gel Gravimetric Determination

Analyst: KLA
Date: 1/31/06

BATCH: 0601073

Entered by: KLA
Verified by: KLA

FTC #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.251	NA	NA	NA	NA	NA	100%
0601073	1		10000	50	NA	1.756	NA	351.20	1300	45.66	7.69	
0601073	2		25000	50	NA	1.178	NA	589.00	2000	47.12	12.50	
0601073	3		25000	50	NA	0.424	NA	212.00	5500	46.64	4.55	
0601073	4	D	10000	50	NA	1.575	NA	315.00	1500	47.25	6.67	12%
0601073	4		25000	50	NA	0.556	NA	278.00	4250	47.26	5.88	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight ✓ 2nd W 2/17/06
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

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

✓ 2nd W 2/17/06

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

Alpha Woods Hole Laboratories Raynham, MA

0601073ST.xls

Alpha Woods Hole Lab
Batch Clean Up Report

01/30/2006 0601073 - 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
0601073-01	SAM	3630	MAL	2/1/06				MAL	2/1/06	True	10	1.3	0	0.15
0601073-02	SAM	3630	MAL	2/1/06				MAL	2/1/06	True	25	2	0	0.15
0601073-03	SAM	3630	MAL	2/1/06				MAL	2/1/06	True	25	5.5	0	0.15
0601073-04	D	3630	MAL	2/1/06				MAL	2/1/06	True	10	1.5	0	0.15
0601073-04	SAM	3630	MAL	2/1/06				MAL	2/1/06	True	25	4.25	0	0.15
SS013006B05	B	3630	MAL	2/1/06				MAL	2/1/06	True	2	0.5	0	0.15

✓ ✓

2nd 2/17/06

Alpha Woods Hole Lab
Batch Clean Up Report

01/30/2006 0601073 - OP Steranes/Triterpanes

Lab ID	Notes
0601073-01	
0601073-02	
0601073-03	
0601073-04	
0601073-04	
SS013006B05	

Post-Silica Gel Gravimetric Determination

Analyst: MAL
Date: 2/1/06

BATCH: 0601073

Entered by: MAL
Verified by: MAL

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.241	NA	48.20	NA	NA	NA	96%
0601073	1		1000	50	NA	0.124	NA	2.48	950	2.36	1.05	
0601073	2		1000	50	NA	0.106	NA	2.12	950	2.01	1.05	
0601073	3		1000	50	NA	0.411	NA	8.22	600	4.93	1.67	
0601073	4	D	1000	50	NA	0.373	NA	7.46	600	4.48	1.67	2%
0601073	4		1000	50	NA	0.379	NA	7.58	600	4.55	1.67	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight ✓ 2nd 2/17/06
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

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

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

Post-Silica Gel Gravimetric Determination

Analyst: MAL
Date: 2/1/06

BATCH: 0601073

Entered by:
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.241	NA		NA	NA	NA	0%
0601073	1		1000	50	NA	0.124	NA					
0601073	2		1000	50	NA	0.106	NA					
0601073	3		1000	50	NA	0.411	NA					
0601073	4	D	1000	50	NA	0.373	NA					#VALUE!
0601073	4		1000	50	NA	0.379	NA					

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: Gowanus Canal
ETR: 0601073

Biomarker

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0601073-01-F1	900	WHAC12 2 OF 5	100	1000	8.07	MAL	150	NA	2/1/2006
0601073-02-F1	900	WHAC12 2 OF 5	100	1000	13.13	MAL	150	NA	2/1/2006
0601073-03-F1	900	WHAC12 2 OF 5	100	1000	7.60	MAL	150	NA	2/1/2006
0601073-04D-F1	900	WHAC12 2 OF 5	100	1000	11.14	MAL	150	NA	2/1/2006
0601073-04-F1	900	WHAC12 2 OF 5	100	1000	9.82	MAL	150	NA	2/1/2006
SS013006B05-F1	900	WHAC12 2 OF 5	100	1000	4	MAL	150	NA	2/1/2006

[1] Includes Internal Std

✓ 2nd
2/17/06

Forensic Preparation Checklist

ETR: 0601073 **Client:** New Fields **Project:** Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

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

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

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

Other:

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

Other:

Identify Matrix - Circle One

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

	Date	Initials
1st Extraction	1-30-06	DMP
2nd Extraction	1-31-06	GSP
3rd Extraction	1/31/06	KLA

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

Other:

1° Review RPR 2/3/06

KLA 2/2/06 Alk/SHC

Batch Completed

Analyst: MAL Biomarkers

Date: 2/1/06

Alpha Woods Hole Lab
Batch Weight Report
01/27/2006

Lab ID	QC Type	PS012706 - Pan Weight	PS012706 - Wet Weight	PS012706 - Dry Weight	PS012706 - Dry Weight #2	PS012706 - Dry Weight #3	Percent Solid	RPD
0601073-01	D	1.01	9.51	6.56	6.56		65.29	7.80%
0601073-01	SAM	1.03	8.51	6.31	6.31		70.59	
0601073-02	SAM	0.97	8.78	7.82	7.82		87.71	
0601073-03	SAM	0.98	7.78	3.75	3.74		40.59	
0601073-04	SAM	0.99	8.19	3.76	3.76		38.47	
0601075-01	SAM	1	7.82	6.53	6.53		81.09	
0601075-02	SAM	1.04	8.87	7.39	7.39		81.1	
0601075-03	SAM	1.01	8.43	7.18	7.18		83.15	
0601075-04	SAM	0.98	9.73	7.88	7.88		78.86	
0601075-05	SAM	1	11.43	9.43	9.43		80.82	
0601075-06	SAM	1.01	8.35	6.67	6.67		77.11	
PSS012706B04	B	1	1	1	1		100	
PSS012706B04	B						100	

Initial: 1/27/2006 2:26:41 PM KJB
Weight #1: 1/30/2006 9:38:48 AM KJB
Weight #2: 1/30/2006 11:14:16 AM KJB

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

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-50 (2-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-01**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/07/06	70.6	5.00	61.6	10	AC

Parameter	Result		Parameter	Result
Naphthalene	4900000	E	Fluoranthene	470000
C1-Naphthalenes	2900000	E	Pyrene	770000
C2-Naphthalenes	1600000		C1-Fluoranthenes/Pyrenes	1000000
C3-Naphthalenes	610000		C2-Fluoranthenes/Pyrenes	490000
C4-Naphthalenes	190000		C3-Fluoranthenes/Pyrenes	220000
Biphenyl	230000		C4-Fluoranthenes/Pyrenes	70000
Dibenzofuran	64000		Naphthobenzothiophenes	120000
Acenaphthylene	270000		C1-Naphthobenzothiophenes	150000
Acenaphthene	1200000		C2-Naphthobenzothiophenes	99000
Fluorene	640000		C3-Naphthobenzothiophenes	51000
C1-Fluorenes	400000		C4-Naphthobenzothiophenes	19000
C2-Fluorenes	290000		Benz[a]anthracene	280000
C3-Fluorenes	140000		Chrysene/Triphenylene	310000
Anthracene	740000		C1-Chrysenes	360000
Phenanthrene	1700000		C2-Chrysenes	220000
C1-Phenanthrenes/Anthracenes	1500000		C3-Chrysenes	120000
C2-Phenanthrenes/Anthracenes	820000		C4-Chrysenes	36000
C3-Phenanthrenes/Anthracenes	330000		Benzo[b]fluoranthene	84000
C4-Phenanthrenes/Anthracenes	87000		Benzo[k]fluoranthene	120000
Retene	250	U	Benzo[a]fluoranthene	55000
Dibenzothiophene	250000		Benzo[e]pyrene	100000
C1-Dibenzothiophenes	320000		Benzo[a]pyrene	190000
C2-Dibenzothiophenes	260000		Perylene	33000
C3-Dibenzothiophenes	150000		Indeno[1,2,3-cd]pyrene	64000
C4-Dibenzothiophenes	49000		Dibenz[a,h]anthracene	22000
Benzo(b)fluorene	160000		Benzo[g,h,i]perylene	70000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	113	50-130
Pyrene-d10	120	50-130
Benzo[b]fluoranthene-d12	109	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.

02/15/06 20:04

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-50 (2-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-01**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/07/06	70.6	5.00	61.6	10	AC

Parameter	Result
Carbazole	**36000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	113	50-130
Pyrene-d10	120	50-130
Benzo[b]fluoranthene-d12	109	50-130

N/A - Not Applicable

02/15/06 20:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28162.D
Acq On : 7 Feb 2006 11:59 pm
Operator : AC
Sample : 0601073-01
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 09 13:03:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	28928m	500.00	ng/mL	0.00
72) Chrysene-d12	43.57	240	48849	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	2188	36.80	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.68%#			
58) Pyrene-d10	38.65	212	4746m	38.81	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.88%#			
81) Benzo[b]fluoranthene-d12	47.51	264	3540	35.35	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.54%#			
125) 5B(H)Cholane - Surr	44.17	217	591m	26.32	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.63%#			

Target Compounds						Qvalue
9) Naphthalene	20.16	128	3661687	28142.05	ng/mL#E	100
10) C1-Naphthalenes	22.86	142	2174734m	16714.01	ng/mLE	
11) C2-Naphthalenes	25.70	156	1192109m	9162.00	ng/mL	
12) C3-Naphthalenes	28.04	170	453623m	3486.34	ng/mL	
13) C4-Naphthalenes	30.81	184	143429m	1102.33	ng/mL	
15) 2-Methylnaphthalene	22.86	142	1327753	16031.15	ng/mL#E	100
16) 1-Methylnaphthalene	23.29	142	839886	10654.07	ng/mL#E	100
22) Biphenyl	24.75	154	134821	1293.07	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.37	156	170921m	2395.67	ng/mL	
24) Dibenzofuran	27.84	168	42142	366.15	ng/mL	97
25) Acenaphthylene	26.46	152	199403m	1544.61	ng/mL	
26) Acenaphthene	27.20	153	532522	6729.56	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	31168m	500.59	ng/mL	
28) Fluorene	29.22	166	338776m	3661.43	ng/mL-RETRYCurve 2nd on 2/17/06	
29) C1-Fluorenes	31.45	180	214400m	2317.20	ng/mL	
30) C2-Fluorenes	33.63	194	155652m	1682.26	ng/mL	
31) C3-Fluorenes	35.62	208	76427m	826.01	ng/mL	
32) Dibenzothiophene	32.55	184	174831	1413.15	ng/mL#	87
37) C1-Dibenzothiophenes	34.33	198	227063m	1835.34	ng/mL	
38) C2-Dibenzothiophenes	36.02	212	187273m	1513.72	ng/mL	
39) C3-Dibenzothiophenes	37.81	226	103553m	837.01	ng/mL	
40) C4-Dibenzothiophenes	39.50	240	34586m	279.56	ng/mL	
41) Phenanthrene	33.06	178	1273727	9648.00	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.11	192	1117352m	8463.52	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.28	206	619456m	4692.15	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.12	220	251483m	1904.89	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.33	234	66050m	500.30	ng/mL	
53) Anthracene	33.23	178	519914	4240.33	ng/mL	99
54) Carbazole	33.91	167	23901m	204.53	ng/mL	
55) 1-Methylphenanthrene	35.56	192	183516	2003.72	ng/mL	99
56) Fluoranthene	37.84	202	382921m	2717.57	ng/mL	
57) Benzo(b)fluorene	40.36	216	79556m	918.43	ng/mL	
59) Pyrene	38.73	202	633997	4393.98	ng/mL	98
60) C1-Fluoranthenes/Pyrenes	40.12	216	862313m	5976.35	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.58	230	402202m	2787.50	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.05	244	180269m	1249.37	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.29	258	57930m	401.49	ng/mL	
64) Naphthobenzothiophene	42.58	234	57691	431.17	ng/ml#	69
65) Naphthobenzothiophene-2,1-	42.58	234	57764	431.72	ng/mL#	69
66) Naphthobenzothiophene-1,2-	42.93	234	16767m	125.31	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28162.D
Acq On : 7 Feb 2006 11:59 pm
Operator : AC
Sample : 0601073-01
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 09 13:03:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

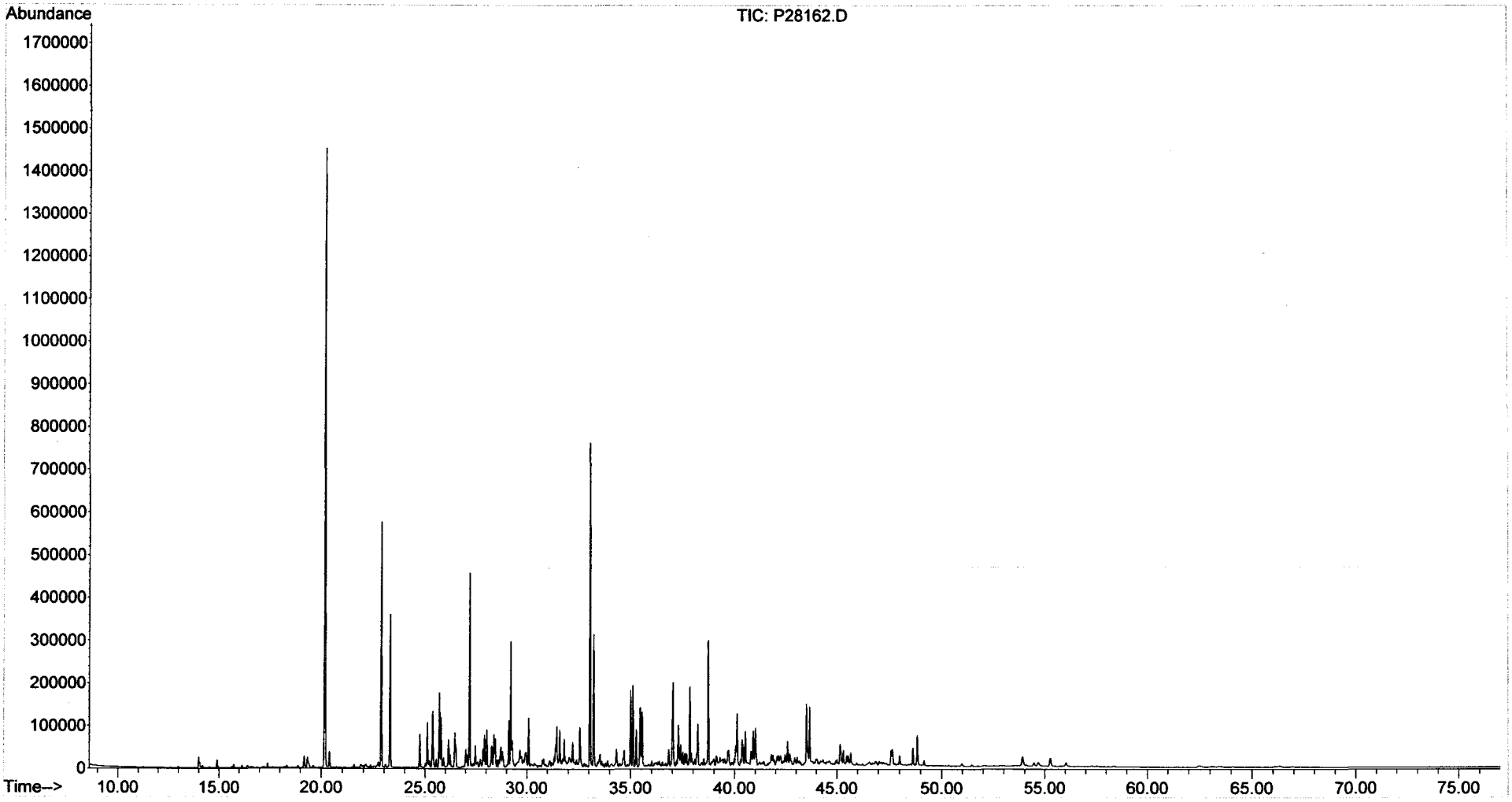
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
67) Naphthobenzothiophene-2,3-	43.22	234	18594m	138.97	ng/mL	
68) C1-Naphthobenzothiophenes	43.98	248	115490m	863.15	ng/ml	
69) C2-Naphthobenzothiophenes	45.48	262	75757m	566.19	ng/ml	
70) C3-Naphthobenzothiophenes	47.61	276	38784m	289.86	ng/ml	
71) C4-Naphthobenzothiophenes	48.71	290	14367m	107.38	ng/mL	
73) Benz[a]anthracene	43.51	228	221457m	1587.51	ng/mL	
74) Chrysene	43.67	228	249156m	1778.27	ng/mL	
75) Chrysene/Triphenylene	43.67	228	250534m	1788.11	ng/mL	
76) C1-Chrysenes	45.16	242	292399m	2086.91	ng/mL	
77) C2-Chrysenes	46.87	256	175335m	1251.40	ng/mL	
78) BBF-d12 Surr BKGD	47.50	256	711m	5.07	ng/mL	
79) C3-Chrysenes	48.50	270	92870m	662.83	ng/mL	
80) C4-Chrysenes	50.04	284	28560m	203.84	ng/mL	
82) Benzo[b]fluoranthene	47.60	252	71809	479.29	ng/mL	100
83) Benzo[k]fluoranthene	47.66	252	105861	675.68	ng/mL	99
84) Benzo[a]fluoranthene	47.99	252	49496m	315.92	ng/mL	
85) Benzo[e]pyrene	48.64	252	84432	584.59	ng/mL	98
86) Benzo[a]pyrene	48.84	252	157953m	1093.90	ng/mL	
87) Perylene	49.16	252	27396m	190.31	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.89	276	52854m	369.31	ng/mL	
89) Dibenz[a,h]anthracene	53.93	278	16989m	126.23	ng/mL	
90) Benzo[g,h,i]perylene	55.28	276	59379	397.93	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28162.D
Acq On : 7 Feb 2006 11:59 pm
Operator : AC
Sample : 0601073-01
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 09 13:03:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-50 (2-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-01**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/02/06	70.6	5.00	8.07	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**460**	30,31-Bishomohopane-22S	**680**
C24 Tricyclic Terpane	**300**	30,31-Bishomohopane-22R	**480**
C25 Tricyclic Terpane	**300**	30,31-Trishomohopane-22S	**320**
C24 Tetracyclic Terpane	**470**	30,31-Trishomohopane-22R	**220**
C26 Tricyclic Terpane-22S	**130**	Tetrakishomohopane-22S	**200**
C26 Tricyclic Terpane-22R	**130**	Tetrakishomohopane-22R	**140**
C28 Tricyclic Terpane-22S	**140**	Pentakishomohopane-22S	**140**
C28 Tricyclic Terpane-22R	**150**	Pentakishomohopane-22R	**99**
C29 Tricyclic Terpane-22S	**170**	13b(H),17a(H)-20S-Diacholestane	**650**
C29 Tricyclic Terpane-22R	**170**	13b(H),17a(H)-20R-Diacholestane	**380**
18a-22,29,30-Trisnorneohopane-TS	**1600**	13b,17a-20S-Methyldiacholestane	**250**
C30 Tricyclic Terpane-22S	**160**	14a(H),17a(H)-20S-Cholestane	**380**
C30 Tricyclic Terpane-22R	**61**	14a(H),17a(H)-20R-Cholestane	**1000**
17a(H)-22,29,30-Trisnorhopane-TM	**1000**	13b,17a-20R-Ethyldiacholestane	**150**
17a/b,21b/a 28,30-Bisnorhopane	**250**	13a,17b-20S-Ethyldiacholestane	**31**
17a(H),21b(H)-25-Norhopane	**110**	14a,17a-20S-Methylcholestane	**220**
30-Norhopane	**2800**	14a,17a-20R-Methylcholestane	**450**
18a(H)-30-Norneohopane-C29Ts	**1400**	14a(H),17a(H)-20S-Ethylcholestane	**310**
17a(H)-Diahopane	**380**	14a(H),17a(H)-20R-Ethylcholestane	**410**
30-Normoretane	**620**	14b(H),17b(H)-20R-Cholestane	**460**
18a(H)&18b(H)-Oleananes	**840**	14b(H),17b(H)-20S-Cholestane	**460**
Hopane	**5000**	14b,17b-20R-Methylcholestane	**420**
Moretane	**740**	14b,17b-20S-Methylcholestane	**500**
30-Homohopane-22S	**1100**	14b(H),17b(H)-20R-Ethylcholestane	**590**
30-Homohopane-22R	**980**	14b(H),17b(H)-20S-Ethylcholestane	**470**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	108	50-130

N/A - Not Applicable

02/16/06 06:26

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34938.D
Acq On : 2 Feb 2006 5:18 pm
Operator : AC
Sample : 0601073-01
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 16 06:15:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

MS for MAL 2/16/06

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	78825	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	43.90	217	89011	2686.87	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 268.69%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.46	191	147806m	2182.02	ng/mL	
84) Hopane (T19)	52.46	191	147108m	2171.72	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	13780m	203.43	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.65	191	9001	132.88	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.14	191	8804m	129.97	ng/ml	
88) C24 Tetracyclic Terpane (T	44.46	191	13912m	205.38	ng/ml	
89) C26 Tricyclic Terpane-22S	44.19	191	3753m	55.40	ng/ml	
90) C26 Tricyclic Terpane-22R	44.29	191	3858m	56.95	ng/ml	
91) C28 Tricyclic Terpane-22S	46.58	191	4189m	61.84	ng/ml	
92) C28 Tricyclic Terpane-22R	46.74	191	4516m	66.67	ng/ml	
93) C29 Tricyclic Terpane-22S	47.26	191	5065	74.77	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.46	191	4981m	73.53	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.61	191	48035m	709.13	ng/ml	
96) C30 Tricyclic Terpane-22S	48.70	191	4717m	69.64	ng/mL	
97) C30 Tricyclic Terpane-22R	48.95	191	1810m	26.72	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.16	191	30335m	447.83	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	7299m	107.75	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.16	191	3192	47.12	ng/ml	100
101) 30-Norhopane (T15)	51.05	191	84048m	1240.78	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.17	191	42232m	623.46	ng/ml	
103) 17a(H)-Diahopane (X)	51.29	191	11257m	166.18	ng/ml	
104) 30-Normoretane (T17)	51.85	191	18293	270.05	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.27	191	24923m	367.93	ng/ml	
106) Moretane (T20)	53.16	191	21954m	324.10	ng/ml	
107) 30-Homohopane-22S (T21)	54.27	191	33677m	497.17	ng/ml	
108) 30-Homohopane-22R (T22)	54.51	191	28928m	427.06	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.85	191	20083m	296.48	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.24	191	14376m	212.23	ng/ml	
111) 30,31-Trishomohopane-22S (	58.03	191	9535m	140.76	ng/ml	
112) 30,31-Trishomohopane-22R (	58.66	191	6572m	97.02	ng/ml	
113) Tetrakishomohopane-22S (T3	60.71	191	5874m	86.72	ng/ml	
114) Tetrakishomohopane-22R (T3	61.62	191	4096m	60.47	ng/ml	
115) Pentakishomohopane-22S (T3	63.92	191	4202m	62.03	ng/ml	
116) Pentakishomohopane-22R (T3	65.24	191	2922m	43.14	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.41	217	9386m	283.32	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.83	217	5491m	165.75	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.53	217	3585m	108.22	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.40	217	5545m	167.38	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.94	217	15195	458.67	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.21	217	2191	66.14	ng/ml	100

Retention 2nd 2/17/06

MS 2/16/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34938.D
Acq On : 2 Feb 2006 5:18 pm
Operator : AC
Sample : 0601073-01
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 16 06:15:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

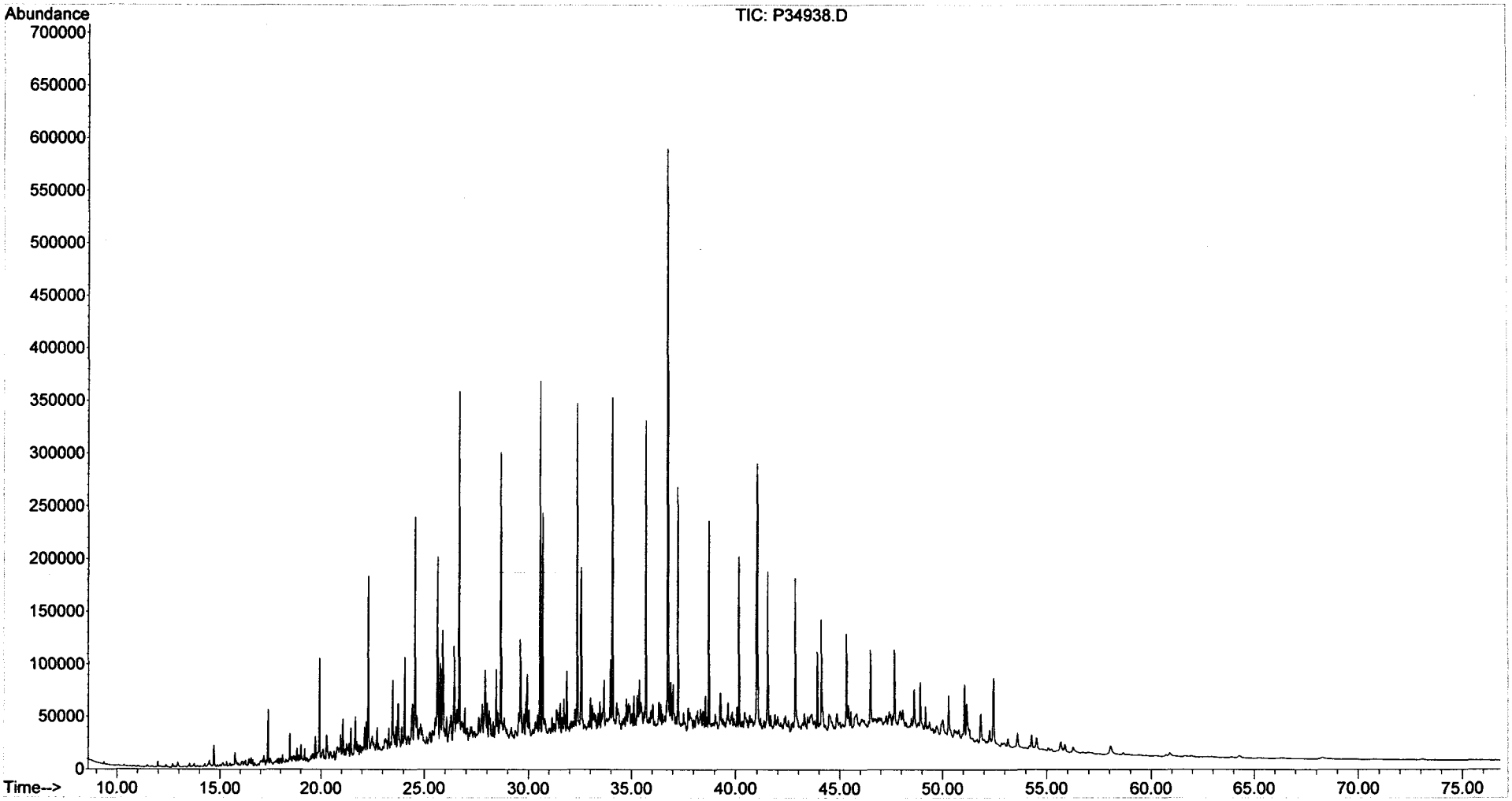
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.48	217	455m	13.73	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.63	217	3130m	94.48	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.37	217	6496m	196.09	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.72	217	4442m	134.09	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.66	217	5991m	180.84	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.49	218	6607m	199.44	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.59	218	6666m	201.22	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.81	218	6009m	181.39	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.90	218	7235m	218.39	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.97	218	8606m	259.78	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.01	218	6817m	205.78	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34938.D
Acq On : 2 Feb 2006 5:18 pm
Operator : AC
Sample : 0601073-01
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 16 06:15:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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-50 (2-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-01E**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/07/06	70.6	5.00	61.6	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**5400000**		Fluoranthene	1800	U
C1-Naphthalenes	**3000000**		Pyrene	1600	U
C2-Naphthalenes	2900	U	C1-Fluoranthenes/Pyrenes	1600	U
C3-Naphthalenes	2900	U	C2-Fluoranthenes/Pyrenes	1600	U
C4-Naphthalenes	2900	U	C3-Fluoranthenes/Pyrenes	1600	U
Biphenyl	1600	U	C4-Fluoranthenes/Pyrenes	1600	U
Dibenzofuran	2100	U	Naphthobenzothiophenes	2100	U
Acenaphthylene	3200	U	C1-Naphthobenzothiophenes	2100	U
Acenaphthene	2000	U	C2-Naphthobenzothiophenes	2100	U
Fluorene	2000	U	C3-Naphthobenzothiophenes	2100	U
C1-Fluorenes	2000	U	C4-Naphthobenzothiophenes	2100	U
C2-Fluorenes	2000	U	Benz[a]anthracene	2700	U
C3-Fluorenes	2000	U	Chrysene/Triphenylene	1900	U
Anthracene	2300	U	C1-Chrysenes	1900	U
Phenanthrene	2500	U	C2-Chrysenes	1900	U
C1-Phenanthrenes/Anthracenes	2500	U	C3-Chrysenes	1900	U
C2-Phenanthrenes/Anthracenes	2500	U	C4-Chrysenes	1900	U
C3-Phenanthrenes/Anthracenes	2500	U	Benzo[b]fluoranthene	1800	U
C4-Phenanthrenes/Anthracenes	2500	U	Benzo[k]fluoranthene	3500	U
Retene	2500	U	Benzo[a]fluoranthene	3500	U
Dibenzothiophene	1900	U	Benzo[e]pyrene	2400	U
C1-Dibenzothiophenes	1900	U	Benzo[a]pyrene	2400	U
C2-Dibenzothiophenes	1900	U	Perylene	3000	U
C3-Dibenzothiophenes	1900	U	Indeno[1,2,3-cd]pyrene	4200	U
C4-Dibenzothiophenes	1900	U	Dibenz[a,h]anthracene	3300	U
Benzo(b)fluorene	1800	U	Benzo[g,h,i]perylene	3100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	116	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	109	50-130

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

02/15/06 20:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28160.D
Acq On : 7 Feb 2006 8:49 pm
Operator : AC
Sample : 0601073-01-RE
Misc : 100X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 09 14:04:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

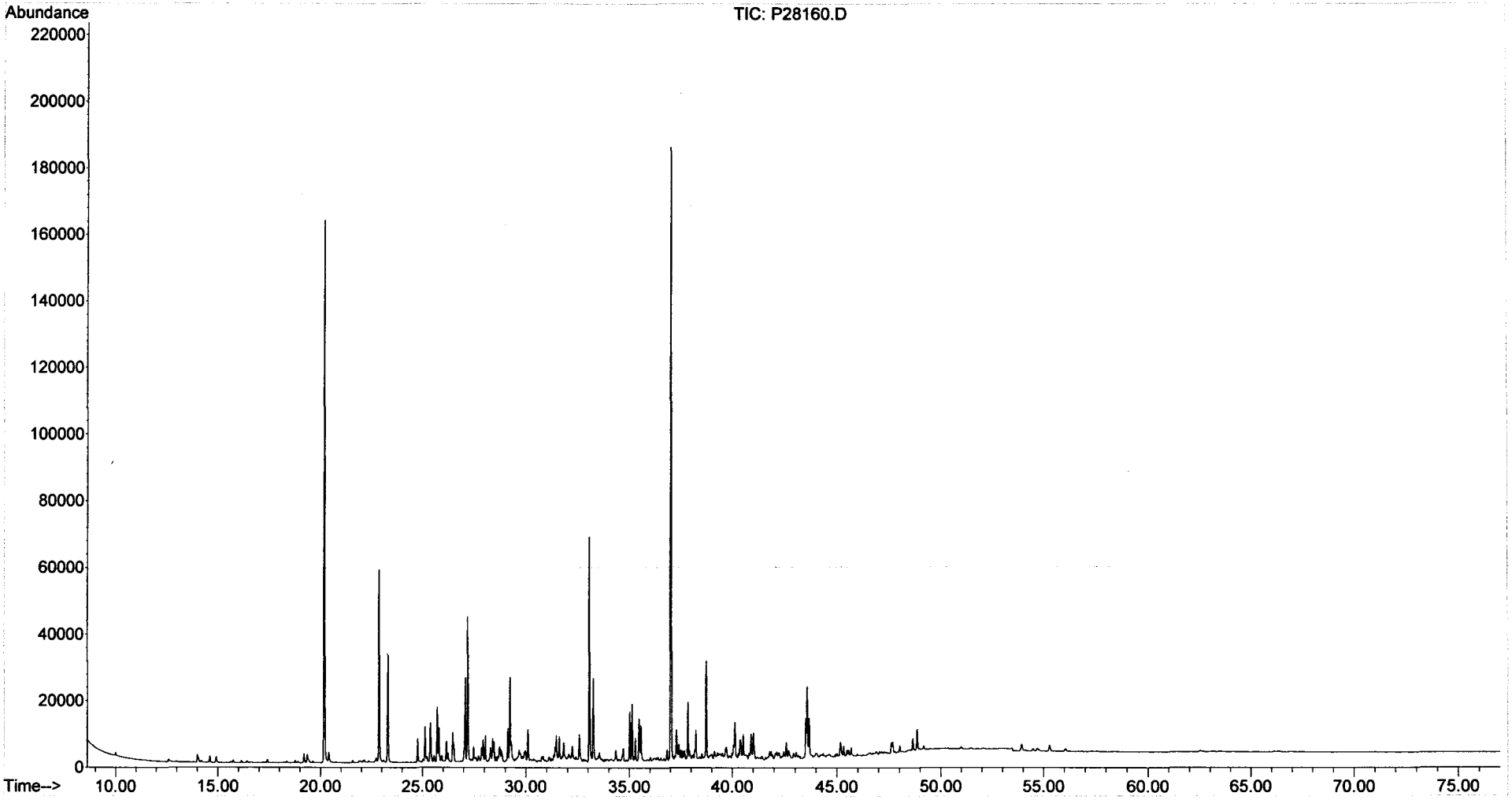
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	28992	500.00	ng/mL	0.00
72) Chrysene-d12	43.58	240	44665	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	224m	3.76	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.38%#	
58) Pyrene-d10	38.65	212	421m	3.44	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.34%#	
81) Benzo[b]fluoranthene-d12	47.52	264	323m	3.53	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.35%#	
125) 5B(H)Cholane - Surr	44.15	217	64m	3.12	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.31%#	
Target Compounds						Qvalue
9) Naphthalene	20.16	128	406220	3115.13	ng/mL#	100
10) C1-Naphthalenes	22.86	142	228084m	1749.08	ng/mL	
15) 2-Methylnaphthalene	22.86	142	139978	1686.35	ng/mL#	100
16) 1-Methylnaphthalene	23.29	142	86269	1091.92	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28160.D
Acq On : 7 Feb 2006 8:49 pm
Operator : AC
Sample : 0601073-01-RE
Misc : 100X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 09 14:04:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-56 (5.8-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-02**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	87.7	4.98	104.38	10	AC

Parameter	Result		Parameter	Result
Naphthalene	4100000	E	Fluoranthene	540000
C1-Naphthalenes	2800000	E	Pyrene	890000
C2-Naphthalenes	1900000		C1-Fluoranthenes/Pyrenes	1300000
C3-Naphthalenes	820000		C2-Fluoranthenes/Pyrenes	700000
C4-Naphthalenes	290000		C3-Fluoranthenes/Pyrenes	340000
Biphenyl	240000		C4-Fluoranthenes/Pyrenes	110000
Dibenzofuran	71000		Naphthobenzothiophenes	170000
Acenaphthylene	780000		C1-Naphthobenzothiophenes	230000
Acenaphthene	540000		C2-Naphthobenzothiophenes	160000
Fluorene	650000		C3-Naphthobenzothiophenes	82000
C1-Fluorenes	520000		C4-Naphthobenzothiophenes	36000
C2-Fluorenes	420000		Benz[a]anthracene	330000
C3-Fluorenes	230000		Chrysene/Triphenylene	380000
Anthracene	660000		C1-Chrysenes	510000
Phenanthrene	1800000		C2-Chrysenes	340000
C1-Phenanthrenes/Anthracenes	1800000		C3-Chrysenes	180000
C2-Phenanthrenes/Anthracenes	1200000		C4-Chrysenes	57000
C3-Phenanthrenes/Anthracenes	520000		Benzo[b]fluoranthene	100000
C4-Phenanthrenes/Anthracenes	140000		Benzo[k]fluoranthene	140000
Retene	350	U	Benzo[a]fluoranthene	72000
Dibenzothiophene	300000		Benzo[e]pyrene	130000
C1-Dibenzothiophenes	440000		Benzo[a]pyrene	230000
C2-Dibenzothiophenes	400000		Perylene	44000
C3-Dibenzothiophenes	240000		Indeno[1,2,3-cd]pyrene	81000
C4-Dibenzothiophenes	82000		Dibenz[a,h]anthracene	28000
Benzo(b)fluorene	180000		Benzo[g,h,i]perylene	91000

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	120		50-130
Pyrene-d10	141	§	50-130
Benzo[b]fluoranthene-d12	116		50-130

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

02/15/06 20:04

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-56 (5.8-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-02**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	87.7	4.98	104.38	10	AC

Parameter	Result
Carbazole	**28000**

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	120		50-130
Pyrene-d10	141	§	50-130
Benzo[b]fluoranthene-d12	116		50-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.

02/15/06 20:05

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28163.D
Acq On : 8 Feb 2006 1:34 am
Operator : AC
Sample : 0601073-02
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 09 13:14:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	24439m	500.00	ng/mL	0.00
72) Chrysene-d12	43.57	240	41093	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	1158	23.06	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.31%#			
58) Pyrene-d10	38.65	212	2794m	27.05	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.71%#			
81) Benzo[b]fluoranthene-d12	47.51	264	1876m	22.27	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.23%#			
125) 5B(H)Cholane - Surr	44.17	217	327m	17.31	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.73%#			

Target Compounds						Qvalue
9) Naphthalene	20.16	128	1889206	17186.55	ng/mL#E	100
10) C1-Naphthalenes	22.86	142	1283110m	11672.75	ng/mLE	
11) C2-Naphthalenes	25.70	156	863479m	7855.27	ng/mL	
12) C3-Naphthalenes	28.05	170	379193m	3449.61	ng/mL	
13) C4-Naphthalenes	30.81	184	131911m	1200.03	ng/mL	
15) 2-Methylnaphthalene	22.86	142	732511	10468.79	ng/mL#E	100
16) 1-Methylnaphthalene	23.29	142	548203	8231.36	ng/mL#	100
22) Biphenyl	24.75	154	86448	981.42	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.37	156	123702m	2052.31	ng/mL	
24) Dibenzofuran	27.84	168	28772m	295.90	ng/mL	
25) Acenaphthylene	26.46	152	355485m	3259.43	ng/mL	
26) Acenaphthene	27.20	153	150731	2254.69	ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.75	170	26874m	510.90	ng/mL	
28) Fluorene	29.22	166	212765m	2721.91	ng/mL	
29) C1-Fluorenes	31.45	180	169575m	2169.38	ng/mL	
30) C2-Fluorenes	33.63	194	136245m	1742.98	ng/mL	
31) C3-Fluorenes	35.62	208	75387m	964.43	ng/mL	
32) Dibenzothiophene	32.55	184	130865	1252.07	ng/mL#	93
37) C1-Dibenzothiophenes	34.33	198	191092m	1828.30	ng/mL	
38) C2-Dibenzothiophenes	36.02	212	175420m	1678.36	ng/mL	
39) C3-Dibenzothiophenes	37.81	226	102575m	981.40	ng/mL	
40) C4-Dibenzothiophenes	39.50	240	35990m	344.34	ng/mL	
41) Phenanthrene	33.04	178	860559	7715.72	ng/mL	99
47) C1-Phenanthrenes/Anthracen	35.11	192	857079m	7684.52	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.28	206	546949m	4903.91	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.13	220	243217m	2180.67	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.33	234	66880m	599.64	ng/mL	
53) Anthracene	33.23	178	288317	2783.38	ng/mL	99
54) Carbazole	33.91	167	11558m	117.07	ng/mL	
55) 1-Methylphenanthrene	35.56	192	143004	1848.18	ng/mL	99
56) Fluoranthene	37.84	202	267285m	2245.34	ng/mL	
57) Benzo(b)fluorene	40.36	216	56125m	766.94	ng/mL	
59) Pyrene	38.73	202	455524	3736.95	ng/mL	98
60) C1-Fluoranthenes/Pyrenes	40.12	216	680858m	5585.50	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.58	230	358795m	2943.42	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.05	244	171144m	1404.00	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.29	258	55857m	458.23	ng/mL	
64) Naphthobenzothiophene	42.58	234	49227	435.49	ng/ml#	69
65) Naphthobenzothiophene-2,1-	42.58	234	49319	436.30	ng/mL#	69
66) Naphthobenzothiophene-1,2-	42.93	234	14613m	129.28	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28163.D
Acq On : 8 Feb 2006 1:34 am
Operator : AC
Sample : 0601073-02
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 09 13:14:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

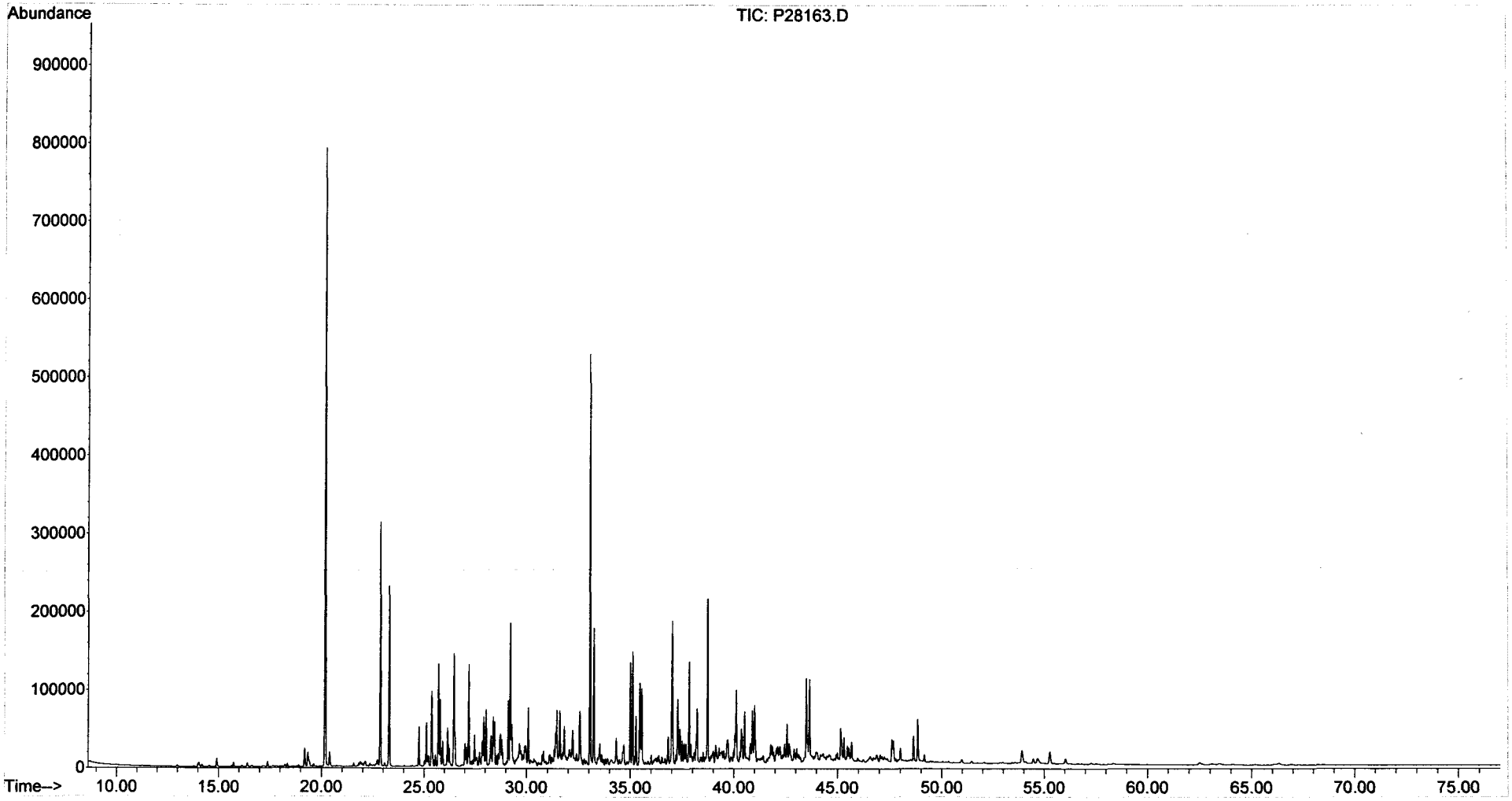
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
67) Naphthobenzothiophene-2,3-	43.22	234	14405m	127.44	ng/mL	
68) C1-Naphthobenzothiophenes	43.98	248	107377m	949.92	ng/ml	
69) C2-Naphthobenzothiophenes	45.48	262	73788m	652.77	ng/ml	
70) C3-Naphthobenzothiophenes	47.61	276	38581m	341.31	ng/ml	
71) C4-Naphthobenzothiophenes	48.71	290	16938m	149.84	ng/mL	
73) Benz[a]anthracene	43.51	228	162878m	1387.96	ng/mL	
74) Chrysene	43.67	228	184955m	1569.21	ng/mL	
75) Chrysene/Triphenylene	43.67	228	187068m	1587.14	ng/mL	
76) C1-Chrysenes	45.16	242	249750m	2118.95	ng/mL	
77) C2-Chrysenes	46.87	256	170370m	1445.47	ng/mL	
78) BBF-d12 Surr BKGD	47.50	256	572m	4.85	ng/mL	
79) C3-Chrysenes	48.50	270	90730m	769.78	ng/mL	
80) C4-Chrysenes	50.04	284	28204m	239.29	ng/mL	
82) Benzo[b]fluoranthene	47.60	252	54498	432.41	ng/mL	100
83) Benzo[k]fluoranthene	47.66	252	77380	587.11	ng/mL	99
84) Benzo[a]fluoranthene	47.99	252	39451m	299.33	ng/mL	
85) Benzo[e]pyrene	48.64	252	66780	549.64	ng/mL	99
86) Benzo[a]pyrene	48.84	252	118006m	971.50	ng/mL	
87) Perylene	49.16	252	22029m	181.91	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.90	276	40675m	337.85	ng/mL	
89) Dibenz[a,h]anthracene	53.93	278	13169m	116.32	ng/mL	
90) Benzo[g,h,i]perylene	55.27	276	47708	380.06	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28163.D
Acq On : 8 Feb 2006 1:34 am
Operator : AC
Sample : 0601073-02
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 09 13:14:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-56 (5.8-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-02**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/02/06	87.7	4.98	13.13	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**580**	30,31-Bishomohopane-22S	**750**
C24 Tricyclic Terpane	**360**	30,31-Bishomohopane-22R	**600**
C25 Tricyclic Terpane	**360**	30,31-Trishomohopane-22S	**370**
C24 Tetracyclic Terpane	**650**	30,31-Trishomohopane-22R	**260**
C26 Tricyclic Terpane-22S	**140**	Tetrakishomohopane-22S	**260**
C26 Tricyclic Terpane-22R	**140**	Tetrakishomohopane-22R	**160**
C28 Tricyclic Terpane-22S	**140**	Pentakishomohopane-22S	**120**
C28 Tricyclic Terpane-22R	**180**	Pentakishomohopane-22R	**91**
C29 Tricyclic Terpane-22S	**180**	13b(H),17a(H)-20S-Diacholestane	**720**
C29 Tricyclic Terpane-22R	**190**	13b(H),17a(H)-20R-Diacholestane	**430**
18a-22,29,30-Trisnorneohopane-TS	**2200**	13b,17a-20S-Methyldiacholestane	**290**
C30 Tricyclic Terpane-22S	**180**	14a(H),17a(H)-20S-Cholestane	**350**
C30 Tricyclic Terpane-22R	**64**	14a(H),17a(H)-20R-Cholestane	**1100**
17a(H)-22,29,30-Trisnorhopane-TM	**1200**	13b,17a-20R-Ethyldiacholestane	**140**
17a/b,21b/a 28,30-Bisnorhopane	**230**	13a,17b-20S-Ethyldiacholestane	**56**
17a(H),21b(H)-25-Norhopane	**120**	14a,17a-20S-Methylcholestane	**310**
30-Norhopane	**3600**	14a,17a-20R-Methylcholestane	**480**
18a(H)-30-Norneohopane-C29Ts	**2000**	14a(H),17a(H)-20S-Ethylcholestane	**320**
17a(H)-Diahopane	**540**	14a(H),17a(H)-20R-Ethylcholestane	**410**
30-Normoretane	**720**	14b(H),17b(H)-20R-Cholestane	**490**
18a(H)&18b(H)-Oleananes	**1200**	14b(H),17b(H)-20S-Cholestane	**490**
Hopane	**6000**	14b,17b-20R-Methylcholestane	**480**
Moretane	**820**	14b,17b-20S-Methylcholestane	**520**
30-Homohopane-22S	**1400**	14b(H),17b(H)-20R-Ethylcholestane	**630**
30-Homohopane-22R	**1100**	14b(H),17b(H)-20S-Ethylcholestane	**460**

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

N/A - Not Applicable

02/15/06 20:38

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34939.D
Acq On : 2 Feb 2006 6:50 pm
Operator : AC
Sample : 0601073-02
Misc : 1X
ALS Vial : 33 Sample Multiplier: 1

MAL 2/15/06

Quant Time: Feb 15 16:19:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	43.42	240	85648	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	43.90	217	59538	1654.03	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 165.40%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.46	191	147200m	1999.96	ng/mL	
84) Hopane (T19)	52.46	191	147181m	1999.70	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.92	191	14152m	192.28	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.65	191	8861	120.39	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.13	191	8786m	119.37	ng/ml	
88) C24 Tetracyclic Terpane (T	44.46	191	15869m	215.61	ng/ml	
89) C26 Tricyclic Terpane-22S	44.19	191	3504	47.61	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.29	191	3429	46.59	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.57	191	3306m	44.92	ng/ml	
92) C28 Tricyclic Terpane-22R	46.74	191	4400m	59.78	ng/ml	
93) C29 Tricyclic Terpane-22S	47.26	191	4341m	58.98	ng/ml	
94) C29 Tricyclic Terpane-22R	47.46	191	4728m	64.24	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.61	191	55197m	749.95	ng/ml	
96) C30 Tricyclic Terpane-22S	48.70	191	4296	58.37	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.95	191	1564m	21.25	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.16	191	29381m	399.19	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.38	191	5681m	77.19	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.16	191	2868m	38.97	ng/ml	
101) 30-Norhopane (T15)	51.05	191	87501m	1188.85	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.17	191	50225m	682.39	ng/ml	
103) 17a(H)-Diahopane (X)	51.29	191	13137m	178.49	ng/ml	
104) 30-Normoretane (T17)	51.85	191	17502	237.79	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.26	191	28434m	386.32	ng/ml	
106) Moretane (T20)	53.15	191	20036m	272.22	ng/ml	
107) 30-Homohopane-22S (T21)	54.26	191	33346m	453.06	ng/ml	
108) 30-Homohopane-22R (T22)	54.50	191	27655m	375.74	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.85	191	18391m	249.87	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.24	191	14649	199.03	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.03	191	9112m	123.80	ng/ml	
112) 30,31-Trishomohopane-22R (	58.65	191	6353m	86.32	ng/ml	
113) Tetrakishomohopane-22S (T3	60.71	191	6493	88.22	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.63	191	3924	53.31	ng/ml	100
115) Pentakishomohopane-22S (T3	63.91	191	2951m	40.09	ng/ml	
116) Pentakishomohopane-22R (T3	65.23	191	2226m	30.24	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.41	217	8632m	239.81	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.83	217	5109m	141.93	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.53	217	3492m	97.01	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.40	217	4140m	115.01	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.94	217	13128m	364.71	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.21	217	1714m	47.62	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34939.D
Acq On : 2 Feb 2006 6:50 pm
Operator : AC
Sample : 0601073-02
Misc : 1X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 15 16:19:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

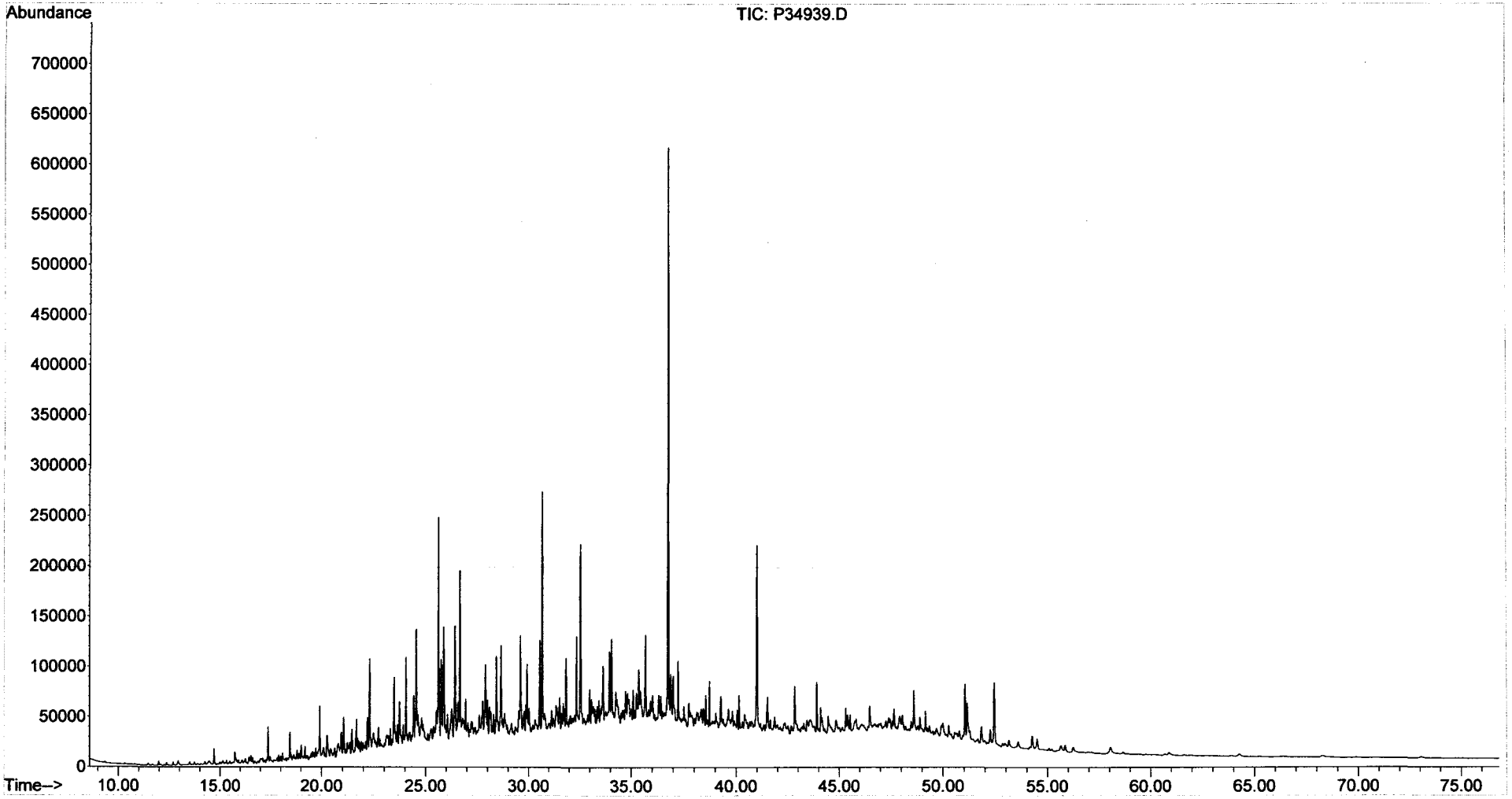
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.47	217	677m	18.81	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.62	217	3716m	103.23	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.37	217	5740m	159.46	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.72	217	3871m	107.54	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.66	217	4953m	137.60	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.49	218	5909m	164.16	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.58	218	5858m	162.74	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.82	218	5739m	159.44	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.89	218	6230m	173.08	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.98	218	7498m	208.30	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.01	218	5504m	152.91	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34939.D
Acq On : 2 Feb 2006 6:50 pm
Operator : AC
Sample : 0601073-02
Misc : 1X
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 15 16:19:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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-56 (5.8-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-02E**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/07/06	87.7	4.98	104.38	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4300000**		Fluoranthene	2400	U
C1-Naphthalenes	**2800000**		Pyrene	2100	U
C2-Naphthalenes	3900	U	C1-Fluoranthenes/Pyrenes	2100	U
C3-Naphthalenes	3900	U	C2-Fluoranthenes/Pyrenes	2100	U
C4-Naphthalenes	3900	U	C3-Fluoranthenes/Pyrenes	2100	U
Biphenyl	2200	U	C4-Fluoranthenes/Pyrenes	2100	U
Dibenzofuran	2800	U	Naphthobenzothiophenes	2900	U
Acenaphthylene	4300	U	C1-Naphthobenzothiophenes	2900	U
Acenaphthene	2800	U	C2-Naphthobenzothiophenes	2900	U
Fluorene	2800	U	C3-Naphthobenzothiophenes	2900	U
C1-Fluorenes	2800	U	C4-Naphthobenzothiophenes	2900	U
C2-Fluorenes	2800	U	Benz[a]anthracene	3800	U
C3-Fluorenes	2800	U	Chrysene/Triphenylene	2600	U
Anthracene	3200	U	C1-Chrysenes	2600	U
Phenanthrene	3500	U	C2-Chrysenes	2600	U
C1-Phenanthrenes/Anthracenes	3500	U	C3-Chrysenes	2600	U
C2-Phenanthrenes/Anthracenes	3500	U	C4-Chrysenes	2600	U
C3-Phenanthrenes/Anthracenes	3500	U	Benzo[b]fluoranthene	2500	U
C4-Phenanthrenes/Anthracenes	3500	U	Benzo[k]fluoranthene	4800	U
Retene	3500	U	Benzo[a]fluoranthene	4800	U
Dibenzothiophene	2600	U	Benzo[e]pyrene	3300	U
C1-Dibenzothiophenes	2600	U	Benzo[a]pyrene	3300	U
C2-Dibenzothiophenes	2600	U	Perylene	4200	U
C3-Dibenzothiophenes	2600	U	Indeno[1,2,3-cd]pyrene	5700	U
C4-Dibenzothiophenes	2600	U	Dibenz[a,h]anthracene	4500	U
Benzo(b)fluorene	2400	U	Benzo[g,h,i]perylene	4200	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	117	50-130
Pyrene-d10	123	50-130
Benzo[b]fluoranthene-d12	119	50-130

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

02/15/06 20:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28161.D
Acq On : 7 Feb 2006 10:24 pm
Operator : AC
Sample : 0601073-02-RE
Misc : 100X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 09 14:07:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

