ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0602017
Report Date:	February 22, 2006

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

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

Sample ID Cross Reference

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

Lab Code: **MA00030**
ETR: **0602017**

Lab Sample ID	Client Sample ID
0602017-01	CGMW-07I
0602017-02	CGMW-08I

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

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: 0602017
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).* Product samples were weighed (approximately 0.1g) eluted to a 10mL final volume for the PAH/FID sample. A 0.5mL portion is spiked with surrogate compounds is alumina cleaned (*Alumina Column Cleanup of Organic Extracts, Revision 0.0, 02/21/1999*) and again concentrated to a 1mL volume. A post alumina gravimetric weight is determined and the final effective volume is 21mLs. Another portion was weighed (approximately 0.25g) and eluted to 10mLs. 2mLs of this extract to equal approximately 50mg is silica fractionated for Biomarker analysis and again concentrated to a 1mL volume. A post silica gravimetric weight is determined and the final effective volume is 5.25mLs. 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 product method blank SO020906B23 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. Both 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: 2/22/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
02/09/2006 0602017 - OP SHC

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
0602017-01	D	3580	DMP	2/9/06	2/13/06		0.104	21	False				0.15	KLA	2/13/06	
0602017-01	SAM	3580	DMP	2/9/06	2/13/06		0.1038	21	False				0.15	KLA	2/13/06	
0602017-02	SAM	3580	DMP	2/9/06	2/13/06		0.1093	21	False				0.15	KLA	2/13/06	
SO020906B23	B	3580	DMP	2/9/06	2/13/06		0.1	4	False				0.15	KLA	2/13/06	
SO020906LCS17	LCS	3580	DMP	2/9/06	2/13/06		0.1	4	False				0.15	KLA	2/13/06	
SO020906LCSD15	LCSD	3580	DMP	2/9/06	2/13/06		0.1	4	False				0.15	KLA	2/13/06	

Alpha Woods Hole Lab
Batch Prep Report
02/09/2006 0602017 - OP SHC

Lab ID	Notes
0602017-01	1st Prep: WASTE DILUTION METHOD USED
0602017-01	1st Prep
0602017-02	1st Prep
SO020906B23	1st Prep
SO020906LCS17	1st Prep
SO020906LCSD15	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
02/09/2006

Lab ID	QC Type	0602017 - Sample
0602017-01	D	0.104
0602017-01	SAM	0.1038
0602017-02	SAM	0.1093
SO020906B23	B	0.1
SO020906LCS17LCSOP NEWFIE		0.1
SO020906LCS17LCSOP SHC		0.1
SO020906LCS17LCSOP Steranes/Triterpanes		0.1
SO020906LCSD15LCSDOP NEWFIE		0.1
SO020906LCSD15LCSDOP SHC		0.1
SO020906LCSD15LCSDOP Steranes/Triterpanes		0.1

PAH/SHC

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

02/09/2006 0602017 - OP NEWFIE Analyst: KLA Witness: RPR

Lab ID	QC Type	OP NEWFIE - surr	Vol OP NEWFIE - surr	Units OP NEWFIE - surr	OP NEWFIE - spk 1	Vol OP NEWFIE - spk 1	Units OP NEWFIE - spk 1	OP NEWFIE - spk 2	Vol OP NEWFIE - spk 2	Units OP NEWFIE - spk 2
0602017-01	D	WHAB63	100	µl				WHAB14	200	µl
0602017-01	SAM	WHAB63	100	µl				WHAB14	200	µl
0602017-02	SAM	WHAB63	100	µl				WHAB14	200	µl
SO020906B23	B	WHAB63	100	µl				WHAB14	200	µl
SO020906LCS17	LCS	WHAB63	100	µl	WHAC14	100	µl	WHAB14	200	µl
SO020906LCSD15	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: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other

ID# WHAC14

Conc. 10ug/ml 500ug/ml

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other Low

ID# WHAB14

Conc. 10ug/ml

Alpha Woods Hole Lab
Batch Clean Up Report
02/09/2006 0602017 - OP SHC

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
0602017-01	D	3610	KLA	2/10/06				KLA	2/10/06	False	10	0.5	0	0.15
0602017-01	SAM	3610	KLA	2/10/06				KLA	2/10/06	False	10	0.5	0	0.15
0602017-02	SAM	3610	KLA	2/10/06				KLA	2/10/06	False	10	0.5	0	0.15
SO020906B23	B	3610	KLA	2/10/06				KLA	2/10/06	False	2	0.5	0	0.15
SO020906LCS17	LCS	3610	KLA	2/10/06				KLA	2/10/06	False	2	0.5	0	0.15
SO020906LCSD15	LCSD	3610	KLA	2/10/06				KLA	2/10/06	False	2	0.5	0	0.15

Alpha Woods Hole Lab
Batch Clean Up Report
02/09/2006 0602017 - OP SHC

Lab ID	Notes
0602017-01	
0602017-01	
0602017-02	
SO020906B23	
SO020906LCS17	
SO020906LCSD15	

Post-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 2/13/06

BATCH: 0602017

Entered by: KLA
Verified by: KLA

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	1000	50	NA	0.249	NA	NA	NA	NA	NA	100%
0602017	1	D	1000	50	NA	0.164	NA	3.28	950	3.12	1.05	1%
0602017	1		1000	50	NA	0.165	NA	3.30	950	3.14	1.05	
0602017	2		1000	50	NA	0.188	NA	3.76	950	3.58	1.05	

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

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

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

Alpha Woods Hole Laboratories Raynham, MA

0602017.xls

Post-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 2/13/06

BATCH: 0602017

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 Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%RPD)
		LCS	1000	50	NA	0.249	NA	NA	NA	NA	NA	0%
0602017	1	D	1000	50		0.164						#VALUE!
0602017	1		1000	50		0.165						
0602017	2		1000	50		0.188						

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 ALK. PAH / SHC
ETR: 0602017

Lab ID	Extract Vol (uL)	Standard Q and Vials	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot Removed (uL)	Aliquot Removed (uL)	Date
0602017-01DUP	900	WHAC 12 3OF5	100	1000	21	KLA	150	150	2/13/06
0602017-01	900	WHAC 12 3OF5	100	1000	21	KLA	150	150	2/13/06
0602017-02	900	WHAC 12 3OF5	100	1000	21	KLA	150	150	2/13/06
SO020906-B23	900	WHAC 12 3OF5	100	1000	4	KLA	150	150	2/13/06
SO020906-LCS17	900	WHAC 12 3OF5	100	1000	4	KLA	150	150	2/13/06
SO020906-LCSD15	900	WHAC 12 3OF5	100	1000	4	KLA	150	150	2/13/06

[1] Includes Internal Std

Alpha Woods Hole Lab
Batch Prep Report
02/09/2006 0602017 - 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
0602017-01	D	3580	DMP	2/9/2006	2/14/2006		0.2621	5.25	True				0.15	DMP	2/14/2006	
0602017-01	SAM	3580	DMP	2/9/2006	2/14/2006		0.2633	5.25	True				0.15	DMP	2/14/2006	
0602017-02	SAM	3580	DMP	2/9/2006	2/14/2006		0.2558	5.25	True				0.15	DMP	2/14/2006	
SO020906B23	B	3580	DMP	2/9/2006	2/14/2006		0.1	4	True				0.15	DMP	2/14/2006	

Alpha Woods Hole Lab
Batch Prep Report
02/09/2006 0602017 - OP Steranes/Triterpanes

Lab ID	Notes
0602017-01	1st Prep
0602017-01	1st Prep
0602017-02	1st Prep
SO020906B23	1st Prep

Alpha Woods Hole Lab

Batch Weight Report

02/09/2006

Lab ID	QC Type	0602017 - Sample
0602017-01	D	0.2621
0602017-01	SAM	0.2633
0602017-02	SAM	0.2558
SO020906B23	B	0.1
SO020906LCS17LCSOP NEWFIE		0.1
SO020906LCS17LCSOP SHC		0.1
SO020906LCS17LCSOP Steranes/Triterpanes		0.1
SO020906LCSD15LCSDNEWFIE		0.1
SO020906LCSD15LCSDSHC		0.1
SO020906LCSD15LCSDSteranes/Triterpanes		0.1

Biomarker

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

02/09/2006 0602017 - OP Steranes/Tri Analyst: KLA Witness: RPR

Lab ID	QC Type	OP Steranes/Tri - surr	Vol OP Steranes/Tri - surr	Units OP Steranes/Tri - surr	OP Steranes/Tri - spk 1	Vol OP Steranes/Tri - spk 1	Units OP Steranes/Tri - spk 1	OP Steranes/Tri - spk 2	Vol OP Steranes/Tri - spk 2	Units OP Steranes/Tri - spk 2
0602017-01	D	WHAC40	200	µl	WHAB99	200	µl			
0602017-01	SAM	WHAC40	200	µl	WHAB99	200	µl			
0602017-02	SAM	WHAC40	200	µl	WHAB99	200	µl			
SO020906B23	B	WHAC40	200	µl	WHAB99	200	µl			
SO020906LCS17	LCS	-99	-99	-99	-99	-99	-99	-99	-99	-99
SO020906LCSD15	LCSD	-99	-99	-99	-99	-99	-99	-99	-99	-99

Test: BIOMARKERS

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other High

ID# WHAC40

Conc. 100ug/ml

Test: PAH/SHC

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other High

ID# WHAB99

Conc. 100ug/ml 5mg/ml

Alpha Woods Hole Lab
Batch Clean Up Report

02/09/2006 0602017 - 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
0602017-01	D	3630	DMP	2/13/2006				DMP	2/13/2006	True	10	2	0	0.15
0602017-01	SAM	3630	GJP	2/14/2006				GJP	2/14/2006	True	10	2	0	0.15
0602017-02	SAM	3630	GJP	2/14/2006				GJP	2/14/2006	True	10	2	0	0.15
SO020906B23	B	3630	DMP	2/13/2006				DMP	2/13/2006	True	2	0.5	0	0.15

Alpha Woods Hole Lab
Batch Clean Up Report

02/09/2006 0602017 - OP Steranes/Triterpanes

Lab ID	Notes
0602017-01	5g silica gel column was eluted with 20ml of Pentane 2/13/06 DMP
0602017-01	5g silica gel column was eluted with 20ml of Pentane 2/14/06 GJP
0602017-02	5g silica gel column was eluted with 20ml of Pentane 2/14/06 GJP
SO020906B23	5g silica gel column was eluted with 20ml of Pentane 2/13/06 DMP

Post-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 2/13/06

BATCH: 0602017

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A	49.60	N/A	N/A	N/A	99%
0206017	1	D	1000	50	N/A	0.102	N/A	2.04	950	1.94	1.05	~~163%~~ N/A
① 0206017	1		1000	50	N/A	1.001	N/A	20.02	250	5.01	4.00	
0206017	2		1000	50	N/A	0.511	N/A	10.22	450	4.60	2.22	

* See Next page - redone
cw 2/21/06

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

① Samples -01 and -02 were re-silica gel Fractionated due to color in FI extract. 2/14/06 RPR

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

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

Alpha Woods Hole Laboratories Raynham, MA

0602017

Post-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 2/13/06

BATCH: 0602017

Entered by: DMP
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.248	N/A		N/A	N/A	N/A	0%
0206017	1	D	1000	50	N/A	0.102	N/A					#VALUE!
0206017	1		1000	50	N/A	1.001	N/A					
0206017	2		1000	50	N/A	0.511	N/A					

Re-fract. Not Used * cy 2/22/06

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-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 2/14/06

BATCH: 0602017

Entered by: DMP
Verified by: DMP

ETR #*	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (%R/RPD)
		LCS	10000	50	N/A	0.249	N/A	49.80	N/A	N/A	N/A	100%
0602017	1		1000	50	N/A	0.112	N/A	2.24	950	2.13	1.05	9.3%
0602017	2		1000	50	N/A	0.188	N/A	3.76	950	3.58	1.05	

- see duplicate from previous page CW 2/22/06

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-Silica Gel Gravimetric Determination

Analyst: DMP
Date: 2/14/06

BATCH: 0602017

Entered by: DMP
Verified by:

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC (MR, RD)
		LCS	10000	50	N/A	0.249	N/A		N/A	N/A	N/A	0%
0602017	1		1000	50	N/A	0.112	N/A					
0602017	2		1000	50	N/A	0.188	N/A					

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

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

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

Alpha Woods Hole Laboratories Raynham, MA

0602017RE

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: Gowanus Canal
ETR: 0602017

Biomarker

0602017-01D-F1	900	WHAC12 3of5	100	1000	5.25	DMP	150	NA	2/14/2006
0602017-01-F1	900	WHAC12 3of5	100	1000	5.25	DMP	150	NA	2/14/2006
0602017-02-F1	900	WHAC12 3of5	100	1000	5.25	DMP	150	NA	2/14/2006
SO020906B23-F1	900	WHAC12 3of5	100	1000	4.00	DMP	150	NA	2/14/2006

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 0602017 **Client:** Newfields **Project:** Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

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

Cleanup Requested	
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		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	

Other: PAH/SHC weighed @ .1
Biomarker weighed @ .25

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

Other: waste dilution method 3580

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

	Date	Initials
1st Extraction	2-9-06	DMP
2nd Extraction		
3rd Extraction		

JD 2/9/06

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

Other:

Batch Reviewed RPR 2/16/06
~~Batch Completed~~
Analyst: RPR
Date: 2/16/06

Batch Completed
Analyst: DMP
Date: 2/14/06
Signed for by RPR 2/16/06

Batch Completed 2/16/06
~~Batch Reviewed~~
Analyst: KLA Alk./SHC
Date: 2/13/06

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: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.104	21	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	78000	E	Fluoranthene	5400	
C1-Naphthalenes	23000	E	Pyrene	7800	
C2-Naphthalenes	7100		C1-Fluoranthenes/Pyrenes	7700	
C3-Naphthalenes	2100		C2-Fluoranthenes/Pyrenes	2300	
C4-Naphthalenes	540		C3-Fluoranthenes/Pyrenes	610	
Biphenyl	2200		C4-Fluoranthenes/Pyrenes	140	
Dibenzofuran	550		Naphthobenzothiophenes	780	
Acenaphthylene	10000		C1-Naphthobenzothiophenes	570	
Acenaphthene	930		C2-Naphthobenzothiophenes	210	
Fluorene	4600		C3-Naphthobenzothiophenes	84	
C1-Fluorenes	2100		C4-Naphthobenzothiophenes	2.4	U
C2-Fluorenes	1200		Benz[a]anthracene	3600	
C3-Fluorenes	530		Chrysene/Triphenylene	3200	
Anthracene	4800		C1-Chrysenes	2300	
Phenanthrene	15000		C2-Chrysenes	780	
C1-Phenanthrenes/Anthracenes	9500		C3-Chrysenes	270	
C2-Phenanthrenes/Anthracenes	4100		C4-Chrysenes	65	
C3-Phenanthrenes/Anthracenes	1200		Benzo[b]fluoranthene	1200	
C4-Phenanthrenes/Anthracenes	260		Benzo[k]fluoranthene	1600	
Retene	2.9	U	Benzo[a]fluoranthene	770	
Dibenzothiophene	1200		Benzo[e]pyrene	1400	
C1-Dibenzothiophenes	1200		Benzo[a]pyrene	2700	
C2-Dibenzothiophenes	870		Perylene	400	
C3-Dibenzothiophenes	440		Indeno[1,2,3-cd]pyrene	1100	
C4-Dibenzothiophenes	120		Dibenz[a,h]anthracene	300	
Benzo(b)fluorene	1300		Benzo[g,h,i]perylene	1000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	89	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.

02/22/06 11:06

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.104	21	10	AC

Parameter	Result
Carbazole	130

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	89	50-130

N/A - Not Applicable

02/22/06 11:07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18189.D
Acq On : 14 Feb 2006 12:45 am
Operator : AC
Sample : 0602017-01
Misc : 10X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:21:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	35878m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	58161	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	5853	76.10	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.61%#			
58) Pyrene-d10	38.02	212	14313m	90.51	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.05%#			
81) Benzo[b]fluoranthene-d12	46.84	264	9796	84.58	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.46%#			
125) 5B(H)Cholane - Surr	43.57	217	3474	152.01	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 15.20%#			

Target Compounds						Qvalue
9) Naphthalene	19.62	128	7045492	38452.76	ng/mL#E	100
10) C1-Naphthalenes	22.29	142	2068122m	11287.36	ng/mL E	
11) C2-Naphthalenes	25.13	156	646777m	3529.97	ng/mL	
12) C3-Naphthalenes	27.47	170	188980m	1031.41	ng/mL	
13) C4-Naphthalenes	30.23	184	49063m	267.78	ng/mL	
15) 2-Methylnaphthalene	22.29	142	1300699	11213.49	ng/mL#E	100
16) 1-Methylnaphthalene	22.72	142	764006	6996.30	ng/mL#	100
22) Biphenyl	24.18	154	158240	1097.30	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	100167m	1040.55	ng/mL	
24) Dibenzofuran	27.26	168	44084m	272.12	ng/mL	
25) Acenaphthylene	25.87	152	914983m	5208.18	ng/mL	
26) Acenaphthene	26.62	153	50161	459.65	ng/mL	96
27) 2,3,5-Trimethylnaphthalene	28.16	170	13392m	154.97	ng/mL	
28) Fluorene	28.62	166	280453m	2291.51	ng/mL	
29) C1-Fluorenes	30.85	180	128301m	1048.31	ng/mL	
30) C2-Fluorenes	32.93	194	73018m	596.61	ng/mL	
31) C3-Fluorenes	35.14	208	31802m	259.85	ng/mL	
32) Dibenzothiophene	31.94	184	109162	604.82	ng/mL#	95
36) OTP	34.11	198	1344m	7.45	ng/mL	
37) C1-Dibenzothiophenes	33.73	198	107055m	593.14	ng/mL	
38) C2-Dibenzothiophenes	35.41	212	78014m	432.24	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	38775m	214.83	ng/mL	
40) C4-Dibenzothiophenes	38.90	240	10702m	59.29	ng/mL	
41) Phenanthrene	32.45	178	1345901	7416.20	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.51	192	851853m	4693.89	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	367490m	2024.95	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	108014m	595.18	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	23497m	129.47	ng/mL	
53) Anthracene	32.62	178	396633	2362.17	ng/mL	99
54) Carbazole	33.29	167	10285m	66.18	ng/mL	
55) 1-Methylphenanthrene	34.94	192	131449	1057.82	ng/mL	99
56) Fluoranthene	37.22	202	520804m	2695.24	ng/mL	
57) Benzo(b)fluorene	39.73	216	71190m	631.28	ng/mL	
59) Pyrene	38.10	202	753433	3833.72	ng/mL	98
60) C1-Fluoranthenes/Pyrenes	39.50	216	749669m	3814.56	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.17	230	224974m	1144.74	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.42	244	59036m	300.39	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.67	258	14088m	71.68	ng/mL	
64) Naphthobenzothiophene	41.95	234	44912	244.28	ng/ml	99
65) Naphthobenzothiophene-2,1-	41.95	234	44912	244.28	ng/mL	99

Kept conc and ce 2/22/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18189.D
Acq On : 14 Feb 2006 12:45 am
Operator : AC
Sample : 0602017-01
Misc : 10X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:21:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

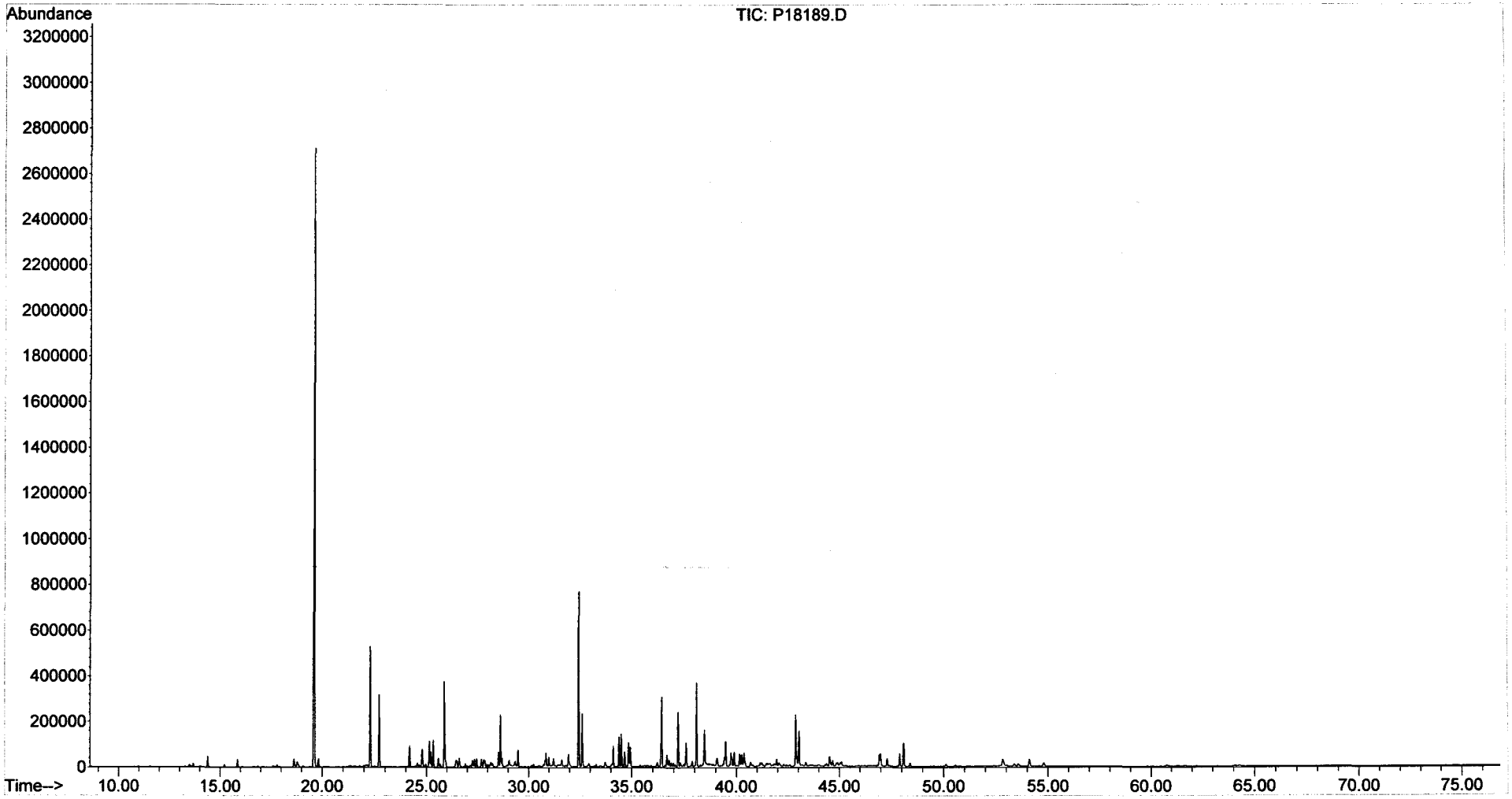
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.28	234	11181	60.81	ng/mL#	26
67) Naphthobenzothiophene-2,3-	42.59	234	14316m	77.87	ng/mL	
68) C1-Naphthobenzothiophenes	43.35	248	52198m	283.91	ng/ml	
69) C2-Naphthobenzothiophenes	44.85	262	19360m	105.30	ng/ml	
70) C3-Naphthobenzothiophenes	46.74	276	7673m	41.73	ng/ml	
73) Benz[a]anthracene	42.88	228	319797m	1806.28	ng/mL	
74) Chrysene	43.04	228	284788m	1574.22	ng/mL	
75) Chrysene/Triphenylene	43.04	228	286313m	1582.65	ng/mL	
76) C1-Chrysenes	44.53	242	208847m	1154.44	ng/mL	
77) C2-Chrysenes	46.24	256	70692m	390.76	ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	1152m	6.37	ng/mL	
79) C3-Chrysenes	47.82	270	23917m	132.21	ng/mL	
80) C4-Chrysenes	48.79	284	5806m	32.09	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	104583	575.17	ng/mL	100
83) Benzo[k]fluoranthene	46.99	252	146733	775.70	ng/mL	99
84) Benzo[a]fluoranthene	47.30	252	72013m	380.69	ng/mL	
85) Benzo[e]pyrene	47.91	252	118251	671.72	ng/mL	100
86) Benzo[a]pyrene	48.09	252	233459	1340.34	ng/mL	99
87) Perylene	48.40	252	33516	196.85	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.83	276	82729m	539.72	ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	22935m	146.79	ng/mL	
90) Benzo[g,h,i]perylene	54.10	276	91901	520.31	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18189.D
Acq On : 14 Feb 2006 12:45 am
Operator : AC
Sample : 0602017-01
Misc : 10X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:21:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.263	5.25	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**1.3**		30,31-Bishomohopane-22S	0.056	U
C24 Tricyclic Terpane	**0.70**		30,31-Bishomohopane-22R	0.056	U
C25 Tricyclic Terpane	**0.35**		30,31-Trishomohopane-22S	0.056	U
C24 Tetracyclic Terpane	**0.23**		30,31-Trishomohopane-22R	0.056	U
C26 Tricyclic Terpane-22S	**0.18**	J	Tetrakishomohopane-22S	0.056	U
C26 Tricyclic Terpane-22R	**0.17**	J	Tetrakishomohopane-22R	0.056	U
C28 Tricyclic Terpane-22S	**0.12**	J	Pentakishomohopane-22S	0.056	U
C28 Tricyclic Terpane-22R	**0.16**	J	Pentakishomohopane-22R	0.056	U
C29 Tricyclic Terpane-22S	**0.14**	J	13b(H),17a(H)-20S-Diacholestane	**0.49**	
C29 Tricyclic Terpane-22R	**0.082**	J	13b(H),17a(H)-20R-Diacholestane	**0.26**	
18a-22,29,30-Trisnorneohopane-TS	**0.15**	J	13b,17a-20S-Methyldiacholestane	**0.10**	J
C30 Tricyclic Terpane-22S	**0.049**	J	14a(H),17a(H)-20S-Cholestane	**0.15**	J
C30 Tricyclic Terpane-22R	0.056	U	14a(H),17a(H)-20R-Cholestane	**0.28**	
17a(H)-22,29,30-Trisnorhopane-TM	**0.13**	J	13b,17a-20R-Ethyldiacholestane	**0.072**	J
17a/b,21b/a 28,30-Bisnorhopane	0.056	U	13a,17b-20S-Ethyldiacholestane	0.056	U
17a(H),21b(H)-25-Norhopane	0.056	U	14a,17a-20S-Methylcholestane	**0.032**	J
30-Norhopane	**0.10**	J	14a,17a-20R-Methylcholestane	0.056	U
18a(H)-30-Norneohopane-C29Ts	**0.083**	J	14a(H),17a(H)-20S-Ethylcholestane	**0.067**	J
17a(H)-Diahopane	**0.044**	J	14a(H),17a(H)-20R-Ethylcholestane	**0.080**	J
30-Normoretane	0.056	U	14b(H),17b(H)-20R-Cholestane	**0.13**	J
18a(H)&18b(H)-Oleananes	0.056	U	14b(H),17b(H)-20S-Cholestane	**0.12**	J
Hopane	**0.18**	J	14b,17b-20R-Methylcholestane	**0.069**	J
Moretane	0.056	U	14b,17b-20S-Methylcholestane	**0.098**	J
30-Homohopane-22S	0.056	U	14b(H),17b(H)-20R-Ethylcholestane	**0.14**	J
30-Homohopane-22R	0.056	U	14b(H),17b(H)-20S-Ethylcholestane	**0.087**	J

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	105	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.

02/21/06 23:29

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28257.D
Acq On : 14 Feb 2006 7:53 pm
Operator : AC
Sample : 0602017-01
Misc : 1x
ALS Vial : 6 Sample Multiplier: 1

MAL 2/21/06

2nd 2/22/06

Quant Time: Feb 21 21:58:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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	43.66	240	51205	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	44.22	217	435601	20003.13	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2000.31%#			

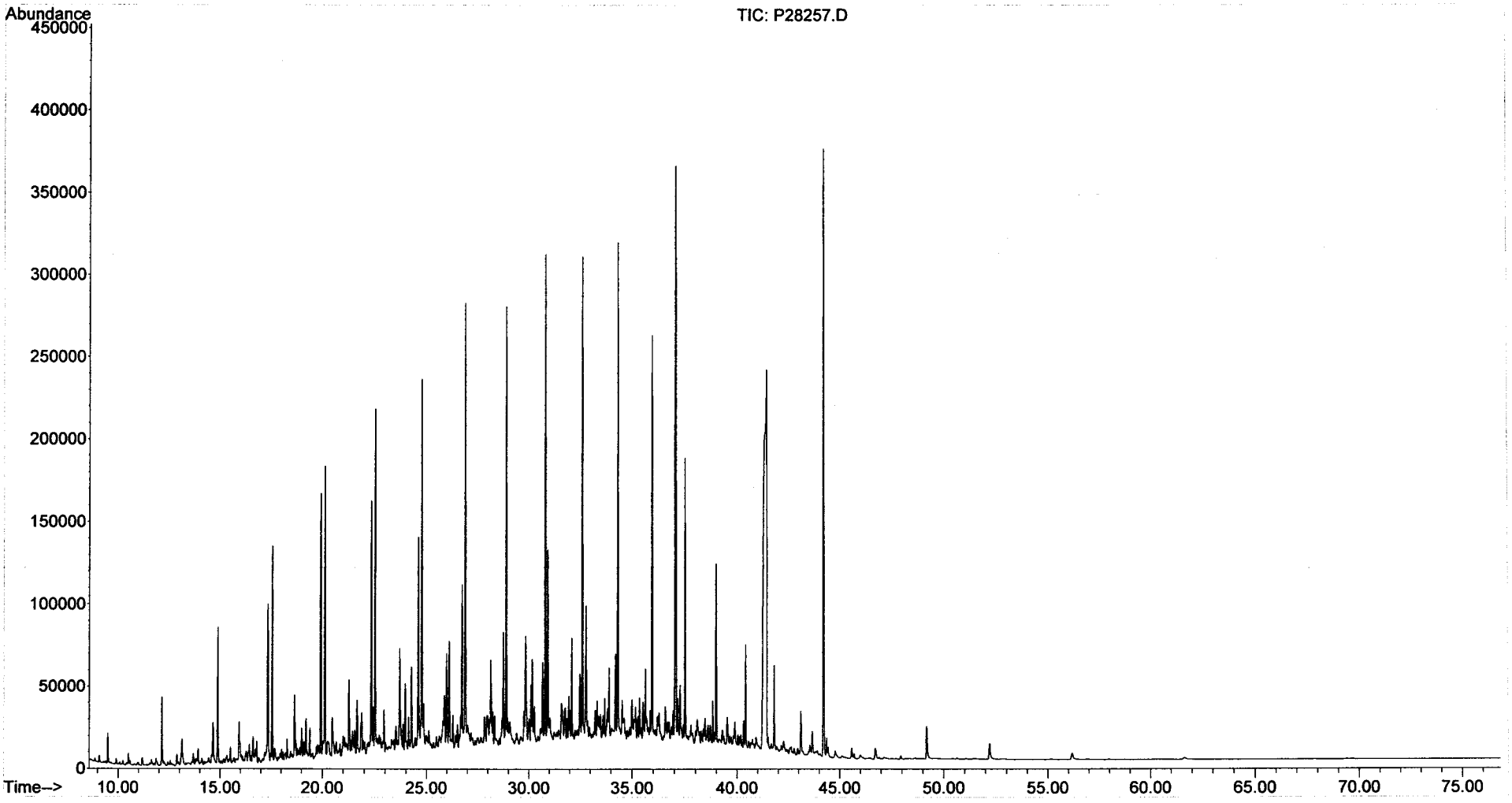
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.92	191	466	9.22	ng/mL#	78
84) Hopane (T19)	52.92	191	466	9.22	ng/mL#	78
85) C23 Tricyclic Terpane (T4)	41.21	191	3321m	65.71	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	1771	35.04	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.49	191	898m	17.77	ng/ml	
88) C24 Tetracyclic Terpane (T	44.77	191	575	11.38	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.48	191	445m	8.80	ng/ml	
90) C26 Tricyclic Terpane-22R	44.59	191	437	8.65	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.86	191	308m	6.09	ng/ml	
92) C28 Tricyclic Terpane-22R	47.03	191	417	8.25	ng/ml	100
93) C29 Tricyclic Terpane-22S	47.57	191	360	7.12	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.76	191	207m	4.10	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.97	191	372m	7.36	ng/ml	
96) C30 Tricyclic Terpane-22S	49.02	191	125m	2.47	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.54	191	318m	6.29	ng/ml	
101) 30-Norhopane (T15)	51.48	191	265m	5.24	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.56	191	211m	4.17	ng/ml	
103) 17a(H)-Diahopane (X)	51.69	191	112m	2.22	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.70	217	532	24.43	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.12	217	279m	12.81	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.82	217	113m	5.19	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.71	217	168m	7.71	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.24	217	305m	14.01	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.54	217	79m	3.63	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.98	217	35m	1.61	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.09	217	73m	3.35	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.05	217	87m	4.00	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.80	218	146m	6.70	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.89	218	131m	6.02	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.16	218	75m	3.44	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.24	218	107m	4.91	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.35	218	155m	7.12	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.39	218	95m	4.36	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28257.D
Acq On : 14 Feb 2006 7:53 pm
Operator : AC
Sample : 0602017-01
Misc : 1x
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 21 21:58:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01E**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/15/06	100	0.104	21	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**94000**		Fluoranthene	20	U
C1-Naphthalenes	**27000**		Pyrene	18	U
C2-Naphthalenes	33	U	C1-Fluoranthenes/Pyrenes	18	U
C3-Naphthalenes	33	U	C2-Fluoranthenes/Pyrenes	18	U
C4-Naphthalenes	33	U	C3-Fluoranthenes/Pyrenes	18	U
Biphenyl	18	U	C4-Fluoranthenes/Pyrenes	18	U
Dibenzofuran	24	U	Naphthobenzothiophenes	24	U
Acenaphthylene	37	U	C1-Naphthobenzothiophenes	24	U
Acenaphthene	23	U	C2-Naphthobenzothiophenes	24	U
Fluorene	23	U	C3-Naphthobenzothiophenes	24	U
C1-Fluorenes	23	U	C4-Naphthobenzothiophenes	24	U
C2-Fluorenes	23	U	Benz[a]anthracene	32	U
C3-Fluorenes	23	U	Chrysene/Triphenylene	22	U
Anthracene	27	U	C1-Chrysenes	22	U
Phenanthrene	29	U	C2-Chrysenes	22	U
C1-Phenanthrenes/Anthracenes	29	U	C3-Chrysenes	22	U
C2-Phenanthrenes/Anthracenes	29	U	C4-Chrysenes	22	U
C3-Phenanthrenes/Anthracenes	29	U	Benzo[b]fluoranthene	21	U
C4-Phenanthrenes/Anthracenes	29	U	Benzo[k]fluoranthene	41	U
Retene	29	U	Benzo[a]fluoranthene	41	U
Dibenzothiophene	22	U	Benzo[e]pyrene	28	U
C1-Dibenzothiophenes	22	U	Benzo[a]pyrene	28	U
C2-Dibenzothiophenes	22	U	Perylene	35	U
C3-Dibenzothiophenes	22	U	Indeno[1,2,3-cd]pyrene	49	U
C4-Dibenzothiophenes	22	U	Dibenz[a,h]anthracene	38	U
Benzo(b)fluorene	20	U	Benzo[g,h,i]perylene	36	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.

02/22/06 11:25

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18221.D
Acq On : 15 Feb 2006 3:58 am
Operator : AC
Sample : 0602017-01-RE
Misc : 100X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 11:15:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

CW 2/22/06

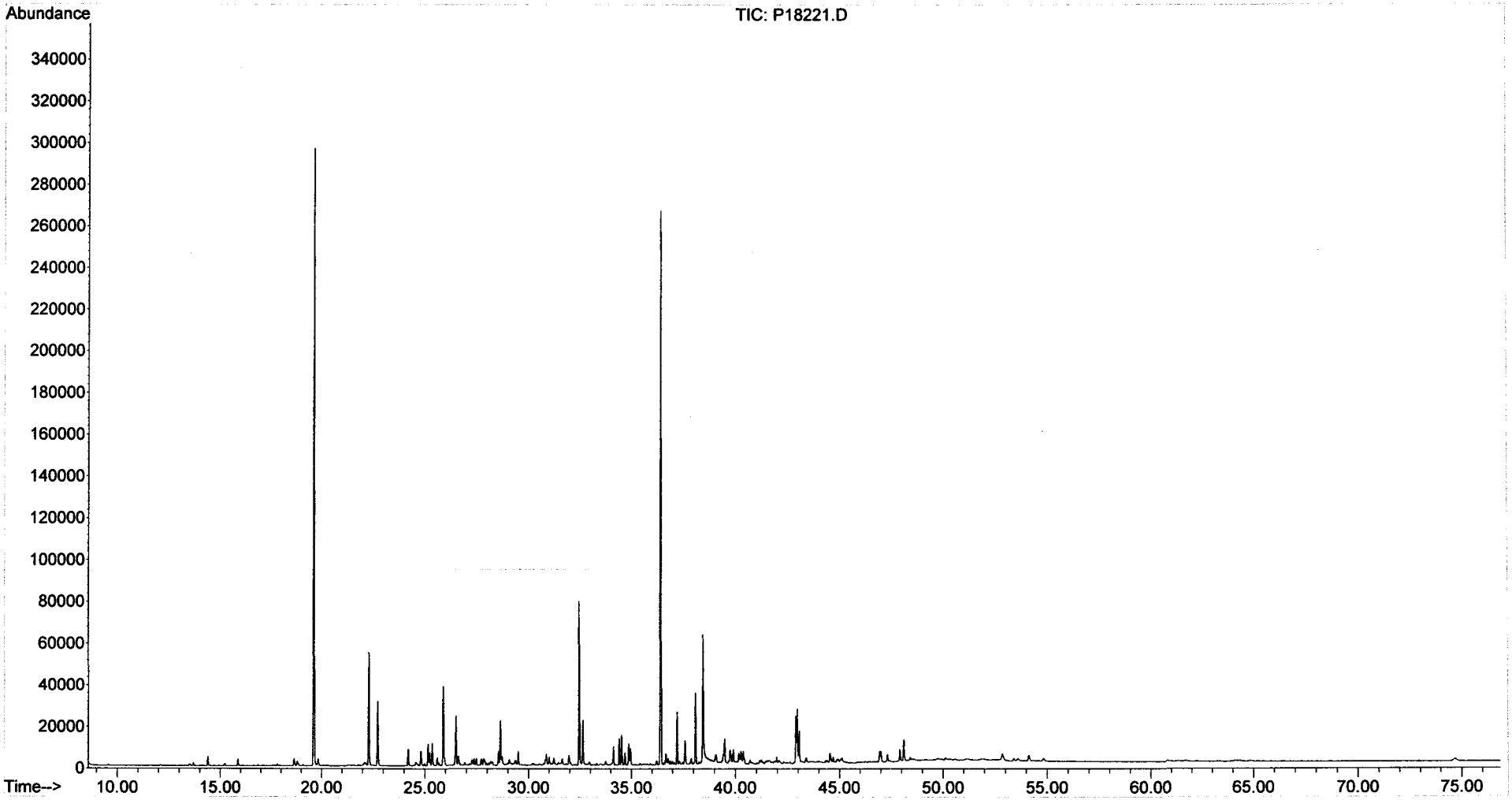
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	30794	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	50945	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	636m	9.63	ng/mL	-0.01 ✓
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.96%#			
58) Pyrene-d10	38.04	212	1457m	10.73	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.07%#			
81) Benzo[b]fluoranthene-d12	46.85	264	1070	10.55	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.05%#			
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.62	128	733351	4663.27	ng/mL#	100
10) C1-Naphthalenes	22.31	142	211017m	1341.82	ng/mL	
15) 2-Methylnaphthalene	22.31	142	132653	1332.43	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18221.D
Acq On : 15 Feb 2006 3:58 am
Operator : AC
Sample : 0602017-01-RE
Misc : 100X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 11:15:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 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: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01 D**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.104	21	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	72000	E	Fluoranthene	5400	
C1-Naphthalenes	22000	E	Pyrene	7800	
C2-Naphthalenes	6900		C1-Fluoranthenes/Pyrenes	7700	
C3-Naphthalenes	2000		C2-Fluoranthenes/Pyrenes	2300	
C4-Naphthalenes	530		C3-Fluoranthenes/Pyrenes	570	
Biphenyl	2200		C4-Fluoranthenes/Pyrenes	140	
Dibenzofuran	520		Naphthobenzothiophenes	770	
Acenaphthylene	10000		C1-Naphthobenzothiophenes	570	
Acenaphthene	910		C2-Naphthobenzothiophenes	220	
Fluorene	4600		C3-Naphthobenzothiophenes	86	
C1-Fluorenes	2100		C4-Naphthobenzothiophenes	2.4	U
C2-Fluorenes	1200		Benz[a]anthracene	3600	
C3-Fluorenes	550		Chrysene/Triphenylene	3200	
Anthracene	4800		C1-Chrysenes	2300	
Phenanthrene	15000		C2-Chrysenes	740	
C1-Phenanthrenes/Anthracenes	9500		C3-Chrysenes	260	
C2-Phenanthrenes/Anthracenes	4100		C4-Chrysenes	66	
C3-Phenanthrenes/Anthracenes	1200		Benzo[b]fluoranthene	1200	
C4-Phenanthrenes/Anthracenes	240		Benzo[k]fluoranthene	1500	
Retene	2.9	U	Benzo[a]fluoranthene	760	
Dibenzothiophene	1200		Benzo[e]pyrene	1400	
C1-Dibenzothiophenes	1200		Benzo[a]pyrene	2700	
C2-Dibenzothiophenes	880		Perylene	400	
C3-Dibenzothiophenes	430		Indeno[1,2,3-cd]pyrene	1100	
C4-Dibenzothiophenes	120		Dibenz[a,h]anthracene	280	
Benzo(b)fluorene	1300		Benzo[g,h,i]perylene	1000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	72	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	88	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.

02/21/06 22:53

Form I
Duplicate
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01 D**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.104	21	10	AC

Parameter	Result
Carbazole	**130**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	72	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	88	50-130

N/A - Not Applicable

02/21/06 22:54

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18191.D
Acq On : 14 Feb 2006 2:18 am
Operator : AC
Sample : 0602017-01D
Misc : 10X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 16 13:54:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	35225m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	57500	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	5185	68.66	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.87%#			
58) Pyrene-d10	38.02	212	13903	89.55	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.95%#			
81) Benzo[b]fluoranthene-d12	46.84	264	9570	83.58	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.36%#			
125) 5B(H)Cholane - Surr	43.57	217	3320	146.94	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 14.69%#			

Target Compounds						Qvalue
9) Naphthalene	19.62	128	6441007	35805.29	ng/mL# E	100
10) C1-Naphthalenes	22.29	142	1944821m	10811.18	ng/mL E	
11) C2-Naphthalenes	25.13	156	615649m	3422.37	ng/mL	
12) C3-Naphthalenes	27.47	170	182069m	1012.11	ng/mL	
13) C4-Naphthalenes	30.23	184	47169m	262.21	ng/mL	
15) 2-Methylnaphthalene	22.29	142	1220539	10717.48	ng/mL# E	100
16) 1-Methylnaphthalene	22.72	142	719819	6713.86	ng/mL#	100
22) Biphenyl	24.18	154	150927	1065.99	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	96037m	1016.14	ng/mL	
24) Dibenzofuran	27.26	168	41118m	258.52	ng/mL	
25) Acenaphthylene	25.87	152	878479m	5093.09	ng/mL	
26) Acenaphthene	26.62	153	48272	450.54	ng/mL	97
27) 2,3,5-Trimethylnaphthalene	28.16	170	12586m	148.35	ng/mL	
28) Fluorene	28.62	166	272502m	2267.82	ng/mL	
29) C1-Fluorenes	30.85	180	126809m	1055.33	ng/mL	
30) C2-Fluorenes	33.03	194	71450m	594.62	ng/mL	
31) C3-Fluorenes	35.03	208	32981m	274.47	ng/mL	
32) Dibenzothiophene	31.94	184	106167	599.13	ng/mL#	94
36) OTP	34.11	198	1243m	7.01	ng/mL	
37) C1-Dibenzothiophenes	33.73	198	105354m	594.54	ng/mL	
38) C2-Dibenzothiophenes	35.41	212	76952m	434.26	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	38029m	214.61	ng/mL	
40) C4-Dibenzothiophenes	38.90	240	10703m	60.40	ng/mL	
41) Phenanthrene	32.45	178	1331779	7474.43	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.51	192	835326m	4688.15	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	361122m	2026.75	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	104265m	585.17	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	21107m	118.46	ng/mL	
53) Anthracene	32.62	178	391343	2373.87	ng/mL	100
54) Carbazole	33.29	167	10006m	65.58	ng/mL	
55) 1-Methylphenanthrene	34.95	192	128012	1049.26	ng/mL	99
56) Fluoranthene	37.22	202	507120m	2673.08	ng/mL	
57) Benzo(b)fluorene	39.73	216	70732m	638.85	ng/mL	
59) Pyrene	38.10	202	742846	3849.92	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.50	216	737939m	3824.49	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.16	230	220195m	1141.20	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.42	244	54469m	282.29	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.67	258	13398m	69.44	ng/mL	
64) Naphthobenzothiophene	41.95	234	43946	243.46	ng/ml	98
65) Naphthobenzothiophene-2,1-	41.95	234	43946	243.46	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18191.D
Acq On : 14 Feb 2006 2:18 am
Operator : AC
Sample : 0602017-01D
Misc : 10X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 16 13:54:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

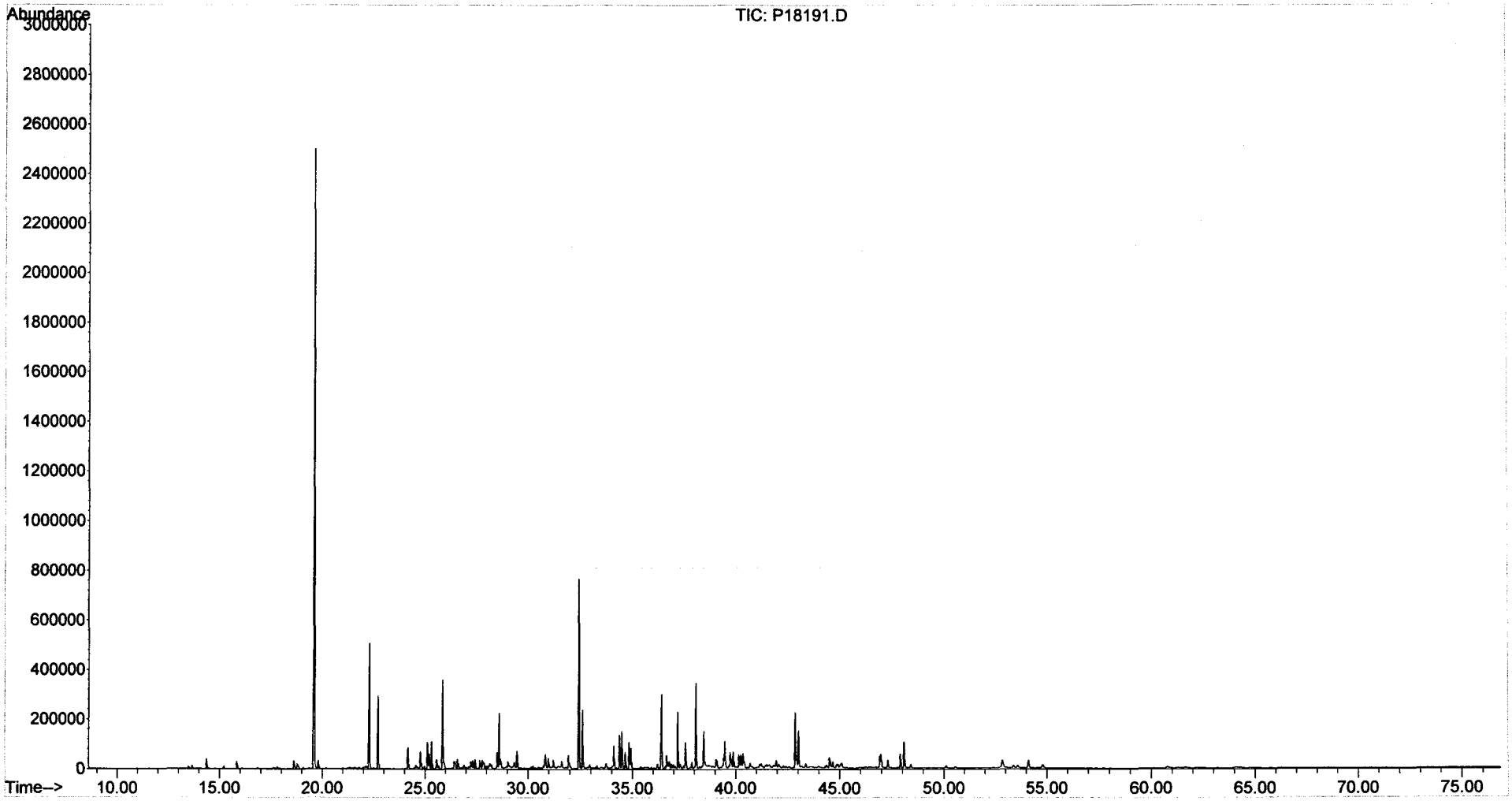
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.28	234	10989	60.88	ng/mL#	26
67) Naphthobenzothiophene-2,3-	42.59	234	14202m	78.68	ng/mL	
68) C1-Naphthobenzothiophenes	43.35	248	50849m	281.70	ng/ml	
69) C2-Naphthobenzothiophenes	44.85	262	19499m	108.02	ng/ml	
70) C3-Naphthobenzothiophenes	46.58	276	7669m	42.49	ng/ml	
73) Benz[a]anthracene	42.88	228	314542m	1797.02	ng/mL	
74) Chrysene	43.04	228	280348m	1567.49	ng/mL	
75) Chrysene/Triphenylene	43.04	228	280348m	1567.49	ng/mL	
76) C1-Chrysenes	44.51	242	206087m	1152.28	ng/mL	
77) C2-Chrysenes	46.24	256	66791m	373.44	ng/mL	
78) BBF-d12 Surr BKGD	46.83	256	1047	5.85	ng/mL	100
79) C3-Chrysenes	47.81	270	22683m	126.83	ng/mL	
80) C4-Chrysenes	48.80	284	5893m	32.95	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	103680	576.76	ng/mL	99
83) Benzo[k]fluoranthene	46.99	252	142125	759.98	ng/mL	100
84) Benzo[a]fluoranthene	47.30	252	70608m	377.56	ng/mL	
85) Benzo[e]pyrene	47.91	252	116702	670.54	ng/mL	99
86) Benzo[a]pyrene	48.09	252	229652	1333.64	ng/mL	99
87) Perylene	48.40	252	33161	197.01	ng/mL	94
88) Indeno[1,2,3-cd]pyrene	52.83	276	79525m	524.78	ng/mL	
89) Dibenz[a,h]anthracene	52.88	278	21783m	141.02	ng/mL	
90) Benzo[g,h,i]perylene	54.10	276	89964	515.19	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18191.D
Acq On : 14 Feb 2006 2:18 am
Operator : AC
Sample : 0602017-01D
Misc : 10X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 16 13:54:59 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 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: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01 D**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.262	5.25	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	**1.2**		30,31-Bishomohopane-22S	0.056	U
C24 Tricyclic Terpane	**0.73**		30,31-Bishomohopane-22R	0.056	U
C25 Tricyclic Terpane	**0.38**		30,31-Trishomohopane-22S	0.056	U
C24 Tetracyclic Terpane	**0.22**		30,31-Trishomohopane-22R	0.056	U
C26 Tricyclic Terpane-22S	**0.16**	J	Tetrakishomohopane-22S	0.056	U
C26 Tricyclic Terpane-22R	**0.17**	J	Tetrakishomohopane-22R	0.056	U
C28 Tricyclic Terpane-22S	**0.11**	J	Pentakishomohopane-22S	0.056	U
C28 Tricyclic Terpane-22R	**0.14**	J	Pentakishomohopane-22R	0.056	U
C29 Tricyclic Terpane-22S	**0.13**	J	13b(H),17a(H)-20S-Diacholestane	**0.54**	
C29 Tricyclic Terpane-22R	**0.083**	J	13b(H),17a(H)-20R-Diacholestane	**0.26**	
18a-22,29,30-Trisnorneohopane-TS	**0.15**	J	13b,17a-20S-Methyldiacholestane	**0.11**	J
C30 Tricyclic Terpane-22S	**0.041**	J	14a(H),17a(H)-20S-Cholestane	**0.13**	J
C30 Tricyclic Terpane-22R	0.056	U	14a(H),17a(H)-20R-Cholestane	**0.30**	
17a(H)-22,29,30-Trisnorhopane-TM	**0.13**	J	13b,17a-20R-Ethyldiacholestane	**0.086**	J
17a/b,21b/a 28,30-Bisnorhopane	0.056	U	13a,17b-20S-Ethyldiacholestane	0.056	U
17a(H),21b(H)-25-Norhopane	0.056	U	14a,17a-20S-Methylcholestane	**0.040**	J
30-Norhopane	**0.11**	J	14a,17a-20R-Methylcholestane	0.056	U
18a(H)-30-Norneohopane-C29Ts	**0.079**	J	14a(H),17a(H)-20S-Ethylcholestane	**0.084**	J
17a(H)-Diahopane	**0.042**	J	14a(H),17a(H)-20R-Ethylcholestane	**0.064**	J
30-Normoretane	0.056	U	14b(H),17b(H)-20R-Cholestane	**0.12**	J
18a(H)&18b(H)-Oleananes	0.056	U	14b(H),17b(H)-20S-Cholestane	**0.10**	J
Hopane	**0.16**	J	14b,17b-20R-Methylcholestane	**0.067**	J
Moretane	0.056	U	14b,17b-20S-Methylcholestane	**0.084**	J
30-Homohopane-22S	0.056	U	14b(H),17b(H)-20R-Ethylcholestane	**0.12**	J
30-Homohopane-22R	0.056	U	14b(H),17b(H)-20S-Ethylcholestane	**0.083**	J

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	104	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.

02/22/06 11:04

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28258.D
Acq On : 14 Feb 2006 9:28 pm
Operator : AC
Sample : 0602017-01D
Misc : 1x
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 10:53:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

cur FORMAL and 3/22/06

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	43.66	240	49230	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	44.22	217	415986	19868.74	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1986.87%#		

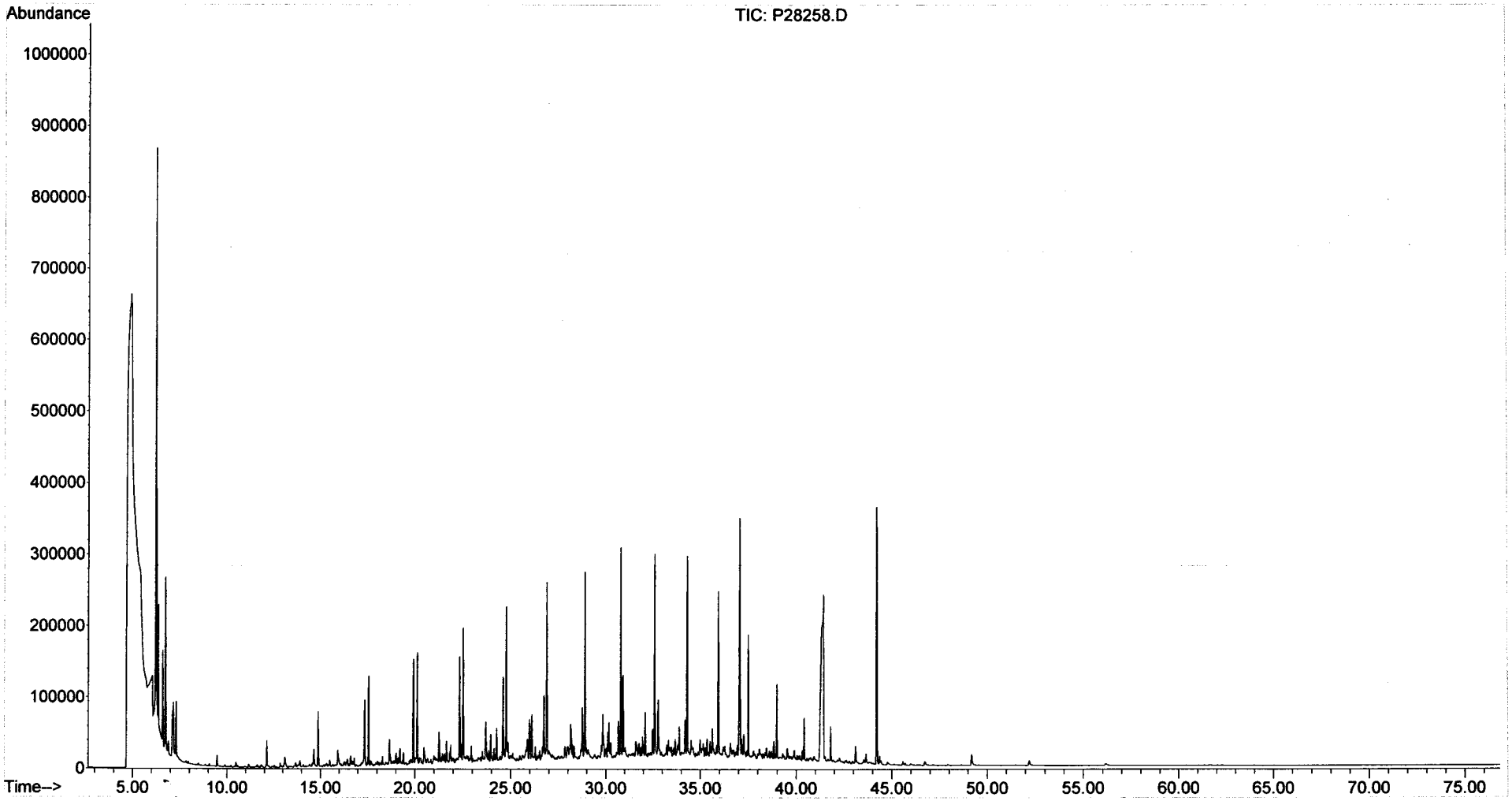
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.94	191	400m	8.23	ng/mL	
84) Hopane (T19)	52.94	191	400m	8.23	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.21	191	2951m	60.73	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.94	191	1767	36.36	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.48	191	910m	18.73	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	524	10.78	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.49	191	389	8.01	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.58	191	405	8.33	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.86	191	255m	5.25	ng/ml	
92) C28 Tricyclic Terpane-22R	47.03	191	330m	6.79	ng/ml	
93) C29 Tricyclic Terpane-22S	47.55	191	327m	6.73	ng/ml	
94) C29 Tricyclic Terpane-22R	47.78	191	202m	4.16	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.96	191	367m	7.55	ng/ml	
96) C30 Tricyclic Terpane-22S	49.02	191	100m	2.06	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.53	191	305m	6.28	ng/ml	
101) 30-Norhopane (T15)	51.47	191	273m	5.62	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.59	191	192	3.95	ng/ml	100
103) 17a(H)-Diahopane (X)	51.71	191	101m	2.08	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.70	217	564	26.94	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.12	217	267m	12.75	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.82	217	112m	5.35	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.72	217	135m	6.45	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.25	217	316	15.09	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.54	217	90m	4.30	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.98	217	42m	2.01	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.09	217	88m	4.20	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.06	217	67m	3.20	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.81	218	130	6.21	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.89	218	109	5.21	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.15	218	70m	3.34	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.23	218	88m	4.20	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.35	218	130m	6.21	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.37	218	87m	4.16	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28258.D
Acq On : 14 Feb 2006 9:28 pm
Operator : AC
Sample : 0602017-01D
Misc : 1x
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 10:53:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration



Solvent Delay overrode cm 2/22/06

Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01E D**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.104	21	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**87000**		Fluoranthene	20	U
C1-Naphthalenes	**26000**		Pyrene	18	U
C2-Naphthalenes	33	U	C1-Fluoranthenes/Pyrenes	18	U
C3-Naphthalenes	33	U	C2-Fluoranthenes/Pyrenes	18	U
C4-Naphthalenes	33	U	C3-Fluoranthenes/Pyrenes	18	U
Biphenyl	18	U	C4-Fluoranthenes/Pyrenes	18	U
Dibenzofuran	24	U	Naphthobenzothiophenes	24	U
Acenaphthylene	36	U	C1-Naphthobenzothiophenes	24	U
Acenaphthene	23	U	C2-Naphthobenzothiophenes	24	U
Fluorene	23	U	C3-Naphthobenzothiophenes	24	U
C1-Fluorenes	23	U	C4-Naphthobenzothiophenes	24	U
C2-Fluorenes	23	U	Benz[a]anthracene	32	U
C3-Fluorenes	23	U	Chrysene/Triphenylene	22	U
Anthracene	27	U	C1-Chrysenes	22	U
Phenanthrene	29	U	C2-Chrysenes	22	U
C1-Phenanthrenes/Anthracenes	29	U	C3-Chrysenes	22	U
C2-Phenanthrenes/Anthracenes	29	U	C4-Chrysenes	22	U
C3-Phenanthrenes/Anthracenes	29	U	Benzo[b]fluoranthene	21	U
C4-Phenanthrenes/Anthracenes	29	U	Benzo[k]fluoranthene	41	U
Retene	29	U	Benzo[a]fluoranthene	41	U
Dibenzothiophene	22	U	Benzo[e]pyrene	28	U
C1-Dibenzothiophenes	22	U	Benzo[a]pyrene	28	U
C2-Dibenzothiophenes	22	U	Perylene	35	U
C3-Dibenzothiophenes	22	U	Indeno[1,2,3-cd]pyrene	48	U
C4-Dibenzothiophenes	22	U	Dibenz[a,h]anthracene	38	U
Benzo(b)fluorene	20	U	Benzo[g,h,i]perylene	36	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	87	50-130
Pyrene-d10	114	50-130
Benzo[b]fluoranthene-d12	118	50-130

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

02/22/06 11:22

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18205.D
Acq On : 14 Feb 2006 3:32 pm
Operator : AC
Sample : 0602017-01D-RE
Misc : 100X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 16 13:32:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/16/06

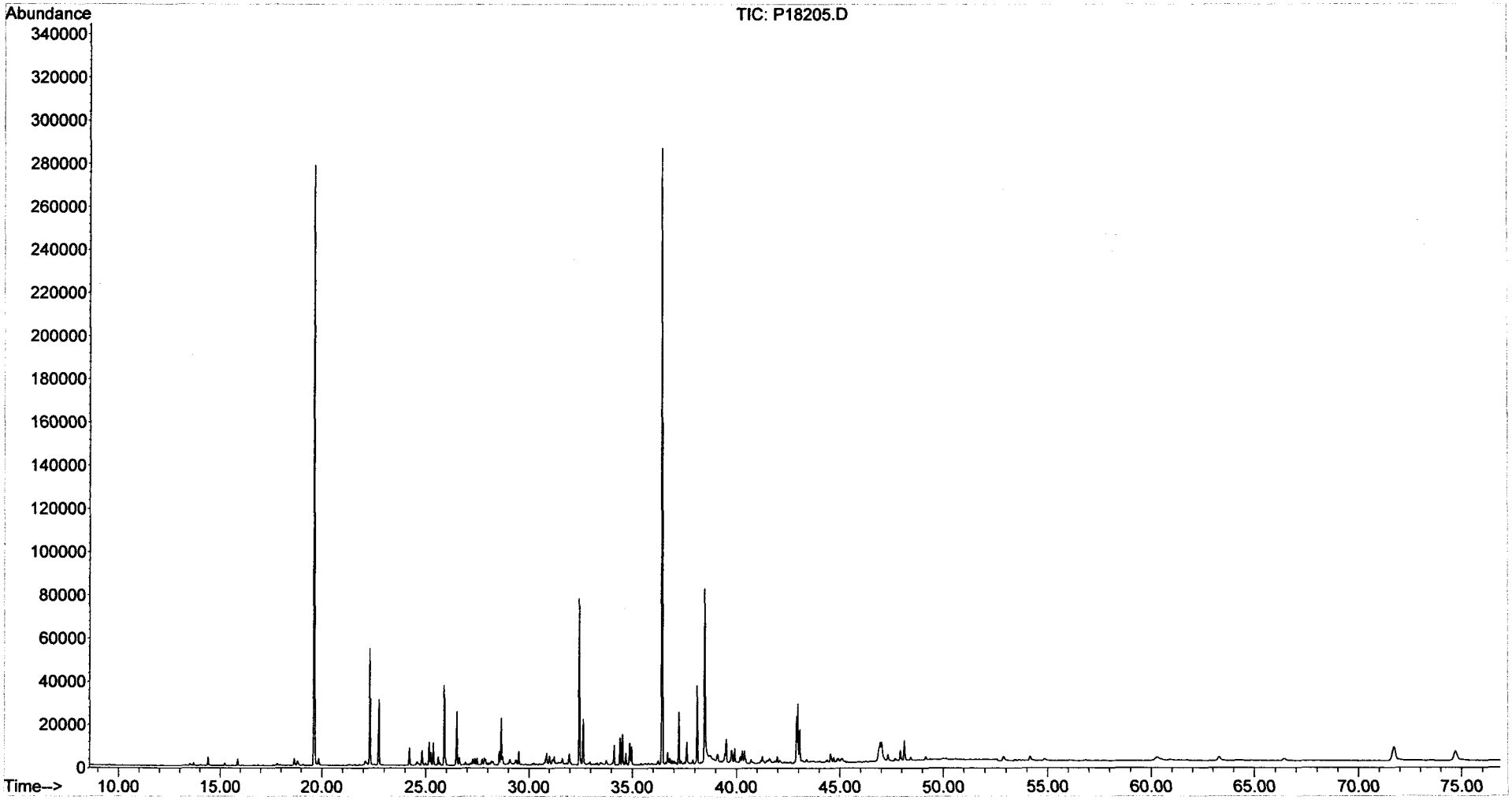
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	32273m	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	53332	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	573m	8.28	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.83%#		
58) Pyrene-d10	38.04	212	1547	10.88	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.09%#		
81) Benzo[b]fluoranthene-d12	46.87	264	1194m	11.24	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.12%#		
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						Qvalue
9) Naphthalene	19.62	128	712515	4323.14	ng/mL#	100
10) C1-Naphthalenes	22.31	142	210662m	1278.18	ng/mL	
15) 2-Methylnaphthalene	22.31	142	131881	1263.97	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18205.D
Acq On : 14 Feb 2006 3:32 pm
Operator : AC
Sample : 0602017-01D-RE
Misc : 100X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 16 13:32:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	78000 E	72000 E	7	30
C1-Naphthalenes	23000 E	22000 E	5	30
C2-Naphthalenes	7100	6900	3	30
C3-Naphthalenes	2100	2000	2	30
C4-Naphthalenes	540	530	2	30
Biphenyl	2200	2200	3	30
Dibenzofuran	550	520	5	30
Acenaphthylene	10000	10000	2	30
Acenaphthene	930	910	2	30
Fluorene	4600	4600	1	30
C1-Fluorenes	2100	2100	0	30
C2-Fluorenes	1200	1200	1	30
C3-Fluorenes	530	550	5	30
Anthracene	4800	4800	0	30
Phenanthrene	15000	15000	1	30
C1-Phenanthrenes/Anthracenes	9500	9500	0	30
C2-Phenanthrenes/Anthracenes	4100	4100	0	30
C3-Phenanthrenes/Anthracenes	1200	1200	2	30
C4-Phenanthrenes/Anthracenes	260	240	9	30
Retene	2.9 U	2.9 U	N/A	30
Dibenzothiophene	1200	1200	1	30
C1-Dibenzothiophenes	1200	1200	0	30
C2-Dibenzothiophenes	870	880	0	30
C3-Dibenzothiophenes	440	430	0	30
C4-Dibenzothiophenes	120	120	2	30
Benzo(b)fluorene	1300	1300	1	30
Fluoranthene	5400	5400	1	30
Pyrene	7800	7800	0	30
C1-Fluoranthenes/Pyrenes	7700	7700	0	30
C2-Fluoranthenes/Pyrenes	2300	2300	1	30
C3-Fluoranthenes/Pyrenes	610	570	6	30
C4-Fluoranthenes/Pyrenes	140	140	3	30
Naphthobenzothiophenes	780	770	0	30
C1-Naphthobenzothiophenes	570	570	1	30
C2-Naphthobenzothiophenes	210	220	2	30

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.

