166664

Remedial Investigation and Remedial Action Report
Shear Area
Appendix A – Laboratory Data (Volume 2 of 3)

Atlantic States Cast Iron Pipe Company
Phillipsburg, New Jersey

December 2004

Prepared for:
Atlantic States Cast Iron Pipe Company
183 Sitgreaves Street
Phillipsburg, New Jersey

Prepared by:
Dewberry-Goodkind, Inc.
299 Webro Road
Parsippany, NJ 07054

Dewberry

New Jersey
ACCUTEST
Laboratories

06/30/04

Technical Report for

Dewberry

Atlantic States Cast Iron Pipe, Phillipsburg, NJ

3852

Accutest Job Number: N69732

Sampling Date: 06/14/04

Report to:

Dewberry-Goodkind, Inc.
299 Webro Road
Parsippany, NJ 08054

ATTN: Larry Brunt

Total number of pages in report: 148

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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Sample Summary

Dewberry

Job No: N69732

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
N69732-1	06/14/04	16:35	MS	06/14/04	SO	Soil	WC

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

RESULTS

Accutest Laboratories

Report of Analysis

Client Sample ID:	WC		
Lab Sample ID:	N69732-1	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G70537.D	1	06/15/04	SJM	n/a	n/a	VG3699
Run #2 [a]	G70556.D	1	06/16/04	SJM	n/a	n/a	VG3699

	Initial Weight
Run #1	4.6 g
Run #2	5.1 g

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.3	0.31	ug/kg	
108-88-3	Toluene	17.1	1.3	0.30	ug/kg	
100-41-4	Ethylbenzene	19.0	1.3	0.75	ug/kg	
1330-20-7	Xylene (total)	216	2.6	0.56	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	46% [c]	39% [b]	67-119%
17060-07-0	1,2-Dichloroethane-D4	80%	81%	58-128%
2037-26-5	Toluene-D8	89%	79%	75-121%
460-00-4	4-Bromofluorobenzene	94%	131%	67-132%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	WC		
Lab Sample ID:	N69732-1	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8082 SW846 3545	**Percent Solids:**	82.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF52197.D	1	06/16/04	OYA	06/15/04	OP17188	GEF2535
Run #2	EF52229.D	10	06/17/04	OYA	06/15/04	OP17188	GEF2536

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2	15.1 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	16	ug/kg	
11104-28-2	Aroclor 1221	ND	40	11	ug/kg	
11141-16-5	Aroclor 1232	ND	40	15	ug/kg	
53469-21-9	Aroclor 1242	4510 [a]	400	170	ug/kg	
12672-29-6	Aroclor 1248	ND	40	3.4	ug/kg	
11097-69-1	Aroclor 1254	3130 [a]	400	72	ug/kg	
11096-82-5	Aroclor 1260	705	40	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%	54%	32-134%
877-09-8	Tetrachloro-m-xylene	48%	40%	32-134%
2051-24-3	Decachlorobiphenyl	62%	99%	22-154%
2051-24-3	Decachlorobiphenyl	75%	124%	22-154%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	WC		
Lab Sample ID:	N69732-1	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	82.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	<0.50	D004	5.0	0.50	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]
Barium	1.0	D005	100	1.0	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]
Cadmium	<0.0050	D006	1.0	0.0050	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]
Chromium	0.015	D007	5.0	0.010	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]
Lead	<0.50	D008	5.0	0.50	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]
Mercury	<0.00020	D009	0.20	0.00020	mg/l	1	06/16/04	06/17/04	WG	SW846 7470A [2]	SW846 7470A [4]
Selenium	<0.50	D010	1.0	0.50	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]
Silver	<0.010	D011	5.0	0.010	mg/l	1	06/16/04	06/17/04	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13983
(2) Instrument QC Batch: MA13991
(3) Prep QC Batch: MP26093
(4) Prep QC Batch: MP26099

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	WC		
Lab Sample ID:	N69732-1	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	82.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	4150	750	mg/kg	25	06/16/04	JOO	EPA 418.1 M
Solids, Percent	82.3		%	1	06/15/04	MH	ASTM 4643-00

RL = Reporting Limit

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # N69732

Client / Reporting Information

Company Name: Dewberry-Goodkind
Address: 299 Welsh Rd
City: Parsippany State: NJ Zip: 07054
Project Contact: MEHMET SECILMIS E-mail: mecelmis@dewberry.com
Phone #: (973) 4284909
Sampler's Name: MEHMET SECILMIS

Project Information

Project Name: ATLANTIC STATES CAST IRON PIPE
Street:
City: PHILLIPSBURG State: NJ
Project #: 3852
Fax #:
Client Purchase Order #:

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PAUG ☐ / BTEX ☐ MTBE ☐ TBA ☐ NAP ☐ PALG ☐	8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ / TBA ☐ NAP ☐ +10 ☐ +15 ☐	8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ / ABN ☐ BN ☐ PAH ☐ PADF ☐ +TICs ☐	TPH418.1, BTEX, PCB, TCLP & RCRA metals (WASTE CLASS)							Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe / LAB USE ONLY
-1	WC		6/24/04	4:55	MS	Soil	3												✓							Q38, 19F8

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☑ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

O.K. TO ANALYZE [signature]

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 [signature]	6/24/04 7:10	1 [signature]	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐ On Ice ☐	Cooler Temp. 27.8°C

Internal Sample Tracking Chronicle

Dewberry

Job No: N69732

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N69732-1	Collected: 14-JUN-04 16:35 By: MS		Received: 14-JUN-04 By: JD			
WC						
N69732-1	ASTM 4643-00	15-JUN-04	MH			%SOL
N69732-1	SW846 8260B	15-JUN-04 22:34	SJM			V8260BTX
N69732-1	EPA 418.1 M	16-JUN-04	JOO	15-JUN-04	HBA	PHC
N69732-1	SW846 8260B	16-JUN-04 10:01	SJM			V8260BTX
N69732-1	SW846 8082	16-JUN-04 11:32	OYA	15-JUN-04	GGP	P8082PCB
N69732-1	SW846 6010B	17-JUN-04 03:49	ND	16-JUN-04	MKW	EAG,EAS,EBA,ECD,ECR,EPB,ESE
N69732-1	SW846 7470A	17-JUN-04 09:57	WG	16-JUN-04	WG	EHG
N69732-1	SW846 8082	17-JUN-04 13:18	OYA	15-JUN-04	GGP	P8082PCB

GC/MS

GC/MS VOLATILE

ACCUTEST

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Volatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		N/A
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: [signature] Date: 6/23/04

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3699-MB1	G70524.D	1	06/15/04	SJM	n/a	n/a	VG3699

The QC reported here applies to the following samples: **Method:** SW846 8260B

N69732-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.24	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.57	ug/kg	
108-88-3	Toluene	ND	1.0	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.42	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	85%	67-119%
17060-07-0	1,2-Dichloroethane-D4	80%	58-128%
2037-26-5	Toluene-D8	88%	75-121%
460-00-4	4-Bromofluorobenzene	87%	67-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	2.79	37	ug/kg	JN
	Total TIC, Volatile		37	ug/kg	J

Blank Spike Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3699-BS	G70525.D	1	06/15/04	SJM	n/a	n/a	VG3699

The QC reported here applies to the following samples: **Method:** SW846 8260B

N69732-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	49.9	100	80-116
100-41-4	Ethylbenzene	50	52.4	105	81-118
108-88-3	Toluene	50	50.3	101	82-118
1330-20-7	Xylene (total)	150	162	108	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	67-119%
17060-07-0	1,2-Dichloroethane-D4	101%	58-128%
2037-26-5	Toluene-D8	98%	75-121%
460-00-4	4-Bromofluorobenzene	95%	67-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N69489-3MS	G70527.D	1	06/15/04	SJM	n/a	n/a	VG3699
N69489-3MSD	G70528.D	1	06/15/04	SJM	n/a	n/a	VG3699
N69489-3	G70526.D	1	06/15/04	SJM	n/a	n/a	VG3699

The QC reported here applies to the following samples: **Method:** SW846 8260B

N69732-1

CAS No.	Compound	N69489-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		104	95.7	92	100	96	4	52-132/19
100-41-4	Ethylbenzene	2.4		104	86.7	81	92.6	87	7	39-144/23
108-88-3	Toluene	ND		104	95.9	92	101	97	5	46-140/20
1330-20-7	Xylene (total)	4.2		312	272	86	286	90	5	40-145/24

CAS No.	Surrogate Recoveries	MS	MSD	N69489-3	Limits
1868-53-7	Dibromofluoromethane	91%	91%	87%	67-119%
17060-07-0	1,2-Dichloroethane-D4	92%	91%	88%	58-128%
2037-26-5	Toluene-D8	92%	94%	94%	75-121%
460-00-4	4-Bromofluorobenzene	80%	79%	69%	67-132%

Instrument Performance Check (BFB)

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	VG3699-BFB1	**Injection Date:**	06/15/04
Lab File ID:	G70521.D	**Injection Time:**	12:10
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9204	22.7		Pass
75	30.0 - 60.0% of mass 95	21771	53.8		Pass
95	Base peak, 100% relative abundance	40477	100.0		Pass
96	5.0 - 9.0% of mass 95	2979	7.4		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	30552	75.5		Pass
175	5.0 - 9.0% of mass 174	2575	6.4	(8.4) [a]	Pass
176	95.0 - 101.0% of mass 174	30765	76.0	(100.7) [a]	Pass
177	5.0 - 9.0% of mass 176	2302	5.7	(7.5) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG3699-CC3698	G70522.D	06/15/04	13:07	00:57	Continuing cal 100
VG3699-MB1	G70524.D	06/15/04	14:30	02:20	Method Blank
VG3699-BS	G70525.D	06/15/04	15:13	03:03	Blank Spike
N69489-3	G70526.D	06/15/04	15:49	03:39	(used for QC only; not part of job N69732)
N69489-3MS	G70527.D	06/15/04	16:39	04:29	Matrix Spike
N69489-3MSD	G70528.D	06/15/04	17:14	05:04	Matrix Spike Duplicate
ZZZZZZ	G70531.D	06/15/04	19:01	06:51	(unrelated sample)
ZZZZZZ	G70532.D	06/15/04	19:37	07:27	(unrelated sample)
ZZZZZZ	G70533.D	06/15/04	20:12	08:02	(unrelated sample)
ZZZZZZ	G70534.D	06/15/04	20:48	08:38	(unrelated sample)
ZZZZZZ	G70535.D	06/15/04	21:23	09:13	(unrelated sample)
ZZZZZZ	G70536.D	06/15/04	21:59	09:49	(unrelated sample)
N69732-1	G70537.D	06/15/04	22:34	10:24	WC
ZZZZZZ	G70539.D	06/15/04	23:45	11:35	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	VG3699-BFB2	**Injection Date:**	06/16/04
Lab File ID:	G70542.D	**Injection Time:**	01:31
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8718	23.1		Pass
75	30.0 - 60.0% of mass 95	20317	53.7		Pass
95	Base peak, 100% relative abundance	37821	100.0		Pass
96	5.0 - 9.0% of mass 95	2573	6.8		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	30381	80.3		Pass
175	5.0 - 9.0% of mass 174	2599	6.9	(8.6) [a]	Pass
176	95.0 - 101.0% of mass 174	30640	81.0	(100.9) [a]	Pass
177	5.0 - 9.0% of mass 176	2035	5.4	(6.6) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG3699-CC3698	G70543.D	06/16/04	02:07	00:36	Continuing cal 50
VG3699-MB2	G70545.D	06/16/04	03:17	01:46	Method Blank
ZZZZZZ	G70546.D	06/16/04	03:52	02:21	(unrelated sample)
ZZZZZZ	G70547.D	06/16/04	04:28	02:57	(unrelated sample)
ZZZZZZ	G70549.D	06/16/04	05:38	04:07	(unrelated sample)
ZZZZZZ	G70550.D	06/16/04	06:14	04:43	(unrelated sample)
ZZZZZZ	G70551.D	06/16/04	06:49	05:18	(unrelated sample)
ZZZZZZ	G70552.D	06/16/04	07:25	05:54	(unrelated sample)
ZZZZZZ	G70553.D	06/16/04	08:00	06:29	(unrelated sample)
ZZZZZZ	G70554.D	06/16/04	08:36	07:05	(unrelated sample)
ZZZZZZ	G70555.D	06/16/04	09:20	07:49	(unrelated sample)
N69732-1	G70556.D	06/16/04	10:01	08:30	WC
ZZZZZZ	G70558.D	06/16/04	11:14	09:43	(unrelated sample)
ZZZZZZ	G70559.D	06/16/04	11:51	10:20	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	VG3699-CC3698	**Injection Date:**	06/15/04
Lab File ID:	G70522.D	**Injection Time:**	13:07
Instrument ID:	GCMSG	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	45990	5.72	304002	9.62	251376	11.67	172895	18.00	117093	22.57
Upper Limit [a]	91980	6.22	608004	10.12	502752	12.17	345790	18.50	234186	23.07
Lower Limit [b]	22995	5.22	152001	9.12	125688	11.17	86448	17.50	58547	22.07

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VG3699-MB1	52223	5.75	312072	9.60	259256	11.66	180250	17.99	105092	22.58
VG3699-BS	54762	5.73	313782	9.60	267076	11.66	172818	18.00	120158	22.58
N69489-3	63321	5.73	302308	9.62	250190	11.68	182511	18.00	120099	22.59
N69489-3MS	56060	5.74	309614	9.63	263405	11.68	189062	18.00	128848	22.58
N69489-3MSD	47897	5.72	300824	9.62	263779	11.67	185708	18.01	112996	22.58
ZZZZZZ	54152	5.79	322834	9.61	284795	11.67	203966	18.01	123264	22.58
ZZZZZZ	50384	5.78	320978	9.59	281430	11.66	202527	18.00	124044	22.58
ZZZZZZ	37640	5.78	327641	9.61	280580	11.66	199290	18.00	120427	22.58
ZZZZZZ	55208	5.78	327077	9.61	284999	11.65	204523	18.00	130084	22.57
ZZZZZZ	47608	5.75	335839	9.58	286594	11.64	205174	17.99	131532	22.56
ZZZZZZ	50583	5.76	334628	9.59	283077	11.65	208249	17.98	138557	22.57
N69732-1	47021	5.77	332379	9.59	279952	11.65	198965	17.99	122735	22.56
ZZZZZZ	37665	5.78	348170	9.58	296033	11.64	208026	17.99	133335	22.56

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	VG3699-CC3698	**Injection Date:**	06/16/04
Lab File ID:	G70543.D	**Injection Time:**	02:07
Instrument ID:	GCMSG	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	49710	5.70	335845	9.58	279387	11.64	190372	17.97	122607	22.56
Upper Limit [a]	99420	6.20	671690	10.08	558774	12.14	380744	18.47	245214	23.06
Lower Limit [b]	24855	5.20	167923	9.08	139694	11.14	95186	17.47	61304	22.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VG3699-MB2	39240	5.73	334188	9.58	273862	11.64	186767	17.98	107464	22.55
ZZZZZZ	43089	5.78	342916	9.55	284189	11.64	199743	17.96	124267	22.54
ZZZZZZ	46237	5.73	345278	9.57	288673	11.63	206726	17.97	135226	22.56
ZZZZZZ	44229	5.73	327936	9.60	272783	11.65	190211	17.97	110696	22.55
ZZZZZZ	55664	5.72	312162	9.58	267643	11.64	187311	17.97	117948	22.55
ZZZZZZ	59771	5.73	320302	9.58	265675	11.65	192538	17.98	116082	22.56
ZZZZZZ	35158	5.77	316917	9.60	260651	11.65	184183	17.99	109156	22.57
ZZZZZZ	49146	5.75	308099	9.60	255239	11.66	178312	17.99	109887	22.56
ZZZZZZ	53905	5.74	298006	9.59	249385	11.65	176808	17.98	104449	22.57
ZZZZZZ	30350	5.79	312204	9.58	260206	11.65	183470	17.99	119634	22.56
N69732-1 [c]	32161	5.74	291848	9.58	251303	11.63	140567	17.97	45405*	22.56
ZZZZZZ	42760	5.76	335514	9.58	282706	11.64	198655	17.98	125422	22.55
ZZZZZZ	47376	5.77	336242	9.57	292218	11.64	204956	17.97	136179	22.57

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.

Volatile Surrogate Recovery Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Method: SW846 8260B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
N69732-1	G70556.D	39.0* [a]	81.0	79.0	131.0
N69732-1	G70537.D	46.0* [b]	80.0	89.0	94.0
N69489-3MS	G70527.D	91.0	92.0	92.0	80.0
N69489-3MSD	G70528.D	91.0	91.0	94.0	79.0
VG3699-BS	G70525.D	100.0	101.0	98.0	95.0
VG3699-MB1	G70524.D	85.0	80.0	88.0	87.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	67-119%
S2 = 1,2-Dichloroethane-D4	58-128%
S3 = Toluene-D8	75-121%
S4 = 4-Bromofluorobenzene	67-132%

(a) Outside control limits due to matrix interference.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

Initial Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3698-ICC3698
Lab FileID: G70486.D

Response Factor Report GC/MS G

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Jun 14 17:50:13 2004
Response via : Initial Calibration

Calibration Files
1 =G70483.D 5 =g70484.D 100 =G70487.D
50 =G70486.D 10 =G70485.D 200 =G70488.D 400 =G70489.D

Compound	1	5	100	50	10	200	400	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------								
2)M tertiary butyl al		1.412	1.387	1.684	1.512	1.406	1.428	1.471	7.66
3)M 1,4-dioxane			0.094	0.106	0.091	0.098	0.105	0.099	6.75
4) I pentafluorobenzene	----------ISTD----------								
5)M chlorodifluoromet		0.504	0.472	0.483	0.531	0.484		0.495	4.72
6)M dichlorodifluorom		0.657	0.588	0.611	0.656	0.620		0.627	4.74
7)M chloromethane		0.151	0.145	0.160	0.176	0.148		0.156	7.96
8)M vinyl chloride		0.190	0.183	0.190	0.191	0.193		0.190	1.98
9)M bromomethane		0.261	0.249	0.266	0.268	0.267		0.262	2.92
10)M chloroethane		0.123	0.126	0.131	0.134	0.137		0.130	4.37
11)M trichlorofluorome		0.963	0.864	0.911	0.952	0.907		0.919	4.28
12)M ethyl ether		0.090	0.102	0.103	0.094	0.104		0.099	6.21
13)M acrolein		0.015	0.018	0.016	0.015	0.017		0.016	8.09
14)M freon 113		0.711	0.584	0.617	0.696	0.599		0.642	9.05
15)M acetone			0.089	0.085	0.081	0.083	0.081	0.084	3.96
16)M 1,1-dichloroethen		0.262	0.267	0.282	0.281	0.287	0.278	0.276	3.52
17)M iodomethane	0.735	0.825	0.858	0.867	0.898	0.855	0.827	0.838	6.19
18)M methyl acetate		0.090	0.116	0.110	0.106	0.110		0.106	9.26
19)M allyl chloride		0.294	0.304	0.312	0.340	0.300		0.310	5.79
20)M methylene chlorid		0.176	0.240	0.250	0.243	0.243	0.243	0.232	12.06
21)M carbon disulfide		0.523	0.551	0.538	0.570	0.579		0.552	4.12
22)M acrylonitrile		0.016	0.025	0.023	0.019	0.024		0.022	17.62
----- Linear regression ----- Coefficient = 0.9998									
Response Ratio = -0.00488 + 0.02477 *A									
23)M methyl tert butyl	0.522	0.605	0.604	0.612	0.618	0.576	0.540	0.582	6.49
24)M trans-1,2-dichlor		0.273	0.290	0.296	0.291	0.296	0.288	0.289	2.95
25)M hexane		0.315	0.254	0.274	0.291	0.267		0.280	8.49
26)M di-isopropyl ethe	0.893	0.891	0.868	0.902	0.938	0.861	0.830	0.883	3.90
27)M 1,1-dichloroethan		0.537	0.555	0.587	0.568	0.562		0.562	3.30
28)M vinyl acetate			0.043	0.040	0.024	0.046	0.048	0.040	24.14
----- Linear regression ----- Coefficient = 0.9998									
Response Ratio = -0.00780 + 0.04845 *A									
29)M chloroprene		0.430	0.438	0.450	0.452	0.455	0.450	0.446	2.14
30)M ethyl tert-butyl	0.952	1.026	0.965	1.011	1.049	0.936	0.870	0.973	6.30
31)M 2-butanone			0.085	0.083	0.083	0.084	0.092	0.085	4.42
32)M propionitrile		0.006	0.010	0.010	0.007	0.010	0.011	0.009	21.13
----- Linear regression ----- Coefficient = 0.9999									
Response Ratio = -0.00782 + 0.01075 *A									
33)M 2,2-dichloropropa		0.485	0.448	0.485	0.510	0.423		0.470	7.36
34)M ethyl acetate		0.175	0.167	0.159	0.183	0.156	0.161	0.167	6.23
35)M cis-1,2-dichloroe		0.286	0.301	0.310	0.300	0.307	0.308	0.302	2.86
36)M methacrylonitrile		0.128	0.139	0.129	0.131	0.144	0.144	0.136	5.46

Initial Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3698-ICC3698
Lab FileID: G70486.D

37)M	iso-butyl alcohol								0.000	-1.00
38)M	chloroform	0.731	0.799	0.783	0.809	0.825	0.779	0.761	0.784	4.03
39)M	bromochloromethan		0.184	0.215	0.219	0.205	0.215	0.208	0.208	6.18
40)M	tetrahydrofuran								0.000	-1.00
41)M	1,1,1-trichloroet		0.740	0.735	0.777	0.780	0.723	0.660	0.736	5.97
42)S	dibromofluorometh		0.688	0.661	0.676	0.681	0.656		0.672	2.01
43)S	1,2-dichloroethan		0.486	0.468	0.478	0.479	0.455		0.473	2.61
44) I	1,4-difluorobenzene		----------ISTD----------							
45)M	n-butyl alcohol		0.020	0.019	0.020	0.021	0.020	0.019	0.020	3.72
46)M	cyclohexane		0.254	0.339	0.358	0.357	0.361	0.342	0.335	12.22
47)M	1,1-dichloroprope	0.730	0.596	0.557	0.599	0.604	0.578	0.551	0.602	10.01
48)M	isopropyl acetate		1.546	1.420	1.456	1.540	1.418	1.383	1.460	4.65
49)M	carbon tetrachlor		0.891	0.872	0.935	0.922	0.905		0.905	2.78
50)M	tert-amyl methyl	0.867	0.939	0.872	0.796	0.839	0.852		0.861	5.44
51)M	heptane		0.213	0.240	0.248	0.256	0.245		0.241	6.76
52)M	1,2-dichloroethan		0.605	0.618	0.647	0.639	0.629	0.607	0.624	2.74
53)M	benzene	0.692	0.746	0.729	0.760	0.764	0.754	0.724	0.739	3.45
54)M	trichloroethene		0.497	0.491	0.512	0.528	0.511	0.489	0.504	2.97
55)M	1,2-dichloropropa		0.315	0.298	0.325	0.314	0.307	0.303	0.310	3.08
56)M	methylcyclohexane		0.437	0.432	0.444	0.471	0.445	0.442	0.445	3.09
57)M	propyl acetate		0.335	0.341	0.332	0.345	0.336	0.338	0.338	1.36
58)M	methyl methacryla		0.138	0.162	0.157	0.151	0.159	0.165	0.155	6.27
59)M	bromodichlorometh	0.679	0.775	0.849	0.889	0.824	0.882	0.852	0.821	8.92
60)M	dibromomethane		0.342	0.391	0.397	0.366	0.395	0.379	0.378	5.61
61)M	3-methyl-1-butano			0.008	0.008	0.006	0.008	0.008	0.008	10.11
62)M	2-chloroethyl vin		0.040	0.052	0.050	0.039	0.053	0.058	0.048	15.57

----- Linear regression ----- Coefficient = 0.9986
Response Ratio = -0.03774 + 0.05780 *A

63)M	4-methyl-2-pentan		0.090	0.088	0.083	0.062	0.090	0.091	0.084	13.26
64)M	epichlorohydrin								0.000	-1.00
65)M	cis-1,3-dichlorop		0.504	0.545	0.575	0.523	0.584	0.572	0.550	5.81
66)M	toluene	0.477	0.540	0.543	0.562	0.563	0.564	0.543	0.542	5.64
67)M	trans-1,3-dichlor		0.421	0.518	0.526	0.452	0.539		0.491	10.51
68)M	ethyl methacrylat		0.337	0.380	0.375	0.340	0.383	0.387	0.367	6.12
69)M	1,1,2-trichloroet		0.228	0.258	0.261	0.236	0.253	0.256	0.249	5.41
70)M	2-hexanone		0.141	0.212	0.201	0.150	0.200	0.206	0.185	16.72

----- Linear regression ----- Coefficient = 0.9997
Response Ratio = -0.00577 + 0.20580 *A

71)S	toluene-d8 (s)		0.990	0.900	0.948	0.988	0.935		0.952	3.99
72) I	chlorobenzene-d5		----------ISTD----------							
73)M	1,3-dichloropropa	0.612	0.649	0.686	0.689	0.617	0.659		0.652	5.08
74)M	butyl acetate		0.178	0.213	0.202	0.172	0.201	0.212	0.197	8.91
75)M	tetrachloroethene	1.146	1.198	1.105	1.181	1.220	1.042	0.989	1.126	7.56
76)M	dibromochlorometh		0.900	1.066	1.091	0.918	1.048		1.005	8.84
77)M	1,2-dibromoethane		0.557	0.654	0.671	0.566	0.632	0.649	0.622	7.76
78)M	chlorobenzene	1.022	1.139	1.151	1.189	1.125	1.097	1.124	1.121	4.64
79)M	1,1,1,2-tetrachlo		0.785	0.804	0.858	0.793	0.774		0.803	4.05
80)M	ethylbenzene	1.783	1.793	1.802	1.840	1.802	1.725	1.727	1.782	2.35
81)M	m,p-xylene	0.517	0.610	0.612	0.637	0.634	0.598	0.617	0.603	6.71
82)M	o-xylene	0.505	0.565	0.618	0.635	0.594	0.590	0.600	0.587	7.20
83)M	styrene		0.840	0.999	1.006	0.895	0.961	0.983	0.947	6.98
84)M	bromoform		0.571	0.778	0.773	0.590	0.740	0.746	0.699	13.38
85)M	cyclohexanone		0.036	0.054	0.051	0.039	0.051	0.054	0.048	16.36

----- Linear regression ----- Coefficient = 0.9994
Response Ratio = -0.02886 + 0.05397 *A

Initial Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3698-ICC3698
Lab FileID: G70486.D

86) I	1,4-dichlorobenzene-d	----------ISTD----------								
87) S	4-bromofluorobenz		1.869	1.537	1.564	1.772	1.528		1.654	9.45
88) M	isopropylbenzene	2.658	3.033	2.595	2.672	3.011	2.562		2.755	7.65
89) M	1,1,2,2-tetrachlo		0.838	0.817	0.805	0.802	0.815		0.816	1.74
90) M	1,2,3-trichloropr		0.552	0.426	0.459	0.419	0.420		0.455	12.40
91) M	trans-1,4-dichlor		0.131	0.231	0.207	0.155	0.237	0.243	0.201	23.46

----- Linear regression ----- Coefficient = 0.9998
Response Ratio = -0.02414 + 0.24501 *A

92) M	n-propylbenzene	3.338	3.727	3.333	3.470	3.801	3.340	3.184	3.456	6.57
93) M	bromobenzene		1.109	1.027	1.061	1.086	0.995	0.949	1.038	5.75
94) M	1,3,5-trimethylbe	2.740	2.966	2.549	2.624	2.966	2.508		2.725	7.42
95) M	2-chlorotoluene		2.866	2.332	2.510	2.626	2.289		2.525	9.28
96) M	4-chlorotoluene		3.100	2.718	2.768	3.219	2.734		2.908	8.05
97) M	1,2,4-trimethylbe	2.780	2.830	2.480	2.598	2.866	2.459		2.669	6.74
98) M	tert-butylbenzene	2.697	2.888	2.382	2.512	2.918	2.329	2.174	2.557	11.18
99) M	pentachloroethane		0.794	0.858	0.881	0.841	0.843	0.794	0.835	4.18
100) M	sec-butylbenzene	3.281	3.618	3.101	3.191	3.676	3.108	2.935	3.273	8.45
101) M	p-isopropyltoluen	2.984	3.123	2.799	2.845	3.202	2.764	2.605	2.903	7.26
102) M	1,3-dichlorobenze	1.556	1.738	1.599	1.654	1.742	1.564	1.514	1.624	5.54
103) M	1,4-dichlorobenze	1.701	1.789	1.612	1.668	1.659	1.605	1.510	1.649	5.28
104) M	benzyl chloride		1.008	1.166	1.098	1.015	1.209		1.099	8.14
105) M	n-butylbenzene	2.488	2.978	2.628	2.753	2.865	2.670	2.549	2.704	6.42
106) M	1,2-dichlorobenze	1.537	1.612	1.436	1.524	1.616	1.437		1.527	5.22
107) M	hexachloroethane		0.959	1.037	1.054	1.069	1.028	0.961	1.018	4.61
108) M	1,2-dibromo-3-chl		0.210	0.266	0.253	0.209	0.258	0.258	0.242	10.68
109) M	1,2,4-trichlorobe		1.149	1.140	1.206	1.160	1.161	1.116	1.155	2.58
110) M	hexachlorobutadie	1.058	1.377	1.137	1.258	1.343	1.102		1.212	10.93
111) M	naphthalene	0.975	0.900	1.026	0.991	0.887	1.032	1.084	0.985	7.27
112) M	1,2,3-trichlorobe	0.948	0.972	0.975	1.019	0.958	0.954	0.923	0.964	3.08

(#) = Out of Range

MG3698.M Mon Jun 14 17:53:43 2004 RTD1

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3699-CC3698
Lab FileID: G70522.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\G70522.D
Acq On : 15 Jun 2004 1:07 pm
Sample : CC3698-100
Misc : MS155,VG3699,,,,,1
MS Integration Params: LSCINT.P

Vial: 30
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	84	-0.01	5.72
2	M	tertiary butyl alcohol	1.471	1.437	2.3	87	-0.05	5.87
3	M	1,4-dioxane	0.099	0.103	-4.0	92	0.00	13.25
4	I	pentafluorobenzene	1.000	1.000	0.0	96	0.02	9.62
5	M	chlorodifluoromethane	0.495	0.462	6.7	94	0.00	2.98
6	M	dichlorodifluoromethane	0.627	0.567	9.6	93	0.02	3.02
7	M	chloromethane	0.156	0.137	12.2	91	0.01	3.33
8	M	vinyl chloride	0.190	0.170	10.5	89	0.00	3.51
9	M	bromomethane	0.262	0.248	5.3	96	-0.01	4.19
10	M	chloroethane	0.130	0.122	6.2	94	0.01	4.32
11	M	trichlorofluoromethane	0.919	0.893	2.8	100	0.02	4.73
12	M	ethyl ether	0.099	0.096	3.0	90	0.00	5.16
13	M	acrolein	0.016	0.015	6.3	85	0.00	5.39
14	M	freon 113	0.642	0.576	10.3	95	0.01	5.49
15	M	acetone	0.084	0.076	9.5	83	0.03	5.49
16	M	1,1-dichloroethene	0.276	0.260	5.8	94	0.03	5.74
17	M	iodomethane	0.838	0.865	-3.2	97	0.02	6.29
18	M	methyl acetate	0.106	0.108	-1.9	90	0.02	6.31
19	M	allyl chloride	0.310	0.302	2.6	96	0.03	6.39
20	M	methylene chloride	0.232	0.233	-0.4	94	0.02	6.58
21	M	carbon disulfide	0.552	0.529	4.2	93	0.01	6.65
		----------	True	Calc.	% Drift	----------		
22	M	acrylonitrile	500.000	475.043	5.0	90	-0.01	6.80
		----------	AvgRF	CCRF	% Dev	----------		
23	M	methyl tert butyl ether	0.582	0.627	-7.7	100	0.02	6.90
24	M	trans-1,2-dichloroethene	0.289	0.281	2.8	93	0.01	7.14
25	M	hexane	0.280	0.247	11.8	94	0.03	7.29
26	M	di-isopropyl ether	0.883	0.851	3.6	95	0.01	7.75
27	M	1,1-dichloroethane	0.562	0.552	1.8	96	0.03	7.95
		----------	True	Calc.	% Drift	----------		
28	M	vinyl acetate	100.000	85.804	14.2	84	0.00	7.94
		----------	AvgRF	CCRF	% Dev	----------		
29	M	chloroprene	0.446	0.438	1.8	97	-0.01	8.13
30	M	ethyl tert-butyl ether	0.973	0.954	2.0	95	0.00	8.54
31	M	2-butanone	0.085	0.082	3.5	93	-0.02	8.74
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3699-CC3698
Lab FileID: G70522.D

32	M	propionitrile	1000.000	936.132	6.4	90	0.03	8.90
		----------	AvgRF	CCRF	% Dev	----------		
33	M	2,2-dichloropropane	0.470	0.473	-0.6	102	0.02	9.04
34	M	ethyl acetate	0.167	0.155	7.2	90	0.00	9.11
35	M	cis-1,2-dichloroethene	0.302	0.306	-1.3	98	0.00	9.14
36	M	methacrylonitrile	0.136	0.131	3.7	91	0.03	9.31
37	M	iso-butyl alcohol	0.000	0.015	0.0	0#	0.01	9.11
38	M	chloroform	0.784	0.799	-1.9	98	0.00	9.45
39	M	bromochloromethane	0.208	0.216	-3.8	97	0.00	9.77
40	M	tetrahydrofuran	0.000	0.035	0.0	0#	0.01	9.85
41	M	1,1,1-trichloroethane	0.736	0.773	-5.0	101	0.03	10.26
42	S	dibromofluoromethane (s)	0.672	0.669	0.4	98	0.00	9.87
43	S	1,2-dichloroethane-d4 (s)	0.473	0.484	-2.3	100	0.02	10.88
44	I	1,4-difluorobenzene	1.000	1.000	0.0	93	0.00	11.67
45	M	n-butyl alcohol	0.020	0.019	5.0	95	0.00	10.28
46	M	cyclohexane	0.335	0.348	-3.9	95	0.00	10.29
47	M	1,1-dichloropropene	0.581	0.577	0.7	96	0.00	10.56
48	M	isopropyl acetate	1.460	1.443	1.2	94	0.00	10.84
49	M	carbon tetrachloride	0.905	0.946	-4.5	101	0.02	10.76
50	M	tert-amyl methyl ether	0.861	0.889	-3.3	94	0.00	10.82
51	M	heptane	0.241	0.241	0.0	93	0.02	10.89
52	M	1,2-dichloroethane	0.624	0.625	-0.2	94	0.00	11.06
53	M	benzene	0.739	0.743	-0.5	94	0.00	11.09
54	M	trichloroethene	0.504	0.508	-0.8	96	-0.03	12.36
55	M	1,2-dichloropropane	0.310	0.310	0.0	96	0.03	12.74
56	M	methylcyclohexane	0.445	0.433	2.7	93	-0.02	12.50
57	M	propyl acetate	0.338	0.329	2.7	89	0.00	12.81
58	M	methyl methacrylate	0.155	0.157	-1.3	90	0.00	12.86
59	M	bromodichloromethane	0.821	0.910	-10.8	99	0.00	13.22
60	M	dibromomethane	0.378	0.406	-7.4	96	0.02	13.34
61	M	3-methyl-1-butanol	0.008	0.008	0.0	93	0.00	13.43
		----------	True	Calc.	% Drift	----------		
62	M	2-chloroethyl vinyl ether	500.000	365.288	26.9#	69	0.00	13.87
		----------	AvgRF	CCRF	% Dev	----------		
63	M	4-methyl-2-pentanone	0.084	0.087	-3.6	92	0.01	13.95
64	M	epichlorohydrin	0.000	0.018	0.0	0#	0.03	13.93
65	M	cis-1,3-dichloropropene	0.550	0.570	-3.6	97	0.02	14.38
66	M	toluene	0.542	0.562	-3.7	96	0.02	15.07
67	M	trans-1,3-dichloropropene	0.491	0.535	-9.0	96	0.00	15.44
68	M	ethyl methacrylate	0.367	0.388	-5.7	95	-0.02	15.43
69	M	1,1,2-trichloroethane	0.249	0.263	-5.6	94	-0.02	15.76
		----------	True	Calc.	% Drift	----------		
70	M	2-hexanone	100.000	105.023	-5.0	93	0.02	15.79
		----------	AvgRF	CCRF	% Dev	----------		
71	S	toluene-d8 (s)	0.952	0.950	0.2	98	0.00	14.90
72	I	chlorobenzene-d5	1.000	1.000	0.0	98	0.00	18.00
73	M	1,3-dichloropropane	0.652	0.668	-2.5	95	0.00	16.28
74	M	butyl acetate	0.197	0.197	0.0	90	0.00	16.30
75	M	tetrachloroethene	1.126	1.122	0.4	99	0.00	16.43
76	M	dibromochloromethane	1.005	1.089	-8.4	100	0.02	16.84
77	M	1,2-dibromoethane	0.622	0.655	-5.3	98	-0.01	17.24
78	M	chlorobenzene	1.121	1.147	-2.3	97	0.00	18.08
79	M	1,1,1,2-tetrachloroethane	0.803	0.832	-3.6	101	0.00	18.16

Continuing Calibration Summary

Job Number: N69732 **Sample:** VG3699-CC3698
Account: GODNJP Dewberry **Lab FileID:** G70522.D
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

80	M	ethylbenzene	1.782	1.764	1.0	96	0.00	18.18
81	M	m,p-xylene	0.603	0.618	-2.5	99	-0.01	18.33
82	M	o-xylene	0.587	0.617	-5.1	98	-0.01	19.19
83	M	styrene	0.947	0.979	-3.4	96	0.01	19.26
84	M	bromoform	0.699	0.787	-12.6	99	0.01	19.90
		----------	True	Calc.	% Drift	----------		
85	M	cyclohexanone	1000.000	968.016	3.2	92	0.00	19.98
		----------	AvgRF	CCRF	% Dev	----------		
86	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	22.57
87	S	4-bromofluorobenzene (s)	1.654	1.607	2.8	100	0.01	20.35
88	M	isopropylbenzene	2.755	2.693	2.3	99	0.02	19.88
89	M	1,1,2,2-tetrachloroethane	0.816	0.825	-1.1	97	0.00	20.20
90	M	1,2,3-trichloropropane	0.455	0.472	-3.7	106	0.00	20.48
		----------	True	Calc.	% Drift	----------		
91	M	trans-1,4-dichloro-2-bute	100.000	101.328	-1.3	98	0.01	20.60
		----------	AvgRF	CCRF	% Dev	----------		
92	M	n-propylbenzene	3.456	3.358	2.8	96	0.00	20.65
93	M	bromobenzene	1.038	1.069	-3.0	99	0.00	20.73
94	M	1,3,5-trimethylbenzene	2.725	2.572	5.6	96	0.00	20.93
95	M	2-chlorotoluene	2.525	2.346	7.1	96	0.01	20.98
96	M	4-chlorotoluene	2.908	2.753	5.3	97	0.02	21.07
97	M	1,2,4-trimethylbenzene	2.669	2.551	4.4	98	0.02	21.68
98	M	tert-butylbenzene	2.557	2.439	4.6	98	0.00	21.61
99	M	pentachloroethane	0.835	0.914	-9.5	102	0.01	21.73
100	M	sec-butylbenzene	3.273	3.228	1.4	99	0.00	22.00
101	M	p-isopropyltoluene	2.903	2.826	2.7	96	0.01	22.26
102	M	1,3-dichlorobenzene	1.624	1.659	-2.2	99	0.00	22.44
103	M	1,4-dichlorobenzene	1.649	1.678	-1.8	99	0.00	22.63
104	M	benzyl chloride	1.099	1.133	-3.1	93	0.00	22.84
105	M	n-butylbenzene	2.704	2.710	-0.2	99	0.00	23.01
106	M	1,2-dichlorobenzene	1.527	1.494	2.2	99	0.00	23.31
107	M	hexachloroethane	1.018	1.095	-7.6	101	0.00	23.99
108	M	1,2-dibromo-3-chloropropa	0.242	0.262	-8.3	94	-0.01	24.69
109	M	1,2,4-trichlorobenzene	1.155	1.191	-3.1	100	-0.01	26.08
110	M	hexachlorobutadiene	1.212	1.209	0.2	102	0.00	26.28
111	M	naphthalene	0.985	1.028	-4.4	96	-0.02	26.45
112	M	1,2,3-trichlorobenzene	0.964	0.980	-1.7	96	-0.02	26.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
G70487.D MG3698.M Tue Jun 15 15:01:54 2004 RTD1

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3699-CC3698
Lab FileID: G70543.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\G70543.D
Acq On : 16 Jun 2004 2:07 am
Sample : CC3698-50
Misc : MS429,VG3699,,,,,1
MS Integration Params: LSCINT.P

Vial: 15
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	104	-0.03	5.70
2	M	tertiary butyl alcohol	1.471	1.605	-9.1	99	-0.06	5.86
3	M	1,4-dioxane	0.099	0.113	-14.1	112	-0.03	13.22
4	I	pentafluorobenzene	1.000	1.000	0.0	108	-0.02	9.58
5	M	chlorodifluoromethane	0.495	0.372	24.8#	84	0.00	2.99
6	M	dichlorodifluoromethane	0.627	0.482	23.1#	86	0.03	3.02
7	M	chloromethane	0.156	0.133	14.7	90	0.00	3.32
8	M	vinyl chloride	0.190	0.172	9.5	98	0.00	3.49
9	M	bromomethane	0.262	0.259	1.1	105	-0.02	4.18
10	M	chloroethane	0.130	0.122	6.2	101	0.00	4.32
11	M	trichlorofluoromethane	0.919	0.752	18.2	89	0.00	4.72
12	M	ethyl ether	0.099	0.108	-9.1	114	-0.03	5.14
13	M	acrolein	0.016	0.006	62.5#	44#	-0.03	5.36
14	M	freon 113	0.642	0.470	26.8#	82	0.00	5.47
15	M	acetone	0.084	0.044	47.6#	56	0.02	5.48
16	M	1,1-dichloroethene	0.276	0.240	13.0	92	0.00	5.71
17	M	iodomethane	0.838	0.859	-2.5	107	-0.02	6.25
18	M	methyl acetate	0.106	0.112	-5.7	111	-0.02	6.28
19	M	allyl chloride	0.310	0.284	8.4	99	0.00	6.35
20	M	methylene chloride	0.232	0.255	-9.9	111	0.00	6.55
21	M	carbon disulfide	0.552	0.476	13.8	96	0.00	6.63
		----------	True	Calc.	% Drift	----------		
22	M	acrylonitrile	250.000	260.927	-4.4	116	-0.04	6.77
		----------	AvgRF	CCRF	% Dev	----------		
23	M	methyl tert butyl ether	0.582	0.677	-16.3	120	-0.03	6.86
24	M	trans-1,2-dichloroethene	0.289	0.269	6.9	99	0.00	7.13
25	M	hexane	0.280	0.192	31.4#	76	-0.01	7.25
26	M	di-isopropyl ether	0.883	0.815	7.7	98	0.00	7.73
27	M	1,1-dichloroethane	0.562	0.546	2.8	101	0.01	7.94
		----------	True	Calc.	% Drift	----------		
28	M	vinyl acetate	50.000	39.471	21.1#	82	-0.03	7.92
		----------	AvgRF	CCRF	% Dev	----------		
29	M	chloroprene	0.446	0.354	20.6#	85	-0.03	8.11
30	M	ethyl tert-butyl ether	0.973	0.961	1.2	103	-0.01	8.53
31	M	2-butanone	0.085	0.010	88.2#	13#	-0.05	8.71
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3699-CC3698
Lab FileID: G70543.D

32	M	propionitrile	500.000	507.644	-1.5	112	-0.02	8.86
			AvgRF	CCRF	% Dev			
33	M	2,2-dichloropropane	0.470	0.404	14.0	90	-0.01	9.02
34	M	ethyl acetate	0.167	0.150	10.2	103	-0.01	9.09
35	M	cis-1,2-dichloroethene	0.302	0.308	-2.0	108	-0.02	9.11
36	M	methacrylonitrile	0.136	0.133	2.2	112	-0.02	9.27
37	M	iso-butyl alcohol	0.000	0.015	0.0	0#	-0.01	9.09
38	M	chloroform	0.784	0.793	-1.1	106	-0.03	9.41
39	M	bromochloromethane	0.208	0.229	-10.1	113	-0.03	9.73
40	M	tetrahydrofuran	0.000	0.036	0.0	0#	0.00	9.84
41	M	1,1,1-trichloroethane	0.736	0.684	7.1	95	-0.01	10.22
42	S	dibromofluoromethane (s)	0.672	0.571	15.0	92	-0.02	9.86
43	S	1,2-dichloroethane-d4 (s)	0.473	0.382	19.2	87	-0.02	10.85
44	I	1,4-difluorobenzene	1.000	1.000	0.0	106	-0.02	11.64
45	M	n-butyl alcohol	0.020	0.017	15.0	92	-0.02	10.26
46	M	cyclohexane	0.335	0.309	7.8	91	0.02	10.31
47	M	1,1-dichloropropene	0.581	0.513	11.7	91	-0.02	10.54
48	M	isopropyl acetate	1.460	1.282	12.2	93	-0.11	10.74
49	M	carbon tetrachloride	0.905	0.807	10.8	91	-0.01	10.74
50	M	tert-amyl methyl ether	0.861	0.800	7.1	106	-0.05	10.78
51	M	heptane	0.241	0.178	26.1#	76	0.00	10.88
52	M	1,2-dichloroethane	0.624	0.646	-3.5	106	-0.01	11.04
53	M	benzene	0.739	0.736	0.4	103	-0.02	11.08
54	M	trichloroethene	0.504	0.476	5.6	98	-0.05	12.33
55	M	1,2-dichloropropane	0.310	0.309	0.3	101	-0.01	12.70
56	M	methylcyclohexane	0.445	0.352	20.9#	84	-0.04	12.48
57	M	propyl acetate	0.338	0.320	5.3	102	-0.03	12.78
58	M	methyl methacrylate	0.155	0.171	-10.3	116	-0.05	12.81
59	M	bromodichloromethane	0.821	0.879	-7.1	105	-0.04	13.19
60	M	dibromomethane	0.378	0.415	-9.8	111	-0.04	13.28
61	M	3-methyl-1-butanol	0.008	0.007	12.5	95	-0.03	13.39
			True	Calc.	% Drift			
62	M	2-chloroethyl vinyl ether	250.000	284.229	-13.7	124	-0.02	13.84
			AvgRF	CCRF	% Dev			
63	M	4-methyl-2-pentanone	0.084	0.086	-2.4	111	-0.03	13.91
64	M	epichlorohydrin	0.000	0.020	0.0	0#	0.09	13.99
65	M	cis-1,3-dichloropropene	0.550	0.558	-1.5	103	-0.01	14.35
66	M	toluene	0.542	0.544	-0.4	103	-0.01	15.04
67	M	trans-1,3-dichloropropene	0.491	0.528	-7.5	106	-0.02	15.42
68	M	ethyl methacrylate	0.367	0.395	-7.6	111	-0.04	15.41
69	M	1,1,2-trichloroethane	0.249	0.276	-10.8	112	-0.05	15.74
			True	Calc.	% Drift			
70	M	2-hexanone	50.000	40.036	19.9	84	0.00	15.77
			AvgRF	CCRF	% Dev			
71	S	toluene-d8 (s)	0.952	0.847	11.0	95	-0.01	14.88
72	I	chlorobenzene-d5	1.000	1.000	0.0	109	-0.02	17.97
73	M	1,3-dichloropropane	0.652	0.704	-8.0	111	-0.02	16.26
74	M	butyl acetate	0.197	0.185	6.1	100	-0.01	16.28
75	M	tetrachloroethene	1.126	1.030	8.5	95	-0.03	16.40
76	M	dibromochloromethane	1.005	1.113	-10.7	111	-0.02	16.80
77	M	1,2-dibromoethane	0.622	0.672	-8.0	109	-0.04	17.21
78	M	chlorobenzene	1.121	1.147	-2.3	105	-0.02	18.05
79	M	1,1,1,2-tetrachloroethane	0.803	0.839	-4.5	107	-0.03	18.13

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: VG3699-CC3698
Lab FileID: G70543.D

80	M	ethylbenzene	1.782	1.715	3.8	102	-0.02	18.16
81	M	m,p-xylene	0.603	0.590	2.2	101	-0.03	18.31
82	M	o-xylene	0.587	0.618	-5.3	106	-0.04	19.16
83	M	styrene	0.947	0.999	-5.5	109	-0.02	19.22
84	M	bromoform	0.699	0.793	-13.4	112	-0.02	19.88
		----------	True	Calc.	% Drift	----------		
85	M	cyclohexanone	500.000	185.445	62.9#	36	-0.04	19.94
		----------	AvgRF	CCRF	% Dev	----------		
86	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	22.56
87	S	4-bromofluorobenzene (s)	1.654	1.394	15.7	89	0.00	20.33
88	M	isopropylbenzene	2.755	2.658	3.5	100	0.00	19.85
89	M	1,1,2,2-tetrachloroethane	0.816	0.911	-11.6	114	-0.02	20.17
90	M	1,2,3-trichloropropane	0.455	0.524	-15.2	114	-0.02	20.45
		----------	True	Calc.	% Drift	----------		
91	M	trans-1,4-dichloro-2-bute	50.000	44.518	11.0	94	-0.02	20.57
		----------	AvgRF	CCRF	% Dev	----------		
92	M	n-propylbenzene	3.456	3.215	7.0	93	-0.02	20.63
93	M	bromobenzene	1.038	1.115	-7.4	105	-0.02	20.70
94	M	1,3,5-trimethylbenzene	2.725	2.505	8.1	96	-0.02	20.91
95	M	2-chlorotoluene	2.525	2.565	-1.6	103	0.00	20.96
96	M	4-chlorotoluene	2.908	2.656	8.7	96	0.00	21.04
97	M	1,2,4-trimethylbenzene	2.669	2.507	6.1	97	0.00	21.65
98	M	tert-butylbenzene	2.557	2.358	7.8	94	-0.02	21.59
99	M	pentachloroethane	0.835	0.951	-13.9	108	0.00	21.71
100	M	sec-butylbenzene	3.273	3.088	5.7	97	-0.02	21.98
101	M	p-isopropyltoluene	2.903	2.655	8.5	94	-0.02	22.23
102	M	1,3-dichlorobenzene	1.624	1.639	-0.9	99	-0.02	22.42
103	M	1,4-dichlorobenzene	1.649	1.583	4.0	95	-0.02	22.61
104	M	benzyl chloride	1.099	0.807	26.6#	74	-0.02	22.82
105	M	n-butylbenzene	2.704	2.311	14.5	84	-0.02	22.99
106	M	1,2-dichlorobenzene	1.527	1.573	-3.0	104	-0.03	23.29
107	M	hexachloroethane	1.018	1.052	-3.3	100	-0.02	23.96
108	M	1,2-dibromo-3-chloropropa	0.242	0.251	-3.7	100	-0.02	24.69
109	M	1,2,4-trichlorobenzene	1.155	1.015	12.1	84	-0.02	26.07
110	M	hexachlorobutadiene	1.212	1.072	11.6	86	0.00	26.28
111	M	naphthalene	0.985	0.925	6.1	94	-0.03	26.44
112	M	1,2,3-trichlorobenzene	0.964	0.927	3.8	91	-0.02	26.79

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

G70486.D MG3698.M Wed Jun 16 08:24:58 2004 RTD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\g70537.D
Acq On : 15 Jun 2004 10:34 pm
Sample : N69732-1,VBTX
Misc : MS461,VG3699,4.6,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 16 11:41 19104

Vial: 9
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Quant Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration
DataAcq Meth : MG3698

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	5.77	65	47021	500.00	PPb	0.03
4) pentafluorobenzene	9.59	168	332379	50.00	PPb	-0.01
44) 1,4-difluorobenzene	11.65	114	279952	50.00	PPb	0.00
72) chlorobenzene-d5	17.99	117	198965	50.00	PPb	0.00
86) 1,4-dichlorobenzene-d4	22.56	152	122735	50.00	PPb	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	9.85	113	103058	23.06	PPb	-0.03
Spiked Amount 50.000			Recovery =	46.12%		
43) 1,2-dichloroethane-d4 (s)	10.86	65	126339	40.17	PPb	0.00
Spiked Amount 50.000			Recovery =	80.34%		
71) toluene-d8 (s)	14.89	98	236656	44.39	PPb	0.00
Spiked Amount 50.000			Recovery =	88.78%		
87) 4-bromofluorobenzene (s)	20.34	95	191830	47.25	PPb	0.00
Spiked Amount 50.000			Recovery =	94.50%		
Target Compounds						Qvalue
66) toluene	15.06	92	39315	12.96	PPb	99
80) ethylbenzene	18.16	91	101910	14.37	PPb	99
81) m,p-xylene	18.32	106	227971	94.93	PPb	91
82) o-xylene	19.17	106	160145	68.56	PPb	97

gc

(#) = qualifier out of range (m) = manual integration

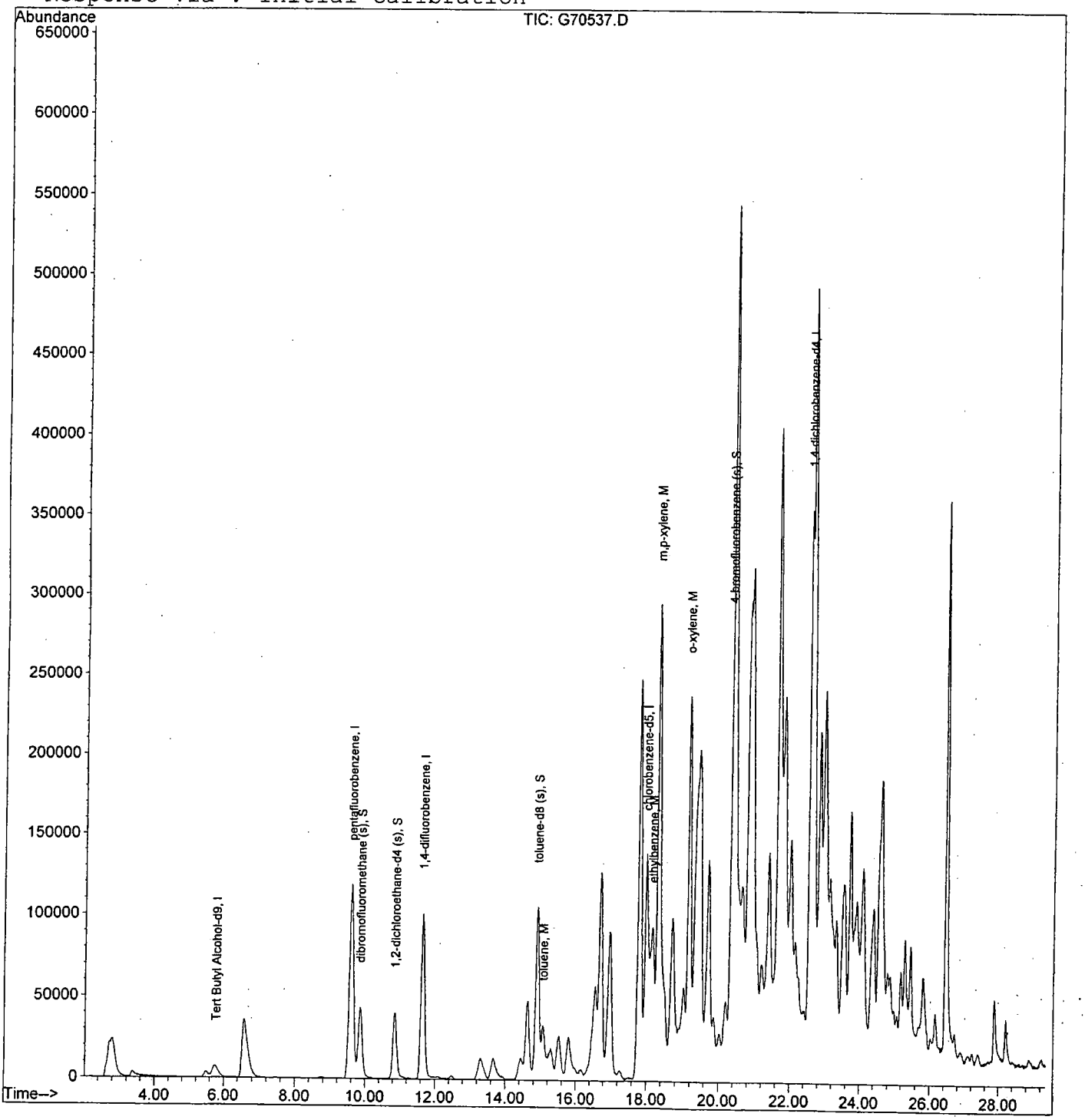
Quantitation Report

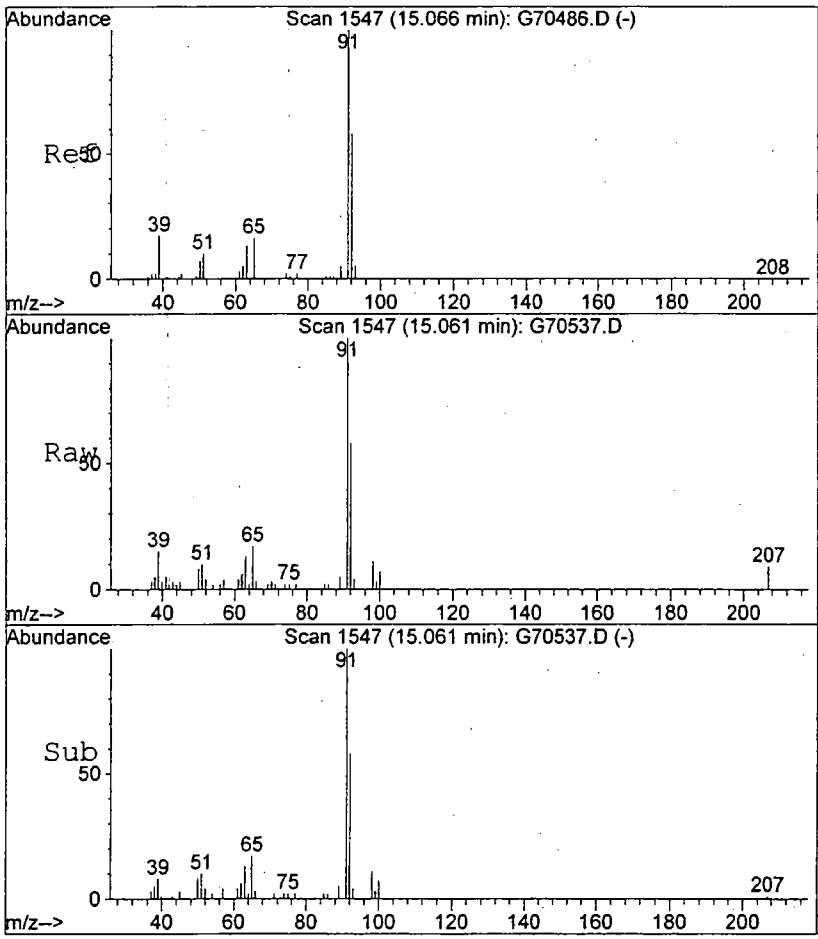
Data File : C:\HPCHEM\1\DATA\g70537.D
Acq On : 15 Jun 2004 10:34 pm
Sample : N69732-1,VBTX
Misc : MS461,VG3699,4.6,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 16 11:41 19104

Vial: 9
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration

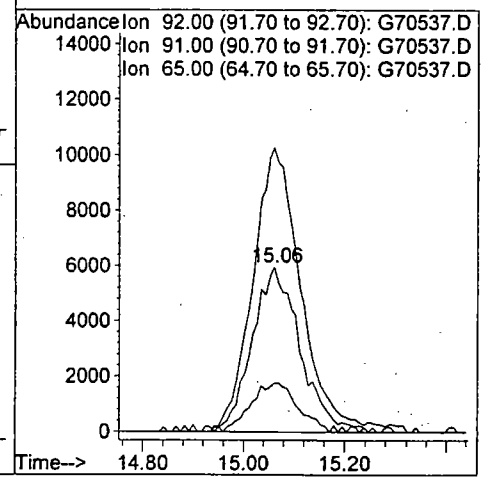


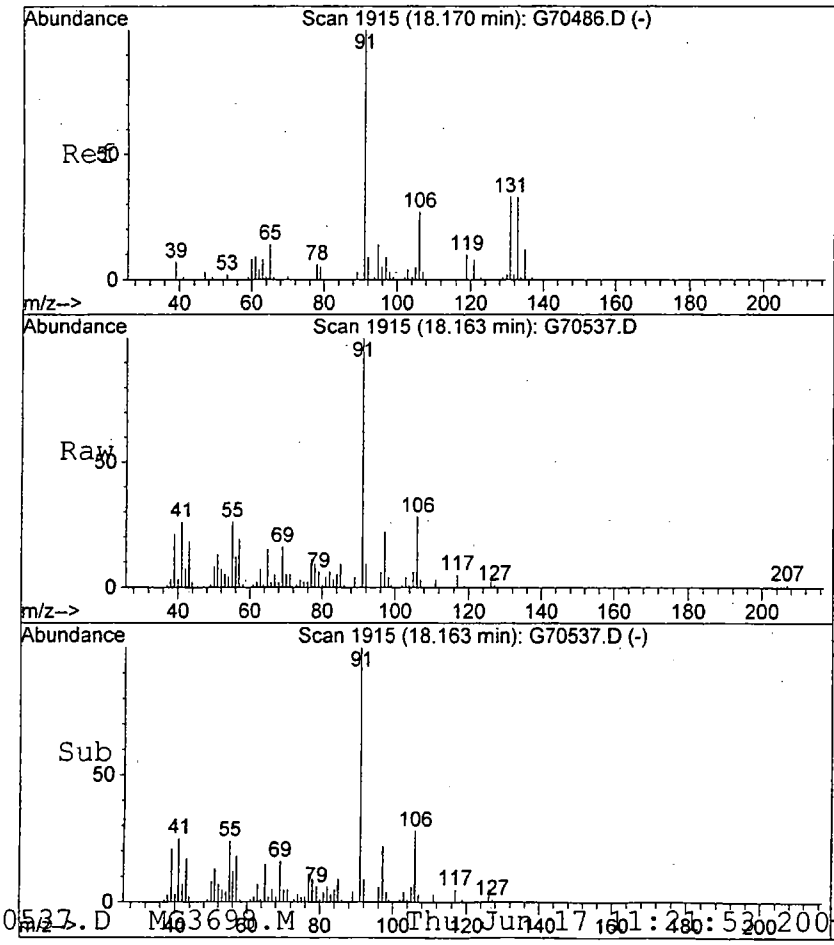


#66
toluene
Concen: 12.96 PPb
RT: 15.06 min Scan# 1547
Delta R.T. 0.00 min
Lab File: g70537.D
Acq: 15 Jun 2004 10:34 pm

Tgt Ion: 92 Resp: 39315

Ion	Ratio	Lower	Upper
92	100		
91	169.8	140.9	200.9
65	27.5	0.0	58.4

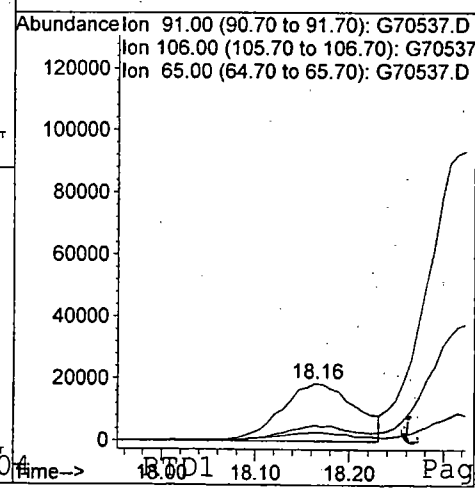


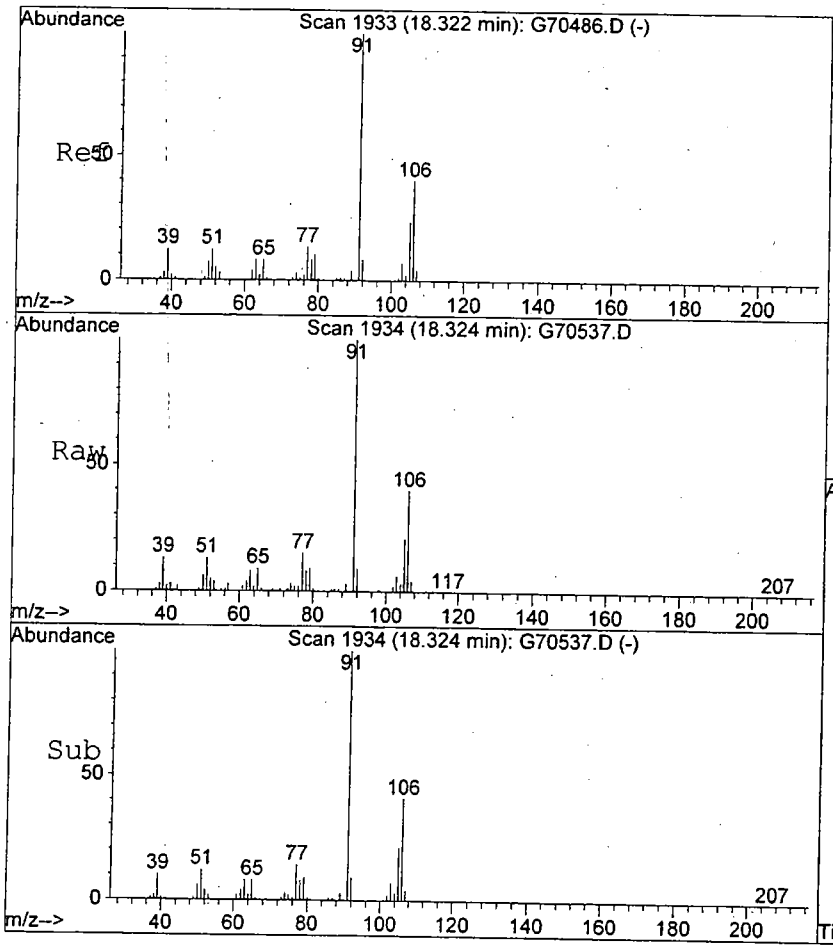


#80
ethylbenzene
Concen: 14.37 PPb
RT: 18.16 min Scan# 1915
Delta R.T. -0.02 min
Lab File: g70537.D
Acq: 15 Jun 2004 10:34 pm

Tgt Ion: 91 Resp: 101910

Ion	Ratio	Lower	Upper
91	100		
106	26.1	0.0	56.6
65	14.3	0.0	44.7

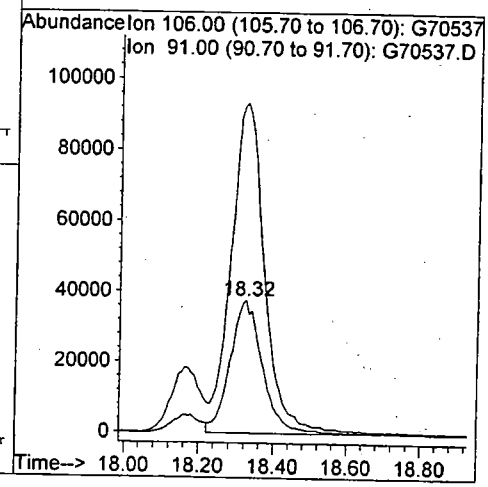


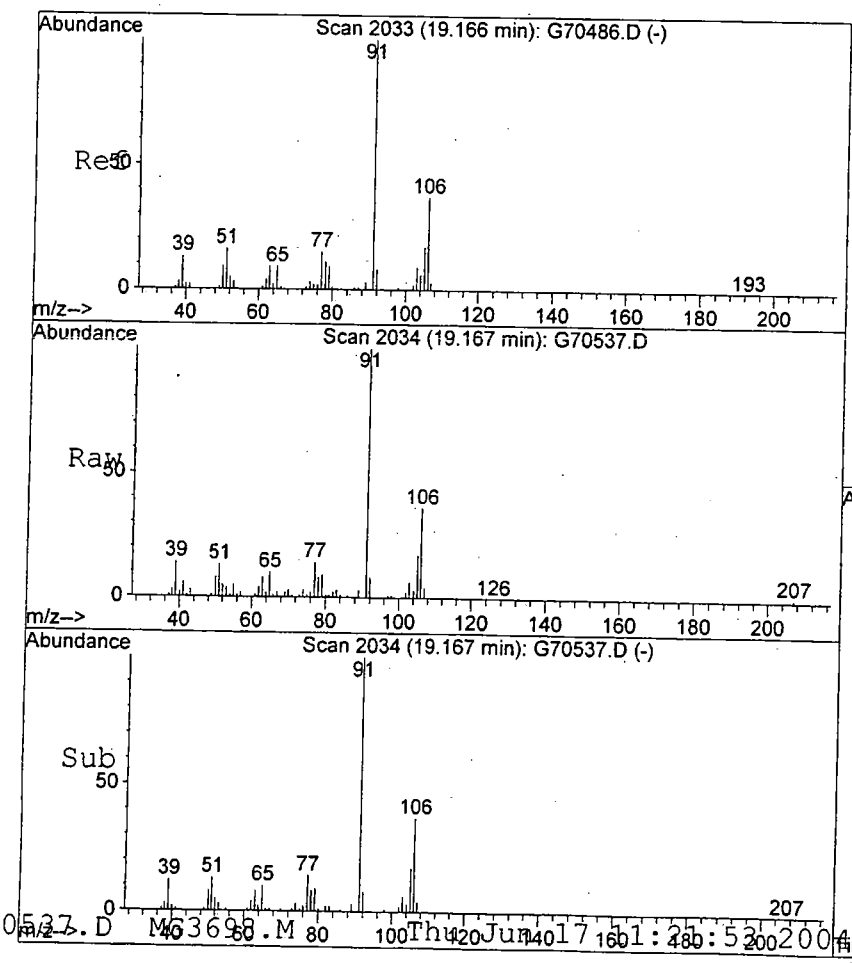


#81
m,p-xylene
Concen: 94.93 PPb
RT: 18.32 min Scan# 1934
Delta R.T. -0.02 min
Lab File: g70537.D
Acq: 15 Jun 2004 10:34 pm

Tgt Ion:106 Resp: 227971

Ion	Ratio	Lower	Upper
106	100		
91	244.5	182.4	338.8

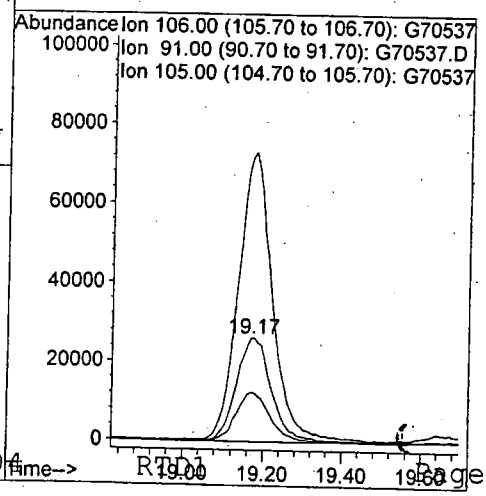




#82
o-xylene
Concen: 68.56 PPb
RT: 19.17 min Scan# 2034
Delta R.T. -0.03 min
Lab File: g70537.D
Acq: 15 Jun 2004 10:34 pm

Tgt Ion:106 Resp: 160145

Ion	Ratio	Lower	Upper
106	100		
91	272.6	187.5	348.1
105	47.4	31.6	58.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\G70556.D
Acq On : 16 Jun 2004 10:01 am
Sample : N69732-1CF,VBTX
Misc : MS461,VG3699,5.1,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 16 11:38 19104

Vial: 27
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Quant Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration
DataAcq Meth : MG3698

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	5.74	65	32161	500.00 PPb	0.00
4) pentafluorobenzene	9.58	168	291848	50.00 PPb	-0.02
44) 1,4-difluorobenzene	11.63	114	251303	50.00 PPb	-0.02
72) chlorobenzene-d5	17.97	117	140567	50.00 PPb	-0.02
86) 1,4-dichlorobenzene-d4	22.56	152	45405	50.00 PPb	0.00
System Monitoring Compounds					
42) dibromofluoromethane (s)	9.85	113	77152	19.66 PPb	-0.02
Spiked Amount 50.000			Recovery =	39.32%	
43) 1,2-dichloroethane-d4 (s)	10.83	65	112019	40.56 PPb	-0.03
Spiked Amount 50.000			Recovery =	81.12%	
71) toluene-d8 (s)	14.87	98	189188	39.53 PPb	-0.03
Spiked Amount 50.000			Recovery =	79.06%	
87) 4-bromofluorobenzene (s)	20.33	95	98087	65.31 PPb	-0.01
Spiked Amount 50.000			Recovery =	130.62%	
Target Compounds					Qvalue
66) toluene	15.03	92	65956	24.22 PPb	90
80) ethylbenzene	18.14	91	313925	62.67 PPb	98
81) m,p-xylene	18.30	106	727786	428.98 PPb	96
82) o-xylene	19.15	106	531858	322.28 PPb	99

(#) = qualifier out of range (m) = manual integration

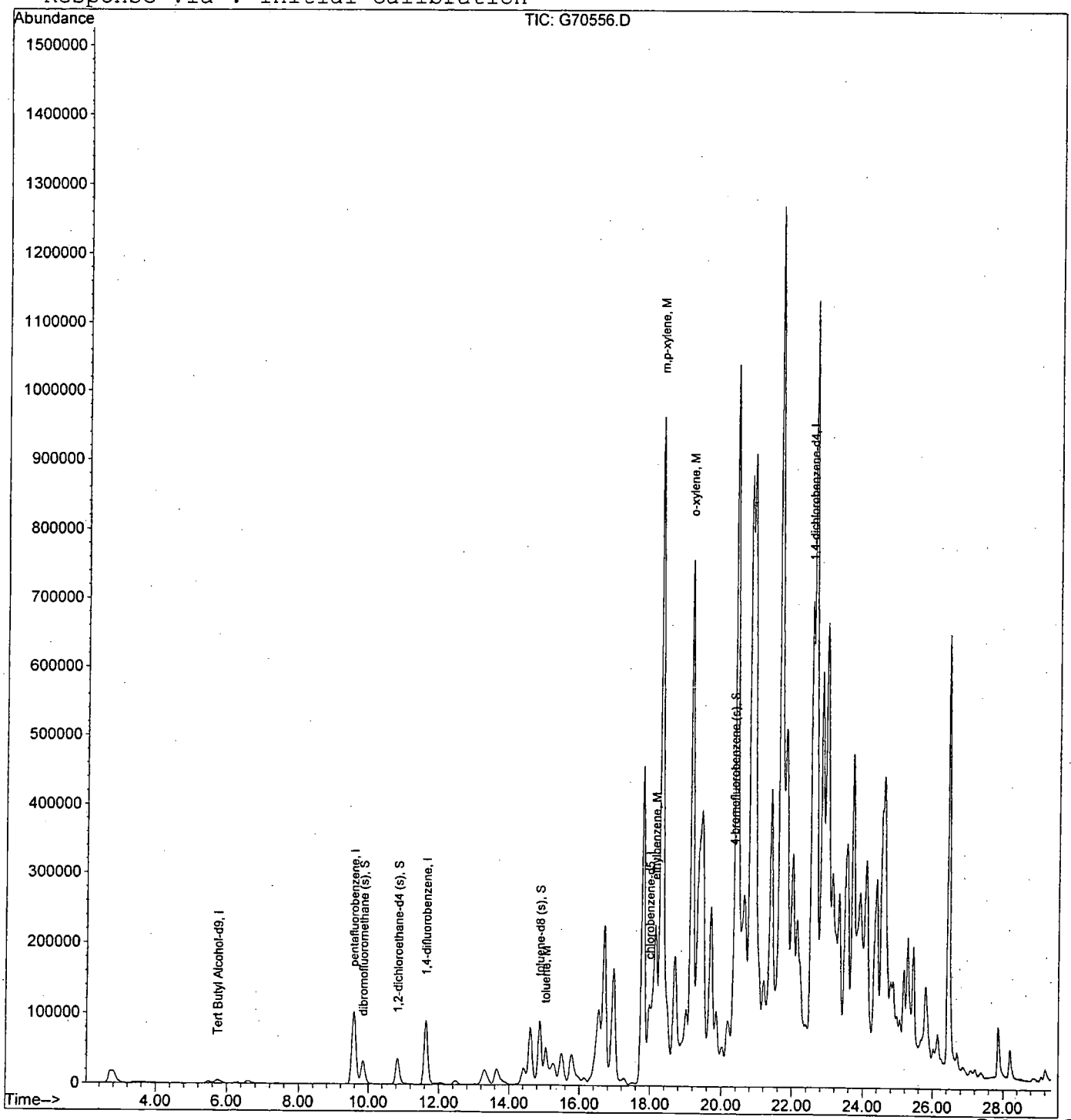
Quantitation Report

Data File : C:\HPCHEM\1\DATA\G70556.D
Acq On : 16 Jun 2004 10:01 am
Sample : N69732-1CF,VBTX
Misc : MS461,VG3699,5.1,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 16 11:38 19104

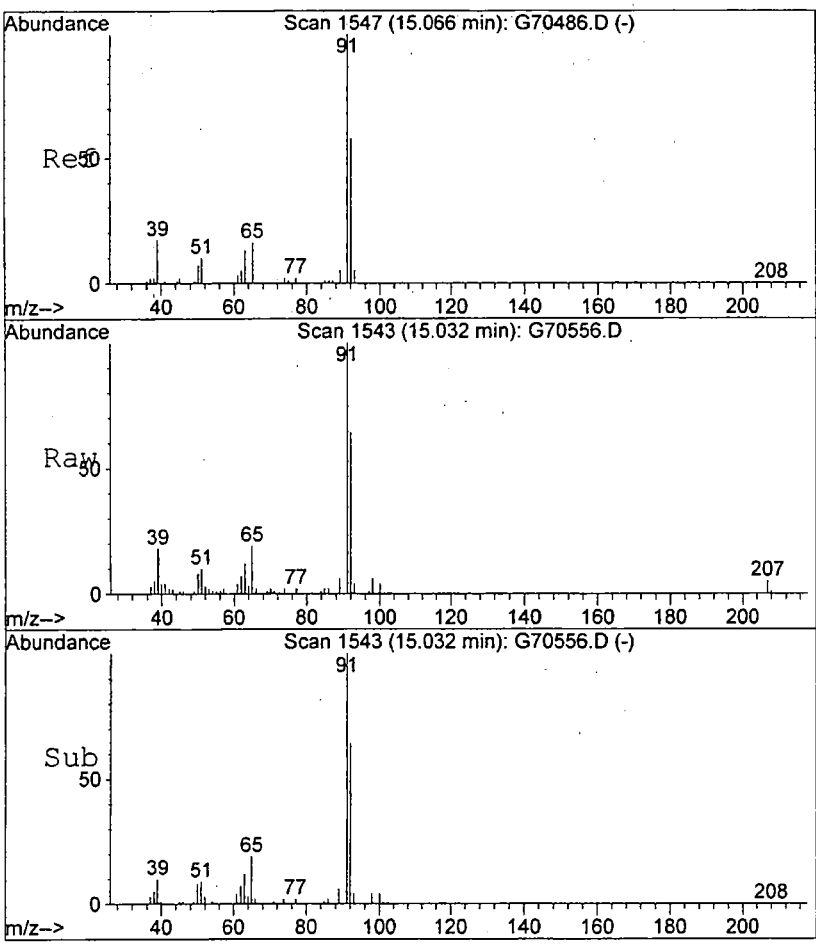
Vial: 27
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration