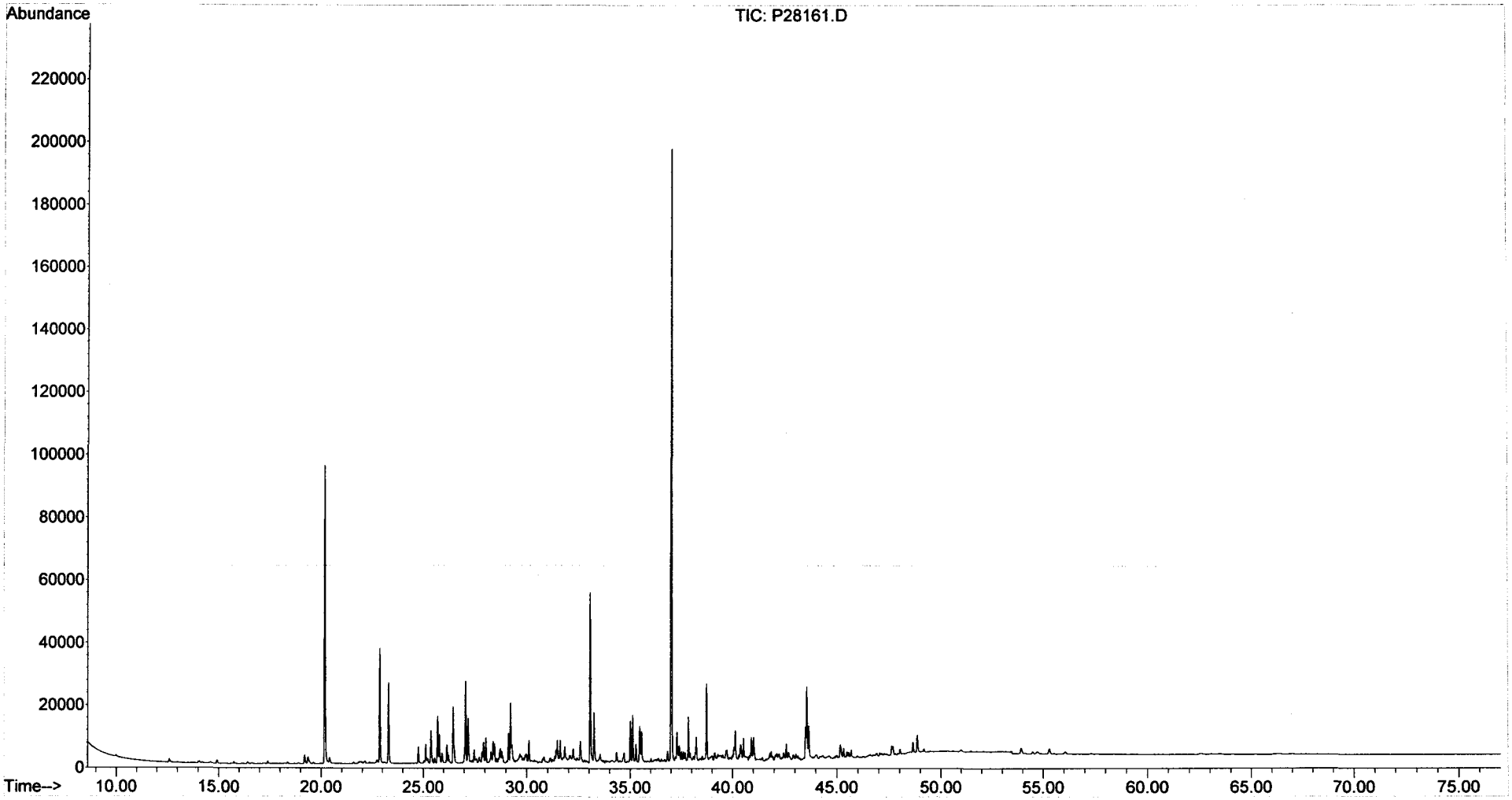
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	30950	500.00	ng/mL	0.00
72) Chrysene-d12	43.58	240	47204	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	143m	2.25	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.22%#	
58) Pyrene-d10	38.65	212	309m	2.36	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.24%#	
81) Benzo[b]fluoranthene-d12	47.52	264	221m	2.28	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.23%#	
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	20.16	128	250809	1801.67	ng/mL#	100
10) C1-Naphthalenes	22.86	142	161608m	1160.90	ng/mL	
15) 2-Methylnaphthalene	22.86	142	92114	1039.51	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28161.D
Acq On : 7 Feb 2006 10:24 pm
Operator : AC
Sample : 0601073-02-RE
Misc : 100X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 09 14:07:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-57 (7-9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-03**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	40.6	10.04	27.75	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	46000		Fluoranthene	130000	E
C1-Naphthalenes	57000		Pyrene	180000	E
C2-Naphthalenes	94000		C1-Fluoranthenes/Pyrenes	220000	
C3-Naphthalenes	71000		C2-Fluoranthenes/Pyrenes	96000	
C4-Naphthalenes	38000		C3-Fluoranthenes/Pyrenes	41000	
Biphenyl	7700		C4-Fluoranthenes/Pyrenes	15000	
Dibenzofuran	5500		Naphthobenzothiophenes	28000	
Acenaphthylene	32000		C1-Naphthobenzothiophenes	31000	
Acenaphthene	73000	E	C2-Naphthobenzothiophenes	19000	
Fluorene	36000		C3-Naphthobenzothiophenes	11000	
C1-Fluorenes	46000		C4-Naphthobenzothiophenes	5000	
C2-Fluorenes	50000		Benz[a]anthracene	79000	E
C3-Fluorenes	32000		Chrysene/Triphenylene	82000	E
Anthracene	110000	E	C1-Chrysenes	78000	
Phenanthrene	180000	E	C2-Chrysenes	43000	
C1-Phenanthrenes/Anthracenes	220000		C3-Chrysenes	22000	
C2-Phenanthrenes/Anthracenes	150000		C4-Chrysenes	7500	
C3-Phenanthrenes/Anthracenes	67000		Benzo[b]fluoranthene	32000	
C4-Phenanthrenes/Anthracenes	19000		Benzo[k]fluoranthene	40000	
Retene	3000		Benzo[a]fluoranthene	17000	
Dibenzothiophene	27000		Benzo[e]pyrene	35000	
C1-Dibenzothiophenes	48000		Benzo[a]pyrene	64000	
C2-Dibenzothiophenes	51000		Perylene	10000	
C3-Dibenzothiophenes	31000		Indeno[1,2,3-cd]pyrene	27000	
C4-Dibenzothiophenes	12000		Dibenz[a,h]anthracene	8500	
Benzo(b)fluorene	36000		Benzo[g,h,i]perylene	28000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	113	50-130
Benzo[b]fluoranthene-d12	108	50-130

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

02/15/06 20:05

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-57 (7-9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-03**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	40.6	10.04	27.75	1	AC

Parameter	Result
Carbazole	**1200**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	113	50-130
Benzo[b]fluoranthene-d12	108	50-130

N/A - Not Applicable

02/15/06 20:05

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28164.D
Acq On : 8 Feb 2006 3:08 am
Operator : AC
Sample : 0601073-03
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

2nd 2/17/06

Quant Time: Feb 09 13:26:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

CMS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	30793m	500.00	ng/mL	0.00
72) Chrysene-d12	43.60	240	52936m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	43298	684.19	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 68.42%			
58) Pyrene-d10	38.67	212	106467	817.93	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 81.79%			
81) Benzo[b]fluoranthene-d12	47.52	264	84707	780.52	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 78.05%			
125) 5B(H)Cholane - Surr	44.18	217	16470	676.76	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 67.68%			

Target Compounds						Qvalue
9) Naphthalene	20.16	128	943027	6808.71	ng/mL#	100
10) C1-Naphthalenes	23.29	142	1163239m	8398.66	ng/mL	
11) C2-Naphthalenes	25.71	156	1915923m	13833.08	ng/mL	
12) C3-Naphthalenes	28.05	170	1449299m	10464.03	ng/mL	
13) C4-Naphthalenes	30.81	184	763692m	5513.90	ng/mL	
15) 2-Methylnaphthalene	22.86	142	547153	6206.15	ng/mL#	100
16) 1-Methylnaphthalene	23.29	142	612861	7303.37	ng/mL#	100
22) Biphenyl	24.75	154	125971	1135.02	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.37	156	282703m	3722.44	ng/mL	
24) Dibenzofuran	27.84	168	99722	813.96	ng/mL	93
25) Acenaphthylene	26.47	152	654103m	4759.91	ng/mL	
26) Acenaphthene	27.20	153	898772	10670.01	ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	113212m	1708.16	ng/mL	
28) Fluorene	29.22	166	524068m	5320.99	ng/mL	
29) C1-Fluorenes	31.46	180	663495m	6736.62	ng/mL	
30) C2-Fluorenes	33.64	194	723822m	7349.13	ng/mL	
31) C3-Fluorenes	35.62	208	456978m	4639.80	ng/mL	
32) Dibenzothiophene	32.56	184	518650	3938.32	ng/mL#	84
37) C1-Dibenzothiophenes	34.33	198	925090m	7024.58	ng/mL	
38) C2-Dibenzothiophenes	36.39	212	988617m	7506.97	ng/mL	
39) C3-Dibenzothiophenes	37.84	226	604209m	4588.00	ng/mL	
40) C4-Dibenzothiophenes	39.52	240	224446m	1704.31	ng/mL	
41) Phenanthrene	33.07	178	3652425	25990.14	ng/mL E	97
47) C1-Phenanthrenes/Anthracen	35.03	192	4628551m	32936.12	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.30	206	3094591m	22020.68	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.14	220	1384347m	9850.82	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.34	234	383207m	2726.85	ng/mL	
52) Retene	40.05	234	14281m	447.86	ng/mL	
53) Anthracene	33.24	178	2169908	16625.53	ng/mL E	98
54) Carbazole	33.91	167	21957m	176.51	ng/mL	
55) 1-Methylphenanthrene	35.57	192	782539	8026.65	ng/mL	100
56) Fluoranthene	37.86	202	2839404m	18930.65	ng/mL E	
57) Benzo(b)fluorene	40.38	216	489913m	5313.22	ng/mL	
59) Pyrene	38.77	202	4010211	26109.85	ng/mL E	93
60) C1-Fluoranthenes/Pyrenes	40.14	216	5057662m	32929.64	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.61	230	2173315m	14150.11	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.07	244	929937m	6054.67	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.32	258	331871m	2160.76	ng/mL	
64) Naphthobenzothiophene	42.59	234	367778	2582.22	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.59	234	367778	2582.22	ng/mL#	68

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28164.D
Acq On : 8 Feb 2006 3:08 am
Operator : AC
Sample : 0601073-03
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 09 13:26:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

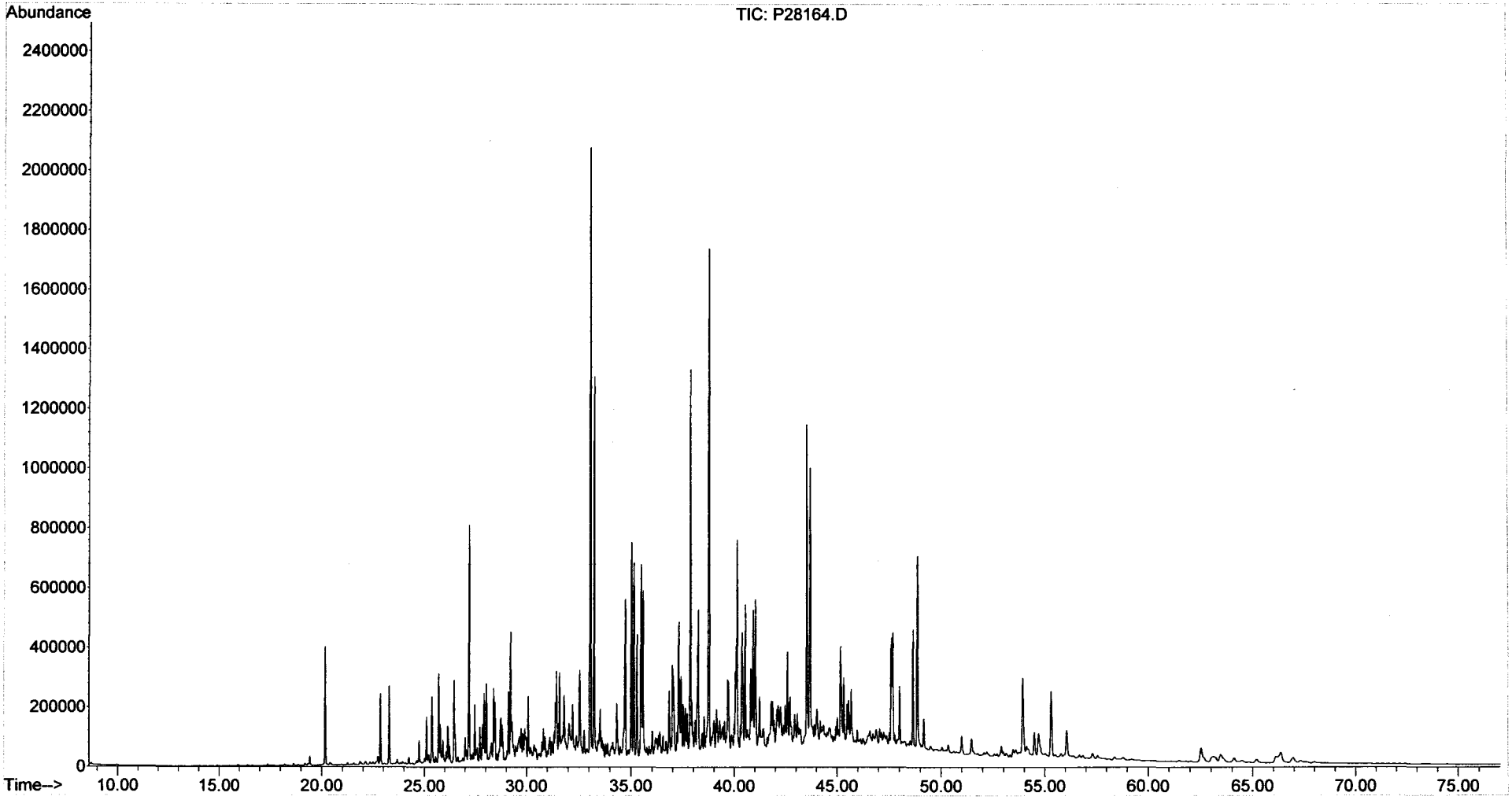
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.94	234	96745	679.26 ng/mL#	31
67) Naphthobenzothiophene-2,3-	43.24	234	125898m	883.95 ng/mL	
68) C1-Naphthobenzothiophenes	43.99	248	640715m	4498.55 ng/ml	
69) C2-Naphthobenzothiophenes	45.50	262	404258m	2838.35 ng/ml	
70) C3-Naphthobenzothiophenes	47.63	276	220845m	1550.58 ng/ml	
71) C4-Naphthobenzothiophenes	48.74	290	103750m	728.44 ng/mL	
73) Benz[a]anthracene	43.53	228	1746842m	11555.39 ng/mL E	
74) Chrysene	43.71	228	1834341m	12081.24 ng/mL E	
75) Chrysene/Triphenylene	43.71	228	1836013m	12092.26 ng/mL	
76) C1-Chrysenes	45.17	242	1746096m	11500.05 ng/mL	
77) C2-Chrysenes	46.88	256	968773m	6380.48 ng/mL	
78) BBF-d12 Surr BKGD	47.51	256	5625m	37.05 ng/mL	
79) C3-Chrysenes	48.53	270	499228m	3287.99 ng/mL	
80) C4-Chrysenes	50.06	284	166670m	1097.71 ng/mL	
82) Benzo[b]fluoranthene	47.62	252	763658	4703.56 ng/mL	99
83) Benzo[k]fluoranthene	47.70	252	1009048	5943.23 ng/mL	99
84) Benzo[a]fluoranthene	48.02	252	418038m	2462.22 ng/mL	
85) Benzo[e]pyrene	48.66	252	807869m	5161.66 ng/mL	
86) Benzo[a]pyrene	48.87	252	1465112m	9363.23 ng/mL	
87) Perylene	49.18	252	237496m	1522.45 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.93	276	605098m	3901.58 ng/mL	
89) Dibenz[a,h]anthracene	53.95	278	181530m	1244.66 ng/mL	
90) Benzo[g,h,i]perylene	55.32	276	665106	4113.05 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28164.D
Acq On : 8 Feb 2006 3:08 am
Operator : AC
Sample : 0601073-03
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 09 13:26:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-57 (7-9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-03**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/02/06	40.6	10.04	7.6	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1300**	30,31-Bishomohopane-22S	**2200**
C24 Tricyclic Terpane	**740**	30,31-Bishomohopane-22R	**1400**
C25 Tricyclic Terpane	**800**	30,31-Trishomohopane-22S	**1100**
C24 Tetracyclic Terpane	**810**	30,31-Trishomohopane-22R	**730**
C26 Tricyclic Terpane-22S	**320**	Tetrakishomohopane-22S	**750**
C26 Tricyclic Terpane-22R	**320**	Tetrakishomohopane-22R	**510**
C28 Tricyclic Terpane-22S	**390**	Pentakishomohopane-22S	**650**
C28 Tricyclic Terpane-22R	**390**	Pentakishomohopane-22R	**480**
C29 Tricyclic Terpane-22S	**440**	13b(H),17a(H)-20S-Diacholestane	**1400**
C29 Tricyclic Terpane-22R	**490**	13b(H),17a(H)-20R-Diacholestane	**710**
18a-22,29,30-Trisnorneohopane-TS	**1900**	13b,17a-20S-Methyldiacholestane	**690**
C30 Tricyclic Terpane-22S	**380**	14a(H),17a(H)-20S-Cholestane	**700**
C30 Tricyclic Terpane-22R	**350**	14a(H),17a(H)-20R-Cholestane	**2600**
17a(H)-22,29,30-Trisnorhopane-TM	**1900**	13b,17a-20R-Ethyldiacholestane	**440**
17a/b,21b/a 28,30-Bisnorhopane	**470**	13a,17b-20S-Ethyldiacholestane	**130**
17a(H),21b(H)-25-Norhopane	**180**	14a,17a-20S-Methylcholestane	**450**
30-Norhopane	**6200**	14a,17a-20R-Methylcholestane	**1100**
18a(H)-30-Norneohopane-C29Ts	**1500**	14a(H),17a(H)-20S-Ethylcholestane	**1200**
17a(H)-Diahopane	**310**	14a(H),17a(H)-20R-Ethylcholestane	**1600**
30-Normoretane	**960**	14b(H),17b(H)-20R-Cholestane	**1300**
18a(H)&18b(H)-Oleananes	**750**	14b(H),17b(H)-20S-Cholestane	**1300**
Hopane	**7700**	14b,17b-20R-Methylcholestane	**1300**
Moretane	**1100**	14b,17b-20S-Methylcholestane	**1700**
30-Homohopane-22S	**2900**	14b(H),17b(H)-20R-Ethylcholestane	**2400**
30-Homohopane-22R	**2600**	14b(H),17b(H)-20S-Ethylcholestane	**1600**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	81	50-130

N/A - Not Applicable

02/15/06 20:38

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34940.D
Acq On : 2 Feb 2006 8:21 pm
Operator : AC
Sample : 0601073-03
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

MAL 2/15/6

Quant Time: Feb 15 17:02:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	43.43	240	85367	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.91	217	76813	2140.97	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 214.10%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	303890m	4142.45	ng/mL	
84) Hopane (T19)	52.48	191	303985m	4143.75	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	49725m	677.82	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	29172m	397.66	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.14	191	31557m	430.17	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	31756m	432.88	ng/ml	
89) C26 Tricyclic Terpane-22S	44.20	191	12801	174.50	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.30	191	12780m	174.21	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	15298m	208.53	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	15464m	210.80	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	17105m	233.17	ng/ml	
94) C29 Tricyclic Terpane-22R	47.47	191	19258m	262.51	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	74379m	1013.89	ng/ml	
96) C30 Tricyclic Terpane-22S	48.71	191	15054m	205.21	ng/mL	
97) C30 Tricyclic Terpane-22R	48.96	191	13676m	186.42	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.19	191	75733m	1032.35	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	18627m	253.91	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	7146m	97.41	ng/ml	
101) 30-Norhopane (T15)	51.07	191	242912m	3311.24	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	58592m	798.69	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	12291	167.54	ng/ml	100
104) 30-Normoretane (T17)	51.87	191	37796	515.21	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	29501m	402.14	ng/ml	
106) Moretane (T20)	53.17	191	42201m	575.26	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	114321m	1558.36	ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	100621m	1371.61	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.87	191	85538m	1166.00	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.28	191	53160	724.65	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.04	191	44304m	603.93	ng/ml	
112) 30,31-Trishomohopane-22R (	58.68	191	28784m	392.37	ng/ml	
113) Tetrakishomohopane-22S (T3	60.73	191	29444m	401.36	ng/ml	
114) Tetrakishomohopane-22R (T3	61.65	191	19995m	272.56	ng/ml	
115) Pentakishomohopane-22S (T3	63.94	191	25746m	350.95	ng/ml	
116) Pentakishomohopane-22R (T3	65.25	191	18753m	255.63	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	27522	767.11	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	45.84	217	13624m	379.74	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	13212m	368.25	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	13375m	372.80	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	50587m	1409.99	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.23	217	8475m	236.22	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34940.D
Acq On : 2 Feb 2006 8:21 pm
Operator : AC
Sample : 0601073-03
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 15 17:02:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

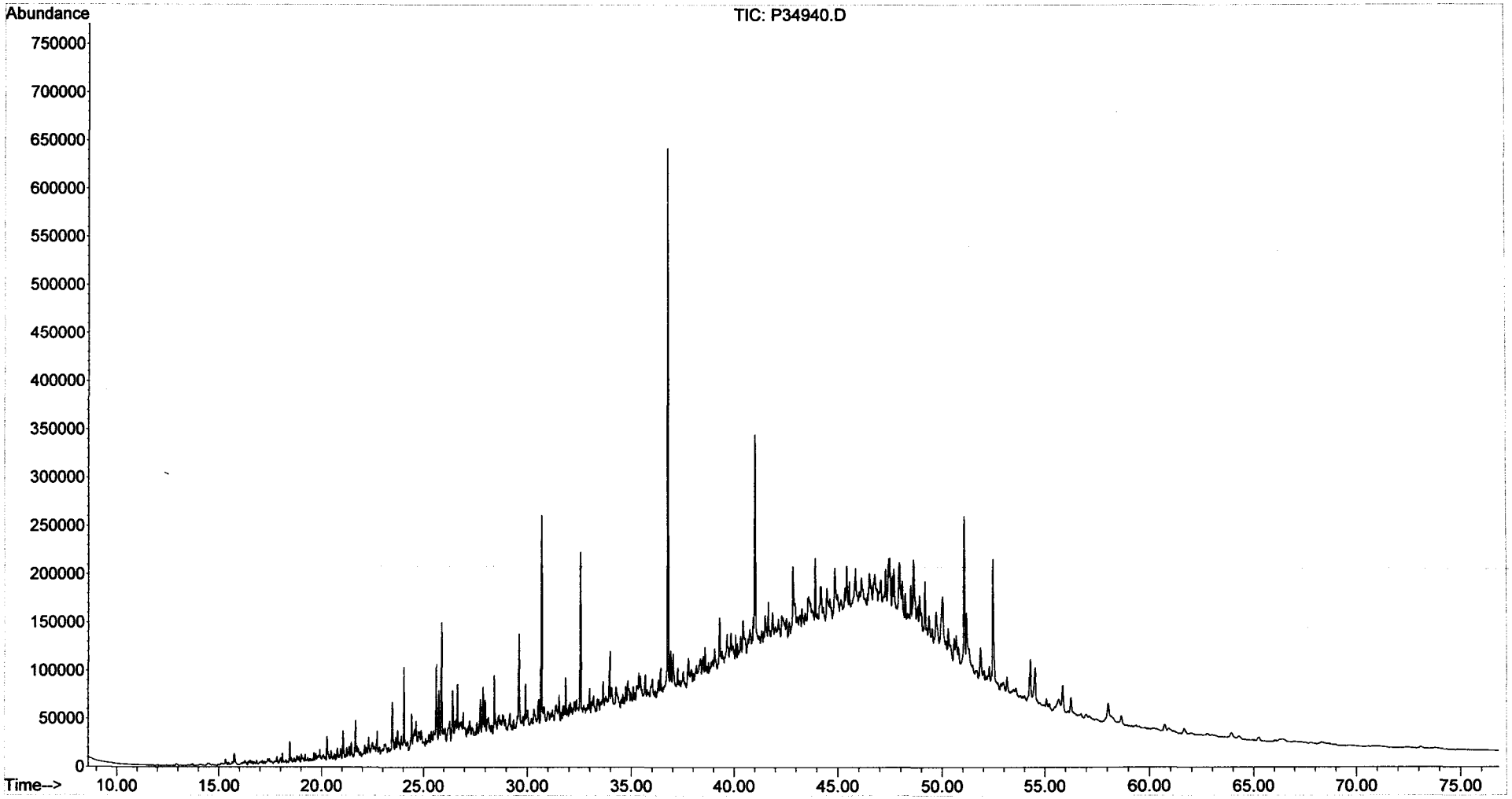
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	2543m	70.88	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.66	217	8590m	239.43	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.38	217	21006m	585.49	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	22697m	632.62	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	30403m	847.41	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	25365	706.99	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	25201m	702.42	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	25786m	718.72	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	32128m	895.49	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	45381m	1264.88	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	30728m	856.47	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34940.D
Acq On : 2 Feb 2006 8:21 pm
Operator : AC
Sample : 0601073-03
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 15 17:02:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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-57 (7-9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-03E**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/05/06	40.6	10.04	27.75	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	110	U	Fluoranthene	**150000**	
C1-Naphthalenes	110	U	Pyrene	**210000**	
C2-Naphthalenes	110	U	C1-Fluoranthenes/Pyrenes	61	U
C3-Naphthalenes	110	U	C2-Fluoranthenes/Pyrenes	61	U
C4-Naphthalenes	110	U	C3-Fluoranthenes/Pyrenes	61	U
Biphenyl	62	U	C4-Fluoranthenes/Pyrenes	61	U
Dibenzofuran	81	U	Naphthobenzothiophenes	82	U
Acenaphthylene	120	U	C1-Naphthobenzothiophenes	82	U
Acenaphthene	**80000**		C2-Naphthobenzothiophenes	82	U
Fluorene	78	U	C3-Naphthobenzothiophenes	82	U
C1-Fluorenes	78	U	C4-Naphthobenzothiophenes	82	U
C2-Fluorenes	78	U	Benz[a]anthracene	**89000**	
C3-Fluorenes	78	U	Chrysene/Triphenylene	**92000**	
Anthracene	**120000**		C1-Chrysenes	74	U
Phenanthrene	**200000**		C2-Chrysenes	74	U
C1-Phenanthrenes/Anthracenes	99	U	C3-Chrysenes	74	U
C2-Phenanthrenes/Anthracenes	99	U	C4-Chrysenes	74	U
C3-Phenanthrenes/Anthracenes	99	U	Benzo[b]fluoranthene	72	U
C4-Phenanthrenes/Anthracenes	99	U	Benzo[k]fluoranthene	140	U
Retene	99	U	Benzo[a]fluoranthene	140	U
Dibenzothiophene	76	U	Benzo[e]pyrene	93	U
C1-Dibenzothiophenes	76	U	Benzo[a]pyrene	95	U
C2-Dibenzothiophenes	76	U	Perylene	120	U
C3-Dibenzothiophenes	76	U	Indeno[1,2,3-cd]pyrene	160	U
C4-Dibenzothiophenes	76	U	Dibenz[a,h]anthracene	130	U
Benzo(b)fluorene	69	U	Benzo[g,h,i]perylene	120	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	113	50-130
Benzo[b]fluoranthene-d12	111	50-130

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

02/15/06 19:59

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB03\
Data File : P28134.D
Acq On : 5 Feb 2006 4:41 am
Operator : AC
Sample : 0601073-03-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 09 14:11:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

MS 2/9/06

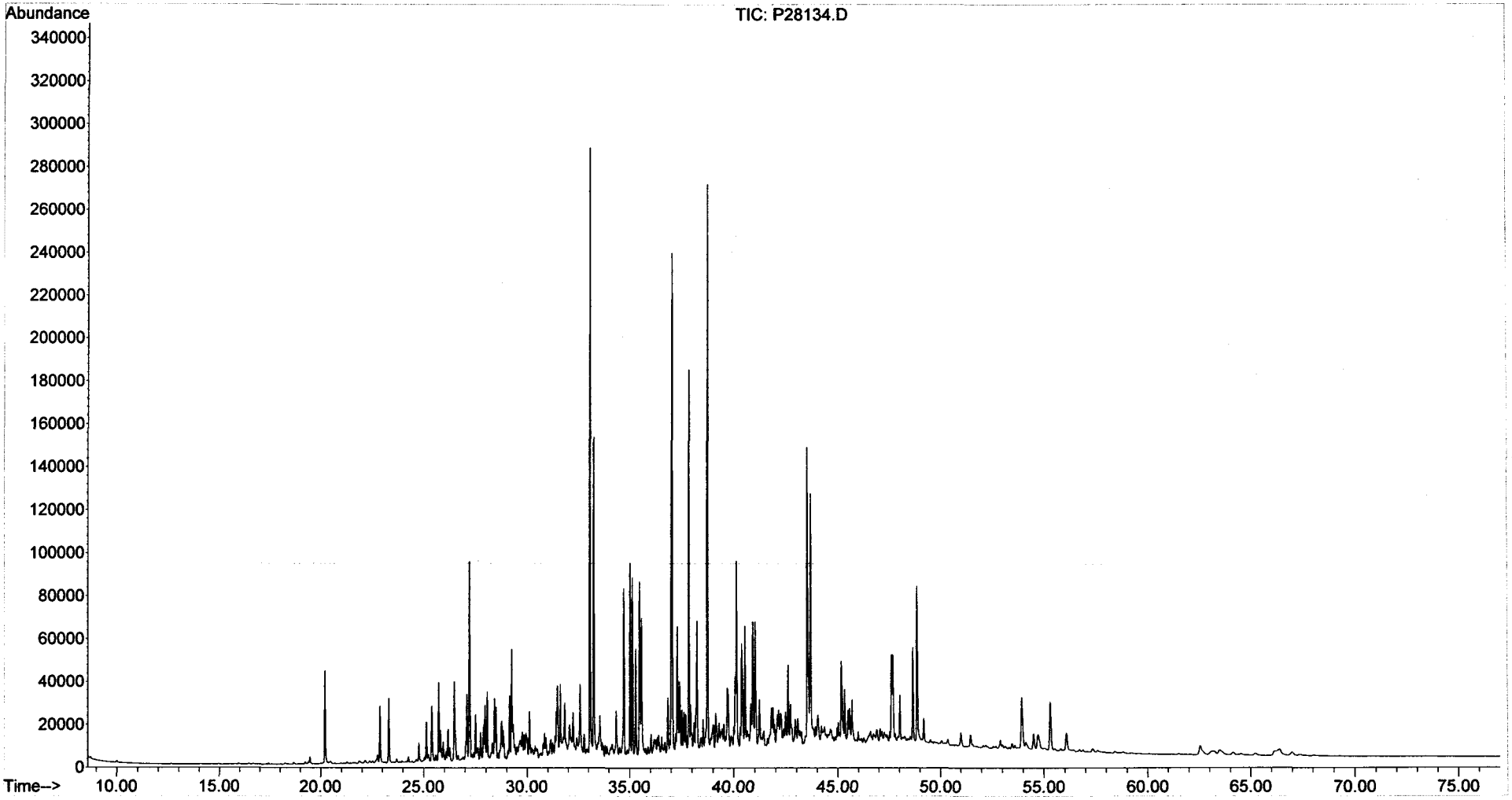
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	35716	500.00	ng/mL	-0.02
72) Chrysene-d12	43.60	240	58341	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	5317	72.44	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.24%#			
58) Pyrene-d10	38.67	212	12347m	81.78	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.18%#			
81) Benzo[b]fluoranthene-d12	47.54	264	9602	80.28	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.03%#			
125) 5B(H)Cholane - Surr	44.18	217	2003	74.68	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.47%#			
Target Compounds						Qvalue
26) Acenaphthene	27.21	153	114178	1168.66	ng/mL	99
41) Phenanthrene	33.07	178	478306	2934.42	ng/mL	100
53) Anthracene	33.25	178	272223	1798.24	ng/mL	99
56) Fluoranthene	37.85	202	373698m	2148.07	ng/mL	
59) Pyrene	38.74	202	540280	3032.81	ng/mL	98
73) Benz[a]anthracene	43.53	228	217266m	1304.07	ng/mL	
74) Chrysene	43.70	228	225405m	1347.01	ng/mL	
75) Chrysene/Triphenylene	43.70	228	225183m	1345.69	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB03\
Data File : P28134.D
Acq On : 5 Feb 2006 4:41 am
Operator : AC
Sample : 0601073-03-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 09 14:11:19 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	38.5	9.99	48.13	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	410000	E	Fluoranthene	170000	E
C1-Naphthalenes	360000	E	Pyrene	260000	E
C2-Naphthalenes	350000		C1-Fluoranthenes/Pyrenes	380000	
C3-Naphthalenes	180000		C2-Fluoranthenes/Pyrenes	190000	
C4-Naphthalenes	79000		C3-Fluoranthenes/Pyrenes	89000	
Biphenyl	37000		C4-Fluoranthenes/Pyrenes	31000	
Dibenzofuran	16000		Naphthobenzothiophenes	47000	
Acenaphthylene	65000		C1-Naphthobenzothiophenes	60000	
Acenaphthene	220000	E	C2-Naphthobenzothiophenes	40000	
Fluorene	120000		C3-Naphthobenzothiophenes	23000	
C1-Fluorenes	120000		C4-Naphthobenzothiophenes	11000	
C2-Fluorenes	110000		Benz[a]anthracene	100000	
C3-Fluorenes	64000		Chrysene/Triphenylene	110000	
Anthracene	190000	E	C1-Chrysenes	130000	
Phenanthrene	410000	E	C2-Chrysenes	84000	
C1-Phenanthrenes/Anthracenes	460000		C3-Chrysenes	47000	
C2-Phenanthrenes/Anthracenes	300000		C4-Chrysenes	15000	
C3-Phenanthrenes/Anthracenes	130000		Benzo[b]fluoranthene	41000	
C4-Phenanthrenes/Anthracenes	40000		Benzo[k]fluoranthene	46000	
Retene	4500		Benzo[a]fluoranthene	23000	
Dibenzothiophene	65000		Benzo[e]pyrene	44000	
C1-Dibenzothiophenes	100000		Benzo[a]pyrene	79000	
C2-Dibenzothiophenes	100000		Perylene	13000	
C3-Dibenzothiophenes	62000		Indeno[1,2,3-cd]pyrene	32000	
C4-Dibenzothiophenes	23000		Dibenz[a,h]anthracene	11000	
Benzo(b)fluorene	57000		Benzo[g,h,i]perylene	34000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	116	50-130
Benzo[b]fluoranthene-d12	107	50-130

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

02/15/06 20:06

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	38.5	9.99	48.13	1	AC

Parameter	Result
Carbazole	3600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	116	50-130
Benzo[b]fluoranthene-d12	107	50-130

N/A - Not Applicable

02/15/06 20:06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28165.D
Acq On : 8 Feb 2006 4:42 am
Operator : AC
Sample : 0601073-04
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 09 13:38:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	29135m	500.00	ng/mL	0.00
72) Chrysene-d12	43.60	240	52524m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	24467	408.63	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.86%#			
58) Pyrene-d10	38.67	212	59492m	483.06	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.31%#			
81) Benzo[b]fluoranthene-d12	47.52	264	47673	442.72	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.27%#			
125) 5B(H)Cholane - Surr	44.17	217	9611	398.02	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.80%#			

Target Compounds						Qvalue
9) Naphthalene	20.18	128	4280267	32662.45	ng/mL#E	100
10) C1-Naphthalenes	22.86	142	3779757m	28843.09	ng/mL E	
11) C2-Naphthalenes	25.71	156	3645011m	27814.85	ng/mL	
12) C3-Naphthalenes	28.05	170	1940482m	14807.70	ng/mL	
13) C4-Naphthalenes	30.81	184	824270m	6289.95	ng/mL	
15) 2-Methylnaphthalene	22.86	142	1932412	23165.96	ng/mL#E	100
16) 1-Methylnaphthalene	23.30	142	1843551	23219.54	ng/mL#E	100
22) Biphenyl	24.75	154	311150	2963.04	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.37	156	473295m	6586.68	ng/mL	
24) Dibenzofuran	27.84	168	152733	1317.60	ng/mL	96
25) Acenaphthylene	26.47	152	673848m	5182.64	ng/mL	
26) Acenaphthene	27.21	153	1395290	17507.20	ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	118129m	1883.77	ng/mL	
28) Fluorene	29.23	166	880896m	9452.92	ng/mL	
29) C1-Fluorenes	31.46	180	855882m	9184.49	ng/mL	
30) C2-Fluorenes	33.64	194	799429m	8578.70	ng/mL	
31) C3-Fluorenes	35.62	208	474000m	5086.51	ng/mL	
32) Dibenzothiophene	32.56	184	644217	5170.18	ng/mL#	85
37) C1-Dibenzothiophenes	34.33	198	1041324m	8357.17	ng/mL	
38) C2-Dibenzothiophenes	36.39	212	1031017m	8274.45	ng/mL	
39) C3-Dibenzothiophenes	37.82	226	613276m	4921.86	ng/mL	
40) C4-Dibenzothiophenes	39.51	240	227543m	1826.15	ng/mL	
41) Phenanthrene	33.08	178	4356505	32764.43	ng/mL E	97
47) C1-Phenanthrenes/Anthracen	35.14	192	4856860m	36527.50	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.30	206	3149450m	23686.40	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.13	220	1410262m	10606.31	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.34	234	424305m	3191.12	ng/mL	
52) Retene	40.05	234	10757m	356.54	ng/mL	
53) Anthracene	33.24	178	1838976	14891.80	ng/mL E	98
54) Carbazole	33.91	167	33634m	285.77	ng/mL	
55) 1-Methylphenanthrene	35.57	192	810839	8790.23	ng/mL	100
56) Fluoranthene	37.86	202	1956283m	13785.01	ng/mL E	
57) Benzo(b)fluorene	40.38	216	396262m	4542.12	ng/mL	
59) Pyrene	38.75	202	2969870	20436.74	ng/mL E	95
60) C1-Fluoranthenes/Pyrenes	40.13	216	4461974m	30704.44	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.61	230	2191337m	15079.38	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.07	244	1032348m	7103.96	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.31	258	362596m	2495.15	ng/mL	
64) Naphthobenzothiophene	42.59	234	308022	2285.74	ng/ml#	70
65) Naphthobenzothiophene-2,1-	42.59	234	308617	2290.15	ng/mL#	70

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28165.D
Acq On : 8 Feb 2006 4:42 am
Operator : AC
Sample : 0601073-04
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 09 13:38:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

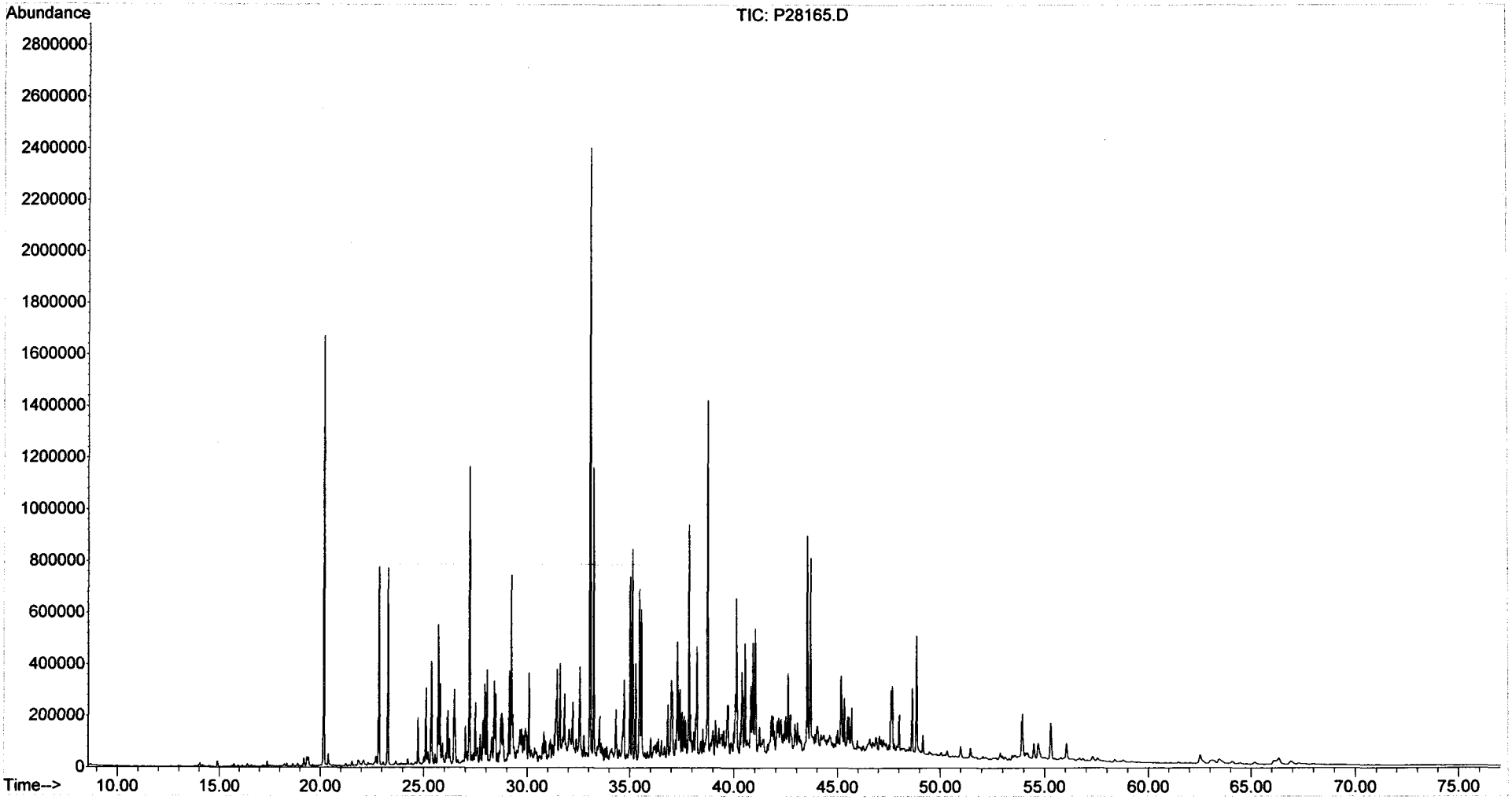
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.93	234	89366m	663.16 ng/mL	
67) Naphthobenzothiophene-2,3-	43.22	234	105626m	783.82 ng/mL	
68) C1-Naphthobenzothiophenes	43.99	248	642484m	4767.67 ng/ml	
69) C2-Naphthobenzothiophenes	45.50	262	430836m	3197.10 ng/ml	
70) C3-Naphthobenzothiophenes	47.62	276	243878m	1809.74 ng/ml	
71) C4-Naphthobenzothiophenes	48.74	290	114515m	849.78 ng/mL	
73) Benz[a]anthracene	43.53	228	1224272m	8162.10 ng/mL	
74) Chrysene	43.70	228	1330721m	8833.07 ng/mL	
75) Chrysene/Triphenylene	43.70	228	1337068m	8875.20 ng/mL	
76) C1-Chrysenes	45.17	242	1604155m	10648.08 ng/mL	
77) C2-Chrysenes	46.87	256	1015944m	6743.64 ng/mL	
78) BBF-d12 Surr BKGD	47.51	256	5283m	35.07 ng/mL	
79) C3-Chrysenes	48.51	270	568026m	3770.45 ng/mL	
80) C4-Chrysenes	50.06	284	178508m	1184.90 ng/mL	
82) Benzo[b]fluoranthene	47.61	252	528879	3283.05 ng/mL	99
83) Benzo[k]fluoranthene	47.68	252	617687	3666.67 ng/mL	100
84) Benzo[a]fluoranthene	48.02	252	312852m	1857.13 ng/mL	
85) Benzo[e]pyrene	48.66	252	548611	3532.70 ng/mL	97
86) Benzo[a]pyrene	48.86	252	981399m	6321.12 ng/mL	
87) Perylene	49.17	252	164733m	1064.29 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.93	276	390347m	2536.64 ng/mL	
89) Dibenz[a,h]anthracene	53.95	278	126302m	872.78 ng/mL	
90) Benzo[g,h,i]perylene	55.30	276	430491	2683.06 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28165.D
Acq On : 8 Feb 2006 4:42 am
Operator : AC
Sample : 0601073-04
Misc : 1X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 09 13:38:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/02/06	38.5	9.99	9.82	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1500**	30,31-Bishomohopane-22S	**2500**
C24 Tricyclic Terpane	**890**	30,31-Bishomohopane-22R	**1700**
C25 Tricyclic Terpane	**930**	30,31-Trishomohopane-22S	**1500**
C24 Tetracyclic Terpane	**980**	30,31-Trishomohopane-22R	**950**
C26 Tricyclic Terpane-22S	**400**	Tetrakishomohopane-22S	**910**
C26 Tricyclic Terpane-22R	**400**	Tetrakishomohopane-22R	**600**
C28 Tricyclic Terpane-22S	**470**	Pentakishomohopane-22S	**790**
C28 Tricyclic Terpane-22R	**490**	Pentakishomohopane-22R	**550**
C29 Tricyclic Terpane-22S	**590**	13b(H),17a(H)-20S-Diacholestane	**1900**
C29 Tricyclic Terpane-22R	**580**	13b(H),17a(H)-20R-Diacholestane	**950**
18a-22,29,30-Trisnorneohopane-TS	**2600**	13b,17a-20S-Methyldiacholestane	**870**
C30 Tricyclic Terpane-22S	**470**	14a(H),17a(H)-20S-Cholestane	**940**
C30 Tricyclic Terpane-22R	**390**	14a(H),17a(H)-20R-Cholestane	**3500**
17a(H)-22,29,30-Trisnorhopane-TM	**2500**	13b,17a-20R-Ethyldiacholestane	**580**
17a/b,21b/a 28,30-Bisnorhopane	**580**	13a,17b-20S-Ethyldiacholestane	**180**
17a(H),21b(H)-25-Norhopane	**280**	14a,17a-20S-Methylcholestane	**550**
30-Norhopane	**7700**	14a,17a-20R-Methylcholestane	**1400**
18a(H)-30-Norneohopane-C29Ts	**2000**	14a(H),17a(H)-20S-Ethylcholestane	**1400**
17a(H)-Diahopane	**480**	14a(H),17a(H)-20R-Ethylcholestane	**1700**
30-Normoretane	**1300**	14b(H),17b(H)-20R-Cholestane	**1700**
18a(H)&18b(H)-Oleananes	**960**	14b(H),17b(H)-20S-Cholestane	**1700**
Hopane	**11000**	14b,17b-20R-Methylcholestane	**1600**
Moretane	**1400**	14b,17b-20S-Methylcholestane	**2000**
30-Homohopane-22S	**3600**	14b(H),17b(H)-20R-Ethylcholestane	**2900**
30-Homohopane-22R	**3200**	14b(H),17b(H)-20S-Ethylcholestane	**2000**

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

N/A - Not Applicable

02/16/06 06:27

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34941.D
Acq On : 2 Feb 2006 9:53 pm
Operator : AC
Sample : 0601073-04
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 16 06:17:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

Chg for MAL 2/16/06

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	85180	500.00	ng/mL	0.02

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.91	217	59587	1664.49	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 166.45%#			

Target Compounds

						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	304971m	4166.31	ng/mL	
84) Hopane (T19)	52.48	191	304999m	4166.70	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	43711m	597.15	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	25451m	347.69	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.14	191	26679m	364.47	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	28209m	385.37	ng/ml	
89) C26 Tricyclic Terpane-22S	44.20	191	11383m	155.51	ng/ml	
90) C26 Tricyclic Terpane-22R	44.30	191	11436m	156.23	ng/ml	
91) C28 Tricyclic Terpane-22S	46.59	191	13394m	182.98	ng/ml	
92) C28 Tricyclic Terpane-22R	46.75	191	13996m	191.20	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	16953	231.60	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.47	191	16600m	226.78	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	73531	1004.53	ng/ml	100
96) C30 Tricyclic Terpane-22S	48.72	191	13406	183.14	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	11063m	151.14	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.18	191	71913m	982.43	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.39	191	16484m	225.19	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	8076	110.33	ng/ml	100
101) 30-Norhopane (T15)	51.07	191	220528m	3012.71	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	58118m	793.97	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	13709m	187.28	ng/ml	
104) 30-Normoretane (T17)	51.86	191	36759	502.18	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.28	191	27615m	377.26	ng/ml	
106) Moretane (T20)	53.17	191	39733m	542.81	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	104694m	1430.26	ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	90861m	1241.28	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.87	191	72730m	993.59	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.26	191	47898	654.35	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.05	191	43260m	590.99	ng/ml	
112) 30,31-Trishomohopane-22R (	58.68	191	27128m	370.61	ng/ml	
113) Tetrakishomohopane-22S (T3	60.75	191	26166m	357.46	ng/ml	
114) Tetrakishomohopane-22R (T3	61.65	191	17212m	235.14	ng/ml	
115) Pentakishomohopane-22S (T3	63.95	191	22671m	309.72	ng/ml	
116) Pentakishomohopane-22R (T3	65.28	191	15678m	214.18	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.42	217	26497m	740.16	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	13262m	370.46	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.54	217	12132m	338.89	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	13106m	366.10	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	49003	1368.84	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	8088m	225.93	ng/ml	

✓ MS 2/16/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34941.D
Acq On : 2 Feb 2006 9:53 pm
Operator : AC
Sample : 0601073-04
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 16 06:17:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

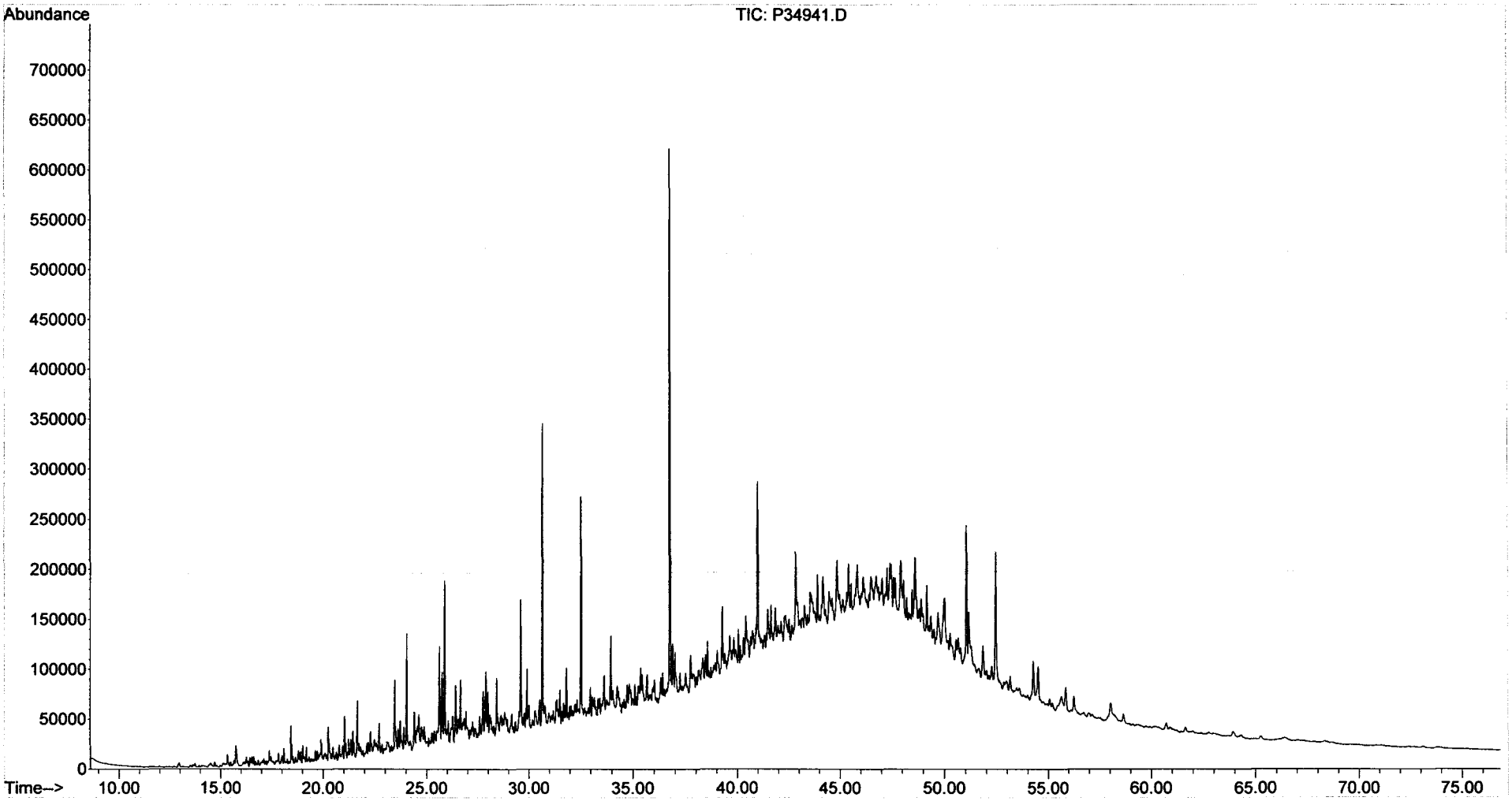
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.49	217	2502m	69.89	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.66	217	7707m	215.29	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	19923m	556.52	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.73	217	19738m	551.36	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	23583m	658.76	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	24031m	671.28	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	23880m	667.06	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	22996m	642.36	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.91	218	28500m	796.11	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	41236m	1151.87	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.04	218	27400m	765.38	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34941.D
Acq On : 2 Feb 2006 9:53 pm
Operator : AC
Sample : 0601073-04
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 16 06:17:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04E**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/05/06	38.5	9.99	48.13	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**470000**		Fluoranthene	**190000**	
C1-Naphthalenes	**400000**		Pyrene	**290000**	
C2-Naphthalenes	210	U	C1-Fluoranthenes/Pyrenes	110	U
C3-Naphthalenes	210	U	C2-Fluoranthenes/Pyrenes	110	U
C4-Naphthalenes	210	U	C3-Fluoranthenes/Pyrenes	110	U
Biphenyl	110	U	C4-Fluoranthenes/Pyrenes	110	U
Dibenzofuran	150	U	Naphthobenzothiophenes	150	U
Acenaphthylene	230	U	C1-Naphthobenzothiophenes	150	U
Acenaphthene	**240000**		C2-Naphthobenzothiophenes	150	U
Fluorene	140	U	C3-Naphthobenzothiophenes	150	U
C1-Fluorenes	140	U	C4-Naphthobenzothiophenes	150	U
C2-Fluorenes	140	U	Benz[a]anthracene	200	U
C3-Fluorenes	140	U	Chrysene/Triphenylene	140	U
Anthracene	**200000**		C1-Chrysenes	140	U
Phenanthrene	**470000**		C2-Chrysenes	140	U
C1-Phenanthrenes/Anthracenes	180	U	C3-Chrysenes	140	U
C2-Phenanthrenes/Anthracenes	180	U	C4-Chrysenes	140	U
C3-Phenanthrenes/Anthracenes	180	U	Benzo[b]fluoranthene	130	U
C4-Phenanthrenes/Anthracenes	180	U	Benzo[k]fluoranthene	250	U
Retene	180	U	Benzo[a]fluoranthene	250	U
Dibenzothiophene	140	U	Benzo[e]pyrene	170	U
C1-Dibenzothiophenes	140	U	Benzo[a]pyrene	170	U
C2-Dibenzothiophenes	140	U	Perylene	220	U
C3-Dibenzothiophenes	140	U	Indeno[1,2,3-cd]pyrene	300	U
C4-Dibenzothiophenes	140	U	Dibenz[a,h]anthracene	240	U
Benzo(b)fluorene	130	U	Benzo[g,h,i]perylene	220	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	116	50-130
Benzo[b]fluoranthene-d12	108	50-130

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

02/15/06 20:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB03\
Data File : P28135.D
Acq On : 5 Feb 2006 6:18 am
Operator : AC
Sample : 0601073-04-RE
Misc : 10X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 09 14:13:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

MS 2/9/06

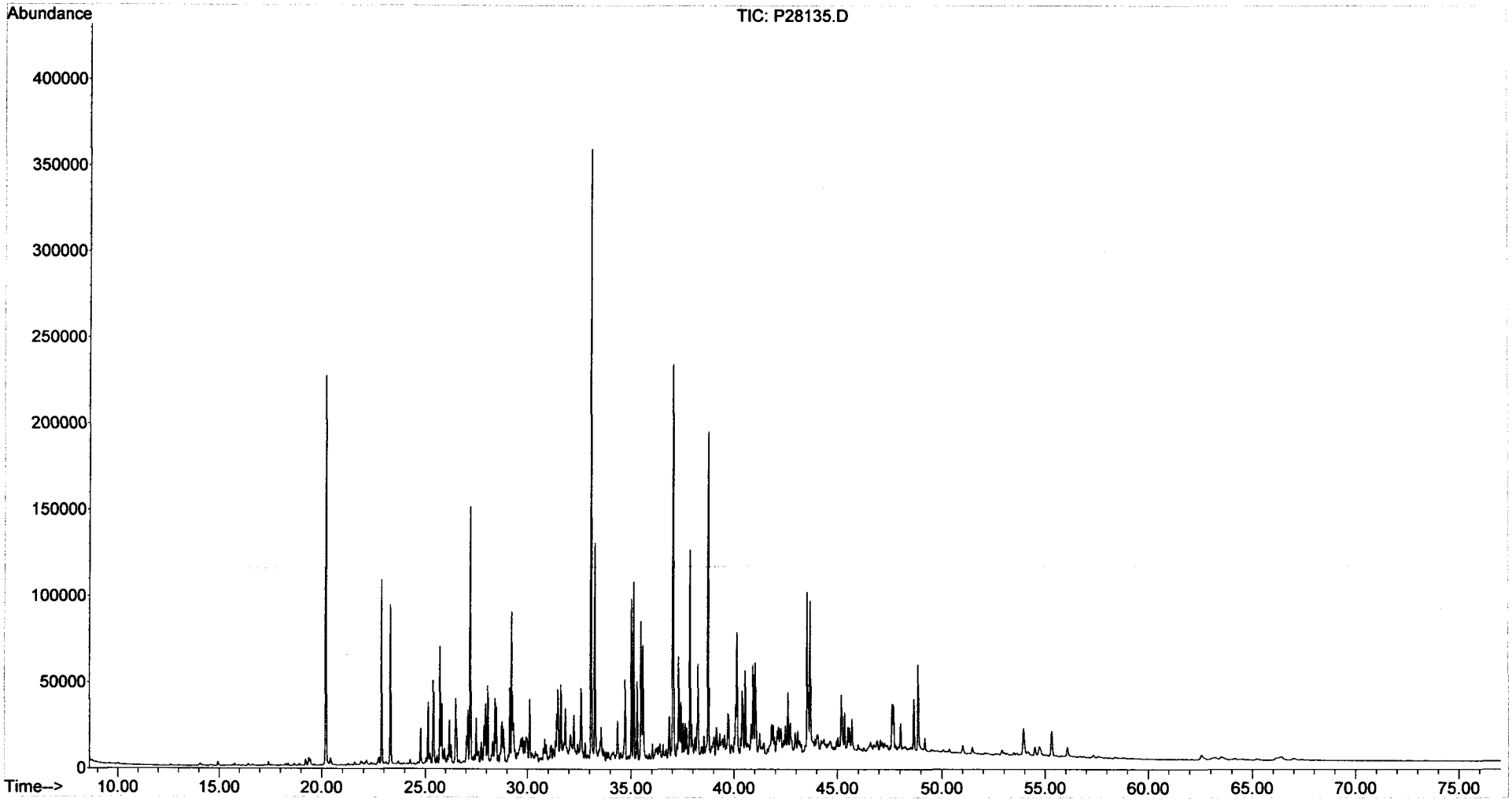
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	34504m	500.00	ng/mL	-0.02
72) Chrysene-d12	43.60	240	56634	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	2942m	41.49	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.15%#			
58) Pyrene-d10	38.67	212	7055m	48.37	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.84%#			
81) Benzo[b]fluoranthene-d12	47.54	264	5197m	44.76	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.48%#			
125) 5B(H)Cholane - Surr	44.18	217	1228	47.16	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.72%#			
Target Compounds						Qvalue
9) Naphthalene	20.18	128	578042	3724.63	ng/mL#	100
10) C1-Naphthalenes	22.88	142	497554m	3206.00	ng/mL	
15) 2-Methylnaphthalene	22.88	142	254680	2578.05	ng/mL#	100
16) 1-Methylnaphthalene	23.30	142	240988	2562.95	ng/mL#	100
26) Acenaphthene	27.21	153	180083	1907.97	ng/mL	99
41) Phenanthrene	33.07	178	587051	3728.08	ng/mL	100
53) Anthracene	33.25	178	232108	1587.11	ng/mL	99
56) Fluoranthene	37.85	202	254860m	1516.43	ng/mL	
59) Pyrene	38.74	202	397306	2308.58	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB03\
Data File : P28135.D
Acq On : 5 Feb 2006 6:18 am
Operator : AC
Sample : 0601073-04-RE
Misc : 10X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 09 14:13:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04 D**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	38.5	10.05	51.33	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**480000**	E	Fluoranthene	**210000**	E
C1-Naphthalenes	**430000**	E	Pyrene	**310000**	E
C2-Naphthalenes	**440000**		C1-Fluoranthenes/Pyrenes	**480000**	
C3-Naphthalenes	**240000**		C2-Fluoranthenes/Pyrenes	**240000**	
C4-Naphthalenes	**99000**		C3-Fluoranthenes/Pyrenes	**110000**	
Biphenyl	**46000**		C4-Fluoranthenes/Pyrenes	**39000**	
Dibenzofuran	**21000**		Naphthobenzothiophenes	**57000**	
Acenaphthylene	**82000**		C1-Naphthobenzothiophenes	**74000**	
Acenaphthene	**270000**	E	C2-Naphthobenzothiophenes	**51000**	
Fluorene	**150000**	E	C3-Naphthobenzothiophenes	**27000**	
C1-Fluorenes	**150000**		C4-Naphthobenzothiophenes	**13000**	
C2-Fluorenes	**140000**		Benz[a]anthracene	**130000**	
C3-Fluorenes	**79000**		Chrysene/Triphenylene	**140000**	E
Anthracene	**230000**	E	C1-Chrysenes	**170000**	
Phenanthrene	**510000**	E	C2-Chrysenes	**110000**	
C1-Phenanthrenes/Anthracenes	**570000**	E	C3-Chrysenes	**62000**	
C2-Phenanthrenes/Anthracenes	**370000**		C4-Chrysenes	**19000**	
C3-Phenanthrenes/Anthracenes	**170000**		Benzo[b]fluoranthene	**55000**	
C4-Phenanthrenes/Anthracenes	**47000**		Benzo[k]fluoranthene	**57000**	
Retene	**5500**		Benzo[a]fluoranthene	**30000**	
Dibenzothiophene	**81000**		Benzo[e]pyrene	**56000**	
C1-Dibenzothiophenes	**130000**		Benzo[a]pyrene	**100000**	
C2-Dibenzothiophenes	**130000**		Perylene	**17000**	
C3-Dibenzothiophenes	**78000**		Indeno[1,2,3-cd]pyrene	**41000**	
C4-Dibenzothiophenes	**28000**		Dibenz[a,h]anthracene	**14000**	
Benzo(b)fluorene	**64000**		Benzo[g,h,i]perylene	**43000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	108	50-130
Pyrene-d10	125	50-130
Benzo[b]fluoranthene-d12	120	50-130