02/22/06 09:38

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	84	86	2	30
C4-Naphthobenzothiophenes	2.4 U	2.4 U	N/A	30
Benz[a]anthracene	3600	3600	1	30
Chrysene/Triphenylene	3200	3200	1	30
C1-Chrysenes	2300	2300	0	30
C2-Chrysenes	780	740	5	30
C3-Chrysenes	270	260	4	30
C4-Chrysenes	65	66	2	30
Benzo[b]fluoranthene	1200	1200	0	30
Benzo[k]fluoranthene	1600	1500	2	30
Benzo[a]fluoranthene	770	760	1	30
Benzo[e]pyrene	1400	1400	0	30
Benzo[a]pyrene	2700	2700	1	30
Perylene	400	400	0	30
Indeno[1,2,3-cd]pyrene	1100	1100	3	30
Dibenz[a,h]anthracene	300	280	4	30
Benzo[g,h,i]perylene	1000	1000	1	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	80	72	50-130
Pyrene-d10	95	94	50-130
Benzo[b]fluoranthene-d12	89	88	50-130

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

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

02/22/06 09:38

Duplicate
Carbazole

Client:	**NewFields Environmental Forensics Practice**	Lab Code:	**MA00030**
Project:	**Gowanus Canal**	ETR:	**0602017**
Client ID:	**CGMW-07I**	Lab ID:	**0602017-01**
Case:	**N/A** SDG: **N/A**	Associated Blank:	**SO020906B23**
Matrix:	**Product**	Concentration Units:	**mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	130	130	1	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	80	72	50-130
Pyrene-d10	95	94	50-130
Benzo[b]fluoranthene-d12	89	88	50-130

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

02/22/06 09:39

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	**1.3**	**1.2**	7	30
C24 Tricyclic Terpane	**0.70**	**0.73**	4	30
C25 Tricyclic Terpane	**0.35**	**0.38**	6	30
C24 Tetracyclic Terpane	**0.23**	**0.22**	5	30
C26 Tricyclic Terpane-22S	**0.18** J	**0.16** J	9	30
C26 Tricyclic Terpane-22R	**0.17** J	**0.17** J	3	30
C28 Tricyclic Terpane-22S	**0.12** J	**0.11** J	14	30
C28 Tricyclic Terpane-22R	**0.16** J	**0.14** J	19	30
C29 Tricyclic Terpane-22S	**0.14** J	**0.13** J	5	30
C29 Tricyclic Terpane-22R	**0.082** J	**0.083** J	2	30
18a-22,29,30-Trisnorneohopane-TS	**0.15** J	**0.15** J	3	30
C30 Tricyclic Terpane-22S	**0.049** J	**0.041** J	18	30
C30 Tricyclic Terpane-22R	0.056 U	0.056 U	N/A	30
17a(H)-22,29,30-Trisnorhopane-TM	**0.13** J	**0.13** J	0	30
17a/b,21b/a 28,30-Bisnorhopane	0.056 U	0.056 U	N/A	30
17a(H),21b(H)-25-Norhopane	0.056 U	0.056 U	N/A	30
30-Norhopane	**0.10** J	**0.11** J	7	30
18a(H)-30-Norneohopane-C29Ts	**0.083** J	**0.079** J	5	30
17a(H)-Diahopane	**0.044** J	**0.042** J	6	30
30-Normoretane	0.056 U	0.056 U	N/A	30
18a(H)&18b(H)-Oleananes	0.056 U	0.056 U	N/A	30
Hopane	**0.18** J	**0.16** J	11	30
Moretane	0.056 U	0.056 U	N/A	30
30-Homohopane-22S	0.056 U	0.056 U	N/A	30
30-Homohopane-22R	0.056 U	0.056 U	N/A	30
30,31-Bishomohopane-22S	0.056 U	0.056 U	N/A	30
30,31-Bishomohopane-22R	0.056 U	0.056 U	N/A	30
30,31-Trishomohopane-22S	0.056 U	0.056 U	N/A	30
30,31-Trishomohopane-22R	0.056 U	0.056 U	N/A	30
Tetrakishomohopane-22S	0.056 U	0.056 U	N/A	30
Tetrakishomohopane-22R	0.056 U	0.056 U	N/A	30
Pentakishomohopane-22S	0.056 U	0.056 U	N/A	30
Pentakishomohopane-22R	0.056 U	0.056 U	N/A	30
13b(H),17a(H)-20S-Diacholestane	**0.49**	**0.54**	10	30
13b(H),17a(H)-20R-Diacholestane	**0.26**	**0.26**	0	30

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

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

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	**0.10** J	**0.11** J	3	30
14a(H),17a(H)-20S-Cholestane	**0.15** J	**0.13** J	17	30
14a(H),17a(H)-20R-Cholestane	**0.28**	**0.30**	8	30
13b,17a-20R-Ethyldiacholestane	**0.072** J	**0.086** J	17	30
13a,17b-20S-Ethyldiacholestane	0.056 U	0.056 U	N/A	30
14a,17a-20S-Methylcholestane	**0.032** J	**0.040** J	23	30
14a,17a-20R-Methylcholestane	0.056 U	0.056 U	N/A	30
14a(H),17a(H)-20S-Ethylcholestane	**0.067** J	**0.084** J	23	30
14a(H),17a(H)-20R-Ethylcholestane	**0.080** J	**0.064** J	22	30
14b(H),17b(H)-20R-Cholestane	**0.13** J	**0.12** J	7	30
14b(H),17b(H)-20S-Cholestane	**0.12** J	**0.10** J	14	30
14b,17b-20R-Methylcholestane	**0.069** J	**0.067** J	2	30
14b,17b-20S-Methylcholestane	**0.098** J	**0.084** J	15	30
14b(H),17b(H)-20R-Ethylcholestane	**0.14** J	**0.12** J	13	30
14b(H),17b(H)-20S-Ethylcholestane	**0.087** J	**0.083** J	4	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	105	104	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.

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

02/22/06 11:06

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01E**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	**94000**	**87000**	8	30
C1-Naphthalenes	**27000**	**26000**	5	30
C2-Naphthalenes	33 U	33 U	N/A	30
C3-Naphthalenes	33 U	33 U	N/A	30
C4-Naphthalenes	33 U	33 U	N/A	30
Biphenyl	18 U	18 U	N/A	30
Dibenzofuran	24 U	24 U	N/A	30
Acenaphthylene	37 U	36 U	N/A	30
Acenaphthene	23 U	23 U	N/A	30
Fluorene	23 U	23 U	N/A	30
C1-Fluorenes	23 U	23 U	N/A	30
C2-Fluorenes	23 U	23 U	N/A	30
C3-Fluorenes	23 U	23 U	N/A	30
Anthracene	27 U	27 U	N/A	30
Phenanthrene	29 U	29 U	N/A	30
C1-Phenanthrenes/Anthracenes	29 U	29 U	N/A	30
C2-Phenanthrenes/Anthracenes	29 U	29 U	N/A	30
C3-Phenanthrenes/Anthracenes	29 U	29 U	N/A	30
C4-Phenanthrenes/Anthracenes	29 U	29 U	N/A	30
Retene	29 U	29 U	N/A	30
Dibenzothiophene	22 U	22 U	N/A	30
C1-Dibenzothiophenes	22 U	22 U	N/A	30
C2-Dibenzothiophenes	22 U	22 U	N/A	30
C3-Dibenzothiophenes	22 U	22 U	N/A	30
C4-Dibenzothiophenes	22 U	22 U	N/A	30
Benzo(b)fluorene	20 U	20 U	N/A	30
Fluoranthene	20 U	20 U	N/A	30
Pyrene	18 U	18 U	N/A	30
C1-Fluoranthenes/Pyrenes	18 U	18 U	N/A	30
C2-Fluoranthenes/Pyrenes	18 U	18 U	N/A	30
C3-Fluoranthenes/Pyrenes	18 U	18 U	N/A	30
C4-Fluoranthenes/Pyrenes	18 U	18 U	N/A	30
Naphthobenzothiophenes	24 U	24 U	N/A	30
C1-Naphthobenzothiophenes	24 U	24 U	N/A	30
C2-Naphthobenzothiophenes	24 U	24 U	N/A	30

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

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01E**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	24 U	24 U	N/A	30
C4-Naphthobenzothiophenes	24 U	24 U	N/A	30
Benz[a]anthracene	32 U	32 U	N/A	30
Chrysene/Triphenylene	22 U	22 U	N/A	30
C1-Chrysenes	22 U	22 U	N/A	30
C2-Chrysenes	22 U	22 U	N/A	30
C3-Chrysenes	22 U	22 U	N/A	30
C4-Chrysenes	22 U	22 U	N/A	30
Benzo[b]fluoranthene	21 U	21 U	N/A	30
Benzo[k]fluoranthene	41 U	41 U	N/A	30
Benzo[a]fluoranthene	41 U	41 U	N/A	30
Benzo[e]pyrene	28 U	28 U	N/A	30
Benzo[a]pyrene	28 U	28 U	N/A	30
Perylene	35 U	35 U	N/A	30
Indeno[1,2,3-cd]pyrene	49 U	48 U	N/A	30
Dibenz[a,h]anthracene	38 U	38 U	N/A	30
Benzo[g,h,i]perylene	36 U	36 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	101	87	50-130
Pyrene-d10	113	114	50-130
Benzo[b]fluoranthene-d12	111	118	50-130

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

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

02/22/06 11:30

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-08I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-02**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.109	21	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	56000	E	Fluoranthene	5600	
C1-Naphthalenes	32000	E	Pyrene	8000	
C2-Naphthalenes	14000		C1-Fluoranthenes/Pyrenes	7700	
C3-Naphthalenes	4000		C2-Fluoranthenes/Pyrenes	2000	
C4-Naphthalenes	920		C3-Fluoranthenes/Pyrenes	470	
Biphenyl	2600		C4-Fluoranthenes/Pyrenes	110	
Dibenzofuran	930		Naphthobenzothiophenes	770	
Acenaphthylene	14000		C1-Naphthobenzothiophenes	580	
Acenaphthene	2500		C2-Naphthobenzothiophenes	220	
Fluorene	7400		C3-Naphthobenzothiophenes	100	
C1-Fluorenes	3600		C4-Naphthobenzothiophenes	2.3	U
C2-Fluorenes	1600		Benz[a]anthracene	2900	
C3-Fluorenes	570		Chrysene/Triphenylene	2500	
Anthracene	6700		C1-Chrysenes	1800	
Phenanthrene	20000	E	C2-Chrysenes	580	
C1-Phenanthrenes/Anthracenes	12000		C3-Chrysenes	210	
C2-Phenanthrenes/Anthracenes	4200		C4-Chrysenes	74	
C3-Phenanthrenes/Anthracenes	960		Benzo[b]fluoranthene	880	
C4-Phenanthrenes/Anthracenes	170		Benzo[k]fluoranthene	1200	
Retene	2.8	U	Benzo[a]fluoranthene	590	
Dibenzothiophene	2600		Benzo[e]pyrene	870	
C1-Dibenzothiophenes	2500		Benzo[a]pyrene	2000	
C2-Dibenzothiophenes	1500		Perylene	280	
C3-Dibenzothiophenes	580		Indeno[1,2,3-cd]pyrene	750	
C4-Dibenzothiophenes	140		Dibenz[a,h]anthracene	200	
Benzo(b)fluorene	1400		Benzo[g,h,i]perylene	650	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	77	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	84	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.

02/21/06 22:54

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-08I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-02**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.109	21	10	AC

Parameter	Result
Carbazole	220

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	77	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	84	50-130

N/A - Not Applicable

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18193.D
Acq On : 14 Feb 2006 3:52 am
Operator : AC
Sample : 0602017-02
Misc : 10X
ALS Vial : 9 Sample Multiplier: 1

2nd 2/20/06

Quant Time: Feb 16 13:04:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

CMS 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	35181m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	57981	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	5503	72.96	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.30%#			
58) Pyrene-d10	38.02	212	14084	90.82	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.08%#			
81) Benzo[b]fluoranthene-d12	46.84	264	9217	79.83	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.98%#			
125) 5B(H)Cholane - Surr	43.57	217	3314	145.46	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 14.55%#			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) Naphthalene	19.62	128	5231932	29120.47	ng/mL#E	100
10) C1-Naphthalenes	22.31	142	2973866m	16552.27	ng/mLE	
11) C2-Naphthalenes	25.13	156	1262855m	7028.94	ng/mL	
12) C3-Naphthalenes	27.47	170	372531m	2073.47	ng/mL	
13) C4-Naphthalenes	30.23	184	86422m	481.02	ng/mL	
15) 2-Methylnaphthalene	22.31	142	1888456	16603.16	ng/mL#E	100
16) 1-Methylnaphthalene	22.73	142	1079862	10084.63	ng/mL#E	100
22) Biphenyl	24.18	154	190236	1345.30	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	214489m	2272.28	ng/mL	
24) Dibenzofuran	27.25	168	77103m	485.37	ng/mL	
25) Acenaphthylene	25.87	152	1272818m	7388.55	ng/mL	
26) Acenaphthene	26.62	153	137840	1288.13	ng/mL	98
27) 2,3,5-Trimethylnaphthalene	28.16	170	25307m	298.65	ng/mL	
28) Fluorene	28.62	166	461233m	3843.27	ng/mL	
29) C1-Fluorenes	30.85	180	223495m	1862.30	ng/mL	
30) C2-Fluorenes	33.03	194	97823m	815.12	ng/mL	
31) C3-Fluorenes	35.03	208	35729m	297.72	ng/mL	
32) Dibenzothiophene	31.94	184	237758	1343.41	ng/mL	96
36) OTP	34.11	198	1271m	7.18	ng/mL	
37) C1-Dibenzothiophenes	33.71	198	230183m	1300.61	ng/mL	
38) C2-Dibenzothiophenes	35.77	212	137161m	775.00	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	53325m	301.30	ng/mL	
40) C4-Dibenzothiophenes	38.90	240	12462m	70.41	ng/mL	
41) Phenanthrene	32.45	178	1892992	10637.44	ng/mLE	99
47) C1-Phenanthrenes/Anthracen	34.51	192	1135960m	6383.39	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.67	206	391089m	2197.68	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	88765m	498.80	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.71	234	15702m	88.24	ng/mL	
53) Anthracene	32.62	178	573665	3484.17	ng/mL	100
54) Carbazole	33.29	167	17284m	113.42	ng/mL	
55) 1-Methylphenanthrene	34.94	192	182130	1494.70	ng/mL	99
56) Fluoranthene	37.22	202	549498m	2900.08	ng/mL	
57) Benzo(b)fluorene	39.73	216	79687m	720.63	ng/mL	
59) Pyrene	38.10	202	797976	4140.81	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.48	216	776012m	4026.84	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.23	230	203608m	1056.55	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.13	244	47152m	244.68	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.67	258	11229m	58.27	ng/mL	
64) Naphthobenzothiophene	41.95	234	43798	242.94	ng/ml	99
65) Naphthobenzothiophene-2,1-	41.95	234	43798	242.94	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18193.D
Acq On : 14 Feb 2006 3:52 am
Operator : AC
Sample : 0602017-02
Misc : 10X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 16 13:04:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

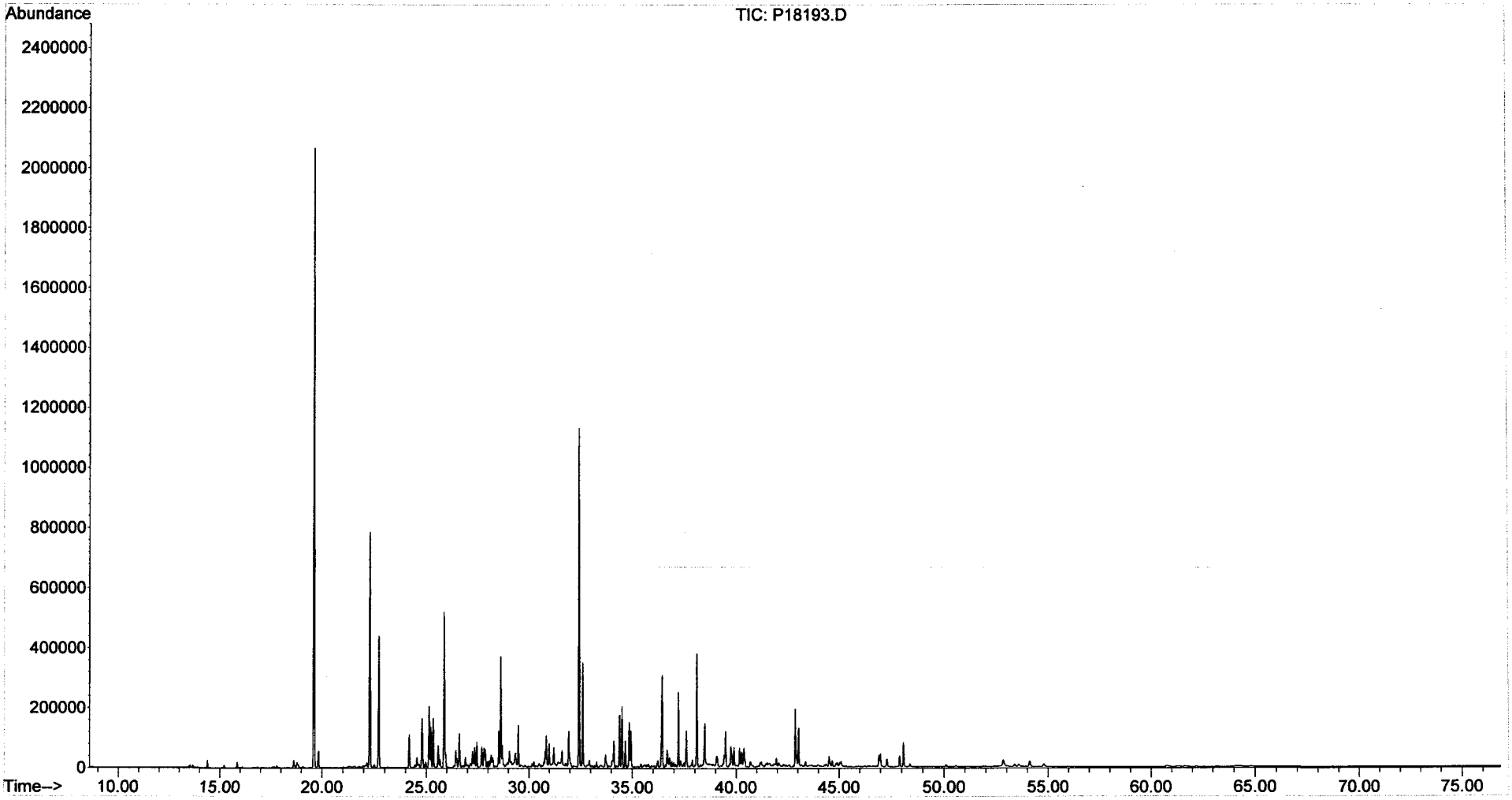
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.28	234	12679	70.33	ng/mL#	27
67) Naphthobenzothiophene-2,3-	42.59	234	16068m	89.13	ng/mL	
68) C1-Naphthobenzothiophenes	43.35	248	54127m	300.23	ng/ml	
69) C2-Naphthobenzothiophenes	44.86	262	20762m	115.16	ng/ml	
70) C3-Naphthobenzothiophenes	46.76	276	9451m	52.42	ng/ml	
73) Benz[a]anthracene	42.88	228	264713m	1499.79	ng/mL	
74) Chrysene	43.04	228	236864m	1313.37	ng/mL	
75) Chrysene/Triphenylene	43.04	228	237720m	1318.12	ng/mL	
76) C1-Chrysenes	44.51	242	169438m	939.51	ng/mL	
77) C2-Chrysenes	46.22	256	55033m	305.15	ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	1099	6.09	ng/mL	100
79) C3-Chrysenes	47.81	270	19389m	107.51	ng/mL	
80) C4-Chrysenes	48.80	284	6945m	38.51	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	82607	455.72	ng/mL	99
83) Benzo[k]fluoranthene	46.99	252	115278	611.31	ng/mL	100
84) Benzo[a]fluoranthene	47.30	252	57834m	306.69	ng/mL	
85) Benzo[e]pyrene	47.91	252	79616	453.66	ng/mL	98
86) Benzo[a]pyrene	48.09	252	176165	1014.54	ng/mL	99
87) Perylene	48.40	252	24481	144.23	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	52.83	276	59366m	388.50	ng/mL	
89) Dibenz[a,h]anthracene	52.88	278	15975m	102.56	ng/mL	
90) Benzo[g,h,i]perylene	54.10	276	59465	337.71	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18193.D
Acq On : 14 Feb 2006 3:52 am
Operator : AC
Sample : 0602017-02
Misc : 10X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 16 13:04:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-08I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-02**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.256	5.25	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2.7**	30,31-Bishomohopane-22S	**0.90**
C24 Tricyclic Terpane	**1.7**	30,31-Bishomohopane-22R	**0.74**
C25 Tricyclic Terpane	**1.4**	30,31-Trishomohopane-22S	**0.60**
C24 Tetracyclic Terpane	**0.76**	30,31-Trishomohopane-22R	**0.30**
C26 Tricyclic Terpane-22S	**0.57**	Tetrakishomohopane-22S	**0.27**
C26 Tricyclic Terpane-22R	**0.56**	Tetrakishomohopane-22R	0.058 U
C28 Tricyclic Terpane-22S	**0.62**	Pentakishomohopane-22S	0.058 U
C28 Tricyclic Terpane-22R	**0.71**	Pentakishomohopane-22R	0.058 U
C29 Tricyclic Terpane-22S	**0.58**	13b(H),17a(H)-20S-Diacholestane	**2.1**
C29 Tricyclic Terpane-22R	**0.62**	13b(H),17a(H)-20R-Diacholestane	**1.1**
18a-22,29,30-Trisnorneohopane-TS	**1.6**	13b,17a-20S-Methyldiacholestane	**0.76**
C30 Tricyclic Terpane-22S	**0.37**	14a(H),17a(H)-20S-Cholestane	**1.1**
C30 Tricyclic Terpane-22R	**0.30**	14a(H),17a(H)-20R-Cholestane	**3.6**
17a(H)-22,29,30-Trisnorhopane-TM	**1.8**	13b,17a-20R-Ethyldiacholestane	**0.39**
17a/b,21b/a 28,30-Bisnorhopane	**0.54**	13a,17b-20S-Ethyldiacholestane	**0.13** J
17a(H),21b(H)-25-Norhopane	**0.28**	14a,17a-20S-Methylcholestane	**0.57**
30-Norhopane	**3.8**	14a,17a-20R-Methylcholestane	**1.9**
18a(H)-30-Norneohopane-C29Ts	**1.2**	14a(H),17a(H)-20S-Ethylcholestane	**1.1**
17a(H)-Diahopane	**0.40**	14a(H),17a(H)-20R-Ethylcholestane	**1.5**
30-Normoretane	**0.91**	14b(H),17b(H)-20R-Cholestane	**1.7**
18a(H)&18b(H)-Oleananes	**0.65**	14b(H),17b(H)-20S-Cholestane	**1.7**
Hopane	**5.6**	14b,17b-20R-Methylcholestane	**1.5**
Moretane	**0.90**	14b,17b-20S-Methylcholestane	**1.9**
30-Homohopane-22S	**1.5**	14b(H),17b(H)-20R-Ethylcholestane	**2.4**
30-Homohopane-22R	**1.5**	14b(H),17b(H)-20S-Ethylcholestane	**1.2**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	107	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.

02/21/06 23:35

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28259.D
Acq On : 14 Feb 2006 11:01 pm
Operator : AC
Sample : 0602017-02
Misc : 1x
ALS Vial : 8 Sample Multiplier: 1

MAL 2/21/06

Quant Time: Feb 21 22:05:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

2nd 2/22/06

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	43.66	240	51765	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	44.22	217	450651	20470.36	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	2047.04%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.91	191	14046m	274.89	ng/mL	
84) Hopane (T19)	52.91	191	14046m	274.89	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.21	191	6813m	133.34	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	4251	83.20	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.49	191	3410m	66.74	ng/ml	
88) C24 Tetracyclic Terpane (T	44.77	191	1893	37.05	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.49	191	1419m	27.77	ng/ml	
90) C26 Tricyclic Terpane-22R	44.59	191	1396	27.32	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.86	191	1537	30.08	ng/ml	100
92) C28 Tricyclic Terpane-22R	47.03	191	1778m	34.80	ng/ml	
93) C29 Tricyclic Terpane-22S	47.56	191	1441	28.20	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.76	191	1537m	30.08	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.96	191	4107m	80.38	ng/ml	
96) C30 Tricyclic Terpane-22S	49.03	191	931	18.22	ng/mL	100
97) C30 Tricyclic Terpane-22R	49.28	191	747m	14.62	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.53	191	4432	86.74	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.76	191	1352m	26.46	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.53	191	706	13.82	ng/ml	100
101) 30-Norhopane (T15)	51.48	191	9463	185.20	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.58	191	3034m	59.38	ng/ml	
103) 17a(H)-Diahopane (X)	51.71	191	996m	19.49	ng/ml	
104) 30-Normoretane (T17)	52.29	191	2261	44.25	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.72	191	1611m	31.53	ng/ml	
106) Moretane (T20)	53.65	191	2241m	43.86	ng/ml	
107) 30-Homohopane-22S (T21)	54.80	191	3836	75.07	ng/ml	100
108) 30-Homohopane-22R (T22)	55.05	191	3730m	73.00	ng/ml	
109) 30,31-Bishomohopane-22S (T	56.45	191	2232m	43.68	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.86	191	1842	36.05	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.71	191	1500	29.36	ng/ml	100
112) 30,31-Trishomohopane-22R (	59.36	191	746m	14.60	ng/ml	
113) Tetrakishomohopane-22S (T3	61.51	191	670m	13.11	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.70	217	2208	100.30	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.12	217	1202m	54.60	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.82	217	815m	37.02	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.71	217	1148m	52.15	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.25	217	3890	176.70	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.54	217	420m	19.08	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	48.81	217	135m	6.13	ng/ml	
125) 14a,17a-20S-Methylcholesta	48.98	217	608m	27.62	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.72	217	2076m	94.30	ng/ml	

- RFRPT CMC 2nd 2/22/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28259.D
Acq On : 14 Feb 2006 11:01 pm
Operator : AC
Sample : 0602017-02
Misc : 1x
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 21 22:05:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

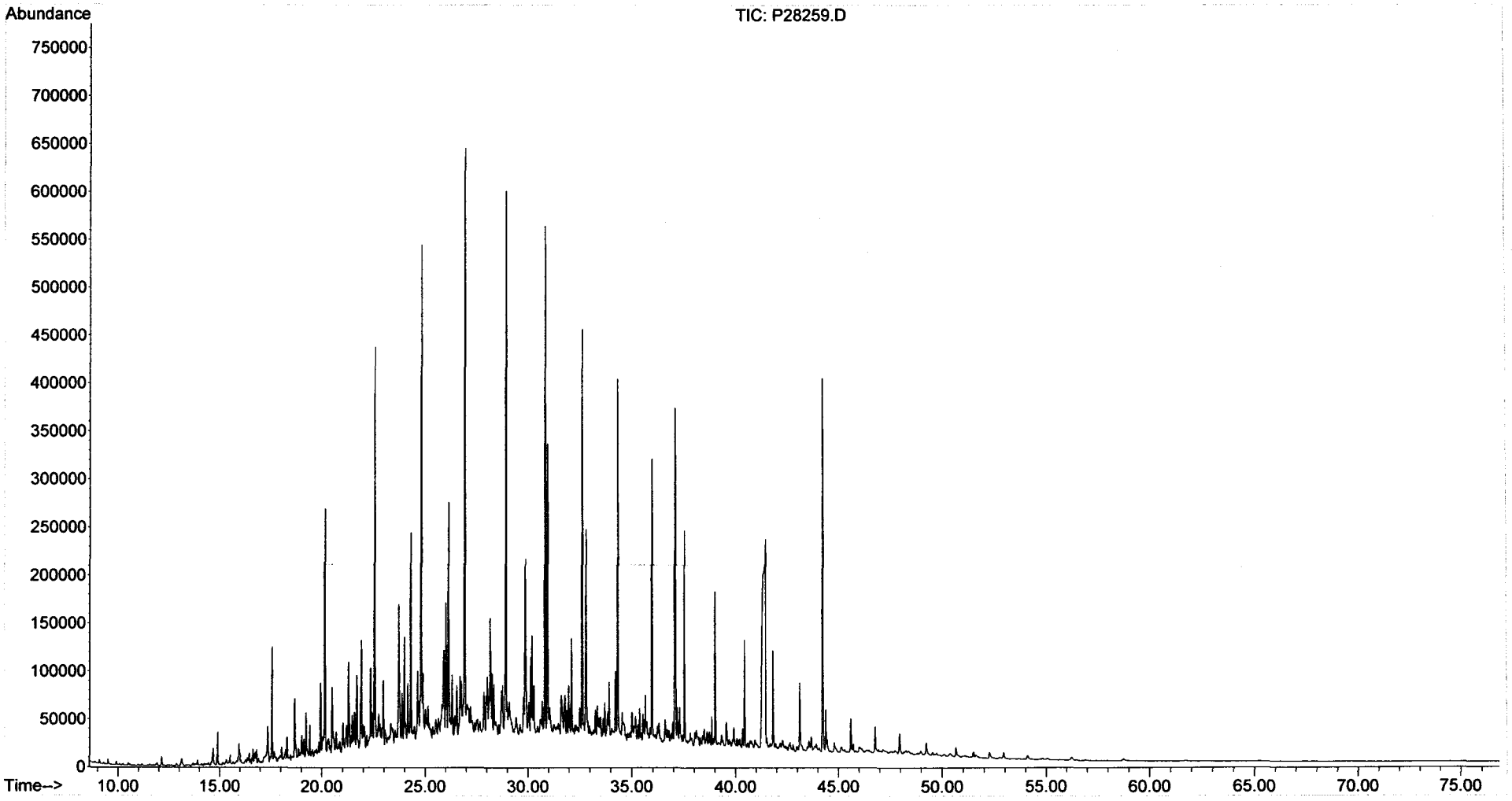
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
127) 14a(H),17a(H)-20S-Ethylcho	50.09	217	1168m	53.06	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.05	217	1579	71.72	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	47.80	218	1839m	83.53	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.89	218	1815m	82.44	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.15	218	1612m	73.22	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.24	218	2067m	93.89	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.35	218	2553	115.97	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.39	218	1337m	60.73	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28259.D
Acq On : 14 Feb 2006 11:01 pm
Operator : AC
Sample : 0602017-02
Misc : 1x
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 21 22:05:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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: **CGMW-08I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-02E**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/14/06	100	0.109	21	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**66000**		Fluoranthene	19	U
C1-Naphthalenes	**37000**		Pyrene	17	U
C2-Naphthalenes	32	U	C1-Fluoranthenes/Pyrenes	17	U
C3-Naphthalenes	32	U	C2-Fluoranthenes/Pyrenes	17	U
C4-Naphthalenes	32	U	C3-Fluoranthenes/Pyrenes	17	U
Biphenyl	18	U	C4-Fluoranthenes/Pyrenes	17	U
Dibenzofuran	23	U	Naphthobenzothiophenes	23	U
Acenaphthylene	35	U	C1-Naphthobenzothiophenes	23	U
Acenaphthene	22	U	C2-Naphthobenzothiophenes	23	U
Fluorene	22	U	C3-Naphthobenzothiophenes	23	U
C1-Fluorenes	22	U	C4-Naphthobenzothiophenes	23	U
C2-Fluorenes	22	U	Benz[a]anthracene	30	U
C3-Fluorenes	22	U	Chrysene/Triphenylene	21	U
Anthracene	26	U	C1-Chrysenes	21	U
Phenanthrene	**24000**		C2-Chrysenes	21	U
C1-Phenanthrenes/Anthracenes	28	U	C3-Chrysenes	21	U
C2-Phenanthrenes/Anthracenes	28	U	C4-Chrysenes	21	U
C3-Phenanthrenes/Anthracenes	28	U	Benzo[b]fluoranthene	20	U
C4-Phenanthrenes/Anthracenes	28	U	Benzo[k]fluoranthene	39	U
Retene	28	U	Benzo[a]fluoranthene	39	U
Dibenzothiophene	21	U	Benzo[e]pyrene	26	U
C1-Dibenzothiophenes	21	U	Benzo[a]pyrene	27	U
C2-Dibenzothiophenes	21	U	Perylene	33	U
C3-Dibenzothiophenes	21	U	Indeno[1,2,3-cd]pyrene	46	U
C4-Dibenzothiophenes	21	U	Dibenz[a,h]anthracene	36	U
Benzo(b)fluorene	19	U	Benzo[g,h,i]perylene	34	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	110	50-130
Benzo[b]fluoranthene-d12	98	50-130

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

02/22/06 11:23

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18207.D
Acq On : 14 Feb 2006 5:07 pm
Operator : AC
Sample : 0602017-02-RE
Misc : 100X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 16 13:36:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

CMS 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	34122m	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	55161	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	629m	8.60	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.86%#	
58) Pyrene-d10	38.04	212	1570	10.44	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	1.04%#	
81) Benzo[b]fluoranthene-d12	46.87	264	1030	9.38	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.94%#	
125) 5B(H)Cholane - Surr	0.00	217	0	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	

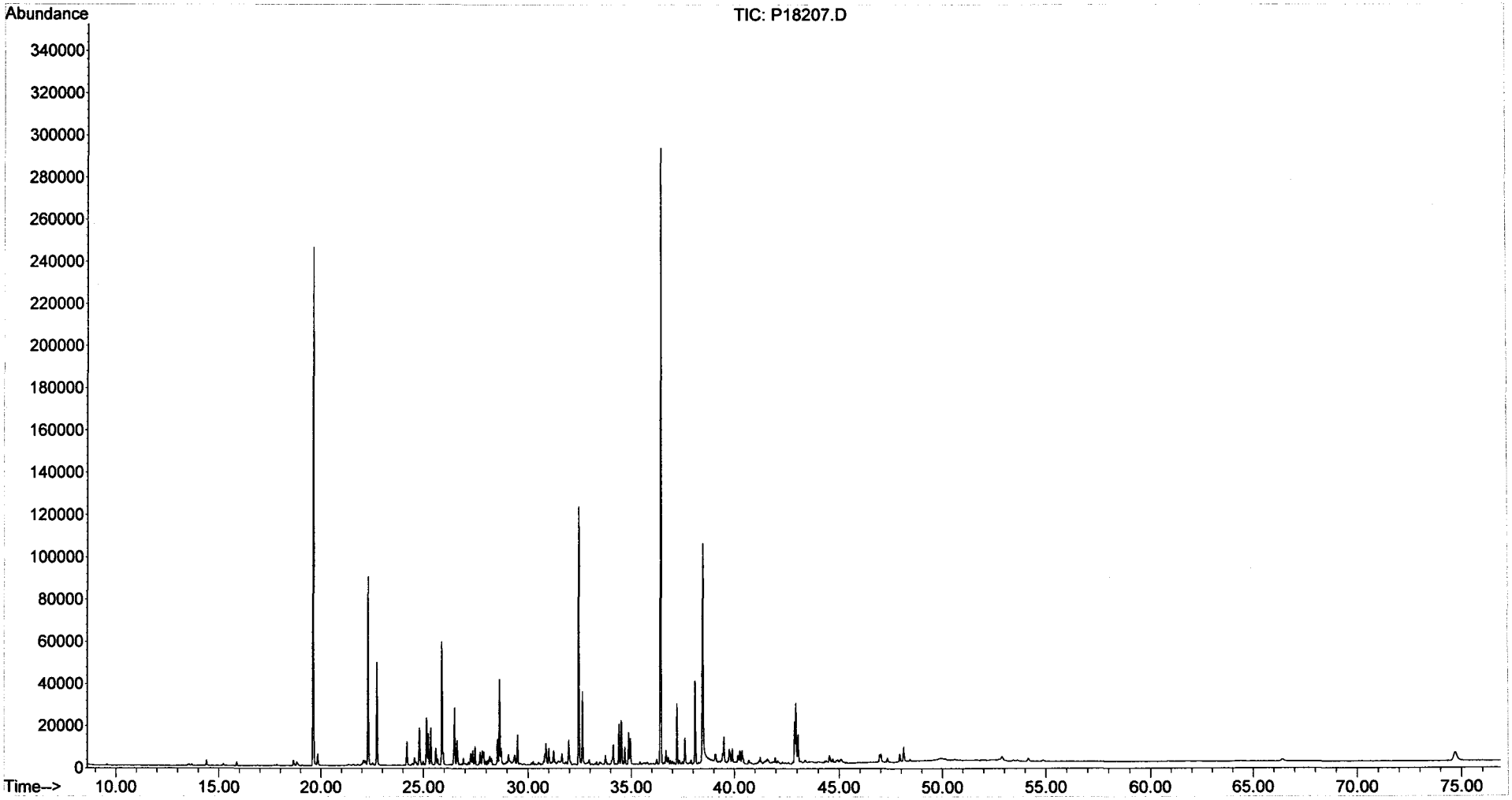
Target Compounds						Qvalue
9) Naphthalene	19.62	128	600008	3443.24	ng/mL#	100
10) C1-Naphthalenes	22.31	142	334105m	1917.31	ng/mL	
15) 2-Methylnaphthalene	22.31	142	210829	1911.12	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	122062	1175.29	ng/mL#	100
41) Phenanthrene	32.45	178	210677	1220.62	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18207.D
Acq On : 14 Feb 2006 5:07 pm
Operator : AC
Sample : 0602017-02-RE
Misc : 100X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 16 13:36:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.046**	J	Fluoranthene	**0.031**	J
C1-Naphthalenes	**0.061**	J	Pyrene	0.036	U
C2-Naphthalenes	0.066	U	C1-Fluoranthenes/Pyrenes	0.036	U
C3-Naphthalenes	0.066	U	C2-Fluoranthenes/Pyrenes	0.036	U
C4-Naphthalenes	0.066	U	C3-Fluoranthenes/Pyrenes	0.036	U
Biphenyl	0.036	U	C4-Fluoranthenes/Pyrenes	0.036	U
Dibenzofuran	0.048	U	Naphthobenzothiophenes	0.048	U
Acenaphthylene	**0.32**	J	C1-Naphthobenzothiophenes	0.048	U
Acenaphthene	0.046	U	C2-Naphthobenzothiophenes	0.048	U
Fluorene	0.046	U	C3-Naphthobenzothiophenes	0.048	U
C1-Fluorenes	0.046	U	C4-Naphthobenzothiophenes	0.048	U
C2-Fluorenes	0.046	U	Benz[a]anthracene	0.063	U
C3-Fluorenes	0.046	U	Chrysene/Triphenylene	0.043	U
Anthracene	0.054	U	C1-Chrysenes	0.043	U
Phenanthrene	**0.11**	J	C2-Chrysenes	0.043	U
C1-Phenanthrenes/Anthracenes	**0.23**	J	C3-Chrysenes	0.043	U
C2-Phenanthrenes/Anthracenes	0.058	U	C4-Chrysenes	0.043	U
C3-Phenanthrenes/Anthracenes	0.058	U	Benzo[b]fluoranthene	0.042	U
C4-Phenanthrenes/Anthracenes	0.058	U	Benzo[k]fluoranthene	0.081	U
Retene	0.058	U	Benzo[a]fluoranthene	0.081	U
Dibenzothiophene	0.044	U	Benzo[e]pyrene	0.055	U
C1-Dibenzothiophenes	0.044	U	Benzo[a]pyrene	0.056	U
C2-Dibenzothiophenes	0.044	U	Perylene	0.070	U
C3-Dibenzothiophenes	0.044	U	Indeno[1,2,3-cd]pyrene	0.096	U
C4-Dibenzothiophenes	0.044	U	Dibenz[a,h]anthracene	0.076	U
Benzo(b)fluorene	0.040	U	Benzo[g,h,i]perylene	0.070	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	94	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.

02/21/06 19:12

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result
Carbazole	0.052 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	94	50-130

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

02/21/06 19:12

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18201.D
Acq On : 14 Feb 2006 10:35 am
Operator : AC
Sample : SO020906B23
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 15 07:08:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/15/06

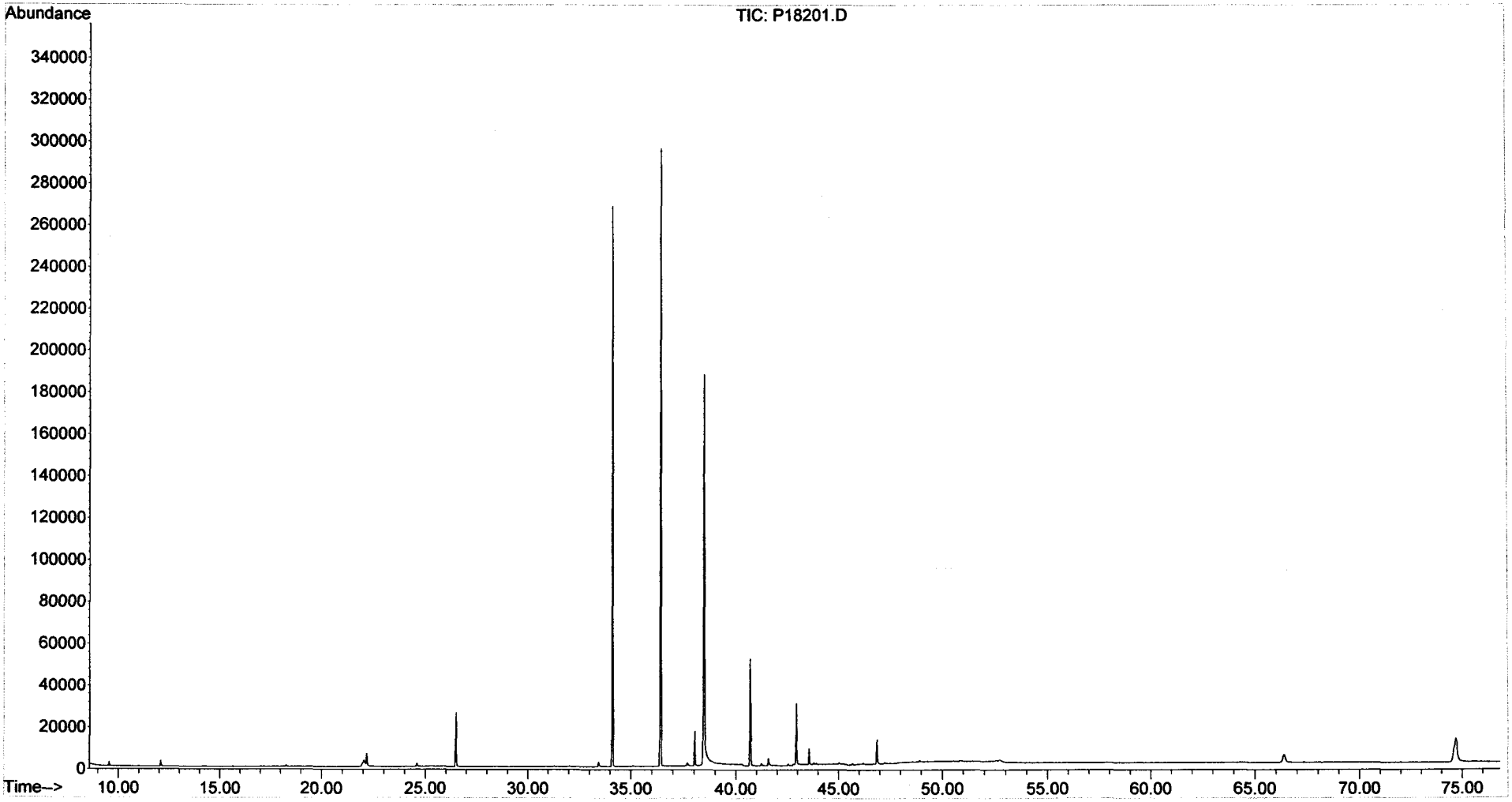
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	34647m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	58553	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	15748	212.02	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.20%#			
58) Pyrene-d10	38.02	212	39383	257.89	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.79%#			
81) Benzo[b]fluoranthene-d12	46.85	264	27526	236.07	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.61%#			
125) 5B(H)Cholane - Surr	43.57	217	9826	427.08	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.71%#			
Target Compounds						Qvalue
9) Naphthalene	19.62	128	202m	1.14	ng/mL	
10) C1-Naphthalenes	22.29	142	270m	1.53	ng/mL	
15) 2-Methylnaphthalene	22.29	142	111m	0.99	ng/mL	
25) Acenaphthylene	25.85	152	1372m	8.09	ng/mL	
41) Phenanthrene	32.44	178	462m	2.64	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.95	192	1000m	5.71	ng/mL	
55) 1-Methylphenanthrene	34.95	192	154m	1.28	ng/mL	
56) Fluoranthene	37.22	202	145m	0.78	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18201.D
Acq On : 14 Feb 2006 10:35 am
Operator : AC
Sample : SO020906B23
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 15 07:08:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Form I
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.11	U	30,31-Bishomohopane-22S	0.11	U
C24 Tricyclic Terpane	0.11	U	30,31-Bishomohopane-22R	0.11	U
C25 Tricyclic Terpane	0.11	U	30,31-Trishomohopane-22S	0.11	U
C24 Tetracyclic Terpane	0.11	U	30,31-Trishomohopane-22R	0.11	U
C26 Tricyclic Terpane-22S	0.11	U	Tetrakishomohopane-22S	0.11	U
C26 Tricyclic Terpane-22R	0.11	U	Tetrakishomohopane-22R	0.11	U
C28 Tricyclic Terpane-22S	0.11	U	Pentakishomohopane-22S	0.11	U
C28 Tricyclic Terpane-22R	0.11	U	Pentakishomohopane-22R	0.11	U
C29 Tricyclic Terpane-22S	0.11	U	13b(H),17a(H)-20S-Diacholestane	0.11	U
C29 Tricyclic Terpane-22R	0.11	U	13b(H),17a(H)-20R-Diacholestane	0.11	U
18a-22,29,30-Trisnorneohopane-TS	0.11	U	13b,17a-20S-Methyldiacholestane	0.11	U
C30 Tricyclic Terpane-22S	0.11	U	14a(H),17a(H)-20S-Cholestane	0.11	U
C30 Tricyclic Terpane-22R	0.11	U	14a(H),17a(H)-20R-Cholestane	0.11	U
17a(H)-22,29,30-Trisnorhopane-TM	0.11	U	13b,17a-20R-Ethyldiacholestane	0.11	U
17a/b,21b/a 28,30-Bisnorhopane	0.11	U	13a,17b-20S-Ethyldiacholestane	0.11	U
17a(H),21b(H)-25-Norhopane	0.11	U	14a,17a-20S-Methylcholestane	0.11	U
30-Norhopane	0.11	U	14a,17a-20R-Methylcholestane	0.11	U
18a(H)-30-Norneohopane-C29Ts	0.11	U	14a(H),17a(H)-20S-Ethylcholestane	0.11	U
17a(H)-Diahopane	0.11	U	14a(H),17a(H)-20R-Ethylcholestane	0.11	U
30-Normoretane	0.11	U	14b(H),17b(H)-20R-Cholestane	0.11	U
18a(H)&18b(H)-Oleananes	0.11	U	14b(H),17b(H)-20S-Cholestane	0.11	U
Hopane	0.11	U	14b,17b-20R-Methylcholestane	0.11	U
Moretane	0.11	U	14b,17b-20S-Methylcholestane	0.11	U
30-Homohopane-22S	0.11	U	14b(H),17b(H)-20R-Ethylcholestane	0.11	U
30-Homohopane-22R	0.11	U	14b(H),17b(H)-20S-Ethylcholestane	0.11	U

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

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

02/21/06 22:42

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28256.D
Acq On : 14 Feb 2006 6:17 pm
Operator : AC
Sample : so020906b23
Misc : 1x etr0602017
ALS Vial : 5 Sample Multiplier: 1

MAL 2/21/06

Quant Time: Feb 21 22:09:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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	43.65	240	38980	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	44.20	217	8347	503.51	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.35%			

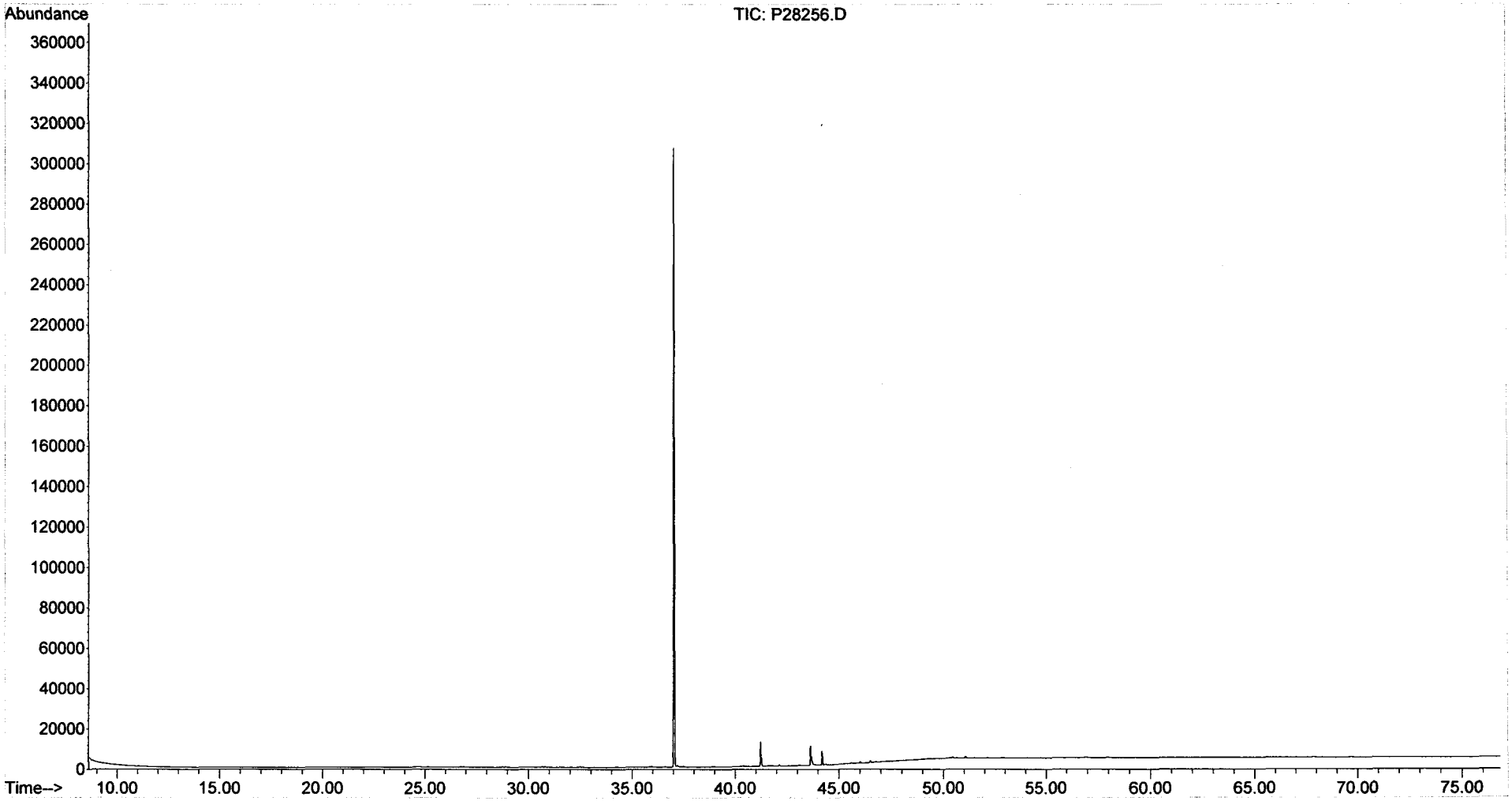
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB14\
Data File : P28256.D
Acq On : 14 Feb 2006 6:17 pm
Operator : AC
Sample : so020906b23
Misc : 1x etr0602017
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 21 22:09:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **See Below**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	02/09/06	100	AC

Lab ID:	SO020906B23		SO020906LCS17		SO020906LCSD15				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.046		9.2	92	9.4	95	3	30	50-130
Acenaphthylene	0.32		9.1	91	9.3	93	2	30	50-130
Acenaphthene	0.046	U	9.1	91	9.4	94	4	30	50-130
Fluorene	0.046	U	8.9	89	9.3	93	4	30	50-130
Anthracene	0.054	U	8.8	88	9.0	90	3	30	50-130
Phenanthrene	0.11		8.9	89	9.3	93	4	30	50-130
Fluoranthene	0.031		9.5	95	9.8	98	3	30	50-130
Pyrene	0.036	U	9.7	97	10	102	5	30	50-130
Benz[a]anthracene	0.063	U	9.6	96	10	104	8	30	50-130
Chrysene/Triphenylene	0.043	U	9.0	90	9.5	95	6	30	50-130
Benzo[b]fluoranthene	0.042	U	9.1	91	9.7	97	7	30	50-130
Benzo[k]fluoranthene	0.081	U	9.4	94	9.9	99	6	30	50-130
Benzo[a]pyrene	0.056	U	8.5	85	9.1	91	7	30	50-130
Indeno[1,2,3-cd]pyrene	0.096	U	9.0	90	9.6	96	6	30	50-130
Dibenz[a,h]anthracene	0.076	U	9.0	90	9.7	97	8	30	50-130
Benzo[g,h,i]perylene	0.070	U	8.6	86	9.4	94	8	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	94	98	50-130
Pyrene-d10	108	113	50-130
Benzo[b]fluoranthene-d12	99	104	50-130

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

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

02/21/06 19:44

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: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906LCS17**
Associated Blank: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**9.2**	S	Fluoranthene	**9.5**	S
C1-Naphthalenes	0.066	U	Pyrene	**9.7**	S
C2-Naphthalenes	0.066	U	C1-Fluoranthenes/Pyrenes	0.036	U
C3-Naphthalenes	0.066	U	C2-Fluoranthenes/Pyrenes	0.036	U
C4-Naphthalenes	0.066	U	C3-Fluoranthenes/Pyrenes	0.036	U
Biphenyl	0.036	U	C4-Fluoranthenes/Pyrenes	0.036	U
Dibenzofuran	0.048	U	Naphthobenzothiophenes	0.048	U
Acenaphthylene	**9.1**	S	C1-Naphthobenzothiophenes	0.048	U
Acenaphthene	**9.1**	S	C2-Naphthobenzothiophenes	0.048	U
Fluorene	**8.9**	S	C3-Naphthobenzothiophenes	0.048	U
C1-Fluorenes	0.046	U	C4-Naphthobenzothiophenes	0.048	U
C2-Fluorenes	0.046	U	Benz[a]anthracene	**9.6**	S
C3-Fluorenes	0.046	U	Chrysene/Triphenylene	**9.0**	S
Anthracene	**8.8**	S	C1-Chrysenes	0.043	U
Phenanthrene	**8.9**	S	C2-Chrysenes	0.043	U
C1-Phenanthrenes/Anthracenes	0.058	U	C3-Chrysenes	0.043	U
C2-Phenanthrenes/Anthracenes	0.058	U	C4-Chrysenes	0.043	U
C3-Phenanthrenes/Anthracenes	0.058	U	Benzo[b]fluoranthene	**9.1**	S
C4-Phenanthrenes/Anthracenes	0.058	U	Benzo[k]fluoranthene	**9.4**	S
Retene	0.058	U	Benzo[a]fluoranthene	0.081	U
Dibenzothiophene	0.044	U	Benzo[e]pyrene	0.055	U
C1-Dibenzothiophenes	0.044	U	Benzo[a]pyrene	**8.5**	S
C2-Dibenzothiophenes	0.044	U	Perylene	0.070	U
C3-Dibenzothiophenes	0.044	U	Indeno[1,2,3-cd]pyrene	**9.0**	S
C4-Dibenzothiophenes	0.044	U	Dibenz[a,h]anthracene	**9.0**	S
Benzo(b)fluorene	0.040	U	Benzo[g,h,i]perylene	**8.6**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

02/21/06 19:13

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906LCS17**
Associated Blank: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result
Carbazole	0.052 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	94	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

02/21/06 19:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18209.D
Acq On : 14 Feb 2006 6:40 pm
Operator : AC
Sample : SO020906LCS17
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 16 12:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/16/06