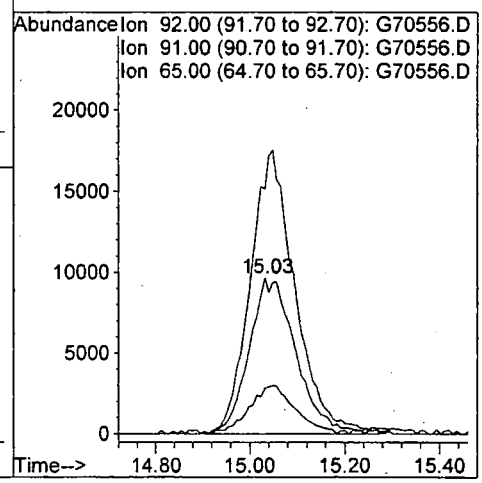
OC 36

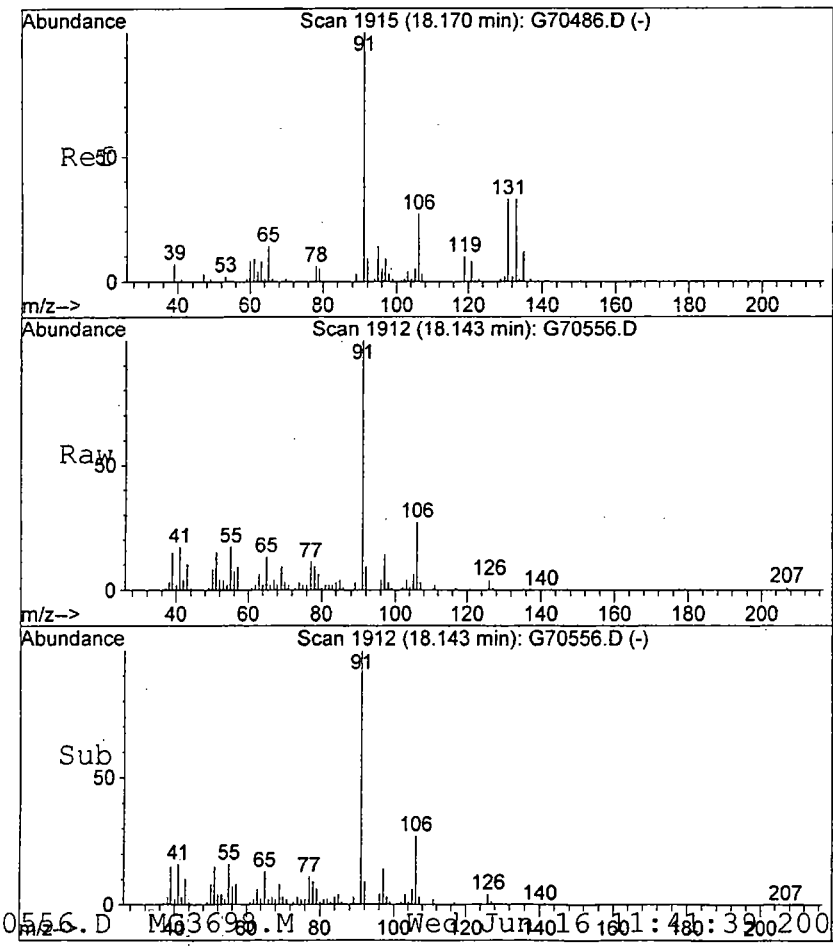


#66
toluene
Concen: 24.22 PPb
RT: 15.03 min Scan# 1543
Delta R.T. -0.03 min
Lab File: G70556.D
Acq: 16 Jun 2004 10:01 am

Tgt Ion: 92 Resp: 65956

Ion	Ratio	Lower	Upper
92	100		
91	155.3	140.9	200.9
65	27.6	0.0	58.4

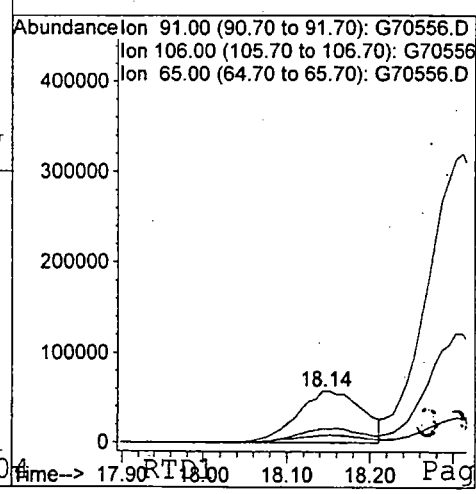


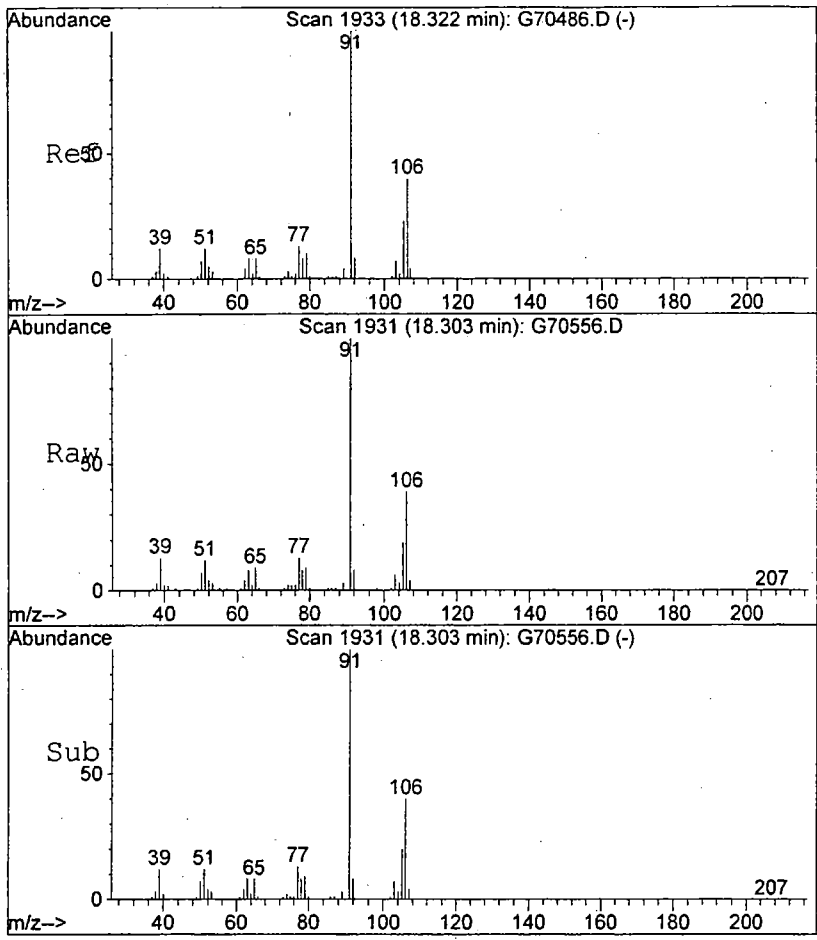


#80
ethylbenzene
Concen: 62.67 PPb
RT: 18.14 min Scan# 1912
Delta R.T. -0.04 min
Lab File: G70556.D
Acq: 16 Jun 2004 10:01 am

Tgt Ion: 91 Resp: 313925

Ion	Ratio	Lower	Upper
91	100		
106	25.8	0.0	56.6
65	13.4	0.0	44.7

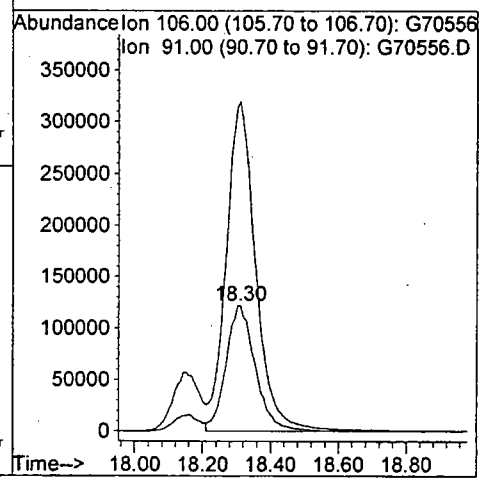


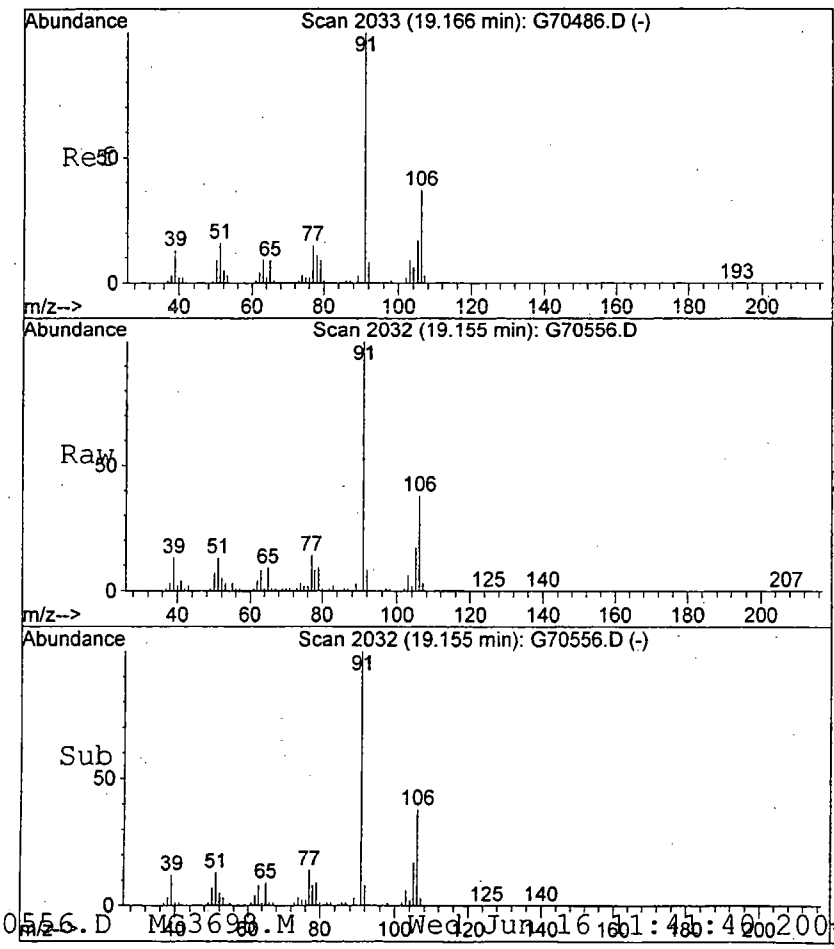


#81
m,p-xylene
Concen: 428.98 PPb
RT: 18.30 min Scan# 1931
Delta R.T. -0.04 min
Lab File: G70556.D
Acq: 16 Jun 2004 10:01 am

Tgt Ion:106 Resp: 727786

Ion	Ratio	Lower	Upper
106	100		
91	254.2	182.4	338.8

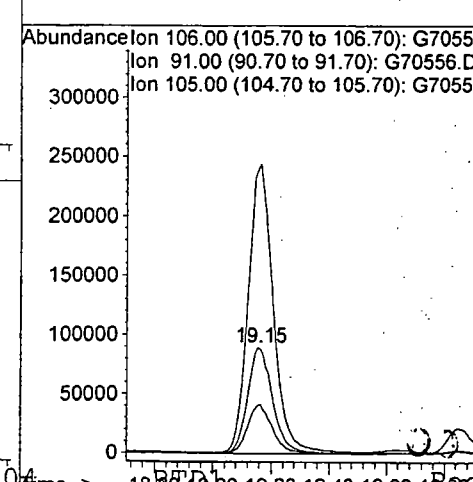




#82
o-xylene
Concen: 322.28 PPb
RT: 19.15 min Scan# 2032
Delta R.T. -0.04 min
Lab File: G70556.D
Acq: 16 Jun 2004 10:01 am

Tgt Ion:106 Resp: 531858

Ion	Ratio	Lower	Upper
106	100		
91	265.1	187.5	348.1
105	45.2	31.6	58.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\G70524.D
Acq On : 15 Jun 2004 2:30 pm
Sample : MB1
Misc : MS155,VG3699,,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 15 15:45 19104

Vial: 2
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Quant Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 09:33:29 2004
Response via : Initial Calibration
DataAcq Meth : MG3698

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	5.75	65	52223	500.00	PPb	0.02
4) pentafluorobenzene	9.60	168	312072	50.00	PPb	0.00
44) 1,4-difluorobenzene	11.66	114	259256	50.00	PPb	0.00
72) chlorobenzene-d5	17.99	117	180250	50.00	PPb	0.00
86) 1,4-dichlorobenzene-d4	22.58	152	105092	50.00	PPb	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	9.88	113	178601	42.57	PPb	0.00
Spiked Amount 50.000			Recovery =	85.14%		
43) 1,2-dichloroethane-d4 (s)	10.87	65	117623	39.83	PPb	0.00
Spiked Amount 50.000			Recovery =	79.66%		
71) toluene-d8 (s)	14.91	98	217922	44.14	PPb	0.01
Spiked Amount 50.000			Recovery =	88.28%		
87) 4-bromofluorobenzene (s)	20.36	95	151894	43.69	PPb	0.02
Spiked Amount 50.000			Recovery =	87.38%		

Target Compounds Qvalue

SS
6/15/04

(#) = qualifier out of range (m) = manual integration

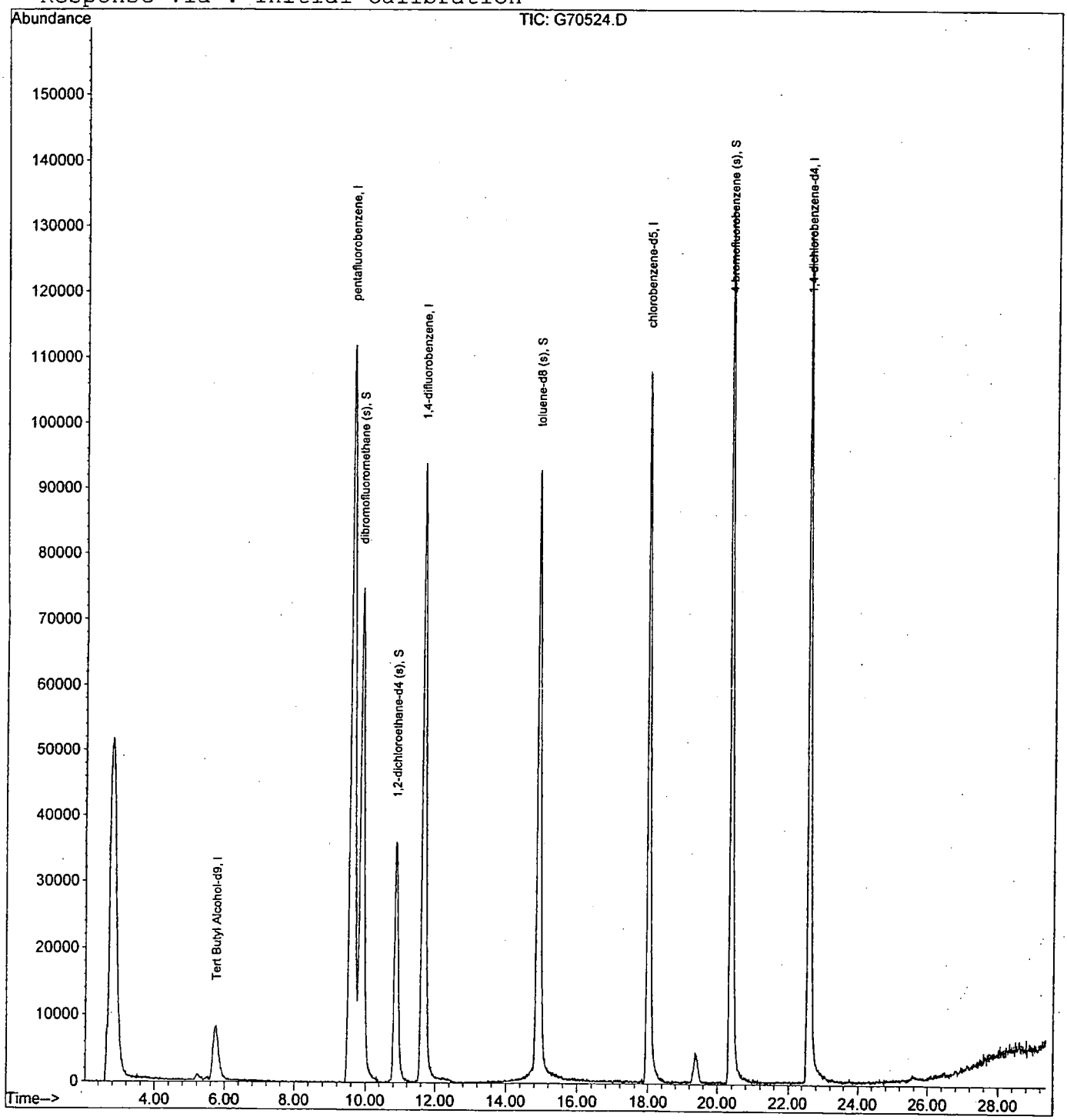
Quantitation Report

Data File : C:\HPCHEM\1\DATA\G70524.D
Acq On : 15 Jun 2004 2:30 pm
Sample : MB1
Misc : MS155,VG3699,,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 15 15:45 19104

Vial: 2
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\G70545.D
Acq On : 16 Jun 2004 3:17 am
Sample : MB2
Misc : MS429,VG3699,,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 16 8:24 19104

Vial: 17
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Quant Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration
DataAcq Meth : MG3698

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	5.73	65	39240	500.00	PPb	0.00
4) pentafluorobenzene	9.58	168	334188	50.00	PPb	-0.02
44) 1,4-difluorobenzene	11.64	114	273862	50.00	PPb	-0.02
72) chlorobenzene-d5	17.98	117	186767	50.00	PPb	-0.01
86) 1,4-dichlorobenzene-d4	22.55	152	107464	50.00	PPb	-0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	9.84	113	179074	39.86	PPb	-0.04
Spiked Amount 50.000			Recovery =	79.72%		
43) 1,2-dichloroethane-d4 (s)	10.83	65	110575	34.97	PPb	-0.04
Spiked Amount 50.000			Recovery =	69.94%		
71) toluene-d8 (s)	14.88	98	234709	45.00	PPb	-0.01
Spiked Amount 50.000			Recovery =	90.00%		
87) 4-bromofluorobenzene (s)	20.33	95	158364	44.55	PPb	0.00
Spiked Amount 50.000			Recovery =	89.10%		

Target Compounds Qvalue

GL
6/16/04

(#) = qualifier out of range (m) = manual integration

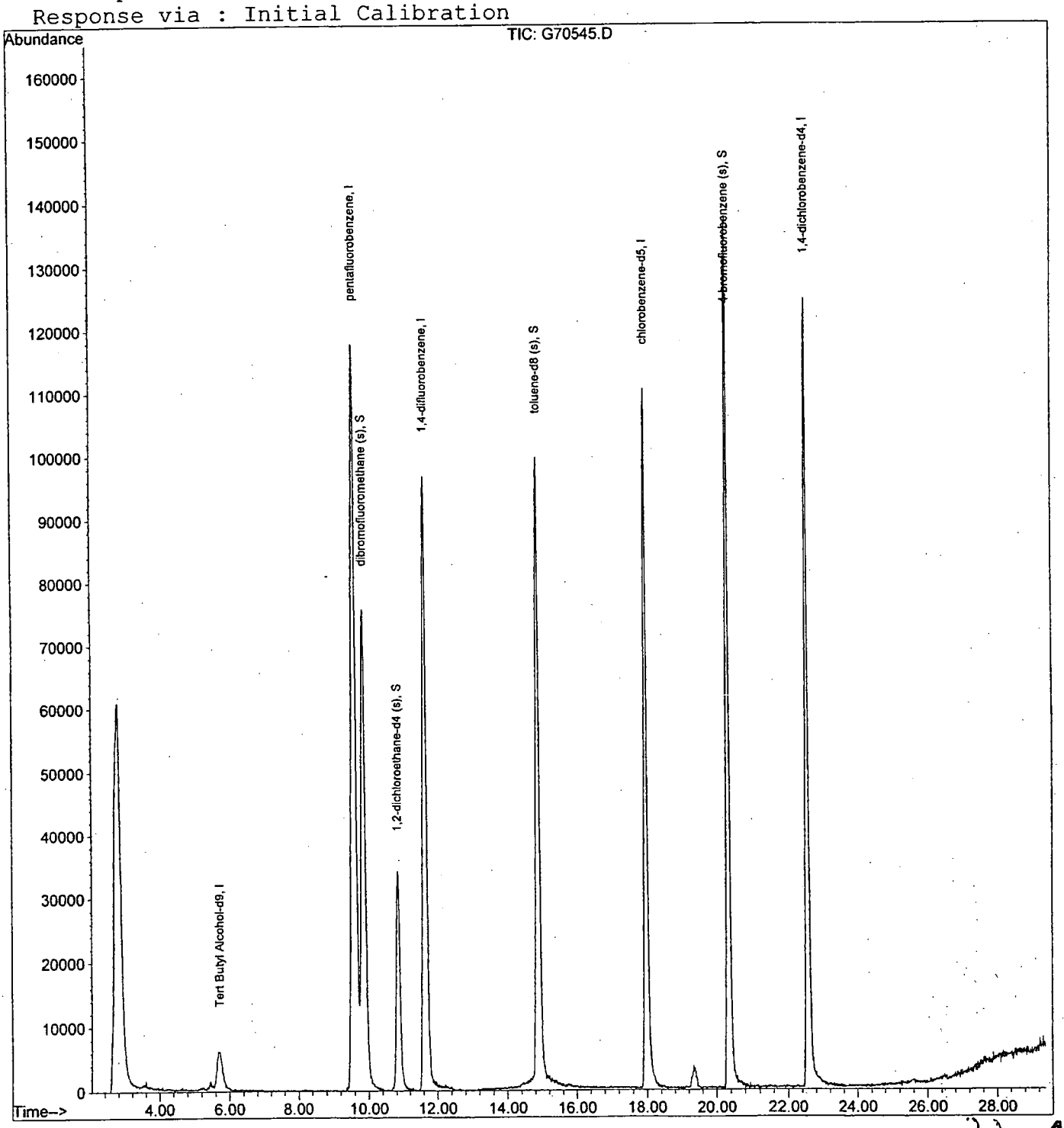
Quantitation Report

Data File : C:\HPCHEM\1\DATA\G70545.D
Acq On : 16 Jun 2004 3:17 am
Sample : MB2
Misc : MS429,VG3699,,,,,1
MS Integration Params: LSCINT.P
Quant Time: Jun 16 8:24 19104

Vial: 17
Operator: SCOTTM
Inst : GC/MS G
Multiplr: 1.00

Quant Results File: MG3698.RES

Method : C:\HPCHEM\1\METHODS\MG3698.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Jun 15 15:00:00 2004
Response via : Initial Calibration



GC
SW846 8082
PCB

ACCUTEST

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction P8082PCB

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
3. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
4. Surrogate Recoveries Meet Criteria (if applicable)		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
5. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
6. Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Retention Time Summary for comment.		
7. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
8. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

9. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: Benedetta M. Popow Date: 6/22/2004

Form: RG05
Rev. Date: 2/15/00

Method Blank Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17188-MB1	EF52194.D	1	06/16/04	OYA	06/15/04	OP17188	GEF2535

The QC reported here applies to the following samples: **Method:** SW846 8082

N69732-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	14	ug/kg	
11104-28-2	Aroclor 1221	ND	33	8.8	ug/kg	
11141-16-5	Aroclor 1232	ND	33	12	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	2.8	ug/kg	
11097-69-1	Aroclor 1254	ND	33	5.9	ug/kg	
11096-82-5	Aroclor 1260	ND	33	13	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	88%	32-134%
877-09-8	Tetrachloro-m-xylene	90%	32-134%
2051-24-3	Decachlorobiphenyl	84%	22-154%
2051-24-3	Decachlorobiphenyl	86%	22-154%

Blank Spike Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17188-BS1	EF52195.D	1	06/16/04	OYA	06/15/04	OP17188	GEF2535

The QC reported here applies to the following samples: **Method:** SW846 8082

N69732-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	132	130	98	78-133
11104-28-2	Aroclor 1221		ND		70-130
11141-16-5	Aroclor 1232		ND		70-130
53469-21-9	Aroclor 1242		ND		70-130
12672-29-6	Aroclor 1248		ND		70-130
11097-69-1	Aroclor 1254		ND		70-130
11096-82-5	Aroclor 1260	132	146	110	74-135

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	93%	32-134%
877-09-8	Tetrachloro-m-xylene	90%	32-134%
2051-24-3	Decachlorobiphenyl	90%	22-154%
2051-24-3	Decachlorobiphenyl	91%	22-154%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17188-MS	EF52198.D	1	06/16/04	OYA	06/15/04	OP17188	GEF2535
OP17188-MSD	EF52199.D	1	06/16/04	OYA	06/15/04	OP17188	GEF2535
N69692-2	EF52200.D	1	06/16/04	OYA	06/15/04	OP17188	GEF2535

The QC reported here applies to the following samples: **Method:** SW846 8082

N69732-1

CAS No.	Compound	N69692-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		148	134	90	139	94	4	49-150/33
11104-28-2	Aroclor 1221	ND			ND		ND		nc	70-130/10
11141-16-5	Aroclor 1232	ND			ND		ND		nc	70-130/10
53469-21-9	Aroclor 1242	ND			ND		ND		nc	70-130/11
12672-29-6	Aroclor 1248	ND			ND		ND		nc	70-130/12
11097-69-1	Aroclor 1254	ND			ND		ND		nc	70-130/19
11096-82-5	Aroclor 1260	ND		148	161	109	153	103	5	37-149/37

CAS No.	Surrogate Recoveries	MS	MSD	N69692-2	Limits
877-09-8	Tetrachloro-m-xylene	86%	88%	86%	32-134%
877-09-8	Tetrachloro-m-xylene	78%	84%	83%	32-134%
2051-24-3	Decachlorobiphenyl	100%	79%	79%	22-154%
2051-24-3	Decachlorobiphenyl	74%	77%	78%	22-154%

Semivolatile Surrogate Recovery Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Method: SW846 8082 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
N69732-1	EF52229.D	54.0	40.0	99.0	124.0
N69732-1	EF52197.D	80.0	48.0	62.0	75.0
OP17188-BS1	EF52195.D	93.0	90.0	90.0	91.0
OP17188-MB1	EF52194.D	88.0	90.0	84.0	86.0
OP17188-MS	EF52198.D	86.0	78.0	100.0	74.0
OP17188-MSD	EF52199.D	88.0	84.0	79.0	77.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	32-134%
S2 = Decachlorobiphenyl	22-154%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Initial Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2533-ICC2533
Lab FileID: EF52146.D

Response Factor Report GCEF

Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 11:00:21 2004

Calibration Files

3000	=ef52148.D	2000	=ef52147.D	1000	=ef52146.D
500	=ef52145.D	250	=ef52144.D	50	=ef52143.D

		Compound	3000	2000	1000	500	250	50	Avg		%RSD
1)	S	Tetrachloro-m-xylen	4.607	4.785	4.964	4.806	4.335	4.167	4.610	E4	6.63
2)		AR1221-A			4.322				4.322	E2	0.00
3)		AR1221-B			4.636				4.636	E2	0.00
4)		AR1221-C			1.750				1.750	E3	0.00
5)		AR1221-D			1.519				1.519	E2	0.00
6)		AR1221-E			1.742				1.742	E2	0.00
7)		AR1232-A			1.239				1.239	E3	0.00
8)		AR1232-B			9.728				9.728	E2	0.00
9)		AR1232-C			1.477				1.477	E3	0.00
10)		AR1232-D			6.321				6.321	E2	0.00
11)		AR1232-E			5.977				5.977	E2	0.00
12)		AR1242-A			1.858				1.858	E3	0.00
13)		AR1242-B			3.003				3.003	E3	0.00
14)		AR1242-C			1.261				1.261	E3	0.00
15)		AR1242-D			1.360				1.360	E3	0.00
16)		AR1242-E			1.353				1.353	E3	0.00
17)		AR1248-A			1.192				1.192	E3	0.00
18)		AR1248-B			9.853				9.853	E2	0.00
19)		AR1248-C			2.144				2.144	E3	0.00
20)		AR1248-D			2.283				2.283	E3	0.00
21)		AR1248-E			1.322				1.322	E3	0.00
22)		AR1254-A			1.752				1.752	E3	0.00
23)		AR1254-B			2.106				2.106	E3	0.00
24)		AR1254-C			2.603				2.603	E3	0.00
25)		AR1254-D			2.336				2.336	E3	0.00
26)		AR1254-E			2.261				2.261	E3	0.00
27)		AR1016-A	1.870	2.024	2.274	2.705	2.622	3.087	2.430	E3	18.83
28)		AR1016-B	1.427	1.515	1.648	1.982	1.756	1.955	1.714	E3	13.24
29)		AR1016-C	3.908	4.032	4.110	4.165	3.754	3.448	3.903	E3	6.85
30)		AR1016-D	1.514	1.591	1.704	1.825	1.721	1.598	1.659	E3	6.76
31)		AR1016-E	1.616	1.701	1.832	1.976	1.804	1.661	1.765	E3	7.50
32)		AR1260-A	3.472	3.620	3.845	3.919	3.864	4.082	3.800	E3	5.76
33)		AR1260-B	1.532	1.619	1.768	1.867	1.909	2.139	1.806	E3	12.05
34)		AR1260-C	1.649	1.719	1.826	1.868	1.854	1.969	1.814	E3	6.27
35)		AR1260-D	3.190	3.329	3.538	3.615	3.552	3.694	3.486	E3	5.43
36)		AR1260-E	1.701	1.762	1.844	1.837	1.724	1.770	1.773	E3	3.28
37)	S	Decachlorobiphenyl	3.043	3.253	3.661	3.998	4.198	4.782	3.822	E4	16.75

Signal #2 Calibration Files

3000	=ef52148.D	2000	=ef52147.D	1000	=ef52146.D
500	=ef52145.D	250	=ef52144.D	50	=ef52143.D

		Compound	3000	2000	1000	500	250	50	Avg		%RSD
1)	S	Tetrachloro-m-xylen	5.314	5.521	5.804	5.783	5.407	5.188	5.503	E4	4.55
2)		AR1221-A			4.501				4.501	E2	0.00
3)		AR1221-B			5.907				5.907	E2	0.00
4)		AR1221-C			3.838				3.838	E2	0.00

Initial Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2533-ICC2533
Lab FileID: EF52146.D

5)		AR1221-D			1.675			1.675	E3	0.00
6)		AR1221-E			3.275			3.275	E2	0.00
7)		AR1232-A			1.358			1.358	E3	0.00
8)		AR1232-B			1.175			1.175	E3	0.00
9)		AR1232-C			1.920			1.920	E3	0.00
10)		AR1232-D			9.643			9.643	E2	0.00
11)		AR1232-E			5.936			5.936	E2	0.00
12)		AR1242-A			1.952			1.952	E3	0.00
13)		AR1242-B			3.485			3.485	E3	0.00
14)		AR1242-C			1.719			1.719	E3	0.00
15)		AR1242-D			1.171			1.171	E3	0.00
16)		AR1242-E			1.679			1.679	E3	0.00
17)		AR1248-A			2.372			2.372	E3	0.00
18)		AR1248-B			1.617			1.617	E3	0.00
19)		AR1248-C			1.932			1.932	E3	0.00
20)		AR1248-D			2.300			2.300	E3	0.00
21)		AR1248-E			1.902			1.902	E3	0.00
22)		AR1254-A			2.440			2.440	E3	0.00
23)		AR1254-B			2.470			2.470	E3	0.00
24)		AR1254-C			1.814			1.814	E3	0.00
25)		AR1254-D			3.363			3.363	E3	0.00
26)		AR1254-E			2.641			2.641	E3	0.00
27)		AR1016-A	1.036	1.113	1.238	1.359	1.299	1.391	1.239 E3	11.31
28)		AR1016-B	4.171	4.410	4.767	4.908	4.810	4.865	4.655 E3	6.37
29)		AR1016-C	1.988	2.134	2.372	2.531	2.517	3.100	2.440 E3	15.90
30)		AR1016-D	1.349	1.439	1.591	1.678	1.623	1.990	1.612 E3	13.80
31)		AR1016-E	1.601	1.689	1.913	1.977	1.898	1.911	1.832 E3	8.17
32)		AR1260-A	2.968	3.193	3.457	3.589	3.551	3.969	3.454 E3	10.01
33)		AR1260-B	1.884	2.022	2.246	2.411	2.476	2.933	2.329 E3	15.98
34)		AR1260-C	2.183	2.330	2.534	2.709	2.727	3.329	2.635 E3	15.22
35)		AR1260-D	3.967	4.177	4.523	4.730	4.804	5.408	4.601 E3	11.07
36)		AR1260-E	2.861	2.986	3.186	3.255	3.231	3.402	3.154 E3	6.22
37)	S	Decachlorobiphenyl	3.848	4.096	4.611	4.992	5.182	6.029	4.793 E4	16.50

(#) = Out of Range

GEF2533.M Tue Jun 15 11:02:05 2004 RPT1

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2534-CC2533
Lab FileID: EF52192.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef52192.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef52192.D\ECD2B.CH
Acq On : 16 Jun 2004 8:26 am Operator: olgaa
Sample : CC2533-1000 Inst : GCEF
Misc : OP17060,GEF2534,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	46.104	49.356 E3	-7.1	99	0.00	5.87- 6.01
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1016-A	2.430	2.307 E3	5.1	101	-0.01	8.26- 8.45
28		AR1016-B	1.714	1.544 E3	9.9	94	-0.01	9.02- 9.21
29		AR1016-C	3.903	4.163 E3	-6.7	101	-0.01	10.07-10.29
30		AR1016-D	1.659	1.679 E3	-1.2	99	-0.02	10.64-10.85
31		AR1016-E	1.765	1.732 E3	1.9	95	-0.01	12.31-12.53
32		AR1260-A	3.800	3.991 E3	-5.0	104	-0.02	20.58-20.83
33		AR1260-B	1.806	1.826 E3	-1.1	103	-0.02	21.14-21.39
34		AR1260-C	1.814	1.908 E3	-5.2	104	-0.02	22.35-22.57
35		AR1260-D	3.486	3.631 E3	-4.2	103	-0.02	23.71-23.89
36		AR1260-E	1.773	1.898 E3	-7.1	103	-0.02	24.78-24.93
37	S	Decachlorobiphenyl	38.224	33.267 E3	13.0	91	-0.02	28.56-28.75

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	55.029	58.284 E3	-5.9	100	0.00	6.01- 6.14

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2534-CC2533
Lab FileID: EF52192.D

2	AR1221-A		----------NA----------					
3	AR1221-B		----------NA----------					
4	AR1221-C		----------NA----------					
5	AR1221-D		----------NA----------					
6	AR1221-E		----------NA----------					
7	AR1232-A		----------NA----------					
8	AR1232-B		----------NA----------					
9	AR1232-C		----------NA----------					
10	AR1232-D		----------NA----------					
11	AR1232-E		----------NA----------					
12	AR1242-A		----------NA----------					
13	AR1242-B		----------NA----------					
14	AR1242-C		----------NA----------					
15	AR1242-D		----------NA----------					
16	AR1242-E		----------NA----------					
17	AR1248-A		----------NA----------					
18	AR1248-B		----------NA----------					
19	AR1248-C		----------NA----------					
20	AR1248-D		----------NA----------					
21	AR1248-E		----------NA----------					
22	AR1254-A		----------NA----------					
23	AR1254-B		----------NA----------					
24	AR1254-C		----------NA----------					
25	AR1254-D		----------NA----------					
26	AR1254-E		----------NA----------					
27	AR1016-A	1.239	1.254 E3	-1.2	101	-0.01	7.67- 7.83
28	AR1016-B	4.655	4.836 E3	-3.9	101	-0.02	11.02-11.24
29	AR1016-C	2.440	2.360 E3	3.3	99	-0.02	11.61-11.80
30	AR1016-D	1.612	1.608 E3	0.2	101	-0.01	13.67-13.85
31	AR1016-E	1.832	1.834 E3	-0.1	96	-0.02	14.22-14.41
32	AR1260-A	3.454	3.556 E3	-3.0	103	-0.02	22.45-22.64
33	AR1260-B	2.329	2.269 E3	2.6	101	-0.02	22.85-23.03
34	AR1260-C	2.635	2.588 E3	1.8	102	-0.01	24.07-24.22
35	AR1260-D	4.601	4.570 E3	0.7	101	-0.01	25.01-25.13
36	AR1260-E	3.154	3.240 E3	-2.7	102	-0.01	26.21-26.33
37 S	Decachlorobiphenyl	47.931	42.546 E3	11.2	92	-0.02	30.65-30.80

Average % D = 4.3

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52146.D GEF2533.M Thu Jun 17 16:49:27 2004 RPT1

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2535-ECC2533
Lab FileID: EF52201.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\ef52201.D\ECD1A.CH          Vial: 33
Acq On    : 16 Jun 2004   1:59 pm                     Operator: olgaa
Sample    : ECC2533-500                               Inst    : GCEF
Misc      : OP17188,GEF2535,1.00,,,10,1               Multiplr: 1.00
IntFile   : events.e

Data File : C:\HPCHEM\1\DATA\ef52201.D\ECD2B.CH          Vial: 33
Acq On    : 16 Jun 2004   1:59 pm                     Operator: olgaa
Sample    : CC2533-500                                Inst    : GCEF
Misc      : OP17188,GEF2535,1.00,,,10,1               Multiplr: 1.00
IntFile   : events2.e

Method       : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	46.104	50.096 E3	-8.7	104	-0.02	5.86- 5.99
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1016-A	2.430	2.601 E3	-7.0	96	-0.02	8.25- 8.44
28		AR1016-B	1.714	1.678 E3	2.1	85	-0.03	9.01- 9.20
29		AR1016-C	3.903	4.276 E3	-9.6	103	-0.02	10.06-10.28
30		AR1016-D	1.659	1.802 E3	-8.6	99	-0.03	10.63-10.84
31		AR1016-E	1.765	1.871 E3	-6.0	95	-0.03	12.30-12.52
32		AR1260-A	3.800	4.225 E3	-11.2	108	-0.03	20.57-20.82
33		AR1260-B	1.806	2.000 E3	-10.7	107	-0.03	21.13-21.38
34		AR1260-C	1.814	1.975 E3	-8.9	106	-0.03	22.34-22.56
35		AR1260-D	3.486	3.834 E3	-10.0	106	-0.03	23.70-23.88
36		AR1260-E	1.773	1.958 E3	-10.4	107	-0.02	24.77-24.92

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2535-ECC2533
Lab FileID: EF52201.D

37 S	Decachlorobiphenyl	38.224	36.076 E3	5.6	90	-0.03	28.56-28.74

***** Signal #2 *****

1 S	Tetrachloro-m-xylene	55.029	56.510 E3	-2.7	98	-0.01	6.00- 6.13
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1254-A		----------NA----------				
23	AR1254-B		----------NA----------				
24	AR1254-C		----------NA----------				
25	AR1254-D		----------NA----------				
26	AR1254-E		----------NA----------				
27	AR1016-A	1.239	1.206 E3	2.7	89	-0.02	7.67- 7.82
28	AR1016-B	4.655	4.985 E3	-7.1	102	-0.02	11.02-11.23
29	AR1016-C	2.440	2.411 E3	1.2	95	-0.02	11.61-11.79
30	AR1016-D	1.612	1.650 E3	-2.4	98	-0.02	13.66-13.85
31	AR1016-E	1.832	1.789 E3	2.3	90	-0.02	14.21-14.40
32	AR1260-A	3.454	3.683 E3	-6.6	103	-0.02	22.45-22.63
33	AR1260-B	2.329	2.399 E3	-3.0	100	-0.02	22.84-23.03
34	AR1260-C	2.635	2.414 E3	8.4	89	-0.02	24.06-24.21
35	AR1260-D	4.601	4.570 E3	0.7	97	-0.02	25.00-25.13
36	AR1260-E	3.154	3.297 E3	-4.5	101	-0.02	26.21-26.33
37 S	Decachlorobiphenyl	47.931	45.548 E3	5.0	91	-0.03	30.65-30.80

Average % D = 6.1

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52145.D GEF2533.M Thu Jun 17 16:50:06 2004 RPT1

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2536-CC2533
Lab FileID: EF52225.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef52225.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\ef52225.D\ECD2B.CH
Acq On : 17 Jun 2004 10:49 am Operator: olgaa
Sample : CC2533-500 Inst : GCEF
Misc : OP17188,GEF2536,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	46.104	50.393 E3	-9.3	105	-0.02	5.86- 5.99
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1016-A	2.430	2.723 E3	-12.1	101	-0.03	8.25- 8.44
28		AR1016-B	1.714	1.721 E3	-0.4	87	-0.04	9.00- 9.19
29		AR1016-C	3.903	4.487 E3	-15.0	108	-0.04	10.05-10.26
30		AR1016-D	1.659	1.829 E3	-10.2	100	-0.04	10.61-10.83
31		AR1016-E	1.765	1.890 E3	-7.1	96	-0.04	12.29-12.50
32		AR1260-A	3.800	4.208 E3	-10.7	107	-0.05	20.56-20.81
33		AR1260-B	1.806	1.943 E3	-7.6	104	-0.04	21.12-21.37
34		AR1260-C	1.814	2.059 E3	-13.5	110	-0.04	22.33-22.55
35		AR1260-D	3.486	3.735 E3	-7.1	103	-0.03	23.69-23.88
36		AR1260-E	1.773	2.007 E3	-13.2	109	-0.03	24.76-24.91
37	S	Decachlorobiphenyl	38.224	39.466 E3	-3.2	99	-0.03	28.56-28.74

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	55.029	58.377 E3	-6.1	101	0.00	6.01- 6.13

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2536-CC2533
Lab FileID: EF52225.D

2	AR1221-A		----------NA----------					
3	AR1221-B		----------NA----------					
4	AR1221-C		----------NA----------					
5	AR1221-D		----------NA----------					
6	AR1221-E		----------NA----------					
7	AR1232-A		----------NA----------					
8	AR1232-B		----------NA----------					
9	AR1232-C		----------NA----------					
10	AR1232-D		----------NA----------					
11	AR1232-E		----------NA----------					
12	AR1242-A		----------NA----------					
13	AR1242-B		----------NA----------					
14	AR1242-C		----------NA----------					
15	AR1242-D		----------NA----------					
16	AR1242-E		----------NA----------					
17	AR1248-A		----------NA----------					
18	AR1248-B		----------NA----------					
19	AR1248-C		----------NA----------					
20	AR1248-D		----------NA----------					
21	AR1248-E		----------NA----------					
22	AR1254-A		----------NA----------					
23	AR1254-B		----------NA----------					
24	AR1254-C		----------NA----------					
25	AR1254-D		----------NA----------					
26	AR1254-E		----------NA----------					
27	AR1016-A	1.239	1.297 E3	-4.7	95	-0.02	7.66- 7.82
28	AR1016-B	4.655	5.033 E3	-8.1	103	-0.03	11.01-11.22
29	AR1016-C	2.440	2.414 E3	1.1	95	-0.03	11.60-11.78
30	AR1016-D	1.612	1.664 E3	-3.2	99	-0.03	13.65-13.84
31	AR1016-E	1.832	1.806 E3	1.4	91	-0.03	14.20-14.39
32	AR1260-A	3.454	3.486 E3	-0.9	97	-0.03	22.44-22.62
33	AR1260-B	2.329	2.260 E3	3.0	94	-0.03	22.84-23.02
34	AR1260-C	2.635	2.256 E3	14.4	83	-0.02	24.06-24.21
35	AR1260-D	4.601	4.473 E3	2.8	95	-0.02	25.00-25.12
36	AR1260-E	3.154	3.051 E3	3.3	94	-0.02	26.21-26.33
37 S	Decachlorobiphenyl	47.931	48.087 E3	-0.3	96	-0.02	30.66-30.81

Average % D = 6.6

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52145.D GEF2533.M Thu Jun 17 16:50:21 2004 RPT1

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2536-CC2533
Lab FileID: EF52231.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef52231.D\ECD1A.CH Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\ef52231.D\ECD2B.CH
Acq On : 17 Jun 2004 3:49 pm Operator: olgaa
Sample : CC2533-1000 Inst : GCEF
Misc : OP17165,GEF2536,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	46.104	49.161 E3	-6.6	99	-0.04	5.83- 5.97
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1016-A	2.430	2.291 E3	5.7	101	-0.05	8.22- 8.41
28		AR1016-B	1.714	1.503 E3	12.3	91	-0.06	8.97- 9.16
29		AR1016-C	3.903	4.220 E3	-8.1	103	-0.07	10.02-10.24
30		AR1016-D	1.659	1.669 E3	-0.6	98	-0.07	10.58-10.80
31		AR1016-E	1.765	1.721 E3	2.5	94	-0.07	12.26-12.48
32		AR1260-A	3.800	4.001 E3	-5.3	104	-0.08	20.52-20.77
33		AR1260-B	1.806	1.800 E3	0.3	102	-0.07	21.09-21.34
34		AR1260-C	1.814	1.867 E3	-2.9	102	-0.07	22.30-22.52
35		AR1260-D	3.486	3.542 E3	-1.6	100	-0.06	23.67-23.85
36		AR1260-E	1.773	1.925 E3	-8.6	104	-0.06	24.74-24.89
37	S	Decachlorobiphenyl	38.224	35.421 E3	7.3	97	-0.06	28.53-28.71

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	55.029	57.541 E3	-4.6	99	-0.04	5.98- 6.10

Continuing Calibration Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: GEF2536-CC2533
Lab FileID: EF52231.D

2	AR1221-A		----------NA----------					
3	AR1221-B		----------NA----------					
4	AR1221-C		----------NA----------					
5	AR1221-D		----------NA----------					
6	AR1221-E		----------NA----------					
7	AR1232-A		----------NA----------					
8	AR1232-B		----------NA----------					
9	AR1232-C		----------NA----------					
10	AR1232-D		----------NA----------					
11	AR1232-E		----------NA----------					
12	AR1242-A		----------NA----------					
13	AR1242-B		----------NA----------					
14	AR1242-C		----------NA----------					
15	AR1242-D		----------NA----------					
16	AR1242-E		----------NA----------					
17	AR1248-A		----------NA----------					
18	AR1248-B		----------NA----------					
19	AR1248-C		----------NA----------					
20	AR1248-D		----------NA----------					
21	AR1248-E		----------NA----------					
22	AR1254-A		----------NA----------					
23	AR1254-B		----------NA----------					
24	AR1254-C		----------NA----------					
25	AR1254-D		----------NA----------					
26	AR1254-E		----------NA----------					
27	AR1016-A	1.239	1.190 E3	4.0	96	-0.05	7.63- 7.79
28	AR1016-B	4.655	4.706 E3	-1.1	99	-0.06	10.98-11.19
29	AR1016-C	2.440	2.222 E3	8.9	94	-0.06	11.57-11.75
30	AR1016-D	1.612	1.533 E3	4.9	96	-0.06	13.62-13.81
31	AR1016-E	1.832	1.727 E3	5.7	90	-0.06	14.17-14.36
32	AR1260-A	3.454	3.343 E3	3.2	97	-0.06	22.41-22.59
33	AR1260-B	2.329	2.124 E3	8.8	95	-0.05	22.81-22.99
34	AR1260-C	2.635	2.344 E3	11.0	93	-0.05	24.03-24.18
35	AR1260-D	4.601	4.256 E3	7.5	94	-0.04	24.98-25.10
36	AR1260-E	3.154	3.031 E3	3.9	95	-0.04	26.19-26.31
37 S	Decachlorobiphenyl	47.931	43.883 E3	8.4	95	-0.05	30.62-30.77

Average % D = 5.6

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52146.D GEF2533.M Thu Jun 17 16:50:59 2004 RPT1

GC Surrogate Retention Time Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	GEF2534-CC2533	**Injection Date:**	06/16/04
Lab File ID:	EF52192.D	**Injection Time:**	08:26
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.94	6.07	28.66	30.73

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17188-MB1	EF52194.D	06/16/04	09:41	5.93	6.07	28.65	30.73
OP17188-BS1	EF52195.D	06/16/04	10:18	5.93	6.07	28.65	30.72
ZZZZZZ	EF52196.D	06/16/04	10:55	5.93	6.07	28.65	30.72
N69732-1	EF52197.D	06/16/04	11:32	5.92	6.07	28.67	30.74
OP17188-MS	EF52198.D	06/16/04	12:09	5.92	6.06	28.65	30.72
OP17188-MSD	EF52199.D	06/16/04	12:45	5.93	6.07	28.65	30.72
N69692-2	EF52200.D	06/16/04	13:22	5.93	6.07	28.65	30.73
GEF2535-ECC253	EF52201.D	06/16/04	13:59	5.93	6.07	28.65	30.72

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	GEF2534-CC2533	**Injection Date:**	06/16/04
Lab File ID:	EF52192.D	**Injection Time:**	08:26
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.94	6.07	28.66	30.73

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17188-MB1	EF52194.D	06/16/04	09:41	5.93	6.07	28.65	30.73
OP17188-BS1	EF52195.D	06/16/04	10:18	5.93	6.07	28.65	30.72
ZZZZZZ	EF52196.D	06/16/04	10:55	5.93	6.07	28.65	30.72
N69732-1	EF52197.D	06/16/04	11:32	5.92	6.07	28.67	30.74
OP17188-MS	EF52198.D	06/16/04	12:09	5.92	6.06	28.65	30.72
OP17188-MSD	EF52199.D	06/16/04	12:45	5.93	6.07	28.65	30.72
N69692-2	EF52200.D	06/16/04	13:22	5.93	6.07	28.65	30.73
GEF2535-ECC253	EF52201.D	06/16/04	13:59	5.93	6.07	28.65	30.72

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N69732
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	GEF2536-CC2533	**Injection Date:**	06/17/04
Lab File ID:	EF52225.D	**Injection Time:**	10:49
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.93	6.07	28.65	30.73

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	EF52227.D	06/17/04	12:04	5.91	6.05	28.64	30.72
ZZZZZZ	EF52228.D	06/17/04	12:41	5.90	6.04	28.63	30.71
N69732-1	EF52229.D	06/17/04	13:18	5.90	6.03	28.64	30.72
ZZZZZZ	EF52230.D	06/17/04	13:56	5.90	6.05	28.63	30.71

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52197.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\ef52197.D\ECD2B.CH
Acq On : 16 Jun 2004 11:32 am Operator: olgaa
Sample : N69732-1 Inst : GCEF
Misc : OP17188,GEF2535,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 12:23 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	5.92	6.07	1467511	1061126	31.831	19.283	P
Spiked Amount	40.000			Recovery	=	79.58%	48.21%	
37) S	Decachlorobiphen	28.67	30.74	954747	1445649	24.978	30.161	
Spiked Amount	40.000			Recovery	=	62.45%	75.40%	
	Target Compounds							
12)	AR1242-A	8.34	9.25	6693809	6872100	3603.515	3520.675	
13)	AR1242-B	10.15	11.10	14696918	13559213	4893.550	3890.387	
14)	AR1242-C	10.70	11.68	5376315	5926925	4264.814	3447.202	
15)	AR1242-D	12.40	13.75	7878668	6056403	5794.820	5171.049	
23)	AR1254-B	15.29	16.60	8942000	6068341	4245.579	2456.626	P
24)	AR1254-C	17.13	18.24	8420231	4999146	3234.599	2756.026	
25)	AR1254-D	18.48	18.80	7331687	8432768	3138.110	2507.157	
26)	AR1254-E	19.36	19.93	7421318	6531227	3282.126	2472.800	
33)	AR1260-B	21.28	22.97	1245782	1983665	689.907	851.842	
34)	AR1260-C	22.47	24.15	1663548	1379305	916.997	523.397	P
35)	AR1260-D	23.82	25.08	2843432	3130254	815.569	680.275	
36)	AR1260-E	24.87	26.28	1916976	2432364	1081.145	771.319	

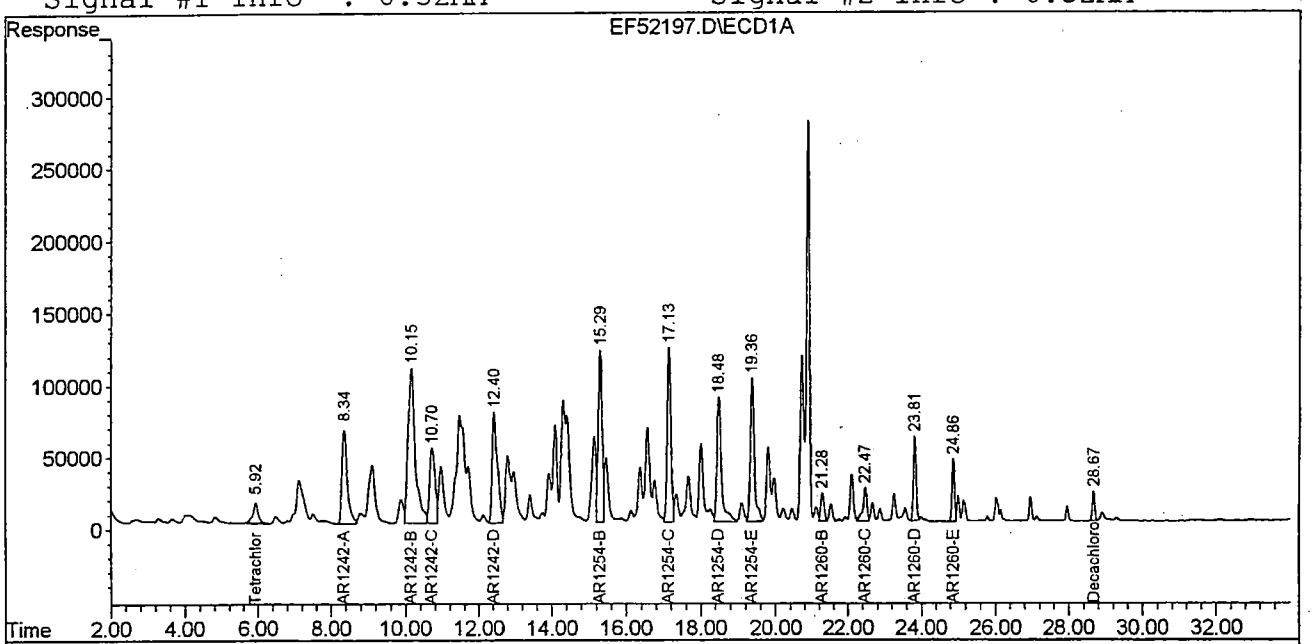
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

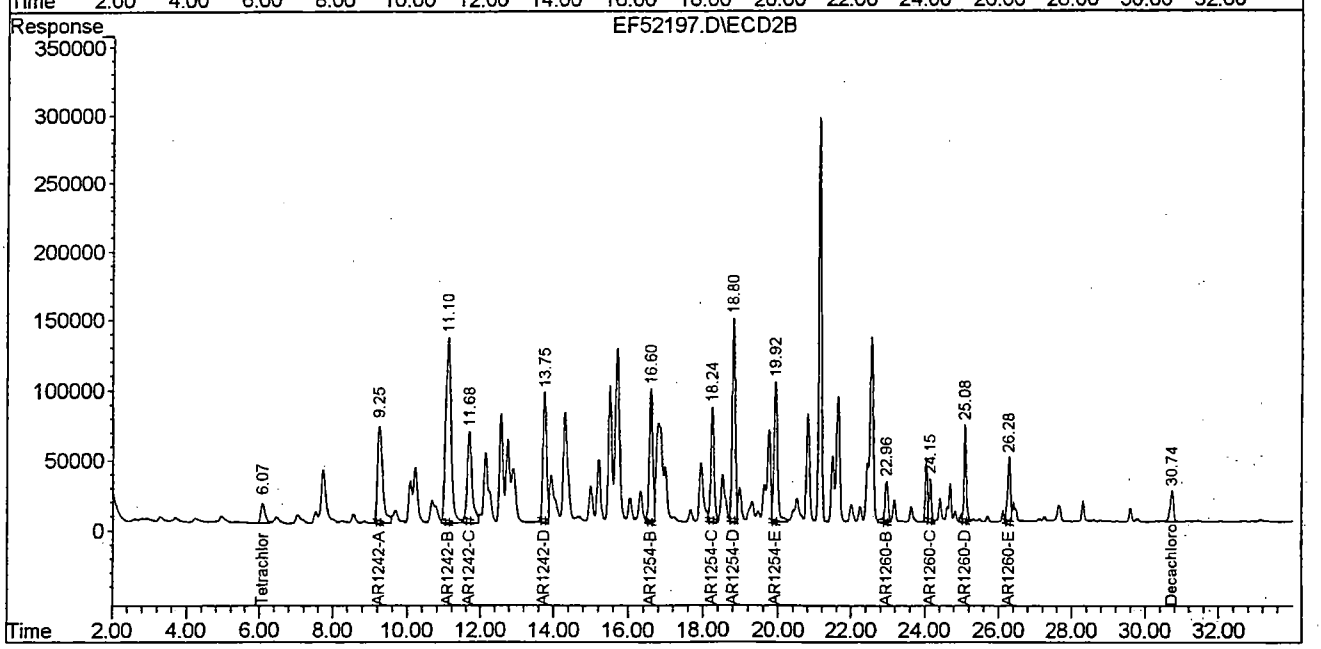
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52197.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\ef52197.D\ECD2B.CH
Acq On : 16 Jun 2004 11:32 am Operator: olgaa
Sample : N69732-1 Inst : GCEF
Misc : OP17188,GEF2535,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 12:23 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52229.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\ef52229.D\ECD2B.CH
Acq On : 17 Jun 2004 1:18 pm Operator: olgaa
Sample : N69732-1 Inst : GCEF
Misc : OP17188,GEF2536,15.1,,,10,10 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 15:46 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
System Monitoring Compounds							
1) S Tetrachloro-m-xy	5.90	6.03	100146	87660	2.172	1.593	
Spiked Amount 40.000			Recovery =		5.43%	3.98%	
37) S Decachlorobiphen	28.64	30.72	150886	237405	3.947	4.953	
Spiked Amount 40.000			Recovery =		9.87%	12.38%	
Target Compounds							
12) AR1242-A	8.32	9.23	974721	1087055	524.727	556.914	
13) AR1242-B	10.13	11.09	1766826	1990642	588.290	571.152	
14) AR1242-C	10.70	11.66	697727	951161	553.479	553.212	
24) AR1254-C	17.09	18.21	991328	697552	380.815	384.560	
25) AR1254-D	18.44	18.77	902743	1189921	386.392	353.777	
26) AR1254-E	19.31	19.89	901148	1003629	398.539	379.986	
33) AR1260-B	21.23	22.92	167138	228102	92.560	97.953	
34) AR1260-C	22.42f	24.12	208424	186377	114.889	70.723	P
35) AR1260-D	23.77	25.05	326042	376190	93.517	81.755	
36) AR1260-E	24.83	26.26	213338	322573	120.319	102.290	

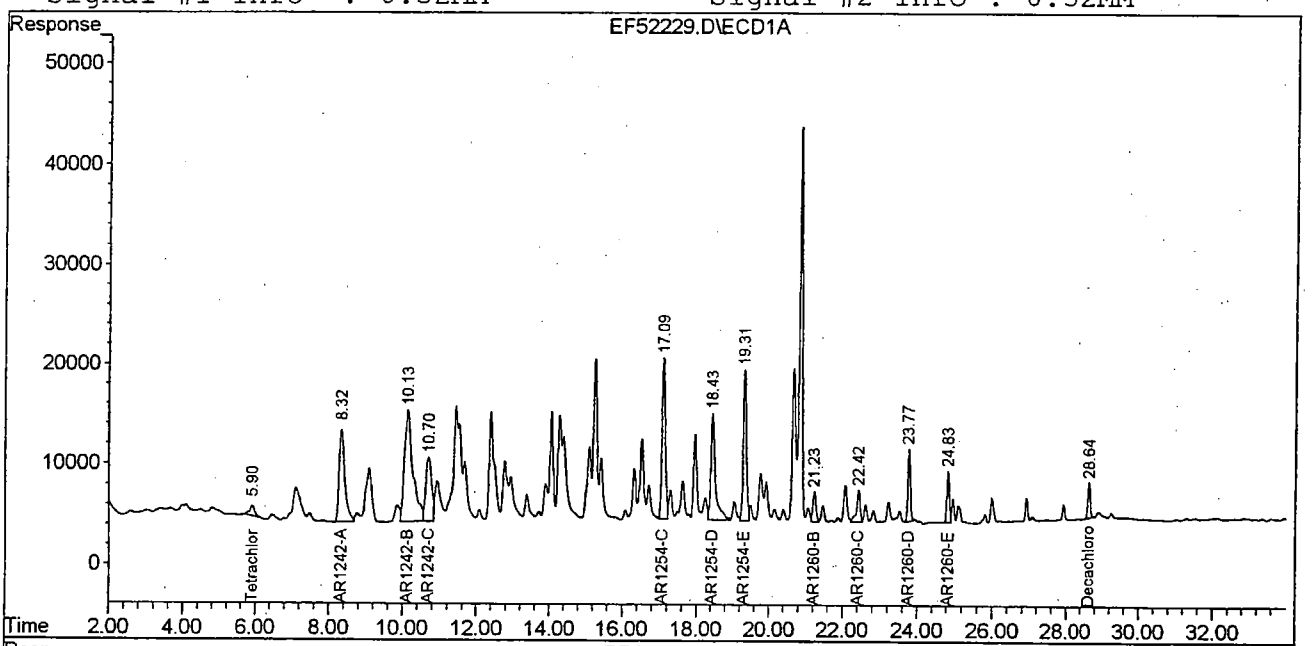
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

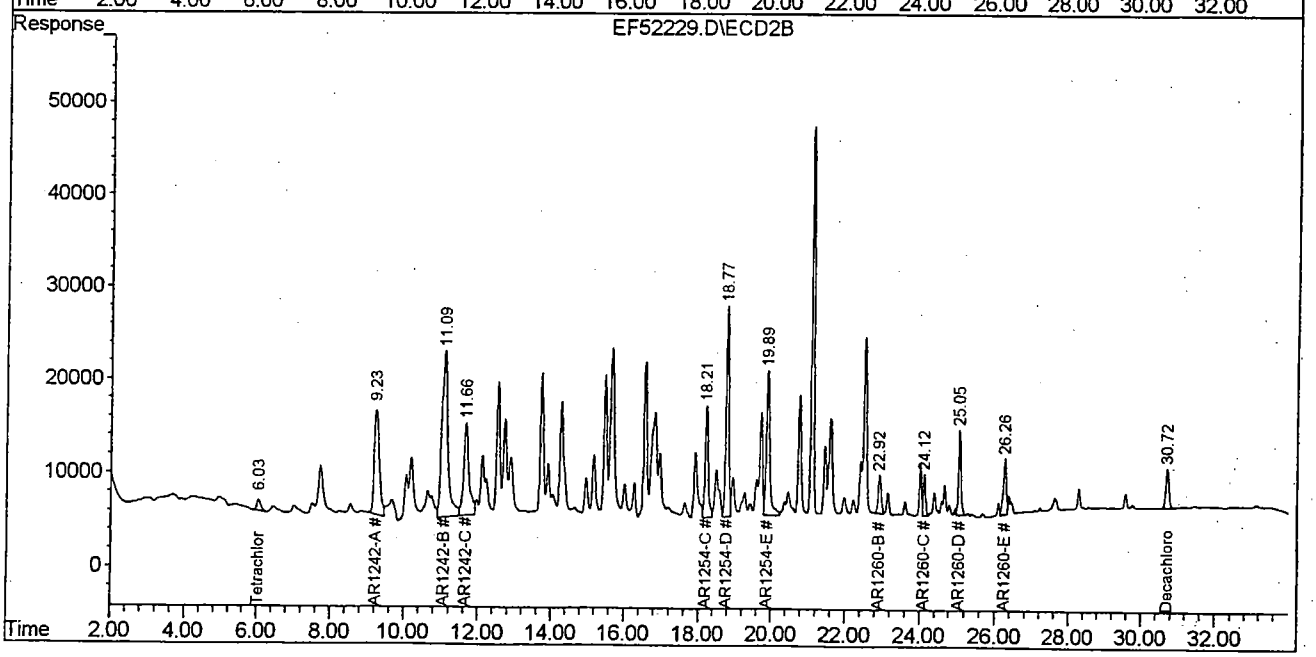
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52229.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\ef52229.D\ECD2B.CH
Acq On : 17 Jun 2004 1:18 pm Operator: olgaa
Sample : N69732-1 Inst : GCEF
Misc : OP17188,GEF2536,15.1,,,10,10 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 17 15:46 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52194.D\ECD1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\ef52194.D\ECD2B.CH
Acq On : 16 Jun 2004 9:41 am Operator: olgaa
Sample : OP17188-MB1 Inst : GCEF
Misc : OP17188,GEF2535,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 12:45 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.07	1621426	1974398	35.169	35.879
Spiked Amount 40.000			Recovery	=	87.92%	89.70%
37) S Decachlorobiphen	28.65	30.73	1288557	1648997	33.711	34.403
Spiked Amount 40.000			Recovery	=	84.28%	86.01%

Target Compounds

Voided

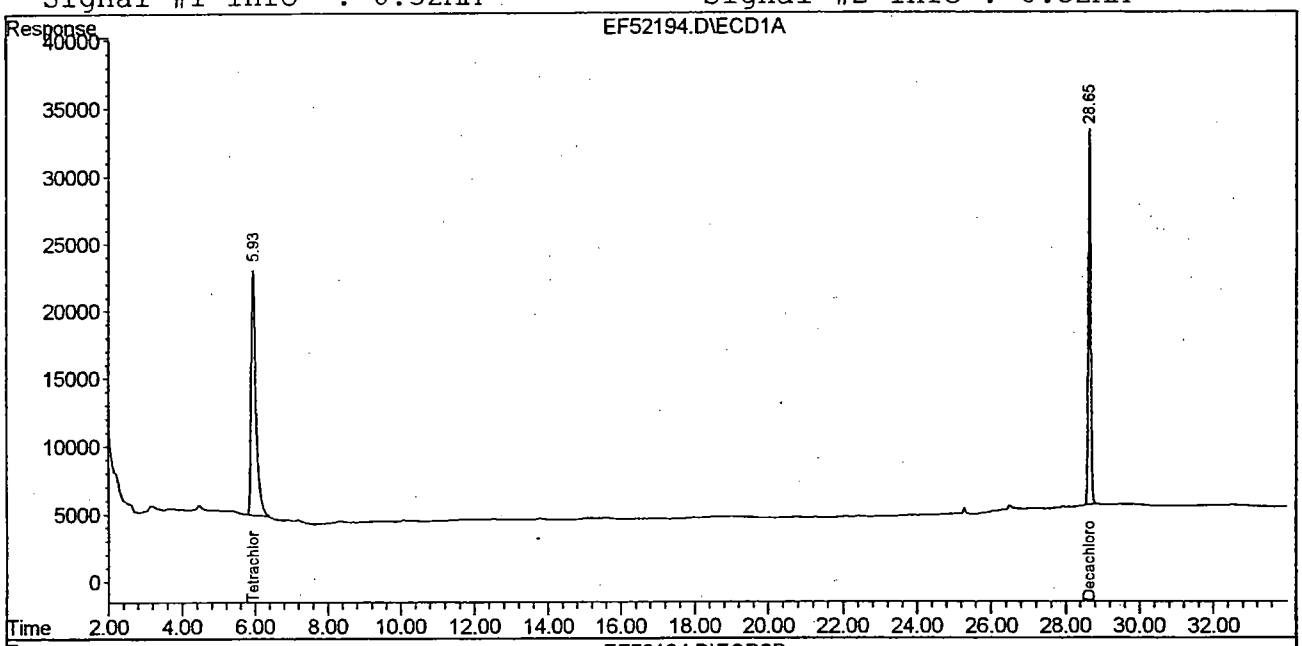
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef52194 D GEF2533 M Wed Jun 16 12:45:33 2004 RPT1 Page 1

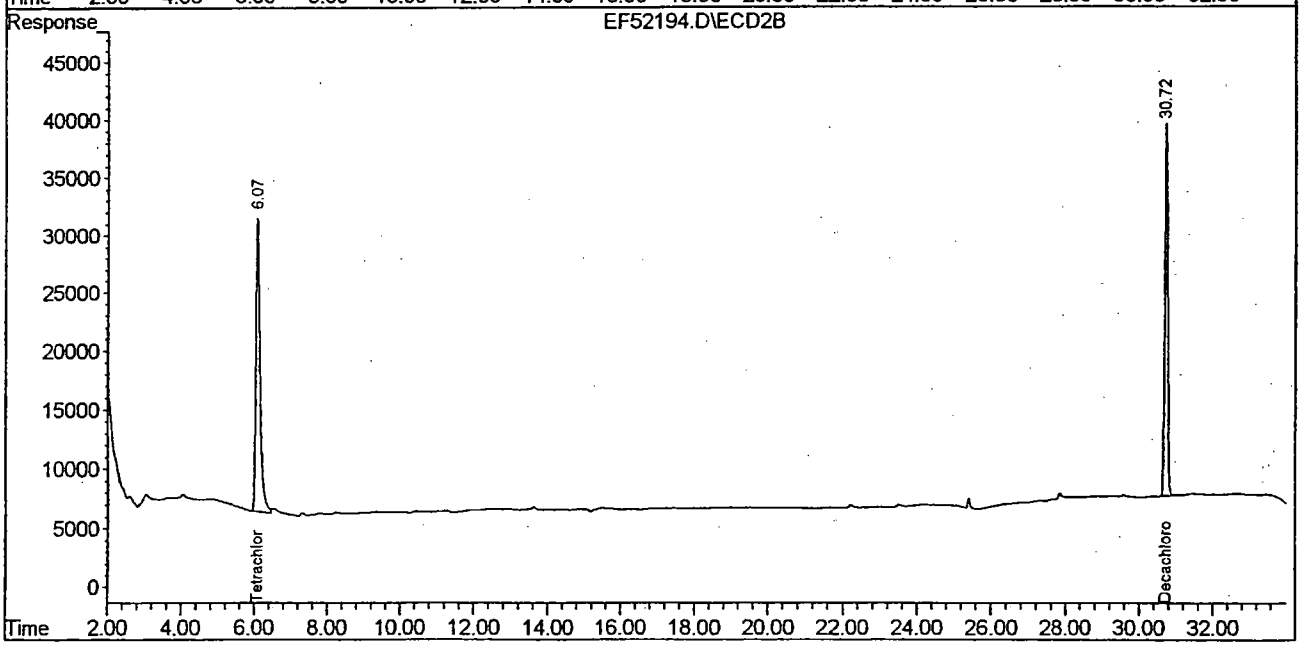
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52194.D\ECD1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\ef52194.D\ECD2B.CH
Acq On : 16 Jun 2004 9:41 am Operator: olgaa
Sample : OP17188-MB1 Inst : GCEF
Misc : OP17188,GEF2535,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 16 12:45 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Jun 15 10:59:16 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52138.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef52138.D\ECD2B.CH
Acq On : 14 Jun 2004 8:34 pm Operator: olgaa
Sample : IC2533-1000, 1221 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:24 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

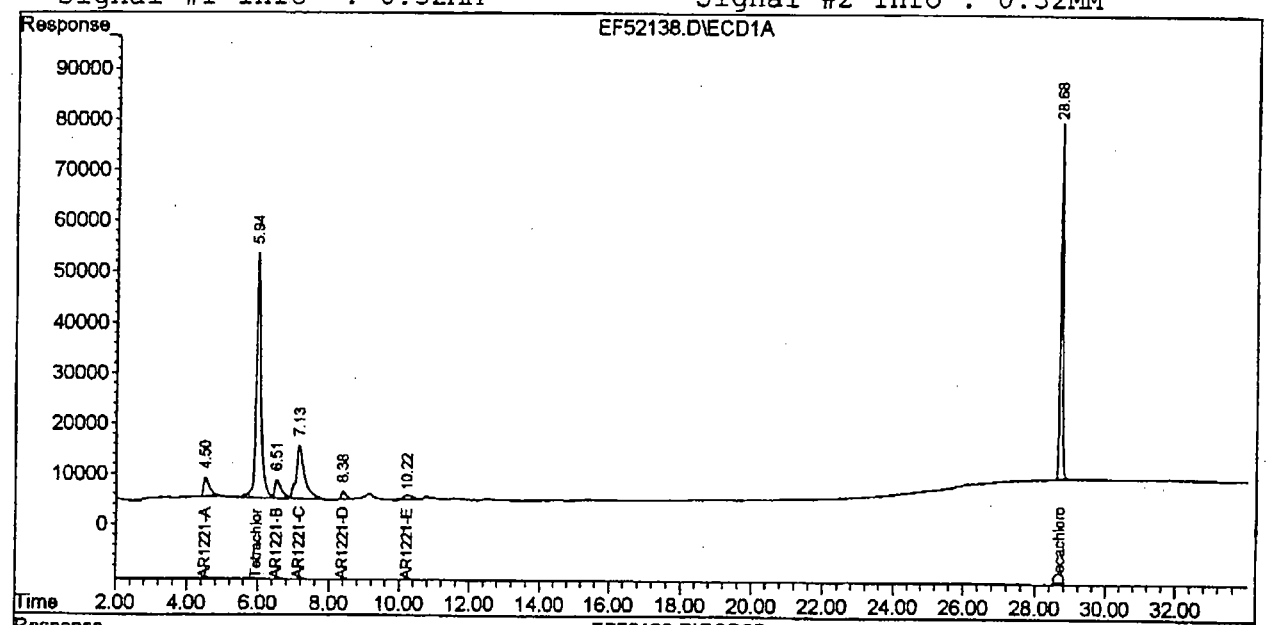
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.95	6.08	4556982	5116845	87.879	83.360
Spiked Amount 40.000			Recovery	=	219.70%	208.40%
37) S Decachlorobiphen	28.68	30.76	3265019	4150054	75.382	88.834
Spiked Amount 40.000			Recovery	=	188.46%	222.09%
Target Compounds						
2) AR1221-A	4.50	4.81	432209	450070	865.118	981.243
3) AR1221-B	6.51	7.05	463603	590730	682.086	775.298
4) AR1221-C	7.14	7.54	1750316	383756	805.766	941.928
5) AR1221-D	8.39	7.76	151877	1675478	927.894	884.364
6) AR1221-E	10.23	9.30	174240	327532	676.270	968.441

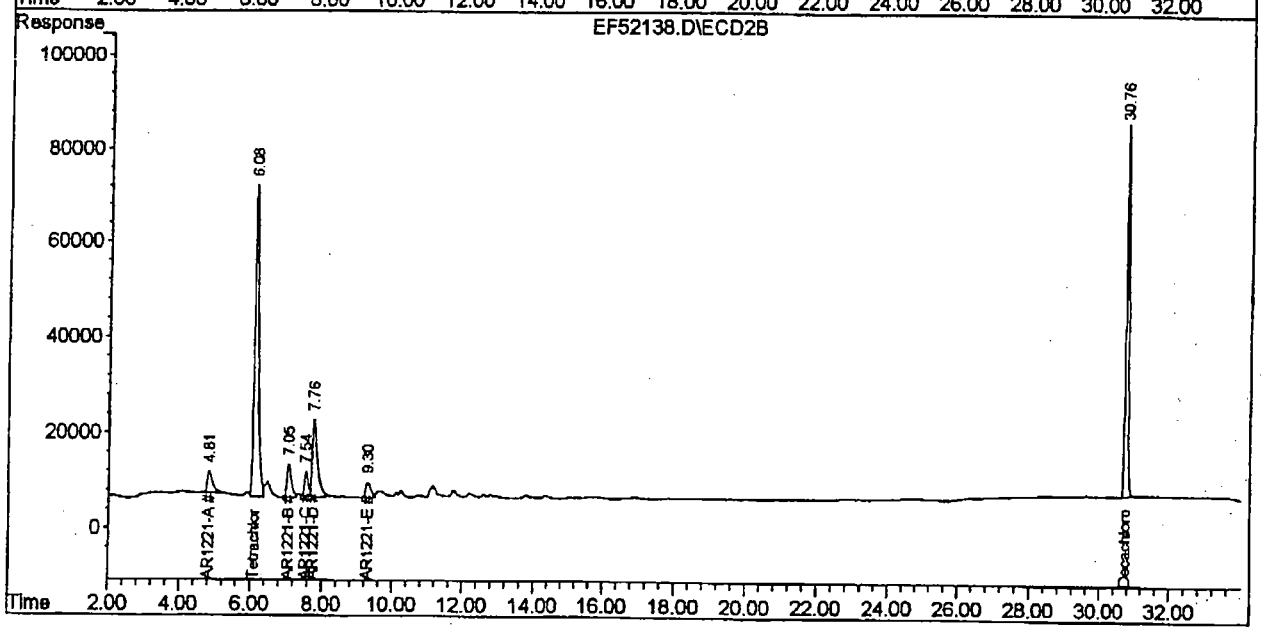
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52138.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef52138.D\ECD2B.CH
Acq On : 14 Jun 2004 8:34 pm Operator: olgaa
Sample : IC2533-1000, 1221 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:24 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52139.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef52139.D\ECD2B.CH
Acq On : 14 Jun 2004 9:11 pm Operator: olgaa
Sample : IC2533-1000, 1232 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:30 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.94	6.08	4555492	5299479	87.850	86.335
	Spiked Amount 40.000			Recovery	=	219.63%	215.84%
37) S	Decachlorobiphen	28.68	30.76	3299066	4197180	76.168	89.842
	Spiked Amount 40.000			Recovery	=	190.42%	224.61%
	Target Compounds						
7)	AR1232-A	7.14	7.76	1238504	1358351	774.717	891.811
8)	AR1232-B	8.38	9.28	972847	1174640	842.433	926.090
9)	AR1232-C	10.21	11.16	1477176	1919606	736.498	938.689
10)	AR1232-D	10.77	11.73	632078	964274	783.777	1005.572
11)	AR1232-E	12.44	13.79	597682	593560	761.498	908.190

KG6504

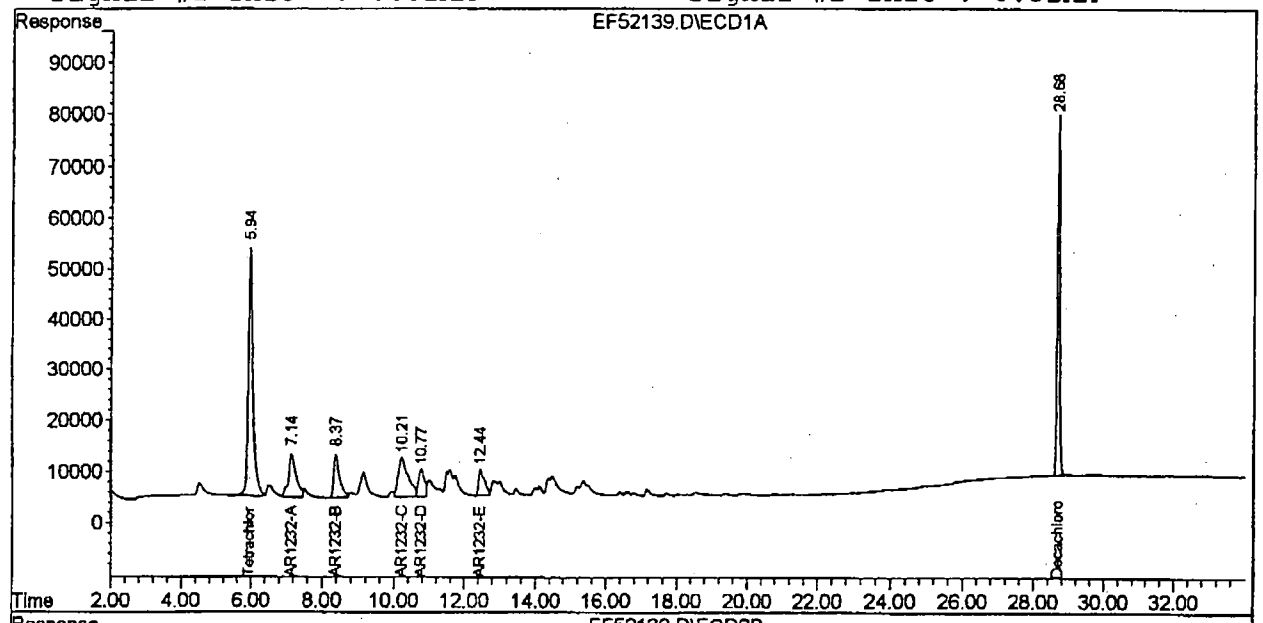
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

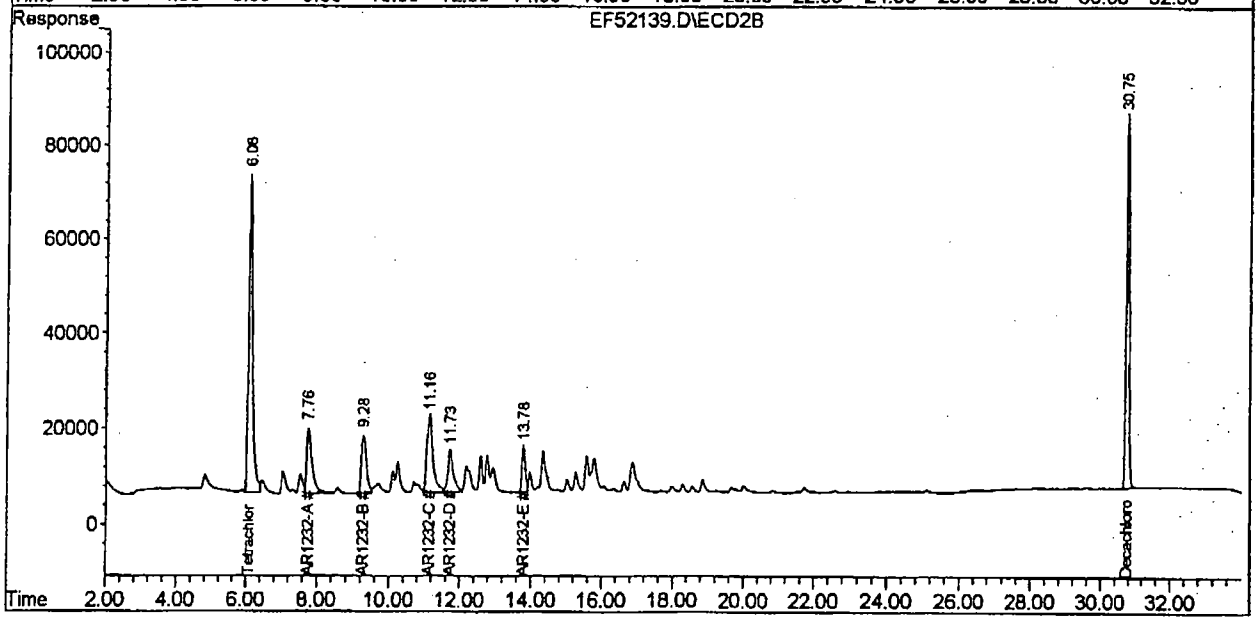
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52139.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef52139.D\ECD2B.CH
Acq On : 14 Jun 2004 9:11 pm Operator: olgaa
Sample : IC2533-1000, 1232 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:30 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52140.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\ef52140.D\ECD2B.CH
Acq On : 14 Jun 2004 9:48 pm Operator: olgaa
Sample : IC2533-1000, 1242 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:32 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.94	6.08	4778100	5789455	92.143	94.318
Spiked Amount 40.000			Recovery	=	230.36%	235.80%
37) S Decachlorobiphen	28.68	30.75	3560669	4519383	82.208	96.739
Spiked Amount 40.000			Recovery	=	205.52%	241.85%
Target Compounds						
12) AR1242-A	8.37	9.27	1857578	1951927	936.907	903.600
13) AR1242-B	10.20	11.15	3003324	3485312	816.287	955.069
14) AR1242-C	10.77	11.73	1260621	1719344	866.576	1045.758
15) AR1242-D	12.44	13.78	1359605	1171214	855.500	931.555
16) AR1242-E	14.47	14.34	1353376	1679302	1741.057	1027.895 P