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

02/16/06 06:59

Form I
Duplicate
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04 D**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/08/06	38.5	10.05	51.33	1	AC

Parameter	Result
Carbazole	**4200**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	108	50-130
Pyrene-d10	125	50-130
Benzo[b]fluoranthene-d12	120	50-130

N/A - Not Applicable

02/16/06 06:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28166.D
Acq On : 8 Feb 2006 6:18 am
Operator : AC
Sample : 0601073-04D
Misc : 1X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 16 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	36032m	500.00	ng/mL	0.00
72) Chrysene-d12	43.60	240	62636m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	31215	421.54	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.15%#			
58) Pyrene-d10	38.67	212	74181m	487.03	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.70%#			
81) Benzo[b]fluoranthene-d12	47.54	264	60056	467.68	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.77%#			
125) 5B(H)Cholane - Surr	44.18	217	11696m	406.17	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.62%#			

Target Compounds						Qvalue
9) Naphthalene	20.18	128	5814170	35875.03	ng/mL#E	100
10) C1-Naphthalenes	22.88	142	5294008m	32665.48	ng/mLE	
11) C2-Naphthalenes	25.72	156	5309682m	32762.20	ng/mL	
12) C3-Naphthalenes	28.05	170	2866440m	17686.72	ng/mL	
13) C4-Naphthalenes	30.81	184	1203025m	7422.99	ng/mL	
15) 2-Methylnaphthalene	22.88	142	2703123	26202.52	ng/mL#E	100
16) 1-Methylnaphthalene	23.30	142	2583160	26307.31	ng/mL#E	100
22) Biphenyl	24.75	154	449875	3464.07	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	878244m	9882.72	ng/mL	
24) Dibenzofuran	27.84	168	222431	1551.57	ng/mL	97
25) Acenaphthylene	26.47	152	988246m	6145.84	ng/mL	
26) Acenaphthene	27.21	153	1988683	20176.44	ng/mLE	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	182927m	2358.72	ng/mL	
28) Fluorene	29.23	166	1285592m	11155.04	ng/mLE	
29) C1-Fluorenes	31.46	180	1299710m	11277.54	ng/mL	
30) C2-Fluorenes	33.64	194	1194191m	10361.96	ng/mL	
31) C3-Fluorenes	35.63	208	685468m	5947.78	ng/mL	
32) Dibenzothiophene	32.56	184	944416	6128.63	ng/mL#	85
37) C1-Dibenzothiophenes	34.33	198	1538175m	9981.73	ng/mL	
38) C2-Dibenzothiophenes	36.39	212	1501016m	9740.59	ng/mL	
39) C3-Dibenzothiophenes	37.84	226	903038m	5860.11	ng/mL	
40) C4-Dibenzothiophenes	39.52	240	327096m	2122.64	ng/mL	
41) Phenanthrene	33.09	178	6334496	38521.49	ng/mLE	96
47) C1-Phenanthrenes/Anthracen	35.15	192	7101223m	43184.13	ng/mLE	
48) C2-Phenanthrenes/Anthracen	37.30	206	4612344m	28048.70	ng/mL	
50) C3-Phenanthrenes/Anthracen	39.14	220	2067053m	12570.21	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.34	234	583392m	3547.74	ng/mL	
52) Retene	40.05	234	15438m	413.75	ng/mL	
53) Anthracene	33.25	178	2688885	17606.38	ng/mLE	97
54) Carbazole	33.91	167	46616m	320.26	ng/mL	
55) 1-Methylphenanthrene	35.58	192	1166987	10229.59	ng/mLE	100
56) Fluoranthene	37.87	202	2802420m	15967.44	ng/mLE	
57) Benzo(b)fluorene	40.38	216	522668m	4844.27	ng/mL	
59) Pyrene	38.77	202	4206636	23406.46	ng/mLE	94
60) C1-Fluoranthenes/Pyrenes	40.14	216	6455359m	35918.75	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.61	230	3198967m	17799.62	ng/mL	
62) C3-Fluoranthenes/Pyrenes	44.07	244	1506685m	8383.46	ng/mL	
63) C4-Fluoranthenes/Pyrenes	45.32	258	527738m	2936.43	ng/mL	
64) Naphthobenzothiophene	42.61	234	446907	2681.56	ng/ml#	69
65) Naphthobenzothiophene-2,1-	42.61	234	446907	2681.56	ng/mL#	69

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28166.D
Acq On : 8 Feb 2006 6:18 am
Operator : AC
Sample : 0601073-04D
Misc : 1X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 16 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

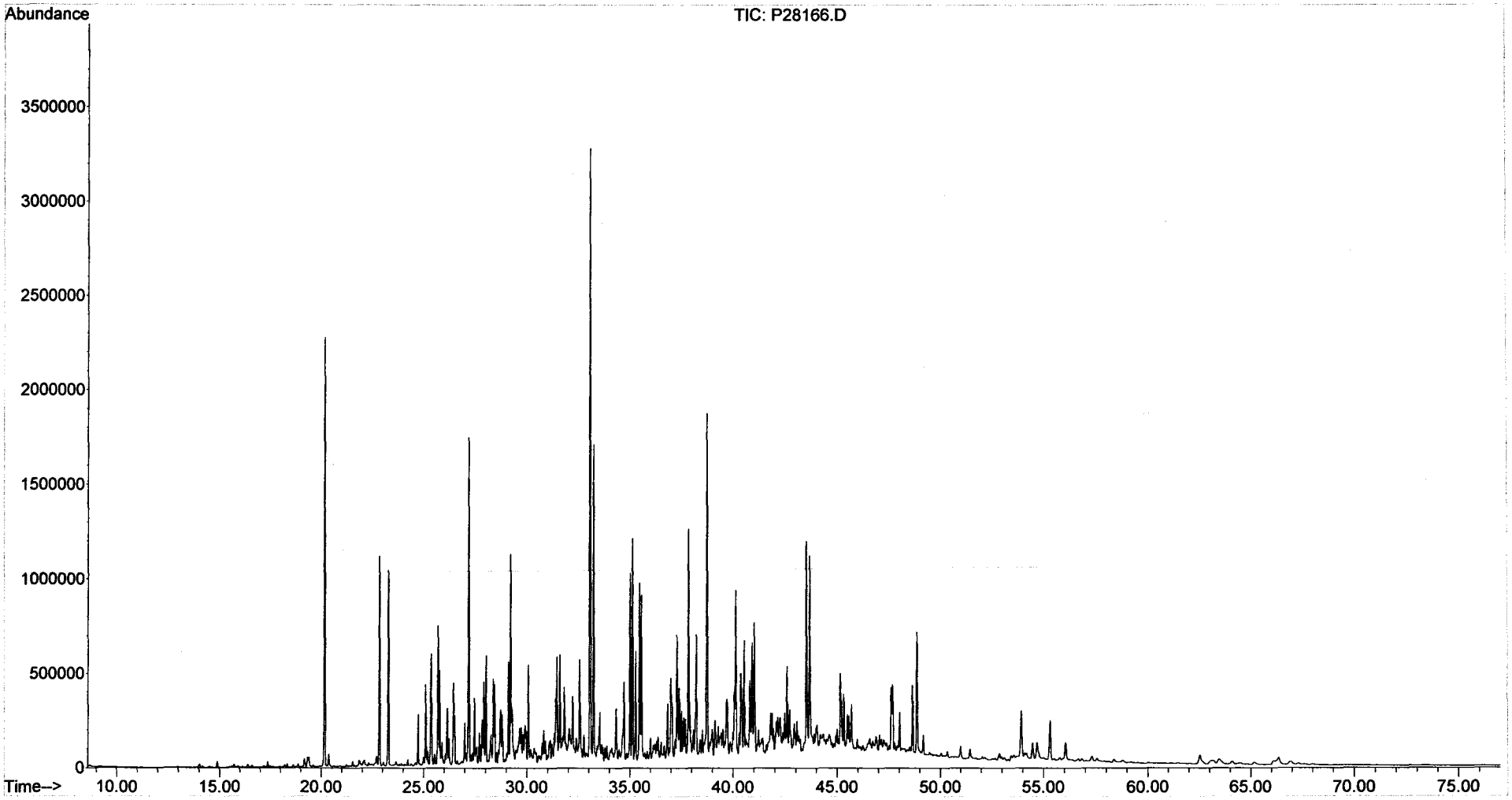
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.94	234	128482	770.93 ng/mL#	32
67) Naphthobenzothiophene-2,3-	43.24	234	139126m	834.79 ng/mL	
68) C1-Naphthobenzothiophenes	44.01	248	927290m	5563.99 ng/ml	
69) C2-Naphthobenzothiophenes	45.50	262	637045m	3822.44 ng/ml	
70) C3-Naphthobenzothiophenes	47.63	276	344260m	2065.65 ng/ml	
71) C4-Naphthobenzothiophenes	48.74	290	161513m	969.12 ng/mL	
73) Benz[a]anthracene	43.55	228	1756999m	9822.67 ng/mL	
74) Chrysene	43.71	228	1931493m	10751.07 ng/mL E	
75) Chrysene/Triphenylene	43.71	228	1940857m	10803.19 ng/mL	
76) C1-Chrysenes	45.18	242	2326198m	12948.08 ng/mL	
77) C2-Chrysenes	46.88	256	1441499m	8023.67 ng/mL	
78) BBF-d12 Surr BKGD	47.52	256	6579m	36.62 ng/mL	
79) C3-Chrysenes	48.53	270	842407m	4689.00 ng/mL	
80) C4-Chrysenes	50.06	284	255377m	1421.48 ng/mL	
82) Benzo[b]fluoranthene	47.62	252	801440	4171.82 ng/mL	99
83) Benzo[k]fluoranthene	47.70	252	860989	4285.83 ng/mL	99
84) Benzo[a]fluoranthene	48.02	252	452278m	2251.35 ng/mL	
85) Benzo[e]pyrene	48.66	252	788050	4255.30 ng/mL	98
86) Benzo[a]pyrene	48.87	252	1421280m	7676.47 ng/mL	
87) Perylene	49.18	252	237736m	1287.98 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.94	276	567010m	3089.82 ng/mL	
89) Dibenz[a,h]anthracene	53.97	278	183879m	1065.52 ng/mL	
90) Benzo[g,h,i]perylene	55.33	276	621520	3248.29 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28166.D
Acq On : 8 Feb 2006 6:18 am
Operator : AC
Sample : 0601073-04D
Misc : 1X
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 16 06:51:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04 D**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/02/06	38.5	10.05	11.14	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1800**	30,31-Bishomohopane-22S	**2900**
C24 Tricyclic Terpane	**1000**	30,31-Bishomohopane-22R	**1900**
C25 Tricyclic Terpane	**1100**	30,31-Trishomohopane-22S	**1600**
C24 Tetracyclic Terpane	**1200**	30,31-Trishomohopane-22R	**1100**
C26 Tricyclic Terpane-22S	**450**	Tetrakishomohopane-22S	**1000**
C26 Tricyclic Terpane-22R	**440**	Tetrakishomohopane-22R	**690**
C28 Tricyclic Terpane-22S	**560**	Pentakishomohopane-22S	**920**
C28 Tricyclic Terpane-22R	**560**	Pentakishomohopane-22R	**680**
C29 Tricyclic Terpane-22S	**640**	13b(H),17a(H)-20S-Diacholestane	**2100**
C29 Tricyclic Terpane-22R	**680**	13b(H),17a(H)-20R-Diacholestane	**1100**
18a-22,29,30-Trisnorneohopane-TS	**2900**	13b,17a-20S-Methyldiacholestane	**930**
C30 Tricyclic Terpane-22S	**480**	14a(H),17a(H)-20S-Cholestane	**1100**
C30 Tricyclic Terpane-22R	**490**	14a(H),17a(H)-20R-Cholestane	**4000**
17a(H)-22,29,30-Trisnorhopane-TM	**2900**	13b,17a-20R-Ethyldiacholestane	**680**
17a/b,21b/a 28,30-Bisnorhopane	**630**	13a,17b-20S-Ethyldiacholestane	**220**
17a(H),21b(H)-25-Norhopane	**300**	14a,17a-20S-Methylcholestane	**660**
30-Norhopane	**8600**	14a,17a-20R-Methylcholestane	**1600**
18a(H)-30-Norneohopane-C29Ts	**2400**	14a(H),17a(H)-20S-Ethylcholestane	**1700**
17a(H)-Diahopane	**540**	14a(H),17a(H)-20R-Ethylcholestane	**2000**
30-Normoretane	**1400**	14b(H),17b(H)-20R-Cholestane	**2000**
18a(H)&18b(H)-Oleananes	**1200**	14b(H),17b(H)-20S-Cholestane	**2000**
Hopane	**12000**	14b,17b-20R-Methylcholestane	**1800**
Moretane	**1600**	14b,17b-20S-Methylcholestane	**2300**
30-Homohopane-22S	**4200**	14b(H),17b(H)-20R-Ethylcholestane	**3200**
30-Homohopane-22R	**3700**	14b(H),17b(H)-20S-Ethylcholestane	**2400**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	90	50-130

N/A - Not Applicable

02/15/06 20:39

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34942.D
Acq On : 2 Feb 2006 11:24 pm
Operator : AC
Sample : 0601073-04D
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

MAL 2/15/6

Quant Time: Feb 15 18:25:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	43.42	240	93738	500.00	ng/mL	0.01

System Monitoring Compounds

14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.91	217	63314	1607.13	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 160.71%#			

Target Compounds

						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.48	191	330205m	4099.20	ng/mL	
84) Hopane (T19)	52.48	191	330258m	4099.86	ng/mL	
85) C23 Tricyclic Terpane (T4)	40.93	191	49061m	609.05	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.66	191	28584	354.84	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.18	191	29758m	369.42	ng/ml	
88) C24 Tetracyclic Terpane (T	44.47	191	32259m	400.47	ng/ml	
89) C26 Tricyclic Terpane-22S	44.20	191	12692	157.56	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.31	191	12336	153.14	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.59	191	15545m	192.98	ng/ml	
92) C28 Tricyclic Terpane-22R	46.76	191	15760m	195.65	ng/ml	
93) C29 Tricyclic Terpane-22S	47.27	191	17948m	222.81	ng/ml	
94) C29 Tricyclic Terpane-22R	47.47	191	18898m	234.60	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.62	191	82057m	1018.66	ng/ml	
96) C30 Tricyclic Terpane-22S	48.72	191	13422	166.62	ng/mL	100
97) C30 Tricyclic Terpane-22R	48.96	191	13811m	171.45	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.19	191	81354m	1009.94	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.40	191	17606m	218.56	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.18	191	8523	105.81	ng/ml	100
101) 30-Norhopane (T15)	51.08	191	241143m	2993.58	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.19	191	66990m	831.62	ng/ml	
103) 17a(H)-Diahopane (X)	51.31	191	15012m	186.36	ng/ml	
104) 30-Normoretane (T17)	51.87	191	40550	503.39	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.29	191	32915m	408.61	ng/ml	
106) Moretane (T20)	53.17	191	45928m	570.16	ng/ml	
107) 30-Homohopane-22S (T21)	54.29	191	117443m	1457.95	ng/ml	
108) 30-Homohopane-22R (T22)	54.53	191	102617m	1273.90	ng/ml	
109) 30,31-Bishomohopane-22S (T	55.88	191	81393	1010.42	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.28	191	54019	670.60	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.05	191	46057m	571.76	ng/ml	
112) 30,31-Trishomohopane-22R (	58.69	191	30611	380.01	ng/ml	100
113) Tetrakishomohopane-22S (T3	60.74	191	28949	359.38	ng/ml	100
114) Tetrakishomohopane-22R (T3	61.65	191	19403	240.87	ng/ml	100
115) Pentakishomohopane-22S (T3	63.94	191	25698m	319.02	ng/ml	
116) Pentakishomohopane-22R (T3	65.27	191	18874m	234.30	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.43	217	28461m	722.44	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	45.84	217	15333m	389.20	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.55	217	12721m	322.90	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.42	217	15156m	384.71	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	47.95	217	54904	1393.65	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.23	217	9245m	234.67	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34942.D
Acq On : 2 Feb 2006 11:24 pm
Operator : AC
Sample : 0601073-04D
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 15 18:25:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

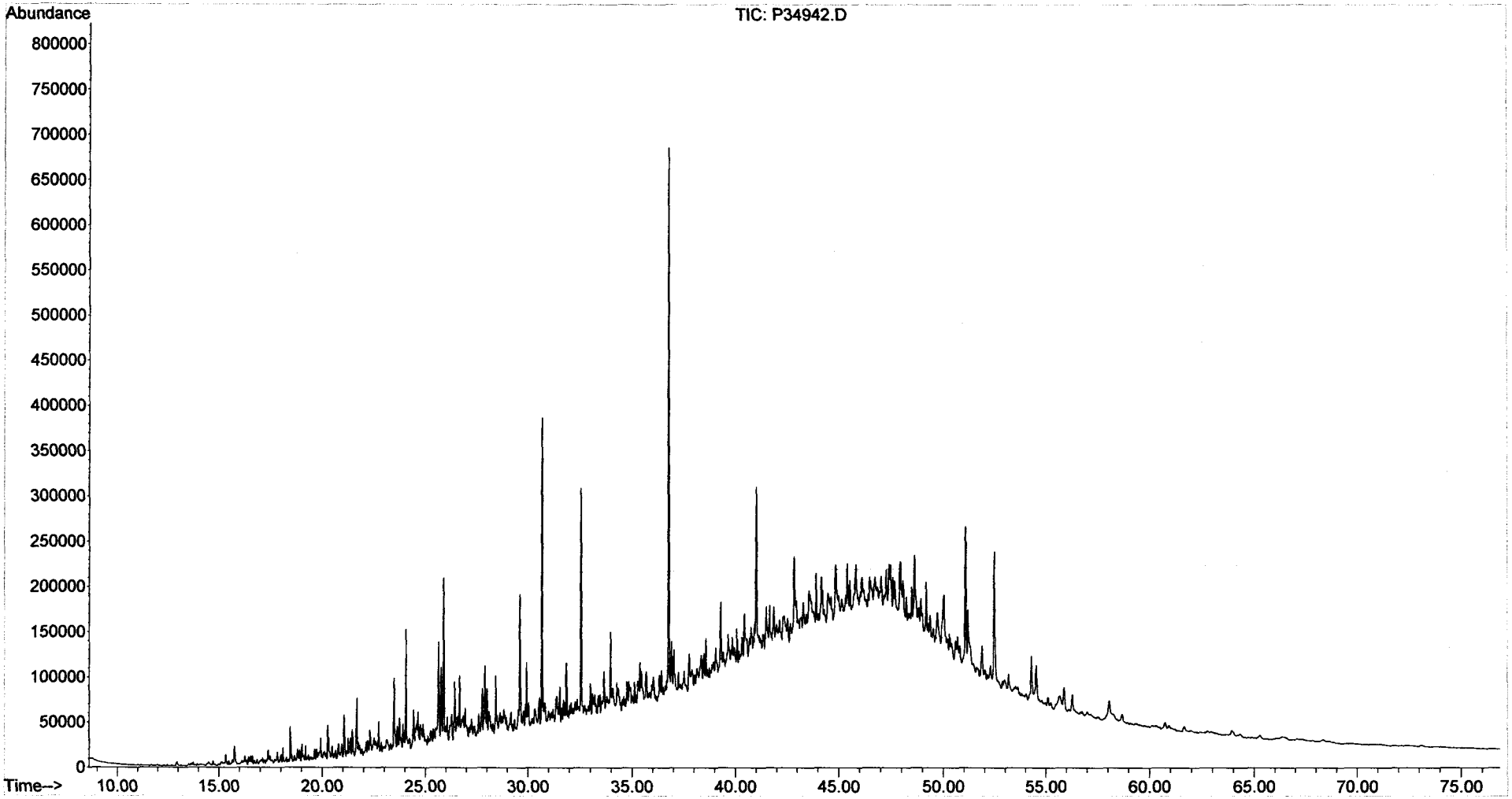
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.50	217	3081	78.21	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.66	217	9022m	229.01	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.39	217	21157m	537.04	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.74	217	22991m	583.59	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.68	217	27571m	699.85	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.51	218	26742m	678.80	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.60	218	26701m	677.76	ng/ml	
131) 14b,17b-20R-Methylcholesta	48.83	218	24250m	615.55	ng/ml	
132) 14b,17b-20S-Methylcholesta	48.92	218	31222m	792.52	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	49.99	218	44421m	1127.56	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.03	218	32296m	819.78	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34942.D
Acq On : 2 Feb 2006 11:24 pm
Operator : AC
Sample : 0601073-04D
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 15 18:25:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04E D**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/05/06	38.5	10.05	51.33	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**570000**		Fluoranthene	**240000**	
C1-Naphthalenes	**500000**		Pyrene	**370000**	
C2-Naphthalenes	220	U	C1-Fluoranthenes/Pyrenes	120	U
C3-Naphthalenes	220	U	C2-Fluoranthenes/Pyrenes	120	U
C4-Naphthalenes	220	U	C3-Fluoranthenes/Pyrenes	120	U
Biphenyl	120	U	C4-Fluoranthenes/Pyrenes	120	U
Dibenzofuran	160	U	Naphthobenzothiophenes	160	U
Acenaphthylene	240	U	C1-Naphthobenzothiophenes	160	U
Acenaphthene	**300000**		C2-Naphthobenzothiophenes	160	U
Fluorene	**160000**		C3-Naphthobenzothiophenes	160	U
C1-Fluorenes	150	U	C4-Naphthobenzothiophenes	160	U
C2-Fluorenes	150	U	Benz[a]anthracene	210	U
C3-Fluorenes	150	U	Chrysene/Triphenylene	**160000**	
Anthracene	**260000**		C1-Chrysenes	140	U
Phenanthrene	**600000**		C2-Chrysenes	140	U
C1-Phenanthrenes/Anthracenes	**630000**		C3-Chrysenes	140	U
C2-Phenanthrenes/Anthracenes	190	U	C4-Chrysenes	140	U
C3-Phenanthrenes/Anthracenes	190	U	Benzo[b]fluoranthene	140	U
C4-Phenanthrenes/Anthracenes	190	U	Benzo[k]fluoranthene	270	U
Retene	190	U	Benzo[a]fluoranthene	270	U
Dibenzothiophene	150	U	Benzo[e]pyrene	180	U
C1-Dibenzothiophenes	150	U	Benzo[a]pyrene	180	U
C2-Dibenzothiophenes	150	U	Perylene	230	U
C3-Dibenzothiophenes	150	U	Indeno[1,2,3-cd]pyrene	320	U
C4-Dibenzothiophenes	150	U	Dibenz[a,h]anthracene	250	U
Benzo(b)fluorene	130	U	Benzo[g,h,i]perylene	230	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	108	50-130
Pyrene-d10	128	50-130
Benzo[b]fluoranthene-d12	116	50-130

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

02/15/06 20:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB03\
Data File : P28136.D
Acq On : 5 Feb 2006 7:55 am
Operator : AC
Sample : 0601073-04D-RE
Misc : 10X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 09 14:17:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

CMS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	32886m	500.00	ng/mL	-0.02
72) Chrysene-d12	43.60	240	55016	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	2853m	42.21	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.22%#		
58) Pyrene-d10	38.67	212	6919m	49.77	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.98%#		
81) Benzo[b]fluoranthene-d12	47.54	264	5081m	45.05	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	4.50%#		
125) 5B(H)Cholane - Surr	44.18	217	1008m	39.85	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	3.99%#		
Target Compounds						Qvalue
9) Naphthalene	20.18	128	632640	4276.99	ng/mL#	100
10) C1-Naphthalenes	22.88	142	556698m	3763.58	ng/mL	
15) 2-Methylnaphthalene	22.88	142	284786	3024.64	ng/mL#	100
16) 1-Methylnaphthalene	23.30	142	270720	3020.81	ng/mL#	100
26) Acenaphthene	27.21	153	204383	2271.96	ng/mL	99
28) Fluorene	29.24	166	127011m	1207.50	ng/mL	
41) Phenanthrene	33.07	178	682825	4549.65	ng/mL	100
47) C1-Phenanthrenes/Anthracen	35.14	192	715622m	4768.17	ng/mL	
53) Anthracene	33.25	178	270568	1941.12	ng/mL	100
55) 1-Methylphenanthrene	35.57	192	120635	1158.62	ng/mL	100
56) Fluoranthene	37.85	202	292435m	1825.61	ng/mL	
59) Pyrene	38.74	202	457344	2788.18	ng/mL	98
74) Chrysene	43.70	228	187592m	1188.80	ng/mL	
75) Chrysene/Triphenylene	43.70	228	187322m	1187.09	ng/mL	

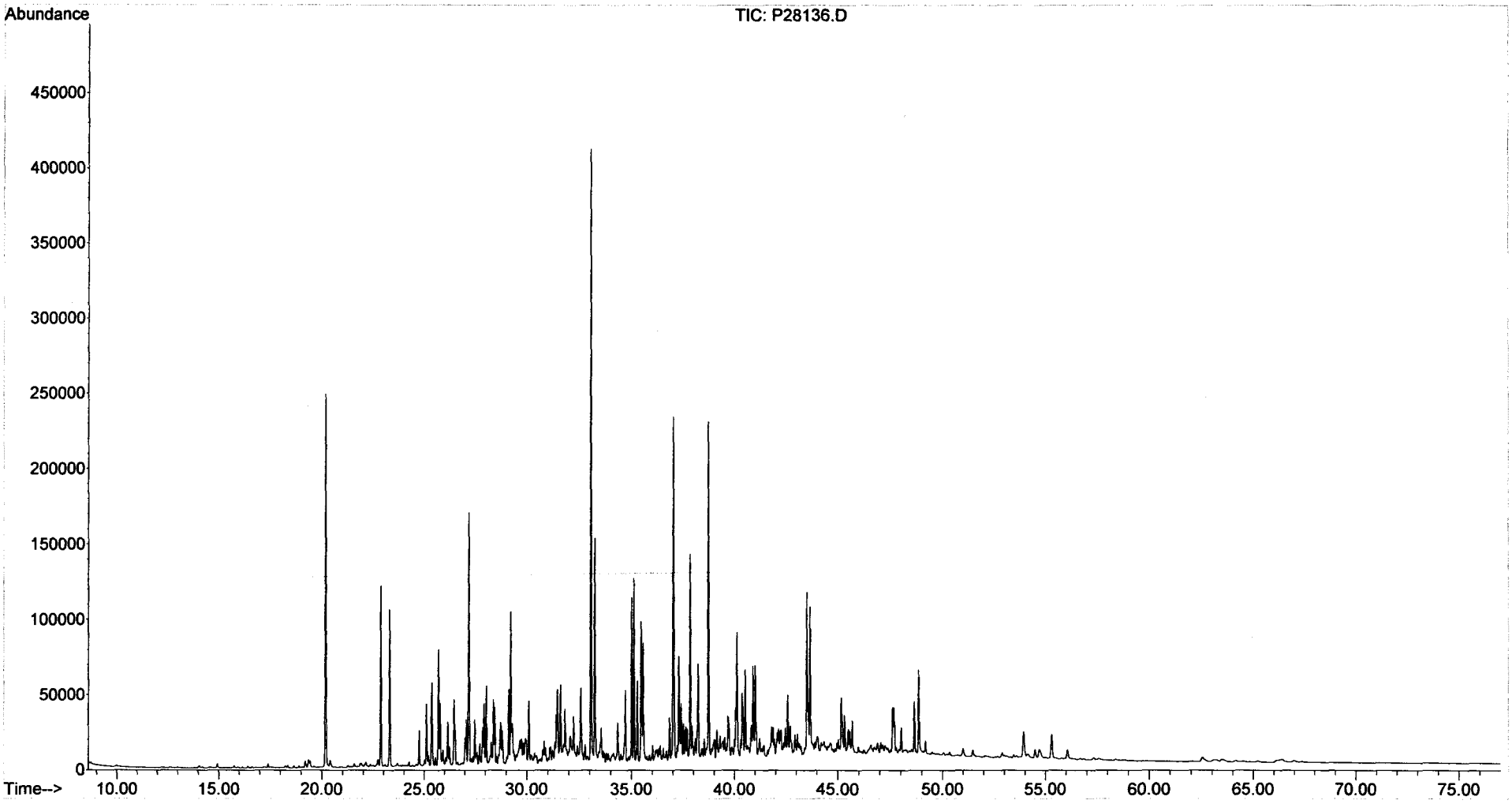
calc checked CMS 2/16/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB03\
Data File : P28136.D
Acq On : 5 Feb 2006 7:55 am
Operator : AC
Sample : 0601073-04D-RE
Misc : 10X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 09 14:17:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	410000 E	480000 E	15	30
C1-Naphthalenes	360000 E	430000 E	18	30
C2-Naphthalenes	350000	440000	22	30
C3-Naphthalenes	180000	240000	23	30
C4-Naphthalenes	79000	99000	22	30
Biphenyl	37000	46000	21	30
Dibenzofuran	16000	21000	22	30
Acenaphthylene	65000	82000	23	30
Acenaphthene	220000 E	270000 E	20	30
Fluorene	120000	150000 E	22	30
C1-Fluorenes	120000	150000	26	30
C2-Fluorenes	110000	140000	25	30
C3-Fluorenes	64000	79000	21	30
Anthracene	190000 E	230000 E	22	30
Phenanthrene	410000 E	510000 E	22	30
C1-Phenanthrenes/Anthracenes	460000	570000 E	22	30
C2-Phenanthrenes/Anthracenes	300000	370000	23	30
C3-Phenanthrenes/Anthracenes	130000	170000	23	30
C4-Phenanthrenes/Anthracenes	40000	47000	16	30
Retene	4500	5500	21	30
Dibenzothiophene	65000	81000	23	30
C1-Dibenzothiophenes	100000	130000	23	30
C2-Dibenzothiophenes	100000	130000	22	30
C3-Dibenzothiophenes	62000	78000	23	30
C4-Dibenzothiophenes	23000	28000	21	30
Benzo(b)fluorene	57000	64000	12	30
Fluoranthene	170000 E	210000 E	20	30
Pyrene	260000 E	310000 E	19	30
C1-Fluoranthenes/Pyrenes	380000	480000	21	30
C2-Fluoranthenes/Pyrenes	190000	240000	22	30
C3-Fluoranthenes/Pyrenes	89000	110000	22	30
C4-Fluoranthenes/Pyrenes	31000	39000	22	30
Naphthobenzothiophenes	47000	57000	20	30
C1-Naphthobenzothiophenes	60000	74000	21	30
C2-Naphthobenzothiophenes	40000	51000	24	30

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

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	**23000**	**27000**	19	30
C4-Naphthobenzothiophenes	**11000**	**13000**	19	30
Benz[a]anthracene	**100000**	**130000**	24	30
Chrysene/Triphenylene	**110000**	**140000 E**	25	30
C1-Chrysenes	**130000**	**170000**	25	30
C2-Chrysenes	**84000**	**110000**	23	30
C3-Chrysenes	**47000**	**62000**	27	30
C4-Chrysenes	**15000**	**19000**	24	30
Benzo[b]fluoranthene	**41000**	**55000**	30	30
Benzo[k]fluoranthene	**46000**	**57000**	21	30
Benzo[a]fluoranthene	**23000**	**30000**	25	30
Benzo[e]pyrene	**44000**	**56000**	24	30
Benzo[a]pyrene	**79000**	**100000**	25	30
Perylene	**13000**	**17000**	25	30
Indeno[1,2,3-cd]pyrene	**32000**	**41000**	25	30
Dibenz[a,h]anthracene	**11000**	**14000**	26	30
Benzo[g,h,i]perylene	**34000**	**43000**	25	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98	108	50-130
Pyrene-d10	116	125	50-130
Benzo[b]fluoranthene-d12	107	120	50-130

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

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

02/16/06 07:00

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	3600	4200	17	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98	108	50-130
Pyrene-d10	116	125	50-130
Benzo[b]fluoranthene-d12	107	120	50-130

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

02/16/06 07:00

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	1500	1800	14	30
C24 Tricyclic Terpane	890	1000	14	30
C25 Tricyclic Terpane	930	1100	13	30
C24 Tetracyclic Terpane	980	1200	16	30
C26 Tricyclic Terpane-22S	400	450	13	30
C26 Tricyclic Terpane-22R	400	440	10	30
C28 Tricyclic Terpane-22S	470	560	17	30
C28 Tricyclic Terpane-22R	490	560	14	30
C29 Tricyclic Terpane-22S	590	640	8	30
C29 Tricyclic Terpane-22R	580	680	15	30
18a-22,29,30-Trisnorneohopane-TS	2600	2900	13	30
C30 Tricyclic Terpane-22S	470	480	3	30
C30 Tricyclic Terpane-22R	390	490	24	30
17a(H)-22,29,30-Trisnorhopane-TM	2500	2900	15	30
17a/b,21b/a 28,30-Bisnorhopane	580	630	9	30
17a(H),21b(H)-25-Norhopane	280	300	8	30
30-Norhopane	7700	8600	11	30
18a(H)-30-Norneohopane-C29Ts	2000	2400	17	30
17a(H)-Diahopane	480	540	12	30
30-Normoretane	1300	1400	12	30
18a(H)&18b(H)-Oleananes	960	1200	20	30
Hopane	11000	12000	10	30
Moretane	1400	1600	17	30
30-Homohopane-22S	3600	4200	14	30
30-Homohopane-22R	3200	3700	15	30
30,31-Bishomohopane-22S	2500	2900	14	30
30,31-Bishomohopane-22R	1700	1900	14	30
30,31-Trishomohopane-22S	1500	1600	9	30
30,31-Trishomohopane-22R	950	1100	14	30
Tetrakishomohopane-22S	910	1000	13	30
Tetrakishomohopane-22R	600	690	14	30
Pentakishomohopane-22S	790	920	15	30
Pentakishomohopane-22R	550	680	21	30
13b(H),17a(H)-20S-Diacholestane	1900	2100	10	30
13b(H),17a(H)-20R-Diacholestane	950	1100	17	30

N/A - Not Applicable

02/16/06 06:33

Duplicate
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	870	930	7	30
14a(H),17a(H)-20S-Cholestane	940	1100	17	30
14a(H),17a(H)-20R-Cholestane	3500	4000	14	30
13b,17a-20R-Ethyldiacholestane	580	680	16	30
13a,17b-20S-Ethyldiacholestane	180	220	23	30
14a,17a-20S-Methylcholestane	550	660	18	30
14a,17a-20R-Methylcholestane	1400	1600	8	30
14a(H),17a(H)-20S-Ethylcholestane	1400	1700	18	30
14a(H),17a(H)-20R-Ethylcholestane	1700	2000	18	30
14b(H),17b(H)-20R-Cholestane	1700	2000	13	30
14b(H),17b(H)-20S-Cholestane	1700	2000	14	30
14b,17b-20R-Methylcholestane	1600	1800	8	30
14b,17b-20S-Methylcholestane	2000	2300	12	30
14b(H),17b(H)-20R-Ethylcholestane	2900	3200	10	30
14b(H),17b(H)-20S-Ethylcholestane	2000	2400	19	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	82	90	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.

02/16/06 06:33

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04E**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	**470000**	**570000**	20	30
C1-Naphthalenes	**400000**	**500000**	22	30
C2-Naphthalenes	210 U	220 U	N/A	30
C3-Naphthalenes	210 U	220 U	N/A	30
C4-Naphthalenes	210 U	220 U	N/A	30
Biphenyl	110 U	120 U	N/A	30
Dibenzofuran	150 U	160 U	N/A	30
Acenaphthylene	230 U	240 U	N/A	30
Acenaphthene	**240000**	**300000**	23	30
Fluorene	140 U	**160000**	X	30
C1-Fluorenes	140 U	150 U	N/A	30
C2-Fluorenes	140 U	150 U	N/A	30
C3-Fluorenes	140 U	150 U	N/A	30
Anthracene	**200000**	**260000**	26	30
Phenanthrene	**470000**	**600000**	26	30
C1-Phenanthrenes/Anthracenes	180 U	**630000**	X	30
C2-Phenanthrenes/Anthracenes	180 U	190 U	N/A	30
C3-Phenanthrenes/Anthracenes	180 U	190 U	N/A	30
C4-Phenanthrenes/Anthracenes	180 U	190 U	N/A	30
Retene	180 U	190 U	N/A	30
Dibenzothiophene	140 U	150 U	N/A	30
C1-Dibenzothiophenes	140 U	150 U	N/A	30
C2-Dibenzothiophenes	140 U	150 U	N/A	30
C3-Dibenzothiophenes	140 U	150 U	N/A	30
C4-Dibenzothiophenes	140 U	150 U	N/A	30
Benzo(b)fluorene	130 U	130 U	N/A	30
Fluoranthene	**190000**	**240000**	24	30
Pyrene	**290000**	**370000**	25	30
C1-Fluoranthenes/Pyrenes	110 U	120 U	N/A	30
C2-Fluoranthenes/Pyrenes	110 U	120 U	N/A	30
C3-Fluoranthenes/Pyrenes	110 U	120 U	N/A	30
C4-Fluoranthenes/Pyrenes	110 U	120 U	N/A	30
Naphthobenzothiophenes	150 U	160 U	N/A	30
C1-Naphthobenzothiophenes	150 U	160 U	N/A	30
C2-Naphthobenzothiophenes	150 U	160 U	N/A	30

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

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04E**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	150 U	160 U	N/A	30
C4-Naphthobenzothiophenes	150 U	160 U	N/A	30
Benz[a]anthracene	200 U	210 U	N/A	30
Chrysene/Triphenylene	140 U	**160000**	X	30
C1-Chrysenes	140 U	140 U	N/A	30
C2-Chrysenes	140 U	140 U	N/A	30
C3-Chrysenes	140 U	140 U	N/A	30
C4-Chrysenes	140 U	140 U	N/A	30
Benzo[b]fluoranthene	130 U	140 U	N/A	30
Benzo[k]fluoranthene	250 U	270 U	N/A	30
Benzo[a]fluoranthene	250 U	270 U	N/A	30
Benzo[e]pyrene	170 U	180 U	N/A	30
Benzo[a]pyrene	170 U	180 U	N/A	30
Perylene	220 U	230 U	N/A	30
Indeno[1,2,3-cd]pyrene	300 U	320 U	N/A	30
Dibenz[a,h]anthracene	240 U	250 U	N/A	30
Benzo[g,h,i]perylene	220 U	230 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	100	108	50-130
Pyrene-d10	116	128	50-130
Benzo[b]fluoranthene-d12	108	116	50-130

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

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

02/15/06 20:07

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: **0601073**
Lab ID: **SS013006B05**
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	01/30/06	02/06/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1.1**	J	Fluoranthene	**0.19**	J
C1-Naphthalenes	**1.0**	J	Pyrene	**0.32**	J
C2-Naphthalenes	**1.2**	J	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	**0.57**	J	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	**0.35**	J	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	**0.077**	J	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**0.48**	J	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**0.45**	J	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**0.48**	J	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**0.11**	J
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**0.15**	J
Anthracene	**0.34**	J	C1-Chrysenes	0.14	U
Phenanthrene	**1.0**	J	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	**0.52**	J	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	0.14	U
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	0.27	U
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	**0.17**	J	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	0.19	U
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	0.32	U
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	0.25	U
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	0.23	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	101	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.

02/15/06 20:17

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: **0601073**
Lab ID: **SS013006B05**
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	01/30/06	02/06/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	101	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

02/15/06 20:17

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28146.D
Acq On : 6 Feb 2006 10:27 pm
Operator : AC
Sample : SS013006B05
Misc : 1X ETR0601073
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 09 12:45:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	27797	500.00	ng/mL	0.00
72) Chrysene-d12	43.60	240	42852	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	11808	206.70	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.67%#			
58) Pyrene-d10	38.67	212	29656	252.39	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.24%#			
81) Benzo[b]fluoranthene-d12	47.54	264	22120	251.78	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.18%#			
125) 5B(H)Cholane - Surr	44.17	217	9203	467.15	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.71%#			

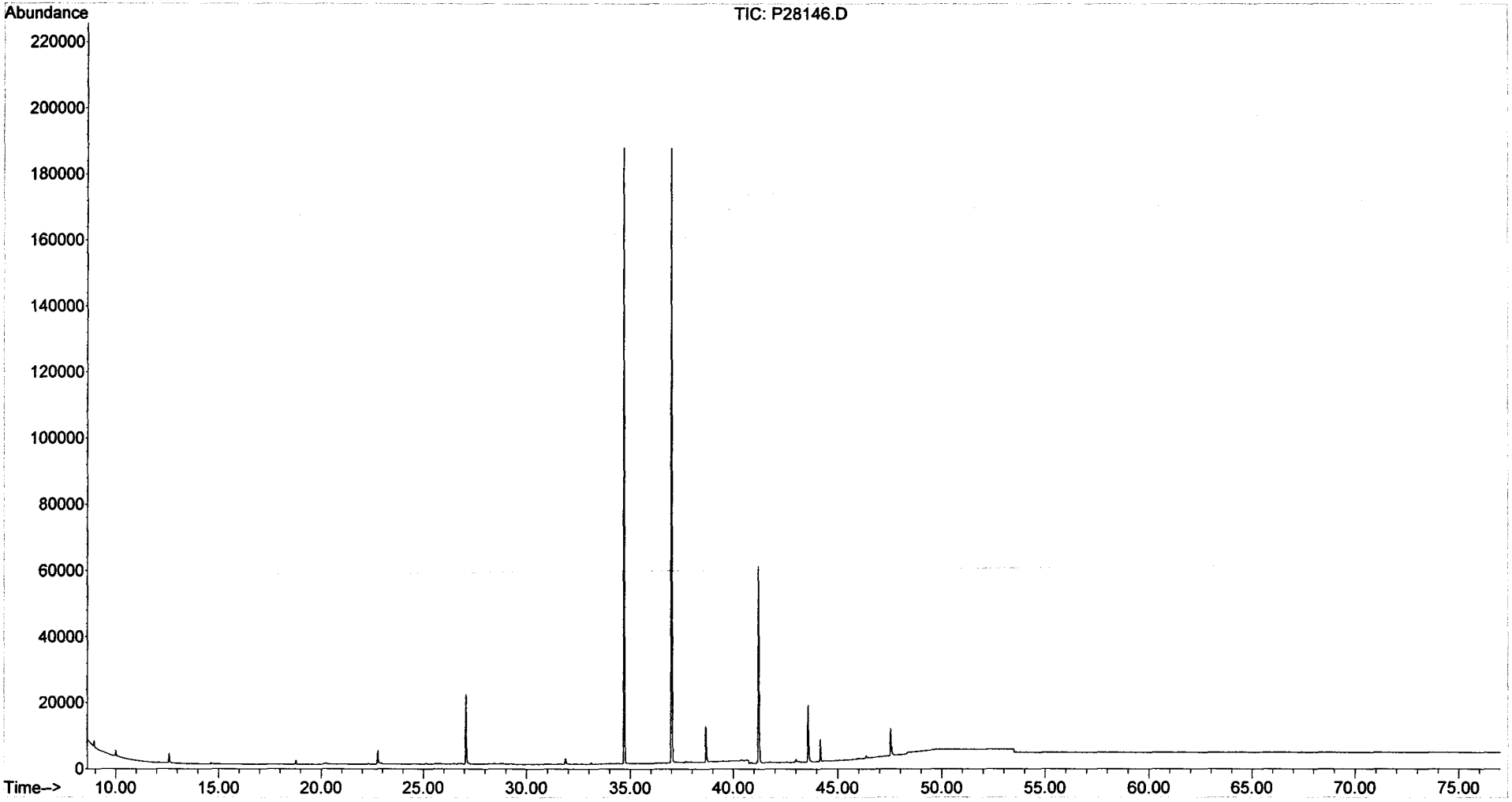
Target Compounds						Qvalue
9) Naphthalene	20.20	128	991m	7.93	ng/mL	
10) C1-Naphthalenes	22.89	142	938m	7.50	ng/mL	
11) C2-Naphthalenes	25.74	156	1167m	9.33	ng/mL	
12) C3-Naphthalenes	28.09	170	538m	4.30	ng/mL	
15) 2-Methylnaphthalene	22.89	142	603	7.58	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	291	3.84	ng/mL#	100
22) Biphenyl	24.78	154	267m	2.66	ng/mL	
23) 2,6-Dimethylnaphthalene	25.42	156	106m	1.55	ng/mL	
24) Dibenzofuran	27.90	168	64m	0.58	ng/mL	
25) Acenaphthylene	26.49	152	449	3.62	ng/mL#	100
26) Acenaphthene	27.21	153	255	3.35	ng/mL	92
28) Fluorene	29.27	166	322m	3.62	ng/mL	
32) Dibenzothiophene	32.61	184	151m	1.27	ng/mL	
41) Phenanthrene	33.11	178	948m	7.47	ng/mL	
47) C1-Phenanthrenes/Anthracen	35.17	192	496m	3.91	ng/mL	
53) Anthracene	33.29	178	299m	2.54	ng/mL	
55) 1-Methylphenanthrene	35.61	192	80m	0.91	ng/mL	
56) Fluoranthene	37.89	202	197	1.45	ng/mL#	64
59) Pyrene	38.74	202	335	2.42	ng/mL#	60
73) Benz[a]anthracene	43.52	228	97m	0.79	ng/mL	
74) Chrysene	43.70	228	143	1.16	ng/mL#	45
75) Chrysene/Triphenylene	43.70	228	138	1.12	ng/mL#	45

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28146.D
Acq On : 6 Feb 2006 10:27 pm
Operator : AC
Sample : SS013006B05
Misc : 1X ETR0601073
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 09 12:45:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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: **0601073**
Lab ID: **SS013006B05**
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	01/30/06	02/02/06	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	121	50-130

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

02/15/06 20:36

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34937.D
Acq On : 2 Feb 2006 3:45 pm
Operator : AC
Sample : SS013006B05
Misc : 1X ETR0601073
ALS Vial : 31 Sample Multiplier: 1

MAL 2/15/6

Quant Time: Feb 15 14:49:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	43.47	240	63984	500.00	ng/mL	0.05

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	43.90	217	16298	606.08	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	60.61%	

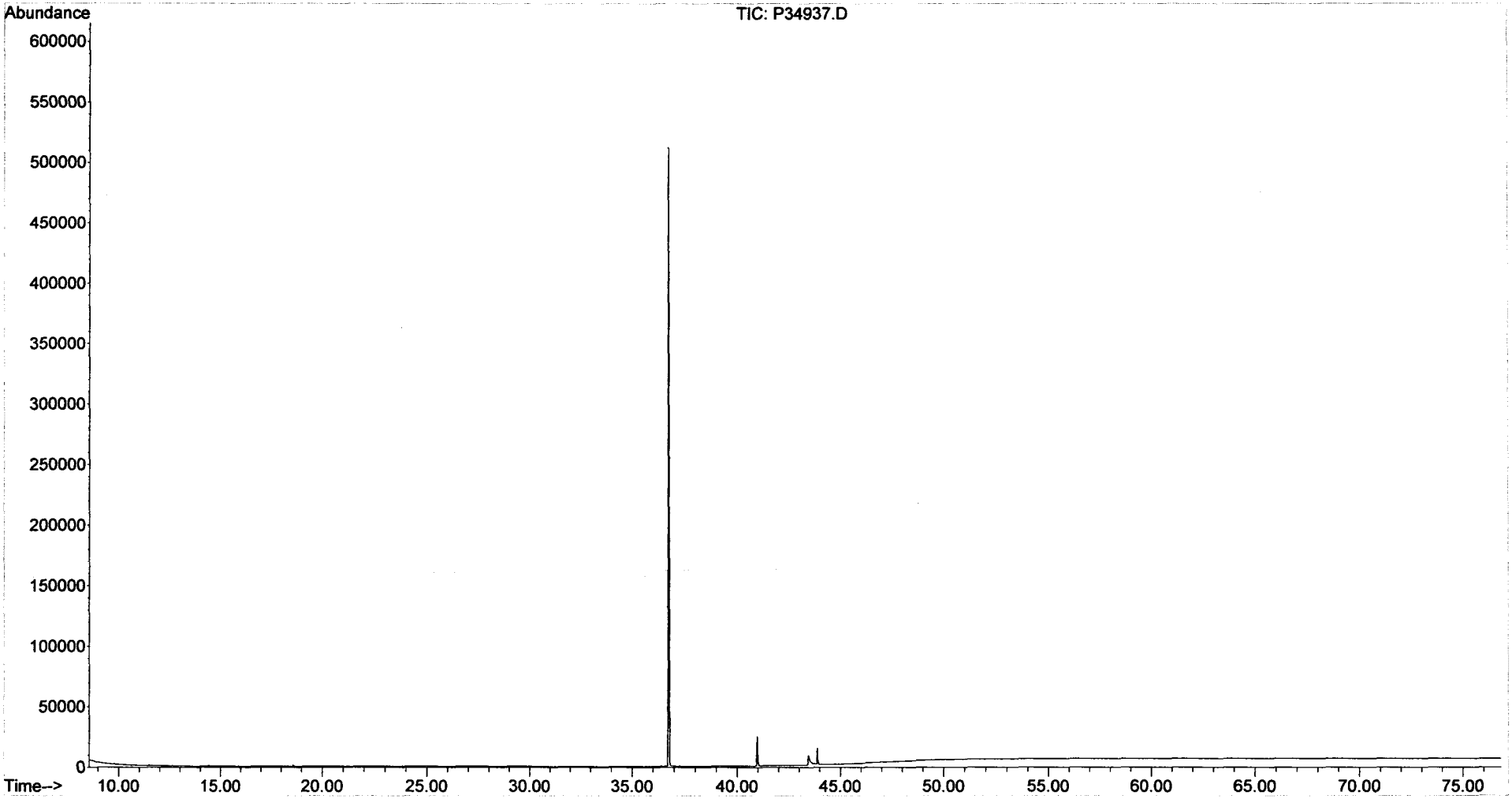
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN26\
Data File : P34937.D
Acq On : 2 Feb 2006 3:45 pm
Operator : AC
Sample : SS013006B05
Misc : 1X ETR0601073
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 15 14:49:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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: **0601073**
Lab ID: **See Below**
Associated Blank: **SS013006B05**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/30/06	100	AC

Lab ID:	SS013006B05	SS013006LCS03		SS013006LCSD04				
Parameter	**Blank Conc.**	**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	1.1	37	110	35	105	4	30	50-130
Acenaphthylene	0.48	35	104	34	102	3	30	50-130
Acenaphthene	0.45	36	108	35	106	2	30	50-130
Fluorene	0.48	35	105	34	102	3	30	50-130
Anthracene	0.34	34	102	33	98	4	30	50-130
Phenanthrene	1.0	35	105	34	102	3	30	50-130
Fluoranthene	0.19	37	111	36	107	3	30	50-130
Pyrene	0.32	37	111	36	108	3	30	50-130
Benz[a]anthracene	0.11	36	109	35	105	4	30	50-130
Chrysene/Triphenylene	0.15	37	111	36	109	2	30	50-130
Benzo[b]fluoranthene	0.14 U	35	105	34	101	4	30	50-130
Benzo[k]fluoranthene	0.27 U	40	121	39	117	3	30	50-130
Benzo[a]pyrene	0.19 U	34	101	32	97	5	30	50-130
Indeno[1,2,3-cd]pyrene	0.32 U	32	97	32	96	1	30	50-130
Dibenz[a,h]anthracene	0.25 U	34	103	32	97	6	30	50-130
Benzo[g,h,i]perylene	0.23 U	34	102	32	97	5	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	104	102	50-130
Pyrene-d10	108	107	50-130
Benzo[b]fluoranthene-d12	111	108	50-130

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

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

02/15/06 20:23

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: **0601073**
Lab ID: **SS013006LCS03**
Associated Blank: **SS013006B05**
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	01/30/06	02/07/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**37**	S	Fluoranthene	**37**	S
C1-Naphthalenes	0.22	U	Pyrene	**37**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**35**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**36**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**35**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**36**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**37**	S
Anthracene	**34**	S	C1-Chrysenes	0.14	U
Phenanthrene	**35**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**35**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**40**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**34**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**32**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**34**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**34**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	111	50-130

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

02/15/06 20:17

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: **0601073**
Lab ID: **SS013006LCS03**
Associated Blank: **SS013006B05**
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	01/30/06	02/07/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	111	50-130

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

02/15/06 20:18

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28149.D
Acq On : 7 Feb 2006 3:13 am
Operator : AC
Sample : SS013006LCS03
Misc : 1X ETR0601073
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 09 12:49:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

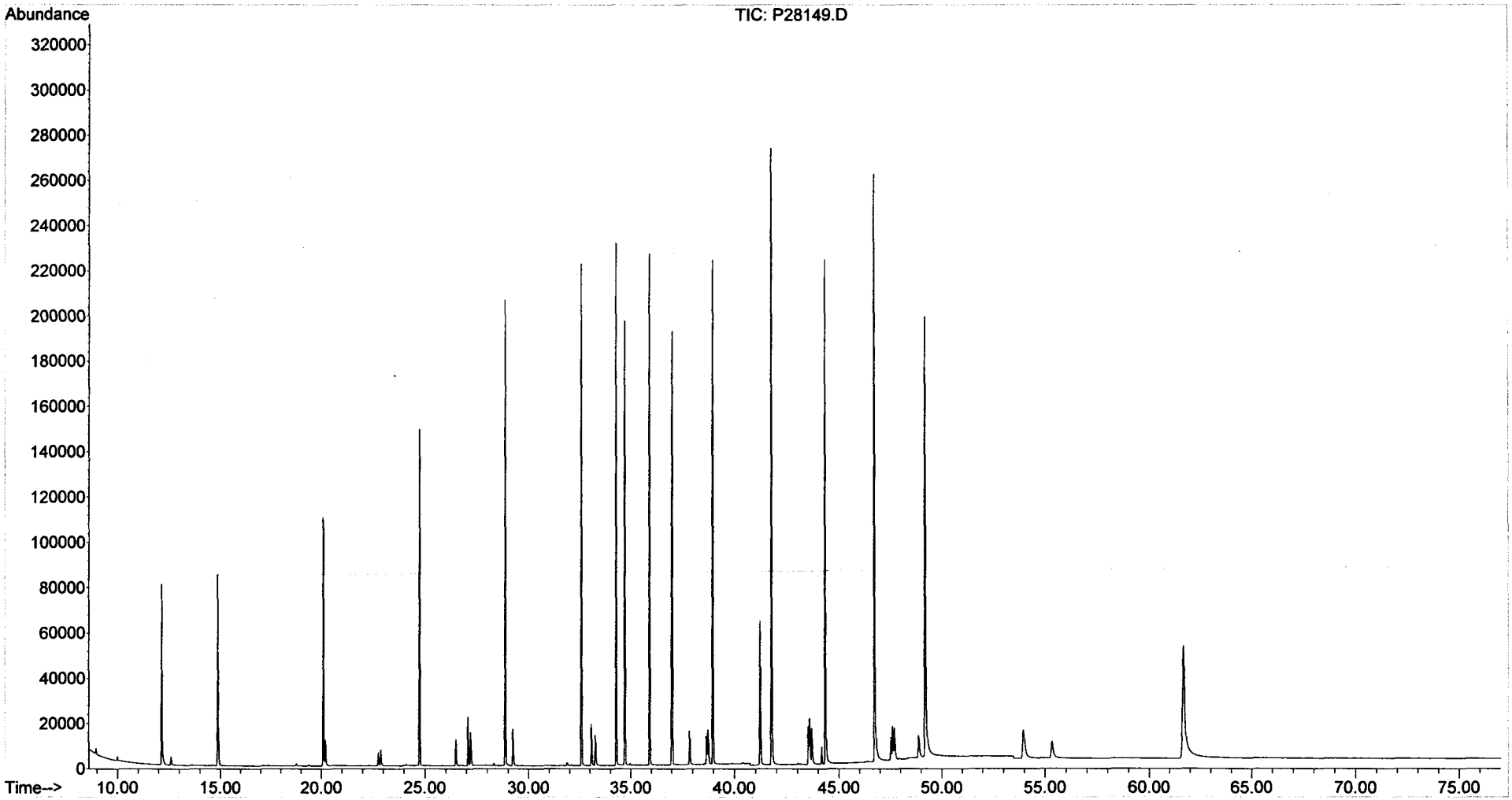
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	27898	500.00	ng/mL	0.00
72) Chrysene-d12	43.58	240	44539	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	14841	258.85	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.89%#			
58) Pyrene-d10	38.67	212	31749	269.22	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.92%#			
81) Benzo[b]fluoranthene-d12	47.54	264	25245	276.47	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.65%#			
125) 5B(H)Cholane - Surr	44.17	217	9963	486.57	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.66%#			
Target Compounds						Qvalue
9) Naphthalene	20.19	128	34462	274.64	ng/mL#	100
15) 2-Methylnaphthalene	22.88	142	20532	257.05	ng/mL#	100
25) Acenaphthylene	26.48	152	32470	260.80	ng/mL#	100
26) Acenaphthene	27.20	153	20662	270.75	ng/mL	99
28) Fluorene	29.24	166	23416	262.42	ng/mL	100
41) Phenanthrene	33.07	178	33373	262.12	ng/mL	100
53) Anthracene	33.25	178	30146m	254.94	ng/mL	
56) Fluoranthene	37.85	202	37566	276.45	ng/mL	98
59) Pyrene	38.74	202	38697	278.10	ng/mL	99
73) Benz[a]anthracene	43.52	228	34747	273.19	ng/mL	100
74) Chrysene	43.70	228	35553	278.30	ng/mL	99
75) Chrysene/Triphenylene	43.70	228	35553	278.30	ng/mL	99
82) Benzo[b]fluoranthene	47.62	252	35870	262.58	ng/mL	100
83) Benzo[k]fluoranthene	47.71	252	43040	301.30	ng/mL	96
86) Benzo[a]pyrene	48.87	252	33333	253.19	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.94	276	31548m	241.77	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	31697	258.30	ng/mL	97
90) Benzo[g,h,i]perylene	55.33	276	34683	254.92	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28149.D
Acq On : 7 Feb 2006 3:13 am
Operator : AC
Sample : SS013006LCS03
Misc : 1X ETR0601073
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 09 12:49:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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: **0601073**
Lab ID: **SS013006LCSD04**
Associated Blank: **SS013006B05**
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	01/30/06	02/07/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**35**	S	Fluoranthene	**36**	S
C1-Naphthalenes	0.22	U	Pyrene	**36**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**34**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**35**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**34**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**35**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**36**	S
Anthracene	**33**	S	C1-Chrysenes	0.14	U
Phenanthrene	**34**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**34**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**39**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**32**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**32**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**32**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**32**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	102	50-130
Pyrene-d10	107	50-130
Benzo[b]fluoranthene-d12	108	50-130

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

02/15/06 20:19

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: **0601073**
Lab ID: **SS013006LCSD04**
Associated Blank: **SS013006B05**
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	01/30/06	02/07/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	102	50-130
Pyrene-d10	107	50-130
Benzo[b]fluoranthene-d12	108	50-130

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

02/15/06 20:19

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28150.D
Acq On : 7 Feb 2006 4:46 am
Operator : AC
Sample : SS013006LCSD04
Misc : 1X ETR0601073
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 09 12:51:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/9/06

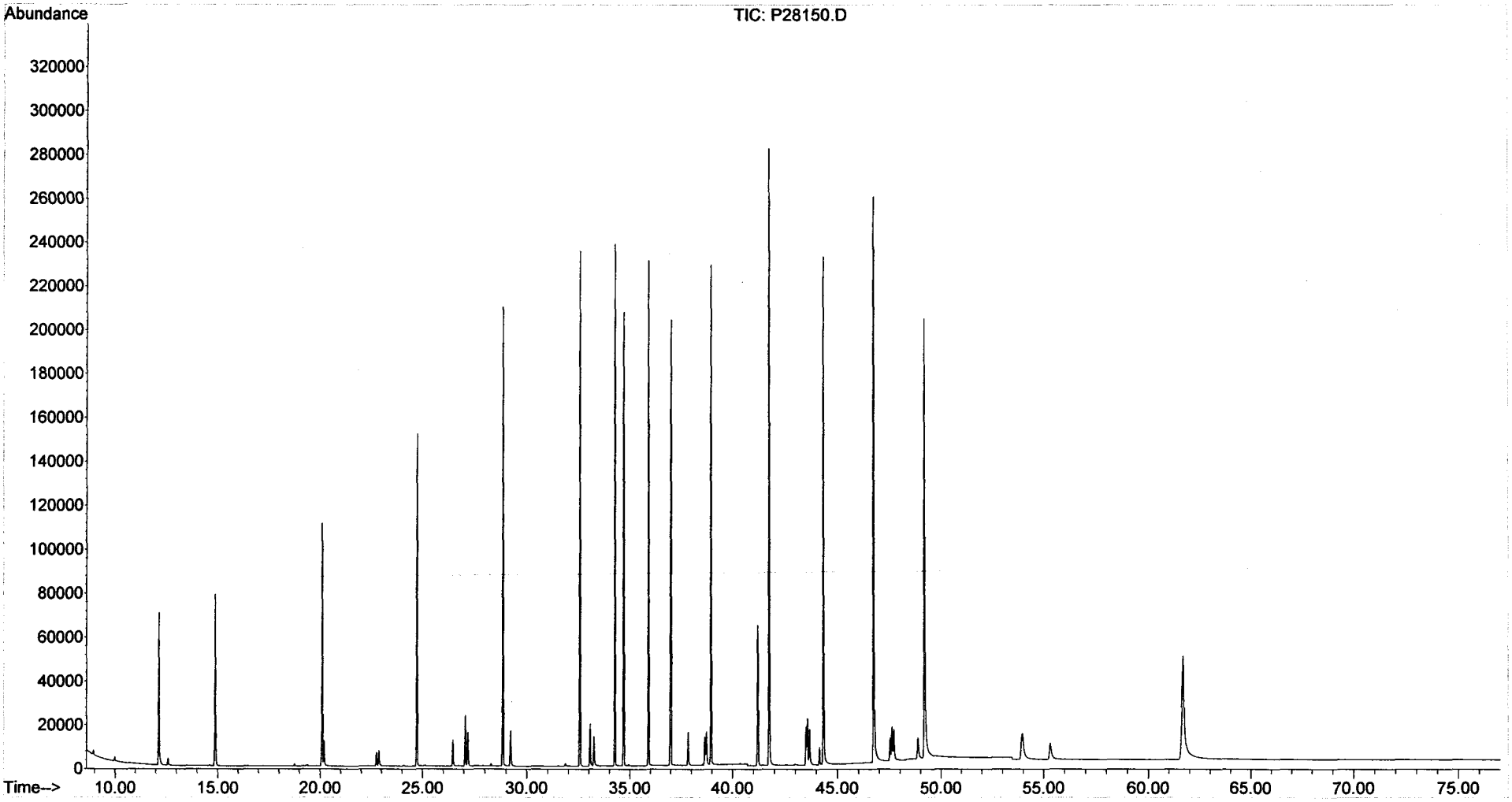
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	29244	500.00	ng/mL	0.00
72) Chrysene-d12	43.58	240	46775	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	15289	254.39	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.44%#			
58) Pyrene-d10	38.67	212	33084	267.63	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.76%#			
81) Benzo[b]fluoranthene-d12	47.54	264	25899	270.07	ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.01%#			
125) 5B(H)Cholane - Surr	44.17	217	10279	478.00	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.80%#			
Target Compounds						Qvalue
9) Naphthalene	20.18	128	34563	262.77	ng/mL#	100
15) 2-Methylnaphthalene	22.88	142	20820	248.66	ng/mL#	100
25) Acenaphthylene	26.48	152	33151	254.02	ng/mL#	100
26) Acenaphthene	27.21	153	21136	264.21	ng/mL	98
28) Fluorene	29.24	166	23774	254.17	ng/mL	99
41) Phenanthrene	33.07	178	33952	254.39	ng/mL	100
53) Anthracene	33.25	178	30453m	245.69	ng/mL	
56) Fluoranthene	37.85	202	38137	267.73	ng/mL	98
59) Pyrene	38.74	202	39242	269.03	ng/mL	99
73) Benz[a]anthracene	43.52	228	34992	261.96	ng/mL	100
74) Chrysene	43.70	228	36643	273.12	ng/mL	99
75) Chrysene/Triphenylene	43.70	228	36643	273.12	ng/mL	99
82) Benzo[b]fluoranthene	47.62	252	36253	252.70	ng/mL	97
83) Benzo[k]fluoranthene	47.71	252	43765	291.73	ng/mL	97
86) Benzo[a]pyrene	48.87	252	33420	241.71	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.94	276	32891m	240.01	ng/mL	
89) Dibenz[a,h]anthracene	53.99	278	31260	242.56	ng/mL	98
90) Benzo[g,h,i]perylene	55.33	276	34533	241.68	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28150.D
Acq On : 7 Feb 2006 4:46 am
Operator : AC
Sample : SS013006LCSD04
Misc : 1X ETR0601073
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 09 12:51:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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: **0601073**
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

02/15/06 20:29

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: **0601073**
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.