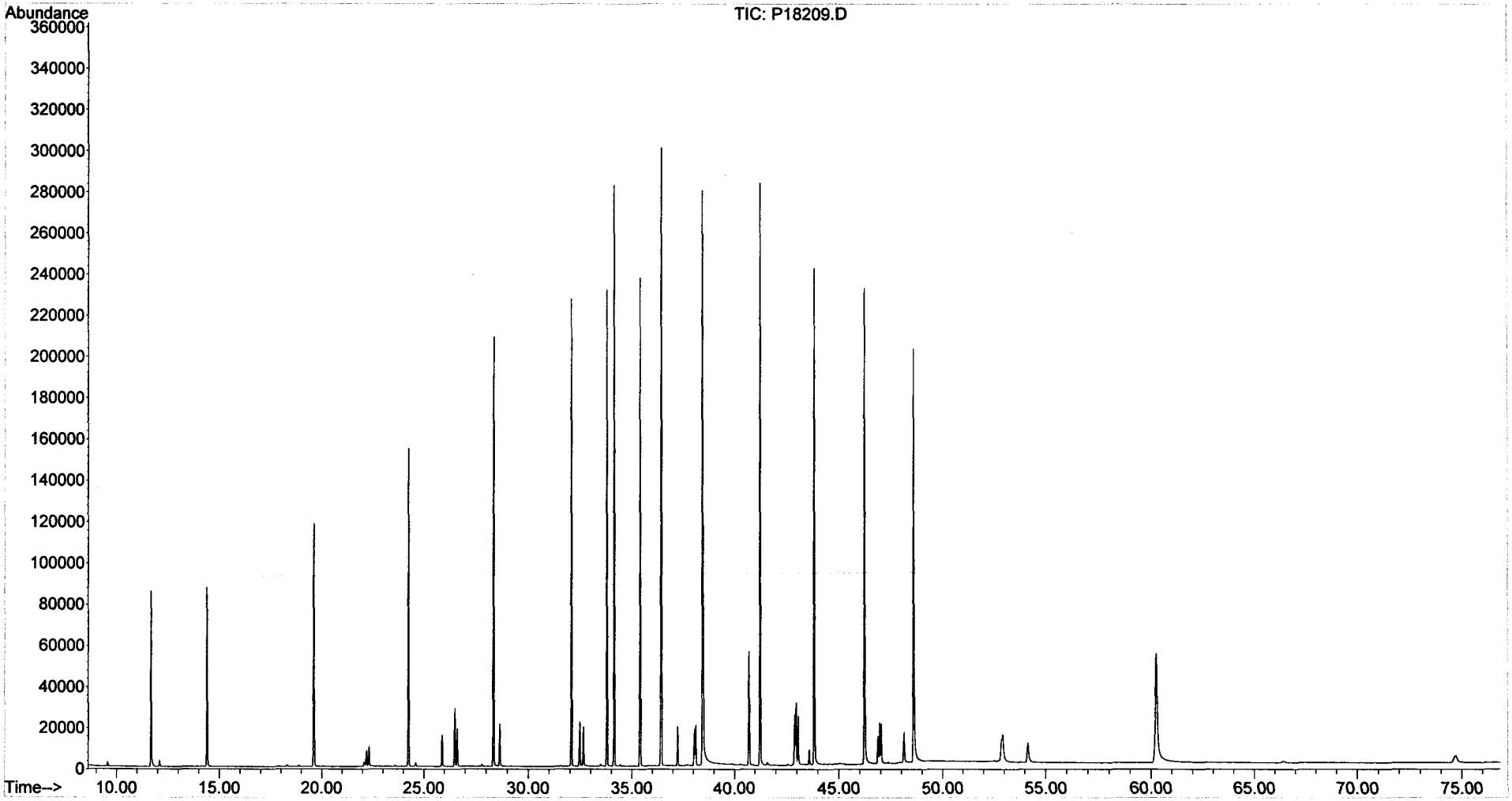
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	34687m	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	58656	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	17565	236.21	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.62%#			
58) Pyrene-d10	38.04	212	41454	271.14	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.11%#			
81) Benzo[b]fluoranthene-d12	46.85	264	28841	246.91	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.69%#			
125) 5B(H)Cholane - Surr	43.58	217	9912	430.06	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 43.01%#			
Target Compounds						Qvalue
9) Naphthalene	19.62	128	40657	229.52	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	24246	216.20	ng/mL#	100
25) Acenaphthylene	25.89	152	38586	227.18	ng/mL#	100
26) Acenaphthene	26.63	153	23990	227.38	ng/mL	99
28) Fluorene	28.65	166	26374	222.89	ng/mL	94
41) Phenanthrene	32.45	178	39063	222.64	ng/mL	99
53) Anthracene	32.64	178	35582	219.19	ng/mL	98
56) Fluoranthene	37.22	202	44361m	237.46	ng/mL	
59) Pyrene	38.11	202	46191	243.11	ng/mL	99
73) Benz[a]anthracene	42.89	228	42964m	240.62	ng/mL	
74) Chrysene	43.05	228	41438m	227.12	ng/mL	
75) Chrysene/Triphenylene	43.05	228	41079m	225.16	ng/mL	
82) Benzo[b]fluoranthene	46.94	252	41551	226.59	ng/mL	99
83) Benzo[k]fluoranthene	47.03	252	44631	233.95	ng/mL	100
86) Benzo[a]pyrene	48.12	252	37410	212.97	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	52.85	276	34868m	225.56	ng/mL	
89) Dibenz[a,h]anthracene	52.93	278	35496	225.27	ng/mL	98
90) Benzo[g,h,i]perylene	54.13	276	38513	216.20	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18209.D
Acq On : 14 Feb 2006 6:40 pm
Operator : AC
Sample : SO020906LCS17
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 16 12:04:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 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: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906LCSD15**
Associated Blank: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**9.4**	S	Fluoranthene	**9.8**	S
C1-Naphthalenes	0.066	U	Pyrene	**10**	S
C2-Naphthalenes	0.066	U	C1-Fluoranthenes/Pyrenes	0.036	U
C3-Naphthalenes	0.066	U	C2-Fluoranthenes/Pyrenes	0.036	U
C4-Naphthalenes	0.066	U	C3-Fluoranthenes/Pyrenes	0.036	U
Biphenyl	0.036	U	C4-Fluoranthenes/Pyrenes	0.036	U
Dibenzofuran	0.048	U	Naphthobenzothiophenes	0.048	U
Acenaphthylene	**9.3**	S	C1-Naphthobenzothiophenes	0.048	U
Acenaphthene	**9.4**	S	C2-Naphthobenzothiophenes	0.048	U
Fluorene	**9.3**	S	C3-Naphthobenzothiophenes	0.048	U
C1-Fluorenes	0.046	U	C4-Naphthobenzothiophenes	0.048	U
C2-Fluorenes	0.046	U	Benz[a]anthracene	**10**	S
C3-Fluorenes	0.046	U	Chrysene/Triphenylene	**9.5**	S
Anthracene	**9.0**	S	C1-Chrysenes	0.043	U
Phenanthrene	**9.3**	S	C2-Chrysenes	0.043	U
C1-Phenanthrenes/Anthracenes	0.058	U	C3-Chrysenes	0.043	U
C2-Phenanthrenes/Anthracenes	0.058	U	C4-Chrysenes	0.043	U
C3-Phenanthrenes/Anthracenes	0.058	U	Benzo[b]fluoranthene	**9.7**	S
C4-Phenanthrenes/Anthracenes	0.058	U	Benzo[k]fluoranthene	**9.9**	S
Retene	0.058	U	Benzo[a]fluoranthene	0.081	U
Dibenzothiophene	0.044	U	Benzo[e]pyrene	0.055	U
C1-Dibenzothiophenes	0.044	U	Benzo[a]pyrene	**9.1**	S
C2-Dibenzothiophenes	0.044	U	Perylene	0.070	U
C3-Dibenzothiophenes	0.044	U	Indeno[1,2,3-cd]pyrene	**9.6**	S
C4-Dibenzothiophenes	0.044	U	Dibenz[a,h]anthracene	**9.7**	S
Benzo(b)fluorene	0.040	U	Benzo[g,h,i]perylene	**9.4**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	113	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/21/06 19:16

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906LCSD15**
Associated Blank: **SO020906B23**
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	02/09/06	02/14/06	100	0.10	4	1	AC

Parameter	Result
Carbazole	0.052 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	113	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/21/06 19:17

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18211.D
Acq On : 14 Feb 2006 8:13 pm
Operator : AC
Sample : SO020906LCSD15
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 16 12:06:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	34920	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	57448	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.20	152	18381	245.53	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.55%#			
58) Pyrene-d10	38.04	212	43659	283.65	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 28.36%#			
81) Benzo[b]fluoranthene-d12	46.85	264	29884	261.22	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.12%#			
125) 5B(H)Cholane - Surr	43.58	217	10689	473.53	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.35%#			

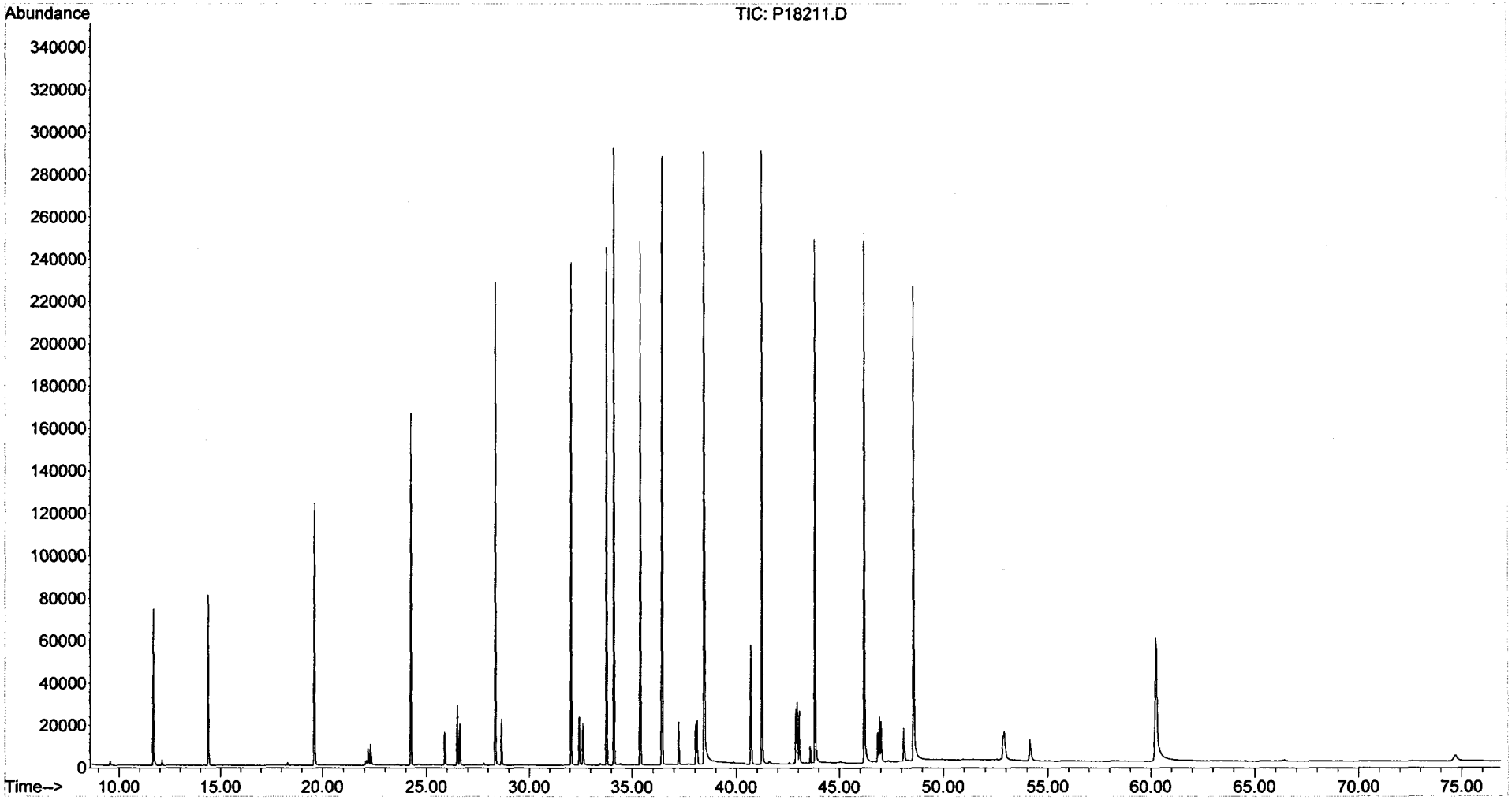
Target Compounds						Qvalue
9) Naphthalene	19.62	128	42150	236.36	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	25297	224.07	ng/mL#	100
25) Acenaphthylene	25.89	152	39691	232.12	ng/mL#	100
26) Acenaphthene	26.63	153	25062	235.96	ng/mL	100
28) Fluorene	28.65	166	27694	232.49	ng/mL	94
41) Phenanthrene	32.45	178	40998	232.11	ng/mL	99
53) Anthracene	32.64	178	36896	225.76	ng/mL	98
56) Fluoranthene	37.23	202	46058m	244.90	ng/mL	
59) Pyrene	38.11	202	48693	254.56	ng/mL	98
73) Benz[a]anthracene	42.89	228	45512m	260.25	ng/mL	
74) Chrysene	43.05	228	43358m	242.64	ng/mL	
75) Chrysene/Triphenylene	43.05	228	42598m	238.39	ng/mL	
82) Benzo[b]fluoranthene	46.94	252	43689	243.26	ng/mL	100
83) Benzo[k]fluoranthene	47.03	252	46312	247.87	ng/mL	100
86) Benzo[a]pyrene	48.12	252	39197	227.83	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	52.86	276	36349m	240.08	ng/mL	
89) Dibenz[a,h]anthracene	52.93	278	37529	243.18	ng/mL	98
90) Benzo[g,h,i]perylene	54.14	276	41029	235.17	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18211.D
Acq On : 14 Feb 2006 8:13 pm
Operator : AC
Sample : SO020906LCSD15
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 16 12:06:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 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: **0602017**
Lab ID: **SS011106AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Naphthalene	714.43	750	106	65-135
C1-Naphthalenes	1534.53	1500	96	65-135
C2-Naphthalenes	1897.27	1800	92	65-135
C3-Naphthalenes	1436.53	1300	90	65-135
C4-Naphthalenes	773.42	700	91	65-135
Biphenyl	216.49	200	95	65-135
Acenaphthene	15.55	17	112	65-135
Fluorene	87.56	84	96	65-135
C1-Fluorenes	219.89	210	96	65-135
C2-Fluorenes	341.2	320	94	65-135
C3-Fluorenes	299.61	300	99	65-135
Phenanthrene	272.58	270	99	65-135
C1-Phenanthrenes/Anthracenes	564.81	560	99	65-135
C2-Phenanthrenes/Anthracenes	660.43	630	95	65-135
C3-Phenanthrenes/Anthracenes	448.76	430	95	65-135
C4-Phenanthrenes/Anthracenes	175.88	160	93	65-135
Dibenzothiophene	218.8	230	105	65-135
C1-Dibenzothiophenes	434.54	420	97	65-135
C2-Dibenzothiophenes	551.44	570	104	65-135
C3-Dibenzothiophenes	460.96	470	102	65-135
C4-Dibenzothiophenes	236.77	240	102	65-135
Fluoranthene	4.26	4.3	102	65-135
Pyrene	15.56	14	93	65-135
C1-Fluoranthenes/Pyrenes	78.43	78	100	65-135
C2-Fluoranthenes/Pyrenes	132.93	120	91	65-135
C3-Fluoranthenes/Pyrenes	111.33	130	121	65-135
Chrysene/Triphenylene	50.99	46	89	65-135
C1-Chrysenes	81.69	76	93	65-135
C2-Chrysenes	95.93	87	91	65-135
C3-Chrysenes	89.87	90	100	65-135
C4-Chrysenes	51.86	50	96	65-135
Benzo[b]fluoranthene	6.54	5.8	89	65-135
Benzo[e]pyrene	12.88	12	92	65-135

02/21/06 23:11

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: **0602017**
Lab ID: **SS011106AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Dibenz[a,h]anthracene	1.02	0.89	87	65-135
Benzo[g,h,i]perylene	3.35	3.5	104	65-135
Hopane	118.8	150	122	65-135

N/A - Not Applicable

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

02/21/06 23:11

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: **0602017**
Lab ID: **SS011106AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	01/05/06	100	0.051	10	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**750**		Fluoranthene	**4.3**	
C1-Naphthalenes	**1500**		Pyrene	**14**	
C2-Naphthalenes	**1800**		C1-Fluoranthenes/Pyrenes	**78**	
C3-Naphthalenes	**1300**		C2-Fluoranthenes/Pyrenes	**120**	
C4-Naphthalenes	**700**		C3-Fluoranthenes/Pyrenes	**130**	
Biphenyl	**200**		C4-Fluoranthenes/Pyrenes	**100**	
Dibenzofuran	**69**		Naphthobenzothiophenes	**65**	
Acenaphthylene	**7.0**		C1-Naphthobenzothiophenes	**160**	
Acenaphthene	**17**		C2-Naphthobenzothiophenes	**190**	
Fluorene	**84**		C3-Naphthobenzothiophenes	**140**	
C1-Fluorenes	**210**		C4-Naphthobenzothiophenes	**90**	
C2-Fluorenes	**320**		Benz[a]anthracene	**1.8**	J
C3-Fluorenes	**300**		Chrysene/Triphenylene	**46**	
Anthracene	0.26	U	C1-Chrysenes	**76**	
Phenanthrene	**270**		C2-Chrysenes	**87**	
C1-Phenanthrenes/Anthracenes	**560**		C3-Chrysenes	**90**	
C2-Phenanthrenes/Anthracenes	**630**		C4-Chrysenes	**50**	
C3-Phenanthrenes/Anthracenes	**430**		Benzo[b]fluoranthene	**5.8**	
C4-Phenanthrenes/Anthracenes	**160**		Benzo[k]fluoranthene	0.40	U
Retene	0.28	U	Benzo[a]fluoranthene	**0.78**	J
Dibenzothiophene	**230**		Benzo[e]pyrene	**12**	
C1-Dibenzothiophenes	**420**		Benzo[a]pyrene	**1.1**	J
C2-Dibenzothiophenes	**570**		Perylene	**0.41**	J
C3-Dibenzothiophenes	**470**		Indeno[1,2,3-cd]pyrene	**1.1**	J
C4-Dibenzothiophenes	**240**		Dibenz[a,h]anthracene	**0.89**	J
Benzo(b)fluorene	0.20	U	Benzo[g,h,i]perylene	**3.5**	

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

02/21/06 23:08

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: **0602017**
Lab ID: **SS011106AWS02**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	N/A	01/05/06	100	0.051	10	1	AC

Parameter	Result
Carbazole	6.6

N/A - Not Applicable

02/21/06 23:09

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration

MS 1-11-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.60	164	69939m	500.00 ng/mL	0.00
72) Chrysene-d12	43.09	240	121579	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.28	152	149356	996.14 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 99.61%		
58) Pyrene-d10	38.16	212	339594m	1101.61 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 110.16%		
81) Benzo[b]fluoranthene-d12	47.00	264	259580	1072.16 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 107.22%		
125) 5B(H)Cholane - Surr	43.73	217	51605	1080.23 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.02%		

Target Compounds					Qvalue
2) Decalin	16.30	138	163849m	2992.66 ng/mL	
3) trans-Decalin	16.30	138	139502	2308.97 ng/mL	100
4) cis-Decalin	17.51	138	4366m	96.04 ng/mL	
5) C1-Decalins	18.23	152	233049m	3857.32 ng/mL	
6) C2-Decalins	19.56	166	210016m	3476.09 ng/mL	
7) C3-Decalins	22.03	180	106753m	1766.93 ng/mL	
8) C4-Decalins	25.43	194	113003m	1870.37 ng/mL	
9) Naphthalene	19.71	128	1372507	3842.73 ng/mL#	100
10) C1-Naphthalenes	22.41	142	2684101m	7514.91 ng/mL	
11) C2-Naphthalenes	25.25	156	3188535m	8927.22 ng/mL	
12) C3-Naphthalenes	27.60	170	2346032m	6568.39 ng/mL	
13) C4-Naphthalenes	30.36	184	1276753m	3574.64 ng/mL	
15) 2-Methylnaphthalene	22.41	142	1574646	6963.95 ng/mL#	100
16) 1-Methylnaphthalene	22.83	142	1107443	5202.38 ng/mL#	100
17) Benzothiophene	19.93	134	8189m	25.70 ng/mL	
18) C1-Benzo(b)thiophenes	21.97	148	48497m	152.22 ng/mL	
19) C2-Benzo(b)thiophenes	25.45	162	91217m	286.31 ng/mL	
20) C3-Benzo(b)thiophenes	27.42	176	186680m	585.95 ng/mL	
21) C4-Benzo(b)thiophenes	29.17	190	166990m	524.15 ng/mL	
22) Biphenyl	24.29	154	293684m	1044.71 ng/mL	
23) 2,6-Dimethylnaphthalene	24.91	156	451153m	2404.20 ng/mL	
24) Dibenzofuran	27.37	168	111148	351.96 ng/mL#	84
25) Acenaphthylene	26.00	152	12198m	35.62 ng/mL	
26) Acenaphthene	26.75	153	18911m	88.90 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.29	170	163623m	971.32 ng/mL	
28) Fluorene	28.75	166	102550m	429.84 ng/mL	
29) C1-Fluorenes	31.11	180	255440m	1070.68 ng/mL	
30) C2-Fluorenes	33.32	194	387950m	1626.09 ng/mL	
31) C3-Fluorenes	35.15	208	361214m	1514.03 ng/mL	
32) Dibenzothiophene	32.07	184	410428	1166.54 ng/mL#	92
33) 4-Methyldibenzothiophene(4	33.85	198	377380	1072.61 ng/mL#	100
34) 2/3-Methyldibenzothiophene	34.20	198	257980	733.24 ng/mL#	100
35) 1-Methyldibenzothiophene(1	34.62	198	115320	327.77 ng/mL#	100
36) OTP	34.28	198	52349	148.79 ng/mL#	100
37) C1-Dibenzothiophenes	33.85	198	806277m	2291.64 ng/mL	
38) C2-Dibenzothiophenes	35.53	212	1024988m	2913.27 ng/mL	
39) C3-Dibenzothiophenes	37.35	226	840527m	2388.98 ng/mL	
40) C4-Dibenzothiophenes	39.04	240	432496m	1229.26 ng/mL	
41) Phenanthrene	32.56	178	488467	1380.74 ng/mL	95
42) 3-Methylphenanthrene(3MP)	34.53	192	203106	574.12 ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2/4-Methylphenanthrene(2MP	34.64	192	233437	659.85	ng/mL	97
44) 2-Methylanthracene(2MA)	34.80	192	5940m	16.79	ng/mL	
45) 9-Methylphenanthrene(9MP)	34.99	192	324353	916.84	ng/mL	99
46) 1-Methylphenanthrene(1MP)	35.08	192	232051m	655.93	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.99	192	1003136m	2835.55	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.81	206	1135756m	3210.42	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.65	220	770944m	2179.21	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.85	234	296394m	837.81	ng/mL	
54) Carbazole	33.42	167	10118m	33.40	ng/mL	
55) 1-Methylphenanthrene	35.08	192	231760m	956.76	ng/mL	
56) Fluoranthene	37.34	202	8303m	22.04	ng/mL	
59) Pyrene	38.23	202	28103m	73.36	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.63	216	153342m	400.26	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.44	230	237184m	619.11	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.46	244	261913m	683.66	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.82	258	200024m	522.12	ng/mL	
64) Naphthobenzothiophene	42.09	234	87648	244.55	ng/ml#	84
65) Naphthobenzothiophene-2,1-	42.09	234	87648	244.55	ng/mL#	84
66) Naphthobenzothiophene-1,2-	42.43	234	22215	61.98	ng/mL#	60
67) Naphthobenzothiophene-2,3-	42.73	234	9564	26.69	ng/mL#	1
68) C1-Naphthobenzothiophenes	43.50	248	288523m	805.03	ng/ml	
69) C2-Naphthobenzothiophenes	45.50	262	344746m	961.90	ng/ml	
70) C3-Naphthobenzothiophenes	47.11	276	260897m	727.95	ng/ml	
71) C4-Naphthobenzothiophenes	48.21	290	163651m	456.61	ng/mL	
73) Benz[a]anthracene	43.01	228	3496m	9.45	ng/mL	
74) Chrysene	43.15	228	87573m	231.57	ng/mL	
75) Chrysene/Triphenylene	43.15	228	87704m	231.92	ng/mL	
76) C1-Chrysenes	44.66	242	146771m	388.11	ng/mL	
77) C2-Chrysenes	47.37	256	180007m	476.00	ng/mL	
78) BBF-d12 Surr BKGD	46.99	256	11987	31.70	ng/mL	100
79) C3-Chrysenes	49.47	270	173205m	458.01	ng/mL	
80) C4-Chrysenes	49.06	284	95936m	253.69	ng/mL	
82) Benzo[b]fluoranthene	47.08	252	11218m	29.51	ng/mL	
84) Benzo[a]fluoranthene	47.45	252	1560m	3.95	ng/mL	
85) Benzo[e]pyrene	48.08	252	22267m	60.51	ng/mL	
86) Benzo[a]pyrene	48.28	252	1967m	5.40	ng/mL	
87) Perylene	48.59	252	738m	2.07	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.12	276	1725m	5.38	ng/mL	
89) Dibenz[a,h]anthracene	53.15	278	1479m	4.53	ng/mL	
90) Benzo[g,h,i]perylene	54.41	276	6535m	17.70	ng/mL	
91) 17a(H),21B(H)-hopane - C30	52.27	191	78105m	731.65	ng/mL	
92) Hopane (T19)	52.27	191	79164m	741.57	ng/mL	
93) C23 Tricyclic Terpane (T4)	40.75	191	32968	308.83	ng/ml	100
94) C24 Tricyclic Terpane (T5)	41.47	191	22038	206.44	ng/ml	100
95) C25 Tricyclic Terpane (T6)	42.96	191	22936	214.85	ng/ml	100
96) C24 Tetracyclic Terpane (T	44.29	191	6991	65.49	ng/ml	100
97) C26 Tricyclic Terpane-22S	44.03	191	9296	87.08	ng/ml	100
98) C26 Tricyclic Terpane-22R	44.12	191	8228	77.08	ng/ml	100
99) C28 Tricyclic Terpane-22S	46.42	191	5998m	56.19	ng/ml	
100) C28 Tricyclic Terpane-22R	46.58	191	8471m	79.35	ng/ml	
101) C29 Tricyclic Terpane-22S	47.10	191	10607	99.36	ng/ml	100
102) C29 Tricyclic Terpane-22R	47.30	191	10309	96.57	ng/ml	100
103) 18a-22,29,30-Trisnorneohop	48.44	191	13999	131.14	ng/ml	100
104) C30 Tricyclic Terpane-22S	48.54	191	6887	64.51	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration

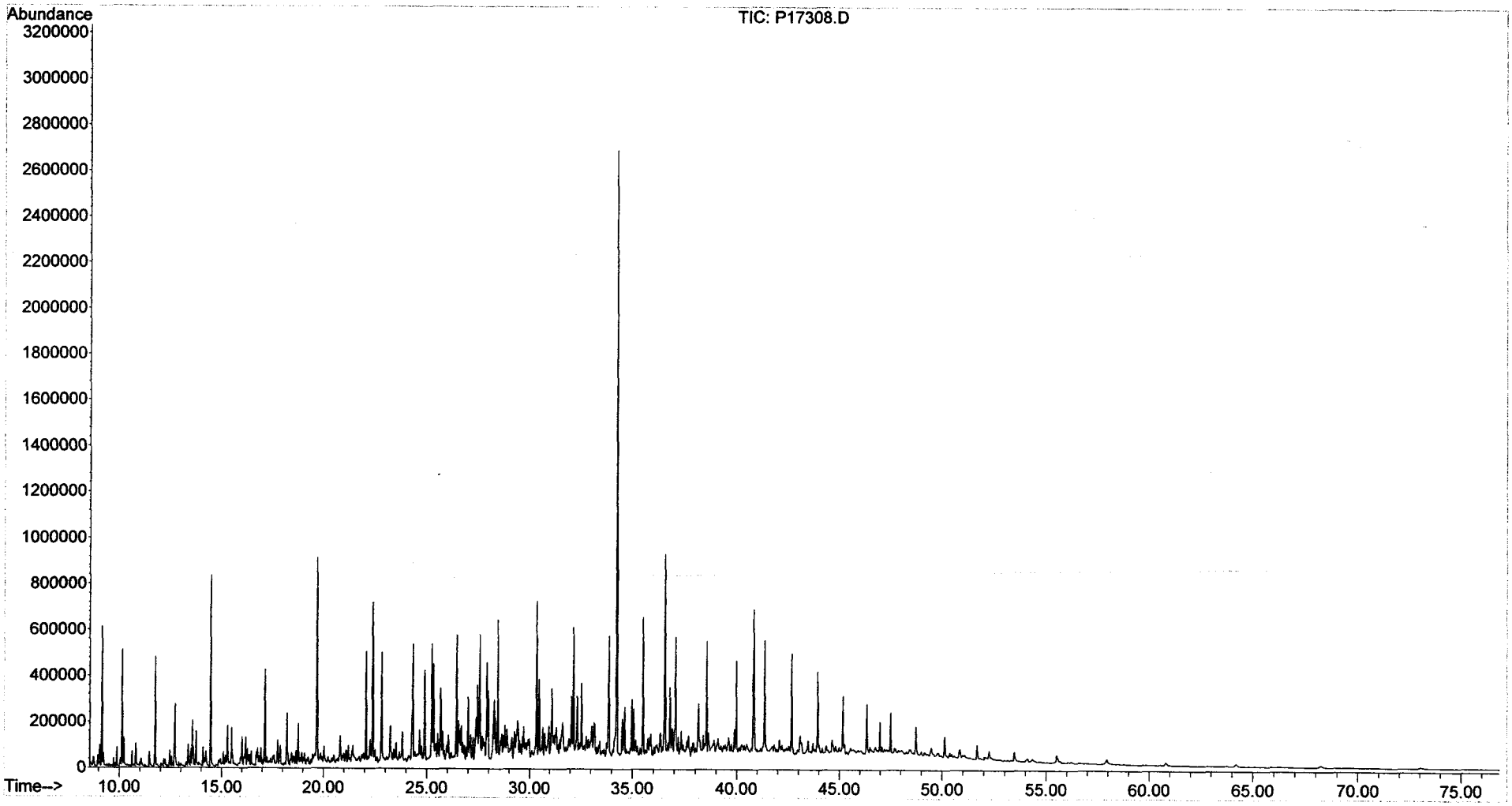
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
105) C30 Tricyclic Terpane-22R	48.79	191	8136m	76.21 ng/mL	
106) 17a(H)-22,29,30-Trisnorhop	48.99	191	15800m	148.01 ng/ml	
107) 17a/b,21b/a 28,30-Bisnorho	50.20	191	3610	33.82 ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.00	191	3915	36.67 ng/ml	100
109) 30-Norhopane (T15)	50.87	191	42626m	399.30 ng/ml	
110) 18a(H)-30-Norneohopane-C29	50.98	191	9988m	93.56 ng/ml	
111) 17a(H)-Diahopane (X)	51.12	191	5756m	53.92 ng/ml	
112) 30-Normoretane (T17)	51.66	191	5261m	49.28 ng/ml	
114) Moretane (T20)	52.96	191	6334m	59.33 ng/ml	
115) 30-Homohopane-22S (T21)	54.09	191	36303	340.07 ng/ml	100
116) 30-Homohopane-22R (T22)	54.33	191	29082	272.43 ng/ml	100
117) 30,31-Bishomohopane-22S (T	55.68	191	25307	237.06 ng/ml	100
118) 30,31-Bishomohopane-22R (T	56.06	191	19574	183.36 ng/ml	100
119) 30,31-Trishomohopane-22S (	57.84	191	21032	197.02 ng/ml	100
120) 30,31-Trishomohopane-22R (	58.48	191	14302	133.97 ng/ml	100
121) Tetrakishomohopane-22S (T3	60.53	191	14453	135.39 ng/ml	100
122) Tetrakishomohopane-22R (T3	61.44	191	11166	104.60 ng/ml	100
123) Pentakishomohopane-22S (T3	63.75	191	16108	150.89 ng/ml	100
124) Pentakishomohopane-22R (T3	65.05	191	12028	112.67 ng/ml	100
126) 13b(H),17a(H)-20S-Diachole	45.24	217	12046m	252.15 ng/ml	
127) 13b(H),17a(H)-20R-Diachole	45.67	217	6741	141.11 ng/ml	100
128) 13b,17a-20S-Methyldiachole	46.37	217	6566m	137.44 ng/ml	
129) 14a(H),17a(H)-20S-Cholesta	47.24	217	6566m	137.44 ng/ml	
130) 14a(H),17a(H)-20R-Cholesta	47.77	217	20341m	425.79 ng/ml	
131) 13b,17a-20R-Ethyldiacholes	48.06	217	5676	118.81 ng/ml	100
132) 13a,17b-20S-Ethyldiacholes	48.32	217	1570	32.86 ng/ml	100
133) 14a,17a-20S-Methylcholesta	48.48	217	4828m	101.06 ng/ml	
134) 14a,17a-20R-Methylcholesta	49.20	217	9561m	200.14 ng/ml	
135) 14a(H),17a(H)-20S-Ethylcho	49.56	217	13425m	281.02 ng/ml	
136) 14a(H),17a(H)-20R-Ethylcho	50.47	217	10942m	229.04 ng/ml	
137) 14b(H),17b(H)-20R-Cholesta	47.34	218	10496m	219.71 ng/ml	
138) 14b(H),17b(H)-20S-Cholesta	47.41	218	11278m	236.08 ng/ml	
139) 14b,17b-20R-Methylcholesta	48.65	218	12015m	251.51 ng/ml	
140) 14b,17b-20S-Methylcholesta	48.73	218	13914m	291.26 ng/ml	
141) 14b(H),17b(H)-20R-Ethylcho	49.80	218	16661	348.76 ng/ml	100
142) 14b(H),17b(H)-20S-Ethylcho	49.85	218	12077m	252.80 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN05\
Data File : P17308.D
Acq On : 5 Jan 2006 5:32 pm
Operator : AC
Sample : SS011106AWS02
Misc : ANS1010501
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 14:31:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 10 07:43:59 2006
Response via : Initial Calibration



Form III
Spike Recovery Summary
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SS021106AWS02**
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	132	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.

02/21/06 23:19

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: **0602017**
Lab ID: **SS021106AWS02**
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	02/10/06	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	43	30,31-Trishomohopane-22S	38
C24 Tetracyclic Terpane	14	30,31-Trishomohopane-22R	25
C26 Tricyclic Terpane-22S	14	Tetrakishomohopane-22S	28
C26 Tricyclic Terpane-22R	15	Tetrakishomohopane-22R	20
C28 Tricyclic Terpane-22S	13	Pentakishomohopane-22S	30
C28 Tricyclic Terpane-22R	16	Pentakishomohopane-22R	20
C29 Tricyclic Terpane-22S	22	13b(H),17a(H)-20S-Diacholestane	58
C29 Tricyclic Terpane-22R	22	13b(H),17a(H)-20R-Diacholestane	27
18a-22,29,30-Trisnorneohopane-TS	26	13b,17a-20S-Methyldiacholestane	24
C30 Tricyclic Terpane-22S	14	14a(H),17a(H)-20S-Cholestane	23
C30 Tricyclic Terpane-22R	12	14a(H),17a(H)-20R-Cholestane	89
17a(H)-22,29,30-Trisnorhopane-TM	38	13b,17a-20R-Ethyldiacholestane	16
17a/b,21b/a 28,30-Bisnorhopane	6.4	13a,17b-20S-Ethyldiacholestane	4.4
17a(H),21b(H)-25-Norhopane	5.7	14a,17a-20S-Methylcholestane	18
30-Norhopane	93	14a,17a-20R-Methylcholestane	43
18a(H)-30-Norneohopane-C29Ts	19	14a(H),17a(H)-20S-Ethylcholestane	66
17a(H)-Diahopane	12	14a(H),17a(H)-20R-Ethylcholestane	53
30-Normoretane	11	14b(H),17b(H)-20R-Cholestane	46
18a(H)&18b(H)-Oleananes	0.55 U	14b(H),17b(H)-20S-Cholestane	49
Hopane	160	14b,17b-20R-Methylcholestane	50
Moretane	14	14b,17b-20S-Methylcholestane	64
30-Homohopane-22S	72	14b(H),17b(H)-20R-Ethylcholestane	68
30-Homohopane-22R	59	14b(H),17b(H)-20S-Ethylcholestane	59

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

02/21/06 23:15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28201B.D
Acq On : 10 Feb 2006 12:05 pm
Operator : AC
Sample : SS021106AWS02
Misc : ANS2020902
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Feb 13 06:43:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

MS for MAL 2/13/06

2/13/06.

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	43.63	240	47288	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	44.20	217	23747	1180.81	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 118.08%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	37464m	802.61	ng/mL	
84) Hopane (T19)	52.93	191	37164m	796.19	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.21	191	15756m	337.55	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.94	191	10637	227.88	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.43	191	10322m	221.13	ng/ml	
88) C24 Tetracyclic Terpane (T	44.76	191	3295m	70.59	ng/ml	
89) C26 Tricyclic Terpane-22S	44.48	191	3207m	68.71	ng/ml	
90) C26 Tricyclic Terpane-22R	44.58	191	3555m	76.16	ng/ml	
91) C28 Tricyclic Terpane-22S	46.87	191	3106m	66.54	ng/ml	
92) C28 Tricyclic Terpane-22R	47.04	191	3711m	79.50	ng/ml	
93) C29 Tricyclic Terpane-22S	47.57	191	5103m	109.32	ng/ml	
94) C29 Tricyclic Terpane-22R	47.77	191	5108m	109.43	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.97	191	6248m	133.85	ng/ml	
96) C30 Tricyclic Terpane-22S	49.04	191	3291m	70.51	ng/mL	
97) C30 Tricyclic Terpane-22R	49.29	191	2933m	62.84	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.54	191	9004	192.90	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	1516m	32.48	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.54	191	1355m	29.03	ng/ml	
101) 30-Norhopane (T15)	51.49	191	22084m	473.12	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.59	191	4537m	97.20	ng/ml	
103) 17a(H)-Diahopane (X)	51.72	191	2924m	62.64	ng/ml	
104) 30-Normoretane (T17)	52.31	191	2622	56.17	ng/ml	100
106) Moretane (T20)	53.66	191	3434m	73.57	ng/ml	
107) 30-Homohopane-22S (T21)	54.82	191	17201m	368.51	ng/ml	
108) 30-Homohopane-22R (T22)	55.06	191	14067m	301.37	ng/ml	
109) 30,31-Bishomohopane-22S (T	56.47	191	12568m	269.25	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.88	191	9183m	196.73	ng/ml	
111) 30,31-Trishomohopane-22S (	58.74	191	9065m	194.21	ng/ml	
112) 30,31-Trishomohopane-22R (	59.39	191	5990m	128.33	ng/ml	
113) Tetrakishomohopane-22S (T3	61.54	191	6692m	143.37	ng/ml	
114) Tetrakishomohopane-22R (T3	62.49	191	4748	101.72	ng/ml	100
115) Pentakishomohopane-22S (T3	64.88	191	7158	153.35	ng/ml	100
116) Pentakishomohopane-22R (T3	66.27	191	4757m	101.91	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.71	217	5971	296.90	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.12	217	2770m	137.74	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.83	217	2422m	120.43	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.72	217	2335m	116.11	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.26	217	9148m	454.88	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.54	217	1665m	82.79	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	48.82	217	447	22.23	ng/ml	100

MS 2/13/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28201B.D
Acq On : 10 Feb 2006 12:05 pm
Operator : AC
Sample : SS021106AWS02
Misc : ANS2020902
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Feb 13 06:43:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	48.99	217	1809m	89.95	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.74	217	4429m	220.23	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.11	217	6737m	334.99	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.06	217	5388m	267.92	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.81	218	4746	235.99	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.90	218	5064m	251.80	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.16	218	5071m	252.15	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.25	218	6519m	324.15	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.37	218	6931m	344.64	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.40	218	6029m	299.79	ng/ml	

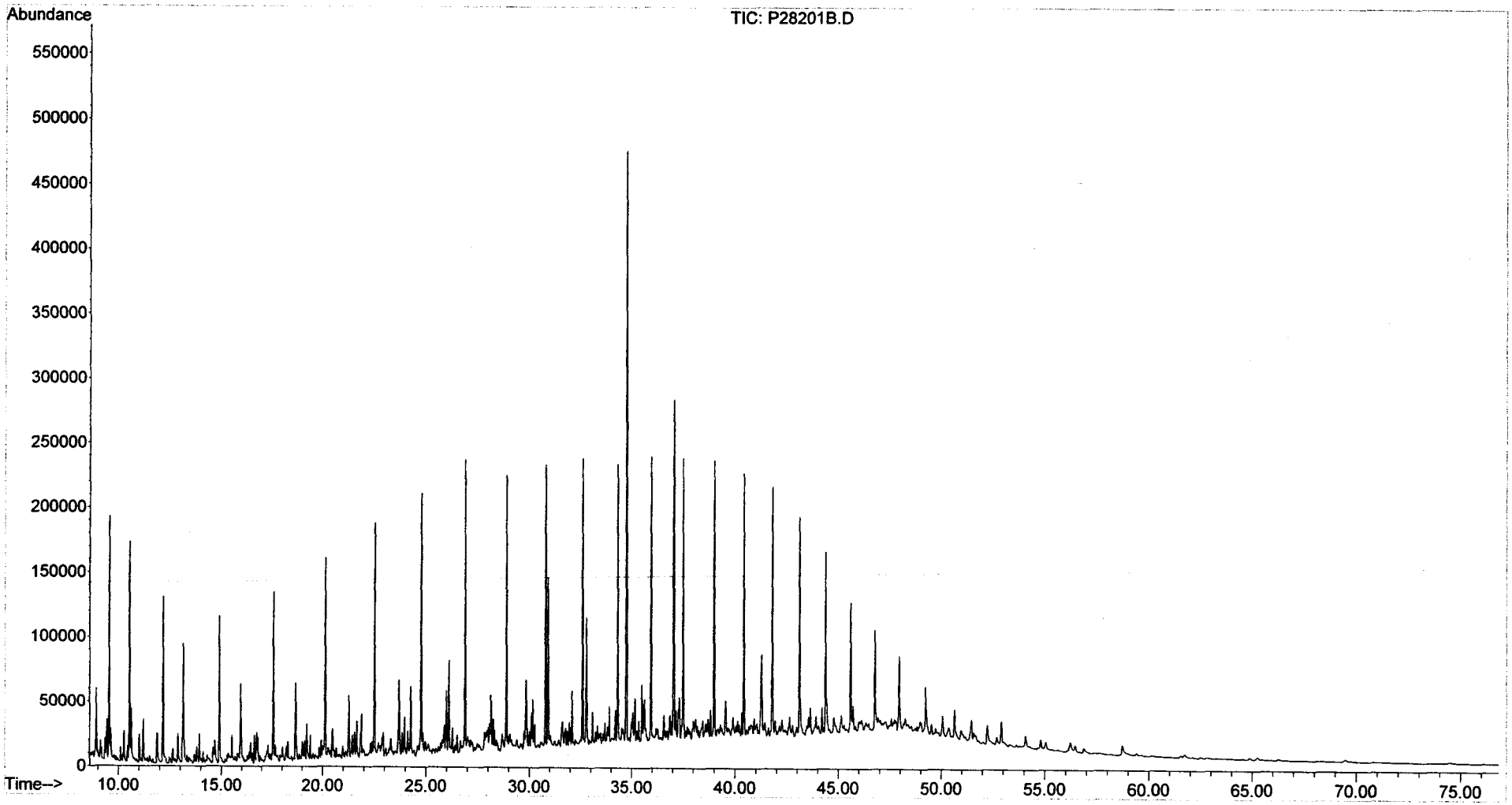
RF+Rpt conc 2nd
ch 2/14/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28201B.D
Acq On : 10 Feb 2006 12:05 pm
Operator : AC
Sample : SS021106AWS02
Misc : ANS2020902
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Feb 13 06:43:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration



Sequence Name: C:\MSDChem\1\sequence\S1021301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB13\

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:

2/15/06

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

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

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P18176	FRNC1D	ALK STD
5)	Sample	1	P18177	FRNC1D	PAH STD
6)	RearSamp	52	P18178	FRNC1D	C1021301-AFID
7)	Sample	2	P18179	FRNC1D	C1021301 PASS
8)	RearSamp	53	P18180	FRNC1D	ANS1021301-AFID
9)	Sample	3	P18181	FRNC1D	ANS1021301
10)	RearSamp	54	P18182	FRNC1D	DCM-AFID
11)	Sample	4	P18183	FRNC1D	DCM
12)	RearSamp	55	P18184	FRNC1D	DCM-AFID
13)	Sample	5	P18185	FRNC1D	SS020606LCS04 ✓
14)	RearSamp	56	P18186	FRNC1D	SS020606LCS04-AFID
15)	Sample	6	P18187	FRNC1D	C1021302 not needed
16)	RearSamp	57	P18188	FRNC1D	C1021302-AFID
17)	Sample	7	P18189	FRNC1D	0602017-01 ✓
18)	RearSamp	58	P18190	FRNC1D	DCM-AFID
19)	Sample	8	P18191	FRNC1D	0602017-01D ✓
20)	RearSamp	59	P18192	FRNC1D	ALUMINA CHECK-AFID
21)	Sample	9	P18193	FRNC1D	0602017-02 ✓
22)	RearSamp	60	P18194	FRNC1D	SO020906B23-AFID
23)	Sample	10	P18195	FRNC1D	C1021303 PASS
24)	RearSamp	61	P18196	FRNC1D	SO020906LCS17-AFID
25)	Sample	11	P18197	FRNC1D	DCM
26)	RearSamp	62	P18198	FRNC1D	SO020906LCS15-AFID
27)	Sample	25	P18199	FRNC1D	DCM
28)	Pause				
29)	RearSamp	63	P18200	FRNC1D	0602017-01-AFID
30)	Sample	12	P18201	FRNC1D	SO020906B23 ✓
31)	Pause				
32)	RearSamp	64	P18202	FRNC1D	DCM
33)	Sample	13	P18203	FRNC1D	0602017-01-RE see rerun
34)	Pause				
35)	RearSamp	64	P18203A	FRNC1D	DCM
36)	Sample	13	P18203B	FRNC1D	0602017-01-RE
37)	RearSamp	65	P18204	FRNC1D	DCM
38)	Sample	14	P18205	FRNC1D	0602017-01D-RE ✓
39)	RearSamp	66	P18206	FRNC1D	DCM
40)	Sample	15	P18207	FRNC1D	0602017-02-RE ✓
41)	RearSamp	67	P18208	FRNC1D	DCM-AFID
42)	Sample	16	P18209	FRNC1D	SO020906LCS17 ✓
43)	RearSamp	68	P18210	FRNC1D	DCM-AFID

✓ run used

MS 2/15/06

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 ✓

Last Modified: Tue Feb 14 13:58:12 2006

Sequence Name: O:\Forensics\Data\PAH1\February06\FEB13.SEC\S1021301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	17	P18211	FRNC1D	SO020906LCSD15 ✓
45)	RearSamp	69	P18212	FRNC1D	DCM-AFID
[illegible]	Sample	18	P18213	FRNC1D	C1021304
[illegible]	RearSamp	70	P18214	FRNC1D	DCM-AFID
48)	Sample	19	P18215	FRNC1D	0602017-01
49)	RearSamp	71	P18216	FRNC1D	DCM-AFID
50)	Sample	20	P18217	FRNC1D	0602017-01D
51)	RearSamp	72	P18218	FRNC1D	DCM-AFID
52)	Sample	21	P18219	FRNC1D	0602017-02
53)	RearSamp	73	P18220	FRNC1D	DCM-AFID
54)	Sample	22	P18221	FRNC1D	0602017-01-RE ✓
55)	RearSamp	74	P18222	FRNC1D	DCM CHECK
56)	Sample	23	P18223	FRNC1D	C1021305 PASS
57)	RearSamp	75	P18224	FRNC1D	BBF CONTAMINATION CHECK
58)	Sample	23	P18225	FRNC1D	
59)	RearSamp	76	P18226	FRNC1D	C1021401-AFID
60)	Sample	23	P18227	FRNC1D	
61)	Pause				
62)	RearSamp	77	P18228	FRNC1D	DCM-AFID
63)	Sample	25	P18229	FRNC1D	C1021501
64)	RearSamp	78	P18230	FRNC1D	SO020906B23-AFID
65)	Sample	25	P18231	FRNC1D	
66)	RearSamp	79	P18232	FRNC1D	SO020906LCS17-AFID
67)	Sample	25	P18233	FRNC1D	
68)	RearSamp	80	P18234	FRNC1D	SO020906LCSD17-AFID
69)	Sample	25	P18235	FRNC1D	
70)	RearSamp	81	P18236	FRNC1D	0602017-01-AFID
71)	Sample	25	P18237	FRNC1D	
72)	RearSamp	82	P18238	FRNC1D	0602017-01D-AFID
73)	Sample	25	P18239	FRNC1D	
74)	RearSamp	83	P18240	FRNC1D	0602017-02-AFID
[illegible]	Sample	25	P18241	FRNC1D	
[illegible]	RearSamp	84	P18242	FRNC1D	C1021402-AFID
77)	Sample	25	P18243	FRNC1D	
78)	RearSamp	85	P18244	FRNC1D	DCM-AFID
79)	Sample	25	P18245	FRNC1D	
80)	RearSamp	86	P18246	FRNC1D	TS021306B04-AFID
81)	Sample	25	P18247	FRNC1D	
82)	RearSamp	87	P18248	FRNC1D	TS021306LCS02-AFID
83)	Sample	25	P18249	FRNC1D	
84)	RearSamp	88	P18250	FRNC1D	TS021306LCSD02-AFID
85)	Sample	25	P18251	FRNC1D	
86)	RearSamp	89	P18252	FRNC1D	0602038-01-AFID
87)	Sample	25	P18253	FRNC1D	
88)	RearSamp	90	P18254	FRNC1D	C1021403-AFID
89)	Sample	25	P18255	FRNC1D	
90)	RearSamp	91	P18256	FRNC1D	DCM-AFID
91)	Sample	25	P18257	FRNC1D	

CM 2/22/06

Sequence Name: C:\MSDChem\1\sequence\S2021401.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB14\

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	P28252	FRBIO2B	prime
2)	Sample	2	P28253	FRBIO2B	C2021401 PASS
3)	Sample	3	P28254	FRBIO2B	dcm
4)	Sample	4	P28255	FRBIO2B	dcm
5)	Sample	5	P28256	FRBIO2B	so020906b23 ✓
6)	Sample	6	P28257	FRBIO2B	0602017-01 ✓
7)	Sample	7	P28258	FRBIO2B	0602017-01D ✓
8)	Sample	8	P28259	FRBIO2B	0602017-02 ✓
9)	Sample	9	P28260	FRBIO2B	C2021402 PASS

✓ run used

MS 2/15/06

PAH #2 Sequence Information

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

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

FID Process Method: ~~HC20901.M~~ PAH Process Method: ~~PAH20115.M~~
B1020209.M

Last Modified: Mon Feb 13 11:34:23 2006

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: **0602017**
Lab ID: **SO020906B23**
Date Analyzed: **02/14/06 10:35**

Client ID	Lab ID	Date/Time Analyzed
CGMW-07I	0602017-01	02/14/06 00:45
CGMW-07I	0602017-01 D	02/14/06 02:18
CGMW-08I	0602017-02	02/14/06 03:52
CGMW-07I	0602017-01E D	02/14/06 15:32
CGMW-08I	0602017-02E	02/14/06 17:07
LCS	SO020906LCS17	02/14/06 18:40
LCSD	SO020906LCSD15	02/14/06 20:13
CGMW-07I	0602017-01E	02/15/06 03:58

N/A - Not Applicable

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

Form IV
Method Blank Summary
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906B23**
Date Analyzed: **02/14/06 18:17**

Client ID	Lab ID	Date/Time Analyzed
CGMW-07I	0602017-01	02/14/06 19:53
CGMW-07I	0602017-01 D	02/14/06 21:28
CGMW-08I	0602017-02	02/14/06 23:01

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\S1010401.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN04\

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

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

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

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

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P17268A	FRNC1D	DCM
4)	Sample	1	P17268	FRNC1D	PAH STD
5)	RearSamp	52	P17269	FRNC1D	DCM2
6)	Sample	2	P17270	FRNC1D	DCM
7)	RearSamp	53	P17271	FRNC1D	
8)	Sample	3	P17272	FRNC1D	DCM
9)	RearSamp	54	P17273	FRNC1D	DCM4 * KAL.
10)	Sample	4	P17274	FRNC1D	I1010401*
11)	RearSamp	55	P17275	FRNC1D	C1010401-AFID PAH
12)	Sample	5	P17276	FRNC1D	I1010402 *
13)	RearSamp	56	P17277	FRNC1D	ANS1010401 TS010506 AW502
14)	Sample	6	P17278	FRNC1D	I1010403 *
15)	RearSamp	57	P17279	FRNC1D	DCM IB10104060
16)	Sample	7	P17280	FRNC1D	I1010404*
17)	RearSamp	58	P17281	FRNC1D	Alumina check1
18)	Sample	8	P17282	FRNC1D	I1010405*
19)	RearSamp	59	P17283	FRNC1D	Alumina Check2
	Sample	9	P17284	FRNC1D	I1010406*
21)	RearSamp	60	P17285	FRNC1D	SS122105B10
22)	Sample	10	P17286	FRNC1D	I1010407*
23)	RearSamp	61	P17287	FRNC1D	SS122105LCS07
24)	Sample	11	P17288	FRNC1D	DCM
25)	RearSamp	62	P17289	FRNC1D	SS122105LCSD07
26)	Sample	12	P17290	FRNC1D	Q1010401
27)	RearSamp	63	P17291	FRNC1D	0512101-01-AFID
28)	Sample	13	P17292	FRNC1D	ANS1010401
29)	RearSamp	64	P17293	FRNC1D	0512101-02-AFID - sequence stopped. FID to can't
30)	Sample	12	P17294	FRNC1D	Q1010402 on S1010501
31)	RearSamp	65	P17295	FRNC1D	C1010402-AFID
32)	Sample	14	P17296	FRNC1D	SSFS1010401
33)	RearSamp	66	P17297	FRNC1D	DCM-AFID
34)	Sample	16	P17298	FRNC1D	C1010401
35)	RearSamp	67	P17299	FRNC1D	DCM-AFID
36)	Sample	17	P17300	FRNC1D	BaF RT check

PAH #1 Sequence Information

SHC Continuing Calibration: WHAC10 Conc.: 50ug/mL
PAH Continuing Calibration: WHAB5~~2~~5 Conc.: 500ng/mL

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

FID Process Method: HC11005.M PAH Process Method: ~~PAH121701.M~~ PAH10104.M

PAH Calibration IDs

PAH Calibration Level 1: WHAB60 Conc.: 10ng/mL
PAH Calibration Level 2: WHAB59 Conc.: 25ng/mL
PAH Calibration Level 3: WHAB58 Conc.: 100ng/mL
PAH Calibration Level 4 (CC): ~~WHAC12~~ Conc.: 500ng/mL WHAB50
PAH Calibration Level 5: WHAB55 Conc.: 1250ng/mL
PAH Calibration Level 6: WHAB54 Conc.: 5000ng/mL
PAH Calibration Level 7: WHAB53 Conc.: 10000ng/mL
PAH Independent Check Verification: WHAB69 Conc. 500ng/mL

Crude Oil IDs

Alaska North Slope: WHAB79 Conc.: 5.096mg/mL
Largo Agrio Norte: WHAB41 Conc.: 6.15mg/mL
Shushufindi South West: WHAB42 Conc.: 6.25mg/mL
Shushufindi Central: WHAC08 Conc.: 5.48mg/mL
Sasha Central: WHAB46 Conc.: 5.38mg/mL
Shushufindi North: WHAB47 Conc.: 5.74mg/mL
Shushufindi South: WHAB48 Conc.: 5.00mg/mL
Aguarico: WHAC02 Conc.: 6.02mg/mL
Sasha North 2 WHAC09 Conc.: 5.54mg/mL

La

Sequence Name: C:\MSDChem\1\sequence\S1010501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN05\

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

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

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

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

FID Dirty Not Used

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	65	P17301	FRNC1D	C1010402-AFID
4)	Sample	1	P17302	FRNC1D	PAH TEST
5)	RearSamp	66	P17303	FRNC1D	DCM-AFID
6)	Sample	2	P17304	FRNC1D	C1010501 PASS
7)	RearSamp	67	P17305	FRNC1D	DCM-AFID
8)	Sample	3	P17306	FRNC1D	ANS1010501
9)	Pause				
10)	RearSamp	68	P17307	FRNC1D	DCM-AFID
11)	Sample	4	P17308	FRNC1D	~~ANS1010501~~ SS011106 AWS02
12)	RearSamp	69	P17309	FRNC1D	DCM-AFID
13)	Sample	5	P17310	FRNC1D	BaF rt CHECK CN 1/11/06
14)	RearSamp	70	P17311	FRNC1D	DCM-AFID
15)	Sample	6	P17312	FRNC1D	C1010502 PASS.
16)	RearSamp	71	P17313	FRNC1D	DCM-AFID
17)	Sample	7	P17314	FRNC1D	DCM
18)	RearSamp	72	P17315	FRNC1D	DCM
19)	Sample	8	P17316	FRNC1D	ST122805B04 ✓
20)	RearSamp	73	P17317	FRNC1D	DCM
21)	Sample	9	P17318	FRNC1D	SS122805B03 ✓ ✓ Run used
22)	RearSamp	74	P17319	FRNC1D	DCM
23)	Sample	10	P17320	FRNC1D	SW122805B02 ✓
24)	RearSamp	75	P17321	FRNC1D	DCM
25)	Sample	11	P17322	FRNC1D	ST122805LCS04 ✓
26)	RearSamp	76	P17323	FRNC1D	DCM
27)	Sample	12	P17324	FRNC1D	ST122805LCSD04 ✓
28)	RearSamp	77	P17325	FRNC1D	DCM
29)	Sample	13	P17326	FRNC1D	SS122805LCS03 ✓
30)	RearSamp	78	P17327	FRNC1D	DCM
31)	Sample	14	P17328	FRNC1D	SS122805LCSD03 ✓
32)	RearSamp	79	P17329	FRNC1D	0511156-02-AFID
33)	Sample	15	P17330	FRNC1D	SW122805LCS02 ✓
34)	RearSamp	80	P17331	FRNC1D	0511156-03-AFID
35)	Sample	16	P17332	FRNC1D	SW122805LCSD02 ✓
36)	RearSamp	81	P17333	FRNC1D	DCM
37)	Sample	17	P17334	FRNC1D	C1010503 PASS
38)	Pause				
39)	RearSamp	82	P17335	FRNC1D	
40)	Sample	18	P17336	FRNC1D	DCM
41)	RearSamp	83	P17337	FRNC1D	
42)	Sample	19	P17338	FRNC1D	0512118-01 ✓
43)	RearSamp	84	P17339	FRNC1D	

MS 1-9-06

PAH #1 Sequence Information

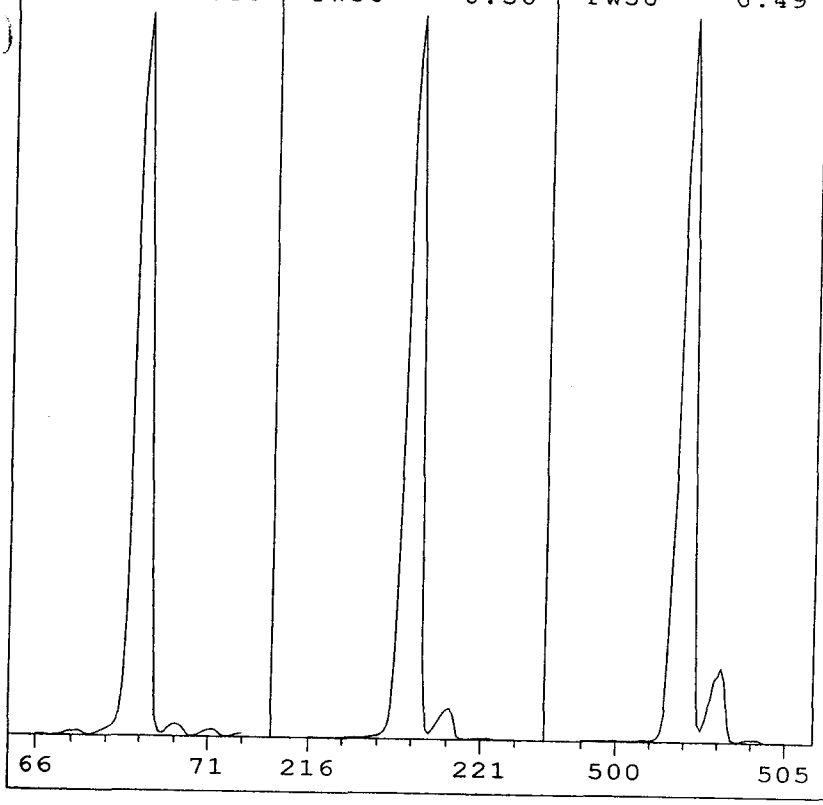
SHC Continuing Calibration: ~~WHAC10~~ Conc.: 50ug/mL
PAH Continuing Calibration: ~~WHAB52~~ WHAB56 Conc.: 500ng/mL
Alaska North Slope Crude Standard: WHAB79 Conc.: 5.096mg/mL

FID Process Method: ~~HC11005.M~~ PAH Process Method: ~~PAH121701.M~~ ✓
NEW ICAL PAH10104.M