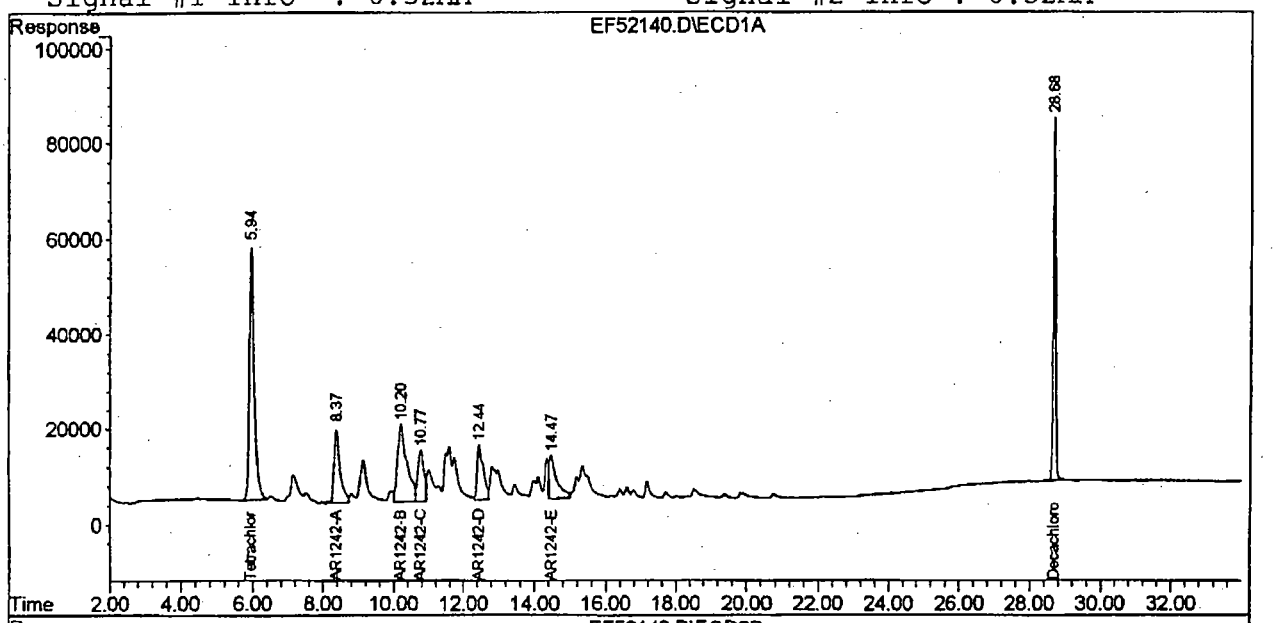
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

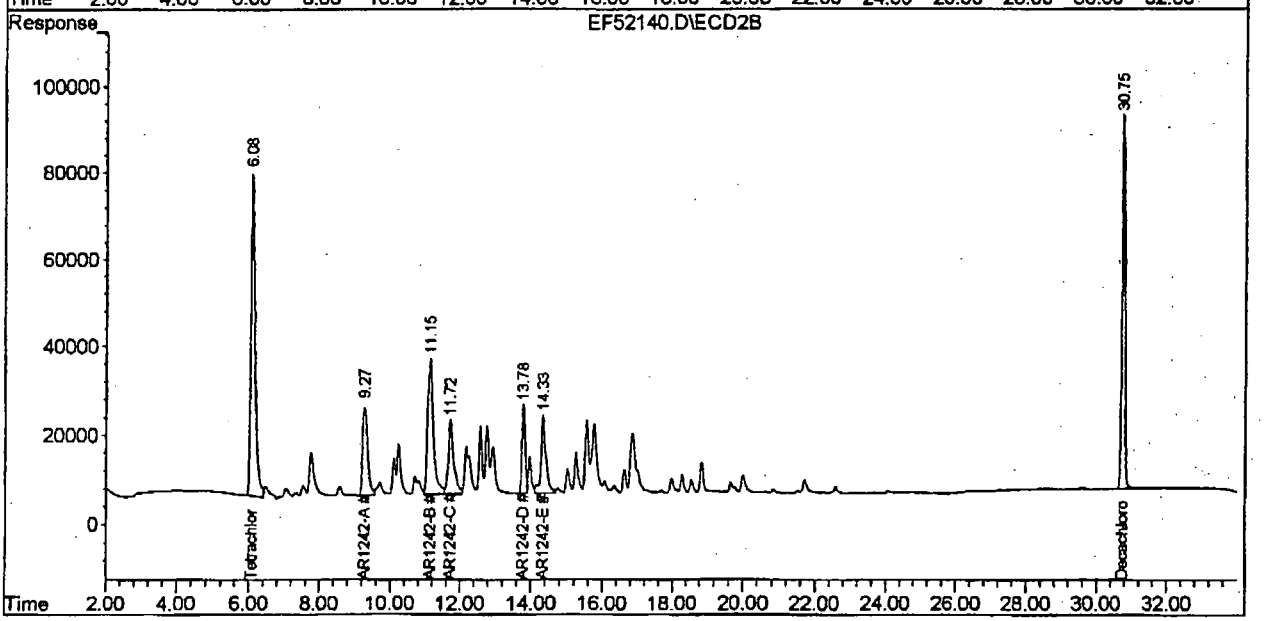
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52140.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\ef52140.D\ECD2B.CH
Acq On : 14 Jun 2004 9:48 pm Operator: olgaa
Sample : IC2533-1000, 1242 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:32 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52141.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef52141.D\ECD2B.CH
Acq On : 14 Jun 2004 10:24 pm Operator: olgaa
Sample : IC2533-1000, 1248 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:35 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.94	6.08	4842669	5915002	93.388	96.363
	Spiked Amount 40.000			Recovery	=	233.47%	240.91%
37) S	Decachlorobiphen	28.68	30.75	3567235	4542316	82.360	97.230
	Spiked Amount 40.000			Recovery	=	205.90%	243.08%
	Target Compounds						
17)	AR1248-A	10.21	11.15	1191742	2372334	689.954	960.649
18)	AR1248-B	11.49	12.58	985270	1617352	839.113	1045.728
19)	AR1248-C	12.44	13.78	2144476	1931845	852.514	974.892
20)	AR1248-D	14.46	14.33	2282972	2299696	1480.732	1047.798
21)	AR1248-E	15.33	15.55	1322041	1902331	798.497	914.259

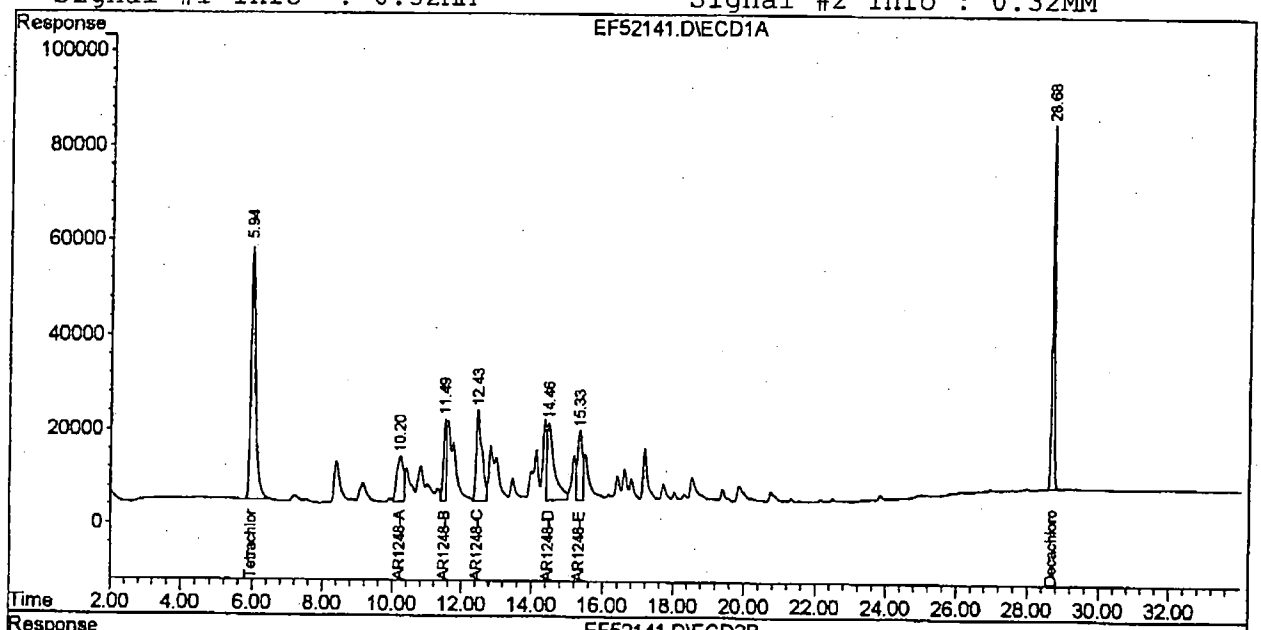
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

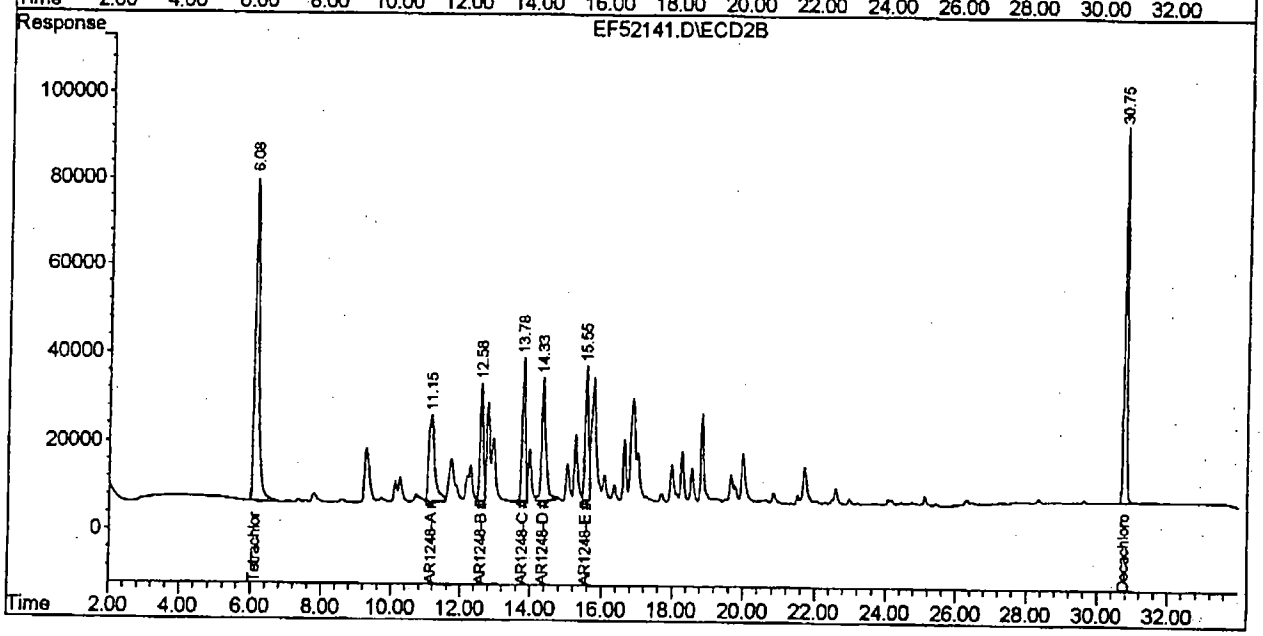
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52141.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef52141.D\ECD2B.CH
Acq On : 14 Jun 2004 10:24 pm Operator: olgaa
Sample : IC2533-1000, 1248 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:35 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52142.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\ef52142.D\ECD2B.CH
Acq On : 14 Jun 2004 11:01 pm Operator: olgaa
Sample : IC2533-1000, 1254 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:39 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.94	6.08	4826062	5699664	93.068	92.855
	Spiked Amount 40.000			Recovery	=	232.67%	232.14%
37) S	Decachlorobiphen	28.68	30.75	3561814	4500506	82.234	96.335
	Spiked Amount 40.000			Recovery	=	205.59%	240.84%
	Target Compounds						
22)	AR1254-A	14.11	15.70	1751973	2440487	836.323	919.526
23)	AR1254-B	15.31	16.62	2106191	2470193	840.479	941.300
24)	AR1254-C	17.16	18.27	2603176	1813897	842.323	956.829
25)	AR1254-D	18.51	18.83	2336339	3363478	841.855	960.384
26)	AR1254-E	19.38	19.96	2261131	2641228	885.643	934.675

Kbiasy

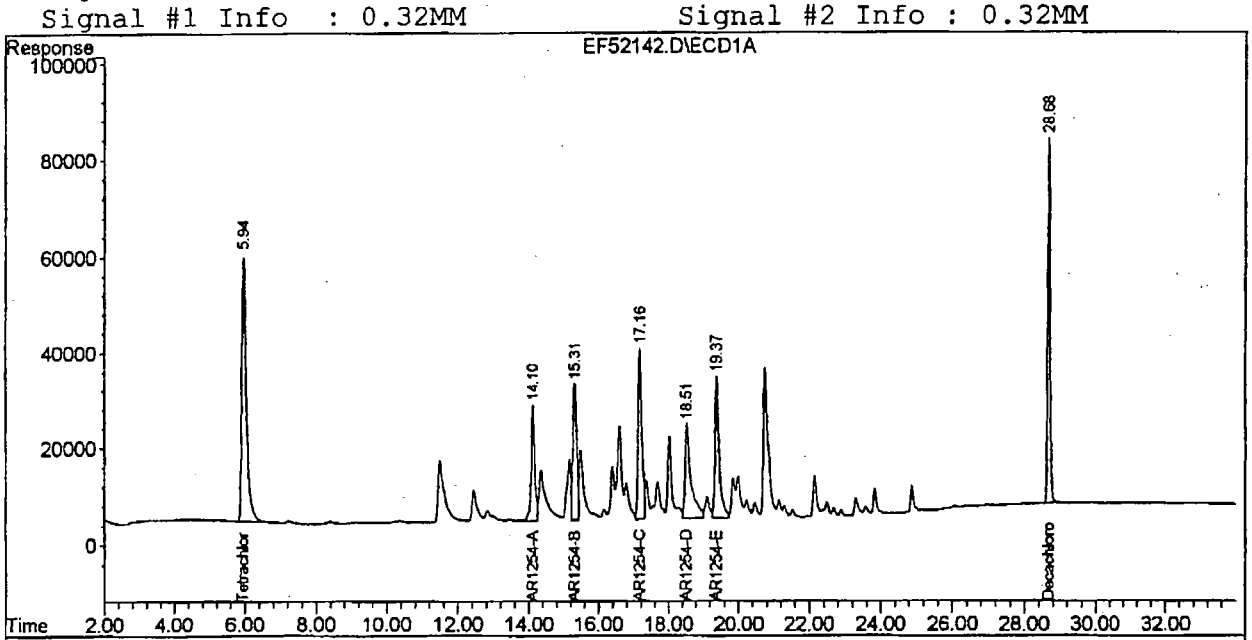
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

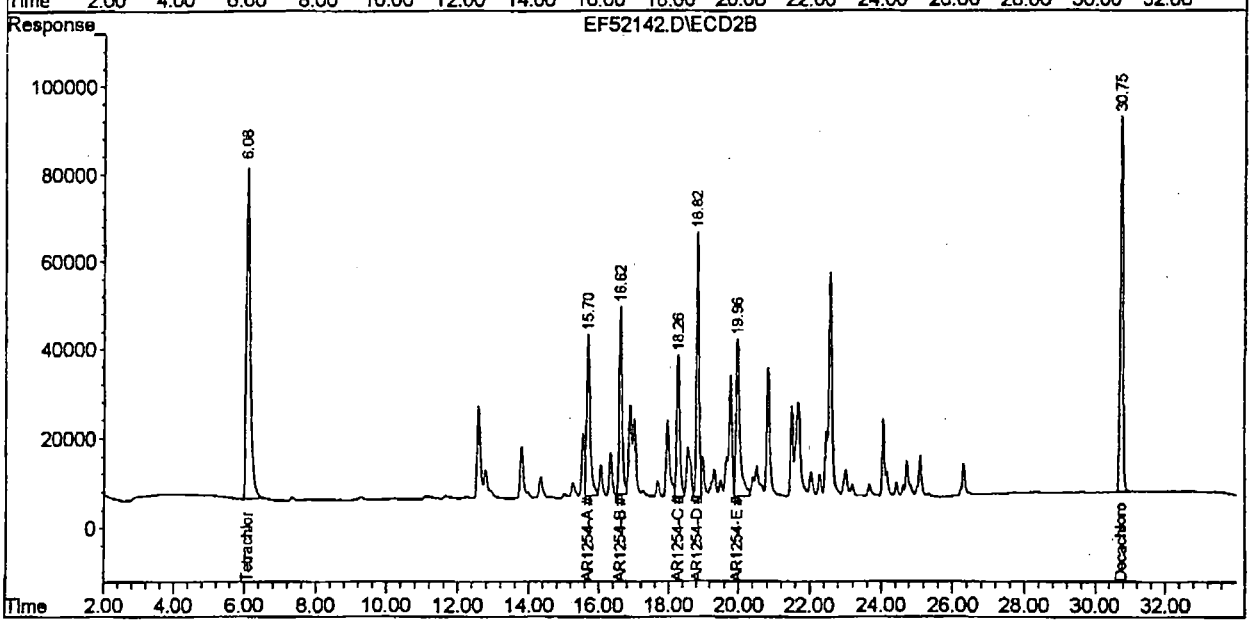
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52142.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\ef52142.D\ECD2B.CH
Acq On : 14 Jun 2004 11:01 pm Operator: olgaa
Sample : IC2533-1000, 1254 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:39 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





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Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52146.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\ef52146.D\ECD2B.CH
Acq On : 15 Jun 2004 1:29 am Operator: olgaa
Sample : ICC2533-1000, 1016/1260 Inst : GCEF
Misc : OP17111,GEF2533,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:47 2004 Quant Results File: GEF2533.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Initial Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.94	6.08	4964098	5804176	95.730	94.557
	Spiked Amount 40.000			Recovery	=	239.33%	236.39%
37)	S Decachlorobiphen	28.68	30.75	3660744	4610767	84.518	98.695
	Spiked Amount 40.000			Recovery	=	211.30%	246.74%
	Target Compounds						
27)	AR1016-A	8.37	7.76	2273859	1238288	880.663	1050.379
28)	AR1016-B	9.13	11.15	1648070	4766649	994.874	1119.038
29)	AR1016-C	10.20	11.72	4110268	2371738	879.564	1230.250
30)	AR1016-D	10.76	13.78	1703953	1590753	888.900	1073.721
31)	AR1016-E	12.44	14.33	1832090	1913040	962.604	1178.678
32)	AR1260-A	20.73	22.56	3844722	3456614	866.375	1013.946
33)	AR1260-B	21.29	22.96	1767772	2245667	867.346	972.372
34)	AR1260-C	22.48	24.16	1825738	2533985	843.538	1107.931
35)	AR1260-D	23.82	25.08	3538301	4522785	912.964	1003.661
36)	AR1260-E	24.87	26.29	1844311	3186312	929.485	1041.251

(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

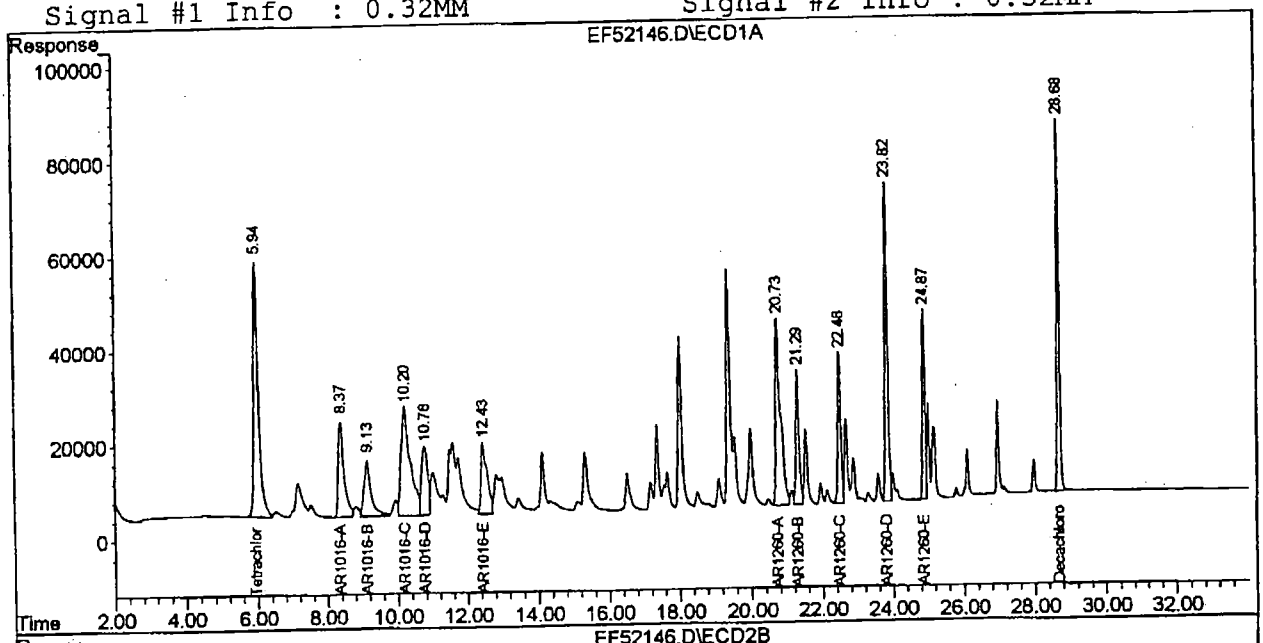
Quantitation Report

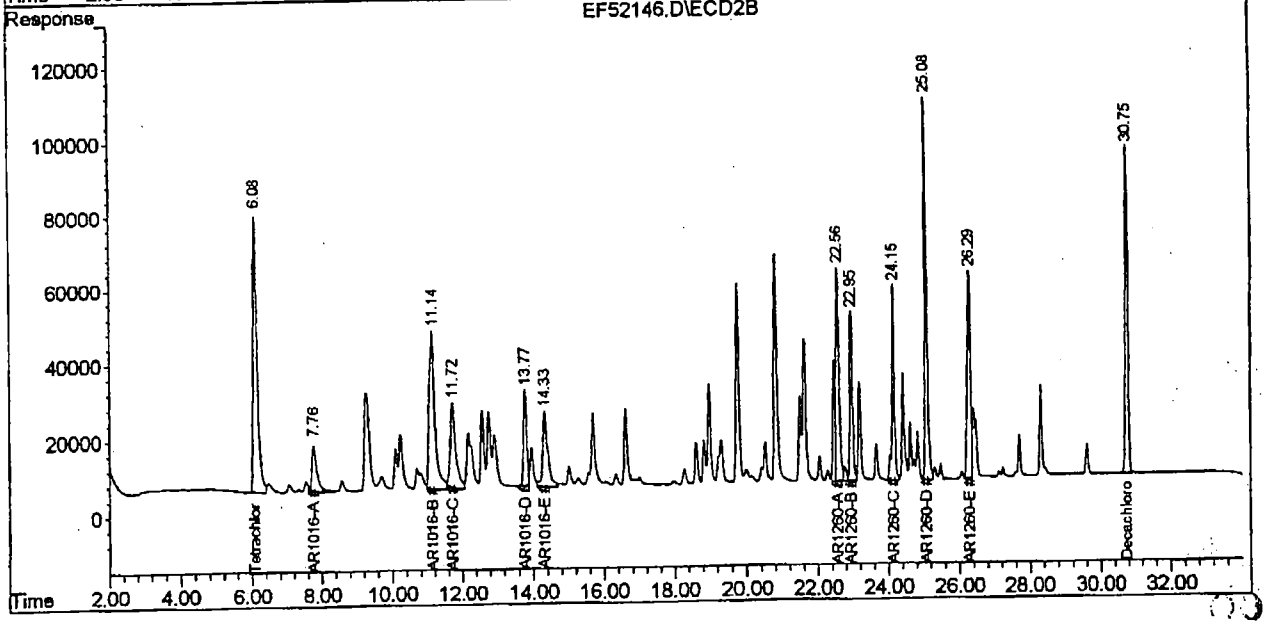
Signal #1 : C:\HPCHEM\1\DATA\ef52146.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\ef52146.D\ECD2B.CH
Acq On : 15 Jun 2004 1:29 am
Sample : ICC2533-1000, 1016/1260
Misc : OP17111,GEF2533,1.00,,,10,1
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 15 10:47 2004 Quant Results File: GEF2533.RES

Vial: 10
Operator: olgaa
Inst : GCEF
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\GEF2533.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue May 11 09:23:22 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2533.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1
Signal #1 Info : 0.32MM
Signal #2 Phase: RTX-CLP2
Signal #2 Info : 0.32MM





METALS

ACCUTEST

Metals Analysis Case Narrative/Conformance/Non-Conformance Summary

	NO	YES
1. Method blank levels below reporting limits?		✓
If not, list elements above reporting limits:		
2. Spike blank or lab control data within acceptable limits?		✓
If no, list elements outside of acceptable limits. Refer to QC summary for additional comments:		
3. Matrix Spike data within acceptable limits?		✓
If no, list elements outside of acceptable limits. Refer to QC summary for additional comments:		
4. Matrix duplicate data within acceptable limits?		✓
If no, list elements outside of acceptable limits. Refer to QC summary for additional comments:		
5. Serial dilution data within acceptable limits?	Ba ✓	all others ✓
If no, list elements outside of acceptable limits. Refer to QC summary for additional comments: Barium,		
6. Samples digested and analyzed within holding time?		✓
If holding times were not met, list elements where holding times were exceeded and explain:		
7. All analytical criteria met (High Standard, CRI, ICV, ICB, CCV, CCB, ICSA, ICSAB, SIC1, SIC2, SIC3, and Post-spike for GFAA)?		✓
If not met, list affected samples and elements:		

Additional Comments:

QC Review Signature: Mary Ann Date: 6/25/04

Form: RG06
Rev. Date: 11/01/01

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	18	anr							
Antimony	5.0	2.8	anr							
Arsenic	5.0	2	2.4	<5.0	-0.74	<5.0	1.3	<5.0	0.53	<5.0
Barium	200	.3	0.46	<200	0.95	<200	0.95	<200	0.95	<200
Beryllium	5.0	.06	anr							
Cadmium	4.0	.3	0.48	<4.0	0.56	<4.0	0.70	<4.0	0.84	<4.0
Calcium	5000	20	anr							
Chromium	10	.8	0.39	<10	0.63	<10	0.80	<10	0.78	<10
Cobalt	50	.6	anr							
Copper	25	1.3	anr							
Iron	100	14	anr							
Lead	3.0	1.7	1.2	<3.0	1.5	<3.0	1.3	<3.0	1.1	<3.0
Magnesium	5000	9.7	anr							
Manganese	15	.1	anr							
Molybdenum	10	1								
Nickel	40	2.4	anr							
Palladium	50	1.9								
Potassium	5000	13	anr							
Selenium	5.0	3	1.7	<5.0	2.2	<5.0	1.5	<5.0	1.0	<5.0
Silicon	200	6.3								
Silver	10	.7	0.25	<10	0.36	<10	-0.23	<10	-0.15	<10
Sodium	5000	160	anr							
Thallium	10	4.6	anr							
Tin	10	2.3								
Vanadium	50	.9	anr							
Zinc	20	1.9	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	18	anr							
Antimony	5.0	2.8	anr							
Arsenic	5.0	2	0.97	<5.0	-0.96	<5.0	1.2	<5.0	-0.40	<5.0
Barium	200	.3	1.5	<200	1.1	<200	1.0	<200	0.94	<200
Beryllium	5.0	.06	anr							
Cadmium	4.0	.3	1.0	<4.0	0.69	<4.0	0.51	<4.0	0.48	<4.0
Calcium	5000	20	anr							
Chromium	10	.8	1.1	<10	0.65	<10	0.91	<10	0.91	<10
Cobalt	50	.6	anr							
Copper	25	1.3	anr							
Iron	100	14	anr							
Lead	3.0	1.7	1.7	<3.0	2.3	<3.0	0.96	<3.0	2.1	<3.0
Magnesium	5000	9.7	anr							
Manganese	15	.1	anr							
Molybdenum	10	1								
Nickel	40	2.4	anr							
Palladium	50	1.9								
Potassium	5000	13	anr							
Selenium	5.0	3	1.7	<5.0	1.9	<5.0	1.8	<5.0	2.5	<5.0
Silicon	200	6.3								
Silver	10	.7	0.17	<10	-0.050	<10	0.46	<10	0.39	<10
Sodium	5000	160	anr							
Thallium	10	4.6	anr							
Tin	10	2.3								
Vanadium	50	.9	anr							
Zinc	20	1.9	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	18	anr							
Antimony	5.0	2.8	anr							
Arsenic	5.0	2	1.7	<5.0	0.80	<5.0	0.76	<5.0	4.2	<5.0
Barium	200	.3	0.71	<200	1.1	<200	1.1	<200	1.4	<200
Beryllium	5.0	.06	anr							
Cadmium	4.0	.3	-0.050	<4.0	0.21	<4.0	0.48	<4.0	0.67	<4.0
Calcium	5000	20	anr							
Chromium	10	.8	0.21	<10	0.42	<10	0.41	<10	0.83	<10
Cobalt	50	.6	anr							
Copper	25	1.3	anr							
Iron	100	14	anr							
Lead	3.0	1.7	1.7	<3.0	1.6	<3.0	0.87	<3.0	1.2	<3.0
Magnesium	5000	9.7	anr							
Manganese	15	.1	anr							
Molybdenum	10	1								
Nickel	40	2.4	anr							
Palladium	50	1.9								
Potassium	5000	13	anr							
Selenium	5.0	3	2.2	<5.0	2.0	<5.0	3.1	<5.0	5.1	* (a)
Silicon	200	6.3								
Silver	10	.7	0.020	<10	0.14	<10	0.38	<10	0.19	<10
Sodium	5000	160	anr							
Thallium	10	4.6	anr							
Tin	10	2.3								
Vanadium	50	.9	anr							
Zinc	20	1.9	anr							

(*) Outside of QC limits
(anr) Analyte not requested
(a) Within RDL limits for TCLP leachates and soils and < 3 x IDL. Only TCLP and soil samples reported for this element in the area bracketed by this QC.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	18	anr							
Antimony	5.0	2.8	anr							
Arsenic	5.0	2	0.95	<5.0	0.32	<5.0	-0.43	<5.0	-0.080	<5.0
Barium	200	.3	0.91	<200	1.1	<200	0.98	<200	0.96	<200
Beryllium	5.0	.06	anr							
Cadmium	4.0	.3	0.48	<4.0	0.40	<4.0	0.52	<4.0	0.63	<4.0
Calcium	5000	20	anr							
Chromium	10	.8	0.66	<10	0.55	<10	0.65	<10	0.81	<10
Cobalt	50	.6	anr							
Copper	25	1.3	anr							
Iron	100	14	anr							
Lead	3.0	1.7	1.1	<3.0	1.9	<3.0	0.28	<3.0	1.7	<3.0
Magnesium	5000	9.7	anr							
Manganese	15	.1	anr							
Molybdenum	10	1								
Nickel	40	2.4	anr							
Palladium	50	1.9								
Potassium	5000	13	anr							
Selenium	5.0	3	2.5	<5.0	2.4	<5.0	1.6	<5.0	2.5	<5.0
Silicon	200	6.3								
Silver	10	.7	0.61	<10	0.32	<10	0.62	<10	0.76	<10
Sodium	5000	160	anr							
Thallium	10	4.6	anr							
Tin	10	2.3								
Vanadium	50	.9	anr							
Zinc	20	1.9	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final
Aluminum	200	18	anr	
Antimony	5.0	2.8	anr	
Arsenic	5.0	2	-0.43	<5.0
Barium	200	.3	0.95	<200
Beryllium	5.0	.06	anr	
Cadmium	4.0	.3	0.55	<4.0
Calcium	5000	20	anr	
Chromium	10	.8	0.49	<10
Cobalt	50	.6	anr	
Copper	25	1.3	anr	
Iron	100	14	anr	
Lead	3.0	1.7	0.24	<3.0
Magnesium	5000	9.7	anr	
Manganese	15	.1	anr	
Molybdenum	10	1		
Nickel	40	2.4	anr	
Palladium	50	1.9		
Potassium	5000	13	anr	
Selenium	5.0	3	3.7	<5.0
Silicon	200	6.3		
Silver	10	.7	0.16	<10
Sodium	5000	160	anr	
Thallium	10	4.6	anr	
Tin	10	2.3		
Vanadium	50	.9	anr	
Zinc	20	1.9	anr	

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: result < RL

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	18								
Antimony	10	5.7								
Arsenic	10	3.7	-3.2	<10	-3.2	<10	-1.2	<10	-0.55	<10
Barium	200	.7	-0.34	<200	0.060	<200	-0.020	<200	0.20	<200
Beryllium	5.0	.2								
Boron	100	2.7								
Cadmium	5.0	.4	-0.31	<5.0	0.22	<5.0	0.88	<5.0	0.29	<5.0
Calcium	5000	27								
Chromium	10	.8	-0.48	<10	0.25	<10	0.66	<10	0.54	<10
Cobalt	50	1.1								
Copper	25	1.3								
Iron	100	12								
Lead	10	1.3	1.1	<10	2.8	<10	2.8	<10	2.3	<10
Magnesium	5000	9								
Manganese	15	.3								
Molybdenum	10	1.3								
Nickel	40	1.8								
Palladium	50	3								
Potassium	5000	20								
Selenium	10	5	-0.24	<10	-0.050	<10	-6.0	<10	-2.0	<10
Silicon	200	15								
Silver	10	.9	0.15	<10	-0.16	<10	0.28	<10	0.38	<10
Sodium	5000	280								
Strontium	10	1.4								
Thallium	10	6.5								
Tin	50	2.5								
Titanium	10	.5								
Vanadium	50	.7								
Zinc	20	2.7								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: result < RL

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final
Aluminum	200	18				
Antimony	10	5.7				
Arsenic	10	3.7	-0.27	<10	-1.9	<10
Barium	200	.7	1.7	<200	2.0	<200
Beryllium	5.0	.2				
Boron	100	2.7				
Cadmium	5.0	.4	0.58	<5.0	0.59	<5.0
Calcium	5000	27				
Chromium	10	.8	0.060	<10	0.28	<10
Cobalt	50	1.1				
Copper	25	1.3				
Iron	100	12				
Lead	10	1.3	3.4	<10	2.2	<10
Magnesium	5000	9				
Manganese	15	.3				
Molybdenum	10	1.3				
Nickel	40	1.8				
Palladium	50	3				
Potassium	5000	20				
Selenium	10	5	0.37	<10	-1.0	<10
Silicon	200	15				
Silver	10	.9	0.22	<10	0.24	<10
Sodium	5000	280				
Strontium	10	1.4				
Thallium	10	6.5				
Tin	50	2.5				
Titanium	10	.5				
Vanadium	50	.7				
Zinc	20	2.7				

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: result < RL

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	9.9								
Antimony	5.0	3.2	anr							
Arsenic	5.0	2.6	0.77	<5.0	0.74	<5.0	0.28	<5.0	2.2	<5.0
Barium	200	.4	0.69	<200	0.54	<200	0.51	<200	0.45	<200
Beryllium	5.0	.1	anr							
Cadmium	4.0	.3	0.16	<4.0	0.56	<4.0	0.36	<4.0	0.78	<4.0
Calcium	5000	9.1								
Chromium	10	.8	0.0	<10	0.52	<10	0.0	<10	0.96	<10
Cobalt	50	.9								
Copper	25	.9	anr							
Iron	100	18	anr							
Lead	3.0	1.4	-0.57	<3.0	-1.2	<3.0	-1.1	<3.0	-1.3	<3.0
Magnesium	5000	8.7								
Manganese	15	.2	anr							
Molybdenum	10									
Nickel	40	1.1	anr							
Palladium	50	2.7								
Potassium	5000	12								
Selenium	5.0	1.8	1.3	<5.0	2.1	<5.0	1.2	<5.0	0.030	<5.0
Silicon	200	7.7								
Silver	10	.7	0.060	<10	0.32	<10	-0.16	<10	0.28	<10
Sodium	5000	170								
Thallium	10	4.5	anr							
Tin	10	2.3								
Vanadium	50	1								
Zinc	20	.9	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: result < RL

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	9.9								
Antimony	5.0	3.2	anr							
Arsenic	5.0	2.6	0.49	<5.0	2.6	<5.0	1.6	<5.0	0.24	<5.0
Barium	200	.4	0.17	<200	0.17	<200	-0.20	<200	0.080	<200
Beryllium	5.0	.1	anr							
Cadmium	4.0	.3	0.49	<4.0	0.54	<4.0	0.65	<4.0	0.44	<4.0
Calcium	5000	9.1								
Chromium	10	.8	0.43	<10	0.57	<10	0.59	<10	0.44	<10
Cobalt	50	.9								
Copper	25	.9	anr							
Iron	100	18	anr							
Lead	3.0	1.4	-0.59	<3.0	0.050	<3.0	-0.48	<3.0	-0.21	<3.0
Magnesium	5000	8.7								
Manganese	15	.2	anr							
Molybdenum	10									
Nickel	40	1.1	anr							
Palladium	50	2.7								
Potassium	5000	12								
Selenium	5.0	1.8	0.84	<5.0	0.62	<5.0	2.1	<5.0	1.8	<5.0
Silicon	200	7.7								
Silver	10	.7	-0.13	<10	-0.40	<10	-0.31	<10	-0.68	<10
Sodium	5000	170								
Thallium	10	4.5	anr							
Tin	10	2.3								
Vanadium	50	1								
Zinc	20	.9	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: result < RL

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	9.9						
Antimony	5.0	3.2	anr					
Arsenic	5.0	2.6	-0.48	<5.0	-0.31	<5.0	0.89	<5.0
Barium	200	.4	2.1	<200	-0.22	<200	-0.22	<200
Beryllium	5.0	.1	anr					
Cadmium	4.0	.3	0.41	<4.0	0.39	<4.0	0.55	<4.0
Calcium	5000	9.1						
Chromium	10	.8	0.31	<10	0.42	<10	0.15	<10
Cobalt	50	.9						
Copper	25	.9	anr					
Iron	100	18	anr					
Lead	3.0	1.4	-0.080	<3.0	-1.5	<3.0	-0.36	<3.0
Magnesium	5000	8.7						
Manganese	15	.2	anr					
Molybdenum	10							
Nickel	40	1.1	anr					
Palladium	50	2.7						
Potassium	5000	12						
Selenium	5.0	1.8	1.4	<5.0	0.72	<5.0	0.30	<5.0
Silicon	200	7.7						
Silver	10	.7	-0.66	<10	-0.71	<10	-0.83	<10
Sodium	5000	170						
Thallium	10	4.5	anr					
Tin	10	2.3						
Vanadium	50	1						
Zinc	20	.9	anr					

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H20610W1.PRN
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13963

Methods: EPA 245.1, SW846 7470A
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Mercury	0.20	.063	0.036	<0.20	0.035	<0.20	0.044	<0.20	0.031	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H20610W1.PRN
QC Limits: result < RL

Date Analyzed: 06/10/04
Run ID: MA13963

Methods: EPA 245.1, SW846 7470A
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final
Mercury	0.20	.063	0.049	<0.20	0.049	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H10617W1.PRN
QC Limits: result < RL

Date Analyzed: 06/17/04
Run ID: MA13991

Methods: SW846 7470A
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Mercury	0.20	.045	-0.025	<0.20	0.0040	<0.20	-0.0030	<0.20	-0.012	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26093
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 06/16/04

Metal	RL	IDL	MB raw	final
Aluminum	0.20	.0099		
Antimony	0.20	.0028		
Arsenic	0.50	.002	0.0090	<0.50
Barium	1.0	.0003	0.0078	<1.0
Beryllium	0.0050	.00006		
Cadmium	0.0050	.0003	-0.00016	<0.0050
Calcium	5.0	.0091		
Chromium	0.010	.0008	0.0011	<0.010
Cobalt	0.050	.0006		
Copper	0.025	.0009		
Iron	0.10	.014		
Lead	0.50	.0014	0.0015	<0.50
Magnesium	5.0	.0087		
Manganese	0.015	.0001		
Molybdenum	0.010	.001		
Nickel	0.040	.0011		
Palladium	0.010	.0019		
Potassium	5.0	.012		
Selenium	0.50	.0018	0.012	<0.50
Silicon	0.20	.0063		
Silver	0.010	.0007	-0.00075	<0.010
Sodium	5.0	.16		
Thallium	0.20	.0045		
Tin	0.010	.0023		
Vanadium	0.050	.0009		
Zinc	0.020	.0009		

Associated samples MP26093: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26099
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 06/16/04

Metal	RL	IDL	MB raw	final
Mercury	0.00020	.000045	-0.000004	0<0.00020

Associated samples MP26099: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26093
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 06/09/04

Metal	N68822-1 Original	MS	Spikelot MPITCLP1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.052	1.9	2.0	92.4	75-125
Barium	0.49	9.7	10.	92.1	75-125
Beryllium					
Boron					
Cadmium	0.0025	0.045	0.050	85.0	75-125
Calcium					
Chromium	0.0099	0.19	0.20	90.1	75-125
Cobalt					
Copper					
Iron					
Lead	0.075	1.7	2.0	81.3	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel					
Palladium					
Potassium					
Selenium	0.13	2.2	2.0	103.5	75-125
Silicon					
Silver	0.0040	0.048	0.050	88.0	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP26093: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26093
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 06/09/04

Metal	N68822-1 Original	MSD	Spikelot MPITCLP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.052	1.9	2.0	92.4	0.0	20
Barium	0.49	9.5	10.	90.1	2.1	20
Beryllium						
Boron						
Cadmium	0.0025	0.044	0.050	83.0	2.2	20
Calcium						
Chromium	0.0099	0.18	0.20	85.1	5.4	20
Cobalt						
Copper						
Iron						
Lead	0.075	1.7	2.0	81.3	0.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Palladium						
Potassium						
Selenium	0.13	2.1	2.0	98.5	4.7	20
Silicon						
Silver	0.0040	0.046	0.050	84.0	4.3	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP26093: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26099
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 06/09/04

Metal	N68822-1 Original	MS	Spikelot HGPW2	% Rec	QC Limits
Mercury	0.0	0.0021	0.0020	105.0	75-125

Associated samples MP26099: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26099
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 06/09/04

Metal	N68822-1 Original	MSD	Spikelot HGPW2	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0021	0.0020	105.0	0.0	20

Associated samples MP26099: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26093
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date:			06/09/04				06/16/04	
Metal	BSP Result	Spikelot MPITCLP1	% Rec	QC Limits	LCS Result	Spikelot MPLCW2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	2.2	2.0	110.0	80-120	0.48	0.50	96.0	80-120
Barium	10.2	10.0	102.0	80-120	0.50	0.50	100.0	80-120
Beryllium								
Cadmium	0.046	0.050	92.0	80-120	0.49	0.50	98.0	80-120
Calcium								
Chromium	0.19	0.20	95.0	80-120	0.50	0.50	100.0	80-120
Cobalt								
Copper								
Iron								
Lead	1.7	2.0	85.0	80-120	0.49	0.50	98.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel								
Palladium								
Potassium								
Selenium	2.7	2.0	135.0*(a	80-120	0.43	0.50	86.0	80-120
Silicon								
Silver	0.047	0.050	94.0	80-120	0.20	0.20	100.0	80-120
Sodium								
Thallium								
Tin								
Vanadium								
Zinc								

Associated samples MP26093: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible high bias, reported samples <RL.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26099
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date:		06/09/04				06/16/04		
Metal	BSP Result	Spikelot HGPW2	% Rec	QC Limits	LCS Result	Spikelot HGPW2	% Rec	QC Limits
Mercury	0.0021	0.0020	105.0	80-120	0.0019	0.0020	95.0	80-120

Associated samples MP26099: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

QC Batch ID: MP26093
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/09/04

Metal	N68822-1 Original	SDL 3:15	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	52.2	0.00	100.0(a)	0-10
Barium	486	557	14.8*(b)	0-10
Beryllium				
Boron				
Cadmium	2.49	6.78	172.3(a)	0-10
Calcium				
Chromium	9.88	0.00	100.0(a)	0-10
Cobalt				
Copper				
Iron				
Lead	74.8	133	77.9 (a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Potassium				
Selenium	126	140	11.6 (a)	0-10
Silicon				
Silver	3.99	0.00	100.0(a)	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26093: N69732-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference. Results confirmed with analysis of second dilution.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC Date Analyzed: 06/10/04 Methods: EPA 200.7, SW846 6010B
QC Limits: 95 to 105 % Recovery Run ID: MA13961 Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	1000	1000	100.0	2000	1990	99.5	2000	1970	98.5
Barium	1000	1020	102.0	2000	2020	101.0	2000	2000	100.0
Beryllium	anr								
Cadmium	1000	1020	102.0	2000	2010	100.5	2000	1980	99.0
Calcium	anr								
Chromium	1000	999	99.9	2000	2020	101.0	2000	2000	100.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	1000	1010	101.0	2000	2010	100.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	1000	1010	101.0	2000	2020	101.0	2000	2020	101.0
Silicon									
Silver	500	500	100.0	250	249	99.6	250	248	99.2
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2010	100.5	2000	1990	99.5	2000	1990	99.5
Barium	2000	2050	102.5	2000	2030	101.5	2000	2030	101.5
Beryllium	anr								
Cadmium	2000	2020	101.0	2000	2010	100.5	2000	2020	101.0
Calcium	anr								
Chromium	2000	2040	102.0	2000	2040	102.0	2000	2040	102.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2020	101.0	2000	2020	101.0	2000	2030	101.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	2030	101.5	2000	2020	101.0	2000	2020	101.0
Silicon									
Silver	250	251	100.4	250	250	100.0	250	250	100.0
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2000	100.0	2000	1950	97.5	2000	1990	99.5
Barium	2000	2040	102.0	2000	1990	99.5	2000	2060	103.0
Beryllium	anr								
Cadmium	2000	2030	101.5	2000	1990	99.5	2000	2030	101.5
Calcium	anr								
Chromium	2000	2050	102.5	2000	2010	100.5	2000	2050	102.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2030	101.5	2000	2000	100.0	2000	2020	101.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	2030	101.5	2000	1980	99.0	2000	2000	100.0
Silicon									
Silver	250	251	100.4	250	245	98.0	250	252	100.8
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2010	100.5	2000	1970	98.5	2000	2030	101.5
Barium	2000	2050	102.5	2000	2040	102.0	2000	2050	102.5
Beryllium	anr								
Cadmium	2000	2070	103.5	2000	2030	101.5	2000	2060	103.0
Calcium	anr								
Chromium	2000	2080	104.0	2000	2040	102.0	2000	2070	103.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2060	103.0	2000	2030	101.5	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	2050	102.5	2000	2020	101.0	2000	2150	107.5
Silicon									
Silver	250	252	100.8	250	250	100.0	250	250	100.0
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1980	99.0	2000	1990	99.5	2000	1990	99.5
Barium	2000	2040	102.0	2000	2060	103.0	2000	2050	102.5
Beryllium	anr								
Cadmium	2000	2050	102.5	2000	2070	103.5	2000	2070	103.5
Calcium	anr								
Chromium	2000	2060	103.0	2000	2080	104.0	2000	2070	103.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2040	102.0	2000	2060	103.0	2000	2060	103.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	2030	101.5	2000	2050	102.5	2000	2040	102.0
Silicon									
Silver	250	250	100.0	250	253	101.2	250	252	100.8
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony									
Arsenic	1000	1040	104.0	2000	2010	100.5	2000	1920	96.0
Barium	1000	1000	100.0	2000	1990	99.5	2000	1930	96.5
Beryllium									
Boron									
Cadmium	1000	1010	101.0	2000	1990	99.5	2000	1920	96.0
Calcium									
Chromium	1000	993	99.3	2000	2010	100.5	2000	1950	97.5
Cobalt									
Copper									
Iron									
Lead	1000	1010	101.0	2000	2000	100.0	2000	1920	96.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Potassium									
Selenium	1000	1030	103.0	2000	1970	98.5	2000	1900	95.0
Silicon									
Silver	500	500	100.0	250	248	99.2	250	239	95.6
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	1970	98.5	2000	2010	100.5	2000	2040	102.0
Barium	2000	1990	99.5	2000	2040	102.0	2000	2080	104.0
Beryllium									
Boron									
Cadmium	2000	1980	99.0	2000	1960	98.0	2000	1970	98.5
Calcium									
Chromium	2000	2010	100.5	2000	1990	99.5	2000	2000	100.0
Cobalt									
Copper									
Iron									
Lead	2000	1980	99.0	2000	2010	100.5	2000	2050	102.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Palladium									
Potassium									
Selenium	2000	1960	98.0	2000	2060	103.0	2000	2040	102.0
Silicon									
Silver	250	245	98.0	250	248	99.2	250	257	102.8
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	1000	1020	102.0	2000	2050	102.5	2000	2000	100.0
Barium	1000	1050	105.0	2000	2060	103.0	2000	2020	101.0
Beryllium	anr								
Cadmium	1000	1000	100.0	2000	2010	100.5	2000	2030	101.5
Calcium									
Chromium	1000	979	97.9	2000	2000	100.0	2000	2030	101.5
Cobalt									
Copper	anr								
Iron	anr								
Lead	1000	1000	100.0	2000	2020	101.0	2000	2050	102.5
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium									
Selenium	1000	1010	101.0	2000	2050	102.5	2000	1990	99.5
Silicon									
Silver	500	500	100.0	250	256	102.4	250	258	103.2
Sodium									
Thallium	anr								
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5
Barium	2000	2040	102.0	2000	2070	103.5	2000	2050	102.5
Beryllium	anr								
Cadmium	2000	2040	102.0	2000	2010	100.5	2000	2010	100.5
Calcium									
Chromium	2000	2040	102.0	2000	2020	101.0	2000	2030	101.5
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	2060	103.0	2000	2040	102.0	2000	2030	101.5
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium									
Selenium	2000	2000	100.0	2000	2000	100.0	2000	1960	98.0
Silicon									
Silver	250	259	103.6	250	260	104.0	250	258	103.2
Sodium									
Thallium	anr								
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	1970	98.5	2000	1990	99.5	2000	1970	98.5
Barium	2000	2040	102.0	2000	2050	102.5	2000	2050	102.5
Beryllium	anr								
Cadmium	2000	1970	98.5	2000	1980	99.0	2000	1970	98.5
Calcium									
Chromium	2000	2000	100.0	2000	2020	101.0	2000	2010	100.5
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	1990	99.5	2000	1990	99.5	2000	1980	99.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium									
Selenium	2000	1930	96.5	2000	1930	96.5	2000	1920	96.0
Silicon									
Silver	250	256	102.4	250	257	102.8	250	255	102.0
Sodium									
Thallium	anr								
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: 95 to 105 % Recovery

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	2000	1970	98.5	2000	1980	99.0
Barium	2000	2030	101.5	2000	2040	102.0
Beryllium	anr					
Cadmium	2000	1950	97.5	2000	1950	97.5
Calcium						
Chromium	2000	1990	99.5	2000	1990	99.5
Cobalt						
Copper	anr					
Iron	anr					
Lead	2000	1970	98.5	2000	1960	98.0
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Palladium						
Potassium						
Selenium	2000	1910	95.5	2000	1910	95.5
Silicon						
Silver	250	254	101.6	250	254	101.6
Sodium						
Thallium	anr					
Tin						
Vanadium						
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H20610W1.PRN
QC Limits: 90 to 110 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13963

Methods: EPA 245.1, SW846 7470A
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.1	103.3	2.5	2.5	100.0	2.5	2.5	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H20610W1.PRN Date Analyzed: 06/10/04 Methods: EPA 245.1, SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA13963 Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	2.5	2.4	96.0	2.5	2.6	104.0	2.5	2.7	108.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H10617W1.PRN
QC Limits: 80 to 120 % Recovery

Date Analyzed: 06/17/04
Run ID: MA13991

Methods: SW846 7470A
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.0	100.0	2.5	2.5	100.0	2.5	2.5	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H10617W1.PRN Date Analyzed: 06/17/04 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA13991 Units: ug/l

Metal	CCV True	CCV Results	% Rec
Mercury	2.5	2.5	100.0

(*) Outside of QC limits
(anr) Analyte not requested

INITIAL LOW CALIBRATION CHECK STANDARD SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 50 to 150 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CRIB True	CRIB Results	% Rec	CRIB Results	% Rec
Aluminum	400				
Antimony	10				
Arsenic	10	10.7	107.0	9.6	96.0
Barium	400	412	103.0	419	104.8
Beryllium	10				
Cadmium	8.0	9.7	121.3	8.4	105.0
Calcium	5000				
Chromium	20	22.2	111.0	21.5	107.5
Cobalt	100				
Copper	50				
Iron	200				
Lead	6.0	7.8	130.0	7.6	126.7
Magnesium	5000				
Manganese	30				
Molybdenum	20				
Nickel	80				
Palladium	100				
Potassium	5000				
Selenium	10	10.6	106.0	13.5	135.0
Silicon	400				
Silver	20	20.0	100.0	20.5	102.5
Sodium	5000				
Thallium	20				
Tin	20				
Vanadium	100				
Zinc	40				

(*) Outside of QC limits
(anr) Analyte not requested

INITIAL LOW CALIBRATION CHECK STANDARD SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: 50 to 150 % Recovery

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	CRIB True	CRIB Results	% Rec
Aluminum	400		
Antimony	10		
Arsenic	10	10.5	105.0
Barium	400	403	100.8
Beryllium	10		
Boron	200		
Cadmium	8.0	8.3	103.8
Calcium	5000		
Chromium	20	20.4	102.0
Cobalt	100		
Copper	50		
Iron	200		
Lead	6.0	6.8	113.3
Magnesium	5000		
Manganese	30		
Molybdenum	20		
Nickel	80		
Palladium	100		
Potassium	5000		
Selenium	10	9.5	95.0
Silicon	400		
Silver	20	19.7	98.5
Sodium	5000		
Strontium	20		
Thallium	20		
Tin	20		
Titanium	20		
Vanadium	100		
Zinc	40		

(*) Outside of QC limits
(anr) Analyte not requested

INITIAL LOW CALIBRATION CHECK STANDARD SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: 50 to 150 % Recovery

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	CRIB True	CRIB Results	% Rec	CRIB Results	% Rec	CRIB Results	% Rec
Aluminum	400						
Antimony	10						
Arsenic	10	10.2	102.0	11.7	117.0	9.5	95.0
Barium	400	426	106.5	422	105.5	419	104.8
Beryllium	10						
Cadmium	8.0	8.9	111.3	9.0	112.5	8.3	103.8
Calcium	5000						
Chromium	20	20.9	104.5	22.1	110.5	20.7	103.5
Cobalt	100						
Copper	50						
Iron	200						
Lead	6.0	5.4	90.0	5.6	93.3	5.3	88.3
Magnesium	5000						
Manganese	30						
Molybdenum	20						
Nickel	80						
Palladium	100						
Potassium	5000						
Selenium	10	10.6	106.0	10.9	109.0	9.6	96.0
Silicon	400						
Silver	20	20.6	103.0	21.1	105.5	19.8	99.0
Sodium	5000						
Thallium	20						
Tin	20						
Vanadium	100						
Zinc	40						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H20610W1.PRN
QC Limits: 50 to 150 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13963

Methods: EPA 245.1, SW846 7470A
Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Mercury	0.20		0.21	105.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: H10617W1.PRN
QC Limits: to % Recovery

Date Analyzed: 06/17/04
Run ID: MA13991

Methods: SW846 7470A
Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Mercury	0.20		0.21	105.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC Date Analyzed: 06/10/04 Methods: EPA 200.7, SW846 6010B
QC Limits: 95 to 105 % Recovery Run ID: MA13961 Units: ug/l

Metal	HSTD True	HSTD Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	4000	4000	100.0
Barium	4000	4060	101.5
Beryllium	anr		
Cadmium	4000	4010	100.3
Calcium	anr		
Chromium	4000	4050	101.3
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	4040	101.0
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Palladium			
Potassium	anr		
Selenium	4000	4070	101.8
Silicon			
Silver	500	507	101.4
Sodium	anr		
Thallium	anr		
Tin			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSAB Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000	497000	99.4	514000	102.8	497000	99.4	503000	100.6
Antimony		1000	2.9		1040	104.0	3.4		1020	102.0
Arsenic		1000	-3.5		1080	108.0	0.16		1060	106.0
Barium		500	8.7		533	106.6	8.6		521	104.2
Beryllium		500	0.36		488	97.6	0.34		482	96.4
Cadmium		1000	-0.13		998	99.8	-0.32		987	98.7
Calcium	500000	500000	512000	102.4	529000	105.8	521000	104.2	524000	104.8
Chromium		500	1.4		504	100.8	1.3		497	99.4
Cobalt		500	3.3		514	102.8	3.6		508	101.6
Copper		500	2.1		528	105.6	1.9		514	102.8
Iron	200000	200000	204000	102.0	202000	101.0	205000	102.5	198000	99.0
Lead		1000	0.97		1030	103.0	-1.3		1020	102.0
Magnesium	500000	500000	511000	102.2	524000	104.8	514000	102.8	513000	102.6
Manganese		500	0.14		514	102.8	0.12		506	101.2
Molybdenum		500	2.5		570	114.0	1.3		556	111.2
Nickel		1000	2.2		996	99.6	2.9		980	98.0
Palladium		500	-0.55		551	110.2	0.15		537	107.4
Potassium			145		161		147		151	
Selenium		1000	3.4		1040	104.0	3.7		1030	103.0
Silicon			19.4		95.9		17.4		93.8	
Silver		1000	0.25		1050	105.0	0.37		1030	103.0
Sodium			-54		-22		-58		-76	
Thallium		1000	3.7		1020	102.0	-3.2		983	98.3
Tin			3.8		3.8		4.8		3.7	
Vanadium		500	-1.2		510	102.0	-0.87		498	99.6
Zinc		1000	3.9		978	97.8	4.1		968	96.8

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0610M1.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 06/10/04
Run ID: MA13961

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSAB Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000	501000	100.2	502000	100.4	501000	100.2	509000	101.8
Antimony		1000	-1.1		1010	101.0	1.5		1020	102.0
Arsenic		1000	-0.020		1050	105.0	0.17		1050	105.0
Barium		500	8.4		519	103.8	8.6		525	105.0
Beryllium		500	0.31		484	96.8	0.31		491	98.2
Cadmium		1000	0.10		988	98.8	0.33		997	99.7
Calcium	500000	500000	527000	105.4	526000	105.2	525000	105.0	534000	106.8
Chromium		500	1.1		496	99.2	0.62		500	100.0
Cobalt		500	3.4		509	101.8	2.9		516	103.2
Copper		500	2.4		514	102.8	2.5		522	104.4
Iron	200000	200000	205000	102.5	196000	98.0	203000	101.5	198000	99.0
Lead		1000	-1.1		1020	102.0	-0.44		1030	103.0
Magnesium	500000	500000	514000	102.8	509000	101.8	510000	102.0	513000	102.6
Manganese		500	0.17		503	100.6	0.060		510	102.0
Molybdenum		500	1.7		550	110.0	0.85		548	109.6
Nickel		1000	1.8		977	97.7	2.5		984	98.4
Palladium		500	-0.52		536	107.2	-1.4		545	109.0
Potassium			147		142		141		158	
Selenium		1000	2.7		1020	102.0	5.7* (a)		1030	103.0
Silicon			19.7		95.3		20.3		97.9	
Silver		1000	0.58		1030	103.0	0.54		1040	104.0
Sodium			-94		-98		-220		-98	
Thallium		1000	-8.4		963	96.3	-14**(b)		946	94.6
Tin			3.6		4.0		6.6		2.0	
Vanadium		500	-0.50		489	97.8	-0.92		491	98.2
Zinc		1000	3.8		963	96.3	4.2		971	97.1

(*) Outside of QC limits
(anr) Analyte not requested
(a) Within RDL limits for TCLP leachates. Only TCLP samples reported for this element in the area bracketed by this QC.
(b) No samples reported for this element in the area bracketed by this QC.

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec	ICSA Results	% Rec
Aluminum	500000	500000			490000	98.0	494000	98.8	494000	98.8
Antimony		1000			4.2		996	99.6	0.69	
Arsenic		1000			-4.6		1040	104.0	0.44	
Barium		500			5.4		513	102.6	7.7	
Beryllium		500			-0.71		461	92.2	-0.33	
Boron					-6.1		6.2		-7.1	
Cadmium		1000			-0.080		962	96.2	2.0	
Calcium	500000	500000			504000	100.8	504000	100.8	498000	99.6
Chromium		500			-0.42		485	97.0	-0.29	
Cobalt		500			2.3		505	101.0	3.1	
Copper		500			0.090		521	104.2	2.3	
Iron	200000	200000			203000	101.5	195000	97.5	203000	101.5
Lead		1000			4.2		1010	101.0	-4.0	
Magnesium	500000	500000			526000	105.2	523000	104.6	527000	105.4
Manganese		500			-0.27		488	97.6	-0.22	
Molybdenum		500			-3.2		485	97.0	-3.2	
Nickel		1000			-0.36		970	97.0	0.47	
Palladium		500			0.36		521	104.2	0.030	
Potassium					-3.6		-1.7		3.4	
Selenium		1000			-9.3		988	98.8	-0.47	
Silicon					-37		59.0		-42	
Silver		1000			1.3		1010	101.0	1.8	
Sodium					-22		-23		10.6	
Strontium					-0.61		-0.50		0.18	
Thallium		1000								
Tin					5.2		1.6		2.3	
Titanium					-0.74		-0.66		-0.77	
Vanadium		500			0.050		527	105.4	-0.72	
Zinc		1000			6.1		927	92.7	5.9	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IP0614M1.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 06/14/04
Run ID: MA13976

Methods: SW846 6010B
Units: ug/l

Metal	ICSA True	ICSAB True	ICSAB Results	% Rec
Aluminum	500000	500000	501000	100.2
Antimony		1000	980	98.0
Arsenic		1000	1040	104.0
Barium		500	526	105.2
Beryllium		500	458	91.6
Boron			6.9	
Cadmium		1000	938	93.8
Calcium	500000	500000	499000	99.8
Chromium		500	477	95.4
Cobalt		500	501	100.2
Copper		500	524	104.8
Iron	200000	200000	195000	97.5
Lead		1000	1010	101.0
Magnesium	500000	500000	526000	105.2
Manganese		500	484	96.8
Molybdenum		500	497	99.4
Nickel		1000	966	96.6
Palladium		500	535	107.0
Potassium			0.0	
Selenium		1000	993	99.3
Silicon			64.7	
Silver		1000	1030	103.0
Sodium			-23	
Strontium			0.13	
Thallium		1000		
Tin			4.1	
Titanium			-0.53	
Vanadium		500	524	104.8
Zinc		1000	909	90.9

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 06/16/04
Run ID: MA13983

Methods: EPA 200.7, SW846 6010B
Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec	ICSA Results	% Rec
Aluminum	500000	500000			489000	97.8	491000	98.2	496000	99.2
Antimony		1000			1.6		1040	104.0	-1.6	
Arsenic		1000			2.0		1070	107.0	0.68	
Barium		500			6.1		518	103.6	5.9	
Beryllium		500			0.44		475	95.0	0.43	
Cadmium		1000			1.1		995	99.5	-0.78	
Calcium	500000	500000			531000	106.2	533000	106.6	540000	108.0
Chromium		500			-1.3		493	98.6	-2.1	
Cobalt		500			2.2		512	102.4	1.6	
Copper		500			1.9		534	106.8	0.62	
Iron	200000	200000			205000	102.5	207000	103.5	210000	105.0
Lead		1000			2.0		1040	104.0	2.7	
Magnesium	500000	500000			516000	103.2	518000	103.6	526000	105.2
Manganese		500			-0.63		506	101.2	-0.94	
Molybdenum		500			-0.030		535	107.0	-0.62	
Nickel		1000			1.1		993	99.3	0.58	
Palladium		500			1.9		563	112.6	0.23	
Potassium					155		151		161	
Selenium		1000			0.84		1020	102.0	2.5	
Silicon					141		133		133	
Silver		1000			0.61		1070	107.0	-0.48	
Sodium					384		368		348	
Thallium		1000			9.3		1000	100.0	2.9	
Tin					3.7		2.8		6.3	
Vanadium		500			-8.9		504	100.8	-7.9	
Zinc		1000			4.1		971	97.1	2.5	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

File ID: IT0616M3.ASC Date Analyzed: 06/16/04 Methods: EPA 200.7, SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA13983 Units: ug/l

Metal	ICSA True	ICSAB True	ICSAB Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000	494000	98.8	468000	93.6	474000	94.8
Antimony		1000	1030	103.0	-2.7		950	95.0
Arsenic		1000	1070	107.0	0.74		1010	101.0
Barium		500	522	104.4	5.2		507	101.4
Beryllium		500	473	94.6	0.57		430	86.0
Cadmium		1000	989	98.9	-4.3**(a		902	90.2
Calcium	500000	500000	533000	106.6	496000	99.2	489000	97.8
Chromium		500	492	98.4	-2.4		459	91.8
Cobalt		500	509	101.8	1.6		465	93.0
Copper		500	535	107.0	-2.6		502	100.4
Iron	200000	200000	208000	104.0	200000	100.0	199000	99.5
Lead		1000	1040	104.0	2.2		956	95.6
Magnesium	500000	500000	522000	104.4	501000	100.2	503000	100.6
Manganese		500	506	101.2	-0.79		472	94.4
Molybdenum		500	535	107.0	-0.47		518	103.6
Nickel		1000	993	99.3	0.88		937	93.7
Palladium		500	559	111.8	0.13		520	104.0
Potassium			156		137		133	
Selenium		1000	1020	102.0	1.8		941	94.1
Silicon			129		112		111	
Silver		1000	1080	108.0	-0.51		1020	102.0
Sodium			416		313		364	
Thallium		1000	1010	101.0	49.4*(b)		1050	105.0
Tin			3.8		4.3		5.8	
Vanadium		500	510	102.0	-9.2		505	101.0
Zinc		1000	967	96.7	0.91		876	87.6

(*) Outside of QC limits
(anr) Analyte not requested
(a) Within RDL limits for TCLP leachates. Only TCLP samples reported for this element in the area bracketed by this QC.
(b) No samples reported for this element in the area bracketed by this QC.

GEN CHEM

ACCUTEST.

General Chemistry Case Narrative/Conformance/Non-Conformance Summary

	NO	YES
1. Blank levels below reporting limits?		✓
If no, list analytes above reporting limits:		
2. Spike blank or lab control data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
3. Matrix Spike data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
4. Matrix duplicate data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
5. Samples prepared and analyzed within holding time?		✓
If holding times were not met, list analytes where holding times were exceeded and explain:		
6. All analytical criteria met (calibrations, CCV checks, etc.)?		✓
If no, list affected samples and elements:		

Additional Comments:

QC Review Signature: Mary Hum Date: 6/25/04

Form: RG07
Rev. Date: 2/10/00

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Petroleum Hydrocarbons	GP23818/GN68431	25	<25	mg/kg	81.8	80-120%

Associated Samples:
Batch GP23818: N69732-1

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP23818/GN68448	N69531-1	mg/kg	<33	120	101	84.4	52-132%

Associated Samples:
Batch GP23818: N69732-1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N69732
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Petroleum Hydrocarbons	GP23818/GN68448	N69531-1	mg/kg	<33	<31	0.0	0-34%

Associated Samples:
Batch GP23818: N69732-1

ACCUTEST

Prep Log - TPH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Soil / Solid**
Analytical wavenumber: **2924 cm-1**
Balance #: **b-17**
Freon Used: **midatlantic 40722a**
Spike Lot #: **gne6-5858-phc**

Analyst: **HA**
GN Batch ID: 68448
GP Batch ID: **GP23818**
Analysis Date: 6/16/04
Prep Date: **6/15/04 16:46**

	Cell #	BOT #	Sample ID	Sample Wt (g)	Dilution	Dilution Prep	Comments
1	AA2		GP23818-MB1				
2	AA3		GP23818-B1				1.0 mL of 0.96 mg/mL
3	J	1	GP23818-S1(n69531-1)	10.1700			1.0 mL of 0.96 mg/mL
4	AA5	1	GP23818-D1(n69531-1)	10.2700			
5	F	1	N69529-11	10.0700			
6	AA4	1	N69529-12	10.3200			
7	AA1	1	N69529-4	9.6500			
8	Q	1	N69529-5	10.2900			
9	K	1	N69529-6	10.0500			
10	D	1	N69529-7	9.8700			
11	W	1	N69529-8	9.9500			
12	C	1	N69529-9	10.1700			
13	T	1	N69531-1 XX	9.7200			ornge-brwn,clay-like,in clumps,rocky,no odor
14	I	1	N69531-2	9.5600			
15	O	1	N69531-3	9.8800			
16	S	1	N69567-1	10.2300			
17	AA6	1	N69567-2	10.1400			
18	X	1	N69567-3	9.6400			
19	G	1	N69732-1	10.1600	1:25	1.0ml → 25ml	
20	P	1	N69733-26	10.1300			
21	E	1	N69733-27	9.9600			
22	H	1	N69733-28	10.1800			
23	R	1	N69733-29	9.7300			
24	N	1	N69733-30	9.8600			

XX = QC Sample

Analyst: [signature] Date: 6/16/04 QC Reviewer: [signature] Date: 6.16.04

[signature] 6/17/04

ACCUTEST

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Units: mg/kg

Analyst: JO
GNBatch ID: 68448
GPBatch ID: 23818
Date: 6/16/04.

Preparation Batch QC Summary Units = mg/kg.

Method Blank ID: MB Date: 6/16/04 Result: <25 DL: 25 <DL: YES.
Spike Blank ID: BSP Date: ↓ Result: 78.5 Spike: 96 %Rec.: 81.8
Duplicate ID: N69531-1 Samp. Result: <25 Dup. Result: <25 %RPD: 0
MS ID: N69531-1 Samp. Result: <25 MS Result: 79.7 Spike: 94.4 %Rec: 84.4.

Method Blank ID: ____ Date: ____ Result: ____ DL: ____ <DL: ____
Spike Blank ID: ____ Date: ____ Result: ____ Spike: ____ %Rec.: ____
Duplicate ID: ____ Samp. Result: ____ Dup. Result: ____ %RPD: ____
MS ID: ____ Samp. Result: ____ MS Result: ____ Spike: ____ %Rec: ____

Analysis Batch QC Summary Units = mg/100ml

ICV (Ext): 6/16/04 Result: 3.79 TV: 4.0 %Rec: 94.8

CCV: ____ Result: 4.04 TV: 4.0 %Rec.: 101.0
CCV: ____ Result: 4.01 TV: 4.0 %Rec.: 100.3
CCV: ↓ Result: 4.02 TV: 4.0 %Rec.: 100.5
CCV: ____ Result: ____ TV: ____ %Rec.: ____
CCV: ____ Result: ____ TV: ____ %Rec.: ____
CCV: ____ Result: ____ TV: ____ %Rec.: ____

CCB: ____ Result: ____ DL: ____ <DL: ____
CCB: ____ Result: ____ DL: ____ <DL: ____
CCB: ____ Result: ____ DL: ____ <DL: ____
CCB: ____ Result: ____ DL: ____ <DL: ____
CCB: ____ Result: ____ DL: ____ <DL: ____
CCB: ____ Result: ____ DL: ____ <DL: ____

Reagent Reference Numbers:
See attached sheets

Freon Manufacturer: ____ Lot Number: ____
Sodium Sulfate Manufacturer: ____ Lot Number: ____
Silica Gel Manufacturer: ____ Lot Number: ____

Analyst: [signature] Date: 6/16/04.

Comments: ____

Form: GN-109-01
Rev. Date:2/15/99

Total Petroleum Hydrocarbon Soils

Test Title: PHC
Analyst: JAREDO
Prep Date: 6/15/2004
GP Batch #: GP23818

EPA 418.1 Mod

Analysis Date: 6/16/2004
GN Batch: GN68448

Corr. Coef: 0.999786
Slope: 115.4875
Intercept: -0.71481

Check QC Sample	Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol.	Sam. Wt.	Dilution	Final Conc.	Units	DL	Factor
		Cal Blk	0	0.0							
		STD 1	0.048	5.00							
		STD 2	0.092	10.00							
		STD 3	0.187	20.00							
		STD 4	0.356	40.00							
		STD 5	0.53	60.00	Final Vol. (ml)	Sam Wt (g)	Dilution	Final Conc.	Units	DL	Factor
		STD 6	0.692	80.00							
		ICV	0.334	37.86	NA	NA	NA	NA	mg/l	0.5	NA
		CCV	0.356	40.40	NA	NA	NA	NA	mg/l	0.5	NA
MB		GP23818-MB2	0.003	-0.37	25.0	10.00	1	-0.9	mg/kg	25.0	1
BS		GP23818-B2	0.278	31.39	25.0	10.00	1	78.5	mg/kg	25.0	1
S		GP23818-S1	0.287	32.43	25.0	10.17	1	79.7	mg/kg	25.0	0.983284
UP		GP23818-D1	0.013	0.79	25.0	10.27	1	1.9	mg/kg	25.0	0.97371
		N69529-11	0.014	0.90	25.0	10.07	1	2.2	mg/kg	25.0	0.993049
		N69529-12	0.017	1.25	25.0	10.32	1	3.0	mg/kg	25.0	0.968992
		N69529-4	0.048	4.83	25.0	9.65	1	12.5	mg/kg	25.0	1.036269
		N69529-5	0.03	2.75	25.0	10.29	1	6.7	mg/kg	25.0	0.971817
		N69529-6	0.012	0.67	25.0	10.05	1	1.7	mg/kg	25.0	0.995025
		N69529-7	0.037	3.56	25.0	9.87	1	9.0	mg/kg	25.0	1.013171
		CCV	0.353	40.05	NA	NA	NA	NA	mg/l	0.5	NA
1		N69529-8	0.011	0.56	25.0	9.95	1	1.4	mg/kg	25.0	1.005025
		N69529-9	0.015	1.02	25.0	10.17	1	2.5	mg/kg	25.0	0.983284
		N69531-1	0.035	3.33	25.0	9.72	1	8.6	mg/kg	25.0	1.028807
4		N69531-2	0.205	22.96	25.0	9.56	1	60.0	mg/kg	25.0	1.046025
5		N69531-3	0.174	19.38	25.0	9.88	1	49.0	mg/kg	25.0	1.012146
		N69567-1	0.436	49.64	25.0	10.23	1	121.3	mg/kg	25.0	0.977517
7		N69567-2	0.02	1.59	25.0	10.14	1	3.9	mg/kg	25.0	0.986193
8		N69567-3	0.052	5.29	25.0	9.64	1	13.7	mg/kg	25.0	1.037344
		N69732-1	OVR	#VALUE!	25.0	10.16	1			25.0	0.984252
		N69732-1	0.487	55.53	25.0	10.16	25	3415.8	mg/kg	25.0	0.984252
		CCV	0.354	40.17	NA	NA	NA	NA	mg/l	0.5	NA
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
3				#VALUE!	25.0		1			25.0	#DIV/0!
4				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
7				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
0				#VALUE!	25.0		1			25.0	#DIV/0!
		CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
				#VALUE!	25.0		1			25.0	#DIV/0!
2				#VALUE!	25.0		1			25.0	#DIV/0!
3				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
6				#VALUE!	25.0	27.00	1			25.0	0.37037
				#VALUE!	25.0	28.00	1			25.0	0.357143
				#VALUE!	25.0	29.00	1			25.0	0.344828
9				#VALUE!	25.0	30.00	1			25.0	0.333333
				#VALUE!	25.0	31.00	1			25.0	0.322581
		CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
				#VALUE!	25.0		1			25.0	#DIV/0!
3				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!

ACCUTEST

GN: 68448-

Reagent Information Log - PHC

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Fluorocarbon - 113	Mid Atlantic 40722A	N/A
Spike Solution	GNE6-5858-PHC	7/15/04
Sodium Sulfate	JT Baker #Y19611	N/A
Hydromatrix	Varian 12604	N/A
Silica Gel	Fischer # 020594	N/A
ICV	GNE6-5857-PHC	7/15/04
CCV	GNE6-5856-PHC	7/15/04

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

Form: GN-087 1-45B
Rev. Date: 4/11/00

ACCUTEST

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHc

GN or GP Number: 68448

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
Dil. Std. Stock	GNE4-5415-PHC	10,000ppm	10.0	FREON	100	1000ppm	7/15/04	JO	6/15/04
Dil. Ext. Stock	GNE4-5416-PHC	10000ppm	10.0	FREON	100	1000ppm	7/15/04	↓	6/15/04

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
STD 1	GNE6-5856-PHC	1000ppm	0.5	FREON	100ml	5.0	7/15/04	JO	6/15/04
STD 2	↓	↓	1.0	↓	↓	10.0	↓	↓	↓
STD 3			2.0			20.0			
STD 4			4.0			40.0			
STD 5			6.0			60.0			
STD 6			8.0			80.0			
Ext. (ICV)	GNE6-5857-PHC	1000ppm	4.0	FREON	100ml	40.0	7/15/04	↓	6/15/04

Form: GN121
Rev. Date:9/14/01

ACCUTEST

Prep Log - TPH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Soil / Solid**
Analytical wavenumber: **2924 cm-1**
Balance #: **b-17**
Freon Used: **midatlantic 40722a**
Spike Lot #: **gne6-5858-phc**

Analyst: **HA**
GN Batch ID: GN68431
GP Batch ID: **GP23818**
Analysis Date:
Prep Date: **6/15/04 16:46**

	Cell #	BOT #	Sample ID	Sample Wt (g)	Dilution	Dilution Prep	Comments
1	AA2		GP23818-MB1 (A)				
2	AA3		GP23818-B1 ↓				1.0 mL of 0.96 mg/mL
3			GP23818-S1(n69531-1)				1.0 mL of 0.96 mg/mL
4			GP23818-D1(n69531-1)				
5			N69529-11				
6			N69529-12				
7			N69529-4				
8			N69529-5				
9			N69529-6				
10			N69529-7				
11			N69529-8				
12			N69529-9				
13			N69531-1 XX				clay-like, in clumps, rocky,no odor
14			N69531-2				
15			N69531-3				
16			N69567-1				
17			N69567-2				
18			N69567-3				
19			N69732-1				
20	P	1	N69733-26 (A)	10.1300	1:25	1.0 mL → 25 mL freon	
21	E	1	N69733-27	9.9600	1:50	0.50 mL → 25 mL freon	
22	H	1	N69733-28	10.1800	1:125	0.20 mL → 25 mL freon	
23	R	1	N69733-29	9.7300	1:250	0.10 mL → 25 mL freon	
24	N	1	N69733-30 ↓	9.8600	1:25	1.0 mL → 25 mL freon	

XX = QC Sample

Analyst: [signature] Date: 6/15/04 QC Reviewer: [signature] Date: 6-16-04

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Total Petroleum Hydrocarbon Soils

Test Title: PHC
Analyst: HA
Prep Date:
GP Batch #: GP23818

EPA 418.1 Mod

Analysis Date: 6/15/2004
GN Batch: GN68431

Corr. Coef: 0.999859
Slope: 115.2151
Intercept: -0.75588

Check QC Sample	Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol.	Sam. Wt.	Dilution	Final Conc.	Units	DL	Factor
		Cal Blk	0	0.0							
		STD 1	0.049	5.00							
		STD 2	0.095	10.00							
		STD 3	0.188	20.00							
		STD 4	0.354	40.00							
		STD 5	0.528	60.00	Final Vol. (ml)	Sam Wt (g)					
		STD 6	0.698	80.00							
	22:11	ICV	0.347	39.22	NA	NA	NA	NA	mg/l	0.5	NA
	22:12	CCV	0.352	39.80	NA	NA	NA	NA	mg/l	0.5	NA
MB		GP23818-MB1	0.005	-0.18	25.0	10.00	1	-0.4	mg/kg	25.0	1
BS		GP23818-B1	0.279	31.39	25.0	10.00	1	78.5	mg/kg	25.0	1
MS		conf		#VALUE!	25.0	10.00	1			25.0	1
DUP		conf		#VALUE!	25.0	10.00	1			25.0	1
		N69733-26	OVR	#VALUE!	25.0	10.13	1			25.0	0.987167
		N69733-26	0.19	21.13	25.0	10.13	25	1304.0	mg/kg	25.0	0.987167
		N69733-27	OVR	#VALUE!	25.0	9.96	1			25.0	1.004016
		N69733-27	0.212	23.67	25.0	9.96	50	2970.6	mg/kg	25.0	1.004016
		N69733-28	OVR	#VALUE!	25.0	10.18	1			25.0	0.982318
		N69733-28	0.247	27.70	25.0	10.18	125	8503.9	mg/kg	25.0	0.982318
	22:27	CCV	0.356	40.26	NA	NA	NA	NA	mg/l	0.5	NA
		N69733-29	OVR	#VALUE!	25.0	9.73	1			25.0	1.027749
		N69733-29	0.219	24.48	25.0	9.73	250	15722.1	mg/kg	25.0	1.027749
		N69733-30	OVR	#VALUE!	25.0	9.86	1			25.0	1.014199
		N69733-30	0.178	19.75	25.0	9.86	25	1252.1	mg/kg	25.0	1.014199
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
	22:36	CCV	0.358	40.49	NA	NA	NA	NA	mg/l	0.5	NA
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
		CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0	27.00	1			25.0	0.37037
		CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
				#VALUE!	25.0	28.00	1			25.0	0.357143
				#VALUE!	25.0	29.00	1			25.0	0.344828
				#VALUE!	25.0	30.00	1			25.0	0.333333
				#VALUE!	25.0	31.00	1			25.0	0.322581

ACCUTEST.