02/15/06 20:29

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: **0601073**
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.

02/15/06 20:28

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: **0601073**
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

02/15/06 20:28

Quantitation Report (QT Reviewed)

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

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

MG 1/17/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.36	164	60203m	500.00 ng/mL	0.01
72) Chrysene-d12	43.87	240	99371	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	123926m	1001.63 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.16%		
58) Pyrene-d10	38.95	212	276434	1086.25 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.63%		
81) Benzo[b]fluoranthene-d12	47.82	264	222726	1093.26 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 109.33%		
125) 5B(H)Cholane - Surr	44.46	217	46841	1025.32 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 102.53%		
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	111121	2189.08 ng/mL	100
4) cis-Decalin	18.22	138	3500m	92.15 ng/mL	
5) C1-Decalins	18.48	152	194296m	3827.62 ng/mL	
6) C2-Decalins	20.26	166	184310m	3630.89 ng/mL	
7) C3-Decalins	22.74	180	93032m	1832.72 ng/mL	
8) C4-Decalins	26.15	194	97452m	1919.80 ng/mL	
9) Naphthalene	20.44	128	972946m	3593.05 ng/mL	
10) C1-Naphthalenes	23.14	142	2073529m	7657.46 ng/mL	
11) C2-Naphthalenes	25.98	156	2561527m	9459.62 ng/mL	
12) C3-Naphthalenes	28.33	170	1889244m	6976.90 ng/mL	
13) C4-Naphthalenes	31.10	184	1013533m	3742.94 ng/mL	
15) 2-Methylnaphthalene	23.14	142	1204512	6988.09 ng/mL#	100
16) 1-Methylnaphthalene	23.57	142	864864	5271.61 ng/mL#	100
17) Benzothiophene	20.62	134	6111m	28.04 ng/mL	
18) C1-Benzo(b)thiophenes	22.69	148	35880m	164.62 ng/mL	
19) C2-Benzo(b)thiophenes	26.18	162	73497m	337.21 ng/mL	
20) C3-Benzo(b)thiophenes	28.16	176	138063m	633.44 ng/mL	
21) C4-Benzo(b)thiophenes	30.27	190	126181m	578.93 ng/mL	
22) Biphenyl	25.02	154	241686	1113.82 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.64	156	324116m	2182.89 ng/mL	
24) Dibenzofuran	28.13	168	85404	356.55 ng/mL#	88
25) Acenaphthylene	26.73	152	8177m	30.44 ng/mL	
26) Acenaphthene	27.48	153	14874m	90.32 ng/mL	
27) 2,3,5-Trimethylnaphthalene	29.02	170	150504m	1161.50 ng/mL	
28) Fluorene	29.50	166	86233	447.83 ng/mL	87
29) C1-Fluorenes	31.88	180	202291m	1050.55 ng/mL	
30) C2-Fluorenes	34.07	194	301214m	1564.28 ng/mL	
31) C3-Fluorenes	35.90	208	282572m	1467.46 ng/mL	
32) Dibenzothiophene	32.85	184	306474	1190.32 ng/mL#	84
33) 4-Methyldibenzothiophene(4	34.62	198	276612	1074.34 ng/mL#	100
34) 2/3-Methyldibenzothiophene	34.96	198	197165m	765.77 ng/mL	
35) 1-Methyldibenzothiophene(1	35.40	198	82976	322.27 ng/mL#	100
36) OTP	35.00	198	22920m	89.02 ng/mL	
37) C1-Dibenzothiophenes	34.62	198	587613m	2282.24 ng/mL	
38) C2-Dibenzothiophenes	36.30	212	735837m	2857.93 ng/mL	
39) C3-Dibenzothiophenes	38.11	226	632572m	2456.86 ng/mL	
40) C4-Dibenzothiophenes	39.79	240	316870m	1230.70 ng/mL	
41) Phenanthrene	33.34	178	371844m	1353.39 ng/mL	
42) 3-Methylphenanthrene(3MP)	35.30	192	158459	576.74 ng/mL	100
43) 2/4-Methylphenanthrene(2MP	35.42	192	178226	648.68 ng/mL	98

RF 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

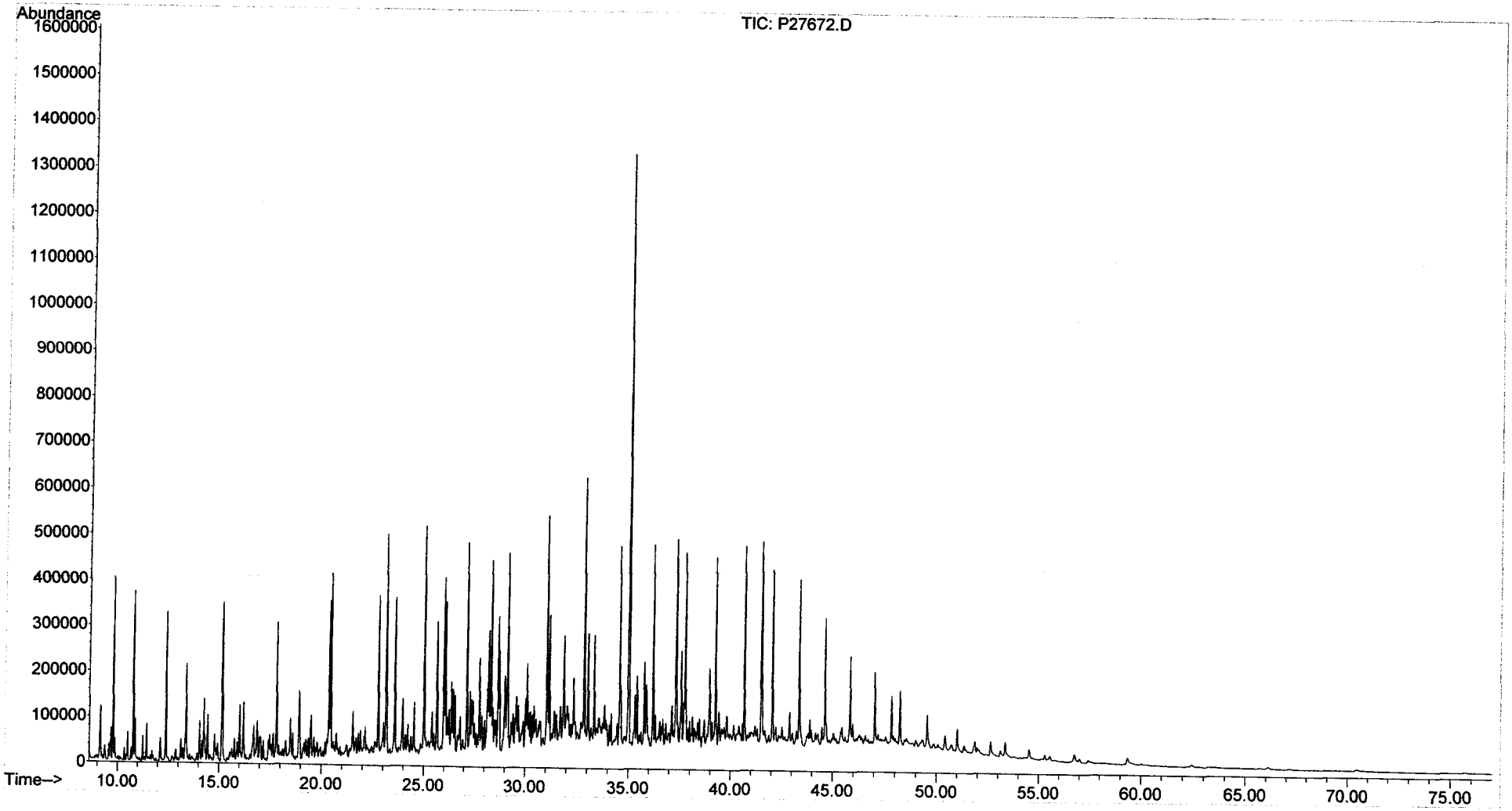
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	51.17	191	2797	28.54	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.89	191	2670m	27.25	ng/ml	
109) 30-Norhopane (T15)	51.87	191	42464m	433.34	ng/ml	
110) 18a(H)-30-Norneohopane-C29	51.98	191	8425m	85.98	ng/ml	
111) 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: **0601073**
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.

02/15/06 20:58

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: **0601073**
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.

02/15/06 20:48

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

mg 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

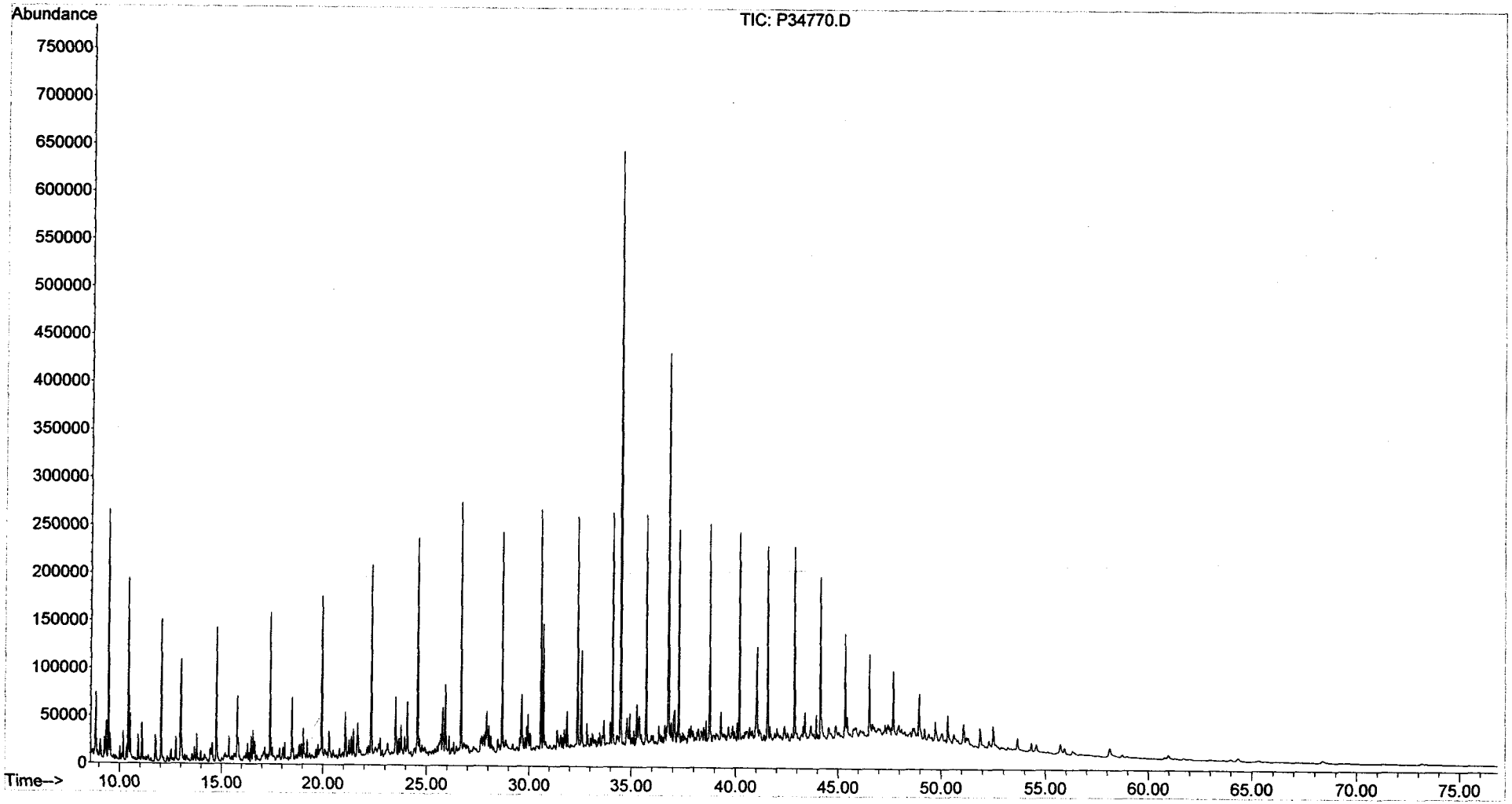
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.68	217	2524m	85.76 ng/ml	
126) 14a,17a-20R-Methylcholesta	49.41	217	6356m	215.96 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	49.77	217	8252m	280.38 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	50.69	217	6836m	232.27 ng/ml	
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\S2020301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB03\

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	P28108	FRNC2B	DCM	
2)	Sample	2	P28110	FRNC2B	WHAC41	
3)	Sample	3	P28111	FRNC2B	C2020301	PASS
4)	Sample	4	P28112	FRNC2B	DCM	
5)	Sample	5	P28113	FRNC2B	DCM	
6)	Sample	6	P28114	FRNC2B	SS012506B01	rerun
7)	Sample	7	P28115	FRNC2B	SS012506LCS01	rerun
8)	Sample	8	P28116	FRNC2B	SS012506LCSD01	rerun
9)	Sample	9	P28117	FRNC2B	0601064-01-RE2	✓
10)	Sample	10	P28118	FRNC2B	0601064-04-RE2	✓
11)	Sample	11	P28119	FRNC2B	0601064-06-RE2	✓
12)	Sample	12	P28120	FRNC2B	0601064-07-RE2	✓
13)	Sample	13	P28121	FRNC2B	0601064-08-RE2	✓
14)	Sample	14	P28122	FRNC2B	0601064-10-RE2	✓
15)	Sample	15	P28123	FRNC2B	0601064-11-RE2	✓
16)	Sample	16	P28124	FRNC2B	C2020302	OK for dilutions only
17)	Sample	17	P28125	FRNC2B	DCM	
18)	Sample	18	P28126	FRNC2B	0601064-02	rerun
19)	Sample	19	P28127	FRNC2B	0601064-03	rerun
20)	Sample	20	P28128	FRNC2B	0601064-05	rerun
21)	Sample	21	P28129	FRNC2B	0601064-05D	rerun
22)	Sample	22	P28130	FRNC2B	0601064-09	rerun
23)	Sample	23	P28131	FRNC2B	C2020303	PASS
24)	Sample	24	P28132	FRNC2B	0601073-01-RE	rerun
25)	Sample	25	P28133	FRNC2B	0601073-02-RE	rerun
26)	Sample	26	P28134	FRNC2B	0601073-03-RE	✓
27)	Sample	27	P28135	FRNC2B	0601073-04-RE	✓
28)	Sample	28	P28136	FRNC2B	0601073-04D-RE	✓
29)	Sample	29	P28137	FRNC2B	C2020304	PASS
30)	Sample	30	P28138	FRNC2B	DCM	

CW 2/17/06

Last Modified: Thu Feb 02 15:08:35 2006

Sequence Name: C:\MSDChem\1\sequence\S2020801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB06\

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

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

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

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

2/7/06

Line					Sample Name/Misc Info
1)	Sample	3	P28139	FRNC2B	pah std
2)	Sample	1	P28140	FRNC2B	pah std
3)	Sample	2	P28141	FRNC2B	C2020601 PASS
4)	Sample	3	P28142	FRNC2B	ANS2020601
5)	Sample	4	P28143	FRNC2B	DCM
6)	Sample	5	P28144	FRNC2B	DCM
7)	Sample	6	P28145	FRNC2B	SS012506B01
8)	Sample	7	P28146	FRNC2B	SS013006B05
9)	Sample	8	P28147	FRNC2B	SS012506LCS01
10)	Sample	9	P28148	FRNC2B	SS012506LCSD01
11)	Sample	10	P28149	FRNC2B	SS013006LCS03
12)	Sample	11	P28150	FRNC2B	SS013006LCSD04
13)	Sample	12	P28151	FRNC2B	C2020602 PASS
14)	Sample	13	P28152	FRNC2B	DCM
15)	Sample	14	P28153	FRNC2B	0601064-02
16)	Sample	15	P28154	FRNC2B	0601064-03
17)	Sample	16	P28155	FRNC2B	0601064-05
18)	Sample	17	P28156	FRNC2B	0601064-05D
19)	Sample	18	P28157	FRNC2B	0601064-09
[illegible])	Sample	19	P28158	FRNC2B	C2020603 PASS
[illegible]	Sample	20	P28159	FRNC2B	DCM
22)	Sample	21	P28160	FRNC2B	0601073-01E
23)	Sample	22	P28161	FRNC2B	0601073-02E CN 2/17/06
24)	Sample	23	P28162	FRNC2B	0601073-01
25)	Sample	24	P28163	FRNC2B	0601073-02
26)	Sample	25	P28164	FRNC2B	0601073-03
27)	Sample	26	P28165	FRNC2B	0601073-04
28)	Sample	27	P28166	FRNC2B	0601073-04D
29)	Sample	28	P28167	FRNC2B	C2020604 PASS
30)	Sample	29	P28168	FRNC2B	DCM
31)	Sample	30	P28169	FRNC2B	BbF D12
32)	Sample	31	P28170	FRNC2B	c2020605
33)	Sample	32	P28171	FRNC2B	0602004-03
34)	Sample	33	P28172	FRNC2B	0602004-04
35)	Sample	34	P28173	FRNC2B	0602004-05
36)	Sample	35	P28174	FRNC2B	0602004-06
37)	Sample	36	P28175	FRNC2B	0602004-07
38)	Sample	37	P28176	FRNC2B	0602004-08
39)	Sample	38	P28177	FRNC2B	0602004-08
40)	Sample	39	P28178	FRNC2B	0602004-09
41)	Pause				
42)	Sample	40	P28179	FRNC2B	0602004-09D
43)	Sample	41	P28180	FRNC2B	0602004-10

Screen Only

Run Stopped.

PAH #2 Sequence Information

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

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

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

Last Modified: Mon Feb 06 06:06:09 2006

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

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

2/3/06.

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

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

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

PAH #3 Sequence Information

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

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

FID Process Method: ~~HC31213.M~~ PAH Process Method: ~~PAH31110.M~~

B10 30111.M
2/7/06

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

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

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

CV 2/17/06

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: **0601073**
Lab ID: **SS013006B05**
Date Analyzed: **02/06/06 22:27**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-57 (7-9)	0601073-03E	02/05/06 04:41
GC-SED-51 (0-1.5)	0601073-04E	02/05/06 06:18
GC-SED-51 (0-1.5)	0601073-04E D	02/05/06 07:55
LCS	SS013006LCS03	02/07/06 03:13
LCSD	SS013006LCSD04	02/07/06 04:46
GC-SED-50 (2-5)	0601073-01E	02/07/06 20:49
GC-SED-56 (5.8-6.2)	0601073-02E	02/07/06 22:24
GC-SED-50 (2-5)	0601073-01	02/07/06 23:59
GC-SED-56 (5.8-6.2)	0601073-02	02/08/06 01:34
GC-SED-57 (7-9)	0601073-03	02/08/06 03:08
GC-SED-51 (0-1.5)	0601073-04	02/08/06 04:42
GC-SED-51 (0-1.5)	0601073-04 D	02/08/06 06:18

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: **0601073**
Lab ID: **SS013006B05**
Date Analyzed: **02/02/06 15:45**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-50 (2-5)	0601073-01	02/02/06 17:18
GC-SED-56 (5.8-6.2)	0601073-02	02/02/06 18:50
GC-SED-57 (7-9)	0601073-03	02/02/06 20:21
GC-SED-51 (0-1.5)	0601073-04	02/02/06 21:53
GC-SED-51 (0-1.5)	0601073-04 D	02/02/06 23:24

N/A - Not Applicable

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

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

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

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

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

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

1/17/07

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

* ICAL PAH20113.M

→ Instrument error, sequence re-start 1/10/06

SO011006LCS01 - mis-inject, re-analyze 1/17/06

SO011706ANS01

MS 1/17/06

PAH #2 Sequence Information

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

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

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

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

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

	Line	Type	Vial	DataFile	Method	Sample Name
44)		Sample	17	P27680	FRNC2B	SFFCO2011301
45)		RearSamp	68	P27681	FRNC2B	0512128-04-AFID
		Sample	18	P27682	FRNC2B	DCM
		RearSamp	69	P27683	FRNC2B	0512128-05-AFID
48)		Sample	19	P27684	FRNC2B	C2011301
49)		RearSamp	70	P27685	FRNC2B	C2011304-AFID
50)		Sample	20	P27686	FRNC2B	DCM
51)		RearSamp	71	P27687	FRNC2B	DCM-AFID
52)		Sample	21	P27688	FRNC2B	0512128-01-RE
53)		RearSamp	72	P27689	FRNC2B	DCM-AFID
54)		Sample	22	P27690	FRNC2B	0512128-02-RE
55)		RearSamp	71	P27691	FRNC2B	DCM-AFID
56)		Sample	23	P27692	FRNC2B	0512128-03-RE
57)		RearSamp	72	P27693	FRNC2B	DCM-AFID
58)		Sample	24	P27694	FRNC2B	0512128-03D-RE
59)		RearSamp	71	P27695	FRNC2B	DCM-AFID
60)		Sample	25	P27696	FRNC2B	0512128-04-RE
61)		RearSamp	72	P27697	FRNC2B	DCM-AFID
62)		Sample	26	P27698	FRNC2B	0512128-05-RE
63)		RearSamp	73	P27699	FRNC2B	DCM-AFID
64)		Sample	27	P27700	FRNC2B	C2011304
65)		RearSamp	73	P27701	FRNC2B	DCM-AFID
66)		Sample	28	P27702	FRNC2B	DCM
67)		RearSamp	74	P27703	FRNC2B	DCM-AFID did not inject 1/17/07

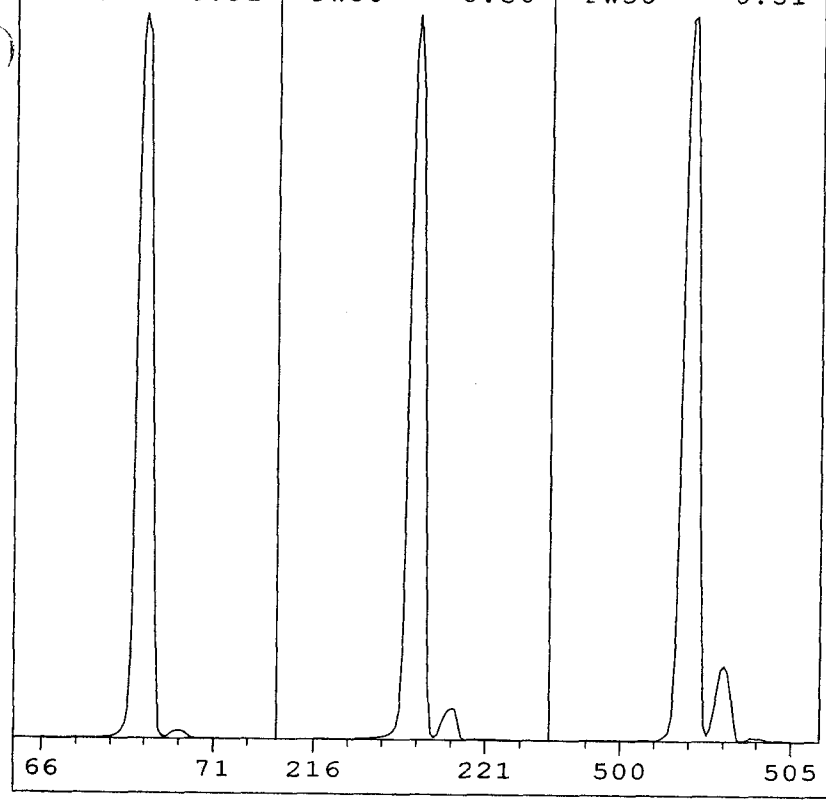
5973 Tune

1/13/06

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

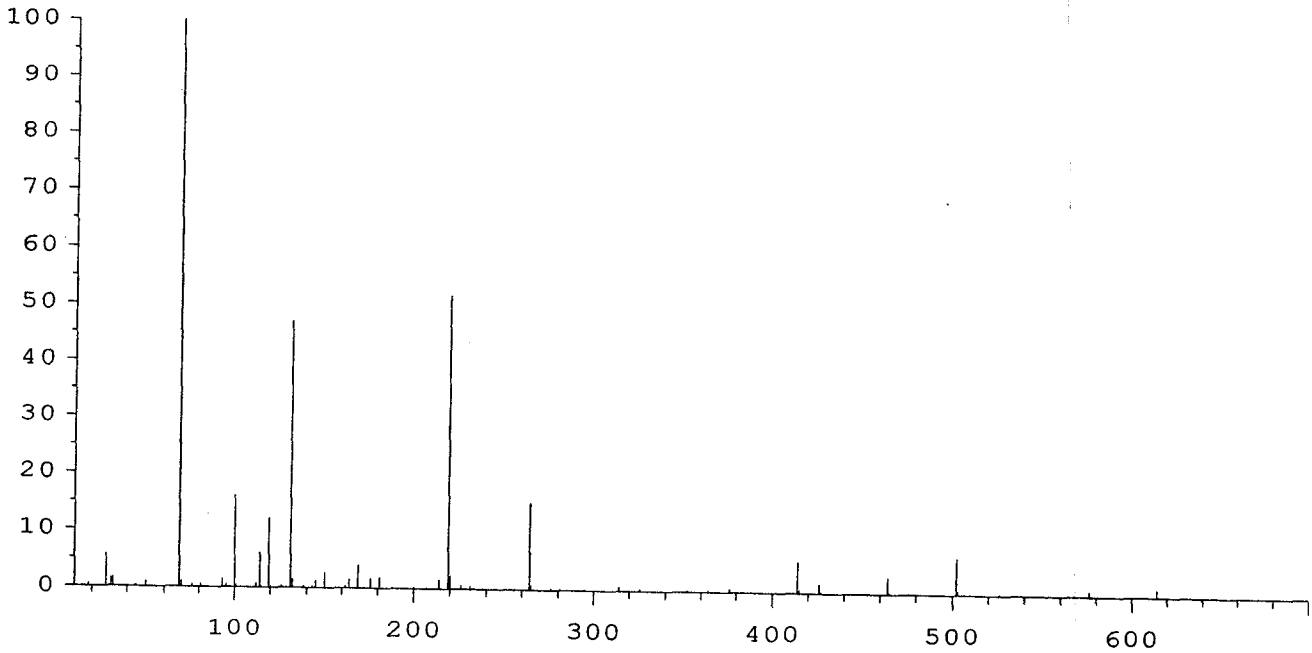
Instrument: PAHINST2

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

CMS 1-17-06

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

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

RF 2nd CV 1/2010

Response Factor Report PAHINST2

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

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

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

Response Factor Report PAHINST2

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

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

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

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

Quantitation Report (QT Reviewed)

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

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

CWS 1/17/06

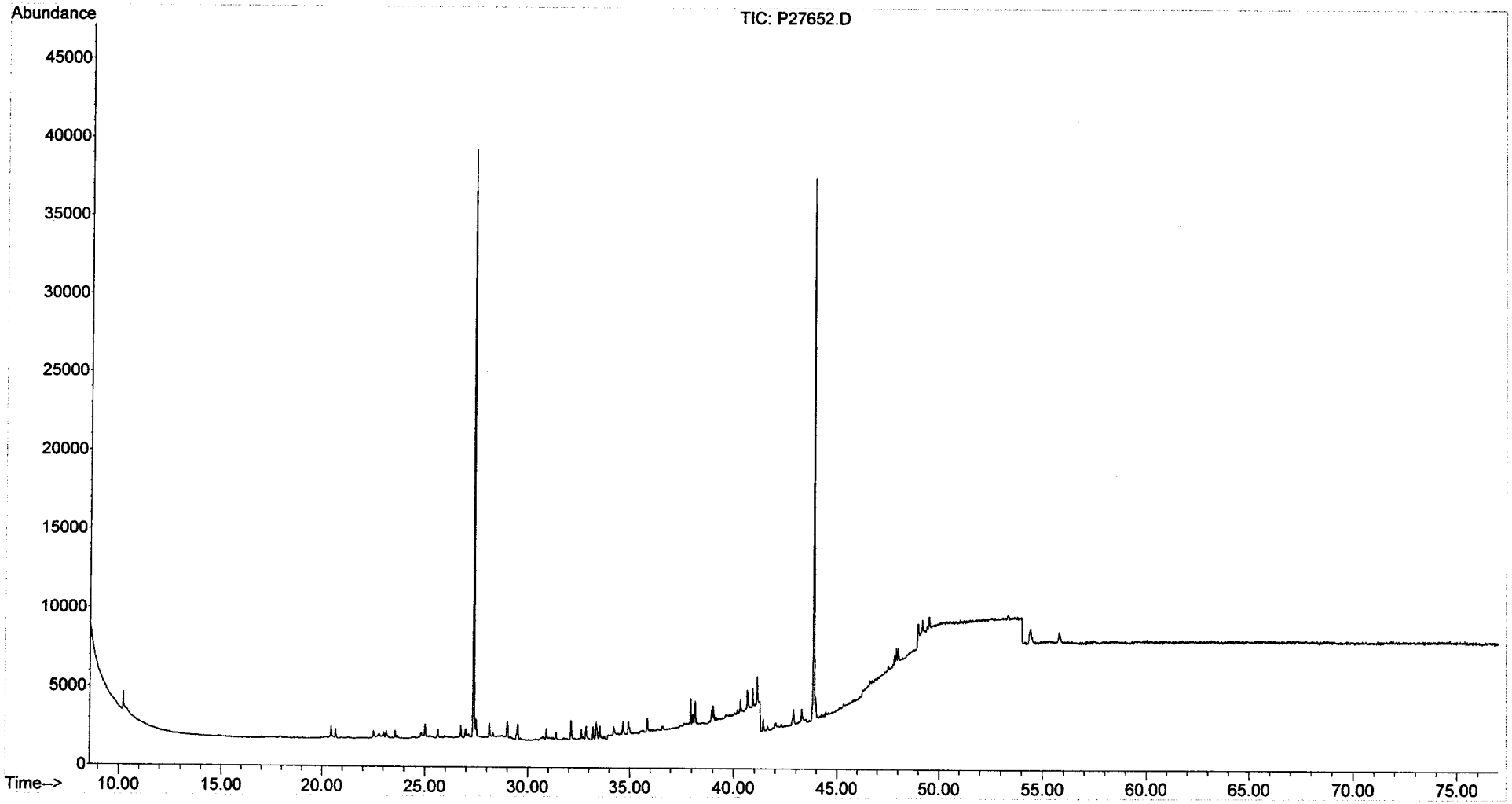
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48581	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	73691	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	970	9.32	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMS 1-17-06

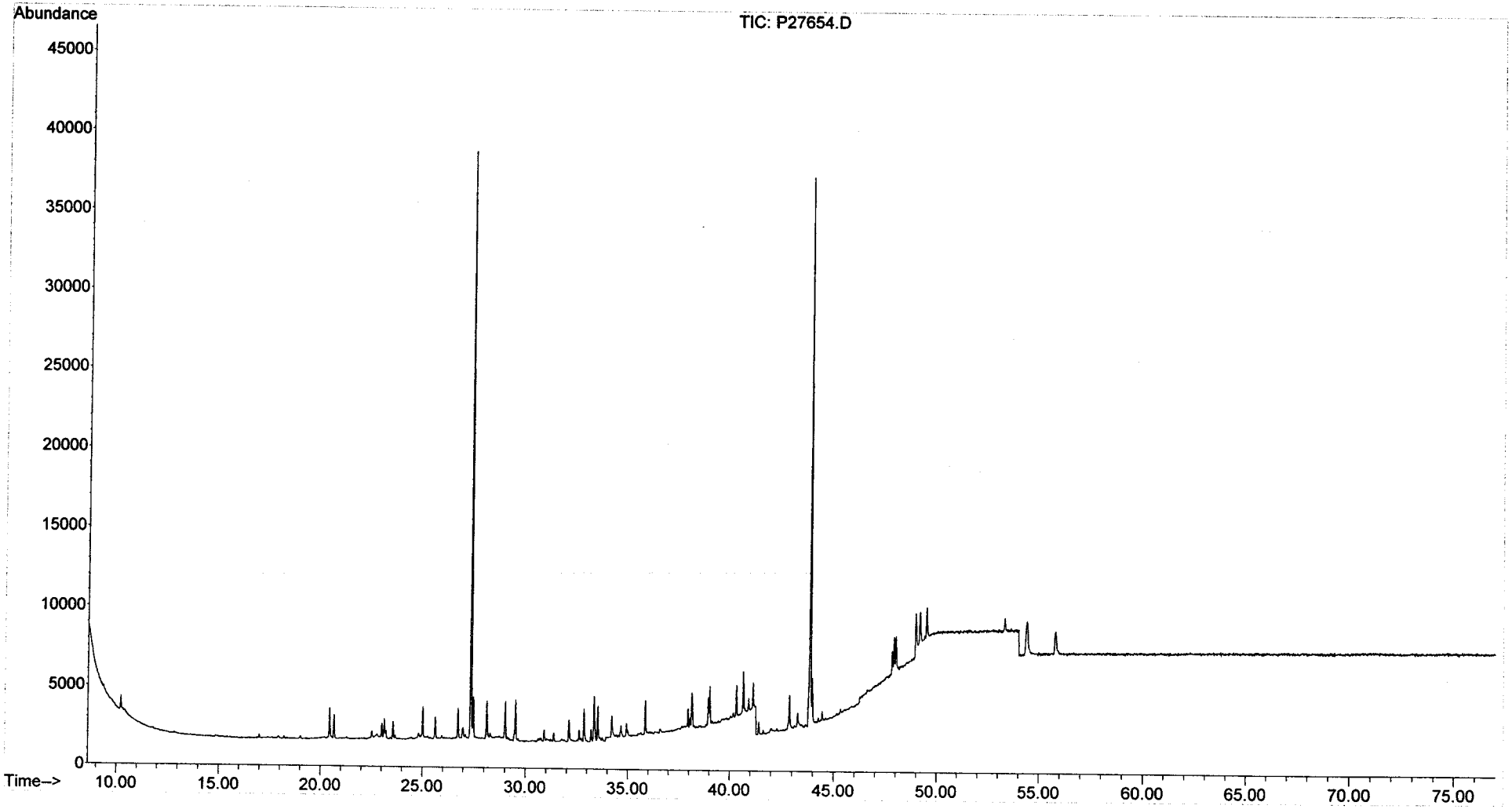
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	47740	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	71793	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	2471	24.16	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-17-06

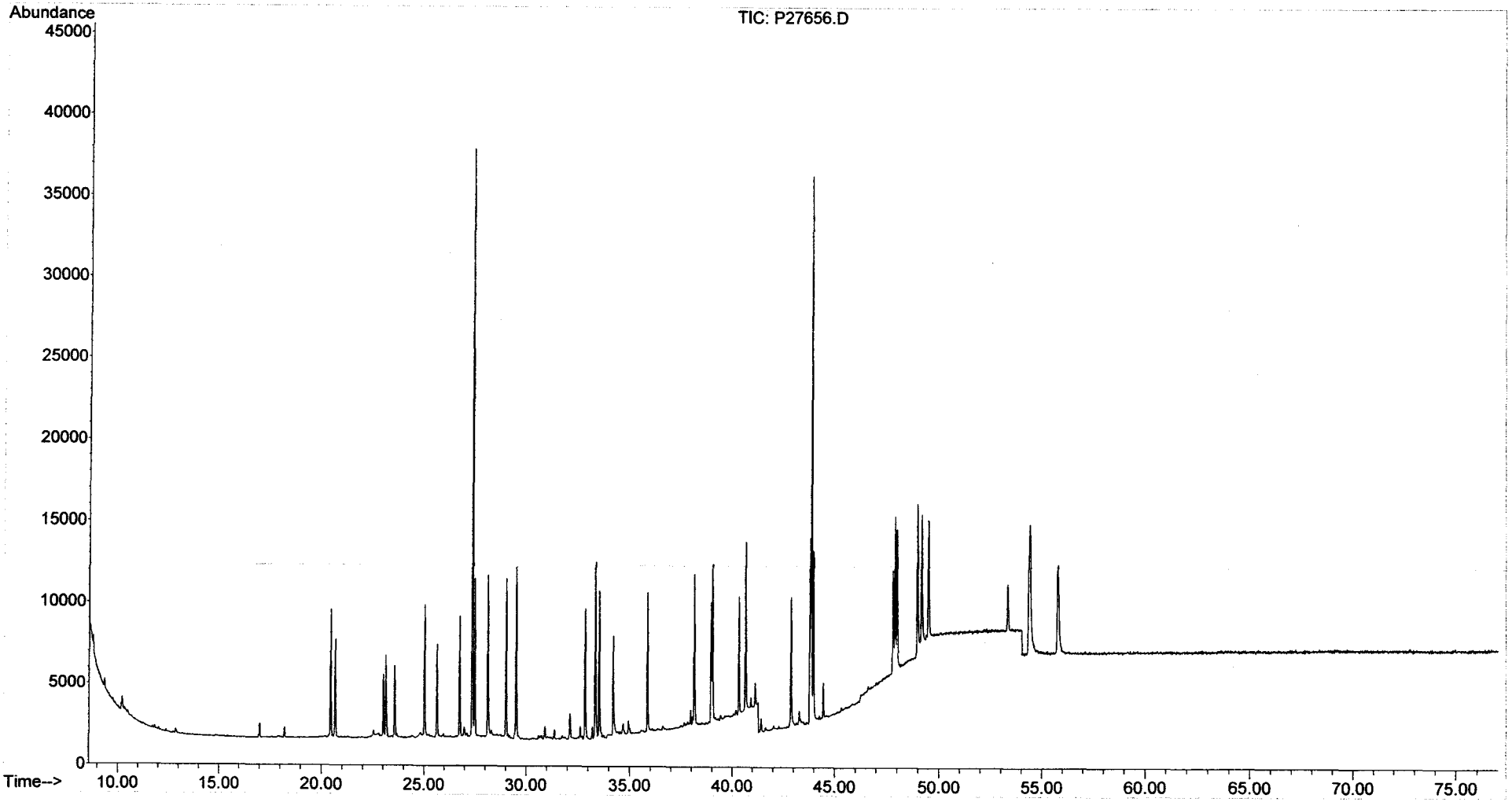
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	46810	500.00	ng/mL	0.04
72) Chrysene-d12	43.86	240	70628	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	9713	96.87	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AMS 1-17-06

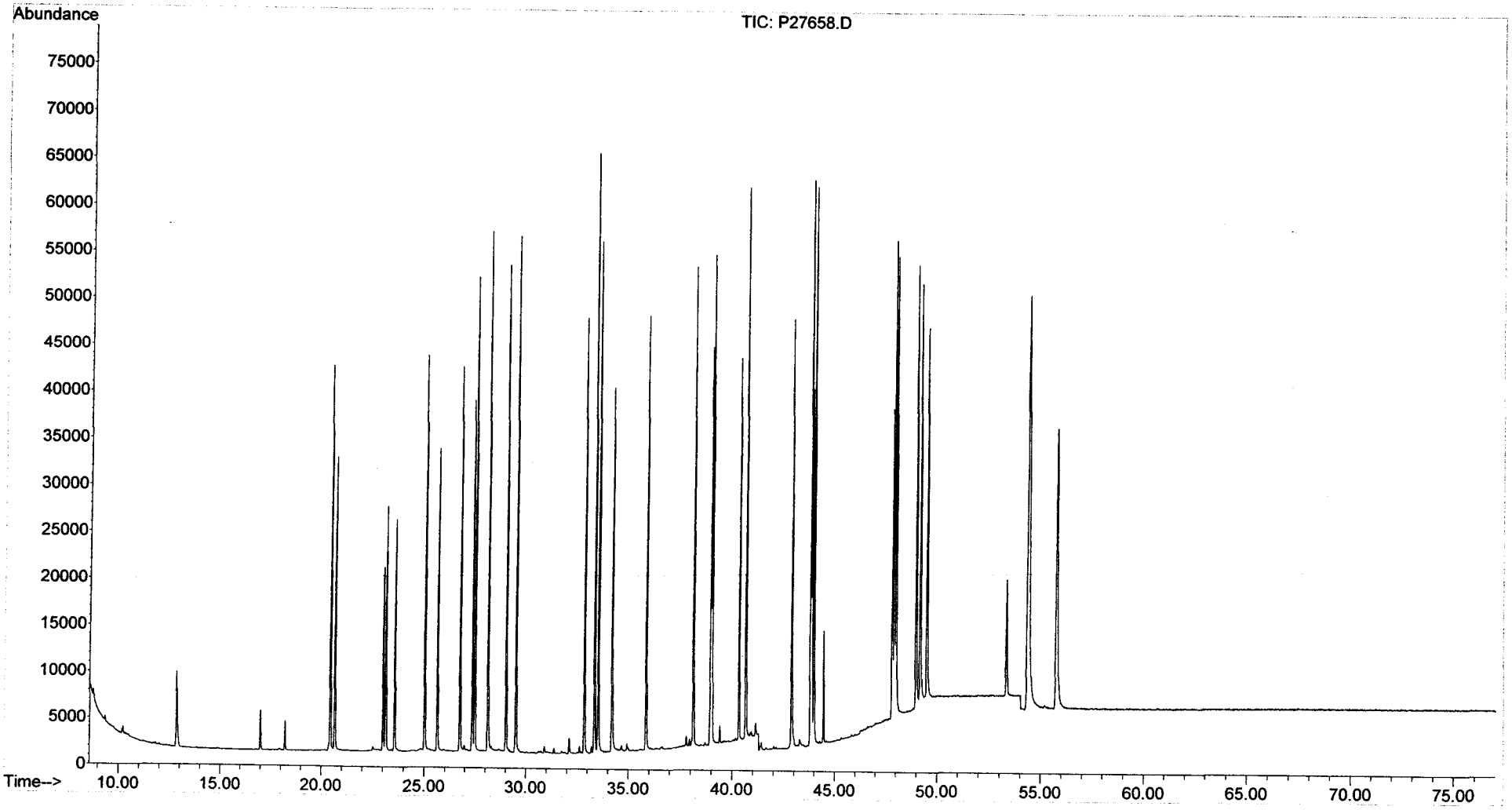
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48150	500.00	ng/mL	0.00
72) Chrysene-d12	43.86	240	74806	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	23.01	152	48972	496.78	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

AWS 1/17/06

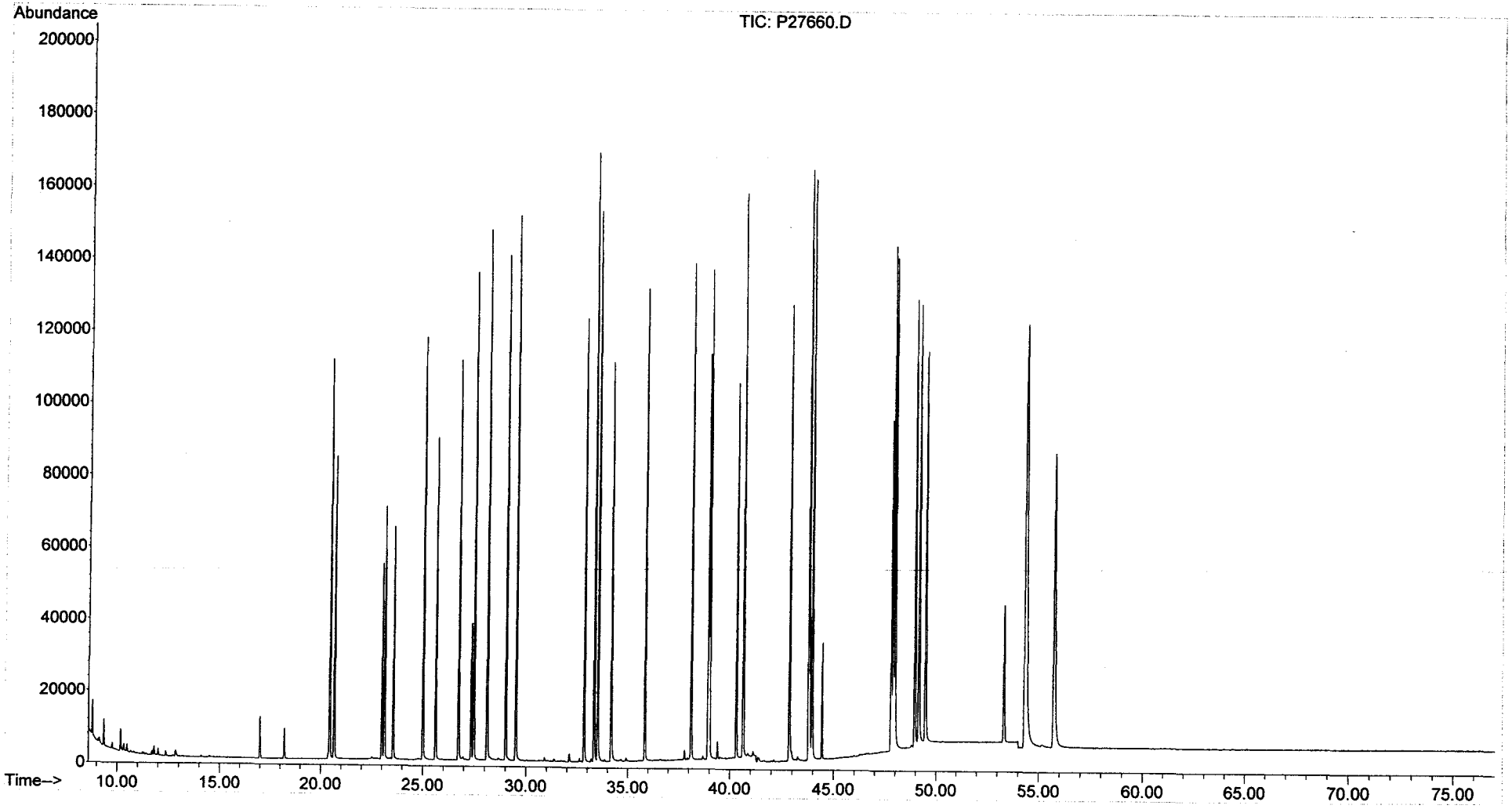
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	48512	500.00 ng/mL	0.00
72) Chrysene-d12	43.86	240	76104	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	126002	1268.64 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-17-06

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

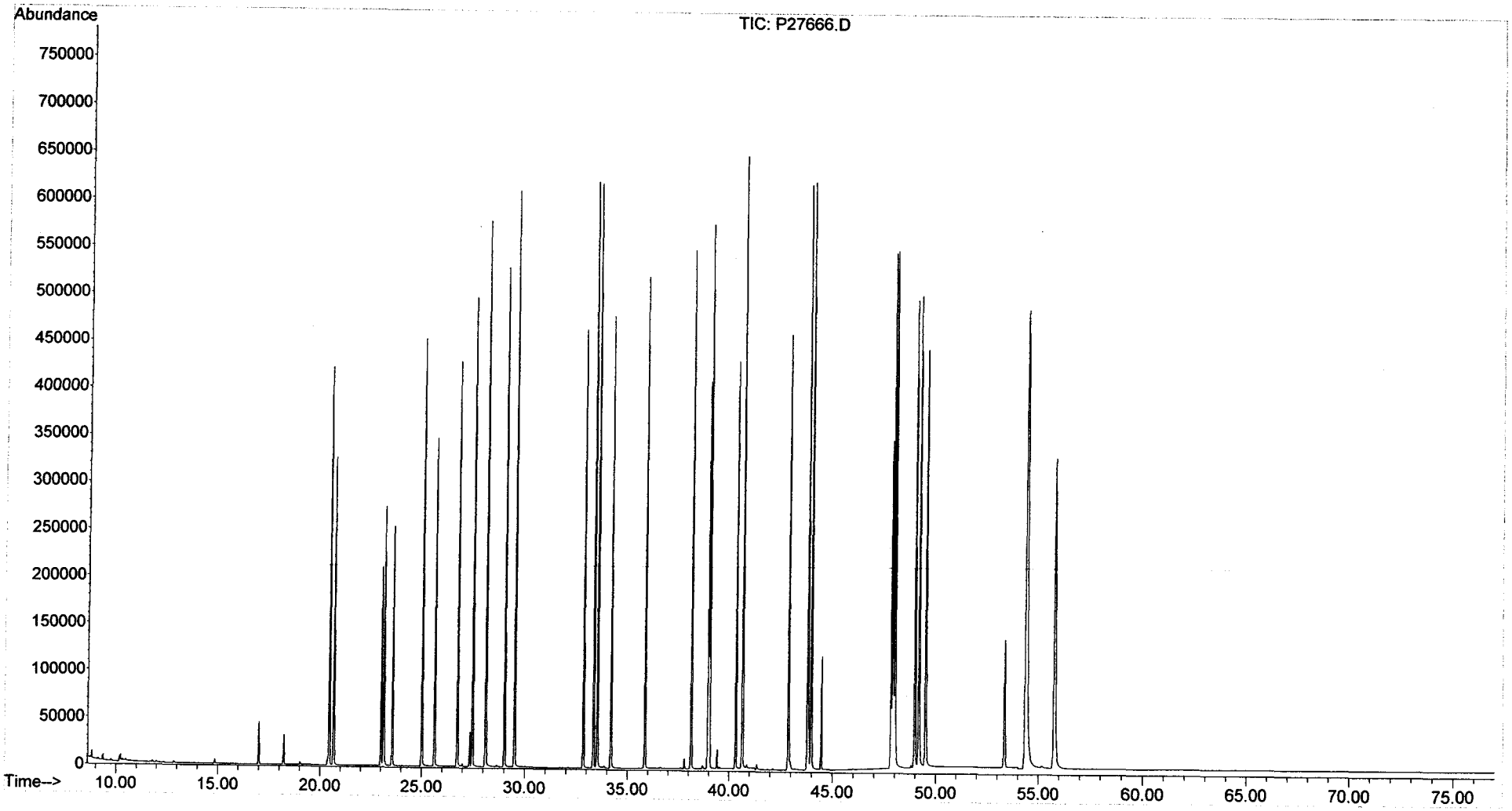
Target Compounds					Qvalue
3) trans-Decalin	16.99	138	95544	2353.44 ng/mL	100
4) cis-Decalin	18.22	138	72265	2426.89 ng/mL	100
9) Naphthalene	20.44	128	1036151	4911.69 ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	681031	5245.66 ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	646356	5188.91 ng/mL#	100
17)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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MS 1-17-06

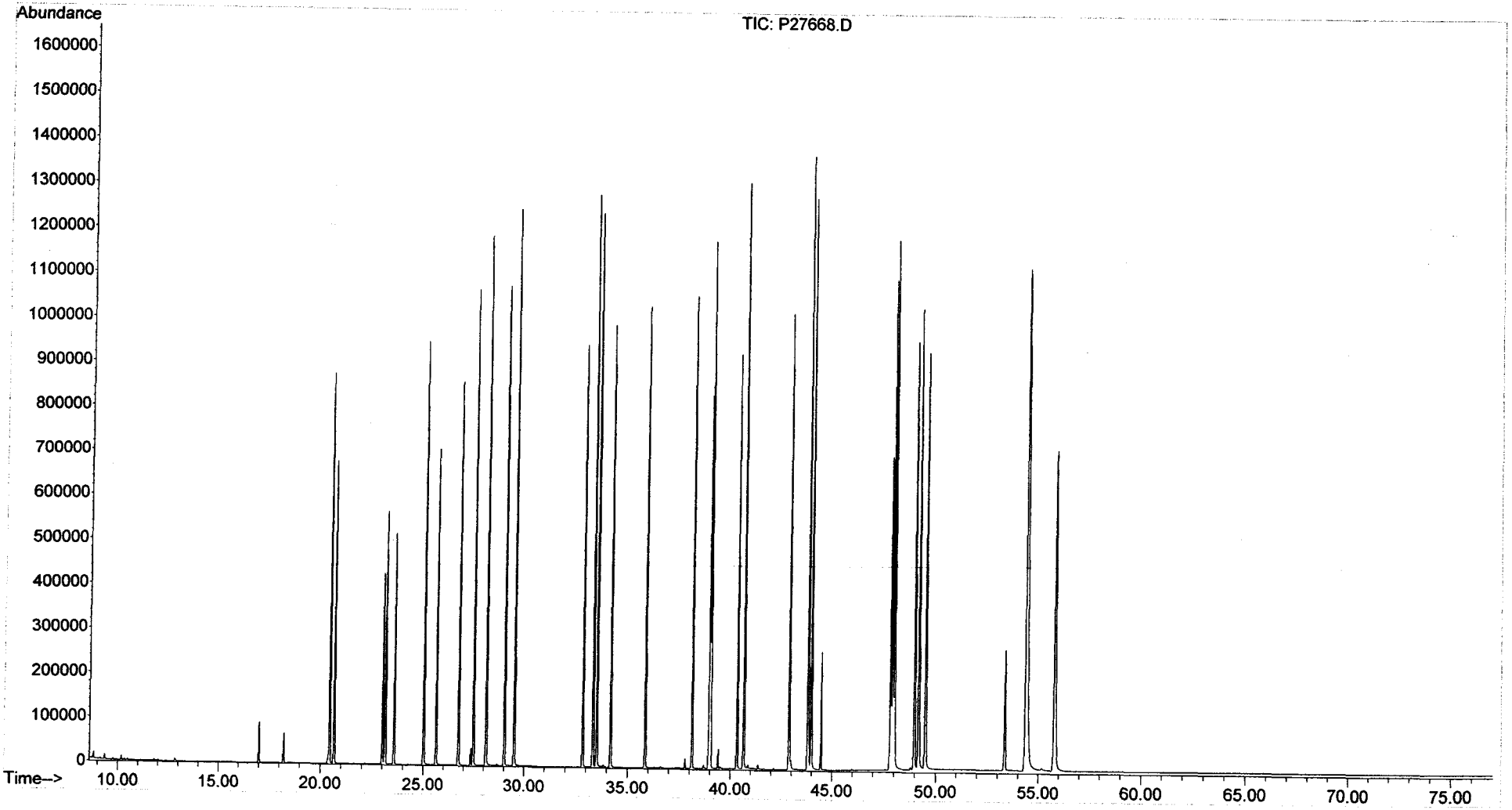
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	27.35	164	49430	500.00 ng/mL	0.00
72) Chrysene-d12	43.87	240	80511	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	23.01	152	995717	9839.08 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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%#			

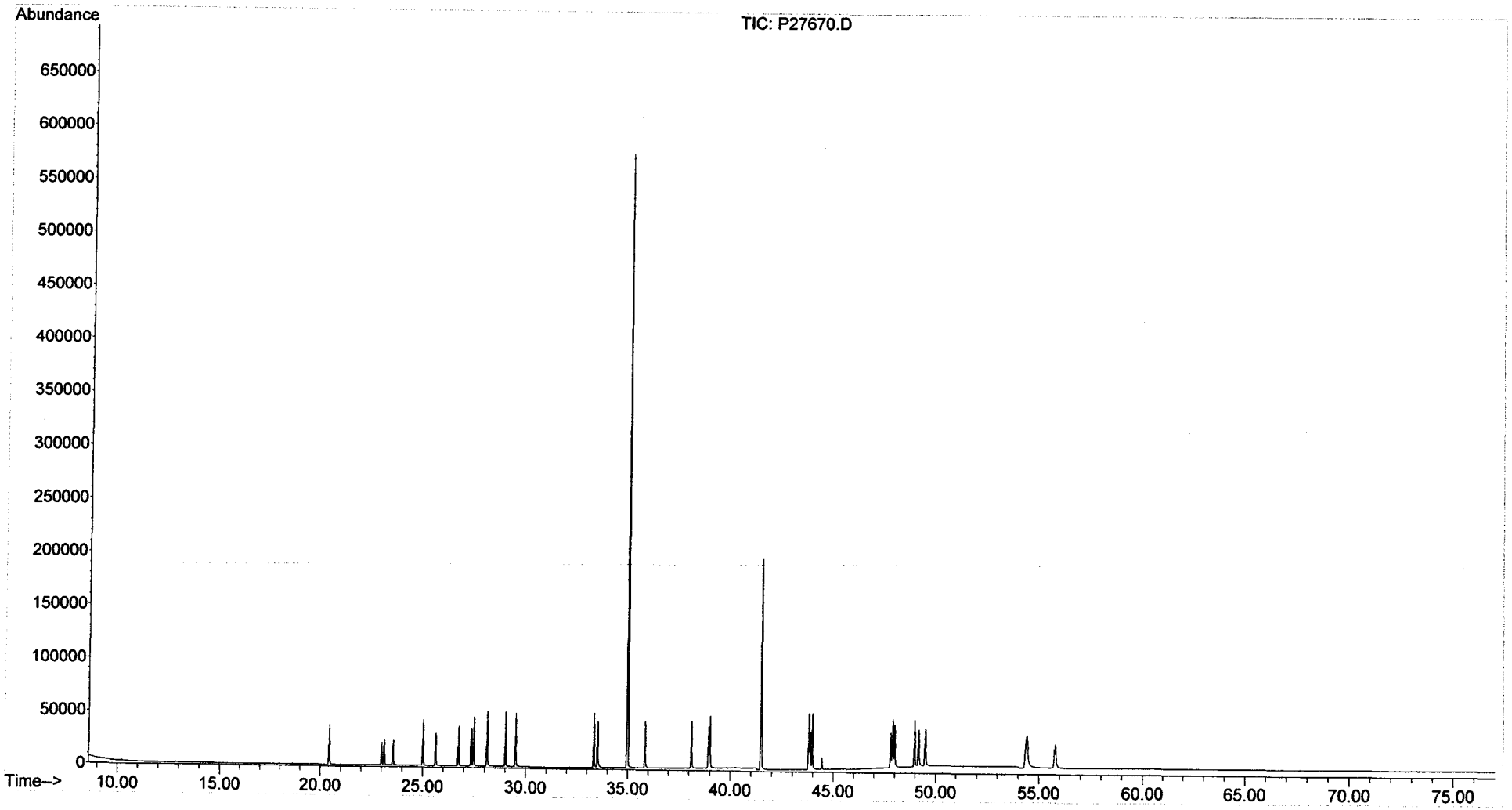
Target Compounds						Qvalue
9) Naphthalene	20.44	128	101937	481.26	ng/mL#	100
15) 2-Methylnaphthalene	23.14	142	63568	471.47	ng/mL#	100
16) 1-Methylnaphthalene	23.56	142	63677	496.19	ng/mL#	100
22) Biphenyl	25.02	154	82264	484.67	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.63	156	57120	491.80	ng/mL#	100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

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

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P34759	FRBIO3B	alk std
4)	Sample	1	P34760	FRBIO3B	pah std
5)	RearSamp	51	P34761	FRBIO3B	alk std
6)	Sample	1	P34762	FRBIO3B	pah std
7)	Sample	2	P34763	FRBIO3B	i3011101
8)	Sample	3	P34764	FRBIO3B	i3011102
9)	Sample	4	P34765	FRBIO3B	i3011103
10)	Sample	5	P34766	FRBIO3B	i3011104
11)	Sample	6	P34767	FRBIO3B	i3011105
12)	Sample	7	P34768	FRBIO3B	i3011106
13)	Sample	8	P34769	FRBIO3B	i3011107
14)	Sample	9	P34770	FRBIO3B	ANS3011101
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 cm 1/24/06

SS012506AWS01 cm 1/25/06

no quant - just post.

