ANALYTICAL REPORT

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

Project:	Gowanus Canal
ETR:	0512110
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**
Project: **Gowanus Canal**

Lab Code: **MA00030**
ETR: **0512110**

Lab Sample ID	Client Sample ID
0512110-01	GC-SED-93 (0-1)
0512110-02	GC-SED-92 (0-2)
0512110-03	GC-SED-85B (8.5-9.3)
0512110-04	GC-SED-67 (8-8.4)
0512110-05	GC-SED-68 (2.2-3.1)
0512110-06	GC-SED-80 (0-2)
0512110-07	GC-SED-79 (2.5-3.5)
0512110-08	GC-SED-81 (8-11)
0512110-09	GC-SED-69 (6-7)
0512110-10	GC-SED-72 (13.5-14.5)
0512110-11	GC-SED-07 (7.5-8.5)
0512110-12	GC-SED-03 (0-1.5)
0512110-13	GC-SED-01 (19-20)
0512110-14	GC-SED-02 (17.1-18.1)

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Certificate Program Summary

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

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

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

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

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

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

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

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

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

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

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

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

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CASE NARRATIVE
Alpha Woods Hole Lab

ETR: 0512110
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 SS122105B16 contained low-level target compounds detected below the reporting limit, with four compounds detected above the reporting limit. Associated field sample results would be flagged with "B" qualifiers if the concentration of the analyte in the sample is less than 5X the concentration in the blank. Please note that no "B" qualifiers were utilized.

2. 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. Sample GC-SED-07 (7.5-8.5) (0512110-11) and its duplicate (0512110-11D) have two compounds above the 30% relative percent difference QC limit due to potential matrix in-homogeneity. The integrations in the native sample and the duplicate were reviewed and found to be appropriate.

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: 1/25/06

Elizabeth Porta **Quality Assurance Manager**

Sample Preparation Records

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512110STBIO - 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
0512110-01	SAM	Shaker	KLA	12/21/05	12/29/05		5.16	26.6	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-02	SAM	Shaker	KLA	12/21/05	12/29/05		5.77	13.875	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-03	SAM	Shaker	KLA	12/21/05	12/29/05		5.25	36.9963	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-04	SAM	Shaker	KLA	12/21/05	12/29/05		5.37	59	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-05	SAM	Shaker	KLA	12/21/05	12/29/05		5.48	83.3375	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-06	SAM	Shaker	KLA	12/21/05	12/29/05		5.19	11.1	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-07	SAM	Shaker	KLA	12/21/05	12/29/05		5.23	17.8625	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-08	SAM	Shaker	KLA	12/21/05	12/29/05		5.16	22.725	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-09	SAM	Shaker	KLA	12/21/05	12/29/05		5.25	6.95	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-10	SAM	Shaker	KLA	12/21/05	12/29/05		5.22	57.2	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-11	D	Shaker	KLA	12/21/05	12/29/05		5.1	17.0718	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-11	SAM	Shaker	KLA	12/21/05	12/29/05		5.35	15.8619	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-12	SAM	Shaker	KLA	12/21/05	12/29/05		10.45	11.1	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-13	SAM	Shaker	KLA	12/21/05	12/29/05		5.43	18.5537	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
0512110-14	SAM	Shaker	KLA	12/21/05	12/29/05		5.09	10	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
SS122105B16	B	Shaker	KLA	12/21/05	12/29/05		30	2	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
SS122105LCS13	LCS	Shaker	KLA	12/21/05	12/29/05		30	2	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	
SS122105LCSD13	LCSD	Shaker	KLA	12/21/05	12/29/05		30	2	False	DMP	12/23/05	KD Flask	0.15	DMP	12/29/05	

✓ 2nd cw 1/26/06

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512110STBIO - OP NEWFIE

Lab ID	Notes
0512110-01	1st Prep
0512110-02	1st Prep
0512110-03	1st Prep
0512110-04	1st Prep
0512110-05	1st Prep
0512110-06	1st Prep
0512110-07	1st Prep
0512110-08	1st Prep
0512110-09	1st Prep
0512110-10	1st Prep
0512110-11	1st Prep
0512110-11	1st Prep
0512110-12	1st Prep
0512110-13	1st Prep
0512110-14	1st Prep
SS122105B16	1st Prep
SS122105LCS13	1st Prep
SS122105LCSD13	1st Prep

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512110STBIO - 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
0512110-01	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.16	13.32	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-02	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.77	6.66	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-03	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.25	14.28	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-04	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.37	8.88	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-05	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.48	11.1	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-06	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.19	5.56	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-07	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.23	7.15	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-08	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.16	5.13	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-09	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.25	1.69	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-10	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.22	8.88	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-11	D	Shaker	KLA	12/21/2005	12/29/2005		5.1	6.35	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-11	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.35	6.25	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-12	SAM	Shaker	KLA	12/21/2005	12/29/2005		10.45	4.44	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-13	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.43	2.22	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
0512110-14	SAM	Shaker	KLA	12/21/2005	12/29/2005		5.09	1.59	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
SS010606AWS02	AWS						0.05096	10								
SS122105B16	B	Shaker	KLA	12/21/2005	12/29/2005		30	2	False	DMP	12/23/2005	KD Flask	0.15	DMP	1/6/2006	
② ~~SS122105LCS13~~	~~LCS~~	~~Shaker~~	~~KLA~~	~~12/21/2005~~	~~12/29/2005~~		~~30~~	~~2~~	~~False~~	~~DMP~~	~~12/23/2005~~	~~KD Flask~~	~~0.15~~	~~DMP~~	~~1/6/2006~~	
① ~~SS122105LCSD13~~	~~LCSD~~	~~Shaker~~	~~KLA~~	~~12/21/2005~~	~~12/29/2005~~		~~30~~	~~2~~	~~False~~	~~DMP~~	~~12/23/2005~~	~~KD Flask~~	~~0.15~~	~~DMP~~	~~1/6/2006~~	
TS010506AWS03	AWS															

① LCS/LCSD not prep'd for biomarkers 1/6/06 RM

✓ 2nd ar 1/24/06

Alpha Woods Hole Lab
Batch Prep Report
12/21/2005 0512110STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512110-01	1st Prep
0512110-02	1st Prep
0512110-03	1st Prep
0512110-04	1st Prep
0512110-05	1st Prep
0512110-06	1st Prep
0512110-07	1st Prep
0512110-08	1st Prep
0512110-09	1st Prep
0512110-10	1st Prep
0512110-11	1st Prep
0512110-11	1st Prep
0512110-12	1st Prep
0512110-13	1st Prep
0512110-14	1st Prep
SS010606AWS02	1st Prep
SS122105B16	1st Prep
SS122105LCS13	1st Prep
SS122105LCSD13	1st Prep
TS010506AWS03	1st Prep

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

Lab ID	QC Type	0512110STBIO - Sample
0512110-01	SAM	5.16
0512110-02	SAM	5.77
0512110-03	SAM	5.25
0512110-04	SAM	5.37
0512110-05	SAM	5.48
0512110-06	SAM	5.19
0512110-07	SAM	5.23
0512110-08	SAM	5.16
0512110-09	SAM	5.25
0512110-10	SAM	5.22
0512110-11	D	5.1
0512110-11	SAM	5.35
0512110-12	SAM	10.45
0512110-13	SAM	5.43
0512110-14	SAM	5.09
SS122105B16	B	30
SS122105LCS13LCS	OP NEWFIE	30
SS122105LCS13LCS	OP SHC	30
SS122105LCS13LCS	OP Steranes/Triterpanes	30
SS122105LCSD13LCSD	OP NEWFIE	30
SS122105LCSD13LCSD	OP SHC	30
SS122105LCSD13LCSD	OP Steranes/Triterpanes	30

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

Alpha Woods Hole Lab
Batch Prep Spike Report

12/21/2005 0512110STBIO - OP NEWFIE Analyst: KLA Witness: RPR

Lab ID	QC Type	OP NEWFIE - surr	Vol OP NEWFIE - surr	Units OP NEWFIE - surr	OP NEWFIE - spk 1	Vol OP NEWFIE - spk 1	Units OP NEWFIE - spk 1	OP NEWFIE - spk 2	Vol OP NEWFIE - spk 2	Units OP NEWFIE - spk 2
0512110-01	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-02	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-03	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-04	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-05	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-06	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-07	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-08	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-09	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-10	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-11	D	WHAC11	200	µl	WHAC04	200	µl			
0512110-11	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-12	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-13	SAM	WHAC11	200	µl	WHAC04	200	µl			
0512110-14	SAM	WHAC11	200	µl	WHAC04	200	µl			
SS122105B16	B	WHAB63	100	µl	WHAB15	200	µl			
SS122105LCS13	LCS	WHAB63	100	µl	WHAB15	200	µl	WHAB85	100	µl
SS122105LCSD13	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 High
Standard Type: Surrogate / LCS / MS-MSD
LFB / Other High
ID# WHAC11
Conc. 100/5000 ug/ml

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

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

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

Gravimetric Determination for Column

Analyst: DMP
Date: 12/27/05

BATCH: 0512110

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%
0512110	01		10000	50	N/A	0.912	N/A	182.40	500	9.12	20.00	
0512110	02		10000	50	N/A	0.509	N/A	101.80	800	8.14	12.50	
0512110	03		10000	50	N/A	1.350	N/A	270.00	300	8.10	33.33	
0512110	04		10000	50	N/A	1.820	N/A	364.00	200	7.28	50.00	
0512110	05		10000	50	N/A	2.497	N/A	499.40	150	7.49	66.67	
0512110	06		10000	50	N/A	0.415	N/A	83.00	1000	8.30	10.00	
0512110	07		10000	50	N/A	0.630	N/A	126.00	700	8.82	14.29	
0512110	08		10000	50	N/A	0.760	N/A	152.00	550	8.36	18.18	
0512110	09		10000	50	N/A	0.232	N/A	46.40	1800	8.35	5.56	
0512110	10		10000	50	N/A	1.773	N/A	354.60	250	8.87	40.00	
0512110	11	D	10000	50	N/A	0.655	N/A	131.00	650	8.52	15.38	11%
0512110	11		10000	50	N/A	0.585	N/A	117.00	700	8.19	14.29	
0512110	12		10000	50	N/A	0.451	N/A	90.20	1000	9.02	10.00	
0512110	13		10000	50	N/A	0.494	N/A	98.80	900	8.89	11.11	
0512110	14		10000	50	N/A	0.330	N/A	66.00	1250	8.25	8.00	

Total Extract Oil Weight (mg) = (Final Volume of Extract / Aliquot Removed) * Aliquot Weight ✓ 2nd 1/24/06

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) ✓ 2nd 1/24/06

TEMPLATE: GravimetricT.XLT

Duplicates should agree within +/- 10%.

Gravimetric Determination for Column

Analyst: DMP
Date: 12-27-05

BATCH: 0512110

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%
0512110	01		10000	50	N/A	0.912	N/A					
0512110	02		10000	50	N/A	0.509	N/A					
0512110	03		10000	50	N/A	1.350	N/A					
0512110	04		10000	50	N/A	1.820	N/A					
0512110	05		10000	50	N/A	2.497	N/A					
0512110	06		10000	50	N/A	0.415	N/A					
0512110	07		10000	50	N/A	0.630	N/A					
0512110	08		10000	50	N/A	0.760	N/A					
0512110	09		10000	50	N/A	0.232	N/A					
0512110	10		10000	50	N/A	1.773	N/A					
0512110	11	D	10000	50	N/A	0.655	N/A					#VALUE!
0512110	11		10000	50	N/A	0.585	N/A					
0512110	12		10000	50	N/A	0.451	N/A					
0512110	13		10000	50	N/A	0.494	N/A					
0512110	14		10000	50	N/A	0.330	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 0512110STBIO - 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
0512110-01	SAM	3660B	DMP	12/29/05										0.15
0512110-02	SAM	3660B	DMP	12/29/05										0.15
0512110-03	SAM	3660B	DMP	12/29/05										0.15
0512110-04	SAM	3660B	DMP	12/29/05										0.15
0512110-05	SAM	3660B	DMP	12/29/05										0.15
0512110-06	SAM	3660B	DMP	12/29/05										0.15
0512110-07	SAM	3660B	DMP	12/29/05										0.15
0512110-08	SAM	3660B	DMP	12/29/05										0.15
0512110-09	SAM	3660B	DMP	12/29/05										0.15
0512110-10	SAM	3660B	DMP	12/29/05										0.15
0512110-11	D	3660B	DMP	12/29/05										0.15
0512110-11	SAM	3660B	DMP	12/29/05										0.15
0512110-12	SAM	3660B	DMP	12/29/05										0.15
0512110-13	SAM	3660B	DMP	12/29/05										0.15
0512110-14	SAM	3660B	DMP	12/29/05										0.15
SS122105B16	B	3660B	DMP	12/29/05										0.15
SS122105LCS13	LCS	3660B	DMP	12/29/05										0.15
SS122105LCSD13	LCSD	3660B	DMP	12/29/05										0.15

Alpha Woods Hole Lab
Batch Clean Up Report
12/21/2005 0512110STBIO - OP NEWFIE

Lab ID	Notes
0512110-01	
0512110-02	
0512110-03	
0512110-04	
0512110-05	
0512110-06	
0512110-07	
0512110-08	
0512110-09	
0512110-10	
0512110-11	
0512110-11	
0512110-12	
0512110-13	
0512110-14	
SS122105B16	
SS122105LCS13	
SS122105LCSD13	

Alpha Woods Hole Lab
Batch Clean Up Report
12/21/2005 0512110STBIO - OP NEWFIE

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume	Fractionation Amount	Fractionation Factor	Transfer Volume
0512110-01	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.5	0	0.15
0512110-02	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.8	0	0.15
0512110-03	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.3	0	0.15
0512110-04	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.2	0	0.15
0512110-05	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.15	0	0.15
0512110-06	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	1	0	0.15
0512110-07	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.7	0	0.15
0512110-08	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.55	0	0.15
0512110-09	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	1.8	0	0.15
0512110-10	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.25	0	0.15
0512110-11	D	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.65	0	0.15
0512110-11	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.7	0	0.15
0512110-12	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	1	0	0.15
0512110-13	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	0.9	0	0.15
0512110-14	SAM	3610	DMP	12/29/05				DMP	12/29/05	False	10	1.25	0	0.15
SS122105B16	B	3610	DMP	12/29/05				DMP	12/29/05	False	10	1	0	0.15
SS122105LCS13	LCS	3610	DMP	12/29/05				DMP	12/29/05	False	10	1	0	0.15
SS122105LCSD13	LCSD	3610	DMP	12/29/05				DMP	12/29/05	False	10	1	0	0.15

✓ 2nd ✓ 1/24/06

Alpha Woods Hole Lab
Batch Clean Up Report
12/21/2005 0512110STBIO - OP NEWFIE

Lab ID	Notes
0512110-01	
0512110-02	
0512110-03	
0512110-04	
0512110-05	
0512110-06	
0512110-07	
0512110-08	
0512110-09	
0512110-10	
0512110-11	
0512110-11	
0512110-12	
0512110-13	
0512110-14	
SS122105B16	
SS122105LCS13	
SS122105LCSD13	

Gravimetric Determination for Column

Analyst: DMP
Date: 12/30/05

BATCH: 0512110

Entered by: DMP
Verified by: DMP

Post - Column Alumina 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%
0512110	01		1000	50	N/A	0.320	N/A	6.40	750	4.80	1.33	
0512110	02		1000	50	N/A	0.270	N/A	5.40	900	4.86	1.11	
0512110	03		1000	50	N/A	0.270	N/A	5.40	900	4.86	1.11	
0512110	04		1000	50	N/A	0.297	N/A	5.94	850	5.05	1.18	
0512110	05		1000	50	N/A	0.313	N/A	6.26	800	5.01	1.25	
0512110	06		1000	50	N/A	0.260	N/A	5.20	900	4.68	1.11	
0512110	07		1000	50	N/A	0.303	N/A	6.06	800	4.85	1.25	
0512110	08		1000	50	N/A	0.306	N/A	6.12	800	4.90	1.25	
0512110	09		1000	50	N/A	0.301	N/A	6.02	800	4.82	1.25	
0512110	10		1000	50	N/A	0.340	N/A	6.80	700	4.76	1.43	
0512110	11	D	1000	50	N/A	0.260	N/A	5.20	900	4.68	1.11	6%
0512110	11		1000	50	N/A	0.244	N/A	4.88	900	4.39	1.11	
0512110	12		1000	50	N/A	0.266	N/A	5.32	900	4.79	1.11	
0512110	13		1000	50	N/A	0.392	N/A	7.84	600	4.70	1.67	
0512110	14		1000	50	N/A	0.318	N/A	6.36	800	5.09	1.25	

✓ 2nd 1/24/06

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

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

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

Gravimetric Determination for Column

Analyst: DMP
Date: 12/30/05

BATCH: 0512110

Entered by: DMP
Verified by:

Post- Column Alumina w/12/4/06

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%
0512110	01		1000	50	N/A	0.320	N/A					
0512110	02		1000	50	N/A	0.270	N/A					
0512110	03		1000	50	N/A	0.270	N/A					
0512110	04		1000	50	N/A	0.297	N/A					
0512110	05		1000	50	N/A	0.313	N/A					
0512110	06		1000	50	N/A	0.260	N/A					
0512110	07		1000	50	N/A	0.303	N/A					
0512110	08		1000	50	N/A	0.306	N/A					
0512110	09		1000	50	N/A	0.301	N/A					
0512110	10		1000	50	N/A	0.340	N/A					
0512110	11	D	1000	50	N/A	0.260	N/A					#VALUE!
0512110	11		1000	50	N/A	0.244	N/A					
0512110	12		1000	50	N/A	0.266	N/A					
0512110	13		1000	50	N/A	0.392	N/A					
0512110	14		1000	50	N/A	0.318	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: 0512110

Lab ID	Extract Vol (uL)	Standard ID and Vial #	Vol IS Added (uL)	Pre-Injection Vol (uL)[1]	Final Volume Equivalent	Spiked By	Aliquot 1 Removed (uL)	Aliquot 2 Removed (uL)	Date
0512110-01	900	WHAB38#5	100	1000	26.6	DMP	150	150	12/29/05
0512110-02	900	WHAB38#5	100	1000	13.875	DMP	150	150	12/29/05
0512110-03	900	WHAB38#5	100	1000	36.9963	DMP	150	150	12/29/05
0512110-04	900	WHAB38#5	100	1000	59	DMP	150	150	12/29/05
0512110-05	900	WHAB38#5	100	1000	83.3375	DMP	150	150	12/29/05
0512110-06	900	WHAB38#5	100	1000	11.1	DMP	150	150	12/29/05
0512110-07	900	WHAB38#5	100	1000	17.8625	DMP	150	150	12/29/05
0512110-08	900	WHAB38#5	100	1000	22.725	DMP	150	150	12/29/05
0512110-09	900	WHAB38#5	100	1000	6.95	DMP	150	150	12/29/05
0512110-10	900	WHAB38#5	100	1000	57.2	DMP	150	150	12/29/05
0512110-11D	900	WHAB38#5	100	1000	17.0718	DMP	150	150	12/29/05
0512110-11	900	WHAB38#5	100	1000	15.8619	DMP	150	150	12/29/05
0512110-12	900	WHAB38#5	100	1000	11.1	DMP	150	150	12/29/05
0512110-13	900	WHAB38#5	100	1000	18.5537	DMP	150	150	12/29/05
0512110-14	900	WHAB38#5	100	1000	10	DMP	150	150	12/29/05
SS122105B16	900	WHAB38#5	100	1000	2	DMP	150	150	12/29/05
SS122105LCS13	900	WHAB38#5	100	1000	2	DMP	150	150	12/29/05
SS122105LCSD13	900	WHAB38#5	100	1000	2	DMP	150	150	12/29/05

[1] Includes Internal Std

2nd cv 1/24/06

Forensic Dilution Sheet

Client Name:	NewFields					PAH3			
Project						PREP			
ETR # :	0512110								
Matrix :									
Analysis Type :	GC/MS								
Relinquished By:	MS			**Received By:**	RPM				
Date:	1/3/06 9:43 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
0512110-03	660	700	200	1000	0512110-03-RE	WHAB38 80UL	1/3/06 RPM	5	5
0512110-04	640		50	1000	0512110-04-RE	WHAB38 95UL		20	20
0512110-05	680		50	1000	0512110-05-RE	WHAB38 95UL		20	20
0512110-07 ①	370	400	~~500~~	1000	0512110-07-RE	WHAB38 50UL		2	2
0512110-08	670		100	1000	0512110-08-RE	WHAB38 90UL		10	10
0512110-09	680		100	1000	0512110-09-RE	WHAB38 90UL		10	10
0512110-10	670		200	1000	0512110-10-RE	WHAB38 80UL		5	5
0512110-11	650		500	1000	0512110-11-RE	WHAB38 50UL		2	2
0512110-11D	640		500	1000	0512110-11D-RE	WHAB38 50UL		2	2
0512110-12	640		200	1000	0512110-12-RE	WHAB38 80UL		5	5
0512110-13	680		100	1000	0512110-13-RE	WHAB38 90UL		10	10
0512110-14	680		200	1000	0512110-14-RE	WHAB38 80UL		5	5
0512110-10-RE	1000	1000	100	1000	0512110-10-RE2	WHAB38 90UL	1/3/06 RPM	10	50
0512110-13-RE			100	1000	0512110-13-RE2	WHAB38 90UL		10	100
0512110-14-RE			100	1000	0512110-14-RE2	WHAB38 90UL		10	50

ALSO realiquots needed of whole ETR 0512110-01-14,B,LCS,LCSD except the three samples with two dilutions above(-10,-13,-14)

Dilution Calculations Validated by: MS 1/5/06
Date:

① 250ul brought to 500ul PIU w/ 25ul RIS added. 1/3/06 RPM

Gravimetric Determination for Silica Column

Analyst: DMP
Date: 12/27/05

BATCH: 0512110

Entered by: DMP
Verified by: DMP

ETS #	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%
0512110	01		10000	50	N/A	0.912	N/A	182.40	2500	45.60	4.00	
0512110	02		10000	50	N/A	0.509	N/A	101.80	5000	50.90	2.00	
0512110	03		10000	50	N/A	1.350	N/A	270.00	1750	47.25	5.71	
0512110	04		10000	50	N/A	1.820	N/A	364.00	1250	45.50	8.00	
0512110	05		10000	50	N/A	2.497	N/A	499.40	1000	49.94	10.00	
0512110	06		10000	50	N/A	0.415	N/A	83.00	6000	49.80	1.67	
0512110	07		10000	50	N/A	0.630	N/A	126.00	4000	50.40	2.50	
0512110	08		10000	50	N/A	0.760	N/A	152.00	3000	45.60	3.33	
0512110	09		10000	50	N/A	0.232	N/A	46.40	7000	32.48	1.43	
0512110	10		10000	50	N/A	1.773	N/A	354.60	1250	44.33	8.00	
0512110	11	D	10000	50	N/A	0.655	N/A	131.00	3500	45.85	2.86	11%
0512110	11		10000	50	N/A	0.585	N/A	117.00	4000	46.80	2.50	
0512110	12		10000	50	N/A	0.451	N/A	90.20	5000	45.10	2.00	
0512110	13		10000	50	N/A	0.494	N/A	98.80	5000	49.40	2.00	
0512110	14		10000	50	N/A	0.330	N/A	66.00	7000	46.20	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%.

Alpha Woods Hole Lab
Batch Clean Up Report

12/21/2005 0512110STBIO - OP Steranes/Triterpanes

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction Volume	Fractionation Amount	Fractionation Factor	Transfer Volume	
0512110-01	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	2.5	0	0.15	
0512110-02	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	5	0	0.15	
0512110-03	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	1.75	0	0.15	
0512110-04	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	1.25	0	0.15	
0512110-05	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	1	0	0.15	
0512110-06	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	6	0	0.15	
0512110-07	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	4	0	0.15	
0512110-08	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	3	0	0.15	
0512110-09	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	7	0	0.15	
0512110-10	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	1.25	0	0.15	
0512110-11	D	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	3.5	0	0.15	
0512110-11	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	4	0	0.15	
0512110-12	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	5	0	0.15	
0512110-13	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	5	0	0.15	
0512110-14	SAM	3630	RPR	1/6/2006				DMP	1/6/2006	True	10	7	0	0.15	
SS010606AWS02	AWS	3630													
SS122105B16	B	3630	RPR	1/6/2006				DMP	1/6/2006	True	2	1	0	0.15	
~~SS122105LCS13~~	~~LCS~~	~~3630~~	~~RPR~~	~~1/6/2006~~				~~DMP~~	~~1/6/2006~~	~~True~~	~~2~~	~~1~~	~~0~~	~~0.15~~	①
~~SS122105LCSD13~~	~~LCSD~~	~~3630~~	~~RPR~~	~~1/6/2006~~				~~DMP~~	~~1/6/2006~~	~~True~~	~~2~~	~~1~~	~~0~~	~~0.15~~	①
TS010506AWS03	AWS	3630													

① Not prep'd for biomarkers 1/6/06 RPR

✓ 2nd CK 1/24/06

Alpha Woods Hole Lab
Batch Clean Up Report

12/21/2005 0512110STBIO - OP Steranes/Triterpanes

Lab ID	Notes
0512110-01	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-02	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-03	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-04	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-05	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-06	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-07	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-08	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-09	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-10	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-11	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-11	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-12	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-13	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
0512110-14	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
SS010606AWS02	
SS122105B16	Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR
~~SS122105LCS13~~	~~Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR~~ ①
~~SS122105LCSD13~~	~~Sample was solvent exchanged to hexane, run through a 5g silica gel column, with a 20ml pentane elution. Sample was also copper cleaned. 1/6/06 RPR~~ ①
TS010506AWS03	

① Not prep'd for biomarkers 1/6/06 RPR

Gravimetric Determination Post-Silica Gel Column

Analyst: DMP
Date: 1/5/2006

BATCH: 0512110

Entered by: DMP
Verified by: DMP

GMP #	Sample #	Comments	Final Volume of Extract (ul)	Aliquot Removed #1 (ul)	Aliquot Removed #2 (ul)	Aliquot Weight #1 (mg)	Aliquot Weight #2 (mg)	Total Extract Oil Weight (mg)	Volume Removed For Column (ul)	Oil to Column (mg)	Dilution Factor	% Recovery
		LCS	10000	50	N/A	0.249	N/A	49.80	N/A	N/A	N/A	100%
0512110	01		1000	50	N/A	0.776	N/A	15.52	300	4.66	3.33	
0512110	02		1000	50	N/A	0.813	N/A	16.26	300	4.88	3.33	
0512110	03		1000	50	N/A	0.629	N/A	12.58	400	5.03	2.50	
0512110	04		1000	50	N/A	0.144	N/A	2.88	900	2.59	1.11	
0512110	05		1000	50	N/A	0.229	N/A	4.58	900	4.12	1.11	
0512110	06		1000	50	N/A	0.760	N/A	15.20	300	4.56	3.33	
0512110	07		1000	50	N/A	0.655	N/A	13.10	350	4.59	2.86	
0512110	08		1000	50	N/A	0.367	N/A	7.34	650	4.77	1.54	
0512110	09		1000	50	N/A	0.293	N/A	5.86	850	4.98	1.18	
0512110	10		1000	50	N/A	0.181	N/A	3.62	900	3.26	1.11	
0512110	11	D	1000	50	N/A	0.545	N/A	10.90	450	4.91	2.22	8%
0512110	11		1000	50	N/A	0.588	N/A	11.76	400	4.70	2.50	
0512110	12		1000	50	N/A	0.545	N/A	10.90	450	4.91	2.22	
0512110	13		1000	50	N/A	0.170	N/A	3.40	900	3.06	1.11	
0512110	14		1000	50	N/A	0.187	N/A	3.74	900	3.37	1.11	

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

✓ 2nd w 1/24/06

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

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

Gravimetric Determination for Column

POST-SILICA COLUMN

Analyst: DMP
Date: 1/5/06

BATCH: 0512110

Entered by: DMP
Verified by: ——

STR #	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	0.249	N/A					0%
0512110	01		1000	50	N/A	0.776	N/A					
0512110	02		1000	50	N/A	0.813	N/A					
0512110	03		1000	50	N/A	0.629	N/A					
0512110	04		1000	50	N/A	0.144	N/A					
0512110	05		1000	50	N/A	0.229	N/A					
0512110	06		1000	50	N/A	0.760	N/A					
0512110	07		1000	50	N/A	0.655	N/A					
0512110	08		1000	50	N/A	0.367	N/A					
0512110	09		1000	50	N/A	0.293	N/A					
0512110	10		1000	50	N/A	0.181	N/A					
0512110	11	D	1000	50	N/A	0.545	N/A					#VALUE!
0512110	11		1000	50	N/A	0.588	N/A					
0512110	12		1000	50	N/A	0.545	N/A					
0512110	13		1000	50	N/A	0.170	N/A					
0512110	14		1000	50	N/A	0.187	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

0512110SILICA

Alpha Woods Hole Labs Internal Std Tracking Form

Project Name: GOWANUS CANAL
ETR: 0512110STBIO

-F1 BIOMARKERS

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0512110-01	900	WHAB12 1of5	100	1000	13.32	DMP	150	NA	1/6/2006
0512110-02	900	WHAB12 1of5	100	1000	6.66	DMP	150	NA	1/6/2006
0512110-03	900	WHAB12 1of5	100	1000	14.28	DMP	150	NA	1/6/2006
0512110-04	900	WHAB12 1of5	100	1000	8.88	DMP	150	NA	1/6/2006
0512110-05	900	WHAB12 1of5	100	1000	11.1	DMP	150	NA	1/6/2006
0512110-06	900	WHAB12 1of5	100	1000	5.56	DMP	150	NA	1/6/2006
0512110-07	900	WHAB12 1of5	100	1000	7.15	DMP	150	NA	1/6/2006
0512110-08	900	WHAB12 1of5	100	1000	5.13	DMP	150	NA	1/6/2006
0512110-09	900	WHAB12 1of5	100	1000	1.69	DMP	150	NA	1/6/2006
0512110-10	900	WHAB12 1of5	100	1000	8.88	DMP	150	NA	1/6/2006
0512110-11D	900	WHAB12 1of5	100	1000	6.35	DMP	150	NA	1/6/2006
0512110-11	900	WHAB12 1of5	100	1000	6.25	DMP	150	NA	1/6/2006
0512110-12	900	WHAB12 1of5	100	1000	4.44	DMP	150	NA	1/6/2006
0512110-13	900	WHAB12 1of5	100	1000	2.22	DMP	150	NA	1/6/2006
0512110-14	900	WHAB12 1of5	100	1000	1.59	DMP	150	NA	1/6/2006
SS122105B16	900	WHAB12 1of5	100	1000	2	DMP	150	NA	1/6/2006

[1] Includes Internal Std

✓ 2nd
W 1/24/06

Forensic Preparation Checklist

ETR: 05/2110 **Client:** Newfie **Project:** Gowanus Canal

Workplan Present	

Workplan Reviewed With Project Manager	

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

Required Cleanups	
No Cleanup Required	
Copper	✓
Conc. Sulfuric Acid	
GPC	
Silica Gel 923 Grade Glass Column Biomarker	✓
Alumina (Super I) Glass Column	✓
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:
-1 sheen, pudding-like texture to sample
-2 sheen, pudding-like texture to sample
-3 strong odor
-4 strong odor, sheen
-5 sheen, strong odor
-6 sheen, strong odor
-7
-8
-9
-10 odor
-11 sheen, rocks
-12 rocks, sheen, sulfur odor
-13 odor
74 odor

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	12/22/05	DMP
3rd Extraction	12/22/05	KLA

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

Other:

Batch Completed
Analyst: DMP
Date: 12/29/05

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

Lab ID	QC Type	PS122105C - Pan Weight	PS122105C - Wet Weight	PS122105C - Dry Weight	PS122105C - Dry Weight #2	PS122105C - Dry Weight #3	Percent Solid	RPD
0512103-01	SAM	1.02	5.54	3.53	3.53		55.53	
0512110-01	D	1.01	7.22	2.69	2.69		27.05	1.26%
0512110-01	SAM	1.01	7.15	2.65	2.65		26.71	
0512110-02	SAM	1.01	6.87	2.5	2.5		25.43	
0512110-03	SAM	1.01	7.06	4.12	4.11		51.24	
0512110-04	SAM	1	7.98	7.08	7.08		87.11	
0512110-05	SAM	1.01	7.86	6.14	6.14		74.89	
0512110-06	SAM	1.02	7.03	3.35	3.36		38.94	
0512110-07	SAM	1.04	7.74	3.98	3.98		43.88	
0512110-08	SAM	1.01	7.97	5.49	5.49		64.37	
0512110-09	SAM	1.02	8	6.69	6.69		81.23	
0512110-10	SAM	1.02	6.16	4.44	4.44		66.54	
0512110-11	SAM	1.02	8.48	6.25	6.25		70.11	
0512110-12	SAM	1.01	6.95	4.68	4.68		61.78	
0512110-13	SAM	1.02	8.49	7.37	7.37		85.01	
0512110-14	SAM	1.01	6.81	5.77	5.77		82.07	
PSS122105B20	B						100	
PSS122105B20	B	1.01	1.01	1.01	1.01		100	

Initial: 12/21/2005 5:32:13 PM KJB
Weight #1: 12/22/2005 10:01:21 AM KJB
Weight #2: 12/22/2005 1:27:16 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-93 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-01**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/06/06	26.7	5.16	26.6	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**18000**	Fluoranthene	**83000**
C1-Naphthalenes	**23000**	Pyrene	**130000**
C2-Naphthalenes	**100000**	C1-Fluoranthenes/Pyrenes	**140000**
C3-Naphthalenes	**140000**	C2-Fluoranthenes/Pyrenes	**68000**
C4-Naphthalenes	**98000**	C3-Fluoranthenes/Pyrenes	**35000**
Biphenyl	**2600**	C4-Fluoranthenes/Pyrenes	**14000**
Dibenzofuran	**3900**	Naphthobenzothiophenes	**17000**
Acenaphthylene	**19000**	C1-Naphthobenzothiophenes	**24000**
Acenaphthene	**42000**	C2-Naphthobenzothiophenes	**16000**
Fluorene	**8200**	C3-Naphthobenzothiophenes	**8800**
C1-Fluorenes	**41000**	C4-Naphthobenzothiophenes	**4400**
C2-Fluorenes	**69000**	Benz[a]anthracene	**60000**
C3-Fluorenes	**52000**	Chrysene/Triphenylene	**64000**
Anthracene	**59000**	C1-Chrysenes	**72000**
Phenanthrene	**60000**	C2-Chrysenes	**42000**
C1-Phenanthrenes/Anthracenes	**180000**	C3-Chrysenes	**28000**
C2-Phenanthrenes/Anthracenes	**170000**	C4-Chrysenes	**8700**
C3-Phenanthrenes/Anthracenes	**77000**	Benzo[b]fluoranthene	**22000**
C4-Phenanthrenes/Anthracenes	**28000**	Benzo[k]fluoranthene	**25000**
Retene	**4900**	Benzo[a]fluoranthene	**9300**
Dibenzothiophene	**18000**	Benzo[e]pyrene	**24000**
C1-Dibenzothiophenes	**44000**	Benzo[a]pyrene	**41000**
C2-Dibenzothiophenes	**62000**	Perylene	**6400**
C3-Dibenzothiophenes	**42000**	Indeno[1,2,3-cd]pyrene	**17000**
C4-Dibenzothiophenes	**18000**	Dibenz[a,h]anthracene	**4800**
Benzo(b)fluorene	**20000**	Benzo[g,h,i]perylene	**17000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	81	50-130
Benzo[b]fluoranthene-d12	96	50-130

N/A - Not Applicable

01/18/06 10:30

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-93 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-01**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/06/06	26.7	5.16	26.6	1	AC

Parameter	Result
Carbazole	930

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	81	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\JANUARY\JAN05\
Data File : P43086.D
Acq On : 6 Jan 2006 11:12 pm
Operator : AC
Sample : 0512110-01
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 09:01:36 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

MJ for WW 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	41149m	500.00	ng/mL	-0.03
72) Chrysene-d12	43.18	240	63002m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	61815	791.83	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 79.18%			
58) Pyrene-d10	38.26	212	118682m	611.53	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 61.15%			
81) Benzo[b]fluoranthene-d12	47.09	264	95085m	720.54	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 72.05%			
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	151063	945.21	ng/mL#	100
10) C1-Naphthalenes	22.92	142	191675m	1199.32	ng/mL	
11) C2-Naphthalenes	25.35	156	831593m	5203.33	ng/mL	
12) C3-Naphthalenes	27.68	170	1151154m	7202.84	ng/mL	
13) C4-Naphthalenes	30.46	184	815098m	5100.12	ng/mL	
15) 2-Methylnaphthalene	22.49	142	58681m	576.38	ng/mL	
16) 1-Methylnaphthalene	22.92	142	133919	1305.70	ng/mL#	100
22) Biphenyl	24.39	154	16141m	132.33	ng/mL	
23) 2,6-Dimethylnaphthalene	24.99	156	102806m	1164.56	ng/mL	
24) Dibenzofuran	27.46	168	28886	202.42	ng/mL#	68
25) Acenaphthylene	26.09	152	175401m	980.74	ng/mL	
26) Acenaphthene	26.83	153	236742m	2160.60	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.39	170	93234m	1032.11	ng/mL	
28) Fluorene	28.85	166	50128m	427.05	ng/mL	
29) C1-Fluorenes	31.07	180	247281m	2106.63	ng/mL	
30) C2-Fluorenes	33.26	194	418489m	3565.18	ng/mL	
31) C3-Fluorenes	35.25	208	316296m	2694.58	ng/mL	
32) Dibenzothiophene	32.17	184	164556	945.64	ng/mL#	61
36) OTP	34.37	198	20876	119.97	ng/mL#	100
37) C1-Dibenzothiophenes	33.94	198	420806m	2418.22	ng/mL	
38) C2-Dibenzothiophenes	35.64	212	561339m	3225.81	ng/mL	
39) C3-Dibenzothiophenes	37.44	226	377267m	2168.02	ng/mL	
40) C4-Dibenzothiophenes	39.14	240	160393m	921.72	ng/mL	
41) Phenanthrene	32.67	178	609657	3114.57	ng/mL	99
47) C1-Phenanthrenes/Anthracen	34.63	192	1769842m	9041.63	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.92	206	1685616m	8611.34	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.75	220	780900m	3989.40	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.94	234	280309m	1432.02	ng/mL	
52) Retene	39.68	234	12809m	255.32	ng/mL	
53) Anthracene	32.85	178	546840m	3059.56	ng/mL	
54) Carbazole	33.51	167	6854m	48.39	ng/mL	
55) 1-Methylphenanthrene	35.18	192	335067	2594.03	ng/mL	99
56) Fluoranthene	37.45	202	868888m	4306.31	ng/mL	
57) Benzo(b)fluorene	39.97	216	120030	1015.63	ng/mL	96
59) Pyrene	38.34	202	1375369m	6570.54	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.73	216	1503180m	7181.13	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.19	230	742206m	3545.74	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.67	244	382650m	1828.03	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.93	258	155371m	742.25	ng/mL	
64) Naphthobenzothiophene	42.19	234	104507m	549.13	ng/ml	

REPRINT 2nd w 1-24-06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43086.D
Acq On : 6 Jan 2006 11:12 pm
Operator : AC
Sample : 0512110-01
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 09:01:36 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

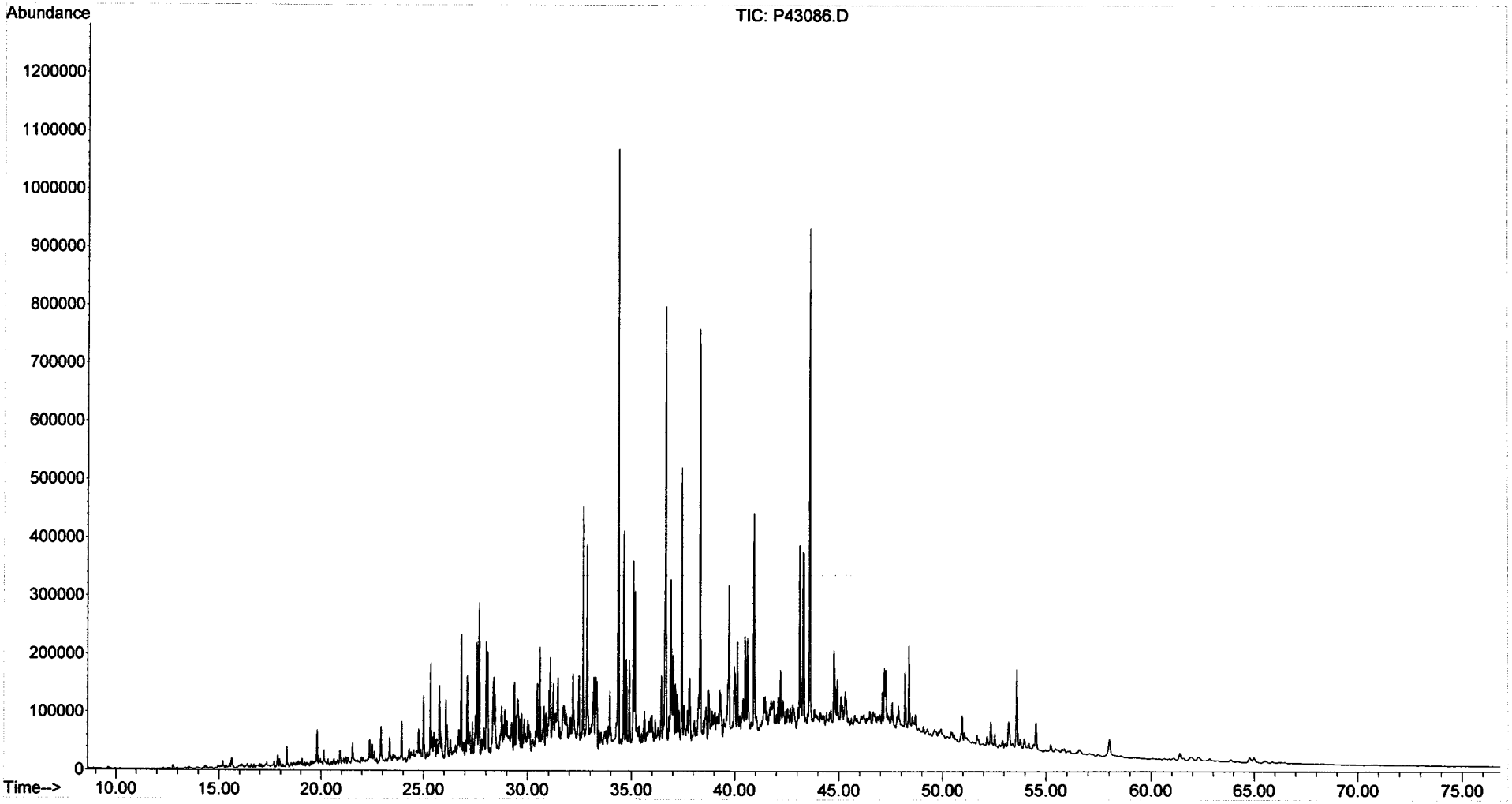
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.19	234	103893m	545.91	ng/mL	
66) Naphthobenzothiophene-1,2-	42.53	234	29749m	156.32	ng/mL	
67) Naphthobenzothiophene-2,3-	42.83	234	32297m	169.71	ng/mL	
68) C1-Naphthobenzothiophenes	43.59	248	232919m	1223.88	ng/ml	
69) C2-Naphthobenzothiophenes	45.10	262	156158m	820.54	ng/ml	
70) C3-Naphthobenzothiophenes	47.22	276	87247m	458.44	ng/ml	
71) C4-Naphthobenzothiophenes	48.29	290	43572m	228.95	ng/mL	
73) Benz[a]anthracene	43.12	228	469190m	3131.09	ng/mL	
74) Chrysene	43.28	228	504592m	3317.97	ng/mL	
75) Chrysene/Triphenylene	43.28	228	504506m	3317.40	ng/mL	
76) C1-Chrysenes	44.76	242	568328m	3737.07	ng/mL	
77) C2-Chrysenes	46.47	256	339244m	2230.72	ng/mL	
78) BBF-d12 Surr BKGD	47.09	256	7609	50.03	ng/mL	100
79) C3-Chrysenes	48.07	270	219891m	1445.90	ng/mL	
80) C4-Chrysenes	49.66	284	68687m	451.65	ng/mL	
82) Benzo[b]fluoranthene	47.18	252	178273	1144.75	ng/mL	99
83) Benzo[k]fluoranthene	47.25	252	227757	1296.49	ng/mL	99
84) Benzo[a]fluoranthene	47.56	252	84857m	483.04	ng/mL	
85) Benzo[e]pyrene	48.19	252	191242	1218.51	ng/mL	96
86) Benzo[a]pyrene	48.38	252	318556	2105.72	ng/mL	97
87) Perylene	48.68	252	49867m	332.87	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.22	276	122427m	871.32	ng/mL	
89) Dibenz[a,h]anthracene	53.26	278	36490m	251.37	ng/mL	
90) Benzo[g,h,i]perylene	54.53	276	144231	900.80	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43086.D
Acq On : 6 Jan 2006 11:12 pm
Operator : AC
Sample : 0512110-01
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 09:01:36 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-93 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-01**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/06/06	26.7	5.16	13.32	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**5500**	30,31-Bishomohopane-22S	**9400**
C24 Tricyclic Terpane	**3400**	30,31-Bishomohopane-22R	**6900**
C25 Tricyclic Terpane	**3400**	30,31-Trishomohopane-22S	**6100**
C24 Tetracyclic Terpane	**3300**	30,31-Trishomohopane-22R	**4300**
C26 Tricyclic Terpane-22S	**1600**	Tetrakishomohopane-22S	**3800**
C26 Tricyclic Terpane-22R	**1700**	Tetrakishomohopane-22R	**2600**
C28 Tricyclic Terpane-22S	**1800**	Pentakishomohopane-22S	**3400**
C28 Tricyclic Terpane-22R	**1900**	Pentakishomohopane-22R	**3100**
C29 Tricyclic Terpane-22S	**2300**	13b(H),17a(H)-20S-Diacholestane	**7100**
C29 Tricyclic Terpane-22R	**2100**	13b(H),17a(H)-20R-Diacholestane	**4100**
18a-22,29,30-Trisnorneohopane-TS	**8900**	13b,17a-20S-Methyldiacholestane	**3200**
C30 Tricyclic Terpane-22S	**1900**	14a(H),17a(H)-20S-Cholestane	**3200**
C30 Tricyclic Terpane-22R	**2400**	14a(H),17a(H)-20R-Cholestane	**14000**
17a(H)-22,29,30-Trisnorhopane-TM	**9800**	13b,17a-20R-Ethyldiacholestane	**2200**
17a/b,21b/a 28,30-Bisnorhopane	**2300**	13a,17b-20S-Ethyldiacholestane	**730**
17a(H),21b(H)-25-Norhopane	**1600**	14a,17a-20S-Methylcholestane	**1900**
30-Norhopane	**30000**	14a,17a-20R-Methylcholestane	**5600**
18a(H)-30-Norneohopane-C29Ts	**8600**	14a(H),17a(H)-20S-Ethylcholestane	**5100**
17a(H)-Diahopane	**1600**	14a(H),17a(H)-20R-Ethylcholestane	**6800**
30-Normoretane	**5100**	14b(H),17b(H)-20R-Cholestane	**6300**
18a(H)&18b(H)-Oleananes	**5600**	14b(H),17b(H)-20S-Cholestane	**6800**
Hopane	**44000**	14b,17b-20R-Methylcholestane	**6500**
Moretane	**6100**	14b,17b-20S-Methylcholestane	**7200**
30-Homohopane-22S	**15000**	14b(H),17b(H)-20R-Ethylcholestane	**11000**
30-Homohopane-22R	**12000**	14b(H),17b(H)-20S-Ethylcholestane	**7800**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	129	50-130

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34706.D
Acq On : 6 Jan 2006 10:01 pm
Operator : AC
Sample : 0512110-01
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 13 00:37:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

ms forwd 1-18-06

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	50.34	240	53279m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	51.01	217	47872	1938.87	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	193.89%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.55	191	248884m	4614.50	ng/mL	
84) Hopane (T19)	60.55	191	247058m	4580.64	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	30756	570.24	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.32	191	18684	346.42	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.12	191	19217m	356.30	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	18601m	344.88	ng/ml	
89) C26 Tricyclic Terpane-22S	51.39	191	9040m	167.61	ng/ml	
90) C26 Tricyclic Terpane-22R	51.50	191	9534	176.77	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.25	191	9958m	184.63	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	10362m	192.12	ng/ml	
93) C29 Tricyclic Terpane-22S	55.07	191	12731m	236.04	ng/ml	
94) C29 Tricyclic Terpane-22R	55.30	191	11715m	217.20	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.48	191	49843	924.13	ng/ml	100
96) C30 Tricyclic Terpane-22S	56.65	191	10426	193.31	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.92	191	13234	245.37	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.07	191	54858	1017.11	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.36	191	12983m	240.71	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.22	191	9198m	170.54	ng/ml	
101) 30-Norhopane (T15)	59.09	191	169449m	3141.71	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.21	191	47947m	888.97	ng/ml	
103) 17a(H)-Diahopane (X)	59.36	191	9139m	169.44	ng/ml	
104) 30-Normoretane (T17)	59.93	191	28531	528.99	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.35	191	31282	579.99	ng/ml	100
106) Moretane (T20)	61.28	191	33961m	629.66	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	83163	1541.90	ng/ml	100
108) 30-Homohopane-22R (T22)	62.70	191	66831	1239.10	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.10	191	52191m	967.66	ng/ml	
110) 30,31-Bishomohopane-22R (T	64.51	191	38498	713.78	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.34	191	34060	631.50	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.00	191	24142	447.61	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.12	191	21251	394.01	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.04	191	14610	270.88	ng/ml	100
115) Pentakishomohopane-22S (T3	72.39	191	19116	354.43	ng/ml	100
116) Pentakishomohopane-22R (T3	73.74	191	17073	316.55	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	18115	733.68	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	10540	426.88	ng/ml	100
120) 13b,17a-20S-Methyldiachole	54.19	217	8234m	333.49	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.22	217	8234m	333.49	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.80	217	34363	1391.74	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.11	217	5676	229.88	ng/ml	100

-RF + Pptenc 2nd cy 1/24/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34706.D
Acq On : 6 Jan 2006 10:01 pm
Operator : AC
Sample : 0512110-01
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 13 00:37:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

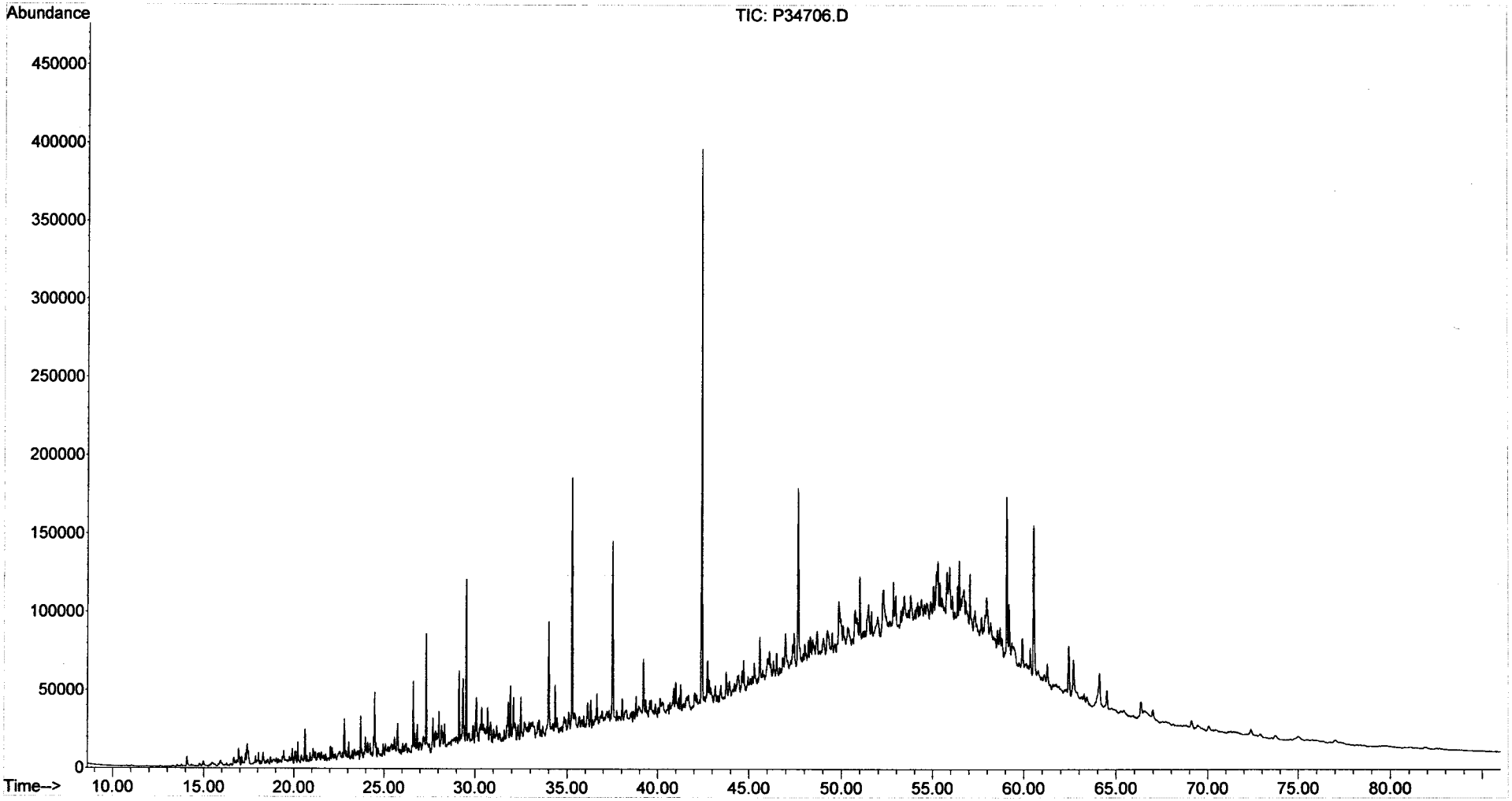
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.39	217	1854m	75.09	ng/ml	
125) 14a,17a-20S-Methylcholesta	56.57	217	4877m	197.52	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.34	217	14282m	578.44	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.73	217	13019m	527.28	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.71	217	17508m	709.09	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	16076	651.10	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	17270m	699.45	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.75	218	16680m	675.56	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.84	218	18416m	745.87	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.99	218	27447	1111.63	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	20022m	810.91	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34706.D
Acq On : 6 Jan 2006 10:01 pm
Operator : AC
Sample : 0512110-01
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 13 00:37:24 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-92 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-02**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/07/06	25.4	5.77	13.875	1	AC

Parameter	Result	Parameter	Result
Naphthalene	**6900**	Fluoranthene	**48000**
C1-Naphthalenes	**5000**	Pyrene	**70000**
C2-Naphthalenes	**20000**	C1-Fluoranthenes/Pyrenes	**76000**
C3-Naphthalenes	**42000**	C2-Fluoranthenes/Pyrenes	**37000**
C4-Naphthalenes	**38000**	C3-Fluoranthenes/Pyrenes	**16000**
Biphenyl	**610**	C4-Fluoranthenes/Pyrenes	**6200**
Dibenzofuran	**580**	Naphthobenzothiophenes	**9300**
Acenaphthylene	**11000**	C1-Naphthobenzothiophenes	**11000**
Acenaphthene	**21000**	C2-Naphthobenzothiophenes	**7800**
Fluorene	**870**	C3-Naphthobenzothiophenes	**4300**
C1-Fluorenes	**15000**	C4-Naphthobenzothiophenes	**2000**
C2-Fluorenes	**28000**	Benz[a]anthracene	**40000**
C3-Fluorenes	**25000**	Chrysene/Triphenylene	**38000**
Anthracene	**20000**	C1-Chrysenes	**44000**
Phenanthrene	**8300**	C2-Chrysenes	**24000**
C1-Phenanthrenes/Anthracenes	**65000**	C3-Chrysenes	**14000**
C2-Phenanthrenes/Anthracenes	**78000**	C4-Chrysenes	**4300**
C3-Phenanthrenes/Anthracenes	**40000**	Benzo[b]fluoranthene	**16000**
C4-Phenanthrenes/Anthracenes	**13000**	Benzo[k]fluoranthene	**17000**
Retene	**1900**	Benzo[a]fluoranthene	**6300**
Dibenzothiophene	**2500**	Benzo[e]pyrene	**16000**
C1-Dibenzothiophenes	**16000**	Benzo[a]pyrene	**27000**
C2-Dibenzothiophenes	**27000**	Perylene	**5000**
C3-Dibenzothiophenes	**19000**	Indeno[1,2,3-cd]pyrene	**12000**
C4-Dibenzothiophenes	**8600**	Dibenz[a,h]anthracene	**3200**
Benzo(b)fluorene	**11000**	Benzo[g,h,i]perylene	**12000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	106	50-130
Pyrene-d10	75	50-130
Benzo[b]fluoranthene-d12	94	50-130

N/A - Not Applicable

01/18/06 10:31

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-92 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-02**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/07/06	25.4	5.77	13.875	1	AC

Parameter	Result
Carbazole	440

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	106	50-130
Pyrene-d10	75	50-130
Benzo[b]fluoranthene-d12	94	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 : P43088.D
Acq On : 7 Jan 2006 12:42 am
Operator : AC
Sample : 0512110-02
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 12 09:02:03 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 for WD 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	59648m	500.00	ng/mL	-0.03
72) Chrysene-d12	43.19	240	82781	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	173449	1532.76	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 153.28%#			
58) Pyrene-d10	38.27	212	304928m	1083.91	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 108.39%			
81) Benzo[b]fluoranthene-d12	47.09	264	235269m	1356.85	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 135.69%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.80	128	169912	733.43	ng/mL#	100
10) C1-Naphthalenes	22.92	142	122299m	527.91	ng/mL	
11) C2-Naphthalenes	25.35	156	501010m	2162.62	ng/mL	
12) C3-Naphthalenes	28.03	170	1018461m	4396.21	ng/mL	
13) C4-Naphthalenes	30.46	184	923121m	3984.67	ng/mL	
15) 2-Methylnaphthalene	22.50	142	53335m	361.40	ng/mL	
16) 1-Methylnaphthalene	22.92	142	66540	447.56	ng/mL#	100
22) Biphenyl	24.38	154	11443m	64.72	ng/mL	
23) 2,6-Dimethylnaphthalene	24.99	156	54259m	424.01	ng/mL	
24) Dibenzofuran	27.46	168	12699m	61.39	ng/mL	
25) Acenaphthylene	26.09	152	309299m	1193.06	ng/mL	
26) Acenaphthene	26.83	153	350179m	2204.72	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.39	170	67884m	518.42	ng/mL	
28) Fluorene	28.85	166	15591m	91.63	ng/mL	
29) C1-Fluorenes	31.08	180	268361m	1577.18	ng/mL	
30) C2-Fluorenes	33.26	194	511984m	3008.97	ng/mL	
31) C3-Fluorenes	35.25	208	452079m	2656.90	ng/mL	
32) Dibenzothiophene	32.17	184	67368	267.07	ng/mL#	1
36) OTP	34.39	198	55036	218.18	ng/mL#	100
37) C1-Dibenzothiophenes	33.95	198	486214m	1927.55	ng/mL	
38) C2-Dibenzothiophenes	35.64	212	728156m	2886.70	ng/mL	
39) C3-Dibenzothiophenes	37.45	226	510606m	2024.25	ng/mL	
40) C4-Dibenzothiophenes	40.95	240	229858m	911.25	ng/mL	
41) Phenanthrene	32.67	178	249131	878.02	ng/mL	98
47) C1-Phenanthrenes/Anthracen	34.64	192	1962739m	6917.32	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.92	206	2332611m	8220.87	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.75	220	1192658m	4203.31	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.95	234	392173m	1382.14	ng/mL	
52) Retene	39.68	234	14361m	197.48	ng/mL	
53) Anthracene	32.85	178	544823m	2102.89	ng/mL	
54) Carbazole	33.51	167	9554m	46.53	ng/mL	
55) 1-Methylphenanthrene	35.19	192	332817m	1777.51	ng/mL	
56) Fluoranthene	37.46	202	1485237m	5078.09	ng/mL	
57) Benzo(b)fluorene	39.98	216	205198	1197.79	ng/mL	96
59) Pyrene	38.34	202	2234277m	7363.47	ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.74	216	2440505m	8043.13	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.20	230	1194218m	3935.76	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.67	244	526405m	1734.86	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.93	258	200274m	660.04	ng/mL	
64) Naphthobenzothiophene	42.19	234	173736	629.78	ng/ml#	88

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43088.D
Acq On : 7 Jan 2006 12:42 am
Operator : AC
Sample : 0512110-02
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 12 09:02:03 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

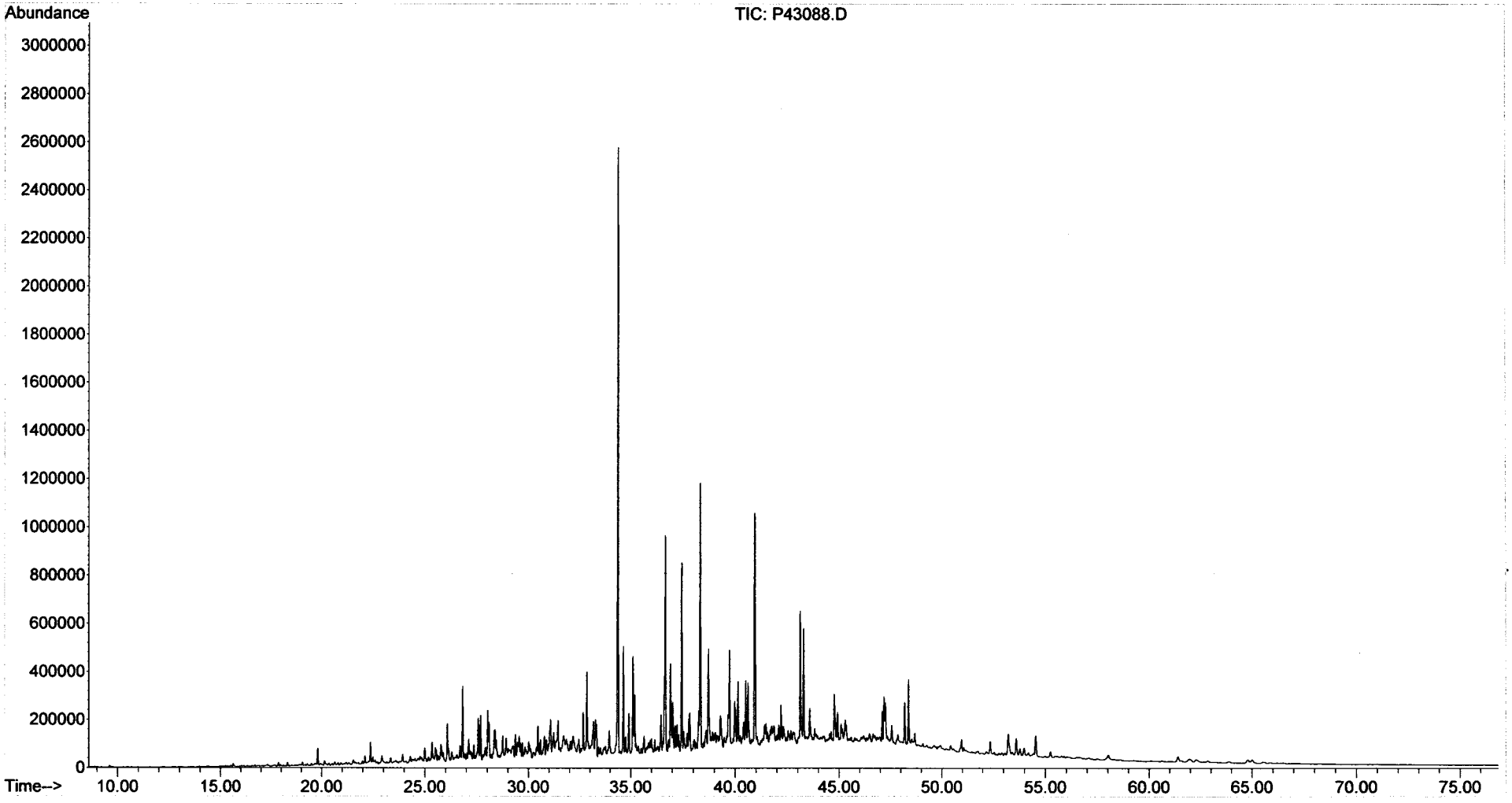
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.19	234	173736	629.78	ng/mL#	89
66) Naphthobenzothiophene-1,2-	42.53	234	48570	176.06	ng/mL#	28
67) Naphthobenzothiophene-2,3-	42.84	234	49306m	178.73	ng/mL	
68) C1-Naphthobenzothiophenes	43.59	248	329189m	1193.28	ng/ml	
69) C2-Naphthobenzothiophenes	45.10	262	226328m	820.42	ng/ml	
70) C3-Naphthobenzothiophenes	47.22	276	126174m	457.37	ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	59349m	215.13	ng/mL	
73) Benz[a]anthracene	43.13	228	822204m	4175.90	ng/mL	
74) Chrysene	43.29	228	803923m	4023.19	ng/mL	
75) Chrysene/Triphenylene	43.29	228	804188m	4024.51	ng/mL	
76) C1-Chrysenes	44.76	242	921430m	4611.24	ng/mL	
77) C2-Chrysenes	46.47	256	514385m	2574.21	ng/mL	
78) BBF-d12 Surr BKGD	47.09	256	14591	73.02	ng/mL	100
79) C3-Chrysenes	48.08	270	292146m	1462.03	ng/mL	
80) C4-Chrysenes	49.66	284	91675m	458.78	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	351358	1717.11	ng/mL	99
83) Benzo[k]fluoranthene	47.25	252	418980	1815.16	ng/mL	99
84) Benzo[a]fluoranthene	47.56	252	153043m	663.03	ng/mL	
85) Benzo[e]pyrene	48.19	252	344668	1671.36	ng/mL	97
86) Benzo[a]pyrene	48.38	252	567085m	2852.91	ng/mL	
87) Perylene	48.69	252	105145	534.16	ng/mL	92
88) Indeno[1,2,3-cd]pyrene	53.22	276	231688m	1254.96	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	65097m	341.29	ng/mL	
90) Benzo[g,h,i]perylene	54.53	276	255625	1215.06	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43088.D
Acq On : 7 Jan 2006 12:42 am
Operator : AC
Sample : 0512110-02
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 12 09:02:03 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-92 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-02**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/06/06	25.4	5.77	6.66	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2400**	30,31-Bishomohopane-22S	**4100**
C24 Tricyclic Terpane	**1400**	30,31-Bishomohopane-22R	**2800**
C25 Tricyclic Terpane	**1600**	30,31-Trishomohopane-22S	**2600**
C24 Tetracyclic Terpane	**1500**	30,31-Trishomohopane-22R	**1800**
C26 Tricyclic Terpane-22S	**640**	Tetrakishomohopane-22S	**1500**
C26 Tricyclic Terpane-22R	**700**	Tetrakishomohopane-22R	**1100**
C28 Tricyclic Terpane-22S	**730**	Pentakishomohopane-22S	**1600**
C28 Tricyclic Terpane-22R	**750**	Pentakishomohopane-22R	**1300**
C29 Tricyclic Terpane-22S	**860**	13b(H),17a(H)-20S-Diacholestane	**3300**
C29 Tricyclic Terpane-22R	**900**	13b(H),17a(H)-20R-Diacholestane	**2000**
18a-22,29,30-Trisnorneohopane-TS	**3700**	13b,17a-20S-Methyldiacholestane	**1400**
C30 Tricyclic Terpane-22S	**770**	14a(H),17a(H)-20S-Cholestane	**1900**
C30 Tricyclic Terpane-22R	**880**	14a(H),17a(H)-20R-Cholestane	**5600**
17a(H)-22,29,30-Trisnorhopane-TM	**3900**	13b,17a-20R-Ethyldiacholestane	**1100**
17a/b,21b/a 28,30-Bisnorhopane	**900**	13a,17b-20S-Ethyldiacholestane	**260**
17a(H),21b(H)-25-Norhopane	**700**	14a,17a-20S-Methylcholestane	**690**
30-Norhopane	**12000**	14a,17a-20R-Methylcholestane	**2100**
18a(H)-30-Norneohopane-C29Ts	**3400**	14a(H),17a(H)-20S-Ethylcholestane	**2200**
17a(H)-Diahopane	**700**	14a(H),17a(H)-20R-Ethylcholestane	**2800**
30-Normoretane	**1900**	14b(H),17b(H)-20R-Cholestane	**2800**
18a(H)&18b(H)-Oleananes	**1500**	14b(H),17b(H)-20S-Cholestane	**3000**
Hopane	**17000**	14b,17b-20R-Methylcholestane	**2600**
Moretane	**2100**	14b,17b-20S-Methylcholestane	**3000**
30-Homohopane-22S	**6200**	14b(H),17b(H)-20R-Ethylcholestane	**5300**
30-Homohopane-22R	**5000**	14b(H),17b(H)-20S-Ethylcholestane	**3000**

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

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34707.D
Acq On : 6 Jan 2006 11:40 pm
Operator : AC
Sample : 0512110-02
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 18:34:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1-18-06

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	50.34	240	61829m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	51.02	217	90521	3159.22	ng/ml	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 315.92%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.56	191	237407m	3793.02	ng/mL	
84) Hopane (T19)	60.56	191	236430m	3777.41	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	32559	520.19	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.32	191	19516m	311.80	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.12	191	21704m	346.76	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	20352	325.16	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.40	191	8893	142.08	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.51	191	9665	154.42	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.26	191	10059m	160.71	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	10385m	165.92	ng/ml	
93) C29 Tricyclic Terpane-22S	55.07	191	11928m	190.57	ng/ml	
94) C29 Tricyclic Terpane-22R	55.30	191	12356	197.41	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.48	191	50837m	812.22	ng/ml	
96) C30 Tricyclic Terpane-22S	56.66	191	10648	170.12	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.92	191	12107m	193.43	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.07	191	53307m	851.68	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.37	191	12455m	198.99	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.22	191	9620	153.70	ng/ml	100
101) 30-Norhopane (T15)	59.10	191	170279m	2720.52	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.21	191	47478m	758.55	ng/ml	
103) 17a(H)-Diahopane (X)	59.36	191	9724m	155.36	ng/ml	
104) 30-Normoretane (T17)	59.94	191	26208	418.72	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.35	191	21299m	340.29	ng/ml	
106) Moretane (T20)	61.29	191	28636m	457.51	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	85079	1359.29	ng/ml	100
108) 30-Homohopane-22R (T22)	62.71	191	68717	1097.88	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.10	191	56846	908.22	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.51	191	39080	624.38	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.36	191	35839	572.59	ng/ml	100
112) 30,31-Trishomohopane-22R (	67.00	191	24496m	391.37	ng/ml	
113) Tetrakishomohopane-22S (T3	69.12	191	21021	335.85	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.06	191	14833	236.98	ng/ml	100
115) Pentakishomohopane-22S (T3	72.40	191	21527	343.93	ng/ml	100
116) Pentakishomohopane-22R (T3	73.75	191	17423	278.36	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.85	217	20744m	723.97	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.36	217	12559m	438.31	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.19	217	8636m	301.40	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.22	217	12034m	419.99	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.81	217	35500	1238.97	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.11	217	7147m	249.43	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34707.D
Acq On : 6 Jan 2006 11:40 pm
Operator : AC
Sample : 0512110-02
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 18:34:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

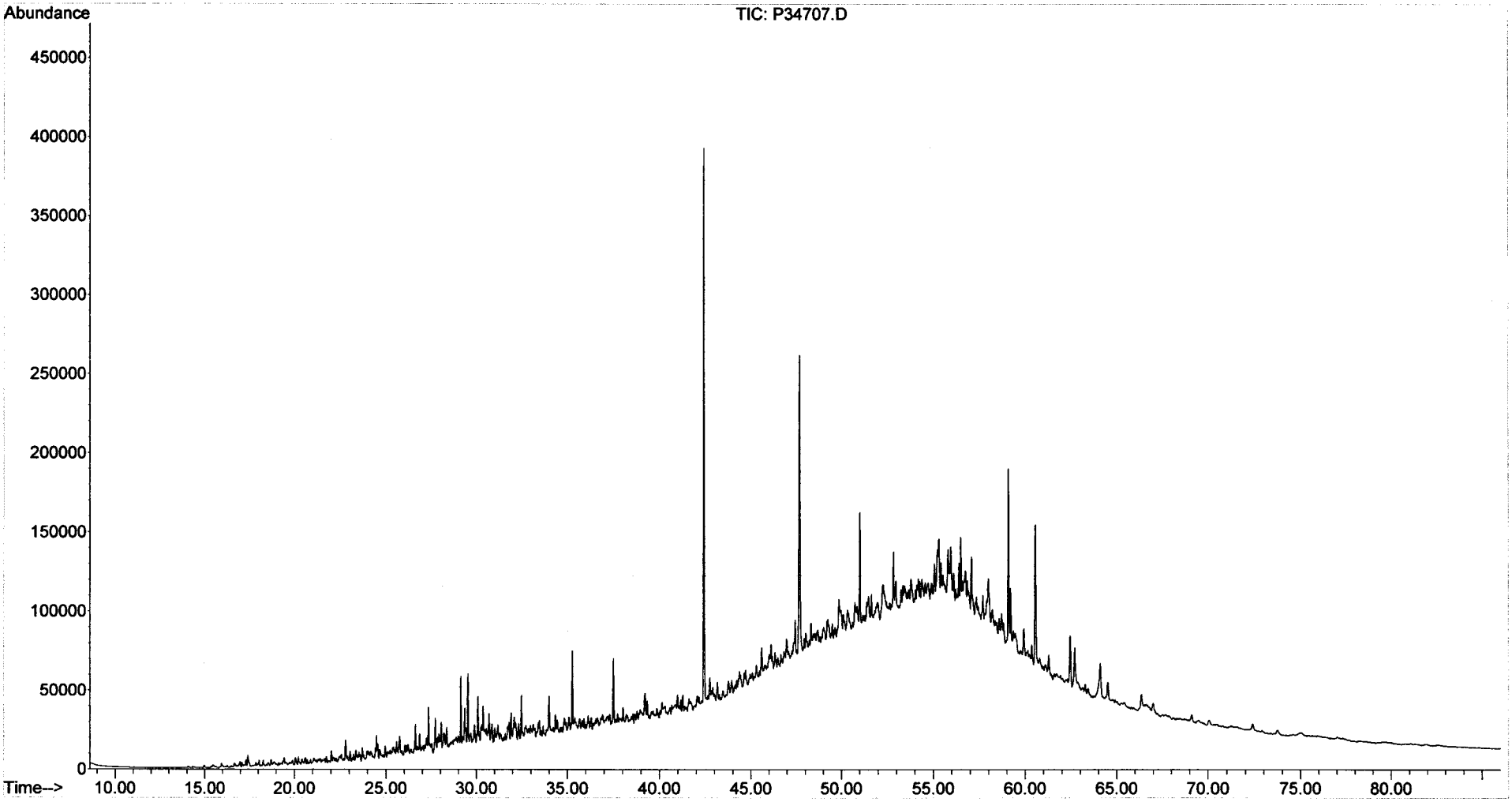
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.40	217	1654	57.73	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.58	217	4331m	151.15	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.34	217	13150m	458.94	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.73	217	13850m	483.37	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.71	217	17715m	618.26	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.32	218	17513	611.21	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	18743m	654.14	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.75	218	16192m	565.11	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.85	218	18625m	650.02	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	58.00	218	33736	1177.40	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.05	218	18659m	651.21	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34707.D
Acq On : 6 Jan 2006 11:40 pm
Operator : AC
Sample : 0512110-02
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 18:34:54 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-85B (8.5-9.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-03**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/07/06	51.2	5.25	36.9963	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	120000		Fluoranthene	170000	E
C1-Naphthalenes	180000	E	Pyrene	240000	E
C2-Naphthalenes	240000		C1-Fluoranthenes/Pyrenes	260000	
C3-Naphthalenes	200000		C2-Fluoranthenes/Pyrenes	120000	
C4-Naphthalenes	110000		C3-Fluoranthenes/Pyrenes	52000	
Biphenyl	21000		C4-Fluoranthenes/Pyrenes	19000	
Dibenzofuran	12000		Naphthobenzothiophenes	31000	
Acenaphthylene	39000		C1-Naphthobenzothiophenes	36000	
Acenaphthene	98000		C2-Naphthobenzothiophenes	26000	
Fluorene	74000		C3-Naphthobenzothiophenes	14000	
C1-Fluorenes	85000		C4-Naphthobenzothiophenes	6000	
C2-Fluorenes	93000		Benz[a]anthracene	140000	E
C3-Fluorenes	61000		Chrysene/Triphenylene	140000	E
Anthracene	120000		C1-Chrysenes	140000	
Phenanthrene	330000	E	C2-Chrysenes	81000	
C1-Phenanthrenes/Anthracenes	340000		C3-Chrysenes	47000	
C2-Phenanthrenes/Anthracenes	220000		C4-Chrysenes	14000	
C3-Phenanthrenes/Anthracenes	96000		Benzo[b]fluoranthene	57000	
C4-Phenanthrenes/Anthracenes	29000		Benzo[k]fluoranthene	59000	
Retene	6500		Benzo[a]fluoranthene	24000	
Dibenzothiophene	38000		Benzo[e]pyrene	53000	
C1-Dibenzothiophenes	73000		Benzo[a]pyrene	99000	
C2-Dibenzothiophenes	81000		Perylene	17000	
C3-Dibenzothiophenes	50000		Indeno[1,2,3-cd]pyrene	45000	
C4-Dibenzothiophenes	19000		Dibenz[a,h]anthracene	13000	
Benzo(b)fluorene	39000		Benzo[g,h,i]perylene	41000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	113	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	92	50-130

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

01/18/06 10:54

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-85B (8.5-9.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-03**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/07/06	51.2	5.25	36.9963	1	AC

Parameter	Result
Carbazole	**5800**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	113	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	92	50-130

N/A - Not Applicable

01/18/06 10:55

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43090.D
Acq On : 7 Jan 2006 2:11 am
Operator : AC
Sample : 0512110-03
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 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 for WW 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	55368m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.19	240	77172m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.38	152	64198	611.17 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 61.12%		
58) Pyrene-d10	38.27	212	117222m	448.89 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.89%#		
81) Benzo[b]fluoranthene-d12	47.10	264	80670m	499.06 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.91%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.80	128	1791143	8329.16 ng/mL#	100
10) C1-Naphthalenes	22.50	142	2739551m	12739.44 ng/mL E	
11) C2-Naphthalenes	25.35	156	3784414m	17598.26 ng/mL	
12) C3-Naphthalenes	27.69	170	3043932m	14154.87 ng/mL	
13) C4-Naphthalenes	30.46	184	1741733m	8099.40 ng/mL	
15) 2-Methylnaphthalene	22.50	142	1627693m	11881.82 ng/mL E	
16) 1-Methylnaphthalene	22.93	142	1107330	8023.79 ng/mL#	100
22) Biphenyl	24.39	154	247035m	1505.19 ng/mL	
23) 2,6-Dimethylnaphthalene	25.01	156	581520m	4895.65 ng/mL	
24) Dibenzofuran	27.47	168	165964m	864.35 ng/mL	
25) Acenaphthylene	26.10	152	679516m	2823.71 ng/mL	
26) Acenaphthene	26.84	153	1045157	7088.95 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.39	170	241802m	1989.36 ng/mL	
28) Fluorene	28.85	166	849573m	5378.96 ng/mL	
29) C1-Fluorenes	31.23	180	974720m	6171.32 ng/mL	
30) C2-Fluorenes	33.27	194	1073167m	6794.62 ng/mL	
31) C3-Fluorenes	35.26	208	697204m	4414.26 ng/mL	
32) Dibenzothiophene	32.18	184	639027	2729.19 ng/mL#	80
36) OTP	34.37	198	15654	66.86 ng/mL#	100
37) C1-Dibenzothiophenes	33.95	198	1263640m	5396.82 ng/mL	
38) C2-Dibenzothiophenes	36.01	212	1377907m	5884.83 ng/mL	
39) C3-Dibenzothiophenes	37.46	226	842936m	3600.05 ng/mL	
40) C4-Dibenzothiophenes	39.15	240	319269m	1363.55 ng/mL	
41) Phenanthrene	32.69	178	6278414	23837.60 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.76	192	6466755m	24552.68 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.92	206	4275827m	16234.27 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.75	220	1833462m	6961.21 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.94	234	557588m	2117.02 ng/mL	
52) Retene	39.68	234	31724m	469.96 ng/mL	
53) Anthracene	32.86	178	2147320	8928.85 ng/mL	99
54) Carbazole	33.51	167	81103m	425.51 ng/mL	
55) 1-Methylphenanthrene	35.19	192	1034471m	5951.98 ng/mL	
56) Fluoranthene	37.48	202	3382233m	12457.90 ng/mL E	
57) Benzo(b)fluorene	39.99	216	451340	2838.24 ng/mL	95
59) Pyrene	38.36	202	4847940m	17212.33 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.74	216	5225461m	18552.70 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.21	230	2506269m	8898.36 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.67	244	1064299m	3778.73 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.93	258	385486m	1368.65 ng/mL	
64) Naphthobenzothiophene	42.20	234	358269m	1399.08 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43090.D
Acq On : 7 Jan 2006 2:11 am
Operator : AC
Sample : 0512110-03
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 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

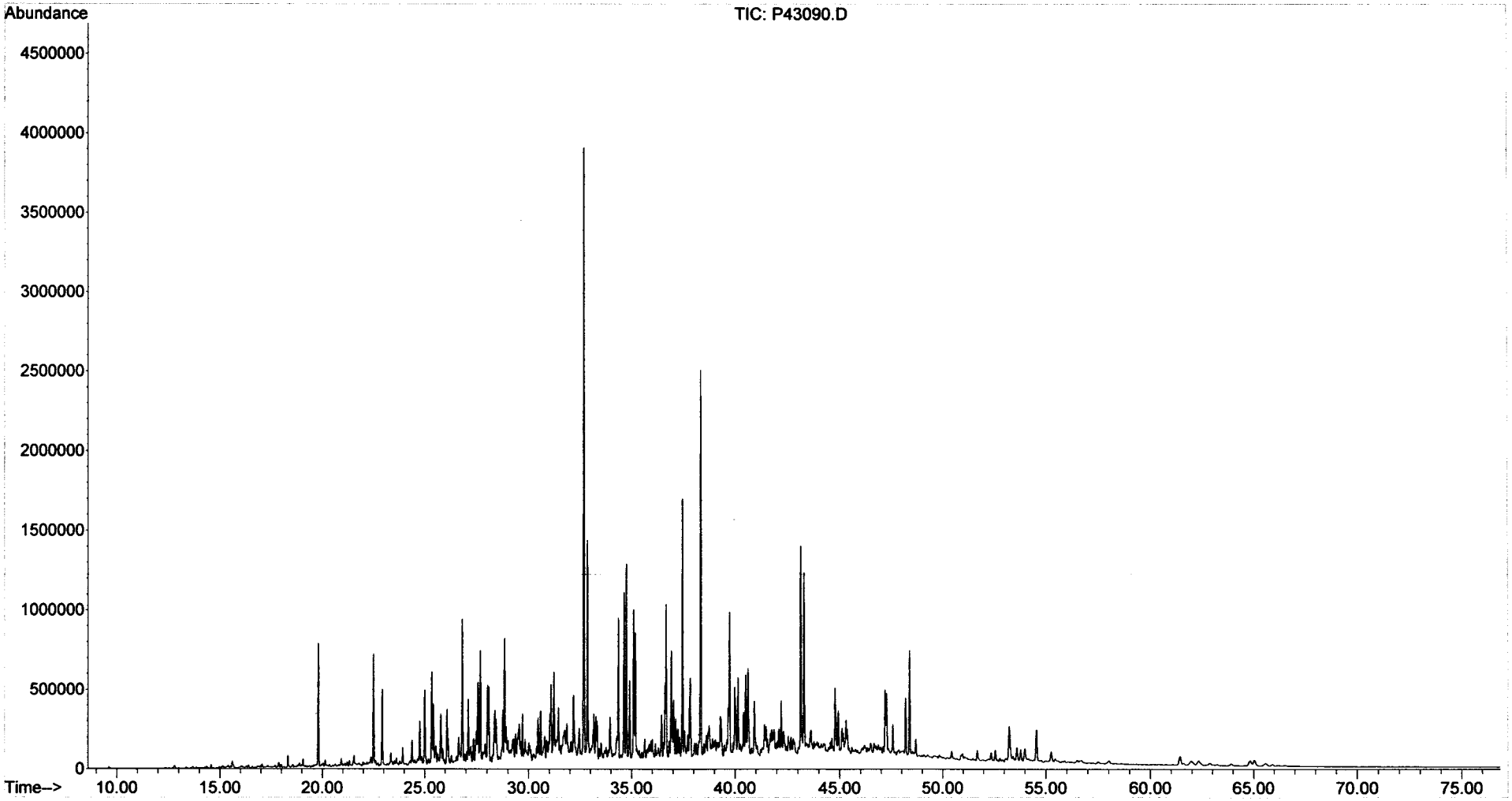
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.20	234	362073m	1413.94 ng/mL	
66) Naphthobenzothiophene-1,2-	42.54	234	95795m	374.09 ng/mL	
67) Naphthobenzothiophene-2,3-	42.84	234	112690m	440.07 ng/mL	
68) C1-Naphthobenzothiophenes	43.60	248	672658m	2626.81 ng/ml	
69) C2-Naphthobenzothiophenes	45.11	262	482923m	1885.87 ng/ml	
70) C3-Naphthobenzothiophenes	47.22	276	258600m	1009.86 ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	111524m	435.51 ng/mL	
73) Benz[a]anthracene	43.14	228	1867389m	10173.63 ng/mL E	
74) Chrysene	43.30	228	1907912m	10242.00 ng/mL E	
75) Chrysene/Triphenylene	43.30	228	1916621m	10288.76 ng/mL	
76) C1-Chrysenes	44.77	242	1940494m	10416.91 ng/mL	
77) C2-Chrysenes	46.48	256	1108305m	5949.57 ng/mL	
78) BBF-d12 Surr BKGD	47.10	256	14929	80.14 ng/mL	100
79) C3-Chrysenes	48.09	270	636939m	3419.20 ng/mL	
80) C4-Chrysenes	49.68	284	184038m	987.95 ng/mL	
82) Benzo[b]fluoranthene	47.19	252	794243	4163.63 ng/mL	98
83) Benzo[k]fluoranthene	47.26	252	924818m	4297.82 ng/mL	
84) Benzo[a]fluoranthene	47.57	252	383276m	1781.16 ng/mL	
85) Benzo[e]pyrene	48.20	252	738345	3840.59 ng/mL	96
86) Benzo[a]pyrene	48.39	252	1339115m	7226.50 ng/mL	
87) Perylene	48.69	252	226438	1233.97 ng/mL	91
88) Indeno[1,2,3-cd]pyrene	53.24	276	568422m	3302.68 ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	171990m	967.24 ng/mL	
90) Benzo[g,h,i]perylene	54.56	276	585725	2986.48 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43090.D
Acq On : 7 Jan 2006 2:11 am
Operator : AC
Sample : 0512110-03
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-85B (8.5-9.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-03E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/03/06	51.2	5.25	36.9963	5	AC

Parameter	Result		Parameter	Result	
Naphthalene	110	U	Fluoranthene	**180000**	
C1-Naphthalenes	**180000**		Pyrene	**240000**	
C2-Naphthalenes	110	U	C1-Fluoranthenes/Pyrenes	61	U
C3-Naphthalenes	110	U	C2-Fluoranthenes/Pyrenes	61	U
C4-Naphthalenes	110	U	C3-Fluoranthenes/Pyrenes	61	U
Biphenyl	63	U	C4-Fluoranthenes/Pyrenes	61	U
Dibenzofuran	82	U	Naphthobenzothiophenes	83	U
Acenaphthylene	120	U	C1-Naphthobenzothiophenes	83	U
Acenaphthene	79	U	C2-Naphthobenzothiophenes	83	U
Fluorene	79	U	C3-Naphthobenzothiophenes	83	U
C1-Fluorenes	79	U	C4-Naphthobenzothiophenes	83	U
C2-Fluorenes	79	U	Benz[a]anthracene	**140000**	
C3-Fluorenes	79	U	Chrysene/Triphenylene	**140000**	
Anthracene	92	U	C1-Chrysenes	74	U
Phenanthrene	**330000**		C2-Chrysenes	74	U
C1-Phenanthrenes/Anthracenes	100	U	C3-Chrysenes	74	U
C2-Phenanthrenes/Anthracenes	100	U	C4-Chrysenes	74	U
C3-Phenanthrenes/Anthracenes	100	U	Benzo[b]fluoranthene	73	U
C4-Phenanthrenes/Anthracenes	100	U	Benzo[k]fluoranthene	140	U
Retene	100	U	Benzo[a]fluoranthene	140	U
Dibenzothiophene	76	U	Benzo[e]pyrene	94	U
C1-Dibenzothiophenes	76	U	Benzo[a]pyrene	96	U
C2-Dibenzothiophenes	76	U	Perylene	120	U
C3-Dibenzothiophenes	76	U	Indeno[1,2,3-cd]pyrene	160	U
C4-Dibenzothiophenes	76	U	Dibenz[a,h]anthracene	130	U
Benzo(b)fluorene	70	U	Benzo[g,h,i]perylene	120	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	119	50-130
Pyrene-d10	89	50-130
Benzo[b]fluoranthene-d12	103	50-130

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

01/18/06 10:33

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42821.D
Acq On : 3 Jan 2006 8:27 pm
Operator : AC
Sample : 0512110-03-RE
Misc : 5X
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 11 20:04:02 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 for WW
1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	65851m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	92891	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	16121	129.04	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 12.90%#			
58) Pyrene-d10	38.28	212	29884m	96.22	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 9.62%#			
81) Benzo[b]fluoranthene-d12	47.10	264	21580m	110.91	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 11.09%#			
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
10) C1-Naphthalenes	22.52	142	687210m	2686.93	ng/mL	
15) 2-Methylnaphthalene	22.52	142	406899m	2497.43	ng/mL	
41) Phenanthrene	32.70	178	1518013m	4846.01	ng/mL	
56) Fluoranthene	37.48	202	828434m	2565.64	ng/mL	
59) Pyrene	38.36	202	1154044m	3445.10	ng/mL	
73) Benz[a]anthracene	43.14	228	454617m	2057.66	ng/mL	
74) Chrysene	43.30	228	469378m	2093.32	ng/mL	
75) Chrysene/Triphenylene	43.30	228	471368m	2102.19	ng/mL	

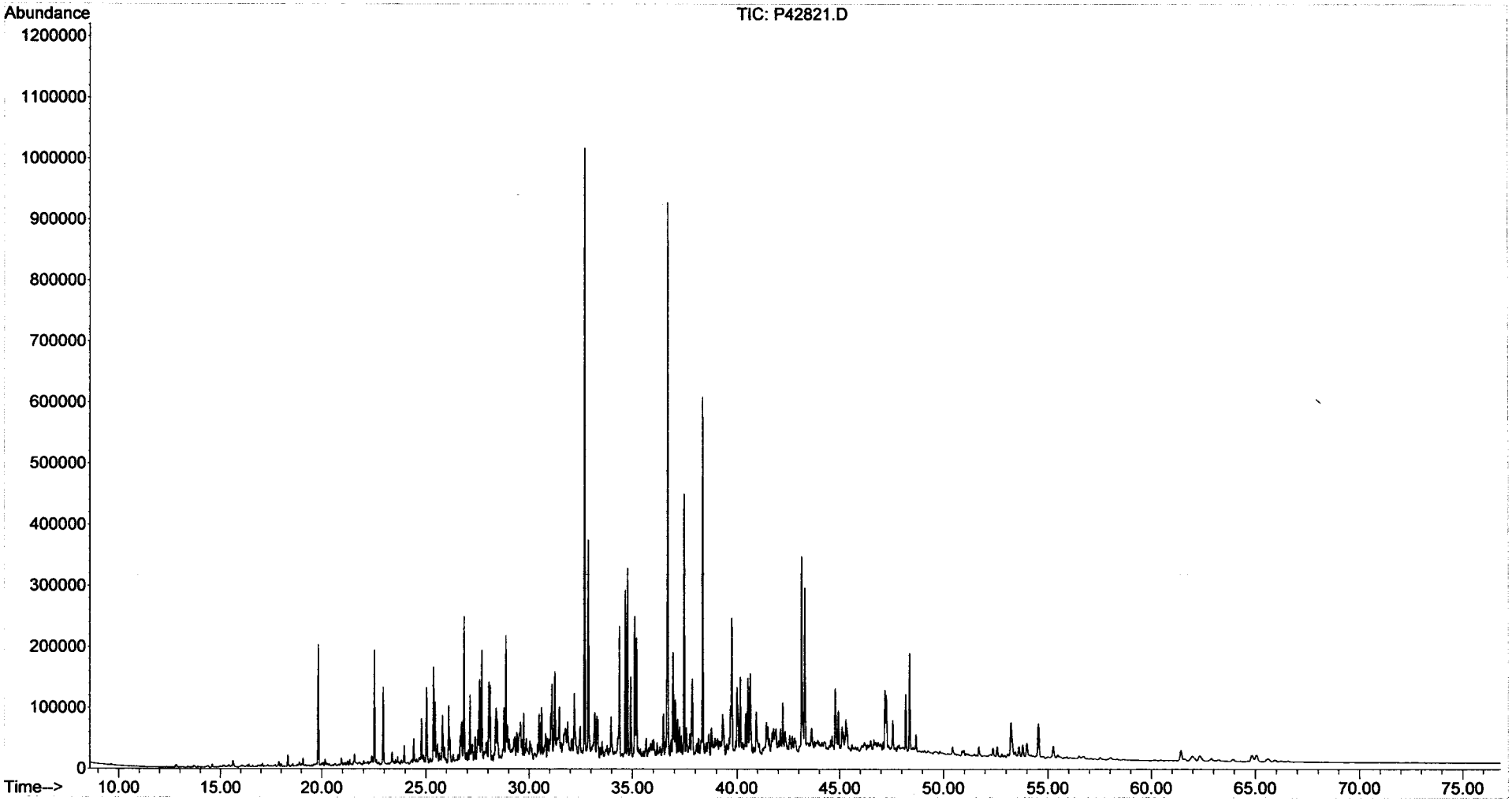
2nd Surr 9,ree
on 1 Kulk

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42821.D
Acq On : 3 Jan 2006 8:27 pm
Operator : AC
Sample : 0512110-03-RE
Misc : 5X
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 11 20:04:02 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-85B (8.5-9.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-03**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	01/07/06	51.2	5.25	14.28	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**2000**	30,31-Bishomohopane-22S	**3800**
C24 Tricyclic Terpane	**1400**	30,31-Bishomohopane-22R	**2800**
C25 Tricyclic Terpane	**1400**	30,31-Trishomohopane-22S	**2400**
C24 Tetracyclic Terpane	**1400**	30,31-Trishomohopane-22R	**1700**
C26 Tricyclic Terpane-22S	**640**	Tetrakishomohopane-22S	**1400**
C26 Tricyclic Terpane-22R	**720**	Tetrakishomohopane-22R	**940**
C28 Tricyclic Terpane-22S	**760**	Pentakishomohopane-22S	**1200**
C28 Tricyclic Terpane-22R	**830**	Pentakishomohopane-22R	**1200**
C29 Tricyclic Terpane-22S	**920**	13b(H),17a(H)-20S-Diacholestane	**3500**
C29 Tricyclic Terpane-22R	**840**	13b(H),17a(H)-20R-Diacholestane	**2100**
18a-22,29,30-Trisnorneohopane-TS	**4100**	13b,17a-20S-Methyldiacholestane	**1600**
C30 Tricyclic Terpane-22S	**830**	14a(H),17a(H)-20S-Cholestane	**2600**
C30 Tricyclic Terpane-22R	**1000**	14a(H),17a(H)-20R-Cholestane	**6500**
17a(H)-22,29,30-Trisnorhopane-TM	**4900**	13b,17a-20R-Ethyldiacholestane	**1100**
17a/b,21b/a 28,30-Bisnorhopane	**1100**	13a,17b-20S-Ethyldiacholestane	**260**
17a(H),21b(H)-25-Norhopane	**770**	14a,17a-20S-Methylcholestane	**750**
30-Norhopane	**14000**	14a,17a-20R-Methylcholestane	**2800**
18a(H)-30-Norneohopane-C29Ts	**4300**	14a(H),17a(H)-20S-Ethylcholestane	**2400**
17a(H)-Diahopane	**1100**	14a(H),17a(H)-20R-Ethylcholestane	**3400**
30-Normoretane	**2800**	14b(H),17b(H)-20R-Cholestane	**2800**
18a(H)&18b(H)-Oleananes	**2100**	14b(H),17b(H)-20S-Cholestane	**2900**
Hopane	**23000**	14b,17b-20R-Methylcholestane	**2800**
Moretane	**3700**	14b,17b-20S-Methylcholestane	**3200**
30-Homohopane-22S	**6200**	14b(H),17b(H)-20R-Ethylcholestane	**4700**
30-Homohopane-22R	**5300**	14b(H),17b(H)-20S-Ethylcholestane	**3400**

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

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34708.D
Acq On : 7 Jan 2006 1:19 am
Operator : AC
Sample : 0512110-03
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 18:37:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

OMS for WD 1-18-06

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	50.33	240	63852	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	51.01	217	45319	1531.54	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 153.15%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.56	191	271712m	4203.56	ng/mL	
84) Hopane (T19)	60.56	191	275283m	4258.81	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	25012m	386.95	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.32	191	16430m	254.18	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.12	191	17593m	272.18	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	17551	271.53	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.39	191	7853	121.49	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.50	191	8719m	134.89	ng/ml	
91) C28 Tricyclic Terpane-22S	54.25	191	9227m	142.75	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	10091m	156.11	ng/ml	
93) C29 Tricyclic Terpane-22S	55.07	191	11190m	173.12	ng/ml	
94) C29 Tricyclic Terpane-22R	55.30	191	10234m	158.33	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.48	191	50254m	777.46	ng/ml	
96) C30 Tricyclic Terpane-22S	56.65	191	10126m	156.66	ng/mL	
97) C30 Tricyclic Terpane-22R	56.92	191	12234m	189.27	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.07	191	59150m	915.09	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.36	191	13825m	213.88	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.22	191	9326m	144.28	ng/ml	
101) 30-Norhopane (T15)	59.09	191	170558m	2638.65	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.21	191	52163m	807.00	ng/ml	
103) 17a(H)-Diahopane (X)	59.36	191	13279m	205.43	ng/ml	
104) 30-Normoretane (T17)	59.93	191	33651	520.60	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.35	191	25254m	390.70	ng/ml	
106) Moretane (T20)	61.29	191	44739m	692.14	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	76078	1176.98	ng/ml	100
108) 30-Homohopane-22R (T22)	62.70	191	64819	1002.79	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.10	191	46107	713.31	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.51	191	34468	533.24	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.34	191	29170	451.28	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.99	191	20164	311.95	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.11	191	17019	263.30	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.06	191	11442	177.02	ng/ml	100
115) Pentakishomohopane-22S (T3	72.39	191	14836	229.52	ng/ml	100
116) Pentakishomohopane-22R (T3	73.73	191	14247	220.41	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	19309	652.54	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	11463m	387.39	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.19	217	8901m	300.81	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.21	217	14191m	479.58	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.81	217	36471	1232.53	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.11	217	6292	212.64	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34708.D
Acq On : 7 Jan 2006 1:19 am
Operator : AC
Sample : 0512110-03
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 18:37:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

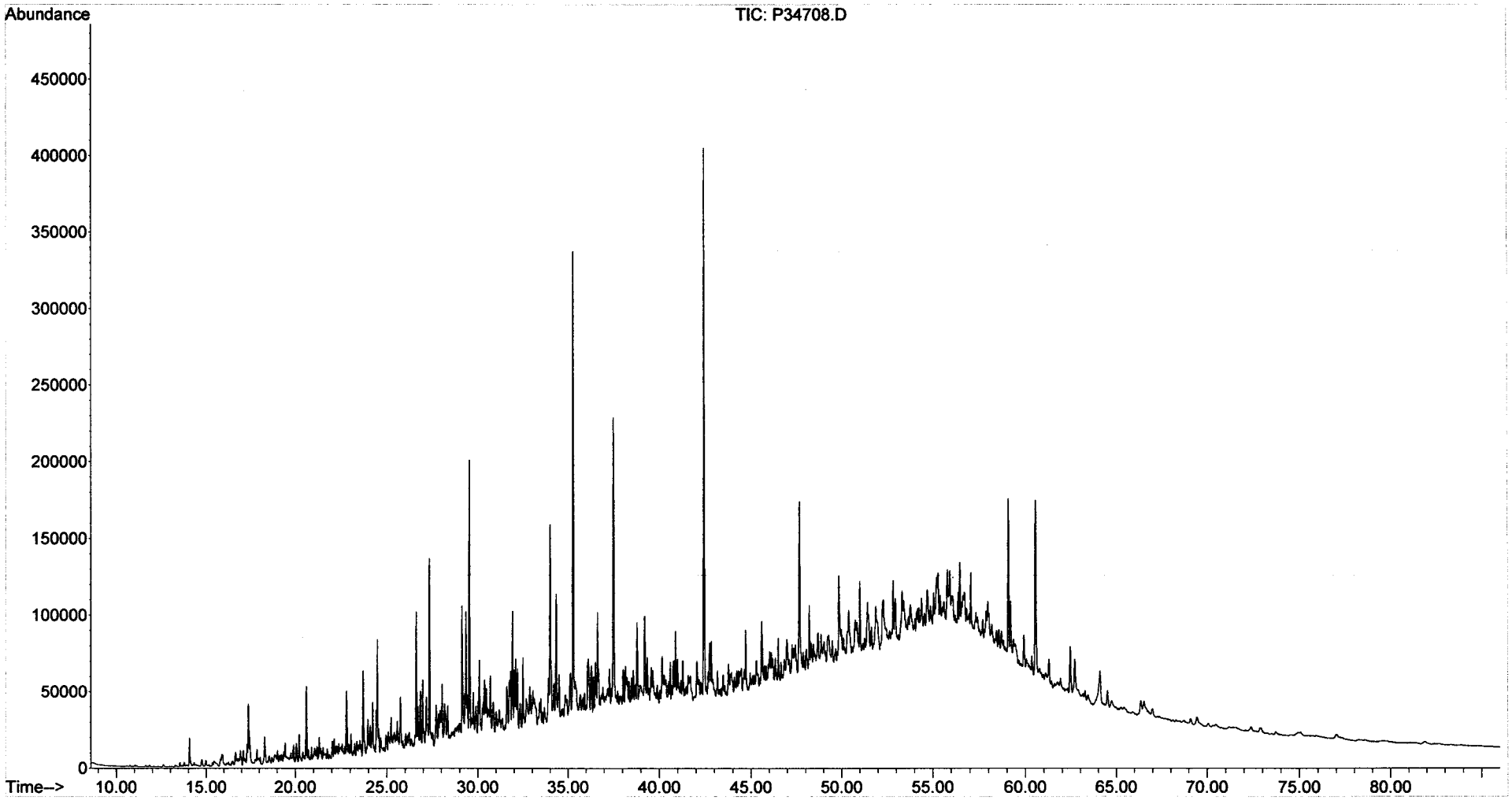
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.40	217	1434	48.46	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.58	217	4182m	141.33	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.34	217	15800m	533.96	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.72	217	13192m	445.82	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.71	217	19095m	645.31	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.32	218	15396	520.30	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	16175m	546.63	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.75	218	15354m	518.88	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.85	218	17765m	600.36	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.99	218	26031	879.71	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	19212m	649.26	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34708.D
Acq On : 7 Jan 2006 1:19 am
Operator : AC
Sample : 0512110-03
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 18:37:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-67 (8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-04**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	87.1	5.37	59	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	1700000	E	Fluoranthene	170000	E
C1-Naphthalenes	1500000	E	Pyrene	300000	E
C2-Naphthalenes	950000	E	C1-Fluoranthenes/Pyrenes	510000	
C3-Naphthalenes	480000		C2-Fluoranthenes/Pyrenes	320000	
C4-Naphthalenes	180000		C3-Fluoranthenes/Pyrenes	160000	
Biphenyl	97000		C4-Fluoranthenes/Pyrenes	55000	
Dibenzofuran	30000		Naphthobenzothiophenes	59000	
Acenaphthylene	350000	E	C1-Naphthobenzothiophenes	84000	
Acenaphthene	130000	E	C2-Naphthobenzothiophenes	65000	
Fluorene	220000	E	C3-Naphthobenzothiophenes	34000	
C1-Fluorenes	280000		C4-Naphthobenzothiophenes	15000	
C2-Fluorenes	250000		Benz[a]anthracene	160000	E
C3-Fluorenes	120000		Chrysene/Triphenylene	180000	E
Anthracene	190000	E	C1-Chrysenes	290000	
Phenanthrene	660000	E	C2-Chrysenes	200000	
C1-Phenanthrenes/Anthracenes	760000	E	C3-Chrysenes	120000	
C2-Phenanthrenes/Anthracenes	560000		C4-Chrysenes	36000	
C3-Phenanthrenes/Anthracenes	260000		Benzo[b]fluoranthene	50000	
C4-Phenanthrenes/Anthracenes	79000		Benzo[k]fluoranthene	48000	
Retene	18	U	Benzo[a]fluoranthene	30000	
Dibenzothiophene	100000		Benzo[e]pyrene	56000	
C1-Dibenzothiophenes	170000		Benzo[a]pyrene	100000	
C2-Dibenzothiophenes	180000		Perylene	19000	
C3-Dibenzothiophenes	110000		Indeno[1,2,3-cd]pyrene	39000	
C4-Dibenzothiophenes	41000		Dibenz[a,h]anthracene	16000	
Benzo(b)fluorene	55000		Benzo[g,h,i]perylene	40000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	110	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

01/18/06 10:56

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-67 (8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-04**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	87.1	5.37	59	1	AC

Parameter	Result
Carbazole	**8000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	110	50-130
Pyrene-d10	100	50-130
Benzo[b]fluoranthene-d12	89	50-130

N/A - Not Applicable

01/18/06 10:56

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43092.D
Acq On : 7 Jan 2006 3:39 am
Operator : AC
Sample : 0512110-04
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 12 09:02:58 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 for WP 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	65349m	500.00	ng/mL	-0.02
72) Chrysene-d12	43.21	240	98765m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.39	152	46087	371.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 37.17%#			
58) Pyrene-d10	38.28	212	104160m	337.95	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 33.79%#			
81) Benzo[b]fluoranthene-d12	47.11	264	62515	302.19	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 30.22%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds						Qvalue
9) Naphthalene	19.83	128	34658120m	136551.33	ng/mL E	
10) C1-Naphthalenes	22.55	142	29481090m	116154.08	ng/mL E	
11) C2-Naphthalenes	25.38	156	19203907m	75662.47	ng/mL E	
12) C3-Naphthalenes	27.71	170	9601474m	37829.35	ng/mL	
13) C4-Naphthalenes	30.46	184	3647955m	14372.77	ng/mL	
15) 2-Methylnaphthalene	22.55	142	17650634	109166.84	ng/mL# E	100
16) 1-Methylnaphthalene	22.97	142	11828374	72618.56	ng/mL# E	100
22) Biphenyl	24.39	154	1490759m	7695.93	ng/mL	
23) 2,6-Dimethylnaphthalene	25.03	156	3024366m	21572.45	ng/mL E	
24) Dibenzofuran	27.48	168	542295m	2392.92	ng/mL	
25) Acenaphthylene	26.12	152	7892722m	27788.61	ng/mL E	
26) Acenaphthene	26.85	153	1777711	10216.01	ng/mL E	98
27) 2,3,5-Trimethylnaphthalene	28.41	170	680896m	4746.29	ng/mL	
28) Fluorene	28.88	166	3323671m	17829.36	ng/mL E	
29) C1-Fluorenes	31.10	180	4064472m	21803.28	ng/mL	
30) C2-Fluorenes	33.28	194	3648610m	19572.45	ng/mL	
31) C3-Fluorenes	35.27	208	1811192m	9715.88	ng/mL	
32) Dibenzothiophene	32.19	184	2202837m	7971.07	ng/mL	
36) OTP	34.38	198	11422m	41.33	ng/mL	
37) C1-Dibenzothiophenes	33.97	198	3749881m	13569.12	ng/mL	
38) C2-Dibenzothiophenes	36.02	212	3902352m	14120.84	ng/mL	
39) C3-Dibenzothiophenes	37.47	226	2472069m	8945.30	ng/mL	
40) C4-Dibenzothiophenes	39.15	240	907071m	3282.28	ng/mL	
41) Phenanthrene	32.72	178	16359917m	52627.59	ng/mL E	
47) C1-Phenanthrenes/Anthracen	34.78	192	18853511m	60649.14	ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.95	206	13791661m	44365.87	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	6401250m	20591.94	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	1945644m	6258.87	ng/mL	
53) Anthracene	32.88	178	4328735	15250.34	ng/mL E	99
54) Carbazole	33.53	167	143201	636.56	ng/mL#	63
55) 1-Methylphenanthrene	35.21	192	3035437m	14797.36	ng/mL E	
56) Fluoranthene	37.49	202	4330165m	13513.44	ng/mL E	
57) Benzo(b)fluorene	40.00	216	816698m	4351.38	ng/mL	
59) Pyrene	38.38	202	8039944m	24185.52	ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.77	216	13383414m	40259.59	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	8390297m	25239.44	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.69	244	4275083m	12860.18	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	1442503m	4339.29	ng/mL	
64) Naphthobenzothiophene	42.22	234	896455m	2966.08	ng/ml	
65) Naphthobenzothiophene-2,1-	42.22	234	894770m	2960.50	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43092.D
Acq On : 7 Jan 2006 3:39 am
Operator : AC
Sample : 0512110-04
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 12 09:02:58 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

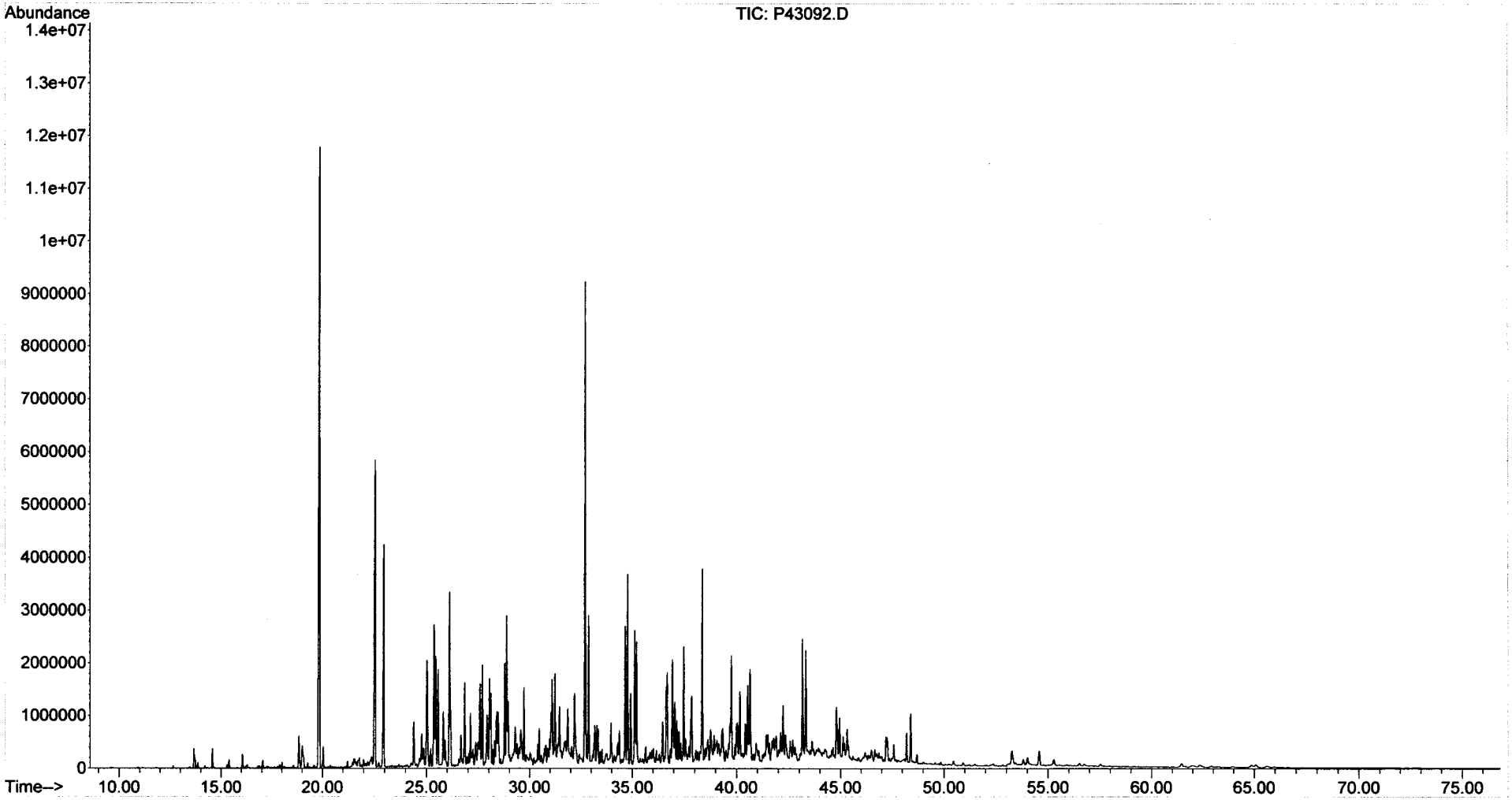
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.55	234	260882	863.17 ng/mL#	33
67) Naphthobenzothiophene-2,3-	42.85	234	256485m	848.63 ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	2018577m	6678.81 ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	1564574m	5176.67 ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	825201m	2730.32 ng/ml	
71) C4-Naphthobenzothiophenes	48.42	290	369517m	1222.61 ng/mL	
73) Benz[a]anthracene	43.15	228	2967171m	12631.08 ng/mL E	
74) Chrysene	43.32	228	3399072m	14257.51 ng/mL E	
75) Chrysene/Triphenylene	43.32	228	3423653m	14360.62 ng/mL	
76) C1-Chrysenes	44.79	242	5451461m	22866.32 ng/mL	
77) C2-Chrysenes	46.49	256	3769021m	15809.27 ng/mL	
78) BBF-d12 Surr BKGD	47.10	256	36979m	155.11 ng/mL	
79) C3-Chrysenes	48.09	270	2344478m	9833.98 ng/mL	
80) C4-Chrysenes	49.69	284	675237m	2832.30 ng/mL	
82) Benzo[b]fluoranthene	47.21	252	957226	3920.93 ng/mL	96
83) Benzo[k]fluoranthene	47.27	252	1058668	3844.22 ng/mL	93
84) Benzo[a]fluoranthene	47.59	252	650766m	2363.05 ng/mL	
85) Benzo[e]pyrene	48.21	252	1093447	4444.20 ng/mL	95
86) Benzo[a]pyrene	48.41	252	1888727m	7964.09 ng/mL	
87) Perylene	48.71	252	353701m	1506.08 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	677786m	3077.13 ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	288837m	1269.24 ng/mL	
90) Benzo[g,h,i]perylene	54.58	276	796636	3173.83 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43092.D
Acq On : 7 Jan 2006 3:39 am
Operator : AC
Sample : 0512110-04
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 12 09:02:58 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-67 (8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-04E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/03/06	87.1	5.37	59	20	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1300000**		Fluoranthene	**140000**	
C1-Naphthalenes	**1000000**		Pyrene	**240000**	
C2-Naphthalenes	**730000**		C1-Fluoranthenes/Pyrenes	220	U
C3-Naphthalenes	420	U	C2-Fluoranthenes/Pyrenes	220	U
C4-Naphthalenes	420	U	C3-Fluoranthenes/Pyrenes	220	U
Biphenyl	230	U	C4-Fluoranthenes/Pyrenes	220	U
Dibenzofuran	300	U	Naphthobenzothiophenes	300	U
Acenaphthylene	**270000**		C1-Naphthobenzothiophenes	300	U
Acenaphthene	**100000**		C2-Naphthobenzothiophenes	300	U
Fluorene	**180000**		C3-Naphthobenzothiophenes	300	U
C1-Fluorenes	290	U	C4-Naphthobenzothiophenes	300	U
C2-Fluorenes	290	U	Benz[a]anthracene	**120000**	
C3-Fluorenes	290	U	Chrysene/Triphenylene	**130000**	
Anthracene	**160000**		C1-Chrysenes	270	U
Phenanthrene	**490000**		C2-Chrysenes	270	U
C1-Phenanthrenes/Anthracenes	**610000**		C3-Chrysenes	270	U
C2-Phenanthrenes/Anthracenes	370	U	C4-Chrysenes	270	U
C3-Phenanthrenes/Anthracenes	370	U	Benzo[b]fluoranthene	270	U
C4-Phenanthrenes/Anthracenes	370	U	Benzo[k]fluoranthene	510	U
Retene	370	U	Benzo[a]fluoranthene	510	U
Dibenzothiophene	280	U	Benzo[e]pyrene	350	U
C1-Dibenzothiophenes	280	U	Benzo[a]pyrene	350	U
C2-Dibenzothiophenes	280	U	Perylene	440	U
C3-Dibenzothiophenes	280	U	Indeno[1,2,3-cd]pyrene	600	U
C4-Dibenzothiophenes	280	U	Dibenz[a,h]anthracene	480	U
Benzo(b)fluorene	260	U	Benzo[g,h,i]perylene	440	U

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

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

01/18/06 10:34

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42822.D
Acq On : 3 Jan 2006 9:56 pm
Operator : AC
Sample : 0512110-04-RE
Misc : 20X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 11 20:07:56 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

MSGarwood 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	66067m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	112320m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	1994	15.91	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.59%#		
58) Pyrene-d10	38.28	212	4665m	14.97	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.50%#		
81) Benzo[b]fluoranthene-d12	47.09	264	3188	13.55	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.36%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		

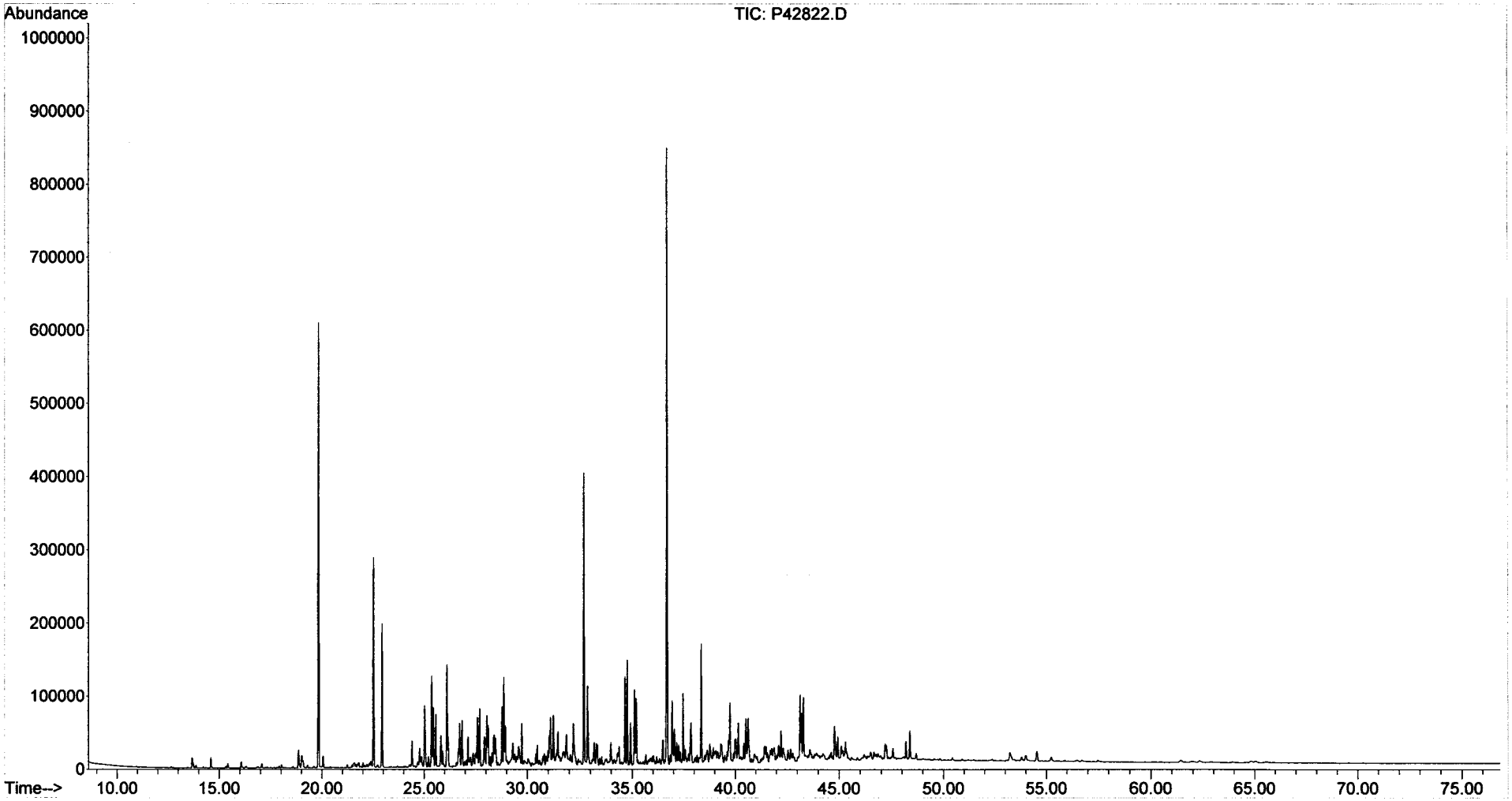
Target Compounds						Qvalue
9) Naphthalene	19.83	128	1360235m	5301.02	ng/mL	
10) C1-Naphthalenes	22.52	142	1070866m	4173.31	ng/mL	
11) C2-Naphthalenes	25.37	156	739490m	2881.89	ng/mL	
15) 2-Methylnaphthalene	22.52	142	634362m	3880.81	ng/mL	
16) 1-Methylnaphthalene	22.95	142	435865	2646.85	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	88316m	623.10	ng/mL	
25) Acenaphthylene	26.11	152	308628m	1074.81	ng/mL	
26) Acenaphthene	26.85	153	71862	408.48	ng/mL	97
28) Fluorene	28.87	166	133929m	710.64	ng/mL	
41) Phenanthrene	32.69	178	612868m	1950.09	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.76	192	757133m	2409.12	ng/mL	
53) Anthracene	32.87	178	177320m	617.92	ng/mL	
55) 1-Methylphenanthrene	35.20	192	125025m	602.86	ng/mL	
56) Fluoranthene	37.47	202	181178m	559.27	ng/mL	
59) Pyrene	38.35	202	316942m	943.05	ng/mL	
73) Benz[a]anthracene	43.14	228	122896m	460.03	ng/mL	
74) Chrysene	43.30	228	142822m	526.77	ng/mL	
75) Chrysene/Triphenylene	43.30	228	142994m	527.41	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42822.D
Acq On : 3 Jan 2006 9:56 pm
Operator : AC
Sample : 0512110-04-RE
Misc : 20X
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 11 20:07:56 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



Form I
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-67 (8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-04**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	87.1	5.37	8.88	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**390**	30,31-Bishomohopane-22S	**570**
C24 Tricyclic Terpane	**250**	30,31-Bishomohopane-22R	**440**
C25 Tricyclic Terpane	**250**	30,31-Trishomohopane-22S	**310**
C24 Tetracyclic Terpane	**440**	30,31-Trishomohopane-22R	**230**
C26 Tricyclic Terpane-22S	**110**	Tetrakishomohopane-22S	**200**
C26 Tricyclic Terpane-22R	**120**	Tetrakishomohopane-22R	**130**
C28 Tricyclic Terpane-22S	**98**	Pentakishomohopane-22S	**120**
C28 Tricyclic Terpane-22R	**130**	Pentakishomohopane-22R	**120**
C29 Tricyclic Terpane-22S	**120**	13b(H),17a(H)-20S-Diacholestane	**560**
C29 Tricyclic Terpane-22R	**110**	13b(H),17a(H)-20R-Diacholestane	**320**
18a-22,29,30-Trisnorneohopane-TS	**1500**	13b,17a-20S-Methyldiacholestane	**270**
C30 Tricyclic Terpane-22S	**120**	14a(H),17a(H)-20S-Cholestane	**280**
C30 Tricyclic Terpane-22R	**220**	14a(H),17a(H)-20R-Cholestane	**830**
17a(H)-22,29,30-Trisnorhopane-TM	**840**	13b,17a-20R-Ethyldiacholestane	**150**
17a/b,21b/a 28,30-Bisnorhopane	**150**	13a,17b-20S-Ethyldiacholestane	**25**
17a(H),21b(H)-25-Norhopane	**100**	14a,17a-20S-Methylcholestane	**140**
30-Norhopane	**2500**	14a,17a-20R-Methylcholestane	**390**
18a(H)-30-Norneohopane-C29Ts	**1400**	14a(H),17a(H)-20S-Ethylcholestane	**280**
17a(H)-Diahopane	**380**	14a(H),17a(H)-20R-Ethylcholestane	**400**
30-Normoretane	**480**	14b(H),17b(H)-20R-Cholestane	**380**
18a(H)&18b(H)-Oleananes	**760**	14b(H),17b(H)-20S-Cholestane	**390**
Hopane	**4400**	14b,17b-20R-Methylcholestane	**370**
Moretane	**520**	14b,17b-20S-Methylcholestane	**370**
30-Homohopane-22S	**1000**	14b(H),17b(H)-20R-Ethylcholestane	**540**
30-Homohopane-22R	**840**	14b(H),17b(H)-20S-Ethylcholestane	**330**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	111	50-130

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34709.D
Acq On : 7 Jan 2006 2:58 am
Operator : AC
Sample : 0512110-04
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 19:00:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1-18-06

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	50.33	240	58651m	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	51.01	217	67789m	2494.06	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 249.41%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.54	191	135372m	2280.01	ng/mL	
84) Hopane (T19)	60.54	191	136839m	2304.72	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	12311m	207.35	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.32	191	7934m	133.63	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.11	191	7885m	132.80	ng/ml	
88) C24 Tetracyclic Terpane (T	51.65	191	13809	232.58	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.39	191	3488m	58.75	ng/ml	
90) C26 Tricyclic Terpane-22R	51.50	191	3663m	61.69	ng/ml	
91) C28 Tricyclic Terpane-22S	54.24	191	3063m	51.59	ng/ml	
92) C28 Tricyclic Terpane-22R	54.44	191	4031m	67.89	ng/ml	
93) C29 Tricyclic Terpane-22S	55.06	191	3711m	62.50	ng/ml	
94) C29 Tricyclic Terpane-22R	55.29	191	3548m	59.76	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.47	191	46867m	789.36	ng/ml	
96) C30 Tricyclic Terpane-22S	56.64	191	3722m	62.69	ng/mL	
97) C30 Tricyclic Terpane-22R	56.91	191	6842	115.24	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.06	191	26290m	442.79	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.35	191	4763m	80.22	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.21	191	3297m	55.53	ng/ml	
101) 30-Norhopane (T15)	59.08	191	77294m	1301.83	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.19	191	42962m	723.59	ng/ml	
103) 17a(H)-Diahopane (X)	59.34	191	11948	201.23	ng/ml	100
104) 30-Normoretane (T17)	59.91	191	15167	255.45	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.34	191	23941m	403.23	ng/ml	
106) Moretane (T20)	61.28	191	16101m	271.18	ng/ml	
107) 30-Homohopane-22S (T21)	62.44	191	31229m	525.98	ng/ml	
108) 30-Homohopane-22R (T22)	62.69	191	26439	445.30	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.08	191	17750	298.96	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.49	191	13784	232.16	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.32	191	9707	163.49	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.98	191	7323	123.34	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.10	191	6386	107.56	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.02	191	3974	66.93	ng/ml	100
115) Pentakishomohopane-22S (T3	72.38	191	3788	63.80	ng/ml	100
116) Pentakishomohopane-22R (T3	73.74	191	3692	62.18	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	8045	295.99	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	4629m	170.31	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.18	217	3900m	143.49	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.20	217	4016m	147.75	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.79	217	11856	436.20	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.10	217	2094m	77.04	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34709.D
Acq On : 7 Jan 2006 2:58 am
Operator : AC
Sample : 0512110-04
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 19:00:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

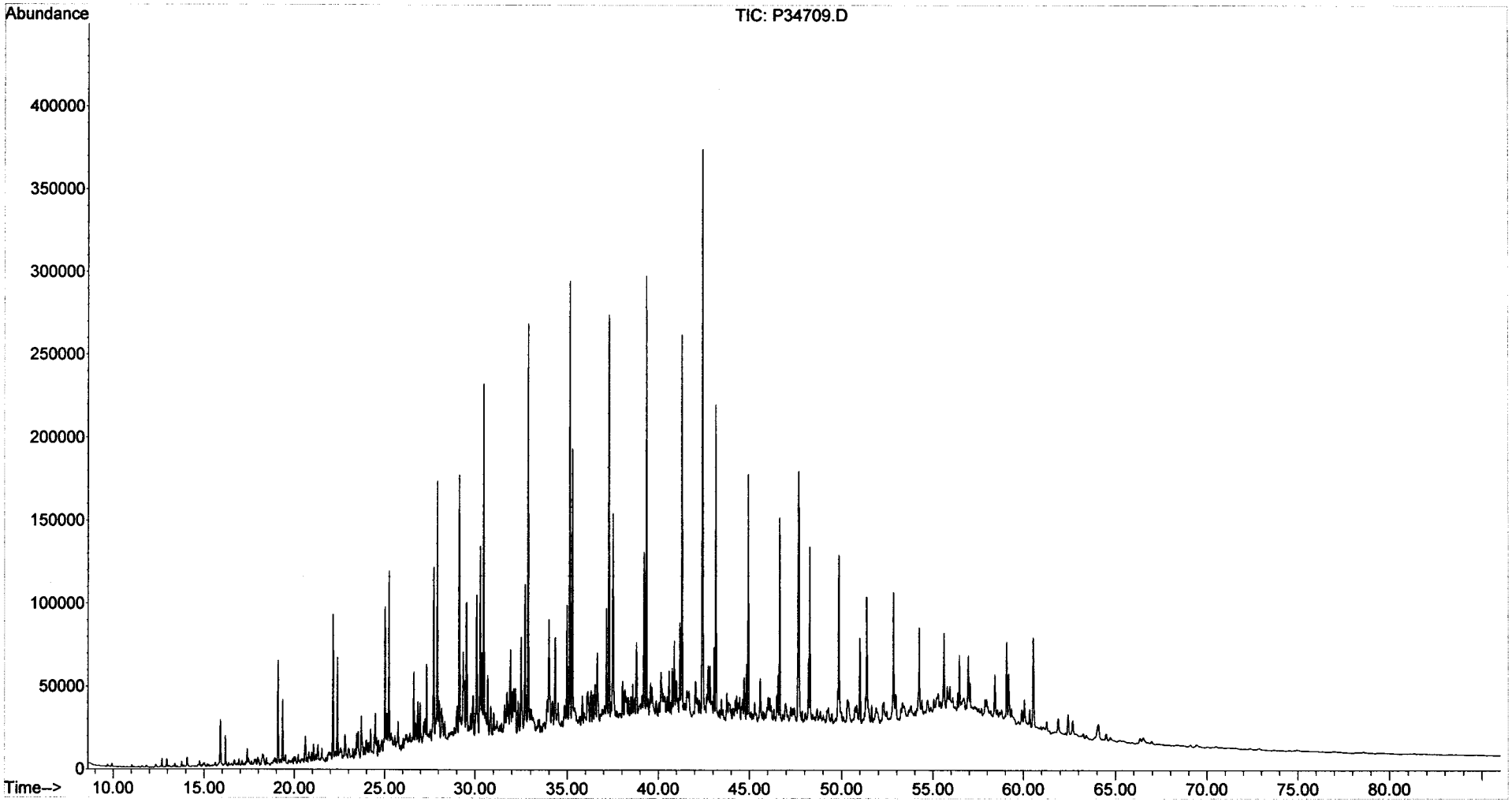
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.39	217	357m	13.13	ng/ml	
125) 14a,17a-20S-Methylcholesta	56.56	217	1948m	71.67	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.33	217	5622m	206.84	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.71	217	3991m	146.83	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.69	217	5788	212.95	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	5437	200.04	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.40	218	5573m	205.04	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.74	218	5351m	196.87	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.83	218	5298m	194.92	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.98	218	7718	283.96	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.03	218	4726m	173.88	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34709.D
Acq On : 7 Jan 2006 2:58 am
Operator : AC
Sample : 0512110-04
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 19:00:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-68 (2.2-3.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-05**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	74.9	5.48	83.3375	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	3300000	E	Fluoranthene	310000	E
C1-Naphthalenes	2600000	E	Pyrene	520000	E
C2-Naphthalenes	1700000	E	C1-Fluoranthenes/Pyrenes	800000	
C3-Naphthalenes	810000		C2-Fluoranthenes/Pyrenes	480000	
C4-Naphthalenes	310000		C3-Fluoranthenes/Pyrenes	240000	
Biphenyl	180000		C4-Fluoranthenes/Pyrenes	79000	
Dibenzofuran	54000		Naphthobenzothiophenes	91000	
Acenaphthylene	190000		C1-Naphthobenzothiophenes	130000	
Acenaphthene	760000	E	C2-Naphthobenzothiophenes	96000	
Fluorene	410000	E	C3-Naphthobenzothiophenes	52000	
C1-Fluorenes	440000		C4-Naphthobenzothiophenes	22000	
C2-Fluorenes	380000		Benz[a]anthracene	260000	E
C3-Fluorenes	210000		Chrysene/Triphenylene	280000	E
Anthracene	350000	E	C1-Chrysenes	420000	
Phenanthrene	1200000	E	C2-Chrysenes	290000	
C1-Phenanthrenes/Anthracenes	1200000	E	C3-Chrysenes	180000	
C2-Phenanthrenes/Anthracenes	850000		C4-Chrysenes	51000	
C3-Phenanthrenes/Anthracenes	390000		Benzo[b]fluoranthene	82000	
C4-Phenanthrenes/Anthracenes	110000		Benzo[k]fluoranthene	85000	
Retene	29	U	Benzo[a]fluoranthene	48000	
Dibenzothiophene	170000		Benzo[e]pyrene	93000	
C1-Dibenzothiophenes	270000		Benzo[a]pyrene	170000	
C2-Dibenzothiophenes	280000		Perylene	32000	
C3-Dibenzothiophenes	170000		Indeno[1,2,3-cd]pyrene	68000	
C4-Dibenzothiophenes	61000		Dibenz[a,h]anthracene	25000	
Benzo(b)fluorene	82000		Benzo[g,h,i]perylene	68000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	118	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	91	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.

