ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0602004
Report Date:	February 21, 2006

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

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

Sample ID Cross Reference

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**

Lab Sample ID	Client Sample ID
0602004-01	GC-SED-98 (1-2)
0602004-02	GC-SED-58C (8-10)
0602004-03	GC-SED-103 (8.1-9.1)
0602004-04	GC-SED-102 (2-4)
0602004-05	GC-SED-101 (7.9-9.1)
0602004-06	GC-SED-100 (5-6)
0602004-07	GC-SED-97 (8.5-9.5)
0602004-08	GC-SED-74 (5.3-6.3)
0602004-09	GC-SED-73E (3.8-8.4)
0602004-10	GC-SED-70B (4-5)
0602004-11	GC-SED-83 (0-2)
0602004-12	GC-SED-82 (12-12.8)
0602004-13	GC-SED-77 (14.5-15.4)
0602004-14	GC-SED-71C (1.5-2.5)

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Certificate Program Summary

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

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

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

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

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

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

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

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

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

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

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

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

CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0602004
Project: Gowanus Canal

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

Alkylated Polynuclear Aromatic Hydrocarbons
Steranes and Triterpanes

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

1. The sediment method blank SS020106B11 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. The sediment method blank SS020606B06 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.

3. Samples GC-SED-103 (8.1-9.1) (0602004-03), GC-SED-102 (2-4) (0602004-04), and its duplicate (0602004-04D), GC-SED-100 (5-6) (0602004-06), and GC-SED-97 (8.5-9.5) (0602004-07) recovered the surrogate Pyrene-d10 above the 130% QC limit potentially due to matrix interference. Please note that the final diluted analyses of these samples exhibited acceptable recoveries for this surrogate.

4. Sample GC-SED-102 (2-4) (0602004-04) and its duplicate (0602004-04D) have one of the compounds above the 30% relative percent difference QC limit due to potential matrix in-homogeneity. The integrations in the native sample and the duplicate were reviewed and found to be appropriate.

5. Sample GC-SED-73E (3.8-8.4) (0602004-09) and its duplicate (0602004-09D) have most of the compounds above the 30% relative percent difference QC limit due to potential matrix in-homogeneity. The integrations in the native sample and the duplicate were reviewed and found to be appropriate. It is also noted that the gravimetric determination exhibits a high relative percent difference of 22%.

6. Samples GC-SED-102 (2-4) (0602004-04) and GC-SED-100 (5-6) (0602004-06) were re-extracted within holding time on 2/6/06 due to a preparation error in the original extraction.

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

Total Petroleum Hydrocarbons by GC/FID

Samples for Total Petroleum Hydrocarbons were analyzed following the procedures in Alpha Woods Hole Lab *Total Petroleum Hydrocarbons by Gas Chromatography/Flame Ionization Detector (Revision 1.1)* Method 8100/8015mod and SOP *Addendum for Saturated Hydrocarbons, Rev. 1.0, 2004.* Samples were prepared as stated above for the PAH analysis. A portion of the final extract was aliquoted for GC/FID analysis. Extracts are analyzed by gas chromatography with flame ionization detection (FID). A multi-level initial calibration over the n-alkane range from C9-C40 was evaluated and quantified using internal standard techniques prior to sample analysis.

1. Samples GC-SED-102 (2-4) (0602004-04) and GC-SED-100 (5-6) (0602004-06) were re-extracted within holding time on 2/6/06 due to a preparation error in the original extraction.

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: 2/21/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report

02/01/2006 0602004STBIO - OP NEWFIE

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount	Final Volume	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume	Vialed By	Vialed Date	Cell Number
0601070-04	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.08	116.67	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0601070-06	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.21	84	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-01	SAM	Shaker	DMP	2/1/2006	2/9/2006		10.17	23.33	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-02	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.03	35	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-03	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.04	84	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-04	D	Shaker	GJP	2/6/2006	2/9/2006		4.93	175	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-04	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.25	150	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-05	SAM	Shaker	DMP	2/1/2006	2/9/2006		4.98	13.13	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-06	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.11	131.25	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-07	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.24	105	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-08	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.41	35	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-09	D	Shaker	DMP	2/1/2006	2/9/2006		10.17	26.25	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-09	SAM	Shaker	DMP	2/1/2006	2/9/2006		10.14	35	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-10	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.13	23.33	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-11	SAM	Shaker	DMP	2/1/2006	2/9/2006		10.57	23.33	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-12	SAM	Shaker	DMP	2/1/2006	2/9/2006		4.95	35	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-13	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.02	21	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
0602004-14	SAM	Shaker	DMP	2/1/2006	2/9/2006		4.97	42	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020106B11	B	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020106B11	B	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020106LCS04	LCS	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020106LCS04	LCS	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020106LCSD04	LCSD	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020106LCSD04	LCSD	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020606B06	B	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020606B06	B	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020606LCS04	LCS	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020606LCS04	LCS	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020606LCSD05	LCSD	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	
SS020606LCSD05	LCSD	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/7/2006	KD Flask	0.15	DMP	2/8/2006	

✓ ✓

2nd
W
2/16/06

Alpha Woods Hole Lab
Batch Prep Report

02/01/2006 0602004STBIO - OP NEWFIE

Lab ID	Notes
0601070-04	2nd Prep (Re-prep)
0601070-06	2nd Prep (Re-prep)
0602004-01	1st Prep
0602004-02	1st Prep
0602004-03	1st Prep
0602004-04	1st Prep
0602004-04	1st Prep
0602004-05	1st Prep
0602004-06	1st Prep
0602004-07	1st Prep
0602004-08	1st Prep
0602004-09	1st Prep
0602004-09	1st Prep
0602004-10	1st Prep
0602004-11	1st Prep
0602004-12	1st Prep
0602004-13	1st Prep
0602004-14	1st Prep
SS020106B11	1st Prep
SS020106B11	1st Prep
SS020106LCS04	1st Prep
SS020106LCS04	1st Prep
SS020106LCSD04	1st Prep
SS020106LCSD04	1st Prep
SS020606B06	1st Prep
SS020606B06	1st Prep
SS020606LCS04	1st Prep
SS020606LCS04	1st Prep
SS020606LCSD05	1st Prep
SS020606LCSD05	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
02/01/2006

Lab ID	QC Type	0602004STBIO - Sample
0601070-04 (1)	SAM	5.08
0601070-06 (1)	SAM	5.21
0602004-01	SAM	10.17
0602004-02	SAM	5.03
0602004-03	SAM	5.04
0602004-04 (1)	D	4.93
0602004-04 (1)	SAM	5.25
0602004-05	SAM	4.98
0602004-06 (1)	SAM	5.11
0602004-07	SAM	5.24
0602004-08	SAM	5.41
0602004-09	D	10.17
0602004-09	SAM	10.14
0602004-10	SAM	5.13
0602004-11	SAM	10.57
0602004-12	SAM	4.95
0602004-13	SAM	5.02
0602004-14	SAM	4.97
SS020106B11	B	30
SS020106B11	B	30
SS020106LCS04LCS	Gravimetric Determination	30
SS020106LCS04LCS	OP NEWFIE	30
SS020106LCS04LCS	OP NEWFIE	30
SS020106LCS04LCS	OP SHC	30
SS020106LCS04LCS	OP SHC	30
SS020106LCS04LCS	OP Steranes/Triterpanes	30
SS020106LCS04LCS	OP Steranes/Triterpanes	30
SS020106LCSD04LCSD	Gravimetric Determination	30
SS020106LCSD04LCSD	OP NEWFIE	30
SS020106LCSD04LCSD	OP NEWFIE	30
SS020106LCSD04LCSD	OP SHC	30
SS020106LCSD04LCSD	OP SHC	30
SS020106LCSD04LCSD	OP Steranes/Triterpanes	30
SS020106LCSD04LCSD	OP Steranes/Triterpanes	30
(1) SS020606B06	B	30
SS020606B06	B	30
(1) SS020606LCS04LCS	OP NEWFIE	30
SS020606LCS04LCS	OP NEWFIE	30
SS020606LCS04LCS	OP SHC	30
SS020606LCS04LCS	OP SHC	30
SS020606LCS04LCS	OP Steranes/Triterpanes	30
SS020606LCS04LCS	OP Steranes/Triterpanes	30
(1) SS020606LCSD05LCSD	OP NEWFIE	30
SS020606LCSD05LCSD	OP NEWFIE	30

METHYLENE CHLORIDE B52E28 (tank) B07E30(bottle)
ACETONE: A05E31 HEXANE: B45E60
COPPER: B42625 SULFURIC ACID: 3103091
GLASS WOOL: 4303309989 SODIUM SULFATE: B42602
PENTANE: B11E31 HYDROCHLORIC ACID: 4105030

(1) Samples re-weighed on 2/6/06. Extracts were accidentally combined into wrong Erlenmeyer. 2/6/06 RAR

Alpha Woods Hole Lab
Batch Weight Report
02/01/2006

Lab ID	QC Type	0602004STBIO - Sample
SS020606LCSD05LCSD	SHC	30
SS020606LCSD05LCSD	SHC	30
SS020606LCSD05LCSD	Steranes/Triterpanes	30
SS020606LCSD05LCSD	Steranes/Triterpanes	30

Alpha Woods Hole Lab
Batch Prep Spike Report

02/01/2006 0602004STBIO - OP NEWFIE Analyst: GJP Witness: RPR

Lab ID	QC Type	OP NEWFIE - surr	Vol OP NEWFIE - surr	Units OP NEWFIE - surr	OP NEWFIE - spk 1	Vol OP NEWFIE - spk 1	Units OP NEWFIE - spk 1	OP NEWFIE - spk 2	Vol OP NEWFIE - spk 2	Units OP NEWFIE - spk 2
0601070-04 (1)	SAM	WHAC11	200	µl	WHAC40	200	µl			
0601070-06 (1)	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-01	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-02	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-03	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-04 (1)	D	WHAC11	200	µl	WHAC40	200	µl			
0602004-04 (1)	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-05	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-06 (1)	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-07	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-08	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-09	D	WHAC11	200	µl	WHAC40	200	µl			
0602004-09	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-10	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-11	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-12	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-13	SAM	WHAC11	200	µl	WHAC40	200	µl			
0602004-14	SAM	WHAC11	200	µl	WHAC40	200	µl			
SS020106B11	B	WHAB63	100	µl	WHAB14	200	µl			
SS020106B11	B	WHAB63	100	µl	WHAB14	200	µl			
SS020106LCS04	LCS	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
SS020106LCS04	LCS	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
SS020106LCSD04	LCSD	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
SS020106LCSD04	LCSD	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
(1) SS020606B06	B	WHAB63	100	µl	WHAB14	200	µl			
SS020606B06	B	WHAB63	100	µl	WHAB14	200	µl			
(1) SS020606LCS04	LCS	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
SS020606LCS04	LCS	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
(1) SS020606LCSD05	LCSD	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl
SS020606LCSD05	LCSD	WHAB63	100	µl	WHAB14	200	µl	WHAC14	100	µl

Test: PAH/SHC
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other
ID# WHAC14
Conc. 10ug/ml 500ug/ml

(1) Samples spiked on 2/6/06 by GJP witnessed by RPR. All other samples were spiked on 2/2/06 By DMP witnessed by MAL. 2/6/06 RPR

Test: PAH/SHC
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other
ID# WHAB63
Conc. 10ug/ml 500ug/ml

Test: ALK-PAH/SHC (High)
Standard Type: *Surrogate* / *LCS* / *MS-MSD*
LFB / *Other*
ID# WHAC11
Conc. 100ug/ml / 5000ug/ml

Test: BIOMARKERS
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other Low
ID# WHAB14
Conc. 10ug/ml

Test: BIOMARKERS
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other High
ID# WHAC40
Conc. 100ug/ml

Pre-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 2/7/2006

BATCH: 0602004STBIO

Entered by: KLA
Verified by: KLA

Extract	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	Recovery (%R, RPD)
		LCS	10000	50	NA	0.248	NA	NA	NA	NA	NA	99%
0601070	4		10000	50	NA	2.705	NA	541.00	90	4.87	111.11	
0601070	6		10000	50	NA	2.001	NA	400.20	125	5.00	80.00	
0602004	1		10000	50	NA	0.518	NA	103.60	450	4.66	22.22	
0602004	2		10000	50	NA	0.813	NA	162.60	300	4.88	33.33	
0602004	3		10000	50	NA	1.888	NA	377.60	125	4.72	80.00	
0602004	4	D	10000	50	NA	3.784	NA	756.80	60	4.54	166.67	15%
0602004	4		10000	50	NA	3.267	NA	653.40	70	4.57	142.86	
0602004	5		10000	50	NA	0.298	NA	59.60	800	4.77	12.50	
0602004	6		10000	50	NA	2.973	NA	594.60	80	4.76	125.00	
0602004	7		10000	50	NA	2.482	NA	496.40	100	4.96	100.00	
0602004	8		10000	50	NA	0.824	NA	164.80	300	4.94	33.33	
0602004	9	D	10000	50	NA	0.589	NA	117.80	400	4.71	25.00	22%
0602004	9		10000	50	NA	0.738	NA	147.60	300	4.43	33.33	
0602004	10		10000	50	NA	0.543	NA	108.60	450	4.89	22.22	
0602004	11		10000	50	NA	0.504	NA	100.80	450	4.54	22.22	
0602004	12		10000	50	NA	0.786	NA	157.20	300	4.72	33.33	
0602004	13		10000	50	NA	0.481	NA	96.20	500	4.81	20.00	
0602004	14		10000	50	NA	0.850	NA	170.00	250	4.25	40.00	

✓ 2nd KL 2/21/06 ✓ 2nd KL 2/21/06 ✓ 2nd KL 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

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

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

Pre-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 2/7/06

BATCH: 0602004STBIO

Entered by: KLA
Verified by: ↓

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	NA	0.248	NA	NA	NA	NA	NA	0%
0601070	4		10000	50		2.705						
0601070	6		10000	50		2.001						
0602004	1		10000	50		0.518						
0602004	2		10000	50		0.813						
0602004	3		10000	50		1.888						
0602004	4	D	10000	50		3.784						#VALUE!
0602004	4		10000	50		3.267						
0602004	5		10000	50		0.298						
0602004	6		10000	50		2.973						
0602004	7		10000	50		2.482						
0602004	8		10000	50		0.824						
0602004	9	D	10000	50		0.589						#VALUE!
0602004	9		10000	50		0.738						
0602004	10		10000	50		0.543						
0602004	11		10000	50		0.504						
0602004	12		10000	50		0.786						
0602004	13		10000	50		0.481						
0602004	14		10000	50		0.850						

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

0602004.xls

Alpha Woods Hole Lab
Batch Clean Up Report
02/01/2006 0602004STBIO - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0601070-04	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.09	0	0.15
0601070-06	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.125	0	0.15
0602004-01	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.45	0	0.15
0602004-02	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.3	0	0.15
0602004-03	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.125	0	0.15
0602004-04	D	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.06	0	0.15
0602004-04	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.07	0	0.15
0602004-05	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.8	0	0.15
0602004-06	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.08	0	0.15
0602004-07	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.1	0	0.15
0602004-08	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.3	0	0.15
0602004-09	D	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.4	0	0.15
0602004-09	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.3	0	0.15
0602004-10	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.45	0	0.15
0602004-11	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.45	0	0.15
0602004-12	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.3	0	0.15
0602004-13	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.5	0	0.15
0602004-14	SAM	3610	DMP	2/7/2006				DMP	2/7/2006	False	10	0.25	0	0.15
SS020106B11	B	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020106B11	B	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020106LCS04	LCS	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020106LCS04	LCS	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020106LCSD04	LCSD	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020106LCSD04	LCSD	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020606B06	B	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020606B06	B	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020606LCS04	LCS	3610	DMP	① 2/~~7~~/2006				DMP	① 2/~~7~~/2006	False	2	0.5	0	0.15
SS020606LCS04	LCS	3610	DMP	① 2/~~7~~/2006				DMP	① 2/~~7~~/2006	False	2	0.5	0	0.15
SS020606LCSD05	LCSD	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15
SS020606LCSD05	LCSD	3610	DMP	2/7/2006				DMP	2/7/2006	False	2	0.5	0	0.15

① re-alumina cleared 2/13/06 cw 2/13/06

✓ 2nd cw 2/21/06

Alpha Woods Hole Lab
Batch Clean Up Report
02/01/2006 0602004STBIO - OP NEWFIE

Lab ID	Notes
0601070-04	
0601070-06	
0602004-01	
0602004-02	
0602004-03	
0602004-04	
0602004-04	
0602004-05	
0602004-06	
0602004-07	
0602004-08	
0602004-09	
0602004-09	
0602004-10	
0602004-11	
0602004-12	
0602004-13	
0602004-14	
SS020106B11	
SS020106B11	
SS020106LCS04	
SS020106LCS04	
SS020106LCSD04	
SS020106LCSD04	
SS020606B06	
SS020606B06	
SS020606LCS04	
SS020606LCS04	
SS020606LCSD05	
SS020606LCSD05	

Post-Alumina Column Gravimetric Determination

Analyst: DMP
Date: 2/8/06

BATCH: 0602004

Entered by: DMP
Verified by: DMP

LIS #	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%
0601070	4		1000	50	NA	0.199	NA	3.98	950	3.79	1.05	
0601070	6		1000	50	NA	0.160	NA	3.20	950	3.05	1.05	
0602004	1		1000	50	NA	0.137	NA	2.74	950	2.61	1.05	
0602004	2		1000	50	NA	0.201	NA	4.02	950	3.83	1.05	
0602004	3		1000	50	NA	0.185	NA	3.70	950	3.52	1.05	
0602004	4	D	1000	50	NA	0.199	NA	3.98	950	3.79	1.05	2%
0602004	4		1000	50	NA	0.203	NA	4.06	950	3.87	1.05	
0602004	5		1000	50	NA	0.224	NA	4.48	950	4.27	1.05	
0602004	6		1000	50	NA	0.190	NA	3.80	950	3.62	1.05	
0602004	7		1000	50	NA	0.198	NA	3.96	950	3.77	1.05	
0602004	8		1000	50	NA	0.191	NA	3.82	950	3.64	1.05	
0602004	9	D	1000	50	NA	0.153	NA	3.06	950	2.91	1.05	3%
0602004	9		1000	50	NA	0.158	NA	3.16	950	3.01	1.05	
0602004	10		1000	50	NA	0.188	NA	3.76	950	3.58	1.05	
0602004	11		1000	50	NA	0.137	NA	2.74	950	2.61	1.05	
0602004	12		1000	50	NA	0.197	NA	3.94	950	3.75	1.05	
0602004	13		1000	50	NA	0.181	NA	3.62	950	3.45	1.05	
0602004	14		1000	50	NA	0.176	NA	3.52	950	3.35	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

2nd 2/21/06

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

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

Post-Alumina Column Gravimetric Determination

Analyst: KLA
Date: 2/8/06

BATCH: 0602004

Entered by: KLA
Verified by: ↓

Batch #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Analysis (ul)	Oil to Analysis (mg)	Dilution Factor	QC %R (MB)
		LCS	1000	50	NA	0.249	NA	NA	NA	NA	NA	0%
0601070	4		1000	50		0.199						
0601070	6		1000	50		0.160						
0602004	1		1000	50		0.137						
0602004	2		1000	50		0.201						
0602004	3		1000	50		0.185						
0602004	4	D	1000	50		0.199						#VALUE!
0602004	4		1000	50		0.203						
0602004	5		1000	50		0.224						
0602004	6		1000	50		0.190						
0602004	7		1000	50		0.198						
0602004	8		1000	50		0.191						
0602004	9	D	1000	50		0.153						#VALUE!
0602004	9		1000	50		0.158						
0602004	10		1000	50		0.158						
0602004	11		1000	50		0.137						
0602004	12		1000	50		0.197						
0602004	13		1000	50		0.181						
0602004	14		1000	50		0.176						

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: Gowanus Canal
ETR: 0602004STBIO

ALK-PAH/SHC

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0601070-04	900	WHAC12 3of5	100	1000	116.67	DMP	150	150	2/8/2006
0601070-06	900	WHAC12 3of5	100	1000	84.00	DMP	150	150	2/8/2006
0602004-01	900	WHAC12 3of5	100	1000	23.33	DMP	150	150	2/8/2006
0602004-02	900	WHAC12 3of5	100	1000	35.00	DMP	150	150	2/8/2006
0602004-03	900	WHAC12 3of5	100	1000	84.00	DMP	150	150	2/8/2006
0602004-04D	900	WHAC12 3of5	100	1000	175.00	DMP	150	150	2/8/2006
0602004-04	900	WHAC12 3of5	100	1000	150.00	DMP	150	150	2/8/2006
0602004-05	900	WHAC12 3of5	100	1000	13.13	DMP	150	150	2/8/2006
0602004-06	900	WHAC12 3of5	100	1000	131.25	DMP	150	150	2/8/2006
0602004-07	900	WHAC12 3of5	100	1000	105.00	DMP	150	150	2/8/2006
0602004-08	900	WHAC12 3of5	100	1000	35.00	DMP	150	150	2/8/2006
0602004-09D	900	WHAC12 3of5	100	1000	26.25	DMP	150	150	2/8/2006
0602004-09	900	WHAC12 3of5	100	1000	35.00	DMP	150	150	2/8/2006
0602004-10	900	WHAC12 3of5	100	1000	23.33	DMP	150	150	2/8/2006
0602004-11	900	WHAC12 3of5	100	1000	23.33	DMP	150	150	2/8/2006
0602004-12	900	WHAC12 3of5	100	1000	35.00	DMP	150	150	2/8/2006
0602004-13	900	WHAC12 3of5	100	1000	21.00	DMP	150	150	2/8/2006
0602004-14	900	WHAC12 3of5	100	1000	42.00	DMP	150	150	2/8/2006
SS020106B11	900	WHAC12 3of5	100	1000	4.00	DMP	150	150	2/8/2006
SS020106LCS04	900	WHAC12 3of5	100	1000	4.00	DMP	150	150	2/8/2006
SS020106LCSD04	900	WHAC12 3of5	100	1000	4.00	DMP	150	150	2/8/2006
SS020606B06	900	WHAC12 3of5	100	1000	4.00	DMP	150	150	2/8/2006
SS020606LCS04	900	WHAC12 3of5	100	1000	4.00	DMP	150	150	~~2/8/2006~~
SS020606LCSD05	900	WHAC12 3of5	100	1000	4.00	DMP	150	150	2/8/2006

2/13/06 re-alumina cleaned 2/21/06

[1] Includes Internal Std

✓ 2nd 2/21/06

Forensic Preparation Checklist

ETR: 0602004 **Client:** Newfields **Project:** Gowanus Canal

Workplan Present	N/A

Workplan Reviewed With Project Manager	N/A

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

Required Cleanups	
No Cleanup Required	
Copper	X
Conc. Sulfuric Acid	
GPC	
Silica Gel 923 Grade Glass Column	
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 ①	X	Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	

Other: ① All Samples signed for by RPR 2/10/06

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

Other:

Identify Matrix - Circle One

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

	Date	Initials
1st Extraction	2/3/06	GJP
2nd Extraction ②	2/6/06	GJP
3rd Extraction ↓	2/6/06	GJP

② Re-extracted samples poured off on 2/6/06 1st, 2/7/06 2nd + 3rd. RPR 2/10/06

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

Other:

SS020606LCS04 measured 2mL F.V.
Extract spilled 1mL (no archive)
0.5 split for Alumina column
0.5 split for silica column KLA 2/8/06
Signed by RPR 2/10/06

Re-cleaned on 2/13/06 high surrogates 2/21/06

Batch Reviewed
Analyst: RPR
Date: 2/10/06

Batch Completed
Analyst: DMP ③
Date: 2/9/06 ↓

③ Signed by RPR 2/10/06 RPR

Forensic Dilution Sheet

Client Name: NewFields
Project Gowanus Canal
ETR # : **0602004**
Matrix : Sediment
Analysis Type : GC/MS

Relinquished By: AC
Date: 2/3/2006

Received By: DMP
Date: 2/8/06 (1)

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial (ul) Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0602004-01	700	700	100	1000	0602004-01-RE	WHAC12 90uL (1)	2/8/06 DMP	10	10
0602004-02			100	1000	0602004-02-RE	WHAC12 90uL		10	10
0602004-03			100	1000	0602004-03-RE	WHAC12 90uL		10	10
0602004-04D			100	1000	0602004-04D-RE	WHAC12 90uL		10	10
0602004-04			100	1000	0602004-04-RE	WHAC12 90uL		10	10
0602004-05			100	1000	0602004-05-RE	WHAC12 90uL		10	10
0602004-06			100	1000	0602004-06-RE	WHAC12 90uL		10	10
0602004-07			100	1000	0602004-07-RE	WHAC12 90uL		10	10
0602004-08			100	1000	0602004-08-RE	WHAC12 90uL		10	10
0602004-09D			100	1000	0602004-09D-RE	WHAC12 90uL		10	10
0602004-09			100	1000	0602004-09-RE	WHAC12 90uL		10	10
0602004-10			100	1000	0602004-10-RE	WHAC12 90uL		10	10
0602004-11			100	1000	0602004-11-RE	WHAC12 90uL		10	10
0602004-12			100	1000	0602004-12-RE	WHAC12 90uL		10	10
0602004-13			100	1000	0602004-13-RE	WHAC12 90uL		10	10
0602004-14			100	1000	0602004-14-RE	WHAC12 90uL		10	10

(1) Signed For by RPR 2/10/06 RPR

Dilution Calculations Validated by: RPR
Date: 2/10/06

Forensic Dilution Sheet

Client Name: NewFields
Project Gowanus Canal
ETR # : 0602004
Matrix : Sediment
Analysis Type : GC/MS

Relinquished By: AC
Date: 2/3/2006

Received By: DMP ①
Date: 2/8/06

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial (ul) Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0602004-01	600	600	10	1000	0602004-01-RE2	WHAC12 99uL ①	2/8/06 DMP	100	100
0602004-02			10	1000	0602004-02-RE2	WHAC12 99uL		100	100
0602004-03			10	1000	0602004-03-RE2	WHAC12 99uL		100	100
0602004-04D			10	1000	0602004-04D-RE2	WHAC12 99uL		100	100
0602004-04			10	1000	0602004-04-RE2	WHAC12 99uL		100	100
0602004-05			10	1000	0602004-05-RE2	WHAC12 99uL		100	100
0602004-06			10	1000	0602004-06-RE2	WHAC12 99uL		100	100
0602004-07			10	1000	0602004-07-RE2	WHAC12 99uL		100	100
0602004-08			10	1000	0602004-08-RE2	WHAC12 99uL		100	100
0602004-09D			10	1000	0602004-09D-RE2	WHAC12 99uL		100	100
0602004-09			10	1000	0602004-09-RE2	WHAC12 99uL		100	100
0602004-10			10	1000	0602004-10-RE2	WHAC12 99uL		100	100
0602004-11			10	1000	0602004-11-RE2	WHAC12 99uL		100	100
0602004-12			10	1000	0602004-12-RE2	WHAC12 99uL		100	100
0602004-13			10	1000	0602004-13-RE2	WHAC12 99uL		100	100
0602004-14			10	1000	0602004-14-RE2	WHAC12 99uL		100	100

① Signed for by RPR 2/10/06 RPR

Dilution Calculations Validated by: RPR
Date: 2/10/06

Alpha Woods Hole Lab
Batch Prep Report

02/01/2006 0602004STBIO - 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
0601070-04	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.08	11.67	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0601070-06	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.21	8.75	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-01	SAM	Shaker	DMP	2/1/2006	2/9/2006		10.17	5.2	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-02	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.03	3.5	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-03	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.04	9.61	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-04	D	Shaker	GJP	2/6/2006	2/9/2006		4.93	21.99	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-04	SAM	Shaker	DMP	2/6/2006	2/9/2006		5.25	22.26	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-05	SAM	Shaker	DMP	2/1/2006	2/9/2006		4.98	1.26	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-06	SAM	Shaker	GJP	2/6/2006	2/9/2006		5.11	17.88	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-07	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.24	12.5	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-08	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.41	8.33	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-09	D	Shaker	DMP	2/1/2006	2/9/2006		10.17	3.97	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-09	SAM	Shaker	DMP	2/1/2006	2/9/2006		10.14	6.06	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-10	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.13	3.71	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-11	SAM	Shaker	DMP	2/1/2006	2/9/2006		10.57	2.92	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-12	SAM	Shaker	DMP	2/1/2006	2/9/2006		4.95	5.39	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-13	SAM	Shaker	DMP	2/1/2006	2/9/2006		5.02	2.8	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
0602004-14	SAM	Shaker	DMP	2/1/2006	2/9/2006		4.97	4.93	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
SS020106B11	B	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
SS020106B11	B	Shaker	DMP	2/1/2006	2/9/2006		30	4	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
SS020606B06	B	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	
SS020606B06	B	Shaker	GJP	2/6/2006	2/9/2006		30	4	False	KLA	2/8/2006	KD Flask	0.15	DMP	2/9/2006	

✓ ✓ 2nd 2/21/02

Alpha Woods Hole Lab
Batch Prep Report

02/01/2006 0602004STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0601070-04	2nd Prep (Re-prep)
0601070-06	2nd Prep (Re-prep)
0602004-01	1st Prep
0602004-02	1st Prep
0602004-03	1st Prep
0602004-04	1st Prep
0602004-04	1st Prep
0602004-05	1st Prep
0602004-06	1st Prep
0602004-07	1st Prep
0602004-08	1st Prep
0602004-09	1st Prep
0602004-09	1st Prep
0602004-10	1st Prep
0602004-11	1st Prep
0602004-12	1st Prep
0602004-13	1st Prep
0602004-14	1st Prep
SS020106B11	1st Prep
SS020106B11	1st Prep
SS020606B06	1st Prep
SS020606B06	1st Prep

Pre-Silica Gel Gravimetric Determination

Analyst: KLA
Date: 2/7/2006

BATCH: 0602004STBIO

Entered by: KLA
Verified by: KLA

[illegible]	[illegible]	[illegible]	Final Volume of Extract (ml)	Aliquot Removed (ml)	Aliquot Removed (ul)	Aliquot Weight (mg)	Aliquot Weight (mg)	Total Extract Oil Weight (mg)	Volume Removed for Column (ul)	Oil to Column (mg)	Dilution Factor	[illegible]
		LCS	10000	50	NA	0.248	NA	NA	NA	NA	NA	99%
0601070	4		10000	50	NA	2.705	NA	541.00	900	48.69	11.11	
0601070	6		10000	50	NA	2.001	NA	400.20	1200	48.04	8.33	
0602004	1		10000	50	NA	0.518	NA	103.60	4800	49.81	2.08	
0602004	2		10000	50	NA	0.813	NA	162.60	3000	48.83	3.33	
0602004	3		10000	50	NA	1.888	NA	377.60	1300	49.10	7.69	
0602004	4	D	10000	50	NA	3.784	NA	756.80	650	49.21	15.38	15%
0602004	4		10000	50	NA	3.267	NA	653.40	750	49.02	13.33	
0602004	5		10000	50	NA	0.298	NA	59.60	8300	49.67	1.20	
0602004	6		10000	50	NA	2.973	NA	594.60	800	47.57	12.50	
0602004	7		10000	50	NA	2.482	NA	496.40	1000	49.64	10.00	
0602004	8		10000	50	NA	0.824	NA	164.80	3000	49.49	3.33	
0602004	9	D	10000	50	NA	0.589	NA	117.80	4200	49.50	2.38	22%
0602004	9		10000	50	NA	0.738	NA	147.60	3300	48.71	3.03	
0602004	10		10000	50	NA	0.543	NA	108.60	4500	48.92	2.22	
0602004	11		10000	50	NA	0.504	NA	100.80	4900	49.41	2.04	
0602004	12		10000	50	NA	0.786	NA	157.20	3100	48.67	3.23	
0602004	13		10000	50	NA	0.481	NA	96.20	5100	49.08	1.96	
0602004	14		10000	50	NA	0.850	NA	170.00	2900	49.28	3.45	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight 2nd 2/21/06
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

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

✓ 2nd 2/21/06

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

Alpha Woods Hole Lab
Batch Clean Up Report

02/01/2006 0602004STBIO - 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
0601070-04	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	0.9	0	0.15
0601070-06	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	1.2	0	0.15
0602004-01	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	4.8	0	0.15
0602004-02	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	3	0	0.15
0602004-03	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	1.3	0	0.15
0602004-04	D	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	0.65	0	0.15
0602004-04	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	0.75	0	0.15
0602004-05	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	8.3	0	0.15
0602004-06	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	0.8	0	0.15
0602004-07	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	1	0	0.15
0602004-08	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	3	0	0.15
0602004-09	D	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	4.2	0	0.15
0602004-09	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	3.3	0	0.15
0602004-10	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	4.5	0	0.15
0602004-11	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	4.9	0	0.15
0602004-12	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	3.1	0	0.15
0602004-13	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	5.1	0	0.15
0602004-14	SAM	3630	GJP	2/8/2006				DMP	2/8/2006	True	10	2.9	0	0.15
SS020106B11	B	3630	GJP	2/8/2006				DMP	2/8/2006	True	4	0.5	0	0.15
SS020106B11	B	3630	GJP	2/8/2006				DMP	2/8/2006	True	4	0.5	0	0.15
SS020606B06	B	3630	GJP	2/8/2006				DMP	2/8/2006	True	4	0.5	0	0.15
SS020606B06	B	3630	GJP	2/8/2006				DMP	2/8/2006	True	4	0.5	0	0.15

✓ and 2/21/06

Alpha Woods Hole Lab
Batch Clean Up Report

02/01/2006 0602004STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0601070-04	
0601070-06	
0602004-01	
0602004-02	
0602004-03	
0602004-04	
0602004-04	
0602004-05	
0602004-06	
0602004-07	
0602004-08	
0602004-09	
0602004-09	
0602004-10	
0602004-11	
0602004-12	
0602004-13	
0602004-14	
SS020106B11	
SS020106B11	
SS020606B06	
SS020606B06	

Post-Silica Gel Gravimetric Determination

Analyst: GJP
Date: 2/9/06

BATCH: 0602004_01070

Entered by: GJP
Verified by: RPR

Lab #	Sample #	QC (MS, 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	NA	0.271	NA	54.20	NA	NA	NA	108%
0601070	4		1000	50	NA	0.208	NA	4.16	950	3.96	1.05	
0601070	6		1000	50	NA	0.200	NA	4.00	950	3.81	1.05	
0602004	1		1000	50	NA	0.564	NA	11.28	400	4.51	2.50	
0602004	2		1000	50	NA	0.166	NA	3.32	950	3.16	1.05	
0602004	3		1000	50	NA	0.337	NA	6.74	800	5.39	1.25	
0602004	4	D	1000	50	NA	0.386	NA	7.72	700	5.40	1.43	10%
0602004	4		1000	50	NA	0.425	NA	8.50	600	5.09	1.67	
0602004	5		1000	50	NA	0.255	NA	5.10	950	4.86	1.05	
0602004	6		1000	50	NA	0.367	NA	7.34	700	5.13	1.43	
0602004	7		1000	50	NA	0.319	NA	6.38	800	5.10	1.25	
0602004	8		1000	50	NA	0.695	NA	13.90	400	5.56	2.50	
0602004	9	D	1000	50	NA	0.423	NA	8.46	600	5.07	1.67	20%
0602004	9		1000	50	NA	0.518	NA	10.36	500	5.18	2.00	
0602004	10		1000	50	NA	0.428	NA	8.56	600	5.13	1.67	
0602004	11		1000	50	NA	0.380	NA	7.60	700	5.31	1.43	
0602004	12		1000	50	NA	0.416	NA	8.32	600	4.98	1.67	
0602004	13		1000	50	NA	0.376	NA	7.52	700	5.26	1.43	
0602004	14		1000	50	NA	0.364	NA	7.28	700	5.09	1.43	

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

✓ 2nd cw 2/21/06

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

✓ 2nd cw 2/21/06

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

Alpha Woods Hole Laboratories Raynham, MA

0602004

Post-Silica Gel Gravimetric Determination

Analyst: GSP
Date: 2/9/06

BATCH: _____

Entered by: _____
Verified by: _____

Batch	Sample #	QC (MS, LCS, D)	Final Volume of Extract (ml)	Aliquot Removed #1 (ml)	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	NA	0.271						0%
0601070	4		1000	50	NA	0.208						
0601070	6		1000	50		0.200						
0602004	1		1000	50		0.564						
0602004	2		1000	50		0.166						
0602004	3		1000	50		0.337						
0602004	4	D	1000	50		0.386						#VALUE!
0602004	4		1000	50		0.425						
0602004	5		1000	50		0.255						
0602004	6		1000	50		0.367						
0602004	7		1000	50		0.319						
0602004	8		1000	50		0.695						
0602004	9	D	1000	50		0.423						#VALUE!
0602004	9		1000	50		~~0.518~~ ①						
0602004	10		1000	50		0.428						
0602004	11		1000	50		0.380						
0602004	12		1000	50		0.416						
0602004	13		1000	50		0.376						
0602004	14		1000	50		0.364						

① weight should be 0.518 GSP 2/9/06

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%.

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name:
ETR:

Biomarker

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0601070-04-F1	900	WHAC12 3of5	100	1000	11.67	DMP	150	NA	2/9/2006
0601070-06-F1	900	WHAC12 3of6	100	1000	8.75	DMP	150	NA	2/9/2006
0602004-01-F1	900	WHAC12 3of7	100	1000	5.20	DMP	150	NA	2/9/2006
0602004-02-F1	900	WHAC12 3of8	100	1000	3.50	DMP	150	NA	2/9/2006
0602004-03-F1	900	WHAC12 3of9	100	1000	9.61	DMP	150	NA	2/9/2006
0602004-04D-F1	900	WHAC12 3of10	100	1000	21.99	DMP	150	NA	2/9/2006
0602004-04-F1	900	WHAC12 3of11	100	1000	22.26	DMP	150	NA	2/9/2006
0602004-05-F1	900	WHAC12 3of12	100	1000	1.26	DMP	150	NA	2/9/2006
0602004-06-F1	900	WHAC12 3of13	100	1000	17.88	DMP	150	NA	2/9/2006
0602004-07-F1	900	WHAC12 3of14	100	1000	12.50	DMP	150	NA	2/9/2006
0602004-08-F1	900	WHAC12 3of15	100	1000	8.33	DMP	150	NA	2/9/2006
0602004-09D-F1	900	WHAC12 3of16	100	1000	3.97	DMP	150	NA	2/9/2006
0602004-09-F1	900	WHAC12 3of17	100	1000	6.06	DMP	150	NA	2/9/2006
0602004-10-F1	900	WHAC12 3of18	100	1000	3.71	DMP	150	NA	2/9/2006
0602004-11-F1	900	WHAC12 3of19	100	1000	2.92	DMP	150	NA	2/9/2006
0602004-12-F1	900	WHAC12 3of20	100	1000	5.39	DMP	150	NA	2/9/2006
0602004-13-F1	900	WHAC12 3of21	100	1000	2.80	DMP	150	NA	2/9/2006
0602004-14-F1	900	WHAC12 3of22	100	1000	4.93	DMP	150	NA	2/9/2006
SS020106B11-F1	900	WHAC12 3of23	100	1000	4.00	DMP	150	NA	2/9/2006
SS020606B06-F1	900	WHAC12 3of24	100	1000	4.00	DMP	150	NA	2/9/2006

[1] Includes Internal Std

2nd w/blocks

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

Lab ID	QC Type	PS020206 - Pan Weight	PS020206 - Wet Weight	PS020206 - Dry Weight	PS020206 - Dry Weight #2	PS020206 - Dry Weight #3	Percent Solid	RPD
0602004-01	D	1.02	7.7	3.6	3.6		38.62	1.08%
0602004-01	SAM	1.01	7.67	3.61	3.61		39.04	
0602004-02	SAM	1	9.33	8.05	8.05		84.63	
0602004-03	SAM	1.02	8.02	6.58	6.58		79.43	
0602004-04	SAM	1.01	6.96	3.81	3.81		47.06	
0602004-05	SAM	1.01	6.81	5.24	5.24		72.93	
0602004-06	SAM	1	7.18	4.39	4.39		54.85	
0602004-07	SAM	1.01	7.25	4.64	4.64		58.17	
0602004-08	SAM	1.01	8.59	4.19	4.19		41.95	
0602004-09	SAM	1	7.89	6.34	6.34		77.5	
0602004-10	SAM	0.99	9.62	6.47	6.47		63.5	
0602004-11	SAM	1.01	10.09	5.24	5.24		46.59	
0602004-12	SAM	1	8.51	6.99	7		79.89	
0602004-13	SAM	1	9.35	8	8		83.83	
0602004-14	SAM	1.03	7.95	5.37	5.38		62.86	
PSS020206B03	B	1.03	1.03	1.03	1.03		100	

Initial: 2/2/2006 10:09:58 AM KJB
Weight #1: 2/3/2006 10:36:31 AM KJB
Weight #2: 2/3/2006 1:08:13 PM KJB

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

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-98 (1-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-01**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/11/06	39.0	10.17	23.33	1	AC

Parameter	Result	Parameter	Result
Naphthalene	1900	Fluoranthene	16000
C1-Naphthalenes	2500	Pyrene	20000
C2-Naphthalenes	7900	C1-Fluoranthenes/Pyrenes	21000
C3-Naphthalenes	7300	C2-Fluoranthenes/Pyrenes	11000
C4-Naphthalenes	4700	C3-Fluoranthenes/Pyrenes	5000
Biphenyl	300	C4-Fluoranthenes/Pyrenes	1900
Dibenzofuran	520	Naphthobenzothiophenes	3000
Acenaphthylene	3900	C1-Naphthobenzothiophenes	3300
Acenaphthene	9600	C2-Naphthobenzothiophenes	2600
Fluorene	1100	C3-Naphthobenzothiophenes	1700
C1-Fluorenes	3900	C4-Naphthobenzothiophenes	910
C2-Fluorenes	5400	Benz[a]anthracene	9200
C3-Fluorenes	4700	Chrysene/Triphenylene	9600
Anthracene	7300	C1-Chrysenes	8900
Phenanthrene	9800	C2-Chrysenes	4500
C1-Phenanthrenes/Anthracenes	18000	C3-Chrysenes	2800
C2-Phenanthrenes/Anthracenes	16000	C4-Chrysenes	1100
C3-Phenanthrenes/Anthracenes	8200	Benzo[b]fluoranthene	5800
C4-Phenanthrenes/Anthracenes	3200	Benzo[k]fluoranthene	5700
Retene	1700	Benzo[a]fluoranthene	2100
Dibenzothiophene	1900	Benzo[e]pyrene	5200
C1-Dibenzothiophenes	4000	Benzo[a]pyrene	8400
C2-Dibenzothiophenes	5300	Perylene	1900
C3-Dibenzothiophenes	3800	Indeno[1,2,3-cd]pyrene	4800
C4-Dibenzothiophenes	1600	Dibenz[a,h]anthracene	1200
Benzo(b)fluorene	3300	Benzo[g,h,i]perylene	4800

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/17/06 12:53

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-98 (1-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-01**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/11/06	39.0	10.17	23.33	1	AC

Parameter	Result
Carbazole	450

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/17/06 12:53

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18121.D
Acq On : 11 Feb 2006 2:41 am
Operator : AC
Sample : 0602004-01
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 15 14:06:38 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 for WW 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	41902m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	71138m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	63115m	702.61	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 70.26%			
58) Pyrene-d10	38.02	212	157243m	851.38	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 85.14%			
81) Benzo[b]fluoranthene-d12	46.85	264	126260m	891.28	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 89.13%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.61	128	69002m	322.46	ng/mL	
10) C1-Naphthalenes	22.72	142	90833m	424.48	ng/mL	
11) C2-Naphthalenes	25.14	156	286525m	1338.97	ng/mL	RF trpt conc 2nd w 2/21/06
12) C3-Naphthalenes	27.82	170	267179m	1248.57	ng/mL	
13) C4-Naphthalenes	30.23	184	171931m	803.46	ng/mL	
15) 2-Methylnaphthalene	22.29	142	18554m	136.96	ng/mL	
16) 1-Methylnaphthalene	22.72	142	72637m	569.54	ng/mL	
22) Biphenyl	24.18	154	8524m	50.61	ng/mL	
23) 2,6-Dimethylnaphthalene	24.80	156	36961m	328.76	ng/mL	
24) Dibenzofuran	27.26	168	16802m	88.80	ng/mL	
25) Acenaphthylene	25.87	152	134764m	656.81	ng/mL	
26) Acenaphthene	26.62	153	208461m	1635.62	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.16	170	24046m	238.26	ng/mL	
28) Fluorene	28.64	166	27547m	192.72	ng/mL	
29) C1-Fluorenes	30.85	180	94051m	657.99	ng/mL	
30) C2-Fluorenes	33.04	194	132009m	923.54	ng/mL	
31) C3-Fluorenes	35.68	208	115044m	804.86	ng/mL	
32) Dibenzothiophene	31.94	184	68706m	325.94	ng/mL	
36) OTP	34.15	198	19684	93.38	ng/mL#	100
37) C1-Dibenzothiophenes	33.72	198	163875m	777.43	ng/mL	
38) C2-Dibenzothiophenes	35.42	212	190615m	904.28	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	134676m	638.90	ng/mL	
40) C4-Dibenzothiophenes	38.90	240	58345m	276.79	ng/mL	
41) Phenanthrene	32.44	178	351900m	1660.28	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.41	192	652333m	3077.74	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.69	206	593654m	2800.89	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	297684m	1404.49	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	115036m	542.74	ng/mL	
52) Retene	39.45	234	12902m	291.14	ng/mL	
53) Anthracene	32.62	178	244449m	1246.53	ng/mL	
54) Carbazole	33.29	167	13954m	76.88	ng/mL	
55) 1-Methylphenanthrene	34.95	192	108029m	744.37	ng/mL	
56) Fluoranthene	37.22	202	601747m	2666.44	ng/mL	
57) Benzo(b)fluorene	39.73	216	74910m	568.77	ng/mL	
59) Pyrene	38.10	202	790759m	3445.19	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.50	216	817593m	3562.10	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.96	230	431876m	1881.60	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	193698m	843.91	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	72663m	316.58	ng/mL	
64) Naphthobenzothiophene	41.95	234	68290m	318.03	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18121.D
Acq On : 11 Feb 2006 2:41 am
Operator : AC
Sample : 0602004-01
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 15 14:06:38 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

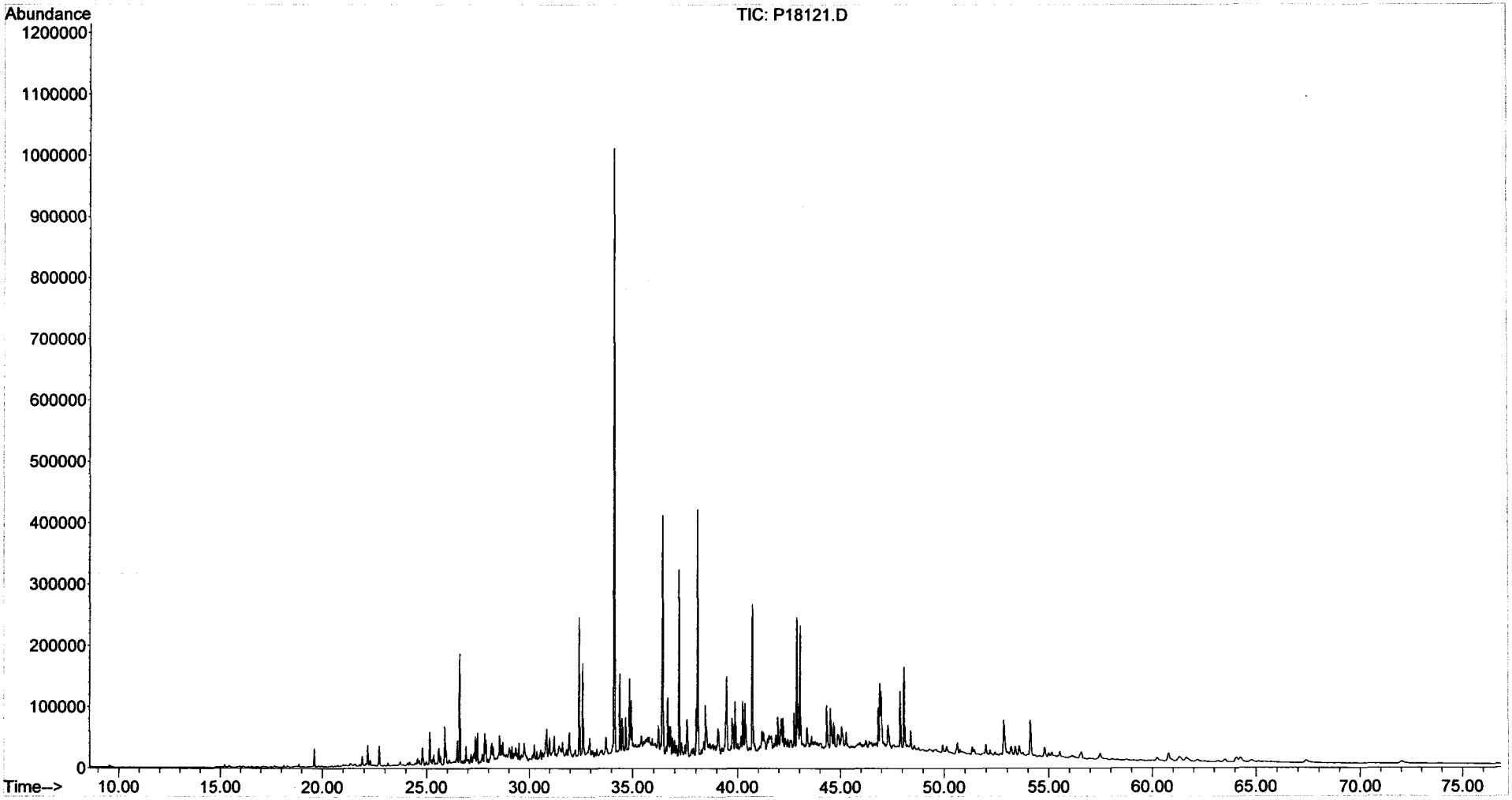
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.95	234	68448m	318.77 ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	19382m	90.26 ng/mL	
67) Naphthobenzothiophene-2,3-	42.59	234	23760m	110.65 ng/mL	
68) C1-Naphthobenzothiophenes	43.35	248	121066m	563.82 ng/ml	
69) C2-Naphthobenzothiophenes	44.86	262	94878m	441.86 ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	62243m	289.87 ng/ml	
71) C4-Naphthobenzothiophenes	48.02	290	33328m	155.21 ng/mL	
73) Benz[a]anthracene	42.88	228	338935m	1565.15 ng/mL	
74) Chrysene	43.04	228	361399m	1633.28 ng/mL	
75) Chrysene/Triphenylene	43.04	228	361836m	1635.25 ng/mL	
76) C1-Chrysenes	44.53	242	335127m	1514.55 ng/mL	
77) C2-Chrysenes	46.23	256	177067m	800.22 ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	6506	29.40 ng/mL	100
79) C3-Chrysenes	47.82	270	106916m	483.19 ng/mL	
80) C4-Chrysenes	49.36	284	40212m	181.73 ng/mL	
82) Benzo[b]fluoranthene	46.93	252	219138m	985.34 ng/mL	
83) Benzo[k]fluoranthene	47.00	252	224578	970.65 ng/mL	100
84) Benzo[a]fluoranthene	47.31	252	81483	352.18 ng/mL#	1
85) Benzo[e]pyrene	47.92	252	191790	890.72 ng/mL	98
86) Benzo[a]pyrene	48.11	252	303560m	1424.88 ng/mL	
87) Perylene	48.40	252	65822m	316.07 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.84	276	153479m	818.64 ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	37948m	198.58 ng/mL	
90) Benzo[g,h,i]perylene	54.10	276	175724m	813.39 ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18121.D
Acq On : 11 Feb 2006 2:41 am
Operator : AC
Sample : 0602004-01
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 15 14:06:38 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: **GC-SED-98 (1-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-01**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/11/06	39.0	10.17	5.2	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**460**	30,31-Bishomohopane-22S	**1100**
C24 Tricyclic Terpane	**260**	30,31-Bishomohopane-22R	**600**
C25 Tricyclic Terpane	**290**	30,31-Trishomohopane-22S	**590**
C24 Tetracyclic Terpane	**350**	30,31-Trishomohopane-22R	**370**
C26 Tricyclic Terpane-22S	**120**	Tetrakishomohopane-22S	**330**
C26 Tricyclic Terpane-22R	**130**	Tetrakishomohopane-22R	**250**
C28 Tricyclic Terpane-22S	**170**	Pentakishomohopane-22S	**330**
C28 Tricyclic Terpane-22R	**160**	Pentakishomohopane-22R	**230**
C29 Tricyclic Terpane-22S	**190**	13b(H),17a(H)-20S-Diacholestane	**620**
C29 Tricyclic Terpane-22R	**200**	13b(H),17a(H)-20R-Diacholestane	**330**
18a-22,29,30-Trisnorneohopane-TS	**800**	13b,17a-20S-Methyldiacholestane	**290**
C30 Tricyclic Terpane-22S	**140**	14a(H),17a(H)-20S-Cholestane	**300**
C30 Tricyclic Terpane-22R	**120**	14a(H),17a(H)-20R-Cholestane	**1200**
17a(H)-22,29,30-Trisnorhopane-TM	**850**	13b,17a-20R-Ethyldiacholestane	**200**
17a/b,21b/a 28,30-Bisnorhopane	**180**	13a,17b-20S-Ethyldiacholestane	**68**
17a(H),21b(H)-25-Norhopane	**70**	14a,17a-20S-Methylcholestane	**200**
30-Norhopane	**2700**	14a,17a-20R-Methylcholestane	**470**
18a(H)-30-Norneohopane-C29Ts	**600**	14a(H),17a(H)-20S-Ethylcholestane	**580**
17a(H)-Diahopane	**120**	14a(H),17a(H)-20R-Ethylcholestane	**760**
30-Normoretane	**400**	14b(H),17b(H)-20R-Cholestane	**650**
18a(H)&18b(H)-Oleananes	**260**	14b(H),17b(H)-20S-Cholestane	**640**
Hopane	**3300**	14b,17b-20R-Methylcholestane	**600**
Moretane	**420**	14b,17b-20S-Methylcholestane	**800**
30-Homohopane-22S	**1400**	14b(H),17b(H)-20R-Ethylcholestane	**1000**
30-Homohopane-22R	**1100**	14b(H),17b(H)-20S-Ethylcholestane	**910**

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

N/A - Not Applicable

02/21/06 16:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28215.D
Acq On : 11 Feb 2006 10:19 am
Operator : AC
Sample : 0602004-01
Misc : 1X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 17 10:08:45 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 2/17/06

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	52347	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	44.21	217	73261	3290.81	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	329.08%#		

9,1cc 2nd

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.94	191	131029m	2535.83	ng/mL	
84) Hopane (T19)	52.94	191	131029m	2535.83	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.22	191	18090m	350.10	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	10146m	196.36	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.44	191	11336m	219.39	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	13787m	266.82	ng/ml	
89) C26 Tricyclic Terpane-22S	44.49	191	4889m	94.62	ng/ml	
90) C26 Tricyclic Terpane-22R	44.59	191	4967m	96.13	ng/ml	
91) C28 Tricyclic Terpane-22S	46.88	191	6565m	127.05	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	6467m	125.16	ng/ml	
93) C29 Tricyclic Terpane-22S	47.58	191	7510	145.34	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.78	191	7948m	153.82	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.98	191	31538m	610.36	ng/ml	
96) C30 Tricyclic Terpane-22S	49.05	191	5474m	105.94	ng/mL	
97) C30 Tricyclic Terpane-22R	49.30	191	4806m	93.01	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.55	191	33681m	651.83	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.80	191	7058m	136.59	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.56	191	2748m	53.18	ng/ml	
101) 30-Norhopane (T15)	51.50	191	107999m	2090.12	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.61	191	23760m	459.83	ng/ml	
103) 17a(H)-Diahopane (X)	51.74	191	4744	91.81	ng/ml	100
104) 30-Normoretane (T17)	52.33	191	15950	308.68	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	10368m	200.65	ng/ml	
106) Moretane (T20)	53.67	191	16407m	317.53	ng/ml	
107) 30-Homohopane-22S (T21)	54.83	191	53552m	1036.40	ng/ml	
108) 30-Homohopane-22R (T22)	55.08	191	44401m	859.30	ng/ml	
109) 30,31-Bishomohopane-22S (T	56.48	191	41780m	808.58	ng/ml	
110) 30,31-Bishomohopane-22R (T	56.90	191	23493m	454.66	ng/ml	
111) 30,31-Trishomohopane-22S (	58.75	191	23419m	453.23	ng/ml	
112) 30,31-Trishomohopane-22R (	59.41	191	14552	281.63	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.56	191	13184m	255.15	ng/ml	
114) Tetrakishomohopane-22R (T3	62.51	191	9794	189.54	ng/ml	100
115) Pentakishomohopane-22S (T3	64.91	191	13056m	252.67	ng/ml	
116) Pentakishomohopane-22R (T3	66.29	191	9031m	174.78	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	10503m	471.78	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.13	217	5573m	250.33	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	4894	219.83	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	5088m	228.55	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.27	217	19557m	878.48	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.55	217	3327m	149.45	ng/ml	

-RT ARpt conc 2nd 2/21/06

MS 2/17/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28215.D
Acq On : 11 Feb 2006 10:19 am
Operator : AC
Sample : 0602004-01
Misc : 1X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 17 10:08:45 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

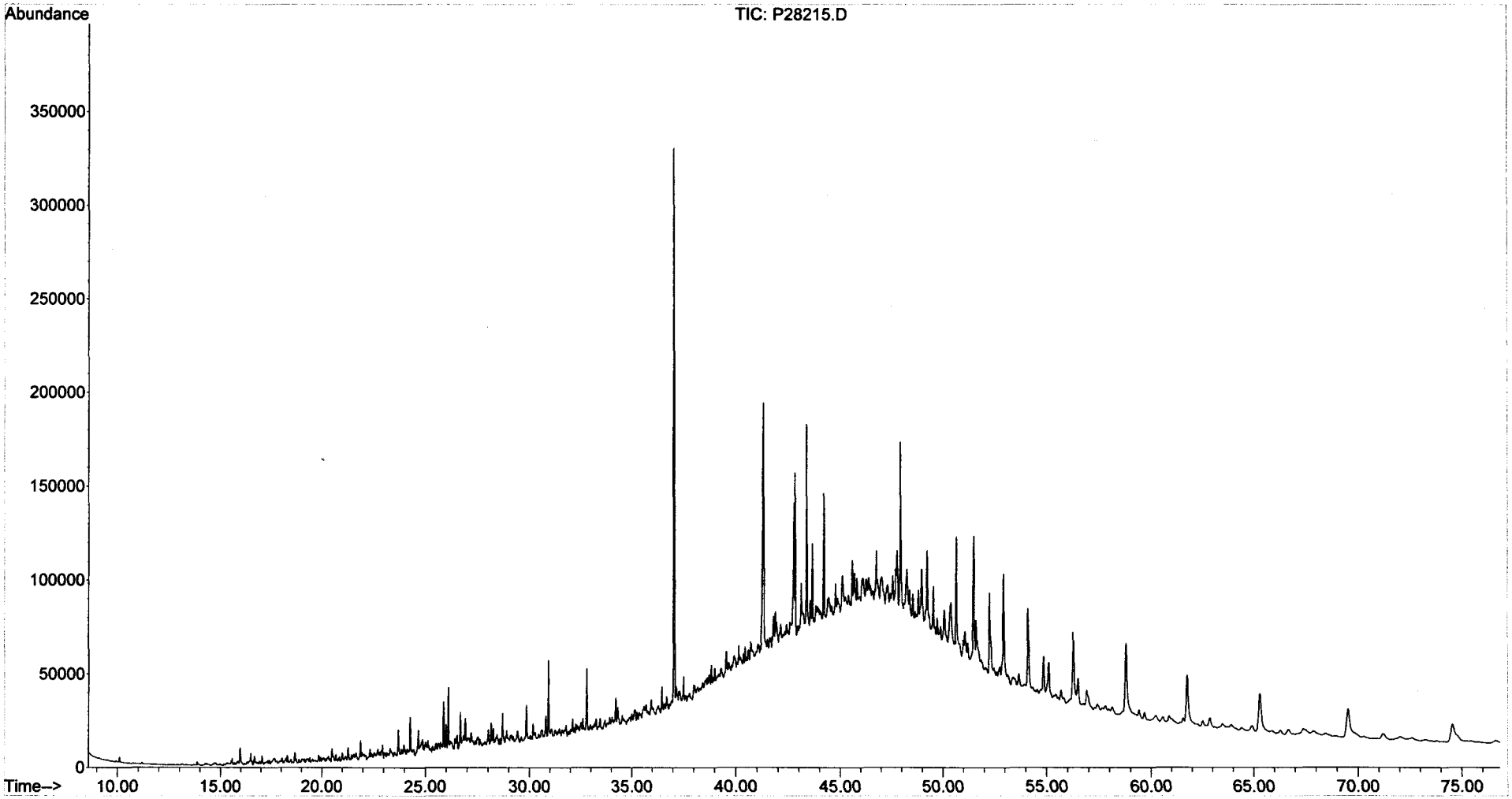
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	1155	51.88	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	3396m	152.54	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.75	217	8015m	360.03	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.11	217	9787m	439.62	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.07	217	12828m	576.22	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.83	218	11031m	495.50	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.91	218	10843m	487.06	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.17	218	10260m	460.87	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.26	218	13515m	607.08	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	16922m	760.12	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.41	218	15455m	694.22	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 : P28215.D
Acq On : 11 Feb 2006 10:19 am
Operator : AC
Sample : 0602004-01
Misc : 1X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 17 10:08:45 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: **GC-SED-58C (8-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-02**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/09/06	84.6	5.03	35	10	AC

Parameter	Result		Parameter	Result
Naphthalene	2700000	E	Fluoranthene	340000
C1-Naphthalenes	1700000	E	Pyrene	500000
C2-Naphthalenes	830000		C1-Fluoranthenes/Pyrenes	400000
C3-Naphthalenes	220000		C2-Fluoranthenes/Pyrenes	94000
C4-Naphthalenes	48000		C3-Fluoranthenes/Pyrenes	20000
Biphenyl	150000		C4-Fluoranthenes/Pyrenes	4600
Dibenzofuran	39000		Naphthobenzothiophenes	38000
Acenaphthylene	150000		C1-Naphthobenzothiophenes	26000
Acenaphthene	760000		C2-Naphthobenzothiophenes	9900
Fluorene	420000		C3-Naphthobenzothiophenes	4900
C1-Fluorenes	170000		C4-Naphthobenzothiophenes	1600
C2-Fluorenes	71000		Benz[a]anthracene	160000
C3-Fluorenes	28000		Chrysene/Triphenylene	150000
Anthracene	360000		C1-Chrysenes	91000
Phenanthrene	1200000	E	C2-Chrysenes	26000
C1-Phenanthrenes/Anthracenes	590000		C3-Chrysenes	8300
C2-Phenanthrenes/Anthracenes	180000		C4-Chrysenes	4300
C3-Phenanthrenes/Anthracenes	38000		Benzo[b]fluoranthene	50000
C4-Phenanthrenes/Anthracenes	6500		Benzo[k]fluoranthene	81000
Retene	1400		Benzo[a]fluoranthene	35000
Dibenzothiophene	120000		Benzo[e]pyrene	54000
C1-Dibenzothiophenes	110000		Benzo[a]pyrene	120000
C2-Dibenzothiophenes	61000		Perylene	18000
C3-Dibenzothiophenes	22000		Indeno[1,2,3-cd]pyrene	51000
C4-Dibenzothiophenes	5200		Dibenz[a,h]anthracene	12000
Benzo(b)fluorene	83000		Benzo[g,h,i]perylene	45000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	102	50-130

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

02/21/06 11:32

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-58C (8-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-02**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/09/06	84.6	5.03	35	10	AC

Parameter	Result
Carbazole	**11000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	108	50-130
Benzo[b]fluoranthene-d12	102	50-130

N/A - Not Applicable

02/21/06 11:32

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18079.D
Acq On : 9 Feb 2006 5:34 pm
Operator : AC
Sample : 0602004-02
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 16 14:40:46 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 for WO
2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	43075m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	74915m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	5312m	57.52	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.75%#			
58) Pyrene-d10	38.02	212	11747m	61.87	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.19%#			
81) Benzo[b]fluoranthene-d12	46.85	264	8701m	58.32	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.83%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.63	128	7224853m	32843.40	ng/mL E	
10) C1-Naphthalenes	22.31	142	4642914m	21106.19	ng/mL E	
11) C2-Naphthalenes	25.14	156	2216143m	10074.35	ng/mL	
12) C3-Naphthalenes	27.48	170	578549m	2630.02	ng/mL	
13) C4-Naphthalenes	30.25	184	129876m	590.40	ng/mL	
15) 2-Methylnaphthalene	22.31	142	2974274	21357.37	ng/mL# E	100
16) 1-Methylnaphthalene	22.73	142	1662385	12679.62	ng/mL# E	100
22) Biphenyl	24.19	154	321766m	1858.45	ng/mL	
23) 2,6-Dimethylnaphthalene	24.81	156	404124m	3496.67	ng/mL	
24) Dibenzofuran	27.26	168	92771m	476.97	ng/mL	
25) Acenaphthylene	25.89	152	390821m	1852.91	ng/mL	
26) Acenaphthene	26.63	153	1208359	9222.79	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.18	170	41393m	398.97	ng/mL	
28) Fluorene	28.64	166	750420m	5107.03	ng/mL	
29) C1-Fluorenes	30.86	180	296103m	2015.15	ng/mL	
30) C2-Fluorenes	33.04	194	126323m	859.70	ng/mL	
31) C3-Fluorenes	35.69	208	49161m	334.57	ng/mL	
32) Dibenzothiophene	31.95	184	325778m	1503.41	ng/mL	
36) OTP	34.12	198	1046m	4.83	ng/mL	
37) C1-Dibenzothiophenes	33.72	198	281552m	1299.31	ng/mL	
38) C2-Dibenzothiophenes	35.41	212	159778m	737.35	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	57166m	263.81	ng/mL	
40) C4-Dibenzothiophenes	38.90	240	13738m	63.40	ng/mL	
41) Phenanthrene	32.46	178	3047805	13988.09	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.52	192	1555516m	7139.14	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.69	206	489792m	2247.93	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	101252m	464.70	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	17207m	78.97	ng/mL	
52) Retene	39.45	234	757m	16.62	ng/mL	
53) Anthracene	32.62	178	877266	4351.67	ng/mL	100
54) Carbazole	33.29	167	24043m	128.86	ng/mL	
55) 1-Methylphenanthrene	34.95	192	242177m	1623.26	ng/mL	
56) Fluoranthene	37.22	202	954317m	4113.57	ng/mL	
57) Benzo(b)fluorene	39.74	216	136770m	1010.18	ng/mL	
59) Pyrene	38.10	202	1421885m	6026.19	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.50	216	1148833m	4868.95	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.17	230	268564m	1138.22	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.13	244	56205m	238.21	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.67	258	13226m	56.05	ng/mL	
64) Naphthobenzothiophene	41.95	234	62135m	281.49	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18079.D
Acq On : 9 Feb 2006 5:34 pm
Operator : AC
Sample : 0602004-02
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 16 14:40:46 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

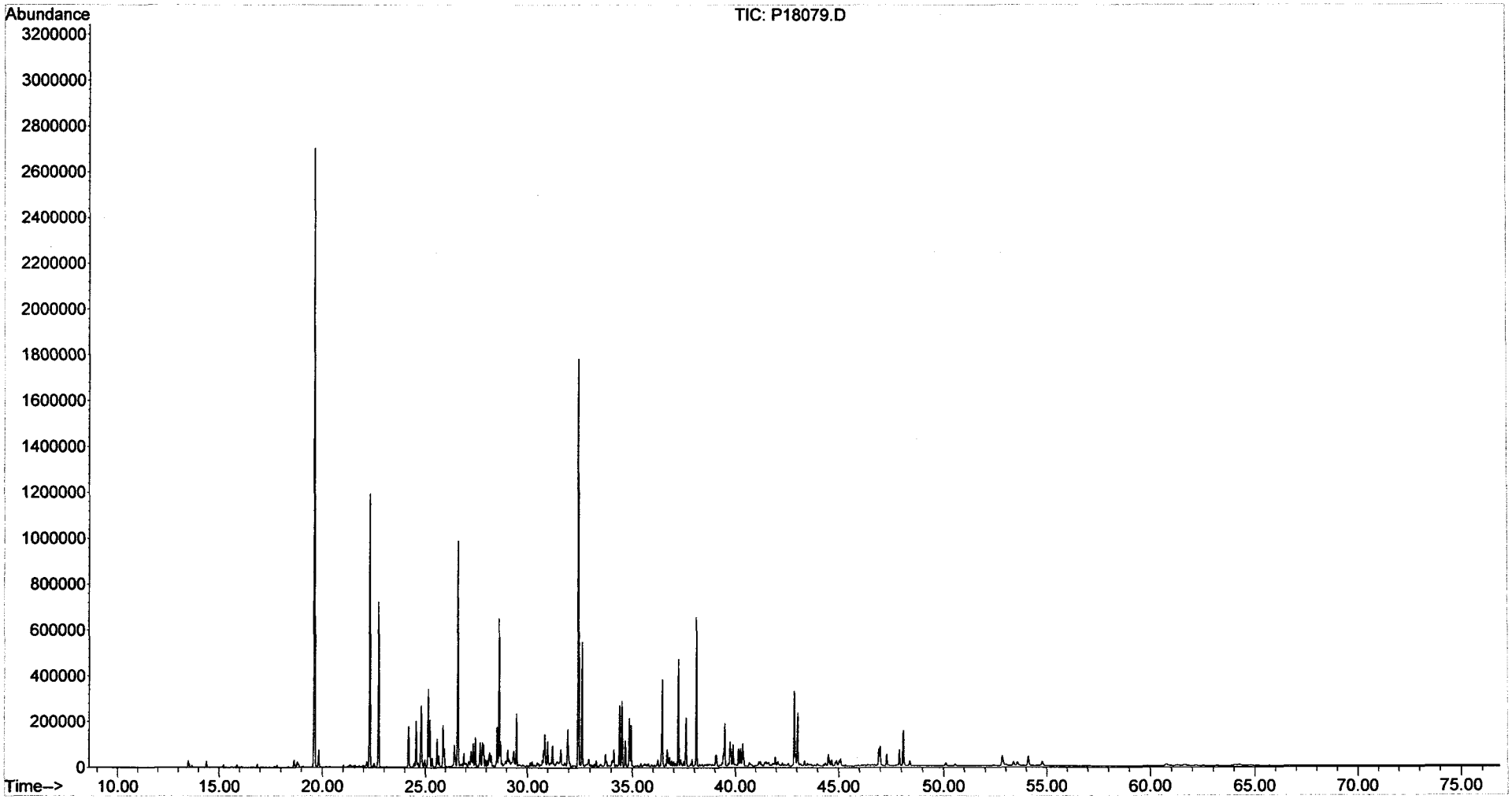
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.95	234	62065m	281.17	ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	18179	82.36	ng/mL#	25
67) Naphthobenzothiophene-2,3-	42.59	234	21014m	95.20	ng/mL	
68) C1-Naphthobenzothiophenes	43.35	248	70585m	319.77	ng/ml	
69) C2-Naphthobenzothiophenes	44.86	262	26652m	120.74	ng/ml	
70) C3-Naphthobenzothiophenes	46.76	276	13207m	59.83	ng/ml	
71) C4-Naphthobenzothiophenes	49.52	290	4199m	19.02	ng/mL	
73) Benz[a]anthracene	42.88	228	457153m	2004.63	ng/mL	
74) Chrysene	43.04	228	418126m	1794.37	ng/mL	
75) Chrysene/Triphenylene	43.04	228	417566m	1791.97	ng/mL	
76) C1-Chrysenes	44.53	242	258222m	1108.15	ng/mL	
77) C2-Chrysenes	46.24	256	73354m	314.80	ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	1158	4.97	ng/mL	100
79) C3-Chrysenes	47.82	270	23598m	101.27	ng/mL	
80) C4-Chrysenes	48.80	284	12276m	52.68	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	142550	608.65	ng/mL	100
83) Benzo[k]fluoranthene	47.00	252	239522	983.05	ng/mL	100
84) Benzo[a]fluoranthene	47.31	252	104950m	430.74	ng/mL	
85) Benzo[e]pyrene	47.92	252	148229	653.70	ng/mL	92
86) Benzo[a]pyrene	48.11	252	332546m	1482.24	ng/mL	
87) Perylene	48.40	252	47166m	215.07	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.83	276	123203m	624.02	ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	29893m	148.54	ng/mL	
90) Benzo[g,h,i]perylene	54.10	276	124232	546.05	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18079.D
Acq On : 9 Feb 2006 5:34 pm
Operator : AC
Sample : 0602004-02
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 16 14:40:46 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: **GC-SED-58C (8-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-02**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/11/06	84.6	5.03	3.5	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**100**	30,31-Bishomohopane-22S	**43**
C24 Tricyclic Terpane	**69**	30,31-Bishomohopane-22R	**27**
C25 Tricyclic Terpane	**58**	30,31-Trishomohopane-22S	**28**
C24 Tetracyclic Terpane	**25**	30,31-Trishomohopane-22R	**17**
C26 Tricyclic Terpane-22S	**25**	Tetrakishomohopane-22S	**16**
C26 Tricyclic Terpane-22R	**24**	Tetrakishomohopane-22R	**12**
C28 Tricyclic Terpane-22S	**27**	Pentakishomohopane-22S	**15**
C28 Tricyclic Terpane-22R	**28**	Pentakishomohopane-22R	**8.6**
C29 Tricyclic Terpane-22S	**25**	13b(H),17a(H)-20S-Diacholestane	**93**
C29 Tricyclic Terpane-22R	**26**	13b(H),17a(H)-20R-Diacholestane	**51**
18a-22,29,30-Trisnorneohopane-TS	**62**	13b,17a-20S-Methyldiacholestane	**40**
C30 Tricyclic Terpane-22S	**21**	14a(H),17a(H)-20S-Cholestane	**75**
C30 Tricyclic Terpane-22R	**17**	14a(H),17a(H)-20R-Cholestane	**200**
17a(H)-22,29,30-Trisnorhopane-TM	**75**	13b,17a-20R-Ethyldiacholestane	**24**
17a/b,21b/a 28,30-Bisnorhopane	**28**	13a,17b-20S-Ethyldiacholestane	**5.1** J
17a(H),21b(H)-25-Norhopane	**12**	14a,17a-20S-Methylcholestane	**28**
30-Norhopane	**160**	14a,17a-20R-Methylcholestane	**110**
18a(H)-30-Norneohopane-C29Ts	**46**	14a(H),17a(H)-20S-Ethylcholestane	**61**
17a(H)-Diahopane	**16**	14a(H),17a(H)-20R-Ethylcholestane	**91**
30-Normoretane	**36**	14b(H),17b(H)-20R-Cholestane	**91**
18a(H)&18b(H)-Oleananes	**29**	14b(H),17b(H)-20S-Cholestane	**84**
Hopane	**250**	14b,17b-20R-Methylcholestane	**82**
Moretane	**38**	14b,17b-20S-Methylcholestane	**92**
30-Homohopane-22S	**66**	14b(H),17b(H)-20R-Ethylcholestane	**120**
30-Homohopane-22R	**65**	14b(H),17b(H)-20S-Ethylcholestane	**60**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	95	50-130

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

02/21/06 16:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28216.D
Acq On : 11 Feb 2006 11:55 am
Operator : AC
Sample : 0602004-02
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 17 10:09:41 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 2/17/06

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	56526	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	44.21	217	130224	5417.07	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 541.71%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	17188m	308.05	ng/mL	
84) Hopane (T19)	52.93	191	17188m	308.05	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.21	191	7073m	126.76	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	4694	84.13	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.48	191	3912m	70.11	ng/ml	
88) C24 Tetracyclic Terpane (T	44.77	191	1694m	30.36	ng/ml	
89) C26 Tricyclic Terpane-22S	44.49	191	1686m	30.22	ng/ml	
90) C26 Tricyclic Terpane-22R	44.59	191	1634	29.29	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.87	191	1830m	32.80	ng/ml	
92) C28 Tricyclic Terpane-22R	47.04	191	1864m	33.41	ng/ml	
93) C29 Tricyclic Terpane-22S	47.57	191	1706m	30.58	ng/ml	
94) C29 Tricyclic Terpane-22R	47.77	191	1778m	31.87	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.97	191	4174m	74.81	ng/ml	
96) C30 Tricyclic Terpane-22S	49.04	191	1440m	25.81	ng/mL	
97) C30 Tricyclic Terpane-22R	49.29	191	1162	20.83	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.54	191	5090m	91.22	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.78	191	1864m	33.41	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.53	191	815m	14.61	ng/ml	
101) 30-Norhopane (T15)	51.49	191	10770m	193.02	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.59	191	3155m	56.55	ng/ml	
103) 17a(H)-Diahopane (X)	51.73	191	1061m	19.02	ng/ml	
104) 30-Normoretane (T17)	52.31	191	2426m	43.48	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	52.74	191	1948m	34.91	ng/ml	
106) Moretane (T20)	53.66	191	2603m	46.65	ng/ml	
107) 30-Homohopane-22S (T21)	54.82	191	4467m	80.06	ng/ml	
108) 30-Homohopane-22R (T22)	55.06	191	4390m	78.68	ng/ml	
109) 30,31-Bishomohopane-22S (T	56.47	191	2911	52.17	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.88	191	1852m	33.19	ng/ml	
111) 30,31-Trishomohopane-22S (	58.71	191	1877	33.64	ng/ml	100
112) 30,31-Trishomohopane-22R (	59.39	191	1148	20.57	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.54	191	1059	18.98	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.49	191	802m	14.37	ng/ml	
115) Pentakishomohopane-22S (T3	64.88	191	1038	18.60	ng/ml	100
116) Pentakishomohopane-22R (T3	66.26	191	585m	10.48	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.71	217	2715	112.94	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.12	217	1488m	61.90	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.83	217	1157m	48.13	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.71	217	2201m	91.56	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.26	217	5969	248.30	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.54	217	704m	29.29	ng/ml	

MS 2/17/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28216.D
Acq On : 11 Feb 2006 11:55 am
Operator : AC
Sample : 0602004-02
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 17 10:09:41 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

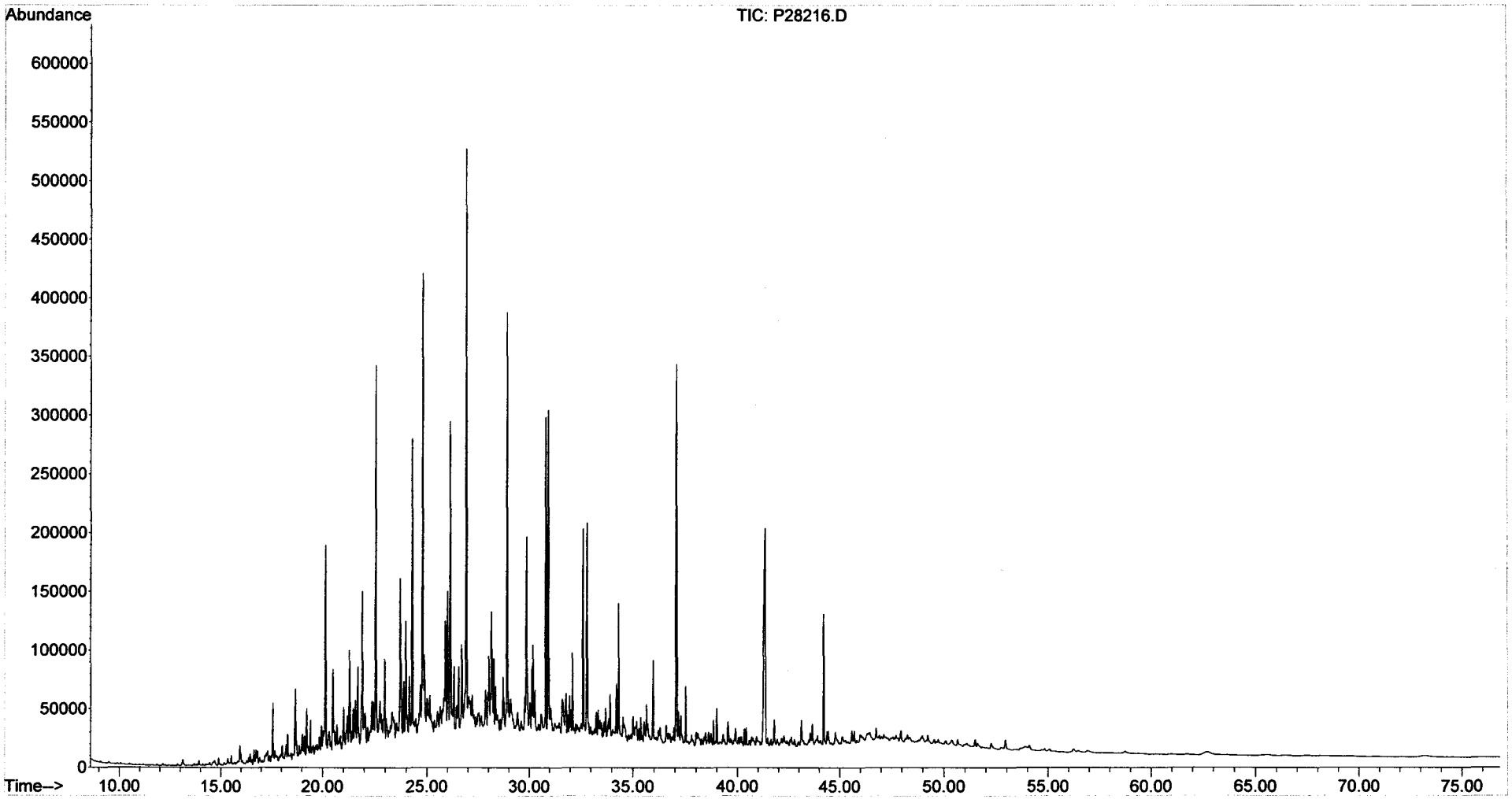
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.82	217	149	6.20	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.99	217	833m	34.65	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.74	217	3248m	135.11	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.10	217	1796m	74.71	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.06	217	2654m	110.40	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.81	218	2651m	110.28	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.90	218	2460	102.33	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.16	218	2383m	99.13	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.25	218	2685m	111.69	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.36	218	3523m	146.55	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.40	218	1758m	73.13	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 : P28216.D
Acq On : 11 Feb 2006 11:55 am
Operator : AC
Sample : 0602004-02
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 17 10:09:41 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: **GC-SED-58C (8-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-02E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/10/06	84.6	5.03	35	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**2600000**		Fluoranthene	830	U
C1-Naphthalenes	**1600000**		Pyrene	730	U
C2-Naphthalenes	1400	U	C1-Fluoranthenes/Pyrenes	730	U
C3-Naphthalenes	1400	U	C2-Fluoranthenes/Pyrenes	730	U
C4-Naphthalenes	1400	U	C3-Fluoranthenes/Pyrenes	730	U
Biphenyl	750	U	C4-Fluoranthenes/Pyrenes	730	U
Dibenzofuran	980	U	Naphthobenzothiophenes	1000	U
Acenaphthylene	1500	U	C1-Naphthobenzothiophenes	1000	U
Acenaphthene	950	U	C2-Naphthobenzothiophenes	1000	U
Fluorene	950	U	C3-Naphthobenzothiophenes	1000	U
C1-Fluorenes	950	U	C4-Naphthobenzothiophenes	1000	U
C2-Fluorenes	950	U	Benz[a]anthracene	1300	U
C3-Fluorenes	950	U	Chrysene/Triphenylene	890	U
Anthracene	1100	U	C1-Chrysenes	890	U
Phenanthrene	**1000000**		C2-Chrysenes	890	U
C1-Phenanthrenes/Anthracenes	1200	U	C3-Chrysenes	890	U
C2-Phenanthrenes/Anthracenes	1200	U	C4-Chrysenes	890	U
C3-Phenanthrenes/Anthracenes	1200	U	Benzo[b]fluoranthene	870	U
C4-Phenanthrenes/Anthracenes	1200	U	Benzo[k]fluoranthene	1700	U
Retene	1200	U	Benzo[a]fluoranthene	1700	U
Dibenzothiophene	910	U	Benzo[e]pyrene	1100	U
C1-Dibenzothiophenes	910	U	Benzo[a]pyrene	1100	U
C2-Dibenzothiophenes	910	U	Perylene	1400	U
C3-Dibenzothiophenes	910	U	Indeno[1,2,3-cd]pyrene	2000	U
C4-Dibenzothiophenes	910	U	Dibenz[a,h]anthracene	1600	U
Benzo(b)fluorene	830	U	Benzo[g,h,i]perylene	1400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	94	50-130
Benzo[b]fluoranthene-d12	85	50-130

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

02/17/06 12:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18107.D
Acq On : 10 Feb 2006 3:11 pm
Operator : AC
Sample : 0602004-02-RE
Misc : 100X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 15 20:01:04 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 for UMS
2/16/06

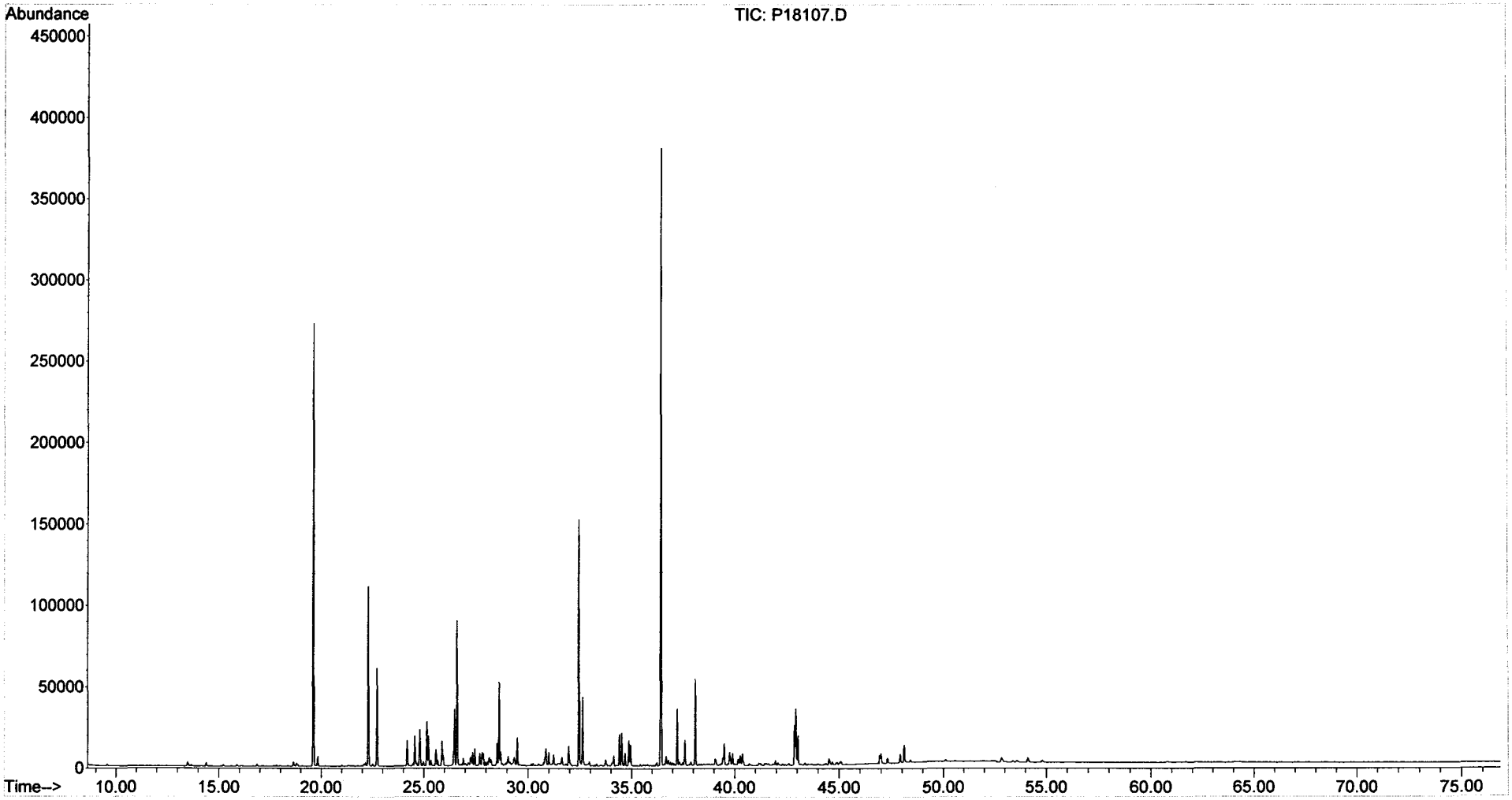
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	39204m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	65931m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	446m	5.31	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.53%#	
58) Pyrene-d10	38.02	212	928m	5.37	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.54%#	
81) Benzo[b]fluoranthene-d12	46.84	264	638m	4.86	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.49%#	
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	19.61	128	641323m	3203.25	ng/mL	
10) C1-Naphthalenes	22.29	142	402573m	2010.75	ng/mL	
15) 2-Methylnaphthalene	22.29	142	257230m	2029.47	ng/mL	
16) 1-Methylnaphthalene	22.72	142	144000	1206.79	ng/mL#	100
41) Phenanthrene	32.44	178	250864	1265.04	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18107.D
Acq On : 10 Feb 2006 3:11 pm
Operator : AC
Sample : 0602004-02-RE
Misc : 100X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 15 20:01:04 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
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-103 (8.1-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-03**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	79.4	5.04	84	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	1800000	E	Fluoranthene	340000	E
C1-Naphthalenes	1400000	E	Pyrene	530000	E
C2-Naphthalenes	960000	E	C1-Fluoranthenes/Pyrenes	750000	
C3-Naphthalenes	450000		C2-Fluoranthenes/Pyrenes	370000	
C4-Naphthalenes	160000		C3-Fluoranthenes/Pyrenes	150000	
Biphenyl	120000		C4-Fluoranthenes/Pyrenes	56000	
Dibenzofuran	38000		Naphthobenzothiophenes	86000	
Acenaphthylene	120000		C1-Naphthobenzothiophenes	110000	
Acenaphthene	630000	E	C2-Naphthobenzothiophenes	78000	
Fluorene	360000	E	C3-Naphthobenzothiophenes	41000	
C1-Fluorenes	300000		C4-Naphthobenzothiophenes	17000	
C2-Fluorenes	240000		Benz[a]anthracene	210000	
C3-Fluorenes	130000		Chrysene/Triphenylene	210000	E
Anthracene	390000	E	C1-Chrysenes	250000	
Phenanthrene	1100000	E	C2-Chrysenes	140000	
C1-Phenanthrenes/Anthracenes	1000000	E	C3-Chrysenes	81000	
C2-Phenanthrenes/Anthracenes	600000		C4-Chrysenes	25000	
C3-Phenanthrenes/Anthracenes	260000		Benzo[b]fluoranthene	72000	
C4-Phenanthrenes/Anthracenes	70000		Benzo[k]fluoranthene	82000	
Retene	12000		Benzo[a]fluoranthene	48000	
Dibenzothiophene	150000		Benzo[e]pyrene	77000	
C1-Dibenzothiophenes	220000		Benzo[a]pyrene	150000	
C2-Dibenzothiophenes	200000		Perylene	26000	
C3-Dibenzothiophenes	110000		Indeno[1,2,3-cd]pyrene	63000	
C4-Dibenzothiophenes	40000		Dibenz[a,h]anthracene	20000	
Benzo(b)fluorene	110000		Benzo[g,h,i]perylene	61000	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	99		50-130
Pyrene-d10	135	§	50-130
Benzo[b]fluoranthene-d12	107		50-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
E - Estimated value, exceeds the upper limit of calibration.

02/21/06 11:35

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-103 (8.1-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-03**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	79.4	5.04	84	1	AC

Parameter	Result
Carbazole	9800

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	99		50-130
Pyrene-d10	135	§	50-130
Benzo[b]fluoranthene-d12	107		50-130

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

02/21/06 11:35

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18123.D
Acq On : 11 Feb 2006 4:15 am
Operator : AC
Sample : 0602004-03
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Feb 16 14:34:59 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

MSforWD
2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	40129m	500.00 ng/mL	-0.02
72) Chrysene-d12	42.95	240	71946m	500.00 ng/mL	-0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	20281m	235.75 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.57%#		
58) Pyrene-d10	38.05	212	56890m	321.64 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 32.16%#		
81) Benzo[b]fluoranthene-d12	46.85	264	36557m	255.16 ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.52%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.64	128	17804848m	86880.90 ng/mL E	
10) C1-Naphthalenes	22.33	142	13925829m	67952.76 ng/mL E	
11) C2-Naphthalenes	25.16	156	9333905m	45545.92 ng/mL E	
12) C3-Naphthalenes	27.48	170	4436342m	21647.67 ng/mL	
13) C4-Naphthalenes	30.25	184	1581647m	7717.84 ng/mL	
15) 2-Methylnaphthalene	22.33	142	8493360	65465.63 ng/mL# E	100
16) 1-Methylnaphthalene	22.75	142	5412866	44316.85 ng/mL# E	100
22) Biphenyl	24.19	154	884158m	5481.60 ng/mL	
23) 2,6-Dimethylnaphthalene	24.82	156	1700804m	15796.53 ng/mL E	
24) Dibenzofuran	27.26	168	324246m	1789.47 ng/mL	
25) Acenaphthylene	25.89	152	1085772m	5525.63 ng/mL	
26) Acenaphthene	26.64	153	3690711m	30237.32 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.18	170	344062m	3559.71 ng/mL	
28) Fluorene	28.65	166	2373683m	17340.18 ng/mL E	
29) C1-Fluorenes	30.86	180	1923504m	14051.54 ng/mL	
30) C2-Fluorenes	33.04	194	1567700m	11452.33 ng/mL	
31) C3-Fluorenes	35.04	208	843336m	6160.72 ng/mL	
32) Dibenzothiophene	31.95	184	1425299m	7060.38 ng/mL	
36) OTP	34.15	198	4655m	23.06 ng/mL	
37) C1-Dibenzothiophenes	33.74	198	2082398m	10315.40 ng/mL	
38) C2-Dibenzothiophenes	35.78	212	1912944m	9475.99 ng/mL	
39) C3-Dibenzothiophenes	37.23	226	1094244m	5420.46 ng/mL	
40) C4-Dibenzothiophenes	38.91	240	385377m	1909.01 ng/mL	
41) Phenanthrene	32.49	178	10825058	53329.62 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.54	192	9855396m	48552.59 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.70	206	5803182m	28589.36 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2469222m	12164.62 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	677952m	3339.93 ng/mL	
52) Retene	39.46	234	24438m	575.82 ng/mL	
53) Anthracene	32.65	178	3474200	18498.91 ng/mL E	100
54) Carbazole	33.29	167	81583m	469.36 ng/mL	
55) 1-Methylphenanthrene	34.98	192	1563810m	11251.42 ng/mL E	
56) Fluoranthene	37.24	202	3450158m	15963.66 ng/mL E	
57) Benzo(b)fluorene	39.76	216	680955m	5398.75 ng/mL	
59) Pyrene	38.13	202	5573367m	25354.96 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.52	216	7835533m	35646.25 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.97	230	3922619m	17845.20 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1616255m	7352.84 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.69	258	587676m	2673.52 ng/mL	
64) Naphthobenzothiophene	41.96	234	508859m	2474.51 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18123.D
Acq On : 11 Feb 2006 4:15 am
Operator : AC
Sample : 0602004-03
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Feb 16 14:34:59 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

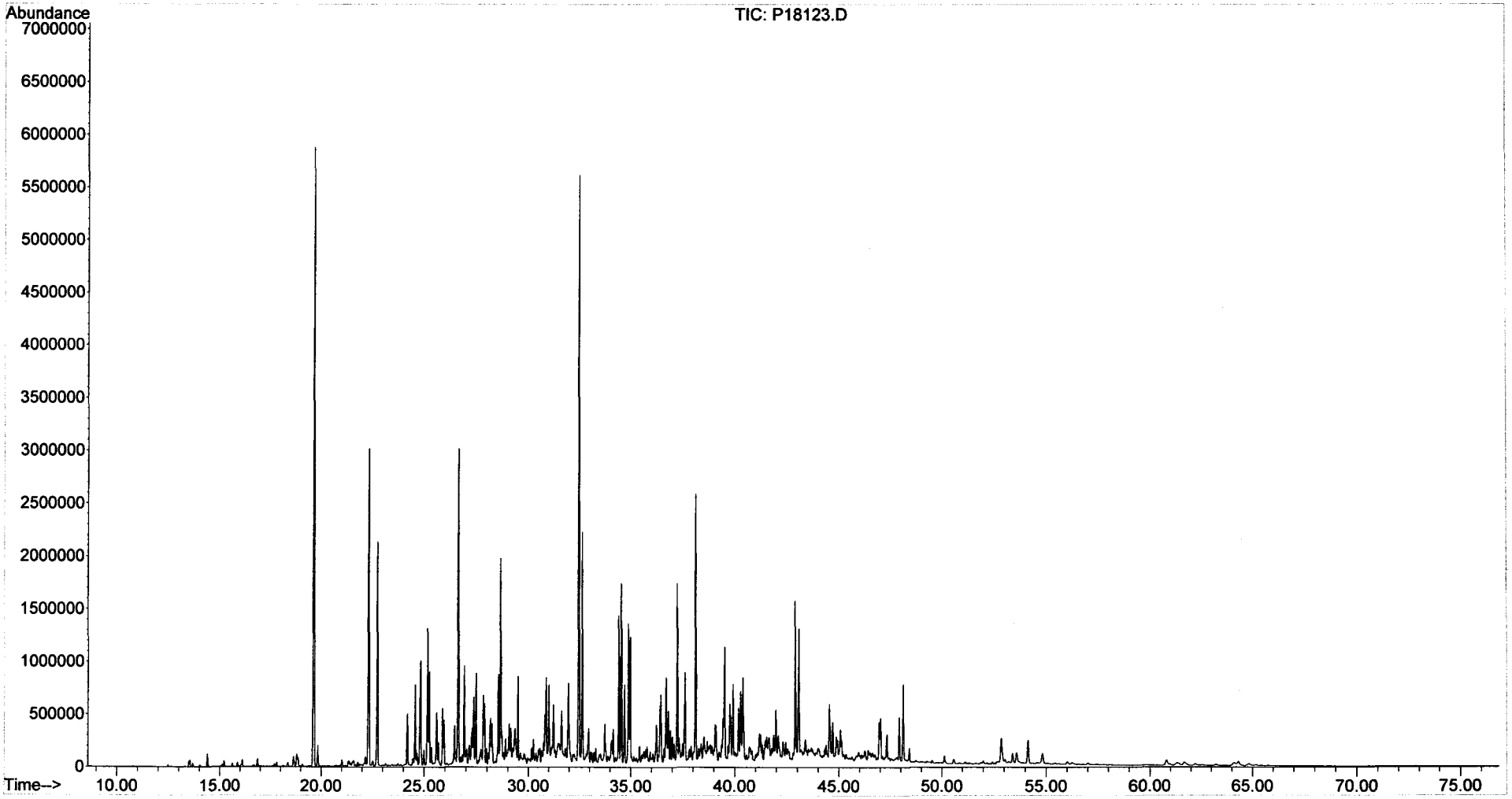
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.96	234	509394m	2477.11 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	151100m	734.78 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	179306m	871.94 ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	1067848m	5192.80 ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	768362m	3736.44 ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	402355m	1956.60 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	168417m	818.99 ng/mL	
73) Benz[a]anthracene	42.90	228	2152160m	9826.75 ng/mL	
74) Chrysene	43.06	228	2237139m	9996.80 ng/mL	
75) Chrysene/Triphenylene	43.06	228	2243013m	10023.05 ng/mL E	
76) C1-Chrysenes	44.54	242	2711383m	12115.99 ng/mL	
77) C2-Chrysenes	46.24	256	1547944m	6917.09 ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	18245	81.53 ng/mL	100
79) C3-Chrysenes	47.82	270	863451m	3858.39 ng/mL	
80) C4-Chrysenes	49.30	284	265264m	1185.35 ng/mL	
82) Benzo[b]fluoranthene	46.94	252	773101	3437.16 ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	916507	3916.76 ng/mL	97
84) Benzo[a]fluoranthene	47.33	252	532894m	2277.36 ng/mL	
85) Benzo[e]pyrene	47.93	252	800817	3677.42 ng/mL	96
86) Benzo[a]pyrene	48.13	252	1536962m	7133.31 ng/mL	
87) Perylene	48.42	252	263219m	1249.77 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.86	276	572132m	3017.41 ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	179791m	930.25 ng/mL	
90) Benzo[g,h,i]perylene	54.14	276	634026	2901.82 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18123.D
Acq On : 11 Feb 2006 4:15 am
Operator : AC
Sample : 0602004-03
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Feb 16 14:34:59 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
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-103 (8.1-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-03**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	79.4	5.04	9.61	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**950**	30,31-Bishomohopane-22S	**1400**
C24 Tricyclic Terpane	**620**	30,31-Bishomohopane-22R	**1000**
C25 Tricyclic Terpane	**640**	30,31-Trishomohopane-22S	**810**
C24 Tetracyclic Terpane	**720**	30,31-Trishomohopane-22R	**520**
C26 Tricyclic Terpane-22S	**280**	Tetrakishomohopane-22S	**500**
C26 Tricyclic Terpane-22R	**270**	Tetrakishomohopane-22R	**330**
C28 Tricyclic Terpane-22S	**370**	Pentakishomohopane-22S	**340**
C28 Tricyclic Terpane-22R	**350**	Pentakishomohopane-22R	**290**
C29 Tricyclic Terpane-22S	**390**	13b(H),17a(H)-20S-Diacholestane	**1400**
C29 Tricyclic Terpane-22R	**380**	13b(H),17a(H)-20R-Diacholestane	**790**
18a-22,29,30-Trisnorneohopane-TS	**2200**	13b,17a-20S-Methyldiacholestane	**580**
C30 Tricyclic Terpane-22S	**320**	14a(H),17a(H)-20S-Cholestane	**760**
C30 Tricyclic Terpane-22R	**200**	14a(H),17a(H)-20R-Cholestane	**2500**
17a(H)-22,29,30-Trisnorhopane-TM	**2000**	13b,17a-20R-Ethyldiacholestane	**340**
17a/b,21b/a 28,30-Bisnorhopane	**480**	13a,17b-20S-Ethyldiacholestane	**91**
17a(H),21b(H)-25-Norhopane	**140**	14a,17a-20S-Methylcholestane	**470**
30-Norhopane	**5600**	14a,17a-20R-Methylcholestane	**1200**
18a(H)-30-Norneohopane-C29Ts	**2200**	14a(H),17a(H)-20S-Ethylcholestane	**790**
17a(H)-Diahopane	**500**	14a(H),17a(H)-20R-Ethylcholestane	**1200**
30-Normoretane	**1200**	14b(H),17b(H)-20R-Cholestane	**1100**
18a(H)&18b(H)-Oleananes	**1000**	14b(H),17b(H)-20S-Cholestane	**1200**
Hopane	**9000**	14b,17b-20R-Methylcholestane	**1200**
Moretane	**1400**	14b,17b-20S-Methylcholestane	**1400**
30-Homohopane-22S	**2400**	14b(H),17b(H)-20R-Ethylcholestane	**1800**
30-Homohopane-22R	**2100**	14b(H),17b(H)-20S-Ethylcholestane	**1200**

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

N/A - Not Applicable

02/21/06 16:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28217.D
Acq On : 11 Feb 2006 1:31 pm
Operator : AC
Sample : 0602004-03
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 17 10:15:10 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 2/17/06

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	60034	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	44.21	217	51146	2003.25	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 200.32%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	223783m	3776.36	ng/mL	
84) Hopane (T19)	52.95	191	221646m	3740.30	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	23533m	397.12	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	15404	259.94	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	15774m	266.19	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	17701	298.71	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7032m	118.67	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	6648	112.19	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	9211	155.44	ng/ml	100
92) C28 Tricyclic Terpane-22R	47.05	191	8613m	145.35	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	9574	161.56	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.78	191	9356m	157.88	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	54497m	919.64	ng/ml	
96) C30 Tricyclic Terpane-22S	49.06	191	7870m	132.81	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	4922	83.06	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	49066	827.99	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	11973m	202.05	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	3345m	56.45	ng/ml	
101) 30-Norhopane (T15)	51.51	191	139453	2353.28	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.62	191	54396m	917.94	ng/ml	
103) 17a(H)-Diahopane (X)	51.74	191	12292m	207.43	ng/ml	
104) 30-Normoretane (T17)	52.33	191	30546	515.47	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	25330m	427.45	ng/ml	
106) Moretane (T20)	53.68	191	34923m	589.33	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	58664	989.96	ng/ml	100
108) 30-Homohopane-22R (T22)	55.08	191	52006	877.61	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.49	191	34974	590.19	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.89	191	25965	438.16	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.76	191	19899m	335.80	ng/ml	
112) 30,31-Trishomohopane-22R (	59.41	191	12706m	214.42	ng/ml	
113) Tetrakishomohopane-22S (T3	61.55	191	12275	207.14	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.52	191	8193	138.26	ng/ml	100
115) Pentakishomohopane-22S (T3	64.91	191	8346m	140.84	ng/ml	
116) Pentakishomohopane-22R (T3	66.28	191	7060m	119.14	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	14591m	571.49	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	8433m	330.30	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	6130m	240.10	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	8120m	318.04	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.27	217	26955	1055.76	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.56	217	3629m	142.14	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28217.D
Acq On : 11 Feb 2006 1:31 pm
Operator : AC
Sample : 0602004-03
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 17 10:15:10 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

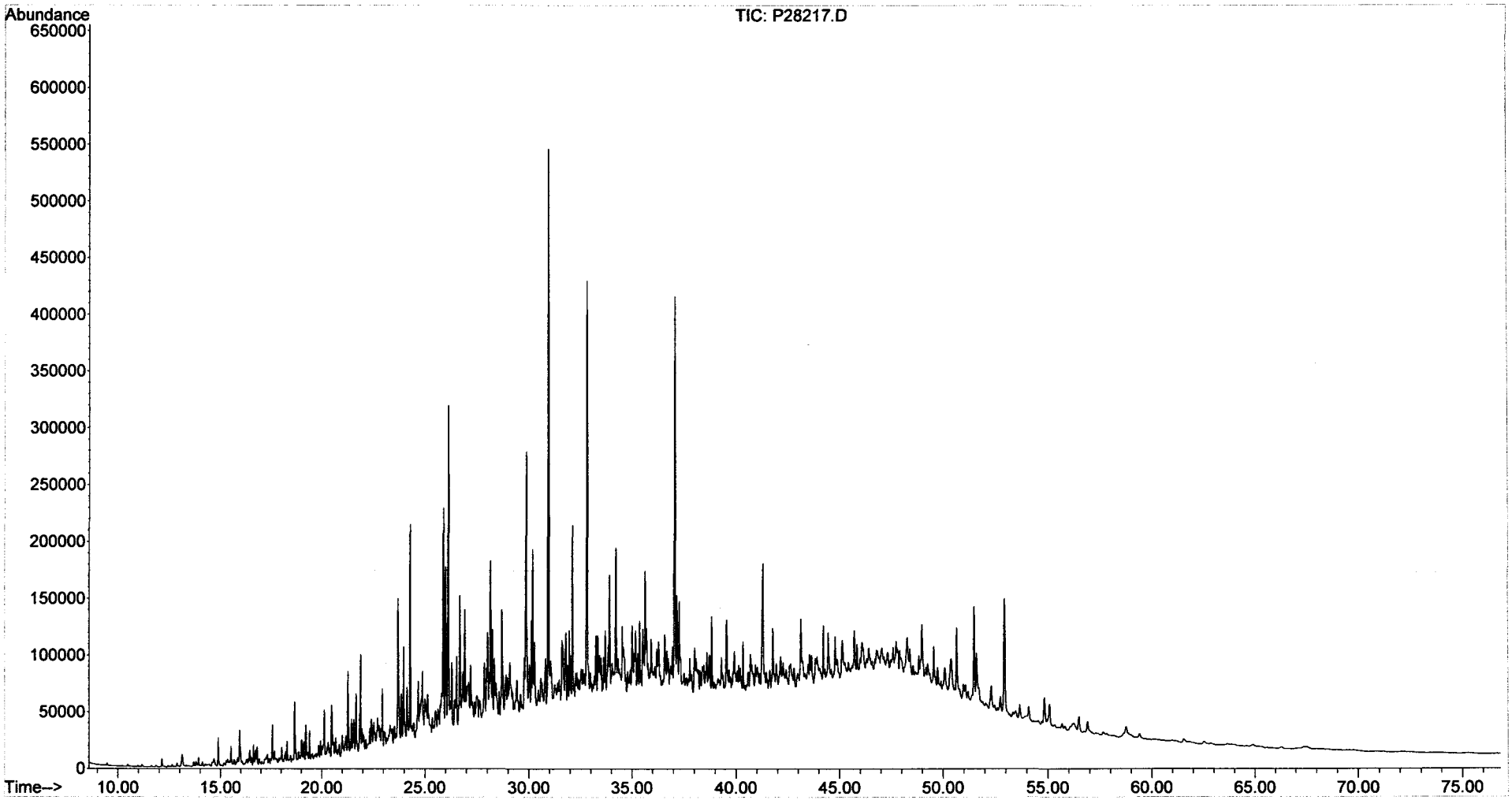
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	967	37.87	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	4962m	194.35	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	12796m	501.19	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.11	217	8408m	329.32	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.07	217	12678m	496.56	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.83	218	12085	473.34	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	12534	490.92	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.19	218	12810m	501.73	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.26	218	14754m	577.87	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	19078m	747.23	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.40	218	12419m	486.42	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 : P28217.D
Acq On : 11 Feb 2006 1:31 pm
Operator : AC
Sample : 0602004-03
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 17 10:15:10 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: **GC-SED-103 (8.1-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-03E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/09/06	79.4	5.04	84	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1800000**		Fluoranthene	**330000**	
C1-Naphthalenes	**1400000**		Pyrene	**520000**	
C2-Naphthalenes	**920000**		C1-Fluoranthenes/Pyrenes	190	U
C3-Naphthalenes	350	U	C2-Fluoranthenes/Pyrenes	190	U
C4-Naphthalenes	350	U	C3-Fluoranthenes/Pyrenes	190	U
Biphenyl	190	U	C4-Fluoranthenes/Pyrenes	190	U
Dibenzofuran	250	U	Naphthobenzothiophenes	250	U
Acenaphthylene	380	U	C1-Naphthobenzothiophenes	250	U
Acenaphthene	**610000**		C2-Naphthobenzothiophenes	250	U
Fluorene	**340000**		C3-Naphthobenzothiophenes	250	U
C1-Fluorenes	240	U	C4-Naphthobenzothiophenes	250	U
C2-Fluorenes	240	U	Benz[a]anthracene	330	U
C3-Fluorenes	240	U	Chrysene/Triphenylene	**200000**	
Anthracene	**360000**		C1-Chrysenes	230	U
Phenanthrene	**1100000**		C2-Chrysenes	230	U
C1-Phenanthrenes/Anthracenes	**970000**		C3-Chrysenes	230	U
C2-Phenanthrenes/Anthracenes	300	U	C4-Chrysenes	230	U
C3-Phenanthrenes/Anthracenes	300	U	Benzo[b]fluoranthene	220	U
C4-Phenanthrenes/Anthracenes	300	U	Benzo[k]fluoranthene	430	U
Retene	300	U	Benzo[a]fluoranthene	430	U
Dibenzothiophene	230	U	Benzo[e]pyrene	290	U
C1-Dibenzothiophenes	230	U	Benzo[a]pyrene	290	U
C2-Dibenzothiophenes	230	U	Perylene	360	U
C3-Dibenzothiophenes	230	U	Indeno[1,2,3-cd]pyrene	500	U
C4-Dibenzothiophenes	230	U	Dibenz[a,h]anthracene	400	U
Benzo(b)fluorene	210	U	Benzo[g,h,i]perylene	370	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	97	50-130
Pyrene-d10	118	50-130
Benzo[b]fluoranthene-d12	105	50-130

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

02/21/06 11:33

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18075.D
Acq On : 9 Feb 2006 2:29 pm
Operator : AC
Sample : 0602004-03-RE
Misc : 10X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 15 19:28:46 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 for WW 2/16/06

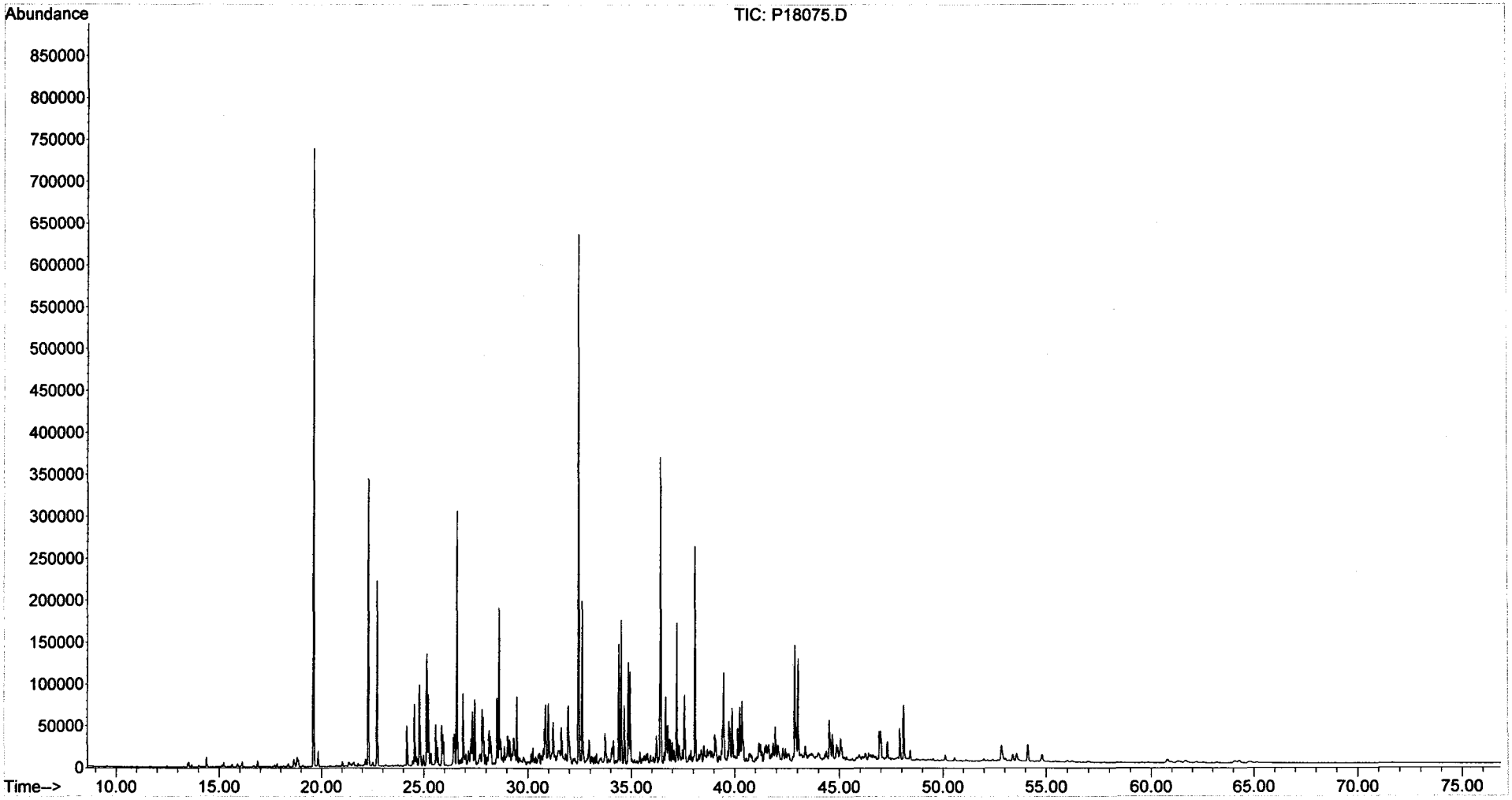
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	39229m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	68855m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	1937m	23.03	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.30%#			
58) Pyrene-d10	38.02	212	4854m	28.07	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.81%#			
81) Benzo[b]fluoranthene-d12	46.84	264	3420m	24.94	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.49%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.61	128	1763865m	8804.46	ng/mL	
10) C1-Naphthalenes	22.31	142	1317424m	6576.01	ng/mL	
11) C2-Naphthalenes	25.14	156	876745m	4376.33	ng/mL	
15) 2-Methylnaphthalene	22.31	142	805054	6347.61	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	511180	4281.21	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	109858m	1043.73	ng/mL	
26) Acenaphthene	26.62	153	347023m	2908.32	ng/mL	
28) Fluorene	28.64	166	216086m	1614.76	ng/mL	
41) Phenanthrene	32.45	178	999981	5039.43	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.52	192	921383m	4643.33	ng/mL	
53) Anthracene	32.62	178	318193m	1733.14	ng/mL	
55) 1-Methylphenanthrene	34.95	192	150777m	1109.71	ng/mL	
56) Fluoranthene	37.22	202	330581m	1564.67	ng/mL	
59) Pyrene	38.10	202	528795m	2460.84	ng/mL	
74) Chrysene	43.04	228	208936m	975.56	ng/mL	
75) Chrysene/Triphenylene	43.04	228	207898m	970.71	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18075.D
Acq On : 9 Feb 2006 2:29 pm
Operator : AC
Sample : 0602004-03-RE
Misc : 10X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 15 19:28:46 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: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	5.25	150	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	5900000	E	Fluoranthene	830000	E
C1-Naphthalenes	3900000	E	Pyrene	1300000	E
C2-Naphthalenes	2500000	E	C1-Fluoranthenes/Pyrenes	2000000	
C3-Naphthalenes	1200000		C2-Fluoranthenes/Pyrenes	1000000	
C4-Naphthalenes	460000		C3-Fluoranthenes/Pyrenes	460000	
Biphenyl	310000		C4-Fluoranthenes/Pyrenes	170000	
Dibenzofuran	120000		Naphthobenzothiophenes	230000	
Acenaphthylene	370000		C1-Naphthobenzothiophenes	300000	
Acenaphthene	1200000	E	C2-Naphthobenzothiophenes	220000	
Fluorene	840000	E	C3-Naphthobenzothiophenes	120000	
C1-Fluorenes	730000		C4-Naphthobenzothiophenes	52000	
C2-Fluorenes	680000		Benz[a]anthracene	500000	
C3-Fluorenes	350000		Chrysene/Triphenylene	530000	
Anthracene	860000	E	C1-Chrysenes	690000	
Phenanthrene	2600000	E	C2-Chrysenes	370000	
C1-Phenanthrenes/Anthracenes	2600000	E	C3-Chrysenes	230000	
C2-Phenanthrenes/Anthracenes	1700000		C4-Chrysenes	76000	
C3-Phenanthrenes/Anthracenes	740000		Benzo[b]fluoranthene	190000	
C4-Phenanthrenes/Anthracenes	210000		Benzo[k]fluoranthene	200000	
Retene	34000		Benzo[a]fluoranthene	110000	
Dibenzothiophene	330000		Benzo[e]pyrene	210000	
C1-Dibenzothiophenes	520000		Benzo[a]pyrene	380000	
C2-Dibenzothiophenes	520000		Perylene	71000	
C3-Dibenzothiophenes	300000		Indeno[1,2,3-cd]pyrene	170000	
C4-Dibenzothiophenes	110000		Dibenz[a,h]anthracene	57000	
Benzo(b)fluorene	270000		Benzo[g,h,i]perylene	160000	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98		50-130
Pyrene-d10	153	§	50-130
Benzo[b]fluoranthene-d12	107		50-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
E - Estimated value, exceeds the upper limit of calibration.