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod** Units: mg/kg

Analyst: HA
GNBatch ID: 68431
GPBatch ID: 23818
Date: 6/15/04

Preparation Batch QC Summary Units = mg/kg

Method Blank ID: GP23818-MB1 Date: 6/15/04 Result: <25.0 DL: 25.0 <DL: yes
Spike Blank ID: ↓ -B1 Date: ↓ Result: 78.5 Spike: 96.0 %Rec.: 82%
Duplicate ID: - Samp. Result: - Dup. Result: - %RPD: -
MS ID: - Samp. Result: - MS Result: - Spike: - %Rec: -

Method Blank ID: Date: Result: DL: <DL:
Spike Blank ID: Date: Result: Spike: %Rec.:
Duplicate ID: Samp. Result: Dup. Result: %RPD:
MS ID: Samp. Result: MS Result: Spike: %Rec:

Analysis Batch QC Summary Units = mg/L

ICV (Ext): 6/15/04 Result: 3.92 TV: 4.00 %Rec: 98.0%

CCV : Result: 3.98 TV: %Rec.: 99.5%
CCV : Result: 4.03 TV: %Rec.: 100.8%
CCV : Result: 4.05 TV: %Rec.: 101.3%
CCV : Result: TV: %Rec.:
CCV : Result: TV: %Rec.:
CCV : Result: TV: %Rec.:

CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:

Reagent Reference Numbers:

see attached

Freon Manufacturer: Lot Number:
Sodium Sulfate Manufacturer: Lot Number:
Silica Gel Manufacturer: Lot Number:

Analyst: Helen R Otey Date: 6/15/04

Comments:

Form: GN-109-01
Rev. Date:2/15/99

ACCUTEST

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHc

GN or GP Number: 68431

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
Dil. Std. Stock	GNE4-5415-PHC	10,000ppm	10.0	FREON	100	1000ppm	7/15/04	HA	6/15/04
Dil. Ext. Stock	GNE4-5416-PHC	10000ppm	10.0	FREON	100	1000ppm	7/15/04	HA	6/15/04

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
STD 1	GNE6-5856-PHC	1000ppm	0.5	FREON	100ml	5.0	7/15/04	HA	6/15/04
STD 2			1.0			10.0			
STD 3			2.0			20.0			
STD 4			4.0			40.0			
STD 5			6.0			60.0			
STD 6			8.0			80.0			
Ext. (ICV)	GNE6-5857-PHC	1000ppm	4.0	FREON	100ml	40.0	7/15/04	HA	6/15/04

Form: GN121
Rev. Date:9/14/01

ACCUTEST

GN: 68431

Reagent Information Log - PHC

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Fluorocarbon - 113	MIDATLANTIC 407222a	NA
Spike Solution	GNE6 - 5858 - PHC	7/15/04
Sodium Sulfate	JT Baker #Y19611	N/A
Hydromatrix	Varian 12604	N/A
Silica Gel	Fischer # 020594	N/A
ICV	GNE6 - 5857 - PHC	7/15/04
CCV	GNE6 - 5856 - PHC	7/15/04

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

Form: GN-087 1-45B
Rev. Date: 4/11/00

New Jersey
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Laboratories

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JUN 15 2004

06/14/04

Technical Report for

Dewberry

Atlantic States Cast Iron Pipe, Phillipsburg, NJ

3852

Accutest Job Number: N67805

Sampling Date: 05/21/04

Report to:

Dewberry-Goodkind, Inc.
299 Webro Road
Parsippany, NJ 08054

ATTN: Larry Brunt

Total number of pages in report: 130

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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Accutest Laboratories

Sample Summary

Dewberry

Job No: N67805

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N67805-1	05/21/04	08:45 MS	05/21/04	SO	Soil	TP-1 1-1.5
N67805-1R	05/21/04	08:45 MS	05/21/04	SO	Soil	TP-1 1-1.5
N67805-2	05/21/04	10:30 MS	05/21/04	SO	Soil	TP-1 2.5-3
N67805-3	05/21/04	10:40 MS	05/21/04	SO	Soil	TP-1 5.5-6
N67805-4	05/21/04	08:50 MS	05/21/04	SO	Soil	TP-2 1-1.5
N67805-4R	05/21/04	08:50 MS	05/21/04	SO	Soil	TP-2 1-1.5
N67805-5	05/21/04	10:08 MS	05/21/04	SO	Soil	TP-2 2.5-3
N67805-6	05/21/04	10:15 MS	05/21/04	SO	Soil	TP-2 5.5-6
N67805-7	05/21/04	08:53 MS	05/21/04	SO	Soil	TP-3 1-1.5
N67805-8	05/21/04	09:40 MS	05/21/04	SO	Soil	TP-3 2.5-3
N67805-9	05/21/04	09:45 MS	05/21/04	SO	Soil	TP-3 5-5.6
N67805-10	05/21/04	12:00 MS	05/21/04	SO	Soil	S-1
N67805-10R	05/21/04	12:00 MS	05/21/04	SO	Soil	S-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Dewberry

Job No: N67805

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N67805-11	05/21/04	12:20 MS	05/21/04	SO	Soil	S-2
N67805-11R	05/21/04	12:20 MS	05/21/04	SO	Soil	S-2

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

ACCUTEST.

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For
Non-USEPA/CLP Methods

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New Jersey * Fresh Ponds Corporate Village * Building B * 2235 Route 130 * Dayton, NJ 08810 Tel: 732.329.0200 * Fax: 732.329.3499 * http://www.accutest.com

RESULTS

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-1 1-1.5		
Lab Sample ID:	N67805-1	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	76.6
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	5280	1700	mg/kg	50	05/22/04	SJG	EPA 418.1 M
Solids, Percent	76.6		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-1 1-1.5		
Lab Sample ID:	N67805-1R	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	76.6
Project:	Atlantic States Cast Iron Pipe		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B62482.D	1	06/01/04	WHS	05/28/04	OP17035	EB1651
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	104	87	25	ug/kg	
208-96-8	Acenaphthylene	43.0	87	19	ug/kg	J
120-12-7	Anthracene	113	87	23	ug/kg	
56-55-3	Benzo(a)anthracene	323	87	24	ug/kg	
50-32-8	Benzo(a)pyrene	296	87	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	566	87	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	87	34	ug/kg	
207-08-9	Benzo(k)fluoranthene	416	87	34	ug/kg	
218-01-9	Chrysene	398	87	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	87	32	ug/kg	
206-44-0	Fluoranthene	693	87	20	ug/kg	
86-73-7	Fluorene	123	87	22	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	87	49	ug/kg	
91-20-3	Naphthalene	2500	87	22	ug/kg	
85-01-8	Phenanthrene	787	87	24	ug/kg	
129-00-0	Pyrene	572	87	46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	98%		27-123%
321-60-8	2-Fluorobiphenyl	72%		40-113%
1718-51-0	Terphenyl-d14	59%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-1 5.5-6		
Lab Sample ID:	N67805-3	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	76.5
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	108	34	mg/kg	1	05/22/04	SJG	EPA 418.1 M
Solids, Percent	76.5		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-2 1-1.5		
Lab Sample ID:	N67805-4	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	83.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	20100	3800	mg/kg	125	05/22/04	SJG	EPA 418.1 M
Solids, Percent	83.3		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-2 1-1.5		
Lab Sample ID:	N67805-4R	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	83.3
Project:	Atlantic States Cast Iron Pipe		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B62483.D	1	06/01/04	WHS	05/28/04	OP17035	EB1651
Run #2 [a]	B62492.D	1	06/01/04	WHS	05/28/04	OP17035	EB1651

	Initial Weight	Final Volume
Run #1	30.0 g	5.0 ml
Run #2	30.0 g	5.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	316	400	110	ug/kg	J
208-96-8	Acenaphthylene	ND	400	85	ug/kg	
120-12-7	Anthracene	163	400	110	ug/kg	J
56-55-3	Benzo(a)anthracene	365	400	110	ug/kg	J
50-32-8	Benzo(a)pyrene	295	400	94	ug/kg	J
205-99-2	Benzo(b)fluoranthene	194	400	97	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	400	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	293	400	160	ug/kg	J
218-01-9	Chrysene	446	400	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	400	150	ug/kg	
206-44-0	Fluoranthene	921	400	94	ug/kg	
86-73-7	Fluorene	193	400	100	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	400	230	ug/kg	
91-20-3	Naphthalene	749	400	100	ug/kg	
85-01-8	Phenanthrene	970	400	110	ug/kg	
129-00-0	Pyrene	393	400	210	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%	80%	27-123%
321-60-8	2-Fluorobiphenyl	81%	82%	40-113%
1718-51-0	Terphenyl-d14	53%	42%	27-144%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-2 2.5-3		
Lab Sample ID:	N67805-5	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	84.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	5180	1500	mg/kg	50	05/22/04	SJG	EPA 418.1 M
Solids, Percent	84.9		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-2 5.5-6		
Lab Sample ID:	N67805-6	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	87.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	132	30	mg/kg	1	05/22/04	SJG	EPA 418.1 M
Solids, Percent	87.9		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-3 1-1.5		
Lab Sample ID:	N67805-7	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	79.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	4070	810	mg/kg	25	05/22/04	SJG	EPA 418.1 M
Solids, Percent	79.3		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-3 2.5-3		
Lab Sample ID:	N67805-8	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	84.8
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	3790	740	mg/kg	25	05/22/04	SJG	EPA 418.1 M
Solids, Percent	84.8		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-3 5-5.6		
Lab Sample ID:	N67805-9	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	89.0
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	125	29	mg/kg	1	05/22/04	SJG	EPA 418.1 M
Solids, Percent	89		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	S-1		
Lab Sample ID:	N67805-10	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
		Percent Solids:	68.1
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	11800	3800	mg/kg	100	05/22/04	SJG	EPA 418.1 M
Solids, Percent	68.1		%	1	05/22/04	TM	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	S-1		
Lab Sample ID:	N67805-10R	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	68.1
Project:	Atlantic States Cast Iron Pipe		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B62484.D	1	06/01/04	WHS	05/28/04	OP17035	EB1651
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	490	140	ug/kg	
208-96-8	Acenaphthylene	ND	490	100	ug/kg	
120-12-7	Anthracene	170	490	130	ug/kg	J
56-55-3	Benzo(a)anthracene	520	490	140	ug/kg	
50-32-8	Benzo(a)pyrene	ND	490	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	490	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	490	190	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	490	190	ug/kg	
218-01-9	Chrysene	567	490	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	490	180	ug/kg	
206-44-0	Fluoranthene	990	490	110	ug/kg	
86-73-7	Fluorene	147	490	130	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	490	280	ug/kg	
91-20-3	Naphthalene	2520	490	120	ug/kg	
85-01-8	Phenanthrene	971	490	130	ug/kg	
129-00-0	Pyrene	535	490	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		27-123%
321-60-8	2-Fluorobiphenyl	77%		40-113%
1718-51-0	Terphenyl-d14	49%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	S-2		
Lab Sample ID:	N67805-11R	**Date Sampled:**	05/21/04
Matrix:	SO - Soil	**Date Received:**	05/21/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	62.4
Project:	Atlantic States Cast Iron Pipe		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B62485.D	1	06/01/04	WHS	05/28/04	OP17035	EB1651
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	112	110	30	ug/kg	
208-96-8	Acenaphthylene	39.9	110	23	ug/kg	J
120-12-7	Anthracene	157	110	28	ug/kg	
56-55-3	Benzo(a)anthracene	494	110	30	ug/kg	
50-32-8	Benzo(a)pyrene	474	110	25	ug/kg	
205-99-2	Benzo(b)fluoranthene	1020	110	26	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	42	ug/kg	
207-08-9	Benzo(k)fluoranthene	729	110	42	ug/kg	
218-01-9	Chrysene	579	110	30	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	39	ug/kg	
206-44-0	Fluoranthene	1070	110	25	ug/kg	
86-73-7	Fluorene	164	110	27	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	60	ug/kg	
91-20-3	Naphthalene	1590	110	26	ug/kg	
85-01-8	Phenanthrene	900	110	29	ug/kg	
129-00-0	Pyrene	461	110	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		27-123%
321-60-8	2-Fluorobiphenyl	71%		40-113%
1718-51-0	Terphenyl-d14	39%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

CHAIN OF CUSTODY

ACCUTEST Laboratories

50

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # N67805

Client / Reporting Information

Company Name	DEWBERRY
Address	299 WEBRO RD
City / State / Zip	PARSIPPANY NJ 07054
Project Contact / E-mail	LARRY BRUNT lbrunt@dewberry.com
Phone #	(973) 428 4909
Sampler's Name	MEHMET SECILMIS

Project Information

Project Name	Atlantic States Cast Iron Pipe
Street	
City / State	
Project #	
Fax #	
Client Purchase Order #	

Requested Analysis

8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PAUG ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐ PALG ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAP ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ BN ☐ PAH ☐ PADF ☐ +TICS ☐

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	TPHC	PAH	LAB USE ONLY
-1	TP-1 0-0.5 *		5/24/04	8:45	MS	Soil	1									✓	✓	HC31
-2	TP-1 2.5-3 *		"	10:30	"	"	"									✓	✓	
-3	TP-1 5.5-6 *		"	10:40	"	"	"									✓	✓	
-4	TP-2 0-0.5 *		"	8:50	"	"	"									✓	✓	
-5	TP-2 2.5-3 *		"	10:03	"	"	"									✓	✓	
-6	TP-2 5.5-6 *		"	10:15	"	"	"									✓	✓	
-7	TP-3 0-0.5 *		"	8:53	"	"	"									✓	✓	
-8	TP-3 2.5-3 *		"	9:40	"	"	"									✓	✓	
-9	TP-3 3.5-4 *		"	9:45	"	"	"									✓	✓	

PHC FAST TRACK

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☑ 1 Day *EMERGENCY*
- ☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

*Proceed with TPHC analysis, wait authorization for PAH analysis

⊕ PROCEED w/ ANALYSIS MS

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 [signature]	5/24/04 6:30	1 Jelle Duncan	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☑ 0 / Cooler Temp. ⊕ 23.8°C

1A 21

CHAIN OF CUSTODY

ACCUTEST Laboratories

50

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #

Bottle Order Control #

Accutest Quote #

Accutest Job # N67805

Client / Reporting Information

Company Name: DEWBERRY

Address: 299 WEBRO RD

City: PARSIPPANY State: NJ Zip: 07054

Project Contact: LARRY BERRY E-mail: lberry@dewberry.com

Phone #: (973) 428 4909

Sampler's Name: MEHMET SECLIMIS

Project Information

Project Name: Atlantic States Cast Iron Pipe

Street:

City: State:

Project #:

Fax #:

Client Purchase Order #:

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vol #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260 ☐ BTEX ☐ 624 ☐ MTBE ☐ 8021 ☐ TBA ☐ 602 ☐ NAP ☐ PAUC ☐ PALG ☐	8260 ☐ TBA ☐ 624 ☐ NAP ☐ TCL ☐ PPL ☐ +10 ☐ +15 ☐ STARS ☐ MTBE ☐	8270 ☐ ABN ☐ 625 ☐ BN ☐ TCL ☐ PRH ☐ PPL ☐ PADF ☐ STARS ☐ +TICs ☐	TPHC	PAH						
-10	S-1 *		5/21/04	12:00	MS	Soil	1												✓	✓					
-11	S-2 *		5/21/04	12:20	MS	Soil	1												✓	✓					

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

LAB USE ONLY: HC31

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☑ 1 Day *EMERGENCY*
- ☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

* Proceed with TPHC Analysis, Wait authorization for PAH Analysis

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 [signature]	5/21/04 6:30	1 Jesse Duncan	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 23.8°C

NJ
DJ

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control # N67805
Accutest Quote #	Accutest Job #

Client / Reporting Information

Company Name	DEWBERRY
Address	299 WEBRO RD
City / State / Zip	PARSIPPANY NJ 07054
Project Contact / E-mail	LARRY BRUNT lbrunt@dewberry.com
Phone #	(973) 428 4909
Sampler's Name	MEHMET SECILMIS

Project Information

Project Name	Atlantic State Cast Iron Pipe
Street	
City / State	
Project #	
Fax #	
Client Purchase Order #	

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles	TPHC	PAH	LAB USE ONLY
	TP-1 1-1.5' /MS		5/24/04	8:45	MS	Soil	1		✓	✓	
	TP-1 2.5-3'		"	10:30	"	"	"		✓	✓	
	TP-1 5.5-6'		"	10:40	"	"	"		✓	✓	
	TP-2 1-1.5' /MS		"	8:50	"	"	"		✓	✓	
	TP-2 2.5-3'		"	10:09	"	"	"		✓	✓	
	TP-2 5.5-6'		"	10:15	"	"	"		✓	✓	
	TP-3 1-1.5' /MS		"	8:55	"	"	"		✓	✓	
	TP-3 2.5-3'		"	9:40	"	"	"		✓	✓	
	TP-3 3.5-4'		"	9:45	"	"	"		✓	✓	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ Other

Approved By: / Date

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial 'A'
- ☐ Commercial 'B'
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other ____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format ____

Commercial 'A' = Results Only

Comments / Remarks

*Proceed with TPHC analysis, wait authorization for PAH analysis

@ PROCEED w/ ANALYSIS me

Sample Custody must be documented below each time samples change possession, including courier delivery

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time	Received by:
1 [signature]	5/24/04 6:30	1 [signature]	2		2
Relinquished by: 3	Date Time	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time	Received by: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☐ Cooler Temp @23.8°C

05/24/04 MON 16:16 [TX/RX NO 8461] 002

23

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control # N67805
Accutest Quote #	Accutest Job #

Client / Reporting Information

Company Name	DEWBERRY
Address	299 WEBRO RD
City / State / Zip	PARSIPPANY NJ 07054
Project Contact / E-mail	LARRY BRUNT lbrunt@dewberry.com
Phone #	(973)428 4909
Sampler's Name	MEHMET SEGILMIS

Project Information

Project Name	Atlantic Steel Cast Iron Pipe
Street	
City / State	
Project #	
Fax #	
Client Purchase Order #	

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PAUG ☐ STEX ☐ MTBE ☐ TBA ☐ NAP ☐ PAUG ☐	8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAP ☐ +10 ☐ +15 ☐	8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ BN ☐ PAH ☐ PADF ☐ +TICs ☐	TPHC	AAH							Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SG - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; LAB USE ONLY
	S-1 *		5/21/04	12:00	MS	Soil	1												✓	✓							
	S-2 *		5/21/04	12:00	MS	Soil	1												✓	✓							

Turnaround Time (Business Days)

- ☐ Std 15 Business Days
- ☐ 10 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☑ 1 Day EMERGENCY
- ☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

* Proceed with TPHC Analysis,
Wait authorization for PAH Analysis

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by
1 [signature]	5/21/04 6:30	1 [signature]	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☐ Cooler Temp. 23.8°C

05/24/04 MON 16:16 [TX/RX NO 8461] 003

24

Internal Sample Tracking Chronicle

Dewberry

Job No: N67805

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N67805-1 TP-1 1-1.5	Collected: 21-MAY-04 08:45 By: MS		Received: 21-MAY-04 By: MPC			
N67805-1	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-1	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-2 TP-1 2.5-3	Collected: 21-MAY-04 10:30 By: MS		Received: 21-MAY-04 By: MPC			
N67805-2	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-2	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-3 TP-1 5.5-6	Collected: 21-MAY-04 10:40 By: MS		Received: 21-MAY-04 By: MPC			
N67805-3	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-3	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-4 TP-2 1-1.5	Collected: 21-MAY-04 08:50 By: MS		Received: 21-MAY-04 By: MPC			
N67805-4	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-4	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-5 TP-2 2.5-3	Collected: 21-MAY-04 10:08 By: MS		Received: 21-MAY-04 By: MPC			
N67805-5	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-5	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-6 TP-2 5.5-6	Collected: 21-MAY-04 10:15 By: MS		Received: 21-MAY-04 By: MPC			
N67805-6	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-6	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-7 TP-3 1-1.5	Collected: 21-MAY-04 08:53 By: MS		Received: 21-MAY-04 By: MPC			
N67805-7	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT

Internal Sample Tracking Chronicle

Dewberry

Job No: N67805

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N67805-7	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-8 TP-3 2.5-3	Collected: 21-MAY-04 09:40 By: MS		Received: 21-MAY-04 By: MPC			
N67805-8	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-8	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-9 TP-3 5-5.6	Collected: 21-MAY-04 09:45 By: MS		Received: 21-MAY-04 By: MPC			
N67805-9	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-9	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-10 S-1	Collected: 21-MAY-04 12:00 By: MS		Received: 21-MAY-04 By: MPC			
N67805-10	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-10	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-11 S-2	Collected: 21-MAY-04 12:20 By: MS		Received: 21-MAY-04 By: MPC			
N67805-11	EPA 418.1 M	22-MAY-04	SJG	22-MAY-04	TC	PHCFT
N67805-11	ASTM 4643-00	22-MAY-04	TM			%SOLFT
N67805-1R TP-1 1-1.5	Collected: 21-MAY-04 08:45 By: MS		Received: 21-MAY-04 By: MPC			
N67805-1R	SW846 8270C	01-JUN-04 15:35	WHS	28-MAY-04	RL	B8270PAH
N67805-4R TP-2 1-1.5	Collected: 21-MAY-04 08:50 By: MS		Received: 21-MAY-04 By: MPC			
N67805-4R	SW846 8270C	01-JUN-04 16:11	WHS	28-MAY-04	RL	B8270PAH
N67805-4R	SW846 8270C	01-JUN-04 21:34	WHS	28-MAY-04	RL	B8270PAH
N67805-10R S-1	Collected: 21-MAY-04 12:00 By: MS		Received: 21-MAY-04 By: MPC			

Internal Sample Tracking Chronicle

Dewberry

Job No: N67805

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N67805-10R	SW846 8270C	01-JUN-04 16:47	WHS	28-MAY-04	RL	B8270PAH
N67805-11R S-2	Collected: 21-MAY-04 12:20 By: MS		Received: 21-MAY-04 By: MPC			
N67805-11R	SW846 8270C	01-JUN-04 17:23	WHS	28-MAY-04	RL	B8270PAH

GC/MS

GC/MS SEMIVOLATILE

ACCUTEST

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Semivolatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: [signature] Date: 6/10/04

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17035-MB1	B62481.D	1	06/01/04	WHS	05/28/04	OP17035	EB1651

The QC reported here applies to the following samples: **Method:** SW846 8270C

N67805-1R, N67805-4R, N67805-10R, N67805-11R

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	94%	34-114%
4165-62-2	Phenol-d5	87%	38-112%
118-79-6	2,4,6-Tribromophenol	68%	32-127%
4165-60-0	Nitrobenzene-d5	85%	27-123%
321-60-8	2-Fluorobiphenyl	82%	40-113%
1718-51-0	Terphenyl-d14	95%	27-144%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.47	250	ug/kg	J
	system artifact	4.08	340	ug/kg	J
	system artifact/aldol-condensation	4.73	39000	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17035-MB1	Z06738.D	1	06/02/04	MCL	05/28/04	OP17035	EZ293

The QC reported here applies to the following samples: **Method:** SW846 8270C

N67805-1R, N67805-4R, N67805-10R, N67805-11R

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	82%	34-114%
4165-62-2	Phenol-d5	81%	38-112%
118-79-6	2,4,6-Tribromophenol	76%	32-127%
4165-60-0	Nitrobenzene-d5	76%	27-123%
321-60-8	2-Fluorobiphenyl	86%	40-113%
1718-51-0	Terphenyl-d14	86%	27-144%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.59	340	ug/kg	J
	system artifact/aldol-condensation	2.81	580	ug/kg	J
	system artifact/aldol-condensation	3.11	33000	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Blank Spike Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17035-BS1	Z06791.D	1	06/04/04	MCL	05/28/04	OP17035	EZ295

The QC reported here applies to the following samples: **Method:** SW846 8270C

N67805-1R, N67805-4R, N67805-10R, N67805-11R

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1710	103	58-110
208-96-8	Acenaphthylene	1670	1560	94	53-103
120-12-7	Anthracene	1670	1770	106	61-117
56-55-3	Benzo(a)anthracene	1670	1670	100	58-117
50-32-8	Benzo(a)pyrene	1670	1770	106	57-119
205-99-2	Benzo(b)fluoranthene	1670	1790	107	55-123
191-24-2	Benzo(g,h,i)perylene	1670	1770	106	49-130
207-08-9	Benzo(k)fluoranthene	1670	1780	107	51-127
218-01-9	Chrysene	1670	1710	103	57-118
53-70-3	Dibenzo(a,h)anthracene	1670	1840	110	50-129
206-44-0	Fluoranthene	1670	1910	115	60-119
86-73-7	Fluorene	1670	1820	109	59-113
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1770	106	50-127
91-20-3	Naphthalene	1670	1610	97	50-105
85-01-8	Phenanthrene	1670	1730	104	59-114
129-00-0	Pyrene	1670	1580	95	55-117

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	108%	34-114%
4165-62-2	Phenol-d5	112%	38-112%
118-79-6	2,4,6-Tribromophenol	103%	32-127%
4165-60-0	Nitrobenzene-d5	98%	27-123%
321-60-8	2-Fluorobiphenyl	99%	40-113%
1718-51-0	Terphenyl-d14	94%	27-144%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17035-MS	Z06743.D	1	06/02/04	MCL	05/28/04	OP17035	EZ293
OP17035-MSD	Z06744.D	1	06/02/04	MCL	05/28/04	OP17035	EZ293
N68246-2	Z06742.D	1	06/02/04	MCL	05/28/04	OP17035	EZ293

The QC reported here applies to the following samples: **Method:** SW846 8270C

N67805-1R, N67805-4R, N67805-10R, N67805-11R

CAS No.	Compound	N68246-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1820	1650	91	1450	80	13	41-113/29
208-96-8	Acenaphthylene	ND		1820	1520	84	1310	72	15	40-103/25
120-12-7	Anthracene	ND		1820	1780	98	1540	85	14	36-128/37
56-55-3	Benzo(a)anthracene	ND		1820	1690	93	1480	82	13	37-125/35
50-32-8	Benzo(a)pyrene	ND		1820	1800	99	1590	88	12	36-126/35
205-99-2	Benzo(b)fluoranthene	29.7	J	1820	1880	102	1640	89	14	32-142/37
191-24-2	Benzo(g,h,i)perylene	ND		1820	1870	103	1610	89	15	4-135/38
207-08-9	Benzo(k)fluoranthene	ND		1820	1810	99	1580	87	14	28-138/33
218-01-9	Chrysene	48.6	J	1820	1820	97	1540	82	17	35-126/33
53-70-3	Dibenzo(a,h)anthracene	ND		1820	1900	104	1650	91	14	17-130/31
206-44-0	Fluoranthene	188		1820	1920	95	1710	84	12	33-131/41
86-73-7	Fluorene	ND		1820	1770	97	1550	85	13	43-116/33
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1820	1820	100	1580	87	14	13-133/35
91-20-3	Naphthalene	ND		1820	1380	76	1160	64	17	31-109/34
85-01-8	Phenanthrene	81.9		1820	1790	94	1560	82	14	35-125/41
129-00-0	Pyrene	104		1820	1740	90	1520	78	13	29-135/41

CAS No.	Surrogate Recoveries	MS	MSD	N68246-2	Limits
367-12-4	2-Fluorophenol	76%	66%	73%	34-114%
4165-62-2	Phenol-d5	81%	70%	76%	38-112%
118-79-6	2,4,6-Tribromophenol	94%	84%	78%	32-127%
4165-60-0	Nitrobenzene-d5	72%	61%	69%	27-123%
321-60-8	2-Fluorobiphenyl	88%	74%	77%	40-113%
1718-51-0	Terphenyl-d14	89%	79%	79%	27-144%

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1647-DFTPP
Lab File ID: B62379.D
Instrument ID: GCMSB
Injection Date: 05/25/04
Injection Time: 17:28

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	27261	49.4		Pass
68	Less than 2.0% of mass 69	253	0.46	(0.99) [a]	Pass
69	Mass 69 relative abundance	25606	46.4		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	24348	44.1		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	55160	100.0		Pass
199	5.0 - 9.0% of mass 198	3503	6.4		Pass
275	10.0 - 30.0% of mass 198	12143	22.0		Pass
365	1.0 - 100.0% of mass 198	1584	2.9		Pass
441	Present, but less than mass 443	4334	7.9	(70.6) [b]	Pass
442	40.0 - 100.0% of mass 198	29937	54.3		Pass
443	17.0 - 23.0% of mass 442	6136	11.1	(20.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EB1647-IC1647	B62380.D	05/25/04	17:44	00:16	Initial cal 100
EB1647-IC1647	B62381.D	05/25/04	18:20	00:52	Initial cal 80
EB1647-ICC1647	B62382.D	05/25/04	18:56	01:28	Initial cal 50
EB1647-IC1647	B62383.D	05/25/04	19:32	02:04	Initial cal 25
EB1647-IC1647	B62384.D	05/25/04	20:07	02:39	Initial cal 10
EB1647-IC1647	B62385.D	05/25/04	20:43	03:15	Initial cal 5
EB1647-IC1647	B62386.D	05/25/04	21:19	03:51	Initial cal 2

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample:	EB1651-DFTPP	**Injection Date:**	06/01/04
Lab File ID:	B62477.D	**Injection Time:**	12:17
Instrument ID:	GCMSB		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	53788	38.2	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
69	Mass 69 relative abundance	56161	39.9	Pass
70	Less than 2.0% of mass 69	69	0.05 (0.12) [a]	Pass
127	40.0 - 60.0% of mass 198	71648	50.9	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	140819	100.0	Pass
199	5.0 - 9.0% of mass 198	9036	6.4	Pass
275	10.0 - 30.0% of mass 198	32821	23.3	Pass
365	1.0 - 100.0% of mass 198	4547	3.2	Pass
441	Present, but less than mass 443	12467	8.9 (72.5) [b]	Pass
442	40.0 - 100.0% of mass 198	91325	64.9	Pass
443	17.0 - 23.0% of mass 442	17195	12.2 (18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EB1651-CC1647	B62478.D	06/01/04	13:47	01:30	Continuing cal 50
OP17035-MB1	B62481.D	06/01/04	14:59	02:42	Method Blank
N67805-1R	B62482.D	06/01/04	15:35	03:18	TP-1 1-1.5
N67805-4R	B62483.D	06/01/04	16:11	03:54	TP-2 1-1.5
N67805-10R	B62484.D	06/01/04	16:47	04:30	S-1
N67805-11R	B62485.D	06/01/04	17:23	05:06	S-2
ZZZZZZ	B62489.D	06/01/04	17:59	05:42	(unrelated sample)
ZZZZZZ	B62491.D	06/01/04	18:35	06:18	(unrelated sample)
ZZZZZZ	B62486.D	06/01/04	19:10	06:53	(unrelated sample)
ZZZZZZ	B62487.D	06/01/04	19:46	07:29	(unrelated sample)
ZZZZZZ	B62488.D	06/01/04	20:22	08:05	(unrelated sample)
ZZZZZZ	B62490.D	06/01/04	20:58	08:41	(unrelated sample)
N67805-4R	B62492.D	06/01/04	21:34	09:17	TP-2 1-1.5

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample:	EZ274-DFTPP	**Injection Date:**	05/03/04
Lab File ID:	Z06210.D	**Injection Time:**	12:27
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	21231	48.4		Pass
68	Less than 2.0% of mass 69	258	0.59	(1.3) [a]	Pass
69	Mass 69 relative abundance	19518	44.5		Pass
70	Less than 2.0% of mass 69	133	0.3	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	25109	57.2		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	43901	100.0		Pass
199	5.0 - 9.0% of mass 198	3064	7.0		Pass
275	10.0 - 30.0% of mass 198	8438	19.2		Pass
365	1.0 - 100.0% of mass 198	1093	2.5		Pass
441	Present, but less than mass 443	4668	10.6	(77.7) [b]	Pass
442	40.0 - 100.0% of mass 198	30090	68.5		Pass
443	17.0 - 23.0% of mass 442	6009	13.7	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ274-IC274	Z06211.D	05/03/04	14:09	01:42	Initial cal 2
EZ274-IC274	Z06212.D	05/03/04	14:45	02:18	Initial cal 5
EZ274-IC274	Z06213.D	05/03/04	15:20	02:53	Initial cal 10
EZ274-ICC274	Z06214.D	05/03/04	15:54	03:27	Initial cal 25
EZ274-IC274	Z06215.D	05/03/04	16:29	04:02	Initial cal 50
EZ274-IC274	Z06216.D	05/03/04	17:04	04:37	Initial cal 80
EZ274-IC274	Z06217.D	05/03/04	17:39	05:12	Initial cal 100

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ293-DFTPP
Lab File ID: Z06731.D
Instrument ID: GCMSZ

Injection Date: 06/02/04
Injection Time: 13:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34092	34.0		Pass
68	Less than 2.0% of mass 69	235	0.23	(0.66) [a]	Pass
69	Mass 69 relative abundance	35435	35.4		Pass
70	Less than 2.0% of mass 69	202	0.2	(0.57) [a]	Pass
127	40.0 - 60.0% of mass 198	51423	51.3		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	100216	100.0		Pass
199	5.0 - 9.0% of mass 198	6656	6.6		Pass
275	10.0 - 30.0% of mass 198	20869	20.8		Pass
365	1.0 - 100.0% of mass 198	2391	2.4		Pass
441	Present, but less than mass 443	11771	11.7	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	81661	81.5		Pass
443	17.0 - 23.0% of mass 442	15738	15.7	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ293-CC274	Z06732.D	06/02/04	13:52	00:11	Continuing cal 50
OP17019-BS2	Z06733.D	06/02/04	14:28	00:47	Blank Spike
ZZZZZZ	Z06735.D	06/02/04	15:03	01:22	(unrelated sample)
OP16984-BS1	Z06737.D	06/02/04	16:12	02:31	Blank Spike
OP17035-MB1	Z06738.D	06/02/04	16:48	03:07	Method Blank
ZZZZZZ	Z06740.D	06/02/04	18:00	04:19	(unrelated sample)
ZZZZZZ	Z06741.D	06/02/04	18:36	04:55	(unrelated sample)
N68246-2	Z06742.D	06/02/04	19:12	05:31	(used for QC only; not part of job N67805)
OP17035-MS	Z06743.D	06/02/04	19:48	06:07	Matrix Spike
OP17035-MSD	Z06744.D	06/02/04	20:24	06:43	Matrix Spike Duplicate
ZZZZZZ	Z06734.D	06/02/04	21:00	07:19	(unrelated sample)
ZZZZZZ	Z06745.D	06/02/04	21:36	07:55	(unrelated sample)
ZZZZZZ	Z06746.D	06/02/04	22:12	08:31	(unrelated sample)
ZZZZZZ	Z06747.D	06/02/04	22:48	09:07	(unrelated sample)
ZZZZZZ	Z06748.D	06/02/04	23:23	09:42	(unrelated sample)
ZZZZZZ	Z06749.D	06/02/04	23:58	10:17	(unrelated sample)
OP16984-MS	Z06750.D	06/03/04	00:34	10:53	Matrix Spike
OP16984-MSD	Z06751.D	06/03/04	01:11	11:30	Matrix Spike Duplicate
OP16984-MB3	Z06752.D	06/03/04	01:48	12:07	Method Blank

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample:	EZ293-DFTPP	**Injection Date:**	06/02/04
Lab File ID:	Z06731.D	**Injection Time:**	13:41
Instrument ID:	GCMSZ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP16984-BS3	Z06753.D	06/03/04	02:25	12:44	Blank Spike
ZZZZZZ	Z06754.D	06/03/04	03:02	13:21	(unrelated sample)
ZZZZZZ	Z06755.D	06/03/04	03:39	13:58	(unrelated sample)
OP17027-MB2	Z06756.D	06/03/04	04:16	14:35	Method Blank
OP17027-BS2	Z06757.D	06/03/04	04:54	15:13	Blank Spike
ZZZZZZ	Z06758.D	06/03/04	05:31	15:50	(unrelated sample)
ZZZZZZ	Z06759.D	06/03/04	06:08	16:27	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample:	EZ295-DFTPP	**Injection Date:**	06/04/04
Lab File ID:	Z06789.D	**Injection Time:**	12:01
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	22512	40.0	Pass
68	Less than 2.0% of mass 69	30	0.05 (0.14) [a]	Pass
69	Mass 69 relative abundance	21874	38.8	Pass
70	Less than 2.0% of mass 69	79	0.14 (0.36) [a]	Pass
127	40.0 - 60.0% of mass 198	29693	52.7	Pass
197	Less than 1.0% of mass 198	131	0.23	Pass
198	Base peak, 100% relative abundance	56338	100.0	Pass
199	5.0 - 9.0% of mass 198	3749	6.7	Pass
275	10.0 - 30.0% of mass 198	11948	21.2	Pass
365	1.0 - 100.0% of mass 198	1334	2.4	Pass
441	Present, but less than mass 443	5847	10.4 (73.0) [b]	Pass
442	40.0 - 100.0% of mass 198	41245	73.2	Pass
443	17.0 - 23.0% of mass 442	8007	14.2 (19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ295-CC274	Z06790.D	06/04/04	12:19	00:18	Continuing cal 50
OP17035-BS1	Z06791.D	06/04/04	12:54	00:53	Blank Spike
OP16973-BS1	Z06792.D	06/04/04	13:29	01:28	Blank Spike
ZZZZZZ	Z06793.D	06/04/04	14:04	02:03	(unrelated sample)
ZZZZZZ	Z06794.D	06/04/04	14:40	02:39	(unrelated sample)
ZZZZZZ	Z06795.D	06/04/04	15:15	03:14	(unrelated sample)
ZZZZZZ	Z06796.D	06/04/04	15:51	03:50	(unrelated sample)
ZZZZZZ	Z06797.D	06/04/04	16:26	04:25	(unrelated sample)
ZZZZZZ	Z06798.D	06/04/04	17:02	05:01	(unrelated sample)
ZZZZZZ	Z06799.D	06/04/04	17:37	05:36	(unrelated sample)
ZZZZZZ	Z06800.D	06/04/04	18:12	06:11	(unrelated sample)
ZZZZZZ	Z06801.D	06/04/04	18:47	06:46	(unrelated sample)
ZZZZZZ	Z06802.D	06/04/04	19:23	07:22	(unrelated sample)
ZZZZZZ	Z06803.D	06/04/04	19:58	07:57	(unrelated sample)
ZZZZZZ	Z06804.D	06/04/04	20:33	08:32	(unrelated sample)
ZZZZZZ	Z06805.D	06/04/04	21:07	09:06	(unrelated sample)
N67695-33	Z06806.D	06/04/04	21:42	09:41	(used for QC only; not part of job N67805)
OP16973-MS	Z06807.D	06/04/04	22:17	10:16	Matrix Spike
OP16973-MSD	Z06808.D	06/04/04	22:52	10:51	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample:	EZ295-DFTPP	**Injection Date:**	06/04/04
Lab File ID:	Z06789.D	**Injection Time:**	12:01
Instrument ID:	GCMSZ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	Z06809.D	06/04/04	23:27	11:26	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Check Std:	EB1651-CC1647	**Injection Date:**	06/01/04
Lab File ID:	B62478.D	**Injection Time:**	13:47
Instrument ID:	GCMSB	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	134387	7.09	494104	8.90	244753	12.13	349193	15.37	369934	21.47	194871	24.02
Upper Limit [a]	268774	7.59	988208	9.40	489506	12.63	698386	15.87	739868	21.97	389742	24.52
Lower Limit [b]	67194	6.59	247052	8.40	122377	11.63	174597	14.87	184967	20.97	97436	23.52

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP17035-MB1	123574	7.09	432913	8.90	242699	12.12	369012	15.35	327887	21.46	210435	24.01
N67805-1R	154745	7.13	500142	8.92	190829	12.13	316271	15.39	351092	21.53	116692	24.10
N67805-4R	66415*	7.09	250817	8.90	129604	12.13	177451	15.37	339358	21.53	110527	24.11
N67805-10R	68535	7.10	269382	8.91	130680	12.13	190871	15.37	332750	21.52	176171	24.10
N67805-11R	96231	7.11	354000	8.92	155625	12.13	281112	15.37	601746	21.54	129721	24.11
ZZZZZZ	59651*	7.09	231403*	8.90	128708	12.12	196147	15.36	102399*	21.47	59185*	24.02
ZZZZZZ	81686	7.09	304980	8.90	144357	12.12	204477	15.36	200676	21.49	155057	24.06
ZZZZZZ	96742	7.11	323730	8.92	124767	12.13	207137	15.37	370173	21.52	159595	24.12
ZZZZZZ	57225*	7.09	209331*	8.91	111507*	12.13	154962*	15.36	106144*	21.46	77119*	24.03
ZZZZZZ	82380	7.09	247255	8.90	113499*	12.12	196445	15.36	335333	21.52	108799	24.11
ZZZZZZ	65354*	7.10	263696	8.91	114245*	12.13	185162	15.37	357435	21.53	123775	24.11
N67805-4R [c]	45675*	7.09	180454*	8.90	90619*	12.13	136609*	15.37	353780	21.53	105284	24.11

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.

Semivolatile Internal Standard Area Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Check Std:	EZ293-CC274	**Injection Date:**	06/02/04
Lab File ID:	Z06732.D	**Injection Time:**	13:52
Instrument ID:	GCMSZ	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	72180	5.48	306995	8.05	162908	12.08	309713	15.58	372530	21.26	280812	23.55
Upper Limit [a]	144360	5.98	613990	8.55	325816	12.58	619426	16.08	745060	21.76	561624	24.05
Lower Limit [b]	36090	4.98	153498	7.55	81454	11.58	154857	15.08	186265	20.76	140406	23.05

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP17019-BS2	49430	5.48	194173	8.05	89132	12.07	172179	15.57	224184	21.25	184237	23.55
ZZZZZZ	54527	5.48	281532	8.05	176326	12.08	308018	15.58	218988	21.31	114536*	23.64
OP16984-BS1	101607	5.49	426670	8.05	214905	12.08	374727	15.58	363543	21.26	244937	23.55
OP17035-MB1	90474	5.48	375706	8.05	187734	12.08	328315	15.58	313081	21.25	220779	23.55
ZZZZZZ	71326	5.48	302973	8.05	155856	12.08	269992	15.58	268418	21.25	188216	23.55
ZZZZZZ	83561	5.48	346518	8.05	171753	12.08	293024	15.57	274958	21.25	182222	23.55
N68246-2	103636	5.48	437936	8.05	221176	12.08	384651	15.57	379008	21.25	254299	23.55
OP17035-MS	95466	5.48	399973	8.05	198338	12.08	336975	15.58	317639	21.26	219632	23.55
OP17035-MSD	96484	5.48	417408	8.05	211958	12.08	373147	15.58	356756	21.26	236318	23.55
ZZZZZZ	117254	5.49	470848	8.05	227719	12.08	399196	15.58	424537	21.26	266449	23.55
ZZZZZZ	76680	5.48	339411	8.05	177602	12.08	319589	15.58	314080	21.25	197351	23.55
ZZZZZZ	79321	5.48	355318	8.05	189871	12.08	342743	15.58	349241	21.25	220349	23.55
ZZZZZZ	72632	5.48	325201	8.05	173244	12.08	315817	15.58	309251	21.25	191927	23.55
ZZZZZZ	102765	5.49	464182	8.05	259865	12.08	483065	15.58	535382	21.25	343080	23.55
ZZZZZZ	110825	5.49	487472	8.05	263391	12.08	485270	15.57	504512	21.25	316031	23.55
OP16984-MS	102380	5.49	440629	8.05	222176	12.08	401017	15.58	445621	21.26	312173	23.55
OP16984-MSD	93363	5.49	398058	8.05	212731	12.08	405444	15.58	467719	21.26	328275	23.55
OP16984-MB3	117137	5.49	503528	8.05	265854	12.08	457830	15.58	438718	21.25	283920	23.55
OP16984-BS3	100601	5.49	441557	8.05	232674	12.08	442870	15.58	478593	21.26	315850	23.55
ZZZZZZ	109416	5.49	489462	8.05	255302	12.08	463841	15.58	464547	21.25	298028	23.55
ZZZZZZ	104347	5.49	445556	8.05	245073	12.08	469781	15.58	452297	21.25	286881	23.55
OP17027-MB2	106585	5.49	445446	8.05	225161	12.08	385407	15.58	372864	21.25	249364	23.55
OP17027-BS2	104023	5.49	451630	8.05	239411	12.08	439644	15.58	443223	21.26	282004	23.55
ZZZZZZ	83483	5.49	383553	8.05	215211	12.08	416783	15.58	464069	21.26	286429	23.55
ZZZZZZ	81881	5.49	369811	8.05	202853	12.08	383947	15.57	439101	21.25	293397	23.55

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Check Std:	EZ295-CC274	**Injection Date:**	06/04/04
Lab File ID:	Z06790.D	**Injection Time:**	12:19
Instrument ID:	GCMSZ	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	76088	5.46	332551	8.02	177788	12.05	323764	15.55	341988	21.24	256178	23.52
Upper Limit [a]	152176	5.96	665102	8.52	355576	12.55	647528	16.05	683976	21.74	512356	24.02
Lower Limit [b]	38044	4.96	166276	7.52	88894	11.55	161882	15.05	170994	20.74	128089	23.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP17035-BS1	66162	5.46	297002	8.02	158312	12.05	296510	15.55	310774	21.23	224294	23.52
OP16973-BS1	74383	5.46	305844	8.02	135553	12.04	233852	15.55	259491	21.23	198172	23.52
ZZZZZZ	71844	5.46	311222	8.02	163039	12.04	293495	15.55	313396	21.23	222135	23.52
ZZZZZZ	86190	5.46	379623	8.02	193621	12.05	353202	15.55	374923	21.23	278554	23.52
ZZZZZZ	84987	5.46	364496	8.02	189322	12.04	343381	15.55	361903	21.23	253649	23.52
ZZZZZZ	106645	5.46	459300	8.02	234313	12.04	416736	15.55	406226	21.23	266991	23.52
ZZZZZZ	96175	5.46	408393	8.02	206883	12.04	369098	15.55	366104	21.23	251319	23.52
ZZZZZZ	86871	5.47	367089	8.04	194126	12.05	351354	15.55	374928	21.24	264901	23.52
ZZZZZZ	88256	5.46	371384	8.03	188499	12.04	323415	15.55	342230	21.23	257624	23.52
ZZZZZZ	83188	5.46	371145	8.02	193280	12.04	349421	15.55	368019	21.23	268784	23.52
ZZZZZZ	96210	5.52	495278	8.10	222267	12.10	346732	15.59	305221	21.26	206917	23.55
ZZZZZZ	75663	5.46	334064	8.02	173723	12.05	313285	15.55	321893	21.23	208791	23.52
ZZZZZZ	82524	5.46	341443	8.02	159130	12.05	281622	15.55	309866	21.23	224645	23.52
ZZZZZZ	88504	5.47	387840	8.03	198742	12.05	367554	15.55	391325	21.23	264072	23.52
ZZZZZZ	85967	5.46	363599	8.02	168809	12.04	295011	15.55	319243	21.23	229233	23.52
N67695-33	108352	5.46	461015	8.02	222084	12.05	407920	15.55	330631	21.24	197331	23.53
OP16973-MS	107002	5.46	443921	8.03	211036	12.05	386292	15.56	367541	21.24	236318	23.53
OP16973-MSD	101886	5.46	434999	8.03	212992	12.05	385470	15.56	305872	21.24	197588	23.53
ZZZZZZ	64253	5.46	276445	8.03	134888	12.05	234122	15.55	263031	21.23	190741	23.52

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Method: SW846 8270C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
N67805-1R	B62482.D	98.0	72.0	59.0
N67805-4R	B62492.D	80.0	82.0	42.0
N67805-4R	B62483.D	78.0	81.0	53.0
N67805-10R	B62484.D	86.0	77.0	49.0
N67805-11R	B62485.D	86.0	71.0	39.0
OP17035-BS1	Z06791.D	98.0	99.0	94.0
OP17035-MB1	Z06738.D	76.0	86.0	86.0
OP17035-MB1	B62481.D	85.0	82.0	95.0
OP17035-MS	Z06743.D	72.0	88.0	89.0
OP17035-MSD	Z06744.D	61.0	74.0	79.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	27-123%
S2 = 2-Fluorobiphenyl	40-113%
S3 = Terphenyl-d14	27-144%

Initial Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1647-ICC1647
Lab FileID: B62382.D

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MB1647T.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:48:22 2004
Response via : Initial Calibration

Calibration Files
2 =B62386.D 5 =B62385.D 10 =B62384.D
100 =B62380.D 50 =B62478.D 80 =B62381.D 25 =B62383.D

Compound	2	5	10	100	50	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------								
2) 1,4-Dioxane								0.000	-1.00
3)t Pyridine	0.786	0.697	0.732	0.818	0.730	0.758	0.733	0.750	5.38
4)t N-Nitrosodimethyl	0.938	0.824	0.885	0.932	0.897	0.922	0.908	0.901	4.32
5)S 2-Fluorophenol	0.933	1.145	1.160	1.234	1.250	1.233	1.201	1.165	9.43
6) Benzaldehyde	0.522	0.853	0.897		0.395		0.673	0.668	32.01
7)t Indene	2.394	2.140	2.321	2.458	2.403	2.348	2.268	2.333	4.50
8)t Cumene	2.986	2.925	2.926	2.811	2.965	2.806	2.864	2.898	2.47
9)S Phenol-d5	1.830	1.328	1.393	1.495	1.498	1.474	1.420	1.491	10.83
10)t Phenol	1.211	1.345	1.398	1.692	1.591	1.637	1.527	1.486	11.70
11)t Aniline	1.423	1.575	1.614	1.398	1.403	1.366	1.473	1.465	6.50
12)t bis(2-Chloroethyl	1.196	0.997	1.177	1.528	1.305	1.473	1.185	1.266	14.61
13)t 2-Chlorophenol	1.345	1.369	1.431	1.599	1.510	1.561	1.453	1.467	6.48
14)t Decane	1.567	1.279	1.356	1.334	1.285	1.307	1.255	1.341	7.87
15)t 1,3-Dichlorobenze	1.518	1.520	1.564	1.563	1.567	1.526	1.520	1.540	1.52
16)t 1,4-Dichlorobenze	1.724	1.650	1.652	1.640	1.671	1.634	1.621	1.656	2.03
17)t Benzyl alcohol	0.631	0.568	0.786	0.884	0.886	0.876	0.849	0.783	16.78
----- Linear regression ----- Coefficient = 0.9998									
Response Ratio = -0.02535 + 0.89369 *A									
18)t 1,2-Dichlorobenze	1.675	1.509	1.550	1.668	1.603	1.623	1.521	1.593	4.24
19)t Acetophenone	1.755	1.801	1.895	1.767	1.835	1.805	1.814	1.810	2.56
20)t 2-Methylphenol	1.173	1.088	1.236	1.181	1.177	1.190	1.179	1.175	3.75
21)t 2,2'-oxybis(1-Chl	0.453	0.493	0.512	0.520	0.509	0.512	0.502	0.500	4.50
22)t 3&4-Methylphenol	0.990	1.105	1.274	1.342	1.321	1.319	1.284	1.233	10.82
23)t n-Nitroso-di-n-pr	0.810	0.880	0.899	0.928	0.870	0.891	0.862	0.877	4.18
24)t Hexachloroethane	0.794	0.773	0.784	0.825	0.785	0.800	0.750	0.787	2.91
25) I Naphthalene-d8	----------ISTD----------								
26)S Nitrobenzene-d5	0.385	0.381	0.382	0.413	0.409	0.398	0.388	0.394	3.35
27)t Nitrobenzene	0.189	0.198	0.203	0.222	0.207	0.210	0.203	0.204	5.03
28)t Quinoline	0.690	0.655	0.674	0.671	0.691	0.669	0.686	0.677	1.94
29)t Isophorone	0.686	0.641	0.673	0.666	0.661	0.663	0.650	0.663	2.21
30)t 2-Nitrophenol	0.203	0.214	0.226	0.269	0.248	0.254	0.238	0.236	9.90
31)t 2,4-Dimethylpheno	0.386	0.367	0.418	0.416	0.407	0.401	0.379	0.396	4.91
32)t Benzoic acid		0.137	0.166	0.253	0.230	0.241	0.200	0.205	22.25
----- Linear regression ----- Coefficient = 0.9983									
Response Ratio = -0.02643 + 0.25843 *A									
33)t bis(2-Chloroethox	0.349	0.366	0.357	0.378	0.370	0.365	0.345	0.361	3.25
34)t 2,4-Dichloropheno	0.299	0.289	0.289	0.324	0.313	0.311	0.300	0.304	4.26
35)t 1,3,5-Trichlorobe	0.339	0.336	0.354	0.386	0.362	0.368	0.345	0.356	4.98
36)t 1,2,4-Trichlorobe	0.308	0.331	0.329	0.366	0.343	0.351	0.328	0.337	5.54
37)t 1,2,3-Trichlorobe	0.313	0.291	0.308	0.361	0.335	0.347	0.317	0.325	7.47
38)t alpha-Terpineol	0.307	0.276	0.285	0.303	0.293	0.295	0.294	0.293	3.50
39)t Naphthalene	1.084	1.046	1.080	1.225	1.147	1.170	1.095	1.121	5.57

Initial Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1647-ICC1647
Lab FileID: B62382.D

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40)t 4-Chloroaniline    0.393 0.417 0.444 0.473 0.436 0.451 0.436 0.436   5.84
41)t 2,3-Dichloroanili 0.385 0.345 0.361 0.383 0.377 0.373 0.364 0.370   3.85
42)t Caprolactam        0.163 0.129 0.134       0.116 0.109 0.124 0.129  14.56
43)t Hexachlorobutadie 0.220 0.201 0.220 0.245 0.223 0.228 0.209 0.221   6.39
44)t 4-Chloro-3-methyl 0.364 0.325 0.355 0.342 0.345 0.343 0.344 0.346   3.50
45)t 2-Methylnaphthale 0.674 0.675 0.714 0.752 0.730 0.735 0.703 0.712   4.18
46)t 1-Methylnaphthale 0.756 0.674 0.680 0.728 0.709 0.709 0.696 0.708   3.99
47)t Dimethylnaphthale 0.569 0.560 0.598 0.630 0.615 0.623 0.590 0.598   4.47

48) I   Acenaphthene-d10       ----------------ISTD--------------------
49)t Hexachlorocyclope                0.113 0.373 0.282 0.339 0.205 0.262  40.01
            ----- Linear regression -----  Coefficient =  0.9916
              Response Ratio = -0.22066 + 0.40312 *A

50)t 2,4,6-Trichloroph                0.358 0.487 0.435 0.458 0.397 0.427  11.94
51)t 2,4,5-Trichloroph                0.383 0.506 0.445 0.483 0.409 0.445  11.43
52)S 2-Fluorobiphenyl  1.345 1.383 1.390 1.692 1.564 1.656 1.475 1.501   9.26
53)t 2-Chloronaphthale 1.140 1.127 1.246 1.527 1.378 1.467 1.280 1.309  11.82
54)t Biphenyl          1.497 1.498 1.602 2.009 1.825 1.921 1.696 1.721  11.82
55)t 2-Nitroaniline    0.408 0.443 0.447 0.457 0.479 0.468 0.468 0.453   5.19
56)t Dimethylphthalate 1.494 1.478 1.491 1.540 1.524 1.549 1.534 1.516   1.83
57)t Acenaphthylene    1.839 1.891 1.905 2.143 2.056 2.109 2.003 1.992   5.86
58)t 2,6-Dinitrotoluen 0.323 0.342 0.346 0.370 0.374 0.371 0.372 0.357   5.56
59)t 3-Nitroaniline    0.343 0.369 0.375 0.393 0.381 0.394 0.379 0.376   4.59
60)t Acenaphthene      1.155 1.137 1.161 1.339 1.236 1.294 1.206 1.218   6.25
61)t 2,4-Dinitrophenol                0.090 0.270 0.244 0.279 0.190 0.215  36.40
            ----- Linear regression -----  Coefficient =  0.9975
              Response Ratio = -0.11865 + 0.29846 *A

62)t 4-Nitrophenol            0.132 0.129 0.272 0.228 0.268 0.199 0.205  31.03
            ----- Linear regression -----  Coefficient =  0.9956
              Response Ratio = -0.04087 + 0.28455 *A

63)t Dibenzofuran      1.628 1.635 1.727 2.009 1.824 1.878 1.726 1.775   7.75
64)t 2,4-Dinitrotoluen 0.394 0.457 0.510 0.555 0.548 0.540 0.514 0.503  11.57
65)t 2,3,4,6-Tetrachlo                0.194 0.324 0.278 0.291 0.248 0.267  18.37
            ----- Linear regression -----  Coefficient =  0.9938
              Response Ratio = -0.05131 + 0.33188 *A

66)t Diethylphthalate  1.688 1.659 1.657 1.867 1.756 1.828 1.737 1.742   4.71
67)t Fluorene          1.313 1.317 1.387 1.639 1.502 1.591 1.423 1.453   8.85
68)t 4-Chlorophenyl-ph 0.673 0.648 0.659 0.789 0.712 0.762 0.697 0.706   7.48
69)t 4-Nitroaniline    0.325 0.381 0.340 0.396 0.389 0.394 0.407 0.376   8.22

70) I   Phenanthrene-d10       ----------------ISTD--------------------
71)t 4,6-Dinitro-2-met                0.139 0.239 0.217 0.242 0.198 0.207  20.22
            ----- Linear regression -----  Coefficient =  0.9987
              Response Ratio = -0.03390 + 0.25381 *A

72)t Atrazine          0.032 0.038 0.037 0.026 0.030 0.034 0.030 0.032  13.43
73)t n-Nitrosodiphenyl 0.547 0.610 0.618 0.819 0.730 0.780 0.685 0.684  14.40
74)t 1,2-Diphenylhydra 1.080 1.084 1.128 1.420 1.314 1.391 1.198 1.231  11.69
75)S 2,4,6-Tribromophe 0.116 0.119 0.119 0.156 0.132 0.144 0.134 0.131  11.33
76)t 4-Bromophenyl-phe 0.230 0.226 0.245 0.308 0.268 0.295 0.266 0.263  11.97
77)t Hexachlorobenzene 0.273 0.271 0.297 0.343 0.314 0.339 0.302 0.306   9.44
78)t Pentachlorophenol                0.052 0.153 0.115 0.143 0.089 0.110  37.47
            ----- Linear regression -----  Coefficient =  0.9920
              Response Ratio = -0.08787 + 0.16634 *A

79)t Phenanthrene      1.148 1.109 1.133 1.330 1.215 1.274 1.153 1.195   6.86
```

Initial Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1647-ICC1647
Lab FileID: B62382.D

```
 80)t Anthracene          1.148 1.145 1.176 1.325 1.246 1.307 1.191 1.220   6.06
 81)t Carbazole           0.948 1.016 1.058 1.164 1.124 1.163 1.119 1.085   7.45
 82)t Di-n-butylphthala   1.679 1.651 1.682 1.981 1.882 1.944 1.803 1.803   7.54
 83)t Fluoranthene        1.228 1.231 1.282 1.452 1.378 1.458 1.304 1.333   7.30
 84)t Octadecane          0.431 0.465 0.506 0.591 0.543 0.563 0.517 0.517  10.76

 85) I   Chrysene-d12          ----------------ISTD--------------------
 86)t Benzidine                0.326 0.322 0.134 0.115 0.124 0.156 0.196  50.93
          ----- Quadratic regression -----  Coefficient =  0.9900
               Response Ratio = 0.10291 + 0.04570 *A + 0.01341 *A^2

 87)t Pyrene              1.261 1.275 1.284 1.321 1.322 1.350 1.368 1.312   3.03
 88)S Terphenyl-d14       0.872 0.836 0.853 0.889 0.887 0.897 0.905 0.877   2.83
 89)t Butylbenzylphthal   0.720 0.751 0.784 0.737 0.773 0.759 0.780 0.758   3.12
 90)t Benzo[a]anthracen   1.128 1.117 1.094 1.217 1.138 1.142 1.103 1.134   3.58
 91)t 3,3'-Dichlorobenz   0.431 0.428 0.446 0.383 0.412 0.383 0.451 0.419   6.62
 92)t Chrysene            1.086 0.998 1.021 0.963 1.057 1.020 1.070 1.031   4.18
 93)t bis(2-Ethylhexyl)   0.947 0.932 0.937 1.037 0.989 0.994 0.961 0.971   3.89

 94) I   Perylene-d12          ----------------ISTD--------------------
 95)t Di-n-octylphthala   2.194 2.328 2.460 3.504 3.146 3.280 2.764 2.811  18.09
             ----- Linear regression -----  Coefficient =  0.9967
               Response Ratio = -0.25259 + 3.49457 *A

 96)t Benzo[b]fluoranth   1.386 1.745 1.579       2.200 3.250 2.161 2.053  32.53
          ----- Quadratic regression -----  Coefficient =  0.9957
               Response Ratio = 0.10849 + 0.84623 *A + 1.15890 *A^2

 97)t Benzo[k]fluoranth   1.588 1.378 1.744 1.485 1.977 1.282 1.593 1.578  14.72
 98)t Benzo[a]pyrene      1.408 1.387 1.428 1.682 1.617 1.618 1.541 1.526   7.75
 99)t Indeno[1,2,3-cd]p   1.350 1.295 1.427 1.759 1.650 1.717 1.580 1.540  11.92
100)t Dibenz(a,h)acridi   1.036 1.051 1.083 1.379 1.295 1.313 1.232 1.199  11.68
101)t Dibenz[a,h]anthra   1.066 1.054 1.124 1.492 1.359 1.417 1.272 1.255  14.07
102)t 7,12-Dimethylbenz   0.592 0.644 0.765 1.154 1.038 1.111 0.886 0.884  25.51
             ----- Linear regression -----  Coefficient =  0.9974
               Response Ratio = -0.09738 + 1.16760 *A

103)t Benzo[g,h,i]peryl   1.109 1.111 1.147 1.327 1.306 1.320 1.244 1.223   8.09

104) I   Naphthalene-d8a      ----------------ISTD--------------------
105)  2,3,7,8-TCDD            0.188                                0.188   0.00
 ---------------------------------------------------------------------------