Last Modified: Thu Jan 05 12:06:45 2006

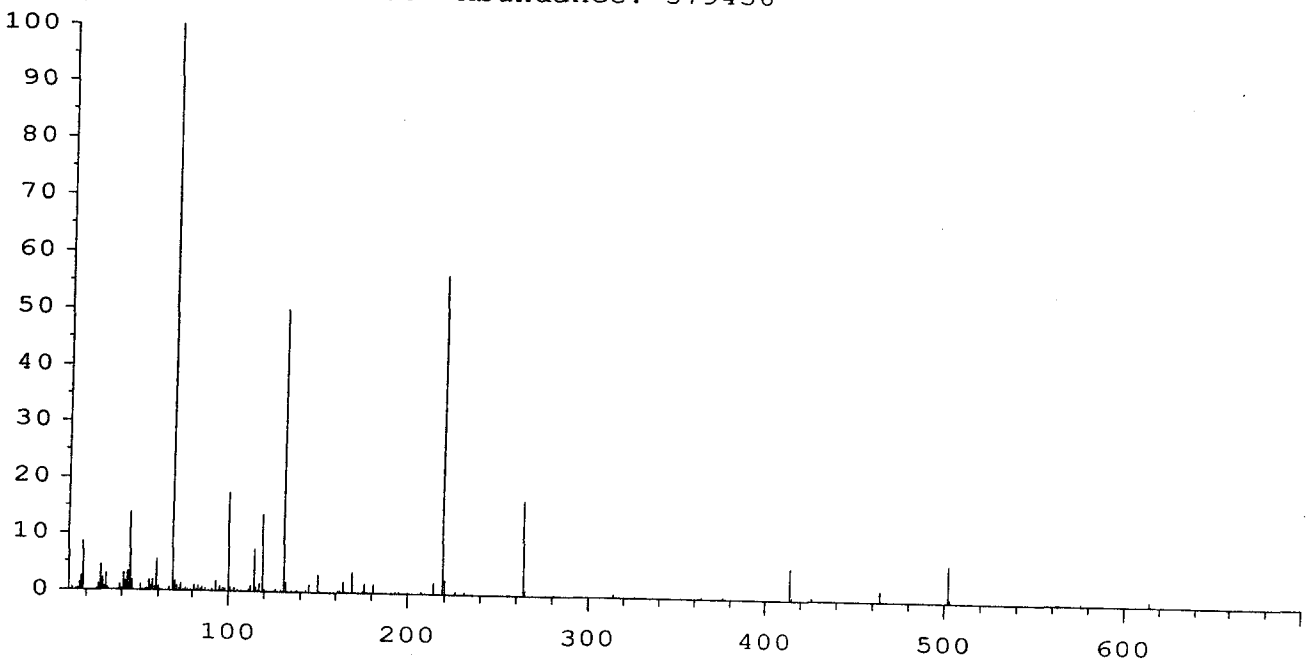
Wed Jan 04 09:47:59 2006 5973 Tune 1/4/06
C:\MSDCHEM\1\5973N\PBTBA.U Instrument: PAH-1

Mass	69.10	Mass	219.10	Mass	502.10
Ab	440529	Ab	250956	Ab	28818
Pw50	0.50	Pw50	0.50	Pw50	0.49



Ion Pol	POS	MassGain	-24
		MassOffs	-11
Emission	34.6	AmuGain	1938
ElEnrgy	69.9	AmuOffs	134
Filament	2	Wid219	-0.019
		DC Pol	NEG
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	1329
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	Foreline	38
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
269 peaks Base: 69.00 Abundance: 379456



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	379456	100.00	70.00	6407	1.69
219.00	213632	56.30	220.00	9423	4.41
502.00	24432	6.44	503.00	2466	10.09

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	12.3	15.6	18.6	20.3	21.3	26.1
TARGET ABUND(%):	1.0	100.0	50.0	55.0	5.0	6.0
ACTUAL TUNE ABUND(%):	1.0	100.0	50.0	56.3	5.5	6.4

Response Factor Report PAH-1

Method Path : O:\FORENSICS\METHODS\PAH1\JAN2006\
Method File : PAH10104.M
Title : Decalins & Alkylated PAH's
Last Update : Thu Jan 05 07:03:26 2006
Response Via : Initial Calibration

Calibration Files
10 =P17274.D 25 =P17276.D 100 =P17278.D 10000= P17286
500 =P17280.D 1250=P17282.D 5000=P17284.D

		Compound	10	25	100	500	1250	5000	Avg	%RSD
1)	i	Acenaphthene-d10	----------	----------	----------	ISTD	----------	----------	----------	
2)	t	Decalin	0.394	0.436	0.404	0.368	0.384	0.383	0.391	5.89
3)	A1	trans-Decalin	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
4)	t	cis-Decalin	0.320	0.334	0.329	0.316	0.328	0.329	0.325	2.09
5)	A2	C1-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
6)	A2	C2-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
7)	A2	C3-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
8)	A2	C4-Decalins	0.439	0.445	0.426	0.419	0.435	0.437	0.432	2.21
9)	A1	Naphthalene	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
10)	A2	C1-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
11)	A2	C2-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
12)	A2	C3-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
13)	A2	C4-Naphthalenes	2.554	2.513	2.487	2.542	2.610	2.609	2.553	1.78
14)	s	2-Methylnaphthale	1.059	1.069	1.027	1.052	1.079	1.131	1.072	3.04
15)	t	2-Methylnaphthale	1.555	1.565	1.565	1.597	1.660	1.705	1.617	3.74
16)	t	1-Methylnaphthale	1.466	1.472	1.482	1.502	1.571	1.589	1.522	3.47
17)	A1	Benzothiophene	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
18)	A2	C1-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
19)	A2	C2-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
20)	A2	C3-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
21)	A2	C4-Benzo(b)thioph	2.264	2.277	2.228	2.262	2.314	2.325	2.278	1.45
22)	t	Biphenyl	1.999	1.972	1.960	1.982	2.040	2.071	2.010	2.11
23)	t	2,6-Dimethylnapht	1.279	1.294	1.276	1.316	1.381	1.420	1.342	4.89
24)	t	Dibenzofuran	2.190	2.184	2.184	2.223	2.325	2.355	2.258	3.53
25)	t	Acenaphthylene	2.300	2.313	2.253	2.408	2.539	2.661	2.448	7.07
26)	t	Acenaphthene	1.501	1.451	1.440	1.491	1.555	1.605	1.521	4.45
27)	t	2,3,5-Trimethylna	1.204	1.129	1.104	1.165	1.234	1.290	1.204	6.39
28)	A1	Fluorene	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
29)	A2	C1-Fluorenes	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
30)	A2	C2-Fluorenes	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
31)	A2	C3-Fluorenes	1.685	1.596	1.590	1.657	1.758	1.828	1.706	5.89
32)	A1	Dibenzothiophene	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
33)	A2	4-Methyldibenzoth	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
34)	A2	2/3-Methyldibenzo	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
35)	A2	1-Methyldibenzoth	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
36)	A2	OTP	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
37)	A2	C1-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
38)	A2	C2-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
39)	A2	C3-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
40)	A2	C4-Dibenzothiophe	2.446	2.431	2.387	2.462	2.568	2.649	2.515	4.41
41)	A1	Phenanthrene	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
42)	A2	3-Methylphenanthr	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
43)	A2	2/4-Methylphenant	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
44)	A2	2-Methylanthracen	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
45)	A2	9-Methylphenanthr	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
46)	A2	1-Methylphenanthr	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
47)	A2	C1-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
48)	A2	C2-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
49)	A2	5AA IS BKGD	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
50)	A2	C3-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
51)	A2	C4-Phenanthrenes/	2.521	2.485	2.363	2.469	2.563	2.633	2.529	4.11
52)	T	Retene	0.518	0.468	0.467	0.504	0.537	0.592	0.529	10.97
53)	t	Anthracene	2.227	2.197	2.142	2.282	2.438	2.545	2.340	7.22
54)	t	Carbazole	1.942	1.958	2.006	2.169	2.272	2.405	2.166	9.35
55)	t	1-Methylphenanthr	1.671	1.625	1.608	1.687	1.763	1.869	1.732	6.67
56)	A1	Fluoranthene	2.550	2.524	2.464	2.636	2.770	2.934	2.693	7.53
57)	T	Benzo(b)fluorene	1.413	1.378	1.355	1.524	1.628	1.816	1.572	13.58

RF checked 1/11/06

Response Factor Report PAH-1

Method Path : O:\FORENSICS\METHODS\PAH1\JAN2006\
Method File : PAH10104.M
Title : Decalins & Alkylated PAH's
Last Update : Thu Jan 05 07:03:26 2006
Response Via : Initial Calibration

Hardcopy checked against computer method on screen

Calibration Files
10 =P17274.D 25 =P17276.D 100 =P17278.D
500 =P17280.D 1250=P17282.D 5000=P17284.D 10000=P17286 CV/1/11/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
58)	s	Pyrene-d10	2.076	2.015	2.022	2.180	2.206	2.433	2.204	8.75
59)	A1	Pyrene	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
60)	A2	C1-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
61)	A2	C2-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
62)	A2	C3-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
63)	A2	C4-Fluoranthenes/	2.646	2.510	2.516	2.700	2.842	2.967	2.739	7.28
64)	A1	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
65)	A2	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
66)	A2	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
67)	A2	Naphthobenzothiop	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
68)	A2	C1-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
69)	A2	C2-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
70)	A2	C3-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
71)	A2	C4-Naphthobenzoth	2.420	2.299	2.321	2.493	2.622	2.845	2.562	9.75
72)	i	Chrysene-d12	----------ISTD----------							
73)	t	Benz[a]anthracene	1.415	1.402	1.424	1.494	1.567	1.644	1.522	7.94
74)	A1	Chrysene	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
75)	A2	Chrysene/Tripheny	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
76)	A2	C1-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
77)	A2	C2-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
78)	A2	BBF-d12 Surr BKGD	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
79)	A2	C3-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
80)	A2	C4-Chrysenes	1.518	1.486	1.461	1.535	1.599	1.614	1.555	4.90
81)	s	Benzo[b]fluoranth	0.969	0.924	0.918	0.986	0.983	1.068	0.996	7.50
82)	t	Benzo[b]fluoranth	1.418	1.422	1.393	1.549	1.669	1.697	1.563	10.22
83)	A1	Benzo[k]fluoranth	1.480	1.491	1.493	1.648	1.660	1.784	1.626	8.84
84)	A2	Benzo[a]fluoranth	1.480	1.491	1.493	1.648	1.660	1.784	1.626	8.84
85)	t	Benzo[e]pyrene	1.485	1.397	1.391	1.486	1.545	1.612	1.513	7.04
86)	t	Benzo[a]pyrene	1.466	1.285	1.334	1.465	1.548	1.653	1.497	10.74
87)	t	Perylene	1.379	1.273	1.291	1.429	1.534	1.635	1.464	11.40
88)	t	Indeno[1,2,3-cd]p	1.247	1.127	1.118	1.193	1.272	1.557✓	1.318	17.23
89)	t	Dibenz[a,h]anthra	1.125	1.151	1.154	1.329	1.414	1.571	1.343	15.97
90)	t	Benzo[g,h,i]peryl	1.423	1.378	1.339	1.491	1.574	1.679	1.518	10.10
91)	A1	17a(H),21B(H)-hop	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
92)	A2	Hopane (T19)	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
93)	A2	C23 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
94)	A2	C24 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
95)	A2	C25 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
96)	A2	C24 Tetracyclic T	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
97)	A2	C26 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
98)	A2	C26 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
99)	A2	C28 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
100)	A2	C28 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
101)	A2	C29 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
102)	A2	C29 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
103)	A2	18a-22,29,30-Tris	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
104)	A2	C30 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
105)	A2	C30 Tricyclic Ter	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
106)	A2	17a(H)-22,29,30-T	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
107)	A2	17a/b,21b/a 28,30	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
108)	A2	17a(H),21b(H)-25-	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
109)	A2	30-Norhopane (T15	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
110)	A2	18a(H)-30-Norneoh	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
111)	A2	17a(H)-Diahopane	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
112)	A2	30-Normoretane (T	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
113)	A2	18a(H)&18b(H)-Ole	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
114)	A2	Moretane (T20)	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66

RF checked CV/1/11/06

Response Factor Report PAH-1

Method Path : O:\FORENSICS\METHODS\PAH1\JAN2006\
Method File : PAH10104.M
Title : Decalins & Alkylated PAH's
Last Update : Thu Jan 05 07:03:26 2006
Response Via : Initial Calibration

Calibration Files
10 =P17274.D 25 =P17276.D 100 =P17278.D
500 =P17280.D 1250=P17282.D 5000=P17284.D 10000=P17286 1/11/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
115)	A2	30-Homohopane-22S	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
116)	A2	30-Homohopane-22R	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
117)	A2	30,31-Bishomohopa	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
118)	A2	30,31-Bishomohopa	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
119)	A2	30,31-Trishomohop	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
120)	A2	30,31-Trishomohop	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
121)	A2	Tetrakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
122)	A2	Tetrakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
123)	A2	Pentakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
124)	A2	Pentakishomohopan	0.558	0.437	0.442	0.425	0.419	0.396	0.439	12.66
125)	SA1	5B(H)Cholane - Su	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
126)	A2	13b(H),17a(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
127)	A2	13b(H),17a(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
128)	A2	13b,17a-20S-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
129)	A2	14a(H),17a(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
130)	A2	14a(H),17a(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
131)	A2	13b,17a-20R-Ethyl	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
132)	A2	13a,17b-20S-Ethyl	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
133)	A2	14a,17a-20S-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
134)	A2	14a,17a-20R-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
135)	A2	14a(H),17a(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
136)	A2	14a(H),17a(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
137)	A2	14b(H),17b(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
138)	A2	14b(H),17b(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
139)	A2	14b,17b-20R-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
140)	A2	14b,17b-20S-Methy	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
141)	A2	14b(H),17b(H)-20R	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57
142)	A2	14b(H),17b(H)-20S	0.194	0.180	0.178	0.189	0.197	0.214	0.196	8.57

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17274.D
Acq On : 4 Jan 2006 4:29 pm
Operator : AC
Sample : I1010401
Misc : L1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 06:52:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

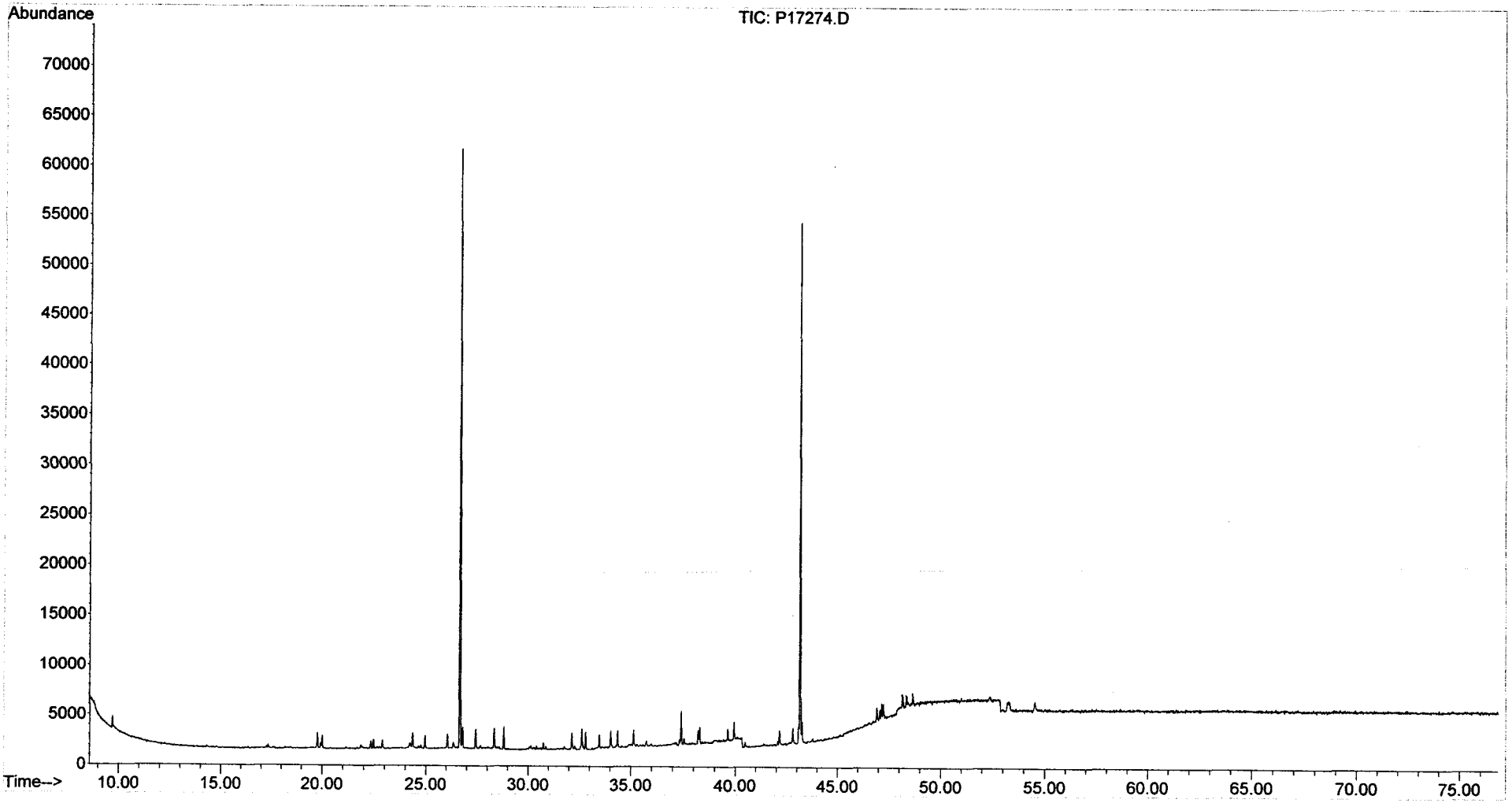
CM 1-5-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	68772	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	102778	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	1457	9.82	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.98%#			
58) Pyrene-d10	38.22	212	2855	9.41	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.94%#			
81) Benzo[b]fluoranthene-d12	47.05	264	1991	9.85	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.98%#			
125) 5B(H)Cholane - Surr	43.78	217	398m	9.83	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.98%#			
Target Compounds						Qvalue
2) Decalin	16.36	138	542m	10.25	ng/mL	
3) trans-Decalin	16.36	138	302m	5.05	ng/mL	
4) cis-Decalin	17.58	138	220m	4.87	ng/mL	
9) Naphthalene	19.77	128	3513	9.79	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	2139	9.37	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	2017	9.33	ng/mL#	100
17) Benzothiophene	19.99	134	3114	9.78	ng/mL	100
22) Biphenyl	24.35	154	2750m	9.80	ng/mL	
23) 2,6-Dimethylnaphthalene	24.96	156	1759m	9.26	ng/mL	
24) Dibenzofuran	27.43	168	3012	9.42	ng/mL#	88
25) Acenaphthylene	26.05	152	3163	9.06	ng/mL#	100
26) Acenaphthene	26.79	153	2064	9.65	ng/mL	96
27) 2,3,5-Trimethylnaphthalene	28.35	170	1656	9.76	ng/mL	99
28) Fluorene	28.81	166	2317	9.58	ng/mL	97
32) Dibenzothiophene	32.13	184	3365	9.53	ng/mL#	75
41) Phenanthrene	32.62	178	3468	9.84	ng/mL#	58
52) Retene	39.63	234	712m	9.65	ng/mL	
53) Anthracene	32.81	178	3063m	9.13	ng/mL	
54) Carbazole	33.48	167	2671	8.55	ng/mL#	64
55) 1-Methylphenanthrene	35.14	192	2299	9.48	ng/mL	98
56) Fluoranthene	37.40	202	3507	9.21	ng/mL#	67
57) Benzo(b)fluorene	39.93	216	1944	8.68	ng/mL	99
59) Pyrene	38.28	202	3639	9.31	ng/mL#	64
64) Naphthobenzothiophene	42.15	234	3328	9.23	ng/ml#	74
65) Naphthobenzothiophene-2,1-	42.15	234	3328	9.23	ng/mL#	74
73) Benz[a]anthracene	43.08	228	2908	9.03	ng/mL#	48
74) Chrysene	43.24	228	3120	9.49	ng/mL#	45
75) Chrysene/Triphenylene	43.24	228	3120	9.49	ng/mL#	45
82) Benzo[b]fluoranthene	47.14	252	2914m	8.49	ng/mL	
83) Benzo[k]fluoranthene	47.23	252	3043	8.92	ng/mL#	54
85) Benzo[e]pyrene	48.14	252	3052	9.61	ng/mL#	69
86) Benzo[a]pyrene	48.34	252	3014	9.47	ng/mL#	54
87) Perylene	48.65	252	2835	8.99	ng/mL#	55
88) Indeno[1,2,3-cd]pyrene	53.21	276	2564m	9.14	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	2313	7.96	ng/mL#	55
90) Benzo[g,h,i]perylene	54.52	276	2926	9.04	ng/mL#	52
91) 17a(H),21B(H)-hopane - C30	52.37	191	1147m	13.07	ng/mL	
92) Hopane (T19)	52.37	191	1147m	13.07	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17274.D
Acq On : 4 Jan 2006 4:29 pm
Operator : AC
Sample : I1010401
Misc : L1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 06:52:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17276.D
Acq On : 4 Jan 2006 6:04 pm
Operator : AC
Sample : I1010402
Misc : L2
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 06:54:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M MS 1-5-06
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

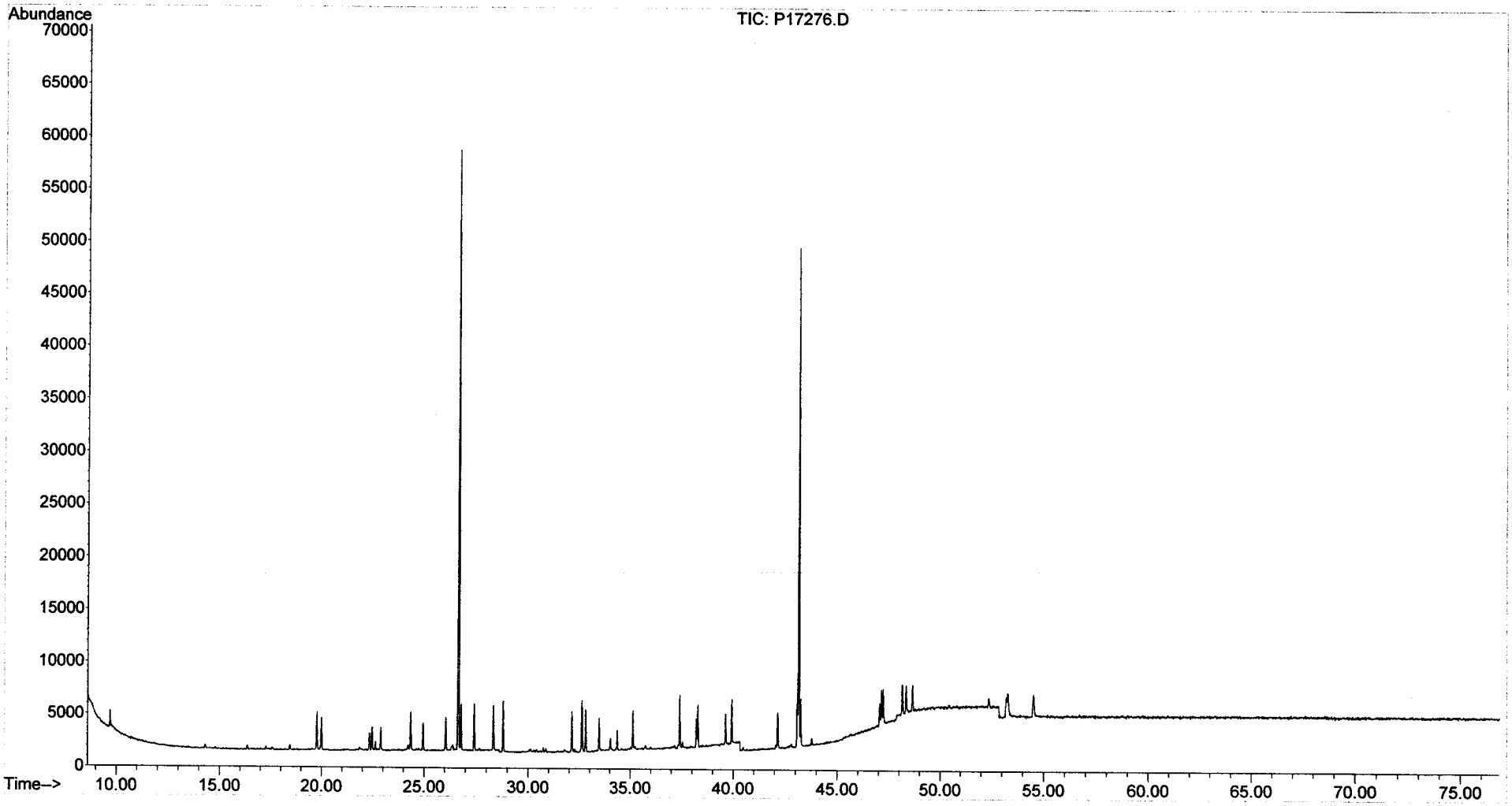
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	65919	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	96617	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	3522	24.76	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.48%#			
58) Pyrene-d10	38.22	212	6640	22.83	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.28%#			
81) Benzo[b]fluoranthene-d12	47.05	264	4463	23.49	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.35%#			
125) 5B(H)Cholane - Surr	43.78	217	869m	22.82	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.28%#			

Target Compounds						Qvalue
2) Decalin	16.36	138	1436m	28.34	ng/mL	
3) trans-Decalin	16.36	138	733m	12.78	ng/mL	
4) cis-Decalin	17.58	138	551m	12.73	ng/mL	
9) Naphthalene	19.77	128	8284	24.08	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	5157	23.57	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	4851	23.41	ng/mL#	100
17) Benzothiophene	19.99	134	7506	24.60	ng/mL	100
22) Biphenyl	24.35	154	6498m	24.16	ng/mL	
23) 2,6-Dimethylnaphthalene	24.96	156	4266	23.43	ng/mL#	100
24) Dibenzofuran	27.43	168	7199	23.49	ng/mL#	92
25) Acenaphthylene	26.05	152	7625	22.78	ng/mL#	100
26) Acenaphthene	26.79	153	4784	23.33	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.35	170	3721	22.88	ng/mL	97
28) Fluorene	28.81	166	5259m	22.68	ng/mL	
32) Dibenzothiophene	32.13	184	8013	23.67	ng/mL#	75
41) Phenanthrene	32.62	178	8192	24.24	ng/mL	100
52) Retene	39.63	234	1542	21.80	ng/mL	99
53) Anthracene	32.80	178	7241m	22.52	ng/mL	
54) Carbazole	33.46	167	6454	21.55	ng/mL	96
55) 1-Methylphenanthrene	35.14	192	5357	23.05	ng/mL	97
56) Fluoranthene	37.40	202	8320	22.78	ng/mL	98
57) Benzo(b)fluorene	39.93	216	4543	21.17	ng/mL	99
59) Pyrene	38.28	202	8272	22.08	ng/mL	98
64) Naphthobenzothiophene	42.15	234	7579	21.92	ng/ml#	74
65) Naphthobenzothiophene-2,1-	42.15	234	7579	21.92	ng/mL#	74
73) Benz[a]anthracene	43.08	228	6774m	22.37	ng/mL	
74) Chrysene	43.24	228	7181	23.23	ng/mL	98
75) Chrysene/Triphenylene	43.24	228	7181	23.23	ng/mL	98
82) Benzo[b]fluoranthene	47.14	252	6868	21.29	ng/mL	94
83) Benzo[k]fluoranthene	47.23	252	7205	22.46	ng/mL	99
85) Benzo[e]pyrene	48.16	252	6748m	22.60	ng/mL	
86) Benzo[a]pyrene	48.34	252	6206m	20.75	ng/mL	
87) Perylene	48.65	252	6150m	20.75	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.20	276	5445m	20.65	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	5560	20.34	ng/mL#	80
90) Benzo[g,h,i]perylene	54.51	276	6658	21.89	ng/mL	97
91) 17a(H),21B(H)-hopane - C30	52.37	191	2111m	25.59	ng/mL	
92) Hopane (T19)	52.37	191	2111m	25.59	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17276.D
Acq On : 4 Jan 2006 6:04 pm
Operator : AC
Sample : I1010402
Misc : L2
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 06:54:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17278.D
Acq On : 4 Jan 2006 7:40 pm
Operator : AC
Sample : I1010403
Misc : L3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 06:55:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

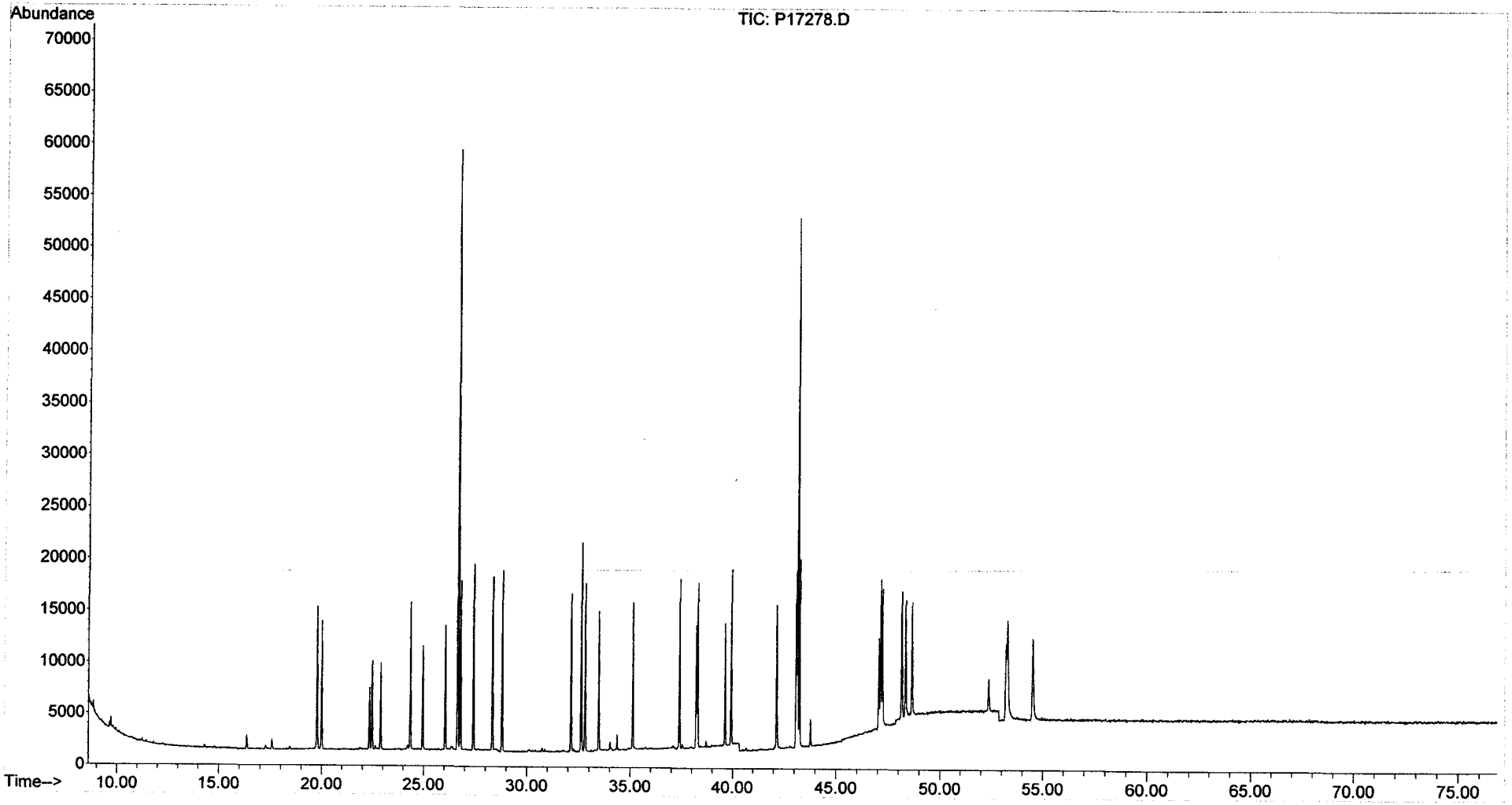
MB 1-5-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	66392	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	99377	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	13633	95.16	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.52%#			
58) Pyrene-d10	38.22	212	26851	91.65	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.17%#			
81) Benzo[b]fluoranthene-d12	47.05	264	18252	93.41	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.34%#			
125) 5B(H)Cholane - Surr	43.78	217	3545	90.52	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.05%#			
Target Compounds						Qvalue
2) Decalin	16.36	138	5359m	104.99	ng/mL	
3) trans-Decalin	16.36	138	2827	48.93	ng/mL	100
4) cis-Decalin	17.58	138	2185	50.11	ng/mL	100
9) Naphthalene	19.77	128	33020	95.29	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	20778	94.27	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	19684	94.33	ng/mL#	100
17) Benzothiophene	19.99	134	29580	96.25	ng/mL	100
22) Biphenyl	24.35	154	26020	96.07	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	16937	92.34	ng/mL#	100
24) Dibenzofuran	27.43	168	28998	93.94	ng/mL	99
25) Acenaphthylene	26.05	152	29916	88.73	ng/mL#	100
26) Acenaphthene	26.79	153	19123	92.59	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	14656	89.47	ng/mL	99
28) Fluorene	28.81	166	21112	90.42	ng/mL	100
32) Dibenzothiophene	32.13	184	31693	92.95	ng/mL	100
41) Phenanthrene	32.62	178	31372	92.16	ng/mL	100
52) Retene	39.63	234	6199	87.01	ng/mL	100
53) Anthracene	32.81	178	28438m	87.83	ng/mL	
54) Carbazole	33.46	167	26632	88.28	ng/mL	100
55) 1-Methylphenanthrene	35.14	192	21352	91.21	ng/mL	99
56) Fluoranthene	37.40	202	32720	88.97	ng/mL	100
57) Benzo(b)fluorene	39.93	216	17994	83.25	ng/mL	99
59) Pyrene	38.28	202	33413	88.55	ng/mL	99
64) Naphthobenzothiophene	42.15	234	30819	88.51	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.15	234	30819	88.51	ng/mL	99
73) Benz[a]anthracene	43.08	228	28302	90.86	ng/mL	99
74) Chrysene	43.24	228	29039	91.35	ng/mL	99
75) Chrysene/Triphenylene	43.24	228	29039	91.35	ng/mL	99
82) Benzo[b]fluoranthene	47.14	252	27689	83.45	ng/mL	96
83) Benzo[k]fluoranthene	47.23	252	29668	89.93	ng/mL	97
85) Benzo[e]pyrene	48.14	252	27649	90.04	ng/mL	97
86) Benzo[a]pyrene	48.34	252	26521	86.19	ng/mL	93
87) Perylene	48.65	252	25658	84.16	ng/mL	95
88) Indeno[1,2,3-cd]pyrene	53.20	276	22228m	81.97	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	22944	81.62	ng/mL	97
90) Benzo[g,h,i]perylene	54.51	276	26619	85.08	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.36	191	8792	103.62	ng/mL#	76
92) Hopane (T19)	52.36	191	8792	103.62	ng/mL#	76

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17278.D
Acq On : 4 Jan 2006 7:40 pm
Operator : AC
Sample : I1010403
Misc : L3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 06:55:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17280.D
Acq On : 4 Jan 2006 9:15 pm
Operator : AC
Sample : I1010404
Misc : L4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 06:56:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:30:56 2006
Response via : Initial Calibration

ams 1-5-06

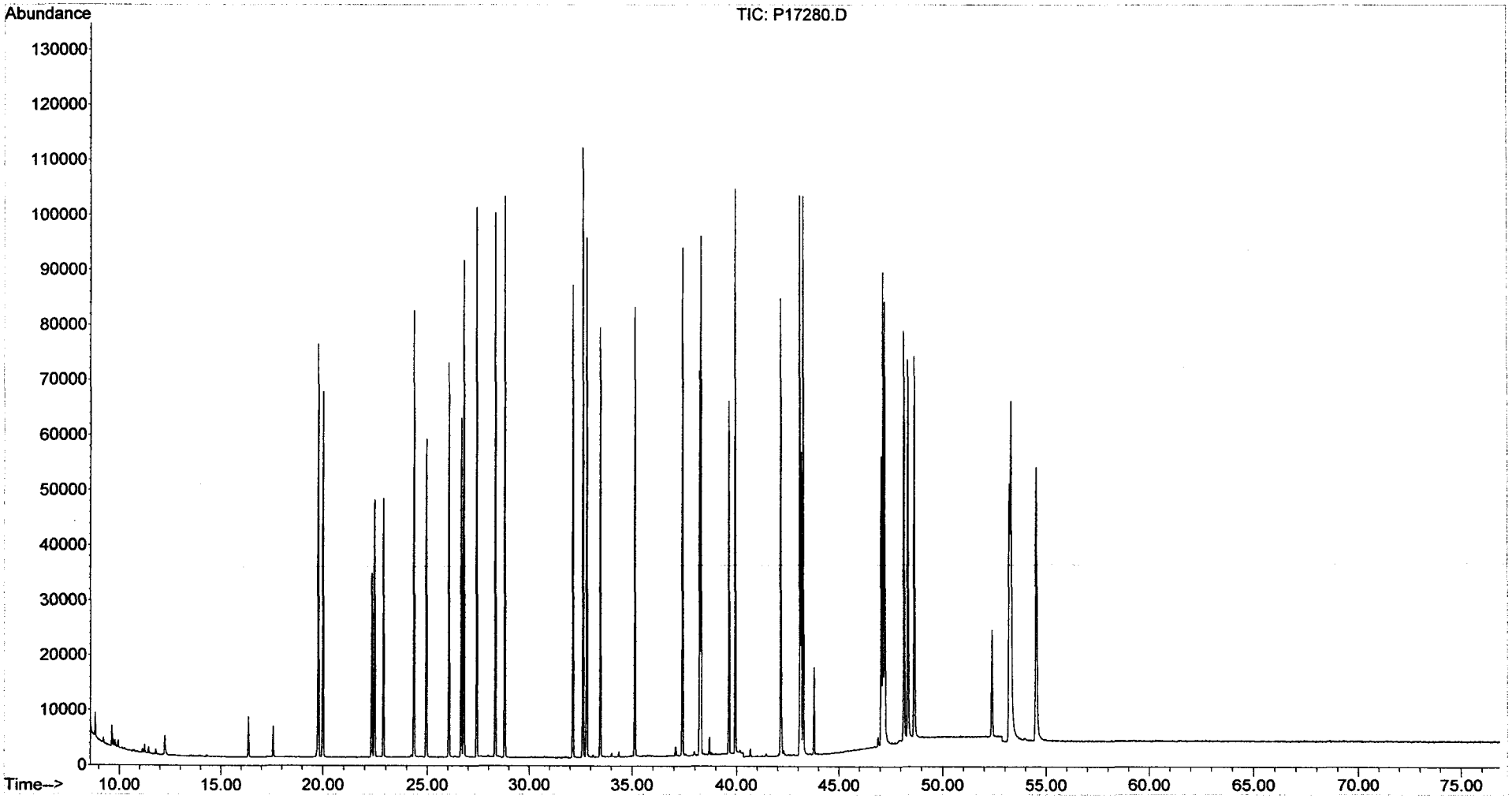
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	71275	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	108818	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	74947	496.76	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.68%#			
58) Pyrene-d10	38.22	212	155412	524.21	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.42%			
81) Benzo[b]fluoranthene-d12	47.05	264	107268	519.66	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.97%			
125) 5B(H)Cholane - Surr	43.78	217	20558	504.53	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.45%			

Target Compounds						Qvalue
2) Decalin	16.36	138	26230m	454.97	ng/mL	
3) trans-Decalin	16.36	138	14929	240.09	ng/mL	100
4) cis-Decalin	17.58	138	11255	240.77	ng/mL	100
9) Naphthalene	19.77	128	181202	500.27	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	113851	503.54	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	107080	501.44	ng/mL#	100
17) Benzothiophene	19.99	134	161214	498.02	ng/mL	100
22) Biphenyl	24.35	154	141241	497.26	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	93790	503.21	ng/mL#	100
24) Dibenzofuran	27.43	168	158411	500.43	ng/mL	100
25) Acenaphthylene	26.05	152	171655	512.13	ng/mL#	100
26) Acenaphthene	26.79	153	106287	501.45	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	83048	498.97	ng/mL	100
28) Fluorene	28.81	166	118094	499.92	ng/mL	100
32) Dibenzothiophene	32.13	184	175502	500.86	ng/mL	100
41) Phenanthrene	32.62	178	175996	497.18	ng/mL	100
52) Retene	39.63	234	35891	506.37	ng/mL	99
53) Anthracene	32.81	178	162649m	506.89	ng/mL	
54) Carbazole	33.46	167	154616	530.54	ng/mL	100
55) 1-Methylphenanthrene	35.14	192	120214	505.89	ng/mL	99
56) Fluoranthene	37.40	202	187873	511.43	ng/mL	99
57) Benzo(b)fluorene	39.93	216	108641	527.92	ng/mL	100
59) Pyrene	38.28	202	192465	513.68	ng/mL	100
64) Naphthobenzothiophene	42.15	234	177719	516.11	ng/ml	100
65) Naphthobenzothiophene-2,1-	42.15	234	177719	516.11	ng/mL	100
73) Benz[a]anthracene	43.08	228	162619	514.60	ng/mL	99
74) Chrysene	43.24	228	166989	506.06	ng/mL	100
75) Chrysene/Triphenylene	43.24	228	166989	506.06	ng/mL	100
82) Benzo[b]fluoranthene	47.14	252	168523	524.81	ng/mL	100
83) Benzo[k]fluoranthene	47.23	252	179341	538.20	ng/mL	100
85) Benzo[e]pyrene	48.14	252	161659	510.72	ng/mL	99
86) Benzo[a]pyrene	48.34	252	159386	520.00	ng/mL	100
87) Perylene	48.65	252	155452m	521.64	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.20	276	129799m	492.93	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	144587	548.50	ng/mL	99
90) Benzo[g,h,i]perylene	54.51	276	162269	521.85	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	46281	452.27	ng/mL	99
92) Hopane (T19)	52.36	191	46281	452.62	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17280.D
Acq On : 4 Jan 2006 9:15 pm
Operator : AC
Sample : I1010404
Misc : L4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 06:56:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:30:56 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17282.D
Acq On : 4 Jan 2006 10:50 pm
Operator : AC
Sample : I1010405
Misc : L5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 06:58:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:11:09 2006
Response via : Initial Calibration

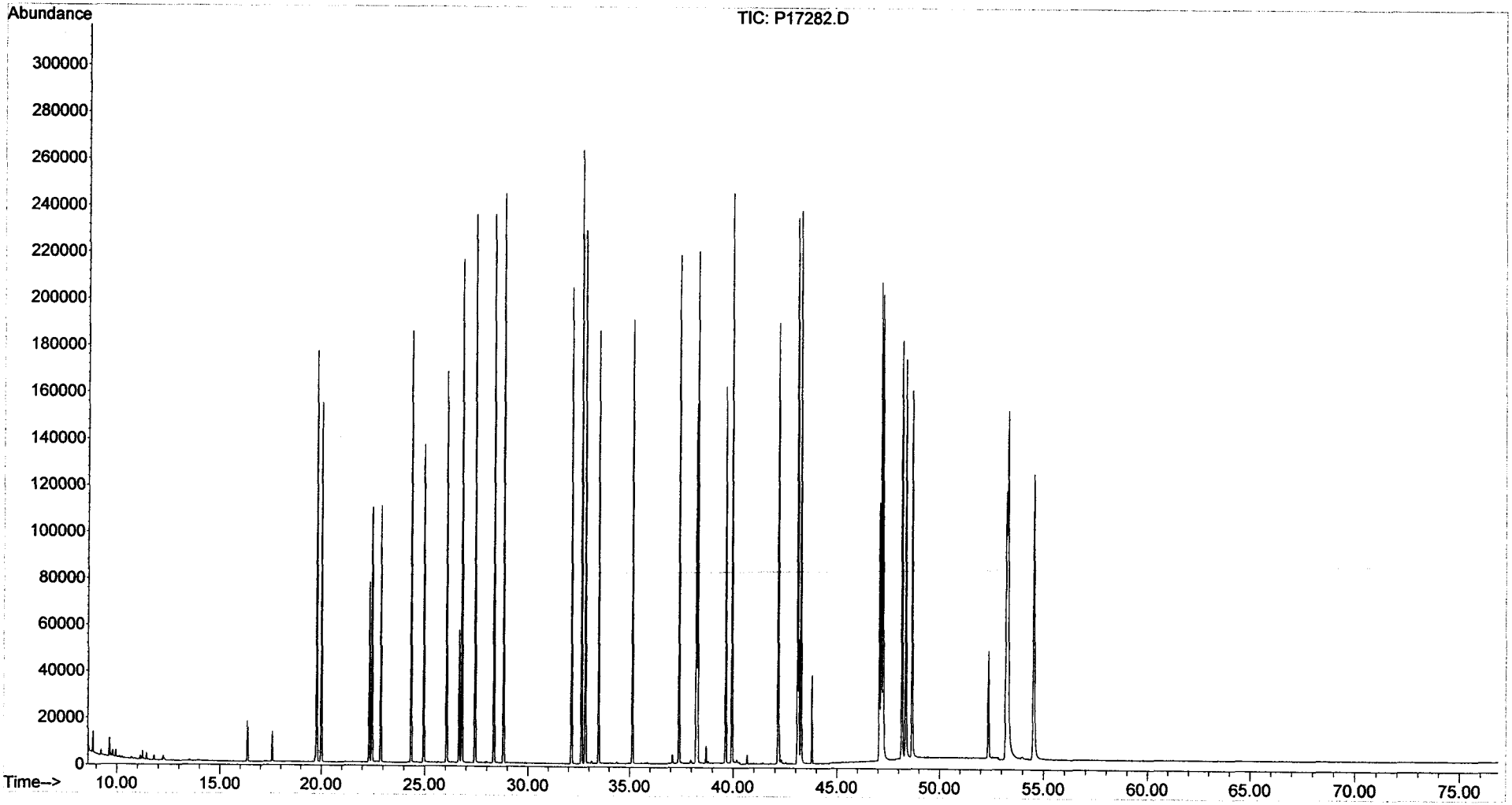
MS 1-5-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	63436	500.00 ng/mL	0.00
72) Chrysene-d12	43.14	240	97535	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	171111	1266.33 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 126.63%		
58) Pyrene-d10	38.22	212	349927	1118.11 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 111.81%		
81) Benzo[b]fluoranthene-d12	47.05	264	239709	1282.65 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 128.27%		
125) 5B(H)Cholane - Surr	43.78	217	48045	1200.51 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 120.05%		
Target Compounds					Qvalue
2) Decalin	16.36	138	60963m	1237.90 ng/mL	
3) trans-Decalin	16.36	138	34499	656.48 ng/mL	100
4) cis-Decalin	17.58	138	26038	681.25 ng/mL	100
9) Naphthalene	19.77	128	413849	1486.68 ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	263234	1413.70 ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	249223	1396.07 ng/mL#	100
17) Benzothiophene	19.99	134	367033	1587.74 ng/mL	100
22) Biphenyl	24.35	154	323478	1369.67 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	219055	1364.05 ng/mL#	100
24) Dibenzofuran	27.43	168	368661	1360.67 ng/mL	99
25) Acenaphthylene	26.05	152	402699	1434.84 ng/mL#	100
26) Acenaphthene	26.79	153	246674	1404.11 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.35	170	195648	1301.33 ng/mL	98
28) Fluorene	28.81	166	278871	1378.56 ng/mL	99
32) Dibenzothiophene	32.13	184	407250	1379.15 ng/mL	97
41) Phenanthrene	32.62	178	406544	1319.60 ng/mL	100
52) Retene	39.63	234	85089	1165.62 ng/mL	100
53) Anthracene	32.81	178	386697m	1385.76 ng/mL	
54) Carbazole	33.46	167	360312	1466.50 ng/mL	100
55) 1-Methylphenanthrene	35.14	192	279607	1288.50 ng/mL	100
56) Fluoranthene	37.40	202	439252	1291.16 ng/mL#	91
57) Benzo(b)fluorene	39.93	216	258137	1307.54 ng/mL	99
59) Pyrene	38.28	202	450682	1300.19 ng/mL#	87
64) Naphthobenzothiophene	42.15	234	415859	1320.50 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.15	234	415859	1320.50 ng/mL	99
73) Benz[a]anthracene	43.08	228	382138	1444.75 ng/mL	100
74) Chrysene	43.24	228	390005	1443.10 ng/mL	99
75) Chrysene/Triphenylene	43.24	228	390005	1443.10 ng/mL	99
82) Benzo[b]fluoranthene	47.14	252	407057	1490.87 ng/mL#	89
83) Benzo[k]fluoranthene	47.23	252	404748	1520.92 ng/mL#	88
85) Benzo[e]pyrene	48.16	252	376712	1432.43 ng/mL#	85
86) Benzo[a]pyrene	48.34	252	377493m	1511.86 ng/mL	
87) Perylene	48.65	252	374032	1521.84 ng/mL#	83
88) Indeno[1,2,3-cd]pyrene	53.20	276	310220m	1416.85 ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	344868	1576.15 ng/mL#	92
90) Benzo[g,h,i]perylene	54.52	276	383819	1566.79 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	102270m	1196.99 ng/mL	
92) Hopane (T19)	52.36	191	102318m	1197.55 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17282.D
Acq On : 4 Jan 2006 10:50 pm
Operator : AC
Sample : I1010405
Misc : L5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 06:58:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:11:09 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17284.D
Acq On : 5 Jan 2006 12:26 am
Operator : AC
Sample : I1010406
Misc : L6
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 06:40:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:35:34 2006
Response via : Initial Calibration

MS 1-5-06

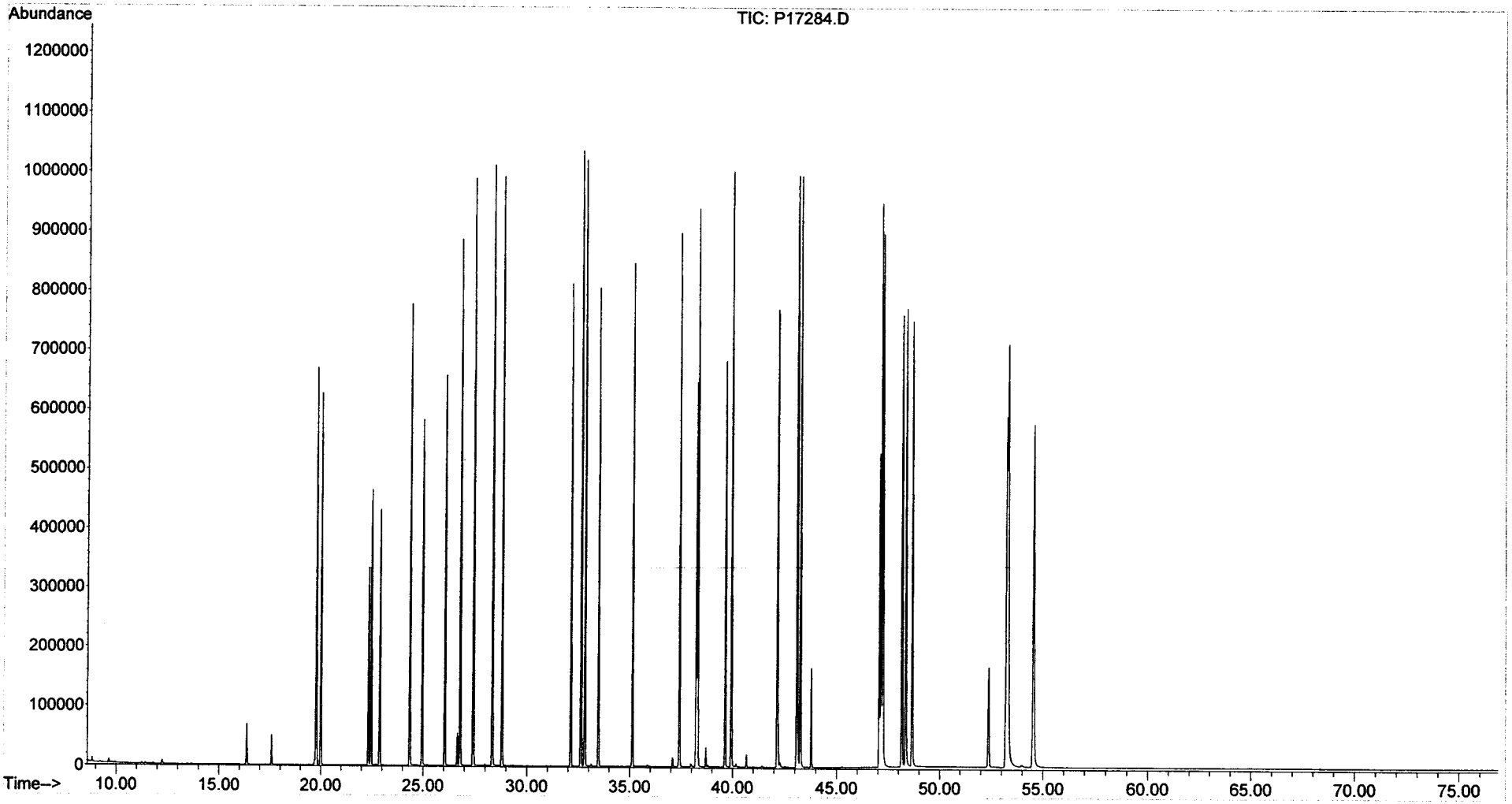
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	62439	500.00 ng/mL	0.00
72) Chrysene-d12	43.15	240	101542	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	705944	5348.16 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 534.82%#		
58) Pyrene-d10	38.22	212	1518835	5792.03 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 579.20%#		
81) Benzo[b]fluoranthene-d12	47.07	264	1084005	5583.86 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 558.39%#		
125) 5B(H)Cholane - Surr	43.78	217	217417	5707.76 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 570.78%#		

Target Compounds					Qvalue
2) Decalin	16.36	138	239149m	4822.02 ng/mL	
3) trans-Decalin	16.36	138	136458	2525.13 ng/mL	100
4) cis-Decalin	17.58	138	102583	2523.64 ng/mL	100
9) Naphthalene	19.77	128	1628939	5133.07 ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	1064587	5367.20 ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	992011	5299.78 ng/mL#	100
17) Benzothiophene	19.99	134	1451976	5124.25 ng/mL	100
22) Biphenyl	24.35	154	1293365	5203.60 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	886644	5423.33 ng/mL#	100
24) Dibenzofuran	27.43	168	1470635	5302.36 ng/mL	100
25) Acenaphthylene	26.06	152	1661396	5630.84 ng/mL#	100
26) Acenaphthene	26.79	153	1001896	5392.60 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.35	170	805368	5525.83 ng/mL	99
28) Fluorene	28.81	166	1141408	5515.83 ng/mL	100
32) Dibenzothiophene	32.13	184	1653968	5386.32 ng/mL	100
41) Phenanthrene	32.62	178	1644272	5308.33 ng/mL	100
52) Retene	39.63	234	369364	5933.54 ng/mL	100
53) Anthracene	32.81	178	1589145m	5637.84 ng/mL	
54) Carbazole	33.48	167	1501779	5811.33 ng/mL	100
55) 1-Methylphenanthrene	35.14	192	1166892	5592.33 ng/mL	100
56) Fluoranthene	37.40	202	1832130m	5667.32 ng/mL	
57) Benzo(b)fluorene	39.94	216	1134172	6221.73 ng/mL	100
59) Pyrene	38.30	202	1852431	5613.00 ng/mL	99
64) Naphthobenzothiophene	42.16	234	1776519	5851.58 ng/ml	100
65) Naphthobenzothiophene-2,1-	42.16	234	1776496	5851.51 ng/mL	100
73) Benz[a]anthracene	43.09	228	1669392	5628.35 ng/mL	99
74) Chrysene	43.25	228	1638682	5308.97 ng/mL	100
75) Chrysene/Triphenylene	43.25	228	1639339	5311.10 ng/mL	100
82) Benzo[b]fluoranthene	47.15	252	1722706	5692.73 ng/mL	100
83) Benzo[k]fluoranthene	47.24	252	1811486	5738.09 ng/mL	100
85) Benzo[e]pyrene	48.17	252	1637175	5519.17 ng/mL	100
86) Benzo[a]pyrene	48.35	252	1678359	5821.51 ng/mL	100
87) Perylene	48.66	252	1660598	5920.41 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.22	276	1580959m	6453.98 ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	1595379	6362.37 ng/mL	100
90) Benzo[g,h,i]perylene	54.55	276	1704807	5824.52 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.37	191	402599	4298.25 ng/mL	99
92) Hopane (T19)	52.37	191	402599	4300.95 ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17284.D
Acq On : 5 Jan 2006 12:26 am
Operator : AC
Sample : I1010406
Misc : L6
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 06:40:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:35:34 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17286.D
Acq On : 5 Jan 2006 2:00 am
Operator : AC
Sample : I1010407
Misc : L7
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 07:00:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:40:19 2006
Response via : Initial Calibration

MS 1-5-06

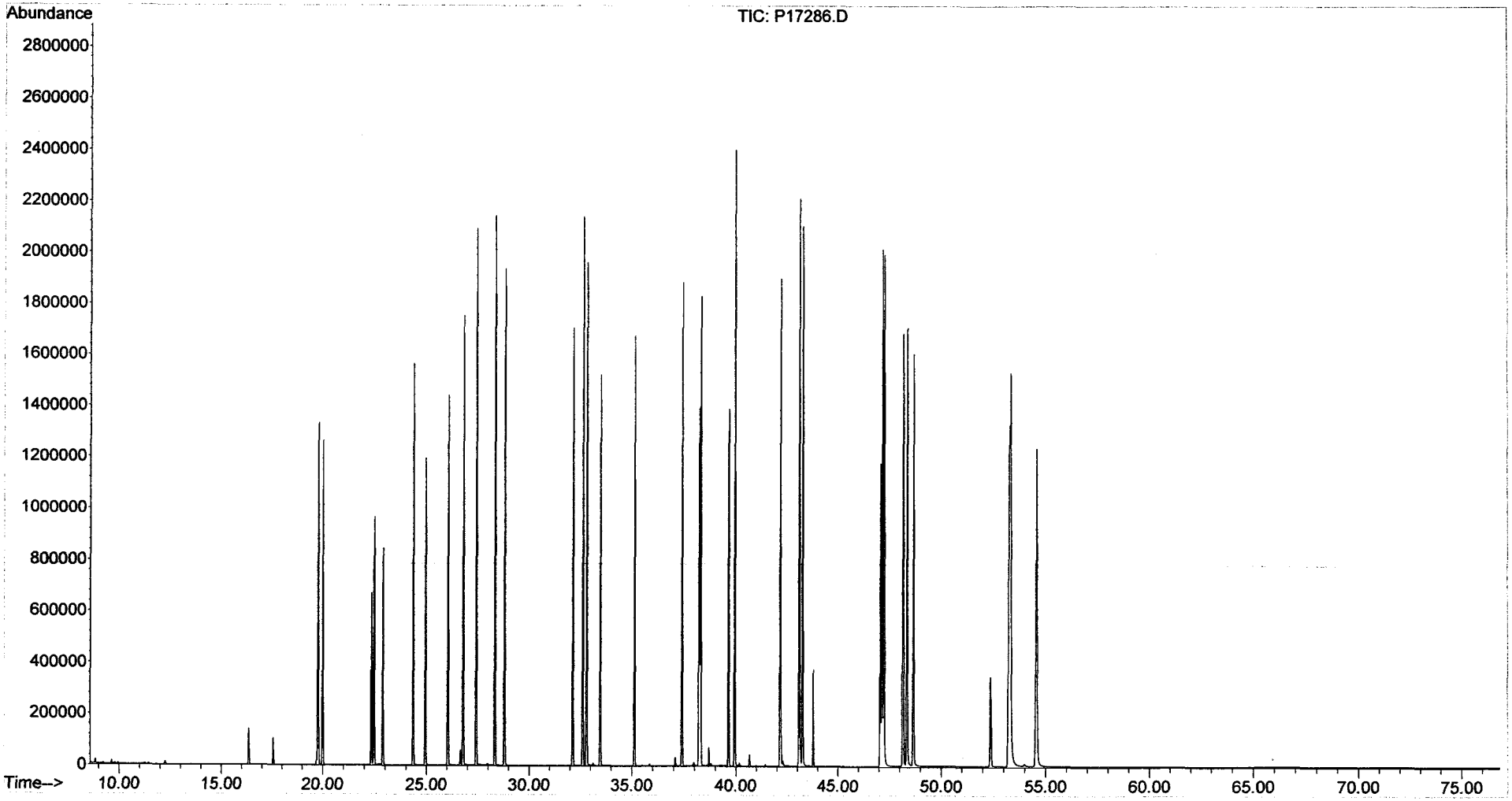
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	65362	500.00 ng/mL	0.00
72) Chrysene-d12	43.15	240	106253	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	1421793	10171.62 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1017.16%#	
58) Pyrene-d10	38.23	212	3261697	11576.49 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1157.65%#	
81) Benzo[b]fluoranthene-d12	47.08	264	2385707	11520.04 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1152.00%#	
125) 5B(H)Cholane - Surr	43.79	217	474573	11631.96 ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1163.20%#	

Target Compounds					Qvalue
2) Decalin	16.36	138	485177m	9401.02 ng/mL	
3) trans-Decalin	16.36	138	276285	4875.80 ng/mL	100
4) cis-Decalin	17.58	138	208434	4890.66 ng/mL	100
9) Naphthalene	19.78	128	3345433	10026.13 ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	2181497	10379.31 ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	2051899	10368.36 ng/mL#	100
17) Benzothiophene	19.99	134	2971108	9975.27 ng/mL	100
22) Biphenyl	24.35	154	2673051	10204.30 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	1862705	10732.63 ng/mL#	100
24) Dibenzofuran	27.43	168	3063405	10445.85 ng/mL	100
25) Acenaphthylene	26.06	152	3482207	11041.99 ng/mL#	100
26) Acenaphthene	26.79	153	2094541	10630.38 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	1705543	10986.27 ng/mL	98
28) Fluorene	28.81	166	2386821	10832.19 ng/mL	99
32) Dibenzothiophene	32.14	184	3481728	10693.84 ng/mL	100
41) Phenanthrene	32.64	178	3488197	10648.18 ng/mL	100
52) Retene	39.65	234	807383	12016.04 ng/mL	99
53) Anthracene	32.81	178	3332392m	11058.57 ng/mL	
54) Carbazole	33.48	167	3147812	11329.73 ng/mL	100
55) 1-Methylphenanthrene	35.14	192	2482402	11144.84 ng/mL	99
56) Fluoranthene	37.42	202	3885280m	11231.04 ng/mL	
57) Benzo(b)fluorene	39.94	216	2465221	12413.17 ng/mL	100
59) Pyrene	38.31	202	3910182	11091.64 ng/mL	100
64) Naphthobenzothiophene	42.16	234	3836418	11738.26 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.16	234	3836745	11739.29 ng/mL	99
73) Benz[a]anthracene	43.09	228	3629131	11453.21 ng/mL	100
74) Chrysene	43.26	228	3556151	10898.09 ng/mL	100
75) Chrysene/Triphenylene	43.26	228	3556402	10898.09 ng/mL	100
82) Benzo[b]fluoranthene	47.16	252	3814487	11774.32 ng/mL	100
83) Benzo[k]fluoranthene	47.25	252	3882179	11469.83 ng/mL	99
85) Benzo[e]pyrene	48.17	252	3566344	11294.18 ng/mL	100
86) Benzo[a]pyrene	48.37	252	3677925	11866.57 ng/mL	100
87) Perylene	48.68	252	3622735	11975.80 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.25	276	3632266m	13515.58 ng/mL	
89) Dibenz[a,h]anthracene	53.32	278	3522142	12840.41 ng/mL	100
90) Benzo[g,h,i]perylene	54.57	276	3706058	11776.78 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.37	191	838594	8761.02 ng/mL	100
92) Hopane (T19)	52.37	191	838594	8765.72 ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\JANUARY06\JAN04\
Data File : P17286.D
Acq On : 5 Jan 2006 2:00 am
Operator : AC
Sample : I1010407
Misc : L7
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 07:00:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:40:19 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration