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

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

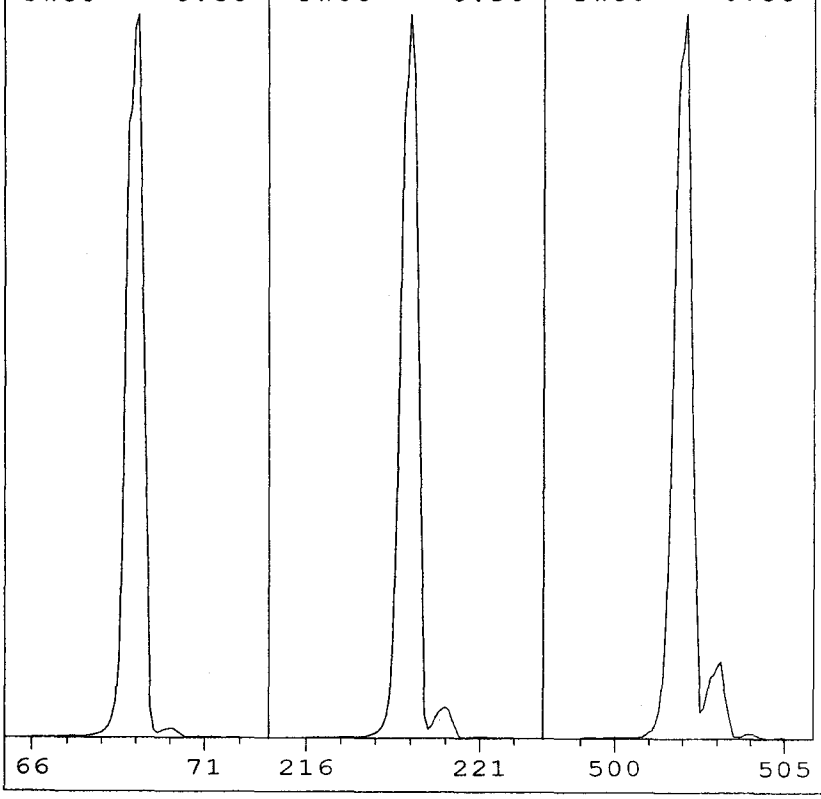
CW 2/8/06

5973

1/11/06

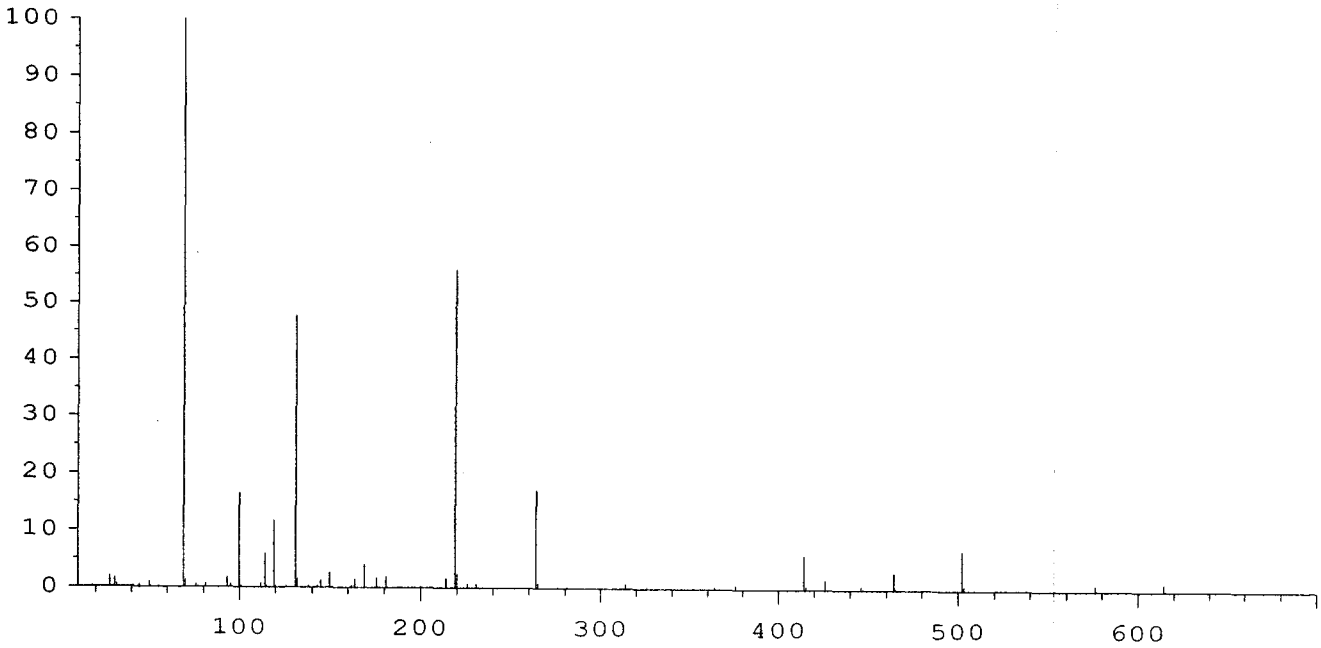
Wed Jan 11 12:32:26 2006 Instrument: PAH-3
C:\MSDCHEM\1\5973N\PFTBA.U

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 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 [illegible]/12/06

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

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

RESPONSE FACTOR REPORT PAH3

111 2/17/06

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 2nd 1/24/06

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

Quantitation Report (QT Reviewed)

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

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

AMS 1-13-06

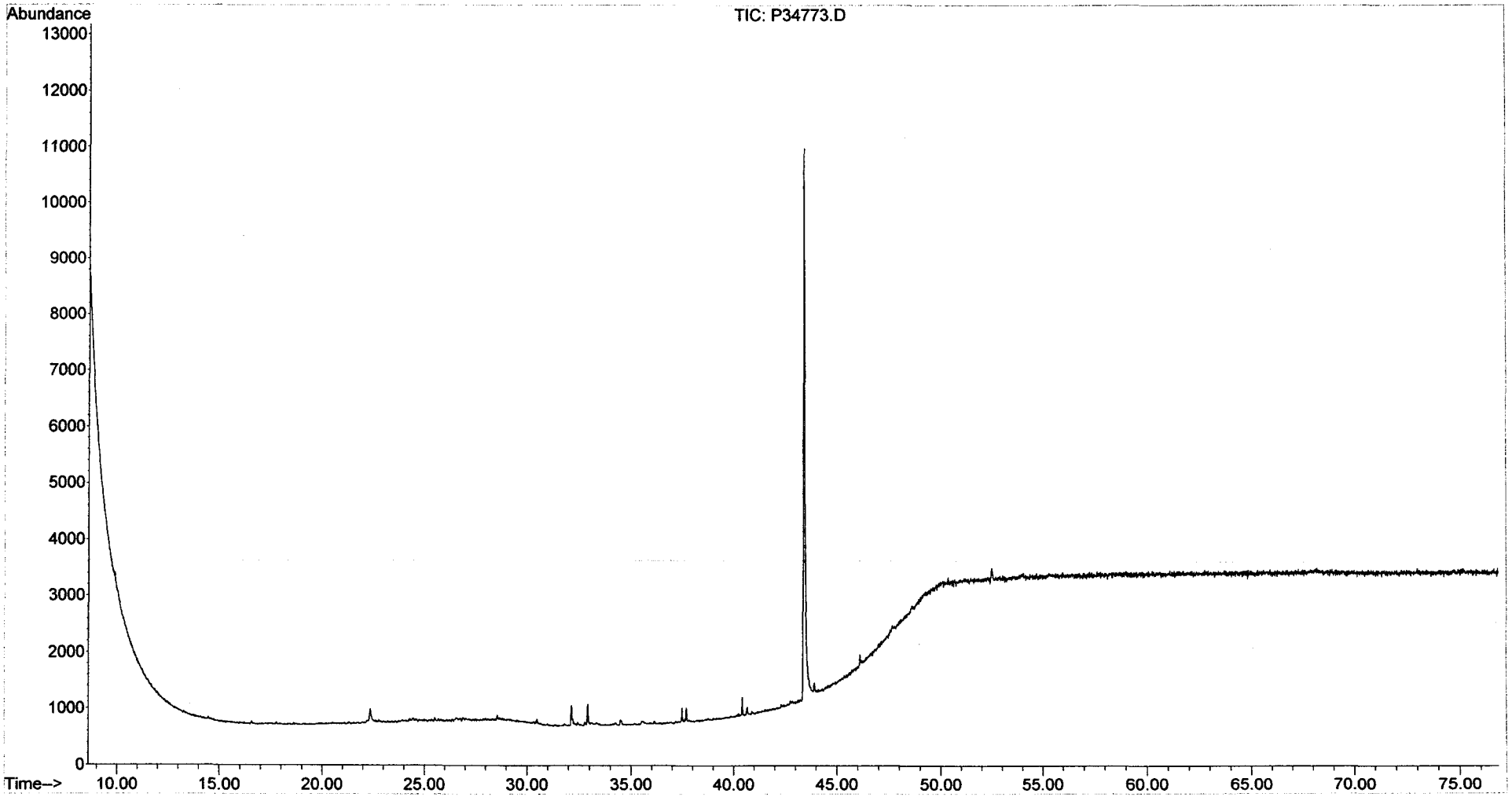
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	50898m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#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

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

Quantitation Report (QT Reviewed)

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

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



Quantitation Report (QT Reviewed)

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

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

MG 1-13-06

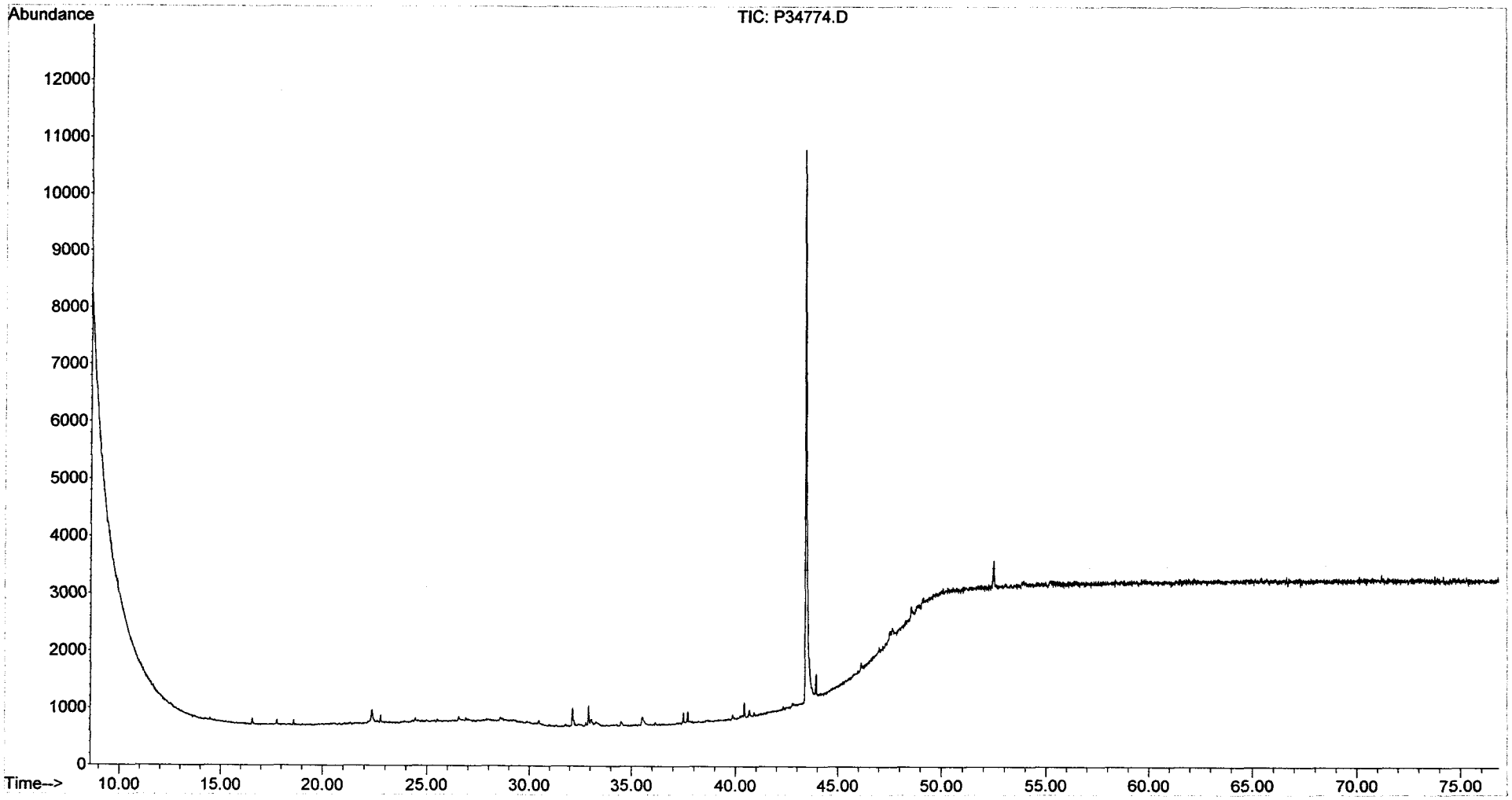
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.41	240	49829	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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

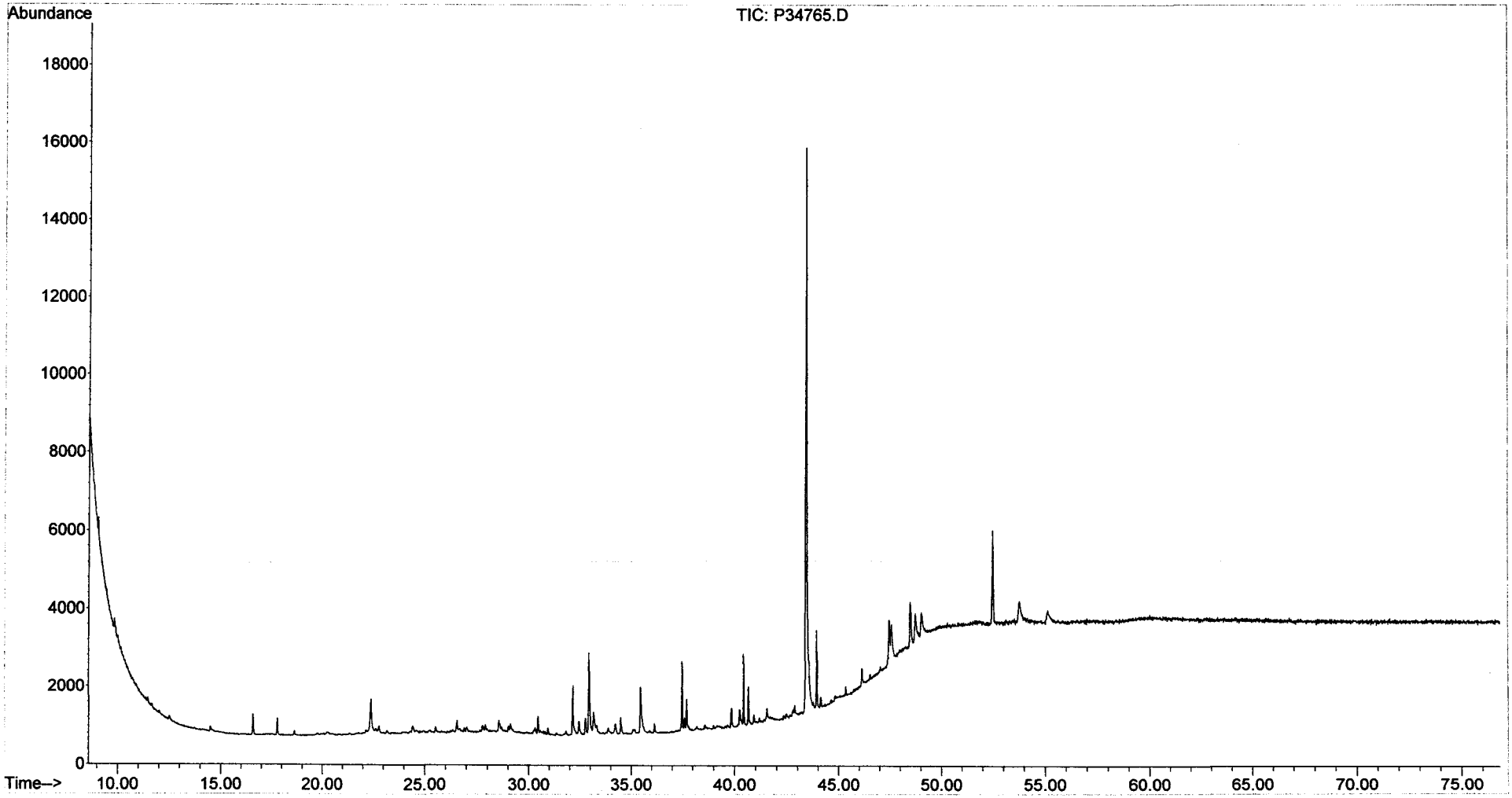
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.40	240	63328	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

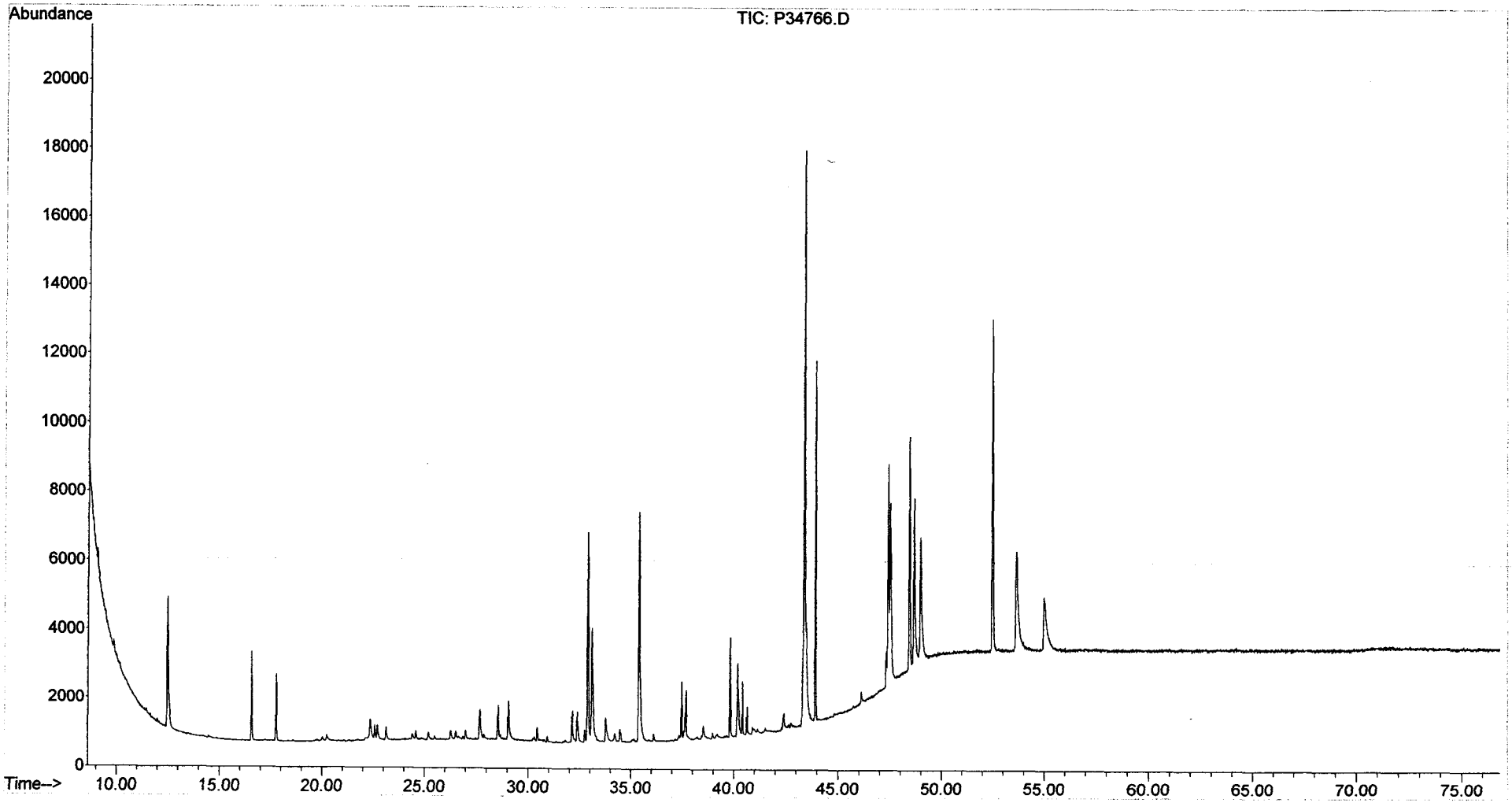
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.38	240	61149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

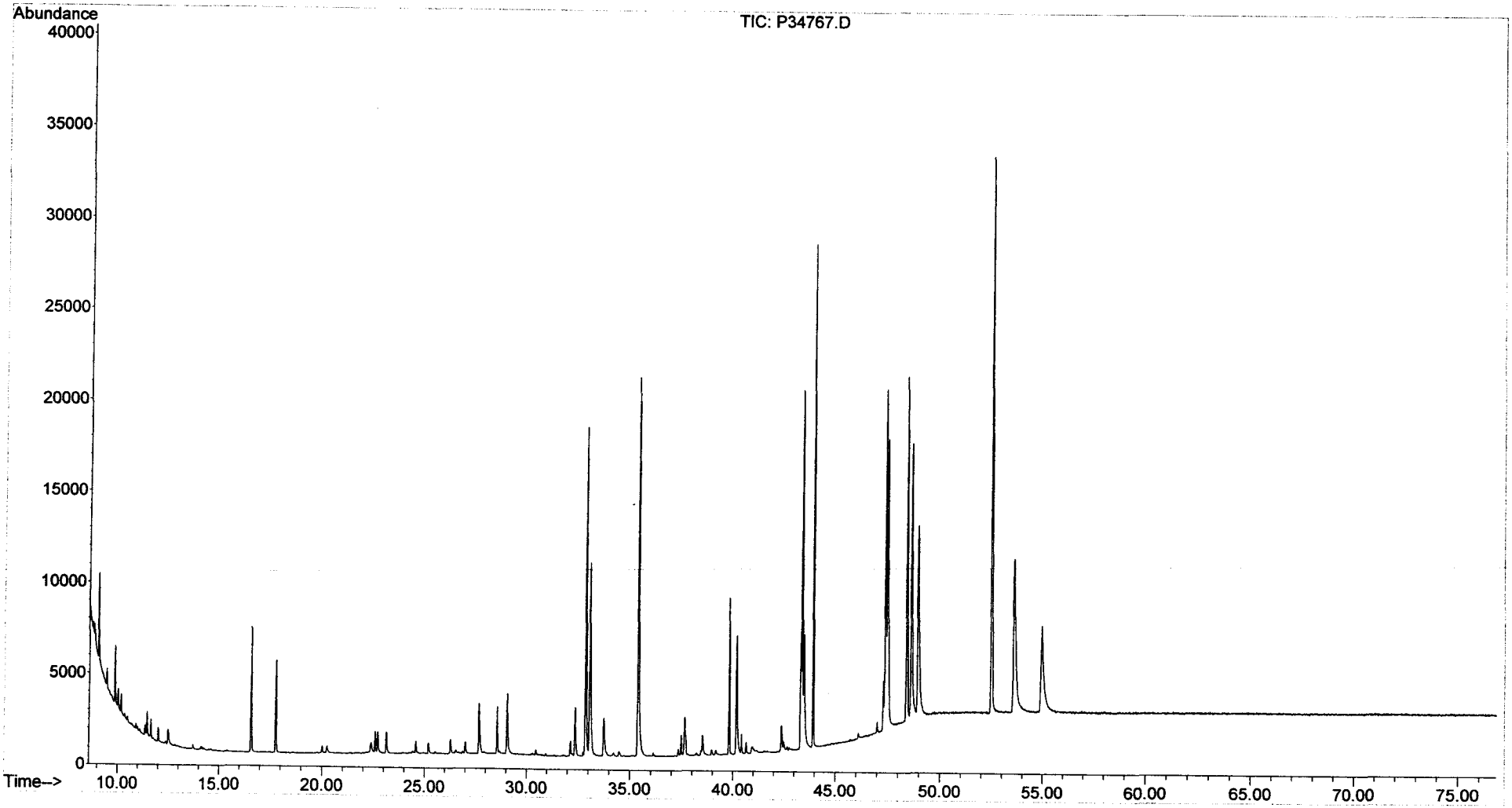
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.36	240	62167	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

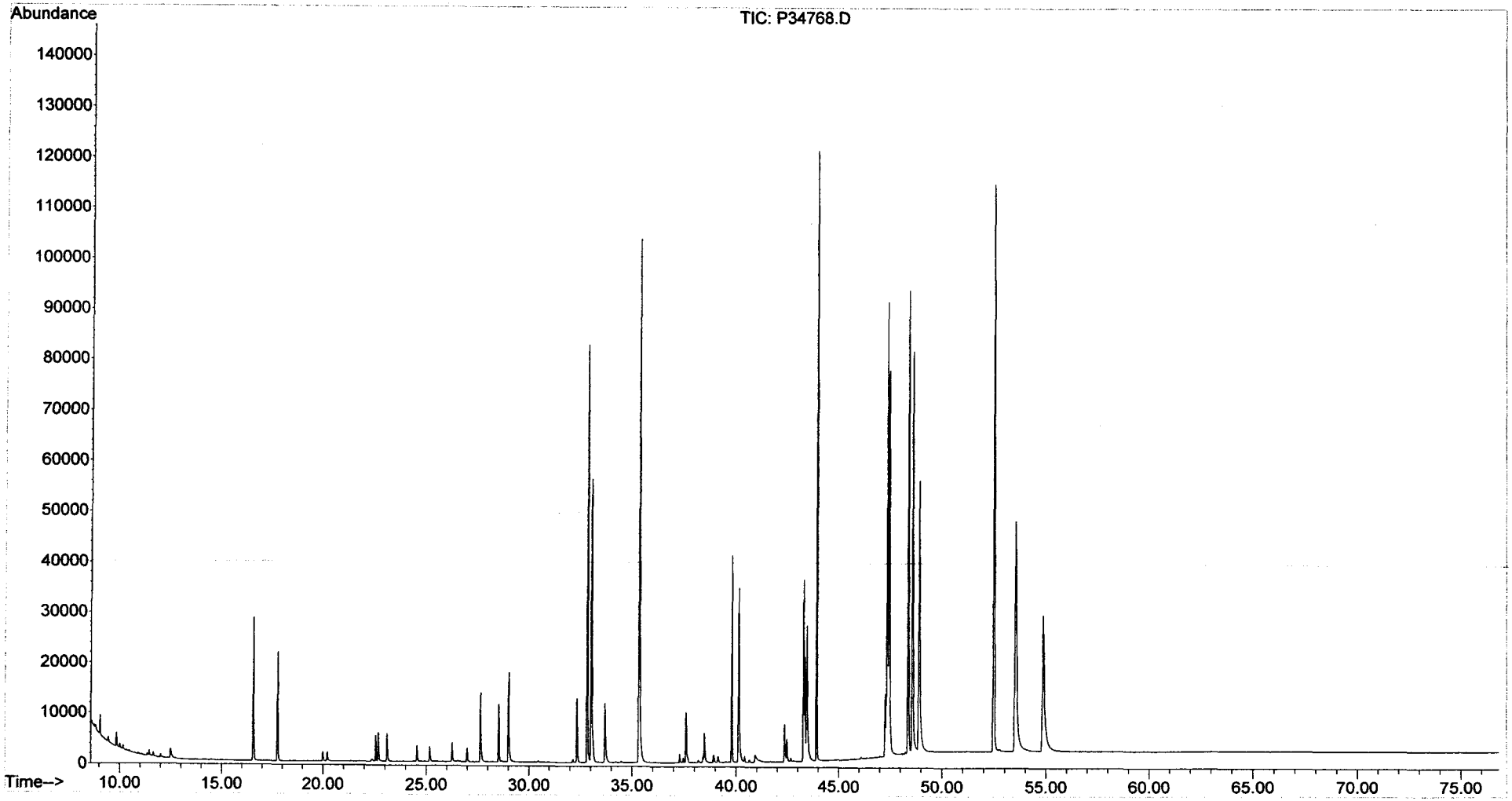
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.35	240	62301	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#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

MS 1-13-06

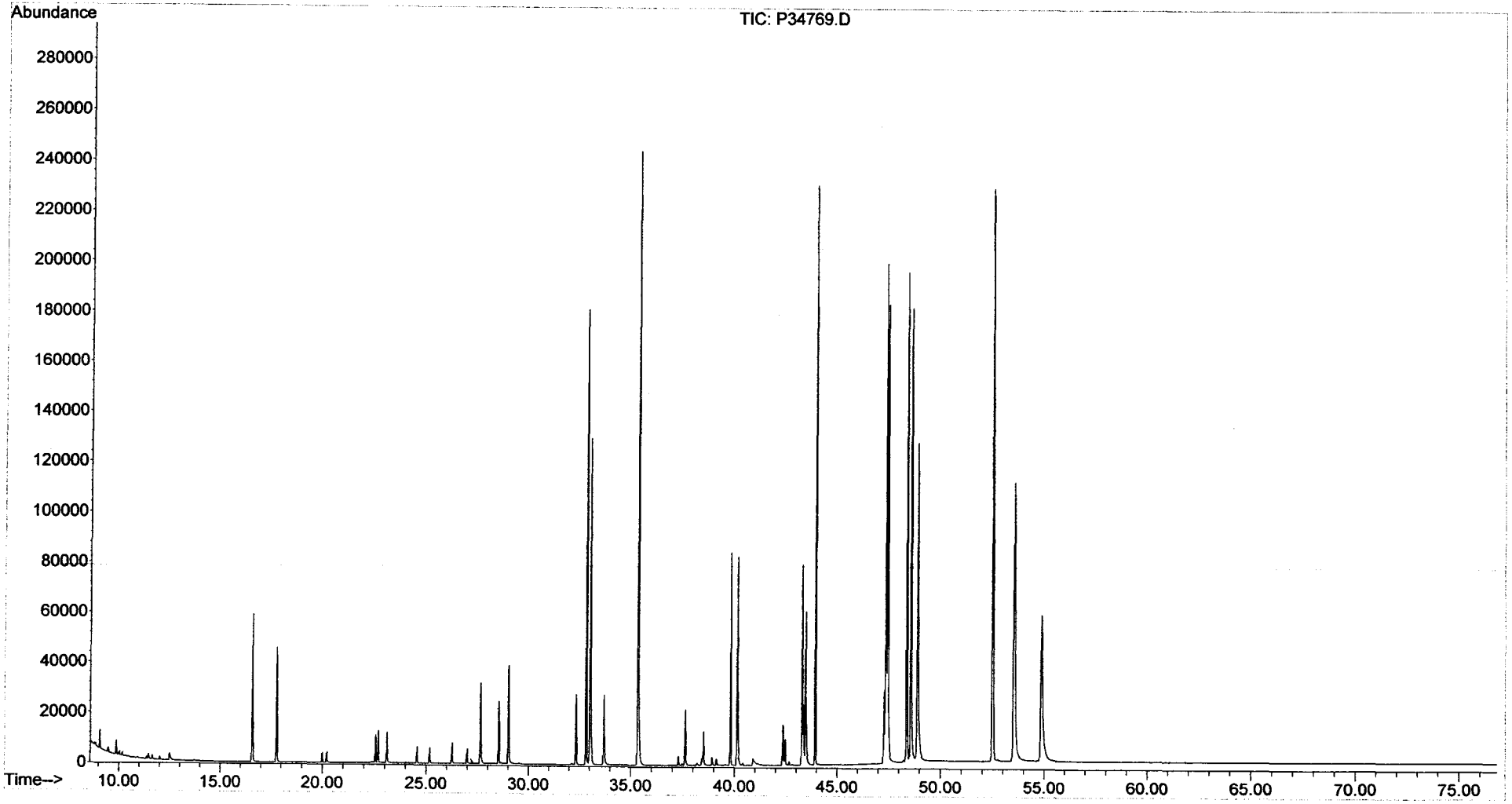
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.34	240	64774	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	43.93	217	291580	9713.60	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 971.36%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.49	191	526755	8033.25	ng/mL#	83
84) Hopane (T19)	52.49	191	526755	8033.25	ng/mL#	83

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

Quantitation Report (QT Reviewed)

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

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



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28131.D
Acq On : 4 Feb 2006 11:48 pm
Operator : AC
Sample : C2020303
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 07:12:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

MS 2/6/06

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	61	-0.02
2	t	Decalin	0.000	0.000#	0.0	0#	-16.76#
3	A1	trans-Decalin	0.422	0.415	1.7	63	-0.02
4	t	cis-Decalin	0.315	0.311	1.3	62	-0.02
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.306	-2.5	63	-0.02
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.024	0.4	61	-0.01
15	t	2-Methylnaphthalene	1.432	1.456	-1.7	62	-0.01
16	t	1-Methylnaphthalene	1.363	1.389	-1.9	63	-0.02
17	A1	Benzothiophene	1.810	1.894	-4.6	64	-0.01
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.769	1.8	62	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.218	1.2	61	-0.02
24	t	Dibenzofuran	1.989	2.009	-1.0	61	-0.02
25	t	Acenaphthylene	2.231	2.528	-13.3	70	-0.02
26	t	Acenaphthene	1.368	1.410	-3.1	64	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.076	1.104	-2.6	64	-0.01
28	A1	Fluorene	1.599	1.586	0.8	62	-0.02
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.038	4.7	58	-0.02
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.062	9.6	56	-0.02
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28131.D
Acq On : 4 Feb 2006 11:48 pm
Operator : AC
Sample : C2020303
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 07:12:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.509	1.7	63	-0.02
53	t	Anthracene	2.119	2.062	2.7	60	-0.02
54	t	Carbazole	2.020	1.977	2.1	60	-0.01
55	t	1-Methylphenanthrene	1.583	1.512	4.5	58	-0.01
56	A1	Fluoranthene	2.435	2.421	0.6	60	-0.02
57	t	Benzo(b)fluorene	1.497	1.596	-6.6	66	-0.02
58	s	Pyrene-d10	2.114	2.070	2.1	59	-0.02
59	A1	Pyrene	2.494	2.481	0.5	61	-0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.416	-4.5	65	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.412	-4.3	64	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	61	-0.01
73	t	Benz[a]anthracene	1.428	1.497	-4.8	65	-0.01
74	A1	Chrysene	1.434	1.486	-3.6	64	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.490	-3.9	64	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	1.081	-5.5	65	-0.02
82	t	Benzo[b]fluoranthene	1.534	1.633	-6.5	67	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.665	-3.8	65	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.556	-5.3	65	-0.02
86	t	Benzo[a]pyrene	1.478	1.580	-6.9	66	-0.01
87	t	Perylene	1.473	1.562	-6.0	66	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.624	-10.9	70	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.493	-8.3	67	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.552	-1.6	64	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.467	5.3	65	-0.02
92	A2	Hopane (T19)	0.493	0.467	5.3	65	-0.02
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28131.D
Acq On : 4 Feb 2006 11:48 pm
Operator : AC
Sample : C2020303
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 07:12:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.222	3.5	62	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28131.D
Acq On : 4 Feb 2006 11:48 pm
Operator : AC
Sample : C2020303
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 07:12:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

WS 2/6/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.09	164	29396	500.00	ng/mL	-0.02
72) Chrysene-d12	43.60	240	45920	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.76	152	30105	498.33	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.83%#			
58) Pyrene-d10	38.67	212	60839	489.61	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.96%#			
81) Benzo[b]fluoranthene-d12	47.52	264	49636	527.24	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.72%			
125) 5B(H)Cholane - Surr	44.18	217	10185	482.45	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.24%#			

Target Compounds						Qvalue
3) trans-Decalin	16.73	138	6107	246.39	ng/mL	100
4) cis-Decalin	17.96	138	4574	246.63	ng/mL	100
9) Naphthalene	20.19	128	67793	512.73	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	42813	508.69	ng/mL#	100
16) 1-Methylnaphthalene	23.31	142	40835	509.75	ng/mL#	100
17) Benzothiophene	20.41	134	55667	523.07	ng/mL	100
22) Biphenyl	24.77	154	51995	490.75	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.38	156	35802	493.82	ng/mL#	100
24) Dibenzofuran	27.87	168	59057	504.95	ng/mL	98
25) Acenaphthylene	26.48	152	74304m	566.41	ng/mL	
26) Acenaphthene	27.21	153	41451	515.48	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	32460	513.04	ng/mL	100
28) Fluorene	29.24	166	46612	495.75	ng/mL	98
32) Dibenzothiophene	32.57	184	59902	476.48	ng/mL	100
41) Phenanthrene	33.07	178	60619	451.86	ng/mL	100
52) Retene	40.05	234	14951	491.15	ng/mL	97
53) Anthracene	33.25	178	60621m	486.54	ng/mL	
54) Carbazole	33.94	167	58112	489.37	ng/mL	99
55) 1-Methylphenanthrene	35.58	192	44433	477.42	ng/mL	99
56) Fluoranthene	37.85	202	71157	496.96	ng/mL	99
57) Benzo(b)fluorene	40.38	216	46911	532.94	ng/mL	99
59) Pyrene	38.74	202	72944	497.50	ng/mL	99
64) Naphthobenzothiophene	42.61	234	71008	522.25	ng/ml#	67
65) Naphthobenzothiophene-2,1-	42.61	234	70895	521.42	ng/mL#	67
73) Benz[a]anthracene	43.53	228	68749m	524.26	ng/mL	
74) Chrysene	43.70	228	68220	517.96	ng/mL	97
75) Chrysene/Triphenylene	43.70	228	68425	519.51	ng/mL	98
82) Benzo[b]fluoranthene	47.61	252	74998	532.51	ng/mL	100
83) Benzo[k]fluoranthene	47.70	252	76463	519.17	ng/mL	100
85) Benzo[e]pyrene	48.65	252	71431	526.12	ng/mL	100
86) Benzo[a]pyrene	48.86	252	72545	534.46	ng/mL	100
87) Perylene	49.18	252	71733	530.09	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.93	276	74554m	554.16	ng/mL	
89) Dibenz[a,h]anthracene	53.98	278	68581	542.07	ng/mL	98
90) Benzo[g,h,i]perylene	55.30	276	71282	508.16	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.90	191	21450	473.68	ng/mL	98
92) Hopane (T19)	52.90	191	21450	473.68	ng/mL	98

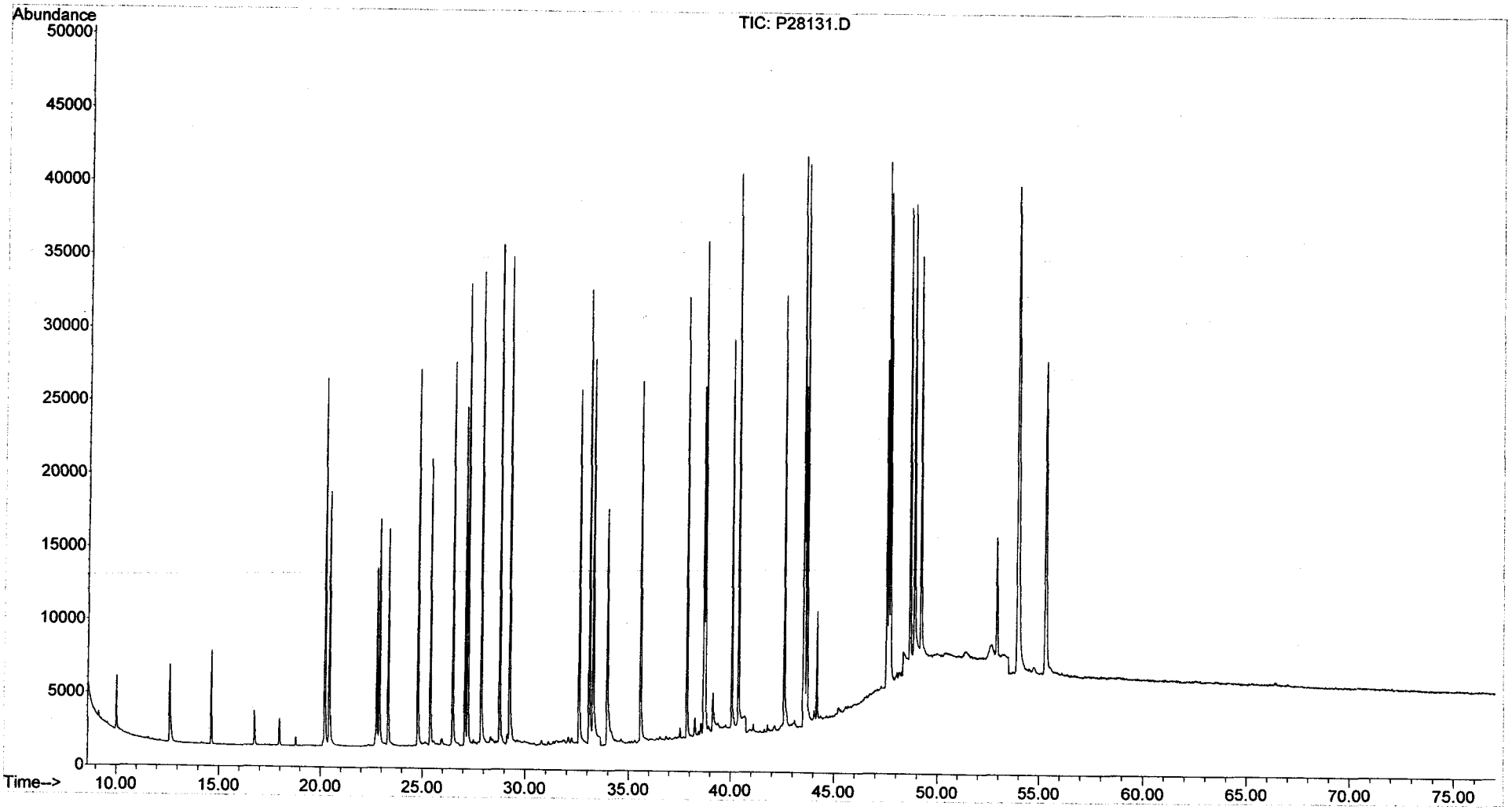
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Mon Feb 06 07:12:42 2006

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28131.D
Acq On : 4 Feb 2006 11:48 pm
Operator : AC
Sample : C2020303
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 06 07:12:14 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28137.D
Acq On : 5 Feb 2006 9:31 am
Operator : AC
Sample : C2020304
Misc : PAH STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 06 07:15:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

MS 2/6/06

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	67	-0.01
2	t	Decalin	0.000	0.000#	0.0	0#	-16.76#
3	A1	trans-Decalin	0.422	0.417	1.2	69	-0.01
4	t	cis-Decalin	0.315	0.311	1.3	68	-0.02
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.346	-4.3	71	-0.02
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.021	0.7	67	-0.01
15	t	2-Methylnaphthalene	1.432	1.466	-2.4	69	-0.01
16	t	1-Methylnaphthalene	1.363	1.388	-1.8	70	-0.01
17	A1	Benzothiophene	1.810	1.929	-6.6	72	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.764	2.1	68	-0.01
23	t	2,6-Dimethylnaphthalene	1.233	1.226	0.6	68	-0.01
24	t	Dibenzofuran	1.989	2.026	-1.9	68	-0.01
25	t	Acenaphthylene	2.231	2.418	-8.4	73	-0.01
26	t	Acenaphthene	1.368	1.417	-3.6	71	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.076	1.115	-3.6	71	-0.01
28	A1	Fluorene	1.599	1.567	2.0	67	-0.01
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.088	2.3	66	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.093	8.3	63	-0.01
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28137.D
Acq On : 5 Feb 2006 9:31 am
Operator : AC
Sample : C2020304
Misc : PAH STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 06 07:15:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.475	8.3	65	-0.02
53	t	Anthracene	2.119	2.049	3.3	65	-0.01
54	t	Carbazole	2.020	1.926	4.7	64	0.01
55	t	1-Methylphenanthrene	1.583	1.480	6.5	63	0.00
56	A1	Fluoranthene	2.435	2.351	3.4	64	-0.01
57	t	Benzo(b)fluorene	1.497	1.383	7.6	63	-0.01
58	s	Pyrene-d10	2.114	2.009	5.0	63	-0.01
59	A1	Pyrene	2.494	2.422	2.9	65	-0.01
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.256	2.5	66	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.253	2.6	66	0.00
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	62	-0.01
73	t	Benz[a]anthracene	1.428	1.456	-2.0	64	-0.01
74	A1	Chrysene	1.434	1.488	-3.8	64	0.00
75	A2	Chrysene/Triphenylene	1.434	1.488	-3.8	64	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	1.015	1.0	61	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.553	-1.2	64	0.00
83	A1	Benzo[k]fluoranthene	1.604	1.586	1.1	62	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.507	-2.0	63	-0.01
86	t	Benzo[a]pyrene	1.478	1.441	2.5	61	0.00
87	t	Perylene	1.473	1.484	-0.7	63	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.384	5.5	60	0.01
89	t	Dibenz[a,h]anthracene	1.378	1.321	4.1	59	0.01
90	t	Benzo[g,h,i]perylene	1.527	1.449	5.1	60	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.458	7.1	64	-0.01
92	A2	Hopane (T19)	0.493	0.458	7.1	64	-0.01
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28137.D
Acq On : 5 Feb 2006 9:31 am
Operator : AC
Sample : C2020304
Misc : PAH STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 06 07:15:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.220	4.3	62	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28137.D
Acq On : 5 Feb 2006 9:31 am
Operator : AC
Sample : C2020304
Misc : PAH STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 06 07:15:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

MW 2/6/06

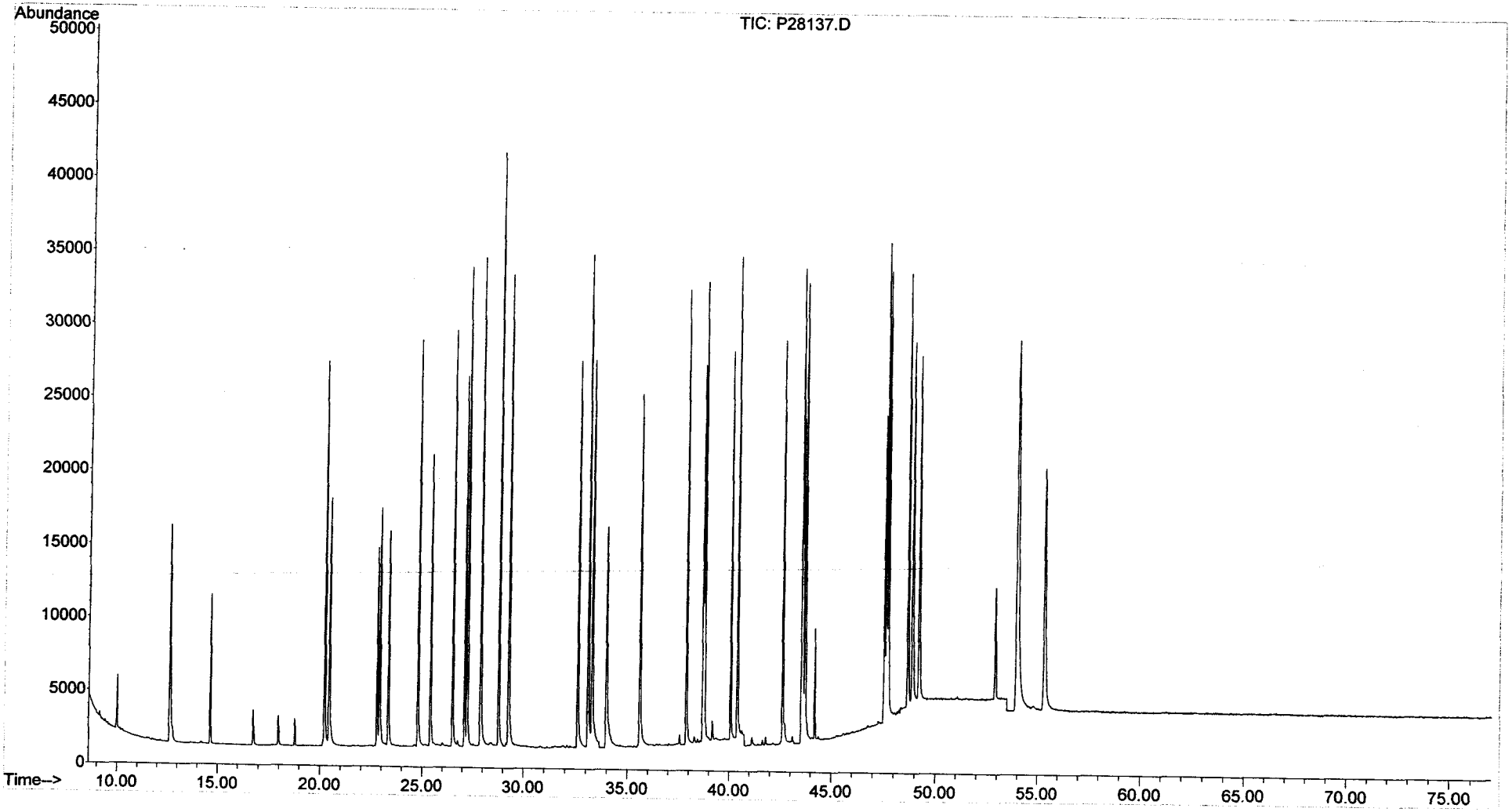
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.10	164	32343	500.00	ng/mL	-0.01
72) Chrysene-d12	43.60	240	46122	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.77	152	33024	496.83	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.68%#			
58) Pyrene-d10	38.68	212	64965	475.18	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.52%#			
81) Benzo[b]fluoranthene-d12	47.54	264	46826	495.21	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.52%#			
125) 5B(H)Cholane - Surr	44.18	217	10131	477.79	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.78%#			
Target Compounds						Qvalue
3) trans-Decalin	16.75	138	6744	247.30	ng/mL	100
4) cis-Decalin	17.96	138	5034	246.70	ng/mL	100
9) Naphthalene	20.19	128	75875	521.57	ng/mL#	100
15) 2-Methylnaphthalene	22.89	142	47427	512.17	ng/mL#	100
16) 1-Methylnaphthalene	23.32	142	44906	509.49	ng/mL#	100
17) Benzothiophene	20.42	134	62401	532.92	ng/mL	100
22) Biphenyl	24.77	154	57042	489.33	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.39	156	39643	496.98	ng/mL#	100
24) Dibenzofuran	27.88	168	65532	509.26	ng/mL	99
25) Acenaphthylene	26.49	152	78216m	541.90	ng/mL	
26) Acenaphthene	27.22	153	45834	518.05	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.77	170	36051	517.87	ng/mL	99
28) Fluorene	29.25	166	50691	490.01	ng/mL	99
32) Dibenzothiophene	32.59	184	67535	488.24	ng/mL	100
41) Phenanthrene	33.08	178	67698	458.64	ng/mL	100
52) Retene	40.05	234	15362	458.67	ng/mL	97
53) Anthracene	33.27	178	66255m	483.31	ng/mL	
54) Carbazole	33.96	167	62294	476.79	ng/mL	100
55) 1-Methylphenanthrene	35.60	192	47854	467.32	ng/mL	100
56) Fluoranthene	37.86	202	76046	482.71	ng/mL	99
57) Benzo(b)fluorene	40.39	216	44741	461.97	ng/mL	99
59) Pyrene	38.75	202	78346	485.65	ng/mL	98
64) Naphthobenzothiophene	42.62	234	72972	487.79	ng/ml#	65
65) Naphthobenzothiophene-2,1-	42.62	234	72884	487.20	ng/mL#	65
73) Benz[a]anthracene	43.53	228	67162	509.91	ng/mL	96
74) Chrysene	43.71	228	68614	518.67	ng/mL	98
75) Chrysene/Triphenylene	43.71	228	68644	518.89	ng/mL	99
82) Benzo[b]fluoranthene	47.62	252	71647	506.49	ng/mL	100
83) Benzo[k]fluoranthene	47.71	252	73136	494.41	ng/mL	100
85) Benzo[e]pyrene	48.66	252	69487	509.56	ng/mL	100
86) Benzo[a]pyrene	48.87	252	66484	487.66	ng/mL	99
87) Perylene	49.20	252	68454	503.65	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.95	276	63830m	472.37	ng/mL	
89) Dibenz[a,h]anthracene	54.00	278	60929	479.48	ng/mL	98
90) Benzo[g,h,i]perylene	55.33	276	66831	474.34	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.91	191	21135	464.68	ng/mL	99
92) Hopane (T19)	52.91	191	21135	464.68	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB03\
Data File : P28137.D
Acq On : 5 Feb 2006 9:31 am
Operator : AC
Sample : C2020304
Misc : PAH STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 06 07:15:53 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28141.D
Acq On : 6 Feb 2006 2:24 pm
Operator : AC
Sample : C2020601
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

2/6/06

Quant Time: Feb 06 17:42:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	62	-0.04
2	t	Decalin	0.000	0.374	0.0	0#	-0.04
3	A1	trans-Decalin	0.422	0.416	1.4	63	-0.04
4	t	cis-Decalin	0.315	0.313	0.6	63	-0.04
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.373	-5.5	66	-0.05
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.024	0.4	62	-0.04
15	t	2-Methylnaphthalene	1.432	1.490	-4.1	64	-0.04
16	t	1-Methylnaphthalene	1.363	1.407	-3.2	65	-0.05
17	A1	Benzothiophene	1.810	1.945	-7.5	66	-0.04
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.828	-1.4	65	-0.04
23	t	2,6-Dimethylnaphthalene	1.233	1.266	-2.7	64	-0.05
24	t	Dibenzofuran	1.989	2.080	-4.6	64	-0.05
25	t	Acenaphthylene	2.231	2.300	-3.1	64	-0.04
26	t	Acenaphthene	1.368	1.394	-1.9	64	-0.04
27	t	2,3,5-Trimethylnaphthalene	1.076	1.142	-6.1	67	-0.04
28	A1	Fluorene	1.599	1.642	-2.7	64	-0.04
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.265	-5.9	65	-0.04
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.352	-3.1	64	-0.04
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28141.D
Acq On : 6 Feb 2006 2:24 pm
Operator : AC
Sample : C2020601
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 06 17:42:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.527	-1.7	66	-0.04
53	t	Anthracene	2.119	2.178	-2.8	64	-0.04
54	t	Carbazole	2.020	2.223	-10.0	68	-0.04
55	t	1-Methylphenanthrene	1.583	1.681	-6.2	66	-0.02
56	A1	Fluoranthene	2.435	2.601	-6.8	65	-0.02
57	t	Benzo(b)fluorene	1.497	1.600	-6.9	67	-0.04
58	s	Pyrene-d10	2.114	2.179	-3.1	63	-0.02
59	A1	Pyrene	2.494	2.637	-5.7	65	-0.04
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.530	-9.4	68	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.530	-9.4	68	-0.02
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	63	-0.02
73	t	Benz[a]anthracene	1.428	1.529	-7.1	68	-0.02
74	A1	Chrysene	1.434	1.504	-4.9	66	-0.02
75	A2	Chrysene/Triphenylene	1.434	1.504	-4.9	66	-0.02
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	1.071	-4.5	66	-0.02
82	t	Benzo[b]fluoranthene	1.534	1.632	-6.4	68	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.736	-8.2	69	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.597	-8.1	68	-0.02
86	t	Benzo[a]pyrene	1.478	1.605	-8.6	69	-0.02
87	t	Perylene	1.473	1.590	-7.9	68	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.611	-10.0	71	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.524	-10.6	70	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.627	-6.5	69	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.467	5.3	66	-0.05
92	A2	Hopane (T19)	0.493	0.467	5.3	66	-0.05
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28141.D
Acq On : 6 Feb 2006 2:24 pm
Operator : AC
Sample : C2020601
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 06 17:42:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.259	-12.6	75	-0.04
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28141.D
Acq On : 6 Feb 2006 2:24 pm
Operator : AC
Sample : C2020601
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 06 17:42:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

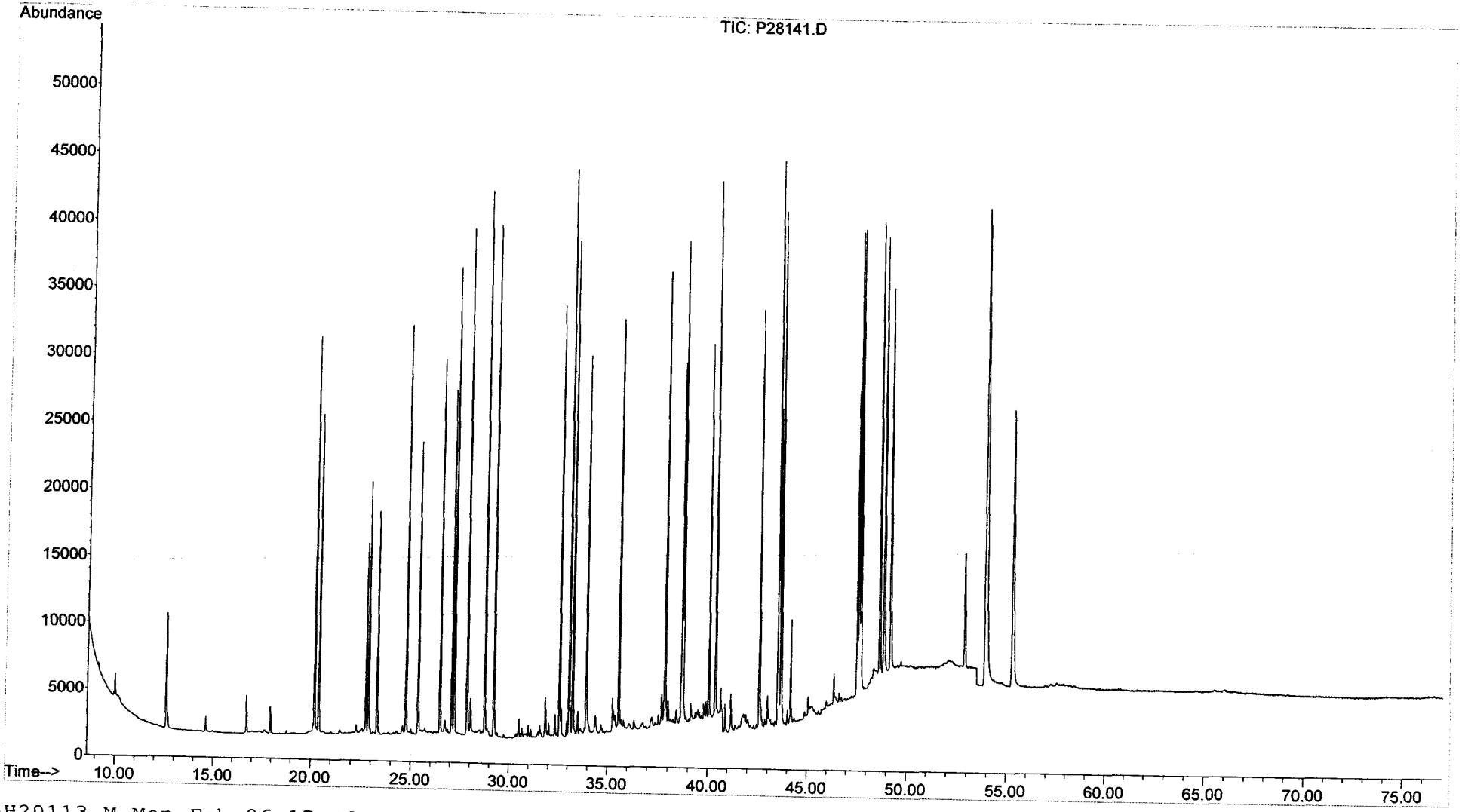
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	29629	500.00	ng/mL	-0.04
72) Chrysene-d12	43.58	240	46991	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	30349	498.41	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.84%#			
58) Pyrene-d10	38.67	212	64566	515.52	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.55%			
81) Benzo[b]fluoranthene-d12	47.52	264	50308	522.20	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.22%			
125) 5B(H)Cholane - Surr	44.17	217	12166	563.15	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.31%			
Target Compounds						Qvalue
3) trans-Decalin	16.72	138	6158	246.49	ng/mL	100
4) cis-Decalin	17.95	138	4637	248.06	ng/mL	100
9) Naphthalene	20.16	128	70299	527.50	ng/mL#	100
15) 2-Methylnaphthalene	22.86	142	44154	520.50	ng/mL#	100
16) 1-Methylnaphthalene	23.29	142	41696	516.41	ng/mL#	100
17) Benzothiophene	20.39	134	57616	537.12	ng/mL	100
22) Biphenyl	24.75	154	54159	507.15	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.35	156	37519	513.43	ng/mL#	100
24) Dibenzofuran	27.84	168	61641	522.90	ng/mL	99
25) Acenaphthylene	26.47	152	68140	515.33	ng/mL#	100
26) Acenaphthene	27.20	153	41312	509.71	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	33846	530.74	ng/mL	98
28) Fluorene	29.23	166	48647	513.33	ng/mL	99
32) Dibenzothiophene	32.56	184	67115	529.65	ng/mL	100
41) Phenanthrene	33.06	178	69687	515.36	ng/mL	100
52) Retene	40.04	234	15628	509.36	ng/mL	97
53) Anthracene	33.24	178	64544	513.95	ng/mL	100
54) Carbazole	33.91	167	65874	550.37	ng/mL	100
55) 1-Methylphenanthrene	35.57	192	49806	530.94	ng/mL	100
56) Fluoranthene	37.85	202	77063	533.97	ng/mL	97
57) Benzo(b)fluorene	40.36	216	47404	534.30	ng/mL	99
59) Pyrene	38.73	202	78145	528.78	ng/mL	99
64) Naphthobenzothiophene	42.59	234	74965	547.02	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.59	234	74965	547.02	ng/mL#	68
73) Benz[a]anthracene	43.52	228	71828	535.26	ng/mL	100
74) Chrysene	43.68	228	70681	524.41	ng/mL	100
75) Chrysene/Triphenylene	43.68	228	70690	524.48	ng/mL	100
82) Benzo[b]fluoranthene	47.61	252	76708	532.24	ng/mL	99
83) Benzo[k]fluoranthene	47.70	252	81586	541.33	ng/mL	99
85) Benzo[e]pyrene	48.65	252	75043	540.13	ng/mL	99
86) Benzo[a]pyrene	48.85	252	75437	543.09	ng/mL	100
87) Perylene	49.17	252	74716	539.55	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.92	276	75694m	549.81	ng/mL	
89) Dibenz[a,h]anthracene	53.97	278	71612	553.13	ng/mL	98
90) Benzo[g,h,i]perylene	55.29	276	76446	532.55	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.88	191	21942	473.50	ng/mL	100
92) Hopane (T19)	52.88	191	21942	473.50	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28141.D
Acq On : 6 Feb 2006 2:24 pm
Operator : AC
Sample : C2020601
Misc : pah std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 06 17:42:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28151.D
Acq On : 7 Feb 2006 6:22 am
Operator : AC
Sample : C2020602
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

2/7/06.