                                                  Average  % RSD =   9.9

  ( 13.4 %) 13 of  97 compounds'% RSD >  0
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MB1647T.M        Wed Jun 02 11:56:43 2004   RPT1
```

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1651-CC1647
Lab FileID: B62478.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62478.D Vial: 2
Acq On : 1 Jun 2004 1:47 pm Operator: WENDYS
Sample : CC1647-50 Inst : GC/MS Ins
Misc : OP16968,EB1651 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:48:22 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	7.09
2		1,4-Dioxane		----------NA----------				
3	t	Pyridine	0.750	0.469	37.5#	84	-0.02	1.58
4	t	N-Nitrosodimethylamine	0.901	0.447	50.4#	65	-0.02	1.62
5	S	2-Fluorophenol	1.165	1.203	-3.3	126	0.00	5.33
6		Benzaldehyde	0.668	0.363	45.7#	120	0.00	6.51
7	t	Indene	2.333	2.481	-6.3	135	0.00	7.47
8	t	Cumene	2.898	2.900	-0.1	128	-0.01	5.99
9	S	Phenol-d5	1.491	1.503	-0.8	131	-0.01	6.79
10	t	Phenol	1.486	1.657	-11.5	136	-0.01	6.80
11	t	Aniline	1.465	1.393	4.9	130	-0.01	6.72
12	t	bis(2-Chloroethyl)ether	1.266	1.267	-0.1	127	-0.01	6.81
13	t	2-Chlorophenol	1.467	1.514	-3.2	131	-0.01	6.88
14	t	Decane	1.341	1.077	19.7	110	0.00	6.93
15	t	1,3-Dichlorobenzene	1.540	1.583	-2.8	132	0.00	7.04
16	t	1,4-Dichlorobenzene	1.656	1.639	1.0	128	0.00	7.12
		----------	True	Calc.	% Drift	----------		
17	t	Benzyl alcohol	50.000	45.215	9.6	116	0.00	7.36
		----------	AvgRF	CCRF	% Dev	----------		
18	t	1,2-Dichlorobenzene	1.593	1.634	-2.6	133	-0.01	7.36
19	t	Acetophenone	1.810	1.852	-2.3	132	0.00	7.69
20	t	2-Methylphenol	1.175	1.268	-7.9	141	-0.01	7.58
21	t	2,2'-oxybis(1-Chloropropa	0.500	0.520	-4.0	134	0.00	7.54
22	t	3&4-Methylphenol	1.233	1.415	-14.8	140	-0.01	7.77
23	t	n-Nitroso-di-n-propylamin	0.877	0.736	16.1	111	0.00	7.75
24	t	Hexachloroethane	0.787	0.764	2.9	127	0.00	7.77
25	I	Naphthalene-d8	1.000	1.000	0.0	133	0.00	8.90
26	S	Nitrobenzene-d5	0.394	0.351	10.9	114	0.00	7.90
27	t	Nitrobenzene	0.204	0.215	-5.4	139	0.00	7.92
28	t	Quinoline	0.677	0.706	-4.3	136	-0.01	9.55
29	t	Isophorone	0.663	0.597	10.0	120	0.00	8.26
30	t	2-Nitrophenol	0.236	0.244	-3.4	131	0.00	8.38
31	t	2,4-Dimethylphenol	0.396	0.384	3.0	126	-0.01	8.49
		----------	True	Calc.	% Drift	----------		
32	t	Benzoic acid	50.000	49.319	1.4	136	0.00	8.78
		----------	AvgRF	CCRF	% Dev	----------		
33	t	bis(2-Chloroethoxy)methan	0.361	0.374	-3.6	135	-0.01	8.59

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1651-CC1647
Lab FileID: B62478.D

34	t	2,4-Dichlorophenol	0.304	0.305	-0.3	130	-0.01	8.76
35	t	1,3,5-Trichlorobenzene	0.356	0.350	1.7	129	0.00	8.37
36	t	1,2,4-Trichlorobenzene	0.337	0.331	1.8	129	0.00	8.85
37	t	1,2,3-Trichlorobenzene	0.325	0.336	-3.4	134	0.00	9.23
38	t	alpha-Terpineol	0.293	0.242	17.4	110	0.00	8.96
39	t	Naphthalene	1.121	1.156	-3.1	134	0.00	8.94
40	t	4-Chloroaniline	0.436	0.452	-3.7	138	-0.01	9.09
41	t	2,3-Dichloroaniline	0.370	0.378	-2.2	134	-0.01	10.68
42	t	Caprolactam	0.129	0.109	15.5	125	-0.01	9.67
43	t	Hexachlorobutadiene	0.221	0.208	5.9	125	0.00	9.23
44	t	4-Chloro-3-methylphenol	0.346	0.336	2.9	130	-0.01	9.97
45	t	2-Methylnaphthalene	0.712	0.739	-3.8	135	0.00	10.09
46	t	1-Methylnaphthalene	0.708	0.712	-0.6	134	-0.01	10.27
47	t	Dimethylnaphthalene	0.598	0.597	0.2	130	-0.01	11.27
48	I	Acenaphthene-d10	1.000	1.000	0.0	132	-0.01	12.13
		----------	True	Calc.	% Drift	----------		
49	t	Hexachlorocyclopentadiene	100.000	73.375	26.6#	97	0.00	10.50
		----------	AvgRF	CCRF	% Dev	----------		
50	t	2,4,6-Trichlorophenol	0.427	0.396	7.3	120	-0.01	10.69
51	t	2,4,5-Trichlorophenol	0.445	0.433	2.7	129	0.00	10.81
52	S	2-Fluorobiphenyl	1.501	1.539	-2.5	130	-0.01	10.81
53	t	2-Chloronaphthalene	1.309	1.372	-4.8	132	-0.01	10.98
54	t	Biphenyl	1.721	1.811	-5.2	131	-0.01	10.97
55	t	2-Nitroaniline	0.453	0.348	23.2#	96	0.00	11.30
56	t	Dimethylphthalate	1.516	1.535	-1.3	133	0.00	11.73
57	t	Acenaphthylene	1.992	2.076	-4.2	134	-0.01	11.81
58	t	2,6-Dinitrotoluene	0.357	0.370	-3.6	131	-0.01	11.86
59	t	3-Nitroaniline	0.376	0.422	-12.2	147	-0.01	12.16
60	t	Acenaphthene	1.218	1.262	-3.6	135	0.00	12.20
		----------	True	Calc.	% Drift	----------		
61	t	2,4-Dinitrophenol	100.000	87.379	12.6	115	-0.01	12.39
62	t	4-Nitrophenol	50.000	33.909	32.2#	93	-0.01	12.67
		----------	AvgRF	CCRF	% Dev	----------		
63	t	Dibenzofuran	1.775	1.803	-1.6	131	-0.01	12.53
64	t	2,4-Dinitrotoluene	0.503	0.535	-6.4	129	0.00	12.70
		----------	True	Calc.	% Drift	----------		
65	t	2,3,4,6-Tetrachlorophenol	50.000	47.962	4.1	132	-0.01	12.94
		----------	AvgRF	CCRF	% Dev	----------		
66	t	Diethylphthalate	1.742	1.764	-1.3	133	-0.01	13.24
67	t	Fluorene	1.453	1.515	-4.3	133	-0.01	13.27
68	t	4-Chlorophenyl-phenylethe	0.706	0.693	1.8	129	-0.01	13.30
69	t	4-Nitroaniline	0.376	0.430	-14.4	146	-0.01	13.51
70	I	Phenanthrene-d10	1.000	1.000	0.0	133	-0.01	15.37
		----------	True	Calc.	% Drift	----------		
71	t	4,6-Dinitro-2-methylpheno	50.000	47.503	5.0	131	-0.01	13.60
		----------	AvgRF	CCRF	% Dev	----------		
72	t	Atrazine	0.032	0.026	18.8	118	-0.02	14.94
73	t	n-Nitrosodiphenylamine	0.684	0.744	-8.8	136	-0.01	13.62
74	t	1,2-Diphenylhydrazine	1.231	1.072	12.9	108	-0.01	13.66
75	S	2,4,6-Tribromophenol	0.131	0.128	2.3	129	-0.01	13.86

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EB1651-CC1647
Lab FileID: B62478.D

76	t	4-Bromophenyl-phenylether	0.263	0.264	-0.4	131	-0.01	14.38
77	t	Hexachlorobenzene	0.306	0.295	3.6	125	-0.01	14.68
		----------	True	Calc.	% Drift	----------		
78	t	Pentachlorophenol	100.000	84.010	16.0	120	-0.01	15.15
		----------	AvgRF	CCRF	% Dev	----------		
79	t	Phenanthrene	1.195	1.238	-3.6	135	-0.01	15.42
80	t	Anthracene	1.220	1.288	-5.6	137	-0.01	15.52
81	t	Carbazole	1.085	1.183	-9.0	140	-0.01	15.96
82	t	Di-n-butylphthalate	1.803	1.961	-8.8	138	-0.01	17.00
83	t	Fluoranthene	1.333	1.356	-1.7	131	-0.01	18.21
84	t	Octadecane	0.517	0.500	3.3	122	-0.01	15.30
85	I	Chrysene-d12	1.000	1.000	0.0	134	0.00	21.47
		----------	True	Calc.	% Drift	----------		
86	t	Benzidine	100.000	101.136	-1.1	141	0.00	18.64
		----------	AvgRF	CCRF	% Dev	----------		
87	t	Pyrene	1.312	1.286	2.0	130	-0.01	18.72
88	S	Terphenyl-d14	0.877	0.834	4.9	126	-0.01	19.21
89	t	Butylbenzylphthalate	0.758	0.805	-6.2	140	-0.01	20.48
90	t	Benzo[a]anthracene	1.134	1.064	6.2	125	-0.01	21.43
91	t	3,3'-Dichlorobenzidine	0.419	0.430	-2.6	140	-0.01	21.47
92	t	Chrysene	1.031	1.093	-6.0	139	0.00	21.52
93	t	bis(2-Ethylhexyl)phthalat	0.971	1.074	-10.6	146	-0.01	21.77
94	I	Perylene-d12	1.000	1.000	0.0	138	0.00	24.02
		----------	True	Calc.	% Drift	----------		
95	t	Di-n-octylphthalate	50.000	49.492	1.0	143	-0.01	22.86
96	t	Benzo[b]fluoranthene	50.000	46.744	6.5	134	0.00	23.40
		----------	AvgRF	CCRF	% Dev	----------		
97	t	Benzo[k]fluoranthene	1.578	1.816	-15.1	127	-0.01	23.44
98	t	Benzo[a]pyrene	1.526	1.586	-3.9	135	0.00	23.93
99	t	Indeno[1,2,3-cd]pyrene	1.540	1.832	-19.0	153	0.00	26.12
100	t	Dibenz(a,h)acridine	1.199	1.334	-11.3	142	0.00	25.63
101	t	Dibenz[a,h]anthracene	1.255	1.499	-19.4	152	0.00	26.14
		----------	True	Calc.	% Drift	----------		
102	t	7,12-Dimethylbenz(a)anthr	50.000	43.711	12.6	125	0.00	23.42
		----------	AvgRF	CCRF	% Dev	----------		
103	t	Benzo[g,h,i]perylene	1.223	1.398	-14.3	147	0.00	26.71

Average % D = 8.0

(6.3 %) 6 of 96 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
B62478.D MB1647.M Tue Jun 01 17:09:23 2004 RPT1

Initial Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ274-ICC274
Lab FileID: Z06214.D

Response Factor Report GCMS Z

Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue May 04 08:12:53 2004
Response via : Initial Calibration

Calibration Files
2 =Z06211.D 5 =Z06212.D 100 =Z06217.D
50 =Z06215.D 10 =Z06213.D 80 =Z06216.D 25 =Z06214.D

Compound	2	5	100	50	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------								
2)t 1,4-Dioxane	0.726	0.711	0.581	0.607	0.672	0.593	0.615	0.644	9.16
3)t Pyridine	1.847	1.789	1.603	1.655	1.797	1.631	1.697	1.717	5.48
4)t N-Nitrosodimethyl	0.838	0.705	0.659	0.677	0.720	0.674	0.696	0.710	8.49
5)S 2-Fluorophenol	1.666	1.550	1.412	1.447	1.529	1.427	1.469	1.500	5.95
6)t Indene	3.002	2.923	2.523	2.663	2.839	2.571	2.723	2.749	6.53
7)t Cumene	3.596	3.414	3.015	3.173	3.444	3.072	3.268	3.283	6.46
8)S Phenol-d5	2.125	1.982	1.791	1.839	1.987	1.803	1.857	1.912	6.42
9)t Phenol	2.374	2.257	1.967	2.040	2.188	2.008	2.090	2.132	6.92
10)t Aniline	2.485	2.565	2.002	2.147	2.470	2.086	2.127	2.269	10.09
11)t bis(2-Chloroethyl	1.574	1.508	1.381	1.446	1.533	1.400	1.466	1.473	4.76
12)t Benzaldehyde	0.222	1.015		0.459	0.795	0.209	0.725	0.571	57.38
13)t 2-Chlorophenol	1.761	1.714	1.481	1.544	1.642	1.514	1.541	1.599	6.70
14)t Decane	2.128	2.099	1.692	1.839	2.057	1.749	1.917	1.926	9.04
15)t 1,3-Dichlorobenze	1.939	1.786	1.568	1.648	1.783	1.604	1.697	1.718	7.46
16)t 1,4-Dichlorobenze	1.929	1.801	1.576	1.661	1.817	1.616	1.705	1.729	7.23
17)t Benzyl alcohol	1.178	1.073	0.951	0.999	1.041	0.970	1.013	1.032	7.41
18)t 1,2-Dichlorobenze	1.784	1.763	1.437	1.554	1.694	1.476	1.595	1.615	8.46
19)t Acetophenone	2.375	2.195	1.848	1.972	2.189	1.911	2.040	2.076	8.96
20)t 2-Methylphenol	1.629	1.546	1.344	1.389	1.568	1.377	1.430	1.469	7.53
21)t 2,2'-oxybis(1-Chl	0.609	0.548	0.443	0.477	0.514	0.456	0.484	0.504	11.51
22)t 3&4-Methylphenol	1.672	1.635	1.491	1.541	1.621	1.517	1.543	1.574	4.32
23)t n-Nitroso-di-n-pr	1.236	1.120	0.979	1.018	1.100	0.998	1.024	1.068	8.47
24)t Hexachloroethane	0.585	0.564	0.484	0.508	0.547	0.483	0.523	0.528	7.46
25) I Naphthalene-d8	----------ISTD----------								
26)S Nitrobenzene-d5	0.445	0.415	0.400	0.402	0.413	0.396	0.400	0.410	4.18
27)t Nitrobenzene	0.224	0.207	0.198	0.201	0.200	0.198	0.202	0.204	4.50
28)t Quinoline	0.793	0.761	0.741	0.729	0.743	0.731	0.730	0.747	3.13
29)t Isophorone	0.859	0.785	0.726	0.732	0.776	0.726	0.735	0.763	6.44
30)t 2-Nitrophenol	0.212	0.204	0.204	0.206	0.201	0.201	0.203	0.205	1.78
31)t 2,4-Dimethylpheno	0.374	0.375	0.371	0.365	0.366	0.363	0.356	0.367	1.84
32)t Benzoic acid			0.302	0.281	0.181	0.317	0.254	0.267	20.12
----- Linear regression ----- Coefficient = 0.9969									
Response Ratio = -0.04013 + 0.32382 *A									
33)t bis(2-Chloroethox	0.473	0.447	0.427	0.436	0.444	0.426	0.435	0.441	3.66
34)t 2,4-Dichloropheno	0.308	0.298	0.289	0.291	0.294	0.286	0.288	0.293	2.62
35)t 1,3,5-Trichlorobe	0.355	0.346	0.315	0.328	0.343	0.315	0.331	0.333	4.59
36)t 1,2,4-Trichlorobe	0.352	0.345	0.320	0.327	0.342	0.318	0.329	0.333	3.99
37)t 1,2,3-Trichlorobe	0.330	0.325	0.294	0.297	0.309	0.293	0.301	0.307	4.89
38)t alpha-Terpineol	0.429	0.382	0.364	0.372	0.382	0.363	0.374	0.381	5.90
39)t Naphthalene	1.238	1.172	1.084	1.103	1.151	1.078	1.120	1.135	4.99
40)t 4-Chloroaniline	0.474	0.473	0.432	0.447	0.479	0.438	0.450	0.456	4.14
41)t 2,3-Dichloroanili	0.382	0.359	0.346	0.345	0.346	0.343	0.343	0.352	4.06
42)t Caprolactam	0.235	0.209	0.204	0.199	0.202	0.206	0.195	0.207	6.25

Initial Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ274-ICC274
Lab FileID: Z06214.D

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43)t Hexachlorobutadie 0.185 0.177 0.161 0.164 0.174 0.162 0.168 0.170   5.34
44)t 4-Chloro-3-methyl 0.362 0.327 0.317 0.312 0.318 0.319 0.314 0.324   5.37
45)t 2-Methylnaphthale 0.854 0.756 0.716 0.728 0.752 0.714 0.730 0.750   6.49
46)t 1-Methylnaphthale 0.800 0.734 0.691 0.699 0.720 0.688 0.701 0.719   5.47
47)t Dimethylnaphthale 0.672 0.634 0.583 0.598 0.629 0.590 0.606 0.616   5.05

48) I   Acenaphthene-d10        ----------------ISTD---------------------
49)t Hexachlorocyclope         0.132 0.268 0.245 0.177 0.266 0.211 0.216  24.95
            ----- Linear regression -----  Coefficient =  0.9987
              Response Ratio = -0.05887 + 0.27810 *A

50)t 2,4,6-Trichloroph 0.421 0.398 0.391 0.398 0.392 0.398 0.396 0.399   2.55
51)t 2,4,5-Trichloroph 0.483 0.424 0.429 0.425 0.420 0.434 0.431 0.435   4.95
52)S 2-Fluorobiphenyl  1.557 1.440 1.354 1.374 1.449 1.359 1.394 1.418   5.07
53)t 2-Chloronaphthale 1.380 1.305 1.172 1.228 1.295 1.190 1.241 1.259   5.77
54)t Biphenyl          1.791 1.748 1.554 1.625 1.713 1.582 1.657 1.667   5.25
55)t 2-Nitroaniline    0.432 0.404 0.395 0.408 0.413 0.405 0.410 0.410   2.77
56)t Dimethylphthalate 1.417 1.353 1.294 1.302 1.321 1.298 1.300 1.326   3.38
57)t Acenaphthylene    2.216 2.136 1.963 2.026 2.101 2.000 2.053 2.071   4.19
58)t 2,6-Dinitrotoluen 0.296 0.278 0.304 0.311 0.306 0.310 0.301 0.301   3.80
59)t 3-Nitroaniline    0.358 0.355 0.384 0.383 0.375 0.393 0.383 0.376   3.86
60)t Acenaphthene      1.399 1.305 1.199 1.228 1.270 1.219 1.240 1.266   5.39
61)t 2,4-Dinitrophenol             0.204 0.173 0.069 0.200 0.144 0.158  35.06
            ----- Linear regression -----  Coefficient =  0.9984
              Response Ratio = -0.09302 + 0.22138 *A

62)t 4-Nitrophenol             0.145 0.186 0.177 0.167 0.189 0.175 0.173   9.22
63)t Dibenzofuran      1.840 1.741 1.640 1.659 1.739 1.662 1.680 1.709   4.09
64)t 2,4-Dinitrotoluen 0.397 0.382 0.429 0.432 0.402 0.439 0.422 0.415   5.14
65)  2,3,4,6-Tetrachlo 0.298 0.292 0.313 0.314 0.294 0.318 0.304 0.305   3.42
66)t Diethylphthalate  1.490 1.370 1.329 1.333 1.379 1.345 1.328 1.368   4.22
67)t Fluorene          1.513 1.433 1.350 1.366 1.412 1.377 1.384 1.405   3.93
68)t 4-Chlorophenyl-ph 0.689 0.661 0.614 0.614 0.652 0.616 0.621 0.638   4.62
69)t 4-Nitroaniline    0.350 0.346 0.389 0.383 0.362 0.401 0.372 0.372   5.51

70) I   Phenanthrene-d10       ----------------ISTD---------------------
71)t 4,6-Dinitro-2-met         0.065 0.154 0.143 0.091 0.152 0.129 0.122  29.82
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = -0.01679 + 0.15985 *A

72)t Atrazine          0.114 0.103 0.088 0.093 0.100 0.091 0.088 0.097  10.05
73)t n-Nitrosodiphenyl 0.563 0.525 0.513 0.517 0.540 0.509 0.522 0.527   3.59
74)t 1,2-Diphenylhydra 0.925 0.890 0.823 0.863 0.907 0.828 0.882 0.874   4.40
75)S 2,4,6-Tribromophe 0.089 0.085 0.091 0.091 0.089 0.091 0.090 0.090   2.29
76)t 4-Bromophenyl-phe 0.216 0.210 0.198 0.202 0.208 0.198 0.199 0.205   3.45
77)t Hexachlorobenzene 0.226 0.222 0.204 0.207 0.220 0.205 0.209 0.213   4.31
78)t Pentachlorophenol         0.088 0.134 0.132 0.101 0.135 0.121 0.118  16.54
            ----- Linear regression -----  Coefficient =  0.9998
              Response Ratio = -0.01644 + 0.13791 *A

79)t Phenanthrene      1.333 1.283 1.167 1.196 1.275 1.182 1.218 1.236   4.97
80)t Anthracene        1.364 1.282 1.180 1.208 1.248 1.193 1.211 1.241   5.20
81)t Carbazole         1.232 1.133 1.081 1.097 1.139 1.099 1.106 1.127   4.52
82)t Di-n-butylphthala 1.465 1.391 1.356 1.373 1.378 1.366 1.371 1.386   2.63
83)t Fluoranthene      1.329 1.242 1.192 1.205 1.236 1.217 1.214 1.233   3.70
84)t Octadecane        0.705 0.707 0.668 0.697 0.742 0.671 0.706 0.700   3.57

85) I   Chrysene-d12          ----------------ISTD---------------------
86)t Benzidine         0.385 0.427 0.270 0.293 0.379 0.282 0.237 0.325  21.92
            ----- Linear regression -----  Coefficient =  0.9952
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Initial Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ274-ICC274
Lab FileID: Z06214.D

Response Ratio = 0.02480 + 0.26986 *A

87)t	Pyrene	1.600	1.516	1.426	1.455	1.517	1.421	1.445	1.483	4.37
88)	Butyl stearate	0.542	0.484	0.470	0.466	0.480	0.461	0.472	0.482	5.74
89)S	Terphenyl-d14	0.980	0.964	0.923	0.927	0.963	0.910	0.928	0.942	2.81
90)t	Butylbenzylphthal	0.716	0.687	0.683	0.684	0.682	0.674	0.673	0.686	2.10
91)t	Benzo[a]anthracen	1.402	1.266	1.211	1.209	1.247	1.213	1.215	1.252	5.56
92)t	3,3'-Dichlorobenz	0.432	0.398	0.404	0.424	0.419	0.405	0.429	0.416	3.25
93)t	Chrysene	1.297	1.218	1.158	1.172	1.199	1.180	1.172	1.199	3.97
94)t	bis(2-Ethylhexyl)	0.981	0.923	0.925	0.928	0.921	0.916	0.916	0.930	2.47
95) I	Perylene-d12	----------ISTD----------								
96)t	Di-n-octylphthala	2.081	2.016	2.013	2.034	2.007	2.003	2.016	2.024	1.32
97)t	Benzo[b]fluoranth	1.742	1.632	1.533	1.621	1.626	1.591	1.628	1.625	3.85
98)t	Benzo[k]fluoranth	1.733	1.742	1.572	1.631	1.753	1.586	1.671	1.670	4.52
99)t	Benzo[a]pyrene	1.633	1.546	1.457	1.475	1.492	1.481	1.494	1.511	4.00
100)t	Indeno[1,2,3-cd]p	1.684	1.507	1.610	1.642	1.563	1.615	1.649	1.610	3.67
101)t	Dibenz(a,h)acridi	1.230	1.122	1.241	1.223	1.165	1.256	1.209	1.207	3.90
102)t	Dibenz[a,h]anthra	1.367	1.249	1.332	1.366	1.288	1.348	1.365	1.331	3.45
103)t	7,12-Dimethylbenz	0.661	0.658	0.707	0.699	0.669	0.718	0.648	0.680	4.04
104)t	Benzo[g,h,i]peryl	1.423	1.306	1.382	1.403	1.369	1.384	1.412	1.383	2.79

Average % RSD = 6.8

(8.2 %) 8 of 98 compounds'% RSD > 30

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

MZ0274.M Tue May 04 11:22:32 2004 RPT1

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ293-CC274
Lab FileID: Z06732.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ293\Z06732.D
Acq On : 2 Jun 2004 1:52 pm
Sample : CC274-50
Misc : OP16938,EZ293,,,,,
MS Integration Params: LSCINT.P

Vial: 2
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue May 11 13:03:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	87	-0.21	5.48
2	t	1,4-Dioxane	0.644	0.605	6.1	87	-0.14	1.86
3	t	Pyridine	1.717	1.726	-0.5	91	-0.14	2.13
4	t	N-Nitrosodimethylamine	0.710	0.738	-3.9	95	-0.14	2.10
5	S	2-Fluorophenol	1.500	1.520	-1.3	91	-0.17	3.48
6	t	Indene	2.749	2.712	1.3	89	-0.21	5.95
7	t	Cumene	3.283	3.043	7.3	83	-0.20	4.14
8	S	Phenol-d5	1.912	2.057	-7.6	97	-0.18	4.92
9	t	Phenol	2.132	2.240	-5.1	95	-0.18	4.94
10	t	Aniline	2.269	2.217	2.3	90	-0.20	4.93
11	t	bis(2-Chloroethyl)ether	1.473	1.532	-4.0	92	-0.19	5.05
12	t	Benzaldehyde	0.571	0.637	-11.6	121	-0.19	4.75
13	t	2-Chlorophenol	1.599	1.636	-2.3	92	-0.20	5.13
14	t	Decane	1.926	1.718	10.8	81	-0.20	5.18
15	t	1,3-Dichlorobenzene	1.718	1.590	7.5	84	-0.21	5.38
16	t	1,4-Dichlorobenzene	1.729	1.616	6.5	85	-0.21	5.52
17	t	Benzyl alcohol	1.032	1.074	-4.1	93	-0.20	5.79
18	t	1,2-Dichlorobenzene	1.615	1.540	4.6	86	-0.21	5.79
19	t	Acetophenone	2.076	2.104	-1.3	93	-0.21	6.28
20	t	2-Methylphenol	1.469	1.496	-1.8	94	-0.20	6.04
21	t	2,2'-oxybis(1-Chloropropa	0.504	0.517	-2.6	94	-0.18	6.04
22	t	3&4-Methylphenol	1.574	1.660	-5.5	94	-0.19	6.36
23	t	n-Nitroso-di-n-propylamin	1.068	1.171	-9.6	100	-0.20	6.30
24	t	Hexachloroethane	0.528	0.485	8.1	83	-0.22	6.41
25	I	Naphthalene-d8	1.000	1.000	0.0	95	-0.22	8.05
26	S	Nitrobenzene-d5	0.410	0.380	7.3	90	-0.21	6.58
27	t	Nitrobenzene	0.204	0.188	7.8	89	-0.21	6.62
28	t	Quinoline	0.747	0.788	-5.5	103	-0.22	8.86
29	t	Isophorone	0.763	0.745	2.4	97	-0.21	7.11
30	t	2-Nitrophenol	0.205	0.196	4.4	90	-0.21	7.28
31	t	2,4-Dimethylphenol	0.367	0.376	-2.5	98	-0.20	7.45
		----------	True	Calc.	% Drift	----------		
32	t	Benzoic acid	50.000	43.523	13.0	84	-0.14	7.77
		----------	AvgRF	CCRF	% Dev	----------		
33	t	bis(2-Chloroethoxy)methan	0.441	0.439	0.5	95	-0.21	7.63
34	t	2,4-Dichlorophenol	0.293	0.290	1.0	94	-0.21	7.82
35	t	1,3,5-Trichlorobenzene	0.333	0.305	8.4	88	-0.22	7.27
36	t	1,2,4-Trichlorobenzene	0.333	0.309	7.2	90	-0.22	7.95
37	t	1,2,3-Trichlorobenzene	0.307	0.294	4.2	94	-0.22	8.43

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ293-CC274
Lab FileID: Z06732.D

38	t	alpha-Terpineol	0.381	0.378	0.8	96	-0.22	8.18
39	t	Naphthalene	1.135	1.110	2.2	95	-0.22	8.09
