ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0512105
Report Date:	January 24, 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: **0512105**

Lab Sample ID	Client Sample ID
0512105-01	GC-SED-90B (6.5-7)
0512105-02	GC-SED-89 (12.8-13.8)
0512105-03	GC-SED-88 (15.9-16.9)
0512105-04	GC-SED-96 (14-15)
0512105-05	GC-SED-95 (3.5-4.5)
0512105-06	GC-SED-86 (0-1)
0512105-07	GC-SED-84 (6-7)
0512105-08	GC-SED-87 (4.4-6.2)

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Certificate Program Summary

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

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

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

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

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

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

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

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

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

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

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

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

CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0512105
Project: Gowanus Canal

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

Alkylated Polynuclear Aromatic Hydrocarbons
Steranes and Triterpanes

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

1. The sediment method blank SS122105B14 contained low-level target compounds detected below the reporting limit. Associated field sample results would be flagged with "B" qualifiers if the concentration of the analyte in the sample is less than 5X the concentration in the blank.

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

3. Samples GC-SED-90B (6.5-7) (0512105-01) and GC-SED-89 (12.8-13.8) (0512105-02) recovered the surrogate 2-Methylnaphthalene-d10 above the 130% QC limit at 151% and 137% respectively potentially due to the high concentration of compound 2-Methylnaphthalene in the sample causing matrix co-elution. Please note that the diluted analyses of these two samples exhibited acceptable recoveries for this surrogate.

4. The continuing calibration verification analyzed on 12/31/05 (C4123003) had Benzo(g,h,i)perylene above the 25%D QC limit, at 25.0%. This analyte was less 35%D, and represents less than 10% of the total analytes, thus analysis proceeded.

Total Petroleum Hydrocarbons by GC/FID

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

1. All quality control parameters met the specified criteria.

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

Approved by: Elizabeth Porta Title: QA Manager Date: 1/24/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512105STBIO - 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
0512105-01	SAM	Shaker	KLA	12/21/05	12/29/05		5.77	38.5	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-02	SAM	Shaker	KLA	12/21/05	12/29/05		5.49	51.3282	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-03	SAM	Shaker	KLA	12/21/05	12/29/05		5.02	17.1094	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-04	SAM	Shaker	KLA	12/21/05	12/29/05		5.33	17.1094	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-05	SAM	Shaker	KLA	12/21/05	12/29/05		5.19	25.9974	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-06	SAM	Shaker	KLA	12/21/05	12/29/05		5.1	40.8551	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-07	SAM	Shaker	KLA	12/21/05	12/29/05		5.57	17.1094	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-08	D	Shaker	KLA	12/21/05	12/29/05		5.53	35.75	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
0512105-08	SAM	Shaker	KLA	12/21/05	12/29/05		5.13	31.7746	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
SS122105B14	B	Shaker	KLA	12/21/05	12/29/05		30	2	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
SS122105LCS11	LCS	Shaker	KLA	12/21/05	12/29/05		30	2	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	
SS122105LCSD11	LCSD	Shaker	KLA	12/21/05	12/29/05		30	2	False	KLA	12/28/05	KD Flask	0.15	DMP	12/29/05	

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512105STBIO - OP NEWFIE

Lab ID	Notes
0512105-01	1st Prep
0512105-02	1st Prep
0512105-03	1st Prep
0512105-04	1st Prep
0512105-05	1st Prep
0512105-06	1st Prep
0512105-07	1st Prep
0512105-08	1st Prep
0512105-08	1st Prep
SS122105B14	1st Prep
SS122105LCS11	1st Prep
SS122105LCSD11	1st Prep

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512105STBIO - 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
0512105-01	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.77	5.55	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-02	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.49	7.4	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-03	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.02	2.22	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-04	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.33	2.22	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-05	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.19	11.09	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-06	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.1	14.3	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-07	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.57	2.22	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-08	D	Shaker	KLA	12/21/2005	1/6/2006		5.53	14.3	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
0512105-08	SAM	Shaker	KLA	12/21/2005	1/6/2006		5.13	11.44	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
SS010606AWS01	AWS						0.05096	10								
SS122105B14	B	Shaker	KLA	12/21/2005	1/6/2006		30	2	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
SS122105LCS11	LCS	Shaker	KLA	12/21/2005	1/6/2006		30	2	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	
SS122105LCSD11	LCSD	Shaker	KLA	12/21/2005	1/6/2006		30	2	True	KLA	12/28/2005	KD Flask	0.15	DMP	1/5/2006	

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512105STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512105-01	1st Prep
0512105-02	1st Prep
0512105-03	1st Prep
0512105-04	1st Prep
0512105-05	1st Prep
0512105-06	1st Prep
0512105-07	1st Prep
0512105-08	1st Prep
0512105-08	1st Prep
SS010606AWS01	1st Prep
SS122105B14	1st Prep
SS122105LCS11	1st Prep
SS122105LCSD11	1st Prep

Alpha Woods Hole Lab
Batch Weight Report
12/21/2005

Lab ID	QC Type	0512105STBIO - Sample
0512105-01	SAM	5.77
0512105-02	SAM	5.49
0512105-03	SAM	5.02
0512105-04	SAM	5.33
0512105-05	SAM	5.19
0512105-06	SAM	5.1
0512105-07	SAM	5.57
0512105-08	D	5.53
0512105-08	SAM	5.13
SS122105B14	B	30
SS122105LCS11LCS	OP NEWFIE	30
SS122105LCS11LCS	OP SHC	30
SS122105LCS11LCS	OP Steranes/Triterpanes	30
SS122105LCSD11LCS	SD NEWFIE	30
SS122105LCSD11LCS	SD SHC	30
SS122105LCSD11LCS	SD Steranes/Triterpanes	30

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

Alpha Woods Hole Lab
Batch Prep Spike Report

12/21/2005 0512105STBIO - OP NEWFIE Analyst: DMP Witness: NLJr

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
0512105-01	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-02	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-03	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-04	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-05	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-06	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-07	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512105-08	D	WHAC11	200	µl	WHAC04	200	µl			
0512105-08	SAM	WHAC11	200	µl	WHAC04	200	µl			
SS122105B14	B	WHAB63	100	µl	WHAB15	200	µl			
SS122105LCS11	LCS	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl
SS122105LCSD11	LCSD	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl

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

Test: PAH/SHC
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other High
ID# WHAC11
Conc. 100/500 ug/ml

Test: BIOMARKERS
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other High
ID# WHAC04
Conc. 100ug/ml

Test: Biomarker
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other Low
ID# WHAB15
Conc. 10 ug/ml

Test: PAH/SHC
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other
ID# WHAB85
Conc. 10ug/ml 500ug/ml

Gravimetric Determination for Column

Analyst: DMP
Date: 12/1/05

BATCH: 0512105

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.243	N/A	48.60	N/A	N/A	N/A	97%
0512105	01		10000	50	N/A	1.095	N/A	219.00	400	8.76	25.00	
0512105	02		10000	50	N/A	1.404	N/A	280.80	300	8.42	33.33	
0512105	03		10000	50	N/A	0.461	N/A	92.20	900	8.30	11.11	
0512105	04		10000	50	N/A	0.497	N/A	99.40	900	8.95	11.11	
0512105	05		10000	50	N/A	0.807	N/A	161.40	550	8.88	18.18	
0512105	06		10000	50	N/A	1.187	N/A	237.40	350	8.31	28.57	
0512105	07		10000	50	N/A	0.470	N/A	94.00	900	8.46	11.11	
0512105	08	D	10000	50	N/A	1.103	N/A	220.60	400	8.82	25.00	17%
0512105	08		10000	50	N/A	0.930	N/A	186.00	450	8.37	22.22	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight

2nd CV, 1/20/06

Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)

LCS TV = 5 mg/mL

Oil to Column = Total Extract Oil Weight (mg) / Dilution Factor

Dilution Factor = Final Volumne of Extract (ul) / Volume Removed For Column (ul)

TEMPLATE: GravimetricT.XLT

Duplicates should agree within +/- 10%.

Gravimetric Determination for Column

Analyst: DMP
Date: 12-27-05

BATCH: 0512105

Entered by: DMP
Verified by: ——

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.243	N/A					0%
0512105	01		10000	50	N/A	1.095	N/A					
0512105	02		10000	50	N/A	1.404	N/A					
0512105	03		10000	50	N/A	0.461	N/A					
0512105	04		10000	50	N/A	0.497	N/A					
0512105	05		10000	50	N/A	0.807	N/A					
0512105	06		10000	50	N/A	1.187	N/A					
0512105	07		10000	50	N/A	0.470	N/A					
0512105	08	D	10000	50	N/A	1.103	N/A					#VALUE!
0512105	08		10000	50	N/A	0.930	N/A					

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

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

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

Alpha Woods Hole Lab
Batch Clean Up Report

12/21/2005 0512105STBIO - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512105-01	SAM	3660B	DMP	12/29/05										0.15
0512105-02	SAM	3660B	DMP	12/29/05										0.15
0512105-03	SAM	3660B	DMP	12/29/05										0.15
0512105-04	SAM	3660B	DMP	12/29/05										0.15
0512105-05	SAM	3660B	DMP	12/29/05										0.15
0512105-06	SAM	3660B	DMP	12/29/05										0.15
0512105-07	SAM	3660B	DMP	12/29/05										0.15
0512105-08	D	3660B	DMP	12/29/05										0.15
0512105-08	SAM	3660B	DMP	12/29/05										0.15
SS122105B14	B	3660B	DMP	12/29/05										0.15
SS122105LCS11	LCS	3660B	DMP	12/29/05										0.15
SS122105LCSD11	LCSD	3660B	DMP	12/29/05										0.15

Alpha Woods Hole Lab
Batch Clean Up Report

12/21/2005 0512105STBIO - OP NEWFIE

Lab ID	Notes
0512105-01	
0512105-02	
0512105-03	
0512105-04	
0512105-05	
0512105-06	
0512105-07	
0512105-08	
0512105-08	
SS122105B14	
SS122105LCS11	
SS122105LCSD11	

Alpha Woods Hole Lab
Batch Clean Up Report
12/21/2005 0512105STBIO - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction ation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512105-01	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.4	0	0.15
0512105-02	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.3	0	0.15
0512105-03	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.9	0	0.15
0512105-04	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.9	0	0.15
0512105-05	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.55	0	0.15
0512105-06	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.35	0	0.15
0512105-07	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.9	0	0.15
0512105-08	D	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.4	0	0.15
0512105-08	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.45	0	0.15
SS122105B14	B	3610	DMP	12/29/05				DMP	12/29/05	False	2	1	0	0.15
SS122105LCS11	LCS	3610	DMP	12/29/05				DMP	12/29/05	False	2	1	0	0.15
SS122105LCSD11	LCSD	3610	DMP	12/29/05				DMP	12/29/05	False	2	1	0	0.15

2nd
w
1/20/06

Alpha Woods Hole Lab
Batch Clean Up Report
12/21/2005 0512105STBIO - OP NEWFIE

Lab ID	Notes
0512105-01	
0512105-02	
0512105-03	
0512105-04	
0512105-05	
0512105-06	
0512105-07	
0512105-08	
0512105-08	
SS122105B14	
SS122105LCS11	
SS122105LCSD11	

Gravimetric Determination for Column

Analyst: DMP
Date: 12/29/05

BATCH: 0512105

Entered by: DMP
Verified by: DMP

Post - Column (alumina) a-1/24/06

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.233	N/A	46.60	N/A	N/A	N/A	93%
0512105	01		1000	50	N/A	0.381	N/A	7.62	650	4.95	1.54	
0512105	02		1000	50	N/A	0.389	N/A	7.78	650	5.06	1.54	
0512105	03		1000	50	N/A	0.375	N/A	7.50	650	4.88	1.54	
0512105	04		1000	50	N/A	0.394	N/A	7.88	650	5.12	1.54	
0512105	05		1000	50	N/A	0.326	N/A	6.52	700	4.56	1.43	
0512105	06		1000	50	N/A	0.320	N/A	6.40	700	4.48	1.43	
0512105	07		1000	50	N/A	0.387	N/A	7.74	650	5.03	1.54	
0512105	08	D	1000	50	N/A	0.353	N/A	7.06	700	4.94	1.43	2%
0512105	08		1000	50	N/A	0.347	N/A	6.94	700	4.86	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

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

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

Gravimetric Determination for Column

Analyst: DMP
Date: 12/29/05

BATCH: 0512105

Entered by: DMD
Verified by:

Post-Column Alumina 01/24/06

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (%R, RPD)
		LCS	10000	50	N/A	0.233	N/A					0%
0512105	01		1000	50	N/A	0.381	N/A					
0512105	02		1000	50	N/A	0.389	N/A					
0512105	03		1000	50	N/A	0.375	N/A					
0512105	04		1000	50	N/A	0.394	N/A					
0512105	05		1000	50	N/A	0.326	N/A					
0512105	06		1000	50	N/A	0.320	N/A					
0512105	07		1000	50	N/A	0.387	N/A					
0512105	08	D	1000	50	N/A	0.353	N/A					#VALUE!
0512105	08		1000	50	N/A	0.347	N/A					

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

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

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

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name:GOWANUS CANAL
ETR: 0512105

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added [1] (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512105-01	900	WHAB38#5	100	1000	38.5	DMP	150	5/29/00	12/29/05
0512105-02	900	WHAB38#5	100	1000	51.3282	DMP	150	5/29/00	12/29/05
0512105-03	900	WHAB38#5	100	1000	17.1094	DMP	150	5/29/00	12/29/05
0512105-04	900	WHAB38#5	100	1000	17.1094	DMP	150	5/29/00	12/29/05
0512105-05	900	WHAB38#5	100	1000	25.9974	DMP	150	5/29/00	12/29/05
0512105-06	900	WHAB38#5	100	1000	40.8551	DMP	150	5/29/00	12/29/05
0512105-07	900	WHAB38#5	100	1000	17.1094	DMP	150	5/29/00	12/29/05
0512105-08D	900	WHAB38#5	100	1000	35.75	DMP	150	5/29/00	12/29/05
0512105-08	900	WHAB38#5	100	1000	31.7746	DMP	150	5/29/00	12/29/05
SS122105B14	900	WHAB38#5	100	1000	2	DMP	150	5/29/00	12/29/05
SS122105LCS11	900	WHAB38#5	100	1000	2	DMP	150	5/29/00	12/29/05
SS122105LCSD11	900	WHAB38#5	100	1000	2	DMP	150	5/29/00	12/29/05

[1] Includes Internal Std

Gravimetric Determination for Silica Column

Analyst: DMP
Date: 12/1/05

BATCH: 0512105

Entered by: DMP
Verified by: DMP

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	TGC (C6-C36)
		LCS	10000	50	N/A	0.243	N/A	48.60	N/A	N/A	N/A	97%
0512105	01		10000	50	N/A	1.095	N/A	219.00	2000	43.80	5.00	
0512105	02		10000	50	N/A	1.404	N/A	280.80	1500	42.12	6.67	
0512105	03		10000	50	N/A	0.461	N/A	92.20	5000	46.10	2.00	
0512105	04		10000	50	N/A	0.497	N/A	99.40	5000	49.70	2.00	
0512105	05		10000	50	N/A	0.807	N/A	161.40	3000	48.42	3.33	
0512105	06		10000	50	N/A	1.187	N/A	237.40	2000	47.48	5.00	
0512105	07		10000	50	N/A	0.470	N/A	94.00	5000	47.00	2.00	
0512105	08	D	10000	50	N/A	1.103	N/A	220.60	2000	44.12	5.00	17%
0512105	08		10000	50	N/A	0.930	N/A	186.00	2500	46.50	4.00	

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

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

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

Alpha Woods Hole Laboratories Raynham, MA

0512105.xls

Alpha Woods Hole Lab
Batch Clean Up Report

12/21/2005 0512105STBIO - 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.	Prefractionation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512105-01	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	2	0	0.15
0512105-02	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	1.5	0	0.15
0512105-03	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	5	0	0.15
0512105-04	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	5	0	0.15
0512105-05	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	3	0	0.15
0512105-06	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	2	0	0.15
0512105-07	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	5	0	0.15
0512105-08	D	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	2	0	0.15
0512105-08	SAM	3630	RPR	1/5/2006				RPR	1/5/2006	False	10	2.5	0	0.15
SS010606AWS01	AWS	3630	RPR	1/5/2006				RPR	1/5/2006	False				
SS122105B14	B	3630	RPR	1/5/2006				RPR	1/5/2006	False	2	1	0	0.15
SS122105LCS11	LCS	3630	RPR	1/5/2006				RPR	1/5/2006	False	2	1	0	0.15
SS122105LCSD11	LCSD	3630	RPR	1/5/2006				RPR	1/5/2006	False	2	1	0	0.15

Alpha Woods Hole Lab
Batch Clean Up Report

12/21/2005 0512105STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512105-01	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-02	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-03	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-04	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-05	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-06	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-07	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-08	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
0512105-08	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
SS010606AWS01	
SS122105B14	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
SS122105LCS11	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR
SS122105LCSD11	Sample was solvent exchanged with hexane and fractionated on a 5g silica gel column eluted with 20ml of Pentane on 1/5/06 RPR

Gravimetric Determination Post-Column (Silica)

Analyst: DMP
Date: 1/5/06

BATCH: 0512105

Entered by: DMP
Verified by: DMP

		LCS	10000	50	N/A	0.249	N/A	49.80	N/A	N/A	N/A	100%
0512105	01		1000	50	N/A	0.239	N/A	4.78	900	4.30	1.11	
0512105	02		1000	50	N/A	0.194	N/A	3.88	900	3.49	1.11	
0512105	03		1000	50	N/A	0.160	N/A	3.20	900	2.88	1.11	
0512105	04		1000	50	N/A	0.131	N/A	2.62	900	2.36	1.11	
0512105	05		1000	50	N/A	0.745	N/A	14.90	300	4.47	3.33	
0512105	06		1000	50	N/A	0.716	N/A	14.32	350	5.01	2.86	
0512105	07		1000	50	N/A	0.173	N/A	3.46	900	3.11	1.11	
0512105	08	D	1000	50	N/A	0.640	N/A	12.80	350	4.48	2.86	9%
0512105	08		1000	50	N/A	0.700	N/A	14.00	350	4.90	2.86	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight ✓ 2N 01/24/06
Sample Weight (mg/mL) = 20 * Aliquot Weight (mg)
LCS TV = 5 mg/mL

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

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

Alpha Woods Hole Laboratories Raynham, MA

0512105SILICA

Gravimetric Determination ~~for Column~~
Post Column (Silica)

Analyst: DMP
Date: 1/5/06

BATCH: 0512105

Entered by: DMP
Verified by: —

ETR #	Sample #	QC (MB, LCS, D)	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	QC (KR, RPD)
		LCS	10000	50	N/A	0.249	N/A					0%
0512105	01		1000	50	N/A	0.239	N/A					
0512105	02		1000	50	N/A	0.194	N/A					
0512105	03		1000	50	N/A	0.160	N/A					
0512105	04		1000	50	N/A	0.131	N/A					
0512105	05		1000	50	N/A	0.745	N/A					
0512105	06		1000	50	N/A	0.716	N/A					
0512105	07		1000	50	N/A	0.173	N/A					
0512105	08	D	1000	50	N/A	0.640	N/A					#VALUE!
0512105	08		1000	50	N/A	0.700	N/A					

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

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

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

Alpha Woods Hole Laboratories Raynham, MA

0512105SILICA

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: Gowanus Canal
ETR: 0512105STBIO

-F1 BIOMARKER FRACTIONS

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0512105-01-F1	900	WHAC12 1of5	100	1000	5.55	DMP	150	NA	1/5/06
0512105-02-F1	900	WHAC12 1of5	100	1000	7.4	DMP	150	NA	1/5/06
0512105-03-F1	900	WHAC12 1of5	100	1000	2.22	DMP	150	NA	1/5/06
0512105-04-F1	900	WHAC12 1of5	100	1000	2.22	DMP	150	NA	1/5/06
0512105-05-F1	900	WHAC12 1of5	100	1000	11.09	DMP	150	NA	1/5/06
0512105-06-F1	900	WHAC12 1of5	100	1000	14.3	DMP	150	NA	1/5/06
0512105-07-F1	900	WHAC12 1of5	100	1000	2.22	DMP	150	NA	1/5/06
0512105-08D-F1	900	WHAC12 1of5	100	1000	14.3	DMP	150	NA	1/5/06
0512105-08-F1	900	WHAC12 1of5	100	1000	11.44	DMP	150	NA	1/5/06
SS122105B14-F1	900	WHAC12 1of5	100	1000	2	DMP	150	NA	1/5/06
SS122105LCS11-F1	900	WHAC12 1of5	100	1000	2	DMP	150	NA	1/5/06
SS122105LCSD11-F1	900	WHAC12 1of5	100	1000	2	DMP	150	NA	1/5/06

[1] Includes Internal Std

Forensic Preparation Checklist

ETR: 051205 **Client:** New fie **Project:** Gowanus Canal

Workplan Present	

Workplan Reviewed With Project Manager	

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

Required Cleanups	
No Cleanup Required	
Copper	✓
Conc. Sulfuric Acid	
GPC	
Silica Gel 923 Grade Glass Column Biomarker	✓
Alumina (Super I) Glass Column Alk/SHC	✓
Alumina (F20) Glass Column	

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

Other: all samples high hydrocarbon odor spiked high sm.

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

Other:

Identify Matrix - Circle One

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

	Date	Initials
1st Extraction	12/22/05	KLA
2nd Extraction	↓	DMP
3rd Extraction	↓	KLA

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

Other:

Batch Completed

Analyst: DMP / RPR

Date: 12/29/05 / 1/6/06

Forensic Dilution Sheet

Client Name:	NewFields					PAH4			
Project						PREP			
ETR # :	0512105								
Matrix :									
Analysis Type :	GC/MS PAHS								
Relinquished By:	MS	MS		**Received By:**	RPR				
Date:	1/3/06 11:22 am			**Date:**	1/3/06				

Sample ID	Init. Sample Vol (uL) *Measured*	Init. Sample Vol (uL) *Adjusted*	Aliquot removed from Initial Sample Volume	Final Volume for GC Analysis (ul)	Diluted Sample ID	Dilution Spiked With: STD ID/ul AMT	Date/ Initials	Dilution of Conc.	Total Dilution of Amount
0512105-01	650	700	20	1000	0512105-01-RE	WHAB38 98UL	1/9/06 RPR	50	50
0512105-02	650	↓	20	1000	0512105-02-RE	WHAB38 98UL	↓	50	50
0512105-03	650		20	1000	0512105-03-RE	WHAB38 98UL		50	50
0512105-04	650		100	1000	0512105-04-RE	WHAB38 90UL		10	10
0512105-07	640		10	1000	0512105-07-RE	WHAB38 99UL		100	100
0512105-04-RE	1000	1000	100	1000	0512105-04-RE2	WHAB38 90UL	1/4/06 RPR	10	100

Dilution Calculations Validated by: CW

Date: 1/24/06

Alpha Woods Hole Lab
Batch Weight Report
12/21/2005

Lab ID	QC Type	PS122105B - Pan Weight	PS122105B - Wet Weight	PS122105B - Dry Weight	PS122105B - Dry Weight #2	PS122105B - Dry Weight #3	Percent Solid	RPD
0512105-01	D	1.02	6.12	5.47	5.47		87.25	0.25%
0512105-01	SAM	1.02	7.11	6.32	6.32		87.03	
0512105-02	SAM	1.02	7.75	6.57	6.57		82.47	
0512105-03	SAM	1.01	7.57	6.5	6.5		83.69	
0512105-04	SAM	1.01	7.45	6.38	6.39		83.54	
0512105-05	SAM	1.02	7.74	3.94	3.94		43.45	
0512105-06	SAM	1.01	7.5	3.66	3.65		40.68	
0512105-07	SAM	1.01	6.17	5.36	5.36		84.3	
0512105-08	SAM	1.02	7.87	3.33	3.33		33.72	
0512106-01	SAM	1.02	7.63	5.66	5.65		70.05	
0512106-02	SAM	1.01	8.86	7.2	7.2		78.85	
0512106-03	SAM	1.01	7.94	6.5	6.5		79.22	
0512106-04	SAM	1.02	8.76	6.49	6.49		70.67	
0512106-05	SAM	1	9.18	6.73	6.73		70.05	
0512106-06	SAM	1.02	8.19	6.59	6.59		77.68	
0512106-07	SAM	1.02	10.27	7.62	7.62		71.35	
PSS122105B19	B						100	
PSS122105B19	B	1.01	1.01	1.01	1.01		100	

Initial: 12/21/2005 5:10:46 PM KJB
Weight #1: 12/22/2005 9:53:00 AM KJB
Weight #2: 12/22/2005 1:36:17 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-90B (6.5-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-01**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	12/30/05	87.0	5.77	38.5	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1700000**	E	Fluoranthene	**410000**	E
C1-Naphthalenes	**2100000**	E	Pyrene	**640000**	E
C2-Naphthalenes	**1400000**	E	C1-Fluoranthenes/Pyrenes	**540000**	
C3-Naphthalenes	**550000**		C2-Fluoranthenes/Pyrenes	**170000**	
C4-Naphthalenes	**160000**		C3-Fluoranthenes/Pyrenes	**54000**	
Biphenyl	**180000**	E	C4-Fluoranthenes/Pyrenes	**15000**	
Dibenzofuran	**44000**		Naphthobenzothiophenes	**56000**	
Acenaphthylene	**94000**	E	C1-Naphthobenzothiophenes	**49000**	
Acenaphthene	**940000**	E	C2-Naphthobenzothiophenes	**24000**	
Fluorene	**450000**	E	C3-Naphthobenzothiophenes	**10000**	
C1-Fluorenes	**300000**		C4-Naphthobenzothiophenes	**3900**	
C2-Fluorenes	**180000**		Benz[a]anthracene	**200000**	E
C3-Fluorenes	**88000**		Chrysene/Triphenylene	**180000**	E
Anthracene	**490000**	E	C1-Chrysenes	**140000**	
Phenanthrene	**1400000**	E	C2-Chrysenes	**53000**	
C1-Phenanthrenes/Anthracenes	**960000**	E	C3-Chrysenes	**24000**	
C2-Phenanthrenes/Anthracenes	**370000**		C4-Chrysenes	**6700**	
C3-Phenanthrenes/Anthracenes	**110000**		Benzo[b]fluoranthene	**57000**	
C4-Phenanthrenes/Anthracenes	**27000**		Benzo[k]fluoranthene	**64000**	
Retene	**5300**		Benzo[a]fluoranthene	**33000**	
Dibenzothiophene	**160000**	E	Benzo[e]pyrene	**58000**	
C1-Dibenzothiophenes	**180000**		Benzo[a]pyrene	**130000**	E
C2-Dibenzothiophenes	**130000**		Perylene	**17000**	
C3-Dibenzothiophenes	**60000**		Indeno[1,2,3-cd]pyrene	**48000**	
C4-Dibenzothiophenes	**18000**		Dibenz[a,h]anthracene	**14000**	
Benzo(b)fluorene	**86000**	E	Benzo[g,h,i]perylene	**46000**	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	151	§	50-130
Pyrene-d10	90		50-130
Benzo[b]fluoranthene-d12	92		50-130

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

01/10/06 12:25

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-90B (6.5-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-01**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	12/30/05	87.0	5.77	38.5	1	AC

Parameter	Result
Carbazole	9100

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	151	§	50-130
Pyrene-d10	90		50-130
Benzo[b]fluoranthene-d12	92		50-130

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

01/10/06 12:26

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42930.D
Acq On : 30 Dec 2005 10:35 pm
Operator : AC
Sample : 0512105-01
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 17:58:14 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WW 1-10-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.76	164	49600m	500.00 ng/mL	0.02
72) Chrysene-d12	43.23	240	107028m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.44	152	73960m	785.98 ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	78.60%	
58) Pyrene-d10	38.31	212	109873m	469.68 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	46.97%#	
81) Benzo[b]fluoranthene-d12	47.12	264	106777m	476.30 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.63%#	
125) 5B(H)Cholane - Surr	43.85	217	24241m	500.33 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.03%	

Target Compounds					Qvalue
9) Naphthalene	19.87	128	43274246m	224635.15 ng/mL E	
10) C1-Naphthalenes	22.61	142	51967318m	269760.60 ng/mL E	
11) C2-Naphthalenes	25.43	156	35679895m	185213.13 ng/mL E	
12) C3-Naphthalenes	27.74	170	13788165m	71573.90 ng/mL	
13) C4-Naphthalenes	30.50	184	3989561m	20709.68 ng/mL	
15) 2-Methylnaphthalene	22.61	142	32373827	263804.22 ng/mL# E	100
16) 1-Methylnaphthalene	23.02	142	19577515m	158357.07 ng/mL E	
22) Biphenyl	24.44	154	3411890	23206.29 ng/mL# E	100
23) 2,6-Dimethylnaphthalene	25.08	156	6167157m	57957.21 ng/mL E	
24) Dibenzofuran	27.52	168	982853m	5713.99 ng/mL	
25) Acenaphthylene	26.15	152	2647725	12282.03 ng/mL# E	100
26) Acenaphthene	26.92	153	16202953	122679.40 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	889233m	8166.69 ng/mL	
28) Fluorene	28.93	166	8361173m	59093.84 ng/mL E	
29) C1-Fluorenes	31.14	180	5614542m	39681.61 ng/mL	
30) C2-Fluorenes	33.32	194	3354738m	23710.11 ng/mL	
31) C3-Fluorenes	35.19	208	1618196m	11436.84 ng/mL	
32) Dibenzothiophene	32.24	184	4400087	20977.45 ng/mL# E	94
36) OTP	34.42	198	15658	74.65 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	4894938m	23336.66 ng/mL	
38) C2-Dibenzothiophenes	35.68	212	3548442m	16917.23 ng/mL	
39) C3-Dibenzothiophenes	37.51	226	1643817m	7836.91 ng/mL	
40) C4-Dibenzothiophenes	39.18	240	491607m	2343.74 ng/mL	
41) Phenanthrene	32.77	178	41556097m	176126.39 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.83	192	29452750m	124829.01 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.98	206	11484232m	48673.40 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.79	220	3356689m	14226.59 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.96	234	840383m	3561.78 ng/mL	
52) Retene	39.72	234	41628m	688.39 ng/mL	
53) Anthracene	32.95	178	13757205	63856.64 ng/mL E	98
54) Carbazole	33.56	167	202217	1184.32 ng/mL#	67
55) 1-Methylphenanthrene	35.26	192	4373590m	28090.43 ng/mL E	
56) Fluoranthene	37.54	202	12905120	53061.64 ng/mL E	100
57) Benzo(b)fluorene	40.03	216	1601030m	11238.86 ng/mL E	
59) Pyrene	38.44	202	21202812	84033.63 ng/mL E	98
60) C1-Fluoranthenes/Pyrenes	39.79	216	17604990m	69774.29 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.44	230	5631300m	22318.67 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.32	244	1782554m	7064.84 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.95	258	485441m	1923.96 ng/mL	
64) Naphthobenzothiophene	42.23	234	1039407m	4531.03 ng/ml	

RFT Retene 2nd on 1/20/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42930.D
Acq On : 30 Dec 2005 10:35 pm
Operator : AC
Sample : 0512105-01
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 17:58:14 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

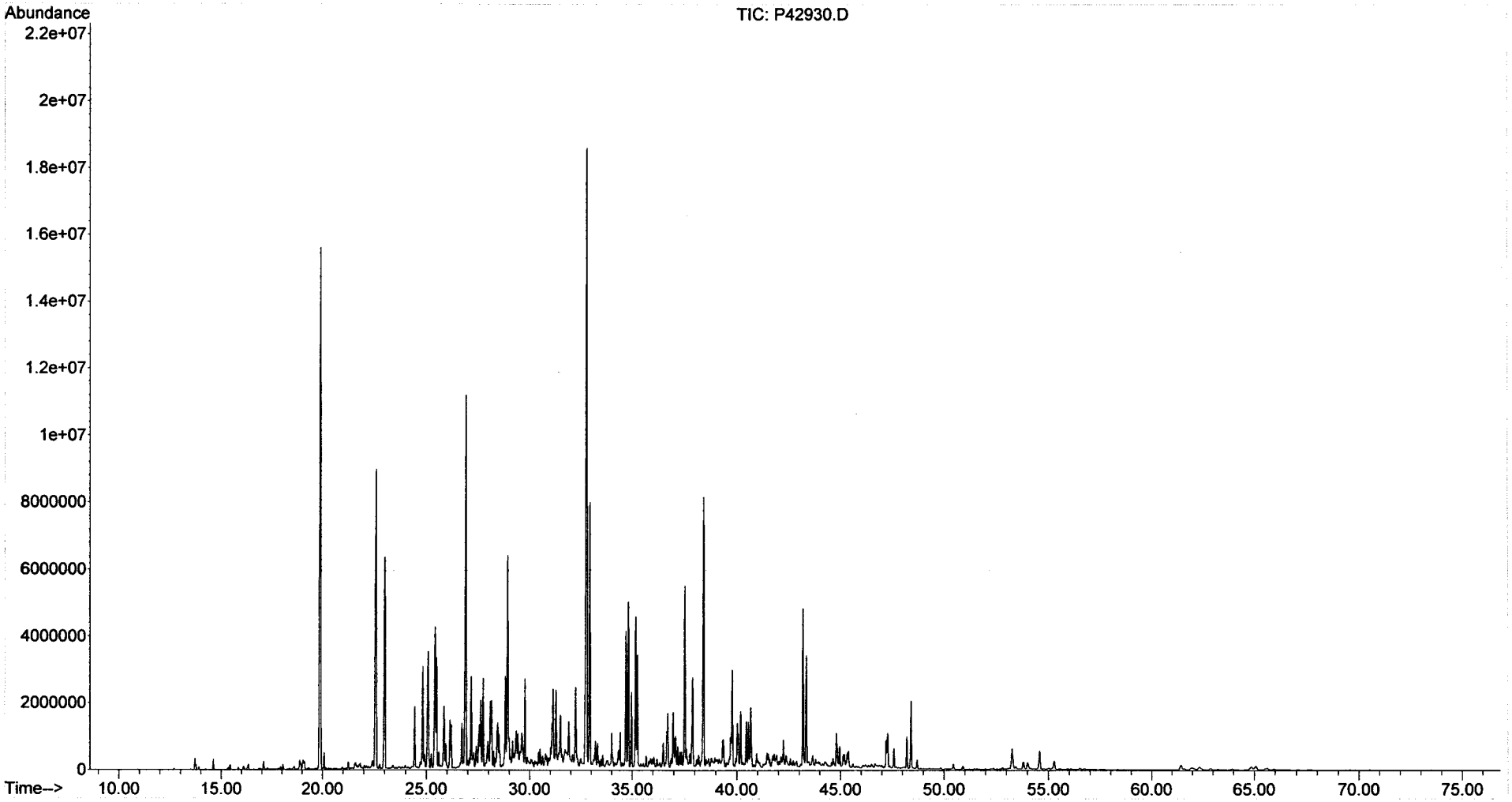
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.23	234	1039532m	4531.58 ng/mL	
66) Naphthobenzothiophene-1,2-	42.57	234	268942	1172.38 ng/mL#	23
67) Naphthobenzothiophene-2,3-	42.87	234	353923m	1542.84 ng/mL	
68) C1-Naphthobenzothiophenes	43.63	248	1471641m	6415.24 ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	733579m	3197.85 ng/ml	
70) C3-Naphthobenzothiophenes	47.24	276	314378m	1370.45 ng/ml	
71) C4-Naphthobenzothiophenes	48.42	290	115901m	505.24 ng/mL	
73) Benz[a]anthracene	43.18	228	6761380m	26560.67 ng/mL E	
74) Chrysene	43.34	228	6065122m	23476.24 ng/mL E	
75) Chrysene/Triphenylene	43.34	228	6072107m	23503.27 ng/mL E	
76) C1-Chrysenes	44.80	242	4678972m	18110.87 ng/mL	
77) C2-Chrysenes	46.49	256	1798372m	6960.95 ng/mL	
78) BBF-d12 Surr BKGD	47.11	256	20669m	80.00 ng/mL	
79) C3-Chrysenes	48.11	270	819626m	3172.52 ng/mL	
80) C4-Chrysenes	49.10	284	225542m	873.00 ng/mL	
82) Benzo[b]fluoranthene	47.22	252	1971531	7452.20 ng/mL	99
83) Benzo[k]fluoranthene	47.28	252	2510763	8413.17 ng/mL	99
84) Benzo[a]fluoranthene	47.59	252	1286520m	4310.93 ng/mL	
85) Benzo[e]pyrene	48.22	252	2029059	7610.20 ng/mL	99
86) Benzo[a]pyrene	48.43	252	4408570m	17154.19 ng/mL E	
87) Perylene	48.71	252	574250	2256.42 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.26	276	1507058m	6313.76 ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	467067m	1893.97 ng/mL	
90) Benzo[g,h,i]perylene	54.58	276	1613437	5931.72 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42930.D
Acq On : 30 Dec 2005 10:35 pm
Operator : AC
Sample : 0512105-01
Misc : 1X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 08 17:58:14 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-90B (6.5-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-01E**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/06/06	87.0	5.77	38.5	50	AC

Parameter	Result	
Naphthalene	**1300000**	
C1-Naphthalenes	**1200000**	
C2-Naphthalenes	**850000**	
C3-Naphthalenes	630	U
C4-Naphthalenes	630	U
Biphenyl	**110000**	
Dibenzofuran	460	U
Acenaphthylene	**56000**	
Acenaphthene	**540000**	
Fluorene	**270000**	
C1-Fluorenes	440	U
C2-Fluorenes	440	U
C3-Fluorenes	440	U
Anthracene	**280000**	
Phenanthrene	**850000**	
C1-Phenanthrenes/Anthracenes	**580000**	
C2-Phenanthrenes/Anthracenes	560	U
C3-Phenanthrenes/Anthracenes	560	U
C4-Phenanthrenes/Anthracenes	560	U
Retene	560	U
Dibenzothiophene	**100000**	
C1-Dibenzothiophenes	430	U
C2-Dibenzothiophenes	430	U
C3-Dibenzothiophenes	430	U
C4-Dibenzothiophenes	430	U
Benzo(b)fluorene	**47000**	

Parameter	Result	
Fluoranthene	**250000**	
Pyrene	**370000**	
C1-Fluoranthenes/Pyrenes	340	U
C2-Fluoranthenes/Pyrenes	340	U
C3-Fluoranthenes/Pyrenes	340	U
C4-Fluoranthenes/Pyrenes	340	U
Naphthobenzothiophenes	460	U
C1-Naphthobenzothiophenes	460	U
C2-Naphthobenzothiophenes	460	U
C3-Naphthobenzothiophenes	460	U
C4-Naphthobenzothiophenes	460	U
Benz[a]anthracene	**160000**	
Chrysene/Triphenylene	**150000**	
C1-Chrysenes	410	U
C2-Chrysenes	410	U
C3-Chrysenes	410	U
C4-Chrysenes	410	U
Benzo[b]fluoranthene	410	U
Benzo[k]fluoranthene	780	U
Benzo[a]fluoranthene	780	U
Benzo[e]pyrene	520	U
Benzo[a]pyrene	**110000**	
Perylene	670	U
Indeno[1,2,3-cd]pyrene	920	U
Dibenz[a,h]anthracene	730	U
Benzo[g,h,i]perylene	680	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	107	50-130
Pyrene-d10	88	50-130
Benzo[b]fluoranthene-d12	91	50-130

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

01/10/06 11:52

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43060.D
Acq On : 6 Jan 2006 2:07 am
Operator : AC
Sample : 0512105-01-RE
Misc : 50X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 09 11:33:48 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WW 1-10-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	69914m	500.00	ng/mL	-0.05
72) Chrysene-d12	43.18	240	123961m	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	1468	11.07	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.11%#			
58) Pyrene-d10	38.25	212	3010m	9.13	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.91%#			
81) Benzo[b]fluoranthene-d12	47.07	264	2447m	9.42	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.94%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

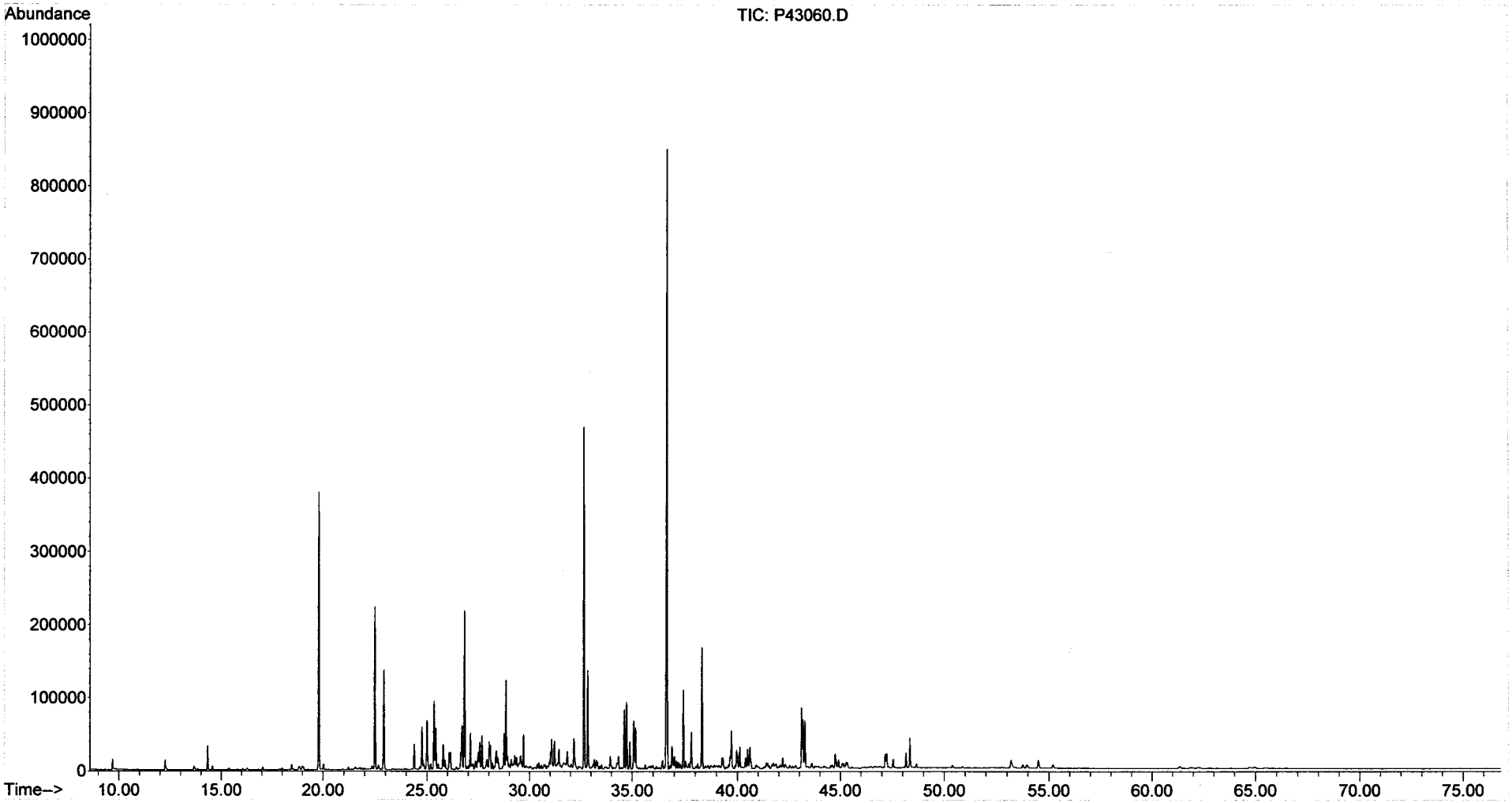
Target Compounds						Qvalue
9) Naphthalene	19.80	128	889580m	3276.05	ng/mL	
10) C1-Naphthalenes	22.49	142	841654m	3099.55	ng/mL	
11) C2-Naphthalenes	25.34	156	603293m	2221.74	ng/mL	
15) 2-Methylnaphthalene	22.49	142	520830m	3010.93	ng/mL	
16) 1-Methylnaphthalene	22.92	142	320084m	1836.80	ng/mL	
22) Biphenyl	24.38	154	60645	292.63	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	62867m	419.14	ng/mL	
25) Acenaphthylene	26.09	152	44387	146.07	ng/mL#	100
26) Acenaphthene	26.82	153	261423	1404.23	ng/mL	99
28) Fluorene	28.85	166	140883m	706.40	ng/mL	
32) Dibenzothiophene	32.17	184	78969m	267.09	ng/mL	
41) Phenanthrene	32.66	178	737031m	2216.12	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.73	192	500464m	1504.80	ng/mL	
53) Anthracene	32.84	178	221925m	730.80	ng/mL	
55) 1-Methylphenanthrene	35.17	192	78274m	356.66	ng/mL	
56) Fluoranthene	37.44	202	220279m	642.55	ng/mL	
57) Benzo(b)fluorene	39.96	216	24814	123.58	ng/mL	92
59) Pyrene	38.32	202	346493	974.25	ng/mL	99
73) Benz[a]anthracene	43.11	228	118931m	403.38	ng/mL	
74) Chrysene	43.27	228	115264m	385.21	ng/mL	
75) Chrysene/Triphenylene	43.27	228	114980m	384.26	ng/mL	
86) Benzo[a]pyrene	48.35	252	84911m	285.27	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43060.D
Acq On : 6 Jan 2006 2:07 am
Operator : AC
Sample : 0512105-01-RE
Misc : 50X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 09 11:33:48 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-90B (6.5-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-01**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/06/06	87.0	5.77	5.55	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**360**	30,31-Bishomohopane-22S	**98**
C24 Tricyclic Terpane	**220**	30,31-Bishomohopane-22R	**76**
C25 Tricyclic Terpane	**190**	30,31-Trishomohopane-22S	**62**
C24 Tetracyclic Terpane	**75**	30,31-Trishomohopane-22R	**40**
C26 Tricyclic Terpane-22S	**76**	Tetrakishomohopane-22S	**33**
C26 Tricyclic Terpane-22R	**76**	Tetrakishomohopane-22R	**22**
C28 Tricyclic Terpane-22S	**70**	Pentakishomohopane-22S	**29**
C28 Tricyclic Terpane-22R	**73**	Pentakishomohopane-22R	**14**
C29 Tricyclic Terpane-22S	**67**	13b(H),17a(H)-20S-Diacholestane	**260**
C29 Tricyclic Terpane-22R	**67**	13b(H),17a(H)-20R-Diacholestane	**150**
18a-22,29,30-Trisnorneohopane-TS	**140**	13b,17a-20S-Methyldiacholestane	**100**
C30 Tricyclic Terpane-22S	**38**	14a(H),17a(H)-20S-Cholestane	**120**
C30 Tricyclic Terpane-22R	**62**	14a(H),17a(H)-20R-Cholestane	**440**
17a(H)-22,29,30-Trisnorhopane-TM	**190**	13b,17a-20R-Ethyldiacholestane	**67**
17a/b,21b/a 28,30-Bisnorhopane	**56**	13a,17b-20S-Ethyldiacholestane	**14**
17a(H),21b(H)-25-Norhopane	**35**	14a,17a-20S-Methylcholestane	**51**
30-Norhopane	**400**	14a,17a-20R-Methylcholestane	**200**
18a(H)-30-Norneohopane-C29Ts	**110**	14a(H),17a(H)-20S-Ethylcholestane	**140**
17a(H)-Diahopane	**33**	14a(H),17a(H)-20R-Ethylcholestane	**170**
30-Normoretane	**83**	14b(H),17b(H)-20R-Cholestane	**210**
18a(H)&18b(H)-Oleananes	**60**	14b(H),17b(H)-20S-Cholestane	**200**
Hopane	**590**	14b,17b-20R-Methylcholestane	**160**
Moretane	**81**	14b,17b-20S-Methylcholestane	**190**
30-Homohopane-22S	**170**	14b(H),17b(H)-20R-Ethylcholestane	**270**
30-Homohopane-22R	**140**	14b(H),17b(H)-20S-Ethylcholestane	**200**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	105	50-130

N/A - Not Applicable

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27477.D
Acq On : 6 Jan 2006 4:23 am
Operator : AC
Sample : 0512105-01
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 09 13:14:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

ms for web 1-10-06

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	50.66	240	56489m	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	51.42	217	91059m	3769.62	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 376.96%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	31388m	535.26	ng/mL	
84) Hopane (T19)	61.10	191	31292m	533.63	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.85	191	19251m	328.29	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.73	191	11754m	200.44	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.51	191	9938m	169.47	ng/ml	
88) C24 Tetracyclic Terpane (T	52.06	191	3962m	67.56	ng/ml	
89) C26 Tricyclic Terpane-22S	51.78	191	4025m	68.64	ng/ml	
90) C26 Tricyclic Terpane-22R	51.89	191	4007m	68.33	ng/ml	
91) C28 Tricyclic Terpane-22S	54.64	191	3710m	63.27	ng/ml	
92) C28 Tricyclic Terpane-22R	54.83	191	3887m	66.29	ng/ml	
93) C29 Tricyclic Terpane-22S	55.44	191	3540m	60.37	ng/ml	
94) C29 Tricyclic Terpane-22R	55.67	191	3548m	60.50	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.90	191	7631m	130.13	ng/ml	
96) C30 Tricyclic Terpane-22S	57.05	191	2026	34.55	ng/mL	100
97) C30 Tricyclic Terpane-22R	57.32	191	3267m	55.71	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.51	191	9969m	170.00	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.84	191	2982m	50.85	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.66	191	1871m	31.91	ng/ml	
101) 30-Norhopane (T15)	59.59	191	20967m	357.55	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.70	191	5636m	96.11	ng/ml	
103) 17a(H)-Diahopane (X)	59.85	191	1762m	30.05	ng/ml	
104) 30-Normoretane (T17)	60.46	191	4384	74.76	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.89	191	3172m	54.09	ng/ml	
106) Moretane (T20)	61.87	191	4301m	73.35	ng/ml	
107) 30-Homohopane-22S (T21)	63.07	191	8855m	151.01	ng/ml	
108) 30-Homohopane-22R (T22)	63.33	191	7499m	127.88	ng/ml	
109) 30,31-Bishomohopane-22S (T	64.80	191	5182m	88.37	ng/ml	
110) 30,31-Bishomohopane-22R (T	65.21	191	4059	69.22	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.14	191	3281m	55.95	ng/ml	
112) 30,31-Trishomohopane-22R (	67.81	191	2111	36.00	ng/ml	100
113) Tetrakishomohopane-22S (T3	70.04	191	1738m	29.64	ng/ml	
114) Tetrakishomohopane-22R (T3	71.04	191	1143	19.49	ng/ml	100
115) Pentakishomohopane-22S (T3	73.48	191	1530m	26.09	ng/ml	
116) Pentakishomohopane-22R (T3	74.88	191	758	12.93	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	53.23	217	5686m	235.39	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.74	217	3303m	136.74	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.58	217	2218m	91.82	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.60	217	2740m	113.43	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.18	217	9697m	401.43	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.50	217	1472m	60.94	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27477.D
Acq On : 6 Jan 2006 4:23 am
Operator : AC
Sample : 0512105-01
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 09 13:14:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

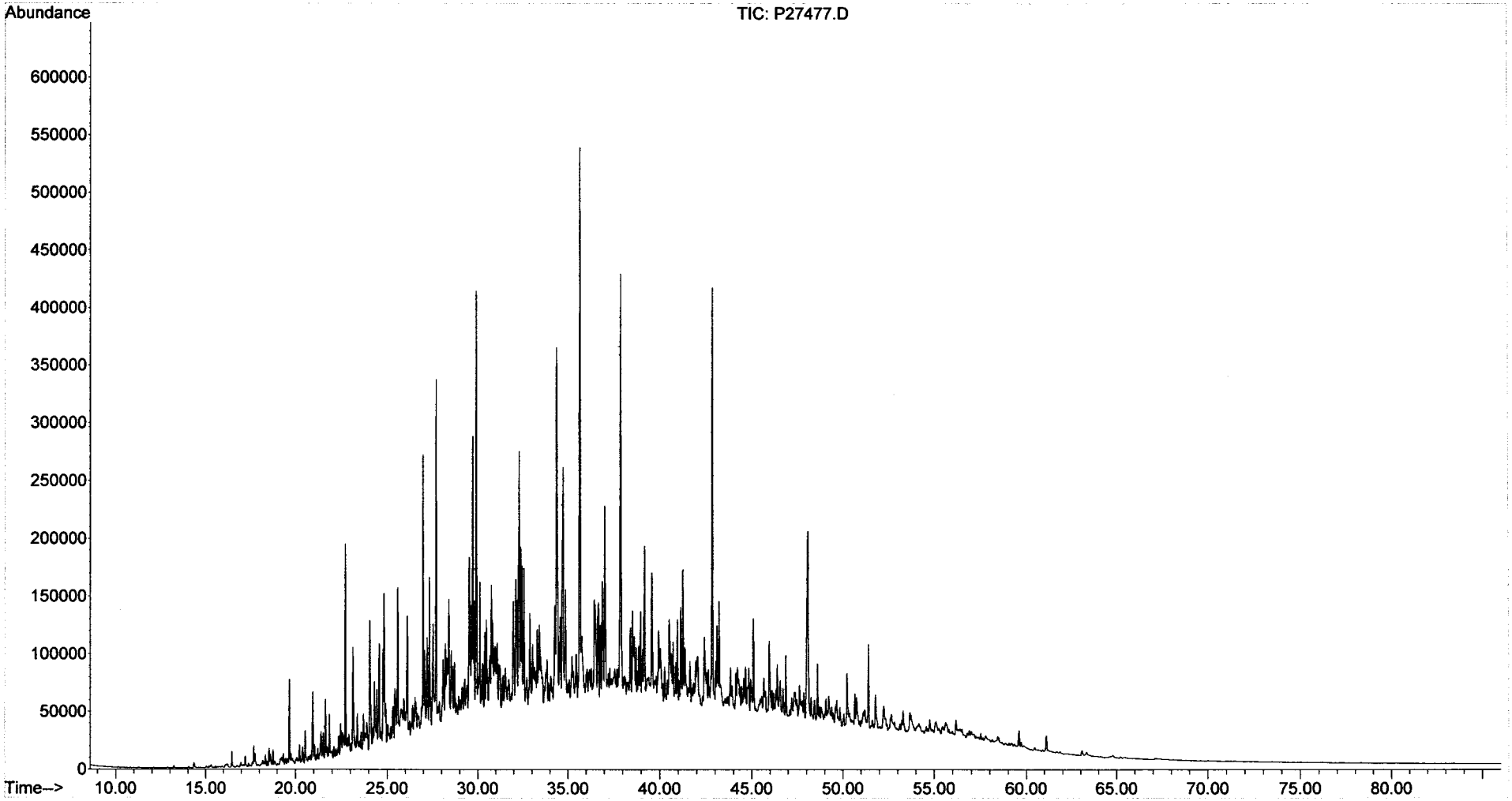
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.80	217	298	12.34	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.98	217	1109m	45.91	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.77	217	4304	178.18	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.15	217	3107m	128.62	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.18	217	3730m	154.41	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.70	218	4639m	192.04	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.80	218	4480m	185.46	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.16	218	3601m	149.07	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.25	218	4058m	167.99	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.43	218	5928	245.40	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.49	218	4375m	181.11	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27477.D
Acq On : 6 Jan 2006 4:23 am
Operator : AC
Sample : 0512105-01
Misc : 1X
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jan 09 13:14:52 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-89 (12.8-13.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-02**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	12/31/05	82.5	5.49	51.3282	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	2300000	E	Fluoranthene	570000	E
C1-Naphthalenes	2700000	E	Pyrene	900000	E
C2-Naphthalenes	1600000	E	C1-Fluoranthenes/Pyrenes	760000	
C3-Naphthalenes	590000		C2-Fluoranthenes/Pyrenes	240000	
C4-Naphthalenes	180000		C3-Fluoranthenes/Pyrenes	73000	
Biphenyl	250000	E	C4-Fluoranthenes/Pyrenes	19000	
Dibenzofuran	62000		Naphthobenzothiophenes	72000	
Acenaphthylene	710000	E	C1-Naphthobenzothiophenes	62000	
Acenaphthene	580000	E	C2-Naphthobenzothiophenes	30000	
Fluorene	600000	E	C3-Naphthobenzothiophenes	12000	
C1-Fluorenes	390000		C4-Naphthobenzothiophenes	4700	
C2-Fluorenes	250000		Benz[a]anthracene	340000	E
C3-Fluorenes	120000		Chrysene/Triphenylene	290000	E
Anthracene	680000	E	C1-Chrysenes	220000	
Phenanthrene	1800000	E	C2-Chrysenes	77000	
C1-Phenanthrenes/Anthracenes	1300000	E	C3-Chrysenes	37000	
C2-Phenanthrenes/Anthracenes	500000		C4-Chrysenes	9800	
C3-Phenanthrenes/Anthracenes	150000		Benzo[b]fluoranthene	89000	
C4-Phenanthrenes/Anthracenes	36000		Benzo[k]fluoranthene	110000	
Retene	4100		Benzo[a]fluoranthene	54000	
Dibenzothiophene	200000	E	Benzo[e]pyrene	95000	
C1-Dibenzothiophenes	220000		Benzo[a]pyrene	210000	E
C2-Dibenzothiophenes	160000		Perylene	28000	
C3-Dibenzothiophenes	75000		Indeno[1,2,3-cd]pyrene	78000	
C4-Dibenzothiophenes	21000		Dibenz[a,h]anthracene	24000	
Benzo(b)fluorene	130000	E	Benzo[g,h,i]perylene	73000	

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	137	§	50-130
Pyrene-d10	81		50-130
Benzo[b]fluoranthene-d12	98		50-130

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

01/10/06 13:33

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-89 (12.8-13.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-02**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	12/31/05	82.5	5.49	51.3282	1	AC

Parameter	Result
Carbazole	**12000**

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	137	§	50-130
Pyrene-d10	81		50-130
Benzo[b]fluoranthene-d12	98		50-130

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

01/10/06 13:33

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42932.D
Acq On : 31 Dec 2005 12:04 am
Operator : AC
Sample : 0512105-02
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

MS for WD 1-10-06

Quant Time: Jan 08 18:09:22 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.75	164	56253m	500.00 ng/mL	0.00
72) Chrysene-d12	43.23	240	106444m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.44	152	56866m	532.85 ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.29%		
58) Pyrene-d10	38.32	212	83722m	315.56 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 31.56%#		
81) Benzo[b]fluoranthene-d12	47.12	264	85201m	382.14 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 38.21%#		
125) 5B(H)Cholane - Surr	43.85	217	19685m	408.52 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.85%#		

Target Compounds					Qvalue
9) Naphthalene	19.87	128	44326573m	202884.26 ng/mL	E
10) C1-Naphthalenes	22.61	142	52433206m	239988.60 ng/mL	E
11) C2-Naphthalenes	25.43	156	30542955m	139796.16 ng/mL	E
12) C3-Naphthalenes	27.74	170	11440372m	52362.98 ng/mL	
13) C4-Naphthalenes	30.50	184	3541205m	16208.22 ng/mL	
15) 2-Methylnaphthalene	22.61	142	32678905m	234796.27 ng/mL	E
16) 1-Methylnaphthalene	23.02	142	19749408m	140854.25 ng/mL	E
22) Biphenyl	24.44	154	3647201m	21872.90 ng/mL	E
23) 2,6-Dimethylnaphthalene	25.08	156	4969831m	41181.30 ng/mL	E
24) Dibenzofuran	27.52	168	1070774m	5488.89 ng/mL	
25) Acenaphthylene	26.17	152	15312233m	62628.47 ng/mL	E
26) Acenaphthene	26.91	153	7628409m	50926.92 ng/mL	E
27) 2,3,5-Trimethylnaphthalene	28.45	170	897691m	7269.31 ng/mL	
28) Fluorene	28.93	166	8510259m	53033.92 ng/mL	E
29) C1-Fluorenes	31.14	180	5471088m	34094.53 ng/mL	
30) C2-Fluorenes	33.32	194	3477328m	21669.89 ng/mL	
31) C3-Fluorenes	35.19	208	1661570m	10354.51 ng/mL	
32) Dibenzothiophene	32.24	184	4209976m	17697.30 ng/mL	E
36) OTP	34.42	198	14299m	60.11 ng/mL	
37) C1-Dibenzothiophenes	34.01	198	4695732m	19739.25 ng/mL	
38) C2-Dibenzothiophenes	35.68	212	3410689m	14337.37 ng/mL	
39) C3-Dibenzothiophenes	37.51	226	1576470m	6626.94 ng/mL	
40) C4-Dibenzothiophenes	39.18	240	438282m	1842.39 ng/mL	
41) Phenanthrene	32.77	178	42689261m	159530.72 ng/mL	E
47) C1-Phenanthrenes/Anthracen	34.83	192	31277173m	116883.49 ng/mL	E
48) C2-Phenanthrenes/Anthracen	36.98	206	11924661m	44562.72 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.79	220	3499699m	13078.45 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.96	234	839705m	3138.00 ng/mL	
52) Retene	39.73	234	24897m	363.02 ng/mL	
53) Anthracene	32.95	178	14575072m	59651.66 ng/mL	E
54) Carbazole	33.57	167	202570m	1046.08 ng/mL	
55) 1-Methylphenanthrene	35.26	192	4514401m	25565.63 ng/mL	E
56) Fluoranthene	37.54	202	13806437m	50053.70 ng/mL	E
57) Benzo(b)fluorene	40.03	216	1801579m	11150.96 ng/mL	E
59) Pyrene	38.44	202	22668762m	79217.92 ng/mL	E
60) C1-Fluoranthenes/Pyrenes	39.80	216	19216449m	67153.52 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.51	230	5975221m	20880.92 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.32	244	1837402m	6420.96 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.95	258	482387m	1685.74 ng/mL	
64) Naphthobenzothiophene	42.23	234	1052579m	4045.78 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42932.D
Acq On : 31 Dec 2005 12:04 am
Operator : AC
Sample : 0512105-02
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 08 18:09:22 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

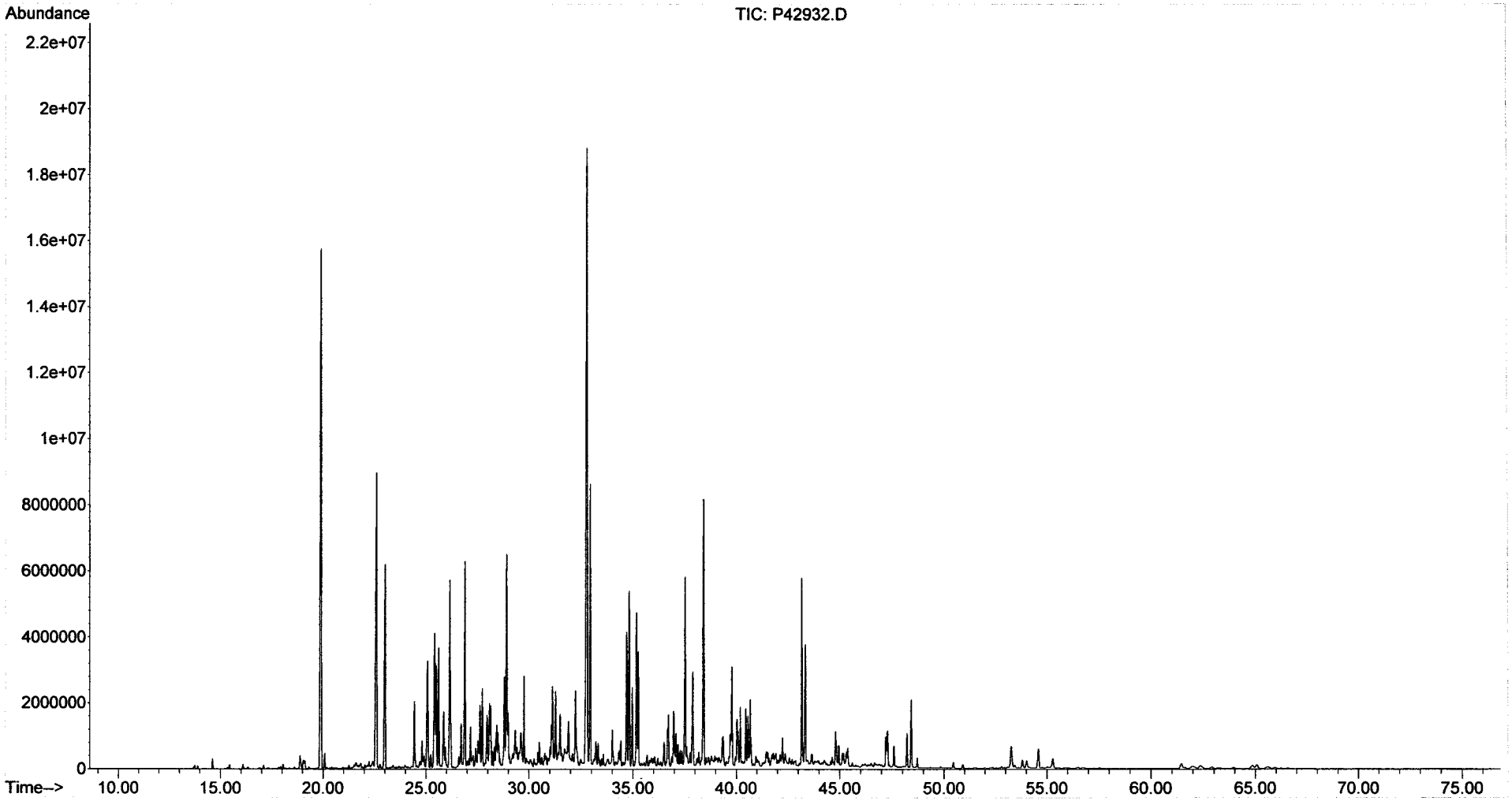
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.23	234	1051371m	4041.13 ng/mL	
66) Naphthobenzothiophene-1,2-	42.57	234	269778m	1036.94 ng/mL	
67) Naphthobenzothiophene-2,3-	42.87	234	322984m	1241.45 ng/mL	
68) C1-Naphthobenzothiophenes	43.63	248	1421781m	5464.87 ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	680685m	2616.34 ng/ml	
70) C3-Naphthobenzothiophenes	47.24	276	268043m	1030.27 ng/ml	
71) C4-Naphthobenzothiophenes	48.43	290	107581m	413.51 ng/mL	
73) Benz[a]anthracene	43.18	228	7538251m	29774.91 ng/mL E	
74) Chrysene	43.35	228	6560627m	25533.51 ng/mL E	
75) Chrysene/Triphenylene	43.35	228	6629305m	25800.80 ng/mL	
76) C1-Chrysenes	44.80	242	5033834m	19591.34 ng/mL	
77) C2-Chrysenes	46.50	256	1773251m	6901.37 ng/mL	
78) BBF-d12 Surr BKGD	47.12	256	18199m	70.83 ng/mL	
79) C3-Chrysenes	48.11	270	835352m	3251.13 ng/mL	
80) C4-Chrysenes	49.10	284	221326m	861.39 ng/mL	
82) Benzo[b]fluoranthene	47.22	252	2071306	7872.29 ng/mL	99
83) Benzo[k]fluoranthene	47.29	252	2840996m	9571.96 ng/mL	
84) Benzo[a]fluoranthene	47.60	252	1427431	4809.34 ng/mL#	1
85) Benzo[e]pyrene	48.22	252	2214261	8350.38 ng/mL	99
86) Benzo[a]pyrene	48.43	252	4830659m	18899.70 ng/mL E	
87) Perylene	48.71	252	629485m	2487.02 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.27	276	1639934m	6908.14 ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	524188m	2137.26 ng/mL	
90) Benzo[g,h,i]perylene	54.59	276	1748010	6461.73 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42932.D
Acq On : 31 Dec 2005 12:04 am
Operator : AC
Sample : 0512105-02
Misc : 1X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 08 18:09:22 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-89 (12.8-13.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-02E**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/06/06	82.5	5.49	51.3282	50	AC

Parameter	Result	
Naphthalene	**2000000**	
C1-Naphthalenes	**1800000**	
C2-Naphthalenes	**1100000**	
C3-Naphthalenes	940	U
C4-Naphthalenes	940	U
Biphenyl	**180000**	
Dibenzofuran	680	U
Acenaphthylene	**460000**	
Acenaphthene	**390000**	
Fluorene	**410000**	
C1-Fluorenes	650	U
C2-Fluorenes	650	U
C3-Fluorenes	650	U
Anthracene	**440000**	
Phenanthrene	**1300000**	
C1-Phenanthrenes/Anthracenes	**910000**	
C2-Phenanthrenes/Anthracenes	820	U
C3-Phenanthrenes/Anthracenes	820	U
C4-Phenanthrenes/Anthracenes	820	U
Retene	820	U
Dibenzothiophene	**150000**	
C1-Dibenzothiophenes	630	U
C2-Dibenzothiophenes	630	U
C3-Dibenzothiophenes	630	U
C4-Dibenzothiophenes	630	U
Benzo(b)fluorene	**85000**	

Parameter	Result	
Fluoranthene	**390000**	
Pyrene	**600000**	
C1-Fluoranthenes/Pyrenes	500	U
C2-Fluoranthenes/Pyrenes	500	U
C3-Fluoranthenes/Pyrenes	500	U
C4-Fluoranthenes/Pyrenes	500	U
Naphthobenzothiophenes	690	U
C1-Naphthobenzothiophenes	690	U
C2-Naphthobenzothiophenes	690	U
C3-Naphthobenzothiophenes	690	U
C4-Naphthobenzothiophenes	690	U
Benz[a]anthracene	**250000**	
Chrysene/Triphenylene	**230000**	
C1-Chrysenes	610	U
C2-Chrysenes	610	U
C3-Chrysenes	610	U
C4-Chrysenes	610	U
Benzo[b]fluoranthene	600	U
Benzo[k]fluoranthene	1200	U
Benzo[a]fluoranthene	1200	U
Benzo[e]pyrene	780	U
Benzo[a]pyrene	**170000**	
Perylene	990	U
Indeno[1,2,3-cd]pyrene	1400	U
Dibenz[a,h]anthracene	1100	U
Benzo[g,h,i]perylene	1000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	112	50-130
Pyrene-d10	90	50-130
Benzo[b]fluoranthene-d12	97	50-130

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

01/10/06 11:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43062.D
Acq On : 6 Jan 2006 3:35 am
Operator : AC
Sample : 0512105-02-RE
Misc : 50X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 09 11:38:16 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

CMS for WD 1-10-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	67069m	500.00	ng/mL	-0.05
72) Chrysene-d12	43.17	240	120899m	500.00	ng/mL	-0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.38	152	1107	8.70	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.87%#	
58) Pyrene-d10	38.25	212	2211m	6.99	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.70%#	
81) Benzo[b]fluoranthene-d12	47.07	264	1920	7.58	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.76%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	

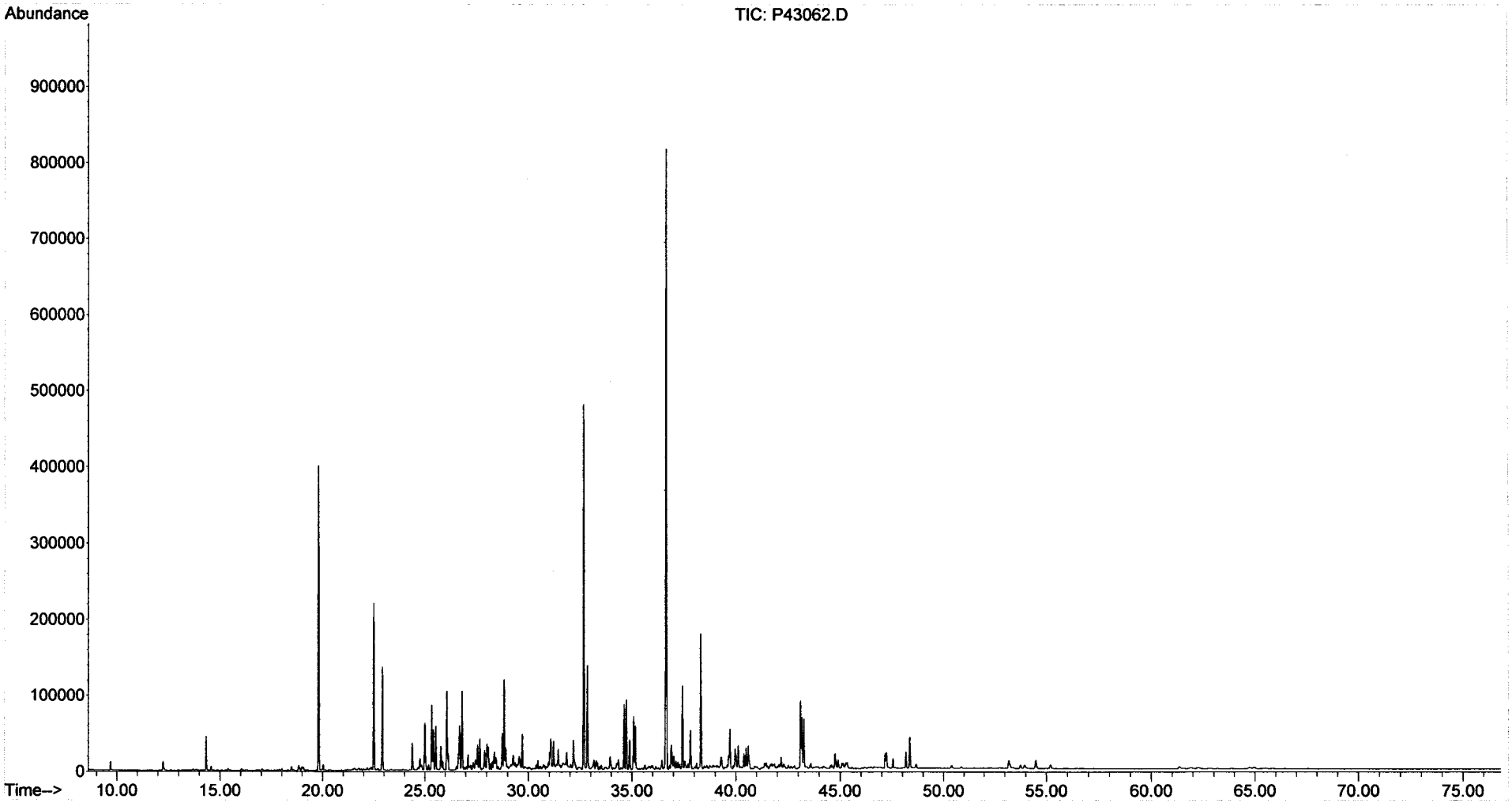
Target Compounds						Qvalue
9) Naphthalene	19.80	128	932725m	3580.65	ng/mL	
10) C1-Naphthalenes	22.49	142	831181m	3190.83	ng/mL	
11) C2-Naphthalenes	25.34	156	499127m	1916.10	ng/mL	
15) 2-Methylnaphthalene	22.49	142	514714m	3101.80	ng/mL	
16) 1-Methylnaphthalene	22.92	142	314894	1883.67	ng/mL#	100
22) Biphenyl	24.38	154	61565	309.67	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.00	156	74356m	516.77	ng/mL	
25) Acenaphthylene	26.09	152	238044m	816.61	ng/mL	
26) Acenaphthene	26.82	153	122049	683.39	ng/mL	98
28) Fluorene	28.84	166	138174m	722.21	ng/mL	
32) Dibenzothiophene	32.16	184	73804m	260.21	ng/mL	
41) Phenanthrene	32.66	178	750195	2351.38	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.73	192	514547m	1612.78	ng/mL	
53) Anthracene	32.84	178	225306m	773.41	ng/mL	
55) 1-Methylphenanthrene	35.17	192	80061m	380.28	ng/mL	
56) Fluoranthene	37.44	202	227182m	690.80	ng/mL	
57) Benzo(b)fluorene	39.96	216	28970	150.39	ng/mL	94
59) Pyrene	38.32	202	359589m	1053.96	ng/mL	
73) Benz[a]anthracene	43.11	228	125555m	436.63	ng/mL	
74) Chrysene	43.27	228	119042m	407.91	ng/mL	
75) Chrysene/Triphenylene	43.27	228	118741m	406.88	ng/mL	
86) Benzo[a]pyrene	48.35	252	89100m	306.92	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43062.D
Acq On : 6 Jan 2006 3:35 am
Operator : AC
Sample : 0512105-02-RE
Misc : 50X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 09 11:38:16 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-89 (12.8-13.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-02**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/06/06	82.5	5.49	7.4	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	410	30,31-Bishomohopane-22S	93
C24 Tricyclic Terpane	250	30,31-Bishomohopane-22R	65
C25 Tricyclic Terpane	210	30,31-Trishomohopane-22S	62
C24 Tetracyclic Terpane	77	30,31-Trishomohopane-22R	36
C26 Tricyclic Terpane-22S	80	Tetrakishomohopane-22S	28
C26 Tricyclic Terpane-22R	80	Tetrakishomohopane-22R	23
C28 Tricyclic Terpane-22S	75	Pentakishomohopane-22S	26
C28 Tricyclic Terpane-22R	80	Pentakishomohopane-22R	24
C29 Tricyclic Terpane-22S	66	13b(H),17a(H)-20S-Diacholestane	280
C29 Tricyclic Terpane-22R	70	13b(H),17a(H)-20R-Diacholestane	160
18a-22,29,30-Trisnorneohopane-TS	140	13b,17a-20S-Methyldiacholestane	100
C30 Tricyclic Terpane-22S	36	14a(H),17a(H)-20S-Cholestane	160
C30 Tricyclic Terpane-22R	62	14a(H),17a(H)-20R-Cholestane	440
17a(H)-22,29,30-Trisnorhopane-TM	180	13b,17a-20R-Ethyldiacholestane	74
17a/b,21b/a 28,30-Bisnorhopane	63	13a,17b-20S-Ethyldiacholestane	7.1 J
17a(H),21b(H)-25-Norhopane	34	14a,17a-20S-Methylcholestane	45
30-Norhopane	350	14a,17a-20R-Methylcholestane	180
18a(H)-30-Norneohopane-C29Ts	110	14a(H),17a(H)-20S-Ethylcholestane	130
17a(H)-Diahopane	30	14a(H),17a(H)-20R-Ethylcholestane	170
30-Normoretane	66	14b(H),17b(H)-20R-Cholestane	200
18a(H)&18b(H)-Oleananes	56	14b(H),17b(H)-20S-Cholestane	200
Hopane	510	14b,17b-20R-Methylcholestane	160
Moretane	80	14b,17b-20S-Methylcholestane	160
30-Homohopane-22S	140	14b(H),17b(H)-20R-Ethylcholestane	270
30-Homohopane-22R	130	14b(H),17b(H)-20S-Ethylcholestane	180

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	107	50-130

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

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27478.D
Acq On : 6 Jan 2006 6:07 am
Operator : AC
Sample : 0512105-02
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 09 13:19:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

CMS for WB 1/10/06

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	50.65	240	56034m	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	51.41	217	69385	2895.70	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 289.57%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	18113m	311.39	ng/mL	
84) Hopane (T19)	61.10	191	18090m	311.00	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.85	191	14625m	251.43	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.72	191	8881m	152.68	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.50	191	7419m	127.54	ng/ml	
88) C24 Tetracyclic Terpane (T	52.06	191	2738m	47.07	ng/ml	
89) C26 Tricyclic Terpane-22S	51.77	191	2844m	48.89	ng/ml	
90) C26 Tricyclic Terpane-22R	51.88	191	2860m	49.17	ng/ml	
91) C28 Tricyclic Terpane-22S	54.63	191	2662m	45.76	ng/ml	
92) C28 Tricyclic Terpane-22R	54.83	191	2828m	48.62	ng/ml	
93) C29 Tricyclic Terpane-22S	55.44	191	2355m	40.49	ng/ml	
94) C29 Tricyclic Terpane-22R	55.67	191	2493	42.86	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.90	191	4988	85.75	ng/ml	100
96) C30 Tricyclic Terpane-22S	57.05	191	1282	22.04	ng/mL	100
97) C30 Tricyclic Terpane-22R	57.32	191	2214m	38.06	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.51	191	6444m	110.78	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.84	191	2228	38.30	ng/ml	100
100) 17a(H),21b(H)-25-Norhopane	58.66	191	1197m	20.58	ng/ml	
101) 30-Norhopane (T15)	59.59	191	12376m	212.76	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.70	191	3759m	64.62	ng/ml	
103) 17a(H)-Diahopane (X)	59.85	191	1076m	18.50	ng/ml	
104) 30-Normoretane (T17)	60.45	191	2330m	40.06	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	60.89	191	1983m	34.09	ng/ml	
106) Moretane (T20)	61.86	191	2856m	49.10	ng/ml	
107) 30-Homohopane-22S (T21)	63.07	191	4937m	84.87	ng/ml	
108) 30-Homohopane-22R (T22)	63.32	191	4569m	78.55	ng/ml	
109) 30,31-Bishomohopane-22S (T	64.79	191	3305	56.82	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.21	191	2326	39.99	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.13	191	2226	38.27	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.81	191	1292m	22.21	ng/ml	
113) Tetrakishomohopane-22S (T3	70.02	191	981	16.86	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.06	191	804m	13.82	ng/ml	
115) Pentakishomohopane-22S (T3	73.47	191	937	16.11	ng/ml	100
116) Pentakishomohopane-22R (T3	74.88	191	847m	14.56	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	53.23	217	4106	171.36	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.74	217	2281m	95.19	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.57	217	1499m	62.56	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.59	217	2343m	97.78	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.18	217	6531m	272.56	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.50	217	1089m	45.45	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27478.D
Acq On : 6 Jan 2006 6:07 am
Operator : AC
Sample : 0512105-02
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 09 13:19:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

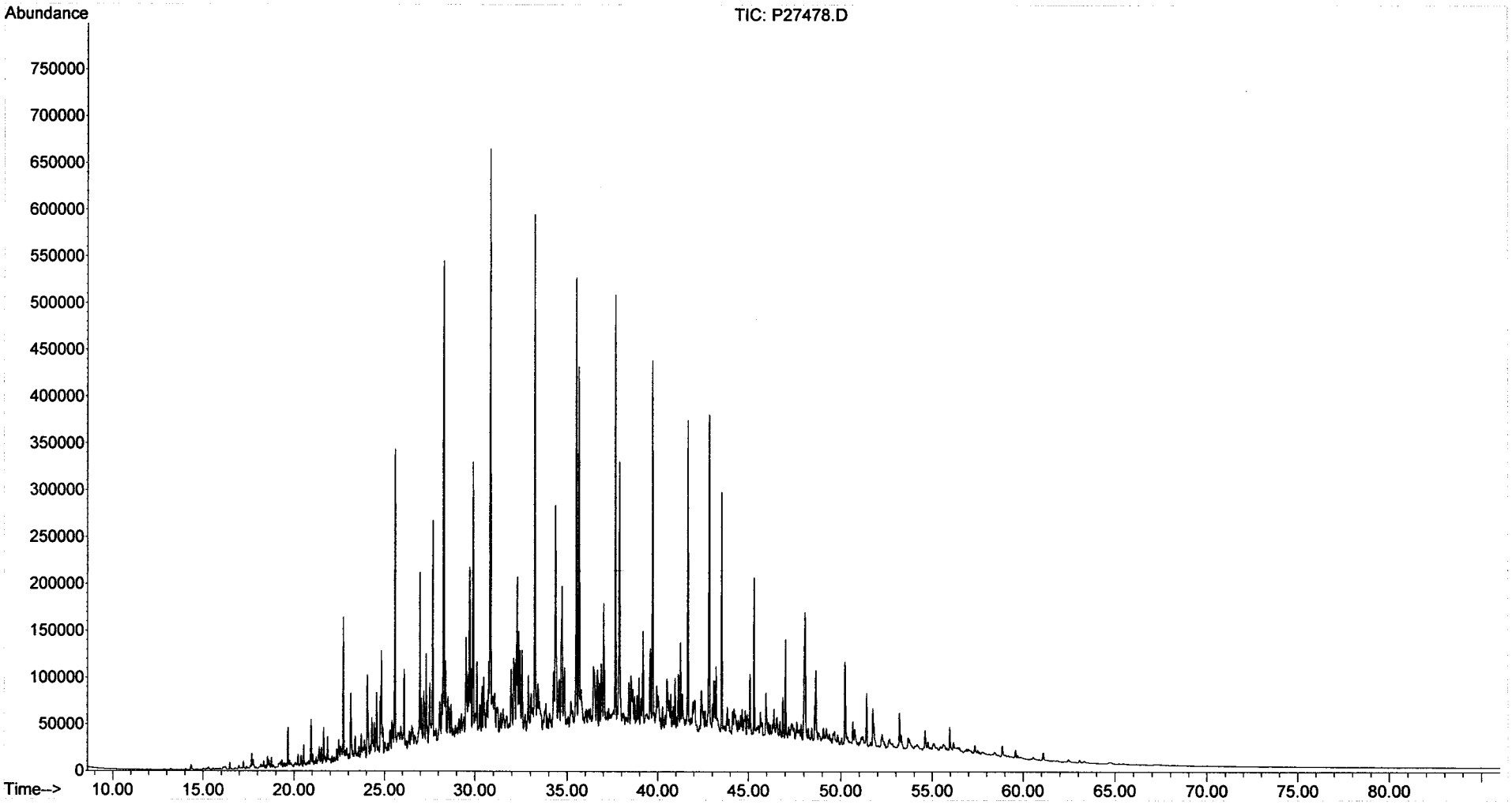
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.79	217	104m	4.34	ng/ml	
125) 14a,17a-20S-Methylcholesta	56.98	217	660m	27.54	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.76	217	2719m	113.47	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	58.15	217	1892m	78.96	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.17	217	2503m	104.46	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.70	218	2981m	124.41	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.80	218	2900m	121.03	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.17	218	2295m	95.78	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.25	218	2349m	98.03	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.43	218	3904	162.93	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.49	218	2581m	107.71	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27478.D
Acq On : 6 Jan 2006 6:07 am
Operator : AC
Sample : 0512105-02
Misc : 1X
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jan 09 13:19:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-88 (15.9-16.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-03**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	12/31/05	83.7	5.02	17.1094	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1200000**	E	Fluoranthene	**200000**	E
C1-Naphthalenes	**1200000**	E	Pyrene	**320000**	E
C2-Naphthalenes	**650000**	E	C1-Fluoranthenes/Pyrenes	**280000**	
C3-Naphthalenes	**210000**		C2-Fluoranthenes/Pyrenes	**86000**	
C4-Naphthalenes	**60000**		C3-Fluoranthenes/Pyrenes	**26000**	
Biphenyl	**100000**	E	C4-Fluoranthenes/Pyrenes	**7500**	
Dibenzofuran	**25000**		Naphthobenzothiophenes	**27000**	
Acenaphthylene	**120000**	E	C1-Naphthobenzothiophenes	**24000**	
Acenaphthene	**450000**	E	C2-Naphthobenzothiophenes	**12000**	
Fluorene	**260000**	E	C3-Naphthobenzothiophenes	**4800**	
C1-Fluorenes	**140000**		C4-Naphthobenzothiophenes	**1900**	
C2-Fluorenes	**82000**		Benz[a]anthracene	**120000**	E
C3-Fluorenes	**39000**		Chrysene/Triphenylene	**110000**	E
Anthracene	**240000**	E	C1-Chrysenes	**84000**	
Phenanthrene	**700000**	E	C2-Chrysenes	**31000**	
C1-Phenanthrenes/Anthracenes	**470000**	E	C3-Chrysenes	**14000**	
C2-Phenanthrenes/Anthracenes	**180000**		C4-Chrysenes	**3700**	
C3-Phenanthrenes/Anthracenes	**53000**		Benzo[b]fluoranthene	**32000**	
C4-Phenanthrenes/Anthracenes	**12000**		Benzo[k]fluoranthene	**39000**	
Retene	5.9	U	Benzo[a]fluoranthene	**20000**	
Dibenzothiophene	**79000**	E	Benzo[e]pyrene	**34000**	
C1-Dibenzothiophenes	**83000**		Benzo[a]pyrene	**78000**	E
C2-Dibenzothiophenes	**59000**		Perylene	**10000**	
C3-Dibenzothiophenes	**27000**		Indeno[1,2,3-cd]pyrene	**28000**	
C4-Dibenzothiophenes	**7700**		Dibenz[a,h]anthracene	**8400**	
Benzo(b)fluorene	**46000**	E	Benzo[g,h,i]perylene	**26000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	128	50-130
Pyrene-d10	68	50-130
Benzo[b]fluoranthene-d12	96	50-130

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

01/10/06 12:32

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-88 (15.9-16.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-03**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	12/31/05	83.7	5.02	17.1094	1	AC

Parameter	Result
Carbazole	**7400**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	128	50-130
Pyrene-d10	68	50-130
Benzo[b]fluoranthene-d12	96	50-130

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42934.D
Acq On : 31 Dec 2005 1:33 am
Operator : AC
Sample : 0512105-03
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

ms for WD 1-10-06

Quant Time: Jan 08 18:18:56 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.75	164	52531m	500.00 ng/mL	0.00
72) Chrysene-d12	43.24	240	99629m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.44	152	149593m	1501.04 ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 150.10%#		
58) Pyrene-d10	38.32	212	196402m	792.72 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.27%		
81) Benzo[b]fluoranthene-d12	47.12	264	235306m	1127.58 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 112.76%		
125) 5B(H)Cholane - Surr	43.85	217	52041	1153.88 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 115.39%		

Target Compounds					Qvalue
9) Naphthalene	19.87	128	58510169m	286777.83 ng/mL E	
10) C1-Naphthalenes	22.61	142	61191386m	299919.36 ng/mL E	
11) C2-Naphthalenes	25.42	156	32491061m	159249.51 ng/mL E	
12) C3-Naphthalenes	27.74	170	10633367m	52117.67 ng/mL	
13) C4-Naphthalenes	30.50	184	2995916m	14683.98 ng/mL	
15) 2-Methylnaphthalene	22.61	142	38087498	293046.24 ng/mL# E	100
16) 1-Methylnaphthalene	23.02	142	23078163m	176257.31 ng/mL E	
22) Biphenyl	24.44	154	3992560	25640.60 ng/mL# E	100
23) 2,6-Dimethylnaphthalene	25.08	156	4936670m	43804.89 ng/mL E	
24) Dibenzofuran	27.52	168	1112716m	6108.03 ng/mL	
25) Acenaphthylene	26.16	152	6857008m	30032.95 ng/mL E	
26) Acenaphthene	26.92	153	15308290	109438.51 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.45	170	749622m	6500.38 ng/mL	
28) Fluorene	28.93	166	9582963m	63950.04 ng/mL E	
29) C1-Fluorenes	31.13	180	5240875m	34973.96 ng/mL	
30) C2-Fluorenes	33.32	194	3021018m	20160.18 ng/mL	
31) C3-Fluorenes	35.19	208	1433391m	9565.46 ng/mL	
32) Dibenzothiophene	32.23	184	4304600m	19377.17 ng/mL E	
36) OTP	34.44	198	36854	165.90 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	4563559m	20542.87 ng/mL	
38) C2-Dibenzothiophenes	35.68	212	3217344m	14482.88 ng/mL	
39) C3-Dibenzothiophenes	37.51	226	1466817m	6602.88 ng/mL	
40) C4-Dibenzothiophenes	39.18	240	422364m	1901.27 ng/mL	
41) Phenanthrene	32.77	178	42709100m	170913.40 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.83	192	28983315m	115985.51 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.98	206	10999313m	44017.08 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.79	220	3236674m	12952.53 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.97	234	732604m	2931.74 ng/mL	
53) Anthracene	32.95	178	13548678	59379.81 ng/mL E	98
54) Carbazole	33.57	167	329091	1819.84 ng/mL#	84
55) 1-Methylphenanthrene	35.26	192	4192461m	25424.67 ng/mL E	
56) Fluoranthene	37.54	202	12779357	49612.79 ng/mL E	100
57) Benzo(b)fluorene	40.03	216	1694563m	11231.73 ng/mL E	
59) Pyrene	38.44	202	21147817m	79139.12 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.80	216	18206545m	68132.32 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.24	230	5657146m	21170.11 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.33	244	1720421m	6438.14 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.95	258	490468m	1835.42 ng/mL	
64) Naphthobenzothiophene	42.24	234	1041933m	4288.62 ng/ml	
65) Naphthobenzothiophene-2,1-	42.24	234	1042981m	4292.93 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42934.D
Acq On : 31 Dec 2005 1:33 am
Operator : AC
Sample : 0512105-03
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 08 18:18:56 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

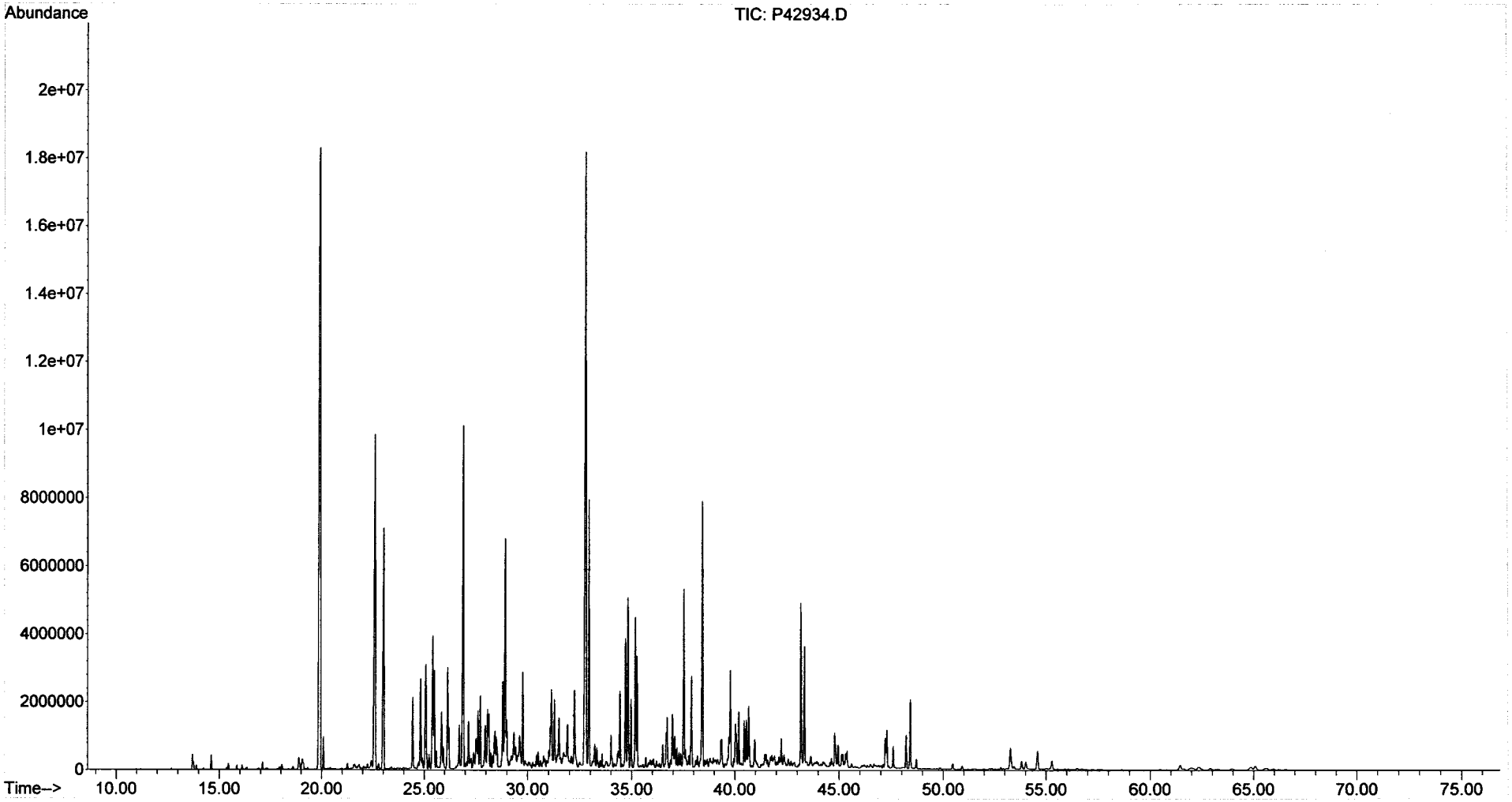
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.57	234	270757m	1114.44 ng/mL	
67) Naphthobenzothiophene-2,3-	42.87	234	311170m	1280.78 ng/mL	
68) C1-Naphthobenzothiophenes	43.63	248	1447145m	5956.48 ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	692023m	2848.38 ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	285879m	1176.68 ng/ml	
71) C4-Naphthobenzothiophenes	48.42	290	112812m	464.34 ng/mL	
73) Benz[a]anthracene	43.18	228	6928565m	29238.74 ng/mL E	
74) Chrysene	43.35	228	6273173m	26084.82 ng/mL E	
75) Chrysene/Triphenylene	43.35	228	6265971m	26054.87 ng/mL	
76) C1-Chrysenes	44.80	242	4932841m	20511.51 ng/mL	
77) C2-Chrysenes	46.50	256	1832629m	7620.35 ng/mL	
78) BBF-d12 Surr BKGD	47.12	256	25682m	106.79 ng/mL	
79) C3-Chrysenes	48.10	270	796897m	3313.62 ng/mL	
80) C4-Chrysenes	49.10	284	215953m	897.97 ng/mL	
82) Benzo[b]fluoranthene	47.22	252	1947244	7907.02 ng/mL	99
83) Benzo[k]fluoranthene	47.29	252	2653343	9551.23 ng/mL	99
84) Benzo[a]fluoranthene	47.59	252	1332099m	4795.15 ng/mL	
85) Benzo[e]pyrene	48.22	252	2091940	8428.73 ng/mL	99
86) Benzo[a]pyrene	48.43	252	4554328m	19037.43 ng/mL E	
87) Perylene	48.71	252	608684	2569.34 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.27	276	1533444m	6901.41 ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	471680m	2054.73 ng/mL	
90) Benzo[g,h,i]perylene	54.59	276	1618681	6392.95 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42934.D
Acq On : 31 Dec 2005 1:33 am
Operator : AC
Sample : 0512105-03
Misc : 1X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 08 18:18:56 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-88 (15.9-16.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-03E**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/06/06	83.7	5.02	17.1094	50	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1300000**		Fluoranthene	**140000**	
C1-Naphthalenes	**800000**		Pyrene	**220000**	
C2-Naphthalenes	**440000**		C1-Fluoranthenes/Pyrenes	180	U
C3-Naphthalenes	340	U	C2-Fluoranthenes/Pyrenes	180	U
C4-Naphthalenes	340	U	C3-Fluoranthenes/Pyrenes	180	U
Biphenyl	**72000**		C4-Fluoranthenes/Pyrenes	180	U
Dibenzofuran	240	U	Naphthobenzothiophenes	250	U
Acenaphthylene	**81000**		C1-Naphthobenzothiophenes	250	U
Acenaphthene	**290000**		C2-Naphthobenzothiophenes	250	U
Fluorene	**170000**		C3-Naphthobenzothiophenes	250	U
C1-Fluorenes	230	U	C4-Naphthobenzothiophenes	250	U
C2-Fluorenes	230	U	Benz[a]anthracene	**89000**	
C3-Fluorenes	230	U	Chrysene/Triphenylene	**86000**	
Anthracene	**160000**		C1-Chrysenes	220	U
Phenanthrene	**500000**		C2-Chrysenes	220	U
C1-Phenanthrenes/Anthracenes	**330000**		C3-Chrysenes	220	U
C2-Phenanthrenes/Anthracenes	300	U	C4-Chrysenes	220	U
C3-Phenanthrenes/Anthracenes	300	U	Benzo[b]fluoranthene	220	U
C4-Phenanthrenes/Anthracenes	300	U	Benzo[k]fluoranthene	410	U
Retene	300	U	Benzo[a]fluoranthene	410	U
Dibenzothiophene	**57000**		Benzo[e]pyrene	280	U
C1-Dibenzothiophenes	230	U	Benzo[a]pyrene	**62000**	
C2-Dibenzothiophenes	230	U	Perylene	350	U
C3-Dibenzothiophenes	230	U	Indeno[1,2,3-cd]pyrene	490	U
C4-Dibenzothiophenes	230	U	Dibenz[a,h]anthracene	390	U
Benzo(b)fluorene	**31000**		Benzo[g,h,i]perylene	360	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	95	50-130
Pyrene-d10	84	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.