02/21/06 11:36

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	5.25	150	1	AC

Parameter	Result
Carbazole	**51000**

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98		50-130
Pyrene-d10	153	§	50-130
Benzo[b]fluoranthene-d12	107		50-130

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

02/21/06 11:37

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18125.D
Acq On : 11 Feb 2006 5:49 am
Operator : AC
Sample : 0602004-04
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 16 14:35:16 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 for WW 2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	35429m	500.00 ng/mL	-0.02
72) Chrysene-d12	42.95	240	67191m	500.00 ng/mL	-0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	9901m	130.36 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 13.04%#		
58) Pyrene-d10	38.04	212	31771m	203.45 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.34%#		
81) Benzo[b]fluoranthene-d12	46.85	264	19017m	142.13 ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 14.21%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.64	128	17483765m	96631.89 ng/mL E	
10) C1-Naphthalenes	22.33	142	11518195m	63660.48 ng/mL E	
11) C2-Naphthalenes	25.16	156	7365704m	40709.87 ng/mL E	
12) C3-Naphthalenes	27.48	170	3519725m	19453.34 ng/mL	
13) C4-Naphthalenes	30.25	184	1368873m	7565.69 ng/mL	
15) 2-Methylnaphthalene	22.33	142	6849575	59799.41 ng/mL# E	100
16) 1-Methylnaphthalene	22.75	142	4658302	43198.50 ng/mL# E	100
22) Biphenyl	24.19	154	730250m	5128.00 ng/mL	
23) 2,6-Dimethylnaphthalene	24.81	156	1024528m	10777.81 ng/mL E	
24) Dibenzofuran	27.26	168	320949m	2006.25 ng/mL	
25) Acenaphthylene	25.89	152	1062824m	6126.38 ng/mL	
26) Acenaphthene	26.63	153	2083362	19332.92 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.18	170	220938m	2589.10 ng/mL	
28) Fluorene	28.65	166	1672386m	13837.79 ng/mL E	
29) C1-Fluorenes	30.86	180	1459296m	12074.63 ng/mL	
30) C2-Fluorenes	33.04	194	1345234m	11130.84 ng/mL	
31) C3-Fluorenes	35.04	208	689756m	5707.24 ng/mL	
32) Dibenzothiophene	31.95	184	969261m	5438.29 ng/mL	
36) OTP	34.13	198	2620m	14.70 ng/mL	
37) C1-Dibenzothiophenes	33.73	198	1519478m	8525.43 ng/mL	
38) C2-Dibenzothiophenes	35.78	212	1518244m	8518.50 ng/mL	
39) C3-Dibenzothiophenes	37.23	226	892911m	5009.91 ng/mL	
40) C4-Dibenzothiophenes	38.91	240	326767m	1833.41 ng/mL	
41) Phenanthrene	32.47	178	7739162	43184.88 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.53	192	7689384m	42907.11 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.70	206	4947816m	27609.04 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2169785m	12107.50 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	629623m	3513.32 ng/mL	
52) Retene	39.45	234	21023m	561.06 ng/mL	
53) Anthracene	32.65	178	2362500	14248.28 ng/mL E	100
54) Carbazole	33.29	167	129459m	843.60 ng/mL	
55) 1-Methylphenanthrene	34.98	192	1278682m	10420.42 ng/mL E	
56) Fluoranthene	37.24	202	2618116m	13720.88 ng/mL E	
57) Benzo(b)fluorene	39.76	216	495460m	4449.21 ng/mL	
59) Pyrene	38.12	202	4248368m	21891.06 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.51	216	6264189m	32278.22 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.97	230	3363144m	17329.67 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	1487529m	7664.96 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	543432m	2800.21 ng/mL	
64) Naphthobenzothiophene	41.96	234	413231m	2276.06 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18125.D
Acq On : 11 Feb 2006 5:49 am
Operator : AC
Sample : 0602004-04
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 16 14:35:16 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

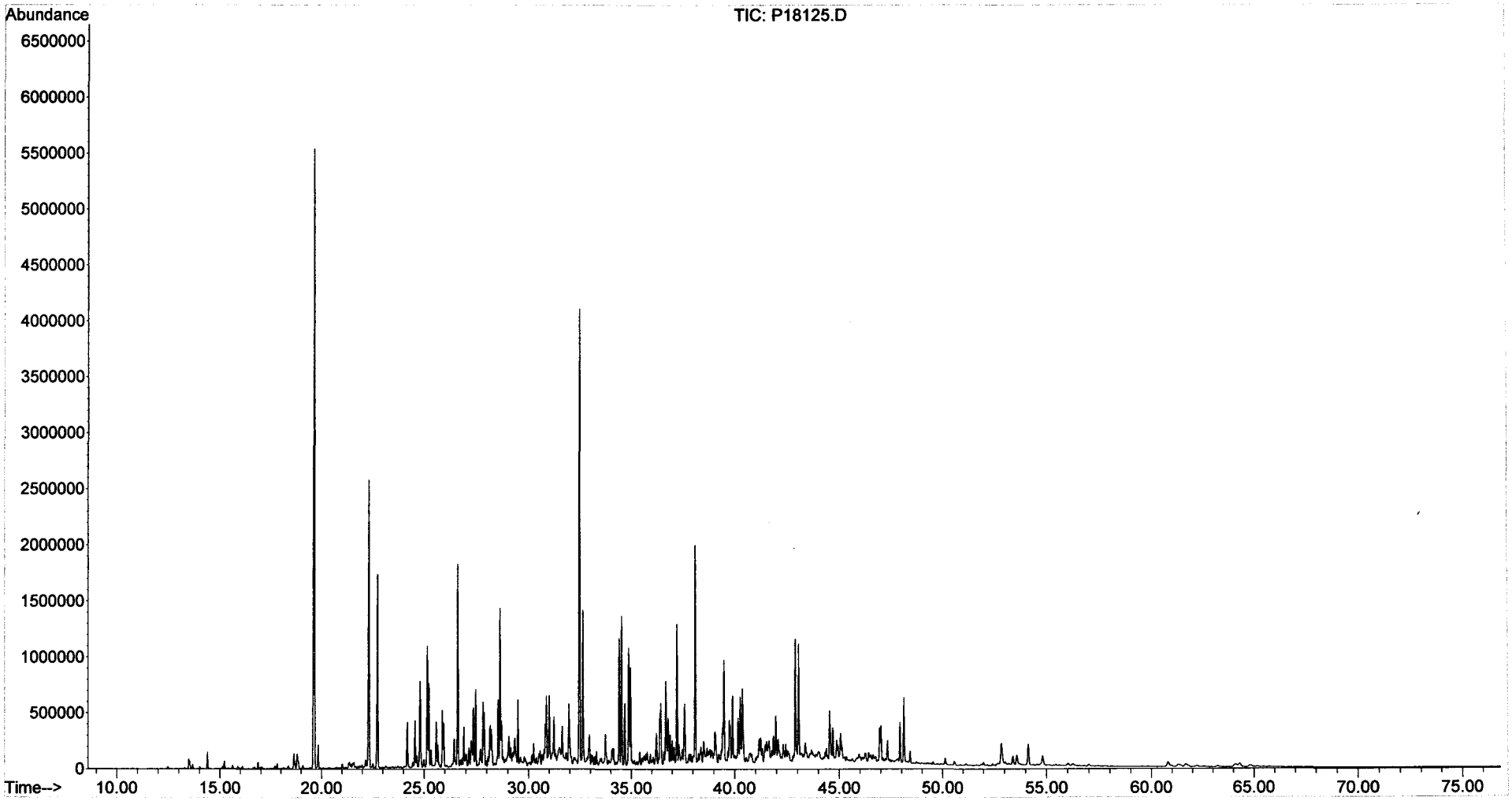
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.96	234	413071m	2275.18 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	128083m	705.48 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	146891m	809.07 ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	910609m	5015.61 ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	655870m	3612.51 ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	352576m	1941.98 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	155306m	855.42 ng/mL	
73) Benz[a]anthracene	42.90	228	1671247m	8170.93 ng/mL	
74) Chrysene	43.06	228	1820238m	8709.47 ng/mL	
75) Chrysene/Triphenylene	43.06	228	1838308m	8795.93 ng/mL	
76) C1-Chrysenes	44.54	242	2377292m	11374.86 ng/mL	
77) C2-Chrysenes	46.25	256	1289604m	6170.50 ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	19587	93.72 ng/mL	100
79) C3-Chrysenes	47.83	270	788332m	3772.01 ng/mL	
80) C4-Chrysenes	49.30	284	261428m	1250.88 ng/mL	
82) Benzo[b]fluoranthene	46.94	252	663617m	3159.19 ng/mL	
83) Benzo[k]fluoranthene	47.02	252	729452	3337.98 ng/mL	97
84) Benzo[a]fluoranthene	47.33	252	402887m	1843.61 ng/mL	
85) Benzo[e]pyrene	47.93	252	694818	3416.46 ng/mL	96
86) Benzo[a]pyrene	48.12	252	1256254m	6243.11 ng/mL	
87) Perylene	48.42	252	228609m	1162.26 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.85	276	502743m	2839.09 ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	168707m	934.68 ng/mL	
90) Benzo[g,h,i]perylene	54.14	276	552989	2710.04 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18125.D
Acq On : 11 Feb 2006 5:49 am
Operator : AC
Sample : 0602004-04
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 16 14:35:16 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: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	5.25	22.26	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**3500**	30,31-Bishomohopane-22S	**4500**
C24 Tricyclic Terpane	**2600**	30,31-Bishomohopane-22R	**3400**
C25 Tricyclic Terpane	**2600**	30,31-Trishomohopane-22S	**2400**
C24 Tetracyclic Terpane	**2700**	30,31-Trishomohopane-22R	**1500**
C26 Tricyclic Terpane-22S	**1200**	Tetrakishomohopane-22S	**1400**
C26 Tricyclic Terpane-22R	**1100**	Tetrakishomohopane-22R	**930**
C28 Tricyclic Terpane-22S	**1300**	Pentakishomohopane-22S	**920**
C28 Tricyclic Terpane-22R	**1400**	Pentakishomohopane-22R	**680**
C29 Tricyclic Terpane-22S	**1600**	13b(H),17a(H)-20S-Diacholestane	**5900**
C29 Tricyclic Terpane-22R	**1600**	13b(H),17a(H)-20R-Diacholestane	**3500**
18a-22,29,30-Trisnorneohopane-TS	**7900**	13b,17a-20S-Methyldiacholestane	**2400**
C30 Tricyclic Terpane-22S	**1100**	14a(H),17a(H)-20S-Cholestane	**3600**
C30 Tricyclic Terpane-22R	**800**	14a(H),17a(H)-20R-Cholestane	**9600**
17a(H)-22,29,30-Trisnorhopane-TM	**7000**	13b,17a-20R-Ethyldiacholestane	**1600**
17a/b,21b/a 28,30-Bisnorhopane	**1500**	13a,17b-20S-Ethyldiacholestane	**370**
17a(H),21b(H)-25-Norhopane	**540**	14a,17a-20S-Methylcholestane	**2000**
30-Norhopane	**19000**	14a,17a-20R-Methylcholestane	**4300**
18a(H)-30-Norneohopane-C29Ts	**7300**	14a(H),17a(H)-20S-Ethylcholestane	**3000**
17a(H)-Diahopane	**1800**	14a(H),17a(H)-20R-Ethylcholestane	**4300**
30-Normoretane	**4300**	14b(H),17b(H)-20R-Cholestane	**4400**
18a(H)&18b(H)-Oleananes	**3300**	14b(H),17b(H)-20S-Cholestane	**4700**
Hopane	**31000**	14b,17b-20R-Methylcholestane	**4500**
Moretane	**4600**	14b,17b-20S-Methylcholestane	**5500**
30-Homohopane-22S	**7500**	14b(H),17b(H)-20R-Ethylcholestane	**6400**
30-Homohopane-22R	**6600**	14b(H),17b(H)-20S-Ethylcholestane	**4600**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	102	50-130

N/A - Not Applicable

02/21/06 16:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28218.D
Acq On : 11 Feb 2006 3:07 pm
Operator : AC
Sample : 0602004-04
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 17 10:19:34 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 2/17/06

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	64063	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	44.21	217	24890	913.56	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 91.36%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	217707	3442.78	ng/mL	98
84) Hopane (T19)	52.95	191	217707	3442.78	ng/mL	98
85) C23 Tricyclic Terpane (T4)	41.23	191	24861m	393.15	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	18624	294.52	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	18325m	289.79	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	18642	294.80	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	8203m	129.72	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	7904	124.99	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	9379m	148.32	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	9749m	154.17	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	11085	175.30	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	10985m	173.71	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	55377m	875.72	ng/ml	
96) C30 Tricyclic Terpane-22S	49.06	191	7697m	121.72	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	5600m	88.56	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	49263m	779.04	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	10591m	167.48	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	3777m	59.73	ng/ml	
101) 30-Norhopane (T15)	51.51	191	131009	2071.75	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.62	191	51402m	812.86	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	12926m	204.41	ng/ml	
104) 30-Normoretane (T17)	52.33	191	30323	479.52	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	23474m	371.21	ng/ml	
106) Moretane (T20)	53.68	191	32273m	510.36	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	52475	829.83	ng/ml	100
108) 30-Homohopane-22R (T22)	55.09	191	46706	738.60	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.49	191	31347	495.72	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.90	191	23693	374.68	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.76	191	16982m	268.55	ng/ml	
112) 30,31-Trishomohopane-22R (	59.42	191	10398m	164.43	ng/ml	
113) Tetrakishomohopane-22S (T3	61.56	191	10168	160.79	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.52	191	6509	102.93	ng/ml	100
115) Pentakishomohopane-22S (T3	64.92	191	6448	101.97	ng/ml	100
116) Pentakishomohopane-22R (T3	66.29	191	4767m	75.38	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	17752m	651.57	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	10556m	387.45	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	7422m	272.42	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	10867m	398.86	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	28893	1060.49	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.56	217	4821m	176.95	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28218.D
Acq On : 11 Feb 2006 3:07 pm
Operator : AC
Sample : 0602004-04
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 17 10:19:34 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

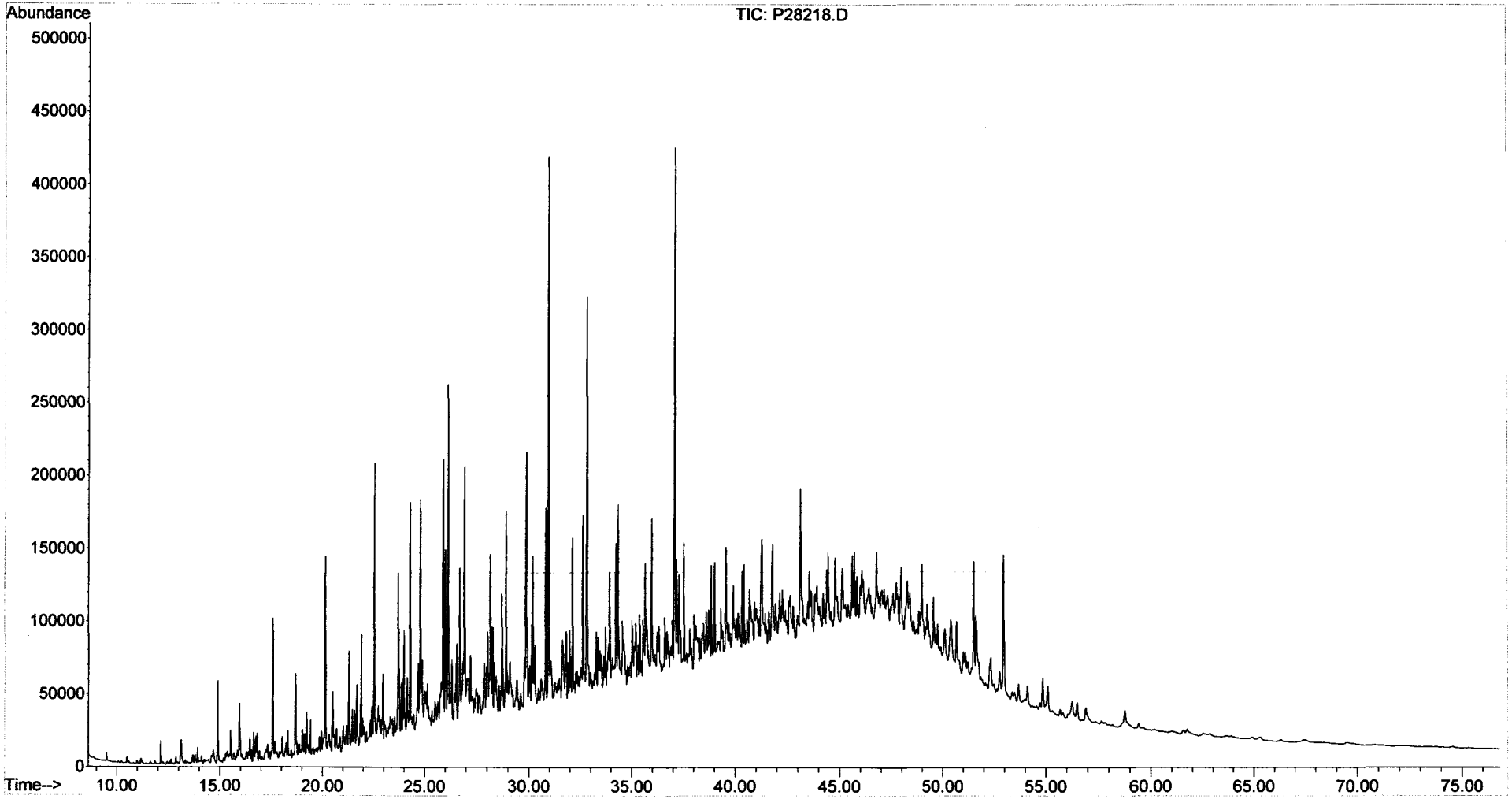
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.84	217	1130	41.48	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	5977m	219.38	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	13115m	481.37	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.11	217	9063m	332.65	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	12961m	475.72	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	13450	493.67	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	14345	526.52	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.19	218	13539m	496.94	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	16696m	612.81	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	19225m	705.64	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.42	218	13959m	512.35	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 : P28218.D
Acq On : 11 Feb 2006 3:07 pm
Operator : AC
Sample : 0602004-04
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 17 10:19:34 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: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04E**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/09/06	47.1	5.25	150	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**5900000**		Fluoranthene	**810000**	
C1-Naphthalenes	**3700000**		Pyrene	**1300000**	
C2-Naphthalenes	**2300000**		C1-Fluoranthenes/Pyrenes	540	U
C3-Naphthalenes	1000	U	C2-Fluoranthenes/Pyrenes	540	U
C4-Naphthalenes	1000	U	C3-Fluoranthenes/Pyrenes	540	U
Biphenyl	550	U	C4-Fluoranthenes/Pyrenes	540	U
Dibenzofuran	720	U	Naphthobenzothiophenes	740	U
Acenaphthylene	1100	U	C1-Naphthobenzothiophenes	740	U
Acenaphthene	**1100000**		C2-Naphthobenzothiophenes	740	U
Fluorene	**820000**		C3-Naphthobenzothiophenes	740	U
C1-Fluorenes	700	U	C4-Naphthobenzothiophenes	740	U
C2-Fluorenes	700	U	Benz[a]anthracene	950	U
C3-Fluorenes	700	U	Chrysene/Triphenylene	660	U
Anthracene	**830000**		C1-Chrysenes	660	U
Phenanthrene	**2500000**		C2-Chrysenes	660	U
C1-Phenanthrenes/Anthracenes	**2500000**		C3-Chrysenes	660	U
C2-Phenanthrenes/Anthracenes	880	U	C4-Chrysenes	660	U
C3-Phenanthrenes/Anthracenes	880	U	Benzo[b]fluoranthene	640	U
C4-Phenanthrenes/Anthracenes	880	U	Benzo[k]fluoranthene	1200	U
Retene	880	U	Benzo[a]fluoranthene	1200	U
Dibenzothiophene	670	U	Benzo[e]pyrene	830	U
C1-Dibenzothiophenes	670	U	Benzo[a]pyrene	840	U
C2-Dibenzothiophenes	670	U	Perylene	1100	U
C3-Dibenzothiophenes	670	U	Indeno[1,2,3-cd]pyrene	1500	U
C4-Dibenzothiophenes	670	U	Dibenz[a,h]anthracene	1200	U
Benzo(b)fluorene	610	U	Benzo[g,h,i]perylene	1100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	117	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

02/17/06 12:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18071.D
Acq On : 9 Feb 2006 11:26 am
Operator : AC
Sample : 0602004-04-RE
Misc : 10X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 15 19:20:18 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 for WO 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	37248m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	68354m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	995m	12.46	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.25%#			
58) Pyrene-d10	38.02	212	2570m	15.65	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.57%#			
81) Benzo[b]fluoranthene-d12	46.85	264	1868	13.72	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.37%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

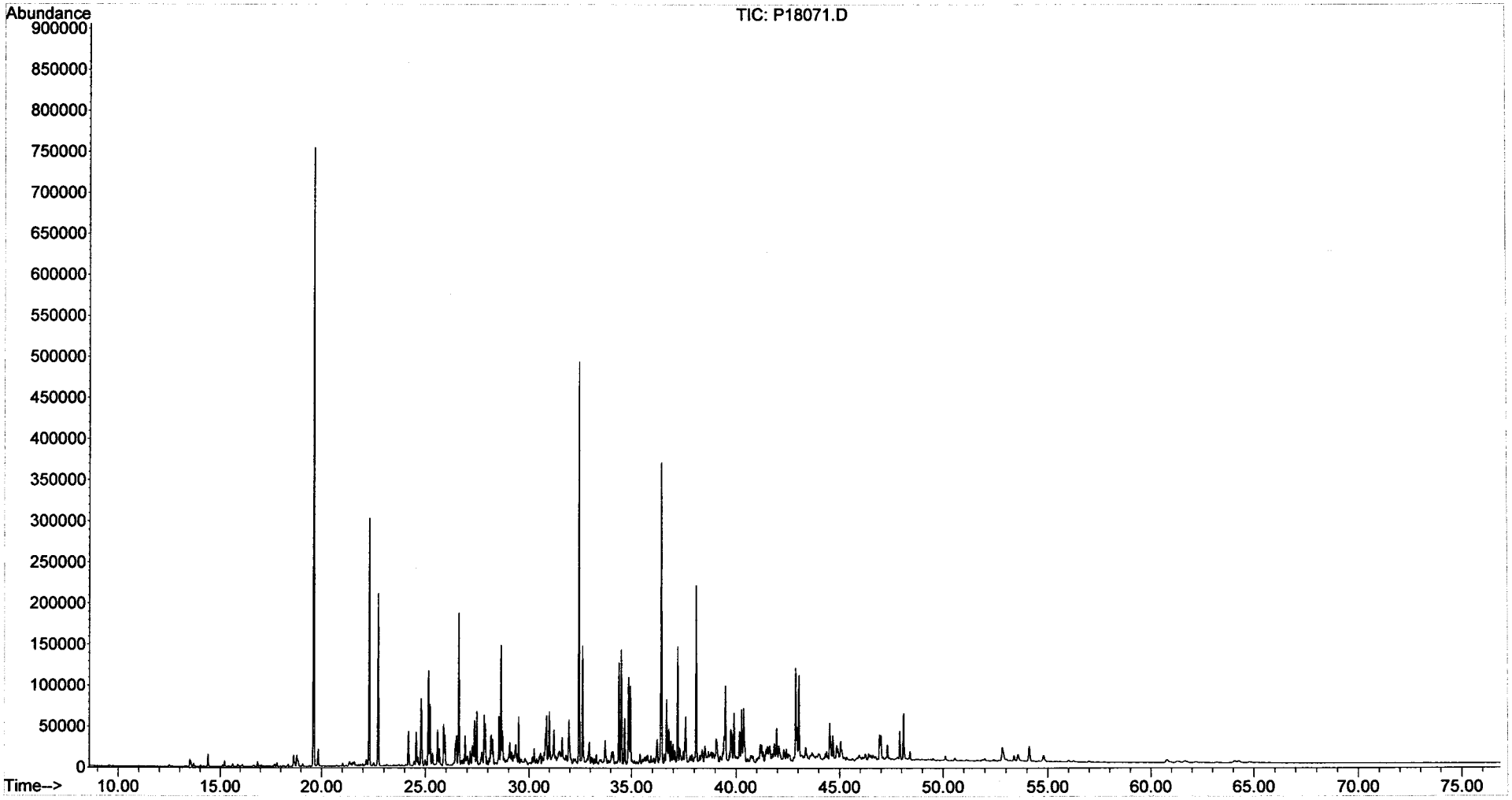
Target Compounds						Qvalue
9) Naphthalene	19.62	128	1857980m	9767.48	ng/mL	
10) C1-Naphthalenes	22.31	142	1170400m	6152.84	ng/mL	
11) C2-Naphthalenes	25.14	156	731781m	3847.00	ng/mL	
15) 2-Methylnaphthalene	22.31	142	696726	5785.64	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	472193	4165.01	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	88501m	885.55	ng/mL	
26) Acenaphthene	26.62	153	210998	1862.37	ng/mL	100
28) Fluorene	28.64	166	171451m	1349.36	ng/mL	
41) Phenanthrene	32.45	178	780032	4140.05	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.52	192	777265m	4125.37	ng/mL	
53) Anthracene	32.62	178	237666m	1363.37	ng/mL	
55) 1-Methylphenanthrene	34.95	192	130897m	1014.63	ng/mL	
56) Fluoranthene	37.22	202	268335m	1337.60	ng/mL	
59) Pyrene	38.10	202	435495m	2134.44	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18071.D
Acq On : 9 Feb 2006 11:26 am
Operator : AC
Sample : 0602004-04-RE
Misc : 10X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 15 19:20:18 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: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04 D**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	4.93	175	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	6700000	E	Fluoranthene	960000	E
C1-Naphthalenes	4700000	E	Pyrene	1600000	E
C2-Naphthalenes	3100000	E	C1-Fluoranthenes/Pyrenes	2500000	
C3-Naphthalenes	1500000		C2-Fluoranthenes/Pyrenes	1400000	
C4-Naphthalenes	590000		C3-Fluoranthenes/Pyrenes	620000	
Biphenyl	380000		C4-Fluoranthenes/Pyrenes	230000	
Dibenzofuran	130000		Naphthobenzothiophenes	280000	
Acenaphthylene	470000		C1-Naphthobenzothiophenes	380000	
Acenaphthene	1400000	E	C2-Naphthobenzothiophenes	280000	
Fluorene	1000000	E	C3-Naphthobenzothiophenes	150000	
C1-Fluorenes	960000		C4-Naphthobenzothiophenes	64000	
C2-Fluorenes	900000		Benz[a]anthracene	630000	
C3-Fluorenes	460000		Chrysene/Triphenylene	680000	
Anthracene	1000000	E	C1-Chrysenes	940000	
Phenanthrene	3100000	E	C2-Chrysenes	500000	
C1-Phenanthrenes/Anthracenes	3300000	E	C3-Chrysenes	310000	
C2-Phenanthrenes/Anthracenes	2200000		C4-Chrysenes	100000	
C3-Phenanthrenes/Anthracenes	970000		Benzo[b]fluoranthene	230000	
C4-Phenanthrenes/Anthracenes	270000		Benzo[k]fluoranthene	260000	
Retene	40000		Benzo[a]fluoranthene	140000	
Dibenzothiophene	390000		Benzo[e]pyrene	270000	
C1-Dibenzothiophenes	630000		Benzo[a]pyrene	480000	
C2-Dibenzothiophenes	640000		Perylene	88000	
C3-Dibenzothiophenes	380000		Indeno[1,2,3-cd]pyrene	220000	
C4-Dibenzothiophenes	140000		Dibenz[a,h]anthracene	70000	
Benzo(b)fluorene	330000		Benzo[g,h,i]perylene	210000	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	100		50-130
Pyrene-d10	154	§	50-130
Benzo[b]fluoranthene-d12	104		50-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
E - Estimated value, exceeds the upper limit of calibration.

02/21/06 11:38

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04 D**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	4.93	175	1	AC

Parameter	Result
Carbazole	**53000**

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	100		50-130
Pyrene-d10	154	§	50-130
Benzo[b]fluoranthene-d12	104		50-130

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

02/21/06 11:39

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18127.D
Acq On : 11 Feb 2006 7:23 am
Operator : AC
Sample : 0602004-04D
Misc : 1X
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Feb 16 14:35:36 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

MSFor MD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	37239m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	67666m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	9142m	114.51	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.45%#			
58) Pyrene-d10	38.04	212	28976m	176.53	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 17.65%#			
81) Benzo[b]fluoranthene-d12	46.87	264	16052m	119.13	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.91%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.64	128	16793727m	88306.66	ng/mL E	
10) C1-Naphthalenes	22.33	142	11804229m	62070.32	ng/mL E	
11) C2-Naphthalenes	25.16	156	7864131m	41352.06	ng/mL E	
12) C3-Naphthalenes	27.48	170	3853029m	20260.43	ng/mL	
13) C4-Naphthalenes	30.25	184	1486906m	7818.62	ng/mL	
15) 2-Methylnaphthalene	22.33	142	7013021	58250.45	ng/mL# E	100
16) 1-Methylnaphthalene	22.75	142	4775342	42131.45	ng/mL# E	100
22) Biphenyl	24.19	154	746038m	4984.24	ng/mL	
23) 2,6-Dimethylnaphthalene	24.81	156	1006348m	10072.00	ng/mL E	
24) Dibenzofuran	27.26	168	291148m	1731.50	ng/mL	
25) Acenaphthylene	25.89	152	1144432m	6276.15	ng/mL	
26) Acenaphthene	26.63	153	2055857m	18150.41	ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.18	170	255134m	2844.51	ng/mL	
28) Fluorene	28.65	166	1680630m	13230.10	ng/mL E	
29) C1-Fluorenes	30.86	180	1609348m	12668.97	ng/mL	
30) C2-Fluorenes	33.04	194	1518818m	11956.30	ng/mL	
31) C3-Fluorenes	35.04	208	783447m	6167.38	ng/mL	
32) Dibenzothiophene	31.95	184	965832m	5155.66	ng/mL	
36) OTP	34.13	198	2670m	14.25	ng/mL	
37) C1-Dibenzothiophenes	33.73	198	1568338m	8371.87	ng/mL	
38) C2-Dibenzothiophenes	35.78	212	1591589m	8495.98	ng/mL	
39) C3-Dibenzothiophenes	37.23	226	955011m	5097.90	ng/mL	
40) C4-Dibenzothiophenes	38.91	240	339207m	1810.70	ng/mL	
41) Phenanthrene	32.49	178	7787438m	41342.17	ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.54	192	8219701m	43636.98	ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.70	206	5442436m	28892.95	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2416518m	12828.88	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	678490m	3601.99	ng/mL	
52) Retene	39.46	234	20782m	527.67	ng/mL	
53) Anthracene	32.65	178	2403586m	13791.49	ng/mL E	
54) Carbazole	33.29	167	112727m	698.87	ng/mL	
55) 1-Methylphenanthrene	34.98	192	1400276m	10856.69	ng/mL E	
56) Fluoranthene	37.24	202	2546493m	12696.86	ng/mL E	
57) Benzo(b)fluorene	39.76	216	508094m	4340.89	ng/mL	
59) Pyrene	38.12	202	4330279m	21228.61	ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.51	216	6740568m	33044.72	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.97	230	3822159m	18737.62	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1671474m	8194.17	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	617158m	3025.53	ng/mL	
64) Naphthobenzothiophene	41.96	234	430100m	2253.83	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18127.D
Acq On : 11 Feb 2006 7:23 am
Operator : AC
Sample : 0602004-04D
Misc : 1X
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Feb 16 14:35:36 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

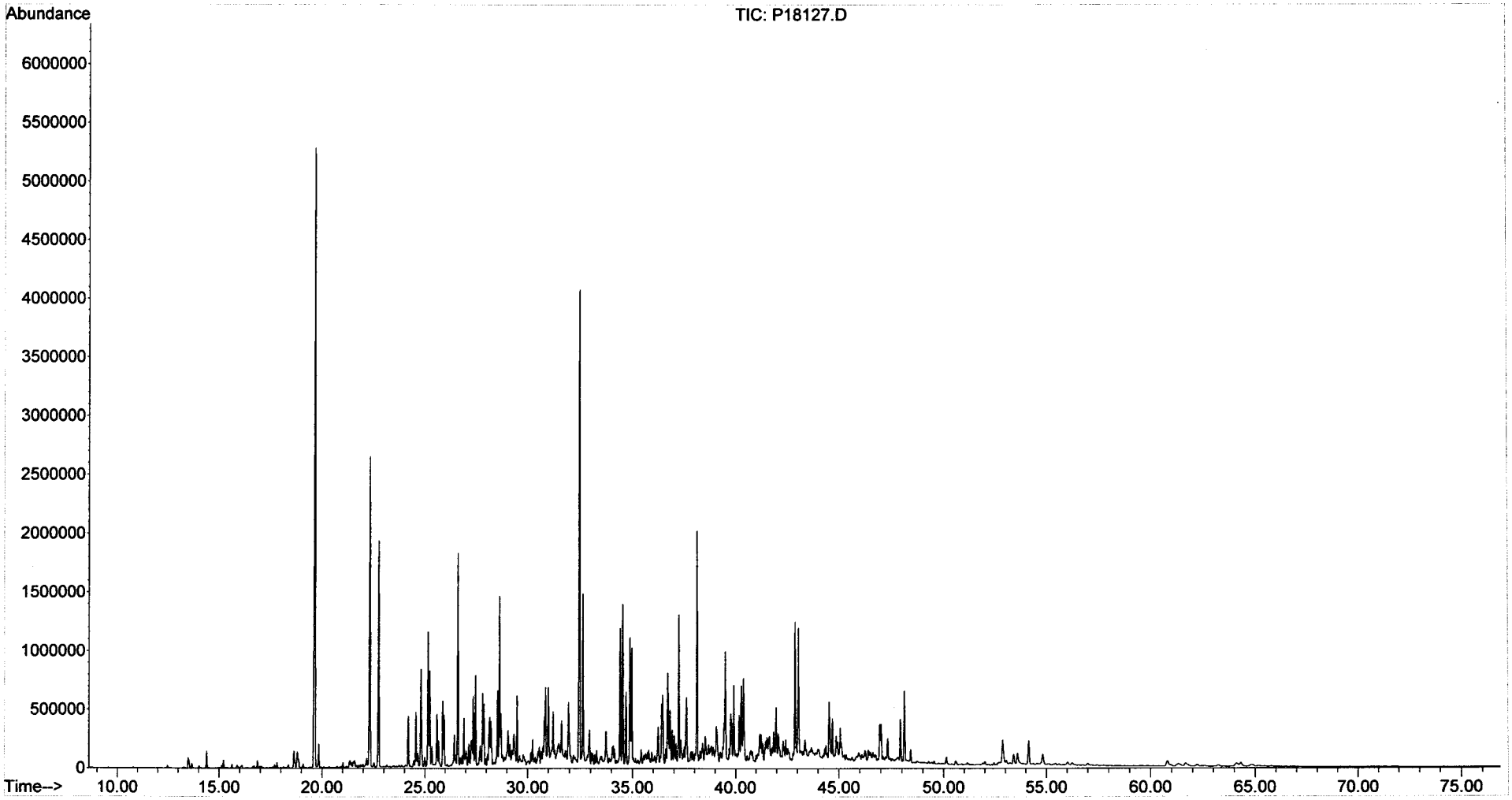
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.96	234	430382m	2255.31 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	130511m	683.91 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	148869m	780.11 ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	963368m	5048.29 ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	716882m	3756.64 ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	376883m	1974.96 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	163163m	855.02 ng/mL	
73) Benz[a]anthracene	42.90	228	1713559m	8318.99 ng/mL	
74) Chrysene	43.06	228	1901399m	9033.95 ng/mL	
75) Chrysene/Triphenylene	43.06	228	1896723m	9011.73 ng/mL	
76) C1-Chrysenes	44.54	242	2611755m	12409.00 ng/mL	
77) C2-Chrysenes	46.25	256	1409715m	6697.85 ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	22097	104.99 ng/mL	100
79) C3-Chrysenes	47.83	270	865004m	4109.82 ng/mL	
80) C4-Chrysenes	49.31	284	289453m	1375.25 ng/mL	
82) Benzo[b]fluoranthene	46.95	252	656891	3105.22 ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	758252	3445.41 ng/mL	97
84) Benzo[a]fluoranthene	47.33	252	408020m	1854.00 ng/mL	
85) Benzo[e]pyrene	47.93	252	725943	3544.45 ng/mL	95
86) Benzo[a]pyrene	48.13	252	1295608m	6393.49 ng/mL	
87) Perylene	48.42	252	231005m	1166.20 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.86	276	509184m	2855.28 ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	169042m	929.96 ng/mL	
90) Benzo[g,h,i]perylene	54.14	276	567442	2761.35 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18127.D
Acq On : 11 Feb 2006 7:23 am
Operator : AC
Sample : 0602004-04D
Misc : 1X
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Feb 16 14:35:36 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: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04 D**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	4.93	21.99	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**3500**	30,31-Bishomohopane-22S	**4600**
C24 Tricyclic Terpane	**2700**	30,31-Bishomohopane-22R	**3200**
C25 Tricyclic Terpane	**2600**	30,31-Trishomohopane-22S	**2400**
C24 Tetracyclic Terpane	**2800**	30,31-Trishomohopane-22R	**1600**
C26 Tricyclic Terpane-22S	**1200**	Tetrakishomohopane-22S	**1500**
C26 Tricyclic Terpane-22R	**1100**	Tetrakishomohopane-22R	**950**
C28 Tricyclic Terpane-22S	**1300**	Pentakishomohopane-22S	**820**
C28 Tricyclic Terpane-22R	**1400**	Pentakishomohopane-22R	**780**
C29 Tricyclic Terpane-22S	**1500**	13b(H),17a(H)-20S-Diacholestane	**5700**
C29 Tricyclic Terpane-22R	**1600**	13b(H),17a(H)-20R-Diacholestane	**3300**
18a-22,29,30-Trisnorneohopane-TS	**8800**	13b,17a-20S-Methyldiacholestane	**2100**
C30 Tricyclic Terpane-22S	**1000**	14a(H),17a(H)-20S-Cholestane	**3100**
C30 Tricyclic Terpane-22R	**780**	14a(H),17a(H)-20R-Cholestane	**9300**
17a(H)-22,29,30-Trisnorhopane-TM	**6900**	13b,17a-20R-Ethyldiacholestane	**1500**
17a/b,21b/a 28,30-Bisnorhopane	**1600**	13a,17b-20S-Ethyldiacholestane	**470**
17a(H),21b(H)-25-Norhopane	**500**	14a,17a-20S-Methylcholestane	**1900**
30-Norhopane	**19000**	14a,17a-20R-Methylcholestane	**4400**
18a(H)-30-Norneohopane-C29Ts	**8700**	14a(H),17a(H)-20S-Ethylcholestane	**3000**
17a(H)-Diahopane	**2000**	14a(H),17a(H)-20R-Ethylcholestane	**4000**
30-Normoretane	**4500**	14b(H),17b(H)-20R-Cholestane	**4300**
18a(H)&18b(H)-Oleananes	**3700**	14b(H),17b(H)-20S-Cholestane	**4400**
Hopane	**32000**	14b,17b-20R-Methylcholestane	**4400**
Moretane	**4800**	14b,17b-20S-Methylcholestane	**5000**
30-Homohopane-22S	**7600**	14b(H),17b(H)-20R-Ethylcholestane	**6300**
30-Homohopane-22R	**6700**	14b(H),17b(H)-20S-Ethylcholestane	**4100**

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

N/A - Not Applicable

02/21/06 16:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28221.D
Acq On : 11 Feb 2006 7:52 pm
Operator : AC
Sample : 0602004-04D
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 17 10:25:00 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 2/17/06

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	59686	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	44.21	217	23827	938.68	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 93.87%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	198286m	3365.61	ng/mL	
84) Hopane (T19)	52.95	191	196969m	3343.25	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	21842m	370.74	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	16696	283.39	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	16091m	273.12	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	17520m	297.38	ng/ml	
89) C26 Tricyclic Terpane-22S	44.50	191	7140m	121.19	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	6983	118.53	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	8220m	139.52	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	8748m	148.48	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	9529m	161.74	ng/ml	
94) C29 Tricyclic Terpane-22R	47.78	191	9834m	166.92	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	54547m	925.85	ng/ml	
96) C30 Tricyclic Terpane-22S	49.06	191	6328m	107.41	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	4862	82.53	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	43128m	732.03	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	9655m	163.88	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	3124m	53.03	ng/ml	
101) 30-Norhopane (T15)	51.51	191	118029m	2003.36	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.61	191	54324m	922.07	ng/ml	
103) 17a(H)-Diahopane (X)	51.74	191	12430	210.98	ng/ml	100
104) 30-Normoretane (T17)	52.33	191	28205	478.74	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	23100m	392.09	ng/ml	
106) Moretane (T20)	53.68	191	29508m	500.85	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	47440	805.22	ng/ml	100
108) 30-Homohopane-22R (T22)	55.08	191	41677	707.40	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.48	191	28615	485.70	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.90	191	20140m	341.85	ng/ml	
111) 30,31-Trishomohopane-22S (	58.76	191	15112m	256.50	ng/ml	
112) 30,31-Trishomohopane-22R (	59.41	191	10164	172.52	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.56	191	9063	153.83	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.51	191	5898	100.11	ng/ml	100
115) Pentakishomohopane-22S (T3	64.90	191	5121m	86.92	ng/ml	
116) Pentakishomohopane-22R (T3	66.28	191	4863m	82.54	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	15282m	602.05	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	8954m	352.75	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	5657	222.86	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	8243m	324.74	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	24826	978.04	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.56	217	3964m	156.16	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28221.D
Acq On : 11 Feb 2006 7:52 pm
Operator : AC
Sample : 0602004-04D
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 17 10:25:00 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

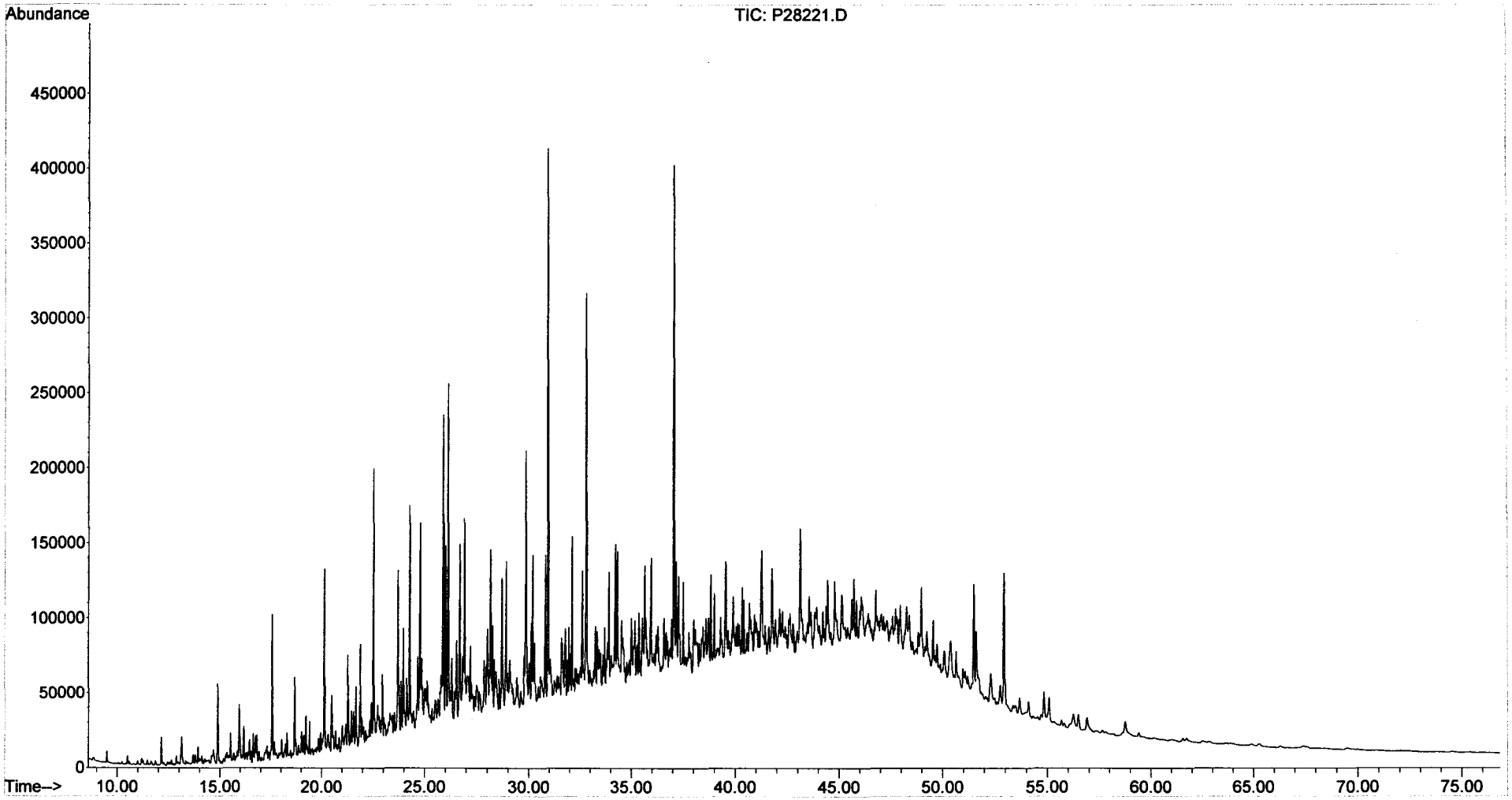
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.84	217	1265	49.84	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	5160m	203.28	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	11868	467.55	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	7941m	312.84	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	10729m	422.68	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.82	218	11489	452.62	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	11882m	468.10	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.18	218	11809m	465.22	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	13401m	527.94	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	16791m	661.49	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.41	218	11077m	436.39	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 : P28221.D
Acq On : 11 Feb 2006 7:52 pm
Operator : AC
Sample : 0602004-04D
Misc : 1X
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 17 10:25:00 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 I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04E D**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/09/06	47.1	4.93	175	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**6900000**		Fluoranthene	**960000**	
C1-Naphthalenes	**4700000**		Pyrene	**1600000**	
C2-Naphthalenes	**3100000**		C1-Fluoranthenes/Pyrenes	670	U
C3-Naphthalenes	1200	U	C2-Fluoranthenes/Pyrenes	670	U
C4-Naphthalenes	1200	U	C3-Fluoranthenes/Pyrenes	670	U
Biphenyl	690	U	C4-Fluoranthenes/Pyrenes	670	U
Dibenzofuran	900	U	Naphthobenzothiophenes	910	U
Acenaphthylene	1400	U	C1-Naphthobenzothiophenes	910	U
Acenaphthene	**1400000**		C2-Naphthobenzothiophenes	910	U
Fluorene	**960000**		C3-Naphthobenzothiophenes	910	U
C1-Fluorenes	870	U	C4-Naphthobenzothiophenes	910	U
C2-Fluorenes	870	U	Benz[a]anthracene	1200	U
C3-Fluorenes	870	U	Chrysene/Triphenylene	820	U
Anthracene	**1000000**		C1-Chrysenes	820	U
Phenanthrene	**3100000**		C2-Chrysenes	820	U
C1-Phenanthrenes/Anthracenes	**3200000**		C3-Chrysenes	820	U
C2-Phenanthrenes/Anthracenes	1100	U	C4-Chrysenes	820	U
C3-Phenanthrenes/Anthracenes	1100	U	Benzo[b]fluoranthene	800	U
C4-Phenanthrenes/Anthracenes	1100	U	Benzo[k]fluoranthene	1500	U
Retene	1100	U	Benzo[a]fluoranthene	1500	U
Dibenzothiophene	840	U	Benzo[e]pyrene	1000	U
C1-Dibenzothiophenes	840	U	Benzo[a]pyrene	1000	U
C2-Dibenzothiophenes	840	U	Perylene	1300	U
C3-Dibenzothiophenes	840	U	Indeno[1,2,3-cd]pyrene	1800	U
C4-Dibenzothiophenes	840	U	Dibenz[a,h]anthracene	1400	U
Benzo(b)fluorene	760	U	Benzo[g,h,i]perylene	1300	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	114	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.

02/17/06 12:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18073.D
Acq On : 9 Feb 2006 12:57 pm
Operator : AC
Sample : 0602004-04D-RE
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 15 19:24:18 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 for WD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	38564m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	67045m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	948m	11.47	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.15%#			
58) Pyrene-d10	38.02	212	2218m	13.05	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.31%#			
81) Benzo[b]fluoranthene-d12	46.85	264	1592m	11.92	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.19%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

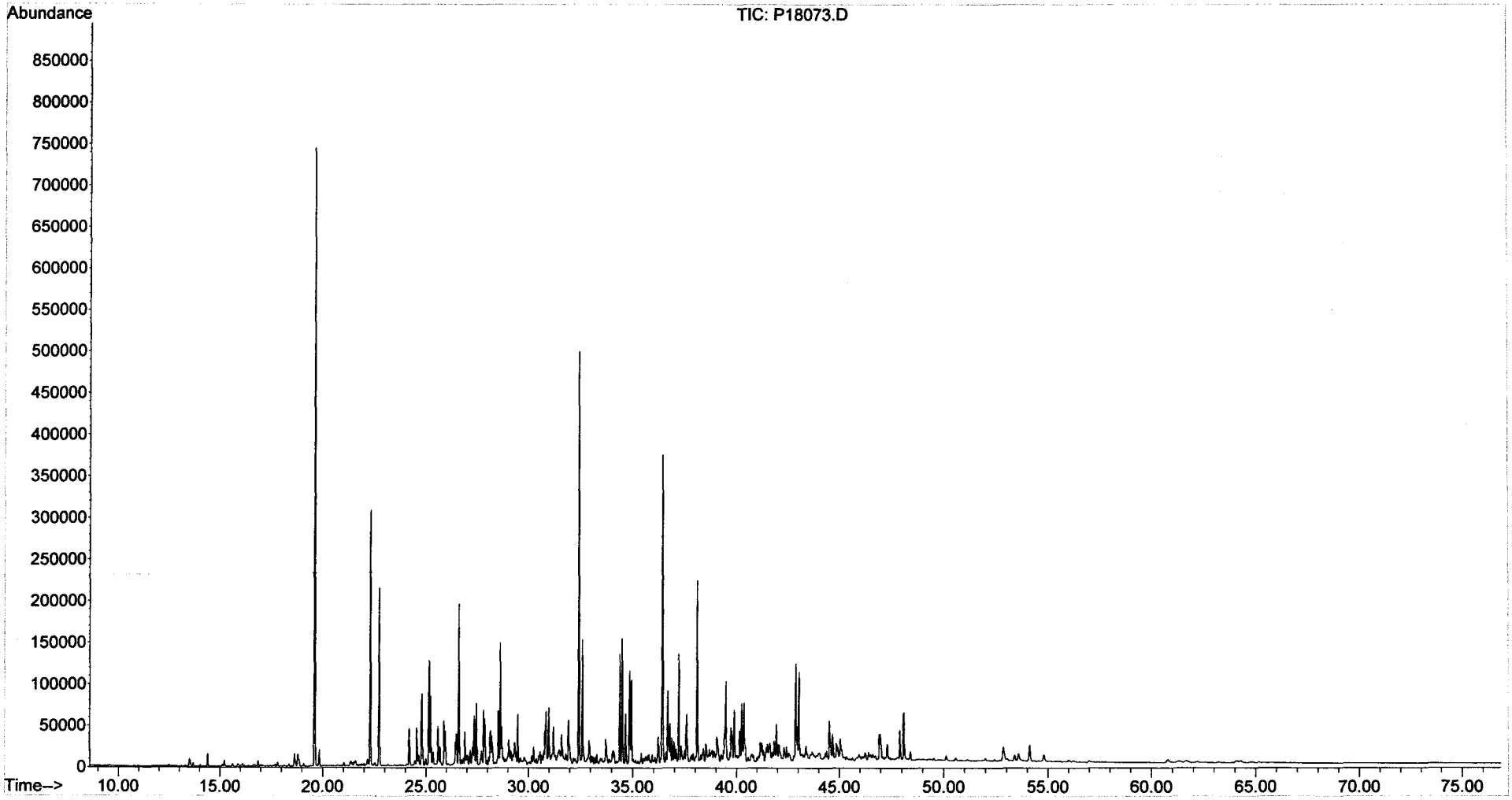
Target Compounds						Qvalue
9) Naphthalene	19.61	128	1810139m	9191.24	ng/mL	
10) C1-Naphthalenes	22.31	142	1224006m	6215.07	ng/mL	
11) C2-Naphthalenes	25.14	156	799056m	4057.32	ng/mL	
15) 2-Methylnaphthalene	22.31	142	726726	5828.82	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	495623	4222.50	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	98455m	951.53	ng/mL	
26) Acenaphthene	26.62	153	212251	1809.50	ng/mL	100
28) Fluorene	28.64	166	166883m	1268.58	ng/mL	
41) Phenanthrene	32.45	178	791133m	4055.68	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.52	192	826144m	4235.16	ng/mL	
53) Anthracene	32.62	178	238687m	1322.50	ng/mL	
55) 1-Methylphenanthrene	34.95	192	139482m	1044.28	ng/mL	
56) Fluoranthene	37.22	202	263047m	1266.49	ng/mL	
59) Pyrene	38.10	202	440385m	2084.75	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18073.D
Acq On : 9 Feb 2006 12:57 pm
Operator : AC
Sample : 0602004-04D-RE
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 15 19:24:18 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: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	5900000 E	6700000 E	13	30
C1-Naphthalenes	3900000 E	4700000 E	19	30
C2-Naphthalenes	2500000 E	3100000 E	23	30
C3-Naphthalenes	1200000	1500000	26	30
C4-Naphthalenes	460000	590000	25	30
Biphenyl	310000	380000	19	30
Dibenzofuran	120000	130000	7	30
Acenaphthylene	370000	470000	24	30
Acenaphthene	1200000 E	1400000 E	15	30
Fluorene	840000 E	1000000 E	17	30
C1-Fluorenes	730000	960000	26	30
C2-Fluorenes	680000	900000	29	30
C3-Fluorenes	350000	460000	29	30
Anthracene	860000 E	1000000 E	18	30
Phenanthrene	2600000 E	3100000 E	17	30
C1-Phenanthrenes/Anthracenes	2600000 E	3300000 E	23	30
C2-Phenanthrenes/Anthracenes	1700000	2200000	26	30
C3-Phenanthrenes/Anthracenes	740000	970000	27	30
C4-Phenanthrenes/Anthracenes	210000	270000	24	30
Retene	34000	40000	16	30
Dibenzothiophene	330000	390000	16	30
C1-Dibenzothiophenes	520000	630000	20	30
C2-Dibenzothiophenes	520000	640000	21	30
C3-Dibenzothiophenes	300000	380000	23	30
C4-Dibenzothiophenes	110000	140000	20	30
Benzo(b)fluorene	270000	330000	19	30
Fluoranthene	830000 E	960000 E	14	30
Pyrene	1300000 E	1600000 E	19	30
C1-Fluoranthenes/Pyrenes	2000000	2500000	24	30
C2-Fluoranthenes/Pyrenes	1000000	1400000	29	30
C3-Fluoranthenes/Pyrenes	460000	620000	28	30
C4-Fluoranthenes/Pyrenes	170000	230000	29	30
Naphthobenzothiophenes	230000	280000	20	30
C1-Naphthobenzothiophenes	300000	380000	22	30
C2-Naphthobenzothiophenes	220000	280000	25	30

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

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	120000	150000	23	30
C4-Naphthobenzothiophenes	52000	64000	22	30
Benz[a]anthracene	500000	630000	23	30
Chrysene/Triphenylene	530000	680000	24	30
C1-Chrysenes	690000	940000	30	30
C2-Chrysenes	370000	500000	30	30
C3-Chrysenes	230000	310000	30	30
C4-Chrysenes	76000	100000	31[a]	30
Benzo[b]fluoranthene	190000	230000	20	30
Benzo[k]fluoranthene	200000	260000	25	30
Benzo[a]fluoranthene	110000	140000	22	30
Benzo[e]pyrene	210000	270000	25	30
Benzo[a]pyrene	380000	480000	24	30
Perylene	71000	88000	22	30
Indeno[1,2,3-cd]pyrene	170000	220000	22	30
Dibenz[a,h]anthracene	57000	70000	21	30
Benzo[g,h,i]perylene	160000	210000	23	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98	100	50-130
Pyrene-d10	153 §	154 §	50-130
Benzo[b]fluoranthene-d12	107	104	50-130

N/A - Not Applicable
[a] - Value outside of QC Limits.
§ - Surrogate value outside of acceptable range.

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

02/21/06 11:40

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	51000	53000	3	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	98	100	50-130
Pyrene-d10	153 §	154 §	50-130
Benzo[b]fluoranthene-d12	107	104	50-130

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

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

02/21/06 11:41

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	3500	3500	1	30
C24 Tricyclic Terpane	2600	2700	1	30
C25 Tricyclic Terpane	2600	2600	1	30
C24 Tetracyclic Terpane	2700	2800	6	30
C26 Tricyclic Terpane-22S	1200	1200	2	30
C26 Tricyclic Terpane-22R	1100	1100	0	30
C28 Tricyclic Terpane-22S	1300	1300	1	30
C28 Tricyclic Terpane-22R	1400	1400	1	30
C29 Tricyclic Terpane-22S	1600	1500	3	30
C29 Tricyclic Terpane-22R	1600	1600	1	30
18a-22,29,30-Trisnorneohopane-TS	7900	8800	11	30
C30 Tricyclic Terpane-22S	1100	1000	7	30
C30 Tricyclic Terpane-22R	800	780	2	30
17a(H)-22,29,30-Trisnorhopane-TM	7000	6900	1	30
17a/b,21b/a 28,30-Bisnorhopane	1500	1600	3	30
17a(H),21b(H)-25-Norhopane	540	500	7	30
30-Norhopane	19000	19000	2	30
18a(H)-30-Norneohopane-C29Ts	7300	8700	18	30
17a(H)-Diahopane	1800	2000	8	30
30-Normoretane	4300	4500	5	30
18a(H)&18b(H)-Oleananes	3300	3700	11	30
Hopane	31000	32000	2	30
Moretane	4600	4800	3	30
30-Homohopane-22S	7500	7600	2	30
30-Homohopane-22R	6600	6700	1	30
30,31-Bishomohopane-22S	4500	4600	3	30
30,31-Bishomohopane-22R	3400	3200	4	30
30,31-Trishomohopane-22S	2400	2400	0	30
30,31-Trishomohopane-22R	1500	1600	10	30
Tetrakishomohopane-22S	1400	1500	1	30
Tetrakishomohopane-22R	930	950	2	30
Pentakishomohopane-22S	920	820	11	30
Pentakishomohopane-22R	680	780	14	30
13b(H),17a(H)-20S-Diacholestane	5900	5700	3	30
13b(H),17a(H)-20R-Diacholestane	3500	3300	4	30

N/A - Not Applicable

02/21/06 16:16

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	2400	2100	15	30
14a(H),17a(H)-20S-Cholestane	3600	3100	15	30
14a(H),17a(H)-20R-Cholestane	9600	9300	3	30
13b,17a-20R-Ethyldiacholestane	1600	1500	7	30
13a,17b-20S-Ethyldiacholestane	370	470	23	30
14a,17a-20S-Methylcholestane	2000	1900	3	30
14a,17a-20R-Methylcholestane	4300	4400	2	30
14a(H),17a(H)-20S-Ethylcholestane	3000	3000	1	30
14a(H),17a(H)-20R-Ethylcholestane	4300	4000	7	30
14b(H),17b(H)-20R-Cholestane	4400	4300	4	30
14b(H),17b(H)-20S-Cholestane	4700	4400	7	30
14b,17b-20R-Methylcholestane	4500	4400	2	30
14b,17b-20S-Methylcholestane	5500	5000	10	30
14b(H),17b(H)-20R-Ethylcholestane	6400	6300	1	30
14b(H),17b(H)-20S-Ethylcholestane	4600	4100	11	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	102	103	50-130

N/A - Not Applicable

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

02/21/06 16:17

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04E**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	**5900000**	**6900000**	16	30
C1-Naphthalenes	**3700000**	**4700000**	23	30
C2-Naphthalenes	**2300000**	**3100000**	27	30
C3-Naphthalenes	1000 U	1200 U	N/A	30
C4-Naphthalenes	1000 U	1200 U	N/A	30
Biphenyl	550 U	690 U	N/A	30
Dibenzofuran	720 U	900 U	N/A	30
Acenaphthylene	1100 U	1400 U	N/A	30
Acenaphthene	**1100000**	**1400000**	19	30
Fluorene	**820000**	**960000**	15	30
C1-Fluorenes	700 U	870 U	N/A	30
C2-Fluorenes	700 U	870 U	N/A	30
C3-Fluorenes	700 U	870 U	N/A	30
Anthracene	**830000**	**1000000**	19	30
Phenanthrene	**2500000**	**3100000**	20	30
C1-Phenanthrenes/Anthracenes	**2500000**	**3200000**	24	30
C2-Phenanthrenes/Anthracenes	880 U	1100 U	N/A	30
C3-Phenanthrenes/Anthracenes	880 U	1100 U	N/A	30
C4-Phenanthrenes/Anthracenes	880 U	1100 U	N/A	30
Retene	880 U	1100 U	N/A	30
Dibenzothiophene	670 U	840 U	N/A	30
C1-Dibenzothiophenes	670 U	840 U	N/A	30
C2-Dibenzothiophenes	670 U	840 U	N/A	30
C3-Dibenzothiophenes	670 U	840 U	N/A	30
C4-Dibenzothiophenes	670 U	840 U	N/A	30
Benzo(b)fluorene	610 U	760 U	N/A	30
Fluoranthene	**810000**	**960000**	16	30
Pyrene	**1300000**	**1600000**	19	30
C1-Fluoranthenes/Pyrenes	540 U	670 U	N/A	30
C2-Fluoranthenes/Pyrenes	540 U	670 U	N/A	30
C3-Fluoranthenes/Pyrenes	540 U	670 U	N/A	30
C4-Fluoranthenes/Pyrenes	540 U	670 U	N/A	30
Naphthobenzothiophenes	740 U	910 U	N/A	30
C1-Naphthobenzothiophenes	740 U	910 U	N/A	30
C2-Naphthobenzothiophenes	740 U	910 U	N/A	30

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

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04E**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	740 U	910 U	N/A	30
C4-Naphthobenzothiophenes	740 U	910 U	N/A	30
Benz[a]anthracene	950 U	1200 U	N/A	30
Chrysene/Triphenylene	660 U	820 U	N/A	30
C1-Chrysenes	660 U	820 U	N/A	30
C2-Chrysenes	660 U	820 U	N/A	30
C3-Chrysenes	660 U	820 U	N/A	30
C4-Chrysenes	660 U	820 U	N/A	30
Benzo[b]fluoranthene	640 U	800 U	N/A	30
Benzo[k]fluoranthene	1200 U	1500 U	N/A	30
Benzo[a]fluoranthene	1200 U	1500 U	N/A	30
Benzo[e]pyrene	830 U	1000 U	N/A	30
Benzo[a]pyrene	840 U	1000 U	N/A	30
Perylene	1100 U	1300 U	N/A	30
Indeno[1,2,3-cd]pyrene	1500 U	1800 U	N/A	30
Dibenz[a,h]anthracene	1200 U	1400 U	N/A	30
Benzo[g,h,i]perylene	1100 U	1300 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	93	100	50-130
Pyrene-d10	117	114	50-130
Benzo[b]fluoranthene-d12	103	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. RPD values are reported based on the unrounded calculated result.

02/17/06 12:58

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-101 (7.9-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-05**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/09/06	72.9	4.98	13.13	10	AC

Parameter	Result		Parameter	Result
Naphthalene	**730000**	E	Fluoranthene	**75000**
C1-Naphthalenes	**440000**	E	Pyrene	**120000**
C2-Naphthalenes	**240000**		C1-Fluoranthenes/Pyrenes	**160000**
C3-Naphthalenes	**90000**		C2-Fluoranthenes/Pyrenes	**73000**
C4-Naphthalenes	**28000**		C3-Fluoranthenes/Pyrenes	**29000**
Biphenyl	**32000**		C4-Fluoranthenes/Pyrenes	**9300**
Dibenzofuran	**9900**		Naphthobenzothiophenes	**18000**
Acenaphthylene	**58000**		C1-Naphthobenzothiophenes	**21000**
Acenaphthene	**150000**		C2-Naphthobenzothiophenes	**14000**
Fluorene	**92000**		C3-Naphthobenzothiophenes	**6900**
C1-Fluorenes	**68000**		C4-Naphthobenzothiophenes	**2900**
C2-Fluorenes	**45000**		Benz[a]anthracene	**44000**
C3-Fluorenes	**24000**		Chrysene/Triphenylene	**51000**
Anthracene	**100000**		C1-Chrysenes	**55000**
Phenanthrene	**270000**		C2-Chrysenes	**29000**
C1-Phenanthrenes/Anthracenes	**230000**		C3-Chrysenes	**16000**
C2-Phenanthrenes/Anthracenes	**130000**		C4-Chrysenes	**6000**
C3-Phenanthrenes/Anthracenes	**47000**		Benzo[b]fluoranthene	**13000**
C4-Phenanthrenes/Anthracenes	**13000**		Benzo[k]fluoranthene	**18000**
Retene	**1000**		Benzo[a]fluoranthene	**9400**
Dibenzothiophene	**35000**		Benzo[e]pyrene	**16000**
C1-Dibenzothiophenes	**47000**		Benzo[a]pyrene	**30000**
C2-Dibenzothiophenes	**39000**		Perylene	**5600**
C3-Dibenzothiophenes	**20000**		Indeno[1,2,3-cd]pyrene	**12000**
C4-Dibenzothiophenes	**6600**		Dibenz[a,h]anthracene	**3600**
Benzo(b)fluorene	**25000**		Benzo[g,h,i]perylene	**12000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	96	50-130
Pyrene-d10	112	50-130
Benzo[b]fluoranthene-d12	105	50-130

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

02/21/06 11:43

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-101 (7.9-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-05**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/09/06	72.9	4.98	13.13	10	AC

Parameter	Result
Carbazole	**5500**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	96	50-130
Pyrene-d10	112	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

02/21/06 11:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18081.D
Acq On : 9 Feb 2006 7:06 pm
Operator : AC
Sample : 0602004-05
Misc : 10X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 16 14:41:03 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 for WD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	37701m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	65754m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	11834m	146.42	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 14.64%#			
58) Pyrene-d10	38.02	212	28297m	170.28	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 17.03%#			
81) Benzo[b]fluoranthene-d12	46.85	264	20979m	160.22	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 16.02%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.62	128	3896262m	20236.70	ng/mL	E
10) C1-Naphthalenes	22.31	142	2345351m	12181.46	ng/mL	E
11) C2-Naphthalenes	25.14	156	1286076m	6679.72	ng/mL	
12) C3-Naphthalenes	27.48	170	478154m	2483.47	ng/mL	
13) C4-Naphthalenes	30.25	184	147635m	766.80	ng/mL	
15) 2-Methylnaphthalene	22.31	142	1435017	11773.25	ng/mL#	E 100
16) 1-Methylnaphthalene	22.73	142	909225	7923.52	ng/mL#	100
22) Biphenyl	24.18	154	134389m	886.84	ng/mL	
23) 2,6-Dimethylnaphthalene	24.81	156	218522m	2160.27	ng/mL	
24) Dibenzofuran	27.26	168	46431m	272.75	ng/mL	
25) Acenaphthylene	25.89	152	294548m	1595.53	ng/mL	
26) Acenaphthene	26.62	153	466854	4071.18	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	43500m	479.04	ng/mL	
28) Fluorene	28.64	166	327679m	2547.91	ng/mL	
29) C1-Fluorenes	30.86	180	241651m	1878.99	ng/mL	
30) C2-Fluorenes	33.04	194	159772m	1242.33	ng/mL	
31) C3-Fluorenes	35.03	208	84001m	653.16	ng/mL	
32) Dibenzothiophene	31.95	184	183187m	965.88	ng/mL	
36) OTP	34.12	198	2192m	11.56	ng/mL	
37) C1-Dibenzothiophenes	33.73	198	246896m	1301.79	ng/mL	
38) C2-Dibenzothiophenes	35.41	212	205501m	1083.53	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	105048m	553.88	ng/mL	
40) C4-Dibenzothiophenes	38.90	240	34639m	182.64	ng/mL	
41) Phenanthrene	32.45	178	1405026m	7367.64	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.52	192	1232357m	6462.20	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.69	206	664838m	3486.26	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	250111m	1311.52	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.71	234	67635m	354.66	ng/mL	
52) Retene	39.46	234	1154m	28.94	ng/mL	
53) Anthracene	32.62	178	488289m	2767.41	ng/mL	
54) Carbazole	33.29	167	24734m	151.46	ng/mL	
55) 1-Methylphenanthrene	34.95	192	204601m	1566.88	ng/mL	
56) Fluoranthene	37.22	202	419372m	2065.37	ng/mL	
57) Benzo(b)fluorene	39.73	216	80739m	681.34	ng/mL	
59) Pyrene	38.10	202	685944m	3321.54	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.50	216	903474m	4374.88	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.96	230	417628m	2022.28	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	167297m	810.10	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.69	258	52962m	256.46	ng/mL	
64) Naphthobenzothiophene	41.95	234	58722m	303.95	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18081.D
Acq On : 9 Feb 2006 7:06 pm
Operator : AC
Sample : 0602004-05
Misc : 10X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 16 14:41:03 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

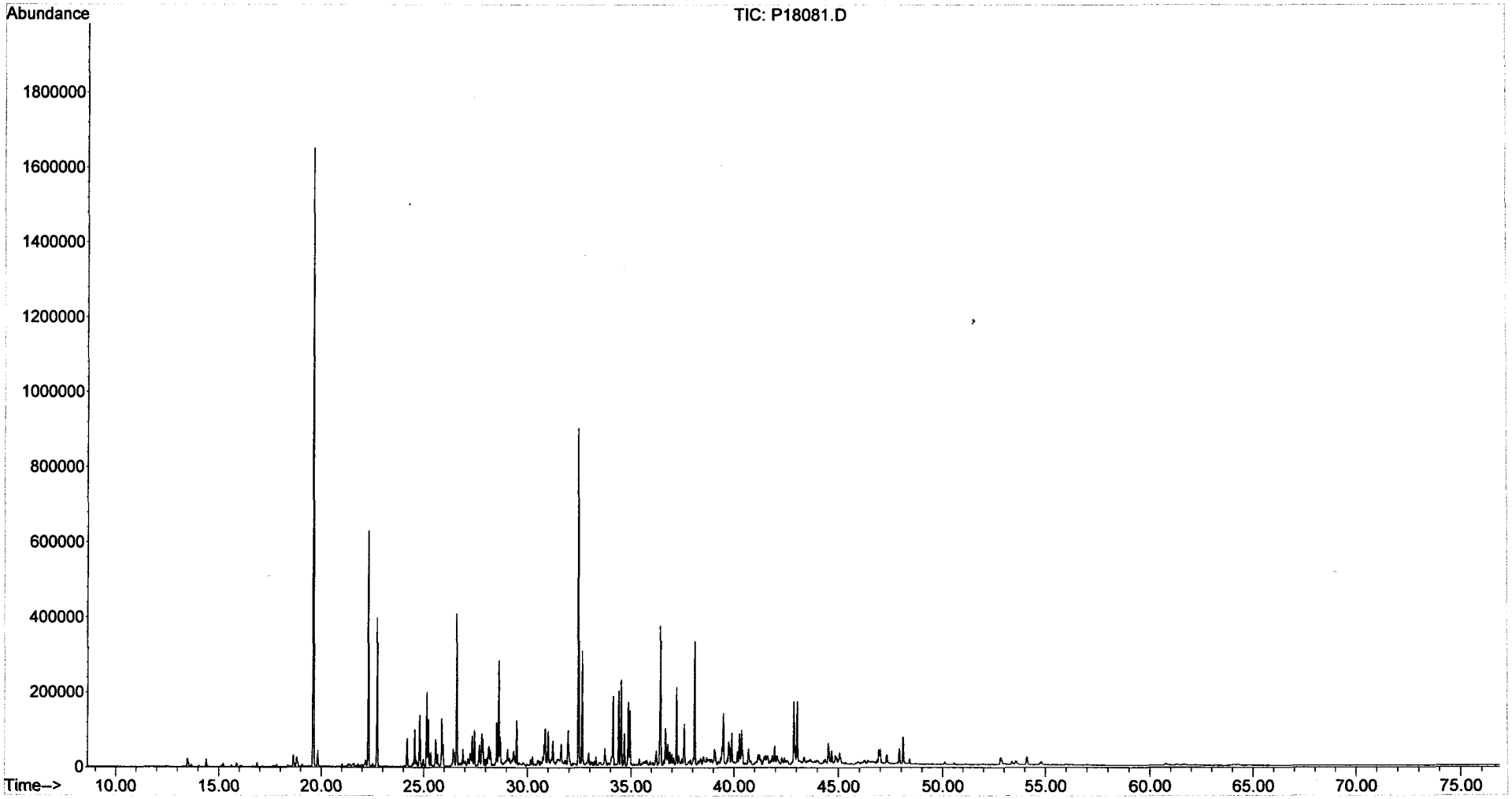
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.95	234	58685m	303.76	ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	17623m	91.22	ng/mL	
67) Naphthobenzothiophene-2,3-	42.59	234	17478m	90.47	ng/mL	
68) C1-Naphthobenzothiophenes	43.35	248	112042m	579.93	ng/ml	
69) C2-Naphthobenzothiophenes	45.41	262	77372m	400.48	ng/ml	
70) C3-Naphthobenzothiophenes	46.97	276	36897m	190.98	ng/ml	
71) C4-Naphthobenzothiophenes	48.03	290	15632m	80.91	ng/mL	
73) Benz[a]anthracene	42.88	228	243595m	1216.99	ng/mL	
74) Chrysene	43.04	228	287788m	1407.10	ng/mL	
75) Chrysene/Triphenylene	43.04	228	289572m	1415.82	ng/mL	
76) C1-Chrysenes	44.53	242	309991m	1515.66	ng/mL	
77) C2-Chrysenes	46.24	256	164259m	803.12	ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	2643	12.92	ng/mL	100
79) C3-Chrysenes	47.82	270	90426m	442.13	ng/mL	
80) C4-Chrysenes	49.37	284	34130m	166.87	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	72601	353.18	ng/mL	99
83) Benzo[k]fluoranthene	46.99	252	104922m	490.62	ng/mL	
84) Benzo[a]fluoranthene	47.31	252	55931m	261.53	ng/mL	
85) Benzo[e]pyrene	47.92	252	86541m	434.83	ng/mL	
86) Benzo[a]pyrene	48.11	252	162038m	822.87	ng/mL	
87) Perylene	48.40	252	29651m	154.04	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.83	276	56990m	328.87	ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	17675m	100.06	ng/mL	
90) Benzo[g,h,i]perylene	54.10	276	64011m	320.55	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18081.D
Acq On : 9 Feb 2006 7:06 pm
Operator : AC
Sample : 0602004-05
Misc : 10X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 16 14:41:03 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: **GC-SED-101 (7.9-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-05**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	72.9	4.98	1.26	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	68	30,31-Bishomohopane-22S	160
C24 Tricyclic Terpane	42	30,31-Bishomohopane-22R	84
C25 Tricyclic Terpane	42	30,31-Trishomohopane-22S	59
C24 Tetracyclic Terpane	67	30,31-Trishomohopane-22R	38
C26 Tricyclic Terpane-22S	18	Tetrakishomohopane-22S	35
C26 Tricyclic Terpane-22R	19	Tetrakishomohopane-22R	24
C28 Tricyclic Terpane-22S	21	Pentakishomohopane-22S	20
C28 Tricyclic Terpane-22R	23	Pentakishomohopane-22R	15
C29 Tricyclic Terpane-22S	23	13b(H),17a(H)-20S-Diacholestane	97
C29 Tricyclic Terpane-22R	24	13b(H),17a(H)-20R-Diacholestane	58
18a-22,29,30-Trisnorneohopane-TS	230	13b,17a-20S-Methyldiacholestane	42
C30 Tricyclic Terpane-22S	18	14a(H),17a(H)-20S-Cholestane	54
C30 Tricyclic Terpane-22R	13	14a(H),17a(H)-20R-Cholestane	150
17a(H)-22,29,30-Trisnorhopane-TM	150	13b,17a-20R-Ethyldiacholestane	24
17a/b,21b/a 28,30-Bisnorhopane	29	13a,17b-20S-Ethyldiacholestane	5.9
17a(H),21b(H)-25-Norhopane	9.7	14a,17a-20S-Methylcholestane	35
30-Norhopane	470	14a,17a-20R-Methylcholestane	66
18a(H)-30-Norneohopane-C29Ts	220	14a(H),17a(H)-20S-Ethylcholestane	40
17a(H)-Diahopane	55	14a(H),17a(H)-20R-Ethylcholestane	63
30-Normoretane	100	14b(H),17b(H)-20R-Cholestane	69
18a(H)&18b(H)-Oleananes	100	14b(H),17b(H)-20S-Cholestane	74
Hopane	810	14b,17b-20R-Methylcholestane	73
Moretane	120	14b,17b-20S-Methylcholestane	78
30-Homohopane-22S	190	14b(H),17b(H)-20R-Ethylcholestane	97
30-Homohopane-22R	170	14b(H),17b(H)-20S-Ethylcholestane	65

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

N/A - Not Applicable

02/21/06 16:40

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28222.D
Acq On : 11 Feb 2006 9:26 pm
Operator : AC
Sample : 0602004-05
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

JMB 2/21/06

Quant Time: Feb 17 10:37:48 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

CMS 2/17/06

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	67384	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	44.23	217	436609	15235.52	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1523.55%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.94	191	156475m	2352.51	ng/mL	
84) Hopane (T19)	52.94	191	155775m	2341.99	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.22	191	13097m	196.91	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	8066m	121.27	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.45	191	8036m	120.82	ng/ml	
88) C24 Tetracyclic Terpane (T	44.79	191	12843	193.09	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	3351m	50.38	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	3716	55.87	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.87	191	4097m	61.60	ng/ml	
92) C28 Tricyclic Terpane-22R	47.04	191	4467m	67.16	ng/ml	
93) C29 Tricyclic Terpane-22S	47.58	191	4467	67.16	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.78	191	4675m	70.29	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.98	191	44390m	667.38	ng/ml	
96) C30 Tricyclic Terpane-22S	49.05	191	3519m	52.91	ng/mL	
97) C30 Tricyclic Terpane-22R	49.30	191	2477m	37.24	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.55	191	28317m	425.73	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	5564m	83.65	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.54	191	1866m	28.05	ng/ml	
101) 30-Norhopane (T15)	51.50	191	89289m	1342.41	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.61	191	42859m	644.36	ng/ml	
103) 17a(H)-Diahopane (X)	51.73	191	10586m	159.15	ng/ml	
104) 30-Normoretane (T17)	52.32	191	20163	303.14	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.75	191	19371m	291.23	ng/ml	
106) Moretane (T20)	53.66	191	23127m	347.70	ng/ml	
107) 30-Homohopane-22S (T21)	54.83	191	36480	548.46	ng/ml	100
108) 30-Homohopane-22R (T22)	55.07	191	32466	488.11	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.46	191	30847	463.77	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.88	191	16130	242.51	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.74	191	11292m	169.77	ng/ml	
112) 30,31-Trishomohopane-22R (	59.40	191	7192m	108.13	ng/ml	
113) Tetrakishomohopane-22S (T3	61.55	191	6727	101.14	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.50	191	4569	68.69	ng/ml	100
115) Pentakishomohopane-22S (T3	64.89	191	3781m	56.85	ng/ml	
116) Pentakishomohopane-22R (T3	66.27	191	2944m	44.26	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.71	217	8017m	279.75	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.13	217	4754m	165.89	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	3499	122.10	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.72	217	4454m	155.42	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.27	217	12141m	423.66	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.56	217	1957m	68.29	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28222.D
Acq On : 11 Feb 2006 9:26 pm
Operator : AC
Sample : 0602004-05
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 17 10:37:48 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

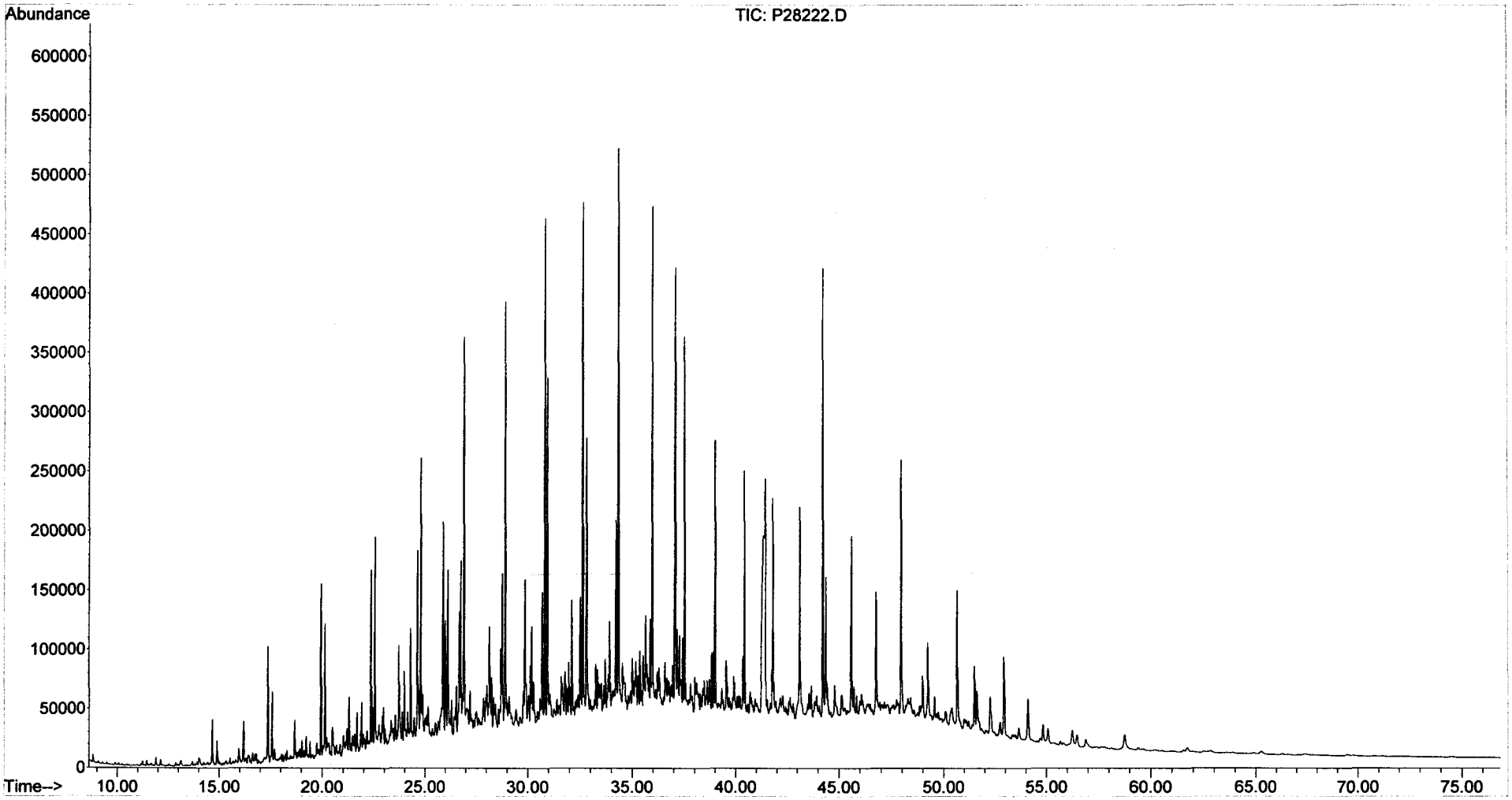
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	485	16.92	ng/ml	100
125) 14a,17a-20S-Methylcholesta	48.99	217	2901m	101.23	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.75	217	5470m	190.88	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.11	217	3299m	115.12	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.07	217	5201m	181.49	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.83	218	5709	199.22	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.91	218	6122	213.63	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.17	218	6052m	211.19	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.26	218	6416m	223.89	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.37	218	8027m	280.10	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.39	218	5336m	186.20	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 : P28222.D
Acq On : 11 Feb 2006 9:26 pm
Operator : AC
Sample : 0602004-05
Misc : 1X
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 17 10:37:48 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: **GC-SED-101 (7.9-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-05E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/10/06	72.9	4.98	13.13	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**670000**		Fluoranthene	360	U
C1-Naphthalenes	**400000**		Pyrene	320	U
C2-Naphthalenes	600	U	C1-Fluoranthenes/Pyrenes	320	U
C3-Naphthalenes	600	U	C2-Fluoranthenes/Pyrenes	320	U
C4-Naphthalenes	600	U	C3-Fluoranthenes/Pyrenes	320	U
Biphenyl	330	U	C4-Fluoranthenes/Pyrenes	320	U
Dibenzofuran	430	U	Naphthobenzothiophenes	440	U
Acenaphthylene	650	U	C1-Naphthobenzothiophenes	440	U
Acenaphthene	420	U	C2-Naphthobenzothiophenes	440	U
Fluorene	420	U	C3-Naphthobenzothiophenes	440	U
C1-Fluorenes	420	U	C4-Naphthobenzothiophenes	440	U
C2-Fluorenes	420	U	Benz[a]anthracene	570	U
C3-Fluorenes	420	U	Chrysene/Triphenylene	390	U
Anthracene	480	U	C1-Chrysenes	390	U
Phenanthrene	520	U	C2-Chrysenes	390	U
C1-Phenanthrenes/Anthracenes	520	U	C3-Chrysenes	390	U
C2-Phenanthrenes/Anthracenes	520	U	C4-Chrysenes	390	U
C3-Phenanthrenes/Anthracenes	520	U	Benzo[b]fluoranthene	380	U
C4-Phenanthrenes/Anthracenes	520	U	Benzo[k]fluoranthene	730	U
Retene	520	U	Benzo[a]fluoranthene	730	U
Dibenzothiophene	400	U	Benzo[e]pyrene	500	U
C1-Dibenzothiophenes	400	U	Benzo[a]pyrene	500	U
C2-Dibenzothiophenes	400	U	Perylene	630	U
C3-Dibenzothiophenes	400	U	Indeno[1,2,3-cd]pyrene	870	U
C4-Dibenzothiophenes	400	U	Dibenz[a,h]anthracene	690	U
Benzo(b)fluorene	360	U	Benzo[g,h,i]perylene	640	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	96	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

02/17/06 12:59

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18105.D
Acq On : 10 Feb 2006 1:37 pm
Operator : AC
Sample : 0602004-05-RE
Misc : 100X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 15 19:58:28 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 for MW 2/16/06

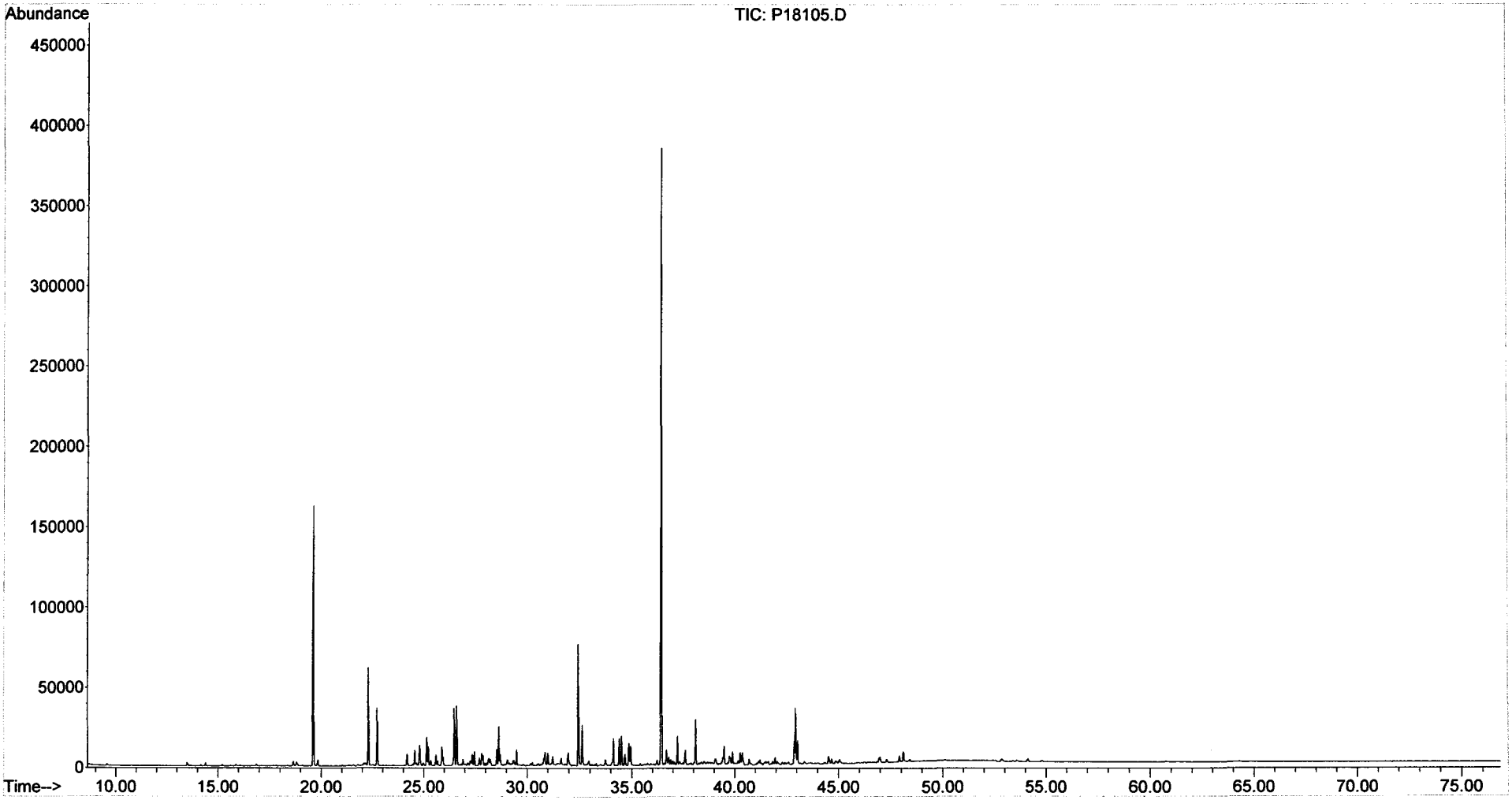
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	40197m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	68083m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	1090	12.65	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.26%#			
58) Pyrene-d10	38.02	212	2582m	14.57	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.46%#			
81) Benzo[b]fluoranthene-d12	46.85	264	1840m	13.57	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.36%#			
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	19.61	128	381165m	1856.79	ng/mL	
10) C1-Naphthalenes	22.29	142	225071m	1096.40	ng/mL	
15) 2-Methylnaphthalene	22.29	142	137333	1056.75	ng/mL#	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18105.D
Acq On : 10 Feb 2006 1:37 pm
Operator : AC
Sample : 0602004-05-RE
Misc : 100X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 15 19:58:28 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: **GC-SED-100 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-06**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	54.9	5.11	131.25	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	2600000	E	Fluoranthene	630000	E
C1-Naphthalenes	2300000	E	Pyrene	1000000	E
C2-Naphthalenes	1900000		C1-Fluoranthenes/Pyrenes	1600000	
C3-Naphthalenes	960000		C2-Fluoranthenes/Pyrenes	930000	
C4-Naphthalenes	380000		C3-Fluoranthenes/Pyrenes	420000	
Biphenyl	200000		C4-Fluoranthenes/Pyrenes	150000	
Dibenzofuran	73000		Naphthobenzothiophenes	200000	
Acenaphthylene	260000		C1-Naphthobenzothiophenes	280000	
Acenaphthene	1000000	E	C2-Naphthobenzothiophenes	210000	
Fluorene	600000	E	C3-Naphthobenzothiophenes	110000	
C1-Fluorenes	620000		C4-Naphthobenzothiophenes	51000	
C2-Fluorenes	580000		Benz[a]anthracene	400000	
C3-Fluorenes	340000		Chrysene/Triphenylene	430000	
Anthracene	710000	E	C1-Chrysenes	610000	
Phenanthrene	2000000	E	C2-Chrysenes	360000	
C1-Phenanthrenes/Anthracenes	2100000	E	C3-Chrysenes	220000	
C2-Phenanthrenes/Anthracenes	1400000		C4-Chrysenes	72000	
C3-Phenanthrenes/Anthracenes	650000		Benzo[b]fluoranthene	140000	
C4-Phenanthrenes/Anthracenes	190000		Benzo[k]fluoranthene	160000	
Retene	27000		Benzo[a]fluoranthene	98000	
Dibenzothiophene	290000		Benzo[e]pyrene	160000	
C1-Dibenzothiophenes	490000		Benzo[a]pyrene	300000	
C2-Dibenzothiophenes	500000		Perylene	55000	
C3-Dibenzothiophenes	310000		Indeno[1,2,3-cd]pyrene	140000	
C4-Dibenzothiophenes	110000		Dibenz[a,h]anthracene	45000	
Benzo(b)fluorene	210000		Benzo[g,h,i]perylene	130000	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	103		50-130
Pyrene-d10	157	§	50-130
Benzo[b]fluoranthene-d12	112		50-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
E - Estimated value, exceeds the upper limit of calibration.

02/21/06 11:44

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-100 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-06**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	54.9	5.11	131.25	1	AC

Parameter	Result
Carbazole	**21000**

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	103		50-130
Pyrene-d10	157	§	50-130
Benzo[b]fluoranthene-d12	112		50-130

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

02/21/06 11:45

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18129.D
Acq On : 11 Feb 2006 8:56 am
Operator : AC
Sample : 0602004-06
Misc : 1X
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Feb 16 14:36:14 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 for WW 2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	36626m	500.00 ng/mL	-0.02
72) Chrysene-d12	42.97	240	66444m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	12304m	156.70 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 15.67%#		
58) Pyrene-d10	38.05	212	38654m	239.44 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.94%#		
81) Benzo[b]fluoranthene-d12	46.87	264	22557m	170.48 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 17.05%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.63	128	10285029m	54987.05 ng/mL E	
10) C1-Naphthalenes	22.33	142	9320528m	49830.52 ng/mL E	
11) C2-Naphthalenes	25.16	156	7482344m	40003.00 ng/mL	
12) C3-Naphthalenes	27.48	170	3829090m	20471.54 ng/mL	
13) C4-Naphthalenes	30.25	184	1520541m	8129.30 ng/mL	
15) 2-Methylnaphthalene	22.33	142	5506517m	46502.86 ng/mL E	
16) 1-Methylnaphthalene	22.74	142	3800739	34094.04 ng/mL#E	100
22) Biphenyl	24.19	154	620951m	4217.97 ng/mL	
23) 2,6-Dimethylnaphthalene	24.81	156	975302m	9924.65 ng/mL	
24) Dibenzofuran	27.26	168	257244m	1555.48 ng/mL	
25) Acenaphthylene	25.89	152	990685m	5523.92 ng/mL	
26) Acenaphthene	26.63	153	2442068m	21920.98 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.18	170	247978m	2811.00 ng/mL	
28) Fluorene	28.65	166	1607067m	12862.75 ng/mL E	
29) C1-Fluorenes	30.86	180	1665376m	13329.44 ng/mL	
30) C2-Fluorenes	33.04	194	1553887m	12437.10 ng/mL	
31) C3-Fluorenes	35.04	208	892787m	7145.75 ng/mL	
32) Dibenzothiophene	31.95	184	1146685m	6223.51 ng/mL	
36) OTP	34.13	198	3776m	20.49 ng/mL	
37) C1-Dibenzothiophenes	33.74	198	1926739m	10457.17 ng/mL	
38) C2-Dibenzothiophenes	35.78	212	1982788m	10761.37 ng/mL	
39) C3-Dibenzothiophenes	37.23	226	1208799m	6560.63 ng/mL	
40) C4-Dibenzothiophenes	38.91	240	448210m	2432.61 ng/mL	
41) Phenanthrene	32.49	178	7768034	41929.36 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.54	192	8466608m	45700.04 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.71	206	5708642m	30813.42 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2587660m	13967.36 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	754763m	4073.97 ng/mL	
52) Retene	39.46	234	22238m	574.09 ng/mL	
53) Anthracene	32.65	178	2607232	15210.37 ng/mL E	100
54) Carbazole	33.29	167	72227m	455.27 ng/mL	
55) 1-Methylphenanthrene	34.98	192	1351898m	10657.03 ng/mL E	
56) Fluoranthene	37.24	202	2655255m	13460.73 ng/mL E	
57) Benzo(b)fluorene	39.76	216	515948m	4481.77 ng/mL	
59) Pyrene	38.13	202	4425606m	22059.05 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.52	216	7051755m	35148.87 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.97	230	3984542m	19860.61 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1793673m	8940.41 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	636597m	3173.06 ng/mL	
64) Naphthobenzothiophene	41.97	234	494145m	2632.78 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18129.D
Acq On : 11 Feb 2006 8:56 am
Operator : AC
Sample : 0602004-06
Misc : 1X
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Feb 16 14:36:14 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

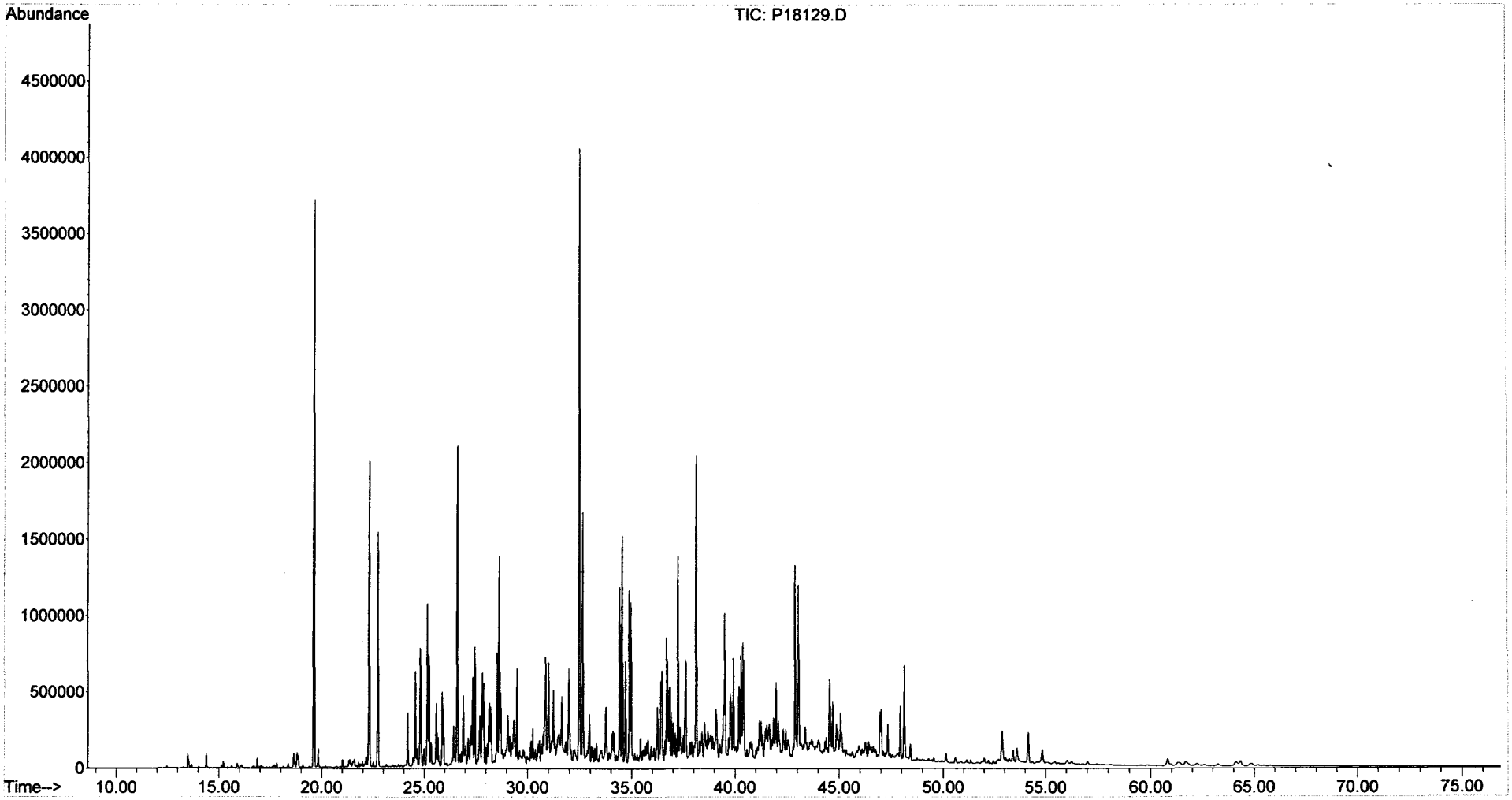
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.97	234	493851m	2631.22 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	151778m	808.67 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	148843m	793.03 ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	1115092m	5941.16 ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	842339m	4487.95 ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	457887m	2439.60 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	203209m	1082.69 ng/mL	
73) Benz[a]anthracene	42.90	228	1729443m	8550.52 ng/mL	
74) Chrysene	43.06	228	1889185m	9141.00 ng/mL	
75) Chrysene/Triphenylene	43.06	228	1898458m	9185.86 ng/mL	
76) C1-Chrysenes	44.54	242	2684308m	12988.27 ng/mL	
77) C2-Chrysenes	46.25	256	1615805m	7818.22 ng/mL	
78) BBF-d12 Surr BKGD	46.85	256	21699	104.99 ng/mL	100
79) C3-Chrysenes	47.83	270	984263m	4762.45 ng/mL	
80) C4-Chrysenes	49.39	284	317122m	1534.42 ng/mL	
82) Benzo[b]fluoranthene	46.95	252	624316	3005.51 ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	748685	3464.50 ng/mL	97
84) Benzo[a]fluoranthene	47.33	252	450488m	2084.61 ng/mL	
85) Benzo[e]pyrene	47.93	252	709268	3526.72 ng/mL	95
86) Benzo[a]pyrene	48.13	252	1257170m	6317.90 ng/mL	
87) Perylene	48.43	252	229346m	1179.11 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.86	276	505951m	2889.33 ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	172363m	965.67 ng/mL	
90) Benzo[g,h,i]perylene	54.14	276	560599	2778.22 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18129.D
Acq On : 11 Feb 2006 8:56 am
Operator : AC
Sample : 0602004-06
Misc : 1X
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Feb 16 14:36:14 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: **GC-SED-100 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-06**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	54.9	5.11	17.88	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2500**	30,31-Bishomohopane-22S	**3800**
C24 Tricyclic Terpane	**1600**	30,31-Bishomohopane-22R	**2800**
C25 Tricyclic Terpane	**1500**	30,31-Trishomohopane-22S	**2000**
C24 Tetracyclic Terpane	**1800**	30,31-Trishomohopane-22R	**1400**
C26 Tricyclic Terpane-22S	**700**	Tetrakishomohopane-22S	**1200**
C26 Tricyclic Terpane-22R	**700**	Tetrakishomohopane-22R	**830**
C28 Tricyclic Terpane-22S	**790**	Pentakishomohopane-22S	**800**
C28 Tricyclic Terpane-22R	**910**	Pentakishomohopane-22R	**690**
C29 Tricyclic Terpane-22S	**1000**	13b(H),17a(H)-20S-Diacholestane	**3600**
C29 Tricyclic Terpane-22R	**940**	13b(H),17a(H)-20R-Diacholestane	**2100**
18a-22,29,30-Trisnorneohopane-TS	**5800**	13b,17a-20S-Methyldiacholestane	**1600**
C30 Tricyclic Terpane-22S	**760**	14a(H),17a(H)-20S-Cholestane	**2100**
C30 Tricyclic Terpane-22R	**530**	14a(H),17a(H)-20R-Cholestane	**6900**
17a(H)-22,29,30-Trisnorhopane-TM	**5200**	13b,17a-20R-Ethyldiacholestane	**920**
17a/b,21b/a 28,30-Bisnorhopane	**1300**	13a,17b-20S-Ethyldiacholestane	**230**
17a(H),21b(H)-25-Norhopane	**330**	14a,17a-20S-Methylcholestane	**1400**
30-Norhopane	**15000**	14a,17a-20R-Methylcholestane	**3700**
18a(H)-30-Norneohopane-C29Ts	**5700**	14a(H),17a(H)-20S-Ethylcholestane	**2200**
17a(H)-Diahopane	**1400**	14a(H),17a(H)-20R-Ethylcholestane	**3400**
30-Normoretane	**3400**	14b(H),17b(H)-20R-Cholestane	**3000**
18a(H)&18b(H)-Oleananes	**2800**	14b(H),17b(H)-20S-Cholestane	**3100**
Hopane	**25000**	14b,17b-20R-Methylcholestane	**3200**
Moretane	**3800**	14b,17b-20S-Methylcholestane	**3700**
30-Homohopane-22S	**6300**	14b(H),17b(H)-20R-Ethylcholestane	**5200**
30-Homohopane-22R	**5500**	14b(H),17b(H)-20S-Ethylcholestane	**2400**

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

N/A - Not Applicable

02/21/06 16:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28223.D
Acq On : 11 Feb 2006 11:00 pm
Operator : AC
Sample : 0602004-06
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 17 10:42:03 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 2/17/06

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	70981	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	44.21	217	32585	1079.44	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 107.94%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	272450m	3888.56	ng/mL	
84) Hopane (T19)	52.95	191	271842m	3879.88	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	27475	392.14	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.95	191	17438	248.88	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	16903m	241.25	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	19260	274.89	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7687	109.71	ng/ml	100
90) C26 Tricyclic Terpane-22R	44.60	191	7635	108.97	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	8645m	123.39	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	9995m	142.65	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	10936	156.08	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	10348m	147.69	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	63618	907.99	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.06	191	8401m	119.90	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	5801	82.80	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	57212m	816.56	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	13855m	197.75	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	3626m	51.75	ng/ml	
101) 30-Norhopane (T15)	51.51	191	163151m	2328.58	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.62	191	62642m	894.06	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	14979m	213.79	ng/ml	
104) 30-Normoretane (T17)	52.33	191	37418	534.05	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	30364m	433.37	ng/ml	
106) Moretane (T20)	53.68	191	41256m	588.83	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	68972	984.41	ng/ml	100
108) 30-Homohopane-22R (T22)	55.09	191	60622	865.23	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.49	191	41541	592.90	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.90	191	30212	431.20	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.76	191	22411m	319.86	ng/ml	
112) 30,31-Trishomohopane-22R (	59.41	191	15609	222.78	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.57	191	13749	196.23	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.52	191	9131	130.32	ng/ml	100
115) Pentakishomohopane-22S (T3	64.92	191	8729m	124.59	ng/ml	
116) Pentakishomohopane-22R (T3	66.29	191	7576m	108.13	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	17144	567.93	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.14	217	9881m	327.33	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	7350m	243.48	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	10093m	334.35	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	32833	1087.65	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.56	217	4367m	144.66	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28223.D
Acq On : 11 Feb 2006 11:00 pm
Operator : AC
Sample : 0602004-06
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 17 10:42:03 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

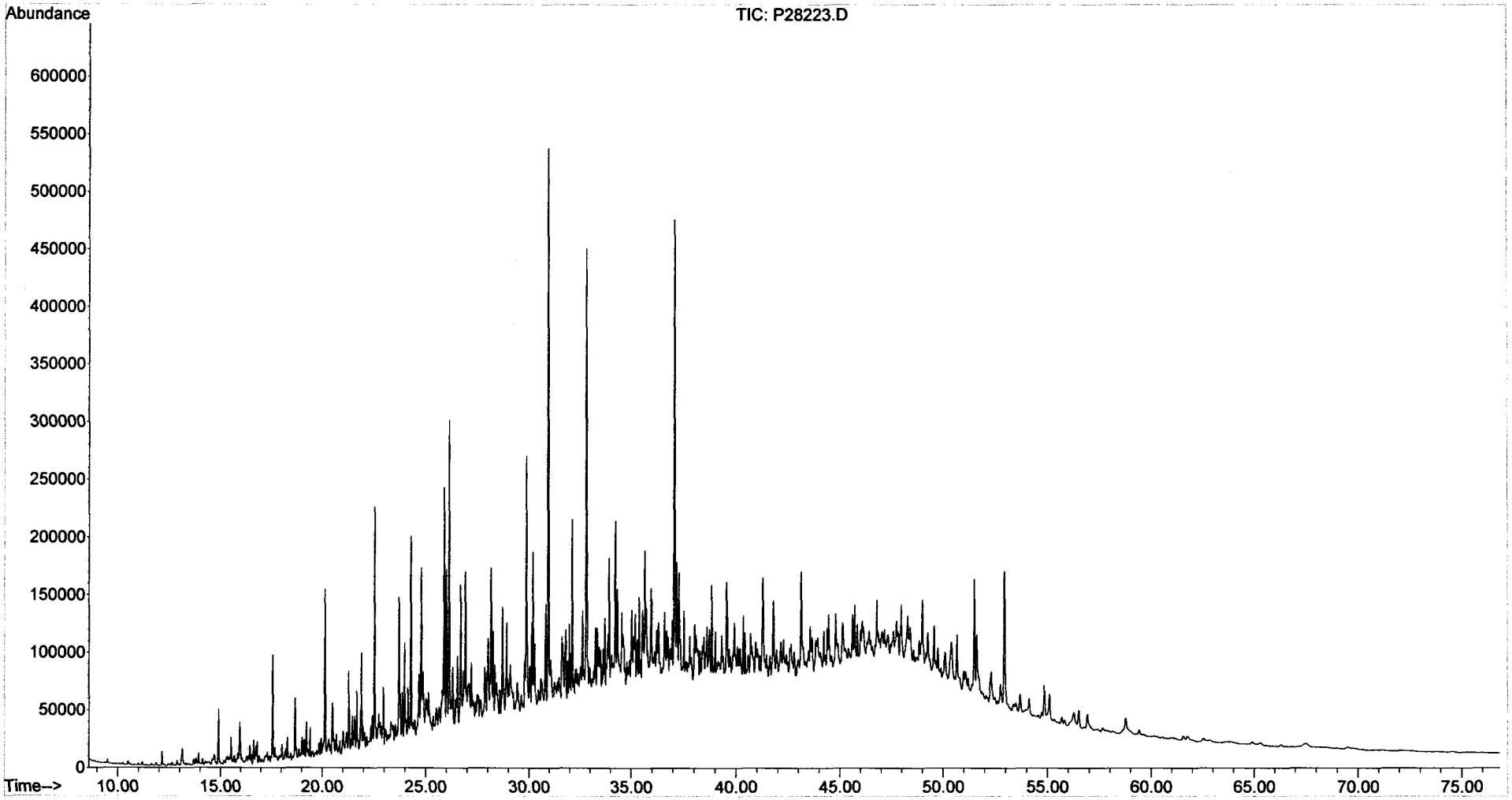
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	1101	36.47	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	6681m	221.32	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	17303	573.19	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	10273m	340.31	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	16253m	538.41	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	14032	464.84	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	14481	479.71	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.19	218	14939m	494.88	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	17385m	575.91	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	24514m	812.07	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.41	218	11613m	384.70	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 : P28223.D
Acq On : 11 Feb 2006 11:00 pm
Operator : AC
Sample : 0602004-06
Misc : 1X
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 17 10:42:03 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: **GC-SED-100 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-06E**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/09/06	54.9	5.11	131.25	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**2500000**		Fluoranthene	**570000**	
C1-Naphthalenes	**2200000**		Pyrene	**920000**	
C2-Naphthalenes	770	U	C1-Fluoranthenes/Pyrenes	420	U
C3-Naphthalenes	770	U	C2-Fluoranthenes/Pyrenes	420	U
C4-Naphthalenes	770	U	C3-Fluoranthenes/Pyrenes	420	U
Biphenyl	430	U	C4-Fluoranthenes/Pyrenes	420	U
Dibenzofuran	560	U	Naphthobenzothiophenes	570	U
Acenaphthylene	850	U	C1-Naphthobenzothiophenes	570	U
Acenaphthene	**930000**		C2-Naphthobenzothiophenes	570	U
Fluorene	**540000**		C3-Naphthobenzothiophenes	570	U
C1-Fluorenes	540	U	C4-Naphthobenzothiophenes	570	U
C2-Fluorenes	540	U	Benz[a]anthracene	740	U
C3-Fluorenes	540	U	Chrysene/Triphenylene	510	U
Anthracene	**630000**		C1-Chrysenes	510	U
Phenanthrene	**1800000**		C2-Chrysenes	510	U
C1-Phenanthrenes/Anthracenes	**1900000**		C3-Chrysenes	510	U
C2-Phenanthrenes/Anthracenes	680	U	C4-Chrysenes	510	U
C3-Phenanthrenes/Anthracenes	680	U	Benzo[b]fluoranthene	500	U
C4-Phenanthrenes/Anthracenes	680	U	Benzo[k]fluoranthene	950	U
Retene	680	U	Benzo[a]fluoranthene	950	U
Dibenzothiophene	520	U	Benzo[e]pyrene	640	U
C1-Dibenzothiophenes	520	U	Benzo[a]pyrene	650	U
C2-Dibenzothiophenes	520	U	Perylene	820	U
C3-Dibenzothiophenes	520	U	Indeno[1,2,3-cd]pyrene	1100	U
C4-Dibenzothiophenes	520	U	Dibenz[a,h]anthracene	890	U
Benzo(b)fluorene	470	U	Benzo[g,h,i]perylene	820	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	119	50-130
Benzo[b]fluoranthene-d12	110	50-130

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

02/17/06 13:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18083.D
Acq On : 9 Feb 2006 8:38 pm
Operator : AC
Sample : 0602004-06-RE
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 15 19:32:28 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 for WP 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	38764m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	65211m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	1207m	14.52	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.45%#			
58) Pyrene-d10	38.02	212	3103m	18.16	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.82%#			
81) Benzo[b]fluoranthene-d12	46.84	264	2170m	16.71	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.67%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

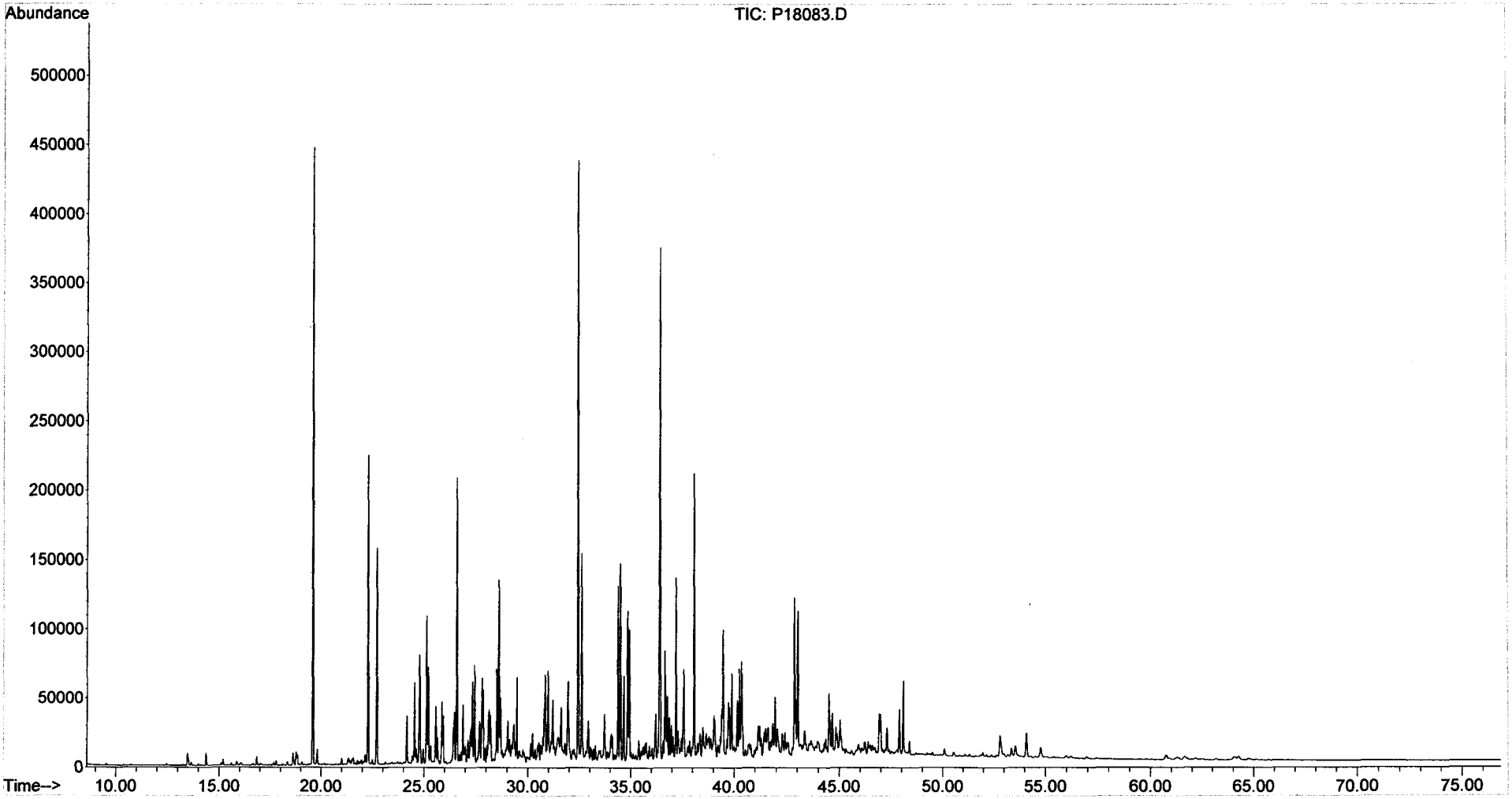
Target Compounds						Qvalue
9) Naphthalene	19.61	128	1048298m	5295.42	ng/mL	
10) C1-Naphthalenes	22.31	142	913267m	4613.32	ng/mL	
15) 2-Methylnaphthalene	22.31	142	541083m	4317.45	ng/mL	
16) 1-Methylnaphthalene	22.73	142	370957	3144.09	ng/mL#	100
26) Acenaphthene	26.62	153	235252m	1995.25	ng/mL	
28) Fluorene	28.64	166	152008m	1149.55	ng/mL	
41) Phenanthrene	32.45	178	731632m	3731.30	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.52	192	801430m	4087.27	ng/mL	
53) Anthracene	32.62	178	244288m	1346.55	ng/mL	
55) 1-Methylphenanthrene	34.95	192	132283m	985.27	ng/mL	
56) Fluoranthene	37.22	202	253319m	1213.36	ng/mL	
59) Pyrene	38.10	202	417898	1968.09	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18083.D
Acq On : 9 Feb 2006 8:38 pm
Operator : AC
Sample : 0602004-06-RE
Misc : 10X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 15 19:32:28 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: **GC-SED-97 (8.5-9.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-07**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	58.2	5.24	105	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1500000**	E	Fluoranthene	**310000**	
C1-Naphthalenes	**1500000**	E	Pyrene	**540000**	E
C2-Naphthalenes	**1200000**		C1-Fluoranthenes/Pyrenes	**970000**	
C3-Naphthalenes	**710000**		C2-Fluoranthenes/Pyrenes	**590000**	
C4-Naphthalenes	**280000**		C3-Fluoranthenes/Pyrenes	**280000**	
Biphenyl	**110000**		C4-Fluoranthenes/Pyrenes	**98000**	
Dibenzofuran	**38000**		Naphthobenzothiophenes	**110000**	
Acenaphthylene	**100000**		C1-Naphthobenzothiophenes	**160000**	
Acenaphthene	**620000**	E	C2-Naphthobenzothiophenes	**130000**	
Fluorene	**320000**		C3-Naphthobenzothiophenes	**70000**	
C1-Fluorenes	**410000**		C4-Naphthobenzothiophenes	**31000**	
C2-Fluorenes	**390000**		Benz[a]anthracene	**210000**	
C3-Fluorenes	**220000**		Chrysene/Triphenylene	**240000**	
Anthracene	**350000**	E	C1-Chrysenes	**360000**	
Phenanthrene	**1000000**	E	C2-Chrysenes	**220000**	
C1-Phenanthrenes/Anthracenes	**1300000**		C3-Chrysenes	**140000**	
C2-Phenanthrenes/Anthracenes	**950000**		C4-Chrysenes	**48000**	
C3-Phenanthrenes/Anthracenes	**460000**		Benzo[b]fluoranthene	**78000**	
C4-Phenanthrenes/Anthracenes	**130000**		Benzo[k]fluoranthene	**83000**	
Retene	**20000**		Benzo[a]fluoranthene	**52000**	
Dibenzothiophene	**160000**		Benzo[e]pyrene	**90000**	
C1-Dibenzothiophenes	**280000**		Benzo[a]pyrene	**150000**	
C2-Dibenzothiophenes	**300000**		Perylene	**32000**	
C3-Dibenzothiophenes	**180000**		Indeno[1,2,3-cd]pyrene	**71000**	
C4-Dibenzothiophenes	**70000**		Dibenz[a,h]anthracene	**25000**	
Benzo(b)fluorene	**120000**		Benzo[g,h,i]perylene	**71000**	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	99		50-130
Pyrene-d10	143	§	50-130
Benzo[b]fluoranthene-d12	111		50-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
E - Estimated value, exceeds the upper limit of calibration.