Quant Time: Feb 07 11:41:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	53	-0.04
2	t	Decalin	0.000	0.380	0.0	0#	-0.04
3	A1	trans-Decalin	0.422	0.423	-0.2	56	-0.04
4	t	cis-Decalin	0.315	0.325	-3.2	56	-0.04
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.70#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-20.03#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.50#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.92#
9	A1	Naphthalene	2.249	2.390	-6.3	57	-0.04
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.90#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.76#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.08#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.85#
14	s	2-Methylnaphthalene-d10	1.028	1.033	-0.5	54	-0.02
15	t	2-Methylnaphthalene	1.432	1.488	-3.9	56	-0.02
16	t	1-Methylnaphthalene	1.363	1.406	-3.2	56	-0.04
17	A1	Benzothiophene	1.810	1.987	-9.8	58	-0.02
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.46#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.96#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.92#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.66#
22	t	Biphenyl	1.802	1.797	0.3	55	-0.02
23	t	2,6-Dimethylnaphthalene	1.233	1.235	-0.2	54	-0.04
24	t	Dibenzofuran	1.989	2.060	-3.6	55	-0.02
25	t	Acenaphthylene	2.231	2.275	-2.0	55	-0.04
26	t	Acenaphthene	1.368	1.427	-4.3	56	-0.04
27	t	2,3,5-Trimethylnaphthalene	1.076	1.122	-4.3	56	-0.02
28	A1	Fluorene	1.599	1.609	-0.6	54	-0.02
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.63#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.84#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.66#
32	A1	Dibenzothiophene	2.138	2.237	-4.6	56	-0.02
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.37#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.72#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.14#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.75#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.37#
38	A2	C2-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-36.07#
39	A2	C3-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-37.86#
40	A2	C4-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-39.55#
41	A1	Phenanthrene	2.282	2.288	-0.3	54	-0.02
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.05#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.17#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.32#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.51#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.61#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.51#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.33#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-37.11#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.16#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28151.D
Acq On : 7 Feb 2006 6:22 am
Operator : AC
Sample : C2020602
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 07 11:41:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-41.34#
52	t	Retene	0.518	0.000#	100.0#	0#	-40.08#
53	t	Anthracene	2.119	2.112	0.3	53	-0.02
54	t	Carbazole	2.020	2.028	-0.4	53	-0.01
55	t	1-Methylphenanthrene	1.583	1.573	0.6	53	-0.02
56	A1	Fluoranthene	2.435	2.447	-0.5	53	-0.02
57	t	Benzo(b)fluorene	1.497	1.390	7.1	50	-0.02
58	s	Pyrene-d10	2.114	2.051	3.0	51	-0.02
59	A1	Pyrene	2.494	2.538	-1.8	54	-0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.17#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.97#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.98#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.33#
64	A1	Naphthobenzothiophene	2.313	2.285	1.2	53	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.284	1.3	53	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.96#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.27#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-44.03#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-46.04#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.66#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.76#
72	i	Chrysene-d12	1.000	1.000	0.0	50	-0.02
73	t	Benz[a]anthracene	1.428	1.430	-0.1	51	-0.02
74	A1	Chrysene	1.434	1.530	-6.7	54	-0.01
75	A2	Chrysene/Triphenylene	1.434	1.530	-6.7	54	-0.01
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.19#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.62#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.55#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.13#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.70#
81	s	Benzo[b]fluoranthene-d12	1.025	1.021	0.4	50	-0.02
82	t	Benzo[b]fluoranthene	1.534	1.560	-1.7	52	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.687	-5.2	53	-0.02
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-48.01#
85	t	Benzo[e]pyrene	1.478	1.524	-3.1	52	-0.02
86	t	Benzo[a]pyrene	1.478	1.432	3.1	49	-0.01
87	t	Perylene	1.473	1.493	-1.4	51	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.378	5.9	49	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.315	4.6	48	-0.01
90	t	Benzo[g,h,i]perylene	1.527	1.494	2.2	51	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.453	8.1	51	-0.05
92	A2	Hopane (T19)	0.493	0.453	8.1	51	-0.05
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.23#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.95#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.44#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.77#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.50#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.59#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.88#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28151.D
Acq On : 7 Feb 2006 6:22 am
Operator : AC
Sample : C2020602
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 07 11:41:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.04#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.57#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.78#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.99#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.06#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.31#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.56#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.81#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.56#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.50#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.61#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.75#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.32#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.74#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.68#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.83#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.08#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.49#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.90#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.76#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.42#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.58#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.54#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.94#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.32#
125	SA1	5B(H)Cholane - Surr	0.230	0.215	6.5	49	-0.04
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.71#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.14#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.84#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.73#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.27#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.55#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.84#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.01#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.75#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.13#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.07#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.82#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.91#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.18#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.26#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.41#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28151.D
Acq On : 7 Feb 2006 6:22 am
Operator : AC
Sample : C2020602
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 07 11:41:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration

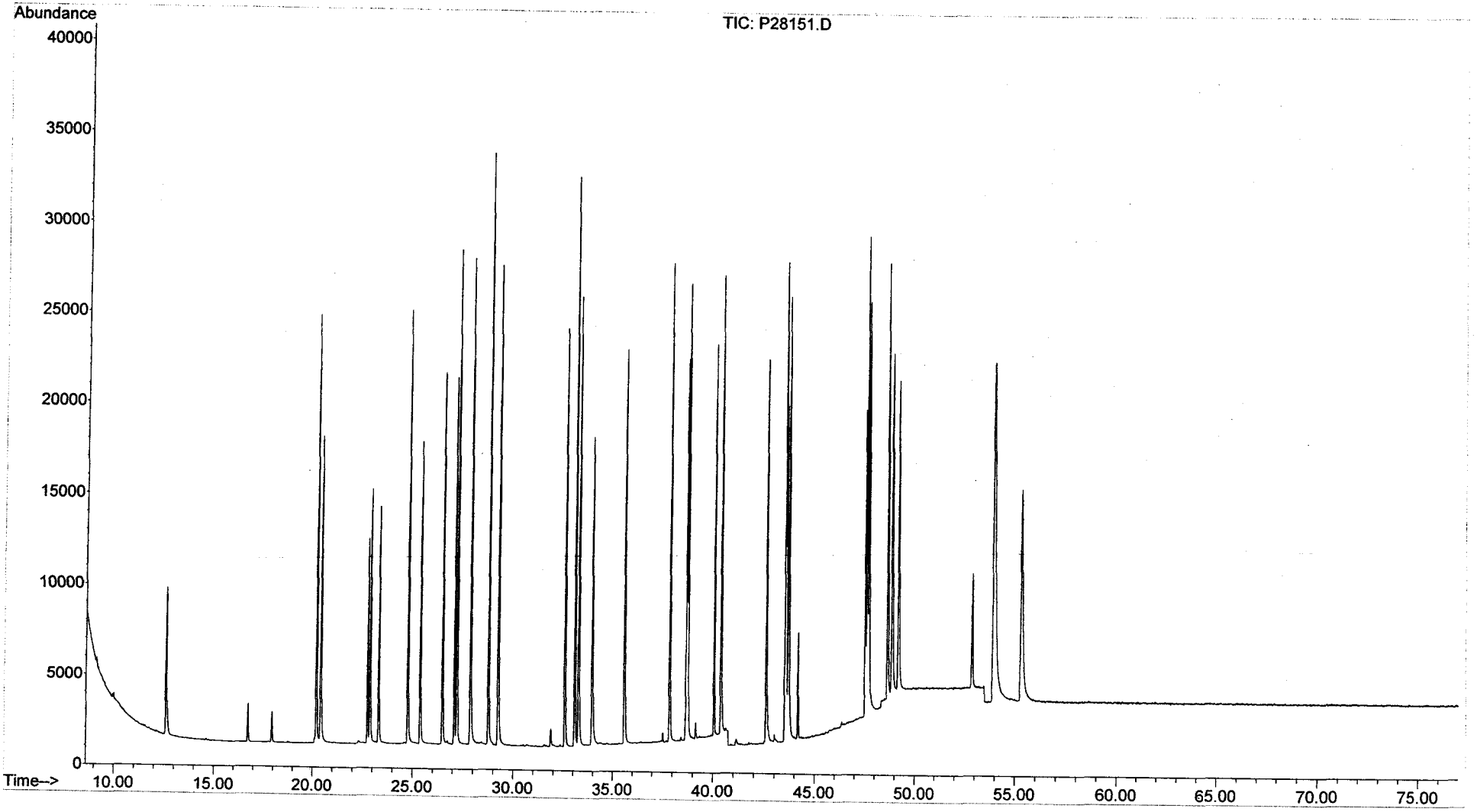
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	25563	500.00	ng/mL	-0.04
72) Chrysene-d12	43.58	240	37479	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.75	152	26397	502.46	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.25%			
58) Pyrene-d10	38.67	212	52442	485.31	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.53%#			
81) Benzo[b]fluoranthene-d12	47.52	264	38281	498.21	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.82%#			
125) 5B(H)Cholane - Surr	44.17	217	8074	468.59	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.86%#			
Target Compounds						Qvalue
3) trans-Decalin	16.72	138	5410	251.00	ng/mL	100
4) cis-Decalin	17.95	138	4158	257.81	ng/mL	100
9) Naphthalene	20.18	128	61101	531.41	ng/mL#	100
15) 2-Methylnaphthalene	22.88	142	38049	519.87	ng/mL#	100
16) 1-Methylnaphthalene	23.30	142	35943	515.96	ng/mL#	100
17) Benzothiophene	20.40	134	50797	548.87	ng/mL	100
22) Biphenyl	24.76	154	45946	498.68	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.37	156	31582	500.93	ng/mL#	100
24) Dibenzofuran	27.87	168	52650	517.67	ng/mL	99
25) Acenaphthylene	26.47	152	58165	509.86	ng/mL#	100
26) Acenaphthene	27.20	153	36472	521.57	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.76	170	28682	521.30	ng/mL	97
28) Fluorene	29.24	166	41123	502.96	ng/mL	99
32) Dibenzothiophene	32.57	184	57184	523.06	ng/mL	99
41) Phenanthrene	33.07	178	58480	501.27	ng/mL	100
53) Anthracene	33.25	178	53998m	498.37	ng/mL	
54) Carbazole	33.94	167	51831	501.92	ng/mL	99
55) 1-Methylphenanthrene	35.57	192	40208	496.80	ng/mL	100
56) Fluoranthene	37.85	202	62565	502.47	ng/mL	98
57) Benzo(b)fluorene	40.38	216	35523	464.08	ng/mL	99
59) Pyrene	38.74	202	64891m	508.93	ng/mL	
64) Naphthobenzothiophene	42.61	234	58404	493.96	ng/ml#	65
65) Naphthobenzothiophene-2,1-	42.61	234	58374	493.70	ng/mL#	65
73) Benz[a]anthracene	43.52	228	53585	500.65	ng/mL	100
74) Chrysene	43.70	228	57351	533.50	ng/mL	100
75) Chrysene/Triphenylene	43.70	228	57351	533.50	ng/mL	100
82) Benzo[b]fluoranthene	47.61	252	58450	508.48	ng/mL	100
83) Benzo[k]fluoranthene	47.70	252	63238	526.08	ng/mL	97
85) Benzo[e]pyrene	48.65	252	57130	515.56	ng/mL	99
86) Benzo[a]pyrene	48.86	252	53683	484.57	ng/mL	98
87) Perylene	49.18	252	55954	506.62	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.93	276	51663m	470.50	ng/mL	
89) Dibenz[a,h]anthracene	53.98	278	49280	477.24	ng/mL	98
90) Benzo[g,h,i]perylene	55.32	276	55993	489.07	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.88	191	16965	459.02	ng/mL	100
92) Hopane (T19)	52.88	191	16965	459.02	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28151.D
Acq On : 7 Feb 2006 6:22 am
Operator : AC
Sample : C2020602
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 07 11:41:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 31 06:44:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28158.D
Acq On : 7 Feb 2006 5:39 pm
Operator : AC
Sample : C2020603
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 06:28:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/8/06

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	53	0.00
2	t	Decalin	0.000	0.000#	0.0	0#	-16.72#
3	A1	trans-Decalin	0.422	0.412	2.4	55	0.00
4	t	cis-Decalin	0.315	0.319	-1.3	56	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.21#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-19.99#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.48#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.90#
9	A1	Naphthalene	2.249	2.344	-4.2	56	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.88#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.74#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.06#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.82#
14	s	2-Methylnaphthalene-d10	1.028	1.031	-0.3	54	0.00
15	t	2-Methylnaphthalene	1.432	1.479	-3.3	56	0.00
16	t	1-Methylnaphthalene	1.363	1.391	-2.1	55	0.01
17	A1	Benzothiophene	1.810	1.924	-6.3	57	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.42#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.93#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.90#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.64#
22	t	Biphenyl	1.802	1.800	0.1	55	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.242	-0.7	55	0.00
24	t	Dibenzofuran	1.989	2.039	-2.5	55	0.01
25	t	Acenaphthylene	2.231	2.511	-12.6	61	0.00
26	t	Acenaphthene	1.368	1.425	-4.2	57	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.122	-4.3	57	0.00
28	A1	Fluorene	1.599	1.616	-1.1	55	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.60#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.81#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.62#
32	A1	Dibenzothiophene	2.138	2.108	1.4	53	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.34#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.69#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.11#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.73#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.34#
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#	-39.51#
41	A1	Phenanthrene	2.282	2.123	7.0	51	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.03#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.14#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.30#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.47#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.57#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.48#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.29#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-36.99#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.13#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28158.D
Acq On : 7 Feb 2006 5:39 pm
Operator : AC
Sample : C2020603
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 06:28:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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#	-41.30#
52	t	Retene	0.518	0.520	-0.4	56	0.00
53	t	Anthracene	2.119	2.071	2.3	53	0.00
54	t	Carbazole	2.020	2.071	-2.5	55	0.01
55	t	1-Methylphenanthrene	1.583	1.573	0.6	53	-0.01
56	A1	Fluoranthene	2.435	2.507	-3.0	55	-0.01
57	t	Benzo(b)fluorene	1.497	1.641	-9.6	60	0.00
58	s	Pyrene-d10	2.114	2.144	-1.4	54	-0.01
59	A1	Pyrene	2.494	2.557	-2.5	55	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.13#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.94#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.94#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.29#
64	A1	Naphthobenzothiophene	2.313	2.520	-8.9	59	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.520	-8.9	59	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.94#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.25#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.99#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.99#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.62#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.72#
72	i	Chrysene-d12	1.000	1.000	0.0	56	-0.01
73	t	Benz[a]anthracene	1.428	1.485	-4.0	59	-0.01
74	A1	Chrysene	1.434	1.473	-2.7	58	0.00
75	A2	Chrysene/Triphenylene	1.434	1.477	-3.0	58	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.17#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.60#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.54#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.12#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.69#
81	s	Benzo[b]fluoranthene-d12	1.025	1.098	-7.1	60	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.626	-6.0	60	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.716	-7.0	61	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-47.98#
85	t	Benzo[e]pyrene	1.478	1.583	-7.1	60	-0.01
86	t	Benzo[a]pyrene	1.478	1.622	-9.7	62	-0.01
87	t	Perylene	1.473	1.602	-8.8	62	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.634	-11.5	65	-0.02
89	t	Dibenz[a,h]anthracene	1.378	1.571	-14.0	64	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.635	-7.1	62	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.450	8.7	57	0.00
92	A2	Hopane (T19)	0.493	0.450	8.7	57	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.19#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.91#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.45#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.74#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.46#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.55#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.84#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28158.D
Acq On : 7 Feb 2006 5:39 pm
Operator : AC
Sample : C2020603
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 06:28:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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#	-47.00#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.55#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.75#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.94#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.02#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.27#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.52#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.76#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.51#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.45#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.56#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.70#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.28#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.71#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.62#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.78#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.02#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.43#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.83#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.69#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.34#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.49#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.44#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.83#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.21#
125	SA1	5B(H)Cholane - Surr	0.230	0.213	7.4	55	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.68#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.10#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.80#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.70#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.23#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.51#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.80#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-48.97#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.72#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.08#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.03#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.78#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.87#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.13#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.34#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28158.D
Acq On : 7 Feb 2006 5:39 pm
Operator : AC
Sample : C2020603
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 06:28:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

MS 2/8/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	25759	500.00	ng/mL	0.00
72) Chrysene-d12	43.57	240	41930	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	26546	501.46	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.15%			
58) Pyrene-d10	38.65	212	55240	507.32	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.73%			
81) Benzo[b]fluoranthene-d12	47.51	264	46022	535.37	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.54%			
125) 5B(H)Cholane - Surr	44.17	217	8918	462.63	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.26%#			
Target Compounds						Qvalue
3) trans-Decalin	16.72	138	5302	244.11	ng/mL	100
4) cis-Decalin	17.95	138	4107	252.71	ng/mL	100
9) Naphthalene	20.16	128	60382	521.16	ng/mL#	100
15) 2-Methylnaphthalene	22.86	142	38107	516.70	ng/mL#	100
16) 1-Methylnaphthalene	23.30	142	35838	510.54	ng/mL#	100
17) Benzothiophene	20.39	134	49552	531.35	ng/mL	100
22) Biphenyl	24.75	154	46357	499.31	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.35	156	31987	503.49	ng/mL#	100
24) Dibenzofuran	27.85	168	52515	512.41	ng/mL	99
25) Acenaphthylene	26.47	152	64689	562.74	ng/mL#	100
26) Acenaphthene	27.20	153	36698	520.81	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	28908	521.41	ng/mL	100
28) Fluorene	29.23	166	41620	505.16	ng/mL	98
32) Dibenzothiophene	32.56	184	54304	492.94	ng/mL	100
41) Phenanthrene	33.06	178	54688	465.20	ng/mL	100
52) Retene	40.04	234	13407	502.62	ng/mL	97
53) Anthracene	33.24	178	53359m	488.73	ng/mL	
54) Carbazole	33.92	167	53355	512.75	ng/mL	100
55) 1-Methylphenanthrene	35.56	192	40525	496.91	ng/mL	100
56) Fluoranthene	37.84	202	64573	514.65	ng/mL	99
57) Benzo(b)fluorene	40.36	216	42273	548.06	ng/mL	99
59) Pyrene	38.73	202	65865	512.64	ng/mL	100
64) Naphthobenzothiophene	42.58	234	64916	544.86	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.58	234	64916	544.86	ng/mL#	68
73) Benz[a]anthracene	43.51	228	62263	519.98	ng/mL	90
74) Chrysene	43.68	228	61779	513.69	ng/mL	98
75) Chrysene/Triphenylene	43.68	228	61914	514.81	ng/mL	99
82) Benzo[b]fluoranthene	47.60	252	68162	530.03	ng/mL	100
83) Benzo[k]fluoranthene	47.68	252	71966	535.14	ng/mL	98
85) Benzo[e]pyrene	48.64	252	66379	535.43	ng/mL	99
86) Benzo[a]pyrene	48.84	252	68008	548.71	ng/mL	99
87) Perylene	49.16	252	67162	543.54	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.89	276	68495m	557.57	ng/mL	
89) Dibenz[a,h]anthracene	53.94	278	65861	570.11	ng/mL	99
90) Benzo[g,h,i]perylene	55.28	276	68549	535.18	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.88	191	18884	456.70	ng/mL	98
92) Hopane (T19)	52.88	191	18884	456.70	ng/mL	98

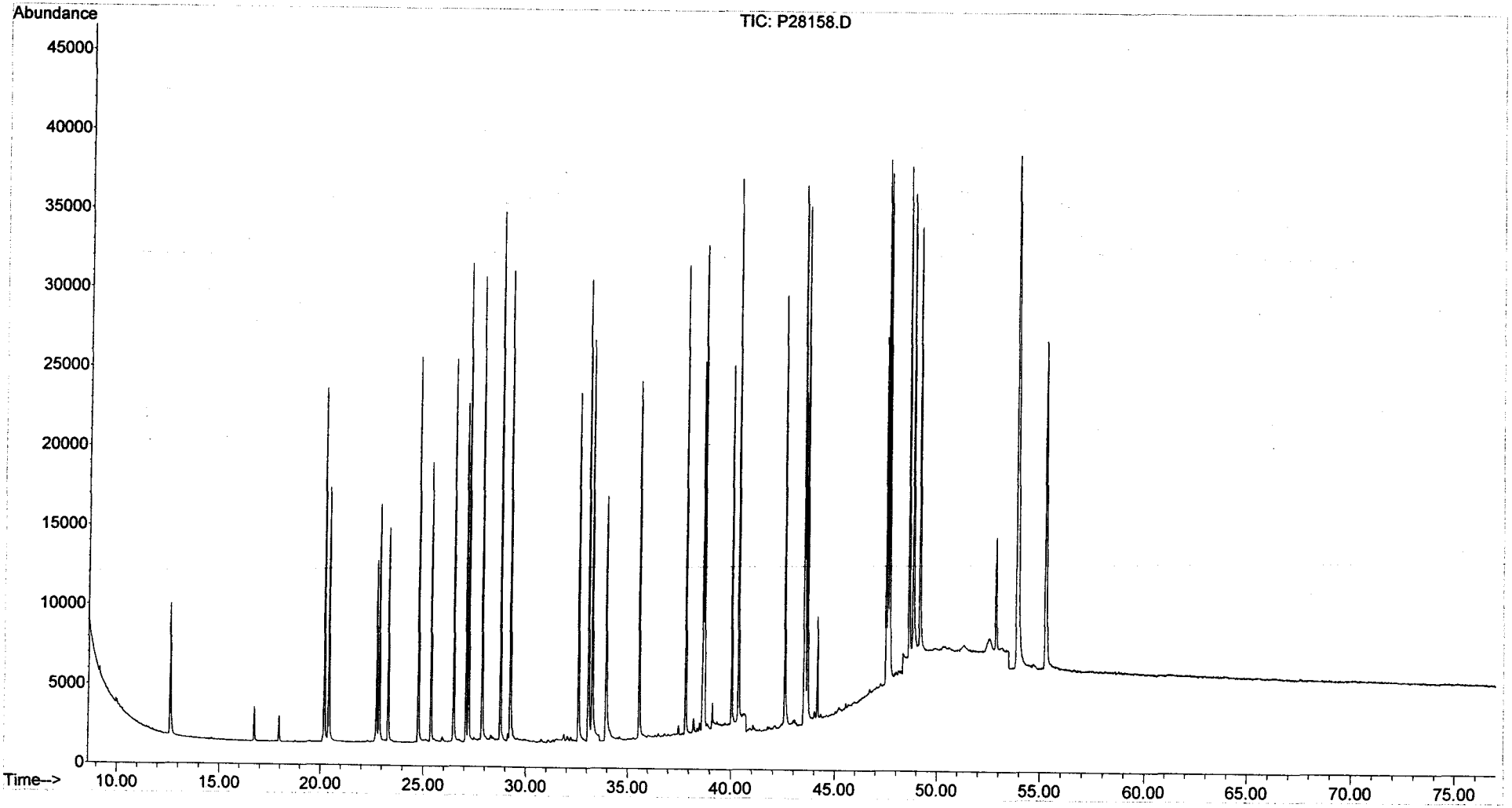
(#) = qualifier out of range (m) = manual integration (+) = signals summed

PAH20113.M Wed Feb 08 06:29:18 2006

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB06\
Data File : P28158.D
Acq On : 7 Feb 2006 5:39 pm
Operator : AC
Sample : C2020603
Misc : PAH STD
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 06:28:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28167.D
Acq On : 8 Feb 2006 7:50 am
Operator : AC
Sample : C2020604
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

2/8/06

Quant Time: Feb 08 09:57:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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	96	0.00
2	t	Decalin	0.000	0.364	0.0	0#	0.00
3	A1	trans-Decalin	0.422	0.413	2.1	98	0.00
4	t	cis-Decalin	0.315	0.313	0.6	98	0.00
5	A2	C1-Decalins	0.422	0.000#	100.0#	0#	-18.21#
6	A2	C2-Decalins	0.422	0.000#	100.0#	0#	-19.99#
7	A2	C3-Decalins	0.422	0.000#	100.0#	0#	-22.48#
8	A2	C4-Decalins	0.422	0.000#	100.0#	0#	-25.90#
9	A1	Naphthalene	2.249	2.335	-3.8	101	0.00
10	A2	C1-Naphthalenes	2.249	0.000#	100.0#	0#	-22.88#
11	A2	C2-Naphthalenes	2.249	0.000#	100.0#	0#	-25.74#
12	A2	C3-Naphthalenes	2.249	0.000#	100.0#	0#	-28.06#
13	A2	C4-Naphthalenes	2.249	0.000#	100.0#	0#	-30.82#
14	s	2-Methylnaphthalene-d10	1.028	1.025	0.3	97	0.00
15	t	2-Methylnaphthalene	1.432	1.475	-3.0	99	0.00
16	t	1-Methylnaphthalene	1.363	1.392	-2.1	99	0.00
17	A1	Benzothiophene	1.810	1.918	-6.0	102	0.00
18	A2	C1-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-22.42#
19	A2	C2-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-25.93#
20	A2	C3-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-27.90#
21	A2	C4-Benzo(b)thiophenes	1.810	0.000#	100.0#	0#	-29.64#
22	t	Biphenyl	1.802	1.781	1.2	98	0.00
23	t	2,6-Dimethylnaphthalene	1.233	1.249	-1.3	98	0.00
24	t	Dibenzofuran	1.989	2.056	-3.4	99	0.00
25	t	Acenaphthylene	2.231	2.447	-9.7	106	0.00
26	t	Acenaphthene	1.368	1.419	-3.7	101	0.00
27	t	2,3,5-Trimethylnaphthalene	1.076	1.139	-5.9	103	0.00
28	A1	Fluorene	1.599	1.602	-0.2	98	0.00
29	A2	C1-Fluorenes	1.599	0.000#	100.0#	0#	-31.60#
30	A2	C2-Fluorenes	1.599	0.000#	100.0#	0#	-33.81#
31	A2	C3-Fluorenes	1.599	0.000#	100.0#	0#	-35.62#
32	A1	Dibenzothiophene	2.138	2.167	-1.4	97	0.00
33	A2	4-Methyldibenzothiophene(4M	2.138	0.000#	100.0#	0#	-34.34#
34	A2	2/3-Methyldibenzothiophene(	2.138	0.000#	100.0#	0#	-34.69#
35	A2	1-Methyldibenzothiophene(1M	2.138	0.000#	100.0#	0#	-35.11#
36	A2	OTP	2.138	0.000#	100.0#	0#	-34.73#
37	A2	C1-Dibenzothiophenes	2.138	0.000#	100.0#	0#	-34.34#
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#	-39.51#
41	A1	Phenanthrene	2.282	2.197	3.7	94	0.00
42	A2	3-Methylphenanthrene(3MP)	2.282	0.000#	100.0#	0#	-35.03#
43	A2	2/4-Methylphenanthrene(2MP)	2.282	0.000#	100.0#	0#	-35.14#
44	A2	2-Methylanthracene(2MA)	2.282	0.000#	100.0#	0#	-35.30#
45	A2	9-Methylphenanthrene(9MP)	2.282	0.000#	100.0#	0#	-35.47#
46	A2	1-Methylphenanthrene(1MP)	2.282	0.000#	100.0#	0#	-35.57#
47	A2	C1-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-35.48#
48	A2	C2-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-37.29#
49	A2	5AA IS BKGD	2.282	0.000#	100.0#	0#	-36.99#
50	A2	C3-Phenanthrenes/Anthracene	2.282	0.000#	100.0#	0#	-39.13#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28167.D
Acq On : 8 Feb 2006 7:50 am
Operator : AC
Sample : C2020604
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 08 09:57:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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#	-41.30#
52	t	Retene	0.518	0.534	-3.1	104	0.00
53	t	Anthracene	2.119	1.996	5.8	91	0.00
54	t	Carbazole	2.020	2.117	-4.8	100	0.00
55	t	1-Methylphenanthrene	1.583	1.600	-1.1	97	-0.01
56	A1	Fluoranthene	2.435	2.540	-4.3	99	-0.01
57	t	Benzo(b)fluorene	1.497	1.654	-10.5	108	0.00
58	s	Pyrene-d10	2.114	2.159	-2.1	97	-0.01
59	A1	Pyrene	2.494	2.577	-3.3	99	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-40.13#
61	A2	C2-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-41.94#
62	A2	C3-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-43.94#
63	A2	C4-Fluoranthenes/Pyrenes	2.494	0.000#	100.0#	0#	-45.29#
64	A1	Naphthobenzothiophene	2.313	2.578	-11.5	108	-0.01
65	A2	Naphthobenzothiophene-2,1-D	2.313	2.577	-11.4	108	-0.01
66	A2	Naphthobenzothiophene-1,2-D	2.313	0.000#	100.0#	0#	-42.94#
67	A2	Naphthobenzothiophene-2,3-D	2.313	0.000#	100.0#	0#	-43.25#
68	A2	C1-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-43.99#
69	A2	C2-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-45.99#
70	A2	C3-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-47.62#
71	A2	C4-Naphthobenzothiophenes	2.313	0.000#	100.0#	0#	-48.72#
72	i	Chrysene-d12	1.000	1.000	0.0	101	0.00
73	t	Benz[a]anthracene	1.428	1.514	-6.0	108	-0.01
74	A1	Chrysene	1.434	1.491	-4.0	106	0.00
75	A2	Chrysene/Triphenylene	1.434	1.494	-4.2	106	0.00
76	A2	C1-Chrysenes	1.434	0.000#	100.0#	0#	-45.17#
77	A2	C2-Chrysenes	1.434	0.000#	100.0#	0#	-46.60#
78	A2	BBF-d12 Surr BKGD	1.434	0.000#	100.0#	0#	-47.54#
79	A2	C3-Chrysenes	1.434	0.000#	100.0#	0#	-50.12#
80	A2	C4-Chrysenes	1.434	0.000#	100.0#	0#	-49.69#
81	s	Benzo[b]fluoranthene-d12	1.025	1.103	-7.6	109	-0.01
82	t	Benzo[b]fluoranthene	1.534	1.645	-7.2	110	-0.01
83	A1	Benzo[k]fluoranthene	1.604	1.750	-9.1	112	-0.01
84	A2	Benzo[a]fluoranthene	1.604	0.000#	100.0#	0#	-47.98#
85	t	Benzo[e]pyrene	1.478	1.593	-7.8	110	-0.01
86	t	Benzo[a]pyrene	1.478	1.639	-10.9	113	-0.01
87	t	Perylene	1.473	1.623	-10.2	112	-0.01
88	t	Indeno[1,2,3-cd]pyrene	1.465	1.507	-2.9	107	-0.01
89	t	Dibenz[a,h]anthracene	1.378	1.580	-14.7	116	-0.02
90	t	Benzo[g,h,i]perylene	1.527	1.624	-6.4	111	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.493	0.471	4.5	108	0.00
92	A2	Hopane (T19)	0.493	0.471	4.5	108	0.00
93	A2	C23 Tricyclic Terpane (T4)	0.493	0.000#	100.0#	0#	-41.19#
94	A2	C24 Tricyclic Terpane (T5)	0.493	0.000#	100.0#	0#	-41.91#
95	A2	C25 Tricyclic Terpane (T6)	0.493	0.000#	100.0#	0#	-43.45#
96	A2	C24 Tetracyclic Terpane (T6	0.493	0.000#	100.0#	0#	-44.74#
97	A2	C26 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-44.46#
98	A2	C26 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-44.55#
99	A2	C28 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-46.84#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28167.D
Acq On : 8 Feb 2006 7:50 am
Operator : AC
Sample : C2020604
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 08 09:57:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 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#	-47.00#
101	A2	C29 Tricyclic Terpane-22S (	0.493	0.000#	100.0#	0#	-47.55#
102	A2	C29 Tricyclic Terpane-22R (	0.493	0.000#	100.0#	0#	-47.75#
103	A2	18a-22,29,30-Trisnorneohopa	0.493	0.000#	100.0#	0#	-48.94#
104	A2	C30 Tricyclic Terpane-22S	0.493	0.000#	100.0#	0#	-49.02#
105	A2	C30 Tricyclic Terpane-22R	0.493	0.000#	100.0#	0#	-49.27#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.493	0.000#	100.0#	0#	-49.52#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.493	0.000#	100.0#	0#	-50.76#
108	A2	17a(H),21b(H)-25-Norhopane	0.493	0.000#	100.0#	0#	-50.51#
109	A2	30-Norhopane (T15)	0.493	0.000#	100.0#	0#	-51.45#
110	A2	18a(H)-30-Norneohopane-C29T	0.493	0.000#	100.0#	0#	-51.56#
111	A2	17a(H)-Diahopane (X)	0.493	0.000#	100.0#	0#	-51.70#
112	A2	30-Normoretane (T17)	0.493	0.000#	100.0#	0#	-52.28#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.493	0.000#	100.0#	0#	-52.71#
114	A2	Moretane (T20)	0.493	0.000#	100.0#	0#	-53.62#
115	A2	30-Homohopane-22S (T21)	0.493	0.000#	100.0#	0#	-54.78#
116	A2	30-Homohopane-22R (T22)	0.493	0.000#	100.0#	0#	-55.02#
117	A2	30,31-Bishomohopane-22S (T2	0.493	0.000#	100.0#	0#	-56.43#
118	A2	30,31-Bishomohopane-22R (T2	0.493	0.000#	100.0#	0#	-56.83#
119	A2	30,31-Trishomohopane-22S (T	0.493	0.000#	100.0#	0#	-58.69#
120	A2	30,31-Trishomohopane-22R (T	0.493	0.000#	100.0#	0#	-59.34#
121	A2	Tetrakishomohopane-22S (T32	0.493	0.000#	100.0#	0#	-61.49#
122	A2	Tetrakishomohopane-22R (T33	0.493	0.000#	100.0#	0#	-62.44#
123	A2	Pentakishomohopane-22S (T34	0.493	0.000#	100.0#	0#	-64.83#
124	A2	Pentakishomohopane-22R (T35	0.493	0.000#	100.0#	0#	-66.21#
125	SA1	5B(H)Cholane - Surr	0.230	0.226	1.7	104	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.230	0.000#	100.0#	0#	-45.68#
127	A2	13b(H),17a(H)-20R-Diacholes	0.230	0.000#	100.0#	0#	-46.10#
128	A2	13b,17a-20S-Methyldiacholes	0.230	0.000#	100.0#	0#	-46.80#
129	A2	14a(H),17a(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.70#
130	A2	14a(H),17a(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-48.23#
131	A2	13b,17a-20R-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.51#
132	A2	13a,17b-20S-Ethyldiacholest	0.230	0.000#	100.0#	0#	-48.80#
133	A2	14a,17a-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-48.97#
134	A2	14a,17a-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.72#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.08#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-51.03#
137	A2	14b(H),17b(H)-20R-Cholestan	0.230	0.000#	100.0#	0#	-47.78#
138	A2	14b(H),17b(H)-20S-Cholestan	0.230	0.000#	100.0#	0#	-47.87#
139	A2	14b,17b-20R-Methylcholestan	0.230	0.000#	100.0#	0#	-49.13#
140	A2	14b,17b-20S-Methylcholestan	0.230	0.000#	100.0#	0#	-49.22#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.230	0.000#	100.0#	0#	-50.34#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.230	0.000#	100.0#	0#	-50.37#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28167.D
Acq On : 8 Feb 2006 7:50 am
Operator : AC
Sample : C2020604
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 08 09:57:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration

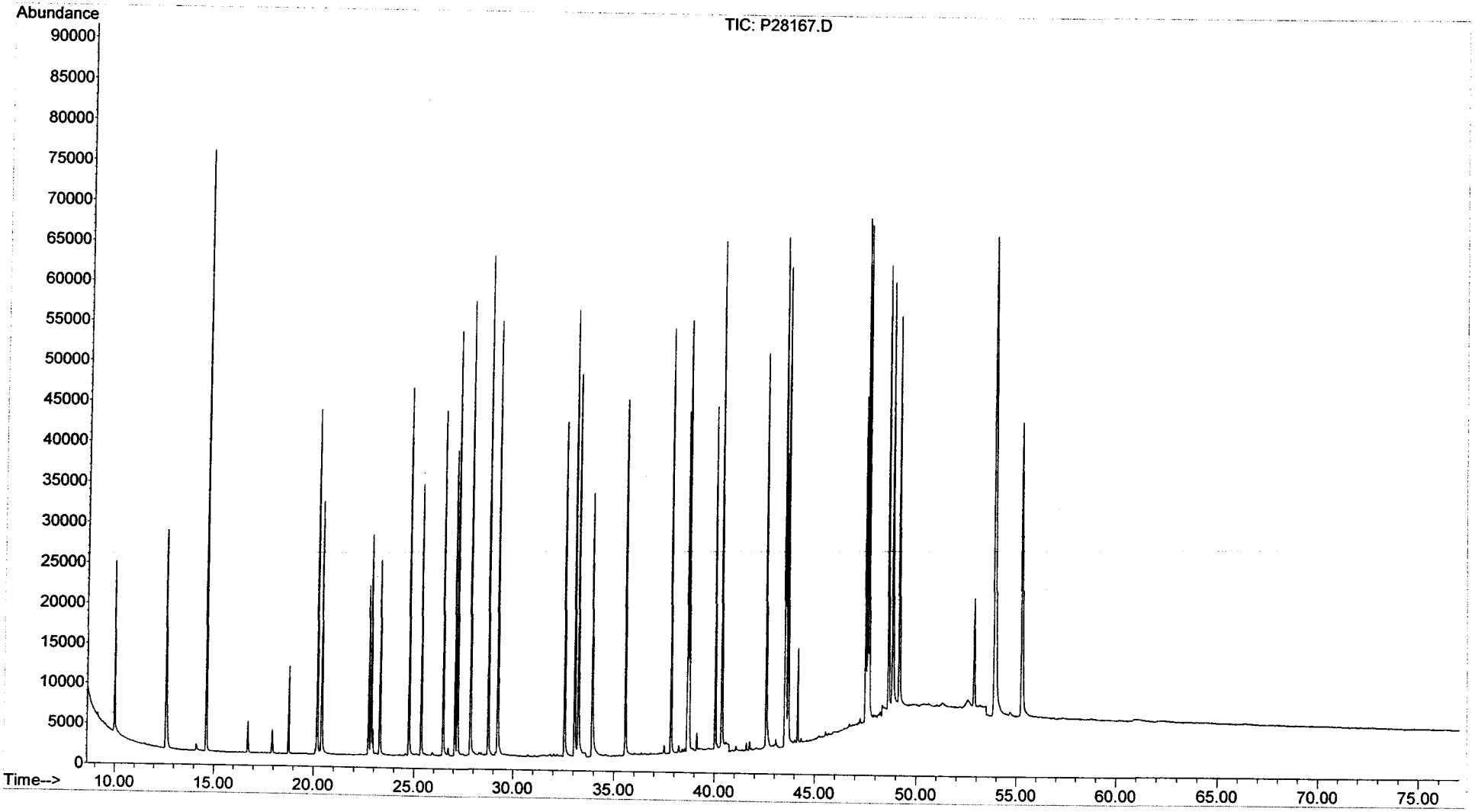
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	27.07	164	46144	500.00	ng/mL	0.00
72) Chrysene-d12	43.58	240	75561	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.74	152	47276	498.53	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.85%#			
58) Pyrene-d10	38.65	212	99624	510.74	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.07%			
81) Benzo[b]fluoranthene-d12	47.51	264	83370	538.18	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.82%			
125) 5B(H)Cholane - Surr	44.17	217	17045	490.67	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.07%#			
Target Compounds						Qvalue
3) trans-Decalin	16.72	138	9538	245.15	ng/mL	100
4) cis-Decalin	17.95	138	7226	248.21	ng/mL	100
9) Naphthalene	20.16	128	107725	519.03	ng/mL#	100
15) 2-Methylnaphthalene	22.86	142	68069	515.23	ng/mL#	100
16) 1-Methylnaphthalene	23.29	142	64214	510.66	ng/mL#	100
17) Benzothiophene	20.39	134	88492	529.71	ng/mL	100
22) Biphenyl	24.75	154	82192	494.19	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.35	156	57634	506.42	ng/mL#	100
24) Dibenzofuran	27.84	168	94873	516.76	ng/mL	98
25) Acenaphthylene	26.47	152	112899	548.25	ng/mL#	100
26) Acenaphthene	27.20	153	65493	518.86	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.75	170	52551	529.12	ng/mL	100
28) Fluorene	29.23	166	73929	500.91	ng/mL	98
32) Dibenzothiophene	32.56	184	99986	506.66	ng/mL	100
41) Phenanthrene	33.06	178	101386	481.44	ng/mL	100
52) Retene	40.04	234	24631	515.47	ng/mL	98
53) Anthracene	33.24	178	92087	470.84	ng/mL	100
54) Carbazole	33.91	167	97674	523.99	ng/mL	99
55) 1-Methylphenanthrene	35.56	192	73840	505.43	ng/mL	100
56) Fluoranthene	37.84	202	117196	521.42	ng/mL	99
57) Benzo(b)fluorene	40.36	216	76321	552.36	ng/mL	100
59) Pyrene	38.73	202	118925	516.71	ng/mL	99
64) Naphthobenzothiophene	42.58	234	118982	557.47	ng/ml#	68
65) Naphthobenzothiophene-2,1-	42.58	234	118892	557.05	ng/mL#	68
73) Benz[a]anthracene	43.51	228	114429	530.30	ng/mL	95
74) Chrysene	43.68	228	112636	519.71	ng/mL	99
75) Chrysene/Triphenylene	43.68	228	112905	520.95	ng/mL	99
82) Benzo[b]fluoranthene	47.60	252	124330	536.48	ng/mL	99
83) Benzo[k]fluoranthene	47.68	252	132255	545.73	ng/mL	99
85) Benzo[e]pyrene	48.64	252	120396	538.91	ng/mL	100
86) Benzo[a]pyrene	48.84	252	123813	554.34	ng/mL	99
87) Perylene	49.16	252	122653	550.83	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.90	276	113861m	514.33	ng/mL	
89) Dibenz[a,h]anthracene	53.94	278	119410	573.58	ng/mL	99
90) Benzo[g,h,i]perylene	55.28	276	122694	531.56	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.88	191	35579	477.48	ng/mL	99
92) Hopane (T19)	52.88	191	35579	477.48	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB06\
Data File : P28167.D
Acq On : 8 Feb 2006 7:50 am
Operator : AC
Sample : C2020604
Misc : PAH STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 08 09:57:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\PAH20113.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 07:04:55 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34935.D
Acq On : 2 Feb 2006 12:38 pm
Operator : AC
Sample : C3012613
Misc : STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 03 06:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

MS 2/3/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34935.D
Acq On : 2 Feb 2006 12:38 pm
Operator : AC
Sample : C3012613
Misc : STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 03 06:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	134	-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	0.472	-9.8	169	-0.03
84	A2	Hopane (T19)	0.430	0.472	-9.8	169	-0.03
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34935.D
Acq On : 2 Feb 2006 12:38 pm
Operator : AC
Sample : C3012613
Misc : STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 03 06:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	0.235	-11.9	152	-0.02
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34935.D
Acq On : 2 Feb 2006 12:38 pm
Operator : AC
Sample : C3012613
Misc : STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 03 06:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

AMG 2/3/06

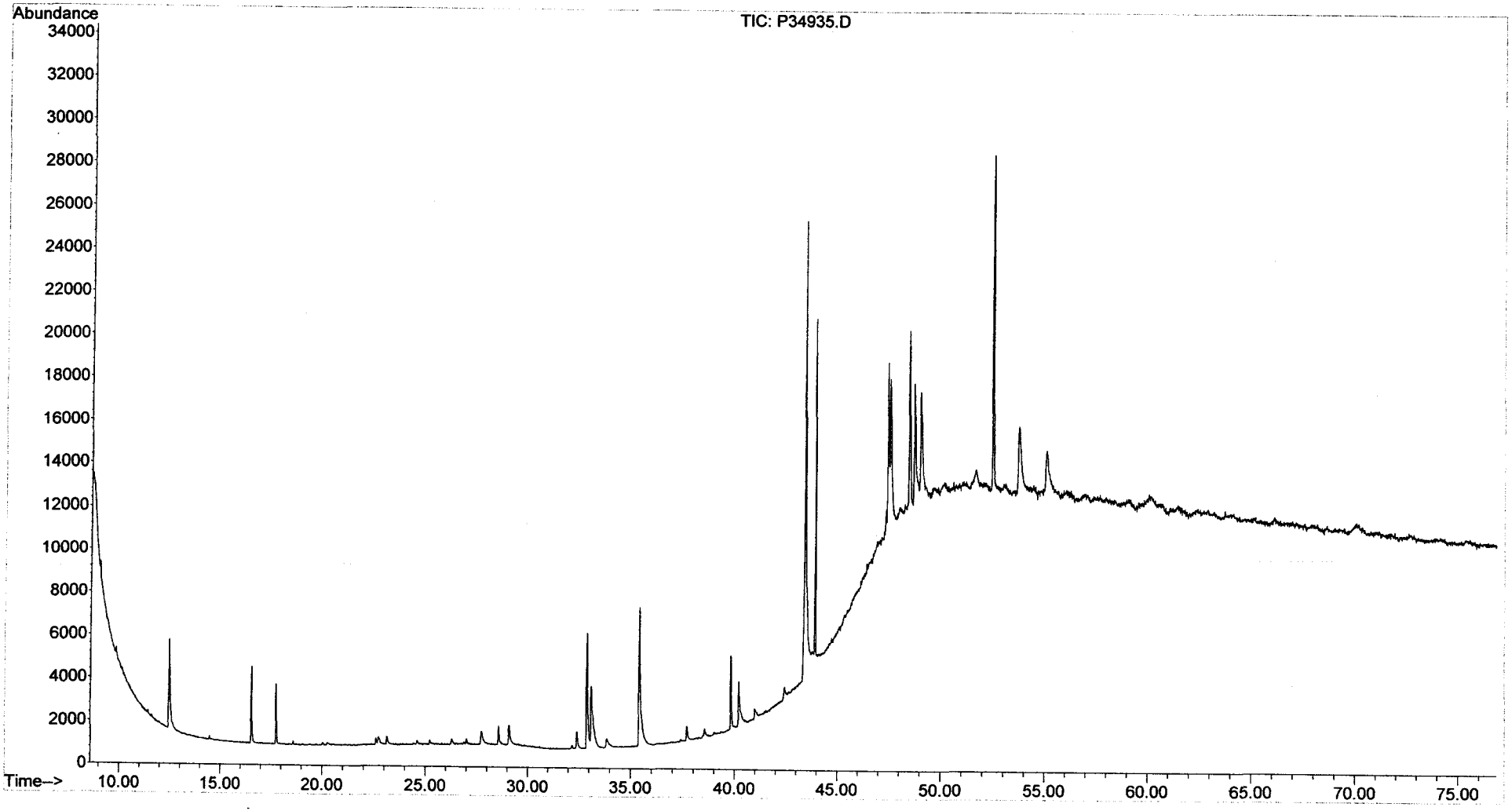
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.39	240	81704	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	43.90	217	19183	558.65	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.86%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.45	191	38597	549.72	ng/mL	100
84) Hopane (T19)	52.45	191	38597	549.72	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34935.D
Acq On : 2 Feb 2006 12:38 pm
Operator : AC
Sample : C3012613
Misc : STD
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 03 06:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34943.D
Acq On : 3 Feb 2006 12:54 am
Operator : AC
Sample : C3012614
Misc : STD
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 03 06:45:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

MS 2/3/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34943.D
Acq On : 3 Feb 2006 12:54 am
Operator : AC
Sample : C3012614
Misc : STD
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 03 06:45:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A1	Pyrene	0.000	0.000#	0.0	0#	-44.03#
52	A2	C1-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-45.71#
53	A2	C2-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-48.25#
54	A2	C3-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-50.28#
55	A2	C4-Fluoranthenes/Pyrenes	0.000	0.000#	0.0	0#	-51.91#
56	A1	Naphthobenzothiophene	0.000	0.000#	0.0	0#	-48.62#
57	A2	Naphthobenzothiophene-2,1-D	0.000	0.000#	0.0	0#	-48.62#
58	A2	Naphthobenzothiophene-1,2-D	0.000	0.000#	0.0	0#	-49.05#
59	A2	Naphthobenzothiophene-2,3-D	0.000	0.000#	0.0	0#	-49.40#
60	A2	C1-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-51.13#
61	A2	C2-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-52.76#
62	A2	C3-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-54.61#
63	A2	C4-Naphthobenzothiophenes	0.000	0.000#	0.0	0#	-55.82#
64	i	Chrysene-d12	1.000	1.000	0.0	136	-0.02
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.38#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.54#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.54#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.65#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.26#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.50#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-49.82#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.49#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.50#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.58#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.66#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.14#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.54#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.71#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.00#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-52.99#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.07#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.10#
83	A1	17a(H),21B(H)-hopane - C30H	0.430	0.464	-7.9	169	-0.04
84	A2	Hopane (T19)	0.430	0.464	-7.9	169	-0.04
85	A2	C23 Tricyclic Terpane (T4)	0.430	0.000#	100.0#	0#	-40.95#
86	A2	C24 Tricyclic Terpane (T5)	0.430	0.000#	100.0#	0#	-41.68#
87	A2	C25 Tricyclic Terpane (T6)	0.430	0.000#	100.0#	0#	-43.16#
88	A2	C24 Tetracyclic Terpane (T6	0.430	0.000#	100.0#	0#	-44.49#
89	A2	C26 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-44.22#
90	A2	C26 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-44.32#
91	A2	C28 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-46.60#
92	A2	C28 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-46.77#
93	A2	C29 Tricyclic Terpane-22S (	0.430	0.000#	100.0#	0#	-47.29#
94	A2	C29 Tricyclic Terpane-22R (	0.430	0.000#	100.0#	0#	-47.49#
95	A2	18a-22,29,30-Trisnorneohopa	0.430	0.000#	100.0#	0#	-48.65#
96	A2	C30 Tricyclic Terpane-22S	0.430	0.000#	100.0#	0#	-48.73#
97	A2	C30 Tricyclic Terpane-22R	0.430	0.000#	100.0#	0#	-48.97#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.430	0.000#	100.0#	0#	-49.20#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.430	0.000#	100.0#	0#	-50.43#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34943.D
Acq On : 3 Feb 2006 12:54 am
Operator : AC
Sample : C3012614
Misc : STD
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 03 06:45:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 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	0.236	-12.4	156	-0.02
118	A2	13b(H),17a(H)-20S-Diacholes	0.210	0.000#	100.0#	0#	-45.44#
119	A2	13b(H),17a(H)-20R-Diacholes	0.210	0.000#	100.0#	0#	-45.85#
120	A2	13b,17a-20S-Methyldiacholes	0.210	0.000#	100.0#	0#	-46.56#
121	A2	14a(H),17a(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.44#
122	A2	14a(H),17a(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.96#
123	A2	13b,17a-20R-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.24#
124	A2	13a,17b-20S-Ethyldiacholest	0.210	0.000#	100.0#	0#	-48.51#
125	A2	14a,17a-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.68#
126	A2	14a,17a-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-49.41#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-49.77#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.69#
129	A2	14b(H),17b(H)-20R-Cholestan	0.210	0.000#	100.0#	0#	-47.52#
130	A2	14b(H),17b(H)-20S-Cholestan	0.210	0.000#	100.0#	0#	-47.61#
131	A2	14b,17b-20R-Methylcholestan	0.210	0.000#	100.0#	0#	-48.84#
132	A2	14b,17b-20S-Methylcholestan	0.210	0.000#	100.0#	0#	-48.93#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.210	0.000#	100.0#	0#	-50.02#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.210	0.000#	100.0#	0#	-50.06#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34943.D
Acq On : 3 Feb 2006 12:54 am
Operator : AC
Sample : C3012614
Misc : STD
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 03 06:45:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration

MS 2/3/06

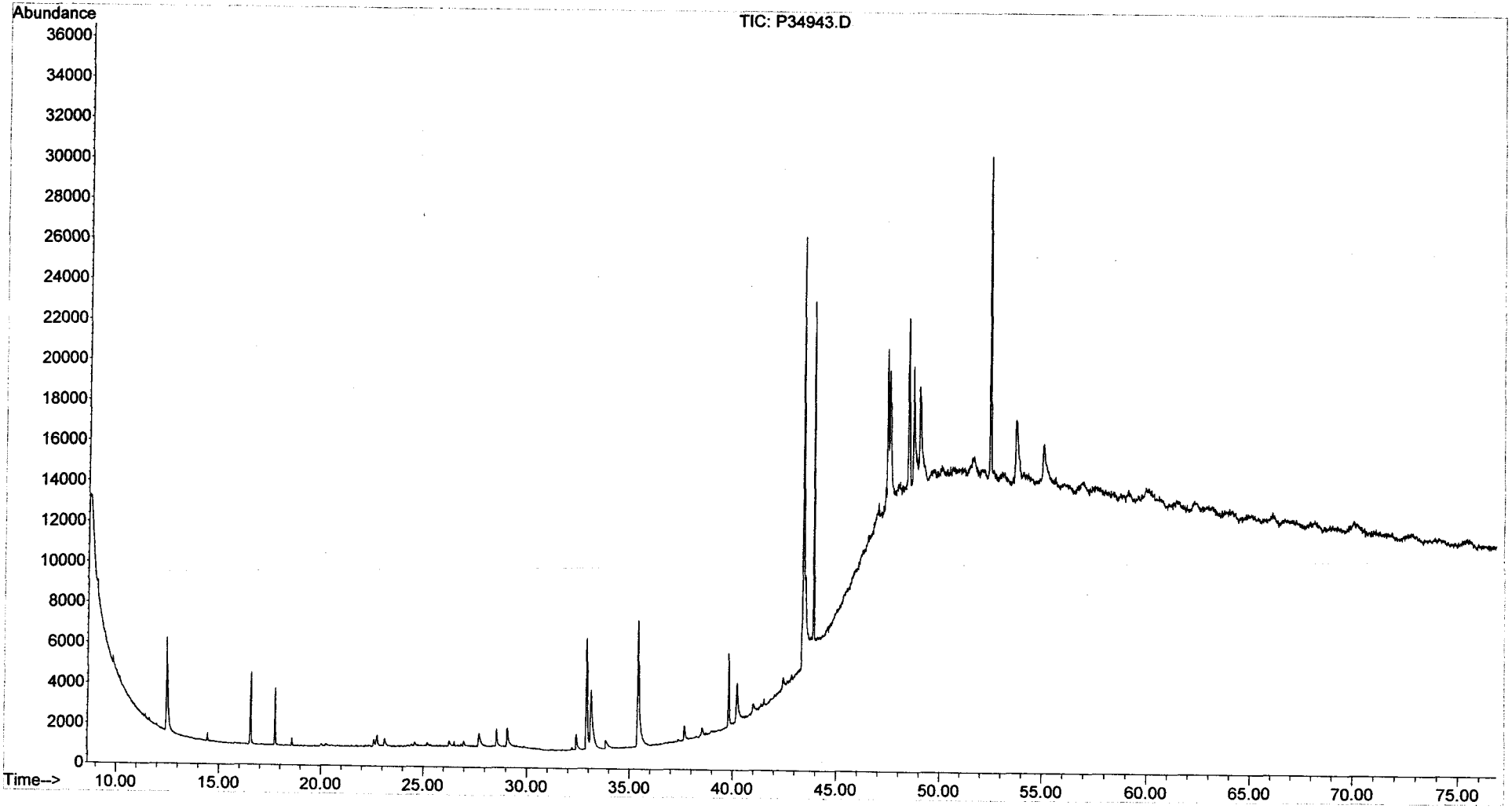
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.39	240	83368	500.00 ng/mL	-0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	
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	43.90	217	19710	562.54 ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	56.25%	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.44	191	38667	539.72 ng/mL	99
84) Hopane (T19)	52.44	191	38667	539.72 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN26\
Data File : P34943.D
Acq On : 3 Feb 2006 12:54 am
Operator : AC
Sample : C3012614
Misc : STD
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 03 06:45:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30111.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Feb 01 10:33:05 2006
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601073**
Lab ID: **C2020303**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		29396	27.09	45920	43.60
Upper Limit:		58792	27.59	91840	44.10
Lower Limit:		14698	26.59	22960	43.10
Client ID	**Lab ID**				
GC-SED-57 (7-9)	0601073-03E	35716	27.09	58341	43.60
GC-SED-51 (0-1.5)	0601073-04E	34504	27.09	56634	43.60
GC-SED-51 (0-1.5)	0601073-04E D	32886	27.09	55016	43.60
CCV	C2020304	32343	27.10	46122	43.60

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.

02/15/06 19:44

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: **0601073**
Lab ID: **C2020601**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		29629	27.07	46991	43.58
Upper Limit:		59258	27.57	93982	44.08
Lower Limit:		14814	26.57	23496	43.08
Client ID	**Lab ID**				
Blank	SS013006B05	27797	27.07	42852	43.60
LCS	SS013006LCS03	27898	27.07	44539	43.58
LCSD	SS013006LCSD04	29244	27.07	46775	43.58
CCV	C2020602	25563	27.07	37479	43.58

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.