01/10/06 11:58

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43064.D
Acq On : 6 Jan 2006 5:04 am
Operator : AC
Sample : 0512105-03-RE
Misc : 50X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 09 11:47:42 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WW 1/10/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	64611m	500.00	ng/mL	-0.05
72) Chrysene-d12	43.17	240	114824m	500.00	ng/mL	-0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	2727	22.25	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.23%#			
58) Pyrene-d10	38.25	212	5987m	19.65	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.96%#			
81) Benzo[b]fluoranthene-d12	47.07	264	5018m	20.86	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.09%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.80	128	1561025m	6220.61	ng/mL	
10) C1-Naphthalenes	22.49	142	988109m	3937.57	ng/mL	
11) C2-Naphthalenes	25.34	156	541736m	2158.79	ng/mL	
15) 2-Methylnaphthalene	22.49	142	617216m	3861.00	ng/mL	
16) 1-Methylnaphthalene	22.92	142	369704	2295.67	ng/mL#	100
22) Biphenyl	24.38	154	67852m	354.28	ng/mL	
23) 2,6-Dimethylnaphthalene	24.99	156	57307m	413.43	ng/mL	
25) Acenaphthylene	26.09	152	111373m	396.60	ng/mL	
26) Acenaphthene	26.82	153	244330	1420.13	ng/mL	99
28) Fluorene	28.85	166	154960m	840.76	ng/mL	
32) Dibenzothiophene	32.16	184	77033m	281.93	ng/mL	
41) Phenanthrene	32.66	178	760663	2474.90	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.73	192	494845m	1610.03	ng/mL	
53) Anthracene	32.84	178	217710m	775.76	ng/mL	
55) 1-Methylphenanthrene	35.17	192	77436m	381.80	ng/mL	
56) Fluoranthene	37.44	202	219024m	691.33	ng/mL	
57) Benzo(b)fluorene	39.96	216	28086	151.35	ng/mL	95
59) Pyrene	38.32	202	350842	1067.45	ng/mL	99
73) Benz[a]anthracene	43.11	228	119599m	437.92	ng/mL	
74) Chrysene	43.27	228	117560m	424.14	ng/mL	
75) Chrysene/Triphenylene	43.27	228	116581m	420.61	ng/mL	
86) Benzo[a]pyrene	48.35	252	83404m	302.50	ng/mL	

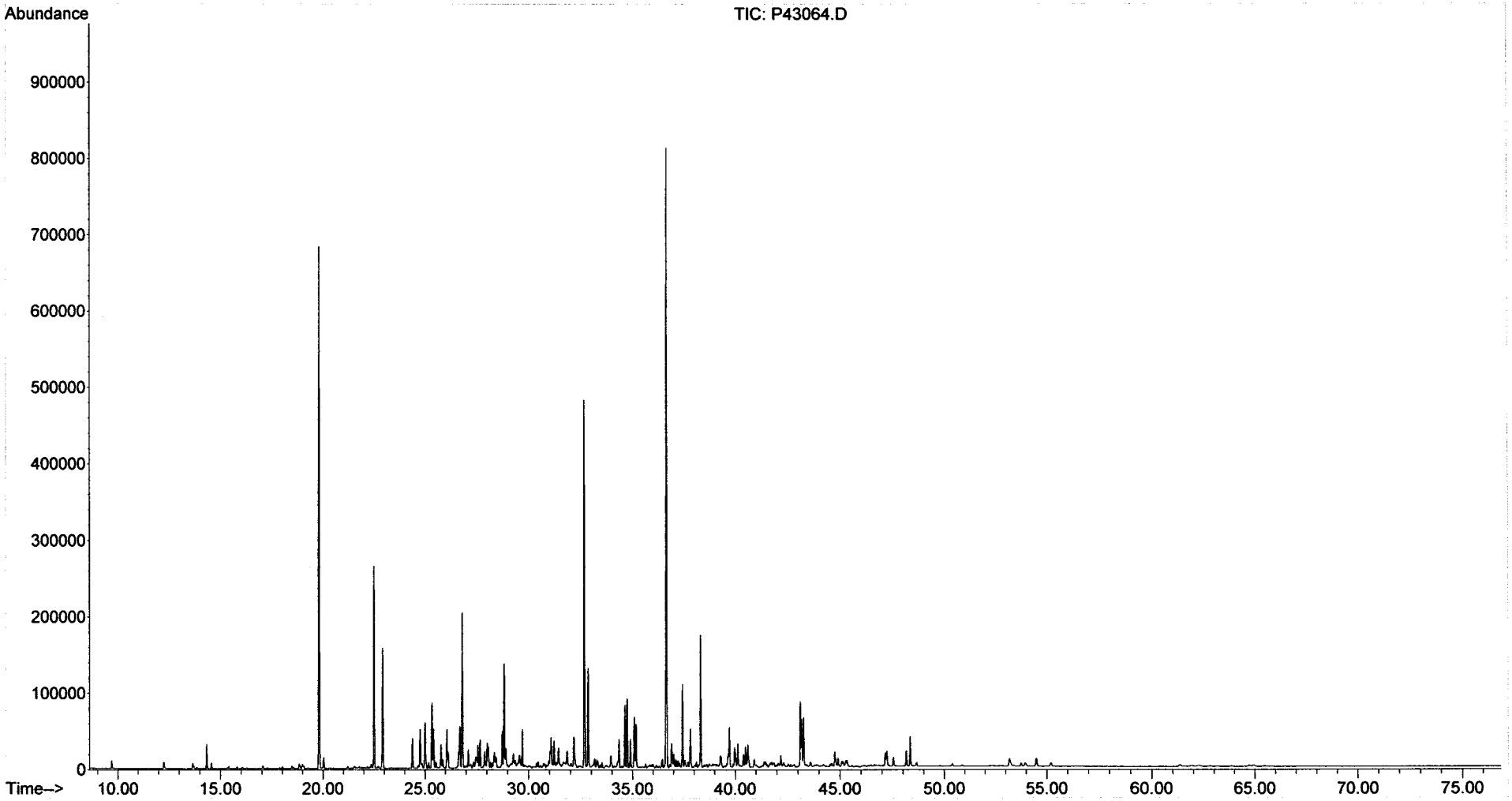
MS

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43064.D
Acq On : 6 Jan 2006 5:04 am
Operator : AC
Sample : 0512105-03-RE
Misc : 50X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 09 11:47:42 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-88 (15.9-16.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-03**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/06/06	83.7	5.02	2.22	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**110**	30,31-Bishomohopane-22S	**24**
C24 Tricyclic Terpane	**68**	30,31-Bishomohopane-22R	**21**
C25 Tricyclic Terpane	**56**	30,31-Trishomohopane-22S	**14**
C24 Tetracyclic Terpane	**22**	30,31-Trishomohopane-22R	**11**
C26 Tricyclic Terpane-22S	**22**	Tetrakishomohopane-22S	**7.9**
C26 Tricyclic Terpane-22R	**23**	Tetrakishomohopane-22R	**6.2**
C28 Tricyclic Terpane-22S	**20**	Pentakishomohopane-22S	**5.4**
C28 Tricyclic Terpane-22R	**23**	Pentakishomohopane-22R	**5.2** J
C29 Tricyclic Terpane-22S	**18**	13b(H),17a(H)-20S-Diacholestane	**71**
C29 Tricyclic Terpane-22R	**18**	13b(H),17a(H)-20R-Diacholestane	**40**
18a-22,29,30-Trisnorneohopane-TS	**45**	13b,17a-20S-Methyldiacholestane	**24**
C30 Tricyclic Terpane-22S	**8.8**	14a(H),17a(H)-20S-Cholestane	**38**
C30 Tricyclic Terpane-22R	**18**	14a(H),17a(H)-20R-Cholestane	**110**
17a(H)-22,29,30-Trisnorhopane-TM	**45**	13b,17a-20R-Ethyldiacholestane	**18**
17a/b,21b/a 28,30-Bisnorhopane	**17**	13a,17b-20S-Ethyldiacholestane	**2.8** J
17a(H),21b(H)-25-Norhopane	**8.4**	14a,17a-20S-Methylcholestane	**10**
30-Norhopane	**100**	14a,17a-20R-Methylcholestane	**49**
18a(H)-30-Norneohopane-C29Ts	**36**	14a(H),17a(H)-20S-Ethylcholestane	**35**
17a(H)-Diahopane	**14**	14a(H),17a(H)-20R-Ethylcholestane	**46**
30-Normoretane	**21**	14b(H),17b(H)-20R-Cholestane	**50**
18a(H)&18b(H)-Oleananes	**24**	14b(H),17b(H)-20S-Cholestane	**50**
Hopane	**160**	14b,17b-20R-Methylcholestane	**41**
Moretane	**20**	14b,17b-20S-Methylcholestane	**42**
30-Homohopane-22S	**42**	14b(H),17b(H)-20R-Ethylcholestane	**57**
30-Homohopane-22R	**38**	14b(H),17b(H)-20S-Ethylcholestane	**49**

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

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

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27479.D
Acq On : 6 Jan 2006 7:53 am
Operator : AC
Sample : 0512105-03
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 09 13:22:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

ans forwd 1/10/06

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	50.65	240	55597m	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	51.42	217	213145	8965.26	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 896.53%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	17019m	294.88	ng/mL	
84) Hopane (T19)	61.10	191	17219m	298.35	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.85	191	12144	210.42	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.72	191	7448	129.05	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.56	191	6173m	106.96	ng/ml	
88) C24 Tetracyclic Terpane (T	52.06	191	2389m	41.39	ng/ml	
89) C26 Tricyclic Terpane-22S	51.77	191	2382m	41.27	ng/ml	
90) C26 Tricyclic Terpane-22R	51.88	191	2556m	44.29	ng/ml	
91) C28 Tricyclic Terpane-22S	54.63	191	2143m	37.13	ng/ml	
92) C28 Tricyclic Terpane-22R	54.82	191	2528m	43.80	ng/ml	
93) C29 Tricyclic Terpane-22S	55.44	191	1939m	33.60	ng/ml	
94) C29 Tricyclic Terpane-22R	55.67	191	1932m	33.48	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.90	191	4953m	85.82	ng/ml	
96) C30 Tricyclic Terpane-22S	57.04	191	960m	16.63	ng/mL	
97) C30 Tricyclic Terpane-22R	57.32	191	1915	33.18	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.51	191	4941m	85.61	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.83	191	1876m	32.50	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.65	191	920	15.94	ng/ml	100
101) 30-Norhopane (T15)	59.59	191	11143m	193.07	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.70	191	3980m	68.96	ng/ml	
103) 17a(H)-Diahopane (X)	59.85	191	1505m	26.08	ng/ml	
104) 30-Normoretane (T17)	60.45	191	2331	40.39	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.89	191	2589m	44.86	ng/ml	
106) Moretane (T20)	61.86	191	2149m	37.24	ng/ml	
107) 30-Homohopane-22S (T21)	63.06	191	4586	79.46	ng/ml	100
108) 30-Homohopane-22R (T22)	63.32	191	4121	71.40	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.79	191	2655	46.00	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.20	191	2265	39.25	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.13	191	1570	27.20	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.80	191	1186	20.55	ng/ml	100
113) Tetrakishomohopane-22S (T3	70.02	191	867	15.02	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.03	191	671m	11.63	ng/ml	
115) Pentakishomohopane-22S (T3	73.46	191	584m	10.12	ng/ml	
116) Pentakishomohopane-22R (T3	74.89	191	572m	9.91	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	53.23	217	3211	135.06	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.73	217	1793	75.42	ng/ml	100
120) 13b,17a-20S-Methyldiachole	54.57	217	1092m	45.93	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.59	217	1692m	71.17	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.18	217	4813m	202.44	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.49	217	825m	34.70	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27479.D
Acq On : 6 Jan 2006 7:53 am
Operator : AC
Sample : 0512105-03
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 09 13:22:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

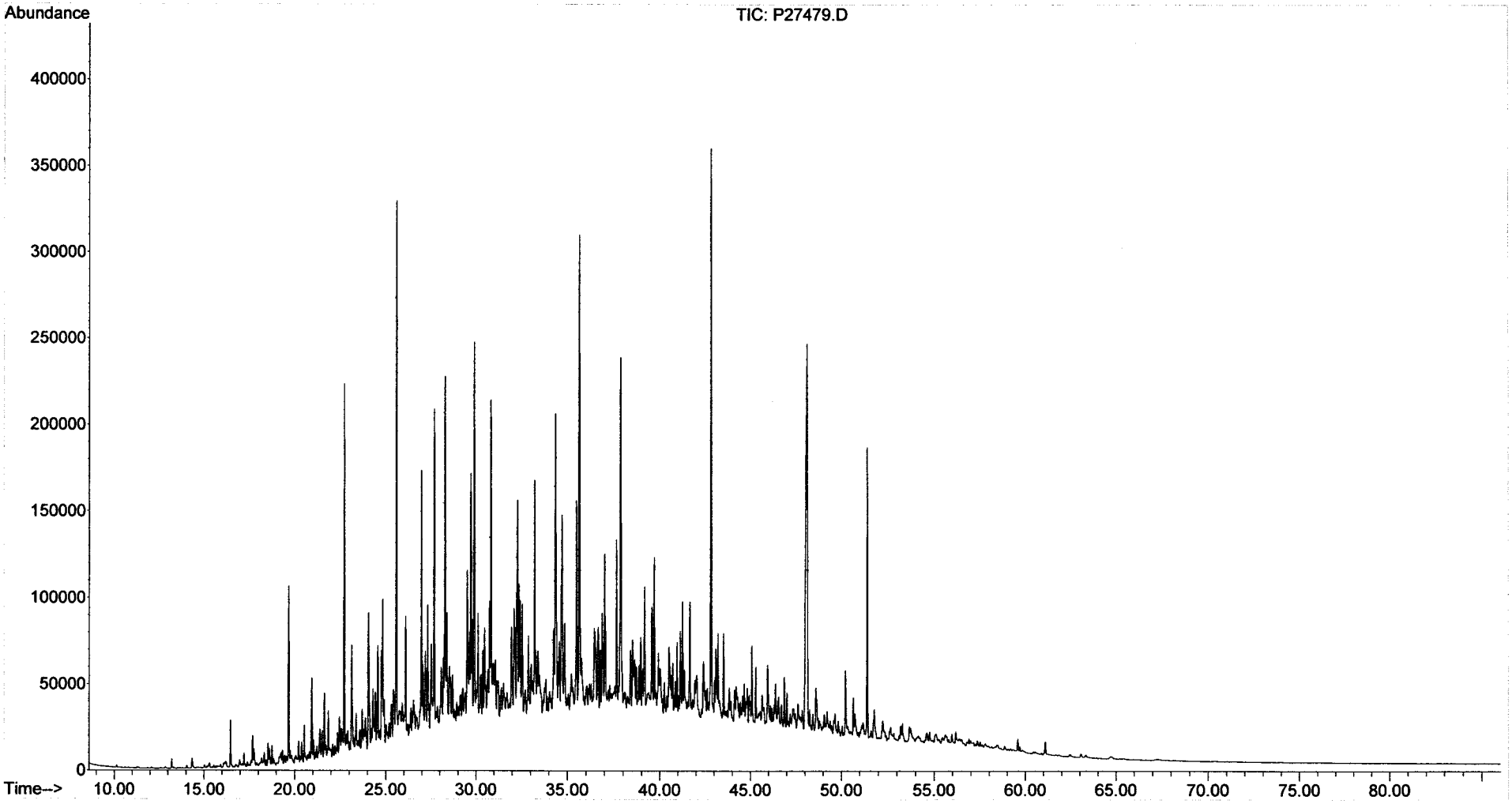
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.80	217	125m	5.26	ng/ml	
125) 14a,17a-20S-Methylcholesta	56.98	217	458m	19.26	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.76	217	2210	92.96	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.15	217	1566m	65.87	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.17	217	2059m	86.61	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.69	218	2227m	93.67	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.80	218	2259m	95.02	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.16	218	1832m	77.06	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.25	218	1892m	79.58	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.43	218	2579	108.48	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.49	218	2210m	92.96	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27479.D
Acq On : 6 Jan 2006 7:53 am
Operator : AC
Sample : 0512105-03
Misc : 1X
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 09 13:22:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-96 (14-15)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-04**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	83.5	5.33	17.1094	10	AC

Parameter	Result		Parameter	Result
Naphthalene	1500000	E	Fluoranthene	150000
C1-Naphthalenes	1000000	E	Pyrene	230000
C2-Naphthalenes	530000		C1-Fluoranthenes/Pyrenes	210000
C3-Naphthalenes	170000		C2-Fluoranthenes/Pyrenes	60000
C4-Naphthalenes	43000		C3-Fluoranthenes/Pyrenes	16000
Biphenyl	84000		C4-Fluoranthenes/Pyrenes	3900
Dibenzofuran	20000		Naphthobenzothiophenes	20000
Acenaphthylene	35000		C1-Naphthobenzothiophenes	18000
Acenaphthene	430000	E	C2-Naphthobenzothiophenes	7500
Fluorene	200000		C3-Naphthobenzothiophenes	3200
C1-Fluorenes	100000		C4-Naphthobenzothiophenes	890
C2-Fluorenes	56000		Benz[a]anthracene	100000
C3-Fluorenes	24000		Chrysene/Triphenylene	92000
Anthracene	170000		C1-Chrysenes	71000
Phenanthrene	560000	E	C2-Chrysenes	24000
C1-Phenanthrenes/Anthracenes	340000		C3-Chrysenes	11000
C2-Phenanthrenes/Anthracenes	130000		C4-Chrysenes	2600
C3-Phenanthrenes/Anthracenes	33000		Benzo[b]fluoranthene	29000
C4-Phenanthrenes/Anthracenes	6300		Benzo[k]fluoranthene	40000
Retene	56	U	Benzo[a]fluoranthene	19000
Dibenzothiophene	58000		Benzo[e]pyrene	33000
C1-Dibenzothiophenes	61000		Benzo[a]pyrene	72000
C2-Dibenzothiophenes	42000		Perylene	10000
C3-Dibenzothiophenes	18000		Indeno[1,2,3-cd]pyrene	27000
C4-Dibenzothiophenes	5100		Dibenz[a,h]anthracene	7300
Benzo(b)fluorene	34000		Benzo[g,h,i]perylene	27000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	87	50-130
Benzo[b]fluoranthene-d12	101	50-130

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

01/10/06 12:35

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-96 (14-15)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-04**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	83.5	5.33	17.1094	10	AC

Parameter	Result
Carbazole	4700

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	87	50-130
Benzo[b]fluoranthene-d12	101	50-130

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43076.D
Acq On : 6 Jan 2006 3:44 pm
Operator : AC
Sample : 0512105-04
Misc : 10X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 09 12:33:10 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WD 1-10-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	56346m	500.00 ng/mL	-0.05
72) Chrysene-d12	43.18	240	94891	500.00 ng/mL	-0.04
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.37	152	13074	122.30 ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 12.23%#		
58) Pyrene-d10	38.25	212	26974m	101.50 ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.15%#		
81) Benzo[b]fluoranthene-d12	47.07	264	23363m	117.54 ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.75%#		
125) 5B(H)Cholane - Surr	43.81	217	4916	114.44 ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.44%#		

Target Compounds					Qvalue
9) Naphthalene	19.81	128	8394574m	38358.84 ng/mL E	
10) C1-Naphthalenes	22.51	142	5686134m	25982.68 ng/mL E	
11) C2-Naphthalenes	25.34	156	2992996m	13676.44 ng/mL	
12) C3-Naphthalenes	27.68	170	990116m	4524.32 ng/mL	
13) C4-Naphthalenes	30.45	184	243064m	1110.68 ng/mL	
15) 2-Methylnaphthalene	22.51	142	3597545m	25805.51 ng/mL E	
16) 1-Methylnaphthalene	22.93	142	2089104	14875.05 ng/mL# E	100
22) Biphenyl	24.38	154	365929	2190.92 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.00	156	400347m	3311.90 ng/mL	
24) Dibenzofuran	27.46	168	99386m	508.62 ng/mL	
25) Acenaphthylene	26.09	152	223893	914.23 ng/mL#	100
26) Acenaphthene	26.83	153	1689856	11262.78 ng/mL E	100
27) 2,3,5-Trimethylnaphthalene	28.38	170	74142m	599.40 ng/mL	
28) Fluorene	28.85	166	823587m	5123.93 ng/mL	
29) C1-Fluorenes	31.07	180	431799m	2686.43 ng/mL	
30) C2-Fluorenes	33.26	194	233103m	1450.25 ng/mL	
31) C3-Fluorenes	35.90	208	99531m	619.23 ng/mL	
32) Dibenzothiophene	32.17	184	362387m	1520.84 ng/mL	
36) OTP	34.34	198	2691m	11.29 ng/mL	
37) C1-Dibenzothiophenes	33.94	198	379580m	1592.99 ng/mL	
38) C2-Dibenzothiophenes	35.99	212	260066m	1091.42 ng/mL	
39) C3-Dibenzothiophenes	37.44	226	110287m	462.84 ng/mL	
40) C4-Dibenzothiophenes	39.12	240	31506m	132.22 ng/mL	
41) Phenanthrene	32.68	178	3943321	14711.96 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.74	192	2386128m	8902.30 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.90	206	896126m	3343.32 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.74	220	231885m	865.13 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.91	234	44079m	164.45 ng/mL	
53) Anthracene	32.84	178	1109857	4534.83 ng/mL	99
54) Carbazole	33.51	167	23788	122.64 ng/mL#	73
55) 1-Methylphenanthrene	35.18	192	372750m	2107.45 ng/mL	
56) Fluoranthene	37.44	202	1101082m	3985.26 ng/mL	
57) Benzo(b)fluorene	39.96	216	143962	889.59 ng/mL	96
59) Pyrene	38.33	202	1722274	6008.70 ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.72	216	1565991m	5463.46 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.39	230	444642m	1551.27 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.27	244	121802m	424.94 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.91	258	29288m	102.18 ng/mL	
64) Naphthobenzothiophene	42.18	234	81801m	313.90 ng/ml	
65) Naphthobenzothiophene-2,1-	42.18	234	81797m	313.88 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43076.D
Acq On : 6 Jan 2006 3:44 pm
Operator : AC
Sample : 0512105-04
Misc : 10X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 09 12:33:10 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.52	234	22854	87.70	ng/mL#	23
67) Naphthobenzothiophene-2,3-	42.82	234	28933m	111.03	ng/mL	
68) C1-Naphthobenzothiophenes	43.58	248	118507m	454.75	ng/ml	
69) C2-Naphthobenzothiophenes	45.08	262	51161m	196.32	ng/ml	
70) C3-Naphthobenzothiophenes	46.82	276	21649m	83.07	ng/ml	
71) C4-Naphthobenzothiophenes	49.80	290	6052m	23.22	ng/mL	
73) Benz[a]anthracene	43.11	228	587236m	2601.89	ng/mL	
74) Chrysene	43.27	228	541911m	2365.86	ng/mL	
75) Chrysene/Triphenylene	43.27	228	545453m	2381.33	ng/mL	
76) C1-Chrysenes	44.75	242	424921m	1855.11	ng/mL	
77) C2-Chrysenes	46.46	256	146009m	637.44	ng/mL	
78) BBF-d12 Surr BKGD	47.06	256	2299	10.04	ng/mL	100
79) C3-Chrysenes	48.06	270	63283m	276.28	ng/mL	
80) C4-Chrysenes	49.07	284	15813m	69.04	ng/mL	
82) Benzo[b]fluoranthene	47.16	252	177682	757.52	ng/mL	100
83) Benzo[k]fluoranthene	47.22	252	276819	1046.22	ng/mL	99
84) Benzo[a]fluoranthene	47.55	252	132726m	501.63	ng/mL	
85) Benzo[e]pyrene	48.16	252	202901	858.34	ng/mL	100
86) Benzo[a]pyrene	48.35	252	428201m	1879.28	ng/mL	
87) Perylene	48.66	252	60140	266.53	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.18	276	150369m	710.54	ng/mL	
89) Dibenz[a,h]anthracene	53.25	278	41328m	189.02	ng/mL	
90) Benzo[g,h,i]perylene	54.49	276	167494m	694.54	ng/mL	

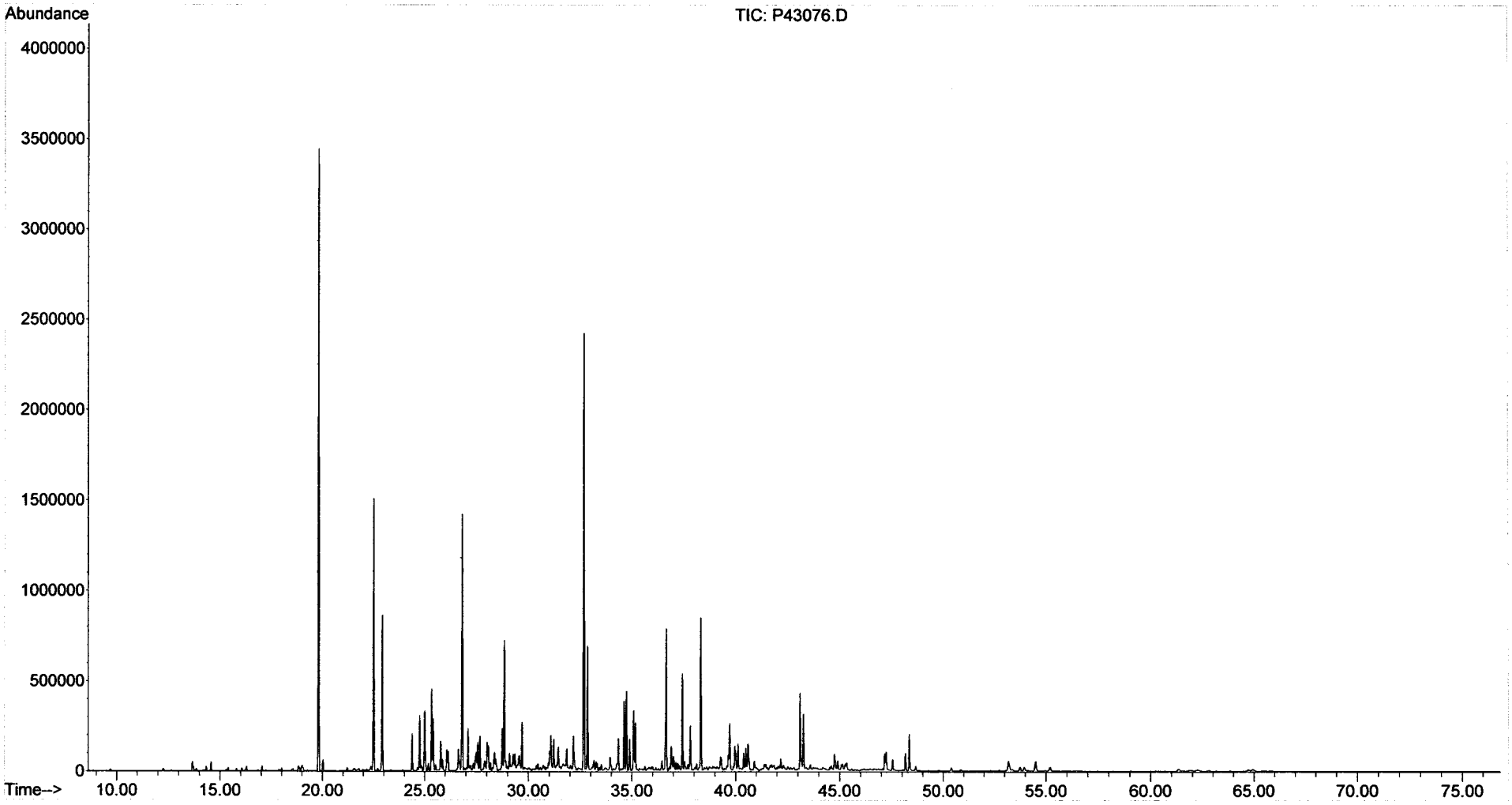
-RF trpt conc 2nd
cw 1/20/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43076.D
Acq On : 6 Jan 2006 3:44 pm
Operator : AC
Sample : 0512105-04
Misc : 10X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 09 12:33:10 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-96 (14-15)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-04E**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	83.5	5.33	17.1094	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1300000**		Fluoranthene	390	U
C1-Naphthalenes	**920000**		Pyrene	340	U
C2-Naphthalenes	630	U	C1-Fluoranthenes/Pyrenes	340	U
C3-Naphthalenes	630	U	C2-Fluoranthenes/Pyrenes	340	U
C4-Naphthalenes	630	U	C3-Fluoranthenes/Pyrenes	340	U
Biphenyl	350	U	C4-Fluoranthenes/Pyrenes	340	U
Dibenzofuran	460	U	Naphthobenzothiophenes	460	U
Acenaphthylene	700	U	C1-Naphthobenzothiophenes	460	U
Acenaphthene	**410000**		C2-Naphthobenzothiophenes	460	U
Fluorene	440	U	C3-Naphthobenzothiophenes	460	U
C1-Fluorenes	440	U	C4-Naphthobenzothiophenes	460	U
C2-Fluorenes	440	U	Benz[a]anthracene	600	U
C3-Fluorenes	440	U	Chrysene/Triphenylene	420	U
Anthracene	520	U	C1-Chrysenes	420	U
Phenanthrene	**530000**		C2-Chrysenes	420	U
C1-Phenanthrenes/Anthracenes	560	U	C3-Chrysenes	420	U
C2-Phenanthrenes/Anthracenes	560	U	C4-Chrysenes	420	U
C3-Phenanthrenes/Anthracenes	560	U	Benzo[b]fluoranthene	410	U
C4-Phenanthrenes/Anthracenes	560	U	Benzo[k]fluoranthene	780	U
Retene	560	U	Benzo[a]fluoranthene	780	U
Dibenzothiophene	430	U	Benzo[e]pyrene	530	U
C1-Dibenzothiophenes	430	U	Benzo[a]pyrene	530	U
C2-Dibenzothiophenes	430	U	Perylene	670	U
C3-Dibenzothiophenes	430	U	Indeno[1,2,3-cd]pyrene	920	U
C4-Dibenzothiophenes	430	U	Dibenz[a,h]anthracene	730	U
Benzo(b)fluorene	390	U	Benzo[g,h,i]perylene	680	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	102	50-130
Pyrene-d10	81	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.

01/10/06 12:01

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43066.D
Acq On : 6 Jan 2006 6:33 am
Operator : AC
Sample : 0512105-04-RE
Misc : 100X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 09 12:44:16 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WD 1-10-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	62895m	500.00	ng/mL	-0.05
72) Chrysene-d12	43.17	240	114225m	500.00	ng/mL	-0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	1423	11.93	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.19%#		
58) Pyrene-d10	38.25	212	2817m	9.50	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.95%#		
81) Benzo[b]fluoranthene-d12	47.07	264	2522m	10.54	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.05%#		
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	19.80	128	840194m	3439.48	ng/mL	
10) C1-Naphthalenes	22.49	142	587445m	2404.81	ng/mL	
15) 2-Methylnaphthalene	22.49	142	368388m	2367.33	ng/mL	
16) 1-Methylnaphthalene	22.92	142	218062	1390.99	ng/mL#	100
26) Acenaphthene	26.82	153	176866m	1056.06	ng/mL	
41) Phenanthrene	32.66	178	412422	1378.47	ng/mL	100

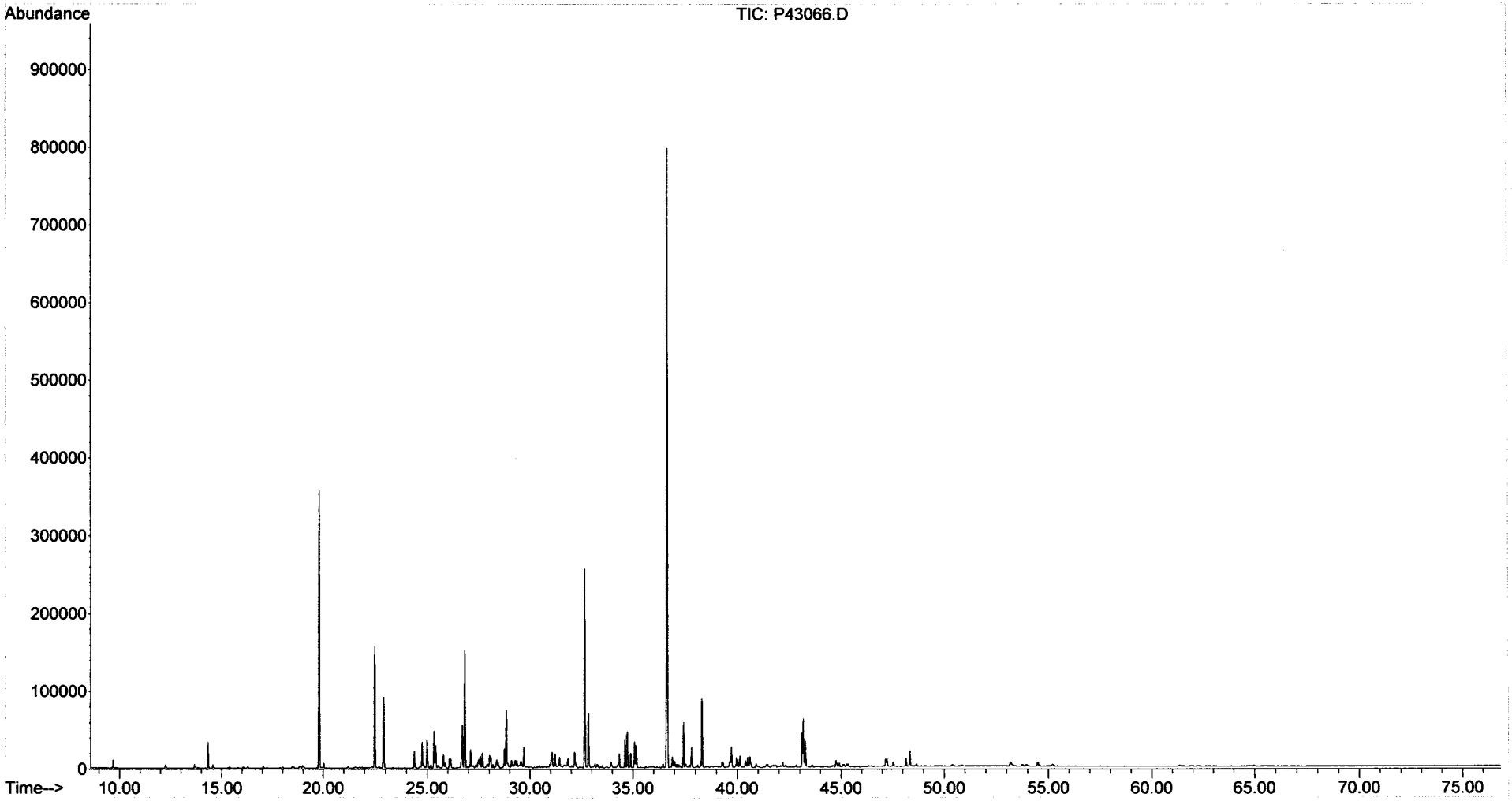
MS

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43066.D
Acq On : 6 Jan 2006 6:33 am
Operator : AC
Sample : 0512105-04-RE
Misc : 100X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 09 12:44:16 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-96 (14-15)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-04**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	83.5	5.33	2.22	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	97	30,31-Bishomohopane-22S	48
C24 Tricyclic Terpane	61	30,31-Bishomohopane-22R	22
C25 Tricyclic Terpane	54	30,31-Trishomohopane-22S	22
C24 Tetracyclic Terpane	23	30,31-Trishomohopane-22R	13
C26 Tricyclic Terpane-22S	22	Tetrakishomohopane-22S	12
C26 Tricyclic Terpane-22R	22	Tetrakishomohopane-22R	10
C28 Tricyclic Terpane-22S	21	Pentakishomohopane-22S	9.6
C28 Tricyclic Terpane-22R	22	Pentakishomohopane-22R	7.9
C29 Tricyclic Terpane-22S	20	13b(H),17a(H)-20S-Diacholestane	84
C29 Tricyclic Terpane-22R	21	13b(H),17a(H)-20R-Diacholestane	47
18a-22,29,30-Trisnorneohopane-TS	46	13b,17a-20S-Methyldiacholestane	33
C30 Tricyclic Terpane-22S	11	14a(H),17a(H)-20S-Cholestane	38
C30 Tricyclic Terpane-22R	18	14a(H),17a(H)-20R-Cholestane	150
17a(H)-22,29,30-Trisnorhopane-TM	64	13b,17a-20R-Ethyldiacholestane	21
17a/b,21b/a 28,30-Bisnorhopane	19	13a,17b-20S-Ethyldiacholestane	3.3 J
17a(H),21b(H)-25-Norhopane	12	14a,17a-20S-Methylcholestane	17
30-Norhopane	130	14a,17a-20R-Methylcholestane	74
18a(H)-30-Norneohopane-C29Ts	40	14a(H),17a(H)-20S-Ethylcholestane	48
17a(H)-Diahopane	13	14a(H),17a(H)-20R-Ethylcholestane	59
30-Normoretane	29	14b(H),17b(H)-20R-Cholestane	64
18a(H)&18b(H)-Oleananes	22	14b(H),17b(H)-20S-Cholestane	64
Hopane	200	14b,17b-20R-Methylcholestane	56
Moretane	33	14b,17b-20S-Methylcholestane	57
30-Homohopane-22S	52	14b(H),17b(H)-20R-Ethylcholestane	88
30-Homohopane-22R	45	14b(H),17b(H)-20S-Ethylcholestane	58

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

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

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27480.D
Acq On : 6 Jan 2006 9:39 am
Operator : AC
Sample : 0512105-04
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 09 13:25:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

OMS for WW 1-10-06

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	50.66	240	63270m	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	51.43	217	244114	9022.64	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 902.26%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	26033m	396.36	ng/mL	
84) Hopane (T19)	61.10	191	26033m	396.36	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.85	191	12732m	193.85	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.73	191	8052	122.60	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.51	191	7057m	107.45	ng/ml	
88) C24 Tetracyclic Terpane (T	52.06	191	3044	46.35	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.78	191	2832m	43.12	ng/ml	
90) C26 Tricyclic Terpane-22R	51.89	191	2968m	45.19	ng/ml	
91) C28 Tricyclic Terpane-22S	54.63	191	2814m	42.84	ng/ml	
92) C28 Tricyclic Terpane-22R	54.83	191	2838m	43.21	ng/ml	
93) C29 Tricyclic Terpane-22S	55.44	191	2705m	41.18	ng/ml	
94) C29 Tricyclic Terpane-22R	55.68	191	2754m	41.93	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.90	191	6040m	91.96	ng/ml	
96) C30 Tricyclic Terpane-22S	57.05	191	1403	21.36	ng/mL	100
97) C30 Tricyclic Terpane-22R	57.32	191	2383m	36.28	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.51	191	8495	129.34	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.84	191	2526m	38.46	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.66	191	1532	23.33	ng/ml	100
101) 30-Norhopane (T15)	59.59	191	16916m	257.55	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.70	191	5311m	80.86	ng/ml	
103) 17a(H)-Diahopane (X)	59.85	191	1665	25.35	ng/ml	100
104) 30-Normoretane (T17)	60.45	191	3852	58.65	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.88	191	2936m	44.70	ng/ml	
106) Moretane (T20)	61.85	191	4393m	66.89	ng/ml	
107) 30-Homohopane-22S (T21)	63.07	191	6870	104.60	ng/ml	100
108) 30-Homohopane-22R (T22)	63.33	191	5914m	90.04	ng/ml	
109) 30,31-Bishomohopane-22S (T	64.79	191	6372	97.02	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.21	191	2968	45.19	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.13	191	2841	43.26	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.82	191	1687	25.69	ng/ml	100
113) Tetrakishomohopane-22S (T3	70.03	191	1540	23.45	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.02	191	1322	20.13	ng/ml	100
115) Pentakishomohopane-22S (T3	73.47	191	1264	19.24	ng/ml	100
116) Pentakishomohopane-22R (T3	74.89	191	1035m	15.76	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	53.23	217	4582m	169.35	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.74	217	2547m	94.14	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.57	217	1781m	65.83	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.60	217	2065m	76.32	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.18	217	8167	301.86	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.50	217	1144m	42.28	ng/ml	

- RERUN conc 2nd 1/20/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27480.D
Acq On : 6 Jan 2006 9:39 am
Operator : AC
Sample : 0512105-04
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 09 13:25:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

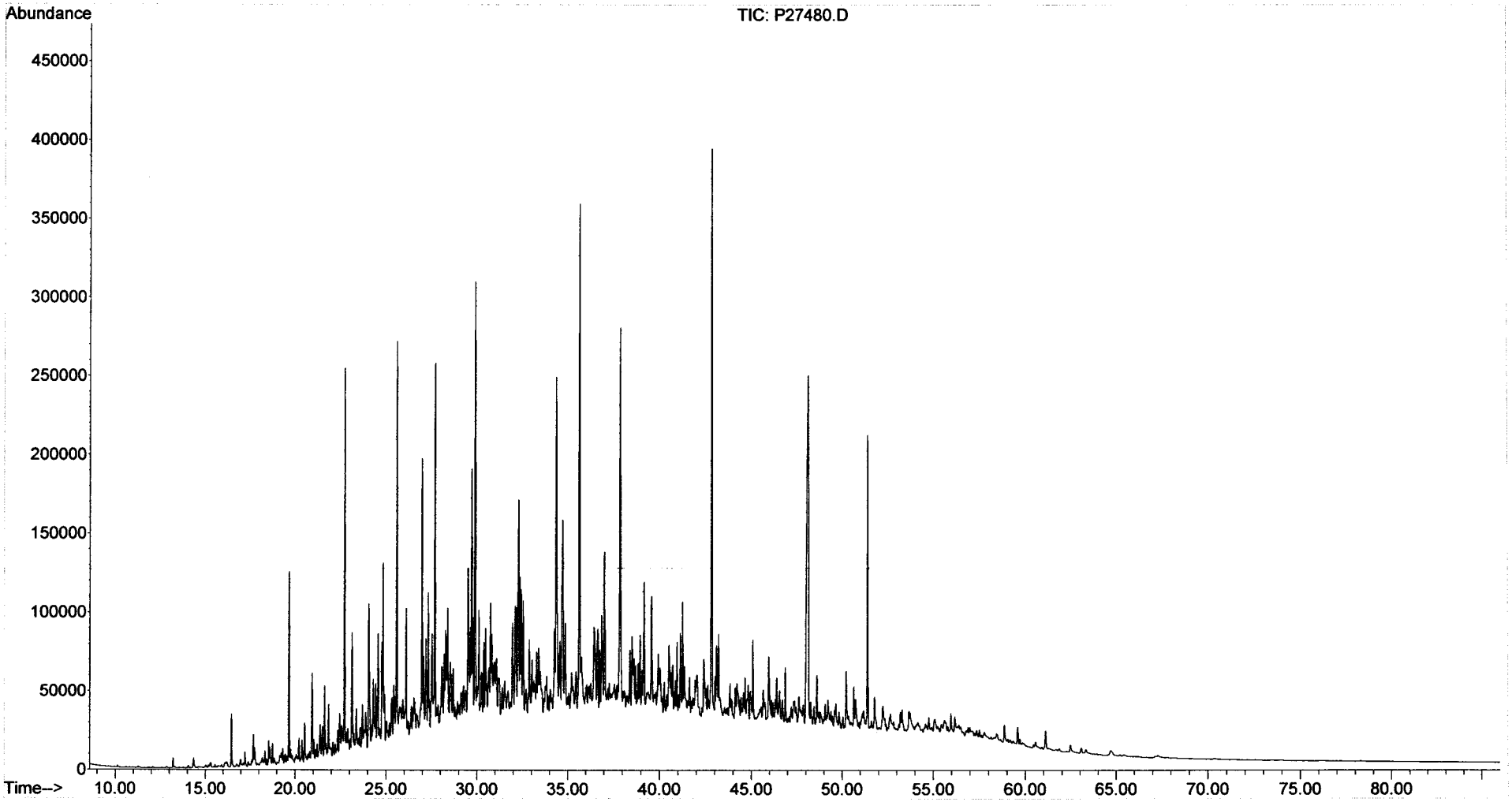
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.80	217	181	6.69	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.98	217	911m	33.67	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.77	217	3993	147.58	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.15	217	2595m	95.91	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.17	217	3218m	118.94	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.70	218	3486m	128.85	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.80	218	3501m	129.40	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.16	218	3038m	112.29	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.25	218	3076m	113.69	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.43	218	4775	176.49	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.49	218	3162m	116.87	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27480.D
Acq On : 6 Jan 2006 9:39 am
Operator : AC
Sample : 0512105-04
Misc : 1X
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 09 13:25:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-95 (3.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-05**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	43.5	5.19	25.9974	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**47000**	Fluoranthene	**60000**
C1-Naphthalenes	**52000**	Pyrene	**75000**
C2-Naphthalenes	**77000**	C1-Fluoranthenes/Pyrenes	**74000**
C3-Naphthalenes	**79000**	C2-Fluoranthenes/Pyrenes	**34000**
C4-Naphthalenes	**56000**	C3-Fluoranthenes/Pyrenes	**16000**
Biphenyl	**4300**	C4-Fluoranthenes/Pyrenes	**6000**
Dibenzofuran	**9200**	Naphthobenzothiophenes	**8800**
Acenaphthylene	**15000**	C1-Naphthobenzothiophenes	**10000**
Acenaphthene	**35000**	C2-Naphthobenzothiophenes	**7200**
Fluorene	**22000**	C3-Naphthobenzothiophenes	**4300**
C1-Fluorenes	**25000**	C4-Naphthobenzothiophenes	**2400**
C2-Fluorenes	**37000**	Benz[a]anthracene	**44000**
C3-Fluorenes	**29000**	Chrysene/Triphenylene	**45000**
Anthracene	**34000**	C1-Chrysenes	**41000**
Phenanthrene	**91000**	C2-Chrysenes	**22000**
C1-Phenanthrenes/Anthracenes	**100000**	C3-Chrysenes	**14000**
C2-Phenanthrenes/Anthracenes	**82000**	C4-Chrysenes	**4800**
C3-Phenanthrenes/Anthracenes	**37000**	Benzo[b]fluoranthene	**20000**
C4-Phenanthrenes/Anthracenes	**12000**	Benzo[k]fluoranthene	**22000**
Retene	**5900**	Benzo[a]fluoranthene	**8400**
Dibenzothiophene	**11000**	Benzo[e]pyrene	**19000**
C1-Dibenzothiophenes	**22000**	Benzo[a]pyrene	**35000**
C2-Dibenzothiophenes	**28000**	Perylene	**6000**
C3-Dibenzothiophenes	**18000**	Indeno[1,2,3-cd]pyrene	**16000**
C4-Dibenzothiophenes	**8200**	Dibenz[a,h]anthracene	**4300**
Benzo(b)fluorene	**12000**	Benzo[g,h,i]perylene	**15000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	102	50-130
Pyrene-d10	74	50-130
Benzo[b]fluoranthene-d12	91	50-130

N/A - Not Applicable

01/10/06 12:37

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-95 (3.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-05**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	43.5	5.19	25.9974	1	AC

Parameter	Result
Carbazole	**2600**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	102	50-130
Pyrene-d10	74	50-130
Benzo[b]fluoranthene-d12	91	50-130

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42938.D
Acq On : 31 Dec 2005 4:30 am
Operator : AC
Sample : 0512105-05
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

MS for WW 1-10-06

Quant Time: Jan 09 02:02:38 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.75	164	64840m	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	88065m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	96236	782.33	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 78.23%						
58) Pyrene-d10	38.30	212	173479m	567.28	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 56.73%						
81) Benzo[b]fluoranthene-d12	47.12	264	129356m	701.27	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 70.13%						
125) 5B(H)Cholane - Surr	43.85	217	28291m	709.65	ng/ml	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 70.97%						
Target Compounds						Qvalue
9) Naphthalene	19.85	128	1024903	4069.77	ng/mL#	100
10) C1-Naphthalenes	22.55	142	1127377m	4476.68	ng/mL	
11) C2-Naphthalenes	25.39	156	1690515m	6712.83	ng/mL	
12) C3-Naphthalenes	27.73	170	1716231m	6814.95	ng/mL	
13) C4-Naphthalenes	30.49	184	1230227m	4885.09	ng/mL	
15) 2-Methylnaphthalene	22.55	142	661606	4124.07	ng/mL#	100
16) 1-Methylnaphthalene	22.97	142	464332	2873.08	ng/mL#	100
22) Biphenyl	24.43	154	71792m	373.53	ng/mL	
23) 2,6-Dimethylnaphthalene	25.04	156	210981m	1516.72	ng/mL	
24) Dibenzofuran	27.51	168	179289m	797.34	ng/mL	
25) Acenaphthylene	26.13	152	371776m	1319.22	ng/mL	
26) Acenaphthene	26.87	153	521047m	3017.82	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.42	170	111867m	785.91	ng/mL	
28) Fluorene	28.89	166	360239m	1947.62	ng/mL	
29) C1-Fluorenes	31.26	180	404099m	2184.75	ng/mL	
30) C2-Fluorenes	33.30	194	590946m	3194.93	ng/mL	
31) C3-Fluorenes	35.29	208	470856m	2545.67	ng/mL	
32) Dibenzothiophene	32.21	184	252087m	919.35	ng/mL	
36) OTP	34.41	198	26572	96.91	ng/mL#	100
37) C1-Dibenzothiophenes	33.98	198	542419m	1978.18	ng/mL	
38) C2-Dibenzothiophenes	35.68	212	663341m	2419.17	ng/mL	
39) C3-Dibenzothiophenes	37.48	226	437862m	1596.86	ng/mL	
40) C4-Dibenzothiophenes	39.18	240	194421m	709.04	ng/mL	
41) Phenanthrene	32.71	178	2423835	7858.35	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.78	192	2785407m	9030.61	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.95	206	2199772m	7131.91	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.78	220	1001517m	3247.03	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.96	234	334872m	1085.69	ng/mL	
52) Retene	39.71	234	40319m	510.03	ng/mL	
53) Anthracene	32.89	178	821878m	2918.25	ng/mL	
54) Carbazole	33.55	167	50802m	227.60	ng/mL	
55) 1-Methylphenanthrene	35.22	192	428142m	2103.52	ng/mL	
56) Fluoranthene	37.49	202	1659602m	5219.89	ng/mL	
57) Benzo(b)fluorene	40.01	216	195612	1050.41	ng/mL	95
59) Pyrene	38.37	202	2158618m	6544.46	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.77	216	2120167m	6427.89	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.23	230	958520m	2906.03	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.70	244	449471m	1362.70	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.95	258	171603m	520.26	ng/mL	
64) Naphthobenzothiophene	42.22	234	146025m	486.94	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42938.D
Acq On : 31 Dec 2005 4:30 am
Operator : AC
Sample : 0512105-05
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 09 02:02:38 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

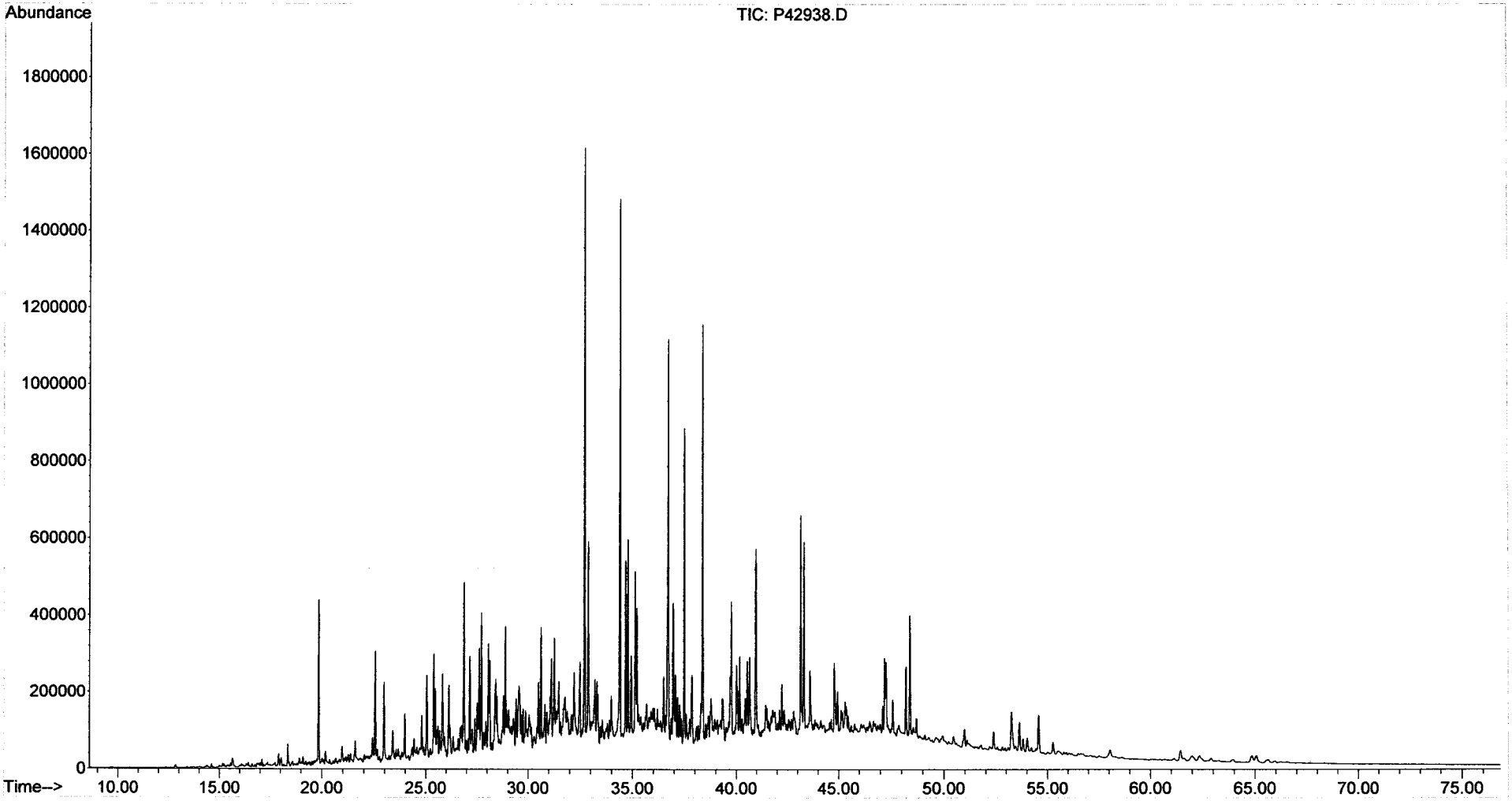
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.22	234	145061m	483.73	ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	37687m	125.67	ng/mL	
67) Naphthobenzothiophene-2,3-	42.86	234	46551m	155.23	ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	267144m	890.83	ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	186615m	622.30	ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	112900m	376.48	ng/ml	
71) C4-Naphthobenzothiophenes	48.32	290	61134m	203.86	ng/mL	
73) Benz[a]anthracene	43.15	228	808699m	3860.87	ng/mL	
74) Chrysene	43.31	228	834088m	3923.69	ng/mL	
75) Chrysene/Triphenylene	43.31	228	836519m	3935.13	ng/mL	
76) C1-Chrysenes	44.79	242	756277m	3557.66	ng/mL	
77) C2-Chrysenes	46.50	256	418308m	1967.79	ng/mL	
78) BBF-d12 Surr BKGD	47.11	256	9453	44.47	ng/mL	100
79) C3-Chrysenes	48.09	270	262838m	1236.43	ng/mL	
80) C4-Chrysenes	49.68	284	88642m	416.99	ng/mL	
82) Benzo[b]fluoranthene	47.20	252	369349	1696.73	ng/mL	100
83) Benzo[k]fluoranthene	47.27	252	457944	1864.92	ng/mL	100
84) Benzo[a]fluoranthene	47.59	252	179164m	729.62	ng/mL	
85) Benzo[e]pyrene	48.21	252	360915	1645.13	ng/mL	98
86) Benzo[a]pyrene	48.40	252	637310	3013.82	ng/mL	99
87) Perylene	48.70	252	108131m	516.37	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	278214m	1416.55	ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	75105m	370.13	ng/mL	
90) Benzo[g,h,i]perylene	54.56	276	291704	1303.36	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42938.D
Acq On : 31 Dec 2005 4:30 am
Operator : AC
Sample : 0512105-05
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 09 02:02:38 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-95 (3.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-05**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	43.5	5.19	11.09	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2100**	30,31-Bishomohopane-22S	**3800**
C24 Tricyclic Terpane	**1200**	30,31-Bishomohopane-22R	**2700**
C25 Tricyclic Terpane	**1400**	30,31-Trishomohopane-22S	**2300**
C24 Tetracyclic Terpane	**1300**	30,31-Trishomohopane-22R	**1500**
C26 Tricyclic Terpane-22S	**610**	Tetrakishomohopane-22S	**1500**
C26 Tricyclic Terpane-22R	**610**	Tetrakishomohopane-22R	**980**
C28 Tricyclic Terpane-22S	**660**	Pentakishomohopane-22S	**1300**
C28 Tricyclic Terpane-22R	**730**	Pentakishomohopane-22R	**1100**
C29 Tricyclic Terpane-22S	**860**	13b(H),17a(H)-20S-Diacholestane	**3000**
C29 Tricyclic Terpane-22R	**820**	13b(H),17a(H)-20R-Diacholestane	**1800**
18a-22,29,30-Trisnorneohopane-TS	**3400**	13b,17a-20S-Methyldiacholestane	**1600**
C30 Tricyclic Terpane-22S	**500**	14a(H),17a(H)-20S-Cholestane	**1200**
C30 Tricyclic Terpane-22R	**830**	14a(H),17a(H)-20R-Cholestane	**5600**
17a(H)-22,29,30-Trisnorhopane-TM	**3700**	13b,17a-20R-Ethyldiacholestane	**1100**
17a/b,21b/a 28,30-Bisnorhopane	**850**	13a,17b-20S-Ethyldiacholestane	**260**
17a(H),21b(H)-25-Norhopane	**560**	14a,17a-20S-Methylcholestane	**770**
30-Norhopane	**12000**	14a,17a-20R-Methylcholestane	**2200**
18a(H)-30-Norneohopane-C29Ts	**3000**	14a(H),17a(H)-20S-Ethylcholestane	**2200**
17a(H)-Diahopane	**620**	14a(H),17a(H)-20R-Ethylcholestane	**2900**
30-Normoretane	**1800**	14b(H),17b(H)-20R-Cholestane	**3100**
18a(H)&18b(H)-Oleananes	**1600**	14b(H),17b(H)-20S-Cholestane	**3100**
Hopane	**16000**	14b,17b-20R-Methylcholestane	**2700**
Moretane	**2000**	14b,17b-20S-Methylcholestane	**3100**
30-Homohopane-22S	**6000**	14b(H),17b(H)-20R-Ethylcholestane	**4600**
30-Homohopane-22R	**4900**	14b(H),17b(H)-20S-Ethylcholestane	**4100**

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

N/A - Not Applicable

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27482.D
Acq On : 6 Jan 2006 11:26 am
Operator : AC
Sample : 0512105-05
Misc : 1X
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 09 13:29:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

CMS for WO 1-10-06

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	50.66	240	58343m	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	51.42	217	44560	1786.06	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 178.61%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.12	191	202866m	3349.57	ng/mL	
84) Hopane (T19)	61.12	191	202030m	3335.76	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.86	191	25821m	426.34	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.73	191	15352	253.48	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.51	191	16910m	279.20	ng/ml	
88) C24 Tetracyclic Terpane (T	52.07	191	16417m	271.06	ng/ml	
89) C26 Tricyclic Terpane-22S	51.78	191	7459m	123.16	ng/ml	
90) C26 Tricyclic Terpane-22R	51.89	191	7496m	123.77	ng/ml	
91) C28 Tricyclic Terpane-22S	54.65	191	8151m	134.58	ng/ml	
92) C28 Tricyclic Terpane-22R	54.84	191	9012m	148.80	ng/ml	
93) C29 Tricyclic Terpane-22S	55.47	191	10623	175.40	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.69	191	10050m	165.94	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.91	191	42162m	696.15	ng/ml	
96) C30 Tricyclic Terpane-22S	57.06	191	6148m	101.51	ng/mL	
97) C30 Tricyclic Terpane-22R	57.33	191	10261m	169.42	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.53	191	45535	751.84	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.85	191	10507m	173.48	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.67	191	6891m	113.78	ng/ml	
101) 30-Norhopane (T15)	59.61	191	145090m	2395.61	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.72	191	36590m	604.15	ng/ml	
103) 17a(H)-Diahopane (X)	59.87	191	7659m	126.46	ng/ml	
104) 30-Normoretane (T17)	60.47	191	22722	375.17	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.92	191	19096	315.30	ng/ml	100
106) Moretane (T20)	61.88	191	25251m	416.93	ng/ml	
107) 30-Homohopane-22S (T21)	63.10	191	73954m	1221.07	ng/ml	
108) 30-Homohopane-22R (T22)	63.35	191	60224	994.37	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.82	191	47123	778.06	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.24	191	33142	547.22	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.16	191	28592m	472.09	ng/ml	
112) 30,31-Trishomohopane-22R (	67.84	191	18744m	309.49	ng/ml	
113) Tetrakishomohopane-22S (T3	70.06	191	18082	298.56	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.05	191	12029	198.61	ng/ml	100
115) Pentakishomohopane-22S (T3	73.51	191	15755m	260.13	ng/ml	
116) Pentakishomohopane-22R (T3	74.93	191	13425	221.66	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	53.24	217	15099	605.20	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.75	217	9249m	370.72	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.59	217	8221m	329.51	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.62	217	6017m	241.17	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.20	217	28411m	1138.77	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.51	217	5703	228.59	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27482.D
Acq On : 6 Jan 2006 11:26 am
Operator : AC
Sample : 0512105-05
Misc : 1X
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 09 13:29:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

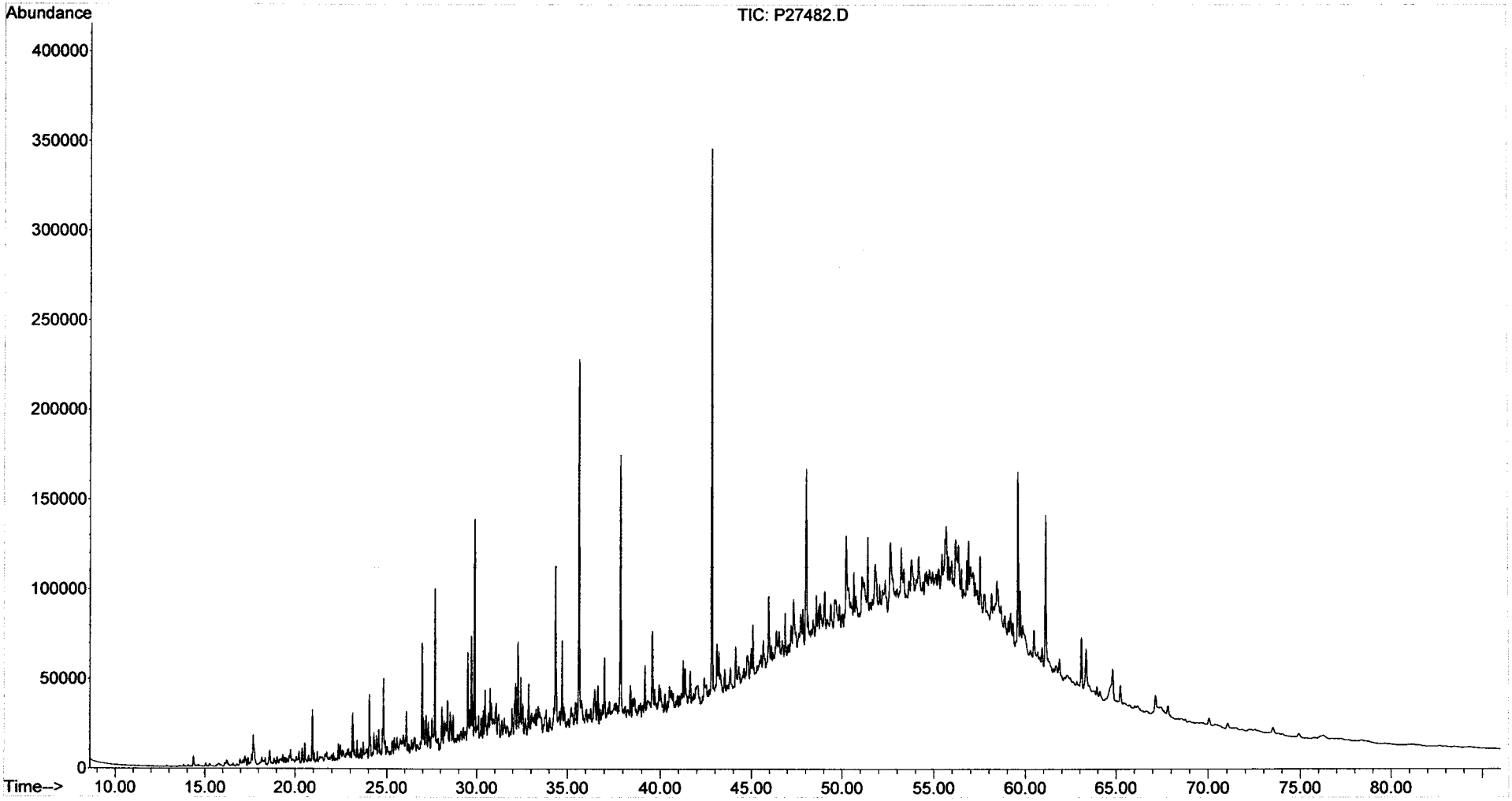
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.81	217	1307	52.39	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.99	217	3928m	157.44	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.78	217	11342	454.61	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.17	217	11186m	448.36	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.19	217	14888m	596.74	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.71	218	15535m	622.67	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.81	218	15605m	625.48	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.18	218	13746m	550.97	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.26	218	15648m	627.20	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.46	218	23551	943.97	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.51	218	20782m	832.99	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27482.D
Acq On : 6 Jan 2006 11:26 am
Operator : AC
Sample : 0512105-05
Misc : 1X
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 09 13:29:56 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-86 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-06**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	40.7	5.10	40.8551	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**19000**	Fluoranthene	**82000**
C1-Naphthalenes	**29000**	Pyrene	**120000**
C2-Naphthalenes	**85000**	C1-Fluoranthenes/Pyrenes	**120000**
C3-Naphthalenes	**110000**	C2-Fluoranthenes/Pyrenes	**50000**
C4-Naphthalenes	**78000**	C3-Fluoranthenes/Pyrenes	**22000**
Biphenyl	**4400**	C4-Fluoranthenes/Pyrenes	**8100**
Dibenzofuran	**4000**	Naphthobenzothiophenes	**13000**
Acenaphthylene	**24000**	C1-Naphthobenzothiophenes	**15000**
Acenaphthene	**36000**	C2-Naphthobenzothiophenes	**10000**
Fluorene	**23000**	C3-Naphthobenzothiophenes	**6300**
C1-Fluorenes	**39000**	C4-Naphthobenzothiophenes	**3200**
C2-Fluorenes	**57000**	Benz[a]anthracene	**68000**
C3-Fluorenes	**45000**	Chrysene/Triphenylene	**67000**
Anthracene	**59000**	C1-Chrysenes	**63000**
Phenanthrene	**130000**	C2-Chrysenes	**31000**
C1-Phenanthrenes/Anthracenes	**170000**	C3-Chrysenes	**20000**
C2-Phenanthrenes/Anthracenes	**120000**	C4-Chrysenes	**6500**
C3-Phenanthrenes/Anthracenes	**53000**	Benzo[b]fluoranthene	**26000**
C4-Phenanthrenes/Anthracenes	**19000**	Benzo[k]fluoranthene	**31000**
Retene	**8900**	Benzo[a]fluoranthene	**12000**
Dibenzothiophene	**16000**	Benzo[e]pyrene	**27000**
C1-Dibenzothiophenes	**35000**	Benzo[a]pyrene	**51000**
C2-Dibenzothiophenes	**44000**	Perylene	**8000**
C3-Dibenzothiophenes	**28000**	Indeno[1,2,3-cd]pyrene	**22000**
C4-Dibenzothiophenes	**12000**	Dibenz[a,h]anthracene	**6200**
Benzo(b)fluorene	**18000**	Benzo[g,h,i]perylene	**21000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	90	50-130

N/A - Not Applicable

01/10/06 12:44

Form I
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-86 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-06**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	40.7	5.10	40.8551	1	AC

Parameter	Result
Carbazole	1500

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	90	50-130

N/A - Not Applicable

01/10/06 12:45

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42944.D
Acq On : 31 Dec 2005 8:58 am
Operator : AC
Sample : 0512105-06
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 09 02:09:42 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WB 1/10/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.75	164	61932m	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	82436m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	56344	479.55	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 47.96%#						
58) Pyrene-d10	38.30	212	104055m	356.24	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 35.62%#						
81) Benzo[b]fluoranthene-d12	47.11	264	75755m	438.73	ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 43.87%#						
125) 5B(H)Cholane - Surr	43.85	217	17112m	458.55	ng/ml	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 45.86%#						

Target Compounds						Qvalue
9) Naphthalene	19.84	128	230739	959.26	ng/mL#	100
10) C1-Naphthalenes	22.96	142	355388m	1477.47	ng/mL	
11) C2-Naphthalenes	25.39	156	1043265m	4337.20	ng/mL	
12) C3-Naphthalenes	27.73	170	1293186m	5376.20	ng/mL	
13) C4-Naphthalenes	30.49	184	950414m	3951.19	ng/mL	
15) 2-Methylnaphthalene	22.54	142	153225	999.96	ng/mL#	100
16) 1-Methylnaphthalene	22.96	142	200112	1296.34	ng/mL#	100
22) Biphenyl	24.43	154	41284m	224.88	ng/mL	
23) 2,6-Dimethylnaphthalene	25.04	156	145292m	1093.53	ng/mL	
24) Dibenzofuran	27.51	168	43296	201.59	ng/mL#	81
25) Acenaphthylene	26.13	152	321844m	1195.66	ng/mL	
26) Acenaphthene	26.87	153	301985	1831.17	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.42	170	103134m	758.58	ng/mL	
28) Fluorene	28.88	166	203115m	1149.70	ng/mL	
29) C1-Fluorenes	31.12	180	351138m	1987.56	ng/mL	
30) C2-Fluorenes	33.30	194	513462m	2906.36	ng/mL	
31) C3-Fluorenes	35.29	208	403500m	2283.94	ng/mL	
32) Dibenzothiophene	32.21	184	213418	814.87	ng/mL#	77
36) OTP	34.40	198	15696	59.93	ng/mL#	100
37) C1-Dibenzothiophenes	33.98	198	484619m	1850.37	ng/mL	
38) C2-Dibenzothiophenes	35.68	212	591290m	2257.66	ng/mL	
39) C3-Dibenzothiophenes	37.48	226	372109m	1420.78	ng/mL	
40) C4-Dibenzothiophenes	39.17	240	158190m	604.00	ng/mL	
41) Phenanthrene	32.71	178	1887055	6405.32	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.78	192	2506126m	8506.66	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.95	206	1819889m	6177.34	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.78	220	793162m	2692.27	ng/mL	
51) C4-Phenanthrenes/Anthracen	39.71	234	278723m	946.08	ng/mL	
52) Retene	39.71	234	34001m	450.30	ng/mL	
53) Anthracene	32.89	178	804383	2990.24	ng/mL	99
54) Carbazole	33.54	167	15815m	74.18	ng/mL	
55) 1-Methylphenanthrene	35.21	192	395567m	2034.73	ng/mL	
56) Fluoranthene	37.49	202	1261994m	4155.68	ng/mL	
57) Benzo(b)fluorene	40.01	216	162223	912.01	ng/mL	96
59) Pyrene	38.37	202	1846969m	5862.54	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.76	216	1836407m	5829.01	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	802044m	2545.80	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.69	244	351934m	1117.09	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	129860m	412.19	ng/mL	
64) Naphthobenzothiophene	42.22	234	120470m	420.59	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42944.D
Acq On : 31 Dec 2005 8:58 am
Operator : AC
Sample : 0512105-06
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 09 02:09:42 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

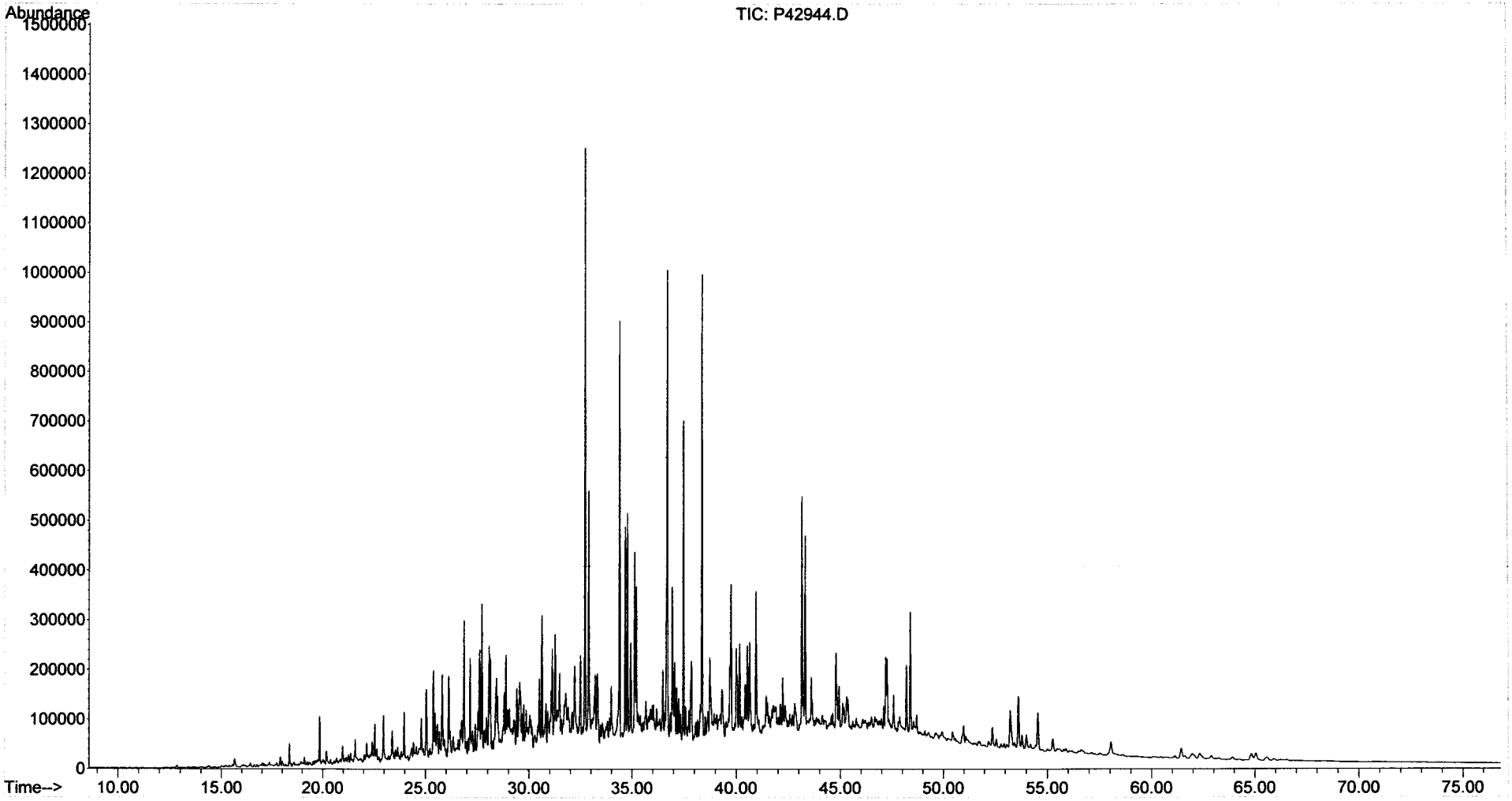
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.22	234	120356m	420.19	ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	33254	116.10	ng/mL#	25
67) Naphthobenzothiophene-2,3-	42.85	234	34602m	120.80	ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	218963m	764.45	ng/ml	
69) C2-Naphthobenzothiophenes	45.12	262	150795m	526.46	ng/ml	
70) C3-Naphthobenzothiophenes	47.22	276	91344m	318.90	ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	46094m	160.92	ng/mL	
73) Benz[a]anthracene	43.15	228	675177m	3443.51	ng/mL	
74) Chrysene	43.31	228	676955m	3401.96	ng/mL	
75) Chrysene/Triphenylene	43.31	228	677731m	3405.86	ng/mL	
76) C1-Chrysenes	44.79	242	632554m	3178.83	ng/mL	
77) C2-Chrysenes	46.49	256	319353m	1604.87	ng/mL	
78) BBF-d12 Surr BKGD	47.10	256	6748	33.91	ng/mL	100
79) C3-Chrysenes	48.09	270	202012m	1015.19	ng/mL	
80) C4-Chrysenes	49.68	284	65390m	328.61	ng/mL	
82) Benzo[b]fluoranthene	47.20	252	269389	1322.03	ng/mL	100
83) Benzo[k]fluoranthene	47.26	252	358062	1557.73	ng/mL	99
84) Benzo[a]fluoranthene	47.58	252	146071m	635.48	ng/mL	
85) Benzo[e]pyrene	48.20	252	279633	1361.67	ng/mL	98
86) Benzo[a]pyrene	48.40	252	514903	2601.23	ng/mL	99
87) Perylene	48.70	252	79770	406.95	ng/mL	94
88) Indeno[1,2,3-cd]pyrene	53.24	276	207461m	1128.43	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	59799m	314.83	ng/mL	
90) Benzo[g,h,i]perylene	54.56	276	225278	1075.30	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42944.D
Acq On : 31 Dec 2005 8:58 am
Operator : AC
Sample : 0512105-06
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 09 02:09:42 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-86 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-06**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	40.7	5.10	14.3	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**3100**	30,31-Bishomohopane-22S	**5500**
C24 Tricyclic Terpane	**1800**	30,31-Bishomohopane-22R	**3900**
C25 Tricyclic Terpane	**2000**	30,31-Trishomohopane-22S	**3600**
C24 Tetracyclic Terpane	**1900**	30,31-Trishomohopane-22R	**2300**
C26 Tricyclic Terpane-22S	**910**	Tetrakishomohopane-22S	**2200**
C26 Tricyclic Terpane-22R	**960**	Tetrakishomohopane-22R	**1600**
C28 Tricyclic Terpane-22S	**1000**	Pentakishomohopane-22S	**2100**
C28 Tricyclic Terpane-22R	**1200**	Pentakishomohopane-22R	**1800**
C29 Tricyclic Terpane-22S	**1300**	13b(H),17a(H)-20S-Diacholestane	**4600**
C29 Tricyclic Terpane-22R	**1400**	13b(H),17a(H)-20R-Diacholestane	**2800**
18a-22,29,30-Trisnorneohopane-TS	**5100**	13b,17a-20S-Methyldiacholestane	**2200**
C30 Tricyclic Terpane-22S	**700**	14a(H),17a(H)-20S-Cholestane	**2400**
C30 Tricyclic Terpane-22R	**1300**	14a(H),17a(H)-20R-Cholestane	**8500**
17a(H)-22,29,30-Trisnorhopane-TM	**5300**	13b,17a-20R-Ethyldiacholestane	**1700**
17a/b,21b/a 28,30-Bisnorhopane	**1200**	13a,17b-20S-Ethyldiacholestane	**380**
17a(H),21b(H)-25-Norhopane	**910**	14a,17a-20S-Methylcholestane	**1000**
30-Norhopane	**17000**	14a,17a-20R-Methylcholestane	**3300**
18a(H)-30-Norneohopane-C29Ts	**4500**	14a(H),17a(H)-20S-Ethylcholestane	**3300**
17a(H)-Diahopane	**990**	14a(H),17a(H)-20R-Ethylcholestane	**4800**
30-Normoretane	**3000**	14b(H),17b(H)-20R-Cholestane	**4500**
18a(H)&18b(H)-Oleananes	**2400**	14b(H),17b(H)-20S-Cholestane	**4600**
Hopane	**25000**	14b,17b-20R-Methylcholestane	**3900**
Moretane	**3400**	14b,17b-20S-Methylcholestane	**4100**
30-Homohopane-22S	**8600**	14b(H),17b(H)-20R-Ethylcholestane	**7700**
30-Homohopane-22R	**7200**	14b(H),17b(H)-20S-Ethylcholestane	**4800**

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

N/A - Not Applicable

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27486.D
Acq On : 6 Jan 2006 4:59 pm
Operator : AC
Sample : 0512105-06
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 09 13:32:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

MS for WB 1/20/06

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	50.68	240	68072m	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	51.45	217	38971	1338.79	ng/ml	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 133.88%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.16	191	254337m	3599.23	ng/mL	
84) Hopane (T19)	61.16	191	253476m	3587.04	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.88	191	31661m	448.05	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.75	191	18943	268.07	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.53	191	21018m	297.43	ng/ml	
88) C24 Tetracyclic Terpane (T	52.09	191	19168	271.25	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.81	191	9285m	131.40	ng/ml	
90) C26 Tricyclic Terpane-22R	51.93	191	9789m	138.53	ng/ml	
91) C28 Tricyclic Terpane-22S	54.68	191	10526m	148.96	ng/ml	
92) C28 Tricyclic Terpane-22R	54.86	191	12068	170.78	ng/ml	100
93) C29 Tricyclic Terpane-22S	55.49	191	13480	190.76	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.71	191	14307m	202.46	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.94	191	52569m	743.93	ng/ml	
96) C30 Tricyclic Terpane-22S	57.10	191	7224m	102.23	ng/mL	
97) C30 Tricyclic Terpane-22R	57.37	191	13132m	185.84	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.56	191	54610	772.81	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.88	191	12442m	176.07	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.70	191	9351	132.33	ng/ml	100
101) 30-Norhopane (T15)	59.65	191	169682m	2401.24	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.76	191	46071m	651.97	ng/ml	
103) 17a(H)-Diahopane (X)	59.90	191	10135m	143.42	ng/ml	
104) 30-Normoretane (T17)	60.51	191	30858	436.68	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.96	191	24137m	341.57	ng/ml	
106) Moretane (T20)	61.92	191	34382m	486.55	ng/ml	
107) 30-Homohopane-22S (T21)	63.14	191	87986	1245.13	ng/ml	100
108) 30-Homohopane-22R (T22)	63.40	191	73790	1044.23	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.86	191	56209	795.44	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.29	191	40377	571.39	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.22	191	36756	520.15	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.89	191	24037	340.16	ng/ml	100
113) Tetrakishomohopane-22S (T3	70.12	191	22885	323.86	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.12	191	15996	226.37	ng/ml	100
115) Pentakishomohopane-22S (T3	73.58	191	21202	300.04	ng/ml	100
116) Pentakishomohopane-22R (T3	75.01	191	18132	256.59	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	53.26	217	19355m	664.91	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.77	217	11714m	402.42	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.61	217	9446m	324.50	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.64	217	10168m	349.31	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.22	217	35792m	1229.58	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.55	217	7135m	245.11	ng/ml	

RT shift one 2nd ex 1/20/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27486.D
Acq On : 6 Jan 2006 4:59 pm
Operator : AC
Sample : 0512105-06
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 09 13:32:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

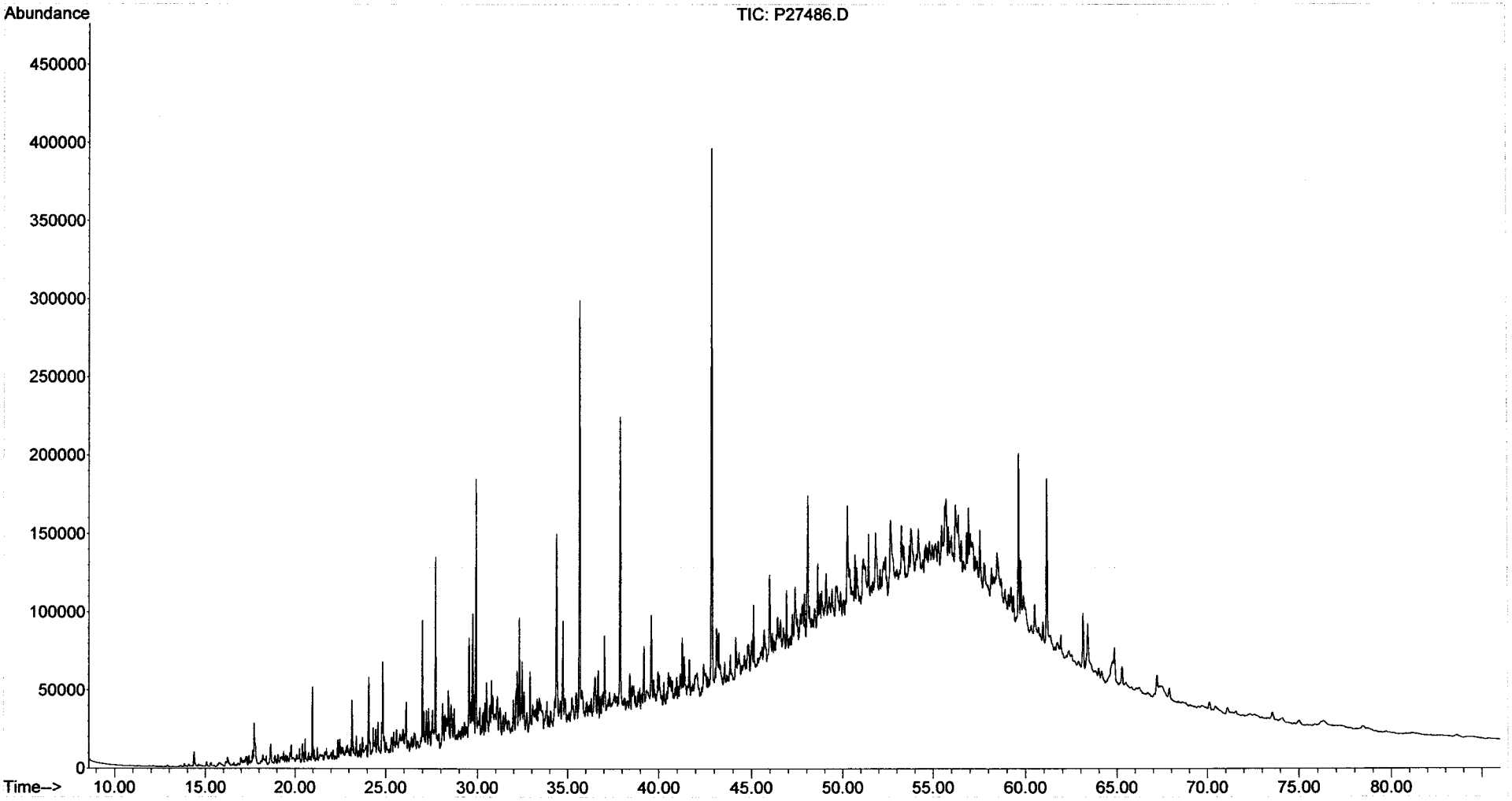
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.84	217	1592	54.69	ng/ml	100
125) 14a,17a-20S-Methylcholesta	57.02	217	4273m	146.79	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.81	217	14054	482.80	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.20	217	13813m	474.52	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.22	217	20244m	695.45	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.75	218	19019m	653.37	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.84	218	19480m	669.21	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.21	218	16647m	571.88	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.29	218	17429m	598.75	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.49	218	32464	1115.25	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.54	218	20273m	696.45	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27486.D
Acq On : 6 Jan 2006 4:59 pm
Operator : AC
Sample : 0512105-06
Misc : 1X
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jan 09 13:32:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-84 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-07**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	84.3	5.57	17.1094	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1100000**	E	Fluoranthene	**200000**	E
C1-Naphthalenes	**1300000**	E	Pyrene	**300000**	E
C2-Naphthalenes	**620000**	E	C1-Fluoranthenes/Pyrenes	**230000**	
C3-Naphthalenes	**180000**		C2-Fluoranthenes/Pyrenes	**60000**	
C4-Naphthalenes	**44000**		C3-Fluoranthenes/Pyrenes	**17000**	
Biphenyl	**110000**	E	C4-Fluoranthenes/Pyrenes	**4000**	
Dibenzofuran	**26000**		Naphthobenzothiophenes	**21000**	
Acenaphthylene	**360000**	E	C1-Naphthobenzothiophenes	**16000**	
Acenaphthene	**250000**	E	C2-Naphthobenzothiophenes	**6700**	
Fluorene	**260000**	E	C3-Naphthobenzothiophenes	**2900**	
C1-Fluorenes	**120000**		C4-Naphthobenzothiophenes	**1100**	
C2-Fluorenes	**59000**		Benz[a]anthracene	**110000**	E
C3-Fluorenes	**25000**		Chrysene/Triphenylene	**96000**	E
Anthracene	**230000**	E	C1-Chrysenes	**64000**	
Phenanthrene	**670000**	E	C2-Chrysenes	**21000**	
C1-Phenanthrenes/Anthracenes	**390000**	E	C3-Chrysenes	**8600**	
C2-Phenanthrenes/Anthracenes	**130000**		C4-Chrysenes	**2200**	
C3-Phenanthrenes/Anthracenes	**34000**		Benzo[b]fluoranthene	**30000**	
C4-Phenanthrenes/Anthracenes	**6100**		Benzo[k]fluoranthene	**37000**	E
Retene	5.3	U	Benzo[a]fluoranthene	**17000**	
Dibenzothiophene	**74000**	E	Benzo[e]pyrene	**29000**	
C1-Dibenzothiophenes	**66000**		Benzo[a]pyrene	**70000**	E
C2-Dibenzothiophenes	**41000**		Perylene	**9200**	
C3-Dibenzothiophenes	**18000**		Indeno[1,2,3-cd]pyrene	**26000**	
C4-Dibenzothiophenes	**4900**		Dibenz[a,h]anthracene	**7000**	
Benzo(b)fluorene	**42000**	E	Benzo[g,h,i]perylene	**23000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	127	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	88	50-130

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

01/10/06 12:47

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-84 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-07**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	84.3	5.57	17.1094	1	AC

Parameter	Result
Carbazole	**5600**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	127	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	88	50-130

N/A - Not Applicable

01/10/06 12:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42946.D
Acq On : 31 Dec 2005 10:27 am
Operator : AC
Sample : 0512105-07
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 09 02:20:10 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WW 1-10-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.76	164	50264m	500.00 ng/mL	0.02
72) Chrysene-d12	43.23	240	90317m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.45	152	141231	1481.05 ng/mL	0.04
Spiked Amount 1000.000 Range 50 - 130 Recovery = 148.10%#					
58) Pyrene-d10	38.32	212	201478m	849.89 ng/mL	0.02
Spiked Amount 1000.000 Range 50 - 130 Recovery = 84.99%					
81) Benzo[b]fluoranthene-d12	47.12	264	193575m	1023.24 ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 102.32%					
125) 5B(H)Cholane - Surr	43.85	217	44533	1089.21 ng/ml	0.00
Spiked Amount 1000.000 Range 50 - 130 Recovery = 108.92%					

Target Compounds					Qvalue
9) Naphthalene	19.87	128	60254402m	308646.69 ng/mL E	
10) C1-Naphthalenes	22.61	142	71047857m	363935.00 ng/mL E	
11) C2-Naphthalenes	25.44	156	33434944m	171266.90 ng/mL E	
12) C3-Naphthalenes	27.74	170	9547028m	48903.62 ng/mL	
13) C4-Naphthalenes	30.50	184	2371762m	12149.10 ng/mL	
15) 2-Methylnaphthalene	22.61	142	44346400m	356591.27 ng/mL E	
16) 1-Methylnaphthalene	23.04	142	26660093m	212797.33 ng/mL E	
22) Biphenyl	24.44	154	4460577	29938.25 ng/mL# E	100
23) 2,6-Dimethylnaphthalene	25.08	156	6081806m	56400.07 ng/mL E	
24) Dibenzofuran	27.52	168	1224903m	7027.11 ng/mL	
25) Acenaphthylene	26.19	152	21896453m	100229.52 ng/mL E	
26) Acenaphthene	26.91	153	9163115	68461.31 ng/mL E	98
27) 2,3,5-Trimethylnaphthalene	28.45	170	768843m	6967.75 ng/mL	
28) Fluorene	28.94	166	10245454m	71454.71 ng/mL E	
29) C1-Fluorenes	31.13	180	4770176m	33268.56 ng/mL	
30) C2-Fluorenes	33.32	194	2324072m	16208.74 ng/mL	
31) C3-Fluorenes	35.19	208	989022m	6897.72 ng/mL	
32) Dibenzothiophene	32.24	184	4329652m	20368.97 ng/mL E	
36) OTP	34.44	198	34477	162.20 ng/mL#	100
37) C1-Dibenzothiophenes	34.01	198	3873678m	18223.83 ng/mL	
38) C2-Dibenzothiophenes	36.05	212	2399788m	11289.87 ng/mL	
39) C3-Dibenzothiophenes	37.51	226	1032085m	4855.47 ng/mL	
40) C4-Dibenzothiophenes	39.18	240	284170m	1336.89 ng/mL	
41) Phenanthrene	32.77	178	44131809m	184572.10 ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.83	192	25567204m	106929.50 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.97	206	8409260m	35169.98 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.79	220	2251077m	9414.66 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.97	234	402284m	1682.47 ng/mL	
53) Anthracene	32.95	178	13782893	63130.74 ng/mL E	98
54) Carbazole	33.56	167	268507m	1551.79 ng/mL	
55) 1-Methylphenanthrene	35.26	192	3717160m	23558.96 ng/mL E	
56) Fluoranthene	37.54	202	13751838m	55796.12 ng/mL E	
57) Benzo(b)fluorene	40.03	216	1676569m	11613.66 ng/mL E	
59) Pyrene	38.44	202	21321702	83388.50 ng/mL E	97
60) C1-Fluoranthenes/Pyrenes	39.80	216	16260558m	63594.53 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.50	230	4222678m	16514.76 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.33	244	1162732m	4547.41 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	279986m	1095.02 ng/mL	
64) Naphthobenzothiophene	42.23	234	818777	3522.10 ng/ml#	88
65) Naphthobenzothiophene-2,1-	42.23	234	818777	3522.10 ng/mL#	88

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42946.D
Acq On : 31 Dec 2005 10:27 am
Operator : AC
Sample : 0512105-07
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 09 02:20:10 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

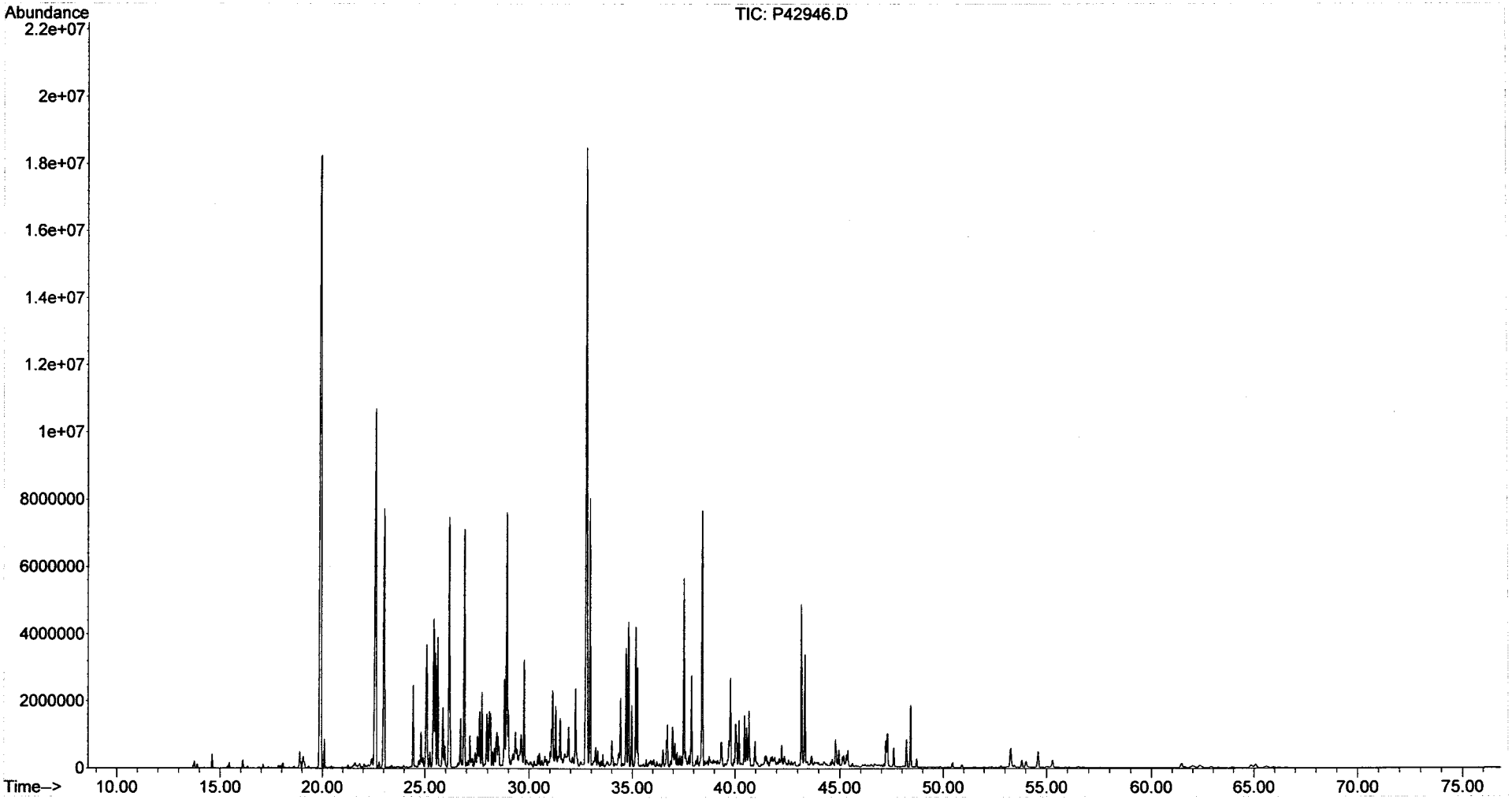
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.57	234	218761	941.04 ng/mL#	22
67) Naphthobenzothiophene-2,3-	42.87	234	296249m	1274.36 ng/mL	
68) C1-Naphthobenzothiophenes	43.63	248	991568m	4265.39 ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	425482m	1830.28 ng/ml	
70) C3-Naphthobenzothiophenes	47.03	276	185630m	798.52 ng/ml	
71) C4-Naphthobenzothiophenes	49.84	290	71009m	305.46 ng/mL	
73) Benz[a]anthracene	43.18	228	6667272m	31037.00 ng/mL E	
74) Chrysene	43.35	228	5704575m	26166.17 ng/mL E	
75) Chrysene/Triphenylene	43.35	228	5712776m	26203.79 ng/mL E	
76) C1-Chrysenes	44.80	242	3799500m	17427.83 ng/mL	
77) C2-Chrysenes	46.49	256	1287789m	5906.93 ng/mL	
78) BBF-d12 Surr BKGD	47.11	256	16926m	77.64 ng/mL	
79) C3-Chrysenes	48.11	270	516193m	2367.71 ng/mL	
80) C4-Chrysenes	49.11	284	132390m	607.26 ng/mL	
82) Benzo[b]fluoranthene	47.22	252	1814730	8128.69 ng/mL	99
83) Benzo[k]fluoranthene	47.30	252	2577594	10235.21 ng/mL E	99
84) Benzo[a]fluoranthene	47.59	252	1171591m	4652.20 ng/mL	
85) Benzo[e]pyrene	48.22	252	1802459	8011.15 ng/mL	99
86) Benzo[a]pyrene	48.43	252	4153099m	19150.17 ng/mL E	
87) Perylene	48.71	252	545025	2537.83 ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.27	276	1464890m	7272.63 ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	401459m	1929.14 ng/mL	
90) Benzo[g,h,i]perylene	54.59	276	1437672	6263.49 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42946.D
Acq On : 31 Dec 2005 10:27 am
Operator : AC
Sample : 0512105-07
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 09 02:20:10 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-84 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-07E**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	84.3	5.57	17.1094	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1300000**		Fluoranthene	**150000**	
C1-Naphthalenes	**960000**		Pyrene	**220000**	
C2-Naphthalenes	**430000**		C1-Fluoranthenes/Pyrenes	320	U
C3-Naphthalenes	600	U	C2-Fluoranthenes/Pyrenes	320	U
C4-Naphthalenes	600	U	C3-Fluoranthenes/Pyrenes	320	U
Biphenyl	**82000**		C4-Fluoranthenes/Pyrenes	320	U
Dibenzofuran	430	U	Naphthobenzothiophenes	440	U
Acenaphthylene	**250000**		C1-Naphthobenzothiophenes	440	U
Acenaphthene	**180000**		C2-Naphthobenzothiophenes	440	U
Fluorene	**190000**		C3-Naphthobenzothiophenes	440	U
C1-Fluorenes	420	U	C4-Naphthobenzothiophenes	440	U
C2-Fluorenes	420	U	Benz[a]anthracene	**84000**	
C3-Fluorenes	420	U	Chrysene/Triphenylene	**79000**	
Anthracene	**160000**		C1-Chrysenes	390	U
Phenanthrene	**540000**		C2-Chrysenes	390	U
C1-Phenanthrenes/Anthracenes	**290000**		C3-Chrysenes	390	U
C2-Phenanthrenes/Anthracenes	530	U	C4-Chrysenes	390	U
C3-Phenanthrenes/Anthracenes	530	U	Benzo[b]fluoranthene	390	U
C4-Phenanthrenes/Anthracenes	530	U	Benzo[k]fluoranthene	**35000**	
Retene	530	U	Benzo[a]fluoranthene	740	U
Dibenzothiophene	**60000**		Benzo[e]pyrene	500	U
C1-Dibenzothiophenes	400	U	Benzo[a]pyrene	**58000**	
C2-Dibenzothiophenes	400	U	Perylene	630	U
C3-Dibenzothiophenes	400	U	Indeno[1,2,3-cd]pyrene	880	U
C4-Dibenzothiophenes	400	U	Dibenz[a,h]anthracene	690	U
Benzo(b)fluorene	**29000**		Benzo[g,h,i]perylene	640	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	84	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.