02/21/06 11:46

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-97 (8.5-9.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-07**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	58.2	5.24	105	1	AC

Parameter	Result
Carbazole	16000

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	99		50-130
Pyrene-d10	143	§	50-130
Benzo[b]fluoranthene-d12	111		50-130

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

02/21/06 11:46

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18131.D
Acq On : 11 Feb 2006 10:29 am
Operator : AC
Sample : 0602004-07
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Feb 16 14:36:32 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 for WD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	33318m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	61494m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	13532m	189.45	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 18.94%#			
58) Pyrene-d10	38.04	212	39994m	272.33	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.23%#			
81) Benzo[b]fluoranthene-d12	46.87	264	25836m	210.98	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.10%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.63	128	7459075m	43837.97	ng/mL E	
10) C1-Naphthalenes	22.32	142	7221291m	42440.48	ng/mL E	
11) C2-Naphthalenes	25.16	156	6180071m	36321.10	ng/mL	
12) C3-Naphthalenes	27.48	170	3516685m	20668.02	ng/mL	
13) C4-Naphthalenes	30.25	184	1384764m	8138.44	ng/mL	
15) 2-Methylnaphthalene	22.32	142	4300469	39923.54	ng/mL# E	100
16) 1-Methylnaphthalene	22.74	142	2916949	28764.04	ng/mL# E	100
22) Biphenyl	24.19	154	433316	3235.65	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.81	156	804150m	8995.47	ng/mL	
24) Dibenzofuran	27.26	168	165602m	1100.76	ng/mL	
25) Acenaphthylene	25.89	152	487466m	2987.90	ng/mL	
26) Acenaphthene	26.63	153	1818044	17939.78	ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.18	170	214305m	2670.48	ng/mL	
28) Fluorene	28.65	166	1072654m	9437.78	ng/mL	
29) C1-Fluorenes	30.86	180	1344644m	11830.89	ng/mL	
30) C2-Fluorenes	33.04	194	1295133m	11395.27	ng/mL	
31) C3-Fluorenes	35.04	208	709462m	6242.22	ng/mL	
32) Dibenzothiophene	31.95	184	757124m	4517.19	ng/mL	
36) OTP	34.13	198	3330m	19.87	ng/mL	
37) C1-Dibenzothiophenes	33.74	198	1343964m	8018.43	ng/mL	
38) C2-Dibenzothiophenes	35.78	212	1436887m	8572.83	ng/mL	
39) C3-Dibenzothiophenes	37.23	226	901016m	5375.69	ng/mL	
40) C4-Dibenzothiophenes	38.91	240	338403m	2019.00	ng/mL	
41) Phenanthrene	32.47	178	4972727m	29506.14	ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.53	192	6277794m	37249.87	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.70	206	4665623m	27683.91	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2229838m	13230.95	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	615587m	3652.64	ng/mL	
52) Retene	39.46	234	20597m	584.52	ng/mL	
53) Anthracene	32.63	178	1600458m	10263.96	ng/mL E	
54) Carbazole	33.29	167	65911m	456.71	ng/mL	
55) 1-Methylphenanthrene	34.96	192	1055250m	9144.46	ng/mL	
56) Fluoranthene	37.24	202	1627666m	9070.65	ng/mL	
57) Benzo(b)fluorene	39.76	216	372196m	3554.07	ng/mL	
59) Pyrene	38.12	202	2838050m	15550.51	ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.51	216	5127185m	28093.36	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.97	230	3144916m	17231.92	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1463872m	8020.99	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	518840m	2842.88	ng/mL	
64) Naphthobenzothiophene	41.96	234	343354m	2011.01	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18131.D
Acq On : 11 Feb 2006 10:29 am
Operator : AC
Sample : 0602004-07
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Feb 16 14:36:32 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

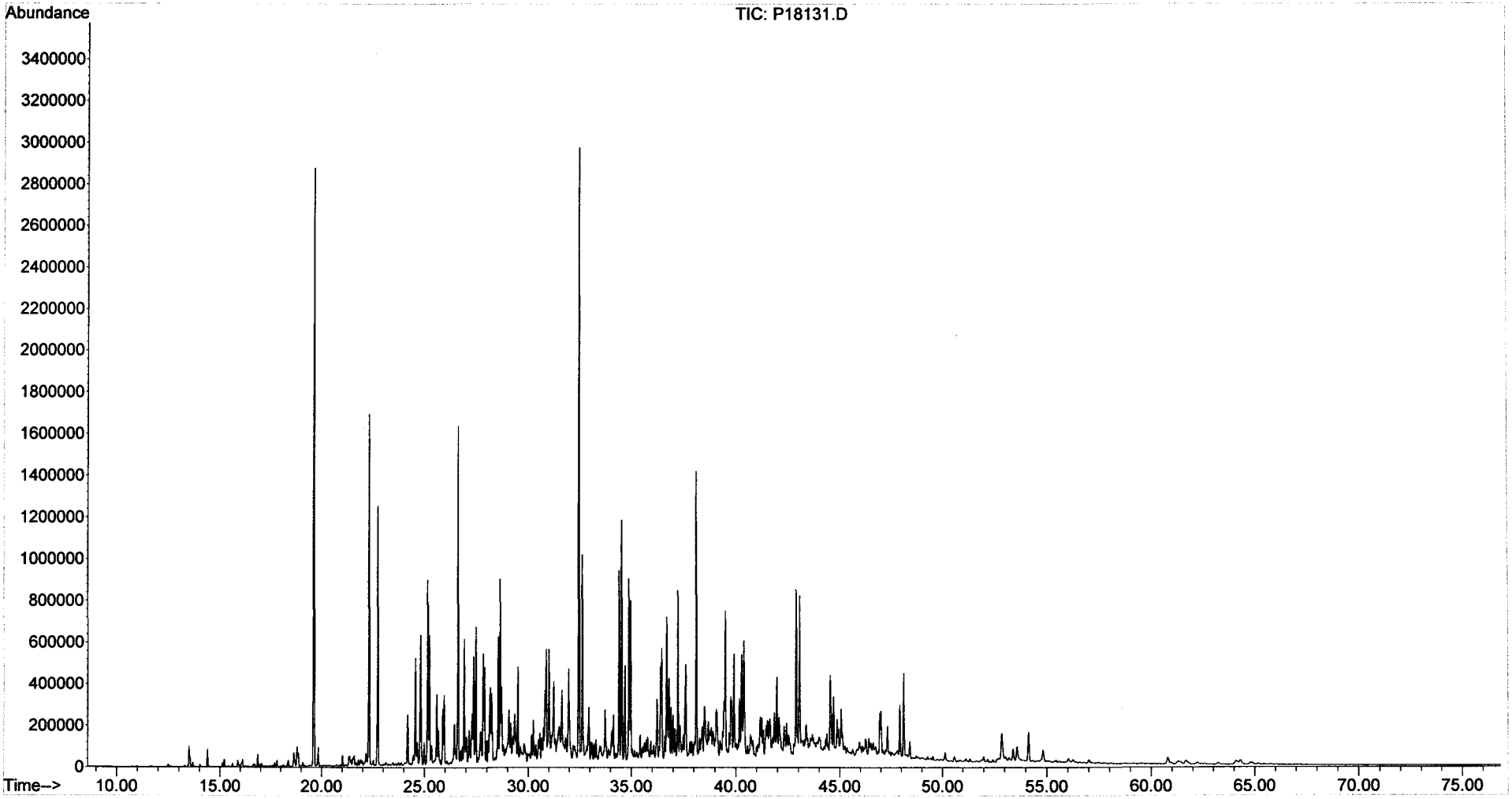
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.96	234	343889m	2014.14 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	103888m	608.47 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	98099m	574.56 ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	809277m	4739.89 ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	624099m	3655.32 ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	345928m	2026.08 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	155330m	909.76 ng/mL	
73) Benz[a]anthracene	42.90	228	1126604m	6018.40 ng/mL	
74) Chrysene	43.06	228	1316419m	6882.34 ng/mL	
75) Chrysene/Triphenylene	43.06	228	1314784m	6873.79 ng/mL	
76) C1-Chrysenes	44.54	242	2010488m	10510.99 ng/mL	
77) C2-Chrysenes	46.25	256	1234916m	6456.24 ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	18839	98.49 ng/mL	100
79) C3-Chrysenes	47.82	270	789771m	4128.98 ng/mL	
80) C4-Chrysenes	49.38	284	264613m	1383.42 ng/mL	
82) Benzo[b]fluoranthene	46.94	252	437288	2274.60 ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	480135	2400.65 ng/mL	96
84) Benzo[a]fluoranthene	47.33	252	303617m	1518.07 ng/mL	
85) Benzo[e]pyrene	47.93	252	486430	2613.39 ng/mL	93
86) Benzo[a]pyrene	48.12	252	824285m	4475.89 ng/mL	
87) Perylene	48.42	252	165450m	919.08 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.85	276	333032m	2054.93 ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	118166m	715.32 ng/mL	
90) Benzo[g,h,i]perylene	54.14	276	382634	2048.90 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18131.D
Acq On : 11 Feb 2006 10:29 am
Operator : AC
Sample : 0602004-07
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Feb 16 14:36:32 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: **GC-SED-97 (8.5-9.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-07**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/12/06	58.2	5.24	12.5	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1300**	30,31-Bishomohopane-22S	**2000**
C24 Tricyclic Terpane	**950**	30,31-Bishomohopane-22R	**1500**
C25 Tricyclic Terpane	**940**	30,31-Trishomohopane-22S	**1000**
C24 Tetracyclic Terpane	**1100**	30,31-Trishomohopane-22R	**700**
C26 Tricyclic Terpane-22S	**420**	Tetrakishomohopane-22S	**600**
C26 Tricyclic Terpane-22R	**400**	Tetrakishomohopane-22R	**390**
C28 Tricyclic Terpane-22S	**490**	Pentakishomohopane-22S	**360**
C28 Tricyclic Terpane-22R	**530**	Pentakishomohopane-22R	**320**
C29 Tricyclic Terpane-22S	**580**	13b(H),17a(H)-20S-Diacholestane	**2200**
C29 Tricyclic Terpane-22R	**590**	13b(H),17a(H)-20R-Diacholestane	**1300**
18a-22,29,30-Trisnorneohopane-TS	**3500**	13b,17a-20S-Methyldiacholestane	**980**
C30 Tricyclic Terpane-22S	**400**	14a(H),17a(H)-20S-Cholestane	**1200**
C30 Tricyclic Terpane-22R	**300**	14a(H),17a(H)-20R-Cholestane	**3800**
17a(H)-22,29,30-Trisnorhopane-TM	**3000**	13b,17a-20R-Ethyldiacholestane	**620**
17a/b,21b/a 28,30-Bisnorhopane	**790**	13a,17b-20S-Ethyldiacholestane	**140**
17a(H),21b(H)-25-Norhopane	**200**	14a,17a-20S-Methylcholestane	**720**
30-Norhopane	**8100**	14a,17a-20R-Methylcholestane	**2000**
18a(H)-30-Norneohopane-C29Ts	**3400**	14a(H),17a(H)-20S-Ethylcholestane	**1200**
17a(H)-Diahopane	**790**	14a(H),17a(H)-20R-Ethylcholestane	**1800**
30-Normoretane	**1900**	14b(H),17b(H)-20R-Cholestane	**1600**
18a(H)&18b(H)-Oleananes	**1600**	14b(H),17b(H)-20S-Cholestane	**1700**
Hopane	**14000**	14b,17b-20R-Methylcholestane	**1800**
Moretane	**2100**	14b,17b-20S-Methylcholestane	**2000**
30-Homohopane-22S	**3300**	14b(H),17b(H)-20R-Ethylcholestane	**2500**
30-Homohopane-22R	**2900**	14b(H),17b(H)-20S-Ethylcholestane	**1700**

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

N/A - Not Applicable

02/21/06 16:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28224.D
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : 0602004-07
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 17 10:50:44 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 2/17/06

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	74767	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	44.21	217	44127	1387.76	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 138.78%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	248673m	3369.48	ng/mL	
84) Hopane (T19)	52.95	191	246356m	3338.08	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	23735m	321.61	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	17175	232.72	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	16829m	228.03	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	19522	264.52	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7473m	101.26	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	7197	97.52	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	8814m	119.43	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	9554m	129.46	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	10426	141.27	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	10556m	143.03	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	62959m	853.08	ng/ml	
96) C30 Tricyclic Terpane-22S	49.06	191	7227m	97.92	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	5316	72.03	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	53953	731.05	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	14174m	192.06	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	3584m	48.56	ng/ml	
101) 30-Norhopane (T15)	51.51	191	146351	1983.03	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.61	191	60660m	821.93	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	14236	192.90	ng/ml	100
104) 30-Normoretane (T17)	52.33	191	34899	472.88	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	29149m	394.96	ng/ml	
106) Moretane (T20)	53.68	191	37517m	508.35	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	59460	805.67	ng/ml	100
108) 30-Homohopane-22R (T22)	55.08	191	52279	708.37	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.48	191	35164	476.47	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.90	191	26828	363.51	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.76	191	18394m	249.24	ng/ml	
112) 30,31-Trishomohopane-22R (	59.41	191	12664	171.60	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.56	191	10756	145.74	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.52	191	6947	94.13	ng/ml	100
115) Pentakishomohopane-22S (T3	64.91	191	6561m	88.90	ng/ml	
116) Pentakishomohopane-22R (T3	66.30	191	5780m	78.32	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	16998m	534.58	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	10054m	316.19	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	7577m	238.29	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	9549m	300.31	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.27	217	29667	933.01	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	48.56	217	4778m	150.26	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28224.D
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : 0602004-07
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 17 10:50:44 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

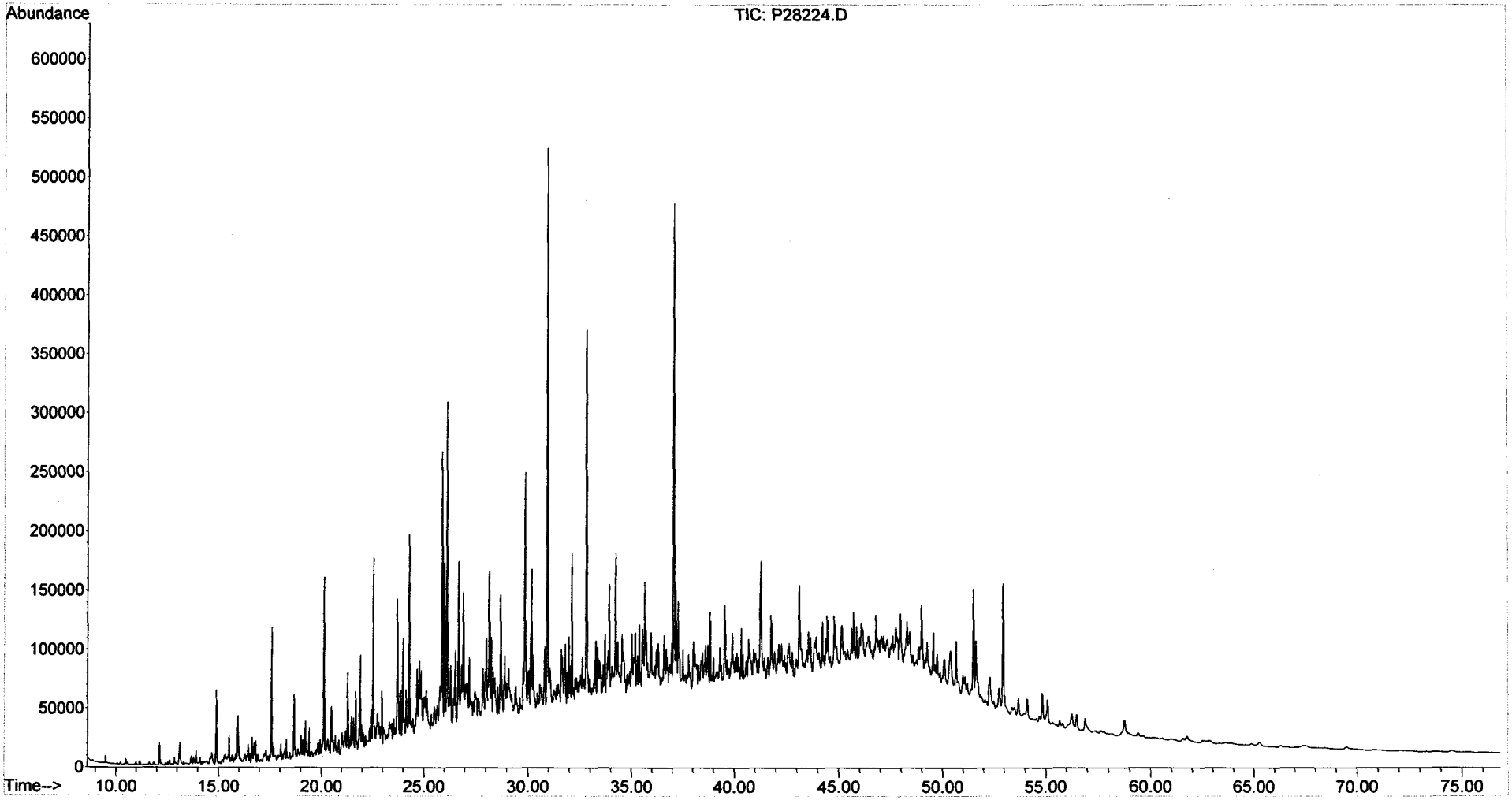
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	1057	33.24	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	5595m	175.96	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	15113	475.29	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	9336m	293.61	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	14207m	446.80	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.82	218	12796	402.43	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	13013	409.25	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.18	218	13859m	435.86	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	15801m	496.93	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	19568m	615.40	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.42	218	12977m	408.12	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 : P28224.D
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : 0602004-07
Misc : 1X
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 17 10:50:44 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: **GC-SED-97 (8.5-9.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-07E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/09/06	58.2	5.24	105	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1500000**		Fluoranthene	350	U
C1-Naphthalenes	**1400000**		Pyrene	**500000**	
C2-Naphthalenes	570	U	C1-Fluoranthenes/Pyrenes	310	U
C3-Naphthalenes	570	U	C2-Fluoranthenes/Pyrenes	310	U
C4-Naphthalenes	570	U	C3-Fluoranthenes/Pyrenes	310	U
Biphenyl	310	U	C4-Fluoranthenes/Pyrenes	310	U
Dibenzofuran	410	U	Naphthobenzothiophenes	420	U
Acenaphthylene	620	U	C1-Naphthobenzothiophenes	420	U
Acenaphthene	**570000**		C2-Naphthobenzothiophenes	420	U
Fluorene	400	U	C3-Naphthobenzothiophenes	420	U
C1-Fluorenes	400	U	C4-Naphthobenzothiophenes	420	U
C2-Fluorenes	400	U	Benz[a]anthracene	540	U
C3-Fluorenes	400	U	Chrysene/Triphenylene	370	U
Anthracene	**310000**		C1-Chrysenes	370	U
Phenanthrene	**930000**		C2-Chrysenes	370	U
C1-Phenanthrenes/Anthracenes	500	U	C3-Chrysenes	370	U
C2-Phenanthrenes/Anthracenes	500	U	C4-Chrysenes	370	U
C3-Phenanthrenes/Anthracenes	500	U	Benzo[b]fluoranthene	360	U
C4-Phenanthrenes/Anthracenes	500	U	Benzo[k]fluoranthene	700	U
Retene	500	U	Benzo[a]fluoranthene	700	U
Dibenzothiophene	380	U	Benzo[e]pyrene	470	U
C1-Dibenzothiophenes	380	U	Benzo[a]pyrene	480	U
C2-Dibenzothiophenes	380	U	Perylene	600	U
C3-Dibenzothiophenes	380	U	Indeno[1,2,3-cd]pyrene	830	U
C4-Dibenzothiophenes	380	U	Dibenz[a,h]anthracene	660	U
Benzo(b)fluorene	350	U	Benzo[g,h,i]perylene	610	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	97	50-130
Pyrene-d10	121	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.

02/17/06 13:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18085.D
Acq On : 9 Feb 2006 10:10 pm
Operator : AC
Sample : 0602004-07-RE
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 15 19:35:38 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

MSforwd 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	50460m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	85634m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	1990m	18.40	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.84%#		
58) Pyrene-d10	38.02	212	5122m	23.03	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.30%#		
81) Benzo[b]fluoranthene-d12	46.84	264	3614m	21.19	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.12%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		

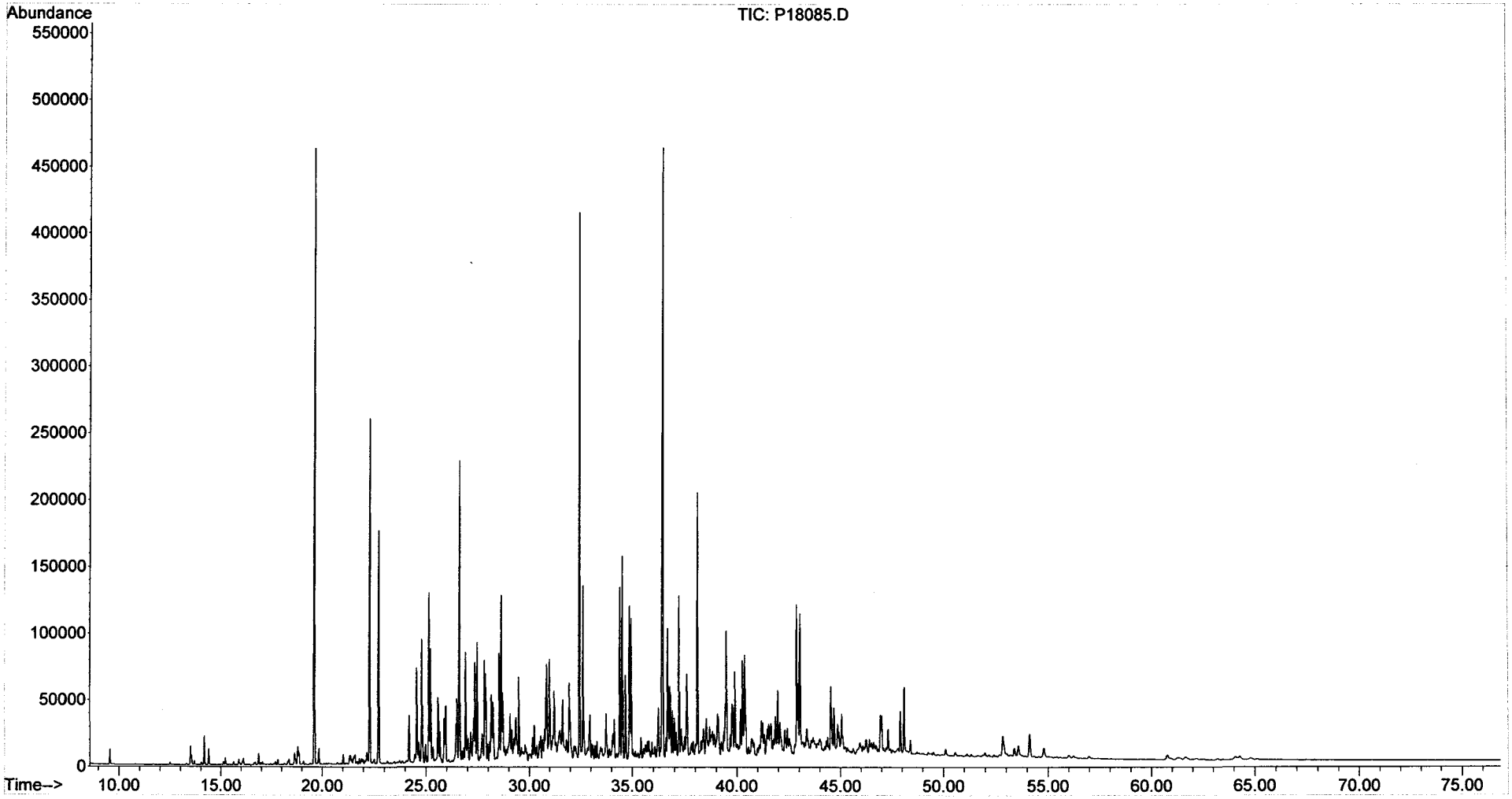
Target Compounds						Qvalue
9) Naphthalene	19.61	128	1091148	4234.29	ng/mL#	100
10) C1-Naphthalenes	22.29	142	1028465m	3991.05	ng/mL	
15) 2-Methylnaphthalene	22.29	142	613538	3760.85	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	415012	2702.17	ng/mL#	100
26) Acenaphthene	26.62	153	253640	1652.58	ng/mL	100
41) Phenanthrene	32.45	178	688111m	2695.93	ng/mL	
53) Anthracene	32.62	178	213273m	903.11	ng/mL	
59) Pyrene	38.10	202	402432m	1455.96	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18085.D
Acq On : 9 Feb 2006 10:10 pm
Operator : AC
Sample : 0602004-07-RE
Misc : 10X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 15 19:35:38 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: **GC-SED-74 (5.3-6.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-08**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	42.0	5.41	35	1	AC

Parameter	Result		Parameter	Result
Naphthalene	**590000**	E	Fluoranthene	**100000**
C1-Naphthalenes	**96000**		Pyrene	**140000**
C2-Naphthalenes	**120000**		C1-Fluoranthenes/Pyrenes	**170000**
C3-Naphthalenes	**93000**		C2-Fluoranthenes/Pyrenes	**89000**
C4-Naphthalenes	**55000**		C3-Fluoranthenes/Pyrenes	**40000**
Biphenyl	**14000**		C4-Fluoranthenes/Pyrenes	**15000**
Dibenzofuran	**15000**		Naphthobenzothiophenes	**22000**
Acenaphthylene	**23000**		C1-Naphthobenzothiophenes	**28000**
Acenaphthene	**61000**		C2-Naphthobenzothiophenes	**22000**
Fluorene	**47000**		C3-Naphthobenzothiophenes	**12000**
C1-Fluorenes	**45000**		C4-Naphthobenzothiophenes	**5800**
C2-Fluorenes	**56000**		Benz[a]anthracene	**60000**
C3-Fluorenes	**37000**		Chrysene/Triphenylene	**60000**
Anthracene	**74000**		C1-Chrysenes	**68000**
Phenanthrene	**190000**	E	C2-Chrysenes	**37000**
C1-Phenanthrenes/Anthracenes	**210000**		C3-Chrysenes	**24000**
C2-Phenanthrenes/Anthracenes	**150000**		C4-Chrysenes	**8000**
C3-Phenanthrenes/Anthracenes	**72000**		Benzo[b]fluoranthene	**26000**
C4-Phenanthrenes/Anthracenes	**22000**		Benzo[k]fluoranthene	**30000**
Retene	**7200**		Benzo[a]fluoranthene	**14000**
Dibenzothiophene	**23000**		Benzo[e]pyrene	**27000**
C1-Dibenzothiophenes	**45000**		Benzo[a]pyrene	**49000**
C2-Dibenzothiophenes	**56000**		Perylene	**9300**
C3-Dibenzothiophenes	**36000**		Indeno[1,2,3-cd]pyrene	**25000**
C4-Dibenzothiophenes	**15000**		Dibenz[a,h]anthracene	**7100**
Benzo(b)fluorene	**24000**		Benzo[g,h,i]perylene	**23000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	105	50-130

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

02/21/06 11:48

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-74 (5.3-6.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-08**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	42.0	5.41	35	1	AC

Parameter	Result
Carbazole	3200

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	105	50-130
Benzo[b]fluoranthene-d12	105	50-130

N/A - Not Applicable

02/21/06 11:49

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18133.D
Acq On : 11 Feb 2006 12:04 pm
Operator : AC
Sample : 0602004-08
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Feb 15 16:43:48 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 for WD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	36720m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	63378m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	37738	479.39	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.94%#			
58) Pyrene-d10	38.04	212	97150m	600.24	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 60.02%			
81) Benzo[b]fluoranthene-d12	46.85	264	75468m	597.96	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 59.80%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.63	128	7121166m	37974.57	ng/mL E	
10) C1-Naphthalenes	22.31	142	1164066m	6207.54	ng/mL	
11) C2-Naphthalenes	25.14	156	1410838m	7523.48	ng/mL	
12) C3-Naphthalenes	27.48	170	1134614m	6050.48	ng/mL	
13) C4-Naphthalenes	30.25	184	666101m	3552.07	ng/mL	
15) 2-Methylnaphthalene	22.31	142	699764m	5894.42	ng/mL	
16) 1-Methylnaphthalene	22.73	142	463958	4151.22	ng/mL#	100
22) Biphenyl	24.18	154	130509m	884.25	ng/mL	
23) 2,6-Dimethylnaphthalene	24.80	156	187654m	1904.67	ng/mL	
24) Dibenzofuran	27.26	168	163892m	988.47	ng/mL	
25) Acenaphthylene	25.89	152	268872m	1495.35	ng/mL	
26) Acenaphthene	26.62	153	441880	3956.34	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	76560m	865.64	ng/mL	
28) Fluorene	28.64	166	378683m	3023.17	ng/mL	
29) C1-Fluorenes	30.86	180	367797m	2936.26	ng/mL	
30) C2-Fluorenes	33.04	194	455243m	3634.38	ng/mL	
31) C3-Fluorenes	35.04	208	298200m	2380.64	ng/mL	
32) Dibenzothiophene	31.95	184	279685m	1514.07	ng/mL	
36) OTP	34.15	198	11201m	60.64	ng/mL	
37) C1-Dibenzothiophenes	33.73	198	549206m	2973.13	ng/mL	
38) C2-Dibenzothiophenes	35.78	212	675032m	3654.28	ng/mL	
39) C3-Dibenzothiophenes	37.23	226	435442m	2357.26	ng/mL	
40) C4-Dibenzothiophenes	38.91	240	175389m	949.47	ng/mL	
41) Phenanthrene	32.46	178	2341508m	12606.36	ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.53	192	2505099m	13487.11	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.70	206	1830780m	9856.67	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	863646m	4649.75	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	260421m	1402.07	ng/mL	
52) Retene	39.45	234	18033m	464.35	ng/mL	
53) Anthracene	32.64	178	819178m	4766.78	ng/mL	
54) Carbazole	33.29	167	32985m	207.39	ng/mL	
55) 1-Methylphenanthrene	34.96	192	385573m	3031.70	ng/mL	
56) Fluoranthene	37.23	202	1282490m	6484.90	ng/mL	
57) Benzo(b)fluorene	39.74	216	183469m	1589.62	ng/mL	
59) Pyrene	38.11	202	1798756	8942.79	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.50	216	2219579m	11034.98	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.96	230	1157224m	5753.32	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	517719m	2573.92	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.69	258	193430m	961.67	ng/mL	
64) Naphthobenzothiophene	41.96	234	168316m	894.49	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18133.D
Acq On : 11 Feb 2006 12:04 pm
Operator : AC
Sample : 0602004-08
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Feb 15 16:43:48 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

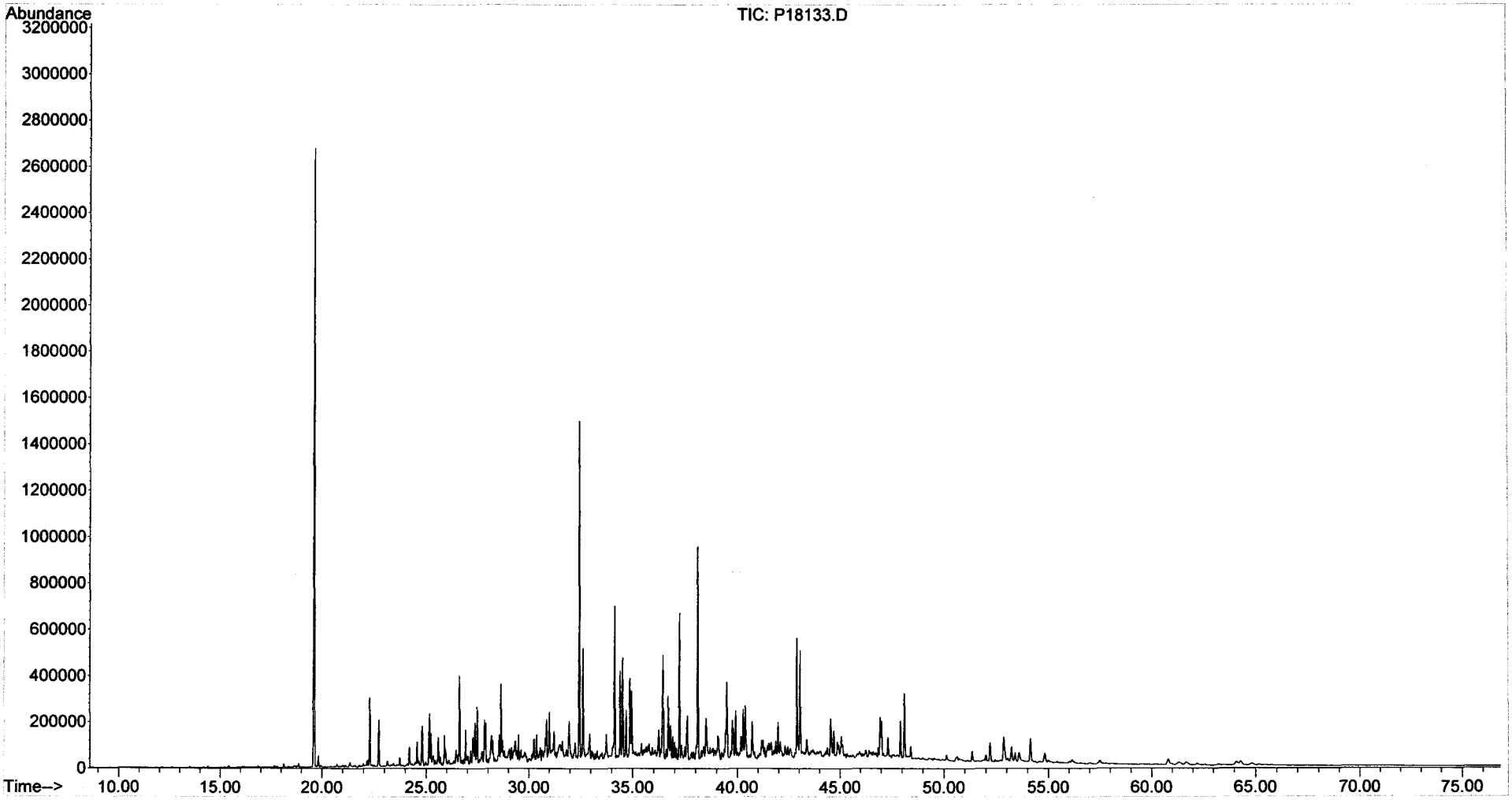
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.96	234	168905m	897.62	ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	48539m	257.95	ng/mL	
67) Naphthobenzothiophene-2,3-	42.59	234	57221m	304.09	ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	337966m	1796.06	ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	269029m	1429.71	ng/ml	
70) C3-Naphthobenzothiophenes	46.97	276	150925m	802.06	ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	71320m	379.02	ng/mL	
73) Benz[a]anthracene	42.89	228	746085m	3867.16	ng/mL	
74) Chrysene	43.05	228	763734m	3874.17	ng/mL	
75) Chrysene/Triphenylene	43.05	228	763413m	3872.54	ng/mL	
76) C1-Chrysenes	44.53	242	863423m	4379.86	ng/mL	
77) C2-Chrysenes	46.24	256	483082m	2450.51	ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	9680	49.10	ng/mL	100
79) C3-Chrysenes	47.82	270	302381m	1533.88	ng/mL	
80) C4-Chrysenes	49.30	284	102896m	521.96	ng/mL	
82) Benzo[b]fluoranthene	46.94	252	327761m	1654.20	ng/mL	
83) Benzo[k]fluoranthene	47.00	252	400885m	1944.82	ng/mL	
84) Benzo[a]fluoranthene	47.31	252	184313m	894.16	ng/mL	
85) Benzo[e]pyrene	47.93	252	333564	1738.83	ng/mL	97
86) Benzo[a]pyrene	48.12	252	598940	3155.58	ng/mL	96
87) Perylene	48.42	252	112133m	604.39	ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.85	276	274566m	1643.81	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	78333m	460.09	ng/mL	
90) Benzo[g,h,i]perylene	54.13	276	292238	1518.34	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18133.D
Acq On : 11 Feb 2006 12:04 pm
Operator : AC
Sample : 0602004-08
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Feb 15 16:43:48 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: **GC-SED-74 (5.3-6.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-08**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	42.0	5.41	8.33	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1800**	30,31-Bishomohopane-22S	**3200**
C24 Tricyclic Terpane	**1100**	30,31-Bishomohopane-22R	**2200**
C25 Tricyclic Terpane	**1200**	30,31-Trishomohopane-22S	**1900**
C24 Tetracyclic Terpane	**1100**	30,31-Trishomohopane-22R	**1100**
C26 Tricyclic Terpane-22S	**520**	Tetrakishomohopane-22S	**1200**
C26 Tricyclic Terpane-22R	**500**	Tetrakishomohopane-22R	**790**
C28 Tricyclic Terpane-22S	**660**	Pentakishomohopane-22S	**970**
C28 Tricyclic Terpane-22R	**660**	Pentakishomohopane-22R	**770**
C29 Tricyclic Terpane-22S	**800**	13b(H),17a(H)-20S-Diacholestane	**2700**
C29 Tricyclic Terpane-22R	**790**	13b(H),17a(H)-20R-Diacholestane	**1500**
18a-22,29,30-Trisnorneohopane-TS	**3100**	13b,17a-20S-Methyldiacholestane	**1100**
C30 Tricyclic Terpane-22S	**600**	14a(H),17a(H)-20S-Cholestane	**1900**
C30 Tricyclic Terpane-22R	**500**	14a(H),17a(H)-20R-Cholestane	**5300**
17a(H)-22,29,30-Trisnorhopane-TM	**3800**	13b,17a-20R-Ethyldiacholestane	**760**
17a/b,21b/a 28,30-Bisnorhopane	**810**	13a,17b-20S-Ethyldiacholestane	**220**
17a(H),21b(H)-25-Norhopane	**300**	14a,17a-20S-Methylcholestane	**1100**
30-Norhopane	**10000**	14a,17a-20R-Methylcholestane	**2500**
18a(H)-30-Norneohopane-C29Ts	**3200**	14a(H),17a(H)-20S-Ethylcholestane	**1700**
17a(H)-Diahopane	**810**	14a(H),17a(H)-20R-Ethylcholestane	**2700**
30-Normoretane	**2200**	14b(H),17b(H)-20R-Cholestane	**2400**
18a(H)&18b(H)-Oleananes	**1700**	14b(H),17b(H)-20S-Cholestane	**2400**
Hopane	**16000**	14b,17b-20R-Methylcholestane	**2500**
Moretane	**2500**	14b,17b-20S-Methylcholestane	**3100**
30-Homohopane-22S	**4800**	14b(H),17b(H)-20R-Ethylcholestane	**4200**
30-Homohopane-22R	**4300**	14b(H),17b(H)-20S-Ethylcholestane	**2400**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	100	50-130

N/A - Not Applicable

02/21/06 16:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28225.D
Acq On : 12 Feb 2006 2:10 am
Operator : AC
Sample : 0602004-08
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 17 11:05:19 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 2/17/06

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	56049	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	57219	2400.46	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 240.05%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.96	191	247315m	4470.19	ng/mL	
84) Hopane (T19)	52.96	191	247296m	4469.85	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.22	191	26773m	483.92	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.95	191	16667	301.25	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	17615m	318.39	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	16563	299.37	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7919m	143.14	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	7553	136.52	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	9960m	180.03	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	9965m	180.12	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	12033	217.50	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	11924m	215.53	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	47333m	855.54	ng/ml	
96) C30 Tricyclic Terpane-22S	49.06	191	9007m	162.80	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	7616m	137.66	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	56825	1027.11	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.80	191	12214m	220.77	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	4541m	82.08	ng/ml	
101) 30-Norhopane (T15)	51.51	191	159018m	2874.23	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.62	191	48153m	870.36	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	12267m	221.72	ng/ml	
104) 30-Normoretane (T17)	52.33	191	33364	603.05	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.77	191	26036m	470.60	ng/ml	
106) Moretane (T20)	53.69	191	37469m	677.25	ng/ml	
107) 30-Homohopane-22S (T21)	54.85	191	72952	1318.60	ng/ml	100
108) 30-Homohopane-22R (T22)	55.09	191	65202	1178.52	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.49	191	48060	868.68	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.91	191	32848	593.72	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.77	191	27984m	505.81	ng/ml	
112) 30,31-Trishomohopane-22R (	59.42	191	16812m	303.88	ng/ml	
113) Tetrakishomohopane-22S (T3	61.57	191	17616	318.41	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.52	191	11869	214.53	ng/ml	100
115) Pentakishomohopane-22S (T3	64.92	191	14588m	263.68	ng/ml	
116) Pentakishomohopane-22R (T3	66.31	191	11595m	209.58	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	17720	743.39	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.14	217	9944	417.17	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.84	217	6937	291.02	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	12199m	511.77	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	34646m	1453.47	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.56	217	4930m	206.82	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28225.D
Acq On : 12 Feb 2006 2:10 am
Operator : AC
Sample : 0602004-08
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 17 11:05:19 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

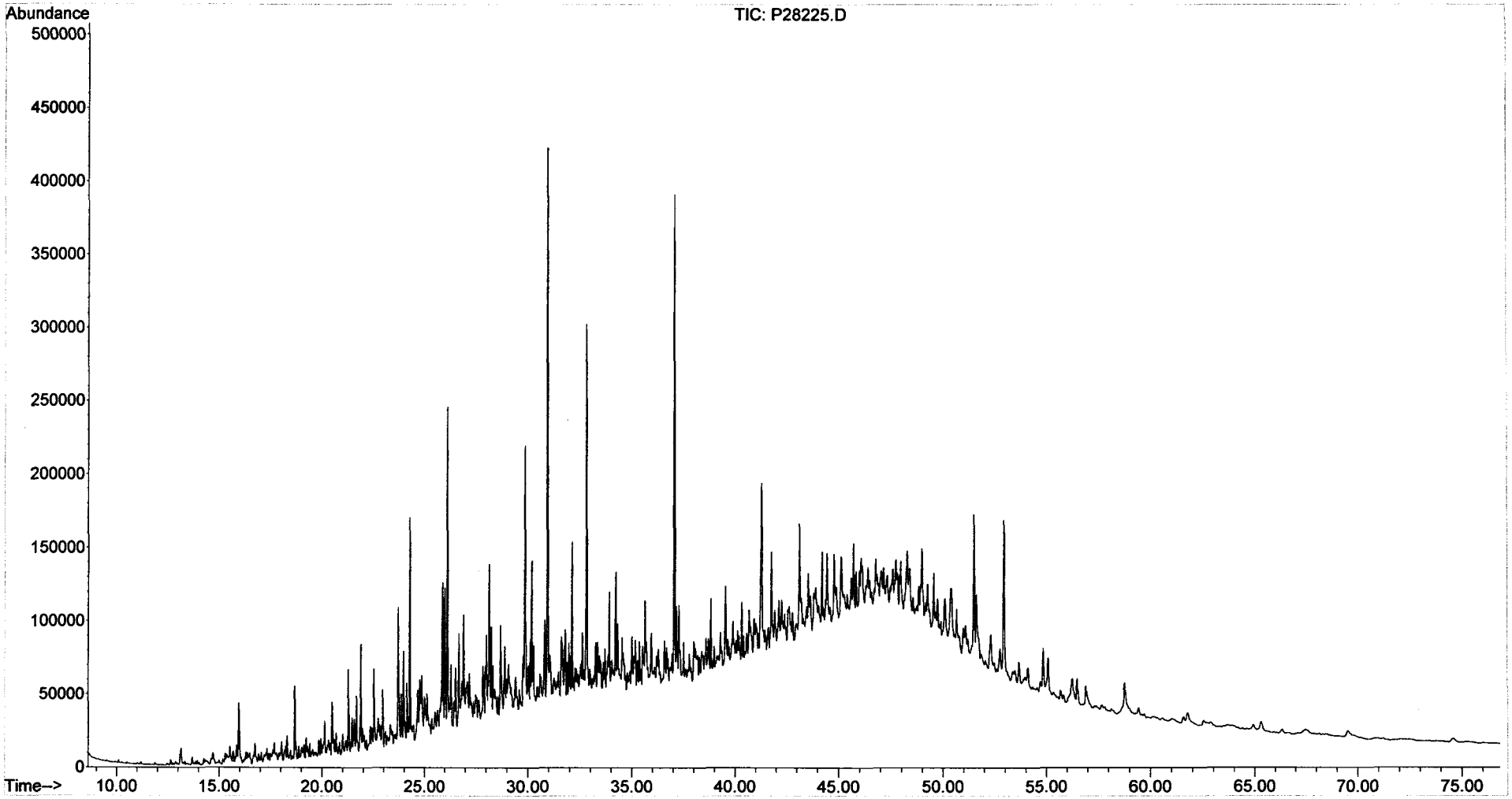
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	1460	61.25	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	7294m	306.00	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	16231m	680.92	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	11176m	468.86	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	17561m	736.72	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	15766	661.42	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	15789	662.38	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.19	218	16264m	682.31	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	20136m	844.75	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.39	218	27130m	1138.16	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.42	218	15331m	643.17	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 : P28225.D
Acq On : 12 Feb 2006 2:10 am
Operator : AC
Sample : 0602004-08
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 17 11:05:19 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: **GC-SED-74 (5.3-6.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-08E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/09/06	42.0	5.41	35	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**620000**		Fluoranthene	160	U
C1-Naphthalenes	250	U	Pyrene	140	U
C2-Naphthalenes	250	U	C1-Fluoranthenes/Pyrenes	140	U
C3-Naphthalenes	250	U	C2-Fluoranthenes/Pyrenes	140	U
C4-Naphthalenes	250	U	C3-Fluoranthenes/Pyrenes	140	U
Biphenyl	140	U	C4-Fluoranthenes/Pyrenes	140	U
Dibenzofuran	180	U	Naphthobenzothiophenes	190	U
Acenaphthylene	280	U	C1-Naphthobenzothiophenes	190	U
Acenaphthene	180	U	C2-Naphthobenzothiophenes	190	U
Fluorene	180	U	C3-Naphthobenzothiophenes	190	U
C1-Fluorenes	180	U	C4-Naphthobenzothiophenes	190	U
C2-Fluorenes	180	U	Benz[a]anthracene	240	U
C3-Fluorenes	180	U	Chrysene/Triphenylene	170	U
Anthracene	210	U	C1-Chrysenes	170	U
Phenanthrene	**190000**		C2-Chrysenes	170	U
C1-Phenanthrenes/Anthracenes	220	U	C3-Chrysenes	170	U
C2-Phenanthrenes/Anthracenes	220	U	C4-Chrysenes	170	U
C3-Phenanthrenes/Anthracenes	220	U	Benzo[b]fluoranthene	160	U
C4-Phenanthrenes/Anthracenes	220	U	Benzo[k]fluoranthene	310	U
Retene	220	U	Benzo[a]fluoranthene	310	U
Dibenzothiophene	170	U	Benzo[e]pyrene	210	U
C1-Dibenzothiophenes	170	U	Benzo[a]pyrene	210	U
C2-Dibenzothiophenes	170	U	Perylene	270	U
C3-Dibenzothiophenes	170	U	Indeno[1,2,3-cd]pyrene	370	U
C4-Dibenzothiophenes	170	U	Dibenz[a,h]anthracene	290	U
Benzo(b)fluorene	160	U	Benzo[g,h,i]perylene	270	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

02/17/06 13:02

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18087.D
Acq On : 9 Feb 2006 11:41 pm
Operator : AC
Sample : 0602004-08-RE
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 15 19:38:24 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 for WW
2/16/06

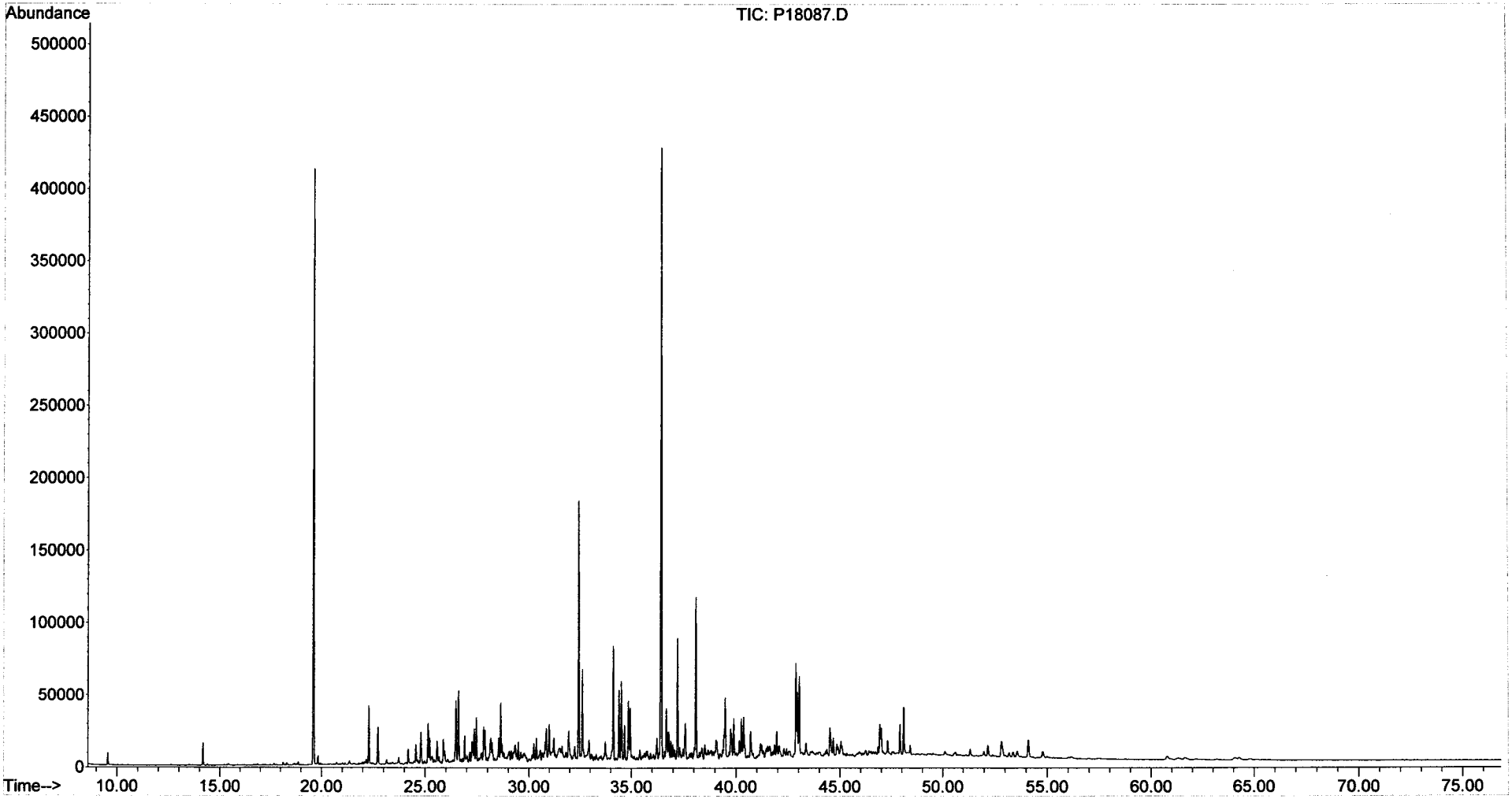
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	47966m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	82012m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	4980	48.43	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.84%#			
58) Pyrene-d10	38.02	212	12574m	59.47	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.95%#			
81) Benzo[b]fluoranthene-d12	46.84	264	9621m	58.91	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.89%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.61	128	977075m	3988.77	ng/mL	
41) Phenanthrene	32.44	178	304019	1253.04	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18087.D
Acq On : 9 Feb 2006 11:41 pm
Operator : AC
Sample : 0602004-08-RE
Misc : 10X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 15 19:38:24 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: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	77.5	10.14	35	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**4200**	Fluoranthene	**51000** E
C1-Naphthalenes	**4100**	Pyrene	**52000** E
C2-Naphthalenes	**7200**	C1-Fluoranthenes/Pyrenes	**39000**
C3-Naphthalenes	**7700**	C2-Fluoranthenes/Pyrenes	**22000**
C4-Naphthalenes	**5900**	C3-Fluoranthenes/Pyrenes	**8400**
Biphenyl	**820**	C4-Fluoranthenes/Pyrenes	**3400**
Dibenzofuran	**3900**	Naphthobenzothiophenes	**7000**
Acenaphthylene	**3700**	C1-Naphthobenzothiophenes	**6600**
Acenaphthene	**8800**	C2-Naphthobenzothiophenes	**4600**
Fluorene	**6100**	C3-Naphthobenzothiophenes	**2700**
C1-Fluorenes	**5300**	C4-Naphthobenzothiophenes	**1400**
C2-Fluorenes	**8000**	Benz[a]anthracene	**25000**
C3-Fluorenes	**7100**	Chrysene/Triphenylene	**23000**
Anthracene	**17000**	C1-Chrysenes	**18000**
Phenanthrene	**43000**	C2-Chrysenes	**8400**
C1-Phenanthrenes/Anthracenes	**36000**	C3-Chrysenes	**5200**
C2-Phenanthrenes/Anthracenes	**28000**	C4-Chrysenes	**2000**
C3-Phenanthrenes/Anthracenes	**13000**	Benzo[b]fluoranthene	**15000**
C4-Phenanthrenes/Anthracenes	**3900**	Benzo[k]fluoranthene	**13000**
Retene	**990**	Benzo[a]fluoranthene	**4200**
Dibenzothiophene	**4100**	Benzo[e]pyrene	**12000**
C1-Dibenzothiophenes	**6400**	Benzo[a]pyrene	**20000**
C2-Dibenzothiophenes	**8800**	Perylene	**4500**
C3-Dibenzothiophenes	**6100**	Indeno[1,2,3-cd]pyrene	**13000**
C4-Dibenzothiophenes	**2500**	Dibenz[a,h]anthracene	**3400**
Benzo(b)fluorene	**5400**	Benzo[g,h,i]perylene	**11000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

02/21/06 11:49

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	77.5	10.14	35	1	AC

Parameter	Result
Carbazole	**2700**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	103	50-130

N/A - Not Applicable

02/21/06 11:49

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18139.D
Acq On : 11 Feb 2006 4:46 pm
Operator : AC
Sample : 0602004-09
Misc : 1X
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 16 14:37:23 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 for WR 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	46052m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	76897m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	45107	456.89	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.69%#			
58) Pyrene-d10	38.04	212	115159m	567.33	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.73%			
81) Benzo[b]fluoranthene-d12	46.85	264	90054m	588.09	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 58.81%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.61	128	219005m	931.21	ng/mL	
10) C1-Naphthalenes	22.29	142	217067m	922.97	ng/mL	
11) C2-Naphthalenes	25.14	156	382066m	1624.55	ng/mL	
12) C3-Naphthalenes	27.82	170	405688m	1725.00	ng/mL	
13) C4-Naphthalenes	30.23	184	309903m	1317.72	ng/mL	
15) 2-Methylnaphthalene	22.29	142	108123m	726.21	ng/mL	
16) 1-Methylnaphthalene	22.72	142	108704	775.53	ng/mL#	100
22) Biphenyl	24.18	154	34210m	184.82	ng/mL	
23) 2,6-Dimethylnaphthalene	24.80	156	45513m	368.34	ng/mL	
24) Dibenzofuran	27.26	168	180946m	870.18	ng/mL	
25) Acenaphthylene	25.87	152	187750m	832.59	ng/mL	
26) Acenaphthene	26.62	153	277724	1982.70	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.16	170	28462m	256.60	ng/mL	
28) Fluorene	28.64	166	215210m	1369.95	ng/mL	
29) C1-Fluorenes	30.86	180	185823m	1182.88	ng/mL	
30) C2-Fluorenes	33.04	194	283743m	1806.20	ng/mL	
31) C3-Fluorenes	35.69	208	250043m	1591.68	ng/mL	
32) Dibenzothiophene	31.95	184	213329m	920.84	ng/mL	
36) OTP	34.15	198	13233m	57.12	ng/mL	
37) C1-Dibenzothiophenes	33.73	198	347681m	1500.77	ng/mL	
38) C2-Dibenzothiophenes	35.42	212	456650m	1971.13	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	316457m	1365.99	ng/mL	
40) C4-Dibenzothiophenes	38.91	240	132309m	571.11	ng/mL	
41) Phenanthrene	32.45	178	2271665m	9751.97	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.41	192	1862311m	7994.67	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.69	206	1465746m	6292.26	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	681372m	2925.04	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	204995m	880.02	ng/mL	
52) Retene	39.45	234	10832m	222.40	ng/mL	
53) Anthracene	32.62	178	812452m	3769.63	ng/mL	
54) Carbazole	33.29	167	122657m	614.90	ng/mL	
55) 1-Methylphenanthrene	34.95	192	300912m	1886.57	ng/mL	
56) Fluoranthene	37.23	202	2818970m	11365.64	ng/mL	E
57) Benzo(b)fluorene	39.74	216	174140m	1203.05	ng/mL	
59) Pyrene	38.11	202	2947152m	11683.09	ng/mL	E
60) C1-Fluoranthenes/Pyrenes	39.50	216	2188922m	8677.32	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.35	230	1229097m	4872.38	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	473076m	1875.37	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	193143m	765.66	ng/mL	
64) Naphthobenzothiophene	41.95	234	234964m	995.64	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18139.D
Acq On : 11 Feb 2006 4:46 pm
Operator : AC
Sample : 0602004-09
Misc : 1X
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 16 14:37:23 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

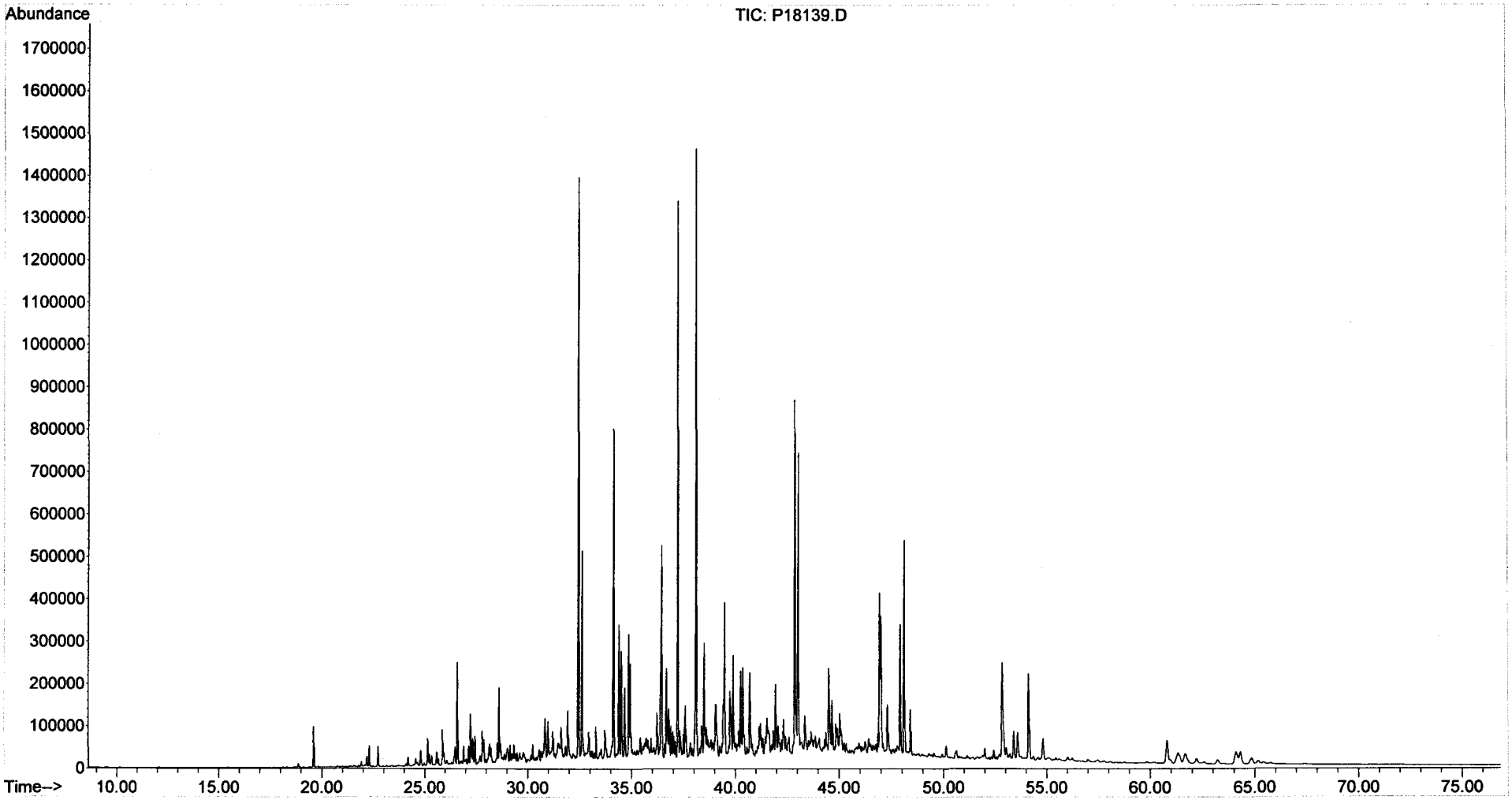
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.95	234	235298m	997.06	ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	62684m	265.62	ng/mL	
67) Naphthobenzothiophene-2,3-	42.59	234	72674m	307.95	ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	346803m	1469.55	ng/ml	
69) C2-Naphthobenzothiophenes	44.87	262	244773m	1037.21	ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	141626m	600.13	ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	72881m	308.83	ng/mL	
73) Benz[a]anthracene	42.89	228	1311640m	5603.35	ng/mL	
74) Chrysene	43.05	228	1246821m	5212.78	ng/mL	
75) Chrysene/Triphenylene	43.05	228	1244271m	5202.12	ng/mL	
76) C1-Chrysenes	44.53	242	950593m	3974.29	ng/mL	
77) C2-Chrysenes	46.24	256	458512m	1916.97	ng/mL	
78) BBF-d12 Surr BKGD	46.85	256	8291	34.66	ng/mL	100
79) C3-Chrysenes	47.82	270	279029m	1166.58	ng/mL	
80) C4-Chrysenes	48.80	284	105871m	442.63	ng/mL	
82) Benzo[b]fluoranthene	46.94	252	831428m	3458.48	ng/mL	
83) Benzo[k]fluoranthene	47.02	252	750805m	3002.03	ng/mL	
84) Benzo[a]fluoranthene	47.31	252	234715m	938.49	ng/mL	
85) Benzo[e]pyrene	47.93	252	633918	2723.58	ng/mL	93
86) Benzo[a]pyrene	48.12	252	1024636m	4449.33	ng/mL	
87) Perylene	48.42	252	228539	1015.25	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	52.85	276	594394m	2932.98	ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	155662m	753.55	ng/mL	
90) Benzo[g,h,i]perylene	54.13	276	577239	2471.82	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18139.D
Acq On : 11 Feb 2006 4:46 pm
Operator : AC
Sample : 0602004-09
Misc : 1X
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 16 14:37:23 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: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	77.5	10.14	6.06	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**310**	30,31-Bishomohopane-22S	**660**
C24 Tricyclic Terpane	**180**	30,31-Bishomohopane-22R	**420**
C25 Tricyclic Terpane	**190**	30,31-Trishomohopane-22S	**380**
C24 Tetracyclic Terpane	**190**	30,31-Trishomohopane-22R	**220**
C26 Tricyclic Terpane-22S	**78**	Tetrakishomohopane-22S	**230**
C26 Tricyclic Terpane-22R	**76**	Tetrakishomohopane-22R	**170**
C28 Tricyclic Terpane-22S	**94**	Pentakishomohopane-22S	**240**
C28 Tricyclic Terpane-22R	**98**	Pentakishomohopane-22R	**160**
C29 Tricyclic Terpane-22S	**120**	13b(H),17a(H)-20S-Diacholestane	**330**
C29 Tricyclic Terpane-22R	**120**	13b(H),17a(H)-20R-Diacholestane	**190**
18a-22,29,30-Trisnorneohopane-TS	**490**	13b,17a-20S-Methyldiacholestane	**160**
C30 Tricyclic Terpane-22S	**88**	14a(H),17a(H)-20S-Cholestane	**280**
C30 Tricyclic Terpane-22R	**71**	14a(H),17a(H)-20R-Cholestane	**680**
17a(H)-22,29,30-Trisnorhopane-TM	**600**	13b,17a-20R-Ethyldiacholestane	**130**
17a/b,21b/a 28,30-Bisnorhopane	**160**	13a,17b-20S-Ethyldiacholestane	**33**
17a(H),21b(H)-25-Norhopane	**35**	14a,17a-20S-Methylcholestane	**180**
30-Norhopane	**1800**	14a,17a-20R-Methylcholestane	**300**
18a(H)-30-Norneohopane-C29Ts	**420**	14a(H),17a(H)-20S-Ethylcholestane	**300**
17a(H)-Diahopane	**94**	14a(H),17a(H)-20R-Ethylcholestane	**370**
30-Normoretane	**310**	14b(H),17b(H)-20R-Cholestane	**280**
18a(H)&18b(H)-Oleananes	**220**	14b(H),17b(H)-20S-Cholestane	**290**
Hopane	**2400**	14b,17b-20R-Methylcholestane	**390**
Moretane	**320**	14b,17b-20S-Methylcholestane	**500**
30-Homohopane-22S	**960**	14b(H),17b(H)-20R-Ethylcholestane	**600**
30-Homohopane-22R	**800**	14b(H),17b(H)-20S-Ethylcholestane	**530**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	88	50-130

N/A - Not Applicable

02/21/06 16:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28226.D
Acq On : 12 Feb 2006 3:45 am
Operator : AC
Sample : 0602004-09
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 17 11:09:25 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

AWS 2/17/06

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	74142	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	44.22	217	91282	2894.96	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 289.50%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	229657m	3138.05	ng/mL	
84) Hopane (T19)	52.95	191	231549m	3163.90	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.22	191	29428m	402.11	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	16919	231.18	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	18325m	250.39	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	18011	246.10	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7439m	101.65	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	7252	99.09	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.89	191	8926m	121.97	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	9255m	126.46	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	10980	150.03	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	11051m	151.00	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	46829	639.87	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.06	191	8388m	114.61	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	6710m	91.69	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	57150m	780.90	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.80	191	15017m	205.19	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	3339m	45.62	ng/ml	
101) 30-Norhopane (T15)	51.51	191	172246m	2353.58	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.62	191	40160m	548.75	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	8927	121.98	ng/ml	100
104) 30-Normoretane (T17)	52.33	191	29239	399.52	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	20429m	279.14	ng/ml	
106) Moretane (T20)	53.69	191	30032m	410.36	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	91411	1249.04	ng/ml	100
108) 30-Homohopane-22R (T22)	55.09	191	75570	1032.59	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.49	191	63041	861.40	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.91	191	40086	547.74	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.77	191	36523m	499.05	ng/ml	
112) 30,31-Trishomohopane-22R (	59.42	191	20986m	286.75	ng/ml	
113) Tetrakishomohopane-22S (T3	61.57	191	21760	297.33	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.55	191	15870	216.85	ng/ml	100
115) Pentakishomohopane-22S (T3	64.92	191	22515	307.65	ng/ml	100
116) Pentakishomohopane-22R (T3	66.30	191	14735m	201.34	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	13605m	431.47	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	7756	245.98	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.84	217	6755m	214.23	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	11451m	363.16	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.27	217	28016m	888.51	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.56	217	5467m	173.38	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28226.D
Acq On : 12 Feb 2006 3:45 am
Operator : AC
Sample : 0602004-09
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 17 11:09:25 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

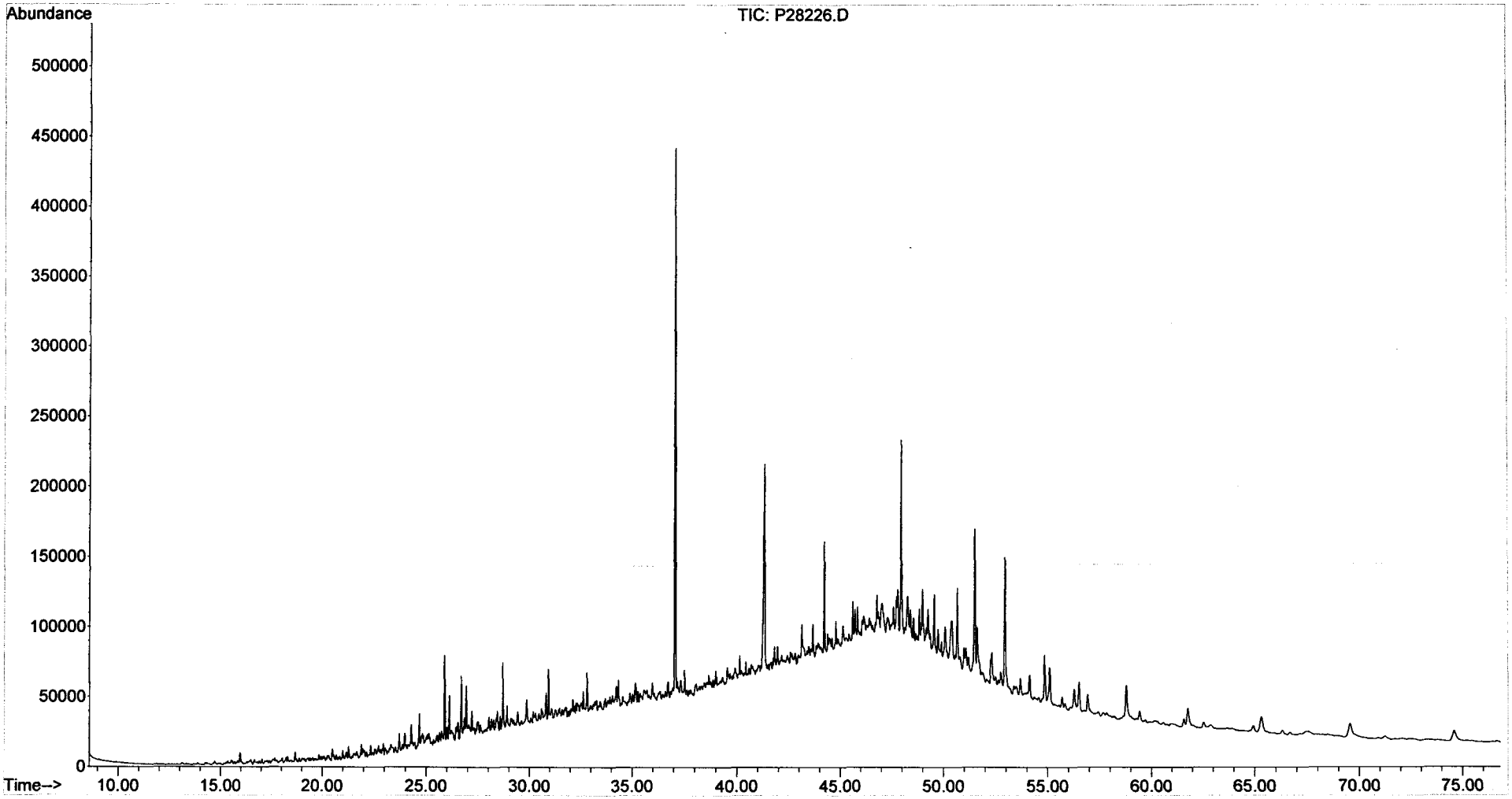
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.84	217	1333	42.28	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	7313m	231.93	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	12276m	389.33	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	12048m	382.10	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	15142m	480.22	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	11332	359.39	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	11915m	377.88	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.18	218	15890m	503.94	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	20428m	647.86	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.39	218	24749	784.90	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.42	218	21522m	682.56	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 : P28226.D
Acq On : 12 Feb 2006 3:45 am
Operator : AC
Sample : 0602004-09
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 17 11:09:25 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 I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/10/06	77.5	10.14	35	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	74	U	Fluoranthene	**51000**	
C1-Naphthalenes	74	U	Pyrene	**52000**	
C2-Naphthalenes	74	U	C1-Fluoranthenes/Pyrenes	40	U
C3-Naphthalenes	74	U	C2-Fluoranthenes/Pyrenes	40	U
C4-Naphthalenes	74	U	C3-Fluoranthenes/Pyrenes	40	U
Biphenyl	40	U	C4-Fluoranthenes/Pyrenes	40	U
Dibenzofuran	53	U	Naphthobenzothiophenes	54	U
Acenaphthylene	81	U	C1-Naphthobenzothiophenes	54	U
Acenaphthene	51	U	C2-Naphthobenzothiophenes	54	U
Fluorene	51	U	C3-Naphthobenzothiophenes	54	U
C1-Fluorenes	51	U	C4-Naphthobenzothiophenes	54	U
C2-Fluorenes	51	U	Benz[a]anthracene	70	U
C3-Fluorenes	51	U	Chrysene/Triphenylene	48	U
Anthracene	60	U	C1-Chrysenes	48	U
Phenanthrene	65	U	C2-Chrysenes	48	U
C1-Phenanthrenes/Anthracenes	65	U	C3-Chrysenes	48	U
C2-Phenanthrenes/Anthracenes	65	U	C4-Chrysenes	48	U
C3-Phenanthrenes/Anthracenes	65	U	Benzo[b]fluoranthene	47	U
C4-Phenanthrenes/Anthracenes	65	U	Benzo[k]fluoranthene	90	U
Retene	65	U	Benzo[a]fluoranthene	90	U
Dibenzothiophene	49	U	Benzo[e]pyrene	61	U
C1-Dibenzothiophenes	49	U	Benzo[a]pyrene	62	U
C2-Dibenzothiophenes	49	U	Perylene	78	U
C3-Dibenzothiophenes	49	U	Indeno[1,2,3-cd]pyrene	110	U
C4-Dibenzothiophenes	49	U	Dibenz[a,h]anthracene	85	U
Benzo(b)fluorene	45	U	Benzo[g,h,i]perylene	78	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	81	50-130
Pyrene-d10	103	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

02/17/06 13:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18089.D
Acq On : 10 Feb 2006 1:12 am
Operator : AC
Sample : 0602004-09-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 19:40:46 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 for WP 2/16/06

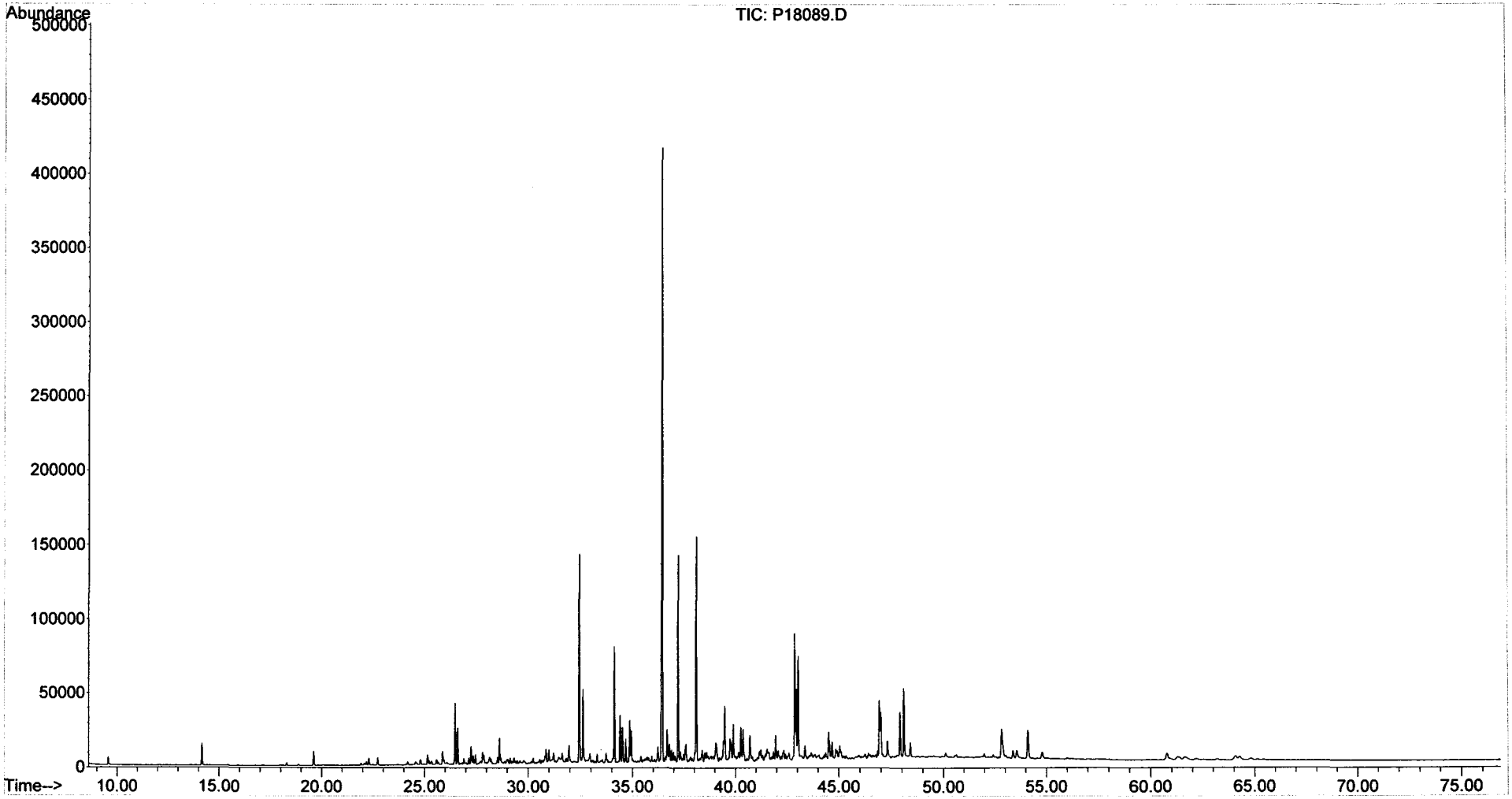
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	47039m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	80265m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	4679m	46.40	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.64%#			
58) Pyrene-d10	38.02	212	12195m	58.82	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.88%#			
81) Benzo[b]fluoranthene-d12	46.85	264	9377m	58.67	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.87%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
56) Fluoranthene	37.22	202	292111m	1153.03	ng/mL	
59) Pyrene	38.10	202	303277m	1177.02	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18089.D
Acq On : 10 Feb 2006 1:12 am
Operator : AC
Sample : 0602004-09-RE
Misc : 10X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 15 19:40:46 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: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09 D**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	77.5	10.17	26.25	1	AC

Parameter	Result	Parameter	Result
Naphthalene	4800	Fluoranthene	54000 E
C1-Naphthalenes	1200	Pyrene	48000 E
C2-Naphthalenes	3300	C1-Fluoranthenes/Pyrenes	24000
C3-Naphthalenes	4200	C2-Fluoranthenes/Pyrenes	12000
C4-Naphthalenes	3100	C3-Fluoranthenes/Pyrenes	5000
Biphenyl	420	C4-Fluoranthenes/Pyrenes	2200
Dibenzofuran	2600	Naphthobenzothiophenes	4900
Acenaphthylene	4700	C1-Naphthobenzothiophenes	3400
Acenaphthene	5000	C2-Naphthobenzothiophenes	2600
Fluorene	4100	C3-Naphthobenzothiophenes	1800
C1-Fluorenes	3100	C4-Naphthobenzothiophenes	960
C2-Fluorenes	3800	Benz[a]anthracene	21000
C3-Fluorenes	3900	Chrysene/Triphenylene	21000
Anthracene	14000	C1-Chrysenes	10000
Phenanthrene	30000	C2-Chrysenes	5300
C1-Phenanthrenes/Anthracenes	17000	C3-Chrysenes	3600
C2-Phenanthrenes/Anthracenes	13000	C4-Chrysenes	1300
C3-Phenanthrenes/Anthracenes	6800	Benzo[b]fluoranthene	17000
C4-Phenanthrenes/Anthracenes	2200	Benzo[k]fluoranthene	14000
Retene	620	Benzo[a]fluoranthene	4000
Dibenzothiophene	2500	Benzo[e]pyrene	12000
C1-Dibenzothiophenes	2900	Benzo[a]pyrene	20000
C2-Dibenzothiophenes	4000	Perylene	5600
C3-Dibenzothiophenes	3000	Indeno[1,2,3-cd]pyrene	15000
C4-Dibenzothiophenes	1600	Dibenz[a,h]anthracene	2900
Benzo(b)fluorene	5300	Benzo[g,h,i]perylene	13000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/21/06 11:50

Form I
Duplicate
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09 D**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	77.5	10.17	26.25	1	AC

Parameter	Result
Carbazole	1000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	83	50-130
Pyrene-d10	93	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/21/06 11:50

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18141.D
Acq On : 11 Feb 2006 6:19 pm
Operator : AC
Sample : 0602004-09D
Misc : 1X
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Feb 16 14:37:45 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 for WD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	38703m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	63122m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	52220	629.37	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 62.94%			
58) Pyrene-d10	38.04	212	121117m	709.98	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 71.00%			
81) Benzo[b]fluoranthene-d12	46.85	264	99506	791.62	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.16%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.61	128	287492	1454.54	ng/mL#	100
10) C1-Naphthalenes	22.29	142	71455m	361.52	ng/mL	
11) C2-Naphthalenes	25.14	156	194086m	981.96	ng/mL	
12) C3-Naphthalenes	27.82	170	249152m	1260.56	ng/mL	
13) C4-Naphthalenes	30.23	184	183822m	930.03	ng/mL	
15) 2-Methylnaphthalene	22.29	142	36948m	295.28	ng/mL	
16) 1-Methylnaphthalene	22.72	142	34875m	296.05	ng/mL	
22) Biphenyl	24.18	154	19403m	124.73	ng/mL	
23) 2,6-Dimethylnaphthalene	24.80	156	23307m	224.44	ng/mL	
24) Dibenzofuran	27.26	168	138901m	794.82	ng/mL	
25) Acenaphthylene	25.87	152	267247m	1410.16	ng/mL	
26) Acenaphthene	26.62	153	176317	1497.76	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.16	170	23113m	247.94	ng/mL	
28) Fluorene	28.64	166	162354m	1229.72	ng/mL	
29) C1-Fluorenes	30.86	180	123274m	933.72	ng/mL	
30) C2-Fluorenes	33.04	194	151571m	1148.05	ng/mL	
31) C3-Fluorenes	35.69	208	154495m	1170.20	ng/mL	
32) Dibenzothiophene	31.95	184	145639m	748.02	ng/mL	
36) OTP	34.15	198	16075	82.56	ng/mL#	100
37) C1-Dibenzothiophenes	33.73	198	187477m	962.91	ng/mL	
38) C2-Dibenzothiophenes	35.41	212	234824m	1206.09	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	173930m	893.33	ng/mL	
40) C4-Dibenzothiophenes	39.34	240	93518m	480.32	ng/mL	
41) Phenanthrene	32.45	178	1772490	9053.90	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.41	192	987354m	5043.42	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.69	206	778154m	3974.82	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.52	220	401020m	2048.42	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	131806m	673.27	ng/mL	
52) Retene	39.45	234	7610m	185.92	ng/mL	
53) Anthracene	32.62	178	749599m	4138.41	ng/mL	
54) Carbazole	33.29	167	51643m	308.06	ng/mL	
55) 1-Methylphenanthrene	34.95	192	152799m	1139.88	ng/mL	
56) Fluoranthene	37.24	202	3405040m	16335.39	ng/mL E	
57) Benzo(b)fluorene	39.74	216	194990m	1602.88	ng/mL	
59) Pyrene	38.12	202	3032702	14305.03	ng/mL E	100
60) C1-Fluoranthenes/Pyrenes	39.50	216	1558873m	7353.09	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.35	230	777859m	3669.10	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	318216m	1501.00	ng/mL	
63) C4-Fluoranthenes/Pyrenes	43.72	258	143190m	675.42	ng/mL	
64) Naphthobenzothiophene	41.95	234	186650m	941.10	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18141.D
Acq On : 11 Feb 2006 6:19 pm
Operator : AC
Sample : 0602004-09D
Misc : 1X
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Feb 16 14:37:45 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

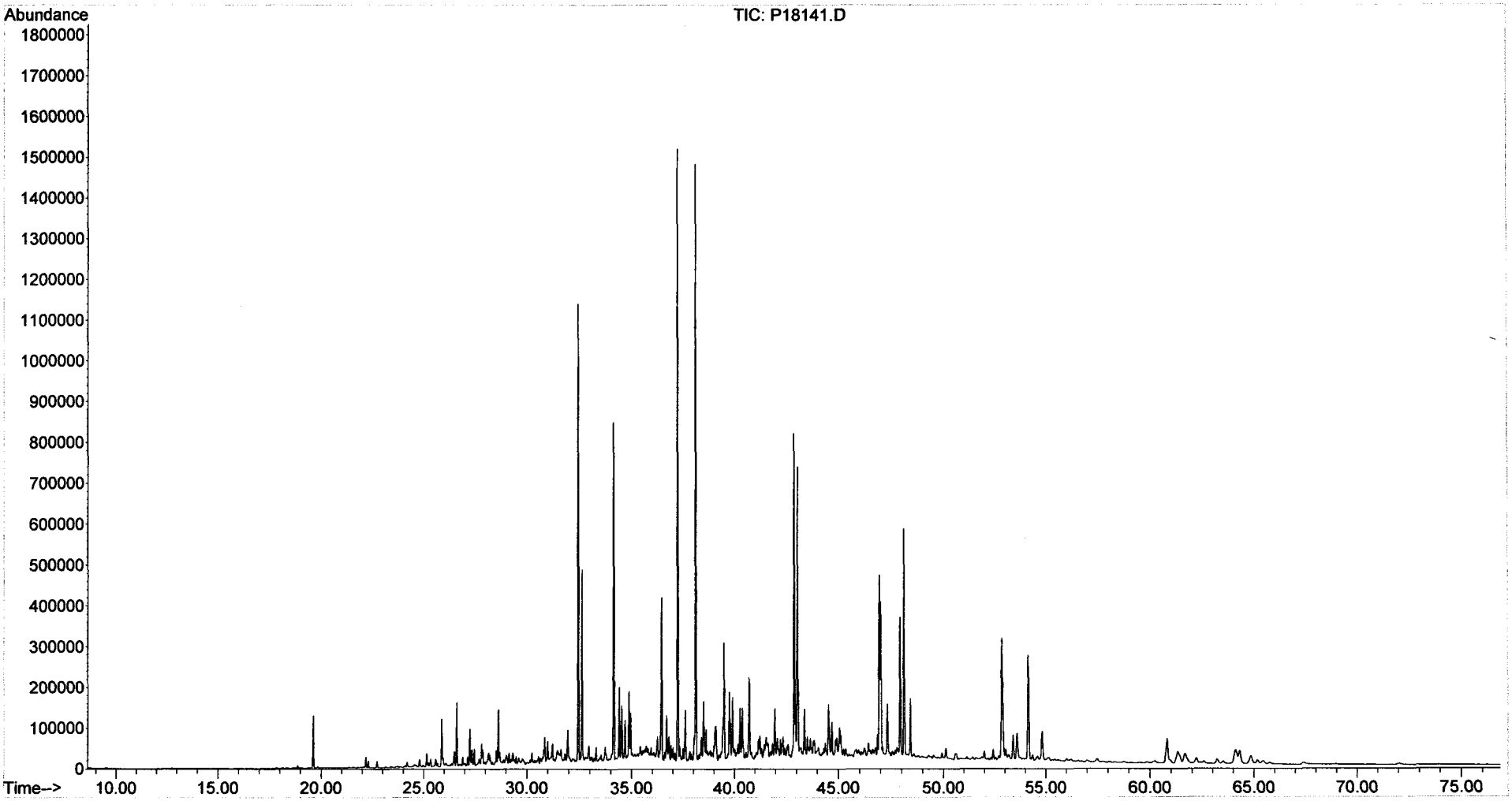
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.95	234	186241m	939.03	ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	46313m	233.51	ng/mL	
67) Naphthobenzothiophene-2,3-	42.59	234	57713m	290.99	ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	204472m	1030.95	ng/ml	
69) C2-Naphthobenzothiophenes	45.41	262	153370m	773.30	ng/ml	
70) C3-Naphthobenzothiophenes	46.98	276	105101m	529.92	ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	57473m	289.78	ng/mL	
73) Benz[a]anthracene	42.89	228	1201652m	6253.74	ng/mL	
74) Chrysene	43.05	228	1233854m	6284.31	ng/mL	
75) Chrysene/Triphenylene	43.05	228	1231643m	6273.05	ng/mL	
76) C1-Chrysenes	44.53	242	604674m	3079.75	ng/mL	
77) C2-Chrysenes	46.24	256	316728m	1613.17	ng/mL	
78) BBF-d12 Surr BKGD	46.85	256	6281	31.99	ng/mL	100
79) C3-Chrysenes	47.82	270	214049m	1090.20	ng/mL	
80) C4-Chrysenes	48.80	284	78967m	402.20	ng/mL	
82) Benzo[b]fluoranthene	46.94	252	985351m	4993.21	ng/mL	
83) Benzo[k]fluoranthene	47.02	252	874565	4260.00	ng/mL	98
84) Benzo[a]fluoranthene	47.31	252	243234m	1184.79	ng/mL	
85) Benzo[e]pyrene	47.93	252	715061	3742.65	ng/mL	93
86) Benzo[a]pyrene	48.12	252	1118312m	5915.85	ng/mL	
87) Perylene	48.42	252	307652	1664.94	ng/mL	96
88) Indeno[1,2,3-cd]pyrene	52.85	276	766973m	4610.45	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	149053m	879.02	ng/mL	
90) Benzo[g,h,i]perylene	54.14	276	745488	3888.93	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18141.D
Acq On : 11 Feb 2006 6:19 pm
Operator : AC
Sample : 0602004-09D
Misc : 1X
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Feb 16 14:37:45 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
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09 D**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	77.5	10.17	3.97	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**210**	30,31-Bishomohopane-22S	**520**
C24 Tricyclic Terpane	**120**	30,31-Bishomohopane-22R	**320**
C25 Tricyclic Terpane	**140**	30,31-Trishomohopane-22S	**300**
C24 Tetracyclic Terpane	**130**	30,31-Trishomohopane-22R	**190**
C26 Tricyclic Terpane-22S	**55**	Tetrakishomohopane-22S	**190**
C26 Tricyclic Terpane-22R	**56**	Tetrakishomohopane-22R	**130**
C28 Tricyclic Terpane-22S	**67**	Pentakishomohopane-22S	**190**
C28 Tricyclic Terpane-22R	**67**	Pentakishomohopane-22R	**120**
C29 Tricyclic Terpane-22S	**84**	13b(H),17a(H)-20S-Diacholestane	**240**
C29 Tricyclic Terpane-22R	**81**	13b(H),17a(H)-20R-Diacholestane	**130**
18a-22,29,30-Trisnorneohopane-TS	**330**	13b,17a-20S-Methyldiacholestane	**120**
C30 Tricyclic Terpane-22S	**68**	14a(H),17a(H)-20S-Cholestane	**170**
C30 Tricyclic Terpane-22R	**54**	14a(H),17a(H)-20R-Cholestane	**550**
17a(H)-22,29,30-Trisnorhopane-TM	**420**	13b,17a-20R-Ethyldiacholestane	**100**
17a/b,21b/a 28,30-Bisnorhopane	**120**	13a,17b-20S-Ethyldiacholestane	**29**
17a(H),21b(H)-25-Norhopane	**28**	14a,17a-20S-Methylcholestane	**130**
30-Norhopane	**1300**	14a,17a-20R-Methylcholestane	**240**
18a(H)-30-Norneohopane-C29Ts	**270**	14a(H),17a(H)-20S-Ethylcholestane	**250**
17a(H)-Diahopane	**60**	14a(H),17a(H)-20R-Ethylcholestane	**310**
30-Normoretane	**190**	14b(H),17b(H)-20R-Cholestane	**250**
18a(H)&18b(H)-Oleananes	**140**	14b(H),17b(H)-20S-Cholestane	**270**
Hopane	**1700**	14b,17b-20R-Methylcholestane	**350**
Moretane	**200**	14b,17b-20S-Methylcholestane	**430**
30-Homohopane-22S	**720**	14b(H),17b(H)-20R-Ethylcholestane	**580**
30-Homohopane-22R	**600**	14b(H),17b(H)-20S-Ethylcholestane	**430**

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

N/A - Not Applicable

02/21/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28227.D
Acq On : 12 Feb 2006 5:20 am
Operator : AC
Sample : 0602004-09D
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Feb 17 11:13:40 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 2/17/06

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	72436	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	135238	4390.01	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 439.00%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.96	191	238297m	3332.79	ng/mL	
84) Hopane (T19)	52.96	191	237338m	3319.38	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	29693m	415.28	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	17624m	246.49	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.45	191	19244m	269.14	ng/ml	
88) C24 Tetracyclic Terpane (T	44.79	191	18783	262.70	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7825m	109.44	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	7967	111.43	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.89	191	9456m	132.25	ng/ml	
92) C28 Tricyclic Terpane-22R	47.06	191	9538m	133.40	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	11873	166.05	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	11464m	160.33	ng/ml	
95) 18a-22,29,30-Trisnorneohop	49.00	191	46908	656.05	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.07	191	9719m	135.93	ng/mL	
97) C30 Tricyclic Terpane-22R	49.32	191	7685m	107.48	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.57	191	58854	823.12	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.81	191	16980m	237.48	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.58	191	4051m	56.66	ng/ml	
101) 30-Norhopane (T15)	51.52	191	179530m	2510.88	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.63	191	38595m	539.78	ng/ml	
103) 17a(H)-Diahopane (X)	51.76	191	8583	120.04	ng/ml	100
104) 30-Normoretane (T17)	52.34	191	27248	381.09	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.77	191	19406m	271.41	ng/ml	
106) Moretane (T20)	53.70	191	28428m	397.59	ng/ml	
107) 30-Homohopane-22S (T21)	54.86	191	101658m	1421.78	ng/ml	
108) 30-Homohopane-22R (T22)	55.10	191	84882	1187.15	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.51	191	73241	1024.34	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.92	191	45533	636.82	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.78	191	42992m	601.28	ng/ml	
112) 30,31-Trishomohopane-22R (	59.44	191	27092	378.91	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.59	191	26882	375.97	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.56	191	18472	258.35	ng/ml	100
115) Pentakishomohopane-22S (T3	64.94	191	26885m	376.01	ng/ml	
116) Pentakishomohopane-22R (T3	66.33	191	17409m	243.48	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.73	217	14943	485.07	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.14	217	7938	257.68	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.85	217	7259	235.64	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.74	217	10301m	334.38	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	33421m	1084.89	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.57	217	6149m	199.61	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28227.D
Acq On : 12 Feb 2006 5:20 am
Operator : AC
Sample : 0602004-09D
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Feb 17 11:13:40 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

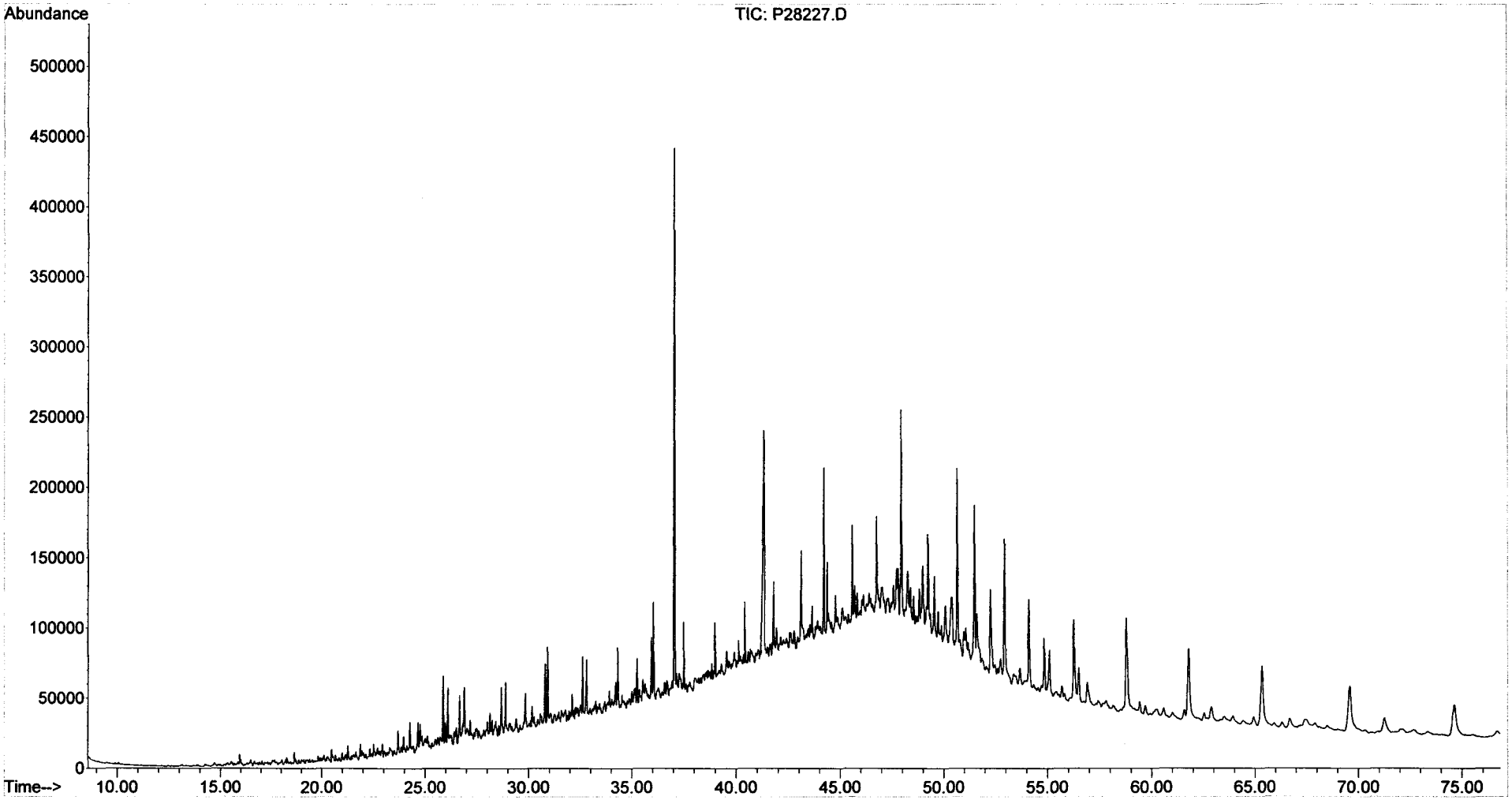
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.84	217	1750	56.81	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.01	217	7708m	250.21	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	14873m	482.80	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.13	217	15465m	502.02	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.09	217	19124m	620.79	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	15155m	491.95	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	16514m	536.07	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.18	218	21305m	691.59	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.28	218	26488m	859.84	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.39	218	35251	1144.30	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	50.43	218	26357m	855.58	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 : P28227.D
Acq On : 12 Feb 2006 5:20 am
Operator : AC
Sample : 0602004-09D
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Feb 17 11:13:40 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
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09E D**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/10/06	77.5	10.17	26.25	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	55	U	Fluoranthene	**57000**	
C1-Naphthalenes	55	U	Pyrene	**49000**	
C2-Naphthalenes	55	U	C1-Fluoranthenes/Pyrenes	30	U
C3-Naphthalenes	55	U	C2-Fluoranthenes/Pyrenes	30	U
C4-Naphthalenes	55	U	C3-Fluoranthenes/Pyrenes	30	U
Biphenyl	30	U	C4-Fluoranthenes/Pyrenes	30	U
Dibenzofuran	40	U	Naphthobenzothiophenes	40	U
Acenaphthylene	60	U	C1-Naphthobenzothiophenes	40	U
Acenaphthene	38	U	C2-Naphthobenzothiophenes	40	U
Fluorene	38	U	C3-Naphthobenzothiophenes	40	U
C1-Fluorenes	38	U	C4-Naphthobenzothiophenes	40	U
C2-Fluorenes	38	U	Benz[a]anthracene	52	U
C3-Fluorenes	38	U	Chrysene/Triphenylene	36	U
Anthracene	45	U	C1-Chrysenes	36	U
Phenanthrene	48	U	C2-Chrysenes	36	U
C1-Phenanthrenes/Anthracenes	48	U	C3-Chrysenes	36	U
C2-Phenanthrenes/Anthracenes	48	U	C4-Chrysenes	36	U
C3-Phenanthrenes/Anthracenes	48	U	Benzo[b]fluoranthene	35	U
C4-Phenanthrenes/Anthracenes	48	U	Benzo[k]fluoranthene	68	U
Retene	48	U	Benzo[a]fluoranthene	68	U
Dibenzothiophene	37	U	Benzo[e]pyrene	46	U
C1-Dibenzothiophenes	37	U	Benzo[a]pyrene	46	U
C2-Dibenzothiophenes	37	U	Perylene	58	U
C3-Dibenzothiophenes	37	U	Indeno[1,2,3-cd]pyrene	80	U
C4-Dibenzothiophenes	37	U	Dibenz[a,h]anthracene	63	U
Benzo(b)fluorene	34	U	Benzo[g,h,i]perylene	59	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	99	50-130
Benzo[b]fluoranthene-d12	100	50-130

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

02/17/06 13:03

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18091.D
Acq On : 10 Feb 2006 2:44 am
Operator : AC
Sample : 0602004-09D-RE
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 16 11:15:28 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 for WW
2/16/06

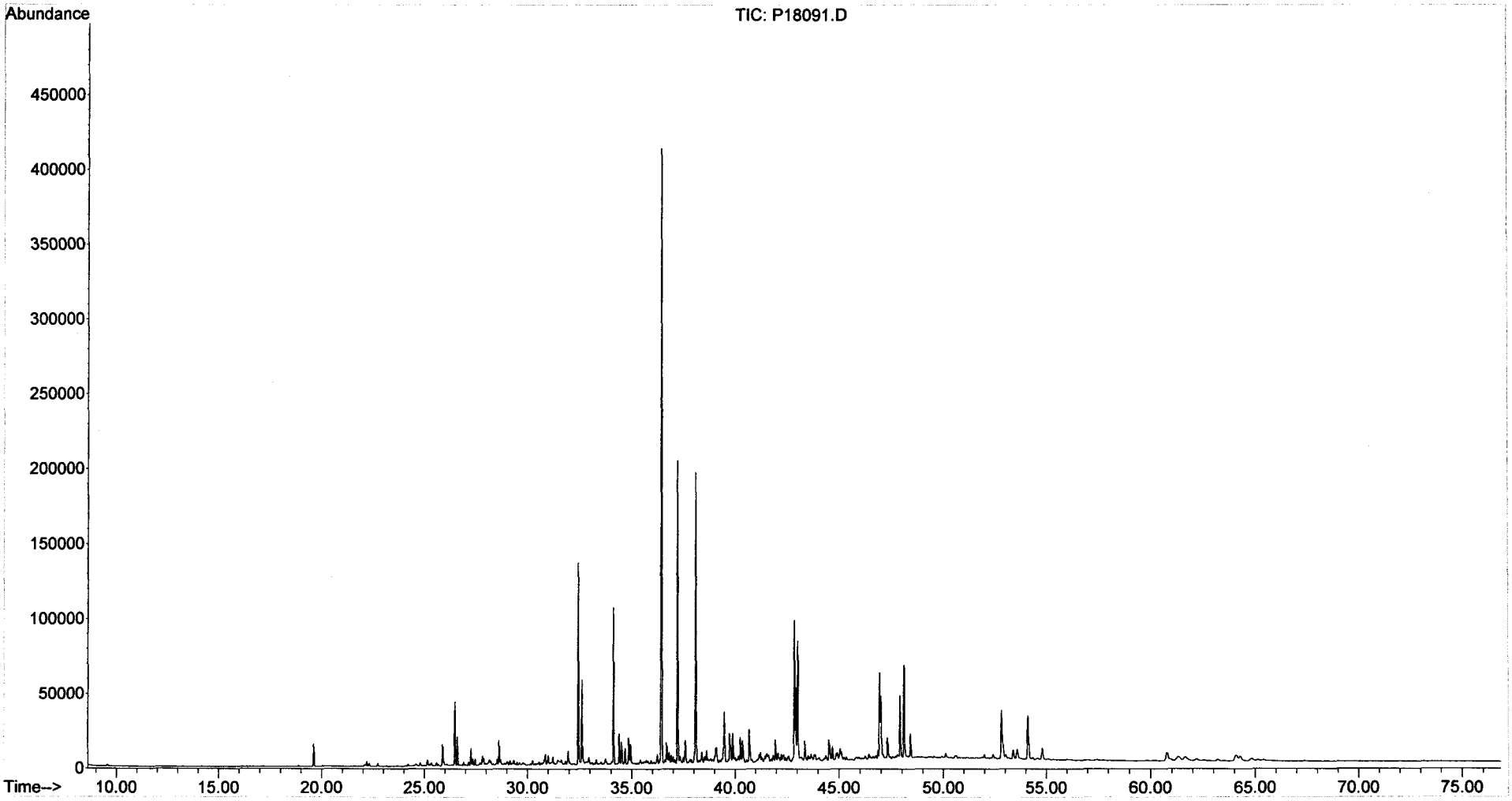
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	47069m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	80493m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	6488	64.30	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	6.43%#		
58) Pyrene-d10	38.02	212	15701m	75.68	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	7.57%#		
81) Benzo[b]fluoranthene-d12	46.84	264	12164m	75.89	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	7.59%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						Qvalue
56) Fluoranthene	37.22	202	432056m	1704.34	ng/mL	
59) Pyrene	38.10	202	381897m	1481.20	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18091.D
Acq On : 10 Feb 2006 2:44 am
Operator : AC
Sample : 0602004-09D-RE
Misc : 10X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 16 11:15:28 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: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	4200	4800	16	30
C1-Naphthalenes	4100	1200	109[a]	30
C2-Naphthalenes	7200	3300	75[a]	30
C3-Naphthalenes	7700	4200	59[a]	30
C4-Naphthalenes	5900	3100	62[a]	30
Biphenyl	820	420	66[a]	30
Dibenzofuran	3900	2600	38[a]	30
Acenaphthylene	3700	4700	24	30
Acenaphthene	8800	5000	56[a]	30
Fluorene	6100	4100	39[a]	30
C1-Fluorenes	5300	3100	52[a]	30
C2-Fluorenes	8000	3800	71[a]	30
C3-Fluorenes	7100	3900	58[a]	30
Anthracene	17000	14000	20	30
Phenanthrene	43000	30000	36[a]	30
C1-Phenanthrenes/Anthracenes	36000	17000	72[a]	30
C2-Phenanthrenes/Anthracenes	28000	13000	72[a]	30
C3-Phenanthrenes/Anthracenes	13000	6800	63[a]	30
C4-Phenanthrenes/Anthracenes	3900	2200	54[a]	30
Retene	990	620	46[a]	30
Dibenzothiophene	4100	2500	49[a]	30
C1-Dibenzothiophenes	6400	2900	75[a]	30
C2-Dibenzothiophenes	8800	4000	74[a]	30
C3-Dibenzothiophenes	6100	3000	69[a]	30
C4-Dibenzothiophenes	2500	1600	46[a]	30
Benzo(b)fluorene	5400	5300	0	30
Fluoranthene	51000 E	54000 E	7	30
Pyrene	52000 E	48000 E	9	30
C1-Fluoranthenes/Pyrenes	39000	24000	45[a]	30
C2-Fluoranthenes/Pyrenes	22000	12000	56[a]	30
C3-Fluoranthenes/Pyrenes	8400	5000	50[a]	30
C4-Fluoranthenes/Pyrenes	3400	2200	41[a]	30
Naphthobenzothiophenes	7000	4900	36[a]	30
C1-Naphthobenzothiophenes	6600	3400	62[a]	30
C2-Naphthobenzothiophenes	4600	2600	57[a]	30

N/A - Not Applicable
[a] - Value outside of QC Limits.
E - Estimated value, exceeds the upper limit of calibration.

02/21/06 11:51

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	2700	1800	41[a]	30
C4-Naphthobenzothiophenes	1400	960	35[a]	30
Benz[a]anthracene	25000	21000	18	30
Chrysene/Triphenylene	23000	21000	10	30
C1-Chrysenes	18000	10000	53[a]	30
C2-Chrysenes	8400	5300	46[a]	30
C3-Chrysenes	5200	3600	35[a]	30
C4-Chrysenes	2000	1300	38[a]	30
Benzo[b]fluoranthene	15000	17000	8	30
Benzo[k]fluoranthene	13000	14000	6	30
Benzo[a]fluoranthene	4200	4000	6	30
Benzo[e]pyrene	12000	12000	3	30
Benzo[a]pyrene	20000	20000	1	30
Perylene	4500	5600	20	30
Indeno[1,2,3-cd]pyrene	13000	15000	16	30
Dibenz[a,h]anthracene	3400	2900	14	30
Benzo[g,h,i]perylene	11000	13000	16	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	80	83	50-130
Pyrene-d10	99	93	50-130
Benzo[b]fluoranthene-d12	103	104	50-130

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

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

02/21/06 11:51

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	**2700**	**1000**	91[a]	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	80	83	50-130
Pyrene-d10	99	93	50-130
Benzo[b]fluoranthene-d12	103	104	50-130

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

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

02/21/06 11:51

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	310	210	39[a]	30
C24 Tricyclic Terpane	180	120	36[a]	30
C25 Tricyclic Terpane	190	140	35[a]	30
C24 Tetracyclic Terpane	190	130	36[a]	30
C26 Tricyclic Terpane-22S	78	55	35[a]	30
C26 Tricyclic Terpane-22R	76	56	31[a]	30
C28 Tricyclic Terpane-22S	94	67	34[a]	30
C28 Tricyclic Terpane-22R	98	67	37[a]	30
C29 Tricyclic Terpane-22S	120	84	32[a]	30
C29 Tricyclic Terpane-22R	120	81	36[a]	30
18a-22,29,30-Trisnorneohopane-TS	490	330	40[a]	30
C30 Tricyclic Terpane-22S	88	68	25	30
C30 Tricyclic Terpane-22R	71	54	27	30
17a(H)-22,29,30-Trisnorhopane-TM	600	420	37[a]	30
17a/b,21b/a 28,30-Bisnorhopane	160	120	28	30
17a(H),21b(H)-25-Norhopane	35	28	21	30
30-Norhopane	1800	1300	36[a]	30
18a(H)-30-Norneohopane-C29Ts	420	270	44[a]	30
17a(H)-Diahopane	94	60	43[a]	30
30-Normoretane	310	190	46[a]	30
18a(H)&18b(H)-Oleananes	220	140	45[a]	30
Hopane	2400	1700	37[a]	30
Moretane	320	200	45[a]	30
30-Homohopane-22S	960	720	29	30
30-Homohopane-22R	800	600	28	30
30,31-Bishomohopane-22S	660	520	25	30
30,31-Bishomohopane-22R	420	320	27	30
30,31-Trishomohopane-22S	380	300	24	30
30,31-Trishomohopane-22R	220	190	15	30
Tetrakishomohopane-22S	230	190	19	30
Tetrakishomohopane-22R	170	130	25	30
Pentakishomohopane-22S	240	190	22	30
Pentakishomohopane-22R	160	120	23	30
13b(H),17a(H)-20S-Diacholestane	330	240	31[a]	30
13b(H),17a(H)-20R-Diacholestane	190	130	37[a]	30

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

02/21/06 16:17

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	160	120	33[a]	30
14a(H),17a(H)-20S-Cholestane	280	170	50[a]	30
14a(H),17a(H)-20R-Cholestane	680	550	23	30
13b,17a-20R-Ethyldiacholestane	130	100	28	30
13a,17b-20S-Ethyldiacholestane	33	29	13	30
14a,17a-20S-Methylcholestane	180	130	35[a]	30
14a,17a-20R-Methylcholestane	300	240	21	30
14a(H),17a(H)-20S-Ethylcholestane	300	250	15	30
14a(H),17a(H)-20R-Ethylcholestane	370	310	17	30
14b(H),17b(H)-20R-Cholestane	280	250	11	30
14b(H),17b(H)-20S-Cholestane	290	270	8	30
14b,17b-20R-Methylcholestane	390	350	11	30
14b,17b-20S-Methylcholestane	500	430	14	30
14b(H),17b(H)-20R-Ethylcholestane	600	580	5	30
14b(H),17b(H)-20S-Ethylcholestane	530	430	20	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	88	87	50-130

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

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

02/21/06 16:17

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	74 U	55 U	N/A	30
C1-Naphthalenes	74 U	55 U	N/A	30
C2-Naphthalenes	74 U	55 U	N/A	30
C3-Naphthalenes	74 U	55 U	N/A	30
C4-Naphthalenes	74 U	55 U	N/A	30
Biphenyl	40 U	30 U	N/A	30
Dibenzofuran	53 U	40 U	N/A	30
Acenaphthylene	81 U	60 U	N/A	30
Acenaphthene	51 U	38 U	N/A	30
Fluorene	51 U	38 U	N/A	30
C1-Fluorenes	51 U	38 U	N/A	30
C2-Fluorenes	51 U	38 U	N/A	30
C3-Fluorenes	51 U	38 U	N/A	30
Anthracene	60 U	45 U	N/A	30
Phenanthrene	65 U	48 U	N/A	30
C1-Phenanthrenes/Anthracenes	65 U	48 U	N/A	30
C2-Phenanthrenes/Anthracenes	65 U	48 U	N/A	30
C3-Phenanthrenes/Anthracenes	65 U	48 U	N/A	30
C4-Phenanthrenes/Anthracenes	65 U	48 U	N/A	30
Retene	65 U	48 U	N/A	30
Dibenzothiophene	49 U	37 U	N/A	30
C1-Dibenzothiophenes	49 U	37 U	N/A	30
C2-Dibenzothiophenes	49 U	37 U	N/A	30
C3-Dibenzothiophenes	49 U	37 U	N/A	30
C4-Dibenzothiophenes	49 U	37 U	N/A	30
Benzo(b)fluorene	45 U	34 U	N/A	30
Fluoranthene	**51000**	**57000**	10	30
Pyrene	**52000**	**49000**	6	30
C1-Fluoranthenes/Pyrenes	40 U	30 U	N/A	30
C2-Fluoranthenes/Pyrenes	40 U	30 U	N/A	30
C3-Fluoranthenes/Pyrenes	40 U	30 U	N/A	30
C4-Fluoranthenes/Pyrenes	40 U	30 U	N/A	30
Naphthobenzothiophenes	54 U	40 U	N/A	30
C1-Naphthobenzothiophenes	54 U	40 U	N/A	30
C2-Naphthobenzothiophenes	54 U	40 U	N/A	30

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

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	54 U	40 U	N/A	30
C4-Naphthobenzothiophenes	54 U	40 U	N/A	30
Benz[a]anthracene	70 U	52 U	N/A	30
Chrysene/Triphenylene	48 U	36 U	N/A	30
C1-Chrysenes	48 U	36 U	N/A	30
C2-Chrysenes	48 U	36 U	N/A	30
C3-Chrysenes	48 U	36 U	N/A	30
C4-Chrysenes	48 U	36 U	N/A	30
Benzo[b]fluoranthene	47 U	35 U	N/A	30
Benzo[k]fluoranthene	90 U	68 U	N/A	30
Benzo[a]fluoranthene	90 U	68 U	N/A	30
Benzo[e]pyrene	61 U	46 U	N/A	30
Benzo[a]pyrene	62 U	46 U	N/A	30
Perylene	78 U	58 U	N/A	30
Indeno[1,2,3-cd]pyrene	110 U	80 U	N/A	30
Dibenz[a,h]anthracene	85 U	63 U	N/A	30
Benzo[g,h,i]perylene	78 U	59 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	81	84	50-130
Pyrene-d10	103	99	50-130
Benzo[b]fluoranthene-d12	103	100	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.