02/15/06 19:44

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601073**
Lab ID: **C2020603**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		25759	27.07	41930	43.57
Upper Limit:		51518	27.57	83860	44.07
Lower Limit:		12880	26.57	20965	43.07
Client ID	**Lab ID**				
GC-SED-50 (2-5)	0601073-01E	28992	27.07	44665	43.58
GC-SED-56 (5.8-6.2)	0601073-02E	30950	27.07	47204	43.58
GC-SED-50 (2-5)	0601073-01	28928	27.07	48849	43.57
GC-SED-56 (5.8-6.2)	0601073-02	24439	27.07	41093	43.57
GC-SED-57 (7-9)	0601073-03	30793	27.07	52936	43.60
GC-SED-51 (0-1.5)	0601073-04	29135	27.07	52524	43.60
GC-SED-51 (0-1.5)	0601073-04 D	36032	27.07	62636	43.60
CCV	C2020604	46144	27.07	75561	43.58

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.

02/15/06 19:45

Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601073**
Lab ID: **C3012613**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		81704	43.39
Upper Limit:		163408	43.89
Lower Limit:		40852	42.89
Client ID	**Lab ID**		
Blank	SS013006B05	63984	43.47
GC-SED-50 (2-5)	0601073-01	78825	43.43
GC-SED-56 (5.8-6.2)	0601073-02	85648	43.42
GC-SED-57 (7-9)	0601073-03	85367	43.43
GC-SED-51 (0-1.5)	0601073-04	85180	43.43
GC-SED-51 (0-1.5)	0601073-04 D	93738	43.42
CCV	C3012614	83368	43.39

N/A - Not Applicable

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

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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-50 (2-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-01**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/04/06	70.6	5.00	61.6	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**80000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	98	50-130
d50-Tetracosane	100	50-130

02/07/06 16:13

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17982.D
Signal(s) : FID2B.CH
Acq On : 04 Feb 2006 10:04 pm
Operator : AC
Sample : 0601073-01-AFID
Misc : 1X
ALS Vial : 68 Sample Multiplier: 1

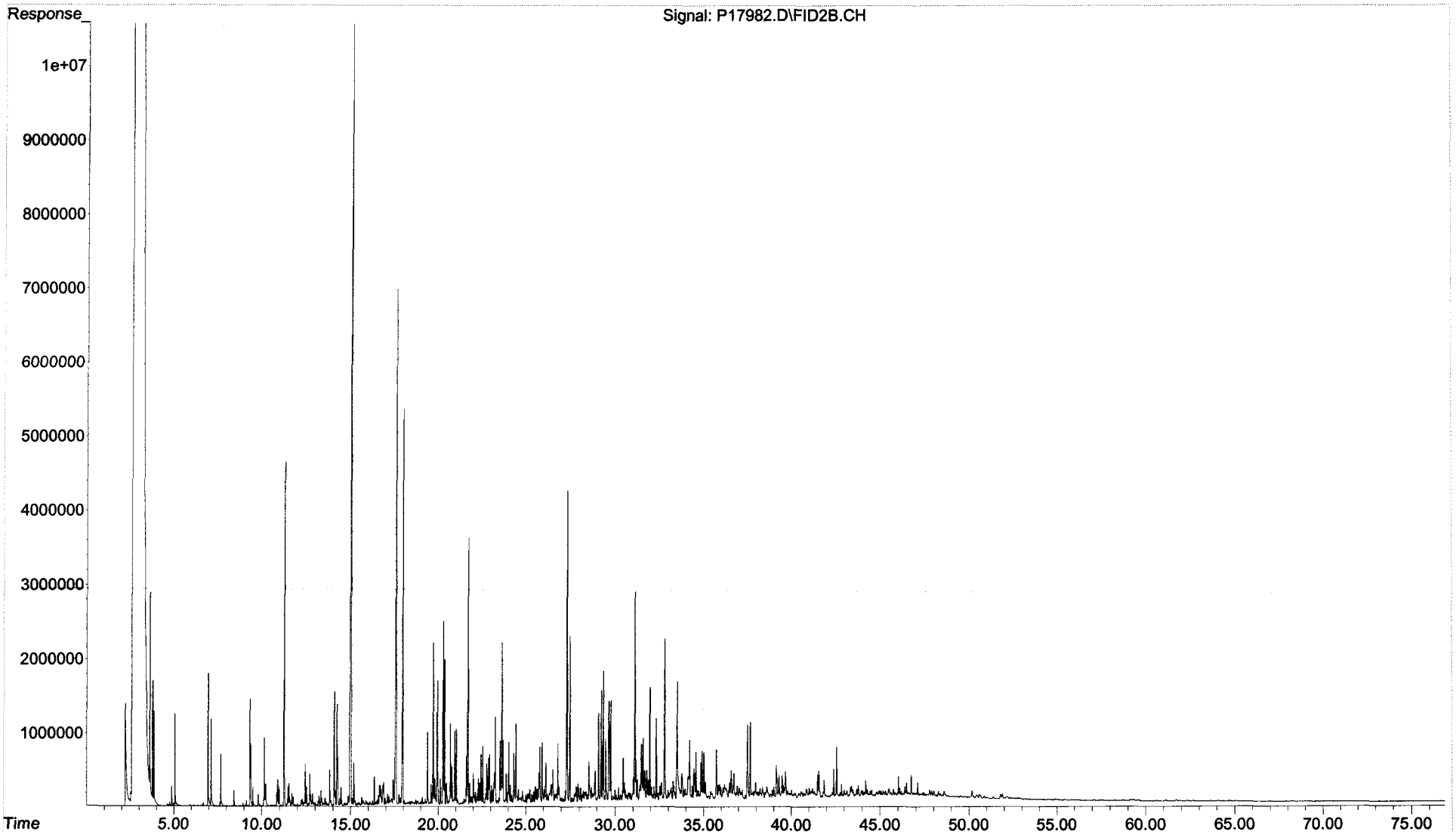
Integration File: SHCINT1.E
Quant Time: Feb 07 15:43:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.13	66344954	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	22916473	15.936 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	31.87%#
24) s d50-Tetracosane	35.75	20950133	16.255 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	32.51%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6720567698	5058.387 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3471772582	2613.108 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17982.D
Operator : AC
Acquired : 04 Feb 2006 10:04 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601073-01-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-56 (5.8-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-02**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/04/06	87.7	4.98	104.38	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**100000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	108	50-130
d50-Tetracosane	121	50-130

02/07/06 16:13

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17984.D
Signal(s) : FID2B.CH
Acq On : 04 Feb 2006 11:39 pm
Operator : AC
Sample : 0601073-02-AFID
Misc : 1X
ALS Vial : 69 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 15:45:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

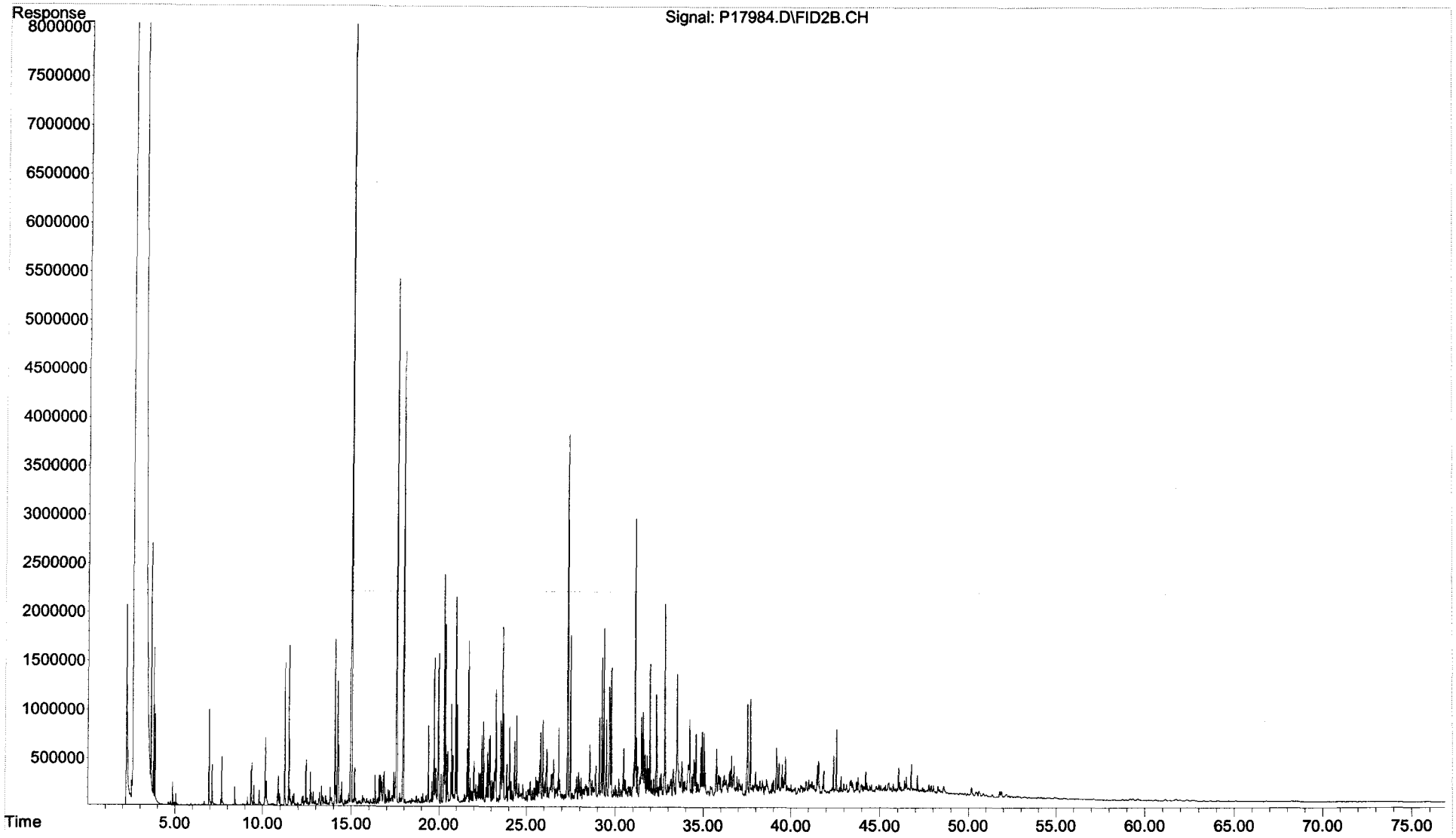
2/7/07

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	70031216	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.10	15774198	10.392 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	20.78%#
24) s d50-Tetracosane	35.75	15754749	11.580 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	23.16%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6554521846	4673.727 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3132038166	2233.312 ug/L

RFT Rpt conc 2nd cy 2/17/06

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17984.D
Operator : AC
Acquired : 04 Feb 2006 11:39 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601073-02-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-57 (7-9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-03**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/05/06	40.6	10.04	27.75	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**27000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	92	50-130
d50-Tetracosane	88	50-130

02/07/06 16:14

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17986.D
Signal(s) : FID2B.CH
Acq On : 05 Feb 2006 1:14 am
Operator : AC
Sample : 0601073-03-AFID
Misc : 1X
ALS Vial : 70 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 15:49:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

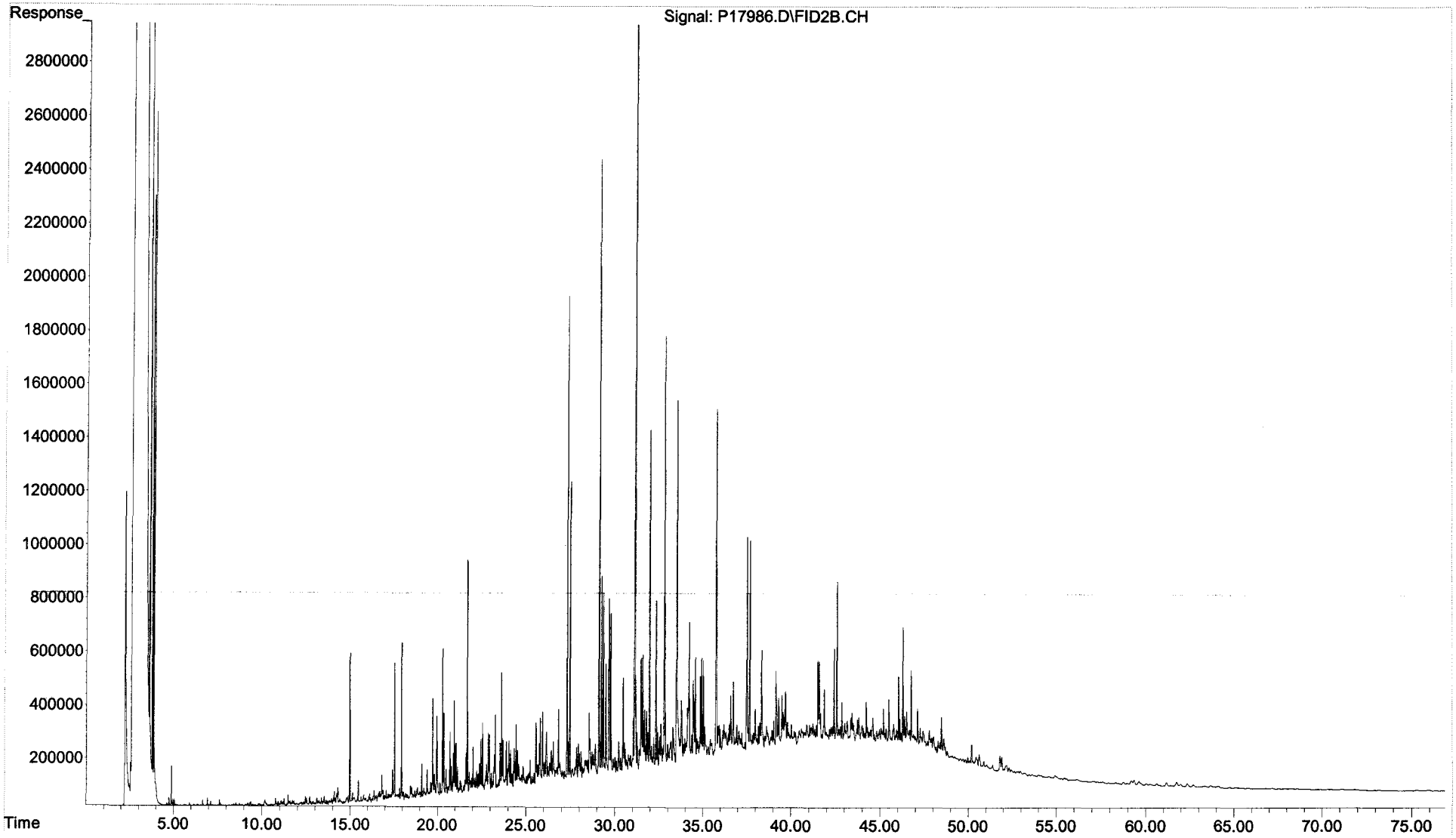
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/7/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.13	64955603	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	46569112	33.076 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	66.15%
24) s d50-Tetracosane	35.76	39843190	31.575 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	63.15%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5826164439	4478.990 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1260357436	968.927 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17986.D
Operator : AC
Acquired : 05 Feb 2006 1:14 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601073-03-AFID
Misc Info : 1X
Vial Number: 70



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/05/06	38.5	9.99	48.13	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**44000**

N/A - Not Applicable

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

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17988.D
Signal(s) : FID2B.CH
Acq On : 05 Feb 2006 2:49 am
Operator : AC
Sample : 0601073-04-AFID
Misc : 1X
ALS Vial : 71 Sample Multiplier: 1

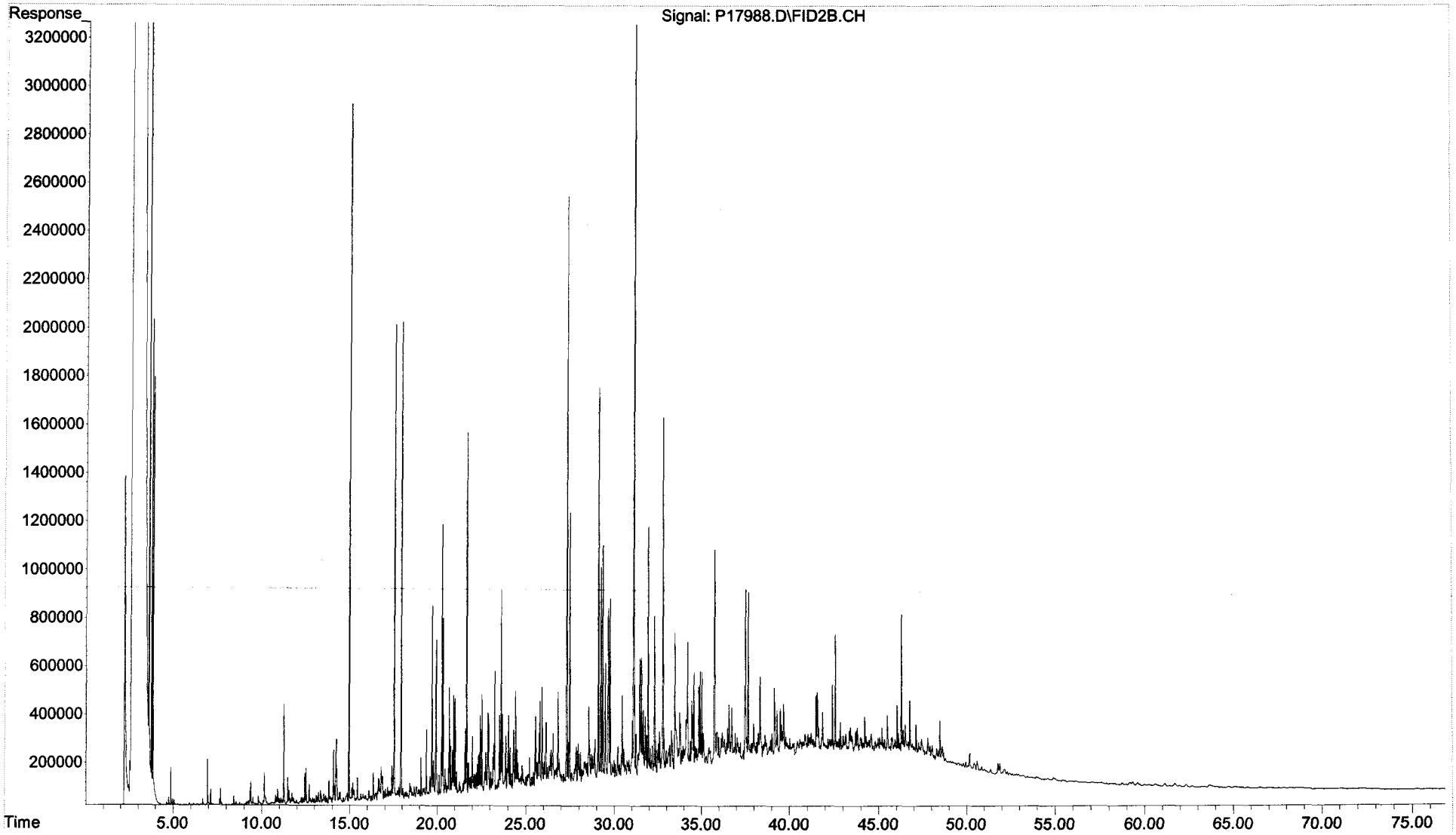
Integration File: SHCINT1.E
Quant Time: Feb 07 15:51:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.14	74991341	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	31186719	19.186 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	38.37%#
24) s d50-Tetracosane	35.76	27636891	18.971 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	37.94%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5917832198	3940.628 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1602700660	1067.223 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17988.D
Operator : AC
Acquired : 05 Feb 2006 2:49 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601073-04-AFID
Misc Info : 1X
Vial Number: 71



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-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04 D**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/26/06	01/27/06	01/30/06	02/05/06	38.5	10.05	51.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**53000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	103	50-130
d50-Tetracosane	102	50-130

02/07/06 16:14

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17990.D
Signal(s) : FID2B.CH
Acq On : 05 Feb 2006 4:24 am
Operator : AC
Sample : 0601073-04D-AFID
Misc : 1X
ALS Vial : 72 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 15:53:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

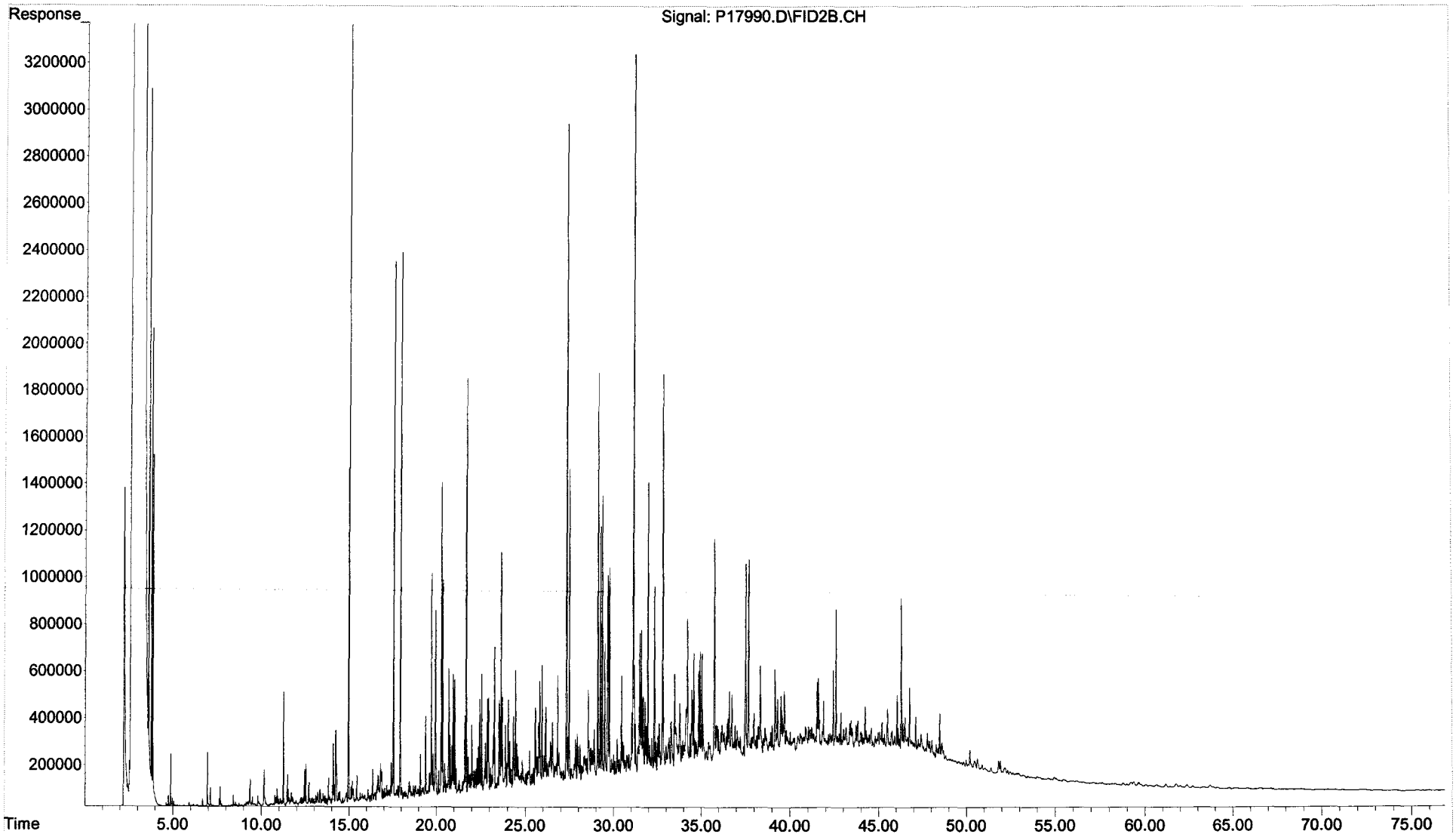
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/7/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	76456037	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	33102859	19.975 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	39.95%#
24) s d50-Tetracosane	35.76	29475287	19.845 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	39.69%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6722322389	4390.576 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1899888147	1240.881 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17990.D
Operator : AC
Acquired : 05 Feb 2006 4:24 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0601073-04D-AFID
Misc Info : 1X
Vial Number: 72



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-51 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **0601073-04**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/26/06	01/27/06	01/30/06	38.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**44000**	**53000**	18	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	92	103	50-130
d50-Tetracosane	91	102	50-130

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

02/07/06 16:15

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: **0601073**
Lab ID: **SS013006B05**
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	01/30/06	02/03/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	4.4 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	95	50-130
d50-Tetracosane	89	50-130

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

02/07/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17954.D
Signal(s) : FID2B.CH
Acq On : 03 Feb 2006 7:47 pm
Operator : AC
Sample : SS013006B05-AFID
Misc : 1X ETR0601073
ALS Vial : 54 Sample Multiplier: 1

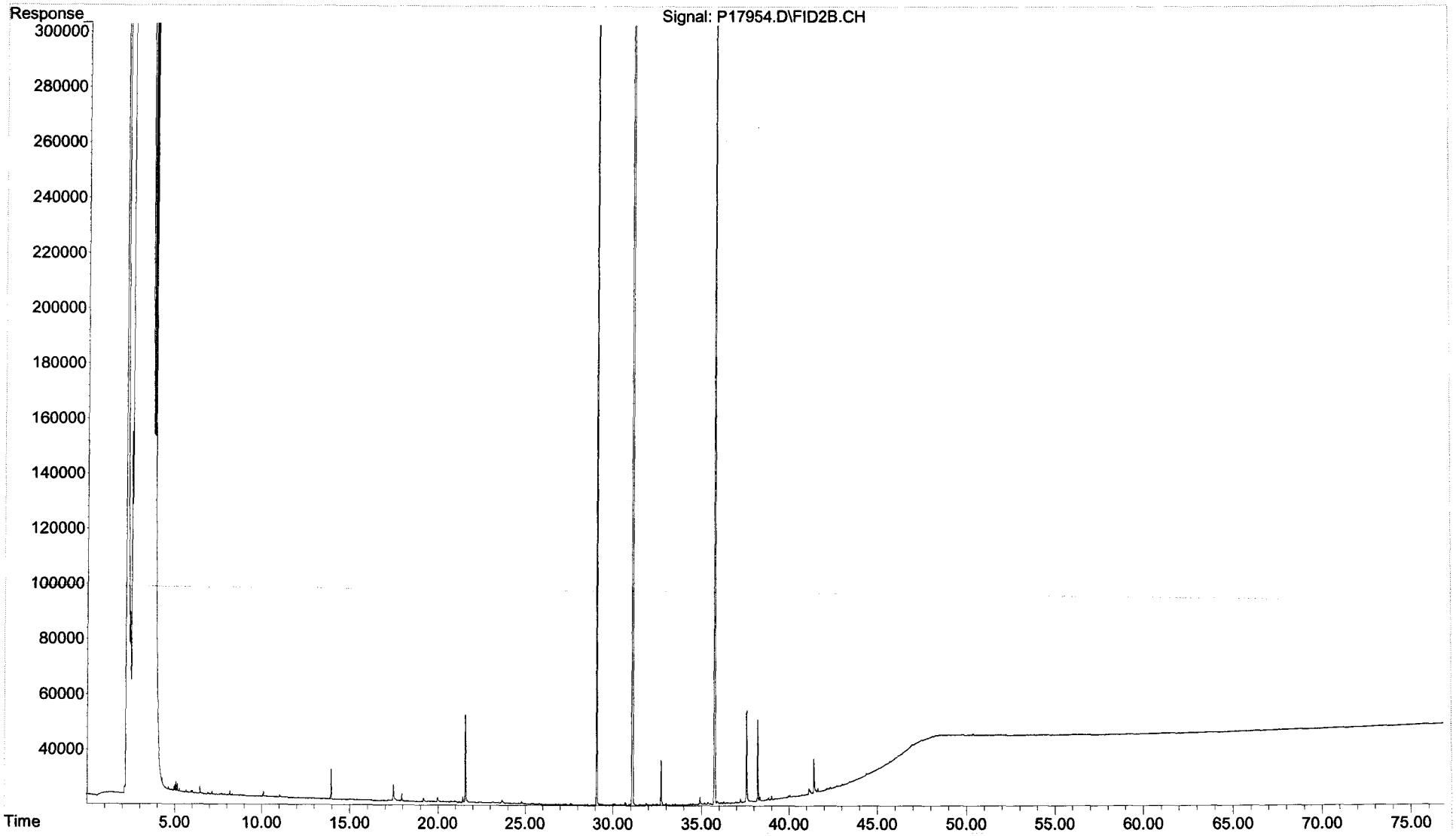
Integration File: SHCINT1.E
Quant Time: Feb 07 15:26:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.12	64226692	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.09	16525019	11.870 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	23.74%#
24) s d50-Tetracosane	35.74	13805953	11.065 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	22.13%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	496366649	385.923 ug/mL
44) h Total Resolved Hydrocarbon	40.94	7343792	5.710 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17954.D
Operator : AC
Acquired : 03 Feb 2006 7:47 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS013006B05-AFID
Misc Info : 1X ETR0601073
Vial Number: 54



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: **0601073**
Lab ID: **See Below**
Associated Blank: **SS013006B05**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	01/30/06	100	AC

Lab ID:	SS013006B05		SS013006LCS03		SS013006LCSD04				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.13	U	1.3	79	1.1	67	17	30	50-130
n-Decane (C10)	0.13	U	1.5	91	1.4	82	10	30	50-130
n-Dodecane (C12)	0.13	U	1.6	96	1.5	92	4	30	50-130
n-Tetradecane (C14)	0.13	U	1.6	96	1.6	93	3	30	50-130
n-Hexadecane (C16)	0.13	U	1.6	99	1.6	97	2	30	50-130
n-Octadecane (C18)	0.13	U	1.6	99	1.6	96	3	30	50-130
n-Nonadecane (C19)	0.13	U	1.7	100	1.6	97	3	30	50-130
n-Eicosane (C20)	0.13	U	1.7	101	1.6	98	3	30	50-130
n-Docosane (C22)	0.13	U	1.7	100	1.6	97	3	30	50-130
n-Tetracosane (C24)	0.13	U	1.6	99	1.6	96	3	30	50-130
n-Hexacosane (C26)	0.13	U	1.7	101	1.6	98	3	30	50-130
n-Octacosane (C28)	0.13	U	1.7	100	1.6	97	3	30	50-130
n-Triacontane (C30)	0.13	U	1.7	100	1.6	96	4	30	50-130
n-Hexatriacontane (C36)	0.13	U	1.7	99	1.5	93	7	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	101	100	50-130
d50-Tetracosane	93	92	50-130

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

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

02/07/06 16:17

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **SS013006LCS03**
Associated Blank: **SS013006B05**
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	01/30/06	02/04/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**6.7**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	101	50-130
d50-Tetracosane	93	50-130

02/07/06 16:17

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17960.D
Signal(s) : FID2B.CH
Acq On : 04 Feb 2006 12:33 am
Operator : AC
Sample : SS013006LCS03
Misc : 1X ETR0601073
ALS Vial : 57 Sample Multiplier: 1

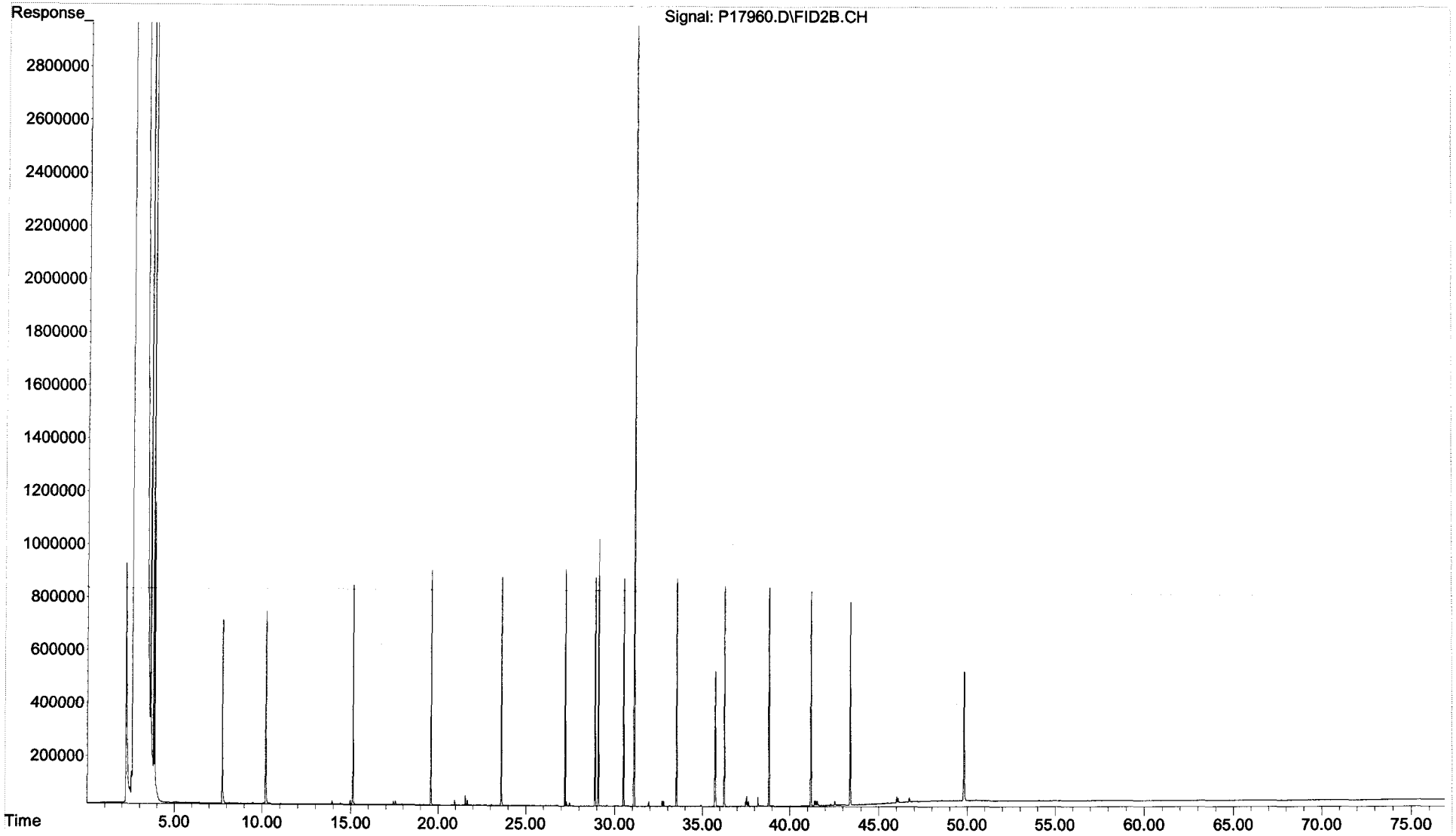
Integration File: SHCINT1.E
Quant Time: Feb 07 15:33:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.12	65939507	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.08	18104511	12.667 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 25.33%#
24) s	d50-Tetracosane	35.73	14943519	11.666 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 23.33%#
	Target Compounds			
3) t	n-Nonane (C9)	7.75	11630892	9.921 ug/mL
4) t	n-Decane (C10)	10.21	13640658	11.350 ug/mLm
6) t	n-Dodecane (C12)	15.12	14841078	11.969 ug/mLm
9) t	n-Tetradecane (C14)	19.60	15244835	11.942 ug/mL
12) t	n-Hexadecane (C16)	23.61	16148996	12.379 ug/mL
16) t	n-Octadecane (C18)	27.23	16344668	12.341 ug/mLm
18) t	n-Nonadecane (C19)	28.91	16463432	12.511 ug/mLm
20) t	n-Eicosane (C20)	30.51	16607766	12.658 ug/mL
22) t	n-Docosane (C22)	33.51	16728188	12.511 ug/mL
25) t	n-Tetracosane (C24)	36.27	16823050	12.345 ug/mL
27) t	n-Hexacosane (C26)	38.82	16939648	12.612 ug/mL
29) t	n-Octacosane (C28)	41.20	16967307	12.477 ug/mL
31) t	n-Triacontane (C30)	43.41	16978821	12.459 ug/mLm
37) t	n-Hexatriacontane (C36)	49.83	16824634	12.434 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	682121994	516.571 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	235250397	178.155 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17960.D
Operator : AC
Acquired : 04 Feb 2006 12:33 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS013006LCS03
Misc Info : 1X ETR0601073
Vial Number: 57



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **SS013006LCSD04**
Associated Blank: **SS013006B05**
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	01/30/06	02/04/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**3.8 J**

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

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	100	50-130
d50-Tetracosane	92	50-130

02/07/06 16:17

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17962.D
Signal(s) : FID2B.CH
Acq On : 04 Feb 2006 2:07 am
Operator : AC
Sample : SS013006LCSD04
Misc : 1X ETR0601073
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 15:38:15 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

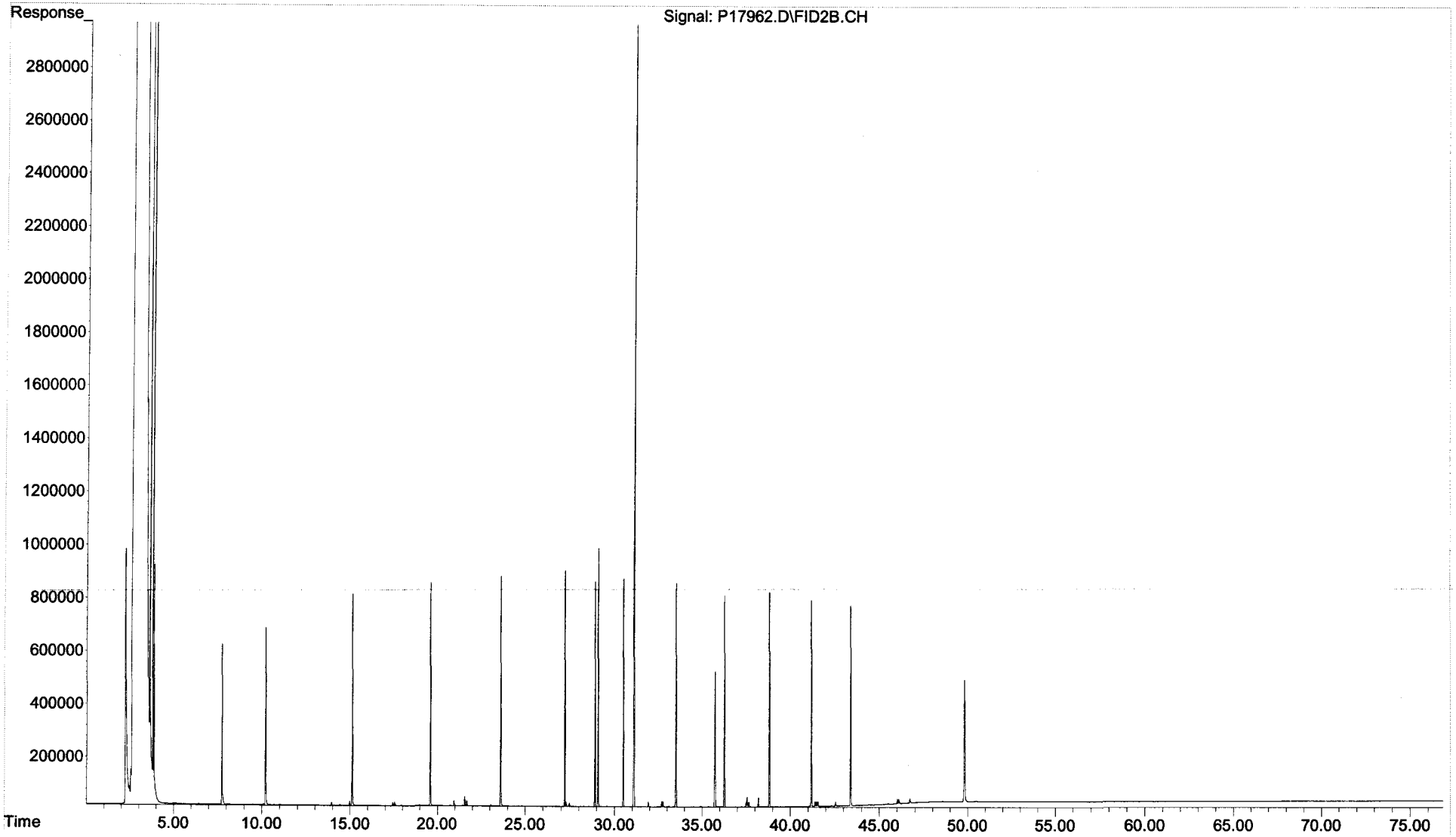
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/7/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.12	66506677	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.09	18020287	12.501 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 25.00%#
24) s	d50-Tetracosane	35.73	14837440	11.484 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 22.97%#
	Target Compounds			
3) t	n-Nonane (C9)	7.75	9937696	8.405 ug/mL
4) t	n-Decane (C10)	10.21	12495120	10.308 ug/mLm
6) t	n-Dodecane (C12)	15.12	14339439	11.465 ug/mLm
9) t	n-Tetradecane (C14)	19.60	14965189	11.623 ug/mL
12) t	n-Hexadecane (C16)	23.61	15889421	12.076 ug/mL
16) t	n-Octadecane (C18)	27.23	16051329	12.017 ug/mLm
18) t	n-Nonadecane (C19)	28.91	16152154	12.170 ug/mLm
20) t	n-Eicosane (C20)	30.51	16282317	12.304 ug/mL
22) t	n-Docosane (C22)	33.51	16390123	12.154 ug/mL
25) t	n-Tetracosane (C24)	36.27	16477913	11.988 ug/mL
27) t	n-Hexacosane (C26)	38.82	16584247	12.242 ug/mL
29) t	n-Octacosane (C28)	41.20	16605750	12.107 ug/mL
31) t	n-Triacontane (C30)	43.41	16514766	12.015 ug/mLm
37) t	n-Hexatriacontane (C36)	49.83	15800370	11.578 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	653692168	490.820 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	227318933	170.681 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17962.D
Operator : AC
Acquired : 04 Feb 2006 2:07 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS013006LCSD04
Misc Info : 1X ETR0601073
Vial Number: 58



Form I
Alaska North Slope Crude
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **TO020306AWS01**
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	02/01/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**580000**

N/A - Not Applicable

02/07/06 16:18

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN31.SEC\
Data File : P17900.D
Signal(s) : FID2B.CH
Acq On : 01 Feb 2006 9:03 pm
Operator : AC
Sample : TO020306AWS01
Misc : 1X ANS STD
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 03 17:46:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:40:18 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

2/7/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.15	83449774	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.14	88218274	48.772 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	97.54%
24) s	d50-Tetracosane	35.78	73974136	45.631 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	91.26%
	Target Compounds			
2) t	n-Octane (C8)	5.60	34708214	25.796 ug/mLm
3) t	n-Nonane (C9)	7.77	28879895	19.466 ug/mLm
4) t	n-Decane (C10)	10.23	32891311	21.625 ug/mLm
5) t	n-Undecane (C11)	12.72	32828229	21.315 ug/mLm
6) t	n-Dodecane (C12)	15.14	32839001	20.926 ug/mLm
7) t	n-Tridecane (C13)	17.44	32873578	20.677 ug/mLm
8) t	1380	19.11	7958589	4.926 ug/mLm
9) t	n-Tetradecane (C14)	19.62	28829832	17.845 ug/mLm
10) t	1470	20.90	11085693	6.778 ug/mLm
11) t	n-Pentadecane (C15)	21.68	30756901	18.804 ug/mLm
12) t	n-Hexadecane (C16)	23.63	26303208	15.932 ug/mLm
13) t	1650	24.53	8503476	5.087 ug/mLm
14) t	n-Heptadecane (C17)	25.49	23542142	14.084 ug/mLm
15) t	Pristane	25.58	17901029	11.210 ug/mLm
16) t	n-Octadecane (C18)	27.25	21435062	12.789 ug/mL
17) t	Phytane	27.41	11275127	6.786 ug/mLm
18) t	n-Nonadecane (C19)	28.93	21583571	12.960 ug/mLm
20) t	n-Eicosane (C20)	30.53	20713961	12.475 ug/mL
21) t	n-Heneicosane (C21)	32.06	19598464	11.438 ug/mLm
22) t	n-Docosane (C22)	33.53	18467751	10.914 ug/mLm
23) t	n-Tricosane (C23)	34.94	16250063	9.537 ug/mLm
25) t	n-Tetracosane (C24)	36.29	15394474	8.926 ug/mLm
26) t	n-Pentacosane (C25)	37.59	15381570	8.838 ug/mL
27) t	n-Hexacosane (C26)	38.84	13648855	8.030 ug/mLm
28) t	n-Heptacosane (C27)	40.05	9879011	5.833 ug/mLm
29) t	n-Octacosane (C28)	41.22	7235232	4.204 ug/mLm
30) t	n-Nonacosane (C29)	42.34	7102447	4.038 ug/mL
31) t	n-Triacontane (C30)	43.43	5739992	3.328 ug/mL
32) t	n-Hentriacontane (C31)	44.49	4758841	2.852 ug/mL
33) t	n-Dotriacontane (C32)	45.51	5382021	3.197 ug/mLm
34) t	n-Tritriacontane (C33)	46.50	3563434	2.094 ug/mLm
35) t	n-tetratriacontane (C34)	47.49	3532565	2.044 ug/mLm
36) t	n-Pentatriacontane (C35)	48.60	3012620	1.812 ug/mLm
37) t	n-Hexatriacontane (C36)	49.86	1971339	1.151 ug/mLm

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN31.SEC\
Data File : P17900.D
Signal(s) : FID2B.CH
Acq On : 01 Feb 2006 9:03 pm
Operator : AC
Sample : TO020306AWS01
Misc : 1X ANS STD
ALS Vial : 53 Sample Multiplier: 1

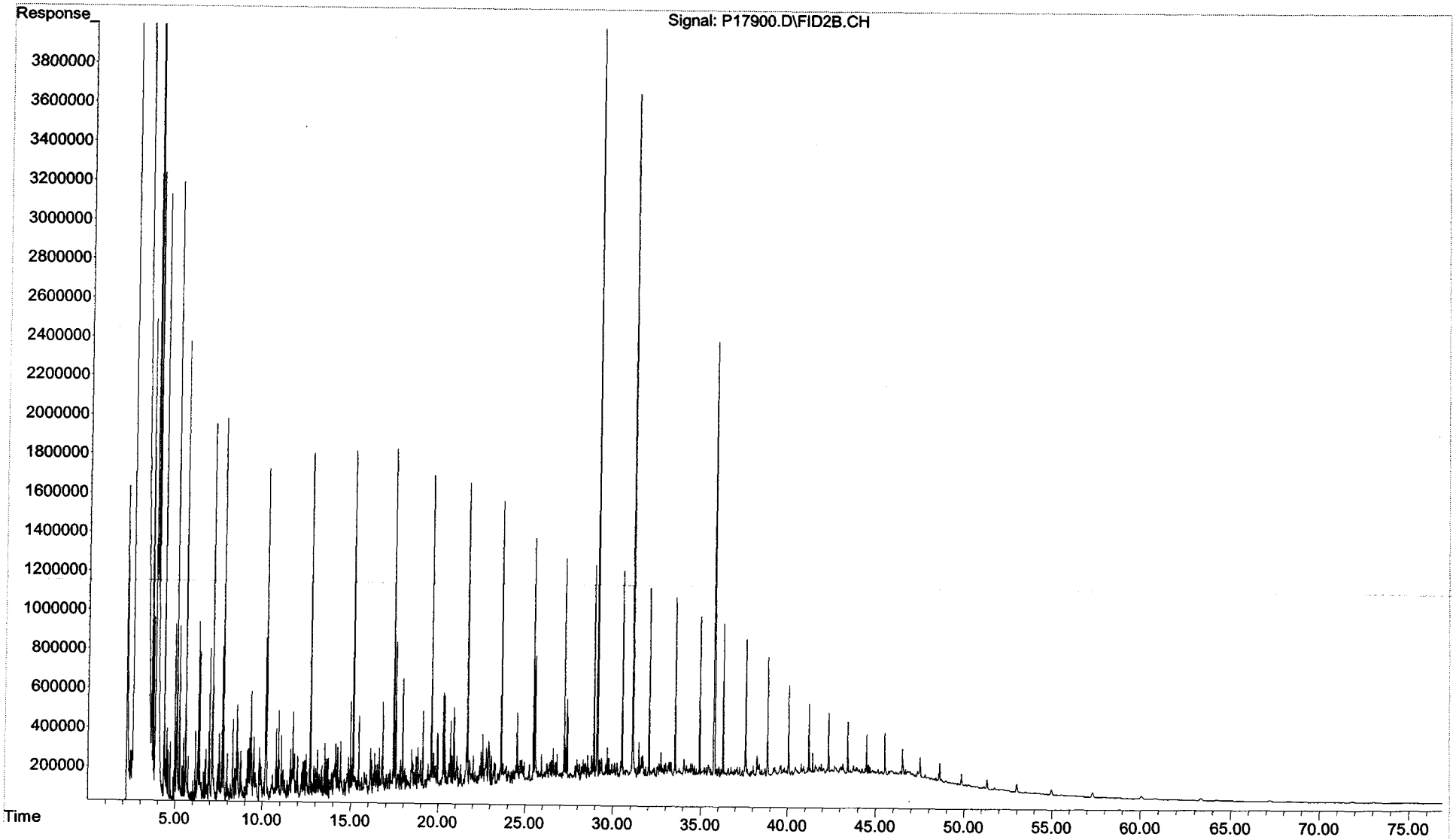
Integration File: SHCINT1.E
Quant Time: Feb 03 17:46:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:40:18 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.31	1908726	1.039	ug/mL
39)	t	n-Octatriacontane (C38)	52.99	1954531	1.131	ug/mLm
40)	t	n-Nonatriacontane (C39)	54.97f	1547711	0.903	ug/mLm
41)	t	n-Tetracontane (C40)	57.31	1655286	0.966	ug/mL
42)	h	C9-C40 Total Petroleum Hyd	40.94	5594092859	3347.484	ug/mL
44)	h	Total Resolved Hydrocarbon	40.94	1574830908	942.373	ug/L

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

File :O:\Forensics\Data\PAH1\January06\JAN31.SEC\P17900.D
Operator : AC
Acquired : 01 Feb 2006 9:03 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TO020306AWS01
Misc Info : 1X ANS STD
Vial Number: 53



Instrument Blank Association

ETR: 0601073

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
TO020306AWS01	IB101310601	P17904.D
SS013006B05	IB102030601	P17950.D
SS013006LCS03	IB102030601	P17950.D
SS013006LCSD04	IB102030601	P17950.D
0601073-01	IB102030601	P17950.D
0601073-02	IB102030601	P17950.D
0601073-03	IB102030601	P17950.D
0601073-04	IB102030601	P17950.D
0601073-04 D	IB102030601	P17950.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN31.SEC\
Data File : P17904.D
Signal(s) : FID2B.CH
Acq On : 02 Feb 2006 12:13 am
Operator : AC
Sample : IB101310601
Misc : DCM
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 03 17:36:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Jan 30 20:24:21 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

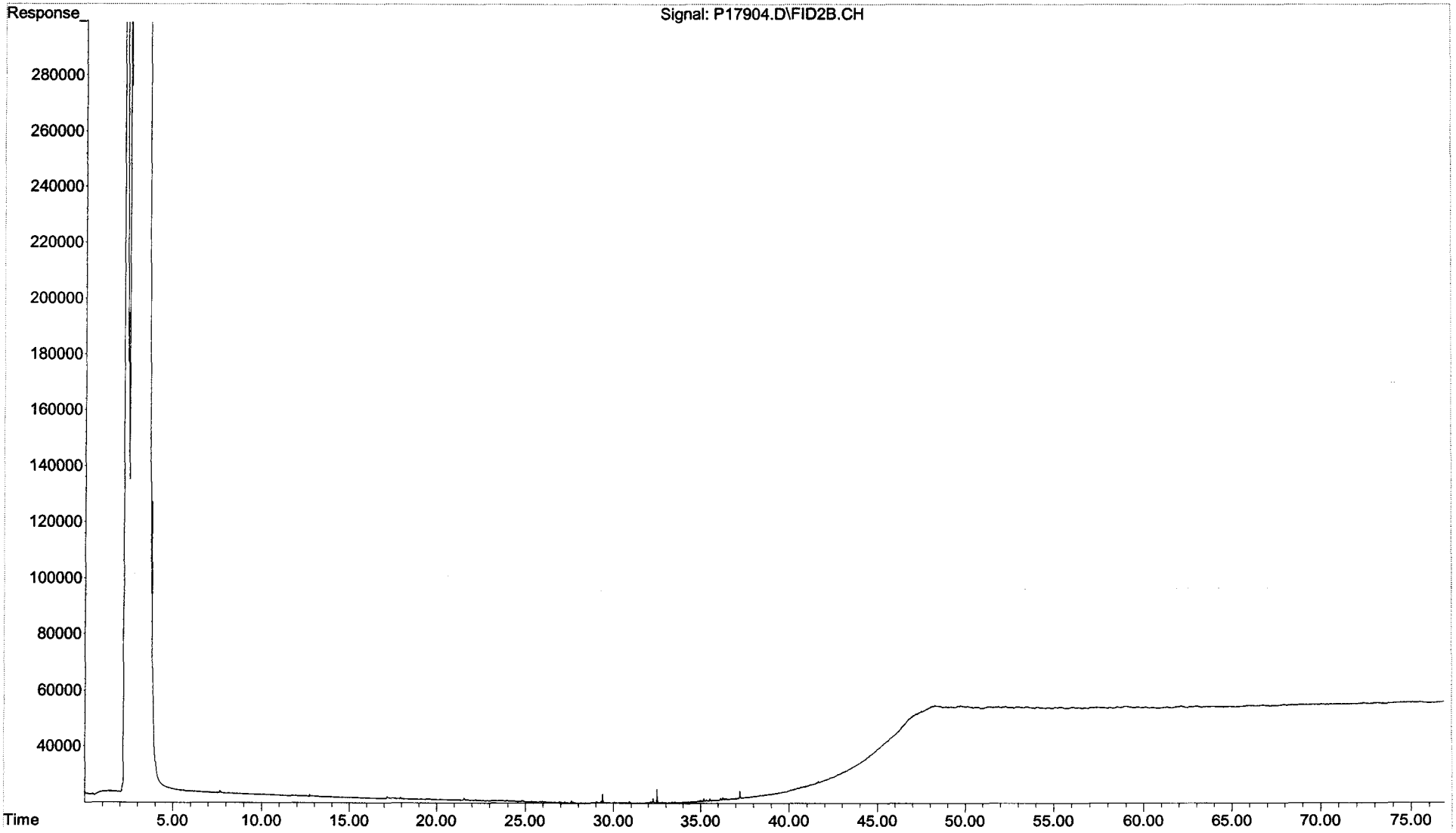
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/7/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	30.91f	20515	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	656856265	1598850.473 ug/mL

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

File :O:\Forensics\Data\PAH1\January06\JAN31.SEC\P17904.D
Operator : AC
Acquired : 02 Feb 2006 12:13 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB101310601
Misc Info : DCM
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17950.D
Signal(s) : FID2B.CH
Acq On : 03 Feb 2006 4:33 pm
Operator : AC
Sample : IB102030601
Misc : DCM
ALS Vial : 52 Sample Multiplier: 1

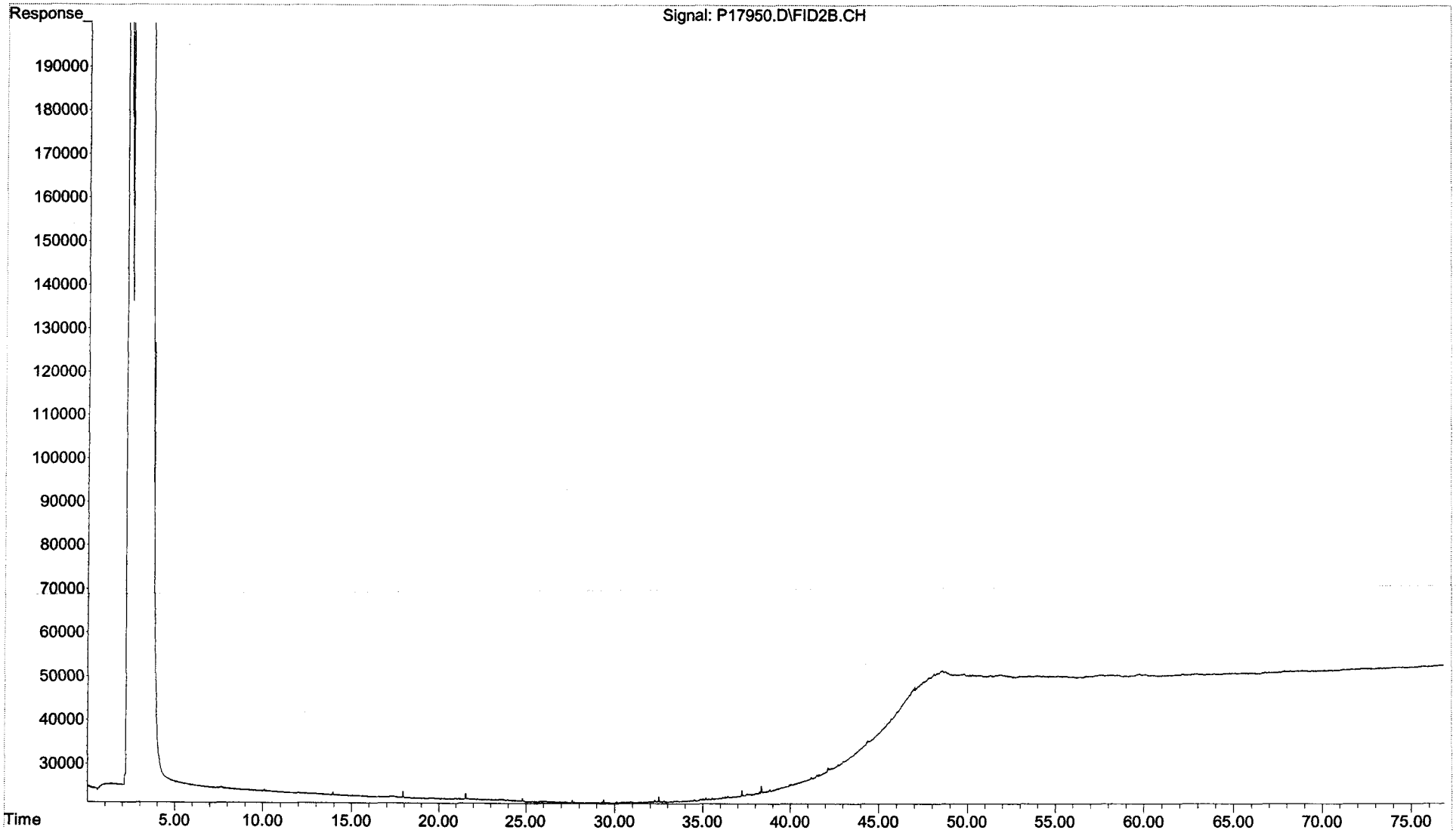
Integration File: SHCINT1.E
Quant Time: Feb 07 15:30:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	30.91f	12751	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	615618269	2410977.636 ug/mL

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

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17950.D
Operator : AC
Acquired : 03 Feb 2006 4:33 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB102030601
Misc Info : DCM
Vial Number: 52



Sequence Name: C:\MSDChem\1\sequence\S1020301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB03\

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	P17948	FRNC1D	C1020301-AFID PASS 2/2/06
5)	Sample	1	P17949	FRNC1D	C1020301 PASS
6)	RearSamp	52	P17950	FRNC1D	DCM-AFID IB102030601 2/2/06
7)	Sample	2	P17951	FRNC1D	DCM
8)	RearSamp	53	P17952	FRNC1D	SS012606B19-AFID
9)	Sample	3	P17953	FRNC1D	0601080-02D-RE ✓
10)	RearSamp	54	P17954	FRNC1D	SS013006B05-AFID
11)	Sample	4	P17955	FRNC1D	0601080-02-RE ✓
12)	RearSamp	55	P17956	FRNC1D	SS012606LCS05
13)	Sample	5	P17957	FRNC1D	0601080-03-RE ✓
14)	RearSamp	56	P17958	FRNC1D	SS012606LCSD05
15)	Sample	6	P17959	FRNC1D	0601080-04-RE ✓
16)	RearSamp	57	P17960	FRNC1D	SS013006LCS03
17)	Sample	7	P17961	FRNC1D	0601080-05-RE ✓
18)	RearSamp	58	P17962	FRNC1D	SS013006LCSD04
)	Sample	8	P17963	FRNC1D	0601080-06-RE ✓
)	RearSamp	59	P17964	FRNC1D	C1020302-AFID PASS 2/2/06
21)	Sample	9	P17965	FRNC1D	C1020302 OK for DILUTIONS
22)	RearSamp	60	P17966	FRNC1D	0601070-01-AFID
23)	Sample	10	P17967	FRNC1D	DCM
24)	RearSamp	61	P17968	FRNC1D	0601070-02-AFID
25)	Sample	11	P17969	FRNC1D	DCM
26)	RearSamp	62	P17970	FRNC1D	0601070-03-AFID
27)	Sample	12	P17971	FRNC1D	SS012606B19 – rerun
28)	RearSamp	63	P17972	FRNC1D	0601070-05-AFID
29)	Sample	13	P17973	FRNC1D	SS012606LCS05 – rerun
30)	RearSamp	64	P17974	FRNC1D	0601070-07-AFID
31)	Sample	14	P17975	FRNC1D	SS012606LCSD05 – rerun
32)	Pause				
33)	RearSamp	64	P17975A	FRNC1D	0601070-07-AFID
34)	Sample	1	P17975B	FRNC1D	PAH STD
35)	RearSamp	99	P17975C	FRNC1D	DCM-AFID
36)	Sample	9	P17975D	FRNC1D	C1020302A PASS
37)	RearSamp	99	P17975E	FRNC1D	DCM-AFID
38)	Sample	100	P17975F	FRNC1D	0601070-09D-RE ✓
39)	RearSamp	65	P17976	FRNC1D	0601070-08-AFID
40)	Sample	15	P17977	FRNC1D	0601070-01-RE ✓
41)	RearSamp	66	P17978	FRNC1D	0601070-09-AFID
42)	Sample	16	P17979	FRNC1D	0601070-02-RE ✓
43)	RearSamp	67	P17980	FRNC1D	0601070-09D-AFID