01/18/06 10:57

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-68 (2.2-3.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-05**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	74.9	5.48	83.3375	1	AC

Parameter	Result
Carbazole	**17000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	118	50-130
Pyrene-d10	106	50-130
Benzo[b]fluoranthene-d12	91	50-130

N/A - Not Applicable

01/18/06 10:58

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43094.D
Acq On : 7 Jan 2006 5:08 am
Operator : AC
Sample : 0512110-05
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 12 09:03:21 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 6/2W 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	51031m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.20	240	78569m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.39	152	27303m	282.02 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 28.20%#		
58) Pyrene-d10	38.28	212	61314m	254.75 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 25.47%#		
81) Benzo[b]fluoranthene-d12	47.11	264	36018	218.86 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.89%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	19.83	128	32305987m	162996.70 ng/mL E	
10) C1-Naphthalenes	22.54	142	25105500m	126667.35 ng/mL E	
11) C2-Naphthalenes	25.37	156	16923437m	85385.55 ng/mL E	
12) C3-Naphthalenes	27.70	170	7879535m	39755.42 ng/mL	
13) C4-Naphthalenes	30.46	184	2992054m	15096.12 ng/mL	
15) 2-Methylnaphthalene	22.54	142	15157471	120049.97 ng/mL# E	100
16) 1-Methylnaphthalene	22.96	142	9948682	78215.54 ng/mL# E	100
22) Biphenyl	24.40	154	1315995	8699.86 ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	2213011m	20214.06 ng/mL E	
24) Dibenzofuran	27.48	168	471374	2663.57 ng/mL#	89
25) Acenaphthylene	26.10	152	2082983	9391.41 ng/mL#	100
26) Acenaphthene	26.85	153	5081190	37393.02 ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.40	170	493901m	4408.78 ng/mL	
28) Fluorene	28.87	166	2969123m	20396.27 ng/mL E	
29) C1-Fluorenes	31.10	180	3129376m	21497.12 ng/mL	
30) C2-Fluorenes	33.28	194	2762549m	18977.22 ng/mL	
31) C3-Fluorenes	35.27	208	1473982m	10125.46 ng/mL	
32) Dibenzothiophene	32.18	184	1800814m	8344.65 ng/mL	
36) OTP	34.36	198	8390m	38.88 ng/mL	
37) C1-Dibenzothiophenes	33.97	198	2873733m	13316.36 ng/mL	
38) C2-Dibenzothiophenes	36.02	212	2926044m	13558.76 ng/mL	
39) C3-Dibenzothiophenes	37.47	226	1763173m	8170.22 ng/mL	
40) C4-Dibenzothiophenes	39.15	240	646920m	2997.71 ng/mL	
41) Phenanthrene	32.71	178	14055819	57901.98 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.78	192	14647907m	60341.05 ng/mL E	
48) C2-Phenanthrenes/Anthracen	36.95	206	10169179m	41891.24 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	4660011m	19196.60 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.97	234	1284978m	5293.38 ng/mL	
53) Anthracene	32.88	178	3833527	17295.06 ng/mL E	99
54) Carbazole	33.52	167	146599	834.51 ng/mL#	70
55) 1-Methylphenanthrene	35.21	192	2377332m	14840.81 ng/mL E	
56) Fluoranthene	37.48	202	3823068m	15278.41 ng/mL E	
57) Benzo(b)fluorene	40.00	216	595547	4063.37 ng/mL	92
59) Pyrene	38.37	202	6661738m	25662.25 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.76	216	10266554m	39548.68 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	6078301m	23414.75 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.69	244	3079840m	11864.12 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	1015196m	3910.72 ng/mL	
64) Naphthobenzothiophene	42.21	234	657641m	2786.43 ng/ml	
65) Naphthobenzothiophene-2,1-	42.21	234	656389m	2781.12 ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43094.D
Acq On : 7 Jan 2006 5:08 am
Operator : AC
Sample : 0512110-05
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 12 09:03:21 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

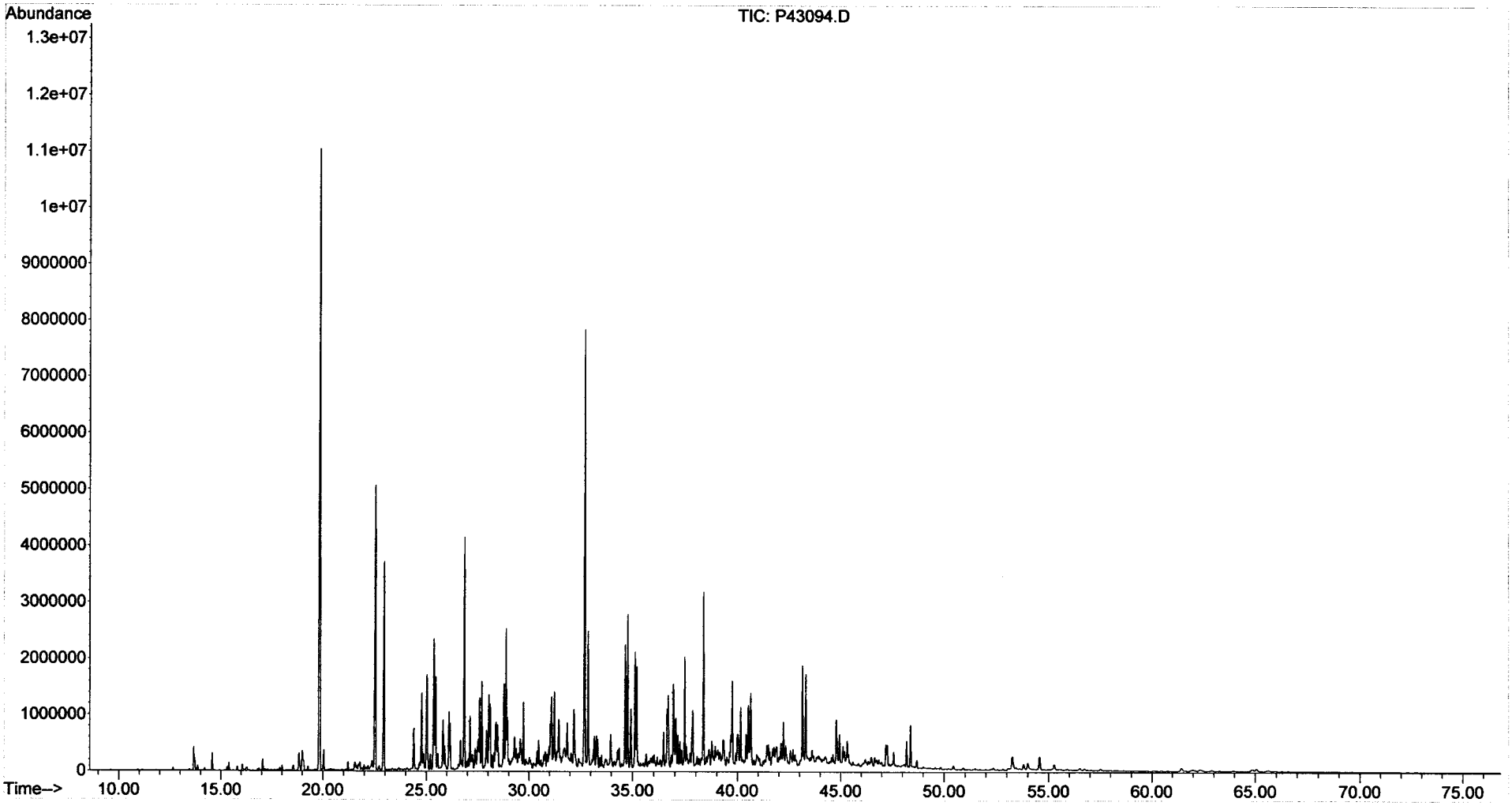
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
66) Naphthobenzothiophene-1,2-	42.55	234	192850	817.11 ng/mL#	33
67) Naphthobenzothiophene-2,3-	42.84	234	205793m	871.95 ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	1461064m	6190.53 ng/ml	
69) C2-Naphthobenzothiophenes	45.12	262	1121506m	4751.83 ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	598546m	2536.04 ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	261804m	1109.26 ng/mL	
73) Benz[a]anthracene	43.15	228	2349291m	12571.49 ng/mL E	
74) Chrysene	43.31	228	2646807m	13955.89 ng/mL E	
75) Chrysene/Triphenylene	43.31	228	2653270m	13989.96 ng/mL E	
76) C1-Chrysenes	44.79	242	3958525m	20872.21 ng/mL	
77) C2-Chrysenes	46.49	256	2760947m	14557.71 ng/mL	
78) BBF-d12 Surr BKGD	47.09	256	28629m	150.95 ng/mL	
79) C3-Chrysenes	48.09	270	1658636m	8745.53 ng/mL	
80) C4-Chrysenes	49.69	284	480365m	2532.83 ng/mL	
82) Benzo[b]fluoranthene	47.20	252	780597	4019.33 ng/mL	97
83) Benzo[k]fluoranthene	47.27	252	913639	4170.37 ng/mL	95
84) Benzo[a]fluoranthene	47.58	252	523061m	2387.55 ng/mL	
85) Benzo[e]pyrene	48.21	252	893026	4562.59 ng/mL	93
86) Benzo[a]pyrene	48.40	252	1565920m	8300.19 ng/mL	
87) Perylene	48.70	252	290970m	1557.44 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	582761m	3325.79 ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	221564	1223.88 ng/mL#	91
90) Benzo[g,h,i]perylene	54.56	276	671653	3363.72 ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43094.D
Acq On : 7 Jan 2006 5:08 am
Operator : AC
Sample : 0512110-05
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 12 09:03:21 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-68 (2.2-3.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-05E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/03/06	74.9	5.48	83.3375	20	AC

Parameter	Result		Parameter	Result	
Naphthalene	**2400000**		Fluoranthene	**250000**	
C1-Naphthalenes	**1800000**		Pyrene	**400000**	
C2-Naphthalenes	**1300000**		C1-Fluoranthenes/Pyrenes	360	U
C3-Naphthalenes	670	U	C2-Fluoranthenes/Pyrenes	360	U
C4-Naphthalenes	670	U	C3-Fluoranthenes/Pyrenes	360	U
Biphenyl	370	U	C4-Fluoranthenes/Pyrenes	360	U
Dibenzofuran	480	U	Naphthobenzothiophenes	490	U
Acenaphthylene	740	U	C1-Naphthobenzothiophenes	490	U
Acenaphthene	**550000**		C2-Naphthobenzothiophenes	490	U
Fluorene	**310000**		C3-Naphthobenzothiophenes	490	U
C1-Fluorenes	470	U	C4-Naphthobenzothiophenes	490	U
C2-Fluorenes	470	U	Benz[a]anthracene	**190000**	
C3-Fluorenes	470	U	Chrysene/Triphenylene	**220000**	
Anthracene	**270000**		C1-Chrysenes	440	U
Phenanthrene	**850000**		C2-Chrysenes	440	U
C1-Phenanthrenes/Anthracenes	**960000**		C3-Chrysenes	440	U
C2-Phenanthrenes/Anthracenes	590	U	C4-Chrysenes	440	U
C3-Phenanthrenes/Anthracenes	590	U	Benzo[b]fluoranthene	430	U
C4-Phenanthrenes/Anthracenes	590	U	Benzo[k]fluoranthene	820	U
Retene	590	U	Benzo[a]fluoranthene	820	U
Dibenzothiophene	450	U	Benzo[e]pyrene	560	U
C1-Dibenzothiophenes	450	U	Benzo[a]pyrene	560	U
C2-Dibenzothiophenes	450	U	Perylene	710	U
C3-Dibenzothiophenes	450	U	Indeno[1,2,3-cd]pyrene	980	U
C4-Dibenzothiophenes	450	U	Dibenz[a,h]anthracene	770	U
Benzo(b)fluorene	410	U	Benzo[g,h,i]perylene	720	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	98	50-130
Pyrene-d10	85	50-130
Benzo[b]fluoranthene-d12	81	50-130

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

01/18/06 10:41

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42823.D
Acq On : 3 Jan 2006 11:23 pm
Operator : AC
Sample : 0512110-05-RE
Misc : 20X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 11 20:12:18 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 for WD 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	65343m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	111505m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	1459	11.77	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.18%#			
58) Pyrene-d10	38.28	212	3129m	10.15	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.02%#			
81) Benzo[b]fluoranthene-d12	47.09	264	2281	9.77	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.98%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

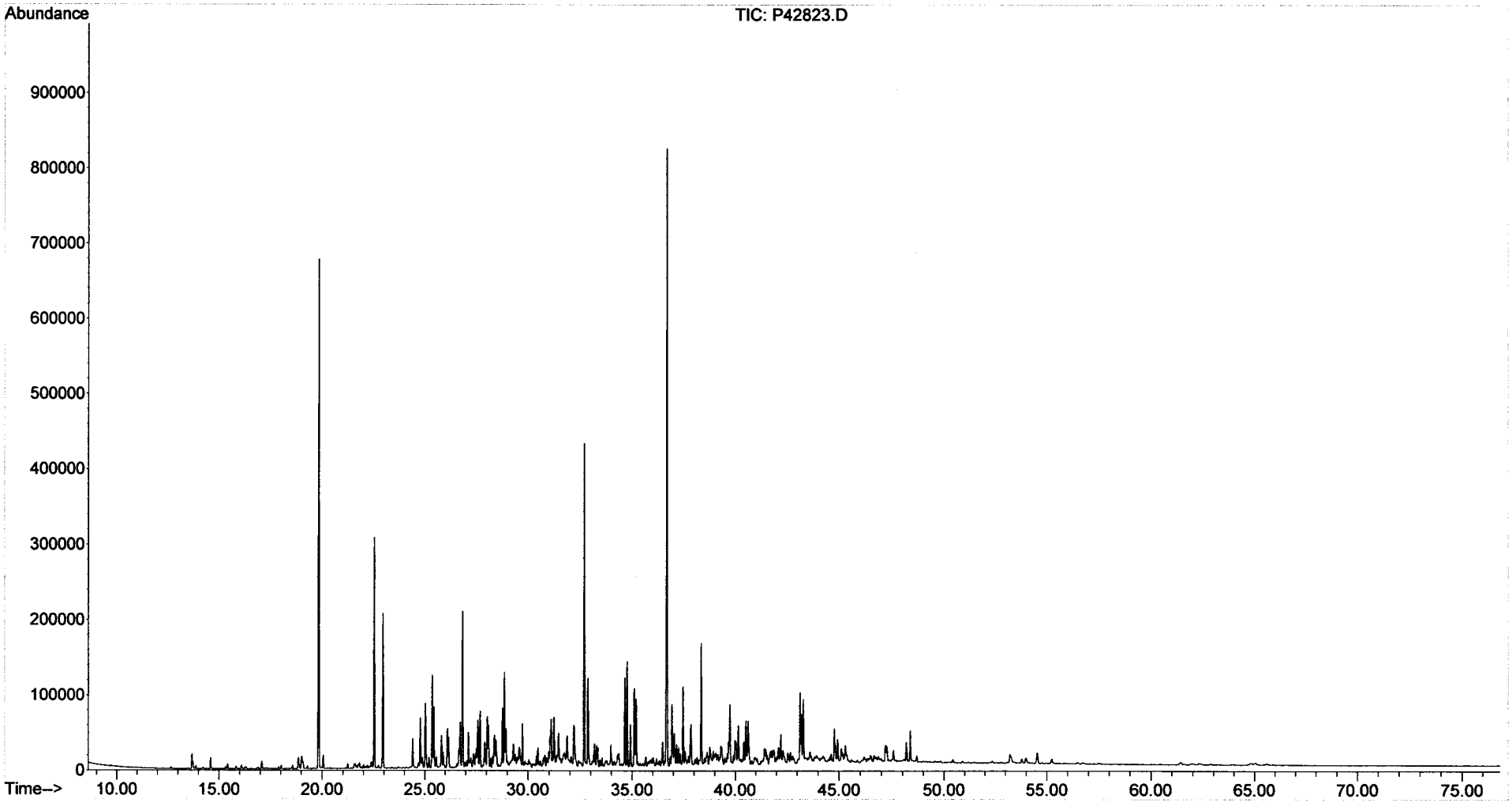
Target Compounds						Qvalue
9) Naphthalene	19.83	128	1511022m	5953.90	ng/mL	
10) C1-Naphthalenes	22.52	142	1121136m	4417.63	ng/mL	
11) C2-Naphthalenes	25.37	156	792218m	3121.59	ng/mL	
15) 2-Methylnaphthalene	22.52	142	671419	4153.02	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	450390	2765.36	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	91879m	655.42	ng/mL	
26) Acenaphthene	26.85	153	236792	1360.90	ng/mL	99
28) Fluorene	28.87	166	141463m	758.93	ng/mL	
41) Phenanthrene	32.69	178	650565m	2092.97	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.76	192	737074m	2371.28	ng/mL	
53) Anthracene	32.87	178	191311	674.06	ng/mL	100
55) 1-Methylphenanthrene	35.20	192	123276m	601.01	ng/mL	
56) Fluoranthene	37.47	202	195954m	611.58	ng/mL	
59) Pyrene	38.35	202	331089m	996.06	ng/mL	
73) Benz[a]anthracene	43.14	228	124637m	469.95	ng/mL	
74) Chrysene	43.30	228	142747m	530.35	ng/mL	
75) Chrysene/Triphenylene	43.30	228	142510m	529.47	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42823.D
Acq On : 3 Jan 2006 11:23 pm
Operator : AC
Sample : 0512110-05-RE
Misc : 20X
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 11 20:12:18 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-68 (2.2-3.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-05**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	74.9	5.48	11.1	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**860**	30,31-Bishomohopane-22S	**1400**
C24 Tricyclic Terpane	**580**	30,31-Bishomohopane-22R	**1000**
C25 Tricyclic Terpane	**570**	30,31-Trishomohopane-22S	**790**
C24 Tetracyclic Terpane	**820**	30,31-Trishomohopane-22R	**530**
C26 Tricyclic Terpane-22S	**270**	Tetrakishomohopane-22S	**470**
C26 Tricyclic Terpane-22R	**280**	Tetrakishomohopane-22R	**290**
C28 Tricyclic Terpane-22S	**260**	Pentakishomohopane-22S	**340**
C28 Tricyclic Terpane-22R	**300**	Pentakishomohopane-22R	**310**
C29 Tricyclic Terpane-22S	**360**	13b(H),17a(H)-20S-Diacholestane	**1300**
C29 Tricyclic Terpane-22R	**310**	13b(H),17a(H)-20R-Diacholestane	**750**
18a-22,29,30-Trisnorneohopane-TS	**2800**	13b,17a-20S-Methyldiacholestane	**570**
C30 Tricyclic Terpane-22S	**280**	14a(H),17a(H)-20S-Cholestane	**640**
C30 Tricyclic Terpane-22R	**460**	14a(H),17a(H)-20R-Cholestane	**2100**
17a(H)-22,29,30-Trisnorhopane-TM	**1900**	13b,17a-20R-Ethyldiacholestane	**360**
17a/b,21b/a 28,30-Bisnorhopane	**470**	13a,17b-20S-Ethyldiacholestane	**59**
17a(H),21b(H)-25-Norhopane	**230**	14a,17a-20S-Methylcholestane	**290**
30-Norhopane	**5600**	14a,17a-20R-Methylcholestane	**1000**
18a(H)-30-Norneohopane-C29Ts	**2700**	14a(H),17a(H)-20S-Ethylcholestane	**730**
17a(H)-Diahopane	**740**	14a(H),17a(H)-20R-Ethylcholestane	**1100**
30-Normoretane	**1200**	14b(H),17b(H)-20R-Cholestane	**930**
18a(H)&18b(H)-Oleananes	**1500**	14b(H),17b(H)-20S-Cholestane	**980**
Hopane	**9600**	14b,17b-20R-Methylcholestane	**960**
Moretane	**1300**	14b,17b-20S-Methylcholestane	**1000**
30-Homohopane-22S	**2300**	14b(H),17b(H)-20R-Ethylcholestane	**1400**
30-Homohopane-22R	**2000**	14b(H),17b(H)-20S-Ethylcholestane	**1000**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	115	50-130

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34710.D
Acq On : 7 Jan 2006 4:37 am
Operator : AC
Sample : 0512110-05
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 12 18:20:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1806

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	50.33	240	60082m	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	51.01	217	57576	2067.86	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 206.79%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.55	191	215248m	3538.98	ng/mL	
84) Hopane (T19)	60.55	191	215123m	3536.93	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	19277m	316.94	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.32	191	13035m	214.31	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.11	191	12896m	212.03	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	18342	301.57	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.39	191	6012	98.85	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.50	191	6258m	102.89	ng/ml	
91) C28 Tricyclic Terpane-22S	54.25	191	5762m	94.74	ng/ml	
92) C28 Tricyclic Terpane-22R	54.44	191	6763m	111.19	ng/ml	
93) C29 Tricyclic Terpane-22S	55.06	191	8025m	131.94	ng/ml	
94) C29 Tricyclic Terpane-22R	55.30	191	6944	114.17	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.47	191	61848m	1016.87	ng/ml	
96) C30 Tricyclic Terpane-22S	56.65	191	6317m	103.86	ng/mL	
97) C30 Tricyclic Terpane-22R	56.91	191	10452	171.85	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.06	191	43717m	718.77	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.35	191	10556m	173.56	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.21	191	5167m	84.95	ng/ml	
101) 30-Norhopane (T15)	59.09	191	125200m	2058.46	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.20	191	60976m	1002.53	ng/ml	
103) 17a(H)-Diahopane (X)	59.35	191	16722	274.93	ng/ml	100
104) 30-Normoretane (T17)	59.92	191	25912	426.03	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.34	191	33077m	543.83	ng/ml	
106) Moretane (T20)	61.28	191	29257m	481.03	ng/ml	
107) 30-Homohopane-22S (T21)	62.44	191	51934	853.87	ng/ml	100
108) 30-Homohopane-22R (T22)	62.69	191	44015	723.67	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.09	191	30612m	503.30	ng/ml	
110) 30,31-Bishomohopane-22R (T	64.50	191	23068	379.27	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.33	191	17720	291.34	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.98	191	11956	196.57	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.10	191	10581	173.97	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.04	191	6539	107.51	ng/ml	100
115) Pentakishomohopane-22S (T3	72.38	191	7722	126.96	ng/ml	100
116) Pentakishomohopane-22R (T3	73.73	191	7018	115.39	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	13559	486.97	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	7721m	277.30	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.18	217	5853m	210.21	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.21	217	6628m	238.05	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.80	217	22033m	791.32	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.11	217	3674m	131.95	ng/ml	

✓ AMS 1/18/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34710.D
Acq On : 7 Jan 2006 4:37 am
Operator : AC
Sample : 0512110-05
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 12 18:20:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

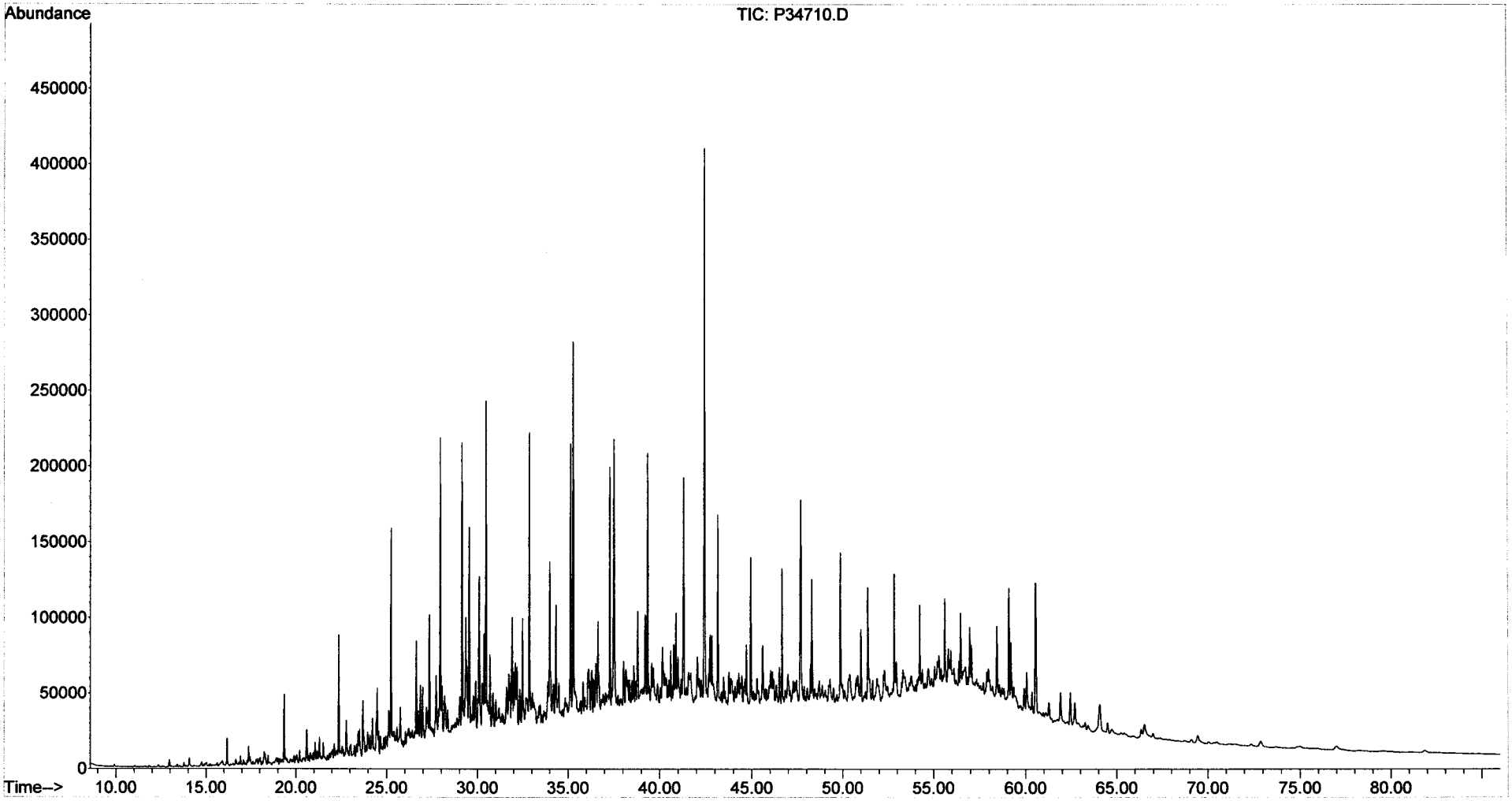
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.39	217	605	21.73	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.57	217	3002m	107.82	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.33	217	10379m	372.76	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.71	217	7551m	271.20	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.70	217	11168m	401.10	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	9563	343.46	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.40	218	10076m	361.88	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.74	218	9858m	354.05	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.84	218	10400m	373.52	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.98	218	14342	515.10	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	10567m	379.52	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34710.D
Acq On : 7 Jan 2006 4:37 am
Operator : AC
Sample : 0512110-05
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 12 18:20:02 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-80 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-06**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/12/06	38.9	5.19	11.1	1	AC

Parameter	Result	Parameter	Result
Naphthalene	9900	Fluoranthene	17000
C1-Naphthalenes	5700	Pyrene	24000
C2-Naphthalenes	13000	C1-Fluoranthenes/Pyrenes	32000
C3-Naphthalenes	19000	C2-Fluoranthenes/Pyrenes	19000
C4-Naphthalenes	20000	C3-Fluoranthenes/Pyrenes	11000
Biphenyl	830	C4-Fluoranthenes/Pyrenes	4600
Dibenzofuran	790	Naphthobenzothiophenes	4300
Acenaphthylene	4200	C1-Naphthobenzothiophenes	6600
Acenaphthene	4200	C2-Naphthobenzothiophenes	6100
Fluorene	2300	C3-Naphthobenzothiophenes	4000
C1-Fluorenes	7200	C4-Naphthobenzothiophenes	2300
C2-Fluorenes	14000	Benz[a]anthracene	14000
C3-Fluorenes	15000	Chrysene/Triphenylene	16000
Anthracene	8400	C1-Chrysenes	20000
Phenanthrene	9600	C2-Chrysenes	14000
C1-Phenanthrenes/Anthracenes	26000	C3-Chrysenes	10000
C2-Phenanthrenes/Anthracenes	36000	C4-Chrysenes	3500
C3-Phenanthrenes/Anthracenes	25000	Benzo[b]fluoranthene	6200
C4-Phenanthrenes/Anthracenes	9800	Benzo[k]fluoranthene	6400
Retene	2300	Benzo[a]fluoranthene	2600
Dibenzothiophene	2000	Benzo[e]pyrene	6400
C1-Dibenzothiophenes	7600	Benzo[a]pyrene	10000
C2-Dibenzothiophenes	14000	Perylene	2000
C3-Dibenzothiophenes	15000	Indeno[1,2,3-cd]pyrene	4600
C4-Dibenzothiophenes	8100	Dibenz[a,h]anthracene	1400
Benzo(b)fluorene	4400	Benzo[g,h,i]perylene	4600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	103	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	90	50-130

N/A - Not Applicable

01/18/06 10:32

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-80 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-06**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/12/06	38.9	5.19	11.1	1	AC

Parameter	Result
Carbazole	380

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	103	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	90	50-130

N/A - Not Applicable

01/18/06 10:32

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43192.D
Acq On : 12 Jan 2006 9:27 pm
Operator : AC
Sample : 0512110-06
Misc : 1X RERUN
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 08:43:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

MS for WW 1-18-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.69	164	52493m	500.00	ng/mL	-0.04
72) Chrysene-d12	43.17	240	73816m	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.36	152	184692	1854.57	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 185.46%#			
58) Pyrene-d10	38.25	212	326462m	1318.63	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 131.86%#			
81) Benzo[b]fluoranthene-d12	47.08	264	249579	1614.20	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 161.42%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) Naphthalene	19.79	128	366673m	1798.49	ng/mL	
10) C1-Naphthalenes	22.49	142	211257m	1036.19	ng/mL	
11) C2-Naphthalenes	25.33	156	473261m	2321.29	ng/mL	
12) C3-Naphthalenes	27.68	170	712940m	3496.89	ng/mL	
13) C4-Naphthalenes	30.44	184	762142m	3738.22	ng/mL	
15) 2-Methylnaphthalene	22.49	142	109758m	845.09	ng/mL	
16) 1-Methylnaphthalene	22.91	142	100940	771.48	ng/mL#	100
22) Biphenyl	24.37	154	23639	151.92	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	60117m	533.83	ng/mL	
24) Dibenzofuran	27.46	168	26328	144.63	ng/mL#	74
25) Acenaphthylene	26.07	152	172479m	755.99	ng/mL	
26) Acenaphthene	26.81	153	105740m	756.48	ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.37	170	43427m	376.85	ng/mL	
28) Fluorene	28.83	166	63862m	426.48	ng/mL	
29) C1-Fluorenes	31.07	180	197507m	1318.98	ng/mL	
30) C2-Fluorenes	33.25	194	393756m	2629.56	ng/mL	
31) C3-Fluorenes	35.25	208	401041m	2678.21	ng/mL	
32) Dibenzothiophene	32.16	184	80209	361.32	ng/mL#	19
36) OTP	34.38	198	62289	280.60	ng/mL#	100
37) C1-Dibenzothiophenes	33.94	198	369317m	1663.68	ng/mL	
38) C2-Dibenzothiophenes	35.63	212	587501m	2646.55	ng/mL	
39) C3-Dibenzothiophenes	37.44	226	597123m	2689.90	ng/mL	
40) C4-Dibenzothiophenes	39.12	240	325984m	1468.48	ng/mL	
41) Phenanthrene	32.65	178	436438	1747.80	ng/mL	97
47) C1-Phenanthrenes/Anthracen	34.63	192	1169507m	4683.52	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.90	206	1626467m	6513.51	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.74	220	1135116m	4545.80	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.93	234	443385m	1775.62	ng/mL	
52) Retene	39.66	234	26277m	410.58	ng/mL	
53) Anthracene	32.83	178	349085m	1531.04	ng/mL	
54) Carbazole	33.51	167	12375m	68.48	ng/mL	
55) 1-Methylphenanthrene	35.17	192	187312	1136.75	ng/mL	99
56) Fluoranthene	37.44	202	797559m	3098.57	ng/mL	
57) Benzo(b)fluorene	39.96	216	120092	796.56	ng/mL	95
59) Pyrene	38.33	202	1169884	4381.10	ng/mL	100
60) C1-Fluoranthenes/Pyrenes	39.72	216	1550100m	5804.97	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.19	230	944504m	3537.07	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.66	244	524920m	1965.77	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.91	258	226211m	847.14	ng/mL	
64) Naphthobenzothiophene	42.18	234	116684m	480.62	ng/ml	

KMS 1/18/06

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43192.D
Acq On : 12 Jan 2006 9:27 pm
Operator : AC
Sample : 0512110-06
Misc : 1X RERUN
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 08:43:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

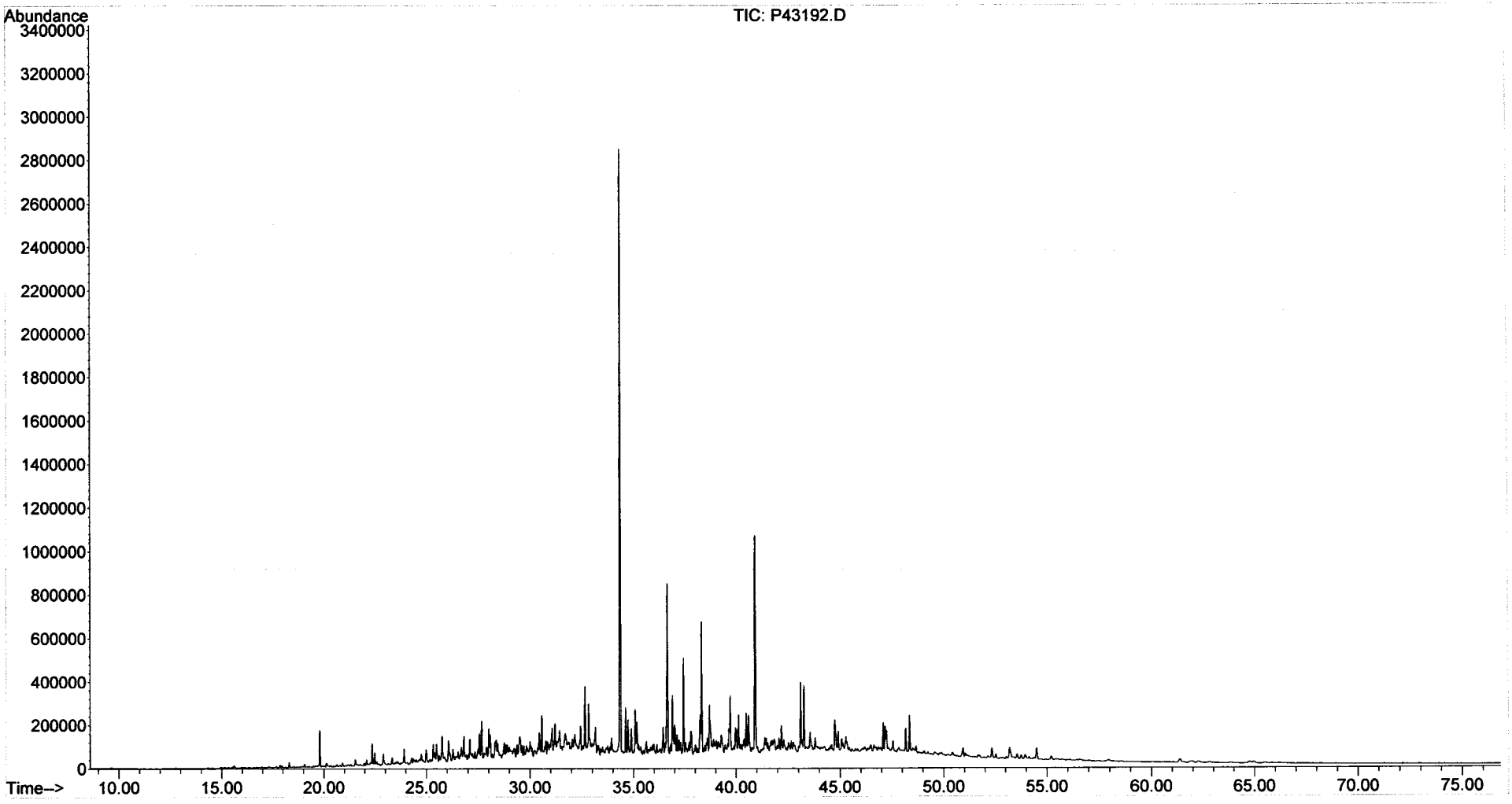
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.18	234	117000m	481.92	ng/mL	
66) Naphthobenzothiophene-1,2-	42.52	234	32236m	132.78	ng/mL	
67) Naphthobenzothiophene-2,3-	42.82	234	40173m	165.47	ng/mL	
68) C1-Naphthobenzothiophenes	43.58	248	293206m	1207.71	ng/ml	
69) C2-Naphthobenzothiophenes	45.09	262	270377m	1113.68	ng/ml	
70) C3-Naphthobenzothiophenes	47.19	276	175135m	721.38	ng/ml	
71) C4-Naphthobenzothiophenes	48.28	290	99725m	410.77	ng/mL	
73) Benz[a]anthracene	43.11	228	464546m	2645.94	ng/mL	
74) Chrysene	43.27	228	509691m	2860.51	ng/mL	
75) Chrysene/Triphenylene	43.27	228	515986m	2895.83	ng/mL	
76) C1-Chrysenes	44.75	242	663648m	3724.55	ng/mL	
77) C2-Chrysenes	46.46	256	453733m	2546.46	ng/mL	
78) BBF-d12 Surr BKGD	47.07	256	14081	79.03	ng/mL	100
79) C3-Chrysenes	48.05	270	327462m	1837.79	ng/mL	
80) C4-Chrysenes	49.65	284	112630m	632.11	ng/mL	
82) Benzo[b]fluoranthene	47.16	252	205886	1128.38	ng/mL	99
83) Benzo[k]fluoranthene	47.23	252	238987	1161.12	ng/mL	98
84) Benzo[a]fluoranthene	47.55	252	96631m	469.48	ng/mL	
85) Benzo[e]pyrene	48.17	252	212528	1155.75	ng/mL	95
86) Benzo[a]pyrene	48.35	252	336621	1899.16	ng/mL	96
87) Perylene	48.66	252	64734m	368.81	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.19	276	139321m	846.30	ng/mL	
89) Dibenz[a,h]anthracene	53.25	278	43447m	255.45	ng/mL	
90) Benzo[g,h,i]perylene	54.50	276	156112	832.17	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43192.D
Acq On : 12 Jan 2006 9:27 pm
Operator : AC
Sample : 0512110-06
Misc : 1X RERUN
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 08:43:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 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-80 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-06**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	38.9	5.19	5.56	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1600**	30,31-Bishomohopane-22S	**2200**
C24 Tricyclic Terpane	**950**	30,31-Bishomohopane-22R	**1600**
C25 Tricyclic Terpane	**960**	30,31-Trishomohopane-22S	**1400**
C24 Tetracyclic Terpane	**730**	30,31-Trishomohopane-22R	**960**
C26 Tricyclic Terpane-22S	**410**	Tetrakishomohopane-22S	**860**
C26 Tricyclic Terpane-22R	**420**	Tetrakishomohopane-22R	**600**
C28 Tricyclic Terpane-22S	**460**	Pentakishomohopane-22S	**730**
C28 Tricyclic Terpane-22R	**470**	Pentakishomohopane-22R	**700**
C29 Tricyclic Terpane-22S	**600**	13b(H),17a(H)-20S-Diacholestane	**1600**
C29 Tricyclic Terpane-22R	**560**	13b(H),17a(H)-20R-Diacholestane	**980**
18a-22,29,30-Trisnorneohopane-TS	**2000**	13b,17a-20S-Methyldiacholestane	**760**
C30 Tricyclic Terpane-22S	**500**	14a(H),17a(H)-20S-Cholestane	**680**
C30 Tricyclic Terpane-22R	**650**	14a(H),17a(H)-20R-Cholestane	**3000**
17a(H)-22,29,30-Trisnorhopane-TM	**2500**	13b,17a-20R-Ethyldiacholestane	**570**
17a/b,21b/a 28,30-Bisnorhopane	**720**	13a,17b-20S-Ethyldiacholestane	**150**
17a(H),21b(H)-25-Norhopane	**480**	14a,17a-20S-Methylcholestane	**420**
30-Norhopane	**7100**	14a,17a-20R-Methylcholestane	**1200**
18a(H)-30-Norneohopane-C29Ts	**2100**	14a(H),17a(H)-20S-Ethylcholestane	**1100**
17a(H)-Diahopane	**490**	14a(H),17a(H)-20R-Ethylcholestane	**1500**
30-Normoretane	**1400**	14b(H),17b(H)-20R-Cholestane	**1200**
18a(H)&18b(H)-Oleananes	**1300**	14b(H),17b(H)-20S-Cholestane	**1300**
Hopane	**11000**	14b,17b-20R-Methylcholestane	**1400**
Moretane	**1800**	14b,17b-20S-Methylcholestane	**1400**
30-Homohopane-22S	**3400**	14b(H),17b(H)-20R-Ethylcholestane	**2000**
30-Homohopane-22R	**2900**	14b(H),17b(H)-20S-Ethylcholestane	**1600**

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

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34711.D
Acq On : 7 Jan 2006 6:16 am
Operator : AC
Sample : 0512110-06
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 12 18:23:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1-18-06

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	50.34	240	56521m	500.00	ng/mL	0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	51.01	217	103115	3936.73	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	393.67%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.55	191	235313m	4112.63	ng/mL	
84) Hopane (T19)	60.55	191	237368m	4148.54	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	34207m	597.84	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.32	191	19824	346.47	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.12	191	19863m	347.15	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	15235m	266.27	ng/ml	
89) C26 Tricyclic Terpane-22S	51.39	191	8523m	148.96	ng/ml	
90) C26 Tricyclic Terpane-22R	51.50	191	8840m	154.50	ng/ml	
91) C28 Tricyclic Terpane-22S	54.25	191	9561m	167.10	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	9755m	170.49	ng/ml	
93) C29 Tricyclic Terpane-22S	55.06	191	12547m	219.29	ng/ml	
94) C29 Tricyclic Terpane-22R	55.30	191	11576	202.32	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.47	191	42383m	740.74	ng/ml	
96) C30 Tricyclic Terpane-22S	56.65	191	10325	180.45	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.91	191	13506	236.05	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.06	191	52221m	912.68	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.37	191	14862m	259.75	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.21	191	10038	175.44	ng/ml	100
101) 30-Norhopane (T15)	59.09	191	147991m	2586.48	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.20	191	43043m	752.27	ng/ml	
103) 17a(H)-Diahopane (X)	59.35	191	10221	178.64	ng/ml	100
104) 30-Normoretane (T17)	59.93	191	29678	518.69	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.35	191	26780m	468.04	ng/ml	
106) Moretane (T20)	61.28	191	38295m	669.29	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	69837	1220.56	ng/ml	100
108) 30-Homohopane-22R (T22)	62.70	191	60375	1055.19	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.09	191	46286m	808.95	ng/ml	
110) 30,31-Bishomohopane-22R (T	64.50	191	32721	571.87	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.33	191	28811	503.54	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.99	191	20077	350.89	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.11	191	17807	311.22	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.04	191	12573	219.74	ng/ml	100
115) Pentakishomohopane-22S (T3	72.39	191	15193m	265.53	ng/ml	
116) Pentakishomohopane-22R (T3	73.74	191	14473	252.95	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	15516m	592.37	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.35	217	9367m	357.61	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.19	217	7227m	275.91	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.22	217	6487m	247.66	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.80	217	28902	1103.42	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.11	217	5399m	206.12	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34711.D
Acq On : 7 Jan 2006 6:16 am
Operator : AC
Sample : 0512110-06
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 12 18:23:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

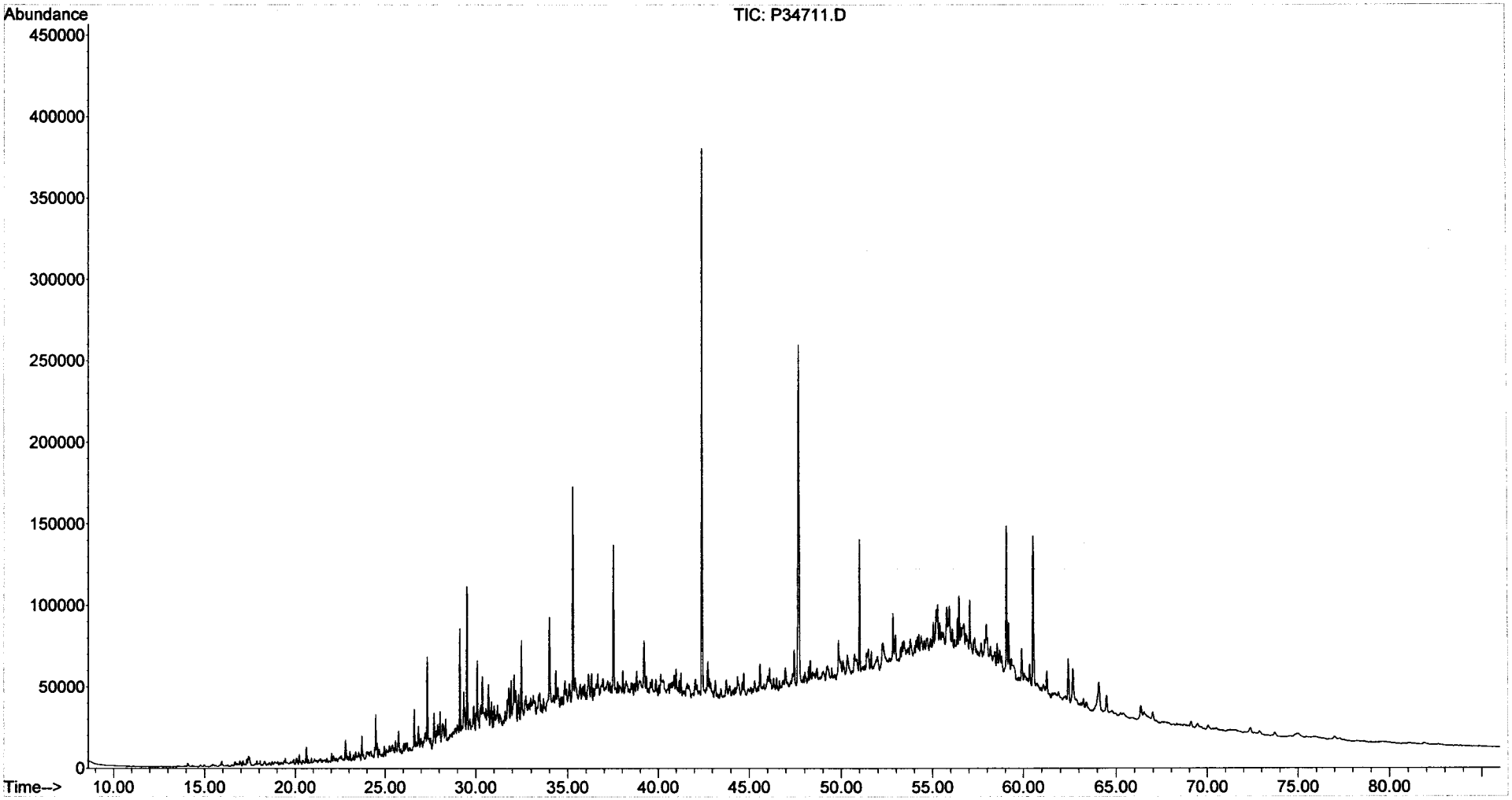
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.40	217	1441m	55.01 ng/ml	
125) 14a,17a-20S-Methylcholesta	56.57	217	4036m	154.09 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.34	217	11894m	454.09 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.72	217	10567m	403.43 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.70	217	14354	548.01 ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	11728	447.75 ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	12426	474.40 ng/ml	100
131) 14b,17b-20R-Methylcholesta	56.74	218	12917m	493.15 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.84	218	13592m	518.92 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.99	218	19200	733.02 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	15257m	582.48 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34711.D
Acq On : 7 Jan 2006 6:16 am
Operator : AC
Sample : 0512110-06
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 12 18:23:28 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-79 (2.5-3.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-07**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	43.9	5.23	17.8625	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	160000	E	Fluoranthene	62000	
C1-Naphthalenes	110000	E	Pyrene	98000	E
C2-Naphthalenes	150000		C1-Fluoranthenes/Pyrenes	140000	
C3-Naphthalenes	140000		C2-Fluoranthenes/Pyrenes	80000	
C4-Naphthalenes	81000		C3-Fluoranthenes/Pyrenes	40000	
Biphenyl	11000		C4-Fluoranthenes/Pyrenes	15000	
Dibenzofuran	5700		Naphthobenzothiophenes	17000	
Acenaphthylene	17000		C1-Naphthobenzothiophenes	24000	
Acenaphthene	46000		C2-Naphthobenzothiophenes	20000	
Fluorene	31000		C3-Naphthobenzothiophenes	11000	
C1-Fluorenes	53000		C4-Naphthobenzothiophenes	5200	
C2-Fluorenes	64000		Benz[a]anthracene	57000	
C3-Fluorenes	43000		Chrysene/Triphenylene	61000	
Anthracene	47000		C1-Chrysenes	82000	
Phenanthrene	130000	E	C2-Chrysenes	53000	
C1-Phenanthrenes/Anthracenes	180000		C3-Chrysenes	33000	
C2-Phenanthrenes/Anthracenes	150000		C4-Chrysenes	10000	
C3-Phenanthrenes/Anthracenes	71000		Benzo[b]fluoranthene	20000	
C4-Phenanthrenes/Anthracenes	24000		Benzo[k]fluoranthene	22000	
Retene	4100		Benzo[a]fluoranthene	12000	
Dibenzothiophene	18000		Benzo[e]pyrene	22000	
C1-Dibenzothiophenes	44000		Benzo[a]pyrene	40000	
C2-Dibenzothiophenes	56000		Perylene	7100	
C3-Dibenzothiophenes	39000		Indeno[1,2,3-cd]pyrene	16000	
C4-Dibenzothiophenes	17000		Dibenz[a,h]anthracene	5500	
Benzo(b)fluorene	16000		Benzo[g,h,i]perylene	16000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	75	50-130
Benzo[b]fluoranthene-d12	85	50-130

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

01/18/06 10:59

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-79 (2.5-3.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-07**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	43.9	5.23	17.8625	1	AC

Parameter	Result
Carbazole	1200

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	105	50-130
Pyrene-d10	75	50-130
Benzo[b]fluoranthene-d12	85	50-130

N/A - Not Applicable

01/18/06 11:00

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43098.D
Acq On : 7 Jan 2006 9:14 am
Operator : AC
Sample : 0512110-07
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 12 09:14:13 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 for MD 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	53668m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.20	240	77427	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.38	152	120100	1179.57 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 117.96%		
58) Pyrene-d10	38.28	212	213122m	841.98 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 84.20%		
81) Benzo[b]fluoranthene-d12	47.11	264	154954	955.45 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 95.55%		
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	19.81	128	4251607m	20397.06 ng/mL E	
10) C1-Naphthalenes	22.51	142	2825441m	13555.04 ng/mL E	
11) C2-Naphthalenes	25.36	156	3942096m	18912.18 ng/mL	
12) C3-Naphthalenes	27.70	170	3617596m	17355.40 ng/mL	
13) C4-Naphthalenes	30.46	184	2158575m	10355.75 ng/mL	
15) 2-Methylnaphthalene	22.51	142	1569183m	11817.55 ng/mL E	
16) 1-Methylnaphthalene	22.93	142	1254124	9375.33 ng/mL#	100
22) Biphenyl	24.39	154	225300m	1416.24 ng/mL	
23) 2,6-Dimethylnaphthalene	25.01	156	490352m	4258.89 ng/mL	
24) Dibenzofuran	27.48	168	135840m	729.87 ng/mL	
25) Acenaphthylene	26.10	152	507569	2176.00 ng/mL#	100
26) Acenaphthene	26.84	153	851152	5955.95 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.39	170	214134m	1817.53 ng/mL	
28) Fluorene	28.86	166	609201m	3979.26 ng/mL	
29) C1-Fluorenes	31.23	180	1039488m	6789.86 ng/mL	
30) C2-Fluorenes	33.28	194	1258812m	8222.47 ng/mL	
31) C3-Fluorenes	35.27	208	843576m	5510.18 ng/mL	
32) Dibenzothiophene	32.18	184	539862m	2378.70 ng/mL	
36) OTP	34.38	198	32736	144.24 ng/mL#	100
37) C1-Dibenzothiophenes	33.96	198	1324239m	5834.77 ng/mL	
38) C2-Dibenzothiophenes	36.02	212	1645834m	7251.77 ng/mL	
39) C3-Dibenzothiophenes	37.46	226	1124414m	4954.32 ng/mL	
40) C4-Dibenzothiophenes	39.15	240	483938m	2132.30 ng/mL	
41) Phenanthrene	32.69	178	4200793	16454.60 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.77	192	5915112m	23169.62 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.93	206	4893833m	19169.25 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	2320824m	9090.72 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.95	234	800605m	3135.99 ng/mL	
52) Retene	39.69	234	34241m	523.31 ng/mL	
53) Anthracene	32.86	178	1398929m	6001.20 ng/mL	
54) Carbazole	33.52	167	29078m	157.39 ng/mL	
55) 1-Methylphenanthrene	35.20	192	948507m	5630.24 ng/mL	
56) Fluoranthene	37.48	202	2111296m	8022.95 ng/mL	
57) Benzo(b)fluorene	39.99	216	319391	2072.11 ng/mL	98
59) Pyrene	38.36	202	3442427m	12609.29 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.75	216	4935302m	18077.55 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	2789893m	10219.12 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.68	244	1413611m	5177.93 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	510795m	1870.99 ng/mL	
64) Naphthobenzothiophene	42.21	234	348460m	1403.88 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43098.D
Acq On : 7 Jan 2006 9:14 am
Operator : AC
Sample : 0512110-07
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 12 09:14:13 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

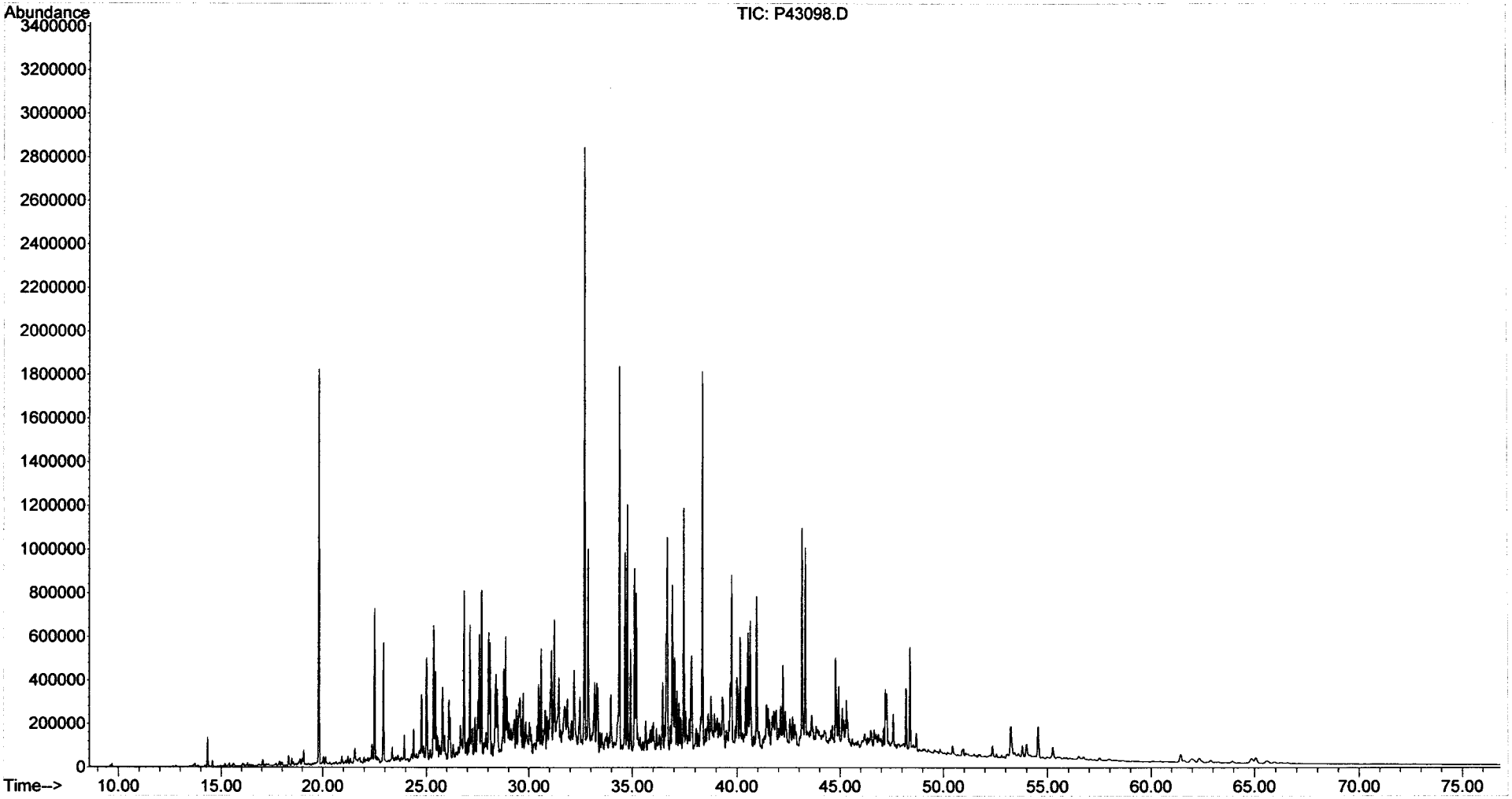
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.21	234	346132m	1394.50 ng/mL	
66) Naphthobenzothiophene-1,2-	42.54	234	95630m	385.28 ng/mL	
67) Naphthobenzothiophene-2,3-	42.84	234	105335m	424.38 ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	756508m	3047.83 ng/ml	
69) C2-Naphthobenzothiophenes	45.11	262	620319m	2499.15 ng/ml	
70) C3-Naphthobenzothiophenes	47.22	276	349860m	1409.52 ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	165262m	665.81 ng/mL	
73) Benz[a]anthracene	43.14	228	1345420m	7305.78 ng/mL	
74) Chrysene	43.30	228	1455730m	7788.88 ng/mL	
75) Chrysene/Triphenylene	43.30	228	1461257m	7818.45 ng/mL	
76) C1-Chrysenes	44.78	242	1977677m	10581.55 ng/mL	
77) C2-Chrysenes	46.49	256	1301451m	6963.41 ng/mL	
78) BBF-d12 Surr BKGD	47.10	256	19973	106.87 ng/mL	100
79) C3-Chrysenes	48.09	270	785934m	4205.14 ng/mL	
80) C4-Chrysenes	49.69	284	245045m	1311.11 ng/mL	
82) Benzo[b]fluoranthene	47.19	252	492333	2572.44 ng/mL	99
83) Benzo[k]fluoranthene	47.26	252	605769	2805.86 ng/mL	97
84) Benzo[a]fluoranthene	47.58	252	317746m	1471.77 ng/mL	
85) Benzo[e]pyrene	48.20	252	542932	2814.83 ng/mL	95
86) Benzo[a]pyrene	48.39	252	944454	5079.94 ng/mL	96
87) Perylene	48.70	252	167935m	912.15 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.24	276	364735m	2112.23 ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	127085m	712.35 ng/mL	
90) Benzo[g,h,i]perylene	54.56	276	405127	2058.85 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43098.D
Acq On : 7 Jan 2006 9:14 am
Operator : AC
Sample : 0512110-07
Misc : 1X
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 12 09:14:13 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-79 (2.5-3.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-07E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/04/06	43.9	5.23	17.8625	2	AC

Parameter	Result	
Naphthalene	**140000**	
C1-Naphthalenes	**94000**	
C2-Naphthalenes	26	U
C3-Naphthalenes	26	U
C4-Naphthalenes	26	U
Biphenyl	14	U
Dibenzofuran	18	U
Acenaphthylene	28	U
Acenaphthene	18	U
Fluorene	18	U
C1-Fluorenes	18	U
C2-Fluorenes	18	U
C3-Fluorenes	18	U
Anthracene	21	U
Phenanthrene	**110000**	
C1-Phenanthrenes/Anthracenes	23	U
C2-Phenanthrenes/Anthracenes	23	U
C3-Phenanthrenes/Anthracenes	23	U
C4-Phenanthrenes/Anthracenes	23	U
Retene	23	U
Dibenzothiophene	17	U
C1-Dibenzothiophenes	17	U
C2-Dibenzothiophenes	17	U
C3-Dibenzothiophenes	17	U
C4-Dibenzothiophenes	17	U
Benzo(b)fluorene	16	U

Parameter	Result	
Fluoranthene	16	U
Pyrene	**85000**	
C1-Fluoranthenes/Pyrenes	14	U
C2-Fluoranthenes/Pyrenes	14	U
C3-Fluoranthenes/Pyrenes	14	U
C4-Fluoranthenes/Pyrenes	14	U
Naphthobenzothiophenes	19	U
C1-Naphthobenzothiophenes	19	U
C2-Naphthobenzothiophenes	19	U
C3-Naphthobenzothiophenes	19	U
C4-Naphthobenzothiophenes	19	U
Benz[a]anthracene	24	U
Chrysene/Triphenylene	17	U
C1-Chrysenes	17	U
C2-Chrysenes	17	U
C3-Chrysenes	17	U
C4-Chrysenes	17	U
Benzo[b]fluoranthene	16	U
Benzo[k]fluoranthene	32	U
Benzo[a]fluoranthene	32	U
Benzo[e]pyrene	21	U
Benzo[a]pyrene	22	U
Perylene	27	U
Indeno[1,2,3-cd]pyrene	37	U
Dibenz[a,h]anthracene	30	U
Benzo[g,h,i]perylene	27	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	68	50-130
Benzo[b]fluoranthene-d12	79	50-130

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

01/18/06 10:42

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42824.D
Acq On : 4 Jan 2006 12:52 am
Operator : AC
Sample : 0512110-07-RE
Misc : 2X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 11 20:14:36 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 for WW 1-12-06

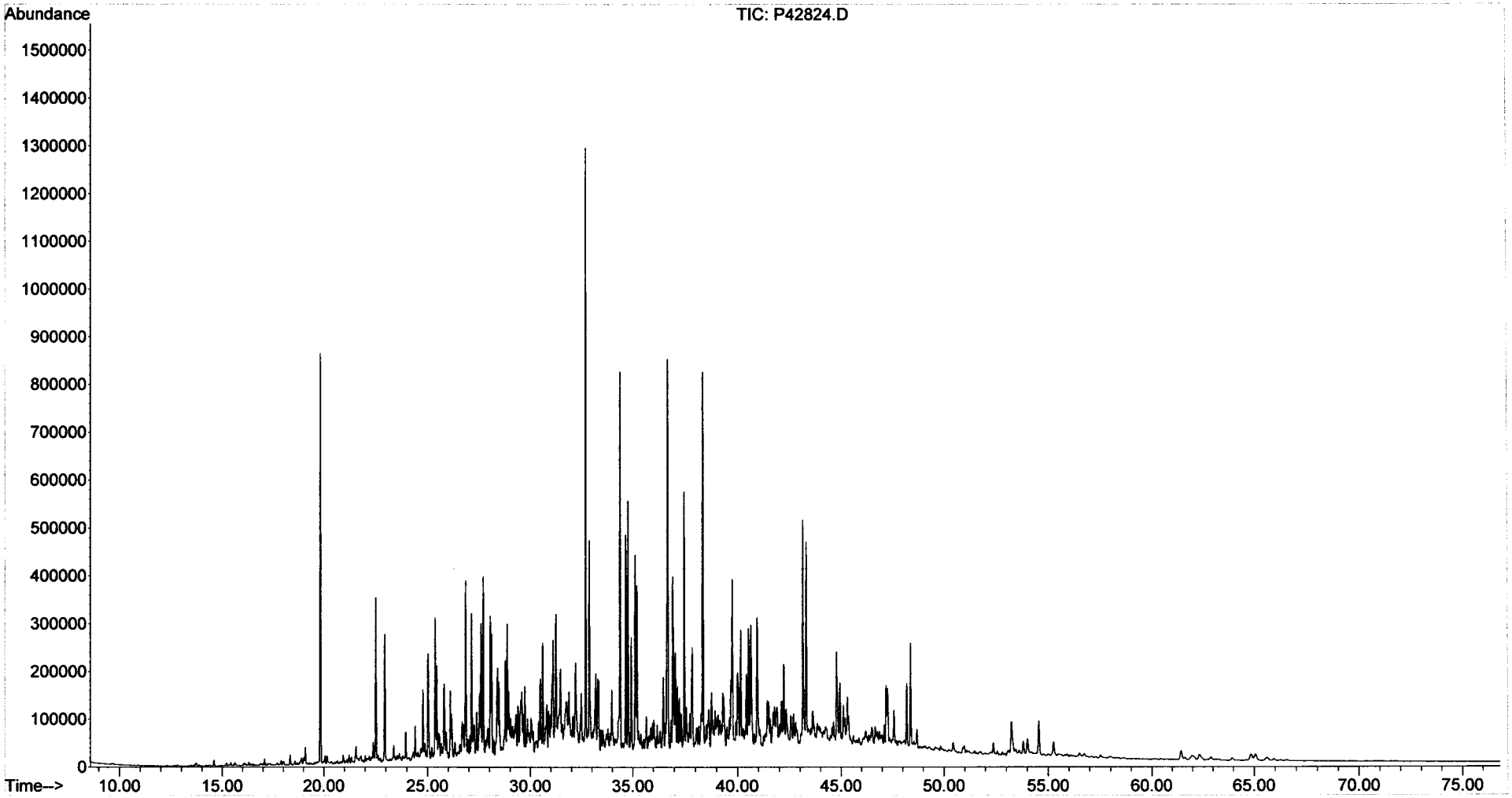
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	56304m	500.00	ng/mL	0.00
72) Chrysene-d12	43.21	240	80721m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	55767m	522.08	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 52.21%			
58) Pyrene-d10	38.29	212	101398m	381.84	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 38.18%#			
81) Benzo[b]fluoranthene-d12	47.11	264	74628m	441.38	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 44.14%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.83	128	1961834m	8971.25	ng/mL	
10) C1-Naphthalenes	22.52	142	1320582m	6038.87	ng/mL	
15) 2-Methylnaphthalene	22.52	142	731049m	5247.79	ng/mL	
41) Phenanthrene	32.70	178	1909036m	7127.65	ng/mL	
59) Pyrene	38.37	202	1561112	5450.50	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42824.D
Acq On : 4 Jan 2006 12:52 am
Operator : AC
Sample : 0512110-07-RE
Misc : 2X
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 11 20:14:36 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-79 (2.5-3.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-07**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	01/07/06	43.9	5.23	7.15	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**1500**	30,31-Bishomohopane-22S	**2200**
C24 Tricyclic Terpane	**900**	30,31-Bishomohopane-22R	**1600**
C25 Tricyclic Terpane	**930**	30,31-Trishomohopane-22S	**1400**
C24 Tetracyclic Terpane	**780**	30,31-Trishomohopane-22R	**920**
C26 Tricyclic Terpane-22S	**400**	Tetrakishomohopane-22S	**810**
C26 Tricyclic Terpane-22R	**430**	Tetrakishomohopane-22R	**480**
C28 Tricyclic Terpane-22S	**470**	Pentakishomohopane-22S	**620**
C28 Tricyclic Terpane-22R	**460**	Pentakishomohopane-22R	**590**
C29 Tricyclic Terpane-22S	**630**	13b(H),17a(H)-20S-Diacholestane	**1700**
C29 Tricyclic Terpane-22R	**550**	13b(H),17a(H)-20R-Diacholestane	**1000**
18a-22,29,30-Trisnorneohopane-TS	**2400**	13b,17a-20S-Methyldiacholestane	**850**
C30 Tricyclic Terpane-22S	**480**	14a(H),17a(H)-20S-Cholestane	**1100**
C30 Tricyclic Terpane-22R	**660**	14a(H),17a(H)-20R-Cholestane	**3500**
17a(H)-22,29,30-Trisnorhopane-TM	**2700**	13b,17a-20R-Ethyldiacholestane	**570**
17a/b,21b/a 28,30-Bisnorhopane	**750**	13a,17b-20S-Ethyldiacholestane	**160**
17a(H),21b(H)-25-Norhopane	**450**	14a,17a-20S-Methylcholestane	**490**
30-Norhopane	**7600**	14a,17a-20R-Methylcholestane	**1700**
18a(H)-30-Norneohopane-C29Ts	**2500**	14a(H),17a(H)-20S-Ethylcholestane	**1300**
17a(H)-Diahopane	**590**	14a(H),17a(H)-20R-Ethylcholestane	**1900**
30-Normoretane	**1700**	14b(H),17b(H)-20R-Cholestane	**1600**
18a(H)&18b(H)-Oleananes	**1300**	14b(H),17b(H)-20S-Cholestane	**1600**
Hopane	**13000**	14b,17b-20R-Methylcholestane	**1700**
Moretane	**2000**	14b,17b-20S-Methylcholestane	**1700**
30-Homohopane-22S	**3400**	14b(H),17b(H)-20R-Ethylcholestane	**2400**
30-Homohopane-22R	**3000**	14b(H),17b(H)-20S-Ethylcholestane	**1800**

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

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34712.D
Acq On : 7 Jan 2006 7:55 am
Operator : AC
Sample : 0512110-07
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 12 18:26:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1/18-06

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	50.33	240	59775m	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	51.01	217	79935	2885.63	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	288.56%#	

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.55	191	248863m	4112.67	ng/mL	
84) Hopane (T19)	60.55	191	248663m	4109.37	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	29039	479.89	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.32	191	17580m	290.52	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.16	191	18146m	299.88	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	15093	249.42	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.39	191	7694	127.15	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.50	191	8341m	137.84	ng/ml	
91) C28 Tricyclic Terpane-22S	54.25	191	9050m	149.56	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	8912m	147.28	ng/ml	
93) C29 Tricyclic Terpane-22S	55.06	191	12200m	201.62	ng/ml	
94) C29 Tricyclic Terpane-22R	55.29	191	10740	177.49	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.47	191	46286	764.92	ng/ml	100
96) C30 Tricyclic Terpane-22S	56.65	191	9312	153.89	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.91	191	12870m	212.69	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.06	191	52818m	872.86	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.36	191	14574m	240.85	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.21	191	8687m	143.56	ng/ml	
101) 30-Norhopane (T15)	59.09	191	146703m	2424.39	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.20	191	49075m	811.01	ng/ml	
103) 17a(H)-Diahopane (X)	59.35	191	11433	188.94	ng/ml	100
104) 30-Normoretane (T17)	59.93	191	32682	540.10	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.34	191	25759m	425.69	ng/ml	
106) Moretane (T20)	61.28	191	38215m	631.54	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	66644	1101.35	ng/ml	100
108) 30-Homohopane-22R (T22)	62.70	191	57439	949.23	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.10	191	42961	709.97	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.50	191	30898	510.62	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.33	191	26407	436.40	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.99	191	17867m	295.27	ng/ml	
113) Tetrakishomohopane-22S (T3	69.11	191	15772	260.65	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.04	191	9343	154.40	ng/ml	100
115) Pentakishomohopane-22S (T3	72.39	191	12029	198.79	ng/ml	100
116) Pentakishomohopane-22R (T3	73.75	191	11541	190.72	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	14825	535.18	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	8948m	323.02	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.19	217	7566	273.13	ng/ml	100
121) 14a(H),17a(H)-20S-Cholesta	55.21	217	9382m	338.69	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.80	217	31443	1135.08	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.11	217	5028	181.51	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34712.D
Acq On : 7 Jan 2006 7:55 am
Operator : AC
Sample : 0512110-07
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 12 18:26:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

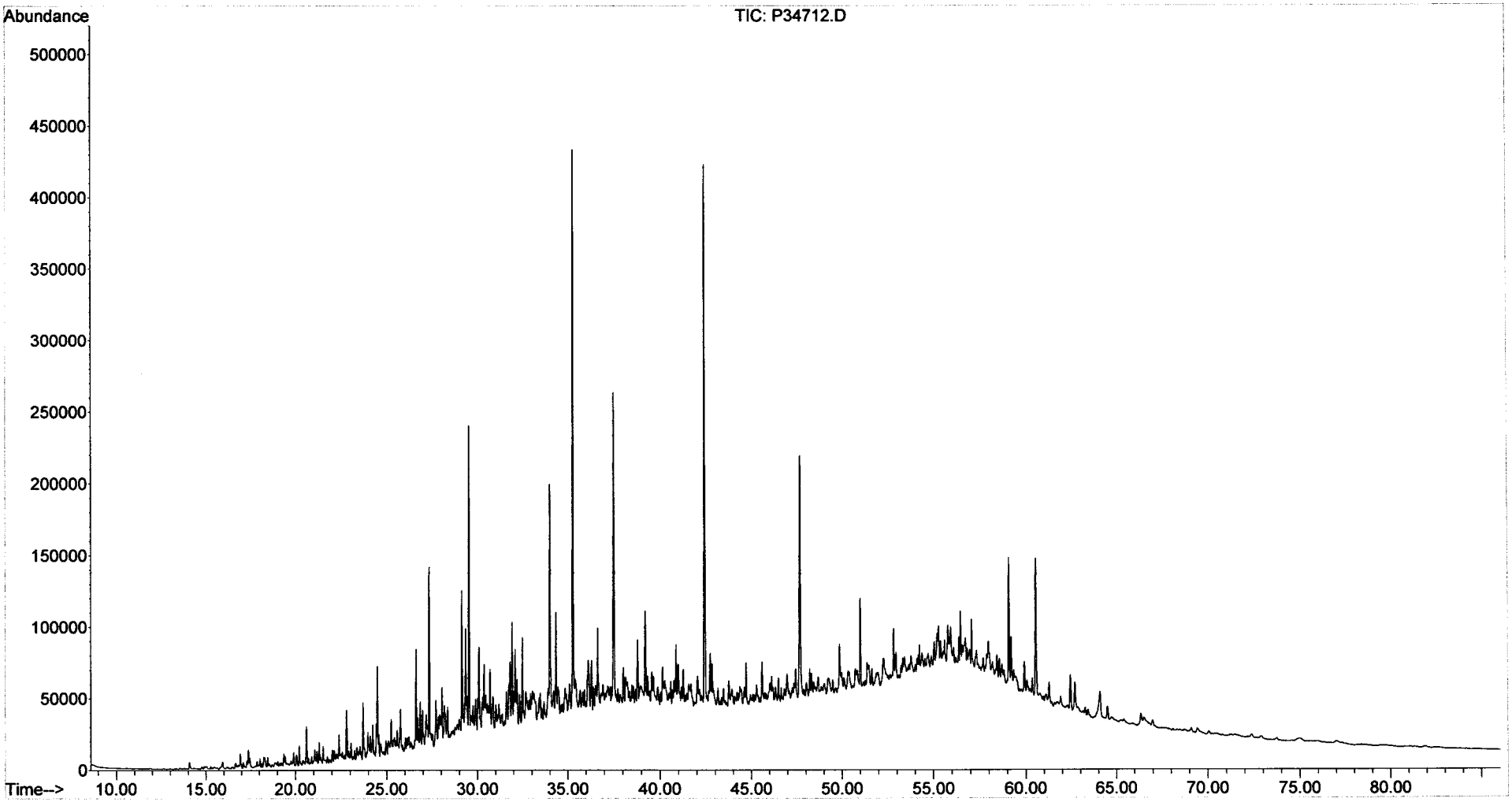
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.39	217	1391	50.21 ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.57	217	4356m	157.25 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.34	217	14979m	540.74 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.72	217	11245m	405.94 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.70	217	16576m	598.39 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	14057	507.45 ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	14658m	529.15 ng/ml	
131) 14b,17b-20R-Methylcholesta	56.74	218	14741m	532.15 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.84	218	14977m	540.67 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.99	218	20996	757.95 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	16309m	588.75 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34712.D
Acq On : 7 Jan 2006 7:55 am
Operator : AC
Sample : 0512110-07
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 12 18:26:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-81 (8-11)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-08**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/07/06	64.4	5.16	22.725	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	470000	E	Fluoranthene	94000	E
C1-Naphthalenes	390000	E	Pyrene	160000	E
C2-Naphthalenes	310000	E	C1-Fluoranthenes/Pyrenes	220000	
C3-Naphthalenes	180000		C2-Fluoranthenes/Pyrenes	120000	
C4-Naphthalenes	80000		C3-Fluoranthenes/Pyrenes	62000	
Biphenyl	30000		C4-Fluoranthenes/Pyrenes	21000	
Dibenzofuran	11000		Naphthobenzothiophenes	25000	
Acenaphthylene	29000		C1-Naphthobenzothiophenes	34000	
Acenaphthene	150000	E	C2-Naphthobenzothiophenes	27000	
Fluorene	73000	E	C3-Naphthobenzothiophenes	14000	
C1-Fluorenes	99000		C4-Naphthobenzothiophenes	6500	
C2-Fluorenes	92000		Benz[a]anthracene	85000	E
C3-Fluorenes	58000		Chrysene/Triphenylene	90000	E
Anthracene	90000	E	C1-Chrysenes	120000	
Phenanthrene	230000	E	C2-Chrysenes	80000	
C1-Phenanthrenes/Anthracenes	300000	E	C3-Chrysenes	50000	
C2-Phenanthrenes/Anthracenes	220000		C4-Chrysenes	14000	
C3-Phenanthrenes/Anthracenes	100000		Benzo[b]fluoranthene	29000	
C4-Phenanthrenes/Anthracenes	32000		Benzo[k]fluoranthene	28000	
Retene	5000		Benzo[a]fluoranthene	16000	
Dibenzothiophene	38000		Benzo[e]pyrene	31000	
C1-Dibenzothiophenes	68000		Benzo[a]pyrene	57000	
C2-Dibenzothiophenes	76000		Perylene	10000	
C3-Dibenzothiophenes	49000		Indeno[1,2,3-cd]pyrene	22000	
C4-Dibenzothiophenes	19000		Dibenz[a,h]anthracene	7800	
Benzo(b)fluorene	27000		Benzo[g,h,i]perylene	22000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	109	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	92	50-130

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

01/18/06 11:01

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-81 (8-11)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-08**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/07/06	64.4	5.16	22.725	1	AC

Parameter	Result
Carbazole	2300

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	109	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	92	50-130

N/A - Not Applicable

01/18/06 11:02

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43100.D
Acq On : 7 Jan 2006 10:43 am
Operator : AC
Sample : 0512110-08
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 12 09:00:39 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 for WD 1/12/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	70085m	500.00	ng/mL	-0.02
72) Chrysene-d12	43.21	240	100129m	500.00	ng/mL	0.01
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.39	152	126983m	955.03	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 95.50%			
58) Pyrene-d10	38.29	212	241090m	729.36	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 72.94%			
81) Benzo[b]fluoranthene-d12	47.13	264	169110	806.32	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 80.63%			
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	19.83	128	18773137m	68967.05	ng/mL	E
10) C1-Naphthalenes	22.53	142	15469345m	56829.88	ng/mL	E
11) C2-Naphthalenes	25.37	156	12280704m	45115.74	ng/mL	E
12) C3-Naphthalenes	27.71	170	7034375m	25842.25	ng/mL	
13) C4-Naphthalenes	30.47	184	3192743m	11729.21	ng/mL	
15) 2-Methylnaphthalene	22.53	142	9127232m	52636.06	ng/mL	E
16) 1-Methylnaphthalene	22.95	142	6339417m	36289.90	ng/mL	E
22) Biphenyl	24.39	154	902840m	4345.88	ng/mL	
23) 2,6-Dimethylnaphthalene	25.02	156	1675129m	11141.08	ng/mL	E
24) Dibenzofuran	27.48	168	400414m	1647.47	ng/mL	
25) Acenaphthylene	26.10	152	1285522m	4220.20	ng/mL	
26) Acenaphthene	26.85	153	3969172m	21268.36	ng/mL	E
27) 2,3,5-Trimethylnaphthalene	28.40	170	438734m	2851.60	ng/mL	
28) Fluorene	28.87	166	2141680m	10712.39	ng/mL	E
29) C1-Fluorenes	31.24	180	2889643m	14453.59	ng/mL	
30) C2-Fluorenes	33.29	194	2688898m	13449.49	ng/mL	
31) C3-Fluorenes	35.28	208	1680827m	8407.26	ng/mL	
32) Dibenzothiophene	32.19	184	1663753m	5613.54	ng/mL	
36) OTP	34.39	198	37214m	125.56	ng/mL	
37) C1-Dibenzothiophenes	33.97	198	2988358m	10082.79	ng/mL	
38) C2-Dibenzothiophenes	36.02	212	3314947m	11184.71	ng/mL	
39) C3-Dibenzothiophenes	37.48	226	2103618m	7097.66	ng/mL	
40) C4-Dibenzothiophenes	39.16	240	820257m	2767.57	ng/mL	
41) Phenanthrene	32.71	178	11104391m	33307.42	ng/mL	E
47) C1-Phenanthrenes/Anthracen	34.78	192	14516702m	43542.59	ng/mL	E
48) C2-Phenanthrenes/Anthracen	36.95	206	10594876m	31779.14	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.78	220	4937182m	14808.99	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.95	234	1543438m	4629.51	ng/mL	
52) Retene	39.70	234	61839m	723.71	ng/mL	
53) Anthracene	32.88	178	4000271m	13140.80	ng/mL	E
54) Carbazole	33.53	167	80838m	335.06	ng/mL	
55) 1-Methylphenanthrene	35.22	192	2437085m	11077.65	ng/mL	E
56) Fluoranthene	37.50	202	4726307m	13752.99	ng/mL	E
57) Benzo(b)fluorene	40.01	216	799528m	3972.04	ng/mL	
59) Pyrene	38.39	202	8096742m	22710.49	ng/mL	E
60) C1-Fluoranthenes/Pyrenes	39.77	216	11246094m	31544.09	ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.23	230	6517823m	18281.79	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.70	244	3208821m	9000.40	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	1089622m	3056.27	ng/mL	
64) Naphthobenzothiophene	42.22	234	741493m	2287.57	ng/ml	

MS 1-12-06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43100.D
Acq On : 7 Jan 2006 10:43 am
Operator : AC
Sample : 0512110-08
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 12 09:00:39 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

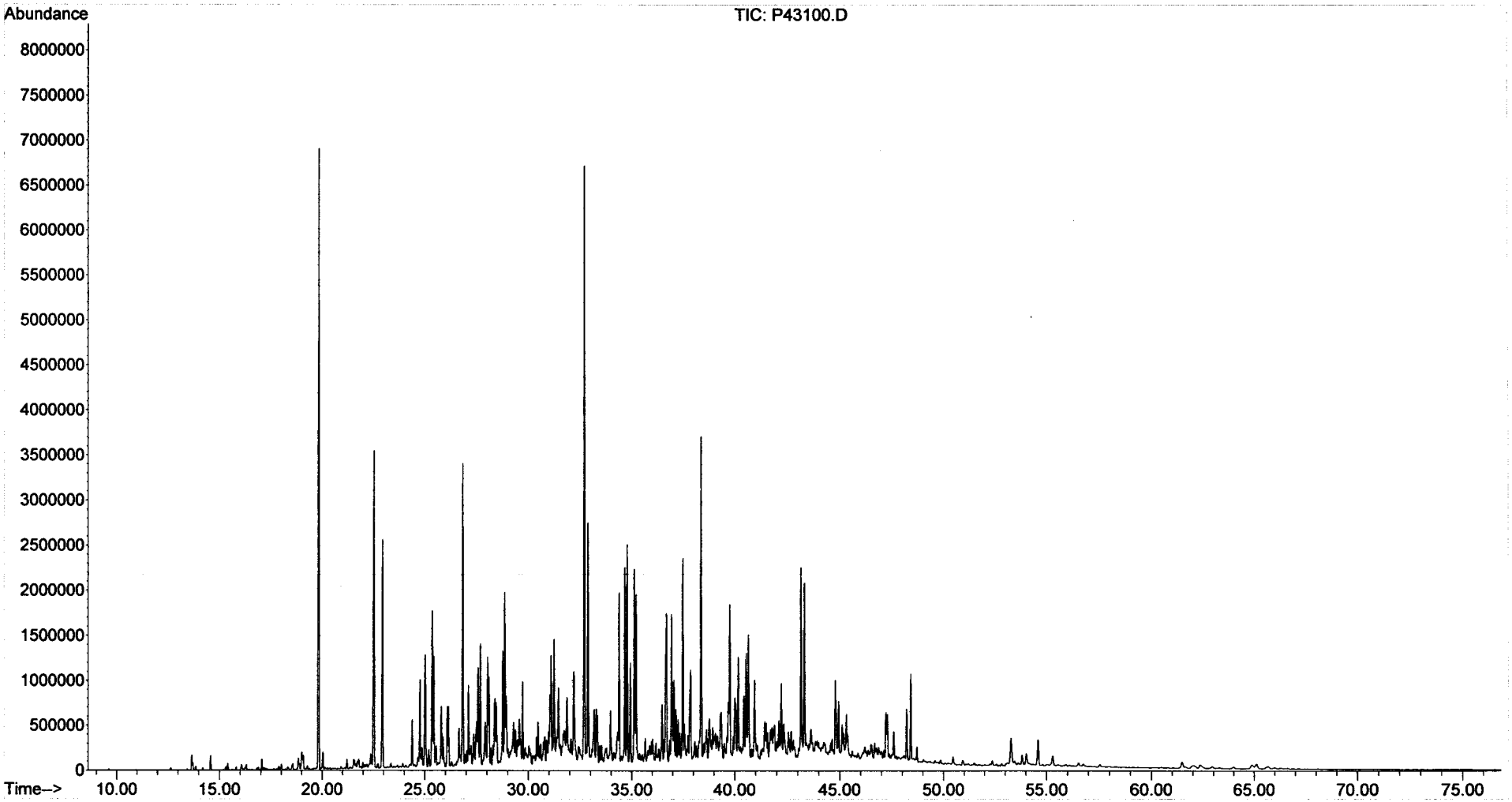
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.22	234	741050m	2286.21	ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	206061m	635.72	ng/mL	
67) Naphthobenzothiophene-2,3-	42.86	234	256031m	789.88	ng/mL	
68) C1-Naphthobenzothiophenes	43.62	248	1626608m	5018.23	ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	1280763m	3951.27	ng/ml	
70) C3-Naphthobenzothiophenes	47.24	276	676899m	2088.29	ng/ml	
71) C4-Naphthobenzothiophenes	48.42	290	306125m	944.42	ng/mL	
73) Benz[a]anthracene	43.16	228	2965994m	12454.07	ng/mL	E
74) Chrysene	43.33	228	3186085m	13182.08	ng/mL	E
75) Chrysene/Triphenylene	43.33	228	3192029m	13206.67	ng/mL	
76) C1-Chrysenes	44.79	242	4278210m	17700.62	ng/mL	
77) C2-Chrysenes	46.50	256	2839613m	11748.59	ng/mL	
78) BBF-d12 Surr BKGD	47.11	256	32087m	132.76	ng/mL	
79) C3-Chrysenes	48.10	270	1768925m	7318.73	ng/mL	
80) C4-Chrysenes	49.60	284	504856m	2088.79	ng/mL	
82) Benzo[b]fluoranthene	47.22	252	1050926	4246.10	ng/mL	97
83) Benzo[k]fluoranthene	47.28	252	1151592	4124.68	ng/mL	95
84) Benzo[a]fluoranthene	47.59	252	631294m	2261.12	ng/mL	
85) Benzo[e]pyrene	48.22	252	1131175	4534.91	ng/mL	95
86) Benzo[a]pyrene	48.41	252	1990276	8277.96	ng/mL	94
87) Perylene	48.72	252	348241m	1462.63	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.28	276	725860m	3250.49	ng/mL	
89) Dibenz[a,h]anthracene	53.31	278	261962m	1135.46	ng/mL	
90) Benzo[g,h,i]perylene	54.59	276	810804	3186.27	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43100.D
Acq On : 7 Jan 2006 10:43 am
Operator : AC
Sample : 0512110-08
Misc : 1X
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 12 09:00:39 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-81 (8-11)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-08E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/04/06	64.4	5.16	22.725	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**360000**		Fluoranthene	**75000**	
C1-Naphthalenes	**300000**		Pyrene	**120000**	
C2-Naphthalenes	**250000**		C1-Fluoranthenes/Pyrenes	61	U
C3-Naphthalenes	110	U	C2-Fluoranthenes/Pyrenes	61	U
C4-Naphthalenes	110	U	C3-Fluoranthenes/Pyrenes	61	U
Biphenyl	62	U	C4-Fluoranthenes/Pyrenes	61	U
Dibenzofuran	81	U	Naphthobenzothiophenes	83	U
Acenaphthylene	120	U	C1-Naphthobenzothiophenes	83	U
Acenaphthene	**120000**		C2-Naphthobenzothiophenes	83	U
Fluorene	**62000**		C3-Naphthobenzothiophenes	83	U
C1-Fluorenes	79	U	C4-Naphthobenzothiophenes	83	U
C2-Fluorenes	79	U	Benz[a]anthracene	**63000**	
C3-Fluorenes	79	U	Chrysene/Triphenylene	**67000**	
Anthracene	**74000**		C1-Chrysenes	74	U
Phenanthrene	**180000**		C2-Chrysenes	74	U
C1-Phenanthrenes/Anthracenes	**240000**		C3-Chrysenes	74	U
C2-Phenanthrenes/Anthracenes	99	U	C4-Chrysenes	74	U
C3-Phenanthrenes/Anthracenes	99	U	Benzo[b]fluoranthene	72	U
C4-Phenanthrenes/Anthracenes	99	U	Benzo[k]fluoranthene	140	U
Retene	99	U	Benzo[a]fluoranthene	140	U
Dibenzothiophene	76	U	Benzo[e]pyrene	94	U
C1-Dibenzothiophenes	76	U	Benzo[a]pyrene	95	U
C2-Dibenzothiophenes	76	U	Perylene	120	U
C3-Dibenzothiophenes	76	U	Indeno[1,2,3-cd]pyrene	160	U
C4-Dibenzothiophenes	76	U	Dibenz[a,h]anthracene	130	U
Benzo(b)fluorene	69	U	Benzo[g,h,i]perylene	120	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	69	50-130
Benzo[b]fluoranthene-d12	79	50-130

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

01/18/06 10:43

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42825.D
Acq On : 4 Jan 2006 2:20 am
Operator : AC
Sample : 0512110-08-RE
Misc : 10X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 11 20:18:02 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 for WD 1-12-06

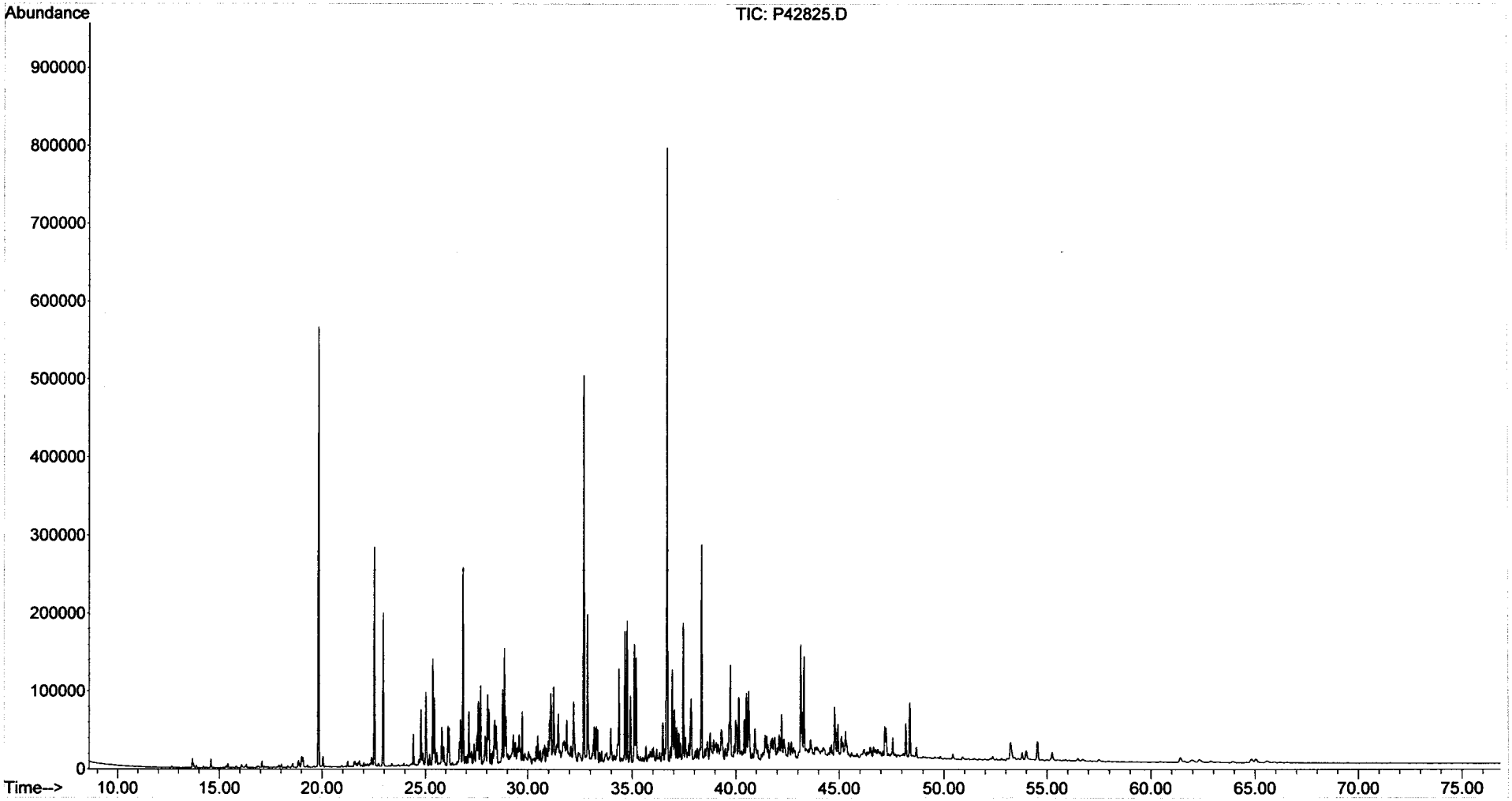
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	62083m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	93863m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	9346	79.35	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 7.93%#			
58) Pyrene-d10	38.28	212	17874m	61.04	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.10%#			
81) Benzo[b]fluoranthene-d12	47.10	264	13628m	69.32	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.93%#			
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	19.83	128	1254819m	5204.01	ng/mL	
10) C1-Naphthalenes	22.52	142	1049602m	4352.93	ng/mL	
11) C2-Naphthalenes	25.36	156	869007m	3603.96	ng/mL	
15) 2-Methylnaphthalene	22.52	142	615473	4006.87	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	434662	2808.93	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	100247m	752.67	ng/mL	
26) Acenaphthene	26.85	153	278425	1684.20	ng/mL	99
28) Fluorene	28.87	166	161236m	910.43	ng/mL	
41) Phenanthrene	32.69	178	755334	2557.63	ng/mL	100
47) C1-Phenanthrenes/Anthracen	34.76	192	1038485m	3516.41	ng/mL	
53) Anthracene	32.87	178	291450	1080.81	ng/mL	100
55) 1-Methylphenanthrene	35.20	192	174828m	897.10	ng/mL	
56) Fluoranthene	37.47	202	333435m	1095.31	ng/mL	
59) Pyrene	38.35	202	538677	1705.68	ng/mL	100
73) Benz[a]anthracene	43.14	228	204669m	916.77	ng/mL	
74) Chrysene	43.30	228	222882m	983.71	ng/mL	
75) Chrysene/Triphenylene	43.30	228	222701m	982.91	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42825.D
Acq On : 4 Jan 2006 2:20 am
Operator : AC
Sample : 0512110-08-RE
Misc : 10X
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 11 20:18:02 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



Form I
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-81 (8-11)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-08**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/07/06	64.4	5.16	5.13	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**790**	30,31-Bishomohopane-22S	**1000**
C24 Tricyclic Terpane	**490**	30,31-Bishomohopane-22R	**740**
C25 Tricyclic Terpane	**490**	30,31-Trishomohopane-22S	**630**
C24 Tetracyclic Terpane	**430**	30,31-Trishomohopane-22R	**420**
C26 Tricyclic Terpane-22S	**210**	Tetrakishomohopane-22S	**370**
C26 Tricyclic Terpane-22R	**220**	Tetrakishomohopane-22R	**250**
C28 Tricyclic Terpane-22S	**230**	Pentakishomohopane-22S	**290**
C28 Tricyclic Terpane-22R	**260**	Pentakishomohopane-22R	**280**
C29 Tricyclic Terpane-22S	**300**	13b(H),17a(H)-20S-Diacholestane	**940**
C29 Tricyclic Terpane-22R	**290**	13b(H),17a(H)-20R-Diacholestane	**540**
18a-22,29,30-Trisnorneohopane-TS	**1300**	13b,17a-20S-Methyldiacholestane	**410**
C30 Tricyclic Terpane-22S	**230**	14a(H),17a(H)-20S-Cholestane	**540**
C30 Tricyclic Terpane-22R	**360**	14a(H),17a(H)-20R-Cholestane	**1800**
17a(H)-22,29,30-Trisnorhopane-TM	**1300**	13b,17a-20R-Ethyldiacholestane	**270**
17a/b,21b/a 28,30-Bisnorhopane	**350**	13a,17b-20S-Ethyldiacholestane	**66**
17a(H),21b(H)-25-Norhopane	**220**	14a,17a-20S-Methylcholestane	**260**
30-Norhopane	**3600**	14a,17a-20R-Methylcholestane	**870**
18a(H)-30-Norneohopane-C29Ts	**1300**	14a(H),17a(H)-20S-Ethylcholestane	**600**
17a(H)-Diahopane	**340**	14a(H),17a(H)-20R-Ethylcholestane	**890**
30-Normoretane	**760**	14b(H),17b(H)-20R-Cholestane	**830**
18a(H)&18b(H)-Oleananes	**700**	14b(H),17b(H)-20S-Cholestane	**820**
Hopane	**6100**	14b,17b-20R-Methylcholestane	**860**
Moretane	**890**	14b,17b-20S-Methylcholestane	**910**
30-Homohopane-22S	**1600**	14b(H),17b(H)-20R-Ethylcholestane	**1100**
30-Homohopane-22R	**1400**	14b(H),17b(H)-20S-Ethylcholestane	**950**

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	104	50-130

N/A - Not Applicable

01/19/06 07:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34713.D
Acq On : 7 Jan 2006 9:34 am
Operator : AC
Sample : 0512110-08
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 12 18:29:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for web 1/18/06

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	50.33	240	66046m	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	51.01	217	123667	4040.46	ng/ml	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 404.05%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.55	191	262703m	3929.18	ng/mL	
84) Hopane (T19)	60.55	191	262190m	3921.51	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	34341	513.63	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.33	191	21029m	314.53	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.16	191	21043m	314.73	ng/ml	
88) C24 Tetracyclic Terpane (T	51.66	191	18741	280.30	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.39	191	9095m	136.03	ng/ml	
90) C26 Tricyclic Terpane-22R	51.50	191	9697	145.04	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.25	191	10125m	151.44	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	11438m	171.08	ng/ml	
93) C29 Tricyclic Terpane-22S	55.06	191	13126	196.32	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.29	191	12498	186.93	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.47	191	56058	838.44	ng/ml	100
96) C30 Tricyclic Terpane-22S	56.65	191	10072	150.64	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.91	191	15354	229.65	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.07	191	57188m	855.35	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.36	191	15221m	227.66	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.22	191	9345m	139.77	ng/ml	
101) 30-Norhopane (T15)	59.09	191	156459m	2340.12	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.20	191	57684m	862.76	ng/ml	
103) 17a(H)-Diahopane (X)	59.35	191	14586	218.16	ng/ml	100
104) 30-Normoretane (T17)	59.92	191	32720	489.38	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.34	191	30468m	455.70	ng/ml	
106) Moretane (T20)	61.28	191	38475m	575.46	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	69518	1039.76	ng/ml	100
108) 30-Homohopane-22R (T22)	62.69	191	60244	901.05	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.09	191	45444	679.69	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.50	191	32101	480.13	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.35	191	27405	409.89	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.99	191	17971	268.79	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.11	191	16006	239.40	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.05	191	11011	164.69	ng/ml	100
115) Pentakishomohopane-22S (T3	72.38	191	12398	185.43	ng/ml	100
116) Pentakishomohopane-22R (T3	73.74	191	12161	181.89	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.84	217	18547	605.97	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	10808m	353.12	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.18	217	8179m	267.22	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.21	217	10733m	350.67	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.80	217	35021m	1144.21	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.11	217	5433m	177.51	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34713.D
Acq On : 7 Jan 2006 9:34 am
Operator : AC
Sample : 0512110-08
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 12 18:29:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

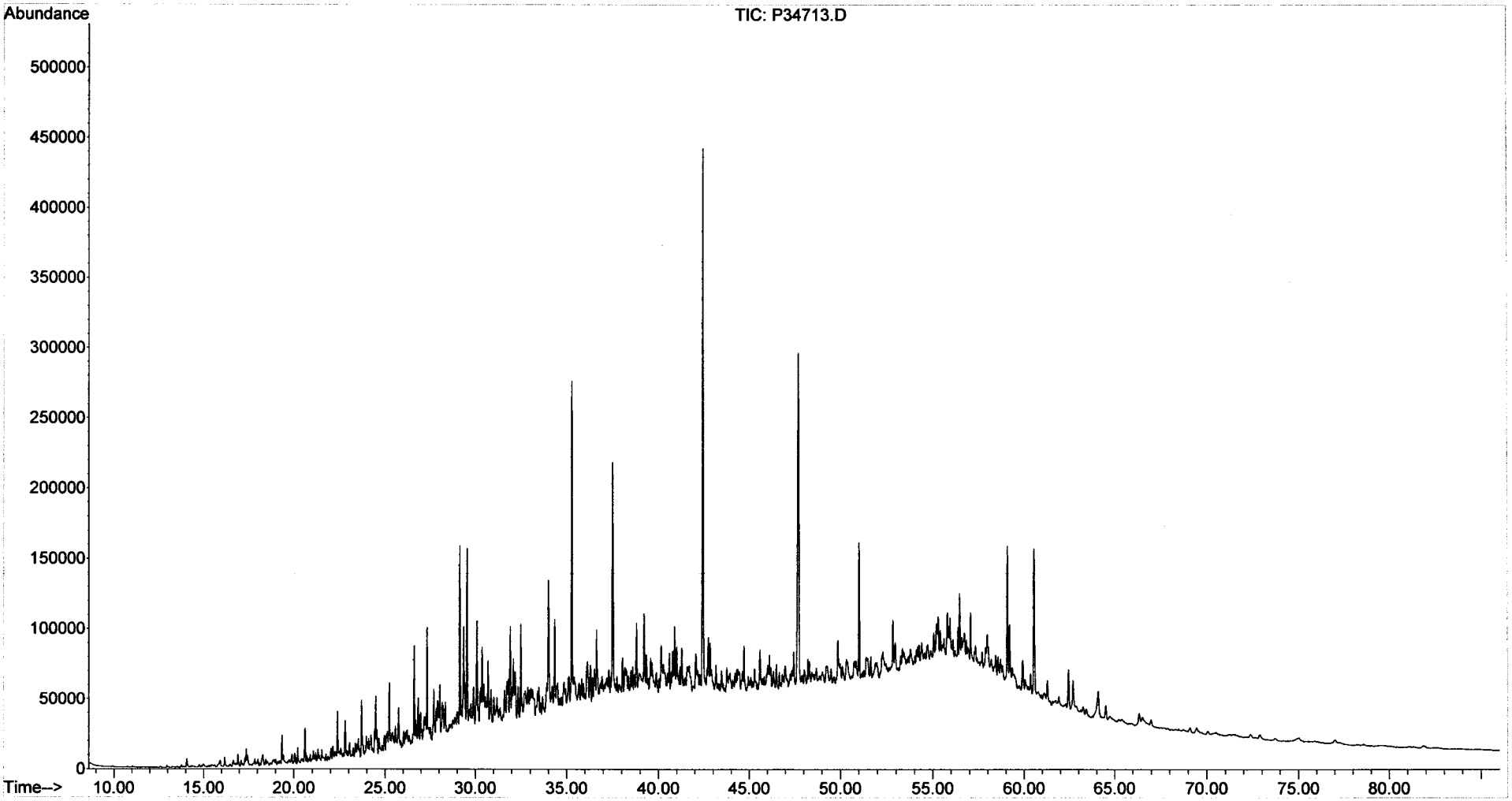
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.39	217	1311	42.83	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.57	217	5193m	169.67	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.33	217	17269m	564.21	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.72	217	11810m	385.86	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.70	217	17589m	574.67	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	16399m	535.79	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	16148	527.59	ng/ml	100
131) 14b,17b-20R-Methylcholesta	56.74	218	16996m	555.29	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.84	218	18106m	591.56	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.99	218	22248	726.89	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	18769m	613.22	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34713.D
Acq On : 7 Jan 2006 9:34 am
Operator : AC
Sample : 0512110-08
Misc : 1X
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 12 18:29:16 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-69 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-09**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/07/06	81.2	5.25	6.95	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	140000	E	Fluoranthene	38000	E
C1-Naphthalenes	120000	E	Pyrene	56000	E
C2-Naphthalenes	88000	E	C1-Fluoranthenes/Pyrenes	56000	
C3-Naphthalenes	41000		C2-Fluoranthenes/Pyrenes	24000	
C4-Naphthalenes	15000		C3-Fluoranthenes/Pyrenes	9800	
Biphenyl	12000		C4-Fluoranthenes/Pyrenes	3100	
Dibenzofuran	4000		Naphthobenzothiophenes	5200	
Acenaphthylene	7600		C1-Naphthobenzothiophenes	5500	
Acenaphthene	66000	E	C2-Naphthobenzothiophenes	3700	
Fluorene	33000	E	C3-Naphthobenzothiophenes	2000	
C1-Fluorenes	24000		C4-Naphthobenzothiophenes	890	
C2-Fluorenes	18000		Benz[a]anthracene	29000	E
C3-Fluorenes	9800		Chrysene/Triphenylene	28000	E
Anthracene	38000	E	C1-Chrysenes	26000	
Phenanthrene	120000	E	C2-Chrysenes	13000	
C1-Phenanthrenes/Anthracenes	85000	E	C3-Chrysenes	7700	
C2-Phenanthrenes/Anthracenes	46000		C4-Chrysenes	2300	
C3-Phenanthrenes/Anthracenes	18000		Benzo[b]fluoranthene	8900	
C4-Phenanthrenes/Anthracenes	5800		Benzo[k]fluoranthene	10000	
Retene	1900		Benzo[a]fluoranthene	4500	
Dibenzothiophene	10000		Benzo[e]pyrene	9000	
C1-Dibenzothiophenes	13000		Benzo[a]pyrene	18000	E
C2-Dibenzothiophenes	12000		Perylene	2900	
C3-Dibenzothiophenes	6900		Indeno[1,2,3-cd]pyrene	7000	
C4-Dibenzothiophenes	3000		Dibenz[a,h]anthracene	2200	
Benzo(b)fluorene	8000		Benzo[g,h,i]perylene	6200	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	114	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	98	50-130