02/17/06 13:04

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-70B (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-10**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	63.5	5.13	23.33	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**550000**	E	Fluoranthene	**240000**	E
C1-Naphthalenes	**440000**	E	Pyrene	**340000**	E
C2-Naphthalenes	**390000**	E	C1-Fluoranthenes/Pyrenes	**300000**	
C3-Naphthalenes	**170000**		C2-Fluoranthenes/Pyrenes	**100000**	
C4-Naphthalenes	**56000**		C3-Fluoranthenes/Pyrenes	**34000**	
Biphenyl	**55000**		C4-Fluoranthenes/Pyrenes	**11000**	
Dibenzofuran	**33000**		Naphthobenzothiophenes	**34000**	
Acenaphthylene	**38000**		C1-Naphthobenzothiophenes	**30000**	
Acenaphthene	**320000**	E	C2-Naphthobenzothiophenes	**17000**	
Fluorene	**190000**	E	C3-Naphthobenzothiophenes	**8500**	
C1-Fluorenes	**110000**		C4-Naphthobenzothiophenes	**3600**	
C2-Fluorenes	**73000**		Benz[a]anthracene	**100000**	E
C3-Fluorenes	**36000**		Chrysene/Triphenylene	**97000**	E
Anthracene	**220000**	E	C1-Chrysenes	**74000**	
Phenanthrene	**670000**	E	C2-Chrysenes	**29000**	
C1-Phenanthrenes/Anthracenes	**420000**	E	C3-Chrysenes	**15000**	
C2-Phenanthrenes/Anthracenes	**180000**		C4-Chrysenes	**4500**	
C3-Phenanthrenes/Anthracenes	**61000**		Benzo[b]fluoranthene	**44000**	
C4-Phenanthrenes/Anthracenes	**16000**		Benzo[k]fluoranthene	**48000**	
Retene	**8300**		Benzo[a]fluoranthene	**22000**	
Dibenzothiophene	**71000**		Benzo[e]pyrene	**41000**	
C1-Dibenzothiophenes	**80000**		Benzo[a]pyrene	**84000**	E
C2-Dibenzothiophenes	**62000**		Perylene	**14000**	
C3-Dibenzothiophenes	**31000**		Indeno[1,2,3-cd]pyrene	**42000**	
C4-Dibenzothiophenes	**9800**		Dibenz[a,h]anthracene	**11000**	
Benzo(b)fluorene	**56000**		Benzo[g,h,i]perylene	**35000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	127	50-130
Benzo[b]fluoranthene-d12	104	50-130

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

02/21/06 11:56

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-70B (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-10**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/11/06	63.5	5.13	23.33	1	AC

Parameter	Result
Carbazole	7600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	100	50-130
Pyrene-d10	127	50-130
Benzo[b]fluoranthene-d12	104	50-130

N/A - Not Applicable

02/21/06 11:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18143.D
Acq On : 11 Feb 2006 7:53 pm
Operator : AC
Sample : 0602004-10
Misc : 1X
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Feb 15 18:24:48 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 for WTW 2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	34443m	500.00 ng/mL	-0.01
72) Chrysene-d12	42.97	240	70251m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	63203	855.96 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 85.60%		
58) Pyrene-d10	38.05	212	165431m	1089.69 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.97%		
81) Benzo[b]fluoranthene-d12	46.87	264	124798m	892.08 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 89.21%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.64	128	13409839m	76237.21 ng/mL E	
10) C1-Naphthalenes	22.33	142	10848317m	61674.52 ng/mL E	
11) C2-Naphthalenes	25.17	156	9657506m	54904.56 ng/mL E	
12) C3-Naphthalenes	27.48	170	4233003m	24065.34 ng/mL	
13) C4-Naphthalenes	30.25	184	1364031m	7754.75 ng/mL	
15) 2-Methylnaphthalene	22.33	142	6075918	54563.61 ng/mL# E	100
16) 1-Methylnaphthalene	22.75	142	4759905	45404.33 ng/mL# E	100
22) Biphenyl	24.19	154	1063787m	7684.03 ng/mL	
23) 2,6-Dimethylnaphthalene	24.82	156	1603673m	17353.24 ng/mL E	
24) Dibenzofuran	27.27	168	715345m	4599.62 ng/mL	
25) Acenaphthylene	25.89	152	892997m	5294.81 ng/mL	
26) Acenaphthene	26.65	153	4753586m	45374.52 ng/mL E	
27) 2,3,5-Trimethylnaphthalene	28.19	170	265269m	3197.59 ng/mL	
28) Fluorene	28.66	166	3083099m	26240.72 ng/mL E	
29) C1-Fluorenes	30.88	180	1766193m	15032.33 ng/mL	
30) C2-Fluorenes	33.06	194	1202711m	10236.45 ng/mL	
31) C3-Fluorenes	35.72	208	593510m	5051.45 ng/mL	
32) Dibenzothiophene	31.97	184	1715841m	9902.77 ng/mL	
36) OTP	34.17	198	18712m	107.99 ng/mL	
37) C1-Dibenzothiophenes	33.74	198	1955485m	11285.85 ng/mL	
38) C2-Dibenzothiophenes	35.42	212	1511527m	8723.60 ng/mL	
39) C3-Dibenzothiophenes	37.24	226	750220m	4329.80 ng/mL	
40) C4-Dibenzothiophenes	38.93	240	238422m	1376.02 ng/mL	
41) Phenanthrene	32.51	178	16327140	93714.28 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.55	192	10211613m	58612.47 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.71	206	4495275m	25801.91 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	1485553m	8526.76 ng/mL	
51) C4-Phenanthrenes/Anthracen	39.46	234	391782m	2248.74 ng/mL	
52) Retene	39.46	234	42372m	1163.20 ng/mL	
53) Anthracene	32.67	178	5003074	31037.42 ng/mL E	100
54) Carbazole	33.30	167	158253m	1060.75 ng/mL	
55) 1-Methylphenanthrene	34.99	192	1607870m	13478.19 ng/mL E	
56) Fluoranthene	37.27	202	6319899m	34069.13 ng/mL E	
57) Benzo(b)fluorene	39.77	216	849356m	7845.52 ng/mL	
59) Pyrene	38.16	202	8849632	46905.94 ng/mL E	99
60) C1-Fluoranthenes/Pyrenes	39.52	216	7908158m	41915.82 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.26	230	2720643m	14420.30 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	894391m	4740.56 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	293724m	1556.83 ng/mL	
64) Naphthobenzothiophene	41.97	234	516244m	2924.86 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18143.D
Acq On : 11 Feb 2006 7:53 pm
Operator : AC
Sample : 0602004-10
Misc : 1X
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Feb 15 18:24:48 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

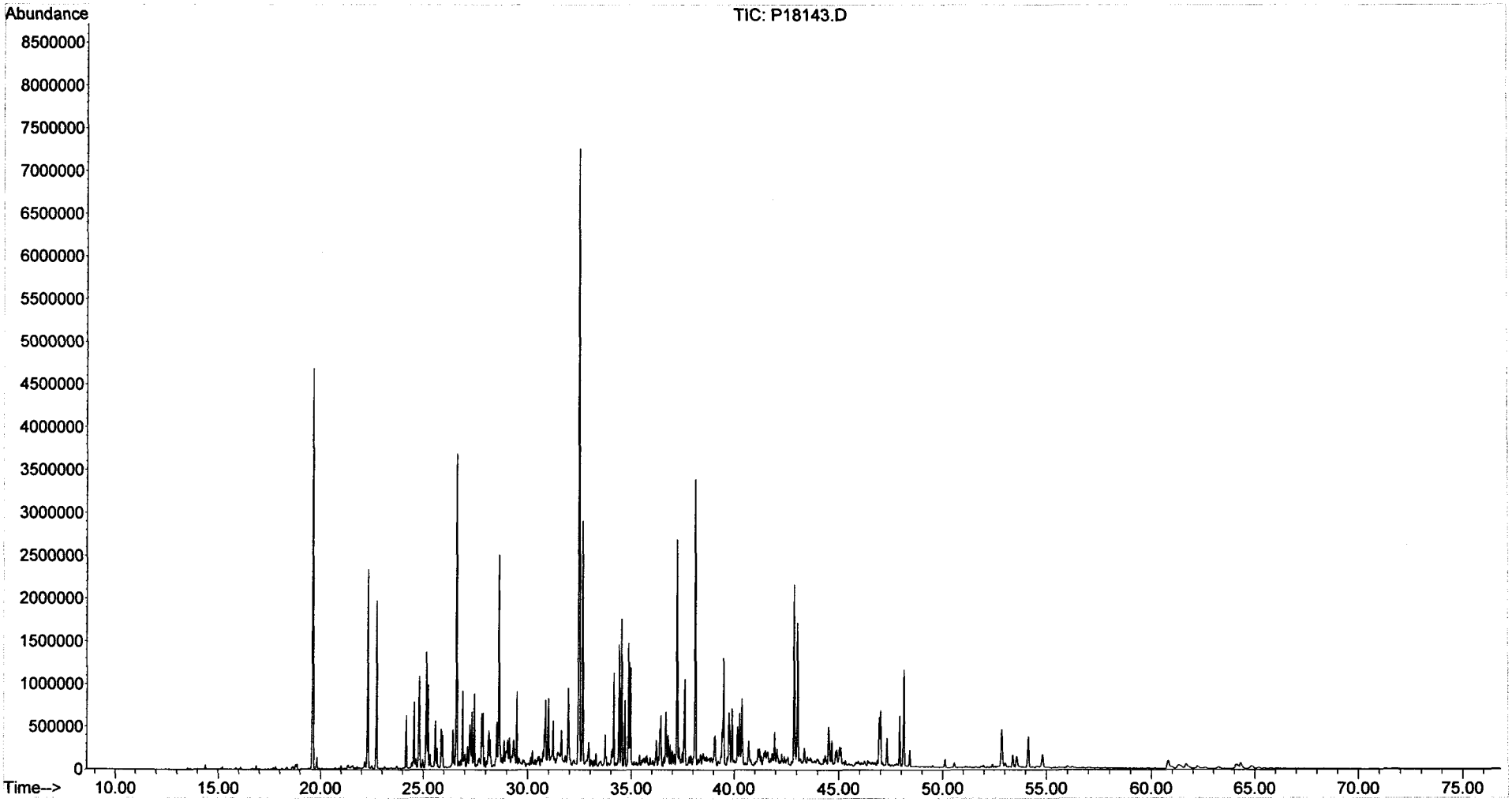
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.97	234	515947m	2923.17 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	144885m	820.87 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	168172m	952.80 ng/mL	
68) C1-Naphthobenzothiophenes	43.37	248	742848m	4208.71 ng/ml	
69) C2-Naphthobenzothiophenes	44.88	262	421023m	2385.37 ng/ml	
70) C3-Naphthobenzothiophenes	46.99	276	210092m	1190.31 ng/ml	
71) C4-Naphthobenzothiophenes	48.06	290	88477m	501.28 ng/mL	
73) Benz[a]anthracene	42.92	228	3139851m	14682.46 ng/mL E	
74) Chrysene	43.08	228	2950725m	13503.64 ng/mL E	
75) Chrysene/Triphenylene	43.08	228	2967419m	13580.04 ng/mL	
76) C1-Chrysenes	44.54	242	2243562m	10267.40 ng/mL	
77) C2-Chrysenes	46.25	256	911159m	4169.81 ng/mL	
78) BBF-d12 Surr BKGD	46.87	256	14488m	66.30 ng/mL	
79) C3-Chrysenes	47.83	270	450311m	2060.80 ng/mL	
80) C4-Chrysenes	48.81	284	138647m	634.50 ng/mL	
82) Benzo[b]fluoranthene	46.95	252	1363682	6209.13 ng/mL	99
83) Benzo[k]fluoranthene	47.03	252	1517114	6639.93 ng/mL	98
84) Benzo[a]fluoranthene	47.33	252	692785m	3032.10 ng/mL	
85) Benzo[e]pyrene	47.94	252	1214865	5713.37 ng/mL	96
86) Benzo[a]pyrene	48.14	252	2451521m	11652.47 ng/mL E	
87) Perylene	48.43	252	411320	2000.08 ng/mL	96
88) Indeno[1,2,3-cd]pyrene	52.88	276	1074952m	5806.05 ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	289449m	1533.76 ng/mL	
90) Benzo[g,h,i]perylene	54.15	276	1048505	4914.59 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18143.D
Acq On : 11 Feb 2006 7:53 pm
Operator : AC
Sample : 0602004-10
Misc : 1X
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Feb 15 18:24:48 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: **GC-SED-70B (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-10**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	63.5	5.13	3.71	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**330**	30,31-Bishomohopane-22S	**360**
C24 Tricyclic Terpane	**230**	30,31-Bishomohopane-22R	**240**
C25 Tricyclic Terpane	**220**	30,31-Trishomohopane-22S	**190**
C24 Tetracyclic Terpane	**160**	30,31-Trishomohopane-22R	**120**
C26 Tricyclic Terpane-22S	**98**	Tetrakishomohopane-22S	**120**
C26 Tricyclic Terpane-22R	**93**	Tetrakishomohopane-22R	**76**
C28 Tricyclic Terpane-22S	**120**	Pentakishomohopane-22S	**91**
C28 Tricyclic Terpane-22R	**120**	Pentakishomohopane-22R	**66**
C29 Tricyclic Terpane-22S	**120**	13b(H),17a(H)-20S-Diacholestane	**390**
C29 Tricyclic Terpane-22R	**120**	13b(H),17a(H)-20R-Diacholestane	**220**
18a-22,29,30-Trisnorneohopane-TS	**450**	13b,17a-20S-Methyldiacholestane	**160**
C30 Tricyclic Terpane-22S	**100**	14a(H),17a(H)-20S-Cholestane	**240**
C30 Tricyclic Terpane-22R	**73**	14a(H),17a(H)-20R-Cholestane	**810**
17a(H)-22,29,30-Trisnorhopane-TM	**490**	13b,17a-20R-Ethyldiacholestane	**110**
17a/b,21b/a 28,30-Bisnorhopane	**150**	13a,17b-20S-Ethyldiacholestane	**32**
17a(H),21b(H)-25-Norhopane	**42**	14a,17a-20S-Methylcholestane	**170**
30-Norhopane	**1200**	14a,17a-20R-Methylcholestane	**430**
18a(H)-30-Norneohopane-C29Ts	**430**	14a(H),17a(H)-20S-Ethylcholestane	**260**
17a(H)-Diahopane	**110**	14a(H),17a(H)-20R-Ethylcholestane	**380**
30-Normoretane	**270**	14b(H),17b(H)-20R-Cholestane	**370**
18a(H)&18b(H)-Oleananes	**210**	14b(H),17b(H)-20S-Cholestane	**370**
Hopane	**2000**	14b,17b-20R-Methylcholestane	**400**
Moretane	**300**	14b,17b-20S-Methylcholestane	**440**
30-Homohopane-22S	**520**	14b(H),17b(H)-20R-Ethylcholestane	**530**
30-Homohopane-22R	**480**	14b(H),17b(H)-20S-Ethylcholestane	**390**

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

N/A - Not Applicable

02/21/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28230.D
Acq On : 12 Feb 2006 10:06 am
Operator : AC
Sample : 0602004-10
Misc : 1X
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Feb 17 11:17:50 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 2/17/06

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	54957	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	122236	5229.95	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 523.00%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	94305m	1738.42	ng/mL	
84) Hopane (T19)	52.95	191	93244m	1718.86	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	15874m	292.62	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	10851	200.03	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.44	191	10578m	195.00	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	7513	138.50	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	4642m	85.57	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	4439	81.83	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	5579	102.84	ng/ml	100
92) C28 Tricyclic Terpane-22R	47.05	191	5795m	106.83	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	5768	106.33	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.78	191	5604m	103.30	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	21503	396.39	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.06	191	4739m	87.36	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	3456m	63.71	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	23159m	426.91	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	7127m	131.38	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.56	191	2001m	36.89	ng/ml	
101) 30-Norhopane (T15)	51.51	191	58578	1079.83	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.62	191	20274m	373.73	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	5411m	99.75	ng/ml	
104) 30-Normoretane (T17)	52.33	191	13041	240.40	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	10046m	185.19	ng/ml	
106) Moretane (T20)	53.68	191	14536m	267.96	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	25014	461.11	ng/ml	100
108) 30-Homohopane-22R (T22)	55.09	191	22835	420.94	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.49	191	16937	312.22	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.91	191	11320	208.67	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.77	191	8899m	164.04	ng/ml	
112) 30,31-Trishomohopane-22R (	59.42	191	5573m	102.73	ng/ml	
113) Tetrakishomohopane-22S (T3	61.58	191	5637	103.91	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.52	191	3644	67.17	ng/ml	100
115) Pentakishomohopane-22S (T3	64.92	191	4330	79.82	ng/ml	100
116) Pentakishomohopane-22R (T3	66.32	191	3118m	57.48	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	8064	345.02	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.14	217	4451m	190.44	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	3218m	137.68	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	4959m	212.17	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	16656m	712.64	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.56	217	2180m	93.27	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28230.D
Acq On : 12 Feb 2006 10:06 am
Operator : AC
Sample : 0602004-10
Misc : 1X
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Feb 17 11:17:50 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

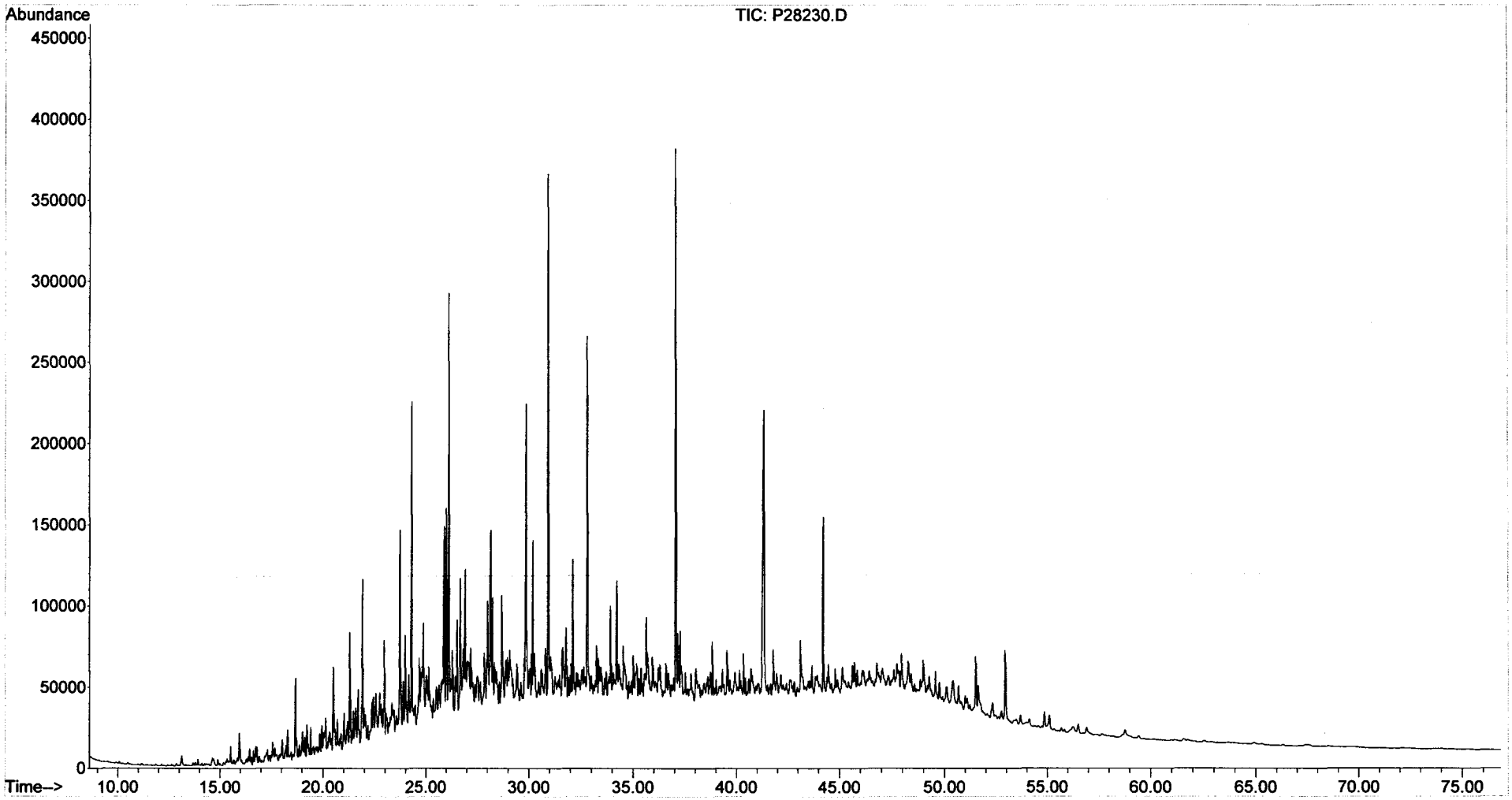
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.84	217	662	28.32	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	3454m	147.78	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	8758m	374.72	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	5296m	226.59	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	7749m	331.55	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	7601	325.21	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	7652	327.40	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.18	218	8220m	351.70	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	9052m	387.30	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	10823m	463.07	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.41	218	8066m	345.11	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 : P28230.D
Acq On : 12 Feb 2006 10:06 am
Operator : AC
Sample : 0602004-10
Misc : 1X
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Feb 17 11:17:50 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: **GC-SED-70B (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-10E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/10/06	63.5	5.13	23.33	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**480000**		Fluoranthene	**210000**	
C1-Naphthalenes	**380000**		Pyrene	**280000**	
C2-Naphthalenes	**330000**		C1-Fluoranthenes/Pyrenes	64	U
C3-Naphthalenes	120	U	C2-Fluoranthenes/Pyrenes	64	U
C4-Naphthalenes	120	U	C3-Fluoranthenes/Pyrenes	64	U
Biphenyl	65	U	C4-Fluoranthenes/Pyrenes	64	U
Dibenzofuran	85	U	Naphthobenzothiophenes	87	U
Acenaphthylene	130	U	C1-Naphthobenzothiophenes	87	U
Acenaphthene	**270000**		C2-Naphthobenzothiophenes	87	U
Fluorene	**160000**		C3-Naphthobenzothiophenes	87	U
C1-Fluorenes	82	U	C4-Naphthobenzothiophenes	87	U
C2-Fluorenes	82	U	Benz[a]anthracene	**100000**	
C3-Fluorenes	82	U	Chrysene/Triphenylene	**97000**	
Anthracene	**180000**		C1-Chrysenes	77	U
Phenanthrene	**540000**		C2-Chrysenes	77	U
C1-Phenanthrenes/Anthracenes	**350000**		C3-Chrysenes	77	U
C2-Phenanthrenes/Anthracenes	100	U	C4-Chrysenes	77	U
C3-Phenanthrenes/Anthracenes	100	U	Benzo[b]fluoranthene	76	U
C4-Phenanthrenes/Anthracenes	100	U	Benzo[k]fluoranthene	140	U
Retene	100	U	Benzo[a]fluoranthene	140	U
Dibenzothiophene	80	U	Benzo[e]pyrene	98	U
C1-Dibenzothiophenes	80	U	Benzo[a]pyrene	**82000**	
C2-Dibenzothiophenes	80	U	Perylene	120	U
C3-Dibenzothiophenes	80	U	Indeno[1,2,3-cd]pyrene	170	U
C4-Dibenzothiophenes	80	U	Dibenz[a,h]anthracene	140	U
Benzo(b)fluorene	72	U	Benzo[g,h,i]perylene	130	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	110	50-130
Benzo[b]fluoranthene-d12	107	50-130

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

02/17/06 13:06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18095.D
Acq On : 10 Feb 2006 5:49 am
Operator : AC
Sample : 0602004-10-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 15 19:45:06 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 for WD 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	49294m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	84119m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	7780	73.62	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.36%#			
58) Pyrene-d10	38.02	212	20496m	94.33	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.43%#			
81) Benzo[b]fluoranthene-d12	46.84	264	15305m	91.37	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.14%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

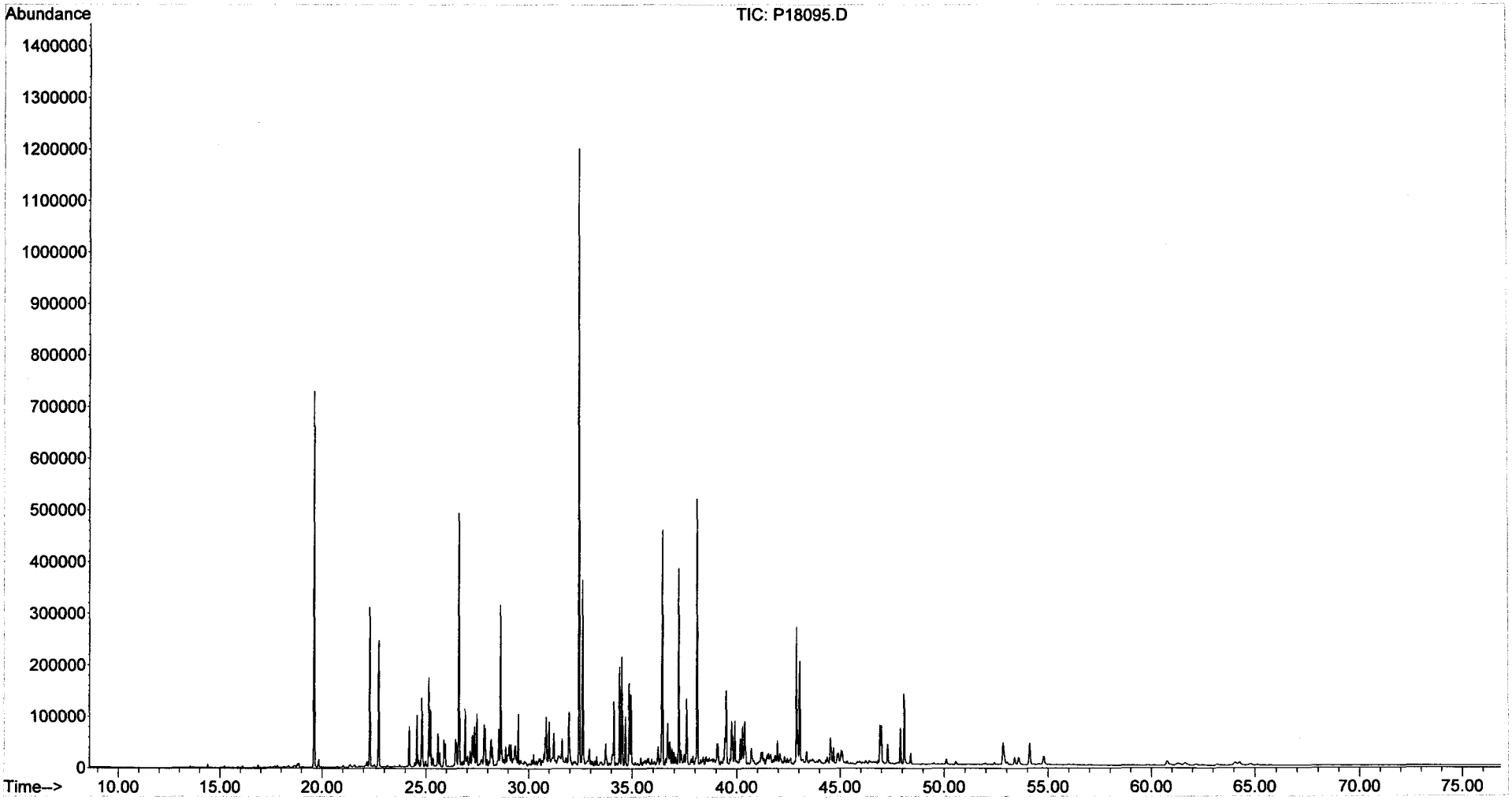
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) Naphthalene	19.61	128	1700072m	6753.33	ng/mL	
10) C1-Naphthalenes	22.29	142	1322038m	5251.63	ng/mL	
11) C2-Naphthalenes	25.14	156	1149850m	4567.64	ng/mL	
15) 2-Methylnaphthalene	22.29	142	742357m	4658.12	ng/mL	
16) 1-Methylnaphthalene	22.73	142	577587	3849.67	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	162159m	1226.06	ng/mL	
26) Acenaphthene	26.62	153	564027	3761.82	ng/mL	99
28) Fluorene	28.64	166	362860m	2157.91	ng/mL	
41) Phenanthrene	32.45	178	1896811	7607.23	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.52	192	1204794m	4831.87	ng/mL	
53) Anthracene	32.62	178	587714m	2547.54	ng/mL	
55) 1-Methylphenanthrene	34.95	192	189168m	1107.99	ng/mL	
56) Fluoranthene	37.22	202	766909m	2888.69	ng/mL	
59) Pyrene	38.10	202	1049946m	3888.45	ng/mL	
73) Benz[a]anthracene	42.88	228	371239m	1449.78	ng/mL	
74) Chrysene	43.04	228	353243m	1350.06	ng/mL	
75) Chrysene/Triphenylene	43.04	228	355226m	1357.64	ng/mL	
86) Benzo[a]pyrene	48.09	252	287728m	1142.15	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18095.D
Acq On : 10 Feb 2006 5:49 am
Operator : AC
Sample : 0602004-10-RE
Misc : 10X
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 15 19:45:06 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-83 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-11**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/11/06	46.6	10.57	23.33	1	AC

Parameter	Result	Parameter	Result
Naphthalene	870	Fluoranthene	3800
C1-Naphthalenes	440	Pyrene	7900
C2-Naphthalenes	620	C1-Fluoranthenes/Pyrenes	10000
C3-Naphthalenes	670	C2-Fluoranthenes/Pyrenes	5900
C4-Naphthalenes	1000	C3-Fluoranthenes/Pyrenes	3100
Biphenyl	120	C4-Fluoranthenes/Pyrenes	1200
Dibenzofuran	120	Naphthobenzothiophenes	1400
Acenaphthylene	1300	C1-Naphthobenzothiophenes	2100
Acenaphthene	370	C2-Naphthobenzothiophenes	1800
Fluorene	220	C3-Naphthobenzothiophenes	1200
C1-Fluorenes	690	C4-Naphthobenzothiophenes	590
C2-Fluorenes	1600	Benz[a]anthracene	3200
C3-Fluorenes	2000	Chrysene/Triphenylene	2900
Anthracene	1200	C1-Chrysenes	5000
Phenanthrene	1000	C2-Chrysenes	3000
C1-Phenanthrenes/Anthracenes	2600	C3-Chrysenes	2000
C2-Phenanthrenes/Anthracenes	4300	C4-Chrysenes	810
C3-Phenanthrenes/Anthracenes	4000	Benzo[b]fluoranthene	2600
C4-Phenanthrenes/Anthracenes	1700	Benzo[k]fluoranthene	2500
Retene	540	Benzo[a]fluoranthene	990
Dibenzothiophene	200	Benzo[e]pyrene	2400
C1-Dibenzothiophenes	720	Benzo[a]pyrene	3800
C2-Dibenzothiophenes	2000	Perylene	940
C3-Dibenzothiophenes	2400	Indeno[1,2,3-cd]pyrene	2200
C4-Dibenzothiophenes	1300	Dibenz[a,h]anthracene	580
Benzo(b)fluorene	1700	Benzo[g,h,i]perylene	2100

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

02/17/06 13:07

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-83 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-11**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/11/06	46.6	10.57	23.33	1	AC

Parameter	Result
Carbazole	74

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	80	50-130
Pyrene-d10	92	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

02/17/06 13:07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18145.D
Acq On : 11 Feb 2006 9:27 pm
Operator : AC
Sample : 0602004-11
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 18:36:56 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 for WW
2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	36818m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	61795m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	54180m	686.43	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 68.64%			
58) Pyrene-d10	38.04	212	128605m	792.47	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.25%			
81) Benzo[b]fluoranthene-d12	46.85	264	103579m	841.72	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 84.17%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.61	128	34664m	184.36	ng/mL	
10) C1-Naphthalenes	22.29	142	17341m	92.23	ng/mL	
11) C2-Naphthalenes	24.80	156	24627m	130.98	ng/mL	
12) C3-Naphthalenes	27.82	170	26631m	141.64	ng/mL	
13) C4-Naphthalenes	29.80	184	40732m	216.63	ng/mL	
15) 2-Methylnaphthalene	22.29	142	11095m	93.21	ng/mL	
16) 1-Methylnaphthalene	22.73	142	6429m	57.37	ng/mL	
22) Biphenyl	24.18	154	3645m	24.63	ng/mL	
23) 2,6-Dimethylnaphthalene	24.80	156	3366m	34.07	ng/mL	
24) Dibenzofuran	27.26	168	4093m	24.62	ng/mL	
25) Acenaphthylene	25.89	152	48420m	268.58	ng/mL	
26) Acenaphthene	26.62	153	8822m	78.78	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.18	170	1671m	18.84	ng/mL	
28) Fluorene	28.64	166	5833m	46.44	ng/mL	
29) C1-Fluorenes	31.22	180	18371m	146.27	ng/mL	
30) C2-Fluorenes	33.04	194	41932m	333.87	ng/mL	
31) C3-Fluorenes	35.03	208	53703m	427.59	ng/mL	
32) Dibenzothiophene	31.95	184	7804m	42.13	ng/mL	
36) OTP	34.15	198	17431	94.11	ng/mL#	100
37) C1-Dibenzothiophenes	34.15	198	45441m	245.34	ng/mL	
38) C2-Dibenzothiophenes	35.41	212	79312m	428.21	ng/mL	
39) C3-Dibenzothiophenes	37.22	226	94295m	509.11	ng/mL	
40) C4-Dibenzothiophenes	38.91	240	49457m	267.02	ng/mL	
41) Phenanthrene	32.44	178	41289m	221.70	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.88	192	102828m	552.14	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.69	206	181790m	976.13	ng/mL	
49) 5AA IS BKGD	36.45	206	11878	63.78	ng/mL	100
50) C3-Phenanthrenes/Anthracen	38.52	220	157828m	847.46	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.72	234	66919m	359.32	ng/mL	
52) Retene	39.45	234	4457m	114.46	ng/mL	
53) Anthracene	32.62	178	44347m	257.37	ng/mL	
54) Carbazole	33.29	167	2496m	15.65	ng/mL	
55) 1-Methylphenanthrene	34.95	192	13067m	102.47	ng/mL	
56) Fluoranthene	37.22	202	157522m	794.39	ng/mL	
57) Benzo(b)fluorene	39.74	216	40902m	353.44	ng/mL	
59) Pyrene	38.10	202	337092m	1671.44	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.50	216	426897m	2116.74	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.96	230	250703m	1243.09	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.44	244	130761m	648.37	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.69	258	51809m	256.89	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18145.D
Acq On : 11 Feb 2006 9:27 pm
Operator : AC
Sample : 0602004-11
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 18:36:56 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

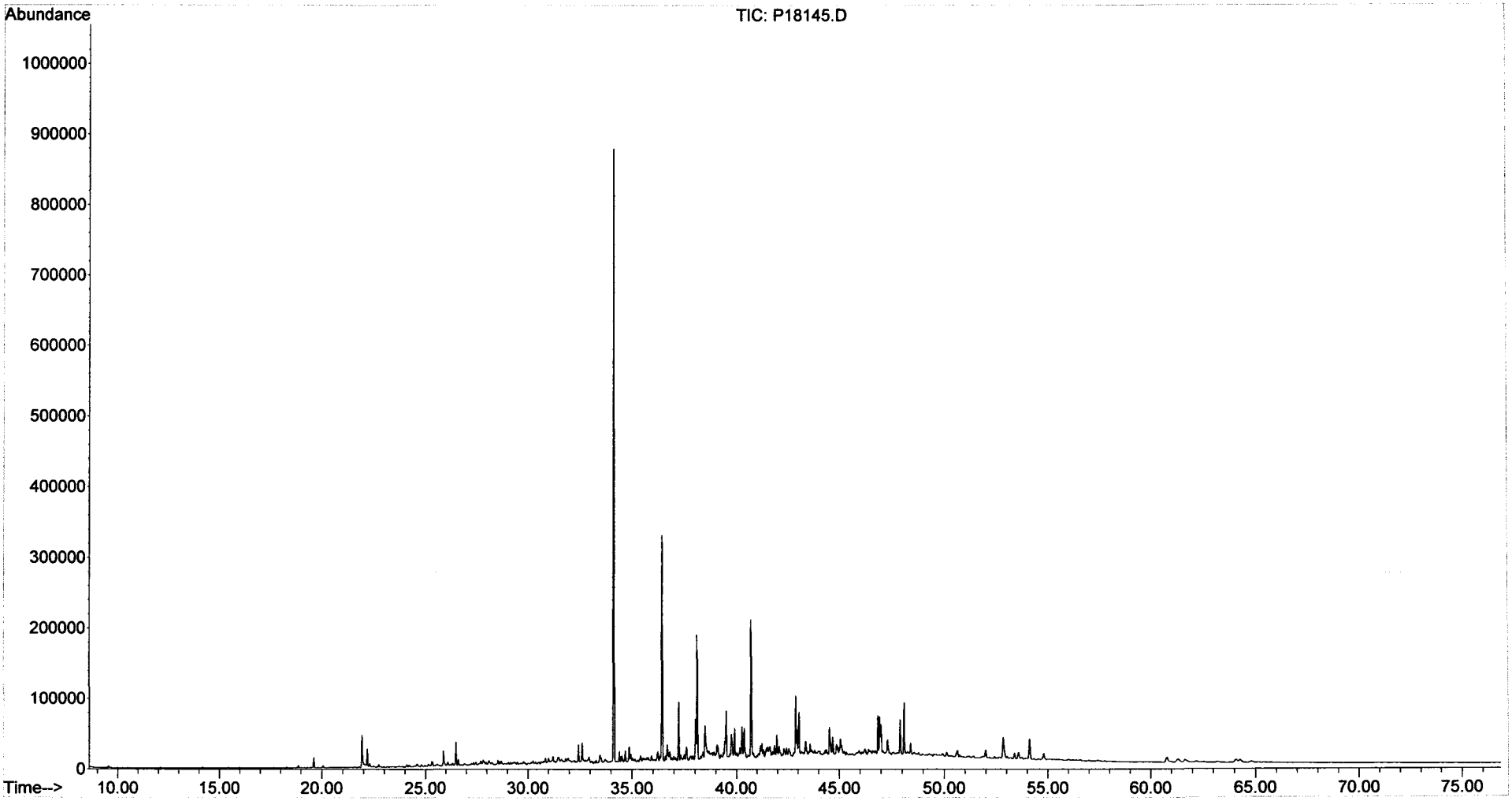
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
64) Naphthobenzothiophene	41.95	234	34604m	183.41 ng/ml	
65) Naphthobenzothiophene-2,1-	41.95	234	34936m	185.17 ng/mL	
66) Naphthobenzothiophene-1,2-	42.30	234	10457m	55.42 ng/mL	
67) Naphthobenzothiophene-2,3-	42.59	234	11683m	61.92 ng/mL	
68) C1-Naphthobenzothiophenes	43.36	248	84331m	446.97 ng/ml	
69) C2-Naphthobenzothiophenes	44.86	262	72555m	384.55 ng/ml	
70) C3-Naphthobenzothiophenes	46.97	276	47001m	249.11 ng/ml	
71) C4-Naphthobenzothiophenes	48.03	290	23628m	125.23 ng/mL	
73) Benz[a]anthracene	42.88	228	126885m	674.53 ng/mL	
74) Chrysene	43.04	228	116706m	607.18 ng/mL	
75) Chrysene/Triphenylene	43.04	228	118455m	616.28 ng/mL	
76) C1-Chrysenes	44.53	242	201372m	1047.66 ng/mL	
77) C2-Chrysenes	46.24	256	125562m	653.25 ng/mL	
78) BBF-d12 Surr BKGD	46.84	256	5293	27.54 ng/mL	100
79) C3-Chrysenes	47.82	270	81494m	423.98 ng/mL	
80) C4-Chrysenes	49.38	284	32903m	171.18 ng/mL	
82) Benzo[b]fluoranthene	46.93	252	107270m	555.26 ng/mL	
83) Benzo[k]fluoranthene	46.99	252	104521m	520.05 ng/mL	
84) Benzo[a]fluoranthene	47.31	252	41837m	208.16 ng/mL	
85) Benzo[e]pyrene	47.92	252	95946	512.97 ng/mL	97
86) Benzo[a]pyrene	48.11	252	147916m	799.28 ng/mL	
87) Perylene	48.40	252	35807m	197.94 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.84	276	75535m	463.81 ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	20436m	123.11 ng/mL	
90) Benzo[g,h,i]perylene	54.12	276	82997	442.26 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18145.D
Acq On : 11 Feb 2006 9:27 pm
Operator : AC
Sample : 0602004-11
Misc : 1X
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 18:36:56 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
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-83 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-11**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	46.6	10.57	2.92	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**390**	30,31-Bishomohopane-22S	**700**
C24 Tricyclic Terpane	**230**	30,31-Bishomohopane-22R	**370**
C25 Tricyclic Terpane	**240**	30,31-Trishomohopane-22S	**350**
C24 Tetracyclic Terpane	**220**	30,31-Trishomohopane-22R	**200**
C26 Tricyclic Terpane-22S	**100**	Tetrakishomohopane-22S	**200**
C26 Tricyclic Terpane-22R	**100**	Tetrakishomohopane-22R	**140**
C28 Tricyclic Terpane-22S	**120**	Pentakishomohopane-22S	**170**
C28 Tricyclic Terpane-22R	**120**	Pentakishomohopane-22R	**130**
C29 Tricyclic Terpane-22S	**140**	13b(H),17a(H)-20S-Diacholestane	**440**
C29 Tricyclic Terpane-22R	**130**	13b(H),17a(H)-20R-Diacholestane	**250**
18a-22,29,30-Trisnorneohopane-TS	**570**	13b,17a-20S-Methyldiacholestane	**190**
C30 Tricyclic Terpane-22S	**110**	14a(H),17a(H)-20S-Cholestane	**190**
C30 Tricyclic Terpane-22R	**90**	14a(H),17a(H)-20R-Cholestane	**750**
17a(H)-22,29,30-Trisnorhopane-TM	**560**	13b,17a-20R-Ethyldiacholestane	**140**
17a/b,21b/a 28,30-Bisnorhopane	**160**	13a,17b-20S-Ethyldiacholestane	**36**
17a(H),21b(H)-25-Norhopane	**48**	14a,17a-20S-Methylcholestane	**180**
30-Norhopane	**1800**	14a,17a-20R-Methylcholestane	**300**
18a(H)-30-Norneohopane-C29Ts	**490**	14a(H),17a(H)-20S-Ethylcholestane	**280**
17a(H)-Diahopane	**100**	14a(H),17a(H)-20R-Ethylcholestane	**350**
30-Normoretane	**330**	14b(H),17b(H)-20R-Cholestane	**350**
18a(H)&18b(H)-Oleananes	**280**	14b(H),17b(H)-20S-Cholestane	**370**
Hopane	**2500**	14b,17b-20R-Methylcholestane	**370**
Moretane	**370**	14b,17b-20S-Methylcholestane	**480**
30-Homohopane-22S	**840**	14b(H),17b(H)-20R-Ethylcholestane	**650**
30-Homohopane-22R	**730**	14b(H),17b(H)-20S-Ethylcholestane	**410**

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

N/A - Not Applicable

02/21/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28231.D
Acq On : 12 Feb 2006 11:41 am
Operator : AC
Sample : 0602004-11
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Feb 17 11:22:17 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 2/17/06

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	74570	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	44.23	217	210935	6651.29	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 665.13%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.97	191	306653m	4166.07	ng/mL	
84) Hopane (T19)	52.97	191	306264m	4160.79	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	48769	662.56	ng/ml	100
86) C24 Tricyclic Terpane (T5)	41.97	191	28548	387.84	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.46	191	29769m	404.43	ng/ml	
88) C24 Tetracyclic Terpane (T	44.79	191	27131	368.59	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.51	191	12983m	176.38	ng/ml	
90) C26 Tricyclic Terpane-22R	44.61	191	12358	167.89	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.89	191	14363m	195.13	ng/ml	
92) C28 Tricyclic Terpane-22R	47.06	191	15001m	203.80	ng/ml	
93) C29 Tricyclic Terpane-22S	47.60	191	17872	242.80	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.80	191	16009m	217.49	ng/ml	
95) 18a-22,29,30-Trisnorneohop	49.00	191	70434	956.89	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.07	191	13293	180.59	ng/mL	100
97) C30 Tricyclic Terpane-22R	49.32	191	11168	151.72	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.58	191	69784m	948.06	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.83	191	19593m	266.18	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.59	191	5923m	80.47	ng/ml	
101) 30-Norhopane (T15)	51.53	191	222886	3028.05	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.65	191	61016m	828.94	ng/ml	
103) 17a(H)-Diahopane (X)	51.76	191	12684m	172.32	ng/ml	
104) 30-Normoretane (T17)	52.35	191	40680	552.66	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.78	191	34323m	466.30	ng/ml	
106) Moretane (T20)	53.70	191	45593m	619.41	ng/ml	
107) 30-Homohopane-22S (T21)	54.87	191	103972	1412.52	ng/ml	100
108) 30-Homohopane-22R (T22)	55.11	191	90628	1231.24	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.51	191	86448	1174.45	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.93	191	46404	630.43	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.79	191	43200m	586.90	ng/ml	
112) 30,31-Trishomohopane-22R (	59.45	191	25424	345.40	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.60	191	24460	332.30	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.57	191	17157	233.09	ng/ml	100
115) Pentakishomohopane-22S (T3	64.96	191	20666m	280.76	ng/ml	
116) Pentakishomohopane-22R (T3	66.33	191	16524m	224.49	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.73	217	23556m	742.78	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.15	217	13214	416.67	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.85	217	10096	318.35	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.75	217	10026m	316.14	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.29	217	40338m	1271.95	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.57	217	7477m	235.77	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28231.D
Acq On : 12 Feb 2006 11:41 am
Operator : AC
Sample : 0602004-11
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Feb 17 11:22:17 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

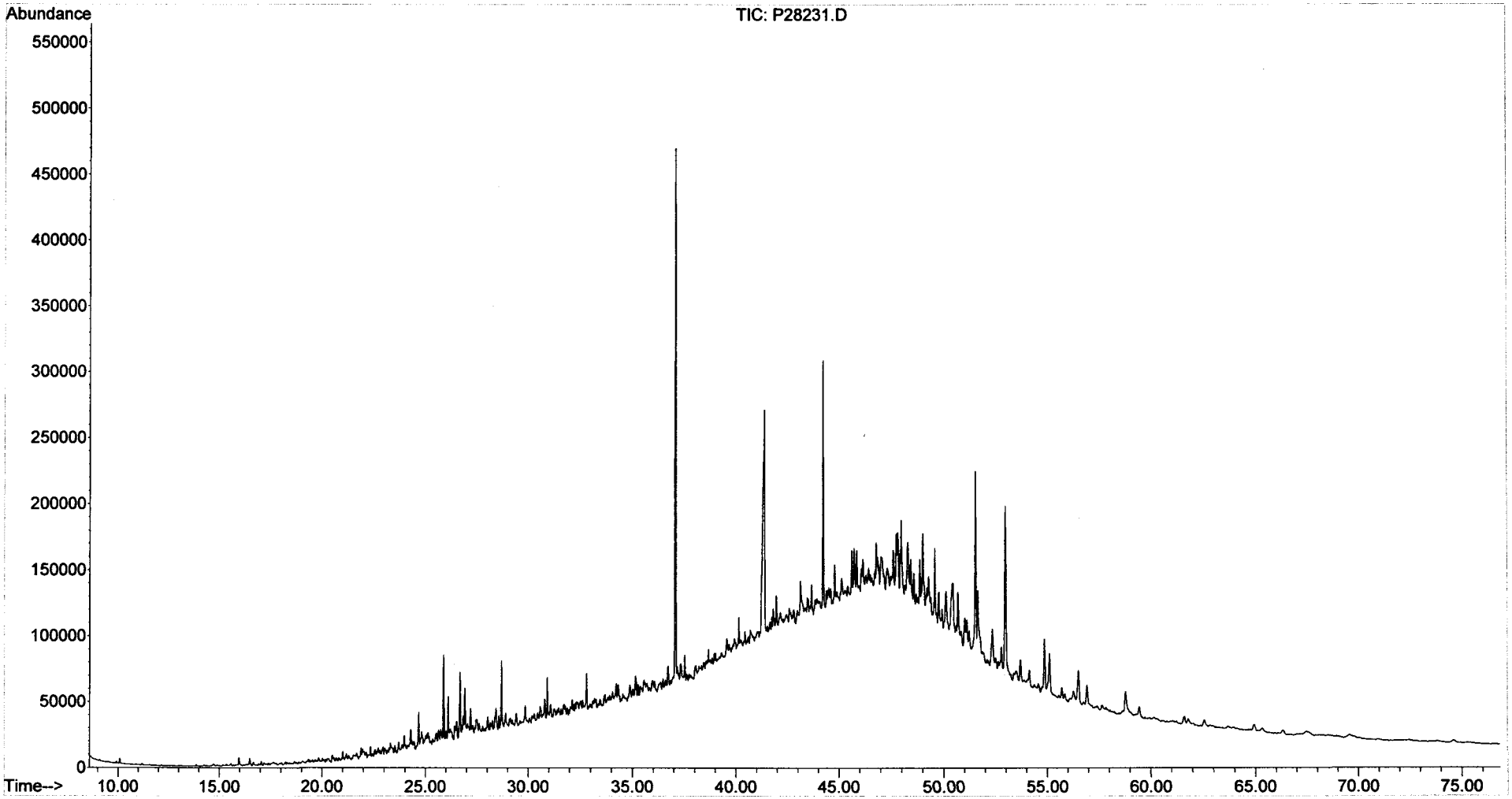
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.85	217	1929	60.83	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.01	217	9860m	310.91	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.77	217	15890m	501.05	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.13	217	14821m	467.34	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.09	217	18517m	583.89	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.85	218	18530	584.30	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.93	218	19755m	622.92	ng/ml	
131) 14b,17b-20R-Methylcholesta	49.20	218	20019m	631.25	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.28	218	25476m	803.32	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.40	218	34816m	1097.83	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.43	218	22079m	696.20	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 : P28231.D
Acq On : 12 Feb 2006 11:41 am
Operator : AC
Sample : 0602004-11
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Feb 17 11:22:17 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: **GC-SED-82 (12-12.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-12**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/11/06	79.9	4.95	35	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**500000**	E	Fluoranthene	**110000**	E
C1-Naphthalenes	**470000**	E	Pyrene	**190000**	E
C2-Naphthalenes	**380000**	E	C1-Fluoranthenes/Pyrenes	**310000**	
C3-Naphthalenes	**190000**		C2-Fluoranthenes/Pyrenes	**180000**	
C4-Naphthalenes	**74000**		C3-Fluoranthenes/Pyrenes	**87000**	
Biphenyl	**38000**		C4-Fluoranthenes/Pyrenes	**30000**	
Dibenzofuran	**14000**		Naphthobenzothiophenes	**40000**	
Acenaphthylene	**53000**		C1-Naphthobenzothiophenes	**58000**	
Acenaphthene	**170000**	E	C2-Naphthobenzothiophenes	**45000**	
Fluorene	**100000**	E	C3-Naphthobenzothiophenes	**24000**	
C1-Fluorenes	**120000**		C4-Naphthobenzothiophenes	**11000**	
C2-Fluorenes	**120000**		Benz[a]anthracene	**74000**	
C3-Fluorenes	**68000**		Chrysene/Triphenylene	**82000**	
Anthracene	**120000**	E	C1-Chrysenes	**120000**	
Phenanthrene	**350000**	E	C2-Chrysenes	**73000**	
C1-Phenanthrenes/Anthracenes	**410000**	E	C3-Chrysenes	**46000**	
C2-Phenanthrenes/Anthracenes	**290000**		C4-Chrysenes	**15000**	
C3-Phenanthrenes/Anthracenes	**140000**		Benzo[b]fluoranthene	**26000**	
C4-Phenanthrenes/Anthracenes	**38000**		Benzo[k]fluoranthene	**31000**	
Retene	**4900**		Benzo[a]fluoranthene	**18000**	
Dibenzothiophene	**54000**		Benzo[e]pyrene	**32000**	
C1-Dibenzothiophenes	**96000**		Benzo[a]pyrene	**56000**	
C2-Dibenzothiophenes	**100000**		Perylene	**11000**	
C3-Dibenzothiophenes	**64000**		Indeno[1,2,3-cd]pyrene	**26000**	
C4-Dibenzothiophenes	**24000**		Dibenz[a,h]anthracene	**9100**	
Benzo(b)fluorene	**39000**		Benzo[g,h,i]perylene	**25000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	122	50-130
Benzo[b]fluoranthene-d12	109	50-130

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

02/21/06 11:58

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-82 (12-12.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-12**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/11/06	79.9	4.95	35	1	AC

Parameter	Result
Carbazole	**3500**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	122	50-130
Benzo[b]fluoranthene-d12	109	50-130

N/A - Not Applicable

02/21/06 11:59

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18147.D
Acq On : 11 Feb 2006 11:01 pm
Operator : AC
Sample : 0602004-12
Misc : 1X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 18:46:12 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 for WP 2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	36083m	500.00 ng/mL	-0.02
72) Chrysene-d12	42.97	240	64929m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	43338m	560.25 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.03%		
58) Pyrene-d10	38.05	212	111120m	698.68 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 69.87%		
81) Benzo[b]fluoranthene-d12	46.87	264	80257m	620.72 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 62.07%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.64	128	10316803m	55986.96 ng/mL E	
10) C1-Naphthalenes	22.33	142	9765402m	52994.63 ng/mL E	
11) C2-Naphthalenes	25.16	156	7906300m	42905.71 ng/mL E	
12) C3-Naphthalenes	27.48	170	3958533m	21482.07 ng/mL	
13) C4-Naphthalenes	30.25	184	1535173m	8331.04 ng/mL	
15) 2-Methylnaphthalene	22.33	142	5735495	49165.50 ng/mL# E	100
16) 1-Methylnaphthalene	22.75	142	4022668	36627.85 ng/mL# E	100
22) Biphenyl	24.19	154	625303m	4311.45 ng/mL	
23) 2,6-Dimethylnaphthalene	24.82	156	1292472m	13350.09 ng/mL E	
24) Dibenzofuran	27.26	168	253017m	1552.94 ng/mL	
25) Acenaphthylene	25.89	152	1060005m	5999.38 ng/mL	
26) Acenaphthene	26.63	153	2120492	19320.82 ng/mL E	100
27) 2,3,5-Trimethylnaphthalene	28.19	170	264995m	3049.10 ng/mL	
28) Fluorene	28.65	166	1394873m	11332.38 ng/mL E	
29) C1-Fluorenes	30.88	180	1662425m	13506.06 ng/mL	
30) C2-Fluorenes	33.04	194	1599365m	12993.74 ng/mL	
31) C3-Fluorenes	35.04	208	938470m	7624.42 ng/mL	
32) Dibenzothiophene	31.97	184	1115701m	6146.47 ng/mL	
36) OTP	34.16	198	12863m	70.86 ng/mL	
37) C1-Dibenzothiophenes	33.74	198	1981100m	10914.01 ng/mL	
38) C2-Dibenzothiophenes	35.42	212	2093219m	11531.68 ng/mL	
39) C3-Dibenzothiophenes	37.23	226	1315174m	7245.38 ng/mL	
40) C4-Dibenzothiophenes	38.93	240	481962m	2655.16 ng/mL	
41) Phenanthrene	32.49	178	7195232m	39422.01 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.54	192	8499748m	46569.34 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.71	206	5981198m	32770.43 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2801187m	15347.45 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	773512m	4238.00 ng/mL	
52) Retene	39.46	234	21021m	550.84 ng/mL	
53) Anthracene	32.65	178	2216015m	13122.59 ng/mL E	
54) Carbazole	33.30	167	61835m	395.64 ng/mL	
55) 1-Methylphenanthrene	34.98	192	1398245m	11188.25 ng/mL E	
56) Fluoranthene	37.24	202	2388820m	12292.29 ng/mL E	
57) Benzo(b)fluorene	39.77	216	497571m	4387.18 ng/mL	
59) Pyrene	38.13	202	4143268m	20962.54 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.52	216	6995699m	35394.20 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.99	230	4122063m	20855.26 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1951886m	9875.42 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	659354m	3335.95 ng/mL	
64) Naphthobenzothiophene	41.97	234	522066m	2823.40 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18147.D
Acq On : 11 Feb 2006 11:01 pm
Operator : AC
Sample : 0602004-12
Misc : 1X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 18:46:12 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

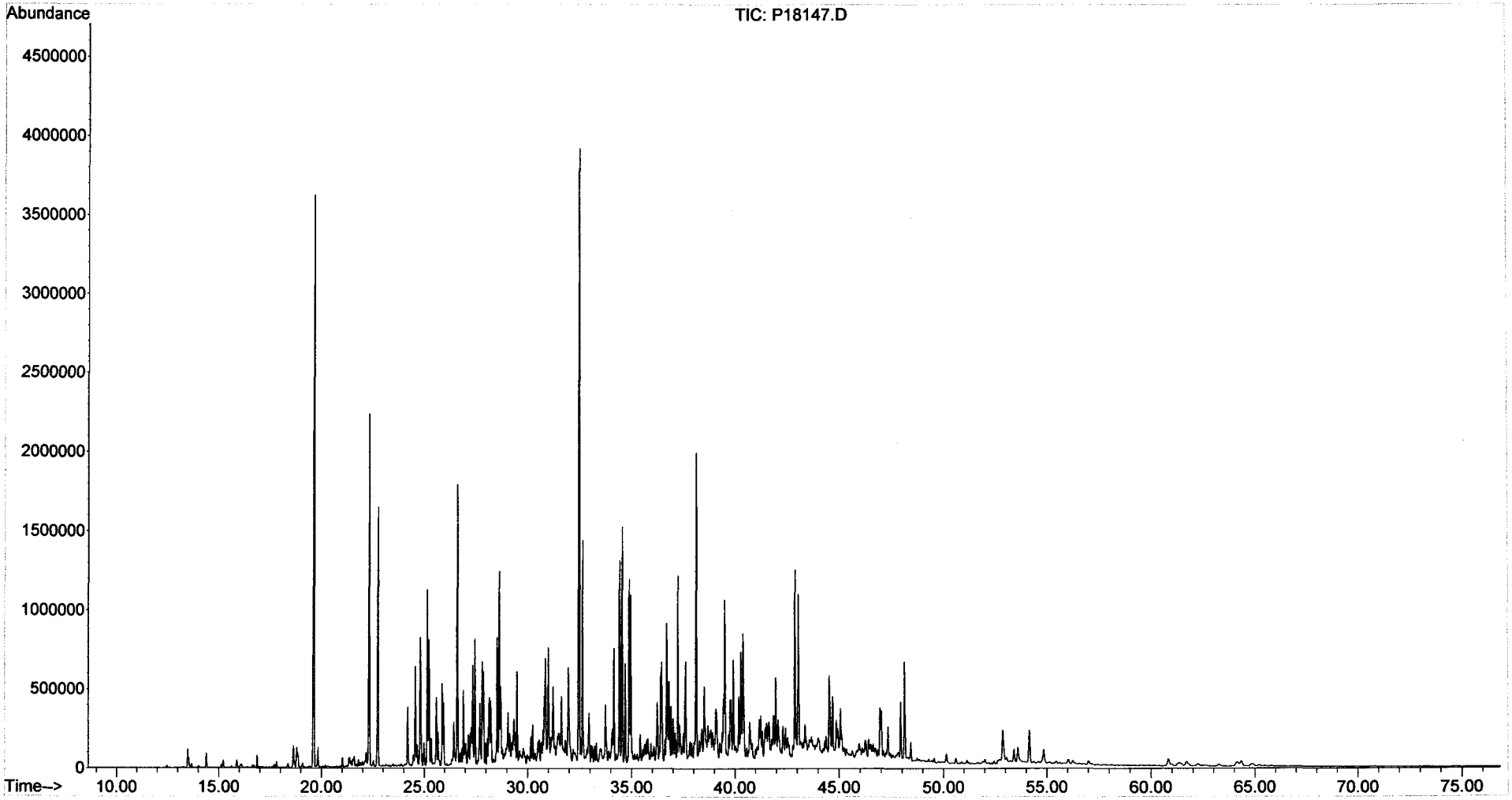
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.97	234	521341m	2819.48 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	154965m	838.07 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	169759m	918.08 ng/mL	
68) C1-Naphthobenzothiophenes	43.37	248	1215030m	6571.05 ng/ml	
69) C2-Naphthobenzothiophenes	44.88	262	945090m	5111.18 ng/ml	
70) C3-Naphthobenzothiophenes	46.99	276	504137m	2726.44 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	222933m	1205.65 ng/mL	
73) Benz[a]anthracene	42.90	228	1658148m	8389.32 ng/mL	
74) Chrysene	43.06	228	1868947m	9254.08 ng/mL	
75) Chrysene/Triphenylene	43.06	228	1866380m	9241.36 ng/mL	
76) C1-Chrysenes	44.55	242	2818861m	13957.57 ng/mL	
77) C2-Chrysenes	46.25	256	1690092m	8368.48 ng/mL	
78) BBF-d12 Surr BKGD	46.85	256	25356	125.55 ng/mL	100
79) C3-Chrysenes	47.83	270	1059348m	5245.35 ng/mL	
80) C4-Chrysenes	49.31	284	343128m	1699.00 ng/mL	
82) Benzo[b]fluoranthene	46.95	252	585245	2883.16 ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	734728	3479.25 ng/mL	96
84) Benzo[a]fluoranthene	47.33	252	427708m	2025.38 ng/mL	
85) Benzo[e]pyrene	47.94	252	720486	3666.09 ng/mL	96
86) Benzo[a]pyrene	48.13	252	1220722	6277.88 ng/mL	92
87) Perylene	48.43	252	238944m	1257.12 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.86	276	497970m	2910.10 ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	179705m	1030.29 ng/mL	
90) Benzo[g,h,i]perylene	54.15	276	561241	2846.30 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18147.D
Acq On : 11 Feb 2006 11:01 pm
Operator : AC
Sample : 0602004-12
Misc : 1X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 15 18:46:12 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-82 (12-12.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-12**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	79.9	4.95	5.39	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**280**	30,31-Bishomohopane-22S	**310**
C24 Tricyclic Terpane	**160**	30,31-Bishomohopane-22R	**220**
C25 Tricyclic Terpane	**170**	30,31-Trishomohopane-22S	**170**
C24 Tetracyclic Terpane	**190**	30,31-Trishomohopane-22R	**110**
C26 Tricyclic Terpane-22S	**66**	Tetrakishomohopane-22S	**110**
C26 Tricyclic Terpane-22R	**86**	Tetrakishomohopane-22R	**83**
C28 Tricyclic Terpane-22S	**87**	Pentakishomohopane-22S	**74**
C28 Tricyclic Terpane-22R	**86**	Pentakishomohopane-22R	**61**
C29 Tricyclic Terpane-22S	**97**	13b(H),17a(H)-20S-Diacholestane	**330**
C29 Tricyclic Terpane-22R	**87**	13b(H),17a(H)-20R-Diacholestane	**180**
18a-22,29,30-Trisnorneohopane-TS	**640**	13b,17a-20S-Methyldiacholestane	**120**
C30 Tricyclic Terpane-22S	**68**	14a(H),17a(H)-20S-Cholestane	**170**
C30 Tricyclic Terpane-22R	**44**	14a(H),17a(H)-20R-Cholestane	**540**
17a(H)-22,29,30-Trisnorhopane-TM	**440**	13b,17a-20R-Ethyldiacholestane	**82**
17a/b,21b/a 28,30-Bisnorhopane	**120**	13a,17b-20S-Ethyldiacholestane	**20**
17a(H),21b(H)-25-Norhopane	**40**	14a,17a-20S-Methylcholestane	**130**
30-Norhopane	**1200**	14a,17a-20R-Methylcholestane	**290**
18a(H)-30-Norneohopane-C29Ts	**570**	14a(H),17a(H)-20S-Ethylcholestane	**200**
17a(H)-Diahopane	**140**	14a(H),17a(H)-20R-Ethylcholestane	**260**
30-Normoretane	**250**	14b(H),17b(H)-20R-Cholestane	**280**
18a(H)&18b(H)-Oleananes	**300**	14b(H),17b(H)-20S-Cholestane	**270**
Hopane	**2000**	14b,17b-20R-Methylcholestane	**270**
Moretane	**270**	14b,17b-20S-Methylcholestane	**290**
30-Homohopane-22S	**520**	14b(H),17b(H)-20R-Ethylcholestane	**360**
30-Homohopane-22R	**450**	14b(H),17b(H)-20S-Ethylcholestane	**260**

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

N/A - Not Applicable

02/21/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28232.D
Acq On : 12 Feb 2006 1:17 pm
Operator : AC
Sample : 0602004-12
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Feb 17 11:26:24 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 2/17/06

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	59417	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	44.22	217	92732	3669.78	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 366.98%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	85802m	1462.95	ng/mL	
84) Hopane (T19)	52.95	191	86221m	1470.10	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	12098m	206.28	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	6964m	118.74	ng/ml	
87) C25 Tricyclic Terpane (T6)	43.44	191	7351m	125.34	ng/ml	
88) C24 Tetracyclic Terpane (T	44.78	191	8231	140.34	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	2861m	48.78	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	3704	63.15	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	3729	63.58	ng/ml	100
92) C28 Tricyclic Terpane-22R	47.05	191	3718m	63.39	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	4157	70.88	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.78	191	3743m	63.82	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	27686	472.06	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.06	191	2946m	50.23	ng/mL	
97) C30 Tricyclic Terpane-22R	49.31	191	1907m	32.52	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	18845m	321.31	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	4945m	84.31	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.58	191	1703m	29.04	ng/ml	
101) 30-Norhopane (T15)	51.51	191	52619	897.17	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	51.62	191	24659m	420.44	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	6256m	106.67	ng/ml	
104) 30-Normoretane (T17)	52.33	191	10642	181.45	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	12869m	219.42	ng/ml	
106) Moretane (T20)	53.68	191	11456m	195.33	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	22261	379.56	ng/ml	100
108) 30-Homohopane-22R (T22)	55.08	191	19537	333.11	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.50	191	13461	229.51	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.91	191	9675	164.96	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.76	191	7327	124.93	ng/ml	100
112) 30,31-Trishomohopane-22R (	59.42	191	4752	81.02	ng/ml	100
113) Tetrakishomohopane-22S (T3	61.57	191	4898	83.51	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.53	191	3584	61.11	ng/ml	100
115) Pentakishomohopane-22S (T3	64.93	191	3200	54.56	ng/ml	100
116) Pentakishomohopane-22R (T3	66.32	191	2608m	44.47	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	6118	242.11	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	46.14	217	3360m	132.97	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.84	217	2270	89.83	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	3184m	126.00	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	9987m	395.23	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.56	217	1517m	60.03	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28232.D
Acq On : 12 Feb 2006 1:17 pm
Operator : AC
Sample : 0602004-12
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Feb 17 11:26:24 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

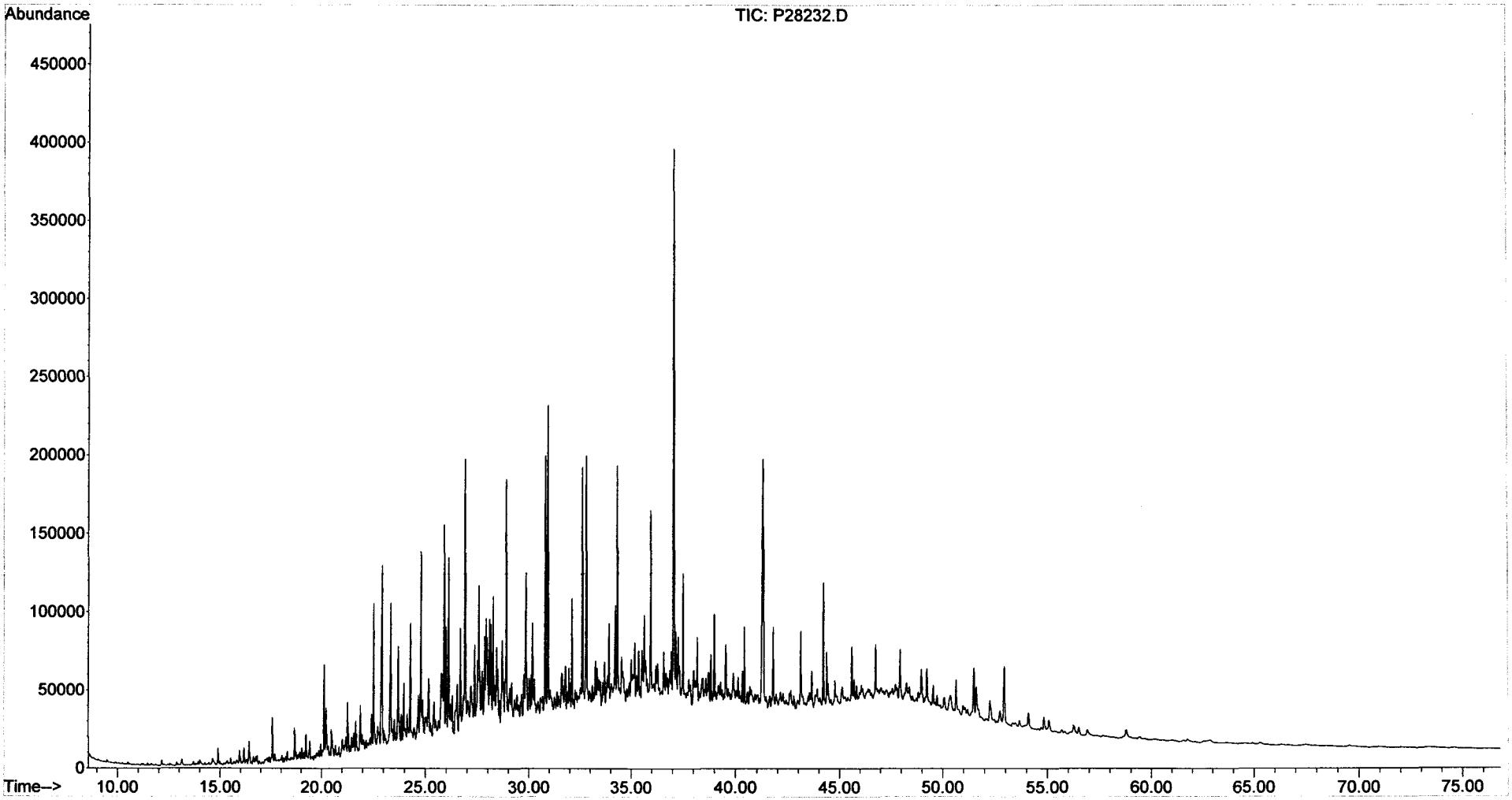
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	375	14.84	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	2350m	93.00	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	5433	215.01	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	3607m	142.74	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	4735m	187.38	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	5146	203.65	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	5085	201.23	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.18	218	5063m	200.36	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	5356m	211.96	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	6653m	263.29	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.42	218	4856m	192.17	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 : P28232.D
Acq On : 12 Feb 2006 1:17 pm
Operator : AC
Sample : 0602004-12
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Feb 17 11:26:24 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: **GC-SED-82 (12-12.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-12E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/10/06	79.9	4.95	35	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**510000**		Fluoranthene	**110000**	
C1-Naphthalenes	**470000**		Pyrene	**180000**	
C2-Naphthalenes	**370000**		C1-Fluoranthenes/Pyrenes	79	U
C3-Naphthalenes	150	U	C2-Fluoranthenes/Pyrenes	79	U
C4-Naphthalenes	150	U	C3-Fluoranthenes/Pyrenes	79	U
Biphenyl	80	U	C4-Fluoranthenes/Pyrenes	79	U
Dibenzofuran	100	U	Naphthobenzothiophenes	110	U
Acenaphthylene	160	U	C1-Naphthobenzothiophenes	110	U
Acenaphthene	**170000**		C2-Naphthobenzothiophenes	110	U
Fluorene	**98000**		C3-Naphthobenzothiophenes	110	U
C1-Fluorenes	100	U	C4-Naphthobenzothiophenes	110	U
C2-Fluorenes	100	U	Benz[a]anthracene	140	U
C3-Fluorenes	100	U	Chrysene/Triphenylene	96	U
Anthracene	**110000**		C1-Chrysenes	96	U
Phenanthrene	**340000**		C2-Chrysenes	96	U
C1-Phenanthrenes/Anthracenes	**400000**		C3-Chrysenes	96	U
C2-Phenanthrenes/Anthracenes	130	U	C4-Chrysenes	96	U
C3-Phenanthrenes/Anthracenes	130	U	Benzo[b]fluoranthene	94	U
C4-Phenanthrenes/Anthracenes	130	U	Benzo[k]fluoranthene	180	U
Retene	130	U	Benzo[a]fluoranthene	180	U
Dibenzothiophene	98	U	Benzo[e]pyrene	120	U
C1-Dibenzothiophenes	98	U	Benzo[a]pyrene	120	U
C2-Dibenzothiophenes	98	U	Perylene	150	U
C3-Dibenzothiophenes	98	U	Indeno[1,2,3-cd]pyrene	210	U
C4-Dibenzothiophenes	98	U	Dibenz[a,h]anthracene	170	U
Benzo(b)fluorene	89	U	Benzo[g,h,i]perylene	160	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	123	50-130
Benzo[b]fluoranthene-d12	109	50-130

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

02/17/06 13:07

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18099.D
Acq On : 10 Feb 2006 8:52 am
Operator : AC
Sample : 0602004-12-RE
Misc : 10X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 15 19:48:46 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 Forulo
2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	48183m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	82392m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	5863m	56.76	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.68%#			
58) Pyrene-d10	38.02	212	14876m	70.05	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.00%#			
81) Benzo[b]fluoranthene-d12	46.84	264	10191m	62.11	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.21%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

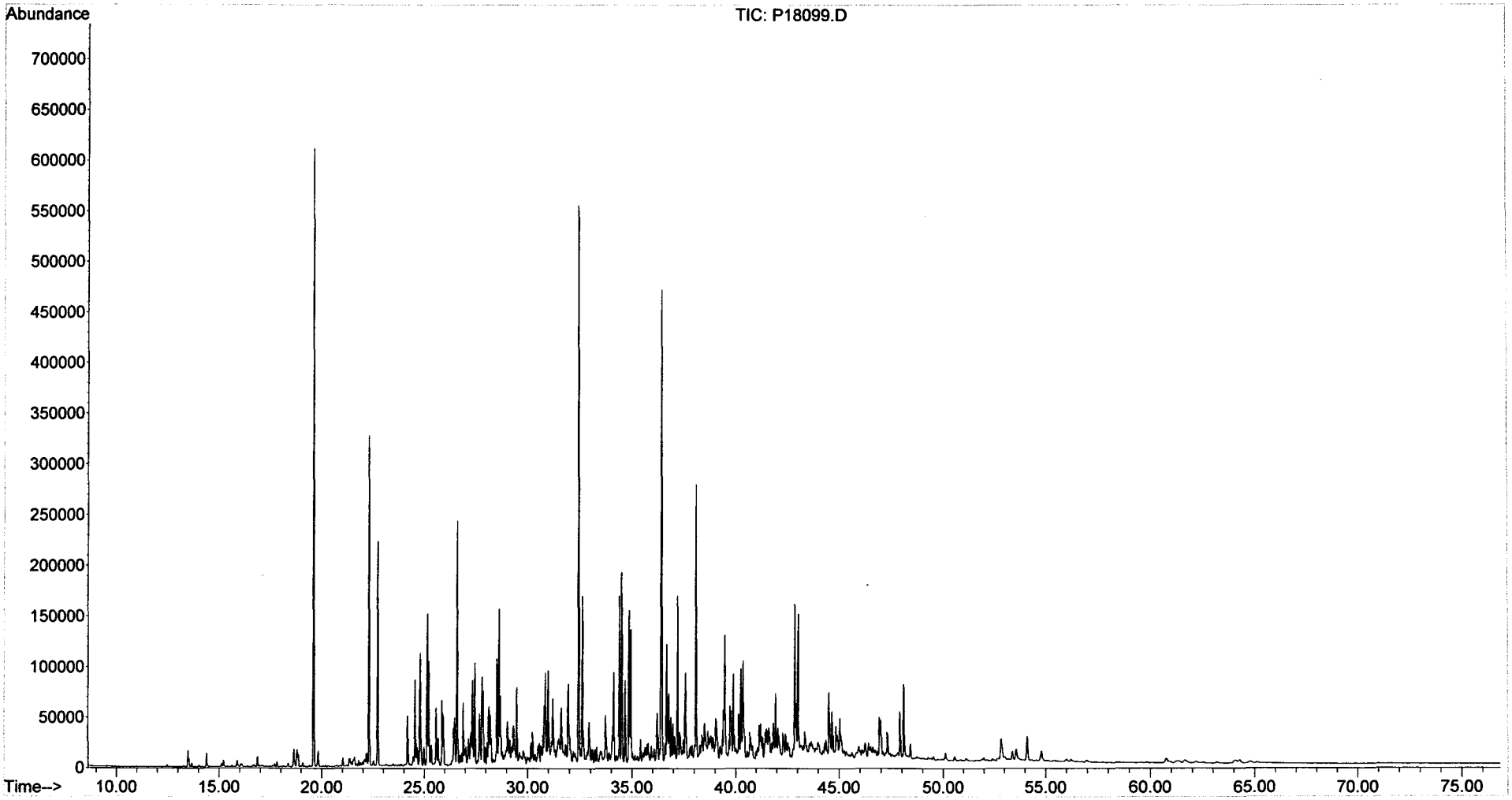
Target Compounds						Qvalue
9) Naphthalene	19.61	128	1429776m	5810.57	ng/mL	
10) C1-Naphthalenes	22.29	142	1304829m	5302.79	ng/mL	
11) C2-Naphthalenes	25.14	156	1036251m	4211.29	ng/mL	
15) 2-Methylnaphthalene	22.29	142	770564	4946.60	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	533276	3636.29	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	134513m	1040.49	ng/mL	
26) Acenaphthene	26.62	153	279962	1910.28	ng/mL	100
28) Fluorene	28.62	166	181851m	1106.40	ng/mL	
41) Phenanthrene	32.45	178	922371m	3784.50	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.52	192	1092119m	4480.98	ng/mL	
53) Anthracene	32.62	178	279736m	1240.52	ng/mL	
55) 1-Methylphenanthrene	34.95	192	180827m	1083.56	ng/mL	
56) Fluoranthene	37.22	202	317163m	1222.20	ng/mL	
59) Pyrene	38.10	202	544674m	2063.70	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18099.D
Acq On : 10 Feb 2006 8:52 am
Operator : AC
Sample : 0602004-12-RE
Misc : 10X
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 15 19:48:46 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: **GC-SED-77 (14.5-15.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-13**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	83.8	5.02	21	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	180000	E	Fluoranthene	110000	E
C1-Naphthalenes	160000	E	Pyrene	150000	E
C2-Naphthalenes	180000	E	C1-Fluoranthenes/Pyrenes	160000	
C3-Naphthalenes	100000		C2-Fluoranthenes/Pyrenes	76000	
C4-Naphthalenes	39000		C3-Fluoranthenes/Pyrenes	30000	
Biphenyl	24000		C4-Fluoranthenes/Pyrenes	10000	
Dibenzofuran	20000		Naphthobenzothiophenes	17000	
Acenaphthylene	22000		C1-Naphthobenzothiophenes	20000	
Acenaphthene	110000	E	C2-Naphthobenzothiophenes	14000	
Fluorene	78000	E	C3-Naphthobenzothiophenes	7400	
C1-Fluorenes	61000		C4-Naphthobenzothiophenes	3300	
C2-Fluorenes	53000		Benz[a]anthracene	55000	E
C3-Fluorenes	30000		Chrysene/Triphenylene	54000	E
Anthracene	93000	E	C1-Chrysenes	58000	
Phenanthrene	300000	E	C2-Chrysenes	30000	
C1-Phenanthrenes/Anthracenes	230000	E	C3-Chrysenes	17000	
C2-Phenanthrenes/Anthracenes	140000		C4-Chrysenes	5400	
C3-Phenanthrenes/Anthracenes	58000		Benzo[b]fluoranthene	23000	
C4-Phenanthrenes/Anthracenes	16000		Benzo[k]fluoranthene	22000	
Retene	5000		Benzo[a]fluoranthene	11000	
Dibenzothiophene	31000		Benzo[e]pyrene	24000	
C1-Dibenzothiophenes	40000		Benzo[a]pyrene	41000	
C2-Dibenzothiophenes	39000		Perylene	7600	
C3-Dibenzothiophenes	23000		Indeno[1,2,3-cd]pyrene	20000	
C4-Dibenzothiophenes	8300		Dibenz[a,h]anthracene	5600	
Benzo(b)fluorene	24000		Benzo[g,h,i]perylene	19000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	112	50-130
Benzo[b]fluoranthene-d12	108	50-130

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

02/21/06 12:00

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-77 (14.5-15.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-13**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	83.8	5.02	21	1	AC

Parameter	Result
Carbazole	**3100**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	112	50-130
Benzo[b]fluoranthene-d12	108	50-130

N/A - Not Applicable

02/21/06 12:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18149.D
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : 0602004-13
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 14:39:03 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

MSG for WO
2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	37455m	500.00 ng/mL	-0.01
72) Chrysene-d12	42.97	240	64426m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	62551	779.00 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 77.90%		
58) Pyrene-d10	38.05	212	176036m	1066.30 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 106.63%		
81) Benzo[b]fluoranthene-d12	46.87	264	131458m	1024.65 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 102.47%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.63	128	7031788m	36762.10 ng/mL E	
10) C1-Naphthalenes	22.74	142	6223456m	32536.15 ng/mL E	
11) C2-Naphthalenes	25.16	156	7046438m	36838.69 ng/mL E	
12) C3-Naphthalenes	27.48	170	3864678m	20204.49 ng/mL	
13) C4-Naphthalenes	30.25	184	1488532m	7782.03 ng/mL	
15) 2-Methylnaphthalene	22.32	142	2870555	23705.45 ng/mL# E	100
16) 1-Methylnaphthalene	22.74	142	3354379	29424.04 ng/mL# E	100
22) Biphenyl	24.19	154	724181m	4810.31 ng/mL	
23) 2,6-Dimethylnaphthalene	24.82	156	1281034m	12747.25 ng/mL E	
24) Dibenzofuran	27.26	168	687666m	4066.07 ng/mL	
25) Acenaphthylene	25.89	152	808008m	4405.62 ng/mL	
26) Acenaphthene	26.64	153	2483312	21797.82 ng/mL E	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	254790m	2824.29 ng/mL	
28) Fluorene	28.65	166	2005090m	15693.26 ng/mL E	
29) C1-Fluorenes	30.88	180	1565492m	12252.66 ng/mL	
30) C2-Fluorenes	33.06	194	1364869m	10682.44 ng/mL	
31) C3-Fluorenes	35.04	208	775833m	6072.22 ng/mL	
32) Dibenzothiophene	31.97	184	1160259m	6157.80 ng/mL	
36) OTP	34.17	198	19279m	102.32 ng/mL	
37) C1-Dibenzothiophenes	33.74	198	1543419m	8191.34 ng/mL	
38) C2-Dibenzothiophenes	35.42	212	1457662m	7736.20 ng/mL	
39) C3-Dibenzothiophenes	37.24	226	856691m	4546.69 ng/mL	
40) C4-Dibenzothiophenes	38.93	240	312172m	1656.78 ng/mL	
41) Phenanthrene	32.50	178	11217960	59210.77 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.55	192	8781695m	46351.65 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.71	206	5282275m	27880.97 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2210954m	11669.88 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	608287m	3210.67 ng/mL	
52) Retene	39.46	234	39995m	1009.65 ng/mL	
53) Anthracene	32.66	178	3263286	18616.37 ng/mL E	100
54) Carbazole	33.30	167	99790m	615.09 ng/mL	
55) 1-Methylphenanthrene	34.99	192	1411754m	10882.56 ng/mL E	
56) Fluoranthene	37.26	202	4390274m	21763.75 ng/mL E	
57) Benzo(b)fluorene	39.77	216	573297m	4869.71 ng/mL	
59) Pyrene	38.15	202	6164873m	30048.16 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.52	216	6581475m	32078.72 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.99	230	3146190m	15334.82 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1219682m	5944.84 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	427485m	2083.60 ng/mL	
64) Naphthobenzothiophene	41.97	234	410464m	2138.53 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18149.D
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : 0602004-13
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 14:39:03 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

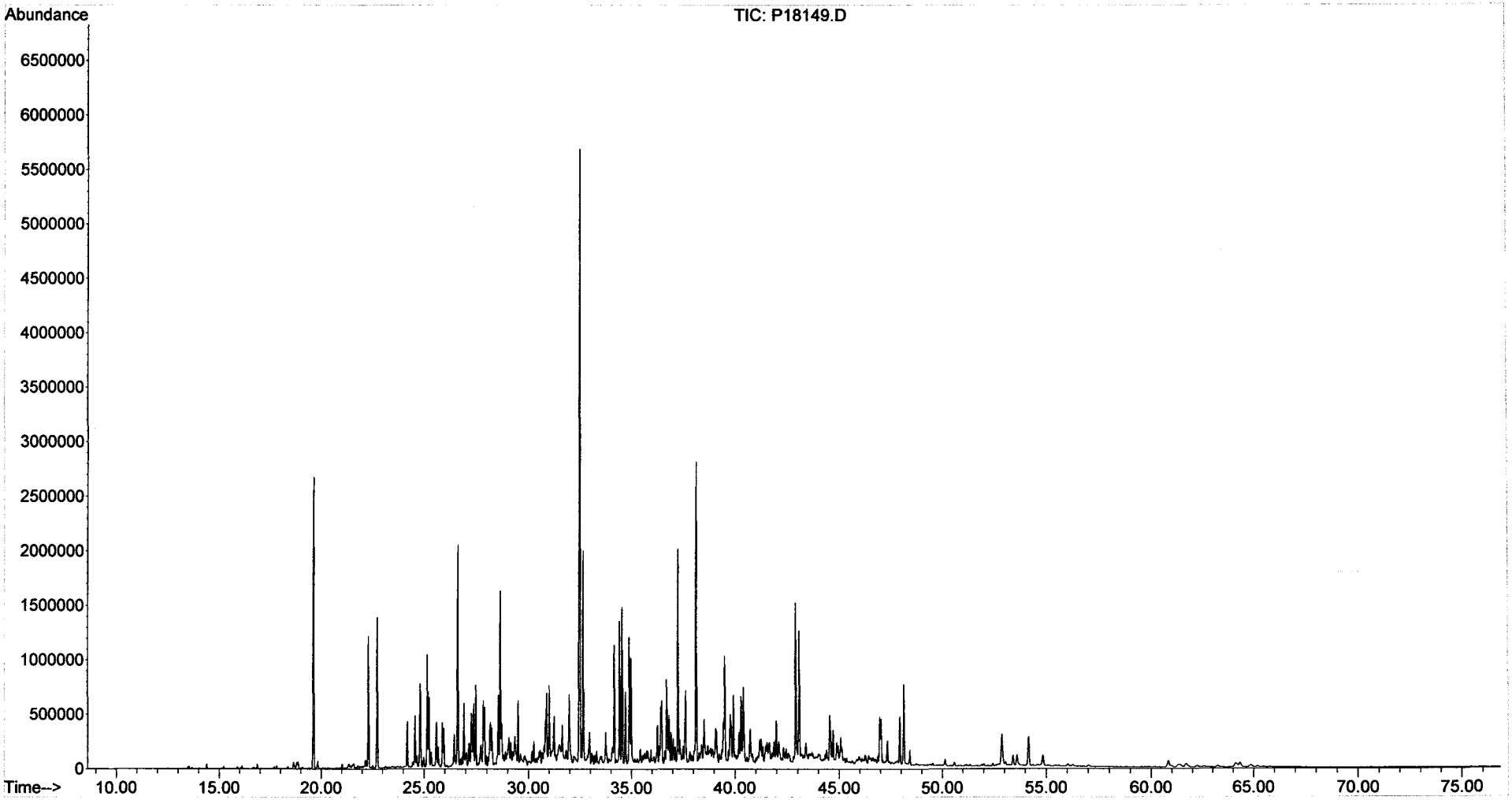
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.97	234	410972m	2141.18 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	114545m	596.78 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	132528m	690.48 ng/mL	
68) C1-Naphthobenzothiophenes	43.37	248	763118m	3975.87 ng/ml	
69) C2-Naphthobenzothiophenes	44.88	262	547071m	2850.26 ng/ml	
70) C3-Naphthobenzothiophenes	46.99	276	283972m	1479.50 ng/ml	
71) C4-Naphthobenzothiophenes	48.06	290	126905m	661.18 ng/mL	
73) Benz[a]anthracene	42.92	228	2176004m	11095.34 ng/mL E	
74) Chrysene	43.08	228	2159182m	10774.64 ng/mL E	
75) Chrysene/Triphenylene	43.08	228	2151805m	10737.83 ng/mL	
76) C1-Chrysenes	44.55	242	2333863m	11646.33 ng/mL	
77) C2-Chrysenes	46.25	256	1214178m	6058.93 ng/mL	
78) BBF-d12 Surr BKGD	46.85	256	18143	90.54 ng/mL	100
79) C3-Chrysenes	47.83	270	700455m	3495.38 ng/mL	
80) C4-Chrysenes	49.39	284	214893m	1072.35 ng/mL	
82) Benzo[b]fluoranthene	46.95	252	931261	4623.60 ng/mL	99
83) Benzo[k]fluoranthene	47.03	252	921065	4395.69 ng/mL	98
84) Benzo[a]fluoranthene	47.33	252	444296m	2120.36 ng/mL	
85) Benzo[e]pyrene	47.94	252	916527	4700.03 ng/mL	96
86) Benzo[a]pyrene	48.13	252	1594108m	8262.12 ng/mL	
87) Perylene	48.43	252	288756m	1531.05 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.88	276	697353m	4107.10 ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	195019m	1126.82 ng/mL	
90) Benzo[g,h,i]perylene	54.15	276	755178	3859.74 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18149.D
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : 0602004-13
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 14:39:03 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: **GC-SED-77 (14.5-15.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-13**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	83.8	5.02	2.8	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**140**	30,31-Bishomohopane-22S	**150**
C24 Tricyclic Terpane	**91**	30,31-Bishomohopane-22R	**95**
C25 Tricyclic Terpane	**78**	30,31-Trishomohopane-22S	**72**
C24 Tetracyclic Terpane	**97**	30,31-Trishomohopane-22R	**44**
C26 Tricyclic Terpane-22S	**34**	Tetrakishomohopane-22S	**45**
C26 Tricyclic Terpane-22R	**34**	Tetrakishomohopane-22R	**33**
C28 Tricyclic Terpane-22S	**36**	Pentakishomohopane-22S	**32**
C28 Tricyclic Terpane-22R	**37**	Pentakishomohopane-22R	**26**
C29 Tricyclic Terpane-22S	**38**	13b(H),17a(H)-20S-Diacholestane	**170**
C29 Tricyclic Terpane-22R	**36**	13b(H),17a(H)-20R-Diacholestane	**96**
18a-22,29,30-Trisnorneohopane-TS	**250**	13b,17a-20S-Methyldiacholestane	**66**
C30 Tricyclic Terpane-22S	**29**	14a(H),17a(H)-20S-Cholestane	**96**
C30 Tricyclic Terpane-22R	**18**	14a(H),17a(H)-20R-Cholestane	**260**
17a(H)-22,29,30-Trisnorhopane-TM	**220**	13b,17a-20R-Ethyldiacholestane	**37**
17a/b,21b/a 28,30-Bisnorhopane	**49**	13a,17b-20S-Ethyldiacholestane	**9.8**
17a(H),21b(H)-25-Norhopane	**14**	14a,17a-20S-Methylcholestane	**58**
30-Norhopane	**540**	14a,17a-20R-Methylcholestane	**130**
18a(H)-30-Norneohopane-C29Ts	**240**	14a(H),17a(H)-20S-Ethylcholestane	**77**
17a(H)-Diahopane	**65**	14a(H),17a(H)-20R-Ethylcholestane	**110**
30-Normoretane	**120**	14b(H),17b(H)-20R-Cholestane	**120**
18a(H)&18b(H)-Oleananes	**120**	14b(H),17b(H)-20S-Cholestane	**120**
Hopane	**840**	14b,17b-20R-Methylcholestane	**110**
Moretane	**120**	14b,17b-20S-Methylcholestane	**140**
30-Homohopane-22S	**220**	14b(H),17b(H)-20R-Ethylcholestane	**160**
30-Homohopane-22R	**200**	14b(H),17b(H)-20S-Ethylcholestane	**120**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	100	50-130

N/A - Not Applicable

02/21/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28233.D
Acq On : 12 Feb 2006 2:51 pm
Operator : AC
Sample : 0602004-13
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 17 11:30:29 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

AMS 2/17/06

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	59558	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	181192	7153.53	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 715.35%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.95	191	74440m	1266.22	ng/mL	
84) Hopane (T19)	52.95	191	74134m	1261.02	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	12718m	216.33	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	8049	136.91	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.45	191	6854m	116.59	ng/ml	
88) C24 Tetracyclic Terpane (T	44.79	191	8601	146.30	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	3007m	51.15	ng/ml	
90) C26 Tricyclic Terpane-22R	44.60	191	2968	50.49	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.88	191	3162m	53.79	ng/ml	
92) C28 Tricyclic Terpane-22R	47.05	191	3272m	55.66	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	3395	57.75	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.78	191	3190m	54.26	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	22472	382.25	ng/ml	100
96) C30 Tricyclic Terpane-22S	49.06	191	2535m	43.12	ng/mL	
97) C30 Tricyclic Terpane-22R	49.30	191	1634m	27.79	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	49.56	191	19908m	338.63	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	50.79	191	4312m	73.35	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.57	191	1222m	20.79	ng/ml	
101) 30-Norhopane (T15)	51.51	191	48159m	819.18	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.61	191	21190m	360.44	ng/ml	
103) 17a(H)-Diahopane (X)	51.75	191	5734m	97.54	ng/ml	
104) 30-Normoretane (T17)	52.33	191	10302	175.24	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.76	191	10309m	175.36	ng/ml	
106) Moretane (T20)	53.68	191	10864m	184.80	ng/ml	
107) 30-Homohopane-22S (T21)	54.84	191	18983	322.90	ng/ml	100
108) 30-Homohopane-22R (T22)	55.09	191	17641	300.07	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.50	191	13169	224.00	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.91	191	8377	142.49	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.77	191	6393m	108.74	ng/ml	
112) 30,31-Trishomohopane-22R (	59.42	191	3878m	65.96	ng/ml	
113) Tetrakishomohopane-22S (T3	61.58	191	3950	67.19	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.55	191	2921	49.69	ng/ml	100
115) Pentakishomohopane-22S (T3	64.93	191	2800	47.63	ng/ml	100
116) Pentakishomohopane-22R (T3	66.32	191	2280m	38.78	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.72	217	6304m	248.88	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	3672	144.97	ng/ml	100
120) 13b,17a-20S-Methyldiachole	46.84	217	2525m	99.69	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.73	217	3638m	143.63	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	9971m	393.66	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.56	217	1415m	55.86	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28233.D
Acq On : 12 Feb 2006 2:51 pm
Operator : AC
Sample : 0602004-13
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 17 11:30:29 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

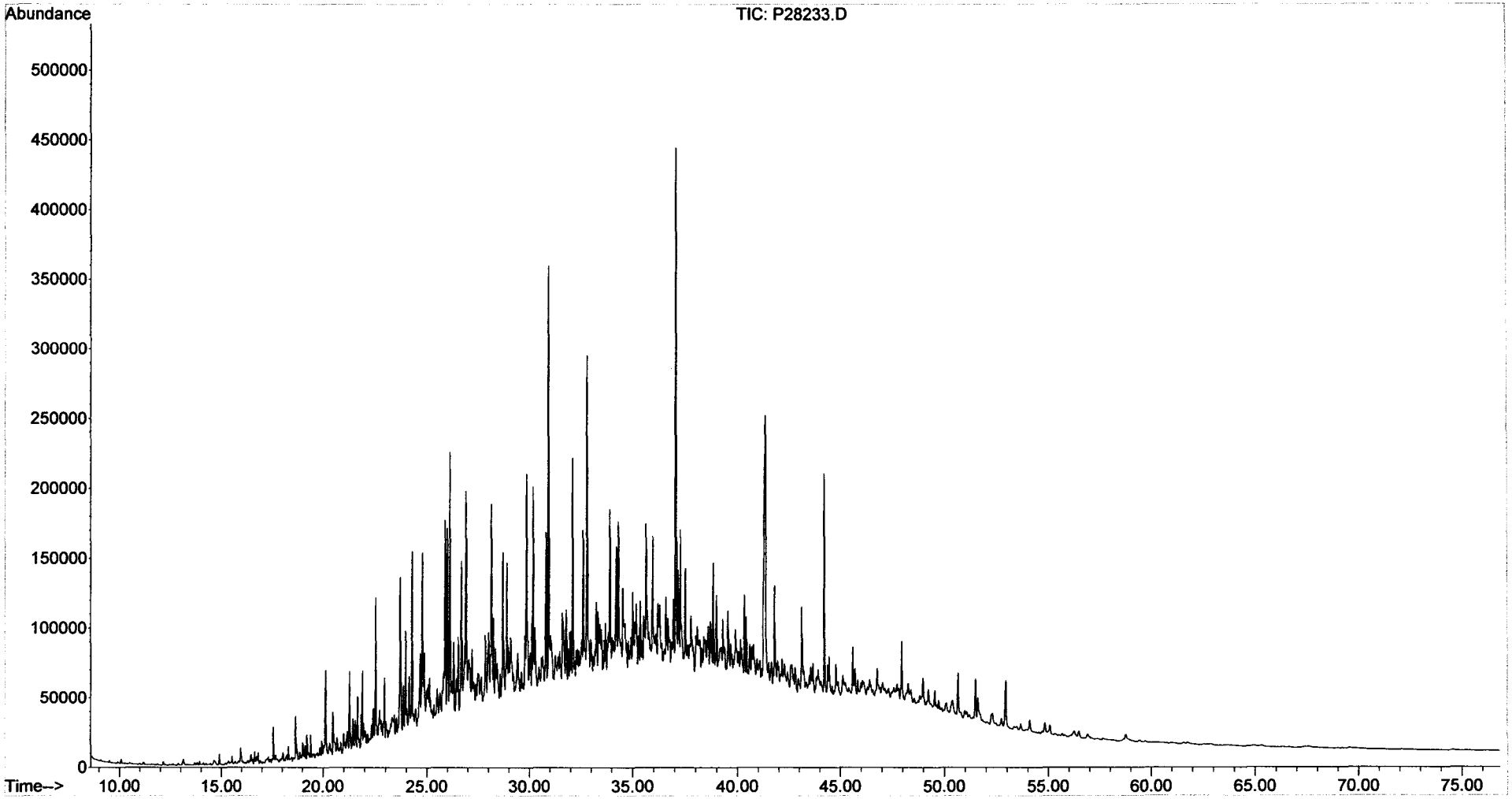
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	48.83	217	375	14.81	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.00	217	2222m	87.73	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.76	217	4871m	192.31	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	2921m	115.32	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.08	217	4223m	166.73	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.83	218	4453	175.81	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	4368	172.45	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.18	218	4323m	170.67	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.27	218	5134m	202.69	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.38	218	6125m	241.82	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.41	218	4454m	175.85	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 : P28233.D
Acq On : 12 Feb 2006 2:51 pm
Operator : AC
Sample : 0602004-13
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 17 11:30:29 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: **GC-SED-77 (14.5-15.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-13E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/10/06	83.8	5.02	21	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**190000**		Fluoranthene	**110000**	
C1-Naphthalenes	**160000**		Pyrene	**150000**	
C2-Naphthalenes	**180000**		C1-Fluoranthenes/Pyrenes	44	U
C3-Naphthalenes	82	U	C2-Fluoranthenes/Pyrenes	44	U
C4-Naphthalenes	82	U	C3-Fluoranthenes/Pyrenes	44	U
Biphenyl	45	U	C4-Fluoranthenes/Pyrenes	44	U
Dibenzofuran	59	U	Naphthobenzothiophenes	60	U
Acenaphthylene	90	U	C1-Naphthobenzothiophenes	60	U
Acenaphthene	**110000**		C2-Naphthobenzothiophenes	60	U
Fluorene	**75000**		C3-Naphthobenzothiophenes	60	U
C1-Fluorenes	57	U	C4-Naphthobenzothiophenes	60	U
C2-Fluorenes	57	U	Benz[a]anthracene	**54000**	
C3-Fluorenes	57	U	Chrysene/Triphenylene	**54000**	
Anthracene	**89000**		C1-Chrysenes	54	U
Phenanthrene	**280000**		C2-Chrysenes	54	U
C1-Phenanthrenes/Anthracenes	**220000**		C3-Chrysenes	54	U
C2-Phenanthrenes/Anthracenes	72	U	C4-Chrysenes	54	U
C3-Phenanthrenes/Anthracenes	72	U	Benzo[b]fluoranthene	53	U
C4-Phenanthrenes/Anthracenes	72	U	Benzo[k]fluoranthene	100	U
Retene	72	U	Benzo[a]fluoranthene	100	U
Dibenzothiophene	55	U	Benzo[e]pyrene	68	U
C1-Dibenzothiophenes	55	U	Benzo[a]pyrene	69	U
C2-Dibenzothiophenes	55	U	Perylene	87	U
C3-Dibenzothiophenes	55	U	Indeno[1,2,3-cd]pyrene	120	U
C4-Dibenzothiophenes	55	U	Dibenz[a,h]anthracene	95	U
Benzo(b)fluorene	50	U	Benzo[g,h,i]perylene	88	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	109	50-130
Benzo[b]fluoranthene-d12	108	50-130

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

02/17/06 13:08

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18101.D
Acq On : 10 Feb 2006 10:29 am
Operator : AC
Sample : 0602004-13-RE
Misc : 10X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 15 19:52:46 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

MSGrund 2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	42505m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	72244m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	7123	78.17	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.82%#			
58) Pyrene-d10	38.02	212	19447m	103.80	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.38%#			
81) Benzo[b]fluoranthene-d12	46.84	264	14739m	102.45	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.24%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

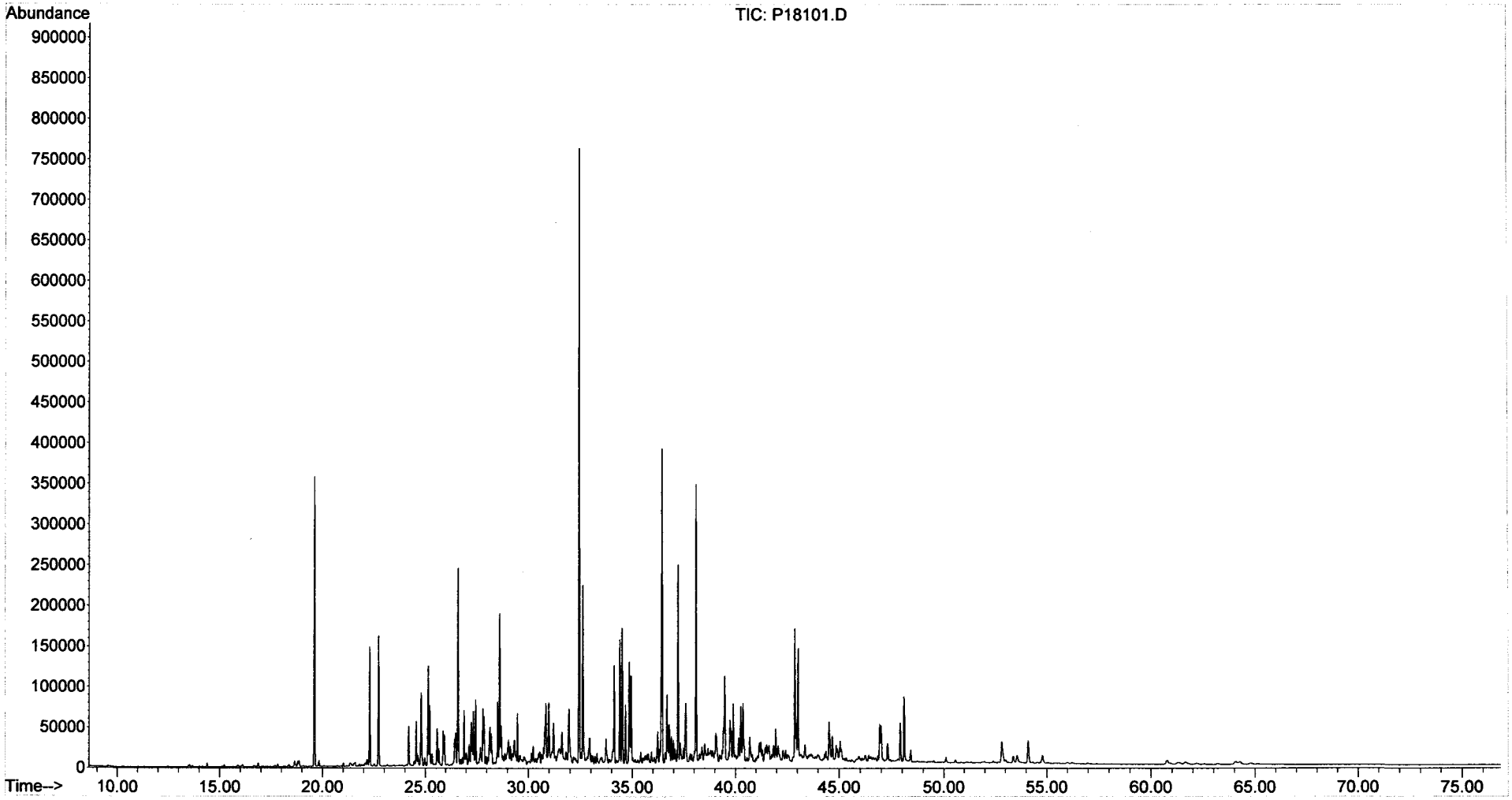
Target Compounds						Qvalue
9) Naphthalene	19.61	128	835076	3847.07	ng/mL#	100
10) C1-Naphthalenes	22.73	142	716956m	3302.91	ng/mL	
11) C2-Naphthalenes	25.14	156	784309m	3613.20	ng/mL	
15) 2-Methylnaphthalene	22.29	142	331611m	2413.13	ng/mL	
16) 1-Methylnaphthalene	22.73	142	383951	2967.81	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	106346m	932.50	ng/mL	
26) Acenaphthene	26.62	153	277973	2150.08	ng/mL	100
28) Fluorene	28.64	166	218238m	1505.15	ng/mL	
41) Phenanthrene	32.45	178	1210586m	5630.57	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.52	192	954038m	4437.34	ng/mL	
53) Anthracene	32.62	178	354540m	1782.28	ng/mL	
55) 1-Methylphenanthrene	34.95	192	151351m	1028.08	ng/mL	
56) Fluoranthene	37.22	202	489656m	2138.96	ng/mL	
59) Pyrene	38.10	202	683699m	2936.49	ng/mL	
73) Benz[a]anthracene	42.88	228	240338m	1092.86	ng/mL	
74) Chrysene	43.04	228	240961m	1072.31	ng/mL	
75) Chrysene/Triphenylene	43.04	228	241469m	1074.57	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18101.D
Acq On : 10 Feb 2006 10:29 am
Operator : AC
Sample : 0602004-13-RE
Misc : 10X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 15 19:52:46 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: **GC-SED-71C (1.5-2.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-14**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	62.9	4.97	42	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**900000**	E	Fluoranthene	**160000**	E
C1-Naphthalenes	**670000**	E	Pyrene	**250000**	E
C2-Naphthalenes	**480000**		C1-Fluoranthenes/Pyrenes	**380000**	
C3-Naphthalenes	**230000**		C2-Fluoranthenes/Pyrenes	**220000**	
C4-Naphthalenes	**92000**		C3-Fluoranthenes/Pyrenes	**100000**	
Biphenyl	**54000**		C4-Fluoranthenes/Pyrenes	**36000**	
Dibenzofuran	**20000**		Naphthobenzothiophenes	**48000**	
Acenaphthylene	**68000**		C1-Naphthobenzothiophenes	**68000**	
Acenaphthene	**260000**	E	C2-Naphthobenzothiophenes	**51000**	
Fluorene	**150000**	E	C3-Naphthobenzothiophenes	**27000**	
C1-Fluorenes	**150000**		C4-Naphthobenzothiophenes	**12000**	
C2-Fluorenes	**140000**		Benz[a]anthracene	**97000**	
C3-Fluorenes	**79000**		Chrysene/Triphenylene	**100000**	
Anthracene	**160000**	E	C1-Chrysenes	**140000**	
Phenanthrene	**480000**	E	C2-Chrysenes	**83000**	
C1-Phenanthrenes/Anthracenes	**510000**		C3-Chrysenes	**54000**	
C2-Phenanthrenes/Anthracenes	**350000**		C4-Chrysenes	**18000**	
C3-Phenanthrenes/Anthracenes	**160000**		Benzo[b]fluoranthene	**36000**	
C4-Phenanthrenes/Anthracenes	**44000**		Benzo[k]fluoranthene	**43000**	
Retene	**5700**		Benzo[a]fluoranthene	**23000**	
Dibenzothiophene	**69000**		Benzo[e]pyrene	**42000**	
C1-Dibenzothiophenes	**110000**		Benzo[a]pyrene	**75000**	
C2-Dibenzothiophenes	**120000**		Perylene	**15000**	
C3-Dibenzothiophenes	**72000**		Indeno[1,2,3-cd]pyrene	**36000**	
C4-Dibenzothiophenes	**27000**		Dibenz[a,h]anthracene	**12000**	
Benzo(b)fluorene	**46000**		Benzo[g,h,i]perylene	**34000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	122	50-130
Benzo[b]fluoranthene-d12	106	50-130

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

02/21/06 12:09

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-71C (1.5-2.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-14**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	62.9	4.97	42	1	AC

Parameter	Result
Carbazole	7600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	122	50-130
Benzo[b]fluoranthene-d12	106	50-130

N/A - Not Applicable

02/21/06 12:09

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18151.D
Acq On : 12 Feb 2006 2:10 am
Operator : AC
Sample : 0602004-14
Misc : 1X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 15 19:13:28 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 for MO 2/16/06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	35266m	500.00 ng/mL	-0.02
72) Chrysene-d12	42.97	240	64115m	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.18	152	34223m	452.67 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.27%#		
58) Pyrene-d10	38.05	212	90231m	580.48 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 58.05%		
81) Benzo[b]fluoranthene-d12	46.87	264	64745m	507.10 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.71%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	19.64	128	12043675m	66872.45 ng/mL	E
10) C1-Naphthalenes	22.33	142	9023334m	50102.02 ng/mL	E
11) C2-Naphthalenes	25.16	156	6459857m	35868.33 ng/mL	
12) C3-Naphthalenes	27.48	170	3118531m	17315.63 ng/mL	
13) C4-Naphthalenes	30.25	184	1229178m	6825.01 ng/mL	
15) 2-Methylnaphthalene	22.33	142	5334920	46791.17 ng/mL#	E 100
16) 1-Methylnaphthalene	22.74	142	3679236	34276.89 ng/mL#	E 100
22) Biphenyl	24.19	154	568248m	4008.83 ng/mL	
23) 2,6-Dimethylnaphthalene	24.81	156	849201m	8974.70 ng/mL	
24) Dibenzofuran	27.26	168	236537m	1485.42 ng/mL	
25) Acenaphthylene	25.89	152	875417m	5069.44 ng/mL	
26) Acenaphthene	26.63	153	2063424m	19236.41 ng/mL	E
27) 2,3,5-Trimethylnaphthalene	28.18	170	205375m	2417.84 ng/mL	
28) Fluorene	28.65	166	1328555m	11043.65 ng/mL	E
29) C1-Fluorenes	30.88	180	1339447m	11134.19 ng/mL	
30) C2-Fluorenes	33.04	194	1228666m	10213.32 ng/mL	
31) C3-Fluorenes	35.04	208	710904m	5909.41 ng/mL	
32) Dibenzothiophene	31.95	184	910078m	5129.83 ng/mL	
36) OTP	34.15	198	9005m	50.76 ng/mL	
37) C1-Dibenzothiophenes	33.74	198	1509172m	8506.74 ng/mL	
38) C2-Dibenzothiophenes	35.78	212	1545563m	8711.87 ng/mL	
39) C3-Dibenzothiophenes	37.23	226	949400m	5351.48 ng/mL	
40) C4-Dibenzothiophenes	38.93	240	351268m	1979.99 ng/mL	
41) Phenanthrene	32.47	178	6349518m	35594.36 ng/mL	E
47) C1-Phenanthrenes/Anthracen	34.54	192	6739813m	37782.29 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.70	206	4637613m	25997.70 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.53	220	2128571m	11932.42 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.74	234	587212m	3291.81 ng/mL	
52) Retene	39.46	234	15862m	425.28 ng/mL	
53) Anthracene	32.65	178	1938445m	11744.83 ng/mL	E
54) Carbazole	33.30	167	86549m	566.59 ng/mL	
55) 1-Methylphenanthrene	34.98	192	1076205m	8810.90 ng/mL	
56) Fluoranthene	37.24	202	2226158m	11720.65 ng/mL	E
57) Benzo(b)fluorene	39.76	216	377694m	3407.35 ng/mL	
59) Pyrene	38.13	202	3595344m	18611.78 ng/mL	E
60) C1-Fluoranthenes/Pyrenes	39.52	216	5481523m	28375.83 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.97	230	3131159m	16208.86 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.45	244	1457760m	7546.29 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.70	258	519270m	2688.07 ng/mL	
64) Naphthobenzothiophene	41.97	234	399001m	2207.84 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18151.D
Acq On : 12 Feb 2006 2:10 am
Operator : AC
Sample : 0602004-14
Misc : 1X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 15 19:13:28 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

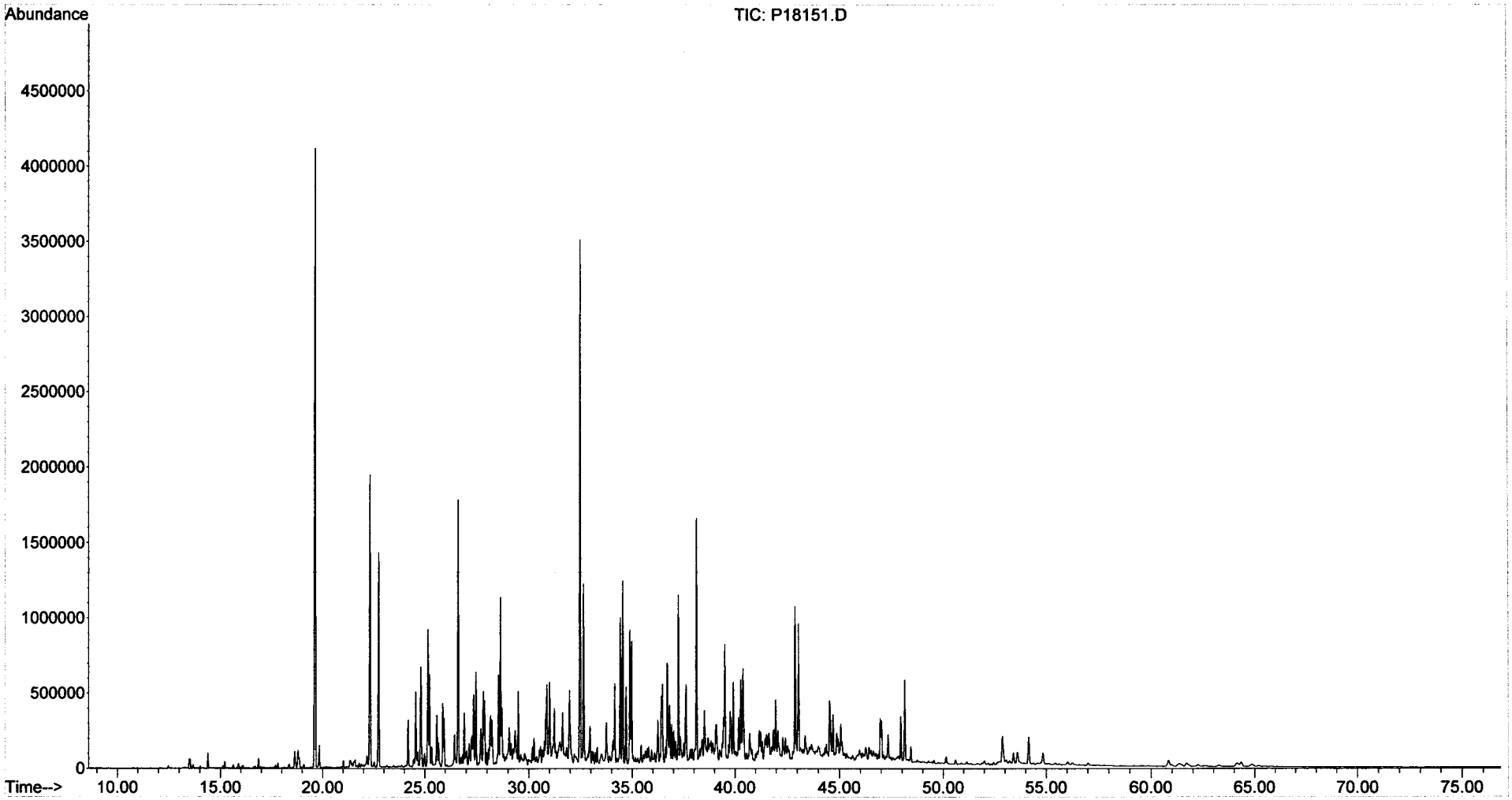
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	41.97	234	399095m	2208.36 ng/mL	
66) Naphthobenzothiophene-1,2-	42.31	234	119250m	659.86 ng/mL	
67) Naphthobenzothiophene-2,3-	42.61	234	124933m	691.31 ng/mL	
68) C1-Naphthobenzothiophenes	43.37	248	917412m	5076.43 ng/ml	
69) C2-Naphthobenzothiophenes	45.42	262	684102m	3785.43 ng/ml	
70) C3-Naphthobenzothiophenes	46.99	276	366203m	2026.36 ng/ml	
71) C4-Naphthobenzothiophenes	48.04	290	162751m	900.57 ng/mL	
73) Benz[a]anthracene	42.90	228	1414410m	7246.99 ng/mL	
74) Chrysene	43.06	228	1557234m	7808.52 ng/mL	
75) Chrysene/Triphenylene	43.06	228	1547317m	7758.80 ng/mL	
76) C1-Chrysenes	44.54	242	2127215m	10666.61 ng/mL	
77) C2-Chrysenes	46.25	256	1250032m	6268.10 ng/mL	
78) BBF-d12 Surr BKGD	46.85	256	20474	102.66 ng/mL	100
79) C3-Chrysenes	47.83	270	799948m	4011.22 ng/mL	
80) C4-Chrysenes	49.31	284	265921m	1333.42 ng/mL	
82) Benzo[b]fluoranthene	46.95	252	529315	2640.73 ng/mL	98
83) Benzo[k]fluoranthene	47.02	252	664035	3184.41 ng/mL	97
84) Benzo[a]fluoranthene	47.33	252	362242m	1737.15 ng/mL	
85) Benzo[e]pyrene	47.95	252	603002	3107.25 ng/mL	94
86) Benzo[a]pyrene	48.13	252	1070517m	5575.31 ng/mL	
87) Perylene	48.43	252	207072m	1103.27 ng/mL	
88) Indeno[1,2,3-cd]pyrene	52.88	276	450436m	2665.74 ng/mL	RF Rptcone 2nd cw 2/21/06
89) Dibenz[a,h]anthracene	52.91	278	152933m	887.93 ng/mL	
90) Benzo[g,h,i]perylene	54.15	276	491087	2522.14 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18151.D
Acq On : 12 Feb 2006 2:10 am
Operator : AC
Sample : 0602004-14
Misc : 1X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 15 19:13:28 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: **GC-SED-71C (1.5-2.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-14**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	62.9	4.97	4.93	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**550**	30,31-Bishomohopane-22S	**930**
C24 Tricyclic Terpane	**350**	30,31-Bishomohopane-22R	**660**
C25 Tricyclic Terpane	**360**	30,31-Trishomohopane-22S	**500**
C24 Tetracyclic Terpane	**440**	30,31-Trishomohopane-22R	**330**
C26 Tricyclic Terpane-22S	**160**	Tetrakishomohopane-22S	**340**
C26 Tricyclic Terpane-22R	**160**	Tetrakishomohopane-22R	**220**
C28 Tricyclic Terpane-22S	**190**	Pentakishomohopane-22S	**270**
C28 Tricyclic Terpane-22R	**200**	Pentakishomohopane-22R	**200**
C29 Tricyclic Terpane-22S	**230**	13b(H),17a(H)-20S-Diacholestane	**810**
C29 Tricyclic Terpane-22R	**200**	13b(H),17a(H)-20R-Diacholestane	**480**
18a-22,29,30-Trisnorneohopane-TS	**1400**	13b,17a-20S-Methyldiacholestane	**400**
C30 Tricyclic Terpane-22S	**200**	14a(H),17a(H)-20S-Cholestane	**410**
C30 Tricyclic Terpane-22R	**120**	14a(H),17a(H)-20R-Cholestane	**1500**
17a(H)-22,29,30-Trisnorhopane-TM	**1200**	13b,17a-20R-Ethyldiacholestane	**220**
17a/b,21b/a 28,30-Bisnorhopane	**300**	13a,17b-20S-Ethyldiacholestane	**60**
17a(H),21b(H)-25-Norhopane	**90**	14a,17a-20S-Methylcholestane	**290**
30-Norhopane	**3400**	14a,17a-20R-Methylcholestane	**710**
18a(H)-30-Norneohopane-C29Ts	**1300**	14a(H),17a(H)-20S-Ethylcholestane	**490**
17a(H)-Diahopane	**310**	14a(H),17a(H)-20R-Ethylcholestane	**750**
30-Normoretane	**710**	14b(H),17b(H)-20R-Cholestane	**690**
18a(H)&18b(H)-Oleananes	**620**	14b(H),17b(H)-20S-Cholestane	**750**
Hopane	**5500**	14b,17b-20R-Methylcholestane	**740**
Moretane	**740**	14b,17b-20S-Methylcholestane	**840**
30-Homohopane-22S	**1500**	14b(H),17b(H)-20R-Ethylcholestane	**1100**
30-Homohopane-22R	**1300**	14b(H),17b(H)-20S-Ethylcholestane	**770**

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

N/A - Not Applicable

02/21/06 16:16

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28234.D
Acq On : 12 Feb 2006 4:27 pm
Operator : AC
Sample : 0602004-14
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

2nd 2/21/06

Quant Time: Feb 17 11:34:52 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

CMS 2/17/06

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	70866	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	125960	4179.42	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 417.94%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.97	191	242349m	3464.55	ng/mL	
84) Hopane (T19)	52.97	191	242825m	3471.36	ng/mL	
85) C23 Tricyclic Terpane (T4)	41.23	191	24490m	350.10	ng/ml	
86) C24 Tricyclic Terpane (T5)	41.96	191	15357	219.54	ng/ml	100
87) C25 Tricyclic Terpane (T6)	43.45	191	15813m	226.06	ng/ml	
88) C24 Tetracyclic Terpane (T	44.79	191	19413	277.52	ng/ml	100
89) C26 Tricyclic Terpane-22S	44.50	191	7289m	104.20	ng/ml	
90) C26 Tricyclic Terpane-22R	44.61	191	7049	100.77	ng/ml	100
91) C28 Tricyclic Terpane-22S	46.89	191	8255m	118.01	ng/ml	
92) C28 Tricyclic Terpane-22R	47.06	191	8755m	125.16	ng/ml	
93) C29 Tricyclic Terpane-22S	47.59	191	10258	146.65	ng/ml	100
94) C29 Tricyclic Terpane-22R	47.79	191	8815m	126.02	ng/ml	
95) 18a-22,29,30-Trisnorneohop	48.99	191	60509m	865.02	ng/ml	
96) C30 Tricyclic Terpane-22S	49.07	191	8636m	123.46	ng/mL	
97) C30 Tricyclic Terpane-22R	49.32	191	5193	74.24	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	49.57	191	53180	760.25	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	50.81	191	13259m	189.55	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	50.58	191	4006m	57.27	ng/ml	
101) 30-Norhopane (T15)	51.52	191	152616m	2181.75	ng/ml	
102) 18a(H)-30-Norneohopane-C29	51.63	191	57850m	827.01	ng/ml	
103) 17a(H)-Diahopane (X)	51.76	191	13733m	196.32	ng/ml	
104) 30-Normoretane (T17)	52.34	191	31474	449.94	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	52.77	191	27573m	394.18	ng/ml	
106) Moretane (T20)	53.69	191	32793m	468.80	ng/ml	
107) 30-Homohopane-22S (T21)	54.85	191	65601	937.81	ng/ml	100
108) 30-Homohopane-22R (T22)	55.10	191	58464	835.78	ng/ml	100
109) 30,31-Bishomohopane-22S (T	56.51	191	41230	589.41	ng/ml	100
110) 30,31-Bishomohopane-22R (T	56.92	191	29049	415.28	ng/ml	100
111) 30,31-Trishomohopane-22S (	58.78	191	22065m	315.43	ng/ml	
112) 30,31-Trishomohopane-22R (	59.44	191	14541m	207.87	ng/ml	
113) Tetrakishomohopane-22S (T3	61.59	191	14832	212.03	ng/ml	100
114) Tetrakishomohopane-22R (T3	62.56	191	9790	139.96	ng/ml	100
115) Pentakishomohopane-22S (T3	64.94	191	11978	171.23	ng/ml	100
116) Pentakishomohopane-22R (T3	66.33	191	9051m	129.39	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	45.73	217	15505m	514.46	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	46.14	217	9108m	302.21	ng/ml	
120) 13b,17a-20S-Methyldiachole	46.85	217	7742m	256.88	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	47.74	217	7903m	262.23	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	48.28	217	28882m	958.32	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	48.57	217	4283m	142.11	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28234.D
Acq On : 12 Feb 2006 4:27 pm
Operator : AC
Sample : 0602004-14
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Feb 17 11:34:52 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)
124) 13a,17b-20S-Ethyldiacholes	48.84	217	1142	37.89	ng/ml	100
125) 14a,17a-20S-Methylcholesta	49.01	217	5506m	182.69	ng/ml	
126) 14a,17a-20R-Methylcholesta	49.77	217	13493m	447.71	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	50.12	217	9341m	309.94	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	51.09	217	14288m	474.08	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	47.84	218	13191	437.68	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	47.92	218	14250	472.82	ng/ml	100
131) 14b,17b-20R-Methylcholesta	49.20	218	14174m	470.30	ng/ml	
132) 14b,17b-20S-Methylcholesta	49.28	218	16058m	532.81	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	50.39	218	20882m	692.88	ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	50.43	218	14631m	485.46	ng/ml	

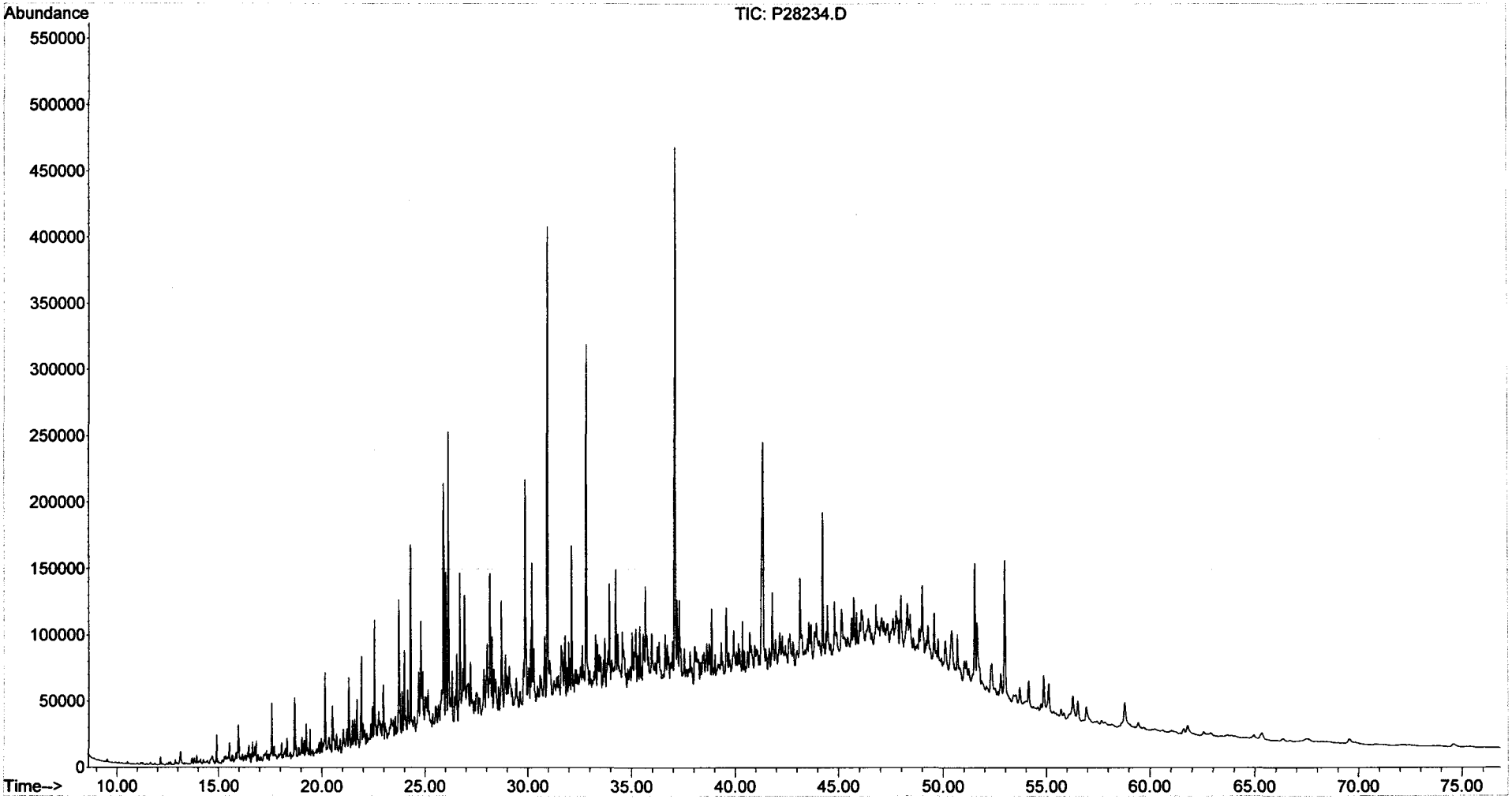
RT Heptane 2nd 2/27/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28234.D
Acq On : 12 Feb 2006 4:27 pm
Operator : AC
Sample : 0602004-14
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Feb 17 11:34:52 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: **GC-SED-71C (1.5-2.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-14E**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/10/06	62.9	4.97	42	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**870000**		Fluoranthene	**150000**	
C1-Naphthalenes	**630000**		Pyrene	**230000**	
C2-Naphthalenes	220	U	C1-Fluoranthenes/Pyrenes	120	U
C3-Naphthalenes	220	U	C2-Fluoranthenes/Pyrenes	120	U
C4-Naphthalenes	220	U	C3-Fluoranthenes/Pyrenes	120	U
Biphenyl	120	U	C4-Fluoranthenes/Pyrenes	120	U
Dibenzofuran	160	U	Naphthobenzothiophenes	160	U
Acenaphthylene	240	U	C1-Naphthobenzothiophenes	160	U
Acenaphthene	**240000**		C2-Naphthobenzothiophenes	160	U
Fluorene	**130000**		C3-Naphthobenzothiophenes	160	U
C1-Fluorenes	160	U	C4-Naphthobenzothiophenes	160	U
C2-Fluorenes	160	U	Benz[a]anthracene	210	U
C3-Fluorenes	160	U	Chrysene/Triphenylene	140	U
Anthracene	**140000**		C1-Chrysenes	140	U
Phenanthrene	**430000**		C2-Chrysenes	140	U
C1-Phenanthrenes/Anthracenes	200	U	C3-Chrysenes	140	U
C2-Phenanthrenes/Anthracenes	200	U	C4-Chrysenes	140	U
C3-Phenanthrenes/Anthracenes	200	U	Benzo[b]fluoranthene	140	U
C4-Phenanthrenes/Anthracenes	200	U	Benzo[k]fluoranthene	270	U
Retene	200	U	Benzo[a]fluoranthene	270	U
Dibenzothiophene	150	U	Benzo[e]pyrene	180	U
C1-Dibenzothiophenes	150	U	Benzo[a]pyrene	190	U
C2-Dibenzothiophenes	150	U	Perylene	230	U
C3-Dibenzothiophenes	150	U	Indeno[1,2,3-cd]pyrene	320	U
C4-Dibenzothiophenes	150	U	Dibenz[a,h]anthracene	260	U
Benzo(b)fluorene	140	U	Benzo[g,h,i]perylene	240	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	111	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.