MB 1/5/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	107	0.00
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.36#
3	A1	trans-Decalin	0.432	0.000#	100.0#	0#	-16.36#
4	t	cis-Decalin	0.325	0.000#	100.0#	0#	-17.58#
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.29#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.62#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-22.10#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.49#
9	A1	Naphthalene	2.553	2.387	6.5	100	0.00
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.47#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.32#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.66#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.43#
14	s	2-Methylnaphthalene-d10	1.072	1.084	-1.1	110	0.00
15	t	2-Methylnaphthalene	1.617	1.475	8.8	99	0.00
16	t	1-Methylnaphthalene	1.522	1.465	3.7	104	0.00
17	A1	Benzothiophene	2.278	0.000#	100.0#	0#	-19.99#
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-22.03#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.51#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.48#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.25#
22	t	Biphenyl	2.010	1.938	3.6	104	0.00
23	t	2,6-Dimethylnaphthalene	1.342	1.321	1.6	107	0.00
24	t	Dibenzofuran	2.258	2.216	1.9	106	0.00
25	t	Acenaphthylene	2.448	2.311	5.6	102	0.00
26	t	Acenaphthene	1.521	1.451	4.6	104	0.00
27	t	2,3,5-Trimethylnaphthalene	1.204	1.207	-0.2	110	0.00
28	A1	Fluorene	1.706	1.559	8.6	100	0.00
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.19#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.38#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.21#
32	A1	Dibenzothiophene	2.515	0.000#	100.0#	0#	-32.13#
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.91#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.26#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.68#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.34#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.92#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.61#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.42#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.31#
41	A1	Phenanthrene	2.529	2.268	10.3	98	0.00
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.59#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.70#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.86#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-35.05#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-35.15#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-35.05#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.87#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.65#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.72#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-40.91#
52	T	Retene	0.529	0.000#	100.0#	0#	-39.63#
53	t	Anthracene	2.340	2.177	7.0	102	0.00
54	t	Carbazole	2.166	0.000#	100.0#	0#	-33.46#
55	t	1-Methylphenanthrene	1.732	1.711	1.2	108	0.00
56	A1	Fluoranthene	2.693	2.448	9.1	99	0.00
57	T	Benzo(b)fluorene	1.572	0.000#	100.0#	0#	-39.93#
58	s	Pyrene-d10	2.204	2.214	-0.5	108	0.00
59	A1	Pyrene	2.739	2.608	4.8	103	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.68#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.50#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.52#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.88#
64	A1	Naphthobenzothiophene	2.562	0.000#	100.0#	0#	-42.15#
65	A2	Naphthobenzothiophene-2,1-D	2.562	0.000#	100.0#	0#	-42.15#
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.49#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.79#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.56#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.58#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.19#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.28#
72	i	Chrysene-d12	1.000	1.000	0.0	113	0.00
73	t	Benz[a]anthracene	1.522	1.531	-0.6	116	0.00
74	A1	Chrysene	1.555	1.468	5.6	108	0.00
75	A2	Chrysene/Triphenylene	1.555	1.468	5.6	108	0.00
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.72#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-46.81#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-47.07#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.57#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-49.16#
81	s	Benzo[b]fluoranthene-d12	0.996	1.108	-11.2	127	0.00
82	t	Benzo[b]fluoranthene	1.563	1.580	-1.1	115	0.00
83	A1	Benzo[k]fluoranthene	1.626	1.654	-1.7	114	0.00
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.58#
85	t	Benzo[e]pyrene	1.513	1.559	-3.0	119	0.00
86	t	Benzo[a]pyrene	1.497	1.467	2.0	113	0.00
87	t	Perylene	1.464	1.608	-9.8	127	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.542	-17.0	146	0.01
89	t	Dibenz[a,h]anthracene	1.343	1.499	-11.6	128	0.00
90	t	Benzo[g,h,i]perylene	1.518	1.591	-4.8	121	-0.01
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.000#	100.0#	0#	-52.36#
92	A2	Hopane (T19)	0.439	0.000#	100.0#	0#	-52.36#
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.81#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.54#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-43.03#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.35#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-44.09#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.18#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.48#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-46.64#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-47.18#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.37#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.51#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.61#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.86#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-49.07#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.27#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-50.09#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.97#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-51.08#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-51.22#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.76#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-52.18#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-53.07#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-54.20#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.44#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.80#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-56.20#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.99#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.64#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.72#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.63#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.95#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-65.28#
125	SA1	5B(H)Cholane - Surr	0.196	0.202	-3.1	121	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.31#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.74#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.43#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.31#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.83#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.13#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.39#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.55#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.28#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.63#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.57#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.40#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.49#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.73#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.81#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.89#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.94#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration

MS 1/5/06

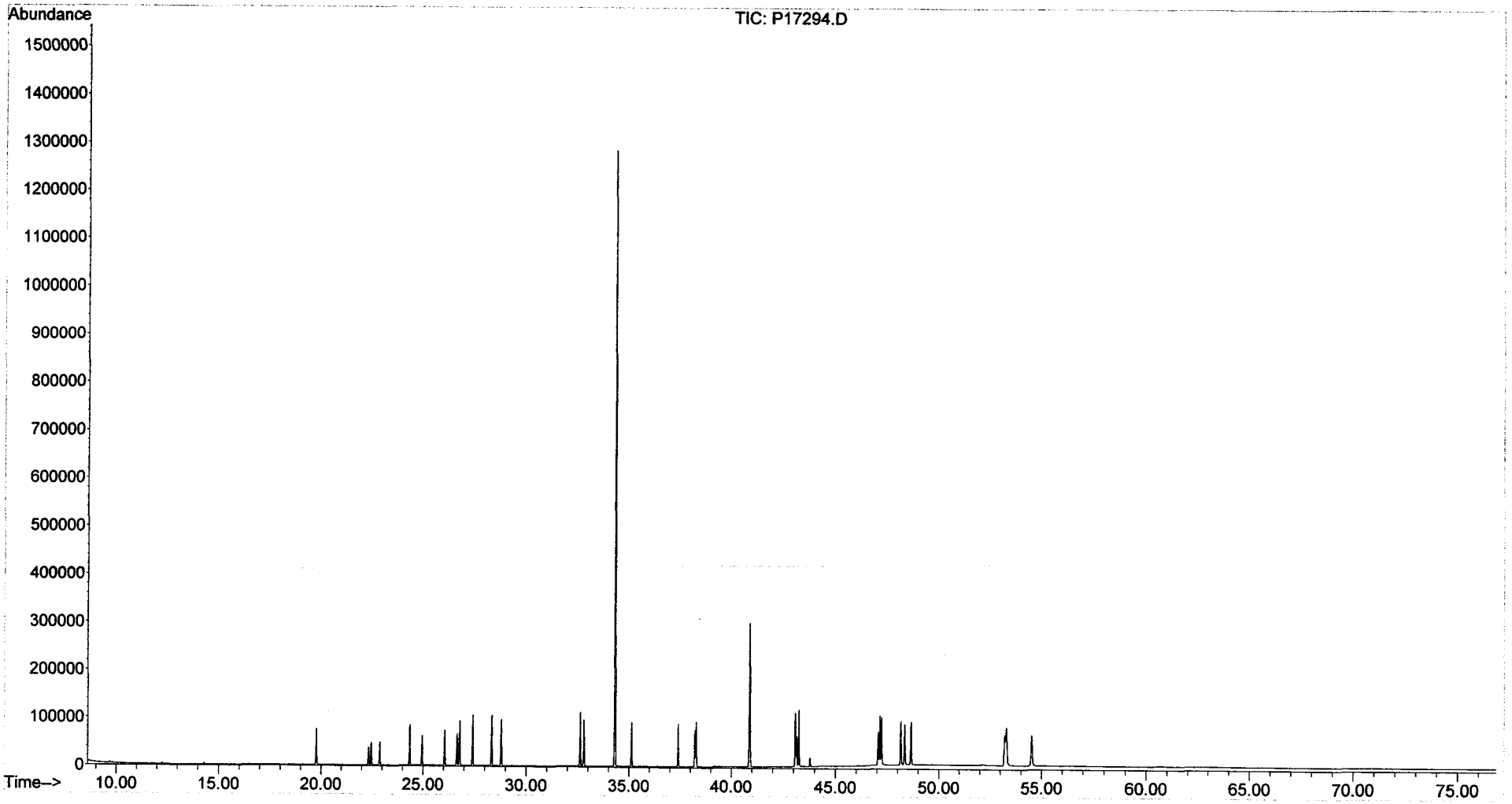
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	76009	500.00	ng/mL	0.00
72) Chrysene-d12	43.14	240	123105	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.34	152	82356	505.41	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.54%			
58) Pyrene-d10	38.22	212	168248	502.19	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.22%			
81) Benzo[b]fluoranthene-d12	47.05	264	136420	556.48	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.65%			
125) 5B(H)Cholane - Surr	43.78	217	24889	514.53	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.45%			
Target Compounds						Qvalue
9) Naphthalene	19.77	128	181434	467.41	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	112145	456.36	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	111328	481.22	ng/mL#	100
22) Biphenyl	24.35	154	147302	482.15	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	100381	492.21	ng/mL#	100
24) Dibenzofuran	27.43	168	168442	490.79	ng/mL	98
25) Acenaphthylene	26.05	152	175623	471.86	ng/mL#	100
26) Acenaphthene	26.79	153	110286	477.03	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.35	170	91737	501.09	ng/mL	99
28) Fluorene	28.81	166	118511	457.07	ng/mL	100
41) Phenanthrene	32.62	178	172384	448.36	ng/mL	100
53) Anthracene	32.81	178	165450	465.11	ng/mL	100
55) 1-Methylphenanthrene	35.14	192	130049	494.00	ng/mL	99
56) Fluoranthene	37.40	202	186103	454.61	ng/mL	100
59) Pyrene	38.28	202	198222	476.09	ng/mL	100
73) Benz[a]anthracene	43.08	228	188511	503.04	ng/mL	99
74) Chrysene	43.24	228	180758	472.06	ng/mL	99
75) Chrysene/Triphenylene	43.24	228	180758	472.06	ng/mL	99
82) Benzo[b]fluoranthene	47.14	252	194457	505.26	ng/mL	99
83) Benzo[k]fluoranthene	47.23	252	203645	508.62	ng/mL	99
85) Benzo[e]pyrene	48.16	252	191976	515.21	ng/mL	100
86) Benzo[a]pyrene	48.34	252	180573	489.79	ng/mL	99
87) Perylene	48.65	252	198010	549.45	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.21	276	189851m	585.17	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	184491	557.88	ng/mL	99
90) Benzo[g,h,i]perylene	54.51	276	195830	523.81	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\January06\JAN04\
Data File : P17294.D
Acq On : 5 Jan 2006 8:19 am
Operator : AC
Sample : Q1010402
Misc : ICC
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 11:04:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 08:21:53 2006
Response via : Initial Calibration



Sequence Name: C:\MSDChem\1\sequence\S2020901.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB09\

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:

2/13/06.

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	P28188	FRBIO2B	DCM
2)	Sample	2	P28189	FRBIO2B	I2020901
3)	Sample	3	P28190	FRBIO2B	I2020902
4)	Sample	4	P28191	FRBIO2B	I2020903 * C2020900 PASS
5)	Sample	5	P28192	FRBIO2B	I2020904
6)	Sample	6	P28193	FRBIO2B	I2020905
7)	Sample	7	P28194	FRBIO2B	I2020906
8)	Sample	8	P28195	FRBIO2B	ANS2020901
9)	Sample	9	P28196	FRBIO2B	DCM
10)	Sample	10	P28197	FRBIO2B	TS020106B10 ✓
11)	Sample	11	P28198	FRBIO2B	0601086-01 ✓
12)	Sample	12	P28199	FRBIO2B	0601086-02 ✓
13)	Sample	13	P28200	FRBIO2B	0601086-03 ✓
14)	Sample	14	P28201	FRBIO2B	0601086-04 ✓
15)	Sample	99	P28201A	FRBIO2B	DCM
16)	Sample	100	P28201B	FRBIO2B	ANS2020902 * SS021106A WS02 2/14/06
17)	Sample	15	P28202	FRBIO2B	0601086-05 ✓
18)	Pause				
19)	Sample	16	P28203	FRBIO2B	0601086-06 ✓
20)	Pause				
21)	Sample	17	P28204	FRBIO2B	0601086-07 ✓
22)	Sample	18	P28205	FRBIO2B	0601086-08 ✓
23)	Sample	19	P28206	FRBIO2B	0601086-09 ✓
24)	Sample	20	P28207	FRBIO2B	0601086-09D ✓
25)	Sample	21	P28208	FRBIO2B	C2021001 PASS
26)	Sample	22	P28209	FRBIO2B	DCM
27)	Sample	23	P28210	FRBIO2B	DCM
28)	Sample	24	P28211	FRBIO2B	SS020606B06 ✓
29)	Sample	25	P28212	FRBIO2B	SS020106B11 ✓
30)	Sample	26	P28213	FRBIO2B	0601070-04 ✓
31)	Sample	27	P28214	FRBIO2B	0601070-06 ✓
32)	Sample	28	P28215	FRBIO2B	0602004-01 ✓
33)	Sample	29	P28216	FRBIO2B	0602004-02 ✓
34)	Sample	30	P28217	FRBIO2B	0602004-03 ✓
35)	Sample	31	P28218	FRBIO2B	0602004-04 ✓
36)	Sample	32	P28219	FRBIO2B	C2021002 PASS
37)	Sample	33	P28220	FRBIO2B	DCM
38)	Sample	34	P28221	FRBIO2B	0602004-04D ✓
39)	Sample	35	P28222	FRBIO2B	0602004-05 ✓
40)	Sample	36	P28223	FRBIO2B	0602004-06 ✓
41)	Sample	37	P28224	FRBIO2B	0602004-07 ✓
42)	Sample	38	P28225	FRBIO2B	0602004-08 ✓
43)	Sample	39	P28226	FRBIO2B	0602004-09 ✓

* ICAL B1020209.M

Run used

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: ~~RAH20113~~.M

B1020209.M.

MS 2/13/06

Last Modified: Fri Feb 10 15:08:42 2006

Sequence Name: C:\MSDChem\1\sequence\S2020901.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	40	P28227	FRBIO2B	0602004-09D ✓
45)	Sample	41	P28228	FRBIO2B	C2021003 PASS
46)	Sample	42	P28229	FRBIO2B	DCM
47)	Sample	43	P28230	FRBIO2B	0602004-10 ✓
48)	Sample	44	P28231	FRBIO2B	0602004-11 ✓
49)	Sample	45	P28232	FRBIO2B	0602004-12 ✓
50)	Sample	46	P28233	FRBIO2B	0602004-13 ✓
51)	Sample	47	P28234	FRBIO2B	0602004-14 ✓
52)	Sample	48	P28235	FRBIO2B	C2021004 PASS
53)	Sample	49	P28236	FRBIO2B	DCM

✓ Run used

MS 2/13/06

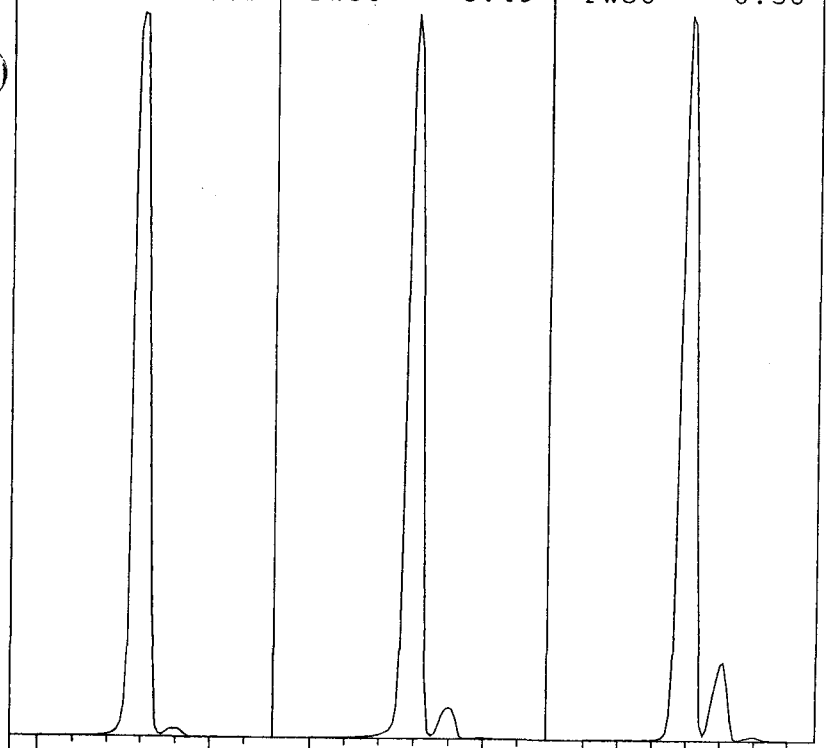
5973

Thu Feb 09 12:04:52 2006
C:\MSDCHEM\1\5973N\PFTBA.U

2/9/05

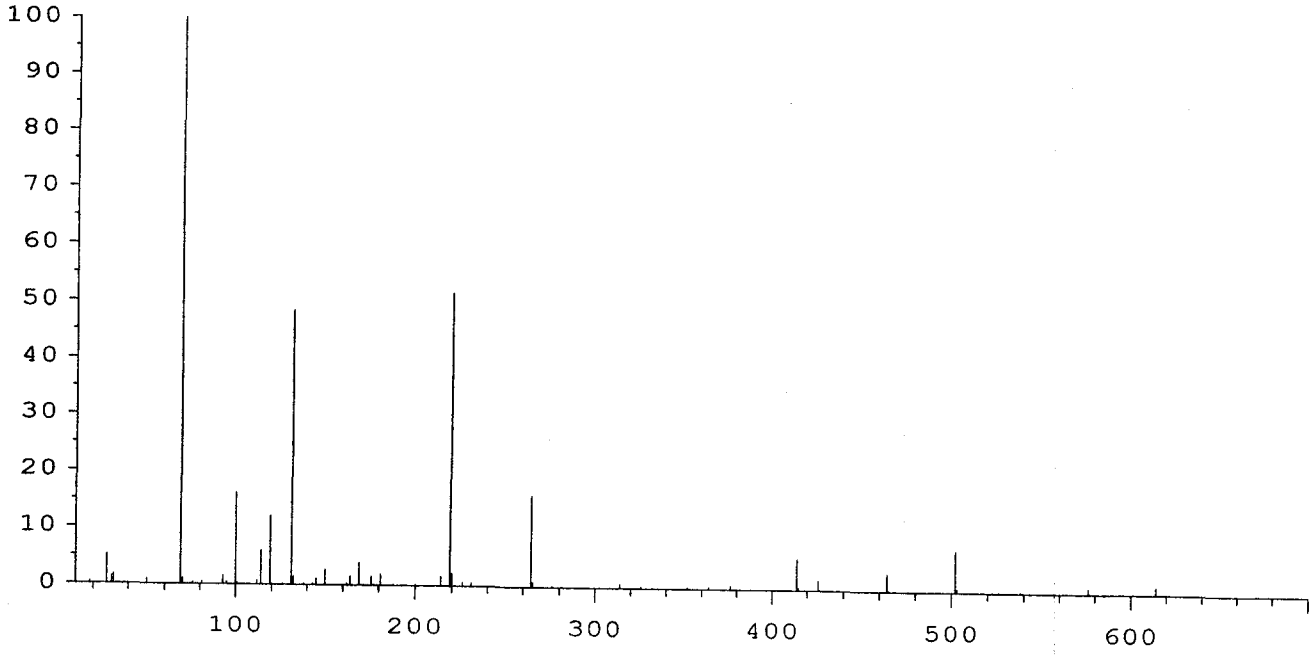
Instrument: PAHINST2

Mass	69.00	Mass	219.00	Mass	502.00
Ab	262104	Ab	141131	Ab	18904
Pw50	0.51	Pw50	0.49	Pw50	0.50



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	1518
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
109 peaks Base: 69.00 Abundance: 234560



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	234560	100.00	70.00	2542	1.08
219.00	120768	51.49	220.00	5274	4.37
502.00	16736	7.14	503.00	1589	9.49

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	48.4	51.5	5.5	7.1

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\FEB06\
Method File : BIO20209.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Feb 10 06:42:03 2006
Response Via : Initial Calibration

Calibration Files
10 =P28189.D 25 =P28190.D 500 =P28191.D
1250=P28192.D 5000=P28193.D 1e4 =P28194.D

MS 2/10/06

		Compound	10	25	500	1250	5000	1e4	Avg	%RSD
1)	i	Acenaphthene-d10				ISTD				
2)	t	Decalin							0.000#	-1.00
3)	A1	trans-Decalin							0.000#	-1.00
4)	t	cis-Decalin							0.000#	-1.00
5)	A2	C1-Decalins							0.000#	-1.00
6)	A2	C2-Decalins							0.000#	-1.00
7)	A2	C3-Decalins							0.000#	-1.00
8)	A2	C4-Decalins							0.000#	-1.00
9)	A1	Naphthalene							0.000#	-1.00
10)	A2	C1-Naphthalenes							0.000#	-1.00
11)	A2	C2-Naphthalenes							0.000#	-1.00
12)	A2	C3-Naphthalenes							0.000#	-1.00
13)	A2	C4-Naphthalenes							0.000#	-1.00
14)	s	2-Methylnaphthale							0.000#	-1.00
15)	t	2-Methylnaphthale							0.000#	-1.00
16)	t	1-Methylnaphthale							0.000#	-1.00
17)	A1	Benzothiophene							0.000#	-1.00
18)	A2	C1-Benzo(b)thioph							0.000#	-1.00
19)	A2	C2-Benzo(b)thioph							0.000#	-1.00
20)	A2	C3-Benzo(b)thioph							0.000#	-1.00
21)	A2	C4-Benzo(b)thioph							0.000#	-1.00
22)	t	Biphenyl							0.000#	-1.00
23)	t	2,6-Dimethylnapht							0.000#	-1.00
24)	t	Dibenzofuran							0.000#	-1.00
25)	t	Acenaphthylene							0.000#	-1.00
26)	t	Acenaphthene							0.000#	-1.00
27)	t	2,3,5-Trimethylna							0.000#	-1.00
28)	A1	Fluorene							0.000#	-1.00
29)	A2	C1-Fluorenes							0.000#	-1.00
30)	A2	C2-Fluorenes							0.000#	-1.00
31)	A2	C3-Fluorenes							0.000#	-1.00
32)	A1	Dibenzothiophene							0.000#	-1.00
33)	A2	OTP							0.000#	-1.00
34)	A2	C1-Dibenzothiophe							0.000#	-1.00
35)	A2	C2-Dibenzothiophe							0.000#	-1.00
36)	A2	C3-Dibenzothiophe							0.000#	-1.00
37)	A2	C4-Dibenzothiophe							0.000#	-1.00
38)	A1	Phenanthrene							0.000#	-1.00
39)	A2	C1-Phenanthrenes/							0.000#	-1.00
40)	A2	C2-Phenanthrenes/							0.000#	-1.00
41)	A2	5AA IS BKGD							0.000#	-1.00
42)	A2	C3-Phenanthrenes/							0.000#	-1.00
43)	A2	C4-Phenanthrenes/							0.000#	-1.00
44)	A2	Retene							0.000#	-1.00
45)	t	Anthracene							0.000#	-1.00
46)	t	Carbazole							0.000#	-1.00
47)	t	1-Methylphenanthr							0.000#	-1.00
48)	A1	Fluoranthene							0.000#	-1.00
49)	A2	Benzo(b)fluorene							0.000#	-1.00
50)	s	Pyrene-d10							0.000#	-1.00
51)	A1	Pyrene							0.000#	-1.00
52)	A2	C1-Fluoranthenes/							0.000#	-1.00
53)	A2	C2-Fluoranthenes/							0.000#	-1.00
54)	A2	C3-Fluoranthenes/							0.000#	-1.00
55)	A2	C4-Fluoranthenes/							0.000#	-1.00
56)	A1	Naphthobenzothiop							0.000#	-1.00
57)	A2	Naphthobenzothiop							0.000#	-1.00

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\FEB06\
Method File : BIO20209.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Feb 10 06:42:03 2006
Response Via : Initial Calibration

Calibration Files
10 =P28189.D 25 =P28190.D 500 =P28191.D
1250=P28192.D 5000=P28193.D 1e4 =P28194.D

		Compound	10	25	500	1250	5000	1e4	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	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
84)	A2	Hopane (T19)	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
85)	A2	C23 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
86)	A2	C24 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
87)	A2	C25 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
88)	A2	C24 Tetracyclic T	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
89)	A2	C26 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
90)	A2	C26 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
91)	A2	C28 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
92)	A2	C28 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
93)	A2	C29 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
94)	A2	C29 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
95)	A2	18a-22,29,30-Tris	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
96)	A2	C30 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
97)	A2	C30 Tricyclic Ter	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
98)	A2	17a(H)-22,29,30-T	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
99)	A2	17a/b,21b/a 28,30	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
100)	A2	17a(H),21b(H)-25-	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
101)	A2	30-Norhopane (T15	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
102)	A2	18a(H)-30-Norneoh	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
103)	A2	17a(H)-Diahopane	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
104)	A2	30-Normoretane (T	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
105)	A2	18a(H)&18b(H)-Ole	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
106)	A2	Moretane (T20)	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
107)	A2	30-Homohopane-22S	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
108)	A2	30-Homohopane-22R	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
109)	A2	30,31-Bishomohopa	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
110)	A2	30,31-Bishomohopa	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
111)	A2	30,31-Trishomohop	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
112)	A2	30,31-Trishomohop	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
113)	A2	Tetrakishomohopan	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
114)	A2	Tetrakishomohopan	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58

2nd
2/14/06

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\FEB06\
Method File : BIO20209.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Feb 10 06:42:03 2006
Response Via : Initial Calibration

Calibration Files
10 =P28189.D 25 =P28190.D 500 =P28191.D
1250=P28192.D 5000=P28193.D 1e4 =P28194.D

		Compound	10	25	500	1250	5000	1e4	Avg	%RSD
115)	A2	Pentakishomohopan	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
116)	A2	Pentakishomohopan	0.596	0.529	0.428	0.525	0.437	0.446	0.494	13.58
117)	SA1	5B(H)Cholane - Su	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
118)	A2	13b(H),17a(H)-20S	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
119)	A2	13b(H),17a(H)-20R	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
120)	A2	13b,17a-20S-Methy	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
121)	A2	14a(H),17a(H)-20S	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
122)	A2	14a(H),17a(H)-20R	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
123)	A2	13b,17a-20R-Ethyl	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
124)	A2	13a,17b-20S-Ethyl	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
125)	A2	14a,17a-20S-Methy	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
126)	A2	14a,17a-20R-Methy	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
127)	A2	14a(H),17a(H)-20S	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
128)	A2	14a(H),17a(H)-20R	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
129)	A2	14b(H),17b(H)-20R	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
130)	A2	14b(H),17b(H)-20S	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
131)	A2	14b,17b-20R-Methy	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
132)	A2	14b,17b-20S-Methy	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
133)	A2	14b(H),17b(H)-20R	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77
134)	A2	14b(H),17b(H)-20S	0.197	0.204	0.207	0.216	0.230	0.221	0.213	5.77

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28189.D
Acq On : 9 Feb 2006 1:52 pm
Operator : AC
Sample : I2020901
Misc : WHAB60
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 10 06:41:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration

2/10/06 2/13/06

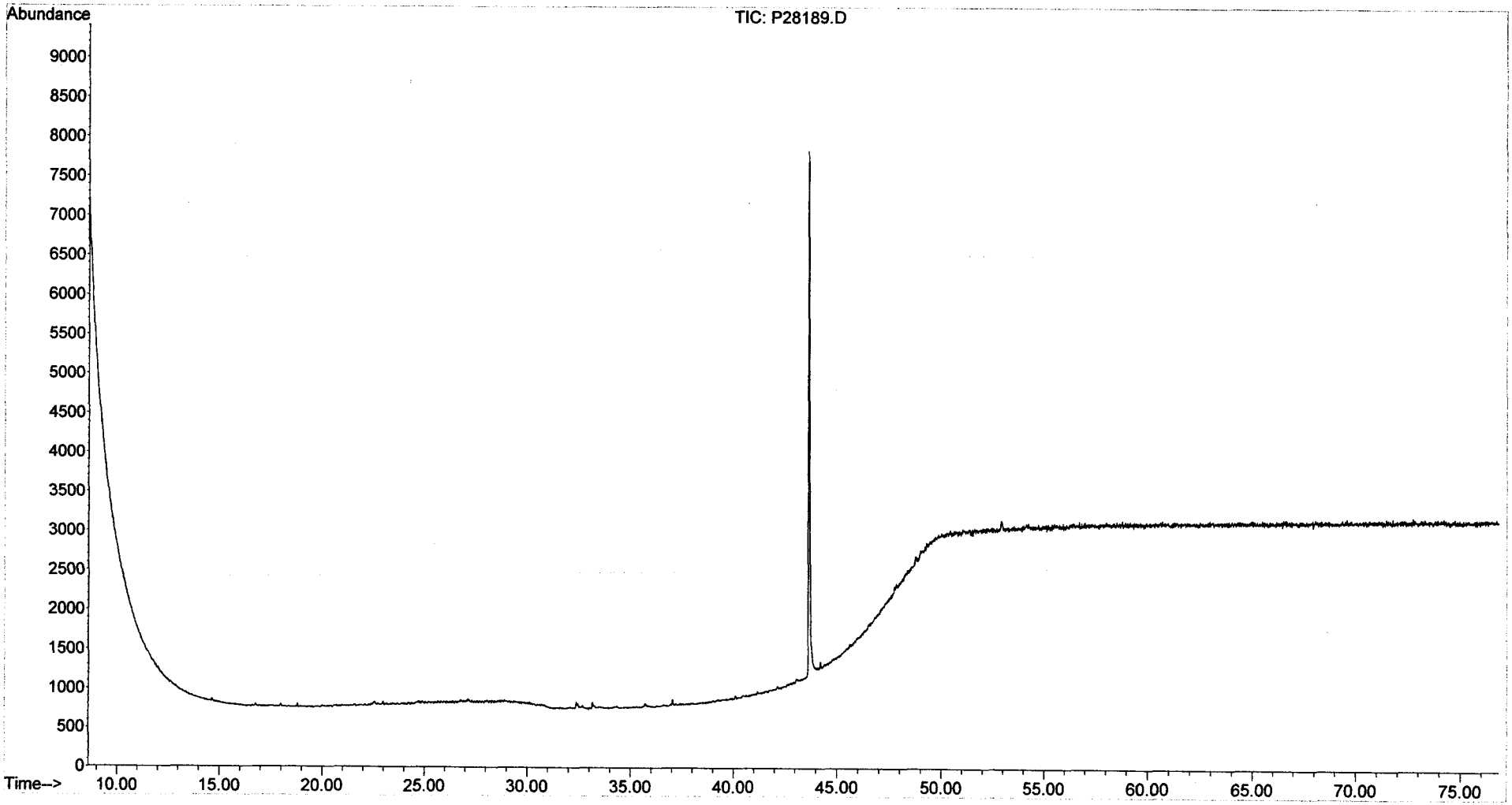
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.65	240	27108	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	44.20	217	107m	9.47	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.95%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	323m	10.99	ng/mL	
84) Hopane (T19)	52.93	191	323m	10.99	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28189.D
Acq On : 9 Feb 2006 1:52 pm
Operator : AC
Sample : I2020901
Misc : WHAB60
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 10 06:41:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28190.D
Acq On : 9 Feb 2006 3:26 pm
Operator : AC
Sample : I2020902
Misc : WHAB59
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 10 06:35:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration

MS 2/10/06 2/13/06

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	43.66	240	26483	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	44.20	217	270m	24.45	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	2.44%#	

Target Compounds

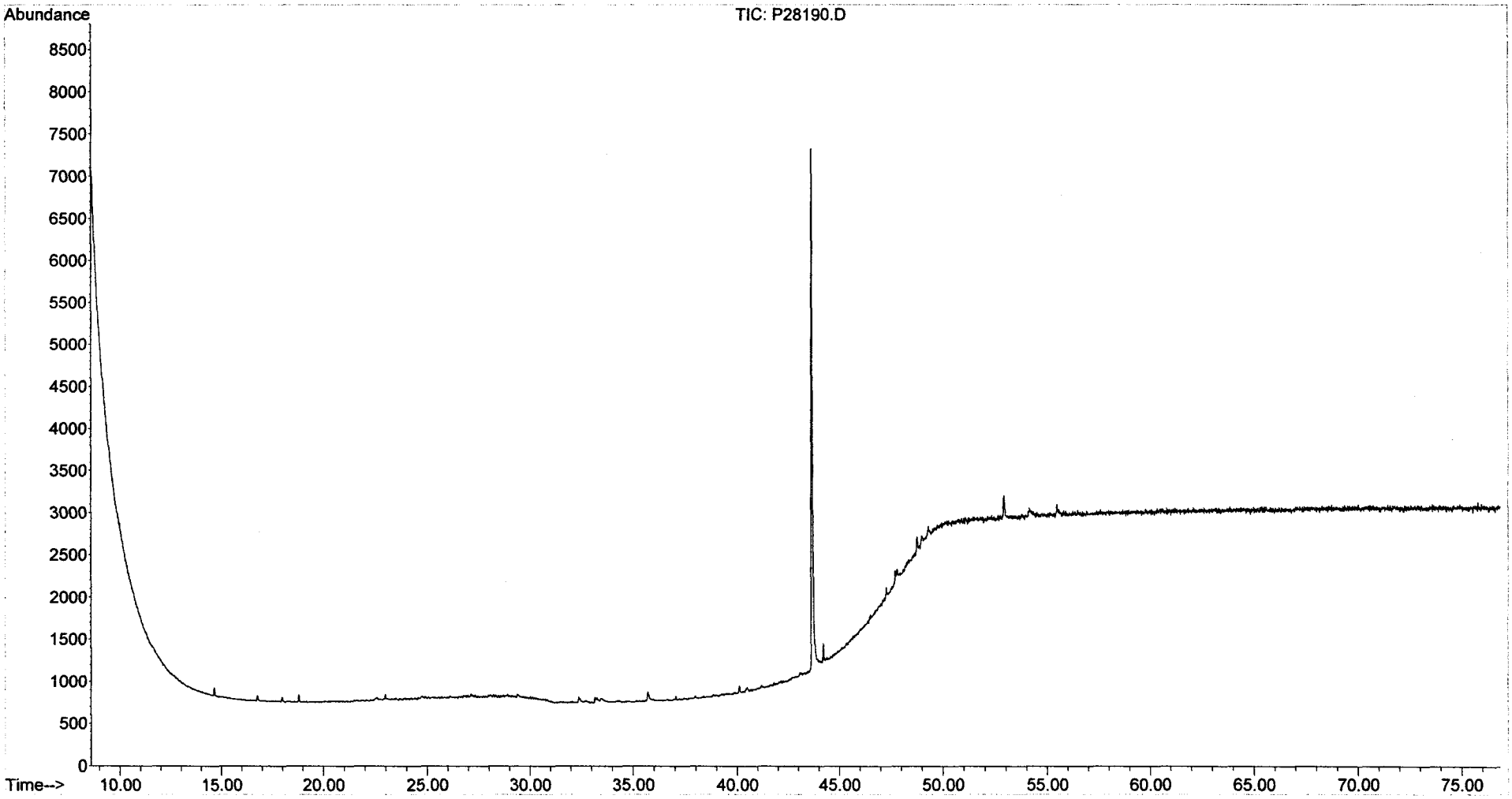
						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.92	191	701m	24.40	ng/mL	
84) Hopane (T19)	52.92	191	686m	23.88	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28190.D
Acq On : 9 Feb 2006 3:26 pm
Operator : AC
Sample : I2020902
Misc : WHAB59
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 10 06:35:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28191.D
Acq On : 9 Feb 2006 5:02 pm
Operator : AC
Sample : I2020903
Misc : WHAC13
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 06:36:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration

2/10/06 2/13/06

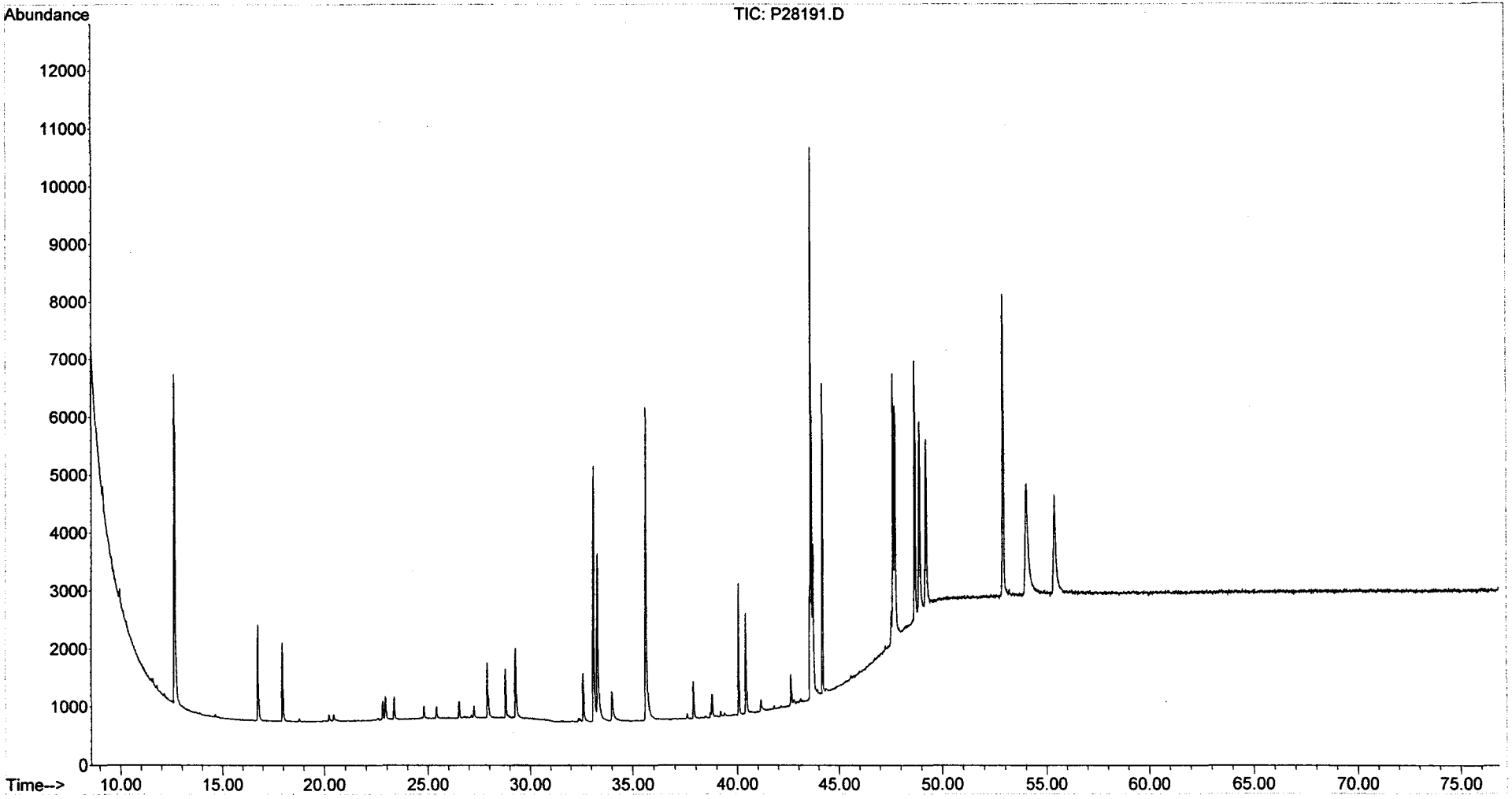
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.63	240	30993	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	44.20	217	6404	495.51	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.55%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.92	191	13278	394.97	ng/mL#	88
84) Hopane (T19)	52.92	191	13278	394.97	ng/mL#	88

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28191.D
Acq On : 9 Feb 2006 5:02 pm
Operator : AC
Sample : I2020903
Misc : WHAC13
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 06:36:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28192.D
Acq On : 9 Feb 2006 6:36 pm
Operator : AC
Sample : I2020904
Misc : WHAB55
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 10 06:36:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration

MS 2/10/06 / 2/13/06

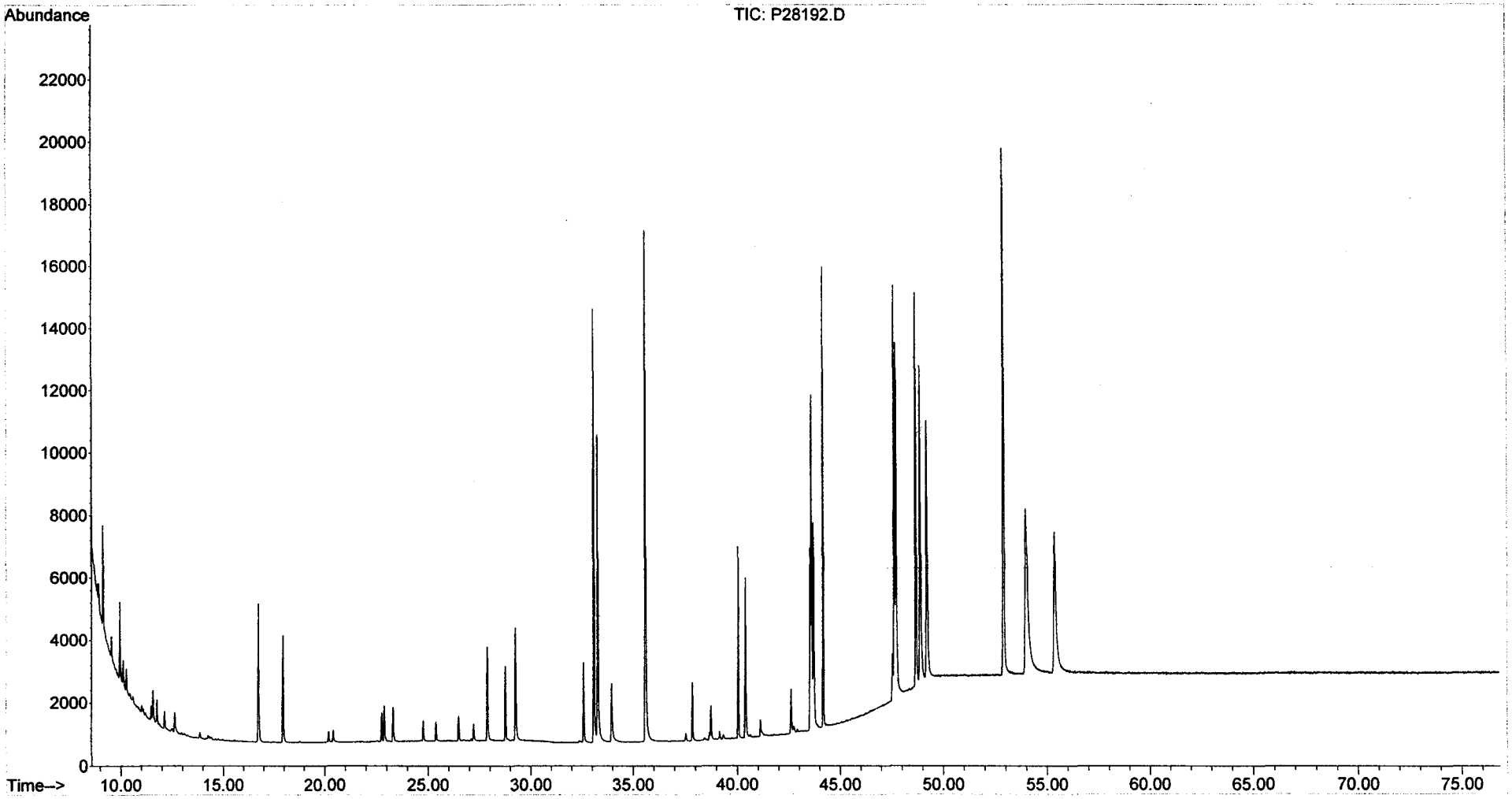
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.63	240	31865	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	44.20	217	17217	1295.70	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 129.57%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.92	191	41831	1210.28	ng/mL#	88
84) Hopane (T19)	52.92	191	41831	1210.28	ng/mL#	88

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28192.D
Acq On : 9 Feb 2006 6:36 pm
Operator : AC
Sample : I2020904
Misc : WHAB55
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 10 06:36:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28193.D
Acq On : 9 Feb 2006 8:09 pm
Operator : AC
Sample : I2020905
Misc : WHAB54
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 10 06:37:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration

MS 2/10/06 2/13/06

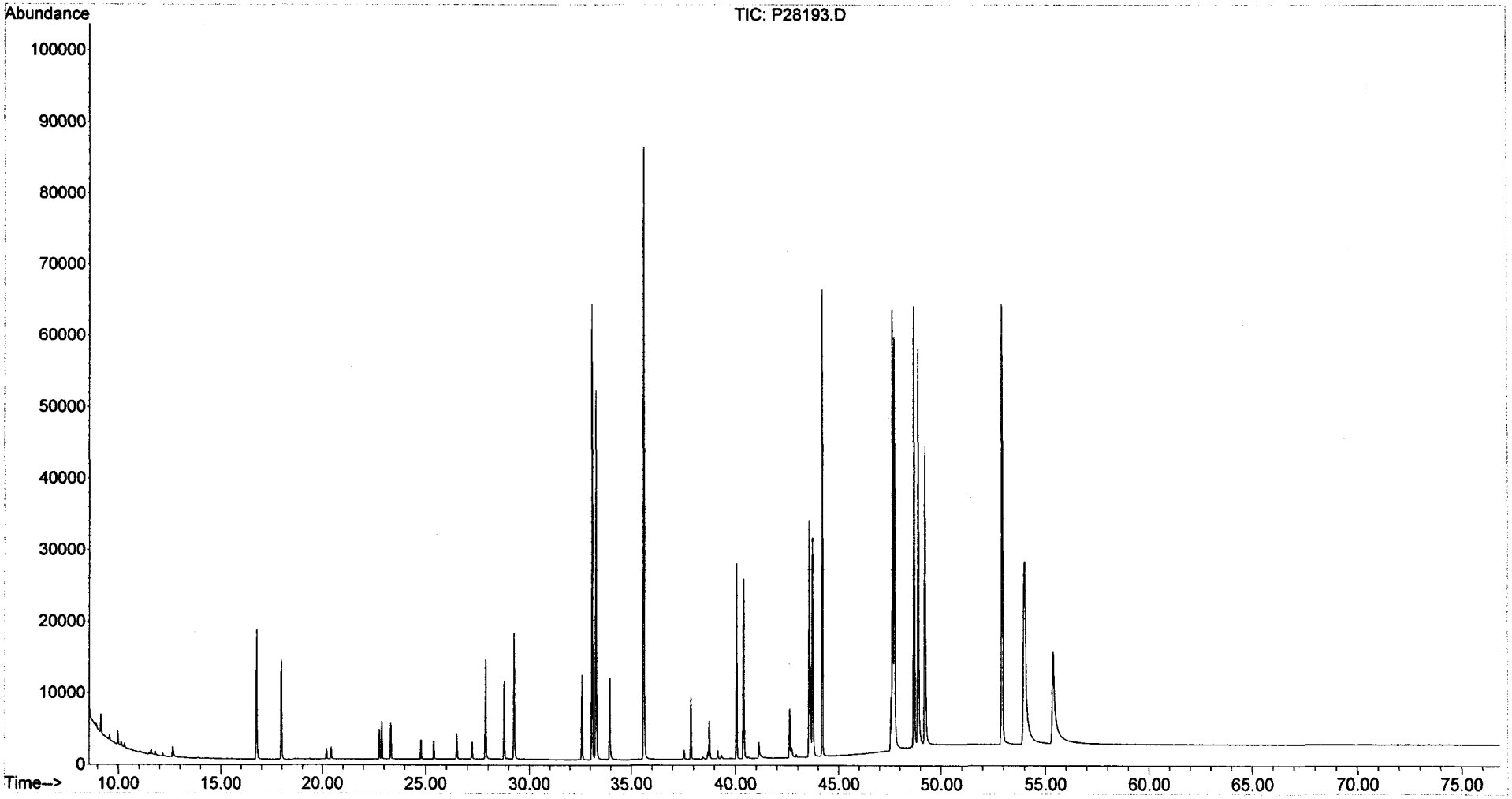
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.62	240	33439	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	
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	44.20	217	77055	5525.97 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 552.60%#	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	146028	4026.08 ng/mL#	88
84) Hopane (T19)	52.93	191	146028	4026.08 ng/mL#	88

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28193.D
Acq On : 9 Feb 2006 8:09 pm
Operator : AC
Sample : I2020905
Misc : WHAB54
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 10 06:37:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28194.D
Acq On : 9 Feb 2006 9:47 pm
Operator : AC
Sample : I2020906
Misc : WHAB53
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 10 06:38:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration

2/10/06 2/13/06

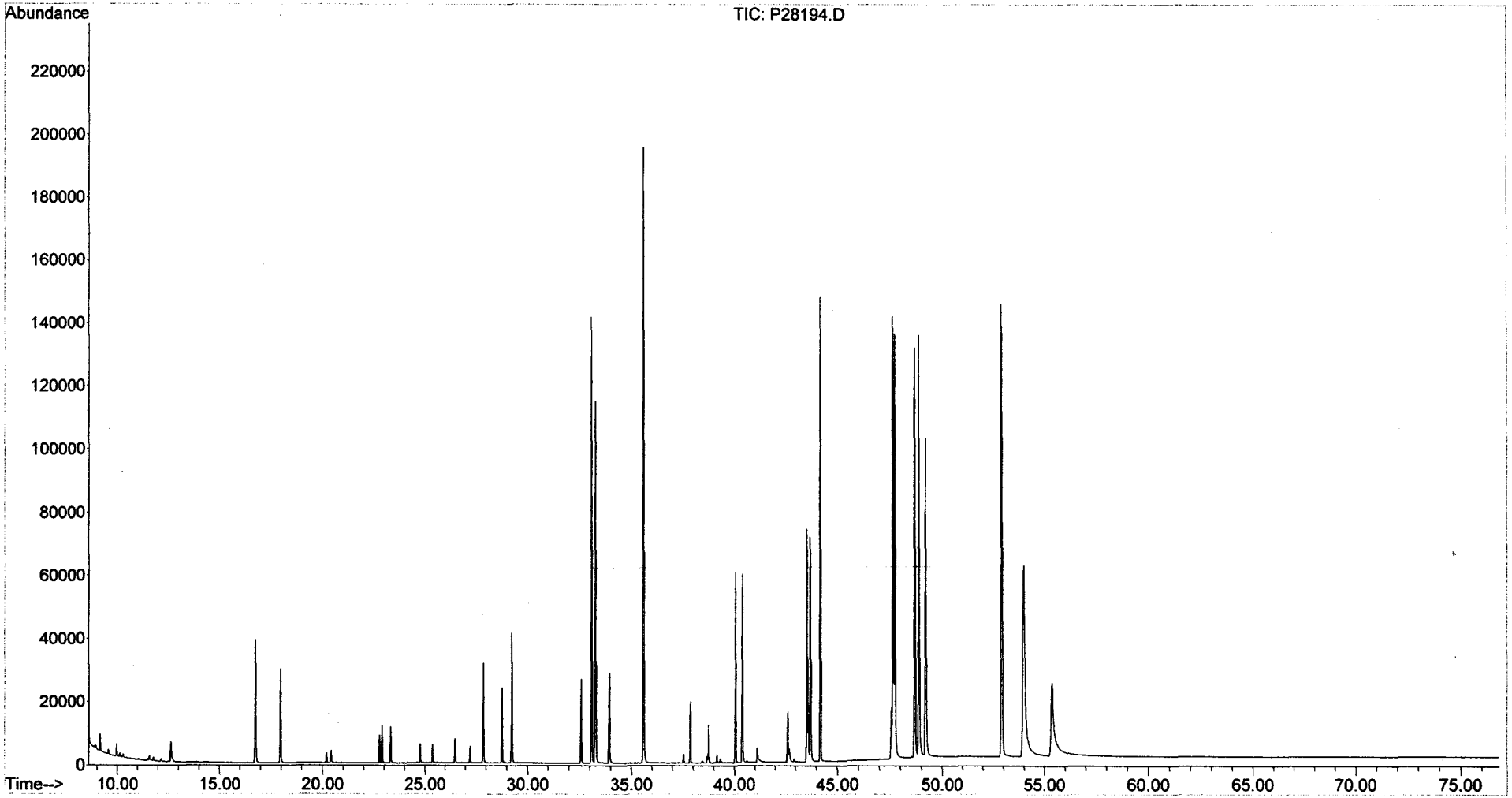
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.62	240	37516	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	
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	44.20	217	166122	10618.70 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1061.87%#	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	334555	8221.50 ng/mL#	88
84) Hopane (T19)	52.93	191	334555	8221.50 ng/mL#	88

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28194.D
Acq On : 9 Feb 2006 9:47 pm
Operator : AC
Sample : I2020906
Misc : WHAB53
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 10 06:38:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:31:12 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18179.D
Acq On : 13 Feb 2006 3:24 pm
Operator : AC
Sample : C1021301
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 06:44:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

2/14/06

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	44	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.393	9.0	41	-0.02
4	t	cis-Decalin	0.325	0.304	6.5	42	-0.04
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.17#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.48#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.96#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.34#
9	A1	Naphthalene	2.553	2.333	8.6	40	-0.02
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.35#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.20#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.53#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.29#
14	s	2-Methylnaphthalene-d10	1.072	1.037	3.3	43	-0.02
15	t	2-Methylnaphthalene	1.617	1.522	5.9	42	-0.02
16	t	1-Methylnaphthalene	1.522	1.435	5.7	42	-0.04
17	A1	Benzothiophene	2.278	2.060	9.6	40	-0.02
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.90#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.37#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.35#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.45#
22	t	Biphenyl	2.010	1.882	6.4	42	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.298	3.3	43	-0.04
24	t	Dibenzofuran	2.258	2.111	6.5	42	-0.02
25	t	Acenaphthylene	2.448	2.331	4.8	42	-0.04
26	t	Acenaphthene	1.521	1.444	5.1	42	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.152	4.3	43	-0.02
28	A1	Fluorene	1.706	1.574	7.7	42	-0.02
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.04#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.23#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.06#
32	A1	Dibenzothiophene	2.515	2.270	9.7	40	-0.02
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.76#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.11#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.53#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.20#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.76#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.45#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.26#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.97#
41	A1	Phenanthrene	2.529	2.271	10.2	40	-0.02
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.44#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.56#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.72#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.90#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-34.99#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.90#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.72#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.49#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.56#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18179.D
Acq On : 13 Feb 2006 3:24 pm
Operator : AC
Sample : C1021301
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 06:44:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-40.75#
52	T	Retene	0.529	0.588	-11.2	51	-0.04
53	t	Anthracene	2.340	2.090	10.7	40	-0.04
54	t	Carbazole	2.166	1.797	17.0	36	-0.04
55	t	1-Methylphenanthrene	1.732	1.652	4.6	43	-0.04
56	A1	Fluoranthene	2.693	2.552	5.2	42	-0.02
57	T	Benzo(b)fluorene	1.572	1.606	-2.2	46	-0.04
58	s	Pyrene-d10	2.204	2.297	-4.2	46	-0.04
59	A1	Pyrene	2.739	2.680	2.2	44	-0.04
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.53#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.34#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.36#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.74#
64	A1	Naphthobenzothiophene	2.562	2.569	-0.3	45	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.570	-0.3	45	-0.04
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.33#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.64#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.40#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.42#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.02#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.10#
72	i	Chrysene-d12	1.000	1.000	0.0	46	-0.04
73	t	Benz[a]anthracene	1.522	1.517	0.3	47	-0.04
74	A1	Chrysene	1.555	1.496	3.8	45	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.494	3.9	45	-0.04
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.56#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.29#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.91#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.33#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.98#
81	s	Benzo[b]fluoranthene-d12	0.996	0.980	1.6	46	-0.05
82	t	Benzo[b]fluoranthene	1.563	1.479	5.4	44	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.573	3.3	44	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.406	7.1	44	-0.04
86	t	Benzo[a]pyrene	1.497	1.415	5.5	45	-0.04
87	t	Perylene	1.464	1.396	4.6	45	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.220	7.4	47	-0.05
89	t	Dibenz[a,h]anthracene	1.343	1.349	-0.4	47	-0.06
90	t	Benzo[g,h,i]perylene	1.518	1.392	8.3	43	-0.05
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.341	22.3	37	-0.07
92	A2	Hopane (T19)	0.439	0.341	22.3	37	-0.07
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.65#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.38#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.87#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.18#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.93#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.02#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.31#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18179.D
Acq On : 13 Feb 2006 3:24 pm
Operator : AC
Sample : C1021301
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 06:44:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-46.48#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.99#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.19#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.30#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.40#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.65#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.85#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.03#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.84#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.70#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.79#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.93#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.48#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.86#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.75#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.83#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.08#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.39#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.78#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.51#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.12#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.12#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.03#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.26#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.53#
125	SA1	5B(H)Cholane - Surr	0.196	0.179	8.7	44	-0.05
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.15#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.57#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.26#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.13#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.65#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.92#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.19#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.34#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.06#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.41#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.30#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.21#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.30#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.52#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.59#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.64#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.69#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18179.D
Acq On : 13 Feb 2006 3:24 pm
Operator : AC
Sample : C1021301
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 06:44:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

CMS 2/14/06

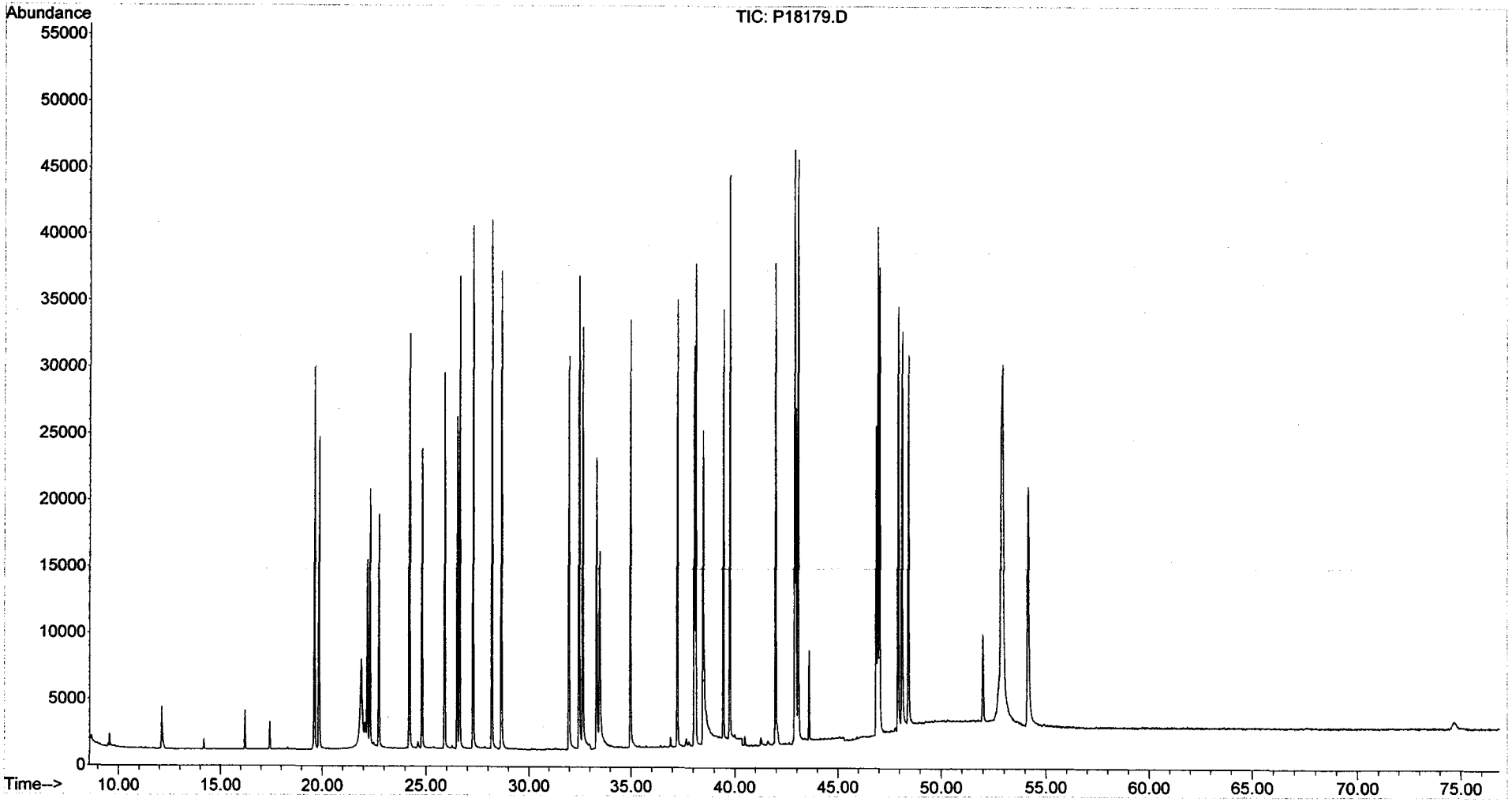
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	31259	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	50447	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	32424	483.85	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.38%#			
58) Pyrene-d10	38.02	212	71790	521.05	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.10%			
81) Benzo[b]fluoranthene-d12	46.84	264	49455	492.29	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.23%#			
125) 5B(H)Cholane - Surr	43.57	217	9052	456.66	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.67%#			
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	6143	227.49	ng/mL	100
4) cis-Decalin	17.40	138	4747	233.63	ng/mL	100
9) Naphthalene	19.61	128	72919	456.78	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	47583	470.84	ng/mL#	100
16) 1-Methylnaphthalene	22.72	142	44847	471.37	ng/mL#	100
17) Benzothiophene	19.83	134	64400	452.27	ng/mL	100
22) Biphenyl	24.18	154	58818	468.13	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.78	156	40568	483.70	ng/mL#	100
24) Dibenzofuran	27.26	168	65977	467.44	ng/mL	98
25) Acenaphthylene	25.87	152	72855	475.98	ng/mL#	100
26) Acenaphthene	26.62	153	45151	474.88	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	36018	478.39	ng/mL	98
28) Fluorene	28.64	166	49187m	461.28	ng/mL	
32) Dibenzothiophene	31.95	184	70943	451.14	ng/mL	99
41) Phenanthrene	32.45	178	70984	448.93	ng/mL	99
52) Retene	39.43	234	18371	555.69	ng/mL	94
53) Anthracene	32.62	178	65328m	446.55	ng/mL	
54) Carbazole	33.29	167	56175	414.89	ng/mL	100
55) 1-Methylphenanthrene	34.95	192	51636	476.94	ng/mL	99
56) Fluoranthene	37.22	202	79784m	473.91	ng/mL	
57) Benzo(b)fluorene	39.73	216	50198	510.91	ng/mL	99
59) Pyrene	38.10	202	83761	489.18	ng/mL	99
64) Naphthobenzothiophene	41.95	234	80291	501.24	ng/ml	97
65) Naphthobenzothiophene-2,1-	41.95	234	80333	501.50	ng/mL	97
73) Benz[a]anthracene	42.88	228	76523m	498.31	ng/mL	
74) Chrysene	43.04	228	75483m	481.05	ng/mL	
75) Chrysene/Triphenylene	43.04	228	75383m	480.41	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	74588	472.94	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	79330	483.50	ng/mL	99
85) Benzo[e]pyrene	47.92	252	70923	464.48	ng/mL	99
86) Benzo[a]pyrene	48.11	252	71368	472.39	ng/mL	100
87) Perylene	48.42	252	70432	476.93	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	52.84	276	61542m	462.89	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	68050	502.15	ng/mL#	65
90) Benzo[g,h,i]perylene	54.12	276	70209	458.28	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	51.97	191	17179	387.83	ng/mL	97
92) Hopane (T19)	51.97	191	17179	387.83	ng/mL	97