40	t	4-Chloroaniline	0.456	0.472	-3.5	100	-0.21	8.30
41	t	2,3-Dichloroaniline	0.352	0.370	-5.1	102	-0.22	10.37
42	t	Caprolactam	0.207	0.240	-15.9	114	-0.17	9.11
43	t	Hexachlorobutadiene	0.170	0.151	11.2	87	-0.22	8.39
44	t	4-Chloro-3-methylphenol	0.324	0.337	-4.0	102	-0.20	9.52
45	t	2-Methylnaphthalene	0.750	0.738	1.6	96	-0.23	9.66
46	t	1-Methylnaphthalene	0.719	0.720	-0.1	98	-0.23	9.88
47	t	Dimethylnaphthalene	0.616	0.627	-1.8	99	-0.23	11.12
48	I	Acenaphthene-d10	1.000	1.000	0.0	99	-0.23	12.08
		----------	True	Calc.	% Drift	----------		
49	t	Hexachlorocyclopentadiene	100.000	80.573	19.4	81	-0.23	10.02
		----------	AvgRF	CCRF	% Dev	----------		
50	t	2,4,6-Trichlorophenol	0.399	0.404	-1.3	101	-0.13	10.40
51	t	2,4,5-Trichlorophenol	0.435	0.430	1.1	100	-0.21	10.49
52	S	2-Fluorobiphenyl	1.418	1.342	5.4	97	-0.22	10.56
53	t	2-Chloronaphthalene	1.259	1.203	4.4	97	-0.23	10.78
54	t	Biphenyl	1.667	1.647	1.2	100	-0.23	10.78
55	t	2-Nitroaniline	0.410	0.432	-5.4	105	-0.21	11.14
56	t	Dimethylphthalate	1.326	1.415	-6.7	108	-0.21	11.60
57	t	Acenaphthylene	2.071	2.116	-2.2	103	-0.23	11.73
58	t	2,6-Dinitrotoluene	0.301	0.305	-1.3	97	-0.21	11.74
59	t	3-Nitroaniline	0.376	0.411	-9.3	106	-0.21	12.12
60	t	Acenaphthene	1.266	1.293	-2.1	104	-0.23	12.15
		----------	True	Calc.	% Drift	----------		
61	t	2,4-Dinitrophenol	100.000	99.419	0.6	104	-0.20	12.41
		----------	AvgRF	CCRF	% Dev	----------		
62	t	4-Nitrophenol	0.173	0.191	-10.4	107	-0.19	12.72
63	t	Dibenzofuran	1.709	1.758	-2.9	105	-0.23	12.57
64	t	2,4-Dinitrotoluene	0.415	0.463	-11.6	106	-0.21	12.70
65		2,3,4,6-Tetrachlorophenol	0.305	0.338	-10.8	107	-0.22	12.94
66	t	Diethylphthalate	1.368	1.480	-8.2	110	-0.22	13.28
67	t	Fluorene	1.405	1.500	-6.8	109	-0.23	13.37
68	t	4-Chlorophenyl-phenylethe	0.638	0.660	-3.4	106	-0.23	13.44
69	t	4-Nitroaniline	0.372	0.444	-19.4	115	-0.21	13.58
70	I	Phenanthrene-d10	1.000	1.000	0.0	113	-0.24	15.58
		----------	True	Calc.	% Drift	----------		
71	t	4,6-Dinitro-2-methylpheno	50.000	48.470	3.1	112	-0.21	13.66
		----------	AvgRF	CCRF	% Dev	----------		
72	t	Atrazine	0.097	0.041#	57.7#	50#	-0.22	15.13
73	t	n-Nitrosodiphenylamine	0.527	0.566	-7.4	124	-0.22	13.76
74	t	1,2-Diphenylhydrazine	0.874	0.810	7.3	106	-0.23	13.81
75	S	2,4,6-Tribromophenol	0.090	0.088	2.2	110	-0.24	13.97
76	t	4-Bromophenyl-phenylether	0.205	0.193	5.9	108	-0.23	14.59
77	t	Hexachlorobenzene	0.213	0.198	7.0	108	-0.24	14.67
		----------	True	Calc.	% Drift	----------		
78	t	Pentachlorophenol	100.000	99.995	0.0	113	-0.23	15.21
		----------	AvgRF	CCRF	% Dev	----------		
79	t	Phenanthrene	1.236	1.234	0.2	117	-0.24	15.63

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ293-CC274
Lab FileID: Z06732.D

80	t	Anthracene	1.241	1.242	-0.1	116	-0.23	15.76
81	t	Carbazole	1.127	1.197	-6.2	123	-0.22	16.24
82	t	Di-n-butylphthalate	1.386	1.462	-5.5	120	-0.22	17.18
83	t	Fluoranthene	1.233	1.387	-12.5	130	-0.22	18.43
84	t	Octadecane	0.700	0.626	10.6	101	-0.22	15.54
85	I	Chrysene-d12	1.000	1.000	0.0	155	-0.18	21.26
		----------	True	Calc.	% Drift	----------		
86	t	Benzidine	100.000	74.897	25.1#	112	-0.20	18.85
		----------	AvgRF	CCRF	% Dev	----------		
87	t	Pyrene	1.483	1.249	15.8	133	-0.21	18.90
88		Butyl stearate	0.482	0.427	11.4	142	-0.17	20.51
89	S	Terphenyl-d14	0.942	0.754	20.0	126	-0.20	19.33
90	t	Butylbenzylphthalate	0.686	0.616	10.2	139	-0.18	20.35
91	t	Benzo[a]anthracene	1.252	1.188	5.1	152	-0.18	21.24
92	t	3,3'-Dichlorobenzidine	0.416	0.425	-2.2	155	-0.18	21.27
93	t	Chrysene	1.199	1.207	-0.7	160	-0.18	21.31
94	t	bis(2-Ethylhexyl)phthalat	0.930	0.838	9.9	140	-0.17	21.40
95	I	Perylene-d12	1.000	1.000	0.0	161	-0.18	23.55
96	t	Di-n-octylphthalate	2.024	1.886	6.8	150	-0.17	22.46
97	t	Benzo[b]fluoranthene	1.625	1.584	2.5	158	-0.17	23.00
98	t	Benzo[k]fluoranthene	1.670	1.785	-6.9	177	-0.17	23.04
99	t	Benzo[a]pyrene	1.511	1.566	-3.6	171	-0.17	23.47
100	t	Indeno[1,2,3-cd]pyrene	1.610	1.623	-0.8	159	-0.25	25.17
101	t	Dibenz(a,h)acridine	1.207	1.193	1.2	157	-0.23	24.78
102	t	Dibenz[a,h]anthracene	1.331	1.303	2.1	154	-0.25	25.19
103	t	7,12-Dimethylbenz(a)anthr	0.680	0.743	-9.3	171	-0.17	22.98
104	t	Benzo[g,h,i]perylene	1.383	1.337	3.3	154	-0.27	25.64

Average % D = 6.4

(2.0 %) 2 of 98 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z06215.D MZ0274.M Wed Jun 02 15:21:04 2004 RPT1

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ295-CC274
Lab FileID: Z06790.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ295\Z06790.D
Acq On : 4 Jun 2004 12:19 pm
Sample : CC274-50
Misc : OP16938,EZ295,,,,,
MS Integration Params: LSCINT.P

Vial: 2
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue May 11 13:03:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	-0.23	5.46
2	t	1,4-Dioxane	0.644	0.575	10.7	87	-0.15	1.85
3	t	Pyridine	1.717	1.717	0.0	95	-0.16	2.11
4	t	N-Nitrosodimethylamine	0.710	0.781	-10.0	106	-0.15	2.09
5	S	2-Fluorophenol	1.500	1.559	-3.9	99	-0.19	3.46
6	t	Indene	2.749	2.740	0.3	94	-0.24	5.93
7	t	Cumene	3.283	3.039	7.4	88	-0.22	4.12
8	S	Phenol-d5	1.912	2.094	-9.5	104	-0.20	4.91
9	t	Phenol	2.132	2.302	-8.0	103	-0.20	4.93
10	t	Aniline	2.269	2.264	0.2	97	-0.22	4.91
11	t	bis(2-Chloroethyl)ether	1.473	1.552	-5.4	98	-0.21	5.03
12	t	Benzaldehyde	0.571	0.704	-23.3#	141	-0.22	4.72
13	t	2-Chlorophenol	1.599	1.706	-6.7	101	-0.22	5.10
14	t	Decane	1.926	1.761	8.6	88	-0.22	5.16
15	t	1,3-Dichlorobenzene	1.718	1.595	7.2	89	-0.23	5.36
16	t	1,4-Dichlorobenzene	1.729	1.628	5.8	90	-0.23	5.49
17	t	Benzyl alcohol	1.032	1.144	-10.9	105	-0.22	5.77
18	t	1,2-Dichlorobenzene	1.615	1.537	4.8	91	-0.23	5.77
19	t	Acetophenone	2.076	2.208	-6.4	103	-0.23	6.26
20	t	2-Methylphenol	1.469	1.557	-6.0	103	-0.21	6.03
21	t	2,2'-oxybis(1-Chloropropa	0.504	0.523	-3.8	101	-0.21	6.02
22	t	3&4-Methylphenol	1.574	1.717	-9.1	102	-0.21	6.34
23	t	n-Nitroso-di-n-propylamin	1.068	1.223	-14.5	110	-0.22	6.28
24	t	Hexachloroethane	0.528	0.498	5.7	90	-0.24	6.39
25	I	Naphthalene-d8	1.000	1.000	0.0	103	-0.25	8.02
26	S	Nitrobenzene-d5	0.410	0.391	4.6	100	-0.23	6.56
27	t	Nitrobenzene	0.204	0.192	5.9	98	-0.23	6.59
28	t	Quinoline	0.747	0.798	-6.8	113	-0.24	8.84
29	t	Isophorone	0.763	0.750	1.7	105	-0.23	7.09
30	t	2-Nitrophenol	0.205	0.206	-0.5	103	-0.24	7.25
31	t	2,4-Dimethylphenol	0.367	0.377	-2.7	106	-0.22	7.43
		----------	True	Calc.	% Drift	----------		
32	t	Benzoic acid	50.000	45.843	8.3	97	-0.14	7.78
		----------	AvgRF	CCRF	% Dev	----------		
33	t	bis(2-Chloroethoxy)methan	0.441	0.453	-2.7	107	-0.23	7.61
34	t	2,4-Dichlorophenol	0.293	0.302	-3.1	107	-0.23	7.80
35	t	1,3,5-Trichlorobenzene	0.333	0.303	9.0	95	-0.24	7.25
36	t	1,2,4-Trichlorobenzene	0.333	0.307	7.8	97	-0.24	7.92
37	t	1,2,3-Trichlorobenzene	0.307	0.292	4.9	101	-0.24	8.41

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ295-CC274
Lab FileID: Z06790.D

38	t	alpha-Terpineol	0.381	0.386	-1.3	107	-0.24	8.15
39	t	Naphthalene	1.135	1.088	4.1	101	-0.24	8.07
40	t	4-Chloroaniline	0.456	0.472	-3.5	108	-0.23	8.28
41	t	2,3-Dichloroaniline	0.352	0.373	-6.0	111	-0.25	10.34
42	t	Caprolactam	0.207	0.236	-14.0	122	-0.18	9.09
43	t	Hexachlorobutadiene	0.170	0.152	10.6	95	-0.25	8.36
44	t	4-Chloro-3-methylphenol	0.324	0.343	-5.9	113	-0.22	9.51
45	t	2-Methylnaphthalene	0.750	0.744	0.8	105	-0.25	9.64
46	t	1-Methylnaphthalene	0.719	0.710	1.3	104	-0.25	9.86
47	t	Dimethylnaphthalene	0.616	0.633	-2.8	109	-0.25	11.10
48	I	Acenaphthene-d10	1.000	1.000	0.0	108	-0.26	12.05
		----------	True	Calc.	% Drift	----------		
49	t	Hexachlorocyclopentadiene	100.000	84.212	15.8	93	-0.25	10.00
		----------	AvgRF	CCRF	% Dev	----------		
50	t	2,4,6-Trichlorophenol	0.399	0.405	-1.5	110	-0.15	10.38
51	t	2,4,5-Trichlorophenol	0.435	0.426	2.1	108	-0.23	10.47
52	S	2-Fluorobiphenyl	1.418	1.333	6.0	105	-0.25	10.54
53	t	2-Chloronaphthalene	1.259	1.186	5.8	104	-0.25	10.76
54	t	Biphenyl	1.667	1.625	2.5	108	-0.25	10.75
55	t	2-Nitroaniline	0.410	0.447	-9.0	119	-0.24	11.11
56	t	Dimethylphthalate	1.326	1.429	-7.8	119	-0.24	11.57
57	t	Acenaphthylene	2.071	2.106	-1.7	112	-0.26	11.71
58	t	2,6-Dinitrotoluene	0.301	0.322	-7.0	112	-0.24	11.72
59	t	3-Nitroaniline	0.376	0.421	-12.0	119	-0.24	12.10
60	t	Acenaphthene	1.266	1.280	-1.1	113	-0.26	12.12
		----------	True	Calc.	% Drift	----------		
61	t	2,4-Dinitrophenol	100.000	82.827	17.2	91	-0.22	12.39
		----------	AvgRF	CCRF	% Dev	----------		
62	t	4-Nitrophenol	0.173	0.204	-17.9	125	-0.21	12.70
63	t	Dibenzofuran	1.709	1.752	-2.5	114	-0.26	12.54
64	t	2,4-Dinitrotoluene	0.415	0.473	-14.0	118	-0.23	12.68
65		2,3,4,6-Tetrachlorophenol	0.305	0.332	-8.9	114	-0.25	12.91
66	t	Diethylphthalate	1.368	1.521	-11.2	123	-0.24	13.26
67	t	Fluorene	1.405	1.474	-4.9	117	-0.25	13.35
68	t	4-Chlorophenyl-phenylethe	0.638	0.670	-5.0	118	-0.25	13.42
69	t	4-Nitroaniline	0.372	0.438	-17.7	123	-0.23	13.56
70	I	Phenanthrene-d10	1.000	1.000	0.0	118	-0.26	15.55
		----------	True	Calc.	% Drift	----------		
71	t	4,6-Dinitro-2-methylpheno	50.000	48.002	4.0	116	-0.22	13.65
		----------	AvgRF	CCRF	% Dev	----------		
72	t	Atrazine	0.097	0.042#	56.7#	53	-0.24	15.10
73	t	n-Nitrosodiphenylamine	0.527	0.587	-11.4	134	-0.24	13.74
74	t	1,2-Diphenylhydrazine	0.874	0.844	3.4	116	-0.25	13.79
75	S	2,4,6-Tribromophenol	0.090	0.092	-2.2	120	-0.26	13.95
76	t	4-Bromophenyl-phenylether	0.205	0.208	-1.5	121	-0.26	14.56
77	t	Hexachlorobenzene	0.213	0.204	4.2	116	-0.26	14.65
		----------	True	Calc.	% Drift	----------		
78	t	Pentachlorophenol	100.000	95.200	4.8	112	-0.25	15.19
		----------	AvgRF	CCRF	% Dev	----------		
79	t	Phenanthrene	1.236	1.228	0.6	121	-0.26	15.61

Continuing Calibration Summary

Job Number: N67805
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe

Sample: EZ295-CC274
Lab FileID: Z06790.D

80	t	Anthracene	1.241	1.248	-0.6	122	-0.26	15.73
81	t	Carbazole	1.127	1.178	-4.5	127	-0.25	16.21
82	t	Di-n-butylphthalate	1.386	1.535	-10.8	132	-0.25	17.16
83	t	Fluoranthene	1.233	1.333	-8.1	131	-0.24	18.41
84	t	Octadecane	0.700	0.678	3.1	115	-0.25	15.51
85	I	Chrysene-d12	1.000	1.000	0.0	142	-0.21	21.24
			True	Calc.	% Drift			
86	t	Benzidine	100.000	80.225	19.8	110	-0.23	18.82
			AvgRF	CCRF	% Dev			
87	t	Pyrene	1.483	1.342	9.5	131	-0.23	18.88
88		Butyl stearate	0.482	0.519	-7.7	158	-0.20	20.48
89	S	Terphenyl-d14	0.942	0.833	11.6	128	-0.23	19.30
90	t	Butylbenzylphthalate	0.686	0.682	0.6	142	-0.21	20.32
91	t	Benzo[a]anthracene	1.252	1.211	3.3	142	-0.21	21.22
92	t	3,3'-Dichlorobenzidine	0.416	0.444	-6.7	149	-0.21	21.25
93	t	Chrysene	1.199	1.188	0.9	144	-0.21	21.28
94	t	bis(2-Ethylhexyl)phthalat	0.930	0.949	-2.0	145	-0.20	21.38
95	I	Perylene-d12	1.000	1.000	0.0	147	-0.20	23.52
96	t	Di-n-octylphthalate	2.024	2.122	-4.8	153	-0.20	22.43
97	t	Benzo[b]fluoranthene	1.625	1.680	-3.4	153	-0.19	22.98
98	t	Benzo[k]fluoranthene	1.670	1.668	0.1	151	-0.20	23.02
99	t	Benzo[a]pyrene	1.511	1.558	-3.1	155	-0.20	23.44
100	t	Indeno[1,2,3-cd]pyrene	1.610	1.759	-9.3	158	-0.28	25.14
101	t	Dibenz(a,h)acridine	1.207	1.345	-11.4	162	-0.25	24.76
102	t	Dibenz[a,h]anthracene	1.331	1.458	-9.5	157	-0.28	25.16
103	t	7,12-Dimethylbenz(a)anthr	0.680	0.727	-6.9	153	-0.20	22.96
104	t	Benzo[g,h,i]perylene	1.383	1.505	-8.8	158	-0.30	25.61

Average % D = 7.0

(2.0 %) 2 of 98 compounds'%D > 20

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

Z06215.D MZ0274.M Fri Jun 04 14:35:57 2004 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\EB1651\B62482.D
Acq On : 1 Jun 2004 3:35 pm
Sample : N67805-1R
Misc : OP17035,EB1651,30.1
MS Integration Params: LSCINT.P
Quant Time: Jun 1 17:01 2004

Vial: 6
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MB1647.RES

Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed May 26 08:34:32 2004
Response via : Initial Calibration
DataAcq Meth : MB1647

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.13	152	154745	40.00 ppb	0.03
25) Naphthalene-d8	8.92	136	500142	40.00 ppb	0.01
48) Acenaphthene-d10	12.13	164	190829	40.00 ppb	0.00
70) Phenanthrene-d10	15.39	188	316271	40.00 ppb	0.01
85) Chrysene-d12	21.53	240	351092	40.00 ppb	0.05
94) Perylene-d12	24.10	264	116692	40.00 ppb	0.08
System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0d	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
9) Phenol-d5	0.00	99	0d	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
26) Nitrobenzene-d5	7.92	82	240263	48.81 ppb	0.01
Spiked Amount 50.000			Recovery	= 97.62%	
52) 2-Fluorobiphenyl	10.81	172	256624	35.84 ppb	0.00
Spiked Amount 50.000			Recovery	= 71.68%	
75) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
88) Terphenyl-d14	19.27	244	225305	29.27 ppb	0.04
Spiked Amount 50.000			Recovery	= 58.54%	
Target Compounds					Qvalue
39) Naphthalene	8.95	128	807343	57.60 ppb	92
57) Acenaphthylene	11.82	152	9433	0.99 ppb	79
60) Acenaphthene	12.20	153	13877	2.39 ppb	87
67) Fluorene	13.29	166	19682m	2.84 ppb	
79) Phenanthrene	15.44	178	171358	18.14 ppb	95
80) Anthracene	15.55	178	25037	2.60 ppb	69
83) Fluoranthene	18.26	202	168348	15.97 ppb	91
87) Pyrene	18.78	202	151762	13.18 ppb	94
90) Benzo[a]anthracene	21.50	228	74226	7.46 ppb	97
92) Chrysene	21.58	228	82915	9.17 ppb	94
96) Benzo[b]fluoranthene	23.47	252	59272m	13.05 ppb	
97) Benzo[k]fluoranthene	23.48	252	44159m	9.59 ppb	
98) Benzo[a]pyrene	24.00	252	30383	6.83 ppb	84
99) Indeno[1,2,3-cd]pyrene	26.19	276	2515	0.56 ppb	96
103) Benzo[g,h,i]perylene	26.78	276	2403	0.67 ppb	80

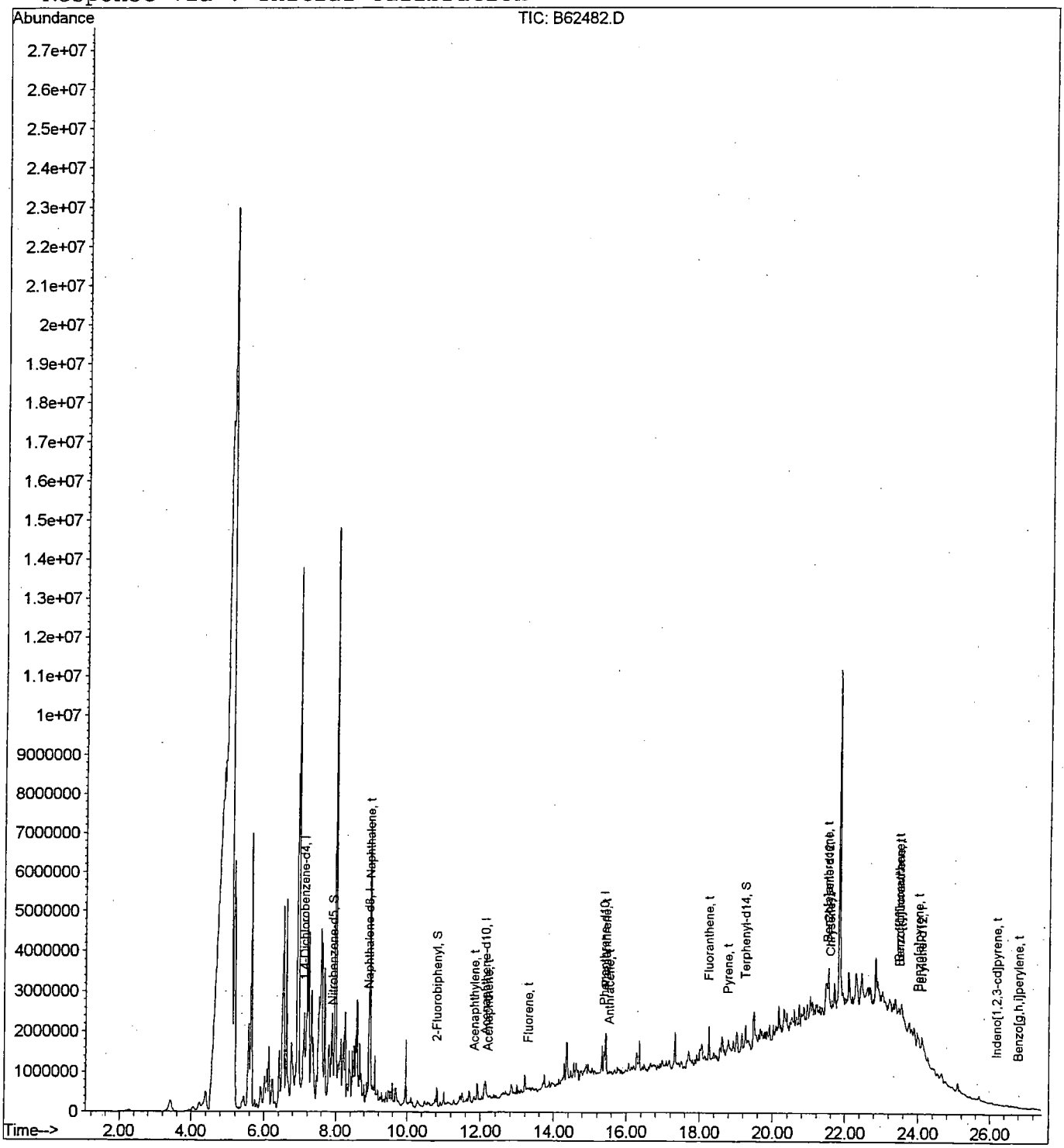
61

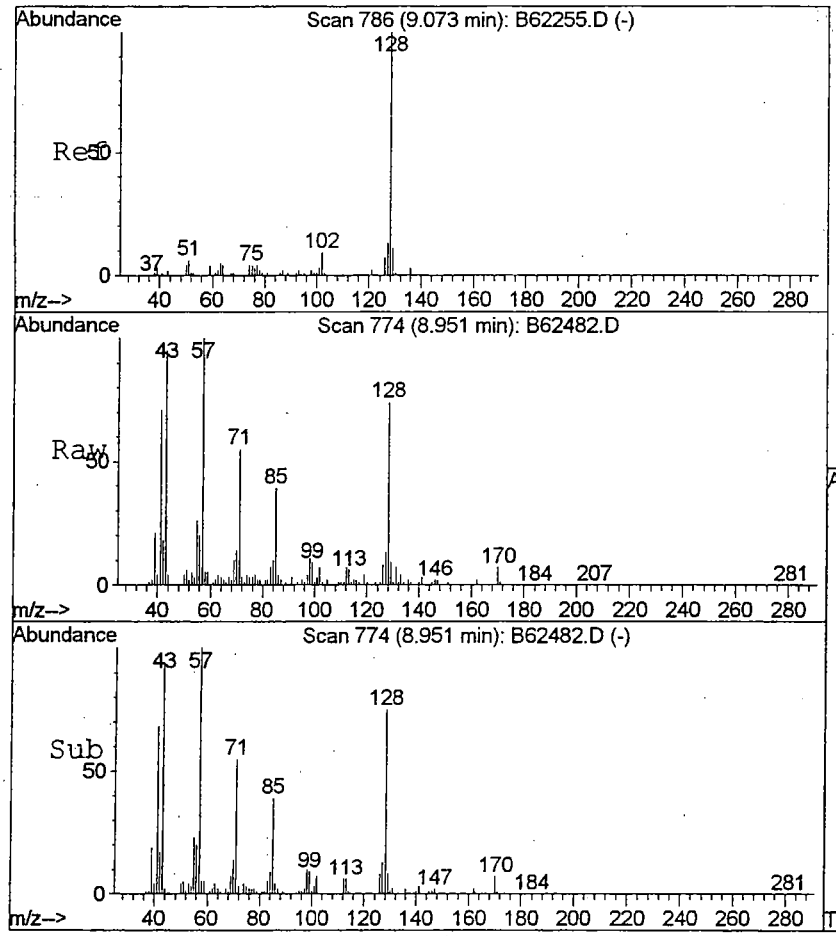
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62482.D Vial: 6
Acq On : 1 Jun 2004 3:35 pm Operator: WENDYS
Sample : N67805-1R Inst : GC/MS Ins
Misc : OP17035,EB1651,30.1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 1 17:01 2004 Quant Results File: MB1647.RES

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration

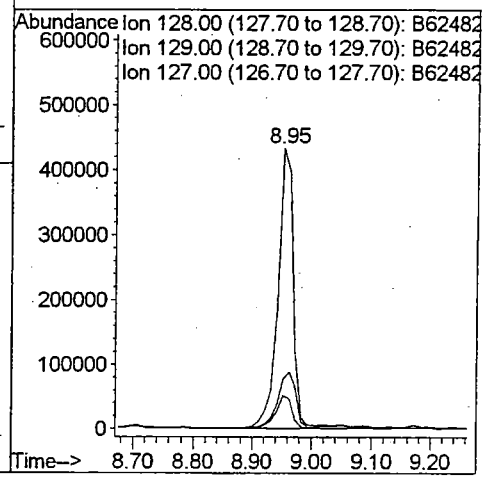


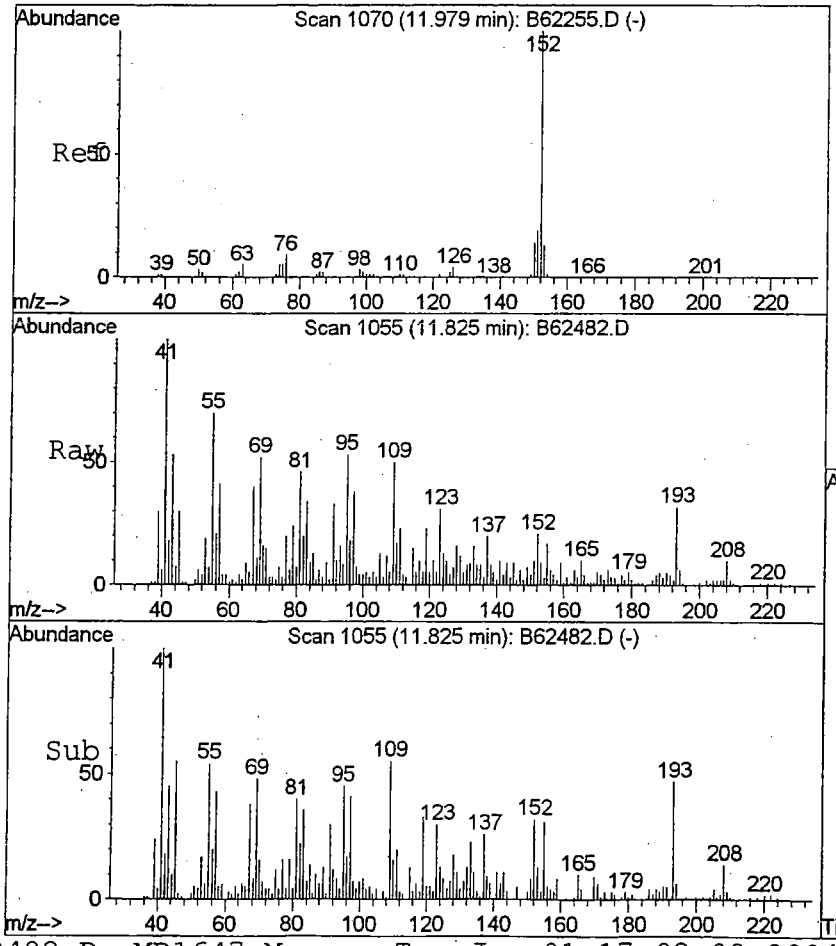


#39
Naphthalene
Concen: 57.60 ppb
RT: 8.95 min Scan# 774
Delta R.T. 0.01 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:128 Resp: 807343

Ion	Ratio	Lower	Upper
128	100		
129	11.9	0.0	40.5
127	17.7	0.0	43.4

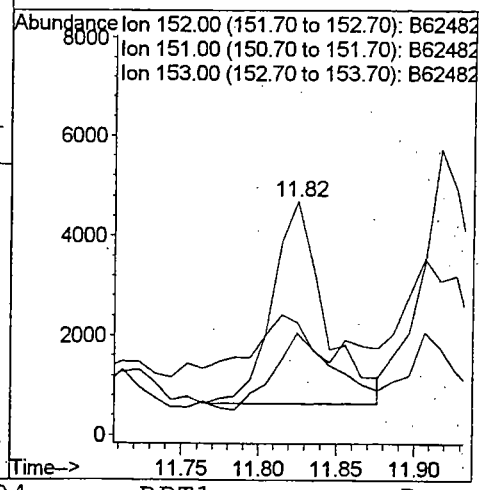


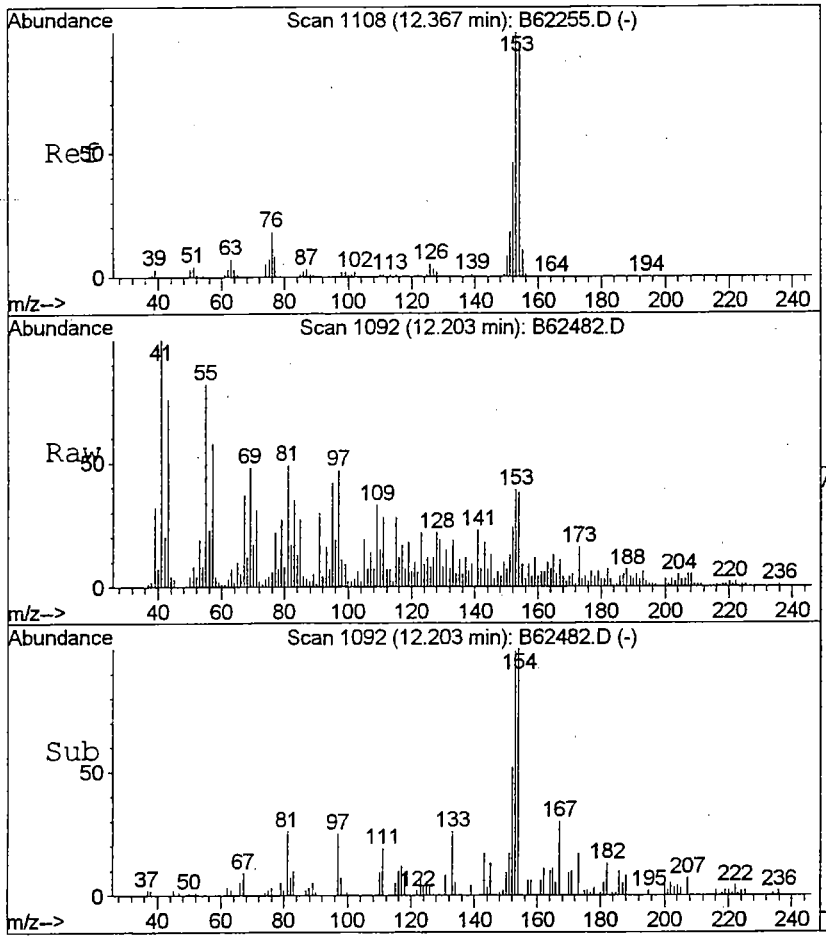


#57
Acenaphthylene
Concen: 0.99 ppb
RT: 11.82 min Scan# 1055
Delta R.T. 0.00 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:152 Resp: 9433

Ion	Ratio	Lower	Upper
152	100		
151	18.8	0.0	49.1
153	33.3	0.0	43.0

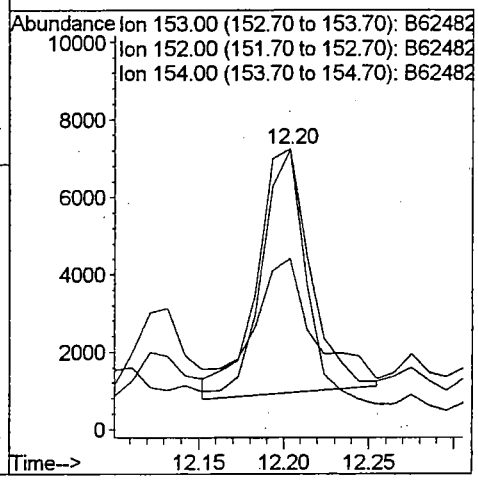


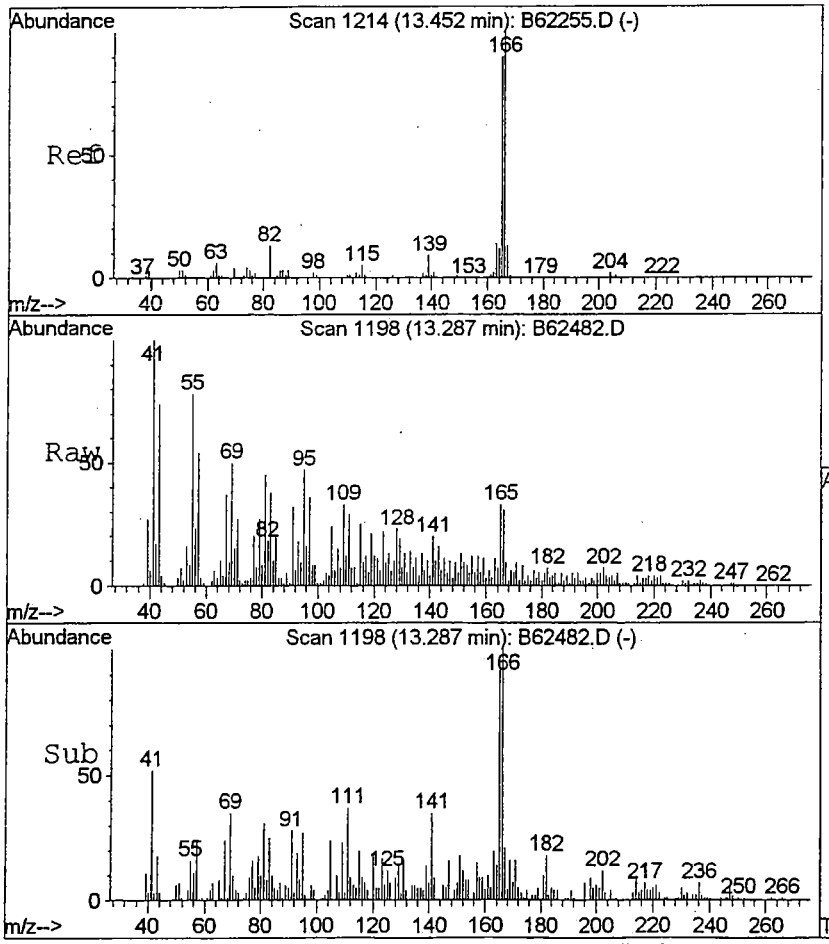


#60
Acenaphthene
Concen: 2.39 ppb
RT: 12.20 min Scan# 1092
Delta R.T. 0.00 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:153 Resp: 13877

Ion	Ratio	Lower	Upper
153	100		
152	50.0	17.8	77.8
154	107.1	60.6	120.6

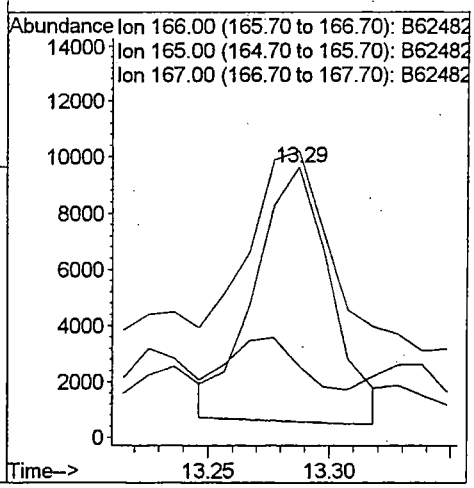




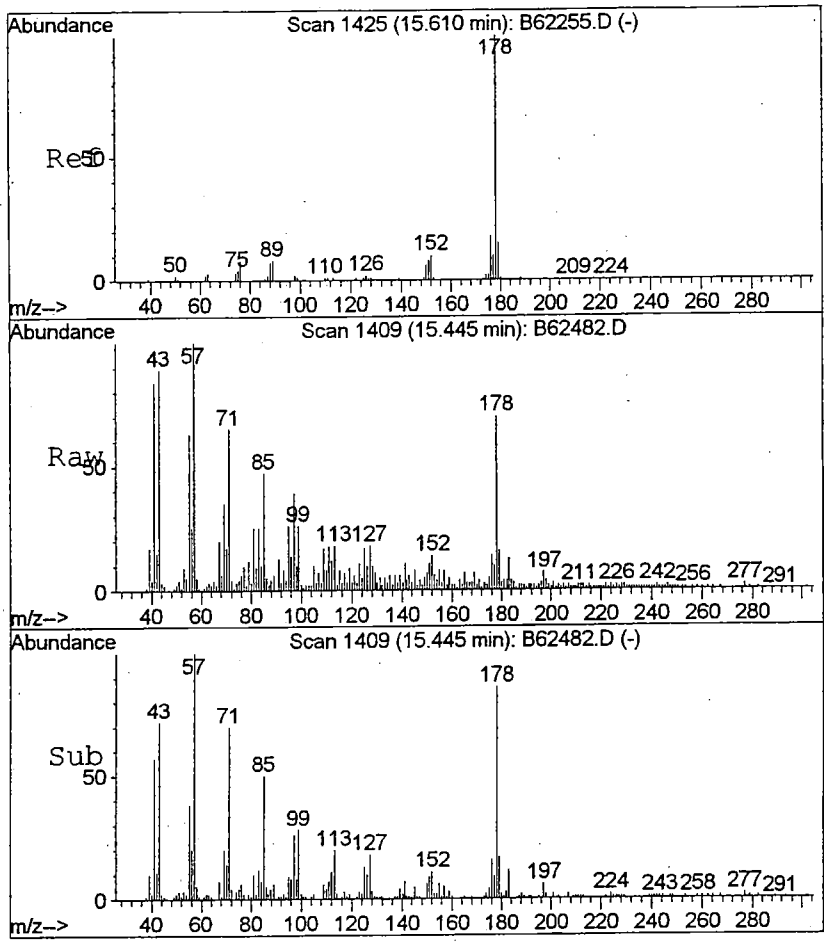
#67
Fluorene
Concen: 2.84 ppb m
RT: 13.29 min Scan# 1198
Delta R.T. 0.00 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:166 Resp: 19682

Ion	Ratio	Lower	Upper
166	100		
165	106.1	58.7	118.7
167	27.1	0.0	43.5



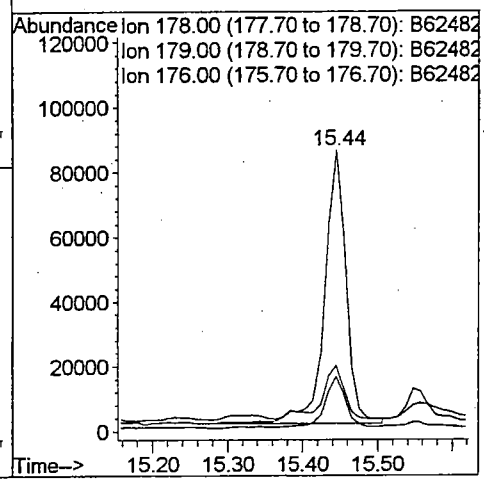
64

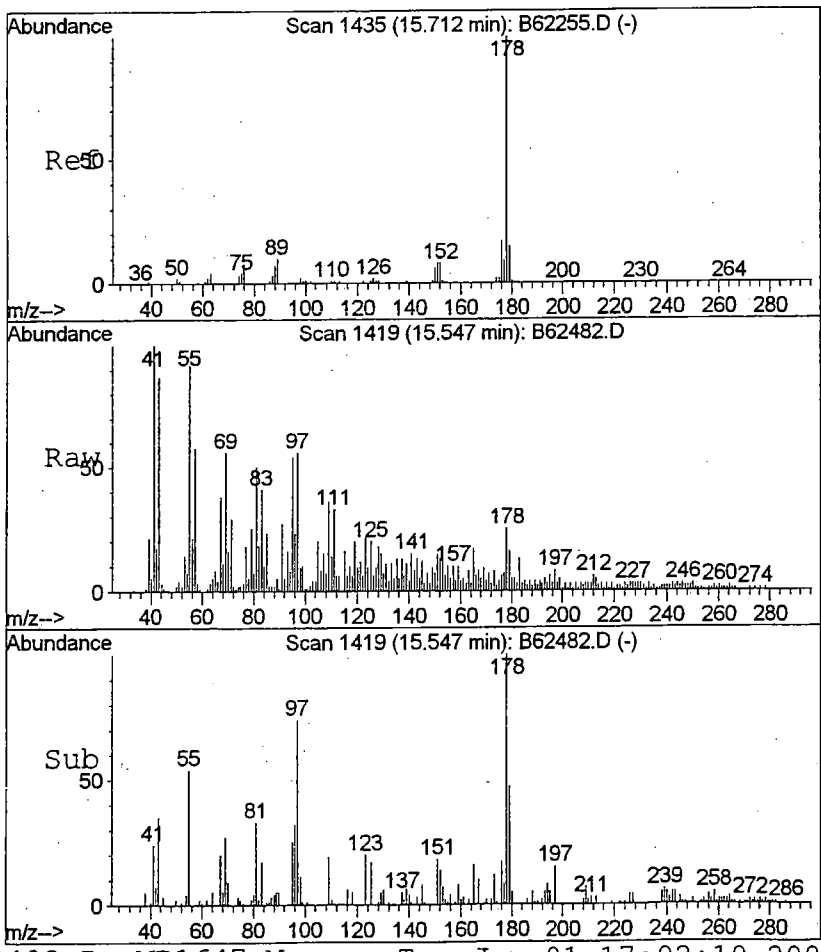


#79
Phenanthrene
Concen: 18.14 ppb
RT: 15.44 min Scan# 1409
Delta R.T. 0.01 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:178 Resp: 171358

Ion	Ratio	Lower	Upper
178	100		
179	19.6	0.0	45.5
176	18.4	0.0	48.3

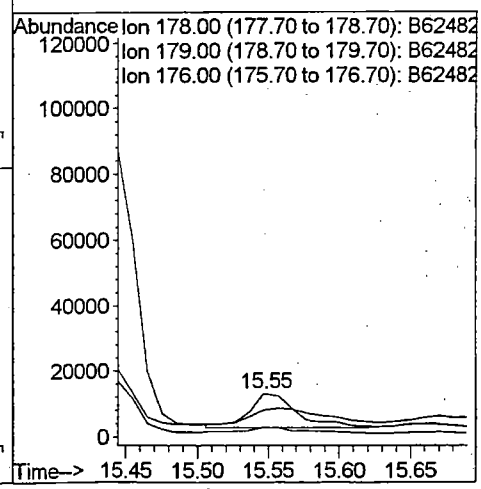


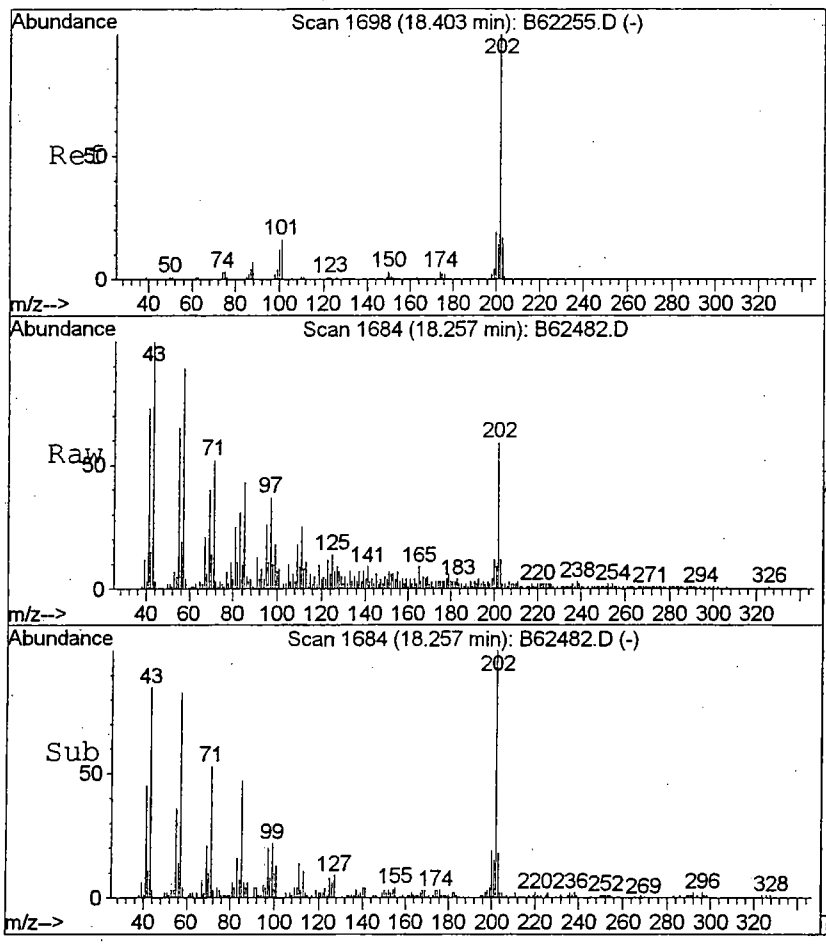


#80
Anthracene
Concen: 2.60 ppb
RT: 15.55 min Scan# 1419
Delta R.T. 0.01 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:178 Resp: 25037

Ion	Ratio	Lower	Upper
178	100		
179	41.4	0.0	45.2
176	16.1	0.0	47.6

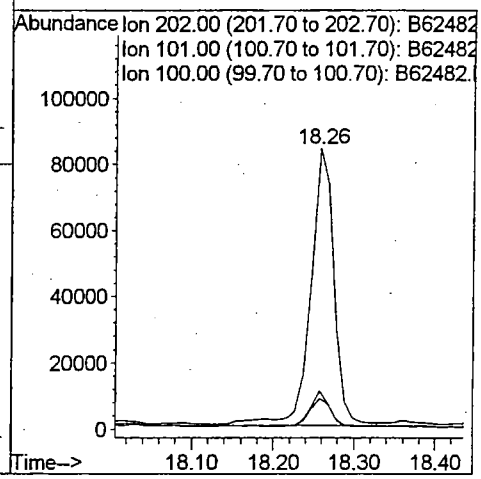


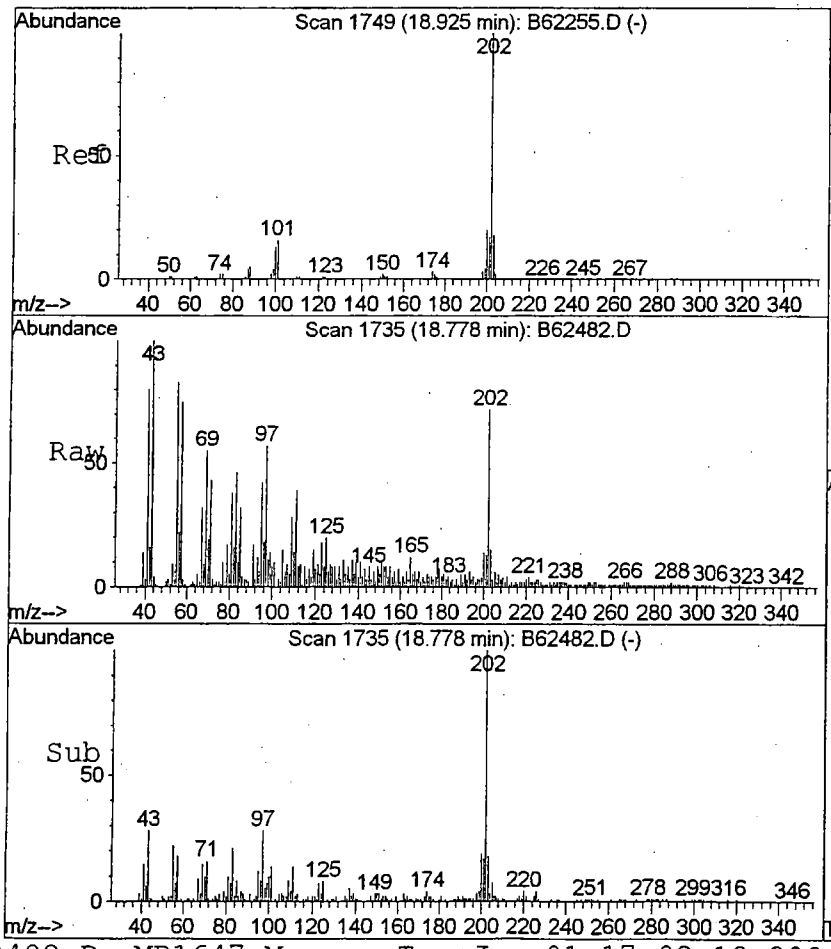


#83
Fluoranthene
Concen: 15.97 ppb
RT: 18.26 min Scan# 1684
Delta R.T. 0.03 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:202 Resp: 168348

Ion	Ratio	Lower	Upper
202	100		
101	13.0	0.0	39.3
100	10.1	0.0	37.6

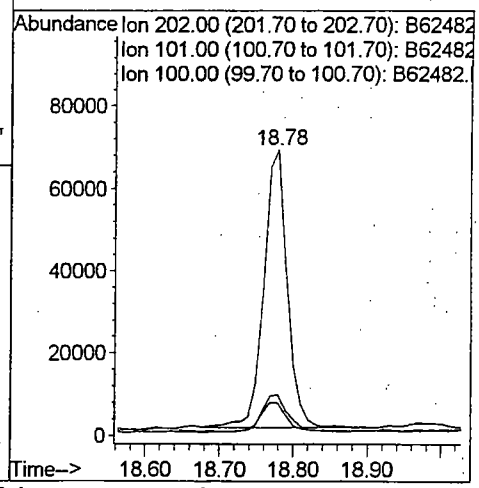


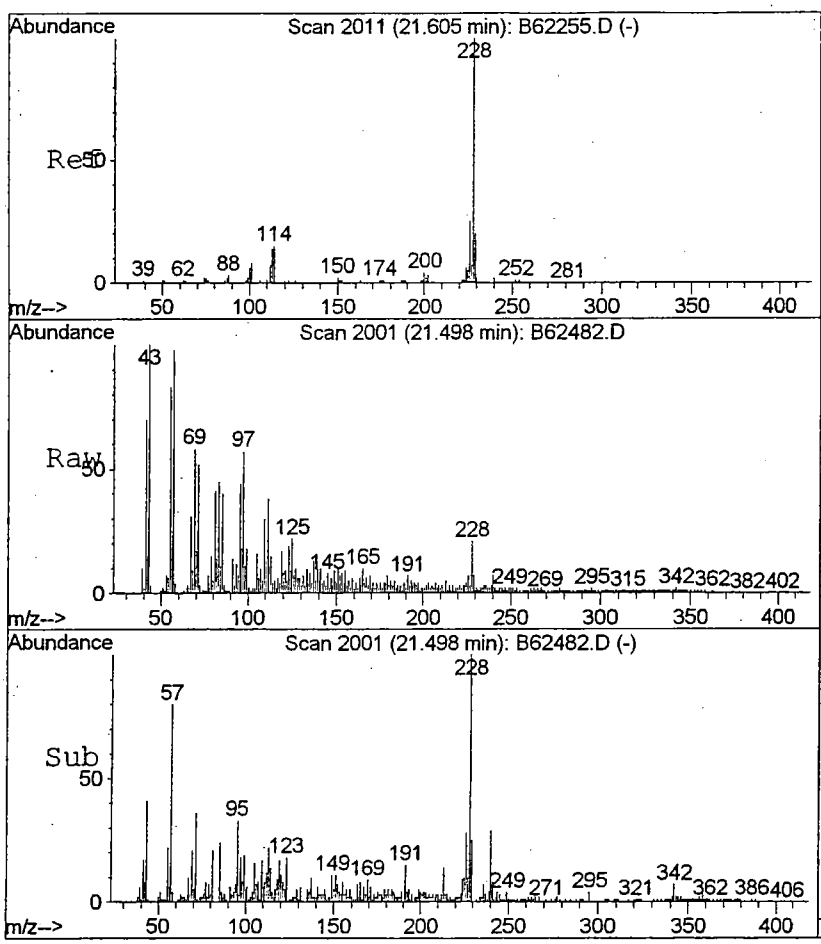


#87
Pyrene
Concen: 13.18 ppb
RT: 18.78 min Scan# 1735
Delta R.T. 0.04 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:202 Resp: 151762

Ion	Ratio	Lower	Upper
202	100		
101	13.6	0.0	41.2
100	10.1	0.0	38.5

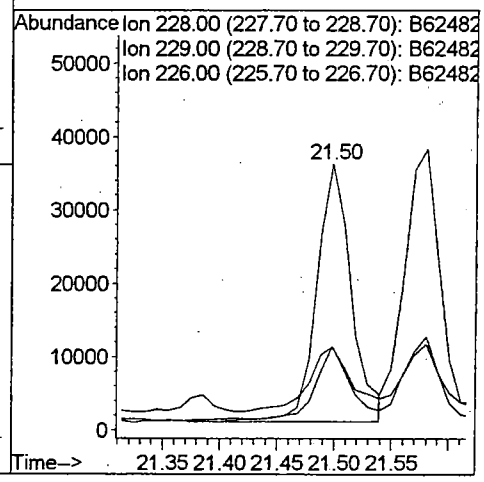


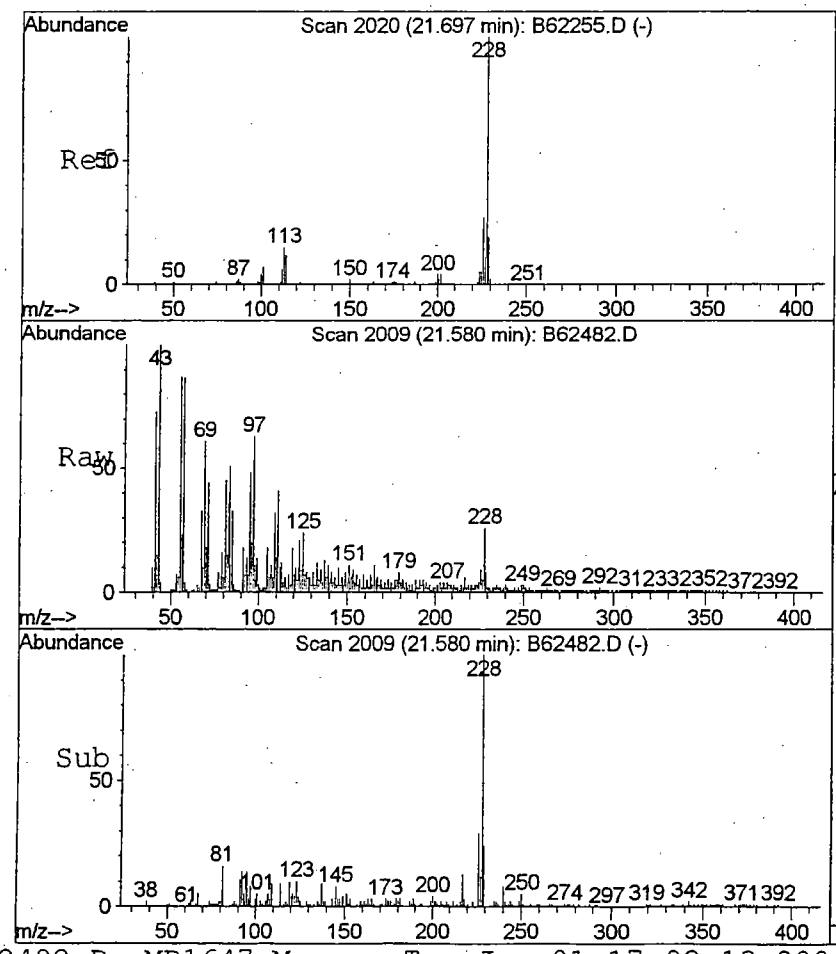


#90
Benzo[a]anthracene
Concen: 7.46 ppb
RT: 21.50 min Scan# 2001
Delta R.T. 0.05 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:228 Resp: 74226

Ion	Ratio	Lower	Upper
228	100		
229	20.2	0.0	50.5
226	27.9	0.0	55.4

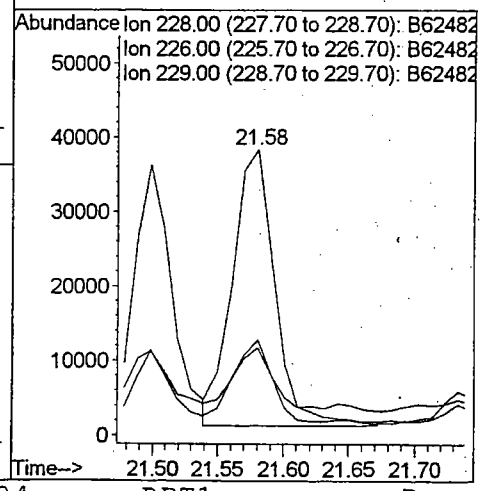


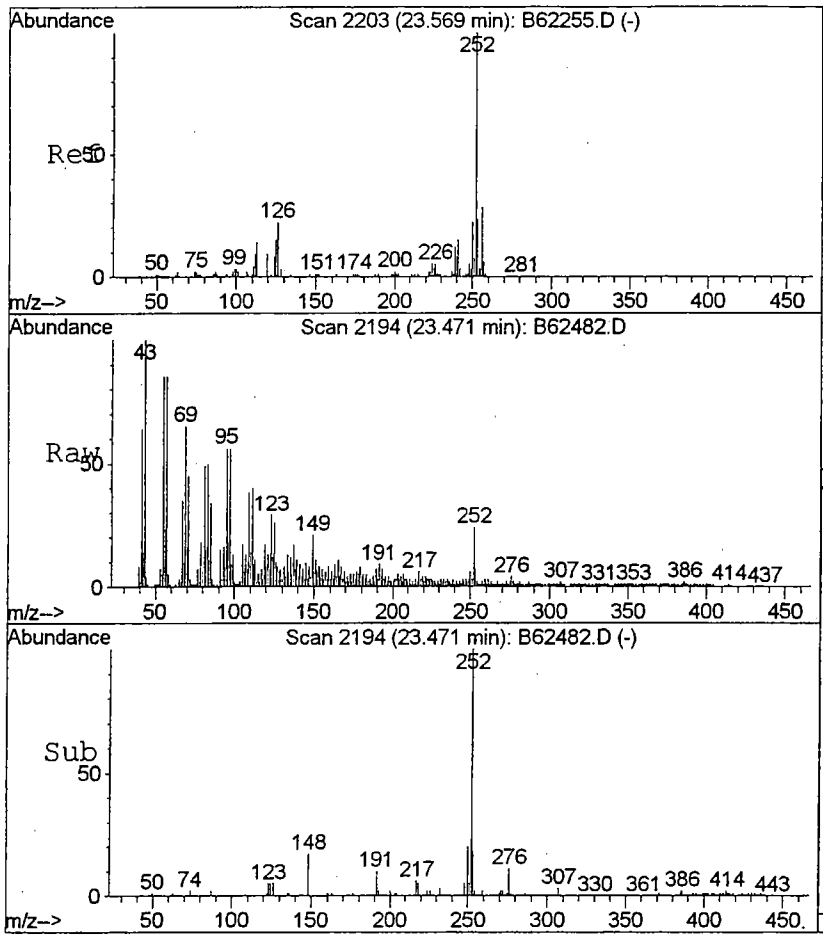


#92
Chrysene
Concen: 9.17 ppb
RT: 21.58 min Scan# 2009
Delta R.T. 0.05 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:228 Resp: 82915

Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	57.2
229	22.6	0.0	49.8

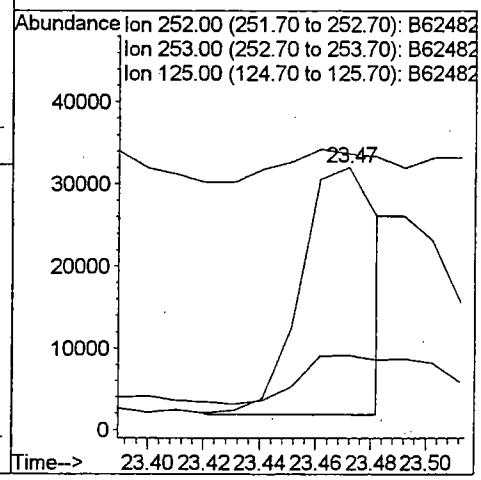


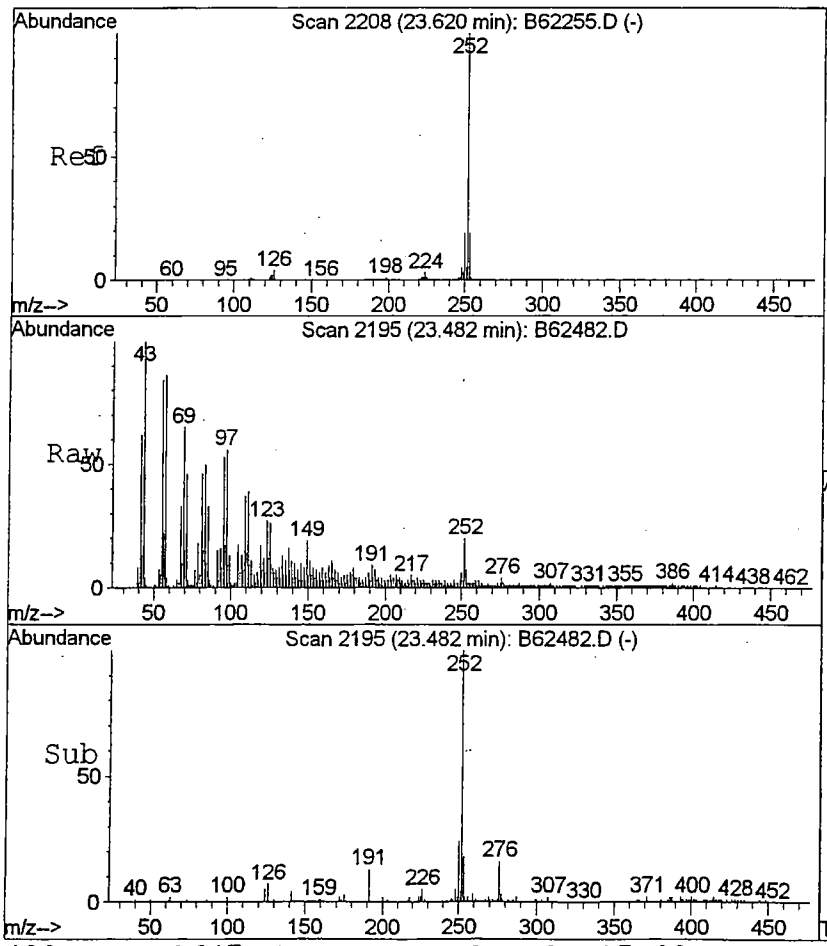


#96
Benzo[b]fluoranthene
Concen: 13.05 ppb m
RT: 23.47 min Scan# 2194
Delta R.T. 0.07 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:252 Resp: 59272

Ion	Ratio	Lower	Upper
252	100		
253	28.7	0.0	52.3
125	105.1	0.0	40.4#

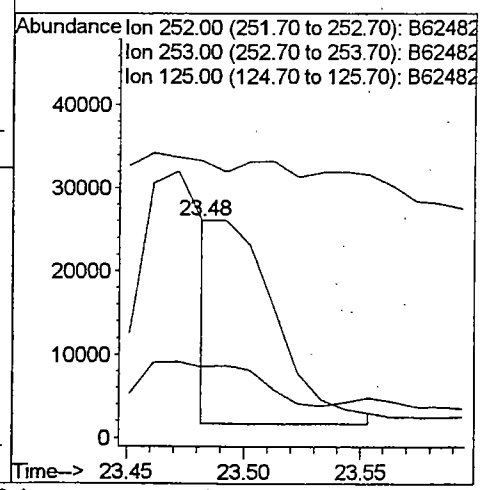


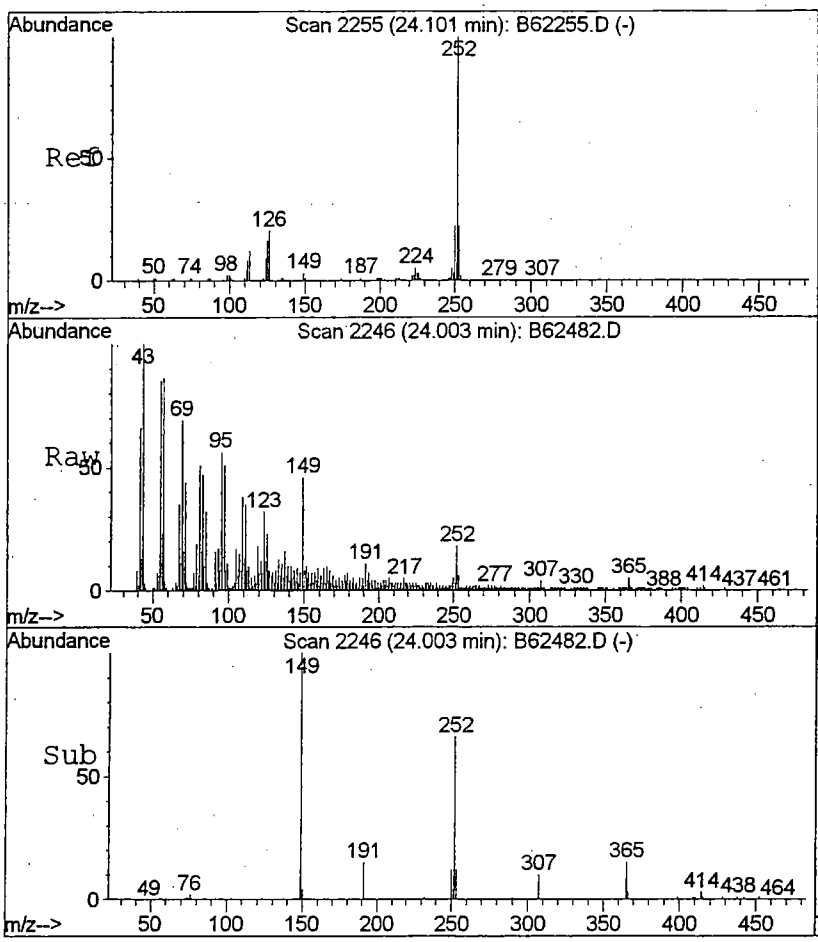


#97
Benzo[k]fluoranthene
Concen: 9.59 ppb m
RT: 23.48 min Scan# 2195
Delta R.T. 0.02 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:252 Resp: 44159

Ion	Ratio	Lower	Upper
252	100		
253	33.1	0.0	52.1
125	127.8	0.0	38.2#

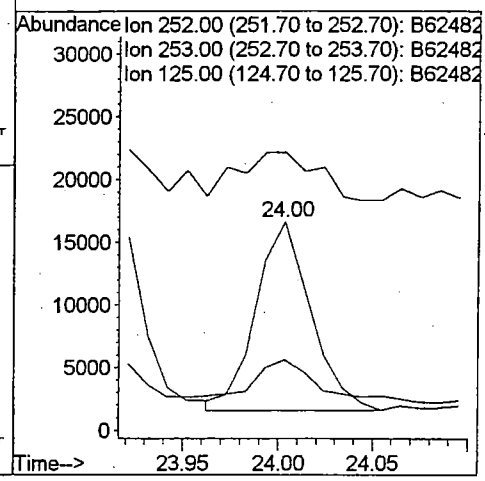


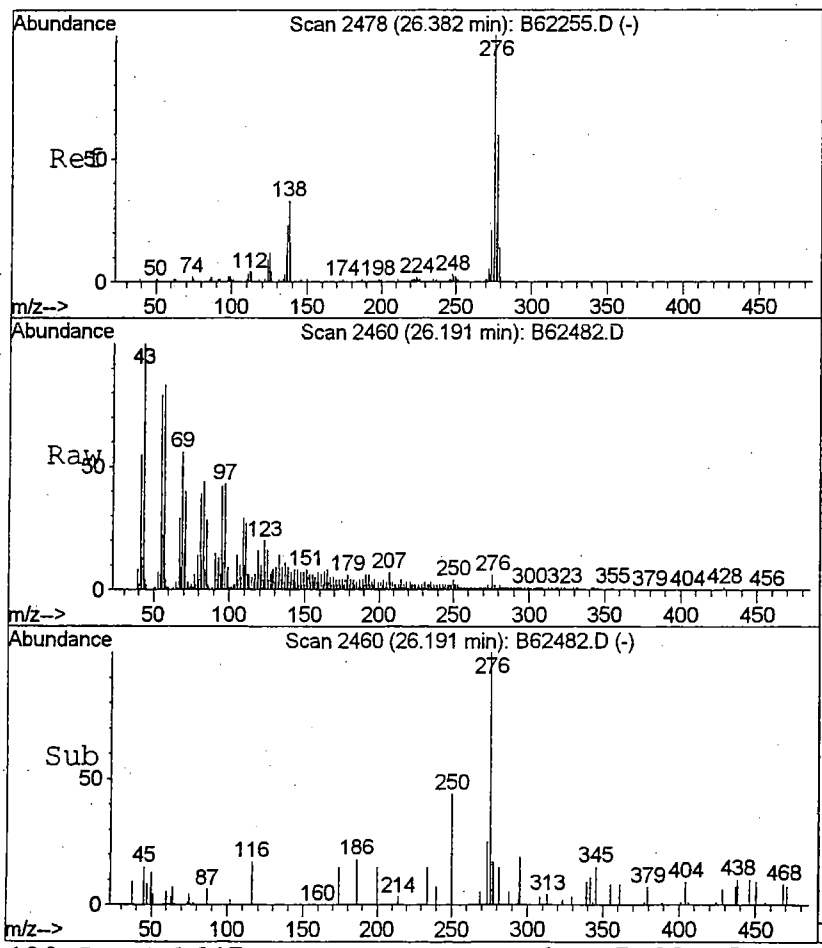


#98
Benzo[a]pyrene
Concen: 6.83 ppb
RT: 24.00 min Scan# 2246
Delta R.T. 0.08 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:252 Resp: 30383

Ion	Ratio	Lower	Upper
252	100		
253	19.7	0.0	52.4
125	25.0	0.0	40.8

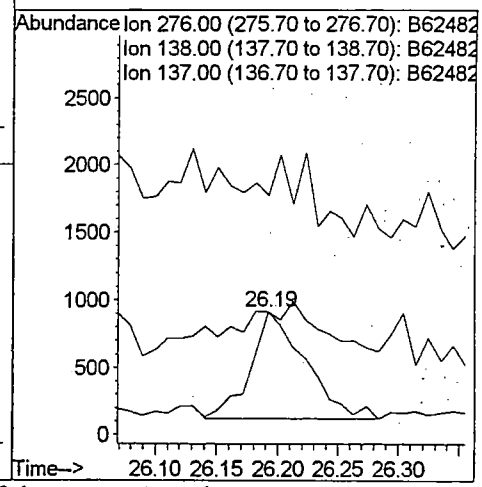


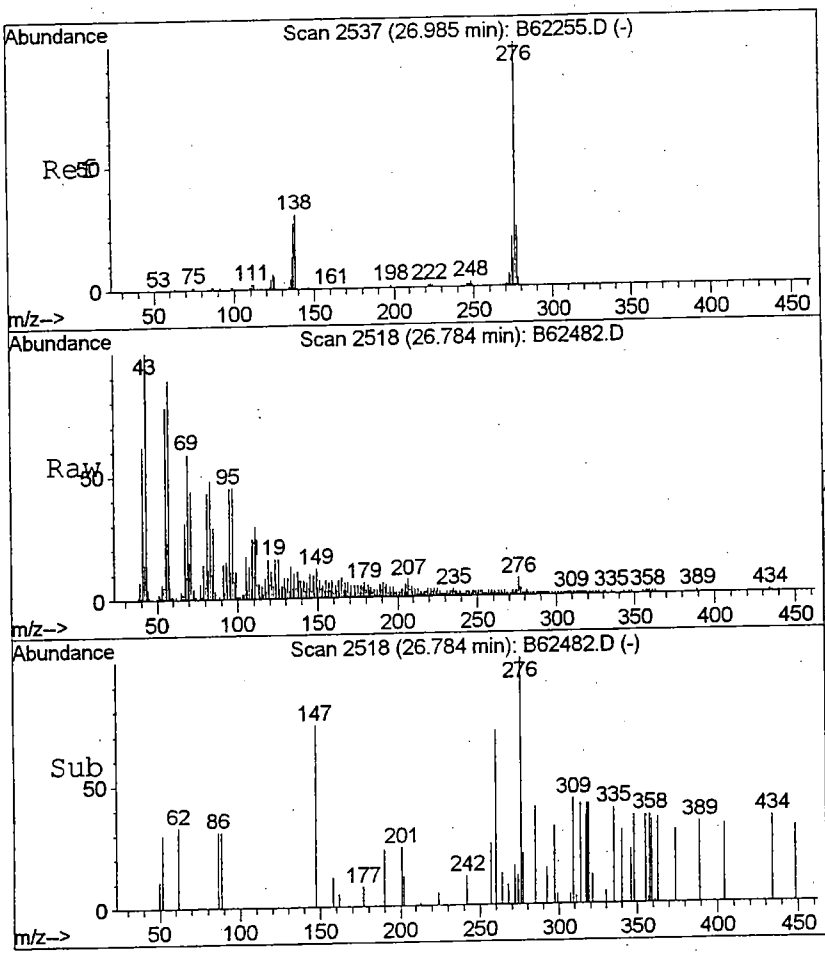


#99
Indeno[1,2,3-cd]pyrene
Concen: 0.56 ppb
RT: 26.19 min Scan# 2460
Delta R.T. 0.07 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:276 Resp: 2515

Ion	Ratio	Lower	Upper
276	100		
138	25.6	0.0	56.7
137	13.8	0.0	47.2

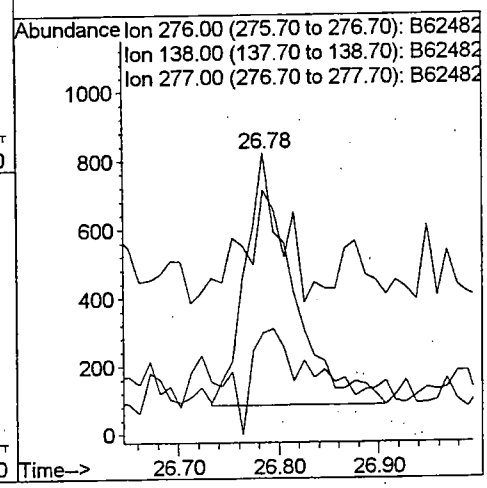




#103
Benzo[g,h,i]perylene
Concen: 0.67 ppb
RT: 26.78 min Scan# 2518
Delta R.T. 0.08 min
Lab File: B62482.D
Acq: 1 Jun 2004 3:35 pm

Tgt Ion:276 Resp: 2403

Ion	Ratio	Lower	Upper
276	100		
138	38.0	0.0	52.5
277	19.5	0.0	53.2



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\EB1651\B62483.D
Acq On : 1 Jun 2004 4:11 pm
Sample : N67805-4R
Misc : OP17035,EB1651,30,,,5
MS Integration Params: LSCINT.P
Quant Time: Jun 1 17:00 2004

Vial: 7
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed May 26 08:34:32 2004
Response via : Initial Calibration
DataAcq Meth : MB1647

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.09	152	66415	40.00 ppb	0.00
25) Naphthalene-d8	8.90	136	250817	40.00 ppb	0.00
48) Acenaphthene-d10	12.13	164	129604	40.00 ppb	0.00
70) Phenanthrene-d10	15.37	188	177451	40.00 ppb	0.00
85) Chrysene-d12	21.53	240	339358	40.00 ppb	0.06
94) Perylene-d12	24.11	264	110527	40.00 ppb	0.09

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
9) Phenol-d5	0.00	99	0d	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
26) Nitrobenzene-d5	7.90	82	19199	7.78 ppb	0.00
Spiked Amount 50.000			Recovery	= 15.56%	
52) 2-Fluorobiphenyl	10.81	172	39396	8.10 ppb	0.00