✓ run used

PMS 2/6/06

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

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S1020301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	17	P17981	FRNC1D	0601070-05-RE ✓
45)	RearSamp	68	P17982	FRNC1D	0601073-01-AFID
46)	Sample	18	P17983	FRNC1D	C1020303 PASS
	RearSamp	69	P17984	FRNC1D	0601073-02-AFID
[illegible])	Sample	19	P17985	FRNC1D	0601070-03 ✓
49)	RearSamp	70	P17986	FRNC1D	0601073-03-AFID
50)	Sample	20	P17987	FRNC1D	0601070-07 ✓
51)	RearSamp	71	P17988	FRNC1D	0601073-04-AFID
52)	Sample	21	P17989	FRNC1D	0601070-08 ✓
53)	RearSamp	72	P17990	FRNC1D	0601073-04D-AFID
54)	Sample	22	P17991	FRNC1D	0601070-09 ✓
55)	RearSamp	73	P17992	FRNC1D	C1020303-AFID PASS
56)	Sample	23	P17993	FRNC1D	0601070-09D ✓
57)	RearSamp	74	P17994	FRNC1D	DCM-AFID
58)	Sample	24	P17995	FRNC1D	C1020304 PASS
59)	RearSamp	75	P17996	FRNC1D	DCM-AFID
60)	Sample	25	P17997	FRNC1D	DCM

✓ Run [illegible].

pr H 2/6/06

QUALITY CONTROL RESULTS

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

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

Lab Code: **MA00030**
ETR: **0601073**
Lab ID: **SS013006B05**
Date Analyzed: **02/03/06 19:47**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS013006LCS03	02/04/06 00:33
LCSD	SS013006LCSD04	02/04/06 02:07
GC-SED-50 (2-5)	0601073-01	02/04/06 22:04
GC-SED-56 (5.8-6.2)	0601073-02	02/04/06 23:39
GC-SED-57 (7-9)	0601073-03	02/05/06 01:14
GC-SED-51 (0-1.5)	0601073-04	02/05/06 02:49
GC-SED-51 (0-1.5)	0601073-04 D	02/05/06 04:24

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

10/12/05

		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

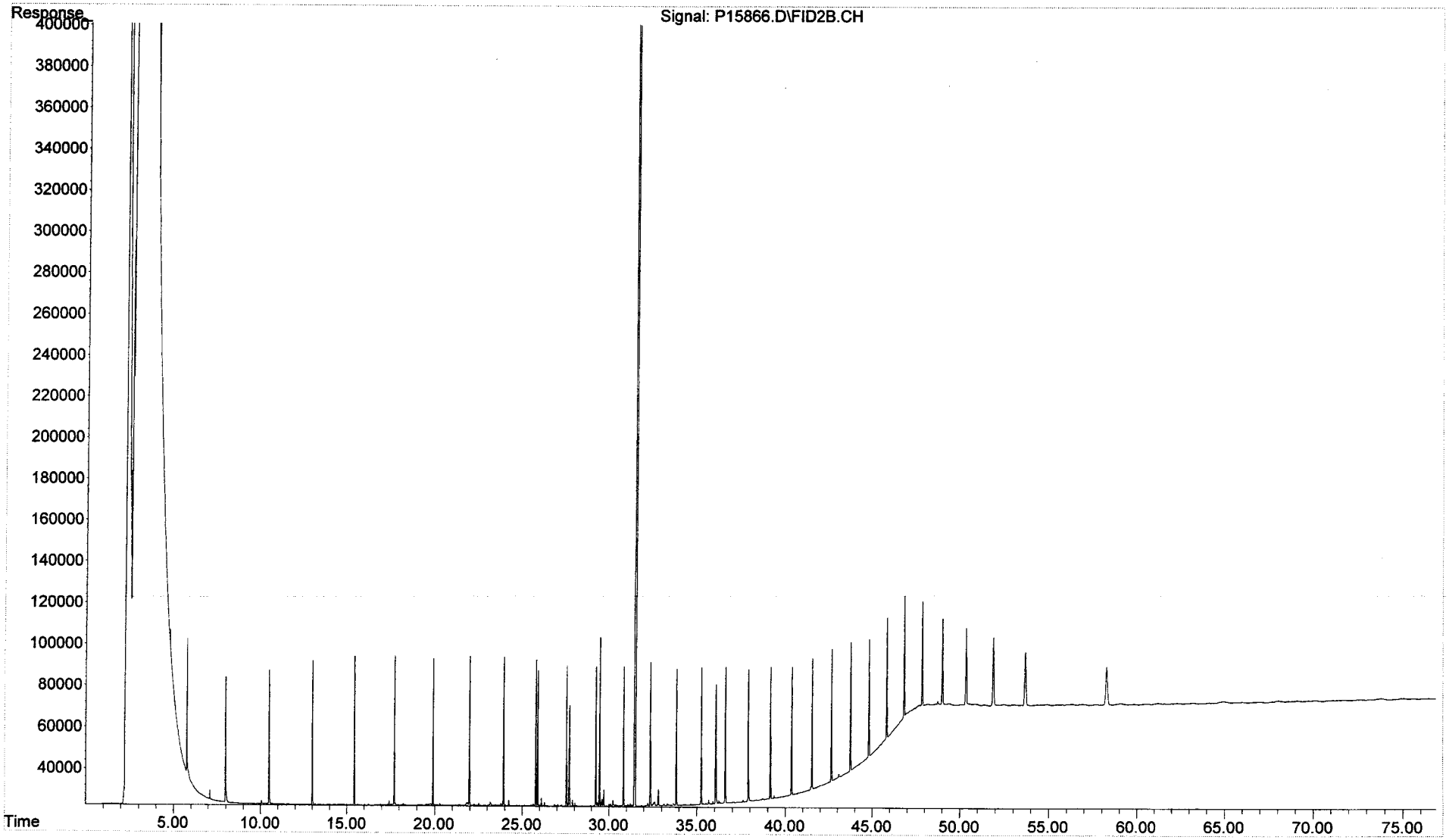
Integration File: SHCINT1.E
Quant Time: Oct 10 21:14:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:02:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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)

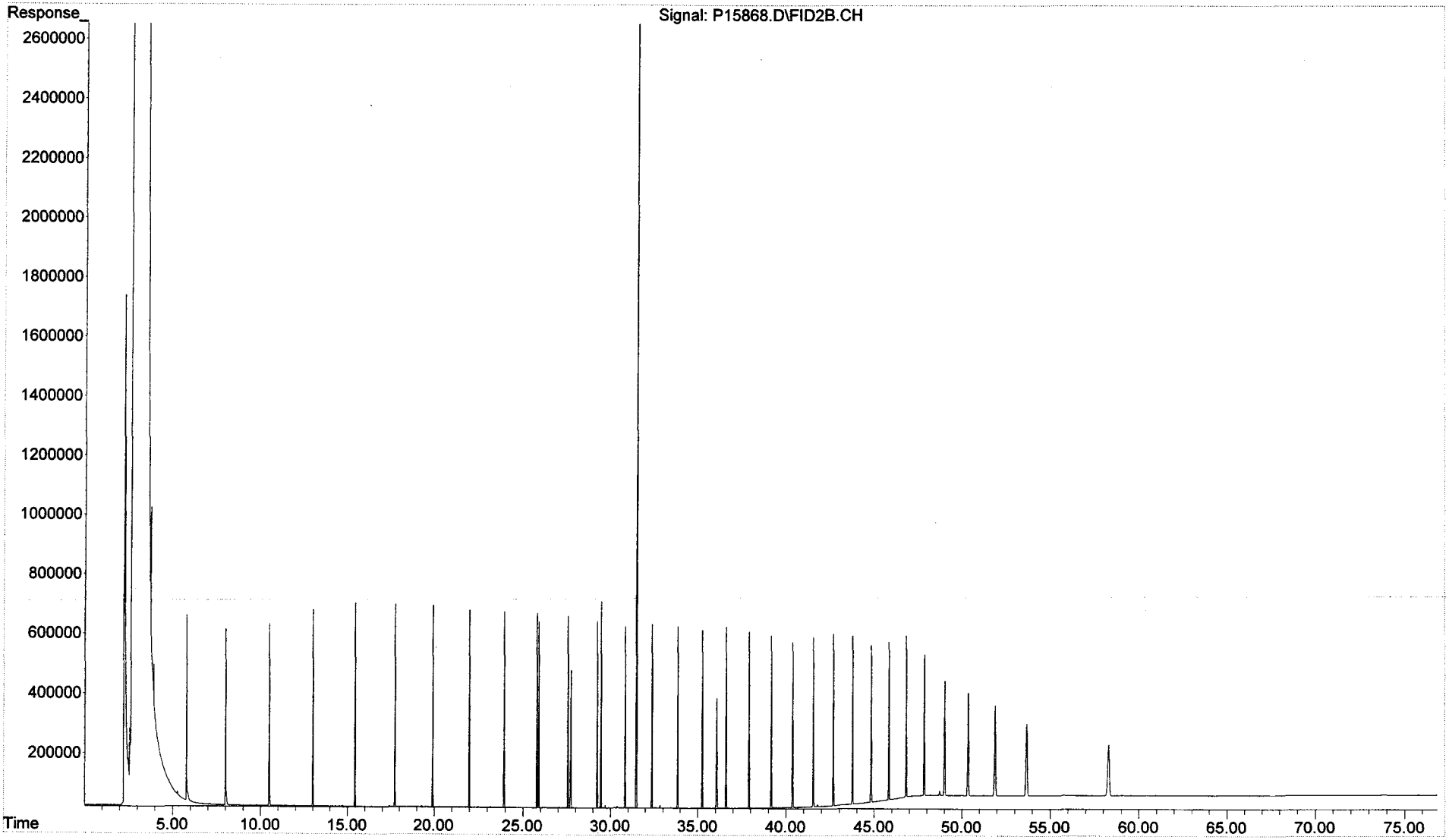
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15868.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 7:02 pm
Operator : AC
Sample : I1100502-AFID
Misc : WHAB30
ALS Vial : 55 Sample Multiplier: 1

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)

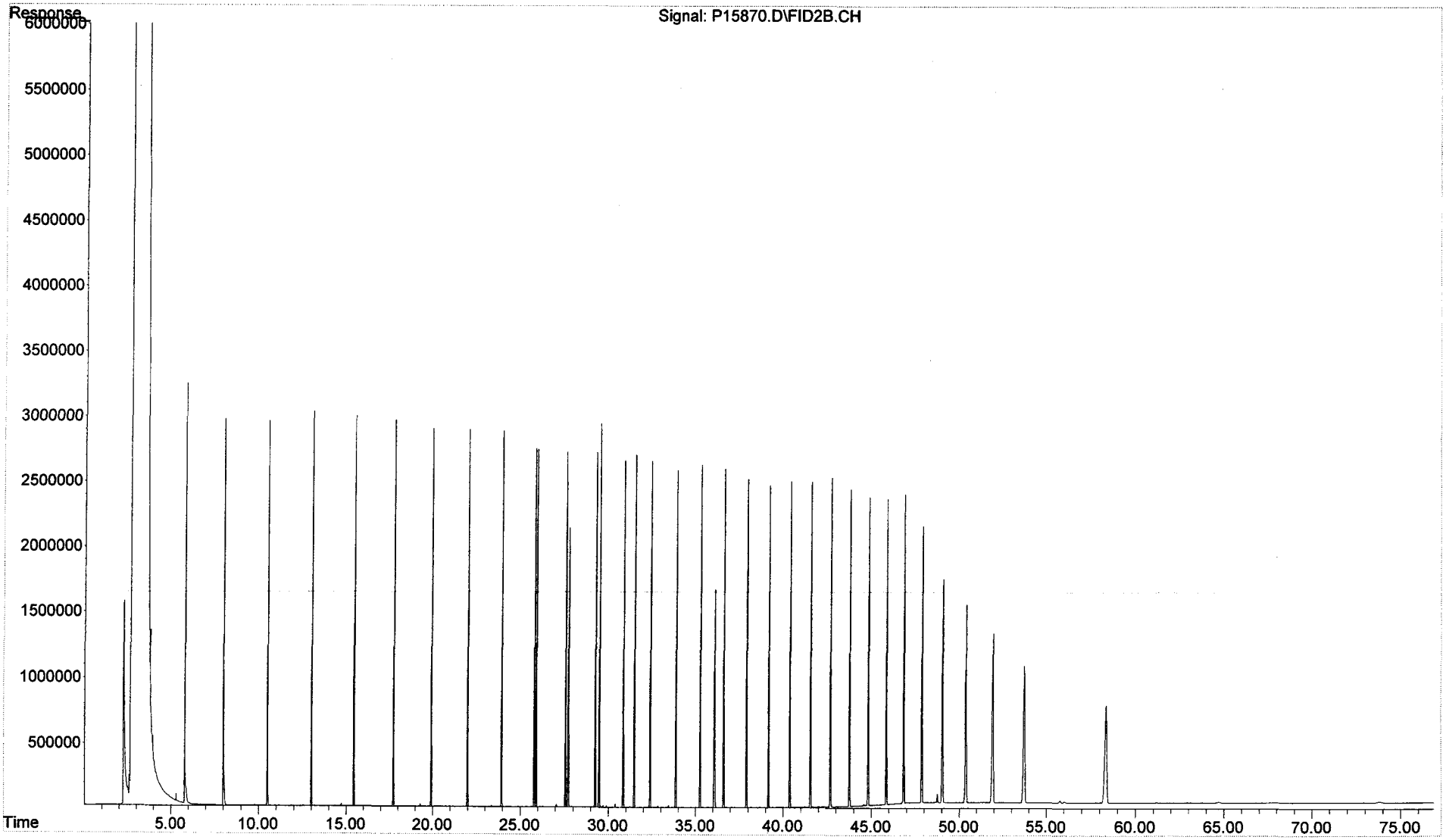
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15870.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 8:37 pm
Operator : AC
Sample : I1100503-AFID
Misc : WHAB31
ALS Vial : 56 Sample Multiplier: 1

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

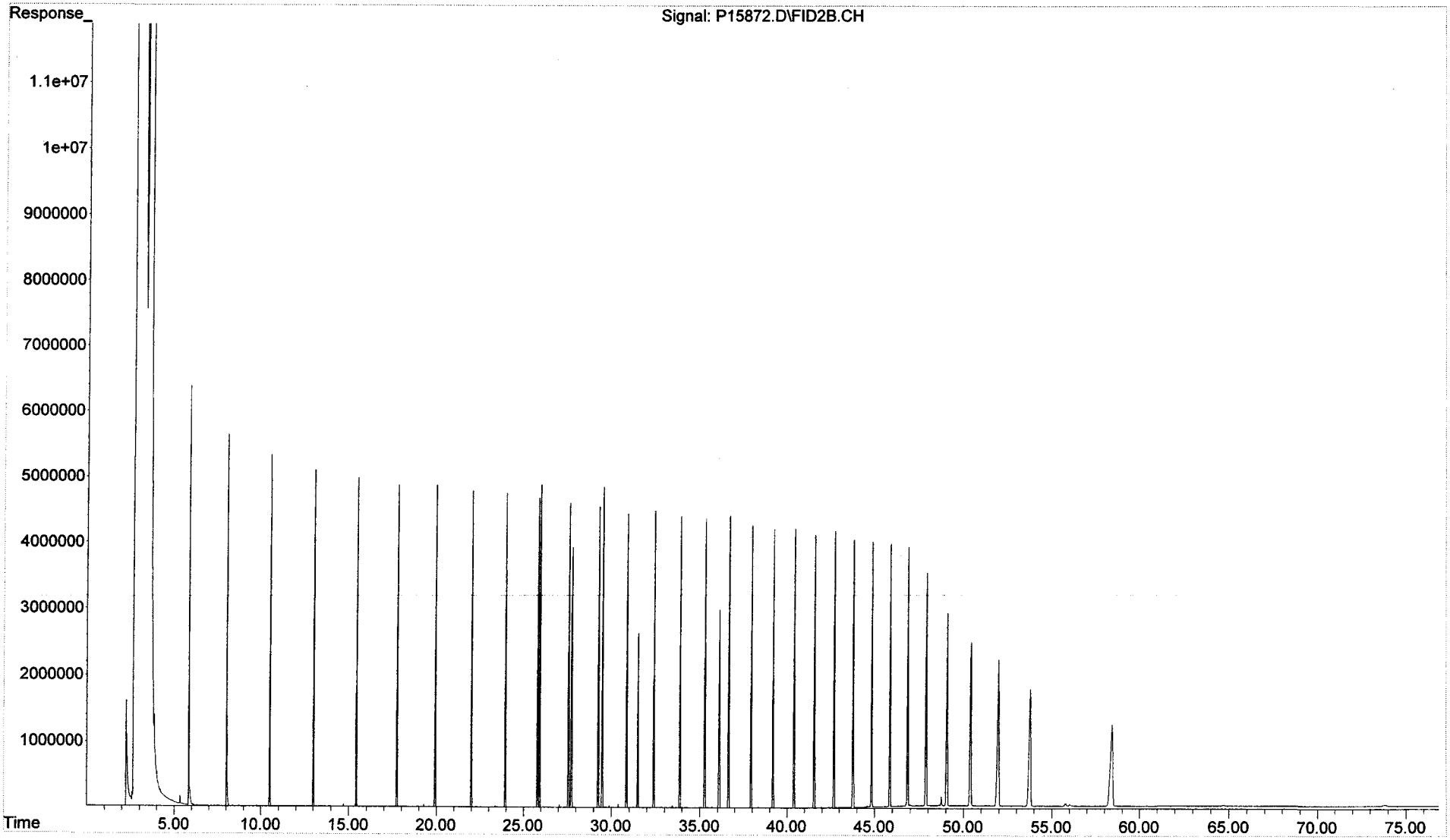
Integration File: SHCINT1.E
Quant Time: Oct 10 21:23:58 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:18:21 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

10/15/05

	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)

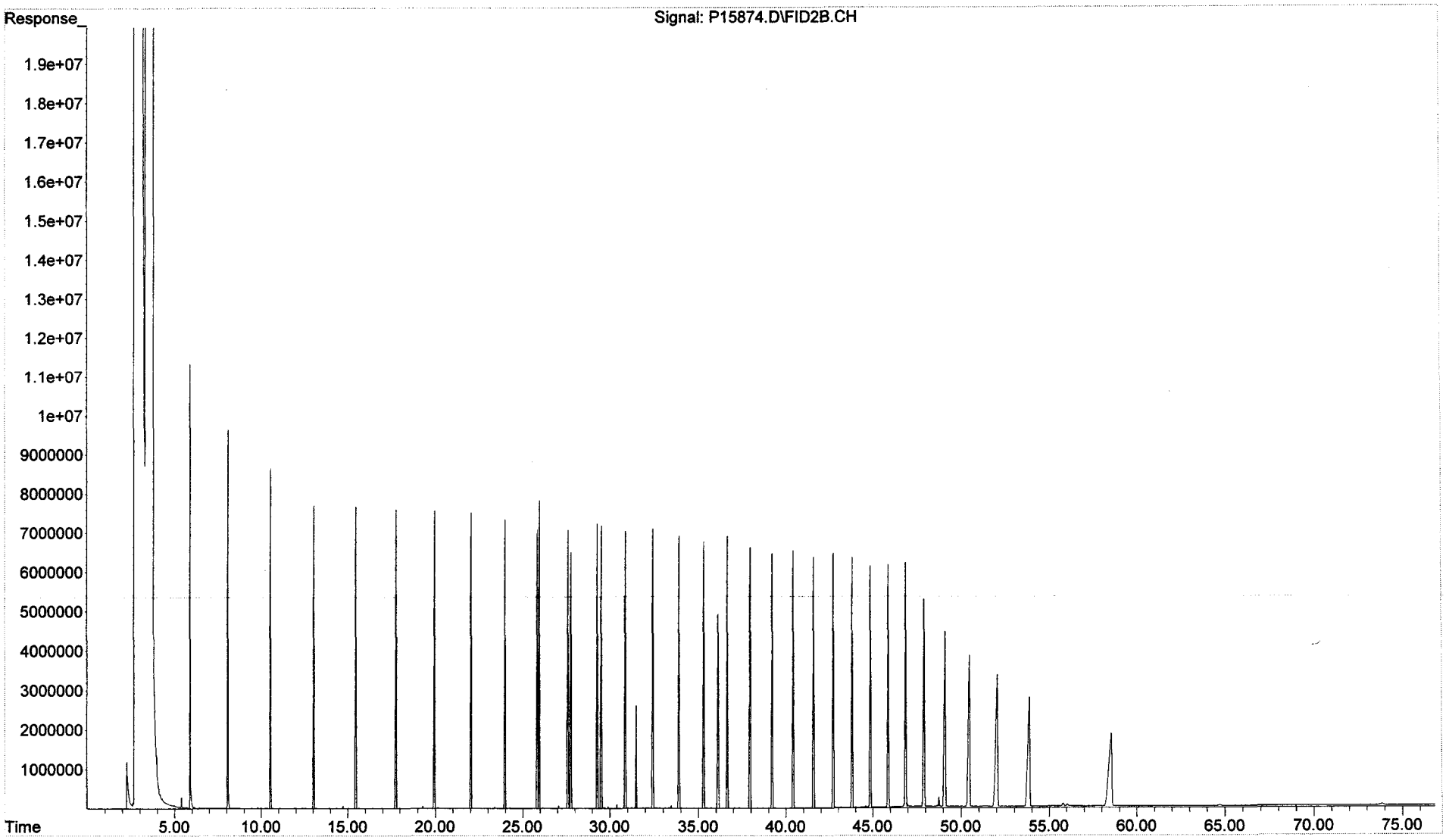
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15874.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 11:47 pm
Operator : AC
Sample : I1100505-AFID
Misc : WHAB33
ALS Vial : 58 Sample Multiplier: 1

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)

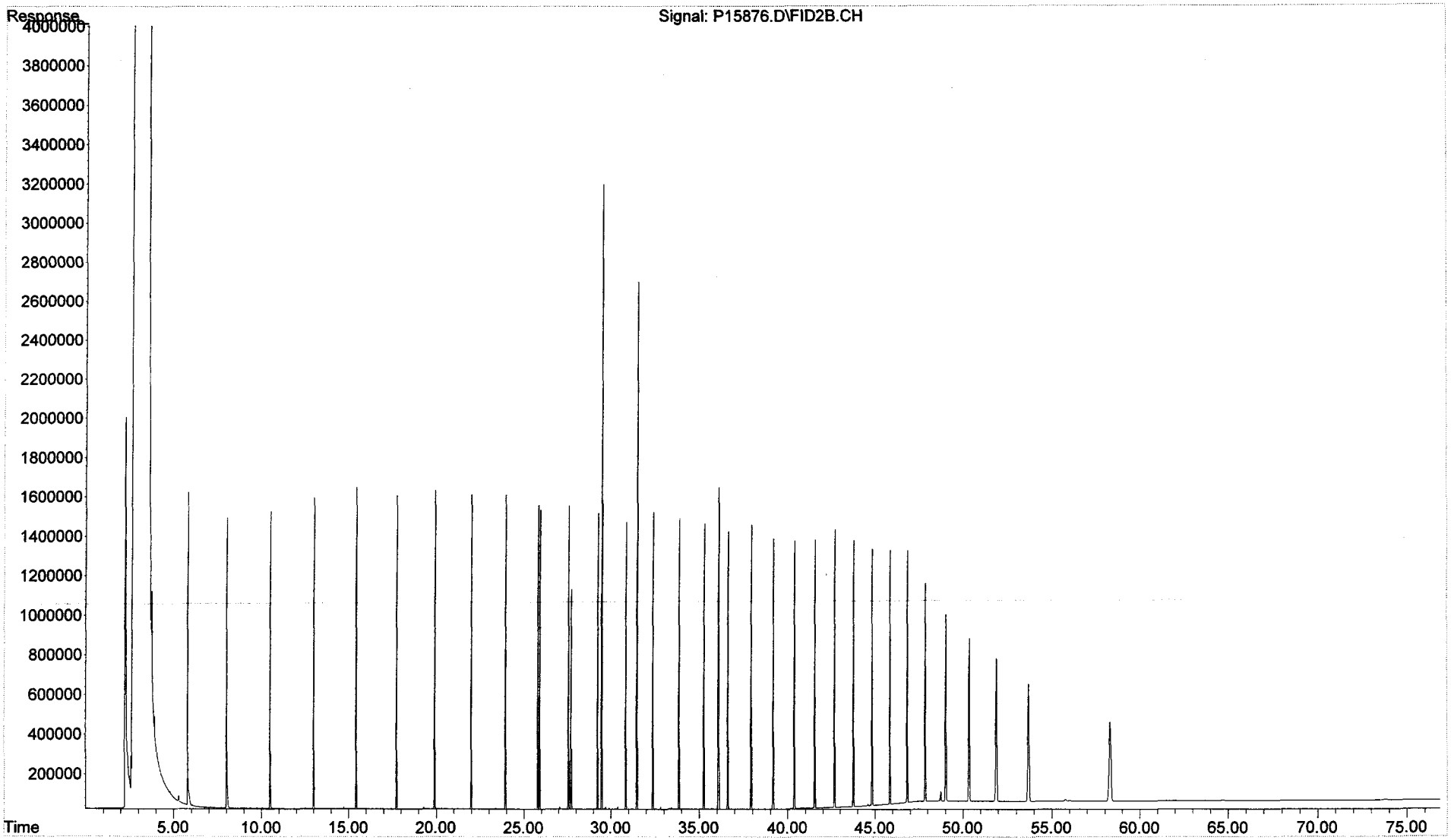
Data Path : C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\
Data File : P15876.D
Signal(s) : FID2B.CH
Acq On : 06 Oct 2005 1:20 am
Operator : AC
Sample : Q1100501-AFID
Misc : WHAB34
ALS Vial : 59 Sample Multiplier: 1

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 ev 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
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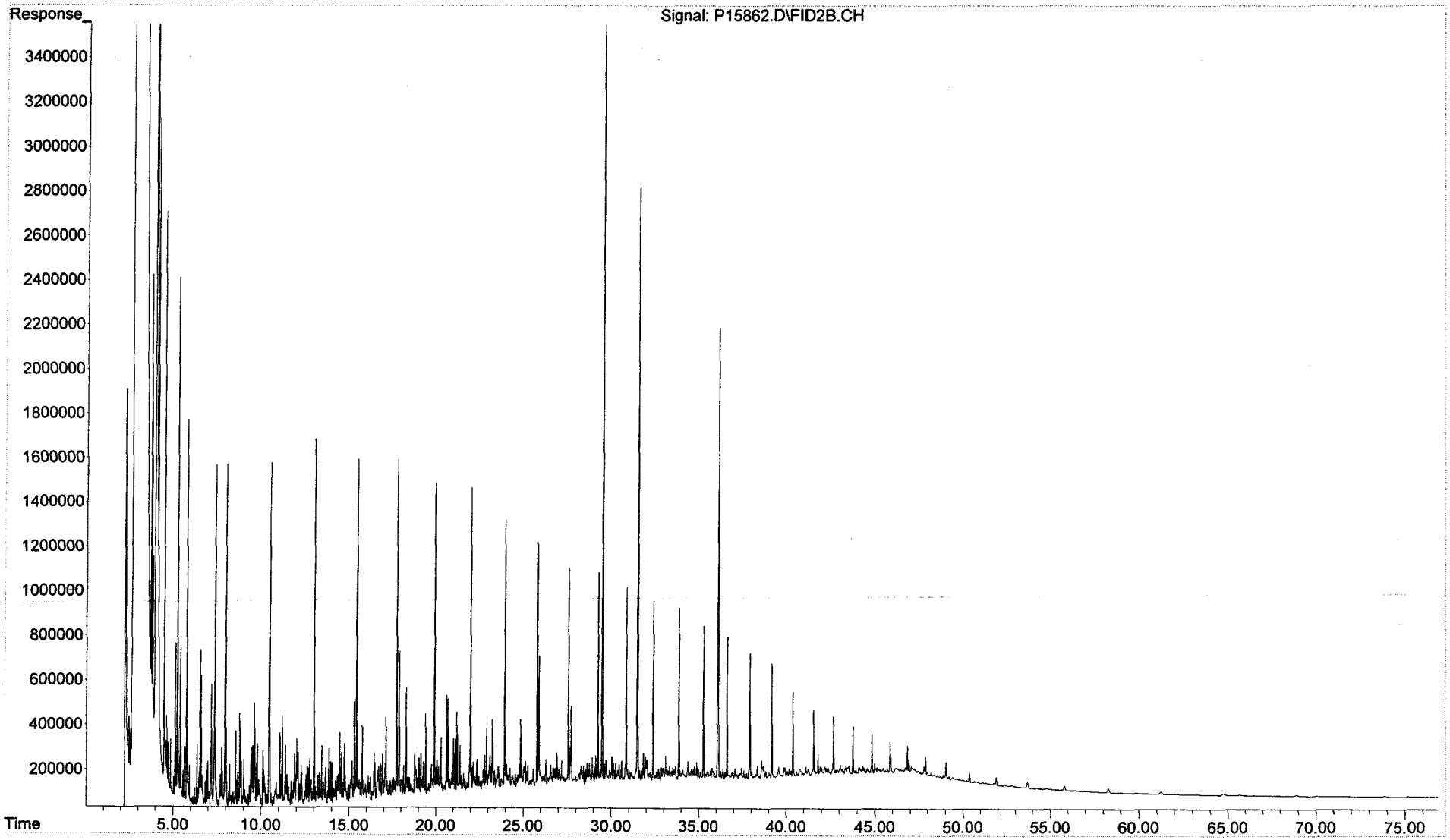


Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601073**
Lab ID: **C1020301**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.41	1.2	25
n-Decane (C10)	50.00	49.32	1.4	25
n-Undecane (C11)	50.00	48.98	2.0	25
n-Dodecane (C12)	50.00	49.35	1.3	25
n-Tridecane (C13)	50.00	49.14	1.7	25
n-Tetradecane (C14)	50.00	49.19	1.6	25
n-Pentadecane (C15)	50.00	48.97	2.1	25
n-Hexadecane (C16)	50.00	48.84	2.3	25
n-Heptadecane (C17)	50.00	48.92	2.2	25
Pristane	50.00	48.98	2.0	25
n-Octadecane (C18)	50.00	48.99	2.0	25
Phytane	50.00	49.37	1.3	25
n-Nonadecane (C19)	50.00	49.11	1.8	25
n-Eicosane (C20)	50.00	49.41	1.2	25
n-Heneicosane (C21)	50.00	48.99	2.0	25
n-Docosane (C22)	50.00	47.56	4.9	25
n-Tricosane (C23)	50.00	49.02	2.0	25
n-Tetracosane (C24)	50.00	48.30	3.4	25
n-Pentacosane (C25)	50.00	48.16	3.7	25
n-Hexacosane (C26)	50.00	49.65	0.7	25
n-Heptacosane (C27)	50.00	49.20	1.6	25
n-Octacosane (C28)	50.00	49.13	1.7	25
n-Nonacosane (C29)	50.00	49.11	1.8	25
n-Triacontane (C30)	50.00	49.24	1.5	25
n-Hentriacontane (C31)	50.00	51.74	3.5	25
n-Dotriacontane (C32)	50.00	49.17	1.7	25
n-Tritriacontane (C33)	50.00	49.67	0.7	25
n-Tetratriacontane (C34)	50.00	49.59	0.8	25
n-Pentatriacontane (C35)	50.00	49.82	0.4	25
n-Hexatriacontane (C36)	50.00	49.70	0.6	25
n-Heptatriacontane (C37)	50.00	47.68	4.6	25
n-Octatriacontane (C38)	50.00	49.82	0.4	25
n-Tetracontane (C40)	50.00	50.52	1.0	25
ortho-Terphenyl	50.00	48.67	2.7	25
d50-Tetracosane	50.00	45.51	9.0	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.04

N/A - Not Applicable

02/07/06 16:14

Quantitation Report (QT Reviewed)

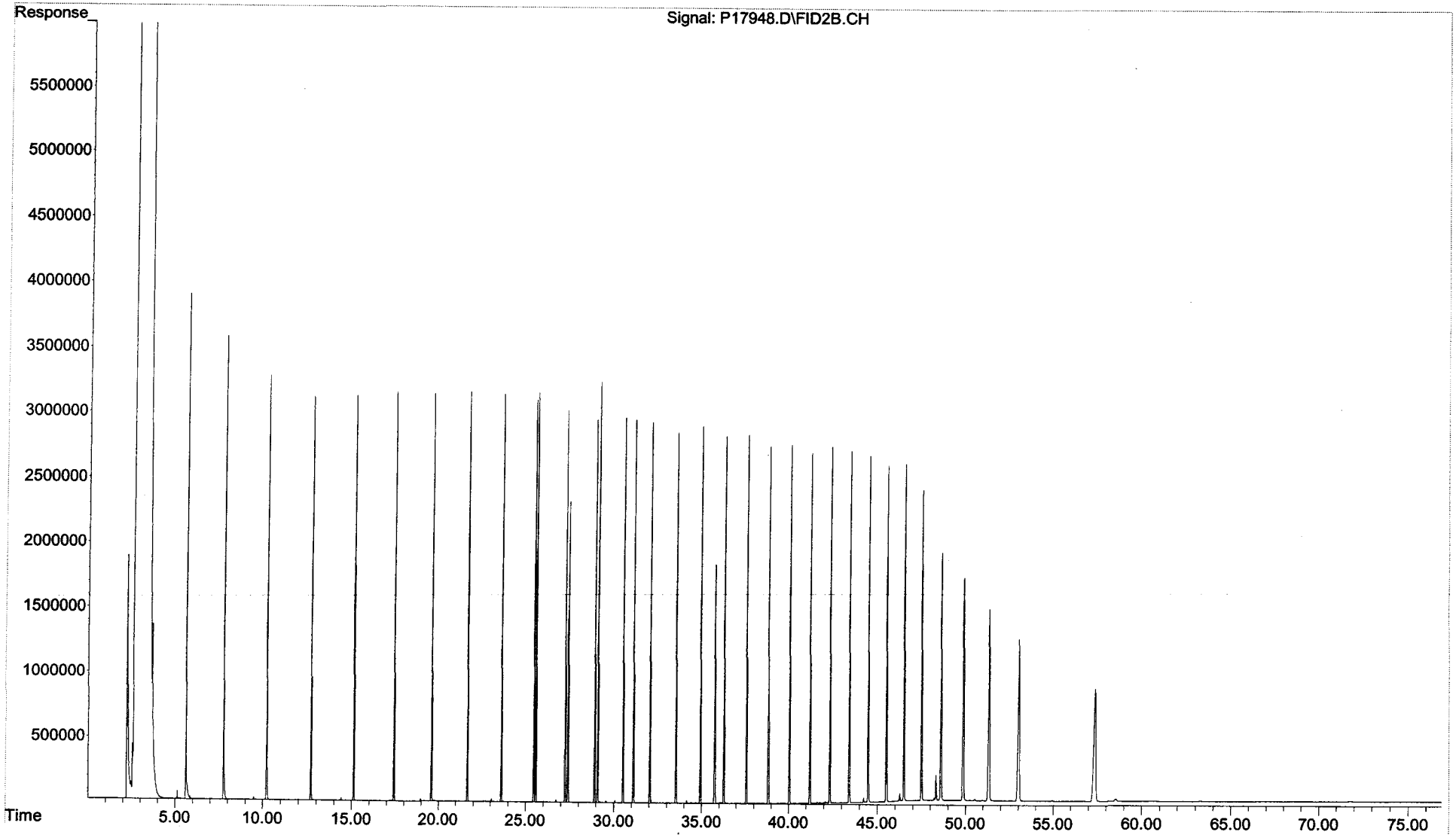
Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17948.D
Signal(s) : FID2B.CH
Acq On : 03 Feb 2006 2:55 pm
Operator : AC
Sample : C1020301-AFID
Misc : 1X
ALS Vial : 51 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 14:53:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 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	31.13	66419454	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.12	70067195	48.669 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	97.34%
24) s d50-Tetracosane	35.76	58725304	45.513 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	91.03%
Target Compounds			
2) t n-Octane (C8)	5.61	53655671	50.104 ug/mL
3) t n-Nonane (C9)	7.78	58343088	49.409 ug/mL
4) t n-Decane (C10)	10.23	59709869	49.324 ug/mLm
5) t n-Undecane (C11)	12.72	60040805	48.980 ug/mL
6) t n-Dodecane (C12)	15.14	61636715	49.348 ug/mLm
7) t n-Tridecane (C13)	17.44	62185038	49.142 ug/mLm
9) t n-Tetradecane (C14)	19.62	63255491	49.193 ug/mL
11) t n-Pentadecane (C15)	21.68	63756022	48.974 ug/mL
12) t n-Hexadecane (C16)	23.64	64182832	48.842 ug/mL
14) t n-Heptadecane (C17)	25.49	65087424	48.922 ug/mL
15) t Pristane	25.60	62251475	48.977 ug/mL
16) t n-Octadecane (C18)	27.25	65351838	48.989 ug/mL
17) t Phytane	27.42	65282246	49.366 ug/mL
18) t n-Nonadecane (C19)	28.94	65090362	49.106 ug/mLm
20) t n-Eicosane (C20)	30.54	65305155	49.413 ug/mLm
21) t n-Heneicosane (C21)	32.07	66807988	48.986 ug/mL
22) t n-Docosane (C22)	33.54	64049019	47.557 ug/mL
23) t n-Tricosane (C23)	34.95	66483404	49.025 ug/mL
25) t n-Tetracosane (C24)	36.30	66296702	48.296 ug/mL
26) t n-Pentacosane (C25)	37.60	66721075	48.165 ug/mLm
27) t n-Hexacosane (C26)	38.86	67174873	49.651 ug/mL
28) t n-Heptacosane (C27)	40.06	66326669	49.203 ug/mL
29) t n-Octacosane (C28)	41.23	67302025	49.135 ug/mL
30) t n-Nonacosane (C29)	42.36	68751602	49.113 ug/mL
31) t n-Triacontane (C30)	43.45	67591751	49.241 ug/mLm
32) t n-Hentriacontane (C31)	44.51	68717069	51.737 ug/mL
33) t n-Dotriacontane (C32)	45.53	65878844	49.167 ug/mLm
34) t n-Tritriacontane (C33)	46.52	67254709	49.665 ug/mLm
35) t n-tetratriacontane (C34)	47.52	68213162	49.590 ug/mLm
36) t n-Pentatriacontane (C35)	48.62	65912273	49.816 ug/mL
37) t n-Hexatriacontane (C36)	49.89	67738256	49.700 ug/mL
38) t n-Heptatriacontane (C37)	51.35	69748331	47.685 ug/mLm
39) t n-Octatriacontane (C38)	53.05	68529036	49.821 ug/mLm
41) t n-Tetracontane (C40)	57.38	68937765	50.522 ug/mLm

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17948.D
Operator : AC
Acquired : 03 Feb 2006 2:55 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1020301-AFID
Misc Info : 1X
Vial Number: 51



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601073**
Lab ID: **C1020302**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.49	1.0	25
n-Decane (C10)	50.00	49.10	1.8	25
n-Undecane (C11)	50.00	48.89	2.2	25
n-Dodecane (C12)	50.00	49.26	1.5	25
n-Tridecane (C13)	50.00	49.16	1.7	25
n-Tetradecane (C14)	50.00	49.15	1.7	25
n-Pentadecane (C15)	50.00	48.93	2.1	25
n-Hexadecane (C16)	50.00	48.82	2.4	25
n-Heptadecane (C17)	50.00	48.93	2.1	25
Pristane	50.00	49.01	2.0	25
n-Octadecane (C18)	50.00	49.03	1.9	25
Phytane	50.00	49.41	1.2	25
n-Nonadecane (C19)	50.00	49.15	1.7	25
n-Eicosane (C20)	50.00	49.52	1.0	25
n-Heneicosane (C21)	50.00	49.10	1.8	25
n-Docosane (C22)	50.00	47.67	4.7	25
n-Tricosane (C23)	50.00	49.24	1.5	25
n-Tetracosane (C24)	50.00	48.46	3.1	25
n-Pentacosane (C25)	50.00	48.37	3.3	25
n-Hexacosane (C26)	50.00	49.87	0.3	25
n-Heptacosane (C27)	50.00	49.47	1.1	25
n-Octacosane (C28)	50.00	49.38	1.2	25
n-Nonacosane (C29)	50.00	49.34	1.3	25
n-Triacontane (C30)	50.00	49.52	1.0	25
n-Hentriacontane (C31)	50.00	51.91	3.8	25
n-Dotriacontane (C32)	50.00	49.47	1.1	25
n-Tritriacontane (C33)	50.00	50.09	0.2	25
n-Tetratriacontane (C34)	50.00	50.03	0.1	25
n-Pentatriacontane (C35)	50.00	50.11	0.2	25
n-Hexatriacontane (C36)	50.00	49.95	0.1	25
n-Heptatriacontane (C37)	50.00	47.96	4.1	25
n-Octatriacontane (C38)	50.00	50.07	0.1	25
n-Tetracontane (C40)	50.00	50.76	1.5	25
ortho-Terphenyl	50.00	48.67	2.7	25
d50-Tetracosane	50.00	45.73	8.5	25

Area Response Ratio C30 to C20	**Ratio**
(Area C30/Area C20)	1.04

N/A - Not Applicable

02/07/06 16:15

Quantitation Report (QT Reviewed)

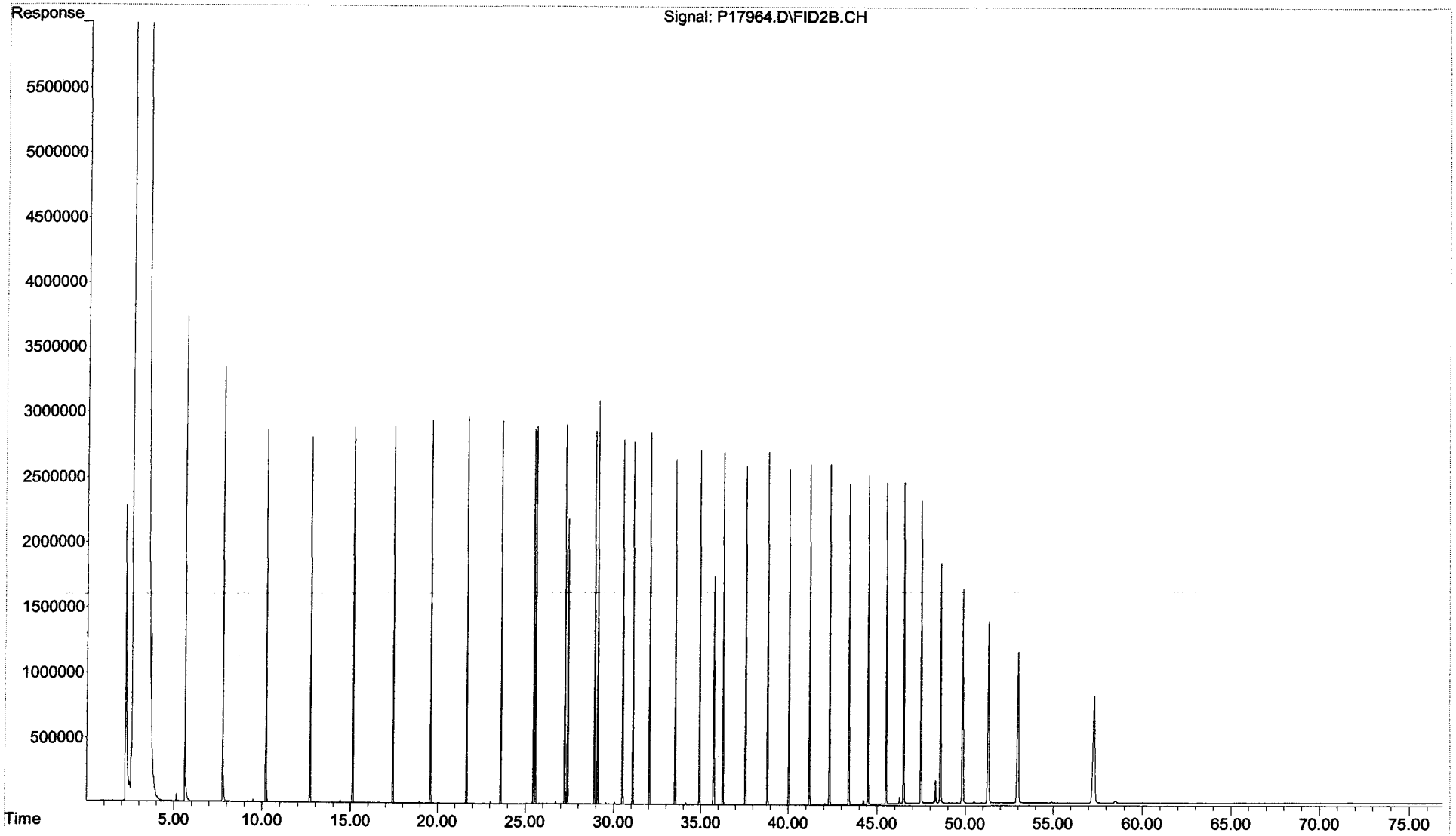
Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17964.D
Signal(s) : FID2B.CH
Acq On : 04 Feb 2006 3:40 am
Operator : AC
Sample : C1020302-AFID
Misc : ALK STD
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 14:56:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 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	31.12	61511669	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	64894626	48.673 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	97.35%
24) s d50-Tetracosane	35.75	54640388	45.726 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	91.45%
Target Compounds			
2) t n-Octane (C8)	5.62	50716562	51.138 ug/mL
3) t n-Nonane (C9)	7.78	54120142	49.489 ug/mL
4) t n-Decane (C10)	10.23	55043102	49.096 ug/mLm
5) t n-Undecane (C11)	12.72	55501565	48.890 ug/mL
6) t n-Dodecane (C12)	15.14	56983335	49.262 ug/mL
7) t n-Tridecane (C13)	17.44	57605117	49.155 ug/mL
9) t n-Tetradecane (C14)	19.61	58535860	49.155 ug/mL
11) t n-Pentadecane (C15)	21.68	58989286	48.928 ug/mL
12) t n-Hexadecane (C16)	23.63	59407703	48.816 ug/mL
14) t n-Heptadecane (C17)	25.48	60284514	48.927 ug/mL
15) t Pristane	25.59	57691670	49.011 ug/mL
16) t n-Octadecane (C18)	27.25	60571491	49.028 ug/mL
17) t Phytane	27.41	60510942	49.408 ug/mL
18) t n-Nonadecane (C19)	28.93	60332806	49.148 ug/mLm
20) t n-Eicosane (C20)	30.53	60606023	49.516 ug/mL
21) t n-Heneicosane (C21)	32.06	62012791	49.098 ug/mL
22) t n-Docosane (C22)	33.53	59459104	47.671 ug/mL
23) t n-Tricosane (C23)	34.94	61835083	49.235 ug/mL
25) t n-Tetracosane (C24)	36.29	61607307	48.461 ug/mL
26) t n-Pentacosane (C25)	37.59	62052666	48.369 ug/mL
27) t n-Hexacosane (C26)	38.84	62488558	49.873 ug/mL
28) t n-Heptacosane (C27)	40.05	61753764	49.466 ug/mL
29) t n-Octacosane (C28)	41.22	62643273	49.383 ug/mL
30) t n-Nonacosane (C29)	42.35	63970537	49.343 ug/mL
31) t n-Triacontane (C30)	43.44	62948687	49.517 ug/mL
32) t n-Hentriacontane (C31)	44.49	63850368	51.908 ug/mL
33) t n-Dotriacontane (C32)	45.51	61387387	49.470 ug/mL
34) t n-Tritriacontane (C33)	46.51	62816955	50.089 ug/mL
35) t n-tetratriacontane (C34)	47.50	63734094	50.031 ug/mL
36) t n-Pentatriacontane (C35)	48.61	61396232	50.105 ug/mL
37) t n-Hexatriacontane (C36)	49.87	63053647	49.954 ug/mLm
38) t n-Heptatriacontane (C37)	51.32	64973036	47.964 ug/mL
39) t n-Octatriacontane (C38)	53.02	63786080	50.073 ug/mLm
41) t n-Tetracontane (C40)	57.33	64146853	50.762 ug/mLm

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17964.D
Operator : AC
Acquired : 04 Feb 2006 3:40 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1020302-AFID
Misc Info : ALK STD
Vial Number: 59



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0601073**
Lab ID: **C1020303**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.37	1.3	25
n-Decane (C10)	50.00	49.05	1.9	25
n-Undecane (C11)	50.00	48.84	2.3	25
n-Dodecane (C12)	50.00	49.29	1.4	25
n-Tridecane (C13)	50.00	49.15	1.7	25
n-Tetradecane (C14)	50.00	49.15	1.7	25
n-Pentadecane (C15)	50.00	48.91	2.2	25
n-Hexadecane (C16)	50.00	48.76	2.5	25
n-Heptadecane (C17)	50.00	48.82	2.4	25
Pristane	50.00	48.90	2.2	25
n-Octadecane (C18)	50.00	48.93	2.1	25
Phytane	50.00	49.29	1.4	25
n-Nonadecane (C19)	50.00	49.05	1.9	25
n-Eicosane (C20)	50.00	49.41	1.2	25
n-Heneicosane (C21)	50.00	49.00	2.0	25
n-Docosane (C22)	50.00	49.96	0.1	25
n-Tricosane (C23)	50.00	49.05	1.9	25
n-Tetracosane (C24)	50.00	48.36	3.3	25
n-Pentacosane (C25)	50.00	48.26	3.5	25
n-Hexacosane (C26)	50.00	49.74	0.5	25
n-Heptacosane (C27)	50.00	49.31	1.4	25
n-Octacosane (C28)	50.00	49.24	1.5	25
n-Nonacosane (C29)	50.00	49.25	1.5	25
n-Triacontane (C30)	50.00	49.39	1.2	25
n-Hentriacontane (C31)	50.00	51.86	3.7	25
n-Dotriacontane (C32)	50.00	49.25	1.5	25
n-Tritriacontane (C33)	50.00	49.82	0.4	25
n-Tetratriacontane (C34)	50.00	49.54	0.9	25
n-Pentatriacontane (C35)	50.00	49.75	0.5	25
n-Hexatriacontane (C36)	50.00	49.61	0.8	25
n-Heptatriacontane (C37)	50.00	47.58	4.8	25
n-Octatriacontane (C38)	50.00	49.66	0.7	25
n-Tetracontane (C40)	50.00	50.25	0.5	25
ortho-Terphenyl	50.00	48.66	2.7	25
d50-Tetracosane	50.00	45.64	8.7	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.04

N/A - Not Applicable

02/07/06 16:15

Quantitation Report (QT Reviewed)

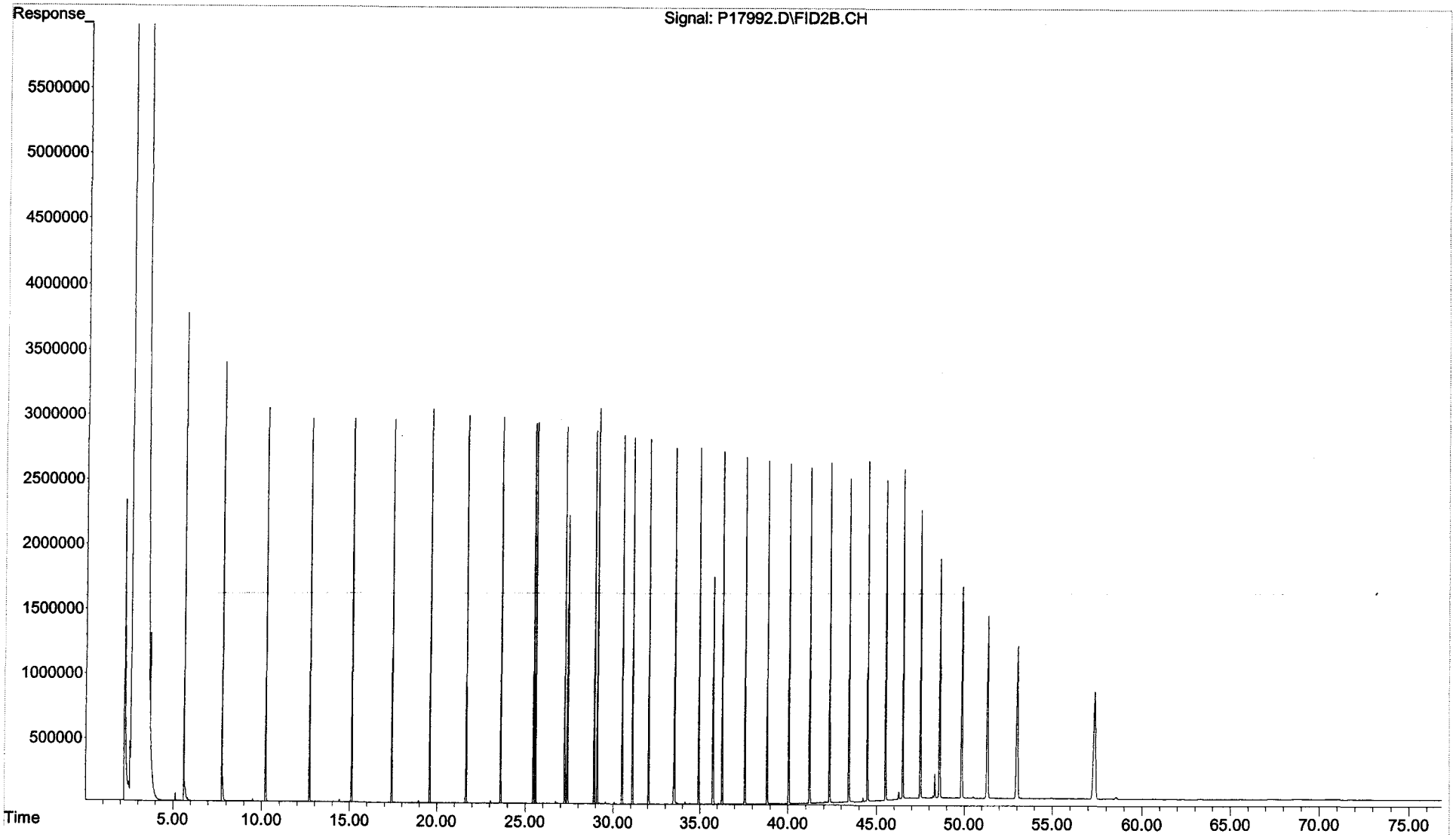
Data Path : O:\Forensics\Data\PAH1\February06\FEB03.SEC\
Data File : P17992.D
Signal(s) : FID2B.CH
Acq On : 05 Feb 2006 5:59 am
Operator : AC
Sample : C1020303-AFID
Misc : ALK STD
ALS Vial : 73 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 07 15:01:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 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	31.13	62388766	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.11	65808440	48.664 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	97.33%
24) s	d50-Tetracosane	35.76	55320687	45.644 ug/mL
Spiked Amount	50.000	Range 50 - 130	Recovery =	91.29%
Target Compounds				
2) t	n-Octane (C8)	5.62	51169035	50.869 ug/mL
3) t	n-Nonane (C9)	7.78	54762245	49.372 ug/mL
4) t	n-Decane (C10)	10.23	55779530	49.054 ug/mLm
5) t	n-Undecane (C11)	12.72	56230280	48.835 ug/mL
6) t	n-Dodecane (C12)	15.14	57834124	49.295 ug/mLm
7) t	n-Tridecane (C13)	17.44	58418801	49.149 ug/mL
9) t	n-Tetradecane (C14)	19.62	59367329	49.152 ug/mL
11) t	n-Pentadecane (C15)	21.68	59811470	48.912 ug/mL
12) t	n-Hexadecane (C16)	23.63	60188885	48.762 ug/mL
14) t	n-Heptadecane (C17)	25.49	61014096	48.823 ug/mL
15) t	Pristane	25.60	58378295	48.897 ug/mL
16) t	n-Octadecane (C18)	27.25	61310421	48.929 ug/mL
17) t	Phytane	27.42	61231635	49.294 ug/mL
18) t	n-Nonadecane (C19)	28.93	61067891	49.048 ug/mLm
20) t	n-Eicosane (C20)	30.54	61336973	49.409 ug/mL
21) t	n-Heneicosane (C21)	32.07	62768221	48.997 ug/mL
22) t	n-Docosane (C22)	33.54	63199192	49.958 ug/mLm
23) t	n-Tricosane (C23)	34.95	62475615	49.046 ug/mL
25) t	n-Tetracosane (C24)	36.30	62355224	48.360 ug/mL
26) t	n-Pentacosane (C25)	37.60	62794879	48.259 ug/mL
27) t	n-Hexacosane (C26)	38.86	63212355	49.741 ug/mL
28) t	n-Heptacosane (C27)	40.06	62434348	49.308 ug/mL
29) t	n-Octacosane (C28)	41.23	63349258	49.237 ug/mL
30) t	n-Nonacosane (C29)	42.36	64764820	49.254 ug/mL
31) t	n-Triacontane (C30)	43.45	63686546	49.393 ug/mLm
32) t	n-Hentriacontane (C31)	44.51	64700373	51.860 ug/mL
33) t	n-Dotriacontane (C32)	45.53	61981467	49.247 ug/mLm
34) t	n-Tritriacontane (C33)	46.52	63371008	49.821 ug/mLm
35) t	n-tetratriacontane (C34)	47.52	64006062	49.538 ug/mLm
36) t	n-Pentatriacontane (C35)	48.63	61835038	49.754 ug/mLm
37) t	n-Hexatriacontane (C36)	49.89	63510742	49.609 ug/mLm
38) t	n-Heptatriacontane (C37)	51.35	65370795	47.579 ug/mLm
39) t	n-Octatriacontane (C38)	53.05	64157389	49.656 ug/mLm
41) t	n-Tetracontane (C40)	57.39	64406876	50.251 ug/mLm

File :O:\Forensics\Data\PAH1\February06\FEB03.SEC\P17992.D
Operator : AC
Acquired : 05 Feb 2006 5:59 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1020303-AFID
Misc Info : ALK STD
Vial Number: 73



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 1 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0601073

Sample ID	Date	Time	Matrix	Environmental Forensics (Includes Lead-210, Cesium 137, EPA 8015 Modified GC/FID Hydrocarbon Fingerprint, 8270 Modified GC/MS/SIM Extended PAH and Biomarkers)
GC-SED-50 (2-5) -1	1/26/2006	16:00	Sediment	☑
GC-SED-56 (5.8-6.2) -2	1/26/2006	16:30	Sediment	☑
GC-SED-57 (7-9) -3	1/26/2006	11:20	Sediment	☑
GC-SED-51 (0-1.5) -4	1/26/2006	12:25	Sediment	☑

Possible Hazard Identification	Turn Around Time Required (other than standard):			
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☒ Unknown	QC Requirements:			
	Date	Time	Date	Time
1. Relinquished by: Melissa Fetter	1/26/06	1730	1. Received by: FED Ex	
2. Relinquished by: FED Ex	1/27/06	0905	2. Received by:	1/27/06 0905
3. Relinquished by:			3. Received by:	

COMMENTS FedEx 8544 0600 2986

ORIGINAL

Page 29 of 29

Sample Receipt Checklist

Client: NEWFIE	**Receipt Date:** 1/27/06		
Project: GOWANUS Canal	**Log-in Date:**		
ETR #: 06001073	**Inspection by:**	**Login by:**	

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

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

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

Number of coolers received for this project delivery: 1

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

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

Cooler 1:
Temperature(s) taken from: 6° IR Gun, _____ Temp. Blank, / NA

Were samples received on ice? (Yes) / No

Chain-of-Custody present? (Yes) / No
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)
Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / (No) If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / (NA)

Project Manager Acknowledgement: EMP Date: 1/27/06

Sample storage refrigerator #: C1

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?
Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

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

te 1-26-06 FedEx Tracking Number 854406002986

nder's me Melissa Felter

Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST

BROOKLYN

Dept./Floor/Suite/Room

State NY ZIP 11231

ur Internal Billing Reference 982482-34-4403