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

01/18/06 11:03

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-69 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-09**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/07/06	81.2	5.25	6.95	1	AC

Parameter	Result
Carbazole	1000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	114	50-130
Pyrene-d10	83	50-130
Benzo[b]fluoranthene-d12	98	50-130

N/A - Not Applicable

01/18/06 11:04

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43104.D
Acq On : 7 Jan 2006 1:42 pm
Operator : AC
Sample : 0512110-09
Misc : 1x
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 11 19:19:42 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

MJ for WB 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	72765m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.22	240	107218m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.39	152	452231m	3275.93 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 327.59%#	
58) Pyrene-d10	38.30	212	815381m	2375.90 ng/mL	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 237.59%#	
81) Benzo[b]fluoranthene-d12	47.13	264	632572m	2816.71 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 281.67%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	19.84	128	24086527m	85227.85 ng/mL	E
10) C1-Naphthalenes	22.54	142	19938149m	70549.22 ng/mL	E
11) C2-Naphthalenes	25.37	156	15219743m	53853.59 ng/mL	E
12) C3-Naphthalenes	27.71	170	7034120m	24889.55 ng/mL	
13) C4-Naphthalenes	30.47	184	2623317m	9282.35 ng/mL	
15) 2-Methylnaphthalene	22.54	142	10646292m	59135.08 ng/mL	E
16) 1-Methylnaphthalene	22.96	142	9291194m	51228.37 ng/mL	E
22) Biphenyl	24.40	154	1597783m	7407.77 ng/mL	
23) 2,6-Dimethylnaphthalene	25.02	156	2055810m	13169.36 ng/mL	E
24) Dibenzofuran	27.48	168	619832m	2456.31 ng/mL	
25) Acenaphthylene	26.10	152	1478275m	4674.25 ng/mL	
26) Acenaphthene	26.87	153	7896677m	40755.01 ng/mL	E
27) 2,3,5-Trimethylnaphthalene	28.40	170	504863m	3160.55 ng/mL	
28) Fluorene	28.88	166	4196830m	20218.81 ng/mL	E
29) C1-Fluorenes	31.10	180	2993977m	14423.90 ng/mL	
30) C2-Fluorenes	33.29	194	2283666m	11001.88 ng/mL	
31) C3-Fluorenes	35.17	208	1253722m	6039.98 ng/mL	
32) Dibenzothiophene	32.19	184	1935375m	6289.49 ng/mL	
36) OTP	34.44	198	153297m	498.18 ng/mL	
37) C1-Dibenzothiophenes	33.97	198	2673652m	8688.71 ng/mL	
38) C2-Dibenzothiophenes	35.66	212	2270375m	7378.16 ng/mL	
39) C3-Dibenzothiophenes	37.48	226	1310004m	4257.19 ng/mL	
40) C4-Dibenzothiophenes	40.99	240	566533m	1841.09 ng/mL	
41) Phenanthrene	32.74	178	24921338m	71997.96 ng/mL	E
47) C1-Phenanthrenes/Anthracen	34.81	192	18070520m	52205.89 ng/mL	E
48) C2-Phenanthrenes/Anthracen	36.95	206	9667043m	27928.17 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	3819883m	11035.67 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	1229142m	3551.00 ng/mL	
52) Retene	39.70	234	101334m	1142.25 ng/mL	
53) Anthracene	32.89	178	7350463m	23256.79 ng/mL	E
54) Carbazole	33.53	167	156120m	623.26 ng/mL	
55) 1-Methylphenanthrene	35.23	192	2779697m	12169.62 ng/mL	E
56) Fluoranthene	37.51	202	8310709m	23292.49 ng/mL	E
57) Benzo(b)fluorene	40.01	216	1024194m	4900.77 ng/mL	
59) Pyrene	38.41	202	12752089m	34450.87 ng/mL	E
60) C1-Fluoranthenes/Pyrenes	39.77	216	12609702m	34066.19 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.23	230	5543512m	14976.27 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.70	244	2213889m	5981.01 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	697952m	1885.58 ng/mL	
64) Naphthobenzothiophene	42.22	234	688891m	2047.01 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43104.D
Acq On : 7 Jan 2006 1:42 pm
Operator : AC
Sample : 0512110-09
Misc : 1x
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 11 19:19:42 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

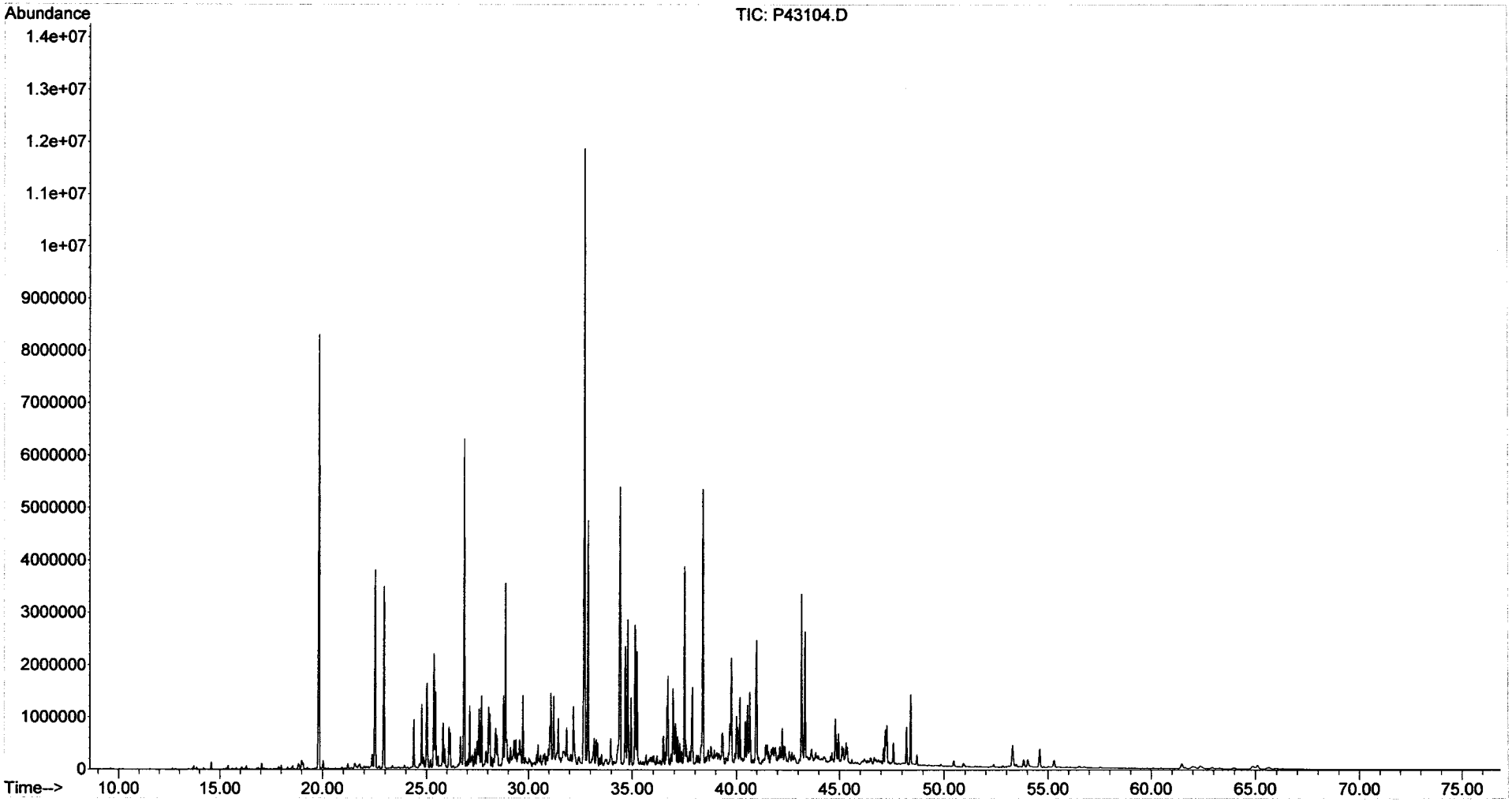
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.22	234	692125m	2056.62 ng/mL	
66) Naphthobenzothiophene-1,2-	42.56	234	178263m	529.70 ng/mL	
67) Naphthobenzothiophene-2,3-	42.86	234	212165m	630.44 ng/mL	
68) C1-Naphthobenzothiophenes	43.62	248	1135867m	3375.19 ng/ml	
69) C2-Naphthobenzothiophenes	45.13	262	755966m	2246.33 ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	412375m	1225.36 ng/ml	
71) C4-Naphthobenzothiophenes	48.43	290	184034m	546.85 ng/mL	
73) Benz[a]anthracene	43.17	228	4532430m	17773.15 ng/mL E	
74) Chrysene	43.33	228	4368531m	16879.29 ng/mL E	
75) Chrysene/Triphenylene	43.33	228	4378371m	16917.31 ng/mL	
76) C1-Chrysenes	44.79	242	4123318m	15931.82 ng/mL	
77) C2-Chrysenes	46.49	256	2144971m	8287.82 ng/mL	
78) BBF-d12 Surr BKGD	47.12	256	40705m	157.28 ng/mL	
79) C3-Chrysenes	48.10	270	1226819m	4740.23 ng/mL	
80) C4-Chrysenes	49.69	284	370851m	1432.91 ng/mL	
82) Benzo[b]fluoranthene	47.22	252	1446421	5457.64 ng/mL	99
83) Benzo[k]fluoranthene	47.29	252	1839188m	6151.91 ng/mL	
84) Benzo[a]fluoranthene	47.59	252	829896m	2775.92 ng/mL	
85) Benzo[e]pyrene	48.22	252	1481824m	5547.89 ng/mL	
86) Benzo[a]pyrene	48.43	252	2872027m	11155.54 ng/mL E	
87) Perylene	48.72	252	446833m	1752.64 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.28	276	1019356m	4262.99 ng/mL	
89) Dibenz[a,h]anthracene	53.31	278	337056m	1364.35 ng/mL	
90) Benzo[g,h,i]perylene	54.60	276	1045708	3837.68 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43104.D
Acq On : 7 Jan 2006 1:42 pm
Operator : AC
Sample : 0512110-09
Misc : 1x
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 11 19:19:42 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-69 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-09E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/04/06	81.2	5.25	6.95	10	AC

Parameter	Result		Parameter	Result	
Naphthalene	**96000**		Fluoranthene	**27000**	
C1-Naphthalenes	**81000**		Pyrene	**38000**	
C2-Naphthalenes	**66000**		C1-Fluoranthenes/Pyrenes	14	U
C3-Naphthalenes	27	U	C2-Fluoranthenes/Pyrenes	14	U
C4-Naphthalenes	27	U	C3-Fluoranthenes/Pyrenes	14	U
Biphenyl	15	U	C4-Fluoranthenes/Pyrenes	14	U
Dibenzofuran	19	U	Naphthobenzothiophenes	20	U
Acenaphthylene	30	U	C1-Naphthobenzothiophenes	20	U
Acenaphthene	**48000**		C2-Naphthobenzothiophenes	20	U
Fluorene	**25000**		C3-Naphthobenzothiophenes	20	U
C1-Fluorenes	19	U	C4-Naphthobenzothiophenes	20	U
C2-Fluorenes	19	U	Benz[a]anthracene	**20000**	
C3-Fluorenes	19	U	Chrysene/Triphenylene	**20000**	
Anthracene	**28000**		C1-Chrysenes	18	U
Phenanthrene	**79000**		C2-Chrysenes	18	U
C1-Phenanthrenes/Anthracenes	**64000**		C3-Chrysenes	18	U
C2-Phenanthrenes/Anthracenes	24	U	C4-Chrysenes	18	U
C3-Phenanthrenes/Anthracenes	24	U	Benzo[b]fluoranthene	17	U
C4-Phenanthrenes/Anthracenes	24	U	Benzo[k]fluoranthene	33	U
Retene	24	U	Benzo[a]fluoranthene	33	U
Dibenzothiophene	18	U	Benzo[e]pyrene	22	U
C1-Dibenzothiophenes	18	U	Benzo[a]pyrene	**14000**	
C2-Dibenzothiophenes	18	U	Perylene	28	U
C3-Dibenzothiophenes	18	U	Indeno[1,2,3-cd]pyrene	39	U
C4-Dibenzothiophenes	18	U	Dibenz[a,h]anthracene	31	U
Benzo(b)fluorene	16	U	Benzo[g,h,i]perylene	29	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	67	50-130
Benzo[b]fluoranthene-d12	79	50-130

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

01/18/06 10:44

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42826.D
Acq On : 4 Jan 2006 3:48 am
Operator : AC
Sample : 0512110-09-RE
Misc : 10X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 11 20:22:12 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 for WD 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	64230m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	95882	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	30035	246.48	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 24.65%#			
58) Pyrene-d10	38.28	212	58166m	192.01	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 19.20%#			
81) Benzo[b]fluoranthene-d12	47.10	264	45896m	228.53	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 22.85%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			

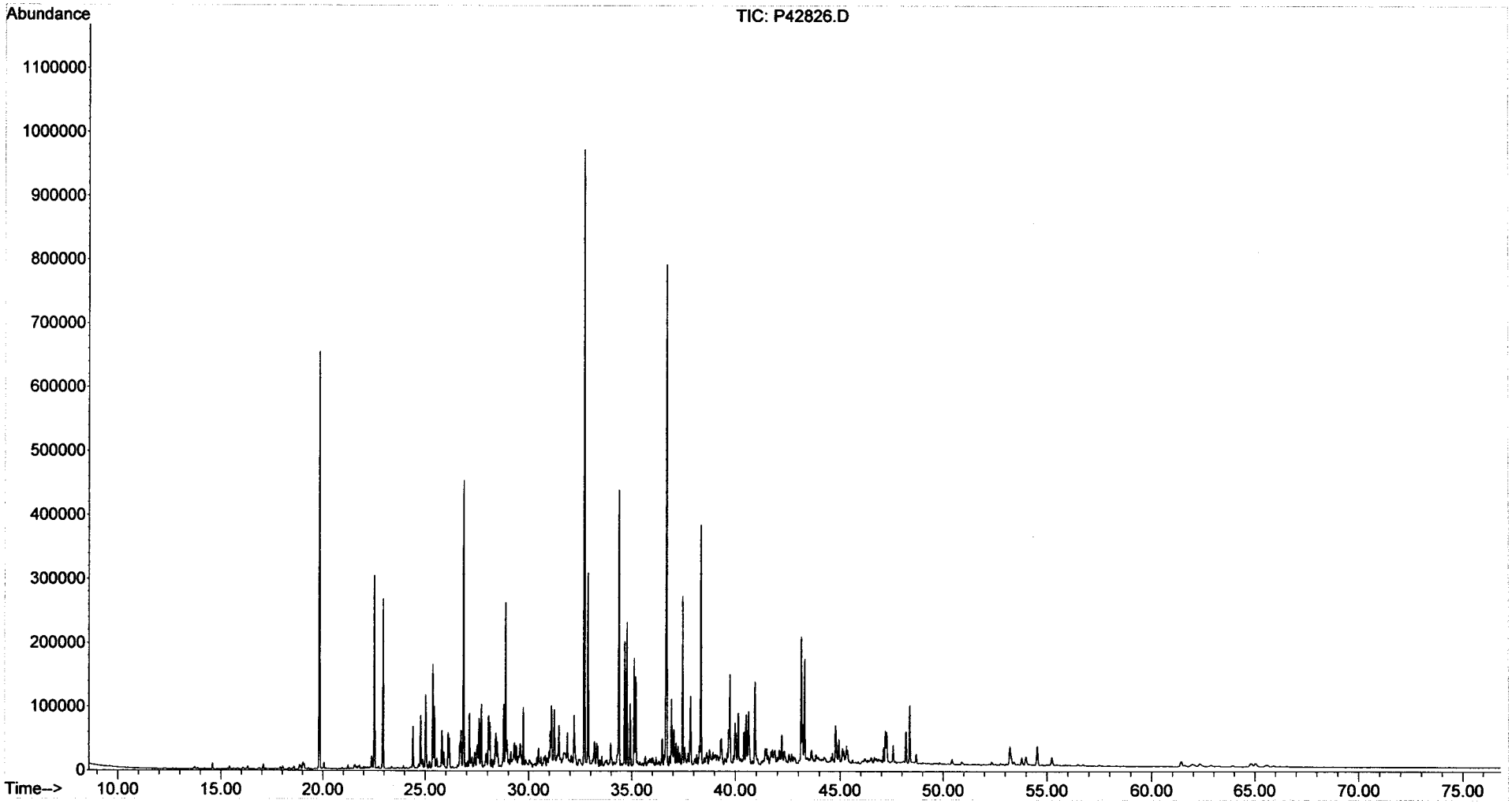
Target Compounds						Qvalue
9) Naphthalene	19.83	128	1473261m	5905.70	ng/mL	
10) C1-Naphthalenes	22.52	142	1241391m	4976.23	ng/mL	
11) C2-Naphthalenes	25.37	156	1001915m	4016.27	ng/mL	
15) 2-Methylnaphthalene	22.52	142	660000m	4153.13	ng/mL	
16) 1-Methylnaphthalene	22.95	142	581071	3629.55	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	122112m	886.19	ng/mL	
26) Acenaphthene	26.85	153	499010	2917.63	ng/mL	99
28) Fluorene	28.87	166	279672m	1526.40	ng/mL	
41) Phenanthrene	32.69	178	1489536m	4875.11	ng/mL	
47) C1-Phenanthrenes/Anthracen	34.76	192	1206362m	3948.31	ng/mL	
53) Anthracene	32.87	178	488129m	1749.66	ng/mL	
55) 1-Methylphenanthrene	35.20	192	191419m	949.40	ng/mL	
56) Fluoranthene	37.47	202	522101m	1657.74	ng/mL	
59) Pyrene	38.35	202	766637	2346.35	ng/mL	99
73) Benz[a]anthracene	43.14	228	281624m	1234.91	ng/mL	
74) Chrysene	43.30	228	280006m	1209.81	ng/mL	
75) Chrysene/Triphenylene	43.30	228	281558m	1216.51	ng/mL	
86) Benzo[a]pyrene	48.38	252	195818m	850.52	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42826.D
Acq On : 4 Jan 2006 3:48 am
Operator : AC
Sample : 0512110-09-RE
Misc : 10X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 11 20:22:12 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-69 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-09**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/07/06	81.2	5.25	1.69	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**130**	30,31-Bishomohopane-22S	**280**
C24 Tricyclic Terpane	**94**	30,31-Bishomohopane-22R	**210**
C25 Tricyclic Terpane	**100**	30,31-Trishomohopane-22S	**170**
C24 Tetracyclic Terpane	**96**	30,31-Trishomohopane-22R	**110**
C26 Tricyclic Terpane-22S	**45**	Tetrakishomohopane-22S	**99**
C26 Tricyclic Terpane-22R	**48**	Tetrakishomohopane-22R	**63**
C28 Tricyclic Terpane-22S	**56**	Pentakishomohopane-22S	**78**
C28 Tricyclic Terpane-22R	**55**	Pentakishomohopane-22R	**73**
C29 Tricyclic Terpane-22S	**71**	13b(H),17a(H)-20S-Diacholestane	**230**
C29 Tricyclic Terpane-22R	**63**	13b(H),17a(H)-20R-Diacholestane	**140**
18a-22,29,30-Trisnorneohopane-TS	**340**	13b,17a-20S-Methyldiacholestane	**110**
C30 Tricyclic Terpane-22S	**58**	14a(H),17a(H)-20S-Cholestane	**160**
C30 Tricyclic Terpane-22R	**71**	14a(H),17a(H)-20R-Cholestane	**460**
17a(H)-22,29,30-Trisnorhopane-TM	**350**	13b,17a-20R-Ethyldiacholestane	**80**
17a/b,21b/a 28,30-Bisnorhopane	**92**	13a,17b-20S-Ethyldiacholestane	**19**
17a(H),21b(H)-25-Norhopane	**51**	14a,17a-20S-Methylcholestane	**80**
30-Norhopane	**1000**	14a,17a-20R-Methylcholestane	**210**
18a(H)-30-Norneohopane-C29Ts	**360**	14a(H),17a(H)-20S-Ethylcholestane	**180**
17a(H)-Diahopane	**85**	14a(H),17a(H)-20R-Ethylcholestane	**240**
30-Normoretane	**220**	14b(H),17b(H)-20R-Cholestane	**190**
18a(H)&18b(H)-Oleananes	**170**	14b(H),17b(H)-20S-Cholestane	**200**
Hopane	**1700**	14b,17b-20R-Methylcholestane	**210**
Moretane	**280**	14b,17b-20S-Methylcholestane	**230**
30-Homohopane-22S	**450**	14b(H),17b(H)-20R-Ethylcholestane	**360**
30-Homohopane-22R	**380**	14b(H),17b(H)-20S-Ethylcholestane	**230**

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

N/A - Not Applicable

01/19/06 07:26

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34714.D
Acq On : 7 Jan 2006 11:13 am
Operator : AC
Sample : 0512110-09
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 12 18:32:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1-18-06

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	50.33	240	67956m	500.00	ng/mL	0.05

System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	51.03	217	381928	12127.66	ng/ml	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1212.77%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.56	191	299880m	4359.16	ng/mL	
84) Hopane (T19)	60.56	191	299178m	4348.96	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.45	191	23119m	336.07	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.33	191	16365	237.89	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.13	191	17555m	255.19	ng/ml	
88) C24 Tetracyclic Terpane (T	51.67	191	16718m	243.02	ng/ml	
89) C26 Tricyclic Terpane-22S	51.40	191	7760	112.80	ng/ml	100
90) C26 Tricyclic Terpane-22R	51.51	191	8424m	122.45	ng/ml	
91) C28 Tricyclic Terpane-22S	54.25	191	9636m	140.07	ng/ml	
92) C28 Tricyclic Terpane-22R	54.45	191	9500m	138.10	ng/ml	
93) C29 Tricyclic Terpane-22S	55.07	191	12333m	179.28	ng/ml	
94) C29 Tricyclic Terpane-22R	55.30	191	10951	159.19	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.48	191	59088	858.92	ng/ml	100
96) C30 Tricyclic Terpane-22S	56.65	191	10145m	147.47	ng/mL	
97) C30 Tricyclic Terpane-22R	56.92	191	12336m	179.32	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.07	191	61056	887.53	ng/ml	100
99) 17a/b,21b/a 28,30-Bisnorho	58.37	191	15991m	232.45	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.22	191	8860m	128.79	ng/ml	
101) 30-Norhopane (T15)	59.09	191	175151m	2546.06	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.20	191	62129m	903.13	ng/ml	
103) 17a(H)-Diahopane (X)	59.35	191	14807	215.24	ng/ml	100
104) 30-Normoretane (T17)	59.93	191	38644	561.74	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.35	191	28849m	419.36	ng/ml	
106) Moretane (T20)	61.28	191	48234m	701.15	ng/ml	
107) 30-Homohopane-22S (T21)	62.45	191	78294	1138.11	ng/ml	100
108) 30-Homohopane-22R (T22)	62.69	191	66670	969.14	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.10	191	48044	698.38	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.50	191	36587	531.84	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.34	191	29276	425.57	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.99	191	19004	276.25	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.10	191	17190	249.88	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.05	191	10933	158.93	ng/ml	100
115) Pentakishomohopane-22S (T3	72.38	191	13586	197.49	ng/ml	100
116) Pentakishomohopane-22R (T3	73.75	191	12655	183.96	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.85	217	18225	578.71	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.35	217	11027	350.15	ng/ml	100
120) 13b,17a-20S-Methyldiachole	54.19	217	8527m	270.76	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.21	217	12695m	403.11	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.80	217	36255	1151.23	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.11	217	6397	203.13	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34714.D
Acq On : 7 Jan 2006 11:13 am
Operator : AC
Sample : 0512110-09
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 12 18:32:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

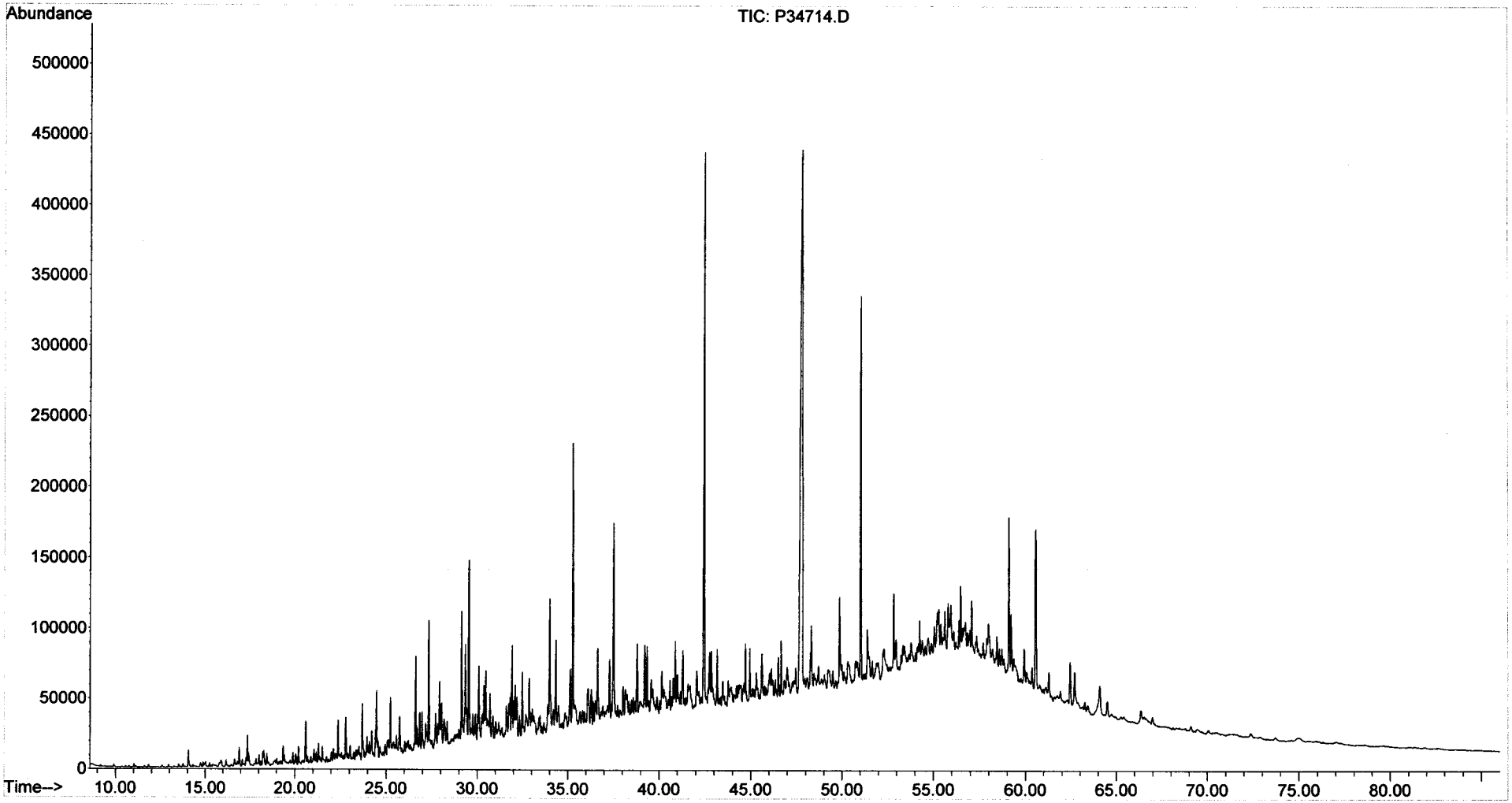
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.40	217	1530	48.58	ng/ml	100
125) 14a,17a-20S-Methylcholesta	56.57	217	6318m	200.62	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.34	217	16760m	532.19	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.72	217	14670m	465.83	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.70	217	19322m	613.55	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.31	218	15207	482.88	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	55.41	218	16069m	510.25	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.75	218	16460m	522.67	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.84	218	17935m	569.50	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.99	218	28560	906.89	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.04	218	18486m	587.00	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34714.D
Acq On : 7 Jan 2006 11:13 am
Operator : AC
Sample : 0512110-09
Misc : 1X
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 12 18:32:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-72 (13.5-14.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-10**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/04/06	66.5	5.22	57.2	5	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4000000**	E	Fluoranthene	**610000**	
C1-Naphthalenes	**3100000**	E	Pyrene	**870000**	E
C2-Naphthalenes	**1800000**		C1-Fluoranthenes/Pyrenes	**660000**	
C3-Naphthalenes	**560000**		C2-Fluoranthenes/Pyrenes	**180000**	
C4-Naphthalenes	**150000**		C3-Fluoranthenes/Pyrenes	**48000**	
Biphenyl	**300000**		C4-Fluoranthenes/Pyrenes	**14000**	
Dibenzofuran	**89000**		Naphthobenzothiophenes	**68000**	
Acenaphthylene	**530000**		C1-Naphthobenzothiophenes	**50000**	
Acenaphthene	**1000000**	E	C2-Naphthobenzothiophenes	**22000**	
Fluorene	**730000**		C3-Naphthobenzothiophenes	**9800**	
C1-Fluorenes	**340000**		C4-Naphthobenzothiophenes	**3600**	
C2-Fluorenes	**180000**		Benz[a]anthracene	**370000**	
C3-Fluorenes	**78000**		Chrysene/Triphenylene	**330000**	
Anthracene	**640000**		C1-Chrysenes	**210000**	
Phenanthrene	**2100000**	E	C2-Chrysenes	**75000**	
C1-Phenanthrenes/Anthracenes	**1100000**		C3-Chrysenes	**32000**	
C2-Phenanthrenes/Anthracenes	**370000**		C4-Chrysenes	**8100**	
C3-Phenanthrenes/Anthracenes	**98000**		Benzo[b]fluoranthene	**130000**	
C4-Phenanthrenes/Anthracenes	**20000**		Benzo[k]fluoranthene	**160000**	
Retene	**6000**		Benzo[a]fluoranthene	**74000**	
Dibenzothiophene	**220000**		Benzo[e]pyrene	**130000**	
C1-Dibenzothiophenes	**200000**		Benzo[a]pyrene	**280000**	
C2-Dibenzothiophenes	**130000**		Perylene	**42000**	
C3-Dibenzothiophenes	**54000**		Indeno[1,2,3-cd]pyrene	**120000**	
C4-Dibenzothiophenes	**15000**		Dibenz[a,h]anthracene	**33000**	
Benzo(b)fluorene	**120000**		Benzo[g,h,i]perylene	**110000**	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	75	50-130
Benzo[b]fluoranthene-d12	82	50-130

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

01/18/06 11:08

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-72 (13.5-14.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-10**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/04/06	66.5	5.22	57.2	5	AC

Parameter	Result
Carbazole	**14000**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	99	50-130
Pyrene-d10	75	50-130
Benzo[b]fluoranthene-d12	82	50-130

N/A - Not Applicable

01/18/06 11:08

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42827.D
Acq On : 4 Jan 2006 5:16 am
Operator : AC
Sample : 0512110-10
Misc : 5X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:21:24 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 for WD 1/12/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	60042m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	97336	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	7885m	69.22	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 6.92%#			
58) Pyrene-d10	38.28	212	14904m	52.63	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.26%#			
81) Benzo[b]fluoranthene-d12	47.10	264	11695m	57.36	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 5.74%#			
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	19.84	128	11265324	48307.93	ng/mL# E	100
10) C1-Naphthalenes	22.54	142	8766380m	37591.96	ng/mL E	
11) C2-Naphthalenes	25.38	156	4956296m	21253.57	ng/mL	
12) C3-Naphthalenes	27.71	170	1596219m	6844.90	ng/mL	
13) C4-Naphthalenes	30.48	184	431092m	1848.61	ng/mL	
15) 2-Methylnaphthalene	22.54	142	5590051	37629.63	ng/mL# E	100
16) 1-Methylnaphthalene	22.96	142	3176810	21227.44	ng/mL# E	100
22) Biphenyl	24.40	154	657186m	3692.54	ng/mL	
23) 2,6-Dimethylnaphthalene	25.03	156	735776m	5712.08	ng/mL	
24) Dibenzofuran	27.49	168	224336m	1077.40	ng/mL	
25) Acenaphthylene	26.12	152	1686746m	6463.59	ng/mL	
26) Acenaphthene	26.86	153	1995928	12483.86	ng/mL E	99
27) 2,3,5-Trimethylnaphthalene	28.41	170	105708m	801.98	ng/mL	
28) Fluorene	28.88	166	1515249m	8846.79	ng/mL	
29) C1-Fluorenes	31.10	180	710640m	4149.07	ng/mL	
30) C2-Fluorenes	33.29	194	366686m	2140.90	ng/mL	
31) C3-Fluorenes	35.28	208	161963m	945.62	ng/mL	
32) Dibenzothiophene	32.20	184	693856m	2732.67	ng/mL	
36) OTP	34.37	198	1464m	5.77	ng/mL	
37) C1-Dibenzothiophenes	33.97	198	633267m	2494.05	ng/mL	
38) C2-Dibenzothiophenes	36.02	212	401479m	1581.18	ng/mL	
39) C3-Dibenzothiophenes	37.47	226	165355m	651.23	ng/mL	
40) C4-Dibenzothiophenes	39.15	240	45285m	178.35	ng/mL	
41) Phenanthrene	32.71	178	7248422	25378.13	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.77	192	3671915m	12856.09	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.94	206	1273461m	4458.63	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	340528m	1192.25	ng/mL	
51) C4-Phenanthrenes/Anthracen	39.69	234	68687m	240.49	ng/mL	
52) Retene	39.69	234	5357m	73.18	ng/mL	
53) Anthracene	32.88	178	2034364	7800.65	ng/mL	100
54) Carbazole	33.54	167	34037	164.68	ng/mL#	73
55) 1-Methylphenanthrene	35.21	192	555020m	2944.80	ng/mL	
56) Fluoranthene	37.48	202	2191280m	7442.91	ng/mL	
57) Benzo(b)fluorene	39.99	216	254751	1477.29	ng/mL	96
59) Pyrene	38.37	202	3218967	10539.08	ng/mL E	99
60) C1-Fluoranthenes/Pyrenes	39.75	216	2445508m	8006.73	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.41	230	663686m	2172.95	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.29	244	178049m	582.94	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.92	258	52280m	171.17	ng/mL	
64) Naphthobenzothiophene	42.21	234	140212m	504.92	ng/ml	

MS 1-12-06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42827.D
Acq On : 4 Jan 2006 5:16 am
Operator : AC
Sample : 0512110-10
Misc : 5X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:21:24 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

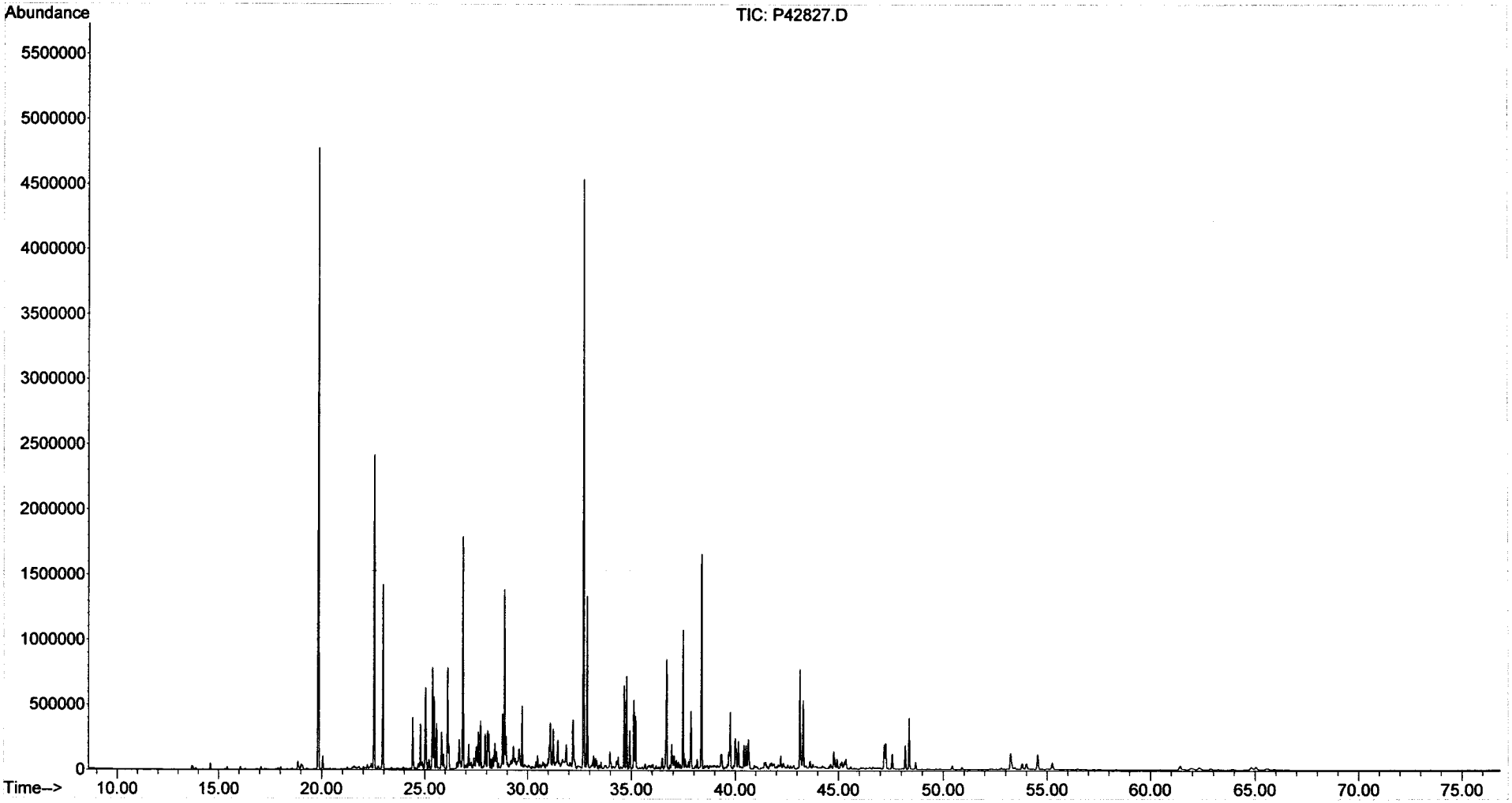
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.21	234	140086m	504.47	ng/mL	
66) Naphthobenzothiophene-1,2-	42.55	234	39647m	142.77	ng/mL	
67) Naphthobenzothiophene-2,3-	42.84	234	50722m	182.66	ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	169685m	611.06	ng/ml	
69) C2-Naphthobenzothiophenes	45.11	262	74653m	268.83	ng/ml	
70) C3-Naphthobenzothiophenes	47.01	276	33208m	119.59	ng/ml	
71) C4-Naphthobenzothiophenes	49.81	290	12098m	43.57	ng/mL	
73) Benz[a]anthracene	43.14	228	1033183m	4462.77	ng/mL	
74) Chrysene	43.30	228	927789m	3948.77	ng/mL	
75) Chrysene/Triphenylene	43.30	228	932412m	3968.45	ng/mL	
76) C1-Chrysenes	44.78	242	612033m	2604.88	ng/mL	
77) C2-Chrysenes	46.48	256	216724m	922.40	ng/mL	
78) BBF-d12 Surr BKGD	47.09	256	2150m	9.15	ng/mL	
79) C3-Chrysenes	48.09	270	89896m	382.61	ng/mL	
80) C4-Chrysenes	49.10	284	23051m	98.11	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	368398	1531.16	ng/mL	99
83) Benzo[k]fluoranthene	47.25	252	533074	1964.11	ng/mL	100
84) Benzo[a]fluoranthene	47.57	252	242387m	893.07	ng/mL	
85) Benzo[e]pyrene	48.19	252	370380	1527.47	ng/mL	98
86) Benzo[a]pyrene	48.38	252	801102m	3427.55	ng/mL	
87) Perylene	48.69	252	118240	510.87	ng/mL	97
88) Indeno[1,2,3-cd]pyrene	53.23	276	324906m	1496.72	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	89716m	400.03	ng/mL	
90) Benzo[g,h,i]perylene	54.54	276	339669	1373.12	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42827.D
Acq On : 4 Jan 2006 5:16 am
Operator : AC
Sample : 0512110-10
Misc : 5X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:21:24 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-72 (13.5-14.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-10E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/04/06	66.5	5.22	57.2	50	AC

Parameter	Result		Parameter	Result	
Naphthalene	**3400000**		Fluoranthene	830	U
C1-Naphthalenes	**2700000**		Pyrene	**840000**	
C2-Naphthalenes	1400	U	C1-Fluoranthenes/Pyrenes	730	U
C3-Naphthalenes	1400	U	C2-Fluoranthenes/Pyrenes	730	U
C4-Naphthalenes	1400	U	C3-Fluoranthenes/Pyrenes	730	U
Biphenyl	750	U	C4-Fluoranthenes/Pyrenes	730	U
Dibenzofuran	980	U	Naphthobenzothiophenes	1000	U
Acenaphthylene	1500	U	C1-Naphthobenzothiophenes	1000	U
Acenaphthene	**930000**		C2-Naphthobenzothiophenes	1000	U
Fluorene	950	U	C3-Naphthobenzothiophenes	1000	U
C1-Fluorenes	950	U	C4-Naphthobenzothiophenes	1000	U
C2-Fluorenes	950	U	Benz[a]anthracene	1300	U
C3-Fluorenes	950	U	Chrysene/Triphenylene	890	U
Anthracene	1100	U	C1-Chrysenes	890	U
Phenanthrene	**1900000**		C2-Chrysenes	890	U
C1-Phenanthrenes/Anthracenes	1200	U	C3-Chrysenes	890	U
C2-Phenanthrenes/Anthracenes	1200	U	C4-Chrysenes	890	U
C3-Phenanthrenes/Anthracenes	1200	U	Benzo[b]fluoranthene	870	U
C4-Phenanthrenes/Anthracenes	1200	U	Benzo[k]fluoranthene	1700	U
Retene	1200	U	Benzo[a]fluoranthene	1700	U
Dibenzothiophene	910	U	Benzo[e]pyrene	1100	U
C1-Dibenzothiophenes	910	U	Benzo[a]pyrene	1100	U
C2-Dibenzothiophenes	910	U	Perylene	1400	U
C3-Dibenzothiophenes	910	U	Indeno[1,2,3-cd]pyrene	2000	U
C4-Dibenzothiophenes	910	U	Dibenz[a,h]anthracene	1600	U
Benzo(b)fluorene	830	U	Benzo[g,h,i]perylene	1400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	85	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	78	50-130

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

01/18/06 11:05

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43002.D
Acq On : 4 Jan 2006 5:05 pm
Operator : AC
Sample : 0512110-10-RE
Misc : 50X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 11 20:30:12 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 for MD 1-12-06

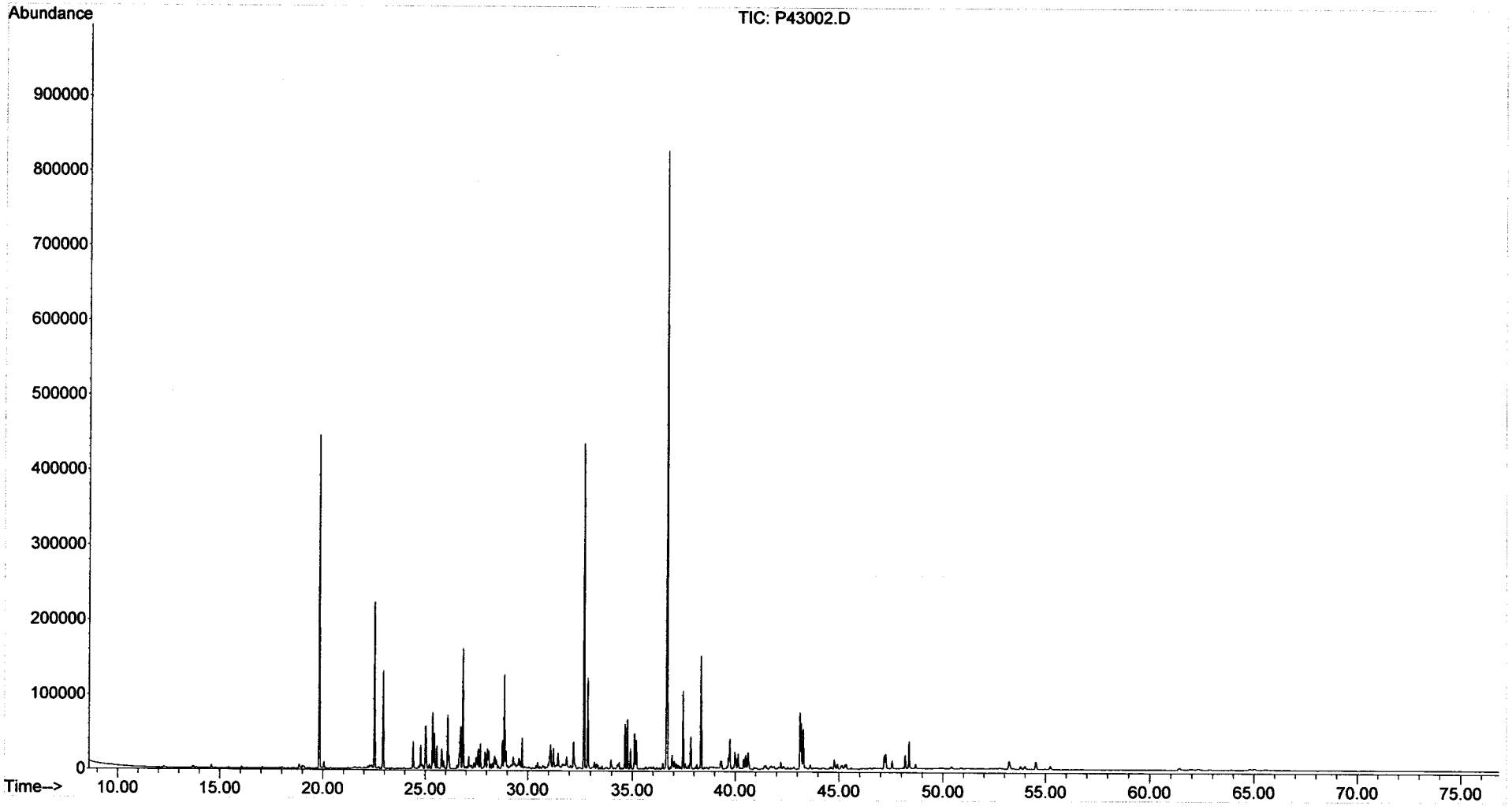
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	61180m	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	113424m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	686m	5.91	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.59%#	
58) Pyrene-d10	38.28	212	1474m	5.11	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.51%#	
81) Benzo[b]fluoranthene-d12	47.09	264	1301	5.48	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.55%#	
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	19.83	128	996775m	4194.86	ng/mL	
10) C1-Naphthalenes	22.52	142	786199m	3308.67	ng/mL	
15) 2-Methylnaphthalene	22.52	142	498402	3292.61	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	287042	1882.34	ng/mL#	100
26) Acenaphthene	26.84	153	183277	1125.01	ng/mL	99
41) Phenanthrene	32.68	178	672020	2309.11	ng/mL	100
59) Pyrene	38.34	202	316418	1016.70	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43002.D
Acq On : 4 Jan 2006 5:05 pm
Operator : AC
Sample : 0512110-10-RE
Misc : 50X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 11 20:30:12 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



Form I
Steranes and Triterpanes

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-72 (13.5-14.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-10**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	01/09/06	66.5	5.22	8.88	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	580	30,31-Bishomohopane-22S	290
C24 Tricyclic Terpane	360	30,31-Bishomohopane-22R	180
C25 Tricyclic Terpane	320	30,31-Trishomohopane-22S	180
C24 Tetracyclic Terpane	140	30,31-Trishomohopane-22R	100
C26 Tricyclic Terpane-22S	130	Tetrakishomohopane-22S	85
C26 Tricyclic Terpane-22R	140	Tetrakishomohopane-22R	59
C28 Tricyclic Terpane-22S	130	Pentakishomohopane-22S	62
C28 Tricyclic Terpane-22R	140	Pentakishomohopane-22R	67
C29 Tricyclic Terpane-22S	120	13b(H),17a(H)-20S-Diacholestane	470
C29 Tricyclic Terpane-22R	120	13b(H),17a(H)-20R-Diacholestane	260
18a-22,29,30-Trisnorneohopane-TS	320	13b,17a-20S-Methyldiacholestane	200
C30 Tricyclic Terpane-22S	74	14a(H),17a(H)-20S-Cholestane	300
C30 Tricyclic Terpane-22R	120	14a(H),17a(H)-20R-Cholestane	990
17a(H)-22,29,30-Trisnorhopane-TM	480	13b,17a-20R-Ethyldiacholestane	140
17a/b,21b/a 28,30-Bisnorhopane	170	13a,17b-20S-Ethyldiacholestane	33
17a(H),21b(H)-25-Norhopane	72	14a,17a-20S-Methylcholestane	130
30-Norhopane	990	14a,17a-20R-Methylcholestane	560
18a(H)-30-Norneohopane-C29Ts	300	14a(H),17a(H)-20S-Ethylcholestane	320
17a(H)-Diahopane	100	14a(H),17a(H)-20R-Ethylcholestane	440
30-Normoretane	210	14b(H),17b(H)-20R-Cholestane	440
18a(H)&18b(H)-Oleananes	170	14b(H),17b(H)-20S-Cholestane	420
Hopane	1500	14b,17b-20R-Methylcholestane	360
Moretane	310	14b,17b-20S-Methylcholestane	360
30-Homohopane-22S	430	14b(H),17b(H)-20R-Ethylcholestane	510
30-Homohopane-22R	360	14b(H),17b(H)-20S-Ethylcholestane	370

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	126	50-130

N/A - Not Applicable

01/19/06 07:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34752.D
Acq On : 9 Jan 2006 1:44 pm
Operator : AC
Sample : 0512110-10
Misc : 1X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 13 00:41:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WD 1/18/06

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	50.35	240	49487	500.00	ng/mL	0.07
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	50.99	217	65291	2846.99	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 284.70%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.51	191	29604m	590.94	ng/mL	
84) Hopane (T19)	60.51	191	29610m	591.06	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.43	191	11265	224.87	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.31	191	7152m	142.76	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.14	191	6323m	126.22	ng/ml	
88) C24 Tetracyclic Terpane (T	51.63	191	2794m	55.77	ng/ml	
89) C26 Tricyclic Terpane-22S	51.36	191	2588m	51.66	ng/ml	
90) C26 Tricyclic Terpane-22R	51.48	191	2723	54.36	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.23	191	2592m	51.74	ng/ml	
92) C28 Tricyclic Terpane-22R	54.43	191	2787m	55.63	ng/ml	
93) C29 Tricyclic Terpane-22S	55.04	191	2377m	47.45	ng/ml	
94) C29 Tricyclic Terpane-22R	55.28	191	2327m	46.45	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.45	191	6220m	124.16	ng/ml	
96) C30 Tricyclic Terpane-22S	56.63	191	1447m	28.88	ng/mL	
97) C30 Tricyclic Terpane-22R	56.89	191	2437m	48.65	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.04	191	9395m	187.54	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.33	191	3279m	65.45	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.19	191	1416m	28.27	ng/ml	
101) 30-Norhopane (T15)	59.06	191	19325m	385.76	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.17	191	5787m	115.52	ng/ml	
103) 17a(H)-Diahopane (X)	59.32	191	1950m	38.92	ng/ml	
104) 30-Normoretane (T17)	59.90	191	4175m	83.34	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	60.31	191	3388m	67.63	ng/ml	
106) Moretane (T20)	61.25	191	6127	122.30	ng/ml	100
107) 30-Homohopane-22S (T21)	62.41	191	8393m	167.54	ng/ml	
108) 30-Homohopane-22R (T22)	62.66	191	7098	141.69	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.06	191	5757	114.92	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.46	191	3519	70.24	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.30	191	3557	71.00	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.94	191	1997	39.86	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.04	191	1663	33.20	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.00	191	1159	23.14	ng/ml	100
115) Pentakishomohopane-22S (T3	72.34	191	1219	24.33	ng/ml	100
116) Pentakishomohopane-22R (T3	73.69	191	1317m	26.29	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	52.82	217	4246	185.15	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.33	217	2339m	101.99	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.17	217	1786m	77.88	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.19	217	2643m	115.25	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.78	217	8900m	388.08	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.08	217	1222m	53.28	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34752.D
Acq On : 9 Jan 2006 1:44 pm
Operator : AC
Sample : 0512110-10
Misc : 1X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 13 00:41:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

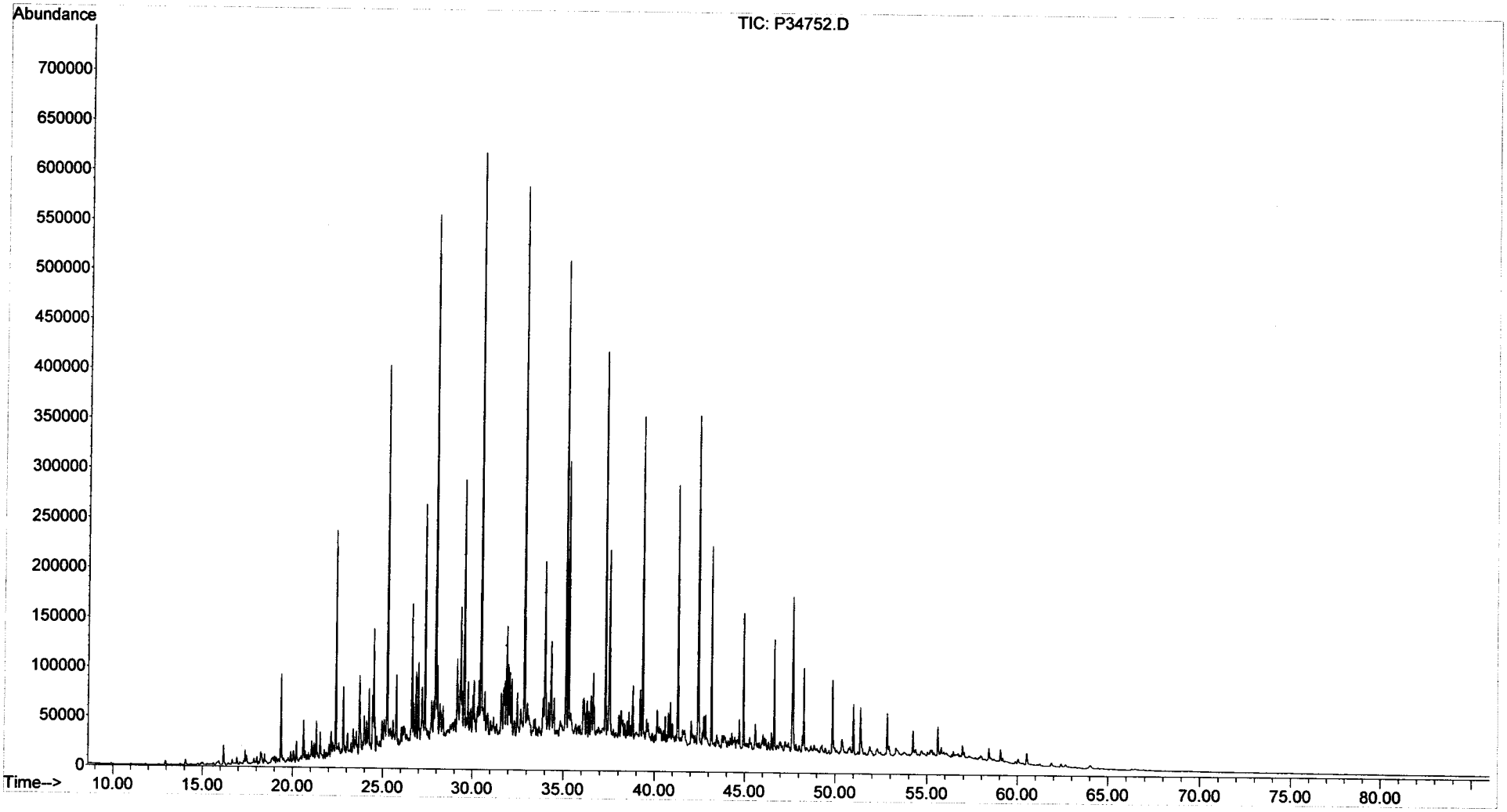
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.37	217	295m	12.86 ng/ml	
125) 14a,17a-20S-Methylcholesta	56.54	217	1173m	51.15 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.32	217	4996	217.85 ng/ml	100
127) 14a(H),17a(H)-20S-Ethylcho	57.69	217	2846m	124.10 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.68	217	3995	174.20 ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	55.29	218	3922m	171.02 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.39	218	3798m	165.61 ng/ml	
131) 14b,17b-20R-Methylcholesta	56.72	218	3226m	140.67 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.81	218	3278m	142.94 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.97	218	4557	198.71 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.01	218	3306m	144.16 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34752.D
Acq On : 9 Jan 2006 1:44 pm
Operator : AC
Sample : 0512110-10
Misc : 1X
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 13 00:41:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/07/06	70.1	5.35	15.8619	1	AC

Parameter	Result	Parameter	Result
Naphthalene	26000	Fluoranthene	23000
C1-Naphthalenes	34000	Pyrene	34000
C2-Naphthalenes	51000	C1-Fluoranthenes/Pyrenes	38000
C3-Naphthalenes	44000	C2-Fluoranthenes/Pyrenes	20000
C4-Naphthalenes	24000	C3-Fluoranthenes/Pyrenes	9300
Biphenyl	1700	C4-Fluoranthenes/Pyrenes	3900
Dibenzofuran	2000	Naphthobenzothiophenes	4700
Acenaphthylene	5300	C1-Naphthobenzothiophenes	5900
Acenaphthene	17000	C2-Naphthobenzothiophenes	4600
Fluorene	11000	C3-Naphthobenzothiophenes	2700
C1-Fluorenes	15000	C4-Naphthobenzothiophenes	1200
C2-Fluorenes	16000	Benz[a]anthracene	20000
C3-Fluorenes	11000	Chrysene/Triphenylene	21000
Anthracene	15000	C1-Chrysenes	23000
Phenanthrene	45000 E	C2-Chrysenes	14000
C1-Phenanthrenes/Anthracenes	52000	C3-Chrysenes	8500
C2-Phenanthrenes/Anthracenes	40000	C4-Chrysenes	2800
C3-Phenanthrenes/Anthracenes	20000	Benzo[b]fluoranthene	8700
C4-Phenanthrenes/Anthracenes	7200	Benzo[k]fluoranthene	9100
Retene	5700	Benzo[a]fluoranthene	3800
Dibenzothiophene	5700	Benzo[e]pyrene	8400
C1-Dibenzothiophenes	12000	Benzo[a]pyrene	15000
C2-Dibenzothiophenes	14000	Perylene	2600
C3-Dibenzothiophenes	9400	Indeno[1,2,3-cd]pyrene	6800
C4-Dibenzothiophenes	4200	Dibenz[a,h]anthracene	2000
Benzo(b)fluorene	5200	Benzo[g,h,i]perylene	6300

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	72	50-130
Benzo[b]fluoranthene-d12	92	50-130

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

01/18/06 11:09

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/07/06	70.1	5.35	15.8619	1	AC

Parameter	Result
Carbazole	880

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	104	50-130
Pyrene-d10	72	50-130
Benzo[b]fluoranthene-d12	92	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 : P43108.D
Acq On : 7 Jan 2006 4:41 pm
Operator : AC
Sample : 0512110-11
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 12 09:15:15 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 for WD 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	74917m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.21	240	102668m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.38	152	186524	1312.36 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 131.24%#		
58) Pyrene-d10	38.28	212	320992m	908.46 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 90.85%		
81) Benzo[b]fluoranthene-d12	47.11	264	250319	1164.01 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 116.40%		
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	19.81	128	1776330m	6104.82 ng/mL	
10) C1-Naphthalenes	22.51	142	2376500m	8167.47 ng/mL	
11) C2-Naphthalenes	25.36	156	3503606m	12041.06 ng/mL	
12) C3-Naphthalenes	27.70	170	2995257m	10293.99 ng/mL	
13) C4-Naphthalenes	30.46	184	1632567m	5610.74 ng/mL	
15) 2-Methylnaphthalene	22.51	142	1290531m	6962.38 ng/mL	
16) 1-Methylnaphthalene	22.93	142	1083177	5800.70 ng/mL#	100
22) Biphenyl	24.39	154	91204m	410.70 ng/mL	
23) 2,6-Dimethylnaphthalene	25.01	156	445167m	2769.79 ng/mL	
24) Dibenzofuran	27.48	168	124064m	477.53 ng/mL	
25) Acenaphthylene	26.10	152	407109m	1250.29 ng/mL	
26) Acenaphthene	26.84	153	802491	4022.71 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.39	170	175249m	1065.58 ng/mL	
28) Fluorene	28.86	166	550529m	2576.06 ng/mL	
29) C1-Fluorenes	31.23	180	744554m	3483.95 ng/mL	
30) C2-Fluorenes	33.28	194	802419m	3754.72 ng/mL	
31) C3-Fluorenes	35.27	208	549021m	2569.01 ng/mL	
32) Dibenzothiophene	32.18	184	425481	1342.99 ng/mL#	81
36) OTP	34.40	198	58014	183.12 ng/mL#	100
37) C1-Dibenzothiophenes	33.96	198	961528m	3034.97 ng/mL	
38) C2-Dibenzothiophenes	36.02	212	1060116m	3346.16 ng/mL	
39) C3-Dibenzothiophenes	37.46	226	703555m	2220.70 ng/mL	
40) C4-Dibenzothiophenes	40.96	240	313736m	990.28 ng/mL	
41) Phenanthrene	32.69	178	3761384	10554.52 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.77	192	4414413m	12386.94 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.93	206	3373731m	9466.76 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.76	220	1709851m	4797.88 ng/mL	
51) C4-Phenanthrenes/Anthracen	39.69	234	604515m	1696.28 ng/mL	
52) Retene	39.69	234	123256m	1349.45 ng/mL	
53) Anthracene	32.86	178	1159267m	3562.55 ng/mL	
54) Carbazole	33.52	167	53791m	208.58 ng/mL	
55) 1-Methylphenanthrene	35.20	192	731853m	3112.04 ng/mL	
56) Fluoranthene	37.48	202	1987511m	5410.40 ng/mL	
57) Benzo(b)fluorene	39.99	216	263587	1225.03 ng/mL	95
59) Pyrene	38.36	202	3064865m	8042.15 ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.75	216	3446745m	9044.20 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	1771861m	4649.33 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.69	244	841280m	2207.50 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	347792m	912.60 ng/mL	
64) Naphthobenzothiophene	42.21	234	244772m	706.44 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43108.D
Acq On : 7 Jan 2006 4:41 pm
Operator : AC
Sample : 0512110-11
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 12 09:15:15 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

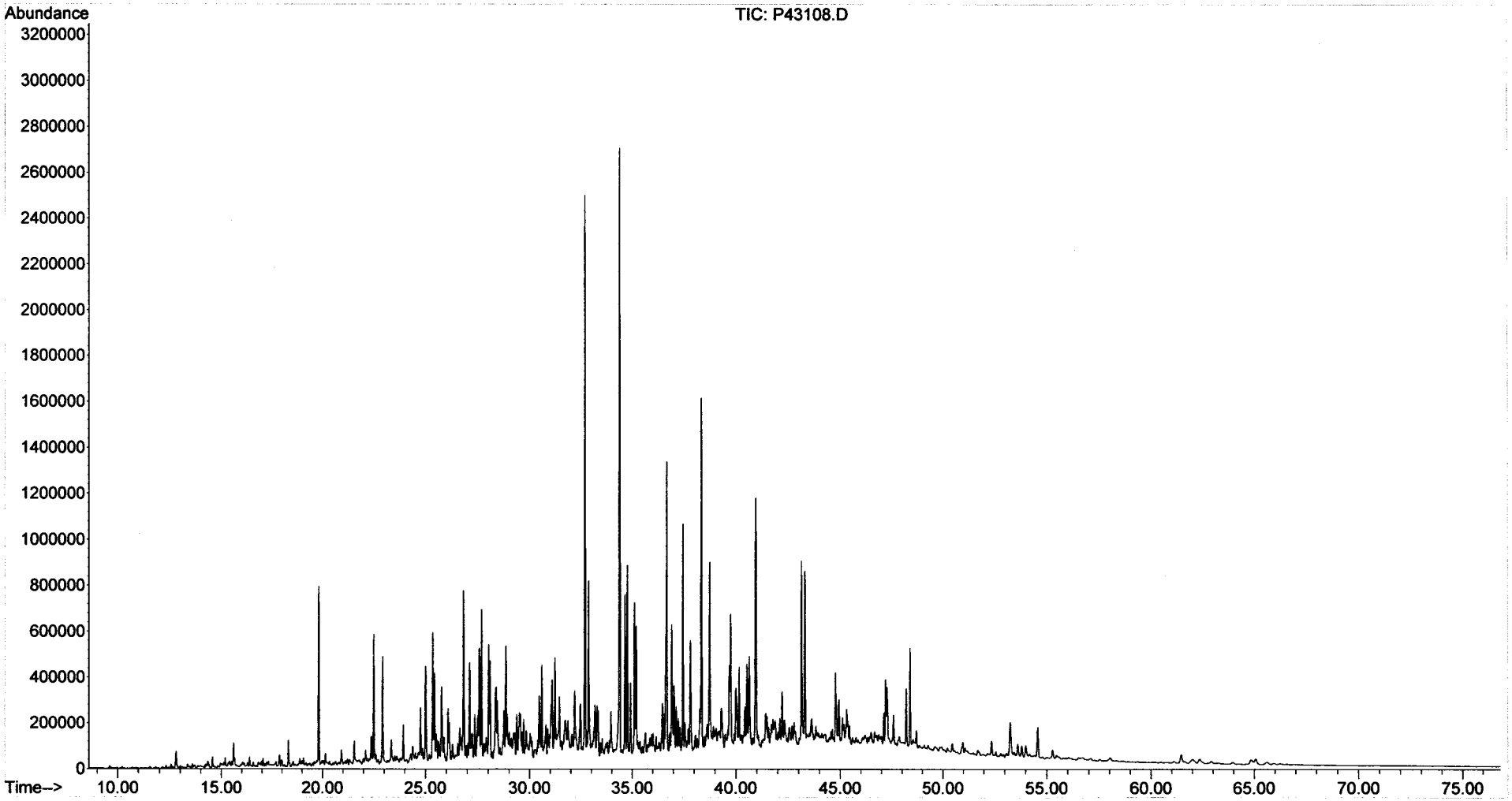
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.21	234	247883m	715.42	ng/mL	
66) Naphthobenzothiophene-1,2-	42.55	234	67562m	194.99	ng/mL	
67) Naphthobenzothiophene-2,3-	42.84	234	67772m	195.60	ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	485502m	1401.21	ng/ml	
69) C2-Naphthobenzothiophenes	45.12	262	376495m	1086.61	ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	223355m	644.63	ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	99849m	288.18	ng/mL	
73) Benz[a]anthracene	43.15	228	1133635m	4642.36	ng/mL	
74) Chrysene	43.30	228	1232355m	4972.64	ng/mL	
75) Chrysene/Triphenylene	43.30	228	1244131m	5020.16	ng/mL	
76) C1-Chrysenes	44.78	242	1328530m	5360.71	ng/mL	
77) C2-Chrysenes	46.49	256	829799m	3348.30	ng/mL	
78) BBF-d12 Surr BKGD	47.10	256	18061	72.88	ng/mL	100
79) C3-Chrysenes	48.09	270	496579m	2003.73	ng/mL	
80) C4-Chrysenes	49.69	284	164003m	661.76	ng/mL	
82) Benzo[b]fluoranthene	47.20	252	520655	2051.60	ng/mL	99
83) Benzo[k]fluoranthene	47.27	252	616725	2154.31	ng/mL	98
84) Benzo[a]fluoranthene	47.59	252	255061m	890.96	ng/mL	
85) Benzo[e]pyrene	48.21	252	506345	1979.75	ng/mL	96
86) Benzo[a]pyrene	48.40	252	854521	3466.23	ng/mL	95
87) Perylene	48.70	252	150011m	614.47	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	366052m	1598.69	ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	112686m	476.35	ng/mL	
90) Benzo[g,h,i]perylene	54.57	276	388363	1488.43	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43108.D
Acq On : 7 Jan 2006 4:41 pm
Operator : AC
Sample : 0512110-11
Misc : 1X
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 12 09:15:15 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	70.1	5.35	15.8619	2	AC

Parameter	Result		Parameter	Result	
Naphthalene	14	U	Fluoranthene	8.5	U
C1-Naphthalenes	14	U	Pyrene	7.5	U
C2-Naphthalenes	14	U	C1-Fluoranthenes/Pyrenes	7.5	U
C3-Naphthalenes	14	U	C2-Fluoranthenes/Pyrenes	7.5	U
C4-Naphthalenes	14	U	C3-Fluoranthenes/Pyrenes	7.5	U
Biphenyl	7.7	U	C4-Fluoranthenes/Pyrenes	7.5	U
Dibenzofuran	10	U	Naphthobenzothiophenes	10	U
Acenaphthylene	15	U	C1-Naphthobenzothiophenes	10	U
Acenaphthene	9.7	U	C2-Naphthobenzothiophenes	10	U
Fluorene	9.7	U	C3-Naphthobenzothiophenes	10	U
C1-Fluorenes	9.7	U	C4-Naphthobenzothiophenes	10	U
C2-Fluorenes	9.7	U	Benz[a]anthracene	13	U
C3-Fluorenes	9.7	U	Chrysene/Triphenylene	9.1	U
Anthracene	11	U	C1-Chrysenes	9.1	U
Phenanthrene	**40000**		C2-Chrysenes	9.1	U
C1-Phenanthrenes/Anthracenes	12	U	C3-Chrysenes	9.1	U
C2-Phenanthrenes/Anthracenes	12	U	C4-Chrysenes	9.1	U
C3-Phenanthrenes/Anthracenes	12	U	Benzo[b]fluoranthene	9.0	U
C4-Phenanthrenes/Anthracenes	12	U	Benzo[k]fluoranthene	17	U
Retene	12	U	Benzo[a]fluoranthene	17	U
Dibenzothiophene	9.4	U	Benzo[e]pyrene	12	U
C1-Dibenzothiophenes	9.4	U	Benzo[a]pyrene	12	U
C2-Dibenzothiophenes	9.4	U	Perylene	15	U
C3-Dibenzothiophenes	9.4	U	Indeno[1,2,3-cd]pyrene	20	U
C4-Dibenzothiophenes	9.4	U	Dibenz[a,h]anthracene	16	U
Benzo(b)fluorene	8.5	U	Benzo[g,h,i]perylene	15	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	66	50-130
Benzo[b]fluoranthene-d12	82	50-130

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

01/18/06 10:47

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42828.D
Acq On : 4 Jan 2006 6:45 am
Operator : AC
Sample : 0512110-11-RE
Misc : 2X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 11 20:23:40 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 for MW 1-12-06

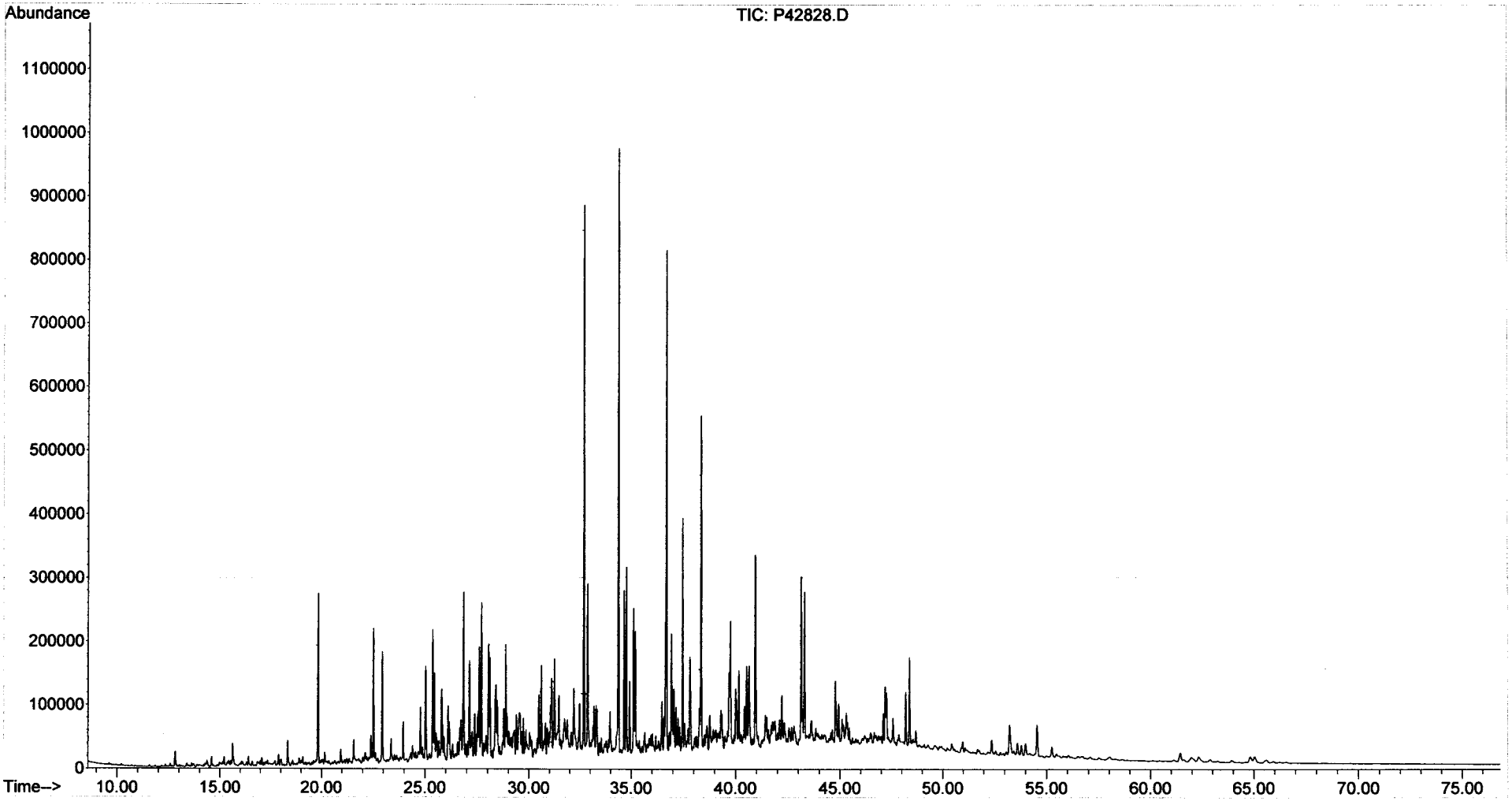
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	57692m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	78802	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	64291	587.40	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 58.74%			
58) Pyrene-d10	38.28	212	113641m	417.65	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 41.76%#			
81) Benzo[b]fluoranthene-d12	47.10	264	85462m	517.77	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 51.78%			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
41) Phenanthrene	32.69	178	1286356	4687.24	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42828.D
Acq On : 4 Jan 2006 6:45 am
Operator : AC
Sample : 0512110-11-RE
Misc : 2X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 11 20:23:40 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/09/06	70.1	5.35	6.25	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**710**	30,31-Bishomohopane-22S	**1200**
C24 Tricyclic Terpane	**520**	30,31-Bishomohopane-22R	**930**
C25 Tricyclic Terpane	**570**	30,31-Trishomohopane-22S	**700**
C24 Tetracyclic Terpane	**460**	30,31-Trishomohopane-22R	**500**
C26 Tricyclic Terpane-22S	**260**	Tetrakishomohopane-22S	**420**
C26 Tricyclic Terpane-22R	**280**	Tetrakishomohopane-22R	**270**
C28 Tricyclic Terpane-22S	**300**	Pentakishomohopane-22S	**280**
C28 Tricyclic Terpane-22R	**330**	Pentakishomohopane-22R	**270**
C29 Tricyclic Terpane-22S	**410**	13b(H),17a(H)-20S-Diacholestane	**1300**
C29 Tricyclic Terpane-22R	**380**	13b(H),17a(H)-20R-Diacholestane	**780**
18a-22,29,30-Trisnorneohopane-TS	**1500**	13b,17a-20S-Methyldiacholestane	**610**
C30 Tricyclic Terpane-22S	**310**	14a(H),17a(H)-20S-Cholestane	**760**
C30 Tricyclic Terpane-22R	**400**	14a(H),17a(H)-20R-Cholestane	**2700**
17a(H)-22,29,30-Trisnorhopane-TM	**1700**	13b,17a-20R-Ethyldiacholestane	**390**
17a/b,21b/a 28,30-Bisnorhopane	**530**	13a,17b-20S-Ethyldiacholestane	**110**
17a(H),21b(H)-25-Norhopane	**320**	14a,17a-20S-Methylcholestane	**330**
30-Norhopane	**4700**	14a,17a-20R-Methylcholestane	**1300**
18a(H)-30-Norneohopane-C29Ts	**1600**	14a(H),17a(H)-20S-Ethylcholestane	**830**
17a(H)-Diahopane	**390**	14a(H),17a(H)-20R-Ethylcholestane	**1300**
30-Normoretane	**1100**	14b(H),17b(H)-20R-Cholestane	**1000**
18a(H)&18b(H)-Oleananes	**850**	14b(H),17b(H)-20S-Cholestane	**1100**
Hopane	**8200**	14b,17b-20R-Methylcholestane	**1100**
Moretane	**1300**	14b,17b-20S-Methylcholestane	**1100**
30-Homohopane-22S	**2100**	14b(H),17b(H)-20R-Ethylcholestane	**1600**
30-Homohopane-22R	**1700**	14b(H),17b(H)-20S-Ethylcholestane	**1200**

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

N/A - Not Applicable

01/19/06 07:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34753.D
Acq On : 9 Jan 2006 3:25 pm
Operator : AC
Sample : 0512110-11
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 18 12:59:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MWS for WD 1-18-06

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	50.35	240	50974m	500.00	ng/mL	0.07
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	51.00	217	81732	3459.92	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 345.99%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	252555m	4894.30	ng/mL	
84) Hopane (T19)	60.53	191	253138m	4905.60	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.44	191	22015m	426.63	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.31	191	15943m	308.96	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.10	191	17548m	340.07	ng/ml	
88) C24 Tetracyclic Terpane (T	51.63	191	14139m	274.00	ng/ml	
89) C26 Tricyclic Terpane-22S	51.38	191	7955m	154.16	ng/ml	
90) C26 Tricyclic Terpane-22R	51.49	191	8659	167.80	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.24	191	9253m	179.32	ng/ml	
92) C28 Tricyclic Terpane-22R	54.44	191	10315m	199.90	ng/ml	
93) C29 Tricyclic Terpane-22S	55.05	191	12685	245.82	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.29	191	11678m	226.31	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.46	191	46607m	903.20	ng/ml	
96) C30 Tricyclic Terpane-22S	56.64	191	9696	187.90	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.90	191	12233	237.07	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.05	191	53835m	1043.28	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.34	191	16399m	317.80	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.20	191	9983m	193.46	ng/ml	
101) 30-Norhopane (T15)	59.07	191	146804m	2844.94	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.18	191	49104m	951.59	ng/ml	
103) 17a(H)-Diahopane (X)	59.33	191	12122m	234.91	ng/ml	
104) 30-Normoretane (T17)	59.91	191	33947	657.86	ng/ml	100
105) 18a(H)&18b(H)-Oleananes (T	60.33	191	26338m	510.41	ng/ml	
106) Moretane (T20)	61.27	191	39672m	768.81	ng/ml	
107) 30-Homohopane-22S (T21)	62.43	191	65248	1264.45	ng/ml	100
108) 30-Homohopane-22R (T22)	62.67	191	53535	1037.46	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.07	191	37985	736.12	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.48	191	28860	559.28	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.31	191	21632m	419.21	ng/ml	
112) 30,31-Trishomohopane-22R (	66.97	191	15528	300.92	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.06	191	13017	252.26	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.01	191	8430	163.37	ng/ml	100
115) Pentakishomohopane-22S (T3	72.36	191	8774m	170.03	ng/ml	
116) Pentakishomohopane-22R (T3	73.69	191	8350m	161.82	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	52.83	217	18793m	795.56	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.34	217	11111m	470.36	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.18	217	8592m	363.72	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.20	217	10789m	456.73	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.79	217	38076	1611.85	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.10	217	5532m	234.18	ng/ml	

KWS 1/18/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34753.D
Acq On : 9 Jan 2006 3:25 pm
Operator : AC
Sample : 0512110-11
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 18 12:59:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

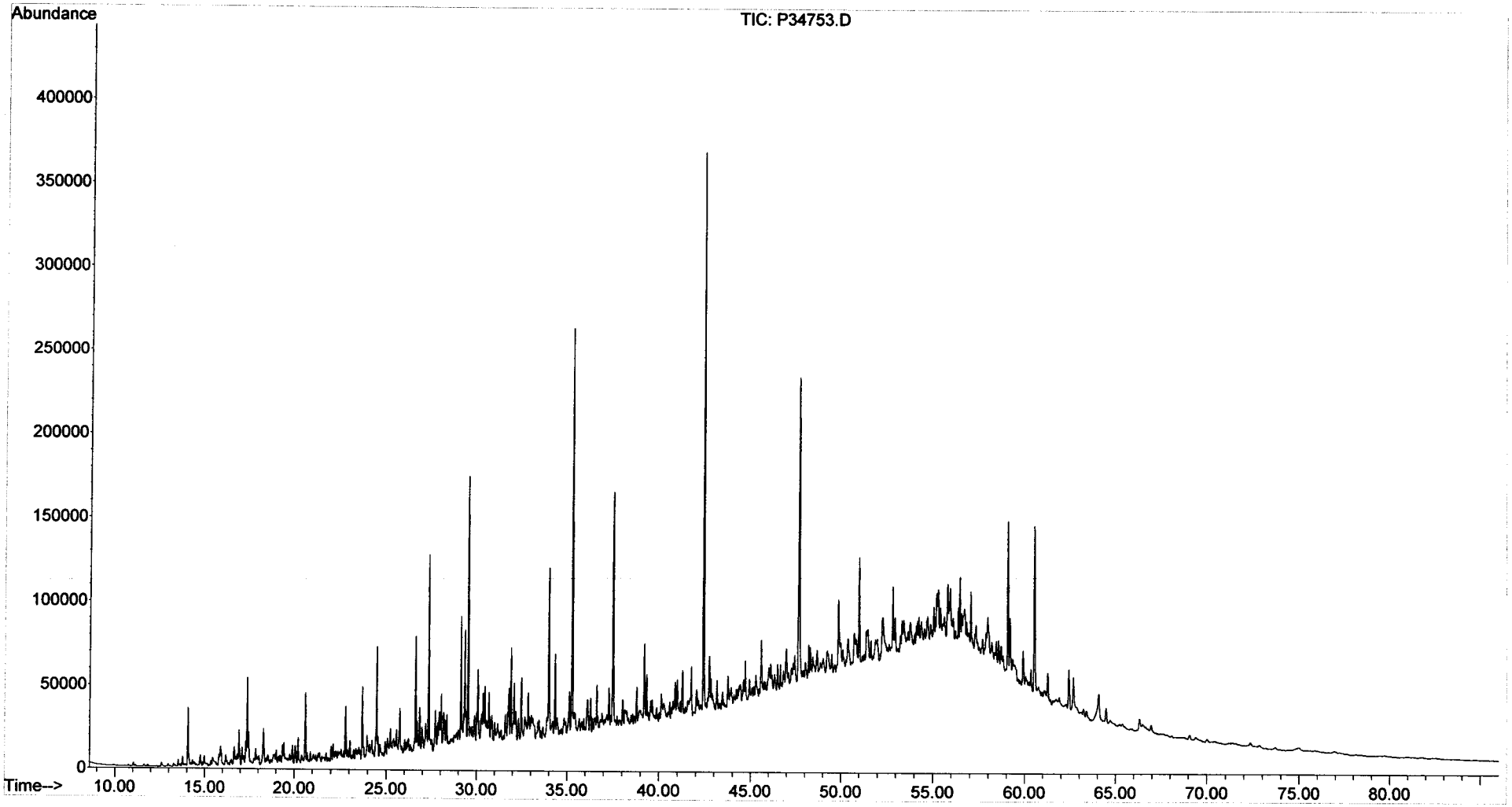
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.38	217	1551m	65.66	ng/ml	
125) 14a,17a-20S-Methylcholesta	56.56	217	4622m	195.66	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.32	217	18262m	773.08	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.70	217	11761m	497.87	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.69	217	18665	790.14	ng/ml	100
129) 14b(H),17b(H)-20R-Cholesta	55.30	218	14823m	627.50	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.40	218	15445m	653.83	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.73	218	15003m	635.12	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.83	218	15778m	667.92	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.98	218	22879	968.53	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.02	218	16305m	690.23	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34753.D
Acq On : 9 Jan 2006 3:25 pm
Operator : AC
Sample : 0512110-11
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 18 12:59:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11 D**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/07/06	70.1	5.10	17.0718	1	AC

Parameter	Result		Parameter	Result
Naphthalene	36000		Fluoranthene	30000
C1-Naphthalenes	47000		Pyrene	45000
C2-Naphthalenes	69000		C1-Fluoranthenes/Pyrenes	49000
C3-Naphthalenes	59000		C2-Fluoranthenes/Pyrenes	25000
C4-Naphthalenes	32000		C3-Fluoranthenes/Pyrenes	12000
Biphenyl	2400		C4-Fluoranthenes/Pyrenes	4500
Dibenzofuran	2800		Naphthobenzothiophenes	6000
Acenaphthylene	5800		C1-Naphthobenzothiophenes	7500
Acenaphthene	21000		C2-Naphthobenzothiophenes	5600
Fluorene	14000		C3-Naphthobenzothiophenes	3200
C1-Fluorenes	20000		C4-Naphthobenzothiophenes	1400
C2-Fluorenes	22000		Benz[a]anthracene	22000
C3-Fluorenes	14000		Chrysene/Triphenylene	25000
Anthracene	20000		C1-Chrysenes	26000
Phenanthrene	60000	E	C2-Chrysenes	16000
C1-Phenanthrenes/Anthracenes	71000		C3-Chrysenes	9900
C2-Phenanthrenes/Anthracenes	53000		C4-Chrysenes	3000
C3-Phenanthrenes/Anthracenes	27000		Benzo[b]fluoranthene	9200
C4-Phenanthrenes/Anthracenes	9000		Benzo[k]fluoranthene	9800
Retene	6100		Benzo[a]fluoranthene	3900
Dibenzothiophene	7600		Benzo[e]pyrene	9000
C1-Dibenzothiophenes	16000		Benzo[a]pyrene	15000
C2-Dibenzothiophenes	19000		Perylene	2800
C3-Dibenzothiophenes	12000		Indeno[1,2,3-cd]pyrene	7200
C4-Dibenzothiophenes	5100		Dibenz[a,h]anthracene	2200
Benzo(b)fluorene	6400		Benzo[g,h,i]perylene	6600

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	106	50-130
Pyrene-d10	74	50-130
Benzo[b]fluoranthene-d12	88	50-130

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

01/18/06 11:10

Form I
Duplicate
Carbazole

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11 D**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/07/06	70.1	5.10	17.0718	1	AC

Parameter	Result
Carbazole	**1200**

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	106	50-130
Pyrene-d10	74	50-130
Benzo[b]fluoranthene-d12	88	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 : P43110.D
Acq On : 7 Jan 2006 6:10 pm
Operator : AC
Sample : 0512110-11D
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 12 09:15:42 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 for WB 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	77990m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.21	240	111929	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.38	152	183018	1236.95 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 123.69%		
58) Pyrene-d10	38.28	212	318256m	865.22 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 86.52%		
81) Benzo[b]fluoranthene-d12	47.12	264	241722m	1031.03 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 103.10%		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#		

Target Compounds					Qvalue
9) Naphthalene	19.81	128	2316529m	7647.66 ng/mL	
10) C1-Naphthalenes	22.51	142	2974966m	9821.39 ng/mL	
11) C2-Naphthalenes	25.36	156	4390912m	14495.92 ng/mL	
12) C3-Naphthalenes	27.70	170	3725510m	12299.20 ng/mL	
13) C4-Naphthalenes	30.46	184	2002114m	6609.67 ng/mL	
15) 2-Methylnaphthalene	22.51	142	1684858m	8731.60 ng/mL	
16) 1-Methylnaphthalene	22.93	142	1295364	6663.69 ng/mL#	100
22) Biphenyl	24.39	154	116921m	505.76 ng/mL	
23) 2,6-Dimethylnaphthalene	25.02	156	635646m	3799.10 ng/mL	
24) Dibenzofuran	27.48	168	155503	574.95 ng/mL#	84
25) Acenaphthylene	26.10	152	408031	1203.74 ng/mL#	100
26) Acenaphthene	26.85	153	919174	4426.07 ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.39	170	234102m	1367.35 ng/mL	
28) Fluorene	28.86	166	661599m	2973.81 ng/mL	
29) C1-Fluorenes	31.23	180	929825m	4179.45 ng/mL	
30) C2-Fluorenes	33.28	194	1005618m	4520.13 ng/mL	
31) C3-Fluorenes	35.27	208	641593m	2883.88 ng/mL	
32) Dibenzothiophene	32.18	184	523369	1586.87 ng/mL#	80
36) OTP	34.40	198	56069	170.00 ng/mL#	100
37) C1-Dibenzothiophenes	33.96	198	1178482m	3573.20 ng/mL	
38) C2-Dibenzothiophenes	36.02	212	1289017m	3908.34 ng/mL	
39) C3-Dibenzothiophenes	37.47	226	842372m	2554.10 ng/mL	
40) C4-Dibenzothiophenes	39.17	240	354602m	1075.17 ng/mL	
41) Phenanthrene	32.70	178	4664820	12573.82 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.77	192	5534070m	14916.85 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.94	206	4102525m	11058.18 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	2114683m	5700.04 ng/mL	
51) C4-Phenanthrenes/Anthracen	39.70	234	698181m	1881.92 ng/mL	
52) Retene	39.70	234	121344m	1276.17 ng/mL	
53) Anthracene	32.86	178	1383211m	4083.26 ng/mL	
54) Carbazole	33.52	167	66104m	246.22 ng/mL	
55) 1-Methylphenanthrene	35.21	192	908211m	3709.79 ng/mL	
56) Fluoranthene	37.48	202	2430030m	6354.38 ng/mL	
57) Benzo(b)fluorene	40.00	216	301190	1344.64 ng/mL	95
59) Pyrene	38.37	202	3704888m	9338.51 ng/mL	
60) C1-Fluoranthenes/Pyrenes	39.76	216	4083453m	10292.72 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.22	230	2045210m	5155.14 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.69	244	1004413m	2531.71 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.94	258	374349m	943.58 ng/mL	
64) Naphthobenzothiophene	42.21	234	287663m	797.51 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43110.D
Acq On : 7 Jan 2006 6:10 pm
Operator : AC
Sample : 0512110-11D
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 12 09:15:42 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

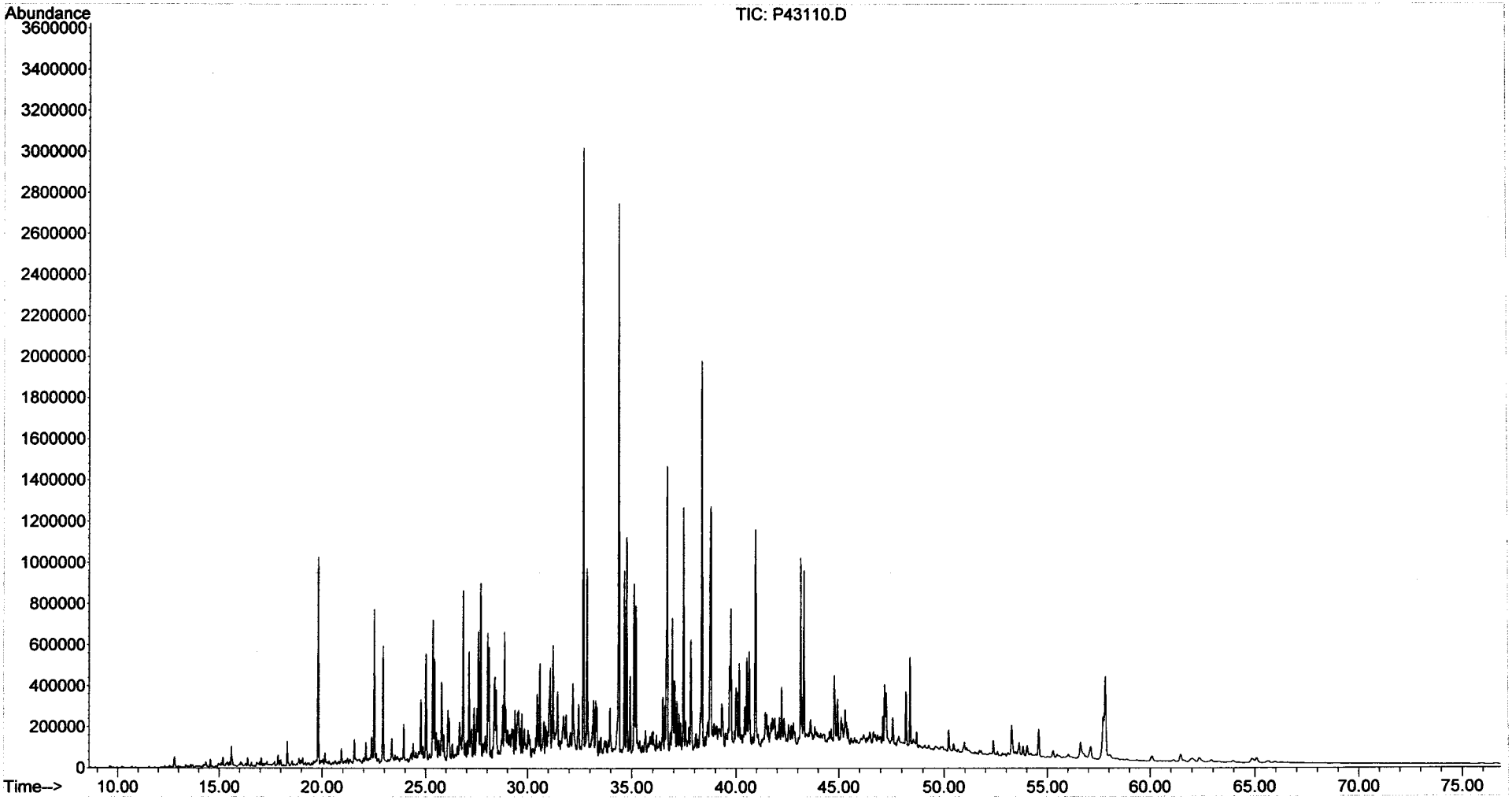
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.21	234	287118m	796.00	ng/mL	
66) Naphthobenzothiophene-1,2-	42.55	234	80398m	222.89	ng/mL	
67) Naphthobenzothiophene-2,3-	42.85	234	82668m	229.19	ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	568952m	1577.36	ng/ml	
69) C2-Naphthobenzothiophenes	45.12	262	423683m	1174.61	ng/ml	
70) C3-Naphthobenzothiophenes	47.22	276	240927m	667.94	ng/ml	
71) C4-Naphthobenzothiophenes	48.31	290	108926m	301.99	ng/mL	
73) Benz[a]anthracene	43.15	228	1254597m	4712.62	ng/mL	
74) Chrysene	43.31	228	1390460m	5146.38	ng/mL	
75) Chrysene/Triphenylene	43.31	228	1395250m	5164.11	ng/mL	
76) C1-Chrysenes	44.79	242	1482566m	5487.29	ng/mL	
77) C2-Chrysenes	46.49	256	928537m	3436.71	ng/mL	
78) BBF-d12 Surr BKGD	47.11	256	19174	70.97	ng/mL	100
79) C3-Chrysenes	48.09	270	558587m	2067.45	ng/mL	
80) C4-Chrysenes	49.69	284	170906m	632.56	ng/mL	
82) Benzo[b]fluoranthene	47.20	252	534710	1932.65	ng/mL	99
83) Benzo[k]fluoranthene	47.28	252	641015	2053.89	ng/mL	98
84) Benzo[a]fluoranthene	47.59	252	255016m	817.10	ng/mL	
85) Benzo[e]pyrene	48.21	252	527610	1892.21	ng/mL	96
86) Benzo[a]pyrene	48.41	252	869158	3233.90	ng/mL	96
87) Perylene	48.71	252	154236m	579.51	ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.25	276	374282m	1499.38	ng/mL	
89) Dibenz[a,h]anthracene	53.30	278	116269m	450.83	ng/mL	
90) Benzo[g,h,i]perylene	54.58	276	395988	1392.08	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43110.D
Acq On : 7 Jan 2006 6:10 pm
Operator : AC
Sample : 0512110-11D
Misc : 1X
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 12 09:15:42 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



Form I
Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11E D**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	70.1	5.10	17.0718	2	AC

Parameter	Result		Parameter	Result	
Naphthalene	16	U	Fluoranthene	9.6	U
C1-Naphthalenes	16	U	Pyrene	8.5	U
C2-Naphthalenes	16	U	C1-Fluoranthenes/Pyrenes	8.5	U
C3-Naphthalenes	16	U	C2-Fluoranthenes/Pyrenes	8.5	U
C4-Naphthalenes	16	U	C3-Fluoranthenes/Pyrenes	8.5	U
Biphenyl	8.7	U	C4-Fluoranthenes/Pyrenes	8.5	U
Dibenzofuran	11	U	Naphthobenzothiophenes	12	U
Acenaphthylene	17	U	C1-Naphthobenzothiophenes	12	U
Acenaphthene	11	U	C2-Naphthobenzothiophenes	12	U
Fluorene	11	U	C3-Naphthobenzothiophenes	12	U
C1-Fluorenes	11	U	C4-Naphthobenzothiophenes	12	U
C2-Fluorenes	11	U	Benz[a]anthracene	15	U
C3-Fluorenes	11	U	Chrysene/Triphenylene	10	U
Anthracene	13	U	C1-Chrysenes	10	U
Phenanthrene	**52000**		C2-Chrysenes	10	U
C1-Phenanthrenes/Anthracenes	14	U	C3-Chrysenes	10	U
C2-Phenanthrenes/Anthracenes	14	U	C4-Chrysenes	10	U
C3-Phenanthrenes/Anthracenes	14	U	Benzo[b]fluoranthene	10	U
C4-Phenanthrenes/Anthracenes	14	U	Benzo[k]fluoranthene	19	U
Retene	14	U	Benzo[a]fluoranthene	19	U
Dibenzothiophene	11	U	Benzo[e]pyrene	13	U
C1-Dibenzothiophenes	11	U	Benzo[a]pyrene	13	U
C2-Dibenzothiophenes	11	U	Perylene	17	U
C3-Dibenzothiophenes	11	U	Indeno[1,2,3-cd]pyrene	23	U
C4-Dibenzothiophenes	11	U	Dibenz[a,h]anthracene	18	U
Benzo(b)fluorene	9.6	U	Benzo[g,h,i]perylene	17	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	91	50-130
Pyrene-d10	66	50-130
Benzo[b]fluoranthene-d12	80	50-130

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

01/18/06 10:48

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42829.D
Acq On : 4 Jan 2006 8:13 am
Operator : AC
Sample : 0512110-11D-RE
Misc : 2X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 11 20:25:28 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 for WD 1-12-06

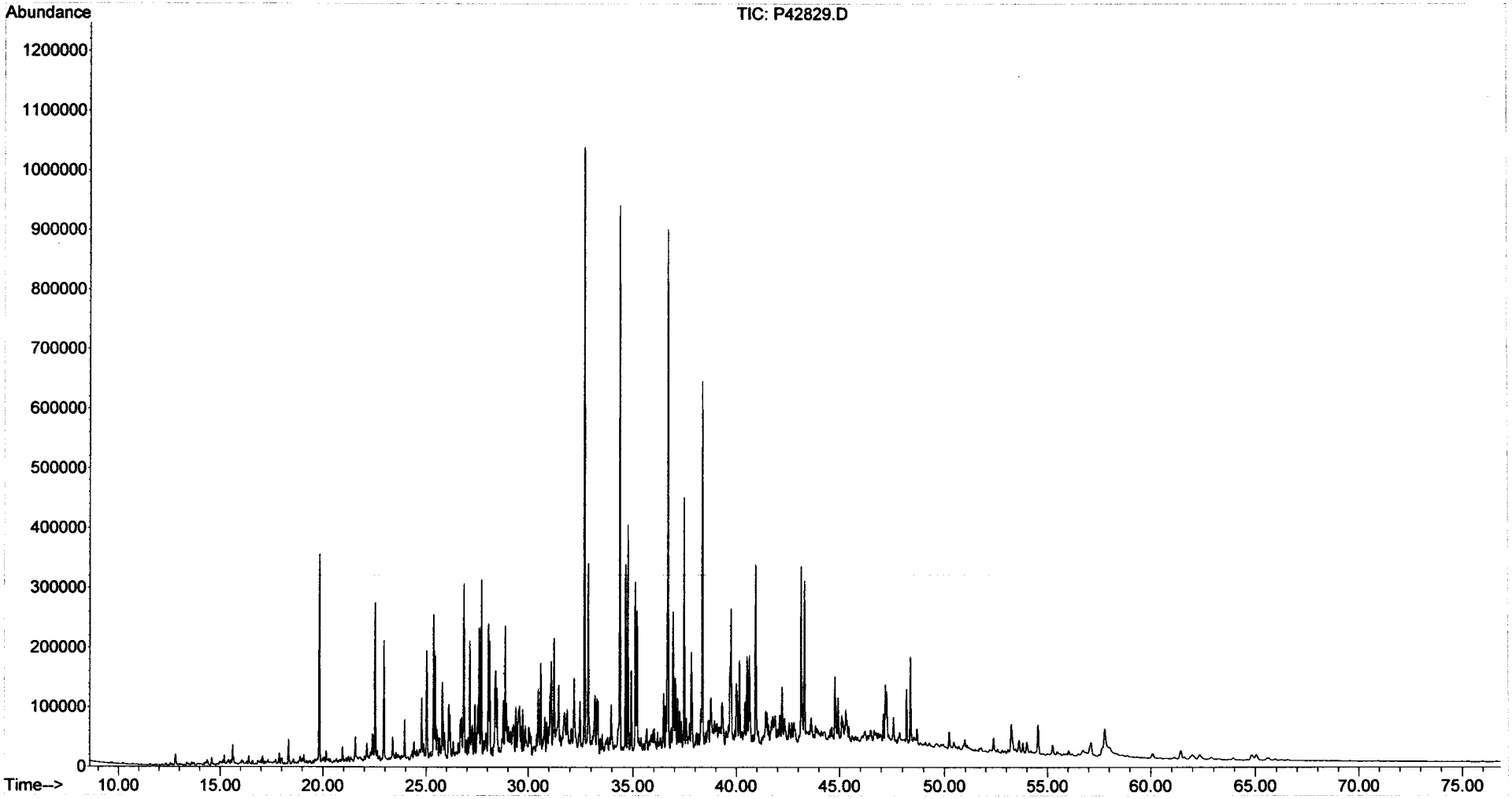
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	60601m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	83894m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	61126	531.67	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 53.17%			
58) Pyrene-d10	38.28	212	110906m	388.03	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 38.80%#			
81) Benzo[b]fluoranthene-d12	47.10	264	82589m	469.99	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.00%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
41) Phenanthrene	32.69	178	1561307	5416.02	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42829.D
Acq On : 4 Jan 2006 8:13 am
Operator : AC
Sample : 0512110-11D-RE
Misc : 2X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 11 20:25:28 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



Form I
Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11 D**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/09/06	70.1	5.10	6.35	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**700**	30,31-Bishomohopane-22S	**1300**
C24 Tricyclic Terpane	**540**	30,31-Bishomohopane-22R	**960**
C25 Tricyclic Terpane	**560**	30,31-Trishomohopane-22S	**720**
C24 Tetracyclic Terpane	**460**	30,31-Trishomohopane-22R	**500**
C26 Tricyclic Terpane-22S	**260**	Tetrakishomohopane-22S	**430**
C26 Tricyclic Terpane-22R	**280**	Tetrakishomohopane-22R	**250**
C28 Tricyclic Terpane-22S	**310**	Pentakishomohopane-22S	**280**
C28 Tricyclic Terpane-22R	**320**	Pentakishomohopane-22R	**260**
C29 Tricyclic Terpane-22S	**390**	13b(H),17a(H)-20S-Diacholestane	**1400**
C29 Tricyclic Terpane-22R	**360**	13b(H),17a(H)-20R-Diacholestane	**840**
18a-22,29,30-Trisnorneohopane-TS	**1600**	13b,17a-20S-Methyldiacholestane	**640**
C30 Tricyclic Terpane-22S	**320**	14a(H),17a(H)-20S-Cholestane	**870**
C30 Tricyclic Terpane-22R	**380**	14a(H),17a(H)-20R-Cholestane	**2900**
17a(H)-22,29,30-Trisnorhopane-TM	**1900**	13b,17a-20R-Ethyldiacholestane	**460**
17a/b,21b/a 28,30-Bisnorhopane	**530**	13a,17b-20S-Ethyldiacholestane	**110**
17a(H),21b(H)-25-Norhopane	**320**	14a,17a-20S-Methylcholestane	**380**
30-Norhopane	**5000**	14a,17a-20R-Methylcholestane	**1400**
18a(H)-30-Norneohopane-C29Ts	**1700**	14a(H),17a(H)-20S-Ethylcholestane	**860**
17a(H)-Diahopane	**440**	14a(H),17a(H)-20R-Ethylcholestane	**1400**
30-Normoretane	**1100**	14b(H),17b(H)-20R-Cholestane	**1100**
18a(H)&18b(H)-Oleananes	**880**	14b(H),17b(H)-20S-Cholestane	**1200**
Hopane	**8700**	14b,17b-20R-Methylcholestane	**1100**
Moretane	**1300**	14b,17b-20S-Methylcholestane	**1100**
30-Homohopane-22S	**2100**	14b(H),17b(H)-20R-Ethylcholestane	**1700**
30-Homohopane-22R	**1800**	14b(H),17b(H)-20S-Ethylcholestane	**1200**

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

N/A - Not Applicable

01/19/06 07:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34754.D
Acq On : 9 Jan 2006 5:03 pm
Operator : AC
Sample : 0512110-11D
Misc : 1X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 13:00:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WED 1/18/06

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	50.35	240	52768m	500.00	ng/mL	0.07
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	51.00	217	77417	3165.84	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 316.58%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	260407m	4874.90	ng/mL	
84) Hopane (T19)	60.53	191	260961m	4885.27	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.44	191	20893m	391.12	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.31	191	16172m	302.74	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.15	191	16836m	315.17	ng/ml	
88) C24 Tetracyclic Terpane (T	51.65	191	13989m	261.88	ng/ml	
89) C26 Tricyclic Terpane-22S	51.38	191	7665m	143.49	ng/ml	
90) C26 Tricyclic Terpane-22R	51.49	191	8575m	160.53	ng/ml	
91) C28 Tricyclic Terpane-22S	54.24	191	9450m	176.91	ng/ml	
92) C28 Tricyclic Terpane-22R	54.44	191	9537m	178.54	ng/ml	
93) C29 Tricyclic Terpane-22S	55.05	191	11842m	221.69	ng/ml	
94) C29 Tricyclic Terpane-22R	55.29	191	10916m	204.35	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.46	191	48231m	902.90	ng/ml	
96) C30 Tricyclic Terpane-22S	56.64	191	9670m	181.03	ng/mL	
97) C30 Tricyclic Terpane-22R	56.90	191	11551m	216.24	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.05	191	55831m	1045.17	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.34	191	16069m	300.82	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.20	191	9653	180.71	ng/ml	100
101) 30-Norhopane (T15)	59.07	191	148768m	2784.98	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.19	191	51671m	967.30	ng/ml	
103) 17a(H)-Diahopane (X)	59.34	191	13271m	248.44	ng/ml	
104) 30-Normoretane (T17)	59.91	191	33937m	635.31	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	60.33	191	26428m	494.74	ng/ml	
106) Moretane (T20)	61.27	191	39598m	741.29	ng/ml	
107) 30-Homohopane-22S (T21)	62.43	191	64449m	1206.50	ng/ml	
108) 30-Homohopane-22R (T22)	62.68	191	54599	1022.11	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.07	191	38156	714.29	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.48	191	28778m	538.73	ng/ml	
111) 30,31-Trishomohopane-22S (	66.31	191	21727m	406.74	ng/ml	
112) 30,31-Trishomohopane-22R (	66.97	191	14891m	278.76	ng/ml	
113) Tetrakishomohopane-22S (T3	69.06	191	13031	243.94	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.02	191	7517	140.72	ng/ml	100
115) Pentakishomohopane-22S (T3	72.32	191	8376	156.80	ng/ml	100
116) Pentakishomohopane-22R (T3	73.67	191	7803m	146.07	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	52.83	217	19183m	784.46	ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.34	217	11603m	474.49	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.18	217	8762m	358.31	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.20	217	12015m	491.33	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.79	217	39325m	1608.13	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.10	217	6291	257.26	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34754.D
Acq On : 9 Jan 2006 5:03 pm
Operator : AC
Sample : 0512110-11D
Misc : 1X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 13:00:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

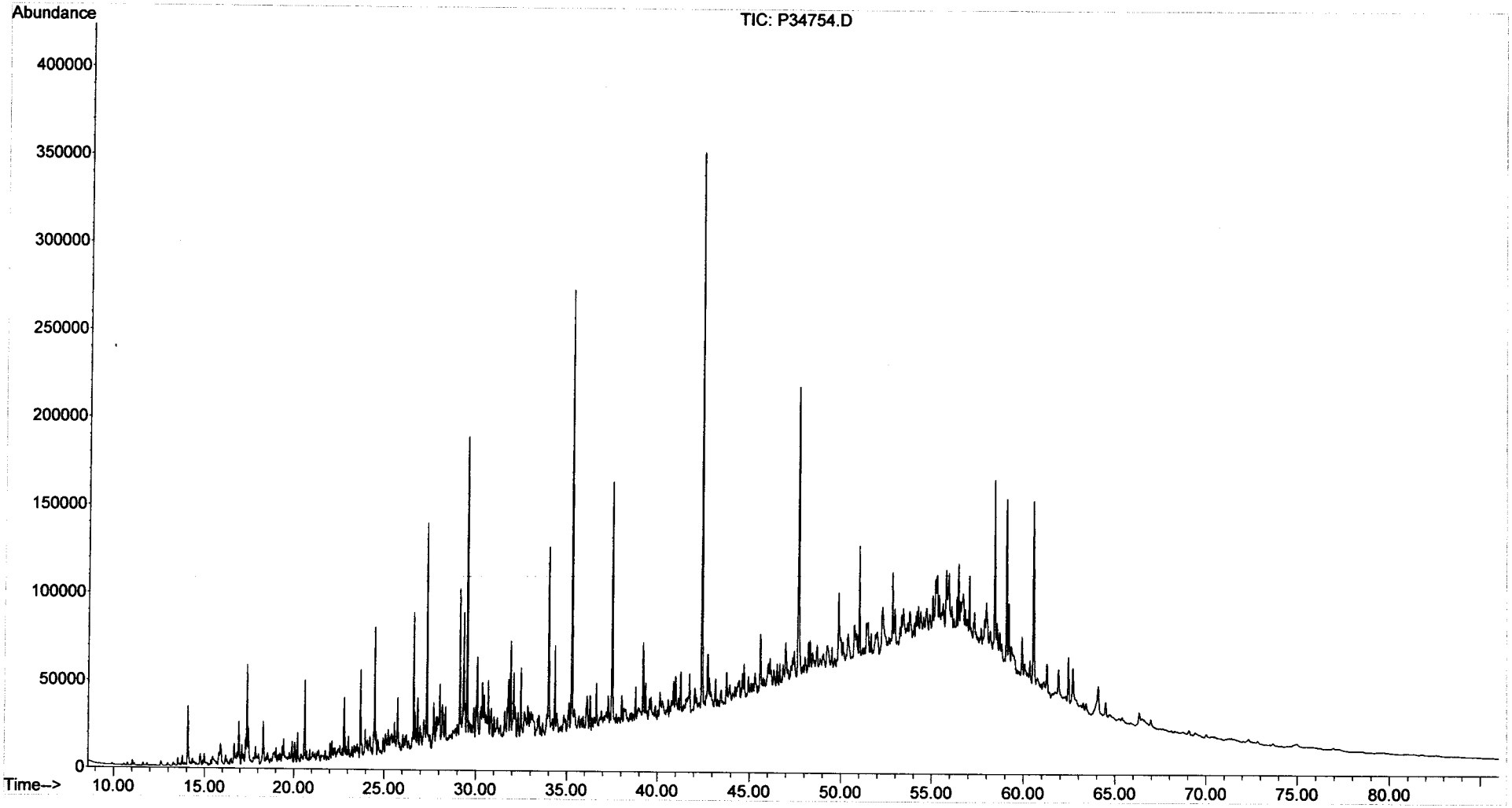
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.38	217	1567m	64.08	ng/ml	
125) 14a,17a-20S-Methylcholesta	56.56	217	5211m	213.10	ng/ml	
126) 14a,17a-20R-Methylcholesta	57.32	217	19304m	789.40	ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.71	217	11876m	485.65	ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.69	217	19263m	787.73	ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.30	218	15150m	619.53	ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.40	218	15858m	648.49	ng/ml	
131) 14b,17b-20R-Methylcholesta	56.73	218	15225m	622.60	ng/ml	
132) 14b,17b-20S-Methylcholesta	56.83	218	15669m	640.76	ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.97	218	23130	945.86	ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.02	218	16663m	681.41	ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34754.D
Acq On : 9 Jan 2006 5:03 pm
Operator : AC
Sample : 0512110-11D
Misc : 1X
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 13:00:34 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	26000	36000	34[a]	30
C1-Naphthalenes	34000	47000	30	30
C2-Naphthalenes	51000	69000	30	30
C3-Naphthalenes	44000	59000	30	30
C4-Naphthalenes	24000	32000	28	30
Biphenyl	1700	2400	33[a]	30
Dibenzofuran	2000	2800	30	30
Acenaphthylene	5300	5800	8	30
Acenaphthene	17000	21000	22	30
Fluorene	11000	14000	26	30
C1-Fluorenes	15000	20000	30	30
C2-Fluorenes	16000	22000	30	30
C3-Fluorenes	11000	14000	24	30
Anthracene	15000	20000	26	30
Phenanthrene	45000 E	60000 E	29	30
C1-Phenanthrenes/Anthracenes	52000	71000	30	30
C2-Phenanthrenes/Anthracenes	40000	53000	27	30
C3-Phenanthrenes/Anthracenes	20000	27000	29	30
C4-Phenanthrenes/Anthracenes	7200	9000	22	30
Retene	5700	6100	7	30
Dibenzothiophene	5700	7600	29	30
C1-Dibenzothiophenes	12000	16000	30	30
C2-Dibenzothiophenes	14000	19000	27	30
C3-Dibenzothiophenes	9400	12000	26	30
C4-Dibenzothiophenes	4200	5100	20	30
Benzo(b)fluorene	5200	6400	21	30
Fluoranthene	23000	30000	28	30
Pyrene	34000	45000	27	30
C1-Fluoranthenes/Pyrenes	38000	49000	25	30
C2-Fluoranthenes/Pyrenes	20000	25000	22	30
C3-Fluoranthenes/Pyrenes	9300	12000	26	30
C4-Fluoranthenes/Pyrenes	3900	4500	15	30
Naphthobenzothiophenes	4700	6000	24	30
C1-Naphthobenzothiophenes	5900	7500	24	30
C2-Naphthobenzothiophenes	4600	5600	20	30

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

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	2700	3200	16	30
C4-Naphthobenzothiophenes	1200	1400	17	30
Benz[a]anthracene	20000	22000	14	30
Chrysene/Triphenylene	21000	25000	15	30
C1-Chrysenes	23000	26000	14	30
C2-Chrysenes	14000	16000	15	30
C3-Chrysenes	8500	9900	15	30
C4-Chrysenes	2800	3000	8	30
Benzo[b]fluoranthene	8700	9200	6	30
Benzo[k]fluoranthene	9100	9800	7	30
Benzo[a]fluoranthene	3800	3900	3	30
Benzo[e]pyrene	8400	9000	8	30
Benzo[a]pyrene	15000	15000	5	30
Perylene	2600	2800	6	30
Indeno[1,2,3-cd]pyrene	6800	7200	6	30
Dibenz[a,h]anthracene	2000	2200	7	30
Benzo[g,h,i]perylene	6300	6600	5	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	104	106	50-130
Pyrene-d10	72	74	50-130
Benzo[b]fluoranthene-d12	92	88	50-130

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

01/18/06 11:11

Duplicate
Carbazole

Client:	**NewFields Environmental Forensics Practice**	Lab Code:	**MA00030**
Project:	**Gowanus Canal**	ETR:	**0512110**
Client ID:	**GC-SED-07 (7.5-8.5)**	Lab ID:	**0512110-11**
Case:	**N/A** SDG: **N/A**	Associated Blank:	**SS122105B16**
Matrix:	**Sediment**	Concentration Units:	**µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Carbazole	**880**	**1200**	29	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	104	106	50-130
Pyrene-d10	72	74	50-130
Benzo[b]fluoranthene-d12	92	88	50-130

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

01/18/06 11:11

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Naphthalene	14 U	16 U	N/A	30
C1-Naphthalenes	14 U	16 U	N/A	30
C2-Naphthalenes	14 U	16 U	N/A	30
C3-Naphthalenes	14 U	16 U	N/A	30
C4-Naphthalenes	14 U	16 U	N/A	30
Biphenyl	7.7 U	8.7 U	N/A	30
Dibenzofuran	10 U	11 U	N/A	30
Acenaphthylene	15 U	17 U	N/A	30
Acenaphthene	9.7 U	11 U	N/A	30
Fluorene	9.7 U	11 U	N/A	30
C1-Fluorenes	9.7 U	11 U	N/A	30
C2-Fluorenes	9.7 U	11 U	N/A	30
C3-Fluorenes	9.7 U	11 U	N/A	30
Anthracene	11 U	13 U	N/A	30
Phenanthrene	**40000**	**52000**	26	30
C1-Phenanthrenes/Anthracenes	12 U	14 U	N/A	30
C2-Phenanthrenes/Anthracenes	12 U	14 U	N/A	30
C3-Phenanthrenes/Anthracenes	12 U	14 U	N/A	30
C4-Phenanthrenes/Anthracenes	12 U	14 U	N/A	30
Retene	12 U	14 U	N/A	30
Dibenzothiophene	9.4 U	11 U	N/A	30
C1-Dibenzothiophenes	9.4 U	11 U	N/A	30
C2-Dibenzothiophenes	9.4 U	11 U	N/A	30
C3-Dibenzothiophenes	9.4 U	11 U	N/A	30
C4-Dibenzothiophenes	9.4 U	11 U	N/A	30
Benzo(b)fluorene	8.5 U	9.6 U	N/A	30
Fluoranthene	8.5 U	9.6 U	N/A	30
Pyrene	7.5 U	8.5 U	N/A	30
C1-Fluoranthenes/Pyrenes	7.5 U	8.5 U	N/A	30
C2-Fluoranthenes/Pyrenes	7.5 U	8.5 U	N/A	30
C3-Fluoranthenes/Pyrenes	7.5 U	8.5 U	N/A	30
C4-Fluoranthenes/Pyrenes	7.5 U	8.5 U	N/A	30
Naphthobenzothiophenes	10 U	12 U	N/A	30
C1-Naphthobenzothiophenes	10 U	12 U	N/A	30
C2-Naphthobenzothiophenes	10 U	12 U	N/A	30

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

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

Duplicate
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C3-Naphthobenzothiophenes	10 U	12 U	N/A	30
C4-Naphthobenzothiophenes	10 U	12 U	N/A	30
Benz[a]anthracene	13 U	15 U	N/A	30
Chrysene/Triphenylene	9.1 U	10 U	N/A	30
C1-Chrysenes	9.1 U	10 U	N/A	30
C2-Chrysenes	9.1 U	10 U	N/A	30
C3-Chrysenes	9.1 U	10 U	N/A	30
C4-Chrysenes	9.1 U	10 U	N/A	30
Benzo[b]fluoranthene	9.0 U	10 U	N/A	30
Benzo[k]fluoranthene	17 U	19 U	N/A	30
Benzo[a]fluoranthene	17 U	19 U	N/A	30
Benzo[e]pyrene	12 U	13 U	N/A	30
Benzo[a]pyrene	12 U	13 U	N/A	30
Perylene	15 U	17 U	N/A	30
Indeno[1,2,3-cd]pyrene	20 U	23 U	N/A	30
Dibenz[a,h]anthracene	16 U	18 U	N/A	30
Benzo[g,h,i]perylene	15 U	17 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	93	91	50-130
Pyrene-d10	66	66	50-130
Benzo[b]fluoranthene-d12	82	80	50-130

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

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

01/18/06 10:49

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
C23 Tricyclic Terpane	710	700	2	30
C24 Tricyclic Terpane	520	540	4	30
C25 Tricyclic Terpane	570	560	1	30
C24 Tetracyclic Terpane	460	460	2	30
C26 Tricyclic Terpane-22S	260	260	1	30
C26 Tricyclic Terpane-22R	280	280	2	30
C28 Tricyclic Terpane-22S	300	310	5	30
C28 Tricyclic Terpane-22R	330	320	5	30
C29 Tricyclic Terpane-22S	410	390	4	30
C29 Tricyclic Terpane-22R	380	360	4	30
18a-22,29,30-Trisnorneohopane-TS	1500	1600	6	30
C30 Tricyclic Terpane-22S	310	320	3	30
C30 Tricyclic Terpane-22R	400	380	3	30
17a(H)-22,29,30-Trisnorhopane-TM	1700	1900	7	30
17a/b,21b/a 28,30-Bisnorhopane	530	530	1	30
17a(H),21b(H)-25-Norhopane	320	320	0	30
30-Norhopane	4700	5000	4	30
18a(H)-30-Norneohopane-C29Ts	1600	1700	8	30
17a(H)-Diahopane	390	440	12	30
30-Normoretane	1100	1100	3	30
18a(H)&18b(H)-Oleananes	850	880	3	30
Hopane	8200	8700	6	30
Moretane	1300	1300	3	30
30-Homohopane-22S	2100	2100	2	30
30-Homohopane-22R	1700	1800	5	30
30,31-Bishomohopane-22S	1200	1300	3	30
30,31-Bishomohopane-22R	930	960	3	30
30,31-Trishomohopane-22S	700	720	3	30
30,31-Trishomohopane-22R	500	500	1	30
Tetrakishomohopane-22S	420	430	3	30
Tetrakishomohopane-22R	270	250	9	30
Pentakishomohopane-22S	280	280	2	30
Pentakishomohopane-22R	270	260	4	30
13b(H),17a(H)-20S-Diacholestane	1300	1400	5	30
13b(H),17a(H)-20R-Diacholestane	780	840	7	30

N/A - Not Applicable

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

Duplicate
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
13b,17a-20S-Methyldiacholestane	610	640	5	30
14a(H),17a(H)-20S-Cholestane	760	870	14	30
14a(H),17a(H)-20R-Cholestane	2700	2900	6	30
13b,17a-20R-Ethyldiacholestane	390	460	16	30
13a,17b-20S-Ethyldiacholestane	110	110	4	30
14a,17a-20S-Methylcholestane	330	380	15	30
14a,17a-20R-Methylcholestane	1300	1400	8	30
14a(H),17a(H)-20S-Ethylcholestane	830	860	4	30
14a(H),17a(H)-20R-Ethylcholestane	1300	1400	6	30
14b(H),17b(H)-20R-Cholestane	1000	1100	5	30
14b(H),17b(H)-20S-Cholestane	1100	1200	6	30
14b,17b-20R-Methylcholestane	1100	1100	4	30
14b,17b-20S-Methylcholestane	1100	1100	2	30
14b(H),17b(H)-20R-Ethylcholestane	1600	1700	4	30
14b(H),17b(H)-20S-Ethylcholestane	1200	1200	5	30

Surrogate	% Recovery		Acceptance Range (%)
5B(H)Cholane	108	101	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.