02/17/06 13:10

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18103.D
Acq On : 10 Feb 2006 12:03 pm
Operator : AC
Sample : 0602004-14-RE
Misc : 10X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 15 19:56:08 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 for WW
2/16/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	48321m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	82890m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	4464	43.09	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.31%#			
58) Pyrene-d10	38.02	212	11261m	52.87	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.29%#			
81) Benzo[b]fluoranthene-d12	46.84	264	8191m	49.62	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 4.96%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

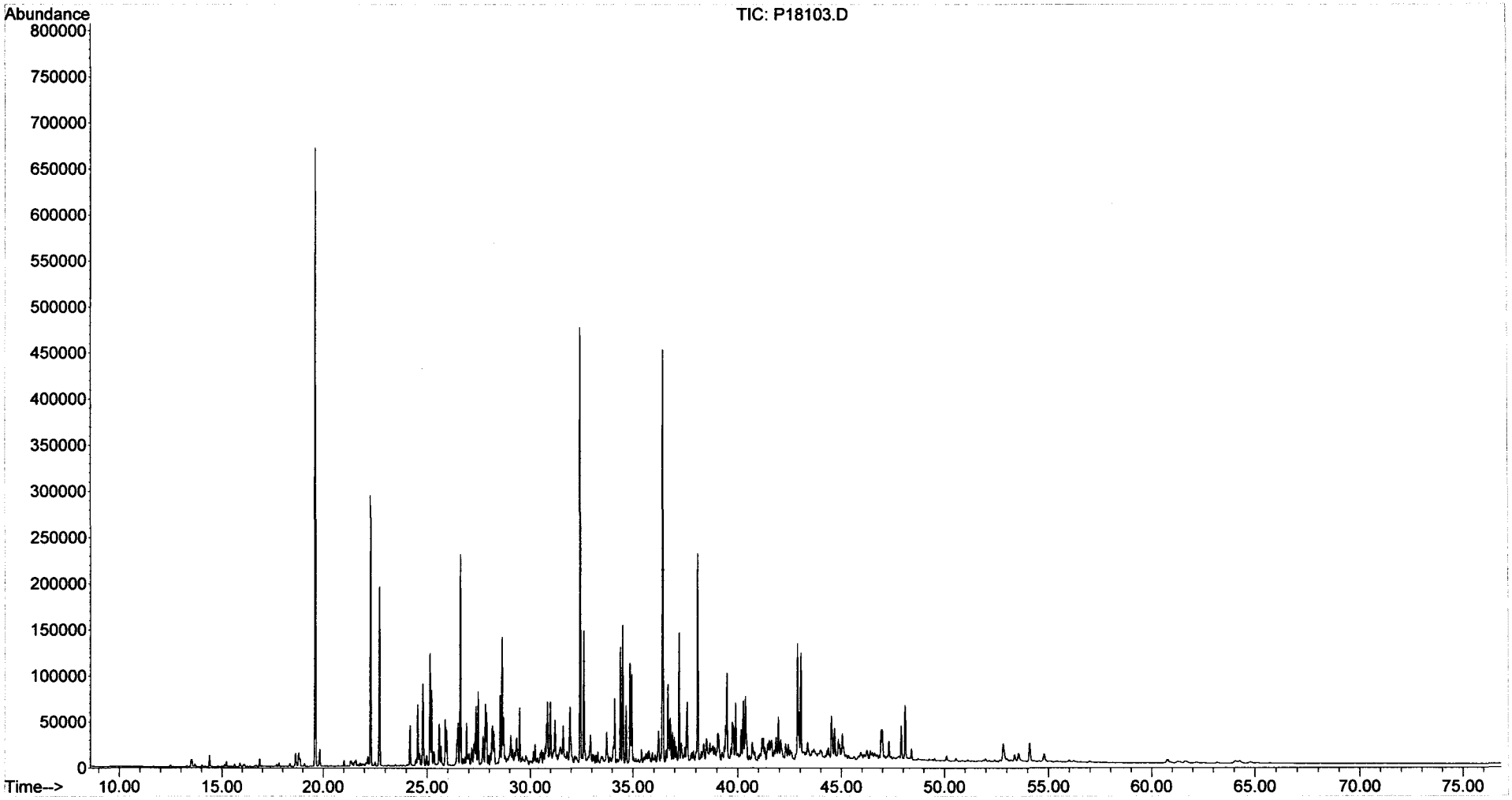
Target Compounds						Qvalue
9) Naphthalene	19.61	128	1590034m	6443.40	ng/mL	
10) C1-Naphthalenes	22.29	142	1148409m	4653.77	ng/mL	
15) 2-Methylnaphthalene	22.29	142	682736	4370.28	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	465444	3164.69	ng/mL#	100
26) Acenaphthene	26.62	153	260854	1774.82	ng/mL	100
28) Fluorene	28.64	166	160086m	971.20	ng/mL	
41) Phenanthrene	32.44	178	788151m	3224.56	ng/mL	
53) Anthracene	32.62	178	236629m	1046.36	ng/mL	
56) Fluoranthene	37.22	202	284055m	1091.49	ng/mL	
59) Pyrene	38.10	202	454803m	1718.27	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18103.D
Acq On : 10 Feb 2006 12:03 pm
Operator : AC
Sample : 0602004-14-RE
Misc : 10X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 15 19:56:08 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: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106B11**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/08/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.33**	J	Fluoranthene	**0.13**	J
C1-Naphthalenes	**0.34**	J	Pyrene	**0.15**	J
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**0.12**	J	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	0.15	U	C2-Naphthobenzothiophenes	0.16	U
Fluorene	0.15	U	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**0.096**	J
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**0.11**	J
Anthracene	**0.076**	J	C1-Chrysenes	0.14	U
Phenanthrene	**0.21**	J	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	0.14	U
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	0.27	U
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	0.19	U
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	0.32	U
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	0.25	U
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	0.23	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

02/17/06 12:40

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106B11**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/08/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

02/17/06 12:40

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18055.D
Acq On : 8 Feb 2006 11:09 pm
Operator : AC
Sample : SS020106B11
Misc : ETR0602004
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 09 07:00:58 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

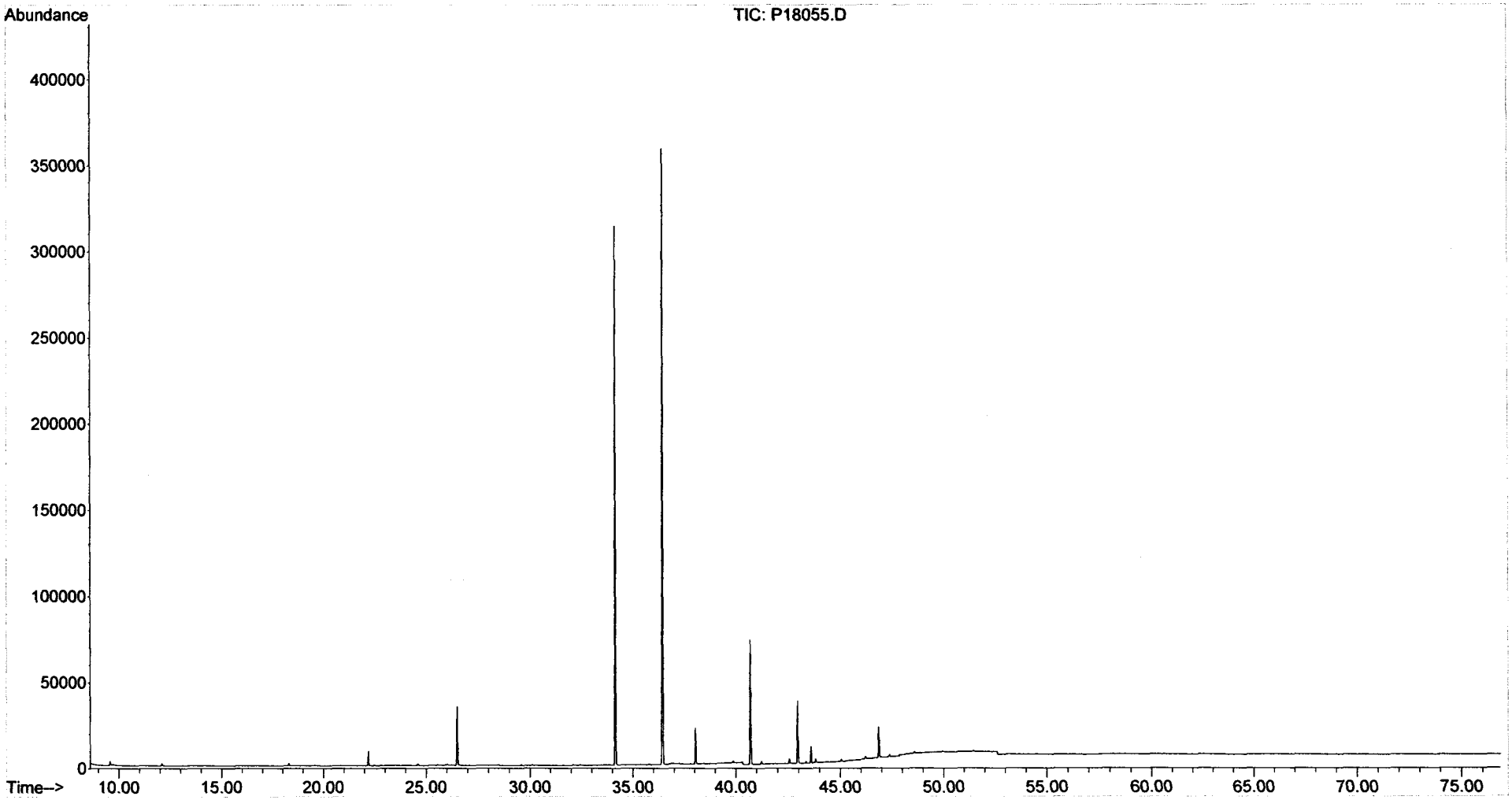
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	41599m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	70753	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	18313	205.35	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.54%#			
58) Pyrene-d10	38.04	212	46682	254.60	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.46%#			
81) Benzo[b]fluoranthene-d12	46.85	264	35686	253.28	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.33%#			
125) 5B(H)Cholane - Surr	43.58	217	12839	461.82	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.18%#			
Target Compounds						Qvalue
9) Naphthalene	19.62	128	533m	2.51	ng/mL	
10) C1-Naphthalenes	22.31	142	546m	2.57	ng/mL	
15) 2-Methylnaphthalene	22.31	142	297m	2.21	ng/mL	
16) 1-Methylnaphthalene	22.73	142	167m	1.32	ng/mL	
25) Acenaphthylene	25.89	152	184m	0.90	ng/mL	
41) Phenanthrene	32.45	178	335m	1.59	ng/mL	
53) Anthracene	32.64	178	111m	0.57	ng/mL	
56) Fluoranthene	37.22	202	214m	0.96	ng/mL	
59) Pyrene	38.10	202	261m	1.15	ng/mL	
73) Benz[a]anthracene	42.88	228	155m	0.72	ng/mL	
74) Chrysene	43.04	228	181m	0.82	ng/mL	
75) Chrysene/Triphenylene	43.04	228	181m	0.82	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18055.D
Acq On : 8 Feb 2006 11:09 pm
Operator : AC
Sample : SS020106B11
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 09 07:00:58 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: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106B11**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/11/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.38	U	30,31-Bishomohopane-22S	0.38	U
C24 Tricyclic Terpane	0.38	U	30,31-Bishomohopane-22R	0.38	U
C25 Tricyclic Terpane	0.38	U	30,31-Trishomohopane-22S	0.38	U
C24 Tetracyclic Terpane	0.38	U	30,31-Trishomohopane-22R	0.38	U
C26 Tricyclic Terpane-22S	0.38	U	Tetrakishomohopane-22S	0.38	U
C26 Tricyclic Terpane-22R	0.38	U	Tetrakishomohopane-22R	0.38	U
C28 Tricyclic Terpane-22S	0.38	U	Pentakishomohopane-22S	0.38	U
C28 Tricyclic Terpane-22R	0.38	U	Pentakishomohopane-22R	0.38	U
C29 Tricyclic Terpane-22S	0.38	U	13b(H),17a(H)-20S-Diacholestane	0.38	U
C29 Tricyclic Terpane-22R	0.38	U	13b(H),17a(H)-20R-Diacholestane	0.38	U
18a-22,29,30-Trisnorneohopane-TS	0.38	U	13b,17a-20S-Methyldiacholestane	0.38	U
C30 Tricyclic Terpane-22S	0.38	U	14a(H),17a(H)-20S-Cholestane	0.38	U
C30 Tricyclic Terpane-22R	0.38	U	14a(H),17a(H)-20R-Cholestane	0.38	U
17a(H)-22,29,30-Trisnorhopane-TM	0.38	U	13b,17a-20R-Ethyldiacholestane	0.38	U
17a/b,21b/a 28,30-Bisnorhopane	0.38	U	13a,17b-20S-Ethyldiacholestane	0.38	U
17a(H),21b(H)-25-Norhopane	0.38	U	14a,17a-20S-Methylcholestane	0.38	U
30-Norhopane	0.38	U	14a,17a-20R-Methylcholestane	0.38	U
18a(H)-30-Norneohopane-C29Ts	0.38	U	14a(H),17a(H)-20S-Ethylcholestane	0.38	U
17a(H)-Diahopane	0.38	U	14a(H),17a(H)-20R-Ethylcholestane	0.38	U
30-Normoretane	0.38	U	14b(H),17b(H)-20R-Cholestane	0.38	U
18a(H)&18b(H)-Oleananes	0.38	U	14b(H),17b(H)-20S-Cholestane	0.38	U
Hopane	0.38	U	14b,17b-20R-Methylcholestane	0.38	U
Moretane	0.38	U	14b,17b-20S-Methylcholestane	0.38	U
30-Homohopane-22S	0.38	U	14b(H),17b(H)-20R-Ethylcholestane	0.38	U
30-Homohopane-22R	0.38	U	14b(H),17b(H)-20S-Ethylcholestane	0.38	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	102	50-130

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

02/21/06 16:12

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28212.D
Acq On : 11 Feb 2006 5:34 am
Operator : AC
Sample : SS020106B11
Misc : 1X ETR0602004
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 16 21:43:15 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 2/17/06

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	36911	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	8037	511.99	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	51.20%	

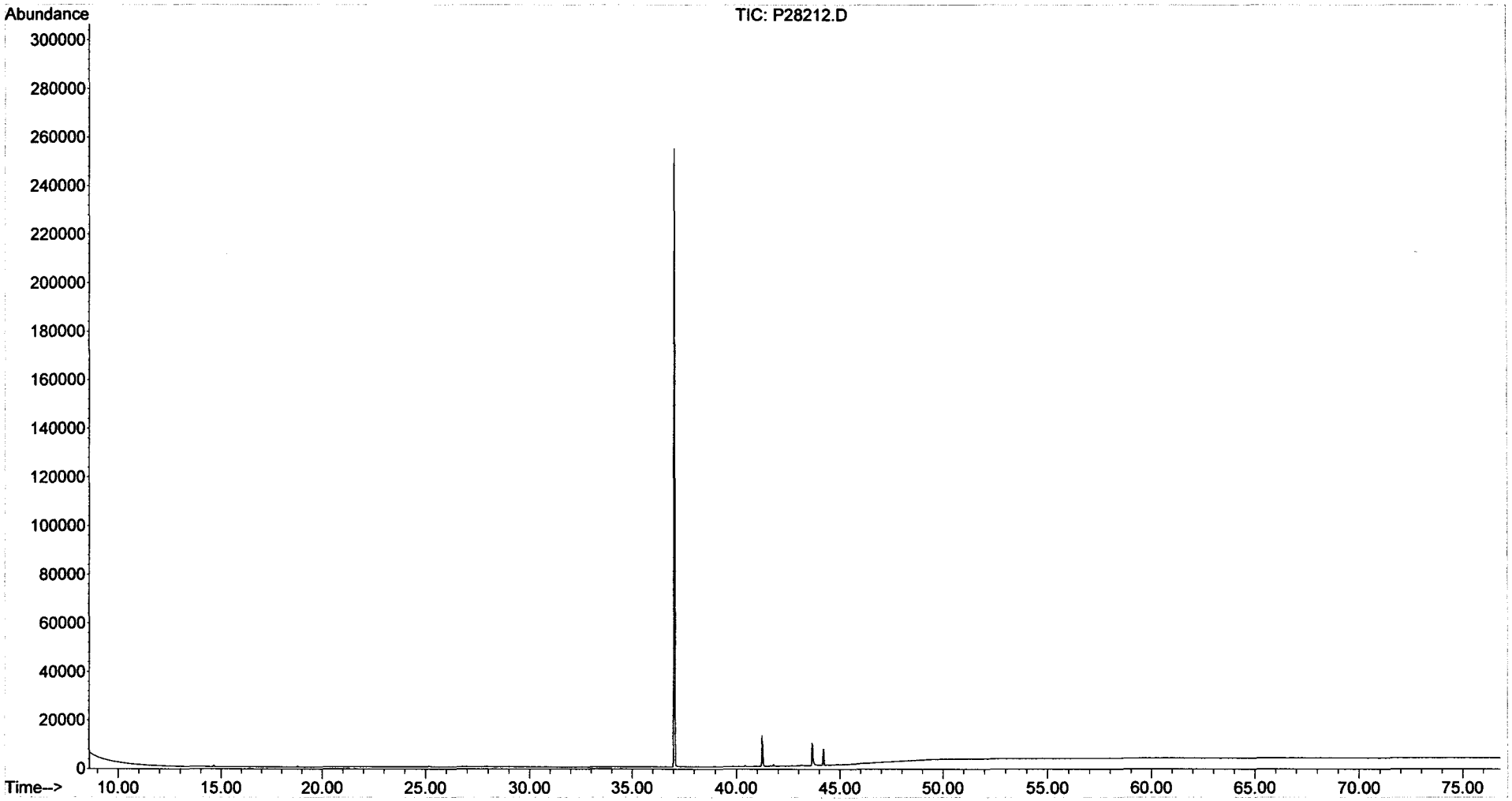
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28212.D
Acq On : 11 Feb 2006 5:34 am
Operator : AC
Sample : SS020106B11
Misc : 1X ETR0602004
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 16 21:43:15 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: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606B06**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/10/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.20**	J	Fluoranthene	**0.060**	J
C1-Naphthalenes	**0.20**	J	Pyrene	**0.10**	J
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**0.30**	J	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	0.15	U	C2-Naphthobenzothiophenes	0.16	U
Fluorene	0.15	U	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	0.21	U
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	0.14	U
Anthracene	0.18	U	C1-Chrysenes	0.14	U
Phenanthrene	**0.11**	J	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	0.14	U
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	0.27	U
Retene	**0.25**	J	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	0.19	U
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	0.32	U
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	0.25	U
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	0.23	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	98	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.

02/17/06 12:42

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606B06**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/10/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	82	50-130
Pyrene-d10	106	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.

02/17/06 12:42

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18115.D
Acq On : 10 Feb 2006 9:59 pm
Operator : AC
Sample : SS020606B06
Misc : 1X ETR0602004
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 14 11:07:06 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 2/14/06

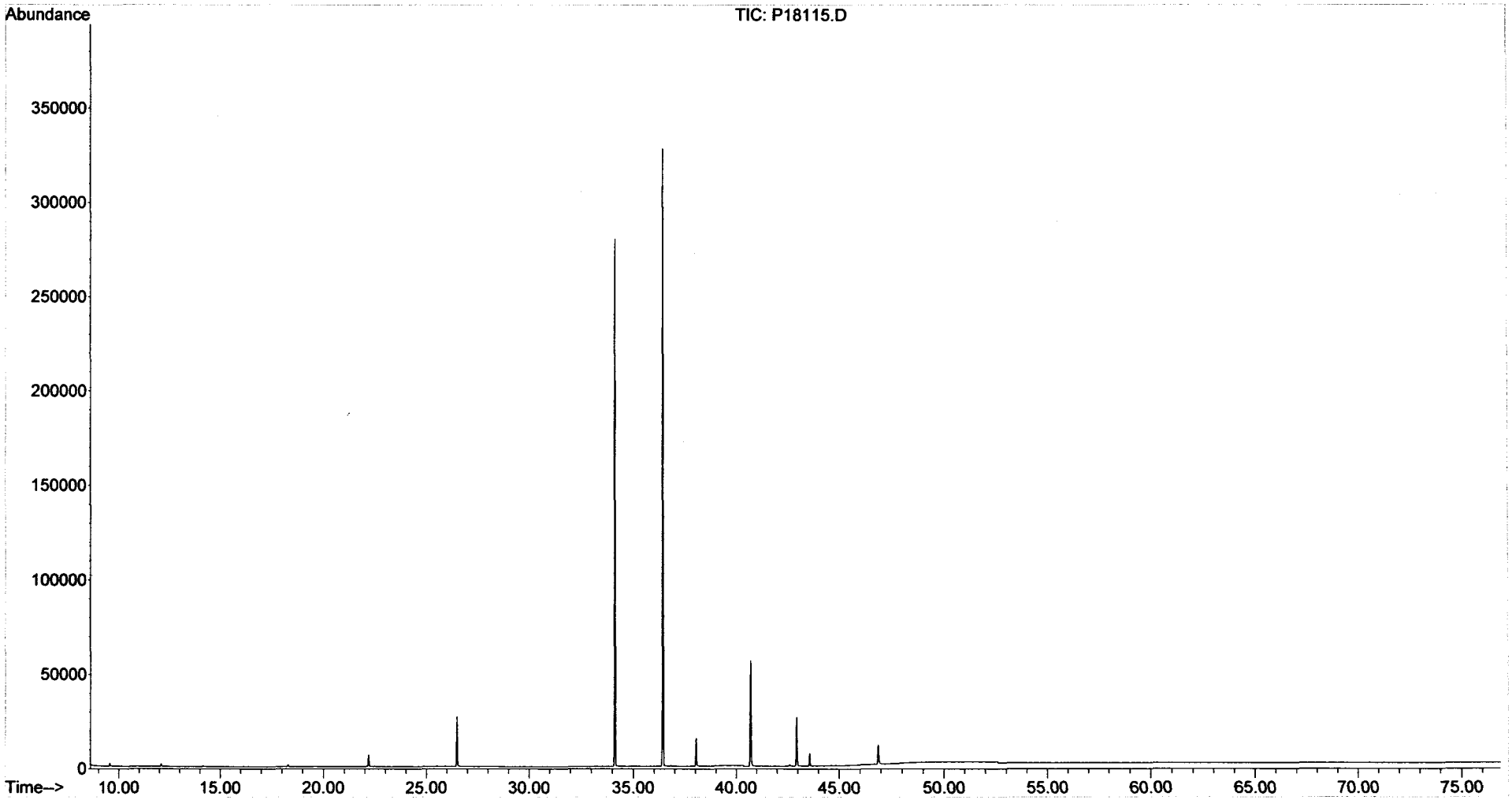
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	31922m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	53578	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	13976	204.22	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 20.42%#			
58) Pyrene-d10	38.04	212	37371	265.60	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.56%#			
81) Benzo[b]fluoranthene-d12	46.85	264	26239	245.93	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.59%#			
125) 5B(H)Cholane - Surr	43.57	217	9223	438.09	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 43.81%#			
Target Compounds						Qvalue
9) Naphthalene	19.61	128	244m	1.50	ng/mL	
10) C1-Naphthalenes	22.29	142	246m	1.51	ng/mL	
15) 2-Methylnaphthalene	22.29	142	112m	1.09	ng/mL	
16) 1-Methylnaphthalene	22.72	142	57m	0.59	ng/mL	
25) Acenaphthylene	25.87	152	348m	2.23	ng/mL	
41) Phenanthrene	32.46	178	132m	0.82	ng/mL	
52) Retene	39.45	234	63m	1.87	ng/mL	
56) Fluoranthene	37.23	202	78m	0.45	ng/mL	
59) Pyrene	38.10	202	132m	0.75	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18115.D
Acq On : 10 Feb 2006 9:59 pm
Operator : AC
Sample : SS020606B06
Misc : 1X ETR0602004
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 14 11:07:06 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606B06**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/11/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.38	U	30,31-Bishomohopane-22S	0.38	U
C24 Tricyclic Terpane	0.38	U	30,31-Bishomohopane-22R	0.38	U
C25 Tricyclic Terpane	0.38	U	30,31-Trishomohopane-22S	0.38	U
C24 Tetracyclic Terpane	0.38	U	30,31-Trishomohopane-22R	0.38	U
C26 Tricyclic Terpane-22S	0.38	U	Tetrakishomohopane-22S	0.38	U
C26 Tricyclic Terpane-22R	0.38	U	Tetrakishomohopane-22R	0.38	U
C28 Tricyclic Terpane-22S	0.38	U	Pentakishomohopane-22S	0.38	U
C28 Tricyclic Terpane-22R	0.38	U	Pentakishomohopane-22R	0.38	U
C29 Tricyclic Terpane-22S	0.38	U	13b(H),17a(H)-20S-Diacholestane	0.38	U
C29 Tricyclic Terpane-22R	0.38	U	13b(H),17a(H)-20R-Diacholestane	0.38	U
18a-22,29,30-Trisnorneohopane-TS	0.38	U	13b,17a-20S-Methyldiacholestane	0.38	U
C30 Tricyclic Terpane-22S	0.38	U	14a(H),17a(H)-20S-Cholestane	0.38	U
C30 Tricyclic Terpane-22R	0.38	U	14a(H),17a(H)-20R-Cholestane	0.38	U
17a(H)-22,29,30-Trisnorhopane-TM	0.38	U	13b,17a-20R-Ethyldiacholestane	0.38	U
17a/b,21b/a 28,30-Bisnorhopane	0.38	U	13a,17b-20S-Ethyldiacholestane	0.38	U
17a(H),21b(H)-25-Norhopane	0.38	U	14a,17a-20S-Methylcholestane	0.38	U
30-Norhopane	0.38	U	14a,17a-20R-Methylcholestane	0.38	U
18a(H)-30-Norneohopane-C29Ts	0.38	U	14a(H),17a(H)-20S-Ethylcholestane	0.38	U
17a(H)-Diahopane	0.38	U	14a(H),17a(H)-20R-Ethylcholestane	0.38	U
30-Normoretane	0.38	U	14b(H),17b(H)-20R-Cholestane	0.38	U
18a(H)&18b(H)-Oleananes	0.38	U	14b(H),17b(H)-20S-Cholestane	0.38	U
Hopane	0.38	U	14b,17b-20R-Methylcholestane	0.38	U
Moretane	0.38	U	14b,17b-20S-Methylcholestane	0.38	U
30-Homohopane-22S	0.38	U	14b(H),17b(H)-20R-Ethylcholestane	0.38	U
30-Homohopane-22R	0.38	U	14b(H),17b(H)-20S-Ethylcholestane	0.38	U

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	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 16:11

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28211.D
Acq On : 11 Feb 2006 4:00 am
Operator : AC
Sample : SS020606B06
Misc : 1X ETR0602004
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 14 13:22:41 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 2/17/06

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	40282	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	8898	519.40	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	51.94%	

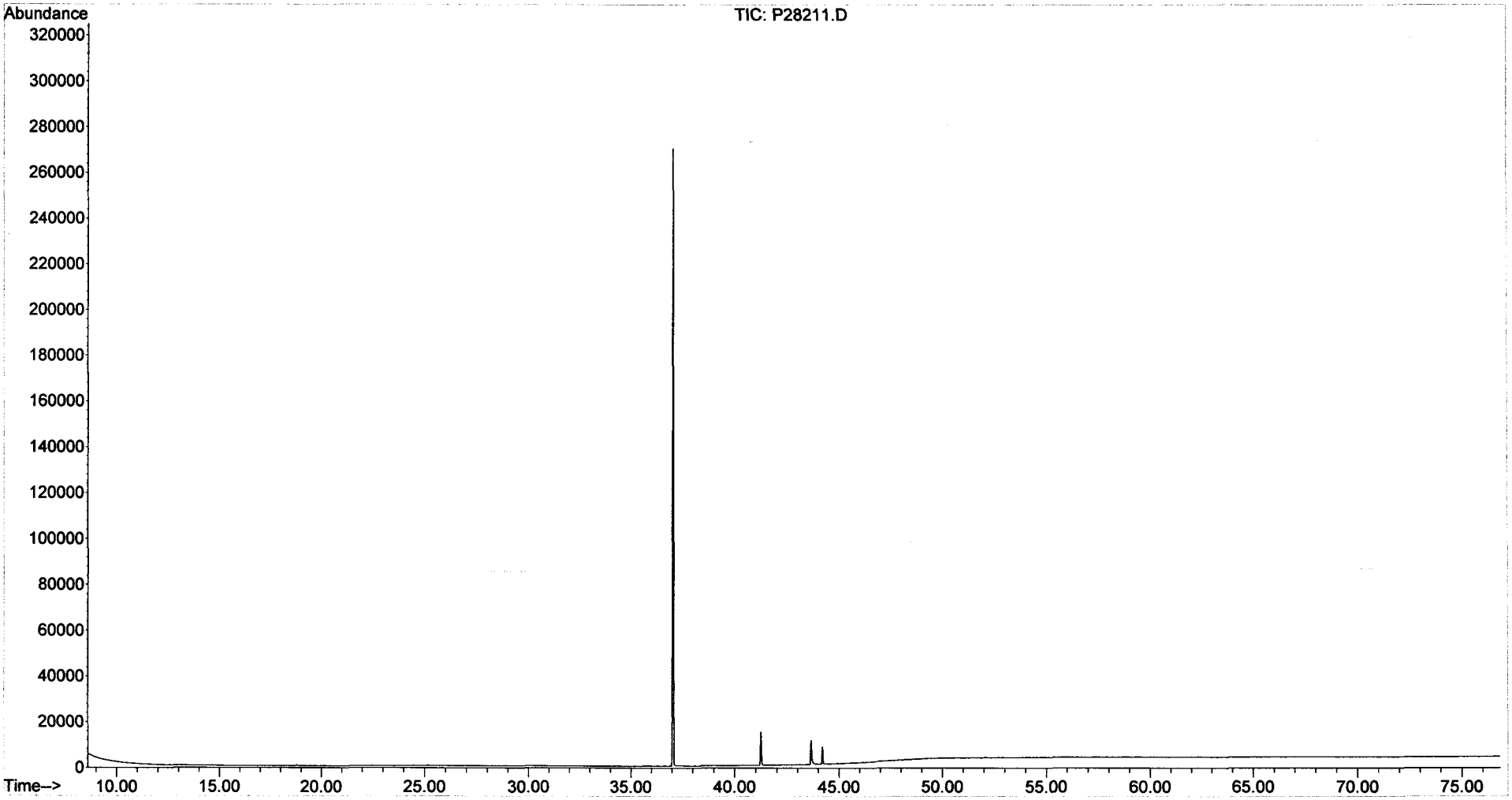
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\FEBRUARY06\FEB09\
Data File : P28211.D
Acq On : 11 Feb 2006 4:00 am
Operator : AC
Sample : SS020606B06
Misc : 1X ETR0602004
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 14 13:22:41 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: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **See Below**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	02/01/06	100	AC

Lab ID:	SS020106B11		SS020106LCS04		SS020106LCSD04				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.33		32	95	32	97	2	30	50-130
Acenaphthylene	0.12		32	94	31	94	1	30	50-130
Acenaphthene	0.15	U	32	96	32	96	1	30	50-130
Fluorene	0.15	U	32	95	32	97	2	30	50-130
Anthracene	0.076		32	95	31	94	1	30	50-130
Phenanthrene	0.21		32	96	32	96	0	30	50-130
Fluoranthene	0.13		33	99	34	101	2	30	50-130
Pyrene	0.15		34	102	34	103	2	30	50-130
Benz[a]anthracene	0.096		35	106	35	105	1	30	50-130
Chrysene/Triphenylene	0.11		33	98	33	99	1	30	50-130
Benzo[b]fluoranthene	0.14	U	35	106	36	107	1	30	50-130
Benzo[k]fluoranthene	0.27	U	34	103	35	105	2	30	50-130
Benzo[a]pyrene	0.19	U	34	101	33	99	1	30	50-130
Indeno[1,2,3-cd]pyrene	0.32	U	40	119	39	116	2	30	50-130
Dibenz[a,h]anthracene	0.25	U	39	118	40	119	1	30	50-130
Benzo[g,h,i]perylene	0.23	U	37	111	37	112	1	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	92	91	50-130
Pyrene-d10	102	104	50-130
Benzo[b]fluoranthene-d12	99	100	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 12:34

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106LCS04**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/09/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**32**	S	Fluoranthene	**33**	S
C1-Naphthalenes	0.22	U	Pyrene	**34**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**32**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**32**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**32**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**35**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**33**	S
Anthracene	**32**	S	C1-Chrysenes	0.14	U
Phenanthrene	**32**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**35**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**34**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**34**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**40**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**39**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**37**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	92	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

02/17/06 12:40

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106LCS04**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/09/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	92	50-130
Pyrene-d10	102	50-130
Benzo[b]fluoranthene-d12	99	50-130

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

02/17/06 12:41

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18057.D
Acq On : 9 Feb 2006 12:41 am
Operator : AC
Sample : SS020106LCS04
Misc : ETR0602004
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 12 13:14:35 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

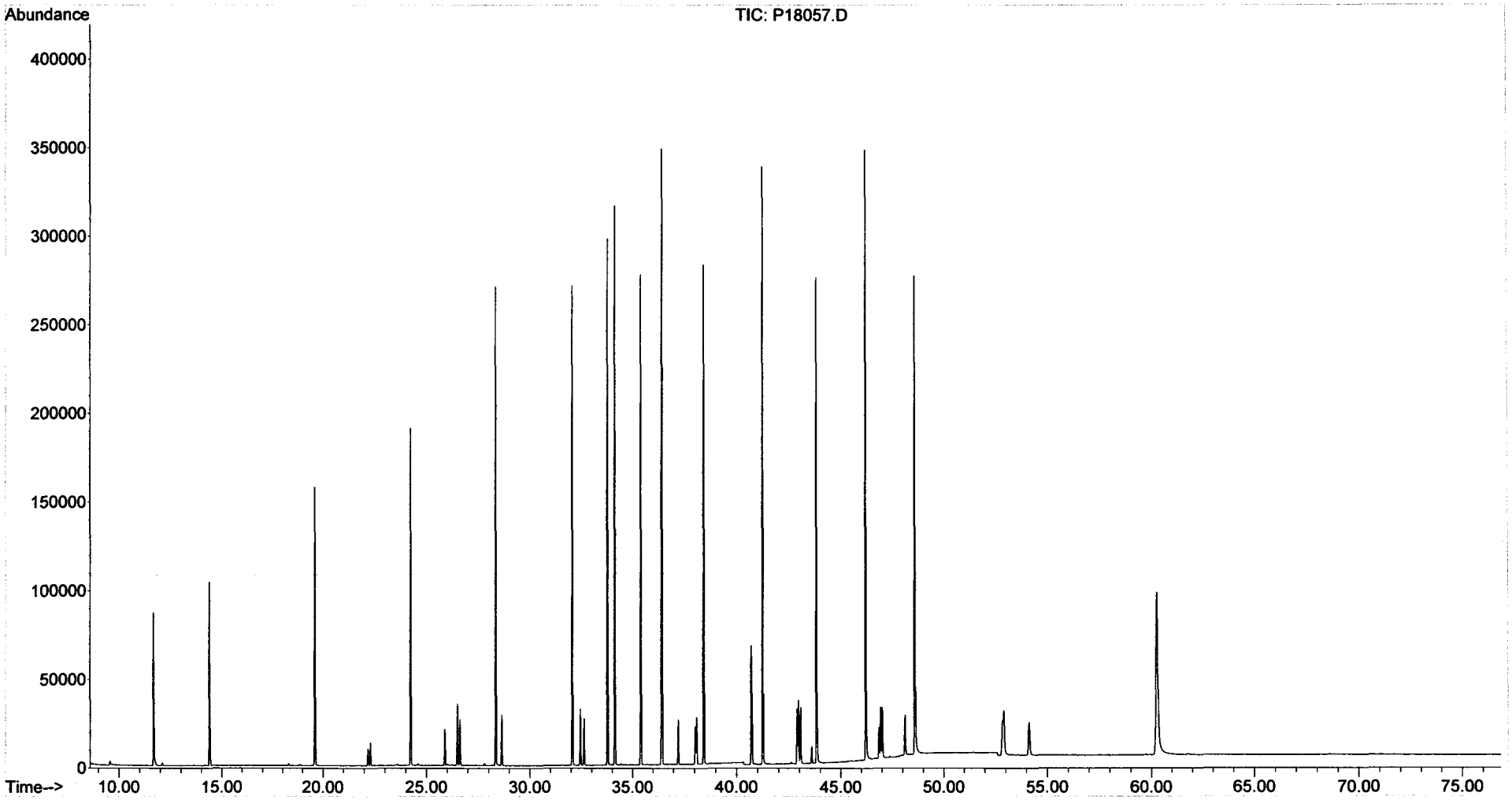
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	41611	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	70112	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	20408	228.77	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.88%#			
58) Pyrene-d10	38.04	212	46755	254.92	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.49%#			
81) Benzo[b]fluoranthene-d12	46.85	264	34660	248.25	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.82%#			
125) 5B(H)Cholane - Surr	43.58	217	12532	454.89	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.49%#			
Target Compounds						Qvalue
9) Naphthalene	19.61	128	50601	238.12	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	30412	226.06	ng/mL#	100
25) Acenaphthylene	25.89	152	48103	236.08	ng/mL#	100
26) Acenaphthene	26.62	153	30273	239.19	ng/mL	100
28) Fluorene	28.64	166	33766	237.88	ng/mL	99
41) Phenanthrene	32.45	178	50703	240.89	ng/mL	98
53) Anthracene	32.62	178	46240	237.44	ng/mL	99
56) Fluoranthene	37.22	202	55350m	246.98	ng/mL	
59) Pyrene	38.10	202	57947	254.23	ng/mL	98
73) Benz[a]anthracene	42.89	228	56451m	264.50	ng/mL	
74) Chrysene	43.05	228	53395	244.84	ng/mL	99
75) Chrysene/Triphenylene	43.05	228	53395	244.84	ng/mL	99
82) Benzo[b]fluoranthene	46.94	252	58114	265.13	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	58843	258.05	ng/mL	98
86) Benzo[a]pyrene	48.11	252	52879	251.84	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	52.84	276	54831m	296.74	ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	55360m	293.93	ng/mL	
90) Benzo[g,h,i]perylene	54.12	276	59075	277.45	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18057.D
Acq On : 9 Feb 2006 12:41 am
Operator : AC
Sample : SS020106LCS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 12 13:14:35 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: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106LCSD04**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/09/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**32**	S	Fluoranthene	**34**	S
C1-Naphthalenes	0.22	U	Pyrene	**34**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**31**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**32**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**32**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**35**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**33**	S
Anthracene	**31**	S	C1-Chrysenes	0.14	U
Phenanthrene	**32**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**36**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**35**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**33**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**39**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**40**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**37**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	100	50-130

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

02/17/06 12:41

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106LCSD04**
Associated Blank: **SS020106B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/01/06	02/09/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	104	50-130
Benzo[b]fluoranthene-d12	100	50-130

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

02/17/06 12:41

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18059.D
Acq On : 9 Feb 2006 2:13 am
Operator : AC
Sample : SS020106LCSD04
Misc : ETR0602004
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 12 13:17:09 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	41339m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.95	240	69691	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	20267	228.69	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.87%#			
58) Pyrene-d10	38.04	212	47436	260.34	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.03%#			
81) Benzo[b]fluoranthene-d12	46.85	264	34547	248.93	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.89%#			
125) 5B(H)Cholane - Surr	43.58	217	12761	466.00	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.60%#			

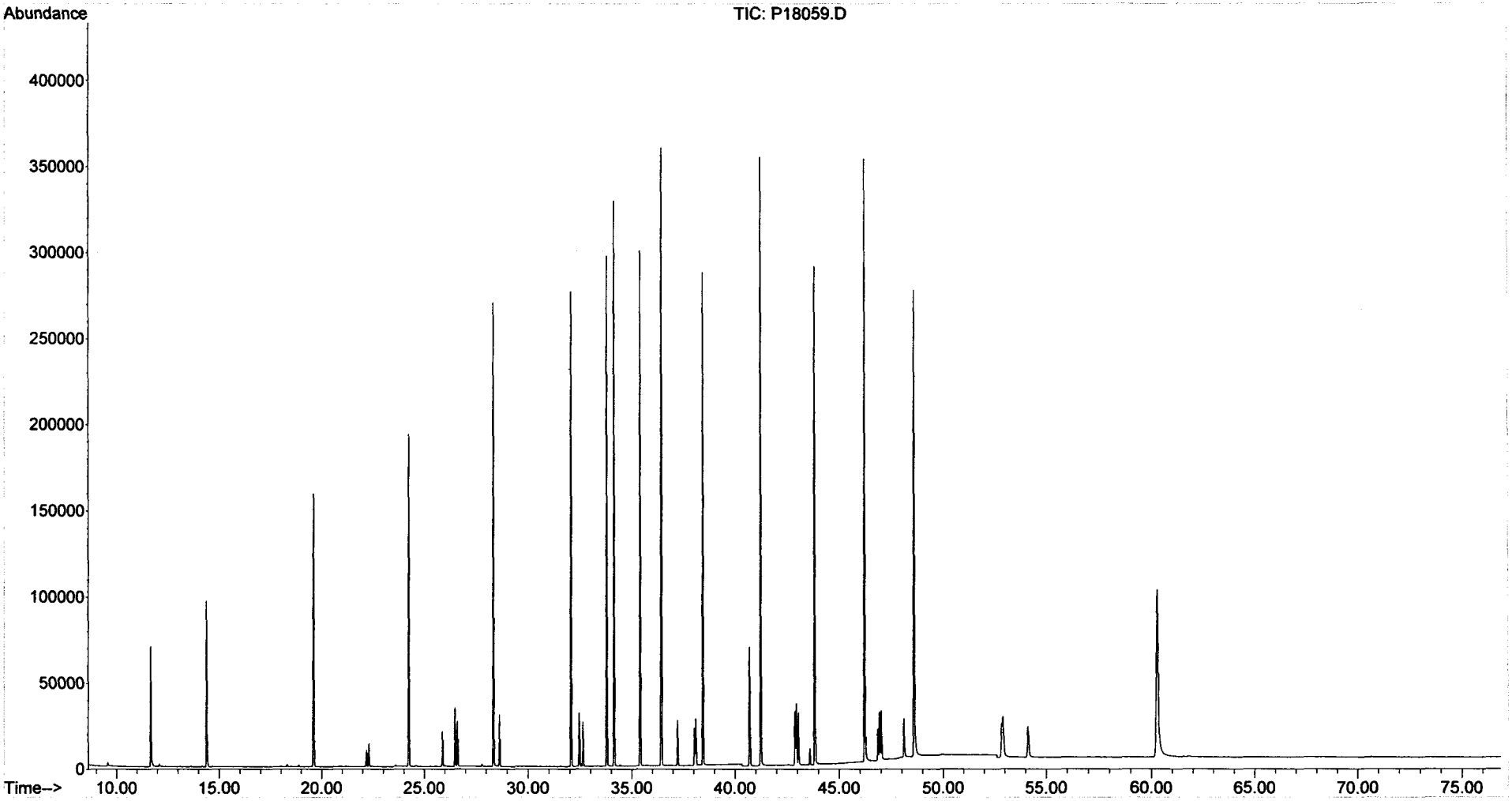
Target Compounds						Qvalue
9) Naphthalene	19.61	128	51281	242.91	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	30987	231.85	ng/mL#	100
25) Acenaphthylene	25.89	152	47446	234.39	ng/mL#	100
26) Acenaphthene	26.62	153	30330	241.21	ng/mL	99
28) Fluorene	28.64	166	34056	241.50	ng/mL	98
41) Phenanthrene	32.45	178	50247	240.30	ng/mL	100
53) Anthracene	32.64	178	45328	234.29	ng/mL	100
56) Fluoranthene	37.22	202	56051m	251.75	ng/mL	
59) Pyrene	38.10	202	58577	258.68	ng/mL	98
73) Benz[a]anthracene	42.89	228	55584m	262.01	ng/mL	
74) Chrysene	43.05	228	53534	246.96	ng/mL	99
75) Chrysene/Triphenylene	43.05	228	53534	246.96	ng/mL	99
82) Benzo[b]fluoranthene	46.93	252	58241	267.31	ng/mL	97
83) Benzo[k]fluoranthene	47.02	252	59778	263.73	ng/mL	99
86) Benzo[a]pyrene	48.11	252	51873	248.54	ng/mL	96
88) Indeno[1,2,3-cd]pyrene	52.84	276	53290m	290.14	ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	55475	296.32	ng/mL	98
90) Benzo[g,h,i]perylene	54.11	276	59035	278.93	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18059.D
Acq On : 9 Feb 2006 2:13 am
Operator : AC
Sample : SS020106LCSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 12 13:17:09 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: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **See Below**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

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

Lab ID:	SS020606B06		SS020606LCS04		SS020606LCSD05				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.20		28	85	33	100	16	30	50-130
Acenaphthylene	0.30		28	85	31	92	8	30	50-130
Acenaphthene	0.15	U	28	85	32	96	13	30	50-130
Fluorene	0.15	U	27	82	32	96	16	30	50-130
Anthracene	0.18	U	26	79	30	90	13	30	50-130
Phenanthrene	0.11		27	81	31	92	12	30	50-130
Fluoranthene	0.060		28	85	33	99	15	30	50-130
Pyrene	0.10		29	88	34	103	16	30	50-130
Benz[a]anthracene	0.21	U	31	92	33	98	6	30	50-130
Chrysene/Triphenylene	0.14	U	29	86	32	95	9	30	50-130
Benzo[b]fluoranthene	0.14	U	30	88	33	98	10	30	50-130
Benzo[k]fluoranthene	0.27	U	30	89	34	101	14	30	50-130
Benzo[a]pyrene	0.19	U	28	84	30	90	6	30	50-130
Indeno[1,2,3-cd]pyrene	0.32	U	32	96	30	89	7	30	50-130
Dibenz[a,h]anthracene	0.25	U	32	97	32	97	0	30	50-130
Benzo[g,h,i]perylene	0.23	U	29	88	31	93	5	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	85	98	50-130
Pyrene-d10	95	111	50-130
Benzo[b]fluoranthene-d12	90	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.

02/17/06 12:46

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606LCS04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/13/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**28**	S	Fluoranthene	**28**	S
C1-Naphthalenes	0.22	U	Pyrene	**29**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**28**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**28**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**27**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**31**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**29**	S
Anthracene	**26**	S	C1-Chrysenes	0.14	U
Phenanthrene	**27**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**30**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**30**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**28**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**32**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**32**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**29**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	90	50-130

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

02/17/06 12:43

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606LCS04**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/13/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	95	50-130
Benzo[b]fluoranthene-d12	90	50-130

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

02/17/06 12:43

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13\
Data File : P18185.D
Acq On : 13 Feb 2006 9:37 pm
Operator : AC
Sample : SS020606LCS04
Misc : 1X RE-ALUMINA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 14 11:03:18 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

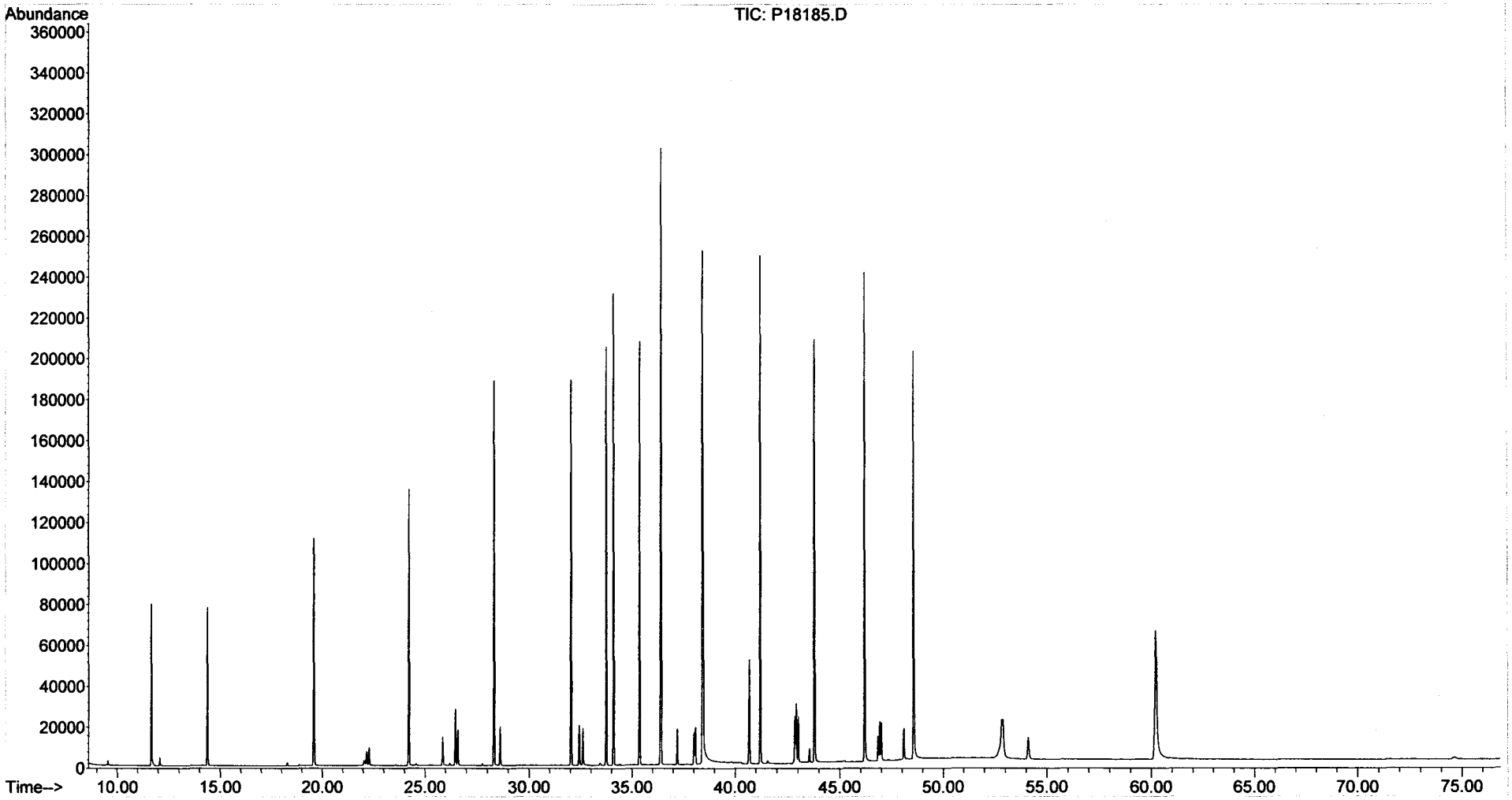
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	34448m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	56624	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	15713	212.77	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.28%#			
58) Pyrene-d10	38.02	212	35903	236.46	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 23.65%#			
81) Benzo[b]fluoranthene-d12	46.84	264	25430	225.52	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.55%#			
125) 5B(H)Cholane - Surr	43.57	217	9045	406.53	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.65%#			
Target Compounds						Qvalue
9) Naphthalene	19.61	128	37410	212.65	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	22499	202.02	ng/mL#	100
25) Acenaphthylene	25.87	152	36014	213.51	ng/mL#	100
26) Acenaphthene	26.62	153	22151	211.41	ng/mL	99
28) Fluorene	28.64	166	24132m	205.36	ng/mL	
41) Phenanthrene	32.45	178	35379	203.04	ng/mL	99
53) Anthracene	32.62	178	32018	198.60	ng/mL	99
56) Fluoranthene	37.22	202	39367m	212.19	ng/mL	
59) Pyrene	38.10	202	41339	219.08	ng/mL	99
73) Benz[a]anthracene	42.88	228	39596m	229.72	ng/mL	
74) Chrysene	43.04	228	37893m	215.15	ng/mL	
75) Chrysene/Triphenylene	43.04	228	37909m	215.24	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	39156	221.19	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	40790	221.49	ng/mL	99
86) Benzo[a]pyrene	48.11	252	35722	210.65	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.84	276	35732m	239.44	ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	36830	242.13	ng/mL#	80
90) Benzo[g,h,i]perylene	54.12	276	37901	220.40	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 : P18185.D
Acq On : 13 Feb 2006 9:37 pm
Operator : AC
Sample : SS020606LCS04
Misc : 1X RE-ALUMINA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 14 11:03:18 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: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606LCSD05**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/11/06	100	30.00	4	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**33**	S	Fluoranthene	**33**	S
C1-Naphthalenes	0.22	U	Pyrene	**34**	S
C2-Naphthalenes	0.22	U	C1-Fluoranthenes/Pyrenes	0.12	U
C3-Naphthalenes	0.22	U	C2-Fluoranthenes/Pyrenes	0.12	U
C4-Naphthalenes	0.22	U	C3-Fluoranthenes/Pyrenes	0.12	U
Biphenyl	0.12	U	C4-Fluoranthenes/Pyrenes	0.12	U
Dibenzofuran	0.16	U	Naphthobenzothiophenes	0.16	U
Acenaphthylene	**31**	S	C1-Naphthobenzothiophenes	0.16	U
Acenaphthene	**32**	S	C2-Naphthobenzothiophenes	0.16	U
Fluorene	**32**	S	C3-Naphthobenzothiophenes	0.16	U
C1-Fluorenes	0.15	U	C4-Naphthobenzothiophenes	0.16	U
C2-Fluorenes	0.15	U	Benz[a]anthracene	**33**	S
C3-Fluorenes	0.15	U	Chrysene/Triphenylene	**32**	S
Anthracene	**30**	S	C1-Chrysenes	0.14	U
Phenanthrene	**31**	S	C2-Chrysenes	0.14	U
C1-Phenanthrenes/Anthracenes	0.19	U	C3-Chrysenes	0.14	U
C2-Phenanthrenes/Anthracenes	0.19	U	C4-Chrysenes	0.14	U
C3-Phenanthrenes/Anthracenes	0.19	U	Benzo[b]fluoranthene	**33**	S
C4-Phenanthrenes/Anthracenes	0.19	U	Benzo[k]fluoranthene	**34**	S
Retene	0.19	U	Benzo[a]fluoranthene	0.27	U
Dibenzothiophene	0.15	U	Benzo[e]pyrene	0.18	U
C1-Dibenzothiophenes	0.15	U	Benzo[a]pyrene	**30**	S
C2-Dibenzothiophenes	0.15	U	Perylene	0.23	U
C3-Dibenzothiophenes	0.15	U	Indeno[1,2,3-cd]pyrene	**30**	S
C4-Dibenzothiophenes	0.15	U	Dibenz[a,h]anthracene	**32**	S
Benzo(b)fluorene	0.13	U	Benzo[g,h,i]perylene	**31**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	111	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.

02/17/06 12:43

Form I
Carbazole

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606LCSD05**
Associated Blank: **SS020606B06**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/06	02/11/06	100	30.00	4	1	AC

Parameter	Result
Carbazole	0.17 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	111	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.

02/17/06 12:44

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18119.D
Acq On : 11 Feb 2006 1:07 am
Operator : AC
Sample : SS020606LCSD05
Misc : 1X ETR0602004
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 14 11:09:33 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

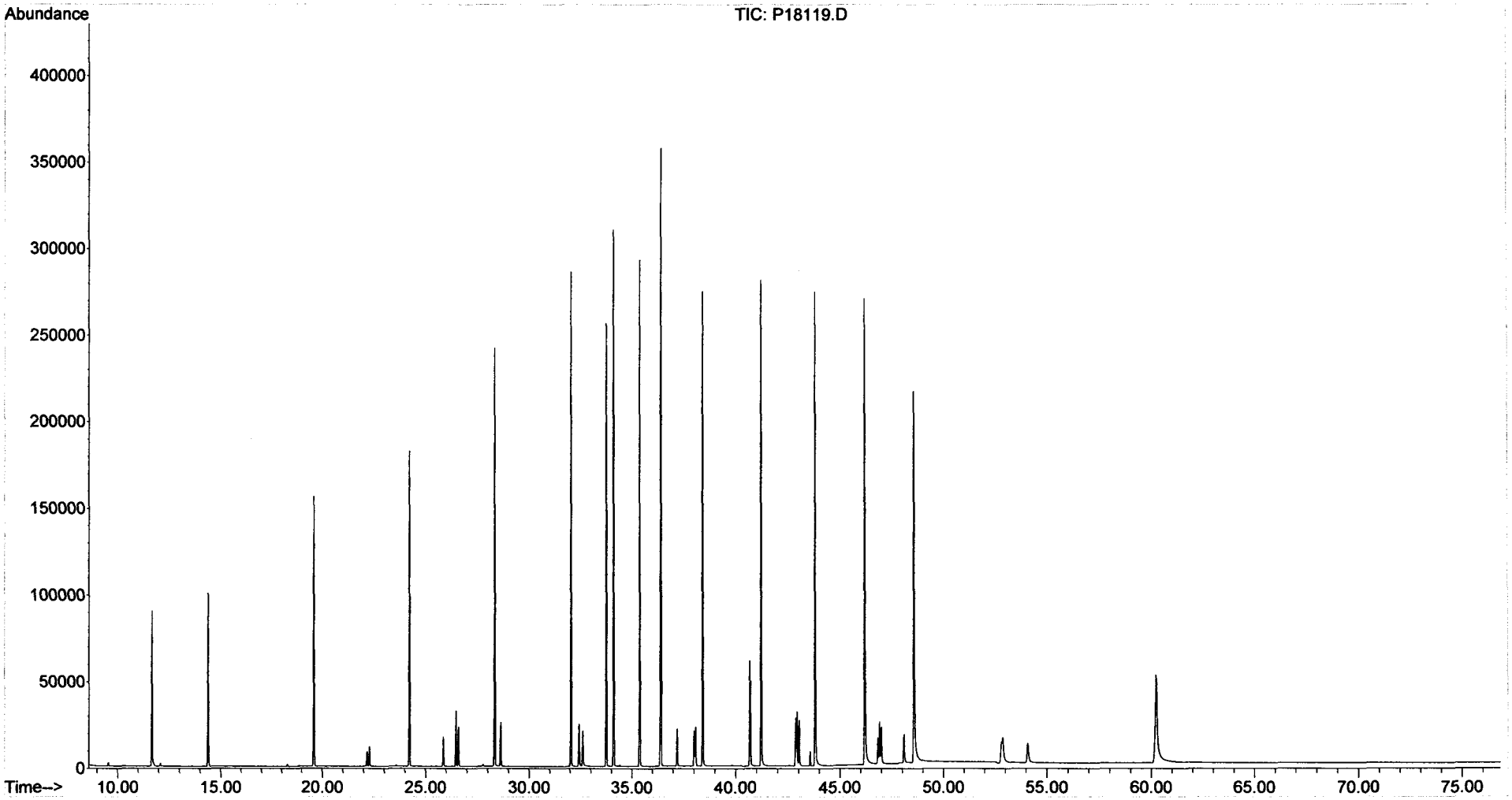
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	36313m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	63017	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	19061	244.85	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.48%#			
58) Pyrene-d10	38.02	212	44364	277.18	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.72%#			
81) Benzo[b]fluoranthene-d12	46.84	264	32756	261.02	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 26.10%#			
125) 5B(H)Cholane - Surr	43.57	217	11171	451.15	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.12%#			
Target Compounds						Qvalue
9) Naphthalene	19.61	128	46464	250.55	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	27623	235.29	ng/mL#	100
25) Acenaphthylene	25.87	152	40972	230.42	ng/mL#	100
26) Acenaphthene	26.62	153	26644	241.23	ng/mL	100
28) Fluorene	28.64	166	29750	240.17	ng/mL	99
41) Phenanthrene	32.44	178	42176	229.61	ng/mL	99
53) Anthracene	32.62	178	38409	226.01	ng/mL	96
56) Fluoranthene	37.22	202	48187m	246.39	ng/mL	
59) Pyrene	38.10	202	51396	258.39	ng/mL	100
73) Benz[a]anthracene	42.88	228	46966m	244.83	ng/mL	
74) Chrysene	43.04	228	46252m	235.96	ng/mL	
75) Chrysene/Triphenylene	43.04	228	46378m	236.61	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	48388	245.61	ng/mL	99
83) Benzo[k]fluoranthene	47.00	252	52003	253.73	ng/mL	99
86) Benzo[a]pyrene	48.11	252	42424	224.80	ng/mL	95
88) Indeno[1,2,3-cd]pyrene	52.83	276	36921m	222.31	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	40841	241.26	ng/mL	97
90) Benzo[g,h,i]perylene	54.10	276	44362	231.81	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18119.D
Acq On : 11 Feb 2006 1:07 am
Operator : AC
Sample : SS020606LCSD05
Misc : 1X ETR0602004
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 14 11:09:33 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: **0602004**
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 18:32

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: **0602004**
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 18:32

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: **0602004**
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 12:33

Form I
Alaska North Slope Crude
Hopane

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: **0602004**
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
Hopane	150

N/A - Not Applicable

02/21/06 12:33

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

AMB 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

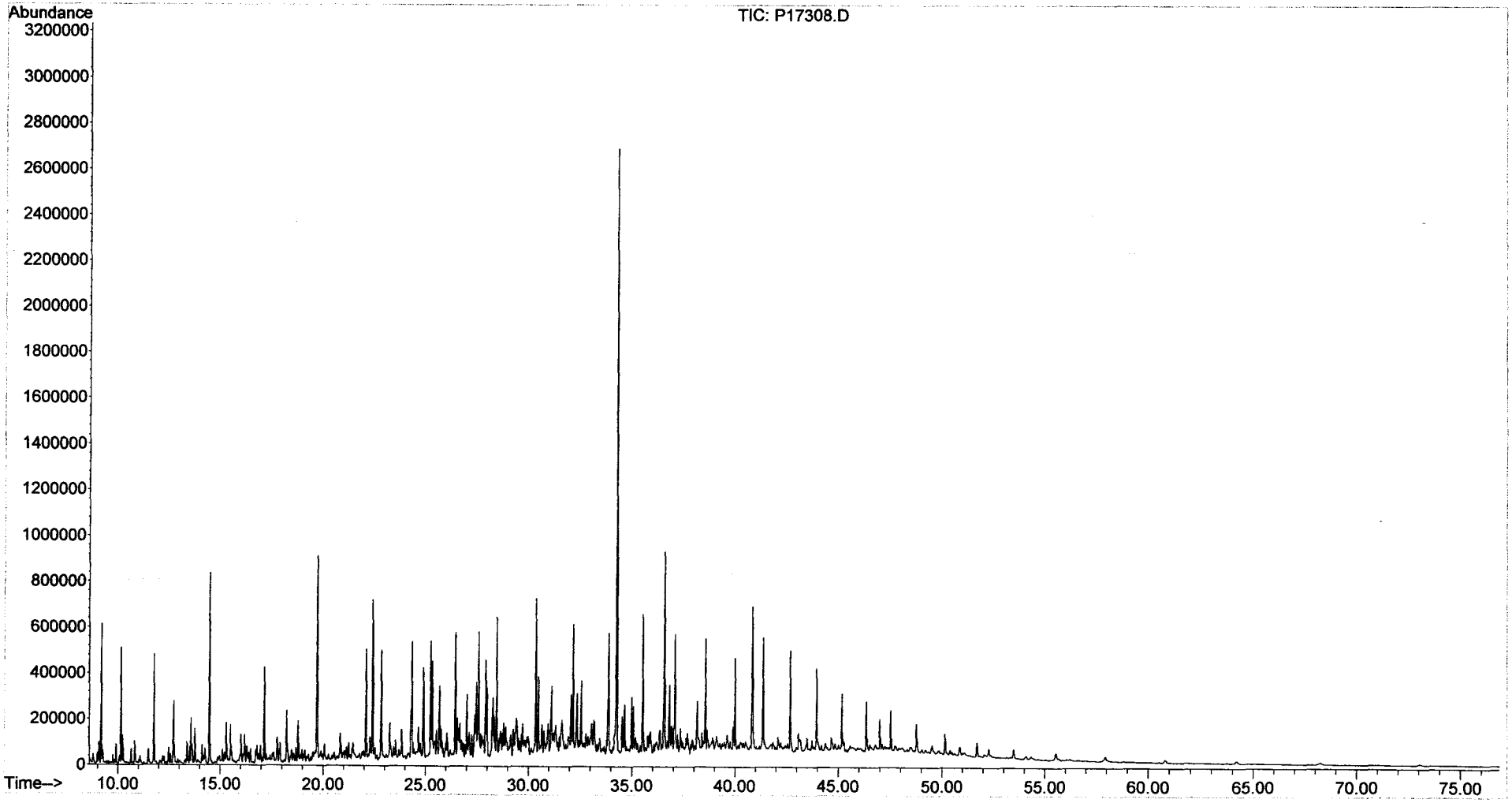
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) C30 Tricyclic Terpane-22R	48.79	191	8136m	76.21	ng/mL	
106) 17a(H)-22,29,30-Trisnorhop	48.99	191	15800m	148.01	ng/ml	
107) 17a/b,21b/a 28,30-Bisnorho	50.20	191	3610	33.82	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.00	191	3915	36.67	ng/ml	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: **0602004**
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 17:59

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: **0602004**
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.

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\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	

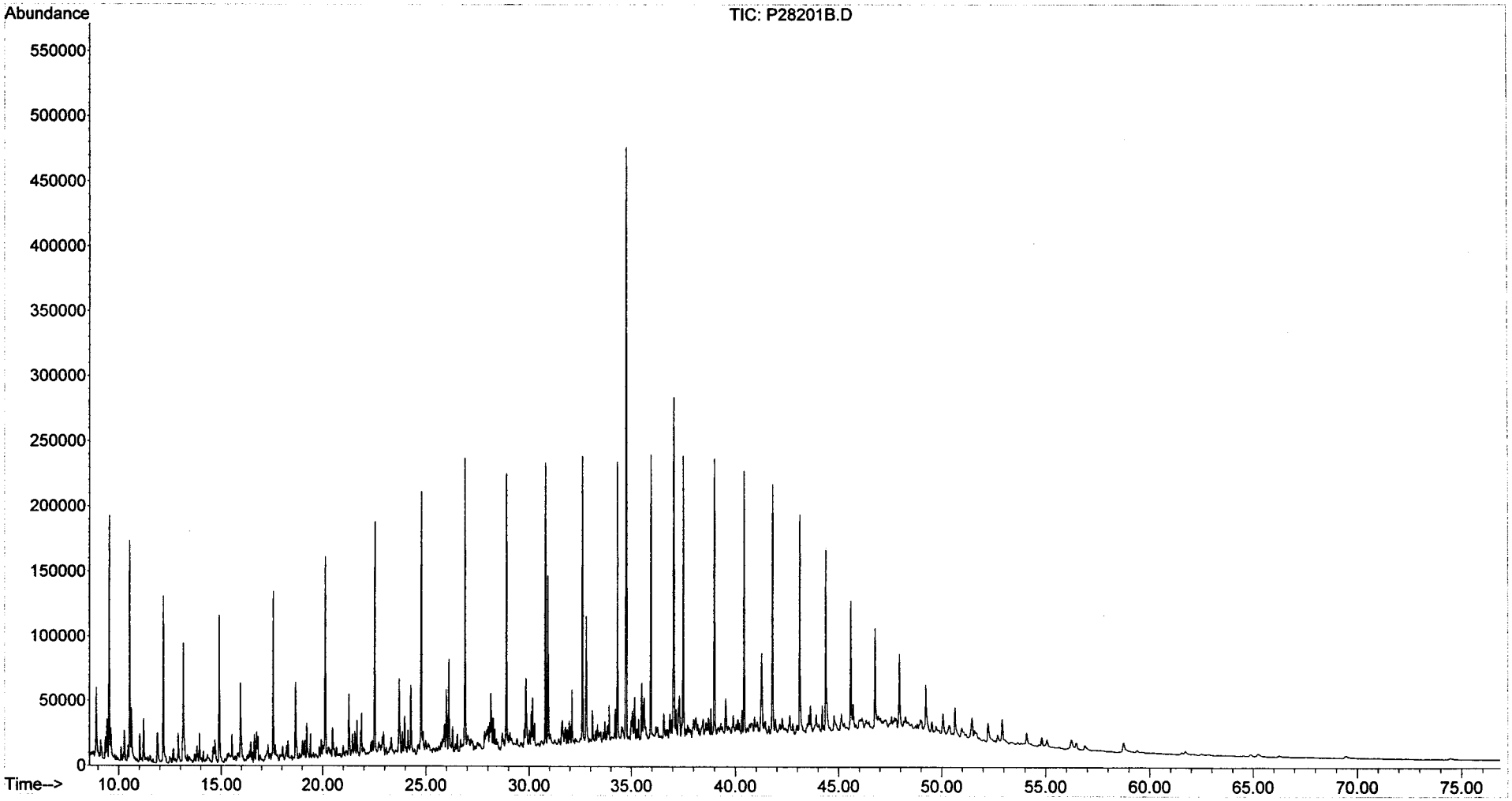
RF + Rpt conc
2nd
cr 2/14/06

(#) = 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\S1020801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB08\

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

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

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

2/10/06

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P18044	FRNC1D	ALK STD
5)	Sample	1	P18045	FRNC1D	PAH STD
6)	RearSamp	52	P18046	FRNC1D	C1020801-AFID ✗
7)	Sample	2	P18047	FRNC1D	C1020801 PASS
8)	RearSamp	53	P18048	FRNC1D	ANS1020801-AFID ✗
9)	Sample	3	P18049	FRNC1D	ANS1020801
10)	RearSamp	54	P18050	FRNC1D	DCM-AFID ✗
11)	Sample	4	P18051	FRNC1D	DCM
12)	RearSamp	55	P18052	FRNC1D	DCM-AFID ✗
13)	Sample	5	P18053	FRNC1D	DCM
14)	RearSamp	56	P18054	FRNC1D	DCM-AFID ✗
15)	Sample	6	P18055	FRNC1D	SS020106B11 ✓
16)	RearSamp	57	P18056	FRNC1D	SS020106B11-AFID ✗
17)	Sample	7	P18057	FRNC1D	SS020106LCS ✓
18)	RearSamp	58	P18058	FRNC1D	SS020106LCS-AFID ✗
19)	Sample	8	P18059	FRNC1D	SS020106LCSD ✓
20)	RearSamp	59	P18060	FRNC1D	SS020106LCSD-FID ✗
21)	Sample	9	P18061	FRNC1D	0601070-04-RE2 ✓
22)	RearSamp	60	P18062	FRNC1D	0601070-04-AFID ✗
23)	Sample	10	P18063	FRNC1D	0601070-06-RE2 ✓
24)	RearSamp	61	P18064	FRNC1D	0601070-06-AFID ✗
25)	Sample	11	P18065	FRNC1D	0601070-04-RE ✓
26)	RearSamp	62	P18066	FRNC1D	0602004-01-AFID ✗
27)	Sample	12	P18067	FRNC1D	0601070-06-RE ✓
28)	RearSamp	63	P18068	FRNC1D	0602004-02-AFID ✗
29)	Sample	13	P18069	FRNC1D	C1020802 PASS
30)	RearSamp	64	P18070	FRNC1D	0602004-03-AFID ✗
31)	Sample	14	P18071	FRNC1D	0602004-04-RE ✓
32)	RearSamp	65	P18072	FRNC1D	C1020802-AFID ✗
33)	Sample	15	P18073	FRNC1D	0602004-04D-RE ✓
34)	RearSamp	66	P18074	FRNC1D	DCM-AFID ✗
35)	Sample	16	P18075	FRNC1D	0602004-03-RE ✓
36)	RearSamp	67	P18076	FRNC1D	SS020606B06-AFID ✗
37)	Sample	17	P18077	FRNC1D	0602004-01-RE
38)	RearSamp	68	P18078	FRNC1D	
39)	Sample	18	P18079	FRNC1D	0602004-02-RE ✓
40)	RearSamp	69	P18080	FRNC1D	
41)	Sample	19	P18081	FRNC1D	0602004-05-RE ✓
42)	RearSamp	70	P18082	FRNC1D	
43)	Sample	20	P18083	FRNC1D	0602004-06-RE ✓

✓ run used

✗ = instrument contamination for FID
re-analyze

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

MG 2/14/06

Last Modified: Fri

Sequence Name: C:\MSDChem\1\sequence\S1020801.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	71	P18084	FRNC1D	
45)	Sample	21	P18085	FRNC1D	0602004-07-RE ✓
[illegible]	RearSamp	72	P18086	FRNC1D	
[illegible]	Sample	22	P18087	FRNC1D	0602004-08-RE ✓
48)	RearSamp	73	P18088	FRNC1D	
49)	Sample	23	P18089	FRNC1D	0602004-09-RE ✓
50)	RearSamp	74	P18090	FRNC1D	
51)	Sample	24	P18091	FRNC1D	0602004-9D-RE ✓
52)	RearSamp	75	P18092	FRNC1D	
53)	Sample	25	P18093	FRNC1D	C1020803 PASS
54)	RearSamp	76	P18094	FRNC1D	
55)	Sample	26	P18095	FRNC1D	0602004-10-RE ✓
56)	RearSamp	77	P18096	FRNC1D	
57)	Sample	27	P18097	FRNC1D	0602004-11-RE
58)	RearSamp	77	P18098	FRNC1D	
59)	Sample	28	P18099	FRNC1D	0602004-12-RE ✓
60)	RearSamp	77	P18100	FRNC1D	
61)	Sample	29	P18101	FRNC1D	0602004-13-RE ✓
62)	RearSamp	77	P18102	FRNC1D	
63)	Sample	30	P18103	FRNC1D	0602004-14-RE ✓
64)	RearSamp	77	P18104	FRNC1D	
65)	Sample	31	P18105	FRNC1D	0602004-05-RE ✓
66)	RearSamp	78	P18106	FRNC1D	
67)	Sample	32	P18107	FRNC1D	0602004-02-RE ✓
68)	Pause				
69)	RearSamp	51	P18108	FRNC1D	C1021001-AFID - FID RESTART.
70)	Sample	33	P18109	FRNC1D	C1020804 PASS
71)	RearSamp	52	P18110	FRNC1D	DCM-AFID
72)	Sample	34	P18111	FRNC1D	DCM
73)	RearSamp	53	P18112	FRNC1D	DCM-AFID
74)	Sample	35	P18113	FRNC1D	DCM
75)	RearSamp	54	P18114	FRNC1D	SS020106B11-AFID
[illegible]	Sample	36	P18115	FRNC1D	SS020606B06 ✓
[illegible]	RearSamp	55	P18116	FRNC1D	SS020606B06-AFID
78)	Sample	37	P18117	FRNC1D	SS020606LCS04
79)	RearSamp	56	P18118	FRNC1D	SS020106LCS04-AFID
80)	Sample	38	P18119	FRNC1D	SS020606LCSD05 ✓
81)	RearSamp	57	P18120	FRNC1D	SS020106LCSD04
82)	Sample	39	P18121	FRNC1D	0602004-01 ✓
83)	RearSamp	58	P18122	FRNC1D	SS020606LCS04-AFID
84)	Sample	40	P18123	FRNC1D	0602004-03 ✓
85)	RearSamp	59	P18124	FRNC1D	SS020606LCSD05-AFID
86)	Sample	41	P18125	FRNC1D	0602004-04 ✓
87)	RearSamp	60	P18126	FRNC1D	C1021002-AFID
88)	Sample	42	P18127	FRNC1D	0602004-04D ✓
89)	RearSamp	61	P18128	FRNC1D	DCM-AFID
90)	Sample	43	P18129	FRNC1D	0602004-06 ✓
91)	RearSamp	62	P18130	FRNC1D	0601070-04-AFID
92)	Sample	44	P18131	FRNC1D	0602004-07 ✓
93)	RearSamp	63	P18132	FRNC1D	0601070-06-AFID
94)	Sample	45	P18133	FRNC1D	0602004-08 ✓
95)	RearSamp	64	P18134	FRNC1D	0602004-01-AFID
96)	Sample	46	P18135	FRNC1D	- C1020805 PASS ~~ACT C.Z~~

✓ run used

MS 2/14/06

Last Modified: Fri Feb 10 16:37:18 2006

Sequence Name: C:\MSDChem\1\sequence\S1020801.S

	Line Type	Vial	DataFile	Method	Sample Name
97)	RearSamp	65	P18136	FRNC1D	0602004-02-AFID
98)	Sample	47	P18137	FRNC1D	DCM
[illegible])	RearSamp	66	P18138	FRNC1D	0602004-03-AFID
1[illegible])	Sample	48	P18139	FRNC1D	0602004-09 ✓
101)	RearSamp	67	P18140	FRNC1D	0602004-04-AFID
102)	Sample	49	P18141	FRNC1D	0602004-09D ✓
103)	RearSamp	68	P18142	FRNC1D	0602004-04D-AFID
104)	Sample	50	P18143	FRNC1D	0602004-10 ✓
105)	RearSamp	69	P18144	FRNC1D	0602004-05-AFID
106)	Sample	1	P18145	FRNC1D	0602004-11 ✓
107)	RearSamp	70	P18146	FRNC1D	0602004-06-AFID
108)	Sample	2	P18147	FRNC1D	0602004-12 ✓
109)	RearSamp	71	P18148	FRNC1D	C1021003-AFID
110)	Sample	3	P18149	FRNC1D	0602004-13 ✓
111)	RearSamp	72	P18150	FRNC1D	DCM-AFID
112)	Sample	4	P18151	FRNC1D	0602004-14 ✓
113)	RearSamp	73	P18152	FRNC1D	0602004-07-AFID
114)	Sample	5	P18153	FRNC1D	C1020806 PASS
115)	RearSamp	74	P18154	FRNC1D	0602004-08-AFID
116)	Sample	6	P18155	FRNC1D	DCM
117)	RearSamp	75	P18156	FRNC1D	0602004-09-AFID
118)	Sample	6	P18157	FRNC1D	
119)	RearSamp	76	P18158	FRNC1D	0602004-09D-AFID
120)	Sample	5	P18159	FRNC1D	
121)	RearSamp	77	P18160	FRNC1D	0602004-10-AFID
122)	Sample	6	P18161	FRNC1D	
123)	RearSamp	78	P18162	FRNC1D	0602004-11-AFID
124)	Sample	5	P18163	FRNC1D	
125)	RearSamp	79	P18164	FRNC1D	0602004-12-AFID
126)	Sample	6	P18165	FRNC1D	
127)	RearSamp	80	P18166	FRNC1D	0602004-13-AFID
128)	Sample	5	P18167	FRNC1D	
1[illegible])	RearSamp	81	P18168	FRNC1D	0602004-14-AFID
1[illegible])	Sample	6	P18169	FRNC1D	
131)	RearSamp	82	P18170	FRNC1D	C1021004-AFID
132)	Sample	5	P18171	FRNC1D	
133)	RearSamp	83	P18172	FRNC1D	DCM
134)	Sample	6	P18173	FRNC1D	
135)	RearSamp	84	P18174	FRNC1DF	BAF D12
136)	Sample	7	P18175	FRNC1DF	0602024-01

✓ run used

MG 2/14/06

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 ✓ ✓ run used
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 ~~use~~ 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

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	

CW 2/21/06

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:

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 *
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: ~~HC2090~~1.M PAH Process Method: ~~RAH20113~~.M
B1020209.M.

MG 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

MG 2/13/06

Supporting Quality Control Results

Form IV
Method Blank Summary
Alkylated Polynuclear Aromatic Hydrocarbons

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106B11**
Date Analyzed: **02/08/06 23:09**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS020106LCS04	02/09/06 00:41
LCSD	SS020106LCSD04	02/09/06 02:13
GC-SED-103 (8.1-9.1)	0602004-03E	02/09/06 14:29
GC-SED-58C (8-10)	0602004-02	02/09/06 17:34
GC-SED-101 (7.9-9.1)	0602004-05	02/09/06 19:06
GC-SED-97 (8.5-9.5)	0602004-07E	02/09/06 22:10
GC-SED-74 (5.3-6.3)	0602004-08E	02/09/06 23:41
GC-SED-73E (3.8-8.4)	0602004-09E	02/10/06 01:12
GC-SED-73E (3.8-8.4)	0602004-09E D	02/10/06 02:44
GC-SED-70B (4-5)	0602004-10E	02/10/06 05:49
GC-SED-82 (12-12.8)	0602004-12E	02/10/06 08:52
GC-SED-77 (14.5-15.4)	0602004-13E	02/10/06 10:29
GC-SED-71C (1.5-2.5)	0602004-14E	02/10/06 12:03
GC-SED-101 (7.9-9.1)	0602004-05E	02/10/06 13:37
GC-SED-58C (8-10)	0602004-02E	02/10/06 15:11
GC-SED-98 (1-2)	0602004-01	02/11/06 02:41
GC-SED-103 (8.1-9.1)	0602004-03	02/11/06 04:15
GC-SED-97 (8.5-9.5)	0602004-07	02/11/06 10:29
GC-SED-74 (5.3-6.3)	0602004-08	02/11/06 12:04
GC-SED-73E (3.8-8.4)	0602004-09	02/11/06 16:46
GC-SED-73E (3.8-8.4)	0602004-09 D	02/11/06 18:19
GC-SED-70B (4-5)	0602004-10	02/11/06 19:53
GC-SED-83 (0-2)	0602004-11	02/11/06 21:27
GC-SED-82 (12-12.8)	0602004-12	02/11/06 23:01
GC-SED-77 (14.5-15.4)	0602004-13	02/12/06 00:35
GC-SED-71C (1.5-2.5)	0602004-14	02/12/06 02:10

N/A - Not Applicable

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

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: **0602004**
Lab ID: **SS020606B06**
Date Analyzed: **02/10/06 21:59**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-102 (2-4)	0602004-04E	02/09/06 11:26
GC-SED-102 (2-4)	0602004-04E D	02/09/06 12:57
GC-SED-100 (5-6)	0602004-06E	02/09/06 20:38
LCSD	SS020606LCSD05	02/11/06 01:07
GC-SED-102 (2-4)	0602004-04	02/11/06 05:49
GC-SED-102 (2-4)	0602004-04 D	02/11/06 07:23
GC-SED-100 (5-6)	0602004-06	02/11/06 08:56
LCS	SS020606LCS04	02/13/06 21:37

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: **0602004**
Lab ID: **SS020106B11**
Date Analyzed: **02/11/06 05:34**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-98 (1-2)	0602004-01	02/11/06 10:19
GC-SED-58C (8-10)	0602004-02	02/11/06 11:55
GC-SED-103 (8.1-9.1)	0602004-03	02/11/06 13:31
GC-SED-101 (7.9-9.1)	0602004-05	02/11/06 21:26
GC-SED-97 (8.5-9.5)	0602004-07	02/12/06 00:35
GC-SED-74 (5.3-6.3)	0602004-08	02/12/06 02:10
GC-SED-73E (3.8-8.4)	0602004-09	02/12/06 03:45
GC-SED-73E (3.8-8.4)	0602004-09 D	02/12/06 05:20
GC-SED-70B (4-5)	0602004-10	02/12/06 10:06
GC-SED-83 (0-2)	0602004-11	02/12/06 11:41
GC-SED-82 (12-12.8)	0602004-12	02/12/06 13:17
GC-SED-77 (14.5-15.4)	0602004-13	02/12/06 14:51
GC-SED-71C (1.5-2.5)	0602004-14	02/12/06 16:27

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: **0602004**
Lab ID: **SS020606B06**
Date Analyzed: **02/11/06 04:00**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-102 (2-4)	0602004-04	02/11/06 15:07
GC-SED-102 (2-4)	0602004-04 D	02/11/06 19:52
GC-SED-100 (5-6)	0602004-06	02/11/06 23:00

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 TS010506AW502
14)	Sample	6	P17278	FRNC1D	I1010403 *
15)	RearSamp	57	P17279	FRNC1D	DCM IB10104060l
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 cont on S1010501
30)	Sample	12	P17294	FRNC1D	Q1010402
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: WHAB52 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~~ WHAB50 Conc.: 500ng/mL
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~~ SS011106AWS02
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: ~~HCH1005.M~~ PAH Process Method: ~~PAH121701.M~~ ✓
NEW ICAL PAH10104.M

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

Sequence Name: C:\MSDChem\1\sequence\S1010901.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	10	P17412	FRNC1D	
45)	RearSamp	70	P17413	FRNC1D	0512019-10
46)	Sample	10	P17414	FRNC1D	
47)	RearSamp	71	P17415	FRNC1D	C1010903-AFID PASS
48)	Sample	10	P17416	FRNC1D	
49)	RearSamp	72	P17417	FRNC1D	SFFS1010901-AFID
50)	Sample	10	P17418	FRNC1D	
51)	RearSamp	73	P17419	FRNC1D	DCM
52)	Sample	10	P17420	FRNC1D	
53)	RearSamp	74	P17421	FRNC1D	SS010306B06
54)	Sample	10	P17422	FRNC1D	C1011101 PASS
55)	RearSamp	75	P17423	FRNC1D	SS010606B01
56)	Sample	10	P17424	FRNC1D	
57)	RearSamp	76	P17425	FRNC1D	SS010306LCS04
58)	Sample	11	P17426	FRNC1D	LA1011101 ✓ SS011106LA02
59)	RearSamp	77	P17427	FRNC1D	SS010306LCSD04
60)	Sample	12	P17428	FRNC1D	DCM
61)	RearSamp	78	P17429	FRNC1D	LA1010901-AFID TS011106LA01
62)	Sample	13	P17430	FRNC1D	TS010306B12 ✓
63)	RearSamp	79	P17431	FRNC1D	SS010606LCS01-AFID
64)	Sample	16	P17432	FRNC1D	0512019-10 ✓
65)	Pause				
66)	RearSamp	80	P17433	FRNC1D	0512021-04
67)	Sample	14	P17434	FRNC1D	TS010306LCS06 ✓
68)	RearSamp	81	P17435	FRNC1D	SS010606LCSD01
69)	Sample	15	P17436	FRNC1D	TS010306LCSD06 ✓
70)	Pause				
71)	RearSamp	82	P17437	FRNC1D	0512132-05-AFID
72)	Sample	17	P17438	FRNC1D	C1011102 PASS
73)	RearSamp	83	P17439	FRNC1D	0512132-06-AFID
74)	Sample	18	P17440	FRNC1D	DCM
75)	Pause				
76)	RearSamp	84	P17441	FRNC1D	0512132-10-AFID
77)	Sample	19	P17442	FRNC1D	SW010306B05 ✓
78)	RearSamp	85	P17443	FRNC1D	C1010904-AFID PASS.
79)	Sample	20	P17444	FRNC1D	SW010306LCS03 ✓
80)	RearSamp	86	P17445	FRNC1D	DCM-AFID
81)	Sample	21	P17446	FRNC1D	SW010306LCSD03 ✓
82)	RearSamp	87	P17447	FRNC1D	SS120805B02-AFID
83)	Sample	22	P17448	FRNC1D	0512132-01 ✓
84)	RearSamp	88	P17449	FRNC1D	0512021-04-AFID
85)	Sample	23	P17450	FRNC1D	0512132-02 ✓
86)	RearSamp	89	P17451	FRNC1D	DCM-AFID
87)	Sample	24	P17452	FRNC1D	0512132-03 ✓
88)	RearSamp	90	P17453	FRNC1D	0601015-01-AFID
89)	Sample	25	P17454	FRNC1D	0512132-04 ✓
90)	RearSamp	91	P17455	FRNC1D	C1010905-AFID PASS
91)	Sample	26	P17456	FRNC1D	LA1011101
92)	RearSamp	91	P17457	FRNC1D	
93)	Sample	27	P17458	FRNC1D	SFFS1011101 ✓ SW011706SSFS01
94)	RearSamp	91	P17459	FRNC1D	
95)	Sample	28	P17460	FRNC1D	C1011103 PASS

✓ Run Here
MM 10-MS
1-12-06

MS
1/17/06

Last Modified: Wed Jan 11 13:10:15 2006

Sequence Name: C:\MSDChem\1\sequence\S1011901.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	24	P17638	FRNC1D	0601020-04 ✓
45)	RearSamp	75	P17639	FRNC1D	
46)	Sample	25	P17640	FRNC1D	0601020-05 ✓
47)	RearSamp	76	P17641	FRNC1D	
48)	Sample	26	P17642	FRNC1D	0601020-06 ✓
49)	RearSamp	77	P17643	FRNC1D	
50)	Sample	27	P17644	FRNC1D	0601020-07 ✓
51)	RearSamp	78	P17645	FRNC1D	
52)	Sample	28	P17646	FRNC1D	0601020-08 ✓
53)	RearSamp	79	P17647	FRNC1D	
54)	Sample	29	P17648	FRNC1D	0601020-08D ✓
55)	RearSamp	80	P17649	FRNC1D	
56)	Sample	30	P17650	FRNC1D	0601020-09 ✓
57)	RearSamp	81	P17651	FRNC1D	
58)	Sample	31	P17652	FRNC1D	C1011903 OK for Biomarkers
59)	RearSamp	82	P17653	FRNC1D	
60)	Sample	32	P17654	FRNC1D	C1011903A OK for BIOMARKERS
61)	RearSamp	83	P17655	FRNC1D	PRIMER-AFID
62)	Sample	33	P17656	FRNC1D	DCM
63)	RearSamp	84	P17657	FRNC1D	C1011901-AFID
64)	Sample	34	P17658	FRNC1D	0601020-10 ✓
65)	RearSamp	85	P17659	FRNC1D	ANS1011901-AFID
66)	Sample	35	P17660	FRNC1D	0601020-11 ✓
67)	RearSamp	86	P17661	FRNC1D	DCM-AFID
68)	Sample	36	P17662	FRNC1D	0601020-12 ✓
69)	RearSamp	87	P17663	FRNC1D	DCM-AFID
70)	Sample	37	P17664	FRNC1D	0601020-13 ✓
71)	RearSamp	88	P17665	FRNC1D	R1011901-AFID
72)	Sample	38	P17666	FRNC1D	0601020-14 ✓
73)	RearSamp	89	P17667	FRNC1D	R1011902-AFID
74)	Sample	39	P17668	FRNC1D	0601020-15 ✓
75)	RearSamp	90	P17669	FRNC1D	R1011903-AFID
76)	Sample	40	P17670	FRNC1D	0601020-16 ✓
77)	RearSamp	91	P17671	FRNC1D	R1011904-AFID
78)	Sample	41	P17672	FRNC1D	0601020-17 ✓
79)	RearSamp	92	P17673	FRNC1D	R1011905-AFID
80)	Sample	42	P17674	FRNC1D	0601020-18 ✓
81)	RearSamp	93	P17675	FRNC1D	R1011906-AFID
82)	Sample	43	P17676	FRNC1D	0601020-19 ✓
83)	RearSamp	94	P17677	FRNC1D	R1011907-AFID
84)	Sample	44	P17678	FRNC1D	0601020-20 ✓
85)	RearSamp	95	P17679	FRNC1D	R1011908-AFID
86)	Sample	45	P17680	FRNC1D	C1011904 PASS
87)	RearSamp	96	P17681	FRNC1D	R1011909-AFID
88)	Sample	46	P17682	FRNC1D	C1011904A OK for Biomarkers
89)	RearSamp	97	P17683	FRNC1D	R1011910-AFID
90)	Sample	47	P17684	FRNC1D	DCM
91)	RearSamp	98	P17685	FRNC1D	DCM-AFID
92)	Sample	48	P17686	FRNC1D	SOURCE01 SS0126006CTEH01
93)	RearSamp	99	P17687	FRNC1D	C1011902-AFID
94)	Sample	49	P17688	FRNC1D	
95)	RearSamp	100	P17689	FRNC1D	DCM-AFID
96)	Sample	50	P17690	FRNC1D	

✓ run used

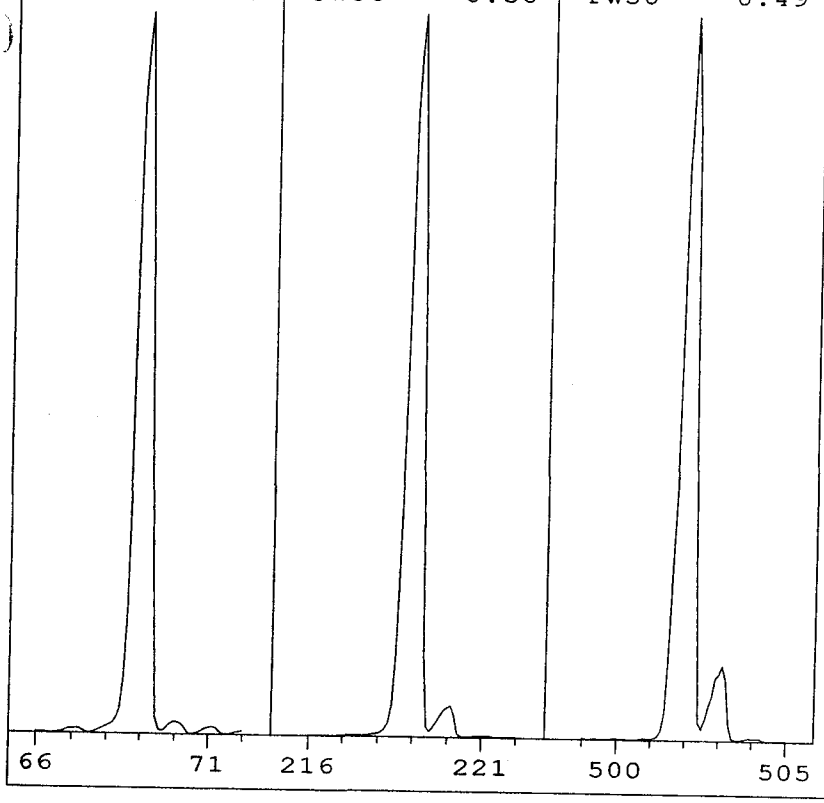
MS 1/26/06

MS 1/23/06

Last Modified: Fri Jan 20 11:39:14 2006

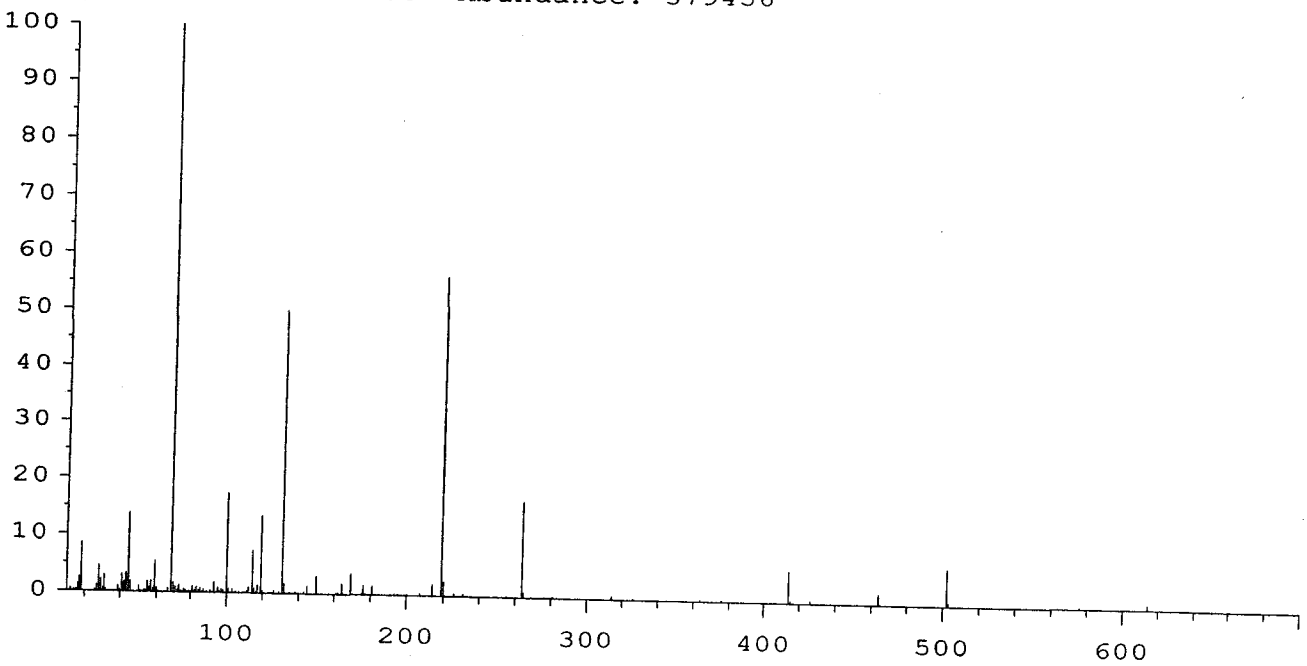
Wed Jan 04 09:47:59 2006 5973 Tune 1/4/06
C:\MSDCHEM\1\5973N\PBTBA.U Instrument: PAH-1

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 CMS 1-5-06
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

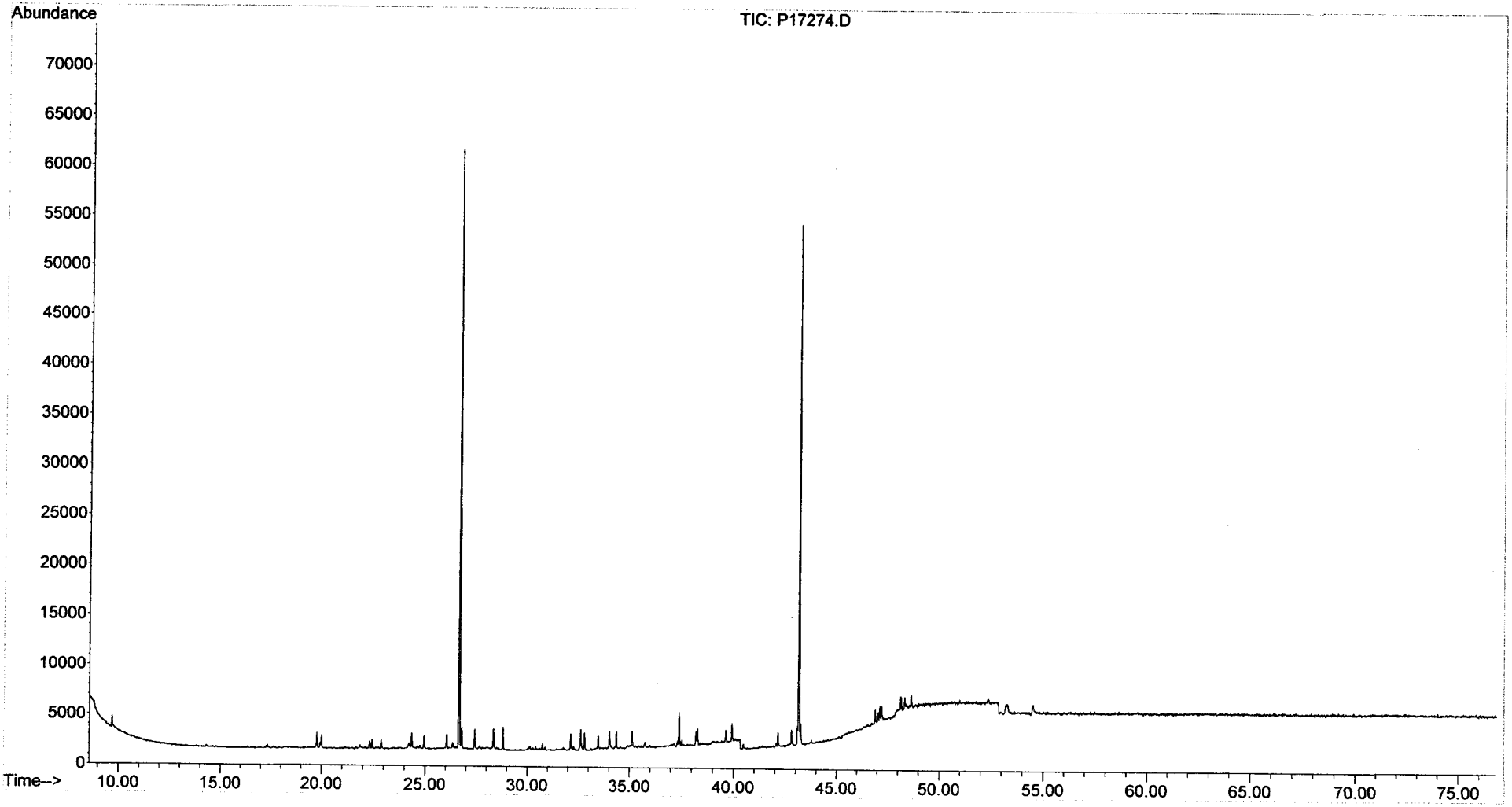
CM 1-5-06

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

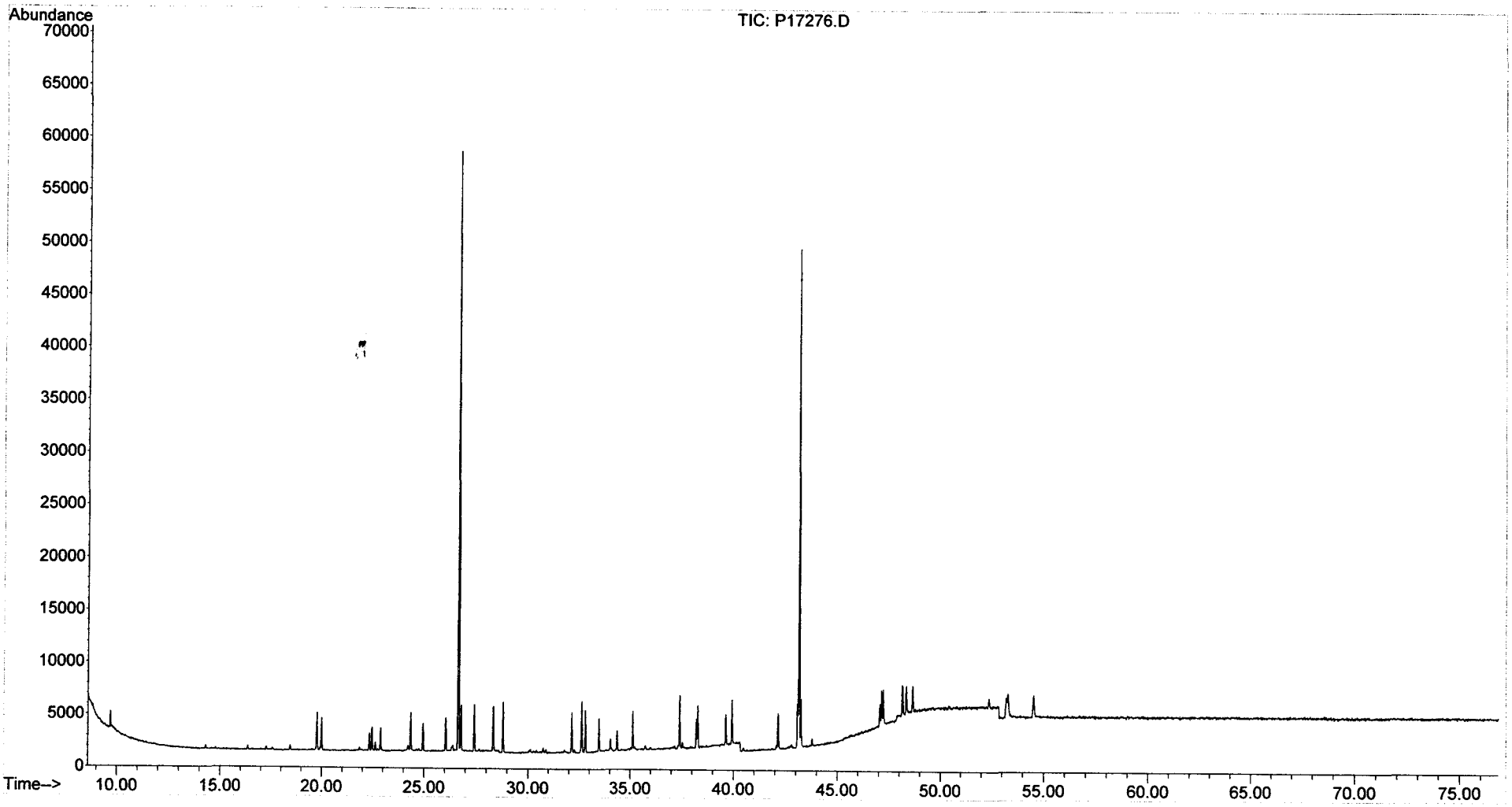
Quant Time: Jan 05 06:54:13 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\JAN2006\PAH10104.M MS 1-5-06
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 06:19:07 2006
Response via : Initial Calibration

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

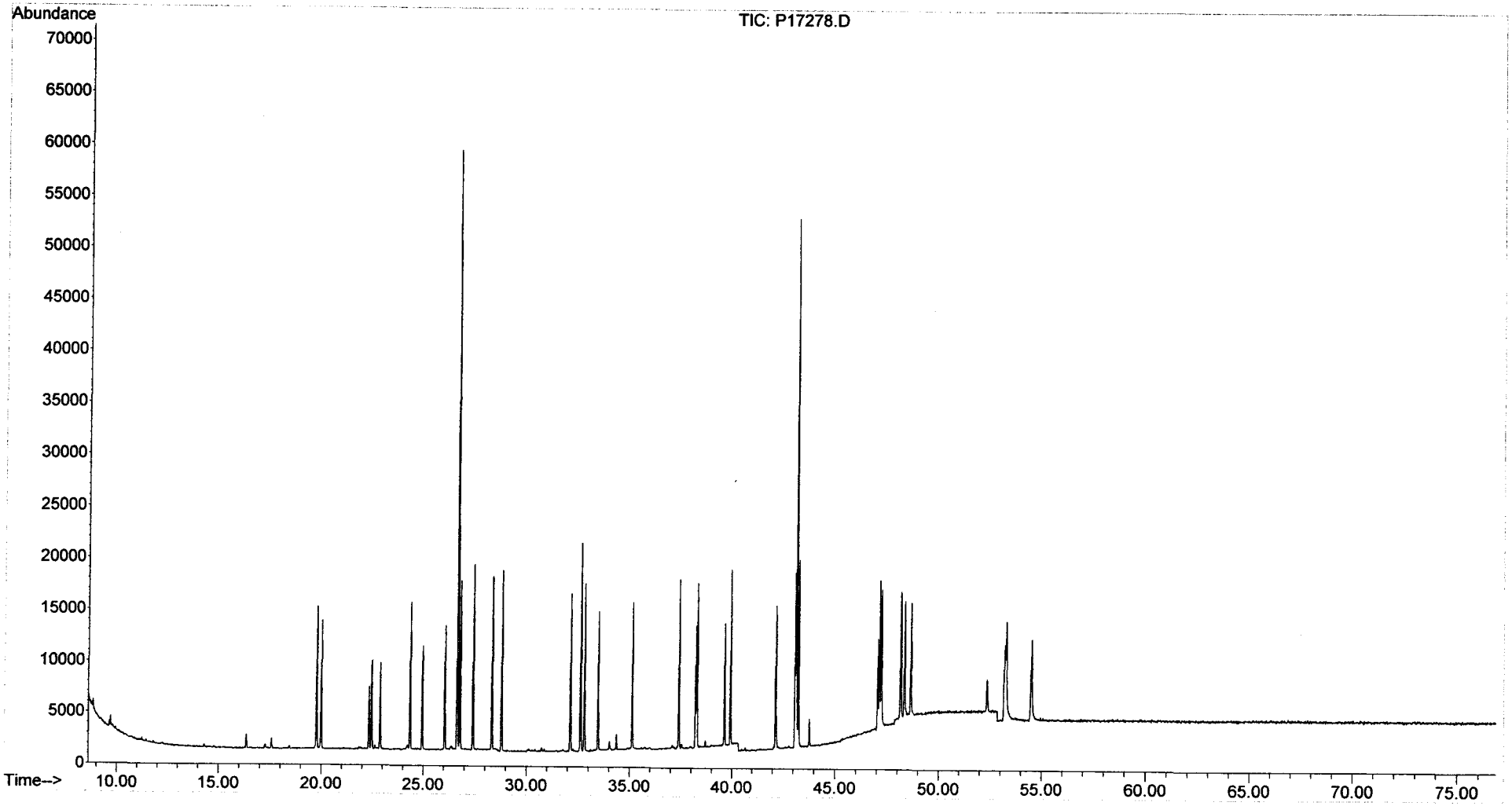
MB 1-5-06

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

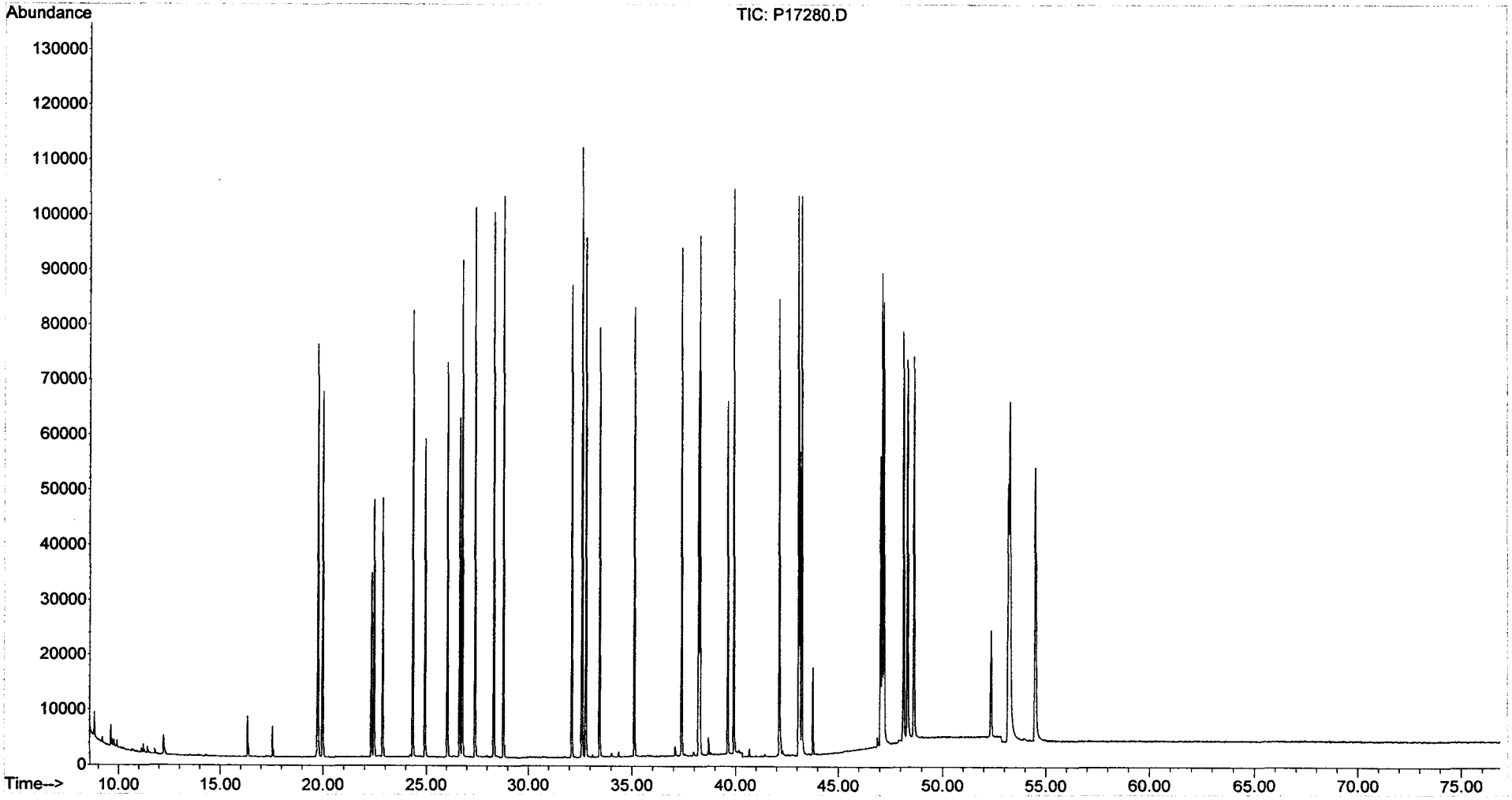
CMS 1-5-06

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

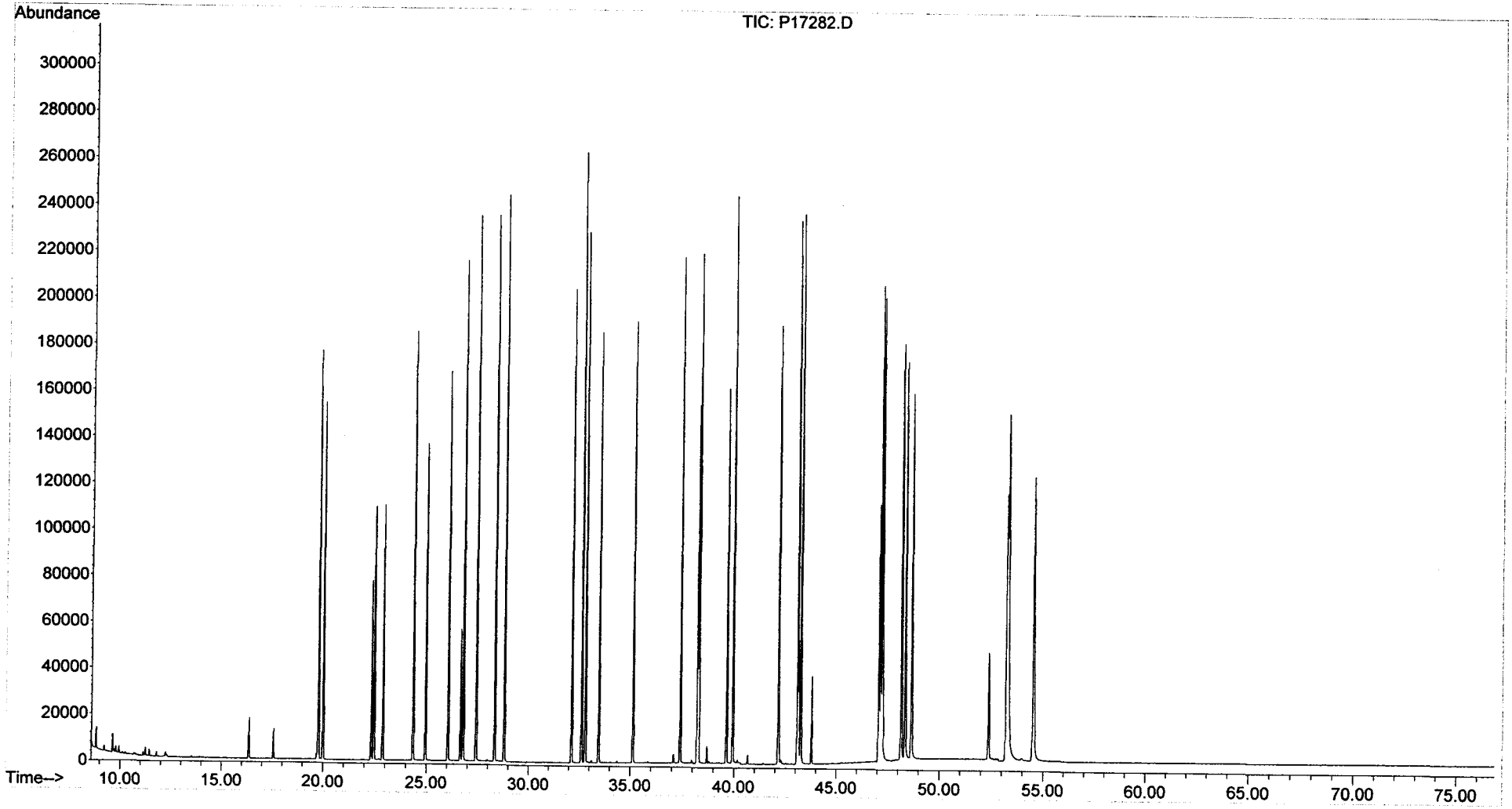
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	63436	500.00 ng/mL	0.00
72) Chrysene-d12	43.14	240	97535	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	171111	1266.33 ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

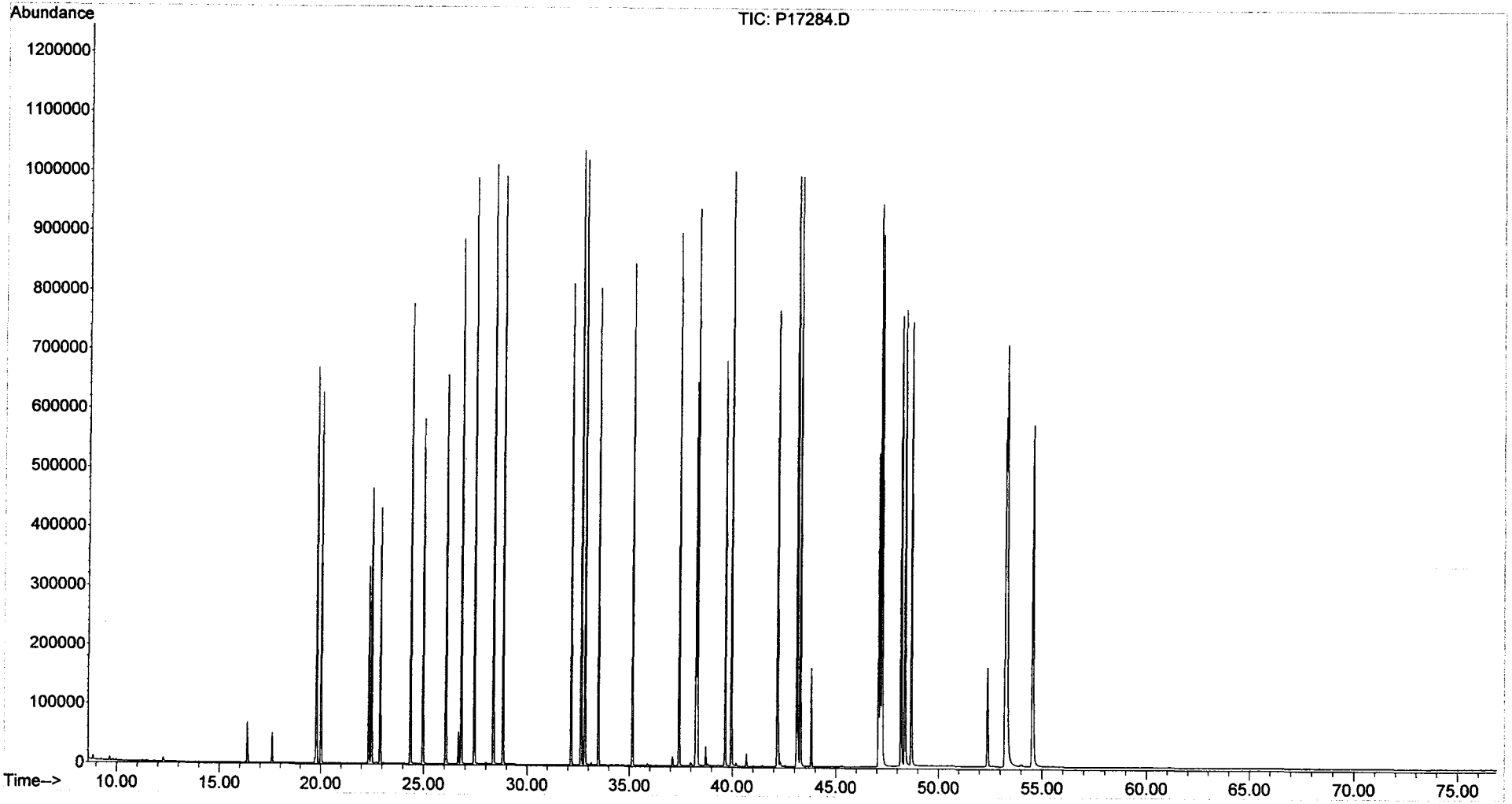
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	62439	500.00 ng/mL	0.00
72) Chrysene-d12	43.15	240	101542	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	705944	5348.16 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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

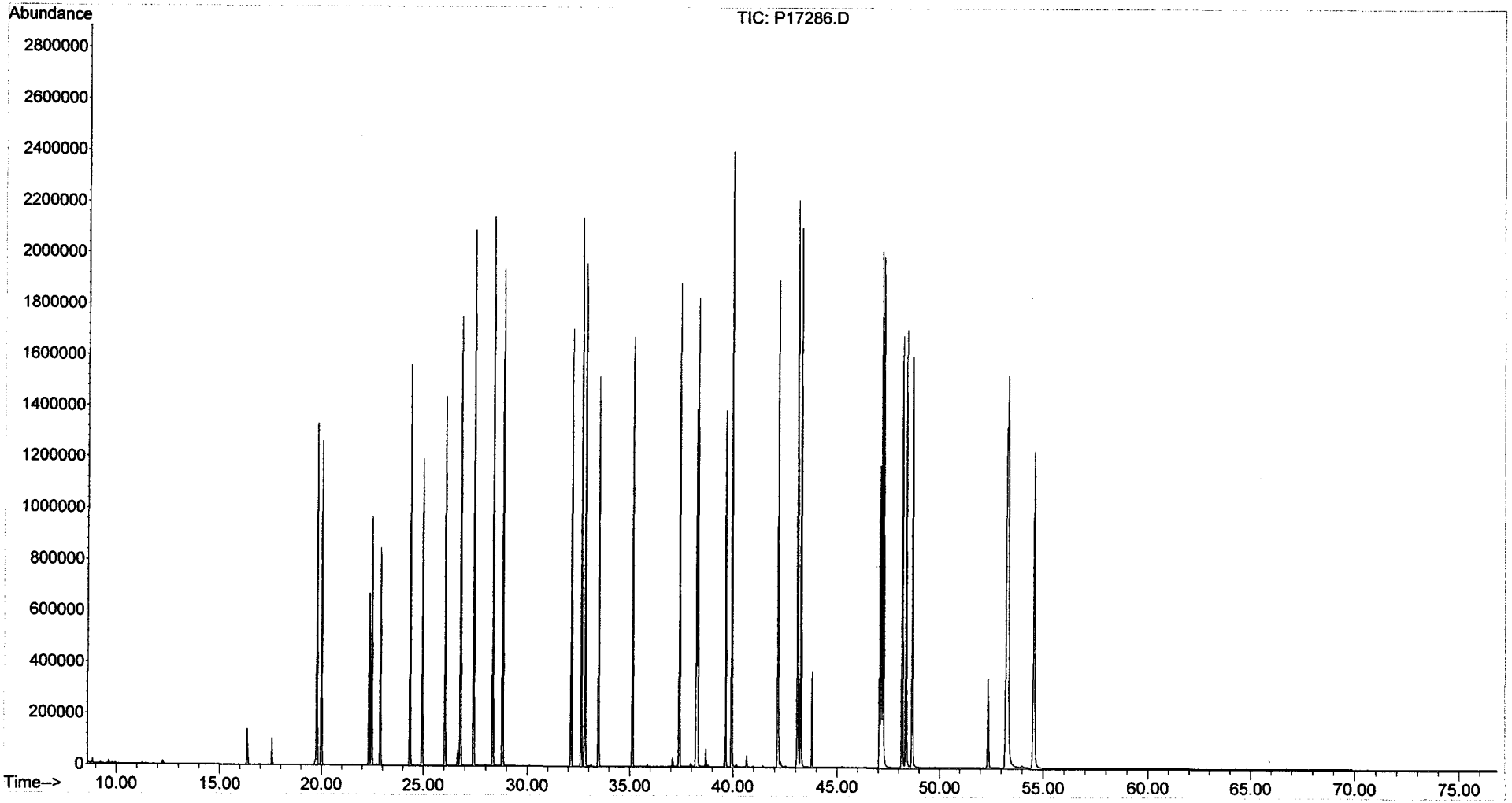
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.67	164	65362	500.00 ng/mL	0.00
72) Chrysene-d12	43.15	240	106253	500.00 ng/mL	0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.34	152	1421793	10171.62 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		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%			