Spiked Amount 50.000			Recovery	= 16.20%	
75) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
88) Terphenyl-d14	19.25	244	39077	5.25 ppb	0.02
Spiked Amount 50.000			Recovery	= 10.50%	

Target Compounds					Qvalue
39) Naphthalene	8.94	128	26304	3.74 ppb	89
60) Acenaphthene	12.19	153	6231m	1.58 ppb	
67) Fluorene	13.28	166	4546	0.97 ppb	85
79) Phenanthrene	15.41	178	25684	4.85 ppb	97
80) Anthracene	15.53	178	4418	0.82 ppb	72
83) Fluoranthene	18.24	202	27218	4.60 ppb	99
87) Pyrene	18.75	202	21883	1.97 ppb	95
90) Benzo[a]anthracene	21.49	228	17539	1.82 ppb	95
92) Chrysene	21.57	228	19484	2.23 ppb	93
96) Benzo[b]fluoranthene	23.48	252	14335m	0.97 ppb	
97) Benzo[k]fluoranthene	23.51	252	6395m	1.47 ppb	
98) Benzo[a]pyrene	24.01	252	6217	1.47 ppb #	1

d4/m

(#) = qualifier out of range (m) = manual integration

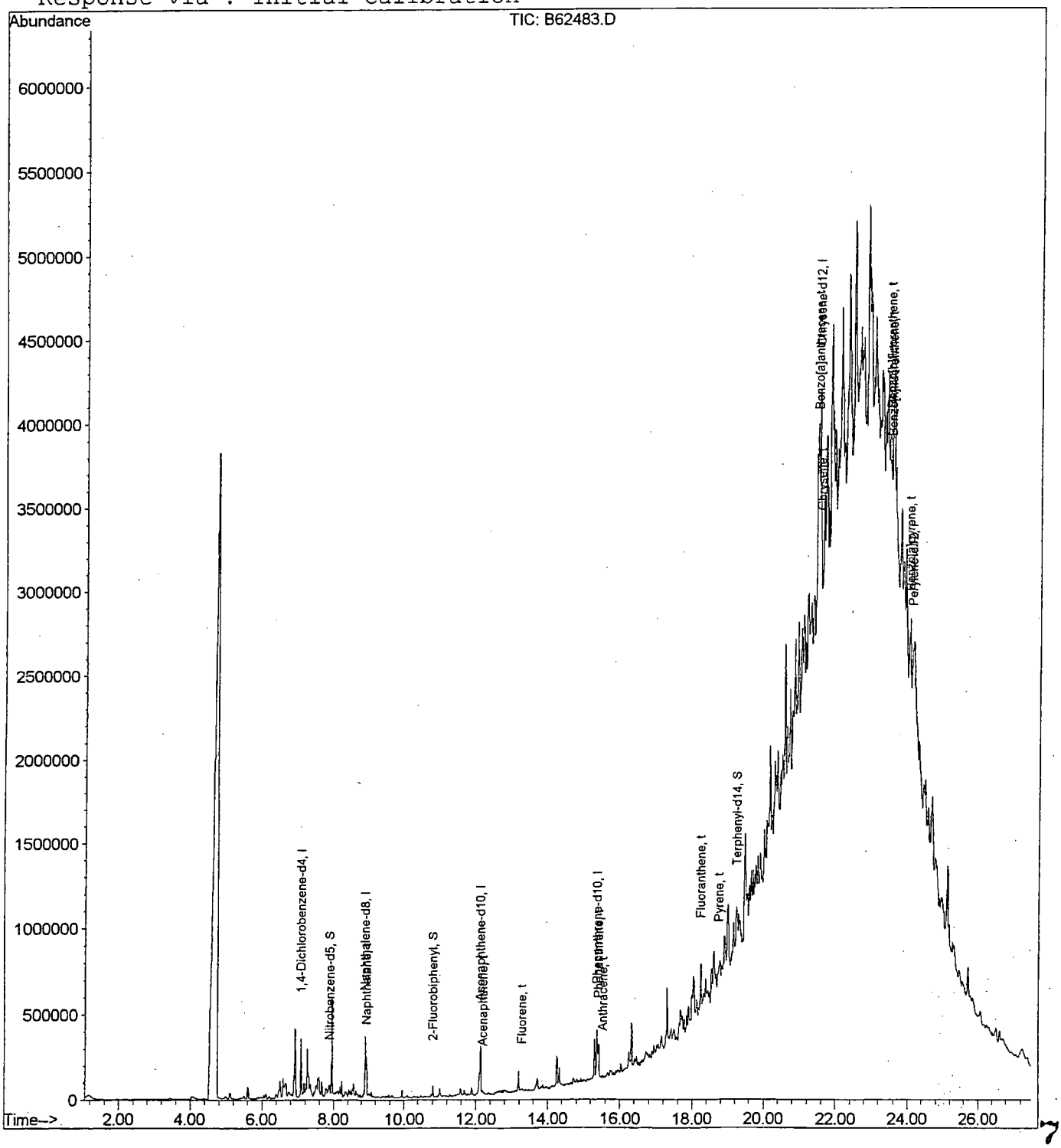
71

Quantitation Report

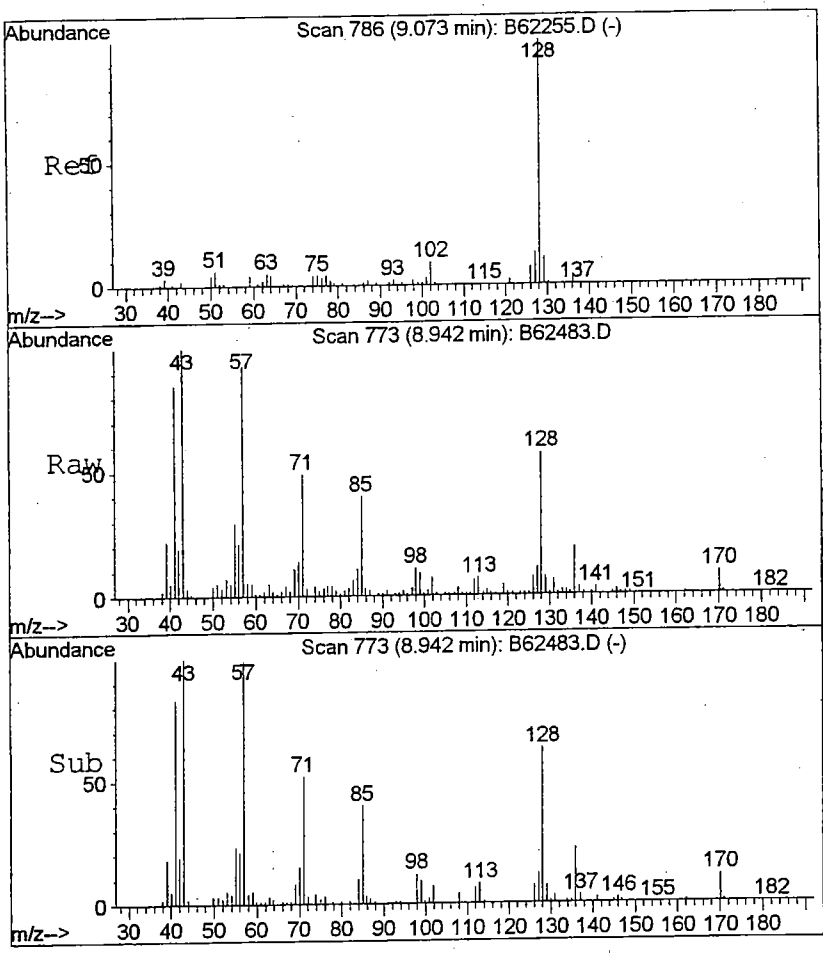
Data File : C:\HPCHEM\2\DATA\EB1651\B62483.D
Acq On : 1 Jun 2004 4:11 pm
Sample : N67805-4R
Misc : OP17035,EB1651,30,,,5
MS Integration Params: LSCINT.P
Quant Time: Jun 1 17:00 2004

Vial: 7
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MB1647.RES

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration



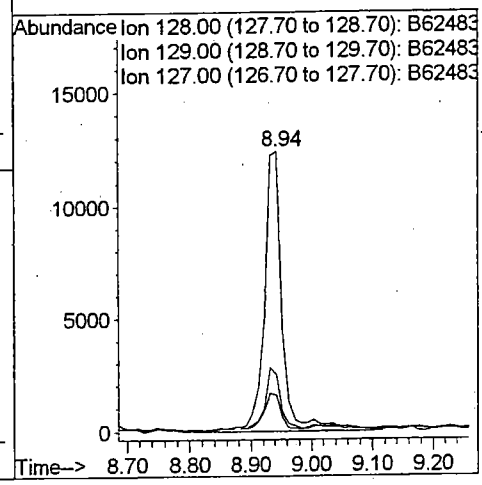
72

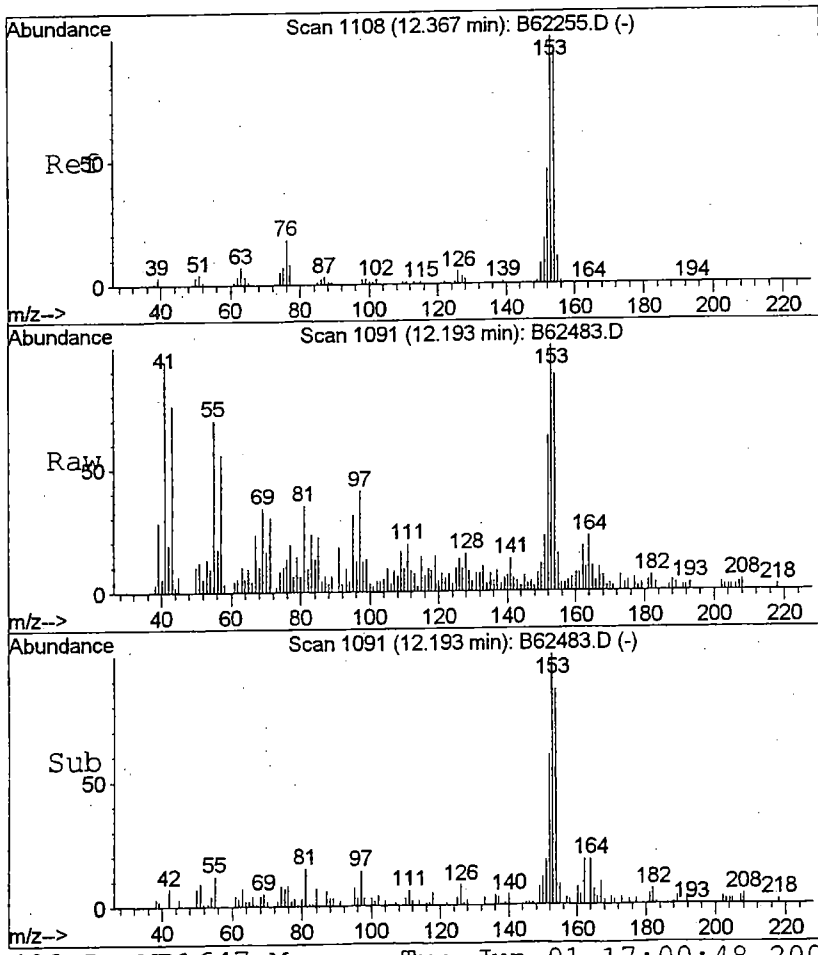


#39
Naphthalene
Concen: 3.74 ppb
RT: 8.94 min Scan# 773
Delta R.T. 0.00 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:128 Resp: 26304

Ion	Ratio	Lower	Upper
128	100		
129	12.5	0.0	40.5
127	19.3	0.0	43.4

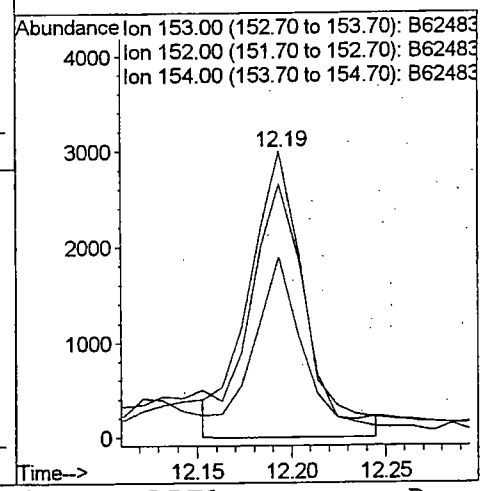


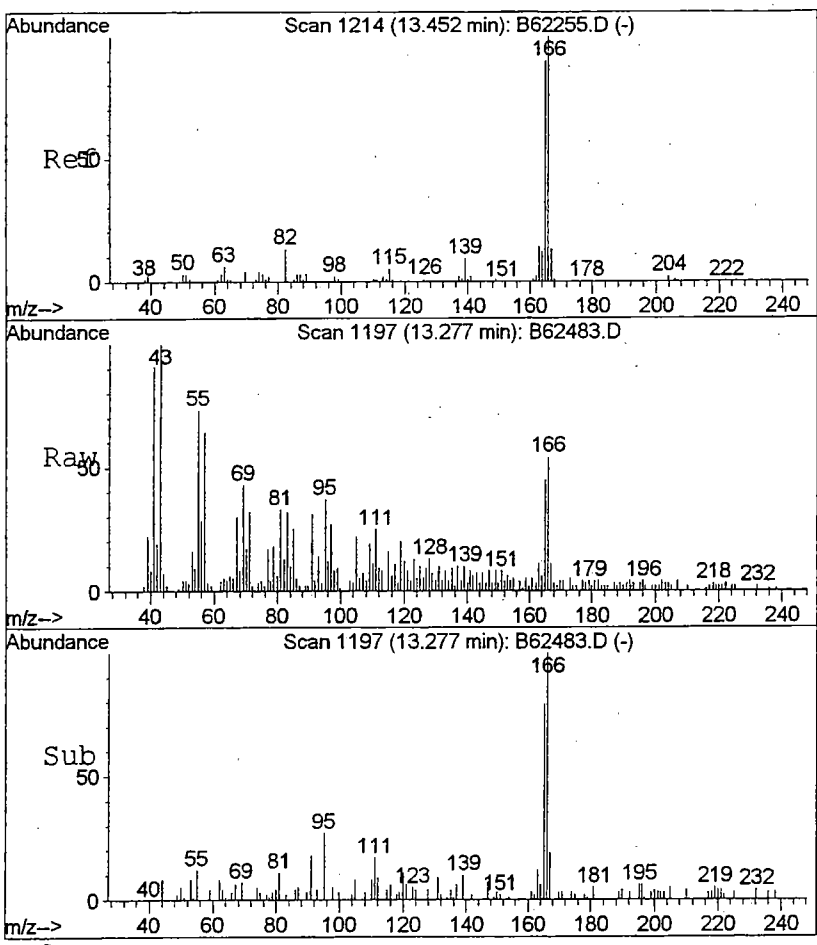


#60
Acenaphthene
Concen: 1.58 ppb m
RT: 12.19 min Scan# 1091
Delta R.T. -0.01 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:153 Resp: 6231

Ion	Ratio	Lower	Upper
153	100		
152	63.1	17.8	77.8
154	88.5	60.6	120.6

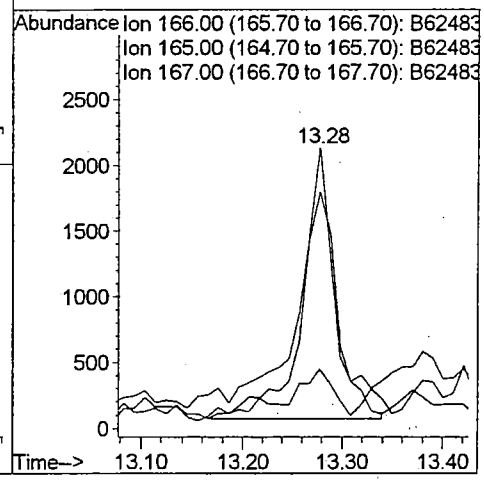


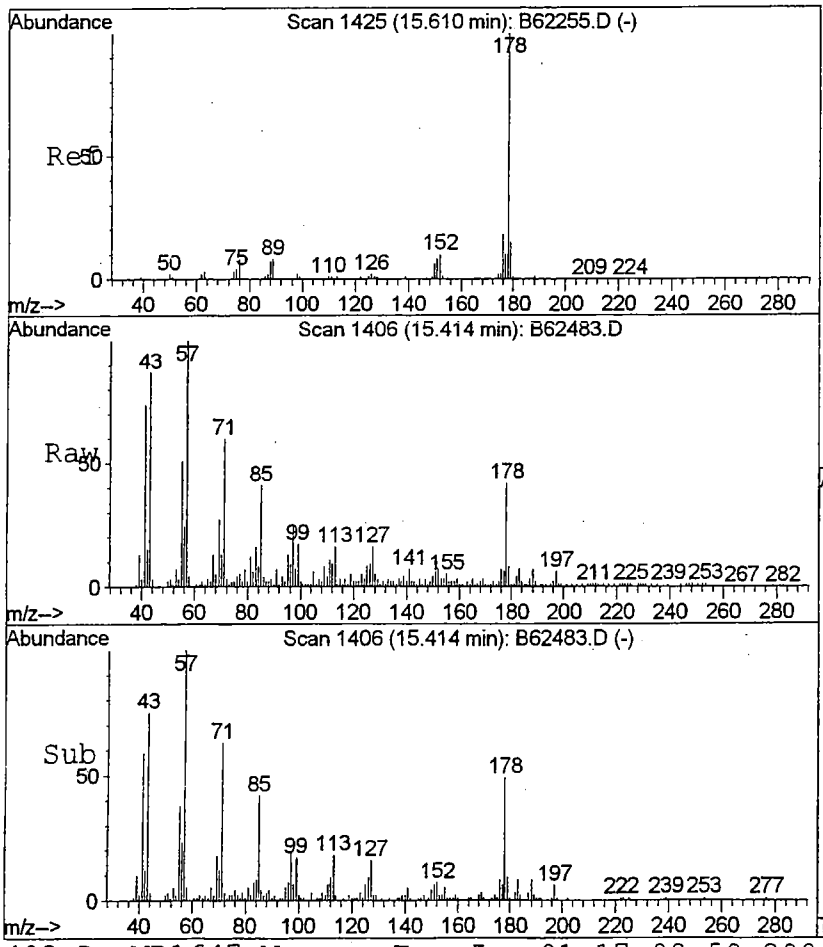


#67
Fluorene
Concen: 0.97 ppb
RT: 13.28 min Scan# 1197
Delta R.T. -0.01 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:166 Resp: 4546

Ion	Ratio	Lower	Upper
166	100		
165	73.0	58.7	118.7
167	14.2	0.0	43.5

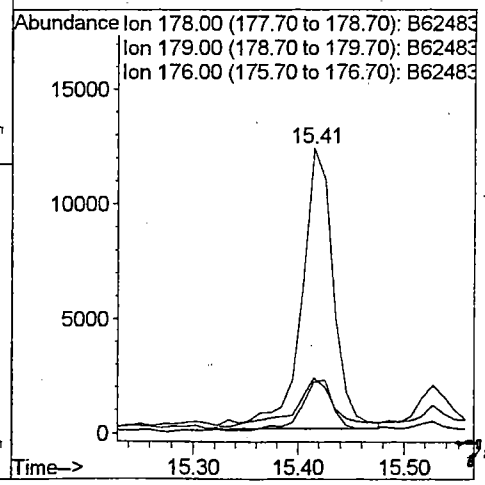


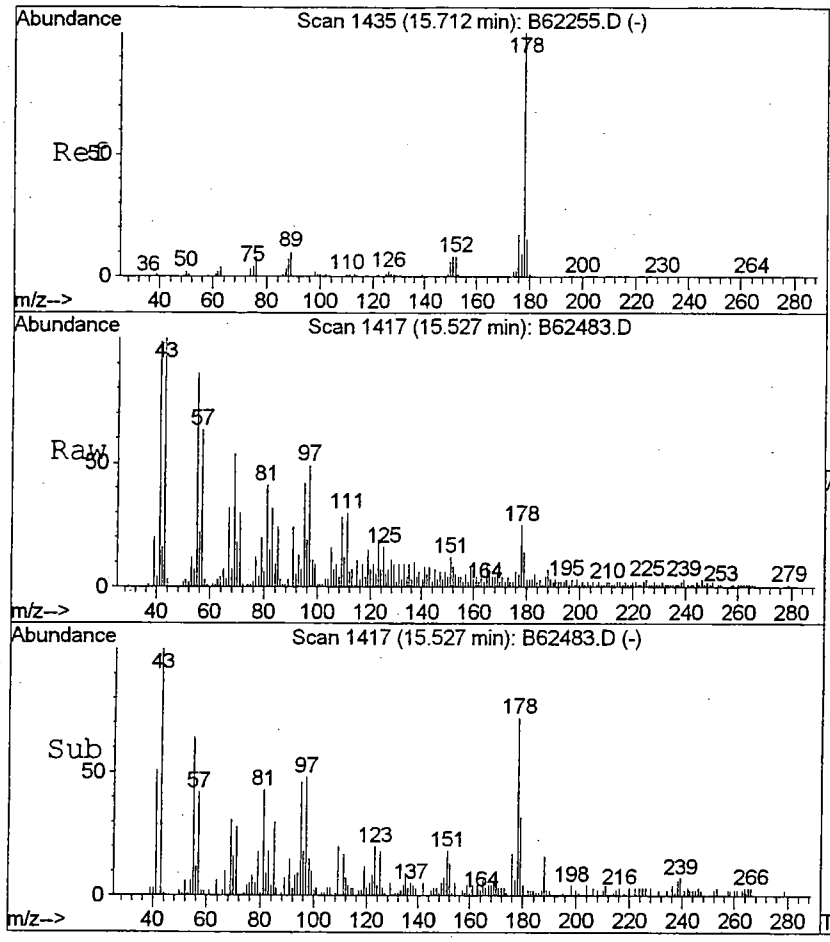


#79
Phenanthrene
Concen: 4.85 ppb
RT: 15.41 min Scan# 1406
Delta R.T. -0.02 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:178 Resp: 25684

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	45.5
176	16.6	0.0	48.3

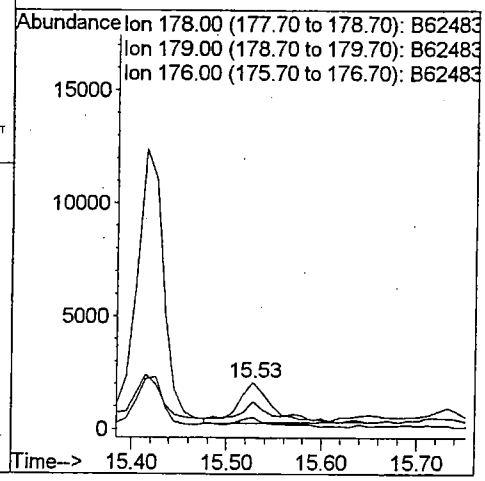


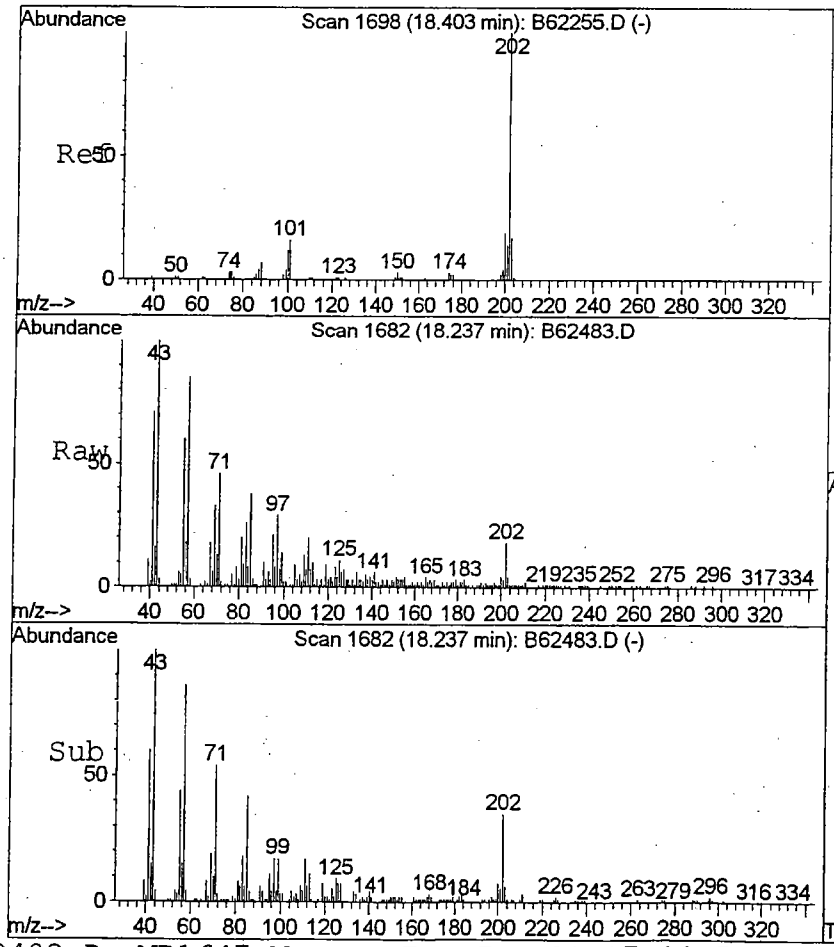


#80
Anthracene
Concen: 0.82 ppb
RT: 15.53 min Scan# 1417
Delta R.T. -0.01 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:178 Resp: 4418

Ion	Ratio	Lower	Upper
178	100		
179	39.6	0.0	45.2
176	18.7	0.0	47.6

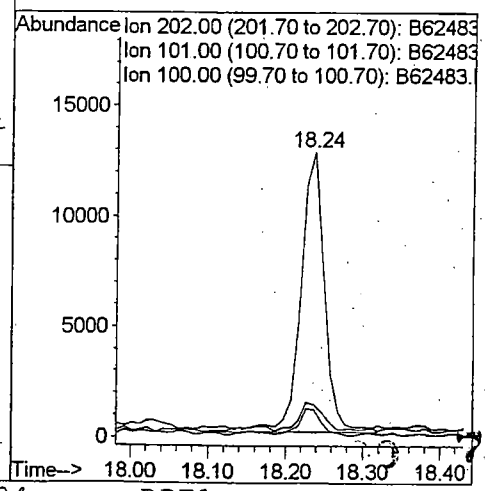


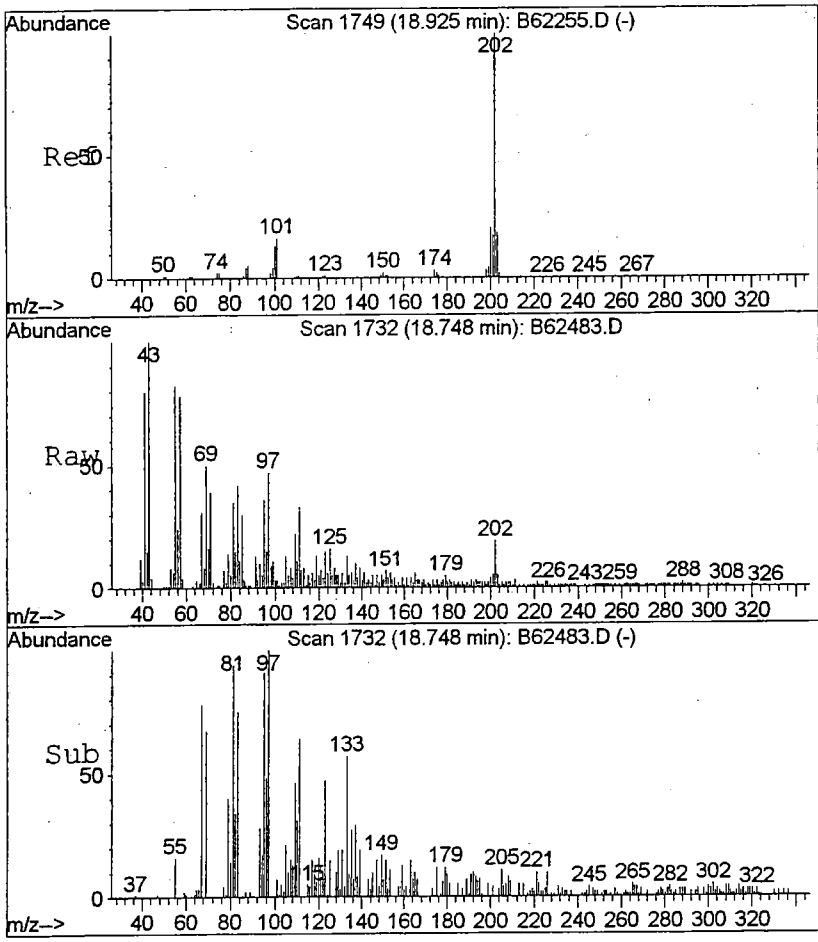


#83
Fluoranthene
Concen: 4.60 ppb
RT: 18.24 min Scan# 1682
Delta R.T. 0.01 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:202 Resp: 27218

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	39.3
100	7.6	0.0	37.6

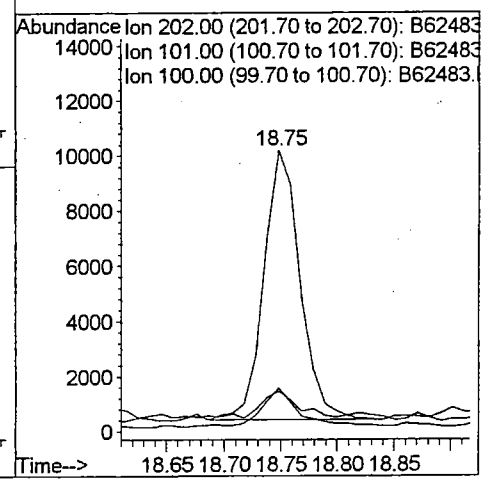


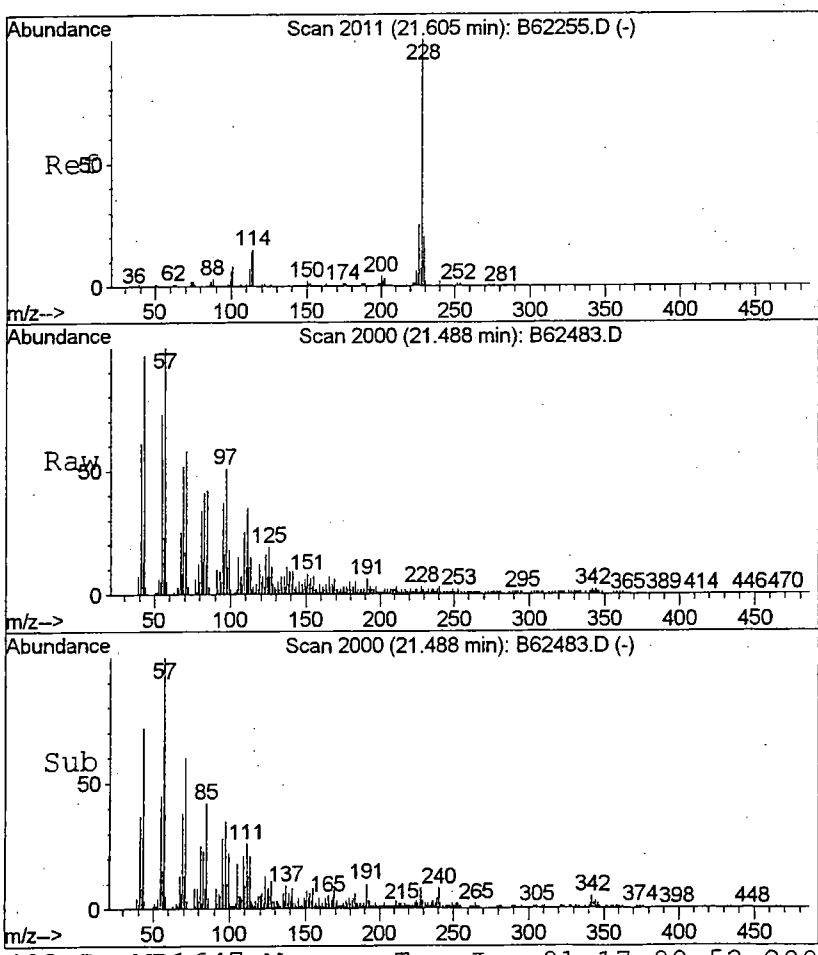


#87
Pyrene
Concen: 1.97 ppb
RT: 18.75 min Scan# 1732
Delta R.T. 0.01 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:202 Resp: 21883

Ion	Ratio	Lower	Upper
202	100		
101	13.8	0.0	41.2
100	9.1	0.0	38.5

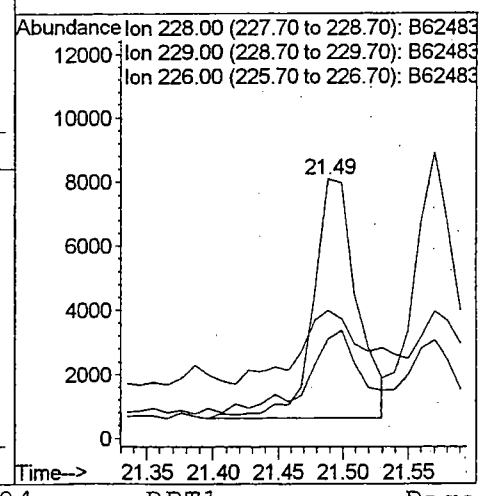


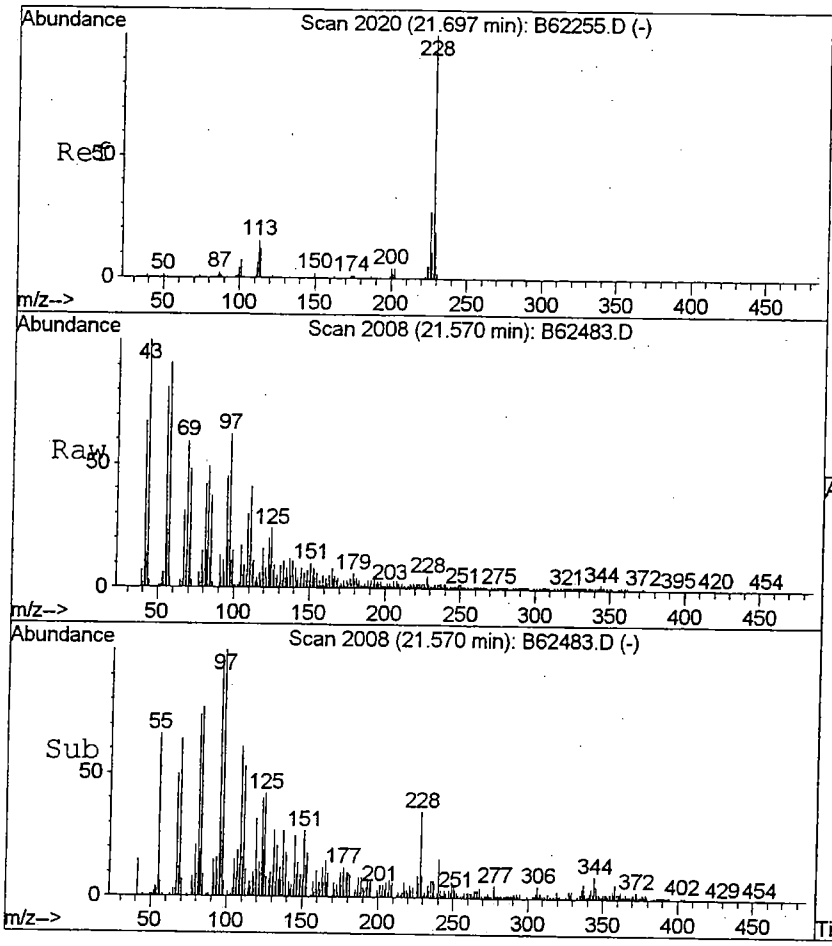


#90
Benzo[a]anthracene
Concen: 1.82 ppb
RT: 21.49 min Scan# 2000
Delta R.T. 0.05 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:228 Resp: 17539

Ion	Ratio	Lower	Upper
228	100		
229	23.0	0.0	50.5
226	27.5	0.0	55.4

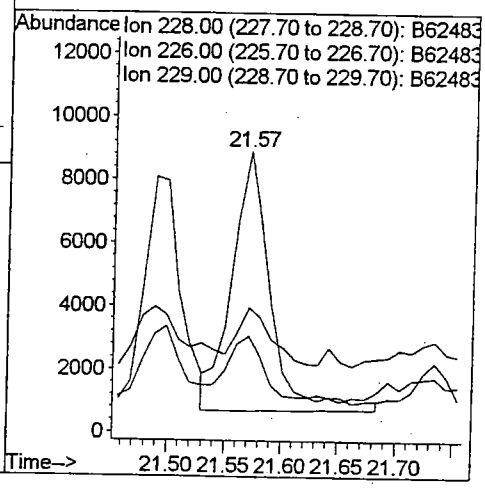


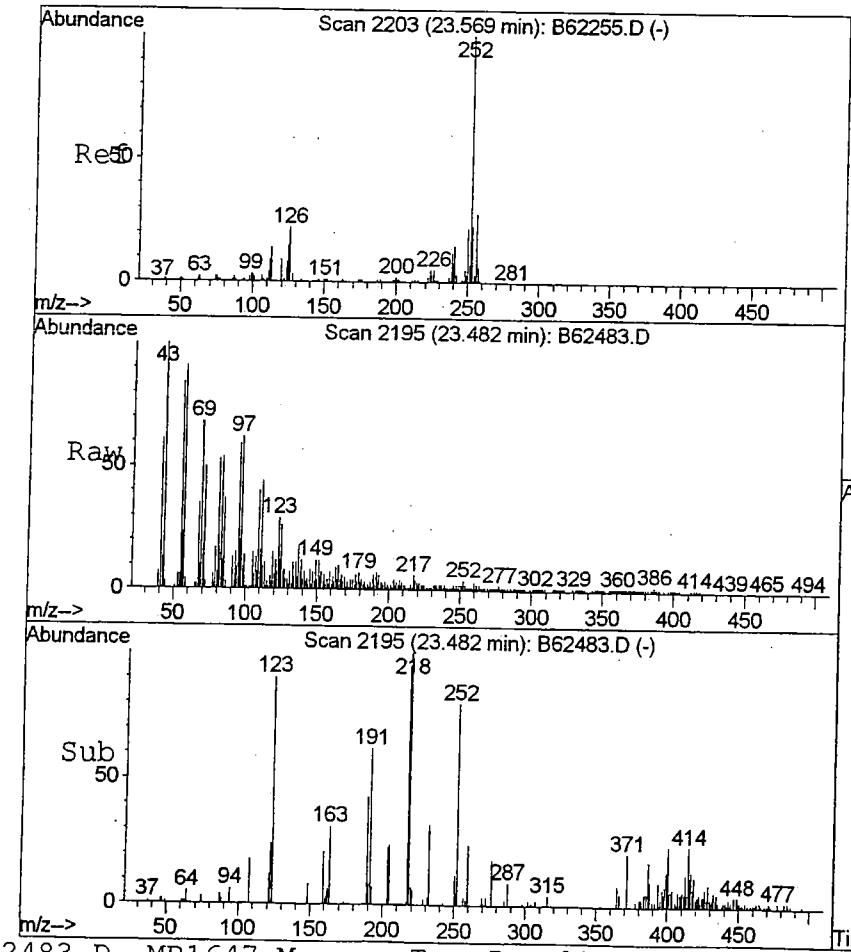


#92
Chrysene
Concen: 2.23 ppb
RT: 21.57 min Scan# 2008
Delta R.T. 0.05 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:228 Resp: 19484

Ion	Ratio	Lower	Upper
228	100		
226	22.4	0.0	57.2
229	18.2	0.0	49.8

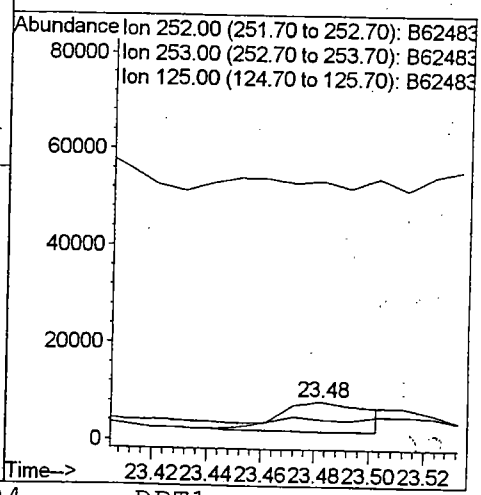




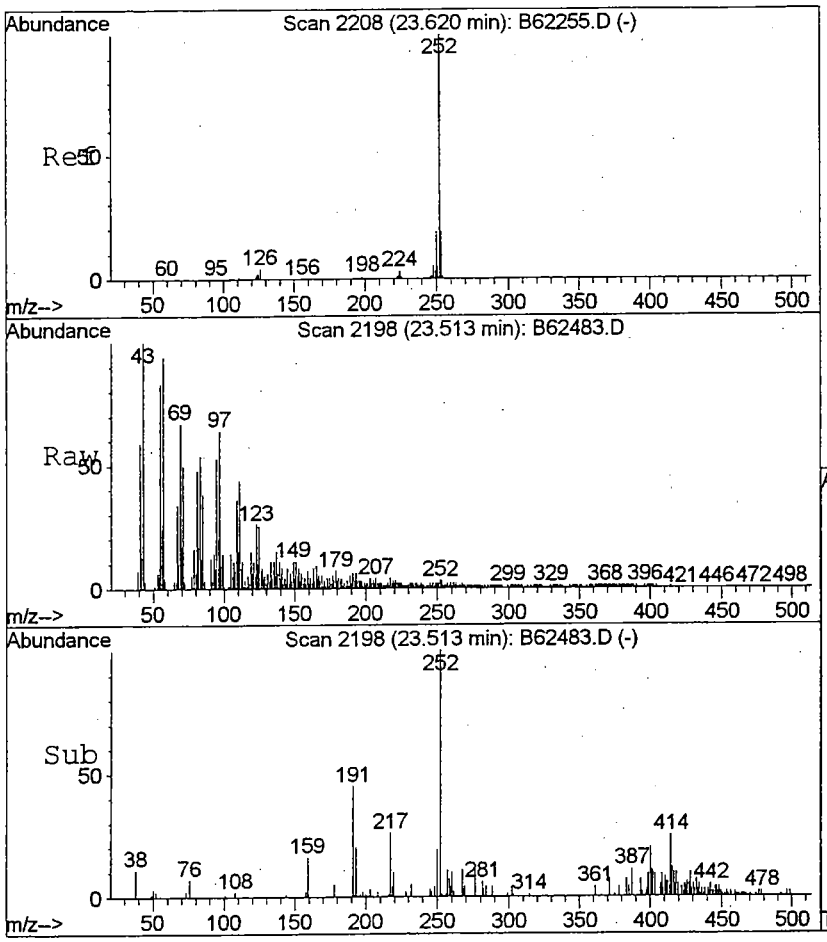
#96
Benzo[b]fluoranthene
Concen: 0.97 ppb m
RT: 23.48 min Scan# 2195
Delta R.T. 0.08 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:252 Resp: 14335

Ion	Ratio	Lower	Upper
252	100		
253	54.9	0.0	52.3#
125	650.7	0.0	40.4#



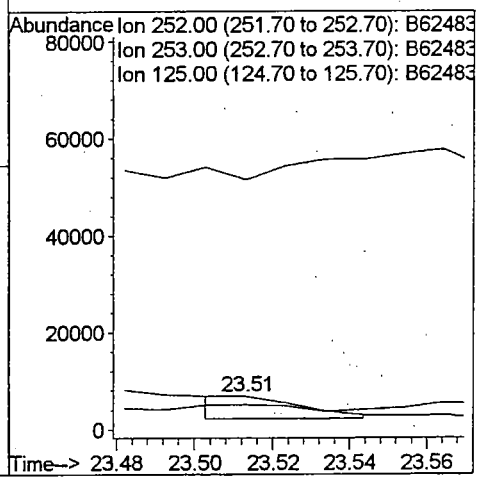
77

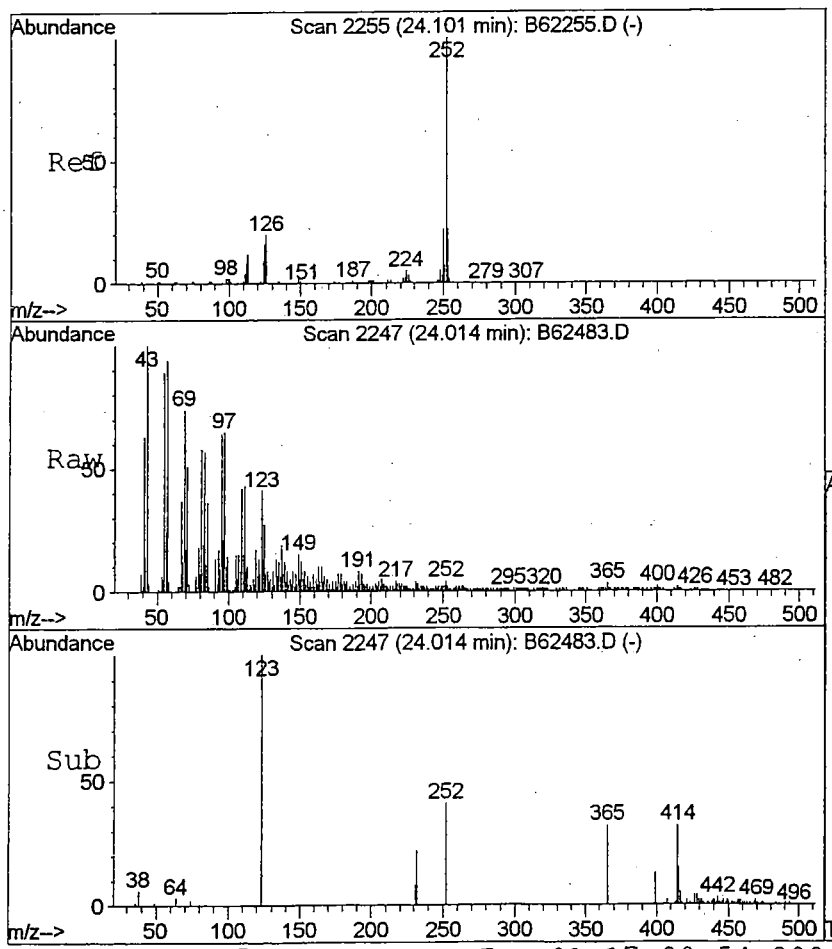


#97
Benzo[k]fluoranthene
Concen: 1.47 ppb m
RT: 23.51 min Scan# 2198
Delta R.T. 0.06 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:252 Resp: 6395

Ion	Ratio	Lower	Upper
252	100		
253	74.7	0.0	52.1#
125	745.7	0.0	38.2#

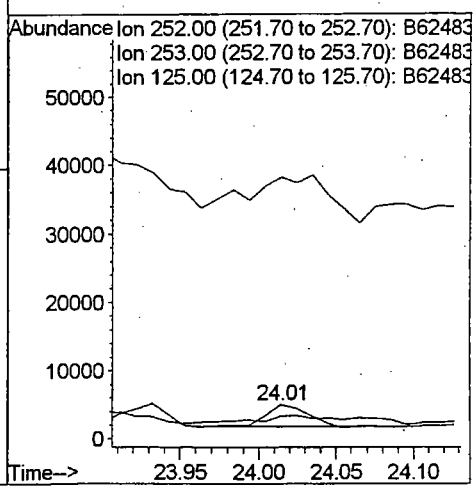




#98
Benzo[a]pyrene
Concen: 1.47 ppb
RT: 24.01 min Scan# 2247
Delta R.T. 0.09 min
Lab File: B62483.D
Acq: 1 Jun 2004 4:11 pm

Tgt Ion:252 Resp: 6217

Ion	Ratio	Lower	Upper
252	100		
253	20.5	0.0	52.4
125	136.9	0.0	40.8#



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\EB1651\B62492.D
Acq On : 1 Jun 2004 9:34 pm
Sample : N67805-4RCF
Misc : OP17035,EB1651,30,,,5,
MS Integration Params: LSCINT.P
Quant Time: Jun 2 9:07 2004

Vial: 16
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration
DataAcq Meth : MB1647

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.09	152	45675	40.00 ppb	0.00
25) Naphthalene-d8	8.90	136	180454	40.00 ppb	0.00
48) Acenaphthene-d10	12.13	164	90619	40.00 ppb	0.00
70) Phenanthrene-d10	15.37	188	136609	40.00 ppb	0.00
85) Chrysene-d12	21.53	240	353780	40.00 ppb	0.05
94) Perylene-d12	24.11	264	105284	40.00 ppb	0.09
System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
9) Phenol-d5	0.00	99	0d	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
26) Nitrobenzene-d5	7.90	82	14288	8.05 ppb	0.00
Spiked Amount 50.000			Recovery	= 16.10%	
52) 2-Fluorobiphenyl	10.81	172	27916	8.21 ppb	0.00
Spiked Amount 50.000			Recovery	= 16.42%	
75) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
88) Terphenyl-d14	19.25	244	32605	4.20 ppb	0.02
Spiked Amount 50.000			Recovery	= 8.40%	

Target Compounds					Qvalue
39) Naphthalene	8.93	128	18527	3.66 ppb	85
60) Acenaphthene	12.19	153	3682	1.33 ppb	89
67) Fluorene	13.27	166	2820	0.86 ppb	92
79) Phenanthrene	15.41	178	19605	4.81 ppb	98
80) Anthracene	15.52	178	4430m	1.06 ppb	
83) Fluoranthene	18.23	202	21563	4.74 ppb	95
87) Pyrene	18.74	202	19333	1.67 ppb	85
90) Benzo[a]anthracene	21.49	228	18234	1.82 ppb	91
92) Chrysene	21.57	228	18199	2.00 ppb	98
96) Benzo[b]fluoranthene	23.48	252	13726m	1.00 ppb	
97) Benzo[k]fluoranthene	23.50	252	8645m	2.08 ppb	
98) Benzo[a]pyrene	23.93	252	8879	2.21 ppb	78

d 6/4/04

79

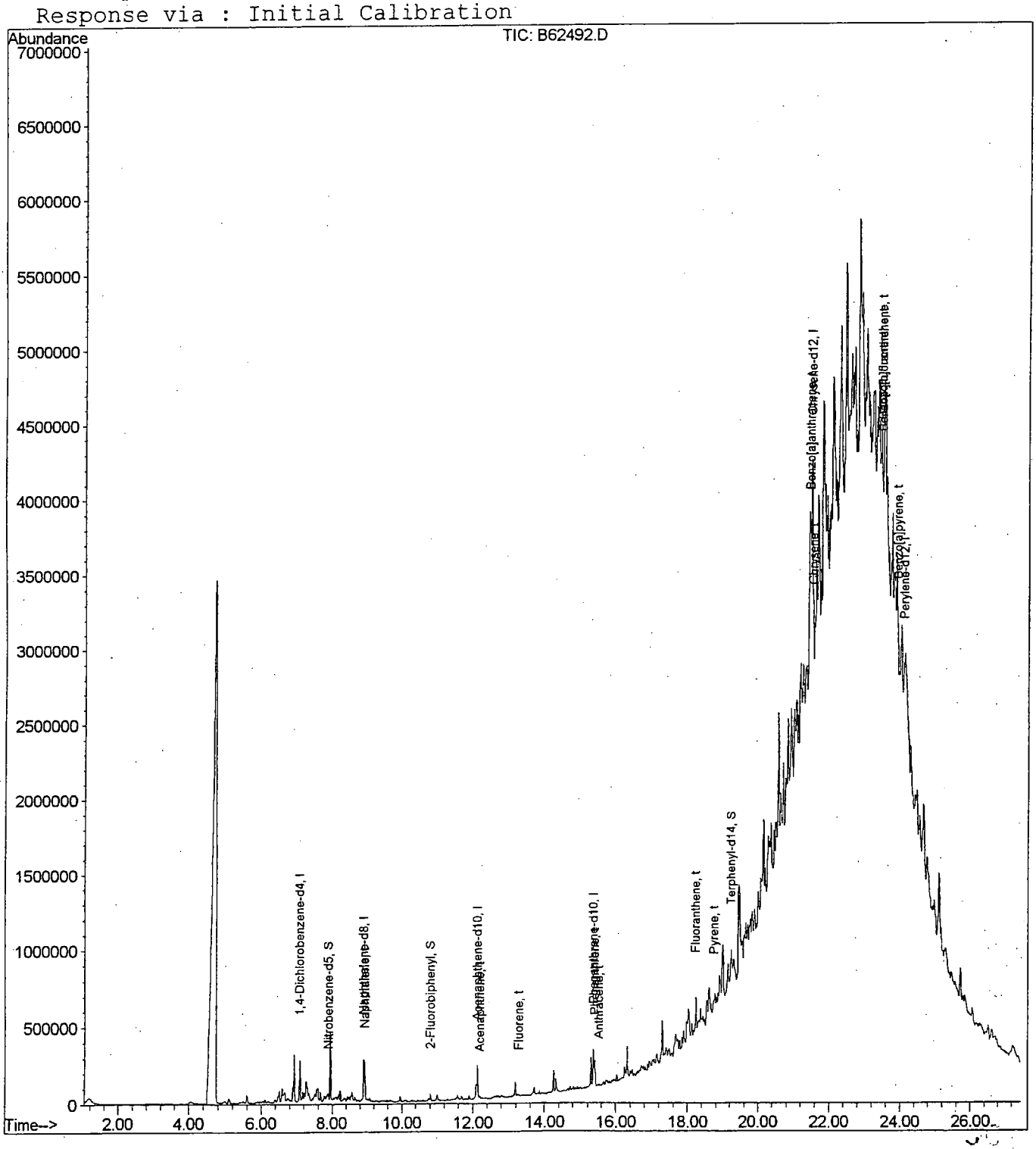
(#) = qualifier out of range (m) = manual integration

Quantitation Report

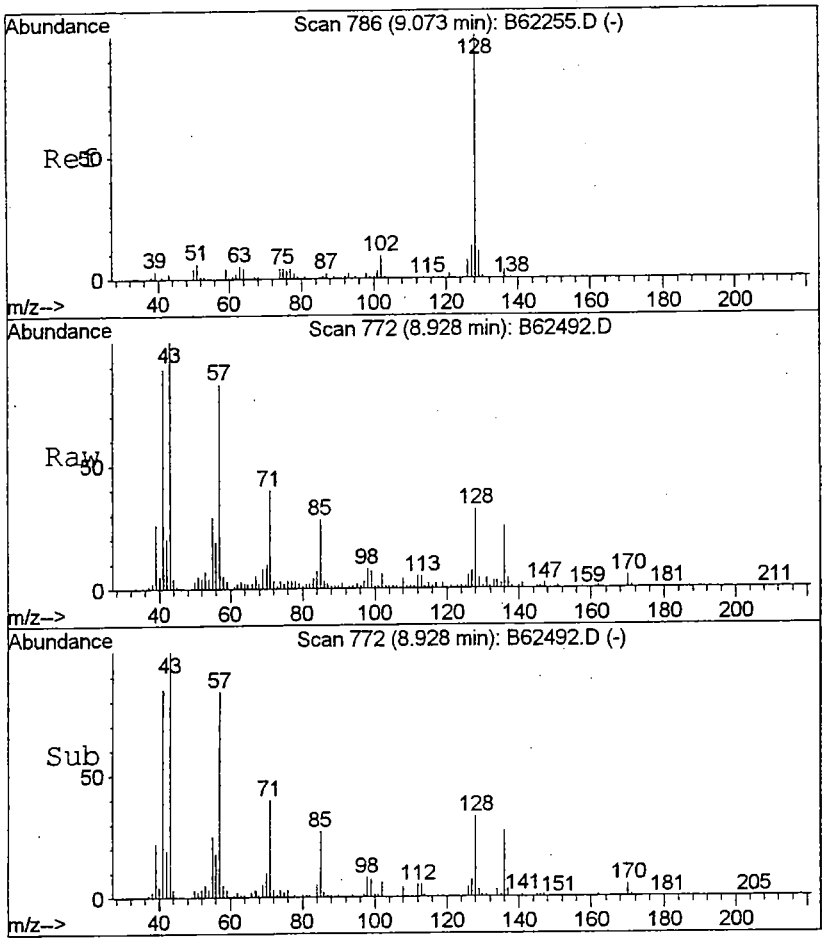
Data File : C:\HPCHEM\2\DATA\EB1651\B62492.D
Acq On : 1 Jun 2004 9:34 pm
Sample : N67805-4RCF
Misc : OP17035,EB1651,30,,,5,
MS Integration Params: LSCINT.P
Quant Time: Jun 2 9:07 2004

Vial: 16
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MB1647.RES

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jun 02 13:48:42 2004
Response via : Initial Calibration



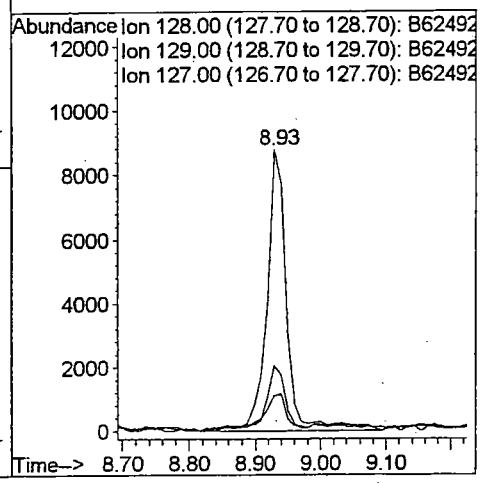
80

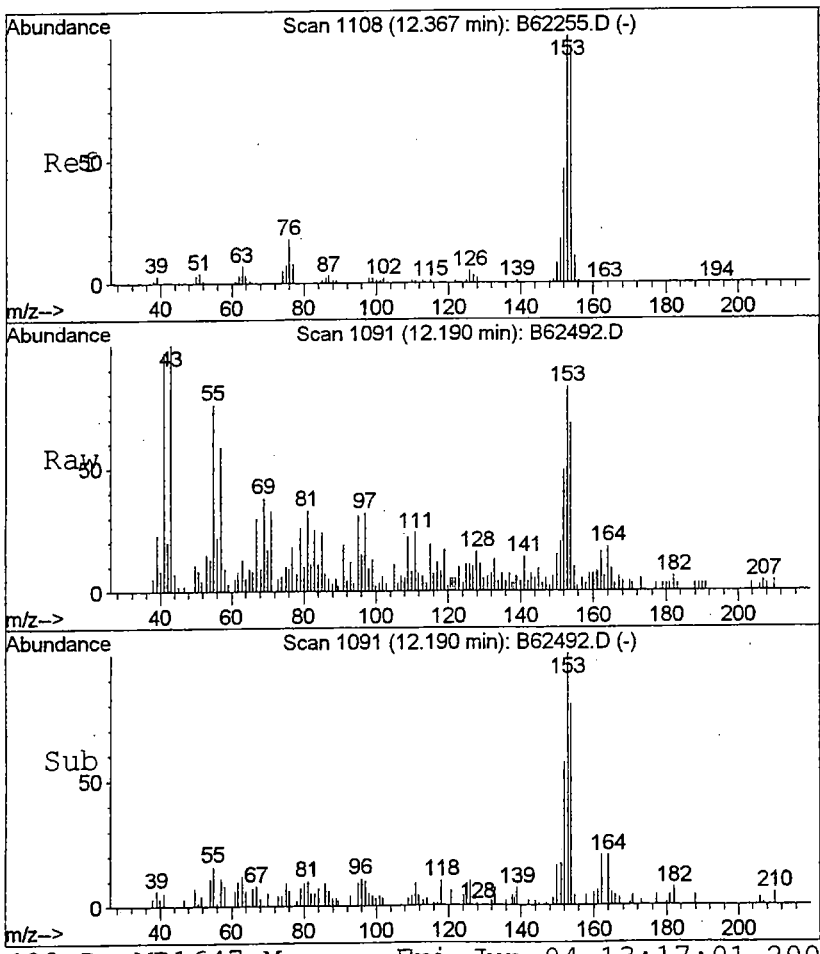


#39
Naphthalene
Concen: 3.66 ppb
RT: 8.93 min Scan# 772
Delta R.T. -0.01 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:128 Resp: 18527

Ion	Ratio	Lower	Upper
128	100		
129	12.0	0.0	41.0
127	22.5	0.0	42.5

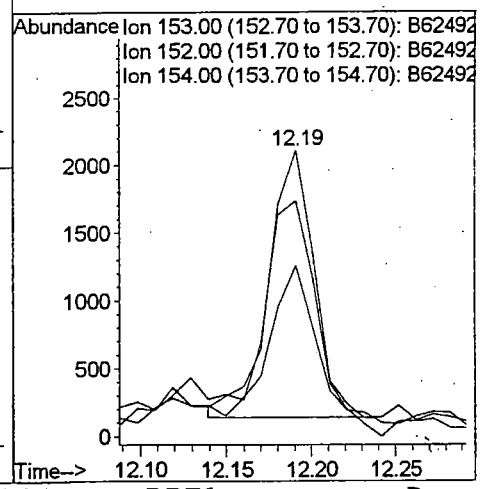


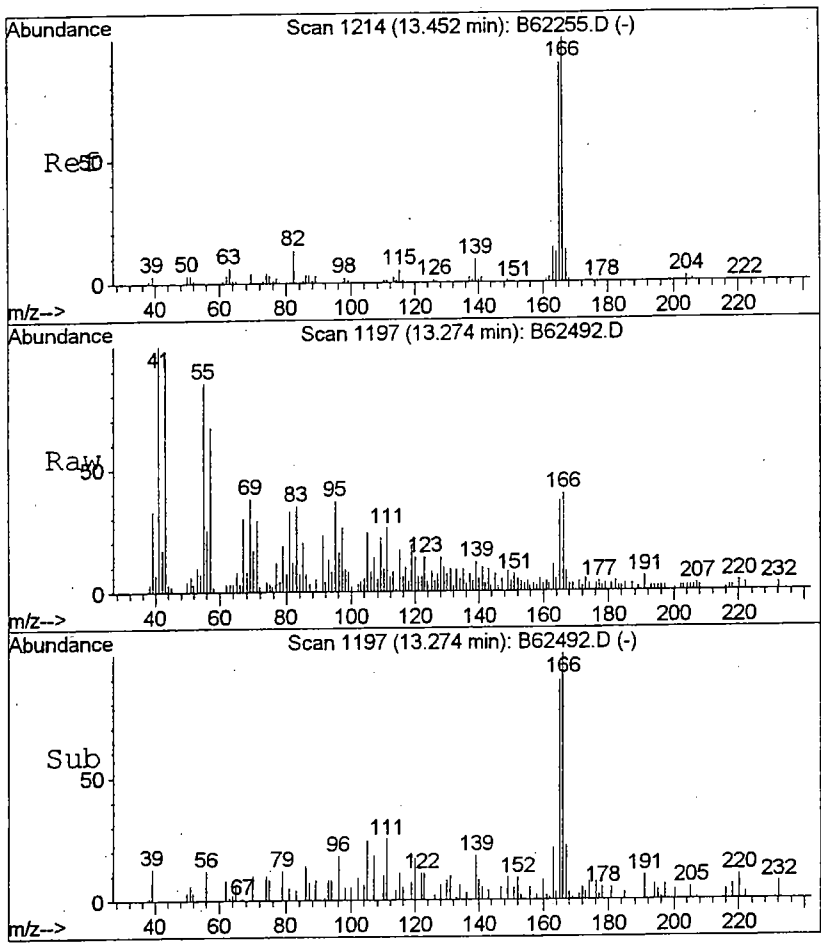


#60
Acenaphthene
Concen: 1.33 ppb
RT: 12.19 min Scan# 1091
Delta R.T. -0.01 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:153 Resp: 3682

Ion	Ratio	Lower	Upper
153	100		
152	56.3	16.8	76.8
154	82.6	62.2	122.2

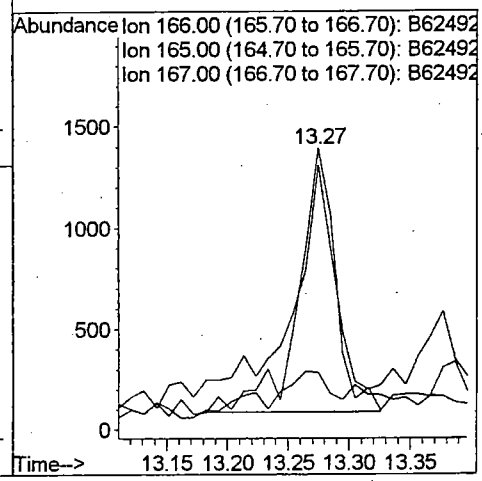


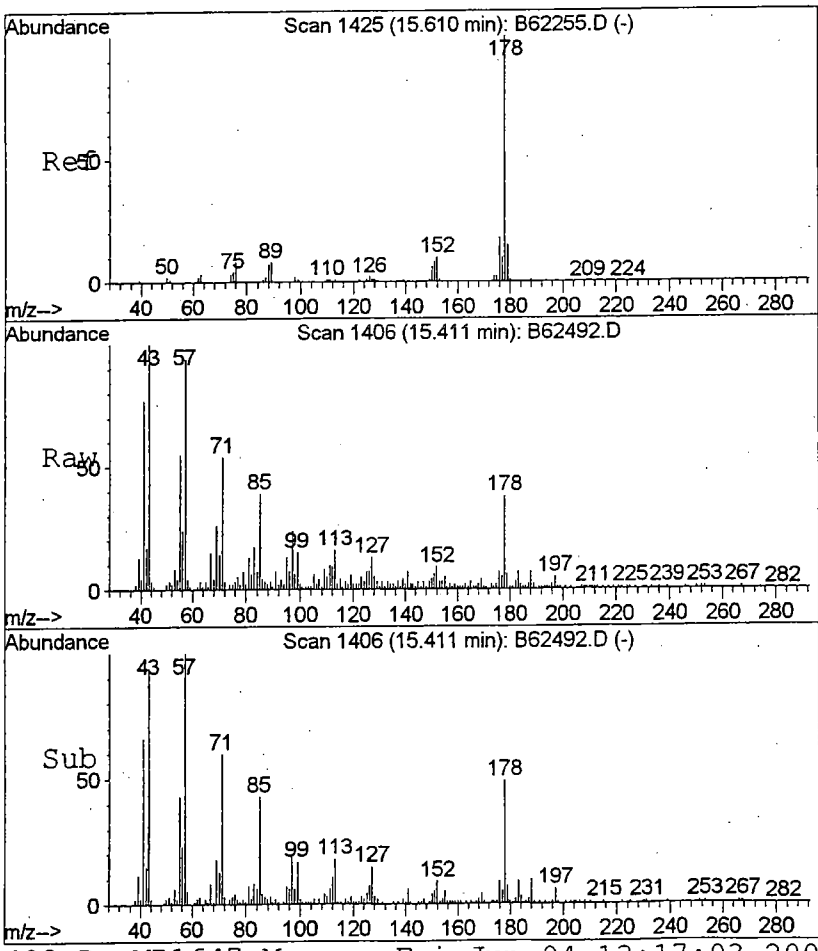


#67
Fluorene
Concen: 0.86 ppb
RT: 13.27 min Scan# 1197
Delta R.T. -0.01 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:166 Resp: 2820

Ion	Ratio	Lower	Upper
166	100		
165	82.6	60.7	120.7
167	11.4	0.0	43.1

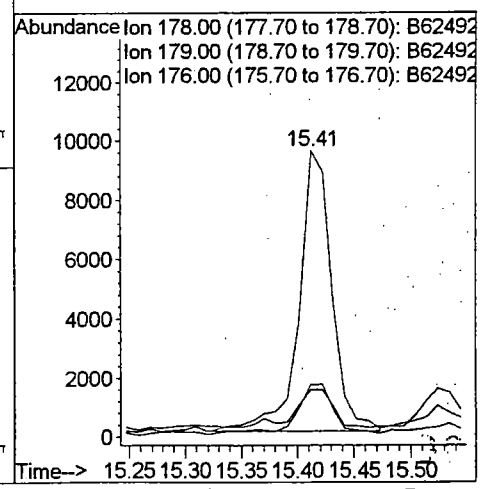


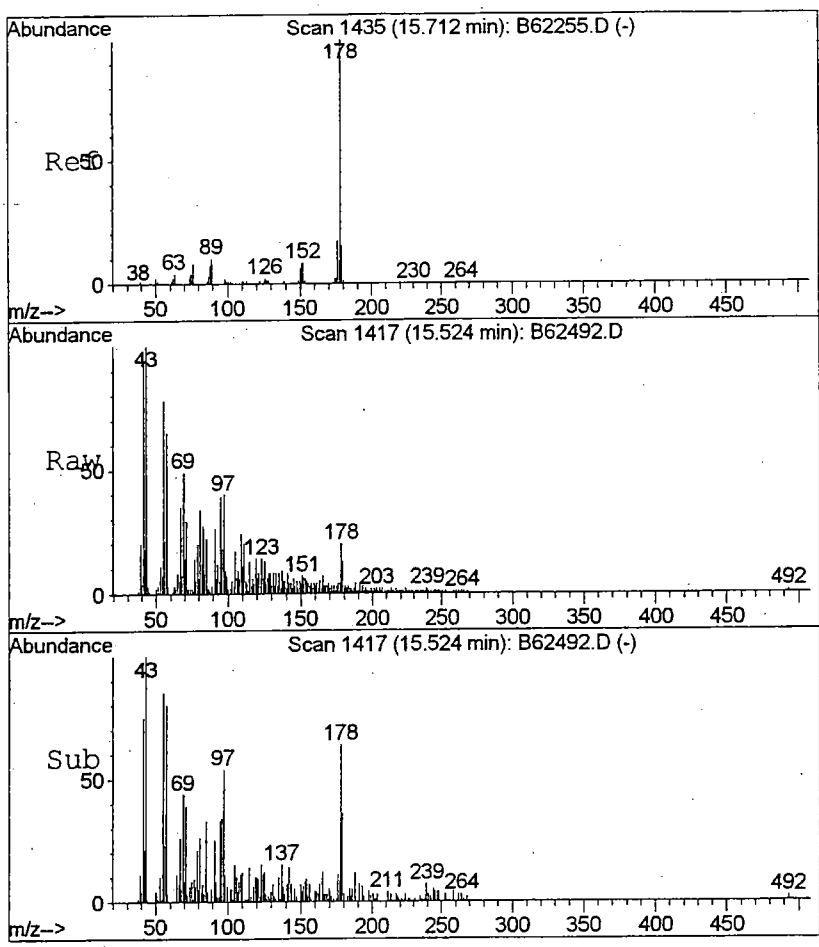


#79
Phenanthrene
Concen: 4.81 ppb
RT: 15.41 min Scan# 1406
Delta R.T. -0.02 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:178 Resp: 19605

Ion	Ratio	Lower	Upper
178	100		
179	13.3	0.0	45.1
176	17.9	0.0	47.9

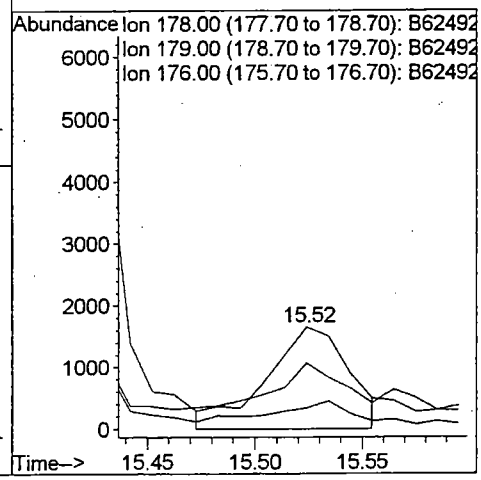


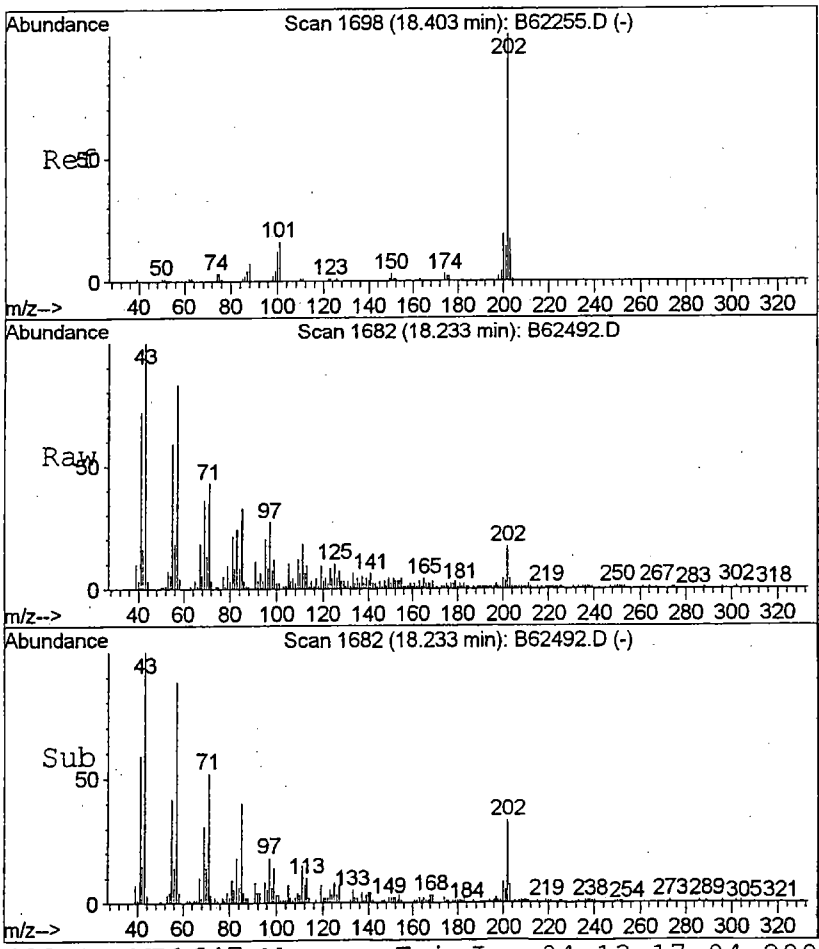


#80
Anthracene
Concen: 1.06 ppb m
RT: 15.52 min Scan# 1417
Delta R.T. -0.01 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:178 Resp: 4430

Ion	Ratio	Lower	Upper
178	100		
179	65.0	0.0	45.4#
176	20.7	0.0	47.4

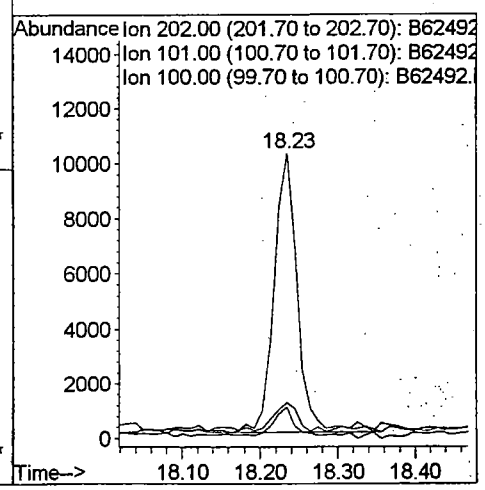


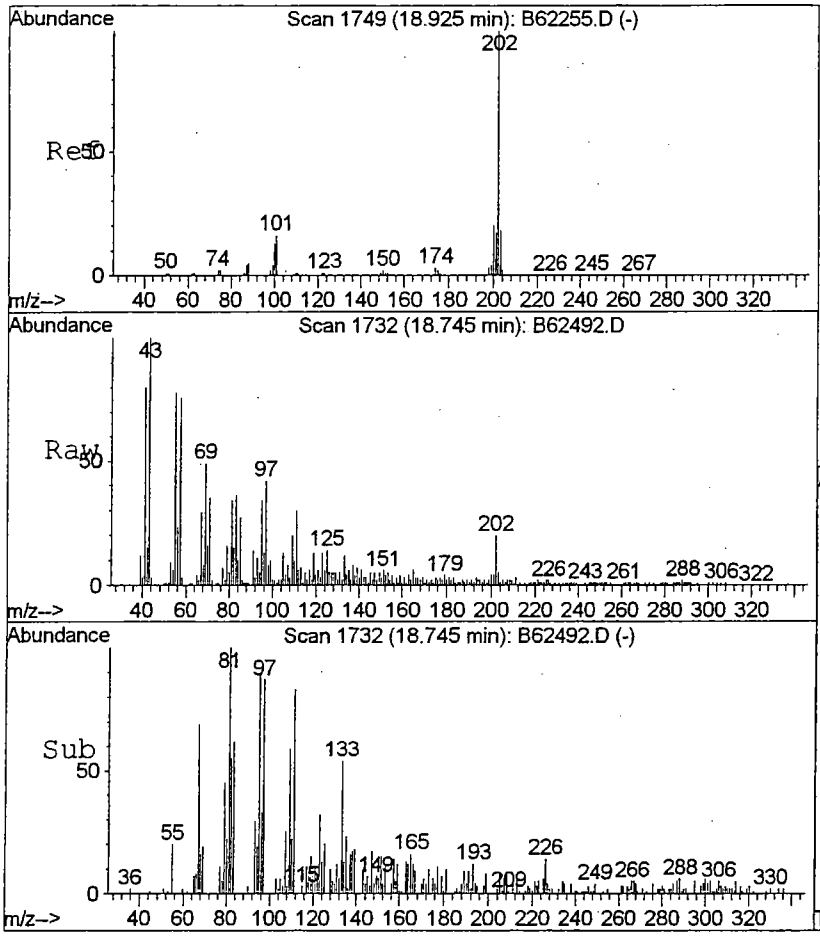


#83
Fluoranthene
Concen: 4.74 ppb
RT: 18.23 min Scan# 1682
Delta R.T. 0.01 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:202 Resp: 21563

Ion	Ratio	Lower	Upper
202	100		
101	10.6	0.0	42.9
100	8.5	0.0	40.3

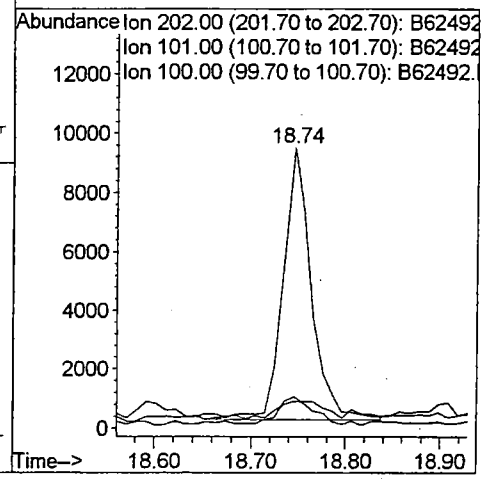


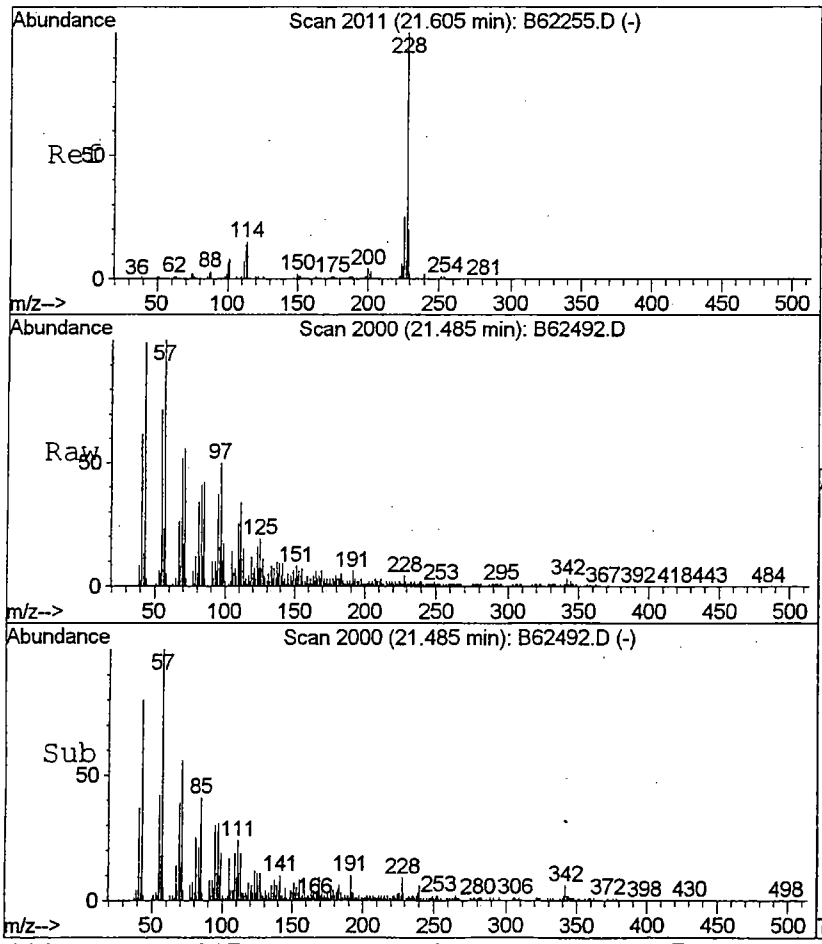


#87
Pyrene
Concen: 1.67 ppb
RT: 18.74 min Scan# 1732
Delta R.T. 0.01 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:202 Resp: 19333

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	44.4
100	5.0	0.0	42.0

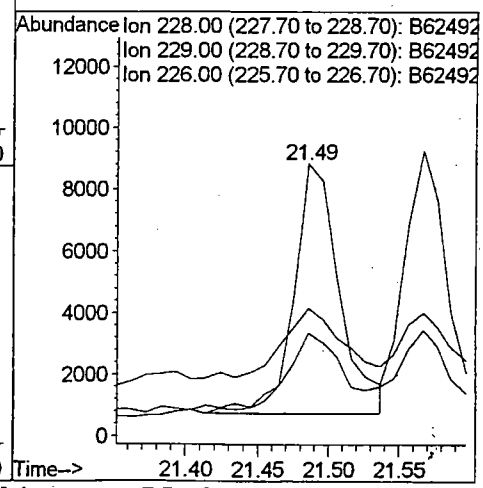




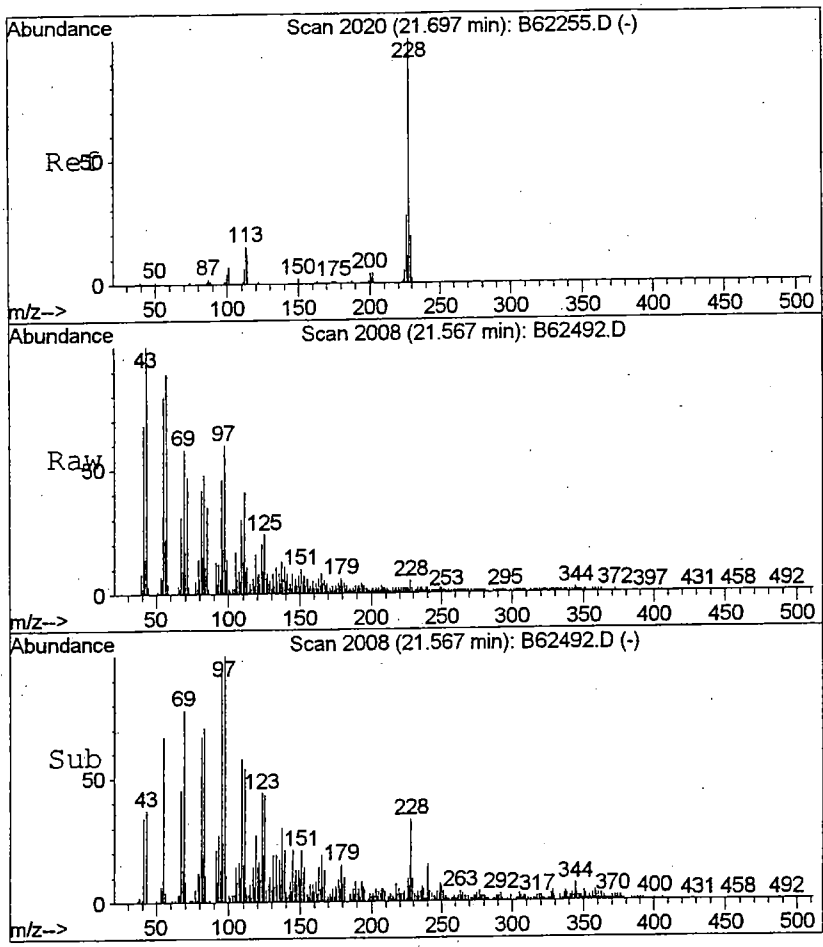
#90
Benzo[a]anthracene
Concen: 1.82 ppb
RT: 21.49 min Scan# 2000
Delta R.T. 0.04 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:228 Resp: 18234

Ion	Ratio	Lower	Upper
228	100		
229	27.1	0.0	49.5
226	26.8	0.0	55.1



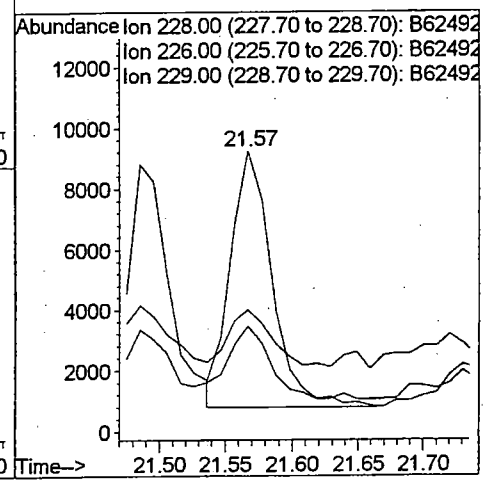
84

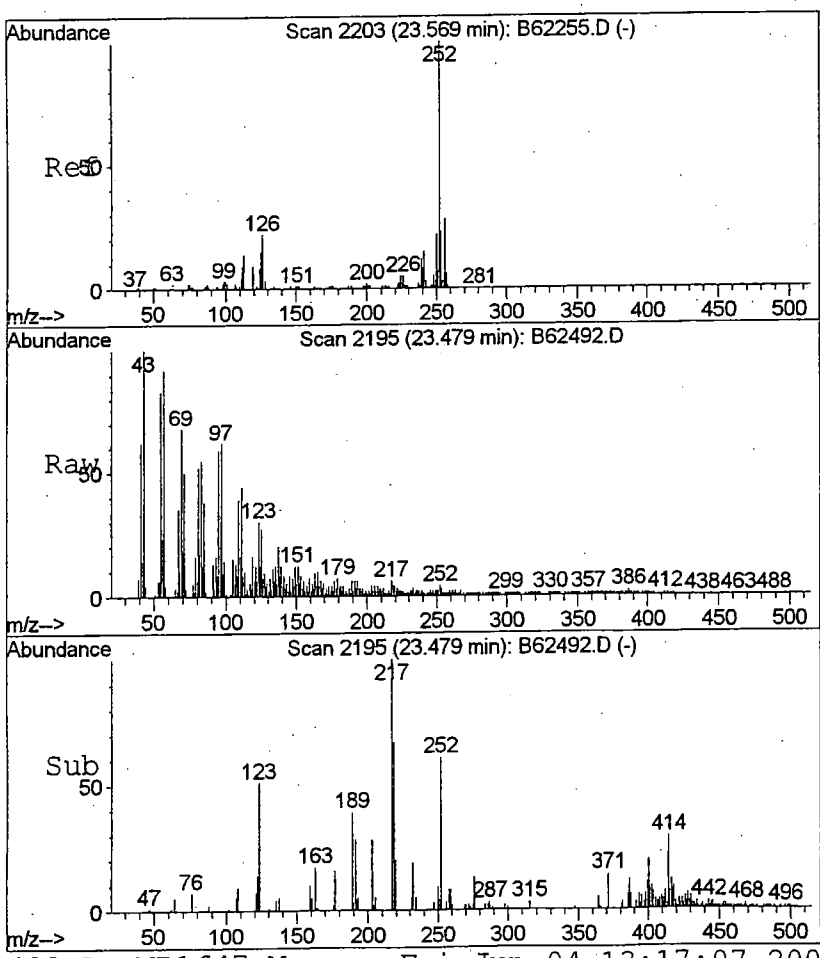


#92
Chrysene
Concen: 2.00 ppb
RT: 21.57 min Scan# 2008
Delta R.T. 0.04 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:228 Resp: 18199

Ion	Ratio	Lower	Upper
228	100		
226	26.1	0.0	57.0
229	20.3	0.0	49.4

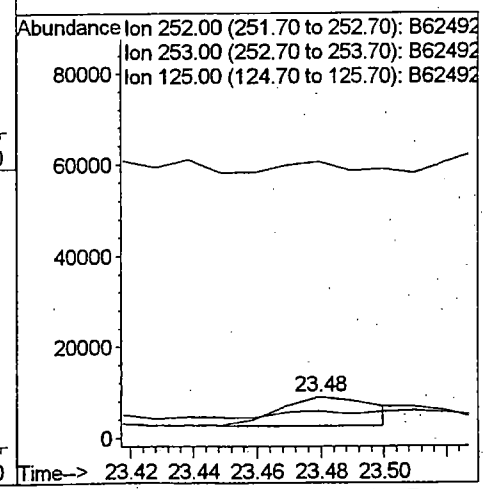


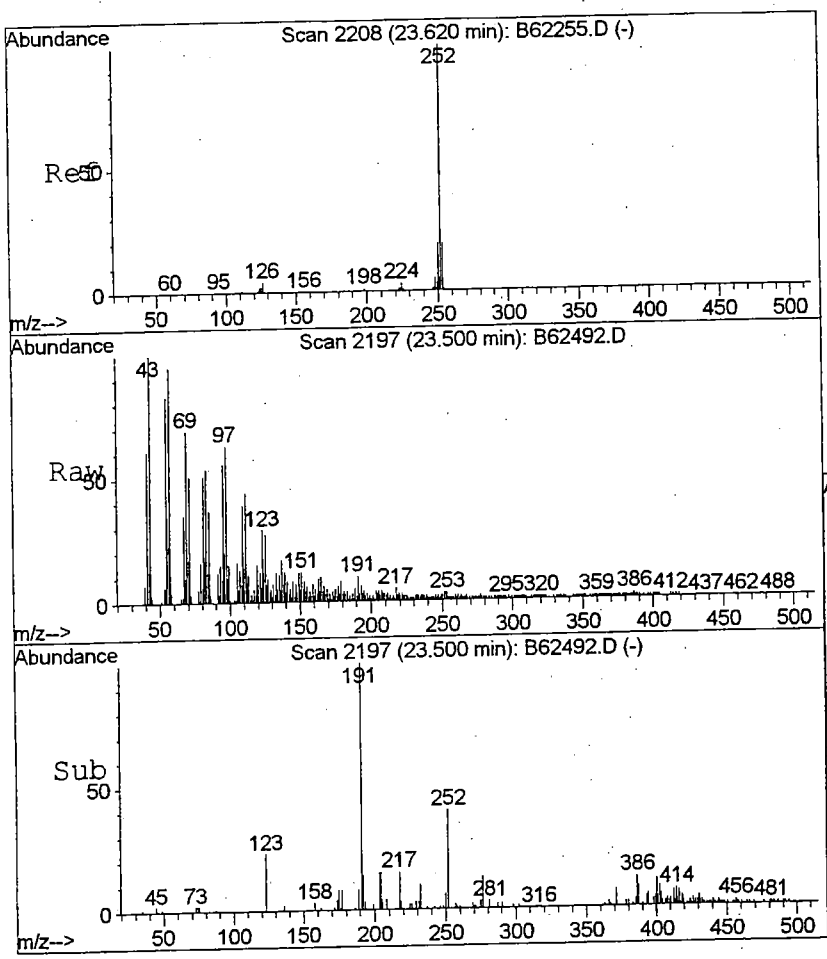


#96
Benzo[b]fluoranthene
Concen: 1.00 ppb m
RT: 23.48 min Scan# 2195
Delta R.T. 0.07 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:252 Resp: 13726

Ion	Ratio	Lower	Upper
252	100		
253	65.2	0.0	51.5#
125	671.3	0.0	42.4#

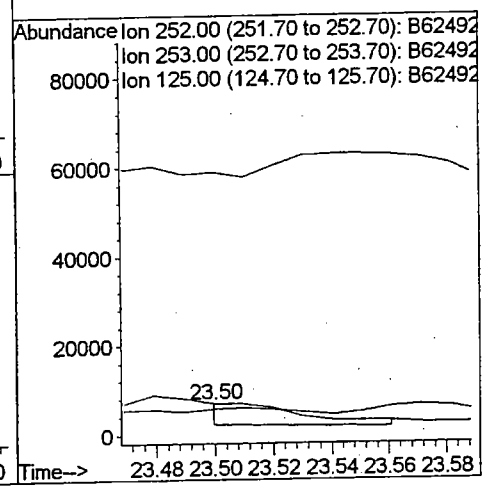


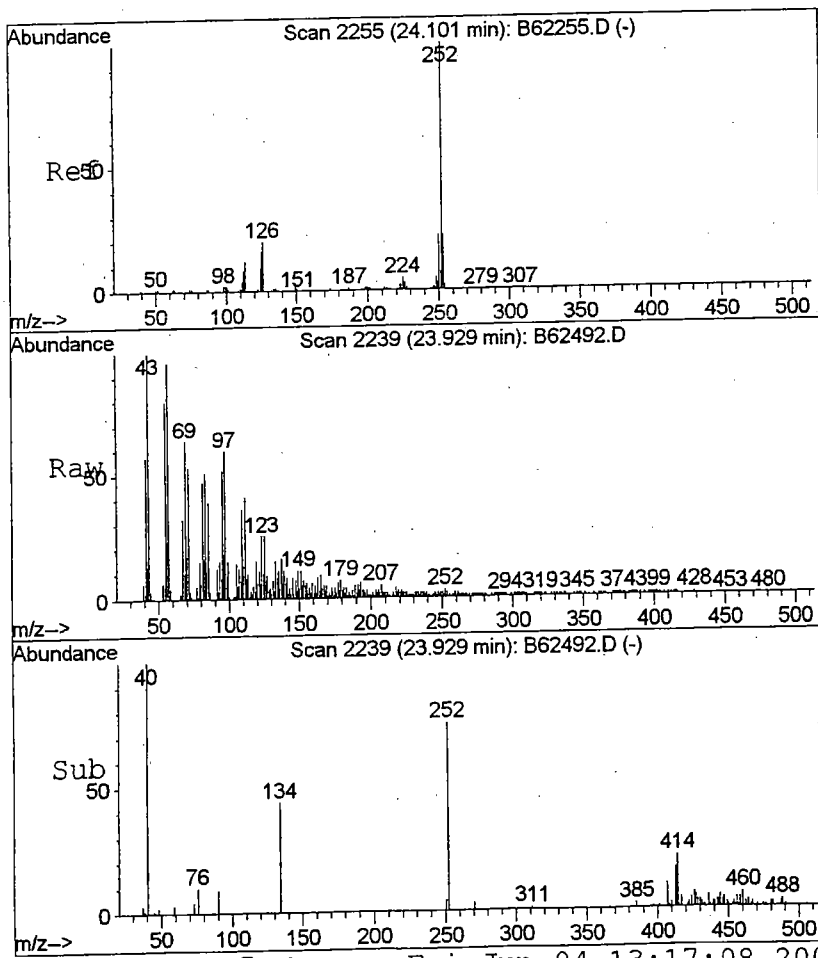


#97
Benzo[k]fluoranthene
Concen: 2.08 ppb m
RT: 23.50 min Scan# 2197
Delta R.T. 0.04 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:252 Resp: 8645

Ion	Ratio	Lower	Upper
252	100		
253	81.4	0.0	50.7#
125	833.1	0.0	43.0#

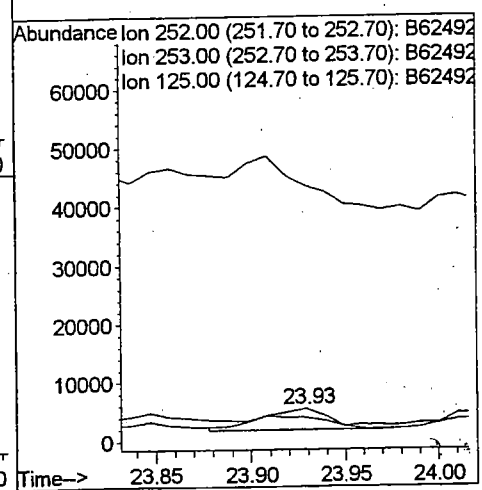




#98
Benzo[a]pyrene
Concen: 2.21 ppb
RT: 23.93 min Scan# 2239
Delta R.T. 0.00 min
Lab File: B62492.D
Acq: 1 Jun 2004 9:34 pm

Tgt Ion:252 Resp: 8879

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.8
125	36.4	0.0	43.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\EB1651\B62484.D
Acq On : 1 Jun 2004 4:47 pm
Sample : N67805-10R
Misc : OP17035,EB1651,30.2,,,5
MS Integration Params: LSCINT.P
Quant Time: Jun 1 17:19 2004

Vial: 8
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration
DataAcq Meth : MB1647

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	68535	40.00 ppb	0.00
25) Naphthalene-d8	8.91	136	269382	40.00 ppb	0.00
48) Acenaphthene-d10	12.13	164	130680	40.00 ppb	0.00
70) Phenanthrene-d10	15.37	188	190871	40.00 ppb	0.00
85) Chrysene-d12	21.52	240	332750	40.00 ppb	0.04
94) Perylene-d12	24.10	264	176171	40.00 ppb	0.08
System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
9) Phenol-d5	0.00	99	0d	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
26) Nitrobenzene-d5	7.90	82	22778	8.59 ppb	0.00
Spiked Amount 50.000			Recovery	= 17.18%	
52) 2-Fluorobiphenyl	10.81	172	37609	7.67 ppb	0.00
Spiked Amount 50.000			Recovery	= 15.34%	
75) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppb	
Spiked Amount 50.000			Recovery	= 0.00%	
88) Terphenyl-d14	19.25	244	35584	4.88 ppb	0.02
Spiked Amount 50.000			Recovery	= 9.76%	
Target Compounds					Qvalue
39) Naphthalene	8.94	128	78351	10.38 ppb	90
60) Acenaphthene	12.19	153	2095	0.53 ppb	85
67) Fluorene	13.28	166	2861	0.60 ppb	98
79) Phenanthrene	15.42	178	22768	3.99 ppb	98
80) Anthracene	15.53	178	4060	0.70 ppb	67
83) Fluoranthene	18.23	202	25904	4.07 ppb	95
87) Pyrene	18.74	202	24026	2.20 ppb	92
90) Benzo[a]anthracene	21.48	228	20177	2.14 ppb	90
92) Chrysene	21.57	228	20005	2.33 ppb	97

(#) = qualifier out of range (m) = manual integration
B62484.D MB1647.M Tue Jun 01 17:19:37 2004 RPT1 Page 1

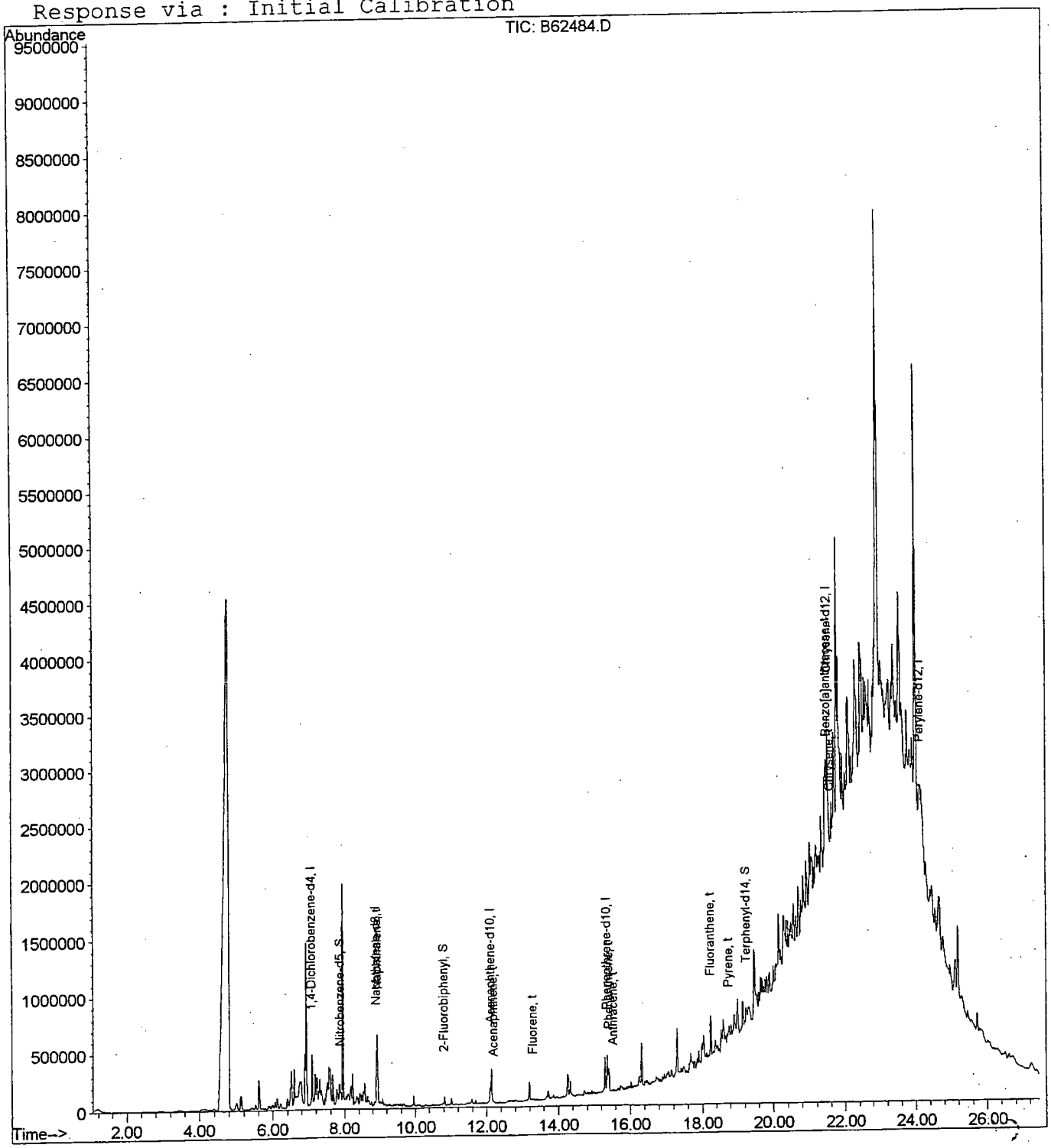
Quantitation Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62484.D
Acq On : 1 Jun 2004 4:47 pm
Sample : N67805-10R
Misc : OP17035,EB1651,30.2,,,5
MS Integration Params: LSCINT.P
Quant Time: Jun 1 17:19 2004

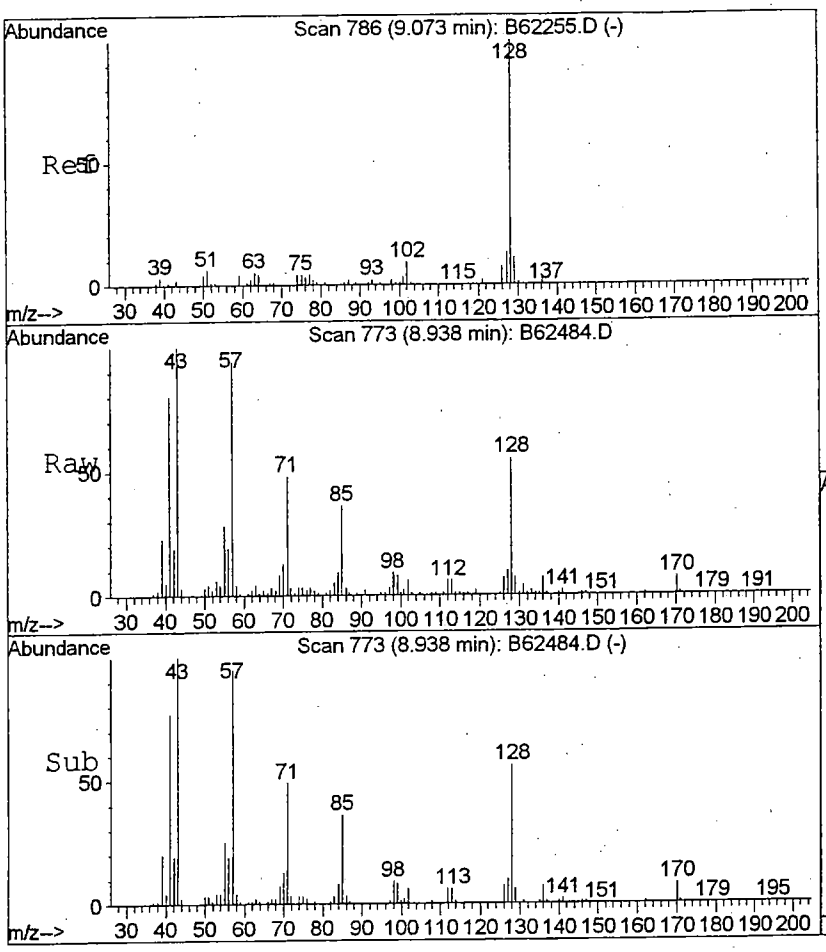
Vial: 8
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration



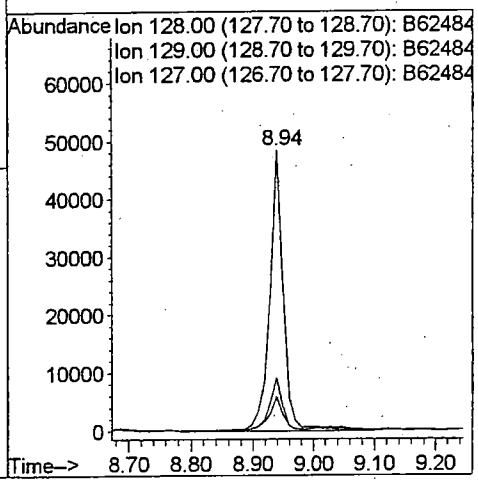
88

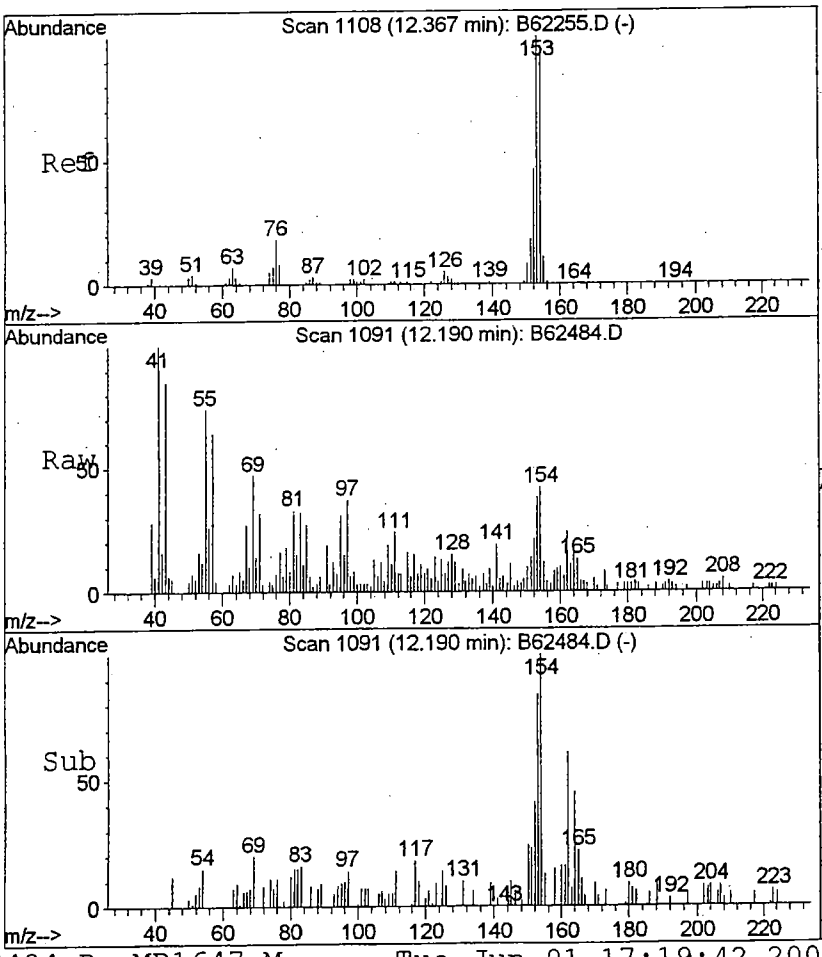


#39
Naphthalene
Concen: 10.38 ppb
RT: 8.94 min Scan# 773
Delta R.T. 0.00 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:128 Resp: 78351

Ion	Ratio	Lower	Upper
128	100		
129	12.2	0.0	41.0
127	18.6	0.0	42.5

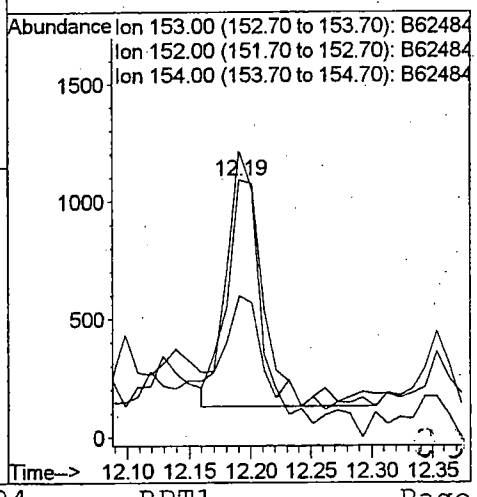


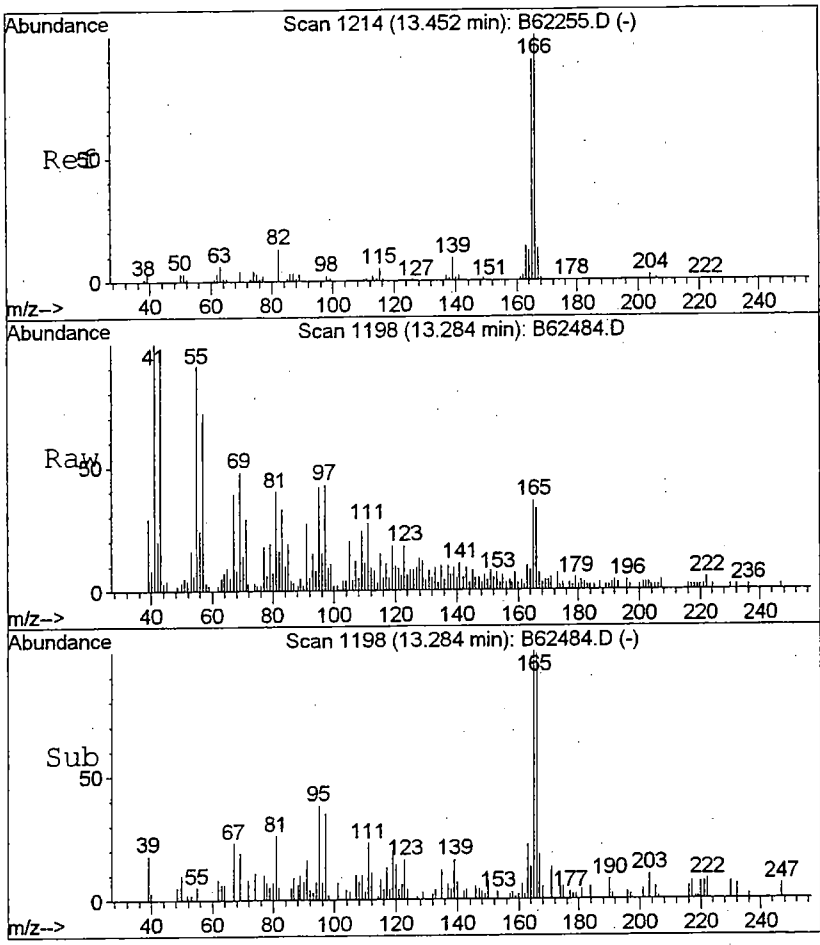


#60
Acenaphthene
Concen: 0.53 ppb
RT: 12.19 min Scan# 1091
Delta R.T. -0.01 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:153 Resp: 2095

Ion	Ratio	Lower	Upper
153	100		
152	42.4	16.8	76.8
154	111.2	62.2	122.2

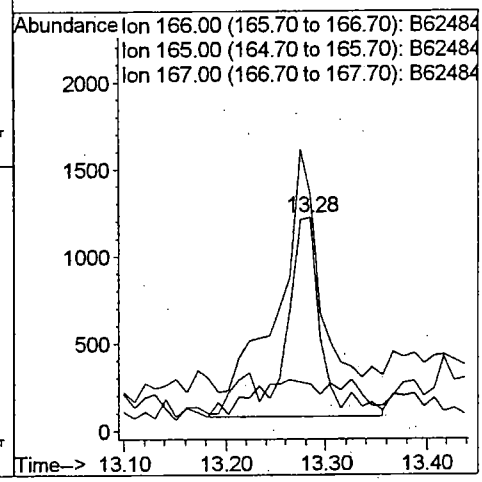


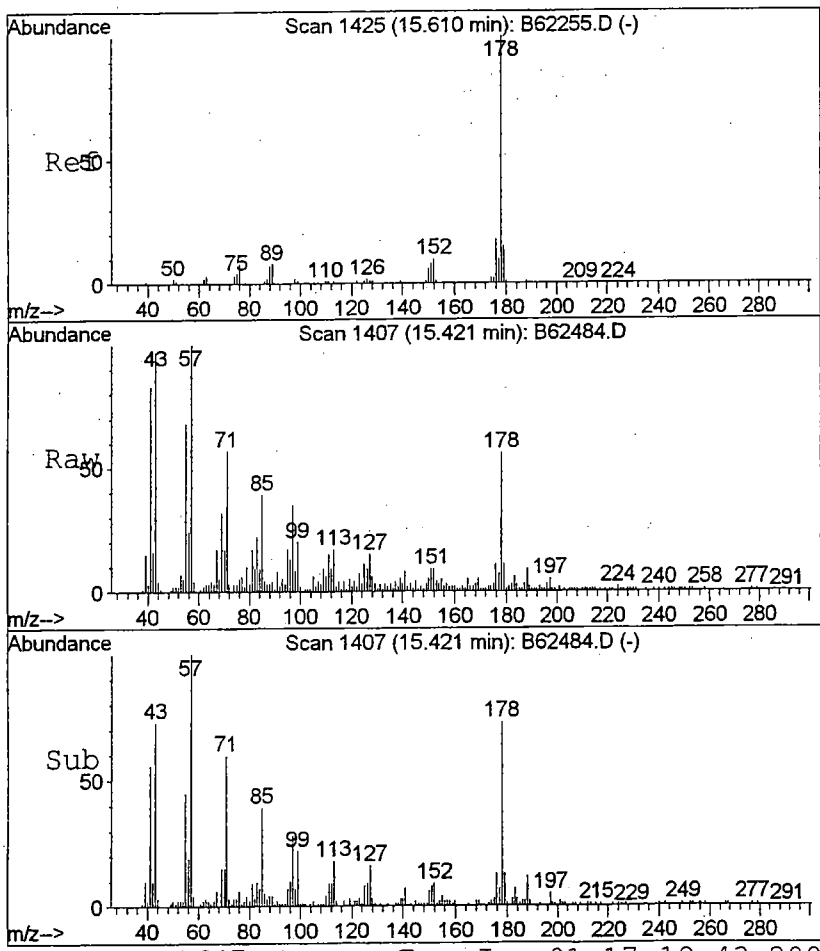


#67
Fluorene
Concen: 0.60 ppb
RT: 13.28 min Scan# 1198
Delta R.T. 0.00 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:166 Resp: 2861

Ion	Ratio	Lower	Upper
166	100		
165	92.3	60.7	120.7
167	12.8	0.0	43.1

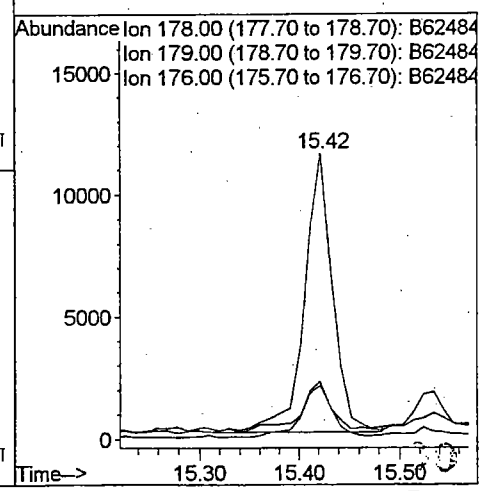


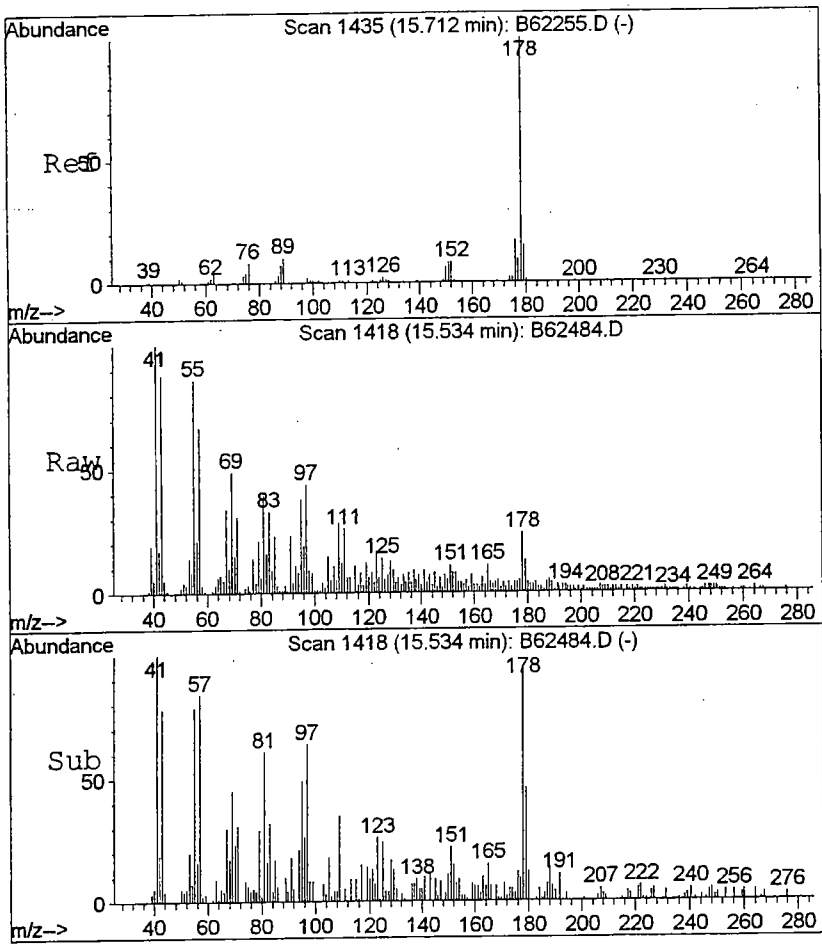


#79
Phenanthrene
Concen: 3.99 ppb
RT: 15.42 min Scan# 1407
Delta R.T. -0.01 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:178 Resp: 22768

Ion	Ratio	Lower	Upper
178	100		
179	17.1	0.0	45.1
176	17.8	0.0	47.9

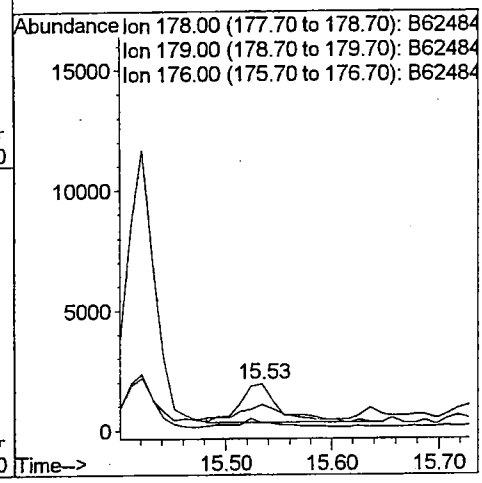


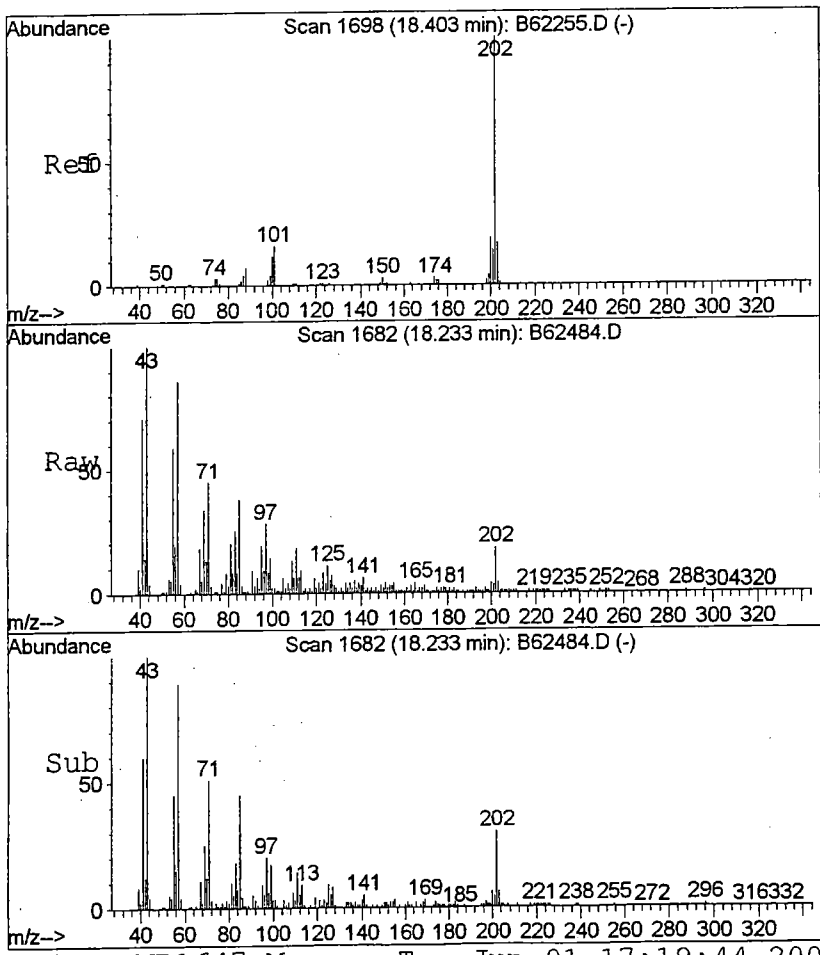


#80
Anthracene
Concen: 0.70 ppb
RT: 15.53 min Scan# 1418
Delta R.T. 0.00 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:178 Resp: 4060

Ion	Ratio	Lower	Upper
178	100		
179	36.4	0.0	45.4
176	9.2	0.0	47.4

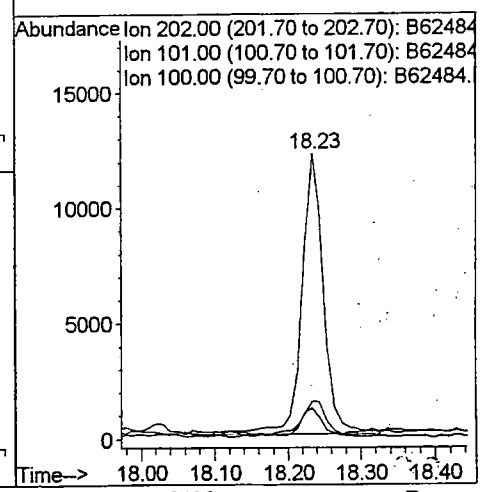


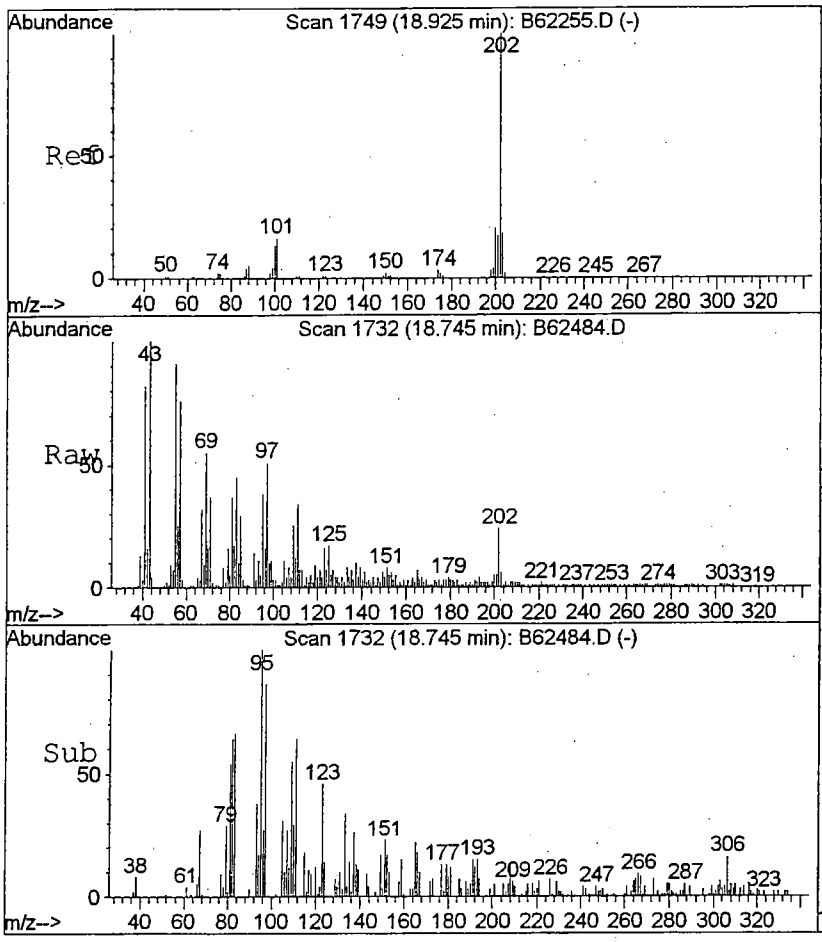


#83
Fluoranthene
Concen: 4.07 ppb
RT: 18.23 min Scan# 1682
Delta R.T. 0.01 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:202 Resp: 25904

Ion	Ratio	Lower	Upper
202	100		
101	9.8	0.0	42.9
100	10.6	0.0	40.3

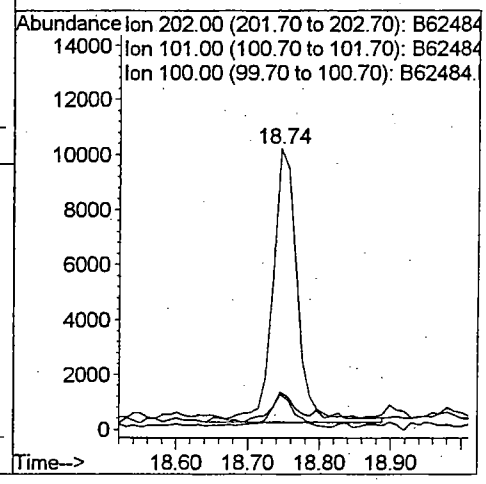


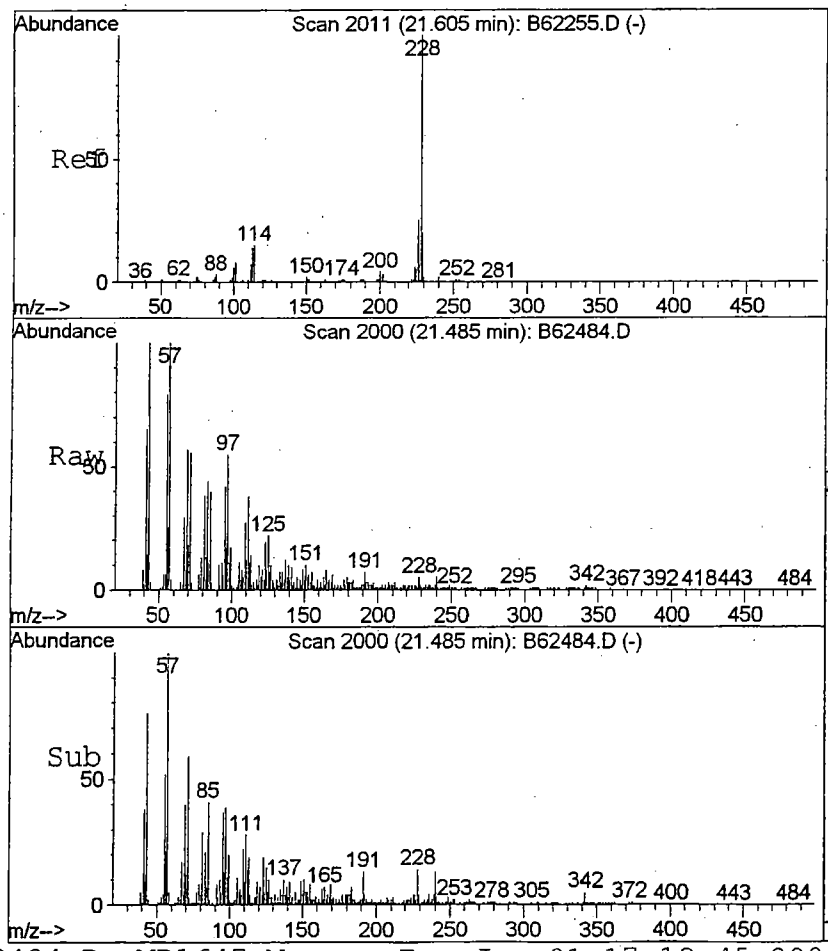


#87
Pyrene
Concen: 2.20 ppb
RT: 18.74 min Scan# 1732
Delta R.T. 0.01 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:202 Resp: 24026

Ion	Ratio	Lower	Upper
202	100		
101	11.5	0.0	44.4
100	8.6	0.0	42.0

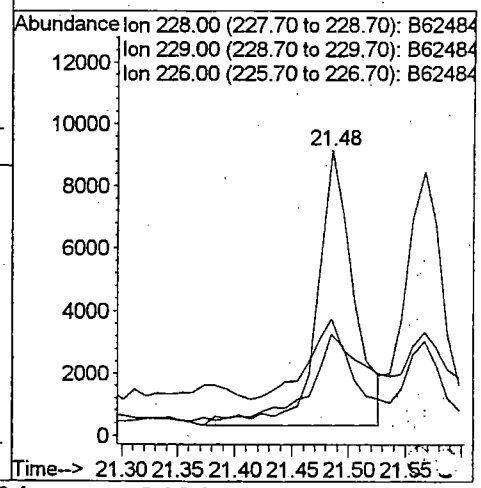


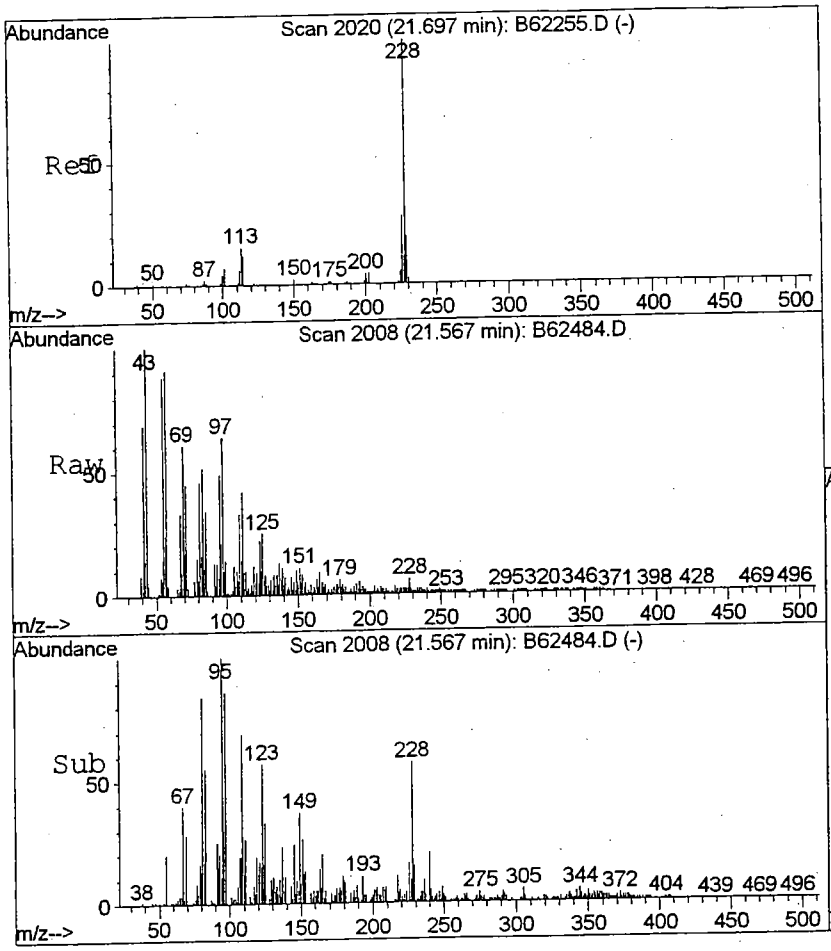


#90
Benzo[a]anthracene
Concen: 2.14 ppb
RT: 21.48 min Scan# 2000
Delta R.T. 0.04 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:228 Resp: 20177

Ion	Ratio	Lower	Upper
228	100		
229	24.3	0.0	49.5
226	29.8	0.0	55.1

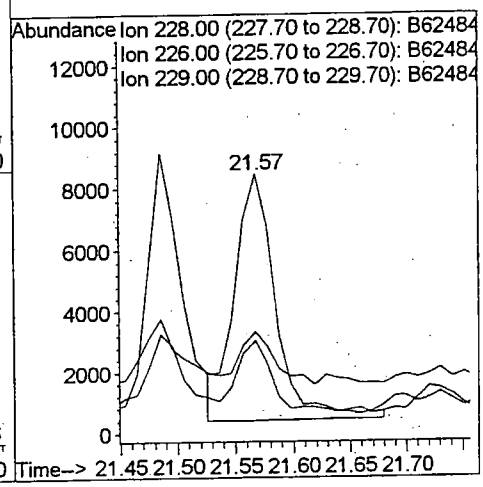




#92
Chrysene
Concen: 2.33 ppb
RT: 21.57 min Scan# 2008
Delta R.T. 0.04 min
Lab File: B62484.D
Acq: 1 Jun 2004 4:47 pm

Tgt Ion:228 Resp: 20005

Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	57.0
229	21.2	0.0	49.4



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EB1651\B62485.D
Acq On : 1 Jun 2004 5:23 pm
Sample : N67805-11R
Misc : OP17035,EB1651,30.2
MS Integration Params: LSCINT.P
Quant Time: Jun 2 8:45 2004

Vial: 9
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: MB1647.RES

Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration
DataAcq Meth : MB1647

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	96231	40.00 ppb	0.01
25) Naphthalene-d8	8.92	136	354000	40.00 ppb	0.01
48) Acenaphthene-d10	12.13	164	155625	40.00 ppb	0.00
70) Phenanthrene-d10	15.37	188	281112	40.00 ppb	0.00
85) Chrysene-d12	21.54	240	601746	40.00 ppb	0.07
94) Perylene-d12	24.11	264	129721	40.00 ppb	0.09
System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0d	0.00 ppb	
Spiked Amount 50.000			Recovery =	0.00%	
9) Phenol-d5	0.00	99	0d	0.00 ppb	
Spiked Amount 50.000			Recovery =	0.00%	
26) Nitrobenzene-d5	7.91	82	150101	43.08 ppb	0.00
Spiked Amount 50.000			Recovery =	86.16%	
52) 2-Fluorobiphenyl	10.81	172	206296	35.33 ppb	0.00
Spiked Amount 50.000			Recovery =	70.66%	
75) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppb	
Spiked Amount 50.000			Recovery =	0.00%	
88) Terphenyl-d14	19.26	244	260147	19.72 ppb	0.04
Spiked Amount 50.000			Recovery =	39.44%	

Target Compounds					Qvalue
39) Naphthalene	8.94	128	297780	30.01 ppb	93
57) Acenaphthylene	11.82	152	5834	0.75 ppb	88
60) Acenaphthene	12.19	153	9976	2.10 ppb	94
67) Fluorene	13.28	166	17448	3.09 ppb	98
79) Phenanthrene	15.42	178	142316	16.95 ppb	99
80) Anthracene	15.53	178	25362	2.96 ppb	90
83) Fluoranthene	18.24	202	189448	20.22 ppb	93
87) Pyrene	18.76	202	171512	8.69 ppb	92
90) Benzo[a]anthracene	21.51	228	158756	9.30 ppb	96
92) Chrysene	21.58	228	169154	10.91 ppb	98
96) Benzo[b]fluoranthene	23.48	252	101369m	19.19 ppb	
97) Benzo[k]fluoranthene	23.50	252	70288m	13.73 ppb	
98) Benzo[a]pyrene	24.01	252	44171	8.93 ppb	91

6-2-04

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

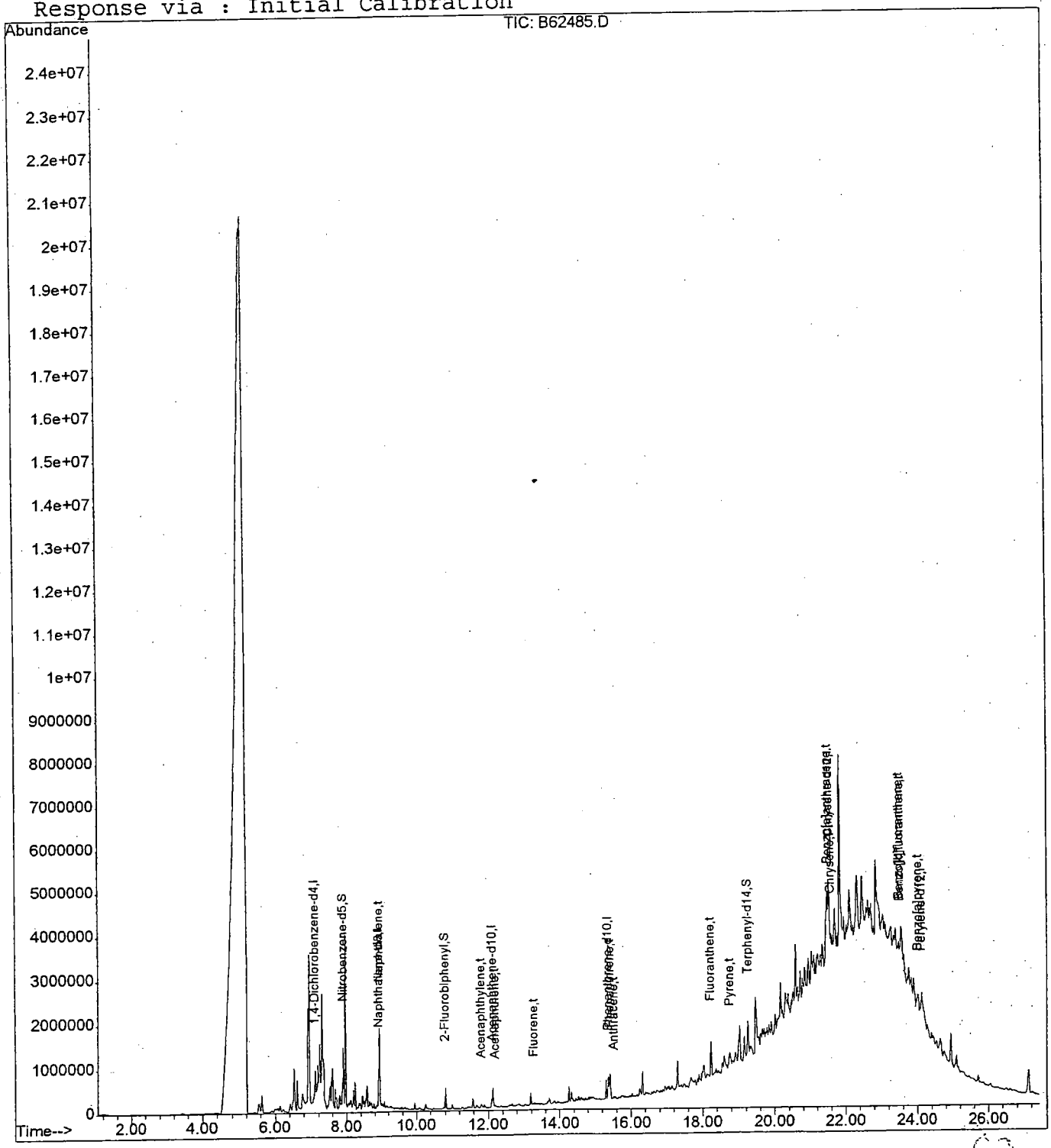
Quantitation Report (QT Reviewed)

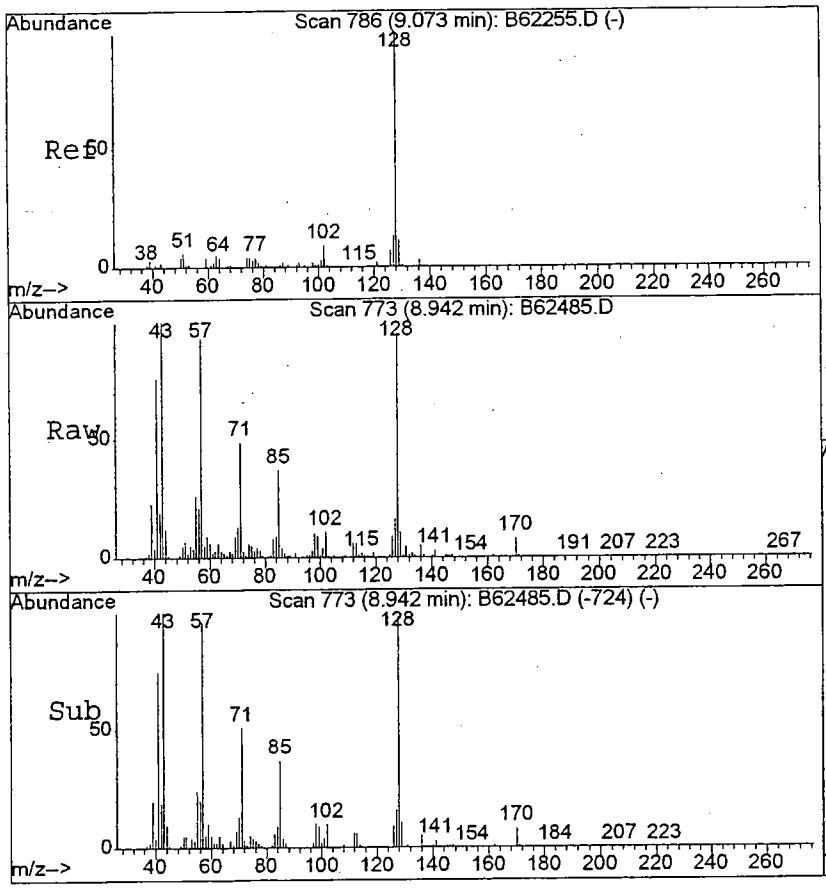
Data File : C:\MSDCHEM\1\DATA\EB1651\B62485.D
Acq On : 1 Jun 2004 5:23 pm
Sample : N67805-11R
Misc : OP17035,EB1651,30.2
MS Integration Params: LSCINT.P
Quant Time: Jun 2 8:45 2004

Vial: 9
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Method : C:\MSDCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jun 01 16:49:02 2004
Response via : Initial Calibration

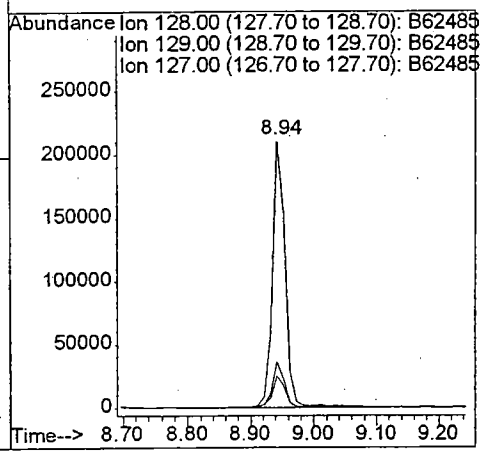


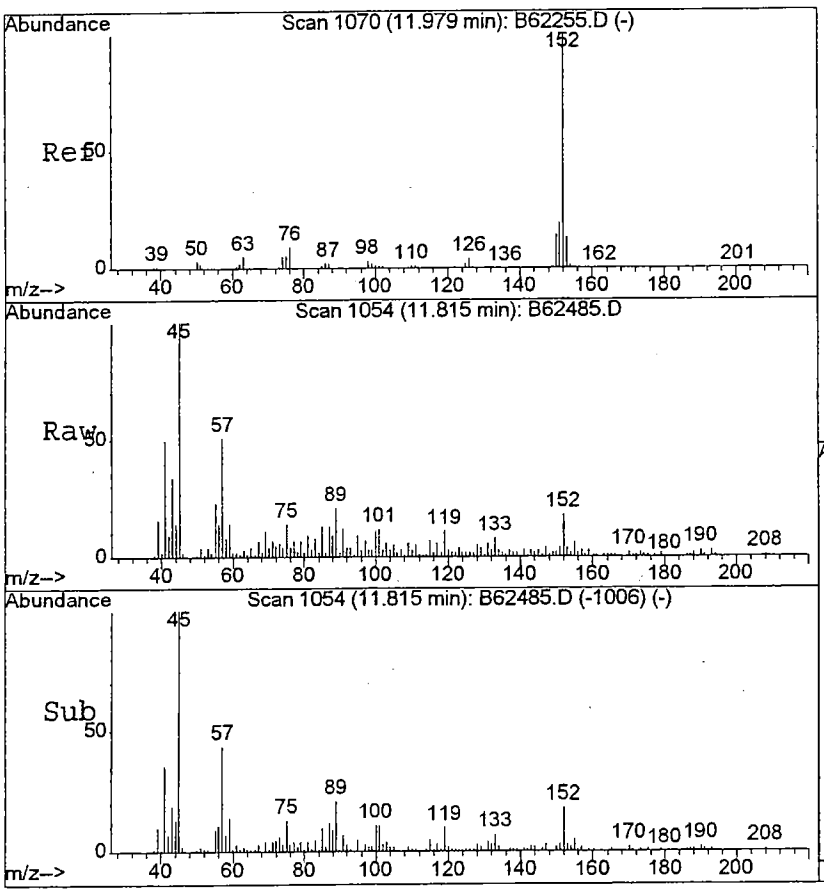


#39
Naphthalene
Concen: 30.01 ppb
RT: 8.94 min Scan# 773
Delta R.T. 0.00 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:128 Resp: 297780

Ion	Ratio	Lower	Upper
128	100		
129	11.8	0.0	41.0
127	17.0	0.0	42.5

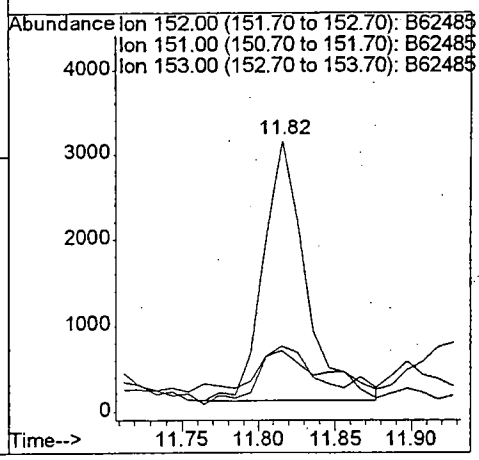


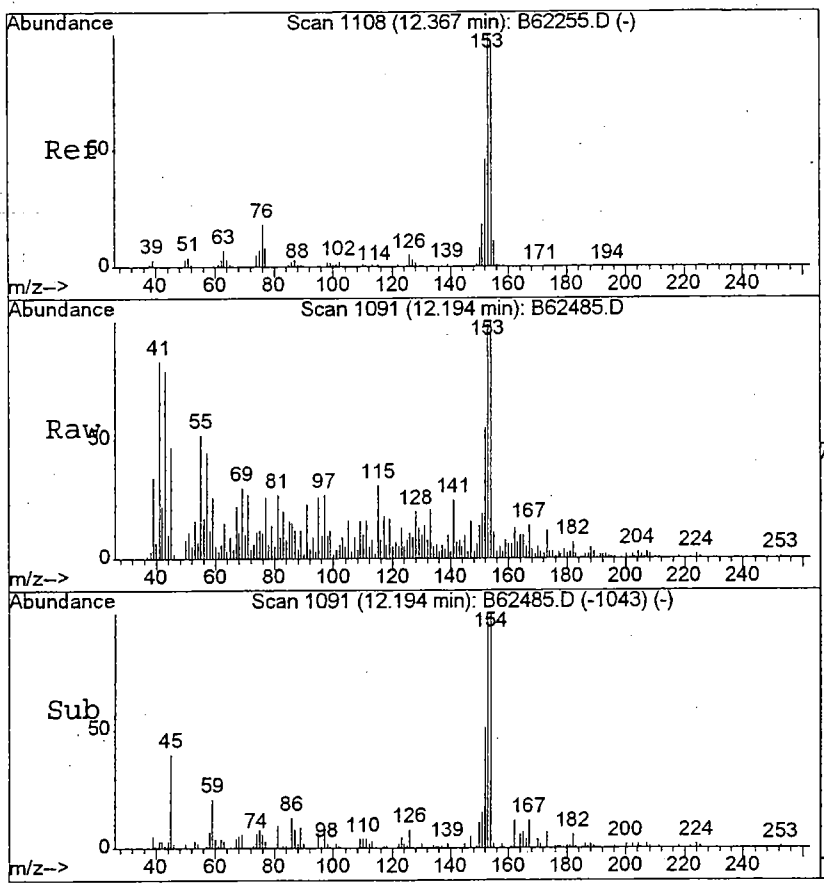


#57
Acenaphthylene
Concen: 0.75 ppb
RT: 11.82 min Scan# 1054
Delta R.T. -0.01 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:152 Resp: 5834

Ion	Ratio	Lower	Upper
152	100		
151	15.4	0.0	49.3
153	19.8	0.0	42.9

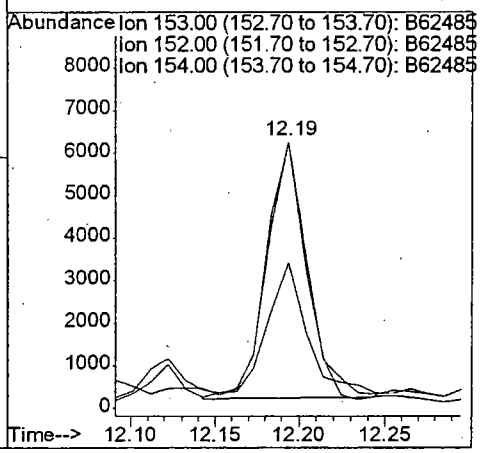


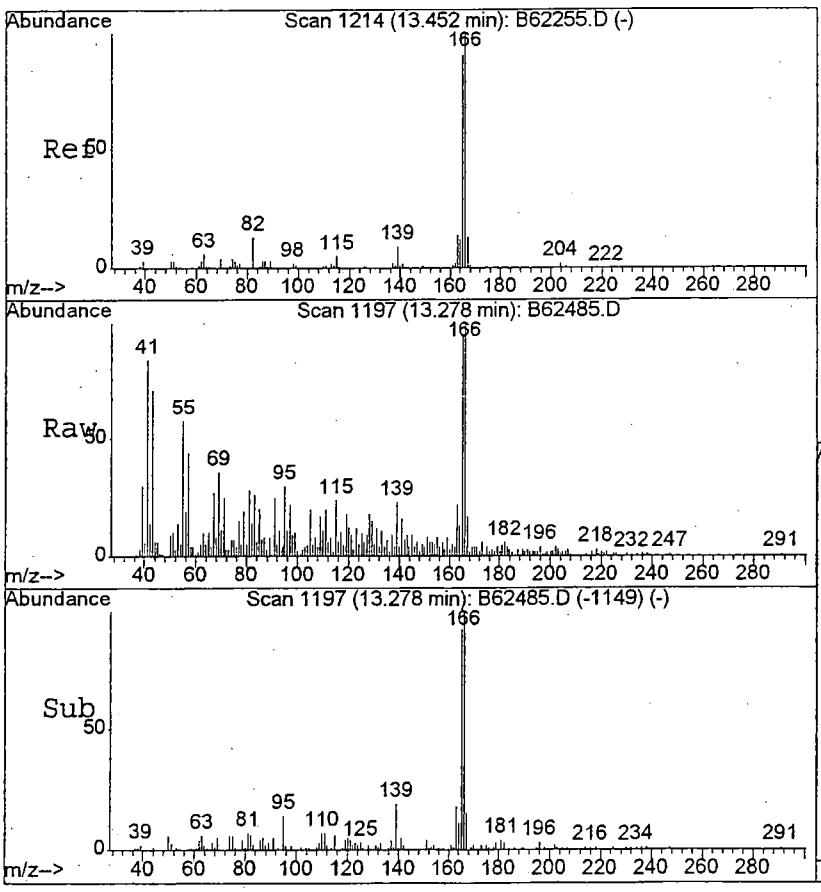


#60
Acenaphthene
Concen: 2.10 ppb
RT: 12.19 min Scan# 1091
Delta R.T. -0.01 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:153 Resp: 9976

Ion	Ratio	Lower	Upper
153	100		
152	50.5	16.8	76.8
154	98.1	62.2	122.2

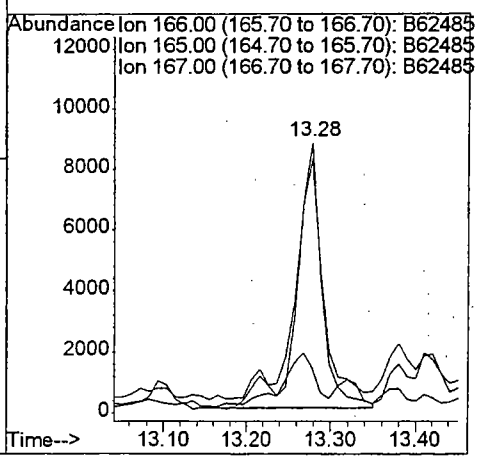


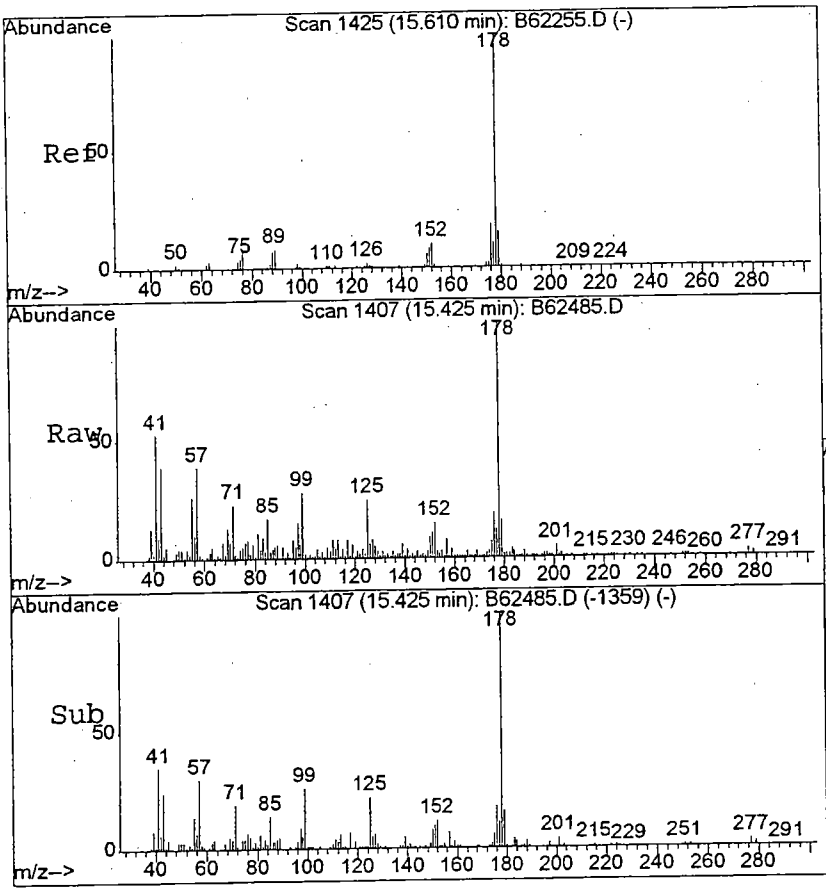


#67
Fluorene
Concen: 3.09 ppb
RT: 13.28 min Scan# 1197
Delta R.T. -0.01 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:166 Resp: 17448

Ion	Ratio	Lower	Upper
166	100		
165	89.2	60.7	120.7
167	14.0	0.0	43.1

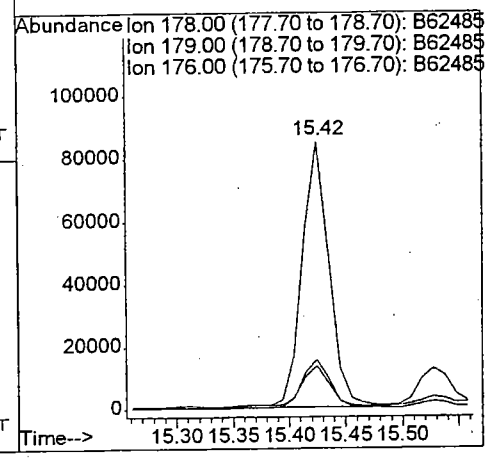