01/10/06 12:05

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43078.D
Acq On : 6 Jan 2006 5:13 pm
Operator : AC
Sample : 0512105-07-RE
Misc : 100X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 09 11:56:18 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

ms for WW
1-100b

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	66019m	500.00	ng/mL	-0.05
72) Chrysene-d12	43.17	240	121090m	500.00	ng/mL	-0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	1537	12.27	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.23%#			
58) Pyrene-d10	38.25	212	3063m	9.84	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.98%#			
81) Benzo[b]fluoranthene-d12	47.07	264	2632m	10.38	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.04%#			
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	19.80	128	915609m	3570.84	ng/mL	
10) C1-Naphthalenes	22.49	142	673508m	2626.66	ng/mL	
11) C2-Naphthalenes	25.34	156	299432m	1167.77	ng/mL	
15) 2-Methylnaphthalene	22.49	142	426140m	2608.87	ng/mL	
16) 1-Methylnaphthalene	22.92	142	246165m	1495.96	ng/mL	
22) Biphenyl	24.38	154	44334	226.55	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	40690m	287.29	ng/mL	
25) Acenaphthylene	26.08	152	195455m	681.17	ng/mL	
26) Acenaphthene	26.82	153	84936	483.15	ng/mL	98
28) Fluorene	28.84	166	99289m	527.22	ng/mL	
32) Dibenzothiophene	32.16	184	45774m	163.95	ng/mL	
41) Phenanthrene	32.66	178	463835m	1476.95	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.73	192	251678m	801.40	ng/mL	
53) Anthracene	32.83	178	125284	436.90	ng/mL	99
55) 1-Methylphenanthrene	35.17	192	39665m	191.40	ng/mL	
56) Fluoranthene	37.44	202	135033m	417.13	ng/mL	
57) Benzo(b)fluorene	39.96	216	14881	78.48	ng/mL	94
59) Pyrene	38.32	202	204387	608.59	ng/mL	99
73) Benz[a]anthracene	43.11	228	66112m	229.55	ng/mL	
74) Chrysene	43.27	228	63479m	217.17	ng/mL	
75) Chrysene/Triphenylene	43.27	228	63669m	217.82	ng/mL	
83) Benzo[k]fluoranthene	47.22	252	32779m	97.08	ng/mL	
86) Benzo[a]pyrene	48.35	252	46384m	159.53	ng/mL	

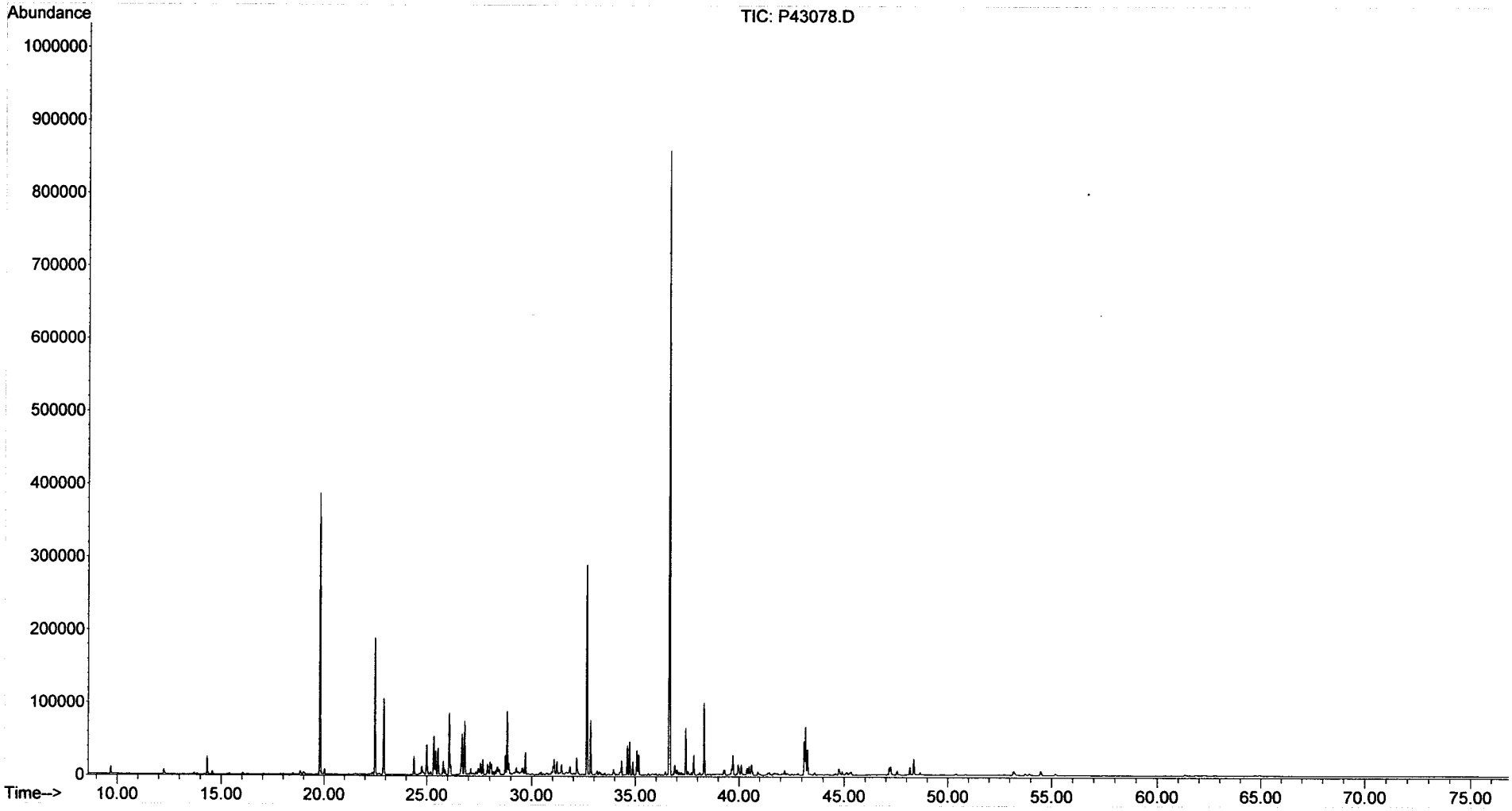
✓ ms

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43078.D
Acq On : 6 Jan 2006 5:13 pm
Operator : AC
Sample : 0512105-07-RE
Misc : 100X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 09 11:56:18 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-84 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-07**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	84.3	5.57	2.22	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	96	30,31-Bishomohopane-22S	70
C24 Tricyclic Terpane	61	30,31-Bishomohopane-22R	29
C25 Tricyclic Terpane	52	30,31-Trishomohopane-22S	32
C24 Tetracyclic Terpane	22	30,31-Trishomohopane-22R	14
C26 Tricyclic Terpane-22S	22	Tetrakishomohopane-22S	15
C26 Tricyclic Terpane-22R	24	Tetrakishomohopane-22R	12
C28 Tricyclic Terpane-22S	23	Pentakishomohopane-22S	8.5
C28 Tricyclic Terpane-22R	26	Pentakishomohopane-22R	8.0
C29 Tricyclic Terpane-22S	21	13b(H),17a(H)-20S-Diacholestane	86
C29 Tricyclic Terpane-22R	20	13b(H),17a(H)-20R-Diacholestane	48
18a-22,29,30-Trisnorneohopane-TS	49	13b,17a-20S-Methyldiacholestane	39
C30 Tricyclic Terpane-22S	13	14a(H),17a(H)-20S-Cholestane	55
C30 Tricyclic Terpane-22R	17	14a(H),17a(H)-20R-Cholestane	160
17a(H)-22,29,30-Trisnorhopane-TM	67	13b,17a-20R-Ethyldiacholestane	25
17a/b,21b/a 28,30-Bisnorhopane	26	13a,17b-20S-Ethyldiacholestane	3.4 J
17a(H),21b(H)-25-Norhopane	12	14a,17a-20S-Methylcholestane	19
30-Norhopane	130	14a,17a-20R-Methylcholestane	78
18a(H)-30-Norneohopane-C29Ts	40	14a(H),17a(H)-20S-Ethylcholestane	45
17a(H)-Diahopane	15	14a(H),17a(H)-20R-Ethylcholestane	66
30-Normoretane	31	14b(H),17b(H)-20R-Cholestane	72
18a(H)&18b(H)-Oleananes	23	14b(H),17b(H)-20S-Cholestane	69
Hopane	210	14b,17b-20R-Methylcholestane	58
Moretane	41	14b,17b-20S-Methylcholestane	64
30-Homohopane-22S	55	14b(H),17b(H)-20R-Ethylcholestane	87
30-Homohopane-22R	58	14b(H),17b(H)-20S-Ethylcholestane	68

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

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

01/10/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27488.D
Acq On : 6 Jan 2006 6:47 pm
Operator : AC
Sample : 0512105-07
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jan 09 13:35:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

MS for UW 1-10-06

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	50.68	240	56712m	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	51.44	217	218516	9010.46 ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 901.05%#	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	61.13	191	26214m	445.27 ng/mL	
84) Hopane (T19)	61.13	191	26070m	442.83 ng/mL	
85) C23 Tricyclic Terpane (T4)	47.87	191	11987	203.61 ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.75	191	7563	128.47 ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.53	191	6539m	111.07 ng/ml	
88) C24 Tetracyclic Terpane (T	52.09	191	2762m	46.92 ng/ml	
89) C26 Tricyclic Terpane-22S	51.80	191	2766m	46.98 ng/ml	
90) C26 Tricyclic Terpane-22R	51.92	191	2921	49.62 ng/ml	100
91) C28 Tricyclic Terpane-22S	54.66	191	2881m	48.94 ng/ml	
92) C28 Tricyclic Terpane-22R	54.85	191	3169	53.83 ng/ml	100
93) C29 Tricyclic Terpane-22S	55.47	191	2650m	45.01 ng/ml	
94) C29 Tricyclic Terpane-22R	55.69	191	2558	43.45 ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.92	191	6051m	102.78 ng/ml	
96) C30 Tricyclic Terpane-22S	57.07	191	1584m	26.91 ng/mL	
97) C30 Tricyclic Terpane-22R	57.34	191	2148	36.49 ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.53	191	8332	141.53 ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.86	191	3238m	55.00 ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.68	191	1464	24.87 ng/ml	100
101) 30-Norhopane (T15)	59.62	191	16236m	275.79 ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.73	191	4964m	84.32 ng/ml	
103) 17a(H)-Diahopane (X)	59.88	191	1858m	31.56 ng/ml	
104) 30-Normoretane (T17)	60.48	191	3851	65.41 ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.93	191	2883m	48.97 ng/ml	
106) Moretane (T20)	61.89	191	5061m	85.97 ng/ml	
107) 30-Homohopane-22S (T21)	63.12	191	6899	117.19 ng/ml	100
108) 30-Homohopane-22R (T22)	63.37	191	7162	121.65 ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.78	191	8737	148.41 ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.27	191	3587	60.93 ng/ml	100
111) 30,31-Trishomohopane-22S (	67.19	191	4020	68.28 ng/ml	100
112) 30,31-Trishomohopane-22R (	67.86	191	1747m	29.67 ng/ml	
113) Tetrakishomohopane-22S (T3	70.07	191	1894	32.17 ng/ml	100
114) Tetrakishomohopane-22R (T3	71.06	191	1449m	24.61 ng/ml	
115) Pentakishomohopane-22S (T3	73.55	191	1061m	18.02 ng/ml	
116) Pentakishomohopane-22R (T3	74.95	191	995m	16.90 ng/ml	
118) 13b(H),17a(H)-20S-Diachole	53.25	217	4396	181.27 ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.76	217	2446m	100.86 ng/ml	
120) 13b,17a-20S-Methyldiachole	54.59	217	1982m	81.73 ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.61	217	2832m	116.78 ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.20	217	7956m	328.06 ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.53	217	1268m	52.29 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27488.D
Acq On : 6 Jan 2006 6:47 pm
Operator : AC
Sample : 0512105-07
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jan 09 13:35:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

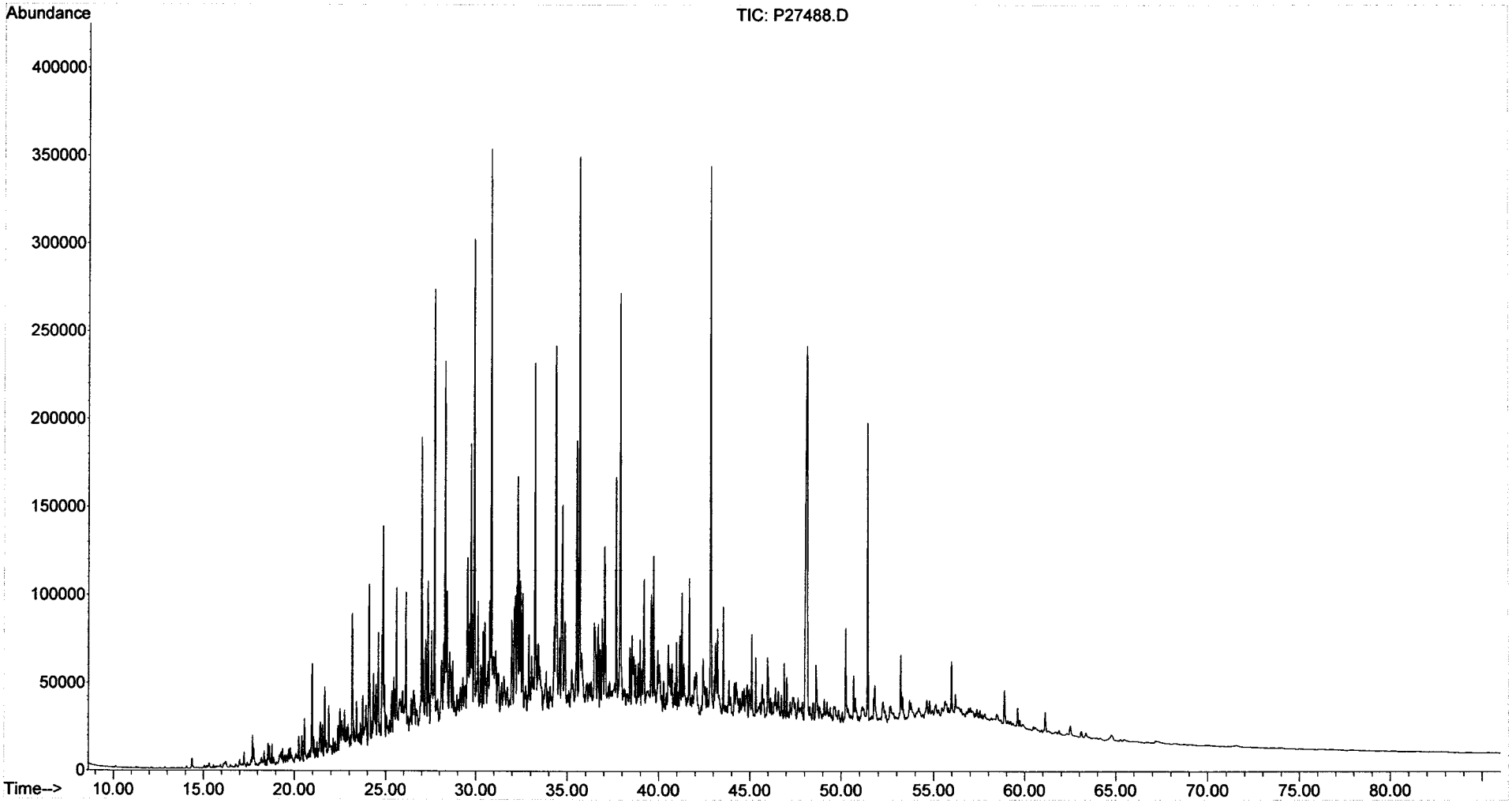
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.83	217	173	7.13	ng/ml	100
125) 14a,17a-20S-Methylcholesta	57.00	217	962m	39.67	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.79	217	4010m	165.35	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	58.19	217	2326m	95.91	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.20	217	3388m	139.70	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.73	218	3676m	151.58	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.82	218	3524m	145.31	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.18	218	2949m	121.60	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.27	218	3271m	134.88	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.47	218	4463	184.03	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.52	218	3465m	142.88	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27488.D
Acq On : 6 Jan 2006 6:47 pm
Operator : AC
Sample : 0512105-07
Misc : 1X
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jan 09 13:35:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	33.7	5.13	31.7746	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**19000**	Fluoranthene	**78000**
C1-Naphthalenes	**31000**	Pyrene	**120000**
C2-Naphthalenes	**130000**	C1-Fluoranthenes/Pyrenes	**140000**
C3-Naphthalenes	**190000**	C2-Fluoranthenes/Pyrenes	**72000**
C4-Naphthalenes	**130000**	C3-Fluoranthenes/Pyrenes	**36000**
Biphenyl	**2400**	C4-Fluoranthenes/Pyrenes	**13000**
Dibenzofuran	**5500**	Naphthobenzothiophenes	**17000**
Acenaphthylene	**19000**	C1-Naphthobenzothiophenes	**23000**
Acenaphthene	**30000**	C2-Naphthobenzothiophenes	**18000**
Fluorene	**22000**	C3-Naphthobenzothiophenes	**10000**
C1-Fluorenes	**53000**	C4-Naphthobenzothiophenes	**4700**
C2-Fluorenes	**79000**	Benz[a]anthracene	**64000**
C3-Fluorenes	**57000**	Chrysene/Triphenylene	**71000**
Anthracene	**56000**	C1-Chrysenes	**82000**
Phenanthrene	**95000**	C2-Chrysenes	**48000**
C1-Phenanthrenes/Anthracenes	**200000**	C3-Chrysenes	**32000**
C2-Phenanthrenes/Anthracenes	**180000**	C4-Chrysenes	**10000**
C3-Phenanthrenes/Anthracenes	**90000**	Benzo[b]fluoranthene	**25000**
C4-Phenanthrenes/Anthracenes	**28000**	Benzo[k]fluoranthene	**27000**
Retene	**9500**	Benzo[a]fluoranthene	**11000**
Dibenzothiophene	**20000**	Benzo[e]pyrene	**26000**
C1-Dibenzothiophenes	**51000**	Benzo[a]pyrene	**44000**
C2-Dibenzothiophenes	**68000**	Perylene	**8200**
C3-Dibenzothiophenes	**45000**	Indeno[1,2,3-cd]pyrene	**20000**
C4-Dibenzothiophenes	**18000**	Dibenz[a,h]anthracene	**6100**
Benzo(b)fluorene	**20000**	Benzo[g,h,i]perylene	**19000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	106	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	92	50-130

N/A - Not Applicable

01/10/06 13:40

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	33.7	5.13	31.7746	1	AC

Parameter	Result
Carbazole	**1800**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	106	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	92	50-130

N/A - Not Applicable

01/10/06 13:41

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42950.D
Acq On : 31 Dec 2005 1:25 pm
Operator : AC
Sample : 0512105-08
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 09 02:48:52 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WO
1-10-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.75	164	60150m	500.00	ng/mL	0.00
72) Chrysene-d12	43.22	240	81395m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	75799	664.24	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 66.42%			
58) Pyrene-d10	38.31	212	138298m	487.50	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.75%#			
81) Benzo[b]fluoranthene-d12	47.12	264	98928	580.26	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 58.03%			
125) 5B(H)Cholane - Surr	43.85	217	21203m	575.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 57.54%			

Target Compounds						Qvalue
9) Naphthalene	19.85	128	239286	1024.26	ng/mL#	100
10) C1-Naphthalenes	22.97	142	388863m	1664.53	ng/mL	
11) C2-Naphthalenes	25.39	156	1629526m	6975.18	ng/mL	
12) C3-Naphthalenes	27.73	170	2371007m	10149.09	ng/mL	
13) C4-Naphthalenes	30.49	184	1652674m	7074.27	ng/mL	
15) 2-Methylnaphthalene	22.54	142	101958m	685.10	ng/mL	
16) 1-Methylnaphthalene	22.97	142	289823	1933.12	ng/mL#	100
22) Biphenyl	24.43	154	23151	129.85	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.04	156	216563m	1678.24	ng/mL	
24) Dibenzofuran	27.51	168	62014	297.29	ng/mL#	76
25) Acenaphthylene	26.14	152	276024m	1055.82	ng/mL	
26) Acenaphthene	26.87	153	263866	1647.43	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.42	170	147091m	1113.94	ng/mL	
28) Fluorene	28.89	166	200635m	1169.30	ng/mL	
29) C1-Fluorenes	31.26	180	496552m	2893.92	ng/mL	
30) C2-Fluorenes	33.31	194	738223m	4302.38	ng/mL	
31) C3-Fluorenes	35.29	208	535825m	3122.80	ng/mL	
32) Dibenzothiophene	32.21	184	271124	1065.87	ng/mL#	65
36) OTP	34.41	198	20798	81.76	ng/mL#	100
37) C1-Dibenzothiophenes	33.99	198	732662m	2880.32	ng/mL	
38) C2-Dibenzothiophenes	36.05	212	943865m	3710.63	ng/mL	
39) C3-Dibenzothiophenes	37.49	226	622015m	2445.33	ng/mL	
40) C4-Dibenzothiophenes	39.18	240	249240m	979.84	ng/mL	
41) Phenanthrene	32.71	178	1474385	5152.84	ng/mL	98
47) C1-Phenanthrenes/Anthracen	34.68	192	3126097m	10925.42	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.95	206	2758048m	9639.12	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.79	220	1398322m	4887.01	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.97	234	434656m	1519.08	ng/mL	
52) Retene	39.71	234	37805m	515.52	ng/mL	
53) Anthracene	32.89	178	802221m	3070.55	ng/mL	
54) Carbazole	33.55	167	20878m	100.83	ng/mL	
55) 1-Methylphenanthrene	35.22	192	522808m	2768.91	ng/mL	
56) Fluoranthene	37.50	202	1253087m	4248.60	ng/mL	
57) Benzo(b)fluorene	40.02	216	185182	1071.93	ng/mL	95
59) Pyrene	38.38	202	1919458	6273.13	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.77	216	2375378m	7763.16	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.23	230	1200841m	3924.56	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.70	244	605955m	1980.37	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	221540m	724.03	ng/mL	
64) Naphthobenzothiophene	42.22	234	165575m	595.19	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42950.D
Acq On : 31 Dec 2005 1:25 pm
Operator : AC
Sample : 0512105-08
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 09 02:48:52 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

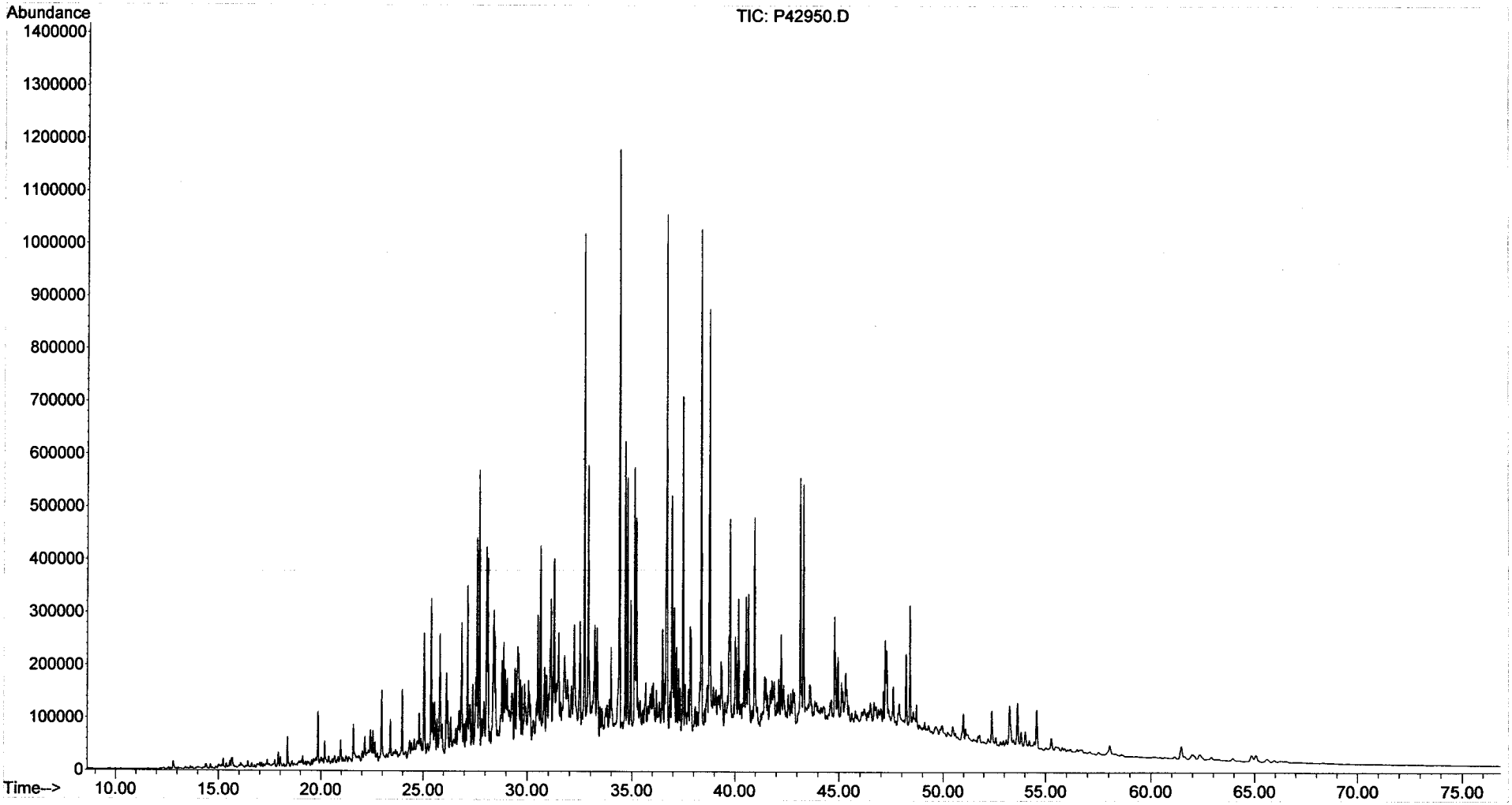
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.22	234	165357m	594.40	ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	46044m	165.51	ng/mL	
67) Naphthobenzothiophene-2,3-	42.87	234	52175m	187.55	ng/mL	
68) C1-Naphthobenzothiophenes	43.62	248	346712m	1246.31	ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	266060m	956.39	ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	152207m	547.13	ng/ml	
71) C4-Naphthobenzothiophenes	48.32	290	71601m	257.38	ng/mL	
73) Benz[a]anthracene	43.15	228	680098m	3512.97	ng/mL	
74) Chrysene	43.32	228	757838m	3857.14	ng/mL	
75) Chrysene/Triphenylene	43.32	228	760734m	3871.88	ng/mL	
76) C1-Chrysenes	44.79	242	872883m	4442.68	ng/mL	
77) C2-Chrysenes	46.50	256	524110m	2667.54	ng/mL	
78) BBF-d12 Surr BKGD	47.11	256	9887m	50.32	ng/mL	
79) C3-Chrysenes	48.10	270	346315m	1762.63	ng/mL	
80) C4-Chrysenes	49.69	284	107580m	547.55	ng/mL	
82) Benzo[b]fluoranthene	47.21	252	276302	1373.30	ng/mL	100
83) Benzo[k]fluoranthene	47.28	252	328304	1446.54	ng/mL	100
84) Benzo[a]fluoranthene	47.59	252	139533m	614.80	ng/mL	
85) Benzo[e]pyrene	48.21	252	283161	1396.48	ng/mL	96
86) Benzo[a]pyrene	48.40	252	471351	2411.66	ng/mL	99
87) Perylene	48.71	252	86948m	449.24	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	198891m	1095.65	ng/mL	
89) Dibenz[a,h]anthracene	53.31	278	61990m	330.53	ng/mL	
90) Benzo[g,h,i]perylene	54.56	276	215247	1040.56	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42950.D
Acq On : 31 Dec 2005 1:25 pm
Operator : AC
Sample : 0512105-08
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 09 02:48:52 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	33.7	5.13	11.44	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2900**	30,31-Bishomohopane-22S	**6000**
C24 Tricyclic Terpane	**1900**	30,31-Bishomohopane-22R	**4300**
C25 Tricyclic Terpane	**2100**	30,31-Trishomohopane-22S	**3300**
C24 Tetracyclic Terpane	**2100**	30,31-Trishomohopane-22R	**2300**
C26 Tricyclic Terpane-22S	**960**	Tetrakishomohopane-22S	**2100**
C26 Tricyclic Terpane-22R	**1100**	Tetrakishomohopane-22R	**1400**
C28 Tricyclic Terpane-22S	**1100**	Pentakishomohopane-22S	**1600**
C28 Tricyclic Terpane-22R	**1300**	Pentakishomohopane-22R	**1400**
C29 Tricyclic Terpane-22S	**1500**	13b(H),17a(H)-20S-Diacholestane	**5500**
C29 Tricyclic Terpane-22R	**1300**	13b(H),17a(H)-20R-Diacholestane	**3200**
18a-22,29,30-Trisnorneohopane-TS	**6400**	13b,17a-20S-Methyldiacholestane	**2900**
C30 Tricyclic Terpane-22S	**670**	14a(H),17a(H)-20S-Cholestane	**3600**
C30 Tricyclic Terpane-22R	**1400**	14a(H),17a(H)-20R-Cholestane	**10000**
17a(H)-22,29,30-Trisnorhopane-TM	**7700**	13b,17a-20R-Ethyldiacholestane	**1900**
17a/b,21b/a 28,30-Bisnorhopane	**1800**	13a,17b-20S-Ethyldiacholestane	**360**
17a(H),21b(H)-25-Norhopane	**1100**	14a,17a-20S-Methylcholestane	**1700**
30-Norhopane	**22000**	14a,17a-20R-Methylcholestane	**4700**
18a(H)-30-Norneohopane-C29Ts	**6200**	14a(H),17a(H)-20S-Ethylcholestane	**3500**
17a(H)-Diahopane	**1700**	14a(H),17a(H)-20R-Ethylcholestane	**5500**
30-Normoretane	**4700**	14b(H),17b(H)-20R-Cholestane	**4800**
18a(H)&18b(H)-Oleananes	**3300**	14b(H),17b(H)-20S-Cholestane	**4800**
Hopane	**36000**	14b,17b-20R-Methylcholestane	**4700**
Moretane	**5700**	14b,17b-20S-Methylcholestane	**5200**
30-Homohopane-22S	**9800**	14b(H),17b(H)-20R-Ethylcholestane	**8100**
30-Homohopane-22R	**8400**	14b(H),17b(H)-20S-Ethylcholestane	**4800**

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

N/A - Not Applicable

01/10/06 10:44

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27490.D
Acq On : 6 Jan 2006 8:35 pm
Operator : AC
Sample : 0512105-08
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jan 10 09:47:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

CMS for WA 1/10/06

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	50.68	240	68842m	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	51.44	217	49220	1671.96	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 167.20%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.16	191	388329m	5433.94	ng/mL	
84) Hopane (T19)	61.16	191	387109m	5416.87	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.88	191	31010	433.93	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.75	191	20464	286.36	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.53	191	22754m	318.40	ng/ml	
88) C24 Tetracyclic Terpane (T	52.09	191	23009	321.97	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.81	191	10426	145.89	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.93	191	11427	159.90	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.68	191	11978m	167.61	ng/ml	
92) C28 Tricyclic Terpane-22R	54.86	191	14066	196.83	ng/ml	100
93) C29 Tricyclic Terpane-22S	55.49	191	15882	222.24	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.71	191	14413m	201.68	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.94	191	68597m	959.89	ng/ml	
96) C30 Tricyclic Terpane-22S	57.10	191	7226	101.11	ng/mL	100
97) C30 Tricyclic Terpane-22R	57.37	191	15423m	215.82	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.55	191	83214	1164.42	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.88	191	19852m	277.79	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.70	191	11538	161.45	ng/ml	100
101) 30-Norhopane (T15)	59.65	191	237276m	3320.23	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.75	191	67176m	940.00	ng/ml	
103) 17a(H)-Diahopane (X)	59.90	191	18660	261.11	ng/ml	100
104) 30-Normoretane (T17)	60.51	191	51015	713.86	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.95	191	35562m	497.62	ng/ml	
106) Moretane (T20)	61.92	191	61510m	860.72	ng/ml	
107) 30-Homohopane-22S (T21)	63.14	191	105696	1479.02	ng/ml	100
108) 30-Homohopane-22R (T22)	63.40	191	90757	1269.97	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.86	191	64311	899.91	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.29	191	46772	654.49	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.21	191	35771m	500.55	ng/ml	
112) 30,31-Trishomohopane-22R (	67.89	191	24556m	343.62	ng/ml	
113) Tetrakishomohopane-22S (T3	70.11	191	22374	313.08	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.10	191	15093	211.20	ng/ml	100
115) Pentakishomohopane-22S (T3	73.57	191	17035	238.37	ng/ml	100
116) Pentakishomohopane-22R (T3	74.99	191	14921m	208.79	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	53.26	217	24416	829.39	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.77	217	14458	491.13	ng/ml	100
120) 13b,17a-20S-Methyldiachole	54.61	217	12882m	437.59	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.64	217	15889m	539.74	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.22	217	45719	1553.04	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.54	217	8442	286.77	ng/ml	100

CMS 1/10/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27490.D
Acq On : 6 Jan 2006 8:35 pm
Operator : AC
Sample : 0512105-08
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jan 10 09:47:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

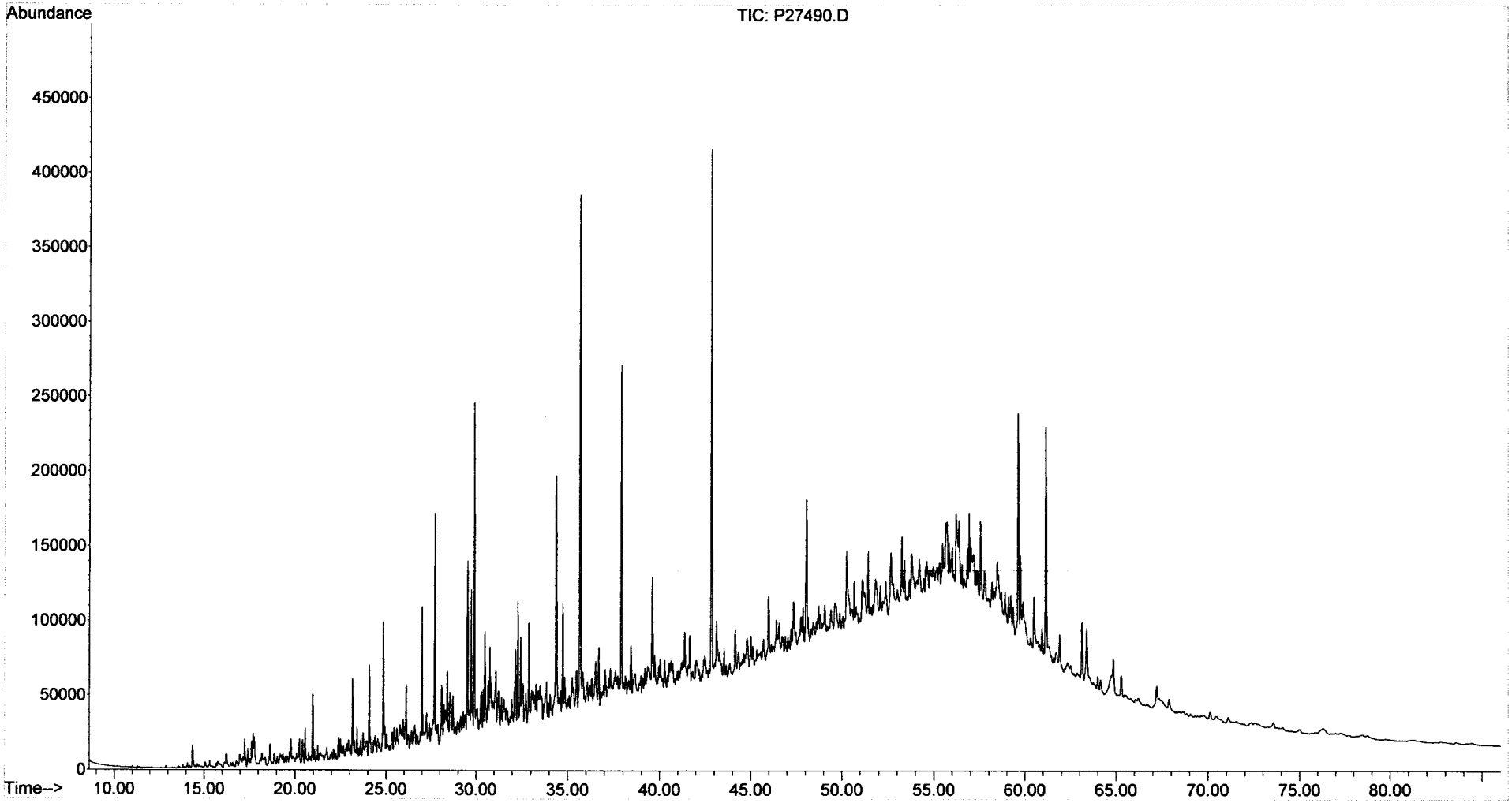
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.84	217	1585	53.84	ng/ml	100
125) 14a,17a-20S-Methylcholesta	57.01	217	7599m	258.13	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.81	217	21062	715.46	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.20	217	15397m	523.02	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.22	217	24634m	836.80	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.74	218	21384m	726.40	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.84	218	21204	720.28	ng/ml	100
131) 14b,17b-20R-Methylcholesta	57.20	218	20847m	708.16	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.29	218	23362m	793.59	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.49	218	36015	1223.40	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.54	218	21188m	719.74	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27490.D
Acq On : 6 Jan 2006 8:35 pm
Operator : AC
Sample : 0512105-08
Misc : 1X
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jan 10 09:47:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08 D**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	33.7	5.53	35.75	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**19000**	Fluoranthene	**77000**
C1-Naphthalenes	**31000**	Pyrene	**110000**
C2-Naphthalenes	**130000**	C1-Fluoranthenes/Pyrenes	**140000**
C3-Naphthalenes	**180000**	C2-Fluoranthenes/Pyrenes	**70000**
C4-Naphthalenes	**130000**	C3-Fluoranthenes/Pyrenes	**35000**
Biphenyl	**2500**	C4-Fluoranthenes/Pyrenes	**14000**
Dibenzofuran	**5400**	Naphthobenzothiophenes	**17000**
Acenaphthylene	**19000**	C1-Naphthobenzothiophenes	**22000**
Acenaphthene	**30000**	C2-Naphthobenzothiophenes	**17000**
Fluorene	**23000**	C3-Naphthobenzothiophenes	**9600**
C1-Fluorenes	**52000**	C4-Naphthobenzothiophenes	**4500**
C2-Fluorenes	**80000**	Benz[a]anthracene	**62000**
C3-Fluorenes	**56000**	Chrysene/Triphenylene	**67000**
Anthracene	**55000**	C1-Chrysenes	**79000**
Phenanthrene	**94000**	C2-Chrysenes	**48000**
C1-Phenanthrenes/Anthracenes	**200000**	C3-Chrysenes	**32000**
C2-Phenanthrenes/Anthracenes	**170000**	C4-Chrysenes	**9600**
C3-Phenanthrenes/Anthracenes	**86000**	Benzo[b]fluoranthene	**25000**
C4-Phenanthrenes/Anthracenes	**26000**	Benzo[k]fluoranthene	**27000**
Retene	**9600**	Benzo[a]fluoranthene	**11000**
Dibenzothiophene	**19000**	Benzo[e]pyrene	**25000**
C1-Dibenzothiophenes	**52000**	Benzo[a]pyrene	**43000**
C2-Dibenzothiophenes	**67000**	Perylene	**8100**
C3-Dibenzothiophenes	**43000**	Indeno[1,2,3-cd]pyrene	**19000**
C4-Dibenzothiophenes	**18000**	Dibenz[a,h]anthracene	**5800**
Benzo(b)fluorene	**18000**	Benzo[g,h,i]perylene	**18000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	91	50-130

N/A - Not Applicable

01/10/06 13:41

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08 D**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	12/31/05	33.7	5.53	35.75	1	AC

Parameter	Result
Carbazole	**1800**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	77	50-130
Benzo[b]fluoranthene-d12	91	50-130

N/A - Not Applicable

01/10/06 13:42

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42948.D
Acq On : 31 Dec 2005 11:56 am
Operator : AC
Sample : 0512105-08D
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 10 08:59:15 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WW 1-10-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.75	164	66338m	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	92174m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	73165	581.35	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 58.14%			
58) Pyrene-d10	38.31	212	134026m	428.37	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.84%#			
81) Benzo[b]fluoranthene-d12	47.12	264	98430m	509.82	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.98%			
125) 5B(H)Cholane - Surr	43.85	217	22081m	529.19	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.92%			
Target Compounds						Qvalue
9) Naphthalene	19.84	128	253274	983.01	ng/mL#	100
10) C1-Naphthalenes	22.97	142	413218m	1603.79	ng/mL	
11) C2-Naphthalenes	25.39	156	1703826m	6612.91	ng/mL	
12) C3-Naphthalenes	27.73	170	2484552m	9643.08	ng/mL	
13) C4-Naphthalenes	30.49	184	1731221m	6719.24	ng/mL	
15) 2-Methylnaphthalene	22.54	142	108558m	661.41	ng/mL	
16) 1-Methylnaphthalene	22.97	142	301851	1825.54	ng/mL#	100
22) Biphenyl	24.43	154	25449m	129.42	ng/mL	
23) 2,6-Dimethylnaphthalene	25.04	156	234151m	1645.27	ng/mL	
24) Dibenzofuran	27.51	168	64982m	282.46	ng/mL	
25) Acenaphthylene	26.13	152	285410m	989.89	ng/mL	
26) Acenaphthene	26.87	153	274403	1553.41	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.42	170	153808m	1056.16	ng/mL	
28) Fluorene	28.89	166	223707m	1182.15	ng/mL	
29) C1-Fluorenes	31.26	180	516145m	2727.51	ng/mL	
30) C2-Fluorenes	33.31	194	784525m	4145.73	ng/mL	
31) C3-Fluorenes	35.30	208	549374m	2903.10	ng/mL	
32) Dibenzothiophene	32.21	184	283132	1009.25	ng/mL#	65
36) OTP	34.41	198	19987	71.25	ng/mL#	100
37) C1-Dibenzothiophenes	33.99	198	773812m	2758.33	ng/mL	
38) C2-Dibenzothiophenes	35.68	212	986474m	3516.38	ng/mL	
39) C3-Dibenzothiophenes	37.48	226	624519m	2226.16	ng/mL	
40) C4-Dibenzothiophenes	39.18	240	256937m	915.88	ng/mL	
41) Phenanthrene	32.71	178	1553024	4921.38	ng/mL	98
47) C1-Phenanthrenes/Anthracen	34.68	192	3249132m	10296.19	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.95	206	2859816m	9062.48	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.78	220	1411214m	4472.00	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.96	234	425241m	1347.55	ng/mL	
52) Retene	39.71	234	40363m	499.06	ng/mL	
53) Anthracene	32.89	178	828388m	2874.94	ng/mL	
54) Carbazole	33.55	167	20827m	91.20	ng/mL	
55) 1-Methylphenanthrene	35.22	192	557306m	2676.29	ng/mL	
56) Fluoranthene	37.50	202	1299310m	3994.39	ng/mL	
57) Benzo(b)fluorene	40.02	216	178532	937.04	ng/mL	95
59) Pyrene	38.37	202	2003223m	5936.20	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.77	216	2435667m	7217.67	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.23	230	1241337m	3678.48	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.70	244	617662m	1830.33	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.95	258	250082m	741.07	ng/mL	
64) Naphthobenzothiophene	42.22	234	172044m	560.75	ng/ml	

KMS 1-10-06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42948.D
Acq On : 31 Dec 2005 11:56 am
Operator : AC
Sample : 0512105-08D
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 10 08:59:15 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

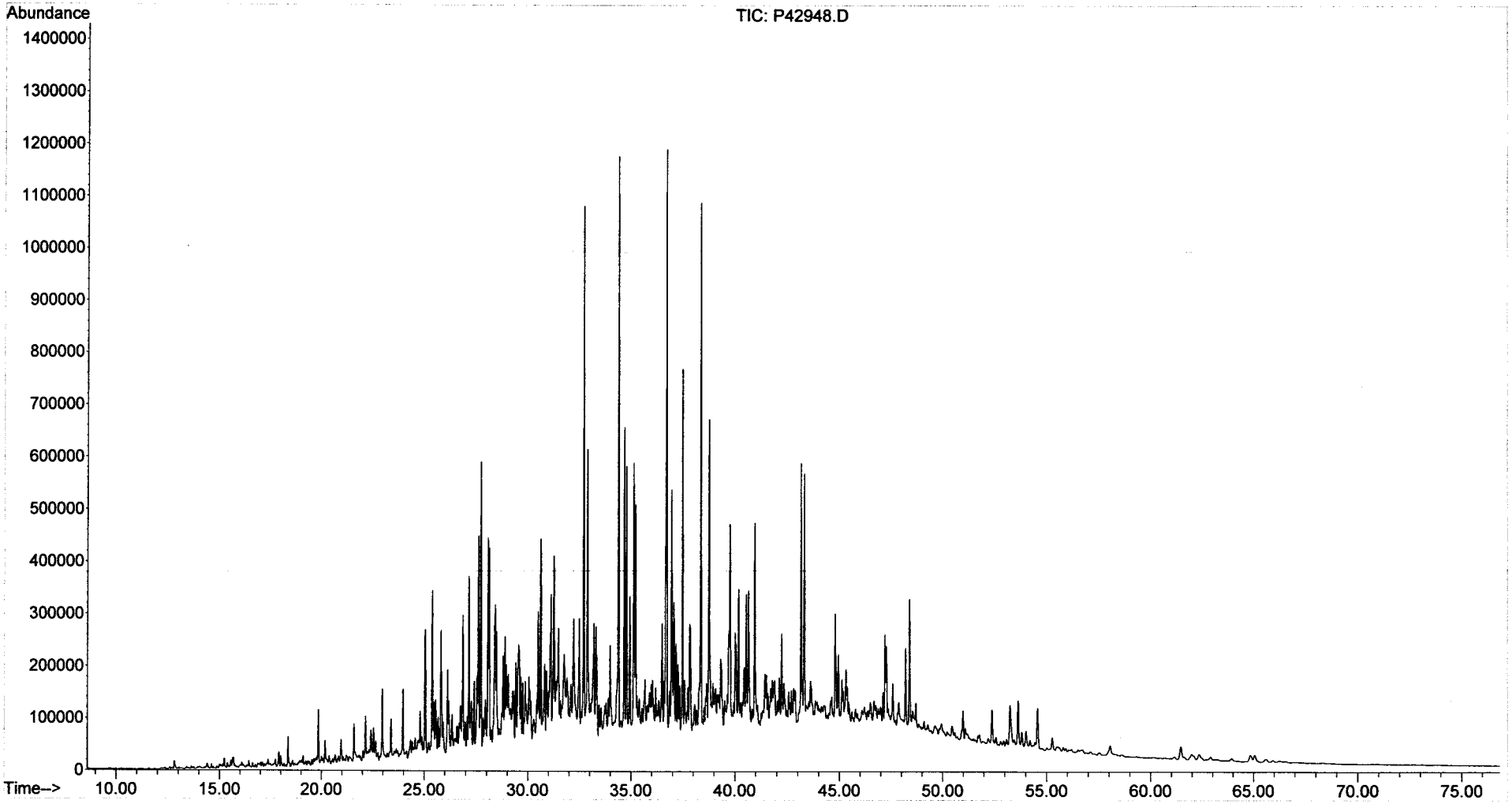
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.22	234	172343m	561.73	ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	47616m	155.20	ng/mL	
67) Naphthobenzothiophene-2,3-	42.87	234	53209m	173.43	ng/mL	
68) C1-Naphthobenzothiophenes	43.62	248	359928m	1173.13	ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	276739m	901.99	ng/ml	
70) C3-Naphthobenzothiophenes	47.24	276	153302m	499.66	ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	72050m	234.84	ng/mL	
73) Benz[a]anthracene	43.15	228	703770m	3210.14	ng/mL	
74) Chrysene	43.31	228	781847m	3513.98	ng/mL	
75) Chrysene/Triphenylene	43.31	228	782256m	3515.82	ng/mL	
76) C1-Chrysenes	44.79	242	912308m	4100.34	ng/mL	
77) C2-Chrysenes	46.50	256	568244m	2553.95	ng/mL	
78) BBF-d12 Surr BKGD	47.10	256	10270m	46.16	ng/mL	
79) C3-Chrysenes	48.09	270	366941m	1649.20	ng/mL	
80) C4-Chrysenes	49.69	284	111419m	500.77	ng/mL	
82) Benzo[b]fluoranthene	47.20	252	295508	1297.00	ng/mL	100
83) Benzo[k]fluoranthene	47.27	252	361290	1405.72	ng/mL	100
84) Benzo[a]fluoranthene	47.59	252	151861m	590.87	ng/mL	
85) Benzo[e]pyrene	48.21	252	299596	1304.75	ng/mL	96
86) Benzo[a]pyrene	48.40	252	495196	2237.37	ng/mL	99
87) Perylene	48.71	252	92808m	423.44	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	207208m	1007.98	ng/mL	
89) Dibenz[a,h]anthracene	53.31	278	64147m	302.04	ng/mL	
90) Benzo[g,h,i]perylene	54.56	276	226514	966.97	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42948.D
Acq On : 31 Dec 2005 11:56 am
Operator : AC
Sample : 0512105-08D
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 10 08:59:15 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08 D**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/06/06	33.7	5.53	14.3	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2900**	30,31-Bishomohopane-22S	**5900**
C24 Tricyclic Terpane	**1900**	30,31-Bishomohopane-22R	**4300**
C25 Tricyclic Terpane	**2100**	30,31-Trishomohopane-22S	**3200**
C24 Tetracyclic Terpane	**2100**	30,31-Trishomohopane-22R	**2400**
C26 Tricyclic Terpane-22S	**940**	Tetrakishomohopane-22S	**2000**
C26 Tricyclic Terpane-22R	**1000**	Tetrakishomohopane-22R	**1400**
C28 Tricyclic Terpane-22S	**1100**	Pentakishomohopane-22S	**1600**
C28 Tricyclic Terpane-22R	**1200**	Pentakishomohopane-22R	**1500**
C29 Tricyclic Terpane-22S	**1500**	13b(H),17a(H)-20S-Diacholestane	**5400**
C29 Tricyclic Terpane-22R	**1400**	13b(H),17a(H)-20R-Diacholestane	**3400**
18a-22,29,30-Trisnorneohopane-TS	**6300**	13b,17a-20S-Methyldiacholestane	**3000**
C30 Tricyclic Terpane-22S	**620**	14a(H),17a(H)-20S-Cholestane	**3400**
C30 Tricyclic Terpane-22R	**1400**	14a(H),17a(H)-20R-Cholestane	**10000**
17a(H)-22,29,30-Trisnorhopane-TM	**7700**	13b,17a-20R-Ethyldiacholestane	**1900**
17a/b,21b/a 28,30-Bisnorhopane	**1900**	13a,17b-20S-Ethyldiacholestane	**400**
17a(H),21b(H)-25-Norhopane	**1000**	14a,17a-20S-Methylcholestane	**1600**
30-Norhopane	**22000**	14a,17a-20R-Methylcholestane	**4700**
18a(H)-30-Norneohopane-C29Ts	**5900**	14a(H),17a(H)-20S-Ethylcholestane	**3600**
17a(H)-Diahopane	**1700**	14a(H),17a(H)-20R-Ethylcholestane	**5500**
30-Normoretane	**4700**	14b(H),17b(H)-20R-Cholestane	**4700**
18a(H)&18b(H)-Oleananes	**3400**	14b(H),17b(H)-20S-Cholestane	**4800**
Hopane	**36000**	14b,17b-20R-Methylcholestane	**4600**
Moretane	**5400**	14b,17b-20S-Methylcholestane	**5100**
30-Homohopane-22S	**9700**	14b(H),17b(H)-20R-Ethylcholestane	**7400**
30-Homohopane-22R	**8400**	14b(H),17b(H)-20S-Ethylcholestane	**5400**

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

N/A - Not Applicable

01/10/06 10:44

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27492.D
Acq On : 6 Jan 2006 10:20 pm
Operator : AC
Sample : 0512105-08D
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jan 10 09:48:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

AMS for WD 1-10-06

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	50.68	240	69886m	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	51.44	217	39621	1325.79	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 132.58%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.15	191	339543m	4680.29	ng/mL	
84) Hopane (T19)	61.15	191	337671m	4654.49	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.88	191	27494	378.98	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.75	191	17873	246.36	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.53	191	19819m	273.19	ng/ml	
88) C24 Tetracyclic Terpane (T	52.09	191	20049	276.36	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.80	191	8851	122.00	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.93	191	9672m	133.32	ng/ml	
91) C28 Tricyclic Terpane-22S	54.67	191	10565m	145.63	ng/ml	
92) C28 Tricyclic Terpane-22R	54.86	191	11580m	159.62	ng/ml	
93) C29 Tricyclic Terpane-22S	55.49	191	13889	191.45	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.71	191	13039m	179.73	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.94	191	59776m	823.96	ng/ml	
96) C30 Tricyclic Terpane-22S	57.10	191	5841	80.51	ng/mL	100
97) C30 Tricyclic Terpane-22R	57.37	191	13202m	181.98	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.55	191	72675	1001.76	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.88	191	17817m	245.59	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.70	191	9925m	136.81	ng/ml	
101) 30-Norhopane (T15)	59.64	191	205849	2837.44	ng/ml	100
102) 18a(H)-30-Norneohopane-C29	59.75	191	56182m	774.42	ng/ml	
103) 17a(H)-Diahopane (X)	59.90	191	16447m	226.71	ng/ml	
104) 30-Normoretane (T17)	60.50	191	44782	617.28	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.95	191	32270m	444.81	ng/ml	
106) Moretane (T20)	61.92	191	50889m	701.46	ng/ml	
107) 30-Homohopane-22S (T21)	63.14	191	91636	1263.12	ng/ml	100
108) 30-Homohopane-22R (T22)	63.40	191	79483	1095.60	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.86	191	55526	765.38	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.28	191	40836	562.89	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.22	191	30432m	419.48	ng/ml	
112) 30,31-Trishomohopane-22R (	67.88	191	22715m	313.11	ng/ml	
113) Tetrakishomohopane-22S (T3	70.11	191	19351	266.74	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.11	191	13283	183.09	ng/ml	100
115) Pentakishomohopane-22S (T3	73.55	191	14935	205.87	ng/ml	100
116) Pentakishomohopane-22R (T3	74.99	191	14228	196.12	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	53.26	217	21103	706.14	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.77	217	13305m	445.21	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.61	217	11633m	389.26	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.63	217	13305m	445.21	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.22	217	40175m	1344.33	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.53	217	7521m	251.67	ng/ml	

AMS 1-10-06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27492.D
Acq On : 6 Jan 2006 10:20 pm
Operator : AC
Sample : 0512105-08D
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jan 10 09:48:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

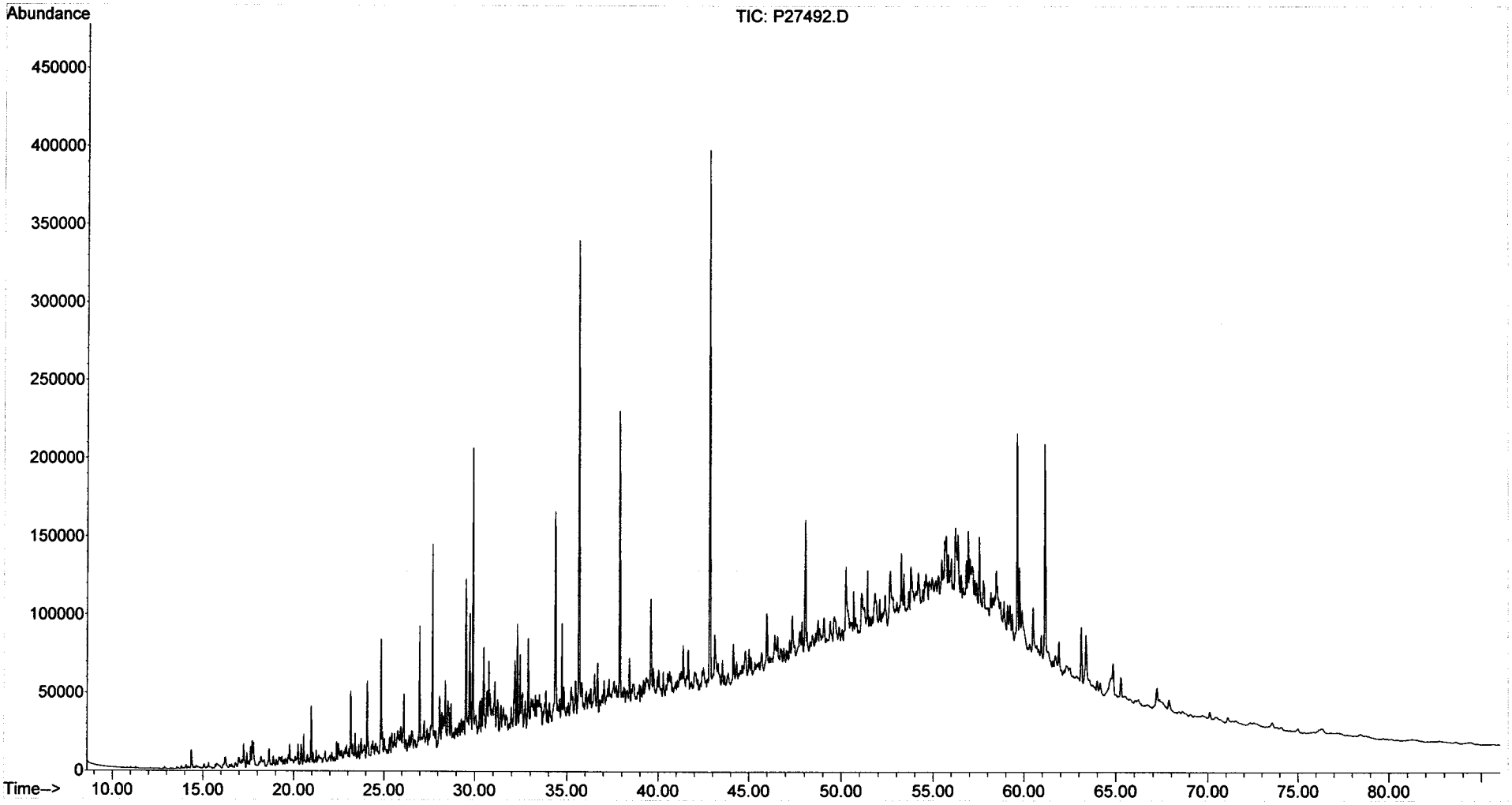
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.84	217	1558	52.13	ng/ml	100
125) 14a,17a-20S-Methylcholesta	57.02	217	6260m	209.47	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.81	217	18205	609.17	ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	58.20	217	13949m	466.76	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.22	217	21579m	722.07	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.74	218	18462m	617.77	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.84	218	18512m	619.44	ng/ml	
131) 14b,17b-20R-Methylcholesta	57.20	218	18084m	605.12	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.29	218	19707m	659.43	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.48	218	28925	967.88	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.53	218	20895m	699.18	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27492.D
Acq On : 6 Jan 2006 10:20 pm
Operator : AC
Sample : 0512105-08D
Misc : 1X
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jan 10 09:48:37 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/15/05	12/16/05	12/21/05	33.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	19000	19000	0	30
C1-Naphthalenes	31000	31000	1	30
C2-Naphthalenes	130000	130000	1	30
C3-Naphthalenes	190000	180000	1	30
C4-Naphthalenes	130000	130000	1	30
Biphenyl	2400	2500	4	30
Dibenzofuran	5500	5400	1	30
Acenaphthylene	19000	19000	2	30
Acenaphthene	30000	30000	2	30
Fluorene	22000	23000	5	30
C1-Fluorenes	53000	52000	2	30
C2-Fluorenes	79000	80000	1	30
C3-Fluorenes	57000	56000	3	30
Anthracene	56000	55000	2	30
Phenanthrene	95000	94000	0	30
C1-Phenanthrenes/Anthracenes	200000	200000	2	30
C2-Phenanthrenes/Anthracenes	180000	170000	2	30
C3-Phenanthrenes/Anthracenes	90000	86000	5	30
C4-Phenanthrenes/Anthracenes	28000	26000	8	30
Retene	9500	9600	1	30
Dibenzothiophene	20000	19000	1	30
C1-Dibenzothiophenes	51000	52000	0	30
C2-Dibenzothiophenes	68000	67000	1	30
C3-Dibenzothiophenes	45000	43000	5	30
C4-Dibenzothiophenes	18000	18000	2	30
Benzo(b)fluorene	20000	18000	9	30
Fluoranthene	78000	77000	2	30
Pyrene	120000	110000	1	30
C1-Fluoranthenes/Pyrenes	140000	140000	3	30
C2-Fluoranthenes/Pyrenes	72000	70000	2	30
C3-Fluoranthenes/Pyrenes	36000	35000	4	30
C4-Fluoranthenes/Pyrenes	13000	14000	7	30
Naphthobenzothiophenes	17000	17000	2	30
C1-Naphthobenzothiophenes	23000	22000	2	30
C2-Naphthobenzothiophenes	18000	17000	2	30

N/A - Not Applicable

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Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/15/05	12/16/05	12/21/05	33.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	10000	9600	5	30
C4-Naphthobenzothiophenes	4700	4500	5	30
Benz[a]anthracene	64000	62000	5	30
Chrysene/Triphenylene	71000	67000	5	30
C1-Chrysenes	82000	79000	4	30
C2-Chrysenes	48000	48000	0	30
C3-Chrysenes	32000	32000	2	30
C4-Chrysenes	10000	9600	5	30
Benzo[b]fluoranthene	25000	25000	1	30
Benzo[k]fluoranthene	27000	27000	1	30
Benzo[a]fluoranthene	11000	11000	0	30
Benzo[e]pyrene	26000	25000	3	30
Benzo[a]pyrene	44000	43000	3	30
Perylene	8200	8100	2	30
Indeno[1,2,3-cd]pyrene	20000	19000	4	30
Dibenz[a,h]anthracene	6100	5800	5	30
Benzo[g,h,i]perylene	19000	18000	3	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	106	104	50-130
Pyrene-d10	77	77	50-130
Benzo[b]fluoranthene-d12	92	91	50-130

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

01/10/06 13:43

Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/15/05	12/16/05	12/21/05	33.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	1800	1800	6	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	106	104	50-130
Pyrene-d10	77	77	50-130
Benzo[b]fluoranthene-d12	92	91	50-130

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

01/10/06 13:44

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/15/05	12/16/05	12/21/05	33.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	2900	2900	1	30
C24 Tricyclic Terpane	1900	1900	0	30
C25 Tricyclic Terpane	2100	2100	1	30
C24 Tetracyclic Terpane	2100	2100	0	30
C26 Tricyclic Terpane-22S	960	940	3	30
C26 Tricyclic Terpane-22R	1100	1000	3	30
C28 Tricyclic Terpane-22S	1100	1100	1	30
C28 Tricyclic Terpane-22R	1300	1200	6	30
C29 Tricyclic Terpane-22S	1500	1500	0	30
C29 Tricyclic Terpane-22R	1300	1400	3	30
18a-22,29,30-Trisnorneohopane-TS	6400	6300	0	30
C30 Tricyclic Terpane-22S	670	620	8	30
C30 Tricyclic Terpane-22R	1400	1400	2	30
17a(H)-22,29,30-Trisnorhopane-TM	7700	7700	0	30
17a/b,21b/a 28,30-Bisnorhopane	1800	1900	2	30
17a(H),21b(H)-25-Norhopane	1100	1000	2	30
30-Norhopane	22000	22000	1	30
18a(H)-30-Norneohopane-C29Ts	6200	5900	5	30
17a(H)-Diahopane	1700	1700	1	30
30-Normoretane	4700	4700	0	30
18a(H)&18b(H)-Oleananes	3300	3400	4	30
Hopane	36000	36000	0	30
Moretane	5700	5400	6	30
30-Homohopane-22S	9800	9700	1	30
30-Homohopane-22R	8400	8400	0	30
30,31-Bishomohopane-22S	6000	5900	1	30
30,31-Bishomohopane-22R	4300	4300	0	30
30,31-Trishomohopane-22S	3300	3200	3	30
30,31-Trishomohopane-22R	2300	2400	6	30
Tetrakishomohopane-22S	2100	2000	1	30
Tetrakishomohopane-22R	1400	1400	1	30
Pentakishomohopane-22S	1600	1600	0	30
Pentakishomohopane-22R	1400	1500	9	30
13b(H),17a(H)-20S-Diacholestane	5500	5400	1	30
13b(H),17a(H)-20R-Diacholestane	3200	3400	5	30

N/A - Not Applicable

01/10/06 10:44

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/15/05	12/16/05	12/21/05	33.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	**2900**	**3000**	3	30
14a(H),17a(H)-20S-Cholestane	**3600**	**3400**	4	30
14a(H),17a(H)-20R-Cholestane	**10000**	**10000**	0	30
13b,17a-20R-Ethyldiacholestane	**1900**	**1900**	2	30
13a,17b-20S-Ethyldiacholestane	**360**	**400**	12	30
14a,17a-20S-Methylcholestane	**1700**	**1600**	6	30
14a,17a-20R-Methylcholestane	**4700**	**4700**	1	30
14a(H),17a(H)-20S-Ethylcholestane	**3500**	**3600**	3	30
14a(H),17a(H)-20R-Ethylcholestane	**5500**	**5500**	0	30
14b(H),17b(H)-20R-Cholestane	**4800**	**4700**	1	30
14b(H),17b(H)-20S-Cholestane	**4800**	**4800**	0	30
14b,17b-20R-Methylcholestane	**4700**	**4600**	1	30
14b,17b-20S-Methylcholestane	**5200**	**5100**	4	30
14b(H),17b(H)-20R-Ethylcholestane	**8100**	**7400**	9	30
14b(H),17b(H)-20S-Ethylcholestane	**4800**	**5400**	12	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	96	95	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.

01/10/06 10:44

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: **0512105**
Lab ID: **SS122105B14**
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	12/21/05	12/30/05	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**0.18**	J	Fluoranthene	**0.047**	J
C1-Naphthalenes	**0.12**	J	Pyrene	**0.069**	J
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	**0.071**	J	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	0.12	U	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	0.077	U	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**0.063**	J	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	0.10	U
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	0.072	U
Anthracene	**0.044**	J	C1-Chrysenes	0.072	U
Phenanthrene	**0.14**	J	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	**0.12**	J	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	0.071	U
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	0.14	U
Retene	**0.094**	J	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	**0.030**	J	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	0.093	U
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	0.16	U
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	0.13	U
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	0.12	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	78	50-130
Pyrene-d10	86	50-130
Benzo[b]fluoranthene-d12	86	50-130

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

01/10/06 11:23

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: **0512105**
Lab ID: **SS122105B14**
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	12/21/05	12/30/05	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	78	50-130
Pyrene-d10	86	50-130
Benzo[b]fluoranthene-d12	86	50-130

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

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42924.D
Acq On : 30 Dec 2005 6:07 pm
Operator : AC
Sample : SS122105B14
Misc : 1X ETR0512105
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 08:35:15 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

MS for WW 1-10-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.74	164	73737	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	130270m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.41	152	54741m	391.31	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.13%#			
58) Pyrene-d10	38.28	212	149287	429.27	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.93%#			
81) Benzo[b]fluoranthene-d12	47.09	264	117781m	431.65	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 43.16%#			
125) 5B(H)Cholane - Surr	43.83	217	52781	895.02	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 89.50%			
Target Compounds						Qvalue
9) Naphthalene	19.85	128	784m	2.74	ng/mL	
10) C1-Naphthalenes	22.53	142	510m	1.78	ng/mL	
15) 2-Methylnaphthalene	22.53	142	267m	1.46	ng/mL	
16) 1-Methylnaphthalene	22.97	142	206	1.12	ng/mL#	100
22) Biphenyl	24.42	154	231m	1.06	ng/mL	
28) Fluorene	28.88	166	198	0.94	ng/mL#	64
32) Dibenzothiophene	32.21	184	141	0.45	ng/mL#	73
41) Phenanthrene	32.69	178	734m	2.09	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.65	192	646m	1.84	ng/mL	
52) Retene	39.68	234	127	1.41	ng/mL	82
53) Anthracene	32.87	178	211	0.66	ng/mL#	60
55) 1-Methylphenanthrene	35.20	192	81m	0.35	ng/mL	
56) Fluoranthene	37.47	202	258m	0.71	ng/mL	
59) Pyrene	38.35	202	387m	1.03	ng/mL	

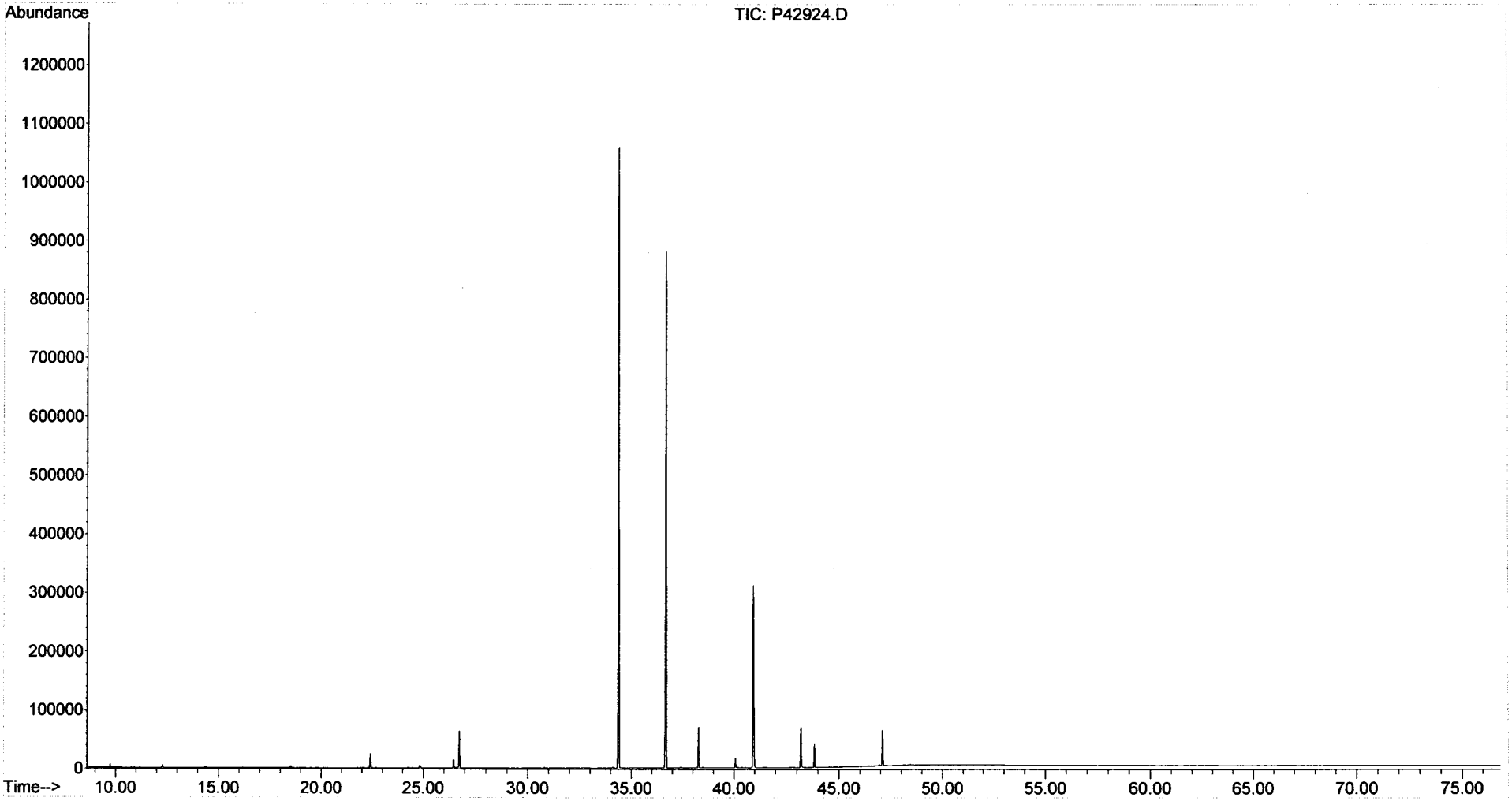
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MS 1-10-06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42924.D
Acq On : 30 Dec 2005 6:07 pm
Operator : AC
Sample : SS122105B14
Misc : 1X ETR0512105
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 10 08:35:15 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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: **0512105**
Lab ID: **SS122105B14**
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	12/21/05	01/05/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
C23 Tricyclic Terpane	0.19	U	30,31-Bishomohopane-22S	0.19	U
C24 Tricyclic Terpane	0.19	U	30,31-Bishomohopane-22R	0.19	U
C25 Tricyclic Terpane	0.19	U	30,31-Trishomohopane-22S	0.19	U
C24 Tetracyclic Terpane	0.19	U	30,31-Trishomohopane-22R	0.19	U
C26 Tricyclic Terpane-22S	0.19	U	Tetrakishomohopane-22S	0.19	U
C26 Tricyclic Terpane-22R	0.19	U	Tetrakishomohopane-22R	0.19	U
C28 Tricyclic Terpane-22S	0.19	U	Pentakishomohopane-22S	0.19	U
C28 Tricyclic Terpane-22R	0.19	U	Pentakishomohopane-22R	0.19	U
C29 Tricyclic Terpane-22S	0.19	U	13b(H),17a(H)-20S-Diacholestane	0.19	U
C29 Tricyclic Terpane-22R	0.19	U	13b(H),17a(H)-20R-Diacholestane	0.19	U
18a-22,29,30-Trisnorneohopane-TS	0.19	U	13b,17a-20S-Methyldiacholestane	0.19	U
C30 Tricyclic Terpane-22S	0.19	U	14a(H),17a(H)-20S-Cholestane	0.19	U
C30 Tricyclic Terpane-22R	0.19	U	14a(H),17a(H)-20R-Cholestane	0.19	U
17a(H)-22,29,30-Trisnorhopane-TM	0.19	U	13b,17a-20R-Ethyldiacholestane	0.19	U
17a/b,21b/a 28,30-Bisnorhopane	0.19	U	13a,17b-20S-Ethyldiacholestane	0.19	U
17a(H),21b(H)-25-Norhopane	0.19	U	14a,17a-20S-Methylcholestane	0.19	U
30-Norhopane	0.19	U	14a,17a-20R-Methylcholestane	0.19	U
18a(H)-30-Norneohopane-C29Ts	0.19	U	14a(H),17a(H)-20S-Ethylcholestane	0.19	U
17a(H)-Diahopane	0.19	U	14a(H),17a(H)-20R-Ethylcholestane	0.19	U
30-Normoretane	0.19	U	14b(H),17b(H)-20R-Cholestane	0.19	U
18a(H)&18b(H)-Oleananes	0.19	U	14b(H),17b(H)-20S-Cholestane	0.19	U
Hopane	0.19	U	14b,17b-20R-Methylcholestane	0.19	U
Moretane	0.19	U	14b,17b-20S-Methylcholestane	0.19	U
30-Homohopane-22S	0.19	U	14b(H),17b(H)-20R-Ethylcholestane	0.19	U
30-Homohopane-22R	0.19	U	14b(H),17b(H)-20S-Ethylcholestane	0.19	U

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

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

01/10/06 10:50

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27474.D
Acq On : 5 Jan 2006 11:12 pm
Operator : AC
Sample : SS122105B14
Misc : 1X ETR0512105
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 09 13:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

MS for WD 1/7006

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	50.65	240	45462m	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	51.40	217	17501	900.23	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	90.02%	

Target Compounds	Qvalue

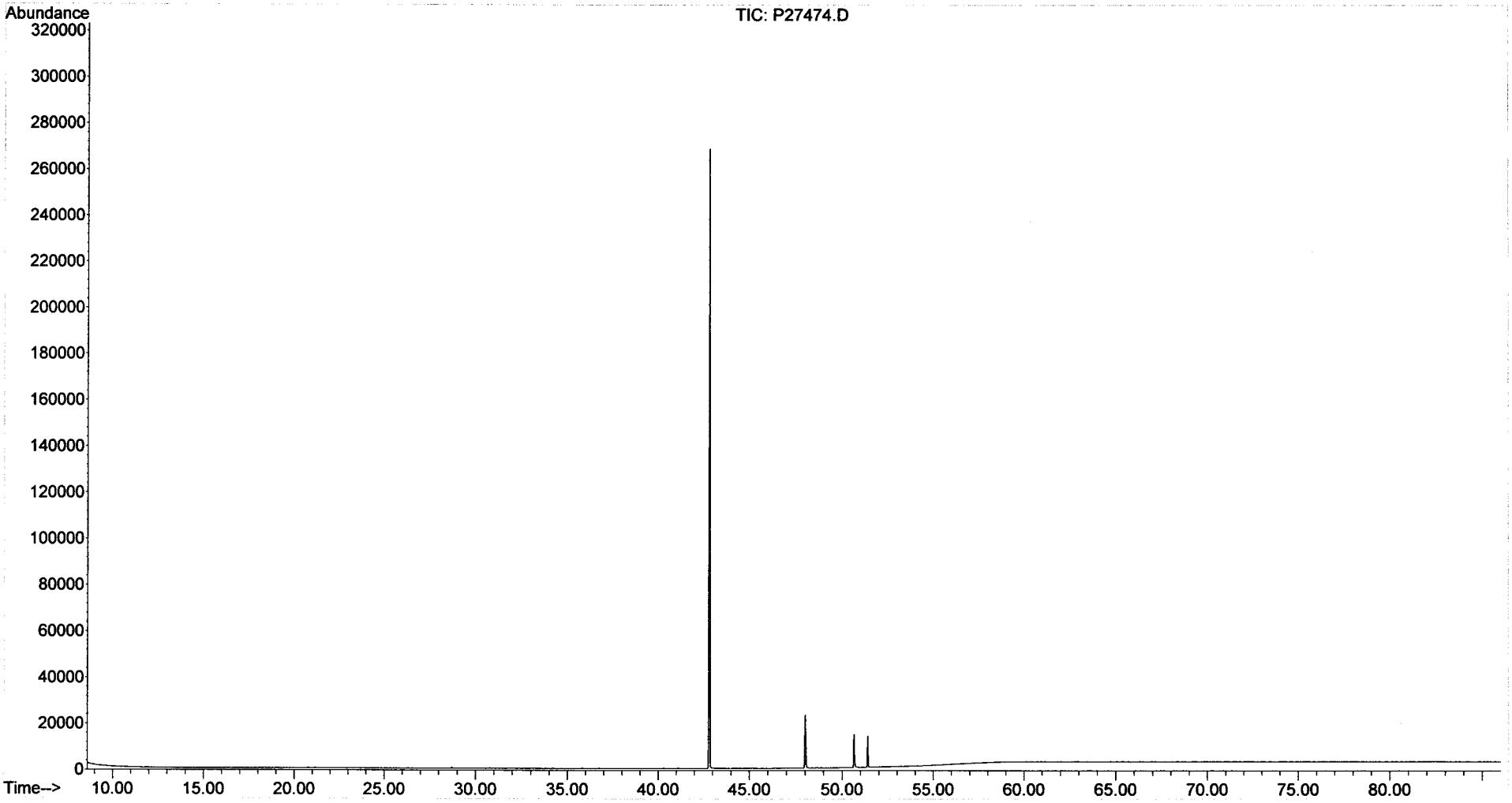
(#) = qualifier out of range (m) = manual integration (+) = signals summed

EWS 1-10-06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27474.D
Acq On : 5 Jan 2006 11:12 pm
Operator : AC
Sample : SS122105B14
Misc : 1X ETR0512105
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jan 09 13:44:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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: **0512105**
Lab ID: **See Below**
Associated Blank: **SS122105B14**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	12/21/05	100	AC

Lab ID:	SS122105B14		SS122105LCS11		SS122105LCSD11				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	0.18		32	95	33	100	4	30	50-130
Acenaphthylene	0.12	U	26	77	26	78	2	30	50-130
Acenaphthene	0.077	U	26	79	27	81	2	30	50-130
Fluorene	0.063		27	82	28	84	2	30	50-130
Anthracene	0.044		25	75	25	75	0	30	50-130
Phenanthrene	0.14		24	73	25	76	3	30	50-130
Fluoranthene	0.047		25	76	26	79	3	30	50-130
Pyrene	0.069		26	77	26	79	3	30	50-130
Benz[a]anthracene	0.10	U	30	89	30	91	2	30	50-130
Chrysene/Triphenylene	0.072	U	28	83	28	86	3	30	50-130
Benzo[b]fluoranthene	0.071	U	26	80	27	81	2	30	50-130
Benzo[k]fluoranthene	0.14	U	24	72	25	76	6	30	50-130
Benzo[a]pyrene	0.093	U	27	81	28	82	2	30	50-130
Indeno[1,2,3-cd]pyrene	0.16	U	32	95	33	100	5	30	50-130
Dibenz[a,h]anthracene	0.13	U	31	93	32	96	4	30	50-130
Benzo[g,h,i]perylene	0.12	U	29	86	29	88	2	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	90	93	50-130
Pyrene-d10	80	82	50-130
Benzo[b]fluoranthene-d12	72	74	50-130

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

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

01/10/06 11:28

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: **0512105**
Lab ID: **SS122105LCS11**
Associated Blank: **SS122105B14**
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	12/21/05	12/30/05	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**32**	S	Fluoranthene	**25**	S
C1-Naphthalenes	0.11	U	Pyrene	**26**	S
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**26**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**26**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**27**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**30**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**28**	S
Anthracene	**25**	S	C1-Chrysenes	0.072	U
Phenanthrene	**24**	S	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**26**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**24**	S
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	**27**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**32**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**31**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**29**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	80	50-130
Benzo[b]fluoranthene-d12	72	50-130

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

01/10/06 11:24

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: **0512105**
Lab ID: **SS122105LCS11**
Associated Blank: **SS122105B14**
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	12/21/05	12/30/05	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	80	50-130
Benzo[b]fluoranthene-d12	72	50-130

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

01/10/06 11:25

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42926.D
Acq On : 30 Dec 2005 7:37 pm
Operator : AC
Sample : SS122105LCS11
Misc : 1X ETR0512105
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 08 17:40:40 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

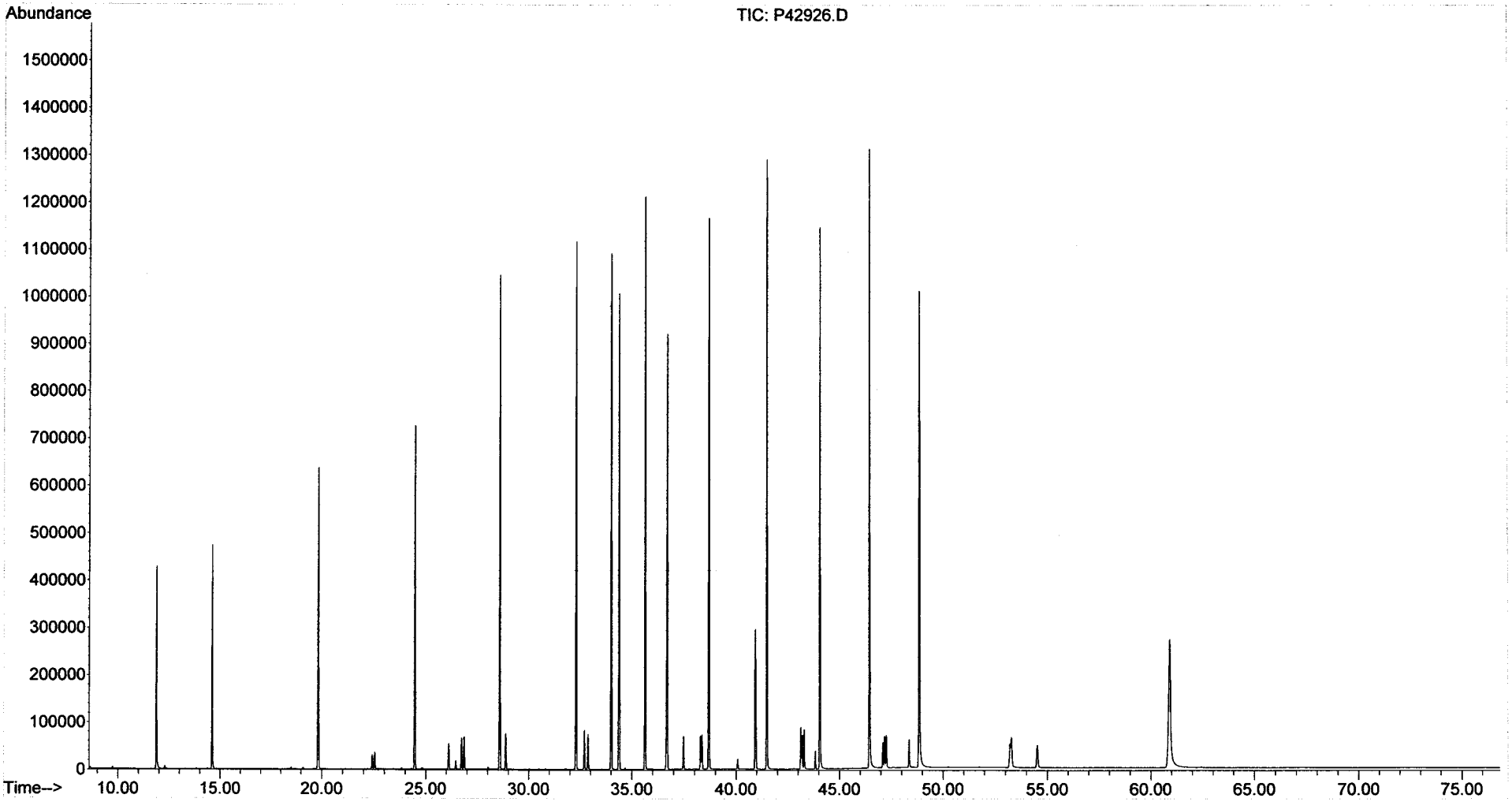
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.74	164	78037m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	135044m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.41	152	66414m	448.60	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.86%#			
58) Pyrene-d10	38.28	212	147775m	401.51	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.15%#			
81) Benzo[b]fluoranthene-d12	47.10	264	101676m	359.45	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 35.95%#			
125) 5B(H)Cholane - Surr	43.83	217	50420	824.76	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 82.48%			
Target Compounds						Qvalue
9) Naphthalene	19.84	128	144653	477.26	ng/mL#	100
15) 2-Methylnaphthalene	22.54	142	84076	435.45	ng/mL#	100
25) Acenaphthylene	26.13	152	130557m	384.93	ng/mL	
26) Acenaphthene	26.86	153	82467m	396.86	ng/mL	
28) Fluorene	28.88	166	91025m	408.90	ng/mL	
41) Phenanthrene	32.70	178	135893	366.07	ng/mL	99
53) Anthracene	32.87	178	126334m	372.72	ng/mL	
56) Fluoranthene	37.47	202	146072m	381.74	ng/mL	
59) Pyrene	38.35	202	152294m	383.64	ng/mL	
73) Benz[a]anthracene	43.13	228	142534	443.76	ng/mL	100
74) Chrysene	43.30	228	135488m	415.63	ng/mL	
75) Chrysene/Triphenylene	43.30	228	135471m	415.58	ng/mL	
82) Benzo[b]fluoranthene	47.18	252	132774m	397.76	ng/mL	
83) Benzo[k]fluoranthene	47.26	252	135369m	359.50	ng/mL	
86) Benzo[a]pyrene	48.37	252	131000	403.99	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.21	276	142626m	473.56	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	143919	462.53	ng/mL	98
90) Benzo[g,h,i]perylene	54.51	276	147331	429.28	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42926.D
Acq On : 30 Dec 2005 7:37 pm
Operator : AC
Sample : SS122105LCS11
Misc : 1X ETR0512105
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 08 17:40:40 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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: **0512105**
Lab ID: **SS122105LCSD11**
Associated Blank: **SS122105B14**
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	12/21/05	12/30/05	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**33**	S	Fluoranthene	**26**	S
C1-Naphthalenes	0.11	U	Pyrene	**26**	S
C2-Naphthalenes	0.11	U	C1-Fluoranthenes/Pyrenes	0.059	U
C3-Naphthalenes	0.11	U	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	0.061	U	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	0.079	U	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**26**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**27**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**28**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**30**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**28**	S
Anthracene	**25**	S	C1-Chrysenes	0.072	U
Phenanthrene	**25**	S	C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	0.097	U	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	0.097	U	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**27**	S
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**25**	S
Retene	0.097	U	Benzo[a]fluoranthene	0.14	U
Dibenzothiophene	0.074	U	Benzo[e]pyrene	0.091	U
C1-Dibenzothiophenes	0.074	U	Benzo[a]pyrene	**28**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**33**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**32**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**29**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	82	50-130
Benzo[b]fluoranthene-d12	74	50-130

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

01/10/06 11:25

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: **0512105**
Lab ID: **SS122105LCSD11**
Associated Blank: **SS122105B14**
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	12/21/05	12/30/05	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	82	50-130
Benzo[b]fluoranthene-d12	74	50-130

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

01/10/06 11:26

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42928.D
Acq On : 30 Dec 2005 9:06 pm
Operator : AC
Sample : SS122105LCSD11
Misc : 1X ETR0512105
ALS Vial : 6 Sample Multiplier: 1

MS for WO H1006

Quant Time: Jan 08 17:44:28 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 2006
Response via : Initial Calibration

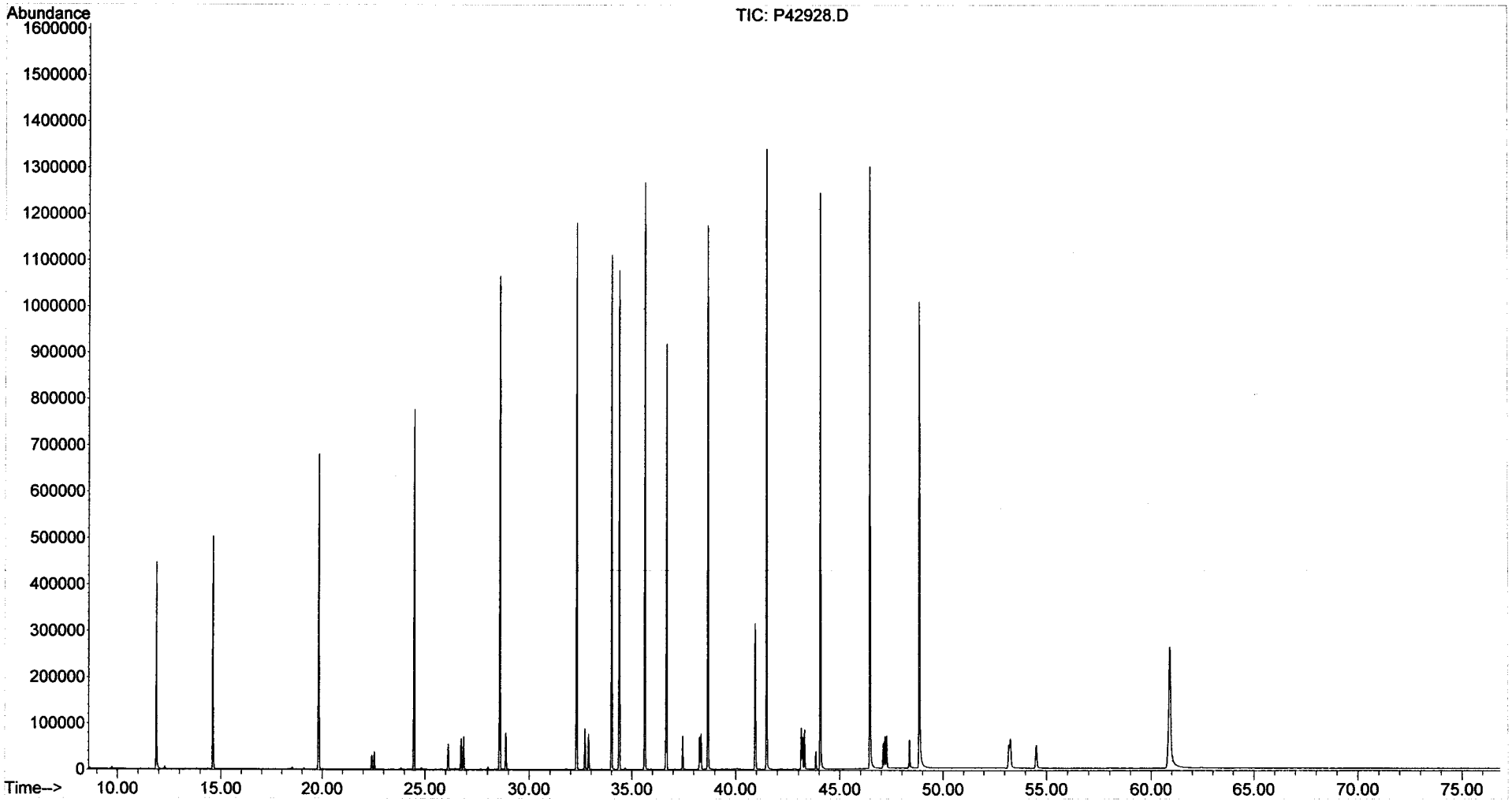
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.74	164	78399	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	135772m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.41	152	69127	464.77	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 46.48%#			
58) Pyrene-d10	38.28	212	152014m	411.12	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 41.11%#			
81) Benzo[b]fluoranthene-d12	47.09	264	105537m	371.10	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 37.11%#			
125) 5B(H)Cholane - Surr	43.83	217	52899	860.67	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 86.07%			
Target Compounds						Qvalue
9) Naphthalene	19.84	128	151864m	498.74	ng/mL	
15) 2-Methylnaphthalene	22.54	142	87182m	449.45	ng/mL	
25) Acenaphthylene	26.13	152	133593m	392.06	ng/mL	
26) Acenaphthene	26.86	153	84828m	406.34	ng/mL	
28) Fluorene	28.88	166	93699m	418.97	ng/mL	
41) Phenanthrene	32.69	178	140876	377.74	ng/mL	99
53) Anthracene	32.87	178	127042m	373.07	ng/mL	
56) Fluoranthene	37.47	202	151444m	393.95	ng/mL	
59) Pyrene	38.35	202	158312m	396.96	ng/mL	
73) Benz[a]anthracene	43.13	228	146906	454.92	ng/mL	99
74) Chrysene	43.30	228	140191m	427.76	ng/mL	
75) Chrysene/Triphenylene	43.30	228	140327m	428.17	ng/mL	
82) Benzo[b]fluoranthene	47.18	252	136042m	405.36	ng/mL	
83) Benzo[k]fluoranthene	47.26	252	143911m	380.13	ng/mL	
86) Benzo[a]pyrene	48.37	252	134470	412.46	ng/mL	96
88) Indeno[1,2,3-cd]pyrene	53.20	276	151099m	499.01	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	150328	480.53	ng/mL	98
90) Benzo[g,h,i]perylene	54.51	276	151846	440.07	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42928.D
Acq On : 30 Dec 2005 9:06 pm
Operator : AC
Sample : SS122105LCSD11
Misc : 1X ETR0512105
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 08 17:44:28 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 15:41:51 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: **0512105**
Lab ID: **SS010406AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Naphthalene	714.43	910	127	65-135
C1-Naphthalenes	1534.53	1800	120	65-135
C2-Naphthalenes	1897.27	2200	115	65-135
C3-Naphthalenes	1436.53	1600	110	65-135
C4-Naphthalenes	773.42	900	116	65-135
Biphenyl	216.49	260	119	65-135
Acenaphthene	15.55	20	126	65-135
Fluorene	87.56	84	96	65-135
C1-Fluorenes	219.89	230	106	65-135
C2-Fluorenes	341.2	340	100	65-135
C3-Fluorenes	299.61	310	105	65-135
Phenanthrene	272.58	240	89	65-135
C1-Phenanthrenes/Anthracenes	564.81	500	89	65-135
C2-Phenanthrenes/Anthracenes	660.43	580	88	65-135
C3-Phenanthrenes/Anthracenes	448.76	410	90	65-135
C4-Phenanthrenes/Anthracenes	175.88	160	91	65-135
Dibenzothiophene	218.8	210	96	65-135
C1-Dibenzothiophenes	434.54	390	90	65-135
C2-Dibenzothiophenes	551.44	520	94	65-135
C3-Dibenzothiophenes	460.96	450	97	65-135
C4-Dibenzothiophenes	236.77	240	103	65-135
Fluoranthene	4.26	3.5	81	65-135
Pyrene	15.56	12	78	65-135
C1-Fluoranthenes/Pyrenes	78.43	76	97	65-135
C2-Fluoranthenes/Pyrenes	132.93	110	85	65-135
C3-Fluoranthenes/Pyrenes	111.33	120	110	65-135
Chrysene/Triphenylene	50.99	47	92	65-135
C1-Chrysenes	81.69	84	103	65-135
C2-Chrysenes	95.93	100	106	65-135
C3-Chrysenes	89.87	120	130	65-135
C4-Chrysenes	51.86	64	124	65-135
Benzo[b]fluoranthene	6.54	6.5	99	65-135
Benzo[e]pyrene	12.88	12	91	65-135

01/10/06 13:30

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: **0512105**
Lab ID: **SS010406AWS01**
Associated Blank: **N/A**
Concentration Units: **mg/Kg**

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

Parameter	True Conc.	Conc.	% Recovery	% Recovery Limits
Dibenz[a,h]anthracene	1.02	0.93	91	65-135
Benzo[g,h,i]perylene	3.35	3.6	106	65-135
Hopane	118.8	140	117	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.