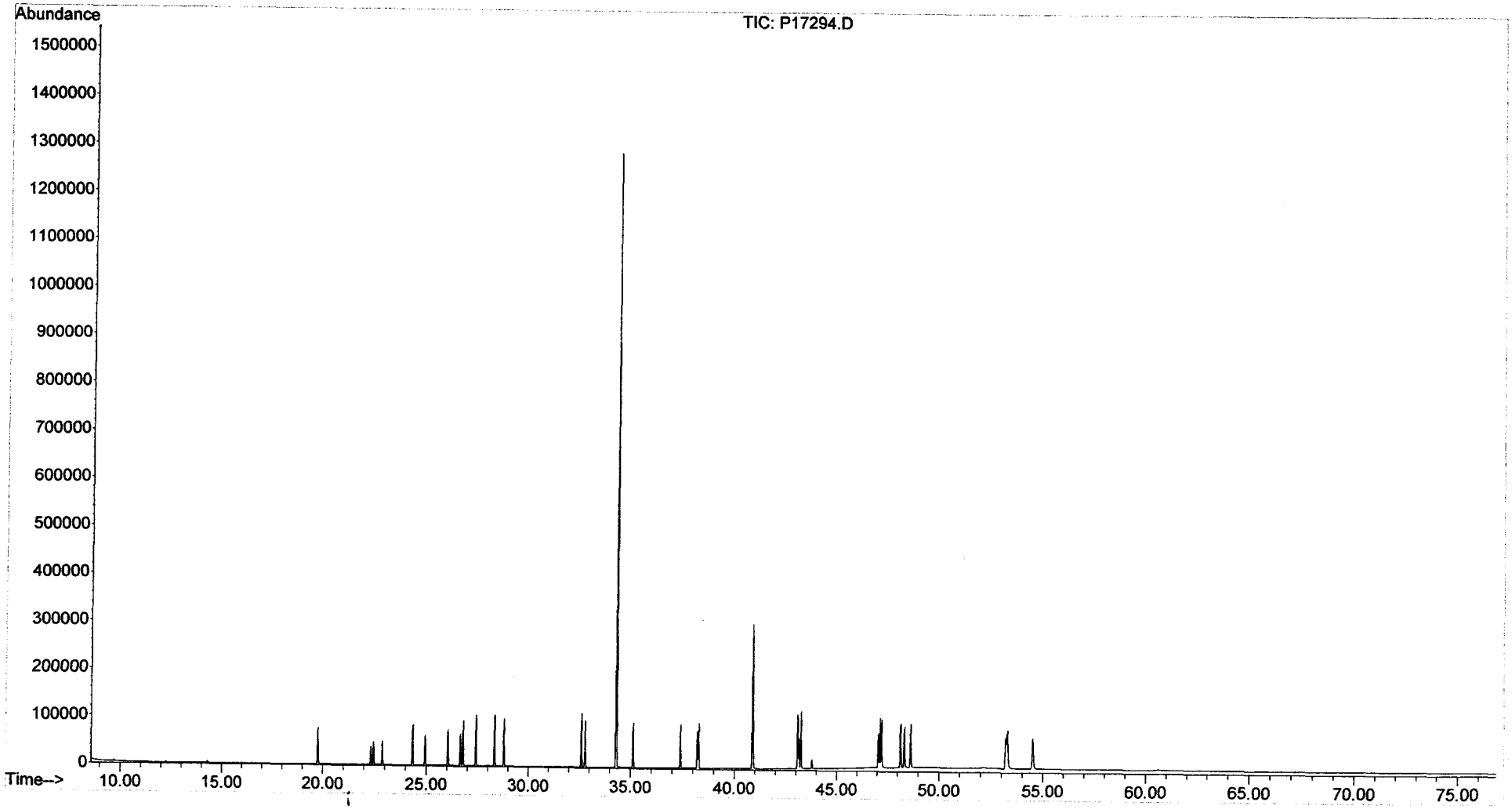
Target Compounds						Qvalue
9) Naphthalene	19.77	128	181434	467.41	ng/mL#	100
15) 2-Methylnaphthalene	22.47	142	112145	456.36	ng/mL#	100
16) 1-Methylnaphthalene	22.89	142	111328	481.22	ng/mL#	100
22) Biphenyl	24.35	154	147302	482.15	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.96	156	100381	492.21	ng/mL#	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

Fun 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

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

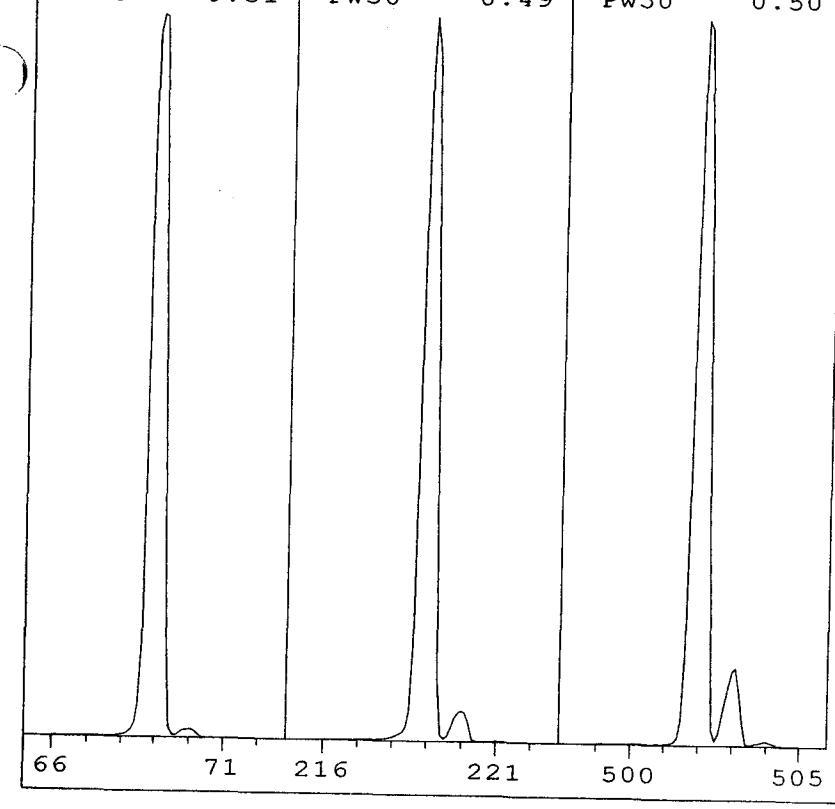
5973

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

2/9/05

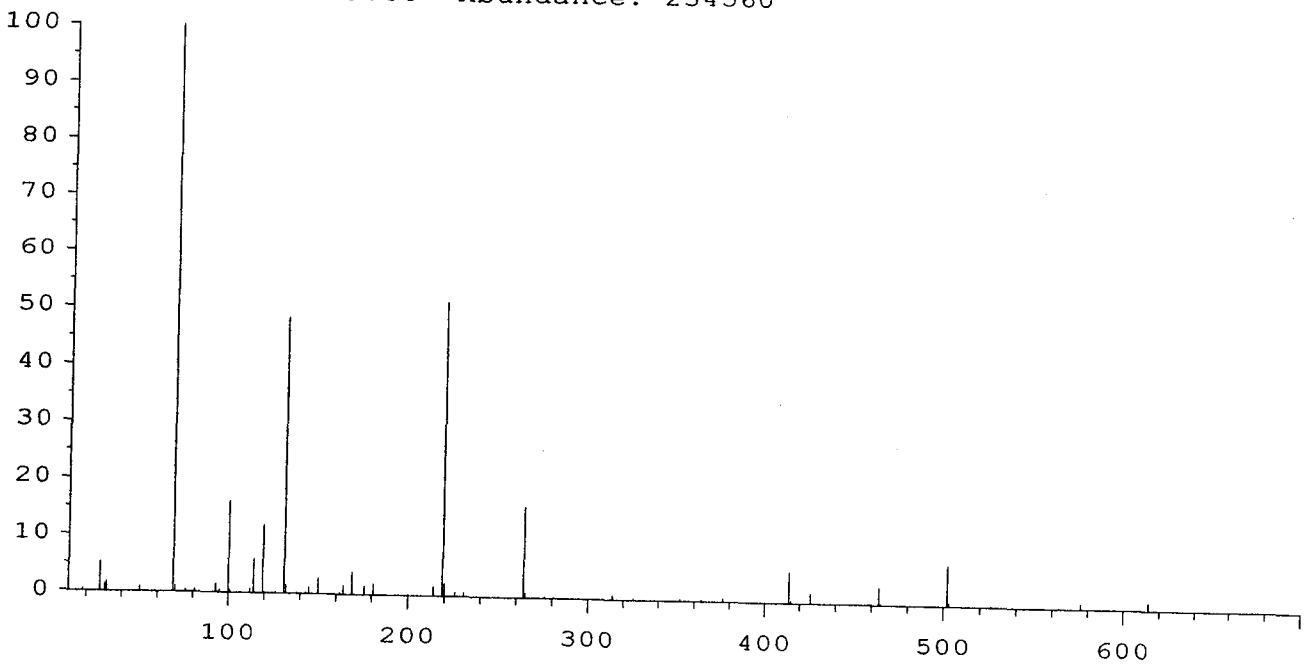
Instrument: PAHINST2

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 w 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

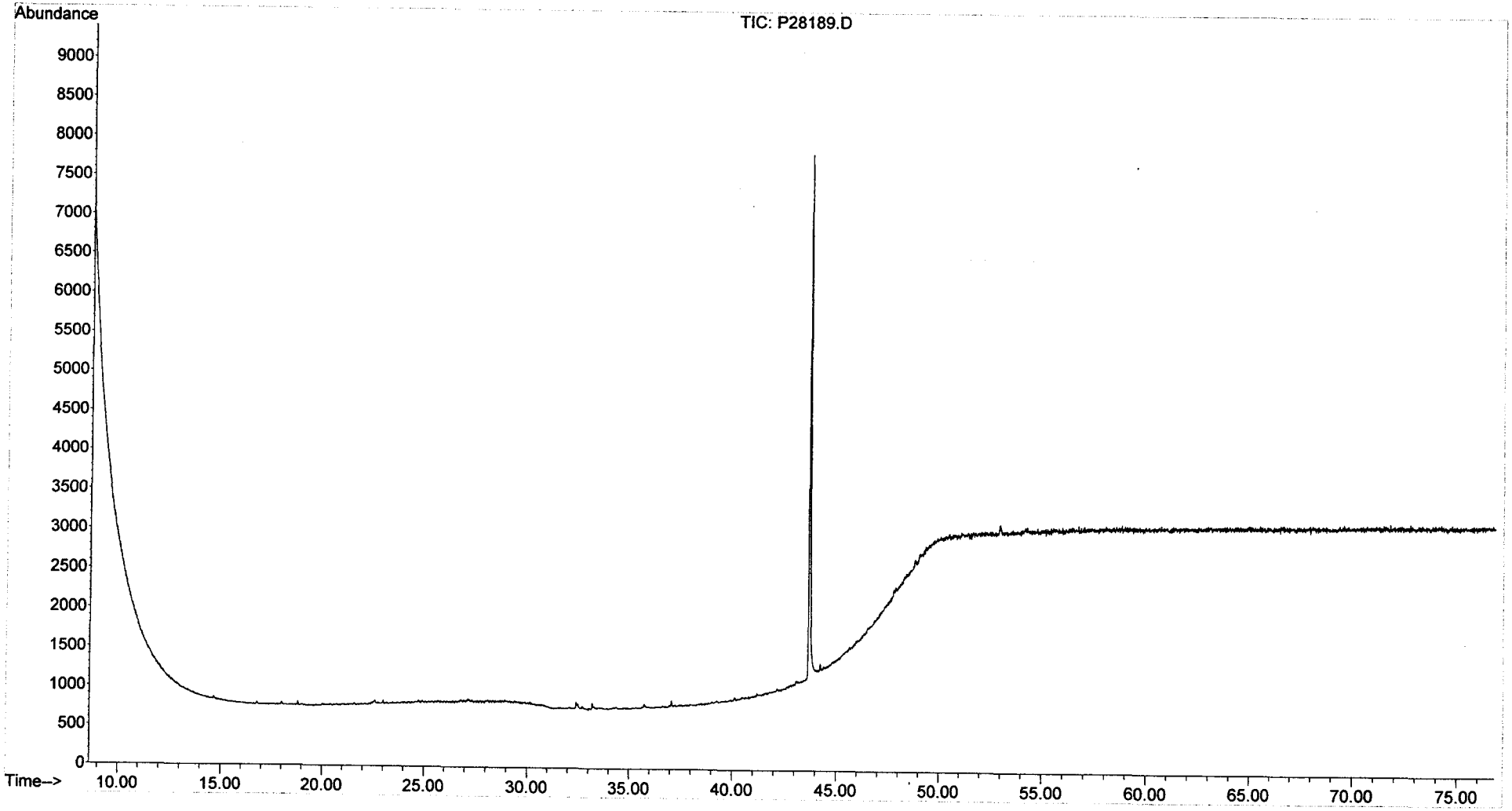
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.65	240	27108	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	
50) 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

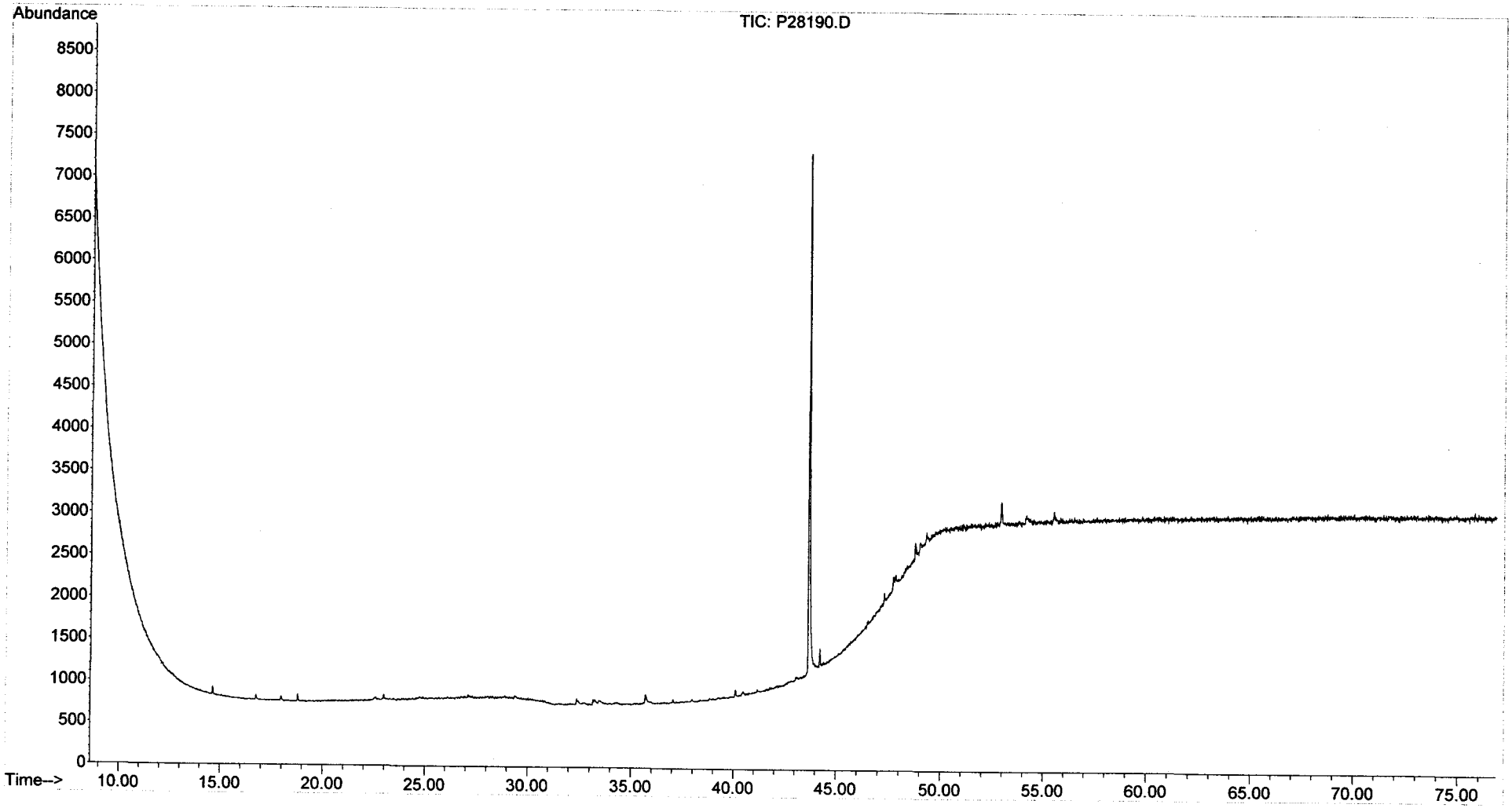
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.66	240	26483	500.00	ng/mL	0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) 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

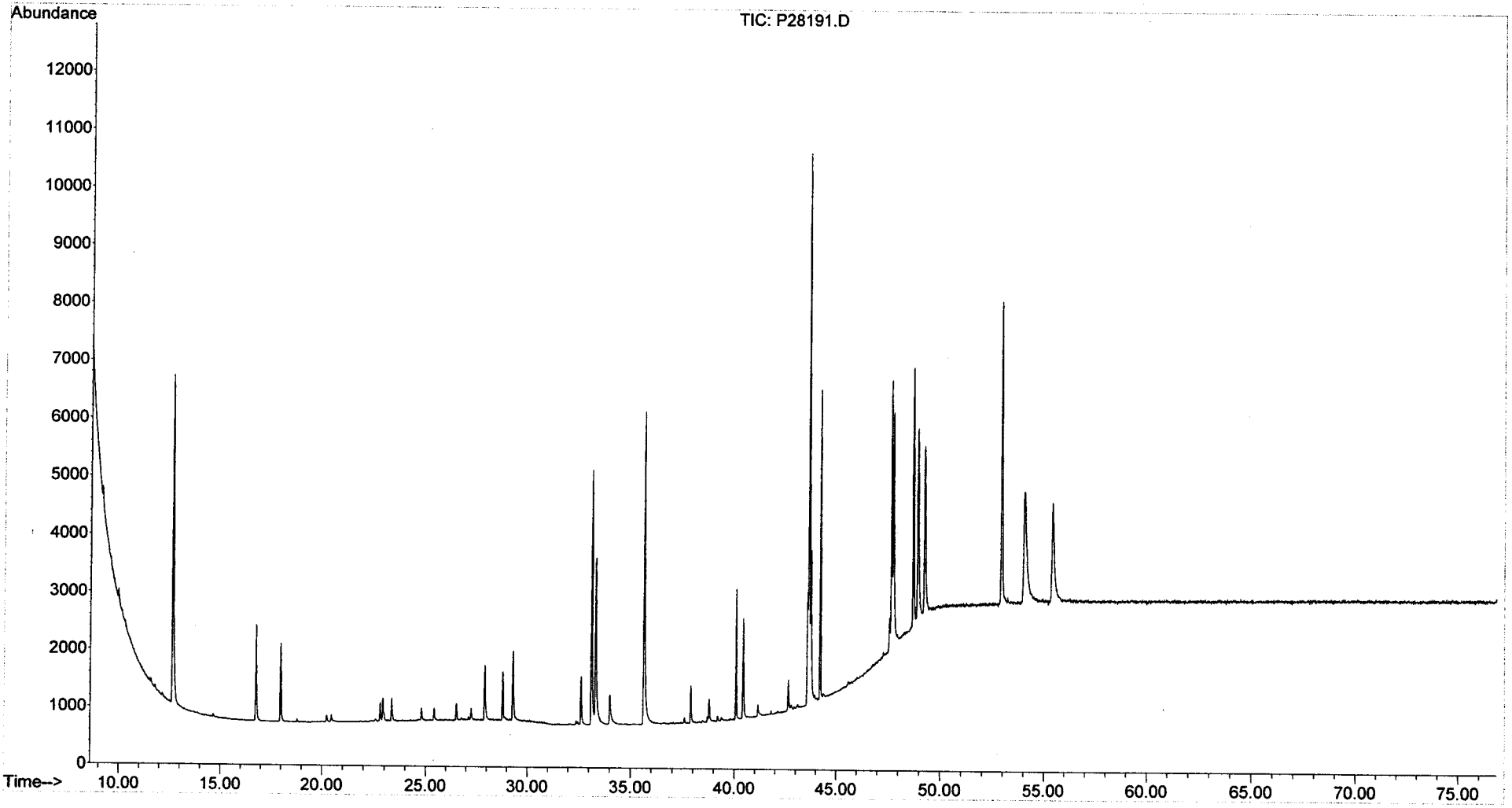
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.63	240	30993	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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

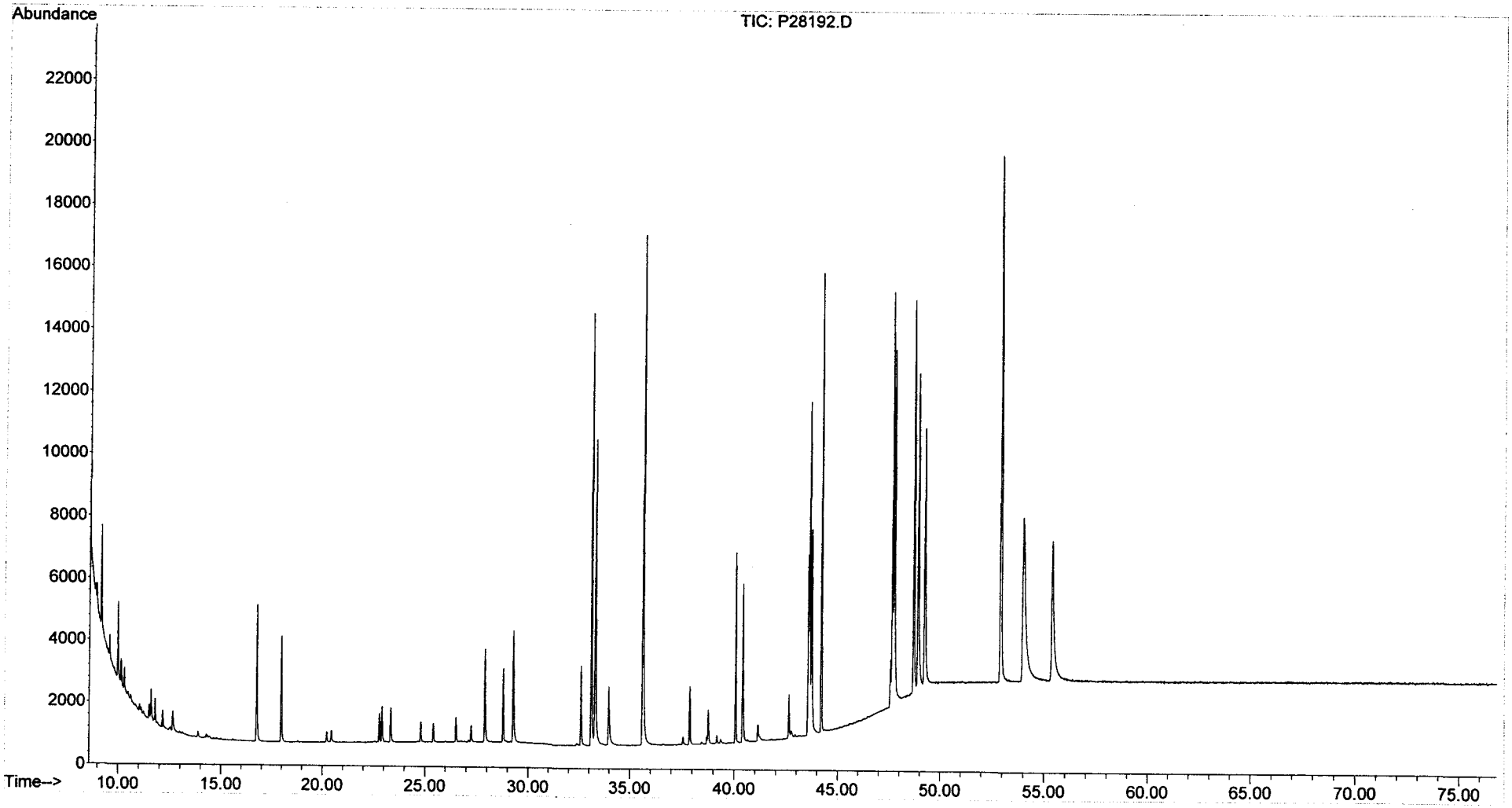
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.63	240	31865	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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

2/10/06 2/13/06

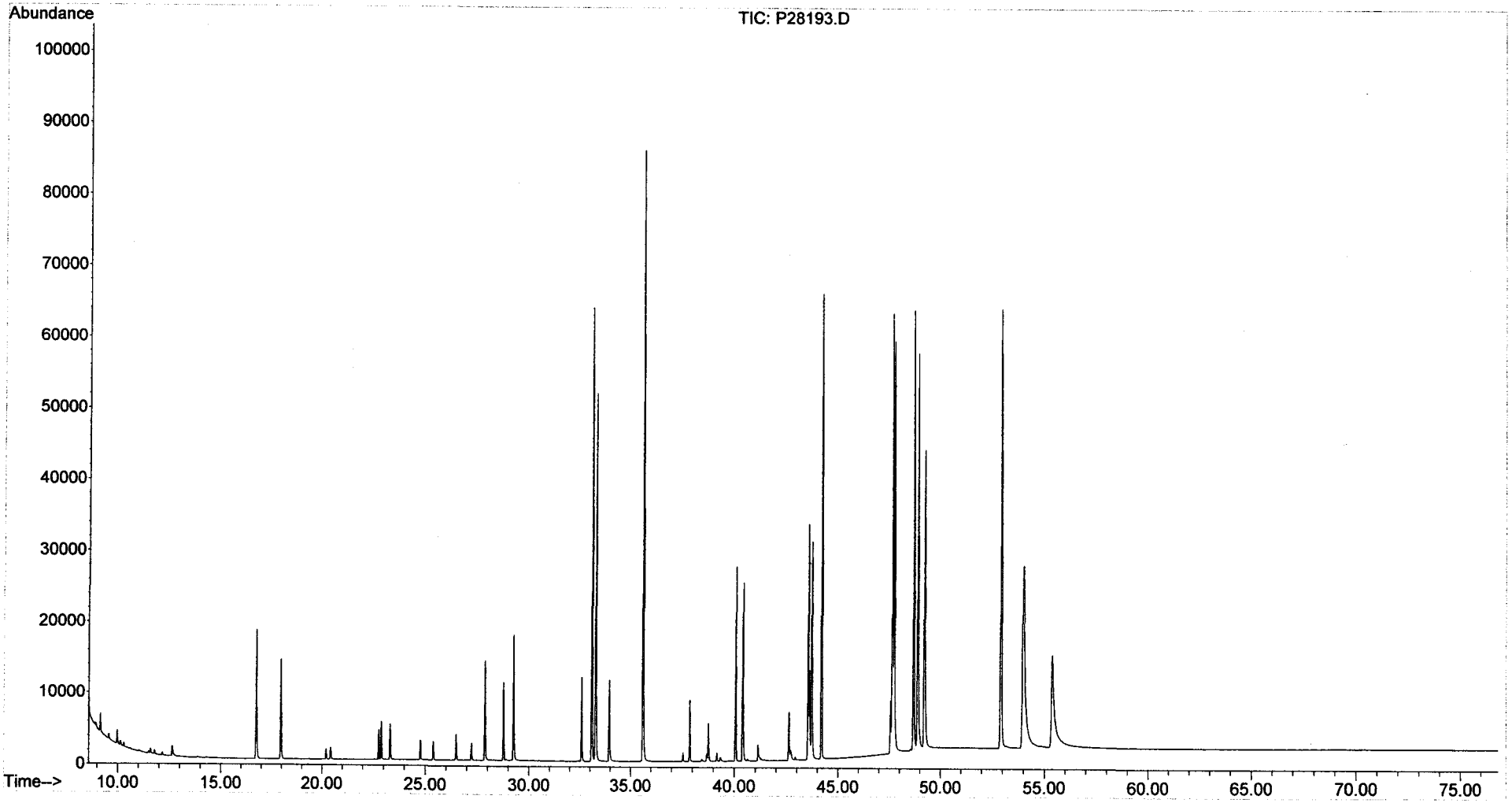
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	43.62	240	33439	500.00 ng/mL	-0.01
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	
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

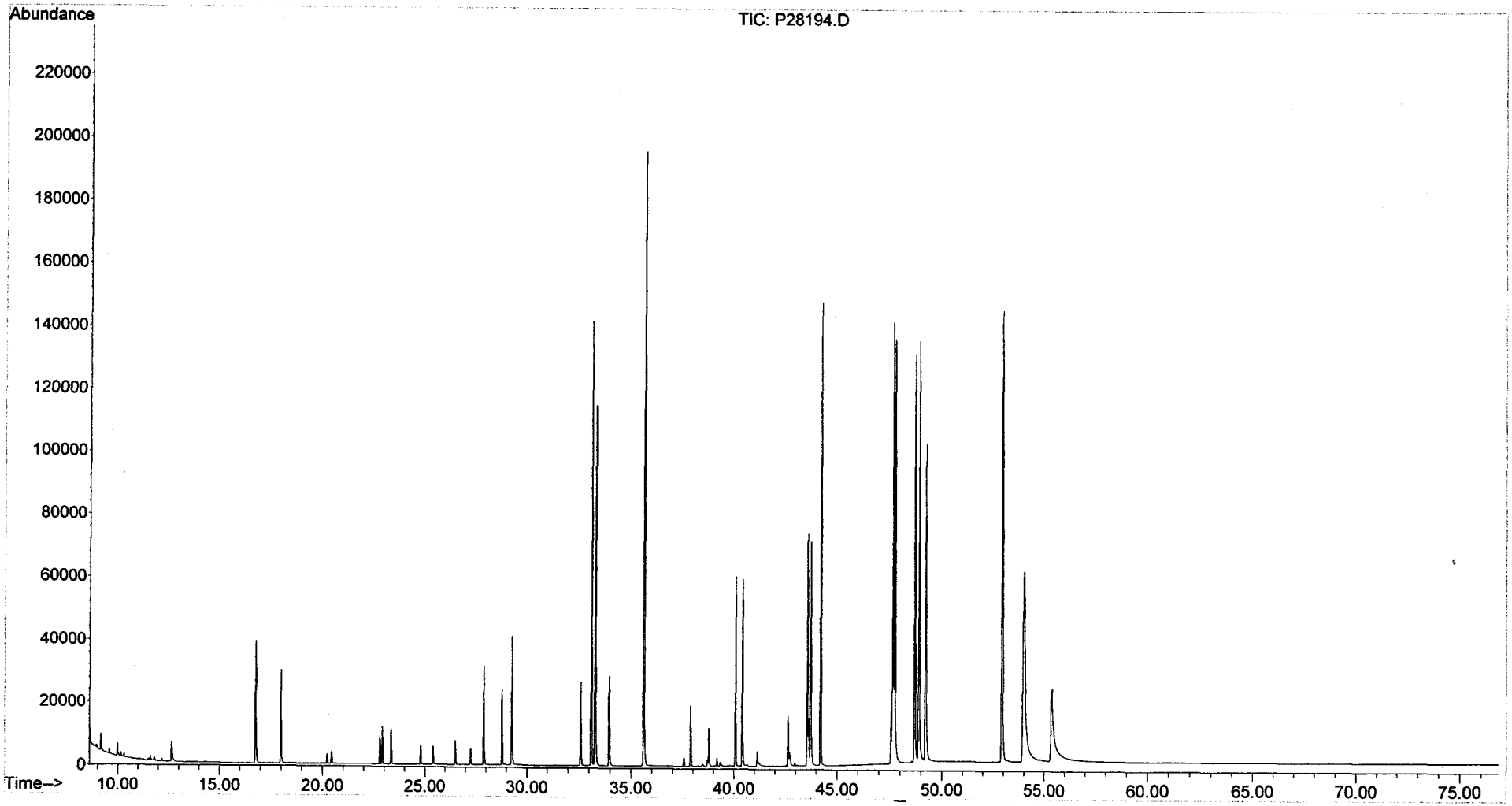
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.62	240	37516	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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\FEB08\
Data File : P18047.D
Acq On : 8 Feb 2006 5:01 pm
Operator : AC
Sample : C1020801
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 06:53:11 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

NS 2/9/06

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	81	-0.01
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.402	6.9	78	-0.01
4	t	cis-Decalin	0.325	0.309	4.9	80	-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	2.322	9.0	74	-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	1.014	5.4	78	-0.01
15	t	2-Methylnaphthalene	1.617	1.512	6.5	77	-0.01
16	t	1-Methylnaphthalene	1.522	1.422	6.6	77	-0.02
17	A1	Benzothiophene	2.278	2.001	12.2	72	-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	1.856	7.7	76	-0.01
23	t	2,6-Dimethylnaphthalene	1.342	1.301	3.1	80	-0.02
24	t	Dibenzofuran	2.258	2.091	7.4	76	-0.02
25	t	Acenaphthylene	2.448	2.314	5.5	78	-0.02
26	t	Acenaphthene	1.521	1.418	6.8	77	-0.01
27	t	2,3,5-Trimethylnaphthalene	1.204	1.157	3.9	81	-0.02
28	A1	Fluorene	1.706	1.612	5.5	79	-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	2.331	7.3	77	-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	2.375	6.1	78	-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\FEB08\
Data File : P18047.D
Acq On : 8 Feb 2006 5:01 pm
Operator : AC
Sample : C1020801
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 06:53:11 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	0.581	-9.8	94	-0.02
53	t	Anthracene	2.340	2.244	4.1	80	-0.02
54	t	Carbazole	2.166	2.138	1.3	80	-0.02
55	t	1-Methylphenanthrene	1.732	1.707	1.4	82	-0.02
56	A1	Fluoranthene	2.693	2.624	2.6	81	-0.02
57	T	Benzo(b)fluorene	1.572	1.709	-8.7	91	-0.02
58	s	Pyrene-d10	2.204	2.282	-3.5	85	-0.02
59	A1	Pyrene	2.739	2.618	4.4	79	-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	2.606	-1.7	85	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.606	-1.7	85	-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	88	-0.02
73	t	Benz[a]anthracene	1.522	1.536	-0.9	91	-0.02
74	A1	Chrysene	1.555	1.487	4.4	86	-0.02
75	A2	Chrysene/Triphenylene	1.555	1.487	4.4	86	-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	1.030	-3.4	92	-0.04
82	t	Benzo[b]fluoranthene	1.563	1.635	-4.6	93	-0.02
83	A1	Benzo[k]fluoranthene	1.626	1.676	-3.1	90	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.530	-1.1	91	-0.02
86	t	Benzo[a]pyrene	1.497	1.604	-7.1	97	-0.04
87	t	Perylene	1.464	1.540	-5.2	95	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.565	-18.7	116	-0.04
89	t	Dibenz[a,h]anthracene	1.343	1.649	-22.8	110	-0.05
90	t	Benzo[g,h,i]perylene	1.518	1.712	-12.8	101	-0.04
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.382	13.0	79	-0.04
92	A2	Hopane (T19)	0.439	0.382	13.0	79	-0.04
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\FEB08\
Data File : P18047.D
Acq On : 8 Feb 2006 5:01 pm
Operator : AC
Sample : C1020801
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 06:53:11 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	89	-0.02
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\FEB08\
Data File : P18047.D
Acq On : 8 Feb 2006 5:01 pm
Operator : AC
Sample : C1020801
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 06:53:11 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

AMS 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.51	164	57912	500.00	ng/mL	-0.01
72) Chrysene-d12	42.95	240	96106	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	58725	473.01	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.30%#			
58) Pyrene-d10	38.04	212	132141	517.67	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.77%			
81) Benzo[b]fluoranthene-d12	46.85	264	98946	517.01	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.70%			
125) 5B(H)Cholane - Surr	43.60	217	18299	484.57	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.46%#			

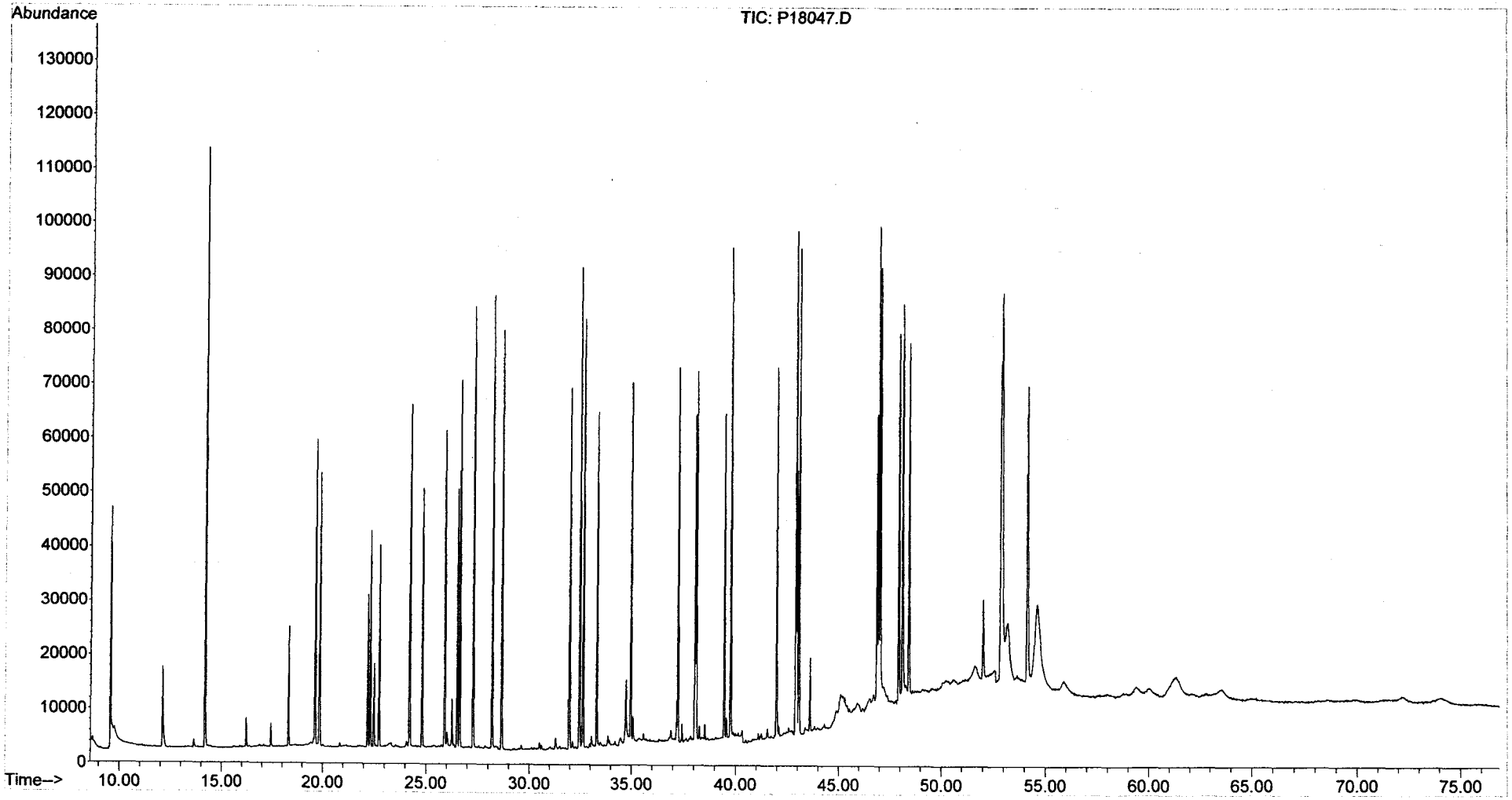
Target Compounds						Qvalue
3) trans-Decalin	16.21	138	11645	232.77	ng/mL	100
4) cis-Decalin	17.42	138	8961	238.05	ng/mL	100
9) Naphthalene	19.62	128	134491	454.75	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	87581	467.77	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	82322	467.03	ng/mL#	100
17) Benzothiophene	19.83	134	115899	439.34	ng/mL	100
22) Biphenyl	24.19	154	107484	461.75	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	75357	484.98	ng/mL#	100
24) Dibenzofuran	27.26	168	121086	463.06	ng/mL	97
25) Acenaphthylene	25.89	152	133985	472.49	ng/mL#	100
26) Acenaphthene	26.63	153	82148	466.36	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	67006	480.38	ng/mL	98
28) Fluorene	28.64	166	93332	472.44	ng/mL	98
32) Dibenzothiophene	31.95	184	134976	463.31	ng/mL	100
41) Phenanthrene	32.45	178	137543	469.53	ng/mL	99
52) Retene	39.45	234	33653	549.45	ng/mL	96
53) Anthracene	32.64	178	129979	479.57	ng/mL	99
54) Carbazole	33.30	167	123841	493.70	ng/mL	99
55) 1-Methylphenanthrene	34.96	192	98884	492.99	ng/mL	98
56) Fluoranthene	37.22	202	151946m	487.16	ng/mL	
57) Benzo(b)fluorene	39.74	216	98944	543.57	ng/mL	99
59) Pyrene	38.11	202	151613	477.94	ng/mL	98
64) Naphthobenzothiophene	41.96	234	150926	508.56	ng/ml	99
65) Naphthobenzothiophene-2,1-	41.96	234	150926	508.56	ng/mL	99
73) Benz[a]anthracene	42.89	228	147642m	504.66	ng/mL	
74) Chrysene	43.05	228	142908	478.06	ng/mL	99
75) Chrysene/Triphenylene	43.05	228	142908	478.06	ng/mL	99
82) Benzo[b]fluoranthene	46.94	252	157111	522.91	ng/mL	100
83) Benzo[k]fluoranthene	47.02	252	161073	515.31	ng/mL	99
85) Benzo[e]pyrene	47.93	252	147053	505.52	ng/mL	100
86) Benzo[a]pyrene	48.11	252	154127	535.50	ng/mL	100
87) Perylene	48.42	252	147963	525.92	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.85	276	150400m	593.80	ng/mL	
89) Dibenz[a,h]anthracene	52.91	278	158455	613.75	ng/mL	98
90) Benzo[g,h,i]perylene	54.13	276	164581	563.90	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.01	191	36746	435.45	ng/mL	96
92) Hopane (T19)	52.01	191	36746	435.45	ng/mL	96

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18047.D
Acq On : 8 Feb 2006 5:01 pm
Operator : AC
Sample : C1020801
Misc : PAH STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 06:53:11 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\FEB08\
Data File : P18069.D
Acq On : 9 Feb 2006 9:53 am
Operator : AC
Sample : C1020802
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 12:12:50 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 2/9/06

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	56	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.391	9.5	52	-0.02
4	t	cis-Decalin	0.325	0.296	8.9	53	-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	2.266	11.2	50	-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	1.014	5.4	54	-0.01
15	t	2-Methylnaphthalene	1.617	1.502	7.1	53	-0.01
16	t	1-Methylnaphthalene	1.522	1.418	6.8	53	-0.02
17	A1	Benzothiophene	2.278	1.986	12.8	49	-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	1.880	6.5	53	-0.01
23	t	2,6-Dimethylnaphthalene	1.342	1.281	4.5	55	-0.02
24	t	Dibenzofuran	2.258	2.137	5.4	54	-0.02
25	t	Acenaphthylene	2.448	2.308	5.7	54	-0.02
26	t	Acenaphthene	1.521	1.430	6.0	54	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.157	3.9	56	-0.02
28	A1	Fluorene	1.706	1.599	6.3	54	-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	2.346	6.7	53	-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	2.386	5.7	54	-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\FEB08\
Data File : P18069.D
Acq On : 9 Feb 2006 9:53 am
Operator : AC
Sample : C1020802
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 12:12:50 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	0.564	-6.6	63	-0.02
53	t	Anthracene	2.340	2.252	3.8	55	-0.04
54	t	Carbazole	2.166	2.048	5.4	53	-0.02
55	t	1-Methylphenanthrene	1.732	1.712	1.2	57	-0.04
56	A1	Fluoranthene	2.693	2.597	3.6	55	-0.02
57	T	Benzo(b)fluorene	1.572	1.657	-5.4	61	-0.02
58	s	Pyrene-d10	2.204	2.309	-4.8	59	-0.02
59	A1	Pyrene	2.739	2.709	1.1	56	-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	2.576	-0.5	58	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.577	-0.6	58	-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	61	-0.04
73	t	Benz[a]anthracene	1.522	1.487	2.3	61	-0.04
74	A1	Chrysene	1.555	1.504	3.3	60	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.504	3.3	60	-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	1.017	-2.1	63	-0.04
82	t	Benzo[b]fluoranthene	1.563	1.633	-4.5	65	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.575	3.1	58	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.504	0.6	62	-0.04
86	t	Benzo[a]pyrene	1.497	1.500	-0.2	63	-0.04
87	t	Perylene	1.464	1.480	-1.1	63	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.438	-9.1	74	-0.05
89	t	Dibenz[a,h]anthracene	1.343	1.509	-12.4	69	-0.06
90	t	Benzo[g,h,i]perylene	1.518	1.600	-5.4	66	-0.05
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.340	22.6	49	-0.05
92	A2	Hopane (T19)	0.439	0.340	22.6	49	-0.05
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\FEB08\
Data File : P18069.D
Acq On : 9 Feb 2006 9:53 am
Operator : AC
Sample : C1020802
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 12:12:50 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	0.180	8.2	58	-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\FEB08\
Data File : P18069.D
Acq On : 9 Feb 2006 9:53 am
Operator : AC
Sample : C1020802
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 12:12:50 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 2/9/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	40013m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	66569	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	40591	473.20	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.32%#			
58) Pyrene-d10	38.04	212	92372	523.75	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.38%			
81) Benzo[b]fluoranthene-d12	46.85	264	67712	510.79	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.08%			
125) 5B(H)Cholane - Surr	43.58	217	11961	457.28	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.73%#			

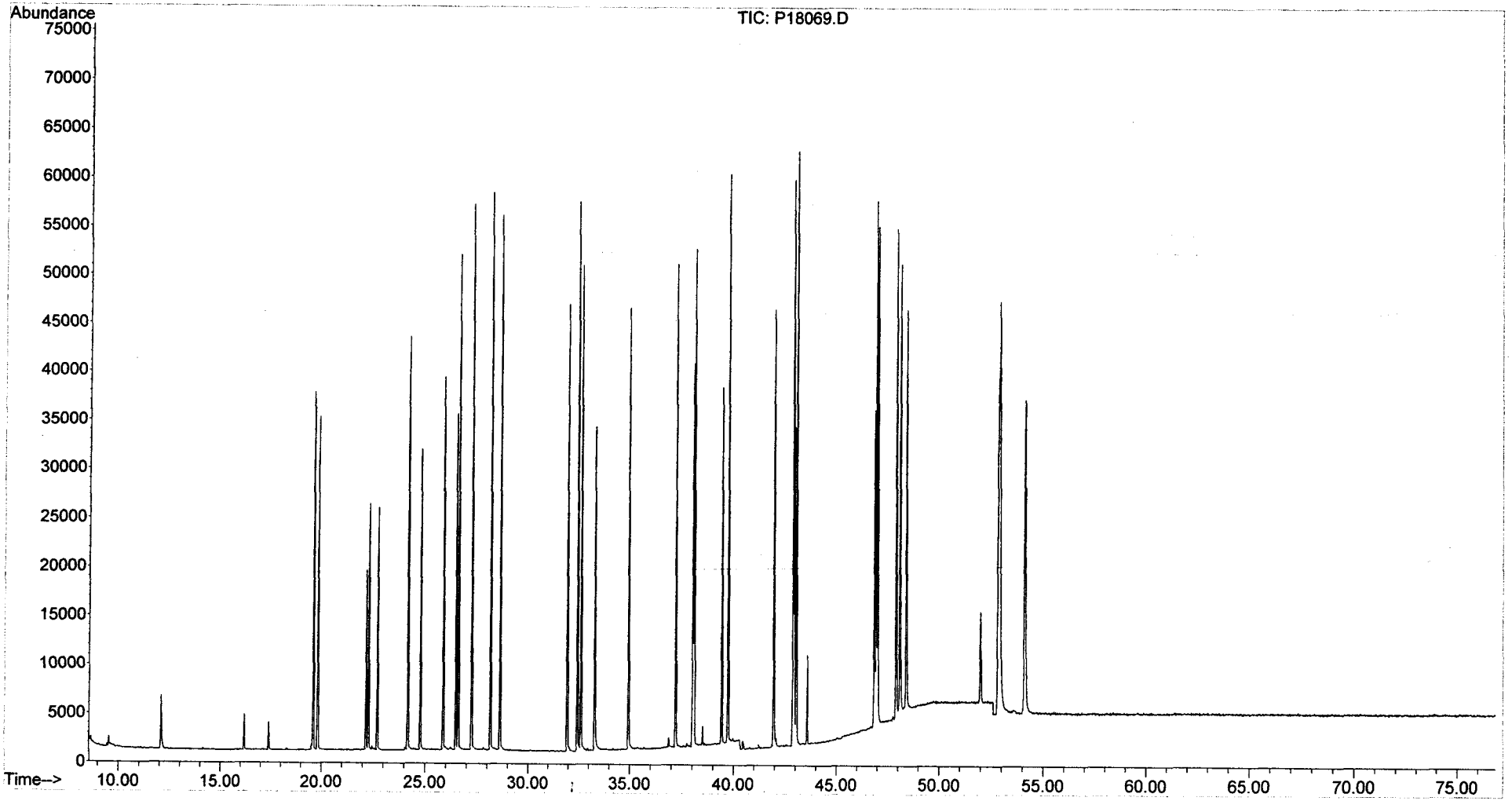
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	7817	226.15	ng/mL	100
4) cis-Decalin	17.42	138	5931	228.04	ng/mL	100
9) Naphthalene	19.61	128	90654	443.64	ng/mL#	100
15) 2-Methylnaphthalene	22.31	142	60100	464.59	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	56729	465.80	ng/mL#	100
17) Benzothiophene	19.83	134	79457	435.93	ng/mL	100
22) Biphenyl	24.19	154	75242	467.84	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	51264	477.50	ng/mL#	100
24) Dibenzofuran	27.26	168	85527	473.38	ng/mL	97
25) Acenaphthylene	25.89	152	92332	471.25	ng/mL#	100
26) Acenaphthene	26.62	153	57221	470.16	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	46308	480.50	ng/mL	97
28) Fluorene	28.64	166	63998m	468.87	ng/mL	
32) Dibenzothiophene	31.95	184	93864	466.31	ng/mL	100
41) Phenanthrene	32.45	178	95473	471.71	ng/mL	99
52) Retene	39.45	234	22555	532.99	ng/mL	95
53) Anthracene	32.62	178	90115	481.22	ng/mL	99
54) Carbazole	33.30	167	81959	472.89	ng/mL	99
55) 1-Methylphenanthrene	34.95	192	68495	494.24	ng/mL	98
56) Fluoranthene	37.22	202	103910m	482.18	ng/mL	
57) Benzo(b)fluorene	39.74	216	66295	527.12	ng/mL	99
59) Pyrene	38.10	202	108409	494.62	ng/mL	97
64) Naphthobenzothiophene	41.95	234	103071	502.67	ng/ml	98
65) Naphthobenzothiophene-2,1-	41.95	234	103097	502.80	ng/mL	98
73) Benz[a]anthracene	42.88	228	99009m	488.59	ng/mL	
74) Chrysene	43.04	228	100103	483.45	ng/mL	99
75) Chrysene/Triphenylene	43.04	228	100103	483.45	ng/mL	99
82) Benzo[b]fluoranthene	46.93	252	108733	522.47	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	104841	484.24	ng/mL	99
85) Benzo[e]pyrene	47.92	252	100098	496.79	ng/mL	99
86) Benzo[a]pyrene	48.11	252	99833	500.77	ng/mL	99
87) Perylene	48.42	252	98520	505.56	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	52.84	276	95704m	545.51	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	100436	561.64	ng/mL	98
90) Benzo[g,h,i]perylene	54.11	276	106491	526.76	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.00	191	22609	386.80	ng/mL	98
92) Hopane (T19)	52.00	191	22609	386.80	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18069.D
Acq On : 9 Feb 2006 9:53 am
Operator : AC
Sample : C1020802
Misc : PAH STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 12:12:50 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\FEB08\
Data File : P18093.D
Acq On : 10 Feb 2006 4:16 am
Operator : AC
Sample : C1020803
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 07:14:19 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 2/10/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	54	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.401	7.2	52	-0.02
4	t	cis-Decalin	0.325	0.305	6.2	52	-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	2.304	9.8	49	-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	1.029	4.0	53	-0.02
15	t	2-Methylnaphthalene	1.617	1.518	6.1	52	-0.02
16	t	1-Methylnaphthalene	1.522	1.426	6.3	51	-0.02
17	A1	Benzothiophene	2.278	2.027	11.0	49	-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	1.885	6.2	52	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.293	3.7	53	-0.04
24	t	Dibenzofuran	2.258	2.138	5.3	52	-0.02
25	t	Acenaphthylene	2.448	2.299	6.1	52	-0.04
26	t	Acenaphthene	1.521	1.433	5.8	52	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.160	3.7	54	-0.02
28	A1	Fluorene	1.706	1.600	6.2	52	-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	2.303	8.4	51	-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	2.323	8.1	51	-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\FEB08\
Data File : P18093.D
Acq On : 10 Feb 2006 4:16 am
Operator : AC
Sample : C1020803
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 07:14:19 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	0.569	-7.6	61	-0.04
53	t	Anthracene	2.340	2.214	5.4	53	-0.04
54	t	Carbazole	2.166	2.025	6.5	51	-0.04
55	t	1-Methylphenanthrene	1.732	1.667	3.8	54	-0.04
56	A1	Fluoranthene	2.693	2.554	5.2	53	-0.02
57	T	Benzo(b)fluorene	1.572	1.617	-2.9	58	-0.02
58	s	Pyrene-d10	2.204	2.283	-3.6	57	-0.04
59	A1	Pyrene	2.739	2.645	3.4	53	-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	2.529	1.3	55	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.529	1.3	55	-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	59	-0.04
73	t	Benz[a]anthracene	1.522	1.482	2.6	58	-0.04
74	A1	Chrysene	1.555	1.492	4.1	57	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.492	4.1	57	-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	1.022	-2.6	61	-0.05
82	t	Benzo[b]fluoranthene	1.563	1.577	-0.9	60	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.648	-1.4	59	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.501	0.8	59	-0.04
86	t	Benzo[a]pyrene	1.497	1.507	-0.7	61	-0.05
87	t	Perylene	1.464	1.481	-1.2	61	-0.05
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.459	-10.7	72	-0.06
89	t	Dibenz[a,h]anthracene	1.343	1.501	-11.8	67	-0.06
90	t	Benzo[g,h,i]perylene	1.518	1.569	-3.4	62	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.349	20.5	48	-0.06
92	A2	Hopane (T19)	0.439	0.349	20.5	48	-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#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18093.D
Acq On : 10 Feb 2006 4:16 am
Operator : AC
Sample : C1020803
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 07:14:19 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	0.181	7.7	56	-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\FEB08\
Data File : P18093.D
Acq On : 10 Feb 2006 4:16 am
Operator : AC
Sample : C1020803
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 07:14:19 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 2/10/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	38679m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	64081	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	39793	479.90	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.99%#			
58) Pyrene-d10	38.02	212	88302	517.94	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.79%			
81) Benzo[b]fluoranthene-d12	46.84	264	65510	513.37	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.34%			
125) 5B(H)Cholane - Surr	43.58	217	11607	460.97	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.10%#			

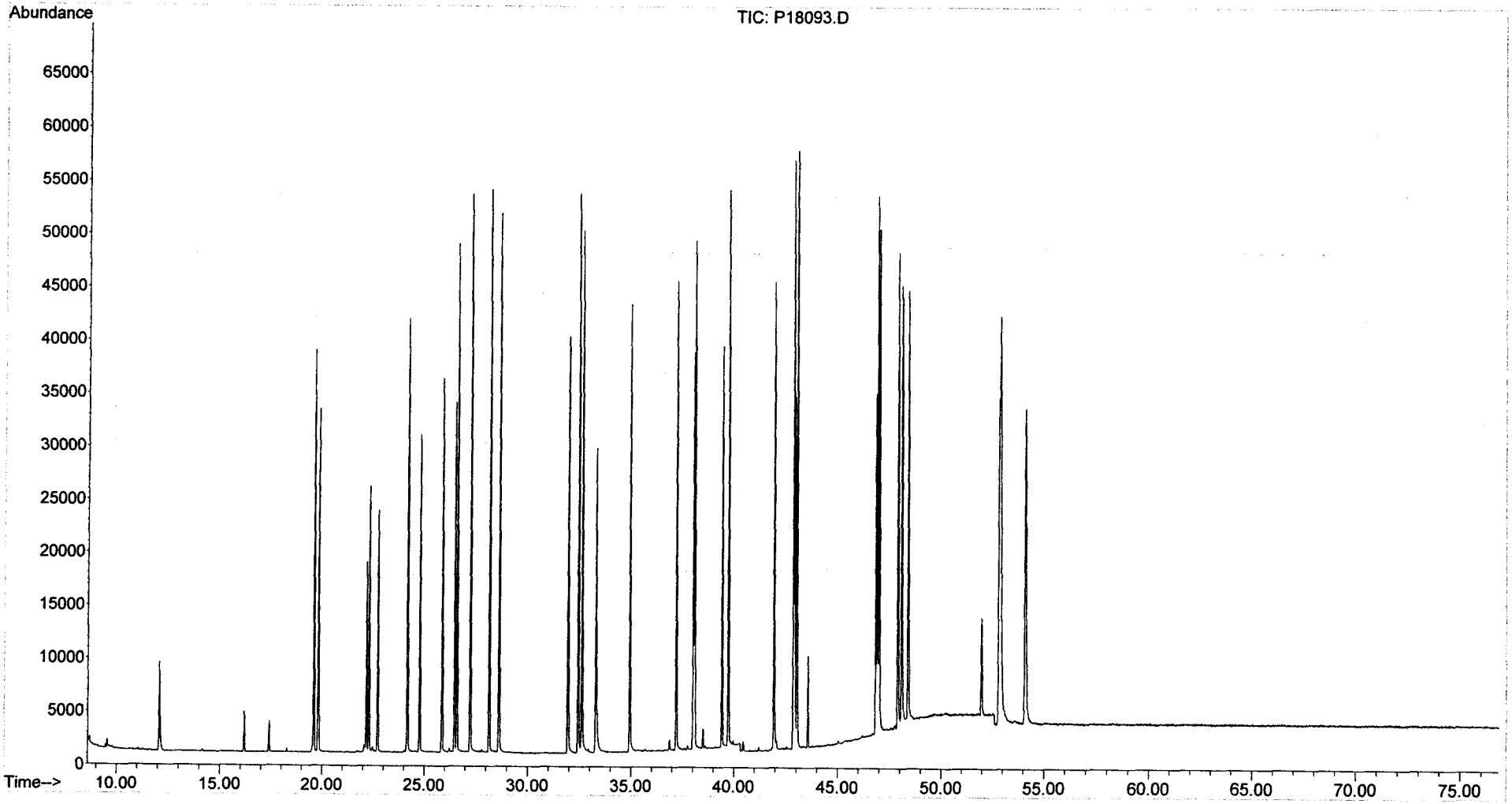
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	7746	231.82	ng/mL	100
4) cis-Decalin	17.42	138	5904	234.83	ng/mL	100
9) Naphthalene	19.61	128	89134	451.25	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	58710	469.49	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	55140	468.37	ng/mL#	100
17) Benzothiophene	19.83	134	78413	445.04	ng/mL	100
22) Biphenyl	24.18	154	72909	468.97	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.78	156	50017	481.96	ng/mL#	100
24) Dibenzofuran	27.26	168	82683	473.42	ng/mL	97
25) Acenaphthylene	25.87	152	88918	469.48	ng/mL#	100
26) Acenaphthene	26.62	153	55409	470.97	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	44862	481.55	ng/mL	98
28) Fluorene	28.64	166	61884	469.02	ng/mL	98
32) Dibenzothiophene	31.95	184	89071	457.76	ng/mL	100
41) Phenanthrene	32.44	178	89858	459.28	ng/mL	99
52) Retene	39.43	234	22002	537.85	ng/mL	96
53) Anthracene	32.62	178	85626	473.02	ng/mL	100
54) Carbazole	33.29	167	78324	467.50	ng/mL	98
55) 1-Methylphenanthrene	34.95	192	64462	481.18	ng/mL	98
56) Fluoranthene	37.22	202	98792m	474.24	ng/mL	
57) Benzo(b)fluorene	39.74	216	62544	514.45	ng/mL	98
59) Pyrene	38.10	202	102299	482.84	ng/mL	99
64) Naphthobenzothiophene	41.95	234	97802	493.43	ng/ml	98
65) Naphthobenzothiophene-2,1-	41.95	234	97832	493.58	ng/mL	98
73) Benz[a]anthracene	42.88	228	94962m	486.81	ng/mL	
74) Chrysene	43.04	228	95603	479.64	ng/mL	99
75) Chrysene/Triphenylene	43.04	228	95603	479.64	ng/mL	99
82) Benzo[b]fluoranthene	46.93	252	101029	504.30	ng/mL	100
83) Benzo[k]fluoranthene	47.02	252	105598	506.67	ng/mL	99
85) Benzo[e]pyrene	47.92	252	96185	495.90	ng/mL	99
86) Benzo[a]pyrene	48.09	252	96545	503.08	ng/mL	99
87) Perylene	48.40	252	94901	505.90	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.83	276	93488m	553.57	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	96169	558.66	ng/mL	98
90) Benzo[g,h,i]perylene	54.10	276	100547	516.67	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	51.98	191	22336	396.97	ng/mL	99
92) Hopane (T19)	51.98	191	22336	396.97	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08\
Data File : P18093.D
Acq On : 10 Feb 2006 4:16 am
Operator : AC
Sample : C1020803
Misc : PAH STD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 10 07:14:19 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\FEB08\
Data File : P18109.D
Acq On : 10 Feb 2006 5:19 pm
Operator : AC
Sample : C1020804
Misc : STD
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 13 06:26:48 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

AW 2/13/06

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	49	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.408	5.6	48	-0.02
4	t	cis-Decalin	0.325	0.308	5.2	48	-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	2.392	6.3	46	-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	1.044	2.6	48	-0.02
15	t	2-Methylnaphthalene	1.617	1.567	3.1	48	-0.02
16	t	1-Methylnaphthalene	1.522	1.475	3.1	48	-0.04
17	A1	Benzothiophene	2.278	2.116	7.1	46	-0.04
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	1.939	3.5	48	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.321	1.6	49	-0.04
24	t	Dibenzofuran	2.258	2.209	2.2	49	-0.02
25	t	Acenaphthylene	2.448	2.358	3.7	48	-0.04
26	t	Acenaphthene	1.521	1.484	2.4	49	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.176	2.3	49	-0.02
28	A1	Fluorene	1.706	1.618	5.2	48	-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	2.359	6.2	47	-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	2.364	6.5	47	-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\FEB08\
Data File : P18109.D
Acq On : 10 Feb 2006 5:19 pm
Operator : AC
Sample : C1020804
Misc : STD
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 13 06:26:48 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	0.566	-7.0	55	-0.04
53	t	Anthracene	2.340	2.195	6.2	47	-0.04
54	t	Carbazole	2.166	2.026	6.5	46	-0.04
55	t	1-Methylphenanthrene	1.732	1.660	4.2	48	-0.04
56	A1	Fluoranthene	2.693	2.575	4.4	48	-0.02
57	T	Benzo(b)fluorene	1.572	1.565	0.4	50	-0.04
58	s	Pyrene-d10	2.204	2.323	-5.4	52	-0.04
59	A1	Pyrene	2.739	2.715	0.9	49	-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	2.558	0.2	50	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.558	0.2	50	-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	54	-0.04
73	t	Benz[a]anthracene	1.522	1.434	5.8	52	-0.04
74	A1	Chrysene	1.555	1.463	5.9	52	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.463	5.9	52	-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	0.996	0.0	55	-0.05
82	t	Benzo[b]fluoranthene	1.563	1.526	2.4	53	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.608	1.1	53	-0.05
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.443	4.6	53	-0.05
86	t	Benzo[a]pyrene	1.497	1.440	3.8	53	-0.04
87	t	Perylene	1.464	1.410	3.7	54	-0.05
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.197	9.2	54	-0.06
89	t	Dibenz[a,h]anthracene	1.343	1.374	-2.3	56	-0.06
90	t	Benzo[g,h,i]perylene	1.518	1.450	4.5	53	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.330	24.8	42	-0.06
92	A2	Hopane (T19)	0.439	0.330	24.8	42	-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#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18109.D
Acq On : 10 Feb 2006 5:19 pm
Operator : AC
Sample : C1020804
Misc : STD
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 13 06:26:48 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	0.175	10.7	50	-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\FEB08\
Data File : P18109.D
Acq On : 10 Feb 2006 5:19 pm
Operator : AC
Sample : C1020804
Misc : STD
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 13 06:26:48 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 2/13/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	34818m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	59032	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	36343	486.89	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.69%#			
58) Pyrene-d10	38.02	212	80895	527.11	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.71%			
81) Benzo[b]fluoranthene-d12	46.84	264	58813	500.30	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.03%			
125) 5B(H)Cholane - Surr	43.57	217	10310	444.48	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.45%#			

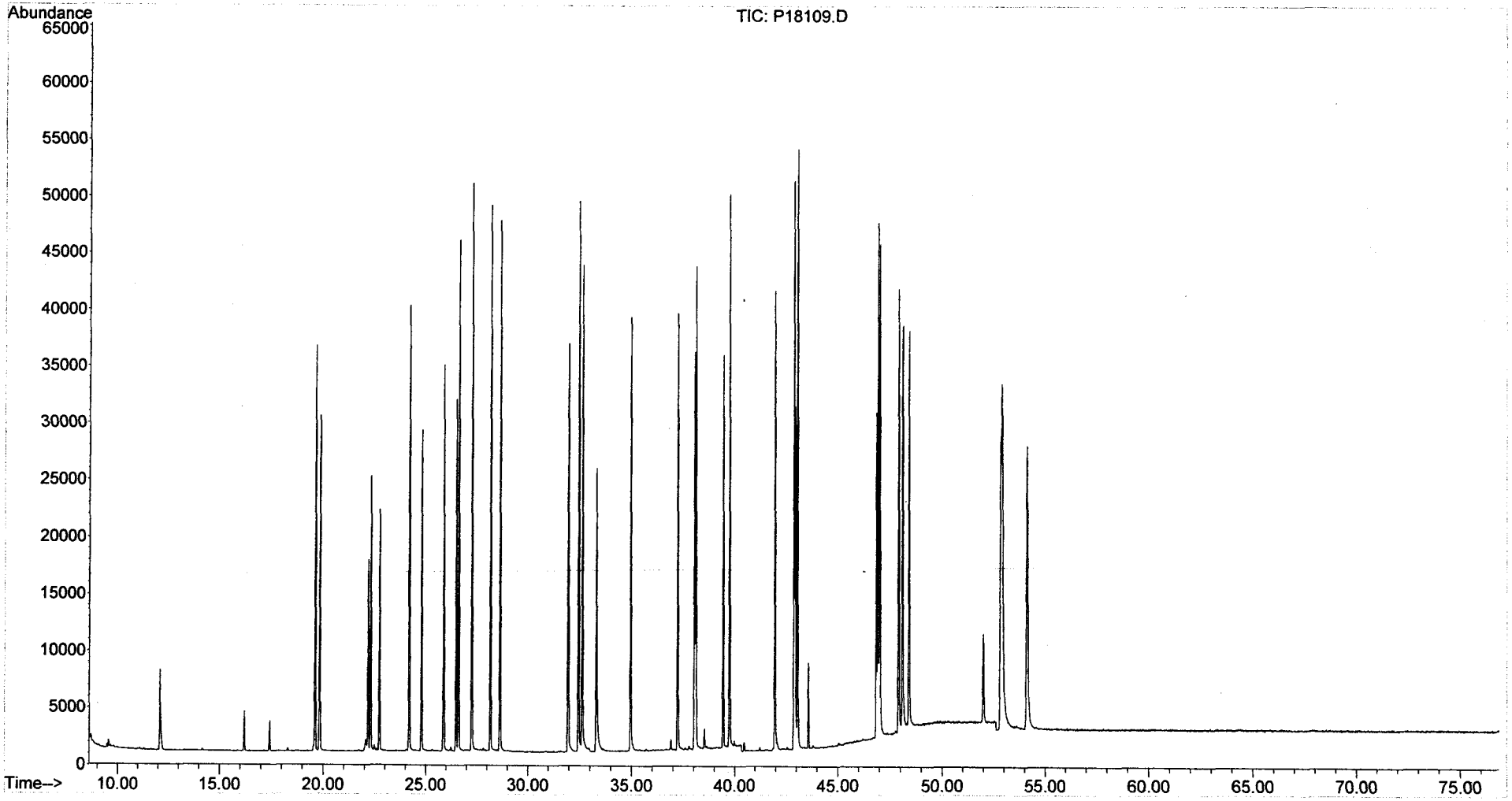
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	7109	236.35	ng/mL	100
4) cis-Decalin	17.42	138	5362	236.92	ng/mL	100
9) Naphthalene	19.61	128	83286	468.40	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	54562	484.71	ng/mL#	100
16) 1-Methylnaphthalene	22.72	142	51357	484.61	ng/mL#	100
17) Benzothiophene	19.82	134	73692	464.62	ng/mL	100
22) Biphenyl	24.18	154	67501	482.33	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.78	156	45993	492.33	ng/mL#	100
24) Dibenzofuran	27.26	168	76900	489.14	ng/mL	97
25) Acenaphthylene	25.87	152	82118	481.65	ng/mL#	100
26) Acenaphthene	26.62	153	51673	487.92	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	40936	488.13	ng/mL	99
28) Fluorene	28.64	166	56345	474.40	ng/mL	99
32) Dibenzothiophene	31.95	184	82146	468.99	ng/mL	99
41) Phenanthrene	32.44	178	82320	467.41	ng/mL	99
52) Retene	39.43	234	19703	535.06	ng/mL	94
53) Anthracene	32.62	178	76441	469.11	ng/mL	99
54) Carbazole	33.29	167	70541	467.74	ng/mL	99
55) 1-Methylphenanthrene	34.95	192	57802	479.31	ng/mL	99
56) Fluoranthene	37.22	202	89657m	478.11	ng/mL	
57) Benzo(b)fluorene	39.73	216	54474	497.76	ng/mL	99
59) Pyrene	38.10	202	94545	495.72	ng/mL	99
64) Naphthobenzothiophene	41.95	234	89068	499.19	ng/ml	98
65) Naphthobenzothiophene-2,1-	41.95	234	89068	499.19	ng/mL	98
73) Benz[a]anthracene	42.88	228	84628m	470.94	ng/mL	
74) Chrysene	43.04	228	86346	470.25	ng/mL	98
75) Chrysene/Triphenylene	43.04	228	86346	470.25	ng/mL	98
82) Benzo[b]fluoranthene	46.93	252	90065	488.02	ng/mL	99
83) Benzo[k]fluoranthene	47.00	252	94937	494.48	ng/mL	99
85) Benzo[e]pyrene	47.91	252	85212	476.90	ng/mL	99
86) Benzo[a]pyrene	48.11	252	85025	480.94	ng/mL	100
87) Perylene	48.40	252	83238	481.68	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	52.83	276	70647m	454.10	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	81137	511.65	ng/mL	97
90) Benzo[g,h,i]perylene	54.10	276	85588	477.41	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	51.98	191	19474	375.71	ng/mL#	91
92) Hopane (T19)	51.98	191	19474	375.71	ng/mL#	91

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18109.D
Acq On : 10 Feb 2006 5:19 pm
Operator : AC
Sample : C1020804
Misc : STD
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 13 06:26:48 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\FEB08\
Data File : P18135.D
Acq On : 11 Feb 2006 1:38 pm
Operator : AC
Sample : C1020805
Misc : STD
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 13 06:32:26 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 2/13/06

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	49	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.402	6.9	47	-0.02
4	t	cis-Decalin	0.325	0.309	4.9	48	-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	2.268	11.2	44	-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	1.024	4.5	48	-0.02
15	t	2-Methylnaphthalene	1.617	1.510	6.6	47	-0.02
16	t	1-Methylnaphthalene	1.522	1.404	7.8	46	-0.02
17	A1	Benzothiophene	2.278	1.986	12.8	43	-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	1.875	6.7	47	-0.02
23	t	2,6-Dimethylnaphthalene	1.342	1.291	3.8	48	-0.04
24	t	Dibenzofuran	2.258	2.098	7.1	47	-0.02
25	t	Acenaphthylene	2.448	2.395	2.2	49	-0.04
26	t	Acenaphthene	1.521	1.426	6.2	47	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.155	4.1	49	-0.02
28	A1	Fluorene	1.706	1.572	7.9	47	-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	2.228	11.4	45	-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	2.281	9.8	46	-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\FEB08\
Data File : P18135.D
Acq On : 11 Feb 2006 1:38 pm
Operator : AC
Sample : C1020805
Misc : STD
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 13 06:32:26 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	0.625	-18.1	61	-0.04
53	t	Anthracene	2.340	2.122	9.3	46	-0.04
54	t	Carbazole	2.166	2.005	7.4	46	-0.04
55	t	1-Methylphenanthrene	1.732	1.685	2.7	49	-0.04
56	A1	Fluoranthene	2.693	2.604	3.3	49	-0.02
57	T	Benzo(b)fluorene	1.572	1.710	-8.8	55	-0.04
58	s	Pyrene-d10	2.204	2.339	-6.1	53	-0.04
59	A1	Pyrene	2.739	2.646	3.4	48	-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	2.609	-1.8	52	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.609	-1.8	52	-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	54	-0.04
73	t	Benz[a]anthracene	1.522	1.535	-0.9	56	-0.04
74	A1	Chrysene	1.555	1.475	5.1	52	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.475	5.1	52	-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	1.039	-4.3	57	-0.05
82	t	Benzo[b]fluoranthene	1.563	1.618	-3.5	57	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.609	1.0	53	-0.05
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.494	1.3	55	-0.05
86	t	Benzo[a]pyrene	1.497	1.559	-4.1	58	-0.05
87	t	Perylene	1.464	1.500	-2.5	57	-0.05
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.534	-16.4	70	-0.06
89	t	Dibenz[a,h]anthracene	1.343	1.537	-14.4	63	-0.07
90	t	Benzo[g,h,i]perylene	1.518	1.609	-6.0	59	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.352	19.8	45	-0.06
92	A2	Hopane (T19)	0.439	0.352	19.8	45	-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#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18135.D
Acq On : 11 Feb 2006 1:38 pm
Operator : AC
Sample : C1020805
Misc : STD
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 13 06:32:26 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	0.185	5.6	53	-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\FEB08\
Data File : P18135.D
Acq On : 11 Feb 2006 1:38 pm
Operator : AC
Sample : C1020805
Misc : STD
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 13 06:32:26 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

2/13/06

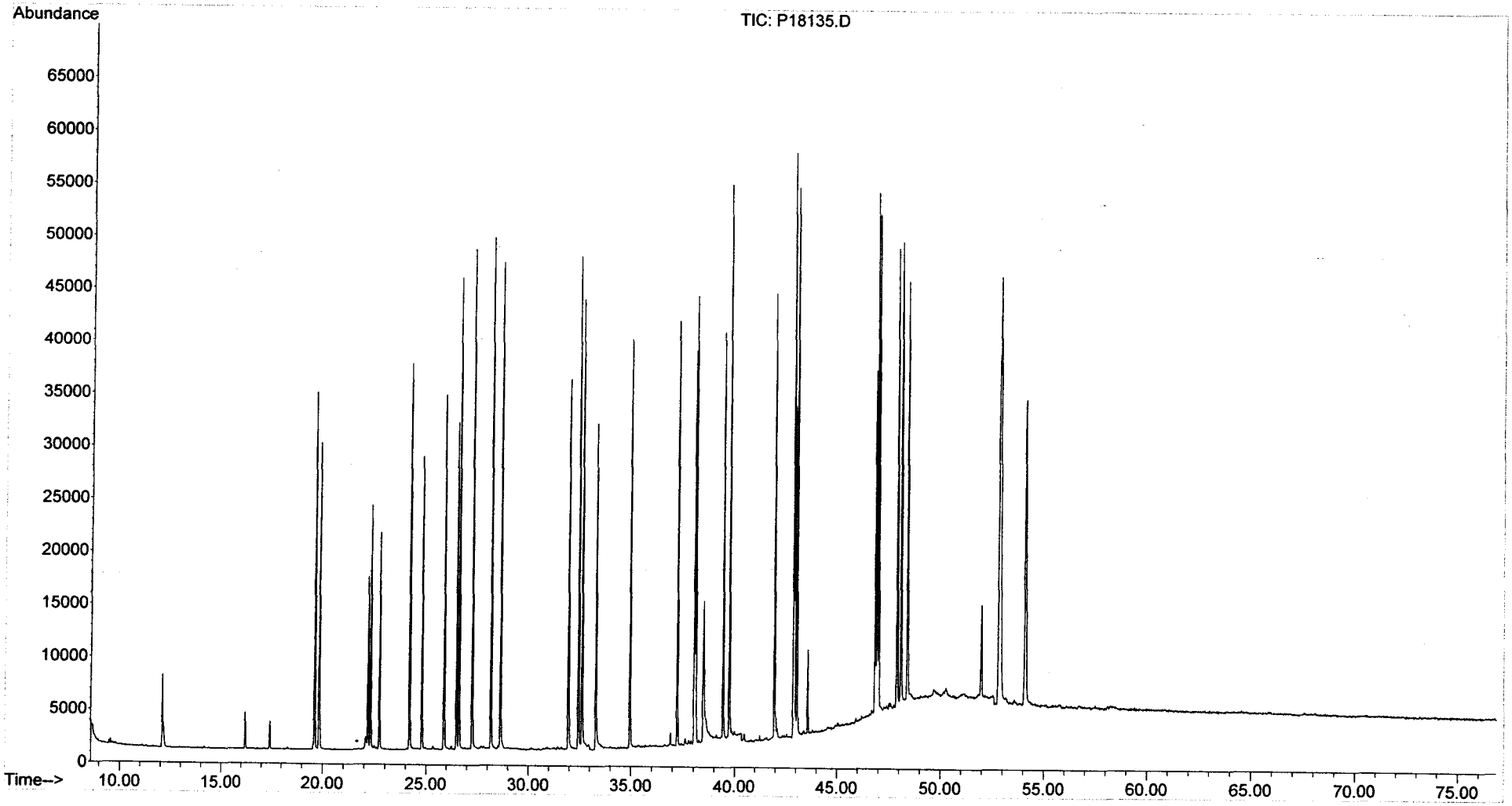
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	35120	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	59073	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	35967	477.71	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.77%#			
58) Pyrene-d10	38.02	212	82150	530.69	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.07%			
81) Benzo[b]fluoranthene-d12	46.84	264	61389	521.86	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.19%			
125) 5B(H)Cholane - Surr	43.57	217	10933	471.01	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.10%#			
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	7067	232.94	ng/mL	100
4) cis-Decalin	17.42	138	5418	237.34	ng/mL	100
9) Naphthalene	19.61	128	79658	444.14	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	53020	466.96	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	49300	461.20	ng/mL#	100
17) Benzothiophene	19.83	134	69764	436.08	ng/mL	100
22) Biphenyl	24.18	154	65833	466.36	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.78	156	45341	481.17	ng/mL#	100
24) Dibenzofuran	27.26	168	73677	464.61	ng/mL	96
25) Acenaphthylene	25.87	152	84100	489.04	ng/mL#	100
26) Acenaphthene	26.62	153	50068	468.70	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	40580	479.73	ng/mL	97
28) Fluorene	28.64	166	55199m	460.75	ng/mL	
32) Dibenzothiophene	31.95	184	78262	442.97	ng/mL	100
41) Phenanthrene	32.44	178	80115	450.98	ng/mL	99
52) Retene	39.44	234	21934	590.53	ng/mL	93
53) Anthracene	32.62	178	74538	453.50	ng/mL	99
54) Carbazole	33.29	167	70421	462.93	ng/mL	98
55) 1-Methylphenanthrene	34.95	192	59160	486.36	ng/mL	98
56) Fluoranthene	37.22	202	91438m	483.42	ng/mL	
57) Benzo(b)fluorene	39.73	216	60063	544.11	ng/mL	97
59) Pyrene	38.10	202	92944	483.14	ng/mL	98
64) Naphthobenzothiophene	41.95	234	91627	509.12	ng/ml	100
65) Naphthobenzothiophene-2,1-	41.95	234	91627	509.12	ng/mL	100
73) Benz[a]anthracene	42.88	228	90675m	504.24	ng/mL	
74) Chrysene	43.04	228	87125	474.16	ng/mL	98
75) Chrysene/Triphenylene	43.04	228	87125	474.16	ng/mL	98
82) Benzo[b]fluoranthene	46.93	252	95568	517.48	ng/mL	99
83) Benzo[k]fluoranthene	47.00	252	95031	494.62	ng/mL	99
85) Benzo[e]pyrene	47.91	252	88247	493.55	ng/mL	99
86) Benzo[a]pyrene	48.09	252	92083	520.51	ng/mL	100
87) Perylene	48.40	252	88581	512.24	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	52.83	276	90641m	582.21	ng/mL	
89) Dibenz[a,h]anthracene	52.89	278	90776	572.03	ng/mL	98
90) Benzo[g,h,i]perylene	54.10	276	95061	529.89	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	51.98	191	20778	400.59	ng/mL	100
92) Hopane (T19)	51.98	191	20778	400.59	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18135.D
Acq On : 11 Feb 2006 1:38 pm
Operator : AC
Sample : C1020805
Misc : STD
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 13 06:32:26 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\FEB08\
Data File : P18153.D
Acq On : 12 Feb 2006 3:44 am
Operator : AC
Sample : C1020806
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 13 06:36:27 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

MS 2/13/06

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	49	-0.02
2	t	Decalin	0.391	0.000#	100.0#	0#	-16.23#
3	A1	trans-Decalin	0.432	0.396	8.3	46	-0.02
4	t	cis-Decalin	0.325	0.304	6.5	47	-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	2.256	11.6	43	-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	1.021	4.8	47	-0.01
15	t	2-Methylnaphthalene	1.617	1.495	7.5	46	-0.02
16	t	1-Methylnaphthalene	1.522	1.405	7.7	46	-0.02
17	A1	Benzothiophene	2.278	1.985	12.9	43	-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	1.854	7.8	46	-0.01
23	t	2,6-Dimethylnaphthalene	1.342	1.275	5.0	47	-0.02
24	t	Dibenzofuran	2.258	2.049	9.3	45	-0.02
25	t	Acenaphthylene	2.448	2.447	0.0	50	-0.04
26	t	Acenaphthene	1.521	1.429	6.0	47	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.204	1.138	5.5	48	-0.02
28	A1	Fluorene	1.706	1.584	7.2	47	-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	2.210	12.1	44	-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	2.244	11.3	44	-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\FEB08\
Data File : P18153.D
Acq On : 12 Feb 2006 3:44 am
Operator : AC
Sample : C1020806
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 13 06:36:27 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

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	0.592	-11.9	57	-0.02
53	t	Anthracene	2.340	2.125	9.2	45	-0.04
54	t	Carbazole	2.166	1.998	7.8	45	-0.04
55	t	1-Methylphenanthrene	1.732	1.641	5.3	47	-0.04
56	A1	Fluoranthene	2.693	2.585	4.0	48	-0.02
57	T	Benzo(b)fluorene	1.572	1.719	-9.4	55	-0.02
58	s	Pyrene-d10	2.204	2.315	-5.0	52	-0.04
59	A1	Pyrene	2.739	2.648	3.3	48	-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	2.586	-0.9	51	-0.04
65	A2	Naphthobenzothiophene-2,1-D	2.562	2.587	-1.0	51	-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	53	-0.04
73	t	Benz[a]anthracene	1.522	1.550	-1.8	54	-0.04
74	A1	Chrysene	1.555	1.491	4.1	51	-0.04
75	A2	Chrysene/Triphenylene	1.555	1.494	3.9	51	-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	1.040	-4.4	55	-0.04
82	t	Benzo[b]fluoranthene	1.563	1.630	-4.3	55	-0.04
83	A1	Benzo[k]fluoranthene	1.626	1.601	1.5	51	-0.04
84	A2	Benzo[a]fluoranthene	1.626	0.000#	100.0#	0#	-47.41#
85	t	Benzo[e]pyrene	1.513	1.495	1.2	53	-0.04
86	t	Benzo[a]pyrene	1.497	1.561	-4.3	56	-0.04
87	t	Perylene	1.464	1.520	-3.8	56	-0.04
88	t	Indeno[1,2,3-cd]pyrene	1.318	1.495	-13.4	66	-0.05
89	t	Dibenz[a,h]anthracene	1.343	1.561	-16.2	62	-0.06
90	t	Benzo[g,h,i]perylene	1.518	1.588	-4.6	56	-0.05
91	A1	17a(H),21B(H)-hopane - C30H	0.439	0.365	16.9	45	-0.06
92	A2	Hopane (T19)	0.439	0.365	16.9	45	-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#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18153.D
Acq On : 12 Feb 2006 3:44 am
Operator : AC
Sample : C1020806
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 13 06:36:27 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

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	0.189	3.6	52	-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\FEB08\
Data File : P18153.D
Acq On : 12 Feb 2006 3:44 am
Operator : AC
Sample : C1020806
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 13 06:36:27 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

MS 2/13/06

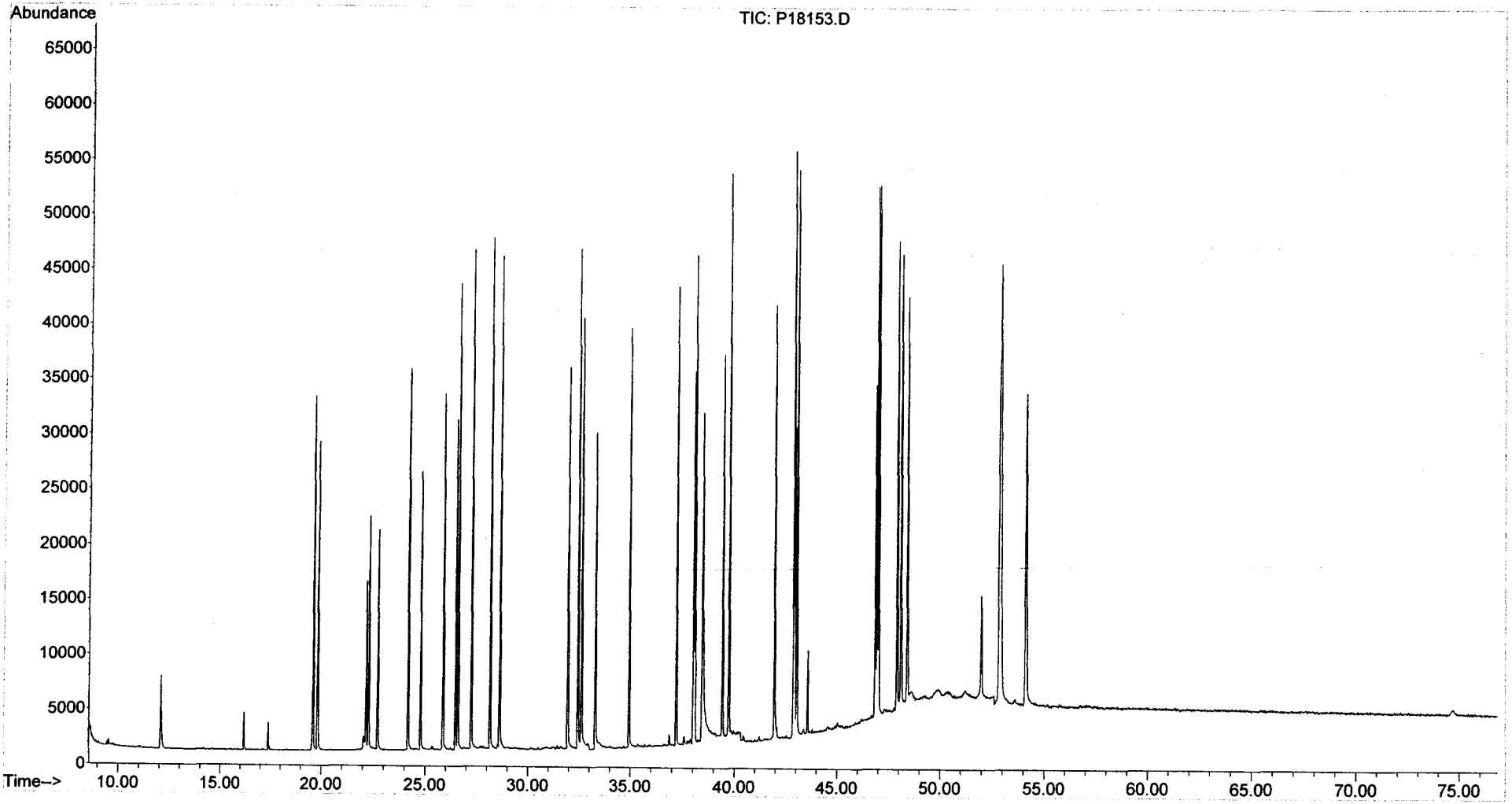
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	34784m	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	57166	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.18	152	35504	476.12	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.61%#			
58) Pyrene-d10	38.02	212	80525	525.22	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.52%			
81) Benzo[b]fluoranthene-d12	46.85	264	59435	522.10	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.21%			
125) 5B(H)Cholane - Surr	43.58	217	10778	479.82	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.98%#			
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	6883	229.06	ng/mL	100
4) cis-Decalin	17.42	138	5284	233.70	ng/mL	100
9) Naphthalene	19.61	128	78475	441.77	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	51995	462.35	ng/mL#	100
16) 1-Methylnaphthalene	22.73	142	48885	461.74	ng/mL#	100
17) Benzothiophene	19.83	134	69061	435.85	ng/mL	100
22) Biphenyl	24.19	154	64474	461.15	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.80	156	44344	475.14	ng/mL#	100
24) Dibenzofuran	27.26	168	71268	453.76	ng/mL	97
25) Acenaphthylene	25.87	152	85109	499.69	ng/mL#	100
26) Acenaphthene	26.62	153	49719	469.93	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.18	170	39579	472.41	ng/mL	98
28) Fluorene	28.64	166	55081m	464.21	ng/mL	
32) Dibenzothiophene	31.95	184	76868	439.29	ng/mL	99
41) Phenanthrene	32.45	178	78054	443.62	ng/mL	99
52) Retene	39.45	234	20587	559.62	ng/mL	94
53) Anthracene	32.62	178	73933m	454.16	ng/mL	
54) Carbazole	33.29	167	69505	461.32	ng/mL	97
55) 1-Methylphenanthrene	34.95	192	57086	473.84	ng/mL	100
56) Fluoranthene	37.22	202	89915m	479.96	ng/mL	
57) Benzo(b)fluorene	39.74	216	59797	546.93	ng/mL	99
59) Pyrene	38.10	202	92095	483.35	ng/mL	98
64) Naphthobenzothiophene	41.95	234	89951	504.63	ng/ml	97
65) Naphthobenzothiophene-2,1-	41.95	234	89987	504.84	ng/mL	97
73) Benz[a]anthracene	42.88	228	88607m	509.18	ng/mL	
74) Chrysene	43.04	228	85251m	479.44	ng/mL	
75) Chrysene/Triphenylene	43.04	228	85407m	480.32	ng/mL	
82) Benzo[b]fluoranthene	46.93	252	93199	521.49	ng/mL	99
83) Benzo[k]fluoranthene	47.02	252	91537	492.33	ng/mL	100
85) Benzo[e]pyrene	47.92	252	85488	494.06	ng/mL	99
86) Benzo[a]pyrene	48.11	252	89252	521.33	ng/mL	100
87) Perylene	48.42	252	86898	519.27	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	52.84	276	85483m	567.40	ng/mL	
89) Dibenz[a,h]anthracene	52.90	278	89226	581.02	ng/mL#	90
90) Benzo[g,h,i]perylene	54.11	276	90796	523.00	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	51.98	191	20861	415.60	ng/mL#	95
92) Hopane (T19)	51.98	191	20861	415.60	ng/mL#	95

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08\
Data File : P18153.D
Acq On : 12 Feb 2006 3:44 am
Operator : AC
Sample : C1020806
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 13 06:36:27 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



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

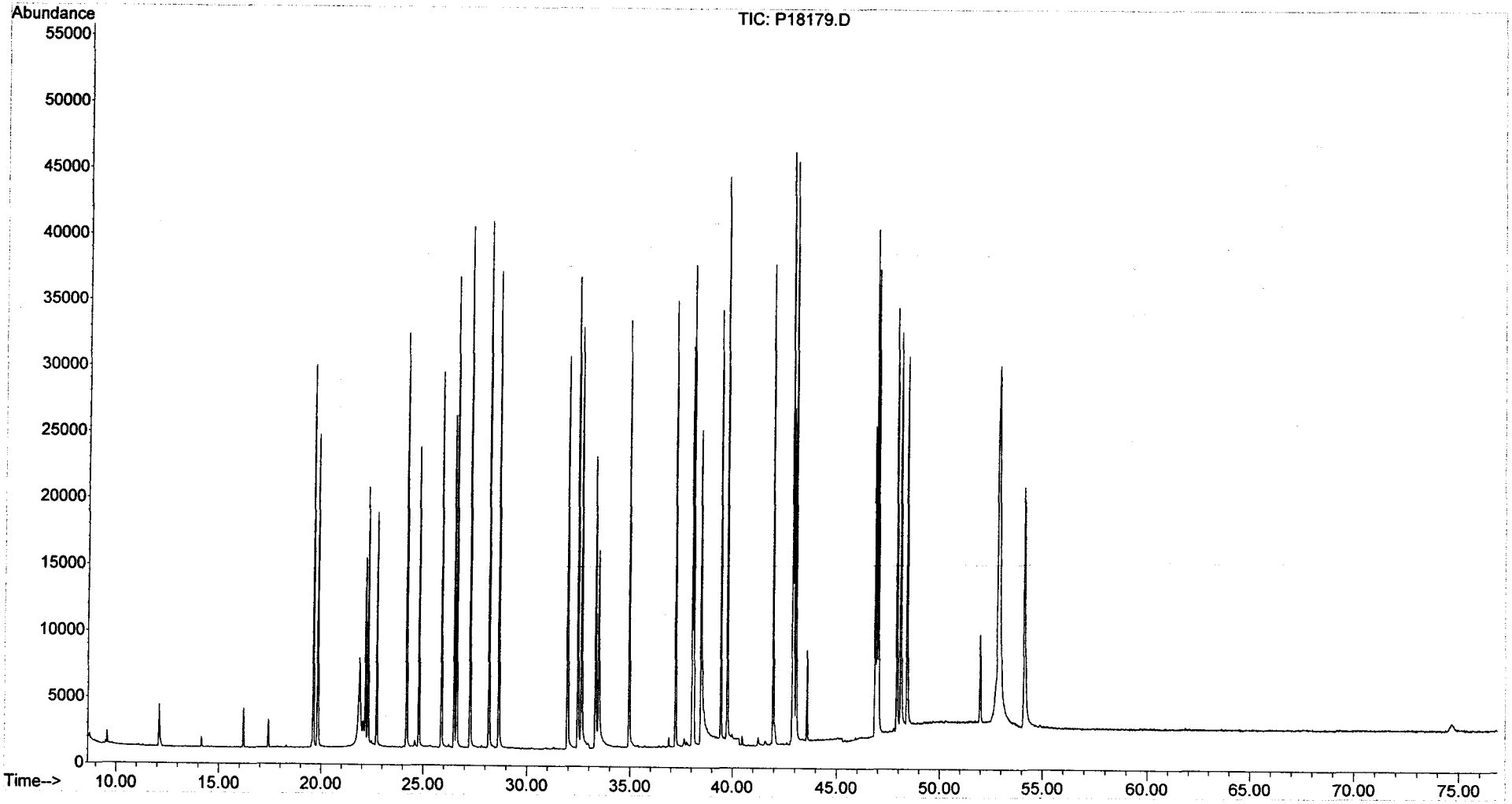
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.49	164	31259	500.00	ng/mL	-0.02
72) Chrysene-d12	42.94	240	50447	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.17	152	32424	483.85	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		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

AMS 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%#			

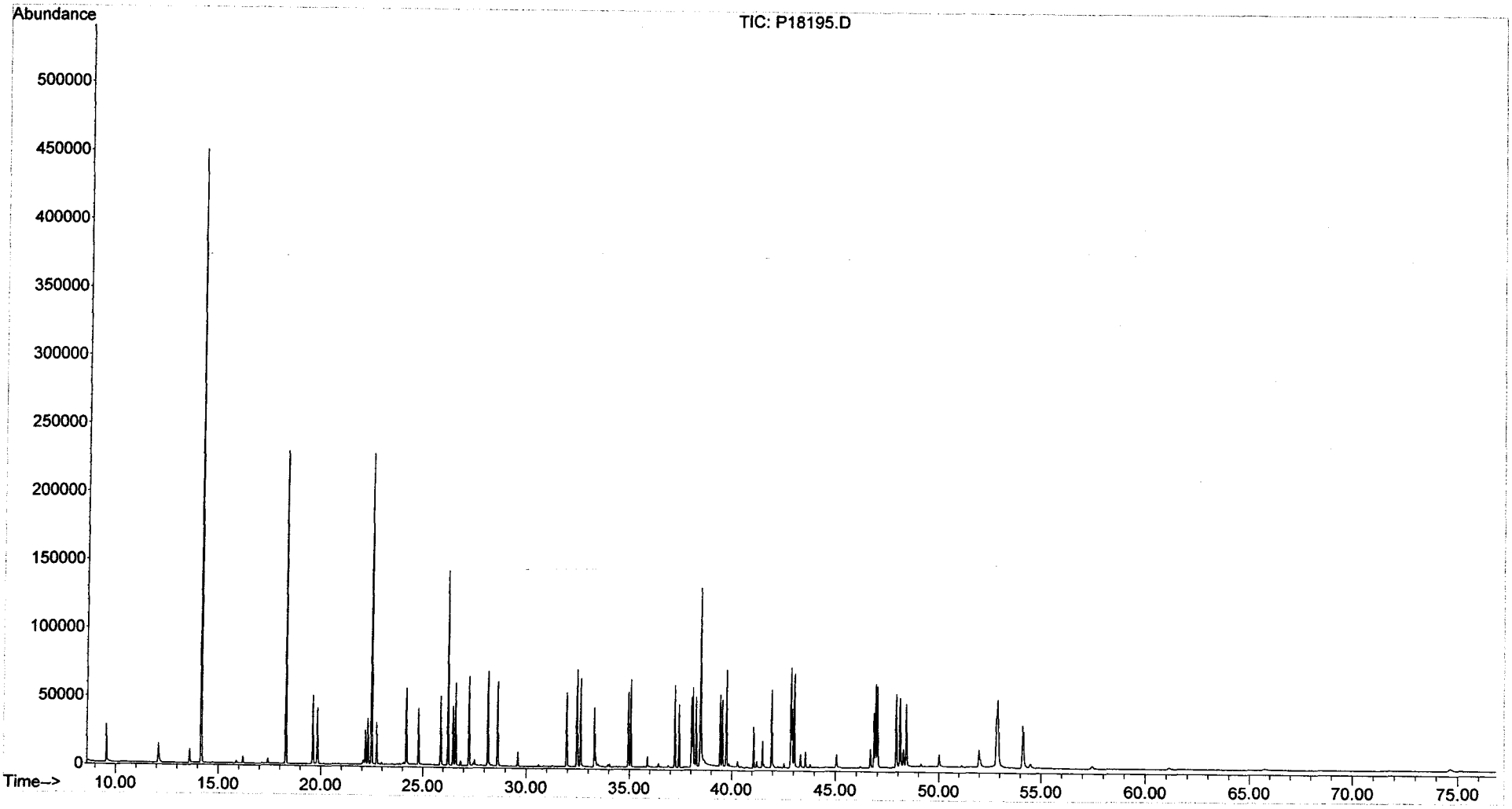
Target Compounds						Qvalue
3) trans-Decalin	16.20	138	10311	230.41	ng/mL	100
4) cis-Decalin	17.42	138	7876	233.90	ng/mL	100
9) Naphthalene	19.61	128	119933	453.34	ng/mL#	100
15) 2-Methylnaphthalene	22.29	142	78518	468.82	ng/mL#	100
16) 1-Methylnaphthalene	22.72	142	74691	473.71	ng/mL#	100
17) Benzothiophene	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\PAH2\FEBRUARY06\FEB09\
Data File : P28208.D
Acq On : 10 Feb 2006 11:16 pm
Operator : AC
Sample : C2021001
Misc : std
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 13 06:52:16 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

dhs 2/13/06

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\FEB09\
Data File : P28208.D
Acq On : 10 Feb 2006 11:16 pm
Operator : AC
Sample : C2021001
Misc : std
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 13 06:52:16 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	131	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	0.560	-13.4	171	-0.01
84	A2	Hopane (T19)	0.494	0.560	-13.4	171	-0.01
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\FEB09\
Data File : P28208.D
Acq On : 10 Feb 2006 11:16 pm
Operator : AC
Sample : C2021001
Misc : std
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 13 06:52:16 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	0.241	-13.1	153	0.00
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\FEB09\
Data File : P28208.D
Acq On : 10 Feb 2006 11:16 pm
Operator : AC
Sample : C2021001
Misc : std
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 13 06:52:16 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 2/13/06

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	40572	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	9798	567.85	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.79%			

Target Compounds

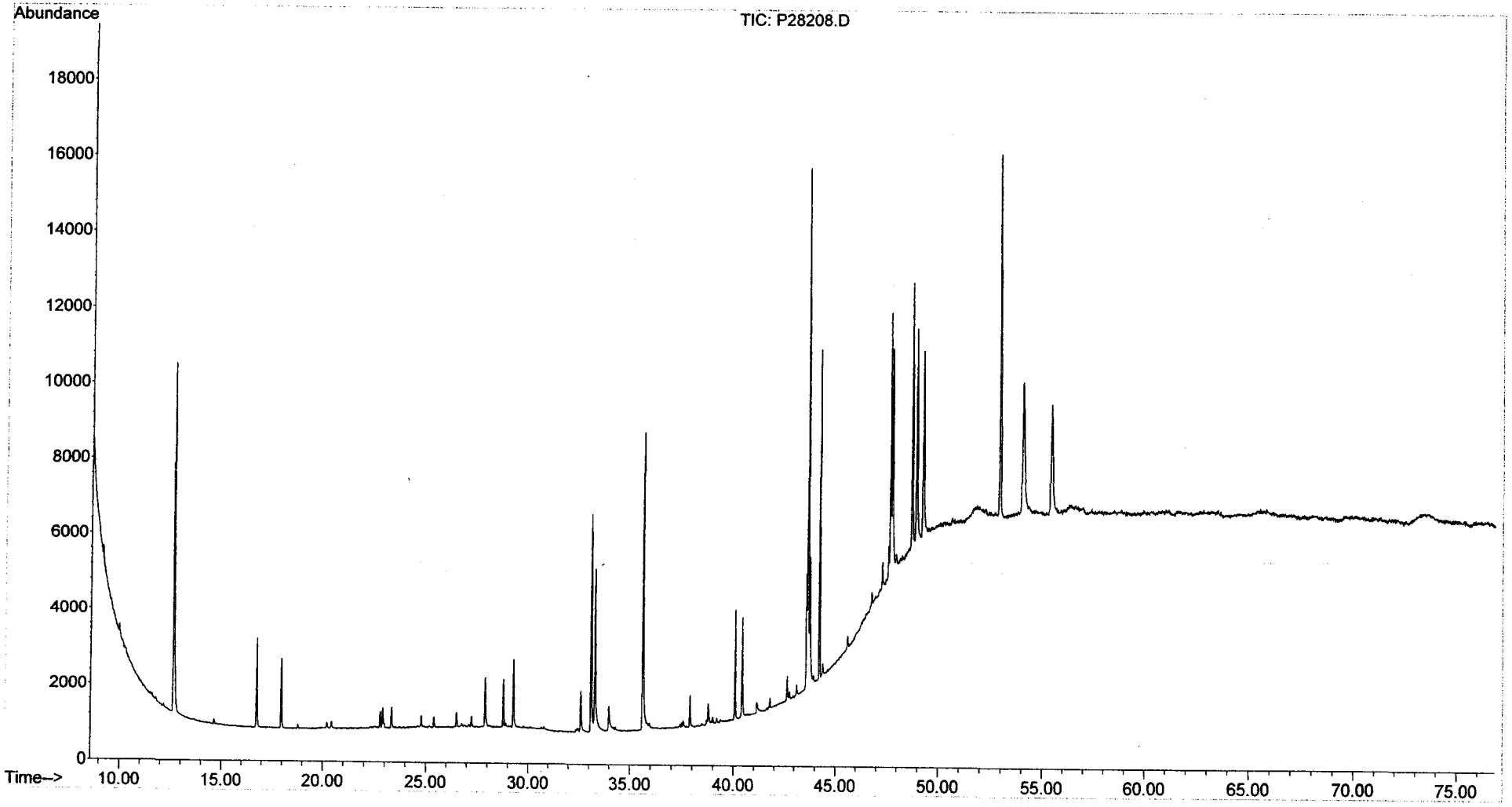
						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	22719	567.29	ng/mL	100
84) Hopane (T19)	52.93	191	22719	567.29	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28208.D
Acq On : 10 Feb 2006 11:16 pm
Operator : AC
Sample : C2021001
Misc : std
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 13 06:52:16 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\FEB09\
Data File : P28219.D
Acq On : 11 Feb 2006 4:43 pm
Operator : AC
Sample : C2021002
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 13 06:53:35 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

AMS 2/13/06

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\FEB09\
Data File : P28219.D
Acq On : 11 Feb 2006 4:43 pm
Operator : AC
Sample : C2021002
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 13 06:53:35 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	149	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	0.532	-7.7	185	-0.02
84	A2	Hopane (T19)	0.494	0.532	-7.7	185	-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\FEB09\
Data File : P28219.D
Acq On : 11 Feb 2006 4:43 pm
Operator : AC
Sample : C2021002
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 13 06:53:35 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	0.245	-15.0	177	0.00
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\FEB09\
Data File : P28219.D
Acq On : 11 Feb 2006 4:43 pm
Operator : AC
Sample : C2021002
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 13 06:53:35 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 2/13/06

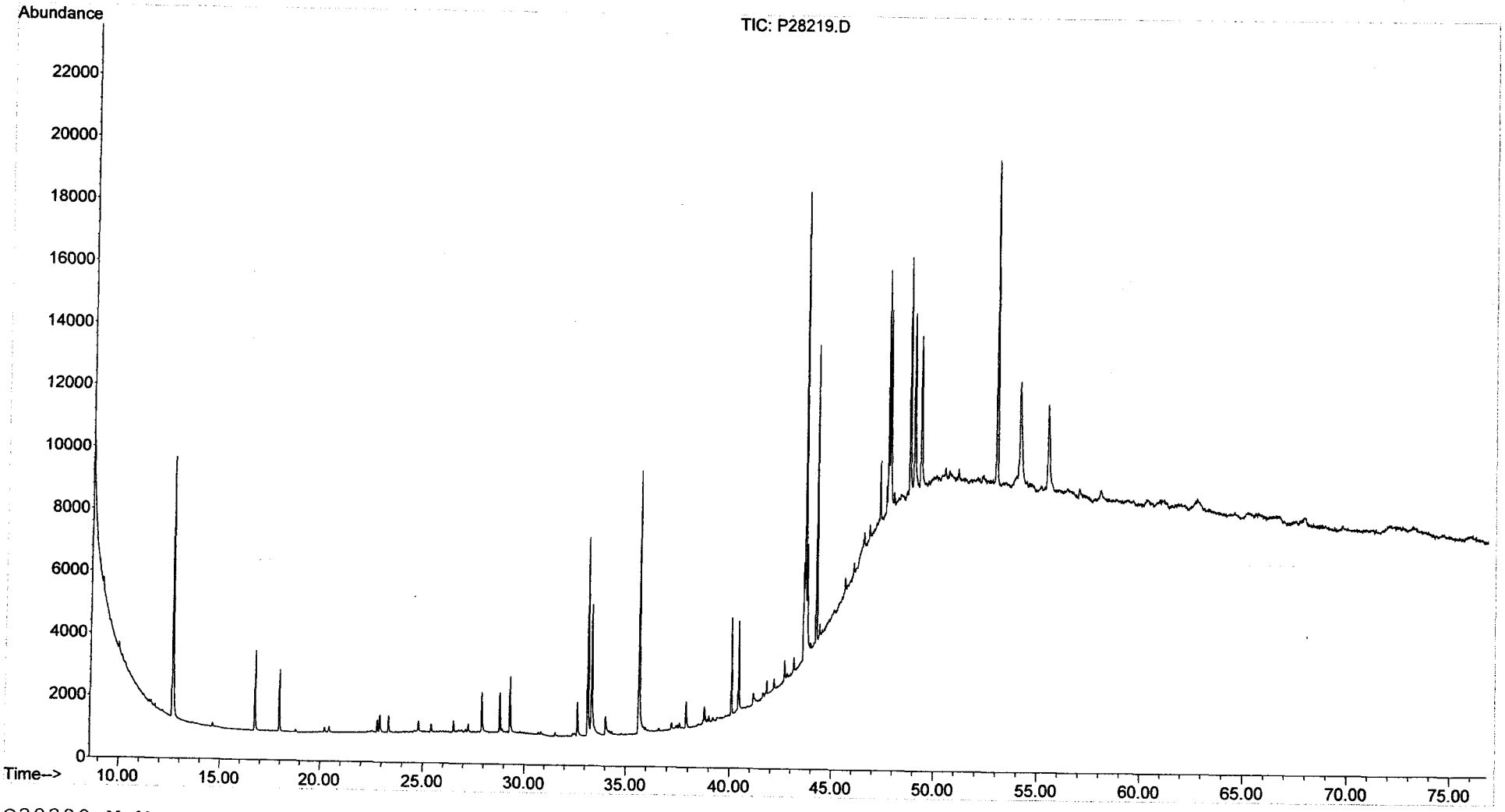
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.63	240	46311	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	11333	575.42	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 57.54%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.92	191	24617	538.51	ng/mL	99
84) Hopane (T19)	52.92	191	24617	538.51	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28219.D
Acq On : 11 Feb 2006 4:43 pm
Operator : AC
Sample : C2021002
Misc : 1X
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 13 06:53:35 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\FEB09\
Data File : P28228.D
Acq On : 12 Feb 2006 6:54 am
Operator : AC
Sample : C2021003
Misc : STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 13 06:54:46 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 2/13/06

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\FEB09\
Data File : P28228.D
Acq On : 12 Feb 2006 6:54 am
Operator : AC
Sample : C2021003
Misc : STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 13 06:54:46 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	166	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	0.528	-6.9	205#	0.00
84	A2	Hopane (T19)	0.494	0.528	-6.9	205#	0.00
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\FEB09\
Data File : P28228.D
Acq On : 12 Feb 2006 6:54 am
Operator : AC
Sample : C2021003
Misc : STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 13 06:54:46 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	0.246	-15.5	198	0.00
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\FEB09\
Data File : P28228.D
Acq On : 12 Feb 2006 6:54 am
Operator : AC
Sample : C2021003
Misc : STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 13 06:54:46 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 2/13/06

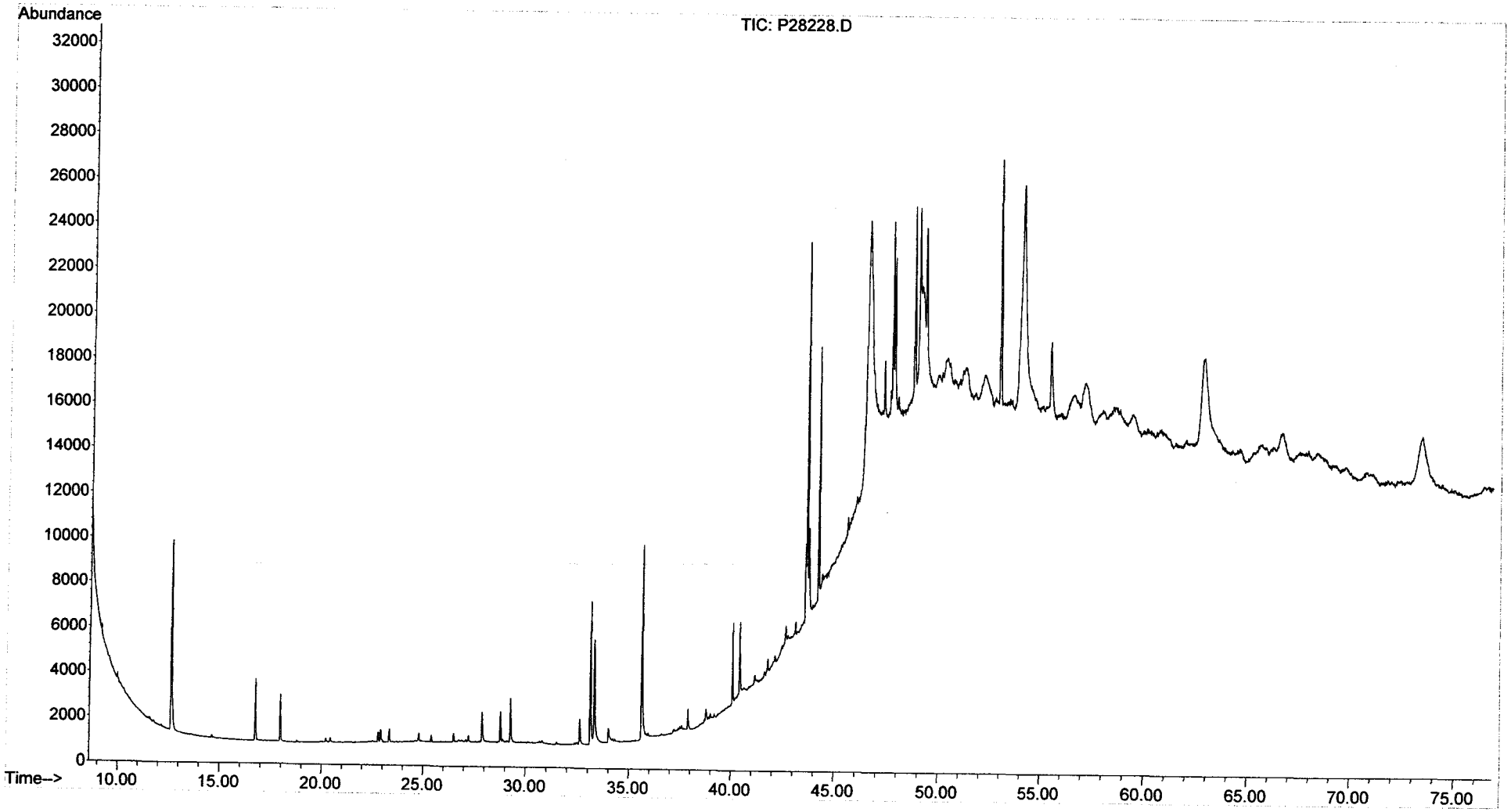
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.64	240	51446	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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	12655	578.40	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	57.84%		
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.94	191	27174	535.11	ng/mL	100
84) Hopane (T19)	52.94	191	27174	535.11	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28228.D
Acq On : 12 Feb 2006 6:54 am
Operator : AC
Sample : C2021003
Misc : STD
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Feb 13 06:54:46 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\FEB09\
Data File : P28235.D
Acq On : 12 Feb 2006 6:02 pm
Operator : AC
Sample : C2021004
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 13 06:55:51 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

AWS 2/13/06

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\FEB09\
Data File : P28235.D
Acq On : 12 Feb 2006 6:02 pm
Operator : AC
Sample : C2021004
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 13 06:55:51 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	169	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	0.537	-8.7	211#	-0.01
84	A2	Hopane (T19)	0.494	0.537	-8.7	211#	-0.01
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\FEB09\
Data File : P28235.D
Acq On : 12 Feb 2006 6:02 pm
Operator : AC
Sample : C2021004
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 13 06:55:51 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	0.250	-17.4	204#	0.00
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\FEB09\
Data File : P28235.D
Acq On : 12 Feb 2006 6:02 pm
Operator : AC
Sample : C2021004
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 13 06:55:51 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 2/13/06

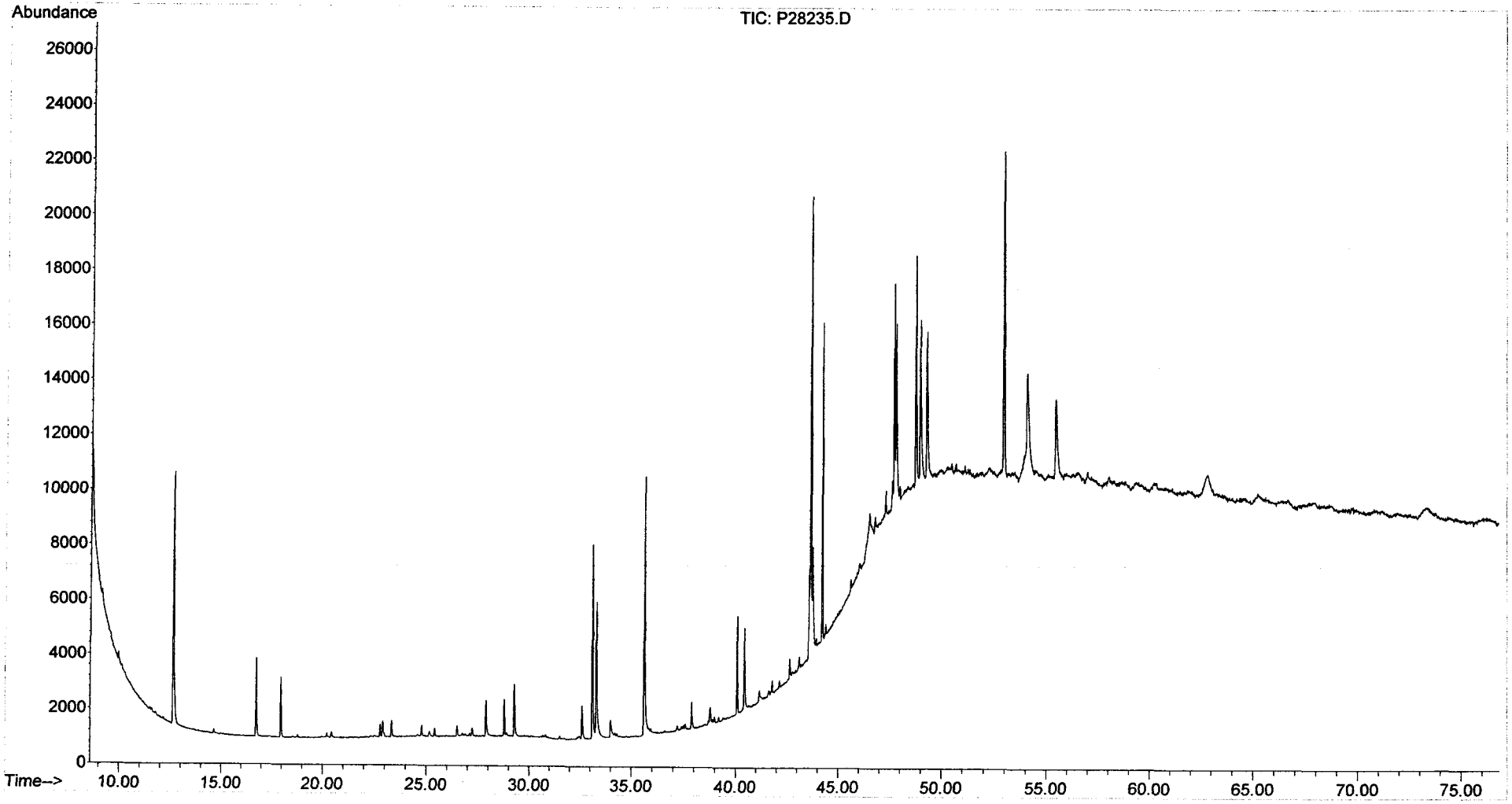
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	43.64	240	52232	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	13039	586.99	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 58.70%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	52.93	191	28037	543.80	ng/mL	99
84) Hopane (T19)	52.93	191	28037	543.80	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\FEBRUARY06\FEB09\
Data File : P28235.D
Acq On : 12 Feb 2006 6:02 pm
Operator : AC
Sample : C2021004
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Feb 13 06:55:51 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: **0602004**
Lab ID: **C1020801**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		57912	26.51	96106	42.95
Upper Limit:		115824	27.01	192212	43.45
Lower Limit:		28956	26.01	48053	42.45
Client ID	**Lab ID**				
Blank	SS020106B11	41599	26.49	70753	42.95
LCS	SS020106LCS04	41611	26.49	70112	42.95
LCSD	SS020106LCSD04	41339	26.49	69691	42.95
CCV	C1020802	40013	26.49	66569	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.