01/19/06 07:16

Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-03 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-12**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/07/06	61.8	10.45	11.1	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	8300		Fluoranthene	37000	E
C1-Naphthalenes	3400		Pyrene	31000	E
C2-Naphthalenes	3400		C1-Fluoranthenes/Pyrenes	12000	
C3-Naphthalenes	3600		C2-Fluoranthenes/Pyrenes	4000	
C4-Naphthalenes	4400		C3-Fluoranthenes/Pyrenes	1700	
Biphenyl	940		C4-Fluoranthenes/Pyrenes	860	
Dibenzofuran	4500		Naphthobenzothiophenes	2500	
Acenaphthylene	840		C1-Naphthobenzothiophenes	1200	
Acenaphthene	4800		C2-Naphthobenzothiophenes	750	
Fluorene	6500		C3-Naphthobenzothiophenes	550	
C1-Fluorenes	1900		C4-Naphthobenzothiophenes	340	
C2-Fluorenes	2000		Benz[a]anthracene	20000	E
C3-Fluorenes	2500		Chrysene/Triphenylene	18000	E
Anthracene	11000		C1-Chrysenes	6300	
Phenanthrene	40000	E	C2-Chrysenes	2400	
C1-Phenanthrenes/Anthracenes	10000		C3-Chrysenes	1800	
C2-Phenanthrenes/Anthracenes	5300		C4-Chrysenes	670	
C3-Phenanthrenes/Anthracenes	3200		Benzo[b]fluoranthene	14000	
C4-Phenanthrenes/Anthracenes	1200		Benzo[k]fluoranthene	11000	
Retene	310		Benzo[a]fluoranthene	2500	
Dibenzothiophene	2500		Benzo[e]pyrene	8800	
C1-Dibenzothiophenes	1500		Benzo[a]pyrene	15000	
C2-Dibenzothiophenes	1600		Perylene	3800	
C3-Dibenzothiophenes	1800		Indeno[1,2,3-cd]pyrene	10000	
C4-Dibenzothiophenes	1000		Dibenz[a,h]anthracene	2400	
Benzo(b)fluorene	3600		Benzo[g,h,i]perylene	8100	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	68	50-130
Benzo[b]fluoranthene-d12	89	50-130

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

01/18/06 11:12

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-03 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-12**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/07/06	61.8	10.45	11.1	1	AC

Parameter	Result
Carbazole	4200

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	101	50-130
Pyrene-d10	68	50-130
Benzo[b]fluoranthene-d12	89	50-130

N/A - Not Applicable

01/18/06 11:13

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43112.D
Acq On : 7 Jan 2006 7:39 pm
Operator : AC
Sample : 0512110-12
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 12 09:16:06 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 for WW 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	80711m	500.00 ng/mL	-0.02
72) Chrysene-d12	43.21	240	106596m	500.00 ng/mL	0.02
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.38	152	277963	1815.31 ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 181.53%#		
58) Pyrene-d10	38.28	212	466470m	1225.41 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 122.54%		
81) Benzo[b]fluoranthene-d12	47.13	264	357185	1599.75 ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 159.97%#		
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	19.81	128	1510521	4818.63 ng/mL#	100
10) C1-Naphthalenes	22.50	142	611852m	1951.84 ng/mL	
11) C2-Naphthalenes	25.35	156	629665m	2008.66 ng/mL	
12) C3-Naphthalenes	28.04	170	656667m	2094.80 ng/mL	
13) C4-Naphthalenes	30.02	184	806945m	2574.19 ng/mL	
15) 2-Methylnaphthalene	22.50	142	366397	1834.80 ng/mL#	100
16) 1-Methylnaphthalene	22.93	142	245342	1219.55 ng/mL#	100
22) Biphenyl	24.39	154	130170m	544.09 ng/mL	
23) 2,6-Dimethylnaphthalene	25.01	156	88412m	510.60 ng/mL	
24) Dibenzofuran	27.48	168	729568m	2606.55 ng/mL	
25) Acenaphthylene	26.10	152	170375m	485.68 ng/mL	
26) Acenaphthene	26.84	153	596907m	2777.37 ng/mL	
27) 2,3,5-Trimethylnaphthalene	28.39	170	46439m	262.10 ng/mL	
28) Fluorene	28.86	166	871850m	3786.74 ng/mL	
29) C1-Fluorenes	31.09	180	255071m	1107.86 ng/mL	
30) C2-Fluorenes	33.27	194	273453m	1187.70 ng/mL	
31) C3-Fluorenes	35.93	208	337923m	1467.71 ng/mL	
32) Dibenzothiophene	32.18	184	494637	1449.20 ng/mL#	88
36) OTP	34.41	198	91191	267.17 ng/mL#	100
37) C1-Dibenzothiophenes	33.96	198	385878m	1130.55 ng/mL	
38) C2-Dibenzothiophenes	35.65	212	326910m	957.79 ng/mL	
39) C3-Dibenzothiophenes	37.47	226	348354m	1020.61 ng/mL	
40) C4-Dibenzothiophenes	40.98	240	202881m	594.40 ng/mL	
41) Phenanthrene	32.71	178	8973090	23371.18 ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.77	192	2266708m	5903.84 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.92	206	1178643m	3069.88 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	714483m	1860.93 ng/mL	
51) C4-Phenanthrenes/Anthracen	40.98	234	268167m	698.46 ng/mL	
52) Retene	39.70	234	17551m	178.36 ng/mL	
53) Anthracene	32.87	178	2300112	6561.06 ng/mL	100
54) Carbazole	33.52	167	675009m	2429.46 ng/mL	
55) 1-Methylphenanthrene	35.20	192	314136m	1239.90 ng/mL	
56) Fluoranthene	37.50	202	8423617m	21284.63 ng/mL E	
57) Benzo(b)fluorene	40.00	216	479517m	2068.60 ng/mL	
59) Pyrene	38.37	202	7410866m	18050.01 ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.76	216	2799151m	6817.65 ng/mL	
61) C2-Fluoranthenes/Pyrenes	42.60	230	959089m	2335.97 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.17	244	397507m	968.17 ng/mL	
63) C4-Fluoranthenes/Pyrenes	43.97	258	206429m	502.78 ng/mL	
64) Naphthobenzothiophene	42.21	234	355778	953.10 ng/ml#	94

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43112.D
Acq On : 7 Jan 2006 7:39 pm
Operator : AC
Sample : 0512110-12
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 12 09:16:06 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

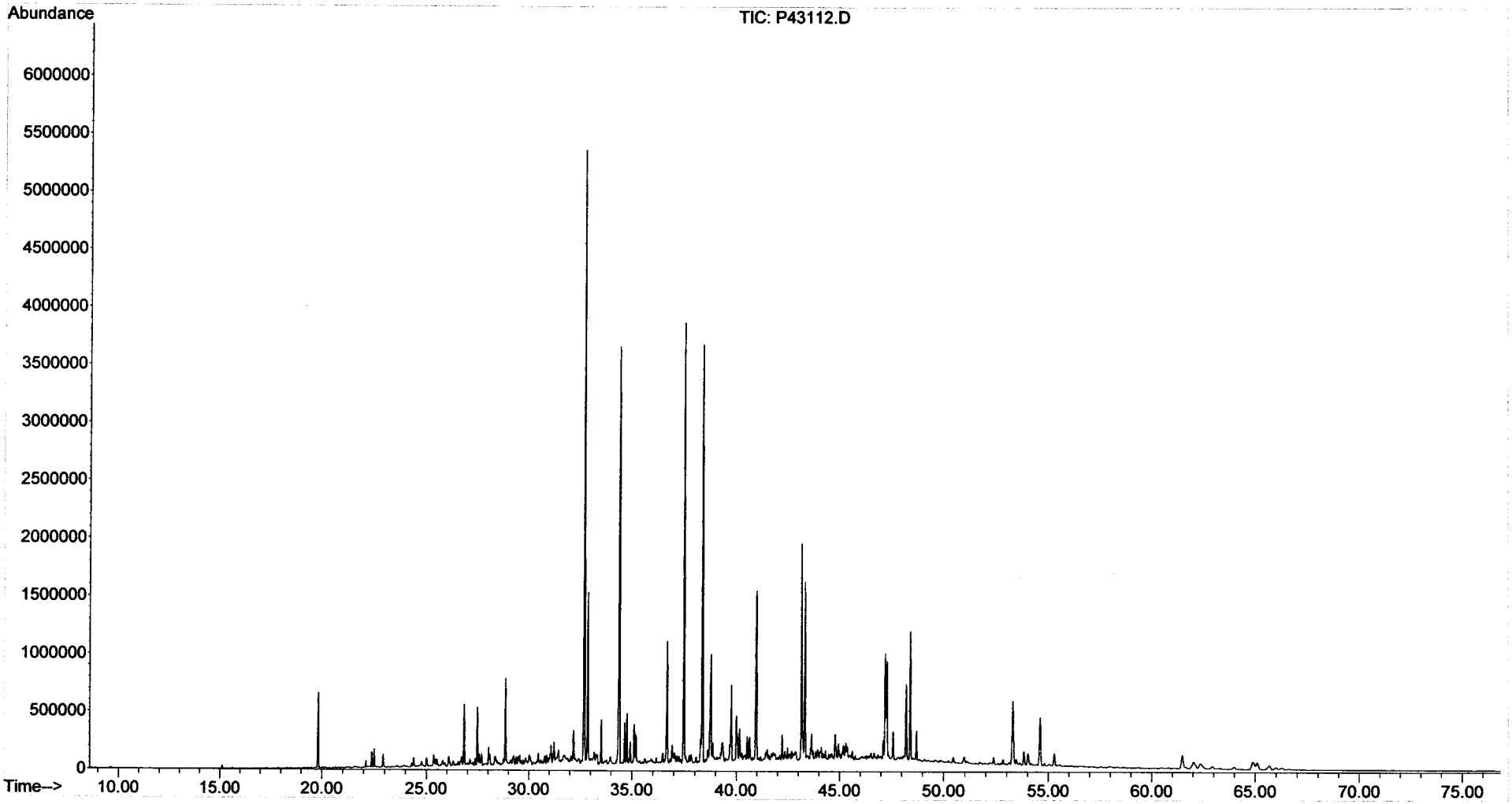
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.21	234	355752	953.03 ng/mL#	94
66) Naphthobenzothiophene-1,2-	42.55	234	76628	205.28 ng/mL#	23
67) Naphthobenzothiophene-2,3-	42.84	234	102407m	274.34 ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	255768m	685.18 ng/ml	
69) C2-Naphthobenzothiophenes	45.12	262	163189m	437.17 ng/ml	
70) C3-Naphthobenzothiophenes	47.23	276	119862m	321.10 ng/ml	
71) C4-Naphthobenzothiophenes	48.43	290	75013m	200.95 ng/mL	
73) Benz[a]anthracene	43.15	228	2928853m	11552.01 ng/mL E	
74) Chrysene	43.32	228	2668023m	10368.96 ng/mL E	
75) Chrysene/Triphenylene	43.32	228	2673620m	10390.71 ng/mL	
76) C1-Chrysenes	44.79	242	938282m	3646.52 ng/mL	
77) C2-Chrysenes	46.49	256	378071m	1469.33 ng/mL	
78) BBF-d12 Surr BKGD	47.12	256	15463	60.10 ng/mL	100
79) C3-Chrysenes	47.55	270	274789m	1067.93 ng/mL	
80) C4-Chrysenes	49.10	284	100358m	390.03 ng/mL	
82) Benzo[b]fluoranthene	47.22	252	2075570	7877.25 ng/mL	98
83) Benzo[k]fluoranthene	47.30	252	1872403	6299.56 ng/mL	98
84) Benzo[a]fluoranthene	47.59	252	429061m	1443.54 ng/mL	
85) Benzo[e]pyrene	48.22	252	1361218	5126.08 ng/mL	95
86) Benzo[a]pyrene	48.42	252	2276873m	8895.45 ng/mL	
87) Perylene	48.72	252	553623m	2184.18 ng/mL	
88) Indeno[1,2,3-cd]pyrene	53.29	276	1381359m	5810.61 ng/mL	
89) Dibenz[a,h]anthracene	53.31	278	344835m	1403.99 ng/mL	
90) Benzo[g,h,i]perylene	54.61	276	1272756	4698.19 ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43112.D
Acq On : 7 Jan 2006 7:39 pm
Operator : AC
Sample : 0512110-12
Misc : 1X
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 12 09:16:06 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-03 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-12E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	61.8	10.45	11.1	5	AC

Parameter	Result	
Naphthalene	14	U
C1-Naphthalenes	14	U
C2-Naphthalenes	14	U
C3-Naphthalenes	14	U
C4-Naphthalenes	14	U
Biphenyl	7.8	U
Dibenzofuran	10	U
Acenaphthylene	16	U
Acenaphthene	9.9	U
Fluorene	9.9	U
C1-Fluorenes	9.9	U
C2-Fluorenes	9.9	U
C3-Fluorenes	9.9	U
Anthracene	12	U
Phenanthrene	**33000**	
C1-Phenanthrenes/Anthracenes	12	U
C2-Phenanthrenes/Anthracenes	12	U
C3-Phenanthrenes/Anthracenes	12	U
C4-Phenanthrenes/Anthracenes	12	U
Retene	12	U
Dibenzothiophene	9.5	U
C1-Dibenzothiophenes	9.5	U
C2-Dibenzothiophenes	9.5	U
C3-Dibenzothiophenes	9.5	U
C4-Dibenzothiophenes	9.5	U
Benzo(b)fluorene	8.7	U

Parameter	Result	
Fluoranthene	**29000**	
Pyrene	**24000**	
C1-Fluoranthenes/Pyrenes	7.6	U
C2-Fluoranthenes/Pyrenes	7.6	U
C3-Fluoranthenes/Pyrenes	7.6	U
C4-Fluoranthenes/Pyrenes	7.6	U
Naphthobenzothiophenes	10	U
C1-Naphthobenzothiophenes	10	U
C2-Naphthobenzothiophenes	10	U
C3-Naphthobenzothiophenes	10	U
C4-Naphthobenzothiophenes	10	U
Benz[a]anthracene	**15000**	
Chrysene/Triphenylene	**14000**	
C1-Chrysenes	9.3	U
C2-Chrysenes	9.3	U
C3-Chrysenes	9.3	U
C4-Chrysenes	9.3	U
Benzo[b]fluoranthene	9.1	U
Benzo[k]fluoranthene	18	U
Benzo[a]fluoranthene	18	U
Benzo[e]pyrene	12	U
Benzo[a]pyrene	12	U
Perylene	15	U
Indeno[1,2,3-cd]pyrene	21	U
Dibenz[a,h]anthracene	16	U
Benzo[g,h,i]perylene	15	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	61	50-130
Benzo[b]fluoranthene-d12	76	50-130

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

01/18/06 10:50

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42832.D
Acq On : 4 Jan 2006 12:39 pm
Operator : AC
Sample : 0512110-12-RE
Misc : 5X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 11 20:27:40 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 for MW 1-12-06

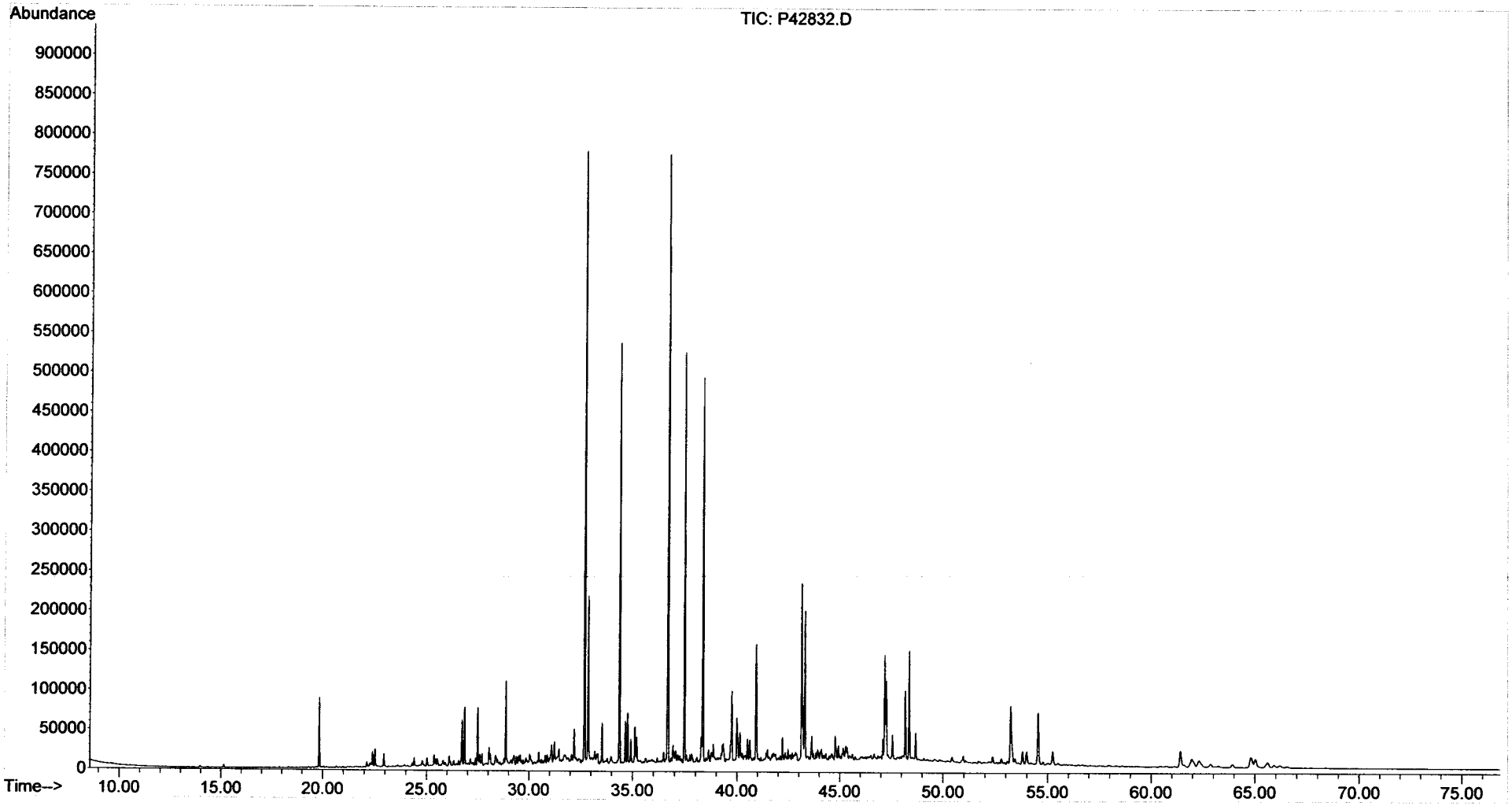
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	64164m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	86646m	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	36818m	302.46	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 30.25%#			
58) Pyrene-d10	38.28	212	66211m	218.79	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 21.88%#			
81) Benzo[b]fluoranthene-d12	47.10	264	49895	274.92	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.49%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
41) Phenanthrene	32.69	178	1166639	3822.23	ng/mL	100
56) Fluoranthene	37.47	202	1052512m	3345.31	ng/mL	
59) Pyrene	38.35	202	909133	2785.33	ng/mL	100
73) Benz[a]anthracene	43.13	228	358462m	1739.38	ng/mL	
74) Chrysene	43.30	228	341298m	1631.82	ng/mL	
75) Chrysene/Triphenylene	43.30	228	340812m	1629.49	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P42832.D
Acq On : 4 Jan 2006 12:39 pm
Operator : AC
Sample : 0512110-12-RE
Misc : 5X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 11 20:27:40 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-03 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-12**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/09/06	61.8	10.45	4.44	1	AC

Parameter	Result
C23 Tricyclic Terpane	340
C24 Tricyclic Terpane	200
C25 Tricyclic Terpane	220
C24 Tetracyclic Terpane	220
C26 Tricyclic Terpane-22S	96
C26 Tricyclic Terpane-22R	100
C28 Tricyclic Terpane-22S	110
C28 Tricyclic Terpane-22R	110
C29 Tricyclic Terpane-22S	120
C29 Tricyclic Terpane-22R	140
18a-22,29,30-Trisnorneohopane-TS	500
C30 Tricyclic Terpane-22S	110
C30 Tricyclic Terpane-22R	150
17a(H)-22,29,30-Trisnorhopane-TM	550
17a/b,21b/a 28,30-Bisnorhopane	170
17a(H),21b(H)-25-Norhopane	110
30-Norhopane	1700
18a(H)-30-Norneohopane-C29Ts	420
17a(H)-Diahopane	89
30-Normoretane	270
18a(H)&18b(H)-Oleananes	220
Hopane	2300
Moretane	320
30-Homohopane-22S	840
30-Homohopane-22R	690

Parameter	Result
30,31-Bishomohopane-22S	550
30,31-Bishomohopane-22R	380
30,31-Trishomohopane-22S	360
30,31-Trishomohopane-22R	230
Tetrakishomohopane-22S	220
Tetrakishomohopane-22R	150
Pentakishomohopane-22S	230
Pentakishomohopane-22R	180
13b(H),17a(H)-20S-Diacholestane	380
13b(H),17a(H)-20R-Diacholestane	240
13b,17a-20S-Methyldiacholestane	180
14a(H),17a(H)-20S-Cholestane	250
14a(H),17a(H)-20R-Cholestane	650
13b,17a-20R-Ethyldiacholestane	150
13a,17b-20S-Ethyldiacholestane	35
14a,17a-20S-Methylcholestane	78
14a,17a-20R-Methylcholestane	200
14a(H),17a(H)-20S-Ethylcholestane	230
14a(H),17a(H)-20R-Ethylcholestane	300
14b(H),17b(H)-20R-Cholestane	240
14b(H),17b(H)-20S-Cholestane	250
14b,17b-20R-Methylcholestane	250
14b,17b-20S-Methylcholestane	290
14b(H),17b(H)-20R-Ethylcholestane	460
14b(H),17b(H)-20S-Ethylcholestane	310

Surrogate	% Recovery	Acceptance Range (%)
5B(H)Cholane	92	50-130

N/A - Not Applicable

01/19/06 07:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34755.D
Acq On : 9 Jan 2006 6:43 pm
Operator : AC
Sample : 0512110-12
Misc : 1X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 12 19:14:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MB for WB 1/18/06

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	50.35	240	53405	500.00	ng/mL	0.07
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	51.00	217	102934	4159.11	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 415.91%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	179246m	3315.51	ng/mL	
84) Hopane (T19)	60.53	191	179246m	3315.51	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.44	191	26820m	496.09	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.31	191	15532	287.30	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.15	191	17081m	315.95	ng/ml	
88) C24 Tetracyclic Terpane (T	51.65	191	16915m	312.88	ng/ml	
89) C26 Tricyclic Terpane-22S	51.38	191	7530m	139.28	ng/ml	
90) C26 Tricyclic Terpane-22R	51.49	191	8008m	148.12	ng/ml	
91) C28 Tricyclic Terpane-22S	54.24	191	8471m	156.69	ng/ml	
92) C28 Tricyclic Terpane-22R	54.44	191	8357m	154.58	ng/ml	
93) C29 Tricyclic Terpane-22S	55.05	191	9837m	181.96	ng/ml	
94) C29 Tricyclic Terpane-22R	55.28	191	10826	200.25	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.46	191	39238m	725.79	ng/ml	
96) C30 Tricyclic Terpane-22S	56.63	191	8854	163.77	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.90	191	12047	222.83	ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.05	191	43562m	805.77	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.36	191	13081m	241.96	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.20	191	8547	158.09	ng/ml	100
101) 30-Norhopane (T15)	59.08	191	134644m	2490.51	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.18	191	32634m	603.63	ng/ml	
103) 17a(H)-Diahopane (X)	59.33	191	7017m	129.79	ng/ml	
104) 30-Normoretane (T17)	59.91	191	21218m	392.47	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	60.32	191	17395m	321.76	ng/ml	
106) Moretane (T20)	61.26	191	25576m	473.08	ng/ml	
107) 30-Homohopane-22S (T21)	62.43	191	66068	1222.06	ng/ml	100
108) 30-Homohopane-22R (T22)	62.67	191	54072	1000.17	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.07	191	43402	802.81	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.48	191	29677	548.94	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.31	191	28667	530.25	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.96	191	18044	333.76	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.06	191	17638	326.25	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.02	191	11910	220.30	ng/ml	100
115) Pentakishomohopane-22S (T3	72.32	191	17977	332.52	ng/ml	100
116) Pentakishomohopane-22R (T3	73.69	191	13968	258.37	ng/ml	100
118) 13b(H),17a(H)-20S-Diachole	52.83	217	13784	556.95	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.34	217	8479m	342.60	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.18	217	6388m	258.11	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.20	217	8991m	363.29	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.79	217	23517	950.22	ng/ml	100
123) 13b,17a-20R-Ethyldiacholes	56.10	217	5277m	213.22	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34755.D
Acq On : 9 Jan 2006 6:43 pm
Operator : AC
Sample : 0512110-12
Misc : 1X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 12 19:14:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

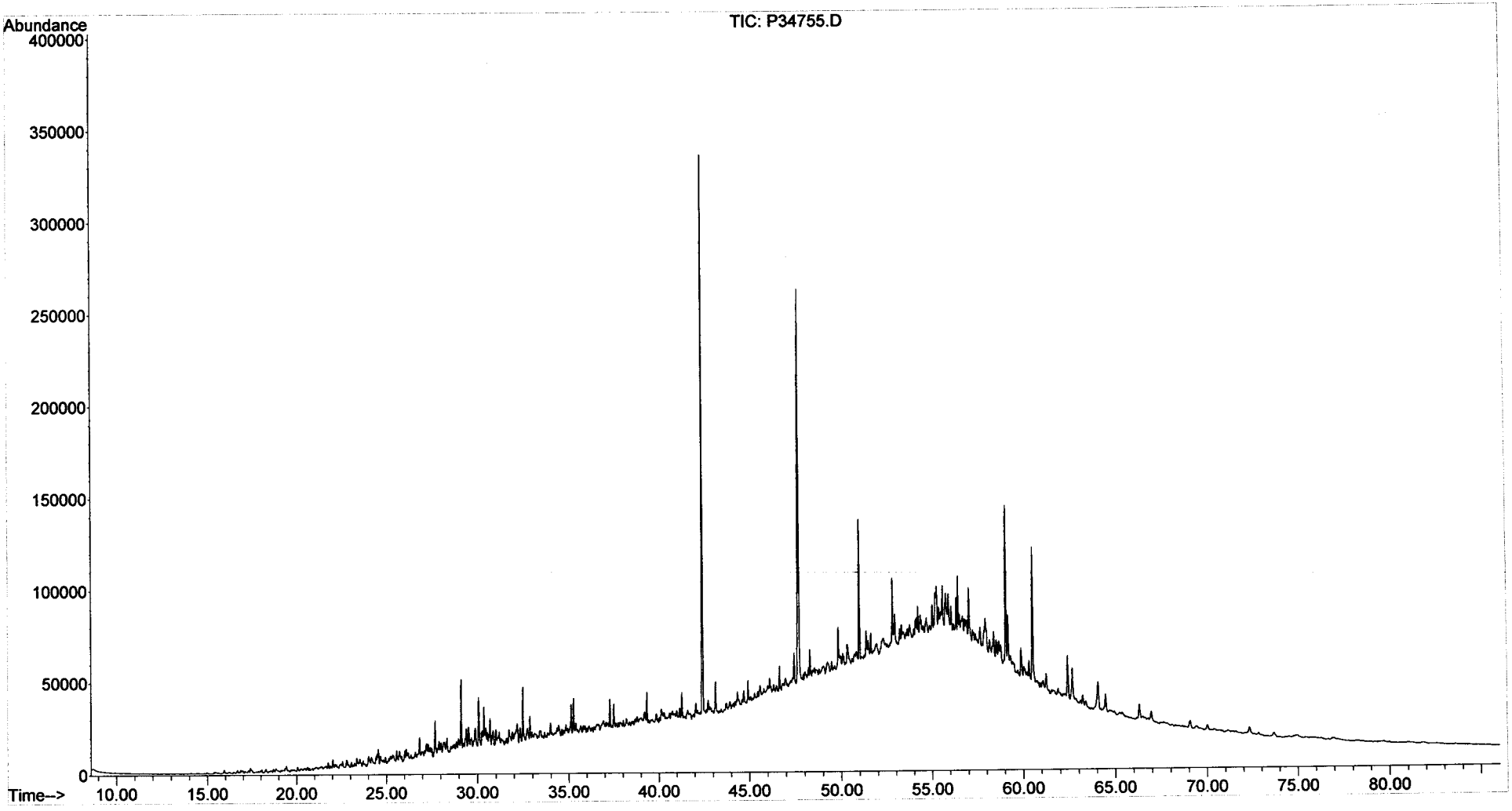
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.38	217	1253m	50.63 ng/ml	
125) 14a,17a-20S-Methylcholesta	56.56	217	2796m	112.97 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.32	217	7232m	292.21 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.70	217	8128m	328.42 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.69	217	10748m	434.28 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.30	218	8581m	346.72 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.40	218	9155m	369.91 ng/ml	
131) 14b,17b-20R-Methylcholesta	56.73	218	9017m	364.34 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.83	218	10324m	417.15 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.98	218	16735	676.19 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.02	218	11247m	454.44 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34755.D
Acq On : 9 Jan 2006 6:43 pm
Operator : AC
Sample : 0512110-12
Misc : 1X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 12 19:14:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-01 (19-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-13**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	85.0	5.43	18.5537	10	AC

Parameter	Result		Parameter	Result
Naphthalene	1700000	E	Fluoranthene	160000
C1-Naphthalenes	770000	E	Pyrene	240000
C2-Naphthalenes	380000		C1-Fluoranthenes/Pyrenes	160000
C3-Naphthalenes	130000		C2-Fluoranthenes/Pyrenes	40000
C4-Naphthalenes	33000		C3-Fluoranthenes/Pyrenes	10000
Biphenyl	90000		C4-Fluoranthenes/Pyrenes	2800
Dibenzofuran	17000		Naphthobenzothiophenes	16000
Acenaphthylene	37000		C1-Naphthobenzothiophenes	11000
Acenaphthene	400000		C2-Naphthobenzothiophenes	4700
Fluorene	170000		C3-Naphthobenzothiophenes	2400
C1-Fluorenes	71000		C4-Naphthobenzothiophenes	920
C2-Fluorenes	36000		Benz[a]anthracene	83000
C3-Fluorenes	14000		Chrysene/Triphenylene	73000
Anthracene	160000		C1-Chrysenes	45000
Phenanthrene	510000	E	C2-Chrysenes	15000
C1-Phenanthrenes/Anthracenes	220000		C3-Chrysenes	5600
C2-Phenanthrenes/Anthracenes	76000		C4-Chrysenes	1500
C3-Phenanthrenes/Anthracenes	19000		Benzo[b]fluoranthene	28000
C4-Phenanthrenes/Anthracenes	3700		Benzo[k]fluoranthene	38000
Retene	1400		Benzo[a]fluoranthene	16000
Dibenzothiophene	56000		Benzo[e]pyrene	33000
C1-Dibenzothiophenes	43000		Benzo[a]pyrene	70000
C2-Dibenzothiophenes	26000		Perylene	10000
C3-Dibenzothiophenes	11000		Indeno[1,2,3-cd]pyrene	28000
C4-Dibenzothiophenes	3300		Dibenz[a,h]anthracene	6300
Benzo(b)fluorene	25000		Benzo[g,h,i]perylene	30000

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	72	50-130
Benzo[b]fluoranthene-d12	81	50-130

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

01/18/06 11:13

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-01 (19-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-13**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	85.0	5.43	18.5537	10	AC

Parameter	Result
Carbazole	7500

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	86	50-130
Pyrene-d10	72	50-130
Benzo[b]fluoranthene-d12	81	50-130

N/A - Not Applicable

01/18/06 11:14

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43000.D
Acq On : 4 Jan 2006 2:08 pm
Operator : AC
Sample : 0512110-13
Misc : 10X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:22:21 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 for WJ 1-12-06

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	63224m	500.00 ng/mL	0.00
72) Chrysene-d12	43.20	240	108219m	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.40	152	11164	93.08 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.31%#	
58) Pyrene-d10	38.28	212	23082m	77.41 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	7.74%#	
81) Benzo[b]fluoranthene-d12	47.09	264	19872m	87.67 ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	8.77%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00 ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#	

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
9) Naphthalene	19.84	128	10583503m	43100.01 ng/mL E	
10) C1-Naphthalenes	22.53	142	4731458m	19268.28 ng/mL E	
11) C2-Naphthalenes	25.36	156	2327171m	9477.12 ng/mL	
12) C3-Naphthalenes	27.14	170	767650m	3126.16 ng/mL	
13) C4-Naphthalenes	30.47	184	199400m	812.03 ng/mL	
15) 2-Methylnaphthalene	22.53	142	3012244m	19256.51 ng/mL E	
16) 1-Methylnaphthalene	22.95	142	1716980m	10895.44 ng/mL E	
22) Biphenyl	24.41	154	419839m	2240.23 ng/mL	
23) 2,6-Dimethylnaphthalene	25.02	156	286429m	2111.73 ng/mL	
24) Dibenzofuran	27.49	168	92568m	422.19 ng/mL	
25) Acenaphthylene	26.11	152	251106	913.81 ng/mL#	100
26) Acenaphthene	26.86	153	1675716	9953.54 ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.41	170	48335m	348.25 ng/mL	
28) Fluorene	28.87	166	753351m	4177.07 ng/mL	
29) C1-Fluorenes	31.10	180	320549m	1777.33 ng/mL	
30) C2-Fluorenes	33.29	194	162265m	899.70 ng/mL	
31) C3-Fluorenes	35.93	208	64730m	358.91 ng/mL	
32) Dibenzothiophene	32.19	184	375370	1403.95 ng/mL#	94
36) OTP	34.36	198	2960m	11.07 ng/mL	
37) C1-Dibenzothiophenes	33.97	198	288505m	1079.06 ng/mL	
38) C2-Dibenzothiophenes	36.02	212	174694m	653.38 ng/mL	
39) C3-Dibenzothiophenes	37.47	226	74606m	279.04 ng/mL	
40) C4-Dibenzothiophenes	39.15	240	21879m	81.83 ng/mL	
41) Phenanthrene	32.70	178	3835207	12752.00 ng/mL E	100
47) C1-Phenanthrenes/Anthracen	34.76	192	1675785m	5571.96 ng/mL	
48) C2-Phenanthrenes/Anthracen	36.93	206	564680m	1877.55 ng/mL	
50) C3-Phenanthrenes/Anthracen	38.76	220	140654m	467.67 ng/mL	
51) C4-Phenanthrenes/Anthracen	39.69	234	27676m	92.02 ng/mL	
52) Retene	39.69	234	2646m	34.33 ng/mL	
53) Anthracene	32.87	178	1113528	4054.87 ng/mL	100
54) Carbazole	33.53	167	40390	185.58 ng/mL#	90
55) 1-Methylphenanthrene	35.20	192	257456m	1297.25 ng/mL	
56) Fluoranthene	37.47	202	1195037m	3854.78 ng/mL	
57) Benzo(b)fluorene	39.99	216	113516	625.14 ng/mL	95
59) Pyrene	38.36	202	1927853	5994.23 ng/mL	100
60) C1-Fluoranthenes/Pyrenes	39.74	216	1251569m	3891.47 ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.41	230	322405m	1002.45 ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.30	244	83854m	260.73 ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.92	258	22175m	68.95 ng/mL	
64) Naphthobenzothiophene	42.20	234	72885m	249.26 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43000.D
Acq On : 4 Jan 2006 2:08 pm
Operator : AC
Sample : 0512110-13
Misc : 10X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:22:21 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

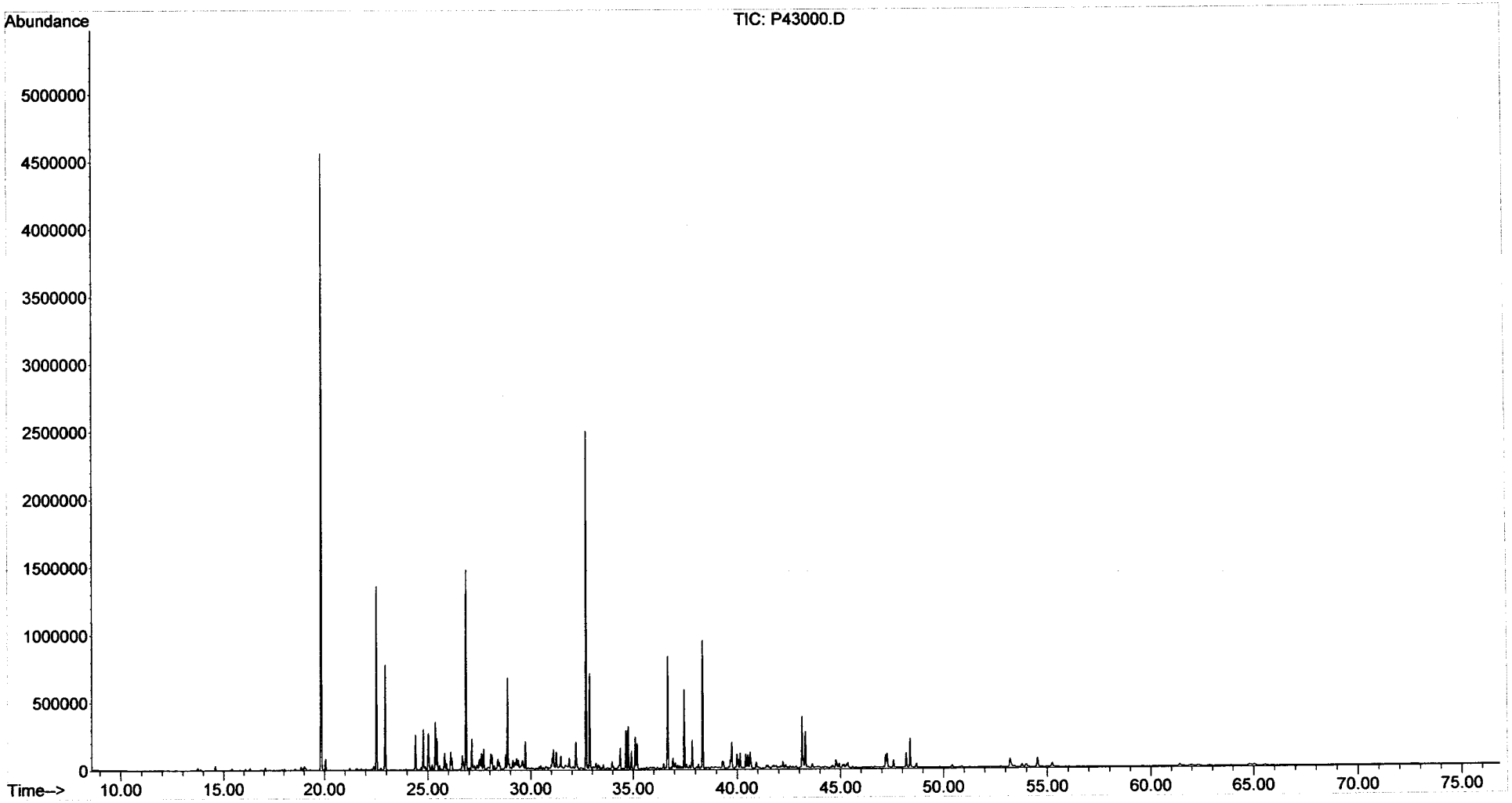
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.20	234	72519m	248.01	ng/mL	
66) Naphthobenzothiophene-1,2-	42.54	234	20962	71.69	ng/mL#	21
67) Naphthobenzothiophene-2,3-	42.84	234	24679m	84.40	ng/mL	
68) C1-Naphthobenzothiophenes	43.60	248	82394m	281.78	ng/ml	
69) C2-Naphthobenzothiophenes	45.10	262	33888m	115.89	ng/ml	
70) C3-Naphthobenzothiophenes	46.84	276	17688m	60.49	ng/ml	
71) C4-Naphthobenzothiophenes	50.39	290	6673m	22.82	ng/mL	
73) Benz[a]anthracene	43.13	228	533769m	2073.72	ng/mL	
74) Chrysene	43.30	228	475584m	1820.58	ng/mL	
75) Chrysene/Triphenylene	43.30	228	475884m	1821.73	ng/mL	
76) C1-Chrysenes	44.77	242	295016m	1129.35	ng/mL	
77) C2-Chrysenes	46.48	256	98341m	376.46	ng/mL	
78) BBF-d12 Surr BKGD	47.09	256	1808m	6.92	ng/mL	
79) C3-Chrysenes	48.08	270	36569m	139.99	ng/mL	
80) C4-Chrysenes	49.09	284	9593m	36.72	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	188859	706.01	ng/mL	100
83) Benzo[k]fluoranthene	47.25	252	287442m	952.57	ng/mL	
84) Benzo[a]fluoranthene	47.56	252	120070m	397.91	ng/mL	
85) Benzo[e]pyrene	48.19	252	221778	822.65	ng/mL	96
86) Benzo[a]pyrene	48.38	252	455521m	1752.97	ng/mL	
87) Perylene	48.69	252	64270	249.76	ng/mL	95
88) Indeno[1,2,3-cd]pyrene	53.22	276	168360m	697.58	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	39278m	157.52	ng/mL	
90) Benzo[g,h,i]perylene	54.53	276	202385	735.87	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43000.D
Acq On : 4 Jan 2006 2:08 pm
Operator : AC
Sample : 0512110-13
Misc : 10X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:22:21 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-01 (19-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-13E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	85.0	5.43	18.5537	100	AC

Parameter	Result		Parameter	Result	
Naphthalene	**1600000**		Fluoranthene	410	U
C1-Naphthalenes	**720000**		Pyrene	360	U
C2-Naphthalenes	660	U	C1-Fluoranthenes/Pyrenes	360	U
C3-Naphthalenes	660	U	C2-Fluoranthenes/Pyrenes	360	U
C4-Naphthalenes	660	U	C3-Fluoranthenes/Pyrenes	360	U
Biphenyl	370	U	C4-Fluoranthenes/Pyrenes	360	U
Dibenzofuran	480	U	Naphthobenzothiophenes	490	U
Acenaphthylene	730	U	C1-Naphthobenzothiophenes	490	U
Acenaphthene	460	U	C2-Naphthobenzothiophenes	490	U
Fluorene	460	U	C3-Naphthobenzothiophenes	490	U
C1-Fluorenes	460	U	C4-Naphthobenzothiophenes	490	U
C2-Fluorenes	460	U	Benz[a]anthracene	630	U
C3-Fluorenes	460	U	Chrysene/Triphenylene	430	U
Anthracene	540	U	C1-Chrysenes	430	U
Phenanthrene	**490000**		C2-Chrysenes	430	U
C1-Phenanthrenes/Anthracenes	580	U	C3-Chrysenes	430	U
C2-Phenanthrenes/Anthracenes	580	U	C4-Chrysenes	430	U
C3-Phenanthrenes/Anthracenes	580	U	Benzo[b]fluoranthene	430	U
C4-Phenanthrenes/Anthracenes	580	U	Benzo[k]fluoranthene	820	U
Retene	580	U	Benzo[a]fluoranthene	820	U
Dibenzothiophene	450	U	Benzo[e]pyrene	550	U
C1-Dibenzothiophenes	450	U	Benzo[a]pyrene	560	U
C2-Dibenzothiophenes	450	U	Perylene	700	U
C3-Dibenzothiophenes	450	U	Indeno[1,2,3-cd]pyrene	960	U
C4-Dibenzothiophenes	450	U	Dibenz[a,h]anthracene	760	U
Benzo(b)fluorene	410	U	Benzo[g,h,i]perylene	710	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	77	50-130
Pyrene-d10	70	50-130
Benzo[b]fluoranthene-d12	81	50-130

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

01/18/06 11:06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43004.D
Acq On : 4 Jan 2006 6:35 pm
Operator : AC
Sample : 0512110-13-RE
Misc : 100X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 11 20:32:00 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 for WK 1-12-06

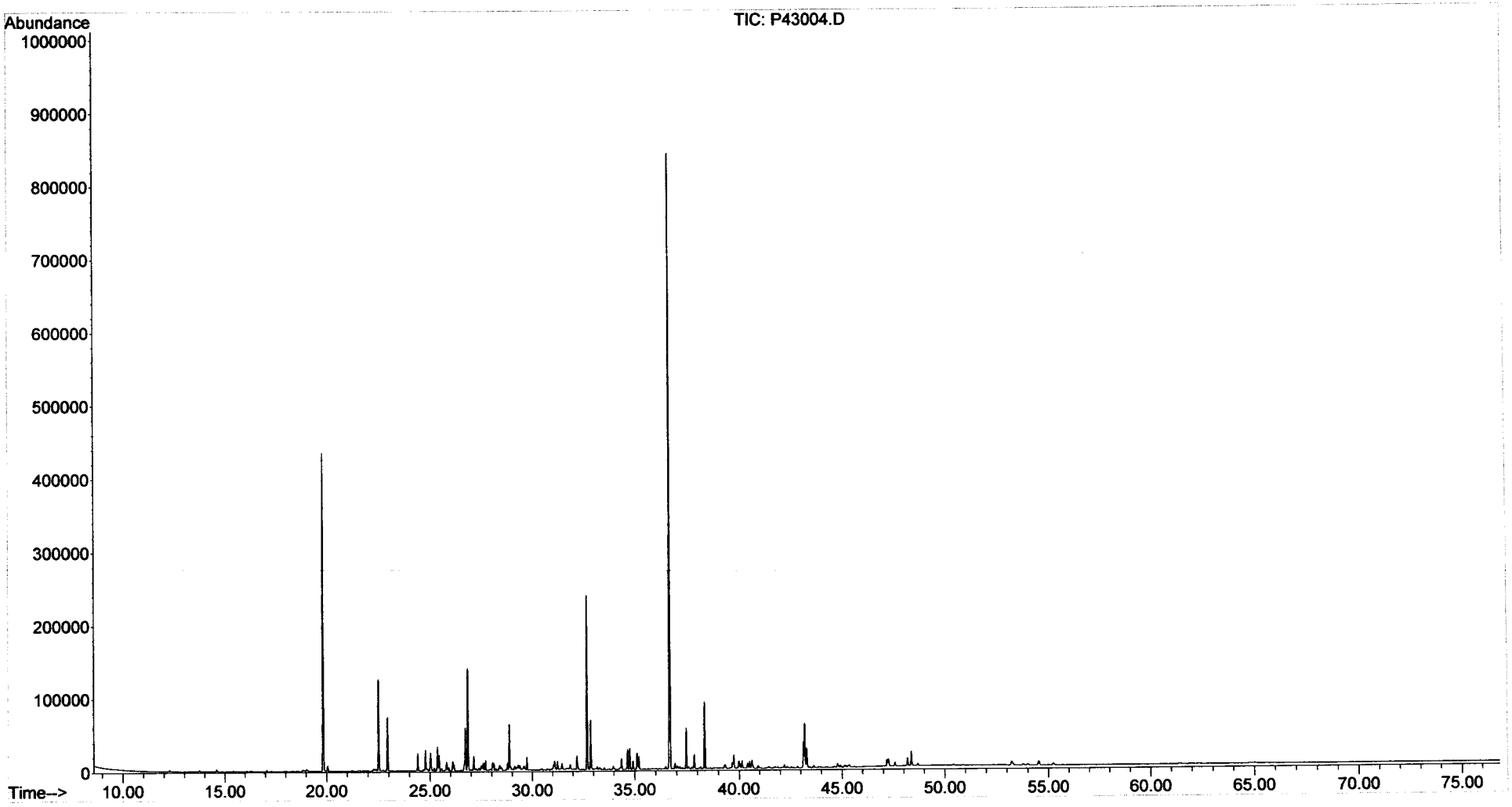
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	64042m	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	119313	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	1006m	8.28	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.83%#	
58) Pyrene-d10	38.28	212	2293	7.59	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.76%#	
81) Benzo[b]fluoranthene-d12	47.09	264	2185	8.74	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.87%#	
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
9) Naphthalene	19.83	128	971645m	3906.36	ng/mL	
10) C1-Naphthalenes	22.52	142	443994m	1785.02	ng/mL	
15) 2-Methylnaphthalene	22.52	142	280558	1770.63	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	162517	1018.11	ng/mL#	100
41) Phenanthrene	32.68	178	370982	1217.75	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43004.D
Acq On : 4 Jan 2006 6:35 pm
Operator : AC
Sample : 0512110-13-RE
Misc : 100X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 11 20:32:00 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-01 (19-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-13**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/09/06	85.0	5.43	2.22	1	AC

Parameter	Result
C23 Tricyclic Terpane	99
C24 Tricyclic Terpane	64
C25 Tricyclic Terpane	56
C24 Tetracyclic Terpane	24
C26 Tricyclic Terpane-22S	22
C26 Tricyclic Terpane-22R	23
C28 Tricyclic Terpane-22S	23
C28 Tricyclic Terpane-22R	24
C29 Tricyclic Terpane-22S	24
C29 Tricyclic Terpane-22R	22
18a-22,29,30-Trisnorneohopane-TS	45
C30 Tricyclic Terpane-22S	15
C30 Tricyclic Terpane-22R	19
17a(H)-22,29,30-Trisnorhopane-TM	70
17a/b,21b/a 28,30-Bisnorhopane	37
17a(H),21b(H)-25-Norhopane	15
30-Norhopane	140
18a(H)-30-Norneohopane-C29Ts	42
17a(H)-Diahopane	9.8
30-Normoretane	27
18a(H)&18b(H)-Oleananes	27
Hopane	230
Moretane	40
30-Homohopane-22S	54
30-Homohopane-22R	53

Parameter	Result
30,31-Bishomohopane-22S	33
30,31-Bishomohopane-22R	27
30,31-Trishomohopane-22S	22
30,31-Trishomohopane-22R	16
Tetrakishomohopane-22S	12
Tetrakishomohopane-22R	8.8
Pentakishomohopane-22S	8.7
Pentakishomohopane-22R	7.3
13b(H),17a(H)-20S-Diacholestane	83
13b(H),17a(H)-20R-Diacholestane	48
13b,17a-20S-Methyldiacholestane	34
14a(H),17a(H)-20S-Cholestane	66
14a(H),17a(H)-20R-Cholestane	200
13b,17a-20R-Ethyldiacholestane	21
13a,17b-20S-Ethyldiacholestane	6.0
14a,17a-20S-Methylcholestane	23
14a,17a-20R-Methylcholestane	110
14a(H),17a(H)-20S-Ethylcholestane	54
14a(H),17a(H)-20R-Ethylcholestane	89
14b(H),17b(H)-20R-Cholestane	73
14b(H),17b(H)-20S-Cholestane	71
14b,17b-20R-Methylcholestane	70
14b,17b-20S-Methylcholestane	71
14b(H),17b(H)-20R-Ethylcholestane	82
14b(H),17b(H)-20S-Ethylcholestane	69

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

N/A - Not Applicable

01/19/06 07:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34756.D
Acq On : 9 Jan 2006 8:21 pm
Operator : AC
Sample : 0512110-13
Misc : 1X
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 19:18:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WW 1-18-06

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	50.34	240	52495	500.00 ng/mL	0.06
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	= 0.00%#	
50) Pyrene-d10	0.00	212	0	0.00 ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	= 0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00 ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	= 0.00%#	
117) 5B(H)Cholane - Surr	51.00	217	238804	9816.28 ng/ml	0.02
Spiked Amount 1000.000	Range	50 - 130	Recovery	= 981.63%#	

Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	60.51	191	25445m	478.82 ng/mL	
84) Hopane (T19)	60.51	191	25480m	479.47 ng/mL	
85) C23 Tricyclic Terpane (T4)	47.43	191	10967m	206.37 ng/ml	
86) C24 Tricyclic Terpane (T5)	48.31	191	7112m	133.83 ng/ml	
87) C25 Tricyclic Terpane (T6)	50.10	191	6204m	116.74 ng/ml	
88) C24 Tetracyclic Terpane (T	51.63	191	2605m	49.02 ng/ml	
89) C26 Tricyclic Terpane-22S	51.36	191	2377m	44.73 ng/ml	
90) C26 Tricyclic Terpane-22R	51.48	191	2513m	47.29 ng/ml	
91) C28 Tricyclic Terpane-22S	54.23	191	2518m	47.38 ng/ml	
92) C28 Tricyclic Terpane-22R	54.43	191	2650m	49.87 ng/ml	
93) C29 Tricyclic Terpane-22S	55.04	191	2613m	49.17 ng/ml	
94) C29 Tricyclic Terpane-22R	55.27	191	2371m	44.62 ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.45	191	5017m	94.41 ng/ml	
96) C30 Tricyclic Terpane-22S	56.62	191	1636	30.79 ng/mL	100
97) C30 Tricyclic Terpane-22R	56.89	191	2125	39.99 ng/mL	100
98) 17a(H)-22,29,30-Trisnorhop	57.04	191	7742m	145.69 ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.34	191	4046m	76.14 ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.19	191	1667	31.37 ng/ml	100
101) 30-Norhopane (T15)	59.06	191	15661m	294.70 ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.17	191	4644m	87.39 ng/ml	
103) 17a(H)-Diahopane (X)	59.31	191	1084m	20.40 ng/ml	
104) 30-Normoretane (T17)	59.89	191	2987m	56.21 ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	60.31	191	2955m	55.61 ng/ml	
106) Moretane (T20)	61.25	191	4402m	82.84 ng/ml	
107) 30-Homohopane-22S (T21)	62.41	191	6003m	112.96 ng/ml	
108) 30-Homohopane-22R (T22)	62.66	191	5809	109.31 ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.06	191	3692m	69.47 ng/ml	
110) 30,31-Bishomohopane-22R (T	64.46	191	3014m	56.72 ng/ml	
111) 30,31-Trishomohopane-22S (	66.29	191	2478	46.63 ng/ml	100
112) 30,31-Trishomohopane-22R (	66.95	191	1755	33.02 ng/ml	100
113) Tetrakishomohopane-22S (T3	69.03	191	1360	25.59 ng/ml	100
114) Tetrakishomohopane-22R (T3	69.97	191	974m	18.33 ng/ml	
115) Pentakishomohopane-22S (T3	72.31	191	958m	18.03 ng/ml	
116) Pentakishomohopane-22R (T3	73.62	191	810m	15.24 ng/ml	
118) 13b(H),17a(H)-20S-Diachole	52.82	217	4210m	173.06 ng/ml	
119) 13b(H),17a(H)-20R-Diachole	53.33	217	2403m	98.78 ng/ml	
120) 13b,17a-20S-Methyldiachole	54.17	217	1746m	71.77 ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.17	217	3360m	138.12 ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.78	217	9947m	408.88 ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.08	217	1065m	43.78 ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34756.D
Acq On : 9 Jan 2006 8:21 pm
Operator : AC
Sample : 0512110-13
Misc : 1X
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 19:18:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

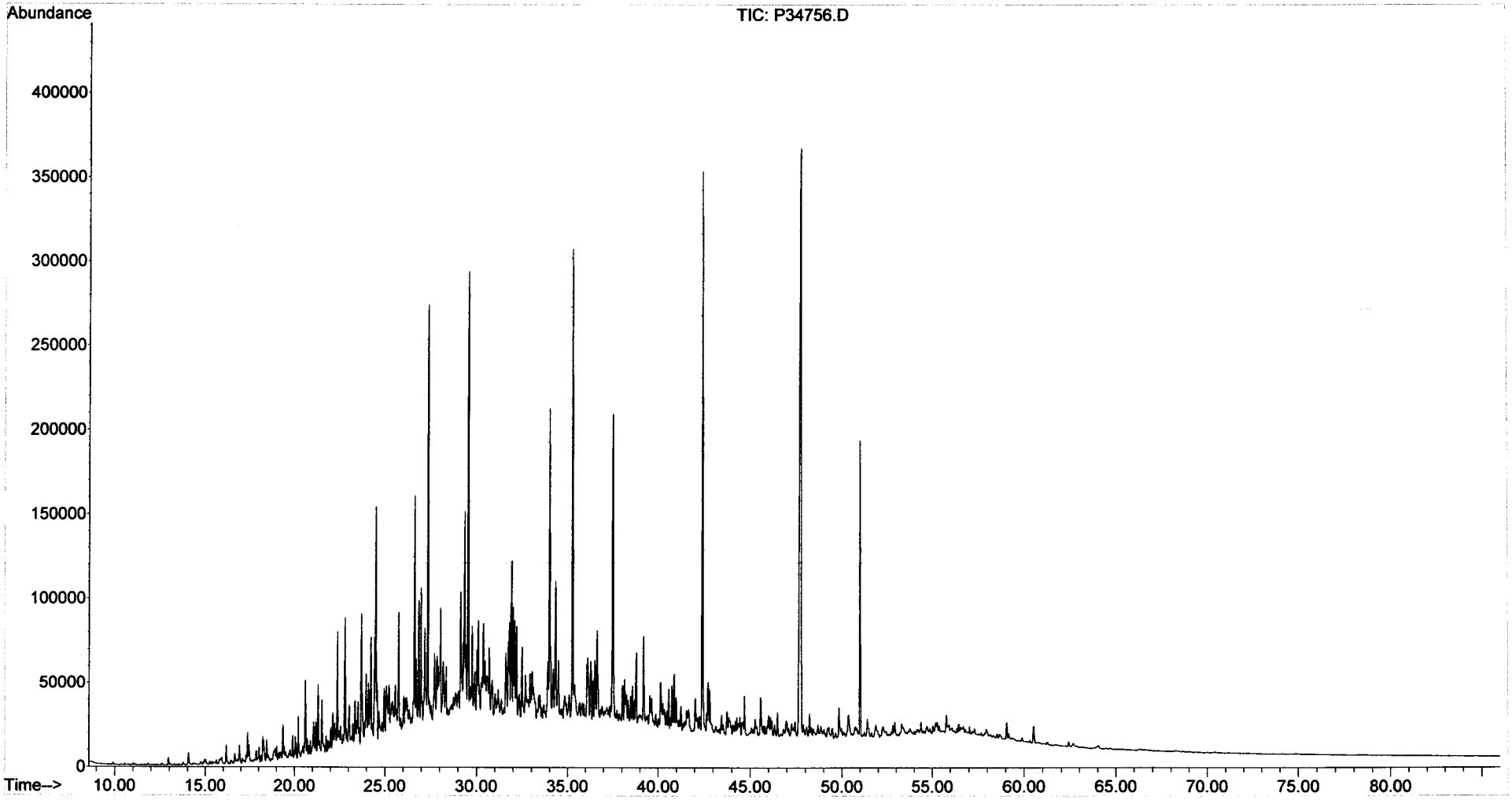
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.38	217	306m	12.58 ng/ml	
125) 14a,17a-20S-Methylcholesta	56.55	217	1172m	48.18 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.31	217	5777m	237.47 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.69	217	2708m	111.32 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.67	217	4486m	184.40 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.29	218	3692m	151.76 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.38	218	3603m	148.10 ng/ml	
131) 14b,17b-20R-Methylcholesta	56.72	218	3533m	145.23 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.80	218	3574m	146.91 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.96	218	4165	171.21 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.01	218	3488m	143.38 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34756.D
Acq On : 9 Jan 2006 8:21 pm
Operator : AC
Sample : 0512110-13
Misc : 1X
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 19:18:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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-02 (17.1-18.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-14**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	82.1	5.09	10	5	AC

Parameter	Result	
Naphthalene	320000	E
C1-Naphthalenes	400000	E
C2-Naphthalenes	240000	
C3-Naphthalenes	90000	
C4-Naphthalenes	26000	
Biphenyl	44000	
Dibenzofuran	11000	
Acenaphthylene	17000	
Acenaphthene	220000	E
Fluorene	94000	
C1-Fluorenes	48000	
C2-Fluorenes	29000	
C3-Fluorenes	13000	
Anthracene	96000	
Phenanthrene	310000	E
C1-Phenanthrenes/Anthracenes	160000	
C2-Phenanthrenes/Anthracenes	60000	
C3-Phenanthrenes/Anthracenes	18000	
C4-Phenanthrenes/Anthracenes	3800	
Retene	600	
Dibenzothiophene	33000	
C1-Dibenzothiophenes	30000	
C2-Dibenzothiophenes	21000	
C3-Dibenzothiophenes	9600	
C4-Dibenzothiophenes	3000	
Benzo(b)fluorene	17000	

Parameter	Result	
Fluoranthene	94000	
Pyrene	140000	E
C1-Fluoranthenes/Pyrenes	100000	
C2-Fluoranthenes/Pyrenes	30000	
C3-Fluoranthenes/Pyrenes	8700	
C4-Fluoranthenes/Pyrenes	2500	
Naphthobenzothiophenes	12000	
C1-Naphthobenzothiophenes	9000	
C2-Naphthobenzothiophenes	4100	
C3-Naphthobenzothiophenes	2000	
C4-Naphthobenzothiophenes	570	
Benz[a]anthracene	59000	
Chrysene/Triphenylene	53000	
C1-Chrysenes	37000	
C2-Chrysenes	13000	
C3-Chrysenes	5400	
C4-Chrysenes	1600	
Benzo[b]fluoranthene	21000	
Benzo[k]fluoranthene	25000	
Benzo[a]fluoranthene	11000	
Benzo[e]pyrene	23000	
Benzo[a]pyrene	48000	
Perylene	7100	
Indeno[1,2,3-cd]pyrene	21000	
Dibenz[a,h]anthracene	4900	
Benzo[g,h,i]perylene	22000	

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	69	50-130
Benzo[b]fluoranthene-d12	84	50-130

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

01/18/06 11:15

Form I
Carbazole

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-02 (17.1-18.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-14**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	82.1	5.09	10	5	AC

Parameter	Result
Carbazole	1700

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	90	50-130
Pyrene-d10	69	50-130
Benzo[b]fluoranthene-d12	84	50-130

N/A - Not Applicable

01/18/06 11:15

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43001.D
Acq On : 4 Jan 2006 3:36 pm
Operator : AC
Sample : 0512110-14
Misc : 5X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 09:22:46 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 for WB 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	60656m	500.00	ng/mL	0.00
72) Chrysene-d12	43.20	240	93534	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	41352	359.35	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 35.94%#			
58) Pyrene-d10	38.28	212	79140	276.64	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 27.66%#			
81) Benzo[b]fluoranthene-d12	47.10	264	65881m	336.27	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 33.63%#			
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	19.83	128	6321273m	26832.47	ng/mL E	
10) C1-Naphthalenes	22.54	142	7854873m	33342.28	ng/mL E	
11) C2-Naphthalenes	25.37	156	4623619m	19626.29	ng/mL	
12) C3-Naphthalenes	27.14	170	1776494m	7540.84	ng/mL	
13) C4-Naphthalenes	30.48	184	500996m	2126.62	ng/mL	
15) 2-Methylnaphthalene	22.54	142	4946722m	32961.97	ng/mL E	
16) 1-Methylnaphthalene	22.95	142	2909253	19242.85	ng/mL# E	100
22) Biphenyl	24.40	154	663968m	3692.88	ng/mL	
23) 2,6-Dimethylnaphthalene	25.02	156	481573m	3700.77	ng/mL	
24) Dibenzofuran	27.49	168	186139	884.90	ng/mL	89
25) Acenaphthylene	26.11	152	366559	1390.43	ng/mL#	100
26) Acenaphthene	26.86	153	3038563	18812.81	ng/mL E	100
27) 2,3,5-Trimethylnaphthalene	28.41	170	118373m	888.98	ng/mL	
28) Fluorene	28.88	166	1364717m	7887.25	ng/mL	
29) C1-Fluorenes	31.10	180	687180m	3971.49	ng/mL	
30) C2-Fluorenes	33.29	194	412860m	2386.08	ng/mL	
31) C3-Fluorenes	35.28	208	183767m	1062.06	ng/mL	
32) Dibenzothiophene	32.19	184	705897m	2751.95	ng/mL	
36) OTP	34.38	198	9386	36.59	ng/mL#	100
37) C1-Dibenzothiophenes	33.97	198	649282m	2531.24	ng/mL	
38) C2-Dibenzothiophenes	35.66	212	444839m	1734.21	ng/mL	
39) C3-Dibenzothiophenes	37.47	226	206731m	805.94	ng/mL	
40) C4-Dibenzothiophenes	39.15	240	64088m	249.85	ng/mL	
41) Phenanthrene	32.71	178	7456831	25843.53	ng/mL E	99
47) C1-Phenanthrenes/Anthracen	34.77	192	3752774m	13006.19	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.93	206	1455468m	5044.29	ng/mL	
50) C3-Phenanthrenes/Anthracen	38.77	220	424577m	1471.48	ng/mL	
51) C4-Phenanthrenes/Anthracen	40.95	234	91266m	316.31	ng/mL	
52) Retene	39.70	234	3733m	50.48	ng/mL	
53) Anthracene	32.88	178	2118545	8041.21	ng/mL	100
54) Carbazole	33.54	167	29201m	139.85	ng/mL	
55) 1-Methylphenanthrene	35.21	192	568716m	2986.92	ng/mL	
56) Fluoranthene	37.48	202	2331285m	7838.30	ng/mL	
57) Benzo(b)fluorene	39.99	216	241846	1388.26	ng/mL	96
59) Pyrene	38.37	202	3667190m	11885.05	ng/mL E	
60) C1-Fluoranthenes/Pyrenes	39.75	216	2656393m	8609.14	ng/mL	
61) C2-Fluoranthenes/Pyrenes	41.49	230	768416m	2490.37	ng/mL	
62) C3-Fluoranthenes/Pyrenes	43.68	244	225145m	729.68	ng/mL	
63) C4-Fluoranthenes/Pyrenes	44.93	258	64213m	208.11	ng/mL	
64) Naphthobenzothiophene	42.21	234	169684m	604.87	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43001.D
Acq On : 4 Jan 2006 3:36 pm
Operator : AC
Sample : 0512110-14
Misc : 5X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 09:22:46 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

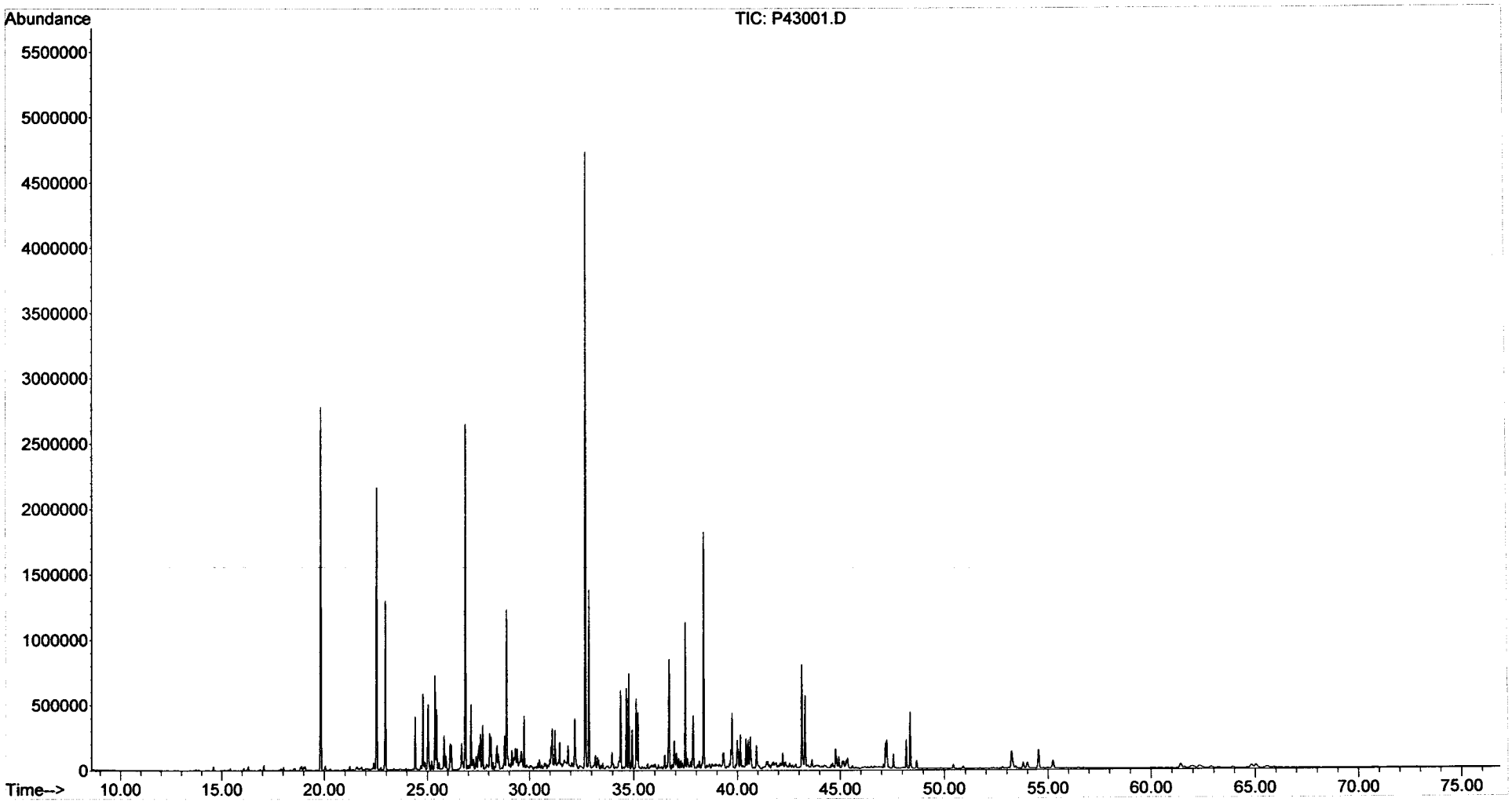
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) Naphthobenzothiophene-2,1-	42.21	234	170097m	606.34	ng/mL	
66) Naphthobenzothiophene-1,2-	42.55	234	45650m	162.73	ng/mL	
67) Naphthobenzothiophene-2,3-	42.84	234	56054m	199.81	ng/mL	
68) C1-Naphthobenzothiophenes	43.61	248	210532m	750.48	ng/ml	
69) C2-Naphthobenzothiophenes	45.11	262	96741m	344.85	ng/ml	
70) C3-Naphthobenzothiophenes	46.84	276	45679m	162.83	ng/ml	
71) C4-Naphthobenzothiophenes	48.33	290	13283m	47.35	ng/mL	
73) Benz[a]anthracene	43.14	228	1094050m	4917.78	ng/mL	
74) Chrysene	43.30	228	992228m	4394.69	ng/mL	
75) Chrysene/Triphenylene	43.30	228	1000631m	4431.91	ng/mL	
76) C1-Chrysenes	44.77	242	696209m	3083.59	ng/mL	
77) C2-Chrysenes	46.48	256	259115m	1147.65	ng/mL	
78) BBF-d12 Surr BKGD	47.09	256	5683	25.17	ng/mL	100
79) C3-Chrysenes	48.07	270	102583m	454.35	ng/mL	
80) C4-Chrysenes	49.09	284	30020m	132.96	ng/mL	
82) Benzo[b]fluoranthene	47.19	252	399528	1728.05	ng/mL	99
83) Benzo[k]fluoranthene	47.25	252	552495m	2118.41	ng/mL	
84) Benzo[a]fluoranthene	47.57	252	236389m	906.38	ng/mL	
85) Benzo[e]pyrene	48.19	252	451877	1939.32	ng/mL	98
86) Benzo[a]pyrene	48.38	252	905637m	4032.32	ng/mL	
87) Perylene	48.69	252	131761	592.42	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.22	276	370984m	1778.45	ng/mL	-RF tr pyrene 2nd cr 1/24/06
89) Dibenz[a,h]anthracene	53.28	278	88787m	411.98	ng/mL	
90) Benzo[g,h,i]perylene	54.53	276	431808	1816.55	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43001.D
Acq On : 4 Jan 2006 3:36 pm
Operator : AC
Sample : 0512110-14
Misc : 5X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 12 09:22:46 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



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-02 (17.1-18.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-14E**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/04/06	82.1	5.09	10	50	AC

Parameter	Result	
Naphthalene	**290000**	
C1-Naphthalenes	**360000**	
C2-Naphthalenes	200	U
C3-Naphthalenes	200	U
C4-Naphthalenes	200	U
Biphenyl	110	U
Dibenzofuran	140	U
Acenaphthylene	220	U
Acenaphthene	**210000**	
Fluorene	140	U
C1-Fluorenes	140	U
C2-Fluorenes	140	U
C3-Fluorenes	140	U
Anthracene	160	U
Phenanthrene	**290000**	
C1-Phenanthrenes/Anthracenes	170	U
C2-Phenanthrenes/Anthracenes	170	U
C3-Phenanthrenes/Anthracenes	170	U
C4-Phenanthrenes/Anthracenes	170	U
Retene	170	U
Dibenzothiophene	130	U
C1-Dibenzothiophenes	130	U
C2-Dibenzothiophenes	130	U
C3-Dibenzothiophenes	130	U
C4-Dibenzothiophenes	130	U
Benzo(b)fluorene	120	U

Parameter	Result	
Fluoranthene	120	U
Pyrene	**140000**	
C1-Fluoranthenes/Pyrenes	110	U
C2-Fluoranthenes/Pyrenes	110	U
C3-Fluoranthenes/Pyrenes	110	U
C4-Fluoranthenes/Pyrenes	110	U
Naphthobenzothiophenes	140	U
C1-Naphthobenzothiophenes	140	U
C2-Naphthobenzothiophenes	140	U
C3-Naphthobenzothiophenes	140	U
C4-Naphthobenzothiophenes	140	U
Benz[a]anthracene	190	U
Chrysene/Triphenylene	130	U
C1-Chrysenes	130	U
C2-Chrysenes	130	U
C3-Chrysenes	130	U
C4-Chrysenes	130	U
Benzo[b]fluoranthene	130	U
Benzo[k]fluoranthene	240	U
Benzo[a]fluoranthene	240	U
Benzo[e]pyrene	160	U
Benzo[a]pyrene	170	U
Perylene	210	U
Indeno[1,2,3-cd]pyrene	290	U
Dibenz[a,h]anthracene	230	U
Benzo[g,h,i]perylene	210	U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	84	50-130
Pyrene-d10	73	50-130
Benzo[b]fluoranthene-d12	80	50-130

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

01/18/06 10:52

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43006.D
Acq On : 4 Jan 2006 8:04 pm
Operator : AC
Sample : 0512110-14-RE
Misc : 50X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 20:33:46 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 for WW
1-12-06

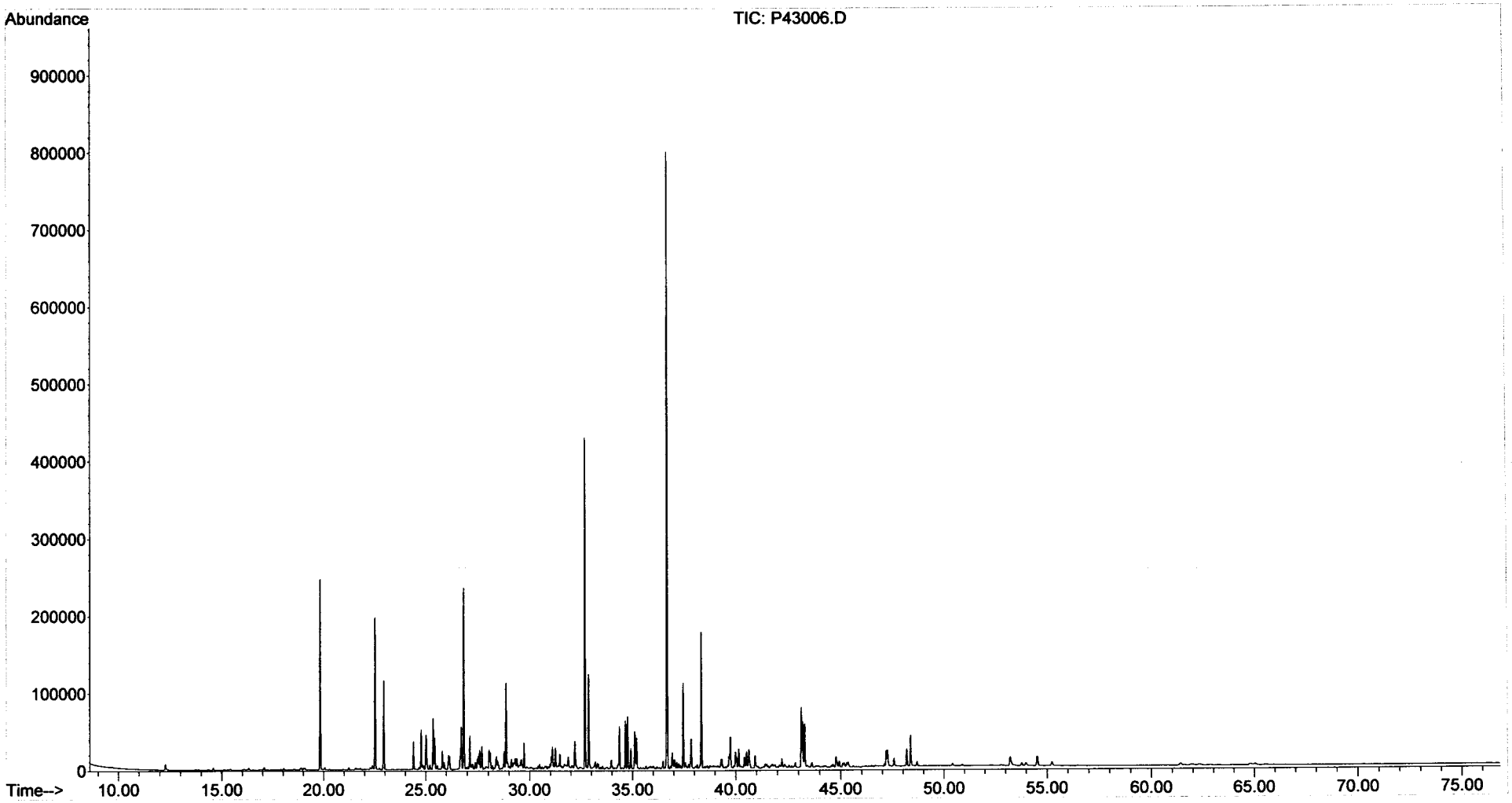
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	59169m	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	107379	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	3786	33.73	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.37%#			
58) Pyrene-d10	38.28	212	8174	29.29	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2.93%#			
81) Benzo[b]fluoranthene-d12	47.09	264	7167	31.87	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 3.19%#			
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
9) Naphthalene	19.83	128	564505m	2456.42	ng/mL	
10) C1-Naphthalenes	22.52	142	701280m	3051.60	ng/mL	
15) 2-Methylnaphthalene	22.52	142	437141	2986.05	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	262541	1780.18	ng/mL#	100
26) Acenaphthene	26.84	153	272974	1732.55	ng/mL	99
41) Phenanthrene	32.68	178	680059	2416.15	ng/mL	100
59) Pyrene	38.34	202	358503	1191.08	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN03\
Data File : P43006.D
Acq On : 4 Jan 2006 8:04 pm
Operator : AC
Sample : 0512110-14-RE
Misc : 50X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 20:33:46 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



Form I
Steranes and Triterpanes

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-02 (17.1-18.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-14**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/18/06	82.1	5.09	1.59	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**94**	30,31-Bishomohopane-22S	**35**
C24 Tricyclic Terpane	**62**	30,31-Bishomohopane-22R	**28**
C25 Tricyclic Terpane	**58**	30,31-Trishomohopane-22S	**22**
C24 Tetracyclic Terpane	**24**	30,31-Trishomohopane-22R	**16**
C26 Tricyclic Terpane-22S	**23**	Tetrakishomohopane-22S	**16**
C26 Tricyclic Terpane-22R	**24**	Tetrakishomohopane-22R	**8.6**
C28 Tricyclic Terpane-22S	**25**	Pentakishomohopane-22S	**10**
C28 Tricyclic Terpane-22R	**27**	Pentakishomohopane-22R	**10**
C29 Tricyclic Terpane-22S	**24**	13b(H),17a(H)-20S-Diacholestane	**88**
C29 Tricyclic Terpane-22R	**24**	13b(H),17a(H)-20R-Diacholestane	**52**
18a-22,29,30-Trisnorneohopane-TS	**53**	13b,17a-20S-Methyldiacholestane	**42**
C30 Tricyclic Terpane-22S	**14**	14a(H),17a(H)-20S-Cholestane	**53**
C30 Tricyclic Terpane-22R	**16**	14a(H),17a(H)-20R-Cholestane	**160**
17a(H)-22,29,30-Trisnorhopane-TM	**76**	13b,17a-20R-Ethyldiacholestane	**29**
17a/b,21b/a 28,30-Bisnorhopane	**31**	13a,17b-20S-Ethyldiacholestane	**5.0**
17a(H),21b(H)-25-Norhopane	**16**	14a,17a-20S-Methylcholestane	**16**
30-Norhopane	**150**	14a,17a-20R-Methylcholestane	**75**
18a(H)-30-Norneohopane-C29Ts	**49**	14a(H),17a(H)-20S-Ethylcholestane	**45**
17a(H)-Diahopane	**16**	14a(H),17a(H)-20R-Ethylcholestane	**70**
30-Normoretane	**34**	14b(H),17b(H)-20R-Cholestane	**64**
18a(H)&18b(H)-Oleananes	**30**	14b(H),17b(H)-20S-Cholestane	**60**
Hopane	**240**	14b,17b-20R-Methylcholestane	**58**
Moretane	**39**	14b,17b-20S-Methylcholestane	**66**
30-Homohopane-22S	**61**	14b(H),17b(H)-20R-Ethylcholestane	**88**
30-Homohopane-22R	**52**	14b(H),17b(H)-20S-Ethylcholestane	**57**

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

N/A - Not Applicable

01/19/06 07:26

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34807.D
Acq On : 18 Jan 2006 7:49 pm
Operator : AC
Sample : 0512110-14
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 06:33:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS 1-19-06

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	50.31	240	53583	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	50.95	217	313271	12615.84	ng/ml	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1261.58%#			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.44	191	34505m	636.12	ng/mL	
84) Hopane (T19)	60.44	191	34319m	632.69	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.38	191	13360	246.30	ng/ml	100
86) C24 Tricyclic Terpane (T5)	48.26	191	8803	162.29	ng/ml	100
87) C25 Tricyclic Terpane (T6)	50.05	191	8254m	152.17	ng/ml	
88) C24 Tetracyclic Terpane (T	51.58	191	3421m	63.07	ng/ml	
89) C26 Tricyclic Terpane-22S	51.31	191	3337m	61.52	ng/ml	
90) C26 Tricyclic Terpane-22R	51.43	191	3496m	64.45	ng/ml	
91) C28 Tricyclic Terpane-22S	54.17	191	3529m	65.06	ng/ml	
92) C28 Tricyclic Terpane-22R	54.37	191	3890m	71.71	ng/ml	
93) C29 Tricyclic Terpane-22S	54.99	191	3381m	62.33	ng/ml	
94) C29 Tricyclic Terpane-22R	55.22	191	3478m	64.12	ng/ml	
95) 18a-22,29,30-Trisnorneohop	56.39	191	7520m	138.64	ng/ml	
96) C30 Tricyclic Terpane-22S	56.57	191	2009	37.04	ng/mL	100
97) C30 Tricyclic Terpane-22R	56.84	191	2316m	42.70	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	56.98	191	10812m	199.33	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.27	191	4384m	80.82	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.12	191	2237m	41.24	ng/ml	
101) 30-Norhopane (T15)	58.98	191	21983m	405.27	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.10	191	7044m	129.86	ng/ml	
103) 17a(H)-Diahopane (X)	59.24	191	2237m	41.24	ng/ml	
104) 30-Normoretane (T17)	59.81	191	4852m	89.45	ng/ml	
105) 18a(H)&18b(H)-Oleananes (T	60.24	191	4348m	80.16	ng/ml	
106) Moretane (T20)	61.17	191	5498m	101.36	ng/ml	
107) 30-Homohopane-22S (T21)	62.32	191	8717m	160.70	ng/ml	
108) 30-Homohopane-22R (T22)	62.58	191	7343m	135.37	ng/ml	
109) 30,31-Bishomohopane-22S (T	63.97	191	5046m	93.03	ng/ml	
110) 30,31-Bishomohopane-22R (T	64.35	191	3956m	72.93	ng/ml	
111) 30,31-Trishomohopane-22S (	66.19	191	3190m	58.81	ng/ml	
112) 30,31-Trishomohopane-22R (	66.81	191	2321	42.79	ng/ml	100
113) Tetrakishomohopane-22S (T3	68.92	191	2333m	43.01	ng/ml	
114) Tetrakishomohopane-22R (T3	69.86	191	1221m	22.51	ng/ml	
115) Pentakishomohopane-22S (T3	72.15	191	1420m	26.18	ng/ml	
116) Pentakishomohopane-22R (T3	73.51	191	1444m	26.62	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	52.77	217	5718	230.27	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.28	217	3411m	137.37	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.12	217	2764m	111.31	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.13	217	3440m	138.53	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.72	217	10337m	416.28	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.03	217	1877m	75.59	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34807.D
Acq On : 18 Jan 2006 7:49 pm
Operator : AC
Sample : 0512110-14
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 06:33:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
124) 13a,17b-20S-Ethyldiacholes	56.32	217	326m	13.13 ng/ml	
125) 14a,17a-20S-Methylcholesta	56.49	217	1060m	42.69 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.25	217	4865m	195.92 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.62	217	2935m	118.20 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.61	217	4533m	182.55 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.24	218	4210m	169.54 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.33	218	3944m	158.83 ng/ml	
131) 14b,17b-20R-Methylcholesta	56.67	218	3777m	152.10 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.75	218	4312m	173.65 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.89	218	5746m	231.40 ng/ml	
134) 14b(H),17b(H)-20S-Ethylcho	57.95	218	3747m	150.90 ng/ml	

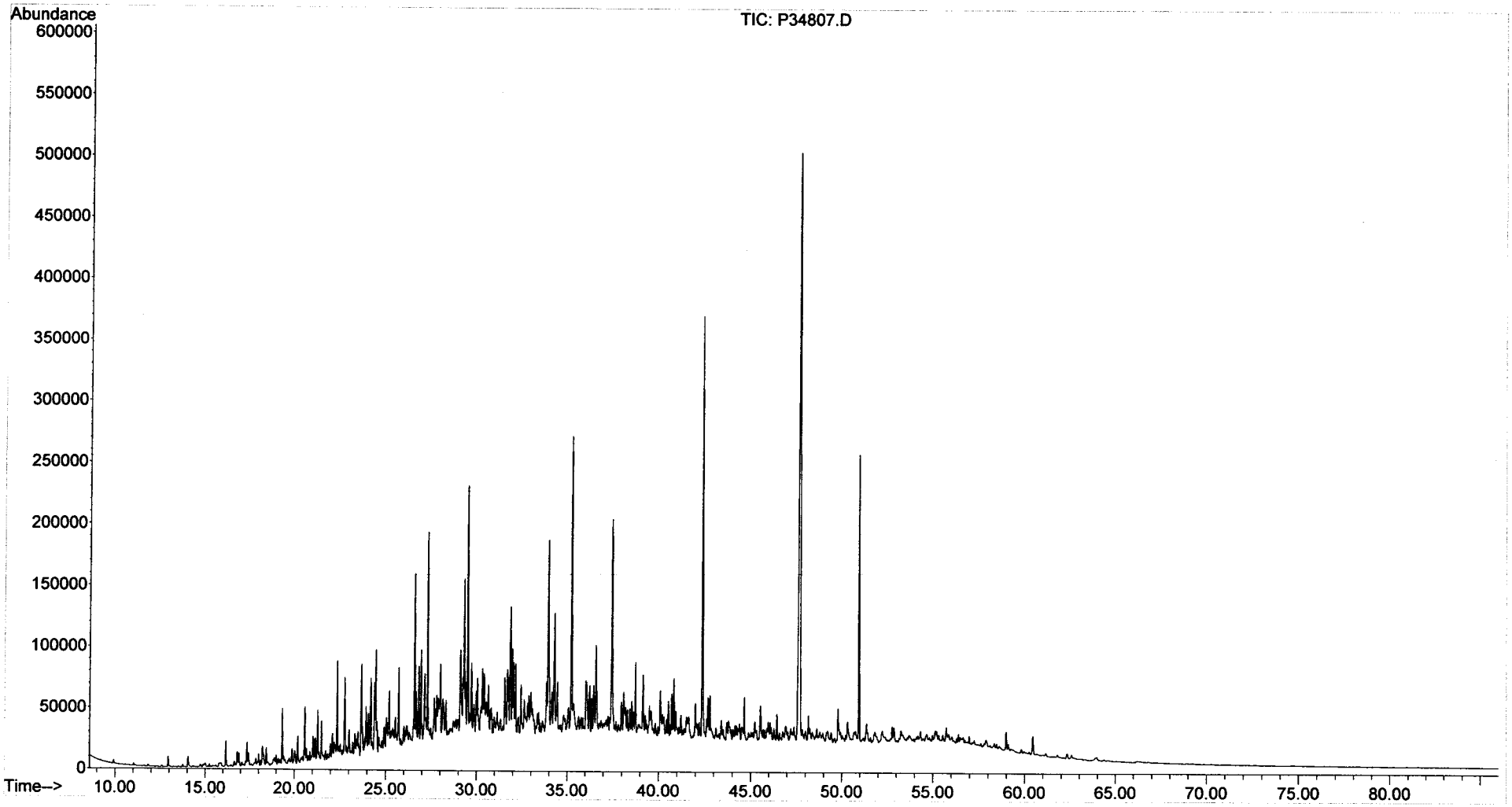
[illegible] 7/24/06

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34807.D
Acq On : 18 Jan 2006 7:49 pm
Operator : AC
Sample : 0512110-14
Misc : 1X
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 06:33:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Form I
Alkylated Polynuclear Aromatic Hydrocarbons

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **SS122105B16**
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	01/06/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**4.8**		Fluoranthene	**0.34**	J
C1-Naphthalenes	**2.8**		Pyrene	**0.58**	J
C2-Naphthalenes	**1.3**		C1-Fluoranthenes/Pyrenes	**0.48**	J
C3-Naphthalenes	**0.40**	J	C2-Fluoranthenes/Pyrenes	0.059	U
C4-Naphthalenes	0.11	U	C3-Fluoranthenes/Pyrenes	0.059	U
Biphenyl	**0.26**	J	C4-Fluoranthenes/Pyrenes	0.059	U
Dibenzofuran	**0.067**	J	Naphthobenzothiophenes	0.081	U
Acenaphthylene	**0.62**	J	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**0.46**	J	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**0.43**	J	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	**0.24**	J	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**0.19**	J
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**0.19**	J
Anthracene	**0.29**	J	C1-Chrysenes	**0.17**	J
Phenanthrene	**1.2**		C2-Chrysenes	0.072	U
C1-Phenanthrenes/Anthracenes	**0.65**	J	C3-Chrysenes	0.072	U
C2-Phenanthrenes/Anthracenes	**0.25**	J	C4-Chrysenes	0.072	U
C3-Phenanthrenes/Anthracenes	0.097	U	Benzo[b]fluoranthene	**0.071**	J
C4-Phenanthrenes/Anthracenes	0.097	U	Benzo[k]fluoranthene	**0.094**	J
Retene	0.097	U	Benzo[a]fluoranthene	**0.043**	J
Dibenzothiophene	**0.15**	J	Benzo[e]pyrene	**0.074**	J
C1-Dibenzothiophenes	**0.15**	J	Benzo[a]pyrene	**0.14**	J
C2-Dibenzothiophenes	**0.15**	J	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**0.075**	J
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	0.13	U
Benzo(b)fluorene	**0.064**	J	Benzo[g,h,i]perylene	**0.088**	J

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

01/18/06 10:11

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: **0512110**
Lab ID: **SS122105B16**
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	01/06/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

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

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

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 : P43074.D
Acq On : 6 Jan 2006 2:14 pm
Operator : AC
Sample : SS122105B16
Misc : 1X 50UL
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 11 08:58:00 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 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	56030m	500.00	ng/mL	-0.03
72) Chrysene-d12	43.17	240	99607	500.00	ng/mL	-0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	44728	420.78	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.08%#			
58) Pyrene-d10	38.25	212	105527	399.33	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 39.93%#			
81) Benzo[b]fluoranthene-d12	47.07	264	88100	422.27	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.23%#			
125) 5B(H)Cholane - Surr	43.81	217	37108	822.96	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 82.30%			

Target Compounds						Qvalue
9) Naphthalene	19.80	128	15563	71.52	ng/mL#	100
10) C1-Naphthalenes	22.50	142	9314m	42.80	ng/mL	
11) C2-Naphthalenes	25.34	156	4110m	18.89	ng/mL	
12) C3-Naphthalenes	27.68	170	1307m	6.01	ng/mL	
15) 2-Methylnaphthalene	22.50	142	5998	43.27	ng/mL#	100
16) 1-Methylnaphthalene	22.92	142	3283	23.51	ng/mL#	100
17) Benzothiophene	20.02	134	347	1.87	ng/mL	100
18) C1-Benzo(b)thiophenes	22.88	148	1913m	10.33	ng/mL	
19) C2-Benzo(b)thiophenes	25.00	162	615m	3.32	ng/mL	
22) Biphenyl	24.38	154	655m	3.94	ng/mL	
23) 2,6-Dimethylnaphthalene	25.00	156	654m	5.44	ng/mL	
24) Dibenzofuran	27.47	168	194	1.00	ng/mL#	78
25) Acenaphthylene	26.08	152	2262	9.29	ng/mL#	100
26) Acenaphthene	26.82	153	1040	6.97	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.39	170	82m	0.67	ng/mL	
28) Fluorene	28.85	166	1022m	6.39	ng/mL	
29) C1-Fluorenes	31.07	180	580m	3.63	ng/mL	
32) Dibenzothiophene	32.17	184	541	2.28	ng/mL#	74
36) OTP	34.35	198	17015	71.81	ng/mL#	100
37) C1-Dibenzothiophenes	34.35	198	17541m	74.03	ng/mL	
38) C2-Dibenzothiophenes	36.67	212	518m	2.19	ng/mL	
41) Phenanthrene	32.66	178	4945	18.55	ng/mL	98
47) C1-Phenanthrenes/Anthracen	34.63	192	2583m	9.69	ng/mL	
48) C2-Phenanthrenes/Anthracen	36.66	206	13984m	52.47	ng/mL	
49) 5AA IS BKGD	36.66	206	13005	48.79	ng/mL	100
53) Anthracene	32.84	178	1066m	4.38	ng/mL	
55) 1-Methylphenanthrene	35.18	192	436	2.48	ng/mL	100
56) Fluoranthene	37.44	202	1407m	5.12	ng/mL	
57) Benzo(b)fluorene	39.97	216	155	0.96	ng/mL#	80
59) Pyrene	38.31	202	2499	8.77	ng/mL	99
60) C1-Fluoranthenes/Pyrenes	39.72	216	2039m	7.15	ng/mL	
73) Benz[a]anthracene	43.11	228	666	2.81	ng/mL#	14
74) Chrysene	43.27	228	691	2.87	ng/mL	93
75) Chrysene/Triphenylene	43.27	228	691	2.87	ng/mL	93
76) C1-Chrysenes	44.74	242	620m	2.58	ng/mL	
82) Benzo[b]fluoranthene	47.17	252	261m	1.06	ng/mL	
83) Benzo[k]fluoranthene	47.23	252	392m	1.41	ng/mL	
84) Benzo[a]fluoranthene	47.55	252	181m	0.65	ng/mL	
85) Benzo[e]pyrene	48.16	252	275m	1.11	ng/mL	
86) Benzo[a]pyrene	48.35	252	518m	2.17	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43074.D
Acq On : 6 Jan 2006 2:14 pm
Operator : AC
Sample : SS122105B16
Misc : 1X 50UL
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 11 08:58:00 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

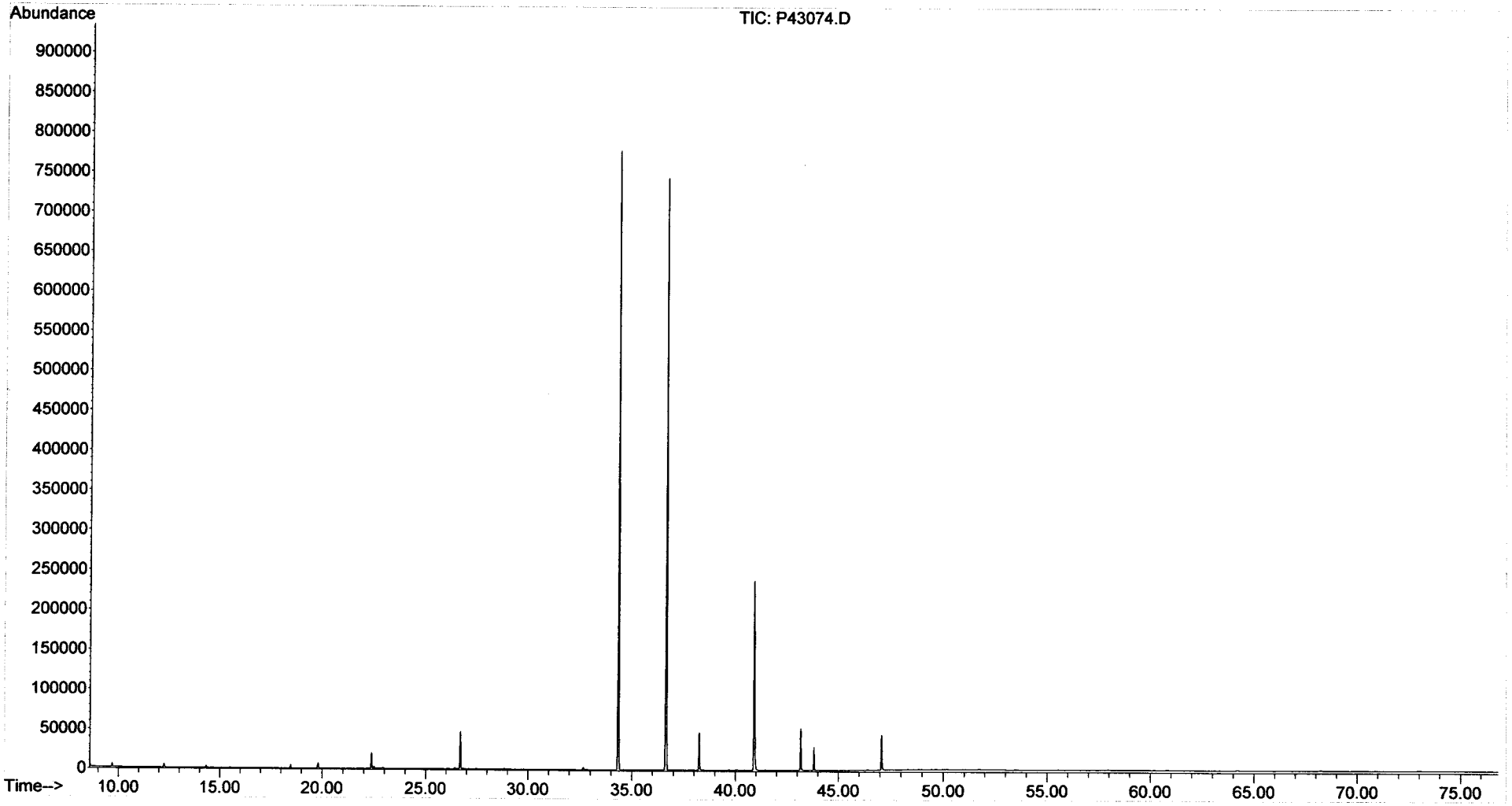
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
88) Indeno[1,2,3-cd]pyrene	53.19	276	251m	1.13	ng/mL	
90) Benzo[g,h,i]perylene	54.50	276	333m	1.32	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43074.D
Acq On : 6 Jan 2006 2:14 pm
Operator : AC
Sample : SS122105B16
Misc : 1X 50UL
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Jan 11 08:58:00 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



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: **0512110**
Lab ID: **SS122105B16**
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	01/06/06	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	114	50-130

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

01/19/06 07:11

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34705.D
Acq On : 6 Jan 2006 8:21 pm
Operator : AC
Sample : SS122105B16
Misc : 1X ETR0512110
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 12 19:01:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for WW 1-18-06

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	50.38	240	40736	500.00	ng/mL	0.10

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	51.00	217	21514m	1139.64	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	113.96%	

Target Compounds Qvalue

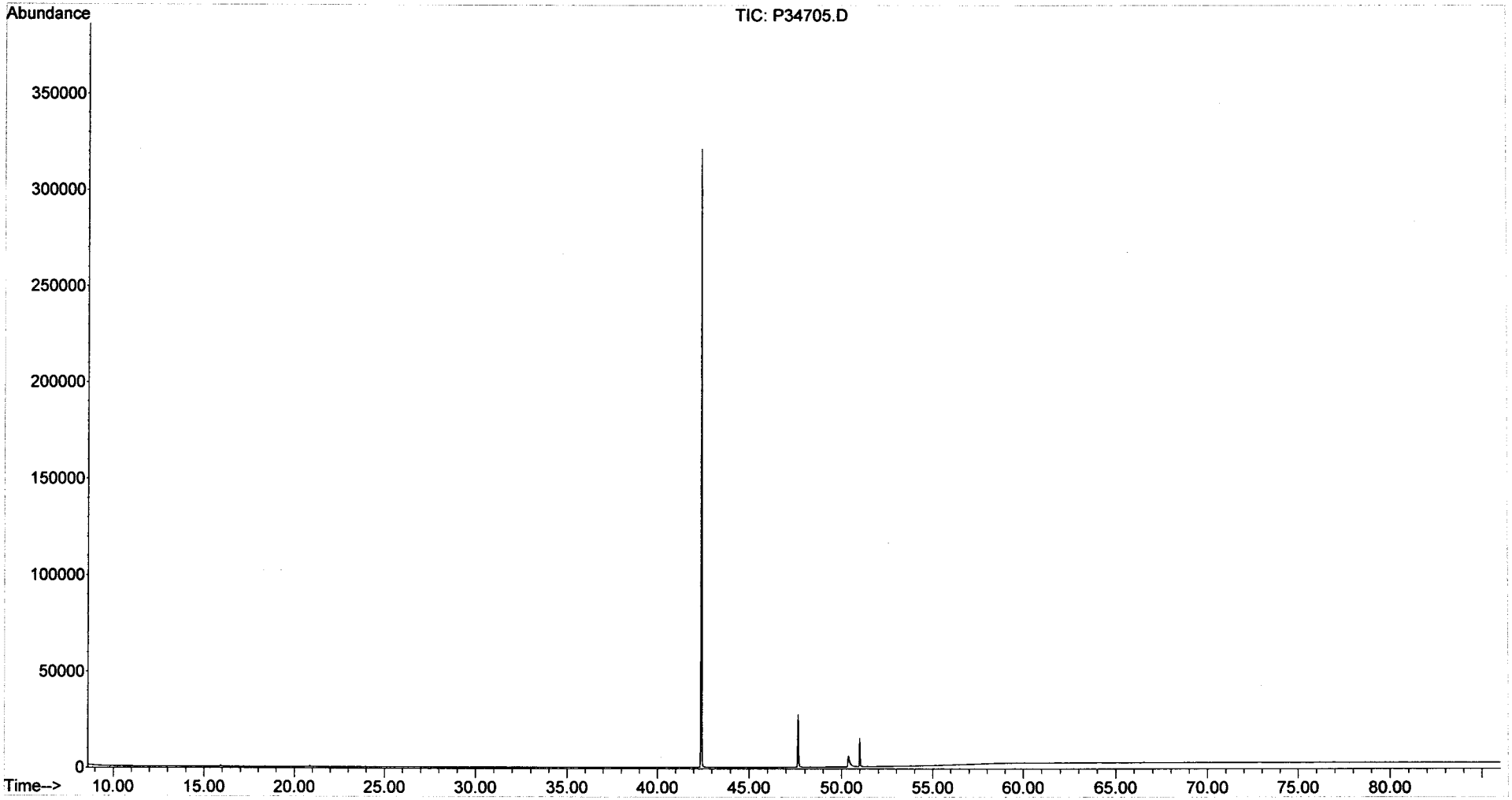
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MS 1/18/06

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34705.D
Acq On : 6 Jan 2006 8:21 pm
Operator : AC
Sample : SS122105B16
Misc : 1X ETR0512110
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 12 19:01:30 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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: **0512110**
Lab ID: **See Below**
Associated Blank: **SS122105B16**
Concentration Units: **µg/Kg**

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

Lab ID:	SS122105B16	SS122105LCS13		SS122105LCSD13				
Parameter	**Blank Conc.**	**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Naphthalene	4.8	34	102	36	108	6	30	50-130
Acenaphthylene	0.62	26	79	27	82	4	30	50-130
Acenaphthene	0.46	27	82	29	86	4	30	50-130
Fluorene	0.43	28	85	30	88	4	30	50-130
Anthracene	0.29	25	76	26	79	4	30	50-130
Phenanthrene	1.2	25	76	27	80	5	30	50-130
Fluoranthene	0.34	26	78	27	82	5	30	50-130
Pyrene	0.58	26	79	28	83	5	30	50-130
Benz[a]anthracene	0.19	30	89	32	95	6	30	50-130
Chrysene/Triphenylene	0.19	28	85	30	90	6	30	50-130
Benzo[b]fluoranthene	0.071	27	81	27	82	2	30	50-130
Benzo[k]fluoranthene	0.094	24	73	26	78	6	30	50-130
Benzo[a]pyrene	0.14	28	83	29	87	5	30	50-130
Indeno[1,2,3-cd]pyrene	0.075	33	99	34	102	3	30	50-130
Dibenz[a,h]anthracene	0.13 U	32	97	34	103	6	30	50-130
Benzo[g,h,i]perylene	0.088	29	88	32	95	7	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
2-Methylnaphthalene-d10	93	96	50-130
Pyrene-d10	81	85	50-130
Benzo[b]fluoranthene-d12	72	73	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.

01/18/06 09:48

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: **0512110**
Lab ID: **SS122105LCS13**
Associated Blank: **SS122105B16**
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	
Naphthalene	**34**	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	**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	**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	81	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.

01/18/06 10:12

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: **0512110**
Lab ID: **SS122105LCS13**
Associated Blank: **SS122105B16**
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
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	93	50-130
Pyrene-d10	81	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.

01/18/06 10:12

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43056.D
Acq On : 5 Jan 2006 11:08 pm
Operator : AC
Sample : SS122105LCS13
Misc : 1X ETR0512110 RERUN
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 11 16:47:54 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 for WW 1-12-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	64377m	500.00	ng/mL	-0.03
72) Chrysene-d12	43.18	240	113126	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	57015	466.83	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	46.68%#		
58) Pyrene-d10	38.25	212	122349m	402.96	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	40.30%#		
81) Benzo[b]fluoranthene-d12	47.08	264	84942m	358.48	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	35.85%#		
125) 5B(H)Cholane - Surr	0.00	217	0d	0.00	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		

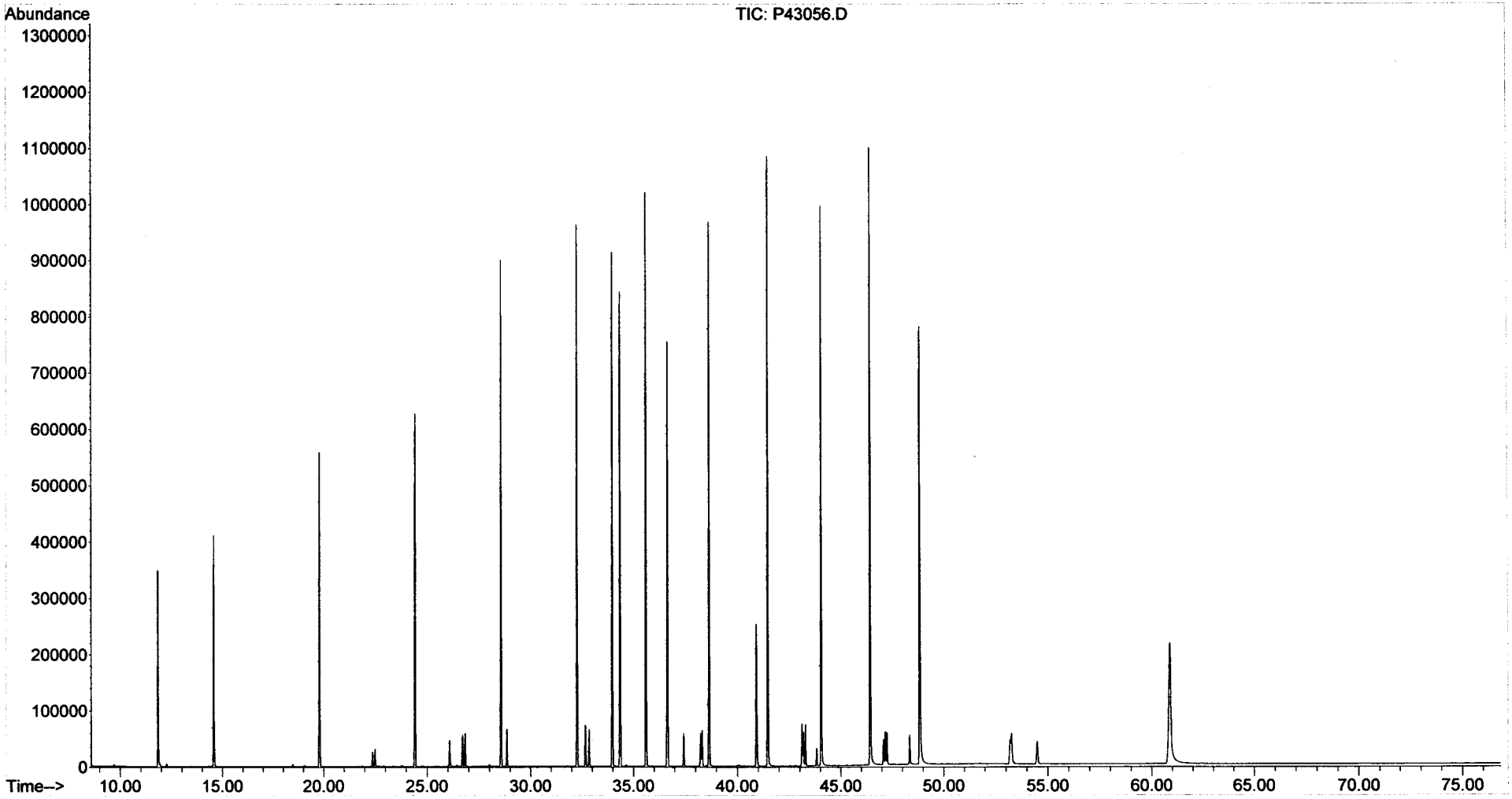
Target Compounds						Qvalue
9) Naphthalene	19.80	128	127001m	507.93	ng/mL	
15) 2-Methylnaphthalene	22.50	142	73576	461.93	ng/mL#	100
25) Acenaphthylene	26.09	152	111040m	396.85	ng/mL	
26) Acenaphthene	26.83	153	70581m	411.73	ng/mL	
28) Fluorene	28.85	166	77839m	423.86	ng/mL	
41) Phenanthrene	32.66	178	116353m	379.94	ng/mL	
53) Anthracene	32.84	178	106222m	379.88	ng/mL	
56) Fluoranthene	37.44	202	123555m	391.41	ng/mL	
59) Pyrene	38.32	202	129344m	394.96	ng/mL	
73) Benz[a]anthracene	43.11	228	120256	446.94	ng/mL	100
74) Chrysene	43.27	228	115499m	422.96	ng/mL	
75) Chrysene/Triphenylene	43.27	228	115875m	424.34	ng/mL	
82) Benzo[b]fluoranthene	47.16	252	113207m	404.85	ng/mL	
83) Benzo[k]fluoranthene	47.25	252	115409m	365.87	ng/mL	
86) Benzo[a]pyrene	48.35	252	112125	412.77	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.19	276	125129m	495.97	ng/mL	
89) Dibenz[a,h]anthracene	53.26	278	126147	483.96	ng/mL	99
90) Benzo[g,h,i]perylene	54.49	276	126487	439.96	ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43056.D
Acq On : 5 Jan 2006 11:08 pm
Operator : AC
Sample : SS122105LCS13
Misc : 1X ETR0512110 RERUN
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 11 16:47:54 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



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: **0512110**
Lab ID: **SS122105LCSD13**
Associated Blank: **SS122105B16**
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	01/06/06	100	30.00	2	1	AC

Parameter	Result		Parameter	Result	
Naphthalene	**36**	S	Fluoranthene	**27**	S
C1-Naphthalenes	0.11	U	Pyrene	**28**	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	**27**	S	C1-Naphthobenzothiophenes	0.081	U
Acenaphthene	**29**	S	C2-Naphthobenzothiophenes	0.081	U
Fluorene	**30**	S	C3-Naphthobenzothiophenes	0.081	U
C1-Fluorenes	0.077	U	C4-Naphthobenzothiophenes	0.081	U
C2-Fluorenes	0.077	U	Benz[a]anthracene	**32**	S
C3-Fluorenes	0.077	U	Chrysene/Triphenylene	**30**	S
Anthracene	**26**	S	C1-Chrysenes	0.072	U
Phenanthrene	**27**	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	**26**	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	**29**	S
C2-Dibenzothiophenes	0.074	U	Perylene	0.12	U
C3-Dibenzothiophenes	0.074	U	Indeno[1,2,3-cd]pyrene	**34**	S
C4-Dibenzothiophenes	0.074	U	Dibenz[a,h]anthracene	**34**	S
Benzo(b)fluorene	0.067	U	Benzo[g,h,i]perylene	**32**	S

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	96	50-130
Pyrene-d10	85	50-130
Benzo[b]fluoranthene-d12	73	50-130

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

01/18/06 10:13

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: **0512110**
Lab ID: **SS122105LCSD13**
Associated Blank: **SS122105B16**
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	01/06/06	100	30.00	2	1	AC

Parameter	Result
Carbazole	0.086 U

Surrogate	% Recovery	Acceptance Range (%)
2-Methylnaphthalene-d10	96	50-130
Pyrene-d10	85	50-130
Benzo[b]fluoranthene-d12	73	50-130

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

01/18/06 10:13

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43058.D
Acq On : 6 Jan 2006 12:38 am
Operator : AC
Sample : SS122105LCSD13
Misc : 1X ETR0512110 RERUN
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 11 16:52:02 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 for WN 1-12-06

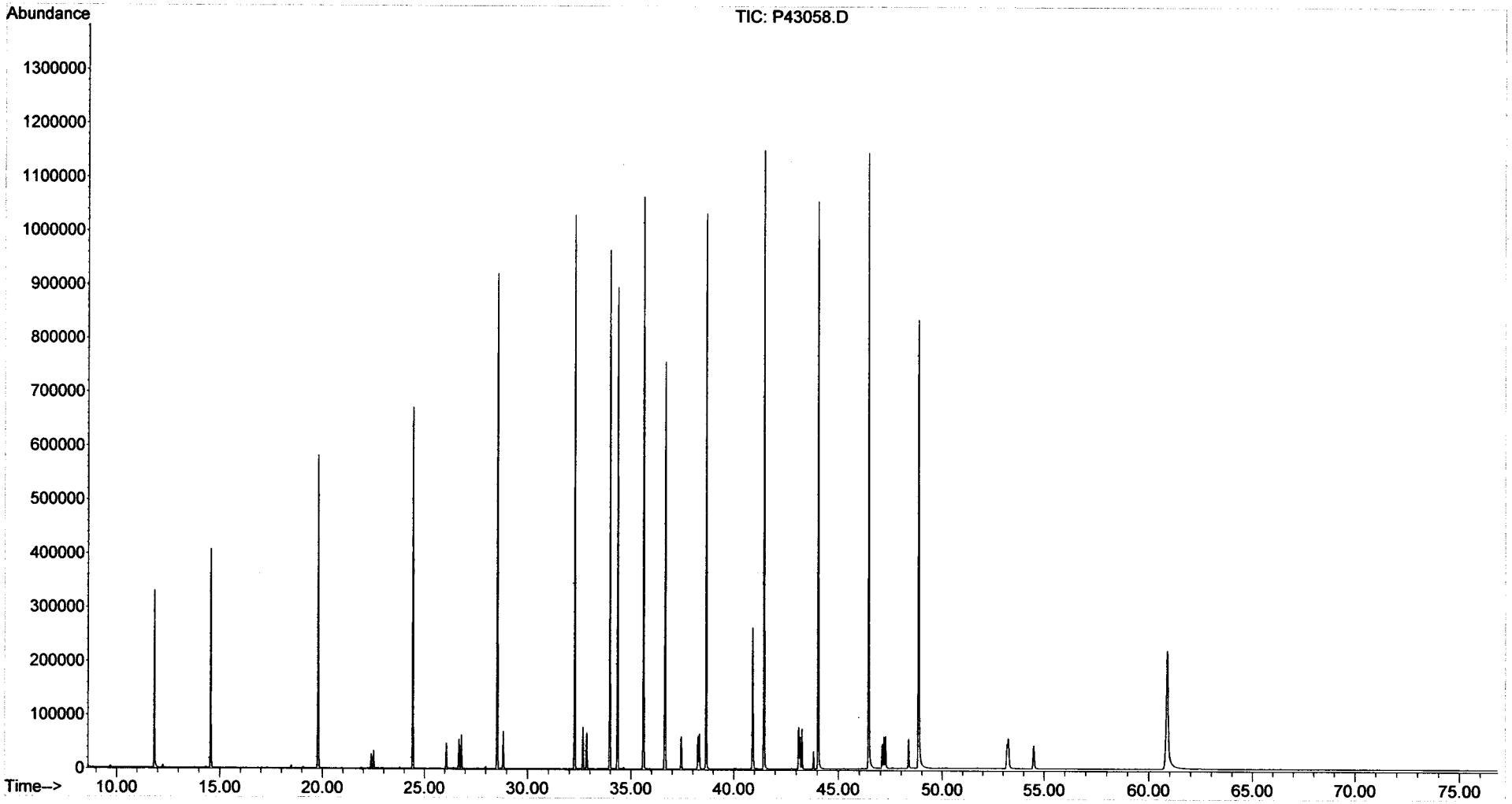
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.70	164	64815m	500.00	ng/mL	-0.03
72) Chrysene-d12	43.18	240	112345m	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.37	152	58995m	479.77	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.98%#			
58) Pyrene-d10	38.25	212	129662m	424.16	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.42%#			
81) Benzo[b]fluoranthene-d12	47.08	264	86419m	367.24	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 36.72%#			
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	135622m	538.75	ng/mL	
15) 2-Methylnaphthalene	22.50	142	77436m	482.88	ng/mL	
25) Acenaphthylene	26.09	152	115943m	411.57	ng/mL	
26) Acenaphthene	26.82	153	74322m	430.63	ng/mL	
28) Fluorene	28.85	166	81792m	442.38	ng/mL	
41) Phenanthrene	32.66	178	123505	400.57	ng/mL	100
53) Anthracene	32.84	178	111857m	397.32	ng/mL	
56) Fluoranthene	37.44	202	130424m	410.38	ng/mL	
59) Pyrene	38.32	202	137549m	417.18	ng/mL	
73) Benz[a]anthracene	43.11	228	126724	474.25	ng/mL	100
74) Chrysene	43.27	228	121819m	449.21	ng/mL	
75) Chrysene/Triphenylene	43.27	228	121792m	449.11	ng/mL	
82) Benzo[b]fluoranthene	47.16	252	114191m	411.20	ng/mL	
83) Benzo[k]fluoranthene	47.25	252	121796m	388.80	ng/mL	
86) Benzo[a]pyrene	48.35	252	117391	435.16	ng/mL	100
88) Indeno[1,2,3-cd]pyrene	53.19	276	128382m	512.40	ng/mL	
89) Dibenz[a,h]anthracene	53.25	278	132771	512.91	ng/mL	99
90) Benzo[g,h,i]perylene	54.49	276	134991	472.80	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH4\JANUARY\JAN05\
Data File : P43058.D
Acq On : 6 Jan 2006 12:38 am
Operator : AC
Sample : SS122105LCSD13
Misc : 1X ETR0512110 RERUN
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 11 16:52:02 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



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: **0512110**
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

01/18/06 12:13

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: **0512110**
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.