01/10/06 13:30

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: **0512105**
Lab ID: **SS010406AWS01**
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	12/18/05	100	0.051	10	1	NLJr

Parameter	Result		Parameter	Result	
Naphthalene	**910**		Fluoranthene	**3.5**	
C1-Naphthalenes	**1800**		Pyrene	**12**	
C2-Naphthalenes	**2200**		C1-Fluoranthenes/Pyrenes	**76**	
C3-Naphthalenes	**1600**		C2-Fluoranthenes/Pyrenes	**110**	
C4-Naphthalenes	**900**		C3-Fluoranthenes/Pyrenes	**120**	
Biphenyl	**260**		C4-Fluoranthenes/Pyrenes	**98**	
Dibenzofuran	**76**		Naphthobenzothiophenes	**46**	
Acenaphthylene	**7.4**		C1-Naphthobenzothiophenes	**130**	
Acenaphthene	**20**		C2-Naphthobenzothiophenes	**160**	
Fluorene	**84**		C3-Naphthobenzothiophenes	**120**	
C1-Fluorenes	**230**		C4-Naphthobenzothiophenes	**84**	
C2-Fluorenes	**340**		Benz[a]anthracene	**1.6**	J
C3-Fluorenes	**310**		Chrysene/Triphenylene	**47**	
Anthracene	0.26	U	C1-Chrysenes	**84**	
Phenanthrene	**240**		C2-Chrysenes	**100**	
C1-Phenanthrenes/Anthracenes	**500**		C3-Chrysenes	**120**	
C2-Phenanthrenes/Anthracenes	**580**		C4-Chrysenes	**64**	
C3-Phenanthrenes/Anthracenes	**410**		Benzo[b]fluoranthene	**6.5**	
C4-Phenanthrenes/Anthracenes	**160**		Benzo[k]fluoranthene	0.40	U
Retene	0.28	U	Benzo[a]fluoranthene	0.40	U
Dibenzothiophene	**210**		Benzo[e]pyrene	**12**	
C1-Dibenzothiophenes	**390**		Benzo[a]pyrene	**1.7**	J
C2-Dibenzothiophenes	**520**		Perylene	**1.4**	J
C3-Dibenzothiophenes	**450**		Indeno[1,2,3-cd]pyrene	**1.2**	J
C4-Dibenzothiophenes	**240**		Dibenz[a,h]anthracene	**0.93**	J
Benzo(b)fluorene	0.20	U	Benzo[g,h,i]perylene	**3.6**	

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

01/10/06 13:30

Form I
Alaska North Slope Crude
Carbazole

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **SS010406AWS01**
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	12/18/05	100	0.051	10	1	NLJr

Parameter	Result
Carbazole	7.6

N/A - Not Applicable

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42693.D
Acq On : 18 Dec 2005 4:16 am
Operator : NLJr
Sample : SS010406AWS01
Misc : ANS4121701
ALS Vial : 12 Sample Multiplier: 1

MS for WW 1-4-05

Quant Time: Jan 04 08:56:40 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 26 20:20:22 2005
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	52115m	500.00 ng/mL	0.02
72) Chrysene-d12	43.27	240	83465m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.47	152	118891	1202.50 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 120.25%		
58) Pyrene-d10	38.35	212	223106m	907.69 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 90.77%		
81) Benzo[b]fluoranthene-d12	47.16	264	177716	1016.53 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 101.65%		
125) 5B(H)Cholane - Surr	43.90	217	37806m	1000.59 ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 100.06%		

Target Compounds					Qvalue
3) trans-Decalin	16.48	138	126257m	2449.87 ng/mL	
4) cis-Decalin	17.70	138	4430m	111.19 ng/mL	
5) C1-Decalins	18.41	152	221206m	4292.25 ng/mL	
6) C2-Decalins	19.74	166	205589m	3989.22 ng/mL	
7) C3-Decalins	22.21	180	111653m	2166.50 ng/mL	
8) C4-Decalins	25.61	194	107948m	2094.61 ng/mL	
9) Naphthalene	19.90	128	934372m	4616.22 ng/mL	
10) C1-Naphthalenes	22.59	142	1900019m	9386.96 ng/mL	
11) C2-Naphthalenes	25.44	156	2260230m	11166.57 ng/mL	
12) C3-Naphthalenes	27.78	170	1626417m	8035.24 ng/mL	
13) C4-Naphthalenes	30.55	184	922680m	4558.46 ng/mL	
15) 2-Methylnaphthalene	22.59	142	1112253m	8626.02 ng/mL	
16) 1-Methylnaphthalene	23.02	142	784839	6041.98 ng/mL#	100
17) Benzothiophene	20.11	134	6883m	39.95 ng/mL	
18) C1-Benzo(b)thiophenes	22.16	148	38426m	223.00 ng/mL	
19) C2-Benzo(b)thiophenes	25.64	162	60715m	352.36 ng/mL	
20) C3-Benzo(b)thiophenes	27.62	176	124945m	725.12 ng/mL	
21) C4-Benzo(b)thiophenes	29.36	190	111838m	649.05 ng/mL	
22) Biphenyl	24.48	154	203282m	1315.92 ng/mL	
23) 2,6-Dimethylnaphthalene	25.10	156	333096m	2979.28 ng/mL	
24) Dibenzofuran	27.56	168	69513	384.62 ng/mL#	78
25) Acenaphthylene	26.19	152	8590m	37.92 ng/mL	
26) Acenaphthene	26.94	153	13882m	100.03 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.48	170	120846m	1056.29 ng/mL	
28) Fluorene	28.94	166	63981m	430.37 ng/mL	
29) C1-Fluorenes	31.31	180	176049m	1184.21 ng/mL	
30) C2-Fluorenes	33.51	194	258707m	1740.21 ng/mL	
31) C3-Fluorenes	35.34	208	237748m	1599.23 ng/mL	
32) Dibenzothiophene	32.27	184	236179	1071.65 ng/mL#	88
33) 4-Methyldibenzothiophene(4	34.04	198	223950m	1016.16 ng/mL	
34) 2/3-Methyldibenzothiophene	34.39	198	144097	653.83 ng/mL#	100
35) 1-Methyldibenzothiophene(1	34.81	198	64154	291.09 ng/mL#	100
36) OTP	34.47	198	42986	195.05 ng/mL#	100
37) C1-Dibenzothiophenes	34.04	198	480022m	2178.07 ng/mL	
38) C2-Dibenzothiophenes	35.73	212	583060m	2645.60 ng/mL	
39) C3-Dibenzothiophenes	37.54	226	502345m	2279.36 ng/mL	
40) C4-Dibenzothiophenes	38.43	240	273070m	1239.04 ng/mL	
41) Phenanthrene	32.76	178	305734	1233.25 ng/mL	95
42) 3-Methylphenanthrene(3MP)	34.72	192	127253	513.31 ng/mL	99
43) 2/4-Methylphenanthrene(2MP	34.84	192	142937	576.57 ng/mL	98

MS 1-4-05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42693.D
Acq On : 18 Dec 2005 4:16 am
Operator : NLJr
Sample : SS010406AWS01
Misc : ANS4121701
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 04 08:56:40 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 26 20:20:22 2005
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2-Methylanthracene(2MA)	35.00	192	4806m	19.39	ng/mL	
45) 9-Methylphenanthrene(9MP)	35.18	192	204044	823.06	ng/mL	98
46) 1-Methylphenanthrene(1MP)	35.28	192	147812m	596.24	ng/mL	
47) C1-Phenanthrenes/Anthracen	35.18	192	636520m	2567.56	ng/mL	
48) C2-Phenanthrenes/Anthracen	37.00	206	730449m	2946.45	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.84	220	512768m	2068.38	ng/mL	
51) C4-Phenanthrenes/Anthracen	41.01	234	201684m	813.54	ng/mL	
54) Carbazole	33.60	167	6900m	38.46	ng/mL	
55) 1-Methylphenanthrene	35.28	192	145831m	891.43	ng/mL	
56) Fluoranthene	37.53	202	4503m	17.62	ng/mL	
59) Pyrene	38.42	202	16309m	61.52	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.81	216	102356m	386.09	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.62	230	152588m	575.57	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.64	244	165748m	625.21	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.99	258	132897m	501.30	ng/mL	
64) Naphthobenzothiophene	42.28	234	42534m	176.47	ng/ml	
65) Naphthobenzothiophene-2,1-	42.28	234	42518m	176.40	ng/mL	
66) Naphthobenzothiophene-1,2-	42.62	234	10120m	41.99	ng/mL	
67) Naphthobenzothiophene-2,3-	42.91	234	4277m	17.74	ng/mL	
68) C1-Naphthobenzothiophenes	43.67	248	154718m	641.91	ng/ml	
69) C2-Naphthobenzothiophenes	45.72	262	192631m	799.20	ng/ml	
70) C3-Naphthobenzothiophenes	47.27	276	146117m	606.22	ng/ml	
71) C4-Naphthobenzothiophenes	48.36	290	102510m	425.30	ng/mL	
73) Benz[a]anthracene	43.20	228	1632m	8.22	ng/mL	
74) Chrysene	43.33	228	48407	240.26	ng/mL	96
75) Chrysene/Triphenylene	43.33	228	48407	240.26	ng/mL	96
76) C1-Chrysenes	44.83	242	86042m	427.06	ng/mL	
77) C2-Chrysenes	46.91	256	110865m	550.27	ng/mL	
78) BBF-d12 Surr BKGD	47.16	256	6862	34.06	ng/mL	100
79) C3-Chrysenes	49.64	270	119843m	594.83	ng/mL	
80) C4-Chrysenes	49.24	284	65830m	326.74	ng/mL	
82) Benzo[b]fluoranthene	47.25	252	6808	33.00	ng/mL#	88
85) Benzo[e]pyrene	48.25	252	12426	59.76	ng/mL#	77
86) Benzo[a]pyrene	48.45	252	1701	8.49	ng/mL#	1
87) Perylene	48.78	252	1448m	7.30	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.35	276	1133m	6.09	ng/mL	
89) Dibenz[a,h]anthracene	53.38	278	910m	4.73	ng/mL	
90) Benzo[g,h,i]perylene	54.63	276	3839	18.10	ng/mL#	87
91) 17a(H),21B(H)-hopane - C30	52.47	191	56893m	708.17	ng/mL	
92) Hopane (T19)	52.47	191	56937m	708.72	ng/mL	
93) C23 Tricyclic Terpane (T4)	40.92	191	25628m	319.00	ng/ml	
94) C24 Tricyclic Terpane (T5)	41.65	191	16561	206.14	ng/ml	100
95) C25 Tricyclic Terpane (T6)	43.14	191	15923m	198.20	ng/ml	
96) C24 Tetracyclic Terpane (T	44.46	191	5268	65.57	ng/ml	100
97) C26 Tricyclic Terpane-22S	44.20	191	5658m	70.43	ng/ml	
98) C26 Tricyclic Terpane-22R	44.29	191	5666m	70.53	ng/ml	
99) C28 Tricyclic Terpane-22S	46.58	191	5093m	63.39	ng/ml	
100) C28 Tricyclic Terpane-22R	46.74	191	6678m	83.12	ng/ml	
101) C29 Tricyclic Terpane-22S	47.26	191	7722	96.12	ng/ml	100
102) C29 Tricyclic Terpane-22R	47.47	191	7188m	89.47	ng/ml	
103) 18a-22,29,30-Trisnorneohop	48.61	191	9464m	117.80	ng/ml	
104) C30 Tricyclic Terpane-22S	48.70	191	5060m	62.98	ng/mL	
105) C30 Tricyclic Terpane-22R	48.95	191	4798m	59.72	ng/mL	
106) 17a(H)-22,29,30-Trisnorhop	49.17	191	11896m	148.08	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42693.D
Acq On : 18 Dec 2005 4:16 am
Operator : NLJr
Sample : SS010406AWS01
Misc : ANS4121701
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 04 08:56:40 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 26 20:20:22 2005
Response via : Initial Calibration

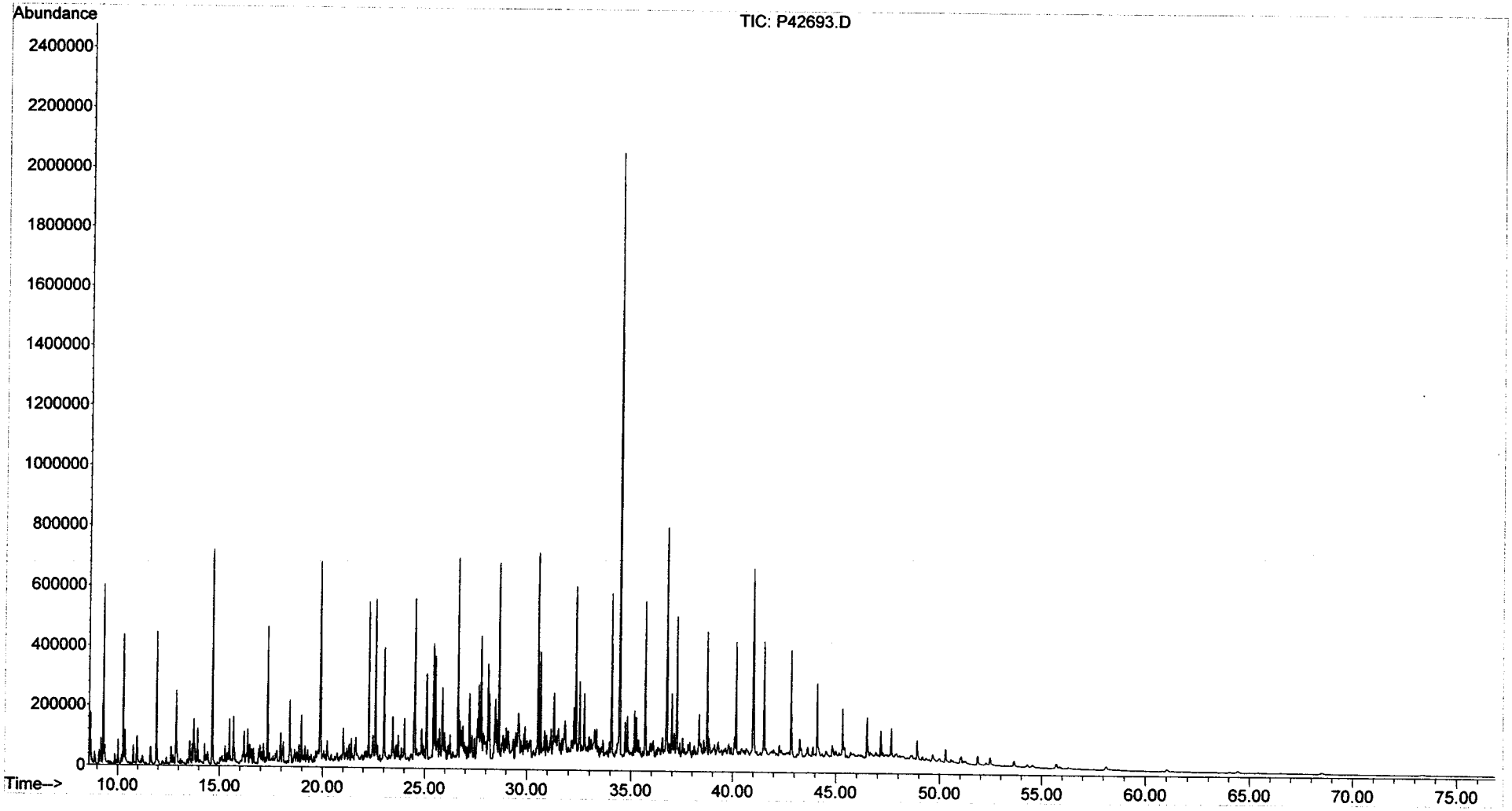
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	50.38	191	2143	26.67	ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.16	191	3400	42.32	ng/ml	100
109) 30-Norhopane (T15)	51.07	191	32518	404.77	ng/ml	100
110) 18a(H)-30-Norneohopane-C29	51.17	191	7047m	87.72	ng/ml	
111) 17a(H)-Diahopane (X)	51.30	191	4512	56.16	ng/ml	100
112) 30-Normoretane (T17)	51.87	191	3975	49.48	ng/ml	100
114) Moretane (T20)	53.17	191	4771m	59.39	ng/ml	
115) 30-Homohopane-22S (T21)	54.31	191	25359	315.66	ng/ml	100
116) 30-Homohopane-22R (T22)	54.53	191	21827	271.69	ng/ml	100
117) 30,31-Bishomohopane-22S (T	55.90	191	19447	242.07	ng/ml	100
118) 30,31-Bishomohopane-22R (T	56.30	191	14178	176.48	ng/ml	100
119) 30,31-Trishomohopane-22S (	58.10	191	13726m	170.85	ng/ml	
120) 30,31-Trishomohopane-22R (	58.74	191	9355	116.45	ng/ml	100
121) Tetrakishomohopane-22S (T3	60.82	191	10772m	134.08	ng/ml	
122) Tetrakishomohopane-22R (T3	61.74	191	7778	96.82	ng/ml	100
123) Pentakishomohopane-22S (T3	64.04	191	12755	158.77	ng/ml	100
124) Pentakishomohopane-22R (T3	65.38	191	9863m	122.77	ng/ml	
126) 13b(H),17a(H)-20S-Diachole	45.41	217	10331m	273.43	ng/ml	
127) 13b(H),17a(H)-20R-Diachole	45.84	217	5367	142.05	ng/ml	100
128) 13b,17a-20S-Methyldiachole	46.53	217	4108m	108.72	ng/ml	
129) 14a(H),17a(H)-20S-Cholesta	47.41	217	4304m	113.91	ng/ml	
130) 14a(H),17a(H)-20R-Cholesta	47.93	217	14781m	391.20	ng/ml	
131) 13b,17a-20R-Ethyldiacholes	48.22	217	3505m	92.77	ng/ml	
132) 13a,17b-20S-Ethyldiacholes	48.49	217	874	23.13	ng/ml	100
133) 14a,17a-20S-Methylcholesta	48.65	217	2809m	74.34	ng/ml	
134) 14a,17a-20R-Methylcholesta	49.37	217	7777m	205.83	ng/ml	
135) 14a(H),17a(H)-20S-Ethylcho	49.73	217	7817m	206.89	ng/ml	
136) 14a(H),17a(H)-20R-Ethylcho	50.66	217	7615m	201.54	ng/ml	
137) 14b(H),17b(H)-20R-Cholesta	47.50	218	7366	194.95	ng/ml	100
138) 14b(H),17b(H)-20S-Cholesta	47.58	218	7805m	206.57	ng/ml	
139) 14b,17b-20R-Methylcholesta	48.82	218	7963m	210.75	ng/ml	
140) 14b,17b-20S-Methylcholesta	48.90	218	9621m	254.63	ng/ml	
141) 14b(H),17b(H)-20R-Ethylcho	49.98	218	12153m	321.65	ng/ml	
142) 14b(H),17b(H)-20S-Ethylcho	50.03	218	6857m	181.48	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42693.D
Acq On : 18 Dec 2005 4:16 am
Operator : NLJr
Sample : SS010406AWS01
Misc : ANS4121701
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 04 08:56:40 2006
Quant Method : C:\MSDCHEM\1\DATA\2005\PAH #4\METHODS-SEQ\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 26 20:20:22 2005
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: **0512105**
Lab ID: **SS010606AWS01**
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	150	126	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.

01/10/06 10:44

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: **0512105**
Lab ID: **SS010606AWS01**
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
C23 Tricyclic Terpane	60	30,31-Bishomohopane-22S	48
C24 Tricyclic Terpane	38	30,31-Bishomohopane-22R	35
C25 Tricyclic Terpane	39	30,31-Trishomohopane-22S	37
C24 Tetracyclic Terpane	12	30,31-Trishomohopane-22R	23
C26 Tricyclic Terpane-22S	14	Tetrakishomohopane-22S	24
C26 Tricyclic Terpane-22R	14	Tetrakishomohopane-22R	18
C28 Tricyclic Terpane-22S	12	Pentakishomohopane-22S	26
C28 Tricyclic Terpane-22R	14	Pentakishomohopane-22R	22
C29 Tricyclic Terpane-22S	20	13b(H),17a(H)-20S-Diacholestane	55
C29 Tricyclic Terpane-22R	19	13b(H),17a(H)-20R-Diacholestane	30
18a-22,29,30-Trisnorneohopane-TS	23	13b,17a-20S-Methyldiacholestane	26
C30 Tricyclic Terpane-22S	10	14a(H),17a(H)-20S-Cholestane	22
C30 Tricyclic Terpane-22R	15	14a(H),17a(H)-20R-Cholestane	87
17a(H)-22,29,30-Trisnorhopane-TM	30	13b,17a-20R-Ethyldiacholestane	21
17a/b,21b/a 28,30-Bisnorhopane	5.7	13a,17b-20S-Ethyldiacholestane	5.2
17a(H),21b(H)-25-Norhopane	8.0	14a,17a-20S-Methylcholestane	18
30-Norhopane	86	14a,17a-20R-Methylcholestane	40
18a(H)-30-Norneohopane-C29Ts	20	14a(H),17a(H)-20S-Ethylcholestane	52
17a(H)-Diahopane	9.8	14a(H),17a(H)-20R-Ethylcholestane	43
30-Normoretane	9.2	14b(H),17b(H)-20R-Cholestane	47
18a(H)&18b(H)-Oleananes	0.55 U	14b(H),17b(H)-20S-Cholestane	48
Hopane	150	14b,17b-20R-Methylcholestane	54
Moretane	10	14b,17b-20S-Methylcholestane	56
30-Homohopane-22S	66	14b(H),17b(H)-20R-Ethylcholestane	70
30-Homohopane-22R	52	14b(H),17b(H)-20S-Ethylcholestane	49

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

01/10/06 10:42

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN03\
Data File : P27471.D
Acq On : 5 Jan 2006 5:52 pm
Operator : AC
Sample : SS010606AWS01
Misc : ANS2010401
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 06 10:38:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

MS 1-6-06 1/9/06

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	50.65	240	65542	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	51.41	217	29910	1067.17	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 106.72%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.11	191	51986m	764.07	ng/mL	
84) Hopane (T19)	61.11	191	51826m	761.72	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.85	191	20715	304.46	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.72	191	12989m	190.91	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.51	191	13625m	200.26	ng/ml	
88) C24 Tetracyclic Terpane (T	52.06	191	4184m	61.50	ng/ml	
89) C26 Tricyclic Terpane-22S	51.78	191	5012m	73.66	ng/ml	
90) C26 Tricyclic Terpane-22R	51.89	191	5044	74.14	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.64	191	4156m	61.08	ng/ml	
92) C28 Tricyclic Terpane-22R	54.83	191	4956	72.84	ng/ml	100
93) C29 Tricyclic Terpane-22S	55.46	191	6798	99.91	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.68	191	6699	98.46	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.91	191	7842m	115.26	ng/ml	
96) C30 Tricyclic Terpane-22S	57.06	191	3635m	53.43	ng/mL	
97) C30 Tricyclic Terpane-22R	57.33	191	5223m	76.77	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.52	191	10588	155.62	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.86	191	1990m	29.25	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.67	191	2767	40.67	ng/ml	100
101) 30-Norhopane (T15)	59.60	191	29934m	439.96	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.71	191	7015m	103.10	ng/ml	
103) 17a(H)-Diahopane (X)	59.86	191	3390m	49.83	ng/ml	
104) 30-Normoretane (T17)	60.47	191	3176	46.68	ng/ml	100
106) Moretane (T20)	61.88	191	3617m	53.16	ng/ml	
107) 30-Homohopane-22S (T21)	63.10	191	22766	334.61	ng/ml	100
108) 30-Homohopane-22R (T22)	63.34	191	18163	266.95	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.81	191	16699	245.44	ng/ml	100
110) 30,31-Bishomohopane-22R (T	65.23	191	12177	178.97	ng/ml	100
111) 30,31-Trishomohopane-22S (	67.16	191	12925	189.97	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.83	191	7865m	115.60	ng/ml	
113) Tetrakishomohopane-22S (T3	70.06	191	8499	124.92	ng/ml	100
114) Tetrakishomohopane-22R (T3	71.05	191	6404	94.12	ng/ml	100
115) Pentakishomohopane-22S (T3	73.51	191	9080m	133.45	ng/ml	
116) Pentakishomohopane-22R (T3	74.93	191	7694	113.08	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	53.23	217	7895m	281.69	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.74	217	4270m	152.35	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.58	217	3683m	131.41	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.61	217	3187m	113.71	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	56.19	217	12444m	444.00	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.50	217	2992	106.75	ng/ml	100
124) 13a,17b-20S-Ethyldiacholes	56.80	217	750	26.76	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN03\
Data File : P27471.D
Acq On : 5 Jan 2006 5:52 pm
Operator : AC
Sample : SS010606AWS01
Misc : ANS2010401
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 06 10:38:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

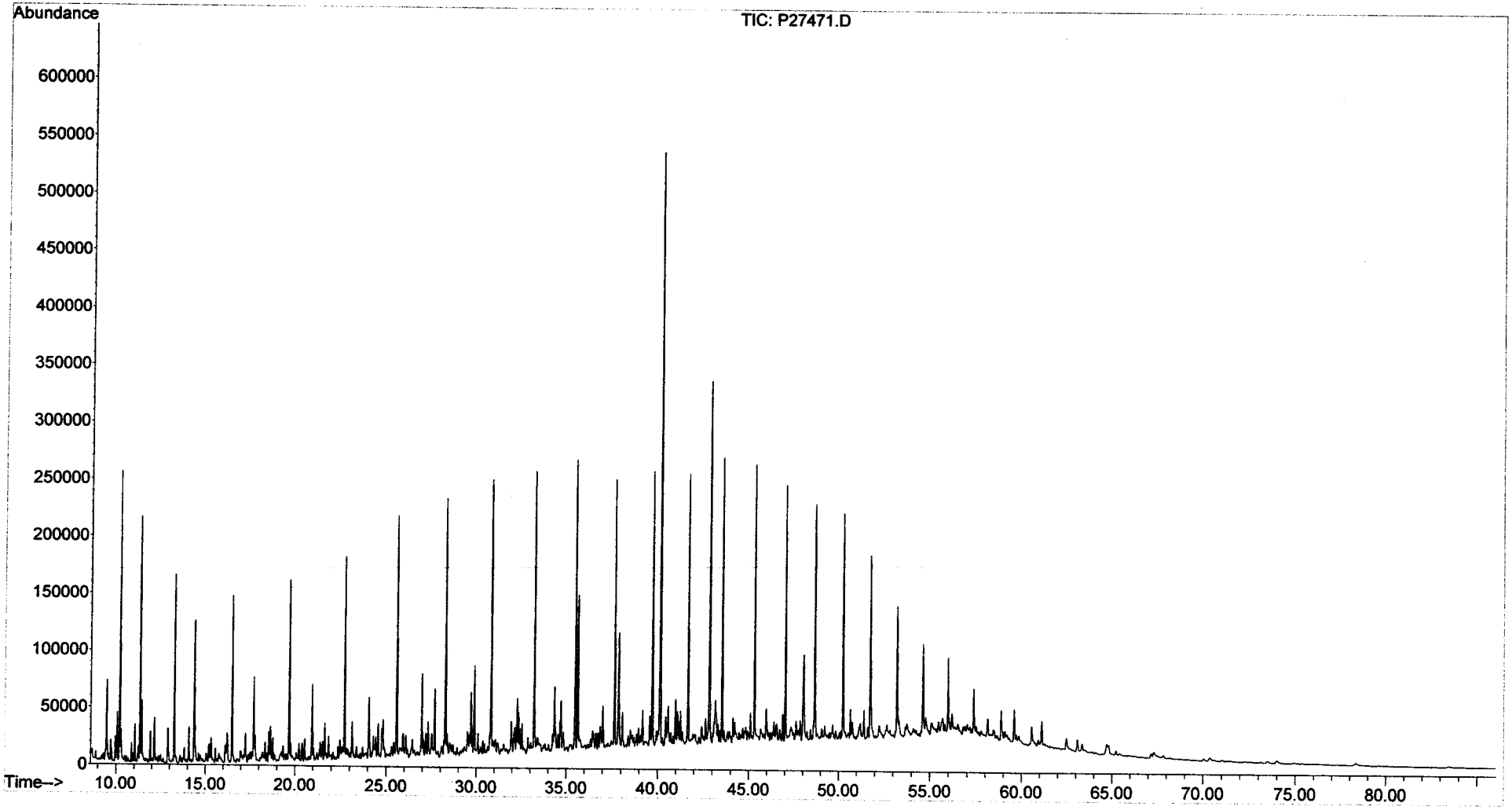
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	56.99	217	2549m	90.95	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.78	217	5645m	201.41	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	58.17	217	7498m	267.53	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	59.18	217	6118m	218.29	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.70	218	6685m	238.52	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.81	218	6843	244.16	ng/ml	100
131) 14b,17b-20R-Methylcholesta	57.17	218	7649m	272.91	ng/ml	
132) 14b,17b-20S-Methylcholesta	57.26	218	7988m	285.01	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.44	218	10053	358.69	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.50	218	7055m	251.72	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN03\
Data File : P27471.D
Acq On : 5 Jan 2006 5:52 pm
Operator : AC
Sample : SS010606AWS01
Misc : ANS2010401
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 06 10:38:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration



Sequence Name: C:\MSDChem\4\sequence\S4123001.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\DATA\DECEMBER\DEC30\

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	P42915	FRNC4B	ALK STD
5)	Sample	1	P42916	FRNC4B	PAH STD
6)	Pause				
7)	RearSamp	51	P42917	FRNC4B	C4123001-AFID
8)	Sample	1	P42918	FRNC4B	C4123001 PASS
9)	RearSamp	52	P42919	FRNC4B	ANS4123001-AFID
10)	Sample	2	P42920	FRNC4B	ANS4123001
11)	RearSamp	53	P42921	FRNC4B	DCM-AFID
12)	Sample	3	P42922	FRNC4B	DCM
13)	RearSamp	54	P42923	FRNC4B	SS122105B14-AFID
14)	Sample	4	P42924	FRNC4B	SS122105B14 ✓
15)	RearSamp	55	P42925	FRNC4B	SS122105LCS11-AFID
16)	Sample	5	P42926	FRNC4B	SS122105LCS11 ✓
17)	RearSamp	56	P42927	FRNC4B	SS122105LCSD11-AFID
18)	Sample	6	P42928	FRNC4B	SS122105LCSD11 ✓
19)	RearSamp	57	P42929	FRNC4B	0512105-01-AFID
20)	Sample	7	P42930	FRNC4B	0512105-01 ✓ needs 50X
21)	RearSamp	58	P42931	FRNC4B	0512105-02-AFID
22)	Sample	8	P42932	FRNC4B	0512105-02 ✓ needs 50X
23)	RearSamp	59	P42933	FRNC4B	0512105-03-AFID
24)	Sample	9	P42934	FRNC4B	0512105-03 ✓ needs 50X
25)	RearSamp	60	P42935	FRNC4B	0512105-04-AFID
26)	Sample	10	P42936	FRNC4B	0512105-04 do 1/10 & 1/100
27)	RearSamp	61	P42937	FRNC4B	0512105-05-AFID
28)	Sample	11	P42938	FRNC4B	0512105-05 ✓
29)	RearSamp	62	P42939	FRNC4B	C4123002-AFID
30)	Sample	12	P42940	FRNC4B	C4123002 PASS
31)	RearSamp	63	P42941	FRNC4B	DCM
32)	Sample	13	P42942	FRNC4B	DCM
33)	RearSamp	64	P42943	FRNC4B	0512105-06-AFID
34)	Sample	14	P42944	FRNC4B	0512105-06 ✓
35)	RearSamp	65	P42945	FRNC4B	0512105-07-AFID
36)	Sample	15	P42946	FRNC4B	0512105-07 ✓ needs 100X
37)	RearSamp	66	P42947	FRNC4B	0512105-08-AFID
38)	Sample	16	P42948	FRNC4B	0512105-~~08 ✓~~ 08D ✓
39)	RearSamp	67	P42949	FRNC4B	0512105-08D-AFID
40)	Sample	17	P42950	FRNC4B	0512105-~~08D ✓~~ 08 ✓ MS 1-10-06
41)	RearSamp	68	P42951	FRNC4B	C4123003-AFID
42)	Sample	18	P42952	FRNC4B	C4123003 PASS
43)	RearSamp	69	P42953	FRNC4B	DCM

✓ run used

PAN41217.M
cw 1/24/06

MS 1-3-06

Last Modified: Sat Dec 17 11:31:19 2005

Sequence Name: C:\MSDChem\4\sequence\S4123001.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	19	P42954	FRNC4B	DCM
45)	RearSamp	70	P42955	FRNC4B	SS122105B13-AFID
46)	Sample	20	P42956	FRNC4B	SS122105B13 ✓
47)	RearSamp	71	P42957	FRNC4B	SS122105LCS10-AFID
48)	Sample	21	P42958	FRNC4B	SS122105LCS10 ✓
49)	RearSamp	72	P42959	FRNC4B	SS122105LCSD10-AFID
50)	Sample	22	P42960	FRNC4B	SS122105LCSD10 ✓
51)	RearSamp	73	P42961	FRNC4B	0512106-01-AFID
52)	Sample	23	P42962	FRNC4B	0512106-01 ✓ needs 5X
53)	RearSamp	74	P42963	FRNC4B	0512106-02-AFID
54)	Sample	24	P42964	FRNC4B	0512106-02 ✓
55)	RearSamp	75	P42965	FRNC4B	0512106-03-AFID
56)	Sample	25	P42966	FRNC4B	0512106-03 ✓
57)	RearSamp	76	P42967	FRNC4B	0512106-04-AFID
58)	Sample	26	P42968	FRNC4B	0512106-04 ✓ needs 50X
59)	RearSamp	77	P42969	FRNC4B	0512106-05-AFID
60)	Sample	27	P42970	FRNC4B	0512106-05 ✓
61)	RearSamp	78	P42971	FRNC4B	0512106-06-AFID
62)	Sample	28	P42972	FRNC4B	0512106-06 ✓ needs 2X
63)	RearSamp	79	P42973	FRNC4B	0512106-07-AFID
64)	Sample	29	P42974	FRNC4B	0512106-07 ✓ needs 2X
65)	RearSamp	80	P42975	FRNC4B	C4123004-AFID
66)	Sample	30	P42976	FRNC4B	C4123004 PASS
67)	RearSamp	81	P42977	FRNC4B	DCM-AFID
68)	Sample	31	P42978	FRNC4B	DCM
69)	RearSamp	81	P42979	FRNC4B	
70)	Sample	32	P42980	FRNC4B	0512101-01-RE ✓
71)	RearSamp	81	P42981	FRNC4B	
72)	Sample	33	P42982	FRNC4B	0512101-02-RE ✓
73)	RearSamp	81	P42983	FRNC4B	
74)	Sample	34	P42984	FRNC4B	0512096-01-RE DONT USE-needs 20X
75)	RearSamp	81	P42985	FRNC4B	
76)	Sample	35	P42986	FRNC4B	0512096-03-RE ✓
77)	RearSamp	81	P42987	FRNC4B	
78)	Sample	36	P42988	FRNC4B	0512096-05-RE ✓
79)	RearSamp	81	P42989	FRNC4B	
80)	Sample	37	P42990	FRNC4B	C4123005 PASS

✓ run used

MS 1-3-06

Sequence Name: C:\MSDChem\4\sequence\S4010501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\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

Line	Sample Name/Misc Info				
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P43043	FRNC4B	DCM
5)	Sample	1	P43044	FRNC4B	PAH TEST
6)	RearSamp	52	P43045	FRNC4B	DCM-AFID
7)	Sample	2	P43046	FRNC4B	DCM
8)	RearSamp	53	P43047	FRNC4B	DCM-AFID
9)	Sample	3	P43048	FRNC4B	C4010501 PASS
10)	RearSamp	54	P43049	FRNC4B	DCM-AFID
11)	Sample	4	P43050	FRNC4B	ANS4010501
12)	RearSamp	55	P43051	FRNC4B	DCM-AFID
13)	Sample	5	P43052	FRNC4B	ANS4010501
14)	RearSamp	56	P43053	FRNC4B	DCM-AFID
15)	Sample	6	P43054	FRNC4B	SS122105B16
16)	RearSamp	57	P43055	FRNC4B	DCM-AFID
17)	Sample	7	P43056	FRNC4B	SS122105LCS13 ✓
18)	RearSamp	58	P43057	FRNC4B	DCM-AFID
19)	Sample	8	P43058	FRNC4B	SS122105LCSD13 ✓
20)	RearSamp	59	P43059	FRNC4B	DCM-AFID
21)	Sample	9	P43060	FRNC4B	0512105-01-RE ✓
22)	RearSamp	60	P43061	FRNC4B	DCM-AFID
23)	Sample	10	P43062	FRNC4B	0512105-02-RE ✓
24)	RearSamp	61	P43063	FRNC4B	DCM-AFID
25)	Sample	11	P43064	FRNC4B	0512105-03-RE ✓
26)	RearSamp	62	P43065	FRNC4B	DCM-AFID
27)	Sample	12	P43066	FRNC4B	0512105-04-RE ✓
28)	RearSamp	65	P43067	FRNC4B	DCM-AFID
29)	Sample	16	P43068	FRNC4B	DCM
30)	RearSamp	62	P43069	FRNC4B	DCM-AFID
31)	Sample	6	P43070	FRNC4B	SS122105B16
32)	RearSamp	63	P43071	FRNC4B	DCM-AFID
33)	Sample	99	P43072	FRNC4B	SS122105B16
34)	RearSamp	63	P43073	FRNC4B	DCM-AFID
35)	Sample	100	P43074	FRNC4B	SS122105B16
36)	Pause				
37)	RearSamp	63	P43075	FRNC4B	DCM-AFID
38)	Sample	13	P43076	FRNC4B	0512105-04-RE ✓
39)	RearSamp	64	P43077	FRNC4B	DCM-AFID
40)	Sample	14	P43078	FRNC4B	0512105-07-RE ✓
41)	RearSamp	65	P43079	FRNC4B	DCM-AFID
42)	Sample	15	P43080	FRNC4B	C4010502 PASS
43)	RearSamp	66	P43081	FRNC4B	

✓ run used

PAH41217.M
cv 1/24/06

MS
1-9-06

Last Modified: Fri Jan 06 12:39:03 2006

Sequence Name: C:\MSDChem\4\sequence\S4010501.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	16	P43082	FRNC4B	DCM
45)	RearSamp	67	P43083	FRNC4B	
46)	Sample	17	P43084	FRNC4B	DCM
47)	RearSamp	68	P43085	FRNC4B	
48)	Sample	18	P43086	FRNC4B	0512110-01 ✓
49)	RearSamp	69	P43087	FRNC4B	
50)	Sample	19	P43088	FRNC4B	0512110-02 ✓
51)	RearSamp	70	P43089	FRNC4B	
52)	Sample	20	P43090	FRNC4B	0512110-03 ✓
53)	RearSamp	71	P43091	FRNC4B	
54)	Sample	21	P43092	FRNC4B	0512110-04 ✓
55)	RearSamp	72	P43093	FRNC4B	
56)	Sample	22	P43094	FRNC4B	0512110-05 ✓
57)	RearSamp	73	P43095	FRNC4B	
58)	Sample	23	P43096	FRNC4B	0512110-06 ✓
59)	RearSamp	74	P43097	FRNC4B	
60)	Sample	24	P43098	FRNC4B	0512110-07 ✓
61)	RearSamp	75	P43099	FRNC4B	
62)	Sample	25	P43100	FRNC4B	0512110-08 ✓
63)	RearSamp	76	P43101	FRNC4B	
64)	Sample	26	P43102	FRNC4B	C4010503 PASS FOR PAHs
65)	RearSamp	77	P43103	FRNC4B	
66)	Sample	27	P43104	FRNC4B	0512110-09 ✓
67)	RearSamp	78	P43105	FRNC4B	
68)	Sample	28	P43106	FRNC4B	0512110-10 ✓
69)	RearSamp	79	P43107	FRNC4B	
70)	Sample	29	P43108	FRNC4B	0512110-11 ✓
71)	RearSamp	80	P43109	FRNC4B	
72)	Sample	30	P43110	FRNC4B	0512110-11D ✓
73)	RearSamp	81	P43111	FRNC4B	
74)	Sample	31	P43112	FRNC4B	0512110-12 ✓
75)	RearSamp	82	P43113	FRNC4B	
76)	Sample	32	P43114	FRNC4B	0512110-13 ✓
77)	RearSamp	83	P43115	FRNC4B	
78)	Sample	33	P43116	FRNC4B	0512110-14 ✓
79)	RearSamp	84	P43117	FRNC4B	
80)	Sample	34	P43118	FRNC4B	C4010504 PASS
81)	RearSamp	85	P43119	FRNC4B	
82)	Sample	35	P43120	FRNC4B	BaF RT check
83)	RearSamp	85	P43121	FRNC4B	
84)	Sample	34	P43122	FRNC4B	C4010505

CW 1/24/06

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2010301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN03\

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

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

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

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

1/9/06

Line	Sample Name/Misc Info				
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27438	FRNC2B	ALK STD
5)	Sample	1	P27439	FRNC2B	PAH STD
6)	Sample	2	P27440	FRNC2B	C2010301 PASS*
7)	Sample	3	P27441	FRNC2B	0512106-01-RE
8)	Sample	4	P27442	FRNC2B	0512106-04-RE
9)	Sample	5	P27443	FRNC2B	0512106-06-RE
10)	Sample	6	P27444	FRNC2B	0512106-07-RE
11)	Sample	7	P27445	FRNC2B	C2010302 PASS*
12)	Sample	8	P27446	FRNC2B	DCM
13)	Sample	9	P27447	FRNC2B	DCM
14)	Sample	10	P27448	FRNC2B	DCM
15)	Sample	11	P27449	FRNC2B	DCM
16)	Sample	7	P27450	FRNC2B	C2010303 PASS -not needed
17)	Sample	12	P27451	FRNC2B	ANS2010401
18)	Sample	13	P27452	FRNC2B	C2010304 PASS*
19)	Sample	14	P27453	FRNC2B	0512105-08
20)	Sample	15	P27454	FRNC2B	0512105-08D
21)	Sample	16	P27455	FRNC2B	0512105-01-RE
22)	Sample	17	P27456	FRNC2B	0512105-02-RE
23)	Sample	18	P27457	FRNC2B	0512105-03-RE
24)	Sample	19	P27458	FRNC2B	0512105-04-RE2
25)	Sample	20	P27459	FRNC2B	0512105-04-RE
26)	Sample	21	P27460	FRNC2B	0512105-07-RE
27)	Sample	22	P27461	FRNC2B	C2010305 PASS*
28)	Sample	23	P27462	FRNC2B	QA WHAC13
29)	Sample	24	P27463	FRNC2B	BaF RT check
30)	Sample	25	P27464	FRBIO2B	I2010401
31)	Sample	26	P27465	FRBIO2B	I2010402
32)	Sample	27	P27466	FRBIO2B	I2010403
33)	Sample	28	P27467	FRBIO2B	I2010404
34)	Sample	29	P27468	FRBIO2B	I2010405
35)	Sample	30	P27469	FRBIO2B	I2010406
36)	Sample	31	P27470	FRBIO2B	I2010407
37)	Sample	32	P27471	FRBIO2B	ANS2010401
38)	Sample	33	P27472	FRBIO2B	DCM
39)	Sample	34	P27473	FRBIO2B	DCM
40)	Sample	35	P27474	FRBIO2B	SS122105B14
41)	Sample	36	P27475	FRBIO2B	~~SS122105LCS1~~1 DCM
42)	Sample	37	P27476	FRBIO2B	~~SS122105LCSD1~~1 DCM.
43)	Sample	38	P27477	FRBIO2B	0512105-01

Bio Calibration

KAL BIO20105.M.

for MS 1-10-06

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): WHAB56 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

PAH #2 Sequence Information

SHC Continuing Calibration: ~~WHAC10~~ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB56 Conc.: 500ng/mL

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

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

Last Modified: Sat Jan 07 07:43:27 2006

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2010301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	39	P27478	FRBIO2B	0512105-02 ✓
45)	Sample	40	P27479	FRBIO2B	0512105-03 ✓
46)	Sample	41	P27480	FRBIO2B	0512105-04 ✓
47)	Pause				
48)	RearSamp	51	P27481	FRBIO2B	DCM
49)	Sample	42	P27482	FRBIO2B	0512105-05 ✓
50)	Pause				
51)	Sample	43	P27484	FRBIO2B	C2010401 PASS
52)	Sample	44	P27486	FRBIO2B	0512105-06 ✓
53)	Sample	45	P27488	FRBIO2B	0512105-07 ✓
54)	Sample	46	P27490	FRBIO2B	0512105-08 ✓
55)	Sample	47	P27492	FRBIO2B	0512105-08D ✓
56)	Sample	48	P27494	FRBIO2B	C2010402 PASS

✓ run used

MS 1-9-06

Last Modified: Sat Jan 07 07:43:27 2006

Supporting Quality Control Results

Form IV
Method Blank Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **SS122105B14**
Date Analyzed: **12/30/05 18:07**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS122105LCS11	12/30/05 19:37
LCSD	SS122105LCSD11	12/30/05 21:06
GC-SED-90B (6.5-7)	0512105-01	12/30/05 22:35
GC-SED-89 (12.8-13.8)	0512105-02	12/31/05 00:04
GC-SED-88 (15.9-16.9)	0512105-03	12/31/05 01:33
GC-SED-95 (3.5-4.5)	0512105-05	12/31/05 04:30
GC-SED-86 (0-1)	0512105-06	12/31/05 08:58
GC-SED-84 (6-7)	0512105-07	12/31/05 10:27
GC-SED-87 (4.4-6.2)	0512105-08	12/31/05 11:56
GC-SED-87 (4.4-6.2)	0512105-08 D	12/31/05 13:25
GC-SED-90B (6.5-7)	0512105-01E	01/06/06 02:07
GC-SED-89 (12.8-13.8)	0512105-02E	01/06/06 03:35
GC-SED-88 (15.9-16.9)	0512105-03E	01/06/06 05:04
GC-SED-96 (14-15)	0512105-04E	01/06/06 06:33
GC-SED-96 (14-15)	0512105-04	01/06/06 15:44
GC-SED-84 (6-7)	0512105-07E	01/06/06 17:13

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: **0512105**
Lab ID: **SS122105B14**
Date Analyzed: **01/05/06 23:12**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-90B (6.5-7)	0512105-01	01/06/06 04:23
GC-SED-89 (12.8-13.8)	0512105-02	01/06/06 06:07
GC-SED-88 (15.9-16.9)	0512105-03	01/06/06 07:53
GC-SED-96 (14-15)	0512105-04	01/06/06 09:39
GC-SED-95 (3.5-4.5)	0512105-05	01/06/06 11:26
GC-SED-86 (0-1)	0512105-06	01/06/06 16:59
GC-SED-84 (6-7)	0512105-07	01/06/06 18:47
GC-SED-87 (4.4-6.2)	0512105-08	01/06/06 20:35
GC-SED-87 (4.4-6.2)	0512105-08 D	01/06/06 22:20

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\4\sequence\S4121602.S
Comment:
Operator: NLJr
Data Path: C:\MSDCHEM\4\DATA\DECEMBER\DEC16\

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	P42650	FRNC4B	PRIMER-AFID
4)	Sample	1	P42651	FRNC4B	
5)	RearSamp	51	P42652	FRNC4B	C4121601-AFID
6)	Sample	1	P42653	FRNC4B	
7)	RearSamp	52	P42654	FRNC4B	DCM-AFID
8)	Sample	1	P42655	FRNC4B	
9)	RearSamp	53	P42656	FRNC4B	ANS4121601-AFID
10)	Sample	1	P42657	FRNC4B	
11)	RearSamp	54	P42658	FRNC4B	LA4121601-AFID
12)	Sample	1	P42659	FRNC4B	
13)	RearSamp	55	P42660	FRNC4B	SSFSW4121601-AFID
14)	Sample	1	P42661	FRNC4B	
15)	RearSamp	56	P42662	FRNC4B	SSFCO4121601-AFID
16)	Sample	1	P42663	FRNC4B	
17)	RearSamp	57	P42664	FRNC4B	SACO4121601-AFID
18)	Sample	1	P42665	FRNC4B	
19)	RearSamp	58	P42666	FRNC4B	SSFN4121601-AFID
20)	Sample	1	P42667	FRNC4B	
21)	RearSamp	59	P42668	FRNC4B	SSFS4121601-AFID
22)	Sample	1	P42669	FRNC4B	
23)	RearSamp	18	P42670	FRNC4B	AG4121601-AFID
24)	Sample	1	P42671	FRNC4B	DCM
25)	RearSamp	54	P42672	FRNC4B	C4121602-AFID
26)	Sample	2	P42673	FRNC4B	DCM
27)	RearSamp	55	P42674	FRNC4B	DCM-AFID
28)	Sample	3	P42675	FRNC4B	*I4121701
29)	RearSamp	56	P42676	FRNC4B	
30)	Sample	4	P42677	FRNC4B	*I4121702
31)	RearSamp	57	P42678	FRNC4B	
32)	Sample	5	P42679	FRNC4B	*I4121703
33)	RearSamp	58	P42680	FRNC4B	
34)	Sample	6	P42681	FRNC4B	*I4121704
35)	RearSamp	56	P42682	FRNC4B	
36)	Sample	7	P42683	FRNC4B	*I4121705
37)	RearSamp	57	P42684	FRNC4B	
38)	Sample	8	P42685	FRNC4B	*I4121706
39)	RearSamp	58	P42686	FRNC4B	
40)	Sample	9	P42687	FRNC4B	*I4121707
41)	RearSamp	56	P42688	FRNC4B	
42)	Sample	10	P42689	FRNC4B	DCM
43)	RearSamp	57	P42690	FRNC4B	

*ICAL PAH41217.M

MS 12/28/05

Last Modified: Sat Dec 17 11:31:19 2005

Sequence Name: C:\MSDChem\4\sequence\S4121602.S

	Line Type	Vial	DataFile	Method	Sample Name	
44)	Sample	11	P42691	FRNC4B	*Q4121701	ICAL4121
45)	RearSamp	58	P42692	FRNC4B		
46)	Sample	12	P42693	FRNC4B	* ANS4121701	SS010406AWS01
47)	RearSamp	56	P42694	FRNC4B		
48)	Sample	13	P42695	FRNC4B	LA4121701	
49)	RearSamp	57	P42696	FRNC4B		
50)	Sample	14	P42697	FRNC4B	SFFSW4121701	
51)	RearSamp	58	P42698	FRNC4B		
52)	Sample	15	P42699	FRNC4B	SFFCO4121701	
53)	RearSamp	56	P42700	FRNC4B		
54)	Sample	16	P42701	FRNC4B	SACO4121701	
55)	RearSamp	57	P42702	FRNC4B		
56)	Sample	17	P42703	FRNC4B	SFFN4121701	
57)	RearSamp	58	P42704	FRNC4B		
58)	Sample	18	P42705	FRNC4B	AG4121701	
59)	RearSamp	56	P42706	FRNC4B		
60)	Sample	19	P42707	FRNC4B	SFFS4121701	
61)	RearSamp	57	P42708	FRNC4B		
62)	Sample	20	P42709	FRNC4B	DCM	
63)	RearSamp	58	P42710	FRNC4B		
64)	Sample	21	P42711	FRNC4B	C4121701	
65)	RearSamp	56	P42712	FRNC4B		

MS 12/28/05

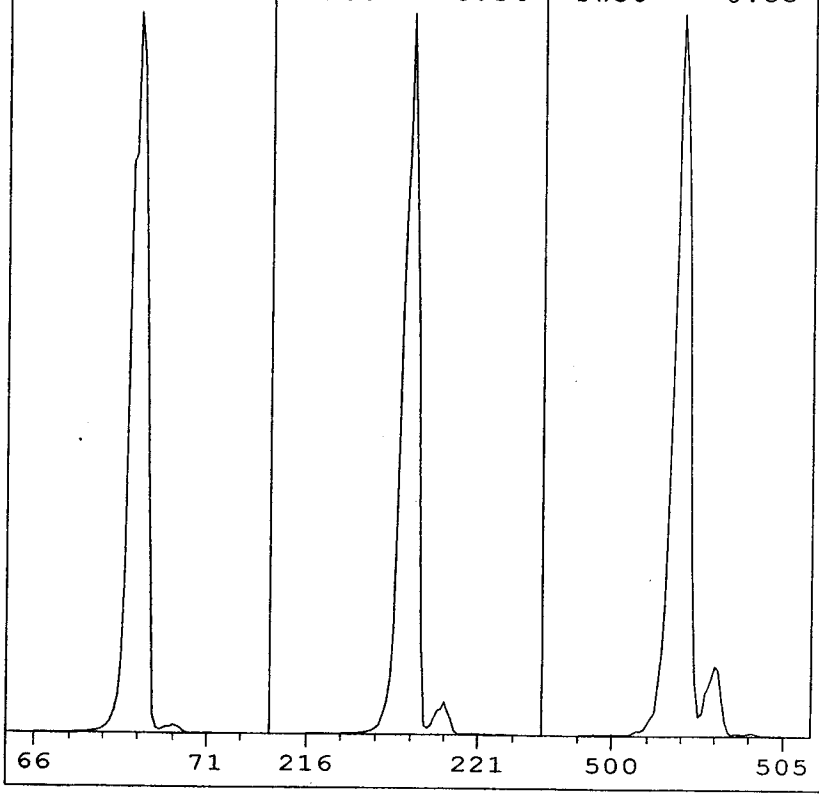
5973

12/17/05.

Sat Dec 17 11:56:06 2005
C:\MSDCHEM\4\5973N\PFTBA.U

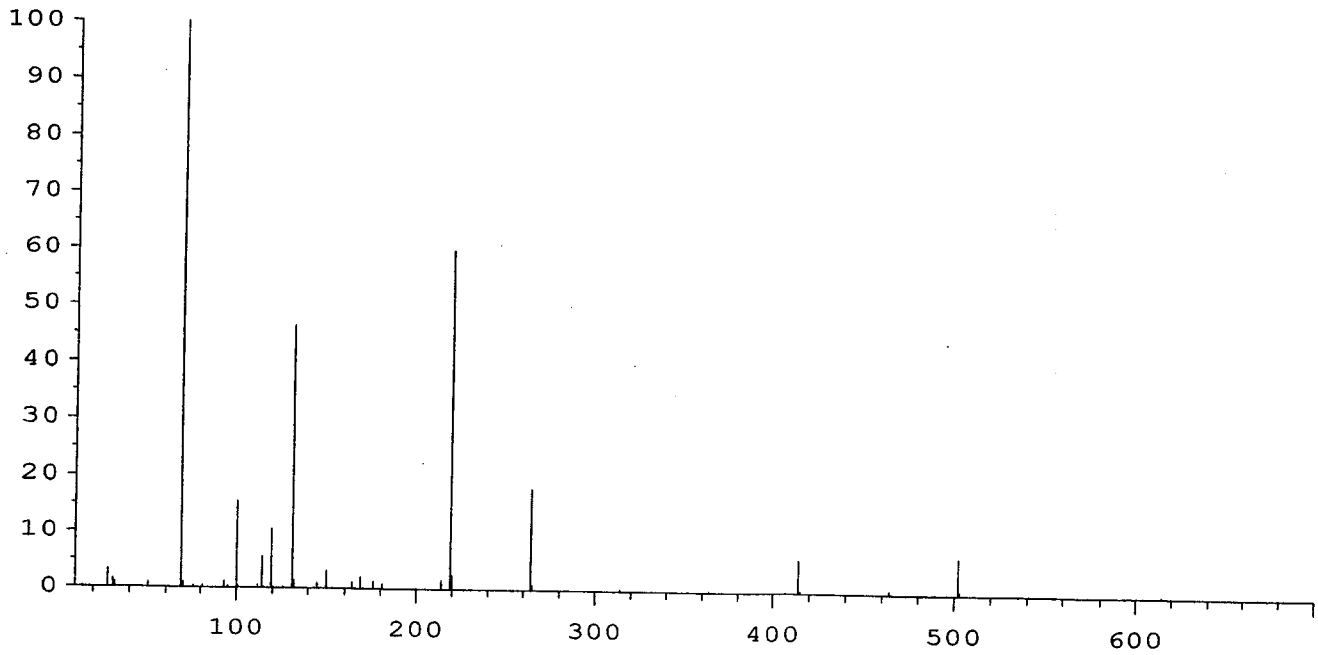
Instrument: PAH-4

Mass	69.00	Mass	219.00	Mass	502.00
Ab	540878	Ab	352949	Ab	36456
Pw50	0.54	Pw50	0.54	Pw50	0.53



Ion Pol	POS	MassGain	211
		MassOffs	-12
Emission	34.6	AmuGain	2382
ElEnrgy	69.9	AmuOffs	132
Filament	1	Wid219	-0.018
		DC Pol	POS
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	2106
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
110 peaks Base: 69.00 Abundance: 474688



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	474688	100.00	70.00	5050	1.06
219.00	283456	59.71	220.00	12070	4.26
502.00	31064	6.54	503.00	3318	10.68

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	17.1	21.3	19.8	20.3	20.8	22.6
TARGET ABUND(%):	1.0	100.0	45.0	55.0	5.0	6.0
ACTUAL TUNE ABUND(%):	1.0	100.0	46.3	59.7	5.8	6.5

Response Factor Report PAH-4

Method Path : O:\FORENSICS\METHODS\PAH4\DEC05\
Method File : PAH41217.M
Title : Decalins & Alkylated PAH's
Last Update : Tue Dec 20 10:14:11 2005
Response Via : Initial Calibration

10,000=P42687

12/21/05

Calibration Files
10 =P42675.D 25 =P42677.D 100 =P42679.D
500 =P42681.D 1250=P42683.D 5000=P42685.D

MS 12/20/05

		Compound	10	25	100	500	1250	5000	Avg	%RSD
1)	i	Acenaphthene-d10	----------ISTD----------							
2)	t	Decalin	0.494	0.505	0.452	0.410	0.422	0.422	0.446	8.92
3)	A1	trans-Decalin	0.532	0.564	0.486	0.459	0.475	0.478	0.494	7.80
4)	t	cis-Decalin	0.453	0.407	0.373	0.355	0.364	0.365	0.382	9.38
5)	A2	C1-Decalins	0.532	0.564	0.486	0.459	0.475	0.478	0.494	7.80
6)	A2	C2-Decalins	0.532	0.564	0.486	0.459	0.475	0.478	0.494	7.80
7)	A2	C3-Decalins	0.532	0.564	0.486	0.459	0.475	0.478	0.494	7.80
8)	A2	C4-Decalins	0.532	0.564	0.486	0.459	0.475	0.478	0.494	7.80
9)	A1	Naphthalene	1.662	1.648	1.772	1.978	2.128	2.204	1.942	12.71
10)	A2	C1-Naphthalenes	1.662	1.648	1.772	1.978	2.128	2.204	1.942	12.71
11)	A2	C2-Naphthalenes	1.662	1.648	1.772	1.978	2.128	2.204	1.942	12.71
12)	A2	C3-Naphthalenes	1.662	1.648	1.772	1.978	2.128	2.204	1.942	12.71
13)	A2	C4-Naphthalenes	1.662	1.648	1.772	1.978	2.128	2.204	1.942	12.71
14)	s	2-Methylnaphthale	0.699	0.704	0.837	1.017	1.082	1.159	0.949	21.01
15)	t	2-Methylnaphthale	0.891	0.938	1.090	1.315	1.435	1.498	1.237	21.12
16)	t	1-Methylnaphthale	1.071	1.095	1.147	1.261	1.352	1.402	1.246	11.43
17)	A1	Benzothiophene	1.377	1.402	1.543	1.666	1.824	1.884	1.653	13.14
18)	A2	C1-Benzo(b)thioph	1.377	1.402	1.543	1.666	1.824	1.884	1.653	13.14
19)	A2	C2-Benzo(b)thioph	1.377	1.402	1.543	1.666	1.824	1.884	1.653	13.14
20)	A2	C3-Benzo(b)thioph	1.377	1.402	1.543	1.666	1.824	1.884	1.653	13.14
21)	A2	C4-Benzo(b)thioph	1.377	1.402	1.543	1.666	1.824	1.884	1.653	13.14
22)	t	Biphenyl	1.039	1.093	1.271	1.599	1.744	1.811	1.482	22.95
23)	t	2,6-Dimethylnapht	0.860	0.797	0.905	1.116	1.224	1.300	1.073	20.17
24)	t	Dibenzofuran	1.248	1.458	1.596	1.839	1.955	2.019	1.734	17.55
25)	t	Acenaphthylene	2.428	2.118	1.891	2.015	2.172	2.288	2.173	8.44
26)	t	Acenaphthene	1.339	1.252	1.255	1.295	1.363	1.406	1.331	4.96
27)	t	2,3,5-Trimethylna	0.984	1.064	0.983	1.075	1.147	1.214	1.098	8.91
28)	A1	Fluorene	1.252	1.306	1.254	1.439	1.529	1.594	1.426	10.97
29)	A2	C1-Fluorenes	1.252	1.306	1.254	1.439	1.529	1.594	1.426	10.97
30)	A2	C2-Fluorenes	1.252	1.306	1.254	1.439	1.529	1.594	1.426	10.97
31)	A2	C3-Fluorenes	1.252	1.306	1.254	1.439	1.529	1.594	1.426	10.97
32)	A1	Dibenzothiophene	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
33)	A2	4-Methyldibenzoth	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
34)	A2	2/3-Methyldibenzo	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
35)	A2	1-Methyldibenzoth	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
36)	A2	OTP	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
37)	A2	C1-Dibenzothiophe	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
38)	A2	C2-Dibenzothiophe	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
39)	A2	C3-Dibenzothiophe	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
40)	A2	C4-Dibenzothiophe	1.894	2.008	2.004	2.098	2.197	2.281	2.114	7.44
41)	A1	Phenanthrene	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
42)	A2	3-Methylphenanthr	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
43)	A2	2/4-Methylphenant	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
44)	A2	2-Methylanthracen	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
45)	A2	9-Methylphenanthr	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
46)	A2	1-Methylphenanthr	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
47)	A2	C1-Phenanthrenes/	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
48)	A2	C2-Phenanthrenes/	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
49)	A2	5AA IS BKGD	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
50)	A2	C3-Phenanthrenes/	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
51)	A2	C4-Phenanthrenes/	2.798	2.460	2.094	2.189	2.298	2.389	2.378	9.52
52)	t	Retene	0.592	0.585	0.561	0.571	0.606	0.666	0.610	7.81
53)	t	Anthracene	2.246	2.109	1.929	2.061	2.195	2.309	2.172	6.84
54)	t	Carbazole	1.444	1.256	1.496	1.750	1.927	2.063	1.721	19.23
55)	t	1-Methylphenanthr	1.473	1.460	1.409	1.506	1.616	1.741	1.570	9.29
56)	A1	Fluoranthene	2.430	2.382	2.207	2.334	2.493	2.631	2.452	6.81
57)	t	Benzo(b)fluorene	1.279	1.255	1.261	1.387	1.524	1.653	1.436	13.09

Response Factor Report PAH-4

Method Path : O:\FORENSICS\METHODS\PAH4\DEC05\
Method File : PAH41217.M
Title : Decalins & Alkylated PAH's
Last Update : Tue Dec 20 10:14:11 2005
Response Via : Initial Calibration

Calibration Files
10 =P42675.D 25 =P42677.D 100 =P42679.D
500 =P42681.D 1250=P42683.D 5000=P42685.D

		Compound	10	25	100	500	1250	5000	Avg	%RSD
58)	s	Pyrene-d10	2.242	2.215	2.199	2.309	2.373	2.549	2.358	7.07
59)	A1	Pyrene	2.563	2.500	2.355	2.464	2.568	2.658	2.543	4.57
60)	A2	C1-Fluoranthenes/	2.563	2.500	2.355	2.464	2.568	2.658	2.543	4.57
61)	A2	C2-Fluoranthenes/	2.563	2.500	2.355	2.464	2.568	2.658	2.543	4.57
62)	A2	C3-Fluoranthenes/	2.563	2.500	2.355	2.464	2.568	2.658	2.543	4.57
63)	A2	C4-Fluoranthenes/	2.563	2.500	2.355	2.464	2.568	2.658	2.543	4.57
64)	A1	Naphthobenzothiop	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
65)	A2	Naphthobenzothiop	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
66)	A2	Naphthobenzothiop	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
67)	A2	Naphthobenzothiop	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
68)	A2	C1-Naphthobenzoth	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
69)	A2	C2-Naphthobenzoth	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
70)	A2	C3-Naphthobenzoth	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
71)	A2	C4-Naphthobenzoth	2.176	2.152	2.163	2.209	2.363	2.530	2.312	8.03
72)	i	Chrysene-d12	----------ISTD----------							
73)	t	Benz[a]anthracene	1.045	1.083	1.126	1.151	1.235	1.333	1.189	10.10
74)	A1	Chrysene	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
75)	A2	Chrysene/Tripheny	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
76)	A2	C1-Chrysenes	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
77)	A2	C2-Chrysenes	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
78)	A2	BBF-d12 Surr BKGD	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
79)	A2	C3-Chrysenes	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
80)	A2	C4-Chrysenes	1.147	1.119	1.130	1.206	1.253	1.297	1.207	6.36
81)	s	Benzo[b]fluoranth	0.940	0.956	0.998	1.044	1.059	1.159	1.047	8.83
82)	t	Benzo[b]fluoranth	1.047	1.021	1.105	1.261	1.327	1.423	1.236	14.63
83)	A1	Benzo[k]fluoranth	1.300	1.299	1.314	1.366	1.451	1.524	1.394	7.02
84)	A2	Benzo[a]fluoranth	1.300	1.299	1.314	1.366	1.451	1.524	1.394	7.02
85)	t	Benzo[e]pyrene	1.235	1.139	1.176	1.218	1.270	1.335	1.246	6.20
86)	t	Benzo[a]pyrene	1.039	1.032	1.077	1.221	1.282	1.369	1.201	12.67
87)	t	Perylene	1.068	1.087	1.093	1.182	1.239	1.324	1.189	9.42
88)	t	Indeno[1,2,3-cd]p	1.075	1.010	1.005	1.047	1.126	1.236	1.115	10.42
89)	t	Dibenz[a,h]anthra	0.929	0.978	1.020	1.181	1.259	1.346	1.152	15.32
90)	t	Benzo[g,h,i]peryl	1.360	1.145	1.174	1.239	1.294	1.342	1.271	6.77
91)	A1	17a(H),21B(H)-hop	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
92)	A2	Hopane (T19)	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
93)	A2	C23 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
94)	A2	C24 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
95)	A2	C25 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
96)	A2	C24 Tetracyclic T	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
97)	A2	C26 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
98)	A2	C26 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
99)	A2	C28 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
100)	A2	C28 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
101)	A2	C29 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
102)	A2	C29 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
103)	A2	18a-22,29,30-Tris	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
104)	A2	C30 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
105)	A2	C30 Tricyclic Ter	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
106)	A2	17a(H)-22,29,30-T	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
107)	A2	17a/b,21b/a 28,30	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
108)	A2	17a(H),21b(H)-25-	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
109)	A2	30-Norhopane (T15	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
110)	A2	18a(H)-30-Norneoh	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
111)	A2	17a(H)-Diahopane	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
112)	A2	30-Normoretane (T	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
113)	A2	18a(H)&18b(H)-Ole	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
114)	A2	Moretane (T20)	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81

Response Factor Report PAH-4

Method Path : O:\FORENSICS\METHODS\PAH4\DEC05\
Method File : PAH41217.M
Title : Decalins & Alkylated PAH's
Last Update : Tue Dec 20 10:14:11 2005
Response Via : Initial Calibration

Calibration Files
10 =P42675.D 25 =P42677.D 100 =P42679.D
500 =P42681.D 1250=P42683.D 5000=P42685.D

		Compound	10	25	100	500	1250	5000	Avg	%RSD
115)	A2	30-Homohopane-22S	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
116)	A2	30-Homohopane-22R	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
117)	A2	30,31-Bishomohopa	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
118)	A2	30,31-Bishomohopa	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
119)	A2	30,31-Trishomohop	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
120)	A2	30,31-Trishomohop	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
121)	A2	Tetrakishomohopan	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
122)	A2	Tetrakishomohopan	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
123)	A2	Pentakishomohopan	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
124)	A2	Pentakishomohopan	0.565	0.477	0.478	0.491	0.480	0.447	0.481	8.81
125)	SA1	5B(H)Cholane - Su	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
126)	A2	13b(H),17a(H)-20S	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
127)	A2	13b(H),17a(H)-20R	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
128)	A2	13b,17a-20S-Methy	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
129)	A2	14a(H),17a(H)-20S	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
130)	A2	14a(H),17a(H)-20R	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
131)	A2	13b,17a-20R-Ethyl	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
132)	A2	13a,17b-20S-Ethyl	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
133)	A2	14a,17a-20S-Methy	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
134)	A2	14a,17a-20R-Methy	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
135)	A2	14a(H),17a(H)-20S	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
136)	A2	14a(H),17a(H)-20R	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
137)	A2	14b(H),17b(H)-20R	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
138)	A2	14b(H),17b(H)-20S	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
139)	A2	14b,17b-20R-Methy	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
140)	A2	14b,17b-20S-Methy	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
141)	A2	14b(H),17b(H)-20R	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00
142)	A2	14b(H),17b(H)-20S	0.216	0.216	0.218	0.217	0.228	0.246	0.226	6.00

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42675.D
Acq On : 17 Dec 2005 2:59 pm
Operator : NLJr
Sample : I4121701
Misc : L1
ALS Vial : 3 Sample Multiplier: 1

12/21/05

Quant Time: Dec 20 10:12:53 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Dec 16 11:27:04 2005
Response via : Initial Calibration

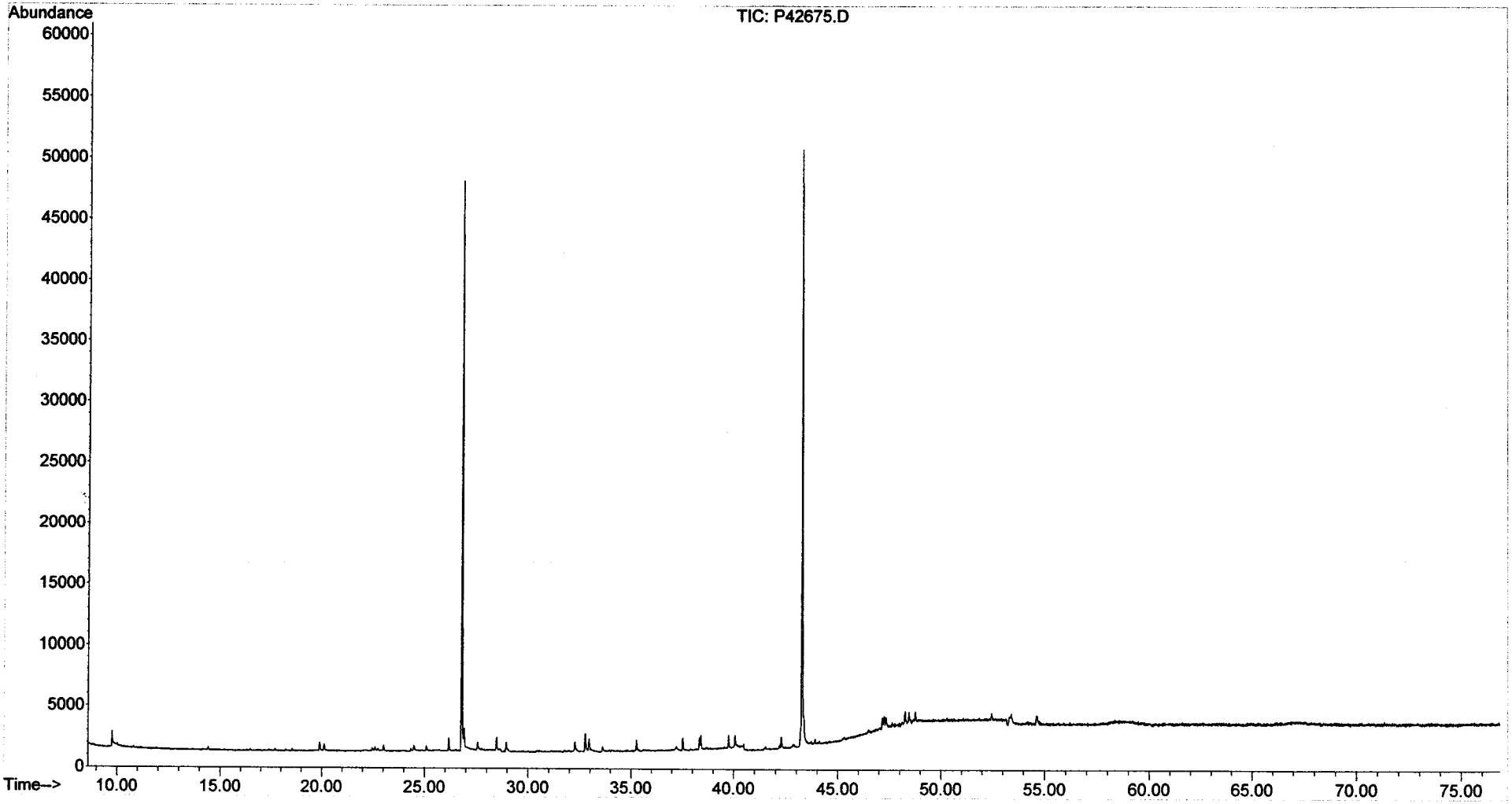
12/22/05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	55612m	500.00	ng/mL	0.00
72) Chrysene-d12	43.26	240	108462	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	778m	32.42	ng/mL	-0.42
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.24%#			
58) Pyrene-d10	38.35	212	2494	9.76	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.98%#			
81) Benzo[b]fluoranthene-d12	47.16	264	2039	10.40	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.04%#			
125) 5B(H)Cholane - Surr	43.90	217	468	10.33	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.03%#			
Target Compounds						Qvalue
2) Decalin	16.48	138	550m	10.70	ng/mL	
3) trans-Decalin	16.48	138	296	5.05	ng/mL	100
4) cis-Decalin	17.69	138	252m	6.24	ng/mL	
9) Naphthalene	19.90	128	1849	9.08	ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	991m	7.31	ng/mL	
16) 1-Methylnaphthalene	23.02	142	1191	9.00	ng/mL#	100
17) Benzothiophene	20.11	134	1532m	10.66	ng/mL	
22) Biphenyl	24.49	154	1156m	7.13	ng/mL	
23) 2,6-Dimethylnaphthalene	25.10	156	956m	7.13	ng/mL	
24) Dibenzofuran	27.57	168	1388	7.01	ng/mL	93
25) Acenaphthylene	26.18	152	2700	11.51	ng/mL#	100
26) Acenaphthene	26.92	153	1489	10.69	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.48	170	1095	8.90	ng/mL	98
28) Fluorene	28.95	166	1393m	9.41	ng/mL	
32) Dibenzothiophene	32.27	184	2107	8.75	ng/mL	99
41) Phenanthrene	32.77	178	3112m	6.36	ng/mL	
52) Retene	39.75	234	659	9.29	ng/mL#	75
53) Anthracene	32.95	178	2498m	9.04	ng/mL	
54) Carbazole	33.61	167	1606m	10.20	ng/mL	
55) 1-Methylphenanthrene	35.27	192	1638m	9.59	ng/mL	
56) Fluoranthene	37.54	202	2703	9.28	ng/mL	98
57) Benzo(b)fluorene	40.06	216	1422	10.10	ng/mL	98
59) Pyrene	38.42	202	2851	8.99	ng/mL	93
64) Naphthobenzothiophene	42.27	234	2420	10.73	ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.27	234	2420	10.73	ng/mL#	100
73) Benz[a]anthracene	43.20	228	2267m	10.39	ng/mL	
74) Chrysene	43.36	228	2489	10.97	ng/mL	100
75) Chrysene/Triphenylene	43.36	228	2489	10.97	ng/mL	100
82) Benzo[b]fluoranthene	47.25	252	2272	10.37	ng/mL#	90
83) Benzo[k]fluoranthene	47.34	252	2820m	12.54	ng/mL	
85) Benzo[e]pyrene	48.26	252	2678m	11.26	ng/mL	
86) Benzo[a]pyrene	48.45	252	2254	10.83	ng/mL	93
87) Perylene	48.76	252	2316m	11.57	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.32	276	2331m	11.04	ng/mL	
89) Dibenz[a,h]anthracene	53.40	278	2016m	9.43	ng/mL	
90) Benzo[g,h,i]perylene	54.63	276	2950m	11.54	ng/mL	
91) 17a(H),21B(H)-hopane - C30	52.47	191	1225m	11.68	ng/mL	
92) Hopane (T19)	52.47	191	1232m	11.75	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42675.D
Acq On : 17 Dec 2005 2:59 pm
Operator : NLJr
Sample : I4121701
Misc : L1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 20 10:12:53 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Dec 16 11:27:04 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42677.D
Acq On : 17 Dec 2005 4:28 pm
Operator : NLJr
Sample : I4121702
Misc : L2
ALS Vial : 4 Sample Multiplier: 1

12/21/05

Quant Time: Dec 20 10:13:22 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 15:58:18 2005
Response via : Initial Calibration

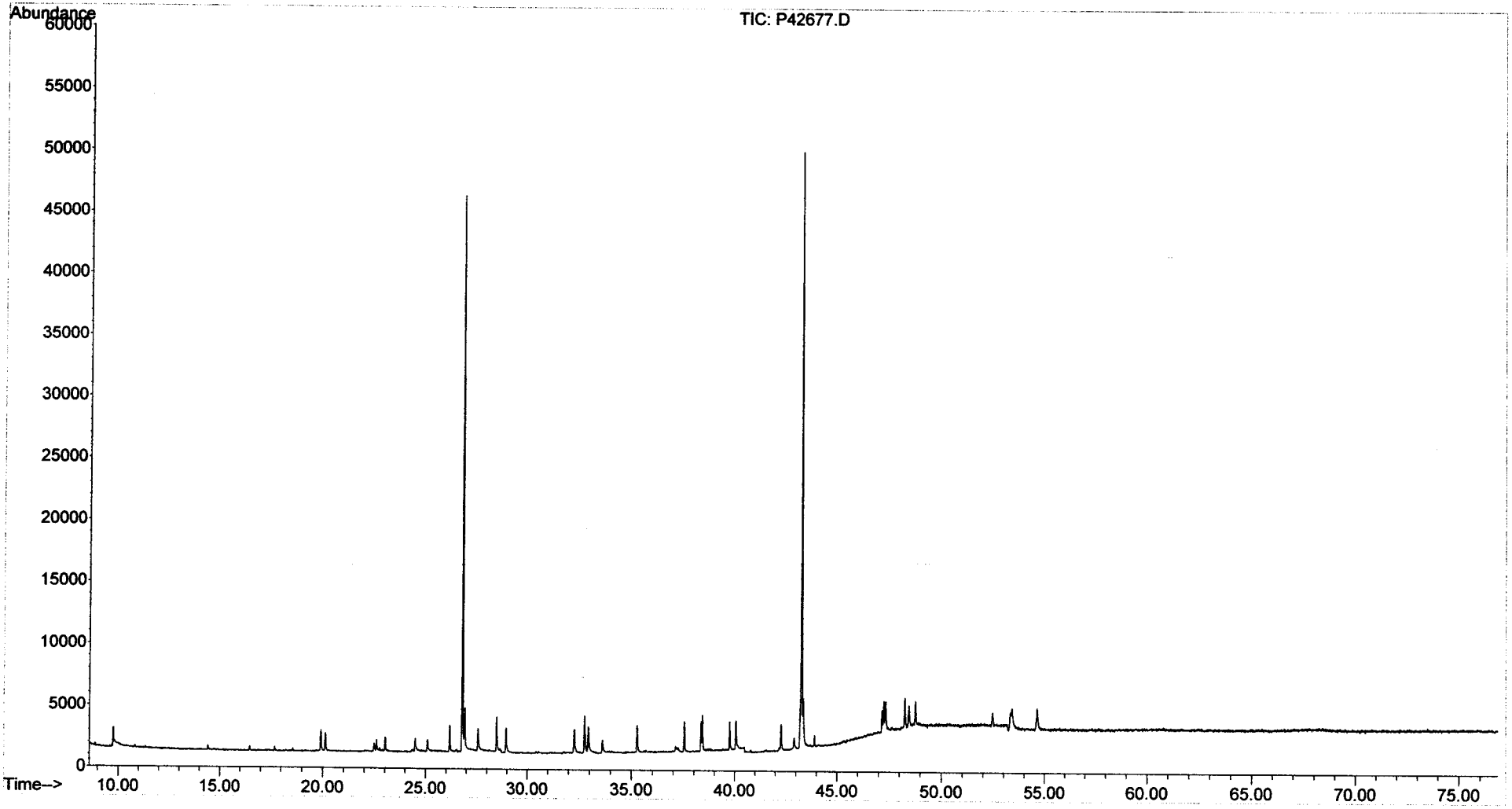
QNS 12/20/05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	54285	500.00	ng/mL	0.00
72) Chrysene-d12	43.26	240	104701	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	1912m	85.91	ng/mL	-0.42
Spiked Amount 1000.000	Range 50 - 130		Recovery = 8.59%#			
58) Pyrene-d10	38.34	212	6011	25.02	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.50%#			
81) Benzo[b]fluoranthene-d12	47.17	264	5004	25.42	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.54%#			
125) 5B(H)Cholane - Surr	43.89	217	1131	25.03	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.50%#			
Target Compounds						Qvalue
2) Decalin	16.47	138	1372m	22.39	ng/mL	
3) trans-Decalin	16.47	138	765	13.41	ng/mL	100
4) cis-Decalin	17.69	138	553	10.83	ng/mL	100
9) Naphthalene	19.90	128	4474	25.12	ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	2545	27.92	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	2971	25.89	ng/mL#	100
17) Benzothiophene	20.12	134	3805	26.14	ng/mL	100
22) Biphenyl	24.48	154	2967	30.34	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.09	156	2164	23.57	ng/mL#	100
24) Dibenzofuran	27.57	168	3958	29.60	ng/mL	91
25) Acenaphthylene	26.18	152	5749	22.10	ng/mL#	100
26) Acenaphthene	26.92	153	3399	23.69	ng/mL	96
27) 2,3,5-Trimethylnaphthalene	28.48	170	2888	27.38	ng/mL	99
28) Fluorene	28.94	166	3544	31.68	ng/mL	87
32) Dibenzothiophene	32.28	184	5449	26.84	ng/mL	96
41) Phenanthrene	32.76	178	6677	20.69	ng/mL	98
52) Retene	39.76	234	1589	25.03	ng/mL	86
53) Anthracene	32.94	178	5725m	27.66	ng/mL	
54) Carbazole	33.62	167	3408	26.88	ng/mL	98
55) 1-Methylphenanthrene	35.27	192	3962m	24.45	ng/mL	
56) Fluoranthene	37.54	202	6466	24.83	ng/mL#	93
57) Benzo(b)fluorene	40.06	216	3406	24.86	ng/mL	96
59) Pyrene	38.41	202	6786	24.71	ng/mL	97
64) Naphthobenzothiophene	42.27	234	5841	25.05	ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.27	234	5841	25.05	ng/mL#	100
73) Benz[a]anthracene	43.20	228	5670m	23.60	ng/mL	
74) Chrysene	43.36	228	5857	24.38	ng/mL	94
75) Chrysene/Triphenylene	43.36	228	5857	24.38	ng/mL	94
82) Benzo[b]fluoranthene	47.25	252	5345m	24.37	ng/mL	
83) Benzo[k]fluoranthene	47.34	252	6798m	24.97	ng/mL	
85) Benzo[e]pyrene	48.25	252	5963	23.07	ng/mL	97
86) Benzo[a]pyrene	48.45	252	5401	24.82	ng/mL	97
87) Perylene	48.76	252	5688	27.42	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.32	276	5290m	23.51	ng/mL	
89) Dibenz[a,h]anthracene	53.40	278	5120	27.24	ng/mL#	79
90) Benzo[g,h,i]perylene	54.62	276	5996	19.92	ng/mL	97
91) 17a(H),21B(H)-hopane - C30	52.46	191	2498m	20.00	ng/mL	
92) Hopane (T19)	52.46	191	2513m	20.12	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42677.D
Acq On : 17 Dec 2005 4:28 pm
Operator : NLJr
Sample : I4121702
Misc : L2
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 20 10:13:22 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 15:58:18 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42679.D
Acq On : 17 Dec 2005 5:57 pm
Operator : NLJr
Sample : I4121703
Misc : L3
ALS Vial : 5 Sample Multiplier: 1

12/20/05

Quant Time: Dec 20 09:46:49 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:03:33 2005
Response via : Initial Calibration

12-20-05

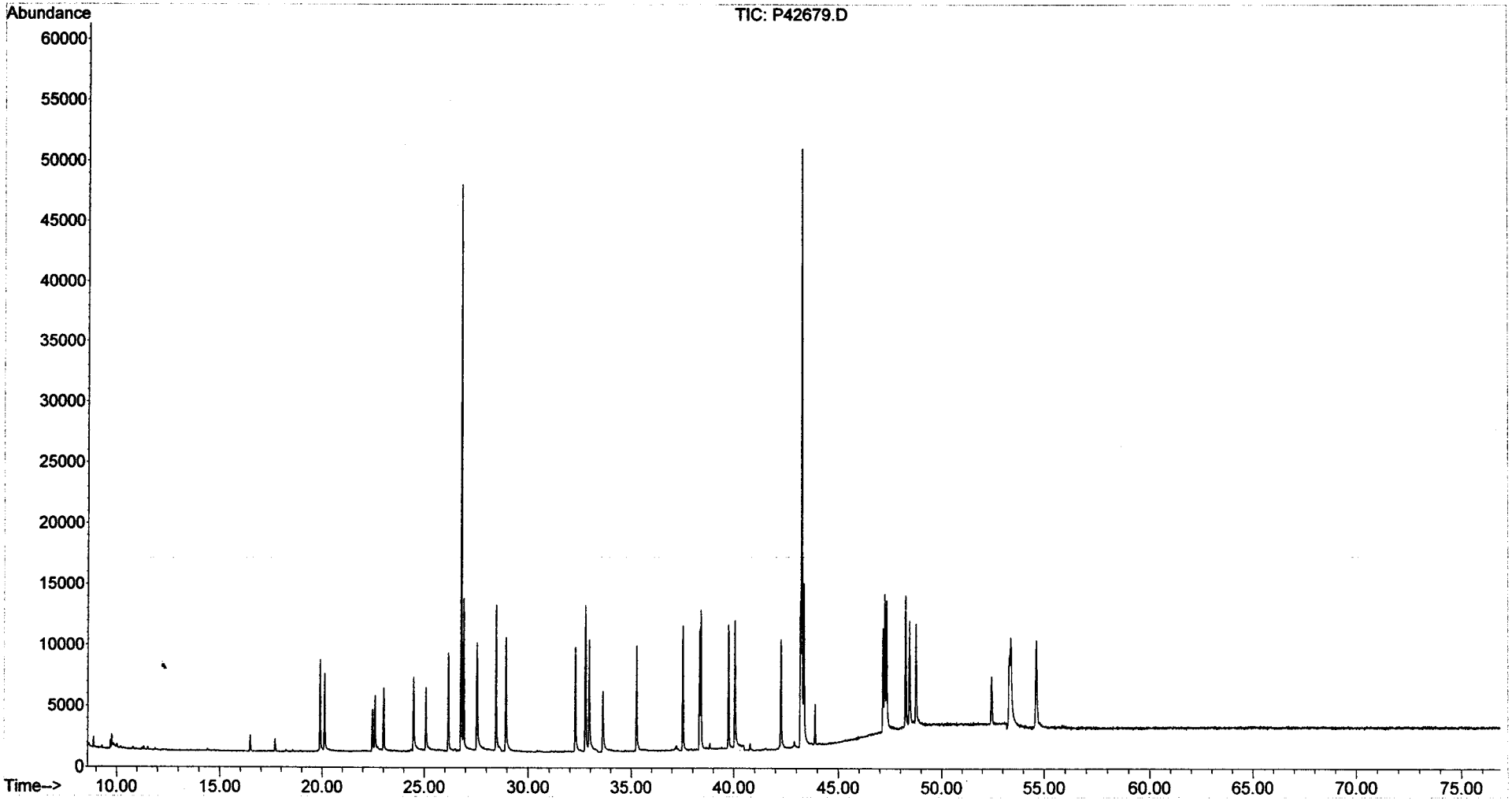
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	55427	500.00	ng/mL	0.00
72) Chrysene-d12	43.26	240	104441	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.47	152	9273	124.20	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 12.42%#			
58) Pyrene-d10	38.34	212	24380	99.34	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.93%#			
81) Benzo[b]fluoranthene-d12	47.16	264	20843	105.27	ng/mL	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.53%#			
125) 5B(H)Cholane - Surr	43.89	217	4547	100.83	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 10.08%#			