02/17/06 12:35

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1020802**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		40013	26.49	66569	42.94
Upper Limit:		80026	26.99	133138	43.44
Lower Limit:		20006	25.99	33284	42.44
Client ID	**Lab ID**				
GC-SED-102 (2-4)	0602004-04E	37248	26.49	68354	42.94
GC-SED-102 (2-4)	0602004-04E D	38564	26.49	67045	42.94
GC-SED-103 (8.1-9.1)	0602004-03E	39229	26.49	68855	42.94
GC-SED-58C (8-10)	0602004-02	43075	26.49	74915	42.94
GC-SED-101 (7.9-9.1)	0602004-05	37701	26.49	65754	42.94
GC-SED-100 (5-6)	0602004-06E	38764	26.49	65211	42.94
GC-SED-97 (8.5-9.5)	0602004-07E	50460	26.49	85634	42.94
GC-SED-74 (5.3-6.3)	0602004-08E	47966	26.49	82012	42.94
GC-SED-73E (3.8-8.4)	0602004-09E	47039	26.49	80265	42.94
GC-SED-73E (3.8-8.4)	0602004-09E D	47069	26.49	80493	42.94
CCV	C1020803	38679	26.49	64081	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.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1020803**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		38679	26.49	64081	42.94
Upper Limit:		77358	26.99	128162	43.44
Lower Limit:		19340	25.99	32040	42.44
Client ID	**Lab ID**				
GC-SED-70B (4-5)	0602004-10E	49294	26.49	84119	42.94
GC-SED-82 (12-12.8)	0602004-12E	48183	26.49	82392	42.94
GC-SED-77 (14.5-15.4)	0602004-13E	42505	26.49	72244	42.94
GC-SED-71C (1.5-2.5)	0602004-14E	48321	26.49	82890	42.94
GC-SED-101 (7.9-9.1)	0602004-05E	40197	26.49	68083	42.94
GC-SED-58C (8-10)	0602004-02E	39204	26.49	65931	42.94
CCV	C1020804	34818	26.49	59032	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.

02/17/06 12:36

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1020804**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		34818	26.49	59032	42.94
Upper Limit:		69636	26.99	118064	43.44
Lower Limit:		17409	25.99	29516	42.44
Client ID	**Lab ID**				
Blank	SS020606B06	31922	26.49	53578	42.94
LCSD	SS020606LCSD05	36313	26.49	63017	42.94
GC-SED-98 (1-2)	0602004-01	41902	26.49	71138	42.95
GC-SED-103 (8.1-9.1)	0602004-03	40129	26.49	71946	42.95
GC-SED-102 (2-4)	0602004-04	35429	26.49	67191	42.95
GC-SED-102 (2-4)	0602004-04 D	37239	26.49	67666	42.95
GC-SED-100 (5-6)	0602004-06	36626	26.49	66444	42.97
GC-SED-97 (8.5-9.5)	0602004-07	33318	26.49	61494	42.95
GC-SED-74 (5.3-6.3)	0602004-08	36720	26.49	63378	42.95
CCV	C1020805	35120	26.49	59073	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.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1020805**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		35120	26.49	59073	42.94
Upper Limit:		70240	26.99	118146	43.44
Lower Limit:		17560	25.99	29536	42.44
Client ID	**Lab ID**				
GC-SED-73E (3.8-8.4)	0602004-09	46052	26.49	76897	42.95
GC-SED-73E (3.8-8.4)	0602004-09 D	38703	26.49	63122	42.95
GC-SED-70B (4-5)	0602004-10	34443	26.51	70251	42.97
GC-SED-83 (0-2)	0602004-11	36818	26.49	61795	42.94
GC-SED-82 (12-12.8)	0602004-12	36083	26.49	64929	42.97
GC-SED-77 (14.5-15.4)	0602004-13	37455	26.51	64426	42.97
GC-SED-71C (1.5-2.5)	0602004-14	35266	26.49	64115	42.97
CCV	C1020806	34784	26.49	57166	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.

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Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
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**				
LCS	SS020606LCS04	34448	26.49	56624	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.

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Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C2021001**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		40572	43.63
Upper Limit:		81144	44.13
Lower Limit:		20286	43.13
Client ID	**Lab ID**		
Blank	SS020606B06	40282	43.64
Blank	SS020106B11	36911	43.65
GC-SED-98 (1-2)	0602004-01	52347	43.65
GC-SED-58C (8-10)	0602004-02	56526	43.65
GC-SED-103 (8.1-9.1)	0602004-03	60034	43.65
GC-SED-102 (2-4)	0602004-04	64063	43.65
CCV	C2021002	46311	43.63

N/A - Not Applicable

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

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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: **0602004**
Lab ID: **C2021002**

		Chrysene-d12	
		Area	**RT**
Standard:		46311	43.63
Upper Limit:		92622	44.13
Lower Limit:		23156	43.13
Client ID	**Lab ID**		
GC-SED-102 (2-4)	0602004-04 D	59686	43.65
GC-SED-101 (7.9-9.1)	0602004-05	67384	43.66
GC-SED-100 (5-6)	0602004-06	70981	43.65
GC-SED-97 (8.5-9.5)	0602004-07	74767	43.65
GC-SED-74 (5.3-6.3)	0602004-08	56049	43.66
GC-SED-73E (3.8-8.4)	0602004-09	74142	43.65
GC-SED-73E (3.8-8.4)	0602004-09 D	72436	43.66
CCV	C2021003	51446	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.

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Form VIII
Internal Standard Summary
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C2021003**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		51446	43.64
Upper Limit:		102892	44.14
Lower Limit:		25723	43.14
Client ID	**Lab ID**		
GC-SED-70B (4-5)	0602004-10	54957	43.66
GC-SED-83 (0-2)	0602004-11	74570	43.66
GC-SED-82 (12-12.8)	0602004-12	59417	43.65
GC-SED-77 (14.5-15.4)	0602004-13	59558	43.66
GC-SED-71C (1.5-2.5)	0602004-14	70866	43.66
CCV	C2021004	52232	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.

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TOTAL PETROLEUM HYDROCARBON (TPH)

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-98 (1-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-01**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/11/06	39.0	10.17	23.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**8500**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	87	50-130
d50-Tetracosane	83	50-130

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18134.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 1:38 pm
Operator : AC
Sample : 0602004-01-AFID
Misc : 1X
ALS Vial : 64 Sample Multiplier: 1

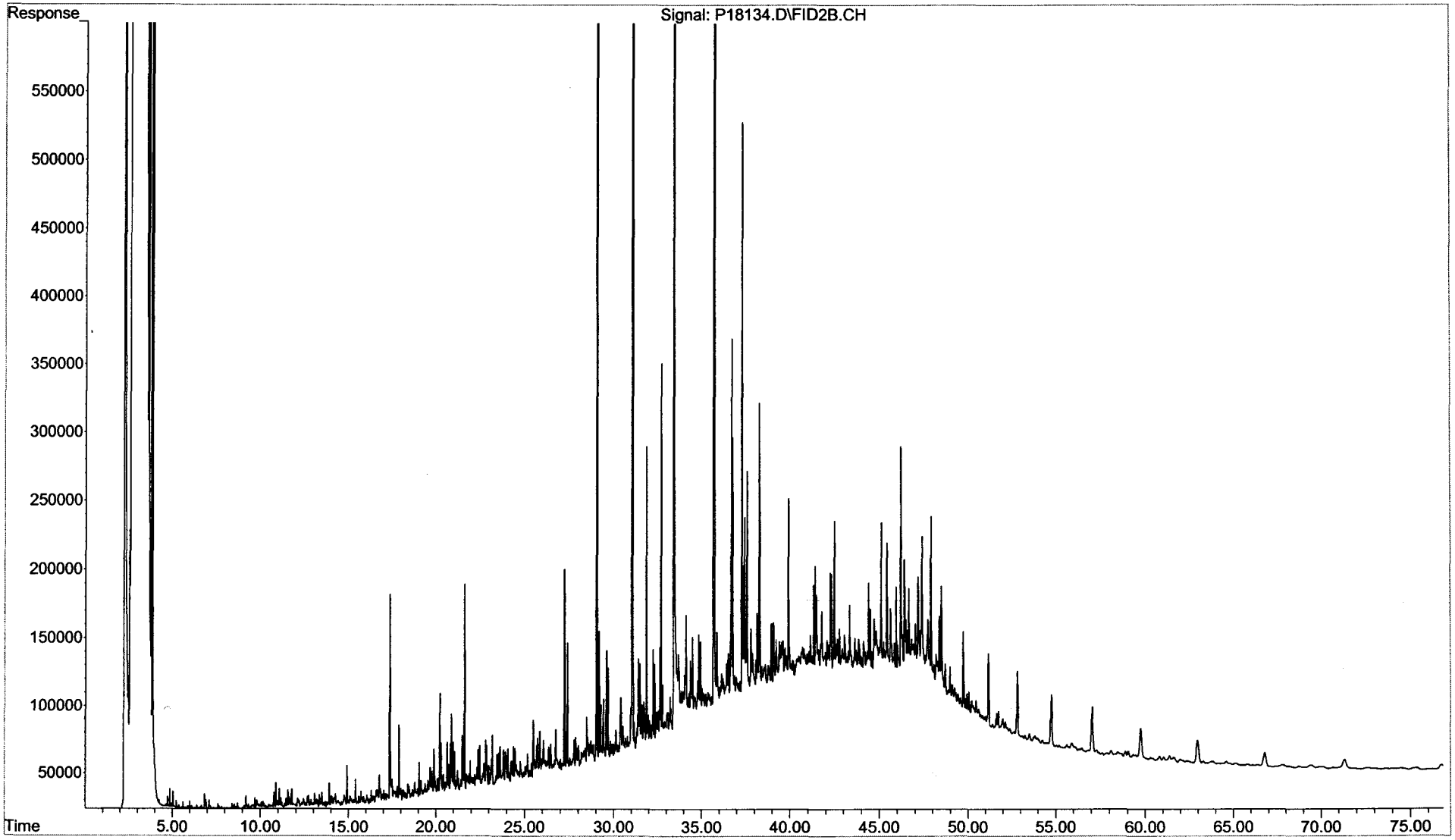
Integration File: SHCINT1.E
Quant Time: Feb 14 14:10:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	66005005	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	53634548	37.489 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	74.98%
24) s d50-Tetracosane	35.69	45493881	35.480 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	70.96%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	2235212479	1691.048 ug/mL
44) h Total Resolved Hydrocarbon	40.94	361290981	273.334 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18134.D
Operator : AC
Acquired : 11 Feb 2006 1:38 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-01-AFID
Misc Info : 1X
Vial Number: 64



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-58C (8-10)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-02**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/27/06	02/01/06	02/01/06	02/11/06	84.6	5.03	35	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**31000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	95	50-130
d50-Tetracosane	87	50-130

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18136.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 3:12 pm
Operator : AC
Sample : 0602004-02-AFID
Misc : 1X ETR0602004
ALS Vial : 65 Sample Multiplier: 1

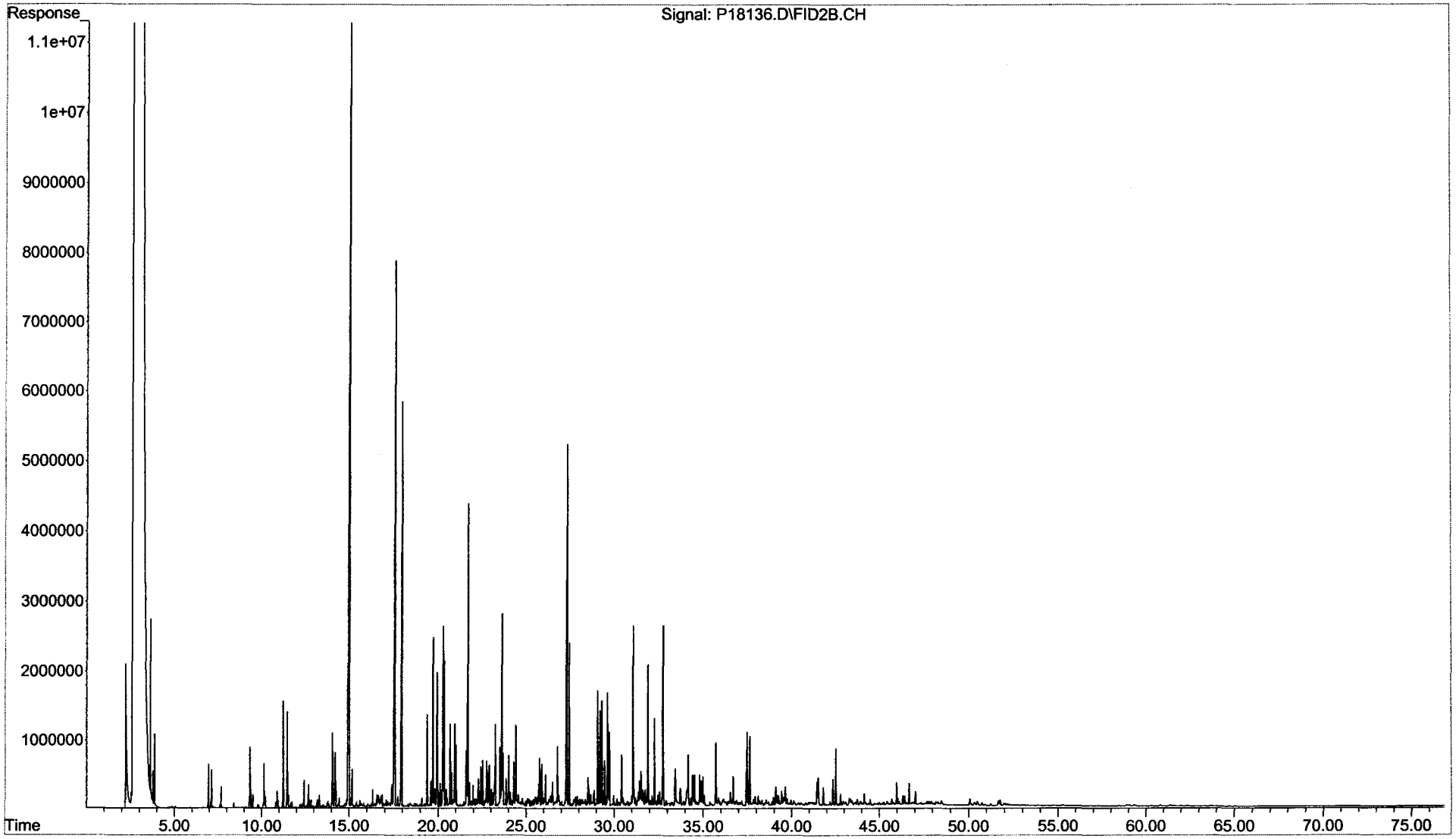
Integration File: SHCINT1.E
Quant Time: Feb 14 14:16:11 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	56775562	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	33373128	27.119 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	54.24%
24) s d50-Tetracosane	35.68	27443406	24.882 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	49.76%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4656108281	4095.204 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3237380042	2847.385 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18136.D
Operator : AC
Acquired : 11 Feb 2006 3:12 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-02-AFID
Misc Info : 1X ETR0602004
Vial Number: 65



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-103 (8.1-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-03**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	79.4	5.04	84	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**64000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	94	50-130
d50-Tetracosane	92	50-130

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18138.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 4:46 pm
Operator : AC
Sample : 0602004-03-AFID
Misc : 1X
ALS Vial : 66 Sample Multiplier: 1

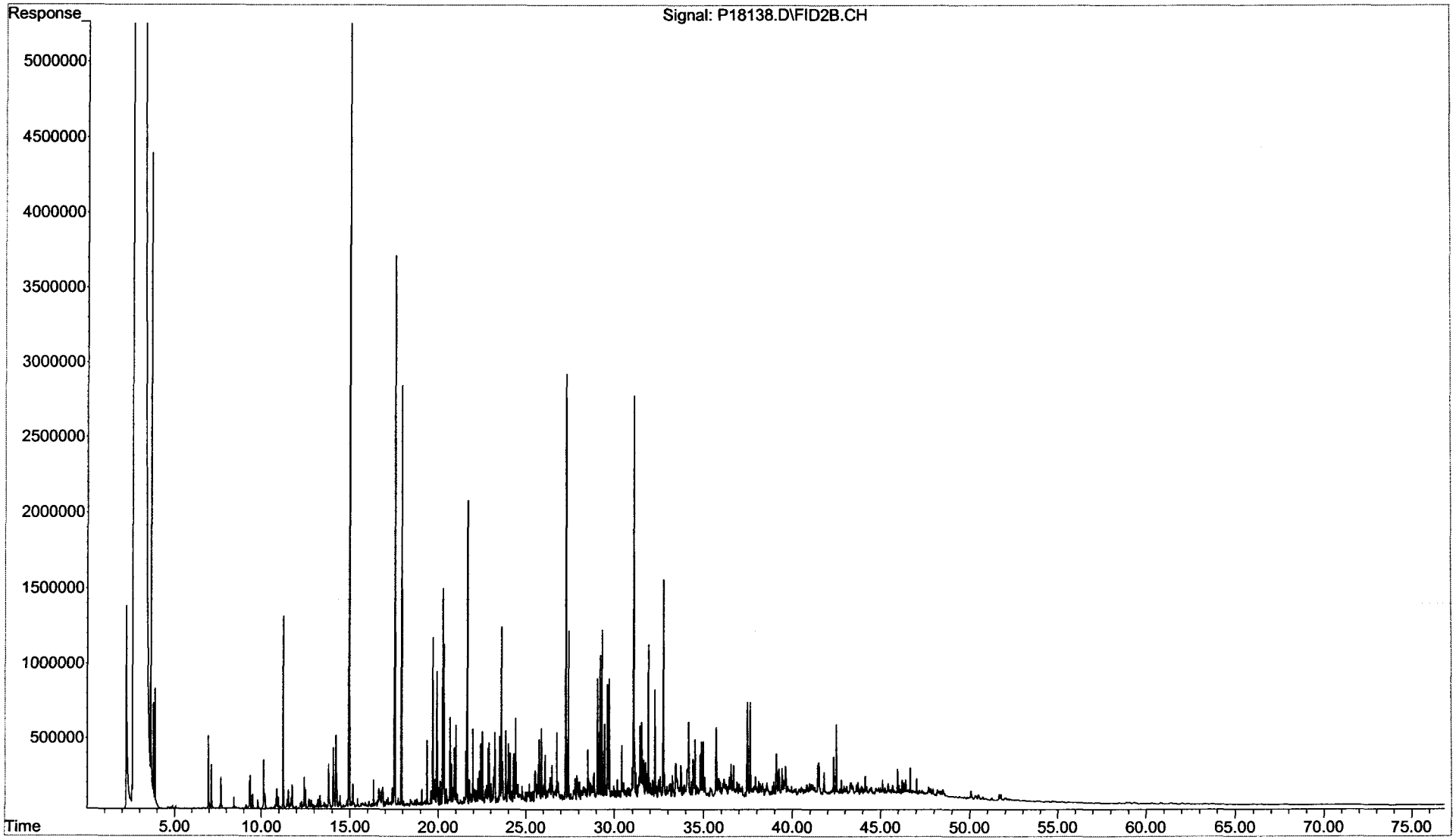
Integration File: SHCINT1.E
Quant Time: Feb 14 14:19:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	61178497	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	14768331	11.137 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	22.27%#
24) s d50-Tetracosane	35.68	13021508	10.956 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	21.91%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4087460879	3336.328 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1852859644	1512.369 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18138.D
Operator : AC
Acquired : 11 Feb 2006 4:46 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-03-AFID
Misc Info : 1X
Vial Number: 66



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04**
Associated Blank: **SS020606B06**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	5.25	150	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**190000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	89	50-130
d50-Tetracosane	100	50-130

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18140.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 6:19 pm
Operator : AC
Sample : 0602004-04-AFID
Misc : 1X
ALS Vial : 67 Sample Multiplier: 1

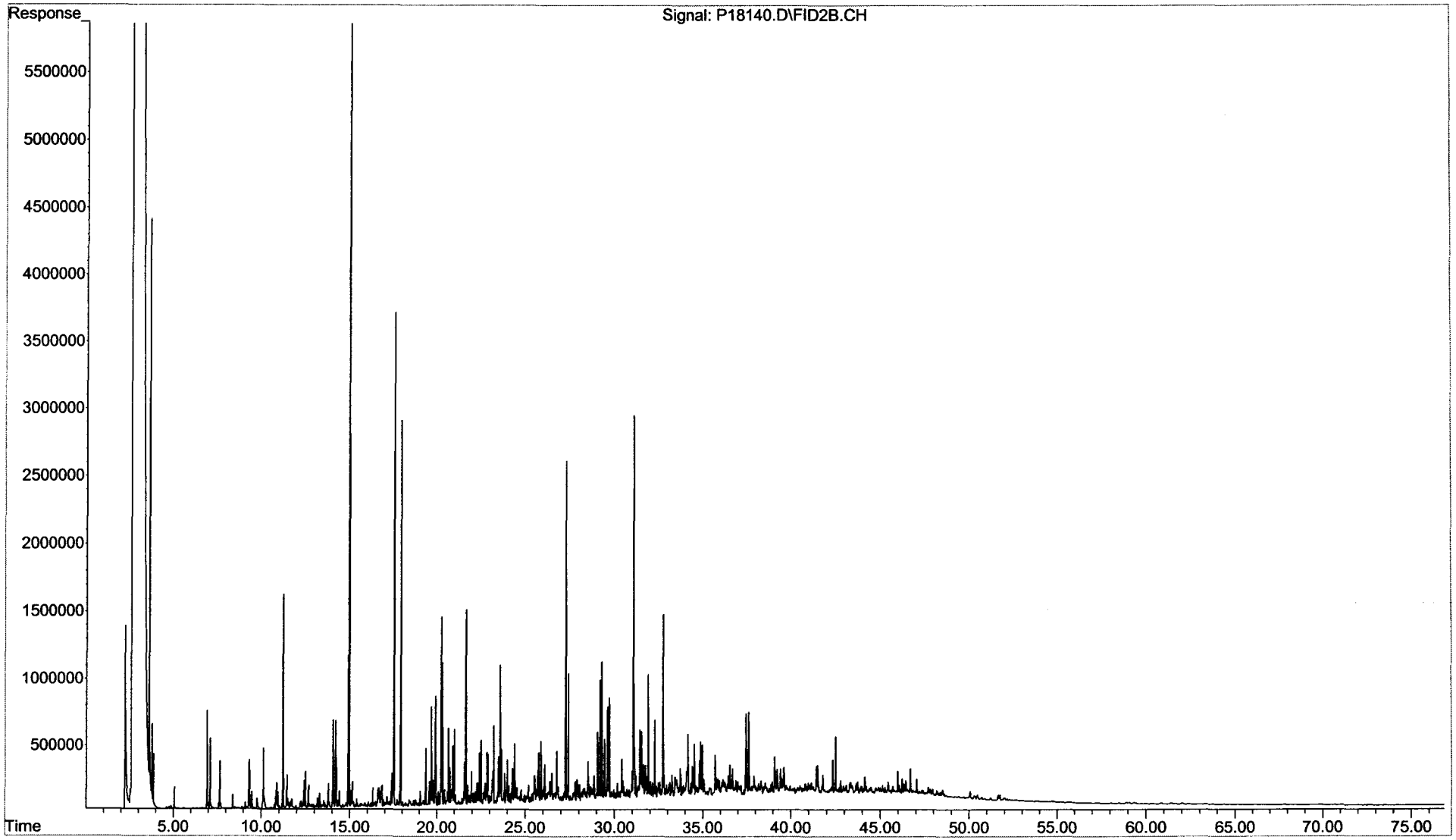
Integration File: SHCINT1.E
Quant Time: Feb 14 14:21:57 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	66225533	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	8526679	5.940 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	11.88%#
24) s d50-Tetracosane	35.67	8568694	6.660 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	13.32%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4381787478	3303.998 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1847811959	1393.305 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18140.D
Operator : AC
Acquired : 11 Feb 2006 6:19 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-04-AFID
Misc Info : 1X
Vial Number: 67



Form I
Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-102 (2-4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-04 D**
Associated Blank: **SS020606B06**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	47.1	4.93	175	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**230000**

N/A - Not Applicable

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

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18142.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 7:53 pm
Operator : AC
Sample : 0602004-04D-AFID
Misc : 1X
ALS Vial : 68 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 14:51:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

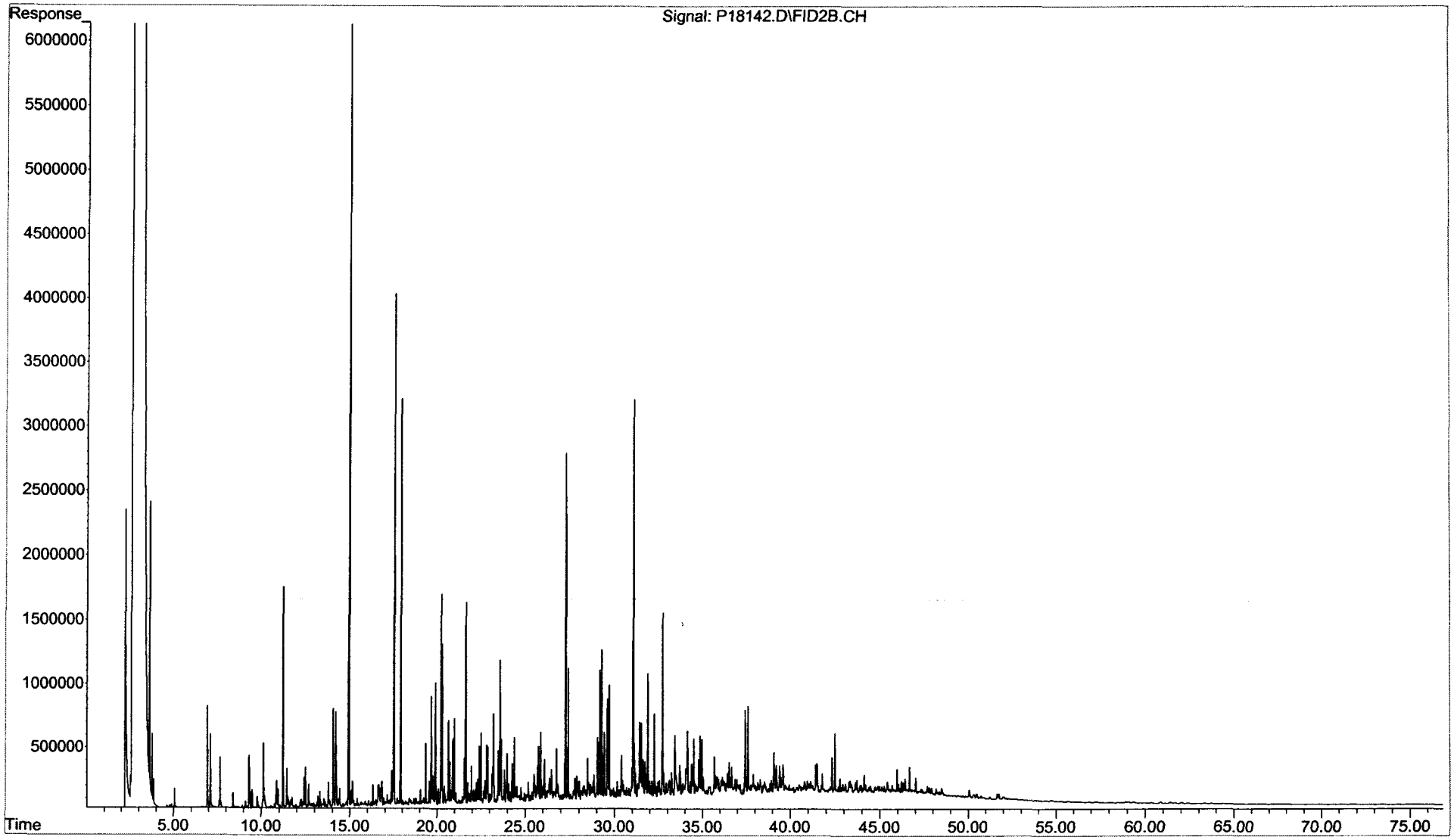
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.07	73371648	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	8260733	5.194 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	10.39%#
24) s d50-Tetracosane	35.68	8304231	5.826 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	11.65%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4774916530	3249.761 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2065345675	1405.654 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18142.D
Operator : AC
Acquired : 11 Feb 2006 7:53 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-04D-AFID
Misc Info : 1X
Vial Number: 68



Duplicate
Total Saturated Hydrocarbons by GC/FID

Client:	**NewFields Environmental Forensics Practice**	Lab Code:	**MA00030**
Project:	**Gowanus Canal**	ETR:	**0602004**
Client ID:	**GC-SED-102 (2-4)**	Lab ID:	**0602004-04**
Case:	**N/A** SDG: **N/A**	Associated Blank:	**SS020606B06**
Matrix:	**Sediment**	Concentration Units:	**mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/28/06	02/01/06	02/06/06	47.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**190000**	**230000**	21	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	89	91	50-130
d50-Tetracosane	100	102	50-130

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

02/17/06 18:59

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-101 (7.9-9.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-05**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/11/06	72.9	4.98	13.13	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**13000**

N/A - Not Applicable

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

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18144.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 9:27 pm
Operator : AC
Sample : 0602004-05-AFID
Misc : 1X
ALS Vial : 69 Sample Multiplier: 1

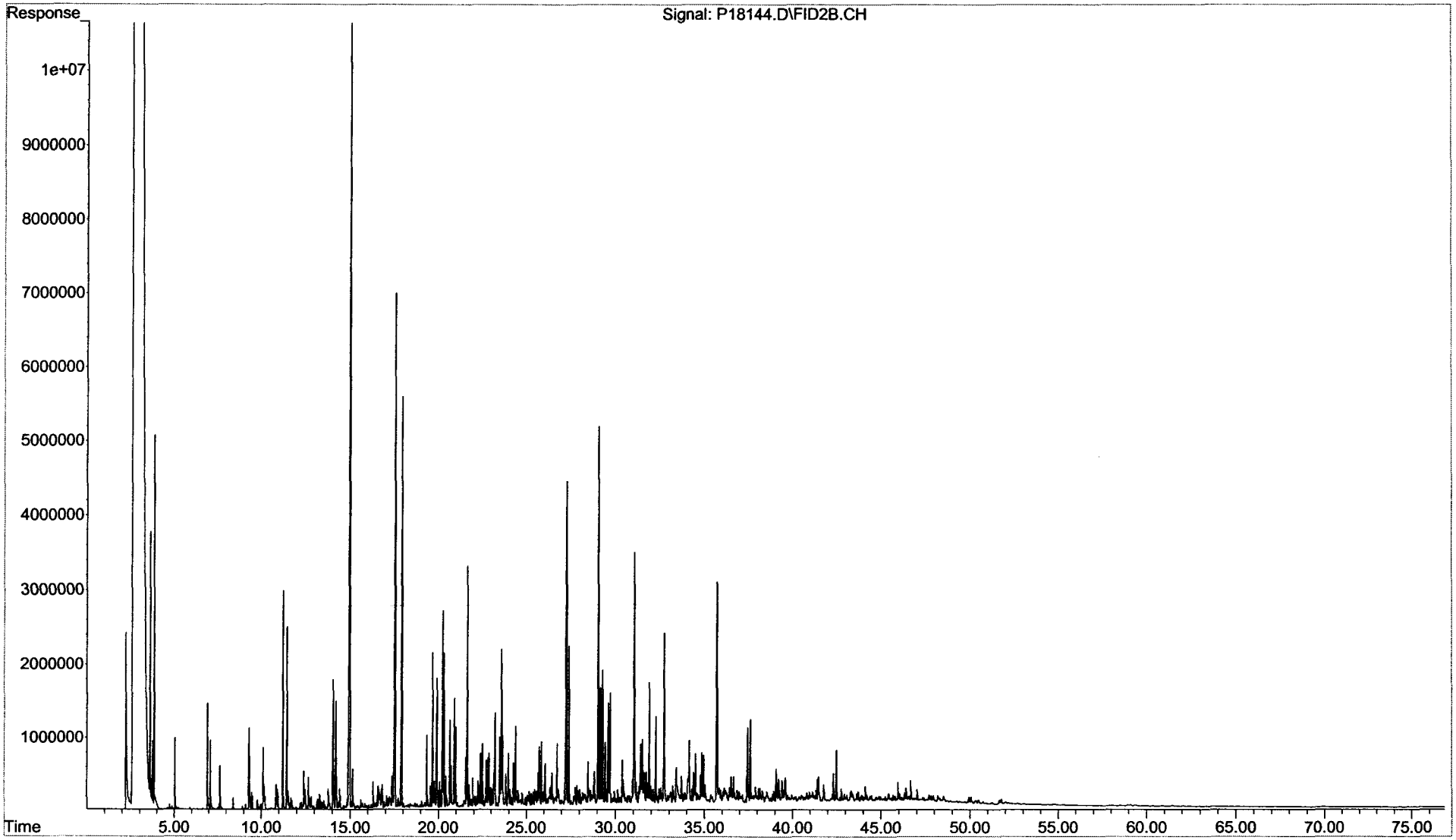
Integration File: SHCINT1.E
Quant Time: Feb 14 14:53:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	84306429	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.08	122002218	66.764 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	133.53%#
24) s d50-Tetracosane	35.72	104977939	64.097 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	128.19%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	6409865378	3796.664 ug/mL
44) h Total Resolved Hydrocarbon	40.94	3691125036	2186.311 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18144.D
Operator : AC
Acquired : 11 Feb 2006 9:27 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-05-AFID
Misc Info : 1X
Vial Number: 69



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-100 (5-6)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-06**
Associated Blank: **SS020606B06**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/06/06	02/11/06	54.9	5.11	131.25	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**150000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	92	50-130
d50-Tetracosane	97	50-130

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18146.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 11:01 pm
Operator : AC
Sample : 0602004-06-AFID
Misc : 1X
ALS Vial : 70 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 14:55:39 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

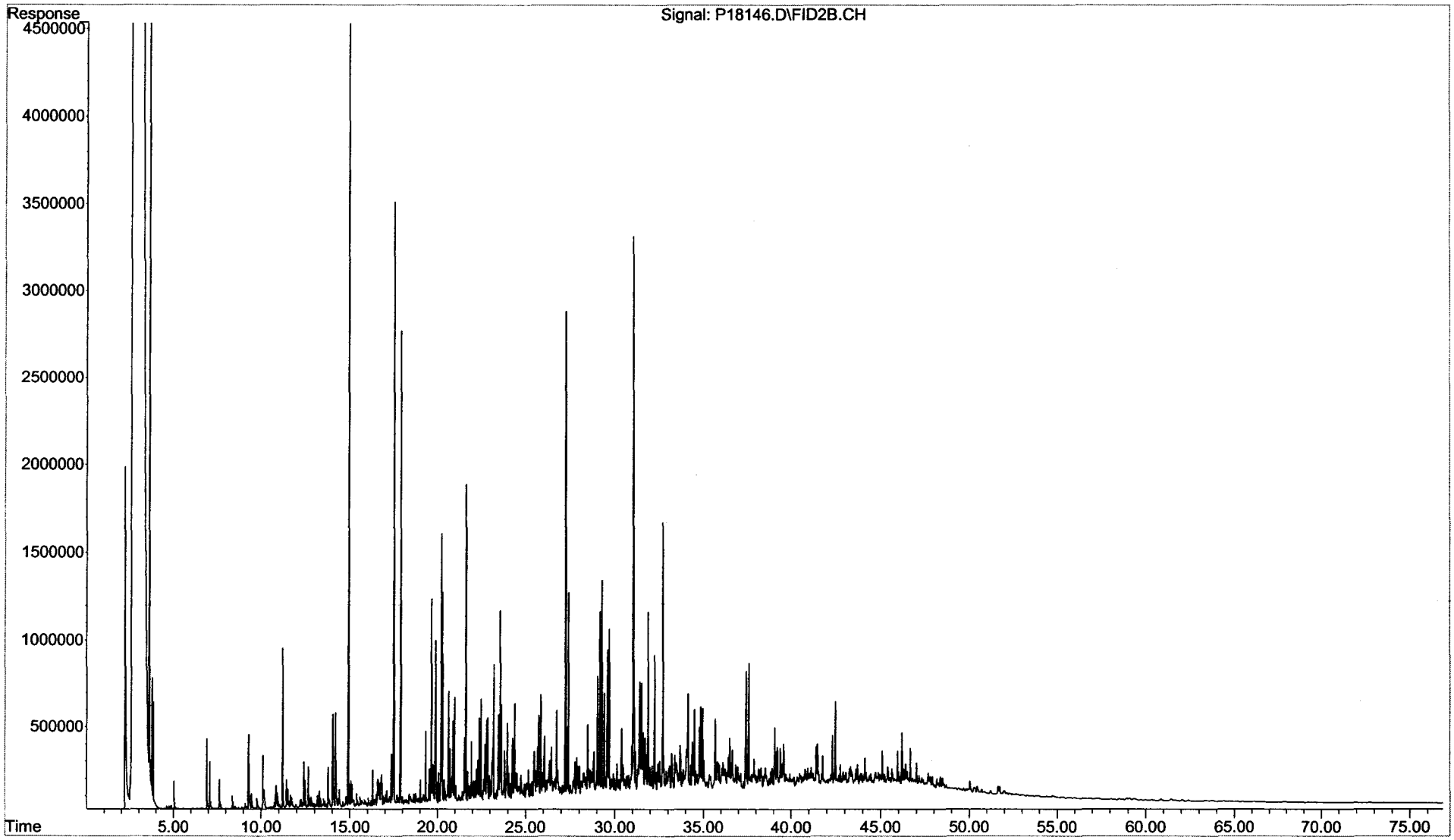
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.07	76131980	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	11555661	7.003 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	14.01%#
24) s d50-Tetracosane	35.68	10907512	7.375 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	14.75%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5140003099	3371.399 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2114571882	1386.977 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18146.D
Operator : AC
Acquired : 11 Feb 2006 11:01 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-06-AFID
Misc Info : 1X
Vial Number: 70



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-97 (8.5-9.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-07**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/28/06	02/01/06	02/01/06	02/12/06	58.2	5.24	105	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**95000**

N/A - Not Applicable

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

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18152.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 3:44 am
Operator : AC
Sample : 0602004-07-AFID
Misc : 1X
ALS Vial : 73 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 14:57:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

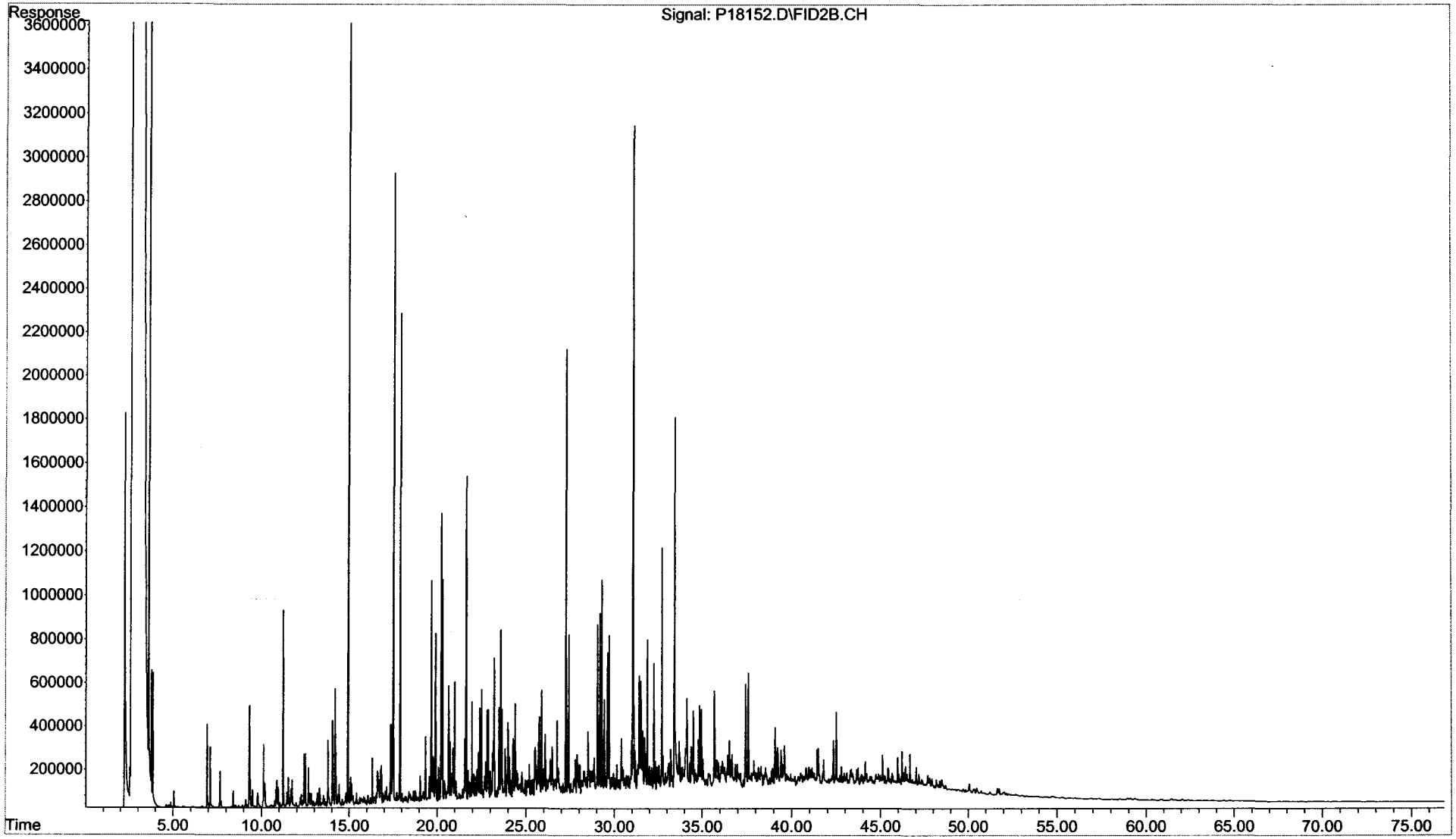
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.07	68810846	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.03	13527333	9.070 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	18.14%#
24) s d50-Tetracosane	35.68	12131726	9.075 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	18.15%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4136611619	3001.939 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1705585012	1237.743 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18152.D
Operator : AC
Acquired : 12 Feb 2006 3:44 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-07-AFID
Misc Info : 1X
Vial Number: 73



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-74 (5.3-6.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-08**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	42.0	5.41	35	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**39000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	91	50-130
d50-Tetracosane	85	50-130

02/17/06 18:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18154.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 5:18 am
Operator : AC
Sample : 0602004-08-AFID
Misc : 1X
ALS Vial : 74 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 15:00:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

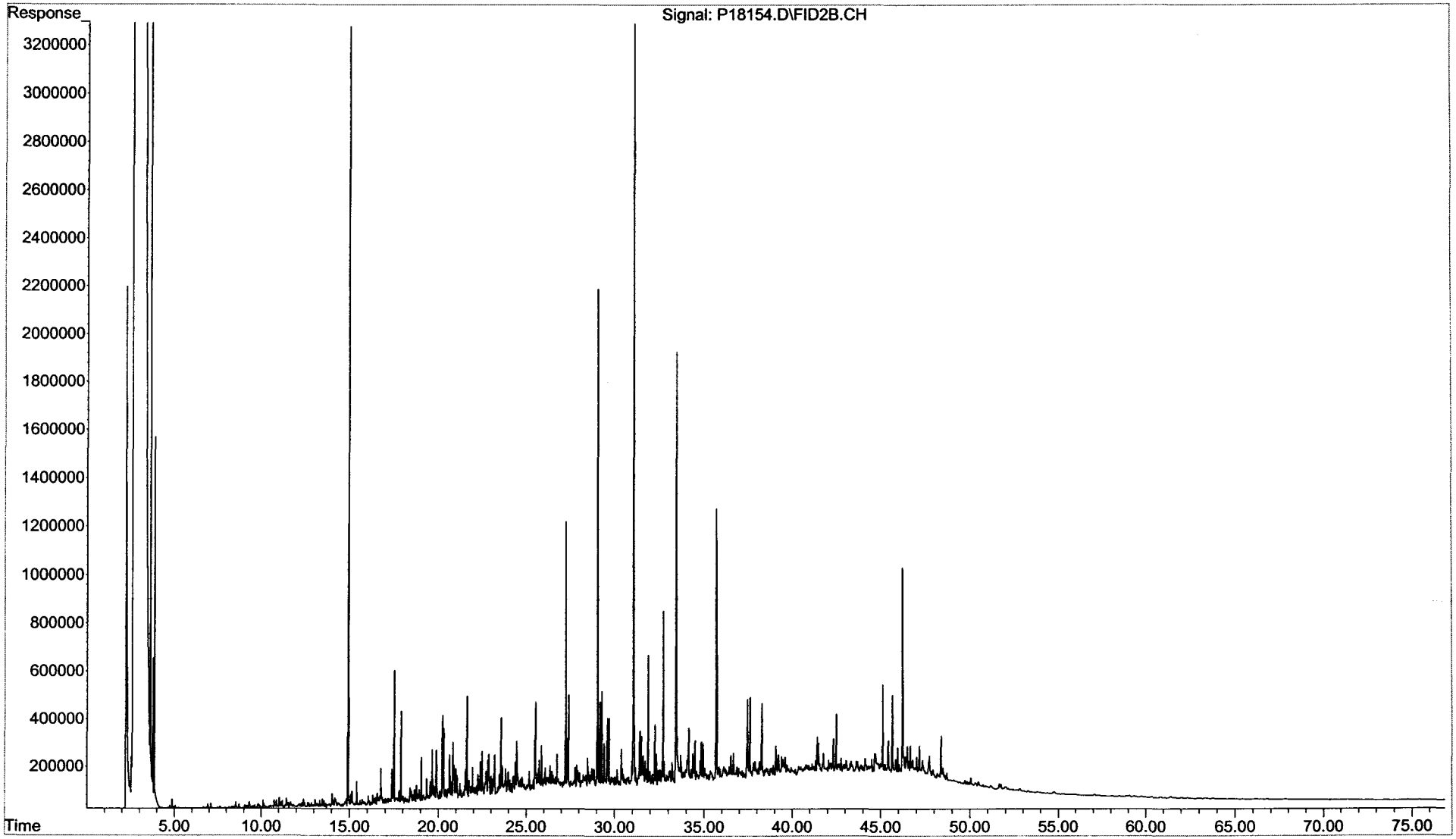
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.07	72526240	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.04	40679484	25.877 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	51.75%
24) s d50-Tetracosane	35.69	34209938	24.281 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	48.56%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	4016890495	2765.724 ug/mL
44) h Total Resolved Hydrocarbon	40.94	1010027109	695.427 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18154.D
Operator : AC
Acquired : 12 Feb 2006 5:18 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-08-AFID
Misc Info : 1X
Vial Number: 74



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	77.5	10.14	35	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	7400

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	86	50-130
d50-Tetracosane	83	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18156.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 6:53 am
Operator : AC
Sample : 0602004-09-AFID
Misc : 1X
ALS Vial : 75 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 15:29:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

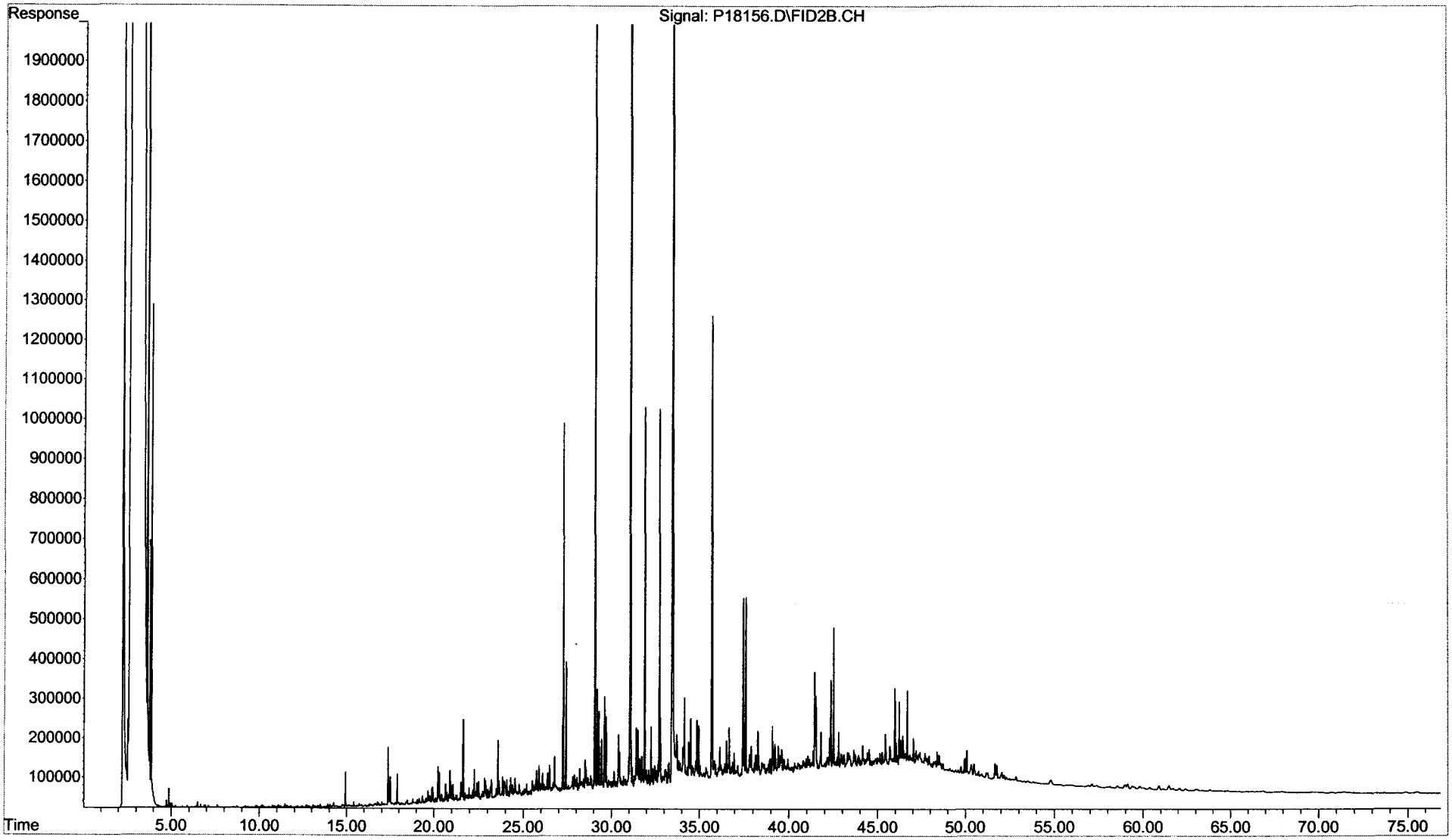
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.07	76451119	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	40918673	24.693 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	49.39%#
24) s d50-Tetracosane	35.69	35080242	23.620 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	47.24%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	2867261114	1872.826 ug/mL
44) h Total Resolved Hydrocarbon	40.94	658309304	429.992 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18156.D
Operator : AC
Acquired : 12 Feb 2006 6:53 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-09-AFID
Misc Info : 1X
Vial Number: 75



Form I
Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09 D**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	77.5	10.17	26.25	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**5500**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	84	50-130
d50-Tetracosane	80	50-130

02/17/06 18:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18158.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 8:28 am
Operator : AC
Sample : 0602004-09D-AFID
Misc : 1X
ALS Vial : 76 Sample Multiplier: 1

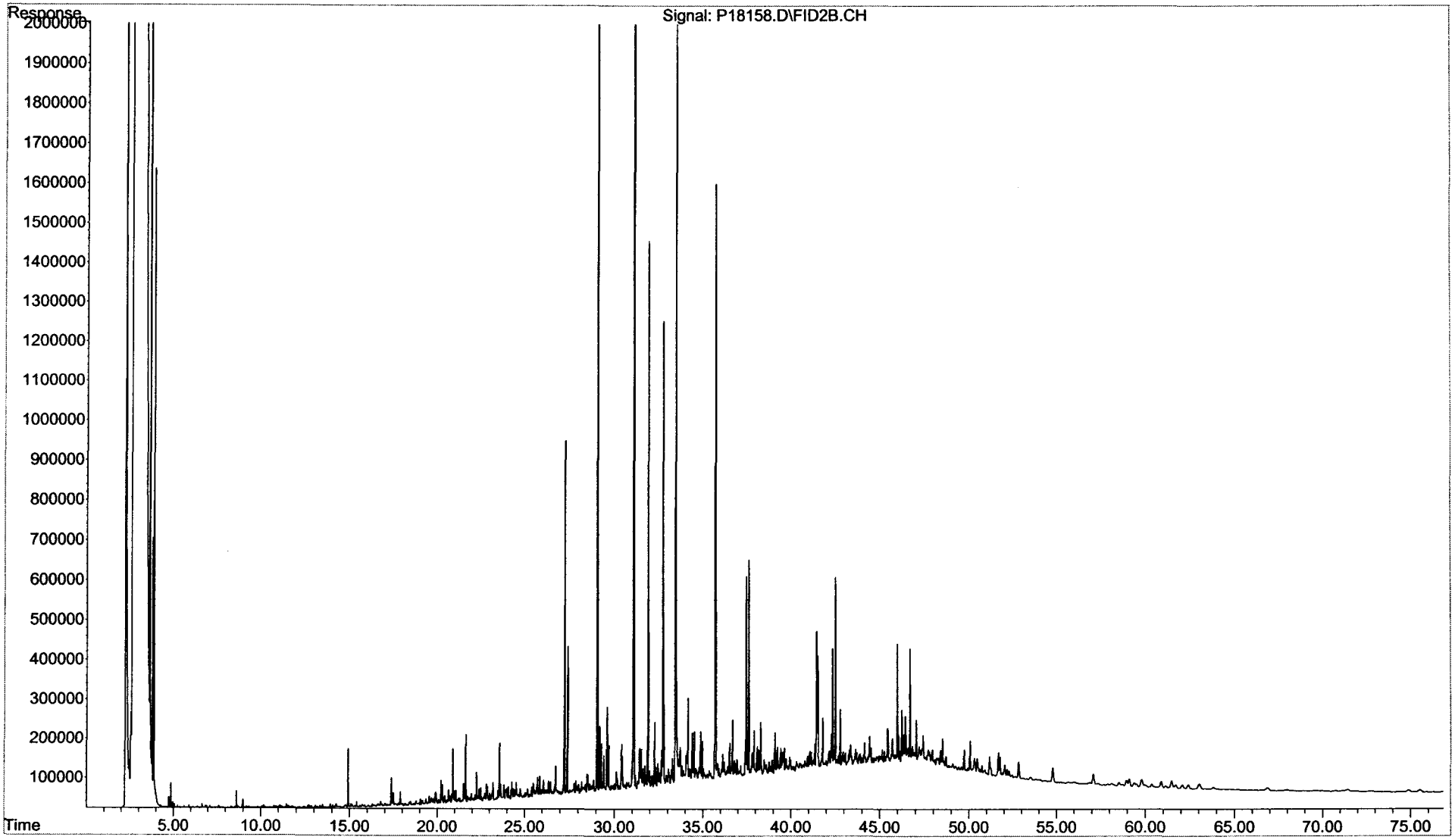
Integration File: SHCINT1.E
Quant Time: Feb 16 10:16:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	79257717	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	55223790	32.145 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	64.29%
24) s d50-Tetracosane	35.70	46982191	30.514 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	61.03%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	2957826766	1863.568 ug/mL
44) h Total Resolved Hydrocarbon	40.94	646830105	407.533 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18158.D
Operator : AC
Acquired : 12 Feb 2006 8:28 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-09D-AFID
Misc Info : 1X
Vial Number: 76



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-73E (3.8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-09**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
01/29/06	02/01/06	02/01/06	77.5	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	7400	5500	29	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	86	84	50-130
d50-Tetracosane	83	80	50-130

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

02/17/06 18:59

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-70B (4-5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-10**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	63.5	5.13	23.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**22000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	90	50-130
d50-Tetracosane	83	50-130

02/17/06 18:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18160.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 10:03 am
Operator : AC
Sample : 0602004-10-AFID
Misc : 1X
ALS Vial : 77 Sample Multiplier: 1

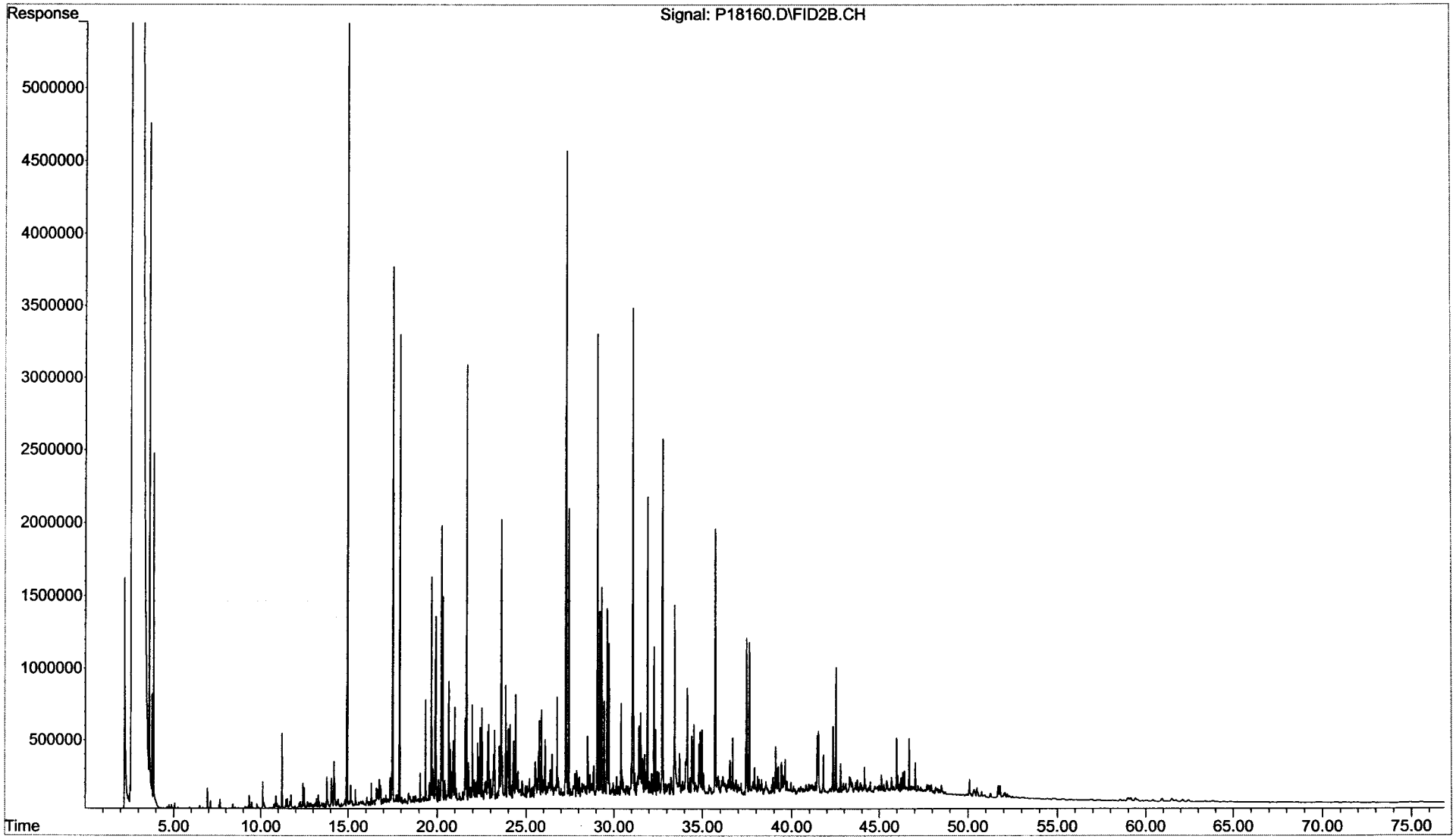
Integration File: SHCINT1.E
Quant Time: Feb 16 10:20:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.08	81561027	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.07	68267274	38.616 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	77.23%
24) s d50-Tetracosane	35.71	56546606	35.688 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	71.38%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5239755437	3208.059 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2480329778	1518.591 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18160.D
Operator : AC
Acquired : 12 Feb 2006 10:03 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-10-AFID
Misc Info : 1X
Vial Number: 77



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-83 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-11**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	46.6	10.57	23.33	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**5200**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	82	50-130
d50-Tetracosane	77	50-130

02/17/06 18:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18162.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 11:38 am
Operator : AC
Sample : 0602004-11-AFID
Misc : 1X
ALS Vial : 78 Sample Multiplier: 1

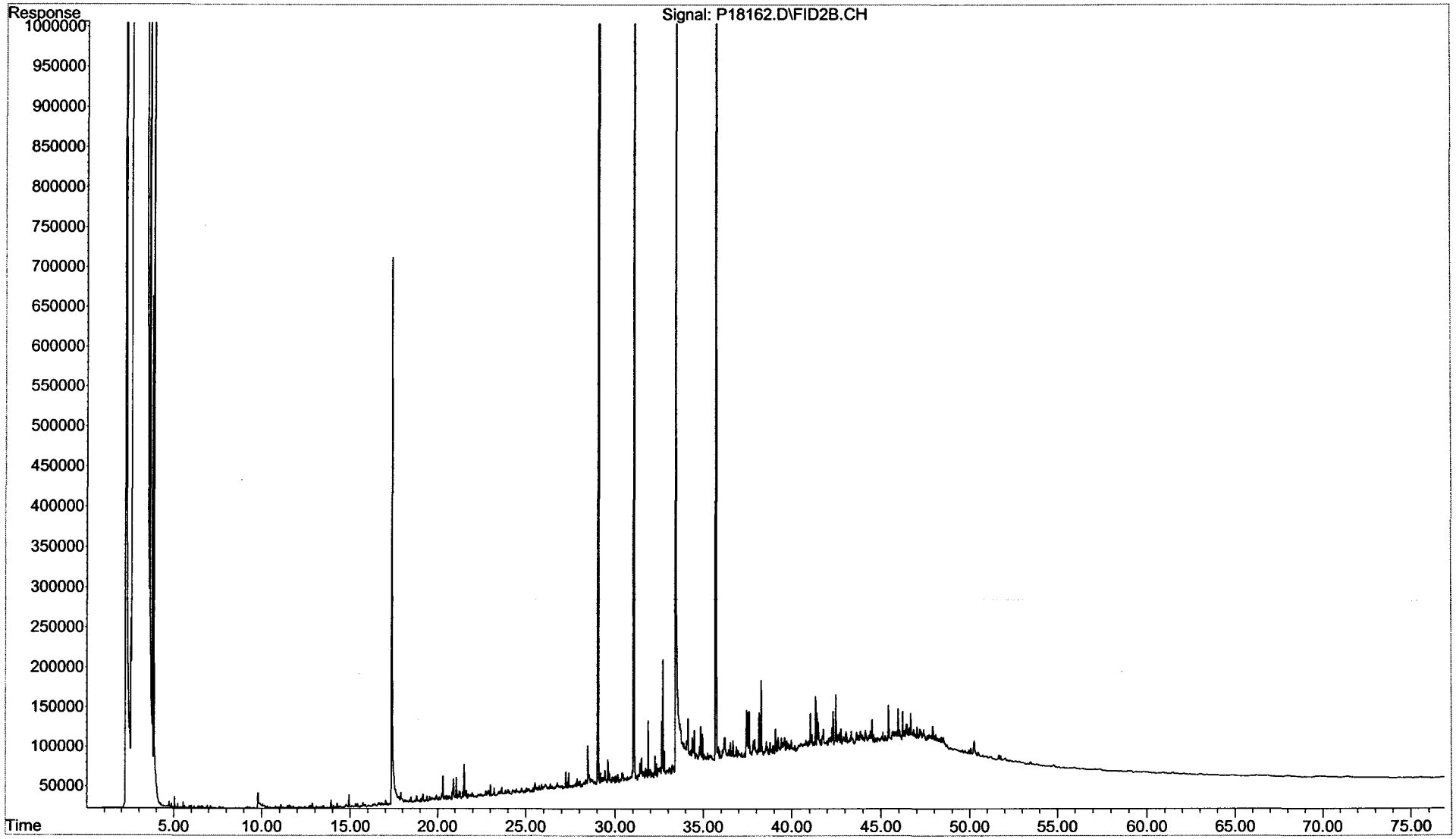
Integration File: SHCINT1.E
Quant Time: Feb 16 10:22:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.07	74193605	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.05	56621300	35.209 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	70.42%
24) s d50-Tetracosane	35.70	47460078	32.928 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	65.86%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	1959380104	1318.761 ug/mL
44) h Total Resolved Hydrocarbon	40.94	196231150	132.073 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18162.D
Operator : AC
Acquired : 12 Feb 2006 11:38 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-11-AFID
Misc Info : 1X
Vial Number: 78



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-82 (12-12.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-12**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	79.9	4.95	35	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**28000**

N/A - Not Applicable

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

02/17/06 18:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18164.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 1:12 pm
Operator : AC
Sample : 0602004-12-AFID
Misc : 1X
ALS Vial : 79 Sample Multiplier: 1

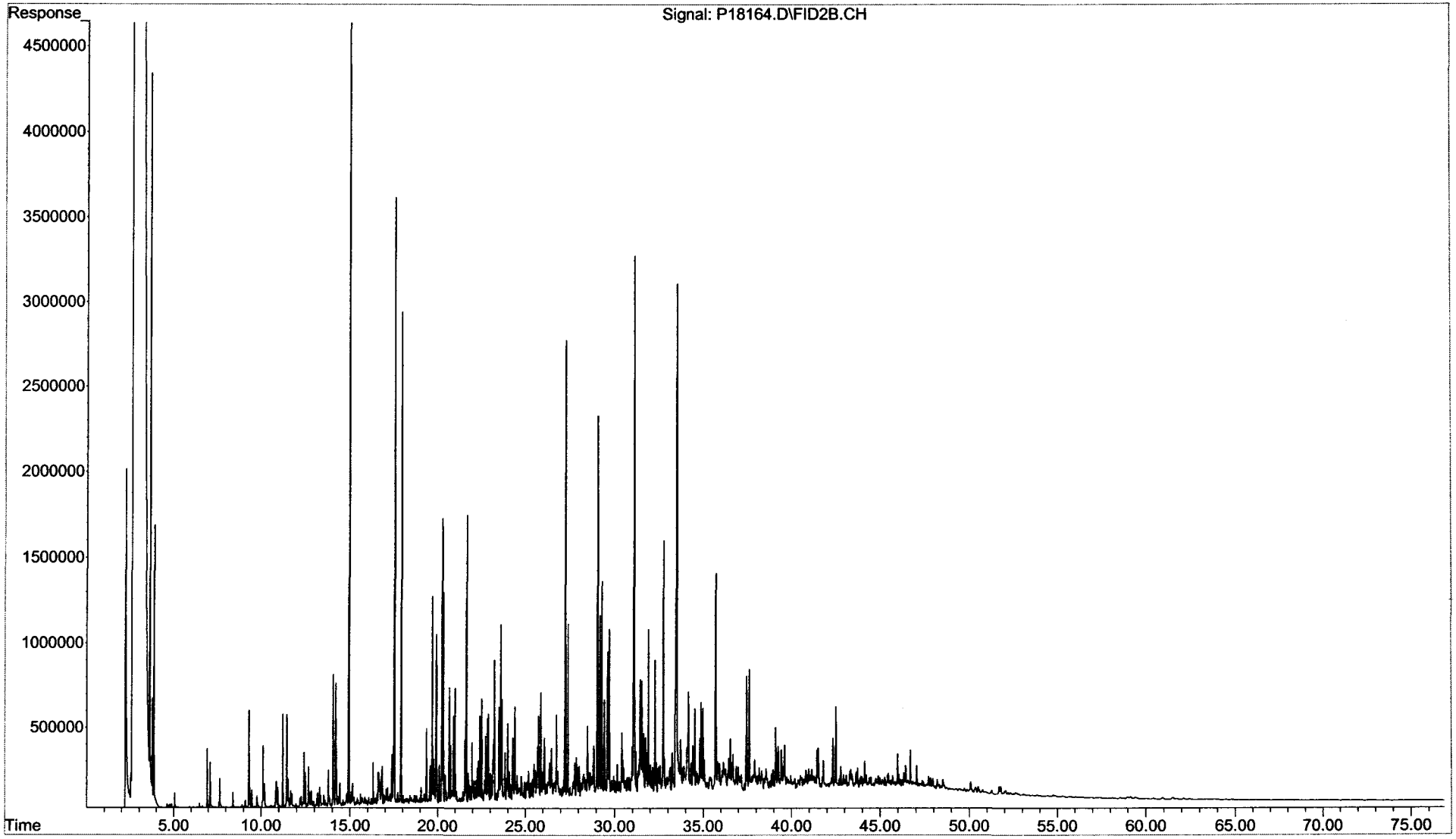
Integration File: SHCINT1.E
Quant Time: Feb 16 10:25:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.08	75640311	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	42675538	26.029 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	52.06%
24) s d50-Tetracosane	35.70	36880435	25.098 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	50.20%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5125662242	3383.846 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2269228117	1498.093 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18164.D
Operator : AC
Acquired : 12 Feb 2006 1:12 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-12-AFID
Misc Info : 1X
Vial Number: 79



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-77 (14.5-15.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-13**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/30/06	02/01/06	02/01/06	02/12/06	83.8	5.02	21	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**15000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	89	50-130
d50-Tetracosane	86	50-130

02/17/06 18:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18166.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 2:46 pm
Operator : AC
Sample : 0602004-13-AFID
Misc : 1X
ALS Vial : 80 Sample Multiplier: 1

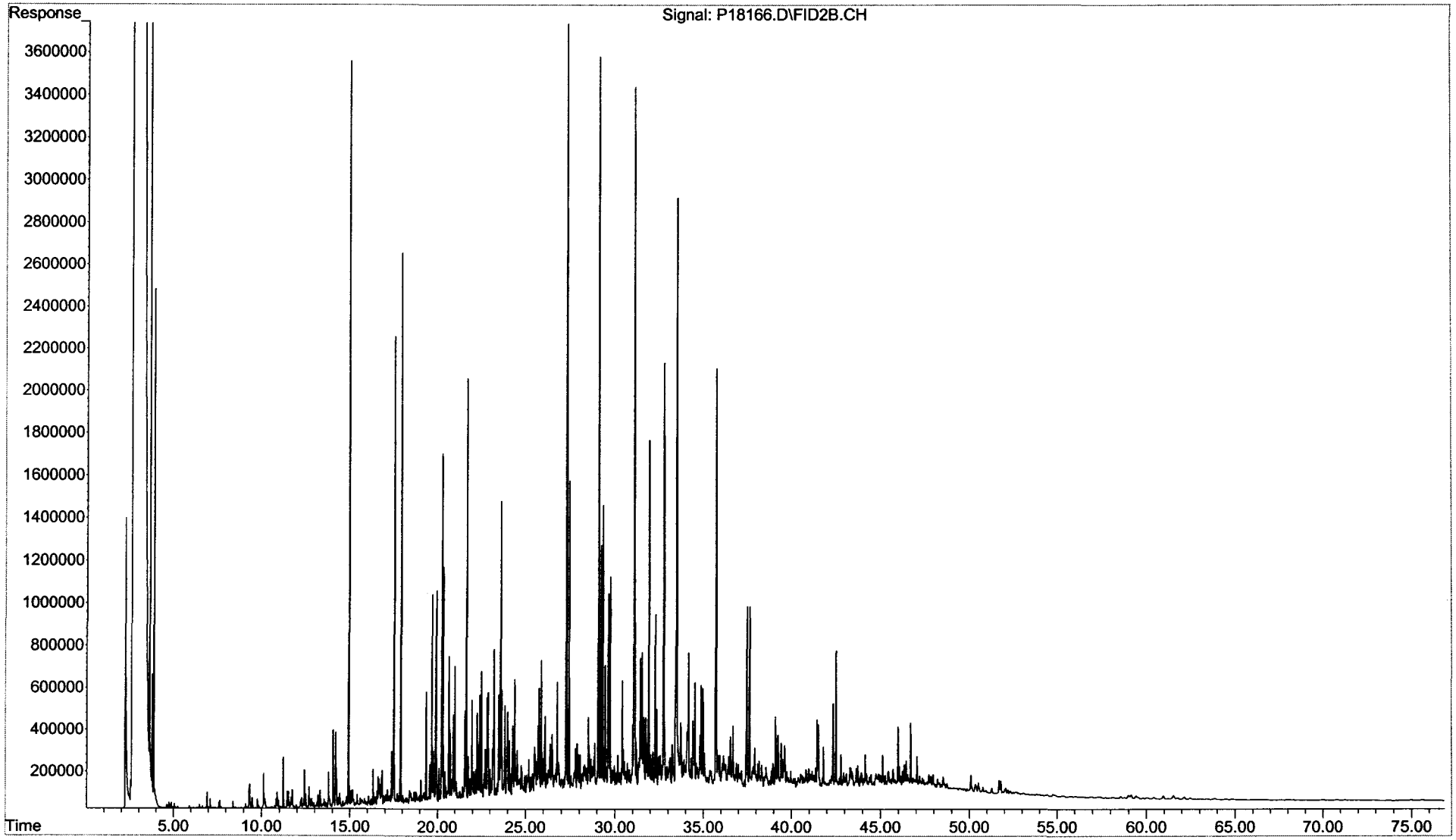
Integration File: SHCINT1.E
Quant Time: Feb 16 10:27:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.09	79076427	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.07	72523740	42.312 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	84.62%
24) s d50-Tetracosane	35.72	62816873	40.891 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	81.78%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5096088525	3218.132 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2111633316	1333.477 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18166.D
Operator : AC
Acquired : 12 Feb 2006 2:46 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-13-AFID
Misc Info : 1X
Vial Number: 80



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-71C (1.5-2.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **0602004-14**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
01/29/06	02/01/06	02/01/06	02/12/06	62.9	4.97	42	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**38000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	89	50-130
d50-Tetracosane	86	50-130

02/17/06 18:57

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18168.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 4:21 pm
Operator : AC
Sample : 0602004-14-AFID
Misc : 1X
ALS Vial : 81 Sample Multiplier: 1

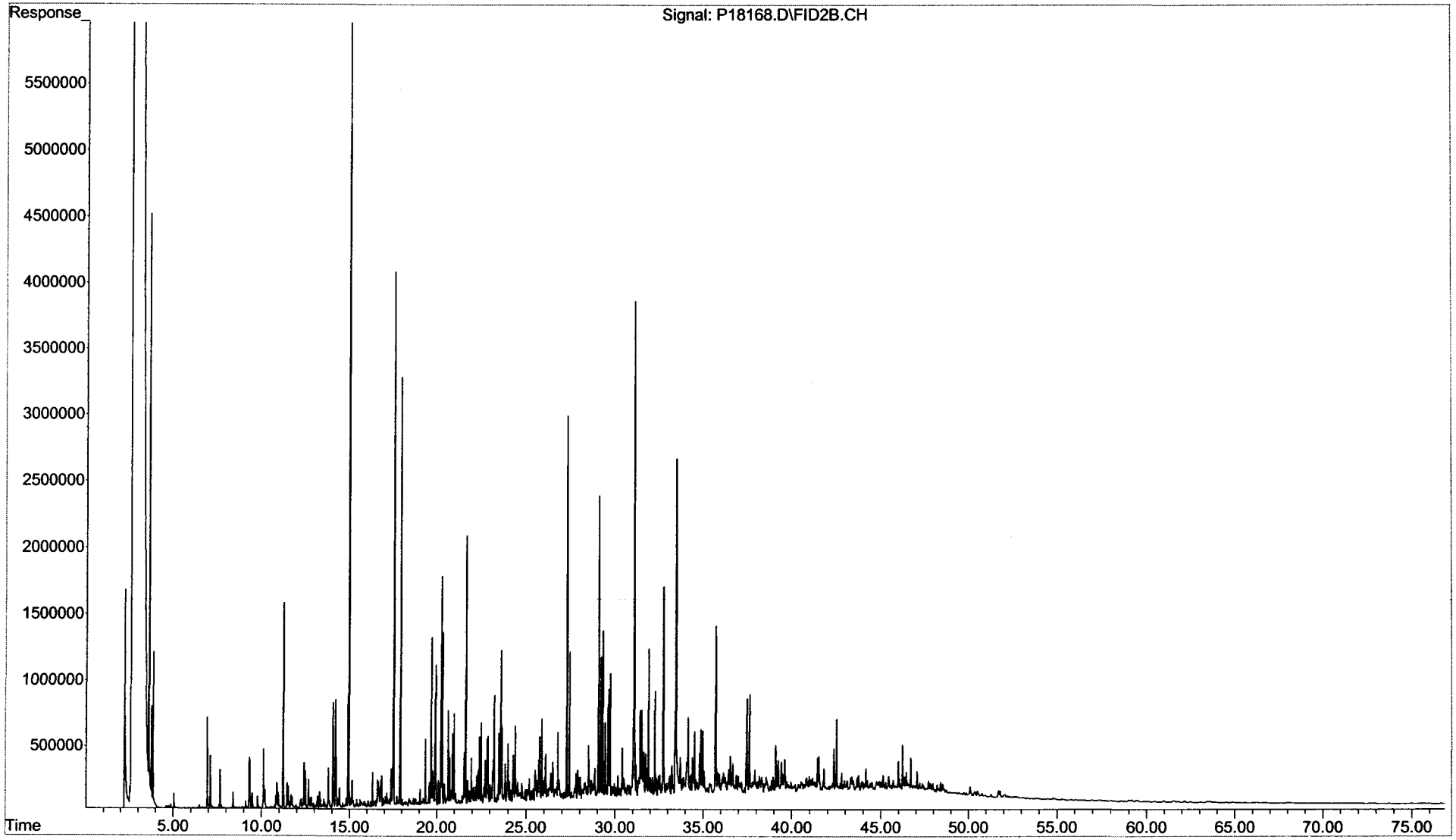
Integration File: SHCINT1.E
Quant Time: Feb 16 10:29:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.09	94214818	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.06	43038522	21.075 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	42.15%#
24) s d50-Tetracosane	35.71	37487845	20.482 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	40.96%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	5589443102	2962.534 ug/mL
44) h Total Resolved Hydrocarbon	40.94	2361942359	1251.884 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18168.D
Operator : AC
Acquired : 12 Feb 2006 4:21 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: 0602004-14-AFID
Misc Info : 1X
Vial Number: 81



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106B11**
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	02/01/06	02/10/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	4.4 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	90	50-130
d50-Tetracosane	85	50-130

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

02/17/06 20:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18114.D
Signal(s) : FID2B.CH
Acq On : 10 Feb 2006 9:59 pm
Operator : AC
Sample : SS020106B11-AFID
Misc : 1X ETR0602004
ALS Vial : 54 Sample Multiplier: 1

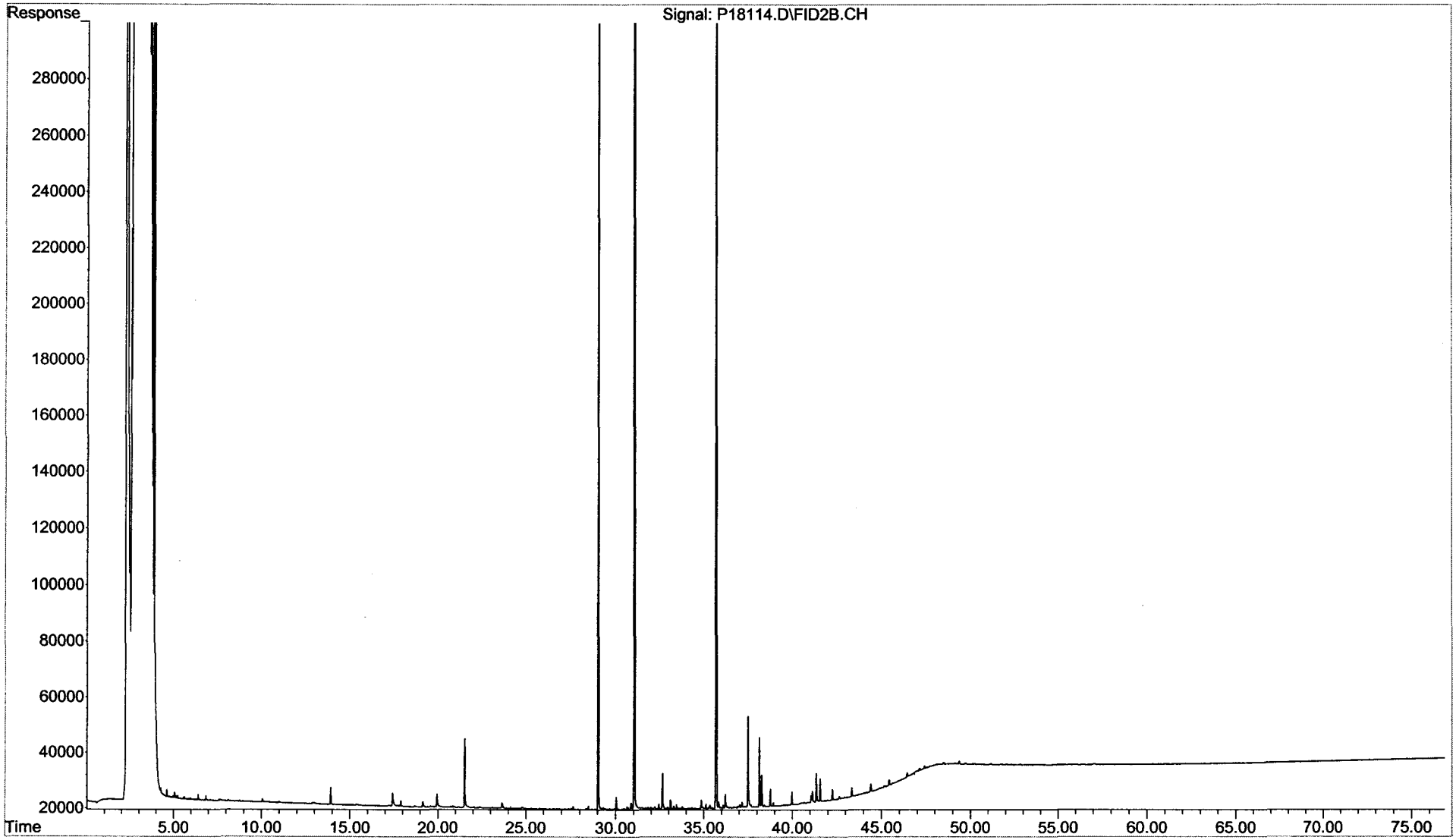
Integration File: SHCINT1.E
Quant Time: Feb 14 12:12:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.05	57602044	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02f	14045920	11.250 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	22.50%#
24) s d50-Tetracosane	35.67	11891922	10.627 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	21.25%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	322634538	279.696 ug/mL
44) h Total Resolved Hydrocarbon	40.94	8971818	7.778 ug/L

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

File :O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\P18114.D
Operator : AC
Acquired : 10 Feb 2006 9:59 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS020106B11-AFID
Misc Info : 1X ETR0602004
Vial Number: 54



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606B06**
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	02/06/06	02/10/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	4.4 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	97	50-130
d50-Tetracosane	90	50-130

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

02/17/06 20:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18116.D
Signal(s) : FID2B.CH
Acq On : 10 Feb 2006 11:33 pm
Operator : AC
Sample : SS020606B06-AFID
Misc : 1X ETR0602004
ALS Vial : 55 Sample Multiplier: 1

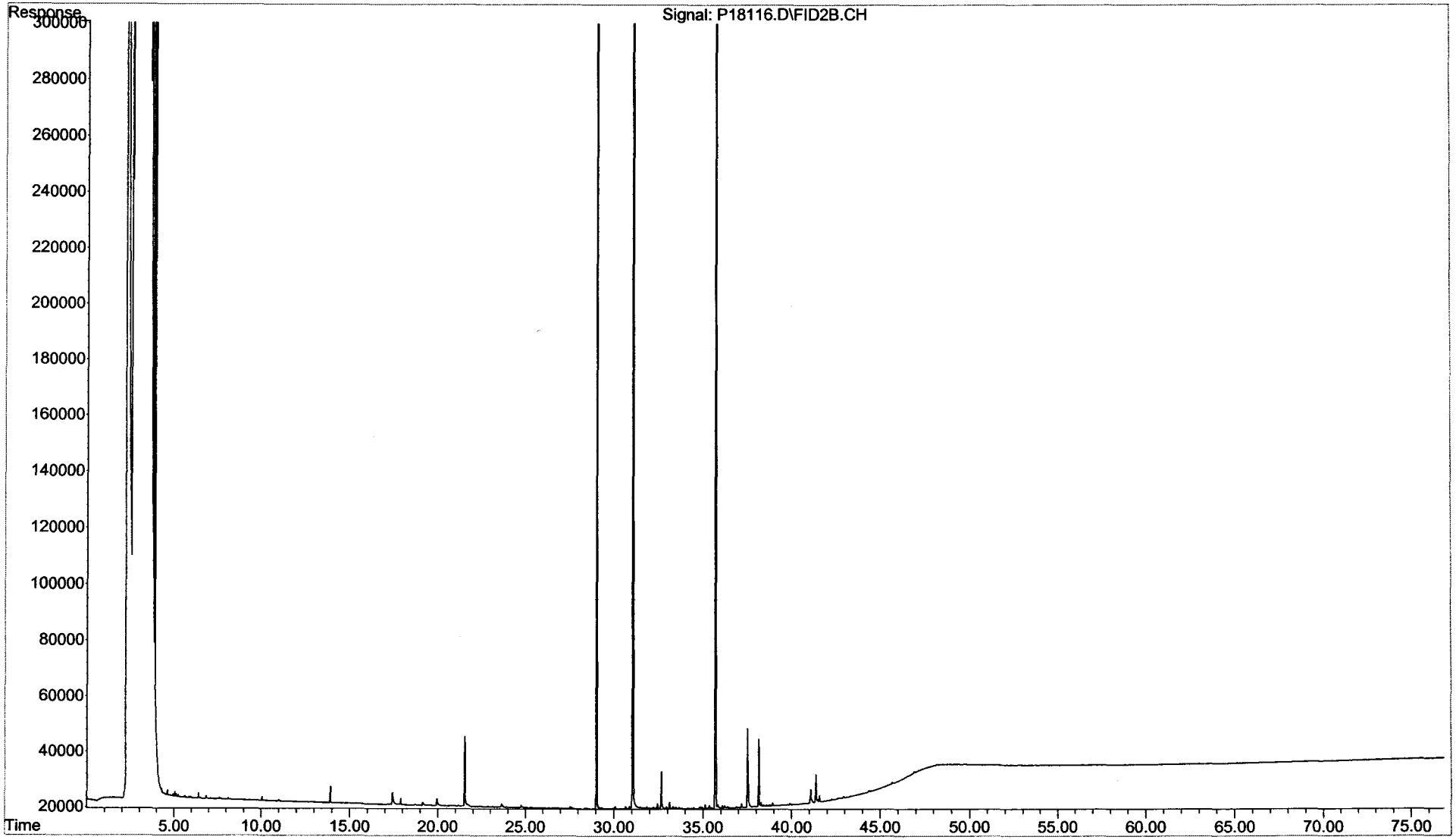
Integration File: SHCINT1.E
Quant Time: Feb 14 12:13:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	58084431	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02f	15212613	12.083 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	24.17%#
24) s d50-Tetracosane	35.67	12641235	11.203 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	22.41%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	315728905	271.437 ug/mL
44) h Total Resolved Hydrocarbon	40.94	6039791	5.192 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18116.D
Operator : AC
Acquired : 10 Feb 2006 11:33 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS020606B06-AFID
Misc Info : 1X ETR0602004
Vial Number: 55



Form III
Spike Recovery Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **See Below**
Associated Blank: **SS020106B11**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	02/01/06	100	AC

Lab ID:	SS020106B11		SS020106LCS04		SS020106LCSD04				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.13	U	1.2	72	1.0	61	17	30	50-130
n-Decane (C10)	0.13	U	1.4	85	1.3	80	6	30	50-130
n-Dodecane (C12)	0.13	U	1.5	91	1.5	93	2	30	50-130
n-Tetradecane (C14)	0.13	U	1.5	91	1.6	94	3	30	50-130
n-Hexadecane (C16)	0.13	U	1.6	95	1.6	98	3	30	50-130
n-Octadecane (C18)	0.13	U	1.6	94	1.6	97	3	30	50-130
n-Nonadecane (C19)	0.13	U	1.6	95	1.6	99	4	30	50-130
n-Eicosane (C20)	0.13	U	1.6	96	1.7	100	4	30	50-130
n-Docosane (C22)	0.13	U	1.6	95	1.6	99	4	30	50-130
n-Tetracosane (C24)	0.13	U	1.6	94	1.6	97	4	30	50-130
n-Hexacosane (C26)	0.13	U	1.6	95	1.6	99	4	30	50-130
n-Octacosane (C28)	0.13	U	1.5	92	1.6	97	6	30	50-130
n-Triacontane (C30)	0.13	U	1.5	88	1.6	95	7	30	50-130
n-Hexatriacontane (C36)	0.13	U	1.3	79	1.5	88	11	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	91	94	50-130
d50-Tetracosane	84	87	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 20:01

Form I
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106LCS04**
Associated Blank: **SS020106B11**
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	02/01/06	02/11/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	23

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	91	50-130
d50-Tetracosane	84	50-130

02/17/06 20:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18118.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 1:07 am
Operator : AC
Sample : SS020106LCS04-AFID
Misc : 1X ETR0602004
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 13:32:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

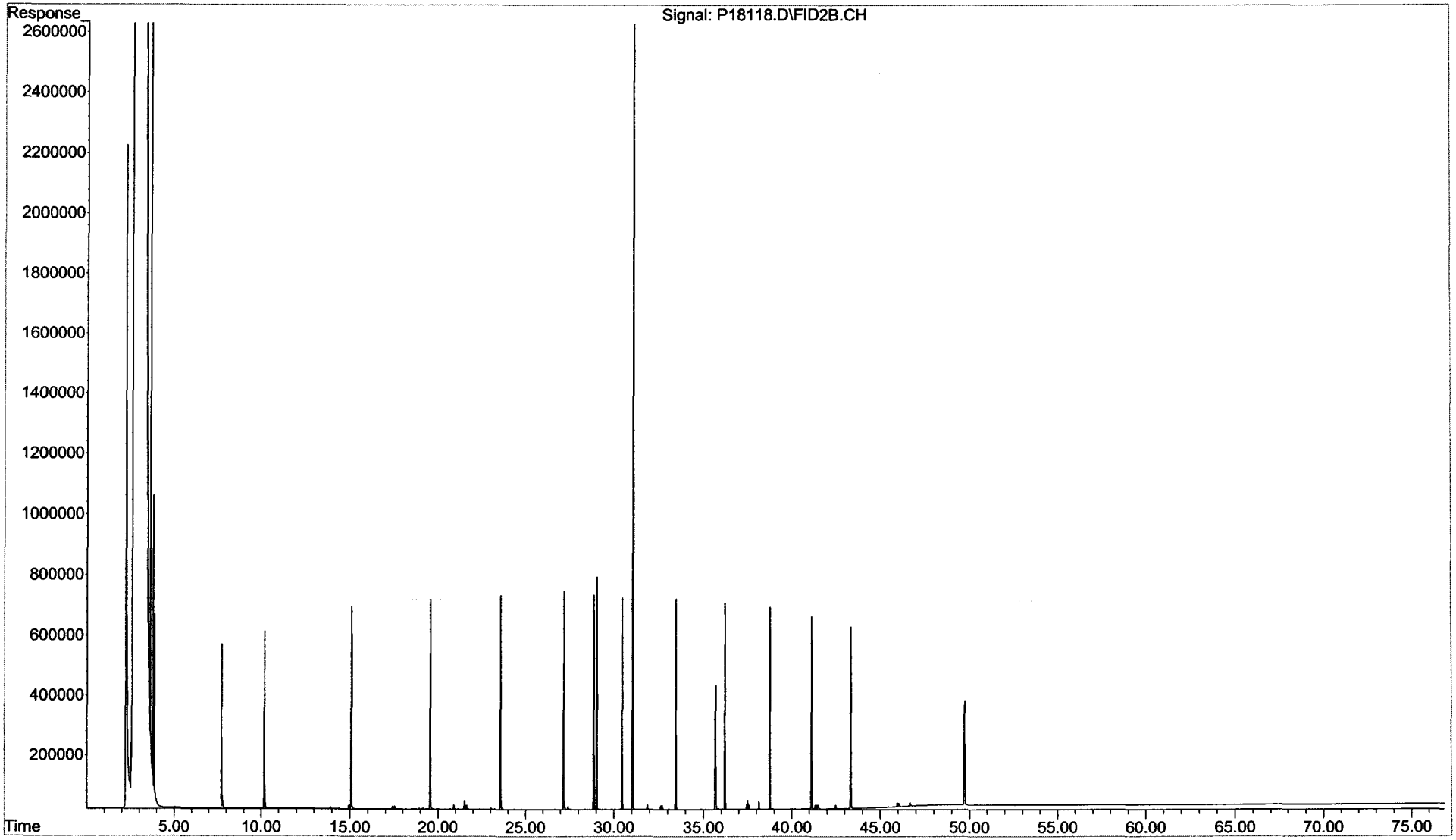
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.05	57511391	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02f	14134829	11.339 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	22.68%#
24) s d50-Tetracosane	35.67	11675265	10.450 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	20.90%#
Target Compounds			
3) t n-Nonane (C9)	7.72	9141725	8.941 ug/mLm
4) t n-Decane (C10)	10.17	11077970	10.568 ug/mLm
6) t n-Dodecane (C12)	15.08	12266154	11.342 ug/mLm
9) t n-Tetradecane (C14)	19.55	12654816	11.366 ug/mLm
12) t n-Hexadecane (C16)	23.56	13481515	11.848 ug/mLm
16) t n-Octadecane (C18)	27.17	13597206	11.772 ug/mLm
18) t n-Nonadecane (C19)	28.85	13660441	11.902 ug/mLm
20) t n-Eicosane (C20)	30.45	13752729	12.018 ug/mLm
22) t n-Docosane (C22)	33.45	13831280	11.861 ug/mLm
25) t n-Tetracosane (C24)	36.21f	13898833	11.693 ug/mLm
27) t n-Hexacosane (C26)	38.76f	13911536	11.875 ug/mLm
29) t n-Octacosane (C28)	41.13f	13632408	11.494 ug/mLm
31) t n-Triacontane (C30)	43.35f	13103897	11.025 ug/mLm
37) t n-Hexatriacontane (C36)	49.73f	11612767	9.840 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.94	522840173	453.972 ug/mL
44) h Total Resolved Hydrocarbon	40.94	190953798	165.801 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18118.D
Operator : AC
Acquired : 11 Feb 2006 1:07 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS020106LCS04-AFID
Misc Info : 1X ETR0602004
Vial Number: 56



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020106LCSD04**
Associated Blank: **SS020106B11**
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	02/01/06	02/11/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**24**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	94	50-130
d50-Tetracosane	87	50-130

02/17/06 20:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18120.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 2:41 am
Operator : AC
Sample : SS020106LCSD04-AFID
Misc : 1X ETR0602004
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 13:22:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

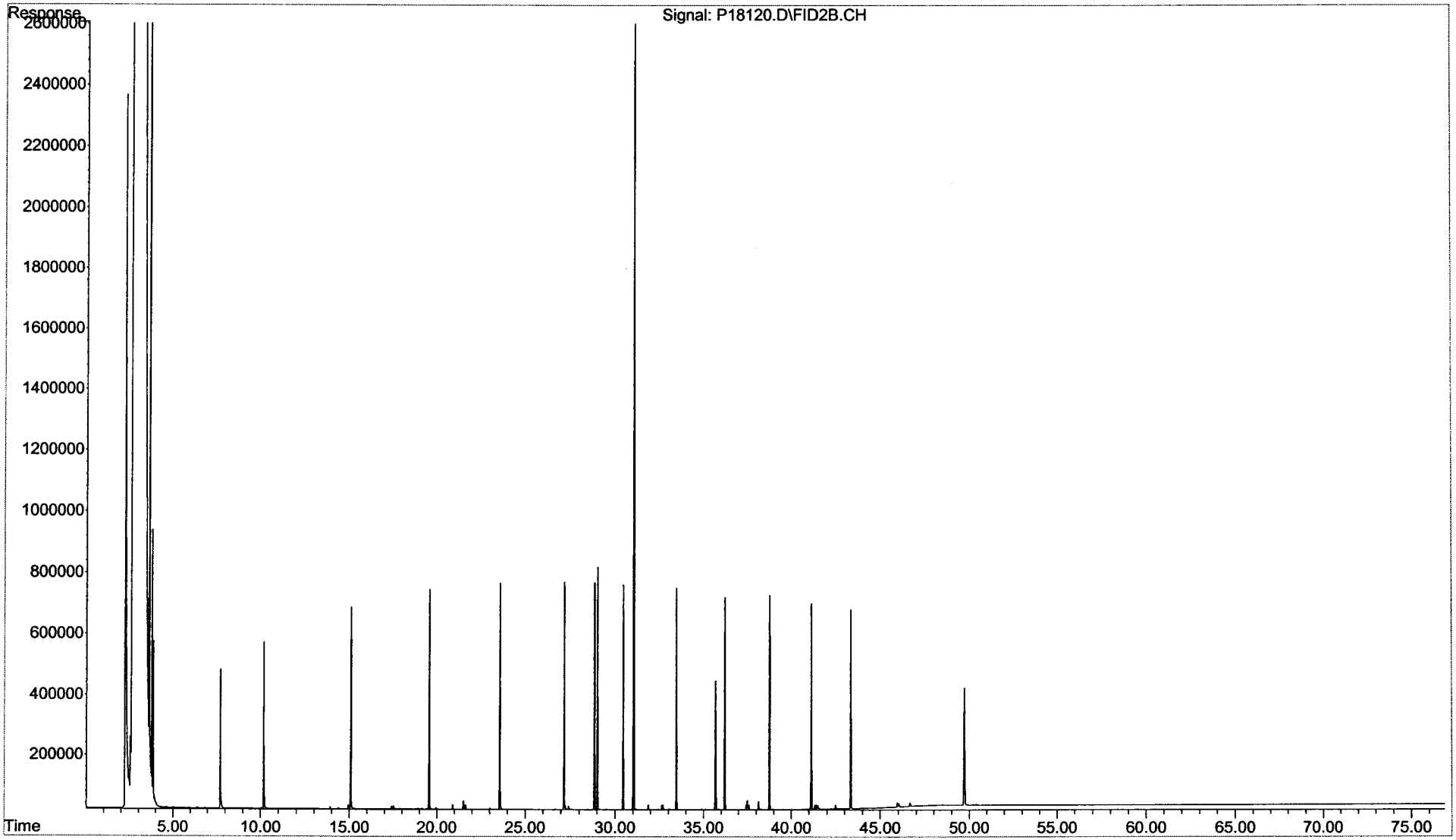
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.05	57361191	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.02f	14688622	11.814 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	23.63%#
24) s	d50-Tetracosane	35.67	12154147	10.907 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	21.81%#
	Target Compounds			
3) t	n-Nonane (C9)	7.72	7714735	7.565 ug/mLm
4) t	n-Decane (C10)	10.17	10437825	9.984 ug/mLm
6) t	n-Dodecane (C12)	15.08	12485168	11.574 ug/mLm
9) t	n-Tetradecane (C14)	19.55	12988686	11.696 ug/mLm
12) t	n-Hexadecane (C16)	23.56	13843059	12.198 ug/mLm
16) t	n-Octadecane (C18)	27.17	14023753	12.173 ug/mLm
18) t	n-Nonadecane (C19)	28.85	14122946	12.337 ug/mLm
20) t	n-Eicosane (C20)	30.45	14230090	12.467 ug/mLm
22) t	n-Docosane (C22)	33.45	14331137	12.321 ug/mLm
25) t	n-Tetracosane (C24)	36.21f	14410857	12.156 ug/mLm
27) t	n-Hexacosane (C26)	38.76f	14486799	12.399 ug/mLm
29) t	n-Octacosane (C28)	41.13f	14410251	12.182 ug/mLm
31) t	n-Triacontane (C30)	43.34f	14047939	11.850 ug/mLm
37) t	n-Hexatriacontane (C36)	49.72f	12973720	11.022 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.94	527299016	459.042 ug/mL
44) h	Total Resolved Hydrocarbon	40.94	195613943	170.293 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18120.D
Operator : AC
Acquired : 11 Feb 2006 2:41 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS020106LCSD04-AFID
Misc Info : 1X ETR0602004
Vial Number: 57



Form III
Spike Recovery Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **See Below**
Associated Blank: **SS020606B06**
Concentration Units: **mg/Kg**

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

Lab ID:	SS020606B06		SS020606LCS04		SS020606LCSD05				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.13	U	1.2	72	1.1	68	5	30	50-130
n-Decane (C10)	0.13	U	1.3	79	1.4	83	5	30	50-130
n-Dodecane (C12)	0.13	U	1.4	82	1.5	91	11	30	50-130
n-Tetradecane (C14)	0.13	U	1.4	82	1.6	93	12	30	50-130
n-Hexadecane (C16)	0.13	U	1.4	85	1.6	97	13	30	50-130
n-Octadecane (C18)	0.13	U	1.4	84	1.6	96	13	30	50-130
n-Nonadecane (C19)	0.13	U	1.4	86	1.6	98	13	30	50-130
n-Eicosane (C20)	0.13	U	1.4	87	1.6	99	13	30	50-130
n-Docosane (C22)	0.13	U	1.6	96	1.6	98	2	30	50-130
n-Tetracosane (C24)	0.13	U	1.4	85	1.6	96	13	30	50-130
n-Hexacosane (C26)	0.13	U	1.4	87	1.6	98	13	30	50-130
n-Octacosane (C28)	0.13	U	1.4	86	1.6	97	13	30	50-130
n-Triacontane (C30)	0.13	U	1.4	85	1.6	97	14	30	50-130
n-Hexatriacontane (C36)	0.13	U	1.3	80	1.6	96	19	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	87	99	50-130
d50-Tetracosane	80	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 20:02

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606LCS04**
Associated Blank: **SS020606B06**
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	02/06/06	02/13/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	16

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	87	50-130
d50-Tetracosane	80	50-130

02/17/06 20:00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18186.D
Signal(s) : FID2B.CH ,
Acq On : 13 Feb 2006 11:10 pm
Operator : AC
Sample : SS020606LCS04
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 15 08:10:15 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

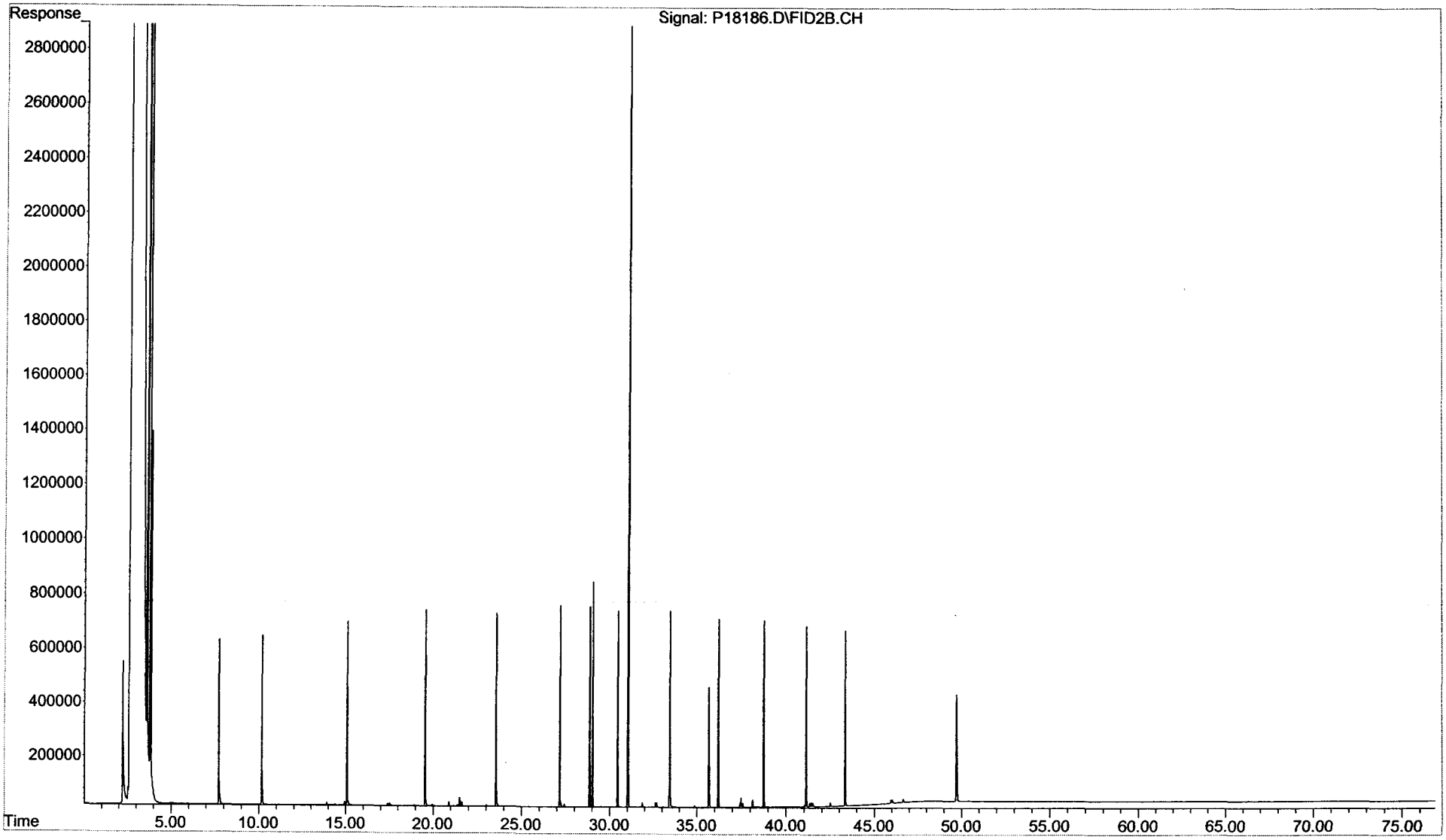
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/20/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.06	64895557	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02f	15284262	10.866 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	21.73%#
24) s d50-Tetracosane	35.67	12605810	9.999 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	20.00%#
Target Compounds			
3) t n-Nonane (C9)	7.71	10334266	8.957 ug/mLm
4) t n-Decane (C10)	10.16	11652654	9.852 ug/mLm
6) t n-Dodecane (C12)	15.07	12519223	10.259 ug/mLm
9) t n-Tetradecane (C14)	19.55	12940938	10.300 ug/mLm
12) t n-Hexadecane (C16)	23.56	13616239	10.605 ug/mLm
16) t n-Octadecane (C18)	27.17	13759672	10.557 ug/mLm
18) t n-Nonadecane (C19)	28.85	13920513	10.749 ug/mLm
20) t n-Eicosane (C20)	30.45	14047325	10.878 ug/mLm
22) t n-Docosane (C22)	33.45	15754012	11.972 ug/mLm
25) t n-Tetracosane (C24)	36.21f	14222589	10.604 ug/mLm
27) t n-Hexacosane (C26)	38.76f	14306005	10.822 ug/mLm
29) t n-Octacosane (C28)	41.13f	14312357	10.694 ug/mLm
31) t n-Triacontane (C30)	43.34f	14178308	10.572 ug/mLm
37) t n-Hexatriacontane (C36)	49.73f	13261603	9.959 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.94	689085852	530.240 ug/mL
44) h Total Resolved Hydrocarbon	40.94	202504711	155.824 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18186.D
Operator : AC
Acquired : 13 Feb 2006 11:10 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS020606LCS04
Misc Info :
Vial Number: 56



Form I
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **SS020606LCSD05**
Associated Blank: **SS020606B06**
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	02/06/06	02/11/06	100	30.00	4	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**24**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	99	50-130
d50-Tetracosane	91	50-130

02/17/06 20:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18124.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 5:49 am
Operator : AC
Sample : SS020606LCSD05-AFID
Misc : 1X ETR0602004
ALS Vial : 59 Sample Multiplier: 1

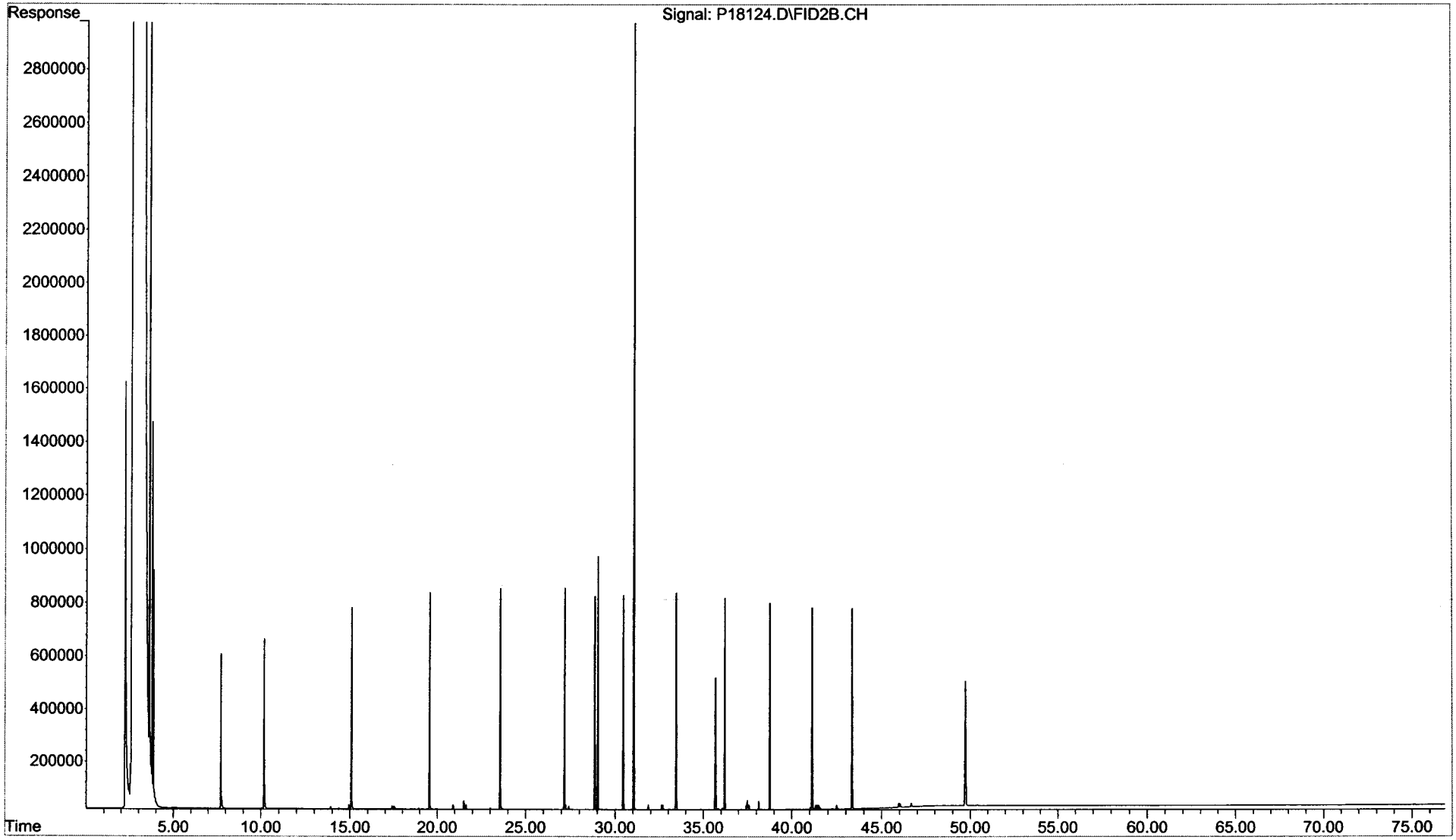
Integration File: SHCINT1.E
Quant Time: Feb 14 13:42:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	64531844	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.02f	17304516	12.371 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	24.74%#
24) s d50-Tetracosane	35.67	14318618	11.422 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	22.84%#
Target Compounds			
3) t n-Nonane (C9)	7.72	9797684	8.540 ug/mLm
4) t n-Decane (C10)	10.17	12157822	10.337 ug/mLm
6) t n-Dodecane (C12)	15.08	13853944	11.416 ug/mLm
9) t n-Tetradecane (C14)	19.55	14566216	11.659 ug/mLm
12) t n-Hexadecane (C16)	23.56	15476741	12.122 ug/mLm
16) t n-Octadecane (C18)	27.17	15606381	12.041 ug/mLm
18) t n-Nonadecane (C19)	28.85	15719676	12.206 ug/mLm
20) t n-Eicosane (C20)	30.45	15849922	12.344 ug/mLm
22) t n-Docosane (C22)	33.45	15966102	12.202 ug/mLm
25) t n-Tetracosane (C24)	36.21f	16067724	12.047 ug/mLm
27) t n-Hexacosane (C26)	38.76f	16165699	12.298 ug/mLm
29) t n-Octacosane (C28)	41.13f	16208444	12.179 ug/mLm
31) t n-Triacontane (C30)	43.35f	16189572	12.139 ug/mLm
37) t n-Hexatriacontane (C36)	49.73f	15960339	12.053 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.94	553765758	428.515 ug/mL
44) h Total Resolved Hydrocarbon	40.94	222905142	172.488 ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18124.D
Operator : AC
Acquired : 11 Feb 2006 5:49 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: SS020606LCSD05-AFID
Misc Info : 1X ETR0602004
Vial Number: 59



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

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

Lab Code: **MA00030**
ETR: **0602004**
Lab ID: **TS020806AWS01**
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	02/06/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**570000**

N/A - Not Applicable

02/17/06 17:21

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB06.SEC\
Data File : P17986A.D
Signal(s) : FID2B.CH
Acq On : 06 Feb 2006 1:01 pm
Operator : AC
Sample : TS020806AWS01
Misc : 1X ANS STD
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 13 19:17:05 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Wed Feb 08 10:11:50 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.12	63070231	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	67299396	49.229 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	98.46%
24) s d50-Tetracosane	35.76	55577905	45.361 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	90.72%
Target Compounds			
2) t n-Octane (C8)	5.58	26082363	25.649 ug/mLm
3) t n-Nonane (C9)	7.75	22037884	19.654 ug/mLm
4) t n-Decane (C10)	10.21	24546372	21.353 ug/mLm
5) t n-Undecane (C11)	12.70	24656248	21.182 ug/mLm
6) t n-Dodecane (C12)	15.12	24741080	20.860 ug/mLm
7) t n-Tridecane (C13)	17.42	24843121	20.675 ug/mLm
8) t 1380	19.09f	5888974	4.823 ug/mLm
9) t n-Tetradecane (C14)	19.60	22632476	18.536 ug/mLm
10) t 1470	20.88f	8496555	6.873 ug/mLm
11) t n-Pentadecane (C15)	21.66	23033053	18.632 ug/mLm
12) t n-Hexadecane (C16)	23.61	19670163	15.764 ug/mLm
13) t 1650	24.51f	6669111	5.279 ug/mLm
14) t n-Heptadecane (C17)	25.46	17727921	14.032 ug/mLm
15) t Pristane	25.56	13270882	10.995 ug/mLm
16) t n-Octadecane (C18)	27.23	16155034	12.753 ug/mL
17) t Phytane	27.39	8566510	6.822 ug/mL
18) t n-Nonadecane (C19)	28.91	16746421	13.305 ug/mLm
20) t n-Eicosane (C20)	30.51	15707303	12.516 ug/mLm
21) t n-Heneicosane (C21)	32.04	14376139	11.101 ug/mLm
22) t n-Docosane (C22)	33.51	14829162	11.595 ug/mLm
23) t n-Tricosane (C23)	34.92	12172701	9.453 ug/mLm
25) t n-Tetracosane (C24)	36.27	12106756	9.288 ug/mLm
26) t n-Pentacosane (C25)	37.57	11504358	8.746 ug/mL
27) t n-Hexacosane (C26)	38.82	10167694	7.914 ug/mL
28) t n-Heptacosane (C27)	40.03	7474860	5.840 ug/mLm
29) t n-Octacosane (C28)	41.20	5454302	4.193 ug/mLm
30) t n-Nonacosane (C29)	42.32	5214476	3.923 ug/mLm
31) t n-Triacontane (C30)	43.41	4307314	3.305 ug/mLm
32) t n-Hentriacontane (C31)	44.47	3457068	2.741 ug/mLm
33) t n-Dotriacontane (C32)	45.49	4327337	3.401 ug/mLm
34) t n-Tritriacontane (C33)	46.48	3070362	2.388 ug/mLm
35) t n-tetratriacontane (C34)	47.47	2737606	2.096 ug/mLm
36) t n-Pentatriacontane (C35)	48.58	2343658	1.865 ug/mLm
37) t n-Hexatriacontane (C36)	49.83	1445408	1.117 ug/mLm

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB06.SEC\
Data File : P17986A.D
Signal(s) : FID2B.CH
Acq On : 06 Feb 2006 1:01 pm
Operator : AC
Sample : TS020806AWS01
Misc : 1X ANS STD
ALS Vial : 53 Sample Multiplier: 1

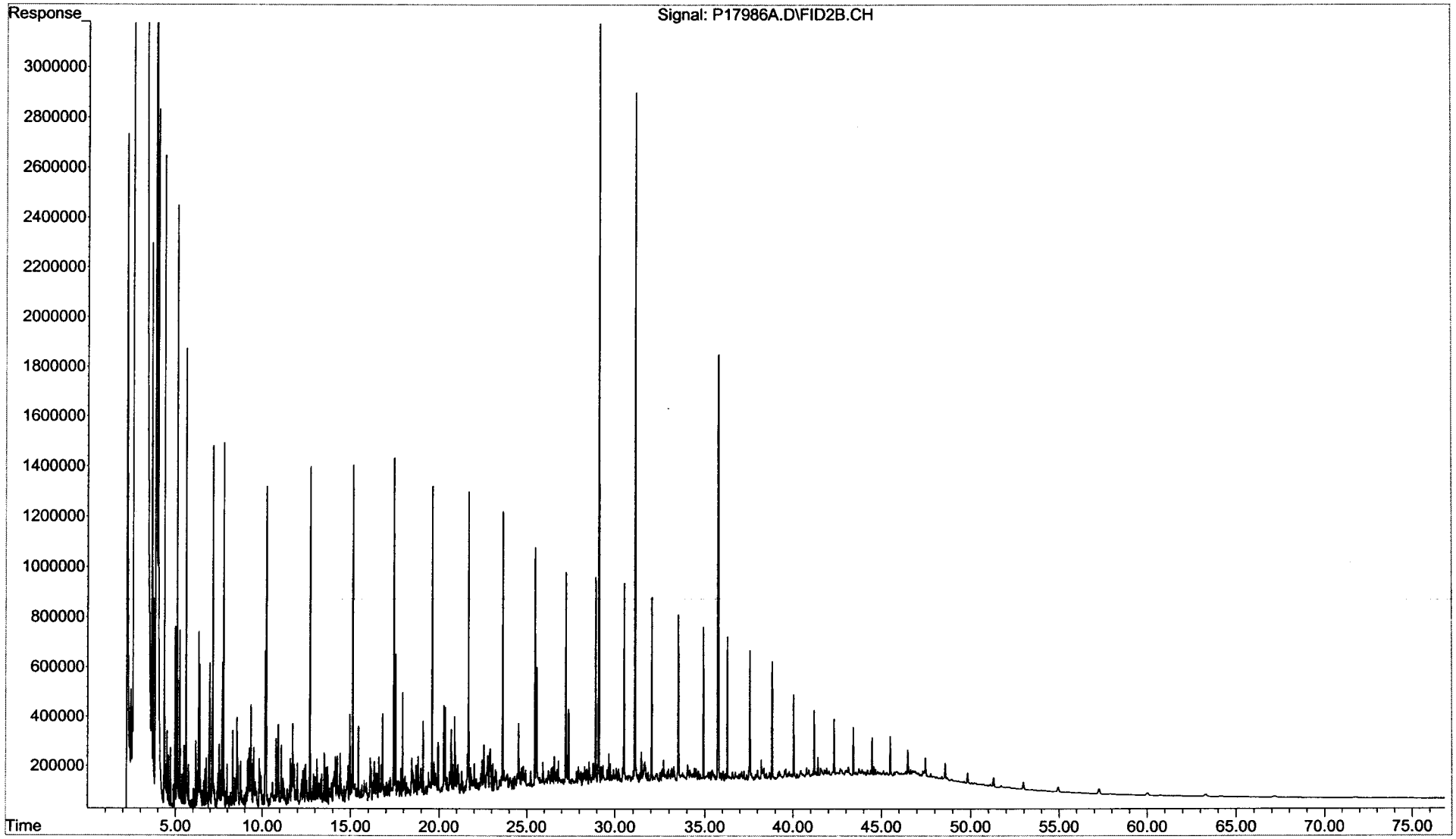
Integration File: SHCINT1.E
Quant Time: Feb 13 19:17:05 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Wed Feb 08 10:11:50 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.28	1387099	0.999	ug/mL
39)	t	n-Octatriacontane (C38)	52.96	1414533	1.083	ug/mL
40)	t	n-Nonatriacontane (C39)	54.94	1183186	0.913	ug/mLm
41)	t	n-Tetracontane (C40)	57.27	1327480	1.025	ug/mL
42)	h	C9-C40 Total Petroleum Hyd	40.94	4394153243	3479.083	ug/mL
43)	h	C10-C28 DRO	26.02	2609778877	2066.299	ug/mL
44)	h	Total Resolved Hydrocarbon	40.94	1174678234	930.055	ug/L

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

File :O:\Forensics\Data\PAH1\February06\FEB06.SEC\P17986A.D
Operator : AC
Acquired : 06 Feb 2006 1:01 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: TS020806AWS01
Misc Info : 1X ANS STD
Vial Number: 53



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: **0602004**
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