01/18/06 12:13

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: **0512110**
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.

01/18/06 12:13

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: **0512110**
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

01/18/06 12:14

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

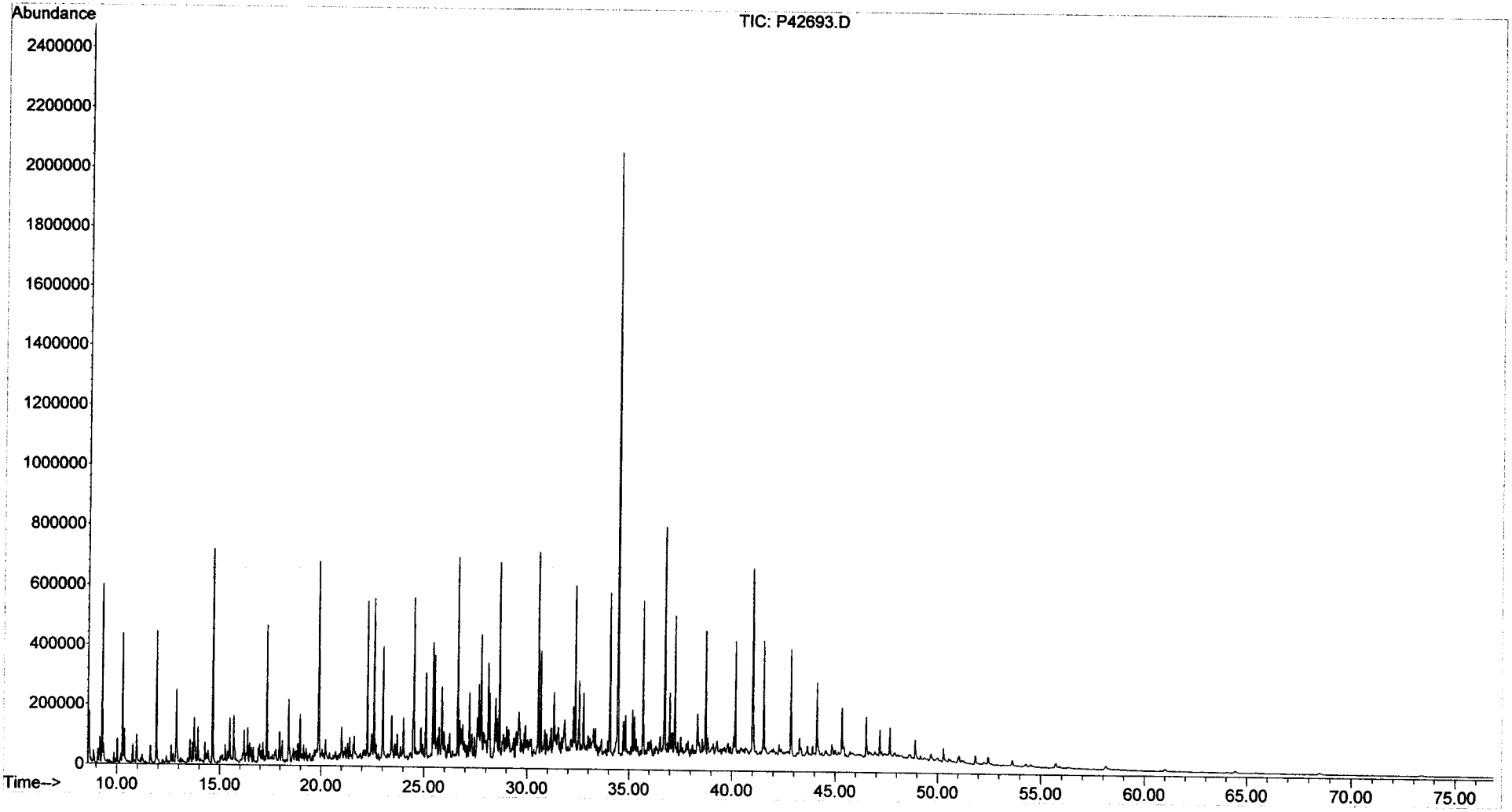
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
107) 17a/b,21b/a 28,30-Bisnorho	50.38	191	2143	26.67 ng/ml	100
108) 17a(H),21b(H)-25-Norhopane	50.16	191	3400	42.32 ng/ml	100
109) 30-Norhopane (T15)	51.07	191	32518	404.77 ng/ml	100
110) 18a(H)-30-Norneohopane-C29	51.17	191	7047m	87.72 ng/ml	
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: **0512110**
Lab ID: **SS010606AWS02**
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.

01/19/06 07:16

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: **0512110**
Lab ID: **SS010606AWS02**
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	01/06/06	100	0.051	10	1	AC

Parameter	Result	Parameter	Result
C23 Tricyclic Terpane	**60**	30,31-Bishomohopane-22S	**50**
C24 Tricyclic Terpane	**39**	30,31-Bishomohopane-22R	**34**
C25 Tricyclic Terpane	**38**	30,31-Trishomohopane-22S	**38**
C24 Tetracyclic Terpane	**12**	30,31-Trishomohopane-22R	**25**
C26 Tricyclic Terpane-22S	**15**	Tetrakishomohopane-22S	**27**
C26 Tricyclic Terpane-22R	**15**	Tetrakishomohopane-22R	**17**
C28 Tricyclic Terpane-22S	**12**	Pentakishomohopane-22S	**29**
C28 Tricyclic Terpane-22R	**14**	Pentakishomohopane-22R	**19**
C29 Tricyclic Terpane-22S	**19**	13b(H),17a(H)-20S-Diacholestane	**53**
C29 Tricyclic Terpane-22R	**19**	13b(H),17a(H)-20R-Diacholestane	**28**
18a-22,29,30-Trisnorneohopane-TS	**23**	13b,17a-20S-Methyldiacholestane	**24**
C30 Tricyclic Terpane-22S	**11**	14a(H),17a(H)-20S-Cholestane	**22**
C30 Tricyclic Terpane-22R	**14**	14a(H),17a(H)-20R-Cholestane	**83**
17a(H)-22,29,30-Trisnorhopane-TM	**30**	13b,17a-20R-Ethyldiacholestane	**19**
17a/b,21b/a 28,30-Bisnorhopane	**5.6**	13a,17b-20S-Ethyldiacholestane	**4.7**
17a(H),21b(H)-25-Norhopane	**7.7**	14a,17a-20S-Methylcholestane	**16**
30-Norhopane	**88**	14a,17a-20R-Methylcholestane	**34**
18a(H)-30-Norneohopane-C29Ts	**19**	14a(H),17a(H)-20S-Ethylcholestane	**44**
17a(H)-Diahopane	**9.1**	14a(H),17a(H)-20R-Ethylcholestane	**41**
30-Normoretane	**9.4**	14b(H),17b(H)-20R-Cholestane	**44**
18a(H)&18b(H)-Oleananes	0.55 U	14b(H),17b(H)-20S-Cholestane	**46**
Hopane	**150**	14b,17b-20R-Methylcholestane	**49**
Moretane	**11**	14b,17b-20S-Methylcholestane	**62**
30-Homohopane-22S	**63**	14b(H),17b(H)-20R-Ethylcholestane	**61**
30-Homohopane-22R	**53**	14b(H),17b(H)-20S-Ethylcholestane	**52**

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

01/19/06 07:13

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\Jan05\
Data File : p34693.D
Acq On : 6 Jan 2006 5:47 am
Operator : AC
Sample : SS010606AWS02
Misc : ANS3010401
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 06 11:32:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS 1-6-06 L. 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	50.27	240	66332	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	50.99	217	32688	1063.38	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 106.34%			

Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.52	191	51454m	766.27	ng/mL	
84) Hopane (T19)	60.52	191	51414m	765.67	ng/mL	
85) C23 Tricyclic Terpane (T4)	47.43	191	20683m	308.02	ng/ml	
86) C24 Tricyclic Terpane (T5)	48.30	191	13443m	200.20	ng/ml	
87) C25 Tricyclic Terpane (T6)	50.09	191	13121m	195.40	ng/ml	
88) C24 Tetracyclic Terpane (T	51.62	191	4066	60.55	ng/ml	100
89) C26 Tricyclic Terpane-22S	51.37	191	5146m	76.64	ng/ml	
90) C26 Tricyclic Terpane-22R	51.48	191	5040	75.06	ng/ml	100
91) C28 Tricyclic Terpane-22S	54.23	191	4256m	63.38	ng/ml	
92) C28 Tricyclic Terpane-22R	54.43	191	4851	72.24	ng/ml	100
93) C29 Tricyclic Terpane-22S	55.04	191	6434	95.82	ng/ml	100
94) C29 Tricyclic Terpane-22R	55.28	191	6565	97.77	ng/ml	100
95) 18a-22,29,30-Trisnorneohop	56.45	191	7834	116.67	ng/ml	100
96) C30 Tricyclic Terpane-22S	56.63	191	3643m	54.25	ng/mL	
97) C30 Tricyclic Terpane-22R	56.89	191	4853m	72.27	ng/mL	
98) 17a(H)-22,29,30-Trisnorhop	57.04	191	10248m	152.62	ng/ml	
99) 17a/b,21b/a 28,30-Bisnorho	58.35	191	1907m	28.40	ng/ml	
100) 17a(H),21b(H)-25-Norhopane	58.19	191	2643m	39.36	ng/ml	
101) 30-Norhopane (T15)	59.06	191	30280m	450.94	ng/ml	
102) 18a(H)-30-Norneohopane-C29	59.17	191	6633m	98.78	ng/ml	
103) 17a(H)-Diahopane (X)	59.33	191	3126m	46.55	ng/ml	
104) 30-Normoretane (T17)	59.90	191	3213	47.85	ng/ml	100
106) Moretane (T20)	61.25	191	3680m	54.80	ng/ml	
107) 30-Homohopane-22S (T21)	62.41	191	21639	322.25	ng/ml	100
108) 30-Homohopane-22R (T22)	62.67	191	18169	270.58	ng/ml	100
109) 30,31-Bishomohopane-22S (T	64.07	191	17078	254.33	ng/ml	100
110) 30,31-Bishomohopane-22R (T	64.47	191	11801	175.74	ng/ml	100
111) 30,31-Trishomohopane-22S (	66.31	191	13173	196.18	ng/ml	100
112) 30,31-Trishomohopane-22R (	66.95	191	8474	126.20	ng/ml	100
113) Tetrakishomohopane-22S (T3	69.07	191	9185	136.79	ng/ml	100
114) Tetrakishomohopane-22R (T3	70.01	191	5811	86.54	ng/ml	100
115) Pentakishomohopane-22S (T3	72.33	191	9884	147.20	ng/ml	100
116) Pentakishomohopane-22R (T3	73.68	191	6390m	95.16	ng/ml	
118) 13b(H),17a(H)-20S-Diachole	52.82	217	8298	269.94	ng/ml	100
119) 13b(H),17a(H)-20R-Diachole	53.33	217	4396m	143.01	ng/ml	
120) 13b,17a-20S-Methyldiachole	54.17	217	3773m	122.74	ng/ml	
121) 14a(H),17a(H)-20S-Cholesta	55.20	217	3473m	112.98	ng/ml	
122) 14a(H),17a(H)-20R-Cholesta	55.78	217	12970m	421.93	ng/ml	
123) 13b,17a-20R-Ethyldiacholes	56.09	217	2982m	97.01	ng/ml	
124) 13a,17b-20S-Ethyldiacholes	56.37	217	742	24.14	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\Jan05\
Data File : p34693.D
Acq On : 6 Jan 2006 5:47 am
Operator : AC
Sample : SS010606AWS02
Misc : ANS3010401
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 06 11:32:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

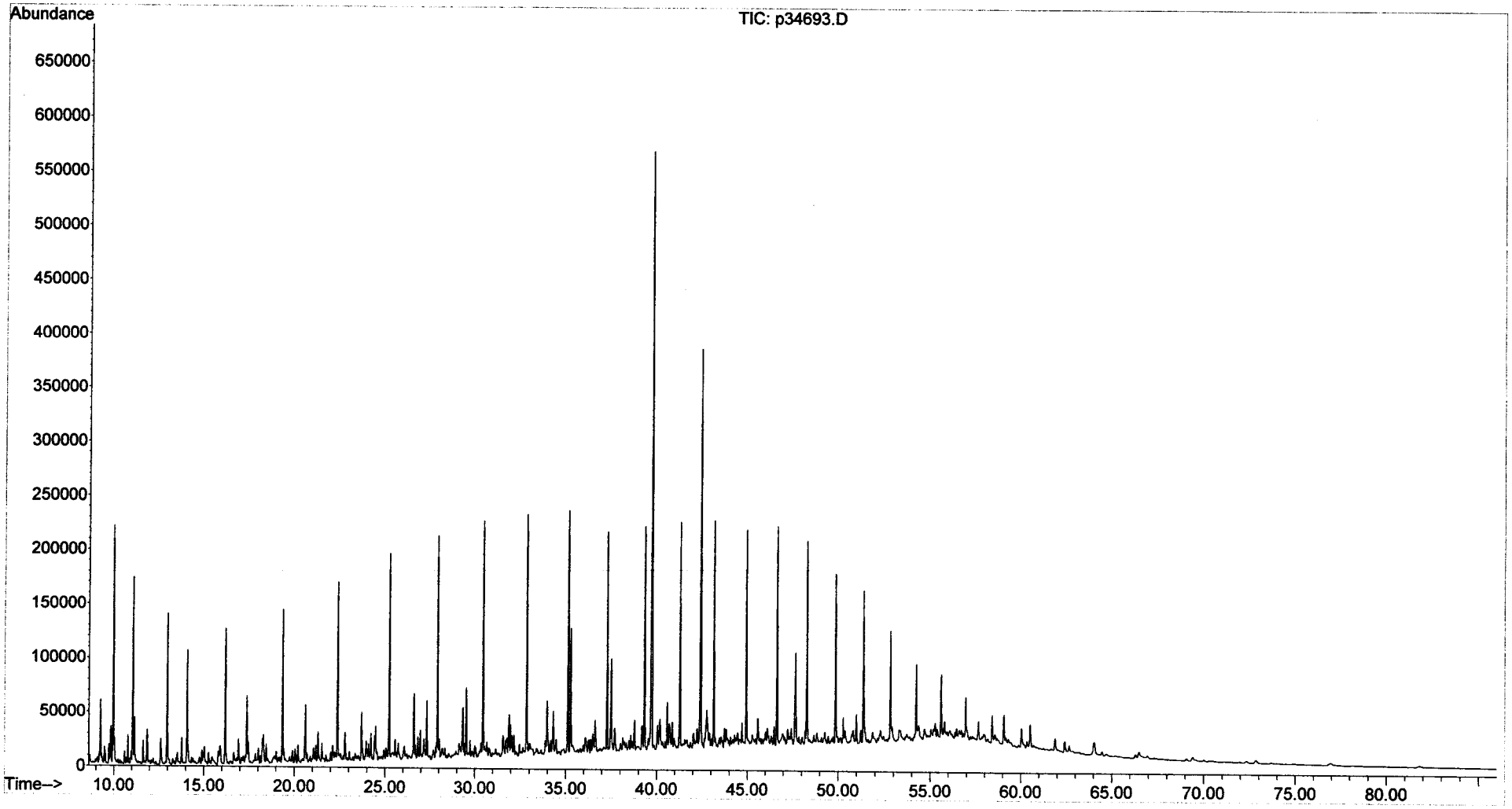
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
125) 14a,17a-20S-Methylcholesta	56.55	217	2550m	82.95 ng/ml	
126) 14a,17a-20R-Methylcholesta	57.31	217	5412m	176.06 ng/ml	
127) 14a(H),17a(H)-20S-Ethylcho	57.71	217	6958m	226.35 ng/ml	
128) 14a(H),17a(H)-20R-Ethylcho	58.68	217	6422m	208.92 ng/ml	
129) 14b(H),17b(H)-20R-Cholesta	55.29	218	6891m	224.17 ng/ml	
130) 14b(H),17b(H)-20S-Cholesta	55.39	218	7159m	232.89 ng/ml	
131) 14b,17b-20R-Methylcholesta	56.72	218	7720m	251.14 ng/ml	
132) 14b,17b-20S-Methylcholesta	56.81	218	9745m	317.02 ng/ml	
133) 14b(H),17b(H)-20R-Ethylcho	57.96	218	9511	309.40 ng/ml	100
134) 14b(H),17b(H)-20S-Ethylcho	58.01	218	8180m	266.11 ng/ml	

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\Jan05\
Data File : p34693.D
Acq On : 6 Jan 2006 5:47 am
Operator : AC
Sample : SS010606AWS02
Misc : ANS3010401
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 06 11:32:00 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Sequence Name: C:\MSDChem\4\sequence\S4010301.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\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

	Line		Sample Name/Misc Info		
1)	Debug				
2)	RearSamp	51	P42813	FRNC4B	alk std
3)	Sample	1	P42814	FRNC4B	pah std
4)	RearSamp	51	P42815	FRNC4B	C4010301-AFID
5)	Sample	1	P42816	FRNC4B	C4010301
6)	Sample	2	P42817	FRNC4B	DCM
7)	Sample	3	P42818	FRNC4B	C4010302 PASS
8)	Pause				
9)	Sample	4	P42819	FRNC4B	ANS4010301
10)	Sample	5	P42820	FRNC4B	DCM
11)	Sample	6	P42821	FRNC4B	0512110-03-RE ✓
12)	Sample	7	P42822	FRNC4B	0512110-04-RE ✓
13)	Sample	8	P42823	FRNC4B	0512110-05-RE ✓
14)	Sample	9	P42824	FRNC4B	0512110-07-RE ✓
15)	Sample	10	P42825	FRNC4B	0512110-08-RE ✓
16)	Sample	11	P42826	FRNC4B	0512110-09-RE ✓
17)	Sample	12	P42827	FRNC4B	0512110-10-RE ✓
18)	Sample	13	P42828	FRNC4B	0512110-11-RE ✓
19)	Sample	15	P42829	FRNC4B	0512110-11D-RE ✓
20)	Sample	22	P42830	FRNC4B	0512096-01-RE ✓
21)	Sample	14	P42831	FRNC4B	C4010303 PASS
22)	Sample	16	P42832	FRNC4B	0512110-12-RE ✓
23)	Sample	17	P43000	FRNC4B	0512110-13-RE ✓
24)	Sample	18	P43001	FRNC4B	0512110-14-RE ✓
25)	Sample	19	P43002	FRNC4B	0512110-10-RE ✓
26)	Pause				
27)	Debug				
28)	DualTwr				
29)	SepGC1				
30)	RearSamp	51	P43003	FRNC4B	DCM-AFID
31)	Sample	20	P43004	FRNC4B	0512110-13-RE ✓
32)	RearSamp	52	P43005	FRNC4B	DCM-AFID
33)	Sample	21	P43006	FRNC4B	0512110-14-RE ✓
34)	RearSamp	53	P43007	FRNC4B	C4010401-AFID
35)	Sample	23	P43008	FRNC4B	C4010304 PASS
36)	RearSamp	54	P43009	FRNC4B	ANS4010401-AFID
37)	Sample	24	P43010	FRNC4B	DCM
38)	RearSamp	55	P43011	FRNC4B	DCM-AFID
39)	Sample	25	P43012	FRNC4B	SS122105B16
40)	RearSamp	56	P43013	FRNC4B	DCM-AFID
41)	Sample	26	P43014	FRNC4B	SS122105LCS13
42)	RearSamp	57	P43015	FRNC4B	SS122105B14-AFID
43)	Sample	27	P43016	FRNC4B	SS122105LCSD14

✓ Run used

→ Data files changed to P43000. Repeated #s from December
CL 1/24/06

Instr. Stopped
See next sequence

MS 1-5-06

PAH41217.M
CL 1/24/06

Last Modified: Fri Dec 23 14:35:18 2005

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

PAH #4 Sequence Information

SHC Continuing Calibration: ~~WHAG10~~ ✓ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB56 ✓ Conc.: 500ng/mL

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

FID Process Method: ~~HG40908.M~~ PAH Process Method: PAH41217.M ✓

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

CM 1/24/06

Sequence Name: C:\MSDChem\4\sequence\S4011201.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\4\DATA\JANUARY06\JAN12\

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) Sample	1	P43188	FRNC4B	PAH STD	
3) Sample	1	P43189	FRNC4B	C4011201 PASS	
4) Sample	2	P43190	FRNC4B	ANS4011201	√run used
5) Sample	3	P43191	FRNC4B	DCM	
6) Sample	4	P43192	FRNC4B	0512110-06 ✓	
7) Sample	5	P43193	FRNC4B	C4011202 PASS	

↑ hopane failed not needed for this sample.

MS
1-13-06

PAH4121 7.M
CV 1/24/06

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

Sequence Name: C:\MSDChem\1\sequence\S3010501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\Jan05\

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

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

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

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

1/5/09.

Line			Sample Name/Misc Info		
1)	Sample	1	p34673	FRBIO3A	bio test
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	p34674	FRBIO3A	DCM-AFID
5)	Sample	1	p34675	FRBIO3A	C3010401*
6)	RearSamp	52	p34676	FRBIO3A	DCM-AFID
7)	Sample	2	p34677	FRBIO3A	DCM
8)	RearSamp	53	p34678	FRBIO3A	DCM-AFID
9)	Sample	3	p34679	FRBIO3A	I3010401
10)	RearSamp	54	p34680	FRBIO3A	DCM-AFID
11)	Sample	4	p34681	FRBIO3A	I3010402
12)	RearSamp	55	p34682	FRBIO3A	DCM-AFID
13)	Sample	5	p34683	FRBIO3A	I3010403
14)	RearSamp	56	p34684	FRBIO3A	DCM-AFID
15)	Sample	6	p34685	FRBIO3A	I3010404
16)	RearSamp	57	p34686	FRBIO3A	DCM-AFID
17)	Sample	7	p34687	FRBIO3A	I3010405
18)	RearSamp	58	p34688	FRBIO3A	DCM-AFID
19)	Sample	8	p34689	FRBIO3A	I3010406
20)	RearSamp	59	p34690	FRBIO3A	DCM-AFID
21)	Sample	9	p34691	FRBIO3A	I3010407
22)	RearSamp	60	p34692	FRBIO3A	DCM-AFID
23)	Sample	10	p34693	FRBIO3A	ANS3010401
24)	RearSamp	61	p34694	FRBIO3A	DCM-AFID
25)	Sample	11	p34695	FRBIO3A	DCM
26)	RearSamp	62	p34696	FRBIO3A	C3010601* PASS
27)	Sample	12	p34697	FRBIO3A	DCM
28)	RearSamp	63	p34698	FRBIO3A	ANS3010601
29)	Sample	12	p34699	FRBIO3A	DCM
30)	RearSamp	64	p34700	FRBIO3A	DCM-AFID
31)	Sample	12	p34701	FRBIO3A	DCM
32)	RearSamp	65	p34702	FRBIO3A	SS122105B13-AFID
33)	Sample	62	p34703	FRBIO3A	C3010602
34)	Sample	13	p34704	FRBIO3A	C3010602A PASS.
35)	Sample	14	p34705	FRBIO3A	SS122105B16
36)	Sample	15	p34706	FRBIO3A	0512110-01
37)	Sample	16	p34707	FRBIO3A	0512110-02
38)	Sample	17	p34708	FRBIO3A	0512110-03
39)	Sample	18	p34709	FRBIO3A	0512110-04
40)	Sample	19	p34710	FRBIO3A	0512110-05
41)	Sample	20	p34711	FRBIO3A	0512110-06
42)	Sample	21	p34712	FRBIO3A	0512110-07
43)	Sample	22	p34713	FRBIO3A	0512110-08

Biomarker Calibration.

B1030105.M
1/24/06

STD – WHAB56.*

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): WHAC13 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

Sequence Name: C:\MSDChem\1\sequence\S3010501.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	23	p34714	FRBIO3A	0512110-09
45)	Sample	24	p34715	FRBIO3A	C3010603 PASS
46)	Sample	25	p34716	FRBIO3A	0512110-10
47)	Sample	26	p34717	FRBIO3A	0512110-11
48)	Sample	27	p34718	FRBIO3A	0512110-11D See next sequence
49)	Sample	28	p34719	FRBIO3A	0512110-12
50)	Sample	29	p34720	FRBIO3A	0512110-13
51)	Sample	30	p34721	FRBIO3A	0512110-14
52)	Sample	31	p34722	FRBIO3A	C3010604 - NOT ACQUIRED. 1/9/06

Sequence Name: C:\MSDChem\1\sequence\S3010901.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)	Sample	1	P34751	FRBIO3A	C3010901 PASS.
2)	Sample	2	P34752	FRBIO3A	0512110-10 ✓
3)	Sample	3	P34753	FRBIO3A	0512110-11 ✓
4)	Sample	4	P34754	FRBIO3A	0512110-11D ✓
5)	Sample	5	P34755	FRBIO3A	0512110-12 ✓
6)	Sample	6	P34756	FRBIO3A	0512110-13 ✓
7)	Sample	7	P34757	FRBIO3A	DCM
8)	Sample	8	P34758	FRBIO3A	C3010902 PASS

✓ run used

MS 1/10/06

PAH #3 Sequence Information

SHC Continuing Calibration: ~~WHAO10~~ Conc.: 50ug/mL
PAH Continuing Calibration: WHAB56 Conc.: 500ng/mL ✓

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

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

B1030105.M
1/24/06

Last Modified: Mon Jan 09 09:45:22 2006

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

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

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

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

Line			Sample Name/Misc Info		
1) Sample	1	P34805	FRBIO3A	dcm	
2) Sample	2	P34806	FRBIO3A	C3011801	PASS
3) Sample	3	P34807	FRBIO3A	0512110-14	✓
4) Sample	4	P34808	FRBIO3A	C3011802	PASS

✓ run used
MS 1/19/06

B1030105.M
CW 1/24/06

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: **0512110**
Lab ID: **SS122105B16**
Date Analyzed: **01/06/06 14:14**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-85B (8.5-9.3)	0512110-03E	01/03/06 20:27
GC-SED-67 (8-8.4)	0512110-04E	01/03/06 21:56
GC-SED-68 (2.2-3.1)	0512110-05E	01/03/06 23:23
GC-SED-79 (2.5-3.5)	0512110-07E	01/04/06 00:52
GC-SED-81 (8-11)	0512110-08E	01/04/06 02:20
GC-SED-69 (6-7)	0512110-09E	01/04/06 03:48
GC-SED-72 (13.5-14.5)	0512110-10	01/04/06 05:16
GC-SED-07 (7.5-8.5)	0512110-11E	01/04/06 06:45
GC-SED-07 (7.5-8.5)	0512110-11E D	01/04/06 08:13
GC-SED-03 (0-1.5)	0512110-12E	01/04/06 12:39
GC-SED-01 (19-20)	0512110-13	01/04/06 14:08
GC-SED-02 (17.1-18.1)	0512110-14	01/04/06 15:36
GC-SED-72 (13.5-14.5)	0512110-10E	01/04/06 17:05
GC-SED-01 (19-20)	0512110-13E	01/04/06 18:35
GC-SED-02 (17.1-18.1)	0512110-14E	01/04/06 20:04
LCS	SS122105LCS13	01/05/06 23:08
LCSD	SS122105LCSD13	01/06/06 00:38
GC-SED-93 (0-1)	0512110-01	01/06/06 23:12
GC-SED-92 (0-2)	0512110-02	01/07/06 00:42
GC-SED-85B (8.5-9.3)	0512110-03	01/07/06 02:11
GC-SED-67 (8-8.4)	0512110-04	01/07/06 03:39
GC-SED-68 (2.2-3.1)	0512110-05	01/07/06 05:08
GC-SED-79 (2.5-3.5)	0512110-07	01/07/06 09:14
GC-SED-81 (8-11)	0512110-08	01/07/06 10:43
GC-SED-69 (6-7)	0512110-09	01/07/06 13:42
GC-SED-07 (7.5-8.5)	0512110-11	01/07/06 16:41
GC-SED-07 (7.5-8.5)	0512110-11 D	01/07/06 18:10
GC-SED-03 (0-1.5)	0512110-12	01/07/06 19:39
GC-SED-80 (0-2)	0512110-06	01/12/06 21:27

N/A - Not Applicable

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

Form IV
Method Blank Summary
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **SS122105B16**
Date Analyzed: **01/06/06 20:21**

Client ID	Lab ID	Date/Time Analyzed
GC-SED-93 (0-1)	0512110-01	01/06/06 22:01
GC-SED-92 (0-2)	0512110-02	01/06/06 23:40
GC-SED-85B (8.5-9.3)	0512110-03	01/07/06 01:19
GC-SED-67 (8-8.4)	0512110-04	01/07/06 02:58
GC-SED-68 (2.2-3.1)	0512110-05	01/07/06 04:37
GC-SED-80 (0-2)	0512110-06	01/07/06 06:16
GC-SED-79 (2.5-3.5)	0512110-07	01/07/06 07:55
GC-SED-81 (8-11)	0512110-08	01/07/06 09:34
GC-SED-69 (6-7)	0512110-09	01/07/06 11:13
GC-SED-72 (13.5-14.5)	0512110-10	01/09/06 13:44
GC-SED-07 (7.5-8.5)	0512110-11	01/09/06 15:25
GC-SED-07 (7.5-8.5)	0512110-11 D	01/09/06 17:03
GC-SED-03 (0-1.5)	0512110-12	01/09/06 18:43
GC-SED-01 (19-20)	0512110-13	01/09/06 20:21
GC-SED-02 (17.1-18.1)	0512110-14	01/18/06 19:49

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 ICAL41217
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	

MLS 12/28/05

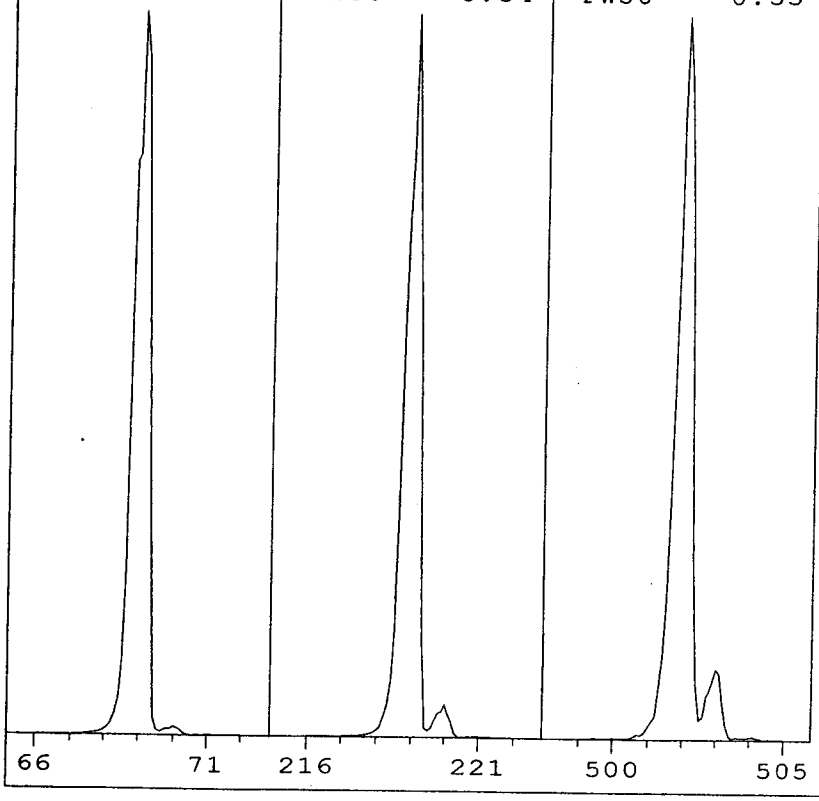
5973

12/17/05.

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

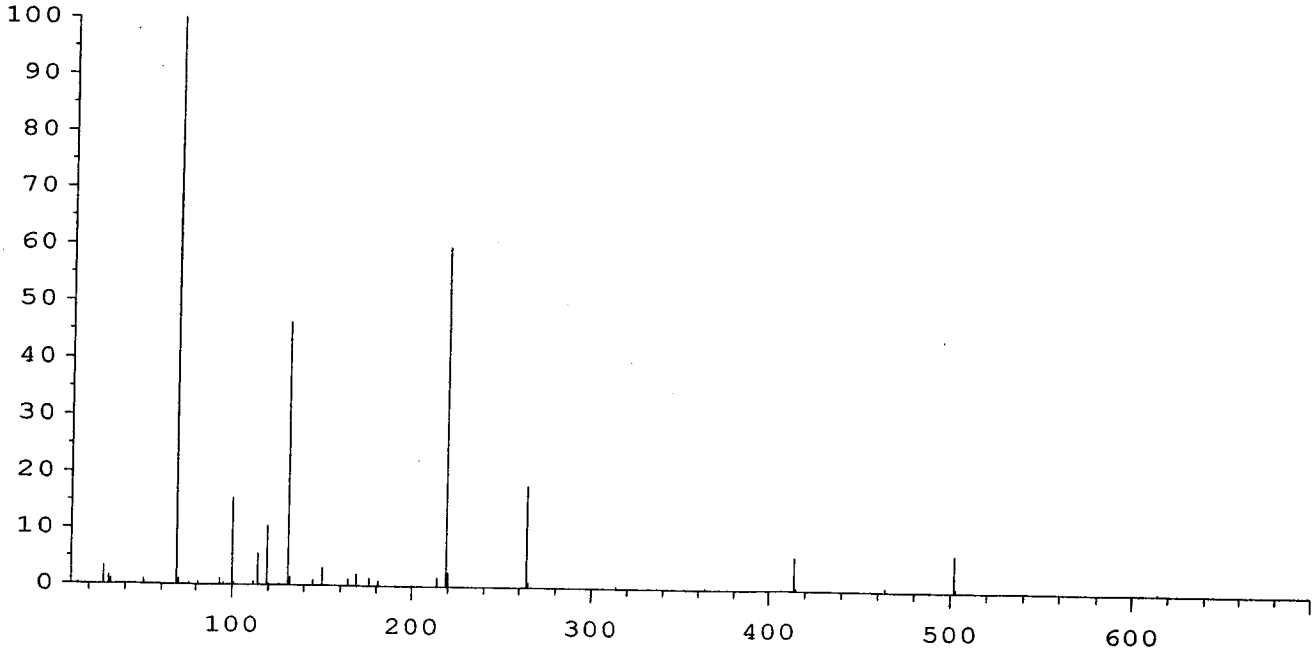
Instrument: PAH-4

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

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

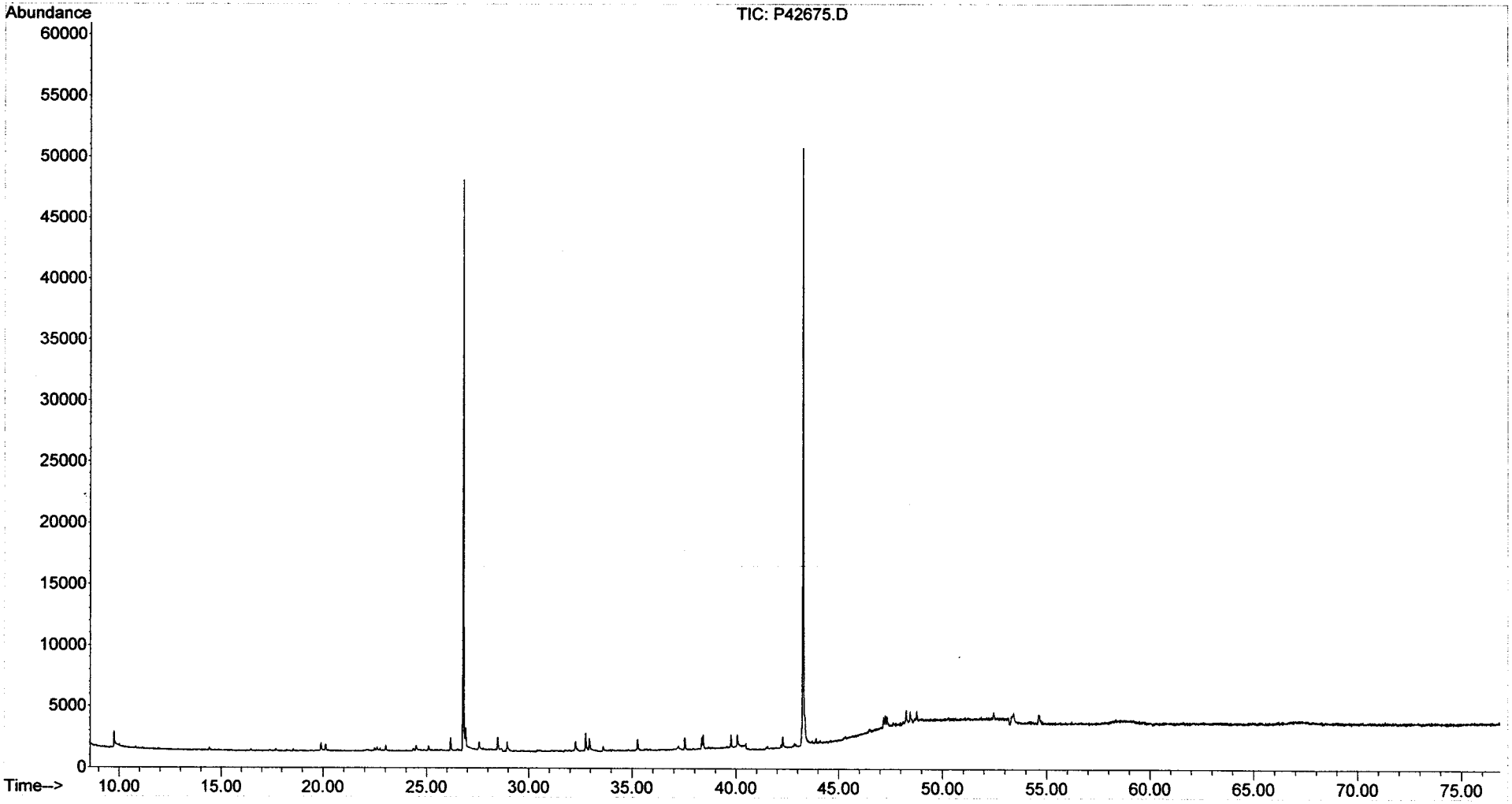
12-2005

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

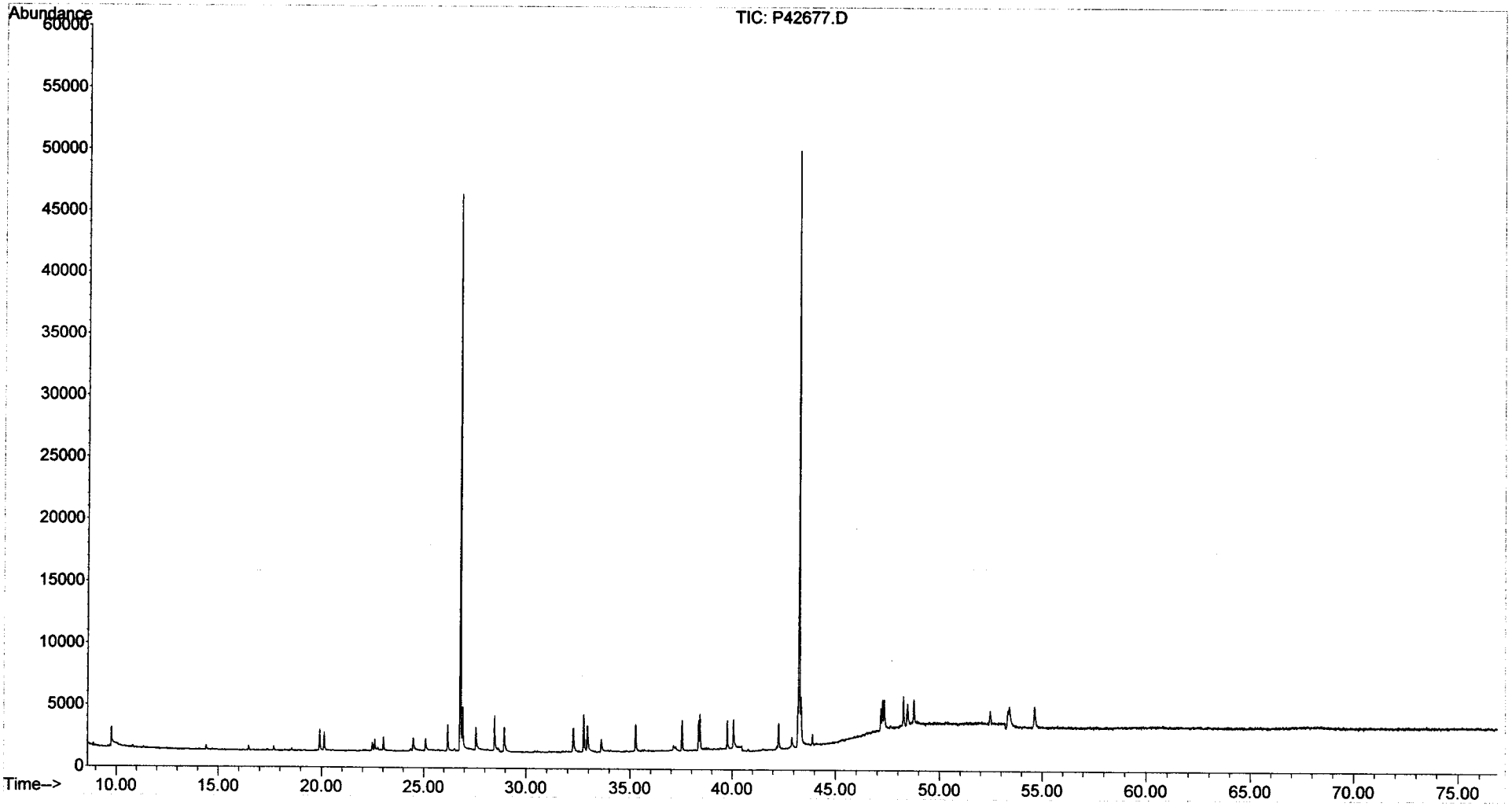
AW 12/2005

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

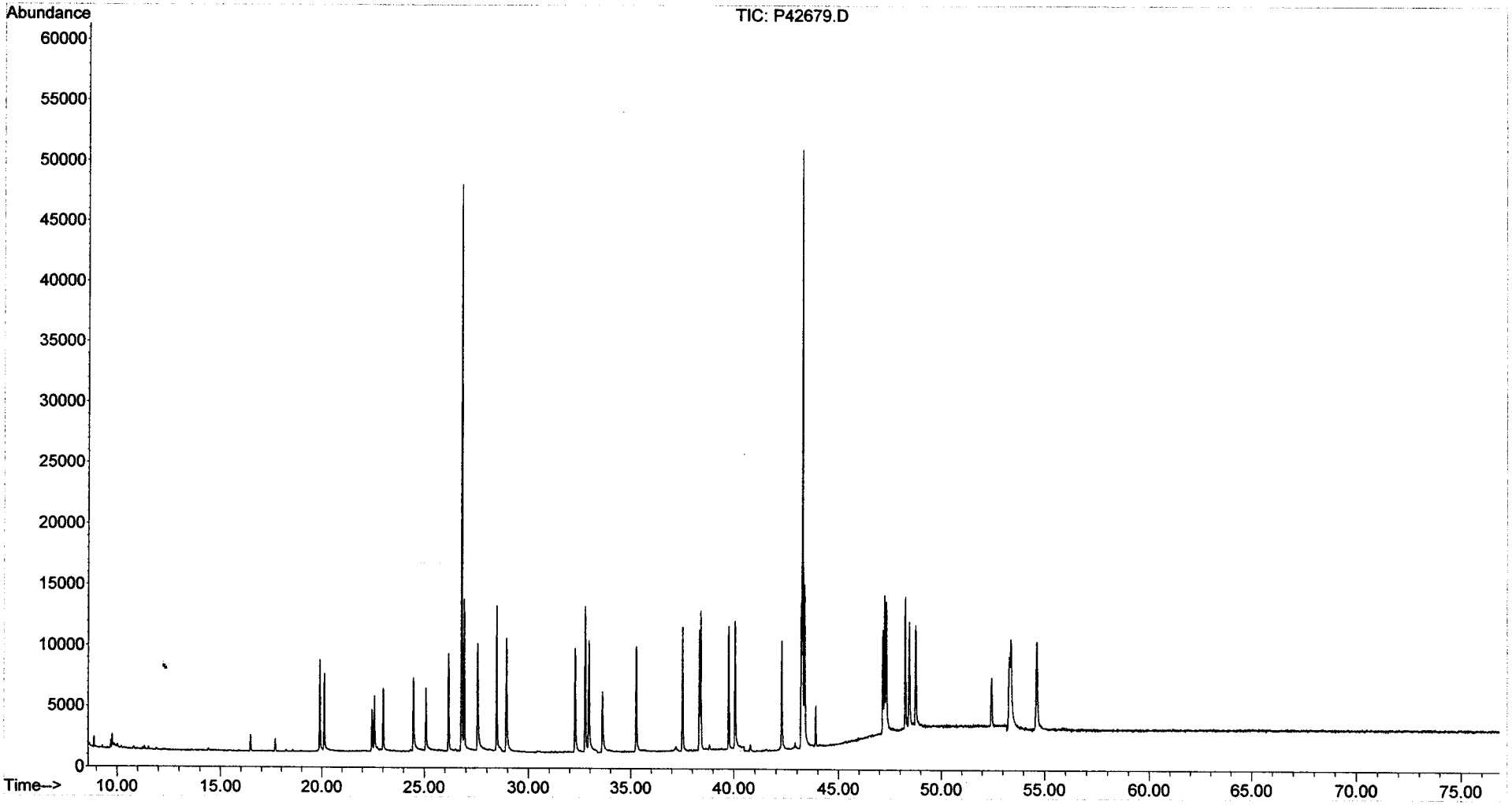
MS 12/20/05

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

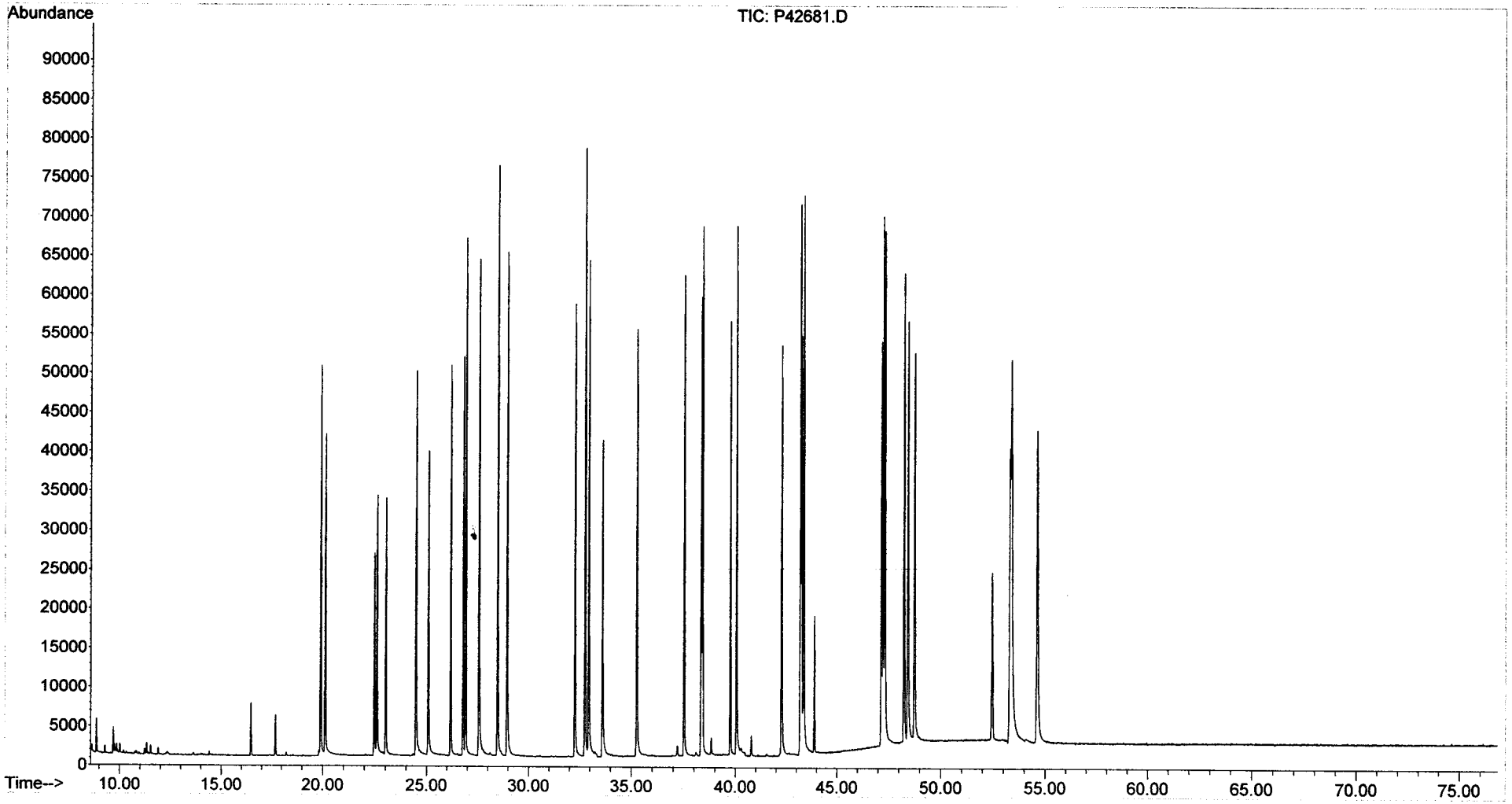
AWS 12/20/05

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

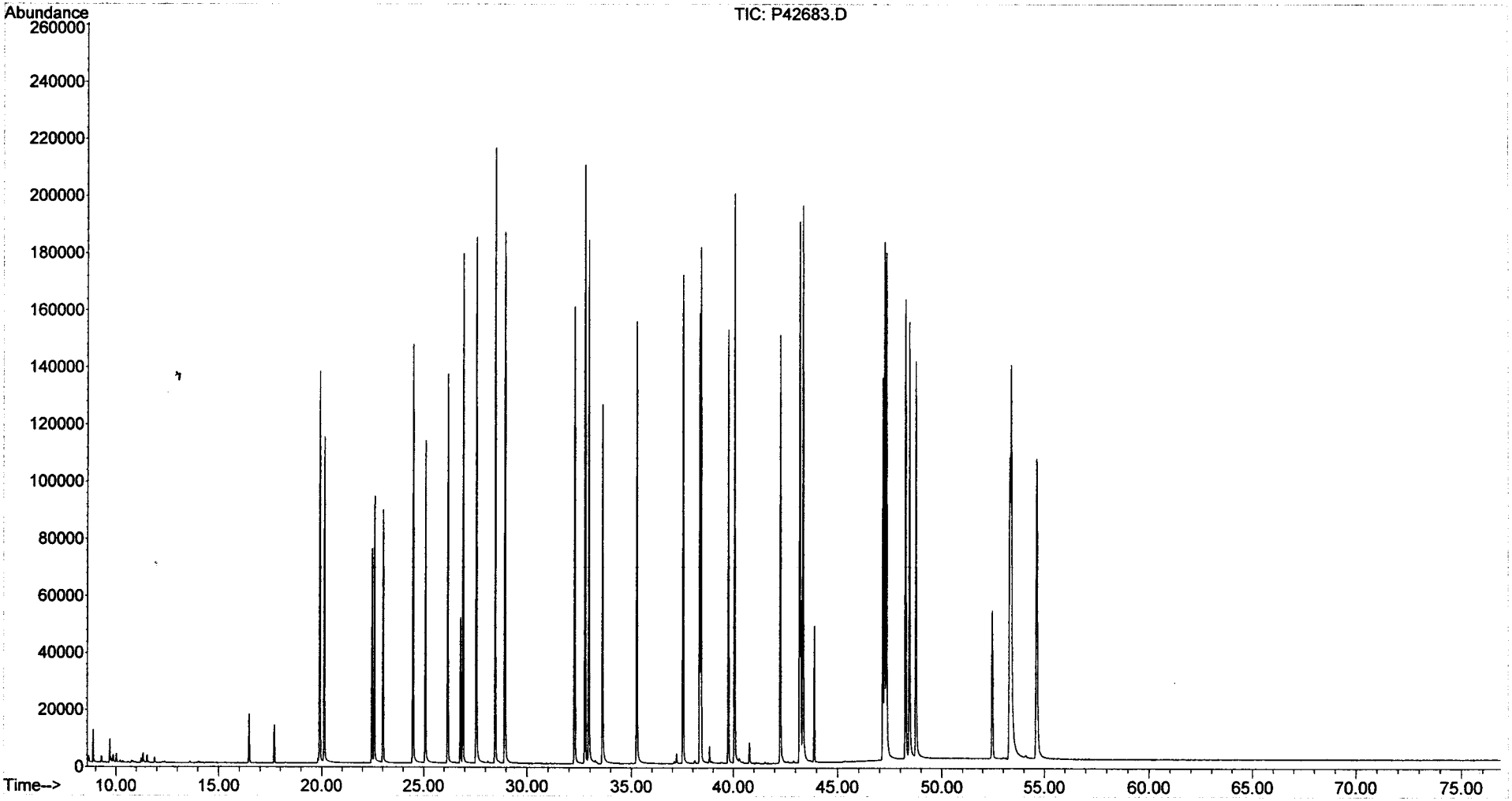
12/2005

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

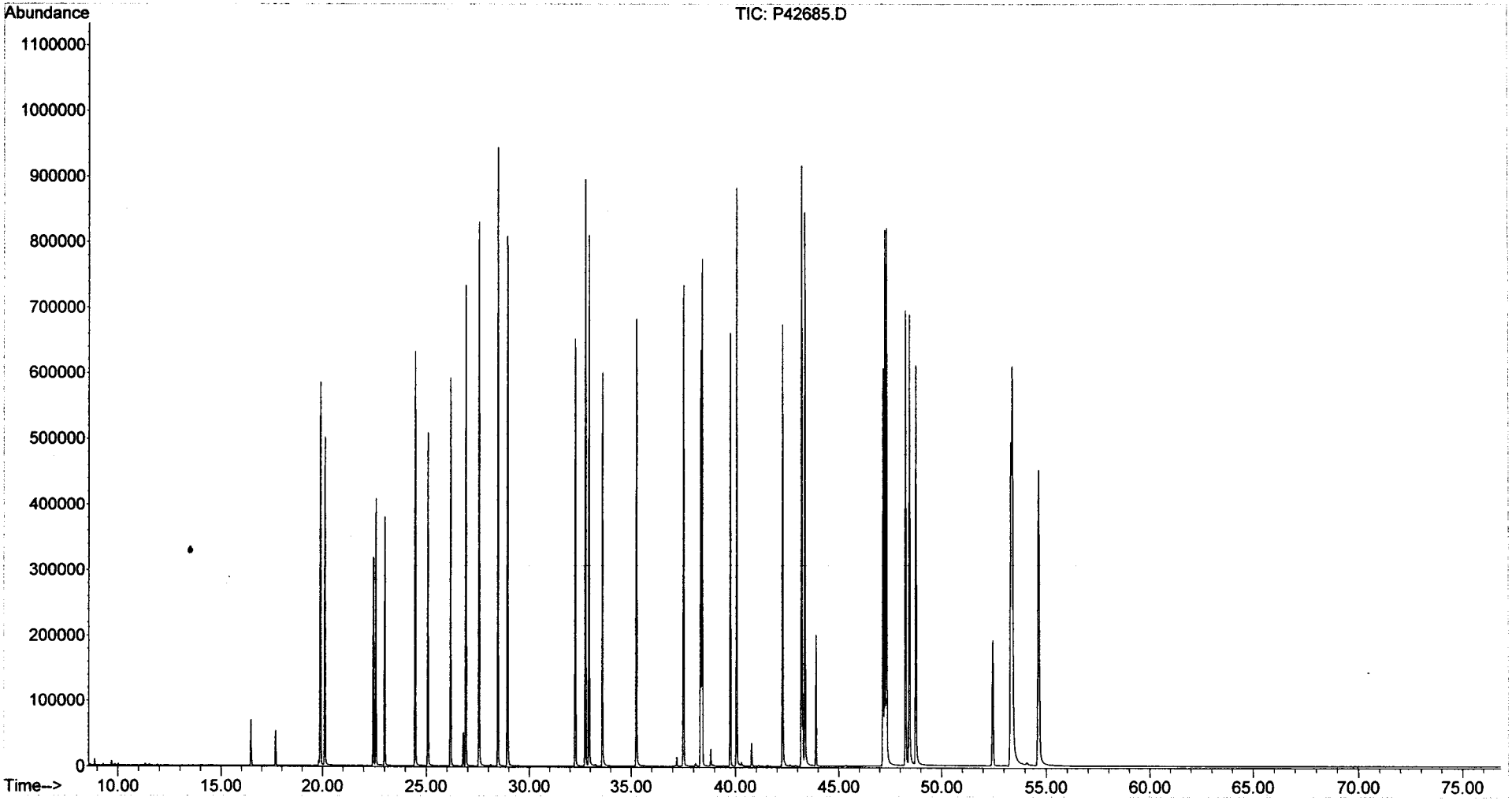
MS 12-2005

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

12/21/05

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

NS 12/2005

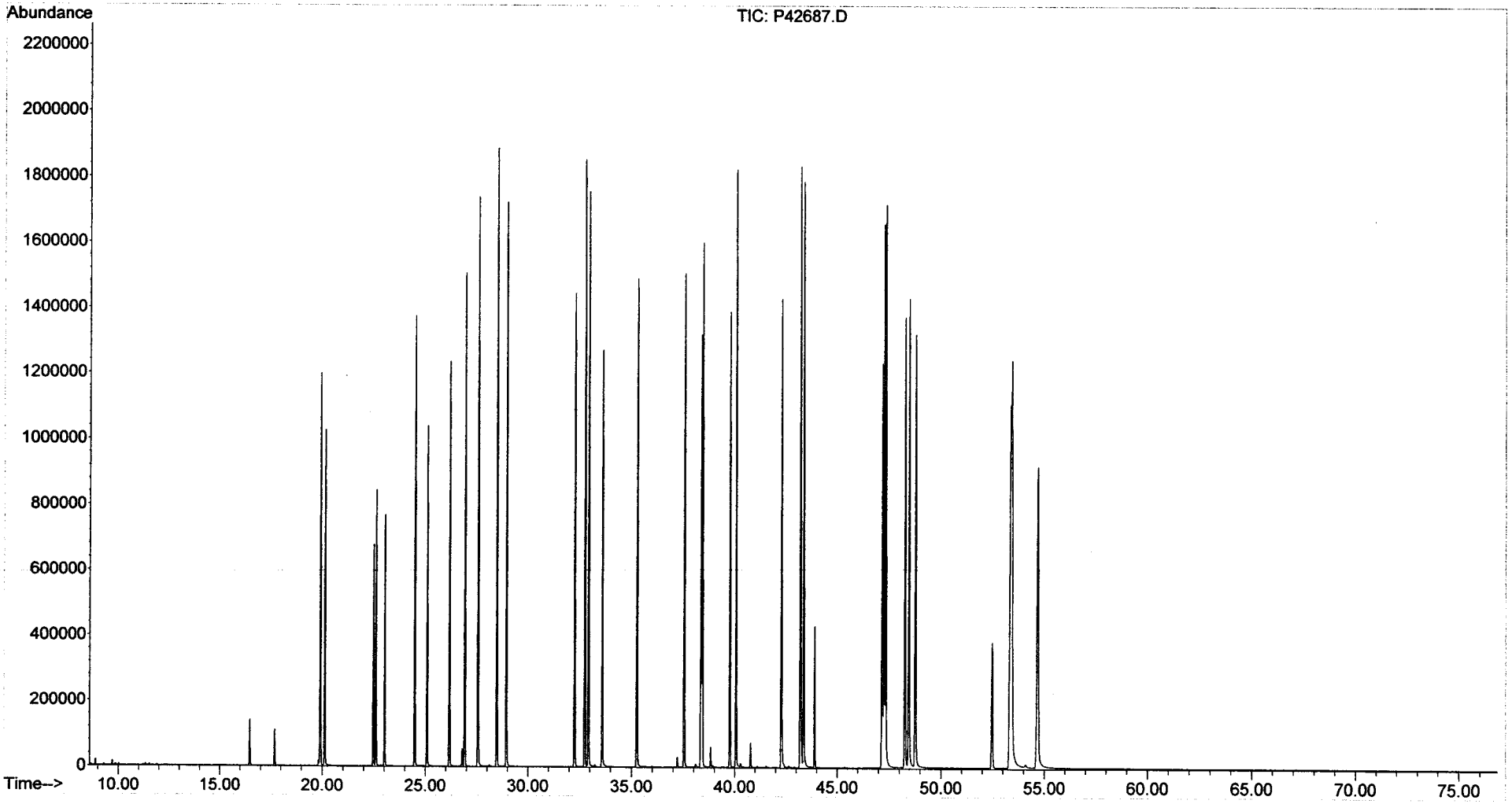
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	26.79	164	58757	500.00 ng/mL	0.00
72) Chrysene-d12	43.26	240	112975	500.00 ng/mL	0.00
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	22.47	152	1341748	12589.83 ng/mL	0.00
Spiked Amount 1000.000 Range 50 - 130 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

CMS 12/2005

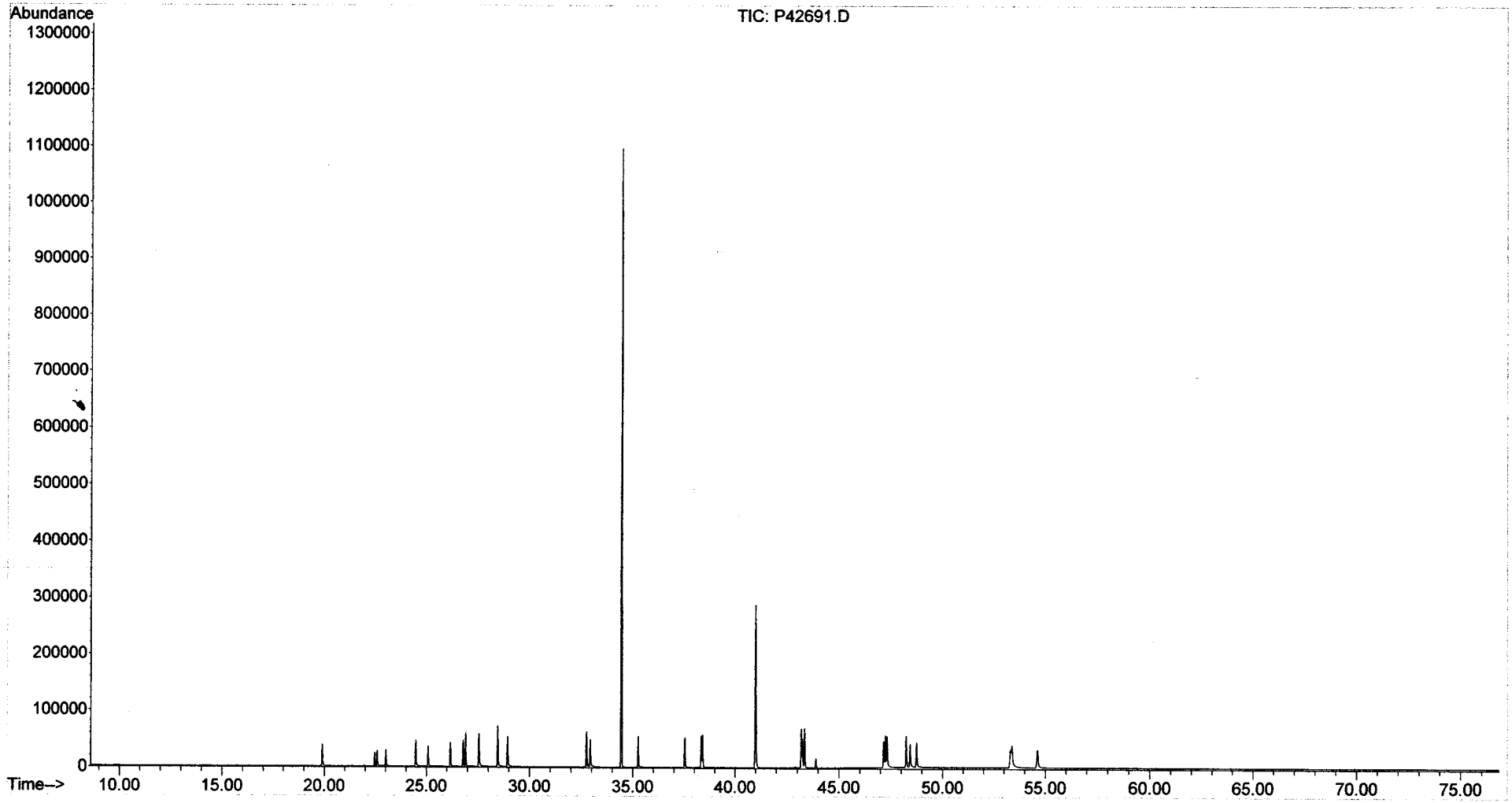
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.80	164	53773	500.00	ng/mL	0.00
72) Chrysene-d12	43.25	240	99269	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.46	152	55440	543.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 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\S3010501.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\JANUARY06\Jan05\

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

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

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

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

1/5/09.

Line			Sample Name/Misc Info		
1)	Sample	1	p34673	FRBIO3A	bio test
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	p34674	FRBIO3A	DCM-AFID
5)	Sample	1	p34675	FRBIO3A	C3010401*
6)	RearSamp	52	p34676	FRBIO3A	DCM-AFID
7)	Sample	2	p34677	FRBIO3A	DCM
8)	RearSamp	53	p34678	FRBIO3A	DCM-AFID
9)	Sample	3	p34679	FRBIO3A	I3010401
10)	RearSamp	54	p34680	FRBIO3A	DCM-AFID
11)	Sample	4	p34681	FRBIO3A	I3010402
12)	RearSamp	55	p34682	FRBIO3A	DCM-AFID
13)	Sample	5	p34683	FRBIO3A	I3010403
14)	RearSamp	56	p34684	FRBIO3A	DCM-AFID
15)	Sample	6	p34685	FRBIO3A	I3010404
16)	RearSamp	57	p34686	FRBIO3A	DCM-AFID
17)	Sample	7	p34687	FRBIO3A	I3010405
18)	RearSamp	58	p34688	FRBIO3A	DCM-AFID
19)	Sample	8	p34689	FRBIO3A	I3010406
20)	RearSamp	59	p34690	FRBIO3A	DCM-AFID
21)	Sample	9	p34691	FRBIO3A	I3010407
22)	RearSamp	60	p34692	FRBIO3A	DCM-AFID
23)	Sample	10	p34693	FRBIO3A	ANS3010401
24)	RearSamp	61	p34694	FRBIO3A	DCM-AFID
25)	Sample	11	p34695	FRBIO3A	DCM
26)	RearSamp	62	p34696	FRBIO3A	C3010601* PASS
27)	Sample	12	p34697	FRBIO3A	DCM
28)	RearSamp	63	p34698	FRBIO3A	ANS3010601
29)	Sample	12	p34699	FRBIO3A	DCM
30)	RearSamp	64	p34700	FRBIO3A	DCM-AFID
31)	Sample	12	p34701	FRBIO3A	DCM
32)	RearSamp	65	p34702	FRBIO3A	SS122105B13-AFID
33)	Sample	62	p34703	FRBIO3A	C3010602
34)	Sample	13	p34704	FRBIO3A	C3010602A PASS.
35)	Sample	14	p34705	FRBIO3A	SS122105B16
36)	Sample	15	p34706	FRBIO3A	0512110-01
37)	Sample	16	p34707	FRBIO3A	0512110-02
38)	Sample	17	p34708	FRBIO3A	0512110-03
39)	Sample	18	p34709	FRBIO3A	0512110-04
40)	Sample	19	p34710	FRBIO3A	0512110-05
41)	Sample	20	p34711	FRBIO3A	0512110-06
42)	Sample	21	p34712	FRBIO3A	0512110-07
43)	Sample	22	p34713	FRBIO3A	0512110-08

Biomarbe Calibration.

B1030105.M
a/12/06

STD – WHAB56*

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): WHAC13 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

Sequence Name: C:\MSDChem\1\sequence\S3010501.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	23	p34714	FRBIO3A	0512110-09
45)	Sample	24	p34715	FRBIO3A	C3010603 PASS
46)	Sample	25	p34716	FRBIO3A	0512110-10
47)	Sample	26	p34717	FRBIO3A	0512110-11
48)	Sample	27	p34718	FRBIO3A	0512110-11D
49)	Sample	28	p34719	FRBIO3A	0512110-12
50)	Sample	29	p34720	FRBIO3A	0512110-13
51)	Sample	30	p34721	FRBIO3A	0512110-14
52)	Sample	31	p34722	FRBIO3A	C3010604 - NOT ACQUIRED.

1/9/06

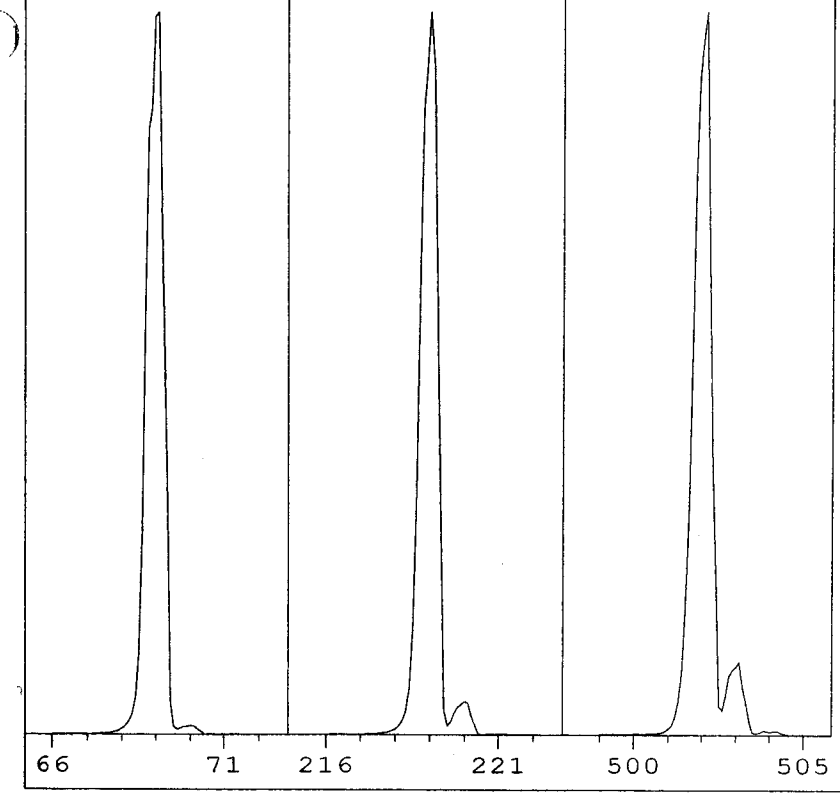
5973

115106

Thu Jan 05 16:07:48 2006
C:\MSDCHEM\1\5973N\PFTBA.U

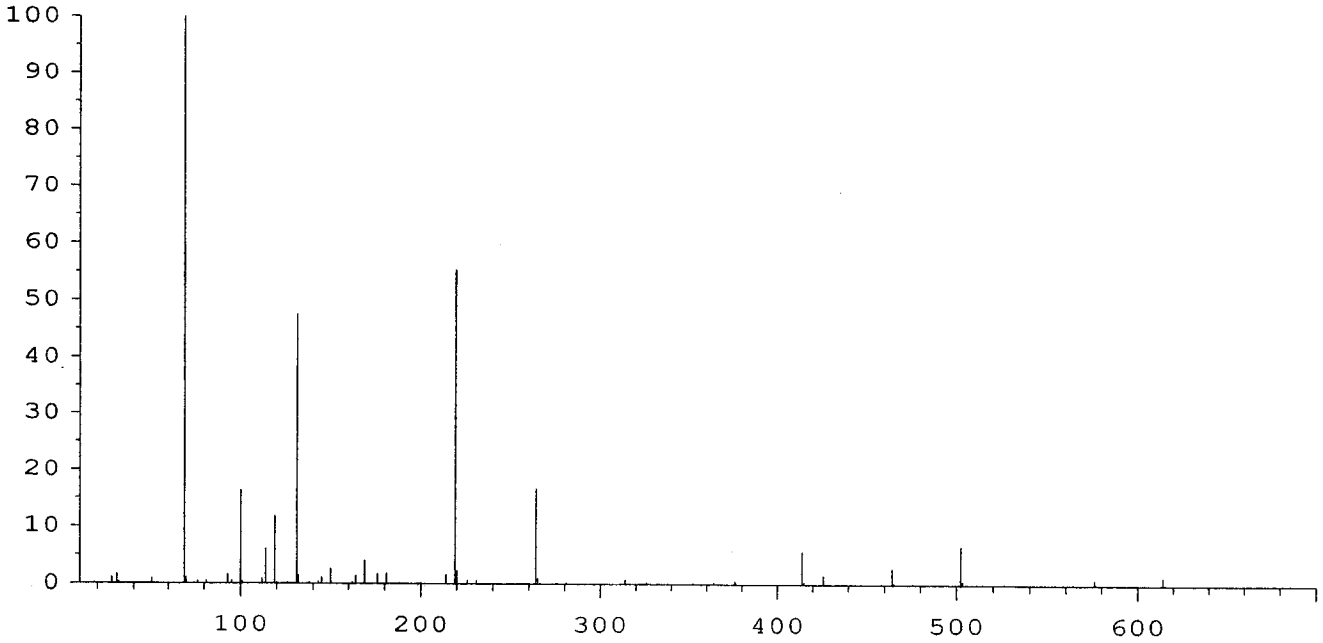
Instrument: PAH-3

Mass	69.10	Mass	219.00	Mass	502.10
Ab	317879	Ab	177535	Ab	21409
Pw50	0.58	Pw50	0.57	Pw50	0.57



Ion Pol	POS	MassGain	63
		MassOffs	-12
Emission	34.6	AmuGain	2443
ElEnrgy	69.9	AmuOffs	127
Filament	1	Wid219	-0.043
		DC Pol	POS
Repeller	34.81		
IonFcus	90.2	HEDEnab	ON
EntLens	0.0	EMVolts	1588
EntOffs	VAR		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	Foreline	49
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
113 peaks Base: 69.00 Abundance: 281088



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	281088	100.00	69.90	3048	1.08
218.90	155520	55.33	220.00	6606	4.25
502.00	18944	6.74	503.00	1817	9.59

TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	15.3	18.1	18.3	19.3	19.1	21.3
TARGET ABUND(%):	1.0	100.0	45.0	55.0	5.0	6.0
ACTUAL TUNE ABUND(%):	0.9	100.0	47.6	55.3	5.7	6.7

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\JAN06\
Method File : BIO30105.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Jan 06 08:31:26 2006
Response Via : Initial Calibration

Calibration Files
10 =p34679.D 25 =p34681.D 100 =p34683.D
500 =p34685.D 1250=p34687.D 5000=p34689.D 10000-P34691

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

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\JAN06\
Method File : BIO30105.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Jan 06 08:31:26 2006
Response Via : Initial Calibration

Calibration Files
10 =p34679.D 25 =p34681.D 100 =p34683.D
500 =p34685.D 1250=p34687.D 5000=p34689.D 10000 - P34691

CV 1/24/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
58)	A2	Naphthobenzothiop							0.000#	-1.00
59)	A2	Naphthobenzothiop							0.000#	-1.00
60)	A2	C1-Naphthobenzoth							0.000#	-1.00
61)	A2	C2-Naphthobenzoth							0.000#	-1.00
62)	A2	C3-Naphthobenzoth							0.000#	-1.00
63)	A2	C4-Naphthobenzoth							0.000#	-1.00
64)	i	Chrysene-d12				ISTD				
65)	t	Benz[a]anthracene							0.000#	-1.00
66)	t	Chrysene							0.000#	-1.00
67)	A1	Chrysene/Tripheny							0.000#	-1.00
68)	A2	C1-Chrysenes							0.000#	-1.00
69)	A2	C2-Chrysenes							0.000#	-1.00
70)	A2	BBF-d12 Surr BKGD							0.000#	-1.00
71)	A2	C3-Chrysenes							0.000#	-1.00
72)	A2	C4-Chrysenes							0.000#	-1.00
73)	s	Benzo[b]fluoranth							0.000#	-1.00
74)	t	Benzo[b]fluoranth							0.000#	-1.00
75)	A1	Benzo[k]fluoranth							0.000#	-1.00
76)	A2	Benzo[a]fluoranth							0.000#	-1.00
77)	t	Benzo[e]pyrene							0.000#	-1.00
78)	t	Benzo[a]pyrene							0.000#	-1.00
79)	t	Perylene							0.000#	-1.00
80)	t	Indeno[1,2,3-cd]p							0.000#	-1.00
81)	t	Dibenz[a,h]anthra							0.000#	-1.00
82)	t	Benzo[g,h,i]peryl							0.000#	-1.00
83)	A1	17a(H),21B(H)-hop	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
84)	A2	Hopane (T19)	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
85)	A2	C23 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
86)	A2	C24 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
87)	A2	C25 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
88)	A2	C24 Tetracyclic T	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
89)	A2	C26 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
90)	A2	C26 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
91)	A2	C28 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
92)	A2	C28 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
93)	A2	C29 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
94)	A2	C29 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
95)	A2	18a-22,29,30-Tris	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
96)	A2	C30 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
97)	A2	C30 Tricyclic Ter	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
98)	A2	17a(H)-22,29,30-T	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
99)	A2	17a/b,21b/a 28,30	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
100)	A2	17a(H),21b(H)-25-	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
101)	A2	30-Norhopane (T15	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
102)	A2	18a(H)-30-Norneoh	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
103)	A2	17a(H)-Diahopane	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
104)	A2	30-Normoretane (T	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
105)	A2	18a(H)&18b(H)-Ole	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
106)	A2	Moretane (T20)	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
107)	A2	30-Homohopane-22S	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
108)	A2	30-Homohopane-22R	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
109)	A2	30,31-Bishomohopa	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
110)	A2	30,31-Bishomohopa	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
111)	A2	30,31-Trishomohop	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
112)	A2	30,31-Trishomohop	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
113)	A2	Tetrakishomohopan	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
114)	A2	Tetrakishomohopan	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\JAN06\
Method File : BIO30105.M
Title : Decalins & Alkylated PAH's
Last Update : Fri Jan 06 08:31:26 2006
Response Via : Initial Calibration

Calibration Files
10 =p34679.D 25 =p34681.D 100 =p34683.D
500 =p34685.D 1250=p34687.D 5000=p34689.D 10000-P34691 11/24/06

		Compound	10	25	100	500	1250	5000	Avg	%RSD
115)	A2	Pentakishomohopan	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
116)	A2	Pentakishomohopan	0.521	0.542	0.558	0.545	0.508	0.447	0.506	10.38
117)	SA1	5B(H)Cholane - Su	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
118)	A2	13b(H),17a(H)-20S	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
119)	A2	13b(H),17a(H)-20R	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
120)	A2	13b,17a-20S-Methy	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
121)	A2	14a(H),17a(H)-20S	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
122)	A2	14a(H),17a(H)-20R	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
123)	A2	13b,17a-20R-Ethyl	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
124)	A2	13a,17b-20S-Ethyl	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
125)	A2	14a,17a-20S-Methy	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
126)	A2	14a,17a-20R-Methy	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
127)	A2	14a(H),17a(H)-20S	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
128)	A2	14a(H),17a(H)-20R	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
129)	A2	14b(H),17b(H)-20R	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
130)	A2	14b(H),17b(H)-20S	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
131)	A2	14b,17b-20R-Methy	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
132)	A2	14b,17b-20S-Methy	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
133)	A2	14b(H),17b(H)-20R	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33
134)	A2	14b(H),17b(H)-20S	0.226	0.237	0.238	0.226	0.230	0.237	0.232	2.33

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

RESPONSE FACTOR REPORT PAH3

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

INITIAL CALIBRATION

MS 1-6-06

CALIBRATION FILES	p34679.D	p34681.D	p34683.D	p34685.D	p34687.D	p34689.D	p34691.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
Chrysene-d12	ISTD								
17a(H),21B(H)-hopane - C30H52	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
Hopane (T19)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C23 Tricyclic Terpane (T4)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C24 Tricyclic Terpane (T5)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C25 Tricyclic Terpane (T6)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C24 Tetracyclic Terpane (T6a)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C26 Tricyclic Terpane-22S (T6b)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C26 Tricyclic Terpane-22R (T6c)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C28 Tricyclic Terpane-22S (T7)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C28 Tricyclic Terpane-22R (T8)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C29 Tricyclic Terpane-22S (T9)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C29 Tricyclic Terpane-22R (T10)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
18a-22,29,30-Trisnorneohopane-TS (T11)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C30 Tricyclic Terpane-22S	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
C30 Tricyclic Terpane-22R	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
17a(H)-22,29,30-Trisnorhopane-TM (T12)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
17a/b,21b/a 28,30-Bisnorhopane (T14a)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
17a(H),21b(H)-25-Norhopane (T14b)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30-Norhopane (T15)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
18a(H)-30-Norneohopane-C29Ts (T16)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
17a(H)-Diahopane (X)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30-Normoretane (T17)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
18a(H)&18b(H)-Oleananes (T18)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
Moretane (T20)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30-Homohopane-22S (T21)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30-Homohopane-22R (T22)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30,31-Bishomohopane-22S (T26)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30,31-Bishomohopane-22R (T27)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30,31-Trishomohopane-22S (T30)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
30,31-Trishomohopane-22R (T31)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
Tetrakishomohopane-22S (T32)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
Tetrakishomohopane-22R (T33)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
Pentakishomohopane-22S (T34)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
Pentakishomohopane-22R (T35)	0.521	0.542	0.558	0.545	0.508	0.447	0.420	0.506	10.38
5B(H)Cholane - Surr	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
13b(H),17a(H)-20S-Diacholestane (S4)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
13b(H),17a(H)-20R-Diacholestane (S5)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
13b,17a-20S-Methyldiacholestane (S8)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14a(H),17a(H)-20S-Cholestane (S12)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14a(H),17a(H)-20R-Cholestane (S17)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
13b,17a-20R-Ethyldiacholestane (S18)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
13a,17b-20S-Ethyldiacholestane (S19)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14a,17a-20S-Methylcholestane (S20)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14a,17a-20R-Methylcholestane (S24)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14a(H),17a(H)-20S-Ethylcholestane (S25)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14a(H),17a(H)-20R-Ethylcholestane (S28)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14b(H),17b(H)-20R-Cholestane (S14)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14b(H),17b(H)-20S-Cholestane (S15)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33

RESPONSE FACTOR REPORT PAH3									
METHOD: O: FORENSICS\METHODS\PAH3\JAN06\BIO30105.M									
INITIAL CALIBRATION									
CALIBRATION FILES	p34679.D	p34681.D	p34683.D	p34685.D	p34687.D	p34689.D	p34691.D		
LEVEL	10	25	100	500	1250	5000	10000	AVERAG	%RSD
COMPOUND									
14b,17b-20R-Methylcholestane (S22)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14b,17b-20S-Methylcholestane (S23)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14b(H),17b(H)-20R-Ethylcholestane (S26)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33
14b(H),17b(H)-20S-Ethylcholestane (S27)	0.226	0.237	0.238	0.226	0.230	0.237	0.228	0.232	2.33

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34679.D
Acq On : 5 Jan 2006 6:08 pm
Operator : AC
Sample : I3010401
Misc : L1 BIO
ALS Vial : 3 Sample Multiplier: 1

1-9-06

Quant Time: Jan 06 08:23:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

MS 1/6/06

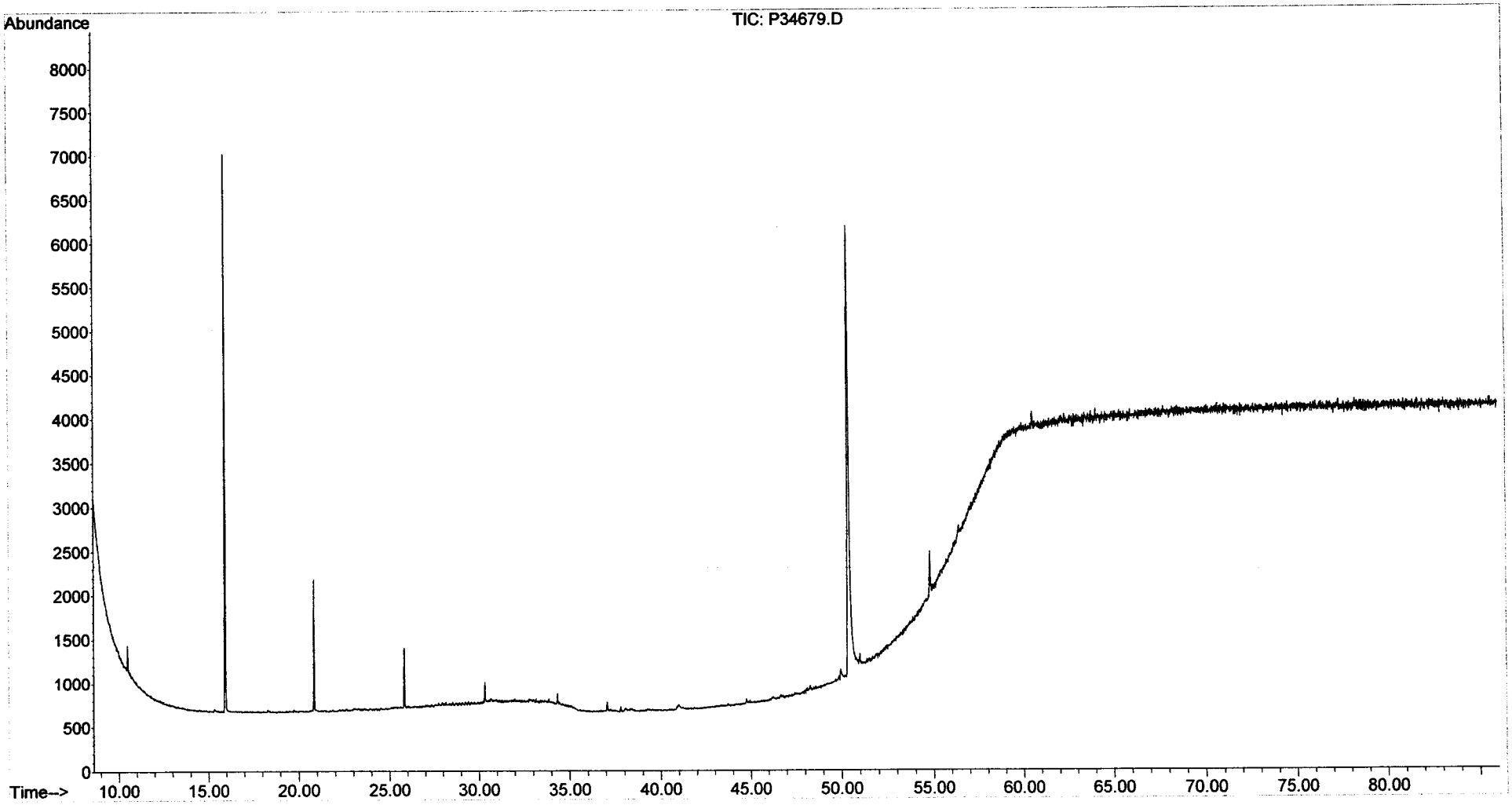
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.36	240	36470	500.00	ng/mL	0.11
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	50.99	217	165	11.76	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1.18%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	380m	12.12	ng/mL	
84) Hopane (T19)	60.53	191	374m	11.93	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34679.D
Acq On : 5 Jan 2006 6:08 pm
Operator : AC
Sample : I3010401
Misc : L1 BIO
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 06 08:23:29 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34681.D
Acq On : 5 Jan 2006 7:49 pm
Operator : AC
Sample : I3010402
Misc : L2 BIO
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 06 08:31:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

1-6-06 1-9-06

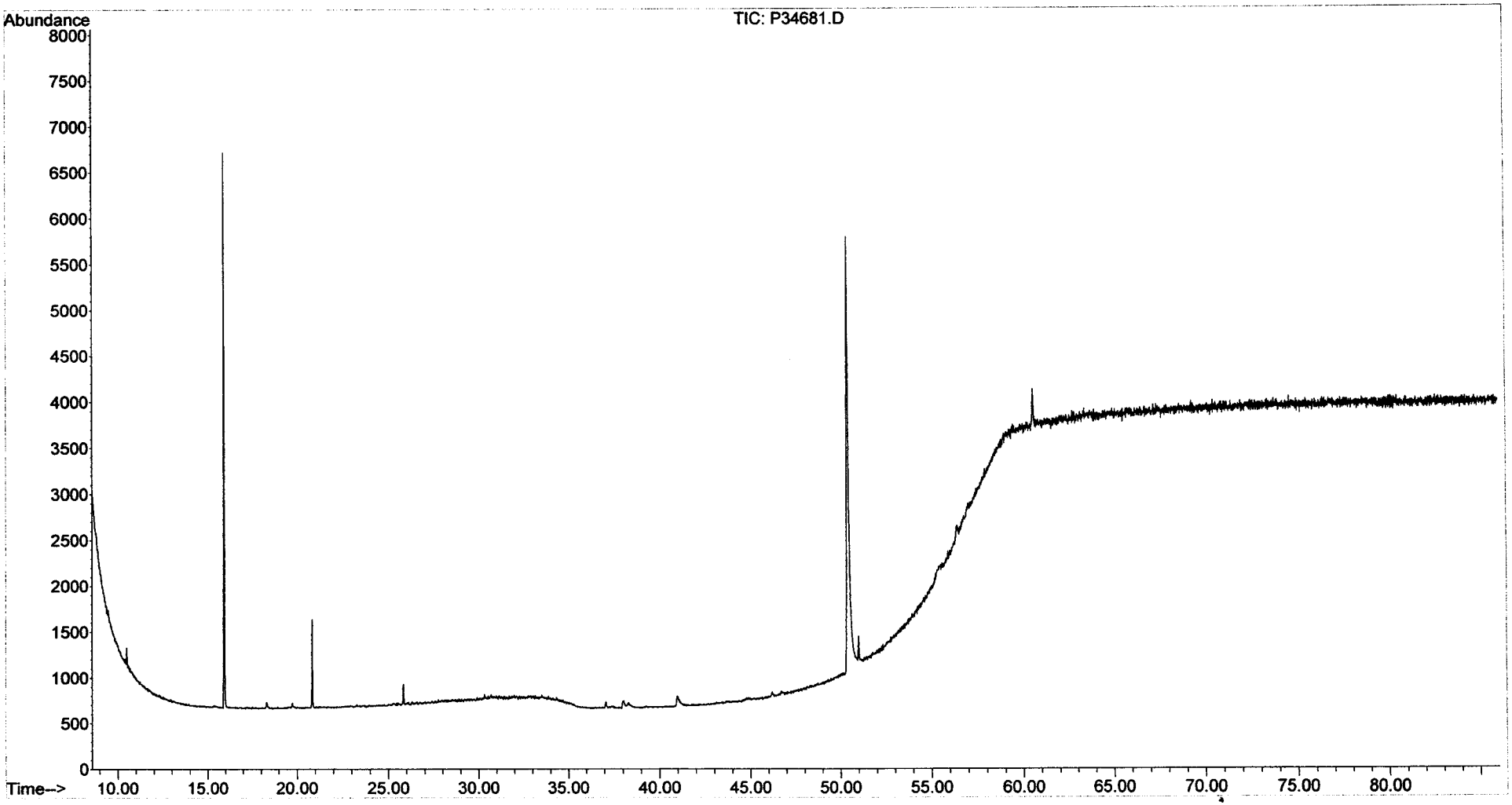
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.37	240	35430	500.00	ng/mL	0.12
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) 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	50.99	217	420	30.82	ng/ml	0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	3.08%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	960m	31.53	ng/mL	
84) Hopane (T19)	60.53	191	937m	30.77	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34681.D
Acq On : 5 Jan 2006 7:49 pm
Operator : AC
Sample : I3010402
Misc : L2 BIO
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 06 08:31:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34683.D
Acq On : 5 Jan 2006 9:29 pm
Operator : AC
Sample : I3010403
Misc : L3 BIO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 06 08:25:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

1-6-06.

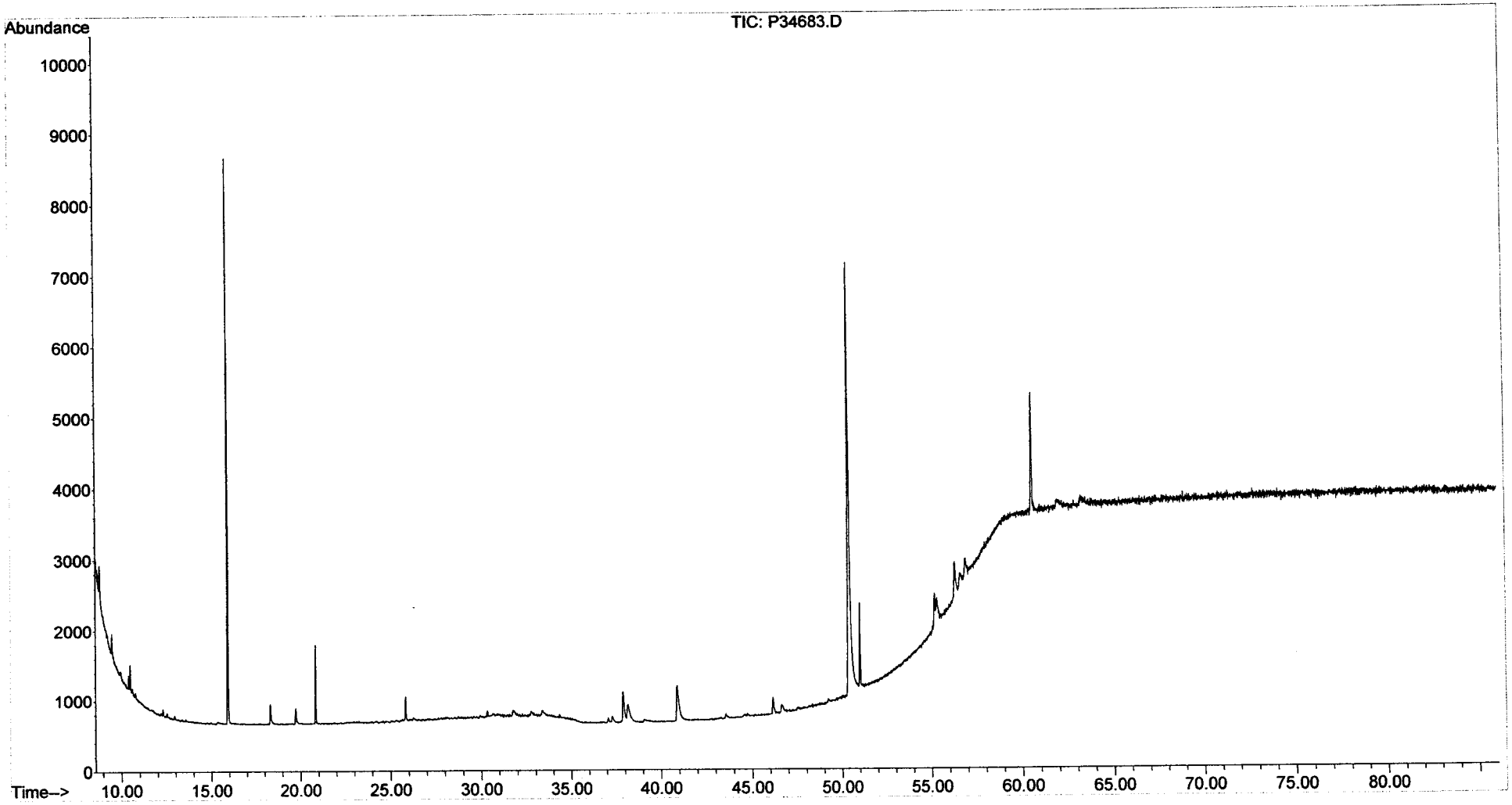
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.36	240	37885	500.00	ng/mL	0.11
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) 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	50.99	217	1800	123.52	ng/ml	0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	12.35%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.52	191	4231m	129.95	ng/mL	
84) Hopane (T19)	60.52	191	4202m	129.06	ng/mL	

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34683.D
Acq On : 5 Jan 2006 9:29 pm
Operator : AC
Sample : I3010403
Misc : L3 BIO
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 06 08:25:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34685.D
Acq On : 5 Jan 2006 11:09 pm
Operator : AC
Sample : I3010404
Misc : L4 BIO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 06 08:25:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

MS 1/6/06

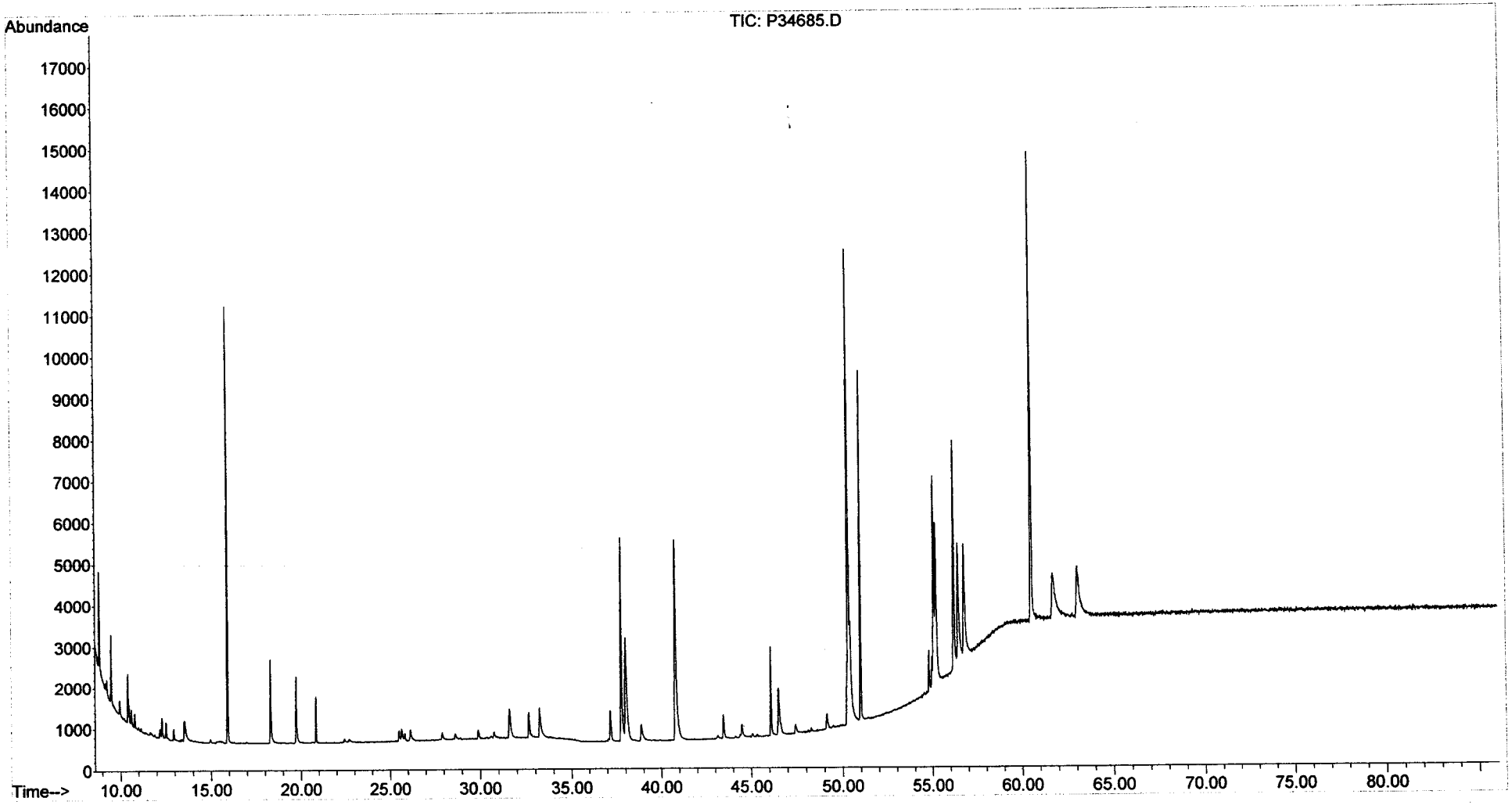
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.30	240	54113	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	50.98	217	12212	586.70	ng/ml	0.00
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	58.67%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.51	191	29514	634.63	ng/mL	98
84) Hopane (T19)	60.51	191	29514	634.63	ng/mL	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34685.D
Acq On : 5 Jan 2006 11:09 pm
Operator : AC
Sample : I3010404
Misc : L4 BIO
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 06 08:25:42 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34687.D
Acq On : 6 Jan 2006 12:49 am
Operator : AC
Sample : I3010405
Misc : L5 BIO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 06 08:26:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

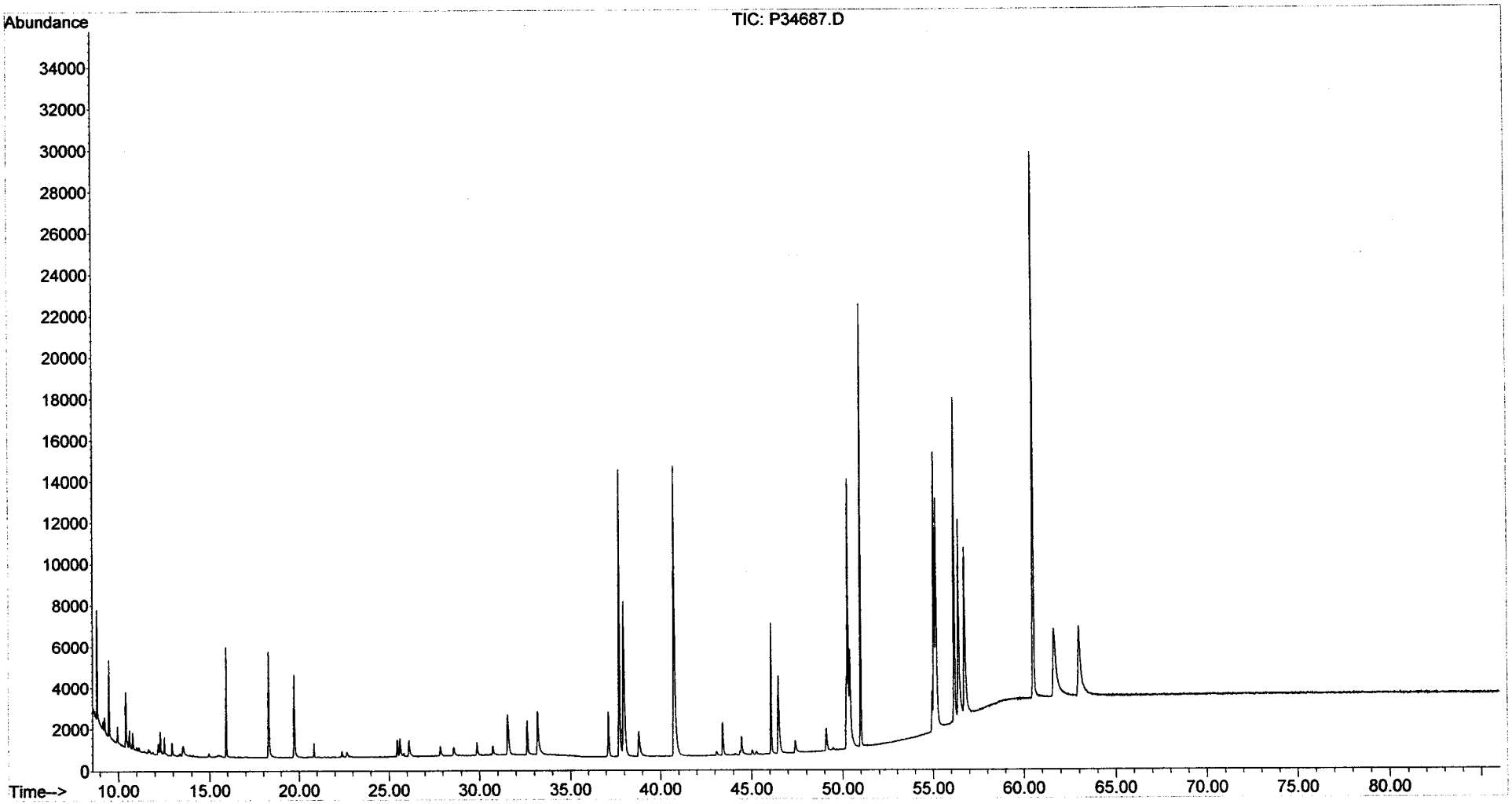
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00 ng/mL	-30.25
64) Chrysene-d12	50.27	240	52830	500.00 ng/mL	0.03
System Monitoring Compounds					
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00 ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 0.00%#	
50) 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	50.98	217	30341	1493.08 ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery	= 149.31%#	
Target Compounds					Qvalue
83) 17a(H),21B(H)-hopane - C30	60.51	191	67148	1478.92 ng/mL	100
84) Hopane (T19)	60.51	191	67148	1478.92 ng/mL	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34687.D
Acq On : 6 Jan 2006 12:49 am
Operator : AC
Sample : I3010405
Misc : L5 BIO
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 06 08:26:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34689.D
Acq On : 6 Jan 2006 2:28 am
Operator : AC
Sample : I3010406
Misc : L6 BIO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 06 08:27:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

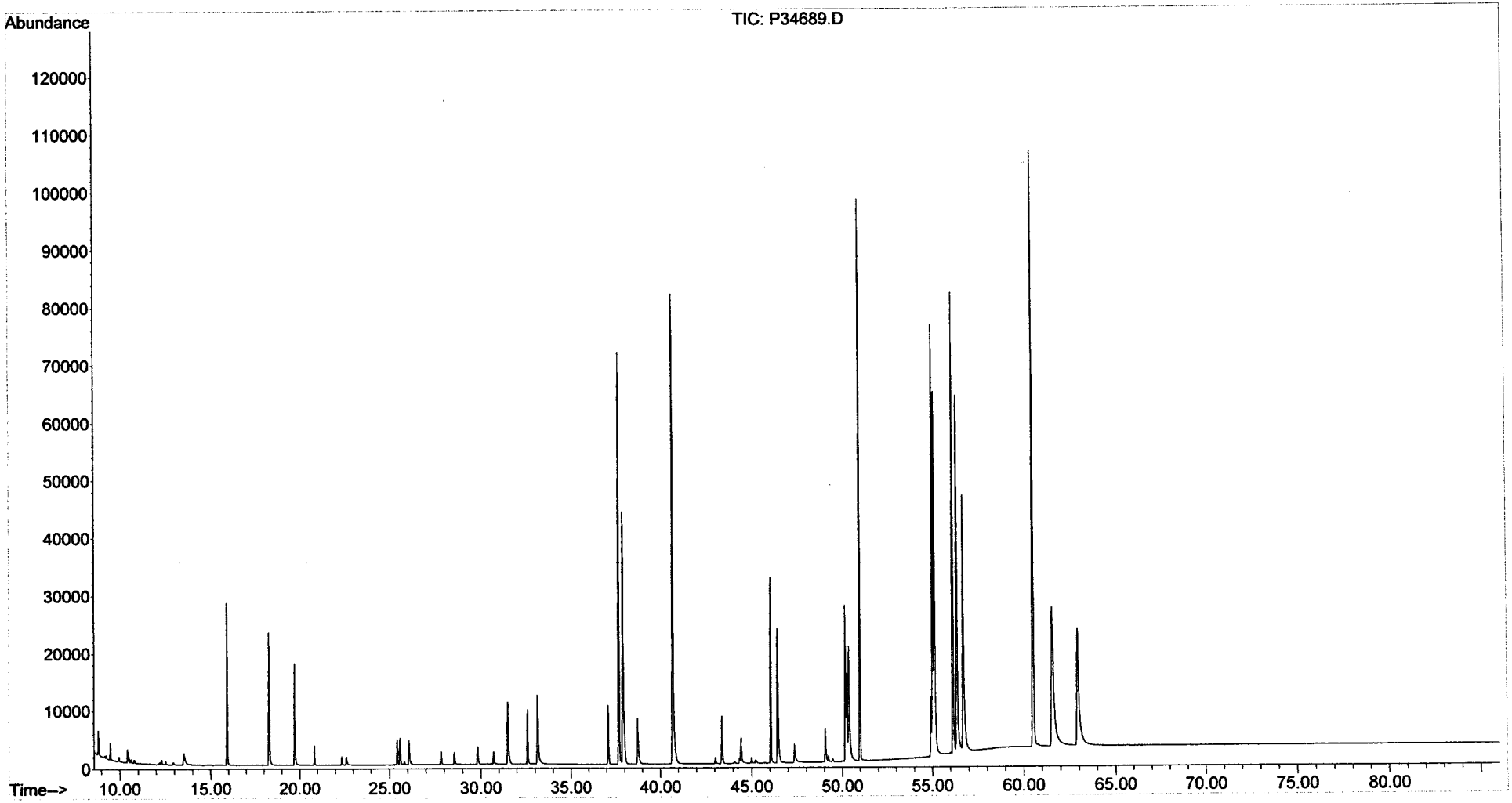
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.24	240	57359	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	50.98	217	136089	6168.16	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 616.82%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.51	191	256681	5206.97	ng/mL	99
84) Hopane (T19)	60.51	191	256681	5206.97	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34689.D
Acq On : 6 Jan 2006 2:28 am
Operator : AC
Sample : I3010406
Misc : L6 BIO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 06 08:27:10 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34691.D
Acq On : 6 Jan 2006 4:08 am
Operator : AC
Sample : I3010407
Misc : L7 BIO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 06 08:27:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration

CMS 1-6-06 1-9-06

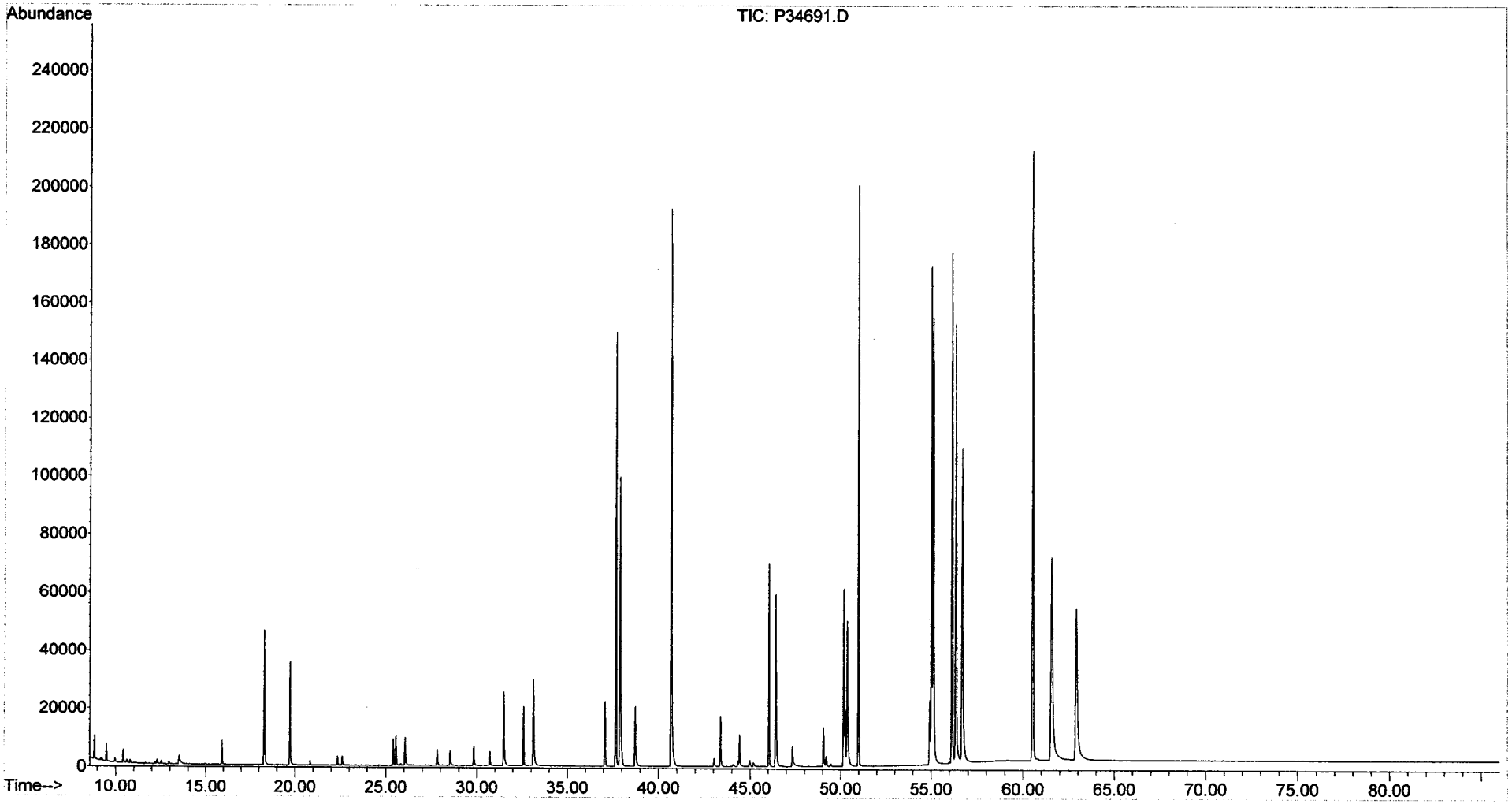
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.24	240	60561	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	50.98	217	276711	11878.66	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1187.87%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.52	191	509316	9785.59	ng/mL	99
84) Hopane (T19)	60.52	191	509316	9785.59	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34691.D
Acq On : 6 Jan 2006 4:08 am
Operator : AC
Sample : I3010407
Misc : L7 BIO
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 06 08:27:44 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 08:12:28 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN03\
Data File : P42818.D
Acq On : 3 Jan 2006 4:01 pm
Operator : AC
Sample : C4010302
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 04 06:42:39 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 1.4.06

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	109	-0.07
2	t	Decalin	0.446	0.389	12.8	103	-0.07
3	A1	trans-Decalin	0.494	0.446	9.7	106	-0.07
4	t	cis-Decalin	0.382	0.339	11.3	104	-0.07
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	2.082	-7.2	114	-0.07
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	1.050	-10.6	112	-0.07
15	t	2-Methylnaphthalene	1.237	1.374	-11.1	114	-0.07
16	t	1-Methylnaphthalene	1.246	1.294	-3.9	111	-0.07
17	A1	Benzothiophene	1.653	1.703	-3.0	111	-0.07
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	1.680	-13.4	114	-0.07
23	t	2,6-Dimethylnaphthalene	1.073	1.177	-9.7	115	-0.07
24	t	Dibenzofuran	1.734	1.841	-6.2	109	-0.07
25	t	Acenaphthylene	2.173	2.057	5.3	111	-0.07
26	t	Acenaphthene	1.331	1.269	4.7	107	-0.07
27	t	2,3,5-Trimethylnaphthalene	1.098	1.092	0.5	110	-0.07
28	A1	Fluorene	1.426	1.465	-2.7	111	-0.07
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	2.038	3.6	106	-0.07
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	2.194	7.7	109	-0.06
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\JANUARY\JAN03\
Data File : P42818.D
Acq On : 3 Jan 2006 4:01 pm
Operator : AC
Sample : C4010302
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 04 06:42:39 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	0.601	1.5	114	-0.06
53	t	Anthracene	2.172	2.075	4.5	109	-0.06
54	t	Carbazole	1.721	1.877	-9.1	117	-0.06
55	t	1-Methylphenanthrene	1.570	1.575	-0.3	114	-0.06
56	A1	Fluoranthene	2.452	2.346	4.3	109	-0.06
57	t	Benzo(b)fluorene	1.436	1.498	-4.3	117	-0.06
58	s	Pyrene-d10	2.358	2.297	2.6	108	-0.06
59	A1	Pyrene	2.543	2.365	7.0	104	-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	2.239	3.2	110	-0.06
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.239	3.2	110	-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	106	-0.06
73	t	Benz[a]anthracene	1.189	1.240	-4.3	114	-0.05
74	A1	Chrysene	1.207	1.203	0.3	105	-0.06
75	A2	Chrysene/Triphenylene	1.207	1.203	0.3	105	-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	0.991	5.3	100	-0.06
82	t	Benzo[b]fluoranthene	1.236	1.231	0.4	103	-0.06
83	A1	Benzo[k]fluoranthene	1.394	1.273	8.7	98	-0.06
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.66#
85	t	Benzo[e]pyrene	1.246	1.148	7.9	100	-0.06
86	t	Benzo[a]pyrene	1.201	1.158	3.6	100	-0.07
87	t	Perylene	1.189	1.116	6.1	100	-0.06
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.045	6.3	105	-0.09
89	t	Dibenz[a,h]anthracene	1.152	1.136	1.4	102	-0.09
90	t	Benzo[g,h,i]perylene	1.271	1.138	10.5	97	-0.09
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.435	9.6	93	-0.09
92	A2	Hopane (T19)	0.481	0.435	9.6	93	-0.09
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\JANUARY\JAN03\
Data File : P42818.D
Acq On : 3 Jan 2006 4:01 pm
Operator : AC
Sample : C4010302
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 04 06:42:39 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	0.224	0.9	109	-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\JANUARY\JAN03\
Data File : P42818.D
Acq On : 3 Jan 2006 4:01 pm
Operator : AC
Sample : C4010302
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 04 06:42:39 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 1-4-06