Target Compounds						Qvalue
2) Decalin	16.48	138	5015m	82.33	ng/mL	
3) trans-Decalin	16.48	138	2691	44.58	ng/mL	100
4) cis-Decalin	17.70	138	2069	42.53	ng/mL	100
9) Naphthalene	19.90	128	19640	107.73	ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	12087	122.71	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	12715	106.63	ng/mL#	100
17) Benzothiophene	20.11	134	17109	112.55	ng/mL	100
22) Biphenyl	24.48	154	14093	127.53	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.09	156	10030	110.14	ng/mL#	100
24) Dibenzofuran	27.56	168	17696	118.69	ng/mL	94
25) Acenaphthylene	26.18	152	20962	83.78	ng/mL#	100
26) Acenaphthene	26.92	153	13916	97.56	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.48	170	10902	96.62	ng/mL	93
28) Fluorene	28.94	166	13902	107.37	ng/mL	96
32) Dibenzothiophene	32.27	184	22219	103.39	ng/mL	98
41) Phenanthrene	32.76	178	23217	77.10	ng/mL	98
52) Retene	39.75	234	6216	95.84	ng/mL#	76
53) Anthracene	32.94	178	21387m	97.44	ng/mL	
54) Carbazole	33.60	167	16586	123.48	ng/mL	99
55) 1-Methylphenanthrene	35.27	192	15619	96.21	ng/mL	98
56) Fluoranthene	37.53	202	24466	92.33	ng/mL	95
57) Benzo(b)fluorene	40.05	216	13978	100.21	ng/mL	96
59) Pyrene	38.41	202	26111	93.65	ng/mL	95
64) Naphthobenzothiophene	42.27	234	23976	100.61	ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.27	234	23976	100.61	ng/mL#	100
73) Benz[a]anthracene	43.20✓	228	23511m	99.33	ng/mL	
74) Chrysene	43.36✓	228	23602	99.72	ng/mL	100
75) Chrysene/Triphenylene	43.36	228	23602	99.72	ng/mL	100
82) Benzo[b]fluoranthene	47.24✓	252	23081	106.85	ng/mL	98
83) Benzo[k]fluoranthene	47.33	252	27457	101.17	ng/mL	100
85) Benzo[e]pyrene	48.25✓	252	24569	99.11	ng/mL	98
86) Benzo[a]pyrene	48.44✓	252	22505	104.06	ng/mL	97
87) Perylene	48.75✓	252	22827	105.22	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.32	276	20991m	96.39	ng/mL	
89) Dibenz[a,h]anthracene	53.38	278	21305m	108.76	ng/mL	
90) Benzo[g,h,i]perylene	54.62	276	24526	90.92	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.46	191	9981	88.77	ng/mL	100
92) Hopane (T19)	52.46	191	9981	88.77	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42679.D
Acq On : 17 Dec 2005 5:57 pm
Operator : NLJr
Sample : I4121703
Misc : L3
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 20 09:46:49 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:03:33 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42681.D
Acq On : 17 Dec 2005 7:26 pm
Operator : NLJr
Sample : I4121704
Misc : L4
ALS Vial : 6 Sample Multiplier: 1

12/21/05

Quant Time: Dec 20 09:49:48 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:08:46 2005
Response via : Initial Calibration

12/20/05

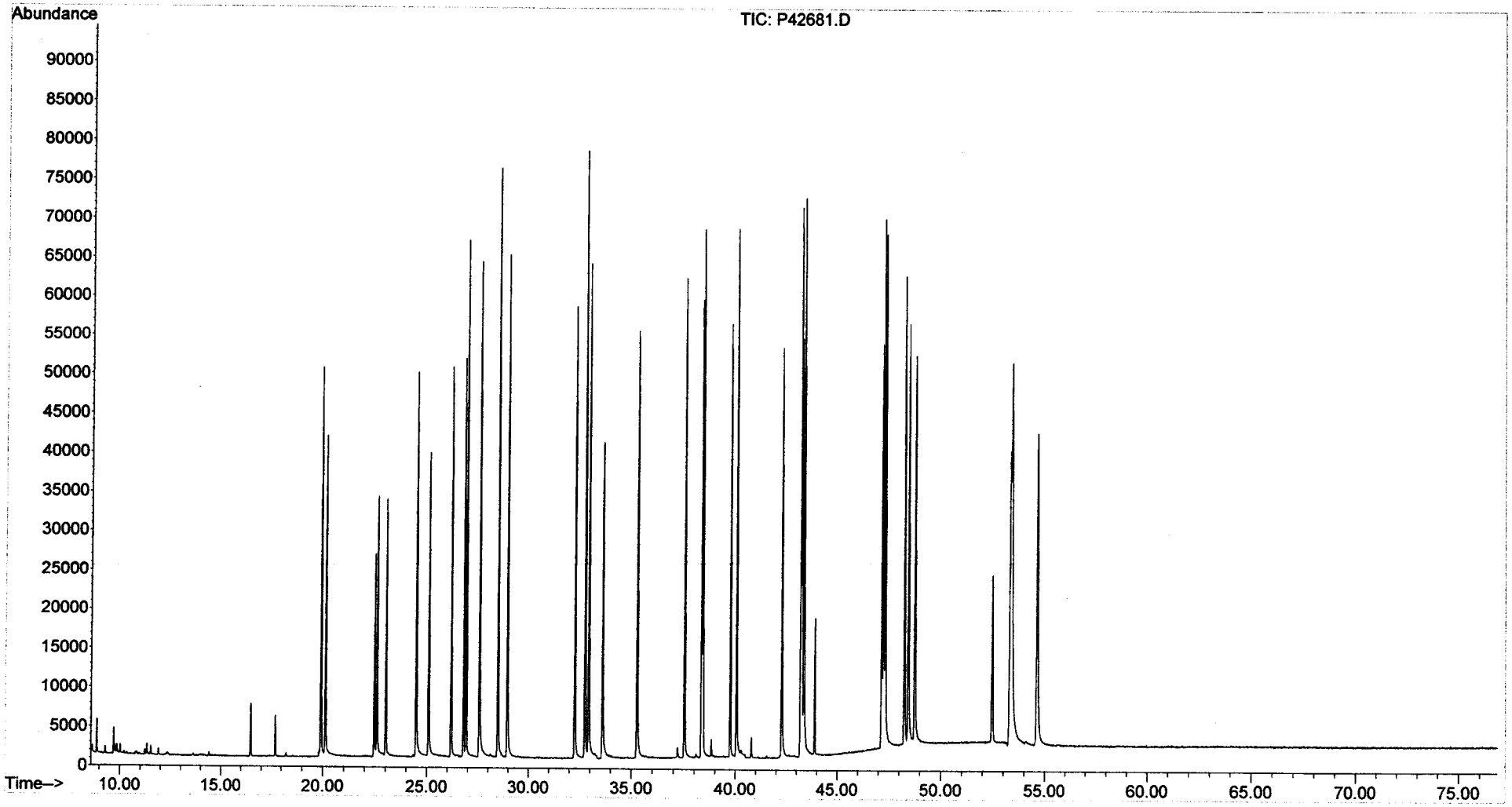
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	57874	500.00	ng/mL	0.00
72) Chrysene-d12	43.26	240	108046	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.46	152	58874	698.81	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 69.88%			
58) Pyrene-d10	38.34	212	133653	522.72	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.27%			
81) Benzo[b]fluoranthene-d12	47.16	264	112825	541.30	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 54.13%			
125) 5B(H)Cholane - Surr	43.89	217	23415	500.52	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.05%			

Target Compounds						Qvalue
2) Decalin	16.48	138	23712m	396.16	ng/mL	
3) trans-Decalin	16.48	138	13280	218.60	ng/mL	100
4) cis-Decalin	17.70	138	10286	213.09	ng/mL	100
9) Naphthalene	19.90	128	114447	586.13	ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	76087	687.74	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	73000	573.61	ng/mL#	100
17) Benzothiophene	20.11	134	96444	583.21	ng/mL	100
22) Biphenyl	24.47	154	92566	734.79	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	64565	656.83	ng/mL#	100
24) Dibenzofuran	27.56	168	106425	643.54	ng/mL	95
25) Acenaphthylene	26.18	152	116610	471.88	ng/mL#	100
26) Acenaphthene	26.92	153	74936	507.25	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.48	170	62219	534.13	ng/mL	95
28) Fluorene	28.94	166	83290	601.32	ng/mL	100
32) Dibenzothiophene	32.26	184	121413	535.03	ng/mL	98
41) Phenanthrene	32.75	178	126702	436.28	ng/mL	99
52) Retene	39.75	234	33052	494.91	ng/mL#	75
53) Anthracene	32.93	178	119271m	520.67	ng/mL	
54) Carbazole	33.60	167	101283	669.74	ng/mL	98
55) 1-Methylphenanthrene	35.26	192	87186m	520.91	ng/mL	
56) Fluoranthene	37.53	202	135059	500.94	ng/mL	96
57) Benzo(b)fluorene	40.05	216	80278	550.79	ng/mL	99
59) Pyrene	38.41	202	142576	500.35	ng/mL	96
64) Naphthobenzothiophene	42.27	234	127836	512.72	ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.27	234	127836	512.72	ng/mL#	100
73) Benz[a]anthracene	43.19	228	124407	530.11	ng/mL	99
74) Chrysene	43.36	228	130345	532.83	ng/mL	99
75) Chrysene/Triphenylene	43.36	228	130345	532.83	ng/mL	99
82) Benzo[b]fluoranthene	47.24	252	136253	596.09	ng/mL	98
83) Benzo[k]fluoranthene	47.33	252	147612	523.71	ng/mL	97
85) Benzo[e]pyrene	48.25	252	131605	514.70	ng/mL	97
86) Benzo[a]pyrene	48.44	252	131974m	581.99	ng/mL	
87) Perylene	48.75	252	127737m	559.42	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.31	276	113101m	508.15	ng/mL	
89) Dibenz[a,h]anthracene	53.38	278	127610m	601.43	ng/mL	
90) Benzo[g,h,i]perylene	54.62	276	133889	494.77	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.46	191	53077	474.06	ng/mL#	93
92) Hopane (T19)	52.46	191	53077	474.06	ng/mL#	93

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42681.D
Acq On : 17 Dec 2005 7:26 pm
Operator : NLJr
Sample : I4121704
Misc : L4
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 20 09:49:48 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:08:46 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42683.D
Acq On : 17 Dec 2005 8:54 pm
Operator : NLJr
Sample : I4121705
Misc : L5
ALS Vial : 7 Sample Multiplier: 1

12/21/05

Quant Time: Dec 20 09:52:56 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:15:08 2005
Response via : Initial Calibration

MS 12/2005

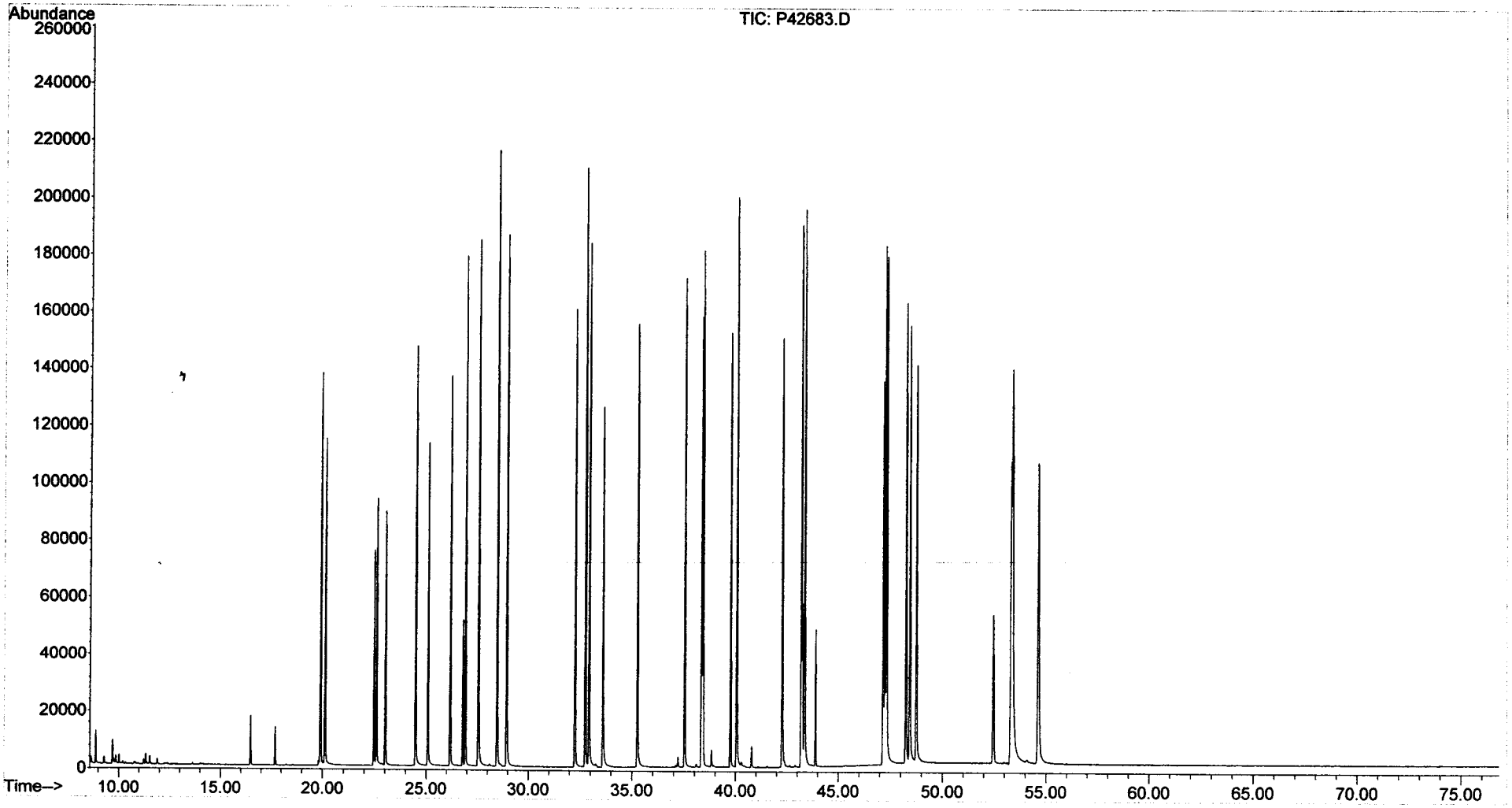
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	58060	500.00 ng/mL	0.00
72) Chrysene-d12	43.26	240	109115	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.46	152	157006	1689.67 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 168.97%#		
58) Pyrene-d10	38.34	212	344377	1327.47 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 132.75%#		
81) Benzo[b]fluoranthene-d12	47.16	264	288894	1344.68 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 134.47%#		
125) 5B(H)Cholane - Surr	43.89	217	62084	1313.76 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 131.38%#		

Target Compounds					Qvalue
2) Decalin	16.48	138	61241m	1071.51 ng/mL	
3) trans-Decalin	16.48	138	34501	584.46 ng/mL	100
4) cis-Decalin	17.70	138	26393	565.92 ng/mL	100
9) Naphthalene	19.90	128	308870	1511.68 ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	208311	1715.79 ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	196181	1482.05 ng/mL#	100
17) Benzothiophene	20.11	134	264801	1532.40 ng/mL	100
22) Biphenyl	24.47	154	253177	1792.81 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	177679	1670.75 ng/mL#	100
24) Dibenzofuran	27.56	168	283715	1595.58 ng/mL	95
25) Acenaphthylene	26.18	152	315321	1290.04 ng/mL#	100
26) Acenaphthene	26.92	153	197820	1329.95 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.48	170	166472	1400.63 ng/mL	94
28) Fluorene	28.94	166	221925	1520.06 ng/mL	100
32) Dibenzothiophene	32.26	184	318887	1376.62 ng/mL	98
41) Phenanthrene	32.75	178	333483	1182.29 ng/mL	100
52) Retene	39.75	234	88033	1317.30 ng/mL#	72
53) Anthracene	32.93	178	318650m	1389.30 ng/mL	
54) Carbazole	33.60	167	279713	1699.46 ng/mL	98
55) 1-Methylphenanthrene	35.26	192	234625	1385.55 ng/mL	99
56) Fluoranthene	37.53	202	361796m	1336.99 ng/mL	
57) Benzo(b)fluorene	40.05	216	221261	1475.73 ng/mL	100
59) Pyrene	38.41	202	372760	1303.73 ng/mL	97
64) Naphthobenzothiophene	42.27	234	343039	1362.76 ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.27	234	343039	1362.76 ng/mL#	100
73) Benz[a]anthracene	43.19	228	336897	1400.40 ng/mL	99
74) Chrysene	43.36	228	341847	1361.39 ng/mL	99
75) Chrysene/Triphenylene	43.36	228	341847	1361.39 ng/mL	99
82) Benzo[b]fluoranthene	47.25	252	362072m	1496.59 ng/mL	
83) Benzo[k]fluoranthene	47.33	252	395881	1374.49 ng/mL	97
85) Benzo[e]pyrene	48.25	252	346458	1331.91 ng/mL	96
86) Benzo[a]pyrene	48.44	252	349585m	1475.52 ng/mL	
87) Perylene	48.75	252	337895m	1423.03 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.32	276	307065m	1347.95 ng/mL	
89) Dibenz[a,h]anthracene	53.38	278	343309m	1517.36 ng/mL	
90) Benzo[g,h,i]perylene	54.62	276	353104	1295.45 ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.46	191	130879	1172.70 ng/mL#	92
92) Hopane (T19)	52.46	191	130879	1172.70 ng/mL#	92

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42683.D
Acq On : 17 Dec 2005 8:54 pm
Operator : NLJr
Sample : I4121705
Misc : L5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 20 09:52:56 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:15:08 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42685.D
Acq On : 17 Dec 2005 10:23 pm
Operator : NLJr
Sample : I4121706
Misc : L6
ALS Vial : 8 Sample Multiplier: 1

12/21/05.

Quant Time: Dec 20 09:57:13 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:19:13 2005
Response via : Initial Calibration

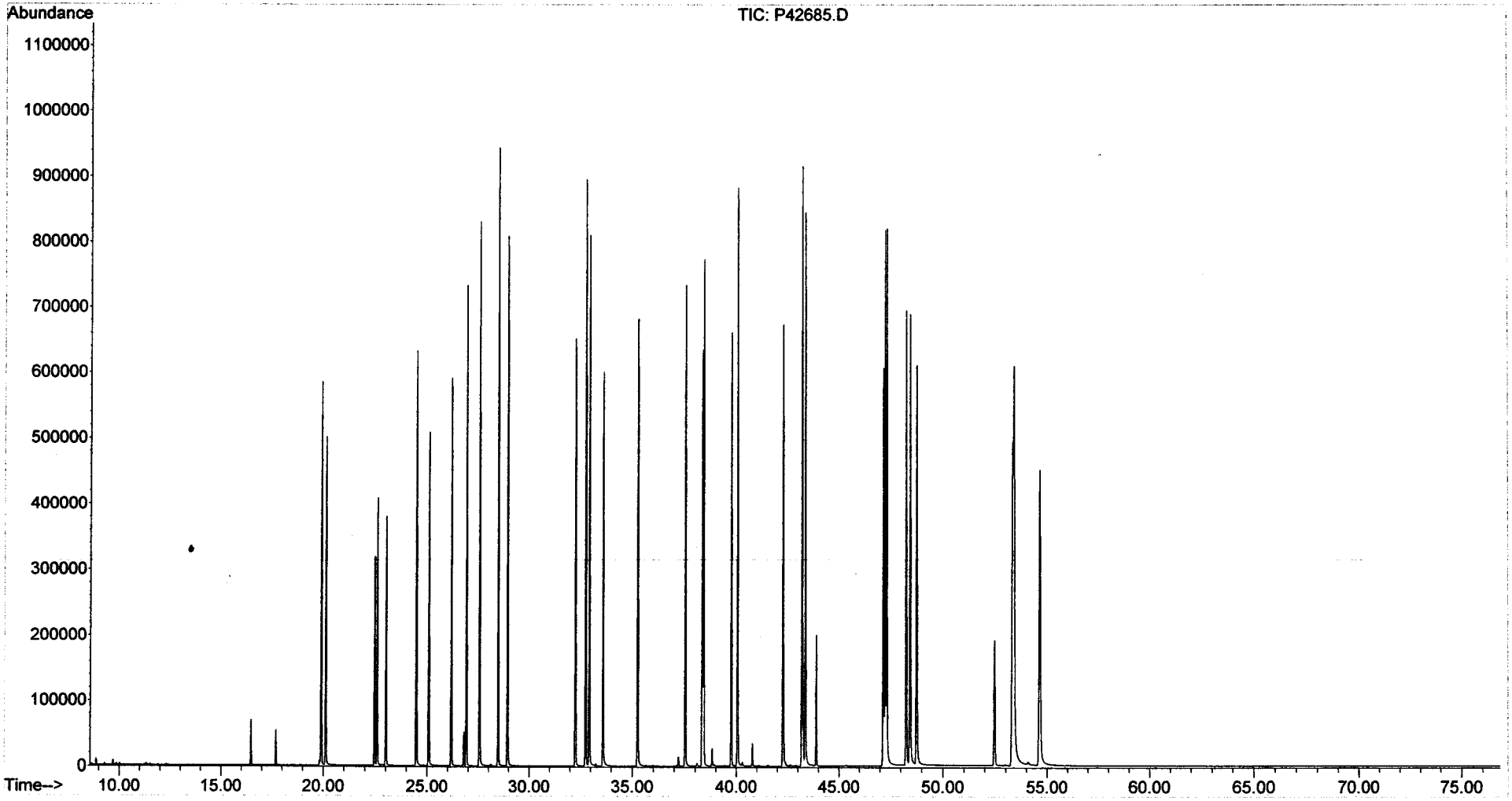
MS 12-2005

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	57285	500.00 ng/mL	0.00
72) Chrysene-d12	43.26	240	108467	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.47	152	663865	6765.14 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 676.51%#		
58) Pyrene-d10	38.35	212	1460339	5635.48 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 563.55%#		
81) Benzo[b]fluoranthene-d12	47.17	264	1256650	5796.33 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 579.63%#		
125) 5B(H)Cholane - Surr	43.89	217	266581	5617.51 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 561.75%#		
Target Compounds					Qvalue
2) Decalin	16.48	138	241975m	4417.16 ng/mL	
3) trans-Decalin	16.48	138	136850	2380.52 ng/mL	100
4) cis-Decalin	17.70	138	104564	2316.17 ng/mL	100
9) Naphthalene	19.90	128	1262637	6011.54 ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	857901	6665.13 ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	802930	5927.71 ng/mL#	100
17) Benzothiophene	20.11	134	1079086	6055.53 ng/mL	100
22) Biphenyl	24.47	154	1037426	6850.68 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	744644	6649.13 ng/mL#	100
24) Dibenzofuran	27.56	168	1156745	6247.94 ng/mL	94
25) Acenaphthylene	26.18	152	1310657	5400.09 ng/mL#	100
26) Acenaphthene	26.92	153	805661	5420.43 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.48	170	695624	5792.28 ng/mL	95
28) Fluorene	28.94	166	913229	6077.14 ng/mL	99
32) Dibenzothiophene	32.26	184	1306855	5604.42 ng/mL	98
41) Phenanthrene	32.76	178	1368606	4971.59 ng/mL	99
52) Retene	39.76	234	381415	5722.96 ng/mL#	74
53) Anthracene	32.94	178	1322921m	5756.03 ng/mL	
54) Carbazole	33.60	167	1181659	6788.38 ng/mL	97
55) 1-Methylphenanthrene	35.27	192	997330m	5842.58 ng/mL	
56) Fluoranthene	37.54	202	1506979	5565.50 ng/mL	96
57) Benzo(b)fluorene	40.05	216	946800	6177.15 ng/mL	99
59) Pyrene	38.42	202	1522810	5352.09 ng/mL	97
64) Naphthobenzothiophene	42.27	234	1449569	5733.06 ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.27	234	1449391	5732.35 ng/mL#	100
73) Benz[a]anthracene	43.20	228	1446092	5904.89 ng/mL	98
74) Chrysene	43.36	228	1406505	5536.13 ng/mL	98
75) Chrysene/Triphenylene	43.36	228	1406505	5536.13 ng/mL	98
82) Benzo[b]fluoranthene	47.25	252	1543447m	6175.65 ng/mL	
83) Benzo[k]fluoranthene	47.34	252	1652858	5660.22 ng/mL	97
85) Benzo[e]pyrene	48.26	252	1448202	5528.21 ng/mL	97
86) Benzo[a]pyrene	48.45	252	1484989m	6110.27 ng/mL	
87) Perylene	48.76	252	1436061	5934.64 ng/mL	96
88) Indeno[1,2,3-cd]pyrene	53.33	276	1340848m	5875.94 ng/mL	
89) Dibenz[a,h]anthracene	53.40	278	1459865m	6213.24 ng/mL	
90) Benzo[g,h,i]perylene	54.65	276	1455635	5333.47 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.47	191	484885	4425.36 ng/mL#	92
92) Hopane (T19)	52.47	191	484885	4425.36 ng/mL#	92

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42685.D
Acq On : 17 Dec 2005 10:23 pm
Operator : NLJr
Sample : I4121706
Misc : L6
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 20 09:57:13 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:19:13 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42687.D
Acq On : 17 Dec 2005 11:51 pm
Operator : NLJr
Sample : I4121707
Misc : L7
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 20 10:01:40 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:20:24 2005
Response via : Initial Calibration

12/21/05

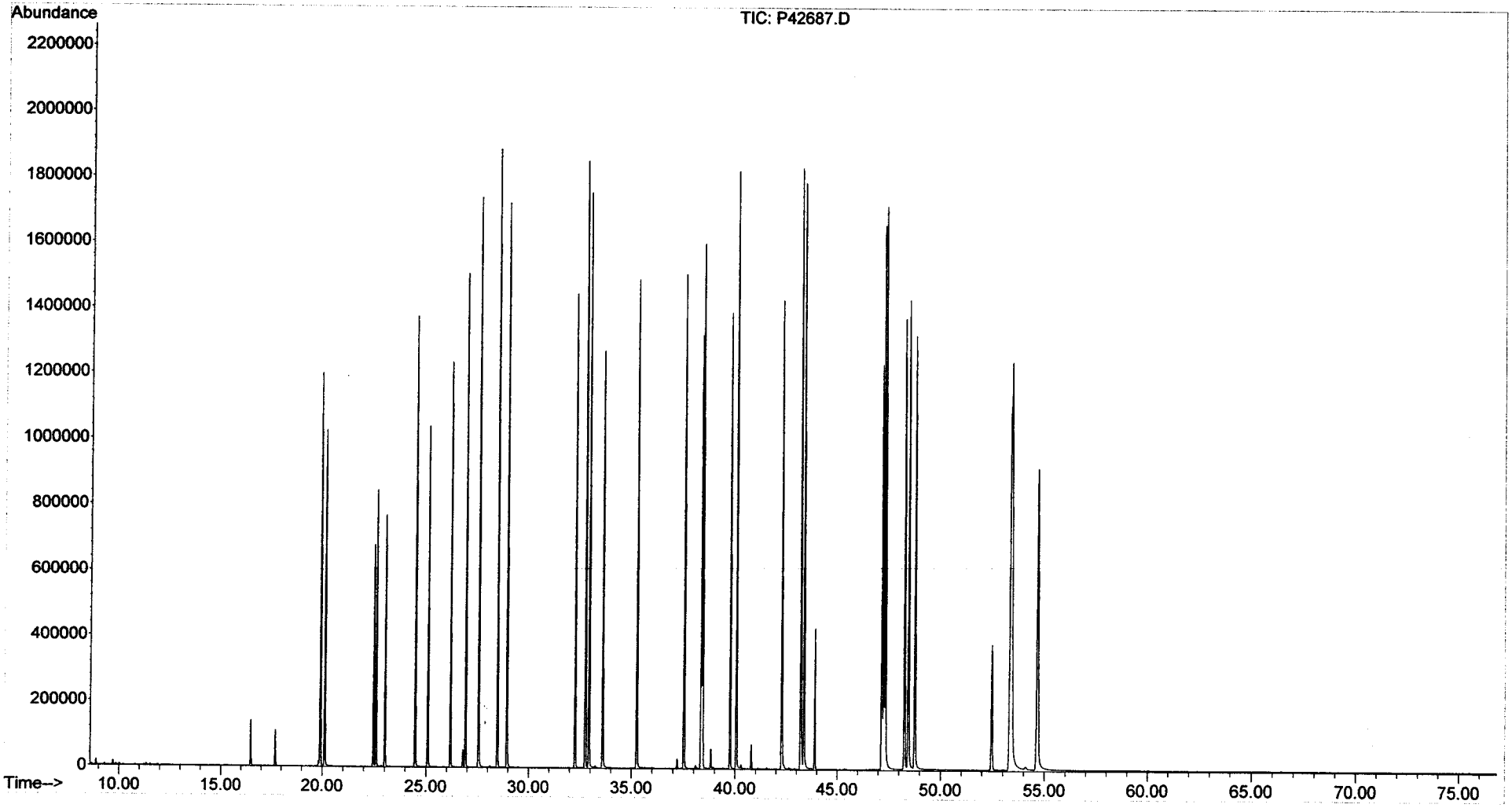
MS 12-2005

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.79	164	58757	500.00 ng/mL	0.00
72) Chrysene-d12	43.26	240	112975	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.47	152	1341748	12589.83 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1258.98%#	
58) Pyrene-d10	38.35	212	3078796	11343.20 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1134.32%#	
81) Benzo[b]fluoranthene-d12	47.18	264	2656269	11459.04 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1145.90%#	
125) 5B(H)Cholane - Surr	43.90	217	553267	10967.71 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 1096.77%#	
Target Compounds					Qvalue
2) Decalin	16.48	138	485211m	9421.87 ng/mL	
3) trans-Decalin	16.48	138	274731	4696.66 ng/mL	100
4) cis-Decalin	17.70	138	210103	4593.65 ng/mL	100
9) Naphthalene	19.90	128	2587280	11617.96 ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	1754695	12592.00 ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	1641471	11460.33 ng/mL#	100
17) Benzothiophene	20.11	134	2203477	11645.77 ng/mL	100
22) Biphenyl	24.48	154	2134352	12942.74 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.09	156	1536470	12678.89 ng/mL#	100
24) Dibenzofuran	27.56	168	2376561	12015.16 ng/mL	94
25) Acenaphthylene	26.19	152	2703168	10715.51 ng/mL#	100
26) Acenaphthene	26.93	153	1656240	10713.77 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.48	170	1428005	11294.46 ng/mL	94
28) Fluorene	28.94	166	1891580	11846.93 ng/mL	100
32) Dibenzothiophene	32.27	184	2724799	11167.51 ng/mL	98
41) Phenanthrene	32.76	178	2845151	10085.91 ng/mL	99
52) Retene	39.76	234	805075	11500.03 ng/mL#	74
53) Anthracene	32.94	178	2764323m	11461.83 ng/mL	
54) Carbazole	33.60	167	2482974	13124.42 ng/mL	97
55) 1-Methylphenanthrene	35.27	192	2093376m	11637.86 ng/mL	
56) Fluoranthene	37.54	202	3155915	11153.04 ng/mL	96
57) Benzo(b)fluorene	40.06	216	1990322	12182.03 ng/mL	99
59) Pyrene	38.43	202	3167630	10728.17 ng/mL	97
64) Naphthobenzothiophene	42.28	234	3048376	11473.94 ng/ml#	100
65) Naphthobenzothiophene-2,1-	42.28	234	3048376	11474.21 ng/mL#	100
73) Benz[a]anthracene	43.21	228	3053269	11619.58 ng/mL	98
74) Chrysene	43.36	228	2928650	10873.14 ng/mL	98
75) Chrysene/Triphenylene	43.36	228	2930350	10879.46 ng/mL	98
82) Benzo[b]fluoranthene	47.27	252	3314204m	12253.23 ng/mL	
83) Benzo[k]fluoranthene	47.35	252	3400443	10939.42 ng/mL	97
85) Benzo[e]pyrene	48.28	252	3041253	10953.26 ng/mL	97
86) Benzo[a]pyrene	48.47	252	3127148m	11932.74 ng/mL	
87) Perylene	48.78	252	3006486	11568.37 ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.35	276	2953388m	11444.90 ng/mL	
89) Dibenz[a,h]anthracene	53.42	278	3054012m	11991.97 ng/mL	
90) Benzo[g,h,i]perylene	54.68	276	3027414	10532.80 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.47	191	974028	8701.54 ng/mL#	92
92) Hopane (T19)	52.47	191	974028	8701.54 ng/mL#	92

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42687.D
Acq On : 17 Dec 2005 11:51 pm
Operator : NLJr
Sample : I4121707
Misc : L7
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 20 10:01:40 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 19 16:20:24 2005
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42691.D
Acq On : 18 Dec 2005 2:48 am
Operator : NLJr
Sample : Q4121701
Misc : ICC
ALS Vial : 11 Sample Multiplier: 1

12/21/05

Quant Time: Dec 20 10:22:32 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 10:14:11 2005
Response via : Initial Calibration

12 2005

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

20%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	93	0.00
2	t	Decalin	0.446	0.000#	100.0#	0#	-16.48#
3	A1	trans-Decalin	0.494	0.000#	100.0#	0#	-16.48#
4	t	cis-Decalin	0.382	0.000#	100.0#	0#	-17.70#
5	A2	C1-Decalins	0.494	0.000#	100.0#	0#	-18.56#
6	A2	C2-Decalins	0.494	0.000#	100.0#	0#	-19.89#
7	A2	C3-Decalins	0.494	0.000#	100.0#	0#	-22.37#
8	A2	C4-Decalins	0.494	0.000#	100.0#	0#	-25.76#
9	A1	Naphthalene	1.942	1.797	7.5	84	0.00
10	A2	C1-Naphthalenes	1.942	0.000#	100.0#	0#	-22.78#
11	A2	C2-Naphthalenes	1.942	0.000#	100.0#	0#	-25.62#
12	A2	C3-Naphthalenes	1.942	0.000#	100.0#	0#	-27.96#
13	A2	C4-Naphthalenes	1.942	0.000#	100.0#	0#	-30.73#
14	s	2-Methylnaphthalene-d10	0.949	1.031	-8.6	94	0.00
15	t	2-Methylnaphthalene	1.237	1.223	1.1	86	0.00
16	t	1-Methylnaphthalene	1.246	1.251	-0.4	92	0.00
17	A1	Benzothiophene	1.653	0.000#	100.0#	0#	-20.11#
18	A2	C1-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-22.32#
19	A2	C2-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-25.82#
20	A2	C3-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-27.79#
21	A2	C4-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-29.54#
22	t	Biphenyl	1.482	1.569	-5.9	91	0.00
23	t	2,6-Dimethylnaphthalene	1.073	1.099	-2.4	91	0.00
24	t	Dibenzofuran	1.734	1.817	-4.8	92	0.00
25	t	Acenaphthylene	2.173	1.878	13.6	87	0.00
26	t	Acenaphthene	1.331	1.250	6.1	90	0.00
27	t	2,3,5-Trimethylnaphthalene	1.098	1.109	-1.0	96	0.00
28	A1	Fluorene	1.426	1.337	6.2	86	0.00
29	A2	C1-Fluorenes	1.426	0.000#	100.0#	0#	-31.51#
30	A2	C2-Fluorenes	1.426	0.000#	100.0#	0#	-33.71#
31	A2	C3-Fluorenes	1.426	0.000#	100.0#	0#	-35.54#
32	A1	Dibenzothiophene	2.114	0.000#	100.0#	0#	-32.26#
33	A2	4-Methyldibenzothiophene(4M	2.114	0.000#	100.0#	0#	-34.25#
34	A2	2/3-Methyldibenzothiophene(	2.114	0.000#	100.0#	0#	-34.59#
35	A2	1-Methyldibenzothiophene(1M	2.114	0.000#	100.0#	0#	-35.02#
36	A2	OTP	2.114	0.000#	100.0#	0#	-34.62#
37	A2	C1-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-34.25#
38	A2	C2-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-35.94#
39	A2	C3-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-37.74#
40	A2	C4-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-39.42#
41	A1	Phenanthrene	2.378	1.994	16.1	85	0.00
42	A2	3-Methylphenanthrene(3MP)	2.378	0.000#	100.0#	0#	-35.26#
43	A2	2/4-Methylphenanthrene(2MP)	2.378	0.000#	100.0#	0#	-35.06#
44	A2	2-Methylanthracene(2MA)	2.378	0.000#	100.0#	0#	-35.18#
45	A2	9-Methylphenanthrene(9MP)	2.378	0.000#	100.0#	0#	-35.39#
46	A2	1-Methylphenanthrene(1MP)	2.378	0.000#	100.0#	0#	-35.49#
47	A2	C1-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-35.39#
48	A2	C2-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-37.20#
49	A2	5AA IS BKGD	2.378	0.000#	100.0#	0#	-36.91#
50	A2	C3-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-39.04#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42691.D
Acq On : 18 Dec 2005 2:48 am
Operator : NLJr
Sample : Q4121701
Misc : ICC
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 10:22:32 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 10:14:11 2005
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	2.378	0.000#	100.0#	0#	-41.22#
52	t	Retene	0.610	0.000#	100.0#	0#	-39.75#
53	t	Anthracene	2.172	1.848	14.9	83	0.00
54	t	Carbazole	1.721	0.000#	100.0#	0#	-33.60#
55	t	1-Methylphenanthrene	1.570	1.559	0.7	96	0.00
56	A1	Fluoranthene	2.452	2.175	11.3	87	0.00
57	t	Benzo(b)fluorene	1.436	0.000#	100.0#	0#	-40.05#
58	s	Pyrene-d10	2.358	2.268	3.8	91	0.00
59	A1	Pyrene	2.543	2.364	7.0	89	0.00
60	A2	C1-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-40.06#
61	A2	C2-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-41.86#
62	A2	C3-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-43.87#
63	A2	C4-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-45.21#
64	A1	Naphthobenzothiophene	2.312	0.000#	100.0#	0#	-42.27#
65	A2	Naphthobenzothiophene-2,1-D	2.312	0.000#	100.0#	0#	-42.27#
66	A2	Naphthobenzothiophene-1,2-D	2.312	0.000#	100.0#	0#	-42.87#
67	A2	Naphthobenzothiophene-2,3-D	2.312	0.000#	100.0#	0#	-43.20#
68	A2	C1-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-43.92#
69	A2	C2-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-45.96#
70	A2	C3-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-47.53#
71	A2	C4-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-48.61#
72	i	Chrysene-d12	1.000	1.000	0.0	92	0.00
73	t	Benz[a]anthracene	1.189	1.175	1.2	94	0.00
74	A1	Chrysene	1.207	1.176	2.6	90	0.00
75	A2	Chrysene/Triphenylene	1.207	1.177	2.5	90	0.00
76	A2	C1-Chrysenes	1.207	0.000#	100.0#	0#	-45.08#
77	A2	C2-Chrysenes	1.207	0.000#	100.0#	0#	-46.81#
78	A2	BBF-d12 Surr BKGD	1.207	0.000#	100.0#	0#	-47.45#
79	A2	C3-Chrysenes	1.207	0.000#	100.0#	0#	-48.56#
80	A2	C4-Chrysenes	1.207	0.000#	100.0#	0#	-50.05#
81	s	Benzo[b]fluoranthene-d12	1.047	1.071	-2.3	94	0.00
82	t	Benzo[b]fluoranthene	1.236	1.128	8.7	82	0.00
83	A1	Benzo[k]fluoranthene	1.394	1.279	8.2	86	0.00
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-48.25#
85	t	Benzo[e]pyrene	1.246	1.208	3.0	91	0.00
86	t	Benzo[a]pyrene	1.201	1.082	9.9	81	0.00
87	t	Perylene	1.189	1.182	0.6	92	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.115	0.952	14.6	84	0.00
89	t	Dibenz[a,h]anthracene	1.152	1.084	5.9	84	0.00
90	t	Benzo[g,h,i]perylene	1.271	1.140	10.3	84	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.000#	100.0#	0#	-52.46#
92	A2	Hopane (T19)	0.481	0.000#	100.0#	0#	-52.46#
93	A2	C23 Tricyclic Terpane (T4)	0.481	0.000#	100.0#	0#	-41.07#
94	A2	C24 Tricyclic Terpane (T5)	0.481	0.000#	100.0#	0#	-41.79#
95	A2	C25 Tricyclic Terpane (T6)	0.481	0.000#	100.0#	0#	-43.27#
96	A2	C24 Tetracyclic Terpane (T6	0.481	0.000#	100.0#	0#	-44.61#
97	A2	C26 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-44.33#
98	A2	C26 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-44.42#
99	A2	C28 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-46.71#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC16\
Data File : P42691.D
Acq On : 18 Dec 2005 2:48 am
Operator : NLJr
Sample : Q4121701
Misc : ICC
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 10:22:32 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 10:14:11 2005
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 (	0.481	0.000#	100.0#	0#	-46.87#
101	A2	C29 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-47.41#
102	A2	C29 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-47.60#
103	A2	18a-22,29,30-Trisnorneohopa	0.481	0.000#	100.0#	0#	-48.78#
104	A2	C30 Tricyclic Terpane-22S	0.481	0.000#	100.0#	0#	-48.85#
105	A2	C30 Tricyclic Terpane-22R	0.481	0.000#	100.0#	0#	-49.11#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.481	0.000#	100.0#	0#	-49.35#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.481	0.000#	100.0#	0#	-50.57#
108	A2	17a(H),21b(H)-25-Norhopane	0.481	0.000#	100.0#	0#	-50.33#
109	A2	30-Norhopane (T15)	0.481	0.000#	100.0#	0#	-51.26#
110	A2	18a(H)-30-Norneohopane-C29T	0.481	0.000#	100.0#	0#	-51.37#
111	A2	17a(H)-Diahopane (X)	0.481	0.000#	100.0#	0#	-51.50#
112	A2	30-Normoretane (T17)	0.481	0.000#	100.0#	0#	-52.06#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.481	0.000#	100.0#	0#	-52.50#
114	A2	Moretane (T20)	0.481	0.000#	100.0#	0#	-53.39#
115	A2	30-Homohopane-22S (T21)	0.481	0.000#	100.0#	0#	-54.54#
116	A2	30-Homohopane-22R (T22)	0.481	0.000#	100.0#	0#	-54.78#
117	A2	30,31-Bishomohopane-22S (T2	0.481	0.000#	100.0#	0#	-56.15#
118	A2	30,31-Bishomohopane-22R (T2	0.481	0.000#	100.0#	0#	-56.55#
119	A2	30,31-Trishomohopane-22S (T	0.481	0.000#	100.0#	0#	-58.37#
120	A2	30,31-Trishomohopane-22R (T	0.481	0.000#	100.0#	0#	-59.01#
121	A2	Tetrakishomohopane-22S (T32	0.481	0.000#	100.0#	0#	-61.11#
122	A2	Tetrakishomohopane-22R (T33	0.481	0.000#	100.0#	0#	-62.04#
123	A2	Pentakishomohopane-22S (T34	0.481	0.000#	100.0#	0#	-64.39#
124	A2	Pentakishomohopane-22R (T35	0.481	0.000#	100.0#	0#	-65.74#
125	SA1	5B(H)Cholane - Surr	0.226	0.213	5.8	90	0.00
126	A2	13b(H),17a(H)-20S-Diacholes	0.226	0.000#	100.0#	0#	-45.55#
127	A2	13b(H),17a(H)-20R-Diacholes	0.226	0.000#	100.0#	0#	-45.96#
128	A2	13b,17a-20S-Methyldiacholes	0.226	0.000#	100.0#	0#	-46.66#
129	A2	14a(H),17a(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.55#
130	A2	14a(H),17a(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-48.09#
131	A2	13b,17a-20R-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.36#
132	A2	13a,17b-20S-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.63#
133	A2	14a,17a-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.82#
134	A2	14a,17a-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-49.55#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.89#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.84#
137	A2	14b(H),17b(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.65#
138	A2	14b(H),17b(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.72#
139	A2	14b,17b-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-48.98#
140	A2	14b,17b-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-49.06#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.15#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-50.19#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42691.D
Acq On : 18 Dec 2005 2:48 am
Operator : NLJr
Sample : Q4121701
Misc : ICC
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 10:22:32 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 10:14:11 2005
Response via : Initial Calibration

MS 12/20/05

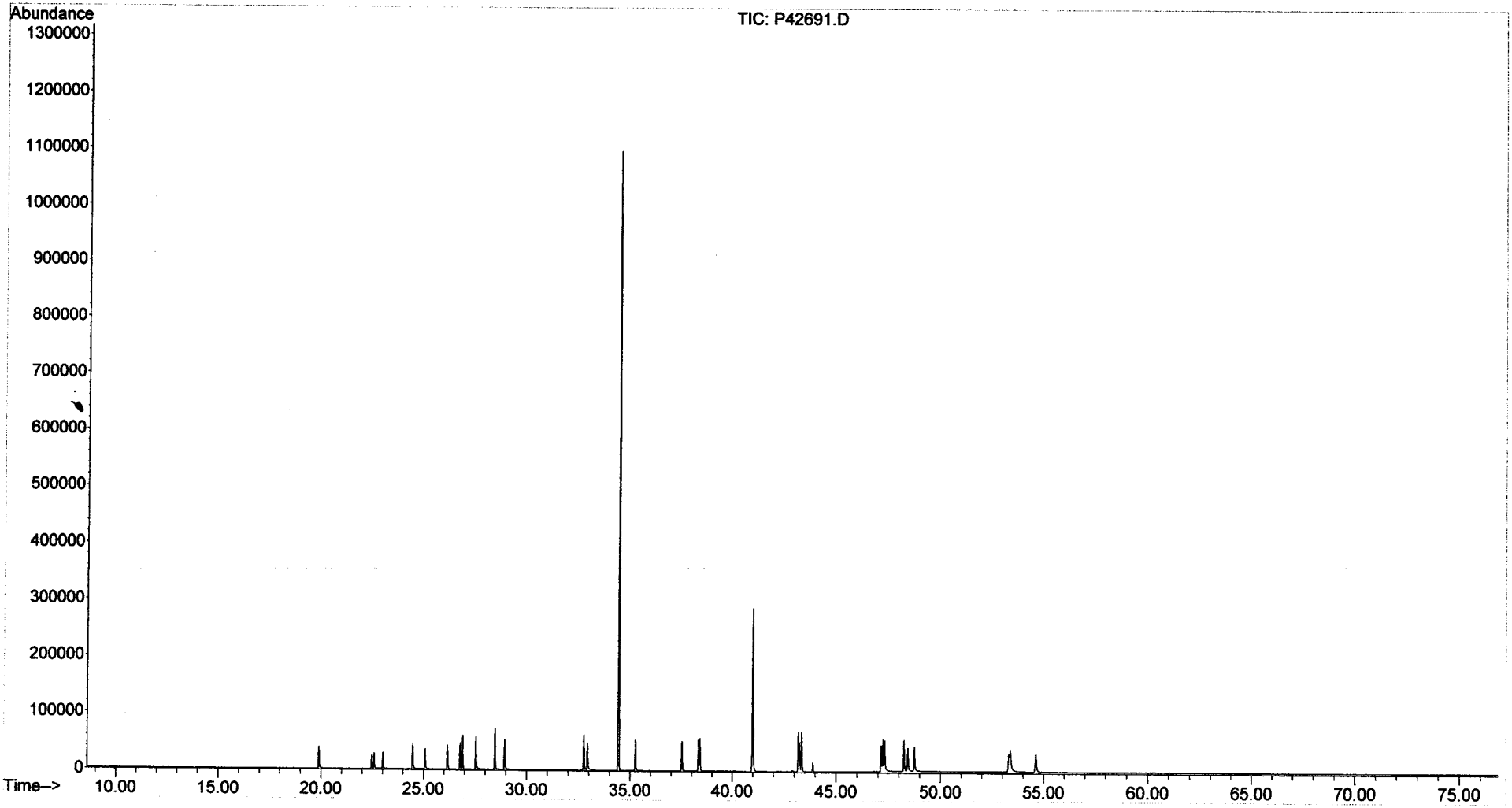
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	53773	500.00	ng/mL	0.00
72) Chrysene-d12	43.25	240	99269	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.46	152	55440	543.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 54.35%			
58) Pyrene-d10	38.34	212	121937	480.80	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.08%#			
81) Benzo[b]fluoranthene-d12	47.16	264	106344	511.44	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.14%			
125) 5B(H)Cholane - Surr	43.89	217	21151	470.67	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.07%#			
Target Compounds						Qvalue
9) Naphthalene	19.90	128	96651	462.78	ng/mL#	100
15) 2-Methylnaphthalene	22.59	142	65757	494.25	ng/mL#	100
16) 1-Methylnaphthalene	23.02	142	67254	501.78	ng/mL#	100
22) Biphenyl	24.47	154	84371	529.32	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.08	156	59076	512.10	ng/mL#	100
24) Dibenzofuran	27.56	168	97697	523.90	ng/mL	100
25) Acenaphthylene	26.18	152	100975	432.04	ng/mL#	100
26) Acenaphthene	26.92	153	67223	469.48	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.48	170	59657	505.37	ng/mL	99
28) Fluorene	28.94	166	71905	468.76	ng/mL	100
41) Phenanthrene	32.75	178	107200	419.08	ng/mL	100
53) Anthracene	32.93	178	99360m	425.41	ng/mL	
55) 1-Methylphenanthrene	35.27	192	83813m	496.53	ng/mL	
56) Fluoranthene	37.53	202	116963	443.59	ng/mL	100
59) Pyrene	38.41	202	127145	464.81	ng/mL	99
73) Benz[a]anthracene	43.19	228	116648	494.04	ng/mL	100
74) Chrysene	43.35	228	116761m	487.27	ng/mL	
75) Chrysene/Triphenylene	43.35	228	116830m	487.56	ng/mL	
82) Benzo[b]fluoranthene	47.24	252	112022	456.53	ng/mL	100
83) Benzo[k]fluoranthene	47.33	252	126916	458.52	ng/mL	98
85) Benzo[e]pyrene	48.25	252	119891	484.81	ng/mL	99
86) Benzo[a]pyrene	48.44	252	107453m	450.79	ng/mL	
87) Perylene	48.75	252	117316m	497.00	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.31	276	94509m	426.89	ng/mL	
89) Dibenz[a,h]anthracene	53.38	278	107635m	470.58	ng/mL	
90) Benzo[g,h,i]perylene	54.62	276	113123	448.40	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC16\
Data File : P42691.D
Acq On : 18 Dec 2005 2:48 am
Operator : NLJr
Sample : Q4121701
Misc : ICC
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 10:22:32 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 10:14:11 2005
Response via : Initial Calibration



Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2010301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN03\

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

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

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

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

1/9/06

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P27438	FRNC2B	ALK STD
5)	Sample	1	P27439	FRNC2B	PAH STD
6)	Sample	2	P27440	FRNC2B	C2010301 PASS*
7)	Sample	3	P27441	FRNC2B	0512106-01-RE
8)	Sample	4	P27442	FRNC2B	0512106-04-RE
9)	Sample	5	P27443	FRNC2B	0512106-06-RE
10)	Sample	6	P27444	FRNC2B	0512106-07-RE
11)	Sample	7	P27445	FRNC2B	C2010302 PASS*
12)	Sample	8	P27446	FRNC2B	DCM
13)	Sample	9	P27447	FRNC2B	DCM
14)	Sample	10	P27448	FRNC2B	DCM
15)	Sample	11	P27449	FRNC2B	DCM
16)	Sample	7	P27450	FRNC2B	C2010303 PASS -not needed
17)	Sample	12	P27451	FRNC2B	ANS2010401
18)	Sample	13	P27452	FRNC2B	C2010304 PASS*
19)	Sample	14	P27453	FRNC2B	0512105-08
[illegible]	Sample	15	P27454	FRNC2B	0512105-08D
21)	Sample	16	P27455	FRNC2B	0512105-01-RE
22)	Sample	17	P27456	FRNC2B	0512105-02-RE
23)	Sample	18	P27457	FRNC2B	0512105-03-RE
24)	Sample	19	P27458	FRNC2B	0512105-04-RE2
25)	Sample	20	P27459	FRNC2B	0512105-04-RE
26)	Sample	21	P27460	FRNC2B	0512105-07-RE
27)	Sample	22	P27461	FRNC2B	C2010305 PASS*
28)	Sample	23	P27462	FRNC2B	QA WHAC13
29)	Sample	24	P27463	FRNC2B	BaF RT check
30)	Sample	25	P27464	FRBIO2B	I2010401
31)	Sample	26	P27465	FRBIO2B	I2010402
32)	Sample	27	P27466	FRBIO2B	I2010403
33)	Sample	28	P27467	FRBIO2B	I2010404
34)	Sample	29	P27468	FRBIO2B	I2010405
35)	Sample	30	P27469	FRBIO2B	I2010406
36)	Sample	31	P27470	FRBIO2B	I2010407
37)	Sample	32	P27471	FRBIO2B	ANS2010401
38)	Sample	33	P27472	FRBIO2B	DCM
39)	Sample	34	P27473	FRBIO2B	DCM
40)	Sample	35	P27474	FRBIO2B	SS122105B14
41)	Sample	36	P27475	FRBIO2B	~~SS122105LCS1~~1 DCM
42)	Sample	37	P27476	FRBIO2B	~~SS122105LCSD1~~1 DCM.
43)	Sample	38	P27477	FRBIO2B	0512105-01

Bio Calibration

KAL BIO20105.M.

for MS 1-10-06

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): WHAB56 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

PAH #2 Sequence Information

SHC Continuing Calibration: ~~WHAC10~~ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB56 Conc.: 500ng/mL *

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

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

Last Modified: Sat Jan 07 07:43:27 2006

Sequence Name: C:\MSDCHEM\1\SEQUENCE\S2010301.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	39	P27478	FRBIO2B	0512105-02 ✓
45)	Sample	40	P27479	FRBIO2B	0512105-03 ✓
46)	Sample	41	P27480	FRBIO2B	0512105-04 ✓
47)	Pause				
48)	RearSamp	51	P27481	FRBIO2B	DCM
49)	Sample	42	P27482	FRBIO2B	0512105-05 ✓
50)	Pause				
51)	Sample	43	P27484	FRBIO2B	C2010401 PASS
52)	Sample	44	P27486	FRBIO2B	0512105-06 ✓
53)	Sample	45	P27488	FRBIO2B	0512105-07 ✓
54)	Sample	46	P27490	FRBIO2B	0512105-08 ✓
55)	Sample	47	P27492	FRBIO2B	0512105-08D ✓
56)	Sample	48	P27494	FRBIO2B	C2010402 PASS

✓ run used

MS 1-9-06

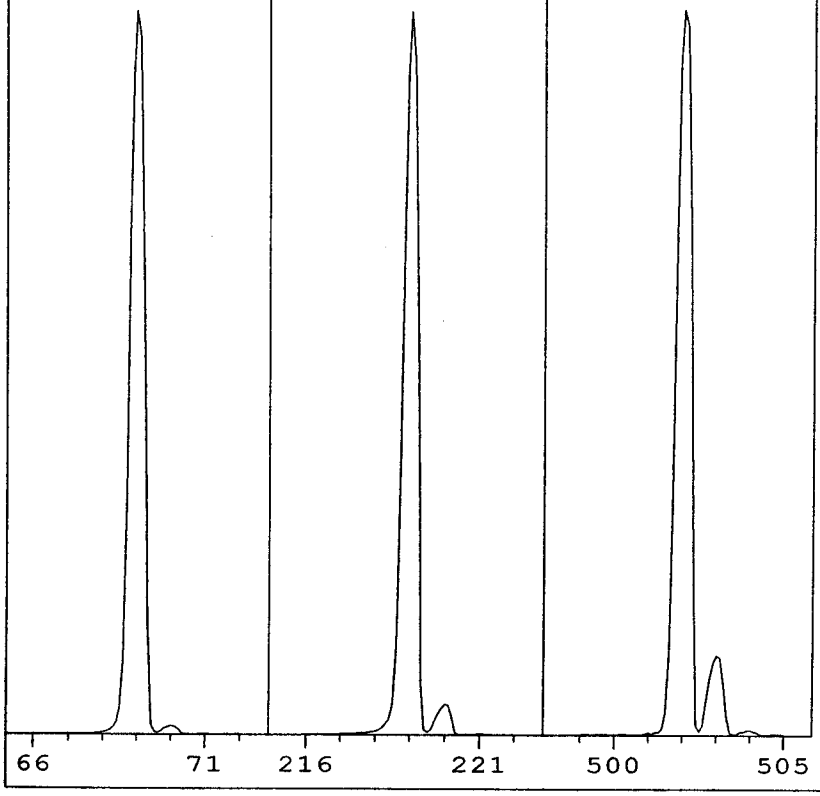
5973

1/3/00

Tue Jan 03 13:15:47 2006 Instrument: PAHINST2

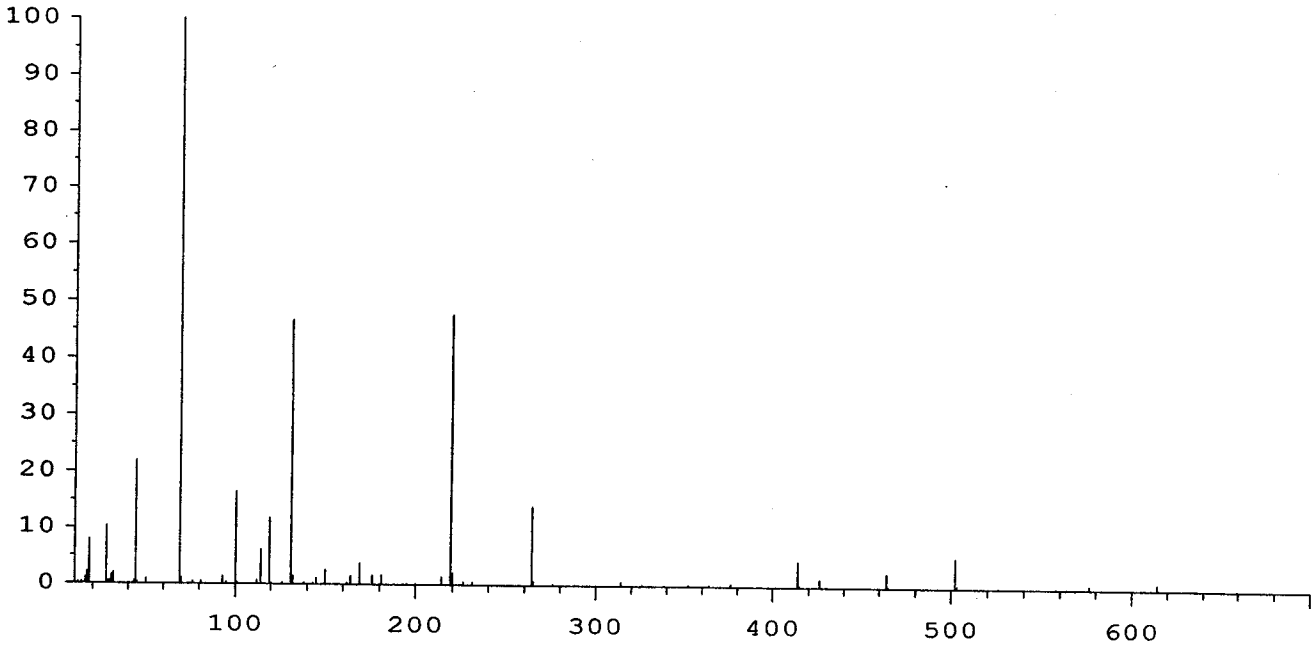
C:\MSDCHEM\1\5973N\PFTBA.U

Mass	69.00	Mass	219.00	Mass	502.00
Ab	202066	Ab	99172	Ab	10208
Pw50	0.48	Pw50	0.47	Pw50	0.50



Ion Pol	POS	MassGain	132
		MassOffs	-12
Emission	34.6	AmuGain	2588
ElEnrgy	69.9	AmuOffs	132
Filament	1	Wid219	-0.038
		DC Pol	POS
Repeller	29.79		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	1482
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	Foreline	46
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
116 peaks Base: 69.00 Abundance: 176576



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	176576	100.00	70.00	1995	1.13
219.00	84088	47.62	220.00	3761	4.47
502.00	9281	5.26	503.00	998	10.75

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	13.6	15.1	15.3	14.6	15.1	19.1
TARGET ABUND(%):	1.0	100.0	45.0	50.0	5.0	6.0
ACTUAL TUNE ABUND(%):	0.9	100.0	46.6	47.6	4.5	5.3

RESPONSE FACTOR REPORT PAH3

METHOD: O: FORENSICS\METHODS\PAH3\JAN06\BIO30105.M

INITIAL CALIBRATION

AMS 5-6-06

CALIBRATION FILES	P27464.D	P27465.D	P27466.D	P27467.D	P27468.D	P27469.D	P27470.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
Chrysene-d12	ISTD								
17a(H),21B(H)-hopane - C30H52	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
Hopane (T19)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C23 Tricyclic Terpane (T4)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C24 Tricyclic Terpane (T5)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C25 Tricyclic Terpane (T6)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C24 Tetracyclic Terpane (T6a)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C26 Tricyclic Terpane-22S (T6b)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C26 Tricyclic Terpane-22R (T6c)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C28 Tricyclic Terpane-22S (T7)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C28 Tricyclic Terpane-22R (T8)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C29 Tricyclic Terpane-22S (T9)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C29 Tricyclic Terpane-22R (T10)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
18a-22,29,30-Trisnorneohopane-TS (T11)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C30 Tricyclic Terpane-22S	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
C30 Tricyclic Terpane-22R	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
17a(H)-22,29,30-Trisnorhopane-TM (T12)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
17a/b,21b/a 28,30-Bisnorhopane (T14a)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
17a(H),21b(H)-25-Norhopane (T14b)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30-Norhopane (T15)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
18a(H)-30-Norneohopane-C29Ts (T16)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
17a(H)-Diahopane (X)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30-Normoretane (T17)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
18a(H)&18b(H)-Oleananes (T18)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
Moretane (T20)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30-Homohopane-22S (T21)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30-Homohopane-22R (T22)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30,31-Bishomohopane-22S (T26)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30,31-Bishomohopane-22R (T27)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30,31-Trishomohopane-22S (T30)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
30,31-Trishomohopane-22R (T31)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
Tetrakishomohopane-22S (T32)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
Tetrakishomohopane-22R (T33)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
Pentakishomohopane-22S (T34)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
Pentakishomohopane-22R (T35)	0.465	0.556	0.542	0.568	0.552	0.492	0.458	0.519	8.86
5B(H)Cholane - Surr	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
13b(H),17a(H)-20S-Diacholestane (S4)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
13b(H),17a(H)-20R-Diacholestane (S5)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
13b,17a-20S-Methyldiacholestane (S8)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14a(H),17a(H)-20S-Cholestane (S12)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14a(H),17a(H)-20R-Cholestane (S17)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
13b,17a-20R-Ethyldiacholestane (S18)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
13a,17b-20S-Ethyldiacholestane (S19)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14a,17a-20S-Methylcholestane (S20)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14a,17a-20R-Methylcholestane (S24)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14a(H),17a(H)-20S-Ethylcholestane (S25)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14a(H),17a(H)-20R-Ethylcholestane (S28)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14b(H),17b(H)-20R-Cholestane (S14)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14b(H),17b(H)-20S-Cholestane (S15)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68

RESPONSE FACTOR REPORT PAH3									
METHOD: O: FORENSICS\METHODS\PAH3\JAN06\BIO30105.M									
INITIAL CALIBRATION									
CALIBRATION FILES	P27464.D	P27465.D	P27466.D	P27467.D	P27468.D	P27469.D	P27470.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
14b,17b-20R-Methylcholestane (S22)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14b,17b-20S-Methylcholestane (S23)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14b(H),17b(H)-20R-Ethylcholestane (S26)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68
14b(H),17b(H)-20S-Ethylcholestane (S27)	0.199	0.199	0.203	0.213	0.225	0.235	0.224	0.214	6.68

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27464.D
Acq On : 5 Jan 2006 5:22 am
Operator : AC
Sample : I2010401
Misc : L1 BIO
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 06 10:27:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:42:07 2006
Response via : Initial Calibration

1/9/06

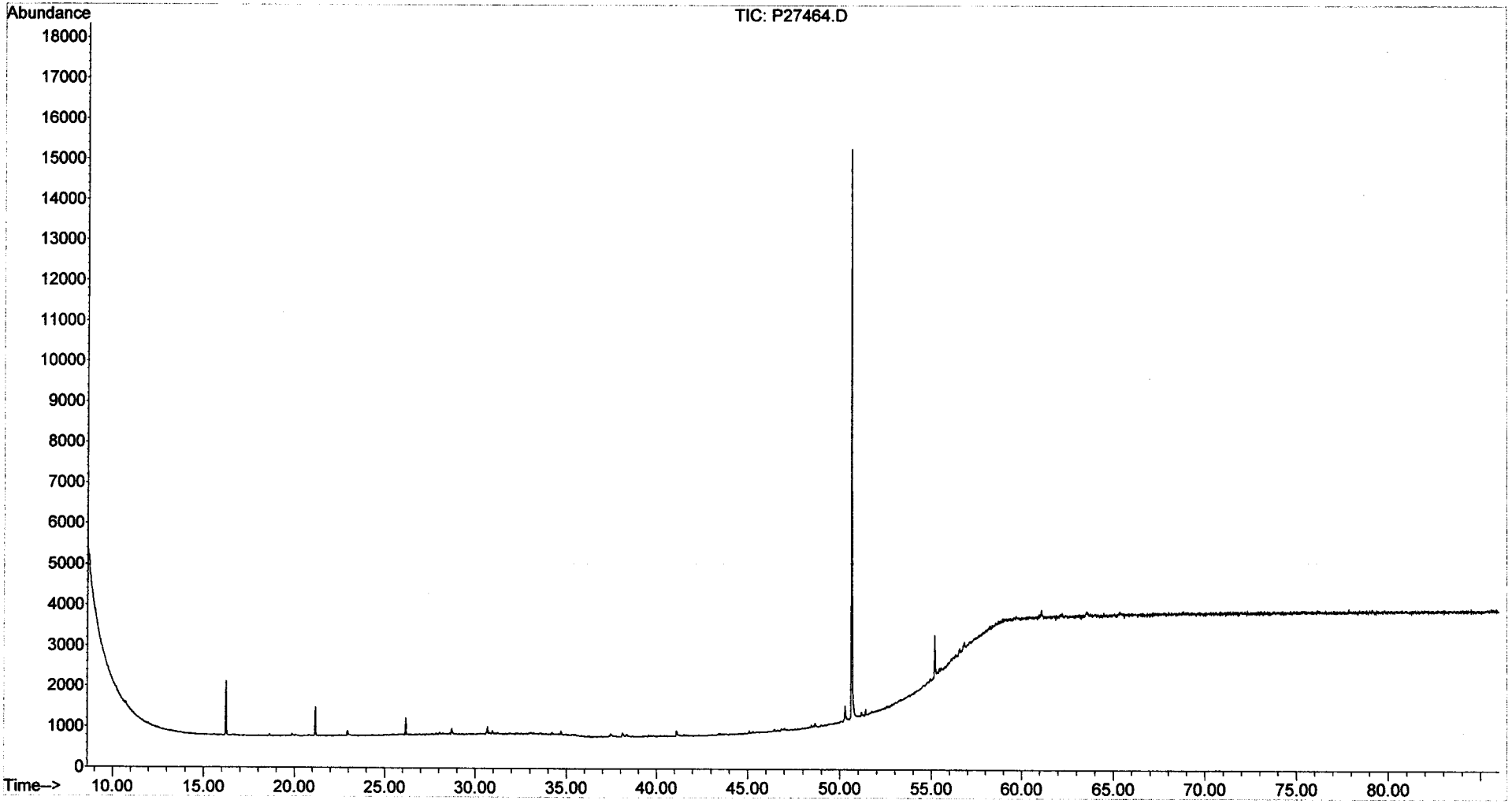
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	43659	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) 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	51.40	217	174m	9.31	ng/ml	-0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.93%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.11	191	406m	8.15	ng/mL	
84) Hopane (T19)	61.11	191	389m	7.81	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27464.D
Acq On : 5 Jan 2006 5:22 am
Operator : AC
Sample : I2010401
Misc : L1 BIO
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 06 10:27:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:42:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27465.D
Acq On : 5 Jan 2006 7:06 am
Operator : AC
Sample : I2010402
Misc : L2 BIO
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 06 10:28:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:51:30 2006
Response via : Initial Calibration

11/9/06

1/6/06

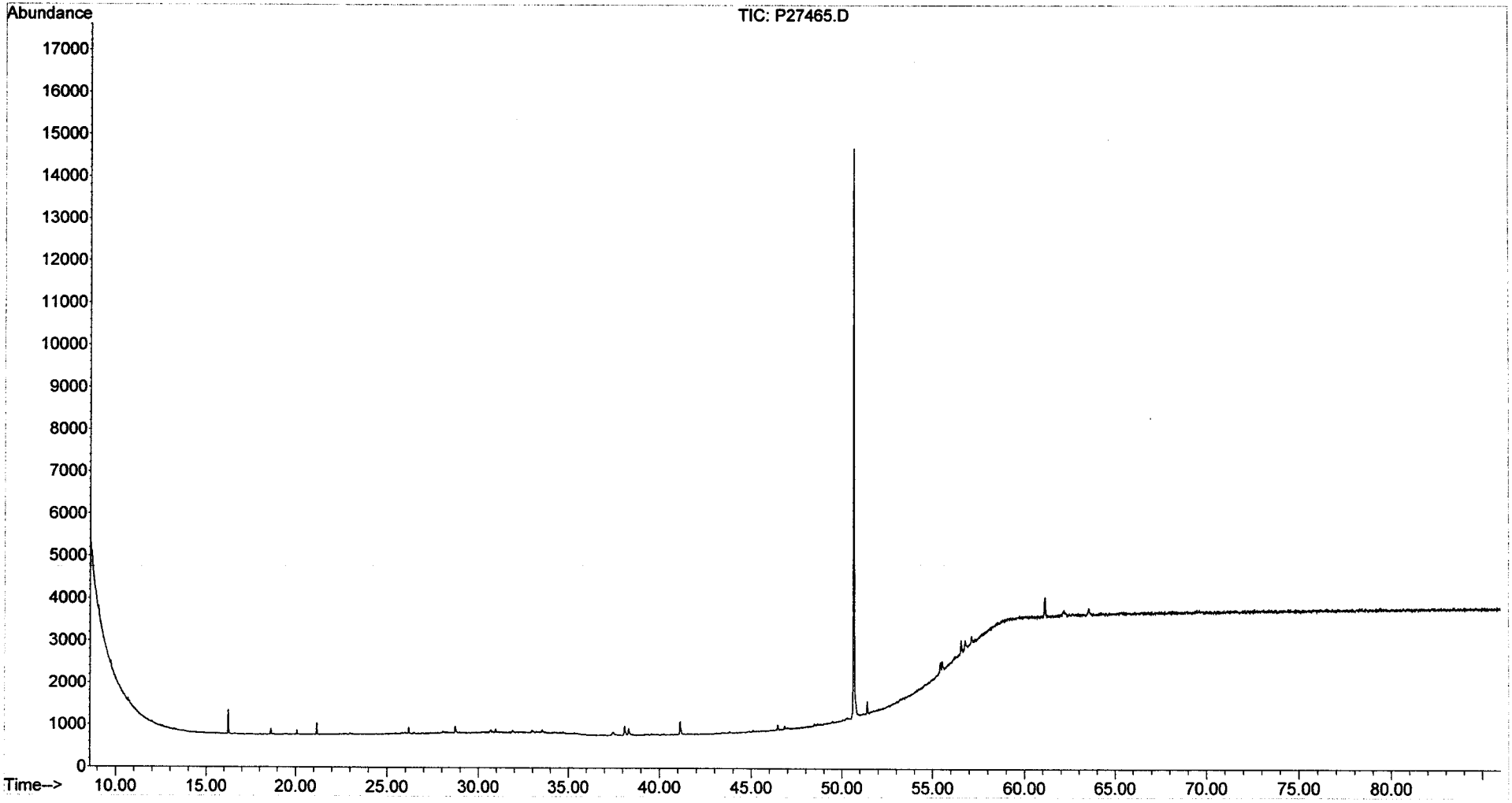
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	42104	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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	51.41	217	418	22.17	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.22%#		
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.11	191	1170m	29.83	ng/mL	
84) Hopane (T19)	61.11	191	1163m	29.19	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27465.D
Acq On : 5 Jan 2006 7:06 am
Operator : AC
Sample : I2010402
Misc : L2 BIO
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 06 10:28:18 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:51:30 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27466.D
Acq On : 5 Jan 2006 8:51 am
Operator : AC
Sample : I2010403
Misc : L3 BIO
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 05 13:54:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:53:10 2006
Response via : Initial Calibration

1/6/06

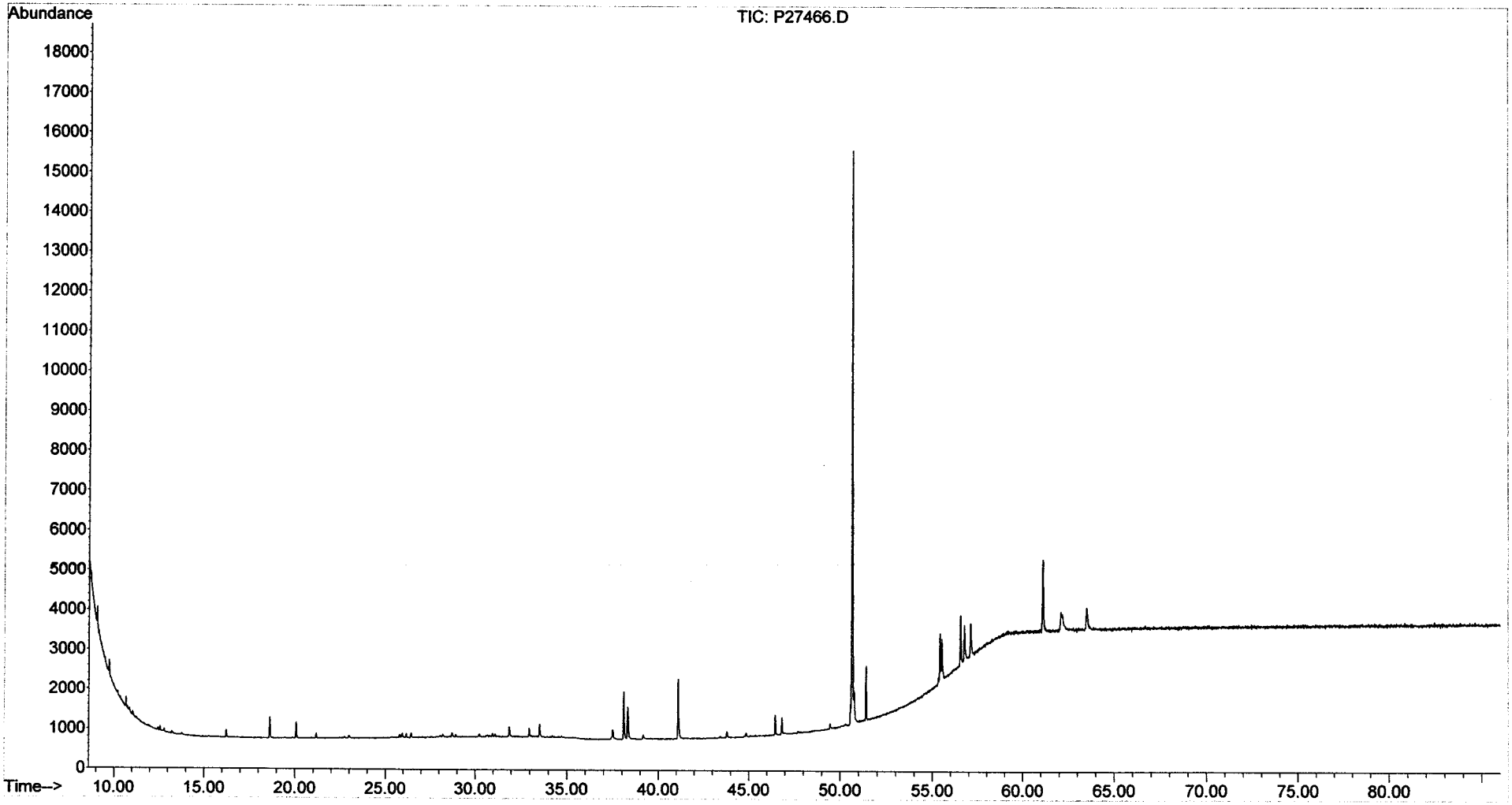
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	44149	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
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	51.41	217	1789	94.04	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.40%#		
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	4785	106.79	ng/mL#	95
84) Hopane (T19)	61.10	191	4785	105.76	ng/mL#	95

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27466.D
Acq On : 5 Jan 2006 8:51 am
Operator : AC
Sample : I2010403
Misc : L3 BIO
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 05 13:54:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:53:10 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : I2010404
Misc : L4 BIO
ALS Vial : 28 Sample Multiplier: 1

1/9/06

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 2006
Response via : Initial Calibration

MB 1-6-06

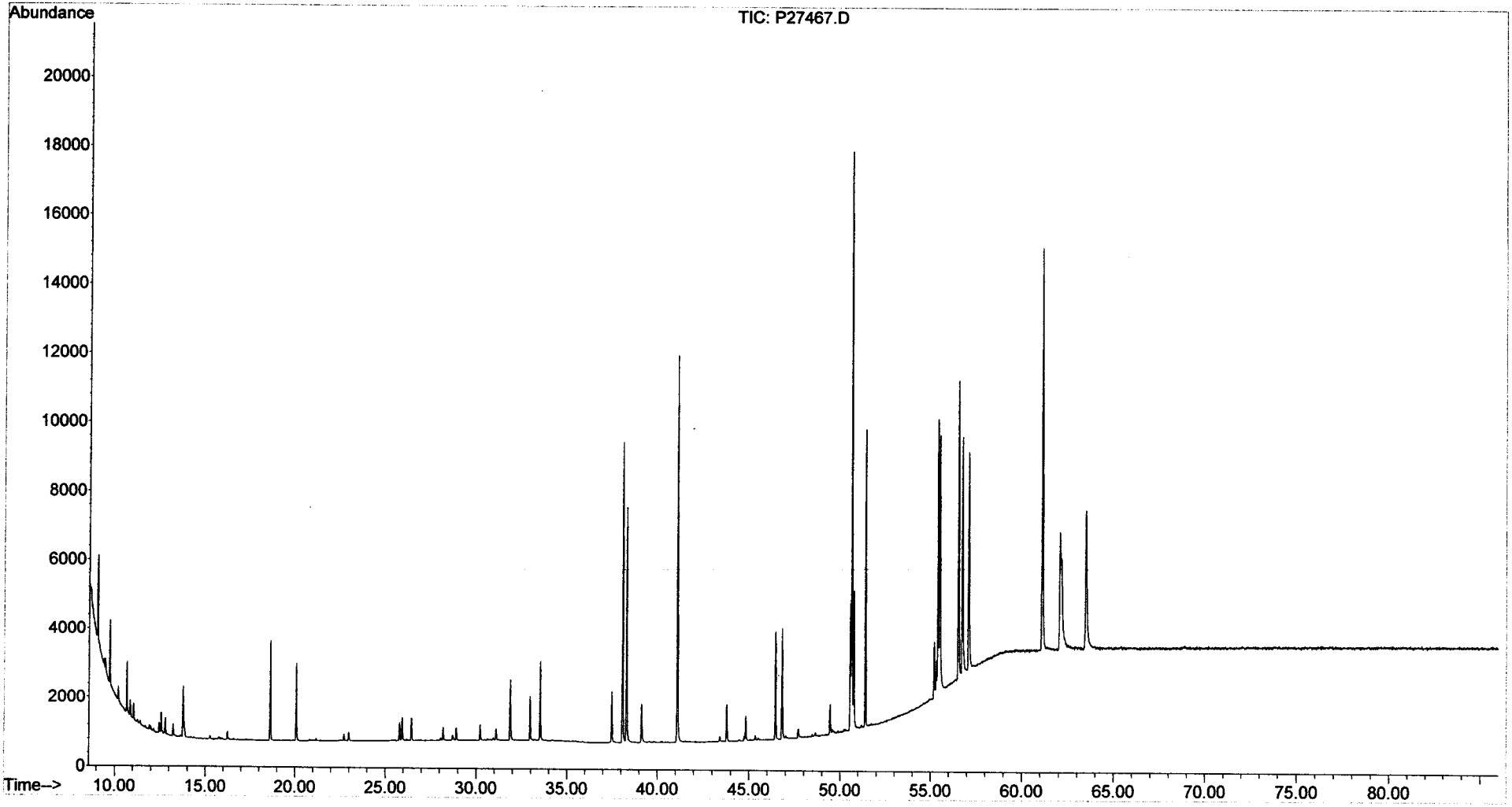
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	50518	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	51.41	217	10769	676.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 67.64%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	28701	803.92	ng/mL	99
84) Hopane (T19)	61.10	191	28701	792.79	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : I2010404
Misc : L4 BIO
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27468.D
Acq On : 5 Jan 2006 12:17 pm
Operator : AC
Sample : I2010405
Misc : L5 BIO
ALS Vial : 29 Sample Multiplier: 1

1/9/06

Quant Time: Jan 05 14:01:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:58:07 2006
Response via : Initial Calibration

1-6-06

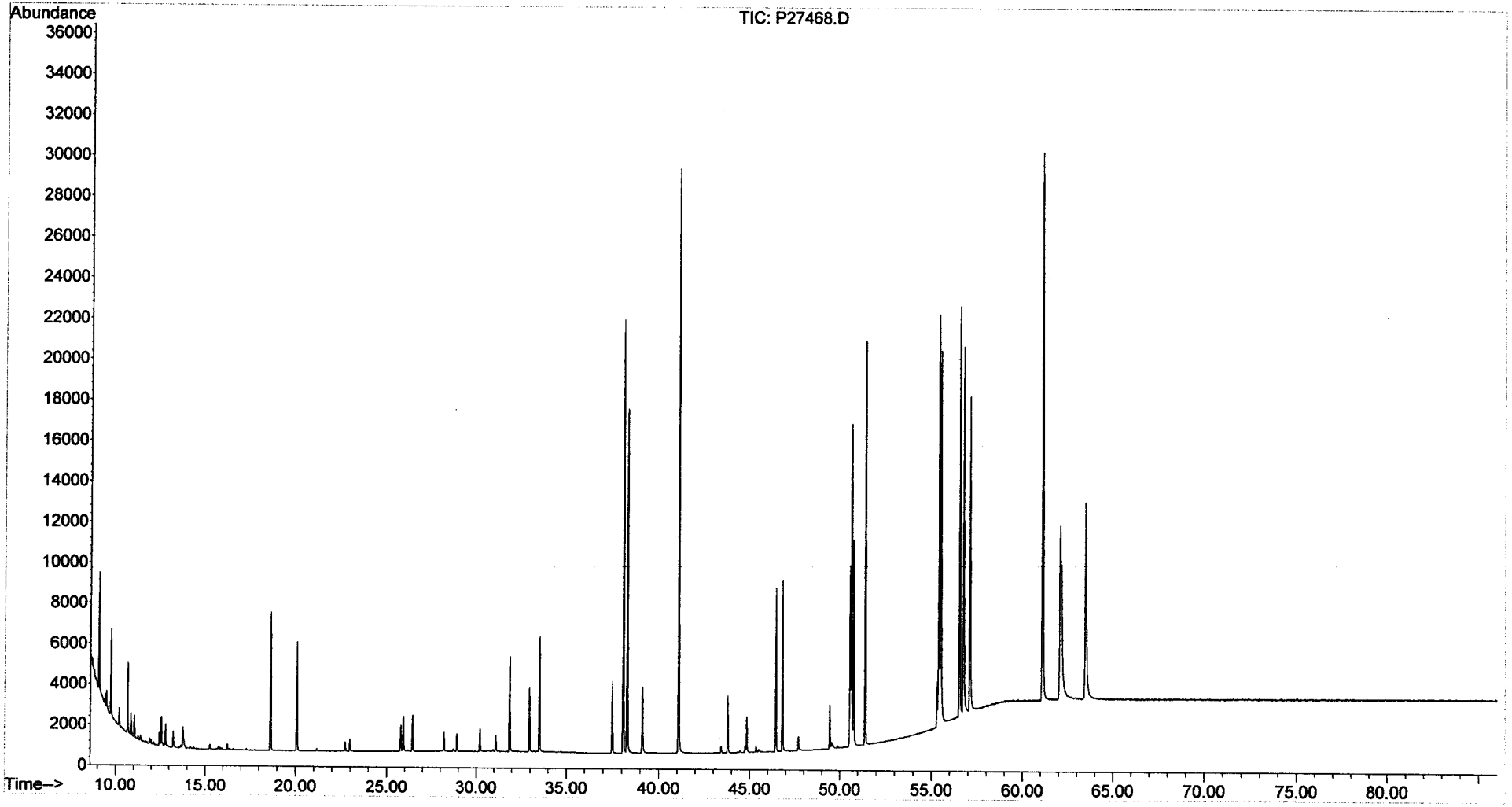
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.64	240	45839	500.00	ng/mL	-0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	51.41	217	25730	1323.90	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 132.39%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	63234	1338.19	ng/mL	100
84) Hopane (T19)	61.10	191	63234	1328.59	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27468.D
Acq On : 5 Jan 2006 12:17 pm
Operator : AC
Sample : I2010405
Misc : L5 BIO
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 05 14:01:22 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:58:07 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27469.D
Acq On : 5 Jan 2006 2:04 pm
Operator : AC
Sample : I2010406
Misc : L6 BIO
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 05 15:34:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 14:45:43 2006
Response via : Initial Calibration

1/9/06.