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18179.D
Acq On : 13 Feb 2006 3:24 pm
Operator : AC
Sample : C1021301
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 06:44:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18195.D
Acq On : 14 Feb 2006 5:26 am
Operator : AC
Sample : C1021303
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 14 07:39:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

CMS 2/14/06

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	73	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.398	7.9	69	-0.02
4	t	cis-Decalin	0.325	0.304	6.5	70	-0.02
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.17#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.48#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.96#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.34#
9	A1	Naphthalene	2.553	2.315	9.3	66	-0.02
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.35#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.20#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.53#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.29#
14	s	2-Methylnaphthalene-d10	1.072	1.032	3.7	71	-0.02
15	t	2-Methylnaphthalene	1.617	1.516	6.2	69	-0.02
16	t	1-Methylnaphthalene	1.522	1.442	5.3	70	-0.04
17	A1	Benzothiophene	2.278	2.024	11.2	65	-0.02
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.90#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.37#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.35#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.45#
22	t	Biphenyl	2.010	1.859	7.5	68	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.289	3.9	71	-0.04
24	t	Dibenzofuran	2.258	2.097	7.1	69	-0.02
25	t	Acenaphthylene	2.448	2.339	4.5	71	-0.04
26	t	Acenaphthene	1.521	1.437	5.5	70	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.150	4.5	72	-0.02
28	A1	Fluorene	1.706	1.562	8.4	69	-0.02
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.04#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.23#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.06#
32	A1	Dibenzothiophene	2.515	2.257	10.3	67	-0.04
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.76#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.11#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.53#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.20#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.76#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.45#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.26#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.97#
41	A1	Phenanthrene	2.529	2.324	8.1	68	-0.04
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.44#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.56#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.72#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.90#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-34.99#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.90#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.72#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.49#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.56#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18195.D
Acq On : 14 Feb 2006 5:26 am
Operator : AC
Sample : C1021303
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 14 07:39:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-40.75#
52	T	Retene	0.529	0.575	-8.7	83	-0.04
53	t	Anthracene	2.340	2.121	9.4	68	-0.04
54	t	Carbazole	2.166	1.918	11.4	64	-0.04
55	t	1-Methylphenanthrene	1.732	1.632	5.8	70	-0.04
56	A1	Fluoranthene	2.693	2.520	6.4	69	-0.04
57	T	Benzo(b)fluorene	1.572	1.570	0.1	75	-0.04
58	s	Pyrene-d10	2.204	2.228	-1.1	74	-0.04
59	A1	Pyrene	2.739	2.520	8.0	68	-0.05
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.53#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.34#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.36#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.74#
64	A1	Naphthobenzothiophene	2.562	2.512	2.0	73	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.513	1.9	73	-0.04
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.33#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.64#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.40#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.42#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.02#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.10#
72	i	Chrysene-d12	1.000	1.000	0.0	76	-0.04
73	t	Benz[a]anthracene	1.522	1.501	1.4	76	-0.04
74	A1	Chrysene	1.555	1.472	5.3	72	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.470	5.5	72	-0.04
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.56#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.29#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.91#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.33#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.98#
81	s	Benzo[b]fluoranthene-d12	0.996	0.979	1.7	75	-0.05
82	t	Benzo[b]fluoranthene	1.563	1.498	4.2	73	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.519	6.6	70	-0.05
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.413	6.6	72	-0.05
86	t	Benzo[a]pyrene	1.497	1.403	6.3	72	-0.05
87	t	Perylene	1.464	1.369	6.5	72	-0.05
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.310	0.6	83	-0.05
89	t	Dibenz[a,h]anthracene	1.343	1.403	-4.5	80	-0.06
90	t	Benzo[g,h,i]perylene	1.518	1.451	4.4	74	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.368	16.2	65	-0.07
92	A2	Hopane (T19)	0.439	0.368	16.2	65	-0.07
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.65#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.38#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.87#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.18#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.93#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.02#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.31#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18195.D
Acq On : 14 Feb 2006 5:26 am
Operator : AC
Sample : C1021303
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 14 07:39:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-46.48#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.99#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.19#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.30#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.40#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.65#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.85#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.03#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.84#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.70#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.79#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.93#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.48#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.86#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.75#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.83#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.08#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.39#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.78#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.51#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.12#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.12#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.03#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.26#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.53#
125	SA1	5B(H)Cholane - Surr	0.196	0.191	2.6	76	-0.05
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.15#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.57#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.26#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.13#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.65#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.92#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.19#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.34#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.06#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.41#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.30#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.21#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.30#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.52#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.59#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.64#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.69#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18195.D
Acq On : 14 Feb 2006 5:26 am
Operator : AC
Sample : C1021303
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 14 07:39:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/14/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	51803m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	82228	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	53474	481.51	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.15%#			
58) Pyrene-d10	38.02	212	115404	505.42	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.54%			
81) Benzo[b]fluoranthene-d12	46.84	264	80515	491.71	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.17%#			
125) 5B(H)Cholane - Surr	43.57	217	15718	486.47	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.65%#			

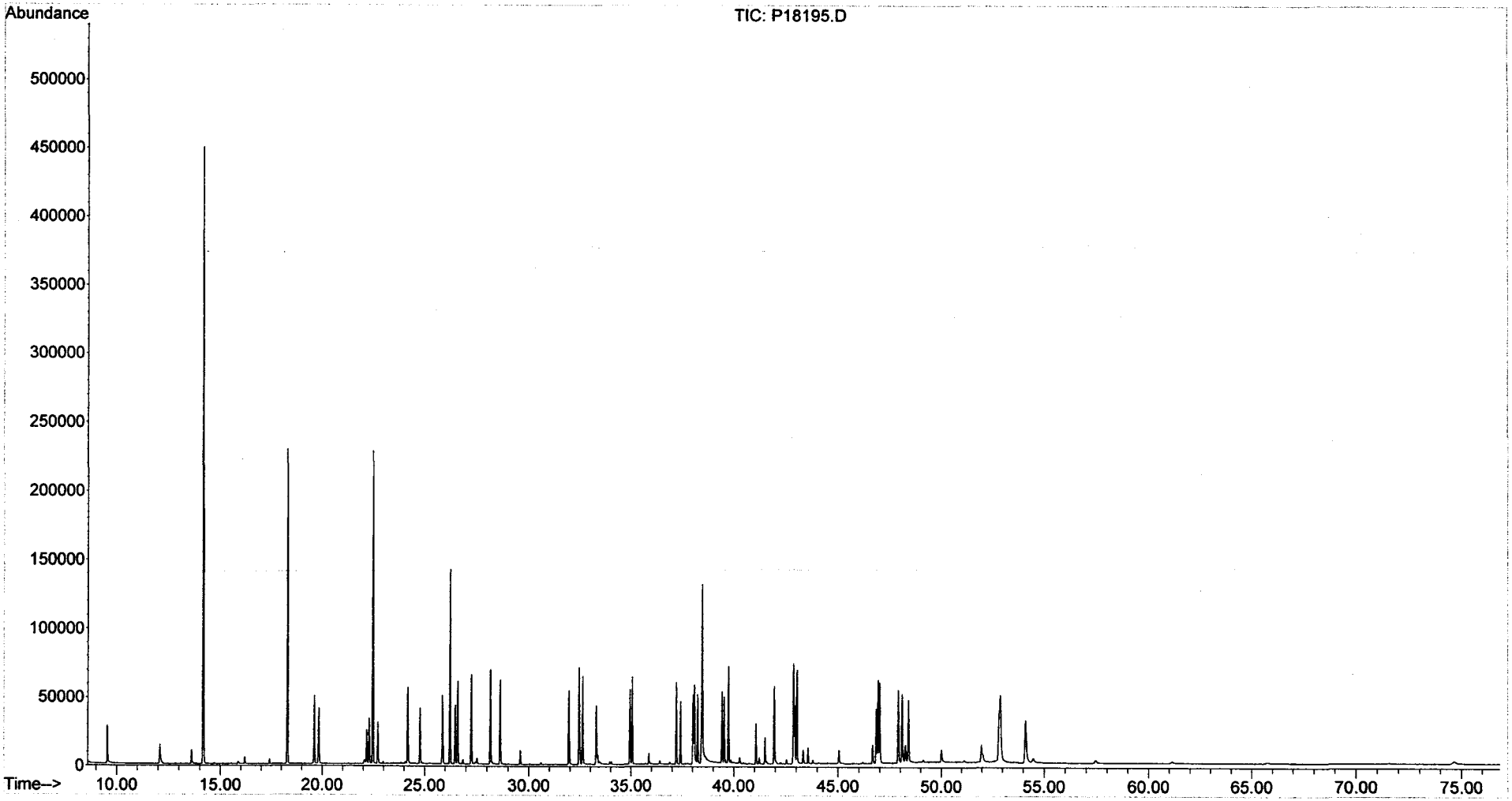
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	10311	230.41	ng/mL	100
4) cis-Decalin	17.42	138	7876	233.90	ng/mL	100
9) Naphthalene	19.61	128	119933	453.34	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	78518	468.82	ng/mL#	100
16) 1-Methylnaphthalene	22.72	142	74691	473.71	ng/mL#	100
17) Benzothiophene	19.83	134	104839	444.28	ng/mL	100
22) Biphenyl	24.18	154	96277	462.38	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.78	156	66771	480.40	ng/mL#	100
24) Dibenzofuran	27.26	168	108646	464.48	ng/mL	97
25) Acenaphthylene	25.87	152	121148	477.60	ng/mL#	100
26) Acenaphthene	26.62	153	74420	472.31	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	59583	477.53	ng/mL	98
28) Fluorene	28.64	166	80914	457.89	ng/mL	99
32) Dibenzothiophene	31.94	184	116906	448.60	ng/mL	99
41) Phenanthrene	32.44	178	120382	459.41	ng/mL	100
52) Retene	39.44	234	29808	544.07	ng/mL	94
53) Anthracene	32.62	178	109899	453.30	ng/mL	99
54) Carbazole	33.29	167	99380	442.90	ng/mL	98
55) 1-Methylphenanthrene	34.95	192	84527	471.11	ng/mL	98
56) Fluoranthene	37.21	202	130564m	467.97	ng/mL	
57) Benzo(b)fluorene	39.73	216	81326	499.47	ng/mL	98
59) Pyrene	38.08	202	130559	460.10	ng/mL	98
64) Naphthobenzothiophene	41.95	234	130143	490.25	ng/ml	97
65) Naphthobenzothiophene-2,1-	41.95	234	130185	490.41	ng/mL	97
73) Benz[a]anthracene	42.88	228	123407m	493.02	ng/mL	
74) Chrysene	43.04	228	121021m	473.17	ng/mL	
75) Chrysene/Triphenylene	43.04	228	120884m	472.63	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	123180	479.17	ng/mL	100
83) Benzo[k]fluoranthene	47.00	252	124893	467.00	ng/mL	100
85) Benzo[e]pyrene	47.91	252	116210	466.92	ng/mL	100
86) Benzo[a]pyrene	48.09	252	115400	468.62	ng/mL	100
87) Perylene	48.40	252	112554	467.59	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	52.84	276	107751m	497.22	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	115336	522.14	ng/mL	99
90) Benzo[g,h,i]perylene	54.10	276	119310	477.78	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	51.97	191	30298m	419.64	ng/mL	
92) Hopane (T19)	51.97	191	30259m	419.10	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18195.D
Acq On : 14 Feb 2006 5:26 am
Operator : AC
Sample : C1021303
Misc : PAH STD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 14 07:39:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18213.D
Acq On : 14 Feb 2006 9:47 pm
Operator : AC
Sample : C1021304
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 15 06:29:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/15/06

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	46	-0.01
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.391	9.5	43	-0.01
4	t	cis-Decalin	0.325	0.304	6.5	45	-0.02
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.17#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.48#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.96#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.34#
9	A1	Naphthalene	2.553	2.249	11.9	41	-0.01
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.35#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.20#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.53#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.29#
14	s	2-Methylnaphthalene-d10	1.072	1.025	4.4	45	-0.01
15	t	2-Methylnaphthalene	1.617	1.471	9.0	43	-0.01
16	t	1-Methylnaphthalene	1.522	1.375	9.7	42	-0.01
17	A1	Benzothiophene	2.278	1.975	13.3	41	-0.01
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.90#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.37#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.35#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.45#
22	t	Biphenyl	2.010	1.838	8.6	43	-0.01
23	t	2,6-Dimethylnaphthalene	1.342	1.248	7.0	44	-0.01
24	t	Dibenzofuran	2.258	2.055	9.0	43	-0.01
25	t	Acenaphthylene	2.448	2.239	8.5	43	-0.02
26	t	Acenaphthene	1.521	1.406	7.6	44	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.204	1.130	6.1	45	-0.01
28	A1	Fluorene	1.706	1.547	9.3	43	-0.01
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.04#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.23#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.06#
32	A1	Dibenzothiophene	2.515	2.218	11.8	42	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.76#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.11#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.53#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.20#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.76#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.45#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.26#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.97#
41	A1	Phenanthrene	2.529	2.282	9.8	43	-0.02
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.44#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.56#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.72#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.90#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-34.99#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.90#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.72#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.49#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.56#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18213.D
Acq On : 14 Feb 2006 9:47 pm
Operator : AC
Sample : C1021304
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 15 06:29:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-40.75#
52	T	Retene	0.529	0.589	-11.3	54	-0.02
53	t	Anthracene	2.340	2.122	9.3	43	-0.02
54	t	Carbazole	2.166	1.928	11.0	41	-0.02
55	t	1-Methylphenanthrene	1.732	1.674	3.3	46	-0.02
56	A1	Fluoranthene	2.693	2.574	4.4	45	-0.02
57	T	Benzo(b)fluorene	1.572	1.545	1.7	47	-0.02
58	s	Pyrene-d10	2.204	2.375	-7.8	51	-0.02
59	A1	Pyrene	2.739	2.633	3.9	45	-0.02
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.53#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.34#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.36#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.74#
64	A1	Naphthobenzothiophene	2.562	2.498	2.5	46	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.498	2.5	46	-0.02
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.33#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.64#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.40#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.42#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.02#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.10#
72	i	Chrysene-d12	1.000	1.000	0.0	49	-0.02
73	t	Benz[a]anthracene	1.522	1.479	2.8	48	-0.02
74	A1	Chrysene	1.555	1.461	6.0	47	-0.02
75	A2	Chrysene/Triphenylene	1.555	1.468	5.6	47	-0.02
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.56#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.29#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.91#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.33#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.98#
81	s	Benzo[b]fluoranthene-d12	0.996	0.979	1.7	49	-0.04
82	t	Benzo[b]fluoranthene	1.563	1.442	7.7	46	-0.02
83	A1	Benzo[k]fluoranthene	1.626	1.552	4.6	46	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.345	11.1	44	-0.04
86	t	Benzo[a]pyrene	1.497	1.365	8.8	46	-0.02
87	t	Perylene	1.464	1.353	7.6	46	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.114	15.5	46	-0.02
89	t	Dibenz[a,h]anthracene	1.343	1.207	10.1	44	-0.04
90	t	Benzo[g,h,i]perylene	1.518	1.289	15.1	42	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.327	25.5	38	-0.06
92	A2	Hopane (T19)	0.439	0.327	25.5	38	-0.06
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.65#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.38#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.87#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.18#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.93#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.02#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.31#

3 NT PAH only
CT 2/22/06

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18213.D
Acq On : 14 Feb 2006 9:47 pm
Operator : AC
Sample : C1021304
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 15 06:29:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-46.48#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.99#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.19#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.30#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.40#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.65#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.85#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.03#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.84#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.70#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.79#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.93#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.48#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.86#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.75#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.83#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.08#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.39#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.78#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.51#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.12#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.12#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.03#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.26#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.53#
125	SA1	5B(H)Cholane - Surr	0.196	0.190	3.1	49	-0.04
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.15#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.57#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.26#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.13#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.65#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.92#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.19#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.34#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.06#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.41#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.30#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.21#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.30#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.52#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.59#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.64#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.69#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18213.D
Acq On : 14 Feb 2006 9:47 pm
Operator : AC
Sample : C1021304
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 15 06:29:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

OWS 2/15/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	33070m	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	53172	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	33892	478.06	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.81%#			
58) Pyrene-d10	38.04	212	78547	538.87	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.89%			
81) Benzo[b]fluoranthene-d12	46.85	264	52080	491.85	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.19%#			
125) 5B(H)Cholane - Surr	43.58	217	10108	483.80	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.38%#			

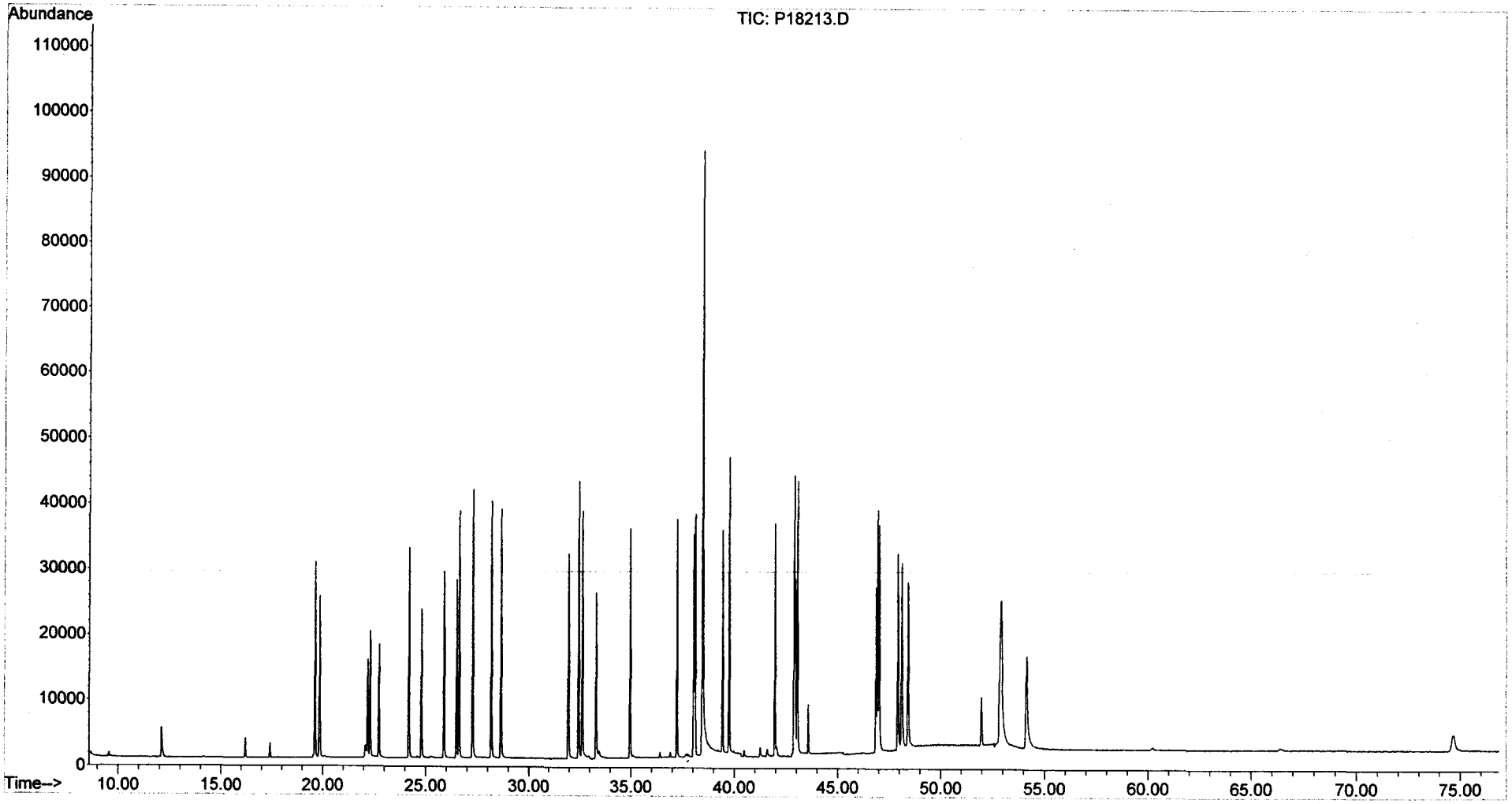
Target Compounds						Qvalue
3) trans-Decalin	16.21	138	6472	226.55	ng/mL	100
4) cis-Decalin	17.42	138	5019	233.49	ng/mL	100
9) Naphthalene	19.62	128	74366	440.34	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	48643	454.97	ng/mL#	100
16) 1-Methylnaphthalene	22.74	142	45472	451.76	ng/mL#	100
17) Benzothiophene	19.84	134	65319	433.60	ng/mL	100
22) Biphenyl	24.19	154	60790	457.33	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.81	156	41275	465.18	ng/mL#	100
24) Dibenzofuran	27.27	168	67948	455.04	ng/mL	97
25) Acenaphthylene	25.89	152	74036	457.20	ng/mL#	100
26) Acenaphthene	26.63	153	46485	462.14	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.19	170	37371	469.18	ng/mL	97
28) Fluorene	28.65	166	51146	453.38	ng/mL	98
32) Dibenzothiophene	31.97	184	73336	440.82	ng/mL	100
41) Phenanthrene	32.45	178	75466	451.14	ng/mL	99
52) Retene	39.45	234	19467	556.60	ng/mL	95
53) Anthracene	32.64	178	70190	453.51	ng/mL	98
54) Carbazole	33.30	167	63753	445.07	ng/mL	96
55) 1-Methylphenanthrene	34.96	192	55365	483.37	ng/mL	98
56) Fluoranthene	37.22	202	85120m	477.91	ng/mL	
57) Benzo(b)fluorene	39.74	216	51082	491.44	ng/mL	98
59) Pyrene	38.11	202	87083	480.73	ng/mL	98
64) Naphthobenzothiophene	41.96	234	82597	487.39	ng/ml	97
65) Naphthobenzothiophene-2,1-	41.96	234	82597	487.39	ng/mL	97
73) Benz[a]anthracene	42.89	228	78666m	486.01	ng/mL	
74) Chrysene	43.05	228	77691m	469.75	ng/mL	
75) Chrysene/Triphenylene	43.05	228	78030m	471.80	ng/mL	
82) Benzo[b]fluoranthene	46.94	252	76687	461.33	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	82500	477.06	ng/mL	100
85) Benzo[e]pyrene	47.92	252	71519	444.38	ng/mL	98
86) Benzo[a]pyrene	48.12	252	72592	455.87	ng/mL	99
87) Perylene	48.42	252	71930	462.11	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	52.86	276	59231m	422.68	ng/mL	
89) Dibenz[a,h]anthracene	52.93	278	64162	449.19	ng/mL	98
90) Benzo[g,h,i]perylene	54.14	276	68549	424.51	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	51.98	191	17385	372.37	ng/mL	97
92) Hopane (T19)	51.98	191	17385	372.37	ng/mL	97

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13\
Data File : P18213.D
Acq On : 14 Feb 2006 9:47 pm
Operator : AC
Sample : C1021304
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 15 06:29:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18223.D
Acq On : 15 Feb 2006 5:30 am
Operator : AC
Sample : C1021305
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 13:58:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MS 2/15/06

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	39	-0.01
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.392	9.3	36	-0.02
4	t	cis-Decalin	0.325	0.300	7.7	37	-0.02
5	A2	C1-Decalins	0.432	0.000#	100.0#	0#	-18.17#
6	A2	C2-Decalins	0.432	0.000#	100.0#	0#	-19.48#
7	A2	C3-Decalins	0.432	0.000#	100.0#	0#	-21.96#
8	A2	C4-Decalins	0.432	0.000#	100.0#	0#	-25.34#
9	A1	Naphthalene	2.553	2.293	10.2	35	-0.01
10	A2	C1-Naphthalenes	2.553	0.000#	100.0#	0#	-22.35#
11	A2	C2-Naphthalenes	2.553	0.000#	100.0#	0#	-25.20#
12	A2	C3-Naphthalenes	2.553	0.000#	100.0#	0#	-27.53#
13	A2	C4-Naphthalenes	2.553	0.000#	100.0#	0#	-30.29#
14	s	2-Methylnaphthalene-d10	1.072	1.023	4.6	38	-0.01
15	t	2-Methylnaphthalene	1.617	1.498	7.4	36	-0.01
16	t	1-Methylnaphthalene	1.522	1.411	7.3	36	-0.02
17	A1	Benzothiophene	2.278	2.016	11.5	34	-0.01
18	A2	C1-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-21.90#
19	A2	C2-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-25.37#
20	A2	C3-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-27.35#
21	A2	C4-Benzo(b)thiophenes	2.278	0.000#	100.0#	0#	-29.45#
22	t	Biphenyl	2.010	1.838	8.6	36	-0.01
23	t	2,6-Dimethylnaphthalene	1.342	1.267	5.6	37	-0.02
24	t	Dibenzofuran	2.258	2.078	8.0	36	-0.01
25	t	Acenaphthylene	2.448	2.552	-4.2	41	-0.02
26	t	Acenaphthene	1.521	1.445	5.0	37	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.204	1.144	5.0	38	-0.01
28	A1	Fluorene	1.706	1.560	8.6	36	-0.01
29	A2	C1-Fluorenes	1.706	0.000#	100.0#	0#	-31.04#
30	A2	C2-Fluorenes	1.706	0.000#	100.0#	0#	-33.23#
31	A2	C3-Fluorenes	1.706	0.000#	100.0#	0#	-35.06#
32	A1	Dibenzothiophene	2.515	2.220	11.7	35	-0.01
33	A2	4-Methyldibenzothiophene(4M	2.515	0.000#	100.0#	0#	-33.76#
34	A2	2/3-Methyldibenzothiophene(	2.515	0.000#	100.0#	0#	-34.11#
35	A2	1-Methyldibenzothiophene(1M	2.515	0.000#	100.0#	0#	-34.53#
36	A2	OTP	2.515	0.000#	100.0#	0#	-34.20#
37	A2	C1-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-33.76#
38	A2	C2-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-35.45#
39	A2	C3-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-37.26#
40	A2	C4-Dibenzothiophenes	2.515	0.000#	100.0#	0#	-38.97#
41	A1	Phenanthrene	2.529	2.263	10.5	35	-0.02
42	A2	3-Methylphenanthrene(3MP)	2.529	0.000#	100.0#	0#	-34.44#
43	A2	2/4-Methylphenanthrene(2MP)	2.529	0.000#	100.0#	0#	-34.56#
44	A2	2-Methylanthracene(2MA)	2.529	0.000#	100.0#	0#	-34.72#
45	A2	9-Methylphenanthrene(9MP)	2.529	0.000#	100.0#	0#	-34.90#
46	A2	1-Methylphenanthrene(1MP)	2.529	0.000#	100.0#	0#	-34.99#
47	A2	C1-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-34.90#
48	A2	C2-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-36.72#
49	A2	5AA IS BKGD	2.529	0.000#	100.0#	0#	-36.49#
50	A2	C3-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-38.56#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18223.D
Acq On : 15 Feb 2006 5:30 am
Operator : AC
Sample : C1021305
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 13:58:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.529	0.000#	100.0#	0#	-40.75#
52	T	Retene	0.529	0.605	-14.4	47	-0.02
53	t	Anthracene	2.340	2.147	8.2	36	-0.02
54	t	Carbazole	2.166	1.952	9.9	35	-0.02
55	t	1-Methylphenanthrene	1.732	1.663	4.0	38	-0.02
56	A1	Fluoranthene	2.693	2.567	4.7	38	-0.02
57	T	Benzo(b)fluorene	1.572	1.674	-6.5	43	-0.02
58	s	Pyrene-d10	2.204	2.319	-5.2	41	-0.02
59	A1	Pyrene	2.739	2.635	3.8	38	-0.04
60	A2	C1-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-39.53#
61	A2	C2-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-41.34#
62	A2	C3-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-43.36#
63	A2	C4-Fluoranthenes/Pyrenes	2.739	0.000#	100.0#	0#	-44.74#
64	A1	Naphthobenzothiophene	2.562	2.584	-0.9	40	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.584	-0.9	40	-0.02
66	A2	Naphthobenzothiophene-1,2-D	2.562	0.000#	100.0#	0#	-42.33#
67	A2	Naphthobenzothiophene-2,3-D	2.562	0.000#	100.0#	0#	-42.64#
68	A2	C1-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-43.40#
69	A2	C2-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-45.42#
70	A2	C3-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-47.02#
71	A2	C4-Naphthobenzothiophenes	2.562	0.000#	100.0#	0#	-48.10#
72	i	Chrysene-d12	1.000	1.000	0.0	42	-0.02
73	t	Benz[a]anthracene	1.522	1.493	1.9	42	-0.02
74	A1	Chrysene	1.555	1.467	5.7	40	-0.02
75	A2	Chrysene/Triphenylene	1.555	1.464	5.9	40	-0.02
76	A2	C1-Chrysenes	1.555	0.000#	100.0#	0#	-44.56#
77	A2	C2-Chrysenes	1.555	0.000#	100.0#	0#	-47.29#
78	A2	BBF-d12 Surr BKGD	1.555	0.000#	100.0#	0#	-46.91#
79	A2	C3-Chrysenes	1.555	0.000#	100.0#	0#	-49.33#
80	A2	C4-Chrysenes	1.555	0.000#	100.0#	0#	-48.98#
81	s	Benzo[b]fluoranthene-d12	0.996	1.008	-1.2	43	-0.04
82	t	Benzo[b]fluoranthene	1.563	1.512	3.3	41	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.528	6.0	39	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.412	6.7	40	-0.04
86	t	Benzo[a]pyrene	1.497	1.418	5.3	41	-0.04
87	t	Perylene	1.464	1.390	5.1	41	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.216	7.7	43	-0.04
89	t	Dibenz[a,h]anthracene	1.343	1.382	-2.9	44	-0.04
90	t	Benzo[g,h,i]perylene	1.518	1.412	7.0	40	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.325	26.0	32	-0.06
92	A2	Hopane (T19)	0.439	0.325	26.0	32	-0.06
93	A2	C23 Tricyclic Terpane (T4)	0.439	0.000#	100.0#	0#	-40.65#
94	A2	C24 Tricyclic Terpane (T5)	0.439	0.000#	100.0#	0#	-41.38#
95	A2	C25 Tricyclic Terpane (T6)	0.439	0.000#	100.0#	0#	-42.87#
96	A2	C24 Tetracyclic Terpane (T6	0.439	0.000#	100.0#	0#	-44.18#
97	A2	C26 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-43.93#
98	A2	C26 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-44.02#
99	A2	C28 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.31#

NT PAHs only 2/22/06

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18223.D
Acq On : 15 Feb 2006 5:30 am
Operator : AC
Sample : C1021305
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 13:58:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-46.48#
101	A2	C29 Tricyclic Terpane-22S (	0.439	0.000#	100.0#	0#	-46.99#
102	A2	C29 Tricyclic Terpane-22R (	0.439	0.000#	100.0#	0#	-47.19#
103	A2	18a-22,29,30-Trisnorneohopa	0.439	0.000#	100.0#	0#	-48.30#
104	A2	C30 Tricyclic Terpane-22S	0.439	0.000#	100.0#	0#	-48.40#
105	A2	C30 Tricyclic Terpane-22R	0.439	0.000#	100.0#	0#	-48.65#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.439	0.000#	100.0#	0#	-48.85#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.439	0.000#	100.0#	0#	-50.03#
108	A2	17a(H),21b(H)-25-Norhopane	0.439	0.000#	100.0#	0#	-49.84#
109	A2	30-Norhopane (T15)	0.439	0.000#	100.0#	0#	-50.70#
110	A2	18a(H)-30-Norneohopane-C29T	0.439	0.000#	100.0#	0#	-50.79#
111	A2	17a(H)-Diahopane (X)	0.439	0.000#	100.0#	0#	-50.93#
112	A2	30-Normoretane (T17)	0.439	0.000#	100.0#	0#	-51.48#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.439	0.000#	100.0#	0#	-51.86#
114	A2	Moretane (T20)	0.439	0.000#	100.0#	0#	-52.75#
115	A2	30-Homohopane-22S (T21)	0.439	0.000#	100.0#	0#	-53.83#
116	A2	30-Homohopane-22R (T22)	0.439	0.000#	100.0#	0#	-54.08#
117	A2	30,31-Bishomohopane-22S (T2	0.439	0.000#	100.0#	0#	-55.39#
118	A2	30,31-Bishomohopane-22R (T2	0.439	0.000#	100.0#	0#	-55.78#
119	A2	30,31-Trishomohopane-22S (T	0.439	0.000#	100.0#	0#	-57.51#
120	A2	30,31-Trishomohopane-22R (T	0.439	0.000#	100.0#	0#	-58.12#
121	A2	Tetrakishomohopane-22S (T32	0.439	0.000#	100.0#	0#	-60.12#
122	A2	Tetrakishomohopane-22R (T33	0.439	0.000#	100.0#	0#	-61.03#
123	A2	Pentakishomohopane-22S (T34	0.439	0.000#	100.0#	0#	-63.26#
124	A2	Pentakishomohopane-22R (T35	0.439	0.000#	100.0#	0#	-64.53#
125	SA1	5B(H)Cholane - Surr	0.196	0.180	8.2	40	-0.04
126	A2	13b(H),17a(H)-20S-Diacholes	0.196	0.000#	100.0#	0#	-45.15#
127	A2	13b(H),17a(H)-20R-Diacholes	0.196	0.000#	100.0#	0#	-45.57#
128	A2	13b,17a-20S-Methyldiacholes	0.196	0.000#	100.0#	0#	-46.26#
129	A2	14a(H),17a(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.13#
130	A2	14a(H),17a(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.65#
131	A2	13b,17a-20R-Ethyldiacholest	0.196	0.000#	100.0#	0#	-47.92#
132	A2	13a,17b-20S-Ethyldiacholest	0.196	0.000#	100.0#	0#	-48.19#
133	A2	14a,17a-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.34#
134	A2	14a,17a-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-49.06#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.41#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-50.30#
137	A2	14b(H),17b(H)-20R-Cholestan	0.196	0.000#	100.0#	0#	-47.21#
138	A2	14b(H),17b(H)-20S-Cholestan	0.196	0.000#	100.0#	0#	-47.30#
139	A2	14b,17b-20R-Methylcholestan	0.196	0.000#	100.0#	0#	-48.52#
140	A2	14b,17b-20S-Methylcholestan	0.196	0.000#	100.0#	0#	-48.59#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.196	0.000#	100.0#	0#	-49.64#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.196	0.000#	100.0#	0#	-49.69#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18223.D
Acq On : 15 Feb 2006 5:30 am
Operator : AC
Sample : C1021305
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 13:58:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration

MG 2/15/04

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	27581m	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	45833	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	28212	477.13	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.71%#			
58) Pyrene-d10	38.04	212	63956	526.09	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.61%			
81) Benzo[b]fluoranthene-d12	46.85	264	46211	506.31	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.63%			
125) 5B(H)Cholane - Surr	43.58	217	8256	458.43	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.84%#			

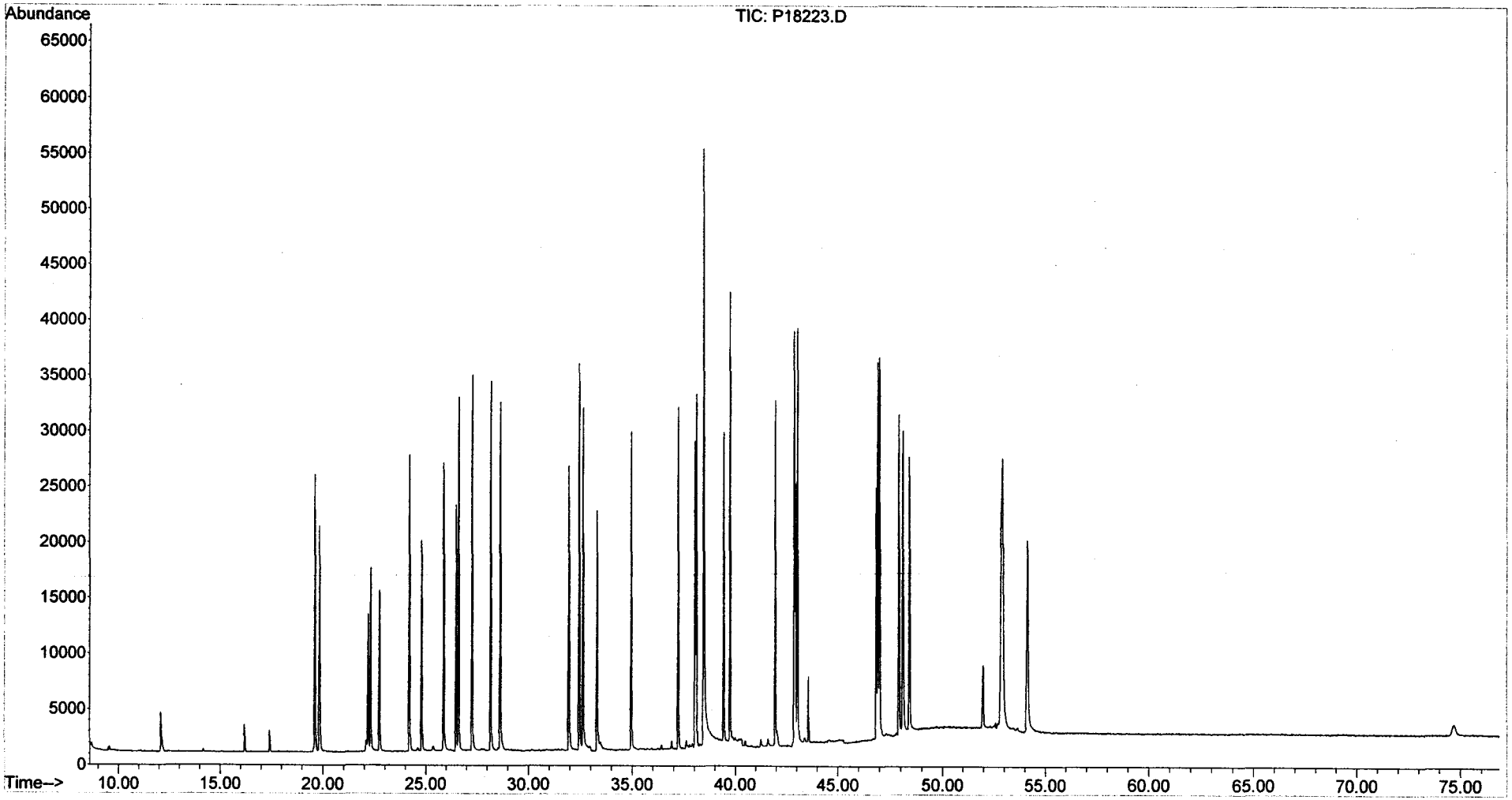
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	5405	226.85	ng/mL	100
4) cis-Decalin	17.42	138	4142	231.04	ng/mL	100
9) Naphthalene	19.62	128	63230	448.91	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	41327	463.46	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	38913	463.54	ng/mL#	100
17) Benzothiophene	19.84	134	55602	442.55	ng/mL	100
22) Biphenyl	24.19	154	50687	457.22	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	34945	472.22	ng/mL#	100
24) Dibenzofuran	27.27	168	57321	460.27	ng/mL	97
25) Acenaphthylene	25.89	152	70395	521.23	ng/mL#	100
26) Acenaphthene	26.63	153	39846	474.97	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.19	170	31539	474.76	ng/mL	97
28) Fluorene	28.65	166	43020	457.25	ng/mL	98
32) Dibenzothiophene	31.97	184	61217	441.21	ng/mL	100
41) Phenanthrene	32.45	178	62420	447.41	ng/mL	99
52) Retene	39.45	234	16695	572.34	ng/mL	94
53) Anthracene	32.64	178	59208m	458.69	ng/mL	
54) Carbazole	33.30	167	53830	450.59	ng/mL	98
55) 1-Methylphenanthrene	34.96	192	45873	480.21	ng/mL	97
56) Fluoranthene	37.22	202	70788m	476.54	ng/mL	
57) Benzo(b)fluorene	39.74	216	46177	532.66	ng/mL	98
59) Pyrene	38.10	202	72687	481.12	ng/mL	98
64) Naphthobenzothiophene	41.96	234	71279	504.32	ng/ml	97
65) Naphthobenzothiophene-2,1-	41.96	234	71279	504.32	ng/mL	97
73) Benz[a]anthracene	42.89	228	68448m	490.60	ng/mL	
74) Chrysene	43.05	228	67221m	471.52	ng/mL	
75) Chrysene/Triphenylene	43.05	228	67078m	470.52	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	69296	483.61	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	70022	469.74	ng/mL	99
85) Benzo[e]pyrene	47.92	252	64709	466.45	ng/mL	100
86) Benzo[a]pyrene	48.11	252	64973	473.36	ng/mL	100
87) Perylene	48.42	252	63719	474.91	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.85	276	55726m	461.34	ng/mL	
89) Dibenz[a,h]anthracene	52.93	278	63330	514.36	ng/mL	98
90) Benzo[g,h,i]perylene	54.13	276	64713	464.93	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	51.98	191	14890	370.00	ng/mL	99
92) Hopane (T19)	51.98	191	14890	370.00	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18223.D
Acq On : 15 Feb 2006 5:30 am
Operator : AC
Sample : C1021305
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 13:58:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Feb 07 06:15:29 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28253.D
Acq On : 14 Feb 2006 12:39 pm
Operator : AC
Sample : C2021401
Misc : std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 07:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

AB 2/15/06

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\PAH2\FEBRUARY06\FEB14\
Data File : P28253.D
Acq On : 14 Feb 2006 12:39 pm
Operator : AC
Sample : C2021401
Misc : std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 07:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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	153	0.00
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.60#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.76#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.76#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.88#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.50#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.74#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-50.07#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.74#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.74#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.81#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.90#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.38#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.78#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.95#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.25#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-53.26#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.33#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.38#
83	A1	17a(H),21B(H)-hopane - C30H	0.494	0.565	-14.4	201#	-0.02
84	A2	Hopane (T19)	0.494	0.565	-14.4	201#	-0.02
85	A2	C23 Tricyclic Terpane (T4)	0.494	0.000#	100.0#	0#	-41.22#
86	A2	C24 Tricyclic Terpane (T5)	0.494	0.000#	100.0#	0#	-41.94#
87	A2	C25 Tricyclic Terpane (T6)	0.494	0.000#	100.0#	0#	-43.43#
88	A2	C24 Tetracyclic Terpane (T6	0.494	0.000#	100.0#	0#	-44.77#
89	A2	C26 Tricyclic Terpane-22S (	0.494	0.000#	100.0#	0#	-44.49#
90	A2	C26 Tricyclic Terpane-22R (	0.494	0.000#	100.0#	0#	-44.59#
91	A2	C28 Tricyclic Terpane-22S (	0.494	0.000#	100.0#	0#	-46.87#
92	A2	C28 Tricyclic Terpane-22R (	0.494	0.000#	100.0#	0#	-47.04#
93	A2	C29 Tricyclic Terpane-22S (	0.494	0.000#	100.0#	0#	-47.58#
94	A2	C29 Tricyclic Terpane-22R (	0.494	0.000#	100.0#	0#	-47.78#
95	A2	18a-22,29,30-Trisnorneohopa	0.494	0.000#	100.0#	0#	-48.97#
96	A2	C30 Tricyclic Terpane-22S	0.494	0.000#	100.0#	0#	-49.05#
97	A2	C30 Tricyclic Terpane-22R	0.494	0.000#	100.0#	0#	-49.30#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.494	0.000#	100.0#	0#	-49.55#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.494	0.000#	100.0#	0#	-50.79#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28253.D
Acq On : 14 Feb 2006 12:39 pm
Operator : AC
Sample : C2021401
Misc : std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 07:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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	0.494	0.000#	100.0#	0#	-50.56#
101	A2	30-Norhopane (T15)	0.494	0.000#	100.0#	0#	-51.49#
102	A2	18a(H)-30-Norneohopane-C29T	0.494	0.000#	100.0#	0#	-51.60#
103	A2	17a(H)-Diahopane (X)	0.494	0.000#	100.0#	0#	-51.73#
104	A2	30-Normoretane (T17)	0.494	0.000#	100.0#	0#	-52.32#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.494	0.000#	100.0#	0#	-52.76#
106	A2	Moretane (T20)	0.494	0.000#	100.0#	0#	-53.66#
107	A2	30-Homohopane-22S (T21)	0.494	0.000#	100.0#	0#	-54.83#
108	A2	30-Homohopane-22R (T22)	0.494	0.000#	100.0#	0#	-55.07#
109	A2	30,31-Bishomohopane-22S (T2	0.494	0.000#	100.0#	0#	-56.48#
110	A2	30,31-Bishomohopane-22R (T2	0.494	0.000#	100.0#	0#	-56.89#
111	A2	30,31-Trishomohopane-22S (T	0.494	0.000#	100.0#	0#	-58.74#
112	A2	30,31-Trishomohopane-22R (T	0.494	0.000#	100.0#	0#	-59.40#
113	A2	Tetrakishomohopane-22S (T32	0.494	0.000#	100.0#	0#	-61.55#
114	A2	Tetrakishomohopane-22R (T33	0.494	0.000#	100.0#	0#	-62.50#
115	A2	Pentakishomohopane-22S (T34	0.494	0.000#	100.0#	0#	-64.90#
116	A2	Pentakishomohopane-22R (T35	0.494	0.000#	100.0#	0#	-66.28#
117	SA1	5B(H)Cholane - Surr	0.213	0.256	-20.2	189	-0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.213	0.000#	100.0#	0#	-45.71#
119	A2	13b(H),17a(H)-20R-Diacholes	0.213	0.000#	100.0#	0#	-46.13#
120	A2	13b,17a-20S-Methyldiacholes	0.213	0.000#	100.0#	0#	-46.83#
121	A2	14a(H),17a(H)-20S-Cholestan	0.213	0.000#	100.0#	0#	-47.72#
122	A2	14a(H),17a(H)-20R-Cholestan	0.213	0.000#	100.0#	0#	-48.26#
123	A2	13b,17a-20R-Ethyldiacholest	0.213	0.000#	100.0#	0#	-48.55#
124	A2	13a,17b-20S-Ethyldiacholest	0.213	0.000#	100.0#	0#	-48.82#
125	A2	14a,17a-20S-Methylcholestan	0.213	0.000#	100.0#	0#	-48.99#
126	A2	14a,17a-20R-Methylcholestan	0.213	0.000#	100.0#	0#	-49.75#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.213	0.000#	100.0#	0#	-50.12#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.213	0.000#	100.0#	0#	-51.06#
129	A2	14b(H),17b(H)-20R-Cholestan	0.213	0.000#	100.0#	0#	-47.81#
130	A2	14b(H),17b(H)-20S-Cholestan	0.213	0.000#	100.0#	0#	-47.91#
131	A2	14b,17b-20R-Methylcholestan	0.213	0.000#	100.0#	0#	-49.17#
132	A2	14b,17b-20S-Methylcholestan	0.213	0.000#	100.0#	0#	-49.26#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.213	0.000#	100.0#	0#	-50.37#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.213	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\FEB14\
Data File : P28253.D
Acq On : 14 Feb 2006 12:39 pm
Operator : AC
Sample : C2021401
Misc : std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 07:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

MW 2/15/06

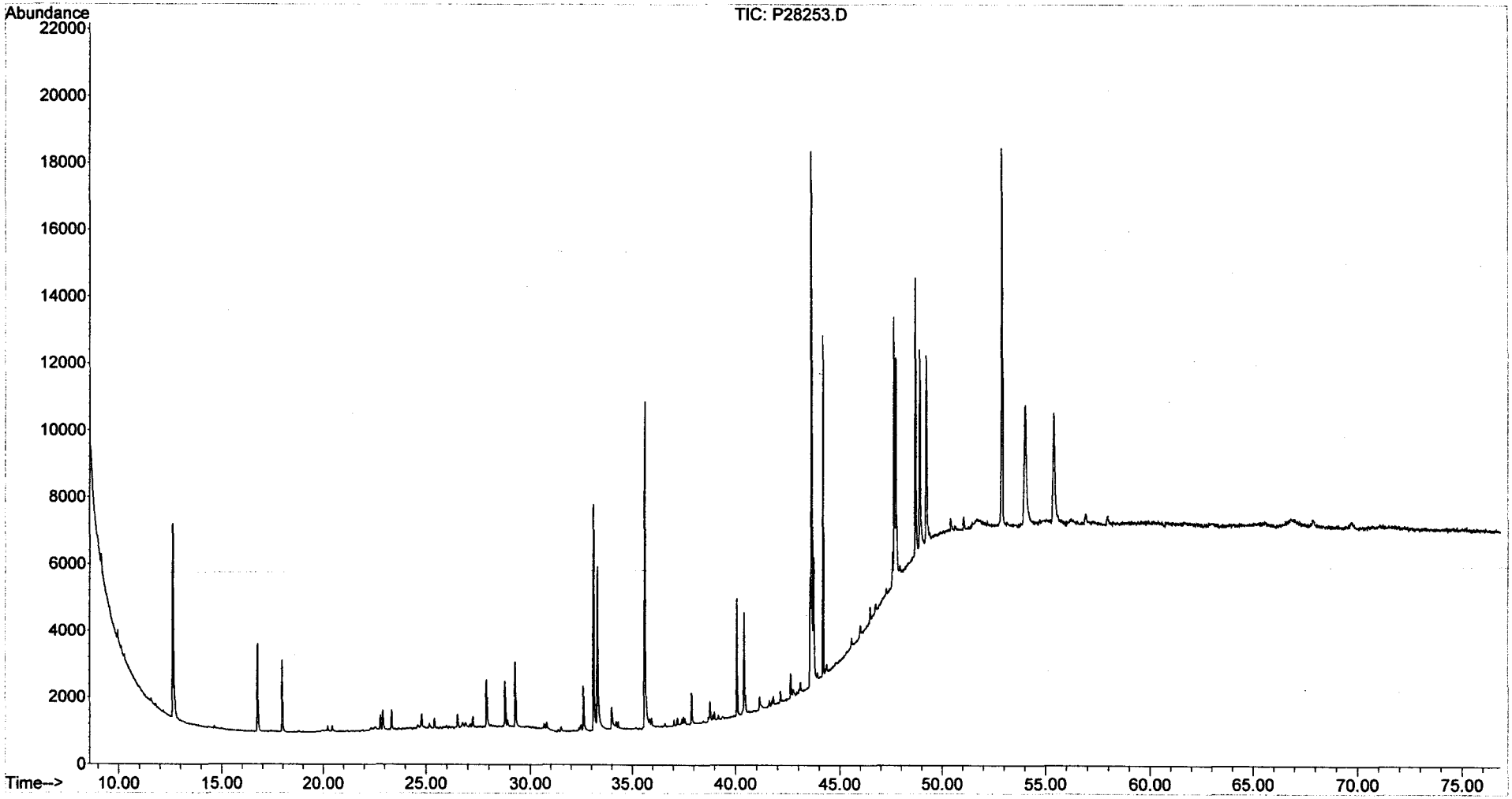
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.63	240	47318	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	44.19	217	12098	601.19	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	60.12%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.92	191	26723	572.14	ng/mL	98
84) Hopane (T19)	52.92	191	26723	572.14	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28253.D
Acq On : 14 Feb 2006 12:39 pm
Operator : AC
Sample : C2021401
Misc : std
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 07:15:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28260.D
Acq On : 15 Feb 2006 12:36 am
Operator : AC
Sample : C2021402
Misc : std
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:17:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

MS 2/15/06

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\PAH2\FEBRUARY06\FEB14\
Data File : P28260.D
Acq On : 15 Feb 2006 12:36 am
Operator : AC
Sample : C2021402
Misc : std
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:17:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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	133	0.01
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-43.60#
66	t	Chrysene	0.000	0.000#	0.0	0#	-43.76#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-43.76#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-45.88#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-47.50#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-47.74#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-50.07#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-49.74#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-47.74#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-47.81#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-47.90#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-48.38#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-48.78#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-48.95#
79	t	Perylene	0.000	0.000#	0.0	0#	-49.25#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-53.26#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-53.33#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-54.38#
83	A1	17a(H),21B(H)-hopane - C30H	0.494	0.576	-16.6	179	-0.03
84	A2	Hopane (T19)	0.494	0.576	-16.6	179	-0.03
85	A2	C23 Tricyclic Terpane (T4)	0.494	0.000#	100.0#	0#	-41.22#
86	A2	C24 Tricyclic Terpane (T5)	0.494	0.000#	100.0#	0#	-41.94#
87	A2	C25 Tricyclic Terpane (T6)	0.494	0.000#	100.0#	0#	-43.43#
88	A2	C24 Tetracyclic Terpane (T6	0.494	0.000#	100.0#	0#	-44.77#
89	A2	C26 Tricyclic Terpane-22S (	0.494	0.000#	100.0#	0#	-44.49#
90	A2	C26 Tricyclic Terpane-22R (	0.494	0.000#	100.0#	0#	-44.59#
91	A2	C28 Tricyclic Terpane-22S (	0.494	0.000#	100.0#	0#	-46.87#
92	A2	C28 Tricyclic Terpane-22R (	0.494	0.000#	100.0#	0#	-47.04#
93	A2	C29 Tricyclic Terpane-22S (	0.494	0.000#	100.0#	0#	-47.58#
94	A2	C29 Tricyclic Terpane-22R (	0.494	0.000#	100.0#	0#	-47.78#
95	A2	18a-22,29,30-Trisnorneohopa	0.494	0.000#	100.0#	0#	-48.97#
96	A2	C30 Tricyclic Terpane-22S	0.494	0.000#	100.0#	0#	-49.05#
97	A2	C30 Tricyclic Terpane-22R	0.494	0.000#	100.0#	0#	-49.30#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.494	0.000#	100.0#	0#	-49.55#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.494	0.000#	100.0#	0#	-50.79#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28260.D
Acq On : 15 Feb 2006 12:36 am
Operator : AC
Sample : C2021402
Misc : std
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:17:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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	0.494	0.000#	100.0#	0#	-50.56#
101	A2	30-Norhopane (T15)	0.494	0.000#	100.0#	0#	-51.49#
102	A2	18a(H)-30-Norneohopane-C29T	0.494	0.000#	100.0#	0#	-51.60#
103	A2	17a(H)-Diahopane (X)	0.494	0.000#	100.0#	0#	-51.73#
104	A2	30-Normoretane (T17)	0.494	0.000#	100.0#	0#	-52.32#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.494	0.000#	100.0#	0#	-52.76#
106	A2	Moretane (T20)	0.494	0.000#	100.0#	0#	-53.66#
107	A2	30-Homohopane-22S (T21)	0.494	0.000#	100.0#	0#	-54.83#
108	A2	30-Homohopane-22R (T22)	0.494	0.000#	100.0#	0#	-55.07#
109	A2	30,31-Bishomohopane-22S (T2	0.494	0.000#	100.0#	0#	-56.48#
110	A2	30,31-Bishomohopane-22R (T2	0.494	0.000#	100.0#	0#	-56.89#
111	A2	30,31-Trishomohopane-22S (T	0.494	0.000#	100.0#	0#	-58.74#
112	A2	30,31-Trishomohopane-22R (T	0.494	0.000#	100.0#	0#	-59.40#
113	A2	Tetrakishomohopane-22S (T32	0.494	0.000#	100.0#	0#	-61.55#
114	A2	Tetrakishomohopane-22R (T33	0.494	0.000#	100.0#	0#	-62.50#
115	A2	Pentakishomohopane-22S (T34	0.494	0.000#	100.0#	0#	-64.90#
116	A2	Pentakishomohopane-22R (T35	0.494	0.000#	100.0#	0#	-66.28#
117	SA1	5B(H)Cholane - Surr	0.213	0.265	-24.4	171	-0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.213	0.000#	100.0#	0#	-45.71#
119	A2	13b(H),17a(H)-20R-Diacholes	0.213	0.000#	100.0#	0#	-46.13#
120	A2	13b,17a-20S-Methyldiacholes	0.213	0.000#	100.0#	0#	-46.83#
121	A2	14a(H),17a(H)-20S-Cholestan	0.213	0.000#	100.0#	0#	-47.72#
122	A2	14a(H),17a(H)-20R-Cholestan	0.213	0.000#	100.0#	0#	-48.26#
123	A2	13b,17a-20R-Ethyldiacholest	0.213	0.000#	100.0#	0#	-48.55#
124	A2	13a,17b-20S-Ethyldiacholest	0.213	0.000#	100.0#	0#	-48.82#
125	A2	14a,17a-20S-Methylcholestan	0.213	0.000#	100.0#	0#	-48.99#
126	A2	14a,17a-20R-Methylcholestan	0.213	0.000#	100.0#	0#	-49.75#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.213	0.000#	100.0#	0#	-50.12#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.213	0.000#	100.0#	0#	-51.06#
129	A2	14b(H),17b(H)-20R-Cholestan	0.213	0.000#	100.0#	0#	-47.81#
130	A2	14b(H),17b(H)-20S-Cholestan	0.213	0.000#	100.0#	0#	-47.91#
131	A2	14b,17b-20R-Methylcholestan	0.213	0.000#	100.0#	0#	-49.17#
132	A2	14b,17b-20S-Methylcholestan	0.213	0.000#	100.0#	0#	-49.26#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.213	0.000#	100.0#	0#	-50.37#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.213	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\FEB14\
Data File : P28260.D
Acq On : 15 Feb 2006 12:36 am
Operator : AC
Sample : C2021402
Misc : std
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:17:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 2006
Response via : Initial Calibration

MS 2/15/06

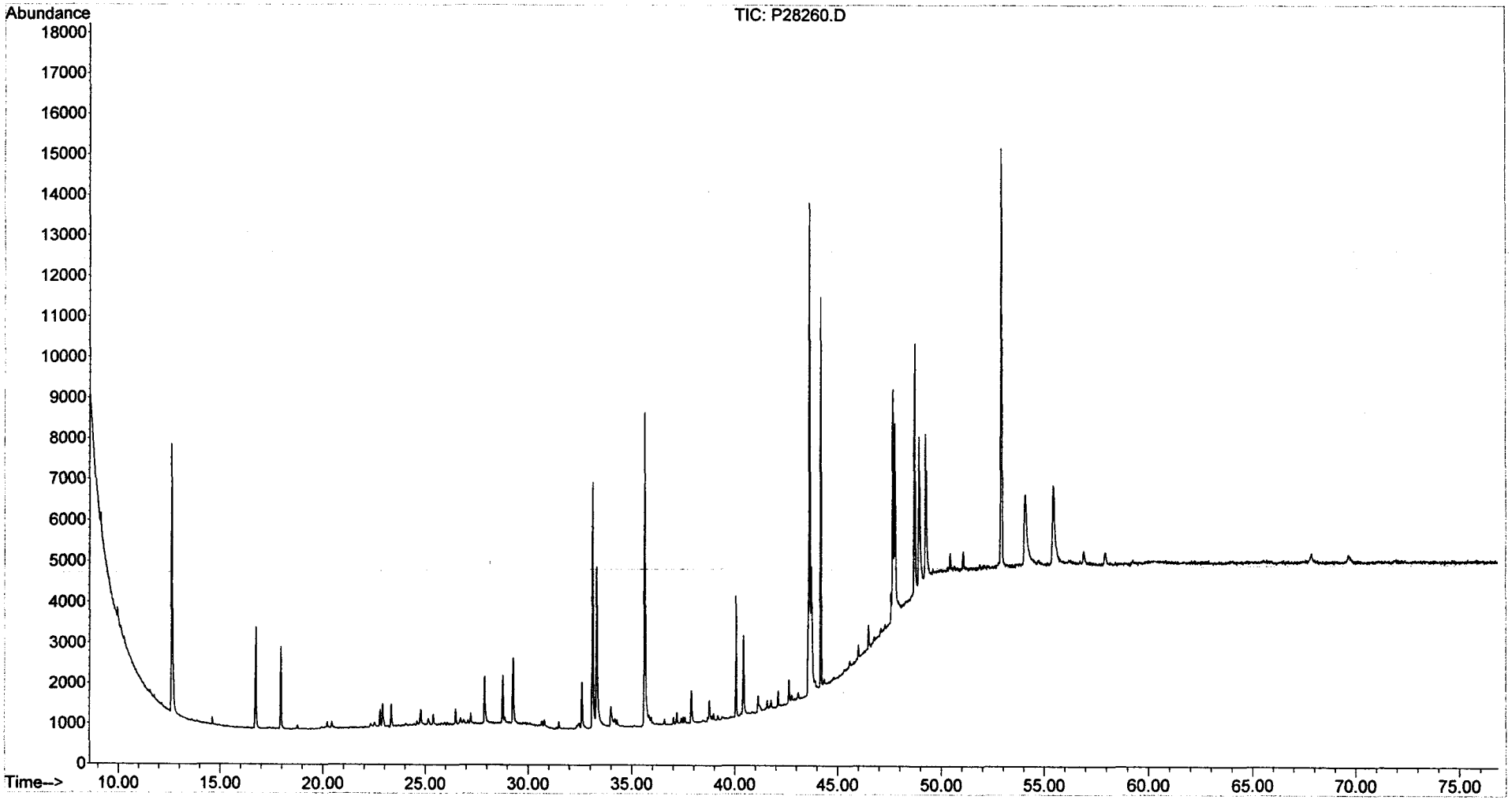
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.64	240	41324	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	44.19	217	10963	623.80	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	62.38%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.91	191	23798	583.42	ng/mL	100
84) Hopane (T19)	52.91	191	23798	583.42	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB14\
Data File : P28260.D
Acq On : 15 Feb 2006 12:36 am
Operator : AC
Sample : C2021402
Misc : std
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:17:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\FEB06\BIO20209.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Feb 10 06:42:13 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: **0602017**
Lab ID: **C1021301**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		31259	26.49	50447	42.94
Upper Limit:		62518	26.99	100894	43.44
Lower Limit:		15630	25.99	25224	42.44
Client ID	**Lab ID**				
CGMW-07I	0602017-01	35878	26.49	58161	42.94
CGMW-07I	0602017-01 D	35225	26.49	57500	42.94
CGMW-08I	0602017-02	35181	26.49	57981	42.94
CCV	C1021303	51803	26.49	82228	42.94

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.