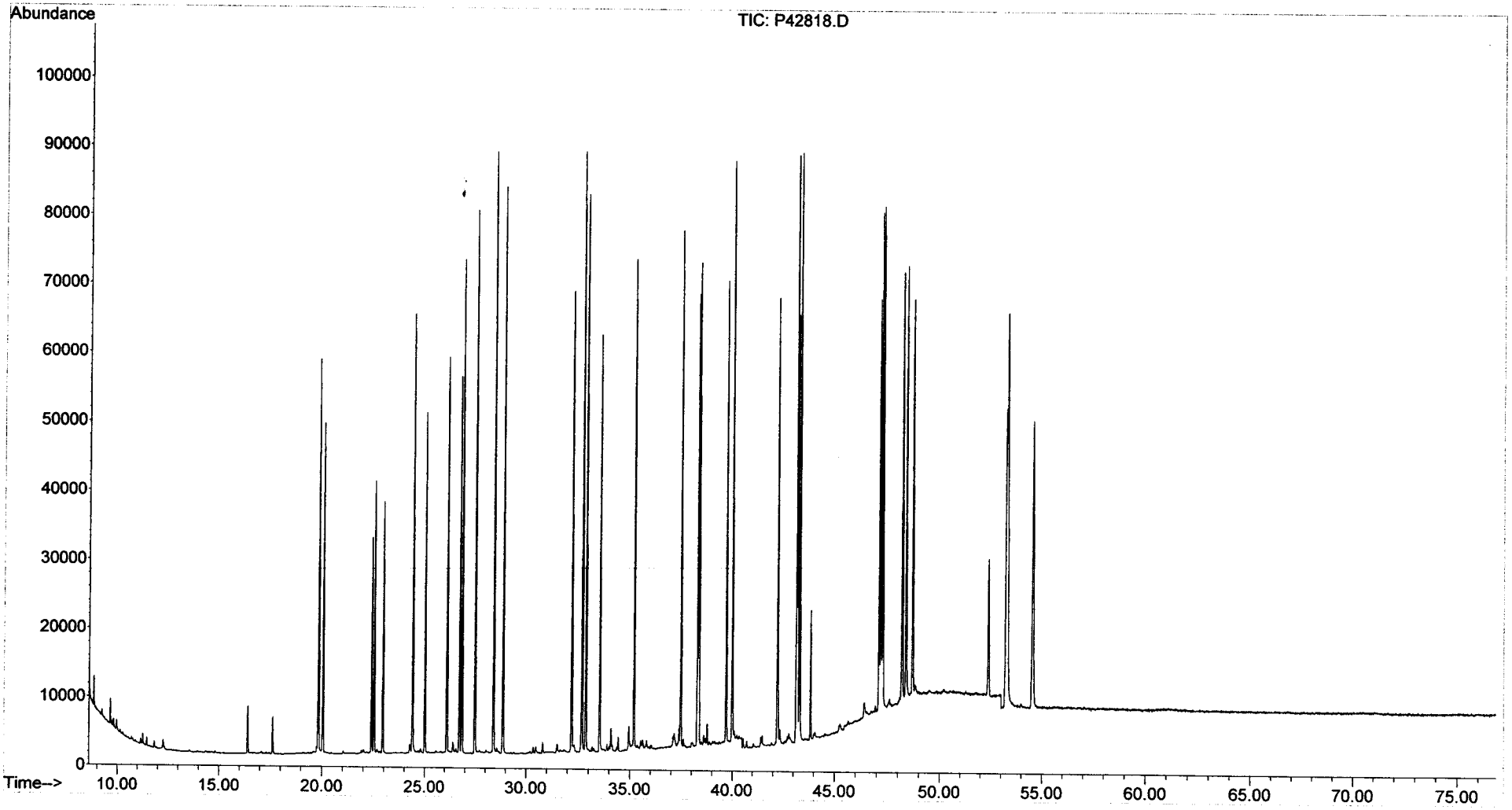
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.73	164	62904	500.00	ng/mL	-0.07
72) Chrysene-d12	43.20	240	114120	500.00	ng/mL	-0.06
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	66029	553.29	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.33%			
58) Pyrene-d10	38.28	212	144518	487.12	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.71%#			
81) Benzo[b]fluoranthene-d12	47.10	264	113093	473.12	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.31%#			
125) 5B(H)Cholane - Surr	43.83	217	25576	495.08	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.51%#			

Target Compounds						Qvalue
2) Decalin	16.41	138	24488m	436.80	ng/mL	
3) trans-Decalin	16.41	138	14042	225.74	ng/mL	100
4) cis-Decalin	17.63	138	10673	221.94	ng/mL	100
9) Naphthalene	19.83	128	130986	536.14	ng/mL#	100
15) 2-Methylnaphthalene	22.52	142	86447	555.44	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	81380	519.04	ng/mL#	100
17) Benzothiophene	20.05	134	107137	515.13	ng/mL	100
22) Biphenyl	24.41	154	105660	566.66	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	74046	548.69	ng/mL#	100
24) Dibenzofuran	27.49	168	115801	530.84	ng/mL	99
25) Acenaphthylene	26.11	152	129417	473.36	ng/mL#	100
26) Acenaphthene	26.85	153	79828	476.58	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.41	170	68672	497.29	ng/mL	100
28) Fluorene	28.87	166	92169m	513.65	ng/mL	
32) Dibenzothiophene	32.19	184	128207	481.96	ng/mL	100
41) Phenanthrene	32.69	178	137986	461.14	ng/mL	100
52) Retene	39.69	234	37823	493.18	ng/mL	99
53) Anthracene	32.87	178	130515m	477.68	ng/mL	
54) Carbazole	33.54	167	118055	545.18	ng/mL	100
55) 1-Methylphenanthrene	35.20	192	99091	501.83	ng/mL	100
56) Fluoranthene	37.47	202	147602m	478.54	ng/mL	
57) Benzo(b)fluorene	39.99	216	94200	521.41	ng/mL	100
59) Pyrene	38.35	202	148752	464.86	ng/mL	100
64) Naphthobenzothiophene	42.21	234	140846	484.13	ng/ml	98
65) Naphthobenzothiophene-2,1-	42.21	234	140846	484.13	ng/mL	98
73) Benz[a]anthracene	43.14	228	141549	521.49	ng/mL	100
74) Chrysene	43.30	228	137247	498.23	ng/mL	99
75) Chrysene/Triphenylene	43.30	228	137247	498.23	ng/mL	99
82) Benzo[b]fluoranthene	47.19	252	140490	498.04	ng/mL	100
83) Benzo[k]fluoranthene	47.27	252	145299	456.62	ng/mL	100
85) Benzo[e]pyrene	48.19	252	131035	460.92	ng/mL	98
86) Benzo[a]pyrene	48.38	252	132149	482.25	ng/mL	100
87) Perylene	48.69	252	127387	469.44	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.22	276	119207m	468.38	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	129626	492.97	ng/mL	99
90) Benzo[g,h,i]perylene	54.53	276	129902	447.90	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.37	191	49615	451.69	ng/mL	98
92) Hopane (T19)	52.37	191	49615	451.69	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN03\
Data File : P42818.D
Acq On : 3 Jan 2006 4:01 pm
Operator : AC
Sample : C4010302
Misc : PAH STD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 04 06:42:39 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\JAN03\
Data File : P42831.D
Acq On : 4 Jan 2006 11:10 am
Operator : AC
Sample : C4010303
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

1/4/06

Quant Time: Jan 04 13:02:32 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	103	0.00
2	t	Decalin	0.446	0.394	11.7	99	0.00
3	A1	trans-Decalin	0.494	0.444	10.1	99	0.00
4	t	cis-Decalin	0.382	0.346	9.4	100	0.00
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	2.038	-4.9	106	0.00
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	1.058	-11.5	107	0.00
15	t	2-Methylnaphthalene	1.237	1.368	-10.6	107	0.00
16	t	1-Methylnaphthalene	1.246	1.294	-3.9	105	0.00
17	A1	Benzothiophene	1.653	1.697	-2.7	104	0.00
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	1.672	-12.8	107	0.00
23	t	2,6-Dimethylnaphthalene	1.073	1.172	-9.2	108	0.00
24	t	Dibenzofuran	1.734	1.831	-5.6	102	0.00
25	t	Acenaphthylene	2.173	2.067	4.9	105	0.00
26	t	Acenaphthene	1.331	1.274	4.3	101	0.00
27	t	2,3,5-Trimethylnaphthalene	1.098	1.087	1.0	104	0.00
28	A1	Fluorene	1.426	1.447	-1.5	103	0.00
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	2.058	2.6	101	0.00
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	2.176	8.5	102	0.00
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\JAN03\
Data File : P42831.D
Acq On : 4 Jan 2006 11:10 am
Operator : AC
Sample : C4010303
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 04 13:02:32 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	0.616	-1.0	111	0.00
53	t	Anthracene	2.172	2.025	6.8	101	0.00
54	t	Carbazole	1.721	1.816	-5.5	106	0.00
55	t	1-Methylphenanthrene	1.570	1.558	0.8	106	0.00
56	A1	Fluoranthene	2.452	2.358	3.8	104	0.00
57	t	Benzo(b)fluorene	1.436	1.476	-2.8	109	0.00
58	s	Pyrene-d10	2.358	2.313	1.9	103	0.00
59	A1	Pyrene	2.543	2.386	6.2	99	0.00
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	2.238	3.2	104	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.238	3.2	104	0.00
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	101	0.00
73	t	Benz[a]anthracene	1.189	1.227	-3.2	107	0.00
74	A1	Chrysene	1.207	1.191	1.3	99	0.00
75	A2	Chrysene/Triphenylene	1.207	1.191	1.3	99	0.00
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	1.042	0.5	100	0.00
82	t	Benzo[b]fluoranthene	1.236	1.301	-5.3	104	0.00
83	A1	Benzo[k]fluoranthene	1.394	1.323	5.1	97	0.00
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.63#
85	t	Benzo[e]pyrene	1.246	1.209	3.0	100	0.00
86	t	Benzo[a]pyrene	1.201	1.232	-2.6	101	0.00
87	t	Perylene	1.189	1.196	-0.6	102	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.141	-2.3	110	0.00
89	t	Dibenz[a,h]anthracene	1.152	1.180	-2.4	100	0.00
90	t	Benzo[g,h,i]perylene	1.271	1.216	4.3	99	0.00
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.467	2.9	96	0.00
92	A2	Hopane (T19)	0.481	0.467	2.9	96	0.00
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\JAN03\
Data File : P42831.D
Acq On : 4 Jan 2006 11:10 am
Operator : AC
Sample : C4010303
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 04 13:02:32 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	0.224	0.9	104	0.00
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\JAN03\
Data File : P42831.D
Acq On : 4 Jan 2006 11:10 am
Operator : AC
Sample : C4010303
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

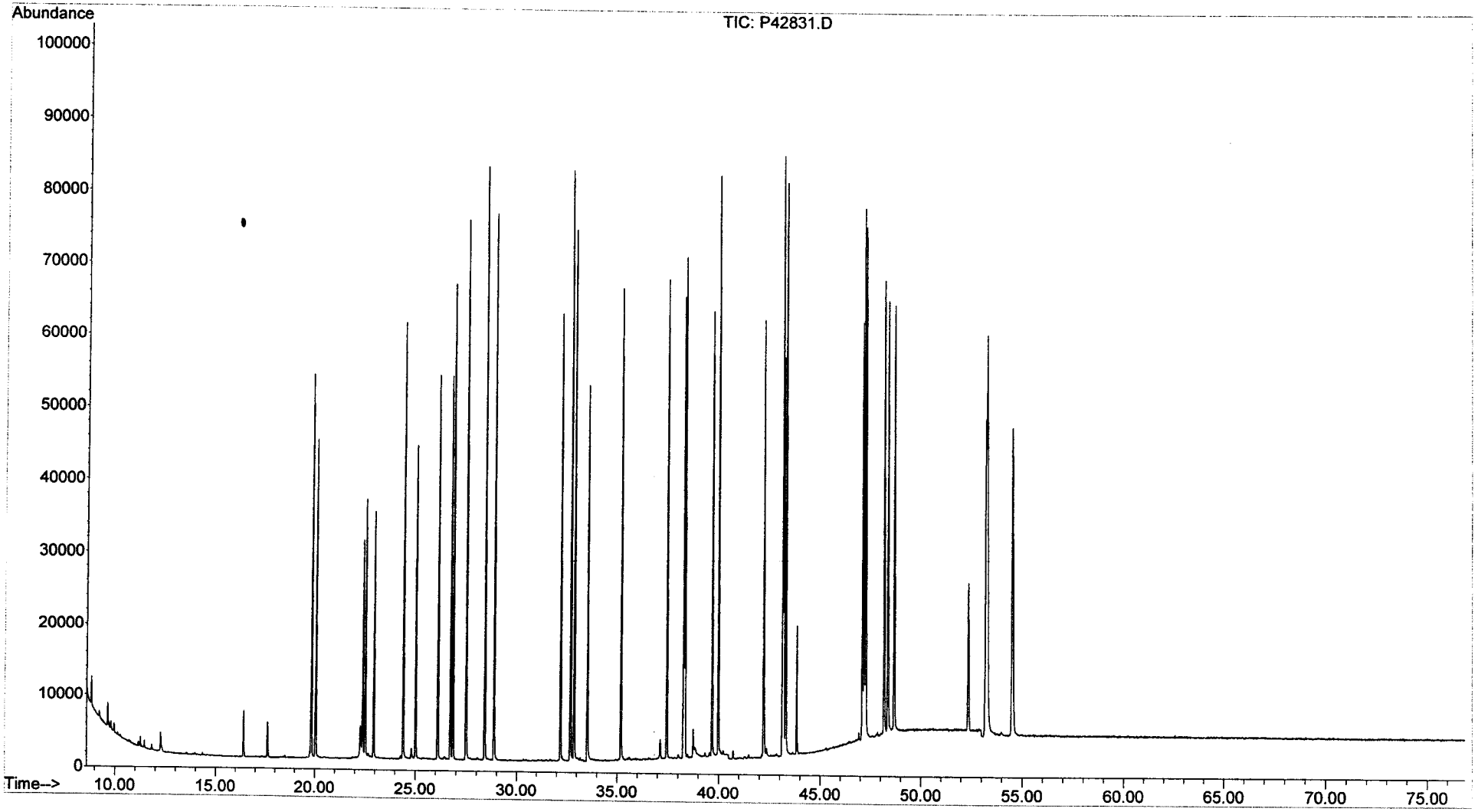
Quant Time: Jan 04 13:02:32 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	59387	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	108686	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	62832	557.68	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.77%			
58) Pyrene-d10	38.28	212	137368	490.44	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.04%#			
81) Benzo[b]fluoranthene-d12	47.09	264	113292	497.65	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.77%#			
125) 5B(H)Cholane - Surr	43.83	217	24375	495.42	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.54%#			
Target Compounds						Qvalue
2) Decalin	16.41	138	23421m	442.51	ng/mL	
3) trans-Decalin	16.41	138	13173	224.31	ng/mL	100
4) cis-Decalin	17.62	138	10263	226.06	ng/mL	100
9) Naphthalene	19.83	128	121017	524.67	ng/mL#	100
15) 2-Methylnaphthalene	22.52	142	81225	552.80	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	76830	519.04	ng/mL#	100
17) Benzothiophene	20.05	134	100781	513.26	ng/mL	100
22) Biphenyl	24.40	154	99301	564.10	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	69626	546.49	ng/mL#	100
24) Dibenzofuran	27.49	168	108765	528.12	ng/mL	100
25) Acenaphthylene	26.11	152	122774	475.66	ng/mL#	100
26) Acenaphthene	26.85	153	75669	478.50	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.41	170	64539	495.04	ng/mL	99
28) Fluorene	28.87	166	85911m	507.12	ng/mL	
32) Dibenzothiophene	32.19	184	122217	486.65	ng/mL	100
41) Phenanthrene	32.68	178	129199	457.34	ng/mL	100
52) Retene	39.69	234	36561	504.96	ng/mL	99
53) Anthracene	32.86	178	120243	466.15	ng/mL	100
54) Carbazole	33.54	167	107831	527.46	ng/mL	100
55) 1-Methylphenanthrene	35.19	192	92503m	496.21	ng/mL	
56) Fluoranthene	37.47	202	140061m	480.98	ng/mL	
57) Benzo(b)fluorene	39.98	216	87646	513.86	ng/mL	100
59) Pyrene	38.34	202	141679	468.98	ng/mL	100
64) Naphthobenzothiophene	42.20	234	132882	483.80	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.20	234	132882	483.80	ng/mL	99
73) Benz[a]anthracene	43.13	228	133374	515.94	ng/mL	100
74) Chrysene	43.29	228	129409	493.26	ng/mL	99
75) Chrysene/Triphenylene	43.29	228	129409	493.26	ng/mL	99
82) Benzo[b]fluoranthene	47.18	252	141446	526.50	ng/mL	100
83) Benzo[k]fluoranthene	47.26	252	143828	474.59	ng/mL	99
85) Benzo[e]pyrene	48.19	252	131423	485.40	ng/mL	99
86) Benzo[a]pyrene	48.38	252	133924	513.16	ng/mL	100
87) Perylene	48.69	252	130020	503.10	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.22	276	124005m	511.59	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	128201	511.93	ng/mL	99
90) Benzo[g,h,i]perylene	54.53	276	132193	478.59	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	50712	484.76	ng/mL	99
92) Hopane (T19)	52.36	191	50712	484.76	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN03\
Data File : P42831.D
Acq On : 4 Jan 2006 11:10 am
Operator : AC
Sample : C4010303
Misc : PAH STD
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 04 13:02:32 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\PAH4\JANUARY\JAN03\
Data File : P43008.D
Acq On : 4 Jan 2006 9:34 pm
Operator : AC
Sample : C4010304
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 05 10:54:28 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

MJ 1-5-06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	87	0.00
2	t	Decalin	0.446	0.401	10.1	85	0.00
3	A1	trans-Decalin	0.494	0.448	9.3	85	0.00
4	t	cis-Decalin	0.382	0.345	9.7	84	0.00
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	2.025	-4.3	89	0.00
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	1.046	-10.2	89	0.00
15	t	2-Methylnaphthalene	1.237	1.354	-9.5	90	0.00
16	t	1-Methylnaphthalene	1.246	1.274	-2.2	88	0.00
17	A1	Benzothiophene	1.653	1.670	-1.0	87	0.00
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	1.657	-11.8	90	0.00
23	t	2,6-Dimethylnaphthalene	1.073	1.164	-8.5	91	0.00
24	t	Dibenzofuran	1.734	1.819	-4.9	86	0.00
25	t	Acenaphthylene	2.173	1.999	8.0	86	0.00
26	t	Acenaphthene	1.331	1.258	5.5	85	0.00
27	t	2,3,5-Trimethylnaphthalene	1.098	1.072	2.4	87	0.00
28	A1	Fluorene	1.426	1.409	1.2	85	0.00
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	2.013	4.8	84	0.00
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	2.145	9.8	85	0.00
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\JAN03\
Data File : P43008.D
Acq On : 4 Jan 2006 9:34 pm
Operator : AC
Sample : C4010304
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 05 10:54:28 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	0.607	0.5	93	0.00
53	t	Anthracene	2.172	1.989	8.4	84	0.00
54	t	Carbazole	1.721	1.727	-0.3	86	0.00
55	t	1-Methylphenanthrene	1.570	1.521	3.1	88	0.00
56	A1	Fluoranthene	2.452	2.296	6.4	86	0.00
57	t	Benzo(b)fluorene	1.436	1.368	4.7	86	0.00
58	s	Pyrene-d10	2.358	2.275	3.5	86	0.00
59	A1	Pyrene	2.543	2.373	6.7	84	0.00
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	2.166	6.3	85	0.00
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.166	6.3	85	0.00
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	85	0.00
73	t	Benz[a]anthracene	1.189	1.185	0.3	87	0.00
74	A1	Chrysene	1.207	1.198	0.7	84	0.00
75	A2	Chrysene/Triphenylene	1.207	1.198	0.7	84	0.00
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	84	0.00
82	t	Benzo[b]fluoranthene	1.236	1.289	-4.3	86	0.00
83	A1	Benzo[k]fluoranthene	1.394	1.310	6.0	81	0.00
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.63#
85	t	Benzo[e]pyrene	1.246	1.211	2.8	84	0.00
86	t	Benzo[a]pyrene	1.201	1.198	0.2	83	0.00
87	t	Perylene	1.189	1.163	2.2	83	0.00
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.093	2.0	88	0.00
89	t	Dibenz[a,h]anthracene	1.152	1.130	1.9	81	0.00
90	t	Benzo[g,h,i]perylene	1.271	1.211	4.7	83	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.475	1.2	82	0.00
92	A2	Hopane (T19)	0.481	0.475	1.2	82	0.00
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\JAN03\
Data File : P43008.D
Acq On : 4 Jan 2006 9:34 pm
Operator : AC
Sample : C4010304
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 05 10:54:28 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	0.219	3.1	85	0.00
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\JAN03\
Data File : P43008.D
Acq On : 4 Jan 2006 9:34 pm
Operator : AC
Sample : C4010304
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 05 10:54:28 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

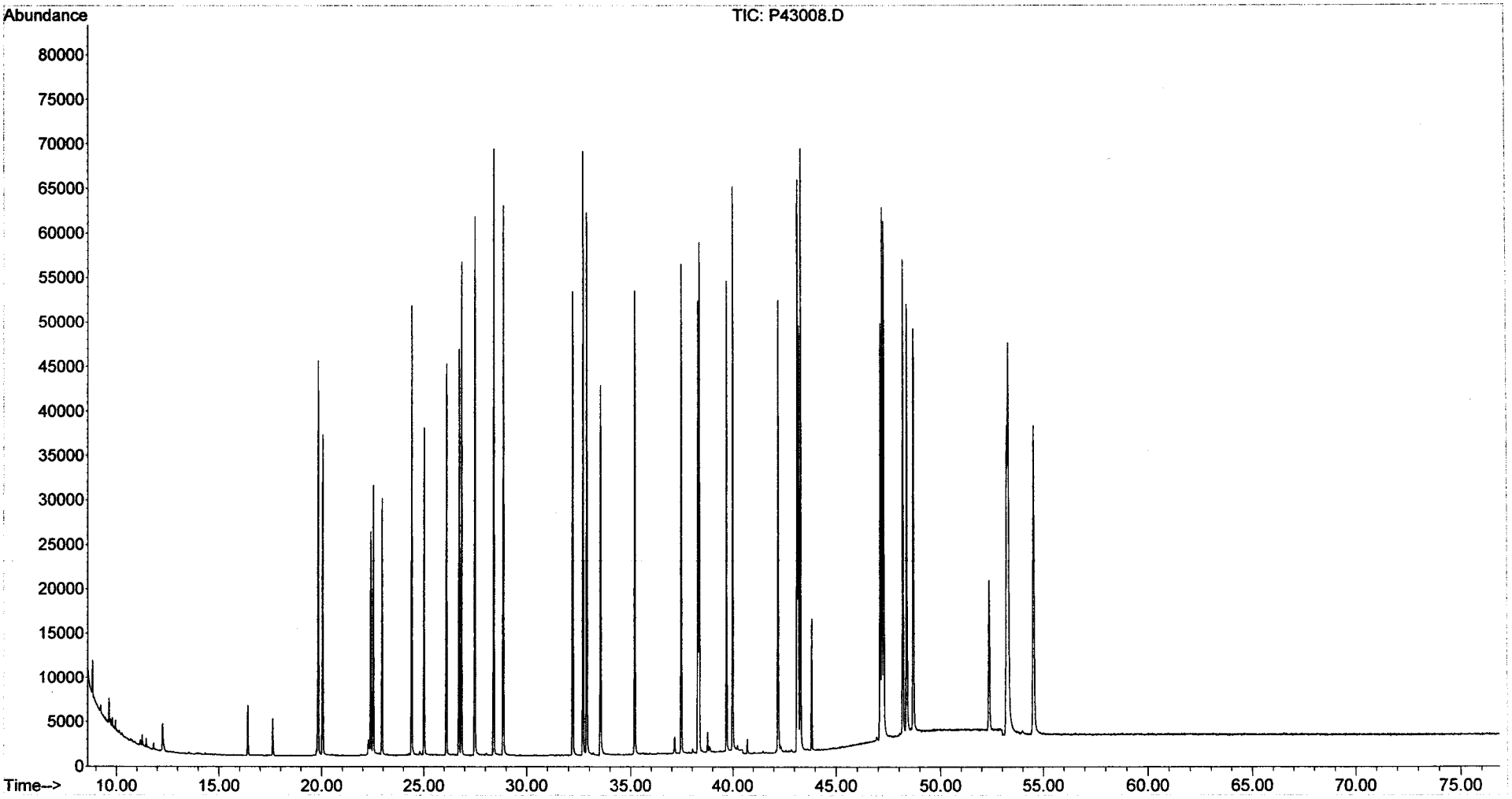
Aug 1-5-06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.72	164	50394	500.00	ng/mL	0.00
72) Chrysene-d12	43.19	240	91318	500.00	ng/mL	0.00
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.40	152	52691	551.13	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.11%			
58) Pyrene-d10	38.28	212	114668	482.45	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.24%#			
81) Benzo[b]fluoranthene-d12	47.09	264	94905	496.17	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.62%#			
125) 5B(H)Cholane - Surr	43.83	217	20011	484.08	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.41%#			
Target Compounds						Qvalue
2) Decalin	16.41	138	20230m	450.43	ng/mL	
3) trans-Decalin	16.41	138	11286	226.47	ng/mL	100
4) cis-Decalin	17.63	138	8685	225.44	ng/mL	100
9) Naphthalene	19.83	128	102054	521.41	ng/mL#	100
15) 2-Methylnaphthalene	22.52	142	68235	547.27	ng/mL#	100
16) 1-Methylnaphthalene	22.95	142	64181	510.96	ng/mL#	100
17) Benzothiophene	20.05	134	84133	504.94	ng/mL	100
22) Biphenyl	24.41	154	83518	559.11	ng/mL#	100
23) 2,6-Dimethylnaphthalene	25.02	156	58667	542.65	ng/mL#	100
24) Dibenzofuran	27.49	168	91647	524.41	ng/mL	99
25) Acenaphthylene	26.11	152	100736	459.92	ng/mL#	100
26) Acenaphthene	26.85	153	63383	472.34	ng/mL	99
27) 2,3,5-Trimethylnaphthalene	28.41	170	54004	488.16	ng/mL	100
28) Fluorene	28.87	166	71013m	493.99	ng/mL	
32) Dibenzothiophene	32.19	184	101447	476.03	ng/mL	99
41) Phenanthrene	32.68	178	108075	450.84	ng/mL	100
52) Retene	39.68	234	30577	497.67	ng/mL	100
53) Anthracene	32.86	178	100211m	457.82	ng/mL	
54) Carbazole	33.54	167	87044	501.76	ng/mL	100
55) 1-Methylphenanthrene	35.20	192	76652	484.56	ng/mL	100
56) Fluoranthene	37.47	202	115707m	468.25	ng/mL	
57) Benzo(b)fluorene	39.99	216	68926	476.22	ng/mL	100
59) Pyrene	38.34	202	119568	466.42	ng/mL	99
64) Naphthobenzothiophene	42.20	234	109140	468.27	ng/ml	99
65) Naphthobenzothiophene-2,1-	42.20	234	109140	468.27	ng/mL	99
73) Benz[a]anthracene	43.13	228	108198	498.15	ng/mL	100
74) Chrysene	43.29	228	109422	496.40	ng/mL	99
75) Chrysene/Triphenylene	43.29	228	109422	496.40	ng/mL	99
82) Benzo[b]fluoranthene	47.18	252	117742	521.62	ng/mL	99
83) Benzo[k]fluoranthene	47.26	252	119604	469.72	ng/mL	100
85) Benzo[e]pyrene	48.19	252	110611	486.23	ng/mL	99
86) Benzo[a]pyrene	48.37	252	109376	498.81	ng/mL	100
87) Perylene	48.69	252	106197	489.07	ng/mL	98
88) Indeno[1,2,3-cd]pyrene	53.22	276	99824m	490.16	ng/mL	
89) Dibenz[a,h]anthracene	53.29	278	103164	490.30	ng/mL	99
90) Benzo[g,h,i]perylene	54.52	276	110608	476.60	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.36	191	43333	493.00	ng/mL	99
92) Hopane (T19)	52.36	191	43333	493.00	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN03\
Data File : P43008.D
Acq On : 4 Jan 2006 9:34 pm
Operator : AC
Sample : C4010304
Misc : PAH STD
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 05 10:54:28 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\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

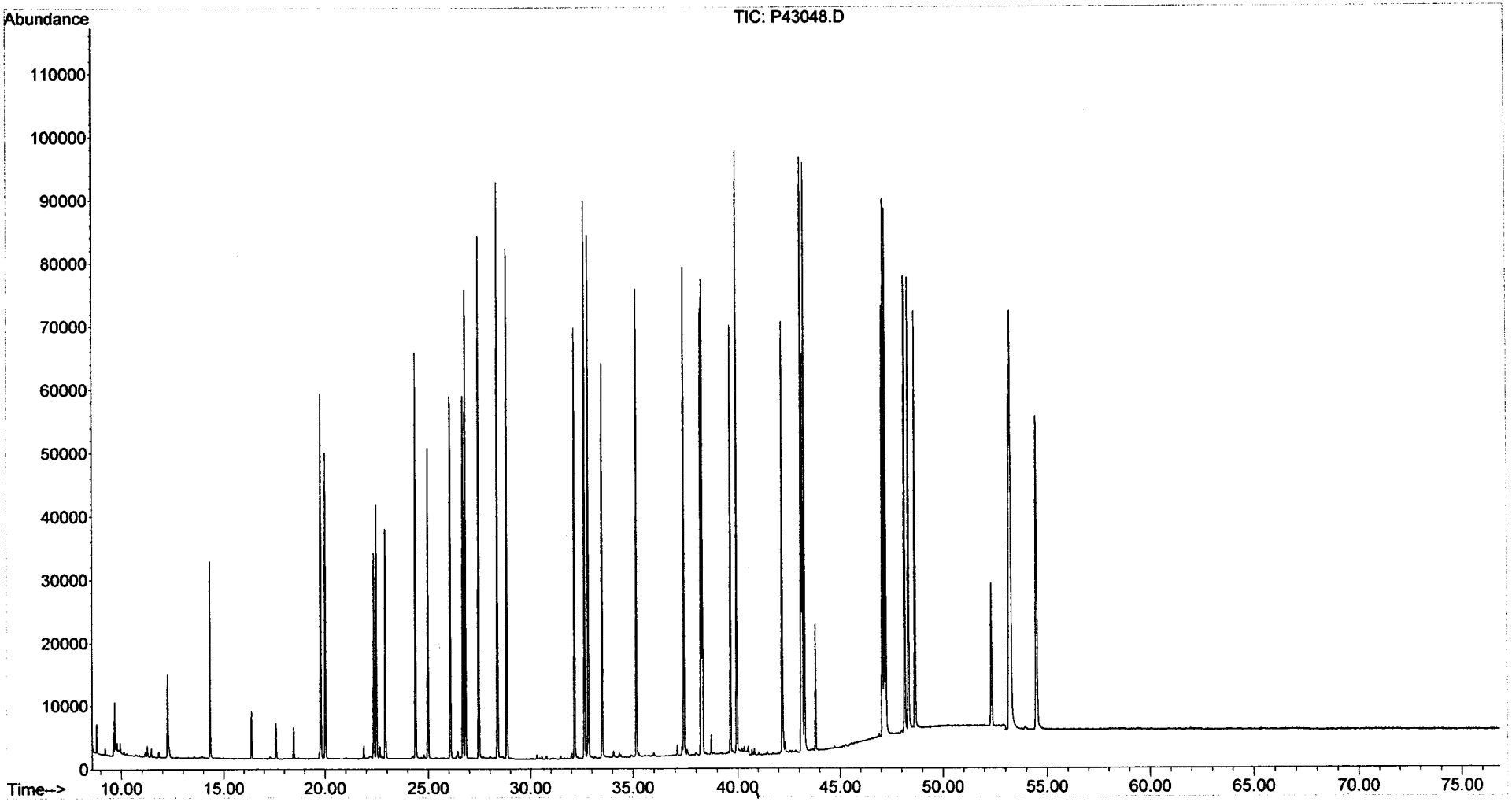
Quant Time: Jan 06 07:40:55 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

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

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

1/7/06

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

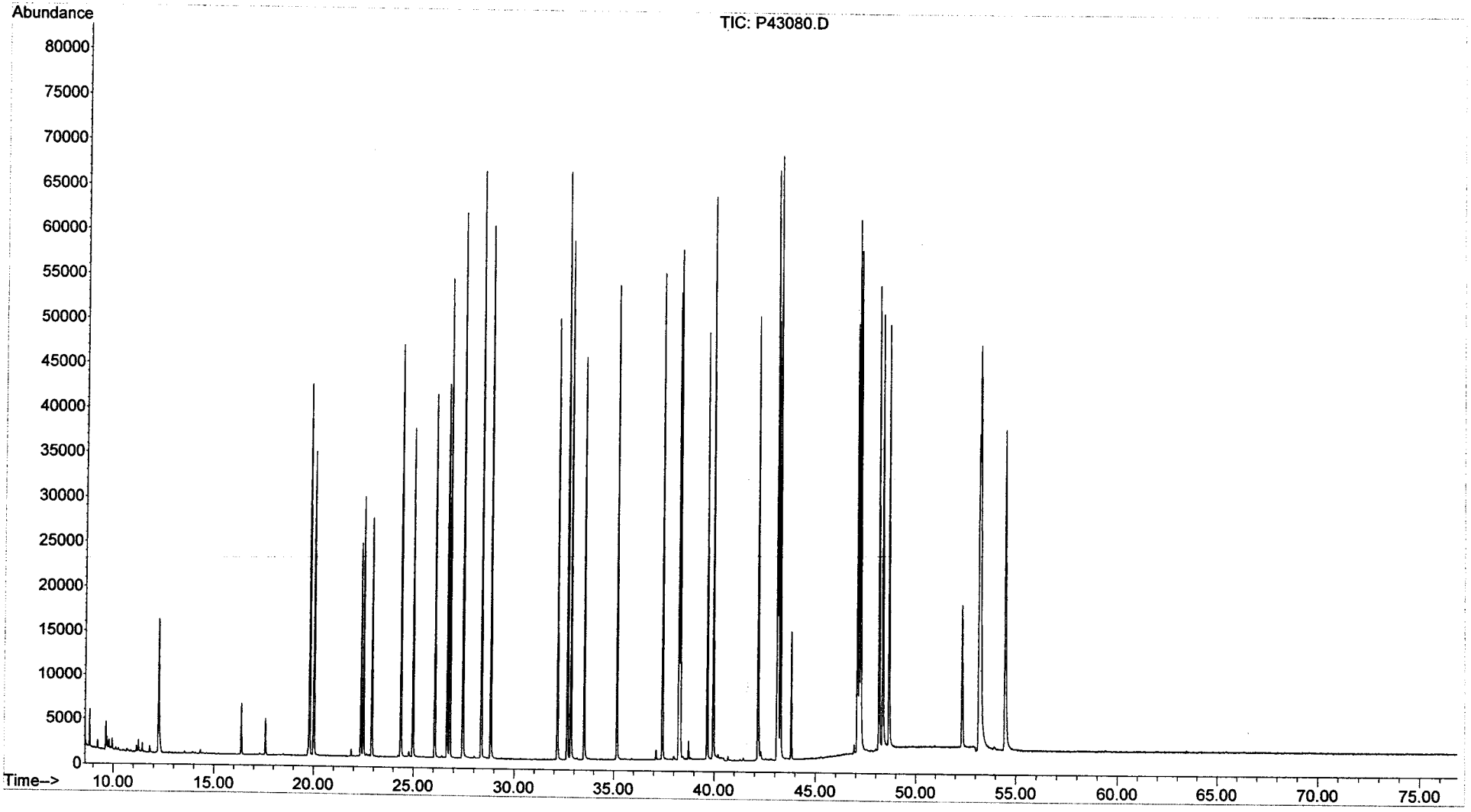
Quant Time: Jan 07 09:01:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

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\PAH4\JANUARY\JAN05\
Data File : P43102.D
Acq On : 7 Jan 2006 12:12 pm
Operator : AC
Sample : C4010503
Misc : pah std
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 09 09:18:21 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

MJ 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	94	-0.02
2	t	Decalin	0.446	0.390	12.6	89	-0.02
3	A1	trans-Decalin	0.494	0.436	11.7	89	-0.02
4	t	cis-Decalin	0.382	0.336	12.0	89	-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	2.007	-3.3	95	-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	1.049	-10.5	97	-0.02
15	t	2-Methylnaphthalene	1.237	1.352	-9.3	97	-0.02
16	t	1-Methylnaphthalene	1.246	1.275	-2.3	95	-0.02
17	A1	Benzothiophene	1.653	1.678	-1.5	95	-0.02
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	1.648	-11.2	97	-0.02
23	t	2,6-Dimethylnaphthalene	1.073	1.170	-9.0	99	-0.02
24	t	Dibenzofuran	1.734	1.828	-5.4	93	-0.02
25	t	Acenaphthylene	2.173	2.179	-0.3	102	-0.02
26	t	Acenaphthene	1.331	1.286	3.4	93	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.098	1.066	2.9	93	-0.02
28	A1	Fluorene	1.426	1.426	0.0	93	-0.02
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	1.940	8.2	87	-0.02
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	2.005	15.7	86	-0.02
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 : P43102.D
Acq On : 7 Jan 2006 12:12 pm
Operator : AC
Sample : C4010503
Misc : pah std
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 09 09:18:21 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	0.582	4.6	96	-0.02
53	t	Anthracene	2.172	1.993	8.2	91	-0.02
54	t	Carbazole	1.721	1.815	-5.5	97	-0.02
55	t	1-Methylphenanthrene	1.570	1.493	4.9	93	-0.02
56	A1	Fluoranthene	2.452	2.266	7.6	91	-0.02
57	t	Benzo(b)fluorene	1.436	1.491	-3.8	101	-0.02
58	s	Pyrene-d10	2.358	2.266	3.9	92	-0.02
59	A1	Pyrene	2.543	2.308	9.2	88	-0.02
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	2.105	9.0	90	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.105	9.0	90	-0.02
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	84	-0.02
73	t	Benz[a]anthracene	1.189	1.260	-6.0	92	-0.02
74	A1	Chrysene	1.207	1.203	0.3	84	-0.02
75	A2	Chrysene/Triphenylene	1.207	1.203	0.3	84	-0.02
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	0.848	19.0	68	-0.02
82	t	Benzo[b]fluoranthene	1.236	1.074	13.1	72	-0.02
83	A1	Benzo[k]fluoranthene	1.394	1.103	20.9	68	-0.02
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.63#
85	t	Benzo[e]pyrene	1.246	0.979	21.4	68	-0.02
86	t	Benzo[a]pyrene	1.201	1.019	15.2	70	-0.02
87	t	Perylene	1.189	0.987	17.0	70	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.013	9.1	82	-0.02
89	t	Dibenz[a,h]anthracene	1.152	1.012	12.2	72	-0.02
90	t	Benzo[g,h,i]perylene	1.271	1.000	21.3	68	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.299	37.8#	51	-0.03
92	A2	Hopane (T19)	0.481	0.299	37.8#	51	-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#

3 non target
1/24/06

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43102.D
Acq On : 7 Jan 2006 12:12 pm
Operator : AC
Sample : C4010503
Misc : pah std
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 09 09:18:21 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	0.219	3.1	85	-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 : P43102.D
Acq On : 7 Jan 2006 12:12 pm
Operator : AC
Sample : C4010503
Misc : pah std
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 09 09:18:21 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 1/9/06

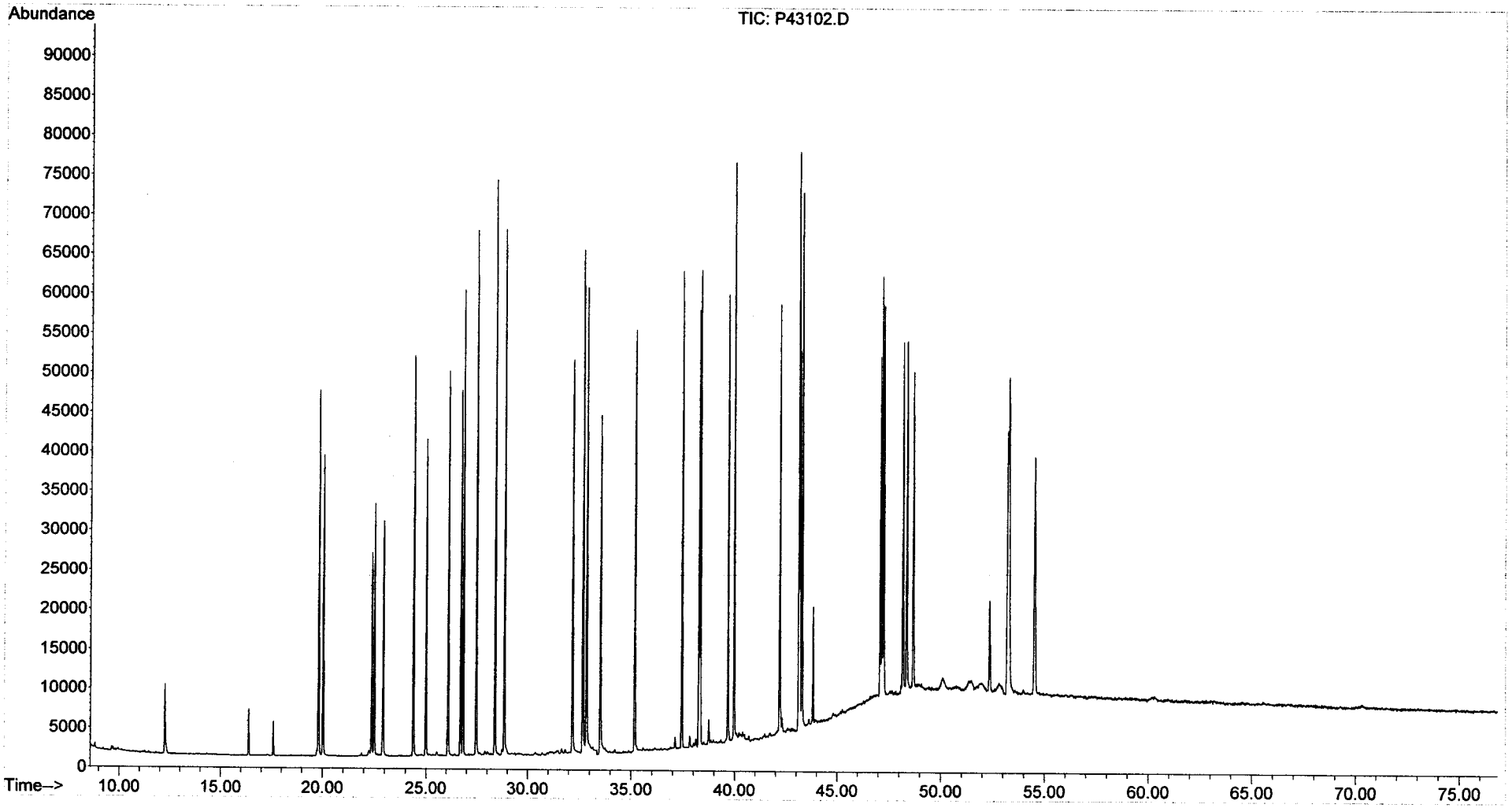
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	54382m	500.00	ng/mL	-0.02
72) Chrysene-d12	43.18	240	91033	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.38	152	57056	553.02	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.30%			
58) Pyrene-d10	38.26	212	123210	480.38	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.04%#			
81) Benzo[b]fluoranthene-d12	47.09	264	77227	405.01	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.50%#			
125) 5B(H)Cholane - Surr	43.82	217	19981	484.86	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.49%#			

Target Compounds						Qvalue
2) Decalin	16.39	138	21195m	437.31	ng/mL	
3) trans-Decalin	16.39	138	11855	220.44	ng/mL	100
4) cis-Decalin	17.61	138	9137	219.78	ng/mL	100
9) Naphthalene	19.80	128	109171	516.87	ng/mL#	100
15) 2-Methylnaphthalene	22.50	142	73541	546.57	ng/mL#	100
16) 1-Methylnaphthalene	22.92	142	69319	511.40	ng/mL#	100
17) Benzothiophene	20.02	134	91237	507.42	ng/mL	100
22) Biphenyl	24.38	154	89604	555.86	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	63632	545.41	ng/mL#	100
24) Dibenzofuran	27.47	168	99407	527.10	ng/mL	99
25) Acenaphthylene	26.09	152	118487	501.30	ng/mL#	100
26) Acenaphthene	26.83	153	69945	483.02	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.39	170	57971	485.59	ng/mL	100
28) Fluorene	28.85	166	77527m	499.75	ng/mL	
32) Dibenzothiophene	32.17	184	105510	458.79	ng/mL	100
41) Phenanthrene	32.67	178	109041	421.51	ng/mL	100
52) Retene	39.67	234	31650	477.36	ng/mL	99
53) Anthracene	32.85	178	108403m	458.93	ng/mL	
54) Carbazole	33.51	167	98718	527.32	ng/mL	99
55) 1-Methylphenanthrene	35.18	192	81172	475.50	ng/mL	99
56) Fluoranthene	37.44	202	123222m	462.10	ng/mL	
57) Benzo(b)fluorene	39.97	216	81102	519.26	ng/mL	100
59) Pyrene	38.33	202	125513	453.71	ng/mL	100
64) Naphthobenzothiophene	42.19	234	114459	455.08	ng/ml	98
65) Naphthobenzothiophene-2,1-	42.19	234	114459	455.08	ng/mL	98
73) Benz[a]anthracene	43.12	228	114741	529.93	ng/mL	91
74) Chrysene	43.27	228	109492	498.28	ng/mL	100
75) Chrysene/Triphenylene	43.27	228	109492	498.28	ng/mL	100
82) Benzo[b]fluoranthene	47.17	252	97758	434.44	ng/mL	99
83) Benzo[k]fluoranthene	47.25	252	100424	395.63	ng/mL	99
85) Benzo[e]pyrene	48.18	252	89145	393.09	ng/mL	99
86) Benzo[a]pyrene	48.36	252	92799	424.54	ng/mL	100
87) Perylene	48.67	252	89866	415.16	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.20	276	92210m	454.19	ng/mL	
89) Dibenz[a,h]anthracene	53.27	278	92111	439.14	ng/mL	97
90) Benzo[g,h,i]perylene	54.51	276	90990	393.30	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.34	191	27191	310.32	ng/mL	97
92) Hopane (T19)	52.34	191	27191	310.32	ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43102.D
Acq On : 7 Jan 2006 12:12 pm
Operator : AC
Sample : C4010503
Misc : pah std
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 09 09:18:21 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\PAH4\JANUARY\JAN05\
Data File : P43118.D
Acq On : 8 Jan 2006 12:07 am
Operator : AC
Sample : C4010504
Misc : PAH STD
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 09 09:23:27 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 1/9/06

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	110	-0.02
2	t	Decalin	0.446	0.400	10.3	107	-0.02
3	A1	trans-Decalin	0.494	0.452	8.5	108	-0.02
4	t	cis-Decalin	0.382	0.347	9.2	107	-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	2.048	-5.5	114	-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	1.072	-13.0	116	-0.02
15	t	2-Methylnaphthalene	1.237	1.370	-10.8	115	-0.02
16	t	1-Methylnaphthalene	1.246	1.289	-3.5	112	-0.02
17	A1	Benzothiophene	1.653	1.717	-3.9	113	-0.02
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	1.666	-12.4	115	-0.02
23	t	2,6-Dimethylnaphthalene	1.073	1.182	-10.2	117	-0.02
24	t	Dibenzofuran	1.734	1.832	-5.7	110	-0.02
25	t	Acenaphthylene	2.173	2.252	-3.6	123	-0.02
26	t	Acenaphthene	1.331	1.297	2.6	110	-0.02
27	t	2,3,5-Trimethylnaphthalene	1.098	1.065	3.0	109	-0.02
28	A1	Fluorene	1.426	1.405	1.5	107	-0.02
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	1.917	9.3	101	-0.02
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	2.021	15.0	102	-0.02
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 : P43118.D
Acq On : 8 Jan 2006 12:07 am
Operator : AC
Sample : C4010504
Misc : PAH STD
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 09 09:23:27 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	0.602	1.3	116	-0.02
53	t	Anthracene	2.172	1.967	9.4	105	-0.02
54	t	Carbazole	1.721	1.837	-6.7	115	-0.02
55	t	1-Methylphenanthrene	1.570	1.503	4.3	110	-0.02
56	A1	Fluoranthene	2.452	2.291	6.6	108	-0.02
57	t	Benzo(b)fluorene	1.436	1.497	-4.2	119	-0.02
58	s	Pyrene-d10	2.358	2.253	4.5	107	-0.02
59	A1	Pyrene	2.543	2.300	9.6	103	-0.02
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	2.130	7.9	106	-0.02
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.130	7.9	106	-0.02
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	101	-0.02
73	t	Benz[a]anthracene	1.189	1.270	-6.8	111	-0.02
74	A1	Chrysene	1.207	1.199	0.7	100	-0.02
75	A2	Chrysene/Triphenylene	1.207	1.199	0.7	100	-0.02
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	0.894	14.6	86	-0.02
82	t	Benzo[b]fluoranthene	1.236	1.133	8.3	90	0.00
83	A1	Benzo[k]fluoranthene	1.394	1.162	16.6	86	0.00
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.63#
85	t	Benzo[e]pyrene	1.246	1.033	17.1	85	-0.02
86	t	Benzo[a]pyrene	1.201	1.078	10.2	89	0.00
87	t	Perylene	1.189	1.025	13.8	87	-0.02
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.039	6.8	100	-0.02
89	t	Dibenz[a,h]anthracene	1.152	1.058	8.2	90	-0.02
90	t	Benzo[g,h,i]perylene	1.271	1.029	19.0	84	-0.02
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.390	18.9	80	-0.02
92	A2	Hopane (T19)	0.481	0.390	18.9	80	-0.02
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 : P43118.D
Acq On : 8 Jan 2006 12:07 am
Operator : AC
Sample : C4010504
Misc : PAH STD
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 09 09:23:27 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	0.217	4.0	101	-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 : P43118.D
Acq On : 8 Jan 2006 12:07 am
Operator : AC
Sample : C4010504
Misc : PAH STD
ALS Vial : 34 Sample Multiplier: 1

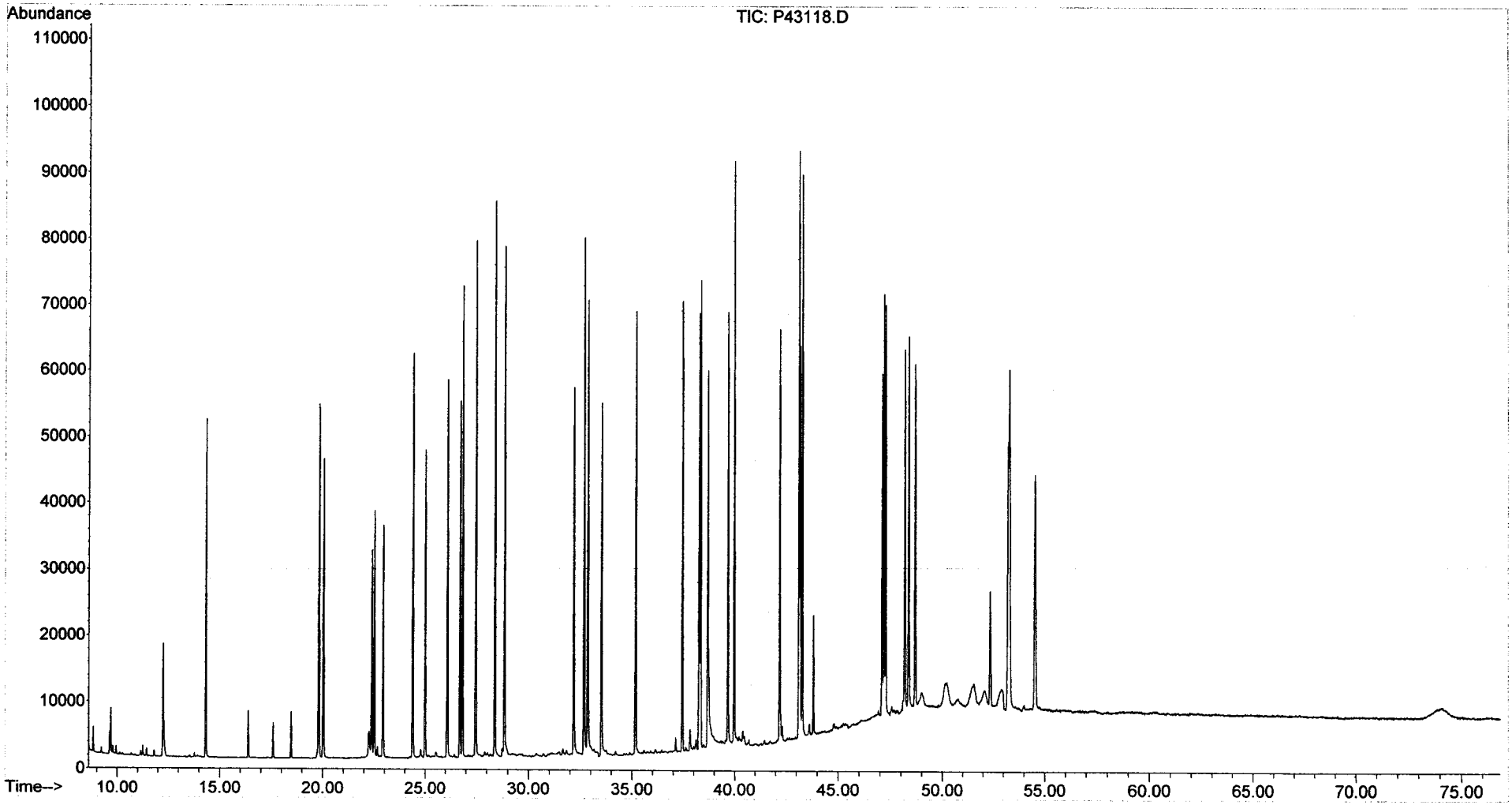
Quant Time: Jan 09 09:23:27 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 04 06:53:15 2006
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.71	164	63675	500.00	ng/mL	-0.02
72) Chrysene-d12	43.18	240	108824	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.38	152	68245	564.94	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 56.49%			
58) Pyrene-d10	38.26	212	143485	477.78	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.78%#			
81) Benzo[b]fluoranthene-d12	47.09	264	97274	426.75	ng/mL	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 42.68%#			
125) 5B(H)Cholane - Surr	43.82	217	23658	480.24	ng/ml	-0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.02%#			
Target Compounds						Qvalue
2) Decalin	16.39	138	25452m	448.50	ng/mL	
3) trans-Decalin	16.39	138	14379	228.36	ng/mL	100
4) cis-Decalin	17.61	138	11057	227.14	ng/mL	100
9) Naphthalene	19.80	128	130413	527.33	ng/mL#	100
15) 2-Methylnaphthalene	22.50	142	87229	553.68	ng/mL#	100
16) 1-Methylnaphthalene	22.92	142	82061	517.05	ng/mL#	100
17) Benzothiophene	20.02	134	109354	519.42	ng/mL	100
22) Biphenyl	24.39	154	106099	562.13	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.99	156	75271	551.01	ng/mL#	100
24) Dibenzofuran	27.47	168	116666	528.33	ng/mL	100
25) Acenaphthylene	26.09	152	143398m	518.15	ng/mL	
26) Acenaphthene	26.83	153	82558	486.91	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.39	170	67842	485.34	ng/mL	99
28) Fluorene	28.85	166	89490m	492.68	ng/mL	
32) Dibenzothiophene	32.18	184	122085	453.38	ng/mL	100
41) Phenanthrene	32.67	178	128713	424.94	ng/mL	100
52) Retene	39.67	234	38336	493.82	ng/mL	98
53) Anthracene	32.85	178	125247m	452.85	ng/mL	
54) Carbazole	33.51	167	116974	533.65	ng/mL	99
55) 1-Methylphenanthrene	35.18	192	95712m	478.85	ng/mL	
56) Fluoranthene	37.44	202	145887m	467.25	ng/mL	
57) Benzo(b)fluorene	39.97	216	95329	521.27	ng/mL	98
59) Pyrene	38.33	202	146457	452.15	ng/mL	100
64) Naphthobenzothiophene	42.19	234	135622	460.53	ng/ml	98
65) Naphthobenzothiophene-2,1-	42.19	234	135622	460.53	ng/mL	98
73) Benz[a]anthracene	43.12	228	138231m	534.05	ng/mL	
74) Chrysene	43.28	228	130527	496.89	ng/mL	99
75) Chrysene/Triphenylene	43.28	228	130527	496.89	ng/mL	99
82) Benzo[b]fluoranthene	47.18	252	123267	458.25	ng/mL	100
83) Benzo[k]fluoranthene	47.26	252	126507	416.91	ng/mL	100
85) Benzo[e]pyrene	48.18	252	112384	414.55	ng/mL	100
86) Benzo[a]pyrene	48.37	252	117270	448.78	ng/mL	99
87) Perylene	48.68	252	111494	430.87	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.21	276	113105m	466.03	ng/mL	
89) Dibenz[a,h]anthracene	53.28	278	115181	459.36	ng/mL	98
90) Benzo[g,h,i]perylene	54.52	276	111944	404.76	ng/mL	99
91) 17a(H),21B(H)-hopane - C30	52.35	191	42387	404.66	ng/mL	98
92) Hopane (T19)	52.35	191	42387	404.66	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN05\
Data File : P43118.D
Acq On : 8 Jan 2006 12:07 am
Operator : AC
Sample : C4010504
Misc : PAH STD
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 09 09:23:27 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\PAH4\JANUARY\JAN12\
Data File : P43189.D
Acq On : 12 Jan 2006 5:01 pm
Operator : AC
Sample : C4011201
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 13 07:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

CMS 1/13/06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	107	-0.05
2	t	Decalin	0.446	0.403	9.6	105	-0.04
3	A1	trans-Decalin	0.494	0.441	10.7	103	-0.04
4	t	cis-Decalin	0.382	0.345	9.7	104	-0.04
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	2.015	-3.8	109	-0.04
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	1.050	-10.6	111	-0.04
15	t	2-Methylnaphthalene	1.237	1.346	-8.8	110	-0.04
16	t	1-Methylnaphthalene	1.246	1.272	-2.1	108	-0.04
17	A1	Benzothiophene	1.653	1.680	-1.6	108	-0.04
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	1.647	-11.1	110	-0.04
23	t	2,6-Dimethylnaphthalene	1.073	1.175	-9.5	113	-0.05
24	t	Dibenzofuran	1.734	1.801	-3.9	105	-0.05
25	t	Acenaphthylene	2.173	2.002	7.9	106	-0.04
26	t	Acenaphthene	1.331	1.253	5.9	104	-0.05
27	t	2,3,5-Trimethylnaphthalene	1.098	1.085	1.2	108	-0.04
28	A1	Fluorene	1.426	1.428	-0.1	106	-0.04
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	1.978	6.4	101	-0.04
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	2.125	10.6	104	-0.05
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\JAN12\
Data File : P43189.D
Acq On : 12 Jan 2006 5:01 pm
Operator : AC
Sample : C4011201
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 13 07:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-40.97#
52	t	Retene	0.610	0.593	2.8	111	-0.05
53	t	Anthracene	2.172	1.983	8.7	103	-0.05
54	t	Carbazole	1.721	1.834	-6.6	112	-0.05
55	t	1-Methylphenanthrene	1.570	1.546	1.5	110	-0.05
56	A1	Fluoranthene	2.452	2.295	6.4	105	-0.05
57	t	Benzo(b)fluorene	1.436	1.460	-1.7	113	-0.05
58	s	Pyrene-d10	2.358	2.250	4.6	104	-0.05
59	A1	Pyrene	2.543	2.288	10.0	99	-0.05
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	2.129	7.9	103	-0.05
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.129	7.9	103	-0.05
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	101	-0.04
73	t	Benz[a]anthracene	1.189	1.243	-4.5	109	-0.05
74	A1	Chrysene	1.207	1.192	1.2	100	-0.05
75	A2	Chrysene/Triphenylene	1.207	1.192	1.2	100	-0.05
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	1.029	1.7	100	-0.04
82	t	Benzo[b]fluoranthene	1.236	1.269	-2.7	102	-0.04
83	A1	Benzo[k]fluoranthene	1.394	1.313	5.8	97	-0.04
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.56#
85	t	Benzo[e]pyrene	1.246	1.172	5.9	97	-0.05
86	t	Benzo[a]pyrene	1.201	1.188	1.1	98	-0.04
87	t	Perylene	1.189	1.152	3.1	99	-0.05
88	t	Indeno[1,2,3-cd]pyrene	1.115	1.144	-2.6	111	-0.06
89	t	Dibenz[a,h]anthracene	1.152	1.208	-4.9	103	-0.05
90	t	Benzo[g,h,i]perylene	1.271	1.229	3.3	100	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.372	22.7	77	-0.06
92	A2	Hopane (T19)	0.481	0.372	22.7	77	-0.06
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\JAN12\
Data File : P43189.D
Acq On : 12 Jan 2006 5:01 pm
Operator : AC
Sample : C4011201
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 13 07:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.481	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	0.227	-0.4	106	-0.04
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\JAN12\
Data File : P43189.D
Acq On : 12 Jan 2006 5:01 pm
Operator : AC
Sample : C4011201
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 13 07:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

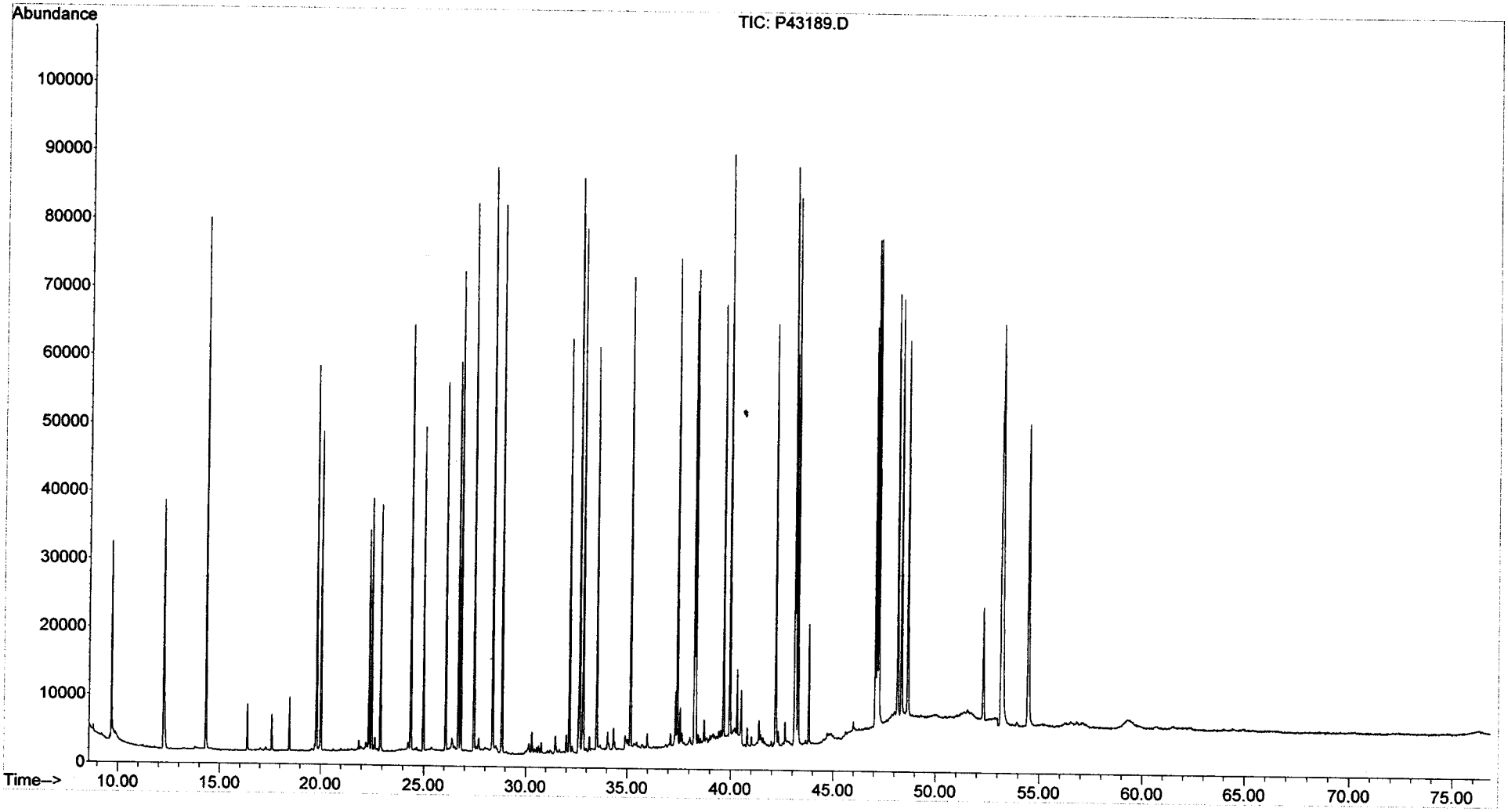
MG 1/13/06

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.69	164	61987	500.00	ng/mL	-0.05
72) Chrysene-d12	43.16	240	109280	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.36	152	65106	553.63	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 55.36%			
58) Pyrene-d10	38.24	212	139487	477.12	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 47.71%#			
81) Benzo[b]fluoranthene-d12	47.06	264	112420	491.14	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.11%#			
125) 5B(H)Cholane - Surr	43.80	217	24821	501.74	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 50.17%			
Target Compounds						Qvalue
2) Decalin	16.38	138	24950m	451.63	ng/mL	
3) trans-Decalin	16.38	138	13656	222.78	ng/mL	100
4) cis-Decalin	17.59	138	10686	225.50	ng/mL	100
9) Naphthalene	19.79	128	124912	518.84	ng/mL#	100
15) 2-Methylnaphthalene	22.49	142	83458	544.17	ng/mL#	100
16) 1-Methylnaphthalene	22.91	142	78876	510.51	ng/mL#	100
17) Benzothiophene	20.01	134	104152	508.18	ng/mL	100
22) Biphenyl	24.37	154	102088	555.61	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.97	156	72838	547.72	ng/mL#	100
24) Dibenzofuran	27.45	168	111642	519.35	ng/mL	99
25) Acenaphthylene	26.07	152	124072	460.52	ng/mL#	100
26) Acenaphthene	26.81	153	77663	470.51	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.37	170	67245	494.16	ng/mL	100
28) Fluorene	28.83	166	88521	500.61	ng/mL	99
32) Dibenzothiophene	32.15	184	122625	467.79	ng/mL	99
41) Phenanthrene	32.65	178	131730	446.74	ng/mL	100
52) Retene	39.65	234	36735	486.08	ng/mL	99
53) Anthracene	32.83	178	122917	456.53	ng/mL	100
54) Carbazole	33.49	167	113707	532.87	ng/mL	100
55) 1-Methylphenanthrene	35.15	192	95816	492.42	ng/mL	100
56) Fluoranthene	37.42	202	142284	468.12	ng/mL	100
57) Benzo(b)fluorene	39.95	216	90521	508.46	ng/mL	100
59) Pyrene	38.31	202	141810	449.73	ng/mL	99
64) Naphthobenzothiophene	42.16	234	131966	460.31	ng/ml	98
65) Naphthobenzothiophene-2,1-	42.16	234	131966	460.31	ng/mL	98
73) Benz[a]anthracene	43.09	228	135889	522.81	ng/mL	99
74) Chrysene	43.25	228	130303	493.97	ng/mL	99
75) Chrysene/Triphenylene	43.25	228	130303	493.97	ng/mL	99
82) Benzo[b]fluoranthene	47.15	252	138647	513.27	ng/mL	99
83) Benzo[k]fluoranthene	47.23	252	143503	470.95	ng/mL	99
85) Benzo[e]pyrene	48.15	252	128056	470.39	ng/mL	100
86) Benzo[a]pyrene	48.34	252	129841	494.81	ng/mL	99
87) Perylene	48.65	252	125891	484.47	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.16	276	125054m	513.11	ng/mL	
89) Dibenz[a,h]anthracene	53.24	278	131995	524.21	ng/mL	99
90) Benzo[g,h,i]perylene	54.47	276	134261	483.43	ng/mL	100
91) 17a(H),21B(H)-hopane - C30	52.31	191	40617	386.15	ng/mL	100
92) Hopane (T19)	52.31	191	40617	386.15	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43189.D
Acq On : 12 Jan 2006 5:01 pm
Operator : AC
Sample : C4011201
Misc : PAH STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 13 07:34:38 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43193.D
Acq On : 12 Jan 2006 10:55 pm
Operator : AC
Sample : C4011202
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 07:44:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

MG 1-13-06

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Acenaphthene-d10	1.000	1.000	0.0	95	-0.05
2	t	Decalin	0.446	0.381	14.6	88	-0.04
3	A1	trans-Decalin	0.494	0.428	13.4	89	-0.04
4	t	cis-Decalin	0.382	0.332	13.1	89	-0.04
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	1.963	-1.1	94	-0.04
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	1.033	-8.9	97	-0.04
15	t	2-Methylnaphthalene	1.237	1.330	-7.5	96	-0.04
16	t	1-Methylnaphthalene	1.246	1.256	-0.8	95	-0.04
17	A1	Benzothiophene	1.653	1.641	0.7	94	-0.04
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	1.633	-10.2	97	-0.04
23	t	2,6-Dimethylnaphthalene	1.073	1.154	-7.5	98	-0.04
24	t	Dibenzofuran	1.734	1.807	-4.2	93	-0.05
25	t	Acenaphthylene	2.173	2.028	6.7	96	-0.04
26	t	Acenaphthene	1.331	1.254	5.8	92	-0.05
27	t	2,3,5-Trimethylnaphthalene	1.098	1.083	1.4	96	-0.04
28	A1	Fluorene	1.426	1.422	0.3	94	-0.04
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	91	-0.04
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	2.126	10.6	92	-0.05
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\JAN12\
Data File : P43193.D
Acq On : 12 Jan 2006 10:55 pm
Operator : AC
Sample : C4011202
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 07:44:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	A2	C4-Phenanthrenes/Anthracene	2.378	0.000#	100.0#	0#	-40.97#
52	t	Retene	0.610	0.587	3.8	98	-0.05
53	t	Anthracene	2.172	1.993	8.2	92	-0.05
54	t	Carbazole	1.721	1.826	-6.1	99	-0.05
55	t	1-Methylphenanthrene	1.570	1.541	1.8	97	-0.05
56	A1	Fluoranthene	2.452	2.325	5.2	95	-0.05
57	t	Benzo(b)fluorene	1.436	1.459	-1.6	100	-0.05
58	s	Pyrene-d10	2.358	2.278	3.4	94	-0.05
59	A1	Pyrene	2.543	2.312	9.1	89	-0.05
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	2.092	9.5	90	-0.05
65	A2	Naphthobenzothiophene-2,1-D	2.312	2.092	9.5	90	-0.05
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	-0.04
73	t	Benz[a]anthracene	1.189	1.258	-5.8	93	-0.05
74	A1	Chrysene	1.207	1.178	2.4	83	-0.05
75	A2	Chrysene/Triphenylene	1.207	1.178	2.4	83	-0.05
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	0.842	19.6	69	-0.04
82	t	Benzo[b]fluoranthene	1.236	1.066	13.8	72	-0.04
83	A1	Benzo[k]fluoranthene	1.394	1.106	20.7	69	-0.04
84	A2	Benzo[a]fluoranthene	1.394	0.000#	100.0#	0#	-47.56#
85	t	Benzo[e]pyrene	1.246	0.976	21.7	69	-0.05
86	t	Benzo[a]pyrene	1.201	1.011	15.8	71	-0.04
87	t	Perylene	1.189	0.976	17.9	71	-0.05
88	t	Indeno[1,2,3-cd]pyrene	1.115	0.959	14.0	78	-0.06
89	t	Dibenz[a,h]anthracene	1.152	0.984	14.6	71	-0.06
90	t	Benzo[g,h,i]perylene	1.271	0.992	22.0	68	-0.06
91	A1	17a(H),21B(H)-hopane - C30H	0.481	0.299	37.8#	52	-0.06
92	A2	Hopane (T19)	0.481	0.299	37.8#	52	-0.06
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#

non target OK not needed for the sample
MS 1-13-06

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43193.D
Acq On : 12 Jan 2006 10:55 pm
Operator : AC
Sample : C4011202
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 07:44:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	C28 Tricyclic Terpane-22R (	0.481	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	0.219	3.1	87	-0.05
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\JAN12\
Data File : P43193.D
Acq On : 12 Jan 2006 10:55 pm
Operator : AC
Sample : C4011202
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 07:44:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration

MS 1-13-06

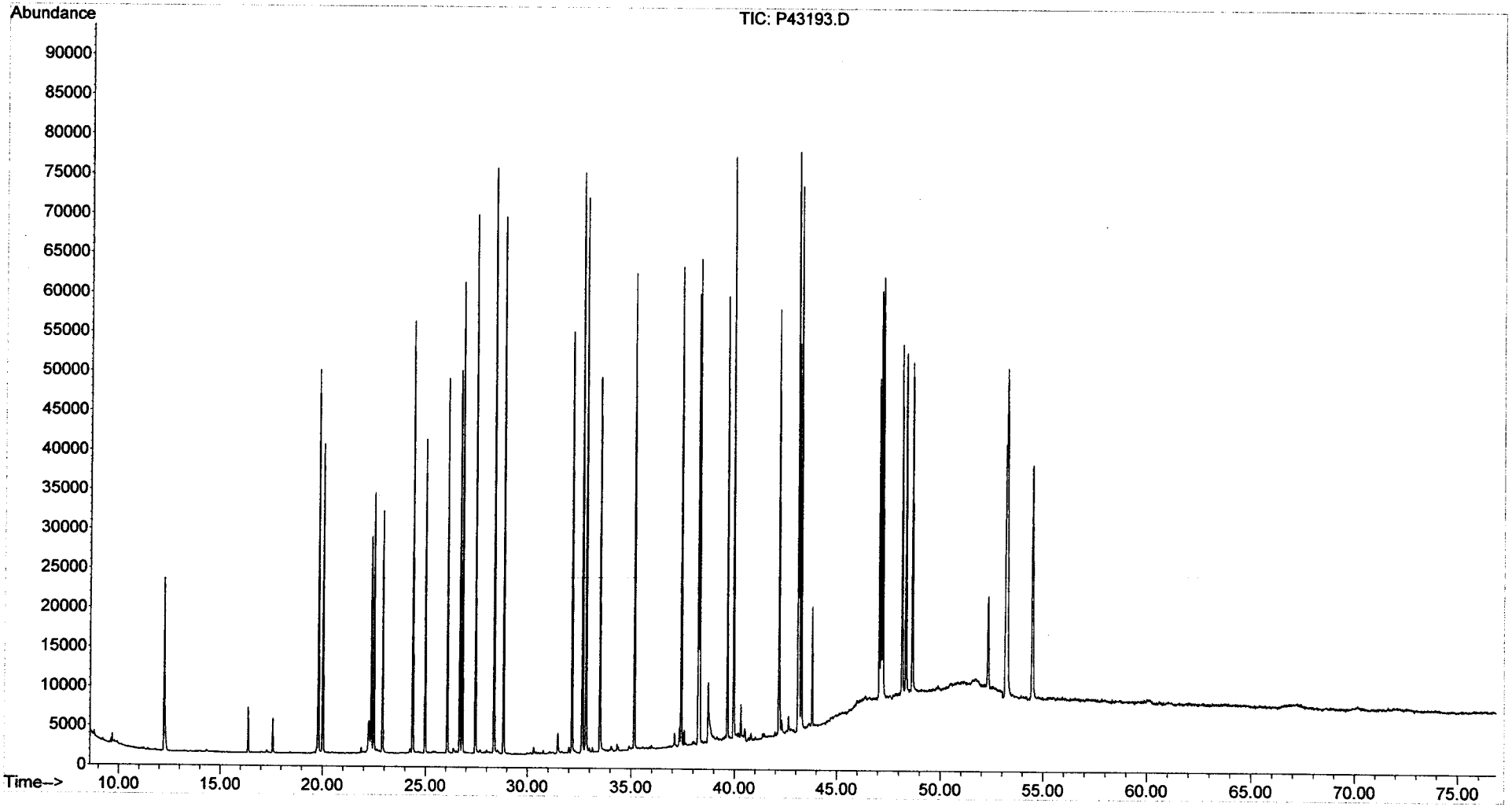
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	26.69	164	55046	500.00	ng/mL	-0.05
72) Chrysene-d12	43.16	240	92404	500.00	ng/mL	-0.04
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	22.36	152	56885	544.71	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 54.47%			
58) Pyrene-d10	38.24	212	125420	483.09	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.31%#			
81) Benzo[b]fluoranthene-d12	47.06	264	77787	401.90	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 40.19%#			
125) 5B(H)Cholane - Surr	43.79	217	20275	484.70	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.47%#			

Target Compounds						Qvalue
2) Decalin	16.38	138	20980m	427.65	ng/mL	
3) trans-Decalin	16.38	138	11771	216.24	ng/mL	100
4) cis-Decalin	17.59	138	9132	217.01	ng/mL	100
9) Naphthalene	19.79	128	108078	505.52	ng/mL#	100
15) 2-Methylnaphthalene	22.49	142	73205	537.51	ng/mL#	100
16) 1-Methylnaphthalene	22.91	142	69139	503.92	ng/mL#	100
17) Benzothiophene	20.01	134	90336	496.35	ng/mL	100
22) Biphenyl	24.37	154	89887	550.89	ng/mL#	100
23) 2,6-Dimethylnaphthalene	24.98	156	63527	537.94	ng/mL#	100
24) Dibenzofuran	27.45	168	99456	521.00	ng/mL	100
25) Acenaphthylene	26.07	152	111634	466.61	ng/mL#	100
26) Acenaphthene	26.81	153	69036	470.99	ng/mL	100
27) 2,3,5-Trimethylnaphthalene	28.37	170	59591	493.14	ng/mL	99
28) Fluorene	28.83	166	78251	498.33	ng/mL	99
32) Dibenzothiophene	32.15	184	110032	472.68	ng/mL	100
41) Phenanthrene	32.65	178	117050	447.01	ng/mL	100
52) Retene	39.64	234	32333	481.78	ng/mL	99
53) Anthracene	32.83	178	109690	458.77	ng/mL	100
54) Carbazole	33.49	167	100504	530.38	ng/mL	100
55) 1-Methylphenanthrene	35.15	192	84803	490.78	ng/mL	100
56) Fluoranthene	37.42	202	127972	474.12	ng/mL	99
57) Benzo(b)fluorene	39.95	216	80322	508.06	ng/mL	100
59) Pyrene	38.31	202	127241	454.40	ng/mL	99
64) Naphthobenzothiophene	42.16	234	115138	452.26	ng/ml	97
65) Naphthobenzothiophene-2,1-	42.16	234	115138	452.26	ng/mL	97
73) Benz[a]anthracene	43.09	228	116266	529.01	ng/mL	100
74) Chrysene	43.25	228	108825	487.89	ng/mL	100
75) Chrysene/Triphenylene	43.25	228	108825	487.89	ng/mL	100
82) Benzo[b]fluoranthene	47.15	252	98510	431.29	ng/mL	100
83) Benzo[k]fluoranthene	47.23	252	102177	396.56	ng/mL	99
85) Benzo[e]pyrene	48.15	252	90191	391.81	ng/mL	99
86) Benzo[a]pyrene	48.34	252	93413	421.00	ng/mL	99
87) Perylene	48.65	252	90148	410.28	ng/mL	99
88) Indeno[1,2,3-cd]pyrene	53.16	276	88647m	430.16	ng/mL	
89) Dibenz[a,h]anthracene	53.23	278	90903	426.95	ng/mL	98
90) Benzo[g,h,i]perylene	54.47	276	91623	390.16	ng/mL	98
91) 17a(H),21B(H)-hopane - C30	52.31	191	27642	310.79	ng/mL	96
92) Hopane (T19)	52.31	191	27642	310.79	ng/mL	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH4\JANUARY\JAN12\
Data File : P43193.D
Acq On : 12 Jan 2006 10:55 pm
Operator : AC
Sample : C4011202
Misc : PAH STD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 07:44:08 2006
Quant Method : O:\FORENSICS\METHODS\PAH4\DEC05\PAH41217.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Jan 09 09:39:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34704.D
Acq On : 6 Jan 2006 5:01 pm
Operator : AC
Sample : C3010602A
Misc : ALK STD
ALS Vial : 13 Sample Multiplier: 1

1/7/06.

Quant Time: Jan 07 09:16:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

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

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34704.D
Acq On : 6 Jan 2006 5:01 pm
Operator : AC
Sample : C3010602A
Misc : ALK STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 07 09:16:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	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	128	0.03
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	0.506	0.616	-21.7	144	0.02
84	A2	Hopane (T19)	0.506	0.616	-21.7	144	0.02
85	A2	C23 Tricyclic Terpane (T4)	0.506	0.000#	100.0#	0#	-47.43#
86	A2	C24 Tricyclic Terpane (T5)	0.506	0.000#	100.0#	0#	-48.30#
87	A2	C25 Tricyclic Terpane (T6)	0.506	0.000#	100.0#	0#	-50.09#
88	A2	C24 Tetracyclic Terpane (T6	0.506	0.000#	100.0#	0#	-51.62#
89	A2	C26 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-51.37#
90	A2	C26 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-51.48#
91	A2	C28 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-54.23#
92	A2	C28 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-54.43#
93	A2	C29 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-55.04#
94	A2	C29 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-55.28#
95	A2	18a-22,29,30-Trisnorneohopa	0.506	0.000#	100.0#	0#	-56.45#
96	A2	C30 Tricyclic Terpane-22S	0.506	0.000#	100.0#	0#	-56.63#
97	A2	C30 Tricyclic Terpane-22R	0.506	0.000#	100.0#	0#	-56.89#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.506	0.000#	100.0#	0#	-57.04#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.506	0.000#	100.0#	0#	-58.35#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34704.D
Acq On : 6 Jan 2006 5:01 pm
Operator : AC
Sample : C3010602A
Misc : ALK STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 07 09:16:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.506	0.000#	100.0#	0#	-58.19#
101	A2	30-Norhopane (T15)	0.506	0.000#	100.0#	0#	-59.06#
102	A2	18a(H)-30-Norneohopane-C29T	0.506	0.000#	100.0#	0#	-59.17#
103	A2	17a(H)-Diahopane (X)	0.506	0.000#	100.0#	0#	-59.33#
104	A2	30-Normoretane (T17)	0.506	0.000#	100.0#	0#	-59.90#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.506	0.000#	100.0#	0#	-60.35#
106	A2	Moretane (T20)	0.506	0.000#	100.0#	0#	-61.25#
107	A2	30-Homohopane-22S (T21)	0.506	0.000#	100.0#	0#	-62.41#
108	A2	30-Homohopane-22R (T22)	0.506	0.000#	100.0#	0#	-62.67#
109	A2	30,31-Bishomohopane-22S (T2	0.506	0.000#	100.0#	0#	-64.07#
110	A2	30,31-Bishomohopane-22R (T2	0.506	0.000#	100.0#	0#	-64.47#
111	A2	30,31-Trishomohopane-22S (T	0.506	0.000#	100.0#	0#	-66.31#
112	A2	30,31-Trishomohopane-22R (T	0.506	0.000#	100.0#	0#	-66.95#
113	A2	Tetrakishomohopane-22S (T32	0.506	0.000#	100.0#	0#	-69.07#
114	A2	Tetrakishomohopane-22R (T33	0.506	0.000#	100.0#	0#	-70.01#
115	A2	Pentakishomohopane-22S (T34	0.506	0.000#	100.0#	0#	-72.33#
116	A2	Pentakishomohopane-22R (T35	0.506	0.000#	100.0#	0#	-73.68#
117	SA1	5B(H)Cholane - Surr	0.232	0.226	2.6	128	0.02
118	A2	13b(H),17a(H)-20S-Diacholes	0.232	0.000#	100.0#	0#	-52.82#
119	A2	13b(H),17a(H)-20R-Diacholes	0.232	0.000#	100.0#	0#	-53.33#
120	A2	13b,17a-20S-Methyldiacholes	0.232	0.000#	100.0#	0#	-54.17#
121	A2	14a(H),17a(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.20#
122	A2	14a(H),17a(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.78#
123	A2	13b,17a-20R-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.09#
124	A2	13a,17b-20S-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.37#
125	A2	14a,17a-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.56#
126	A2	14a,17a-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-57.31#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-57.71#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-58.68#
129	A2	14b(H),17b(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.29#
130	A2	14b(H),17b(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.39#
131	A2	14b,17b-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-56.72#
132	A2	14b,17b-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.81#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-57.96#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-58.01#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34704.D
Acq On : 6 Jan 2006 5:01 pm
Operator : AC
Sample : C3010602A
Misc : ALK STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 07 09:16:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

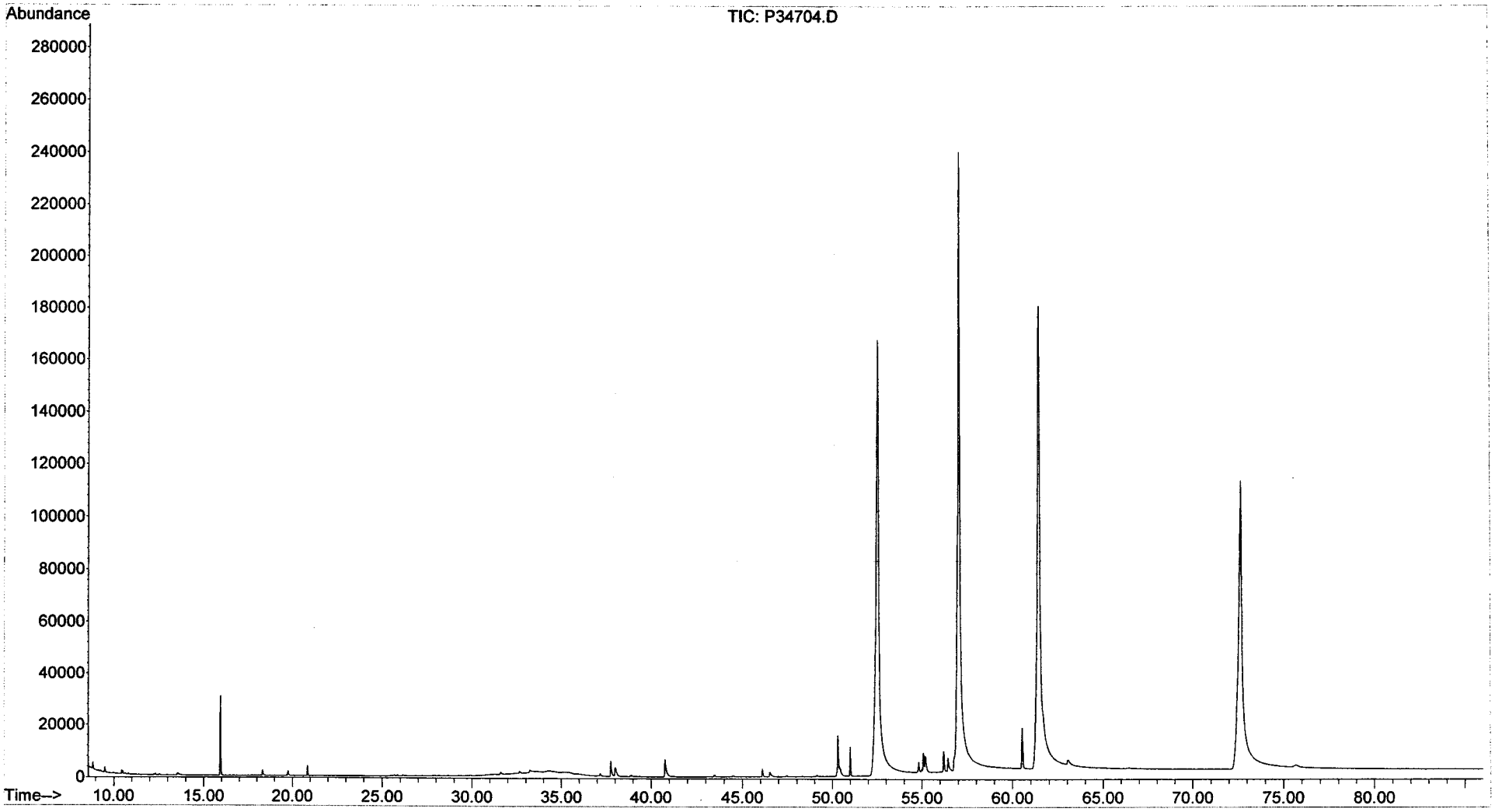
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.31	240	69240	500.00	ng/mL	0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	51.00	217	15615	486.64	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 48.66%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	42628	608.16	ng/mL	99
84) Hopane (T19)	60.53	191	42628	608.16	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : P34704.D
Acq On : 6 Jan 2006 5:01 pm
Operator : AC
Sample : C3010602A
Misc : ALK STD
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 07 09:16:12 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : p34715.D
Acq On : 7 Jan 2006 12:52 pm
Operator : AC
Sample : C3010603
Misc : STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 09 07:48:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 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#	-18.29#
3	A1	trans-Decalin	0.000	0.000#	0.0	0#	-18.29#
4	t	cis-Decalin	0.000	0.000#	0.0	0#	-19.72#
5	A2	C1-Decalins	0.000	0.000#	0.0	0#	-19.82#
6	A2	C2-Decalins	0.000	0.000#	0.0	0#	-21.94#
7	A2	C3-Decalins	0.000	0.000#	0.0	0#	-24.86#
8	A2	C4-Decalins	0.000	0.000#	0.0	0#	-28.16#
9	A1	Naphthalene	0.000	0.000#	0.0	0#	-22.05#
10	A2	C1-Naphthalenes	0.000	0.000#	0.0	0#	-25.27#
11	A2	C2-Naphthalenes	0.000	0.000#	0.0	0#	-28.76#
12	A2	C3-Naphthalenes	0.000	0.000#	0.0	0#	-32.90#
13	A2	C4-Naphthalenes	0.000	0.000#	0.0	0#	-36.23#
14	s	2-Methylnaphthalene-d10	0.000	0.000#	0.0	0#	-25.12#
15	t	2-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.25#
16	t	1-Methylnaphthalene	0.000	0.000#	0.0	0#	-25.76#
17	A1	Benzothiophene	0.000	0.000#	0.0	0#	-22.31#
18	A2	C1-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-24.80#
19	A2	C2-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-28.88#
20	A2	C3-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-31.66#
21	A2	C4-Benzo(b)thiophenes	0.000	0.000#	0.0	0#	-33.76#
22	t	Biphenyl	0.000	0.000#	0.0	0#	-27.52#
23	t	2,6-Dimethylnaphthalene	0.000	0.000#	0.0	0#	-28.23#
24	t	Dibenzofuran	0.000	0.000#	0.0	0#	-31.16#
25	t	Acenaphthylene	0.000	0.000#	0.0	0#	-29.50#
26	t	Acenaphthene	0.000	0.000#	0.0	0#	-30.39#
27	t	2,3,5-Trimethylnaphthalene	0.000	0.000#	0.0	0#	-32.26#
28	A1	Fluorene	0.000	0.000#	0.0	0#	-32.78#
29	A2	C1-Fluorenes	0.000	0.000#	0.0	0#	-35.62#
30	A2	C2-Fluorenes	0.000	0.000#	0.0	0#	-38.24#
31	A2	C3-Fluorenes	0.000	0.000#	0.0	0#	-40.44#
32	A1	Dibenzothiophene	0.000	0.000#	0.0	0#	-36.72#
33	A2	OTP	0.000	0.000#	0.0	0#	-39.42#
34	A2	C1-Dibenzothiophenes	0.000	0.000#	0.0	0#	-38.85#
35	A2	C2-Dibenzothiophenes	0.000	0.000#	0.0	0#	-41.30#
36	A2	C3-Dibenzothiophenes	0.000	0.000#	0.0	0#	-43.04#
37	A2	C4-Dibenzothiophenes	0.000	0.000#	0.0	0#	-45.74#
38	A1	Phenanthrene	0.000	0.000#	0.0	0#	-37.32#
39	A2	C1-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-40.33#
40	A2	C2-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-42.64#
41	A2	5AA IS BKGD	0.000	0.000#	0.0	0#	-42.12#
42	A2	C3-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-46.07#
43	A2	C4-Phenanthrenes/Anthracene	0.000	0.000#	0.0	0#	-45.69#
44	A2	Retene	0.000	0.000#	0.0	0#	-45.69#
45	t	Anthracene	0.000	0.000#	0.0	0#	-37.53#
46	t	Carbazole	0.000	0.000#	0.0	0#	-50.34#
47	t	1-Methylphenanthrene	0.000	0.000#	0.0	0#	-40.30#
48	A1	Fluoranthene	0.000	0.000#	0.0	0#	-42.99#
49	A2	Benzo(b)fluorene	0.000	0.000#	0.0	0#	-46.01#
50	s	Pyrene-d10	0.000	0.000#	0.0	0#	-43.94#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : p34715.D
Acq On : 7 Jan 2006 12:52 pm
Operator : AC
Sample : C3010603
Misc : STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 09 07:48:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	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	141	0.02
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	0.506	0.581	-14.8	151	0.02
84	A2	Hopane (T19)	0.506	0.581	-14.8	151	0.02
85	A2	C23 Tricyclic Terpane (T4)	0.506	0.000#	100.0#	0#	-47.43#
86	A2	C24 Tricyclic Terpane (T5)	0.506	0.000#	100.0#	0#	-48.30#
87	A2	C25 Tricyclic Terpane (T6)	0.506	0.000#	100.0#	0#	-50.09#
88	A2	C24 Tetracyclic Terpane (T6	0.506	0.000#	100.0#	0#	-51.62#
89	A2	C26 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-51.37#
90	A2	C26 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-51.48#
91	A2	C28 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-54.23#
92	A2	C28 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-54.43#
93	A2	C29 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-55.04#
94	A2	C29 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-55.28#
95	A2	18a-22,29,30-Trisnorneohopa	0.506	0.000#	100.0#	0#	-56.45#
96	A2	C30 Tricyclic Terpane-22S	0.506	0.000#	100.0#	0#	-56.63#
97	A2	C30 Tricyclic Terpane-22R	0.506	0.000#	100.0#	0#	-56.89#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.506	0.000#	100.0#	0#	-57.04#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.506	0.000#	100.0#	0#	-58.35#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : p34715.D
Acq On : 7 Jan 2006 12:52 pm
Operator : AC
Sample : C3010603
Misc : STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 09 07:48:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.506	0.000#	100.0#	0#	-58.19#
101	A2	30-Norhopane (T15)	0.506	0.000#	100.0#	0#	-59.06#
102	A2	18a(H)-30-Norneohopane-C29T	0.506	0.000#	100.0#	0#	-59.17#
103	A2	17a(H)-Diahopane (X)	0.506	0.000#	100.0#	0#	-59.33#
104	A2	30-Normoretane (T17)	0.506	0.000#	100.0#	0#	-59.90#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.506	0.000#	100.0#	0#	-60.35#
106	A2	Moretane (T20)	0.506	0.000#	100.0#	0#	-61.25#
107	A2	30-Homohopane-22S (T21)	0.506	0.000#	100.0#	0#	-62.41#
108	A2	30-Homohopane-22R (T22)	0.506	0.000#	100.0#	0#	-62.67#
109	A2	30,31-Bishomohopane-22S (T2	0.506	0.000#	100.0#	0#	-64.07#
110	A2	30,31-Bishomohopane-22R (T2	0.506	0.000#	100.0#	0#	-64.47#
111	A2	30,31-Trishomohopane-22S (T	0.506	0.000#	100.0#	0#	-66.31#
112	A2	30,31-Trishomohopane-22R (T	0.506	0.000#	100.0#	0#	-66.95#
113	A2	Tetrakishomohopane-22S (T32	0.506	0.000#	100.0#	0#	-69.07#
114	A2	Tetrakishomohopane-22R (T33	0.506	0.000#	100.0#	0#	-70.01#
115	A2	Pentakishomohopane-22S (T34	0.506	0.000#	100.0#	0#	-72.33#
116	A2	Pentakishomohopane-22R (T35	0.506	0.000#	100.0#	0#	-73.68#
117	SA1	5B(H)Cholane - Surr	0.232	0.239	-3.0	150	0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.232	0.000#	100.0#	0#	-52.82#
119	A2	13b(H),17a(H)-20R-Diacholes	0.232	0.000#	100.0#	0#	-53.33#
120	A2	13b,17a-20S-Methyldiacholes	0.232	0.000#	100.0#	0#	-54.17#
121	A2	14a(H),17a(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.20#
122	A2	14a(H),17a(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.78#
123	A2	13b,17a-20R-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.09#
124	A2	13a,17b-20S-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.37#
125	A2	14a,17a-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.56#
126	A2	14a,17a-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-57.31#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-57.71#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-58.68#
129	A2	14b(H),17b(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.29#
130	A2	14b(H),17b(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.39#
131	A2	14b,17b-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-56.72#
132	A2	14b,17b-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.81#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-57.96#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-58.01#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : p34715.D
Acq On : 7 Jan 2006 12:52 pm
Operator : AC
Sample : C3010603
Misc : STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 09 07:48:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS 1/9/06

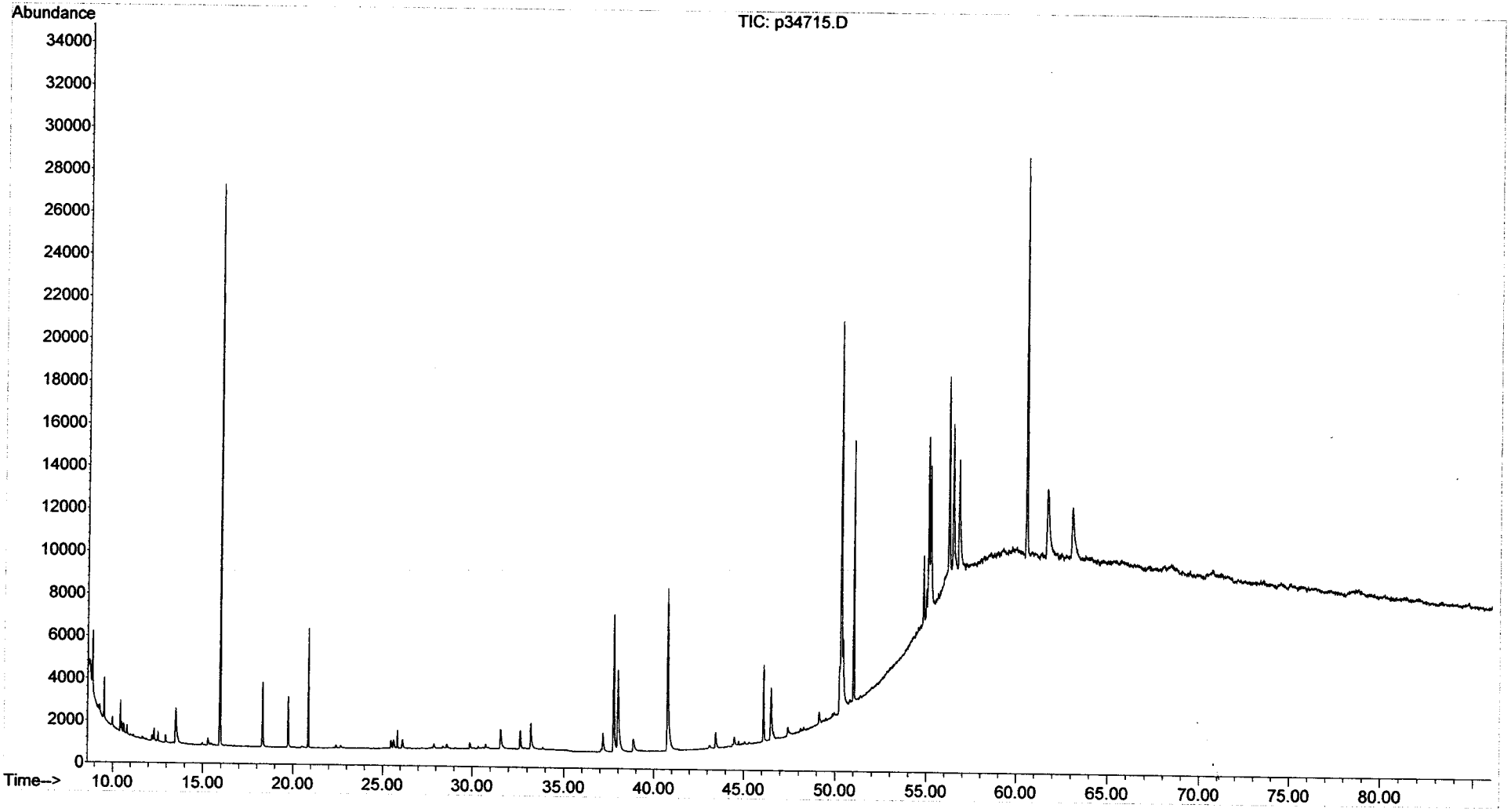
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.30	240	76561	500.00	ng/mL	0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	50.99	217	18319	516.32	ng/ml	0.01
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	51.63%	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.53	191	44460	573.65	ng/mL	99
84) Hopane (T19)	60.53	191	44460	573.65	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN05\
Data File : p34715.D
Acq On : 7 Jan 2006 12:52 pm
Operator : AC
Sample : C3010603
Misc : STD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 09 07:48:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34751.D
Acq On : 9 Jan 2006 11:51 am
Operator : AC
Sample : C3010901
Misc : ALK STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 16:09:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS for AC 1-10-06

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

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

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34751.D
Acq On : 9 Jan 2006 11:51 am
Operator : AC
Sample : C3010901
Misc : ALK STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 16:09:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	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	141	0.03
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	0.506	0.532	-5.1	137	0.01
84	A2	Hopane (T19)	0.506	0.532	-5.1	137	0.01
85	A2	C23 Tricyclic Terpane (T4)	0.506	0.000#	100.0#	0#	-47.43#
86	A2	C24 Tricyclic Terpane (T5)	0.506	0.000#	100.0#	0#	-48.30#
87	A2	C25 Tricyclic Terpane (T6)	0.506	0.000#	100.0#	0#	-50.09#
88	A2	C24 Tetracyclic Terpane (T6	0.506	0.000#	100.0#	0#	-51.62#
89	A2	C26 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-51.37#
90	A2	C26 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-51.48#
91	A2	C28 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-54.23#
92	A2	C28 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-54.43#
93	A2	C29 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-55.04#
94	A2	C29 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-55.28#
95	A2	18a-22,29,30-Trisnorneohopa	0.506	0.000#	100.0#	0#	-56.45#
96	A2	C30 Tricyclic Terpane-22S	0.506	0.000#	100.0#	0#	-56.63#
97	A2	C30 Tricyclic Terpane-22R	0.506	0.000#	100.0#	0#	-56.89#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.506	0.000#	100.0#	0#	-57.04#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.506	0.000#	100.0#	0#	-58.35#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34751.D
Acq On : 9 Jan 2006 11:51 am
Operator : AC
Sample : C3010901
Misc : ALK STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 16:09:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.506	0.000#	100.0#	0#	-58.19#
101	A2	30-Norhopane (T15)	0.506	0.000#	100.0#	0#	-59.06#
102	A2	18a(H)-30-Norneohopane-C29T	0.506	0.000#	100.0#	0#	-59.17#
103	A2	17a(H)-Diahopane (X)	0.506	0.000#	100.0#	0#	-59.33#
104	A2	30-Normoretane (T17)	0.506	0.000#	100.0#	0#	-59.90#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.506	0.000#	100.0#	0#	-60.35#
106	A2	Moretane (T20)	0.506	0.000#	100.0#	0#	-61.25#
107	A2	30-Homohopane-22S (T21)	0.506	0.000#	100.0#	0#	-62.41#
108	A2	30-Homohopane-22R (T22)	0.506	0.000#	100.0#	0#	-62.67#
109	A2	30,31-Bishomohopane-22S (T2	0.506	0.000#	100.0#	0#	-64.07#
110	A2	30,31-Bishomohopane-22R (T2	0.506	0.000#	100.0#	0#	-64.47#
111	A2	30,31-Trishomohopane-22S (T	0.506	0.000#	100.0#	0#	-66.31#
112	A2	30,31-Trishomohopane-22R (T	0.506	0.000#	100.0#	0#	-66.95#
113	A2	Tetrakishomohopane-22S (T32	0.506	0.000#	100.0#	0#	-69.07#
114	A2	Tetrakishomohopane-22R (T33	0.506	0.000#	100.0#	0#	-70.01#
115	A2	Pentakishomohopane-22S (T34	0.506	0.000#	100.0#	0#	-72.33#
116	A2	Pentakishomohopane-22R (T35	0.506	0.000#	100.0#	0#	-73.68#
117	SA1	5B(H)Cholane - Surr	0.232	0.228	1.7	142	0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.232	0.000#	100.0#	0#	-52.82#
119	A2	13b(H),17a(H)-20R-Diacholes	0.232	0.000#	100.0#	0#	-53.33#
120	A2	13b,17a-20S-Methyldiacholes	0.232	0.000#	100.0#	0#	-54.17#
121	A2	14a(H),17a(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.20#
122	A2	14a(H),17a(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.78#
123	A2	13b,17a-20R-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.09#
124	A2	13a,17b-20S-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.37#
125	A2	14a,17a-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.56#
126	A2	14a,17a-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-57.31#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-57.71#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-58.68#
129	A2	14b(H),17b(H)-20R-Cholestan	0.232	0.007#	~~97.0#~~	~~5#~~	~~-0.31~~
130	A2	14b(H),17b(H)-20S-Cholestan	0.232	0.006#	~~97.4#~~	~~4#~~	~~-0.42~~ ND/NA
131	A2	14b,17b-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-56.72#
132	A2	14b,17b-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.81#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-57.96#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-58.01#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34751.D
Acq On : 9 Jan 2006 11:51 am
Operator : AC
Sample : C3010901
Misc : ALK STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 16:09:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

CMS for AC 1/10/06

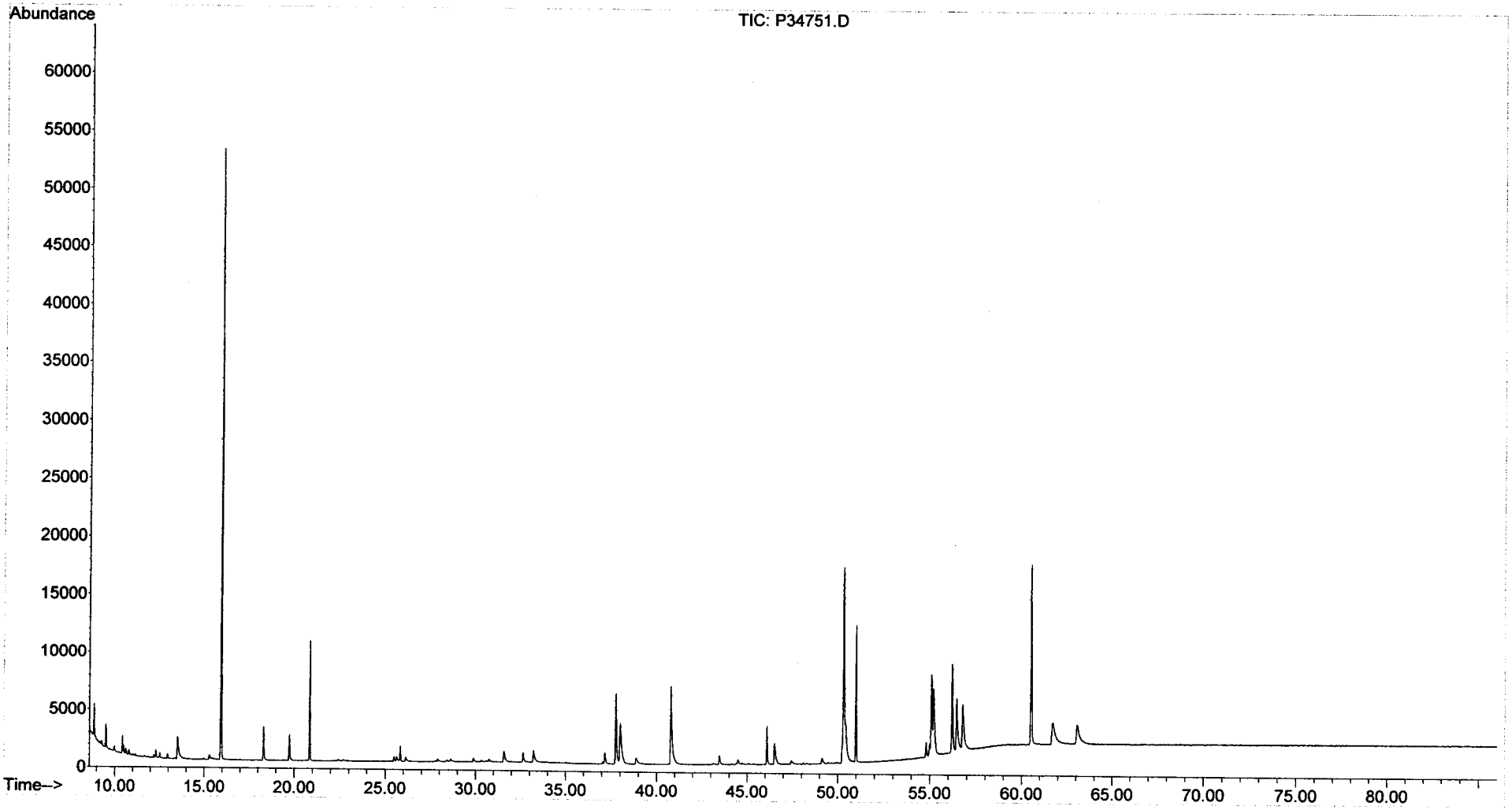
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.31	240	76326	500.00	ng/mL	0.03
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
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	50.99	217	17383	491.45	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.15%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.52	191	40581	525.21	ng/mL	100
84) Hopane (T19)	60.52	191	40581	525.21	ng/mL	100
129) 14b(H),17b(H)-20R-Cholesta	54.98	218	556	~~15.72~~	ng/ml	100
130) 14b(H),17b(H)-20S-Cholesta	54.98	218	480	~~13.57~~	ng/ml ND	100

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34751.D
Acq On : 9 Jan 2006 11:51 am
Operator : AC
Sample : C3010901
Misc : ALK STD
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 16:09:36 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34758.D
Acq On : 9 Jan 2006 11:39 pm
Operator : AC
Sample : C3010902
Misc : ALK STD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 10 06:40:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS 1-10-06

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

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

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34758.D
Acq On : 9 Jan 2006 11:39 pm
Operator : AC
Sample : C3010902
Misc : ALK STD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 10 06:40:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	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	94	0.05
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	0.506	0.483	4.5	83	0.00
84	A2	Hopane (T19)	0.506	0.483	4.5	83	0.00
85	A2	C23 Tricyclic Terpane (T4)	0.506	0.000#	100.0#	0#	-47.43#
86	A2	C24 Tricyclic Terpane (T5)	0.506	0.000#	100.0#	0#	-48.30#
87	A2	C25 Tricyclic Terpane (T6)	0.506	0.000#	100.0#	0#	-50.09#
88	A2	C24 Tetracyclic Terpane (T6	0.506	0.000#	100.0#	0#	-51.62#
89	A2	C26 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-51.37#
90	A2	C26 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-51.48#
91	A2	C28 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-54.23#
92	A2	C28 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-54.43#
93	A2	C29 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-55.04#
94	A2	C29 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-55.28#
95	A2	18a-22,29,30-Trisnorneohopa	0.506	0.000#	100.0#	0#	-56.45#
96	A2	C30 Tricyclic Terpane-22S	0.506	0.000#	100.0#	0#	-56.63#
97	A2	C30 Tricyclic Terpane-22R	0.506	0.000#	100.0#	0#	-56.89#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.506	0.000#	100.0#	0#	-57.04#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.506	0.000#	100.0#	0#	-58.35#

Evaluate Continuing Calibration Report

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34758.D
Acq On : 9 Jan 2006 11:39 pm
Operator : AC
Sample : C3010902
Misc : ALK STD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 10 06:40:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.506	0.000#	100.0#	0#	-58.19#
101	A2	30-Norhopane (T15)	0.506	0.000#	100.0#	0#	-59.06#
102	A2	18a(H)-30-Norneohopane-C29T	0.506	0.000#	100.0#	0#	-59.17#
103	A2	17a(H)-Diahopane (X)	0.506	0.000#	100.0#	0#	-59.33#
104	A2	30-Normoretane (T17)	0.506	0.000#	100.0#	0#	-59.90#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.506	0.000#	100.0#	0#	-60.35#
106	A2	Moretane (T20)	0.506	0.000#	100.0#	0#	-61.25#
107	A2	30-Homohopane-22S (T21)	0.506	0.000#	100.0#	0#	-62.41#
108	A2	30-Homohopane-22R (T22)	0.506	0.000#	100.0#	0#	-62.67#
109	A2	30,31-Bishomohopane-22S (T2	0.506	0.000#	100.0#	0#	-64.07#
110	A2	30,31-Bishomohopane-22R (T2	0.506	0.000#	100.0#	0#	-64.47#
111	A2	30,31-Trishomohopane-22S (T	0.506	0.000#	100.0#	0#	-66.31#
112	A2	30,31-Trishomohopane-22R (T	0.506	0.000#	100.0#	0#	-66.95#
113	A2	Tetrakishomohopane-22S (T32	0.506	0.000#	100.0#	0#	-69.07#
114	A2	Tetrakishomohopane-22R (T33	0.506	0.000#	100.0#	0#	-70.01#
115	A2	Pentakishomohopane-22S (T34	0.506	0.000#	100.0#	0#	-72.33#
116	A2	Pentakishomohopane-22R (T35	0.506	0.000#	100.0#	0#	-73.68#
117	SA1	5B(H)Cholane - Surr	0.232	0.230	0.9	96	0.01
118	A2	13b(H),17a(H)-20S-Diacholes	0.232	0.000#	100.0#	0#	-52.82#
119	A2	13b(H),17a(H)-20R-Diacholes	0.232	0.000#	100.0#	0#	-53.33#
120	A2	13b,17a-20S-Methyldiacholes	0.232	0.000#	100.0#	0#	-54.17#
121	A2	14a(H),17a(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.20#
122	A2	14a(H),17a(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.78#
123	A2	13b,17a-20R-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.09#
124	A2	13a,17b-20S-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.37#
125	A2	14a,17a-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.56#
126	A2	14a,17a-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-57.31#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-57.71#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-58.68#
129	A2	14b(H),17b(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.29#
130	A2	14b(H),17b(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.39#
131	A2	14b,17b-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-56.72#
132	A2	14b,17b-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.81#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-57.96#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-58.01#

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34758.D
Acq On : 9 Jan 2006 11:39 pm
Operator : AC
Sample : C3010902
Misc : ALK STD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 10 06:40:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MG 1/10/06

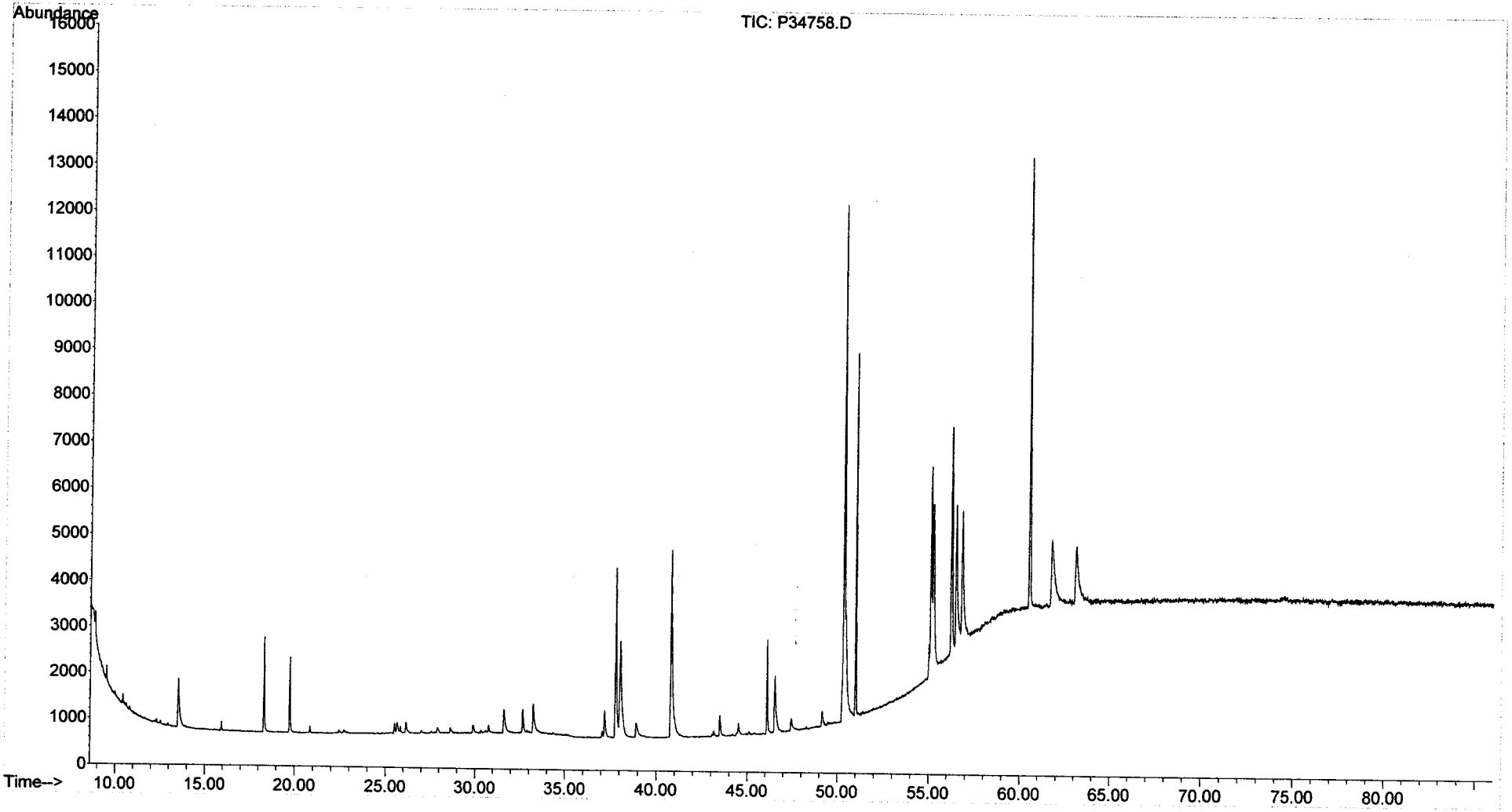
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.33	240	50904	500.00	ng/mL	0.05
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery = 0.00%#			
117) 5B(H)Cholane - Surr	50.99	217	11730	497.24	ng/ml	0.01
Spiked Amount 1000.000	Range 50 - 130		Recovery = 49.72%#			
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.51	191	24577	476.94	ng/mL	99
84) Hopane (T19)	60.51	191	24577	476.94	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\FORENSICS\DATA\PAH3\JANUARY06\JAN09\
Data File : P34758.D
Acq On : 9 Jan 2006 11:39 pm
Operator : AC
Sample : C3010902
Misc : ALK STD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 10 06:40:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34806.D
Acq On : 18 Jan 2006 6:09 pm
Operator : AC
Sample : C3011801
Misc : STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 06:13:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS 1/19/06