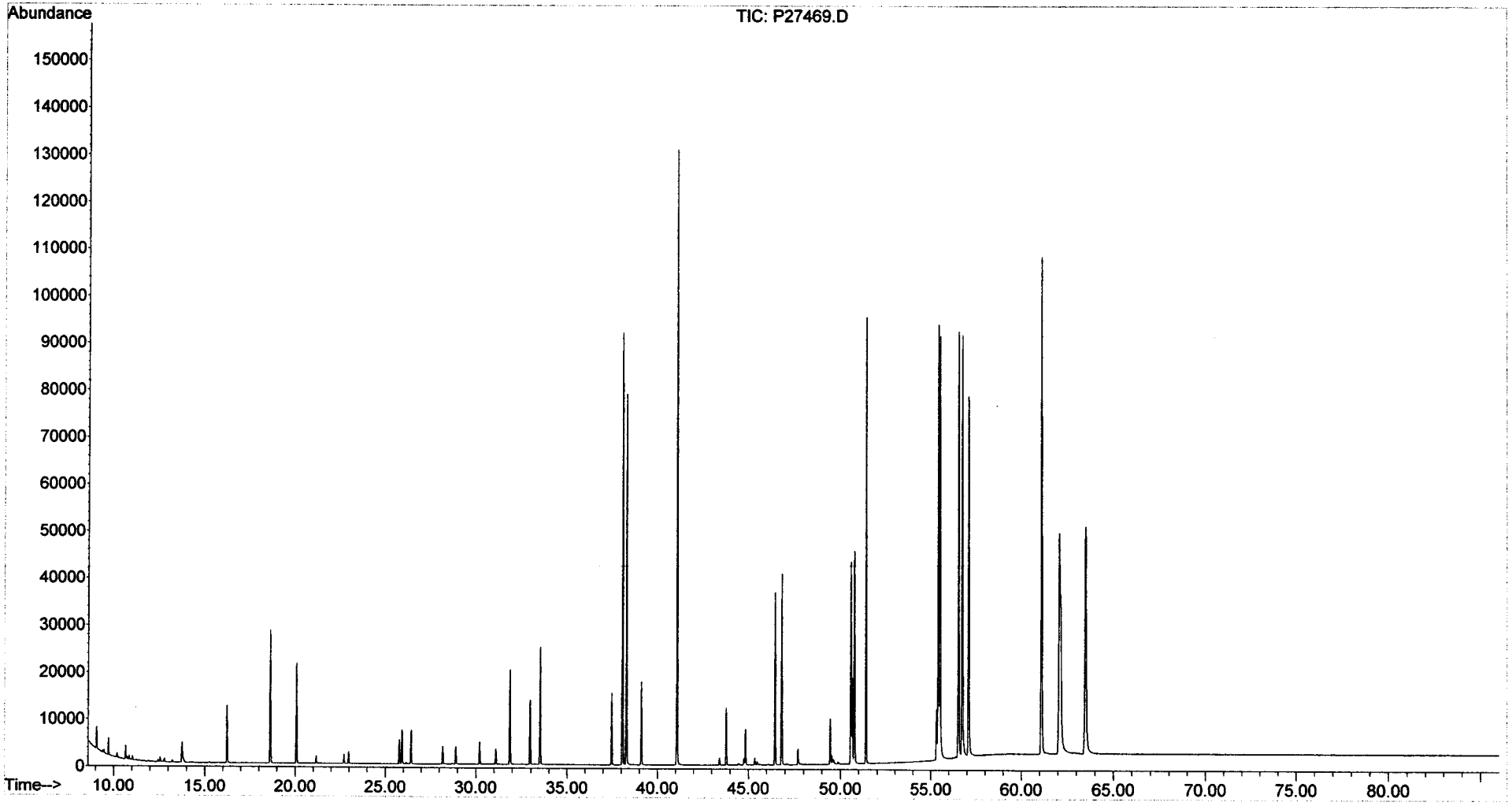
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	50844	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	51.41	217	119370	5472.70	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 547.27%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.11	191	250361	4710.24	ng/mL	100
84) Hopane (T19)	61.11	191	250361	4683.56	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27469.D
Acq On : 5 Jan 2006 2:04 pm
Operator : AC
Sample : I2010406
Misc : L6 BIO
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 05 15:34:41 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 14:45:43 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27470.D
Acq On : 5 Jan 2006 4:04 pm
Operator : AC
Sample : I2010407
Misc : L7 BIO
ALS Vial : 31 Sample Multiplier: 1

1/9/06

Quant Time: Jan 06 10:24:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 15:35:01 2006
Response via : Initial Calibration

1-6-06

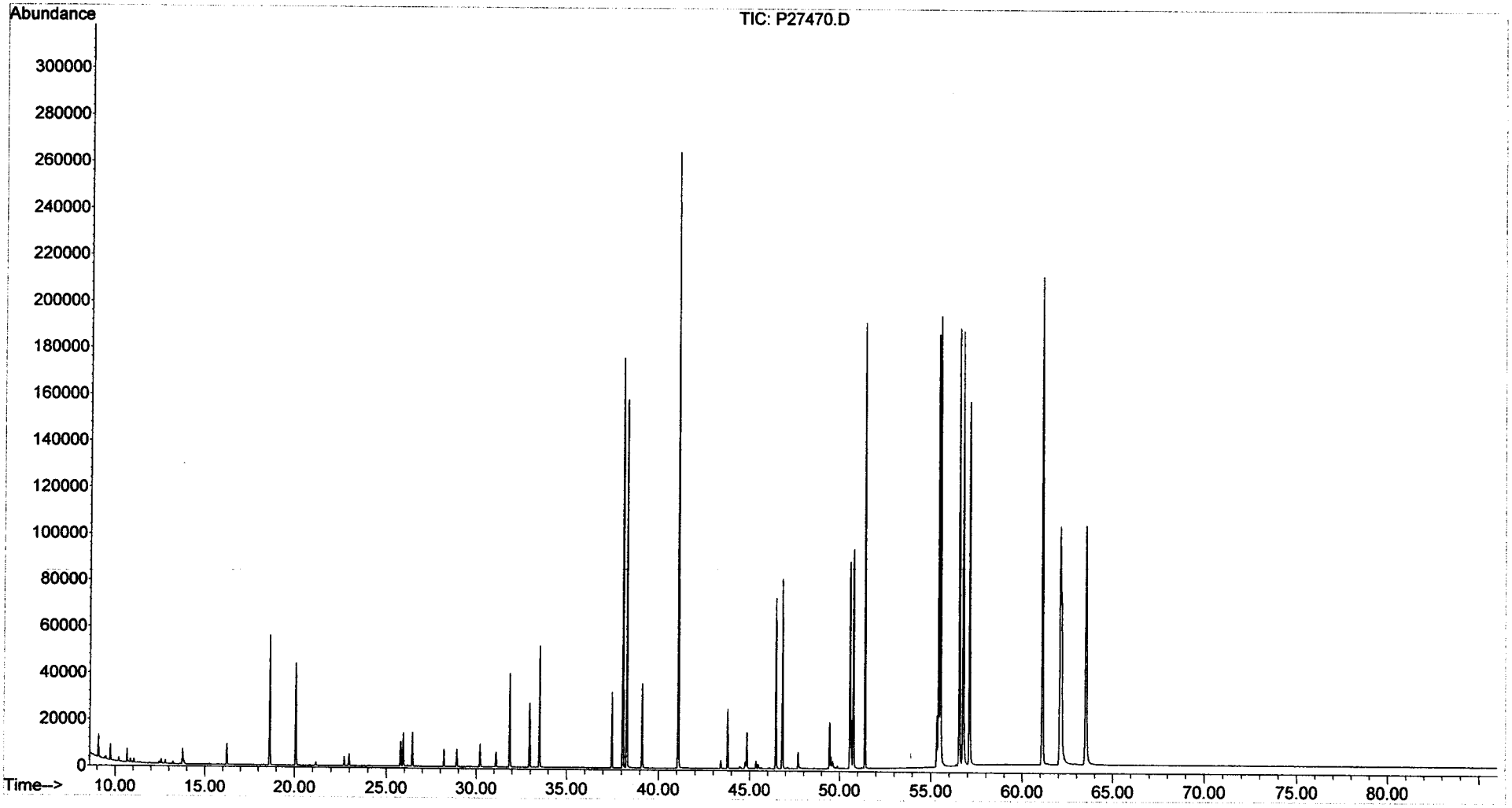
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	54217	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
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	51.41	217	242643m	10270.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	1027.04%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.11	191	496956	8853.47	ng/mL	100
84) Hopane (T19)	61.11	191	496956	8811.23	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27470.D
Acq On : 5 Jan 2006 4:04 pm
Operator : AC
Sample : I2010407
Misc : L7 BIO
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 06 10:24:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 15:35:01 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42918.D
Acq On : 30 Dec 2005 1:37 pm
Operator : AC
Sample : C4123001
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 30 16:37:21 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration

MJS for AC 1-3-06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	111	-0.06
2	t	Decalin	0.446	0.406	9.0	110	-0.05
3	A1	trans-Decalin	0.494	0.455	7.9	110	-0.05
4	t	cis-Decalin	0.382	0.341	10.7	106	-0.05
5	A2	C1-Decalins	0.494	0.000#	100.0#	0#	-18.41#
6	A2	C2-Decalins	0.494	0.000#	100.0#	0#	-19.74#
7	A2	C3-Decalins	0.494	0.000#	100.0#	0#	-22.21#
8	A2	C4-Decalins	0.494	0.000#	100.0#	0#	-25.61#
9	A1	Naphthalene	1.942	2.046	-5.4	115	-0.05
10	A2	C1-Naphthalenes	1.942	0.000#	100.0#	0#	-22.59#
11	A2	C2-Naphthalenes	1.942	0.000#	100.0#	0#	-25.44#
12	A2	C3-Naphthalenes	1.942	0.000#	100.0#	0#	-27.78#
13	A2	C4-Naphthalenes	1.942	0.000#	100.0#	0#	-30.55#
14	s	2-Methylnaphthalene-d10	0.949	1.062	-11.9	116	-0.05
15	t	2-Methylnaphthalene	1.237	1.354	-9.5	114	-0.05
16	t	1-Methylnaphthalene	1.246	1.281	-2.8	112	-0.05
17	A1	Benzothiophene	1.653	1.717	-3.9	114	-0.05
18	A2	C1-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-22.16#
19	A2	C2-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-25.64#
20	A2	C3-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-27.62#
21	A2	C4-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-29.36#
22	t	Biphenyl	1.482	1.662	-12.1	115	-0.05
23	t	2,6-Dimethylnaphthalene	1.073	1.185	-10.4	118	-0.05
24	t	Dibenzofuran	1.734	1.821	-5.0	110	-0.06
25	t	Acenaphthylene	2.173	2.075	4.5	114	-0.05
26	t	Acenaphthene	1.331	1.278	4.0	109	-0.05
27	t	2,3,5-Trimethylnaphthalene	1.098	1.094	0.4	113	-0.06
28	A1	Fluorene	1.426	1.463	-2.6	113	-0.05
29	A2	C1-Fluorenes	1.426	0.000#	100.0#	0#	-31.31#
30	A2	C2-Fluorenes	1.426	0.000#	100.0#	0#	-33.51#
31	A2	C3-Fluorenes	1.426	0.000#	100.0#	0#	-35.34#
32	A1	Dibenzothiophene	2.114	1.982	6.2	105	-0.06
33	A2	4-Methyldibenzothiophene(4M	2.114	0.000#	100.0#	0#	-34.04#
34	A2	2/3-Methyldibenzothiophene(	2.114	0.000#	100.0#	0#	-34.39#
35	A2	1-Methyldibenzothiophene(1M	2.114	0.000#	100.0#	0#	-34.81#
36	A2	OTP	2.114	0.000#	100.0#	0#	-34.47#
37	A2	C1-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-34.04#
38	A2	C2-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-35.73#
39	A2	C3-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-37.54#
40	A2	C4-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-38.43#
41	A1	Phenanthrene	2.378	2.135	10.2	108	-0.05
42	A2	3-Methylphenanthrene(3MP)	2.378	0.000#	100.0#	0#	-34.72#
43	A2	2/4-Methylphenanthrene(2MP)	2.378	0.000#	100.0#	0#	-34.84#
44	A2	2-Methylanthracene(2MA)	2.378	0.000#	100.0#	0#	-35.00#
45	A2	9-Methylphenanthrene(9MP)	2.378	0.000#	100.0#	0#	-35.18#
46	A2	1-Methylphenanthrene(1MP)	2.378	0.000#	100.0#	0#	-35.28#
47	A2	C1-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-35.18#
48	A2	C2-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-37.00#
49	A2	5AA IS BKGD	2.378	0.000#	100.0#	0#	-36.76#
50	A2	C3-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-38.84#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42918.D
Acq On : 30 Dec 2005 1:37 pm
Operator : AC
Sample : C4123001
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 30 16:37:21 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
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	2.378	0.000#	100.0#	0#	-41.01#
52	t	Retene	0.610	0.555	9.0	108	-0.06
53	t	Anthracene	2.172	2.032	6.4	109	-0.05
54	t	Carbazole	1.721	1.865	-8.4	118	-0.05
55	t	1-Methylphenanthrene	1.570	1.487	5.3	109	-0.06
56	A1	Fluoranthene	2.452	2.172	11.4	103	-0.06
57	t	Benzo(b)fluorene	1.436	1.416	1.4	113	-0.06
58	s	Pyrene-d10	2.358	2.121	10.1	102	-0.06
59	A1	Pyrene	2.543	2.176	14.4	98	-0.06
60	A2	C1-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-39.81#
61	A2	C2-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-41.62#
62	A2	C3-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-43.64#
63	A2	C4-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-44.99#
64	A1	Naphthobenzothiophene	2.312	2.055	11.1	103	-0.07
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.055	11.1	103	-0.07
66	A2	Naphthobenzothiophene-1,2-D	2.312	0.000#	100.0#	0#	-42.62#
67	A2	Naphthobenzothiophene-2,3-D	2.312	0.000#	100.0#	0#	-42.91#
68	A2	C1-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-43.67#
69	A2	C2-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-45.72#
70	A2	C3-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-47.27#
71	A2	C4-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-48.36#
72	i	Chrysene-d12	1.000	1.000	0.0	98	-0.06
73	t	Benz[a]anthracene	1.189	1.278	-7.5	109	-0.06
74	A1	Chrysene	1.207	1.216	-0.7	99	-0.07
75	A2	Chrysene/Triphenylene	1.207	1.216	-0.7	99	-0.07
76	A2	C1-Chrysenes	1.207	0.000#	100.0#	0#	-44.83#
77	A2	C2-Chrysenes	1.207	0.000#	100.0#	0#	-46.91#
78	A2	BBF-d12 Surr BKGD	1.207	0.000#	100.0#	0#	-47.16#
79	A2	C3-Chrysenes	1.207	0.000#	100.0#	0#	-49.64#
80	A2	C4-Chrysenes	1.207	0.000#	100.0#	0#	-49.24#
81	s	Benzo[b]fluoranthene-d12	1.047	1.036	1.1	98	-0.07
82	t	Benzo[b]fluoranthene	1.236	1.305	-5.6	102	-0.07
83	A1	Benzo[k]fluoranthene	1.394	1.329	4.7	96	-0.07
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.66#
85	t	Benzo[e]pyrene	1.246	1.217	2.3	98	-0.07
86	t	Benzo[a]pyrene	1.201	1.261	-5.0	101	-0.08
87	t	Perylene	1.189	1.214	-2.1	101	-0.08
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.177	-5.6	111	-0.11
89	t	Dibenz[a,h]anthracene	1.152	1.257	-9.1	105	-0.11
90	t	Benzo[g,h,i]perylene	1.271	1.280	-0.7	102	-0.11
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.474	1.5	95	-0.10
92	A2	Hopane (T19)	0.481	0.474	1.5	95	-0.10
93	A2	C23 Tricyclic Terpane (T4)	0.481	0.000#	100.0#	0#	-40.92#
94	A2	C24 Tricyclic Terpane (T5)	0.481	0.000#	100.0#	0#	-41.65#
95	A2	C25 Tricyclic Terpane (T6)	0.481	0.000#	100.0#	0#	-43.14#
96	A2	C24 Tetracyclic Terpane (T6	0.481	0.000#	100.0#	0#	-44.46#
97	A2	C26 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-44.20#
98	A2	C26 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-44.29#
99	A2	C28 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-46.58#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42918.D
Acq On : 30 Dec 2005 1:37 pm
Operator : AC
Sample : C4123001
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 30 16:37:21 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
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 (	0.481	0.000#	100.0#	0#	-46.74#
101	A2	C29 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-47.26#
102	A2	C29 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-47.47#
103	A2	18a-22,29,30-Trisnorneohopa	0.481	0.000#	100.0#	0#	-48.61#
104	A2	C30 Tricyclic Terpane-22S	0.481	0.000#	100.0#	0#	-48.70#
105	A2	C30 Tricyclic Terpane-22R	0.481	0.000#	100.0#	0#	-48.95#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.481	0.000#	100.0#	0#	-49.17#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.481	0.000#	100.0#	0#	-50.38#
108	A2	17a(H),21b(H)-25-Norhopane	0.481	0.000#	100.0#	0#	-50.16#
109	A2	30-Norhopane (T15)	0.481	0.000#	100.0#	0#	-51.07#
110	A2	18a(H)-30-Norneohopane-C29T	0.481	0.000#	100.0#	0#	-51.17#
111	A2	17a(H)-Diahopane (X)	0.481	0.000#	100.0#	0#	-51.30#
112	A2	30-Normoretane (T17)	0.481	0.000#	100.0#	0#	-51.87#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.481	0.000#	100.0#	0#	-52.28#
114	A2	Moretane (T20)	0.481	0.000#	100.0#	0#	-53.17#
115	A2	30-Homohopane-22S (T21)	0.481	0.000#	100.0#	0#	-54.31#
116	A2	30-Homohopane-22R (T22)	0.481	0.000#	100.0#	0#	-54.53#
117	A2	30,31-Bishomohopane-22S (T2	0.481	0.000#	100.0#	0#	-55.90#
118	A2	30,31-Bishomohopane-22R (T2	0.481	0.000#	100.0#	0#	-56.30#
119	A2	30,31-Trishomohopane-22S (T	0.481	0.000#	100.0#	0#	-58.10#
120	A2	30,31-Trishomohopane-22R (T	0.481	0.000#	100.0#	0#	-58.74#
121	A2	Tetrakishomohopane-22S (T32	0.481	0.000#	100.0#	0#	-60.82#
122	A2	Tetrakishomohopane-22R (T33	0.481	0.000#	100.0#	0#	-61.74#
123	A2	Pentakishomohopane-22S (T34	0.481	0.000#	100.0#	0#	-64.04#
124	A2	Pentakishomohopane-22R (T35	0.481	0.000#	100.0#	0#	-65.38#
125	SA1	5B(H)Cholane - Surr	0.226	0.225	0.4	102	-0.06
126	A2	13b(H),17a(H)-20S-Diacholes	0.226	0.000#	100.0#	0#	-45.41#
127	A2	13b(H),17a(H)-20R-Diacholes	0.226	0.000#	100.0#	0#	-45.84#
128	A2	13b,17a-20S-Methyldiacholes	0.226	0.000#	100.0#	0#	-46.53#
129	A2	14a(H),17a(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.40#
130	A2	14a(H),17a(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.93#
131	A2	13b,17a-20R-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.22#
132	A2	13a,17b-20S-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.49#
133	A2	14a,17a-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.65#
134	A2	14a,17a-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-49.37#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.73#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.66#
137	A2	14b(H),17b(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.50#
138	A2	14b(H),17b(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.58#
139	A2	14b,17b-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-48.82#
140	A2	14b,17b-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.90#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-49.98#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-50.03#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42918.D
Acq On : 30 Dec 2005 1:37 pm
Operator : AC
Sample : C4123001
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 30 16:37:21 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration

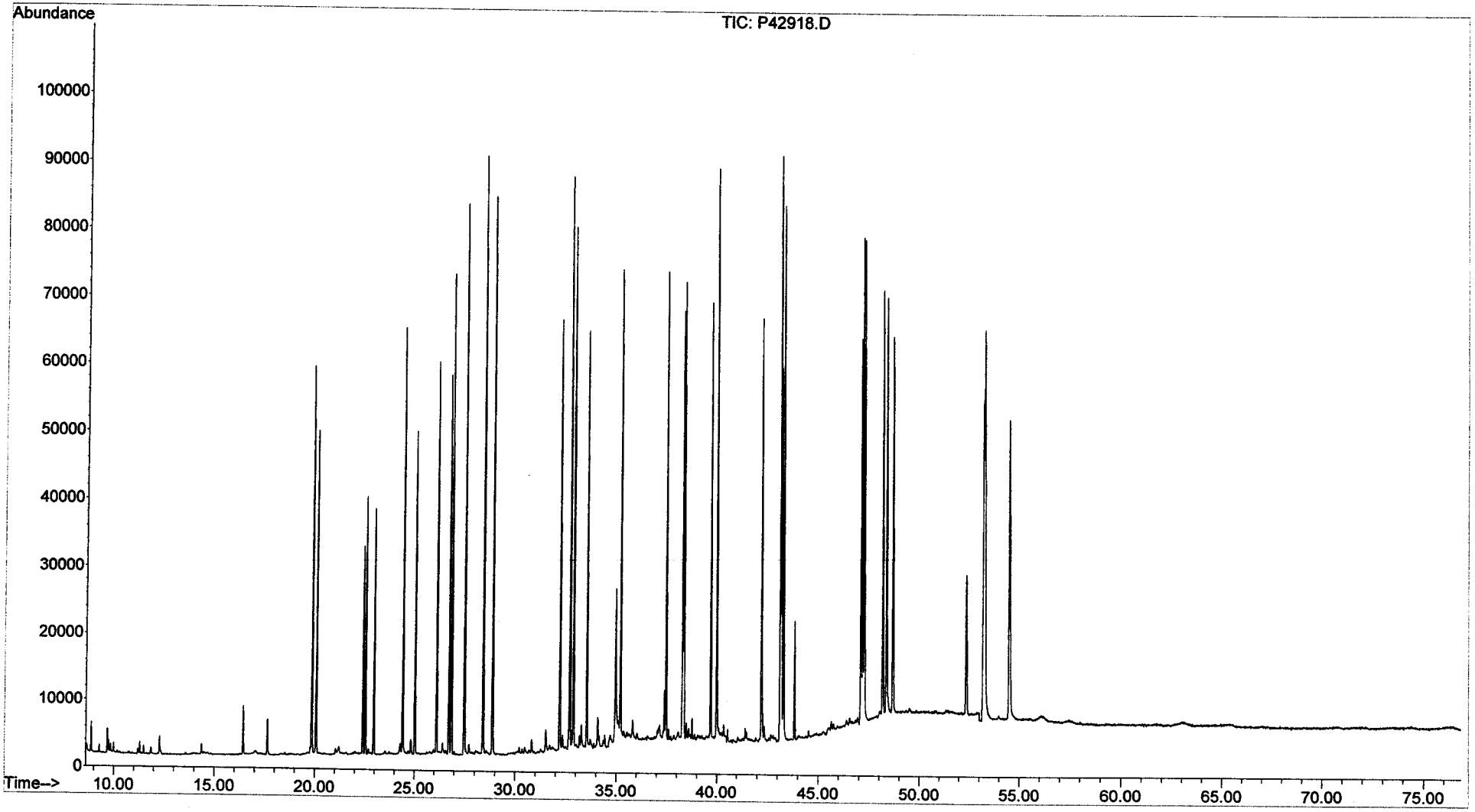
QWG AC 1-3-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.74	164	64071	500.00	ng/mL	-0.06
72) Chrysene-d12	43.20	240	106225	500.00	ng/mL	-0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	68038	559.74	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.97%			
58) Pyrene-d10	38.28	212	135902	449.73	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.97%#			
81) Benzo[b]fluoranthene-d12	47.10	264	110081	494.75	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.48%#			
125) 5B(H)Cholane - Surr	43.83	217	23945	497.95	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.80%#			
Target Compounds						Qvalue
2) Decalin	16.44	138	26008m	455.47	ng/mL	
3) trans-Decalin	16.44	138	14592	230.31	ng/mL	100
4) cis-Decalin	17.64	138	10929	223.13	ng/mL	100
9) Naphthalene	19.84	128	131118	526.90	ng/mL#	100
15) 2-Methylnaphthalene	22.54	142	86754	547.26	ng/mL#	100
16) 1-Methylnaphthalene	22.96	142	82046	513.76	ng/mL#	100
17) Benzothiophene	20.06	134	110040	519.45	ng/mL	100
22) Biphenyl	24.42	154	106472	560.62	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.03	156	75937	552.45	ng/mL#	100
24) Dibenzofuran	27.50	168	116692	525.18	ng/mL	100
25) Acenaphthylene	26.13	152	132971	477.50	ng/mL#	100
26) Acenaphthene	26.87	153	81871	479.87	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.42	170	70068	498.16	ng/mL	99
28) Fluorene	28.88	166	93742	512.90	ng/mL	99
32) Dibenzothiophene	32.20	184	126967	468.60	ng/mL	100
41) Phenanthrene	32.70	178	136805	448.86	ng/mL	100
52) Retene	39.69	234	35566	455.30	ng/mL	100
53) Anthracene	32.88	178	130170	467.74	ng/mL	100
54) Carbazole	33.54	167	119502	541.81	ng/mL	100
55) 1-Methylphenanthrene	35.20	192	95303	473.86	ng/mL	100
56) Fluoranthene	37.47	202	139153	442.93	ng/mL	98
57) Benzo(b)fluorene	39.99	216	90716	492.98	ng/mL	100
59) Pyrene	38.35	202	139411	427.74	ng/mL	99
64) Naphthobenzothiophene	42.20	234	131646	444.26	ng/ml	97
65) Naphthobenzothiophene-2,1-	42.20	234	131646	444.26	ng/mL	97
73) Benz[a]anthracene	43.13	228	135738	537.25	ng/mL	100
74) Chrysene	43.29	228	129140	503.64	ng/mL	99
75) Chrysene/Triphenylene	43.29	228	129140	503.64	ng/mL	99
82) Benzo[b]fluoranthene	47.18	252	138641	528.01	ng/mL	99
83) Benzo[k]fluoranthene	47.26	252	141156	476.57	ng/mL	99
85) Benzo[e]pyrene	48.19	252	129296	488.60	ng/mL	99
86) Benzo[a]pyrene	48.37	252	133918	525.03	ng/mL	99
87) Perylene	48.68	252	128952	510.52	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.21	276	125079m	527.98	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	133550	545.64	ng/mL	98
90) Benzo[g,h,i]perylene	54.51	276	135933	503.53	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	50309	492.04	ng/mL	99
92) Hopane (T19)	52.36	191	50309	492.04	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\DECEMBER\DEC30\
Data File : P42918.D
Acq On : 30 Dec 2005 1:37 pm
Operator : AC
Sample : C4123001
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 30 16:37:21 2005
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42940.D
Acq On : 31 Dec 2005 6:00 am
Operator : AC
Sample : C4123002
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 03 10:30:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration

MB 1-3-06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	98	-0.06
2	t	Decalin	0.446	0.401	10.1	96	-0.05
3	A1	trans-Decalin	0.494	0.449	9.1	96	-0.05
4	t	cis-Decalin	0.382	0.346	9.4	96	-0.05
5	A2	C1-Decalins	0.494	0.000#	100.0#	0#	-18.41#
6	A2	C2-Decalins	0.494	0.000#	100.0#	0#	-19.74#
7	A2	C3-Decalins	0.494	0.000#	100.0#	0#	-22.21#
8	A2	C4-Decalins	0.494	0.000#	100.0#	0#	-25.61#
9	A1	Naphthalene	1.942	2.034	-4.7	101	-0.05
10	A2	C1-Naphthalenes	1.942	0.000#	100.0#	0#	-22.59#
11	A2	C2-Naphthalenes	1.942	0.000#	100.0#	0#	-25.44#
12	A2	C3-Naphthalenes	1.942	0.000#	100.0#	0#	-27.78#
13	A2	C4-Naphthalenes	1.942	0.000#	100.0#	0#	-30.55#
14	s	2-Methylnaphthalene-d10	0.949	1.070	-12.8	103	-0.05
15	t	2-Methylnaphthalene	1.237	1.365	-10.3	102	-0.05
16	t	1-Methylnaphthalene	1.246	1.287	-3.3	100	-0.05
17	A1	Benzothiophene	1.653	1.686	-2.0	100	-0.05
18	A2	C1-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-22.16#
19	A2	C2-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-25.64#
20	A2	C3-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-27.62#
21	A2	C4-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-29.36#
22	t	Biphenyl	1.482	1.665	-12.3	102	-0.05
23	t	2,6-Dimethylnaphthalene	1.073	1.185	-10.4	104	-0.05
24	t	Dibenzofuran	1.734	1.838	-6.0	98	-0.06
25	t	Acenaphthylene	2.173	2.209	-1.7	108	-0.05
26	t	Acenaphthene	1.331	1.298	2.5	99	-0.05
27	t	2,3,5-Trimethylnaphthalene	1.098	1.083	1.4	99	-0.05
28	A1	Fluorene	1.426	1.463	-2.6	100	-0.05
29	A2	C1-Fluorenes	1.426	0.000#	100.0#	0#	-31.31#
30	A2	C2-Fluorenes	1.426	0.000#	100.0#	0#	-33.51#
31	A2	C3-Fluorenes	1.426	0.000#	100.0#	0#	-35.34#
32	A1	Dibenzothiophene	2.114	2.013	4.8	94	-0.05
33	A2	4-Methyldibenzothiophene(4M	2.114	0.000#	100.0#	0#	-34.04#
34	A2	2/3-Methyldibenzothiophene(	2.114	0.000#	100.0#	0#	-34.39#
35	A2	1-Methyldibenzothiophene(1M	2.114	0.000#	100.0#	0#	-34.81#
36	A2	OTP	2.114	0.000#	100.0#	0#	-34.47#
37	A2	C1-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-34.04#
38	A2	C2-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-35.73#
39	A2	C3-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-37.54#
40	A2	C4-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-38.43#
41	A1	Phenanthrene	2.378	2.098	11.8	94	-0.05
42	A2	3-Methylphenanthrene(3MP)	2.378	0.000#	100.0#	0#	-34.72#
43	A2	2/4-Methylphenanthrene(2MP)	2.378	0.000#	100.0#	0#	-34.84#
44	A2	2-Methylanthracene(2MA)	2.378	0.000#	100.0#	0#	-35.00#
45	A2	9-Methylphenanthrene(9MP)	2.378	0.000#	100.0#	0#	-35.18#
46	A2	1-Methylphenanthrene(1MP)	2.378	0.000#	100.0#	0#	-35.28#
47	A2	C1-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-35.18#
48	A2	C2-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-37.00#
49	A2	5AA IS BKGD	2.378	0.000#	100.0#	0#	-36.76#
50	A2	C3-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-38.84#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42940.D
Acq On : 31 Dec 2005 6:00 am
Operator : AC
Sample : C4123002
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 03 10:30:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
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	2.378	0.000#	100.0#	0#	-41.01#
52	t	Retene	0.610	0.613	-0.5	106	-0.05
53	t	Anthracene	2.172	2.063	5.0	98	-0.05
54	t	Carbazole	1.721	1.863	-8.3	105	-0.05
55	t	1-Methylphenanthrene	1.570	1.531	2.5	100	-0.05
56	A1	Fluoranthene	2.452	2.336	4.7	98	-0.05
57	t	Benzo(b)fluorene	1.436	1.538	-7.1	109	-0.06
58	s	Pyrene-d10	2.358	2.305	2.2	98	-0.06
59	A1	Pyrene	2.543	2.373	6.7	95	-0.06
60	A2	C1-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-39.81#
61	A2	C2-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-41.62#
62	A2	C3-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-43.64#
63	A2	C4-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-44.99#
64	A1	Naphthobenzothiophene	2.312	2.225	3.8	99	-0.06
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.225	3.8	99	-0.06
66	A2	Naphthobenzothiophene-1,2-D	2.312	0.000#	100.0#	0#	-42.62#
67	A2	Naphthobenzothiophene-2,3-D	2.312	0.000#	100.0#	0#	-42.91#
68	A2	C1-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-43.67#
69	A2	C2-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-45.72#
70	A2	C3-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-47.27#
71	A2	C4-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-48.36#
72	i	Chrysene-d12	1.000	1.000	0.0	92	-0.07
73	t	Benz[a]anthracene	1.189	1.268	-6.6	102	-0.06
74	A1	Chrysene	1.207	1.193	1.2	91	-0.07
75	A2	Chrysene/Triphenylene	1.207	1.193	1.2	91	-0.07
76	A2	C1-Chrysenes	1.207	0.000#	100.0#	0#	-44.83#
77	A2	C2-Chrysenes	1.207	0.000#	100.0#	0#	-46.91#
78	A2	BBF-d12 Surr BKGD	1.207	0.000#	100.0#	0#	-47.16#
79	A2	C3-Chrysenes	1.207	0.000#	100.0#	0#	-49.64#
80	A2	C4-Chrysenes	1.207	0.000#	100.0#	0#	-49.24#
81	s	Benzo[b]fluoranthene-d12	1.047	0.881	15.9	78	-0.07
82	t	Benzo[b]fluoranthene	1.236	1.128	8.7	83	-0.07
83	A1	Benzo[k]fluoranthene	1.394	1.129	19.0	76	-0.07
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.66#
85	t	Benzo[e]pyrene	1.246	1.012	18.8	77	-0.07
86	t	Benzo[a]pyrene	1.201	1.057	12.0	80	-0.07
87	t	Perylene	1.189	1.016	14.6	79	-0.07
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.028	7.8	91	-0.11
89	t	Dibenz[a,h]anthracene	1.152	1.040	9.7	81	-0.10
90	t	Benzo[g,h,i]perylene	1.271	1.044	17.9	78	-0.11
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.378	21.4	71	-0.10
92	A2	Hopane (T19)	0.481	0.378	21.4	71	-0.10
93	A2	C23 Tricyclic Terpane (T4)	0.481	0.000#	100.0#	0#	-40.92#
94	A2	C24 Tricyclic Terpane (T5)	0.481	0.000#	100.0#	0#	-41.65#
95	A2	C25 Tricyclic Terpane (T6)	0.481	0.000#	100.0#	0#	-43.14#
96	A2	C24 Tetracyclic Terpane (T6	0.481	0.000#	100.0#	0#	-44.46#
97	A2	C26 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-44.20#
98	A2	C26 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-44.29#
99	A2	C28 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-46.58#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42940.D
Acq On : 31 Dec 2005 6:00 am
Operator : AC
Sample : C4123002
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 03 10:30:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
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 (	0.481	0.000#	100.0#	0#	-46.74#
101	A2	C29 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-47.26#
102	A2	C29 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-47.47#
103	A2	18a-22,29,30-Trisnorneohopa	0.481	0.000#	100.0#	0#	-48.61#
104	A2	C30 Tricyclic Terpane-22S	0.481	0.000#	100.0#	0#	-48.70#
105	A2	C30 Tricyclic Terpane-22R	0.481	0.000#	100.0#	0#	-48.95#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.481	0.000#	100.0#	0#	-49.17#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.481	0.000#	100.0#	0#	-50.38#
108	A2	17a(H),21b(H)-25-Norhopane	0.481	0.000#	100.0#	0#	-50.16#
109	A2	30-Norhopane (T15)	0.481	0.000#	100.0#	0#	-51.07#
110	A2	18a(H)-30-Norneohopane-C29T	0.481	0.000#	100.0#	0#	-51.17#
111	A2	17a(H)-Diahopane (X)	0.481	0.000#	100.0#	0#	-51.30#
112	A2	30-Normoretane (T17)	0.481	0.000#	100.0#	0#	-51.87#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.481	0.000#	100.0#	0#	-52.28#
114	A2	Moretane (T20)	0.481	0.000#	100.0#	0#	-53.17#
115	A2	30-Homohopane-22S (T21)	0.481	0.000#	100.0#	0#	-54.31#
116	A2	30-Homohopane-22R (T22)	0.481	0.000#	100.0#	0#	-54.53#
117	A2	30,31-Bishomohopane-22S (T2	0.481	0.000#	100.0#	0#	-55.90#
118	A2	30,31-Bishomohopane-22R (T2	0.481	0.000#	100.0#	0#	-56.30#
119	A2	30,31-Trishomohopane-22S (T	0.481	0.000#	100.0#	0#	-58.10#
120	A2	30,31-Trishomohopane-22R (T	0.481	0.000#	100.0#	0#	-58.74#
121	A2	Tetrakishomohopane-22S (T32	0.481	0.000#	100.0#	0#	-60.82#
122	A2	Tetrakishomohopane-22R (T33	0.481	0.000#	100.0#	0#	-61.74#
123	A2	Pentakishomohopane-22S (T34	0.481	0.000#	100.0#	0#	-64.04#
124	A2	Pentakishomohopane-22R (T35	0.481	0.000#	100.0#	0#	-65.38#
125	SA1	5B(H)Cholane - Surr	0.226	0.221	2.2	94	-0.06
126	A2	13b(H),17a(H)-20S-Diacholes	0.226	0.000#	100.0#	0#	-45.41#
127	A2	13b(H),17a(H)-20R-Diacholes	0.226	0.000#	100.0#	0#	-45.84#
128	A2	13b,17a-20S-Methyldiacholes	0.226	0.000#	100.0#	0#	-46.53#
129	A2	14a(H),17a(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.40#
130	A2	14a(H),17a(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.93#
131	A2	13b,17a-20R-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.22#
132	A2	13a,17b-20S-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.49#
133	A2	14a,17a-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.65#
134	A2	14a,17a-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-49.37#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.73#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.66#
137	A2	14b(H),17b(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.50#
138	A2	14b(H),17b(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.58#
139	A2	14b,17b-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-48.82#
140	A2	14b,17b-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.90#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-49.98#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-50.03#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42940.D
Acq On : 31 Dec 2005 6:00 am
Operator : AC
Sample : C4123002
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 03 10:30:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration

AMS 1-306

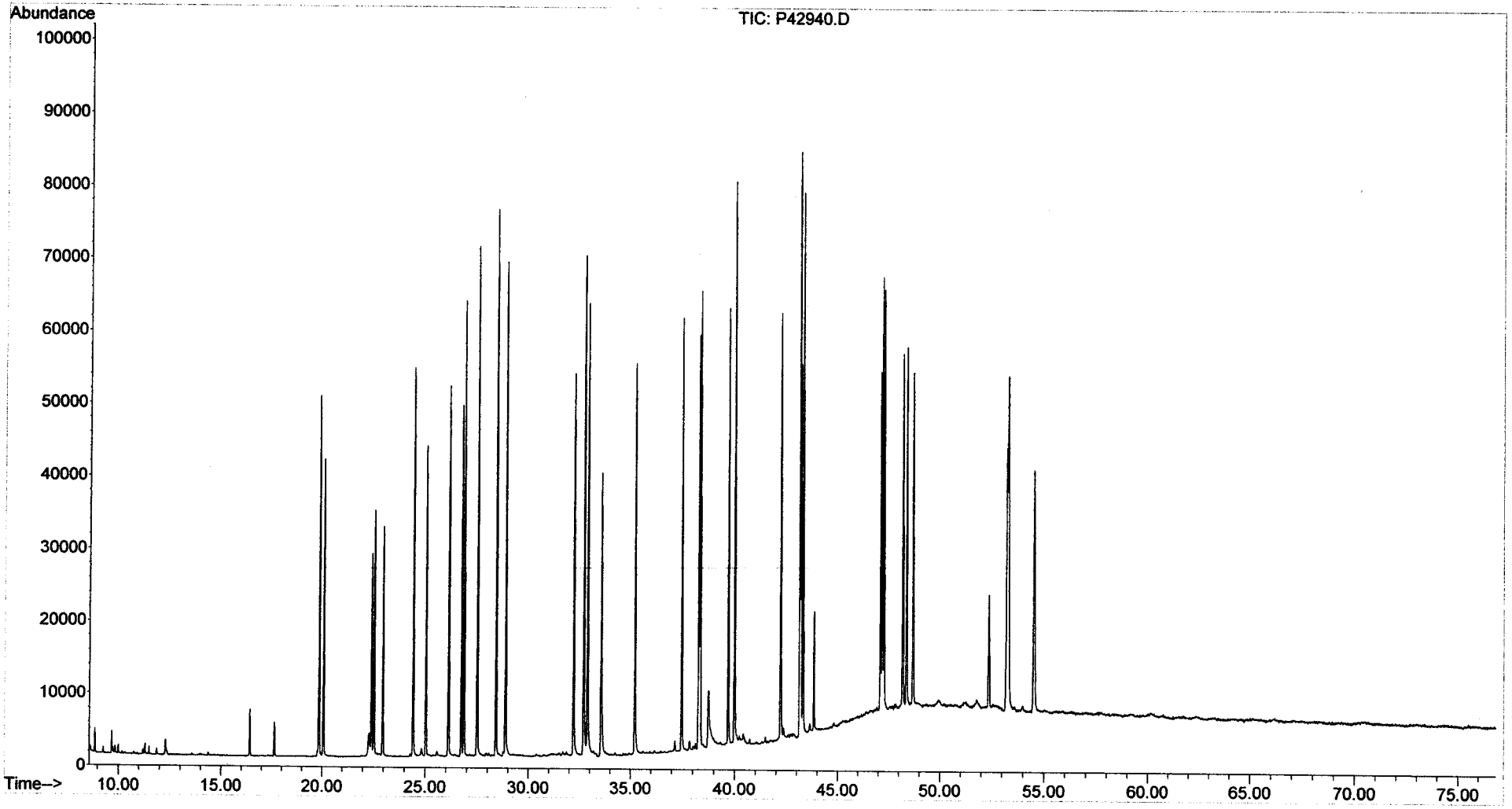
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.74	164	56934	500.00	ng/mL	-0.06
72) Chrysene-d12	43.19	240	99684	500.00	ng/mL	-0.07
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	60895	563.78	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.38%			
58) Pyrene-d10	38.28	212	131256	488.81	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.88%#			
81) Benzo[b]fluoranthene-d12	47.09	264	87795	420.48	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.05%#			
125) 5B(H)Cholane - Surr	43.83	217	22065	488.97	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.90%#			

Target Compounds						Qvalue
2) Decalin	16.43	138	22851m	450.34	ng/mL	
3) trans-Decalin	16.43	138	12776	226.92	ng/mL	100
4) cis-Decalin	17.64	138	9841	226.10	ng/mL	100
9) Naphthalene	19.84	128	115802	523.69	ng/mL#	100
15) 2-Methylnaphthalene	22.54	142	77706	551.64	ng/mL#	100
16) 1-Methylnaphthalene	22.96	142	73254	516.20	ng/mL#	100
17) Benzothiophene	20.06	134	96018	510.07	ng/mL	100
22) Biphenyl	24.42	154	94777	561.60	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.03	156	67440	552.14	ng/mL#	100
24) Dibenzofuran	27.50	168	104621	529.88	ng/mL	99
25) Acenaphthylene	26.13	152	125772	508.27	ng/mL#	100
26) Acenaphthene	26.87	153	73897	487.43	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.42	170	61667	493.39	ng/mL	100
28) Fluorene	28.88	166	83288m	512.82	ng/mL	
32) Dibenzothiophene	32.21	184	114616	476.04	ng/mL	100
41) Phenanthrene	32.70	178	119475	441.14	ng/mL	100
52) Retene	39.70	234	34911	502.94	ng/mL	97
53) Anthracene	32.88	178	117473m	475.03	ng/mL	
54) Carbazole	33.54	167	106080	541.25	ng/mL	100
55) 1-Methylphenanthrene	35.21	192	87149m	487.63	ng/mL	
56) Fluoranthene	37.48	202	132983m	476.35	ng/mL	
57) Benzo(b)fluorene	39.99	216	87555	535.44	ng/mL	100
59) Pyrene	38.35	202	135088	466.43	ng/mL	100
64) Naphthobenzothiophene	42.21	234	126699	481.17	ng/ml	98
65) Naphthobenzothiophene-2,1-	42.21	234	126699	481.17	ng/mL	98
73) Benz[a]anthracene	43.13	228	126351	532.91	ng/mL	90
74) Chrysene	43.29	228	118963	494.39	ng/mL	99
75) Chrysene/Triphenylene	43.29	228	118963	494.39	ng/mL	99
82) Benzo[b]fluoranthene	47.18	252	112487	456.51	ng/mL	100
83) Benzo[k]fluoranthene	47.26	252	112590	405.07	ng/mL	99
85) Benzo[e]pyrene	48.19	252	100916	406.38	ng/mL	99
86) Benzo[a]pyrene	48.38	252	105415	440.40	ng/mL	100
87) Perylene	48.69	252	101327	427.48	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.21	276	102466m	460.90	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	103692m	451.45	ng/mL	
90) Benzo[g,h,i]perylene	54.52	276	104050	410.72	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.36	191	37665	392.55	ng/mL	98
92) Hopane (T19)	52.36	191	37665	392.55	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42940.D
Acq On : 31 Dec 2005 6:00 am
Operator : AC
Sample : C4123002
Misc : PAH STD
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 03 10:30:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42952.D
Acq On : 31 Dec 2005 2:55 pm
Operator : AC
Sample : C4123003
Misc : PAH STD
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 03 10:39:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration

MG 1-3-06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	106	-0.06
2	t	Decalin	0.446	0.396	11.2	102	-0.05
3	A1	trans-Decalin	0.494	0.447	9.5	103	-0.05
4	t	cis-Decalin	0.382	0.343	10.2	102	-0.05
5	A2	C1-Decalins	0.494	0.000#	100.0#	0#	-18.41#
6	A2	C2-Decalins	0.494	0.000#	100.0#	0#	-19.74#
7	A2	C3-Decalins	0.494	0.000#	100.0#	0#	-22.21#
8	A2	C4-Decalins	0.494	0.000#	100.0#	0#	-25.61#
9	A1	Naphthalene	1.942	2.021	-4.1	108	-0.05
10	A2	C1-Naphthalenes	1.942	0.000#	100.0#	0#	-22.59#
11	A2	C2-Naphthalenes	1.942	0.000#	100.0#	0#	-25.44#
12	A2	C3-Naphthalenes	1.942	0.000#	100.0#	0#	-27.78#
13	A2	C4-Naphthalenes	1.942	0.000#	100.0#	0#	-30.55#
14	s	2-Methylnaphthalene-d10	0.949	1.057	-11.4	110	-0.05
15	t	2-Methylnaphthalene	1.237	1.357	-9.7	109	-0.05
16	t	1-Methylnaphthalene	1.246	1.289	-3.5	108	-0.05
17	A1	Benzothiophene	1.653	1.678	-1.5	106	-0.05
18	A2	C1-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-22.16#
19	A2	C2-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-25.64#
20	A2	C3-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-27.62#
21	A2	C4-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-29.36#
22	t	Biphenyl	1.482	1.649	-11.3	109	-0.05
23	t	2,6-Dimethylnaphthalene	1.073	1.180	-10.0	112	-0.05
24	t	Dibenzofuran	1.734	1.823	-5.1	105	-0.05
25	t	Acenaphthylene	2.173	2.171	0.1	114	-0.05
26	t	Acenaphthene	1.331	1.289	3.2	105	-0.05
27	t	2,3,5-Trimethylnaphthalene	1.098	1.087	1.0	107	-0.05
28	A1	Fluorene	1.426	1.460	-2.4	107	-0.05
29	A2	C1-Fluorenes	1.426	0.000#	100.0#	0#	-31.31#
30	A2	C2-Fluorenes	1.426	0.000#	100.0#	0#	-33.51#
31	A2	C3-Fluorenes	1.426	0.000#	100.0#	0#	-35.34#
32	A1	Dibenzothiophene	2.114	1.997	5.5	100	-0.05
33	A2	4-Methyldibenzothiophene(4M	2.114	0.000#	100.0#	0#	-34.04#
34	A2	2/3-Methyldibenzothiophene(	2.114	0.000#	100.0#	0#	-34.39#
35	A2	1-Methyldibenzothiophene(1M	2.114	0.000#	100.0#	0#	-34.81#
36	A2	OTP	2.114	0.000#	100.0#	0#	-34.47#
37	A2	C1-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-34.04#
38	A2	C2-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-35.73#
39	A2	C3-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-37.54#
40	A2	C4-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-38.43#
41	A1	Phenanthrene	2.378	2.112	11.2	102	-0.05
42	A2	3-Methylphenanthrene(3MP)	2.378	0.000#	100.0#	0#	-34.72#
43	A2	2/4-Methylphenanthrene(2MP)	2.378	0.000#	100.0#	0#	-34.84#
44	A2	2-Methylanthracene(2MA)	2.378	0.000#	100.0#	0#	-35.00#
45	A2	9-Methylphenanthrene(9MP)	2.378	0.000#	100.0#	0#	-35.18#
46	A2	1-Methylphenanthrene(1MP)	2.378	0.000#	100.0#	0#	-35.28#
47	A2	C1-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-35.18#
48	A2	C2-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-37.00#
49	A2	5AA IS BKGD	2.378	0.000#	100.0#	0#	-36.76#
50	A2	C3-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-38.84#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42952.D
Acq On : 31 Dec 2005 2:55 pm
Operator : AC
Sample : C4123003
Misc : PAH STD
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 03 10:39:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
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	2.378	0.000#	100.0#	0#	-41.01#
52	t	Retene	0.610	0.604	1.0	112	-0.05
53	t	Anthracene	2.172	2.055	5.4	105	-0.05
54	t	Carbazole	1.721	1.868	-8.5	113	-0.05
55	t	1-Methylphenanthrene	1.570	1.551	1.2	109	-0.05
56	A1	Fluoranthene	2.452	2.347	4.3	106	-0.05
57	t	Benzo(b)fluorene	1.436	1.537	-7.0	117	-0.06
58	s	Pyrene-d10	2.358	2.310	2.0	106	-0.06
59	A1	Pyrene	2.543	2.364	7.0	101	-0.06
60	A2	C1-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-39.81#
61	A2	C2-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-41.62#
62	A2	C3-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-43.64#
63	A2	C4-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-44.99#
64	A1	Naphthobenzothiophene	2.312	2.129	7.9	102	-0.06
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.129	7.9	102	-0.06
66	A2	Naphthobenzothiophene-1,2-D	2.312	0.000#	100.0#	0#	-42.62#
67	A2	Naphthobenzothiophene-2,3-D	2.312	0.000#	100.0#	0#	-42.91#
68	A2	C1-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-43.67#
69	A2	C2-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-45.72#
70	A2	C3-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-47.27#
71	A2	C4-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-48.36#
72	i	Chrysene-d12	1.000	1.000	0.0	94	-0.06
73	t	Benz[a]anthracene	1.189	1.283	-7.9	105	-0.05
74	A1	Chrysene	1.207	1.215	-0.7	95	-0.06
75	A2	Chrysene/Triphenylene	1.207	1.215	-0.7	95	-0.06
76	A2	C1-Chrysenes	1.207	0.000#	100.0#	0#	-44.83#
77	A2	C2-Chrysenes	1.207	0.000#	100.0#	0#	-46.91#
78	A2	BBF-d12 Surr BKGD	1.207	0.000#	100.0#	0#	-47.16#
79	A2	C3-Chrysenes	1.207	0.000#	100.0#	0#	-49.64#
80	A2	C4-Chrysenes	1.207	0.000#	100.0#	0#	-49.24#
81	s	Benzo[b]fluoranthene-d12	1.047	0.821	21.6	74	-0.07
82	t	Benzo[b]fluoranthene	1.236	1.069	13.5	80	-0.07
83	A1	Benzo[k]fluoranthene	1.394	1.092	21.7	75	-0.07
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.66#
85	t	Benzo[e]pyrene	1.246	0.953	23.5	74	-0.07
86	t	Benzo[a]pyrene	1.201	0.996	17.1	77	-0.07
87	t	Perylene	1.189	0.959	19.3	77	-0.07
88	t	Indeno[1,2,3-cd]pyrene	1.115	0.935	16.1	84	-0.10
89	t	Dibenz[a,h]anthracene	1.152	0.980	14.9	78	-0.10
90	t	Benzo[g,h,i]perylene	1.271	0.953	25.0	73	-0.10
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.363	24.5	70	-0.10
92	A2	Hopane (T19)	0.481	0.363	24.5	70	-0.10
93	A2	C23 Tricyclic Terpane (T4)	0.481	0.000#	100.0#	0#	-40.92#
94	A2	C24 Tricyclic Terpane (T5)	0.481	0.000#	100.0#	0#	-41.65#
95	A2	C25 Tricyclic Terpane (T6)	0.481	0.000#	100.0#	0#	-43.14#
96	A2	C24 Tetracyclic Terpane (T6	0.481	0.000#	100.0#	0#	-44.46#
97	A2	C26 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-44.20#
98	A2	C26 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-44.29#
99	A2	C28 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-46.58#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42952.D
Acq On : 31 Dec 2005 2:55 pm
Operator : AC
Sample : C4123003
Misc : PAH STD
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 03 10:39:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
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 (	0.481	0.000#	100.0#	0#	-46.74#
101	A2	C29 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-47.26#
102	A2	C29 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-47.47#
103	A2	18a-22,29,30-Trisnorneohopa	0.481	0.000#	100.0#	0#	-48.61#
104	A2	C30 Tricyclic Terpane-22S	0.481	0.000#	100.0#	0#	-48.70#
105	A2	C30 Tricyclic Terpane-22R	0.481	0.000#	100.0#	0#	-48.95#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.481	0.000#	100.0#	0#	-49.17#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.481	0.000#	100.0#	0#	-50.38#
108	A2	17a(H),21b(H)-25-Norhopane	0.481	0.000#	100.0#	0#	-50.16#
109	A2	30-Norhopane (T15)	0.481	0.000#	100.0#	0#	-51.07#
110	A2	18a(H)-30-Norneohopane-C29T	0.481	0.000#	100.0#	0#	-51.17#
111	A2	17a(H)-Diahopane (X)	0.481	0.000#	100.0#	0#	-51.30#
112	A2	30-Normoretane (T17)	0.481	0.000#	100.0#	0#	-51.87#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.481	0.000#	100.0#	0#	-52.28#
114	A2	Moretane (T20)	0.481	0.000#	100.0#	0#	-53.17#
115	A2	30-Homohopane-22S (T21)	0.481	0.000#	100.0#	0#	-54.31#
116	A2	30-Homohopane-22R (T22)	0.481	0.000#	100.0#	0#	-54.53#
117	A2	30,31-Bishomohopane-22S (T2	0.481	0.000#	100.0#	0#	-55.90#
118	A2	30,31-Bishomohopane-22R (T2	0.481	0.000#	100.0#	0#	-56.30#
119	A2	30,31-Trishomohopane-22S (T	0.481	0.000#	100.0#	0#	-58.10#
120	A2	30,31-Trishomohopane-22R (T	0.481	0.000#	100.0#	0#	-58.74#
121	A2	Tetrakishomohopane-22S (T32	0.481	0.000#	100.0#	0#	-60.82#
122	A2	Tetrakishomohopane-22R (T33	0.481	0.000#	100.0#	0#	-61.74#
123	A2	Pentakishomohopane-22S (T34	0.481	0.000#	100.0#	0#	-64.04#
124	A2	Pentakishomohopane-22R (T35	0.481	0.000#	100.0#	0#	-65.38#
125	SA1	5B(H)Cholane - Surr	0.226	0.218	3.5	95	-0.06
126	A2	13b(H),17a(H)-20S-Diacholes	0.226	0.000#	100.0#	0#	-45.41#
127	A2	13b(H),17a(H)-20R-Diacholes	0.226	0.000#	100.0#	0#	-45.84#
128	A2	13b,17a-20S-Methyldiacholes	0.226	0.000#	100.0#	0#	-46.53#
129	A2	14a(H),17a(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.40#
130	A2	14a(H),17a(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.93#
131	A2	13b,17a-20R-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.22#
132	A2	13a,17b-20S-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.49#
133	A2	14a,17a-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.65#
134	A2	14a,17a-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-49.37#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.73#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.66#
137	A2	14b(H),17b(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.50#
138	A2	14b(H),17b(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.58#
139	A2	14b,17b-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-48.82#
140	A2	14b,17b-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.90#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-49.98#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-50.03#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42952.D
Acq On : 31 Dec 2005 2:55 pm
Operator : AC
Sample : C4123003
Misc : PAH STD
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 03 10:39:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration

MS 1-3-06

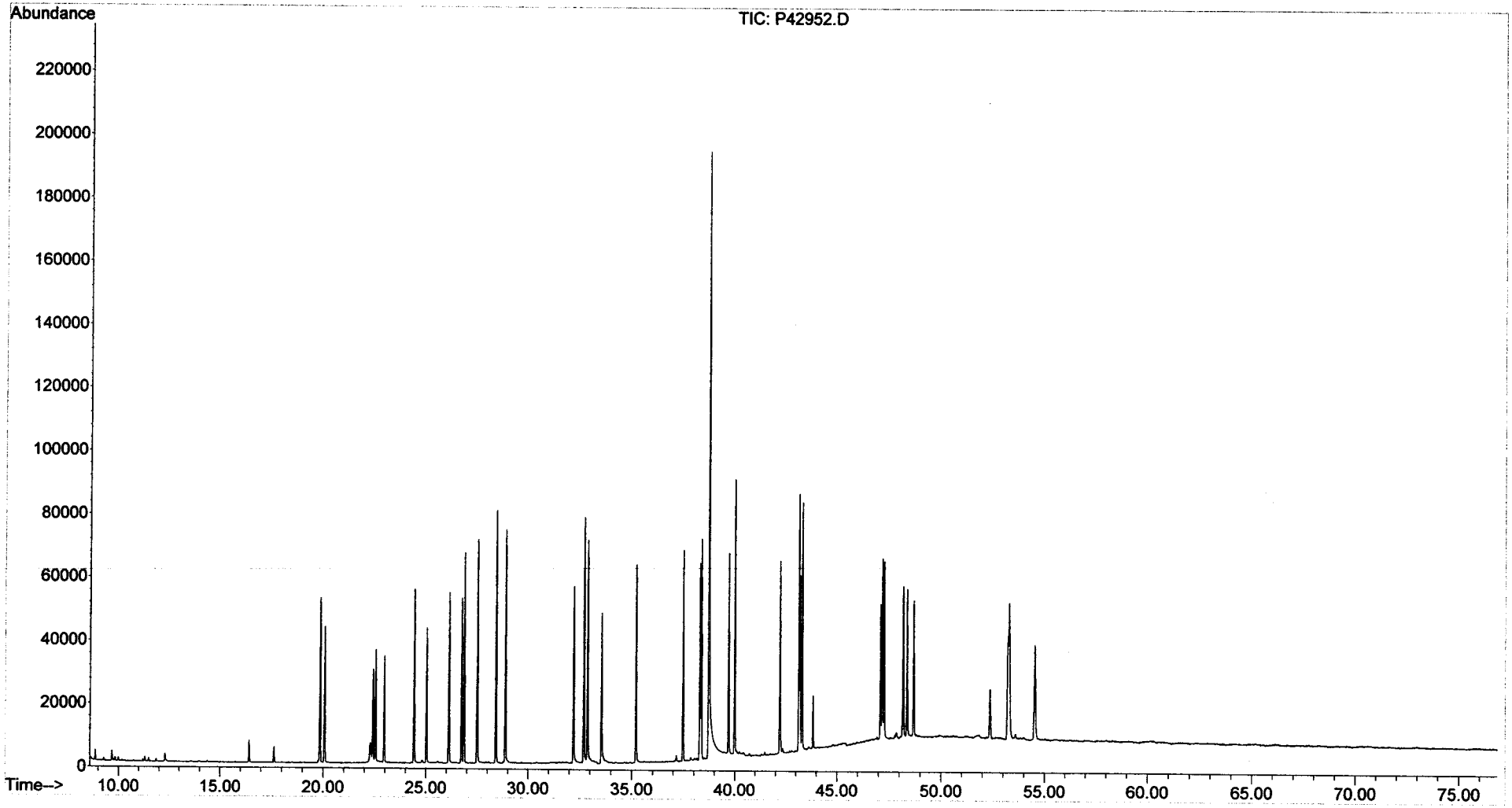
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.74	164	61061	500.00	ng/mL	-0.06
72) Chrysene-d12	43.20	240	102013	500.00	ng/mL	-0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.42	152	64531	557.06	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.71%			
58) Pyrene-d10	38.28	212	141045	489.76	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.98%#			
81) Benzo[b]fluoranthene-d12	47.09	264	83792	392.14	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.21%#			
125) 5B(H)Cholane - Surr	43.83	217	22230	481.38	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.14%#			

Target Compounds						Qvalue
2) Decalin	16.43	138	24157m	443.90	ng/mL	
3) trans-Decalin	16.43	138	13657	226.17	ng/mL	100
4) cis-Decalin	17.64	138	10485	224.62	ng/mL	100
9) Naphthalene	19.84	128	123420	520.42	ng/mL#	100
15) 2-Methylnaphthalene	22.54	142	82842	548.35	ng/mL#	100
16) 1-Methylnaphthalene	22.96	142	78698	517.08	ng/mL#	100
17) Benzothiophene	20.06	134	102470	507.56	ng/mL	100
22) Biphenyl	24.42	154	100671	556.20	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.03	156	72075	550.21	ng/mL#	100
24) Dibenzofuran	27.51	168	111309	525.65	ng/mL	99
25) Acenaphthylene	26.13	152	132551	499.46	ng/mL#	100
26) Acenaphthene	26.87	153	78705	484.06	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.42	170	66387	495.26	ng/mL	100
28) Fluorene	28.88	166	89178	511.98	ng/mL	100
32) Dibenzothiophene	32.21	184	121959	472.31	ng/mL	99
41) Phenanthrene	32.70	178	128988	444.08	ng/mL	100
52) Retene	39.70	234	36911	495.82	ng/mL	100
53) Anthracene	32.88	178	125451m	473.01	ng/mL	
54) Carbazole	33.54	167	114059	542.62	ng/mL	99
55) 1-Methylphenanthrene	35.21	192	94735m	494.25	ng/mL	
56) Fluoranthene	37.48	202	143300m	478.61	ng/mL	
57) Benzo(b)fluorene	39.99	216	93833	535.05	ng/mL	98
59) Pyrene	38.35	202	144374	464.80	ng/mL	99
64) Naphthobenzothiophene	42.21	234	129976	460.25	ng/ml	97
65) Naphthobenzothiophene-2,1-	42.21	234	129976	460.25	ng/mL	97
73) Benz[a]anthracene	43.14	228	130933	539.63	ng/mL	94
74) Chrysene	43.30	228	123980	503.48	ng/mL	100
75) Chrysene/Triphenylene	43.30	228	123980	503.48	ng/mL	100
82) Benzo[b]fluoranthene	47.18	252	109018	432.34	ng/mL	100
83) Benzo[k]fluoranthene	47.26	252	111427	391.73	ng/mL	100
85) Benzo[e]pyrene	48.19	252	97172	382.37	ng/mL	99
86) Benzo[a]pyrene	48.38	252	101641	414.94	ng/mL	100
87) Perylene	48.69	252	97862	403.44	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.22	276	95408m	419.36	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	100010	425.48	ng/mL	98
90) Benzo[g,h,i]perylene	54.53	276	97178	374.83	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	37079	377.62	ng/mL	97
92) Hopane (T19)	52.36	191	37079	377.62	ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\DECEMBER\DEC30\
Data File : P42952.D
Acq On : 31 Dec 2005 2:55 pm
Operator : AC
Sample : C4123003
Misc : PAH STD
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 03 10:39:33 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 20 12:05:59 2005
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43048.D
Acq On : 5 Jan 2006 3:18 pm
Operator : AC
Sample : C4010501
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 06 07:40:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

MS 1/6/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	117	-0.03
2	t	Decalin	0.446	0.396	11.2	113	-0.03
3	A1	trans-Decalin	0.494	0.446	9.7	114	-0.03
4	t	cis-Decalin	0.382	0.344	9.9	114	-0.02
5	A2	C1-Decalins	0.494	0.000#	100.0#	0#	-18.35#
6	A2	C2-Decalins	0.494	0.000#	100.0#	0#	-19.68#
7	A2	C3-Decalins	0.494	0.000#	100.0#	0#	-22.15#
8	A2	C4-Decalins	0.494	0.000#	100.0#	0#	-25.55#
9	A1	Naphthalene	1.942	2.036	-4.8	121	-0.02
10	A2	C1-Naphthalenes	1.942	0.000#	100.0#	0#	-22.54#
11	A2	C2-Naphthalenes	1.942	0.000#	100.0#	0#	-25.38#
12	A2	C3-Naphthalenes	1.942	0.000#	100.0#	0#	-27.72#
13	A2	C4-Naphthalenes	1.942	0.000#	100.0#	0#	-30.49#
14	s	2-Methylnaphthalene-d10	0.949	1.063	-12.0	123	-0.02
15	t	2-Methylnaphthalene	1.237	1.360	-9.9	121	-0.03
16	t	1-Methylnaphthalene	1.246	1.281	-2.8	119	-0.03
17	A1	Benzothiophene	1.653	1.708	-3.3	120	-0.03
18	A2	C1-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-22.10#
19	A2	C2-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-25.58#
20	A2	C3-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-27.56#
21	A2	C4-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-29.30#
22	t	Biphenyl	1.482	1.659	-11.9	122	-0.02
23	t	2,6-Dimethylnaphthalene	1.073	1.179	-9.9	124	-0.03
24	t	Dibenzofuran	1.734	1.834	-5.8	117	-0.03
25	t	Acenaphthylene	2.173	2.060	5.2	120	-0.03
26	t	Acenaphthene	1.331	1.275	4.2	116	-0.03
27	t	2,3,5-Trimethylnaphthalene	1.098	1.084	1.3	118	-0.03
28	A1	Fluorene	1.426	1.432	-0.4	117	-0.03
29	A2	C1-Fluorenes	1.426	0.000#	100.0#	0#	-31.25#
30	A2	C2-Fluorenes	1.426	0.000#	100.0#	0#	-33.45#
31	A2	C3-Fluorenes	1.426	0.000#	100.0#	0#	-35.29#
32	A1	Dibenzothiophene	2.114	2.041	3.5	114	-0.03
33	A2	4-Methyldibenzothiophene(4M	2.114	0.000#	100.0#	0#	-33.98#
34	A2	2/3-Methyldibenzothiophene(	2.114	0.000#	100.0#	0#	-34.33#
35	A2	1-Methyldibenzothiophene(1M	2.114	0.000#	100.0#	0#	-34.75#
36	A2	OTP	2.114	0.000#	100.0#	0#	-34.42#
37	A2	C1-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-33.98#
38	A2	C2-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-35.67#
39	A2	C3-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-37.48#
40	A2	C4-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-38.37#
41	A1	Phenanthrene	2.378	2.159	9.2	116	-0.03
42	A2	3-Methylphenanthrene(3MP)	2.378	0.000#	100.0#	0#	-34.67#
43	A2	2/4-Methylphenanthrene(2MP)	2.378	0.000#	100.0#	0#	-34.78#
44	A2	2-Methylanthracene(2MA)	2.378	0.000#	100.0#	0#	-34.94#
45	A2	9-Methylphenanthrene(9MP)	2.378	0.000#	100.0#	0#	-35.12#
46	A2	1-Methylphenanthrene(1MP)	2.378	0.000#	100.0#	0#	-35.21#
47	A2	C1-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-35.12#
48	A2	C2-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-36.95#
49	A2	5AA IS BKGD	2.378	0.000#	100.0#	0#	-36.72#
50	A2	C3-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-38.78#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43048.D
Acq On : 5 Jan 2006 3:18 pm
Operator : AC
Sample : C4010501
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 06 07:40:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 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	2.378	0.000#	100.0#	0#	-40.97#
52	t	Retene	0.610	0.583	4.4	120	-0.03
53	t	Anthracene	2.172	2.045	5.8	116	-0.03
54	t	Carbazole	1.721	1.874	-8.9	126	-0.03
55	t	1-Methylphenanthrene	1.570	1.552	1.1	121	-0.03
56	A1	Fluoranthene	2.452	2.346	4.3	118	-0.03
57	t	Benzo(b)fluorene	1.436	1.477	-2.9	125	-0.03
58	s	Pyrene-d10	2.358	2.305	2.2	117	-0.03
59	A1	Pyrene	2.543	2.372	6.7	113	-0.03
60	A2	C1-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-39.76#
61	A2	C2-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-41.57#
62	A2	C3-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-43.58#
63	A2	C4-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-44.94#
64	A1	Naphthobenzothiophene	2.312	2.229	3.6	118	-0.03
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.229	3.6	118	-0.03
66	A2	Naphthobenzothiophene-1,2-D	2.312	0.000#	100.0#	0#	-42.56#
67	A2	Naphthobenzothiophene-2,3-D	2.312	0.000#	100.0#	0#	-42.86#
68	A2	C1-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-43.62#
69	A2	C2-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-45.63#
70	A2	C3-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-47.22#
71	A2	C4-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-48.32#
72	i	Chrysene-d12	1.000	1.000	0.0	116	-0.02
73	t	Benz[a]anthracene	1.189	1.205	-1.3	122	-0.03
74	A1	Chrysene	1.207	1.192	1.2	115	-0.03
75	A2	Chrysene/Triphenylene	1.207	1.192	1.2	115	-0.03
76	A2	C1-Chrysenes	1.207	0.000#	100.0#	0#	-44.79#
77	A2	C2-Chrysenes	1.207	0.000#	100.0#	0#	-46.87#
78	A2	BBF-d12 Surr BKGD	1.207	0.000#	100.0#	0#	-47.12#
79	A2	C3-Chrysenes	1.207	0.000#	100.0#	0#	-49.59#
80	A2	C4-Chrysenes	1.207	0.000#	100.0#	0#	-49.19#
81	s	Benzo[b]fluoranthene-d12	1.047	1.039	0.8	116	-0.02
82	t	Benzo[b]fluoranthene	1.236	1.273	-3.0	117	-0.02
83	A1	Benzo[k]fluoranthene	1.394	1.319	5.4	112	-0.02
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.63#
85	t	Benzo[e]pyrene	1.246	1.199	3.8	114	-0.03
86	t	Benzo[a]pyrene	1.201	1.213	-1.0	116	-0.02
87	t	Perylene	1.189	1.186	0.3	117	-0.03
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.151	-3.2	128	-0.04
89	t	Dibenz[a,h]anthracene	1.152	1.206	-4.7	119	-0.03
90	t	Benzo[g,h,i]perylene	1.271	1.225	3.6	115	-0.05
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.460	4.4	109	-0.03
92	A2	Hopane (T19)	0.481	0.460	4.4	109	-0.03
93	A2	C23 Tricyclic Terpane (T4)	0.481	0.000#	100.0#	0#	-40.87#
94	A2	C24 Tricyclic Terpane (T5)	0.481	0.000#	100.0#	0#	-41.60#
95	A2	C25 Tricyclic Terpane (T6)	0.481	0.000#	100.0#	0#	-43.08#
96	A2	C24 Tetracyclic Terpane (T6	0.481	0.000#	100.0#	0#	-44.41#
97	A2	C26 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-44.14#
98	A2	C26 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-44.24#
99	A2	C28 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-46.53#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43048.D
Acq On : 5 Jan 2006 3:18 pm
Operator : AC
Sample : C4010501
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 06 07:40:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 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 (	0.481	0.000#	100.0#	0#	-46.69#
101	A2	C29 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-47.22#
102	A2	C29 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-47.41#
103	A2	18a-22,29,30-Trisnorneohopa	0.481	0.000#	100.0#	0#	-48.55#
104	A2	C30 Tricyclic Terpane-22S	0.481	0.000#	100.0#	0#	-48.65#
105	A2	C30 Tricyclic Terpane-22R	0.481	0.000#	100.0#	0#	-48.89#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.481	0.000#	100.0#	0#	-49.11#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.481	0.000#	100.0#	0#	-50.33#
108	A2	17a(H),21b(H)-25-Norhopane	0.481	0.000#	100.0#	0#	-50.11#
109	A2	30-Norhopane (T15)	0.481	0.000#	100.0#	0#	-51.00#
110	A2	18a(H)-30-Norneohopane-C29T	0.481	0.000#	100.0#	0#	-51.10#
111	A2	17a(H)-Diahopane (X)	0.481	0.000#	100.0#	0#	-51.22#
112	A2	30-Normoretane (T17)	0.481	0.000#	100.0#	0#	-51.79#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.481	0.000#	100.0#	0#	-52.19#
114	A2	Moretane (T20)	0.481	0.000#	100.0#	0#	-53.10#
115	A2	30-Homohopane-22S (T21)	0.481	0.000#	100.0#	0#	-54.22#
116	A2	30-Homohopane-22R (T22)	0.481	0.000#	100.0#	0#	-54.45#
117	A2	30,31-Bishomohopane-22S (T2	0.481	0.000#	100.0#	0#	-55.80#
118	A2	30,31-Bishomohopane-22R (T2	0.481	0.000#	100.0#	0#	-56.20#
119	A2	30,31-Trishomohopane-22S (T	0.481	0.000#	100.0#	0#	-57.99#
120	A2	30,31-Trishomohopane-22R (T	0.481	0.000#	100.0#	0#	-58.63#
121	A2	Tetrakishomohopane-22S (T32	0.481	0.000#	100.0#	0#	-60.70#
122	A2	Tetrakishomohopane-22R (T33	0.481	0.000#	100.0#	0#	-61.61#
123	A2	Pentakishomohopane-22S (T34	0.481	0.000#	100.0#	0#	-63.91#
124	A2	Pentakishomohopane-22R (T35	0.481	0.000#	100.0#	0#	-65.25#
125	SA1	5B(H)Cholane - Surr	0.226	0.221	2.2	119	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.226	0.000#	100.0#	0#	-45.36#
127	A2	13b(H),17a(H)-20R-Diacholes	0.226	0.000#	100.0#	0#	-45.78#
128	A2	13b,17a-20S-Methyldiacholes	0.226	0.000#	100.0#	0#	-46.49#
129	A2	14a(H),17a(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.35#
130	A2	14a(H),17a(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.88#
131	A2	13b,17a-20R-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.16#
132	A2	13a,17b-20S-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.43#
133	A2	14a,17a-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.58#
134	A2	14a,17a-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-49.31#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.66#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.60#
137	A2	14b(H),17b(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.44#
138	A2	14b(H),17b(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.53#
139	A2	14b,17b-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-48.76#
140	A2	14b,17b-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.85#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-49.92#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.97#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43048.D
Acq On : 5 Jan 2006 3:18 pm
Operator : AC
Sample : C4010501
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 06 07:40:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

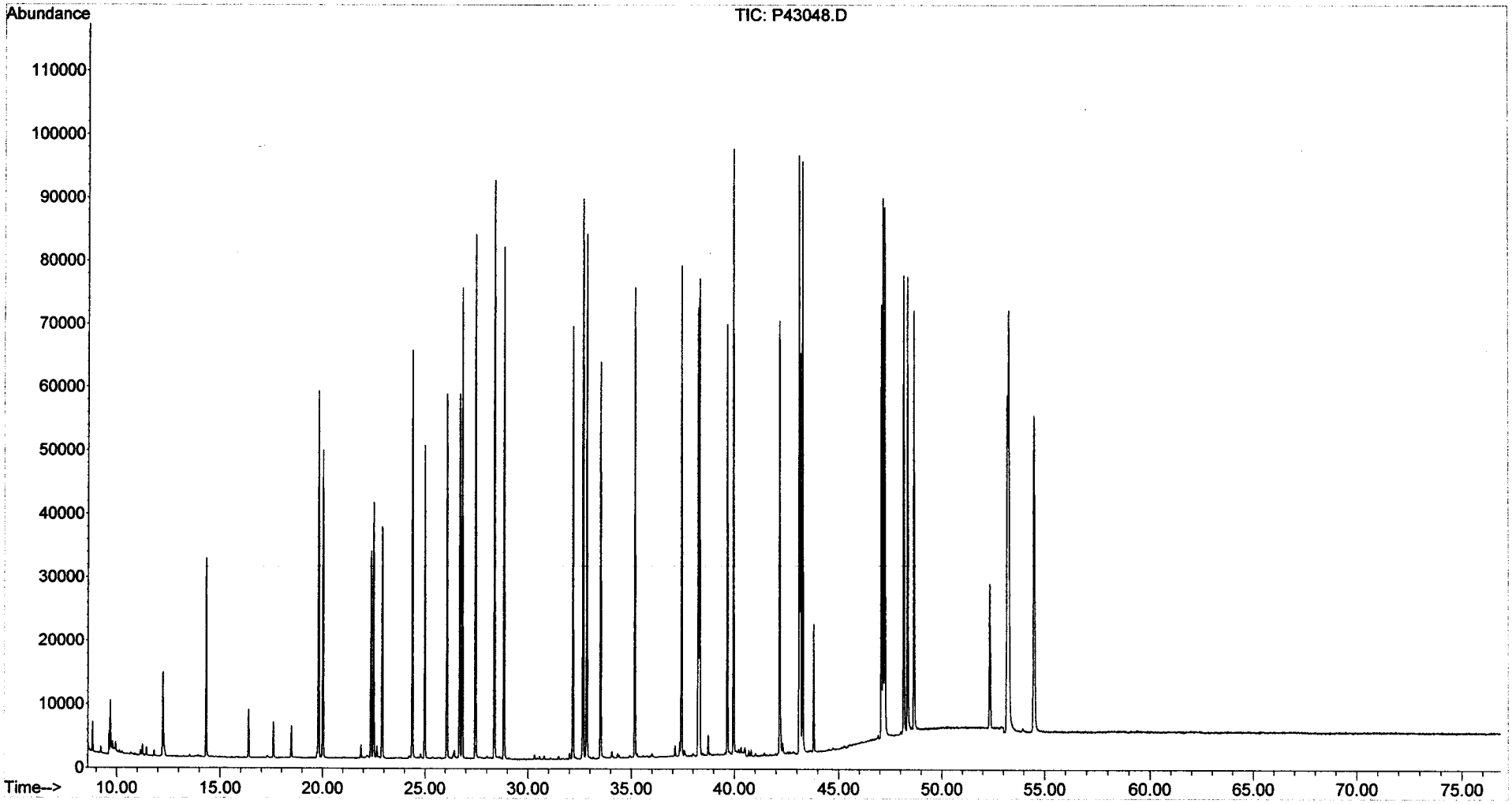
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	67883m	500.00 ng/mL	-0.03
72) Chrysene-d12	43.18	240	125705	500.00 ng/mL	-0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.37	152	72151	560.25 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.03%		
58) Pyrene-d10	38.25	212	156449	488.66 ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.87%#		
81) Benzo[b]fluoranthene-d12	47.08	264	130576	495.92 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.59%#		
125) 5B(H)Cholane - Surr	43.81	217	27840	489.23 ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.92%#		

Target Compounds					Qvalue
2) Decalin	16.38	138	26895m	444.55 ng/mL	
3) trans-Decalin	16.38	138	15147	225.64 ng/mL	100
4) cis-Decalin	17.61	138	11679	225.05 ng/mL	100
9) Naphthalene	19.80	128	138180	524.10 ng/mL#	100
15) 2-Methylnaphthalene	22.49	142	92352	549.86 ng/mL#	100
16) 1-Methylnaphthalene	22.92	142	86991	514.13 ng/mL#	100
17) Benzothiophene	20.02	134	115971	516.70 ng/mL	100
22) Biphenyl	24.38	154	112623	559.70 ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	80005	549.36 ng/mL#	100
24) Dibenzofuran	27.46	168	124495	528.84 ng/mL	99
25) Acenaphthylene	26.08	152	139808	473.86 ng/mL#	100
26) Acenaphthene	26.82	153	86556	478.85 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.38	170	73557	493.60 ng/mL	100
28) Fluorene	28.84	166	97192m	501.91 ng/mL	
32) Dibenzothiophene	32.16	184	138523	482.54 ng/mL	100
41) Phenanthrene	32.66	178	146552	453.84 ng/mL	100
52) Retene	39.66	234	39604	478.53 ng/mL	99
53) Anthracene	32.84	178	138822m	470.82 ng/mL	
54) Carbazole	33.51	167	127179m	544.24 ng/mL	
55) 1-Methylphenanthrene	35.17	192	105328	494.29 ng/mL	100
56) Fluoranthene	37.44	202	159287m	478.54 ng/mL	
57) Benzo(b)fluorene	39.96	216	100267	514.28 ng/mL	100
59) Pyrene	38.32	202	161046	466.37 ng/mL	100
64) Naphthobenzothiophene	42.18	234	151345	482.06 ng/ml	99
65) Naphthobenzothiophene-2,1-	42.18	234	151345	482.06 ng/mL	99
73) Benz[a]anthracene	43.11	228	151515	506.76 ng/mL	100
74) Chrysene	43.27	228	149879	493.94 ng/mL	99
75) Chrysene/Triphenylene	43.27	228	149879	493.94 ng/mL	99
82) Benzo[b]fluoranthene	47.16	252	160050	515.09 ng/mL	100
83) Benzo[k]fluoranthene	47.25	252	165837	473.13 ng/mL	100
85) Benzo[e]pyrene	48.16	252	150687	481.20 ng/mL	100
86) Benzo[a]pyrene	48.35	252	152492	505.20 ng/mL	99
87) Perylene	48.66	252	149081	498.75 ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.19	276	144678m	516.07 ng/mL	
89) Dibenz[a,h]anthracene	53.26	278	151657m	523.60 ng/mL	
90) Benzo[g,h,i]perylene	54.49	276	154050	482.21 ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.34	191	57839	478.03 ng/mL	97
92) Hopane (T19)	52.34	191	57839	478.03 ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43048.D
Acq On : 5 Jan 2006 3:18 pm
Operator : AC
Sample : C4010501
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 06 07:40:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Integrated on #2

1/7/06

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43080.D
Acq On : 6 Jan 2006 6:43 pm
Operator : AC
Sample : C4010502
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 07 09:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	87	-0.03
2	t	Decalin	0.446	0.409	8.3	87	-0.03
3	A1	trans-Decalin	0.494	0.468	5.3	89	-0.03
4	t	cis-Decalin	0.382	0.352	7.9	87	-0.03
5	A2	C1-Decalins	0.494	0.000#	100.0#	0#	-18.35#
6	A2	C2-Decalins	0.494	0.000#	100.0#	0#	-19.68#
7	A2	C3-Decalins	0.494	0.000#	100.0#	0#	-22.15#
8	A2	C4-Decalins	0.494	0.000#	100.0#	0#	-25.55#
9	A1	Naphthalene	1.942	2.064	-6.3	91	-0.03
10	A2	C1-Naphthalenes	1.942	0.000#	100.0#	0#	-22.54#
11	A2	C2-Naphthalenes	1.942	0.000#	100.0#	0#	-25.38#
12	A2	C3-Naphthalenes	1.942	0.000#	100.0#	0#	-27.72#
13	A2	C4-Naphthalenes	1.942	0.000#	100.0#	0#	-30.49#
14	s	2-Methylnaphthalene-d10	0.949	1.075	-13.3	92	-0.02
15	t	2-Methylnaphthalene	1.237	1.377	-11.3	92	-0.03
16	t	1-Methylnaphthalene	1.246	1.307	-4.9	90	-0.03
17	A1	Benzothiophene	1.653	1.706	-3.2	89	-0.03
18	A2	C1-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-22.10#
19	A2	C2-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-25.58#
20	A2	C3-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-27.56#
21	A2	C4-Benzo(b)thiophenes	1.653	0.000#	100.0#	0#	-29.30#
22	t	Biphenyl	1.482	1.681	-13.4	92	-0.02
23	t	2,6-Dimethylnaphthalene	1.073	1.177	-9.7	92	-0.03
24	t	Dibenzofuran	1.734	1.827	-5.4	87	-0.03
25	t	Acenaphthylene	2.173	1.989	8.5	86	-0.03
26	t	Acenaphthene	1.331	1.275	4.2	86	-0.03
27	t	2,3,5-Trimethylnaphthalene	1.098	1.070	2.6	87	-0.03
28	A1	Fluorene	1.426	1.441	-1.1	87	-0.03
29	A2	C1-Fluorenes	1.426	0.000#	100.0#	0#	-31.25#
30	A2	C2-Fluorenes	1.426	0.000#	100.0#	0#	-33.45#
31	A2	C3-Fluorenes	1.426	0.000#	100.0#	0#	-35.29#
32	A1	Dibenzothiophene	2.114	1.999	5.4	83	-0.03
33	A2	4-Methyldibenzothiophene(4M	2.114	0.000#	100.0#	0#	-33.98#
34	A2	2/3-Methyldibenzothiophene(	2.114	0.000#	100.0#	0#	-34.33#
35	A2	1-Methyldibenzothiophene(1M	2.114	0.000#	100.0#	0#	-34.75#
36	A2	OTP	2.114	0.000#	100.0#	0#	-34.42#
37	A2	C1-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-33.98#
38	A2	C2-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-35.67#
39	A2	C3-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-37.48#
40	A2	C4-Dibenzothiophenes	2.114	0.000#	100.0#	0#	-38.37#
41	A1	Phenanthrene	2.378	2.131	10.4	85	-0.03
42	A2	3-Methylphenanthrene(3MP)	2.378	0.000#	100.0#	0#	-34.67#
43	A2	2/4-Methylphenanthrene(2MP)	2.378	0.000#	100.0#	0#	-34.78#
44	A2	2-Methylanthracene(2MA)	2.378	0.000#	100.0#	0#	-34.94#
45	A2	9-Methylphenanthrene(9MP)	2.378	0.000#	100.0#	0#	-35.12#
46	A2	1-Methylphenanthrene(1MP)	2.378	0.000#	100.0#	0#	-35.21#
47	A2	C1-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-35.12#
48	A2	C2-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-36.95#
49	A2	5AA IS BKGD	2.378	0.000#	100.0#	0#	-36.72#
50	A2	C3-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-38.78#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43080.D
Acq On : 6 Jan 2006 6:43 pm
Operator : AC
Sample : C4010502
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 07 09:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 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	2.378	0.000#	100.0#	0#	-40.97#
52	t	Retene	0.610	0.555	9.0	85	-0.03
53	t	Anthracene	2.172	1.940	10.7	82	-0.04
54	t	Carbazole	1.721	1.773	-3.0	89	-0.03
55	t	1-Methylphenanthrene	1.570	1.520	3.2	88	-0.03
56	A1	Fluoranthene	2.452	2.294	6.4	86	-0.03
57	t	Benzo(b)fluorene	1.436	1.400	2.5	88	-0.03
58	s	Pyrene-d10	2.358	2.251	4.5	85	-0.03
59	A1	Pyrene	2.543	2.370	6.8	84	-0.03
60	A2	C1-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-39.76#
61	A2	C2-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-41.57#
62	A2	C3-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-43.58#
63	A2	C4-Fluoranthenes/Pyrenes	2.543	0.000#	100.0#	0#	-44.94#
64	A1	Naphthobenzothiophene	2.312	2.151	7.0	85	-0.03
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.151	7.0	85	-0.03
66	A2	Naphthobenzothiophene-1,2-D	2.312	0.000#	100.0#	0#	-42.56#
67	A2	Naphthobenzothiophene-2,3-D	2.312	0.000#	100.0#	0#	-42.86#
68	A2	C1-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-43.62#
69	A2	C2-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-45.63#
70	A2	C3-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-47.22#
71	A2	C4-Naphthobenzothiophenes	2.312	0.000#	100.0#	0#	-48.32#
72	i	Chrysene-d12	1.000	1.000	0.0	86	-0.03
73	t	Benz[a]anthracene	1.189	1.147	3.5	86	-0.03
74	A1	Chrysene	1.207	1.199	0.7	85	-0.03
75	A2	Chrysene/Triphenylene	1.207	1.199	0.7	85	-0.03
76	A2	C1-Chrysenes	1.207	0.000#	100.0#	0#	-44.79#
77	A2	C2-Chrysenes	1.207	0.000#	100.0#	0#	-46.87#
78	A2	BBF-d12 Surr BKGD	1.207	0.000#	100.0#	0#	-47.12#
79	A2	C3-Chrysenes	1.207	0.000#	100.0#	0#	-49.59#
80	A2	C4-Chrysenes	1.207	0.000#	100.0#	0#	-49.19#
81	s	Benzo[b]fluoranthene-d12	1.047	1.023	2.3	84	-0.03
82	t	Benzo[b]fluoranthene	1.236	1.255	-1.5	86	-0.03
83	A1	Benzo[k]fluoranthene	1.394	1.336	4.2	84	-0.03
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.63#
85	t	Benzo[e]pyrene	1.246	1.193	4.3	84	-0.03
86	t	Benzo[a]pyrene	1.201	1.190	0.9	84	-0.03
87	t	Perylene	1.189	1.165	2.0	85	-0.03
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.076	3.5	88	-0.05
89	t	Dibenz[a,h]anthracene	1.152	1.205	-4.6	88	-0.05
90	t	Benzo[g,h,i]perylene	1.271	1.234	2.9	86	-0.05
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.452	6.0	79	-0.04
92	A2	Hopane (T19)	0.481	0.452	6.0	79	-0.04
93	A2	C23 Tricyclic Terpane (T4)	0.481	0.000#	100.0#	0#	-40.87#
94	A2	C24 Tricyclic Terpane (T5)	0.481	0.000#	100.0#	0#	-41.60#
95	A2	C25 Tricyclic Terpane (T6)	0.481	0.000#	100.0#	0#	-43.08#
96	A2	C24 Tetracyclic Terpane (T6	0.481	0.000#	100.0#	0#	-44.41#
97	A2	C26 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-44.14#
98	A2	C26 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-44.24#
99	A2	C28 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-46.53#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43080.D
Acq On : 6 Jan 2006 6:43 pm
Operator : AC
Sample : C4010502
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 07 09:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 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 (	0.481	0.000#	100.0#	0#	-46.69#
101	A2	C29 Tricyclic Terpane-22S (	0.481	0.000#	100.0#	0#	-47.22#
102	A2	C29 Tricyclic Terpane-22R (	0.481	0.000#	100.0#	0#	-47.41#
103	A2	18a-22,29,30-Trisnorneohopa	0.481	0.000#	100.0#	0#	-48.55#
104	A2	C30 Tricyclic Terpane-22S	0.481	0.000#	100.0#	0#	-48.65#
105	A2	C30 Tricyclic Terpane-22R	0.481	0.000#	100.0#	0#	-48.89#
106	A2	17a(H)-22,29,30-Trisnorhopa	0.481	0.000#	100.0#	0#	-49.11#
107	A2	17a/b,21b/a 28,30-Bisnorhop	0.481	0.000#	100.0#	0#	-50.33#
108	A2	17a(H),21b(H)-25-Norhopane	0.481	0.000#	100.0#	0#	-50.11#
109	A2	30-Norhopane (T15)	0.481	0.000#	100.0#	0#	-51.00#
110	A2	18a(H)-30-Norneohopane-C29T	0.481	0.000#	100.0#	0#	-51.10#
111	A2	17a(H)-Diahopane (X)	0.481	0.000#	100.0#	0#	-51.22#
112	A2	30-Normoretane (T17)	0.481	0.000#	100.0#	0#	-51.79#
113	A2	18a(H)&18b(H)-Oleananes (T1	0.481	0.000#	100.0#	0#	-52.19#
114	A2	Moretane (T20)	0.481	0.000#	100.0#	0#	-53.10#
115	A2	30-Homohopane-22S (T21)	0.481	0.000#	100.0#	0#	-54.22#
116	A2	30-Homohopane-22R (T22)	0.481	0.000#	100.0#	0#	-54.45#
117	A2	30,31-Bishomohopane-22S (T2	0.481	0.000#	100.0#	0#	-55.80#
118	A2	30,31-Bishomohopane-22R (T2	0.481	0.000#	100.0#	0#	-56.20#
119	A2	30,31-Trishomohopane-22S (T	0.481	0.000#	100.0#	0#	-57.99#
120	A2	30,31-Trishomohopane-22R (T	0.481	0.000#	100.0#	0#	-58.63#
121	A2	Tetrakishomohopane-22S (T32	0.481	0.000#	100.0#	0#	-60.70#
122	A2	Tetrakishomohopane-22R (T33	0.481	0.000#	100.0#	0#	-61.61#
123	A2	Pentakishomohopane-22S (T34	0.481	0.000#	100.0#	0#	-63.91#
124	A2	Pentakishomohopane-22R (T35	0.481	0.000#	100.0#	0#	-65.25#
125	SA1	5B(H)Cholane - Surr	0.226	0.207	8.4	82	-0.02
126	A2	13b(H),17a(H)-20S-Diacholes	0.226	0.000#	100.0#	0#	-45.36#
127	A2	13b(H),17a(H)-20R-Diacholes	0.226	0.000#	100.0#	0#	-45.78#
128	A2	13b,17a-20S-Methyldiacholes	0.226	0.000#	100.0#	0#	-46.49#
129	A2	14a(H),17a(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.35#
130	A2	14a(H),17a(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.88#
131	A2	13b,17a-20R-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.16#
132	A2	13a,17b-20S-Ethyldiacholest	0.226	0.000#	100.0#	0#	-48.43#
133	A2	14a,17a-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.58#
134	A2	14a,17a-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-49.31#
135	A2	14a(H),17a(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.66#
136	A2	14a(H),17a(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-50.60#
137	A2	14b(H),17b(H)-20R-Cholestan	0.226	0.000#	100.0#	0#	-47.44#
138	A2	14b(H),17b(H)-20S-Cholestan	0.226	0.000#	100.0#	0#	-47.53#
139	A2	14b,17b-20R-Methylcholestan	0.226	0.000#	100.0#	0#	-48.76#
140	A2	14b,17b-20S-Methylcholestan	0.226	0.000#	100.0#	0#	-48.85#
141	A2	14b(H),17b(H)-20R-Ethylchol	0.226	0.000#	100.0#	0#	-49.92#
142	A2	14b(H),17b(H)-20S-Ethylchol	0.226	0.000#	100.0#	0#	-49.97#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43080.D
Acq On : 6 Jan 2006 6:43 pm
Operator : AC
Sample : C4010502
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 07 09:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

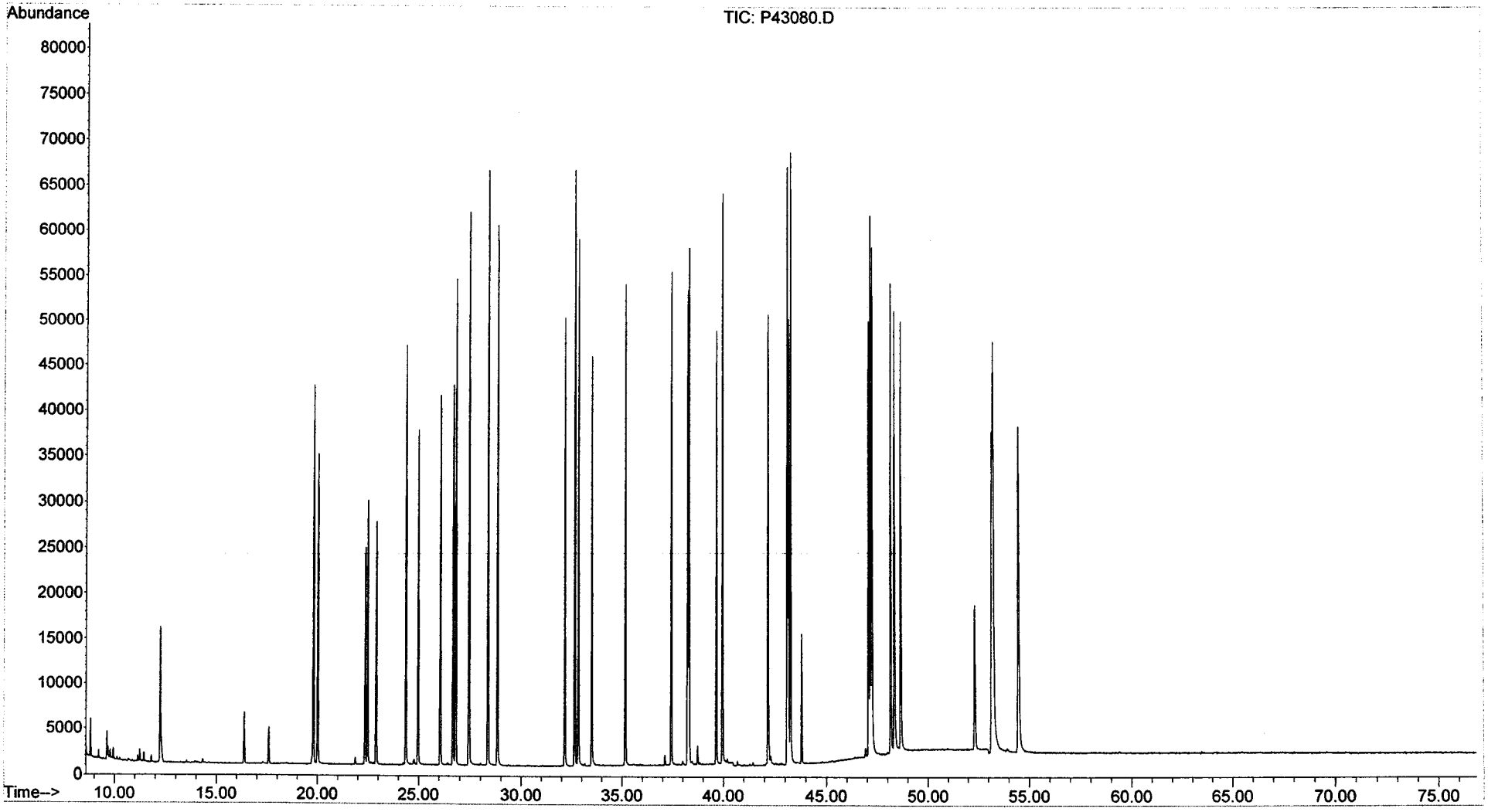
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	50559m	500.00	ng/mL	-0.03
72) Chrysene-d12	43.17	240	92815	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	54342	566.54	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.65%			
58) Pyrene-d10	38.25	212	113829	477.36	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.74%#			
81) Benzo[b]fluoranthene-d12	47.07	264	94975	488.53	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.85%#			
125) 5B(H)Cholane - Surr	43.81	217	19180	456.49	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 45.65%#			

Target Compounds						Qvalue
2) Decalin	16.38	138	20665m	458.61	ng/mL	
3) trans-Decalin	16.38	138	11838	236.77	ng/mL	100
4) cis-Decalin	17.60	138	8898	230.21	ng/mL	100
9) Naphthalene	19.80	128	104375	531.53	ng/mL#	100
15) 2-Methylnaphthalene	22.49	142	69620	556.55	ng/mL#	100
16) 1-Methylnaphthalene	22.92	142	66063	524.23	ng/mL#	100
17) Benzothiophene	20.02	134	86235	515.87	ng/mL	100
22) Biphenyl	24.38	154	84971	566.98	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	59516	548.71	ng/mL#	100
24) Dibenzofuran	27.46	168	92351	526.71	ng/mL	98
25) Acenaphthylene	26.08	152	100544	457.55	ng/mL#	100
26) Acenaphthene	26.82	153	64467	478.85	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.38	170	54094	487.37	ng/mL	100
28) Fluorene	28.84	166	72839	505.04	ng/mL	100
32) Dibenzothiophene	32.16	184	101057	472.65	ng/mL	99
41) Phenanthrene	32.66	178	107754	448.03	ng/mL	100
52) Retene	39.66	234	28061	455.23	ng/mL	98
53) Anthracene	32.83	178	98081	446.63	ng/mL	100
54) Carbazole	33.51	167	89637	515.02	ng/mL	100
55) 1-Methylphenanthrene	35.17	192	76874	484.38	ng/mL	100
56) Fluoranthene	37.44	202	116000	467.91	ng/mL	99
57) Benzo(b)fluorene	39.96	216	70787	487.48	ng/mL	100
59) Pyrene	38.32	202	119824	465.89	ng/mL	99
64) Naphthobenzothiophene	42.18	234	108746	465.06	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.18	234	108746	465.06	ng/mL	99
73) Benz[a]anthracene	43.11	228	106477	482.32	ng/mL	99
74) Chrysene	43.27	228	111240	496.51	ng/mL	99
75) Chrysene/Triphenylene	43.27	228	111240	496.51	ng/mL	99
82) Benzo[b]fluoranthene	47.16	252	116520	507.88	ng/mL	100
83) Benzo[k]fluoranthene	47.24	252	123985	479.07	ng/mL	100
85) Benzo[e]pyrene	48.16	252	110695	478.75	ng/mL	100
86) Benzo[a]pyrene	48.34	252	110455	495.61	ng/mL	100
87) Perylene	48.66	252	108126	489.92	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.18	276	99856m	482.40	ng/mL	
89) Dibenz[a,h]anthracene	53.25	278	111812	522.83	ng/mL	99
90) Benzo[g,h,i]perylene	54.49	276	114513	485.47	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.33	191	41955	469.62	ng/mL	100
92) Hopane (T19)	52.33	191	41955	469.62	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43080.D
Acq On : 6 Jan 2006 6:43 pm
Operator : AC
Sample : C4010502
Misc : PAH STD
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 07 09:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : C2010400
Misc : I2010404 L4 BIO
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 2006
Response via : Initial Calibration

MS 1-9-06

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	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.05#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.05#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.48#
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\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : C2010400
Misc : I2010404 L4 BIO
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 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	100	0.00
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-50.28#
66	t	Chrysene	0.000	0.000#	0.0	0#	-50.46#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-50.46#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-52.90#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-54.77#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-55.05#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-57.74#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-57.35#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-55.05#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-55.13#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-55.23#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-55.79#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-56.25#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-56.45#
79	t	Perylene	0.000	0.000#	0.0	0#	-56.79#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-61.41#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-61.50#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-62.70#
83	A1	17a(H),21B(H)-hopane - C30H	0.519	0.568	-9.4	100	-0.01
84	A2	Hopane (T19)	0.519	0.568	-9.4	100	-0.01
85	A2	C23 Tricyclic Terpane (T4)	0.519	0.000#	100.0#	0#	-47.85#
86	A2	C24 Tricyclic Terpane (T5)	0.519	0.000#	100.0#	0#	-48.72#
87	A2	C25 Tricyclic Terpane (T6)	0.519	0.000#	100.0#	0#	-50.51#
88	A2	C24 Tetracyclic Terpane (T6	0.519	0.000#	100.0#	0#	-52.06#
89	A2	C26 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-51.78#
90	A2	C26 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-51.89#
91	A2	C28 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-54.64#
92	A2	C28 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-54.83#
93	A2	C29 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-55.46#
94	A2	C29 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-55.68#
95	A2	18a-22,29,30-Trisnorneohopa	0.519	0.000#	100.0#	0#	-56.91#
96	A2	C30 Tricyclic Terpane-22S	0.519	0.000#	100.0#	0#	-57.06#
97	A2	C30 Tricyclic Terpane-22R	0.519	0.000#	100.0#	0#	-57.33#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.519	0.000#	100.0#	0#	-57.52#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.519	0.000#	100.0#	0#	-58.86#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : C2010400
Misc : I2010404 L4 BIO
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 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	0.519	0.000#	100.0#	0#	-58.67#
101	A2	30-Norhopane (T15)	0.519	0.000#	100.0#	0#	-59.60#
102	A2	18a(H)-30-Norneohopane-C29T	0.519	0.000#	100.0#	0#	-59.71#
103	A2	17a(H)-Diahopane (X)	0.519	0.000#	100.0#	0#	-59.86#
104	A2	30-Normoretane (T17)	0.519	0.000#	100.0#	0#	-60.47#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.519	0.000#	100.0#	0#	-60.91#
106	A2	Moretane (T20)	0.519	0.000#	100.0#	0#	-61.88#
107	A2	30-Homohopane-22S (T21)	0.519	0.000#	100.0#	0#	-63.10#
108	A2	30-Homohopane-22R (T22)	0.519	0.000#	100.0#	0#	-63.34#
109	A2	30,31-Bishomohopane-22S (T2	0.519	0.000#	100.0#	0#	-64.81#
110	A2	30,31-Bishomohopane-22R (T2	0.519	0.000#	100.0#	0#	-65.23#
111	A2	30,31-Trishomohopane-22S (T	0.519	0.000#	100.0#	0#	-67.16#
112	A2	30,31-Trishomohopane-22R (T	0.519	0.000#	100.0#	0#	-67.83#
113	A2	Tetrakishomohopane-22S (T32	0.519	0.000#	100.0#	0#	-70.06#
114	A2	Tetrakishomohopane-22R (T33	0.519	0.000#	100.0#	0#	-71.05#
115	A2	Pentakishomohopane-22S (T34	0.519	0.000#	100.0#	0#	-73.51#
116	A2	Pentakishomohopane-22R (T35	0.519	0.000#	100.0#	0#	-74.93#
117	SA1	5B(H)Cholane - Surr	0.214	0.213	0.5	100	0.00
118	A2	13b(H),17a(H)-20S-Diacholes	0.214	0.000#	100.0#	0#	-53.23#
119	A2	13b(H),17a(H)-20R-Diacholes	0.214	0.000#	100.0#	0#	-53.74#
120	A2	13b,17a-20S-Methyldiacholes	0.214	0.000#	100.0#	0#	-54.58#
121	A2	14a(H),17a(H)-20S-Cholestan	0.214	0.000#	100.0#	0#	-55.61#
122	A2	14a(H),17a(H)-20R-Cholestan	0.214	0.000#	100.0#	0#	-56.19#
123	A2	13b,17a-20R-Ethyldiacholest	0.214	0.000#	100.0#	0#	-56.50#
124	A2	13a,17b-20S-Ethyldiacholest	0.214	0.000#	100.0#	0#	-56.80#
125	A2	14a,17a-20S-Methylcholestan	0.214	0.000#	100.0#	0#	-56.99#
126	A2	14a,17a-20R-Methylcholestan	0.214	0.000#	100.0#	0#	-57.78#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.214	0.000#	100.0#	0#	-58.17#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.214	0.000#	100.0#	0#	-59.18#
129	A2	14b(H),17b(H)-20R-Cholestan	0.214	0.000#	100.0#	0#	-55.70#
130	A2	14b(H),17b(H)-20S-Cholestan	0.214	0.000#	100.0#	0#	-55.81#
131	A2	14b,17b-20R-Methylcholestan	0.214	0.000#	100.0#	0#	-57.17#
132	A2	14b,17b-20S-Methylcholestan	0.214	0.000#	100.0#	0#	-57.26#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.214	0.000#	100.0#	0#	-58.44#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.214	0.000#	100.0#	0#	-58.50#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : C2010400
Misc : I2010404 L4 BIO
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 2006
Response via : Initial Calibration

CMS 1/9/06

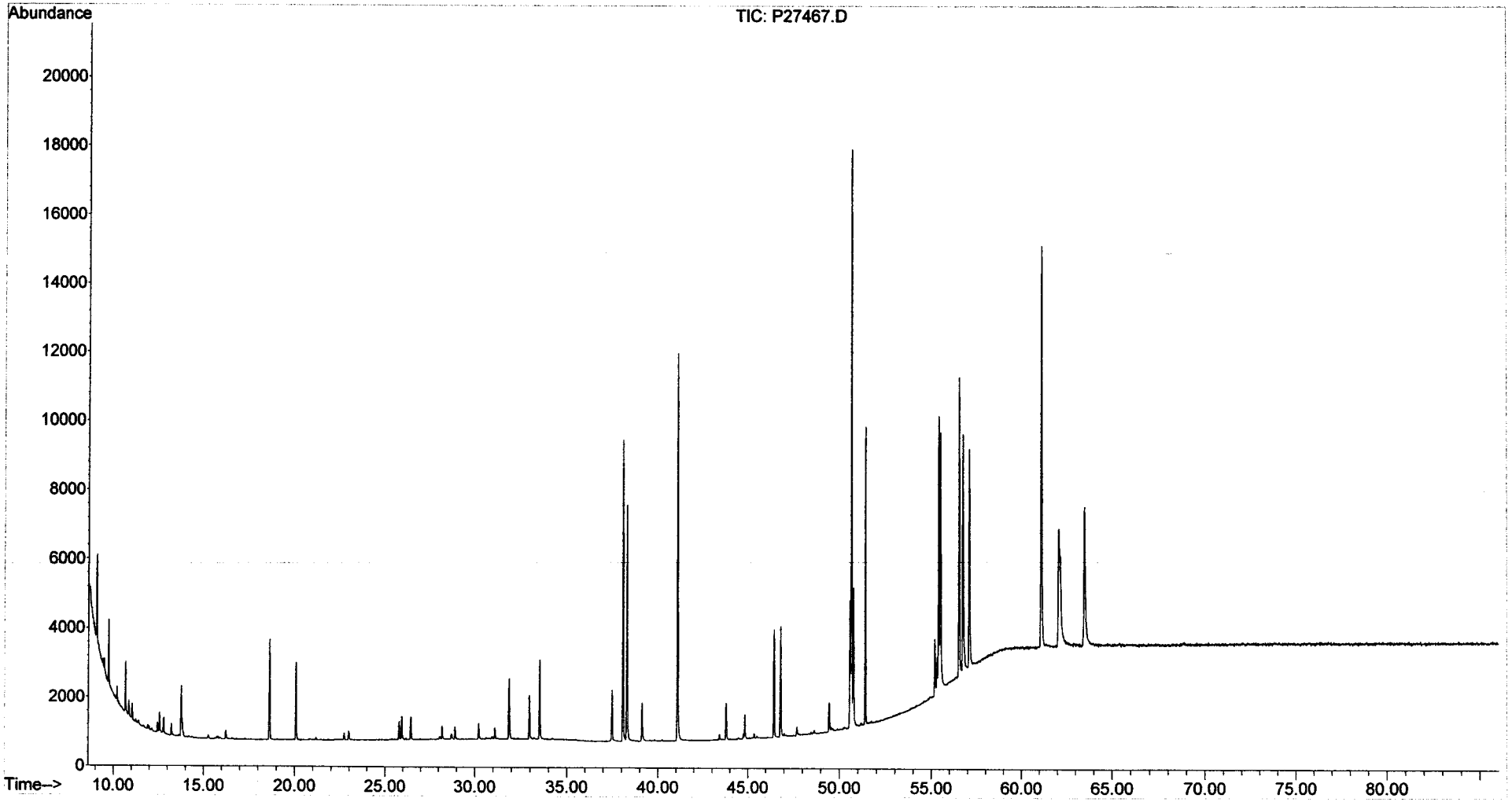
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.65	240	50518	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	51.41	217	10769	676.44	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 67.64%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.10	191	28701	803.92	ng/mL	99
84) Hopane (T19)	61.10	191	28701	792.79	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27467.D
Acq On : 5 Jan 2006 10:35 am
Operator : AC
Sample : C2010400
Misc : I2010404 L4 BIO
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 06 10:22:31 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Jan 05 13:54:41 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27484.D
Acq On : 6 Jan 2006 1:20 pm
Operator : AC
Sample : C2010401
Misc : STD
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 06 15:16:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.05#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.05#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.48#
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\JANUARY06\JAN03\
Data File : P27484.D
Acq On : 6 Jan 2006 1:20 pm
Operator : AC
Sample : C2010401
Misc : STD
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 06 15:16:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