02/21/06 18:49

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602017**
Lab ID: **C1021303**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		51803	26.49	82228	42.94
Upper Limit:		103606	26.99	164456	43.44
Lower Limit:		25902	25.99	41114	42.44
Client ID	**Lab ID**				
Blank	SO020906B23	34647	26.49	58553	42.94
CGMW-07I	0602017-01E D	32273	26.51	53332	42.95
CGMW-08I	0602017-02E	34122	26.51	55161	42.95
LCS	SO020906LCS17	34687	26.51	58656	42.95
LCSD	SO020906LCSD15	34920	26.51	57448	42.95
CCV	C1021304	33070	26.51	53172	42.95

N/A - Not Applicable

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

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

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602017**
Lab ID: **C1021304**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		33070	26.51	53172	42.95
Upper Limit:		66140	27.01	106344	43.45
Lower Limit:		16535	26.01	26586	42.45
Client ID	**Lab ID**				
CGMW-07I	0602017-01E	30794	26.51	50945	42.95
CCV	C1021305	27581	26.51	45833	42.95

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.

02/21/06 18:50

Form VIII
Internal Standard Summary
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **C2021401**

		Chrysene-d12	
		Area	**RT**
Standard:		47318	43.63
Upper Limit:		94636	44.13
Lower Limit:		23659	43.13
Client ID	**Lab ID**		
Blank	SO020906B23	38980	43.65
CGMW-07I	0602017-01	51205	43.66
CGMW-07I	0602017-01 D	49230	43.66
CGMW-08I	0602017-02	51765	43.66
CCV	C2021402	41324	43.64

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.

02/21/06 22:28

TOTAL PETROLEUM HYDROCARBON (TPH)

Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/15/06	100	0.104	21	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**570000**

N/A - Not Applicable

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

02/22/06 12:17

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18236.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 4:49 pm
Operator : AC
Sample : 0602017-01-AFID
Misc : 1X
ALS Vial : 81 Sample Multiplier: 1

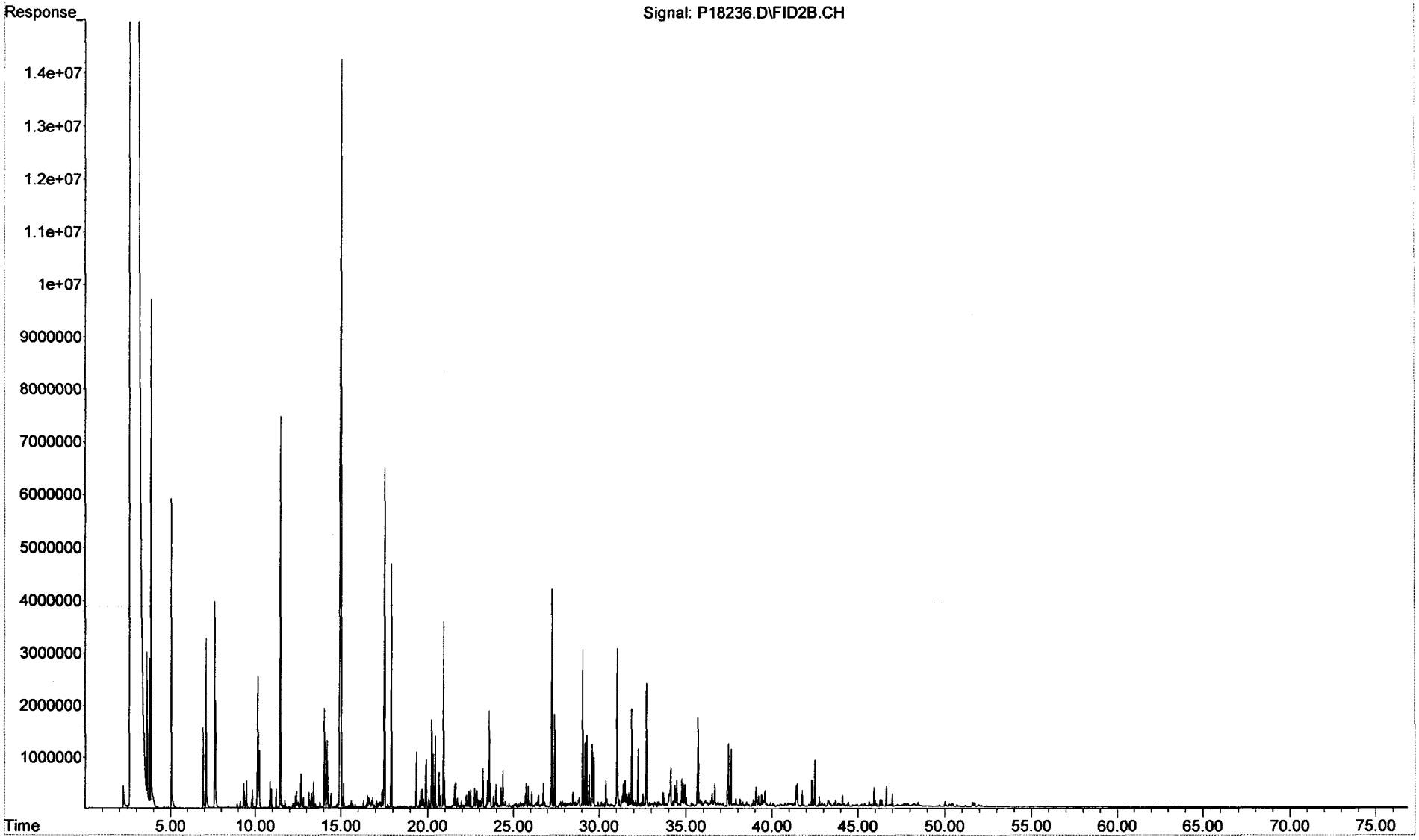
Integration File: SHCINT1.E
Quant Time: Feb 17 08:03:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	69425178	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	61868065	41.114 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	82.23%
24) s d50-Tetracosane	35.69	50993537	37.810 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	75.62%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4298489246	3091.810 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3119841392	2244.034 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18236.D
Operator : AC
Acquired : 15 Feb 2006 4:49 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602017-01-AFID
Misc Info : 1X
Vial Number: 81



Form I
Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01 D**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/15/06	100	0.104	21	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**550000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	78	50-130

02/22/06 12:17

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18238.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 6:26 pm
Operator : AC
Sample : 0602017-01D-AFID
Misc : 1X
ALS Vial : 82 Sample Multiplier: 1

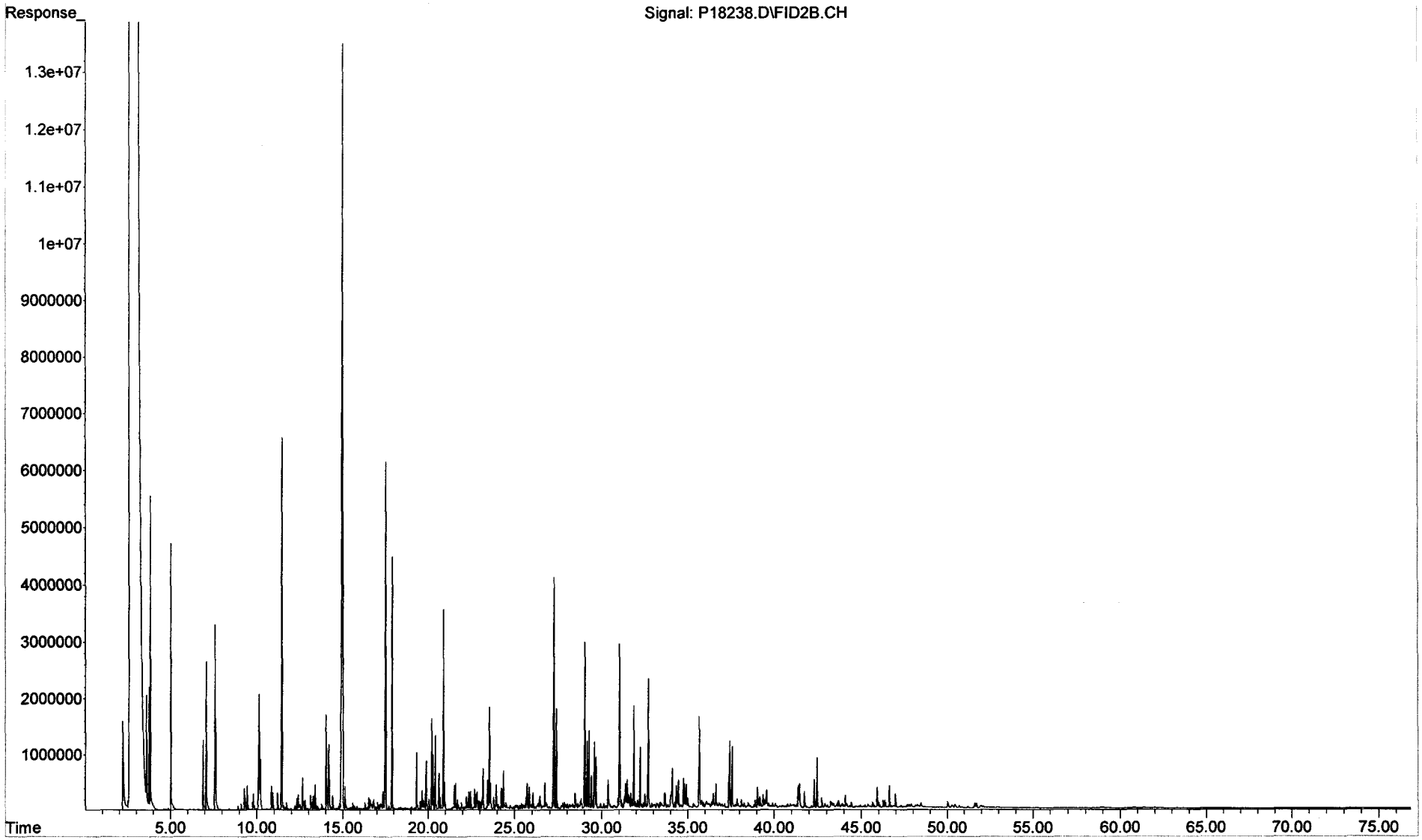
Integration File: SHCINT1.E
Quant Time: Feb 17 08:07:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	67517602	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	59451021	40.624 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	81.25%
24) s d50-Tetracosane	35.69	48846149	37.241 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	74.48%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4095536833	3029.059 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2917634307	2157.883 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18238.D
Operator : AC
Acquired : 15 Feb 2006 6:26 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602017-01D-AFID
Misc Info : 1X
Vial Number: 82



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-07I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-01**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/31/06	02/07/06	02/09/06	100	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**570000**	**550000**	3	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	86	85	50-130
d50-Tetracosane	79	78	50-130

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

02/22/06 12:18

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **CGMW-08I**
Case: **N/A** SDG: **N/A**
Matrix: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **0602017-02**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/31/06	02/07/06	02/09/06	02/15/06	100	0.109	21	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	620000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	82	50-130
d50-Tetracosane	75	50-130

02/22/06 12:18

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18240.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 8:02 pm
Operator : AC
Sample : 0602017-02-AFID
Misc : 1X
ALS Vial : 83 Sample Multiplier: 1

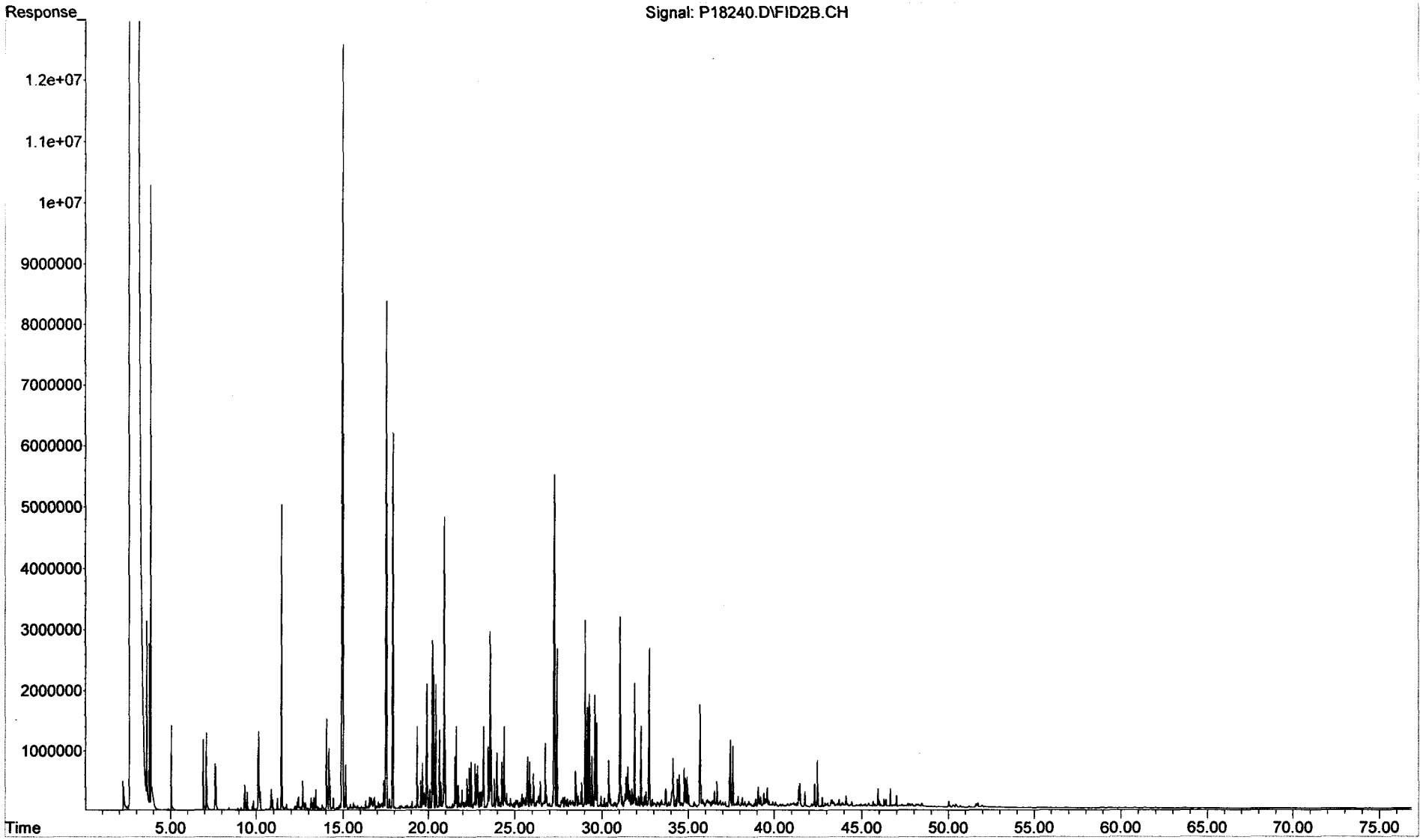
Integration File: SHCINT1.E
Quant Time: Feb 17 08:10:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	74901199	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	63320106	39.002 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	78.00%
24) s d50-Tetracosane	35.69	52296677	35.941 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	71.88%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5242415367	3495.076 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3709950096	2473.394 ug/L

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

```
File        :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18240.D
Operator    : AC
Acquired    : 15 Feb 2006   8:02 pm using AcqMethod FRNC1D.M
Instrument :   PAH-1
Sample Name: 0602017-02-AFID
Misc Info   : 1X
Vial Number: 83
```



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: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906B23**
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	02/09/06	02/15/06	100	0.10	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	1300 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	91	50-130
d50-Tetracosane	79	50-130

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

02/17/06 09:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18230.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 11:53 am
Operator : AC
Sample : SO020906B23-AFID
Misc : 1X ETR0602017
ALS Vial : 78 Sample Multiplier: 1

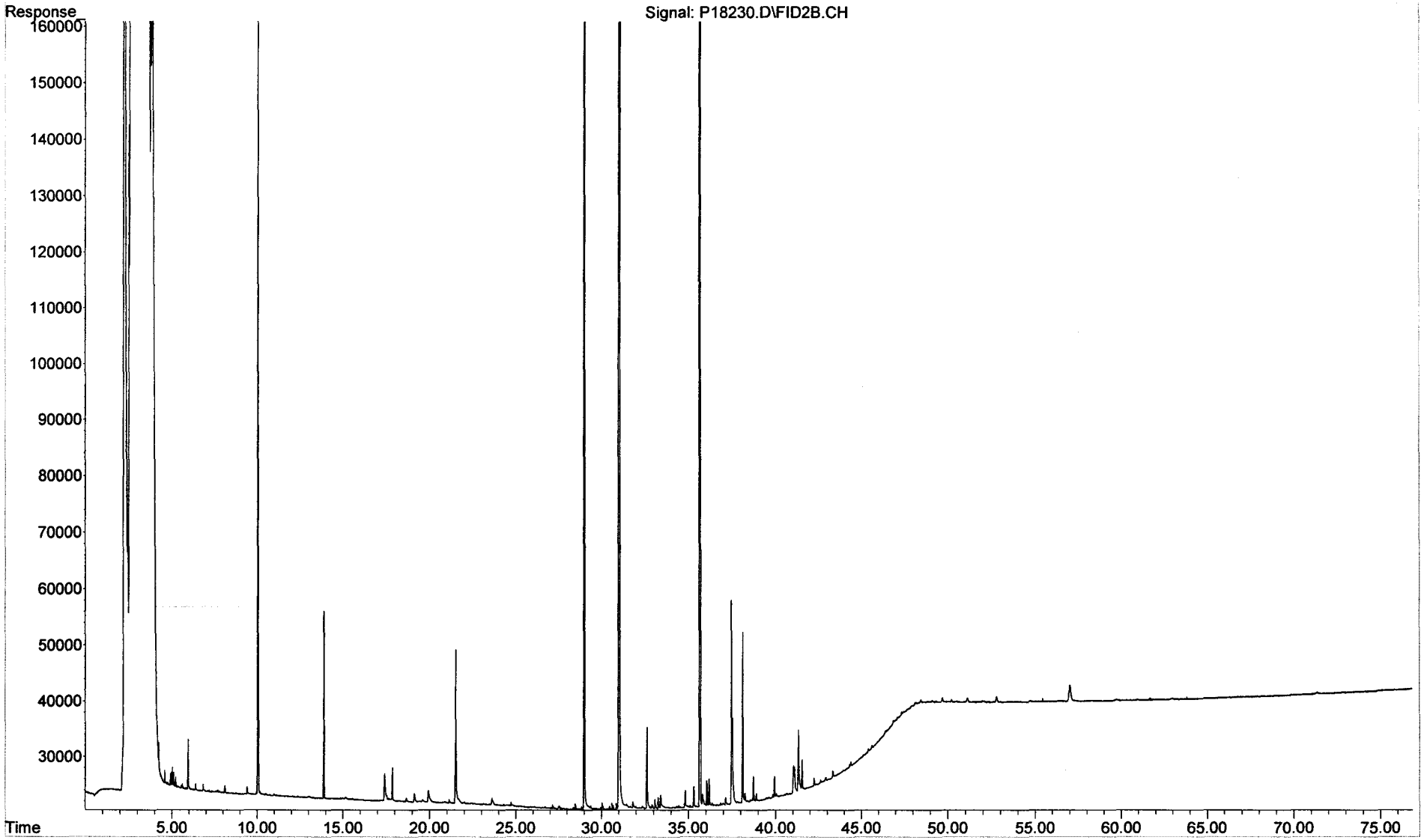
Integration File: SHCINT1.E
Quant Time: Feb 17 07:38:45 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.05	77244525	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.02	19141641	11.433 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 22.87%#
24) s	d50-Tetracosane	35.67	14895928	9.927 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 19.85%#
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.94	388567856	251.196 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	11807423	7.633 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18230.D
Operator : AC
Acquired : 15 Feb 2006 11:53 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SO020906B23-AFID
Misc Info : 1X ETR0602017
Vial Number: 78



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: **Product**

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **See Below**
Associated Blank: **SO020906B23**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	02/09/06	100	AC

Lab ID:	SO020906B23		SO020906LCS17		SO020906LCSD15				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	40	U	380	76	330	66	14	30	50-130
n-Decane (C10)	40	U	420	83	400	79	5	30	50-130
n-Dodecane (C12)	40	U	440	87	440	88	1	30	50-130
n-Tetradecane (C14)	40	U	450	90	460	92	2	30	50-130
n-Hexadecane (C16)	40	U	470	94	480	97	3	30	50-130
n-Octadecane (C18)	40	U	470	94	490	97	4	30	50-130
n-Nonadecane (C19)	40	U	470	95	500	100	5	30	50-130
n-Eicosane (C20)	40	U	480	96	510	101	5	30	50-130
n-Docosane (C22)	40	U	480	95	500	100	5	30	50-130
n-Tetracosane (C24)	40	U	470	94	490	99	5	30	50-130
n-Hexacosane (C26)	40	U	480	95	500	101	6	30	50-130
n-Octacosane (C28)	40	U	470	94	500	100	7	30	50-130
n-Triacontane (C30)	40	U	460	92	500	99	7	30	50-130
n-Hexatriacontane (C36)	40	U	430	86	480	95	10	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	97	100	50-130
d50-Tetracosane	88	91	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.

02/17/06 11:14

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906LCS17**
Associated Blank: **SO020906B23**
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	02/09/06	02/15/06	100	0.10	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**6700**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	97	50-130
d50-Tetracosane	88	50-130

02/17/06 09:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18232.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 1:32 pm
Operator : AC
Sample : SO020906LCS17-AFID
Misc : 1X ETR0602017
ALS Vial : 79 Sample Multiplier: 1

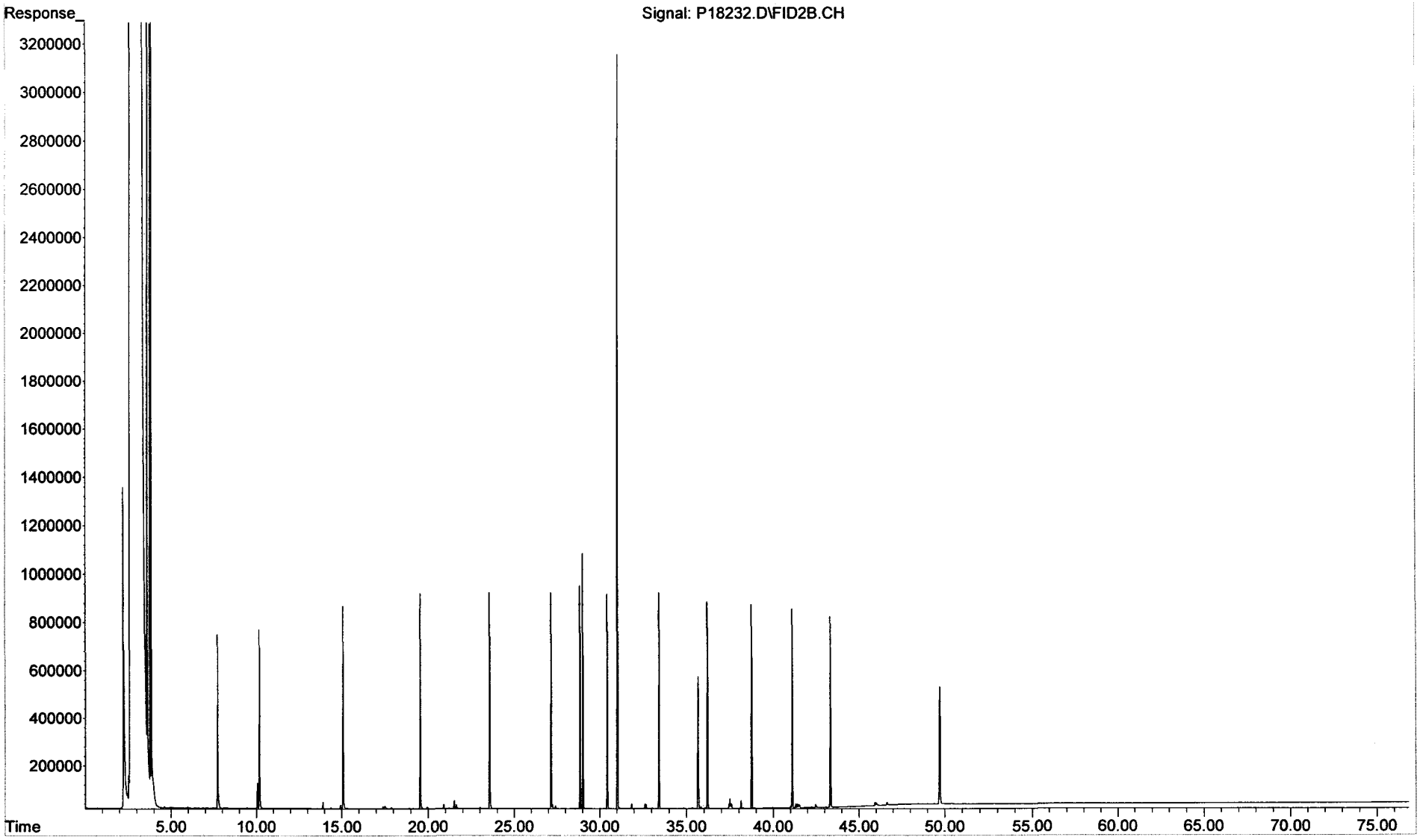
Integration File: SHCINT1.E
Quant Time: Feb 17 07:53:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.05	73945439	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.02	19415265	12.113 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 24.23%#
24) s	d50-Tetracosane	35.67	15715566	10.940 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 21.88%#
	Target Compounds			
3) t	n-Nonane (C9)	7.71	12451838	9.472 ug/mLm
4) t	n-Decane (C10)	10.17	14008946	10.394 ug/mLm
6) t	n-Dodecane (C12)	15.08	15181561	10.918 ug/mLm
9) t	n-Tetradecane (C14)	19.55	16074333	11.228 ug/mLm
12) t	n-Hexadecane (C16)	23.56	17125863	11.706 ug/mLm
16) t	n-Octadecane (C18)	27.17	17355144	11.686 ug/mLm
18) t	n-Nonadecane (C19)	28.85	17503964	11.861 ug/mLm
20) t	n-Eicosane (C20)	30.45	17651501	11.997 ug/mLm
22) t	n-Docosane (C22)	33.44	17828234	11.890 ug/mLm
25) t	n-Tetracosane (C24)	36.20	17889874	11.706 ug/mLm
27) t	n-Hexacosane (C26)	38.75	17932252	11.905 ug/mLm
29) t	n-Octacosane (C28)	41.12	17829504	11.692 ug/mLm
31) t	n-Triacontane (C30)	43.34	17603614	11.519 ug/mLm
37) t	n-Hexatriacontane (C36)	49.71	16301021	10.743 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	638614719	431.262 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	251237597	169.663 ug/L

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

```
File        :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18232.D
Operator    : AC
Acquired    : 15 Feb 2006   1:32 pm using AcqMethod FRNC1D.M
Instrument  :   PAH-1
Sample Name: SO020906LCS17-AFID
Misc Info   : 1X ETR0602017
Vial Number: 79
```



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602017**
Lab ID: **SO020906LCSD15**
Associated Blank: **SO020906B23**
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	02/09/06	02/15/06	100	0.10	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**7200**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	100	50-130
d50-Tetracosane	91	50-130

02/17/06 09:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18234.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 3:13 pm
Operator : AC
Sample : SO020906LCSD15-AFID
Misc : 1X ETR0602017
ALS Vial : 80 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 17 08:01:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

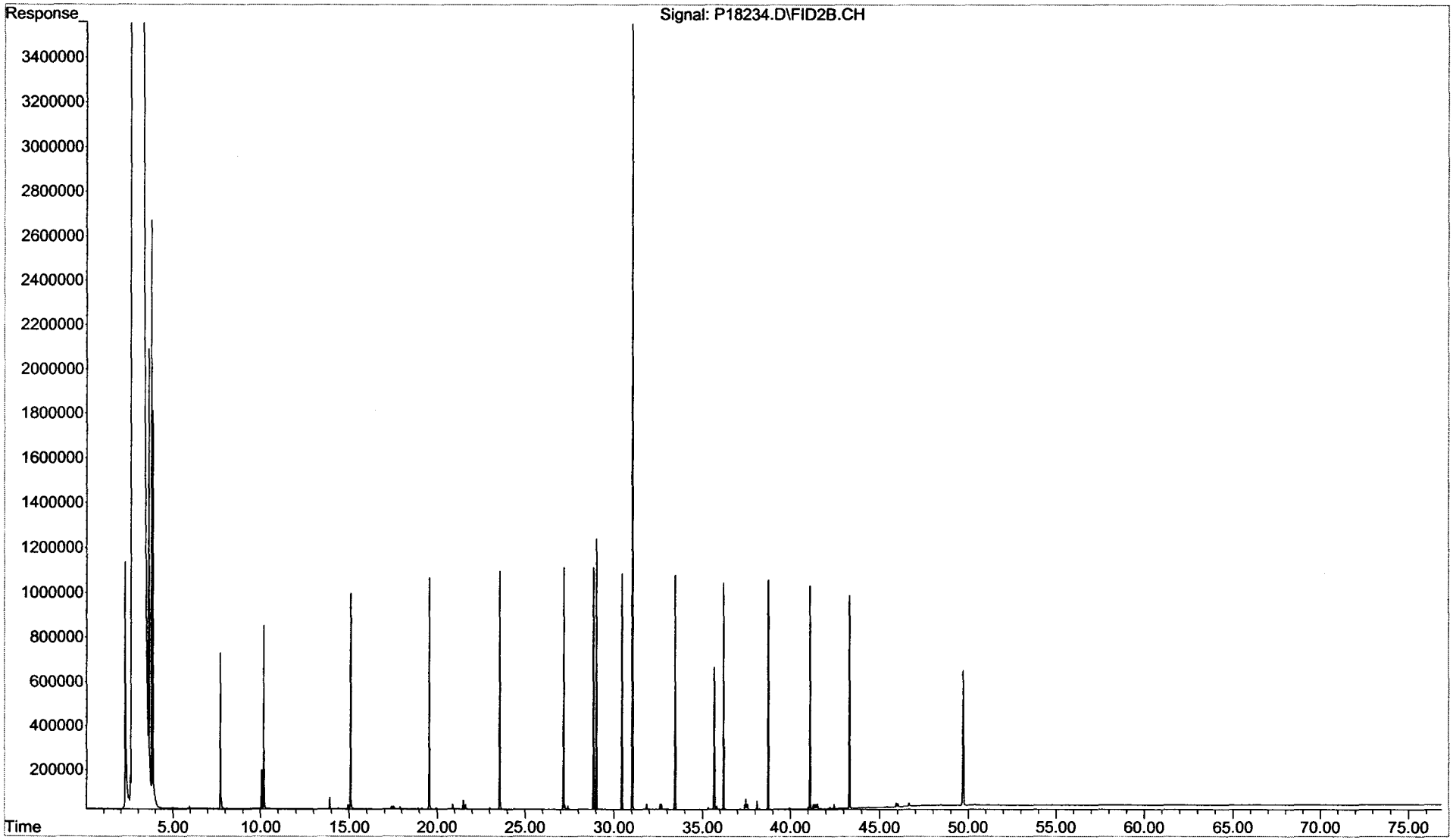
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/17/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.06	83730864	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.02	22783869	12.554 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 25.11%#
24) s	d50-Tetracosane	35.67	18493203	11.369 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 22.74%#
	Target Compounds			
3) t	n-Nonane (C9)	7.71	12209281	8.202 ug/mLm
4) t	n-Decane (C10)	10.17	15156667	9.932 ug/mLm
6) t	n-Dodecane (C12)	15.08	17395085	11.048 ug/mLm
9) t	n-Tetradecane (C14)	19.55	18646352	11.503 ug/mLm
12) t	n-Hexadecane (C16)	23.56	20010890	12.080 ug/mLm
16) t	n-Octadecane (C18)	27.17	20447544	12.159 ug/mLm
18) t	n-Nonadecane (C19)	28.85	20789845	12.442 ug/mLm
20) t	n-Eicosane (C20)	30.45	21058283	12.639 ug/mLm
22) t	n-Docosane (C22)	33.45	21326440	12.561 ug/mLm
25) t	n-Tetracosane (C24)	36.21	21376444	12.353 ug/mLm
27) t	n-Hexacosane (C26)	38.76	21535588	12.627 ug/mLm
29) t	n-Octacosane (C28)	41.13	21558118	12.485 ug/mLm
31) t	n-Triacontane (C30)	43.34	21438864	12.389 ug/mLm
37) t	n-Hexatriacontane (C36)	49.72	20448591	11.901 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	690011147	411.514 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	296556451	176.862 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18234.D
Operator : AC
Acquired : 15 Feb 2006 3:13 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SO020906LCSD15-AFID
Misc Info : 1X ETR0602017
Vial Number: 80



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: **0602017**
Lab ID: **TS021506AWS02**
Associated Blank: **SO020906B23**
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	02/13/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**580000**

N/A - Not Applicable

02/17/06 12:05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18180.D
Signal(s) : FID2B.CH
Acq On : 13 Feb 2006 4:57 pm
Operator : AC
Sample : TS021506AWS02
Misc : ANS
ALS Vial : 53 Sample Multiplier: 1

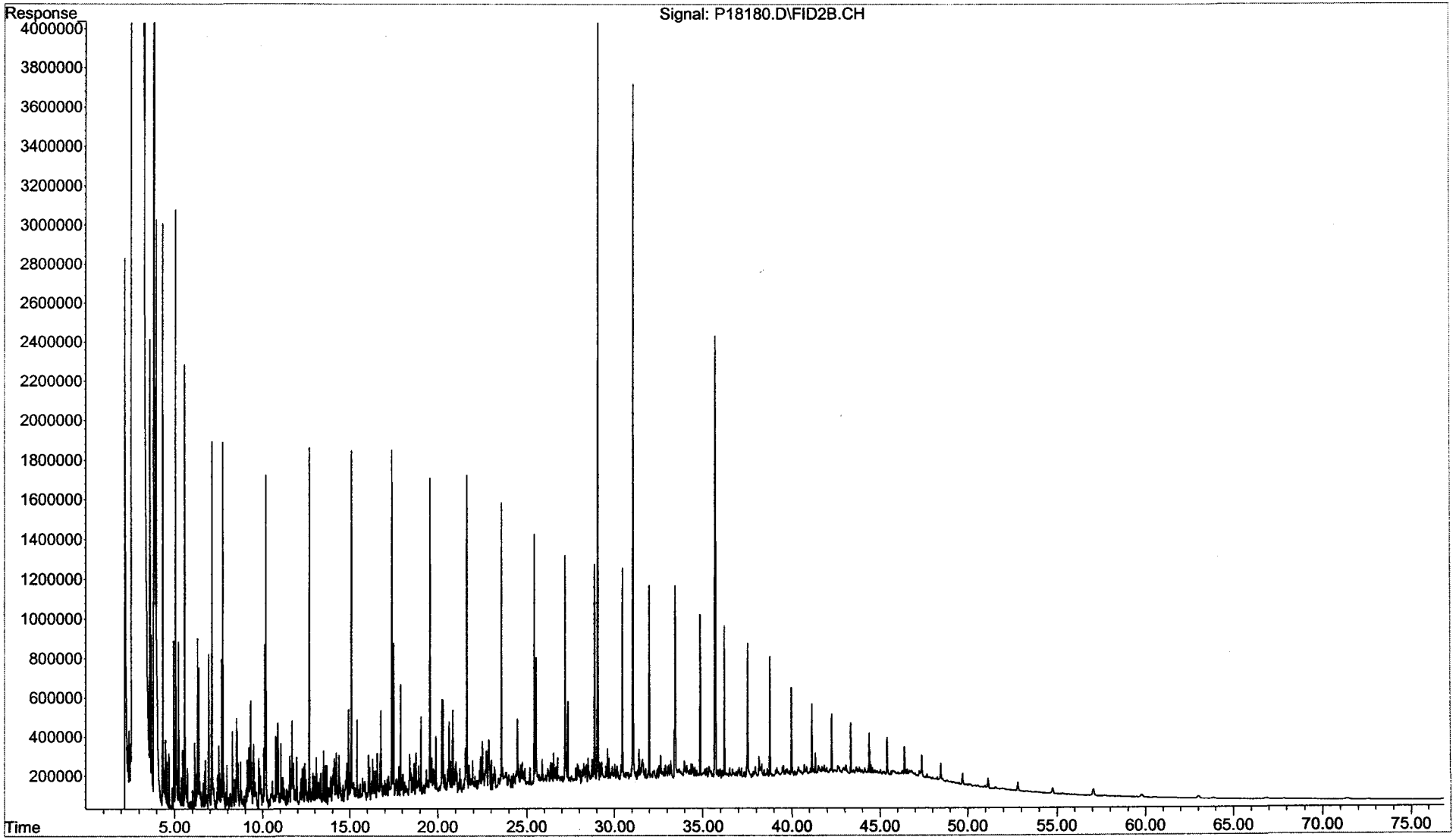
Integration File: SHCINT1.E
Quant Time: Feb 15 08:05:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.07	86203192	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.06	91652761	49.052 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	98.10%
24) s	d50-Tetracosane	35.71	75734148	45.224 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	90.45%
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.94	5615162835	3252.767 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	1551647920	898.843 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18180.D
Operator : AC
Acquired : 13 Feb 2006 4:57 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TS021506AWS02
Misc Info : ANS
Vial Number: 53



Instrument Blank Association

ETR: 0602017

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
TS021506AWS02	IB102130601	P18184.D
0602017-01	IB102130603	P18228.D
0602017-01 D	IB102130603	P18228.D
0602017-02	IB102130603	P18228.D
SO020906B23	IB102130603	P18228.D
SO020906LCS17	IB102130603	P18228.D
SO020906LCSD15	IB102130603	P18228.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18184.D
Signal(s) : FID2B.CH
Acq On : 13 Feb 2006 9:37 pm
Operator : AC
Sample : IB102130601
Misc : DCM
ALS Vial : 55 Sample Multiplier: 1

2/15/06
RPR

Integration File: SHCINT1.E
Quant Time: Feb 15 08:08:28 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	71	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	533872303	374966732.179 ug/mL

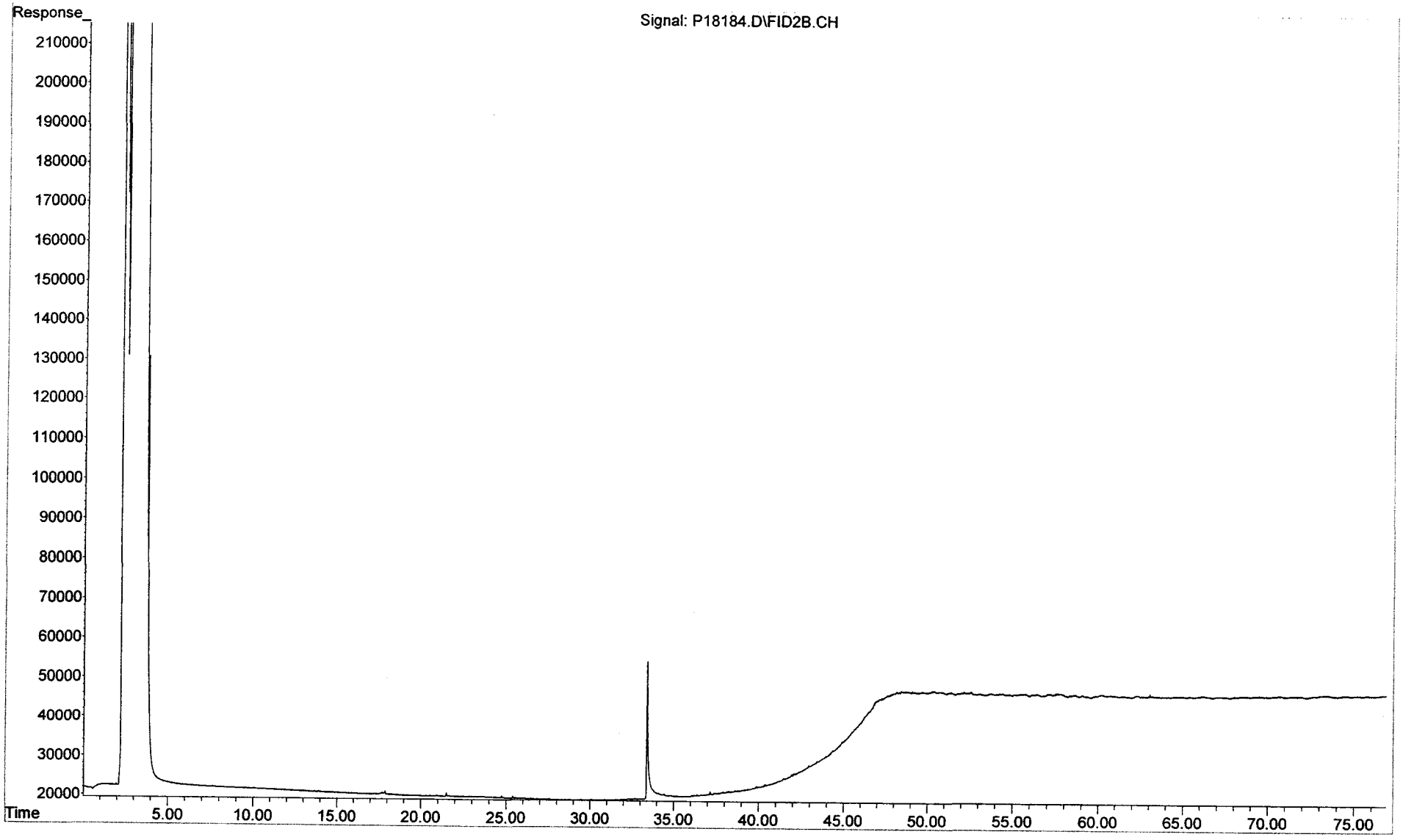
(f)=RT Delta > 1/2 Window (m)=manual int.

GC-FID Chromatogram contains a contaminant peak. This Instrument Blank is being used for an LCS only which is reporting target compounds

2/16/06

and RMS crude 2/22/06

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18184.D
Operator : AC
Acquired : 13 Feb 2006 9:37 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB102130601
Misc Info : DCM
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18228.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 10:18 am
Operator : AC
Sample : IB102130603
Misc :
ALS Vial : 77 Sample Multiplier: 1

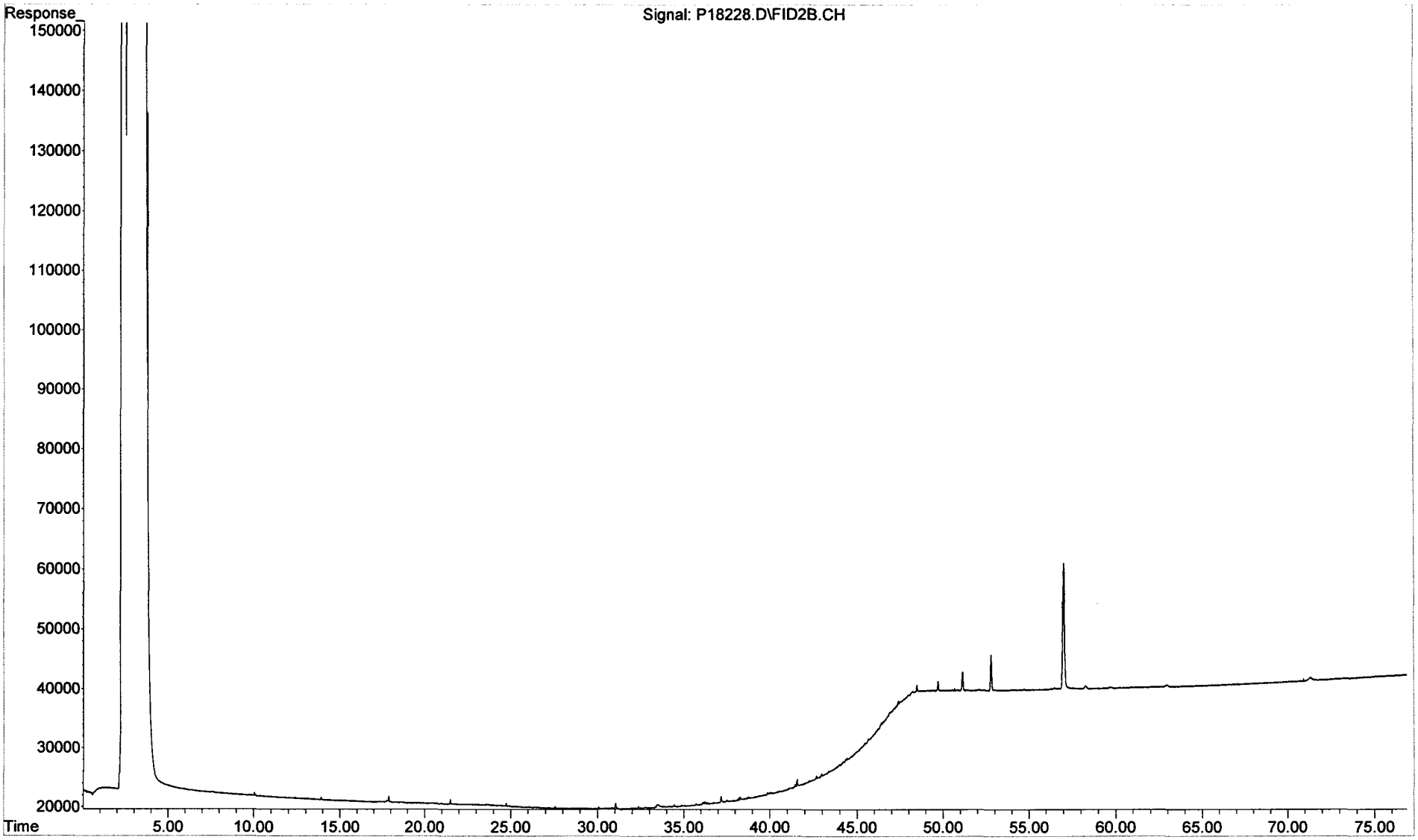
Integration File: SHCINT1.E
Quant Time: Feb 17 07:42:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.04	21712	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	389875610	896675.214 ug/mL

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

```
File        :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18228.D
Operator    : AC
Acquired    : 15 Feb 2006  10:18 am using AcqMethod FRNC1D.M
Instrument :   PAH-1
Sample Name: IB102130603
Misc Info  :
Vial Number: 77
```



Sequence Name: C:\MSDChem\1\sequence\S1021301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB13\

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:

2/15/06

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

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

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P18176	FRNC1D	ALK STD
5)	Sample	1	P18177	FRNC1D	PAH STD
6)	RearSamp	52	P18178	FRNC1D	C1021301-AFID
7)	Sample	2	P18179	FRNC1D	C1021301 PASS
8)	RearSamp	53	P18180	FRNC1D	~~ANS1021301-AFID~~ TS021506AWS02 2/15/06 RPR
9)	Sample	3	P18181	FRNC1D	ANS1021301
10)	RearSamp	54	P18182	FRNC1D	DCM-AFID
11)	Sample	4	P18183	FRNC1D	DCM
12)	RearSamp	55	P18184	FRNC1D	~~DCM-AFID~~ IB102130601 2/15/06 RPR
13)	Sample	5	P18185	FRNC1D	SS020606LCS04 ✓
14)	RearSamp	56	P18186	FRNC1D	SS020606LCS04-AFID
15)	Sample	6	P18187	FRNC1D	C1021302 not needed
16)	RearSamp	57	P18188	FRNC1D	C1021302-AFID
17)	Sample	7	P18189	FRNC1D	0602017-01 ✓
18)	RearSamp	58	P18190	FRNC1D	DCM-AFID
[illegible])	Sample	8	P18191	FRNC1D	0602017-01D ✓
[illegible])	RearSamp	59	P18192	FRNC1D	ALUMINA CHECK-AFID
21)	Sample	9	P18193	FRNC1D	0602017-02 ✓
22)	RearSamp	60	P18194	FRNC1D	SO020906B23-AFID ①
23)	Sample	10	P18195	FRNC1D	C1021303 PASS
24)	RearSamp	61	P18196	FRNC1D	SO020906LCS17-AFID ①
25)	Sample	11	P18197	FRNC1D	DCM
26)	RearSamp	62	P18198	FRNC1D	SO020906LCS15-AFID ①
27)	Sample	25	P18199	FRNC1D	DCM
28)	Pause				
29)	RearSamp	63	P18200	FRNC1D	0602017-01-AFID ①
30)	Sample	12	P18201	FRNC1D	SO020906B23 ✓
31)	Pause				
32)	RearSamp	64	P18202	FRNC1D	DCM
33)	Sample	13	P18203	FRNC1D	0602017-01-RE ~~see~~ rerun
34)	Pause				
35)	RearSamp	64	P18203A	FRNC1D	DCM
36)	Sample	13	P18203B	FRNC1D	0602017-01-RE
37)	RearSamp	65	P18204	FRNC1D	DCM
38)	Sample	14	P18205	FRNC1D	0602017-01D-RE ✓
39)	RearSamp	66	P18206	FRNC1D	DCM
40)	Sample	15	P18207	FRNC1D	0602017-02-RE ✓
41)	RearSamp	67	P18208	FRNC1D	DCM-AFID
42)	Sample	16	P18209	FRNC1D	SO020906LCS17 ✓
43)	RearSamp	68	P18210	FRNC1D	DCM-AFID

✓ run used

① Rerun FID contam. see next pg 2/22/06

MS 2/15/06

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 ✓

Last Modified: Tue Feb 14 13:58:12 2006

Sequence Name: O:\Forensics\Data\PAH1\February06\FEB13.SEC\S1021301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	17	P18211	FRNC1D	SO020906LCSD15
45)	RearSamp	69	P18212	FRNC1D	DCM-AFID
46)	Sample	18	P18213	FRNC1D	C1021304
47)	RearSamp	70	P18214	FRNC1D	DCM-AFID
48)	Sample	19	P18215	FRNC1D	0602017-01
49)	RearSamp	71	P18216	FRNC1D	DCM-AFID
50)	Sample	20	P18217	FRNC1D	0602017-01D
51)	RearSamp	72	P18218	FRNC1D	DCM-AFID
52)	Sample	21	P18219	FRNC1D	0602017-02
53)	RearSamp	73	P18220	FRNC1D	DCM-AFID
54)	Sample	22	P18221	FRNC1D	0602017-01-RE
55)	RearSamp	74	P18222	FRNC1D	DCM CHECK
56)	Sample	23	P18223	FRNC1D	C1021305
57)	RearSamp	75	P18224	FRNC1D	BBF CONTAMINATION CHECK
58)	Sample	23	P18225	FRNC1D	
59)	RearSamp	76	P18226	FRNC1D	C1021401-AFID PASS 2/14/06
60)	Sample	23	P18227	FRNC1D	
61)	Pause				
62)	RearSamp	77	P18228	FRNC1D	~~DCM-AFID~~ IB102130603 RPR 2/17/06
63)	Sample	25	P18229	FRNC1D	C1021501
64)	RearSamp	78	P18230	FRNC1D	SO020906B23-AFID
65)	Sample	25	P18231	FRNC1D	
66)	RearSamp	79	P18232	FRNC1D	SO020906LCS17-AFID
67)	Sample	25	P18233	FRNC1D	
68)	RearSamp	80	P18234	FRNC1D	~~SO020906LCSD17-AFID~~ SO020906LCSD15-AFID 2/17/06 RPR
69)	Sample	25	P18235	FRNC1D	
70)	RearSamp	81	P18236	FRNC1D	0602017-01-AFID
71)	Sample	25	P18237	FRNC1D	
72)	RearSamp	82	P18238	FRNC1D	0602017-01D-AFID
73)	Sample	25	P18239	FRNC1D	
74)	RearSamp	83	P18240	FRNC1D	0602017-02-AFID
75)	Sample	25	P18241	FRNC1D	
76)	RearSamp	84	P18242	FRNC1D	C1021402-AFID PASS 2/14/06
77)	Sample	25	P18243	FRNC1D	
78)	RearSamp	85	P18244	FRNC1D	DCM-AFID IB102130602 2/14/06
79)	Sample	25	P18245	FRNC1D	
80)	RearSamp	86	P18246	FRNC1D	TS021306B04-AFID
81)	Sample	25	P18247	FRNC1D	
82)	RearSamp	87	P18248	FRNC1D	TS021306LCS02-AFID
83)	Sample	25	P18249	FRNC1D	
84)	RearSamp	88	P18250	FRNC1D	TS021306LCSD02-AFID
85)	Sample	25	P18251	FRNC1D	
86)	RearSamp	89	P18252	FRNC1D	0602038-01-AFID
87)	Sample	25	P18253	FRNC1D	
88)	RearSamp	90	P18254	FRNC1D	C1021403-AFID PASS 2/14/06
89)	Sample	25	P18255	FRNC1D	
90)	RearSamp	91	P18256	FRNC1D	DCM-AFID
91)	Sample	25	P18257	FRNC1D	

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: **0602017**
Lab ID: **SO020906B23**
Date Analyzed: **02/15/06 11:53**

Client ID	Lab ID	Date/Time Analyzed
LCS	SO020906LCS17	02/15/06 13:32
LCSD	SO020906LCSD15	02/15/06 15:13
CGMW-07I	0602017-01	02/15/06 16:49
CGMW-07I	0602017-01 D	02/15/06 18:26
CGMW-08I	0602017-02	02/15/06 20:02

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

10/21/05

		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)

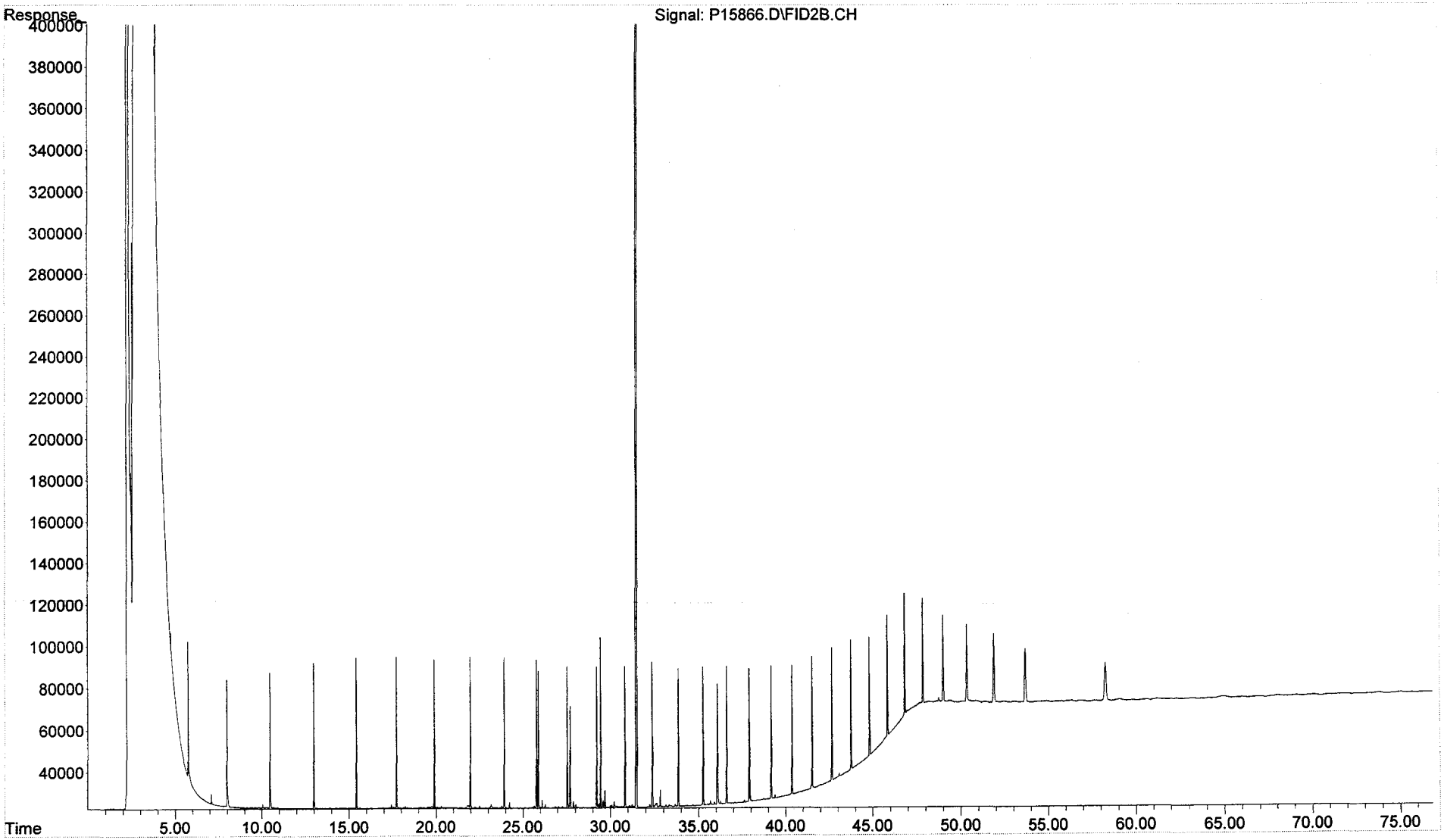
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15866.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 5:25 pm
Operator : AC
Sample : I1100501-AFID
Misc : WHAB29
ALS Vial : 54 Sample Multiplier: 1

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.50	59645108	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.46	1466887	1.136 ug/mL
Spiked Amount 50.000 Range	50 - 130	Recovery =	2.27%#
24) s d50-Tetracosane	36.07	1633831	1.417 ug/mLm
Spiked Amount 50.000 Range	50 - 130	Recovery =	2.83%#
Target Compounds			
2) t n-Octane (C8)	5.76f	961986	0.936 ug/mLm
3) t n-Nonane (C9)	7.99	1132015	1.028 ug/mL
4) t n-Decane (C10)	10.48	1155072	1.033 ug/mLm
5) t n-Undecane (C11)	13.00	1173119	1.045 ug/mLm
6) t n-Dodecane (C12)	15.42	1177197	1.032 ug/mLm
7) t n-Tridecane (C13)	17.73	1196618	1.041 ug/mLm
9) t n-Tetradecane (C14)	19.91	1219535	1.045 ug/mLm
11) t n-Pentadecane (C15)	21.98	1253265	1.065 ug/mLm
12) t n-Hexadecane (C16)	23.93	1274311	1.078 ug/mLm
14) t n-Heptadecane (C17)	25.79	1298169	1.086 ug/mLm
15) t Pristane	25.90	1235036	1.082 ug/mLm
16) t n-Octadecane (C18)	27.55	1294491	1.079 ug/mL
17) t Phytane	27.71	1277504	1.075 ug/mL
18) t n-Nonadecane (C19)	29.24	1282336	1.080 ug/mL
20) t n-Eicosane (C20)	30.84	1283179	1.085 ug/mL
21) t n-Heneicosane (C21)	32.37	1322085	1.085 ug/mLm
22) t n-Docosane (C22)	33.84f	1307258	1.084 ug/mLm
23) t n-Tricosane (C23)	35.25	1316106	1.084 ug/mLm
25) t n-Tetracosane (C24)	36.61	1352536	1.102 ug/mL
26) t n-Pentacosane (C25)	37.91	1425786	1.163 ug/mLm
27) t n-Hexacosane (C26)	39.16	1317424	1.091 ug/mLm
28) t n-Heptacosane (C27)	40.37	1306656	1.086 ug/mLm
29) t n-Octacosane (C28)	41.54	1342650	1.103 ug/mLm
30) t n-Nonacosane (C29)	42.66	1366537	1.096 ug/mLm
31) t n-Triacontane (C30)	43.75	1325208	1.084 ug/mLm
32) t n-Hentriacontane (C31)	44.81	1274172	1.076 ug/mLm
33) t n-Dotriacontane (C32)	45.83	1291994	1.087 ug/mLm
34) t n-Tritriacontane (C33)	46.83	1282666	1.064 ug/mLm
35) t n-tetratriacontane (C34)	47.85	1311738	1.079 ug/mLm
36) t n-Pentatriacontane (C35)	49.02	1262402	1.079 ug/mLm
37) t n-Hexatriacontane (C36)	50.35	1322662	1.106 ug/mLm
38) t n-Heptatriacontane (C37)	51.88	1439482	1.125 ug/mL
39) t n-Octatriacontane (C38)	53.68	1321938	1.096 ug/mLm
41) t n-Tetracontane (C40)	58.28	1341970	1.134 ug/mLm

File :C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\P15866.D
Operator : AC
Acquired : 05 Oct 2005 5:25 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100501-AFID
Misc Info : WHAB29
Vial Number: 54



Quantitation Report (QT Reviewed)