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

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34806.D
Acq On : 18 Jan 2006 6:09 pm
Operator : AC
Sample : C3011801
Misc : STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 06:13:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	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	129	-0.02
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	0.506	0.454	10.3	108	-0.07
84	A2	Hopane (T19)	0.506	0.454	10.3	108	-0.07
85	A2	C23 Tricyclic Terpane (T4)	0.506	0.000#	100.0#	0#	-47.43#
86	A2	C24 Tricyclic Terpane (T5)	0.506	0.000#	100.0#	0#	-48.30#
87	A2	C25 Tricyclic Terpane (T6)	0.506	0.000#	100.0#	0#	-50.09#
88	A2	C24 Tetracyclic Terpane (T6	0.506	0.000#	100.0#	0#	-51.62#
89	A2	C26 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-51.37#
90	A2	C26 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-51.48#
91	A2	C28 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-54.23#
92	A2	C28 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-54.43#
93	A2	C29 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-55.04#
94	A2	C29 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-55.28#
95	A2	18a-22,29,30-Trisnorneohopa	0.506	0.000#	100.0#	0#	-56.45#
96	A2	C30 Tricyclic Terpane-22S	0.506	0.000#	100.0#	0#	-56.63#
97	A2	C30 Tricyclic Terpane-22R	0.506	0.000#	100.0#	0#	-56.89#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.506	0.000#	100.0#	0#	-57.04#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.506	0.000#	100.0#	0#	-58.35#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34806.D
Acq On : 18 Jan 2006 6:09 pm
Operator : AC
Sample : C3011801
Misc : STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 06:13:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.506	0.000#	100.0#	0#	-58.19#
101	A2	30-Norhopane (T15)	0.506	0.000#	100.0#	0#	-59.06#
102	A2	18a(H)-30-Norneohopane-C29T	0.506	0.000#	100.0#	0#	-59.17#
103	A2	17a(H)-Diahopane (X)	0.506	0.000#	100.0#	0#	-59.33#
104	A2	30-Normoretane (T17)	0.506	0.000#	100.0#	0#	-59.90#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.506	0.000#	100.0#	0#	-60.35#
106	A2	Moretane (T20)	0.506	0.000#	100.0#	0#	-61.25#
107	A2	30-Homohopane-22S (T21)	0.506	0.000#	100.0#	0#	-62.41#
108	A2	30-Homohopane-22R (T22)	0.506	0.000#	100.0#	0#	-62.67#
109	A2	30,31-Bishomohopane-22S (T2	0.506	0.000#	100.0#	0#	-64.07#
110	A2	30,31-Bishomohopane-22R (T2	0.506	0.000#	100.0#	0#	-64.47#
111	A2	30,31-Trishomohopane-22S (T	0.506	0.000#	100.0#	0#	-66.31#
112	A2	30,31-Trishomohopane-22R (T	0.506	0.000#	100.0#	0#	-66.95#
113	A2	Tetrakishomohopane-22S (T32	0.506	0.000#	100.0#	0#	-69.07#
114	A2	Tetrakishomohopane-22R (T33	0.506	0.000#	100.0#	0#	-70.01#
115	A2	Pentakishomohopane-22S (T34	0.506	0.000#	100.0#	0#	-72.33#
116	A2	Pentakishomohopane-22R (T35	0.506	0.000#	100.0#	0#	-73.68#
117	SA1	5B(H)Cholane - Surr	0.232	0.216	6.9	124	-0.05
118	A2	13b(H),17a(H)-20S-Diacholes	0.232	0.000#	100.0#	0#	-52.82#
119	A2	13b(H),17a(H)-20R-Diacholes	0.232	0.000#	100.0#	0#	-53.33#
120	A2	13b,17a-20S-Methyldiacholes	0.232	0.000#	100.0#	0#	-54.17#
121	A2	14a(H),17a(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.20#
122	A2	14a(H),17a(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.78#
123	A2	13b,17a-20R-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.09#
124	A2	13a,17b-20S-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.37#
125	A2	14a,17a-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.56#
126	A2	14a,17a-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-57.31#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-57.71#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-58.68#
129	A2	14b(H),17b(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.29#
130	A2	14b(H),17b(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.39#
131	A2	14b,17b-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-56.72#
132	A2	14b,17b-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.81#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-57.96#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-58.01#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34806.D
Acq On : 18 Jan 2006 6:09 pm
Operator : AC
Sample : C3011801
Misc : STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 06:13:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

MS 1/19/06

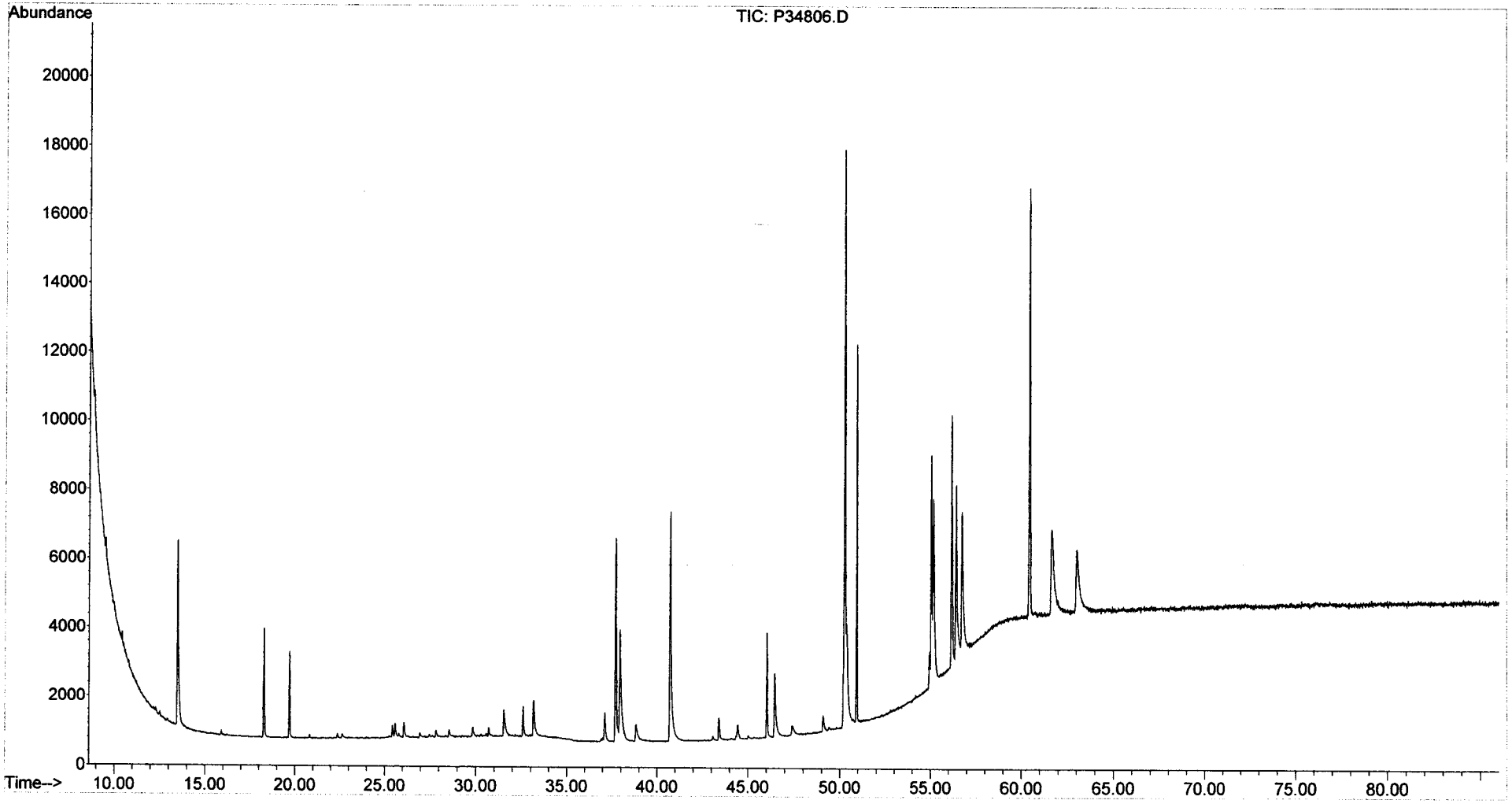
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.25	240	70055	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	50.93	217	15124	465.85	ng/ml	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery	=	46.59%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.44	191	31796	448.35	ng/mL	99
84) Hopane (T19)	60.44	191	31796	448.35	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34806.D
Acq On : 18 Jan 2006 6:09 pm
Operator : AC
Sample : C3011801
Misc : STD
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 06:13:46 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34808.D
Acq On : 18 Jan 2006 9:27 pm
Operator : AC
Sample : C3011802
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 06:15:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

CMS 1/19/06

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

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34808.D
Acq On : 18 Jan 2006 9:27 pm
Operator : AC
Sample : C3011802
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 06:15:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	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	132	-0.02
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	0.506	0.445	12.1	108	-0.07
84	A2	Hopane (T19)	0.506	0.445	12.1	108	-0.07
85	A2	C23 Tricyclic Terpane (T4)	0.506	0.000#	100.0#	0#	-47.43#
86	A2	C24 Tricyclic Terpane (T5)	0.506	0.000#	100.0#	0#	-48.30#
87	A2	C25 Tricyclic Terpane (T6)	0.506	0.000#	100.0#	0#	-50.09#
88	A2	C24 Tetracyclic Terpane (T6	0.506	0.000#	100.0#	0#	-51.62#
89	A2	C26 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-51.37#
90	A2	C26 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-51.48#
91	A2	C28 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-54.23#
92	A2	C28 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-54.43#
93	A2	C29 Tricyclic Terpane-22S (	0.506	0.000#	100.0#	0#	-55.04#
94	A2	C29 Tricyclic Terpane-22R (	0.506	0.000#	100.0#	0#	-55.28#
95	A2	18a-22,29,30-Trisnorneohopa	0.506	0.000#	100.0#	0#	-56.45#
96	A2	C30 Tricyclic Terpane-22S	0.506	0.000#	100.0#	0#	-56.63#
97	A2	C30 Tricyclic Terpane-22R	0.506	0.000#	100.0#	0#	-56.89#
98	A2	17a(H)-22,29,30-Trisnorhopa	0.506	0.000#	100.0#	0#	-57.04#
99	A2	17a/b,21b/a 28,30-Bisnorhop	0.506	0.000#	100.0#	0#	-58.35#

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34808.D
Acq On : 18 Jan 2006 9:27 pm
Operator : AC
Sample : C3011802
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 06:15:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
100	A2	17a(H),21b(H)-25-Norhopane	0.506	0.000#	100.0#	0#	-58.19#
101	A2	30-Norhopane (T15)	0.506	0.000#	100.0#	0#	-59.06#
102	A2	18a(H)-30-Norneohopane-C29T	0.506	0.000#	100.0#	0#	-59.17#
103	A2	17a(H)-Diahopane (X)	0.506	0.000#	100.0#	0#	-59.33#
104	A2	30-Normoretane (T17)	0.506	0.000#	100.0#	0#	-59.90#
105	A2	18a(H)&18b(H)-Oleananes (T1	0.506	0.000#	100.0#	0#	-60.35#
106	A2	Moretane (T20)	0.506	0.000#	100.0#	0#	-61.25#
107	A2	30-Homohopane-22S (T21)	0.506	0.000#	100.0#	0#	-62.41#
108	A2	30-Homohopane-22R (T22)	0.506	0.000#	100.0#	0#	-62.67#
109	A2	30,31-Bishomohopane-22S (T2	0.506	0.000#	100.0#	0#	-64.07#
110	A2	30,31-Bishomohopane-22R (T2	0.506	0.000#	100.0#	0#	-64.47#
111	A2	30,31-Trishomohopane-22S (T	0.506	0.000#	100.0#	0#	-66.31#
112	A2	30,31-Trishomohopane-22R (T	0.506	0.000#	100.0#	0#	-66.95#
113	A2	Tetrakishomohopane-22S (T32	0.506	0.000#	100.0#	0#	-69.07#
114	A2	Tetrakishomohopane-22R (T33	0.506	0.000#	100.0#	0#	-70.01#
115	A2	Pentakishomohopane-22S (T34	0.506	0.000#	100.0#	0#	-72.33#
116	A2	Pentakishomohopane-22R (T35	0.506	0.000#	100.0#	0#	-73.68#
117	SA1	5B(H)Cholane - Surr	0.232	0.214	7.8	125	-0.05
118	A2	13b(H),17a(H)-20S-Diacholes	0.232	0.000#	100.0#	0#	-52.82#
119	A2	13b(H),17a(H)-20R-Diacholes	0.232	0.000#	100.0#	0#	-53.33#
120	A2	13b,17a-20S-Methyldiacholes	0.232	0.000#	100.0#	0#	-54.17#
121	A2	14a(H),17a(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.20#
122	A2	14a(H),17a(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.78#
123	A2	13b,17a-20R-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.09#
124	A2	13a,17b-20S-Ethyldiacholest	0.232	0.000#	100.0#	0#	-56.37#
125	A2	14a,17a-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.56#
126	A2	14a,17a-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-57.31#
127	A2	14a(H),17a(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-57.71#
128	A2	14a(H),17a(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-58.68#
129	A2	14b(H),17b(H)-20R-Cholestan	0.232	0.000#	100.0#	0#	-55.29#
130	A2	14b(H),17b(H)-20S-Cholestan	0.232	0.000#	100.0#	0#	-55.39#
131	A2	14b,17b-20R-Methylcholestan	0.232	0.000#	100.0#	0#	-56.72#
132	A2	14b,17b-20S-Methylcholestan	0.232	0.000#	100.0#	0#	-56.81#
133	A2	14b(H),17b(H)-20R-Ethylchol	0.232	0.000#	100.0#	0#	-57.96#
134	A2	14b(H),17b(H)-20S-Ethylchol	0.232	0.000#	100.0#	0#	-58.01#

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34808.D
Acq On : 18 Jan 2006 9:27 pm
Operator : AC
Sample : C3011802
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 06:15:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration

AW 1/19/06

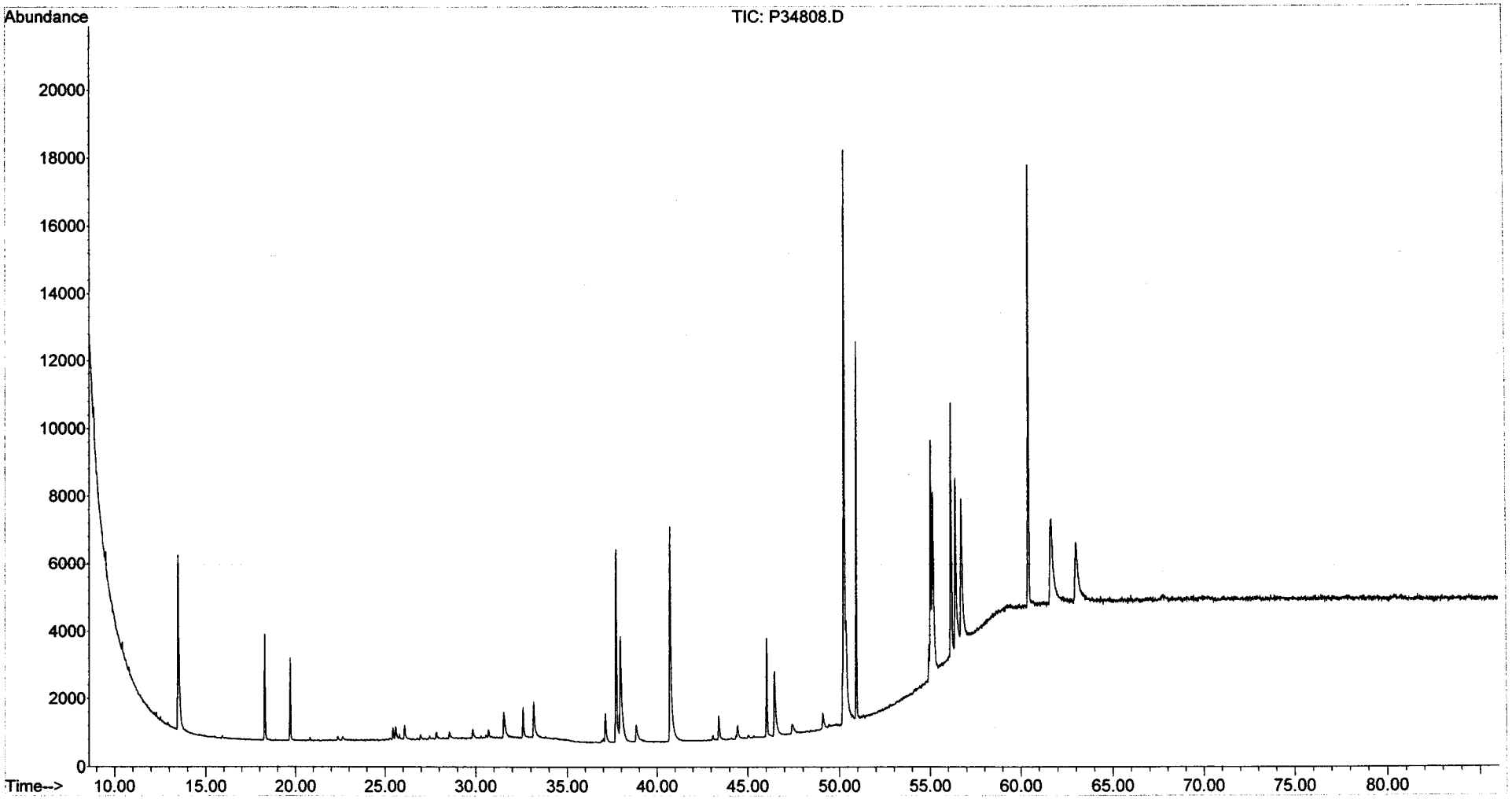
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Acenaphthene-d10	0.00	164	0	0.00	ng/mL	-30.25
64) Chrysene-d12	50.25	240	71513	500.00	ng/mL	-0.02
System Monitoring Compounds						
14) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
50) Pyrene-d10	0.00	212	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
73) Benzo[b]fluoranthene-d12	0.00	264	0	0.00	ng/mL	
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	0.00%#	
117) 5B(H)Cholane - Surr	50.93	217	15279	461.03	ng/ml	-0.05
Spiked Amount 1000.000	Range	50 - 130	Recovery	=	46.10%#	
Target Compounds						Qvalue
83) 17a(H),21B(H)-hopane - C30	60.44	191	31799	439.25	ng/mL	99
84) Hopane (T19)	60.44	191	31799	439.25	ng/mL	99

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\January06\JAN18\
Data File : P34808.D
Acq On : 18 Jan 2006 9:27 pm
Operator : AC
Sample : C3011802
Misc : STD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 06:15:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\JAN06\BIO30105.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Fri Jan 06 11:27:53 2006
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C4010302**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		62904	26.73	114120	43.20
Upper Limit:		125808	27.23	228240	43.70
Lower Limit:		31452	26.23	57060	42.70
Client ID	**Lab ID**				
GC-SED-85B (8.5-9.3)	0512110-03E	65851	26.73	92891	43.20
GC-SED-67 (8-8.4)	0512110-04E	66067	26.73	112320	43.20
GC-SED-68 (2.2-3.1)	0512110-05E	65343	26.72	111505	43.20
GC-SED-79 (2.5-3.5)	0512110-07E	56304	26.73	80721	43.21
GC-SED-81 (8-11)	0512110-08E	62083	26.72	93863	43.20
GC-SED-69 (6-7)	0512110-09E	64230	26.72	95882	43.20
GC-SED-72 (13.5-14.5)	0512110-10	60042	26.73	97336	43.20
GC-SED-07 (7.5-8.5)	0512110-11E	57692	26.73	78802	43.20
GC-SED-07 (7.5-8.5)	0512110-11E D	60601	26.72	83894	43.20
CCV	C4010303	59387	26.72	108686	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.

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

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C4010303**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		59387	26.72	108686	43.19
Upper Limit:		118774	27.22	217372	43.69
Lower Limit:		29694	26.22	54343	42.69
Client ID	**Lab ID**				
GC-SED-03 (0-1.5)	0512110-12E	64164	26.72	86646	43.20
GC-SED-01 (19-20)	0512110-13	63224	26.73	108219	43.20
GC-SED-02 (17.1-18.1)	0512110-14	60656	26.73	93534	43.20
GC-SED-72 (13.5-14.5)	0512110-10E	61180	26.72	113424	43.19
GC-SED-01 (19-20)	0512110-13E	64042	26.72	119313	43.19
GC-SED-02 (17.1-18.1)	0512110-14E	59169	26.72	107379	43.19
CCV	C4010304	50394	26.72	91318	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.

01/18/06 09:49

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
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**				
LCS	SS122105LCS13	64377	26.70	113126	43.18
LCSD	SS122105LCSD13	64815	26.70	112345	43.18
Blank	SS122105B16	56030	26.70	99607	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
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C4010502**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		50559	26.70	92815	43.17
Upper Limit:		101118	27.20	185630	43.67
Lower Limit:		25280	26.20	46408	42.67
Client ID	**Lab ID**				
GC-SED-93 (0-1)	0512110-01	41149	26.70	63002	43.18
GC-SED-92 (0-2)	0512110-02	59648	26.70	82781	43.19
GC-SED-85B (8.5-9.3)	0512110-03	55368	26.71	77172	43.19
GC-SED-67 (8-8.4)	0512110-04	65349	26.71	98765	43.21
GC-SED-68 (2.2-3.1)	0512110-05	51031	26.72	78569	43.20
GC-SED-79 (2.5-3.5)	0512110-07	53668	26.71	77427	43.20
GC-SED-81 (8-11)	0512110-08	70085	26.72	100129	43.21
CCV	C4010503	54382	26.71	91033	43.18

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.

01/18/06 09:50

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: **0512110**
Lab ID: **C4010503**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		54382	26.71	91033	43.18
Upper Limit:		108764	27.21	182066	43.68
Lower Limit:		27191	26.21	45516	42.68
Client ID	**Lab ID**				
GC-SED-69 (6-7)	0512110-09	72765	26.72	107218	43.22
GC-SED-07 (7.5-8.5)	0512110-11	74917	26.71	102668	43.21
GC-SED-07 (7.5-8.5)	0512110-11 D	77990	26.72	111929	43.21
GC-SED-03 (0-1.5)	0512110-12	80711	26.71	106596	43.21
CCV	C4010504	63675	26.71	108824	43.18

N/A - Not Applicable

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

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

Form VIII
Internal Standard Summary
Alkylated Polynuclear Aromatic Hydrocarbons

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C4011201**
Case: **N/A** SDG: **N/A**

		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**
Standard:		61987	26.69	109280	43.16
Upper Limit:		123974	27.19	218560	43.66
Lower Limit:		30994	26.19	54640	42.66
Client ID	**Lab ID**				
GC-SED-80 (0-2)	0512110-06	52493	26.69	73816	43.17
CCV	C4011202	55046	26.69	92404	43.16

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.

01/18/06 09:50

Form VIII
Internal Standard Summary
Steranes and Triterpanes

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **C3010602A**

		Chrysene-d12	
		Area	**RT**
Standard:		69240	50.31
Upper Limit:		138480	50.81
Lower Limit:		34620	49.81
Client ID	**Lab ID**		
Blank	SS122105B16	40736	50.38
GC-SED-93 (0-1)	0512110-01	53279	50.34
GC-SED-92 (0-2)	0512110-02	61829	50.34
GC-SED-85B (8.5-9.3)	0512110-03	63852	50.33
GC-SED-67 (8-8.4)	0512110-04	58651	50.33
GC-SED-68 (2.2-3.1)	0512110-05	60082	50.33
GC-SED-80 (0-2)	0512110-06	56521	50.34
GC-SED-79 (2.5-3.5)	0512110-07	59775	50.33
GC-SED-81 (8-11)	0512110-08	66046	50.33
GC-SED-69 (6-7)	0512110-09	67956	50.33
CCV	C3010603	76561	50.30

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.

01/19/06 07:16

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: **0512110**
Lab ID: **C3010901**

		Chrysene-d12	
		Area	**RT**
Standard:		76326	50.31
Upper Limit:		152652	50.81
Lower Limit:		38163	49.81
Client ID	**Lab ID**		
GC-SED-72 (13.5-14.5)	0512110-10	49487	50.35
GC-SED-07 (7.5-8.5)	0512110-11	50974	50.35
GC-SED-07 (7.5-8.5)	0512110-11 D	52768	50.35
GC-SED-03 (0-1.5)	0512110-12	53405	50.35
GC-SED-01 (19-20)	0512110-13	52495	50.34
CCV	C3010902	50904	50.33

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** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C3011801**
Case: **N/A** SDG: **N/A**

		Chrysene-d12	
		Area	**RT**
Standard:		70055	50.25
Upper Limit:		140110	50.75
Lower Limit:		35028	49.75
Client ID	**Lab ID**		
GC-SED-02 (17.1-18.1)	0512110-14	53583	50.31
CCV	C3011802	71513	50.25

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

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-93 (0-1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-01**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	12/31/05	26.7	5.16	26.6	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**66000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	86	50-130

01/12/06 19:27

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34620.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 12:33 am
Operator : AC
Sample : 0512110-01-AFID
Misc : 1X
ALS Vial : 81 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 06 19:55:51 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

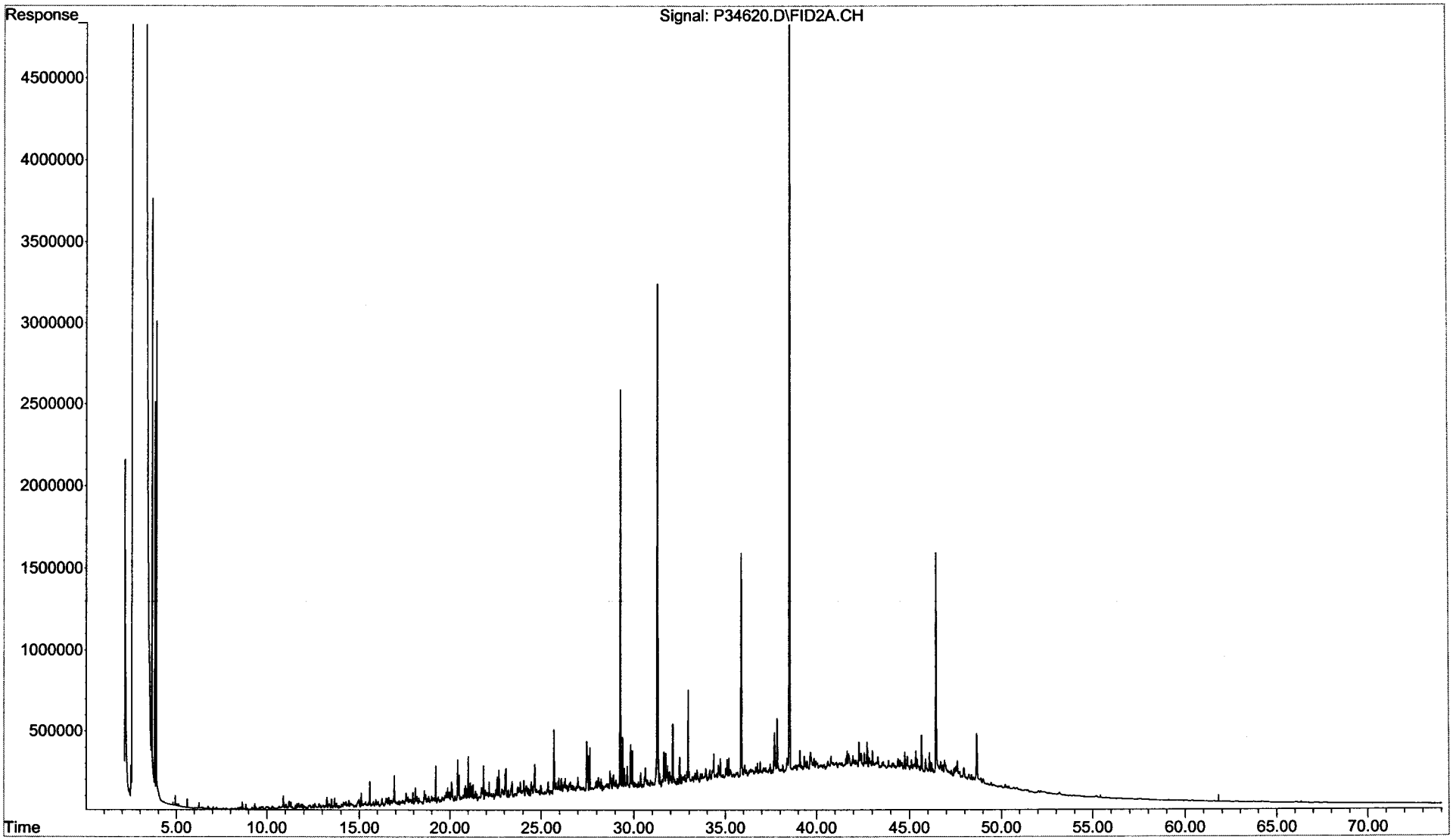
1/6/06

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.29	70715581	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.28	50711381	33.259 ug/mL
Spiked Amount	50.000 Range 50 - 130		Recovery =	66.52%
24) s	d50-Tetracosane	35.88	43009124	32.294 ug/mLm
Spiked Amount	50.000 Range 50 - 130		Recovery =	64.59%
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.39	5149054610	3700.176 ug/mL
44) h	Total Resolved Hydrocarbon	40.39	887913889	638.066 ug/L

- AFFRPT conc 2nd 1/24/06

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34620.D
Operator : AC
Acquired : 31 Dec 2005 12:33 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-01-AFID
Misc Info : 1X
Vial Number: 81



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-92 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-02**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	12/31/05	25.4	5.77	13.875	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	32000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	84	50-130

01/12/06 19:27

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34622.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 2:01 am
Operator : AC
Sample : 0512110-02-AFID
Misc : 1X
ALS Vial : 82 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 06 20:21:06 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

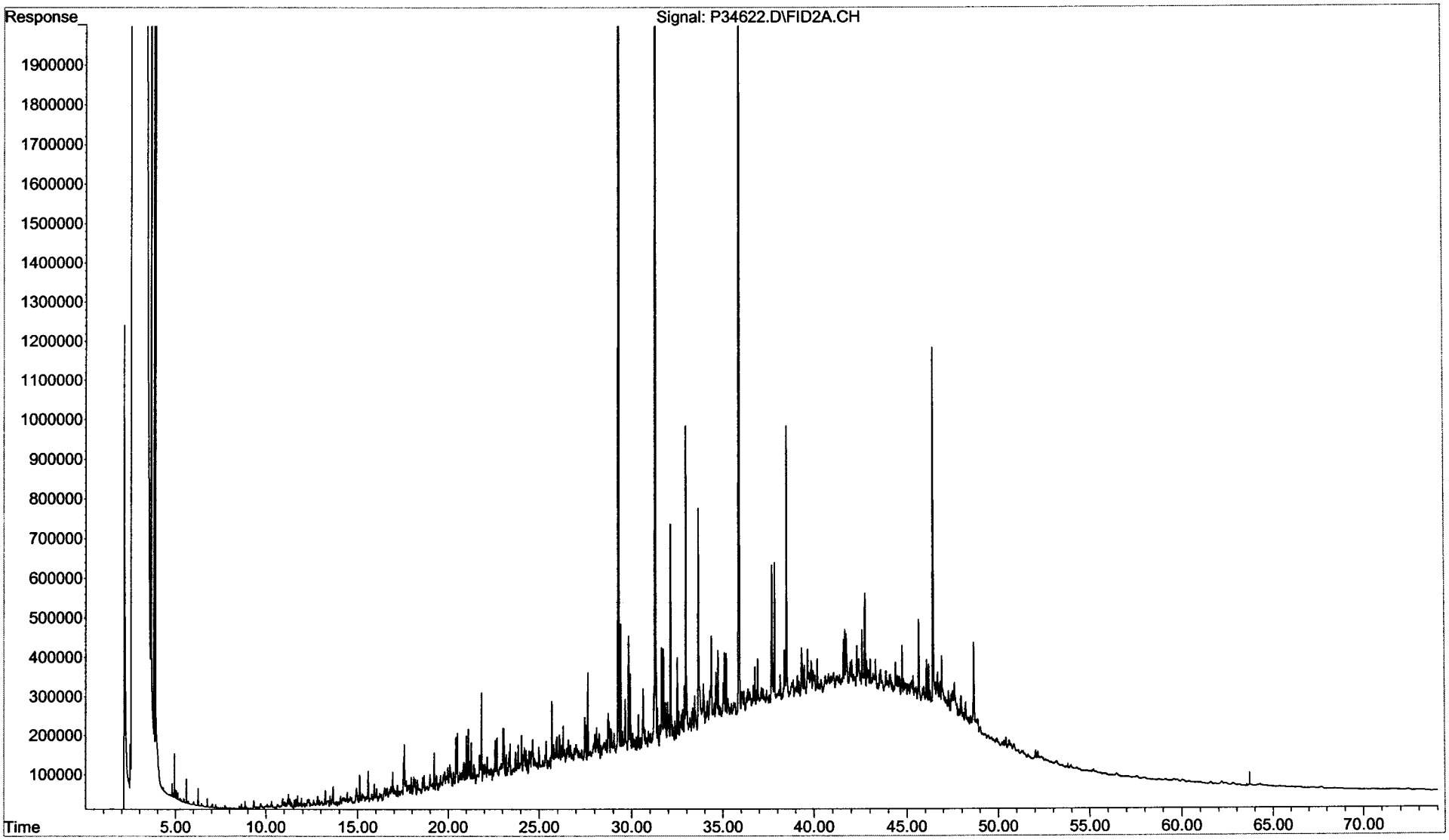
Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.29	79890763	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.30	108661275	63.080 ug/mLm
Spiked Amount	50.000 Range 50 - 130		Recovery =	126.16%
24) s	d50-Tetracosane	35.89	90801713	60.349 ug/mLm
Spiked Amount	50.000 Range 50 - 130		Recovery =	120.70%
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.39	5657346184	3598.539 ug/mL
44) h	Total Resolved Hydrocarbon	40.39	733704228	466.696 ug/L

-RF + Rpt cmc
2nd
cw 1/2/06

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34622.D
Operator : AC
Acquired : 31 Dec 2005 2:01 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-02-AFID
Misc Info : 1X
Vial Number: 82



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-85B (8.5-9.3)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-03**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/16/05	12/20/05	12/21/05	12/31/05	51.2	5.25	36.9963	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**52000**

N/A - Not Applicable

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

01/12/06 19:27

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34624.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 3:28 am
Operator : AC
Sample : 0512110-03-AFID
Misc : 1X
ALS Vial : 83 Sample Multiplier: 1

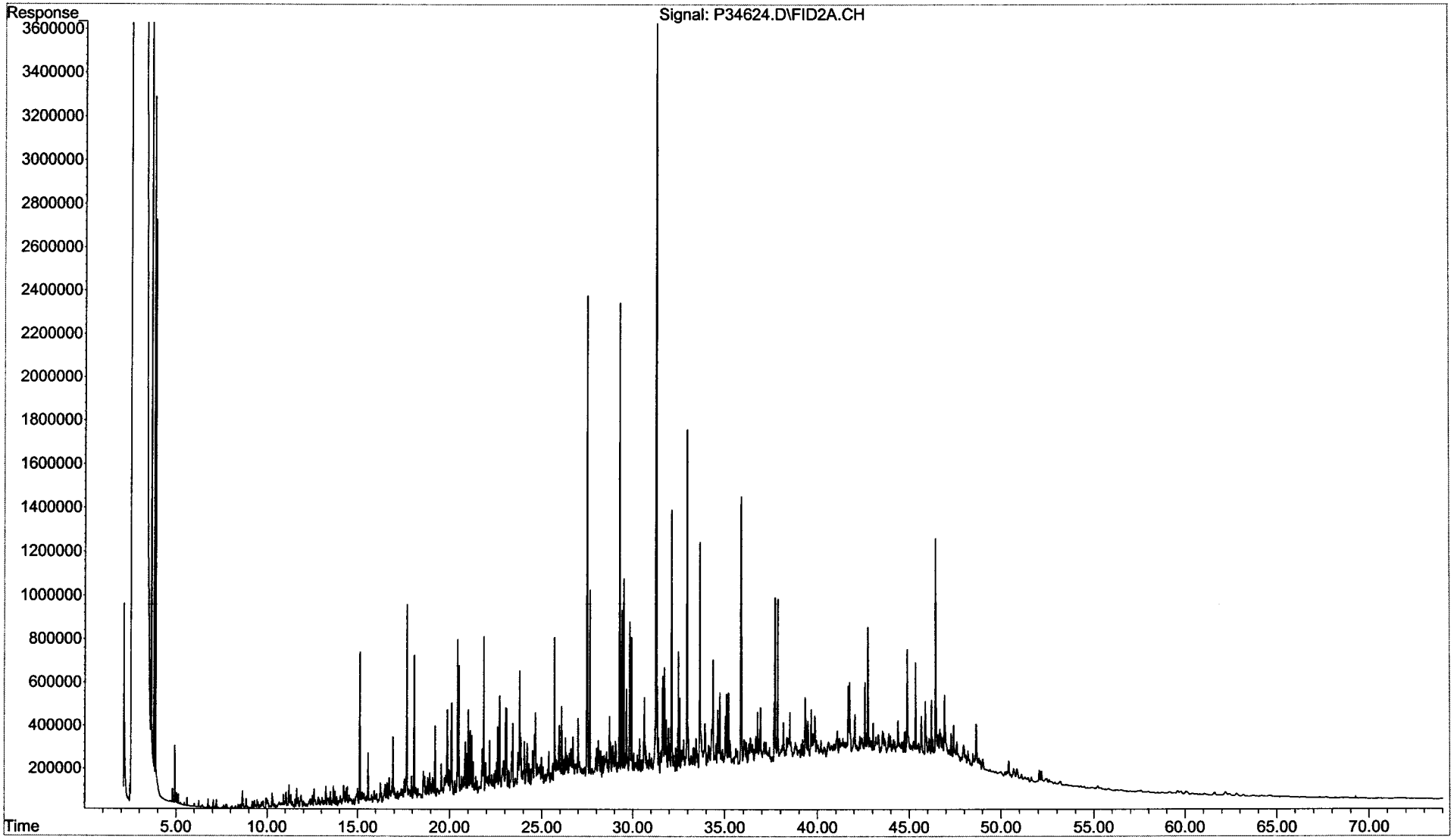
Integration File: SHCINT1.E
Quant Time: Jan 06 20:29:21 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	81935452	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.28	43907836	24.853 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	49.71%#
24) s d50-Tetracosane	35.88	38666628	25.057 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	50.11%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	6524717060	4046.689 ug/mL
44) h Total Resolved Hydrocarbon	40.39	1621457498	1005.643 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34624.D
Operator : AC
Acquired : 31 Dec 2005 3:28 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-03-AFID
Misc Info : 1X
Vial Number: 83



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-67 (8-8.4)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-04**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	12/31/05	87.1	5.37	59	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**51000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	99	50-130

01/12/06 19:28

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34626.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 4:55 am
Operator : AC
Sample : 0512110-04-AFID
Misc : 1X
ALS Vial : 84 Sample Multiplier: 1

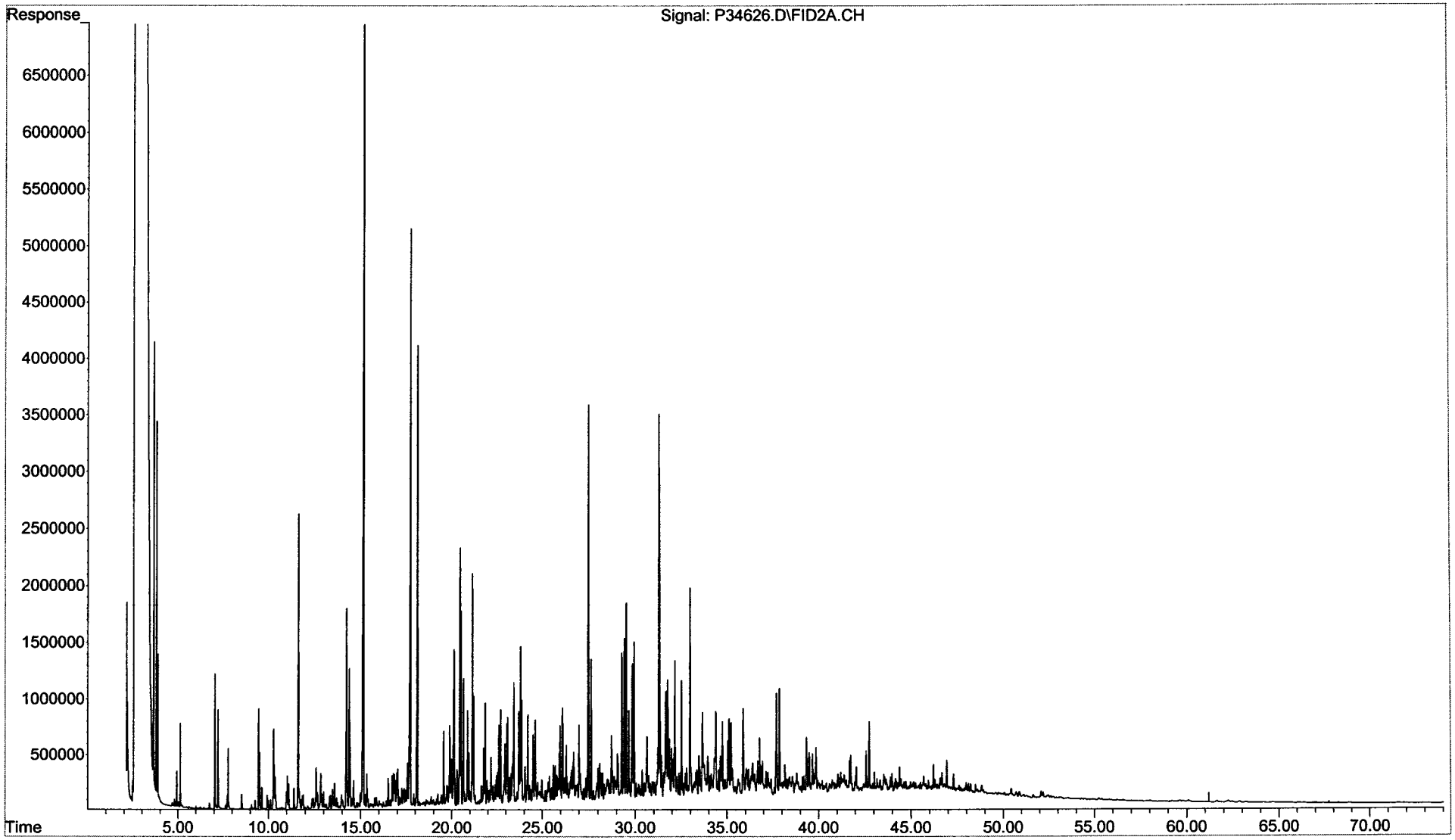
Integration File: SHCINT1.E
Quant Time: Jan 06 20:32:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	80305122	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.28	25849351	14.929 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	29.86%#
24) s d50-Tetracosane	35.87	25390237	16.788 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	33.58%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	6808351203	4308.328 ug/mL
44) h Total Resolved Hydrocarbon	40.39	3139158351	1986.461 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34626.D
Operator : AC
Acquired : 31 Dec 2005 4:55 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-04-AFID
Misc Info : 1X
Vial Number: 84



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-68 (2.2-3.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-05**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	12/31/05	74.9	5.48	83.3375	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**82000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	91	50-130
d50-Tetracosane	96	50-130

01/12/06 19:28

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34628.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 6:24 am
Operator : AC
Sample : 0512110-05-AFID
Misc : 1X
ALS Vial : 85 Sample Multiplier: 1

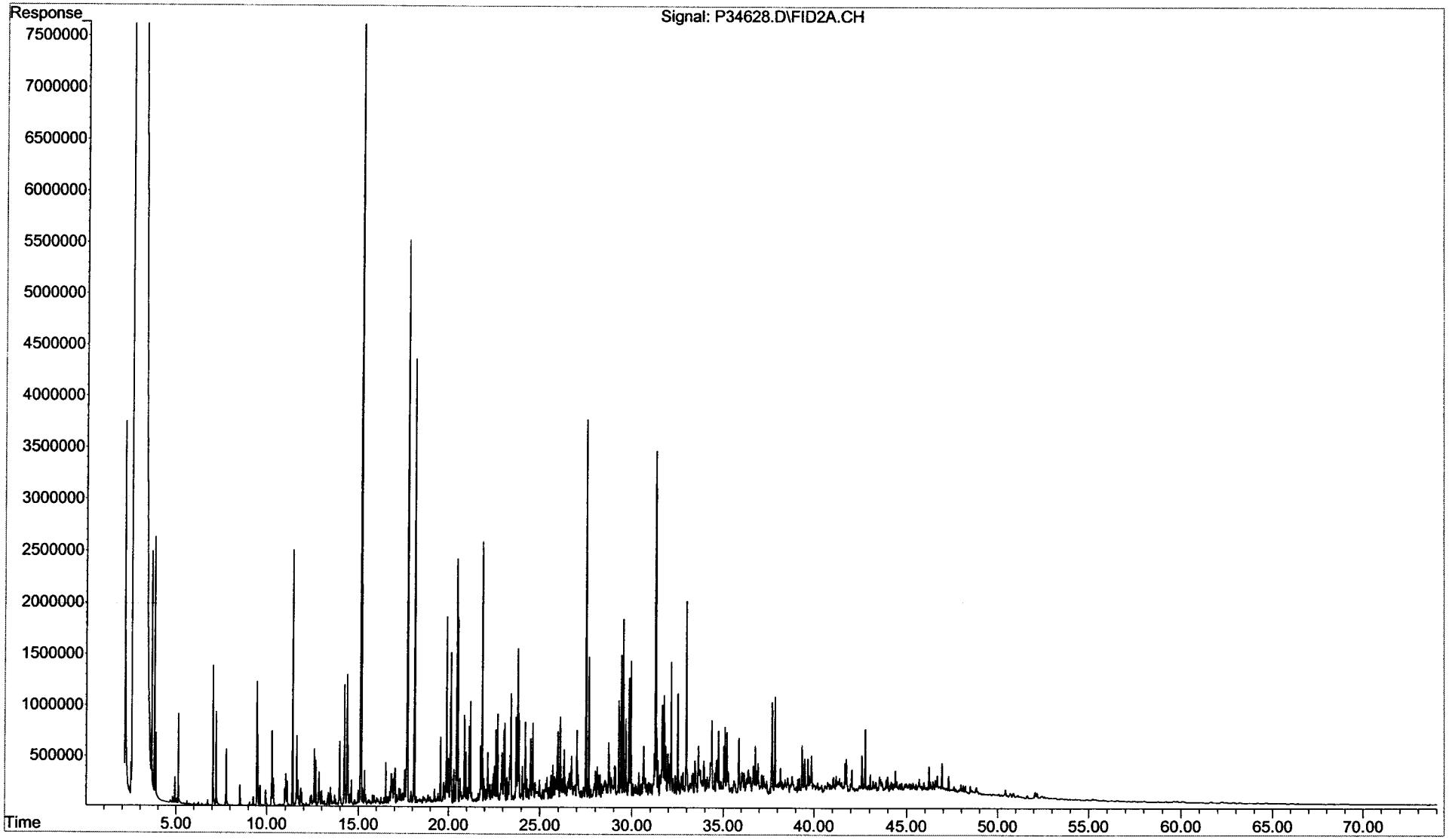
Integration File: SHCINT1.E
Quant Time: Jan 06 20:39:51 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	80682100	50.000 ug/mL
System Monitoring Compounds			
19) s ortho-terphenyl	29.28	18915032	10.873 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	21.75%#
24) s d50-Tetracosane	35.87	17544515	11.546 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	23.09%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	6764586066	4260.632 ug/mL
44) h Total Resolved Hydrocarbon	40.39	3098788204	1951.752 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34628.D
Operator : AC
Acquired : 31 Dec 2005 6:24 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-05-AFID
Misc Info : 1X
Vial Number: 85



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-80 (0-2)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-06**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	12/31/05	38.9	5.19	11.1	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**18000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	80	50-130

01/12/06 19:28

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34634.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 10:47 am
Operator : AC
Sample : 0512110-06-AFID
Misc : 1X
ALS Vial : 88 Sample Multiplier: 1

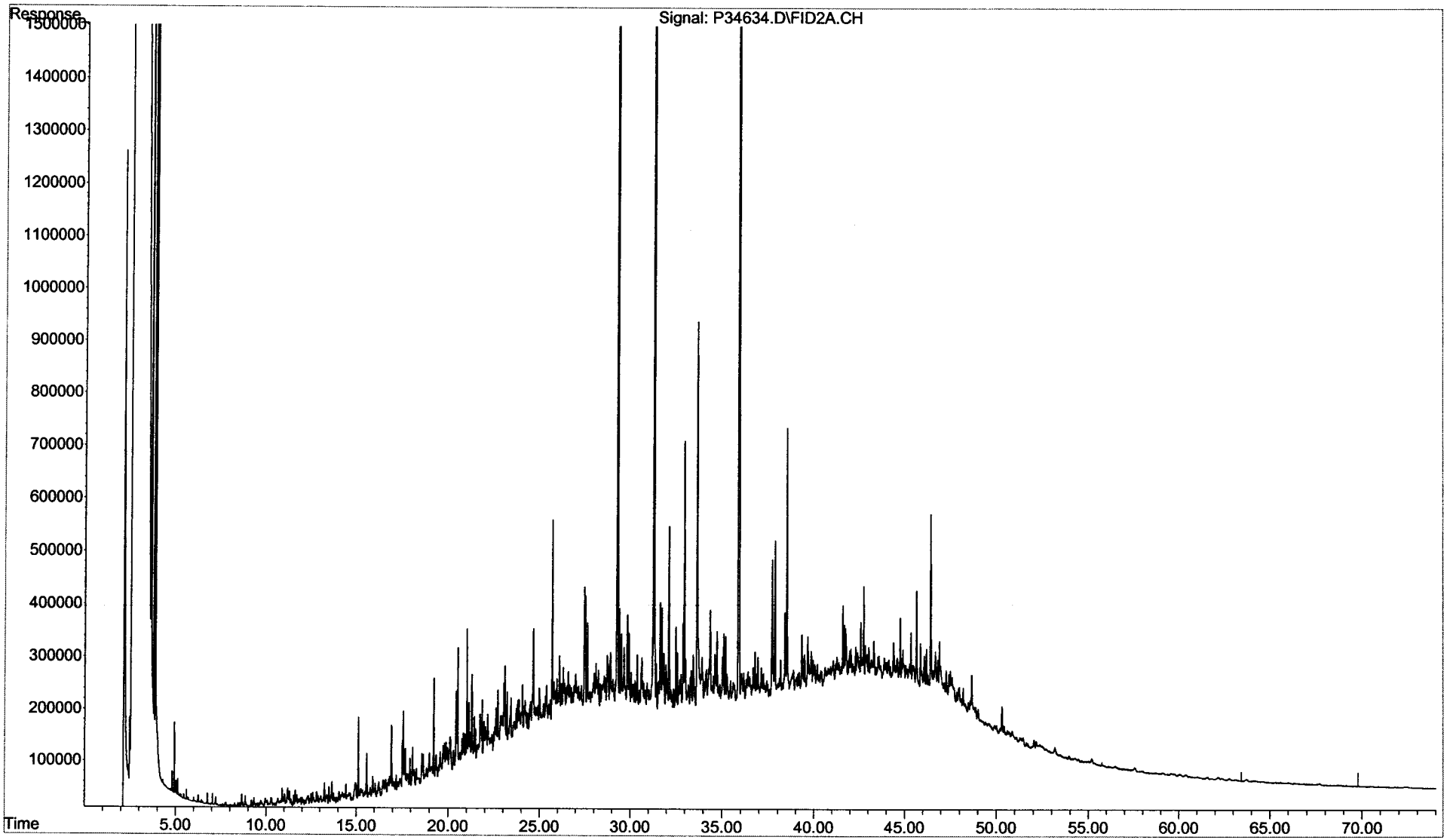
Integration File: SHCINT1.E
Quant Time: Jan 06 21:06:26 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	81218171	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.30	133819974	76.416 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	152.83%#
24) s d50-Tetracosane	35.90	110085392	71.969 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	143.94%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	5556497648	3476.626 ug/mL
44) h Total Resolved Hydrocarbon	40.39	717722231	449.069 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34634.D
Operator : AC
Acquired : 31 Dec 2005 10:47 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-06-AFID
Misc Info : 1X
Vial Number: 88



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-79 (2.5-3.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-07**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/17/05	12/20/05	12/21/05	12/31/05	43.9	5.23	17.8625	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	30000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	84	50-130
d50-Tetracosane	81	50-130

01/12/06 19:28

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34636.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 12:14 pm
Operator : AC
Sample : 0512110-07-AFID
Misc : 1X
ALS Vial : 89 Sample Multiplier: 1

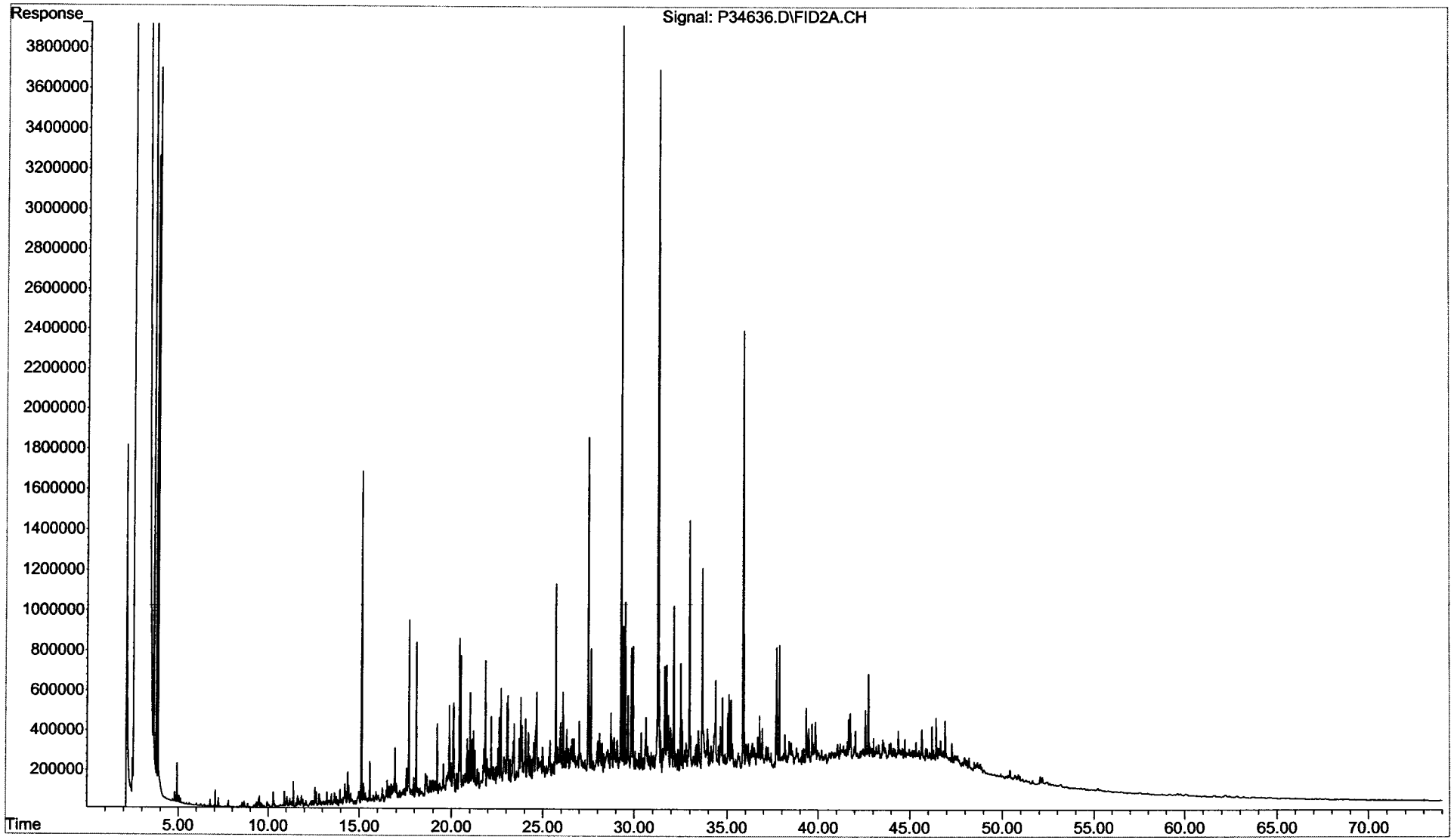
Integration File: SHCINT1.E
Quant Time: Jan 09 09:08:40 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.29	82770849	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.29	83852604	46.985 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 93.97%
24) s	d50-Tetracosane	35.89	70945453	45.511 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 91.02%
	Target Compounds			
42) h	C9-C40 Total Petroleum Hyd	40.39	6640197882	4076.746 ug/mL
44) h	Total Resolved Hydrocarbon	40.39	1542439206	946.980 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34636.D
Operator : AC
Acquired : 31 Dec 2005 12:14 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-07-AFID
Misc Info : 1X
Vial Number: 89



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-81 (8-11)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-08**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	12/31/05	64.4	5.16	22.725	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**27000**

N/A - Not Applicable

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

01/12/06 19:28

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34638.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 1:42 pm
Operator : AC
Sample : 0512110-08-AFID
Misc : 1X
ALS Vial : 90 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 09 09:10:58 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

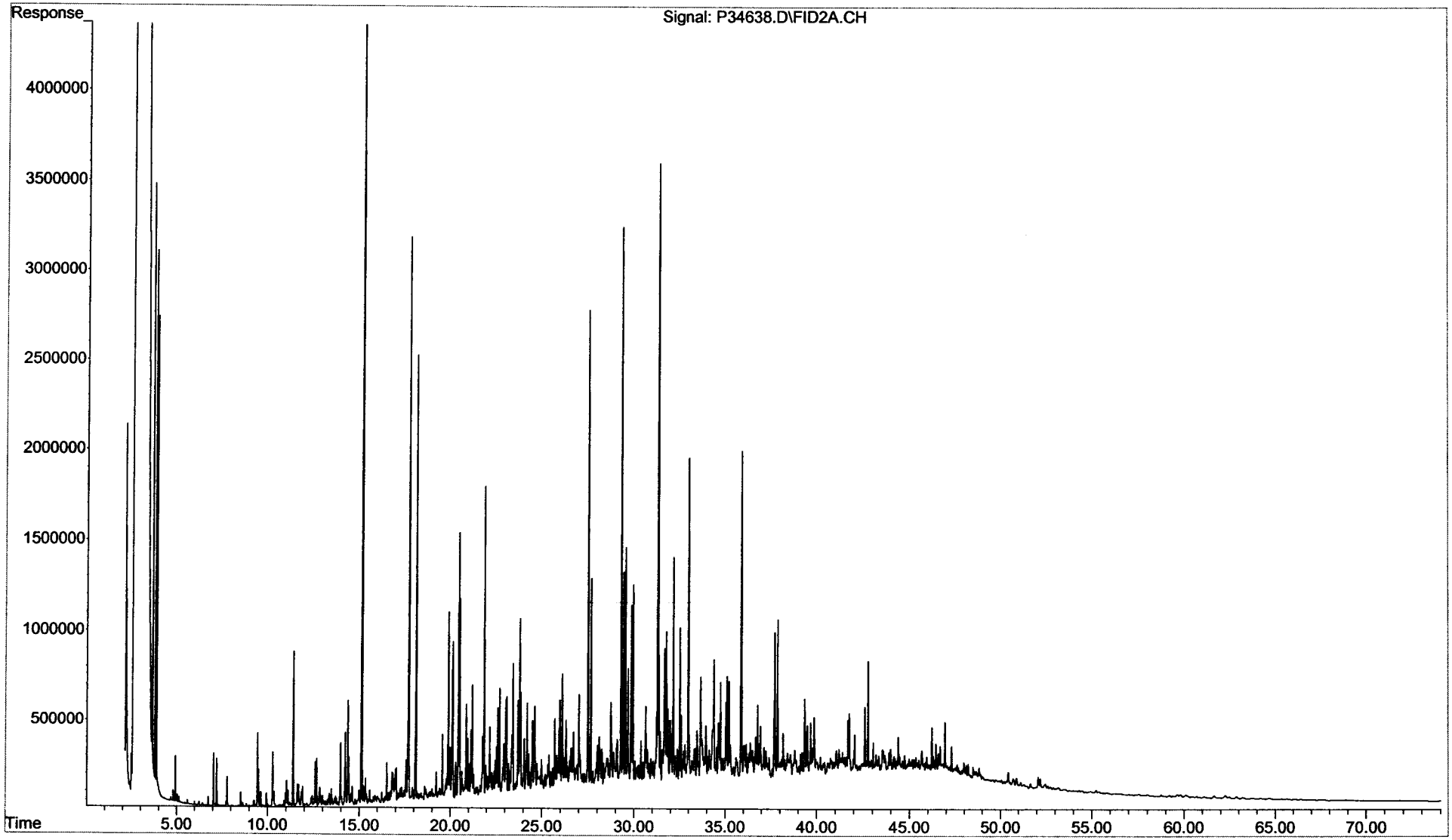
Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5-alpha-androstane	31.30	81696413	50.000 ug/mLm
System Monitoring Compounds				
19) s	ortho-terphenyl	29.29	65801476	37.355 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery =	74.71%
24) s	d50-Tetracosane	35.89	57269655	37.221 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	74.44%
Target Compounds				
42) h	C9-C40 Total Petroleum Hyd	40.39	6728140580	4185.064 ug/mL
44) h	Total Resolved Hydrocarbon	40.39	2214180173	1377.273 ug/L

RF+rept conc 2nd 1/24/06

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34638.D
Operator : AC
Acquired : 31 Dec 2005 1:42 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-08-AFID
Misc Info : 1X
Vial Number: 90



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-69 (6-7)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-09**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	12/31/05	81.2	5.25	6.95	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	5900

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	84	50-130
d50-Tetracosane	80	50-130

01/12/06 19:29

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34640.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 3:11 pm
Operator : AC
Sample : 0512110-09-AFID
Misc : 1X
ALS Vial : 91 Sample Multiplier: 1

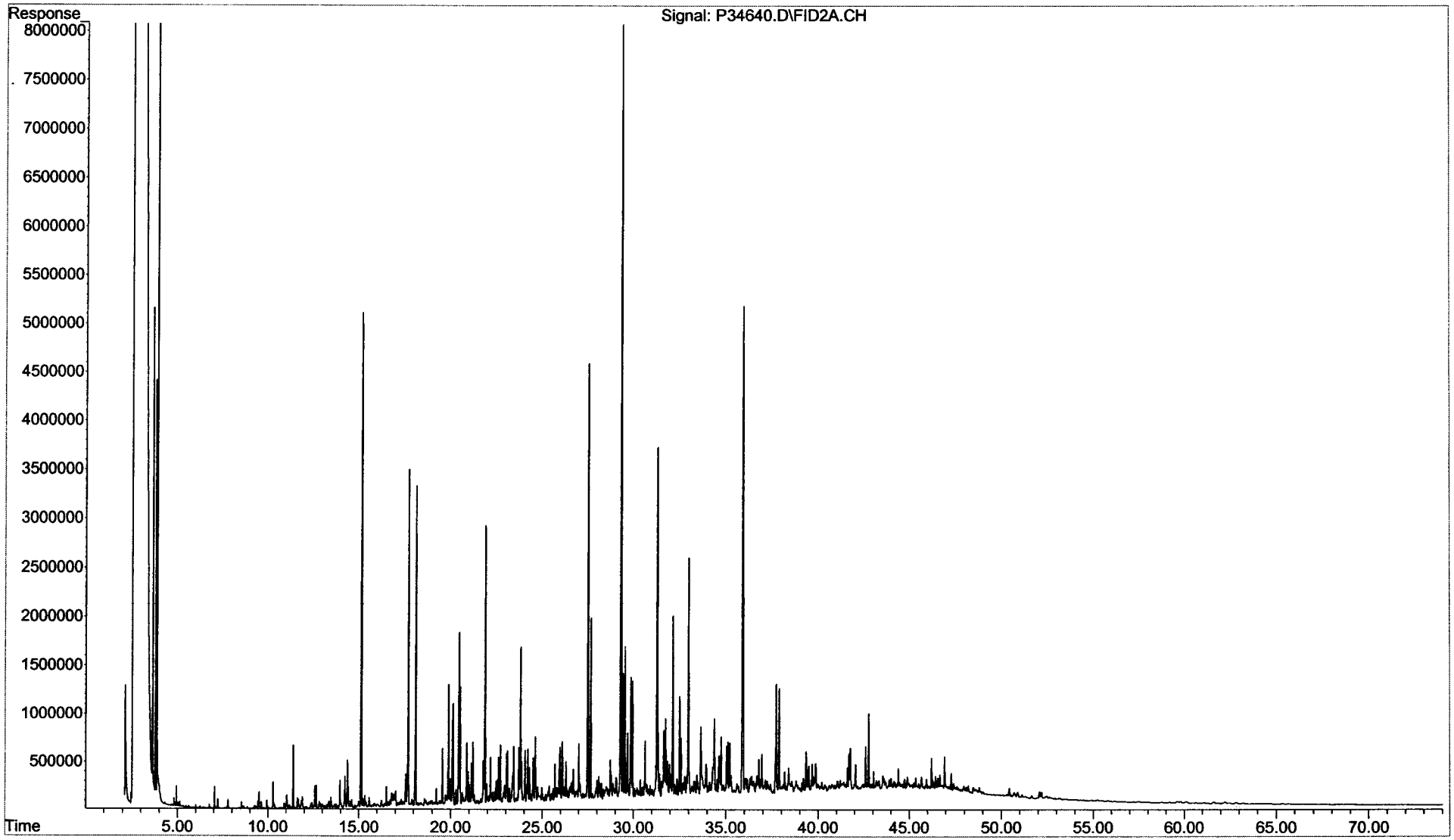
Integration File: SHCINT1.E
Quant Time: Jan 09 09:13:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.30	87363652	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.33	227985324	121.030 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 242.06%#
24) s d50-Tetracosane	35.92	189605644	115.237 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 230.47%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	6642047369	3863.503 ug/mL
44) h Total Resolved Hydrocarbon	40.39	2488237450	1447.342 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34640.D
Operator : AC
Acquired : 31 Dec 2005 3:11 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-09-AFID
Misc Info : 1X
Vial Number: 91



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-72 (13.5-14.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-10**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/18/05	12/20/05	12/21/05	12/31/05	66.5	5.22	57.2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**68000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	88	50-130
d50-Tetracosane	90	50-130

01/12/06 19:29

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34642.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 4:40 pm
Operator : AC
Sample : 0512110-10-AFID
Misc : 1X
ALS Vial : 92 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 09 09:56:05 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

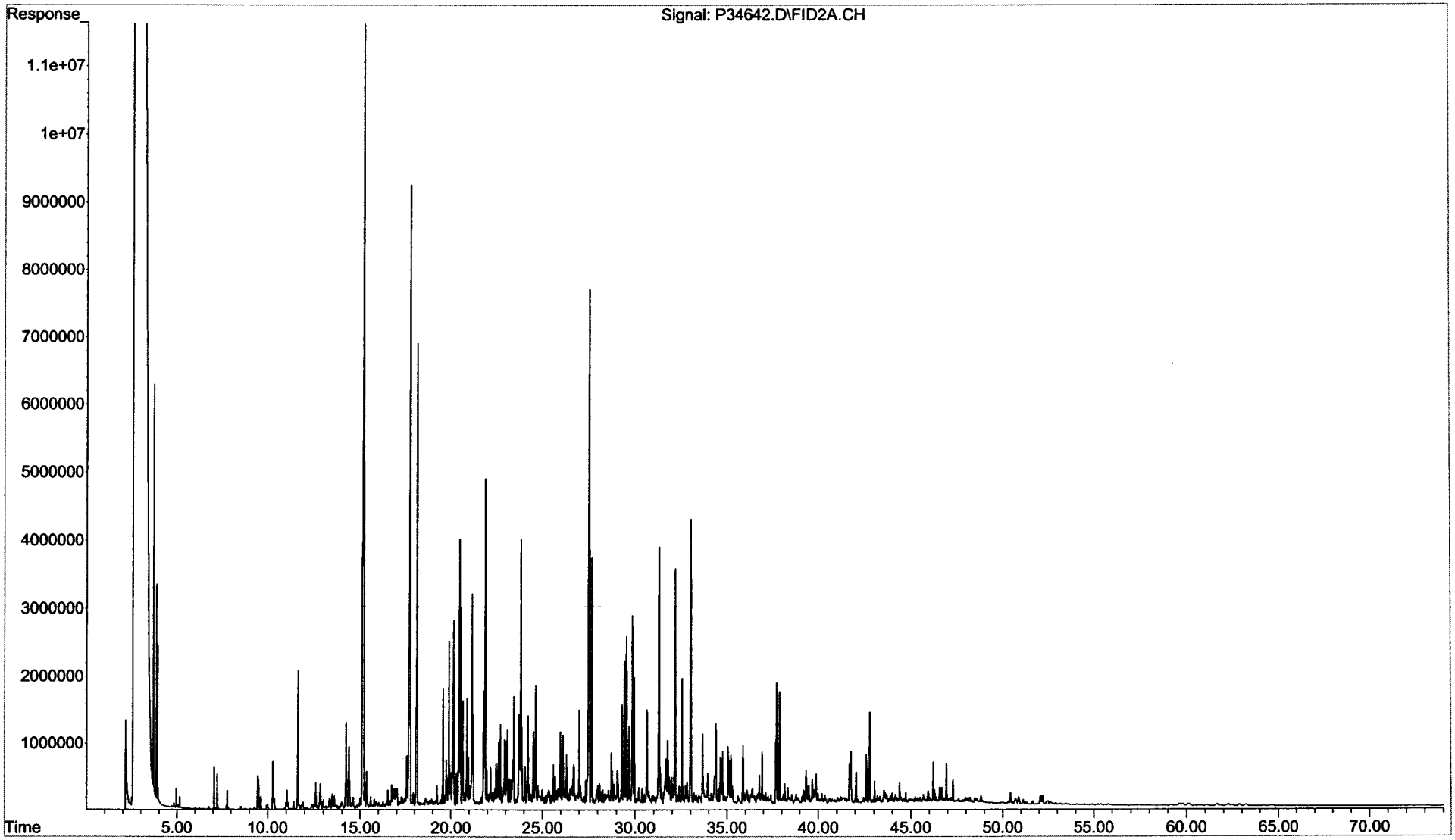
Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

1/9/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.30	96029746	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.29	31783391	15.350 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	30.70%#
24) s d50-Tetracosane	35.87	28442544	15.727 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	31.45%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	8218869047	4349.269 ug/mL
44) h Total Resolved Hydrocarbon	40.39	5686194585	3009.026 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34642.D
Operator : AC
Acquired : 31 Dec 2005 4:40 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-10-AFID
Misc Info : 1X
Vial Number: 92



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	12/31/05	70.1	5.35	15.8619	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**14000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	79	50-130
d50-Tetracosane	76	50-130

01/12/06 19:29

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34644.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 6:07 pm
Operator : AC
Sample : 0512110-11-AFID
Misc : 1X
ALS Vial : 93 Sample Multiplier: 1

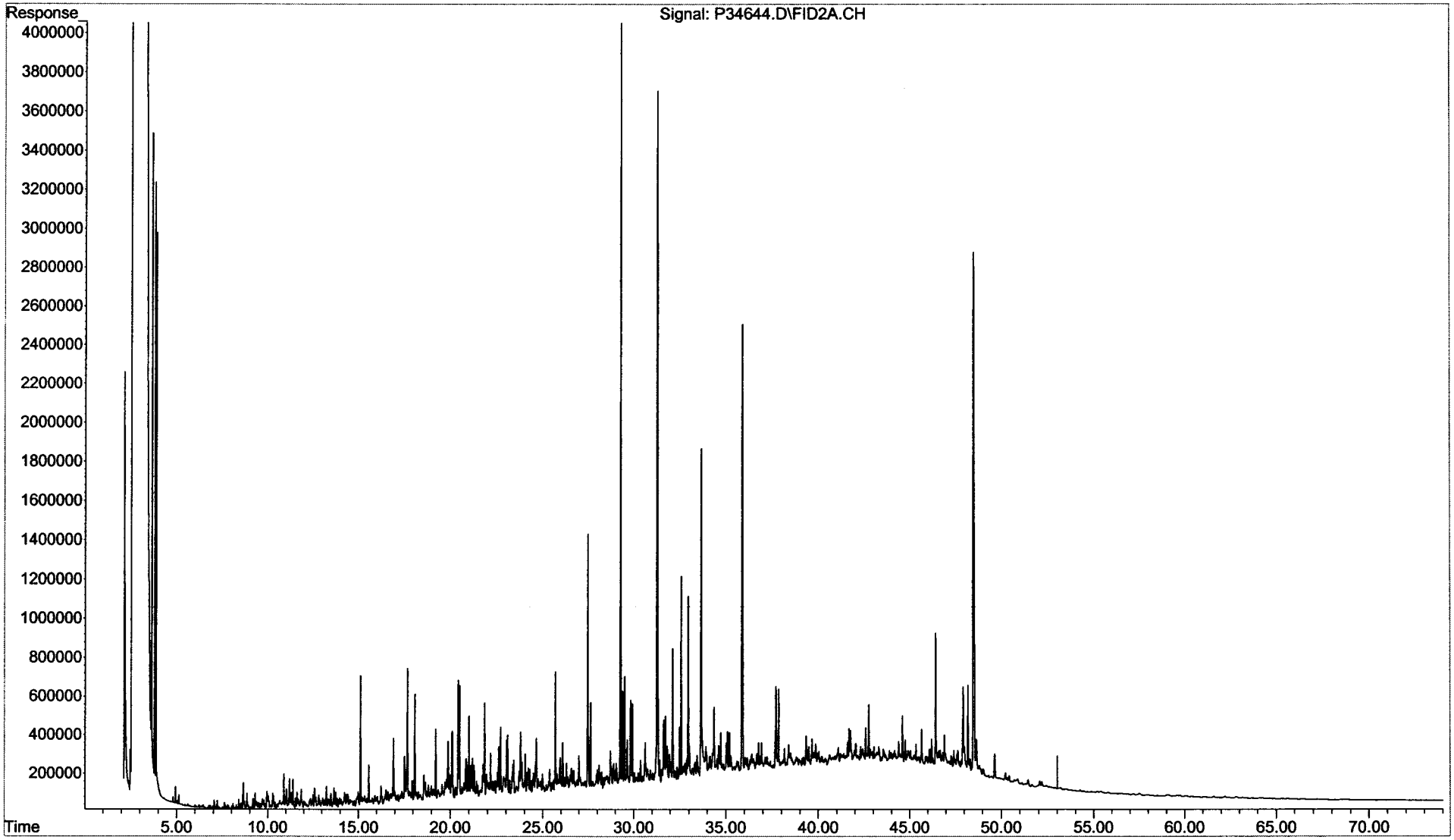
Integration File: SHCINT1.E
Quant Time: Jan 09 09:59:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	82416758	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.29	88272681	49.674 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	99.35%
24) s d50-Tetracosane	35.89	73885053	47.601 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	95.20%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	5912085848	3645.316 ug/mL
44) h Total Resolved Hydrocarbon	40.39	1368762047	843.961 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34644.D
Operator : AC
Acquired : 31 Dec 2005 6:07 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-11-AFID
Misc Info : 1X
Vial Number: 93



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-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11 D**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	12/31/05	70.1	5.10	17.0718	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	16000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	91	50-130
d50-Tetracosane	87	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34646.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 7:35 pm
Operator : AC
Sample : 0512110-11D-AFID
Misc : 1X
ALS Vial : 94 Sample Multiplier: 1

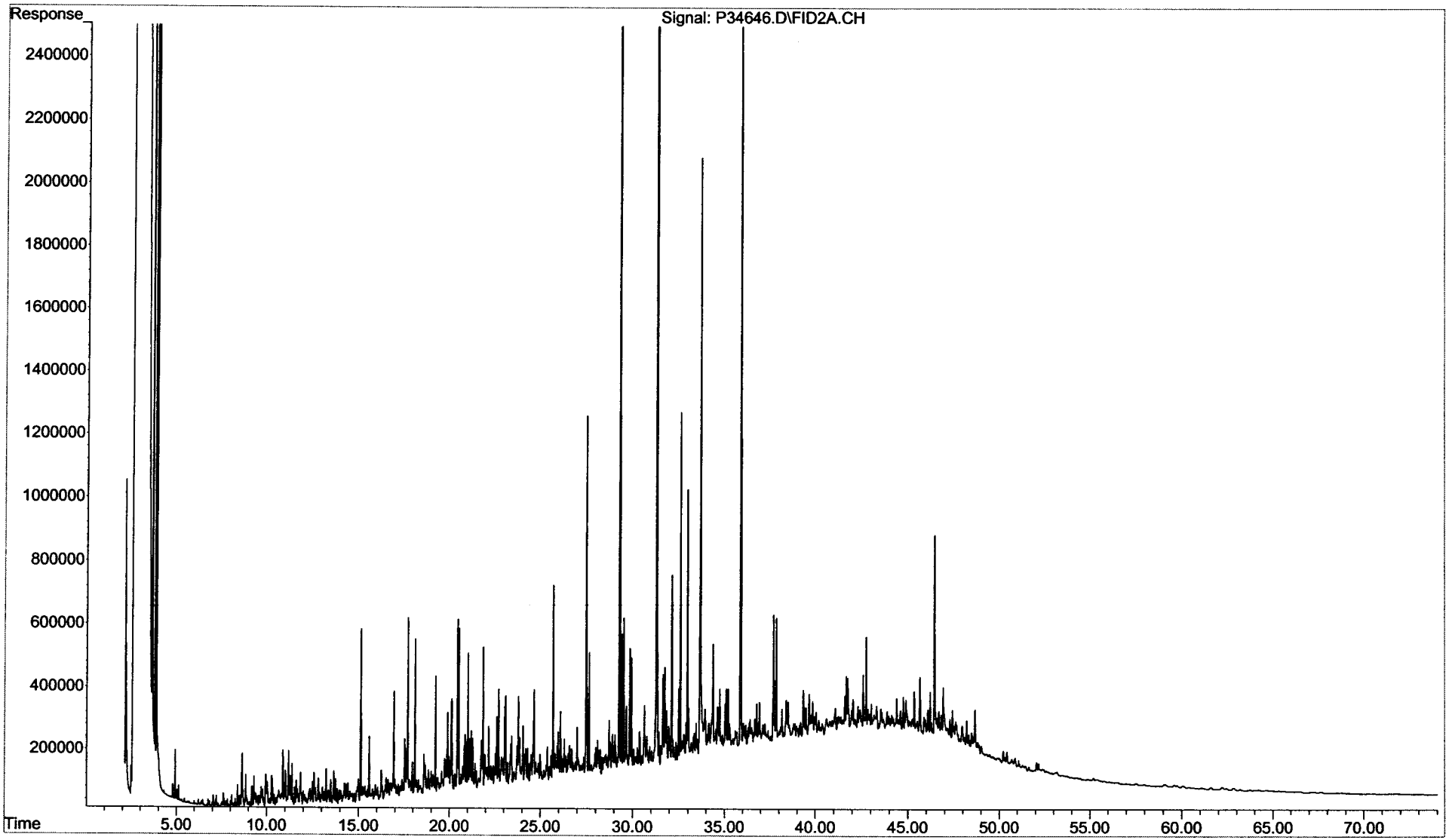
Integration File: SHCINT1.E
Quant Time: Jan 09 10:02:50 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	82994667	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.29	95508346	53.371 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 106.74%	
24) s d50-Tetracosane	35.89	79933037	51.138 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery = 102.28%	
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	5813382817	3559.498 ug/mL
44) h Total Resolved Hydrocarbon	40.39	1199994034	734.749 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34646.D
Operator : AC
Acquired : 31 Dec 2005 7:35 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-11D-AFID
Misc Info : 1X
Vial Number: 94



Duplicate
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-07 (7.5-8.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-11**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/05	12/20/05	12/21/05	70.1	AC

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Total Petroleum Hydrocarbons	**14000**	**16000**	10	30

N/A - Not Applicable

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	79	91	50-130
d50-Tetracosane	76	87	50-130

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

01/12/06 19:29

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-03 (0-1.5)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-12**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	12/31/05	61.8	10.45	11.1	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**5500**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	85	50-130
d50-Tetracosane	81	50-130

01/12/06 19:30

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34648.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 9:04 pm
Operator : AC
Sample : 0512110-12-AFID
Misc : 1X
ALS Vial : 95 Sample Multiplier: 1

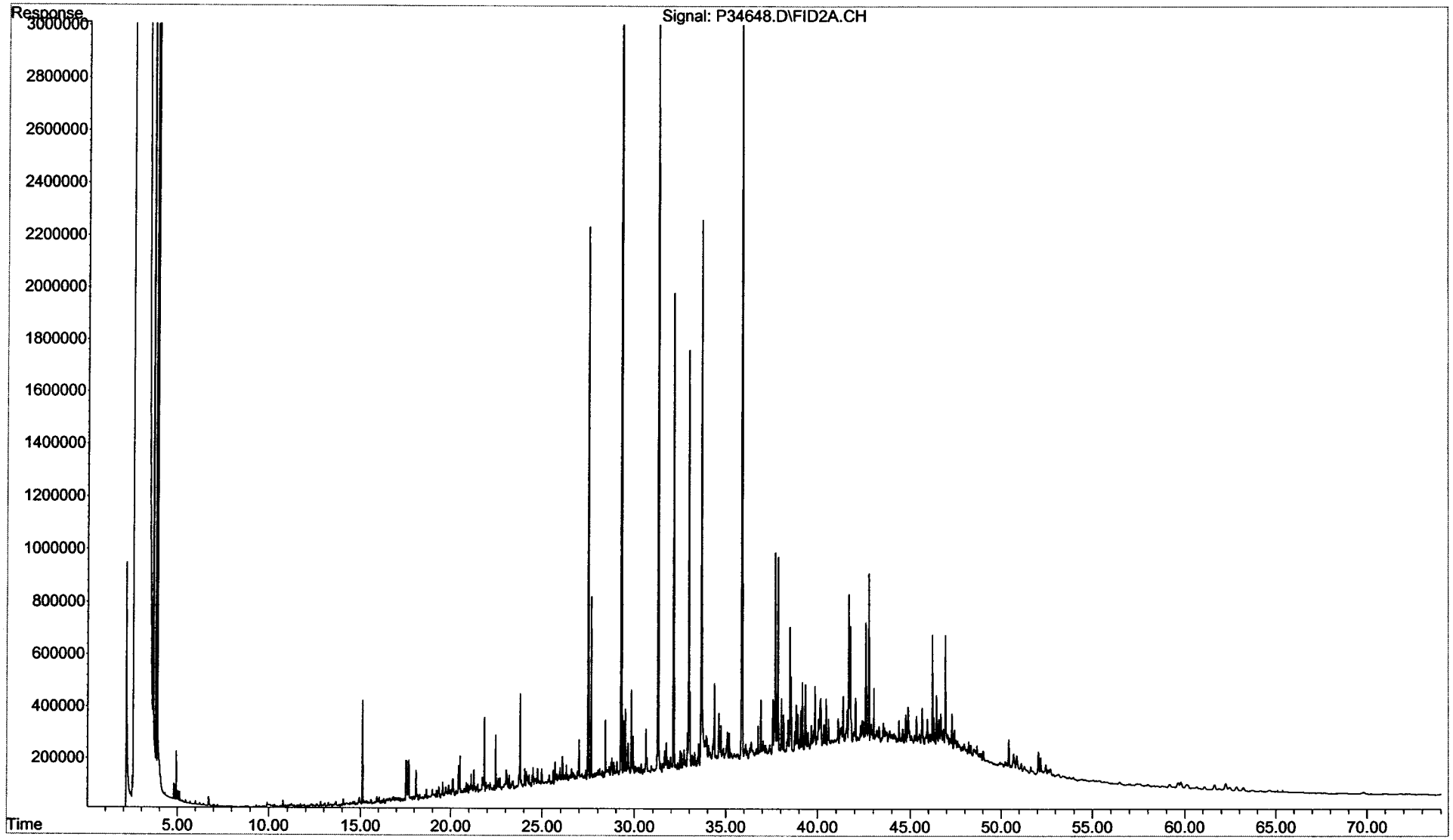
Integration File: SHCINT1.E
Quant Time: Jan 09 10:07:48 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	80041701	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.30	132145456	76.569 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	153.14%#
24) s d50-Tetracosane	35.90	109999244	72.970 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	145.94%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	5432070497	3448.729 ug/mL
44) h Total Resolved Hydrocarbon	40.39	978599497	621.296 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34648.D
Operator : AC
Acquired : 31 Dec 2005 9:04 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-12-AFID
Misc Info : 1X
Vial Number: 95



Form I
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-01 (19-20)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-13**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	12/31/05	85.0	5.43	18.5537	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	17000

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	84	50-130
d50-Tetracosane	82	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34650.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 10:33 pm
Operator : AC
Sample : 0512110-13-AFID
Misc : 1X
ALS Vial : 96 Sample Multiplier: 1

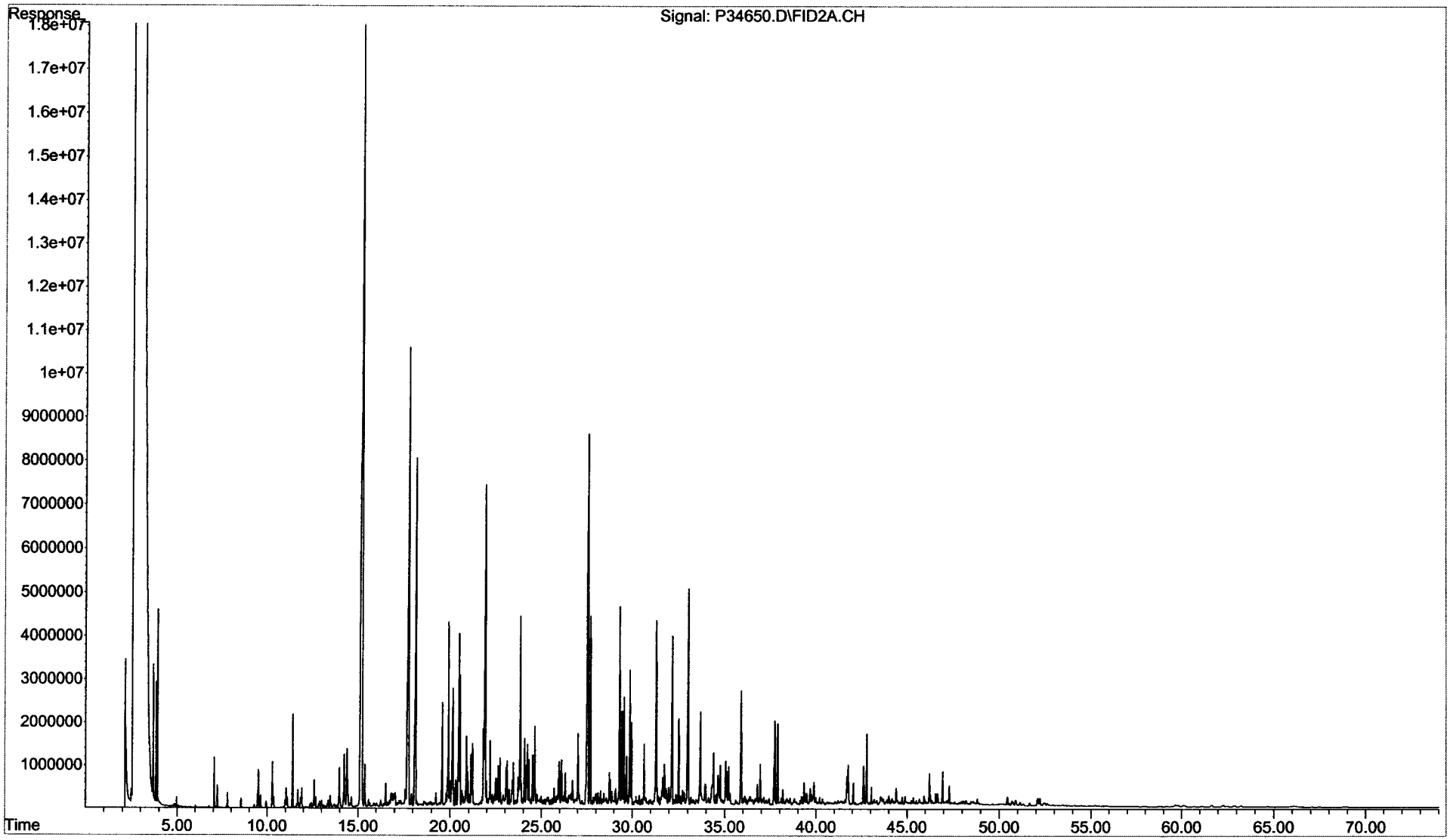
Integration File: SHCINT1.E
Quant Time: Jan 09 10:11:43 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.31	110172739	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.31	107576697	45.286 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	90.57%
24) s d50-Tetracosane	35.90	91999064	44.338 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	88.68%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	9640994223	4446.904 ug/mL
44) h Total Resolved Hydrocarbon	40.39	6462545241	2980.846 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34650.D
Operator : AC
Acquired : 31 Dec 2005 10:33 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-13-AFID
Misc Info : 1X
Vial Number: 96



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice**
Project: **Gowanus Canal**
Client ID: **GC-SED-02 (17.1-18.1)**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **0512110-14**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/05	12/20/05	12/21/05	01/01/06	82.1	5.09	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**10000**

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	83	50-130
d50-Tetracosane	80	50-130

01/12/06 19:30

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34652.D
Signal(s) : FID2A.CH
Acq On : 01 Jan 2006 12:01 am
Operator : AC
Sample : 0512110-14-AFID
Misc : 1X
ALS Vial : 97 Sample Multiplier: 1

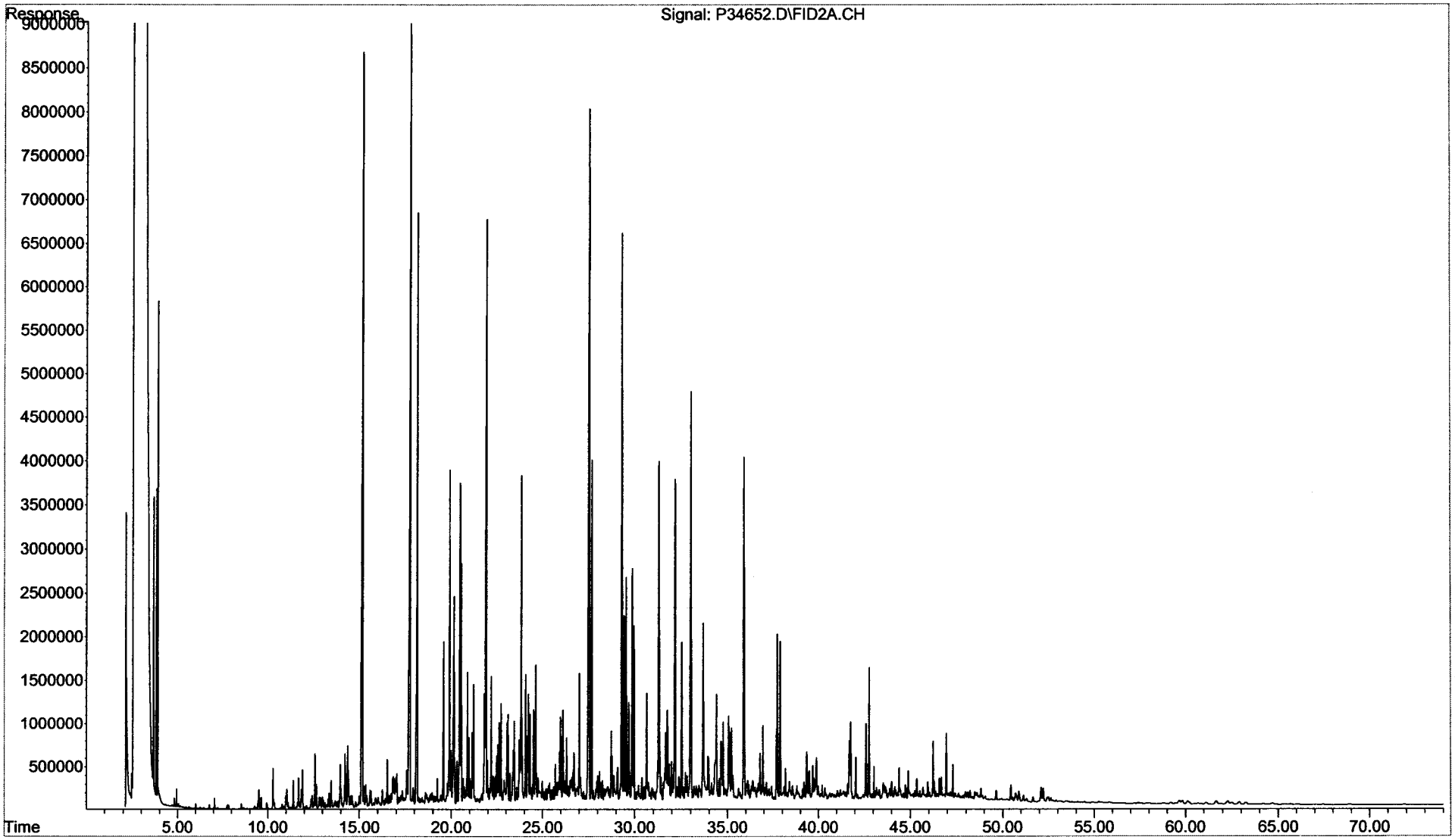
Integration File: SHCINT1.E
Quant Time: Jan 09 10:19:23 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Mon Jan 09 07:37:28 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.30	96623864	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.33	172281586	82.693 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 165.39%#
24) s d50-Tetracosane	35.91	144920557	79.637 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery	= 159.27%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	8489317981	4464.763 ug/mL
44) h Total Resolved Hydrocarbon	40.39	5021980801	2641.196 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34652.D
Operator : AC
Acquired : 01 Jan 2006 12:01 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: 0512110-14-AFID
Misc Info : 1X
Vial Number: 97



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: **0512110**
Lab ID: **SS122105B16**
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	12/30/05	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	2.2 U

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	79	50-130
d50-Tetracosane	73	50-130

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

01/12/06 19:14

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34614.D
Signal(s) : FID2A.CH
Acq On : 30 Dec 2005 8:10 pm
Operator : AC
Sample : SS122105B16-AFID
Misc : 1X ETR0512110
ALS Vial : 78 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 05 22:27:25 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

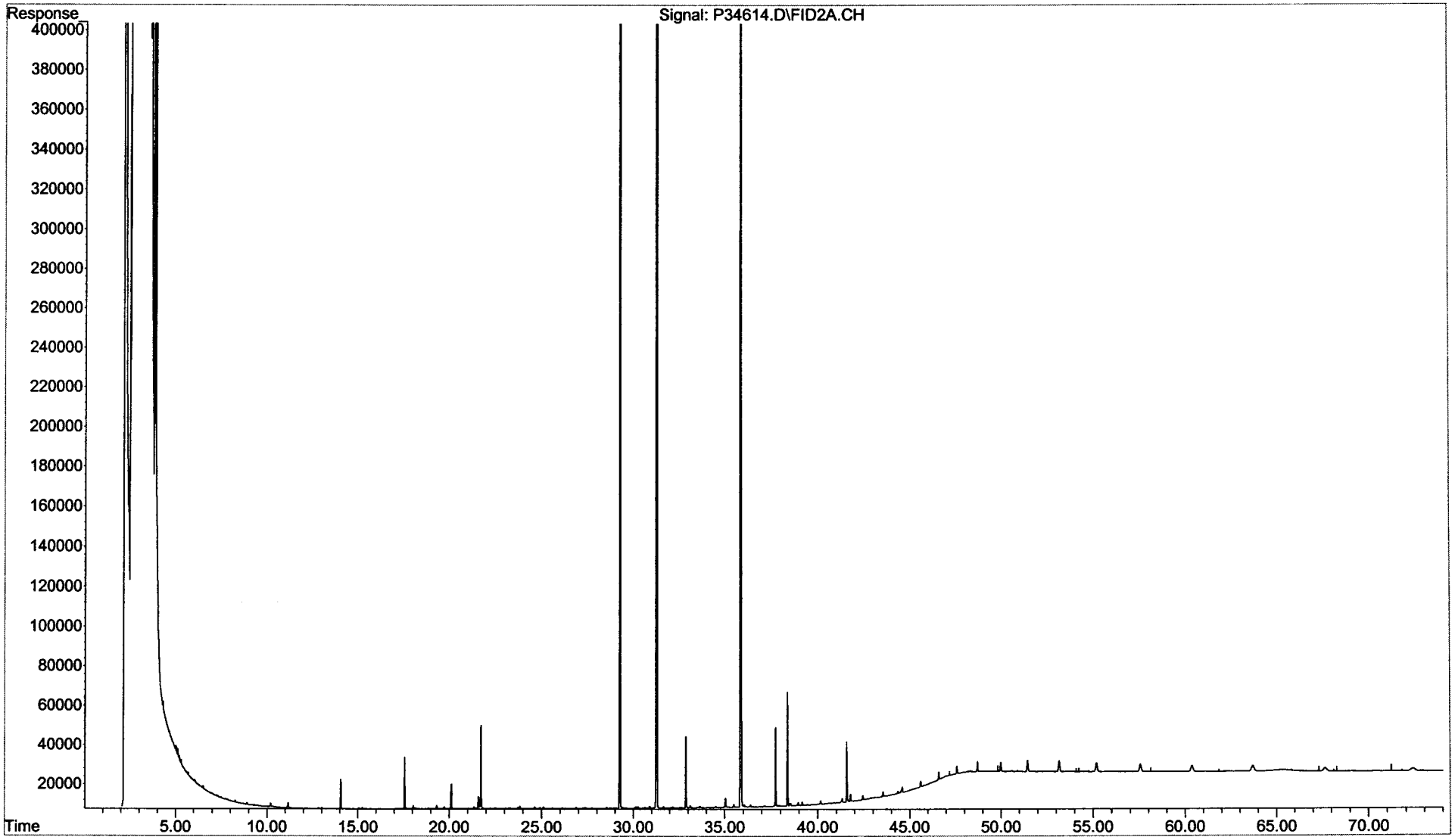
Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

1/5/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	78741197	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.27	33566858	19.771 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	39.54%#
24) s d50-Tetracosane	35.87	27245480	18.372 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	36.74%#
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	363860461	234.824 ug/mL
44) h Total Resolved Hydrocarbon	40.39	11735405	7.574 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34614.D
Operator : AC
Acquired : 30 Dec 2005 8:10 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: SS122105B16-AFID
Misc Info : 1X ETR0512110
Vial Number: 78



Form III
Spike Recovery Summary
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **See Below**
Associated Blank: **SS122105B16**
Concentration Units: **mg/Kg**

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

Lab ID: SS122105B16 SS122105LCS13 SS122105LCSD13

Parameter	Blank Conc.		LCS Conc.	LCS % Recovery	LCSD Conc.	LCSD % Recovery	% RPD	RPD Limit	% Recovery Limits
n-Nonane (C9)	0.067	U	1.0	61	0.94	57	8	30	50-130
n-Decane (C10)	0.067	U	1.2	74	1.2	73	2	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	84	1.5	88	4	30	50-130
n-Hexadecane (C16)	0.067	U	1.4	87	1.5	91	5	30	50-130
n-Octadecane (C18)	0.067	U	1.4	86	1.5	91	5	30	50-130
n-Nonadecane (C19)	0.067	U	1.5	87	1.5	92	5	30	50-130
n-Eicosane (C20)	0.067	U	1.5	88	1.6	93	5	30	50-130
n-Docosane (C22)	0.067	U	1.4	87	1.5	92	5	30	50-130
n-Tetracosane (C24)	0.067	U	1.4	86	1.5	91	5	30	50-130
n-Hexacosane (C26)	0.067	U	1.5	88	1.5	92	5	30	50-130
n-Octacosane (C28)	0.067	U	1.4	87	1.5	91	5	30	50-130
n-Triacontane (C30)	0.067	U	1.4	86	1.5	90	4	30	50-130
n-Hexatriacontane (C36)	0.067	U	1.4	87	1.5	87	1	30	50-130

Surrogate	% Recovery		Acceptance Range (%)
ortho-Terphenyl	81	84	50-130
d50-Tetracosane	75	78	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.

01/12/06 19:17

Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **SS122105LCS13**
Associated Blank: **SS122105B16**
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	12/30/05	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	19

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	81	50-130
d50-Tetracosane	75	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34616.D
Signal(s) : FID2A.CH
Acq On : 30 Dec 2005 9:38 pm
Operator : AC
Sample : SS122105LCS13-AFID
Misc : 1X ETR0512110
ALS Vial : 79 Sample Multiplier: 1

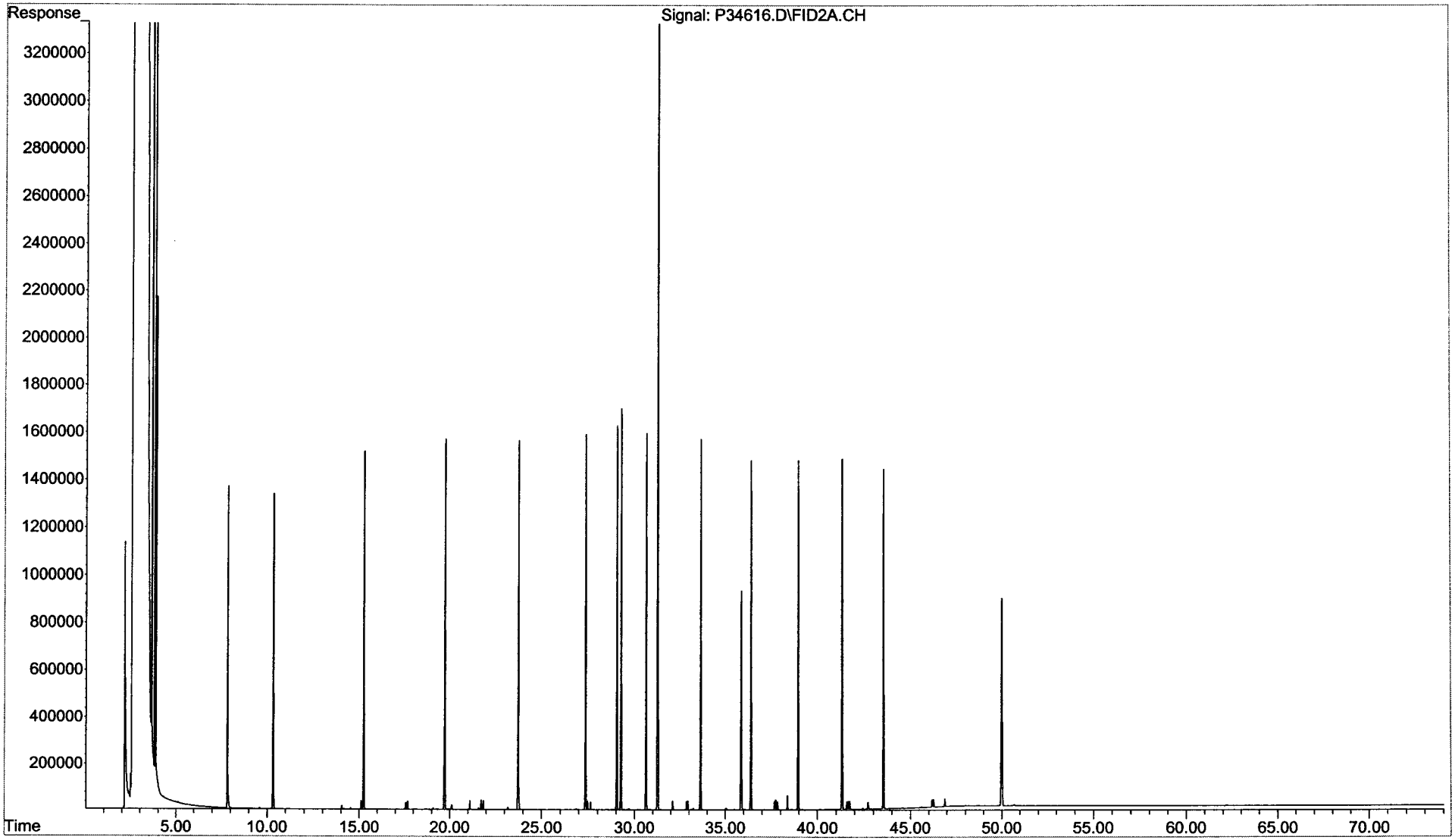
Integration File: SHCINT1.E
Quant Time: Jan 05 22:41:20 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.28	76153559	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.27	33214174	20.228 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 40.46%#
24) s	d50-Tetracosane	35.86	26775440	18.669 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 37.34%#
	Target Compounds			
3) t	n-Nonane (C9)	7.83	22024833	15.371 ug/mL
4) t	n-Decane (C10)	10.31	27040421	18.616 ug/mLm
6) t	n-Dodecane (C12)	15.24	30163504	20.581 ug/mLm
9) t	n-Tetradecane (C14)	19.73	31187448	21.019 ug/mLm
12) t	n-Hexadecane (C16)	23.74	32507733	21.750 ug/mLm
16) t	n-Octadecane (C18)	27.36	32491465	21.578 ug/mL
18) t	n-Nonadecane (C19)	29.04	32577941	21.816 ug/mLm
20) t	n-Eicosane (C20)	30.64	32779283	22.070 ug/mLm
22) t	n-Docosane (C22)	33.64	32898778	21.790 ug/mL
25) t	n-Tetracosane (C24)	36.40	32959623	21.558 ug/mL
27) t	n-Hexacosane (C26)	38.95	33128412	21.928 ug/mLm
29) t	n-Octacosane (C28)	41.32	33180794	21.663 ug/mLm
31) t	n-Triacontane (C30)	43.54	33066378	21.518 ug/mLm
37) t	n-Hexatriacontane (C36)	50.00	32381860	21.690 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.39	802551484	535.541 ug/mL
44) h	Total Resolved Hydrocarbon	40.39	460433817	307.247 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34616.D
Operator : AC
Acquired : 30 Dec 2005 9:38 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: SS122105LCS13-AFID
Misc Info : 1X ETR0512110
Vial Number: 79



Form I
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **SS122105LCSD13**
Associated Blank: **SS122105B16**
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	12/30/05	100	30.00	2	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	19

N/A - Not Applicable

Surrogate	% Recovery	Acceptance Range (%)
ortho-Terphenyl	84	50-130
d50-Tetracosane	78	50-130

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34618.D
Signal(s) : FID2A.CH
Acq On : 30 Dec 2005 11:06 pm
Operator : AC
Sample : SS122105LCSD13-AFID
Misc : 1X ETR0512110
ALS Vial : 80 Sample Multiplier: 1

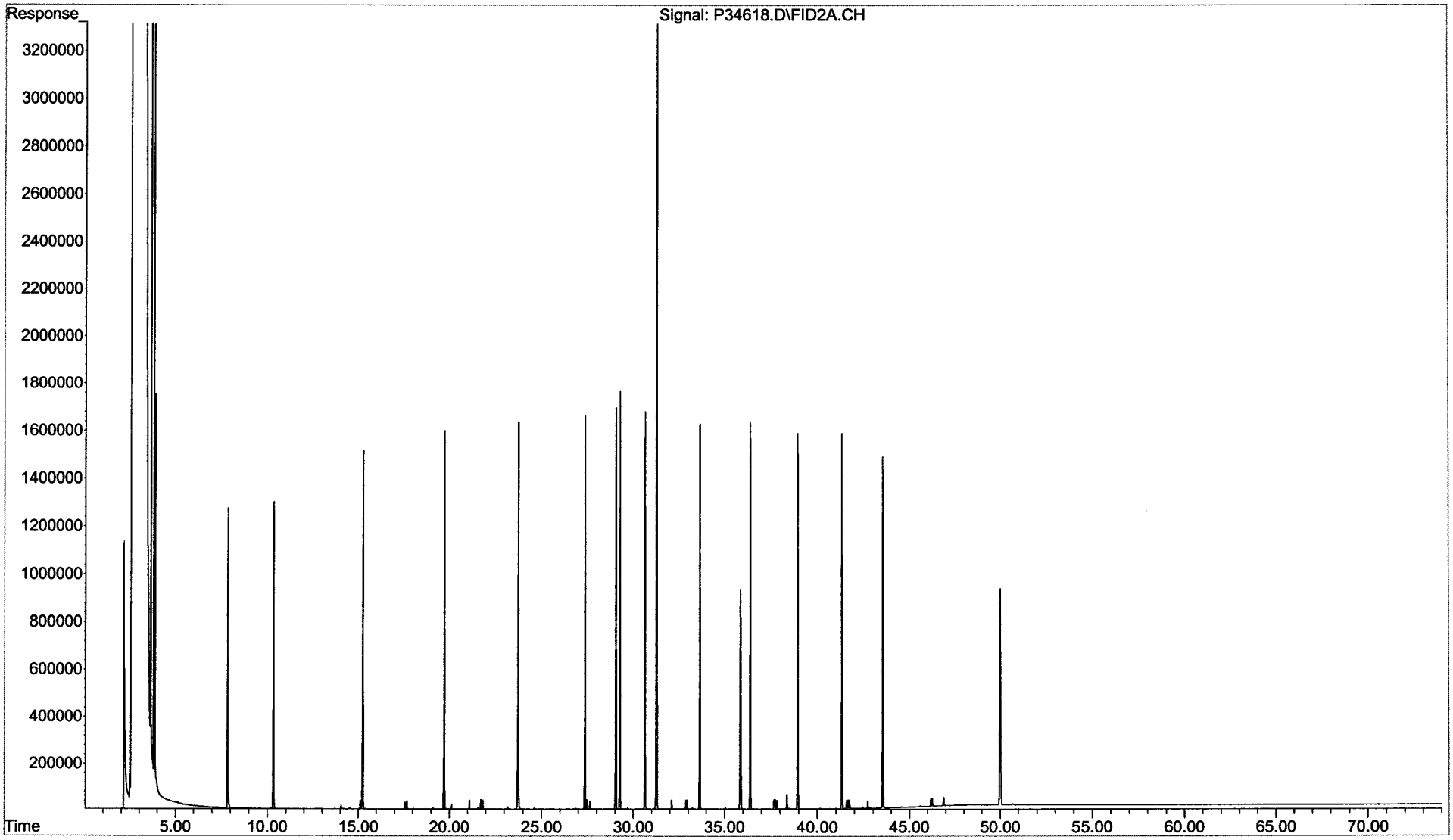
Integration File: SHCINT1.E
Quant Time: Jan 05 23:01:07 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.28	76800861	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.27	34962926	21.113 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 42.23%#
24) s	d50-Tetracosane	35.86	28194565	19.493 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 38.99%#
	Target Compounds			
3) t	n-Nonane (C9)	7.83	20424422	14.134 ug/mL
4) t	n-Decane (C10)	10.31	26851771	18.331 ug/mLm
6) t	n-Dodecane (C12)	15.24	31529930	21.332 ug/mLm
9) t	n-Tetradecane (C14)	19.73	32841027	21.947 ug/mLm
12) t	n-Hexadecane (C16)	23.74	34360818	22.797 ug/mL
16) t	n-Octadecane (C18)	27.36	34483164	22.708 ug/mL
18) t	n-Nonadecane (C19)	29.04	34578738	22.961 ug/mLm
20) t	n-Eicosane (C20)	30.64	34815232	23.243 ug/mL
22) t	n-Docosane (C22)	33.64	34945129	22.950 ug/mL
25) t	n-Tetracosane (C24)	36.40	35018265	22.712 ug/mLm
27) t	n-Hexacosane (C26)	38.95	35195385	23.100 ug/mLm
29) t	n-Octacosane (C28)	41.32	35137954	22.748 ug/mLm
31) t	n-Triacontane (C30)	43.54	34875079	22.504 ug/mL
37) t	n-Hexatriacontane (C36)	50.00	32914975	21.861 ug/mLm
42) h	C9-C40 Total Petroleum Hyd	40.39	810823818	536.501 ug/mL
44) h	Total Resolved Hydrocarbon	40.39	482051423	318.961 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34618.D
Operator : AC
Acquired : 30 Dec 2005 11:06 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: SS122105LCSD13-AFID
Misc Info : 1X ETR0512110
Vial Number: 80



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

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

Lab Code: **MA00030**
ETR: **0512110**
Lab ID: **TS010506AWS03**
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	12/28/05	100	0.051	10	1	AC

Parameter	Result
Total Petroleum Hydrocarbons	**580000**

N/A - Not Applicable

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Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34560.D
Signal(s) : FID2A.CH
Acq On : 28 Dec 2005 12:24 pm
Operator : AC
Sample : TS010506AWS03
Misc : 1X ANS STD
ALS Vial : 52 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 05 21:31:04 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

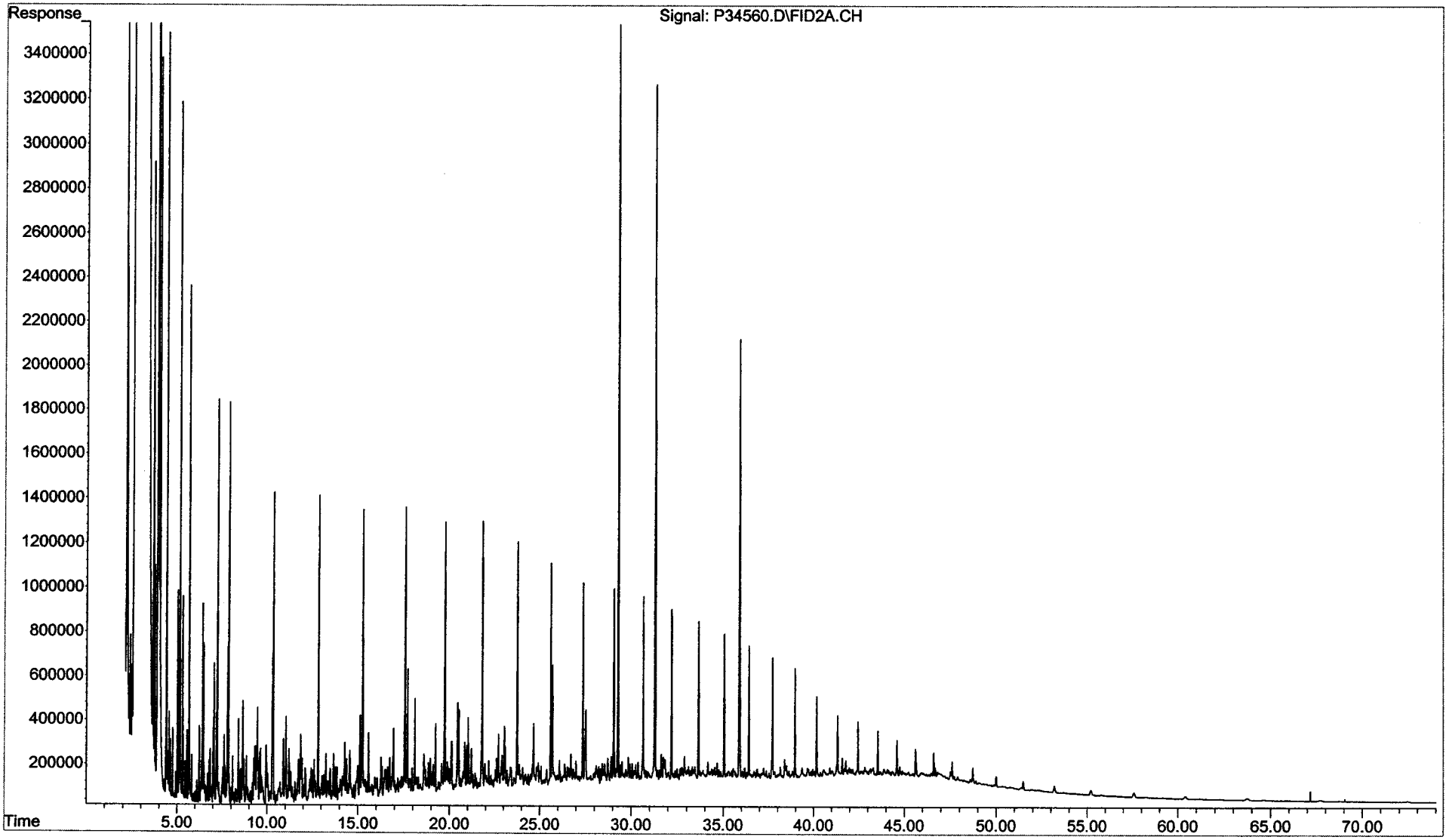
Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

1/18/06

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.29	72775892	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.29	75191503	47.918 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	95.84%
24) s d50-Tetracosane	35.89	62759986	45.789 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.58%
Target Compounds			
42) h C9-C40 Total Petroleum Hyd	40.39	4635351444	3236.720 ug/mL
44) h Total Resolved Hydrocarbon	40.39	1328491408	927.644 ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34560.D
Operator : AC
Acquired : 28 Dec 2005 12:24 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: TS010506AWS03
Misc Info : 1X ANS STD
Vial Number: 52



Instrument Blank Association

ETR: 0512110

Project: Gowanus Canal

	Associated Instrument Blank	
Sample ID	**Laboratory ID**	**File ID**
SS122105B16	IB312280501	P34606.D
SS122105LCS13	IB312280501	P34606.D
SS122105LCSD13	IB312280501	P34606.D
0512110-01	IB312280501	P34606.D
0512110-02	IB312280501	P34606.D
0512110-03	IB312280501	P34606.D
0512110-04	IB312280501	P34606.D
0512110-05	IB312280501	P34606.D
0512110-06	IB312280501	P34606.D
0512110-07	IB312280501	P34606.D
0512110-08	IB312280501	P34606.D
0512110-09	IB312280501	P34606.D
0512110-10	IB312280501	P34606.D
0512110-11	IB312280501	P34606.D
0512110-11 D	IB312280501	P34606.D
0512110-12	IB312280501	P34606.D
0512110-13	IB312280501	P34606.D
0512110-14	IB312280501	P34606.D

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34606.D
Signal(s) : FID2A.CH
Acq On : 30 Dec 2005 1:56 pm
Operator : AC
Sample : IB312280501
Misc : DCM
ALS Vial : 74 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 05 21:28:35 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

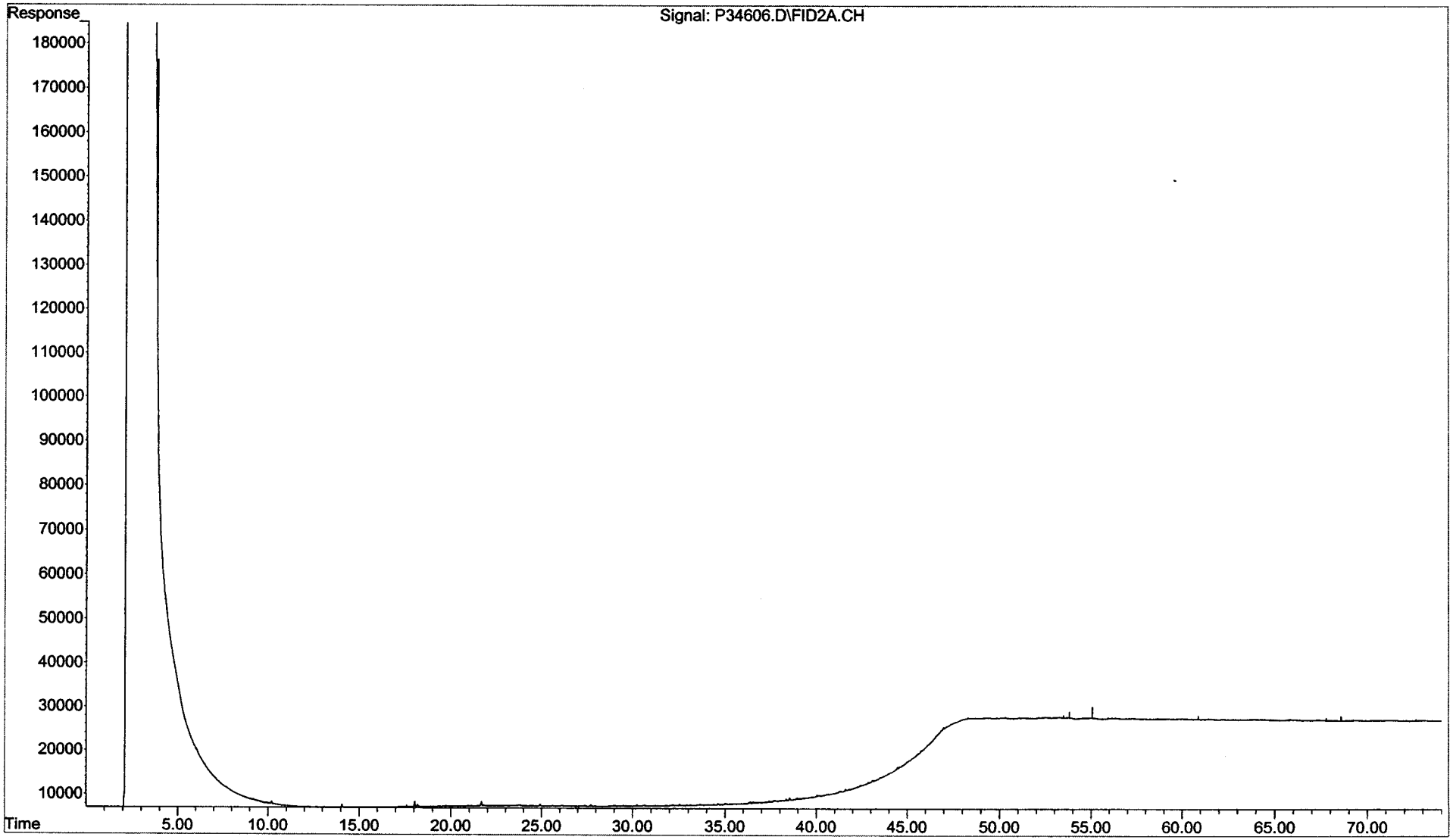
Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.25mm