1/6/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
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	116	-0.01
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-50.28#
66	t	Chrysene	0.000	0.000#	0.0	0#	-50.46#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-50.46#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-52.90#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-54.77#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-55.05#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-57.74#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-57.35#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-55.05#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-55.13#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-55.23#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-55.79#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-56.25#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-56.45#
79	t	Perylene	0.000	0.000#	0.0	0#	-56.79#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-61.41#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-61.50#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-62.70#
83	A1	17a(H),21B(H)-hopane - C30H	0.519	0.607	-17.0	124	-0.02
84	A2	Hopane (T19)	0.519	0.607	-17.0	124	-0.02
85	A2	C23 Tricyclic Terpane (T4)	0.519	0.000#	100.0#	0#	-47.85#
86	A2	C24 Tricyclic Terpane (T5)	0.519	0.000#	100.0#	0#	-48.72#
87	A2	C25 Tricyclic Terpane (T6)	0.519	0.000#	100.0#	0#	-50.51#
88	A2	C24 Tetracyclic Terpane (T6	0.519	0.000#	100.0#	0#	-52.06#
89	A2	C26 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-51.78#
90	A2	C26 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-51.89#
91	A2	C28 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-54.64#
92	A2	C28 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-54.83#
93	A2	C29 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-55.46#
94	A2	C29 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-55.68#
95	A2	18a-22,29,30-Trisnorneohopa	0.519	0.000#	100.0#	0#	-56.91#
96	A2	C30 Tricyclic Terpane-22S	0.519	0.000#	100.0#	0#	-57.06#
97	A2	C30 Tricyclic Terpane-22R	0.519	0.000#	100.0#	0#	-57.33#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.519	0.000#	100.0#	0#	-57.52#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.519	0.000#	100.0#	0#	-58.86#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27484.D
Acq On : 6 Jan 2006 1:20 pm
Operator : AC
Sample : C2010401
Misc : STD
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 06 15:16:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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	0.519	0.000#	100.0#	0#	-58.67#
101	A2	30-Norhopane (T15)	0.519	0.000#	100.0#	0#	-59.60#
102	A2	18a(H)-30-Norneohopane-C29T	0.519	0.000#	100.0#	0#	-59.71#
103	A2	17a(H)-Diahopane (X)	0.519	0.000#	100.0#	0#	-59.86#
104	A2	30-Normoretane (T17)	0.519	0.000#	100.0#	0#	-60.47#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.519	0.000#	100.0#	0#	-60.91#
106	A2	Moretane (T20)	0.519	0.000#	100.0#	0#	-61.88#
107	A2	30-Homohopane-22S (T21)	0.519	0.000#	100.0#	0#	-63.10#
108	A2	30-Homohopane-22R (T22)	0.519	0.000#	100.0#	0#	-63.34#
109	A2	30,31-Bishomohopane-22S (T2	0.519	0.000#	100.0#	0#	-64.81#
110	A2	30,31-Bishomohopane-22R (T2	0.519	0.000#	100.0#	0#	-65.23#
111	A2	30,31-Trishomohopane-22S (T	0.519	0.000#	100.0#	0#	-67.16#
112	A2	30,31-Trishomohopane-22R (T	0.519	0.000#	100.0#	0#	-67.83#
113	A2	Tetrakishomohopane-22S (T32	0.519	0.000#	100.0#	0#	-70.06#
114	A2	Tetrakishomohopane-22R (T33	0.519	0.000#	100.0#	0#	-71.05#
115	A2	Pentakishomohopane-22S (T34	0.519	0.000#	100.0#	0#	-73.51#
116	A2	Pentakishomohopane-22R (T35	0.519	0.000#	100.0#	0#	-74.93#
117	SA1	5B(H)Cholane - Surr	0.214	0.226	-5.6	123	-0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.214	0.000#	100.0#	0#	-53.23#
119	A2	13b(H),17a(H)-20R-Diacholes	0.214	0.000#	100.0#	0#	-53.74#
120	A2	13b,17a-20S-Methyldiacholes	0.214	0.000#	100.0#	0#	-54.58#
121	A2	14a(H),17a(H)-20S-Cholestan	0.214	0.000#	100.0#	0#	-55.61#
122	A2	14a(H),17a(H)-20R-Cholestan	0.214	0.000#	100.0#	0#	-56.19#
123	A2	13b,17a-20R-Ethyldiacholest	0.214	0.000#	100.0#	0#	-56.50#
124	A2	13a,17b-20S-Ethyldiacholest	0.214	0.000#	100.0#	0#	-56.80#
125	A2	14a,17a-20S-Methylcholestan	0.214	0.000#	100.0#	0#	-56.99#
126	A2	14a,17a-20R-Methylcholestan	0.214	0.000#	100.0#	0#	-57.78#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.214	0.000#	100.0#	0#	-58.17#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.214	0.000#	100.0#	0#	-59.18#
129	A2	14b(H),17b(H)-20R-Cholestan	0.214	0.000#	100.0#	0#	-55.70#
130	A2	14b(H),17b(H)-20S-Cholestan	0.214	0.000#	100.0#	0#	-55.81#
131	A2	14b,17b-20R-Methylcholestan	0.214	0.000#	100.0#	0#	-57.17#
132	A2	14b,17b-20S-Methylcholestan	0.214	0.000#	100.0#	0#	-57.26#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.214	0.000#	100.0#	0#	-58.44#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.214	0.000#	100.0#	0#	-58.50#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27484.D
Acq On : 6 Jan 2006 1:20 pm
Operator : AC
Sample : C2010401
Misc : STD
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 06 15:16:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.64	240	58657	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	51.40	217	13246	528.08	ng/ml	-0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	52.81%	

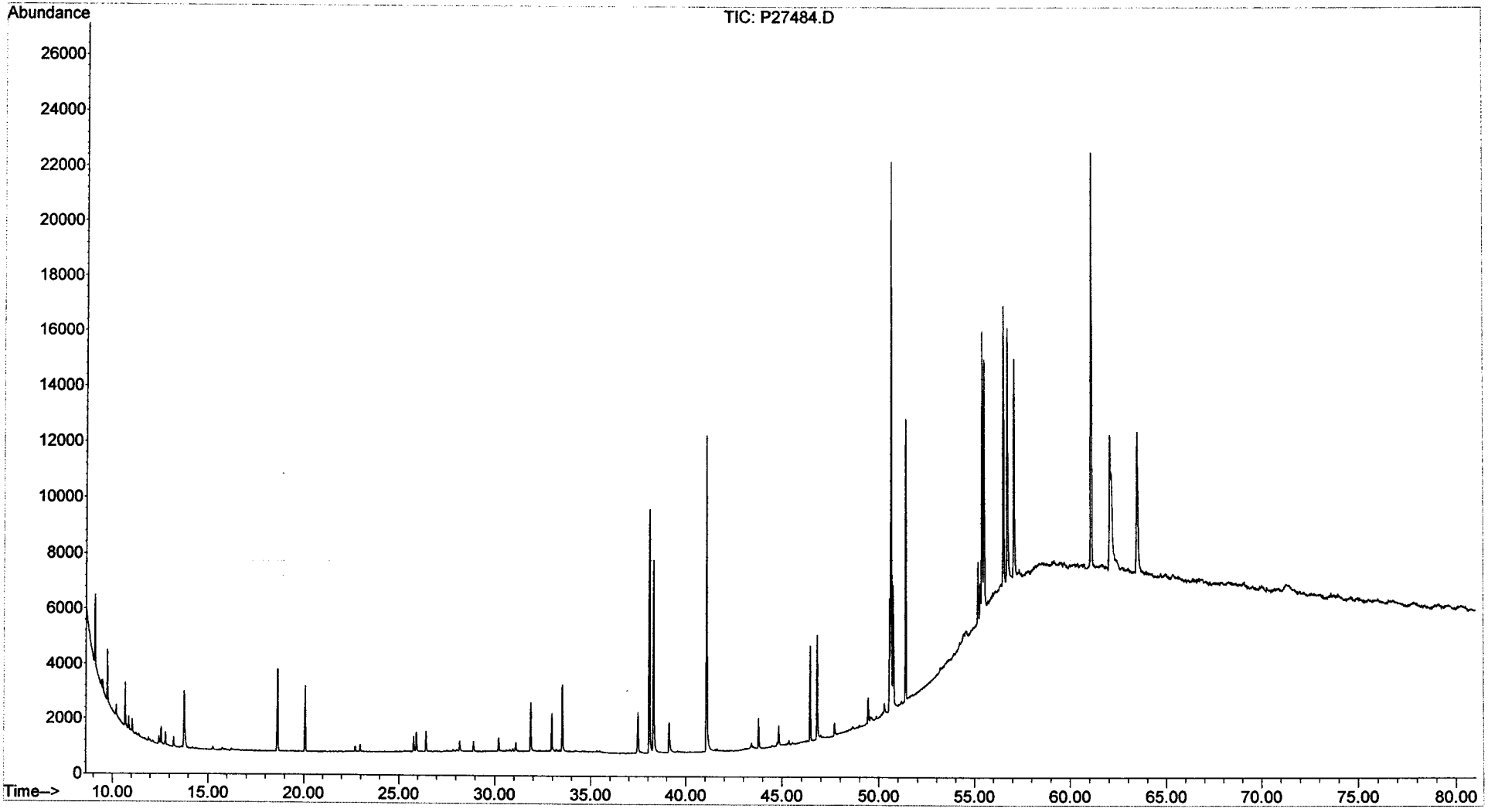
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.09	191	35589	584.47	ng/mL	99
84) Hopane (T19)	61.09	191	35589	584.47	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27484.D
Acq On : 6 Jan 2006 1:20 pm
Operator : AC
Sample : C2010401
Misc : STD
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 06 15:16:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27494.D
Acq On : 7 Jan 2006 12:05 am
Operator : AC
Sample : C2010402
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 10 10:35:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	0#	-30.25#
2	t	Decalin	0.000	0.000#	0.0	0#	-18.05#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.05#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.48#
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\JANUARY06\JAN03\
Data File : P27494.D
Acq On : 7 Jan 2006 12:05 am
Operator : AC
Sample : C2010402
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 10 10:35:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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	125	0.01
65	t	Benz[a]anthracene	0.000	0.000#	0.0	0#	-50.28#
66	t	Chrysene	0.000	0.000#	0.0	0#	-50.46#
67	A1	Chrysene/Triphenylene	0.000	0.000#	0.0	0#	-50.46#
68	A2	C1-Chrysenes	0.000	0.000#	0.0	0#	-52.90#
69	A2	C2-Chrysenes	0.000	0.000#	0.0	0#	-54.77#
70	A2	BBF-d12 Surr BKGD	0.000	0.000#	0.0	0#	-55.05#
71	A2	C3-Chrysenes	0.000	0.000#	0.0	0#	-57.74#
72	A2	C4-Chrysenes	0.000	0.000#	0.0	0#	-57.35#
73	s	Benzo[b]fluoranthene-d12	0.000	0.000#	0.0	0#	-55.05#
74	t	Benzo[b]fluoranthene	0.000	0.000#	0.0	0#	-55.13#
75	A1	Benzo[k]fluoranthene	0.000	0.000#	0.0	0#	-55.23#
76	A2	Benzo[a]fluoranthene	0.000	0.000#	0.0	0#	-55.79#
77	t	Benzo[e]pyrene	0.000	0.000#	0.0	0#	-56.25#
78	t	Benzo[a]pyrene	0.000	0.000#	0.0	0#	-56.45#
79	t	Perylene	0.000	0.000#	0.0	0#	-56.79#
80	t	Indeno[1,2,3-cd]pyrene	0.000	0.000#	0.0	0#	-61.41#
81	t	Dibenz[a,h]anthracene	0.000	0.000#	0.0	0#	-61.50#
82	t	Benzo[g,h,i]perylene	0.000	0.000#	0.0	0#	-62.70#
83	A1	17a(H),21B(H)-hopane - C30H	0.519	0.626	-20.6	138	0.01
84	A2	Hopane (T19)	0.519	0.626	-20.6	138	0.01
85	A2	C23 Tricyclic Terpane (T4)	0.519	0.000#	100.0#	0#	-47.85#
86	A2	C24 Tricyclic Terpane (T5)	0.519	0.000#	100.0#	0#	-48.72#
87	A2	C25 Tricyclic Terpane (T6)	0.519	0.000#	100.0#	0#	-50.51#
88	A2	C24 Tetracyclic Terpane (T6	0.519	0.000#	100.0#	0#	-52.06#
89	A2	C26 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-51.78#
90	A2	C26 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-51.89#
91	A2	C28 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-54.64#
92	A2	C28 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-54.83#
93	A2	C29 Tricyclic Terpane-22S (	0.519	0.000#	100.0#	0#	-55.46#
94	A2	C29 Tricyclic Terpane-22R (	0.519	0.000#	100.0#	0#	-55.68#
95	A2	18a-22,29,30-Trisnorneohopa	0.519	0.000#	100.0#	0#	-56.91#
96	A2	C30 Tricyclic Terpane-22S	0.519	0.000#	100.0#	0#	-57.06#
97	A2	C30 Tricyclic Terpane-22R	0.519	0.000#	100.0#	0#	-57.33#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.519	0.000#	100.0#	0#	-57.52#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.519	0.000#	100.0#	0#	-58.86#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27494.D
Acq On : 7 Jan 2006 12:05 am
Operator : AC
Sample : C2010402
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 10 10:35:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 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	0.519	0.000#	100.0#	0#	-58.67#
101	A2	30-Norhopane (T15)	0.519	0.000#	100.0#	0#	-59.60#
102	A2	18a(H)-30-Norneohopane-C29T	0.519	0.000#	100.0#	0#	-59.71#
103	A2	17a(H)-Diahopane (X)	0.519	0.000#	100.0#	0#	-59.86#
104	A2	30-Normoretane (T17)	0.519	0.000#	100.0#	0#	-60.47#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.519	0.000#	100.0#	0#	-60.91#
106	A2	Moretane (T20)	0.519	0.000#	100.0#	0#	-61.88#
107	A2	30-Homohopane-22S (T21)	0.519	0.000#	100.0#	0#	-63.10#
108	A2	30-Homohopane-22R (T22)	0.519	0.000#	100.0#	0#	-63.34#
109	A2	30,31-Bishomohopane-22S (T2	0.519	0.000#	100.0#	0#	-64.81#
110	A2	30,31-Bishomohopane-22R (T2	0.519	0.000#	100.0#	0#	-65.23#
111	A2	30,31-Trishomohopane-22S (T	0.519	0.000#	100.0#	0#	-67.16#
112	A2	30,31-Trishomohopane-22R (T	0.519	0.000#	100.0#	0#	-67.83#
113	A2	Tetrakishomohopane-22S (T32	0.519	0.000#	100.0#	0#	-70.06#
114	A2	Tetrakishomohopane-22R (T33	0.519	0.000#	100.0#	0#	-71.05#
115	A2	Pentakishomohopane-22S (T34	0.519	0.000#	100.0#	0#	-73.51#
116	A2	Pentakishomohopane-22R (T35	0.519	0.000#	100.0#	0#	-74.93#
117	SA1	5B(H)Cholane - Surr	0.214	0.230	-7.5	135	0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.214	0.000#	100.0#	0#	-53.23#
119	A2	13b(H),17a(H)-20R-Diacholes	0.214	0.000#	100.0#	0#	-53.74#
120	A2	13b,17a-20S-Methyldiacholes	0.214	0.000#	100.0#	0#	-54.58#
121	A2	14a(H),17a(H)-20S-Cholestan	0.214	0.000#	100.0#	0#	-55.61#
122	A2	14a(H),17a(H)-20R-Cholestan	0.214	0.000#	100.0#	0#	-56.19#
123	A2	13b,17a-20R-Ethyldiacholest	0.214	0.000#	100.0#	0#	-56.50#
124	A2	13a,17b-20S-Ethyldiacholest	0.214	0.000#	100.0#	0#	-56.80#
125	A2	14a,17a-20S-Methylcholestan	0.214	0.000#	100.0#	0#	-56.99#
126	A2	14a,17a-20R-Methylcholestan	0.214	0.000#	100.0#	0#	-57.78#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.214	0.000#	100.0#	0#	-58.17#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.214	0.000#	100.0#	0#	-59.18#
129	A2	14b(H),17b(H)-20R-Cholestan	0.214	0.000#	100.0#	0#	-55.70#
130	A2	14b(H),17b(H)-20S-Cholestan	0.214	0.000#	100.0#	0#	-55.81#
131	A2	14b,17b-20R-Methylcholestan	0.214	0.000#	100.0#	0#	-57.17#
132	A2	14b,17b-20S-Methylcholestan	0.214	0.000#	100.0#	0#	-57.26#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.214	0.000#	100.0#	0#	-58.44#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.214	0.000#	100.0#	0#	-58.50#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27494.D
Acq On : 7 Jan 2006 12:05 am
Operator : AC
Sample : C2010402
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 10 10:35:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration

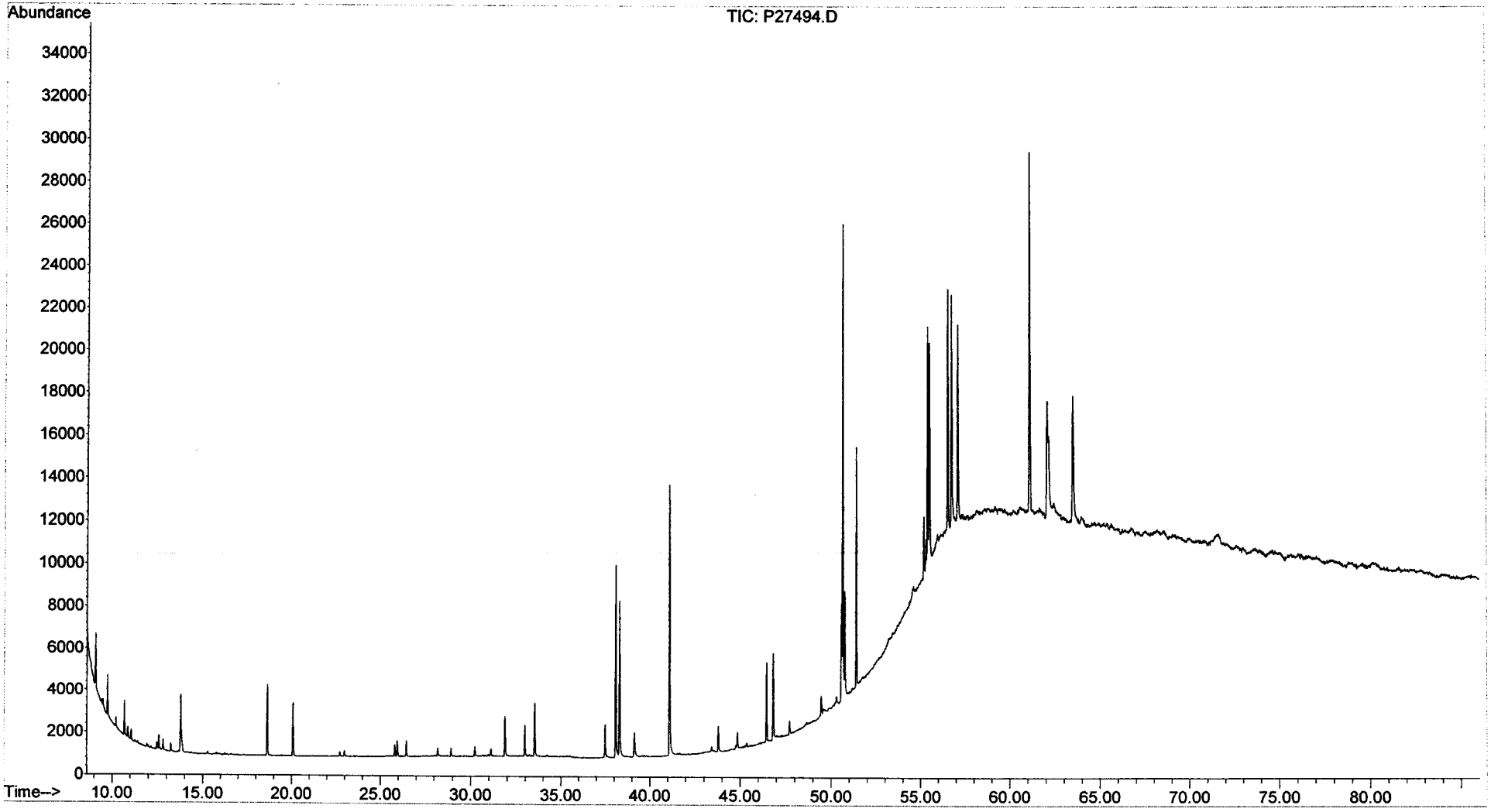
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.66	240	63379	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	51.42	217	14558	537.15	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.72%			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	61.12	191	39672	602.99	ng/mL	99
84) Hopane (T19)	61.12	191	39672	602.99	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN03\
Data File : P27494.D
Acq On : 7 Jan 2006 12:05 am
Operator : AC
Sample : C2010402
Misc : STD
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jan 10 10:35:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\JAN06\BIO20105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 10:31:39 2006
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512105**
Lab ID: **C4123001**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		64071	26.74	106225	43.20
Upper Limit:		128142	27.24	212450	43.70
Lower Limit:		32036	26.24	53112	42.70
Client ID	**Lab ID**				
Blank	SS122105B14	73737	26.74	130270	43.20
LCS	SS122105LCS11	78037	26.74	135044	43.20
LCSD	SS122105LCSD11	78399	26.74	135772	43.20
GC-SED-90B (6.5-7)	0512105-01	49600	26.76	107028	43.23
GC-SED-89 (12.8-13.8)	0512105-02	56253	26.75	106444	43.23
GC-SED-88 (15.9-16.9)	0512105-03	52531	26.75	99629	43.24
GC-SED-95 (3.5-4.5)	0512105-05	64840	26.75	88065	43.21
CCV	C4123002	56934	26.74	99684	43.19

N/A - Not Applicable

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

01/10/06 11:43

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512105**
Lab ID: **C4123002**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		56934	26.74	99684	43.19
Upper Limit:		113868	27.24	199368	43.69
Lower Limit:		28467	26.24	49842	42.69
Client ID	**Lab ID**				
GC-SED-86 (0-1)	0512105-06	61932	26.75	82436	43.21
GC-SED-84 (6-7)	0512105-07	50264	26.76	90317	43.23
GC-SED-87 (4.4-6.2)	0512105-08	66338	26.75	92174	43.21
GC-SED-87 (4.4-6.2)	0512105-08 D	60150	26.75	81395	43.22
CCV	C4123003	61061	26.74	102013	43.20

N/A - Not Applicable

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

01/10/06 11:44

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512105**
Lab ID: **C4010501**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		67883	26.70	125705	43.18
Upper Limit:		135766	27.20	251410	43.68
Lower Limit:		33942	26.20	62852	42.68
Client ID	**Lab ID**				
GC-SED-90B (6.5-7)	0512105-01E	69914	26.70	123961	43.18
GC-SED-89 (12.8-13.8)	0512105-02E	67069	26.70	120899	43.17
GC-SED-88 (15.9-16.9)	0512105-03E	64611	26.70	114824	43.17
GC-SED-96 (14-15)	0512105-04E	62895	26.70	114225	43.17
GC-SED-96 (14-15)	0512105-04	56346	26.70	94891	43.18
GC-SED-84 (6-7)	0512105-07E	66019	26.70	121090	43.17
CCV	C4010502	50559	26.70	92815	43.17

N/A - Not Applicable

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

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

Form VIII
Internal Standard Summary
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512105**
Lab ID: **C2010400**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		50518	50.65
Upper Limit:		101036	51.15
Lower Limit:		25259	50.15
Client ID	**Lab ID**		
Blank	SS122105B14	45462	50.65
GC-SED-90B (6.5-7)	0512105-01	56489	50.66
GC-SED-89 (12.8-13.8)	0512105-02	56034	50.65
GC-SED-88 (15.9-16.9)	0512105-03	55597	50.65
GC-SED-96 (14-15)	0512105-04	63270	50.66
GC-SED-95 (3.5-4.5)	0512105-05	58343	50.66
CCV	C2010401	58657	50.64

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.

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

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: **0512105**
Lab ID: **C2010401**

		Chrysene-d12	
		Area	**RT**
Standard:		58657	50.64
Upper Limit:		117314	51.14
Lower Limit:		29328	50.14
Client ID	**Lab ID**		
GC-SED-86 (0-1)	0512105-06	68072	50.68
GC-SED-84 (6-7)	0512105-07	56712	50.68
GC-SED-87 (4.4-6.2)	0512105-08	68842	50.68
GC-SED-87 (4.4-6.2)	0512105-08 D	69886	50.68
CCV	C2010402	63379	50.66

N/A - Not Applicable

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

01/10/06 10:45

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-90B (6.5-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-01**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/10/06	87.0	5.77	38.5	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**32000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	87	50-130

01/16/06 16:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27573.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 9:19 pm
Operator : AC
Sample : 0512105-01-AFID
Misc : 1X RERUN
ALS Vial : 73 Sample Multiplier: 1

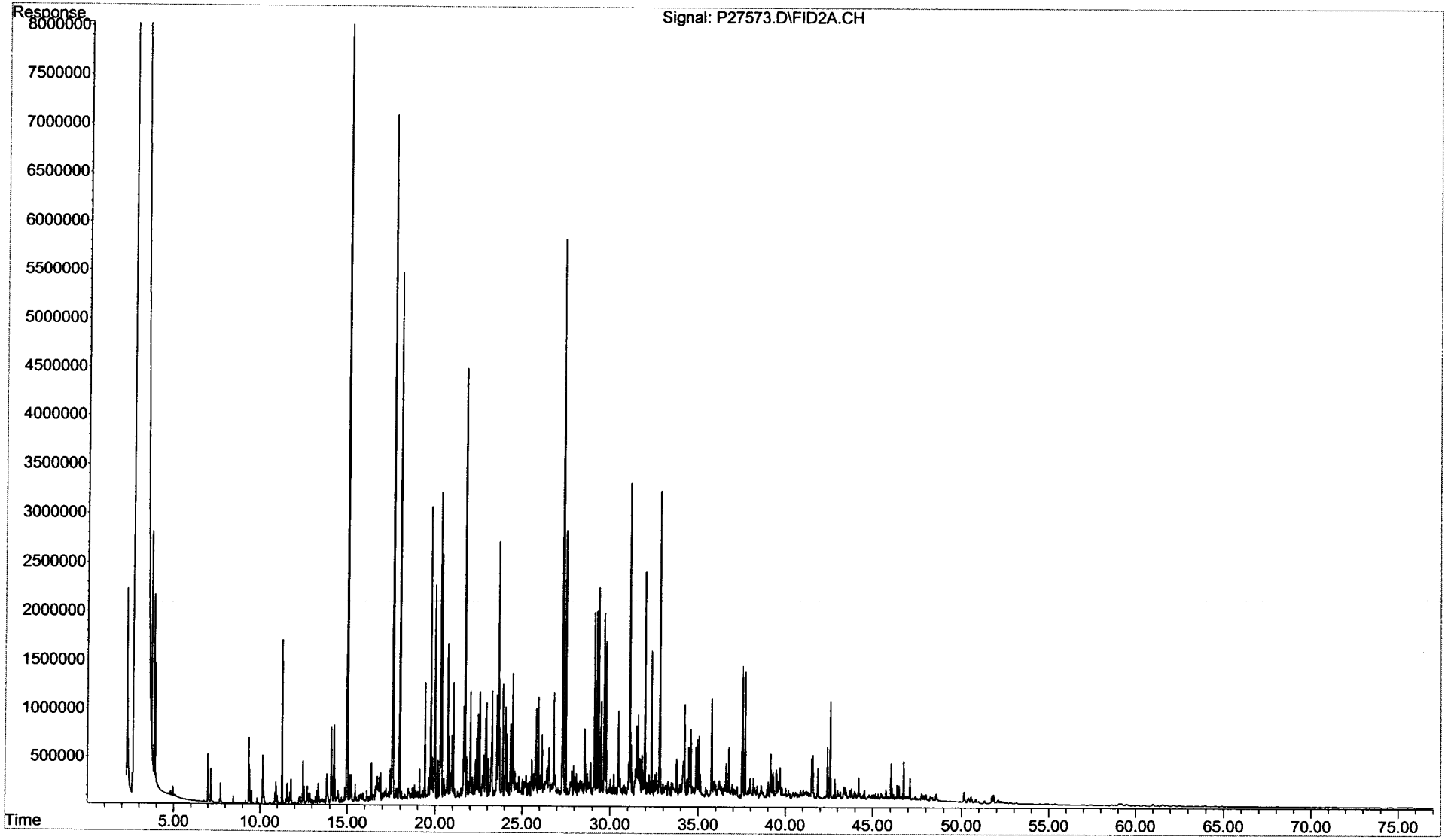
Integration File: SHCINT1.E
Quant Time: Jan 15 21:25:43 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	75384185	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.11	36799500	22.902 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 45.80%#
24) s	d50-Tetracosane	35.75	32022944	22.564 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 45.13%#
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.84	6510027188	4415.123 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	3727354993	2527.905 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27573.D
Operator : AC
Acquired : 10 Jan 2006 9:19 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-01-AFID
Misc Info : 1X RERUN
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-89 (12.8-13.8)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-02**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/10/06	82.5	5.49	51.3282	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**47000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	93	50-130
d50-Tetracosane	94	50-130

01/16/06 16:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27575.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 10:57 pm
Operator : AC
Sample : 0512105-02-AFID
Misc : 1X RERUN
ALS Vial : 74 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 15 21:27:36 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

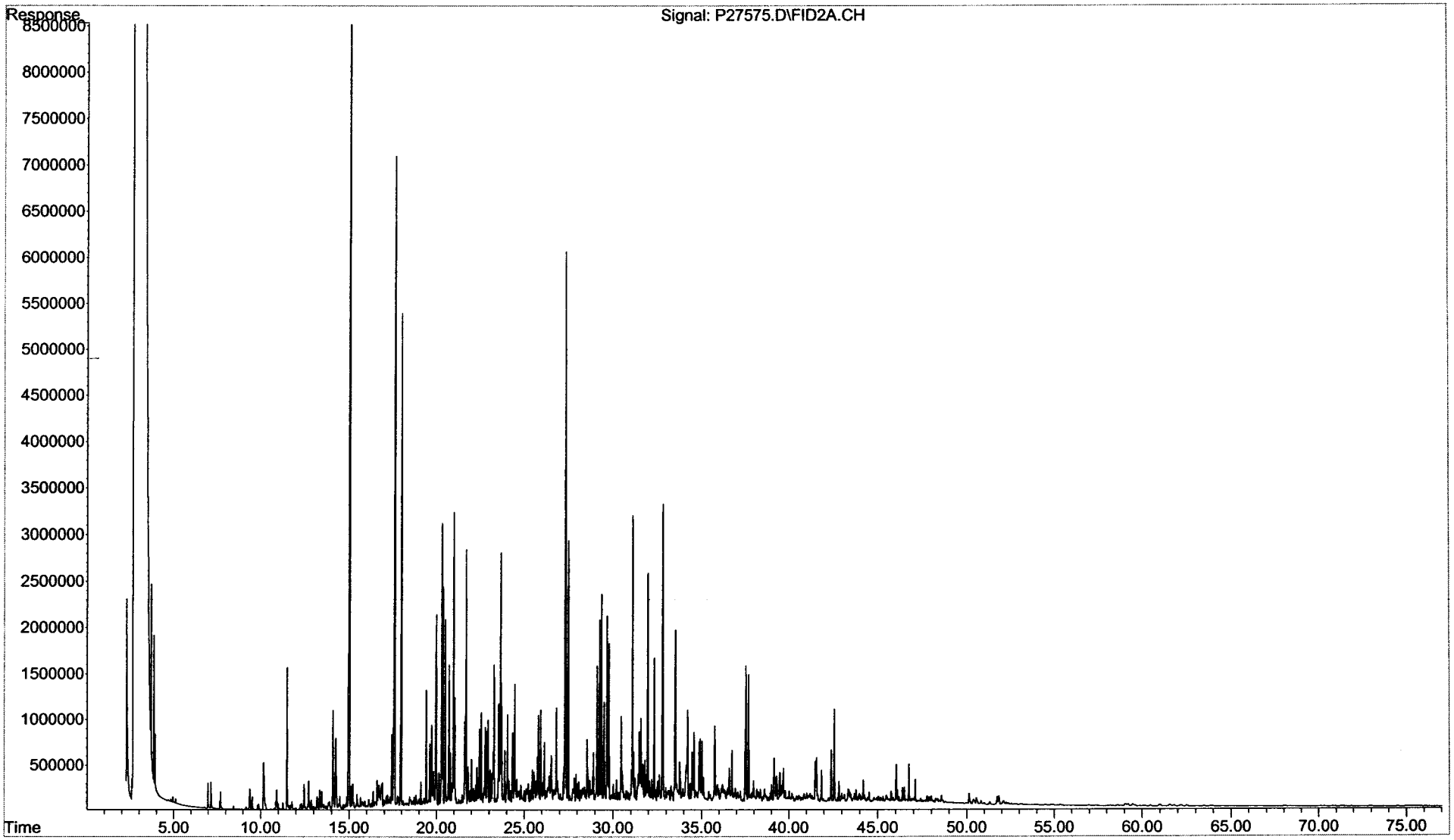
1/16/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.12	74856263	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	28766341	18.029 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	36.06%#
24) s d50-Tetracosane	35.75	25790588	18.301 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	36.60%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	6484771231	4429.011 ug/mL
44) h Total Resolved Hydrocarbon	40.84	3784378206	2584.679 ug/L

-RF + Rpt conc 2nd 1/20/06

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27575.D
Operator : AC
Acquired : 10 Jan 2006 10:57 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-02-AFID
Misc Info : 1X RERUN
Vial Number: 74



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-88 (15.9-16.9)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-03**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/14/05	12/16/05	12/21/05	01/11/06	83.7	5.02	17.1094	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**17000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	82	50-130

01/16/06 16:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27577.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 12:31 am
Operator : AC
Sample : 0512105-03-AFID
Misc : 1X RERUN
ALS Vial : 75 Sample Multiplier: 1

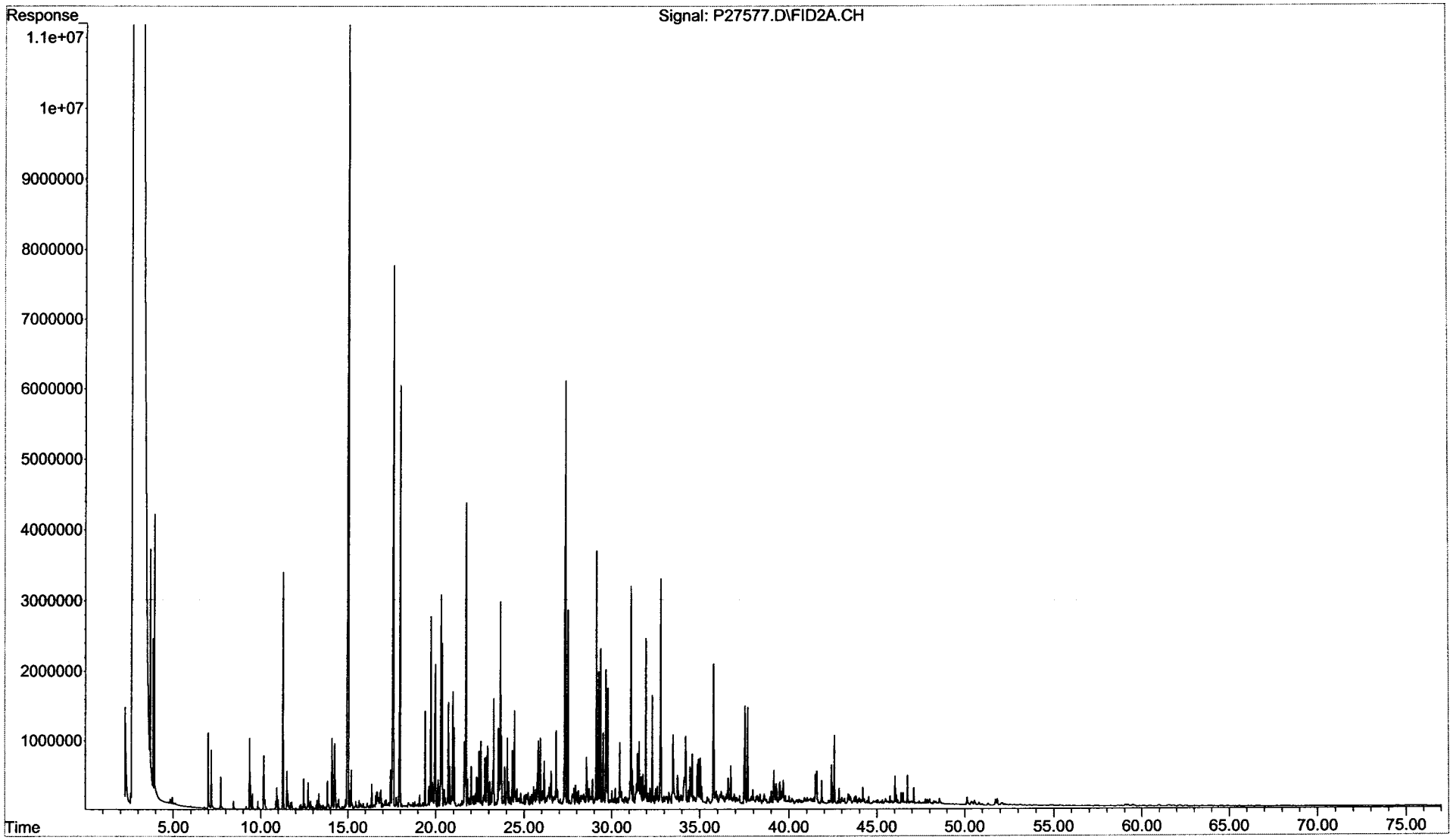
Integration File: SHCINT1.E
Quant Time: Jan 15 21:29:13 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.11	72906227	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.13	77208638	49.684 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.37%
24) s d50-Tetracosane	35.77	65748552	47.902 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	95.80%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	6377419074	4472.194 ug/mL
44) h Total Resolved Hydrocarbon	40.84	4061002314	2847.796 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27577.D
Operator : AC
Acquired : 11 Jan 2006 12:31 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-03-AFID
Misc Info : 1X RERUN
Vial Number: 75



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-96 (14-15)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-04**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/11/06	83.5	5.33	17.1094	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**18000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	90	50-130
d50-Tetracosane	86	50-130

01/16/06 16:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27579.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 2:05 am
Operator : AC
Sample : 0512105-04-AFID
Misc : 1X RERUN
ALS Vial : 76 Sample Multiplier: 1

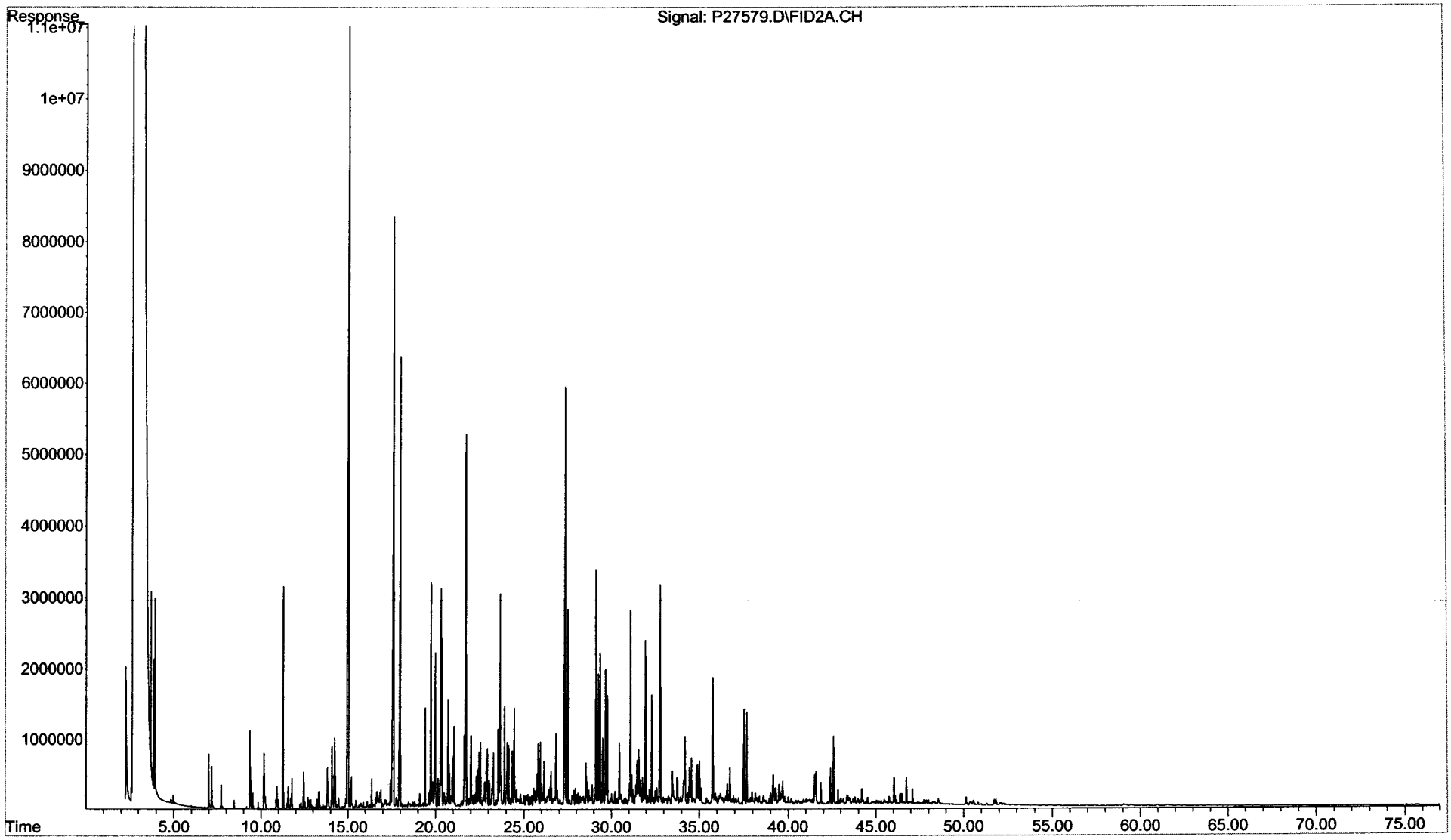
Integration File: SHCINT1.E
Quant Time: Jan 15 21:31:09 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.11	62341684	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.12	69682441	52.439 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 104.88%
24) s	d50-Tetracosane	35.76	59011222	50.279 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 100.56%
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.84	6011924600	4930.322 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	3922585573	3216.875 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27579.D
Operator : AC
Acquired : 11 Jan 2006 2:05 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-04-AFID
Misc Info : 1X RERUN
Vial Number: 76



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-95 (3.5-4.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-05**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/11/06	43.5	5.19	25.9974	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**34000**

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\PAH2\JANUARY06\JAN09.SEC\
Data File : P27585.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 8:09 am
Operator : AC
Sample : 0512105-05-AFID
Misc : 1X RERUN
ALS Vial : 79 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 15 21:33:40 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 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

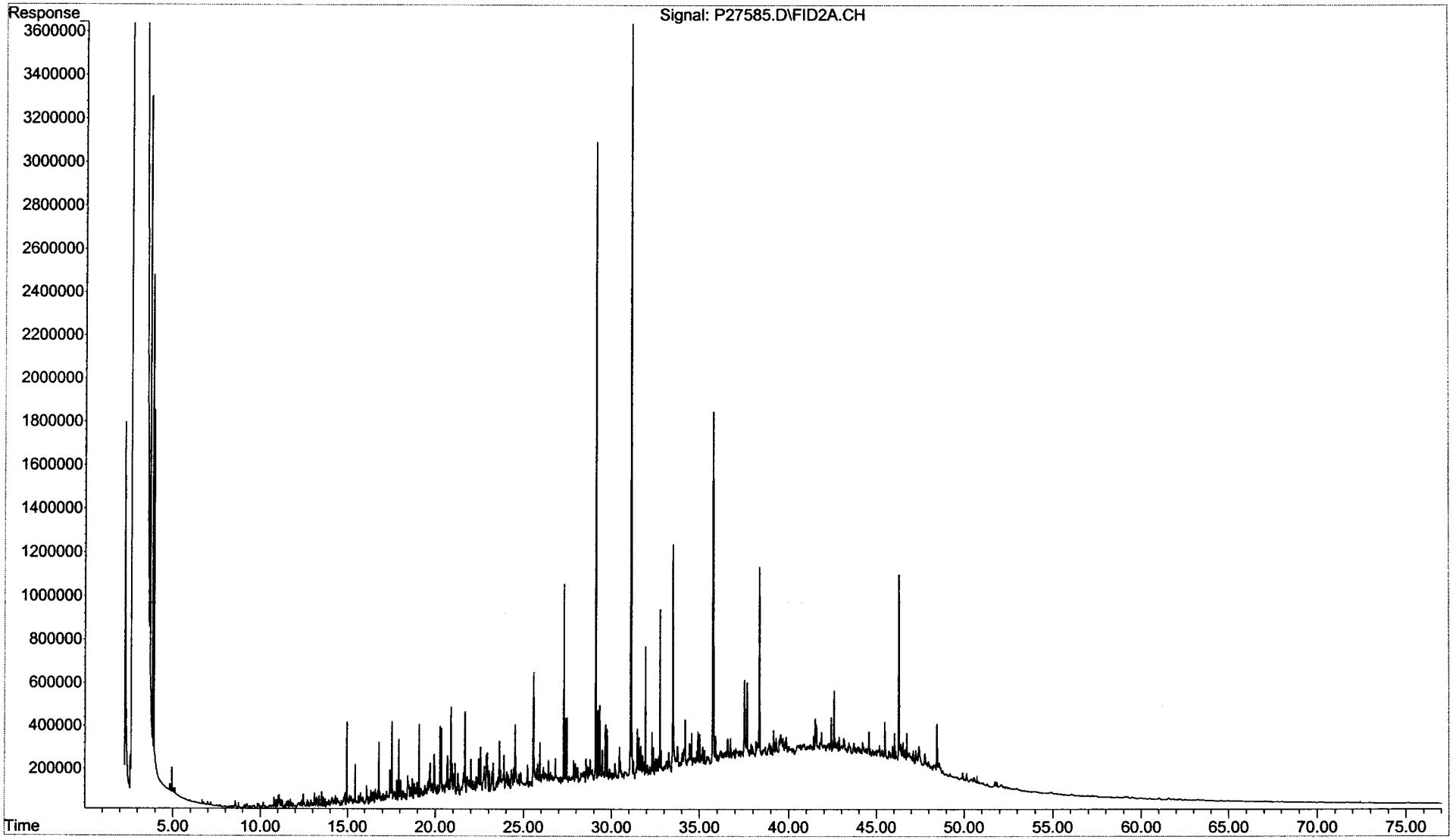
	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.12	85274698	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.11	61787438	33.993 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	67.99%
24) s	d50-Tetracosane	35.77	51766008	32.244 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	64.49%
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.84	5414365504	3246.143 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	960315150	575.750 ug/L

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

1/16/06

LF tppt conc 2nd
1/20/06

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27585.D
Operator : AC
Acquired : 11 Jan 2006 8:09 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-05-AFID
Misc Info : 1X RERUN
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-86 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-06**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/11/06	40.7	5.10	40.8551	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**57000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	90	50-130
d50-Tetracosane	86	50-130

01/16/06 16:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27587.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 9:46 am
Operator : AC
Sample : 0512105-06-AFID
Misc : 1X RERUN
ALS Vial : 80 Sample Multiplier: 1

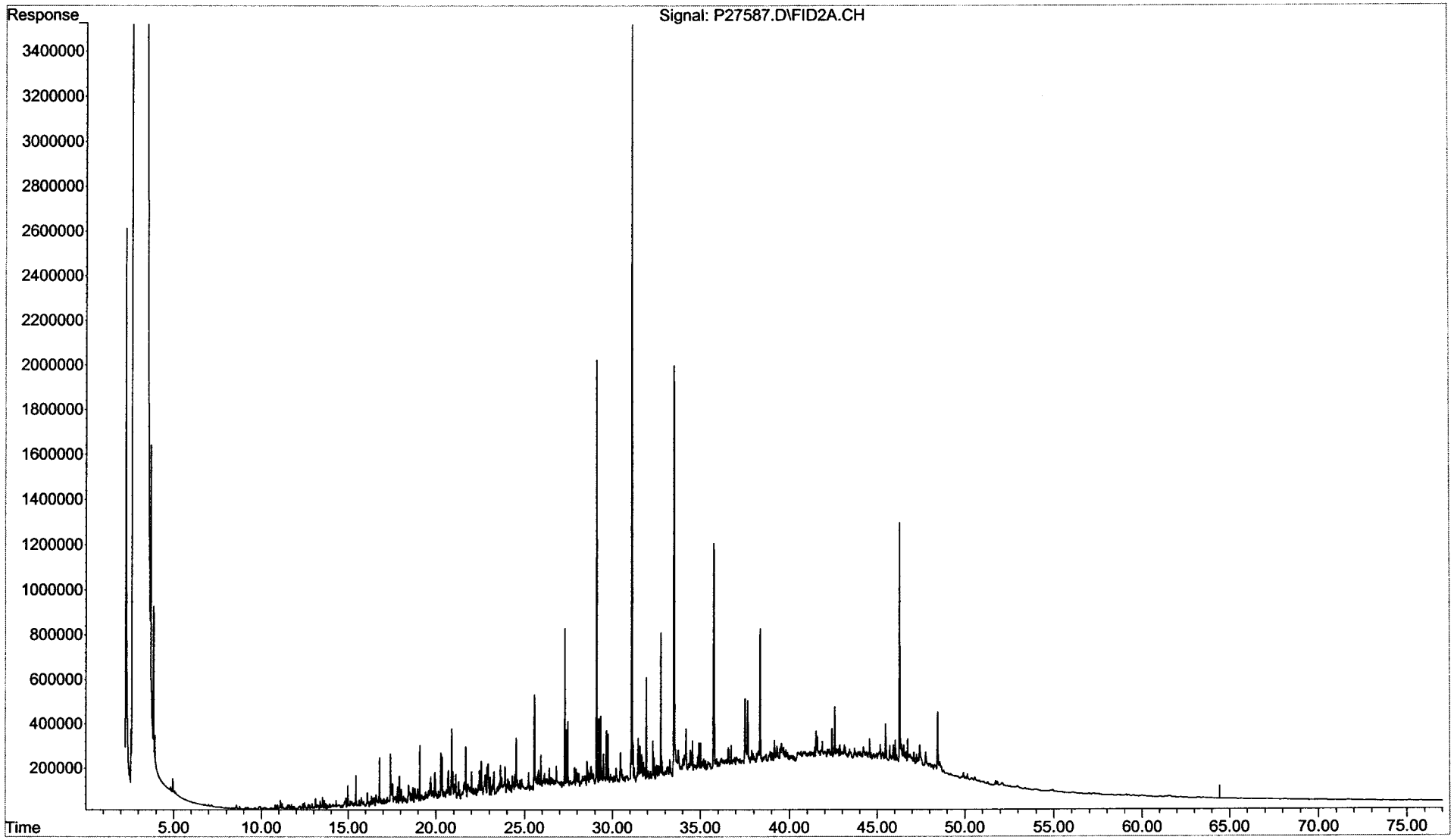
Integration File: SHCINT1.E
Quant Time: Jan 15 21:36:34 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	78594495	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.10	37111930	22.153 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	44.31%#
24) s d50-Tetracosane	35.76	30972722	20.932 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	41.86%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4883767238	3176.897 ug/mL
44) h Total Resolved Hydrocarbon	40.84	801484784	521.367 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27587.D
Operator : AC
Acquired : 11 Jan 2006 9:46 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-06-AFID
Misc Info : 1X RERUN
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-84 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-07**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/11/06	84.3	5.57	17.1094	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**16000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	80	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27589.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 11:25 am
Operator : AC
Sample : 0512105-07-AFID
Misc : 1X RERUN
ALS Vial : 81 Sample Multiplier: 1

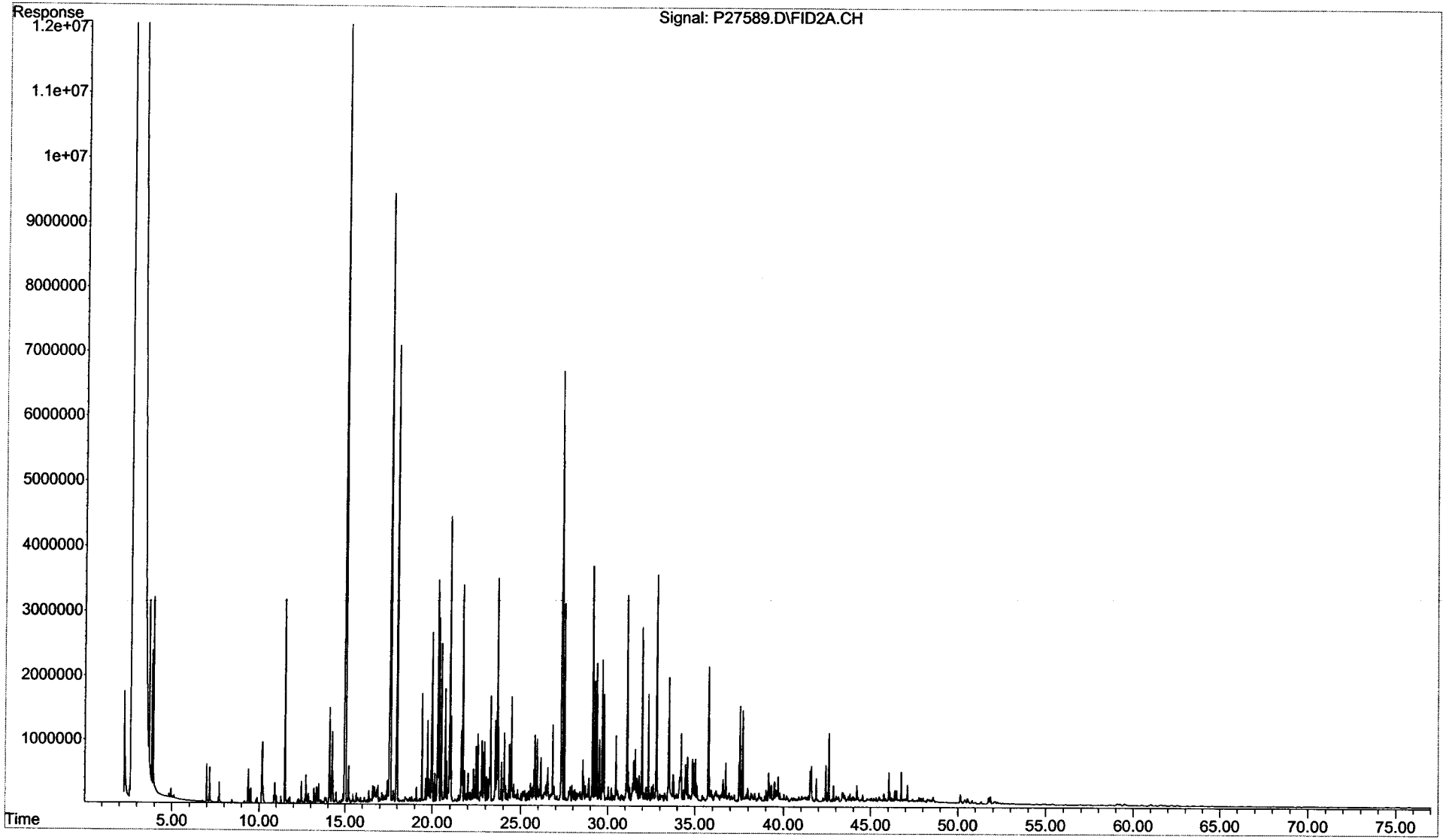
Integration File: SHCINT1.E
Quant Time: Jan 15 21:39:25 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	75493735	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.13	79596462	49.465 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	98.93%
24) s	d50-Tetracosane	35.78	66642434	46.889 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery =	93.78%
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.84	7016471939	4751.691 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	4539171943	3074.015 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27589.D
Operator : AC
Acquired : 11 Jan 2006 11:25 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-07-AFID
Misc Info : 1X RERUN
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: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/11/06	33.7	5.13	31.7746	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**64000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	93	50-130
d50-Tetracosane	86	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27591.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 1:04 pm
Operator : AC
Sample : 0512105-08-AFID
Misc : 1X RERUN
ALS Vial : 82 Sample Multiplier: 1

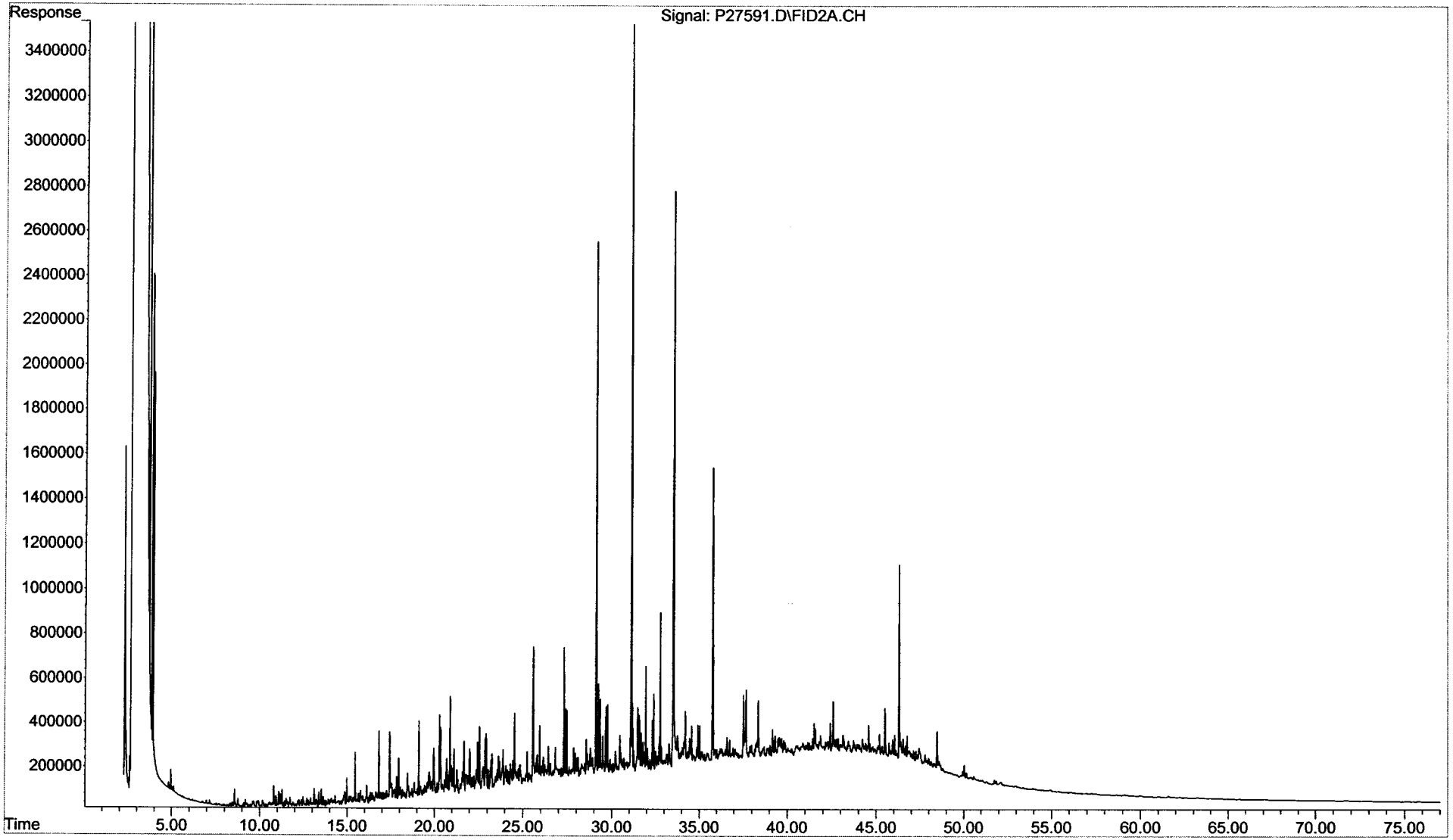
Integration File: SHCINT1.E
Quant Time: Jan 15 21:42:59 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.13	78487738	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	48958623	29.264 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	58.53%
24) s d50-Tetracosane	35.77	40150269	27.172 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	54.34%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5772205177	3759.934 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1016294878	662.000 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27591.D
Operator : AC
Acquired : 11 Jan 2006 1:04 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-08-AFID
Misc Info : 1X RERUN
Vial Number: 82



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-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08 D**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/15/05	12/16/05	12/21/05	01/11/06	33.7	5.53	35.75	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**64000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	92	50-130
d50-Tetracosane	85	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27593.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 2:45 pm
Operator : AC
Sample : 0512105-08D-AFID
Misc : 1X RERUN
ALS Vial : 83 Sample Multiplier: 1

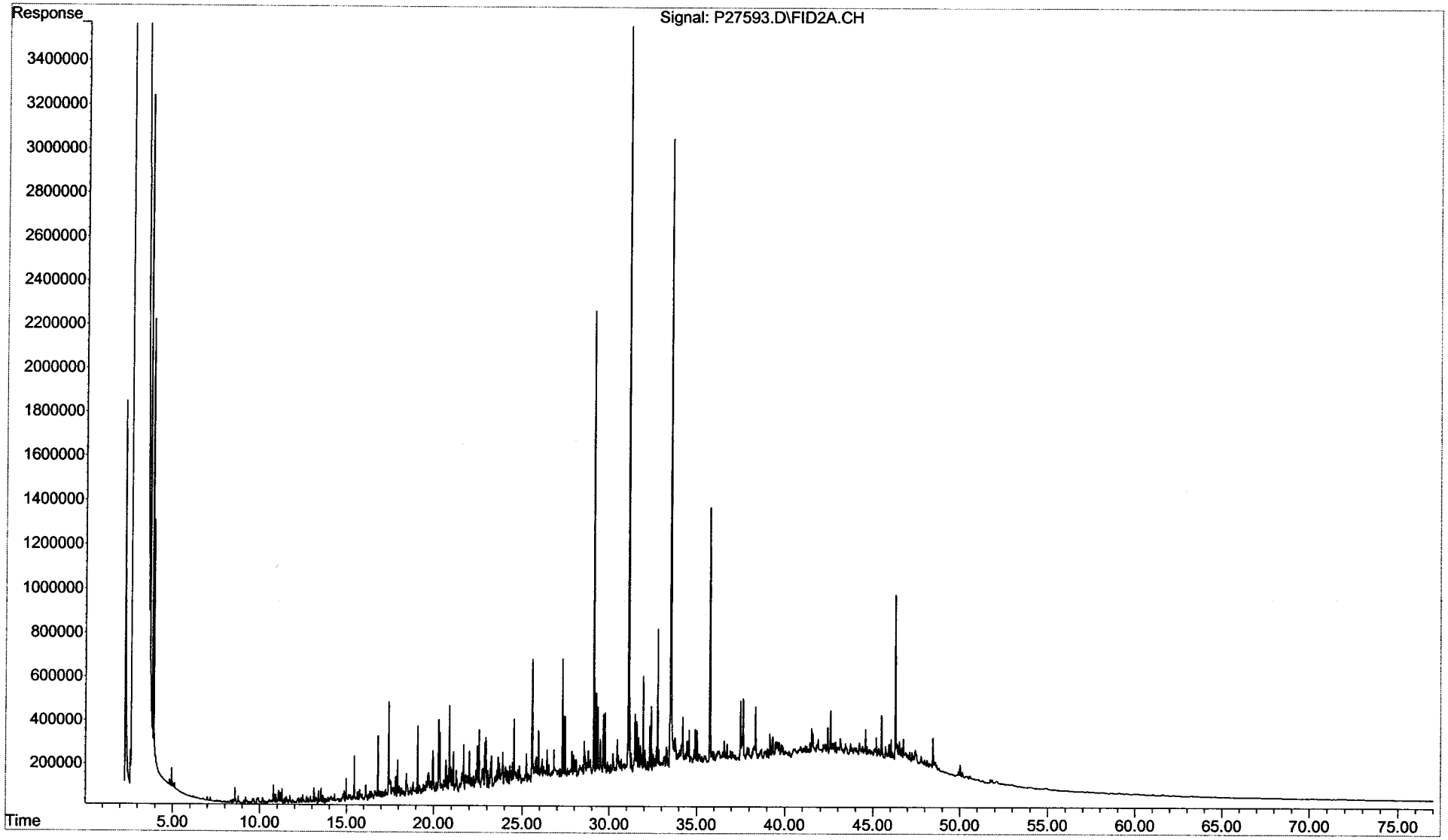
Integration File: SHCINT1.E
Quant Time: Jan 15 21:45:08 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.13	77342585	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	42294815	25.655 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	51.31%
24) s d50-Tetracosane	35.77	34691441	23.825 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	47.65%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	5486846085	3626.973 ug/mL
44) h Total Resolved Hydrocarbon	40.84	962567629	636.287 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27593.D
Operator : AC
Acquired : 11 Jan 2006 2:45 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: 0512105-08D-AFID
Misc Info : 1X RERUN
Vial Number: 83



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-87 (4.4-6.2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **0512105-08**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/15/05	12/16/05	12/21/05	33.7	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**64000**	**64000**	0	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	93	92	50-130
d50-Tetracosane	86	85	50-130

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

01/16/06 16:05

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: **0512105**
Lab ID: **SS122105B14**
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	12/21/05	01/10/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	2.2 U

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

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

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27567.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 4:28 pm
Operator : AC
Sample : SS122105B14-AFID
Misc : 1X ETR0512105 RERUN
ALS Vial : 70 Sample Multiplier: 1

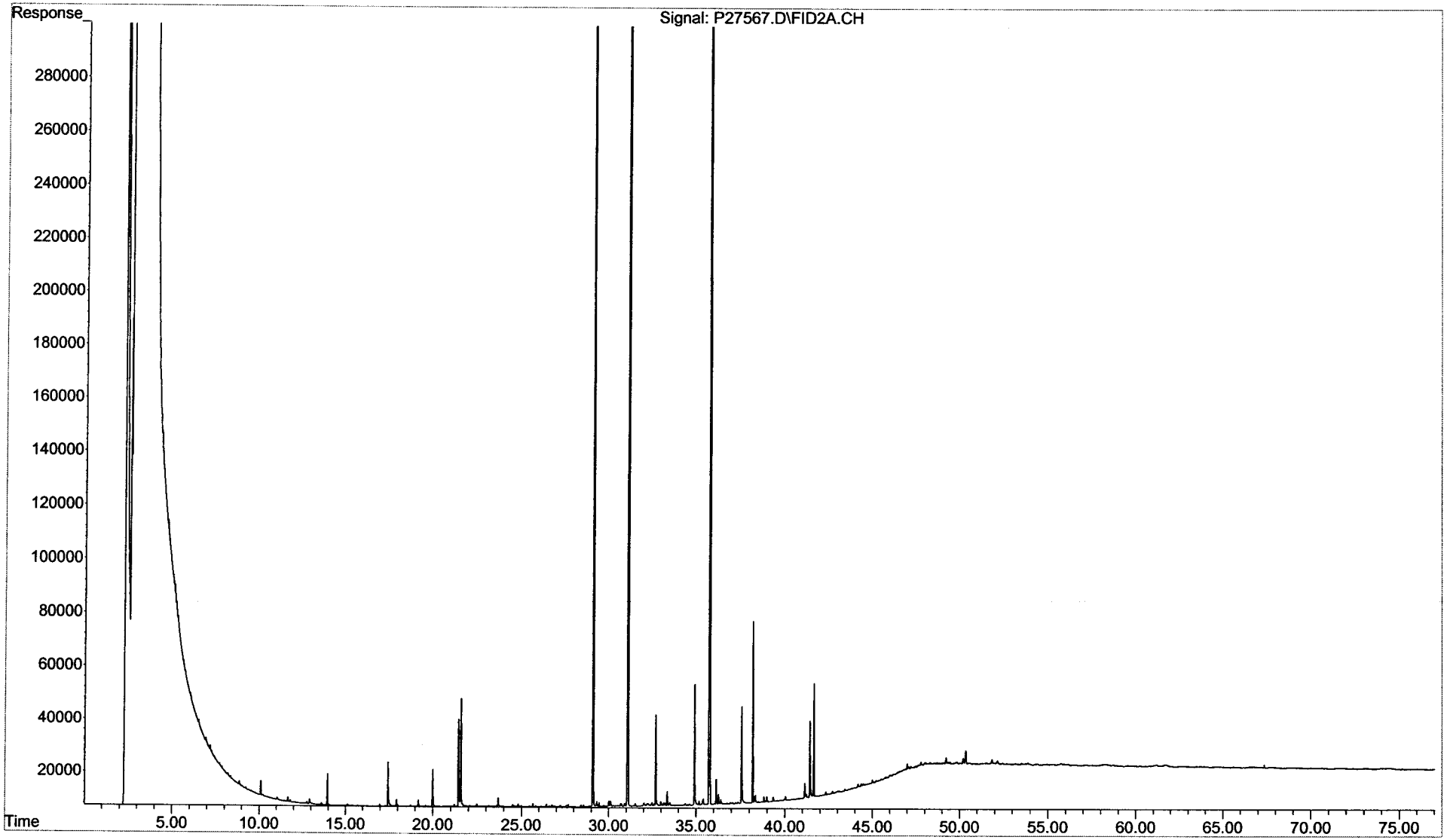
Integration File: SHCINT1.E
Quant Time: Jan 15 21:13:52 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.11	76753474	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.09	35073020	21.438 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	42.88%#
24) s d50-Tetracosane	35.75	28679337	19.847 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	39.69%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	381331084	254.006 ug/mL
44) h Total Resolved Hydrocarbon	40.84	14586745	9.716 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27567.D
Operator : AC
Acquired : 10 Jan 2006 4:28 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS122105B14-AFID
Misc Info : 1X ETR0512105 RERUN
Vial Number: 70



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: **0512105**
Lab ID: **See Below**
Associated Blank: **SS122105B14**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	12/21/05	100	AC

Lab ID:	SS122105B14		SS122105LCS11		SS122105LCSD11				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
n-Nonane (C9)	0.067	U	1.0	62	1.1	64	2	30	50-130
n-Decane (C10)	0.067	U	1.3	76	1.3	78	3	30	50-130
n-Dodecane (C12)	0.067	U	1.4	82	1.4	85	4	30	50-130
n-Tetradecane (C14)	0.067	U	1.4	83	1.4	85	3	30	50-130
n-Hexadecane (C16)	0.067	U	1.4	86	1.4	87	2	30	50-130
n-Octadecane (C18)	0.067	U	1.4	85	1.4	87	2	30	50-130
n-Nonadecane (C19)	0.067	U	1.4	85	1.5	87	2	30	50-130
n-Eicosane (C20)	0.067	U	1.4	86	1.5	88	2	30	50-130
n-Docosane (C22)	0.067	U	1.4	85	1.4	87	2	30	50-130
n-Tetracosane (C24)	0.067	U	1.4	84	1.4	86	2	30	50-130
n-Hexacosane (C26)	0.067	U	1.4	86	1.5	88	2	30	50-130
n-Octacosane (C28)	0.067	U	1.4	85	1.4	87	2	30	50-130
n-Triacontane (C30)	0.067	U	1.4	84	1.4	87	3	30	50-130
n-Hexatriacontane (C36)	0.067	U	1.4	84	1.4	87	3	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	81	83	50-130
d50-Tetracosane	74	75	50-130

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

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

01/16/06 16:07

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: **0512105**
Lab ID: **SS122105LCS11**
Associated Blank: **SS122105B14**
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	12/21/05	01/10/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	15

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	81	50-130
d50-Tetracosane	74	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27569.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 6:06 pm
Operator : AC
Sample : SS122105LCS11-AFID
Misc : 1X ETR0512105 RERUN
ALS Vial : 71 Sample Multiplier: 1

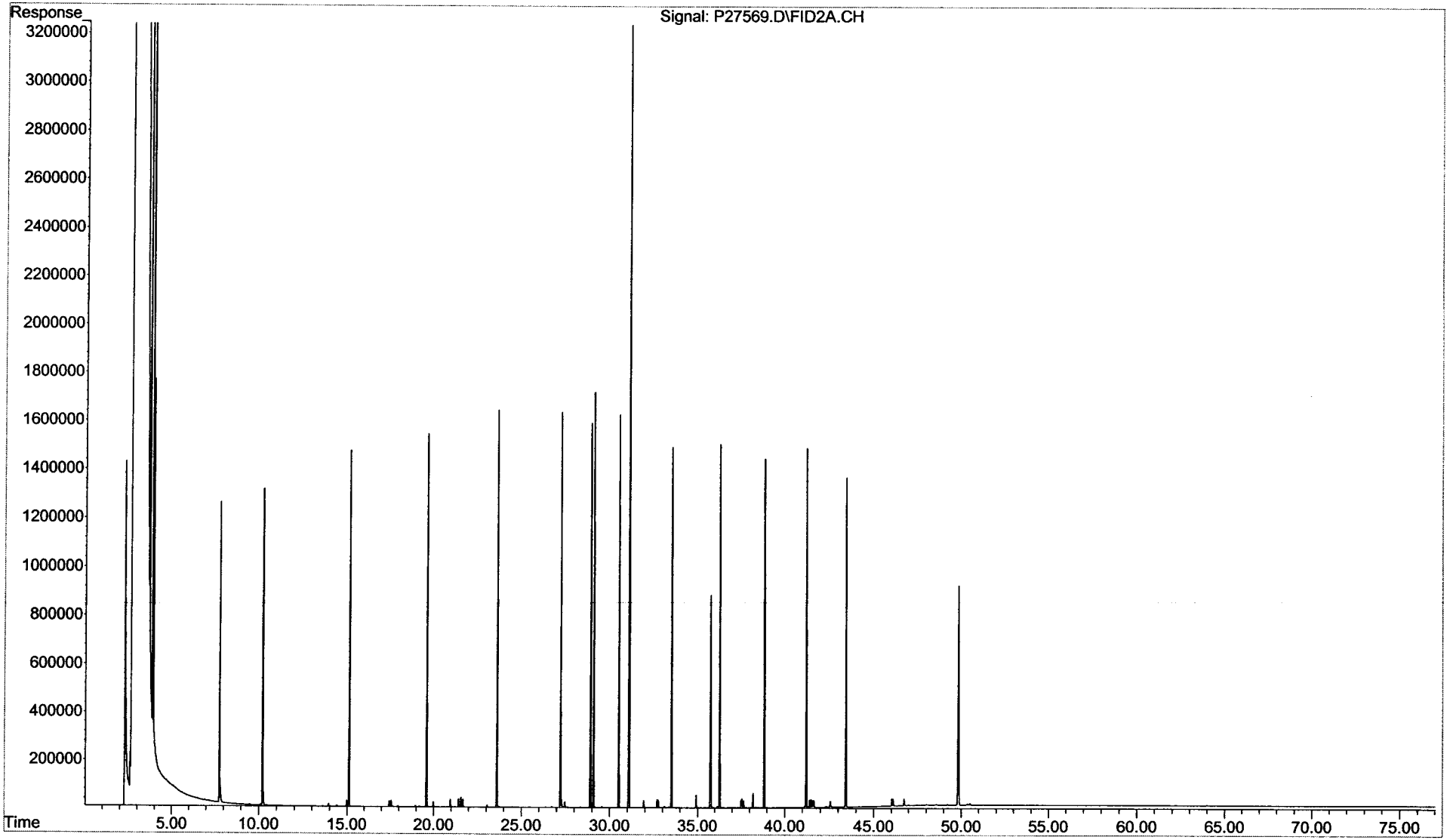
Integration File: SHCINT1.E
Quant Time: Jan 15 21:17:13 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.11	72490171	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.09	31343399	20.285 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery	= 40.57%#
24) s	d50-Tetracosane	35.75	25274425	18.520 ug/mLm
Spiked Amount	50.000	Range 50 - 130	Recovery	= 37.04%#
Target Compounds				
3) t	n-Nonane (C9)	7.76	20110283	15.575 ug/mL
4) t	n-Decane (C10)	10.20	25042880	18.980 ug/mLm
6) t	n-Dodecane (C12)	15.12	27709000	20.530 ug/mL
9) t	n-Tetradecane (C14)	19.60	28647368	20.710 ug/mLm
12) t	n-Hexadecane (C16)	23.61	30072595	21.382 ug/mLm
16) t	n-Octadecane (C18)	27.23	30265415	21.205 ug/mLm
18) t	n-Nonadecane (C19)	28.91	30375369	21.363 ug/mLm
20) t	n-Eicosane (C20)	30.52	30512216	21.536 ug/mLm
22) t	n-Docosane (C22)	33.52	30701888	21.285 ug/mLm
25) t	n-Tetracosane (C24)	36.28	30805374	21.079 ug/mLm
27) t	n-Hexacosane (C26)	38.84	30973635	21.545 ug/mL
29) t	n-Octacosane (C28)	41.22	30930881	21.324 ug/mL
31) t	n-Triacontane (C30)	43.43	30764107	21.100 ug/mL
37) t	n-Hexatriacontane (C36)	49.84f	30125160	20.980 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.84	767377514	541.215 ug/mL
44) h	Total Resolved Hydrocarbon	40.84	431773540	304.521 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27569.D
Operator : AC
Acquired : 10 Jan 2006 6:06 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS122105LCS11-AFID
Misc Info : 1X ETR0512105 RERUN
Vial Number: 71



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **SS122105LCSD11**
Associated Blank: **SS122105B14**
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	12/21/05	01/10/06	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	15

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	83	50-130
d50-Tetracosane	75	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27571.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 7:41 pm
Operator : AC
Sample : SS122105LCSD11-AFID
Misc : 1X ETR0512105 RERUN
ALS Vial : 72 Sample Multiplier: 1

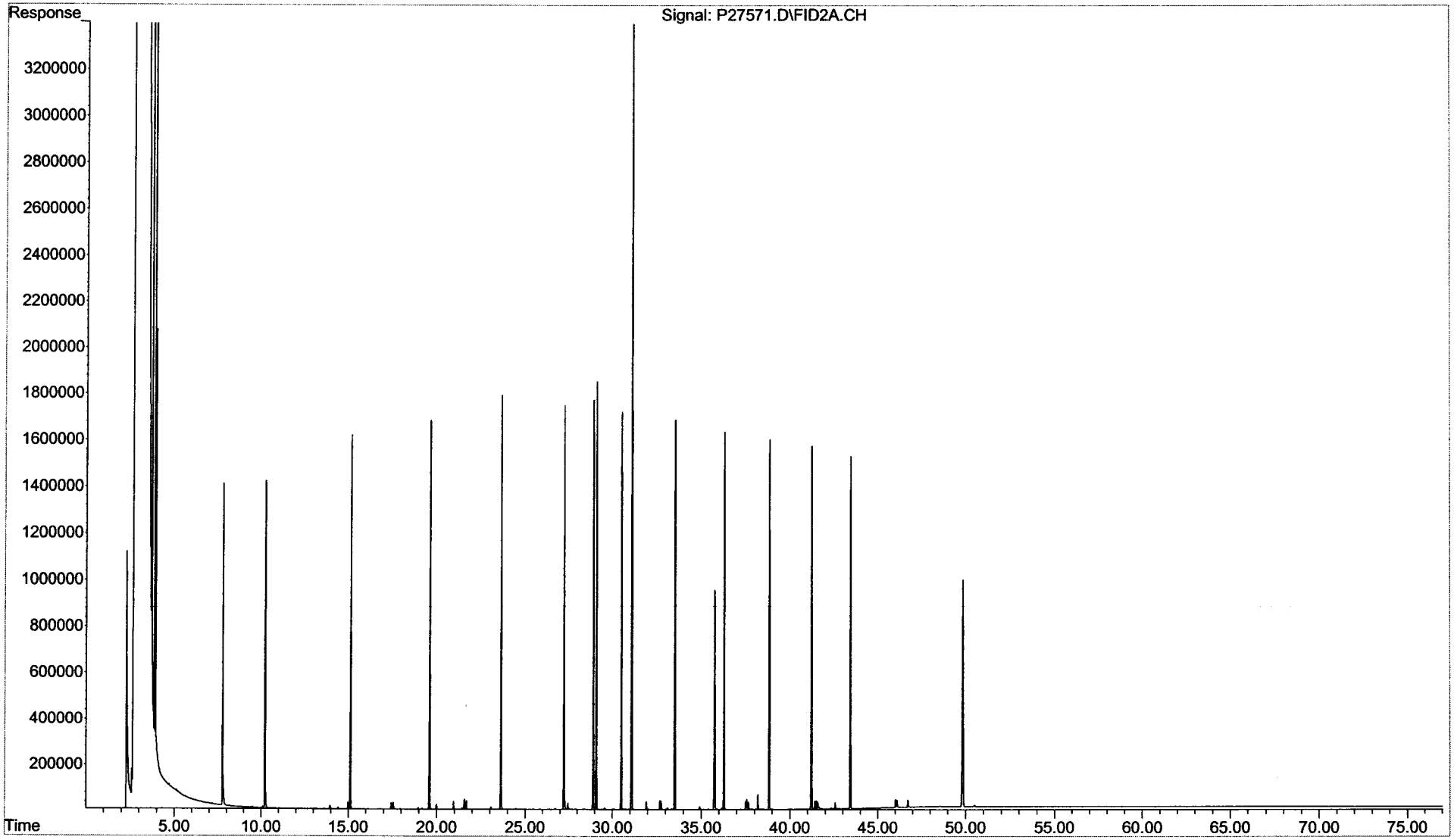
Integration File: SHCINT1.E
Quant Time: Jan 15 21:23:54 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Sun Jan 15 21:17:42 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	31.11	78917498	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.09	34768860	20.669 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	41.34%#
24) s d50-Tetracosane	35.75	27979858	18.832 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	37.66%#
Target Compounds			
3) t n-Nonane (C9)	7.76	22348090	15.898 ug/mL
4) t n-Decane (C10)	10.21	28078080	19.547 ug/mLm
6) t n-Dodecane (C12)	15.12	31323016	21.317 ug/mL
9) t n-Tetradecane (C14)	19.60	32087368	21.307 ug/mL
12) t n-Hexadecane (C16)	23.61	33348454	21.780 ug/mL
16) t n-Octadecane (C18)	27.23	33696822	21.686 ug/mL
18) t n-Nonadecane (C19)	28.91	33821663	21.850 ug/mLm
20) t n-Eicosane (C20)	30.52	33969319	22.024 ug/mL
22) t n-Docosane (C22)	33.52	34174673	21.763 ug/mL
25) t n-Tetracosane (C24)	36.28	34262225	21.535 ug/mL
27) t n-Hexacosane (C26)	38.84	34419195	21.992 ug/mLm
29) t n-Octacosane (C28)	41.22	34408263	21.789 ug/mL
31) t n-Triacontane (C30)	43.43	34390047	21.666 ug/mL
37) t n-Hexatriacontane (C36)	49.85	33807008	21.627 ug/mLm
42) h C9-C40 Total Petroleum Hyd	40.84	789059237	511.183 ug/mL
44) h Total Resolved Hydrocarbon	40.84	478076041	309.716 ug/L

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27571.D
Operator : AC
Acquired : 10 Jan 2006 7:41 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: SS122105LCSD11-AFID
Misc Info : 1X ETR0512105 RERUN
Vial Number: 72



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: **0512105**
Lab ID: **TS011606AWS03**
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	01/10/06	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**590000**

N/A - Not Applicable

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\
Data File : P27563.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 1:14 pm
Operator : AC
Sample : TS011606AWS03
Misc : 1X ANS STD
ALS Vial : 68 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 15 11:02:32 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

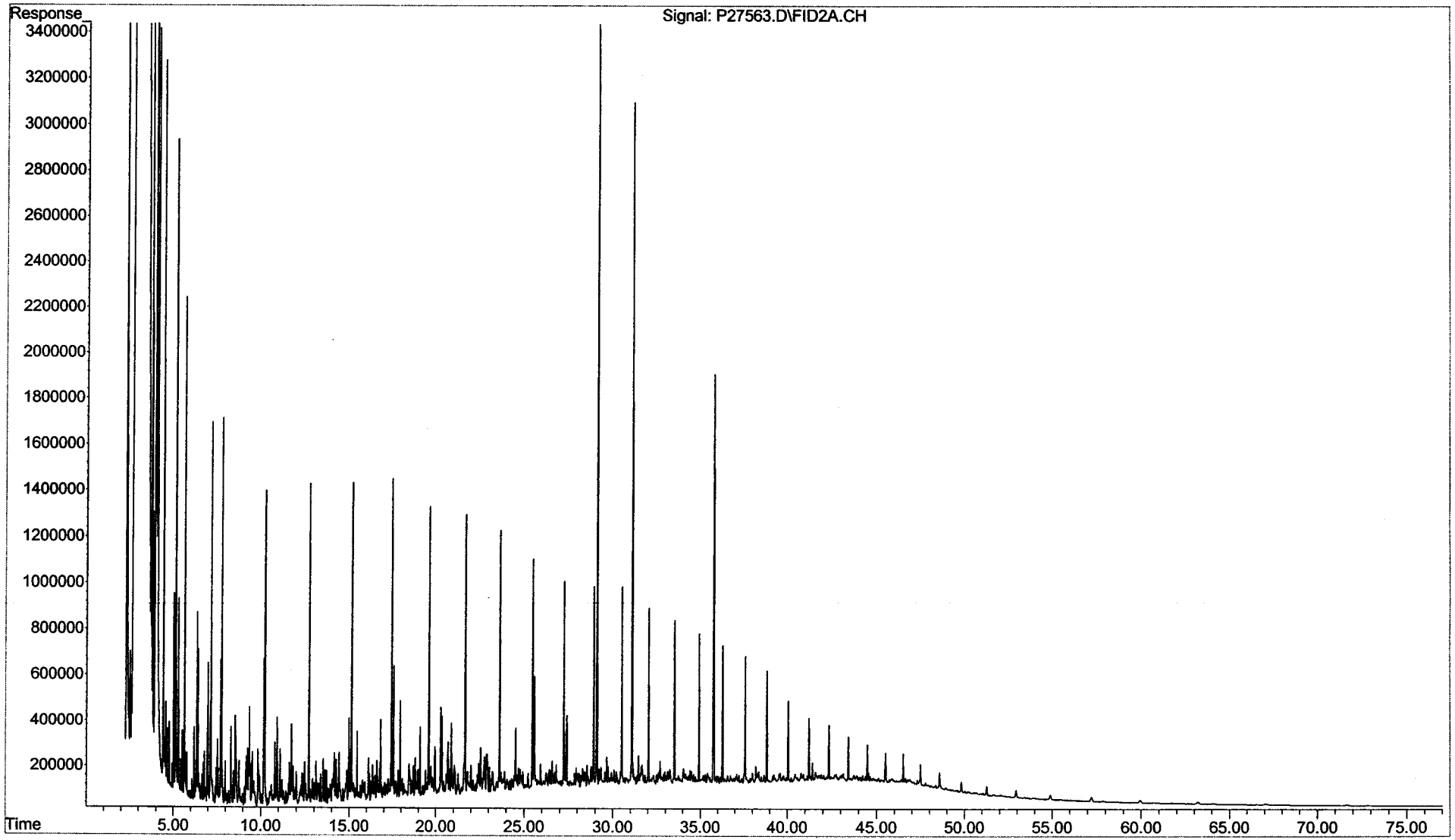
Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

1/18/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.11	66478987	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	71214181	50.257 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	100.51%
24) s d50-Tetracosane	35.77	58211992	46.511 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	93.02%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	4372112622	3362.383 ug/mL
44) h Total Resolved Hydrocarbon	40.84	1296708548	997.237 ug/L

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

File :O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\P27563.D
Operator : AC
Acquired : 10 Jan 2006 1:14 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: TS011606AWS03
Misc Info : 1X ANS STD
Vial Number: 68



Instrument Blank Association

ETR: 0512105

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
SS122105B14	IB201090601	P27565.D
SS122105LCS11	IB201090601	P27565.D
SS122105LCSD11	IB201090601	P27565.D
0512105-01	IB201090601	P27565.D
0512105-02	IB201090601	P27565.D
0512105-03	IB201090601	P27565.D
0512105-04	IB201090601	P27565.D
0512105-05	IB201090601	P27565.D
0512105-06	IB201090601	P27565.D
0512105-07	IB201090601	P27565.D
0512105-08	IB201090601	P27565.D
0512105-08 D	IB201090601	P27565.D

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27565.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 2:48 pm
Operator : AC
Sample : IB201090601
Misc : DCM
ALS Vial : 69 Sample Multiplier: 1

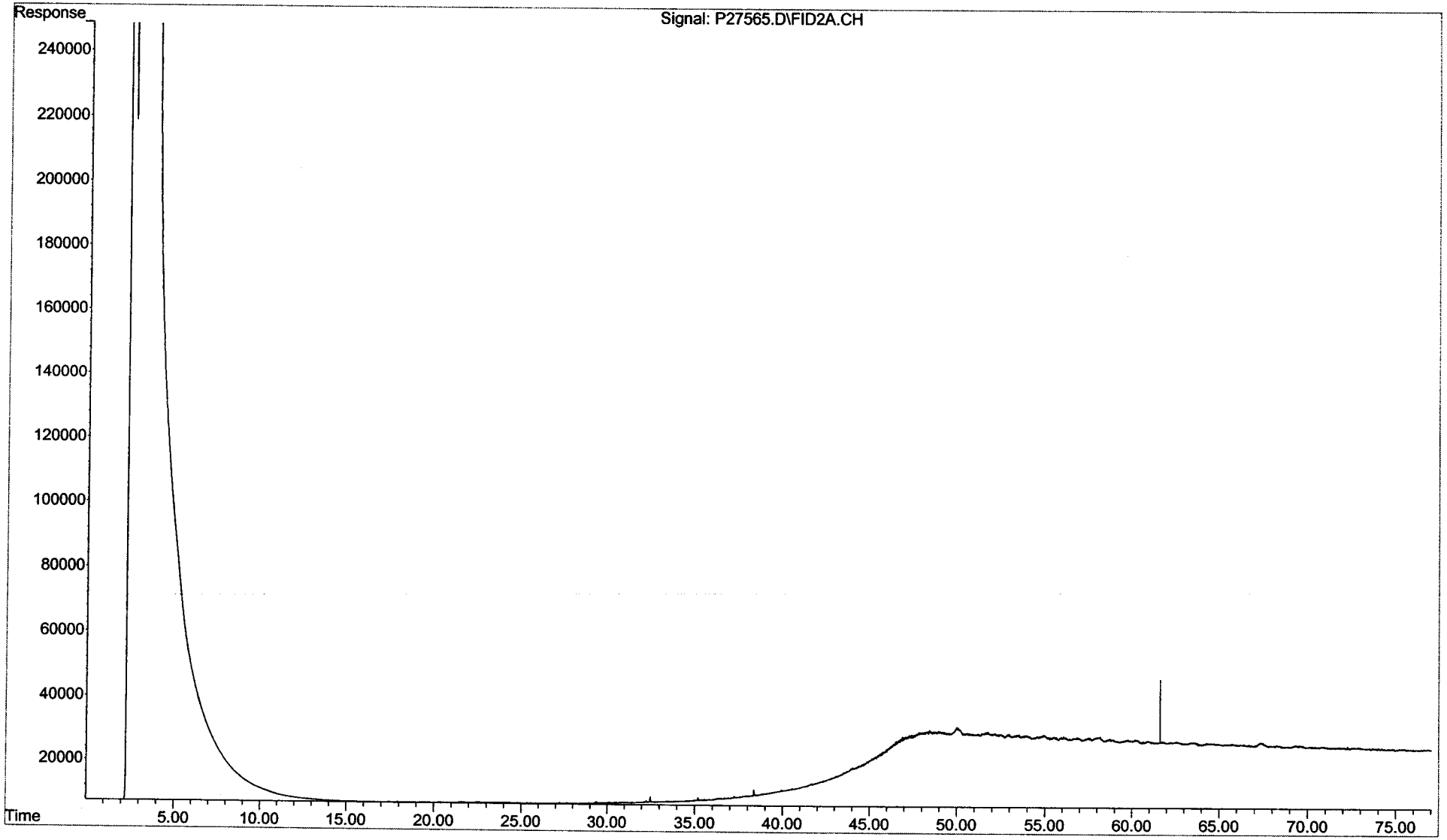
Integration File: SHCINT1.E
Quant Time: Jan 15 11:00:43 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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	61.60f	30430	50.000 ug/mLm
System Monitoring Compounds			
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.84	450777664	757346.339 ug/mL

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

File :O:\Forensics\Data\PAH2\JANUARY06\JAN09.SEC\P27565.D
Operator : AC
Acquired : 10 Jan 2006 2:48 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: IB201090601
Misc Info : DCM
Vial Number: 69



Sequence Name: C:\MSDChem\1\sequence\S2010901.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\JAN09\

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

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	P27529	FRNC2B	alk std
5)	Sample	1	P27530	FRNC2B	pah std
6)	RearSamp	52	P27531	FRNC2B	dcm
7)	Sample	2	P27532	FRNC2B	C2010901 PASS
8)	Pause				
9)	RearSamp	53	P27533	FRNC2B	DCM
[illegible]	Sample	3	P27534	FRNC2B	ANS2010901
[illegible]	RearSamp	54	P27535	FRNC2B	
12)	Sample	4	P27536	FRNC2B	DCM-AFID
13)	Pause				
14)	RearSamp	55	P27537	FRNC2B	
15)	Sample	5	P27538	FRNC2B	SS010906B13
16)	RearSamp	56	P27539	FRNC2B	
17)	Sample	6	P27540	FRNC2B	SS010906LCS02
18)	RearSamp	57	P27541	FRNC2B	
19)	Sample	7	P27542	FRNC2B	SS010906LCSD02
[illegible]	RearSamp	58	P27543	FRNC2B	
[illegible]	Sample	8	P27544	FRNC2B	0601013-01
[illegible]	RearSamp	59	P27545	FRNC2B	
23)	Sample	9	P27546	FRNC2B	0601013-01D
24)	RearSamp	60	P27547	FRNC2B	
25)	Sample	10	P27548	FRNC2B	0601013-02
26)	RearSamp	61	P27549	FRNC2B	
27)	Sample	11	P27550	FRNC2B	C2010902 ~~ALK~~ FID STD
28)	RearSamp	62	P27551	FRNC2B	
29)	Sample	12	P27552	FRNC2B	SOURCE01
30)	RearSamp	63	P27553	FRNC2B	
31)	Sample	13	P27554	FRNC2B	DCM
32)	RearSamp	64	P27555	FRNC2B	
33)	Sample	12	P27556	FRNC2B	
34)	RearSamp	65	P27557	FRNC2B	
35)	Sample	14	P27558	FRNC2B	C2010902A PASS
36)	RearSamp	66	P27559	FRNC2B	~~C2011001-AFID~~ ~~PASS~~ Primer 1/16/06
37)	Sample	15	P27560	FRNC2B	DCM
38)	RearSamp	67	P27561	FRNC2B	~~ANS2011001-AFID~~ C2011001-AFID 1/16/06
39)	Sample	16	P27562	FRNC2B	SW010306B05
40)	RearSamp	68	P27563	FRNC2B	~~DCM-AFID~~ TS011606AWS03 1/16/06
41)	Sample	17	P27564	FRNC2B	SW010306LCS03
42)	RearSamp	69	P27565	FRNC2B	DCM-AFID IB201090601 1/16/06
43)	Sample	18	P27566	FRNC2B	SW010306LCSD03