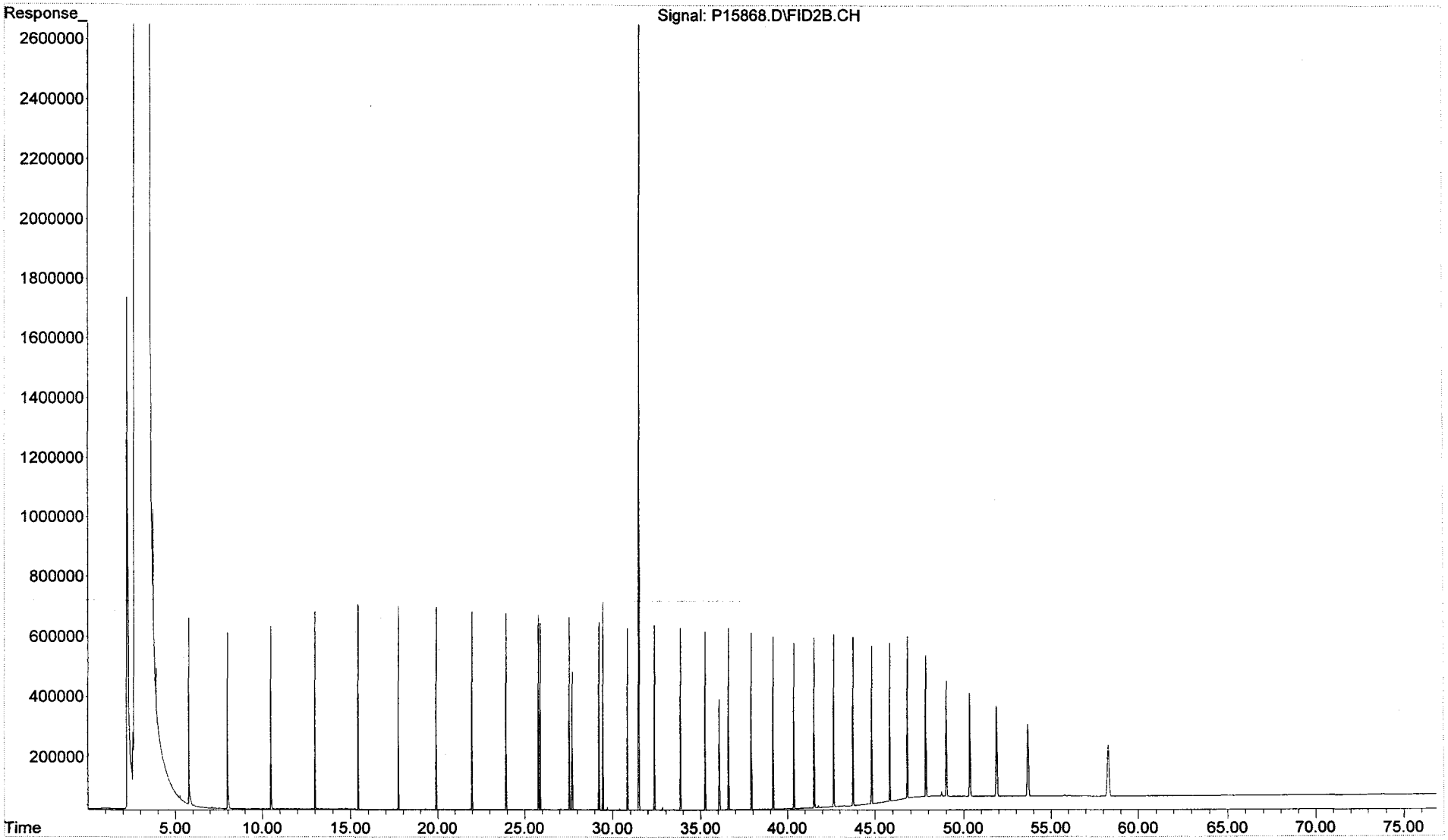
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15868.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 7:02 pm
Operator : AC
Sample : I1100502-AFID
Misc : WHAB30
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:13:37 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:07:37 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	58512810	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.47	12641342	9.966 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 19.93%#
24) s	d50-Tetracosane	36.08	10600586	9.339 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 18.68%#
	Target Compounds			
2) t	n-Octane (C8)	5.77f	9591339	9.752 ug/mLm
3) t	n-Nonane (C9)	8.00	10498459	9.810 ug/mL
4) t	n-Decane (C10)	10.49	10723181	9.826 ug/mLm
5) t	n-Undecane (C11)	13.00	10830002	9.859 ug/mLm
6) t	n-Dodecane (C12)	15.43	11057060	9.916 ug/mLm
7) t	n-Tridecane (C13)	17.74	11218029	9.969 ug/mLm
9) t	n-Tetradecane (C14)	19.92	11427634	10.015 ug/mLm
11) t	n-Pentadecane (C15)	21.98	11564851	10.029 ug/mL
12) t	n-Hexadecane (C16)	23.94	11678982	10.049 ug/mLm
14) t	n-Heptadecane (C17)	25.80	11824086	10.061 ug/mLm
15) t	Pristane	25.90	11330485	10.100 ug/mLm
16) t	n-Octadecane (C18)	27.56	11874715	10.093 ug/mL
17) t	Phytane	27.72	11821363	10.132 ug/mLm
18) t	n-Nonadecane (C19)	29.24	11812345	10.116 ug/mLm
20) t	n-Eicosane (C20)	30.85	11781964	10.126 ug/mLm
21) t	n-Heneicosane (C21)	32.38	12145610	10.118 ug/mL
22) t	n-Docosane (C22)	33.85f	12005057	0.950 ug/mLm
23) t	n-Tricosane (C23)	35.26	12085831	10.125 ug/mL
25) t	n-Tetracosane (C24)	36.61	12189791	10.092 ug/mLm
26) t	n-Pentacosane (C25)	37.92	12158420	9.975 ug/mLm
27) t	n-Hexacosane (C26)	39.17	12060114	10.142 ug/mLm
28) t	n-Heptacosane (C27)	40.38	12032957	10.155 ug/mLm
29) t	n-Octacosane (C28)	41.54	12196722	10.138 ug/mLm
30) t	n-Nonacosane (C29)	42.67	12473008	10.146 ug/mL
31) t	n-Triacontane (C30)	43.76	12252816	10.169 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	11869820	10.185 ug/mL
33) t	n-Dotriacontane (C32)	45.84	11960160	10.186 ug/mLm
34) t	n-Tritriacontane (C33)	46.83	12138837	10.236 ug/mLm
35) t	n-tetratriacontane (C34)	47.86	12298617	10.242 ug/mLm
36) t	n-Pentatriacontane (C35)	49.03	11832639	10.243 ug/mLm
37) t	n-Hexatriacontane (C36)	50.36	12132652	10.225 ug/mL
38) t	n-Heptatriacontane (C37)	51.90	12938023	10.174 ug/mL
39) t	n-Octatriacontane (C38)	53.69	12243108	10.251 ug/mLm
41) t	n-Tetracontane (C40)	58.30	12077082	10.248 ug/mL

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15868.D
Operator : AC
Acquired : 05 Oct 2005 7:02 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100502-AFID
Misc Info : WHAB30
Vial Number: 55



Quantitation Report (QT Reviewed)

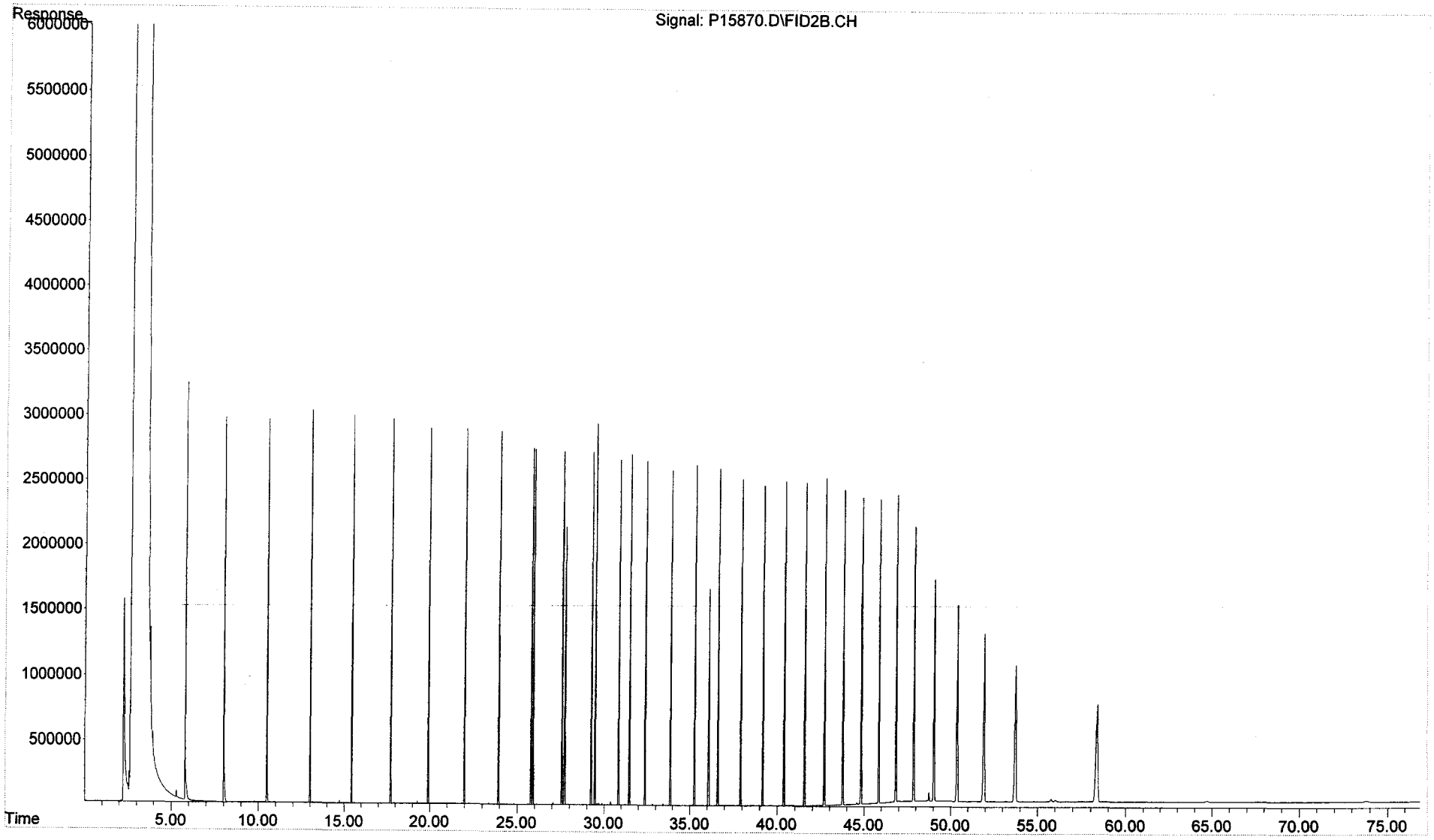
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15870.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 8:37 pm
Operator : AC
Sample : I1100503-AFID
Misc : WHAB31
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:18:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:15:17 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.50	59634355	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	62270271	48.155 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 96.31%
24) s	d50-Tetracosane	36.10	51941629	44.865 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 89.73%
	Target Compounds			
2) t	n-Octane (C8)	5.80	48029027	48.471 ug/mLm
3) t	n-Nonane (C9)	8.02	52246830	48.231 ug/mL
4) t	n-Decane (C10)	10.51	53586773	48.475 ug/mLm
5) t	n-Undecane (C11)	13.02	54155791	48.595 ug/mLm
6) t	n-Dodecane (C12)	15.45	55435782	48.969 ug/mL
7) t	n-Tridecane (C13)	17.76	56082608	49.037 ug/mLm
9) t	n-Tetradecane (C14)	19.94	56897814	49.039 ug/mL
11) t	n-Pentadecane (C15)	22.00	57257602	48.800 ug/mL
12) t	n-Hexadecane (C16)	23.96	57598544	48.675 ug/mL
14) t	n-Heptadecane (C17)	25.82	58193939	48.603 ug/mL
15) t	Pristane	25.93	55683946	48.723 ug/mL
16) t	n-Octadecane (C18)	27.58	58446412	48.754 ug/mL
17) t	Phytane	27.75	58043709	48.818 ug/mL
18) t	n-Nonadecane (C19)	29.27	58140407	48.834 ug/mL
20) t	n-Eicosane (C20)	30.87	57889024	48.802 ug/mL
21) t	n-Heneicosane (C21)	32.40	59789282	48.853 ug/mL
22) t	n-Docosane (C22)	33.87	58983404	48.789 ug/mL
23) t	n-Tricosane (C23)	35.28	59391641	48.802 ug/mL
25) t	n-Tetracosane (C24)	36.64	59836684	48.580 ug/mL
26) t	n-Pentacosane (C25)	37.94	59689553	48.016 ug/mL
27) t	n-Hexacosane (C26)	39.19	59206913	48.796 ug/mL
28) t	n-Heptacosane (C27)	40.40	59061691	48.850 ug/mL
29) t	n-Octacosane (C28)	41.57	59812490	48.701 ug/mLm
30) t	n-Nonacosane (C29)	42.70	61236479	48.800 ug/mL
31) t	n-Triacontane (C30)	43.79	60258513	48.989 ug/mL
32) t	n-Hentriacontane (C31)	44.84	58452135	49.127 ug/mL
33) t	n-Dotriacontane (C32)	45.86	58925133	49.130 ug/mLm
34) t	n-Tritriacontane (C33)	46.85	59891857	49.445 ug/mLm
35) t	n-tetratriacontane (C34)	47.89	60797520	49.497 ug/mL
36) t	n-Pentatriacontane (C35)	49.06	58493593	49.541 ug/mL
37) t	n-Hexatriacontane (C36)	50.40	59965402	49.393 ug/mL
38) t	n-Heptatriacontane (C37)	51.95	64168897	49.328 ug/mL
39) t	n-Octatriacontane (C38)	53.75	60781159	49.743 ug/mLm
41) t	n-Tetracontane (C40)	58.37	59895920	49.594 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15870.D
Operator : AC
Acquired : 05 Oct 2005 8:37 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100503-AFID
Misc Info : WHAB31
Vial Number: 56



Quantitation Report (QT Reviewed)

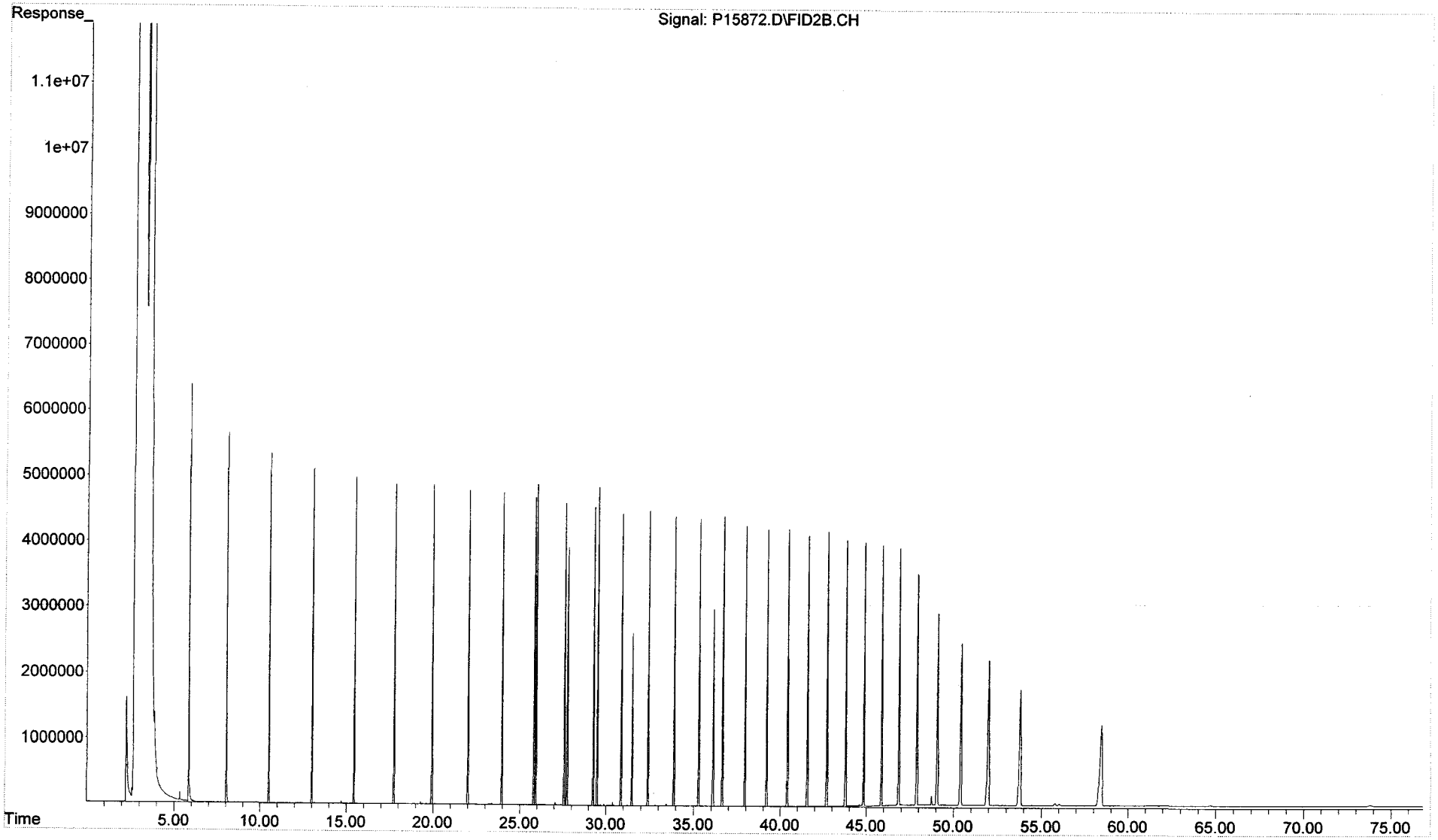
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15872.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 10:13 pm
Operator : AC
Sample : I1100504-AFID
Misc : WHAB32
ALS Vial : 57 Sample Multiplier: 1

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

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.51	59738614	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.52	123784026	95.563 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 191.13%#
24) s	d50-Tetracosane	36.11	102765324	88.576 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 177.15%#
	Target Compounds			
2) t	n-Octane (C8)	5.84	95213258	97.028 ug/mL
3) t	n-Nonane (C9)	8.05	102781405	95.337 ug/mLm
4) t	n-Decane (C10)	10.53	105828639	96.006 ug/mLm
5) t	n-Undecane (C11)	13.03	107262086	96.383 ug/mLm
6) t	n-Dodecane (C12)	15.46	109922584	97.125 ug/mLm
7) t	n-Tridecane (C13)	17.77	111269393	97.224 ug/mLm
9) t	n-Tetradecane (C14)	19.95	112957898	97.245 ug/mLm
11) t	n-Pentadecane (C15)	22.02	113904133	96.961 ug/mLm
12) t	n-Hexadecane (C16)	23.98	114781277	96.873 ug/mLm
14) t	n-Heptadecane (C17)	25.84	115955930	96.694 ug/mLm
15) t	Pristane	25.95	110888857	96.889 ug/mLm
16) t	n-Octadecane (C18)	27.60	116514868	97.015 ug/mLm
17) t	Phytane	27.77	115535600	97.017 ug/mLm
18) t	n-Nonadecane (C19)	29.29	115911503	97.174 ug/mLm
20) t	n-Eicosane (C20)	30.89	115449228	97.123 ug/mLm
21) t	n-Heneicosane (C21)	32.42	119222290	97.208 ug/mLm
22) t	n-Docosane (C22)	33.89	117660808	97.131 ug/mLm
23) t	n-Tricosane (C23)	35.30	118506145	97.186 ug/mLm
25) t	n-Tetracosane (C24)	36.66	119466359	96.808 ug/mL
26) t	n-Pentacosane (C25)	37.96	119085255	95.589 ug/mLm
27) t	n-Hexacosane (C26)	39.21	118092843	97.108 ug/mL
28) t	n-Heptacosane (C27)	40.42	117826940	97.244 ug/mL
29) t	n-Octacosane (C28)	41.59	119359729	96.965 ug/mLm
30) t	n-Nonacosane (C29)	42.72	122129756	97.088 ug/mL
31) t	n-Triacontane (C30)	43.81	120202182	97.473 ug/mL
32) t	n-Hentriacontane (C31)	44.86	116492164	97.639 ug/mL
33) t	n-Dotriacontane (C32)	45.89	117329937	97.516 ug/mLm
34) t	n-Tritriacontane (C33)	46.88	119115966	98.013 ug/mLm
35) t	n-tetratriacontane (C34)	47.92	120764189	97.896 ug/mLm
36) t	n-Pentatriacontane (C35)	49.09	116069115	97.894 ug/mLm
37) t	n-Hexatriacontane (C36)	50.44	118986963	97.518 ug/mLm
38) t	n-Heptatriacontane (C37)	51.99	127310647	97.338 ug/mLm
39) t	n-Octatriacontane (C38)	53.80	120446610	97.994 ug/mLm
41) t	n-Tetracontane (C40)	58.46	118679810	97.565 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15872.D
Operator : AC
Acquired : 05 Oct 2005 10:13 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100504-AFID
Misc Info : WHAB32
Vial Number: 57



Quantitation Report (QT Reviewed)

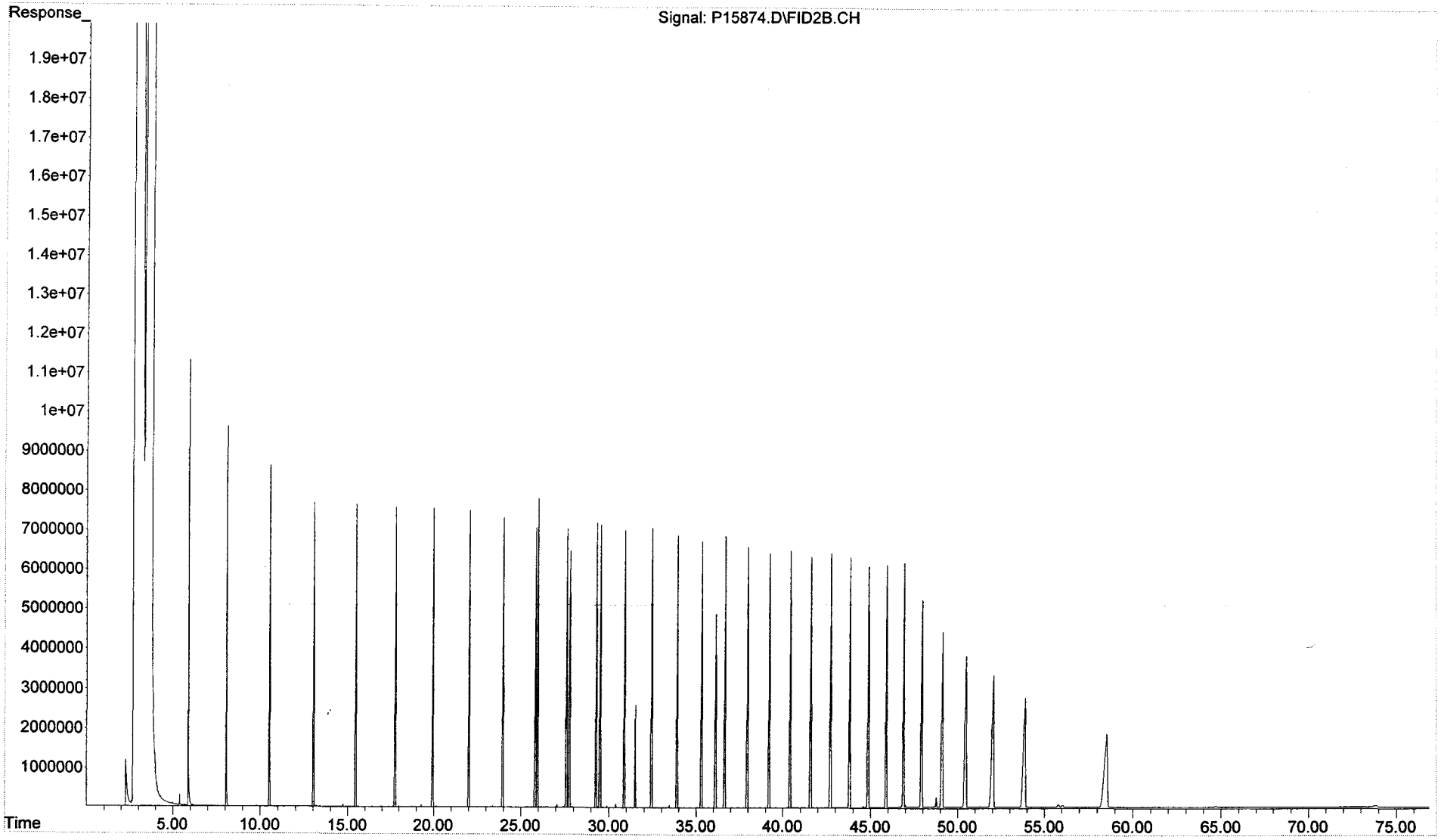
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15874.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 11:47 pm
Operator : AC
Sample : I1100505-AFID
Misc : WHAB33
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 10 21:27:28 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:24:19 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.51	58603173	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.55	241133077	189.819 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 379.64%#
24) s d50-Tetracosane	36.14	199264629	175.235 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	= 350.47%#
Target Compounds			
2) t n-Octane (C8)	5.91f	188106199	193.077 ug/mLm
3) t n-Nonane (C9)	8.09	202095631	190.139 ug/mLm
4) t n-Decane (C10)	10.56	208061331	191.696 ug/mLm
5) t n-Undecane (C11)	13.06	210776366	192.644 ug/mLm
6) t n-Dodecane (C12)	15.49	215654778	193.955 ug/mLm
7) t n-Tridecane (C13)	17.80	217880200	193.979 ug/mLm
9) t n-Tetradecane (C14)	19.98	220715268	193.647 ug/mLm
11) t n-Pentadecane (C15)	22.05	222156659	192.733 ug/mLm
12) t n-Hexadecane (C16)	24.00	223476831	192.247 ug/mLm
14) t n-Heptadecane (C17)	25.86	225671657	191.915 ug/mLm
15) t Pristane	25.98	215367907	191.861 ug/mLm
16) t n-Octadecane (C18)	27.63	226439101	192.251 ug/mL
17) t Phytane	27.80	224131538	191.910 ug/mL
18) t n-Nonadecane (C19)	29.32	224970843	192.413 ug/mL
20) t n-Eicosane (C20)	30.92	223880202	192.088 ug/mL
21) t n-Heneicosane (C21)	32.45	231304721	192.356 ug/mL
22) t n-Docosane (C22)	33.92	228237623	18.041 ug/mL
23) t n-Tricosane (C23)	35.33	229853494	192.197 ug/mL
25) t n-Tetracosane (C24)	36.69	231618014	191.375 ug/mL
26) t n-Pentacosane (C25)	37.99	230257861	188.520 ug/mL
27) t n-Hexacosane (C26)	39.24	228835118	192.044 ug/mL
28) t n-Heptacosane (C27)	40.45	228244100	192.224 ug/mL
29) t n-Octacosane (C28)	41.62	231104479	191.673 ug/mLm
30) t n-Nonacosane (C29)	42.75	236435398	191.874 ug/mL
31) t n-Triacontane (C30)	43.84	232590130	192.562 ug/mL
32) t n-Hentriacontane (C31)	44.90	225434305	192.958 ug/mL
33) t n-Dotriacontane (C32)	45.92	226936670	192.745 ug/mL
34) t n-Tritriacontane (C33)	46.91	230463854	193.762 ug/mLm
35) t n-tetratriacontane (C34)	47.96	233629218	193.923 ug/mLm
36) t n-Pentatriacontane (C35)	49.14	224668006	193.792 ug/mLm
37) t n-Hexatriacontane (C36)	50.49	230449861	193.411 ug/mLm
38) t n-Heptatriacontane (C37)	52.07f	246520015	192.968 ug/mLm
39) t n-Octatriacontane (C38)	53.89f	233388724	194.475 ug/mLm
41) t n-Tetracontane (C40)	58.57f	230023588	194.013 ug/mLm

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15874.D
Operator : AC
Acquired : 05 Oct 2005 11:47 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: I1100505-AFID
Misc Info : WHAB33
Vial Number: 58



Quantitation Report (QT Reviewed)

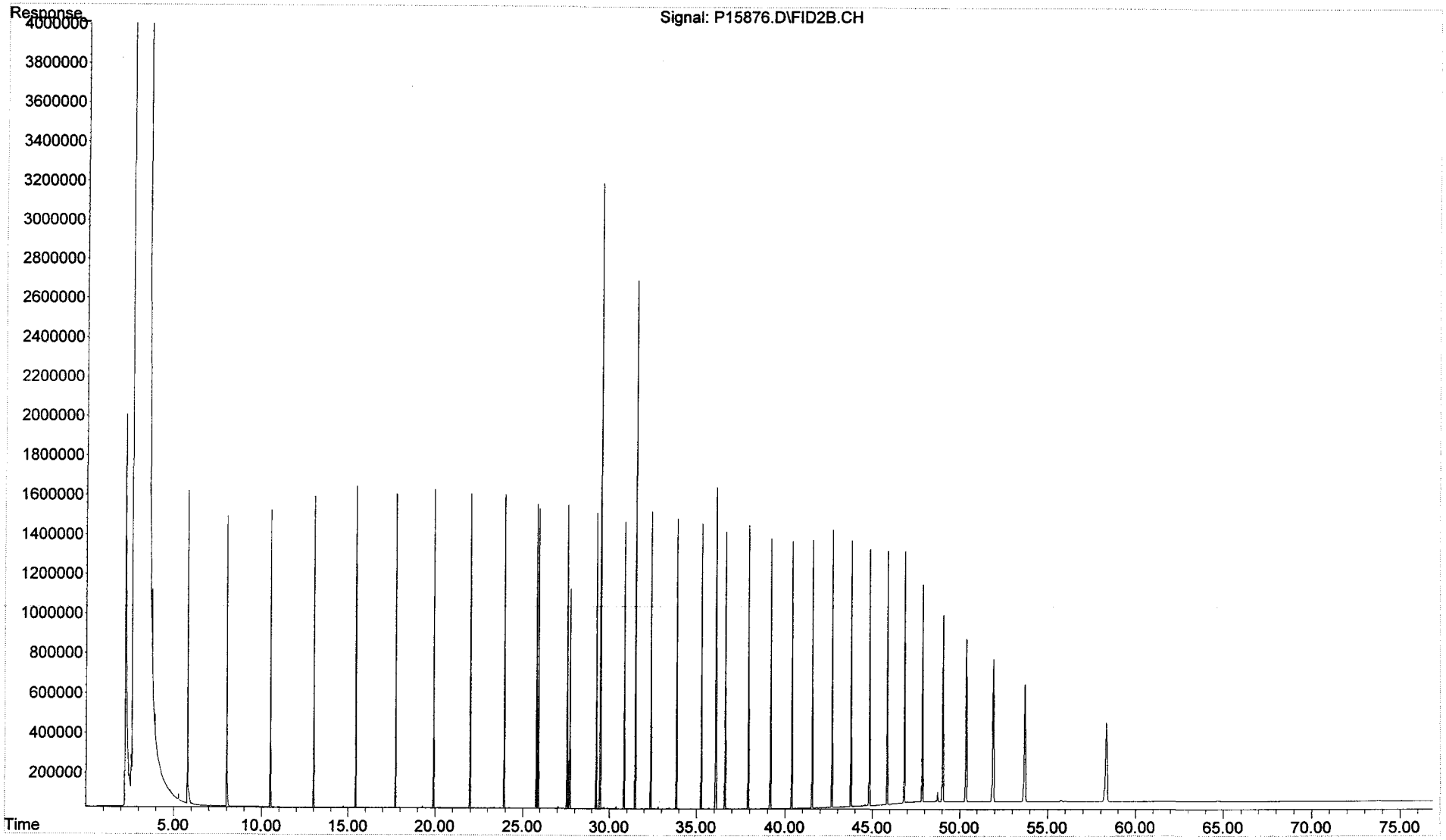
Data Path : C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\
Data File : P15876.D
Signal(s) : FID2B.CH
Acq On : 06 Oct 2005 1:20 am
Operator : AC
Sample : Q1100501-AFID
Misc : WHAB34
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 14 17:48:23 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.50	59317706	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.49	69329670	53.923 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 107.85%	
24) s d50-Tetracosane	36.09	51829846	44.978 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 89.96%	
Target Compounds			
2) t n-Octane (C8)	5.79	23829230	24.916 ug/mL 99.7 %
3) t n-Nonane (C9)	8.01	25967905	24.624 ug/mLm
4) t n-Decane (C10)	10.50	26642537	24.643 ug/mLm
5) t n-Undecane (C11)	13.01	26920944	24.591 ug/mLm
6) t n-Dodecane (C12)	15.44	27543858	24.692 ug/mLm
7) t n-Tridecane (C13)	17.74	27946438	24.729 ug/mLm
9) t n-Tetradecane (C14)	19.92	28440857	24.766 ug/mLm
11) t n-Pentadecane (C15)	21.99	28749024	24.727 ug/mLm
12) t n-Hexadecane (C16)	23.94	29010740	24.720 ug/mLm
14) t n-Heptadecane (C17)	25.80	29343979	24.696 ug/mLm
15) t Pristane	25.91	28116497	24.769 ug/mLm
16) t n-Octadecane (C18)	27.57	29501306	24.762 ug/mLm
17) t Phytane	27.73	29343185	24.845 ug/mLm
18) t n-Nonadecane (C19)	29.25	29361033	24.803 ug/mLm
20) t n-Eicosane (C20)	30.85	29253994	24.785 ug/mLm
21) t n-Heneicosane (C21)	32.39	30178589	24.777 ug/mLm
22) t n-Docosane (C22)	33.86	29823066	24.795 ug/mLm
23) t n-Tricosane (C23)	35.26	30040715	24.804 ug/mL
25) t n-Tetracosane (C24)	36.62	30254682	24.679 ug/mLm
26) t n-Pentacosane (C25)	37.92	30252551	24.453 ug/mLm 97.8 %
27) t n-Hexacosane (C26)	39.17	29926696	24.768 ug/mLm
28) t n-Heptacosane (C27)	40.38	29867556	24.809 ug/mLm
29) t n-Octacosane (C28)	41.55	30257088	24.734 ug/mLm
30) t n-Nonacosane (C29)	42.68	30946072	24.753 ug/mLm
31) t n-Triacontane (C30)	43.77	30442466	24.833 ug/mL
32) t n-Hentriacontane (C31)	44.82	29519658	24.886 ug/mL
33) t n-Dotriacontane (C32)	45.84	29714031	24.831 ug/mLm
34) t n-Tritriacontane (C33)	46.84	30199051	24.971 ug/mLm
35) t n-tetratriacontane (C34)	47.87	30588393	24.900 ug/mLm
36) t n-Pentatriacontane (C35)	49.04	29447904	24.921 ug/mLm
37) t n-Hexatriacontane (C36)	50.37	30202985	24.813 ug/mLm
38) t n-Heptatriacontane (C37)	51.91	32061859	24.544 ug/mLm
39) t n-Octatriacontane (C38)	53.71	30583922	24.897 ug/mL
41) t n-Tetracontane (C40)	58.31	30158389	24.748 ug/mL

File :C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\P15876.D
Operator : AC
Acquired : 06 Oct 2005 1:20 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: Q1100501-AFID
Misc Info : WHAB34
Vial Number: 59



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15862.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 1:38 pm
Operator : AC
Sample : TO101705AWS01
Misc : !X WHAB40
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.51	61467439	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.50	77058252	57.838 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 115.68%
24) s	d50-Tetracosane	36.11	65286454	54.674 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 109.35%
	Target Compounds			
2) t	n-Octane (C8)	5.77	31610910	31.896 ug/mLm
3) t	n-Nonane (C9)	8.00	28798050	26.353 ug/mL — RF 2nd cu 10/18/05
4) t	n-Decane (C10)	10.50	28790402	25.698 ug/mLm
5) t	n-Undecane (C11)	13.01	27885870	24.582 ug/mLm
6) t	n-Dodecane (C12)	15.44	26532784	22.954 ug/mLm
7) t	n-Tridecane (C13)	17.75	27674278	23.632 ug/mLm
8) t	1380	19.42	6968228	5.856 ug/mL
9) t	n-Tetradecane (C14)	19.93	24867330	20.897 ug/mLm
10) t	1470	21.21	9432308	7.829 ug/mLm
11) t	n-Pentadecane (C15)	21.99	26467136	21.969 ug/mLm
12) t	n-Hexadecane (C16)	23.95	22947096	18.869 ug/mLm
13) t	1650	24.85	6837175	5.553 ug/mLm
14) t	n-Heptadecane (C17)	25.80	19606240	15.924 ug/mLm
15) t	Pristane	25.90	15123887	12.857 ug/mLm
16) t	n-Octadecane (C18)	27.57	17767739	14.392 ug/mLm
17) t	Phytane	27.73	12372781	10.110 ug/mLm
18) t	n-Nonadecane (C19)	29.25	18045978	14.711 ug/mLm
20) t	n-Eicosane (C20)	30.86	17910248	14.643 ug/mLm
21) t	n-Heneicosane (C21)	32.39	17175084	13.608 ug/mLm
22) t	n-Docosane (C22)	33.86	15579762	12.500 ug/mL
23) t	n-Tricosane (C23)	35.27	14062637	11.205 ug/mLm
25) t	n-Tetracosane (C24)	36.62	13687084	10.774 ug/mLm
26) t	n-Pentacosane (C25)	37.92	13503614	10.533 ug/mLm
27) t	n-Hexacosane (C26)	39.17	11280982	9.010 ug/mLm
28) t	n-Heptacosane (C27)	40.38	8995736	7.211 ug/mLm
29) t	n-Octacosane (C28)	41.55	6356096	5.014 ug/mLm
30) t	n-Nonacosane (C29)	42.67	6732194	5.197 ug/mLm
31) t	n-Triacontane (C30)	43.76	4936578	3.886 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	4704885	3.828 ug/mLm
33) t	n-Dotriacontane (C32)	45.84	3091860	2.493 ug/mLm
34) t	n-Tritriacontane (C33)	46.83	2589140	2.066 ug/mLm
35) t	n-tetratriacontane (C34)	47.86	2242026	1.761 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	2610459	2.132 ug/mLm
37) t	n-Hexatriacontane (C36)	50.36	1615213	1.281 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15862.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 1:38 pm
Operator : AC
Sample : TO101705AWS01
Misc : !X WHAB40
ALS Vial : 52 Sample Multiplier: 1

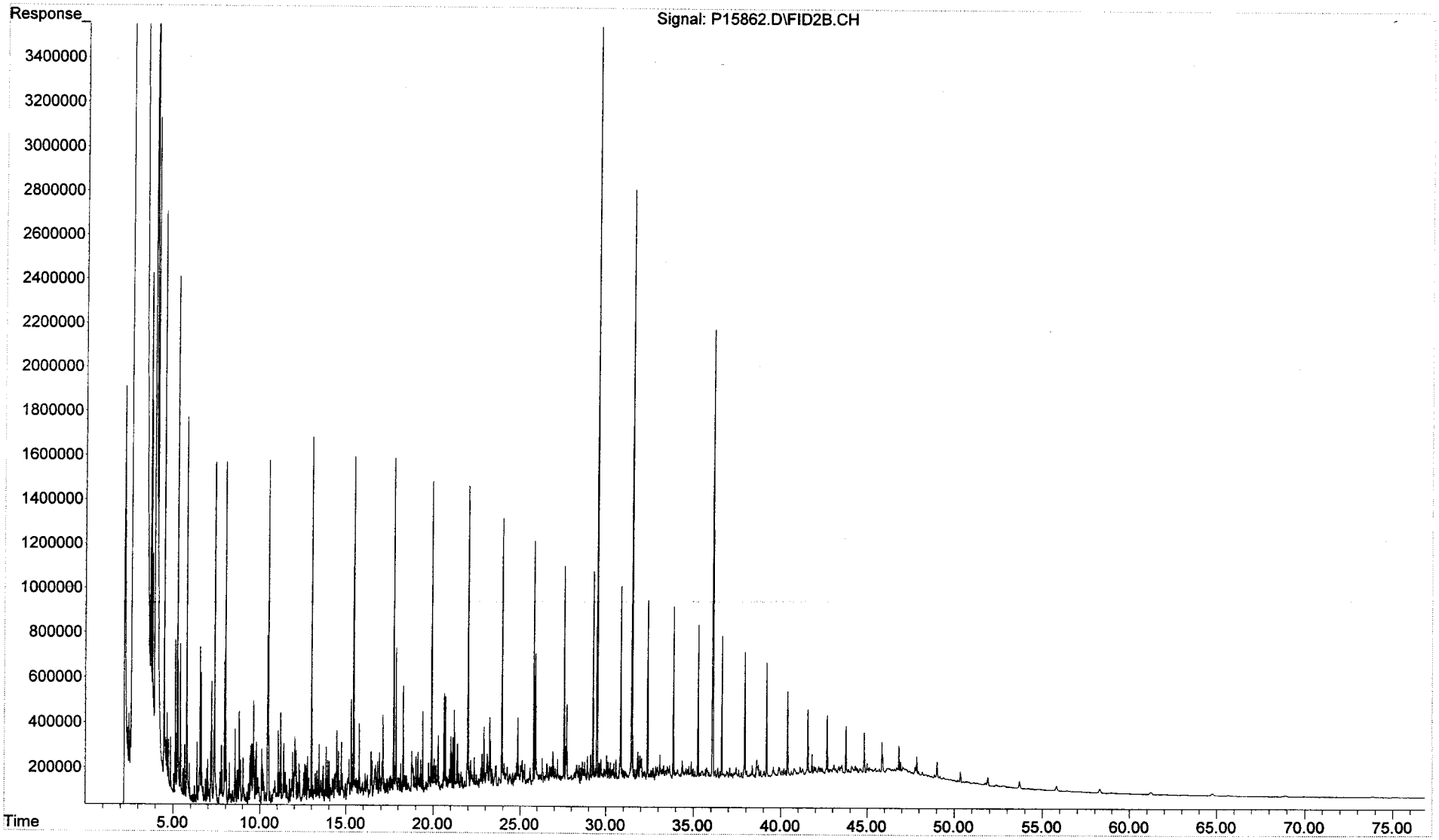
Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.90	1628785	1.203	ug/mLm
39)	t	n-Octatriacontane (C38)	53.70	1695478	1.332	ug/mLm
40)	t	n-Nonatriacontane (C39)	55.80	1205165	0.954	ug/mLm
41)	t	n-Tetracontane (C40)	58.29	1268324	1.004	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.94	5151183122	4184.811	ug/mL
44)	h	Total Resolved Hydrocarbon	37.93	1623832280	1319.198	ug/L

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

File :C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\P15862.D
Operator : AC
Acquired : 05 Oct 2005 1:38 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TO101705AWS01
Misc Info : !X WHAB40
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602017**
Lab ID: **C1021401**
Case: N/A SDG: N/A

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	46.17	7.7	25
n-Decane (C10)	50.00	47.77	4.5	25
n-Undecane (C11)	50.00	47.97	4.1	25
n-Dodecane (C12)	50.00	48.63	2.7	25
n-Tridecane (C13)	50.00	48.60	2.8	25
n-Tetradecane (C14)	50.00	48.74	2.5	25
n-Pentadecane (C15)	50.00	48.64	2.7	25
n-Hexadecane (C16)	50.00	48.60	2.8	25
n-Heptadecane (C17)	50.00	48.80	2.4	25
Pristane	50.00	48.89	2.2	25
n-Octadecane (C18)	50.00	48.98	2.0	25
Phytane	50.00	49.36	1.3	25
n-Nonadecane (C19)	50.00	49.15	1.7	25
n-Eicosane (C20)	50.00	49.54	0.9	25
n-Heneicosane (C21)	50.00	49.13	1.7	25
n-Docosane (C22)	50.00	47.76	4.5	25
n-Tricosane (C23)	50.00	49.29	1.4	25
n-Tetracosane (C24)	50.00	48.51	3.0	25
n-Pentacosane (C25)	50.00	48.36	3.3	25
n-Hexacosane (C26)	50.00	49.87	0.3	25
n-Heptacosane (C27)	50.00	49.39	1.2	25
n-Octacosane (C28)	50.00	49.34	1.3	25
n-Nonacosane (C29)	50.00	49.24	1.5	25
n-Triacontane (C30)	50.00	49.39	1.2	25
n-Hentriacontane (C31)	50.00	51.78	3.6	25
n-Dotriacontane (C32)	50.00	49.30	1.4	25
n-Tritriacontane (C33)	50.00	49.84	0.3	25
n-Tetratriacontane (C34)	50.00	49.62	0.8	25
n-Pentatriacontane (C35)	50.00	49.74	0.5	25
n-Hexatriacontane (C36)	50.00	49.61	0.8	25
n-Heptatriacontane (C37)	50.00	47.43	5.1	25
n-Octatriacontane (C38)	50.00	49.27	1.5	25
n-Tetracontane (C40)	50.00	47.84	4.3	25
ortho-Terphenyl	50.00	48.69	2.6	25
d50-Tetracosane	50.00	45.72	8.6	25

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

N/A - Not Applicable

02/17/06 08:40

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13.SEC\
Data File : P18226.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 8:39 am
Operator : AC
Sample : C1021401-AFID
Misc : ALK STD
ALS Vial : 76 Sample Multiplier: 1

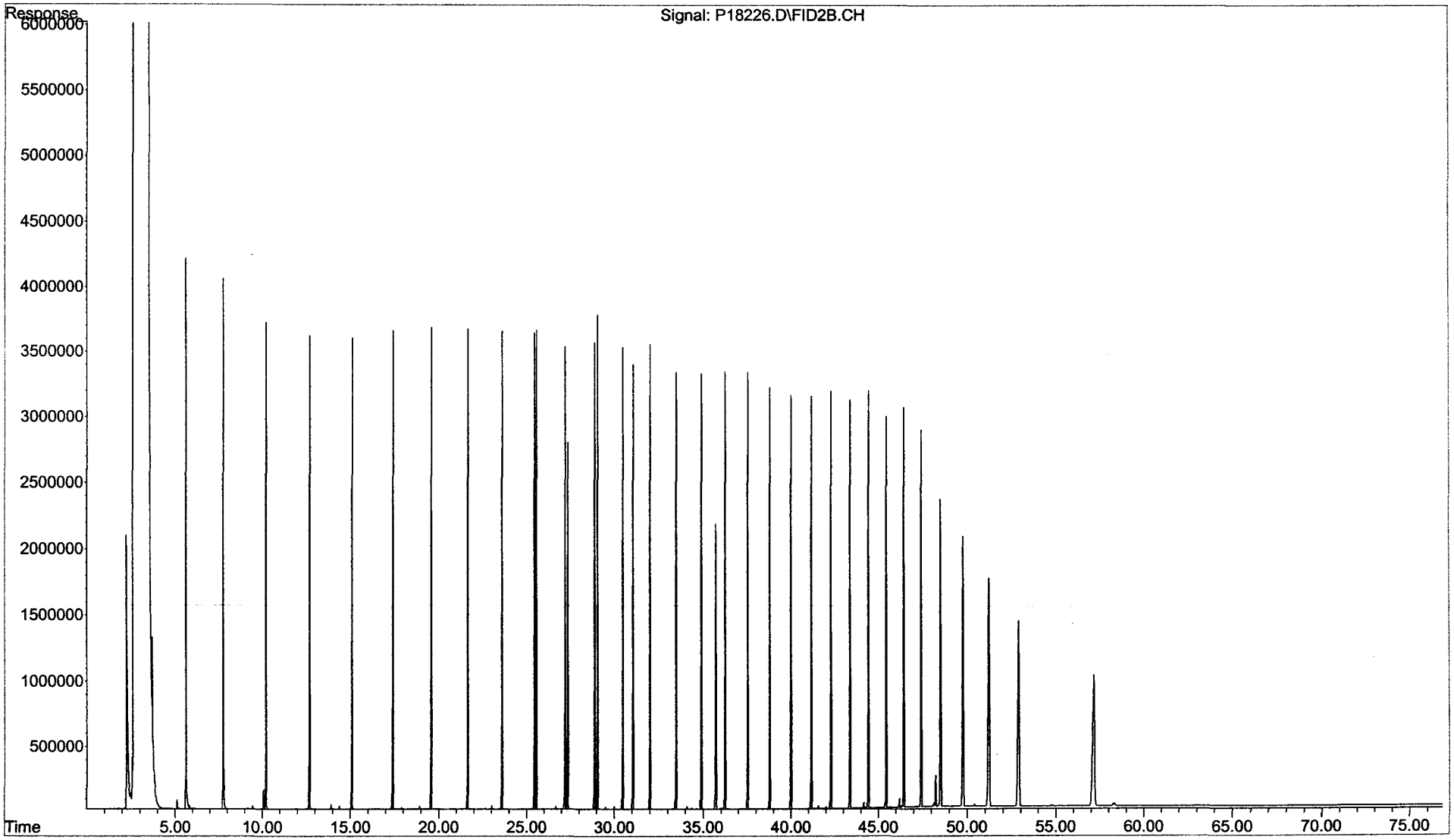
Integration File: SHCINT1.E
Quant Time: Feb 16 18:28:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

2/16/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.06	80937086	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.05	85418563	48.690 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	97.38%
24) s	d50-Tetracosane	35.70	71883382	45.718 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery =	91.44%
	Target Compounds			
2) t	n-Octane (C8)	5.60	57287556	43.900 ug/mL
3) t	n-Nonane (C9)	7.75	66439815	46.173 ug/mL
4) t	n-Decane (C10)	10.19	70468869	47.770 ug/mLm
5) t	n-Undecane (C11)	12.68	71650030	47.967 ug/mL
6) t	n-Dodecane (C12)	15.10	74014394	48.629 ug/mLm
7) t	n-Tridecane (C13)	17.40	74945170	48.603 ug/mLm
9) t	n-Tetradecane (C14)	19.57	76367487	48.737 ug/mL
11) t	n-Pentadecane (C15)	21.63	77163918	48.641 ug/mL
12) t	n-Hexadecane (C16)	23.58	77817911	48.597 ug/mL
14) t	n-Heptadecane (C17)	25.44	79122332	48.804 ug/mLm
15) t	Pristane	25.55	75717452	48.886 ug/mLm
16) t	n-Octadecane (C18)	27.20	79624815	48.982 ug/mL
17) t	Phytane	27.36	79534666	49.355 ug/mL
18) t	n-Nonadecane (C19)	28.88	79392929	49.152 ug/mLm
20) t	n-Eicosane (C20)	30.48	79781530	49.538 ug/mL
21) t	n-Heneicosane (C21)	32.01	81655921	49.134 ug/mL
22) t	n-Docosane (C22)	33.47	78378826	47.758 ug/mL
23) t	n-Tricosane (C23)	34.88	81454757	49.291 ug/mL
25) t	n-Tetracosane (C24)	36.23	81142272	48.508 ug/mL
26) t	n-Pentacosane (C25)	37.53	81626355	48.355 ug/mL
27) t	n-Hexacosane (C26)	38.78	82210468	49.865 ug/mL
28) t	n-Heptacosane (C27)	39.99	81138252	49.395 ug/mL
29) t	n-Octacosane (C28)	41.16	82354935	49.340 ug/mL
30) t	n-Nonacosane (C29)	42.28	84000260	49.242 ug/mL
31) t	n-Triacontane (C30)	43.37	82616278	49.391 ug/mL
32) t	n-Hentriacontane (C31)	44.43	83814523	51.785 ug/mL
33) t	n-Dotriacontane (C32)	45.45	80489527	49.296 ug/mL
34) t	n-Tritriacontane (C33)	46.44	82236566	49.836 ug/mL
35) t	n-tetratriacontane (C34)	47.42	83172834	49.620 ug/mLm
36) t	n-Pentatriacontane (C35)	48.52	80197221	49.740 ug/mLm
37) t	n-Hexatriacontane (C36)	49.77	82396289	49.611 ug/mLm
38) t	n-Heptatriacontane (C37)	51.21	84544641	47.433 ug/mL
39) t	n-Octatriacontane (C38)	52.88	82587263	49.272 ug/mLm
41) t	n-Tetracontane (C40)	57.14	79541474	47.837 ug/mLm

File :O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13.SEC\P18226.D
Operator : AC
Acquired : 15 Feb 2006 8:39 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021401-AFID
Misc Info : ALK STD
Vial Number: 76



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602017**
Lab ID: **C1021402**
Case: N/A SDG: N/A

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.02	4.0	25
n-Decane (C10)	50.00	47.98	4.0	25
n-Undecane (C11)	50.00	47.83	4.3	25
n-Dodecane (C12)	50.00	48.41	3.2	25
n-Tridecane (C13)	50.00	48.37	3.3	25
n-Tetradecane (C14)	50.00	48.48	3.0	25
n-Pentadecane (C15)	50.00	48.40	3.2	25
n-Hexadecane (C16)	50.00	48.35	3.3	25
n-Heptadecane (C17)	50.00	48.53	2.9	25
Pristane	50.00	48.62	2.8	25
n-Octadecane (C18)	50.00	48.72	2.6	25
Phytane	50.00	49.11	1.8	25
n-Nonadecane (C19)	50.00	48.91	2.2	25
n-Eicosane (C20)	50.00	49.29	1.4	25
n-Heneicosane (C21)	50.00	48.90	2.2	25
n-Docosane (C22)	50.00	47.59	4.8	25
n-Tricosane (C23)	50.00	49.05	1.9	25
n-Tetracosane (C24)	50.00	48.27	3.5	25
n-Pentacosane (C25)	50.00	48.13	3.7	25
n-Hexacosane (C26)	50.00	49.59	0.8	25
n-Heptacosane (C27)	50.00	49.12	1.8	25
n-Octacosane (C28)	50.00	49.06	1.9	25
n-Nonacosane (C29)	50.00	49.02	2.0	25
n-Triacontane (C30)	50.00	49.19	1.6	25
n-Hentriacontane (C31)	50.00	51.50	3.0	25
n-Dotriacontane (C32)	50.00	49.08	1.8	25
n-Tritriacontane (C33)	50.00	49.61	0.8	25
n-Tetratriacontane (C34)	50.00	49.40	1.2	25
n-Pentatriacontane (C35)	50.00	49.54	0.9	25
n-Hexatriacontane (C36)	50.00	49.35	1.3	25
n-Heptatriacontane (C37)	50.00	47.28	5.4	25
n-Octatriacontane (C38)	50.00	49.10	1.8	25
n-Tetracontane (C40)	50.00	48.76	2.5	25
ortho-Terphenyl	50.00	48.45	3.1	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

02/17/06 08:40

Quantitation Report (QT Reviewed)

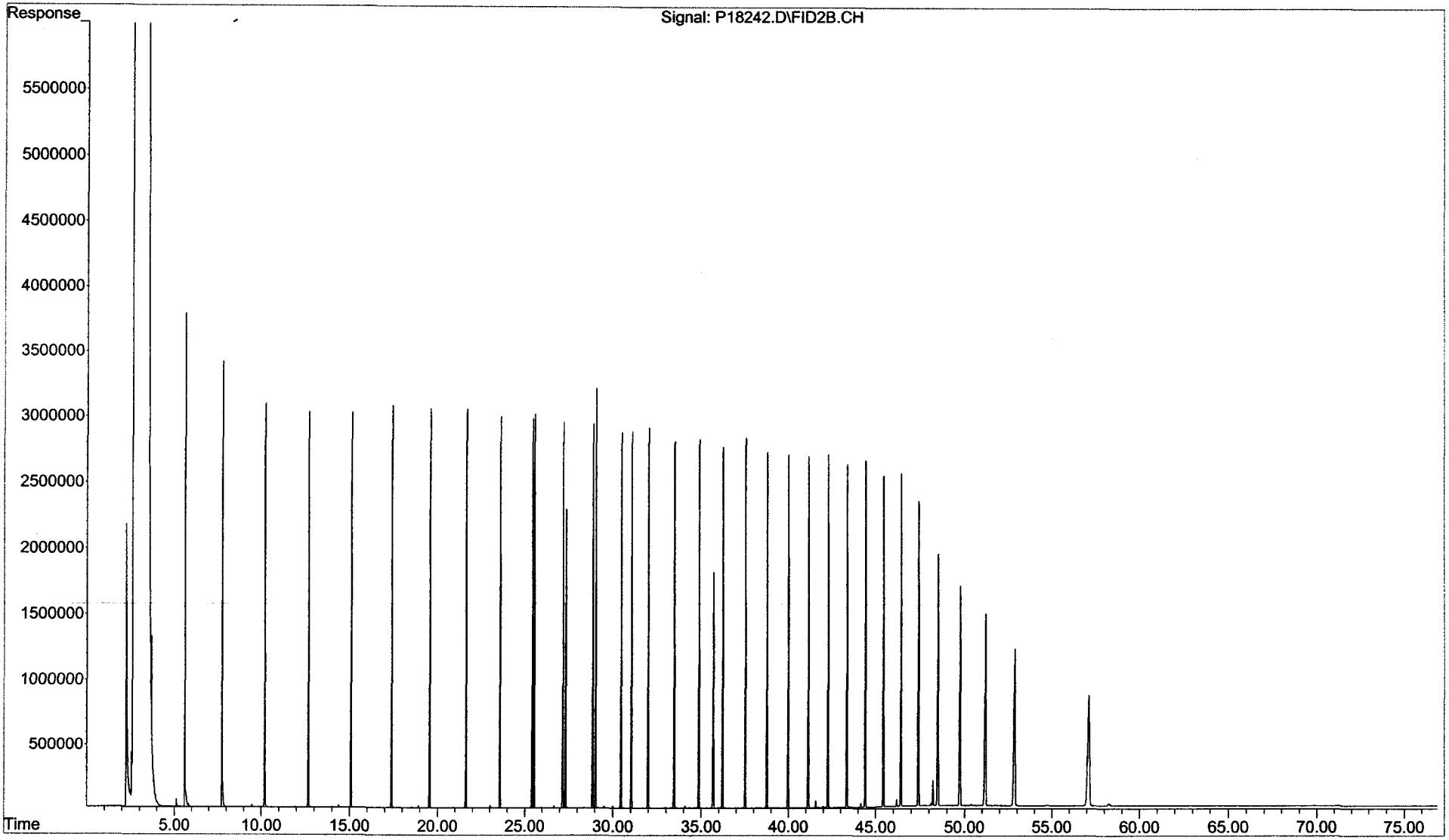
Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13.SEC\
Data File : P18242.D
Signal(s) : FID2B.CH
Acq On : 15 Feb 2006 9:37 pm
Operator : AC
Sample : C1021402-AFID
Misc : ALK STD
ALS Vial : 84 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 16 18:31:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Thu Feb 16 18:14:48 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	64848808	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	68103305	48.451 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	96.90%
24) s d50-Tetracosane	35.69	57333670	45.510 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	91.02%
Target Compounds			
2) t n-Octane (C8)	5.59	51280861	49.046 ug/mL
3) t n-Nonane (C9)	7.74	55361480	48.019 ug/mL
4) t n-Decane (C10)	10.19	56709568	47.980 ug/mLm
5) t n-Undecane (C11)	12.68	57243757	47.830 ug/mL
6) t n-Dodecane (C12)	15.09	59039035	48.413 ug/mLm
7) t n-Tridecane (C13)	17.39	59758412	48.369 ug/mLm
9) t n-Tetradecane (C14)	19.57	60859532	48.476 ug/mL
11) t n-Pentadecane (C15)	21.63	61519034	48.400 ug/mL
12) t n-Hexadecane (C16)	23.58	62032858	48.350 ug/mL
14) t n-Heptadecane (C17)	25.43	63033075	48.525 ug/mLm
15) t Pristane	25.54	60340904	48.623 ug/mLm
16) t n-Octadecane (C18)	27.19	63461683	48.724 ug/mL
17) t Phytane	27.35	63412271	49.113 ug/mL
18) t n-Nonadecane (C19)	28.87	63292409	48.906 ug/mLm
20) t n-Eicosane (C20)	30.47	63599236	49.287 ug/mL
21) t n-Heneicosane (C21)	32.00	65110436	48.898 ug/mL
22) t n-Docosane (C22)	33.47	62572841	47.586 ug/mL
23) t n-Tricosane (C23)	34.87	64948719	49.053 ug/mL
25) t n-Tetracosane (C24)	36.23	64688700	48.266 ug/mL
26) t n-Pentacosane (C25)	37.52	65102696	48.135 ug/mL
27) t n-Hexacosane (C26)	38.78	65508234	49.592 ug/mL
28) t n-Heptacosane (C27)	39.98	64652985	49.123 ug/mL
29) t n-Octacosane (C28)	41.15	65616376	49.064 ug/mL
30) t n-Nonacosane (C29)	42.28	66997005	49.018 ug/mL
31) t n-Triacontane (C30)	43.36	65931473	49.195 ug/mL
32) t n-Hentriacontane (C31)	44.42	66788552	51.503 ug/mL
33) t n-Dotriacontane (C32)	45.44	64205537	49.079 ug/mLm
34) t n-Tritriacontane (C33)	46.43	65590584	49.610 ug/mL
35) t n-tetratriacontane (C34)	47.42	66345551	49.400 ug/mL
36) t n-Pentatriacontane (C35)	48.51	63990763	49.535 ug/mL
37) t n-Hexatriacontane (C36)	49.76	65667224	49.347 ug/mL
38) t n-Heptatriacontane (C37)	51.19	67515080	47.276 ug/mLm
39) t n-Octatriacontane (C38)	52.86	65940905	49.101 ug/mLm
41) t n-Tetracontane (C40)	57.11	64963227	48.762 ug/mLm

File :O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB13.SEC\P18242.D
Operator : AC
Acquired : 15 Feb 2006 9:37 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021402-AFID
Misc Info : ALK STD
Vial Number: 84



CHAIN OF CUSTODY RECORDS

Alpha Woods Hole Labs Attn Liz Porta/Ted Healey 4046 0602017

GEI CONSULTANTS, INC., ATLANTIC ENVIRONMENTAL DIVISION
188 Norwich Avenue, P.O. Box 297, Colchester, CT 06415
PHONE: (860) 537-0751 FAX: (860) 537-6347

CHAIN OF CUSTODY RECORD

PROJECT NAME: Gowanus Canal

PROJECT NUMBER: 982482-34-4403

ANALYSIS: CPA 8015 modified GC/FID; 8270 modified GC/MS/SIM; PRSV. none; extended PAH; Biomarkers

	SAMPLE NO.	DATE	TIME	GRAB	COMP	NO. OF CONT.	SAMPLE MATRIX	CPA 8015 modified GC/FID; 8270 modified GC/MS/SIM; PRSV. none; extended PAH; Biomarkers	PRSV.	PRSV.	PRSV.	PRSV.	PRSV.	PRSV.	PRSV.	PRSV.	PRSV.	PRSV.	COMMENTS
-1	CGMW-07I	1-31-06	1545	X		2	product	X											2-40ml vials
-2	CGMW-08 I	1-31-06	1315	X		2	product	X											2-40ml vials

Relinquished by:	Date/Time	Received by:	Relinquished by:	Date/Time	Received by:
Melissa J Felter	2-2-06 1700	Sample Fridge	[signature]	2.7.06 1300	Leo Lapaie
Leo Lapaie		[signature]	E L Butler 2-7-06 13:00	2/7/06 1600	[signature]

Method of Shipment: Ed

Shipping Waybill No.:

Remarks:

SAMPLED BY: Melissa Felter (Print Name) Melissa J Felter Signature

(Print Name) Signature

PT 1:ORIGINAL PT 2:Laboratory Project Manager-yellow PT 3:Field Copy-pink

SP-3479 8/97

Sample Receipt Checklist

(BMP) 2/8/06

Client: ~~ALPHA~~ NEWFIE		**Receipt Date:** 2-2-06	
Project: GOWANUS		**Log-in Date:** 2/8/06	
ETR #: 0602017		**Inspection by:** EB	**Login by:** WS

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 #:_____
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: 02° IR Gun, 02° 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: BMP Date: 2/8/06

Sample storage refrigerator #: C2

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!