1/5/06

Compound	R.T.	Response	Conc	Units
Internal Standards				
1) I 5-alpha-androstane	30.64f	3272	50.000	ug/mLm
System Monitoring Compounds				
Target Compounds				
42) h C9-C40 Total Petroleum Hyd	40.39	375870250	5838120.095	ug/mL

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34606.D
Operator : AC
Acquired : 30 Dec 2005 1:56 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: IB312280501
Misc Info : DCM
Vial Number: 74



Sequence Name: O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\S3122801.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\DECEMBER\DEC28\

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

1/13/06

Line					Sample Name/Misc Info
1)	Debug				
2)	DualTwr				
3)	SepGC1				
4)	RearSamp	51	P34558	FRNC3C	C3122801-AFID
5)	Sample	1	P34559	FRNC3C	C3122801
6)	RearSamp	52	P34560	FRNC3C	ANS3122801-AFID TS010506AWS03 1/13/06
7)	Sample	2	P34561	FRNC3C	ANS3122801
8)	RearSamp	53	P34562	FRNC3C	DCM-AFID
9)	Sample	3	P34563	FRNC3C	DCM
10)	Pause				
11)	RearSamp	54	P34564	FRNC3C	C3122802-AFID
12)	Sample	4	P34565	FRNC3C	C3122802
13)	RearSamp	55	P34566	FRNC3C	DCM-AFID
14)	Sample	5	P34567	FRNC3C	DCM
15)	RearSamp	55	P34567a	FRNC3C	DCM-AFID
16)	Sample	5	P34567b	FRNC3C	DCM
17)	RearSamp	56	P34568	FRNC3C	SS122105B06-AFID → 0512097 to be re-alumina cleaned
18)	Sample	6	P34569	FRNC3C	SS122105B06 do not use 1/13/06
19)	RearSamp	57	P34570	FRNC3C	SS122105LCS04-AFID
20)	Sample	7	P34571	FRNC3C	SS122105LCS04
21)	RearSamp	99	P34571A	FRNC3C	c3122802a-afid
22)	Sample	100	P34571B	FRNC3C	c3122802a
23)	RearSamp	58	P34572	FRNC3C	SS122105LCSD04-AFID
24)	Sample	8	P34573	FRNC3C	SS122105LCSD04
25)	RearSamp	59	P34574	FRNC3C	0512097-01-AFID
26)	Sample	9	P34575	FRNC3C	0512097-01
27)	RearSamp	60	P34576	FRNC3C	0512097-02-AFID
28)	Sample	10	P34577	FRNC3C	0512097-02
29)	RearSamp	61	P34578	FRNC3C	0512097-03-AFID
30)	Sample	11	P34579	FRNC3C	0512097-03
31)	RearSamp	62	P34580	FRNC3C	0512097-04-AFID
32)	Sample	12	P34581	FRNC3C	0512097-04
33)	RearSamp	63	P34582	FRNC3C	0512097-04D-AFID
34)	Sample	13	P34583	FRNC3C	0512097-04D
35)	RearSamp	64	P34584	FRNC3C	0512097-05-AFID
36)	Sample	14	P34585	FRNC3C	0512097-05
37)	RearSamp	65	P34586	FRNC3C	C3122803-AFID
38)	Sample	15	P34587	FRNC3C	C3122803
39)	RearSamp	66	P34588	FRNC3C	DCM-AFID
40)	Sample	16	P34589	FRNC3C	DCM
41)	RearSamp	67	P34590	FRNC3C	0512097-11-AFID
42)	Sample	17	P34591	FRNC3C	0512097-11
43)	RearSamp	68	P34592	FRNC3C	0512097-12-AFID

PAH #3 Sequence Information

SHC Continuing Calibration: WHAC10 Conc.: 50ug/mL
PAH Continuing Calibration: ~~WHAC13~~ WHAB56 1/13/06 Conc.: 500ng/mL
Alaska North Slope Crude Standard: WHAB79 Conc.: 5.096mg/mL

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

Last Modified: Tue Jan 03 10:25:50 2006 Page: 1

Sequence Name: O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\S3122801.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	18	P34593	FRNC3C	0512097-12
45)	RearSamp	69	P34594	FRNC3C	0512097-13-AFID
46)	Sample	19	P34595	FRNC3C	0512097-13
47)	RearSamp	70	P34596	FRNC3C	0512097-14-AFID
48)	Sample	20	P34597	FRNC3C	0512097-14
49)	RearSamp	71	P34598	FRNC3C	C3122804-AFID
50)	Sample	21	P34599	FRNC3C	C3122804
51)	RearSamp	72	P34600	FRNC3C	DCM-AFID
52)	Sample	22	P34601	FRNC3C	DCM
53)	RearSamp	72	P34602	FRNC3C	
54)	Sample	22	P34603	FRNC3C	
55)	RearSamp	73	P34604	FRNC3C	
56)	Sample	23	P34605	FRNC3C	
57)	Pause				
58)	RearSamp	74	P34606	FRNC3C	DCM IB3122805 01 1/13/06
59)	Sample	24	P34607	FRNC3C	
60)	RearSamp	75	P34608	FRNC3C	0512097-04D
61)	Sample	25	P34609	FRNC3C	
62)	RearSamp	76	P34610	FRNC3C	C3122805-AFID PASS 1/13/06
63)	Sample	26	P34611	FRNC3C	C3122805
64)	RearSamp	77	P34612	FRNC3C	dcm-afid
65)	Sample	27	P34613	FRNC3C	DCM
66)	RearSamp	78	P34614	FRNC3C	SS122105B16-AFID
67)	Sample	28	P34615	FRNC3C	SS122105B16
68)	RearSamp	79	P34616	FRNC3C	SS122105LCS13-AFID
69)	Sample	29	P34617	FRNC3C	SS122105LCS13
70)	RearSamp	80	P34618	FRNC3C	SS122105LCS13D-AFID
71)	Sample	30	P34619	FRNC3C	SS122105LCS13D
72)	RearSamp	81	P34620	FRNC3C	0512110-01-AFID
73)	Sample	31	P34621	FRNC3C	0512110-01
74)	RearSamp	82	P34622	FRNC3C	0512110-02-AFID
75)	Sample	32	P34623	FRNC3C	0512110-02
76)	RearSamp	83	P34624	FRNC3C	0512110-03-AFID
77)	Sample	33	P34625	FRNC3C	0512110-03
78)	RearSamp	84	P34626	FRNC3C	0512110-04-AFID
79)	Sample	34	P34627	FRNC3C	0512110-04
80)	RearSamp	85	P34628	FRNC3C	0512110-05-AFID
81)	Sample	35	P34629	FRNC3C	0512110-05
82)	RearSamp	86	P34630	FRNC3C	C3122806-AFID PASS 1/13/06
83)	Sample	36	P34631	FRNC3C	C3122806
84)	RearSamp	87	P34632	FRNC3C	DCM
85)	Sample	37	P34633	FRNC3C	DCM
86)	RearSamp	88	P34634	FRNC3C	0512110-06-AFID
87)	Sample	38	P34635	FRNC3C	0512110-06
88)	RearSamp	89	P34636	FRNC3C	0512110-07-AFID
89)	Sample	39	P34637	FRNC3C	0512110-07
90)	RearSamp	90	P34638	FRNC3C	0512110-08-AFID
91)	Sample	40	P34639	FRNC3C	0512110-08
92)	RearSamp	91	P34640	FRNC3C	0512110-09-AFID
93)	Sample	41	P34641	FRNC3C	0512110-09
94)	RearSamp	92	P34642	FRNC3C	0512110-10-AFID
95)	Sample	42	P34643	FRNC3C	0512110-10
96)	RearSamp	93	P34644	FRNC3C	0512110-11-AFID

Sequence Name: O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\S3122801.S

	Line Type	Vial	DataFile	Method	Sample Name
97)	Sample	43	P34645	FRNC3C	0512110-11
98)	RearSamp	94	P34646	FRNC3C	0512110-11D-AFID
99)	Sample	44	P34647	FRNC3C	0512110-11D
100)	RearSamp	95	P34648	FRNC3C	0512110-12-AFID
101)	Sample	45	P34649	FRNC3C	0512110-12
102)	RearSamp	96	P34650	FRNC3C	0512110-13-AFID
103)	Sample	46	P34651	FRNC3C	0512110-13
104)	RearSamp	97	P34652	FRNC3C	0512110-14-AFID
105)	Sample	47	P34653	FRNC3C	0512110-14
106)	RearSamp	98	P34654	FRNC3C	C3122807 -AFID PACS 1/13/06
107)	Sample	48	P34655	FRNC3C	C3122807-AFID ~~PASS~~ 1/13/06
108)	RearSamp	99	P34656	FRNC3C	DCM
109)	Sample	49	P34657	FRNC3C	DCM

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: **0512110**
Lab ID: **SS122105B16**
Date Analyzed: **12/30/05 20:10**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS122105LCS13	12/30/05 21:38
LCSD	SS122105LCSD13	12/30/05 23:06
GC-SED-93 (0-1)	0512110-01	12/31/05 00:33
GC-SED-92 (0-2)	0512110-02	12/31/05 02:01
GC-SED-85B (8.5-9.3)	0512110-03	12/31/05 03:28
GC-SED-67 (8-8.4)	0512110-04	12/31/05 04:55
GC-SED-68 (2.2-3.1)	0512110-05	12/31/05 06:24
GC-SED-80 (0-2)	0512110-06	12/31/05 10:47
GC-SED-79 (2.5-3.5)	0512110-07	12/31/05 12:14
GC-SED-81 (8-11)	0512110-08	12/31/05 13:42
GC-SED-69 (6-7)	0512110-09	12/31/05 15:11
GC-SED-72 (13.5-14.5)	0512110-10	12/31/05 16:40
GC-SED-07 (7.5-8.5)	0512110-11	12/31/05 18:07
GC-SED-07 (7.5-8.5)	0512110-11 D	12/31/05 19:35
GC-SED-03 (0-1.5)	0512110-12	12/31/05 21:04
GC-SED-01 (19-20)	0512110-13	12/31/05 22:33
GC-SED-02 (17.1-18.1)	0512110-14	01/01/06 00:01

N/A - Not Applicable

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

Sequence Name: C:\MSDChem\1\sequence\S3121302.S
Comment:
Operator: AC
Data Path: C:\MSDCHEM\1\DATA\DECEMBER\DEC13\

1° 12/14/05

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:

PAH #3 Sequence Information

SHC Continuing Calibration: WHAB80 Conc.: 50ug/mL
PAH Continuing Calibration: WHAB56 Conc.: 500ng/mL

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

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

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

On A E
(X) Inject Anyway
( ) Don't Inject

2° 12/14/05

Line					Sample Name/Misc Info
1)	DualTwr				
2)	SepGC1				
3)	RearSamp	51	P34211	FRNC3C	ALK STD
4)	Sample	1	P34212	FRNC3C	PAH STD
5)	RearSamp	51	P34213	FRNC3C	C3121301-AFID
6)	Sample	1	P34214	FRNC3C	C3121301 PASS
7)	RearSamp	52	P34215	FRNC3C	DCM-AFID
8)	Sample	2	P34216	FRNC3C	ANS3121301
9)	RearSamp	53	P34217	FRNC3C	I3121301
10)	Sample	3	P34218	FRNC3C	DCM
11)	RearSamp	54	P34219	FRNC3C	I3121302
12)	Sample	4	P34220	FRNC3C	SS110905B25
13)	RearSamp	55	P34221	FRNC3C	I3121303
14)	Sample	5	P34222	FRNC3C	SS110905LCS18
15)	RearSamp	56	P34223	FRNC3C	I3121304
16)	Sample	6	P34224	FRNC3C	SS110905LCSD16
17)	RearSamp	57	P34225	FRNC3C	I3121305
18)	Sample	7	P34226	FRNC3C	0511064-01
19)	RearSamp	58	P34227	FRNC3C	Q3121301 PASS
	Sample	8	P34228	FRNC3C	0511064-02
21)	RearSamp	59	P34229	FRNC3C	ANS3121301 TO121405AW501
22)	Sample	9	P34230	FRNC3C	0511084-01
23)	RearSamp	60	P34231	FRNC3C	LA3121301 TO121405LA01
24)	Sample	10	P34232	FRNC3C	C3121302 PASS
25)	RearSamp	61	P34233	FRNC3C	SFFCO3121301 TO121405SSFC001
26)	Sample	12	P34234	FRNC3C	DCM
27)	RearSamp	62	P34235	FRNC3C	DCM-AFID
28)	Sample	11	P34236	FRNC3C	QA WHAB07
29)	RearSamp	63	P34237	FRNC3C	DCM-AFID IB312130501
30)	Sample	4	P34238	FRNC3C	SS110905B25
31)	RearSamp	63	P34239	FRNC3C	DCM-AFID
32)	Sample	13	P34240	FRNC3C	0511084-01
33)	RearSamp	64	P34241	FRNC3C	C3121301-AFID
34)	Sample	14	P34242	FRNC3C	DCM
35)	RearSamp	65	P34243	FRNC3C	DCM-AFID
36)	Sample	15	P34244	FRNC3C	SS110905B25
37)	RearSamp	66	P34245	FRNC3C	SS112705B01-AFID
38)	Sample	16	P34246	FRNC3C	SS110905LCS18
39)	RearSamp	67	P34247	FRNC3C	dcm IB312130502
40)	Sample	17	P34248	FRNC3C	SS110905LCSD16
41)	RearSamp	68	P34249	FRNC3C	TO120605B11-AFID
42)	Sample	18	P34250	FRNC3C	0511064-01
43)	RearSamp	69	P34251	FRNC3C	TO120605LCS03-AFID

Run used

MS 12/19/05

SHC Calibration IDs

SHC Calibration Level 1: WHAB29 Conc.: 1.0ug/mL
SHC Calibration Level 2: WHAB30 Conc.: 10ug/mL
SHC Calibration Level 3 (CC): WHAB80 Conc.: 50ug/mL
SHC Calibration Level 4: WHAB32 Conc.: 100ug/mL
SHC Calibration Level 5: WHAB33 Conc.: 200ug/mL

SHC Independent Check Verification: WHAB34 Conc. 25ug/mL

Crude Oil IDs

Alaska North Slope: WHAB79 Conc.: 5.096mg/mL
Largo Agrio Norte: WHAB41 Conc.: 6.15mg/mL
Shushufindi South West: WHAB42 Conc.: 6.25mg/mL
Shushufindi Central: WHAB44 Conc.: 6.17mg/mL
Sasha Central: WHAB46 Conc.: 5.38mg/mL
Shushufindi North: WHAB47 Conc.: 5.74mug/mL
Shushufindi South: WHAB48 Conc.: 5.00mg/mL
Aguarico: WHAC02 Conc.: 6.02mg/mL

Last Modified: Wed Dec 14 18:56:21 2005

Sequence Name: C:\MSDChem\1\sequence\S3121302.S

	Line Type	Vial	DataFile	Method	Sample Name
44)	Sample	19	P34252	FRNC3C	0511061-02 ✓
45)	RearSamp	70	P34253	FRNC3C	TO120605LCSD03-AFID
[illegible]	Sample	20	P34254	FRNC3C	C3121303 PASS
[illegible]	RearSamp	71	P34255	FRNC3C	0512020-02-AFID
48)	Sample	21	P34256	FRNC3C	DCM
49)	RearSamp	72	P34257	FRNC3C	0512020-03-AFID
50)	Sample	22	P34258	FRNC3C	TS120805B02 ✓
51)	RearSamp	73	P34259	FRNC3C	0512020-04-AFID
52)	Sample	23	P34260	FRNC3C	TS120805LCS01 ✓
53)	RearSamp	74	P34261	FRNC3C	0512020-05-AFID
54)	Sample	24	P34262	FRNC3C	TS120805LCSD01 ✓
55)	RearSamp	75	P34263	FRNC3C	0512020-06-AFID
56)	Sample	25	P34264	FRNC3C	0512021-01 ✓
57)	RearSamp	76	P34265	FRNC3C	0512020-07-AFID
58)	Sample	26	P34266	FRNC3C	0512021-02 ✓
59)	RearSamp	77	P34267	FRNC3C	0512020-08-AFID
60)	Sample	27	P34268	FRNC3C	0512021-03 ✓
61)	RearSamp	78	P34269	FRNC3C	C3121302-AFID
62)	Sample	28	P34270	FRNC3C	0512021-04 ✓
63)	RearSamp	79	P34271	FRNC3C	DCM-AFID IB312130504
64)	Sample	29	P34272	FRNC3C	0512021-05 ✓
65)	RearSamp	80	P34273	FRNC3C	TS112705LCS01-AFID
66)	Sample	30	P34274	FRNC3C	0512021-05D ✓
67)	RearSamp	81	P34275	FRNC3C	TS112705LCSD01-AFID
68)	Sample	31	P34276	FRNC3C	C3121304 PASS
69)	RearSamp	82	P34277	FRNC3C	0511154-01-AFID
70)	Sample	32	P34278	FRNC3C	DCM
71)	RearSamp	83	P34279	FRNC3C	0511154-02-AFID
72)	Sample	33	P34280	FRNC3C	0512021-06 ✓
73)	RearSamp	84	P34281	FRNC3C	0511154-03-AFID
74)	Sample	34	P34282	FRNC3C	0512021-07 ✓
75)	RearSamp	85	P34283	FRNC3C	0511154-03D-AFID
[illegible]	Sample	35	P34284	FRNC3C	0512021-08 ✓
[illegible]	RearSamp	86	P34285	FRNC3C	C3121303-AFID
78)	Sample	36	P34286	FRNC3C	0512021-09 ✓
79)	RearSamp	87	P34287	FRNC3C	DCM-AFID IB312130503
80)	Sample	37	P34288	FRNC3C	0512021-10 ✓
81)	RearSamp	88	P34289	FRNC3C	SO121405B12-AFID
82)	Sample	38	P34290	FRNC3C	C3121305 PASS
83)	RearSamp	89	P34291	FRNC3C	SO121405LCS01-AFID
84)	Sample	39	P34292	FRNC3C	DCM
85)	RearSamp	90	P34293	FRNC3C	0512076-01-AFID
86)	Sample	40	P34294	FRNC3C	SO121405B12 ✓
87)	RearSamp	91	P34295	FRNC3C	C3121304-AFID
88)	Sample	41	P34296	FRNC3C	SO121405LCS01 ✓
89)	RearSamp	92	P34297	FRNC3C	DCM-AFID IB312130505
90)	Sample	42	P34298	FRNC3C	0512076-01 ✓ needs 4X
91)	RearSamp	93	P34299	FRNC3C	TS120805B02-AFID
92)	Sample	43	P34300	FRNC3C	C3121306 ~~PASS~~ IS↑ use C3121307
93)	RearSamp	94	P34301	FRNC3C	TS120805LCS01-AFID
94)	Sample	44	P34302	FRNC3C	DCM
95)	RearSamp	95	P34303	FRNC3C	TS120805LCSD01-AFID
96)	Sample	43	P34304	FRNC3C	C3121307 ~~[illegible]~~ PASS

✓ Thru used

MS 12-19-05

Sequence Name: C:\MSDChem\1\sequence\S3121302.S

	Line	Type	Vial	DataFile	Method	Sample Name	
	97)	RearSamp	96	P34305	FRNC3C	0512021-01-AFID	
	98)	Sample	1	P34306	FRNC3C	DCM	
	99)	RearSamp	97	P34307	FRNC3C	0512021-02-AFID	
	100)	Sample	2	P34308	FRNC3C	TS120805B08 ✓	
	101)	RearSamp	98	P34309	FRNC3C	0512021-03-AFID	
	102)	Sample	3	P34310	FRNC3C	TS120805LCS06 ✓	
	103)	RearSamp	99	P34311	FRNC3C	0512021-04-AFID	
	104)	Sample	4	P34312	FRNC3C	TS120805LCSD06 ✓	
	105)	RearSamp	100	P34313	FRNC3C	0512021-05-AFID	
	106)	Sample	5	P34314	FRNC3C	0512028-01 ✓	SS2↑
	107)	RearSamp	51	P34315	FRNC3C	C3121305-AFID	
	108)	Sample	6	P34316	FRNC3C	0512028-02 ✓	SS2↑
	109)	RearSamp	52	P34317	FRNC3C	DCM-AFID -cc	
	110)	Sample	7	P34318	FRNC3C	0512028-02D ✓	SS2↑
	111)	RearSamp	53	P34319	FRNC3C	0512021-05D-AFID	
	112)	Sample	8	P34320	FRNC3C	C3121308 PASS	
	113)	RearSamp	54	P34321	FRNC3C	0512021-06-AFID	
	114)	Sample	9	P34322	FRNC3C	DCM clean ✓	
	115)	RearSamp	55	P34323	FRNC3C	0512021-07-AFID	
	116)	Sample	10	P34324	FRNC3C	TS120805B07 ✓	
	117)	RearSamp	56	P34325	FRNC3C	0512021-08-AFID	
	118)	Sample	11	P34326	FRNC3C	TS120805LCS05 ✓	
	119)	RearSamp	57	P34327	FRNC3C	0512021-09-AFID	
	120)	Sample	12	P34328	FRNC3C	TS120805LCSD05 ✓	
	121)	RearSamp	58	P34329	FRNC3C	0512021-10-AFID	
	122)	Sample	13	P34330	FRNC3C	0512027-01 ✓	
	123)	RearSamp	59	P34331	FRNC3C	C3121306-AFID PASS	✓ Run used
	124)	Sample	14	P34332	FRNC3C	0512027-01D ✓	
	125)	RearSamp	60	P34333	FRNC3C	DCM-AFID IB312130506	
	126)	Sample	15	P34334	FRNC3C	0512027-02 ✓	
	127)	Pause					
	128)	RearSamp	61	P34335	FRNC3C	TS120805B08-AFID	
	129)	Sample	16	P34336	FRNC3C	0512027-03 ✓	
	130)	RearSamp	62	P34337	FRNC3C	TS120805LCS06-AFID	
	131)	Sample	17	P34338	FRNC3C	0512027-04 ✓	
	132)	RearSamp	63	P34339	FRNC3C	TS120805LCSD06-AFID	
	133)	Sample	18	P34340	FRNC3C	0512027-05 ✓	
	134)	RearSamp	64	P34341	FRNC3C	0512028-01-AFID	
	135)	Sample	19	P34342	FRNC3C	0512027-06 ✓	
	136)	RearSamp	65	P34343	FRNC3C	0512028-02-AFID	
	137)	Sample	20	P34344	FRNC3C	C3121309 PASS	
	138)	RearSamp	66	P34345	FRNC3C	0512028-02D-AFID	
	139)	Sample	21	P34346	FRNC3C	DCM	
	140)	RearSamp	67	P34347	FRNC3C	C3121307-AFID	
	141)	Sample	22	P34348	FRNC3C	0512027-07 ✓	
	142)	RearSamp	68	P34349	FRNC3C	DCM-AFID	
	143)	Sample	23	P34350	FRNC3C	0512027-08 ✓	
	144)	RearSamp	69	P34351	FRNC3C	TS120805B07-AFID	
	145)	Sample	24	P34352	FRNC3C	0512027-09 ✓	
	146)	RearSamp	70	P34353	FRNC3C	TS120805LCS05	
	147)	Sample	25	P34354	FRNC3C	0512027-10 ✓	
	148)	RearSamp	71	P34355	FRNC3C	TS120805LCSD05	
	149)	Sample	26	P34356	FRNC3C	0512027-11 ✓	

cms 121905

Sequence Name: C:\MSDChem\1\sequence\S3121302.S

	Line Type	Vial	DataFile	Method	Sample Name
150)	RearSamp	72	P34357	FRNC3C	0512027-01-AFID
151)	Sample	27	P34358	FRNC3C	0512027-12✓
152)	RearSamp	73	P34359	FRNC3C	0512027-01D-AFID
153)	Sample	28	P34360	FRNC3C	0512027-13✓
154)	RearSamp	74	P34361	FRNC3C	0512027-02-AFID
155)	Sample	29	P34362	FRNC3C	0512027-14✓
156)	RearSamp	75	P34363	FRNC3C	0512027-03-AFID
157)	Sample	30	P34364	FRNC3C	C3121310 DASJ
158)	RearSamp	76	P34365	FRNC3C	0512027-04-AFID
159)	Sample	30	P34366	FRNC3C	
160)	RearSamp	77	P34367	FRNC3C	0512027-05-AFID
161)	Sample	30	P34368	FRNC3C	
162)	RearSamp	78	P34369	FRNC3C	0512027-06-AFID
163)	Sample	30	P34370	FRNC3C	
164)	RearSamp	79	P34371	FRNC3C	C3121308-AFID
165)	Sample	30	P34372	FRNC3C	
166)	RearSamp	80	P34373	FRNC3C	DCM-AFID
167)	Sample	30	P34374	FRNC3C	
168)	RearSamp	81	P34375	FRNC3C	0512027-07-AFID
169)	Sample	30	P34376	FRNC3C	
170)	RearSamp	82	P34377	FRNC3C	0512027-08-AFID
171)	Sample	30	P34378	FRNC3C	
172)	RearSamp	83	P34379	FRNC3C	0512027-09-AFID
173)	Sample	30	P34380	FRNC3C	
174)	RearSamp	84	P34381	FRNC3C	0512027-10-AFID
175)	Sample	30	P34382	FRNC3C	
176)	RearSamp	85	P34383	FRNC3C	0512027-11-AFID
177)	Sample	30	P34384	FRNC3C	
178)	RearSamp	86	P34385	FRNC3C	0512027-12-AFID
179)	Sample	30	P34386	FRNC3C	
180)	RearSamp	87	P34387	FRNC3C	0512027-13-AFID
181)	Sample	30	P34388	FRNC3C	
182)	RearSamp	88	P34389	FRNC3C	0512027-14-AFID
183)	Sample	30	P34390	FRNC3C	
184)	RearSamp	89	P34391	FRNC3C	C3121309-AFID
185)	Sample	30	P34392	FRNC3C	C3121311
186)	RearSamp	90	P34393	FRNC3C	DCM-AFID
187)	Sample	31	P34394	FRNC3C	0512076-01-RE
188)	Sample	90	P34395	FRNC3C	
189)	Sample	32	P34396	FRNC3C	C121312

CW 1/24/06

Response Factor Report PAH-3

Method Path : O:\FORENSICS\METHODS\PAH3\DECEMBER\
Method File : HC31213.M
Title : FID Forensics
Last Update : Wed Dec 14 18:00:26 2005
Response Via : Initial Calibration

Calibration Files
1 =P34217.D 10 =P34219.D 50 =P34221.D
100 =P34223.D 200 =P34225.D

12/15/05.

		Compound	1	10	50	100	200	Avg	%RSD
1)	I	5-alpha-androstane	----------ISTD----------						
2)	t	n-Octane (C8)	0.885	0.879	0.897	0.886	0.895	0.888	0.83
3)	t	n-Nonane (C9)	0.951	0.932	0.946	0.935	0.939	0.941	0.86
4)	t	n-Decane (C10)	0.966	0.947	0.957	0.949	0.950	0.954	0.81
5)	t	n-Undecane (C11)	0.958	0.947	0.954	0.949	0.947	0.951	0.53
6)	t	n-Dodecane (C12)	0.964	0.961	0.967	0.962	0.958	0.962	0.36
7)	t	n-Tridecane (C13)	0.969	0.965	0.970	0.965	0.959	0.966	0.43
8)	t	1380	0.981	0.975	0.978	0.971	0.966	0.974	0.60
9)	t	n-Tetradecane (C14)	0.981	0.975	0.978	0.971	0.966	0.974	0.60
10)	t	1470	0.987	0.979	0.981	0.973	0.968	0.978	0.72
11)	t	n-Pentadecane (C15)	0.987	0.979	0.981	0.973	0.968	0.978	0.72
12)	t	n-Hexadecane (C16)	0.992	0.983	0.984	0.976	0.971	0.981	0.82
13)	t	1650	0.996	0.989	0.990	0.982	0.980	0.988	0.64
14)	t	n-Heptadecane (C17)	0.996	0.989	0.990	0.982	0.980	0.988	0.64
15)	t	Pristane	0.955	0.946	0.947	0.939	0.932	0.944	0.93
16)	t	n-Octadecane (C18)	0.999	0.990	0.991	0.984	0.980	0.989	0.73
17)	t	Phytane	0.986	0.980	0.981	0.974	0.969	0.978	0.67
18)	t	n-Nonadecane (C19)	0.991	0.981	0.983	0.975	0.972	0.980	0.73
19)	s	ortho-terphenyl	1.140	1.056	1.108	1.044	1.043	1.078	4.03
20)	t	n-Eicosane (C20)	0.986	0.975	0.977	0.970	0.967	0.975	0.73
21)	t	n-Heneicosane (C21)	1.018	1.005	1.008	1.000	0.998	1.006	0.80
22)	t	n-Docosane (C22)	1.004	0.989	0.993	0.986	0.984	0.991	0.79
23)	t	n-Tricosane (C23)	1.013	0.995	0.999	0.992	0.990	0.998	0.90
24)	s	d50-Tetracosane	1.256	0.863	0.878	0.856	0.856	0.942	18.69
25)	t	n-Tetracosane (C24)	1.017	1.002	1.005	0.999	0.997	1.004	0.77
26)	t	n-Pentacosane (C25)	1.066	1.000	1.001	0.994	0.993	1.011	3.07
27)	t	n-Hexacosane (C26)	1.009	0.990	0.991	0.985	0.984	0.992	1.03
28)	t	n-Heptacosane (C27)	1.010	0.988	0.987	0.982	0.981	0.989	1.18
29)	t	n-Octacosane (C28)	1.042	1.000	0.999	0.994	0.993	1.006	2.03
30)	t	n-Nonacosane (C29)	1.056	1.024	1.022	1.017	1.016	1.027	1.61
31)	t	n-Triacontane (C30)	1.036	1.006	1.004	1.000	0.999	1.009	1.54
32)	t	n-Hentriacontane (C31	1.004	0.975	0.972	0.969	0.967	0.977	1.56
33)	t	n-Dotriacontane (C32)	1.009	0.982	0.980	0.975	0.972	0.984	1.50
34)	t	n-Tritriacontane (C33	1.011	0.998	0.993	0.990	0.982	0.995	1.08
35)	t	n-tetratriacontane (C	1.028	1.008	1.004	1.001	0.987	1.006	1.45
36)	t	n-Pentatriacontane (C	0.981	0.967	0.963	0.961	0.939	0.962	1.58
37)	t	n-Hexatriacontane (C3	0.999	0.987	0.984	0.983	0.949	0.980	1.91
38)	t	n-Heptatriacontane (C	1.066	1.048	1.043	1.046	0.999	1.041	2.37
39)	t	n-Octatriacontane (C3	1.004	0.991	0.988	0.988	0.932	0.981	2.86
40)	t	n-Nonatriacontane (C3	0.969	0.967	0.963	0.965	0.895	0.952	3.37
41)	t	n-Tetracontane (C40)	0.969	0.967	0.963	0.965	0.895	0.952	3.37
42)	h	C9-C40 Total Petroleu	1.001	0.984	0.985	0.980	0.970	0.984	1.12
43)	h	C10-C28 DRO	1.001	0.984	0.985	0.980	0.970	0.984	1.12
44)	h	Total Resolved Hydroc	1.001	0.984	0.985	0.980	0.970	0.984	1.12

(#) = Out of Range

FID TPH RF CALCULATION

	L5	L4	L3	L2	L1
Method ID	FRNC3C.M	FRNC3C.M	FRNC3C.M	FRNC3C.M	FRNC3C.M
Date	Wed Dec 14 10:50:37 2005	Wed Dec 14 10:43:36 2005	Wed Dec 14 10:09:12 2005	Wed Dec 14 10:37:17 2005	Wed Dec 14 10:27:24 2005
File ID	P34225.D	P34223.D	P34221.D	P34219.D	P34217.D

12/14/05

n-Octane (C8)	243664978	124613863	63610064	12199444	1240094
n-Nonane (C9)	255918772	131441297	67136022	12937190	1333045
n-Decane (C10)	258780646	133468433	67903018	13141437	1352787
n-Undecane (C11)	257944348	133469926	67708538	13144852	1342430
n-Dodecane (C12)	260871001	135255067	68581188	13339540	1350925
n-Tridecane (C13)	261317494	135643812	68809332	13398176	1357283
n-Tetradecane (C14)	263098512	136603927	69379142	13536244	1374229
n-Pentadecane (C15)	263718467	136892711	69571280	13592767	1382136
n-Hexadecane (C16)	264501751	137275119	69816757	13647725	1389994
n-Heptadecane (C17)	267090289	138155653	70245739	13732106	1395640
Pristane	253845484	132078997	67173717	13140154	1338299
n-Octadecane (C18)	266888037	138333949	70322334	13742784	1399041
Phytane	264065017	136966023	69613776	13603557	1381539
n-Nonadecane (C19)	264810577	137174099	69729178	13621566	1387852
n-Eicosane (C20)	263527449	136416548	69338573	13539361	1381027
n-Heneicosane (C21)	271752262	140659370	71490713	13950517	1426559
n-Docosane (C22)	268085478	138708413	70467549	13729051	1406441
n-Tricosane (C23)	269772194	139526977	70889062	13812099	1419051
n-Tetracosane (C24)	271615882	140432797	71294447	13908281	1424175
n-Pentacosane (C25)	270402913	139823706	71033007	13877717	1493296
n-Hexacosane (C26)	268045087	138518736	70308591	13747441	1413993
n-Heptacosane (C27)	267260473	138089353	70033429	13710709	1414480
n-Octacosane (C28)	270536079	139801875	70867945	13887238	1459447
n-Nonacosane (C29)	276711073	142986319	72471029	14217244	1478942
n-Triacontane (C30)	272104837	140588037	71210382	13967083	1451787
n-Hentriacontane (C31)	263325086	136205011	68975685	13540278	1406726
n-Dotriacontane (C32)	264673790	137138208	69495222	13640087	1413303
n-Tritriacontane (C33)	267612782	139271030	70459773	13853933	1417002
n-tetratriacontane (C34)	268933781	140791339	71248630	13991139	1439971
n-Pentatriacontane (C35)	255654885	135176583	68344751	13422144	1373862
n-Hexatriacontane (C36)	258413296	138206653	69810161	13701090	1399378
n-Heptatriacontane (C37)	272210514	147104430	74024482	14550851	1492995
n-Octatriacontane (C38)	253863311	138926598	70094655	13754615	1407007
n-Tetracontane (C40)	243669557	135727650	68307636	13431005	1357272

12/14/05

12/15/05

	L5	L4	L3	L2	L1
C9-C40 Total Petroleum Hydrocarbons	264273367	137783595	69883507	13660909	1401876
C10-C28 DRO	264273367	137783595	69883507	13660909	1401876
Total Resolved Hydrocarbons	264273367	137783595	69883507	13660909	1401876

12/14/05

* Checked in method

12/15/05

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34217.D
Signal(s) : FID2A.CH
Acq On : 13 Dec 2005 7:29 pm
Operator : AC
Sample : I3121301
Misc : WHAB29
ALS Vial : 53 Sample Multiplier: 1

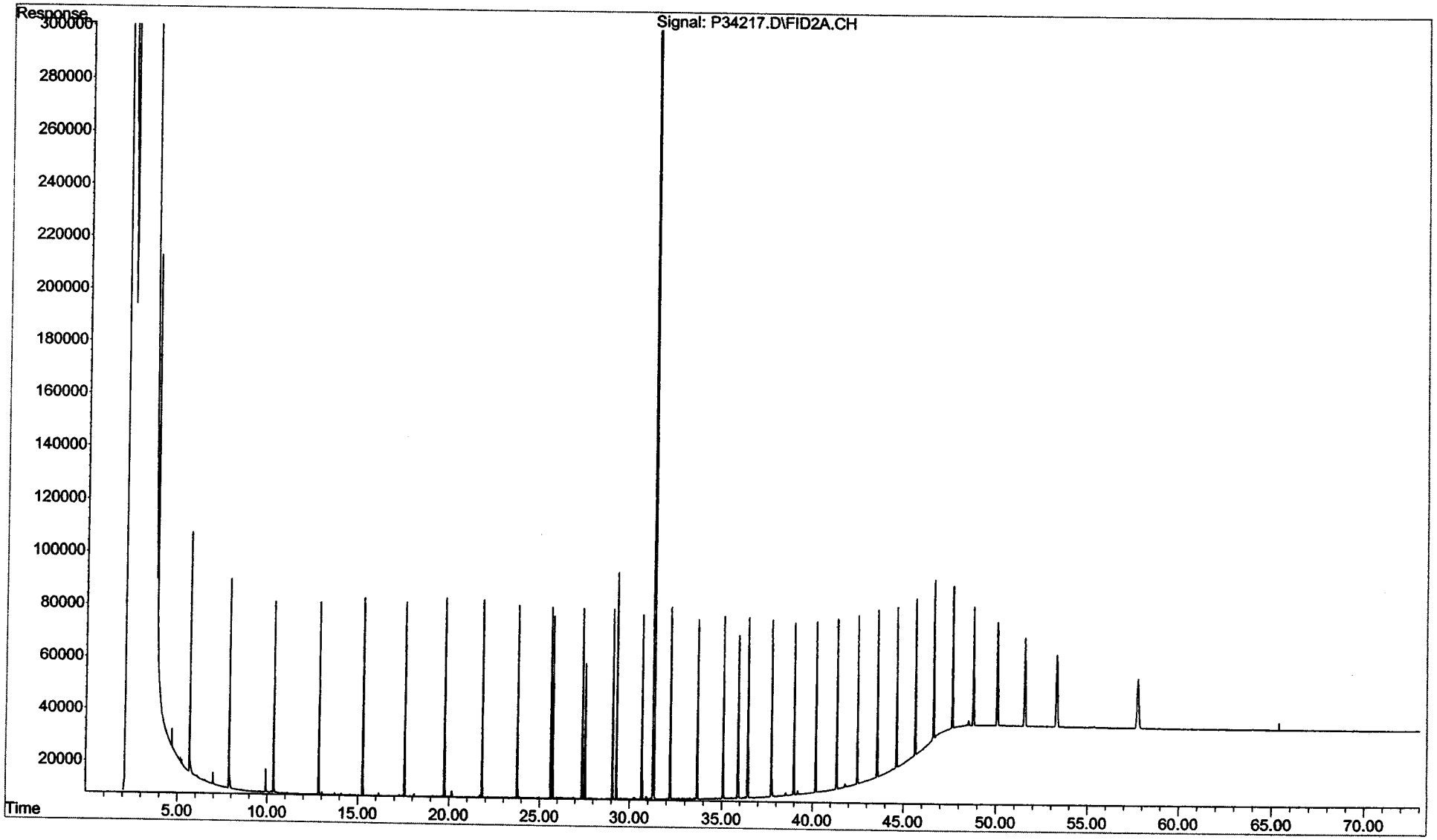
Integration File: SHCINT1.E
Quant Time: Dec 14 10:32:59 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 10:27:24 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

12/15/05

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.31	70050204	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.29	1596976	1.029 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	2.06%#
24) s d50-Tetracosane	35.89	1759909	1.431 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	2.86%#
Target Compounds			
2) t n-Octane (C8)	5.67	1240094	0.987 ug/mLm
3) t n-Nonane (C9)	7.87	1333045	1.005 ug/mLm
4) t n-Decane (C10)	10.35	1352787	1.009 ug/mLm
5) t n-Undecane (C11)	12.85	1342430	1.004 ug/mLm
6) t n-Dodecane (C12)	15.27	1350925	0.997 ug/mLm
7) t n-Tridecane (C13)	17.58	1357283	0.999 ug/mLm
9) t n-Tetradecane (C14)	19.75	1374229	1.003 ug/mLm
11) t n-Pentadecane (C15)	21.81	1382136	1.006 ug/mLm
12) t n-Hexadecane (C16)	23.77	1389994	1.008 ug/mLm
14) t n-Heptadecane (C17)	25.62	1395640	1.006 ug/mL
15) t Pristane	25.73	1338299	1.009 ug/mL
16) t n-Octadecane (C18)	27.38	1399041	1.007 ug/mL
17) t Phytane	27.54	1381539	1.005 ug/mLm
18) t n-Nonadecane (C19)	29.07	1387852	1.008 ug/mLm
20) t n-Eicosane (C20)	30.67	1381027	1.009 ug/mLm
21) t n-Heneicosane (C21)	32.20	1426559	1.010 ug/mLm
22) t n-Docosane (C22)	33.67	1406441	1.011 ug/mLm
23) t n-Tricosane (C23)	35.08	1419051	1.014 ug/mLm
25) t n-Tetracosane (C24)	36.43	1424175	1.012 ug/mLm
26) t n-Pentacosane (C25)	37.73	1493296	1.065 ug/mLm
27) t n-Hexacosane (C26)	38.98	1413993	1.018 ug/mLm
28) t n-Heptacosane (C27)	40.19	1414480	1.023 ug/mLm
29) t n-Octacosane (C28)	41.35	1459447	1.043 ug/mLm
30) t n-Nonacosane (C29)	42.48	1478942	1.033 ug/mLm
31) t n-Triacontane (C30)	43.57	1451787	1.032 ug/mLm
32) t n-Hentriacontane (C31)	44.62	1406726	1.033 ug/mLm
33) t n-Dotriacontane (C32)	45.65	1413303	1.030 ug/mLm
34) t n-Tritriacontane (C33)	46.64	1417002	1.018 ug/mLm
35) t n-tetratriacontane (C34)	47.64	1439971	1.023 ug/mLm
36) t n-Pentatriacontane (C35)	48.77	1373862	1.018 ug/mLm
37) t n-Hexatriacontane (C36)	50.07	1399378	1.015 ug/mLm
38) t n-Heptatriacontane (C37)	51.56	1492995	1.021 ug/mLm
39) t n-Octatriacontane (C38)	53.30	1407007	1.016 ug/mLm
41) t n-Tetracontane (C40)	57.75	1357272	1.006 ug/mLm

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34217.D
Operator : AC
Acquired : 13 Dec 2005 7:29 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: I3121301
Misc Info : WHAB29
Vial Number: 53



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34219.D
Signal(s) : FID2A.CH
Acq On : 13 Dec 2005 8:57 pm
Operator : AC
Sample : I3121302
Misc : WHAB30
ALS Vial : 54 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Dec 14 10:43:09 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 10:37:17 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

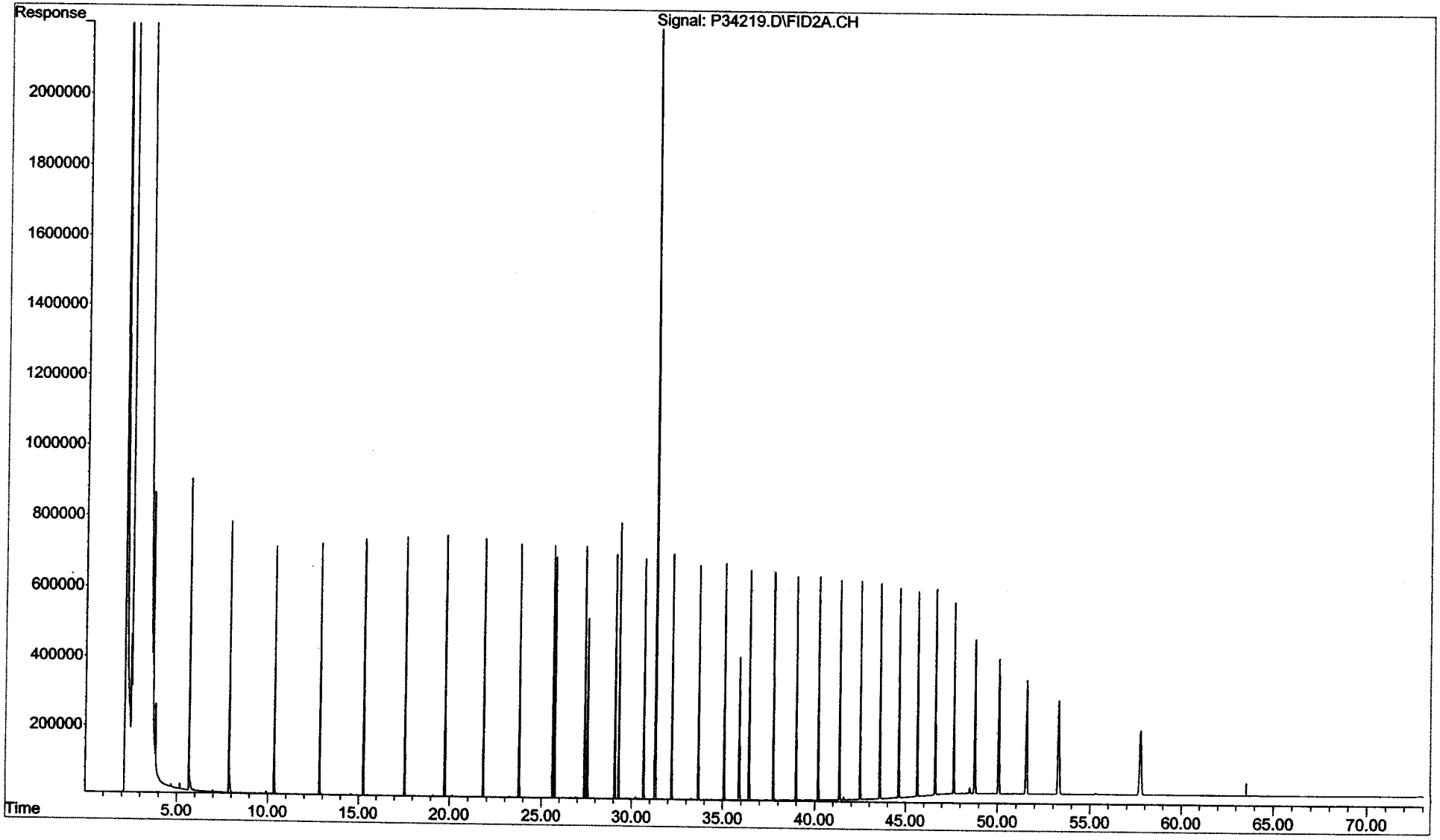
12/15/05.

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

12/14/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.31	69418385	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.29	14657023	9.395 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	18.79%#
24) s d50-Tetracosane	35.90	11984812	8.091 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	16.18%#
Target Compounds			
2) t n-Octane (C8)	5.67	12199444	9.863 ug/mLm
3) t n-Nonane (C9)	7.87	12937190	9.820 ug/mLm
4) t n-Decane (C10)	10.35	13141437	9.846 ug/mLm
5) t n-Undecane (C11)	12.85	13144852	9.900 ug/mLm
6) t n-Dodecane (C12)	15.27	13339540	9.952 ug/mLm
7) t n-Tridecane (C13)	17.58	13398176	9.955 ug/mLm
9) t n-Tetradecane (C14)	19.76	13536244	9.955 ug/mLm
11) t n-Pentadecane (C15)	21.82	13592767	9.954 ug/mLm
12) t n-Hexadecane (C16)	23.77	13647725	9.948 ug/mLm
14) t n-Heptadecane (C17)	25.62	13732106	9.959 ug/mLm
15) t Pristane	25.73	13140154	9.951 ug/mLm
16) t n-Octadecane (C18)	27.39	13742784	9.949 ug/mLm
17) t Phytane	27.55	13603557	9.961 ug/mL
18) t n-Nonadecane (C19)	29.07	13621566	9.943 ug/mLm
20) t n-Eicosane (C20)	30.67	13539361	9.935 ug/mLm
21) t n-Heneicosane (C21)	32.20	13950517	9.919 ug/mL
22) t n-Docosane (C22)	33.67	13729051	9.903 ug/mLm
23) t n-Tricosane (C23)	35.08	13812099	9.888 ug/mLm
25) t n-Tetracosane (C24)	36.43	13908281	9.911 ug/mLm
26) t n-Pentacosane (C25)	37.73	13877717	9.671 ug/mLm
27) t n-Hexacosane (C26)	38.99	13747441	9.900 ug/mLm
28) t n-Heptacosane (C27)	40.19	13710709	9.891 ug/mLm
29) t n-Octacosane (C28)	41.36	13887238	9.803 ug/mLm
30) t n-Nonacosane (C29)	42.49	14217244	9.860 ug/mLm
31) t n-Triacontane (C30)	43.58	13967083	9.863 ug/mLm
32) t n-Hentriacontane (C31)	44.63	13540278	9.869 ug/mLm
33) t n-Dotriacontane (C32)	45.65	13640087	9.882 ug/mLm
34) t n-Tritriacontane (C33)	46.64	13853933	9.956 ug/mLm
35) t n-tetratriacontane (C34)	47.65	13991139	9.918 ug/mLm
36) t n-Pentatriacontane (C35)	48.78	13422144	9.946 ug/mLm
37) t n-Hexatriacontane (C36)	50.08	13701090	9.954 ug/mLm
38) t n-Heptatriacontane (C37)	51.57	14550851	9.938 ug/mLm
39) t n-Octatriacontane (C38)	53.30	13754615	9.945 ug/mLm
41) t n-Tetracontane (C40)	57.77	13431005	10.016 ug/mL

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34219.D
Operator : AC
Acquired : 13 Dec 2005 8:57 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: I3121302
Misc Info : WHAB30
Vial Number: 54



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34221.D
Signal(s) : FID2A.CH
Acq On : 13 Dec 2005 10:25 pm
Operator : AC
Sample : I3121303
Misc : WHAB80
ALS Vial : 55 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Dec 14 10:27:04 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 10:09:12 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

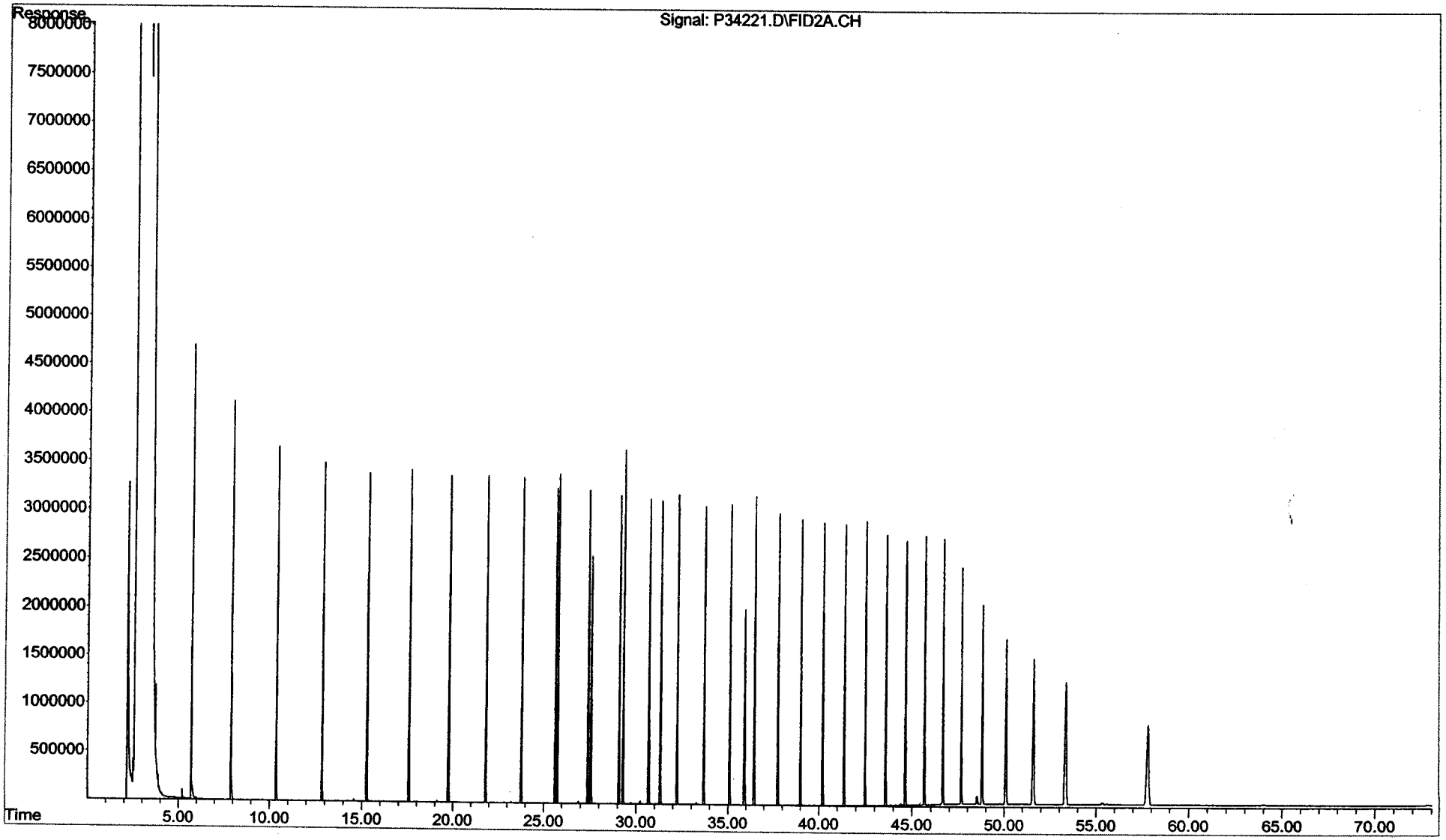
12/15/05.

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

12/14/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.31	70942033	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.32	78571677	49.999 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 100.00%	
24) s d50-Tetracosane	35.92	62261091	49.989 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 99.98%	
Target Compounds			
2) t n-Octane (C8)	5.71	63610064	49.359 ug/mLm
3) t n-Nonane (C9)	7.90	67136022	49.915 ug/mLm
4) t n-Decane (C10)	10.36	67903018	49.944 ug/mLm
5) t n-Undecane (C11)	12.87	67708538	49.916 ug/mLm
6) t n-Dodecane (C12)	15.29	68581188	49.976 ug/mLm
7) t n-Tridecane (C13)	17.59	68809332	49.953 ug/mLm
9) t n-Tetradecane (C14)	19.77	69379142	49.958 ug/mLm
11) t n-Pentadecane (C15)	21.83	69571280	49.938 ug/mLm
12) t n-Hexadecane (C16)	23.79	69816757	49.950 ug/mLm
14) t n-Heptadecane (C17)	25.64	70245739	49.999 ug/mL
15) t Pristane	25.75	67173717	49.999 ug/mL
16) t n-Octadecane (C18)	27.41	70322334	49.989 ug/mLm
17) t Phytane	27.57	69613776	49.999 ug/mL
18) t n-Nonadecane (C19)	29.09	69729178	50.029 ug/mLm
20) t n-Eicosane (C20)	30.69	69338573	49.961 ug/mLm
21) t n-Heneicosane (C21)	32.23	71490713	49.879 ug/mLm
22) t n-Docosane (C22)	33.69	70467549	49.939 ug/mLm
23) t n-Tricosane (C23)	35.10	70889062	49.900 ug/mLm
25) t n-Tetracosane (C24)	36.46	71294447	49.880 ug/mLm
26) t n-Pentacosane (C25)	37.76	71033007	49.875 ug/mLm
27) t n-Hexacosane (C26)	39.01	70308591	49.882 ug/mLm
28) t n-Heptacosane (C27)	40.22	70033429	49.830 ug/mLm
29) t n-Octacosane (C28)	41.38	70867945	49.861 ug/mLm
30) t n-Nonacosane (C29)	42.51	72471029	49.870 ug/mLm
31) t n-Triacontane (C30)	43.60	71210382	49.785 ug/mLm
32) t n-Hentriacontane (C31)	44.65	68975685	49.595 ug/mLm
33) t n-Dotriacontane (C32)	45.68	69495222	49.576 ug/mLm
34) t n-Tritriacontane (C33)	46.67	70459773	49.178 ug/mLm
35) t n-tetratriacontane (C34)	47.68	71248630	49.877 ug/mLm
36) t n-Pentatriacontane (C35)	48.81	68344751	49.989 ug/mLm
37) t n-Hexatriacontane (C36)	50.11	69810161	50.000 ug/mLm
38) t n-Heptatriacontane (C37)	51.61	74024482	50.006 ug/mLm
39) t n-Octatriacontane (C38)	53.36	70094655	49.961 ug/mLm
41) t n-Tetracontane (C40)	57.84	68307636	49.928 ug/mLm

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34221.D
Operator : AC
Acquired : 13 Dec 2005 10:25 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: I3121303
Misc Info : WHAB80
Vial Number: 55



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34223.D
Signal(s) : FID2A.CH
Acq On : 13 Dec 2005 11:50 pm
Operator : AC
Sample : I3121304
Misc : WHAB32
ALS Vial : 56 Sample Multiplier: 1

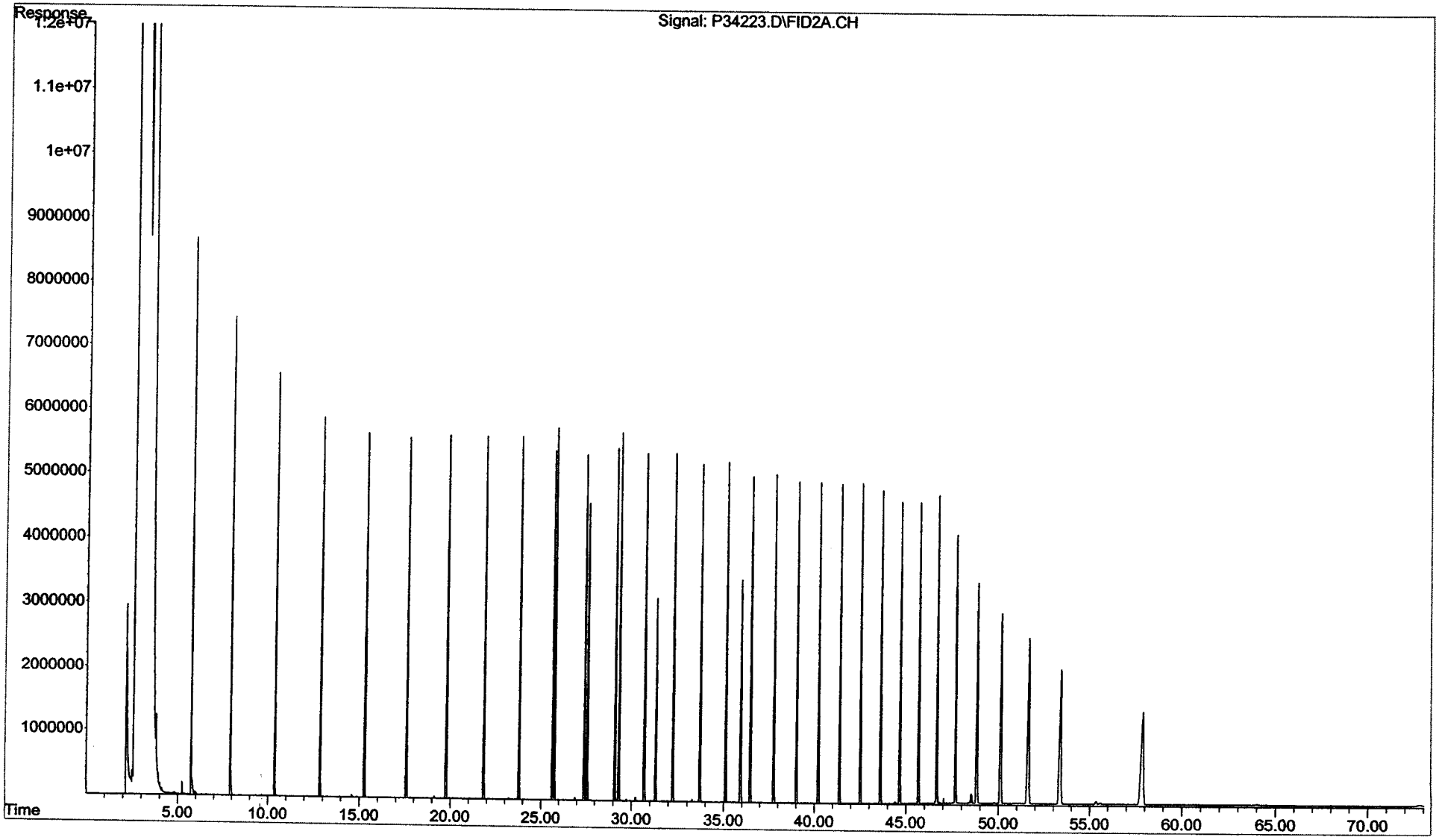
Integration File: SHCINT1.E
Quant Time: Dec 14 10:50:08 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 10:43:36 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

12/15/05.

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

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.32	70312875	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.34	146789382	94.804 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	189.61%#
24) s d50-Tetracosane	35.93	120334880	85.656 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	171.31%#
Target Compounds			
2) t n-Octane (C8)	5.74	124613863	99.922 ug/mLm
3) t n-Nonane (C9)	7.92	131441297	99.095 ug/mLm
4) t n-Decane (C10)	10.38	133468433	99.234 ug/mLm
5) t n-Undecane (C11)	12.88	133469926	99.578 ug/mLm
6) t n-Dodecane (C12)	15.31	135255067	99.780 ug/mLm
7) t n-Tridecane (C13)	17.61	135643812	99.654 ug/mLm
9) t n-Tetradecane (C14)	19.79	136603927	99.331 ug/mLm
11) t n-Pentadecane (C15)	21.85	136892711	99.121 ug/mLm
12) t n-Hexadecane (C16)	23.81	137275119	98.960 ug/mLm
14) t n-Heptadecane (C17)	25.66	138155653	99.054 ug/mLm
15) t Pristane	25.77	132078997	98.915 ug/mL
16) t n-Octadecane (C18)	27.43	138333949	99.040 ug/mLm
17) t Phytane	27.59	136966023	99.142 ug/mLm
18) t n-Nonadecane (C19)	29.11	137174099	99.043 ug/mLm
20) t n-Eicosane (C20)	30.71	136416548	99.043 ug/mLm
21) t n-Heneicosane (C21)	32.24	140659370	99.008 ug/mLm
22) t n-Docosane (C22)	33.71	138708413	99.097 ug/mLm
23) t n-Tricosane (C23)	35.12	139526977	98.988 ug/mLm
25) t n-Tetracosane (C24)	36.48	140432797	99.094 ug/mLm
26) t n-Pentacosane (C25)	37.78	139823706	97.266 ug/mLm
27) t n-Hexacosane (C26)	39.03	138518736	98.814 ug/mLm
28) t n-Heptacosane (C27)	40.24	138089353	98.711 ug/mLm
29) t n-Octacosane (C28)	41.41	139801875	98.076 ug/mLm
30) t n-Nonacosane (C29)	42.53	142986319	98.360 ug/mLm
31) t n-Triacontane (C30)	43.62	140588037	98.462 ug/mLm
32) t n-Hentriacontane (C31)	44.68	136205011	98.444 ug/mLm
33) t n-Dotriacontane (C32)	45.70	137138208	98.477 ug/mLm
34) t n-Tritriacontane (C33)	46.69	139271030	98.955 ug/mLm
35) t n-tetratriacontane (C34)	47.70	140791339	98.804 ug/mLm
36) t n-Pentatriacontane (C35)	48.84	135176583	99.072 ug/mLm
37) t n-Hexatriacontane (C36)	50.15	138206653	99.281 ug/mLm
38) t n-Heptatriacontane (C37)	51.66	147104430	99.400 ug/mLm
39) t n-Octatriacontane (C38)	53.41f	138926598	99.353 ug/mLm
41) t n-Tetracontane (C40)	57.92f	135727650	99.878 ug/mLm

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34223.D
Operator : AC
Acquired : 13 Dec 2005 11:50 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: I3121304
Misc Info : WHAB32
Vial Number: 56



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34225.D
Signal(s) : FID2A.CH
Acq On : 14 Dec 2005 1:15 am
Operator : AC
Sample : I3121305
Misc : WHAB33
ALS Vial : 57 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Dec 14 10:56:19 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 10:50:37 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

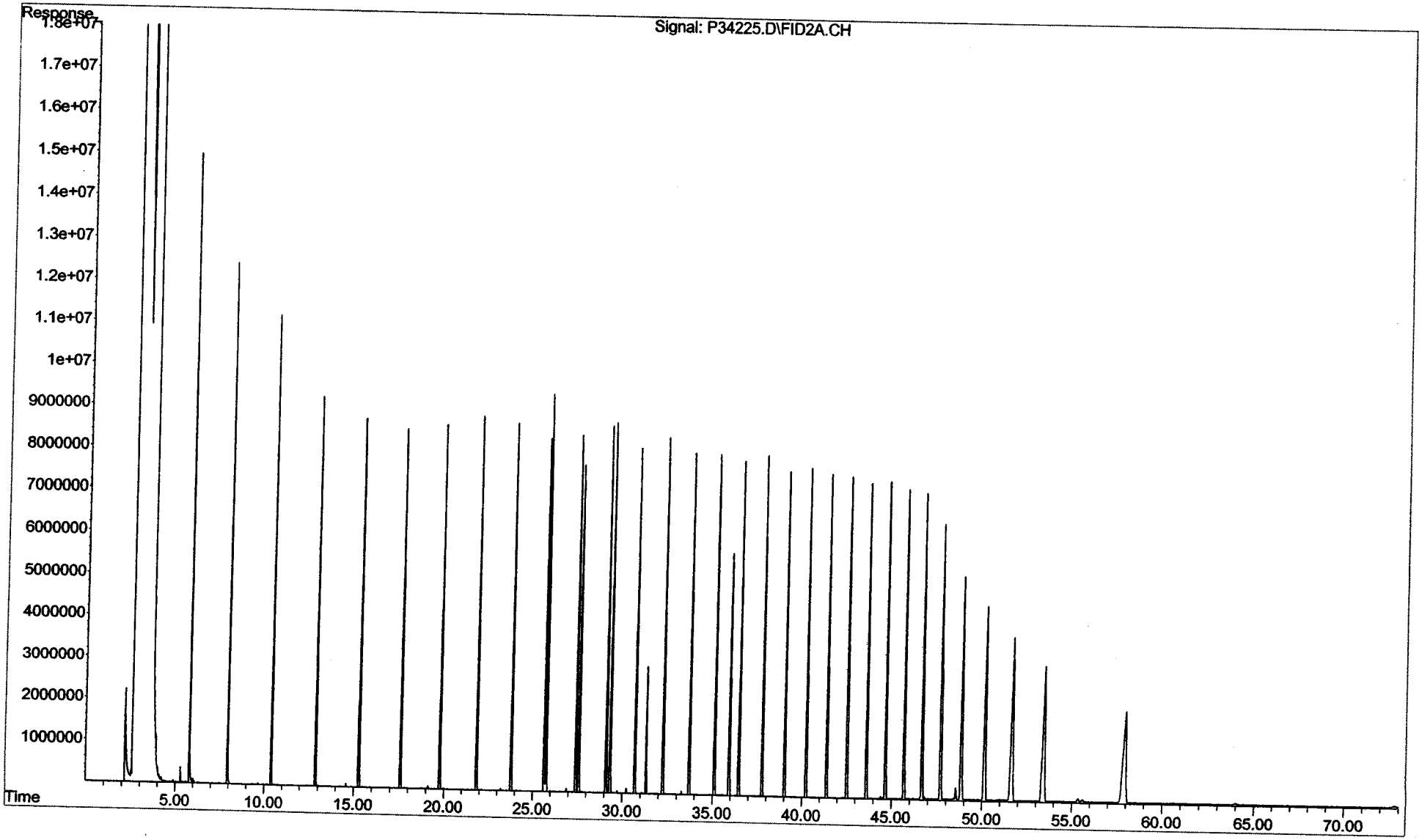
12/15/05.

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

12/14/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.32	68100684	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.37	284246880	192.039 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 384.08%#	
24) s d50-Tetracosane	35.96	233069782	177.662 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery = 355.32%#	
Target Compounds			
2) t n-Octane (C8)	5.81	243664978	201.770 ug/mLm
3) t n-Nonane (C9)	7.97	255918772	199.659 ug/mLm
4) t n-Decane (C10)	10.42	258780646	199.035 ug/mLm
5) t n-Undecane (C11)	12.90	257944348	198.907 ug/mLm
6) t n-Dodecane (C12)	15.32	260871001	198.810 ug/mLm
7) t n-Tridecane (C13)	17.63	261317494	198.391 ug/mLm
9) t n-Tetradecane (C14)	19.81	263098512	197.856 ug/mLm
11) t n-Pentadecane (C15)	21.88	263718467	197.590 ug/mLm
12) t n-Hexadecane (C16)	23.83	264501751	197.384 ug/mLm
14) t n-Heptadecane (C17)	25.69	267090289	198.187 ug/mLm
15) t Pristane	25.80	253845484	196.817 ug/mL
16) t n-Octadecane (C18)	27.45	266888037	197.760 ug/mLm
17) t Phytane	27.62	264065017	197.775 ug/mLm
18) t n-Nonadecane (C19)	29.14	264810577	197.884 ug/mLm
20) t n-Eicosane (C20)	30.74	263527449	198.018 ug/mLm
21) t n-Heneicosane (C21)	32.27	271752262	197.987 ug/mLm
22) t n-Docosane (C22)	33.74	268085478	198.197 ug/mLm
23) t n-Tricosane (C23)	35.15	269772194	198.110 ug/mLm
25) t n-Tetracosane (C24)	36.51	271615882	198.336 ug/mLm
26) t n-Pentacosane (C25)	37.81	270402913	195.548 ug/mLm
27) t n-Hexacosane (C26)	39.06	268045087	198.011 ug/mLm
28) t n-Heptacosane (C27)	40.27	267260473	197.891 ug/mLm
29) t n-Octacosane (C28)	41.43	270536079	196.903 ug/mLm
30) t n-Nonacosane (C29)	42.56	276711073	197.342 ug/mLm
31) t n-Triacontane (C30)	43.65	272104837	197.521 ug/mLm
32) t n-Hentriacontane (C31)	44.71	263325086	197.271 ug/mLm
33) t n-Dotriacontane (C32)	45.73	264673790	196.983 ug/mLm
34) t n-Tritriacontane (C33)	46.72	267612782	196.835 ug/mLm
35) t n-tetratriacontane (C34)	47.74	268933781	195.447 ug/mLm
36) t n-Pentatriacontane (C35)	48.88	255654885	193.908 ug/mLm
37) t n-Hexatriacontane (C36)	50.20	258413296	192.007 ug/mLm
38) t n-Heptatriacontane (C37)	51.71	272210514	190.195 ug/mLm
39) t n-Octatriacontane (C38)	53.47	253863311	187.751 ug/mLm
41) t n-Tetracontane (C40)	58.00	243669557	185.190 ug/mLm

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34225.D
Operator : AC
Acquired : 14 Dec 2005 1:15 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: I3121305
Misc Info : WHAB33
Vial Number: 57



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34227.D
Signal(s) : FID2A.CH
Acq On : 14 Dec 2005 2:40 am
Operator : AC
Sample : Q3121301
Misc : WHAB34
ALS Vial : 58 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Dec 14 18:14:41 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 18:00:26 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

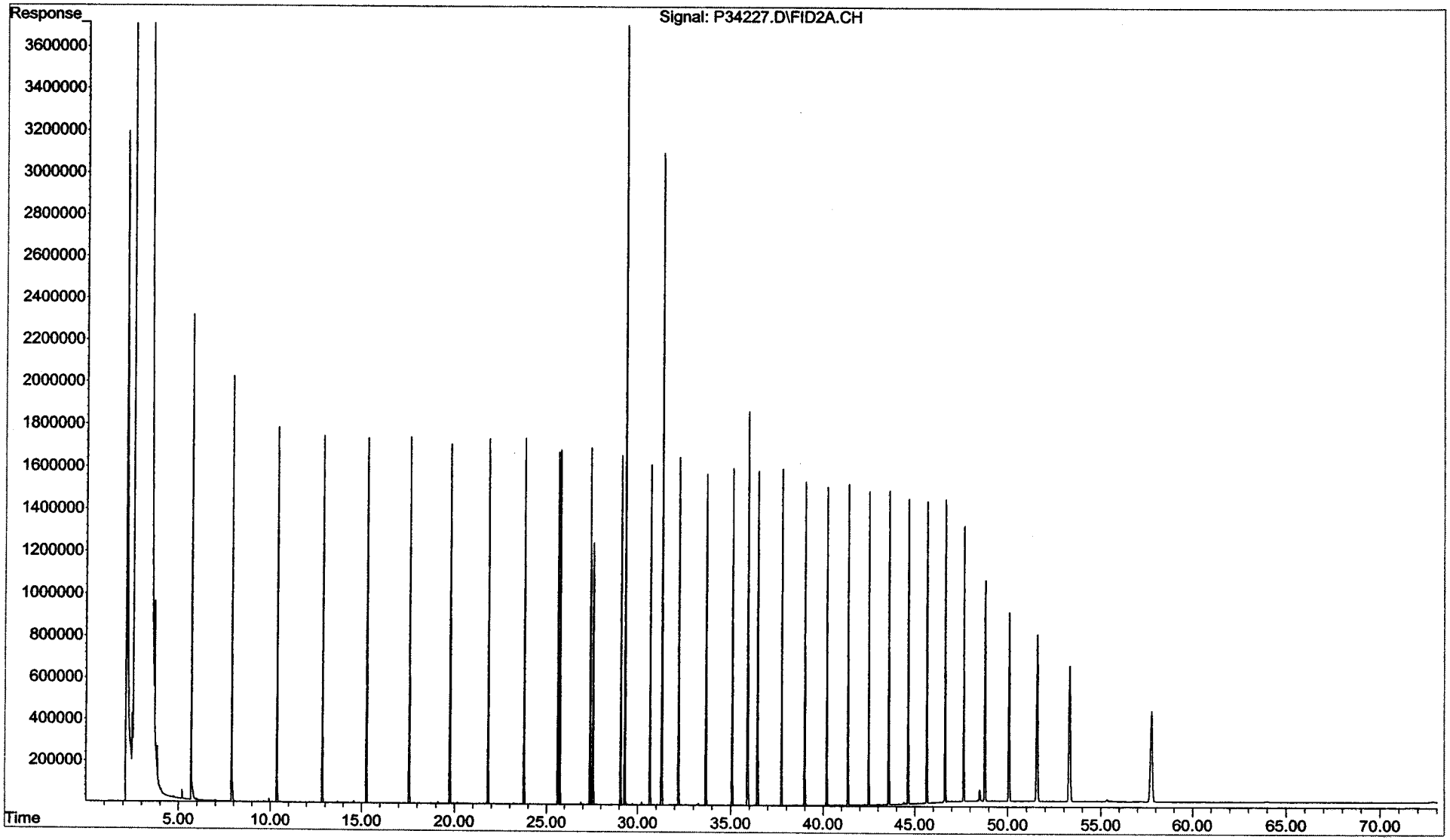
12/15/05.

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

12/14/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.31	68130361	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.32	79973943	54.441 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	108.88%
24) s d50-Tetracosane	35.91	58731835	45.772 ug/mLm
Spiked Amount 50.000	Range 50 - 130	Recovery =	91.54%
Target Compounds			
2) t n-Octane (C8)	5.69f	31093210	25.690 ug/mLm 103%
3) t n-Nonane (C9)	7.88	32831528	25.612 ug/mL
4) t n-Decane (C10)	10.35	33052843	25.435 ug/mLm
5) t n-Undecane (C11)	12.86	32801102	25.310 ug/mLm
6) t n-Dodecane (C12)	15.28	33099901	25.245 ug/mLm
7) t n-Tridecane (C13)	17.58	33115667	25.171 ug/mLm
9) t n-Tetradecane (C14)	19.76	33337003	25.113 ug/mLm
11) t n-Pentadecane (C15)	21.82	33376918	25.057 ug/mLm
12) t n-Hexadecane (C16)	23.78	33437915	25.008 ug/mLm
14) t n-Heptadecane (C17)	25.63	33593780	24.962 ug/mLm
15) t Pristane	25.74	32157888	25.002 ug/mL
16) t n-Octadecane (C18)	27.39	33616525	24.954 ug/mLm
17) t Phytane	27.55	33284452	24.974 ug/mLm
18) t n-Nonadecane (C19)	29.08	33354541	24.967 ug/mLm
20) t n-Eicosane (C20)	30.68	33139162	24.940 ug/mLm
21) t n-Heneicosane (C21)	32.21	34175545	24.938 ug/mL
22) t n-Docosane (C22)	33.68	33712979	24.958 ug/mLm
23) t n-Tricosane (C23)	35.09	33940963	24.961 ug/mLm
25) t n-Tetracosane (C24)	36.44	34136776	24.958 ug/mLm
26) t n-Pentacosane (C25)	37.74	34037662	24.714 ug/mLm 99%
27) t n-Hexacosane (C26)	38.99	33735564	24.960 ug/mLm
28) t n-Heptacosane (C27)	40.20	33648504	24.957 ug/mLm
29) t n-Octacosane (C28)	41.37	34080136	24.871 ug/mLm
30) t n-Nonacosane (C29)	42.49	34872867	24.926 ug/mLm
31) t n-Triacontane (C30)	43.58	34290774	24.943 ug/mL
32) t n-Hentriacontane (C31)	44.64	33217487	24.942 ug/mL
33) t n-Dotriacontane (C32)	45.66	33453906	24.962 ug/mLm
34) t n-Tritriacontane (C33)	46.65	34004431	25.080 ug/mLm
35) t n-tetratriacontane (C34)	47.66	34351494	25.068 ug/mLm
36) t n-Pentatriacontane (C35)	48.79	33025947	25.192 ug/mLm
37) t n-Hexatriacontane (C36)	50.08f	33706657	25.236 ug/mLm
38) t n-Heptatriacontane (C37)	51.58f	35684032	25.169 ug/mLm
39) t n-Octatriacontane (C38)	53.32f	33908777	25.378 ug/mLm
41) t n-Tetracontane (C40)	57.78f	33117837	25.537 ug/mLm

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34227.D
Operator : AC
Acquired : 14 Dec 2005 2:40 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: Q3121301
Misc Info : WHAB34
Vial Number: 58



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34229.D
Signal(s) : FID2A.CH
Acq On : 14 Dec 2005 4:06 am
Operator : AC
Sample : TO121405AWS01
Misc : 1X WHAB79
ALS Vial : 59 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Dec 14 19:17:03 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 19:03:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

12/14/05

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.31	73288647	50.000 ug/mLm
System Monitoring Compounds			
19) s ortho-terphenyl	29.32	76201380	48.222 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	96.44%
24) s d50-Tetracosane	35.92	63606909	46.083 ug/mLm
Spiked Amount 50.000 Range 50 - 130		Recovery =	92.17%
Target Compounds			
2) t n-Octane (C8)	5.66	37110526	28.504 ug/mLm
3) t n-Nonane (C9)	7.87	28728976	20.834 ug/mLm
4) t n-Decane (C10)	10.35	31147982	22.282 ug/mL
5) t n-Undecane (C11)	12.86	29949229	21.483 ug/mLm
6) t n-Dodecane (C12)	15.28	27283576	19.344 ug/mLm
7) t n-Tridecane (C13)	17.58	28766268	20.326 ug/mLm
8) t 1380	19.25	7148094	5.006 ug/mLm
9) t n-Tetradecane (C14)	19.76	26098582	18.277 ug/mLm
10) t 1470	21.04	9777968	6.824 ug/mLm
11) t n-Pentadecane (C15)	21.82	27635087	19.286 ug/mLm
12) t n-Hexadecane (C16)	23.77	24542046	17.063 ug/mLm
13) t 1650	24.68	7245303	5.005 ug/mLm
14) t n-Heptadecane (C17)	25.63	20896448	14.434 ug/mLm
15) t Pristane	25.72	15849726	11.455 ug/mLm
16) t n-Octadecane (C18)	27.39	18501254	12.767 ug/mL
17) t Phytane	27.55	9709697	6.773 ug/mL
18) t n-Nonadecane (C19)	29.07	18214718	12.675 ug/mLm
20) t n-Eicosane (C20)	30.67	18059713	12.635 ug/mLm
21) t n-Heneicosane (C21)	32.21	17169408	11.647 ug/mLm
22) t n-Docosane (C22)	33.67	15688239	10.797 ug/mLm
23) t n-Tricosane (C23)	35.08	14159920	9.681 ug/mLm
25) t n-Tetracosane (C24)	36.43	13578691	9.229 ug/mLm
26) t n-Pentacosane (C25)	37.74	13449499	9.078 ug/mLm
27) t n-Hexacosane (C26)	38.99	11327481	7.791 ug/mLm
28) t n-Heptacosane (C27)	40.19	8814162	6.077 ug/mLm
29) t n-Octacosane (C28)	41.36	6269893	4.254 ug/mLm
30) t n-Nonacosane (C29)	42.48	6323980	4.202 ug/mLm
31) t n-Triacontane (C30)	43.57	4896396	3.311 ug/mLm
32) t n-Hentriacontane (C31)	44.63	4713221	3.290 ug/mLm
33) t n-Dotriacontane (C32)	45.65	4841821	3.359 ug/mL
34) t n-Tritriacontane (C33)	46.64	2491607	1.708 ug/mLm
35) t n-tetratriacontane (C34)	47.64	2424435	1.645 ug/mL
36) t n-Pentatriacontane (C35)	48.77	2621159	1.859 ug/mLm
37) t n-Hexatriacontane (C36)	50.06	1627581	1.133 ug/mL

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\
Data File : P34229.D
Signal(s) : FID2A.CH
Acq On : 14 Dec 2005 4:06 am
Operator : AC
Sample : TO121405AWS01
Misc : 1X WHAB79
ALS Vial : 59 Sample Multiplier: 1

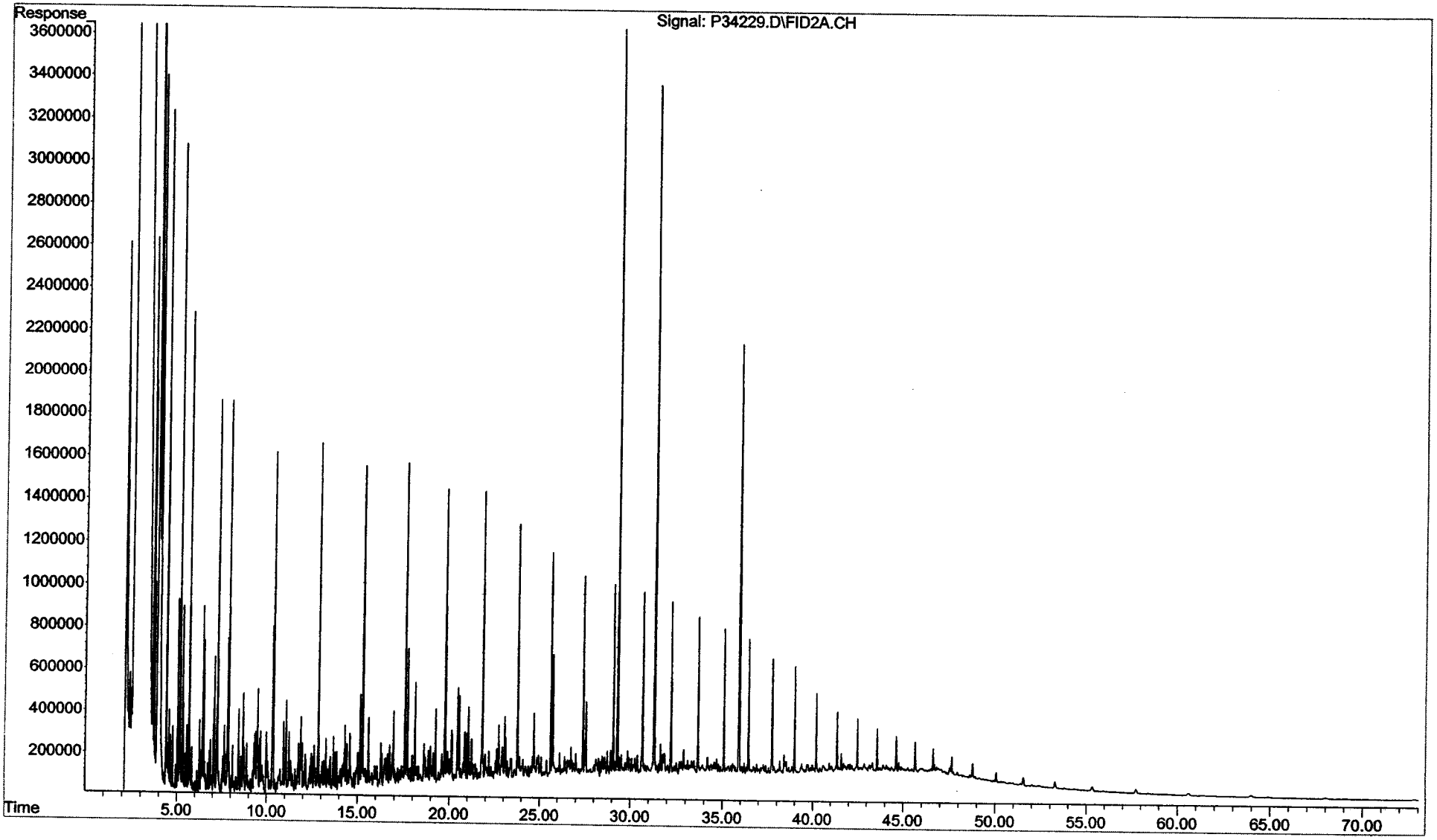
Integration File: SHCINT1.E
Quant Time: Dec 14 19:17:03 2005
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Wed Dec 14 19:03:13 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

		Compound	R.T.	Response	Conc	Units
38)	t	n-Heptatriacontane (C37)	51.55	1822888	1.195	ug/mL
39)	t	n-Octatriacontane (C38)	53.29	1739017	1.210	ug/mL
40)	t	n-Nonatriacontane (C39)	55.34	1317301	0.944	ug/mLm
41)	t	n-Tetracontane (C40)	57.74	1497014	1.073	ug/mL
42)	h	C9-C40 Total Petroleum Hyd	39.77	4696969099	3256.800	ug/mL
43)	h	C10-C28 DRO	26.09	2963425570	2054.790	ug/mL
44)	h	Total Resolved Hydrocarbon	39.77	1345425563	932.896	ug/L

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

File :O:\Forensics\Data\PAH3\DECEMBER\DEC13.SEC\P34229.D
Operator : AC
Acquired : 14 Dec 2005 4:06 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: TO121405AWS01
Misc Info : 1X WHAB79
Vial Number: 59



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: **0512110**
Lab ID: **C3122805**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.51	1.0	25
n-Decane (C10)	50.00	49.42	1.2	25
n-Undecane (C11)	50.00	49.58	0.8	25
n-Dodecane (C12)	50.00	49.91	0.2	25
n-Tridecane (C13)	50.00	49.84	0.3	25
n-Tetradecane (C14)	50.00	49.85	0.3	25
n-Pentadecane (C15)	50.00	49.76	0.5	25
n-Hexadecane (C16)	50.00	49.61	0.8	25
n-Heptadecane (C17)	50.00	49.84	0.3	25
Pristane	50.00	49.85	0.3	25
n-Octadecane (C18)	50.00	49.81	0.4	25
Phytane	50.00	50.16	0.3	25
n-Nonadecane (C19)	50.00	49.95	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	48.34	3.3	25
n-Tricosane (C23)	50.00	49.84	0.3	25
n-Tetracosane (C24)	50.00	49.43	1.1	25
n-Pentacosane (C25)	50.00	49.25	1.5	25
n-Hexacosane (C26)	50.00	50.50	1.0	25
n-Heptacosane (C27)	50.00	49.92	0.2	25
n-Octacosane (C28)	50.00	49.84	0.3	25
n-Nonacosane (C29)	50.00	49.75	0.5	25
n-Triacontane (C30)	50.00	49.77	0.5	25
n-Hentriacontane (C31)	50.00	52.07	4.1	25
n-Dotriacontane (C32)	50.00	49.68	0.6	25
n-Tritriacontane (C33)	50.00	50.27	0.5	25
n-Tetratriacontane (C34)	50.00	50.09	0.2	25
n-Pentatriacontane (C35)	50.00	50.35	0.7	25
n-Hexatriacontane (C36)	50.00	50.71	1.4	25
n-Heptatriacontane (C37)	50.00	49.06	1.9	25
n-Octatriacontane (C38)	50.00	50.97	1.9	25
n-Tetracontane (C40)	50.00	52.56	5.1	25
ortho-Terphenyl	50.00	49.12	1.8	25
d50-Tetracosane	50.00	46.40	7.2	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.02

N/A - Not Applicable

01/12/06 19:17

Quantitation Report (QT Reviewed)

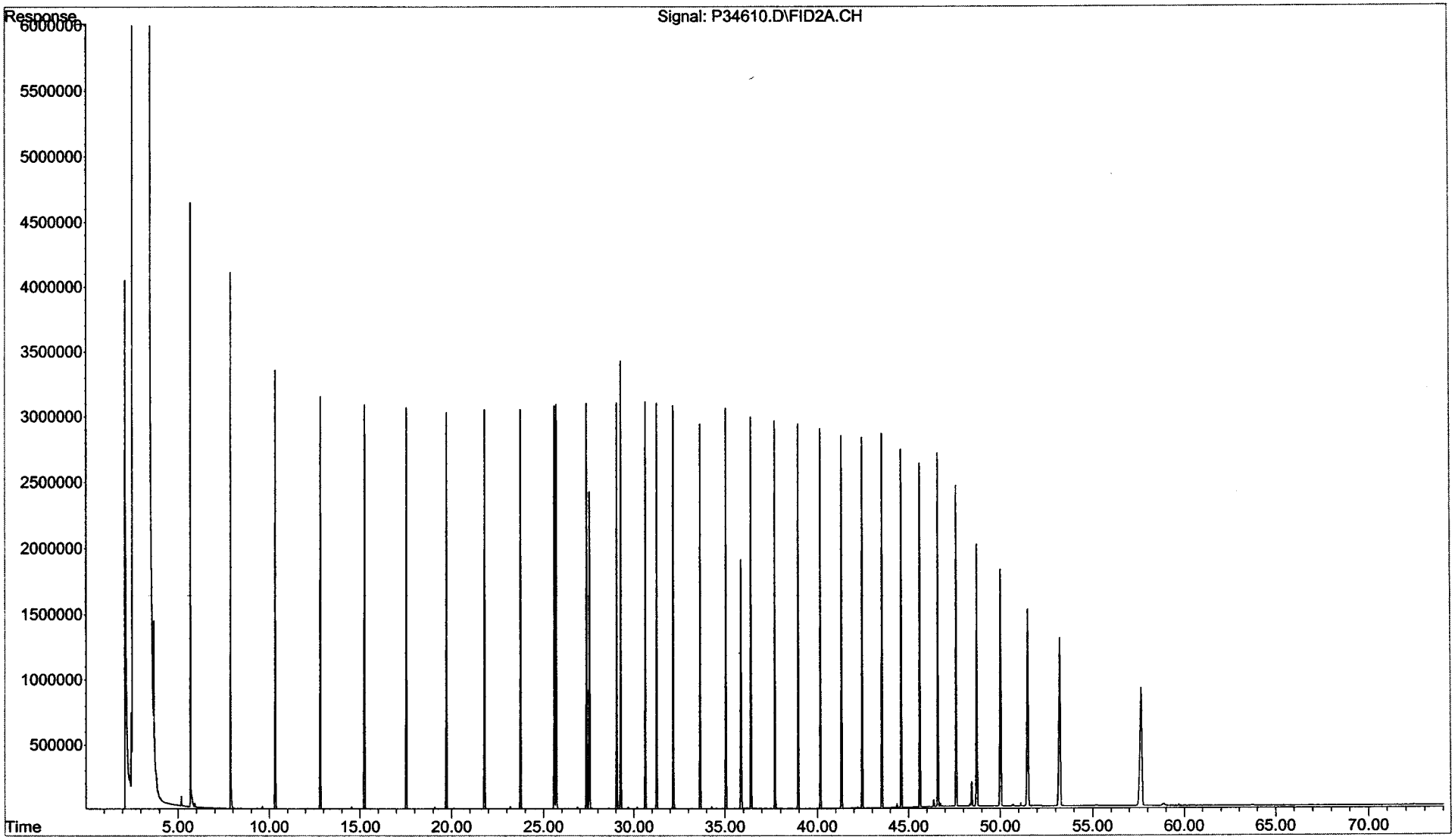
Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34610.D
Signal(s) : FID2A.CH
Acq On : 30 Dec 2005 4:52 pm
Operator : AC
Sample : C3122805-AFID
Misc : ALK STD
ALS Vial : 76 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 05 21:10:09 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.29	69950093	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.29	74082959	49.119 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 98.24%
24) s	d50-Tetracosane	35.88	61121219	46.395 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 92.79%
	Target Compounds			
2) t	n-Octane (C8)	5.68	61408339	49.418 ug/mL
3) t	n-Nonane (C9)	7.86	65156542	49.506 ug/mL
4) t	n-Decane (C10)	10.33	65936733	49.421 ug/mLm
5) t	n-Undecane (C11)	12.83	65968624	49.579 ug/mL
6) t	n-Dodecane (C12)	15.26	67192155	49.913 ug/mL
7) t	n-Tridecane (C13)	17.56	67316566	49.835 ug/mL
9) t	n-Tetradecane (C14)	19.74	67943657	49.851 ug/mL
11) t	n-Pentadecane (C15)	21.80	68052680	49.760 ug/mL
12) t	n-Hexadecane (C16)	23.76	68099737	49.605 ug/mL
14) t	n-Heptadecane (C17)	25.61	68862268	49.837 ug/mL
15) t	Pristane	25.72	65824567	49.846 ug/mL
16) t	n-Octadecane (C18)	27.38	68888142	49.807 ug/mLm
17) t	Phytane	27.54	68638335	50.160 ug/mLm
18) t	n-Nonadecane (C19)	29.06	68511623	49.949 ug/mLm
20) t	n-Eicosane (C20)	30.66	68631599	50.307 ug/mL
21) t	n-Heneicosane (C21)	32.19	70133238	49.845 ug/mL
22) t	n-Docosane (C22)	33.66	67045432	48.344 ug/mL
23) t	n-Tricosane (C23)	35.07	69578832	49.839 ug/mL
25) t	n-Tetracosane (C24)	36.42	69421132	49.434 ug/mL
26) t	n-Pentacosane (C25)	37.72	69644535	49.253 ug/mL
27) t	n-Hexacosane (C26)	38.97	70074982	50.498 ug/mL
28) t	n-Heptacosane (C27)	40.18	69104255	49.920 ug/mL
29) t	n-Octacosane (C28)	41.34	70116491	49.838 ug/mL
30) t	n-Nonacosane (C29)	42.47	71462318	49.750 ug/mL
31) t	n-Triacontane (C30)	43.56	70246005	49.767 ug/mL
32) t	n-Hentriacontane (C31)	44.61	71191152	52.065 ug/mL
33) t	n-Dotriacontane (C32)	45.63	68358716	49.681 ug/mL
34) t	n-Tritriacontane (C33)	46.62	69978274	50.269 ug/mLm
35) t	n-tetratriacontane (C34)	47.63	70467171	50.086 ug/mLm
36) t	n-Pentatriacontane (C35)	48.75	67773511	50.352 ug/mL
37) t	n-Hexatriacontane (C36)	50.04	69536366	50.706 ug/mL
38) t	n-Heptatriacontane (C37)	51.52	71409529	49.056 ug/mL
39) t	n-Octatriacontane (C38)	53.24	69918698	50.967 ug/mLm
41) t	n-Tetracontane (C40)	57.66	69985790	52.562 ug/mL

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34610.D
Operator : AC
Acquired : 30 Dec 2005 4:52 pm using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: C3122805-AFID
Misc Info : ALK STD
Vial Number: 76



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

ALPHA WOODS HOLE LABS

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C3122806**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	49.55	0.9	25
n-Decane (C10)	50.00	49.54	0.9	25
n-Undecane (C11)	50.00	49.61	0.8	25
n-Dodecane (C12)	50.00	49.93	0.1	25
n-Tridecane (C13)	50.00	49.84	0.3	25
n-Tetradecane (C14)	50.00	49.83	0.3	25
n-Pentadecane (C15)	50.00	49.74	0.5	25
n-Hexadecane (C16)	50.00	49.62	0.8	25
n-Heptadecane (C17)	50.00	49.82	0.4	25
Pristane	50.00	49.85	0.3	25
n-Octadecane (C18)	50.00	49.80	0.4	25
Phytane	50.00	50.17	0.3	25
n-Nonadecane (C19)	50.00	50.00	0.0	25
n-Eicosane (C20)	50.00	50.30	0.6	25
n-Heneicosane (C21)	50.00	49.86	0.3	25
n-Docosane (C22)	50.00	50.39	0.8	25
n-Tricosane (C23)	50.00	49.85	0.3	25
n-Tetracosane (C24)	50.00	49.40	1.2	25
n-Pentacosane (C25)	50.00	49.34	1.3	25
n-Hexacosane (C26)	50.00	50.51	1.0	25
n-Heptacosane (C27)	50.00	49.93	0.1	25
n-Octacosane (C28)	50.00	49.95	0.1	25
n-Nonacosane (C29)	50.00	49.81	0.4	25
n-Triacontane (C30)	50.00	49.80	0.4	25
n-Hentriacontane (C31)	50.00	52.11	4.2	25
n-Dotriacontane (C32)	50.00	49.76	0.5	25
n-Tritriacontane (C33)	50.00	50.49	1.0	25
n-Tetratriacontane (C34)	50.00	50.29	0.6	25
n-Pentatriacontane (C35)	50.00	50.50	1.0	25
n-Hexatriacontane (C36)	50.00	51.28	2.6	25
n-Heptatriacontane (C37)	50.00	49.07	1.9	25
n-Octatriacontane (C38)	50.00	50.91	1.8	25
n-Tetracontane (C40)	50.00	52.45	4.9	25
ortho-Terphenyl	50.00	49.15	1.7	25
d50-Tetracosane	50.00	46.40	7.2	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.02

N/A - Not Applicable

01/12/06 19:17

Quantitation Report (QT Reviewed)

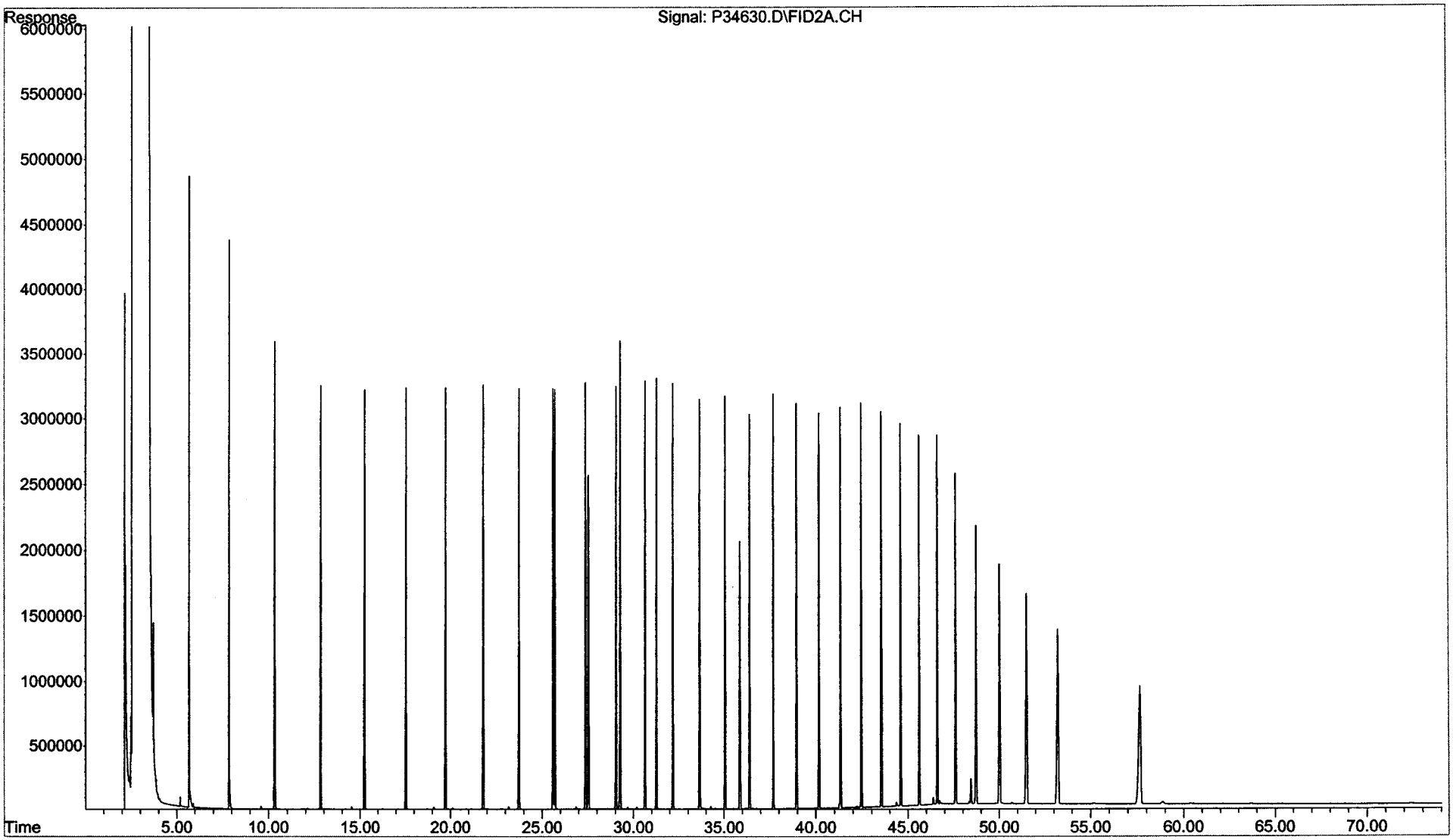
Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34630.D
Signal(s) : FID2A.CH
Acq On : 31 Dec 2005 7:52 am
Operator : AC
Sample : C3122806-AFID
Misc : ALK STD
ALS Vial : 86 Sample Multiplier: 1

Integration File: SHCINT1.E
Quant Time: Jan 05 21:14:01 2006
Quant Method : O:\FORENSICS\METHODS\PAH3\DECEMBER\HC31213.M
Quant Title : FID Forensics
QLast Update : Thu Jan 05 21:07:37 2006
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.28	74369810	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.28	78808651	49.147 ug/mLm
Spiked Amount	50.000	Range	50 - 130	Recovery = 98.29%
24) s	d50-Tetracosane	35.88	64988815	46.399 ug/mL
Spiked Amount	50.000	Range	50 - 130	Recovery = 92.80%
	Target Compounds			
2) t	n-Octane (C8)	5.68	64003306	48.445 ug/mL
3) t	n-Nonane (C9)	7.86	69334530	49.550 ug/mL
4) t	n-Decane (C10)	10.33	70272082	49.540 ug/mLm
5) t	n-Undecane (C11)	12.83	70185077	49.613 ug/mL
6) t	n-Dodecane (C12)	15.25	71469421	49.935 ug/mL
7) t	n-Tridecane (C13)	17.56	71579699	49.842 ug/mL
9) t	n-Tetradecane (C14)	19.74	72212623	49.835 ug/mLm
11) t	n-Pentadecane (C15)	21.80	72324994	49.741 ug/mL
12) t	n-Hexadecane (C16)	23.75	72425015	49.621 ug/mLm
14) t	n-Heptadecane (C17)	25.61	73192715	49.823 ug/mL
15) t	Pristane	25.71	69993893	49.853 ug/mL
16) t	n-Octadecane (C18)	27.37	73237113	49.805 ug/mLm
17) t	Phytane	27.53	72987723	50.169 ug/mLm
18) t	n-Nonadecane (C19)	29.05	72921220	50.004 ug/mLm
20) t	n-Eicosane (C20)	30.66	72959506	50.301 ug/mLm
21) t	n-Heneicosane (C21)	32.19	74593222	49.865 ug/mL
22) t	n-Docosane (C22)	33.65	74295507	50.388 ug/mL
23) t	n-Tricosane (C23)	35.06	73991099	49.850 ug/mL
25) t	n-Tetracosane (C24)	36.42	73759533	49.402 ug/mL
26) t	n-Pentacosane (C25)	37.72	74179619	49.342 ug/mLm
27) t	n-Hexacosane (C26)	38.97	74519307	50.509 ug/mL
28) t	n-Heptacosane (C27)	40.18	73491277	49.934 ug/mL
29) t	n-Octacosane (C28)	41.34	74710077	49.947 ug/mL
30) t	n-Nonacosane (C29)	42.47	76074488	49.813 ug/mL
31) t	n-Triacontane (C30)	43.55	74732787	49.799 ug/mLm
32) t	n-Hentriacontane (C31)	44.61	75755773	52.111 ug/mL
33) t	n-Dotriacontane (C32)	45.63	72796012	49.761 ug/mL
34) t	n-Tritriacontane (C33)	46.62	74726064	50.489 ug/mL
35) t	n-tetratriacontane (C34)	47.62	75217361	50.285 ug/mL
36) t	n-Pentatriacontane (C35)	48.75	72262317	50.496 ug/mL
37) t	n-Hexatriacontane (C36)	50.03	74765233	51.279 ug/mL
38) t	n-Heptatriacontane (C37)	51.51	75943707	49.071 ug/mL
39) t	n-Octatriacontane (C38)	53.24	74256684	50.913 ug/mL
41) t	n-Tetracontane (C40)	57.65	74245246	52.447 ug/mL

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34630.D
Operator : AC
Acquired : 31 Dec 2005 7:52 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: C3122806-AFID
Misc Info : ALK STD
Vial Number: 86



Form VII
Calibration Verification
Total Saturated Hydrocarbons by GC/FID

Client: **NewFields Environmental Forensics Practice** Lab Code: **MA00030**
Project: **Gowanus Canal** ETR: **0512110**
Lab ID: **C3122807**
Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
n-Nonane (C9)	50.00	47.93	4.1	25
n-Decane (C10)	50.00	48.81	2.4	25
n-Undecane (C11)	50.00	49.14	1.7	25
n-Dodecane (C12)	50.00	49.56	0.9	25
n-Tridecane (C13)	50.00	49.52	1.0	25
n-Tetradecane (C14)	50.00	49.50	1.0	25
n-Pentadecane (C15)	50.00	49.75	0.5	25
n-Hexadecane (C16)	50.00	49.47	1.1	25
n-Heptadecane (C17)	50.00	49.53	0.9	25
Pristane	50.00	49.61	0.8	25
n-Octadecane (C18)	50.00	49.49	1.0	25
Phytane	50.00	50.44	0.9	25
n-Nonadecane (C19)	50.00	49.73	0.5	25
n-Eicosane (C20)	50.00	50.11	0.2	25
n-Heneicosane (C21)	50.00	49.73	0.5	25
n-Docosane (C22)	50.00	62.48	25.0	25
n-Tricosane (C23)	50.00	49.64	0.7	25
n-Tetracosane (C24)	50.00	49.13	1.7	25
n-Pentacosane (C25)	50.00	49.21	1.6	25
n-Hexacosane (C26)	50.00	50.25	0.5	25
n-Heptacosane (C27)	50.00	49.68	0.6	25
n-Octacosane (C28)	50.00	49.66	0.7	25
n-Nonacosane (C29)	50.00	49.62	0.8	25
n-Triacontane (C30)	50.00	49.54	0.9	25
n-Hentriacontane (C31)	50.00	51.96	3.9	25
n-Dotriacontane (C32)	50.00	49.46	1.1	25
n-Tritriacontane (C33)	50.00	50.23	0.5	25
n-Tetratriacontane (C34)	50.00	50.13	0.3	25
n-Pentatriacontane (C35)	50.00	50.57	1.1	25
n-Hexatriacontane (C36)	50.00	51.11	2.2	25
n-Heptatriacontane (C37)	50.00	48.85	2.3	25
n-Octatriacontane (C38)	50.00	50.78	1.6	25
n-Tetracontane (C40)	50.00	52.28	4.6	25
ortho-Terphenyl	50.00	49.22	1.6	25
d50-Tetracosane	50.00	46.44	7.1	25

Area Response Ratio C30 to C20	Ratio
(Area C30/Area C20)	1.02

N/A - Not Applicable

01/12/06 19:18

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\
Data File : P34654.D
Signal(s) : FID2A.CH
Acq On : 01 Jan 2006 1:29 am
Operator : AC
Sample : C3122807
Misc : ALK STD
ALS Vial : 98 Sample Multiplier: 1

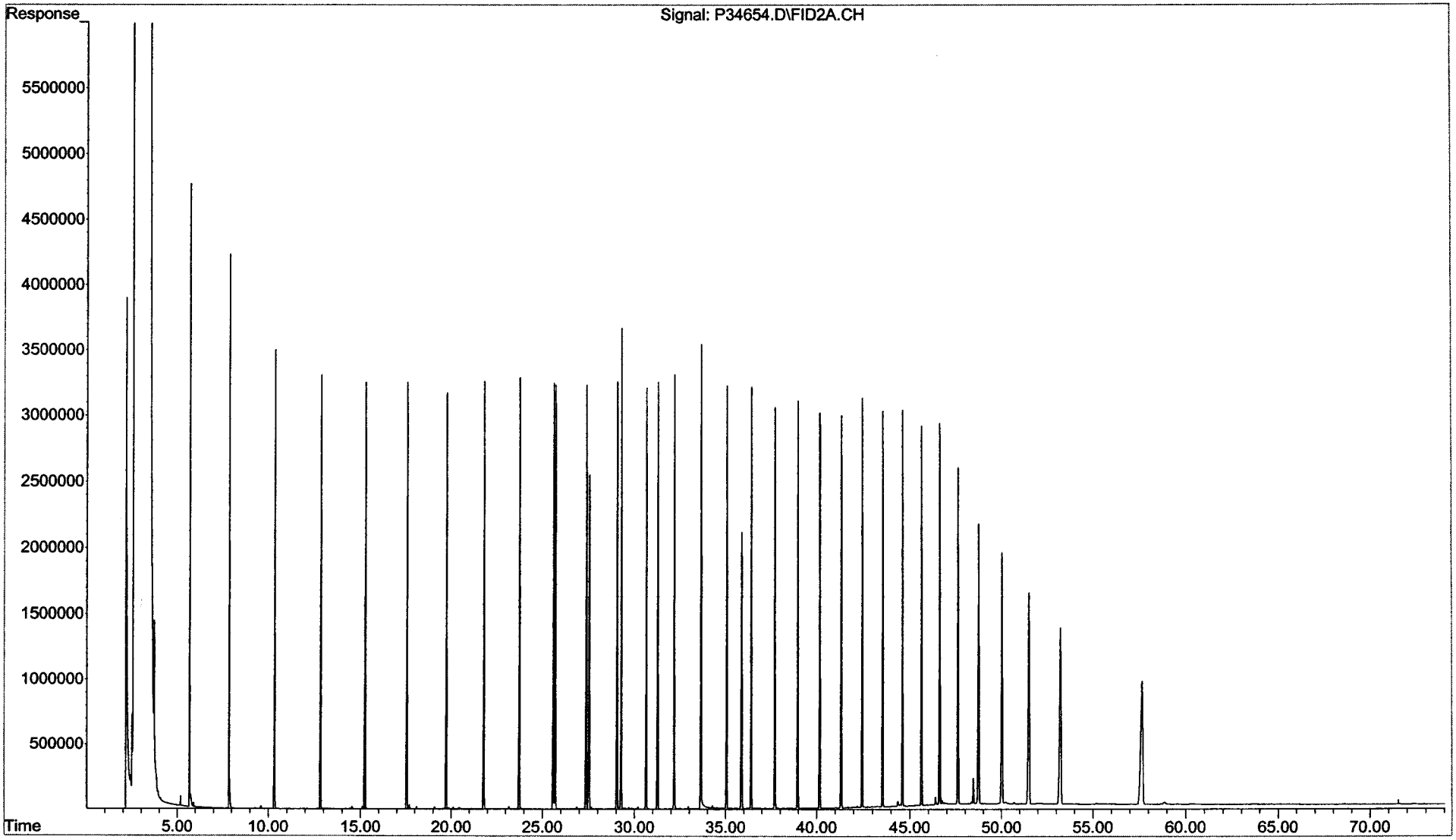
Integration File: SHCINT1.E
Quant Time: Jan 05 21:17:33 2006
Quant Method : C:\MSDCHEM\1\METHODS\HC31213.M
Quant Title : FID Forensics
QLast Update : Sun Dec 18 23:39:18 2005
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

	Compound	R.T.	Response	Conc Units
	Internal Standards			
1) I	5-alpha-androstane	31.29	75406439	50.000 ug/mLm
	System Monitoring Compounds			
19) s	ortho-terphenyl	29.29	80034215	49.225 ug/mLm
Spiked Amount	50.000 Range	50 - 130	Recovery =	98.45%
24) s	d50-Tetracosane	35.88	65954528	46.442 ug/mL
Spiked Amount	50.000 Range	50 - 130	Recovery =	92.88%
	Target Compounds			
2) t	n-Octane (C8)	5.68	62201853	46.435 ug/mL
3) t	n-Nonane (C9)	7.86	68002407	47.929 ug/mL
4) t	n-Decane (C10)	10.33	70199499	48.808 ug/mLm
5) t	n-Undecane (C11)	12.83	70491438	49.145 ug/mL
6) t	n-Dodecane (C12)	15.25	71926717	49.564 ug/mL
7) t	n-Tridecane (C13)	17.56	72101626	49.516 ug/mL
9) t	n-Tetradecane (C14)	19.74	72727607	49.500 ug/mL
11) t	n-Pentadecane (C15)	21.80	73349098	49.752 ug/mL
12) t	n-Hexadecane (C16)	23.75	73212649	49.471 ug/mL
14) t	n-Heptadecane (C17)	25.61	73779755	49.532 ug/mL
15) t	Pristane	25.72	70629168	49.614 ug/mL
16) t	n-Octadecane (C18)	27.37	73782483	49.486 ug/mL
17) t	Phytane	27.54	74402315	50.438 ug/mL
18) t	n-Nonadecane (C19)	29.06	73534175	49.731 ug/mLm
20) t	n-Eicosane (C20)	30.66	73697295	50.111 ug/mL
21) t	n-Heneicosane (C21)	32.19	75426515	49.728 ug/mLm
22) t	n-Docosane (C22)	33.65	93403040	62.476 ug/mLm
23) t	n-Tricosane (C23)	35.07	74703059	49.638 ug/mL
25) t	n-Tetracosane (C24)	36.42	74369939	49.126 ug/mL
26) t	n-Pentacosane (C25)	37.72	75018359	49.214 ug/mLm
27) t	n-Hexacosane (C26)	38.97	75173299	50.252 ug/mL
28) t	n-Heptacosane (C27)	40.18	74131544	49.677 ug/mL
29) t	n-Octacosane (C28)	41.34	75321063	49.663 ug/mL
30) t	n-Nonacosane (C29)	42.47	76828964	49.615 ug/mL
31) t	n-Triacontane (C30)	43.56	75382528	49.541 ug/mLm
32) t	n-Hentriacontane (C31)	44.61	76585510	51.957 ug/mL
33) t	n-Dotriacontane (C32)	45.63	73363586	49.460 ug/mLm
34) t	n-Tritriacontane (C33)	46.62	75383337	50.233 ug/mL
35) t	n-tetratriacontane (C34)	47.63	76023826	50.125 ug/mLm
36) t	n-Pentatriacontane (C35)	48.75	73370367	50.566 ug/mLm
37) t	n-Hexatriacontane (C36)	50.03	75563850	51.115 ug/mL
38) t	n-Heptatriacontane (C37)	51.52	76656543	48.850 ug/mL
39) t	n-Octatriacontane (C38)	53.25	75092311	50.778 ug/mLm
41) t	n-Tetracontane (C40)	57.67	75035314	52.276 ug/mL

ok 25% 1/24/06

File :O:\Forensics\Data\PAH3\DECEMBER\DEC28.SEC\P34654.D
Operator : AC
Acquired : 01 Jan 2006 1:29 am using AcqMethod FRNC3C.M
Instrument : PAH-3
Sample Name: C3122807
Misc Info : ALK STD
Vial Number: 98



CHAIN OF CUSTODY RECORDS

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 1 of 2 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0512110

Sample ID	Date	Time	Matrix	Environmental Forensics (Includes Lead-210, Cesium 137, EPA 8015 Modified GC/FID Hydrocarbon Fingerprint, 8270 Modified GC/MS/SIM Extended PAH and Biomarkers)
-1 GC-SED-93 (0-1)	12/16/2005	15:25	Sediment	☑
-2 GC-SED-92 (0-2)	12/16/2005	13:30	Sediment	☑
-3 GC-SED-85B (8.5-9.3)	12/16/2005	12:15	Sediment	☑
-4 GC-SED-67 (8-8.4)	12/17/2005	16:30	Sediment	☑
-5 GC-SED-68 (2.2-3.1)	12/17/2005	17:05	Sediment	☑
-6 GC-SED-80 (0-2)	12/17/2005	13:40	Sediment	☑
-7 GC-SED-79 (2.5-3.5)	12/17/2005	12:50	Sediment	☑
-8 GC-SED-81 (8-11)	12/18/2005	16:15	Sediment	☑
-9 GC-SED-69 (6-7)	12/18/2005	16:55	Sediment	☑

Possible Hazard Identification	Turn Around Time Required (other than standard):			
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Unknown	QC Requirements:			
	Date	Time	Date	Time
1. Relinquished by: Melissa Helter	12/19/05	1830	1. Received by: FED EX	
2. Relinquished by: FED EX	12/20/05	1045	2. Received by: [illegible]	12/20/05 1045
3. Relinquished by:			3. Received by:	

COMMENTS
Fed Ex 8544 0600 3217

ORIGINAL

Newfields 100 Ledgewood Place Suite 302 Rockland MA	**Chain of Custody Record** Page 2 of 2 Project Name: Gowanus Canal Investigation GEI Project No.: 982482-34-4403	Client: GEI Consultants Inc. 455 Winding Brook Dr Glastonbury CT 06033	Project Manager - Dave Terry Tel: 860-368-5300 Alt. Contact: Karen Swartz	Lab Job Number: 0572110

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-72 (13.5-14.5) 10	12/18/2005	17:30	Sediment	☑
GC-SED-07 (7.5-8.5) 11	12/19/2005	17:10	Sediment	☑
GC-SED-03 (0-1.5) 12	12/19/2005	14:15	Sediment	☑
GC-SED-01 (19-20) 13	12/19/2005	15:50	Sediment	☑
GC-SED-02 (17.1-18.1) 14	12/19/2005	14:48	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 Stelter	12/19/05 1830	1. Received by: Fed Ex		
2. Relinquished by: Fed Ex	12/20/05 1045	2. Received by: [signature]	12/20/05	1045
3. Relinquished by:		3. Received by:		

COMMENTS
Fed Ex 8544 0600 3217

ORIGINAL

Sample Receipt Checklist

Client: NEWFIE	**Receipt Date:** 12/20/05		
Project: Gowanas Canal	**Log-in Date:** / /		
ETR #: 0512110	**Inspection by:** W	**Login by:** W	

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other:_____
No, WHG Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: Attached
No, Unavailable / NA

Number of coolers received for this project delivery: 1

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 3° 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: BMP Date: 12/20/05

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 / NA

If No, list samples below:

Please use back for any additional notes!

Woods Hole Group Environmental Laboratories
Raynham, Massachusetts

27

28 [redacted]

FedEx Express US Airbill — FedEx Tracking Number 8544 0600 3217

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 12-19-05 — FedEx Tracking Number 854406003217

Sender's Name Melissa Fcller — Phone [illegible]

Company GET CONSULTANTS INC

Address SMITH & LUQUER ST — Dept./Floor/Suite/Room

City BROOKLYN — State NY — ZIP 11231

2 Your Internal Billing Reference 982482-34-4403

3 To

Recipient's Name Liz Perta/Ted Heaton 508 822 9300 — Phone

Company Alma Lewis Nuc Labs

Recipient's Address 315 Paramount Dr — Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address Suite 2

To request a package be held at a specific FedEx location, print FedEx address here.

City Raynham — State MA — ZIP 02767

8544 0600 3217

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 ☒ 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.

☒ 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.

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☒ Third Party ☐ Credit Card ☐ Cash/Check Obtain Recip. Acct. No. ☐

[redacted]

Total Packages 1 — Total Weight 77 — [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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