02/20/06 09:41

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

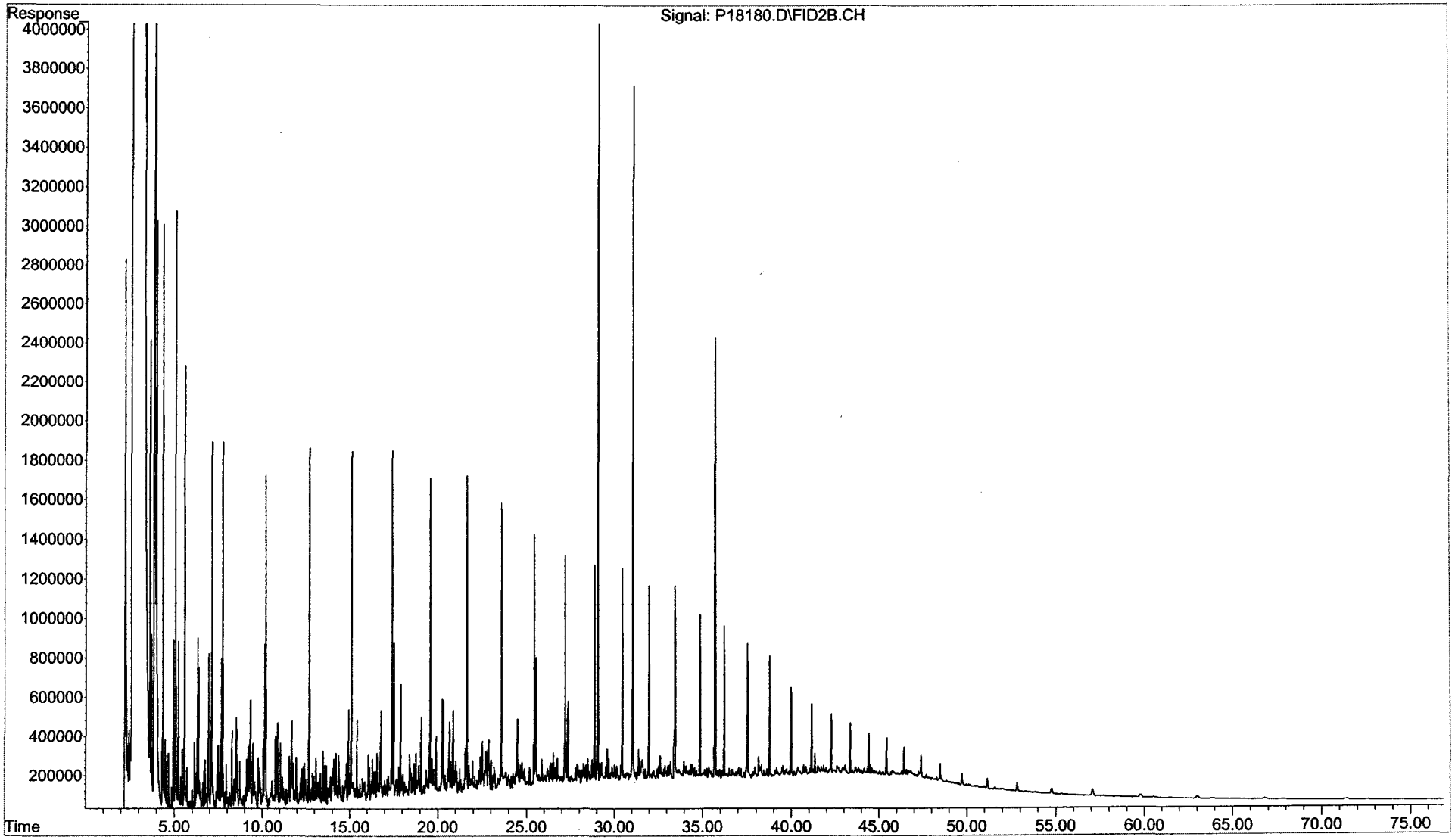
Integration File: SHCINT1.E
Quant Time: Feb 15 08:05:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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: 0602004

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
TS020806AWS01	IB102060601	P17990A.D
0602004-01	IB102080601	P18110.D
0602004-02	IB102080601	P18110.D
0602004-03	IB102080601	P18110.D
0602004-05	IB102080601	P18110.D
0602004-07	IB102080601	P18110.D
0602004-08	IB102080601	P18110.D
0602004-09	IB102080601	P18110.D
0602004-09 D	IB102080601	P18110.D
0602004-10	IB102080601	P18110.D
0602004-11	IB102080601	P18110.D
0602004-12	IB102080601	P18110.D
0602004-13	IB102080601	P18110.D
0602004-14	IB102080601	P18110.D
SS020106B11	IB102080601	P18110.D
SS020106LCS04	IB102080601	P18110.D
SS020106LCSD04	IB102080601	P18110.D
0602004-04	IB102080601	P18110.D
0602004-04 D	IB102080601	P18110.D
0602004-06	IB102080601	P18110.D
SS020606B06	IB102080601	P18110.D
SS020606LCSD05	IB102080601	P18110.D
SS020606LCS04	IB102130601	P18184.D
TS021506AWS02	IB102130601	P18184.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB06.SEC\
Data File : P17990A.D
Signal(s) : FID2B.CH
Acq On : 06 Feb 2006 4:13 pm
Operator : AC
Sample : IB102060601
Misc : DCM
ALS Vial : 55 Sample Multiplier: 1

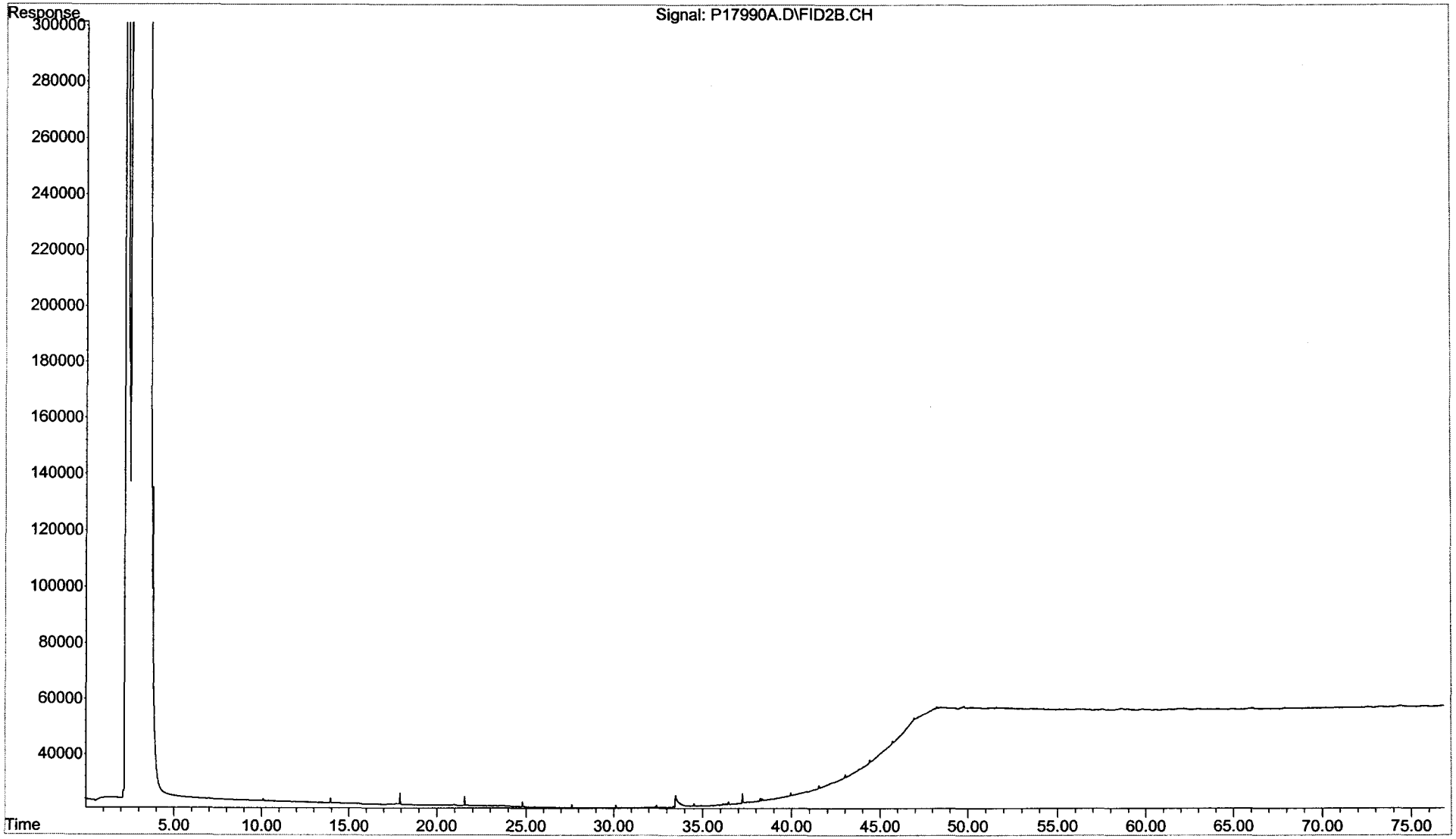
Integration File: SHCINT1.E
Quant Time: Feb 13 20:34:44 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Wed Feb 08 10:17:20 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	33.48f	656903	50.000 ug/mLm
System Monitoring Compounds				
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.94	697333395	53009.444 ug/mL
43) h	C10-C28 DRO	26.02	41140270	3127.375 ug/mL

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

File :O:\Forensics\Data\PAH1\February06\FEB06.SEC\P17990A.D
Operator : AC
Acquired : 06 Feb 2006 4:13 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB102060601
Misc Info : DCM
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08.SEC\
Data File : P18110.D
Signal(s) : FID2B.CH
Acq On : 10 Feb 2006 6:52 pm
Operator : AC
Sample : IB102080601
Misc : DCM
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 12:11:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

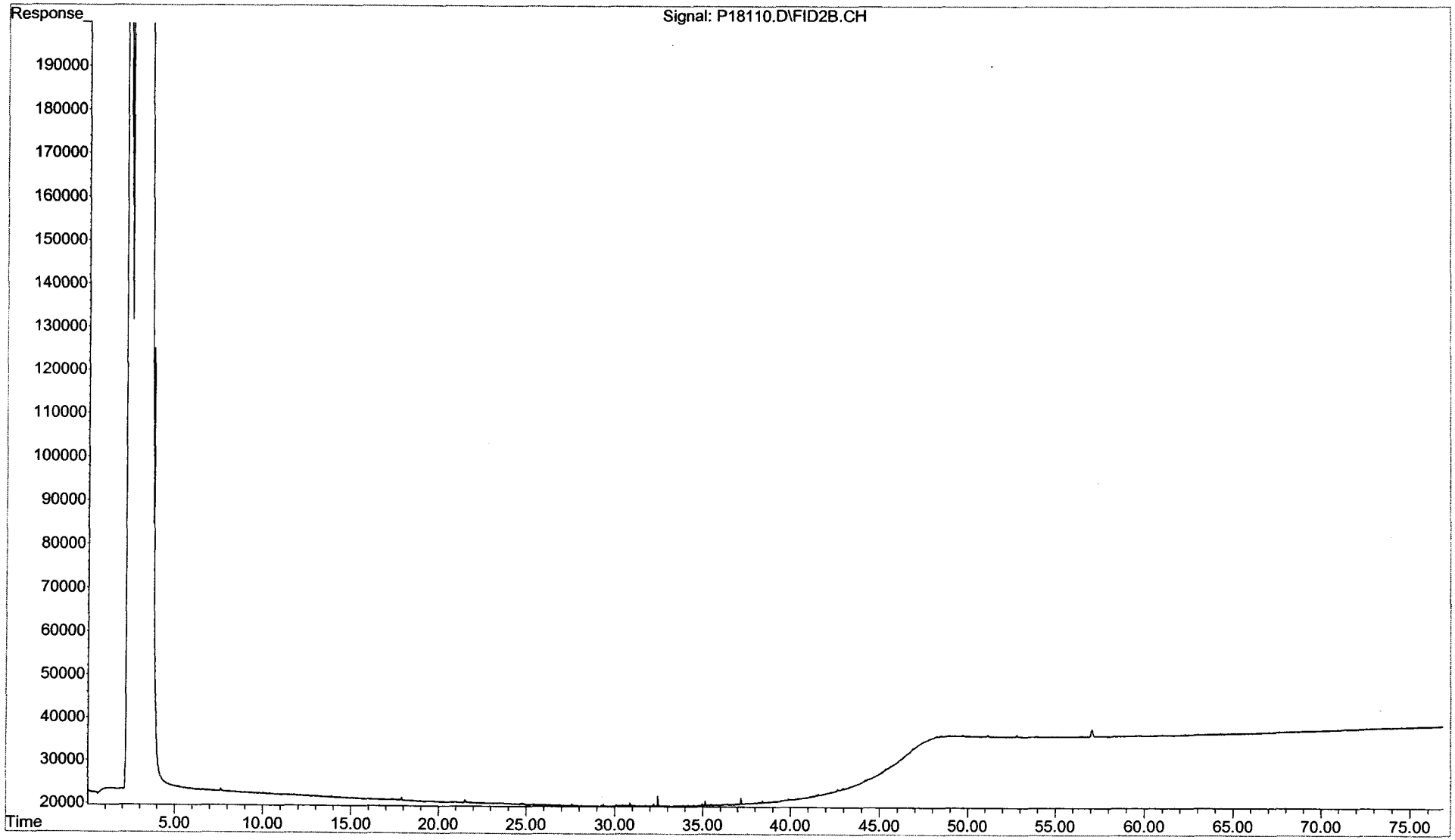
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

2/14/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.14	80	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.94	322698434	201857402.728 ug/mL

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18110.D
Operator : AC
Acquired : 10 Feb 2006 6:52 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: IB102080601
Misc Info : DCM
Vial Number: 52



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

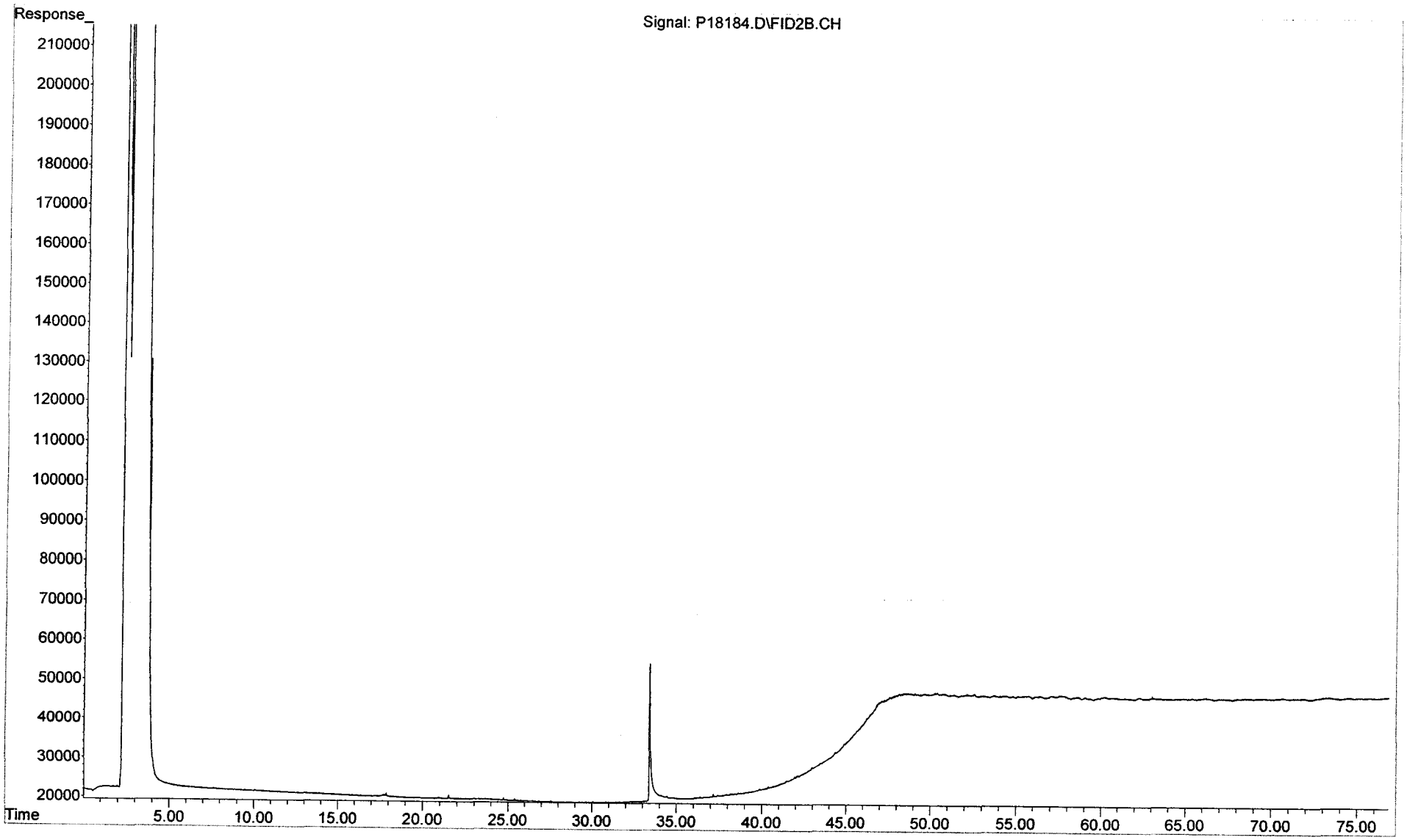
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

	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

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



Sequence Name: O:\Forensics\Data\PAH1\February06\FEB06.SEC\S1020601.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB06\

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

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

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

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

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P17982	FRNC1D	ALK STD
5)	Sample	1	P17983	FRNC1D	PAH STD
6)	RearSamp	52	P17984	FRNC1D	C1020601-AFID PASS
7)	Sample	2	P17985	FRNC1D	C1020601 PASS
8)	RearSamp	53	P17986	FRNC1D	ANS1020601-AFID TS020806 AWS01
9)	Sample	3	P17987	FRNC1D	ANS1020601
10)	RearSamp	54	P17988	FRNC1D	DCM
11)	Sample	4	P17989	FRNC1D	QAWHAC14-AFID ✓
12)	RearSamp	55	P17990	FRNC1D	DCM IB\02060601
13)	Sample	5	P17991	FRNC1D	DCM
14)	Pause				
15)	RearSamp	56	P17992	FRNC1D	TS02010106B10-AFID
16)	Sample	6	P17993	FRNC1D	SS012606B19
17)	RearSamp	57	P17994	FRNC1D	TS020106LCS03-AFID
18)	Sample	7	P17995	FRNC1D	SS012606LCS05
19)	RearSamp	58	P17996	FRNC1D	TS020106LCSD03-AFID
20)	Sample	8	P17997	FRNC1D	SS0102606LCSD05
21)	RearSamp	59	P17998	FRNC1D	0601086-01-AFID
22)	Sample	9	P17999	FRNC1D	C1020602 PASS
23)	RearSamp	60	P18000	FRNC1D	0601086-02-AFID
24)	Sample	10	P18001	FRNC1D	DCM
25)	RearSamp	61	P18002	FRNC1DF	0601086-03-AFID
26)	Sample	11	P18003	FRNC1DF	SFFCO1020601 ✓
27)	RearSamp	62	P18004	FRNC1DF	C1020602-AFID PASS
28)	Sample	9	P18005	FRNC1DF	PAH STD ✓
29)	RearSamp	63	P18006	FRNC1DF	DCM-AFID
30)	Sample	12	P18007	FRNC1DF	TW020606B03 ✓
31)	RearSamp	64	P18008	FRNC1DF	0601086-04-AFID
32)	Sample	13	P18009	FRNC1DF	TW020606LCS03 ✓
33)	RearSamp	65	P18010	FRNC1DF	0601086-05-AFID
34)	Sample	14	P18011	FRNC1DF	TW020606LCSD03 ✓
35)	RearSamp	66	P18012	FRNC1DF	0601086-06-AFID
36)	Sample	15	P18013	FRNC1DF	0602010-01 ✓
37)	RearSamp	67	P18014	FRNC1DF	0601086-07-AFID
38)	Sample	9	P18015	FRNC1DF	PAH STD ✓
39)	RearSamp	68	P18016	FRNC1DF	0601086-08-AFID
40)	Sample	9	P18017	FRNC1DF	
41)	RearSamp	69	P18018	FRNC1DF	0601086-09-AFID
42)	Sample	9	P18019	FRNC1DF	
43)	RearSamp	70	P18020	FRNC1D	0601086-09D-AFID

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: Wed Feb 08 11:16:51 2006

Sequence Name: O:\Forensics\Data\PAH1\February06\FEB06.SEC\S1020601.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	9	P18021	FRNC1D	
45)	RearSamp	71	P18022	FRNC1D	C1020603-AFID PASS 2/8/06
46)	Sample	9	P18023	FRNC1D	
47)	RearSamp	72	P18024	FRNC1D	DCM
48)	Sample	9	P18025	FRNC1D	
49)	RearSamp	73	P18026	FRNC1D	SFFCO1020603
50)	Sample	9	P18027	FRNC1D	
51)	RearSamp	74	P18028	FRNC1D	DCM-AFID
52)	Sample	9	P18029	FRNC1D	
53)	RearSamp	75	P18030	FRNC1D	DCM-AFID
54)	Sample	9	P18031	FRNC1D	
55)	RearSamp	76	P18032	FRNC1D	TW020606B03-AFID
56)	Sample	9	P18033	FRNC1D	
57)	RearSamp	77	P18034	FRNC1D	TW020606LCS03-AFID
58)	Sample	9	P18035	FRNC1D	
59)	RearSamp	78	P18036	FRNC1D	TW020606LCSD03-AFID
60)	Sample	9	P18037	FRNC1D	
61)	RearSamp	79	P18038	FRNC1D	0602010-01-AFID
62)	Sample	9	P18039	FRNC1D	2/8/06
63)	RearSamp	80	P18040	FRNC1D	C1020603-AFID PASS 2/8/06
64)	Sample	9	P18041	FRNC1D	4
65)	RearSamp	81	P18042	FRNC1D	DCM-AFID
66)	Sample	9	P18043	FRNC1D	

Sequence Name: C:\MSDChem\1\sequence\S1020801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\FEBRUARY06\FEB08\

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

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

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

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

2/10/06

Line	Sample Name/Misc Info				
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P18044	FRNC1D	ALK STD
5)	Sample	1	P18045	FRNC1D	PAH STD
6)	RearSamp	52	P18046	FRNC1D	C1020801-AFID ✗
7)	Sample	2	P18047	FRNC1D	C1020801 PASS
8)	RearSamp	53	P18048	FRNC1D	ANS1020801-AFID ✗
9)	Sample	3	P18049	FRNC1D	ANS1020801
10)	RearSamp	54	P18050	FRNC1D	DCM-AFID ✗
11)	Sample	4	P18051	FRNC1D	DCM
12)	RearSamp	55	P18052	FRNC1D	DCM-AFID ✗
13)	Sample	5	P18053	FRNC1D	DCM
14)	RearSamp	56	P18054	FRNC1D	DCM-AFID ✗
15)	Sample	6	P18055	FRNC1D	SS020106B11 ✓
16)	RearSamp	57	P18056	FRNC1D	SS020106B11-AFID ✗
17)	Sample	7	P18057	FRNC1D	SS020106LCS ✓
18)	RearSamp	58	P18058	FRNC1D	SS020106LCS-AFID ✗
)	Sample	8	P18059	FRNC1D	SS020106LCSD ✓
)	RearSamp	59	P18060	FRNC1D	SS020106LCSD-FID ✗
21)	Sample	9	P18061	FRNC1D	0601070-04-RE2 ✓
22)	RearSamp	60	P18062	FRNC1D	0601070-04-AFID ✗
23)	Sample	10	P18063	FRNC1D	0601070-06-RE2 ✓
24)	RearSamp	61	P18064	FRNC1D	0601070-06-AFID ✗
25)	Sample	11	P18065	FRNC1D	0601070-04-RE ✓
26)	RearSamp	62	P18066	FRNC1D	0602004-01-AFID ✗
27)	Sample	12	P18067	FRNC1D	0601070-06-RE ✓
28)	RearSamp	63	P18068	FRNC1D	0602004-02-AFID ✗
29)	Sample	13	P18069	FRNC1D	C1020802 PASS
30)	RearSamp	64	P18070	FRNC1D	0602004-03-AFID ✗
31)	Sample	14	P18071	FRNC1D	0602004-04-RE ✓
32)	RearSamp	65	P18072	FRNC1D	C1020802-AFID ✗
33)	Sample	15	P18073	FRNC1D	0602004-04D-RE ✓
34)	RearSamp	66	P18074	FRNC1D	DCM-AFID ✗
35)	Sample	16	P18075	FRNC1D	0602004-03-RE ✓
36)	RearSamp	67	P18076	FRNC1D	SS020606B06-AFID ✗
37)	Sample	17	P18077	FRNC1D	0602004-01-RE
38)	RearSamp	68	P18078	FRNC1D	
39)	Sample	18	P18079	FRNC1D	0602004-02-RE ✓
40)	RearSamp	69	P18080	FRNC1D	
41)	Sample	19	P18081	FRNC1D	0602004-05-RE ✓
42)	RearSamp	70	P18082	FRNC1D	
43)	Sample	20	P18083	FRNC1D	0602004-06-RE ✓

✓ run used

✗ = instrument contamination for FID re-analyze

MS 2/14/06

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: Fri

Sequence Name: C:\MSDChem\1\sequence\S1020801.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	71	P18084	FRNC1D	
45)	Sample	21	P18085	FRNC1D	0602004-07-RE ✓
	RearSamp	72	P18086	FRNC1D	
	Sample	22	P18087	FRNC1D	0602004-08-RE ✓
48)	RearSamp	73	P18088	FRNC1D	
49)	Sample	23	P18089	FRNC1D	0602004-09-RE ✓
50)	RearSamp	74	P18090	FRNC1D	
51)	Sample	24	P18091	FRNC1D	0602004-9D-RE ✓
52)	RearSamp	75	P18092	FRNC1D	
53)	Sample	25	P18093	FRNC1D	C1020803 PASS
54)	RearSamp	76	P18094	FRNC1D	
55)	Sample	26	P18095	FRNC1D	0602004-10-RE ✓
56)	RearSamp	77	P18096	FRNC1D	
57)	Sample	27	P18097	FRNC1D	0602004-11-RE
58)	RearSamp	77	P18098	FRNC1D	
59)	Sample	28	P18099	FRNC1D	0602004-12-RE ✓
60)	RearSamp	77	P18100	FRNC1D	
61)	Sample	29	P18101	FRNC1D	0602004-13-RE ✓
62)	RearSamp	77	P18102	FRNC1D	
63)	Sample	30	P18103	FRNC1D	0602004-14-RE ✓
64)	RearSamp	77	P18104	FRNC1D	
65)	Sample	31	P18105	FRNC1D	0602004-05-RE ✓
66)	RearSamp	78	P18106	FRNC1D	
67)	Sample	32	P18107	FRNC1D	0602004-02-RE ✓
68)	Pause				
69)	RearSamp	51	P18108	FRNC1D	C1021001-AFID - FID RESTART. PASS 2/14/06
70)	Sample	33	P18109	FRNC1D	C1020804 PASS
71)	RearSamp	52	P18110	FRNC1D	DCM-AFID IB102080601 2/14/06
72)	Sample	34	P18111	FRNC1D	DCM
73)	RearSamp	53	P18112	FRNC1D	DCM-AFID
74)	Sample	35	P18113	FRNC1D	DCM
75)	RearSamp	54	P18114	FRNC1D	SS020106B11-AFID
	Sample	36	P18115	FRNC1D	SS020606B06 ✓
	RearSamp	55	P18116	FRNC1D	SS020606B06-AFID
78)	Sample	37	P18117	FRNC1D	SS020606LCS04 ✓
79)	RearSamp	56	P18118	FRNC1D	SS020106LCS04-AFID run used
80)	Sample	38	P18119	FRNC1D	SS020606LCSD05 ✓
81)	RearSamp	57	P18120	FRNC1D	SS020106LCSD04
82)	Sample	39	P18121	FRNC1D	0602004-01 ✓
83)	RearSamp	58	P18122	FRNC1D	SS020606LCS04-AFID
84)	Sample	40	P18123	FRNC1D	0602004-03 ✓
85)	RearSamp	59	P18124	FRNC1D	SS020606LCSD05-AFID
86)	Sample	41	P18125	FRNC1D	0602004-04 ✓
87)	RearSamp	60	P18126	FRNC1D	C1021002-AFID PASS 2/14/06
88)	Sample	42	P18127	FRNC1D	0602004-04D ✓
89)	RearSamp	61	P18128	FRNC1D	DCM-AFID
90)	Sample	43	P18129	FRNC1D	0602004-06 ✓
91)	RearSamp	62	P18130	FRNC1D	0601070-04-AFID
92)	Sample	44	P18131	FRNC1D	0602004-07 ✓
93)	RearSamp	63	P18132	FRNC1D	0601070-06-AFID
94)	Sample	45	P18133	FRNC1D	0602004-08 ✓
95)	RearSamp	64	P18134	FRNC1D	0602004-01-AFID
96)	Sample	46	P18135	FRNC1D	- C1020805 PASS ~~ACT C.C~~

MS 2/14/06

Sequence Name: C:\MSDChem\1\sequence\S1020801.S

	Line Type	Vial	DataFile	Method	Sample Name
97)	RearSamp	65	P18136	FRNC1D	0602004-02-AFID
98)	Sample	47	P18137	FRNC1D	DCM
[illegible]	RearSamp	66	P18138	FRNC1D	0602004-03-AFID
1[illegible])	Sample	48	P18139	FRNC1D	0602004-09 ✓
101)	RearSamp	67	P18140	FRNC1D	0602004-04-AFID
102)	Sample	49	P18141	FRNC1D	0602004-09D ✓
103)	RearSamp	68	P18142	FRNC1D	0602004-04D-AFID
104)	Sample	50	P18143	FRNC1D	0602004-10 ✓
105)	RearSamp	69	P18144	FRNC1D	0602004-05-AFID
106)	Sample	1	P18145	FRNC1D	0602004-11 ✓
107)	RearSamp	70	P18146	FRNC1D	0602004-06-AFID
108)	Sample	2	P18147	FRNC1D	0602004-12 ✓
109)	RearSamp	71	P18148	FRNC1D	C1021003-AFID PASS 2/14/06 ✓ run used
110)	Sample	3	P18149	FRNC1D	0602004-13 ✓
111)	RearSamp	72	P18150	FRNC1D	DCM-AFID
112)	Sample	4	P18151	FRNC1D	0602004-14 ✓
113)	RearSamp	73	P18152	FRNC1D	0602004-07-AFID
114)	Sample	5	P18153	FRNC1D	C1020806 PASS
115)	RearSamp	74	P18154	FRNC1D	0602004-08-AFID
116)	Sample	6	P18155	FRNC1D	DCM
117)	RearSamp	75	P18156	FRNC1D	0602004-09-AFID
118)	Sample	6	P18157	FRNC1D	
119)	RearSamp	76	P18158	FRNC1D	0602004-09D-AFID
120)	Sample	5	P18159	FRNC1D	
121)	RearSamp	77	P18160	FRNC1D	0602004-10-AFID
122)	Sample	6	P18161	FRNC1D	
123)	RearSamp	78	P18162	FRNC1D	0602004-11-AFID
124)	Sample	5	P18163	FRNC1D	
125)	RearSamp	79	P18164	FRNC1D	0602004-12-AFID
126)	Sample	6	P18165	FRNC1D	
127)	RearSamp	80	P18166	FRNC1D	0602004-13-AFID
128)	Sample	5	P18167	FRNC1D	
1[illegible])	RearSamp	81	P18168	FRNC1D	0602004-14-AFID
1[illegible])	Sample	6	P18169	FRNC1D	
131)	RearSamp	82	P18170	FRNC1D	C1021004-AFID
132)	Sample	5	P18171	FRNC1D	
133)	RearSamp	83	P18172	FRNC1D	DCM
134)	Sample	6	P18173	FRNC1D	
135)	RearSamp	84	P18174	FRNC1DF	BAF D12
136)	Sample	7	P18175	FRNC1DF	0602024-01

MG
2/14/06

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 ✓ run used
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 ~~AOE~~ 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

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~~ IB1021306003 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 IB1021306002 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: **0602004**
Lab ID: **SS020106B11**
Date Analyzed: **02/10/06 21:59**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS020106LCS04	02/11/06 01:07
LCSD	SS020106LCSD04	02/11/06 02:41
GC-SED-98 (1-2)	0602004-01	02/11/06 13:38
GC-SED-58C (8-10)	0602004-02	02/11/06 15:12
GC-SED-103 (8.1-9.1)	0602004-03	02/11/06 16:46
GC-SED-101 (7.9-9.1)	0602004-05	02/11/06 21:27
GC-SED-97 (8.5-9.5)	0602004-07	02/12/06 03:44
GC-SED-74 (5.3-6.3)	0602004-08	02/12/06 05:18
GC-SED-73E (3.8-8.4)	0602004-09	02/12/06 06:53
GC-SED-73E (3.8-8.4)	0602004-09 D	02/12/06 08:28
GC-SED-70B (4-5)	0602004-10	02/12/06 10:03
GC-SED-83 (0-2)	0602004-11	02/12/06 11:38
GC-SED-82 (12-12.8)	0602004-12	02/12/06 13:12
GC-SED-77 (14.5-15.4)	0602004-13	02/12/06 14:46
GC-SED-71C (1.5-2.5)	0602004-14	02/12/06 16:21

N/A - Not Applicable

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

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: **0602004**
Lab ID: **SS020606B06**
Date Analyzed: **02/10/06 23:33**

Client ID	Lab ID	Date/Time Analyzed
LCSD	SS020606LCSD05	02/11/06 05:49
GC-SED-102 (2-4)	0602004-04	02/11/06 18:19
GC-SED-102 (2-4)	0602004-04 D	02/11/06 19:53
GC-SED-100 (5-6)	0602004-06	02/11/06 23:01
LCS	SS020606LCS04	02/13/06 23:10

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

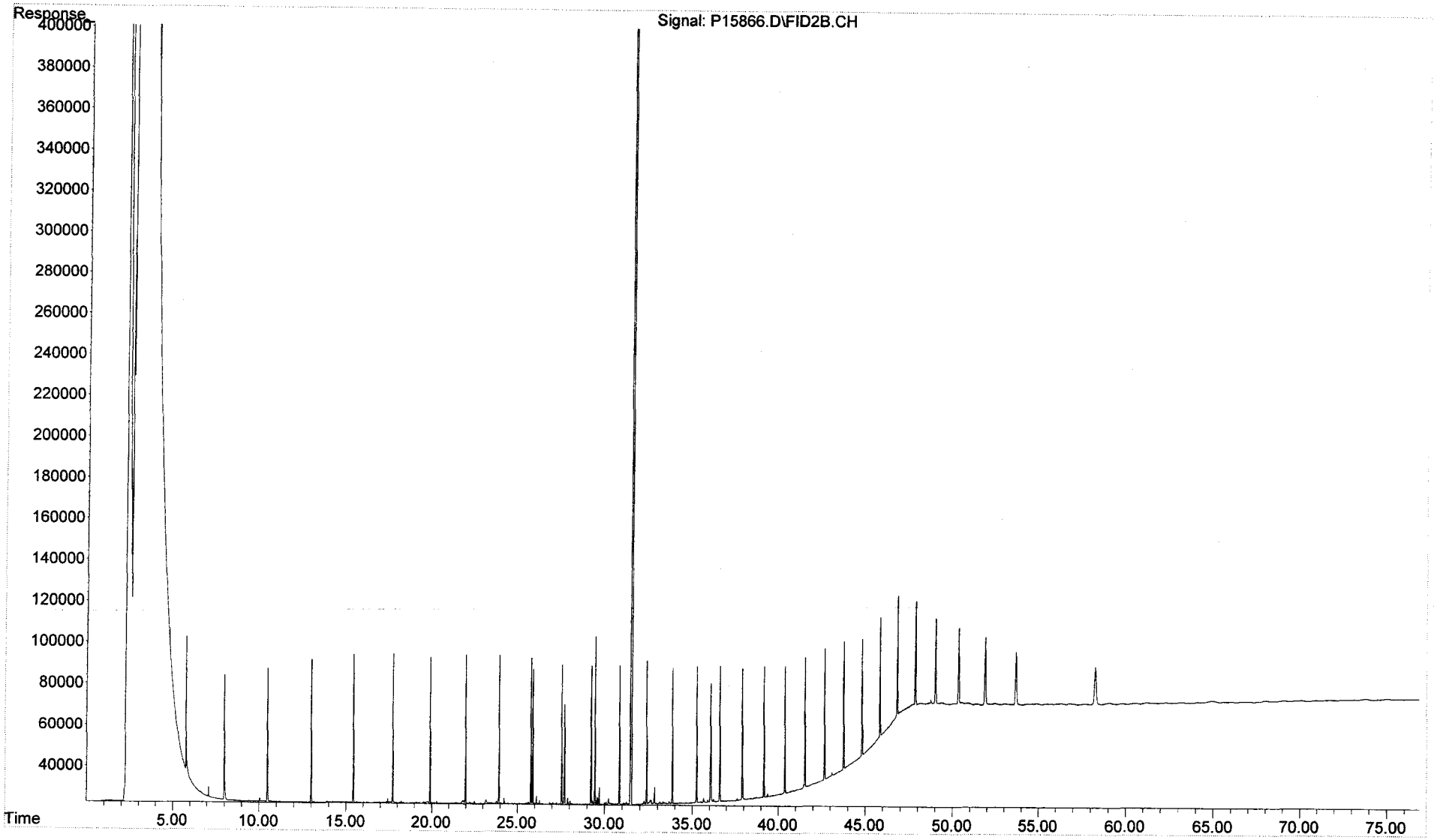
Integration File: SHCINT1.E
Quant Time: Oct 10 21:14:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Mon Oct 10 21:02:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

10/14/05

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

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



Quantitation Report (QT Reviewed)

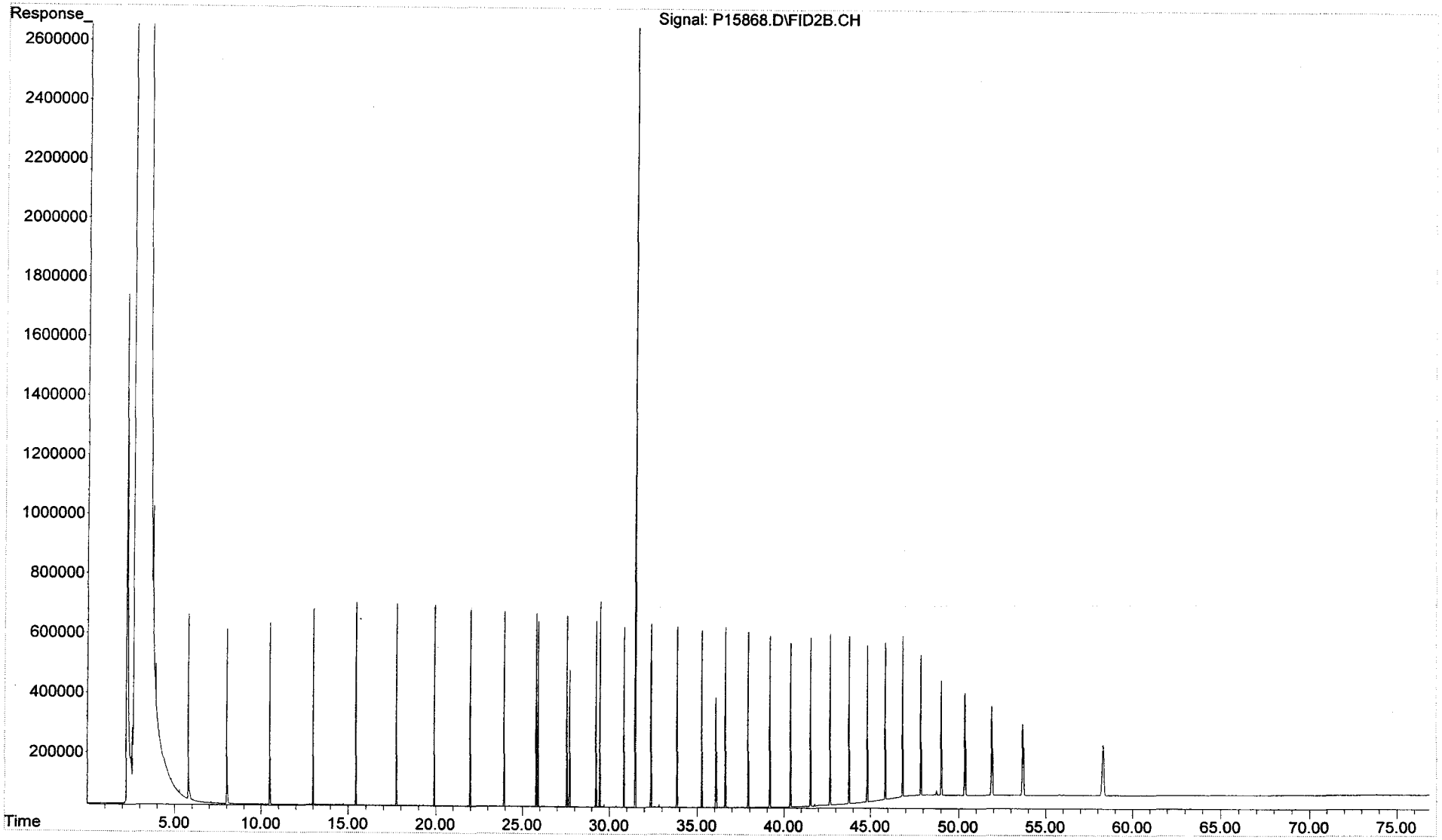
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15868.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 7:02 pm
Operator : AC
Sample : I1100502-AFID
Misc : WHAB30
ALS Vial : 55 Sample Multiplier: 1

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

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

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

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



Quantitation Report (QT Reviewed)

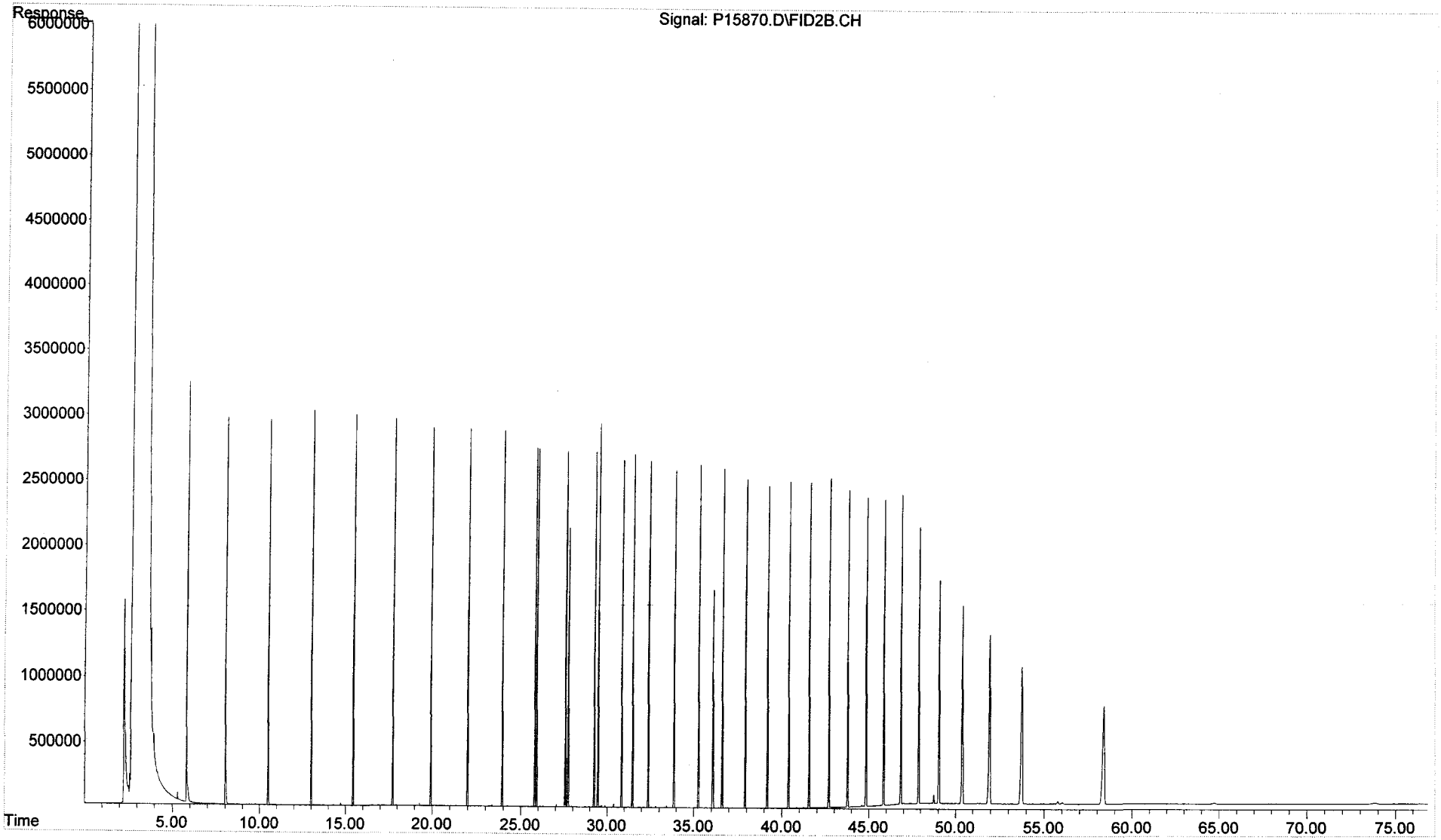
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15870.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 8:37 pm
Operator : AC
Sample : I1100503-AFID
Misc : WHAB31
ALS Vial : 56 Sample Multiplier: 1

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

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

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

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



Quantitation Report (QT Reviewed)

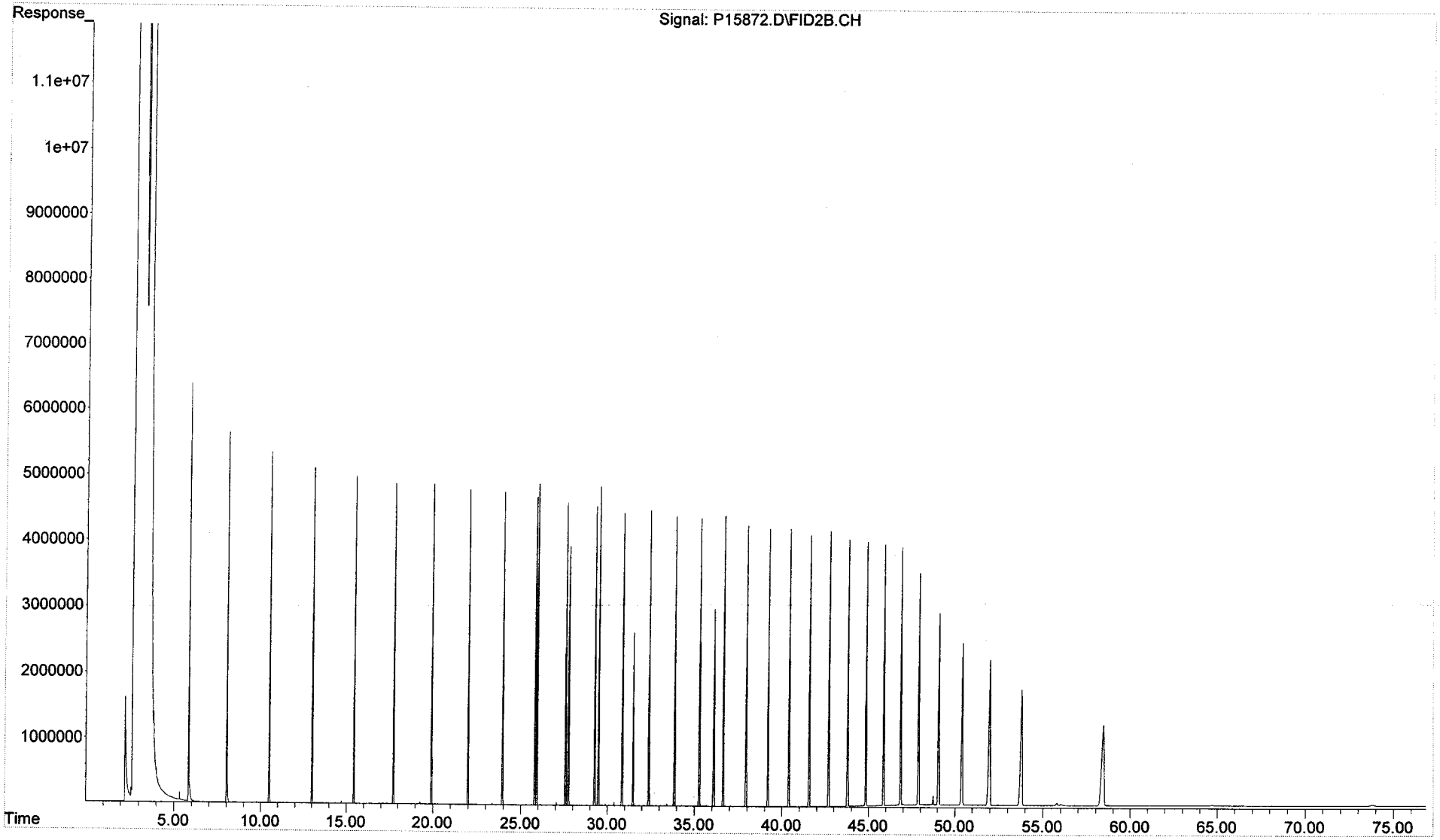
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15872.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 10:13 pm
Operator : AC
Sample : I1100504-AFID
Misc : WHAB32
ALS Vial : 57 Sample Multiplier: 1

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

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

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

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



Quantitation Report (QT Reviewed)

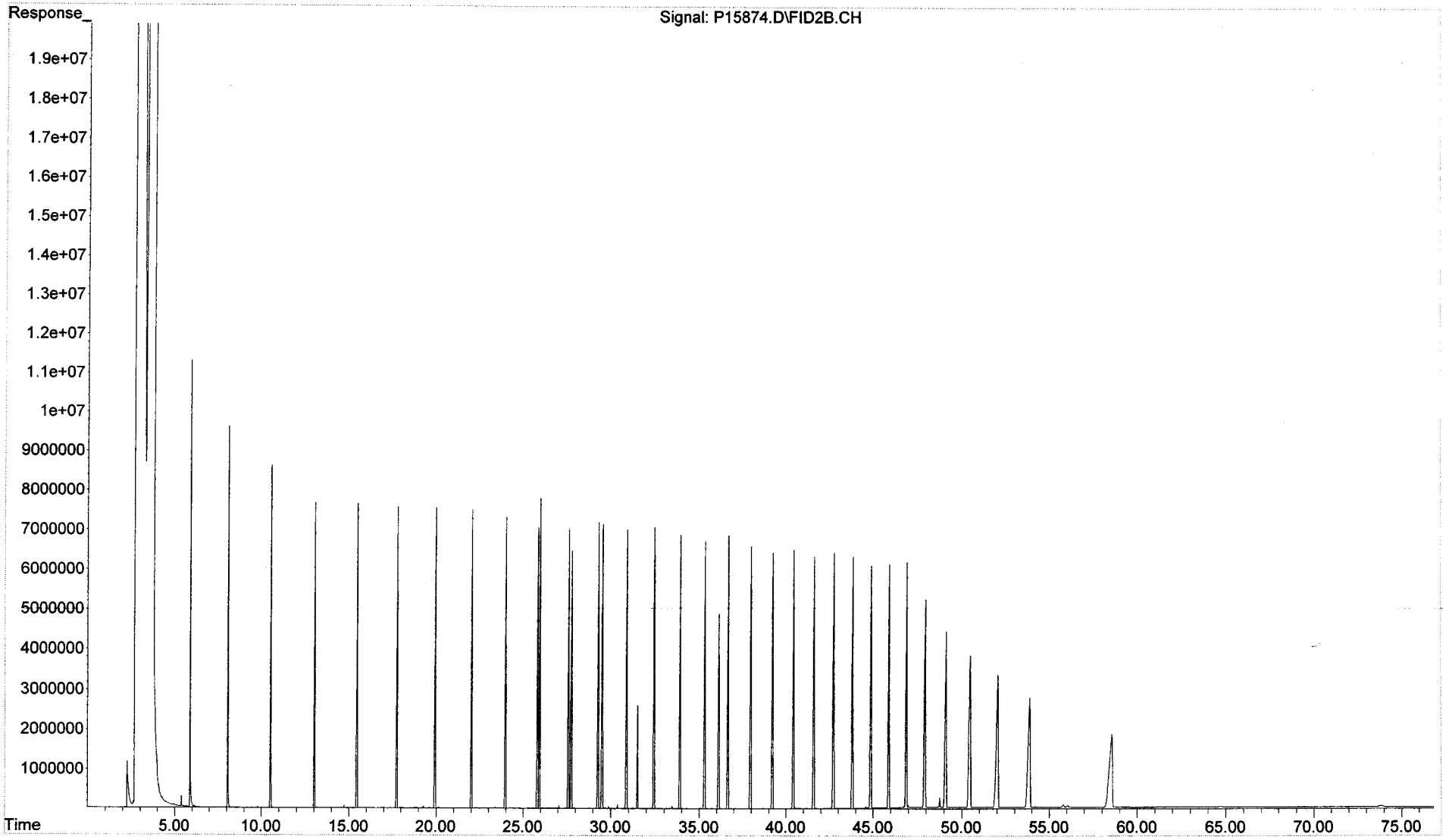
Data Path : C:\MSDCHEM\1\DATA\PAH #1\OCT05.SEC\
Data File : P15874.D
Signal(s) : FID2B.CH
Acq On : 05 Oct 2005 11:47 pm
Operator : AC
Sample : I1100505-AFID
Misc : WHAB33
ALS Vial : 58 Sample Multiplier: 1

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

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

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

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



Quantitation Report (QT Reviewed)

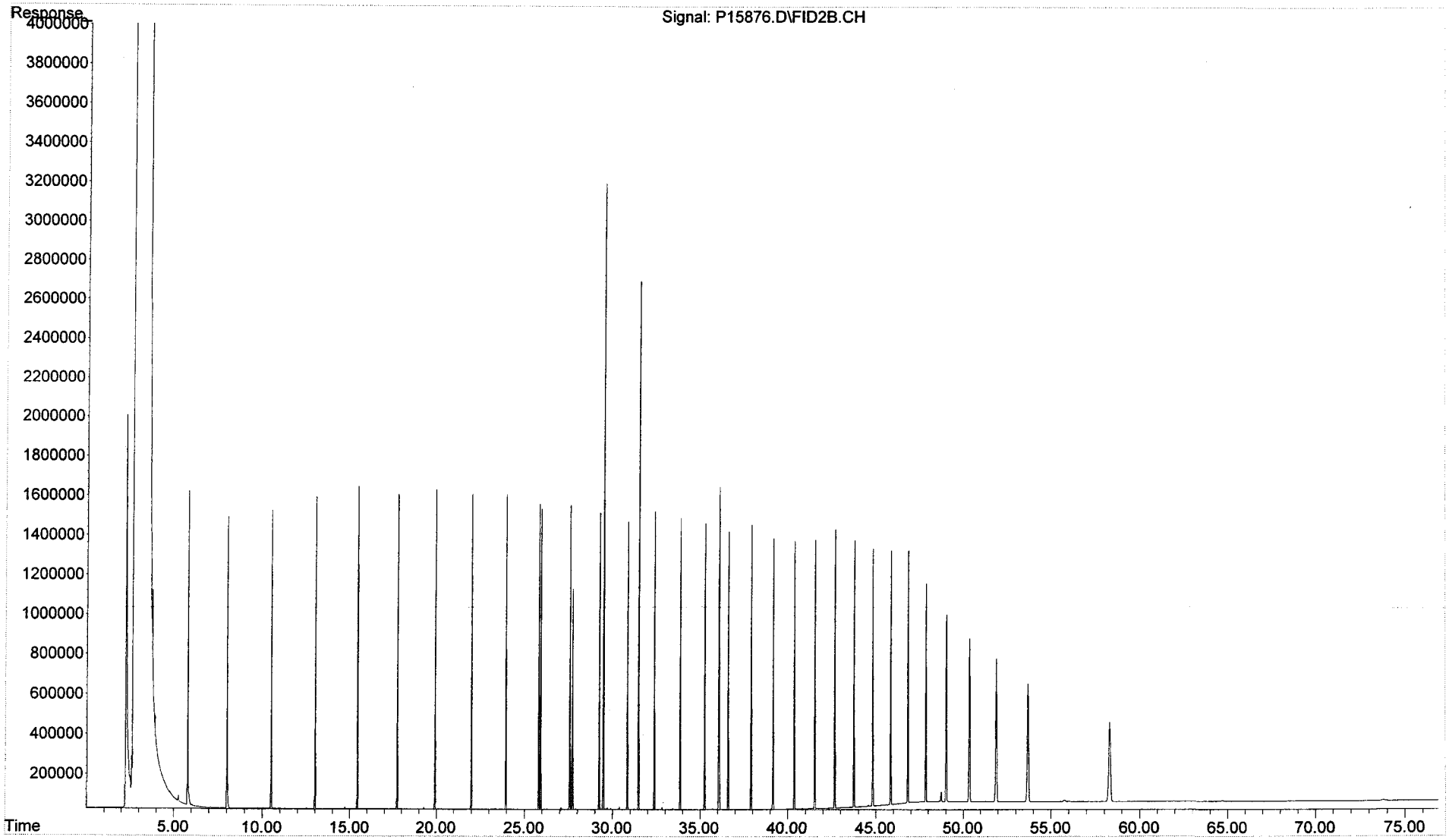
Data Path : C:\MSDChem\1\DATA\PAH #1\OCT05.SEC\
Data File : P15876.D
Signal(s) : FID2B.CH
Acq On : 06 Oct 2005 1:20 am
Operator : AC
Sample : Q1100501-AFID
Misc : WHAB34
ALS Vial : 59 Sample Multiplier: 1

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

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

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

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



Quantitation Report (QT Reviewed)

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

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

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

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

Quantitation Report (QT Reviewed)

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

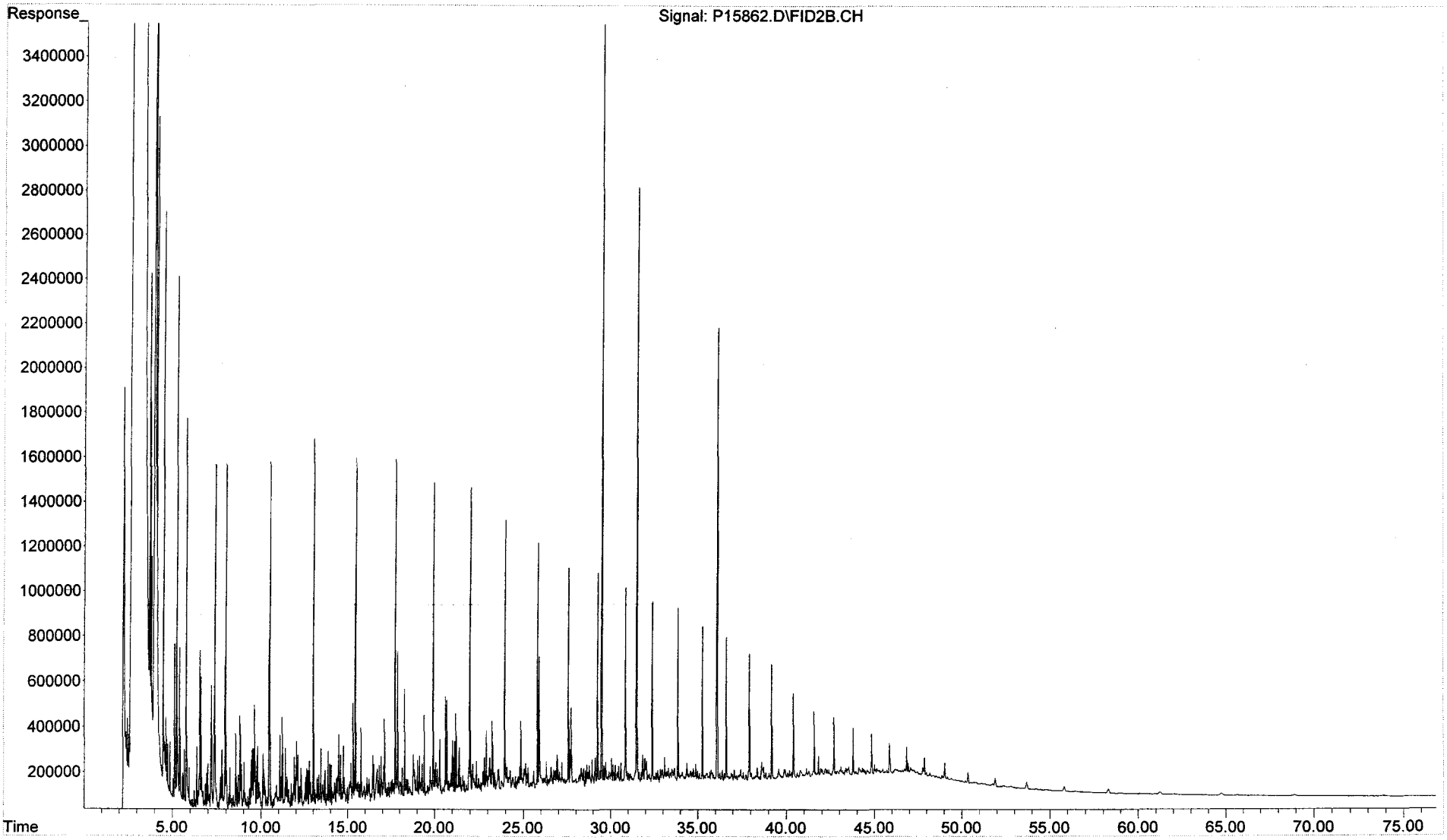
Integration File: SHCINT1.E
Quant Time: Oct 16 22:13:48 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Oct 14 16:49:01 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

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

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

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



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1021001**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.10	3.8	25
n-Decane (C10)	50.00	48.37	3.3	25
n-Undecane (C11)	50.00	48.33	3.3	25
n-Dodecane (C12)	50.00	48.90	2.2	25
n-Tridecane (C13)	50.00	48.83	2.3	25
n-Tetradecane (C14)	50.00	48.96	2.1	25
n-Pentadecane (C15)	50.00	48.81	2.4	25
n-Hexadecane (C16)	50.00	48.69	2.6	25
n-Heptadecane (C17)	50.00	48.88	2.2	25
Pristane	50.00	48.94	2.1	25
n-Octadecane (C18)	50.00	49.00	2.0	25
Phytane	50.00	49.34	1.3	25
n-Nonadecane (C19)	50.00	49.13	1.7	25
n-Eicosane (C20)	50.00	49.50	1.0	25
n-Heneicosane (C21)	50.00	49.11	1.8	25
n-Docosane (C22)	50.00	47.69	4.6	25
n-Tricosane (C23)	50.00	49.26	1.5	25
n-Tetracosane (C24)	50.00	48.52	3.0	25
n-Pentacosane (C25)	50.00	48.36	3.3	25
n-Hexacosane (C26)	50.00	49.84	0.3	25
n-Heptacosane (C27)	50.00	49.42	1.2	25
n-Octacosane (C28)	50.00	49.31	1.4	25
n-Nonacosane (C29)	50.00	49.26	1.5	25
n-Triacontane (C30)	50.00	49.40	1.2	25
n-Hentriacontane (C31)	50.00	51.77	3.5	25
n-Dotriacontane (C32)	50.00	49.30	1.4	25
n-Tritriacontane (C33)	50.00	49.86	0.3	25
n-Tetratriacontane (C34)	50.00	49.63	0.7	25
n-Pentatriacontane (C35)	50.00	49.76	0.5	25
n-Hexatriacontane (C36)	50.00	49.71	0.6	25
n-Heptatriacontane (C37)	50.00	47.69	4.6	25
n-Octatriacontane (C38)	50.00	49.78	0.4	25
n-Tetracontane (C40)	50.00	50.30	0.6	25
ortho-Terphenyl	50.00	48.61	2.8	25
d50-Tetracosane	50.00	45.76	8.5	25

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

N/A - Not Applicable

02/17/06 18:58

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08.SEC\
Data File : P18108.D
Signal(s) : FID2B.CH
Acq On : 10 Feb 2006 5:19 pm
Operator : AC
Sample : C1021001-AFID
Misc :
ALS Vial : 51 Sample Multiplier: 1

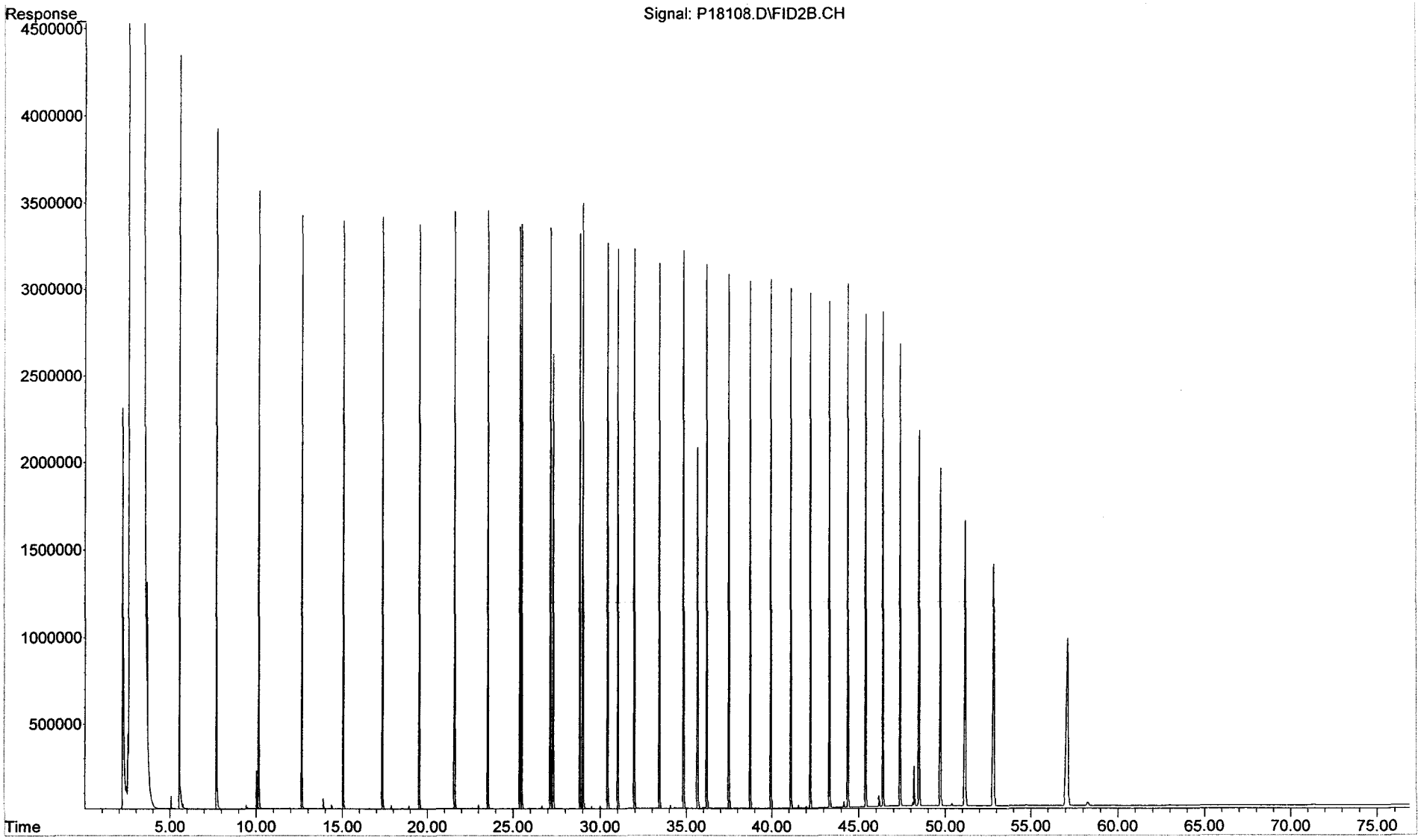
Integration File: SHCINT1.E
Quant Time: Feb 14 09:42:03 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	74798011	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.05	78816231	48.614 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 97.23%
24) s	d50-Tetracosane	35.70	66487315	45.756 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.51%
	Target Compounds			
2) t	n-Octane (C8)	5.59	57811661	47.938 ug/mLm
3) t	n-Nonane (C9)	7.74	63963185	48.100 ug/mLm
4) t	n-Decane (C10)	10.19	65941808	48.370 ug/mLm
5) t	n-Undecane (C11)	12.68	66716663	48.330 ug/mLm
6) t	n-Dodecane (C12)	15.09	68780477	48.899 ug/mLm
7) t	n-Tridecane (C13)	17.39	69589102	48.833 ug/mLm
9) t	n-Tetradecane (C14)	19.57	70903312	48.964 ug/mLm
11) t	n-Pentadecane (C15)	21.63	71560790	48.812 ug/mLm
12) t	n-Hexadecane (C16)	23.58	72057919	48.693 ug/mLm
14) t	n-Heptadecane (C17)	25.44	73235387	48.880 ug/mLm
15) t	Pristane	25.55	70053647	48.941 ug/mLm
16) t	n-Octadecane (C18)	27.20	73615105	49.002 ug/mLm
17) t	Phytane	27.36	73476586	49.338 ug/mLm
18) t	n-Nonadecane (C19)	28.88	73338156	49.130 ug/mLm
20) t	n-Eicosane (C20)	30.48	73676686	49.502 ug/mLm
21) t	n-Heneicosane (C21)	32.01	75427841	49.111 ug/mLm
22) t	n-Docosane (C22)	33.48	72329775	47.690 ug/mLm
23) t	n-Tricosane (C23)	34.89	75232307	49.262 ug/mLm
25) t	n-Tetracosane (C24)	36.24	74999600	48.516 ug/mLm
26) t	n-Pentacosane (C25)	37.54	75441994	48.360 ug/mLm
27) t	n-Hexacosane (C26)	38.79	75942118	49.844 ug/mLm
28) t	n-Heptacosane (C27)	40.00	75019799	49.418 ug/mLm
29) t	n-Octacosane (C28)	41.16	76061520	49.310 ug/mLm
30) t	n-Nonacosane (C29)	42.29	77652039	49.257 ug/mLm
31) t	n-Triacontane (C30)	43.38	76358944	49.397 ug/mLm
32) t	n-Hentriacontane (C31)	44.43	77429138	51.766 ug/mLm
33) t	n-Dotriacontane (C32)	45.46	74384977	49.297 ug/mLm
34) t	n-Tritriacontane (C33)	46.45	76039723	49.863 ug/mLm
35) t	n-tetratriacontane (C34)	47.43	76880288	49.630 ug/mLm
36) t	n-Pentatriacontane (C35)	48.53f	74146608	49.762 ug/mLm
37) t	n-Hexatriacontane (C36)	49.78f	76300071	49.711 ug/mLm
38) t	n-Heptatriacontane (C37)	51.22f	78558986	47.692 ug/mLm
39) t	n-Octatriacontane (C38)	52.89f	77104040	49.776 ug/mLm
41) t	n-Tetracontane (C40)	57.16f	77292862	50.300 ug/mLm

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18108.D
Operator : AC
Acquired : 10 Feb 2006 5:19 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021001-AFID
Misc Info :
Vial Number: 51



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1021002**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.07	3.9	25
n-Decane (C10)	50.00	48.37	3.3	25
n-Undecane (C11)	50.00	48.35	3.3	25
n-Dodecane (C12)	50.00	48.89	2.2	25
n-Tridecane (C13)	50.00	48.79	2.4	25
n-Tetradecane (C14)	50.00	48.89	2.2	25
n-Pentadecane (C15)	50.00	48.72	2.6	25
n-Hexadecane (C16)	50.00	48.60	2.8	25
n-Heptadecane (C17)	50.00	48.76	2.5	25
Pristane	50.00	48.82	2.4	25
n-Octadecane (C18)	50.00	48.84	2.3	25
Phytane	50.00	49.20	1.6	25
n-Nonadecane (C19)	50.00	49.00	2.0	25
n-Eicosane (C20)	50.00	49.31	1.4	25
n-Heneicosane (C21)	50.00	48.89	2.2	25
n-Docosane (C22)	50.00	47.44	5.1	25
n-Tricosane (C23)	50.00	49.00	2.0	25
n-Tetracosane (C24)	50.00	48.23	3.5	25
n-Pentacosane (C25)	50.00	48.05	3.9	25
n-Hexacosane (C26)	50.00	49.52	1.0	25
n-Heptacosane (C27)	50.00	49.09	1.8	25
n-Octacosane (C28)	50.00	48.99	2.0	25
n-Nonacosane (C29)	50.00	48.92	2.2	25
n-Triacontane (C30)	50.00	49.07	1.9	25
n-Hentriacontane (C31)	50.00	51.46	2.9	25
n-Dotriacontane (C32)	50.00	48.97	2.1	25
n-Tritriacontane (C33)	50.00	49.52	1.0	25
n-Tetratriacontane (C34)	50.00	49.28	1.4	25
n-Pentatriacontane (C35)	50.00	49.42	1.2	25
n-Hexatriacontane (C36)	50.00	49.48	1.0	25
n-Heptatriacontane (C37)	50.00	47.35	5.3	25
n-Octatriacontane (C38)	50.00	49.41	1.2	25
n-Tetracontane (C40)	50.00	49.85	0.3	25
ortho-Terphenyl	50.00	48.52	3.0	25
d50-Tetracosane	50.00	45.44	9.1	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

02/17/06 18:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08.SEC\
Data File : P18126.D
Signal(s) : FID2B.CH
Acq On : 11 Feb 2006 7:23 am
Operator : AC
Sample : C1021002-AFID
Misc : ALK STD
ALS Vial : 60 Sample Multiplier: 1

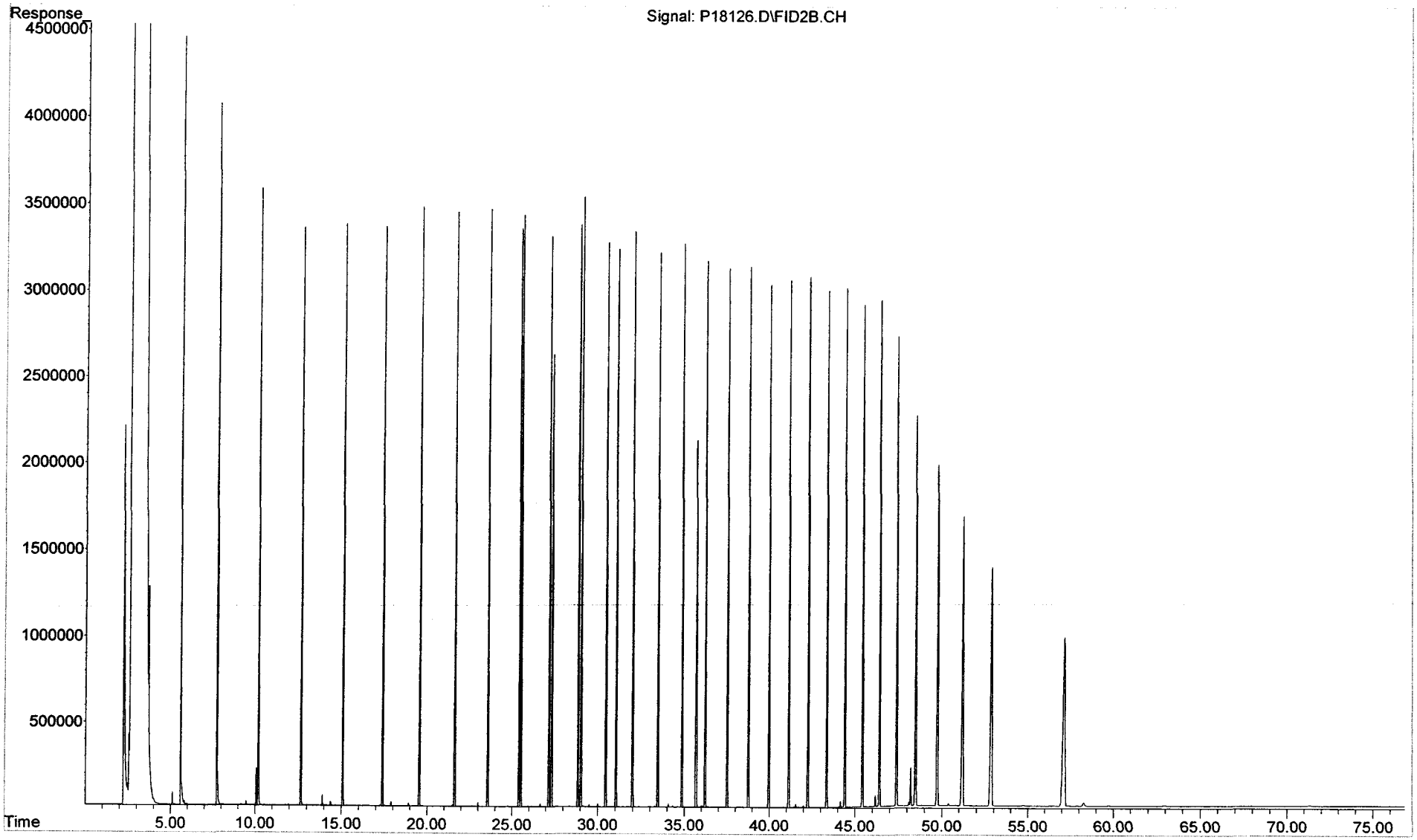
Integration File: SHCINT1.E
Quant Time: Feb 14 11:05:47 2006
Quant Method : O:\FORENSICS\METHODS\PAH1\OCTOBER05\HC11005.M
Quant Title : FID Forensics
QLast Update : Fri Feb 03 17:47:05 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.06	76769041	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.05	80732651	48.518 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 97.04%
24) s	d50-Tetracosane	35.70	67769479	45.441 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 90.88%
Target Compounds				
2) t	n-Octane (C8)	5.60	59164434	47.800 ug/mLm
3) t	n-Nonane (C9)	7.75	65604735	48.068 ug/mLm
4) t	n-Decane (C10)	10.19	67685027	48.374 ug/mLm
5) t	n-Undecane (C11)	12.68	68508994	48.354 ug/mLm
6) t	n-Dodecane (C12)	15.10	70573759	48.886 ug/mLm
7) t	n-Tridecane (C13)	17.40	71356883	48.788 ug/mLm
9) t	n-Tetradecane (C14)	19.57	72661418	48.890 ug/mLm
11) t	n-Pentadecane (C15)	21.63	73309666	48.721 ug/mLm
12) t	n-Hexadecane (C16)	23.58	73810382	48.597 ug/mLm
14) t	n-Heptadecane (C17)	25.44	74982119	48.761 ug/mLm
15) t	Pristane	25.55	71724911	48.822 ug/mLm
16) t	n-Octadecane (C18)	27.20	75308857	48.842 ug/mLm
17) t	Phytane	27.36	75196529	49.197 ug/mLm
18) t	n-Nonadecane (C19)	28.88	75063721	48.995 ug/mLm
20) t	n-Eicosane (C20)	30.48	75322063	49.309 ug/mLm
21) t	n-Heneicosane (C21)	32.01	77065029	48.889 ug/mLm
22) t	n-Docosane (C22)	33.47	73845058	47.439 ug/mLm
23) t	n-Tricosane (C23)	34.88	76800017	48.997 ug/mLm
25) t	n-Tetracosane (C24)	36.24	76522324	48.230 ug/mLm
26) t	n-Pentacosane (C25)	37.54	76932910	48.049 ug/mLm
27) t	n-Hexacosane (C26)	38.79	77444614	49.525 ug/mLm
28) t	n-Heptacosane (C27)	39.99	76490199	49.093 ug/mLm
29) t	n-Octacosane (C28)	41.16	77559473	48.990 ug/mLm
30) t	n-Nonacosane (C29)	42.29	79155872	48.922 ug/mLm
31) t	n-Triacontane (C30)	43.38	77851219	49.069 ug/mLm
32) t	n-Hentriacontane (C31)	44.43	78995784	51.457 ug/mLm
33) t	n-Dotriacontane (C32)	45.45	75837541	48.969 ug/mLm
34) t	n-Tritriacontane (C33)	46.44	77511614	49.523 ug/mLm
35) t	n-tetratriacontane (C34)	47.43	78346274	49.278 ug/mLm
36) t	n-Pentatriacontane (C35)	48.52f	75571875	49.416 ug/mLm
37) t	n-Hexatriacontane (C36)	49.77f	77944254	49.478 ug/mLm
38) t	n-Heptatriacontane (C37)	51.21f	80047186	47.348 ug/mLm
39) t	n-Octatriacontane (C38)	52.88f	78554193	49.410 ug/mLm
41) t	n-Tetracontane (C40)	57.16f	78620443	49.850 ug/mLm

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

File :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18126.D
Operator : AC
Acquired : 11 Feb 2006 7:23 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021002-AFID
Misc Info : ALK STD
Vial Number: 60



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1021003**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.78	2.4	25
n-Decane (C10)	50.00	48.53	2.9	25
n-Undecane (C11)	50.00	48.39	3.2	25
n-Dodecane (C12)	50.00	48.93	2.1	25
n-Tridecane (C13)	50.00	48.88	2.2	25
n-Tetradecane (C14)	50.00	49.02	2.0	25
n-Pentadecane (C15)	50.00	48.89	2.2	25
n-Hexadecane (C16)	50.00	48.79	2.4	25
n-Heptadecane (C17)	50.00	48.97	2.1	25
Pristane	50.00	49.04	1.9	25
n-Octadecane (C18)	50.00	49.07	1.9	25
Phytane	50.00	49.46	1.1	25
n-Nonadecane (C19)	50.00	49.22	1.6	25
n-Eicosane (C20)	50.00	49.56	0.9	25
n-Heneicosane (C21)	50.00	49.16	1.7	25
n-Docosane (C22)	50.00	48.27	3.5	25
n-Tricosane (C23)	50.00	49.28	1.4	25
n-Tetracosane (C24)	50.00	48.49	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	49.44	1.1	25
n-Octacosane (C28)	50.00	49.35	1.3	25
n-Nonacosane (C29)	50.00	49.33	1.3	25
n-Triacontane (C30)	50.00	49.46	1.1	25
n-Hentriacontane (C31)	50.00	51.83	3.7	25
n-Dotriacontane (C32)	50.00	49.44	1.1	25
n-Tritriacontane (C33)	50.00	49.94	0.1	25
n-Tetratriacontane (C34)	50.00	49.68	0.6	25
n-Pentatriacontane (C35)	50.00	49.86	0.3	25
n-Hexatriacontane (C36)	50.00	49.78	0.4	25
n-Heptatriacontane (C37)	50.00	47.76	4.5	25
n-Octatriacontane (C38)	50.00	49.75	0.5	25
n-Tetracontane (C40)	50.00	50.19	0.4	25
ortho-Terphenyl	50.00	48.69	2.6	25
d50-Tetracosane	50.00	45.75	8.5	25

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

N/A - Not Applicable

02/17/06 18:59

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH1\February06\FEB08.SEC\
Data File : P18148.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 12:35 am
Operator : AC
Sample : C1021003-AFID
Misc : ALK STD
ALS Vial : 71 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 11:24:36 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	31.06	64342085	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.05	67905002	48.690 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	97.38%
24) s	d50-Tetracosane	35.70	57183866	45.749 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	91.50%
	Target Compounds			
2) t	n-Octane (C8)	5.60	52300985	50.416 ug/mLm
3) t	n-Nonane (C9)	7.75	55798061	48.779 ug/mLm
4) t	n-Decane (C10)	10.19	56906469	48.526 ug/mLm
5) t	n-Undecane (C11)	12.68	57465356	48.393 ug/mLm
6) t	n-Dodecane (C12)	15.09	59199117	48.926 ug/mLm
7) t	n-Tridecane (C13)	17.39	59914142	48.877 ug/mLm
9) t	n-Tetradecane (C14)	19.57	61055451	49.015 ug/mLm
11) t	n-Pentadecane (C15)	21.63	61655120	48.889 ug/mLm
12) t	n-Hexadecane (C16)	23.58	62103493	48.786 ug/mLm
14) t	n-Heptadecane (C17)	25.43	63117360	48.973 ug/mLm
15) t	Pristane	25.54	60388036	49.045 ug/mLm
16) t	n-Octadecane (C18)	27.19	63418234	49.075 ug/mLm
17) t	Phytane	27.36	63355767	49.456 ug/mLm
18) t	n-Nonadecane (C19)	28.88	63198729	49.218 ug/mLm
20) t	n-Eicosane (C20)	30.48	63450121	49.559 ug/mLm
21) t	n-Heneicosane (C21)	32.01	64949217	49.161 ug/mLm
22) t	n-Docosane (C22)	33.47	62977661	48.271 ug/mLm
23) t	n-Tricosane (C23)	34.88	64739265	49.280 ug/mLm
25) t	n-Tetracosane (C24)	36.23	64485684	48.494 ug/mLm
26) t	n-Pentacosane (C25)	37.53	64891629	48.356 ug/mLm
27) t	n-Hexacosane (C26)	38.79	65354456	49.865 ug/mLm
28) t	n-Heptacosane (C27)	39.99	64565418	49.443 ug/mLm
29) t	n-Octacosane (C28)	41.16	65477691	49.346 ug/mLm
30) t	n-Nonacosane (C29)	42.29	66892839	49.327 ug/mLm
31) t	n-Triacontane (C30)	43.37	65774127	49.464 ug/mLm
32) t	n-Hentriacontane (C31)	44.43	66681661	51.825 ug/mLm
33) t	n-Dotriacontane (C32)	45.45	64174665	49.442 ug/mLm
34) t	n-Tritriacontane (C33)	46.44	65514526	49.942 ug/mLm
35) t	n-tetratriacontane (C34)	47.43	66193232	49.675 ug/mLm
36) t	n-Pentatriacontane (C35)	48.52f	63907992	49.861 ug/mLm
37) t	n-Hexatriacontane (C36)	49.77f	65720134	49.776 ug/mLm
38) t	n-Heptatriacontane (C37)	51.21f	67669373	47.757 ug/mLm
39) t	n-Octatriacontane (C38)	52.89f	66288128	49.748 ug/mLm
41) t	n-Tetracontane (C40)	57.15f	66343919	50.191 ug/mLm

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

```
File        :O:\Forensics\Data\PAH1\February06\FEB08.SEC\P18148.D
Operator    : AC
Acquired    : 12 Feb 2006  12:35 am using AcqMethod FRNC1D.M
Instrument  :   PAH-1
Sample Name: C1021003-AFID
Misc Info   : ALK STD
Vial Number: 71
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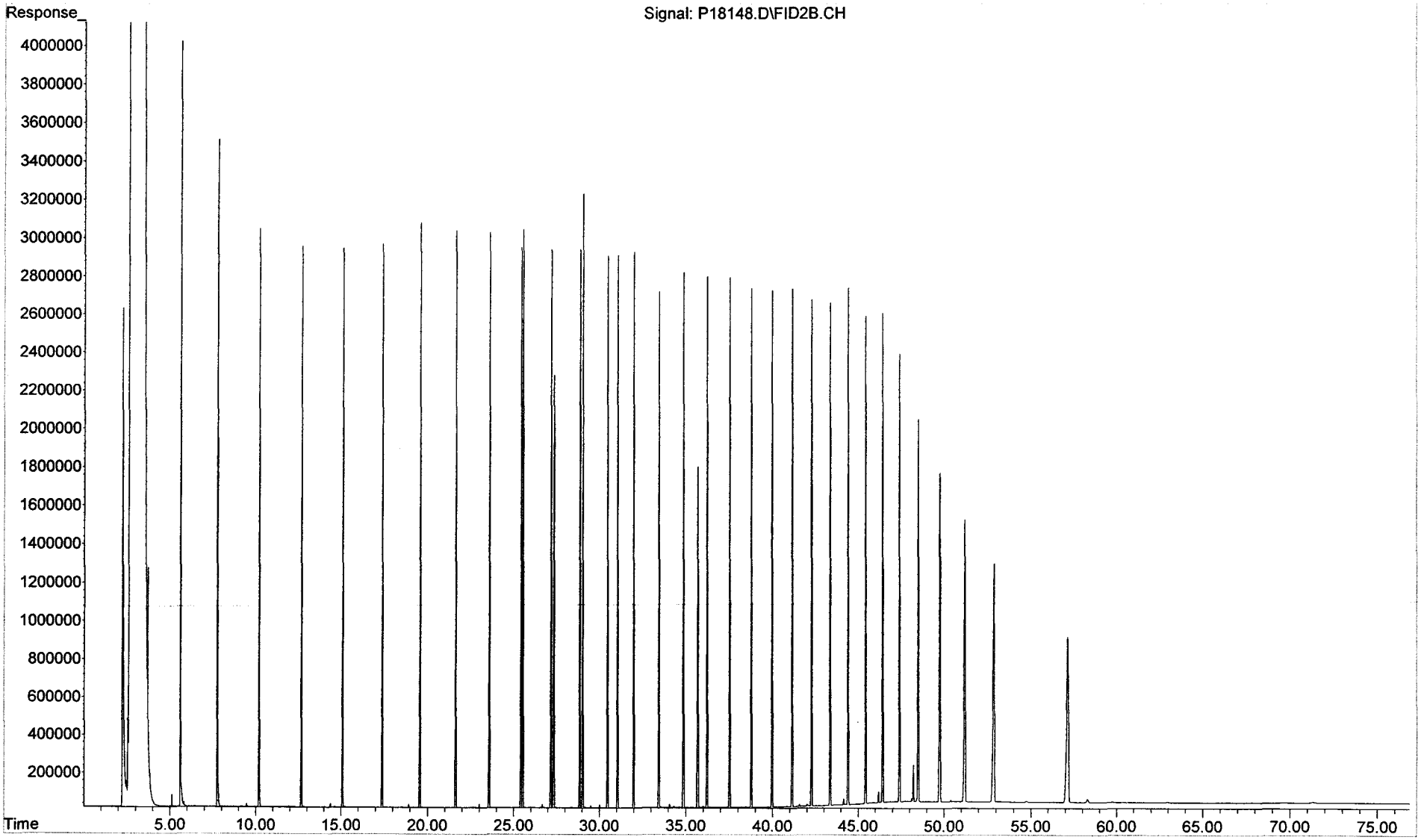


Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1021004**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.64	2.7	25
n-Decane (C10)	50.00	48.49	3.0	25
n-Undecane (C11)	50.00	48.37	3.3	25
n-Dodecane (C12)	50.00	48.82	2.4	25
n-Tridecane (C13)	50.00	48.75	2.5	25
n-Tetradecane (C14)	50.00	48.83	2.3	25
n-Pentadecane (C15)	50.00	48.69	2.6	25
n-Hexadecane (C16)	50.00	48.60	2.8	25
n-Heptadecane (C17)	50.00	48.81	2.4	25
Pristane	50.00	48.89	2.2	25
n-Octadecane (C18)	50.00	48.95	2.1	25
Phytane	50.00	49.32	1.4	25
n-Nonadecane (C19)	50.00	49.12	1.8	25
n-Eicosane (C20)	50.00	49.49	1.0	25
n-Heneicosane (C21)	50.00	49.12	1.8	25
n-Docosane (C22)	50.00	50.18	0.4	25
n-Tricosane (C23)	50.00	49.24	1.5	25
n-Tetracosane (C24)	50.00	48.46	3.1	25
n-Pentacosane (C25)	50.00	48.32	3.4	25
n-Hexacosane (C26)	50.00	49.83	0.3	25
n-Heptacosane (C27)	50.00	49.37	1.3	25
n-Octacosane (C28)	50.00	49.28	1.4	25
n-Nonacosane (C29)	50.00	49.20	1.6	25
n-Triacontane (C30)	50.00	49.38	1.2	25
n-Hentriacontane (C31)	50.00	51.74	3.5	25
n-Dotriacontane (C32)	50.00	49.25	1.5	25
n-Tritriacontane (C33)	50.00	49.76	0.5	25
n-Tetratriacontane (C34)	50.00	49.55	0.9	25
n-Pentatriacontane (C35)	50.00	49.72	0.6	25
n-Hexatriacontane (C36)	50.00	49.62	0.8	25
n-Heptatriacontane (C37)	50.00	47.58	4.8	25
n-Octatriacontane (C38)	50.00	49.61	0.8	25
n-Tetracontane (C40)	50.00	50.19	0.4	25
ortho-Terphenyl	50.00	48.64	2.7	25
d50-Tetracosane	50.00	45.73	8.5	25

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

N/A - Not Applicable

02/17/06 19:00

Quantitation Report (QT Reviewed)

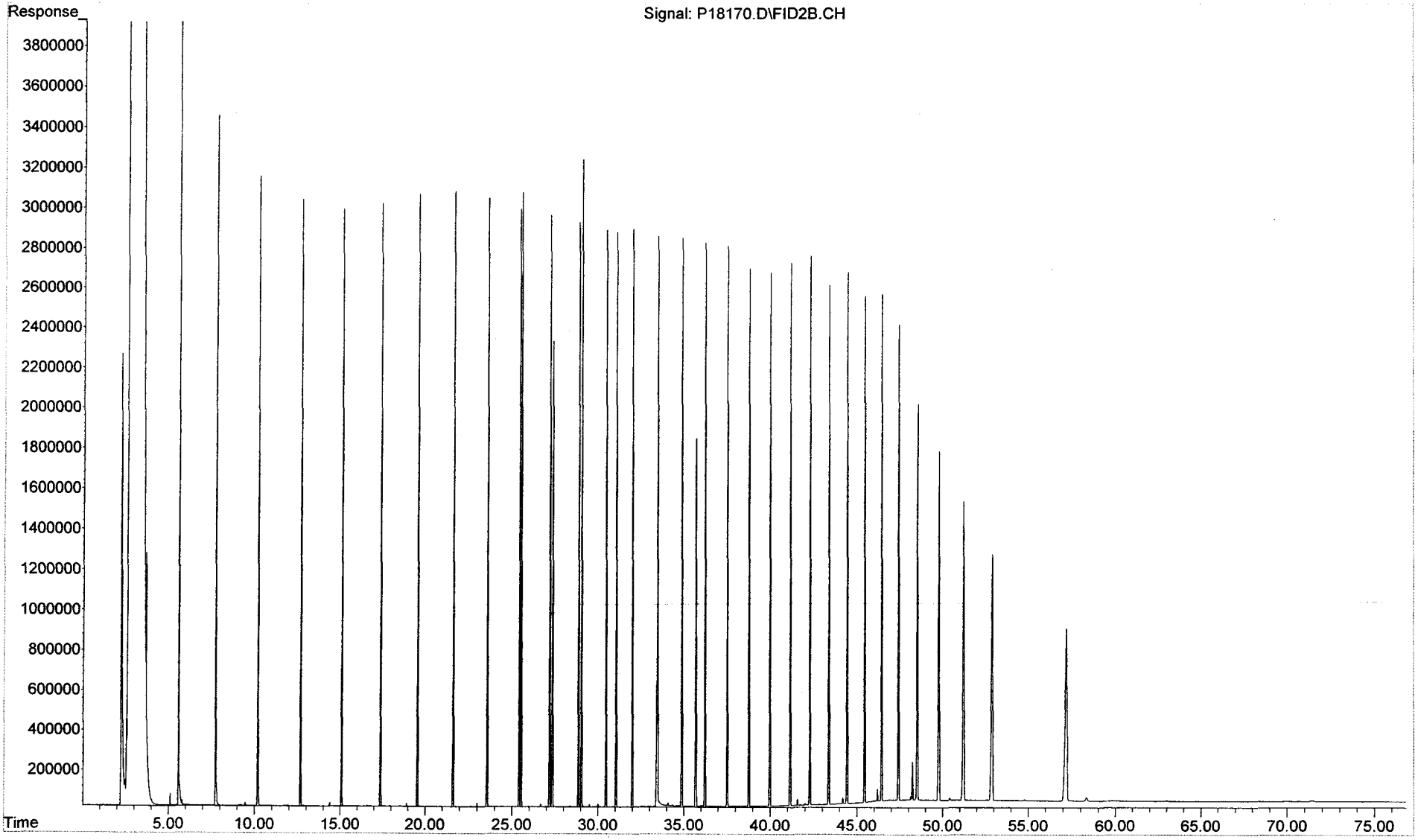
Data Path : O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\
Data File : P18170.D
Signal(s) : FID2B.CH
Acq On : 12 Feb 2006 5:56 pm
Operator : AC
Sample : C1021004-AFID
Misc : ALK STD
ALS Vial : 82 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 14 11:38:42 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	64644452	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.05	68160631	48.645 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 97.29%
24) s	d50-Tetracosane	35.70	57427357	45.729 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.46%
Target Compounds				
2) t	n-Octane (C8)	5.59	51982482	49.874 ug/mLm
3) t	n-Nonane (C9)	7.74	55904535	48.644 ug/mLm
4) t	n-Decane (C10)	10.19	57126397	48.485 ug/mLm
5) t	n-Undecane (C11)	12.68	57710051	48.372 ug/mLm
6) t	n-Dodecane (C12)	15.09	59344376	48.817 ug/mLm
7) t	n-Tridecane (C13)	17.39	60042118	48.752 ug/mLm
9) t	n-Tetradecane (C14)	19.57	61114775	48.833 ug/mLm
11) t	n-Pentadecane (C15)	21.63	61697072	48.694 ug/mLm
12) t	n-Hexadecane (C16)	23.58	62154363	48.598 ug/mLm
14) t	n-Heptadecane (C17)	25.44	63201841	48.809 ug/mLm
15) t	Pristane	25.55	60481117	48.890 ug/mLm
16) t	n-Octadecane (C18)	27.20	63550526	48.947 ug/mLm
17) t	Phytane	27.36	63473897	49.316 ug/mLm
18) t	n-Nonadecane (C19)	28.88	63370364	49.121 ug/mLm
20) t	n-Eicosane (C20)	30.48	63655473	49.487 ug/mLm
21) t	n-Heneicosane (C21)	32.01	65200933	49.120 ug/mLm
22) t	n-Docosane (C22)	33.48	65778469	50.182 ug/mLm
23) t	n-Tricosane (C23)	34.89	64990293	49.240 ug/mLm
25) t	n-Tetracosane (C24)	36.24	64748977	48.464 ug/mLm
26) t	n-Pentacosane (C25)	37.54	65153143	48.324 ug/mLm
27) t	n-Hexacosane (C26)	38.79	65618504	49.833 ug/mLm
28) t	n-Heptacosane (C27)	40.00	64776685	49.373 ug/mLm
29) t	n-Octacosane (C28)	41.17	65695994	49.279 ug/mLm
30) t	n-Nonacosane (C29)	42.30	67037078	49.203 ug/mLm
31) t	n-Triacontane (C30)	43.39	65967912	49.377 ug/mLm
32) t	n-Hentriacontane (C31)	44.44	66889889	51.744 ug/mLm
33) t	n-Dotriacontane (C32)	45.46	64220268	49.245 ug/mLm
34) t	n-Tritriacontane (C33)	46.46	65583842	49.761 ug/mLm
35) t	n-tetratriacontane (C34)	47.44	66332612	49.547 ug/mLm
36) t	n-Pentatriacontane (C35)	48.54	64030942	49.723 ug/mLm
37) t	n-Hexatriacontane (C36)	49.80f	65826227	49.623 ug/mLm
38) t	n-Heptatriacontane (C37)	51.24f	67728314	47.575 ug/mLm
39) t	n-Octatriacontane (C38)	52.92f	66412088	49.608 ug/mLm
41) t	n-Tetracontane (C40)	57.20f	66648872	50.186 ug/mLm

File :O:\FORENSICS\DATA\PAH1\FEBRUARY06\FEB08.SEC\P18170.D
Operator : AC
Acquired : 12 Feb 2006 5:56 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021004-AFID
Misc Info : ALK STD
Vial Number: 82



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: **0602004**
Lab ID: **C1021301**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	46.88	6.2	25
n-Decane (C10)	50.00	48.02	4.0	25
n-Undecane (C11)	50.00	48.20	3.6	25
n-Dodecane (C12)	50.00	48.79	2.4	25
n-Tridecane (C13)	50.00	48.75	2.5	25
n-Tetradecane (C14)	50.00	48.86	2.3	25
n-Pentadecane (C15)	50.00	48.70	2.6	25
n-Hexadecane (C16)	50.00	48.63	2.7	25
n-Heptadecane (C17)	50.00	48.83	2.3	25
Pristane	50.00	48.91	2.2	25
n-Octadecane (C18)	50.00	48.97	2.1	25
Phytane	50.00	49.32	1.4	25
n-Nonadecane (C19)	50.00	49.13	1.7	25
n-Eicosane (C20)	50.00	49.48	1.0	25
n-Heneicosane (C21)	50.00	49.09	1.8	25
n-Docosane (C22)	50.00	49.08	1.8	25
n-Tricosane (C23)	50.00	49.21	1.6	25
n-Tetracosane (C24)	50.00	48.44	3.1	25
n-Pentacosane (C25)	50.00	48.30	3.4	25
n-Hexacosane (C26)	50.00	49.80	0.4	25
n-Heptacosane (C27)	50.00	49.38	1.2	25
n-Octacosane (C28)	50.00	49.30	1.4	25
n-Nonacosane (C29)	50.00	49.25	1.5	25
n-Triacontane (C30)	50.00	49.41	1.2	25
n-Hentriacontane (C31)	50.00	51.79	3.6	25
n-Dotriacontane (C32)	50.00	49.33	1.3	25
n-Tritriacontane (C33)	50.00	49.90	0.2	25
n-Tetratriacontane (C34)	50.00	49.66	0.7	25
n-Pentatriacontane (C35)	50.00	49.82	0.4	25
n-Hexatriacontane (C36)	50.00	49.73	0.5	25
n-Heptatriacontane (C37)	50.00	47.70	4.6	25
n-Octatriacontane (C38)	50.00	49.72	0.6	25
n-Tetracontane (C40)	50.00	50.08	0.2	25
ortho-Terphenyl	50.00	48.68	2.6	25
d50-Tetracosane	50.00	45.68	8.6	25

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

N/A - Not Applicable

02/17/06 19:00

Quantitation Report (QT Reviewed)

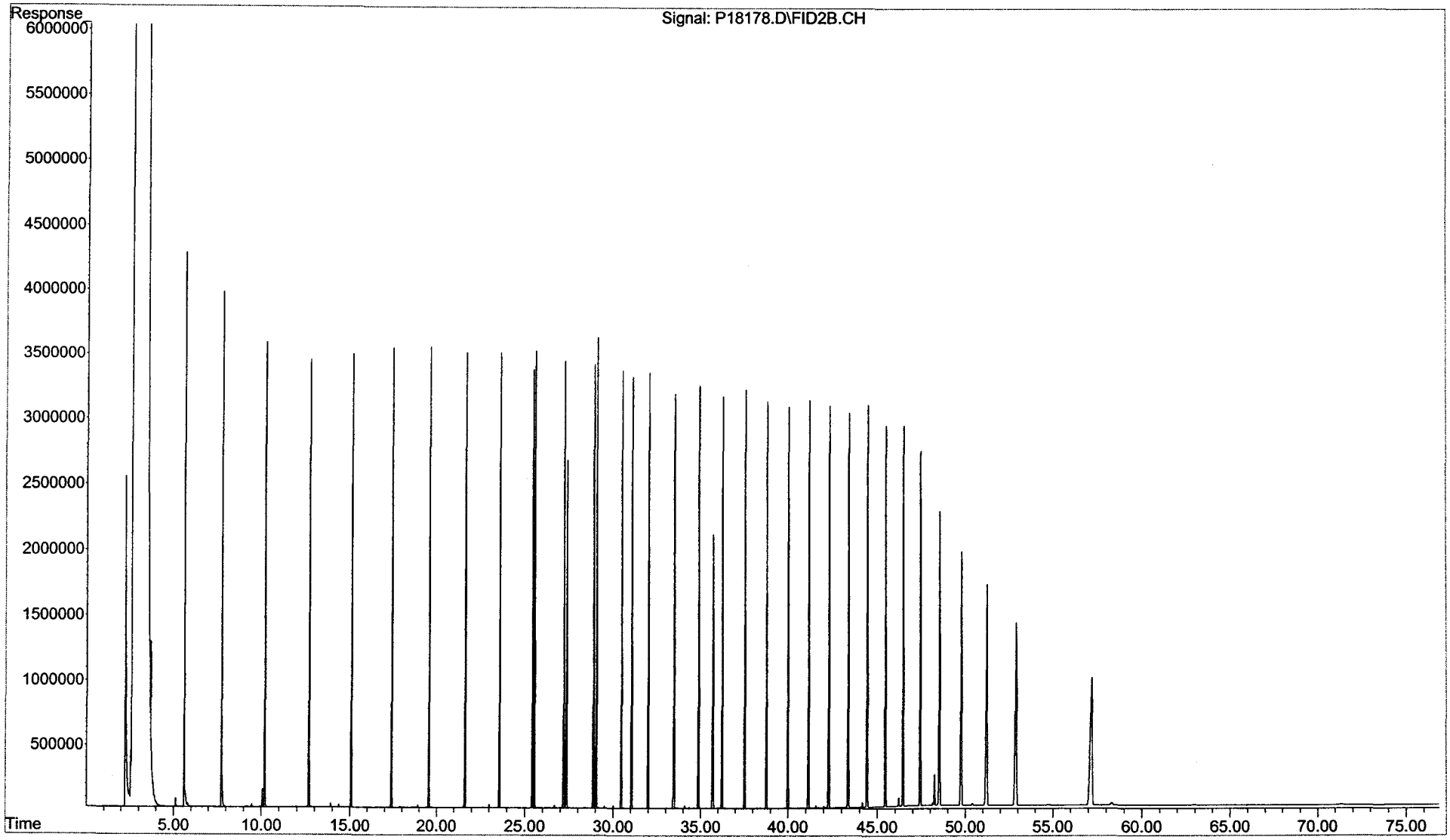
Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18178.D
Signal(s) : FID2B.CH
Acq On : 13 Feb 2006 3:24 pm
Operator : AC
Sample : C1021301-AFID
Misc : ALK STD
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 15 07:35:07 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	31.06	77484927	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.05	81761026	48.682 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	97.36%
24) s	d50-Tetracosane	35.70	68767017	45.684 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	91.37%
Target Compounds				
2) t	n-Octane (C8)	5.59	57216957	45.799 ug/mLm
3) t	n-Nonane (C9)	7.74	64579021	46.880 ug/mLm
4) t	n-Decane (C10)	10.19	67812045	48.017 ug/mLm
5) t	n-Undecane (C11)	12.68	68926885	48.199 ug/mLm
6) t	n-Dodecane (C12)	15.10	71089391	48.788 ug/mLm
7) t	n-Tridecane (C13)	17.39	71969900	48.753 ug/mLm
9) t	n-Tetradecane (C14)	19.57	73295461	48.861 ug/mLm
11) t	n-Pentadecane (C15)	21.63	73966075	48.703 ug/mLm
12) t	n-Hexadecane (C16)	23.58	74551089	48.631 ug/mLm
14) t	n-Heptadecane (C17)	25.43	75791350	48.832 ug/mLm
15) t	Pristane	25.55	72520683	48.908 ug/mLm
16) t	n-Octadecane (C18)	27.20	76206061	48.968 ug/mLm
17) t	Phytane	27.36	76094970	49.325 ug/mLm
18) t	n-Nonadecane (C19)	28.88	75965898	49.126 ug/mLm
20) t	n-Eicosane (C20)	30.48	76287267	49.479 ug/mLm
21) t	n-Heneicosane (C21)	32.01	78106949	49.092 ug/mLm
22) t	n-Docosane (C22)	33.48	77118185	49.084 ug/mLm
23) t	n-Tricosane (C23)	34.89	77852608	49.210 ug/mLm
25) t	n-Tetracosane (C24)	36.24	77573294	48.441 ug/mLm
26) t	n-Pentacosane (C25)	37.54	78048035	48.295 ug/mLm
27) t	n-Hexacosane (C26)	38.79	78607373	49.804 ug/mLm
28) t	n-Heptacosane (C27)	40.00	77653846	49.380 ug/mLm
29) t	n-Octacosane (C28)	41.16	78771108	49.295 ug/mLm
30) t	n-Nonacosane (C29)	42.29	80426892	49.248 ug/mLm
31) t	n-Triacontane (C30)	43.38	79115569	49.405 ug/mLm
32) t	n-Hentriacontane (C31)	44.43	80253335	51.794 ug/mLm
33) t	n-Dotriacontane (C32)	45.46	77115071	49.334 ug/mLm
34) t	n-Tritriacontane (C33)	46.45	78836187	49.904 ug/mLm
35) t	n-tetratriacontane (C34)	47.44	79685715	49.657 ug/mLm
36) t	n-Pentatriacontane (C35)	48.53	76897041	49.818 ug/mLm
37) t	n-Hexatriacontane (C36)	49.79f	79067299	49.727 ug/mLm
38) t	n-Heptatriacontane (C37)	51.23f	81395531	47.701 ug/mLm
39) t	n-Octatriacontane (C38)	52.91f	79789225	49.723 ug/mLm
41) t	n-Tetracontane (C40)	57.18f	79725174	50.084 ug/mLm

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18178.D
Operator : AC
Acquired : 13 Feb 2006 3:24 pm using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021301-AFID
Misc Info : ALK STD
Vial Number: 52



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0602004**
Lab ID: **C1021302**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	48.25	3.5	25
n-Decane (C10)	50.00	48.49	3.0	25
n-Undecane (C11)	50.00	48.43	3.1	25
n-Dodecane (C12)	50.00	48.96	2.1	25
n-Tridecane (C13)	50.00	48.84	2.3	25
n-Tetradecane (C14)	50.00	48.93	2.1	25
n-Pentadecane (C15)	50.00	48.71	2.6	25
n-Hexadecane (C16)	50.00	48.57	2.9	25
n-Heptadecane (C17)	50.00	48.72	2.6	25
Pristane	50.00	48.79	2.4	25
n-Octadecane (C18)	50.00	48.81	2.4	25
Phytane	50.00	49.17	1.7	25
n-Nonadecane (C19)	50.00	48.94	2.1	25
n-Eicosane (C20)	50.00	49.26	1.5	25
n-Heneicosane (C21)	50.00	48.85	2.3	25
n-Docosane (C22)	50.00	48.58	2.8	25
n-Tricosane (C23)	50.00	48.96	2.1	25
n-Tetracosane (C24)	50.00	48.17	3.7	25
n-Pentacosane (C25)	50.00	48.04	3.9	25
n-Hexacosane (C26)	50.00	49.54	0.9	25
n-Heptacosane (C27)	50.00	49.11	1.8	25
n-Octacosane (C28)	50.00	49.03	1.9	25
n-Nonacosane (C29)	50.00	48.95	2.1	25
n-Triacontane (C30)	50.00	49.13	1.7	25
n-Hentriacontane (C31)	50.00	51.45	2.9	25
n-Dotriacontane (C32)	50.00	49.02	2.0	25
n-Tritriacontane (C33)	50.00	49.59	0.8	25
n-Tetratriacontane (C34)	50.00	49.32	1.4	25
n-Pentatriacontane (C35)	50.00	49.46	1.1	25
n-Hexatriacontane (C36)	50.00	49.58	0.8	25
n-Heptatriacontane (C37)	50.00	47.38	5.2	25
n-Octatriacontane (C38)	50.00	49.39	1.2	25
n-Tetracontane (C40)	50.00	49.65	0.7	25
ortho-Terphenyl	50.00	48.60	2.8	25
d50-Tetracosane	50.00	45.43	9.1	25

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

N/A - Not Applicable

02/17/06 19:00

Quantitation Report (QT Reviewed)

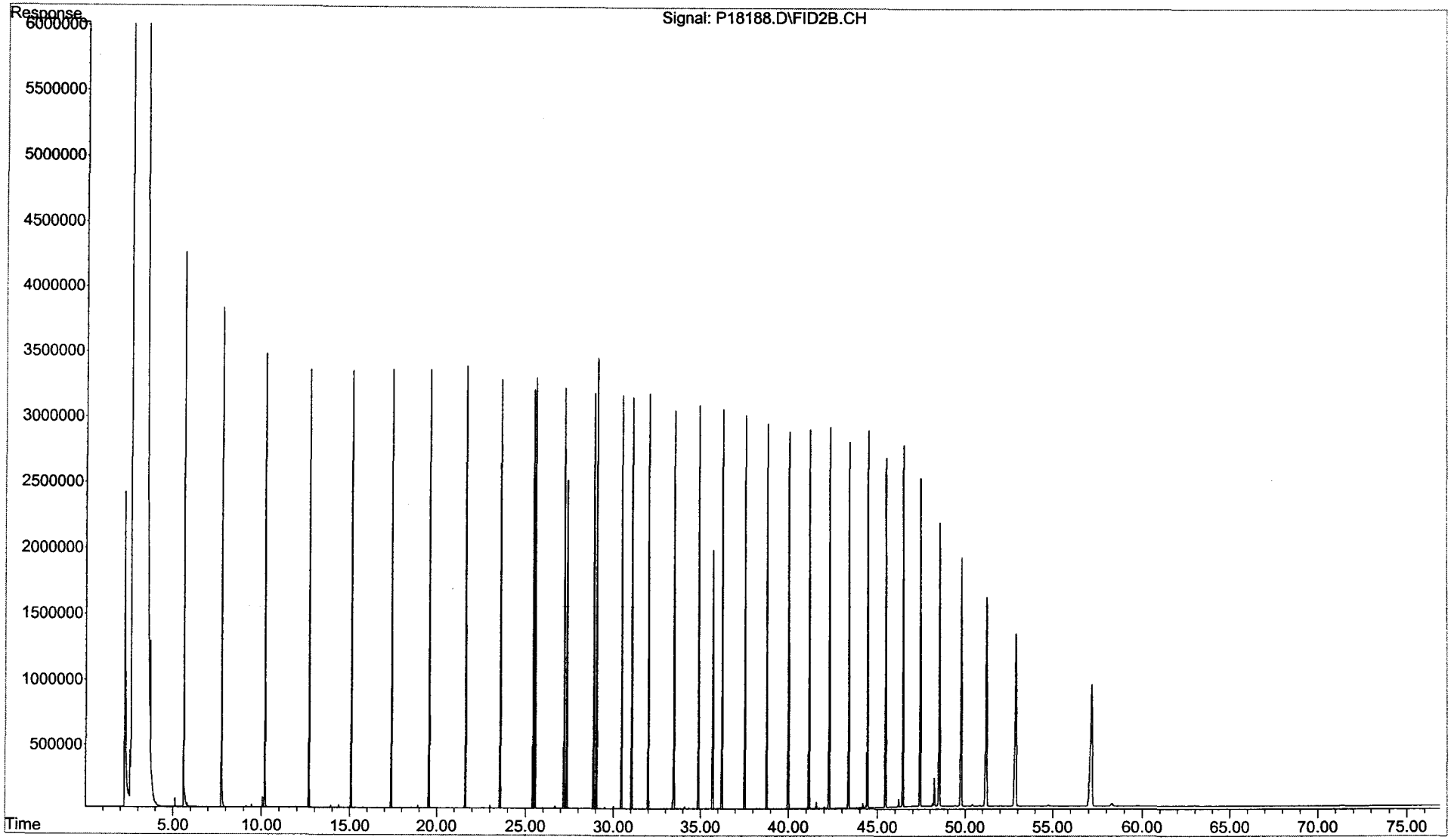
Data Path : O:\Forensics\Data\PAH1\February06\FEB13.SEC\
Data File : P18188.D
Signal(s) : FID2B.CH
Acq On : 14 Feb 2006 12:45 am
Operator : AC
Sample : C1021302-AFID
Misc : ALK STD
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Feb 15 07:45:41 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	31.06	71650599	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.05	75476271	48.599 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	97.20%
24) s	d50-Tetracosane	35.69	63233717	45.429 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	90.86%
	Target Compounds			
2) t	n-Octane (C8)	5.59	55825378	48.324 ug/mLm
3) t	n-Nonane (C9)	7.74	61459347	48.248 ug/mLm
4) t	n-Decane (C10)	10.19	63319584	48.487 ug/mLm
5) t	n-Undecane (C11)	12.68	64039765	48.428 ug/mLm
6) t	n-Dodecane (C12)	15.09	65964109	48.957 ug/mLm
7) t	n-Tridecane (C13)	17.39	66668054	48.839 ug/mLm
9) t	n-Tetradecane (C14)	19.57	67877274	48.933 ug/mLm
11) t	n-Pentadecane (C15)	21.63	68407872	48.711 ug/mLm
12) t	n-Hexadecane (C16)	23.58	68854630	48.572 ug/mLm
14) t	n-Heptadecane (C17)	25.43	69928570	48.723 ug/mLm
15) t	Pristane	25.54	66900465	48.791 ug/mLm
16) t	n-Octadecane (C18)	27.19	70247487	48.814 ug/mLm
17) t	Phytane	27.36	70151595	49.175 ug/mLm
18) t	n-Nonadecane (C19)	28.88	69972679	48.935 ug/mLm
20) t	n-Eicosane (C20)	30.47	70233885	49.262 ug/mLm
21) t	n-Heneicosane (C21)	32.01	71871211	48.851 ug/mLm
22) t	n-Docosane (C22)	33.47	70575221	48.577 ug/mLm
23) t	n-Tricosane (C23)	34.88	71622511	48.958 ug/mLm
25) t	n-Tetracosane (C24)	36.23	71332586	48.171 ug/mLm
26) t	n-Pentacosane (C25)	37.53	71783034	48.036 ug/mLm
27) t	n-Hexacosane (C26)	38.79	72302824	49.540 ug/mLm
28) t	n-Heptacosane (C27)	39.99	71410952	49.107 ug/mLm
29) t	n-Octacosane (C28)	41.16	72445051	49.028 ug/mLm
30) t	n-Nonacosane (C29)	42.29	73927267	48.954 ug/mLm
31) t	n-Triacontane (C30)	43.38	72750855	49.130 ug/mLm
32) t	n-Hentriacontane (C31)	44.43	73712376	51.446 ug/mLm
33) t	n-Dotriacontane (C32)	45.45	70853873	49.019 ug/mLm
34) t	n-Tritriacontane (C33)	46.44	72434724	49.585 ug/mLm
35) t	n-tetratriacontane (C34)	47.43	73187352	49.322 ug/mLm
36) t	n-Pentatriacontane (C35)	48.53f	70589204	49.456 ug/mLm
37) t	n-Hexatriacontane (C36)	49.78f	72901092	49.583 ug/mLm
38) t	n-Heptatriacontane (C37)	51.22f	74763791	47.382 ug/mLm
39) t	n-Octatriacontane (C38)	52.89f	73289913	49.392 ug/mLm
41) t	n-Tetracontane (C40)	57.16f	73085563	49.651 ug/mLm

File :O:\Forensics\Data\PAH1\February06\FEB13.SEC\P18188.D
Operator : AC
Acquired : 14 Feb 2006 12:45 am using AcqMethod FRNC1D.M
Instrument : PAH-1
Sample Name: C1021302-AFID
Misc Info : ALK STD
Vial Number: 57



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 2 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0602004

Sample ID	Date	Time	Matrix	Environmental Forensics (Includes Lead-210, Cesium 137, EPA 8015 Modified GC/FID Hydrocarbon Fingerprint, 8270 Modified GC/MS/SIM Extended PAH and Biomarkers)
GC-SED-98 (1-2) -1	1/27/2006	16:05	Sediment	☑
GC-SED-58C (8-10) -2	1/27/2006	14:20	Sediment	☑
GC-SED-103 (8.1-9.1) -3	1/28/2006	17:25	Sediment	☑
GC-SED-102 (6.5-8.5)	1/28/2006	15:45	Sediment	☑ (Sample Not received) EMP 2/1/06
GC-SED-102 (2-4) -4	1/28/2006	16:05	Sediment	☑
GC-SED-101 (7.9-9.1) -5	1/28/2006	13:05	Sediment	☑
GC-SED-100 (5-6) -6	1/28/2006	12:10	Sediment	☑
GC-SED-97 (8.5-9.0) -7	1/28/2006	10:50	Sediment	☑
GC-SED-74 (5.3-6.3) -8	1/29/2006	17:30	Sediment	☑

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable
☐ Skin Irritant ☒ Unknown

Turn Around Time Required (other than standard):

QC Requirements:

	Date	Time		Date	Time
1. Relinquished by: Melissa Hetter	1/31/06	1800	1. Received by: Fed Ex		
2. Relinquished by: Fed Ex	2/1/06	0850	2. Received by: [signature]	2/1/06	0850
3. Relinquished by:			3. Received by:		

COMMENTS: Fed Ex # 8544 0600 2997

ORIGINAL

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 2 of 2 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0602004

Sample ID	Date	Time	Matrix	Environmental Forensics (Includes Lead-210, Cesium 137, EPA 8015 Modified GC/FID Hydrocarbon Fingerprint, 8270 Modified GC/MS/SIM Extended PAH and Biomarkers)
GC-SED-73E (3.8-4.8) -9	1/29/2006	18:00	Sediment	☑
GC-SED-70B (4-5) -10	1/29/2006	14:00	Sediment	☑
GC-SED-83 (0-2) -11	1/30/2006	17:15	Sediment	☑
GC-SED-82 (12-12.8) -12	1/30/2006	16:40	Sediment	☑
GC-SED-77 (14.5-15.4) -13	1/30/2006	15:50	Sediment	☑

GC-SED-71C (1.5-2.5) 1/29/06 15:00 (Sample received - Not listed on coc)
DMP 2/1/06

Possible Hazard Identification	Turn Around Time Required (other than standard):			
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☒ Unknown	QC Requirements:			
	Date	Time		Date / Time
1. Relinquished by: Melissa Fetter	1/31/06	1800	1. Received by: Fed Ex	
2. Relinquished by: Fed Ex	2/1/06	0850	2. Received by: [signature]	2/1/06 0850
3. Relinquished by:			3. Received by:	

COMMENTS Fed Ex # 8544 0600 2997

ORIGINAL

Page 56 of 58

Sample Receipt Checklist

Client: NENFE		**Receipt Date:** 2/1/06	
Project: GOWANUS Canal		**Log-in Date:**	
ETR #: 0602004		**Inspection by:** NR	**Login by:** NR

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

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

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

Number of coolers received for this project delivery: 1

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

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

Cooler 1:
Temperature(s) taken from: 6 IR Gun, _____ Temp. Blank, / NA

Were samples received on ice? (Yes) / No

Chain-of-Custody present? (Yes) / No
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)
Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) / No If No, list samples: →

Discrepancy between samples rec'd & COC ? (Yes) / No If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / (NA)

Project Manager Acknowledgement: DMP Date: 2/1/06

Sample storage refrigerator #: C1

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____
Cooler 4:_____ Cooler 5:_____
Cooler 6:_____ Cooler 7:_____

More:_____

DID NOT receive:
GC-SED-102 (6.5-8.5)

Rec'd but not on COC
GC-SED-71C (1.5-2.5)
1/29/06 1500

Chemical preservation OK for ALL samples?
Yes / No / (N/A)

If No, list samples below:

notified NEWFIE

Please use back for any additional notes!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

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

te 1-31-06 FedEx Tracking Number 854406002997

nder's me Melissa Felter Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST Dept./Floor/Suite/Room

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