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: PAH21202.M

Last Modified: Wed Jan 11 08:05:49 2006

Sequence Name: C:\MSDChem\1\sequence\S2010901.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	RearSamp	70	P27567	FRNC2B	SS122105B14-AFID
45)	Sample	19	P27568	FRNC2B	0512132-01
46)	RearSamp	71	P27569	FRNC2B	SS122105LCS11-AFID
47)	Sample	20	P27570	FRNC2B	0512132-02
To	RearSamp	72	P27571	FRNC2B	SS122105LCSD11-AFID
In	Sample	21	P27572	FRNC2B	0512132-03
50)	RearSamp	73	P27573	FRNC2B	0512105-01-AFID
51)	Sample	22	P27574	FRNC2B	0512132-04
52)	RearSamp	74	P27575	FRNC2B	0512105-02-AFID
53)	Sample	23	P27576	FRNC2B	C2010903 ~~PASS~~ FAIL
54)	RearSamp	75	P27577	FRNC2B	0512105-03-AFID
55)	Sample	24	P27578	FRNC2B	DCM
56)	RearSamp	76	P27579	FRNC2B	0512105-04-AFID
57)	Sample	25	P27580	FRNC2B	TS010306B12
58)	RearSamp	77	P27581	FRNC2B	C2011002-AFID PASS
59)	Sample	26	P27582	FRNC2B	TS010306LCS06
60)	RearSamp	78	P27583	FRNC2B	DCM
61)	Sample	27	P27584	FRNC2B	TS010306LCSD06
62)	Pause				
63)	RearSamp	79	P27585	FRNC2B	0512105-05-AFID
64)	Sample	28	P27586	FRNC2B	0512019-10
65)	RearSamp	80	P27587	FRNC2B	0512105-06-AFID
66)	Sample	29	P27588	FRNC2B	C2010904 PASS
( )	RearSamp	81	P27589	FRNC2B	0512105-07-AFID
( )	Sample	30	P27590	FRNC2B	DCM
69)	RearSamp	82	P27591	FRNC2B	0512105-08-AFID
70)	Sample	31	P27592	FRNC2B	SS10306B06 ✓
71)	RearSamp	83	P27593	FRNC2B	0512105-08D-AFID
72)	Sample	32	P27594	FRNC2B	SS010306LCS04 ✓
73)	RearSamp	84	P27595	FRNC2B	C2011003-AFID PASS
74)	Sample	33	P27596	FRNC2B	SS010306LCSD04 ✓
75)	Pause				
76)	RearSamp	85	P27597	FRNC2B	DCM-AFID
( )	Sample	34	P27598	FRNC2B	0512132-07 ✓
( )	RearSamp	86	P27599	FRNC2B	DCM-AFID
( )	Sample	35	P27600	FRNC2B	0512132-08 ✓
80)	RearSamp	87	P27601	FRNC2B	DCM-AFID
81)	Sample	36	P27602	FRNC2B	0512132-09 ✓
82)	RearSamp	88	P27603	FRNC2B	C2011004-AFID PASS - not needed.
83)	Sample	37	P27604	FRNC2B	C2010905 PASS
84)	RearSamp	89	P27605	FRNC2B	DCM-AFID
85)	Sample	38	P27606	FRNC2B	DCM
86)	Clocksrt - 04:00				
87)	RearSamp	90	P27607	FRNC2B	C2011005-AFID
88)	Sample	39	P27608	FRNC2B	C2010906
89)	RearSamp	91	P27609	FRNC2B	DCM-AFID
90)	Sample	40	P27610	FRNC2B	DCM

CW 1/24/06

QUALITY CONTROL RESULTS

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

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

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **SS122105B14**
Date Analyzed: **01/10/06 16:28**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS122105LCS11	01/10/06 18:06
LCSD	SS122105LCSD11	01/10/06 19:41
GC-SED-90B (6.5-7)	0512105-01	01/10/06 21:19
GC-SED-89 (12.8-13.8)	0512105-02	01/10/06 22:57
GC-SED-88 (15.9-16.9)	0512105-03	01/11/06 00:31
GC-SED-96 (14-15)	0512105-04	01/11/06 02:05
GC-SED-95 (3.5-4.5)	0512105-05	01/11/06 08:09
GC-SED-86 (0-1)	0512105-06	01/11/06 09:46
GC-SED-84 (6-7)	0512105-07	01/11/06 11:25
GC-SED-87 (4.4-6.2)	0512105-08	01/11/06 13:04
GC-SED-87 (4.4-6.2)	0512105-08 D	01/11/06 14:45

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\1\sequence\S2090101.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\SEPTEMBER\SEP01\

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

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

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

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

9/1/05

Line	Sample Name/Misc Info				
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P25456	FRNC2B	DCM
4)	Sample	1	P25457	FRNC2B	DCM
5)	RearSamp	52	P25458	FRNC2B	I2090101
6)	Sample	2	P25459	FRNC2B	ALKANE STD
7)	RearSamp	53	P25460	FRNC2B	I2090102
8)	Sample	3	P25461	FRNC2B	PRIME
9)	RearSamp	54	P25462	FRNC2B	I2090103
10)	Sample	1	P25463	FRNC2B	DCM
11)	RearSamp	55	P25464	FRNC2B	I2090104
12)	Sample	2	P25465	FRNC2B	PAH STD
13)	RearSamp	56	P25466	FRNC2B	I2090105
14)	Sample	3	P25467	FRNC2B	PRIME
15)	RearSamp	57	P25468	FRNC2B	Q2090101
16)	Sample	1	P25469	FRNC2B	DCM
17)	RearSamp	58	P25470	FRNC2B	DCM
18)	Sample	2	P25471	FRNC2B	PAH STD
19)	RearSamp	59	P25472	FRNC2B	ANS2090101
20)	Sample	3	P25473	FRNC2B	PRIME
21)	RearSamp	60	P25474	FRNC2B	LA2090101
22)	Sample	1	P25475	FRNC2B	DCM
23)	RearSamp	61	P25476	FRNC2B	SFFSW2090101
24)	Sample	2	P25477	FRNC2B	PAH STD
25)	RearSamp	62	P25478	FRNC2B	SFFCO2090101
26)	Sample	3	P25479	FRNC2B	PRIME
27)	RearSamp	63	P25480	FRNC2B	SA2090101
28)	Sample	1	P25481	FRNC2B	DCM
29)	RearSamp	64	P25482	FRNC2B	SFFN2090101
30)	Sample	2	P25483	FRNC2B	PAH STD
31)	RearSamp	65	P25484	FRNC2B	SFFS2090101
32)	Sample	3	P25485	FRNC2B	PRIME

FID Process Method: HC20901.M

Response Factor Report PAHINST2

Method Path : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\
Method File : HC20901.M
Title : FID Forensics
Last Update : Tue Sep 06 10:22:24 2005
Response Via : Initial Calibration

Calibration Files
1 =P25458.D 10 =P25460.D 50 =P25462.D
100 =P25464.D 200 =P25466.D

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.788	0.829	0.834	0.837	0.837	0.825	2.54
3)	t	n-Nonane (C9)	0.891	0.888	0.885	0.895	0.894	0.891	0.45
4)	t	n-Decane (C10)	0.913	0.906	0.904	0.913	0.914	0.910	0.50
5)	t	n-Undecane (C11)	0.907	0.910	0.909	0.918	0.920	0.913	0.63
6)	t	n-Dodecane (C12)	0.924	0.928	0.928	0.936	0.938	0.931	0.65
7)	t	n-Tridecane (C13)	0.936	0.937	0.938	0.944	0.945	0.940	0.46
8)	t	1380	0.954	0.953	0.951	0.957	0.956	0.954	0.26
9)	t	n-Tetradecane (C14)	0.954	0.953	0.951	0.957	0.956	0.954	0.26
10)	t	1470	0.964	0.963	0.958	0.963	0.961	0.962	0.25
11)	t	n-Pentadecane (C15)	0.964	0.963	0.958	0.963	0.961	0.962	0.25
12)	t	n-Hexadecane (C16)	0.976	0.972	0.966	0.970	0.967	0.970	0.44
13)	t	1650	0.988	0.983	0.975	0.979	0.978	0.981	0.48
14)	t	n-Heptadecane (C17)	0.988	0.983	0.975	0.979	0.978	0.981	0.48
15)	t	Pristane	0.946	0.941	0.933	0.936	0.930	0.937	0.67
16)	t	n-Octadecane (C18)	0.991	0.988	0.980	0.983	0.980	0.984	0.49
17)	t	Phytane	0.981	0.979	0.971	0.974	0.970	0.975	0.49
18)	t	n-Nonadecane (C19)	0.990	0.984	0.976	0.979	0.975	0.981	0.66
19)	s	ortho-terphenyl	1.140	1.055	1.046	1.044	1.044	1.066	3.92
20)	t	n-Eicosane (C20)	0.991	0.980	0.971	0.974	0.970	0.977	0.89
21)	t	n-Heneicosane (C21)	1.021	1.012	1.003	1.005	1.001	1.008	0.79
22)	t	n-Docosane (C22)	1.005	0.998	0.990	0.992	0.989	0.995	0.69
23)	t	n-Tricosane (C23)	1.012	1.004	0.996	0.998	0.995	1.001	0.72
24)	s	d50-Tetracosane	1.259	0.869	0.862	0.859	0.857	0.941	18.86
25)	t	n-Tetracosane (C24)	1.024	1.010	1.002	1.003	1.000	1.008	0.98
26)	t	n-Pentacosane (C25)	1.024	1.005	0.996	0.997	0.993	1.003	1.24
27)	t	n-Hexacosane (C26)	1.004	0.994	0.987	0.988	0.985	0.992	0.79
28)	t	n-Heptacosane (C27)	1.005	0.991	0.983	0.983	0.981	0.989	0.99
29)	t	n-Octacosane (C28)	1.016	1.004	0.995	0.995	0.993	1.000	0.96
30)	t	n-Nonacosane (C29)	1.037	1.026	1.018	1.018	1.016	1.023	0.85
31)	t	n-Triacontane (C30)	1.018	1.009	1.002	1.001	0.999	1.006	0.77
32)	t	n-Hentriacontane (C31	0.998	0.978	0.970	0.970	0.968	0.977	1.27
33)	t	n-Dotriacontane (C32)	0.989	0.984	0.977	0.976	0.975	0.980	0.62
34)	t	n-Tritriacontane (C33	1.005	1.000	0.993	0.992	0.989	0.996	0.67
35)	t	n-tetratriacontane (C	1.018	1.010	1.004	1.003	1.001	1.007	0.67
36)	t	n-Pentatriacontane (C	0.982	0.970	0.964	0.963	0.960	0.968	0.88
37)	t	n-Hexatriacontane (C3	1.006	0.992	0.986	0.985	0.983	0.990	0.93
38)	t	n-Heptatriacontane (C	1.061	1.055	1.051	1.051	1.048	1.053	0.46
39)	t	n-Octatriacontane (C3	1.006	0.998	0.994	0.993	0.991	0.997	0.61
40)	t	n-Nonatriacontane (C3	0.983	0.973	0.974	0.973	0.971	0.975	0.49
41)	t	n-Tetracontane (C40)	0.983	0.973	0.974	0.973	0.971	0.975	0.49
42)	h	C9-C40 Total Petroleu	0.987	0.980	0.974	0.976	0.974	0.978	0.56
43)	h	C10-C28 DRO	0.987	0.980	0.974	0.976	0.974	0.978	0.56
44)	h	Total Resolved Hydroc	0.987	0.980	0.974	0.976	0.974	0.978	0.56

(#) = Out of Range

FID TPH RF CALCULATION

	L5	L4	L3	L2	L1
Method ID	FRNC2B.M	FRNC2B.M	FRNC2B.M	FRNC2B.M	FRNC2B.M
Date	Mon Sep 05 21:27:09 2005	Mon Sep 05 21:27:09 2005	Mon Sep 05 21:08:55 2005	Mon Sep 05 21:05:32 2005	Tue Aug 30 10:50:27 2005
File ID	P25466.D	P25464.D	P25462.D	P25460.D	P25458.D

n-Octane (C8)	222197992	111621441	55357660	11047330	1063166
n-Nonane (C9)	237390685	119271616	58745501	11837371	1202863
n-Decane (C10)	242789522	121741910	60010356	12083244	1231334
n-Undecane (C11)	244375644	122338353	60360019	12134854	1223510
n-Dodecane (C12)	249124168	124836563	61620584	12372116	1246543
n-Tridecane (C13)	250959644	125904193	62231550	12496296	1262814
n-Tetradecane (C14)	253891658	127573339	63099832	12703009	1287355
n-Pentadecane (C15)	255267441	128457843	63590343	12842670	1300776
n-Hexadecane (C16)	256742972	129275965	64084175	12960631	1317241
n-Heptadecane (C17)	259771215	130588165	64739328	13099811	1332840
Pristane	247041081	124834324	61938632	12540388	1277059
n-Octadecane (C18)	260200700	131100996	65051952	13173644	1337001
Phytane	257598423	129831456	64429582	13048074	1323351
n-Nonadecane (C19)	258783183	130469466	64775082	13120898	1336318
n-Eicosane (C20)	257595382	129803367	64452491	13069645	1337253
n-Heneicosane (C21)	265904802	134016323	66577835	13487676	1377674
n-Docosane (C22)	262538137	132270977	65715019	13311425	1356292
n-Tricosane (C23)	264122802	133011321	66086647	13385819	1365547
n-Tetracosane (C24)	265619038	133788179	66507982	13462433	1382398
n-Pentacosane (C25)	263680892	132880514	66112269	13403075	1381382
n-Hexacosane (C26)	261479436	131676219	65521218	13257363	1354696
n-Heptacosane (C27)	260490730	131119363	65258410	13215842	1355818
n-Octacosane (C28)	263581351	132661371	66050731	13383477	1370666
n-Nonacosane (C29)	269696287	135721175	67583335	13678131	1399181
n-Triacontane (C30)	265226719	133450262	66478810	13454014	1373270
n-Hentriacontane (C31)	256979309	129312028	64402179	13036096	1346470
n-Dotriacontane (C32)	258813237	130190494	64844061	13117363	1334659
n-Tritriacontane (C33)	262684075	132203159	65888928	13330486	1356572
n-tetratriacontane (C34)	265835468	133722500	66604987	13460354	1373039
n-Pentatriacontane (C35)	255041607	128379572	63975402	12928605	1324543
n-Hexatriacontane (C36)	261018713	131361401	65466917	13219676	1357233
n-Heptatriacontane (C37)	278362887	140156490	69777844	14068486	1431658
n-Octatriacontane (C38)	263048176	132434607	65981882	13311533	1357646
n-Tetracontane (C40)	257774066	129767988	64628739	12976710	1326686

	L5	L4	L3	L2	L1
C9-C40 Total Petroleum Hydrocarbons	258588771	130125803	64624019	13059734	1331566
C10-C28 DRO	258588771	130125803	64624019	13059734	1331566
Total Resolved Hydrocarbons	258588771	130125803	64624019	13059734	1331566

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25458.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 4:06 pm
Operator : AC
Sample : I2090101
Misc : WHAB29
ALS Vial : 52 Sample Multiplier: 1

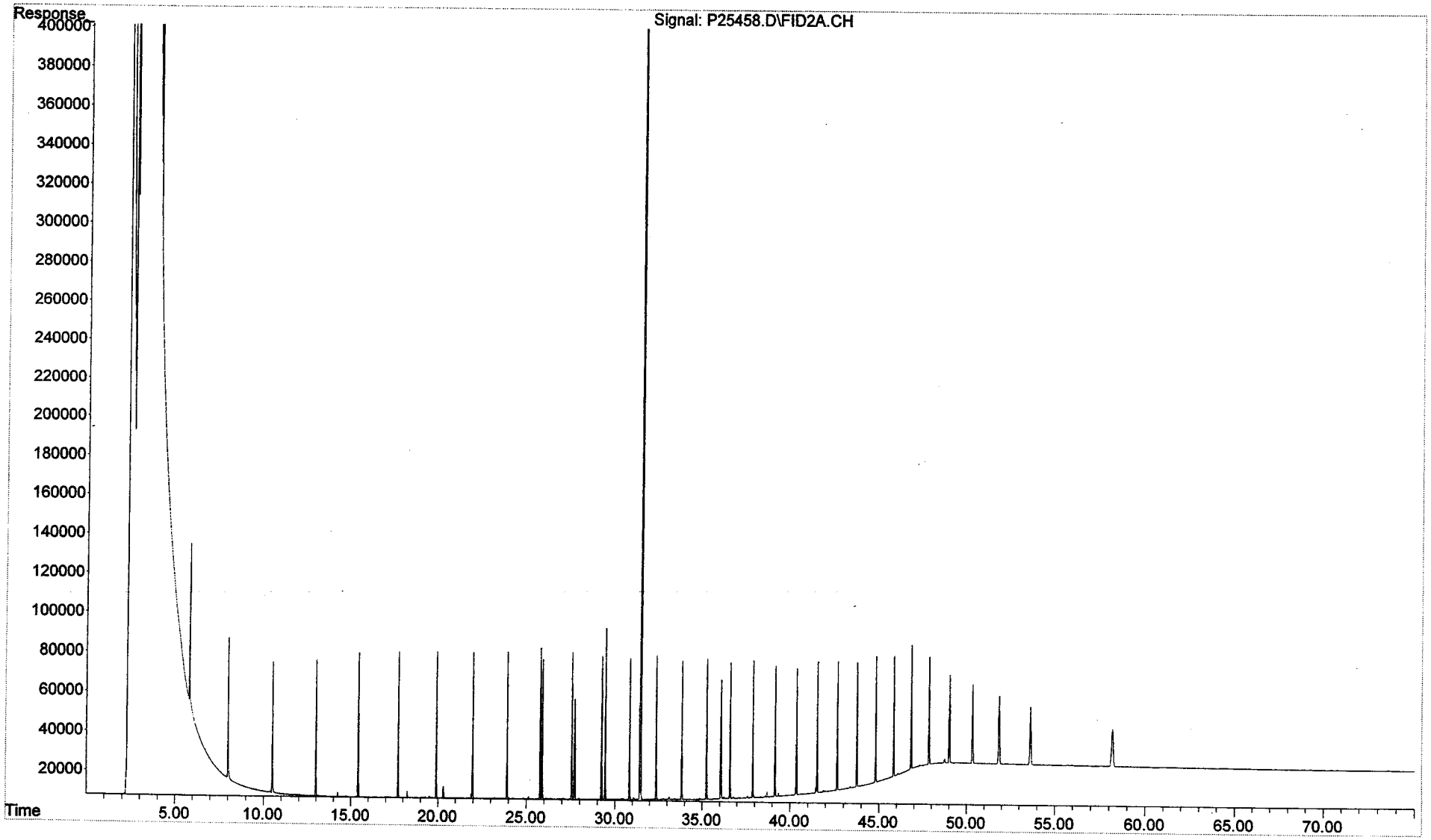
Integration File: SHCINT1.E
Quant Time: Sep 05 21:05:03 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Aug 30 10:50:27 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/6/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	67468758	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.45	1538387	1.071 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	2.14%#
24) s d50-Tetracosane	36.08	1698697	1.335 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	2.67%#
Target Compounds			
2) t n-Octane (C8)	5.82	1063166	0.992 ug/mLm
3) t n-Nonane (C9)	8.02	1202863	1.008 ug/mLm
4) t n-Decane (C10)	10.50	1231334	1.001 ug/mL
5) t n-Undecane (C11)	13.00	1223510	0.990 ug/mL
6) t n-Dodecane (C12)	15.43	1246543	0.993 ug/mL
7) t n-Tridecane (C13)	17.73	1262814	0.999 ug/mLm
9) t n-Tetradecane (C14)	19.91	1287355	1.005 ug/mL
11) t n-Pentadecane (C15)	21.98	1300776	1.008 ug/mL
12) t n-Hexadecane (C16)	23.93	1317241	1.011 ug/mL
14) t n-Heptadecane (C17)	25.79	1332840	1.010 ug/mL
15) t Pristane	25.90	1277059	1.008 ug/mLm
16) t n-Octadecane (C18)	27.55	1337001	1.007 ug/mLm
17) t Phytane	27.72	1323351	1.004 ug/mLm
18) t n-Nonadecane (C19)	29.24	1336318	1.009 ug/mLm
20) t n-Eicosane (C20)	30.84	1337253	1.012 ug/mL
21) t n-Heneicosane (C21)	32.38	1377674	1.009 ug/mL
22) t n-Docosane (C22)	33.85	1356292	1.005 ug/mLm
23) t n-Tricosane (C23)	35.26	1365547	1.006 ug/mL
25) t n-Tetracosane (C24)	36.61	1382398	1.012 ug/mL
26) t n-Pentacosane (C25)	37.91	1381382	1.017 ug/mL
27) t n-Hexacosane (C26)	39.17	1354696	1.010 ug/mLm
28) t n-Heptacosane (C27)	40.38	1355818	1.013 ug/mLm
29) t n-Octacosane (C28)	41.55	1370666	1.014 ug/mLm
30) t n-Nonacosane (C29)	42.67	1399181	1.012 ug/mL
31) t n-Triacontane (C30)	43.76	1373270	1.010 ug/mLm
32) t n-Hentriacontane (C31)	44.82	1346470	1.024 ug/mL
33) t n-Dotriacontane (C32)	45.84	1334659	1.010 ug/mL
34) t n-Tritriacontane (C33)	46.83	1356572	1.012 ug/mLm
35) t n-tetratriacontane (C34)	47.86	1373039	1.013 ug/mLm
36) t n-Pentatriacontane (C35)	49.02	1324543	1.020 ug/mLm
37) t n-Hexatriacontane (C36)	50.34	1357233	1.032 ug/mLm
38) t n-Heptatriacontane (C37)	51.86	1431658	1.040 ug/mLm
39) t n-Octatriacontane (C38)	53.64f	1357646	1.057 ug/mLm
41) t n-Tetracontane (C40)	58.19f	1326686	1.136 ug/mLm

File :O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\P25458.D
Operator : AC
Acquired : 01 Sep 2005 4:06 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090101
Misc Info : WHAB29
Vial Number: 52



Quantitation Report (QT Reviewed)

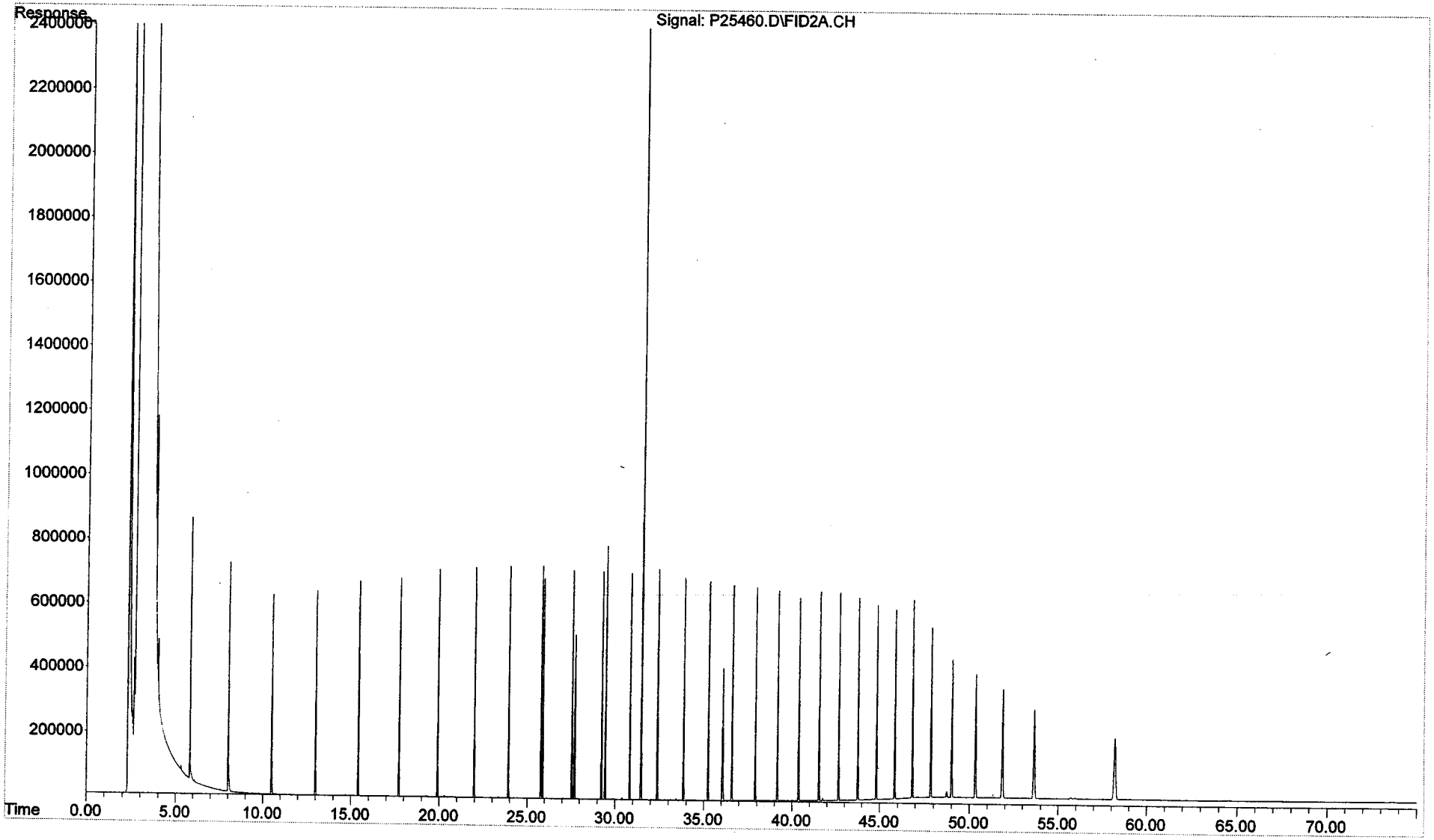
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25460.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 5:38 pm
Operator : AC
Sample : I2090102
Misc : WHAB30
ALS Vial : 53 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:08:37 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:05:32 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	66658750	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.45	14062345	9.904 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	19.81%#
24) s d50-Tetracosane	36.08	11587863	9.211 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	18.42%#
Target Compounds			
2) t n-Octane (C8)	5.82	11047330	10.246 ug/mL
3) t n-Nonane (C9)	8.02	11837371	10.078 ug/mLm
4) t n-Decane (C10)	10.50	12083244	9.970 ug/mL
5) t n-Undecane (C11)	13.00	12134854	9.958 ug/mL
6) t n-Dodecane (C12)	15.43	12372116	9.972 ug/mL
7) t n-Tridecane (C13)	17.73	12496296	9.989 ug/mLm
9) t n-Tetradecane (C14)	19.92	12703009	10.013 ug/mLm
11) t n-Pentadecane (C15)	21.98	12842670	10.043 ug/mL
12) t n-Hexadecane (C16)	23.94	12960631	10.042 ug/mL
14) t n-Heptadecane (C17)	25.79	13099811	10.028 ug/mL
15) t Pristane	25.90	12540388	10.032 ug/mL
16) t n-Octadecane (C18)	27.56	13173644	10.033 ug/mLm
17) t Phytane	27.72	13048074	10.029 ug/mL
18) t n-Nonadecane (C19)	29.24	13120898	10.019 ug/mL
20) t n-Eicosane (C20)	30.85	13069645	10.000 ug/mL
21) t n-Heneicosane (C21)	32.38	13487676	9.992 ug/mLm
22) t n-Docosane (C22)	33.85	13311425	9.994 ug/mLm
23) t n-Tricosane (C23)	35.26	13385819	9.985 ug/mL
25) t n-Tetracosane (C24)	36.62	13462433	9.972 ug/mLm
26) t n-Pentacosane (C25)	37.92	13403075	9.974 ug/mLm
27) t n-Hexacosane (C26)	39.17	13257363	9.988 ug/mLm
28) t n-Heptacosane (C27)	40.38	13215842	9.982 ug/mLm
29) t n-Octacosane (C28)	41.55	13383477	9.999 ug/mL
30) t n-Nonacosane (C29)	42.68	13678131	9.990 ug/mL
31) t n-Triacontane (C30)	43.77	13454014	9.991 ug/mL
32) t n-Hentriacontane (C31)	44.82	13036096	9.965 ug/mL
33) t n-Dotriacontane (C32)	45.85	13117363	9.989 ug/mLm
34) t n-Tritriacontane (C33)	46.84	13330486	10.001 ug/mLm
35) t n-tetratriacontane (C34)	47.87	13460354	9.982 ug/mLm
36) t n-Pentatriacontane (C35)	49.02	12928605	9.970 ug/mLm
37) t n-Hexatriacontane (C36)	50.35	13219676	9.984 ug/mLm
38) t n-Heptatriacontane (C37)	51.87	14068486	10.021 ug/mL
39) t n-Octatriacontane (C38)	53.65	13311533	10.017 ug/mL
41) t n-Tetracontane (C40)	58.21f	12976710	10.081 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25460.D
Operator : AC
Acquired : 01 Sep 2005 5:38 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090102
Misc Info : WHAB30
Vial Number: 53



Quantitation Report (QT Reviewed)

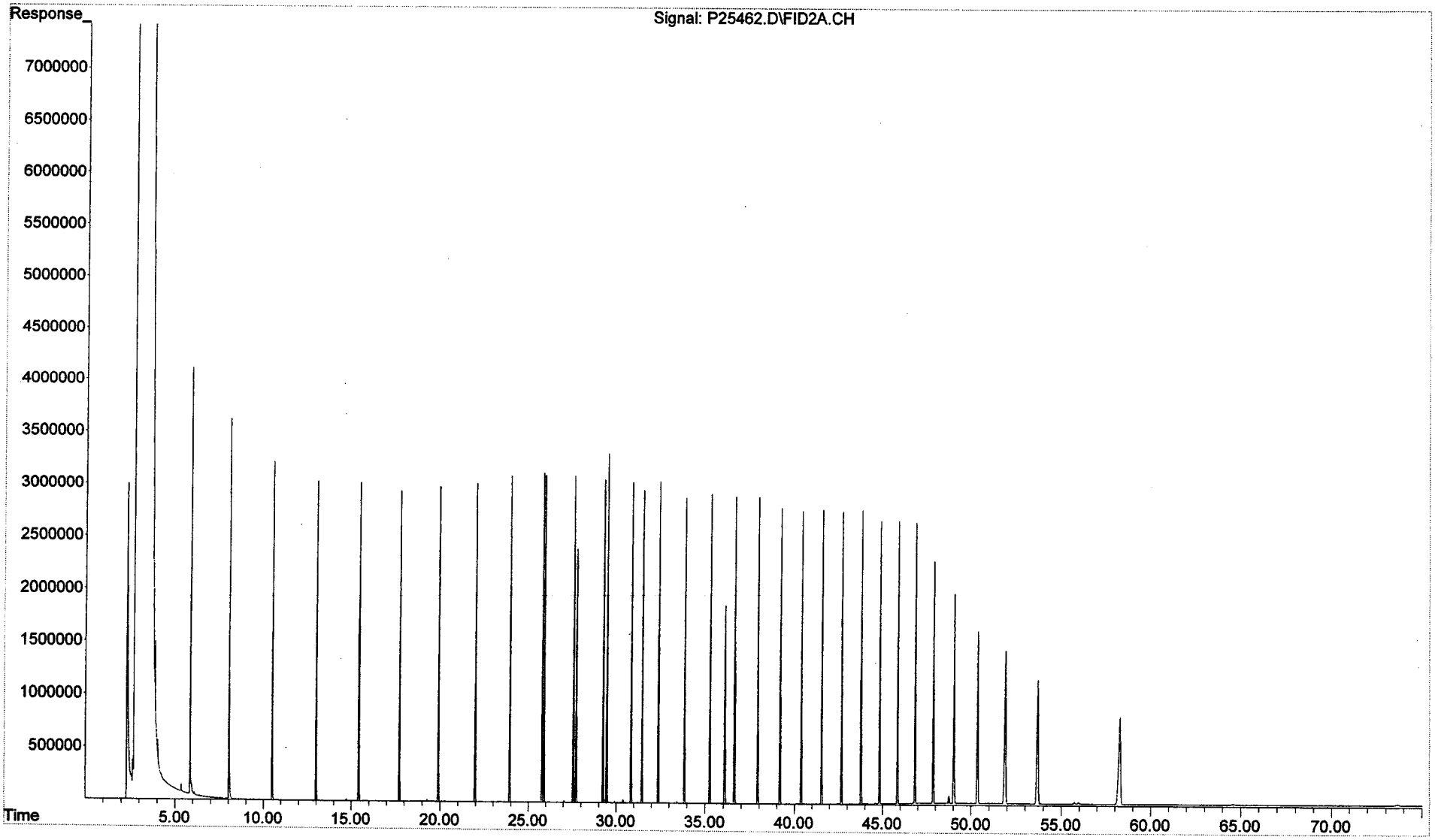
Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25462.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 7:09 pm
Operator : AC
Sample : I2090103
Misc : WHAB31
ALS Vial : 54 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Sep 05 21:18:22 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:08:55 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	66368155	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.48	69435771	49.105 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	98.21%
24) s d50-Tetracosane	36.10	57218973	45.709 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.42%
Target Compounds			
2) t n-Octane (C8)	5.86	55357660	51.019 ug/mL
3) t n-Nonane (C9)	8.04	58745501	49.974 ug/mL
4) t n-Decane (C10)	10.51	60010356	49.728 ug/mL
5) t n-Undecane (C11)	13.02	60360019	49.803 ug/mLm
6) t n-Dodecane (C12)	15.44	61620584	49.912 ug/mL
7) t n-Tridecane (C13)	17.75	62231550	49.974 ug/mL
9) t n-Tetradecane (C14)	19.93	63099832	49.940 ug/mLm
11) t n-Pentadecane (C15)	22.00	63590343	49.901 ug/mL
12) t n-Hexadecane (C16)	23.96	64084175	49.837 ug/mL
14) t n-Heptadecane (C17)	25.81	64739328	49.754 ug/mL
15) t Pristane	25.92	61938632	49.772 ug/mL
16) t n-Octadecane (C18)	27.58	65051952	49.756 ug/mLm
17) t Phytane	27.75	64429582	49.755 ug/mL
18) t n-Nonadecane (C19)	29.27	64775082	49.689 ug/mL
20) t n-Eicosane (C20)	30.87	64452491	49.563 ug/mL
21) t n-Heneicosane (C21)	32.41	66577835	49.585 ug/mL
22) t n-Docosane (C22)	33.88	65715019	49.609 ug/mL
23) t n-Tricosane (C23)	35.29	66086647	49.573 ug/mL
25) t n-Tetracosane (C24)	36.64	66507982	49.539 ug/mL
26) t n-Pentacosane (C25)	37.95	66112269	49.466 ug/mL
27) t n-Hexacosane (C26)	39.20	65521218	49.640 ug/mL
28) t n-Heptacosane (C27)	40.41	65258410	49.568 ug/mL
29) t n-Octacosane (C28)	41.58	66050731	49.614 ug/mL
30) t n-Nonacosane (C29)	42.70	67583335	49.640 ug/mL
31) t n-Triacontane (C30)	43.80	66478810	49.656 ug/mL
32) t n-Hentriacontane (C31)	44.85	64402179	49.516 ug/mL
33) t n-Dotriacontane (C32)	45.88	64844061	49.674 ug/mLm
34) t n-Tritriacontane (C33)	46.87	65888928	49.714 ug/mLm
35) t n-tetratriacontane (C34)	47.90	66604987	49.689 ug/mLm
36) t n-Pentatriacontane (C35)	49.06	63975402	49.636 ug/mLm
37) t n-Hexatriacontane (C36)	50.39	65466917	49.696 ug/mLm
38) t n-Heptatriacontane (C37)	51.93	69777844	49.812 ug/mL
39) t n-Octatriacontane (C38)	53.71	65981882	49.825 ug/mL
41) t n-Tetracontane (C40)	58.30	64628739	50.024 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25462.D
Operator : AC
Acquired : 01 Sep 2005 7:09 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090103
Misc Info : WHAB31
Vial Number: 54



Quantitation Report (QT Reviewed)

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

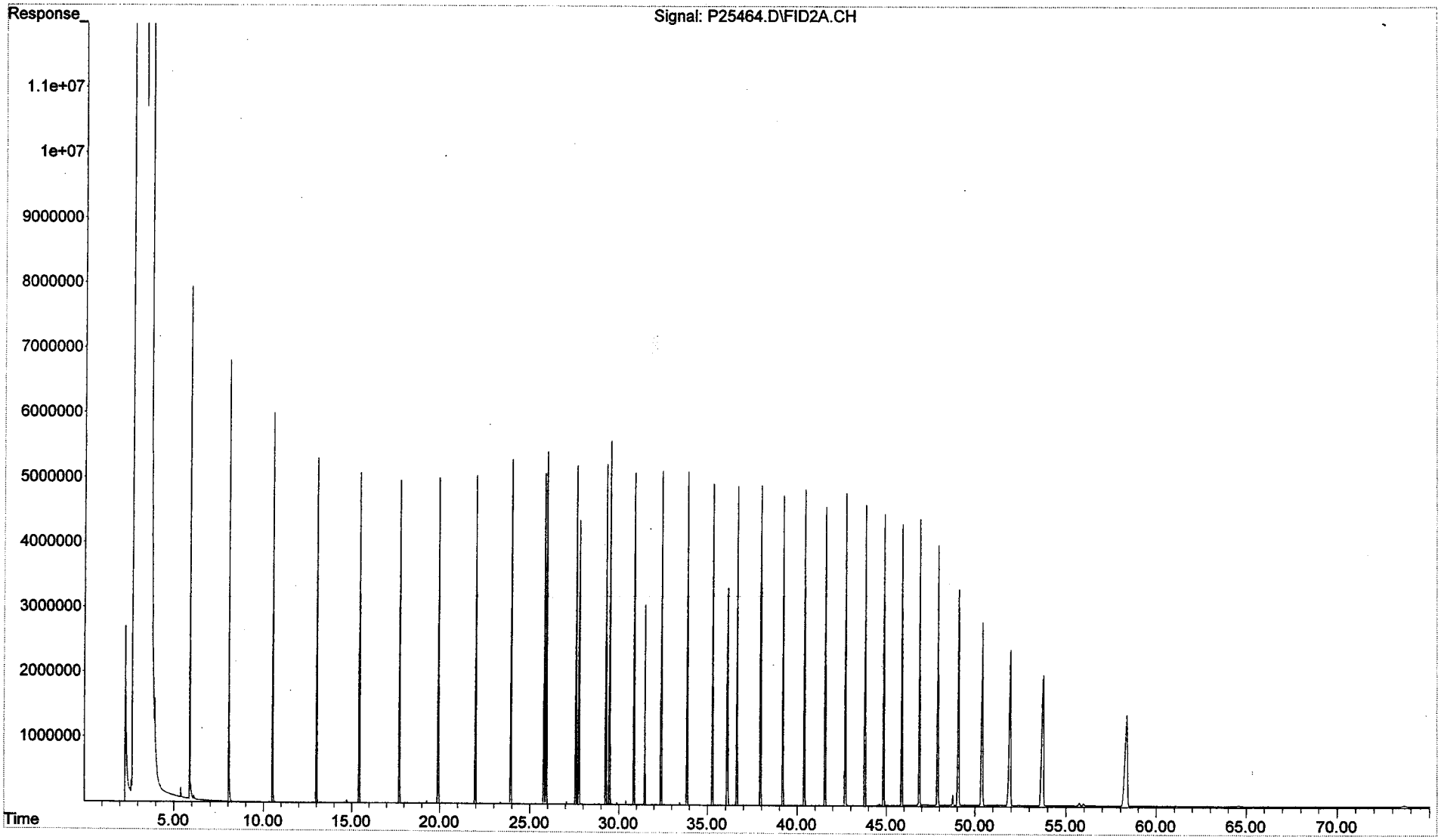
Integration File: SHCINT1.E
Quant Time: Sep 05 21:28:16 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:19:05 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Jablos

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	66667338	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.50	139218991	97.984 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery =	195.97%#
24) s d50-Tetracosane	36.12	114523552	91.120 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	182.24%#
Target Compounds			
2) t n-Octane (C8)	5.89	111621441	102.136 ug/mL
3) t n-Nonane (C9)	8.07	119271616	100.900 ug/mL
4) t n-Decane (C10)	10.53	121741910	100.411 ug/mLm
5) t n-Undecane (C11)	13.03	122338353	100.497 ug/mL
6) t n-Dodecane (C12)	15.46	124836563	100.633 ug/mL
7) t n-Tridecane (C13)	17.76	125904193	100.580 ug/mL
9) t n-Tetradecane (C14)	19.95	127573339	100.434 ug/mLm
11) t n-Pentadecane (C15)	22.02	128457843	100.278 ug/mL
12) t n-Hexadecane (C16)	23.98	129275965	100.028 ug/mLm
14) t n-Heptadecane (C17)	25.83	130588165	99.889 ug/mL
15) t Pristane	25.95	124834324	99.863 ug/mL
16) t n-Octadecane (C18)	27.60	131100996	99.843 ug/mLm
17) t Phytane	27.77	129831456	99.845 ug/mL
18) t n-Nonadecane (C19)	29.29	130469466	99.672 ug/mL
20) t n-Eicosane (C20)	30.89	129803367	99.451 ug/mL
21) t n-Heneicosane (C21)	32.43	134016323	99.457 ug/mL
22) t n-Docosane (C22)	33.90	132270977	99.498 ug/mL
23) t n-Tricosane (C23)	35.31	133011321	99.434 ug/mL
25) t n-Tetracosane (C24)	36.67	133788179	99.304 ug/mL
26) t n-Pentacosane (C25)	37.97	132880514	99.080 ug/mL
27) t n-Hexacosane (C26)	39.22	131676219	99.377 ug/mL
28) t n-Heptacosane (C27)	40.43	131119363	99.218 ug/mL
29) t n-Octacosane (C28)	41.60	132661371	99.258 ug/mL
30) t n-Nonacosane (C29)	42.73	135721175	99.302 ug/mL
31) t n-Triacontane (C30)	43.82	133450262	99.303 ug/mL
32) t n-Hentriacontane (C31)	44.88	129312028	99.060 ug/mL
33) t n-Dotriacontane (C32)	45.90	130190494	99.383 ug/mL
34) t n-Tritriacontane (C33)	46.89	132203159	99.373 ug/mL
35) t n-tetratriacontane (C34)	47.93	133722500	99.400 ug/mLm
36) t n-Pentatriacontane (C35)	49.09	128379572	99.276 ug/mL
37) t n-Hexatriacontane (C36)	50.43	131361401	99.324 ug/mL
38) t n-Heptatriacontane (C37)	51.98	140156490	99.638 ug/mL
39) t n-Octatriacontane (C38)	53.78	132434607	99.578 ug/mL
41) t n-Tetracontane (C40)	58.38	129767988	99.860 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25464.D
Operator : AC
Acquired : 01 Sep 2005 8:41 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090104
Misc Info : WHAB32
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25466.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 10:11 pm
Operator : AC
Sample : I2090105
Misc : WHAB33
ALS Vial : 56 Sample Multiplier: 1

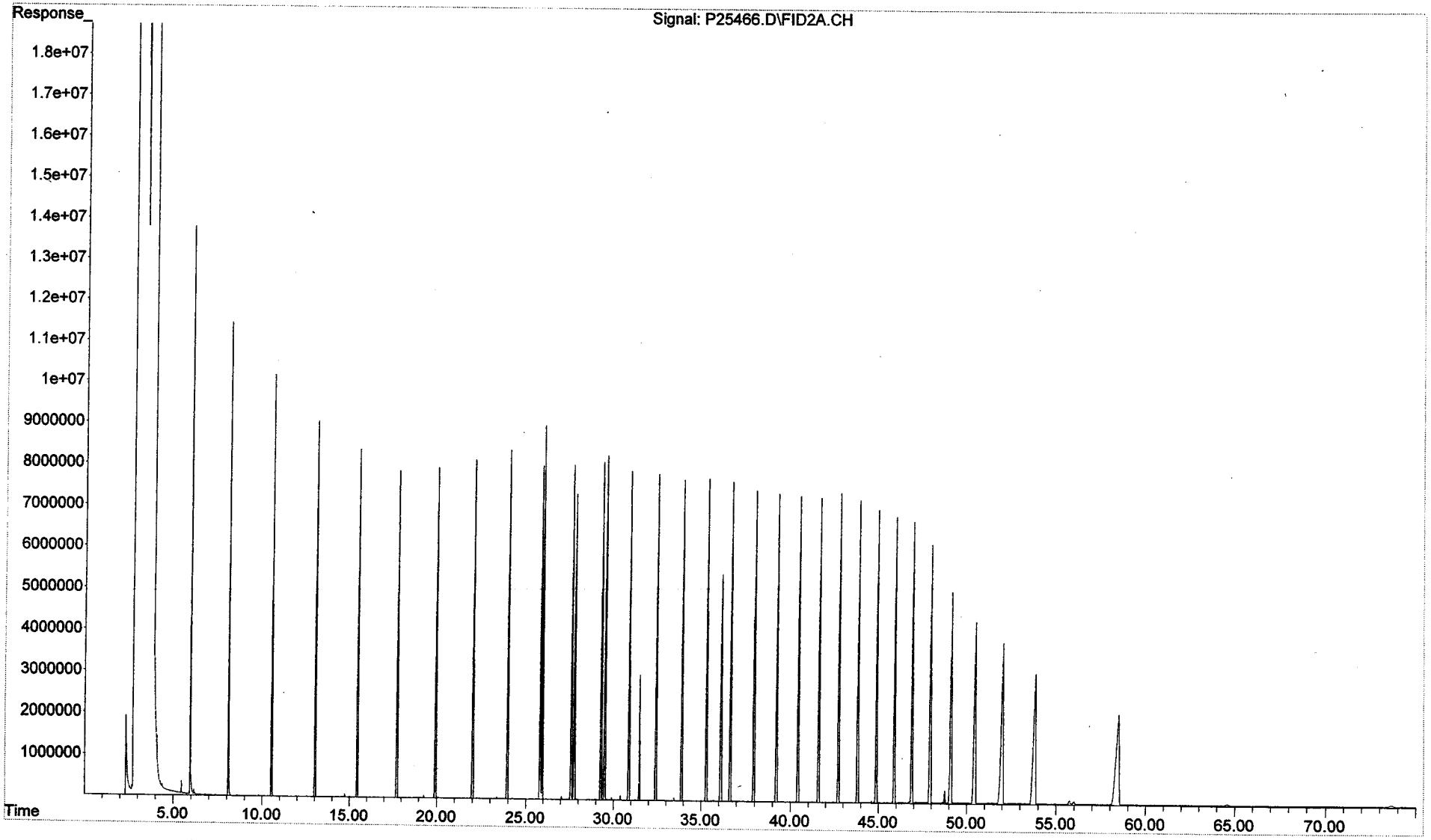
Integration File: SHCINT1.E
Quant Time: Sep 05 21:27:55 2005
Quant Method : C:\MSDCHEM\1\METHODS\HC20901.M
Quant Title : FID Forensics
QLast Update : Mon Sep 05 21:23:02 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/6/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.50	66383447	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.53	277102081	195.823 ug/mL
Spiked Amount 50.000 Range 50 - 130		Recovery = 391.65%#	
24) s d50-Tetracosane	36.15	227694395	182.078 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 364.16%#	
Target Compounds			
2) t n-Octane (C8)	5.97f	222197992	203.316 ug/mLm
3) t n-Nonane (C9)	8.12	237390685	201.145 ug/mLm
4) t n-Decane (C10)	10.57	242789522	201.004 ug/mLm
5) t n-Undecane (C11)	13.06	244375644	201.656 ug/mL
6) t n-Dodecane (C12)	15.48	249124168	201.651 ug/mL
7) t n-Tridecane (C13)	17.79	250959644	201.234 ug/mL
9) t n-Tetradecane (C14)	19.97	253891658	200.598 ug/mLm
11) t n-Pentadecane (C15)	22.04	255267441	199.995 ug/mLm
12) t n-Hexadecane (C16)	24.00	256742972	199.442 ug/mLm
14) t n-Heptadecane (C17)	25.86	259771215	199.555 ug/mLm
15) t Pristane	25.98	247041081	198.480 ug/mLm
16) t n-Octadecane (C18)	27.63	260200700	199.066 ug/mL
17) t Phytane	27.80	257598423	199.021 ug/mL
18) t n-Nonadecane (C19)	29.32	258783183	198.646 ug/mL
20) t n-Eicosane (C20)	30.92	257595382	198.382 ug/mL
21) t n-Heneicosane (C21)	32.46	265904802	198.387 ug/mL
22) t n-Docosane (C22)	33.93	262538137	198.557 ug/mL
23) t n-Tricosane (C23)	35.34	264122802	198.542 ug/mL
25) t n-Tetracosane (C24)	36.70	265619038	198.256 ug/mL
26) t n-Pentacosane (C25)	38.00	263680892	197.731 ug/mL
27) t n-Hexacosane (C26)	39.25	261479436	198.443 ug/mLm
28) t n-Heptacosane (C27)	40.46	260490730	198.246 ug/mL
29) t n-Octacosane (C28)	41.63	263581351	198.318 ug/mL
30) t n-Nonacosane (C29)	42.76	269696287	198.453 ug/mL
31) t n-Triacontane (C30)	43.85	265226719	198.519 ug/mL
32) t n-Hentriacontane (C31)	44.91	256979309	198.025 ug/mL
33) t n-Dotriacontane (C32)	45.93	258813237	198.758 ug/mL
34) t n-Tritriacontane (C33)	46.93	262684075	198.622 ug/mL
35) t n-tetratriacontane (C34)	47.97	265835468	198.784 ug/mL
36) t n-Pentatriacontane (C35)	49.14	255041607	198.450 ug/mLm
37) t n-Hexatriacontane (C36)	50.49f	261018713	198.511 ug/mLm
38) t n-Heptatriacontane (C37)	52.05f	278362887	199.034 ug/mLm
39) t n-Octatriacontane (C38)	53.86f	263048176	198.885 ug/mLm
41) t n-Tetracontane (C40)	58.49f	257774066	199.321 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25466.D
Operator : AC
Acquired : 01 Sep 2005 10:11 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: I2090105
Misc Info : WHAB33
Vial Number: 56



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH2\SEPTEMBER\SEP01.SEC\
Data File : P25468.D
Signal(s) : FID2A.CH
Acq On : 01 Sep 2005 11:43 pm
Operator : AC
Sample : Q2090101
Misc : WHAB34
ALS Vial : 57 Sample Multiplier: 1

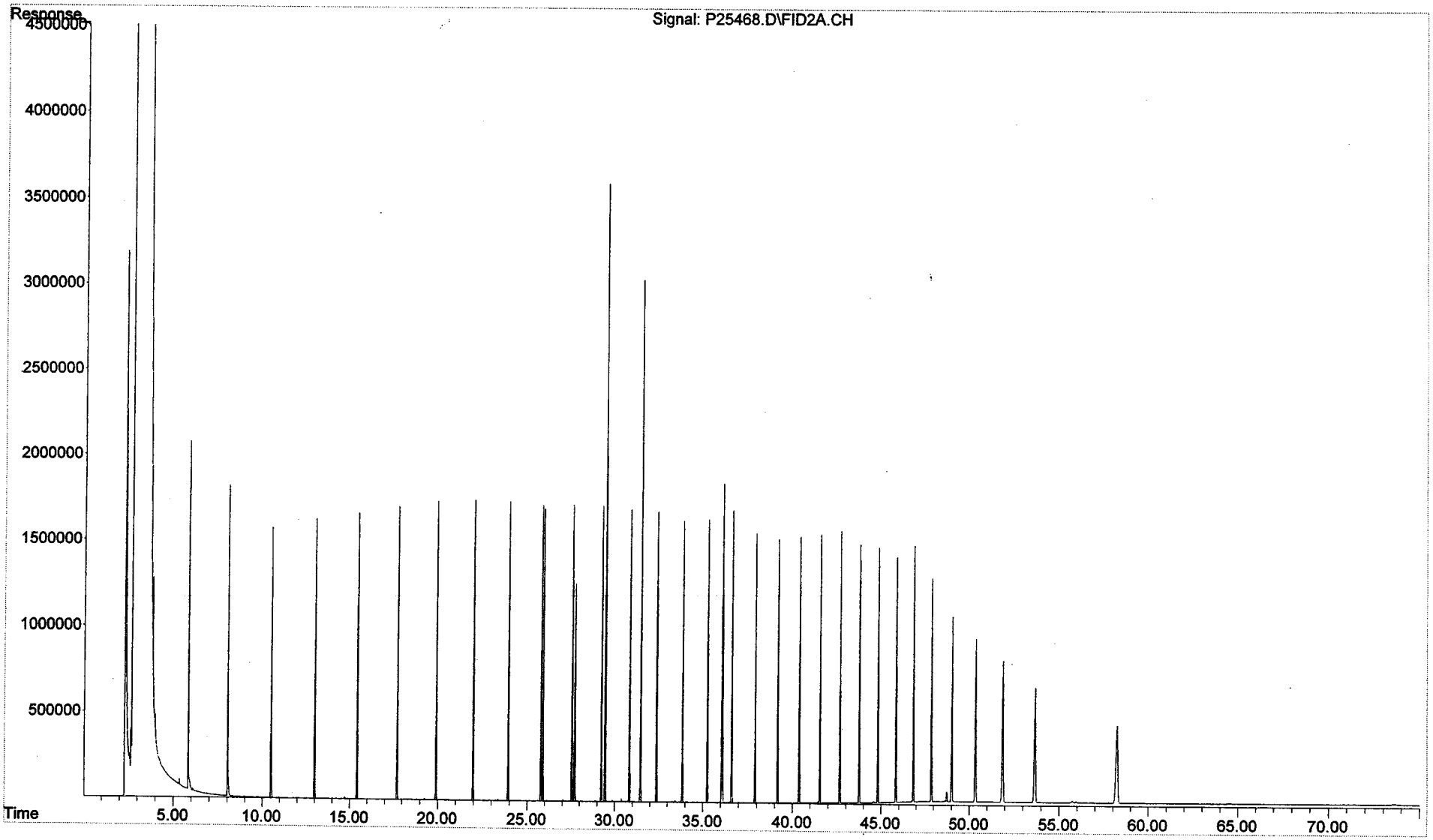
Integration File: SHCINT1.E
Quant Time: Sep 06 10:37:41 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

9/6/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.49	66538026	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.48	77961290	54.969 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	109.94%
24) s d50-Tetracosane	36.10	57608656	45.988 ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.98%
Target Compounds			
2) t n-Octane (C8)	5.84	27653651	25.191 ug/mL 101%
3) t n-Nonane (C9)	8.03	29487539	24.880 ug/mL
4) t n-Decane (C10)	10.50	30160125	24.903 ug/mLm
5) t n-Undecane (C11)	13.01	30324225	24.963 ug/mLm
6) t n-Dodecane (C12)	15.44	30974131	25.002 ug/mL
7) t n-Tridecane (C13)	17.74	31293969	25.016 ug/mL
9) t n-Tetradecane (C14)	19.92	31771245	25.023 ug/mLm
11) t n-Pentadecane (C15)	21.99	32030885	25.019 ug/mLm
12) t n-Hexadecane (C16)	23.94	32291432	25.014 ug/mLm
14) t n-Heptadecane (C17)	25.80	32612740	24.989 ug/mLm
15) t Pristane	25.91	31226578	25.033 ug/mLm
16) t n-Octadecane (C18)	27.57	32780384	25.022 ug/mL
17) t Phytane	27.73	32472660	25.032 ug/mL
18) t n-Nonadecane (C19)	29.25	32626942	25.000 ug/mL
20) t n-Eicosane (C20)	30.85	32510764	25.000 ug/mL
21) t n-Heneicosane (C21)	32.39	33566105	25.011 ug/mL
22) t n-Docosane (C22)	33.86	33139939	25.031 ug/mLm
23) t n-Tricosane (C23)	35.27	33336871	25.031 ug/mL
25) t n-Tetracosane (C24)	36.63	33520818	24.989 ug/mL
26) t n-Pentacosane (C25)	37.93	33370910	25.002 ug/mL
27) t n-Hexacosane (C26)	39.18	33025094	25.027 ug/mL
28) t n-Heptacosane (C27)	40.39	32893878	24.999 ug/mL
29) t n-Octacosane (C28)	41.56	33288759	25.002 ug/mL
30) t n-Nonacosane (C29)	42.69	34039908	25.005 ug/mL
31) t n-Triacontane (C30)	43.78	33474987	25.013 ug/mL
32) t n-Hentriacontane (C31)	44.83	32431256	24.951 ug/mL
33) t n-Dotriacontane (C32)	45.86	32651592	25.031 ug/mLm
34) t n-Tritriacontane (C33)	46.85	33213796	25.065 ug/mL
35) t n-tetratriacontane (C34)	47.88	33577457	25.057 ug/mL
36) t n-Pentatriacontane (C35)	49.04	32255481	25.047 ug/mL
37) t n-Hexatriacontane (C36)	50.36	32979695	25.023 ug/mL
38) t n-Heptatriacontane (C37)	51.89	34873766	24.877 ug/mL 99.5%
39) t n-Octatriacontane (C38)	53.67	33235050	25.061 ug/mL
41) t n-Tetracontane (C40)	58.24	32550041	25.090 ug/mLm

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25468.D
Operator : AC
Acquired : 01 Sep 2005 11:43 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: Q2090101
Misc Info : WHAB34
Vial Number: 57



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH2\September\SEP01.SEC\
Data File : P25472.D
Signal(s) : FID2A.CH
Acq On : 02 Sep 2005 2:41 am
Operator : AC
Sample : ANS2090101
Misc : WHAB40
ALS Vial : 59 Sample Multiplier: 1

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

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

9/7/05

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.49	70098468	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.49	88297654	59.095 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 118.19%
24) s	d50-Tetracosane	36.11	74137404	56.177 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 112.35%
	Target Compounds			
2) t	n-Octane (C8)	5.82	37921621	32.790 ug/mLm
3) t	n-Nonane (C9)	8.02	29254022	23.429 ug/mLm
4) t	n-Decane (C10)	10.50	32431131	25.418 ug/mLm
5) t	n-Undecane (C11)	13.01	32148864	25.120 ug/mLm
6) t	n-Dodecane (C12)	15.44	29145422	22.331 ug/mLm
7) t	n-Tridecane (C13)	17.74	30742901	23.327 ug/mLm
8) t	1380	19.42	7590330	5.674 ug/mLm
9) t	n-Tetradecane (C14)	19.93	27911894	20.867 ug/mLm
10) t	1470	21.21	10841213	8.038 ug/mLm
11) t	n-Pentadecane (C15)	21.99	30523700	22.631 ug/mLm
12) t	n-Hexadecane (C16)	23.94	26565746	19.533 ug/mLm
13) t	1650	24.85	7939974	5.775 ug/mLm
14) t	n-Heptadecane (C17)	25.80	22214514	16.157 ug/mLm
15) t	Pristane	25.90	16877813	12.843 ug/mLm
16) t	n-Octadecane (C18)	27.57	20227625	14.656 ug/mLm
17) t	Phytane	27.73	10824411	7.920 ug/mLm
18) t	n-Nonadecane (C19)	29.25	20632554	15.006 ug/mLm
20) t	n-Eicosane (C20)	30.86	19831242	14.475 ug/mLm
21) t	n-Heneicosane (C21)	32.39	19009322	13.445 ug/mLm
22) t	n-Docosane (C22)	33.86	17754688	12.729 ug/mLm
23) t	n-Tricosane (C23)	35.27	15790037	11.254 ug/mLm
25) t	n-Tetracosane (C24)	36.62	15148579	10.719 ug/mLm
26) t	n-Pentacosane (C25)	37.92	14860303	10.568 ug/mLm
27) t	n-Hexacosane (C26)	39.18	12790549	9.201 ug/mLm
28) t	n-Heptacosane (C27)	40.39	9564759	6.900 ug/mLm
29) t	n-Octacosane (C28)	41.55	6799210	4.847 ug/mLm
30) t	n-Nonacosane (C29)	42.68	7053938	4.919 ug/mLm
31) t	n-Triacontane (C30)	43.77	5461449	3.874 ug/mLm
32) t	n-Hentriacontane (C31)	44.82	4735164	3.458 ug/mLm
33) t	n-Dotriacontane (C32)	45.85	5405402	3.933 ug/mLm
34) t	n-Tritriacontane (C33)	46.84	2812637	2.015 ug/mLm
35) t	n-tetratriacontane (C34)	47.87	2731192	1.935 ug/mLm
36) t	n-Pentatriacontane (C35)	49.02	2861707	2.109 ug/mLm
37) t	n-Hexatriacontane (C36)	50.34	1733362	1.248 ug/mLm

Data Path : O:\Forensics\Data\PAH2\September\SEP01.SEC\
Data File : P25472.D
Signal(s) : FID2A.CH
Acq On : 02 Sep 2005 2:41 am
Operator : AC
Sample : ANS2090101
Misc : WHAB40
ALS Vial : 59 Sample Multiplier: 1

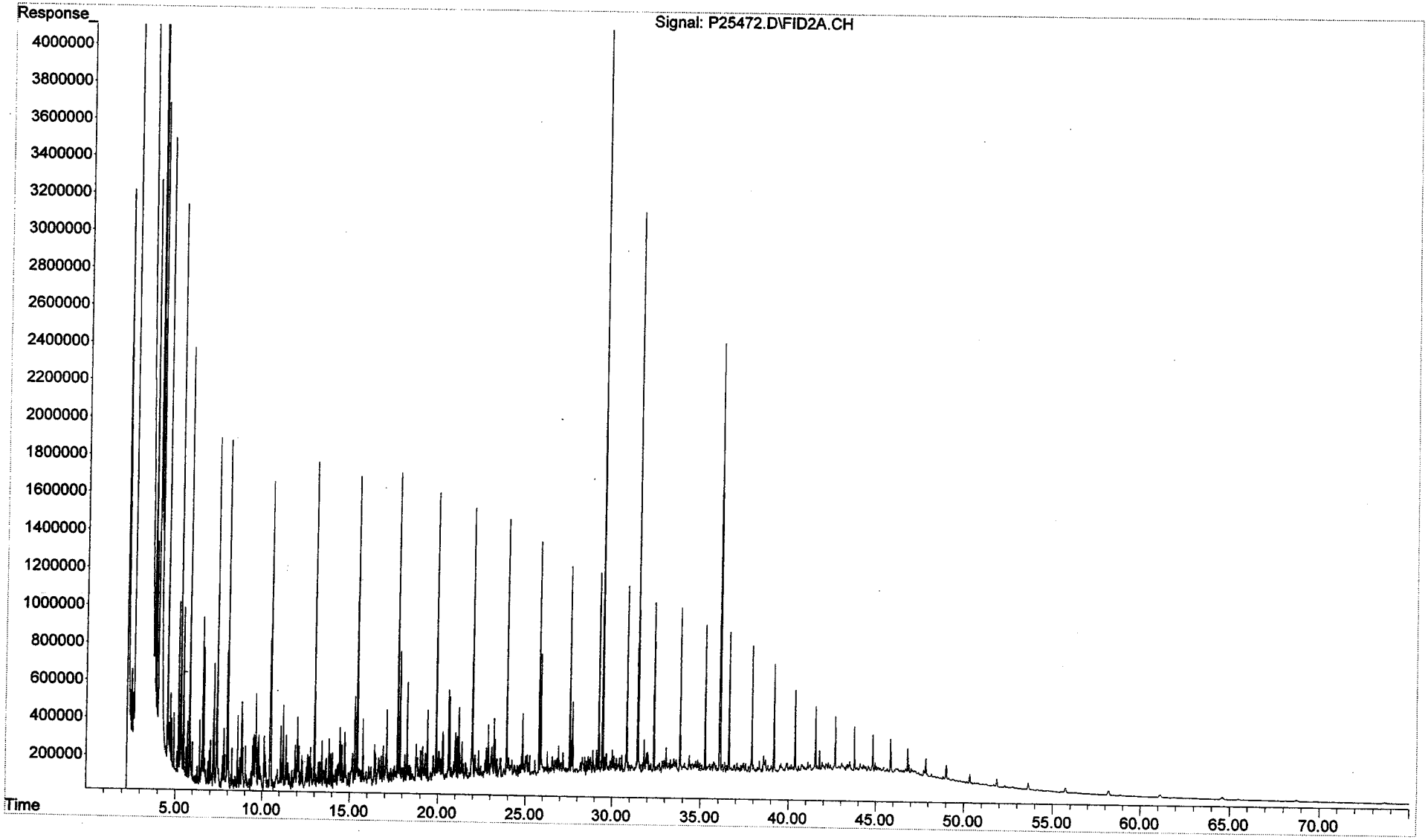
Integration File: SHCINT1.E
Quant Time: Sep 07 22:23:35 2005
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Tue Sep 06 10:22:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.87	1793787	1.215	ug/mLm
39)	t	n-Octatriacontane (C38)	53.64	1770061	1.267	ug/mLm
40)	t	n-Nonatriacontane (C39)	55.72	1456085	1.065	ug/mL
41)	t	n-Tetracontane (C40)	58.18f	1409223	1.031	ug/mLm
42)	h	C9-C40 Total Petroleum Hyd	40.84	5109029529	3726.234	ug/mL
43)	h	C10-C28 DRO	26.05	3241736187	2364.337	ug/mL
44)	h	Total Resolved Hydrocarbon	40.84	1519667622	1108.359	ug/L

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

File :O:\Forensics\Data\PAH2\September\SEP01.SEC\P25472.D
Operator : AC
Acquired : 02 Sep 2005 2:41 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: ANS2090101
Misc Info : WHAB40
Vial Number: 59



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512105**
Lab ID: **C2011001**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	51.90	3.8	25
n-Decane (C10)	50.00	51.29	2.6	25
n-Undecane (C11)	50.00	51.13	2.3	25
n-Dodecane (C12)	50.00	51.18	2.4	25
n-Tridecane (C13)	50.00	50.89	1.8	25
n-Tetradecane (C14)	50.00	50.72	1.4	25
n-Pentadecane (C15)	50.00	50.46	0.9	25
n-Hexadecane (C16)	50.00	50.16	0.3	25
n-Heptadecane (C17)	50.00	50.22	0.4	25
Pristane	50.00	50.22	0.4	25
n-Octadecane (C18)	50.00	50.13	0.3	25
Phytane	50.00	50.40	0.8	25
n-Nonadecane (C19)	50.00	50.04	0.1	25
n-Eicosane (C20)	50.00	50.33	0.7	25
n-Heneicosane (C21)	50.00	49.91	0.2	25
n-Docosane (C22)	50.00	48.37	3.3	25
n-Tricosane (C23)	50.00	50.00	0.0	25
n-Tetracosane (C24)	50.00	49.41	1.2	25
n-Pentacosane (C25)	50.00	49.92	0.2	25
n-Hexacosane (C26)	50.00	50.84	1.7	25
n-Heptacosane (C27)	50.00	50.33	0.7	25
n-Octacosane (C28)	50.00	50.41	0.8	25
n-Nonacosane (C29)	50.00	50.33	0.7	25
n-Triacontane (C30)	50.00	50.34	0.7	25
n-Hentriacontane (C31)	50.00	52.55	5.1	25
n-Dotriacontane (C32)	50.00	50.30	0.6	25
n-Tritriacontane (C33)	50.00	50.54	1.1	25
n-Tetratriacontane (C34)	50.00	50.51	1.0	25
n-Pentatriacontane (C35)	50.00	50.58	1.2	25
n-Hexatriacontane (C36)	50.00	50.71	1.4	25
n-Heptatriacontane (C37)	50.00	49.01	2.0	25
n-Octatriacontane (C38)	50.00	50.71	1.4	25
n-Tetracontane (C40)	50.00	51.83	3.7	25
ortho-Terphenyl	50.00	49.67	0.7	25
d50-Tetracosane	50.00	46.60	6.8	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/16/06 15:58

Quantitation Report (QT Reviewed)

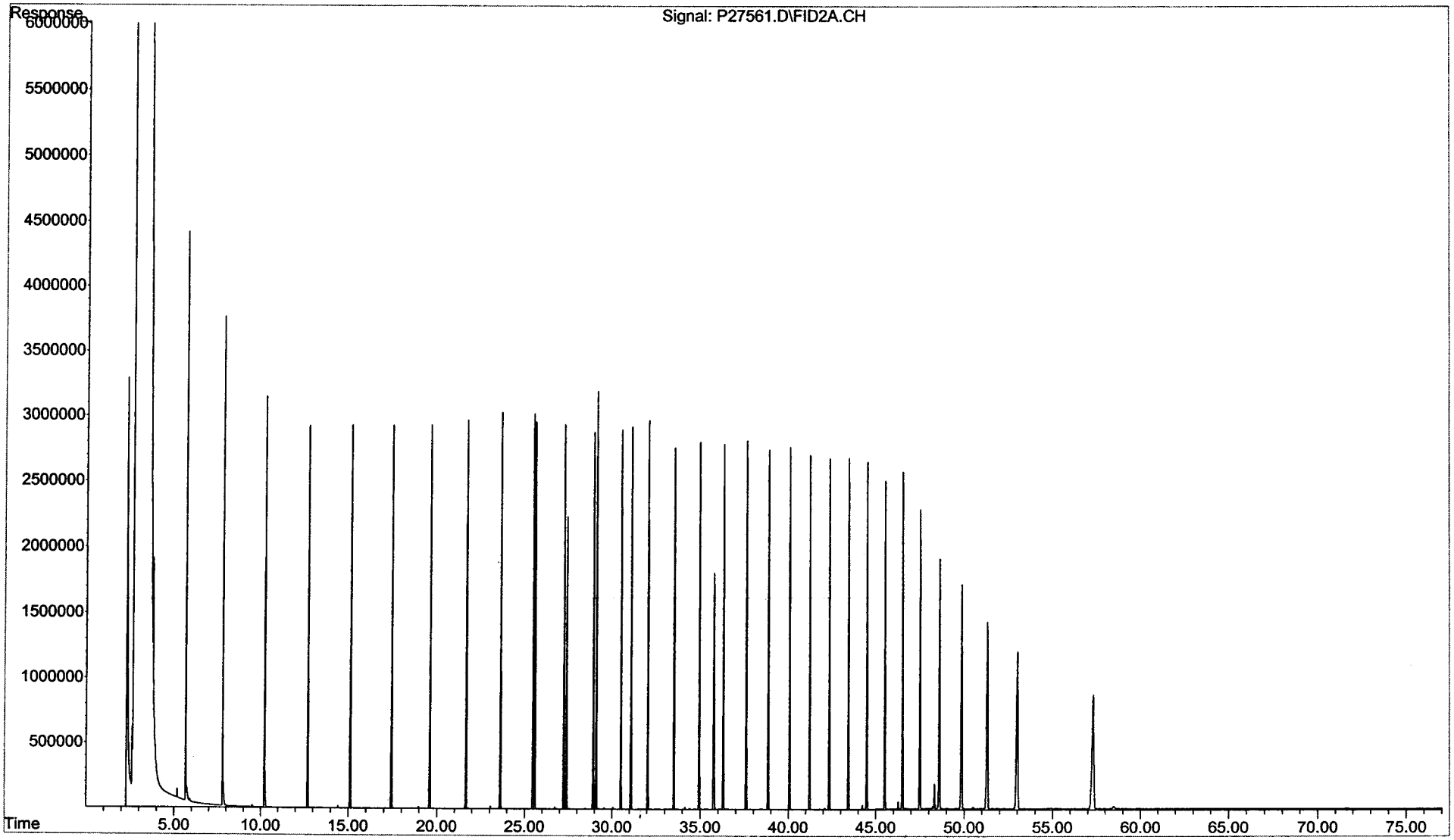
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27561.D
Signal(s) : FID2A.CH
Acq On : 10 Jan 2006 11:41 am
Operator : AC
Sample : C2011001-AFID
Misc : alk std
ALS Vial : 67 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 10 14:23:49 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 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	31.10	63665406	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.11	67398152	49.666 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	99.33%
24) s d50-Tetracosane	35.76	55849280	46.596 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	93.19%
Target Compounds			
2) t n-Octane (C8)	5.66	55769465	53.095 ug/mLm
3) t n-Nonane (C9)	7.78	58854881	51.900 ug/mLm
4) t n-Decane (C10)	10.22	59436847	51.290 ug/mLm
5) t n-Undecane (C11)	12.71	59432086	51.131 ug/mLm
6) t n-Dodecane (C12)	15.13	60672801	51.184 ug/mLm
7) t n-Tridecane (C13)	17.43	60912735	50.889 ug/mLm
9) t n-Tetradecane (C14)	19.61	61614374	50.716 ug/mLm
11) t n-Pentadecane (C15)	21.67	61812839	50.461 ug/mLm
12) t n-Hexadecane (C16)	23.62	61954871	50.157 ug/mLm
14) t n-Heptadecane (C17)	25.48	62707059	50.216 ug/mL
15) t Pristane	25.59	59946756	50.224 ug/mLm
16) t n-Octadecane (C18)	27.24	62837272	50.129 ug/mL
17) t Phytane	27.41	62562517	50.403 ug/mLm
18) t n-Nonadecane (C19)	28.93	62489365	50.041 ug/mLm
20) t n-Eicosane (C20)	30.53	62631280	50.334 ug/mLm
21) t n-Heneicosane (C21)	32.07	64089112	49.910 ug/mLm
22) t n-Docosane (C22)	33.53	61278856	48.372 ug/mLm
23) t n-Tricosane (C23)	34.94	63717926	50.001 ug/mLm
25) t n-Tetracosane (C24)	36.30	63418392	49.410 ug/mLm
26) t n-Pentacosane (C25)	37.60	63755004	49.922 ug/mLm
27) t n-Hexacosane (C26)	38.85	64194578	50.844 ug/mLm
28) t n-Heptacosane (C27)	40.06	63359274	50.326 ug/mLm
29) t n-Octacosane (C28)	41.23	64225278	50.415 ug/mLm
30) t n-Nonacosane (C29)	42.36	65554224	50.328 ug/mLm
31) t n-Triacontane (C30)	43.45	64458605	50.338 ug/mLm
32) t n-Hentriacontane (C31)	44.51	65355350	52.550 ug/mLm
33) t n-Dotriacontane (C32)	45.53	62779827	50.299 ug/mLm
34) t n-Tritriacontane (C33)	46.52	64080401	50.540 ug/mLm
35) t n-tetratriacontane (C34)	47.52	64764086	50.511 ug/mLm
36) t n-Pentatriacontane (C35)	48.61	62321917	50.577 ug/mLm
37) t n-Hexatriacontane (C36)	49.87	63948646	50.709 ug/mLm
38) t n-Heptatriacontane (C37)	51.32f	65741526	49.012 ug/mLm
39) t n-Octatriacontane (C38)	53.01f	64345007	50.709 ug/mLm
41) t n-Tetracontane (C40)	57.31f	64337103	51.830 ug/mLm

File :O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\P27561.D
Operator : AC
Acquired : 10 Jan 2006 11:41 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011001-AFID
Misc Info : alk std
Vial Number: 67



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512105**
Lab ID: **C2011002**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	52.01	4.0	25
n-Decane (C10)	50.00	51.42	2.8	25
n-Undecane (C11)	50.00	51.12	2.2	25
n-Dodecane (C12)	50.00	51.14	2.3	25
n-Tridecane (C13)	50.00	50.83	1.7	25
n-Tetradecane (C14)	50.00	50.67	1.3	25
n-Pentadecane (C15)	50.00	50.44	0.9	25
n-Hexadecane (C16)	50.00	50.13	0.3	25
n-Heptadecane (C17)	50.00	50.18	0.4	25
Pristane	50.00	50.21	0.4	25
n-Octadecane (C18)	50.00	50.10	0.2	25
Phytane	50.00	50.38	0.8	25
n-Nonadecane (C19)	50.00	50.03	0.1	25
n-Eicosane (C20)	50.00	50.31	0.6	25
n-Heneicosane (C21)	50.00	49.85	0.3	25
n-Docosane (C22)	50.00	50.48	1.0	25
n-Tricosane (C23)	50.00	49.90	0.2	25
n-Tetracosane (C24)	50.00	49.35	1.3	25
n-Pentacosane (C25)	50.00	49.84	0.3	25
n-Hexacosane (C26)	50.00	50.74	1.5	25
n-Heptacosane (C27)	50.00	50.23	0.5	25
n-Octacosane (C28)	50.00	50.30	0.6	25
n-Nonacosane (C29)	50.00	50.28	0.6	25
n-Triacontane (C30)	50.00	50.19	0.4	25
n-Hentriacontane (C31)	50.00	52.38	4.8	25
n-Dotriacontane (C32)	50.00	50.28	0.6	25
n-Tritriacontane (C33)	50.00	50.41	0.8	25
n-Tetratriacontane (C34)	50.00	50.37	0.7	25
n-Pentatriacontane (C35)	50.00	50.59	1.2	25
n-Hexatriacontane (C36)	50.00	50.58	1.2	25
n-Heptatriacontane (C37)	50.00	48.89	2.2	25
n-Octatriacontane (C38)	50.00	50.58	1.2	25
n-Tetracontane (C40)	50.00	51.82	3.6	25
ortho-Terphenyl	50.00	49.73	0.5	25
d50-Tetracosane	50.00	46.52	7.0	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/16/06 15:59

Quantitation Report (QT Reviewed)

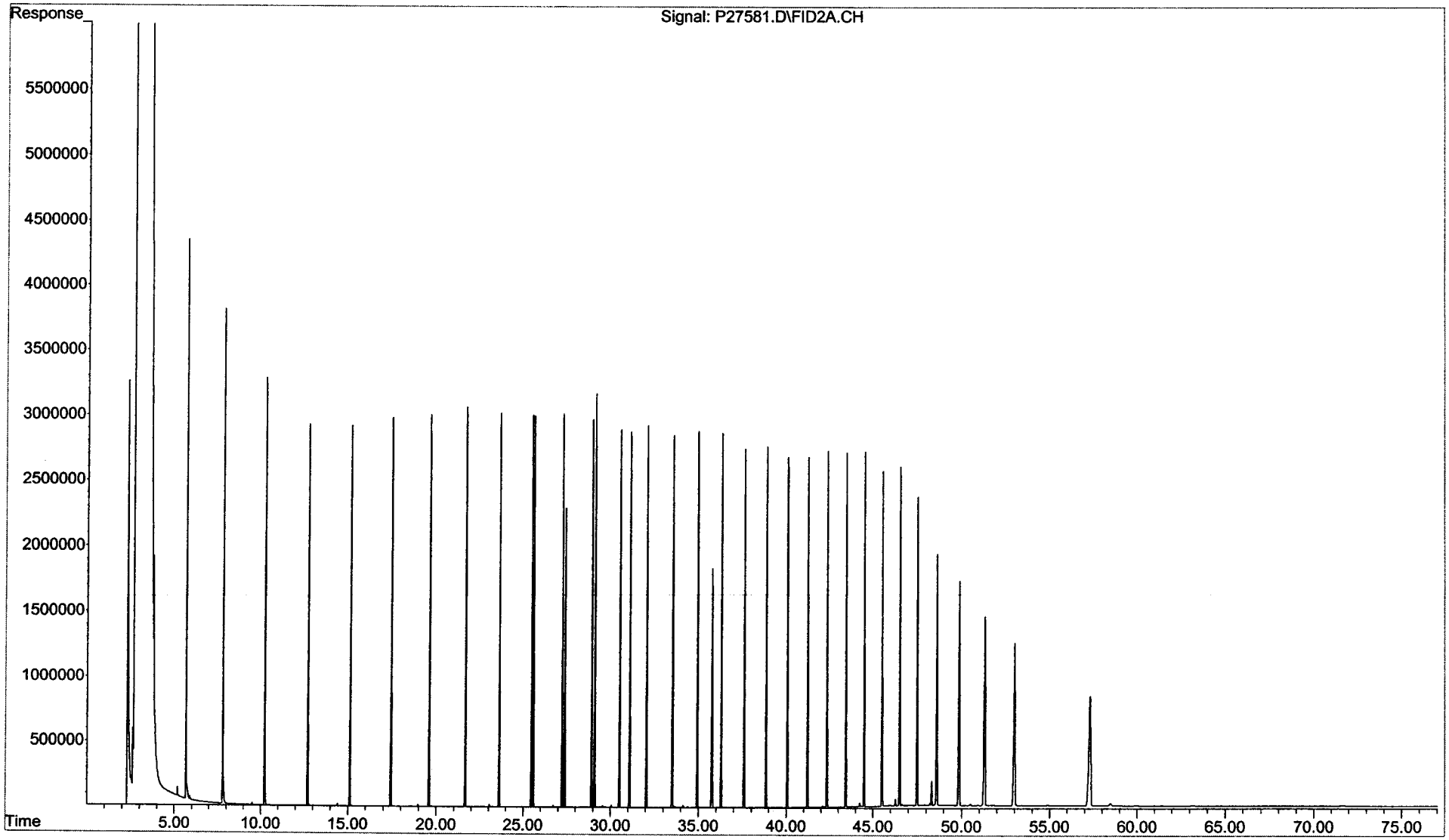
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27581.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 3:41 am
Operator : AC
Sample : C2011002-AFID
Misc : ALK STD
ALS Vial : 77 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 11 11:59:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 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	31.10	64402620	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.11	68263936	49.728 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 99.46%
24) s	d50-Tetracosane	35.76	56409592	46.524 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 93.05%
	Target Compounds			
2) t	n-Octane (C8)	5.66	55866964	52.579 ug/mLm
3) t	n-Nonane (C9)	7.79	59665683	52.012 ug/mLm
4) t	n-Decane (C10)	10.22	60282922	51.425 ug/mLm
5) t	n-Undecane (C11)	12.71	60108594	51.121 ug/mLm
6) t	n-Dodecane (C12)	15.13	61322901	51.140 ug/mLm
7) t	n-Tridecane (C13)	17.43	61548267	50.831 ug/mLm
9) t	n-Tetradecane (C14)	19.61	62273883	50.672 ug/mLm
11) t	n-Pentadecane (C15)	21.67	62508140	50.444 ug/mLm
12) t	n-Hexadecane (C16)	23.62	62643341	50.134 ug/mLm
14) t	n-Heptadecane (C17)	25.48	63389772	50.182 ug/mLm
15) t	Pristane	25.59	60619789	50.207 ug/mLm
16) t	n-Octadecane (C18)	27.24	63527849	50.099 ug/mLm
17) t	Phytane	27.41	63258585	50.381 ug/mLm
18) t	n-Nonadecane (C19)	28.93	63198646	50.030 ug/mLm
20) t	n-Eicosane (C20)	30.53	63328430	50.312 ug/mLm
21) t	n-Heneicosane (C21)	32.06	64748302	49.846 ug/mLm
22) t	n-Docosane (C22)	33.53	64690026	50.481 ug/mLm
23) t	n-Tricosane (C23)	34.94	64330300	49.903 ug/mLm
25) t	n-Tetracosane (C24)	36.30	64072068	49.348 ug/mLm
26) t	n-Pentacosane (C25)	37.60	64383629	49.837 ug/mLm
27) t	n-Hexacosane (C26)	38.85	64811659	50.745 ug/mLm
28) t	n-Heptacosane (C27)	40.06	63972127	50.231 ug/mLm
29) t	n-Octacosane (C28)	41.23	64819998	50.299 ug/mLm
30) t	n-Nonacosane (C29)	42.36	66245050	50.276 ug/mLm
31) t	n-Triacontane (C30)	43.45	65013954	50.191 ug/mLm
32) t	n-Hentriacontane (C31)	44.51	65902041	52.383 ug/mLm
33) t	n-Dotriacontane (C32)	45.53	63483856	50.281 ug/mLm
34) t	n-Tritriacontane (C33)	46.52	64656942	50.411 ug/mLm
35) t	n-tetratriacontane (C34)	47.51	65328627	50.368 ug/mLm
36) t	n-Pentatriacontane (C35)	48.61	63056013	50.587 ug/mLm
37) t	n-Hexatriacontane (C36)	49.87	64520626	50.577 ug/mLm
38) t	n-Heptatriacontane (C37)	51.32f	66333663	48.888 ug/mLm
39) t	n-Octatriacontane (C38)	53.01f	64929179	50.584 ug/mLm
41) t	n-Tetracontane (C40)	57.31f	65063807	51.815 ug/mLm

File :O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\P27581.D
Operator : AC
Acquired : 11 Jan 2006 3:41 am using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011002-AFID
Misc Info : ALK STD
Vial Number: 77



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

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

Lab Code: **MA00030**
ETR: **0512105**
Lab ID: **C2011003**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	51.57	3.1	25
n-Decane (C10)	50.00	51.26	2.5	25
n-Undecane (C11)	50.00	51.19	2.4	25
n-Dodecane (C12)	50.00	51.24	2.5	25
n-Tridecane (C13)	50.00	50.90	1.8	25
n-Tetradecane (C14)	50.00	50.70	1.4	25
n-Pentadecane (C15)	50.00	50.44	0.9	25
n-Hexadecane (C16)	50.00	50.13	0.3	25
n-Heptadecane (C17)	50.00	50.17	0.3	25
Pristane	50.00	50.21	0.4	25
n-Octadecane (C18)	50.00	50.10	0.2	25
Phytane	50.00	50.41	0.8	25
n-Nonadecane (C19)	50.00	50.02	0.0	25
n-Eicosane (C20)	50.00	50.31	0.6	25
n-Heneicosane (C21)	50.00	49.82	0.4	25
n-Docosane (C22)	50.00	46.03	7.9	25
n-Tricosane (C23)	50.00	49.97	0.1	25
n-Tetracosane (C24)	50.00	49.37	1.3	25
n-Pentacosane (C25)	50.00	49.85	0.3	25
n-Hexacosane (C26)	50.00	50.73	1.5	25
n-Heptacosane (C27)	50.00	50.21	0.4	25
n-Octacosane (C28)	50.00	50.30	0.6	25
n-Nonacosane (C29)	50.00	50.20	0.4	25
n-Triacontane (C30)	50.00	50.21	0.4	25
n-Hentriacontane (C31)	50.00	52.40	4.8	25
n-Dotriacontane (C32)	50.00	50.19	0.4	25
n-Tritriacontane (C33)	50.00	50.40	0.8	25
n-Tetratriacontane (C34)	50.00	50.36	0.7	25
n-Pentatriacontane (C35)	50.00	50.30	0.6	25
n-Hexatriacontane (C36)	50.00	50.57	1.1	25
n-Heptatriacontane (C37)	50.00	48.84	2.3	25
n-Octatriacontane (C38)	50.00	50.62	1.2	25
n-Tetracontane (C40)	50.00	51.73	3.5	25
ortho-Terphenyl	50.00	49.77	0.5	25
d50-Tetracosane	50.00	46.52	7.0	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.03

N/A - Not Applicable

01/16/06 15:59

Quantitation Report (QT Reviewed)

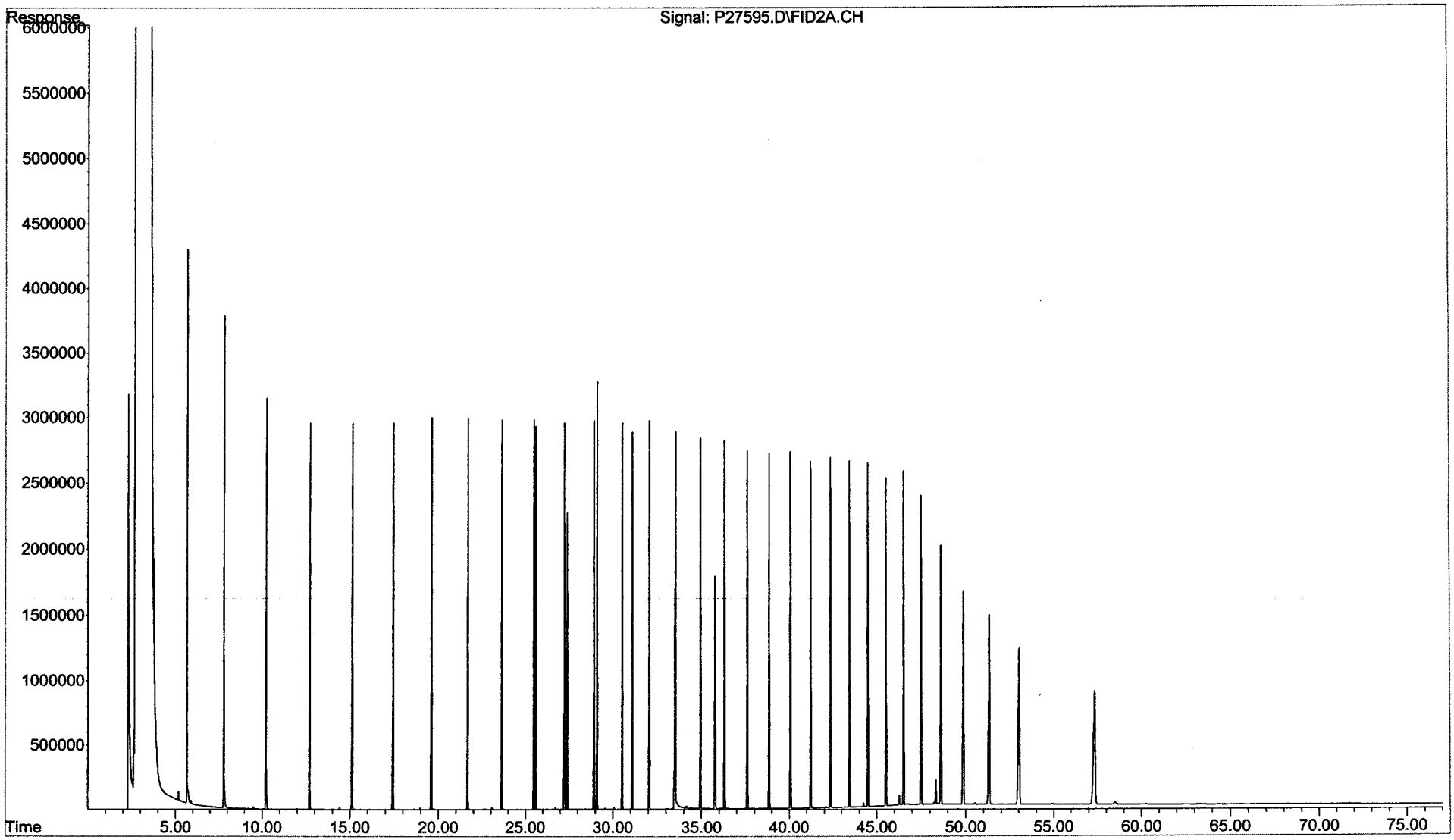
Data Path : O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\
Data File : P27595.D
Signal(s) : FID2A.CH
Acq On : 11 Jan 2006 4:22 pm
Operator : AC
Sample : C2011003-AFID
Misc : ALK STD
ALS Vial : 84 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 16 15:17:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH2\SEPTEMBER05\HC20901.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 23:00:13 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	31.11	64114625	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.12	68015432	49.769 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 99.54%
24) s	d50-Tetracosane	35.77	56152570	46.520 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 93.04%
Target Compounds				
2) t	n-Octane (C8)	5.66	55435606	52.407 ug/mLm
3) t	n-Nonane (C9)	7.79	58896271	51.572 ug/mLm
4) t	n-Decane (C10)	10.23	59822420	51.261 ug/mLm
5) t	n-Undecane (C11)	12.72	59918304	51.188 ug/mLm
6) t	n-Dodecane (C12)	15.13	61162754	51.236 ug/mLm
7) t	n-Tridecane (C13)	17.43	61361363	50.905 ug/mLm
9) t	n-Tetradecane (C14)	19.61	62029581	50.700 ug/mLm
11) t	n-Pentadecane (C15)	21.68	62227935	50.443 ug/mLm
12) t	n-Hexadecane (C16)	23.63	62353157	50.126 ug/mLm
14) t	n-Heptadecane (C17)	25.49	63088486	50.168 ug/mLm
15) t	Pristane	25.60	60357460	50.214 ug/mLm
16) t	n-Octadecane (C18)	27.25	63244801	50.100 ug/mLm
17) t	Phytane	27.42	63008961	50.407 ug/mLm
18) t	n-Nonadecane (C19)	28.93	62903873	50.020 ug/mLm
20) t	n-Eicosane (C20)	30.54	63043550	50.311 ug/mLm
21) t	n-Heneicosane (C21)	32.07	64421777	49.818 ug/mLm
22) t	n-Docosane (C22)	33.54	58726688	46.033 ug/mLm
23) t	n-Tricosane (C23)	34.95	64128583	49.970 ug/mLm
25) t	n-Tetracosane (C24)	36.31	63817631	49.372 ug/mLm
26) t	n-Pentacosane (C25)	37.61	64106133	49.846 ug/mLm
27) t	n-Hexacosane (C26)	38.87	64499464	50.727 ug/mLm
28) t	n-Heptacosane (C27)	40.07	63662575	50.212 ug/mLm
29) t	n-Octacosane (C28)	41.24	64525877	50.296 ug/mLm
30) t	n-Nonacosane (C29)	42.37	65854930	50.205 ug/mLm
31) t	n-Triacontane (C30)	43.46	64745326	50.208 ug/mLm
32) t	n-Hentriacontane (C31)	44.52	65632885	52.403 ug/mLm
33) t	n-Dotriacontane (C32)	45.54	63080782	50.186 ug/mLm
34) t	n-Tritriacontane (C33)	46.53	64354344	50.401 ug/mLm
35) t	n-tetratriacontane (C34)	47.53	65027673	50.362 ug/mLm
36) t	n-Pentatriacontane (C35)	48.63	62420918	50.303 ug/mLm
37) t	n-Hexatriacontane (C36)	49.89	64227213	50.573 ug/mLm
38) t	n-Heptatriacontane (C37)	51.34	65978364	48.844 ug/mLm
39) t	n-Octatriacontane (C38)	53.03f	64680136	50.616 ug/mLm
41) t	n-Tetracontane (C40)	57.35f	64664580	51.729 ug/mLm

File :O:\FORENSICS\DATA\PAH2\JANUARY06\JAN09.SEC\P27595.D
Operator : AC
Acquired : 11 Jan 2006 4:22 pm using AcqMethod FRNC2B.M
Instrument : PAHINST2
Sample Name: C2011003-AFID
Misc Info : ALK STD
Vial Number: 84



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 1 Project Name: Gowanus Canal Investigation GEI Project No. 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 05 12105

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-90B (6.5-7)	-1	12/14/2005	15:40	Sediment	☑
GC-SED-89 (12.8-13.8)	-2	12/14/2005	17:35	Sediment	☑
GC-SED-88 (15.9-16.9)	-3	12/14/2005	18:30	Sediment	☑
GC-SED-96 (14-15)	-4	12/15/2005	17:50	Sediment	☑
GC-SED-95 (3.5-4.5)	-5	12/15/2005	17:05	Sediment	☑
GC-SED-86 (0-1)	-6	12/15/2005	13:30	Sediment	☑
GC-SED-84 (6-7)	-7	12/15/2005	15:45	Sediment	☑
GC-SED-87 (4.4-6.2)	-8	12/15/2005	11:45	Sediment	☑

Possible Hazard Identification	Turn Around Time Required (other than standard):				
☐ Non-Hazard ☐ Flammable	QC Requirements:				
☐ Skin Irritant ☒ Unknown	Date	Time		Date	Time
1. Relinquished by: Melissa Fletter	12-15-05	20:00	1. Received by: Ed Butler	12/16/05	16:30
2. Relinquished by: Ed Butler	12-16-05	17:30	2. Received by:		
3. Relinquished by:			3. Received by:		

COMMENTS Fed Ex 8544 0600 3208

ORIGINAL

Sample Receipt Checklist

Client: NEWFIE		**Receipt Date:** 10/16/05 ~~16:30~~ 17:30 EMP	
Project: Gowanas Canal		**Log-in Date:** 12/19/05	
ETR #: 05/2/05		**Inspection by:** EMP	**Login by:** EMP

ALL SECTIONS BELOW MUST BE COMPLETED

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

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

Number of coolers received for this project delivery: 1

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

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

Cooler 1:
Temperature(s) taken from: 2 IR Gun, _____ Temp. Blank, / NA

Were samples received on ice? Yes / No

Chain-of-Custody present? Yes / No
Complete? Yes / No

Custody seals present on Cooler? Yes / No
on Bottles? Yes / No
Intact? Yes / No / NA
Note: Affix custody seals to back of this page.

Were sample containers intact? Yes / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / NA If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / NA
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
Yes / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / NA
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO NA
If No, why?:

Were samples received within hold time? Yes / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / No If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / NA

Project Manager Acknowledgement: EMP Date: 12/16/05

Comments / Notes

Sample storage refrigerator #: D3

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?

Yes / No / N/A

If No, list samples below:

Please use back for any additional notes!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

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28

FedEx Express **US Airbill**

FedEx Tracking Number 8544 0600 3228

Recipient's Copy

NO POUCH NEEDED.
See back for peel and stick application instructions.

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 12-15-2005 FedEx Tracking Number 854406003228

Sender's Name Melissa Felter Phone 860 368-5300

Company GEI CONSULTANTS INC

Address SMITH & LUQUER ST Dept./Floor/Suite/Room

City BROOKLYN State NY ZIP 11231

2 Your Internal Billing Reference 980482-34-4403

3 To

Recipient's Name Ted Healey Phone 781 681 5040

Company New Fields

Recipient's Address 100 Ledgewood Place

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address Suite 302

To request a package be held at a specific FedEx location, print FedEx address here.

City Rockland State MA ZIP 02370

0320291412

8544 0600 3228

4a Express Package Service To add SATURDAY Delivery, see Section 6. *Packages up to 150 lbs.* * To most locations.

- [x] FedEx Priority Overnight Next business morning.*
- [ ] FedEx Standard Overnight Next business afternoon.*
- [ ] FedEx First Overnight Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day Second business day.*
- [ ] FedEx Express Saver Third business day.*

FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service To add SATURDAY Delivery, see Section 6. *Packages over 150 lbs.* ** To most locations.

- [ ] FedEx 1Day Freight* Next business day.**
- [ ] FedEx 2Day Freight Second business day.**
- [ ] FedEx 3Day Freight Third business day.**

* Call for Confirmation:

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling Include FedEx address in Section 3.

- [ ] SATURDAY Delivery Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes.
- [ ] HOLD Weekday at FedEx Location Not available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes As per attached Shipper's Declaration.
- [ ] Yes Shipper's Declaration not required.
- [ ] Dry Ice Dry Ice, 9, UN 1845 _____ x _____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. [ ]

- [ ] Sender Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [x] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted] 10[redacted]

Total Packages 1 Total Weight 36 [redacted] Total Charges _____ Credit Card Auth. _____

†Our liability is limited to $100 unless you declare a higher value. See the FedEx Service Guide for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

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