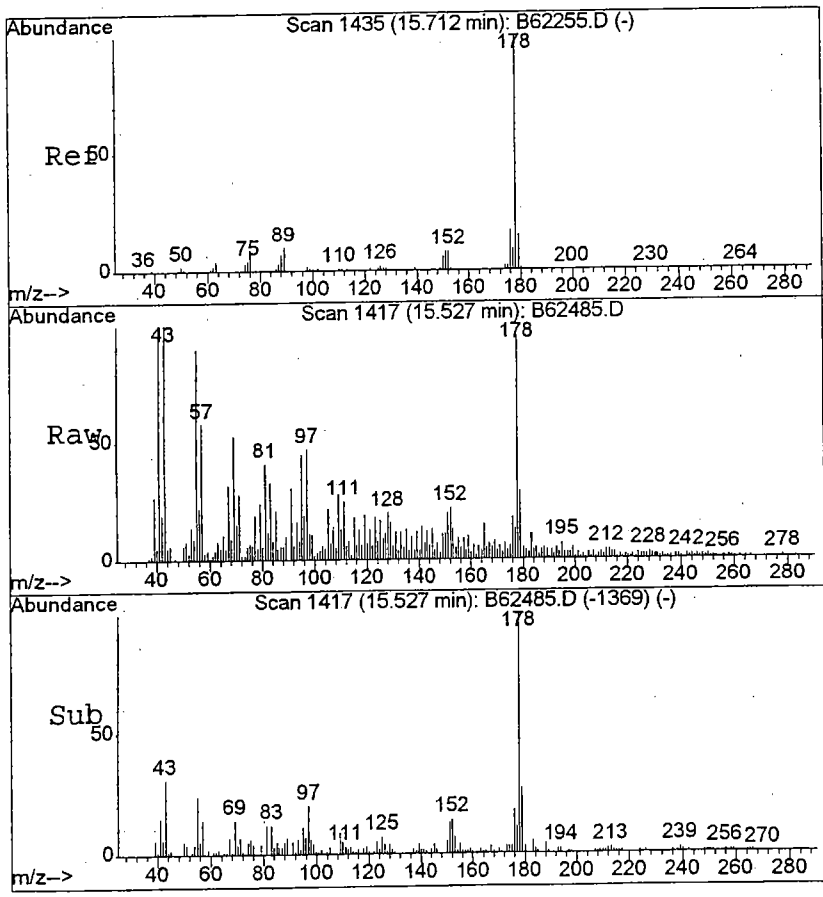


#79
Phenanthrene
Concen: 16.95 ppb
RT: 15.42 min Scan# 1407
Delta R.T. -0.01 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:178 Resp: 142316

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.1
176	18.5	0.0	47.9

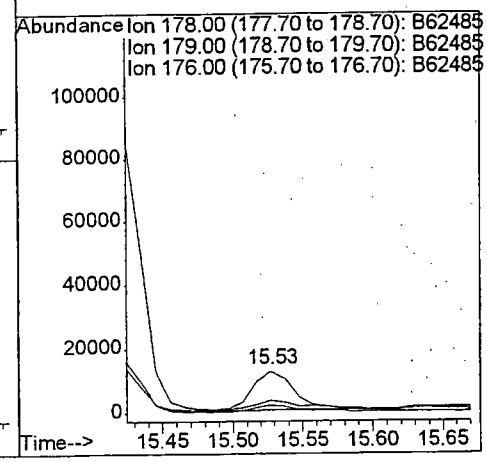


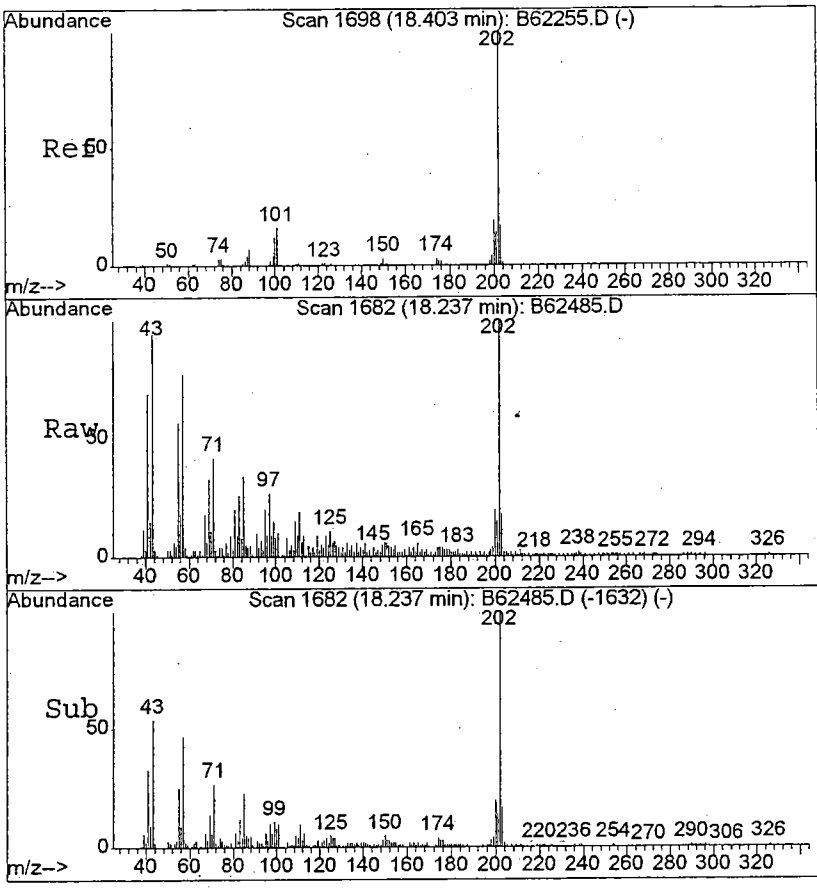


#80
Anthracene
Concen: 2.96 ppb
RT: 15.53 min Scan# 1417
Delta R.T. -0.01 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:178 Resp: 25362

Ion	Ratio	Lower	Upper
178	100		
179	24.5	0.0	45.4
176	17.5	0.0	47.4

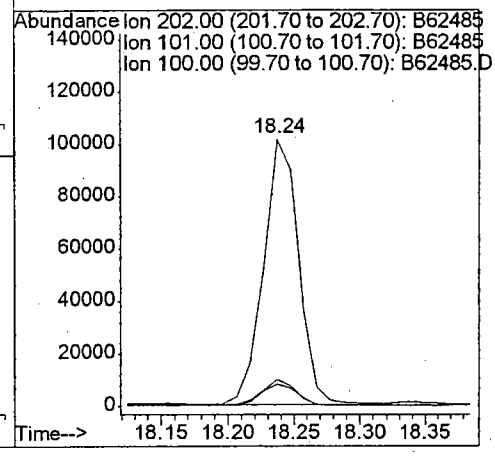


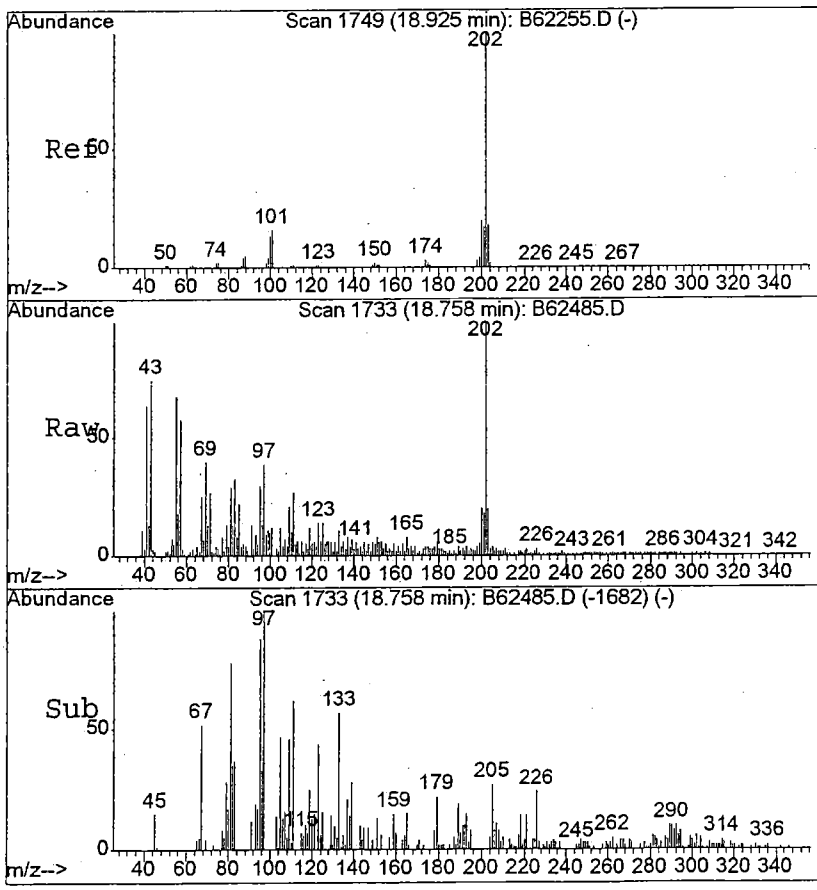


#83
Fluoranthene
Concen: 20.22 ppb
RT: 18.24 min Scan# 1682
Delta R.T. 0.01 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:202 Resp: 189448

Ion	Ratio	Lower	Upper
202	100		
101	9.7	0.0	42.9
100	8.1	0.0	40.3

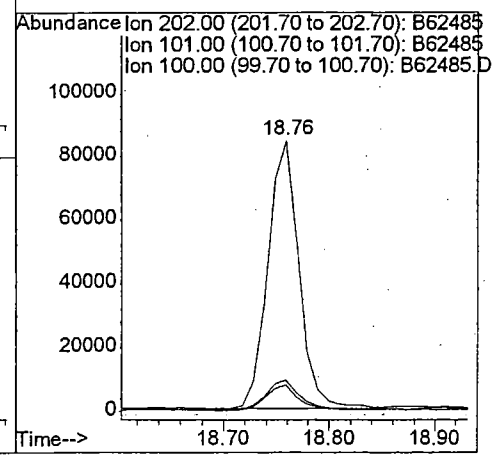


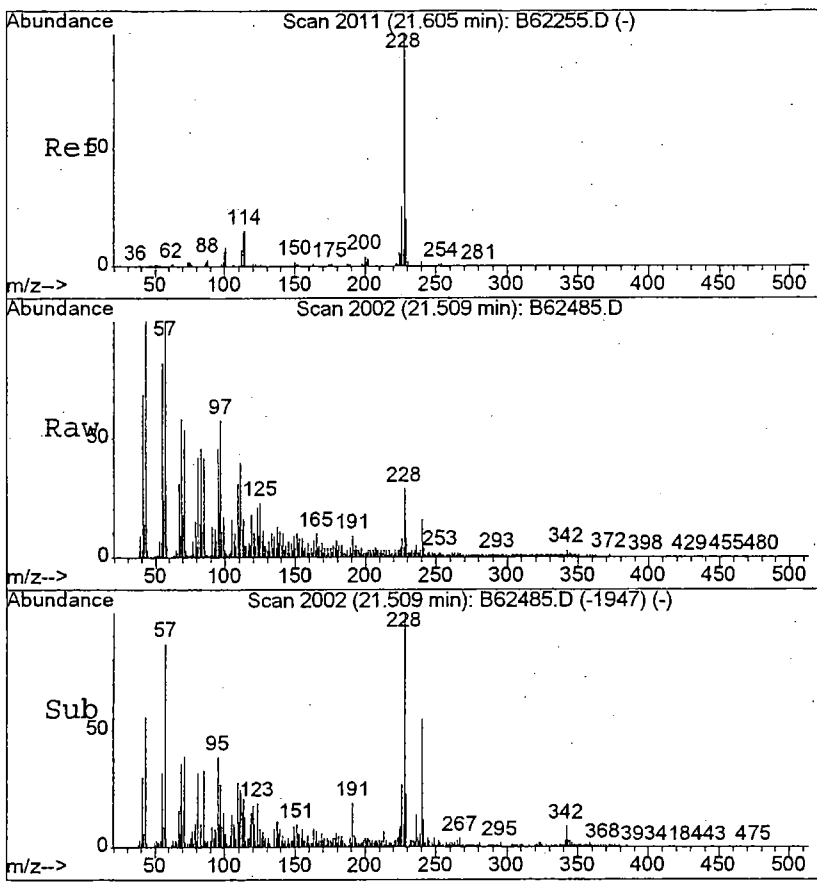


#87
Pyrene
Concen: 8.69 ppb
RT: 18.76 min Scan# 1733
Delta R.T. 0.02 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:202 Resp: 171512

Ion	Ratio	Lower	Upper
202	100		
101	11.0	0.0	44.4
100	9.2	0.0	42.0

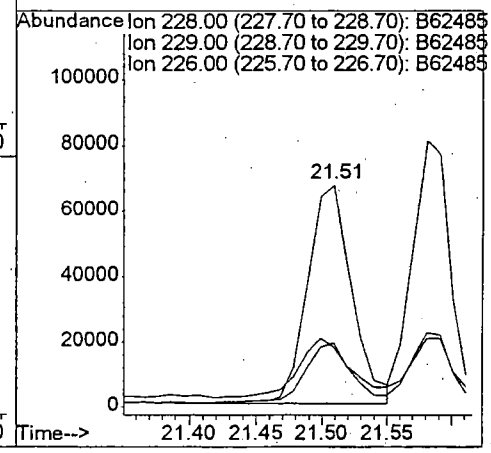


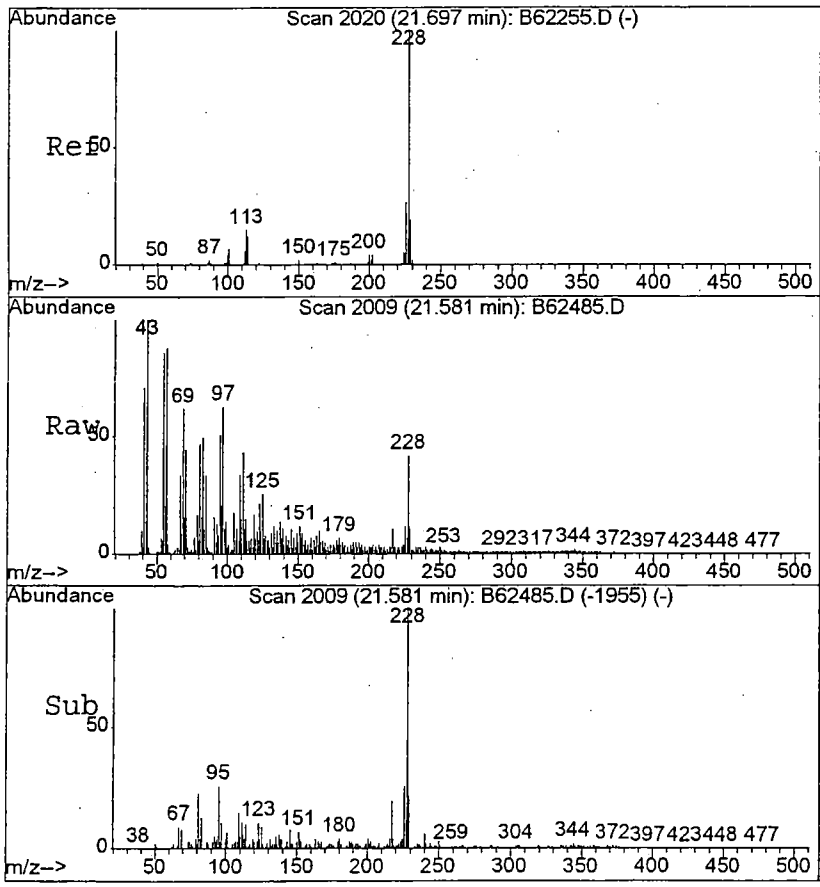


#90
Benzo[a]anthracene
Concen: 9.30 ppb
RT: 21.51 min Scan# 2002
Delta R.T. 0.07 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:228 Resp: 158756

Ion	Ratio	Lower	Upper
228	100		
229	21.6	0.0	49.5
226	26.9	0.0	55.1

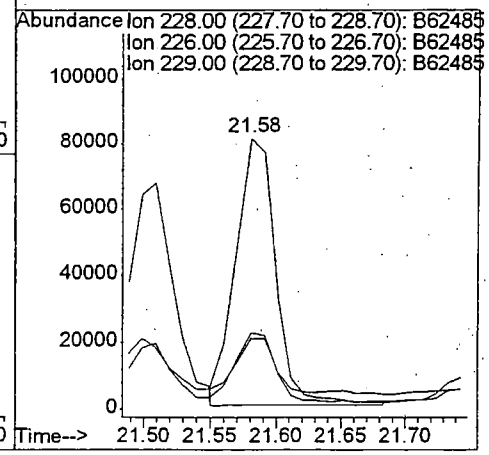


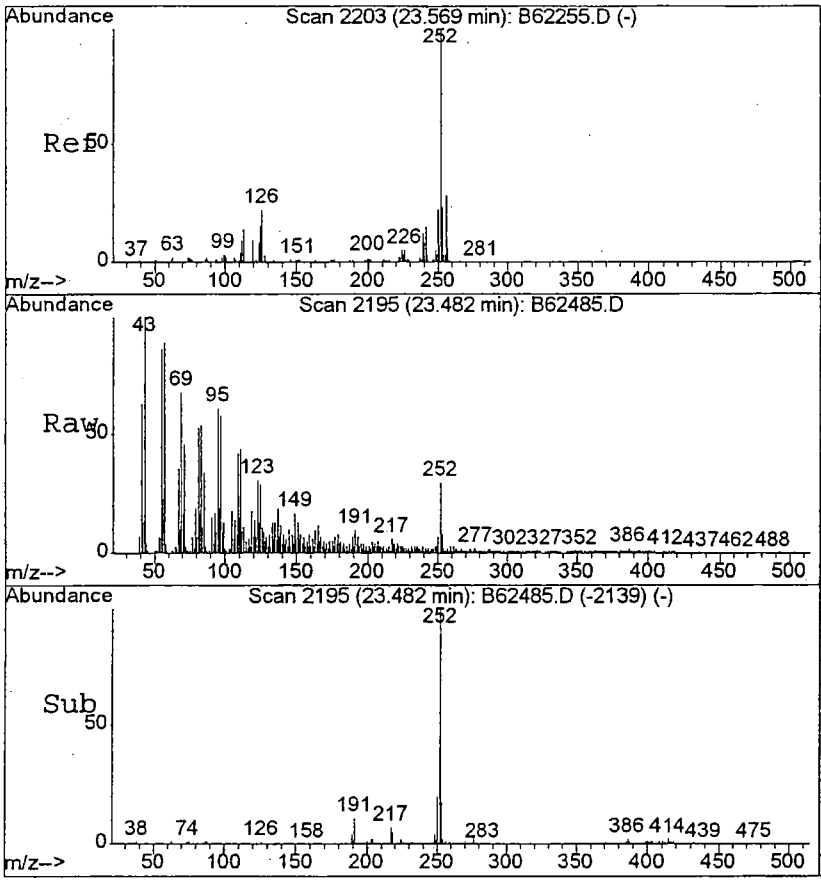


#92
Chrysene
Concen: 10.91 ppb
RT: 21.58 min Scan# 2009
Delta R.T. 0.06 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:228 Resp: 169154

Ion	Ratio	Lower	Upper
228	100		
226	26.0	0.0	57.0
229	20.6	0.0	49.4

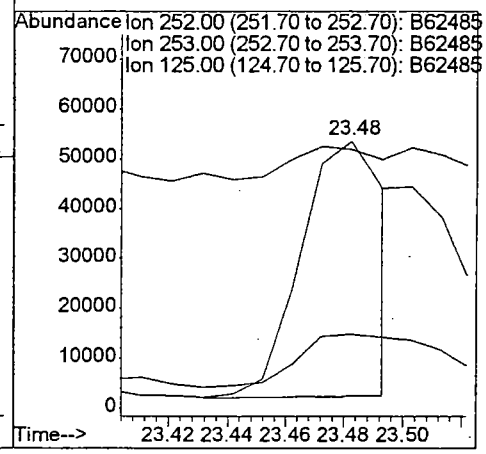


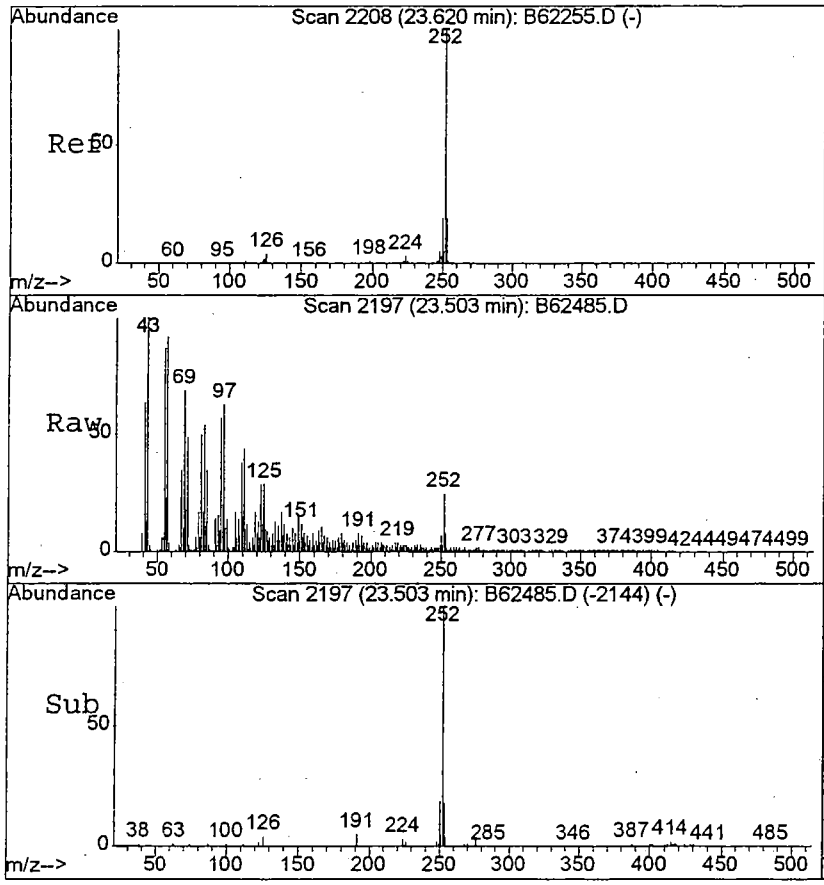


#96
Benzo[b]fluoranthene
Concen: 19.19 ppb m
RT: 23.48 min Scan# 2195
Delta R.T. 0.08 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:252 Resp: 101369

Ion	Ratio	Lower	Upper
252	100		
253	27.6	0.0	51.5
125	97.1	0.0	42.4#

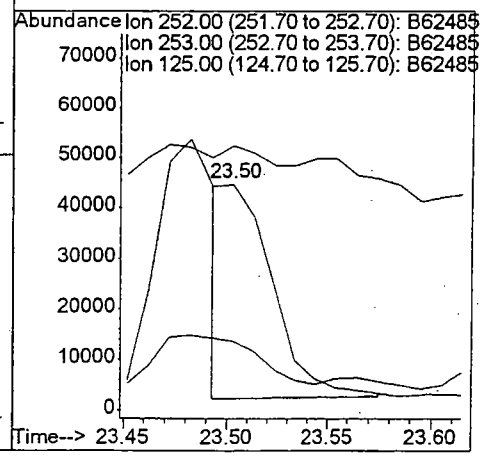


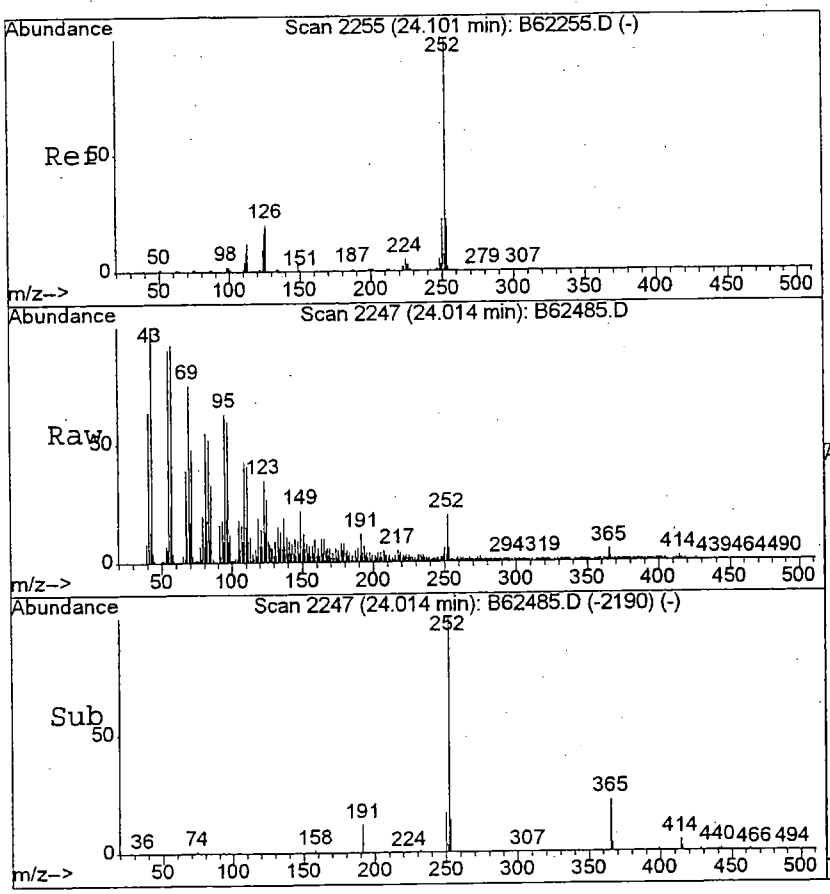


#97
Benzo[k]fluoranthene
Concen: 13.73 ppb m
RT: 23.50 min Scan# 2197
Delta R.T. 0.05 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:252 Resp: 70288

Ion	Ratio	Lower	Upper
252	100		
253	30.6	0.0	50.7
125	117.4	0.0	43.0#

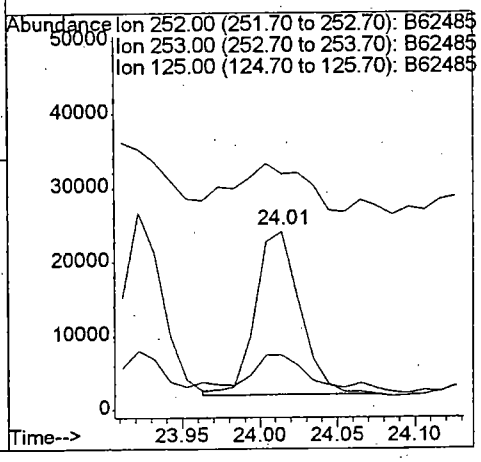




#98
Benzo[a]pyrene
Concen: 8.93 ppb
RT: 24.01 min Scan# 2247
Delta R.T. 0.09 min
Lab File: B62485.D
Acq: 1 Jun 2004 5:23 pm

Tgt Ion:252 Resp: 44171

Ion	Ratio	Lower	Upper
252	100		
253	18.7	0.0	51.8
125	18.2	0.0	43.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\EB1651\B62481.D
Acq On : 1 Jun 2004 2:59 pm
Sample : OP17035-MB1
Misc : OP17035,EB1651,30
MS Integration Params: LSCINT.P
Quant Time: Jun 1 16:51 2004

Vial: 5
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed May 26 08:34:32 2004
Response via : Initial Calibration
DataAcq Meth : MB1647

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.09	152	123574	40.00 ppb	0.00
25) Naphthalene-d8	8.90	136	432913	40.00 ppb	0.00
48) Acenaphthene-d10	12.12	164	242699	40.00 ppb	-0.02
70) Phenanthrene-d10	15.35	188	369012	40.00 ppb	-0.03
85) Chrysene-d12	21.46	240	327887	40.00 ppb	-0.02
94) Perylene-d12	24.01	264	210435	40.00 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	5.34	112	169047	46.96 ppb	0.01
Spiked Amount 50.000			Recovery	= 93.92%	
9) Phenol-d5	6.78	99	200169	43.45 ppb	-0.02
Spiked Amount 50.000			Recovery	= 86.90%	
26) Nitrobenzene-d5	7.90	82	182124	42.75 ppb	0.00
Spiked Amount 50.000			Recovery	= 85.50%	
52) 2-Fluorobiphenyl	10.81	172	372468	40.90 ppb	0.00
Spiked Amount 50.000			Recovery	= 81.80%	
75) 2,4,6-Tribromophenol	13.86	330	41256	34.03 ppb	-0.02
Spiked Amount 50.000			Recovery	= 68.06%	
88) Terphenyl-d14	19.21	244	343020	47.71 ppb	-0.02
Spiked Amount 50.000			Recovery	= 95.42%	

Target Compounds Qvalue

dolution

103

(#) = qualifier out of range (m) = manual integration

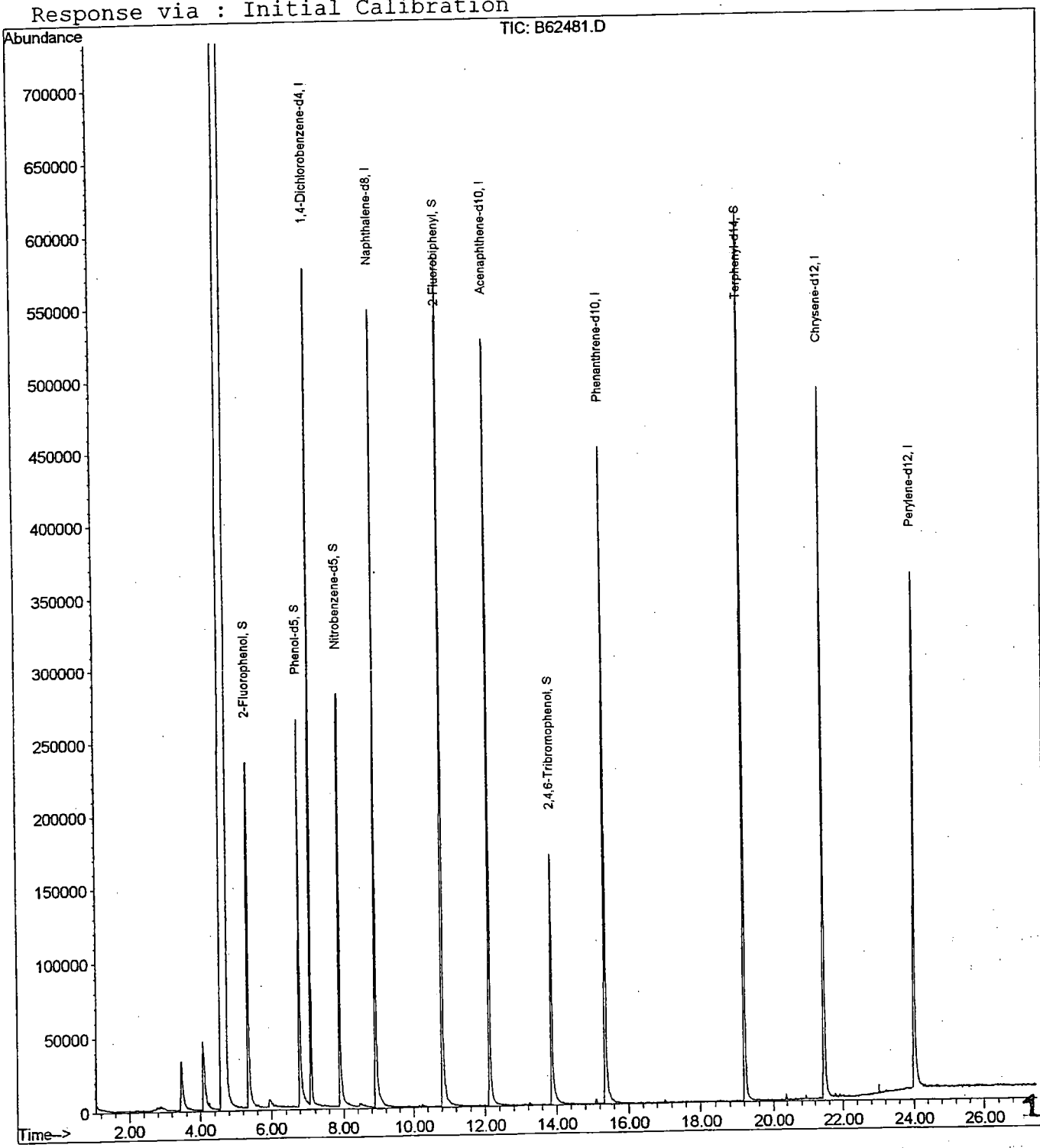
Quantitation Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62481.D
Acq On : 1 Jun 2004 2:59 pm
Sample : OP17035-MB1
Misc : OP17035,EB1651,30
MS Integration Params: LSCINT.P
Quant Time: Jun 1 16:51 2004

Vial: 5
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: MB1647.RES

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jun 02 13:48:42 2004
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62481.D
Acq On : 1 Jun 2004 2:59 pm
Sample : OP17035-MB1
Misc : OP17035,EB1651,30
MS Integration Params: LSCINT.P

Vial: 5
Operator: WENDYS
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.2

Filtering: 5
Min Area: 1500 Area counts
Max Peaks: 125
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

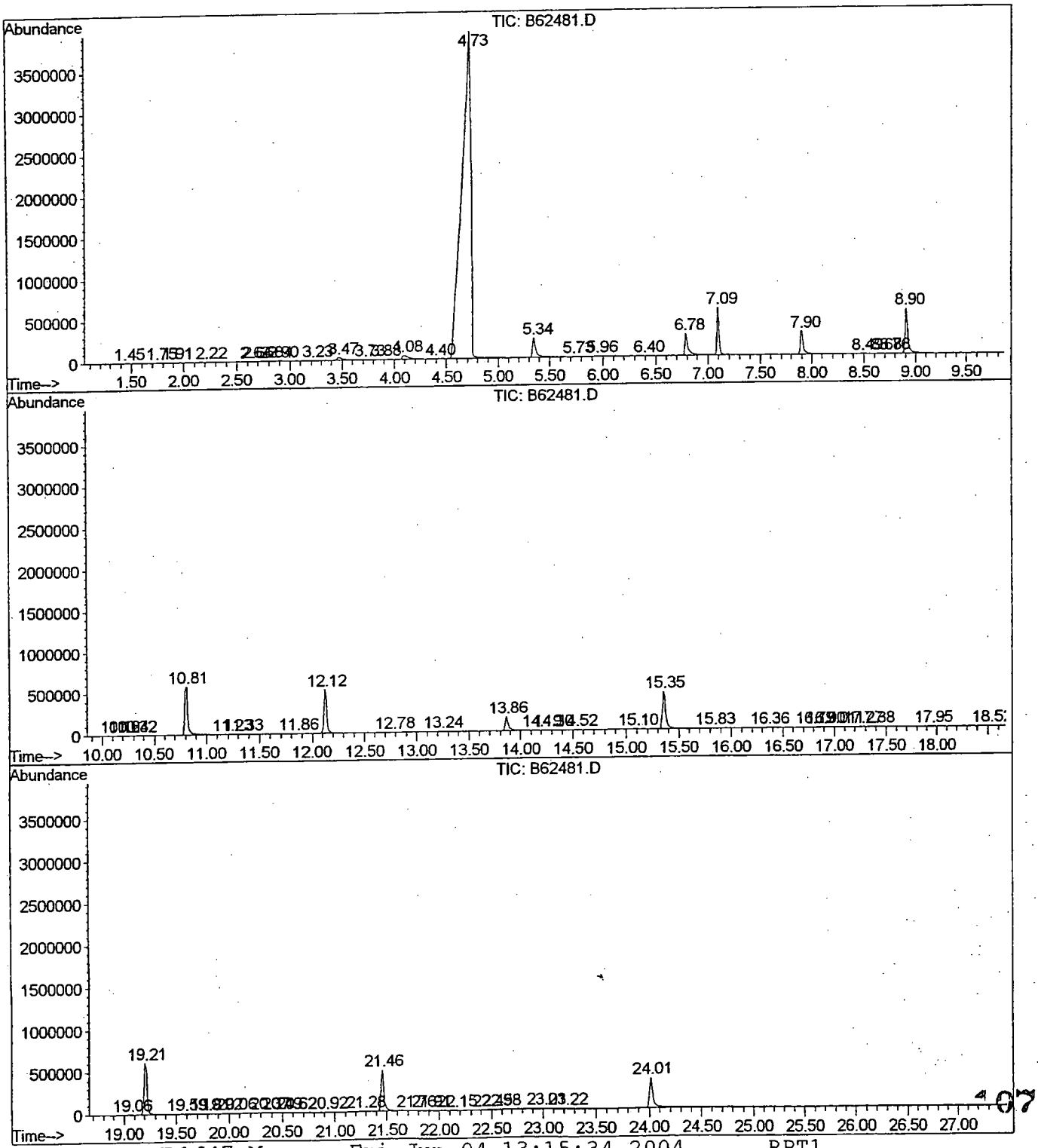
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	peak area	peak % max.	% of total
1	1.447	39	40	47	rVB5	844	2398	0.01%	0.007%
2	1.753	62	70	76	rBV3	435	1609	0.01%	0.005%
3	1.907	79	85	89	rBV3	621	2025	0.01%	0.006%
4	2.224	109	116	124	rBV7	1046	5657	0.02%	0.016%
5	2.643	151	157	158	rBV3	711	2034	0.01%	0.006%
6	2.663	158	159	165	rVV5	1219	4084	0.02%	0.012%
7	2.837	165	176	178	rVV4	2436	14060	0.06%	0.040%
8	2.899	178	182	203	rVV7	3062	21580	0.09%	0.062%
9	3.226	203	214	217	rVB6	493	2765	0.01%	0.008%
10	3.471	231	238	262	rBV	32988	151240	0.64%	0.435%
11	3.727	262	263	275	rVB8	1125	2771	0.01%	0.008%
12	3.880	275	278	290	rVB6	746	4768	0.02%	0.014%
13	4.085	294	298	327	rBV	46346	207715	0.88%	0.598%
14	4.402	327	329	341	rVB6	910	1961	0.01%	0.006%
15	4.729	341	361	393	rBV	3944669	23686910	100.00%	68.147%
16	5.342	416	421	457	rBV	234719	559681	2.36%	1.610%
17	5.731	457	459	477	rVB10	615	3920	0.02%	0.011%
18	5.956	477	481	502	rBV2	5712	33918	0.14%	0.098%
19	6.396	522	524	529	rBV4	671	1625	0.01%	0.005%
20	6.784	557	562	588	rBV	263894	568642	2.40%	1.636%
21	7.091	588	592	629	rVB	574724	806938	3.41%	2.322%
22	7.899	665	671	716	rBV	281418	618469	2.61%	1.779%
23	8.492	724	729	745	rVB6	2413	14015	0.06%	0.040%
24	8.676	745	747	752	rVB4	869	1870	0.01%	0.005%
25	8.758	752	755	765	rVB5	987	2810	0.01%	0.008%
26	8.901	765	769	798	rBV	546937	1015338	4.29%	2.921%
27	10.159	889	892	896	rVB2	917	1634	0.01%	0.005%
28	10.240	896	900	905	rVV3	1901	4617	0.02%	0.013%
29	10.322	905	908	912	rVB2	682	1530	0.01%	0.004%

30	10.813	950	956	984	rBV	582180	1159963	4.90%	3.337%
31	11.232	994	997	1004	rVB3	899	3147	0.01%	0.009%
32	11.334	1004	1007	1017	rVV2	629	2359	0.01%	0.007%
33	11.856	1053	1058	1062	rVB3	619	1569	0.01%	0.005%
34	12.122	1077	1084	1117	rBV	525632	1046102	4.42%	3.010%
35	12.776	1144	1148	1159	rBV3	523	2281	0.01%	0.007%
36	13.236	1188	1193	1202	rVB2	1665	3717	0.02%	0.011%
37	13.860	1248	1254	1284	rBV	169595	431721	1.82%	1.242%
38	14.187	1284	1286	1294	rVV5	1398	4429	0.02%	0.013%
39	14.300	1294	1297	1302	rVB5	759	1856	0.01%	0.005%
40	14.525	1318	1319	1330	rVB2	348	1620	0.01%	0.005%
41	15.097	1371	1375	1383	rVB2	3353	7838	0.03%	0.023%
42	15.353	1395	1400	1445	rBV	449160	1026591	4.33%	2.953%
43	15.834	1445	1447	1456	rVB3	511	1685	0.01%	0.005%
44	16.355	1493	1498	1504	rVB4	492	1770	0.01%	0.005%
45	16.795	1539	1541	1548	rVB3	744	1886	0.01%	0.005%
46	16.897	1548	1551	1556	rBV2	446	1507	0.01%	0.004%
47	17.010	1556	1562	1568	rVB2	2107	5525	0.02%	0.016%
48	17.265	1584	1587	1593	rVB3	514	1614	0.01%	0.005%
49	17.378	1593	1598	1604	rVB2	498	2242	0.01%	0.006%
50	17.950	1647	1654	1657	rVB	402	1618	0.01%	0.005%
51	18.523	1707	1710	1724	rVB4	1044	4205	0.02%	0.012%
52	19.065	1758	1763	1771	rBV4	503	1863	0.01%	0.005%
53	19.208	1771	1777	1807	rVV	609847	1198977	5.06%	3.449%
54	19.586	1807	1814	1827	rVB6	663	3908	0.02%	0.011%
55	19.811	1834	1836	1845	rVV6	704	2092	0.01%	0.006%
56	19.924	1845	1847	1853	rVB2	731	1959	0.01%	0.006%
57	20.057	1858	1860	1869	rVB3	842	3072	0.01%	0.009%
58	20.374	1886	1891	1899	rVB	4350	9255	0.04%	0.027%
59	20.486	1899	1902	1910	rBV4	1223	3345	0.01%	0.010%
60	20.619	1910	1915	1921	rVB6	1011	2698	0.01%	0.008%
61	20.916	1940	1944	1960	rBV6	2645	6115	0.03%	0.018%
62	21.284	1976	1980	1981	rBV3	781	1657	0.01%	0.005%
63	21.458	1991	1997	2025	rBV	487016	962406	4.06%	2.769%
64	21.764	2025	2027	2036	rVV5	2773	6339	0.03%	0.018%
65	21.907	2036	2041	2063	rVB10	2479	12456	0.05%	0.036%
66	22.153	2063	2065	2092	rBV10	1378	10335	0.04%	0.030%
67	22.490	2092	2098	2100	rBV5	1334	4547	0.02%	0.013%
68	22.582	2100	2107	2118	rVV5	987	4705	0.02%	0.014%
69	23.012	2146	2149	2159	rVB	5922	5883	0.02%	0.017%
70	23.216	2159	2169	2176	rBV	2093	11374	0.05%	0.033%
71	24.014	2241	2247	2580	rBV	352053	1043846	4.41%	3.003%

Sum of corrected areas: 34758661

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\2\DATA\EB1651\B62481.D
Operator : WENDYS
Acquired : 1 Jun 2004 2:59 pm using AcqMethod MB1647
Instrument : GC/MS Ins
Sample Name: OP17035-MB1
Misc Info : OP17035,EB1651,30
Vial Number: 5
Quant File :MB1647.RES (RTE Integrator)



B62481.D MB1647.M Fri Jun 04 13:15:34 2004 RPT1

Library Search Compound Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62481.D
Acq On : 1 Jun 2004 2:59 pm
Sample : OP17035-MB1
Misc : OP17035,EB1651,30
MS Integration Params: LSCINT.P

Vial: 5
Operator: WENDYS
Inst : GC/MS In
Multiplr: 1.00

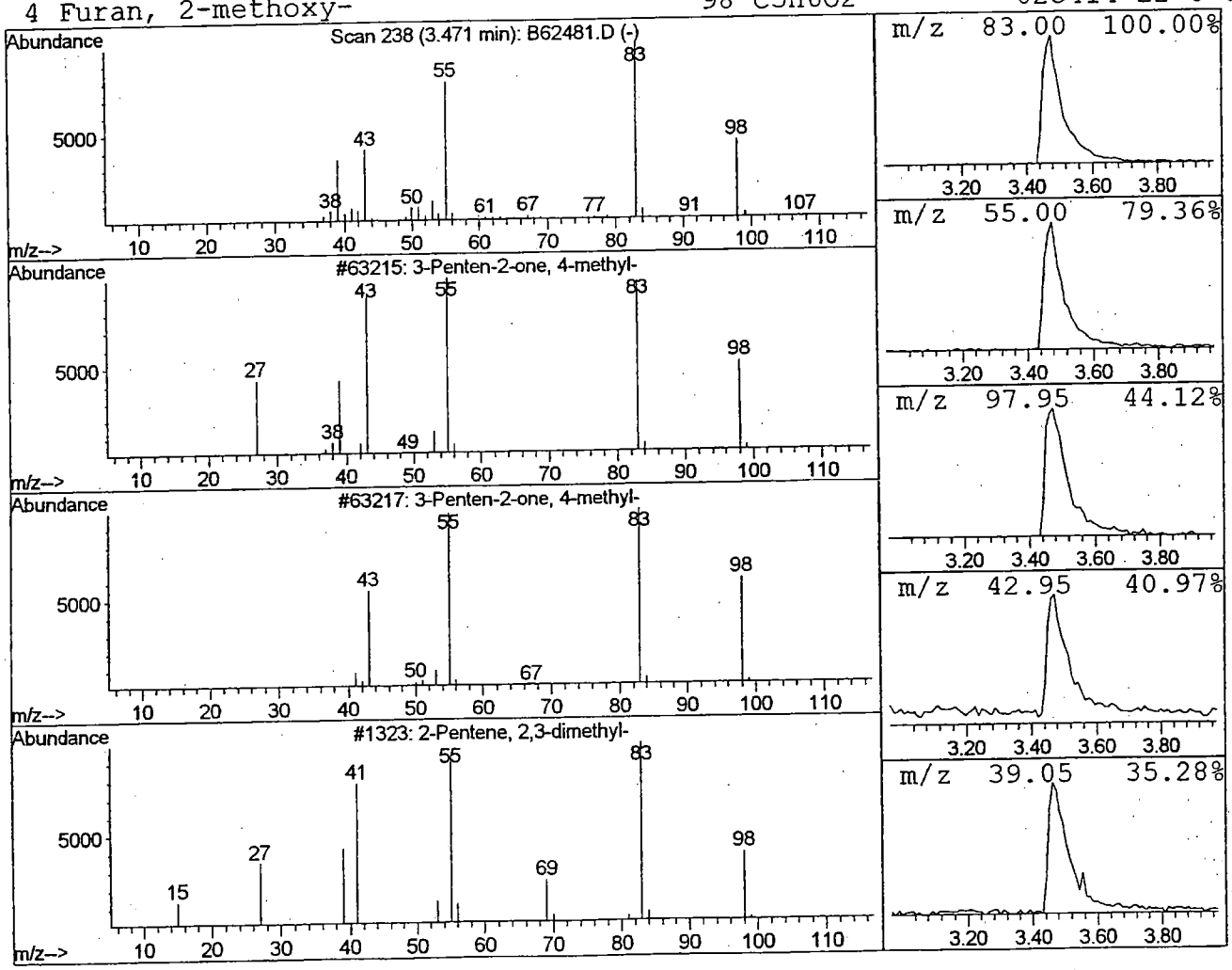
Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.47	7.50 ppb	151240	1,4-Dichlorobenzene-d4	7.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3	2-Pentene, 2,3-dimethyl-	98	C7H14	010574-37-5	90
4	Furan, 2-methoxy-	98	C5H6O2	025414-22-6	83



108

Library Search Compound Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62481.D
Acq On : 1 Jun 2004 2:59 pm
Sample : OP17035-MB1
Misc : OP17035,EB1651,30
MS Integration Params: LSCINT.P

Vial: 5
Operator: WENDYS
Inst : GC/MS In
Multiplr: 1.00

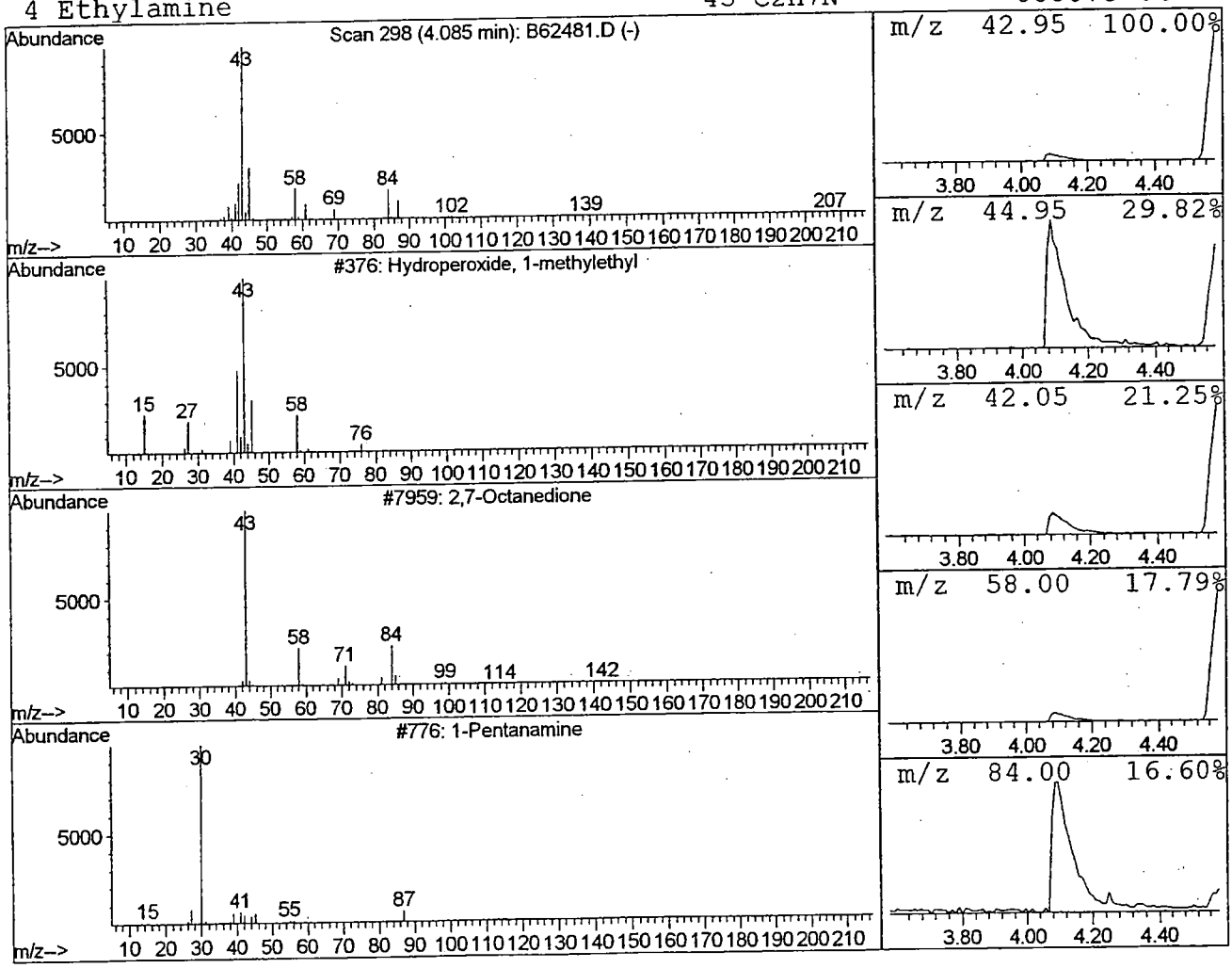
Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.08	10.30 ppb	207715	1,4-Dichlorobenzene-d4	7.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	37
2	2,7-Octanedione	142	C8H14O2	001626-09-1	17
3	1-Pentanamine	87	C5H13N	000110-58-7	9
4	Ethylamine	45	C2H7N	000075-04-7	9



1.09

Library Search Compound Report

Data File : C:\HPCHEM\2\DATA\EB1651\B62481.D Vial: 5
Acq On : 1 Jun 2004 2:59 pm Operator: WENDYS
Sample : OP17035-MB1 Inst : GC/MS In
Misc : OP17035,EB1651,30 Multiplr: 1.00
MS Integration Params: LSCINT.P

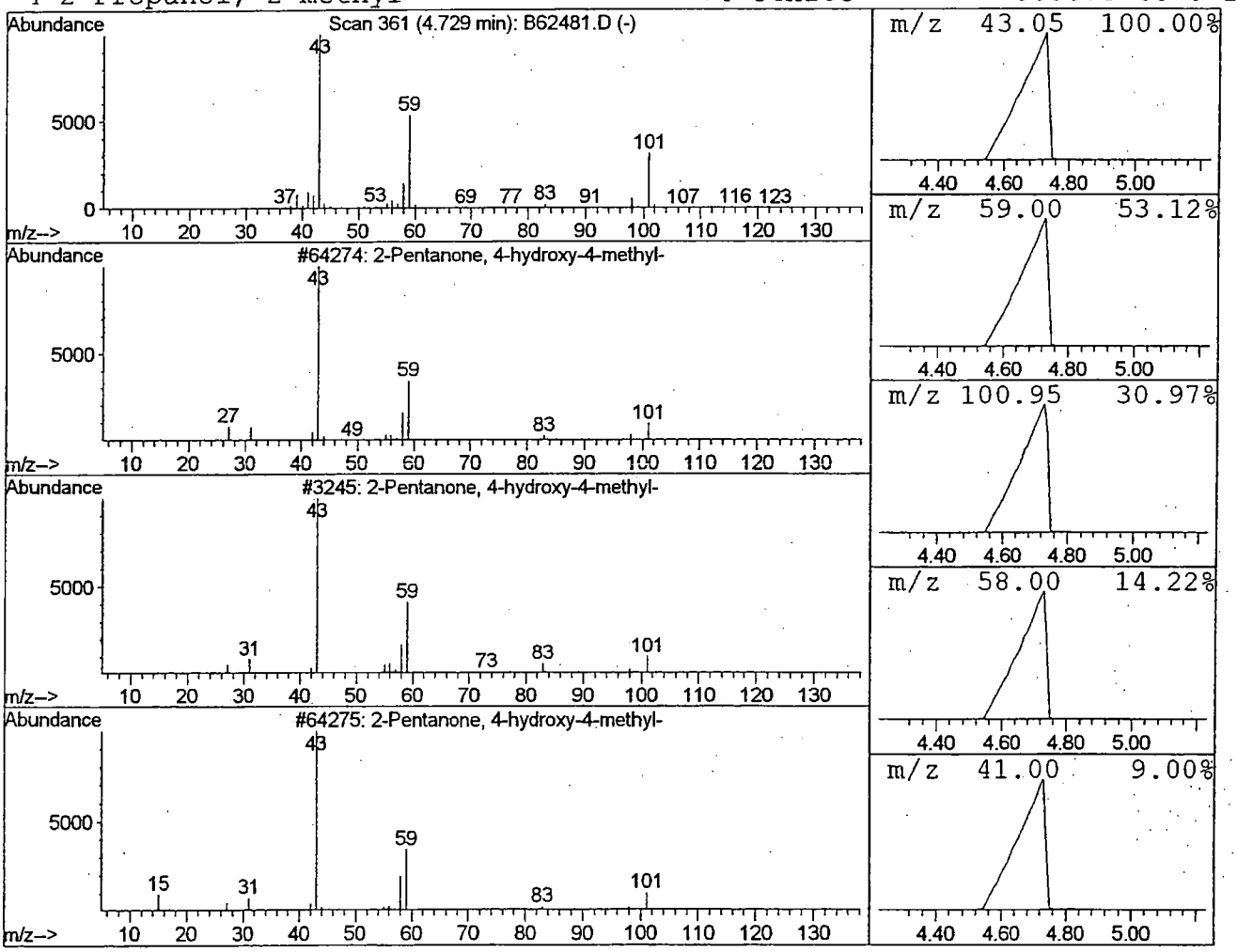
Quant Method : C:\HPCHEM\1\METHODS\MB1647.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.73	1174.16 ppb	23686900	1,4-Dichlorobenzene-d4	7.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	40
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	36
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
4	2-Propanol, 2-methyl-	74	C4H10O	000075-65-0	17



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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Acq On : 2 Jun 2004 4:48 pm
Sample : OP17035-MB1
Misc : OP17035,EZ293,30.0,,,,
MS Integration Params: LSCINT.P
Quant Time: Jun 03 11:44:20 2004

Vial: 8
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

Quant Results File: MZ0274.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 03 11:38:33 2004
Response via : Initial Calibration
DataAcq Meth : MZ0274

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.48	152	90474	40.00 ppb	0.00
25) Naphthalene-d8	8.05	136	375706	40.00 ppb	0.00
48) Acenaphthene-d10	12.08	164	187734	40.00 ppb	0.00
70) Phenanthrene-d10	15.58	188	328315	40.00 ppb	0.00
85) Chrysene-d12	21.25	240	313081	40.00 ppb	0.00
95) Perylene-d12	23.55	264	220779	40.00 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	3.49	112	139211	41.03 ppb	0.00
Spiked Amount 50.000			Recovery =	82.06%	
8) Phenol-d5	4.92	99	175206	40.51 ppb	0.00
Spiked Amount 50.000			Recovery =	81.02%	
26) Nitrobenzene-d5	6.58	82	146716	38.08 ppb	0.00
Spiked Amount 50.000			Recovery =	76.16%	
52) 2-Fluorobiphenyl	10.56	172	285253	42.86 ppb	0.00
Spiked Amount 50.000			Recovery =	85.72%	
75) 2,4,6-Tribromophenol	13.97	330	27809	37.83 ppb	0.00
Spiked Amount 50.000			Recovery =	75.66%	
89) Terphenyl-d14	19.33	244	315604	42.80 ppb	0.00
Spiked Amount 50.000			Recovery =	85.60%	

Target Compounds Qvalue

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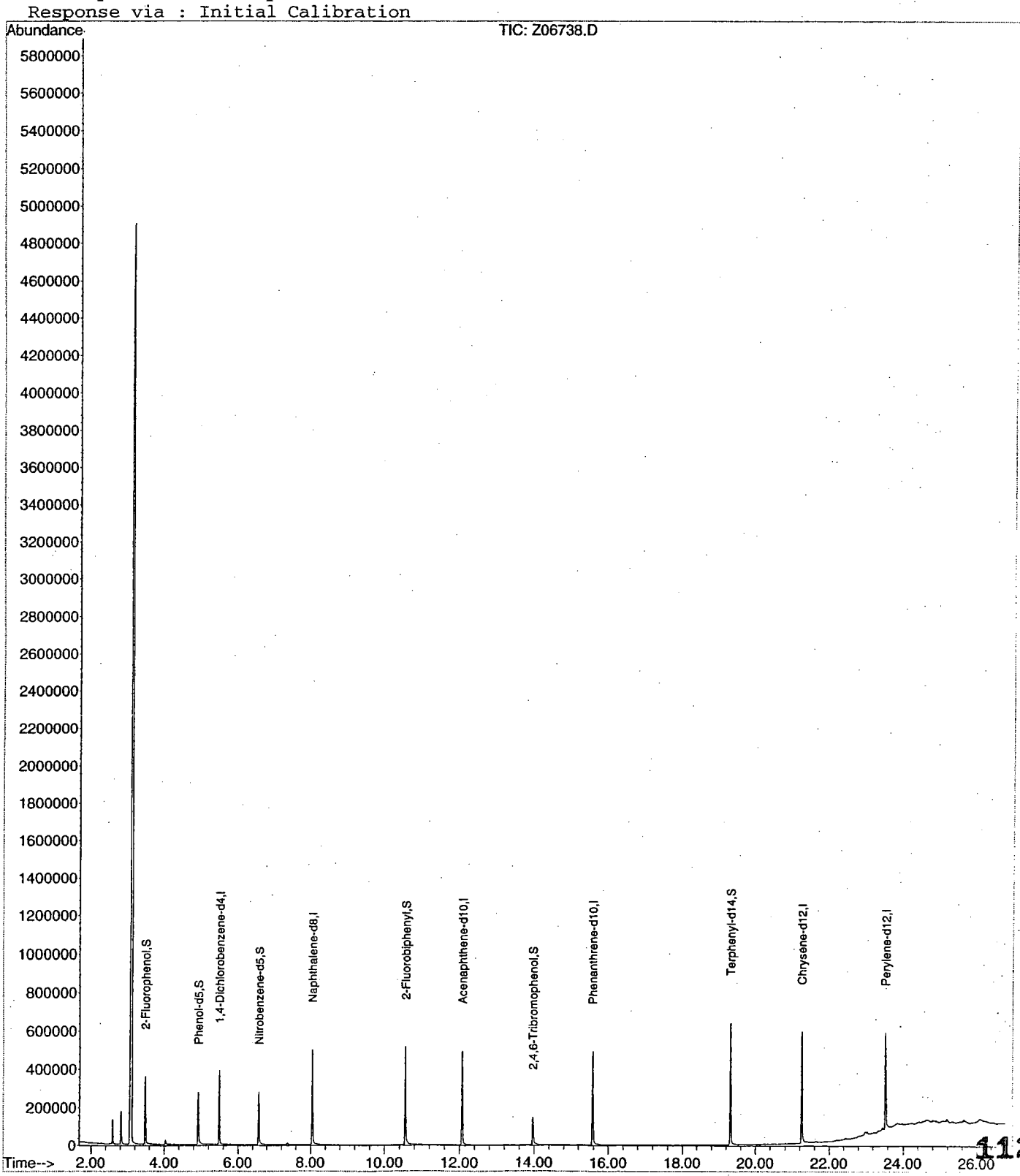
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D Vial: 8
Acq On : 2 Jun 2004 4:48 pm Operator: mingchil
Sample : OP17035-MB1 Inst : GCMS Z
Misc : OP17035,EZ293,30.0,,,, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jun 3 11:48 2004 Quant Results File: MZ0274.RES

Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue May 11 13:03:10 2004
Response via : Initial Calibration



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LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Acq On : 2 Jun 2004 4:48 pm
Sample : OP17035-MB1
Misc : OP17035,EZ293,30.0,,,,
MS Integration Params: LSCINT.P

Vial: 8
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Smoothing : ON
Sampling : 1
Start Thrs: 0.02
Stop Thrs : 0

Filtering: 5
Min Area: 1500 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

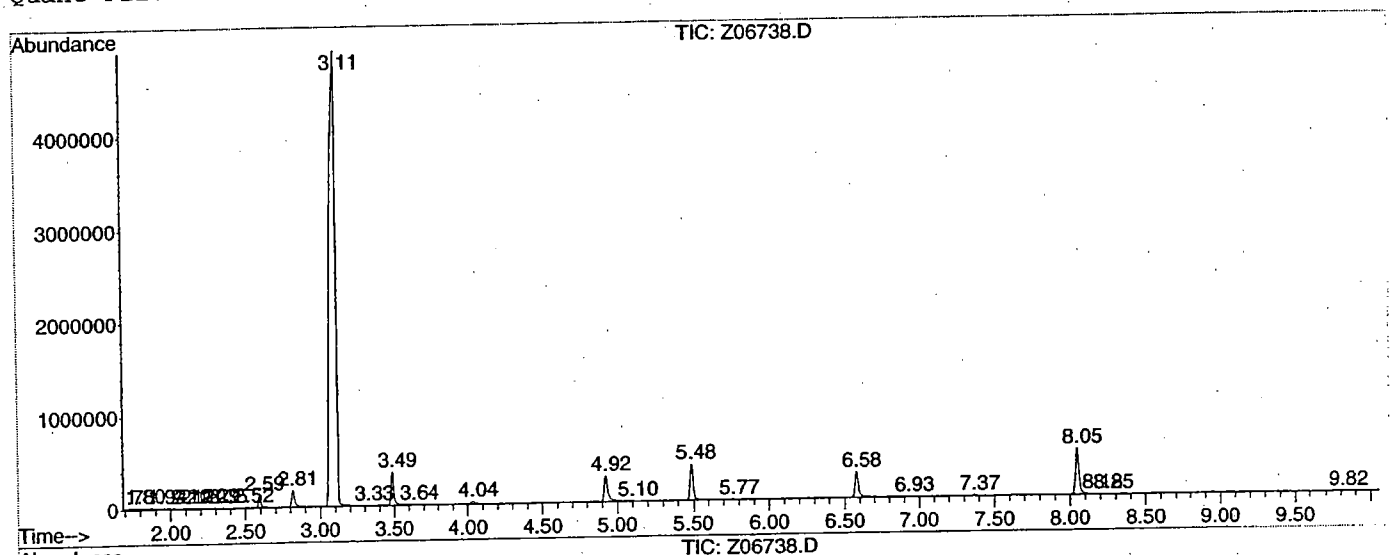
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.728	3	9	11	rBV5	4094	5457	0.04%	0.023%
2	1.797	16	22	47	rVV5	8373	46411	0.34%	0.199%
3	1.942	47	49	55	rVB7	3042	3269	0.02%	0.014%
4	2.097	72	78	81	rBV8	2833	5124	0.04%	0.022%
5	2.123	81	83	87	rVV5	2166	2816	0.02%	0.012%
6	2.161	87	90	93	rVV	3187	4151	0.03%	0.018%
7	2.203	96	98	104	rVB7	2248	2568	0.02%	0.011%
8	2.294	112	115	122	rVB2	5907	7685	0.06%	0.033%
9	2.348	122	125	131	rVB4	2996	3503	0.03%	0.015%
10	2.519	154	157	163	rBV5	4458	5189	0.04%	0.022%
11	2.593	165	171	182	rVV	129966	141134	1.04%	0.606%
12	2.812	207	212	236	rBV	175489	241018	1.78%	1.035%
13	3.112	251	268	296	rBV	4900745	13530468	100.00%	58.127%
14	3.325	305	308	317	rVV10	2042	5433	0.04%	0.023%
15	3.486	330	338	353	rBV	356683	460296	3.40%	1.977%
16	3.635	362	366	372	rVB5	3216	5465	0.04%	0.023%
17	4.036	434	441	459	rBV	23811	43632	0.32%	0.187%
18	4.923	600	607	633	rBV	278304	468595	3.46%	2.013%
19	5.099	638	640	648	rVB9	1268	2500	0.02%	0.011%
20	5.484	706	712	733	rBV	388990	550436	4.07%	2.365%
21	5.767	764	765	776	rVB	1577	2488	0.02%	0.011%
22	6.579	910	917	940	rBV	278052	441397	3.26%	1.896%
23	6.931	979	983	989	rVB9	1291	2680	0.02%	0.012%
24	7.369	1057	1065	1079	rBV	9878	17212	0.13%	0.074%
25	8.048	1183	1192	1214	rBV	499173	782250	5.78%	3.361%
26	8.176	1214	1216	1223	rVV6	5340	10943	0.08%	0.047%
27	8.251	1227	1230	1240	rVB10	2226	5115	0.04%	0.022%
28	9.816	1516	1523	1531	rBV10	2037	5178	0.04%	0.022%
29	10.564	1654	1663	1696	rVV	516698	861512	6.37%	3.701%
30	10.762	1698	1700	1709	rVB10	2636	6700	0.05%	0.029%
31	12.076	1935	1946	1966	rBV	491956	830809	6.14%	3.569%
32	12.193	1966	1968	1982	rVB	2748	8093	0.06%	0.035%
33	13.967	2293	2300	2333	rBV	148683	314768	2.33%	1.352%
34	14.207	2342	2345	2353	rVB10	1524	3386	0.03%	0.015%
35	14.464	2387	2393	2403	rBV10	1648	4644	0.03%	0.020%
36	15.297	2541	2549	2560	rBV2	4078	8995	0.07%	0.039%
37	15.575	2587	2601	2623	rBV2	490698	888483	6.57%	3.817%
38	15.714	2623	2627	2637	rVB2	6141	11298	0.08%	0.049%
39	17.183	2897	2902	2911	rVB2	2670	4403	0.03%	0.019%
40	18.439	3133	3137	3144	rBV10	1278	2664	0.02%	0.011%
41	18.919	3217	3227	3230	rBV10	1445	4027	0.03%	0.017%
42	19.133	3257	3267	3273	rBV10	3047	7621	0.06%	0.033%
43	19.325	3295	3303	3331	rBV2	639021	999482	7.39%	4.294%

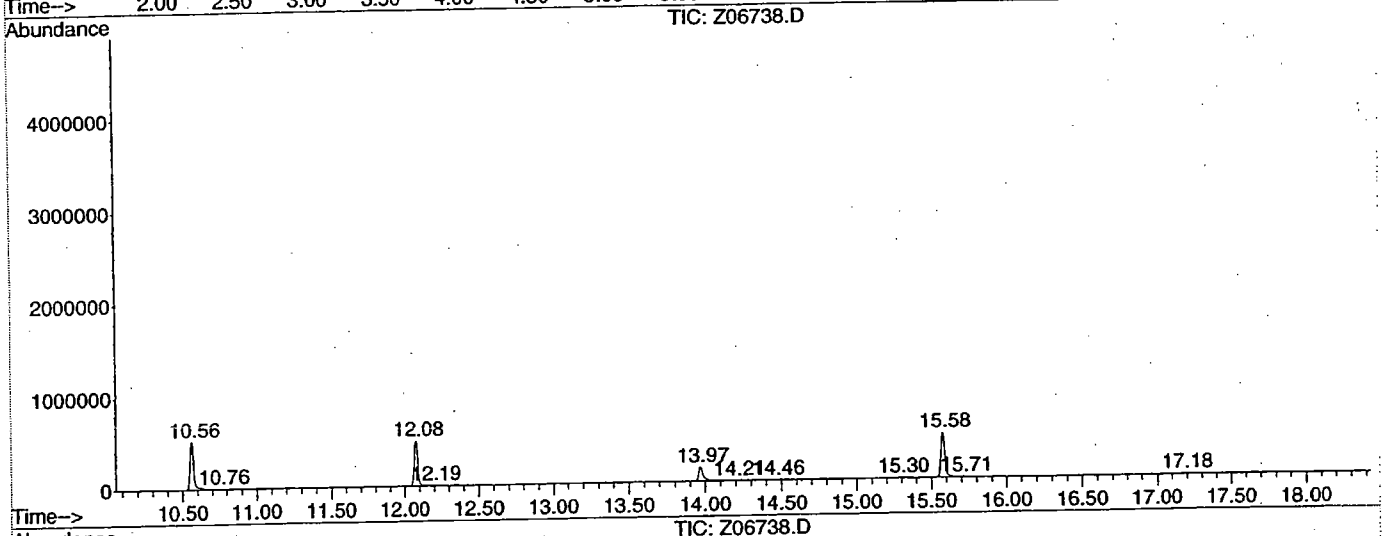
44	19.486	3331	3333	3339	rVB6	1778	2454	0.02%	0.011%
45	20.250	3467	3476	3482	rBV2	4772	8723	0.06%	0.037%
46	20.340	3490	3493	3501	rBV9	2283	3929	0.03%	0.017%
47	20.501	3519	3523	3528	rBV7	3877	6256	0.05%	0.027%
48	20.650	3548	3551	3557	rBV8	2078	3228	0.02%	0.014%
49	20.762	3566	3572	3579	rBV9	3142	8196	0.06%	0.035%
50	21.174	3643	3649	3653	rBV8	1991	3657	0.03%	0.016%
51	21.254	3653	3664	3686	rVV	584243	928529	6.86%	3.989%
52	21.398	3686	3691	3700	rVV7	9062	24073	0.18%	0.103%
53	21.468	3702	3704	3708	rVV5	2984	4041	0.03%	0.017%
54	21.537	3708	3717	3724	rVV5	4709	15117	0.11%	0.065%
55	21.612	3728	3731	3733	rVV4	2394	3652	0.03%	0.016%
56	21.649	3733	3738	3747	rVV4	5413	16744	0.12%	0.072%
57	21.735	3751	3754	3761	rVB9	3158	5609	0.04%	0.024%
58	21.804	3762	3767	3770	rBV7	1762	2474	0.02%	0.011%
59	21.922	3780	3789	3791	rBV10	2200	3988	0.03%	0.017%
60	21.964	3794	3797	3803	rBV8	1612	2853	0.02%	0.012%
61	22.012	3803	3806	3810	rBV6	2059	3123	0.02%	0.013%
62	22.119	3820	3826	3829	rBV8	2094	4085	0.03%	0.018%
63	22.199	3829	3841	3847	rBV8	5547	18788	0.14%	0.081%
64	22.456	3873	3889	3896	rBV2	10943	30268	0.22%	0.130%
65	22.632	3908	3922	3923	rBV2	5133	15221	0.11%	0.065%
66	22.707	3930	3936	3937	rBV6	3103	4093	0.03%	0.018%
67	22.739	3938	3942	3945	rBV6	1970	2529	0.02%	0.011%
68	22.798	3947	3953	3957	rBV9	10675	20300	0.15%	0.087%
69	22.857	3957	3964	3965	rBV7	4273	6369	0.05%	0.027%
70	22.921	3968	3976	3978	rBV9	5493	9292	0.07%	0.040%
71	23.001	3978	3991	3994	rBV2	18774	49926	0.37%	0.214%
72	23.038	3994	3998	4007	rVB3	12464	25717	0.19%	0.110%
73	23.145	4013	4018	4019	rBV5	3401	3838	0.03%	0.016%
74	23.257	4036	4039	4041	rVB4	3721	3400	0.03%	0.015%
75	23.348	4041	4056	4058	rBV4	12702	37037	0.27%	0.159%
76	23.385	4059	4063	4065	rBV5	3216	3962	0.03%	0.017%
77	23.466	4071	4078	4084	rBV	17445	36278	0.27%	0.156%
78	23.546	4085	4093	4105	rBV	503921	800546	5.92%	3.439%
79	23.663	4113	4115	4122	rVB8	4760	9412	0.07%	0.040%
80	23.706	4122	4123	4126	rBV2	3666	3747	0.03%	0.016%
81	23.727	4126	4127	4130	rBV3	3272	3042	0.02%	0.013%
82	23.866	4131	4153	4156	rBV3	16976	77210	0.57%	0.332%
83	24.139	4202	4204	4207	rVB4	5018	4231	0.03%	0.018%
84	24.165	4207	4209	4213	rBV5	4575	6228	0.05%	0.027%
85	24.395	4245	4252	4253	rBV7	7795	14536	0.11%	0.062%
86	24.427	4254	4258	4260	rVV5	8409	10767	0.08%	0.046%
87	24.454	4261	4263	4268	rVB6	4450	5489	0.04%	0.024%
88	24.534	4270	4278	4280	rBV8	8285	17035	0.13%	0.073%
89	24.625	4285	4295	4296	rBV9	10521	21995	0.16%	0.094%
90	24.806	4322	4329	4331	rBV6	12973	27819	0.21%	0.120%
91	25.052	4370	4375	4377	rBV6	5942	7394	0.05%	0.032%
92	25.186	4395	4400	4412	rVB7	18897	58998	0.44%	0.253%
93	25.549	4467	4468	4470	rBV2	4400	2593	0.02%	0.011%
94	25.651	4481	4487	4506	rVB10	15484	56426	0.42%	0.242%
95	25.912	4531	4536	4540	rBV6	5619	10071	0.07%	0.043%
96	25.955	4541	4544	4545	rBV3	3218	3633	0.03%	0.016%
97	25.987	4547	4550	4551	rVV3	5285	3622	0.03%	0.016%
98	26.083	4556	4568	4571	rBV3	18019	45606	0.34%	0.196%
99	26.612	4665	4667	4669	rBV3	4593	4387	0.03%	0.019%
100	26.634	4669	4671	4676	rVV6	4601	5531	0.04%	0.024%

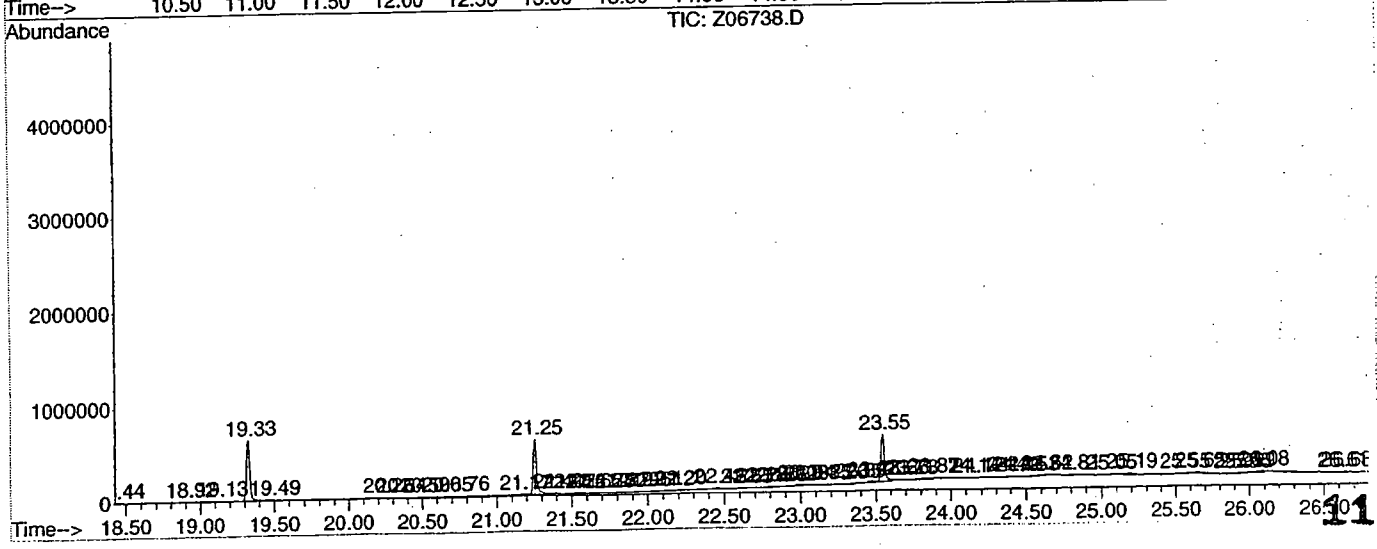
Sum of corrected areas: 23277365

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Operator : mingchil
Acquired : 2 Jun 2004 4:48 pm using AcqMethod MZ0274
Instrument : GCMS Z
Sample Name: OP17035-MB1
Misc Info : OP17035,EZ293,30.0,,,,
Vial Number: 8
Quant File :MZ0274.RES (RTE Integrator)







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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Acq On : 2 Jun 2004 4:48 pm
Sample : OP17035-MB1
Misc : OP17035,EZ293,30.0,,,,
MS Integration Params: LSCINT.P

Vial: 8
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

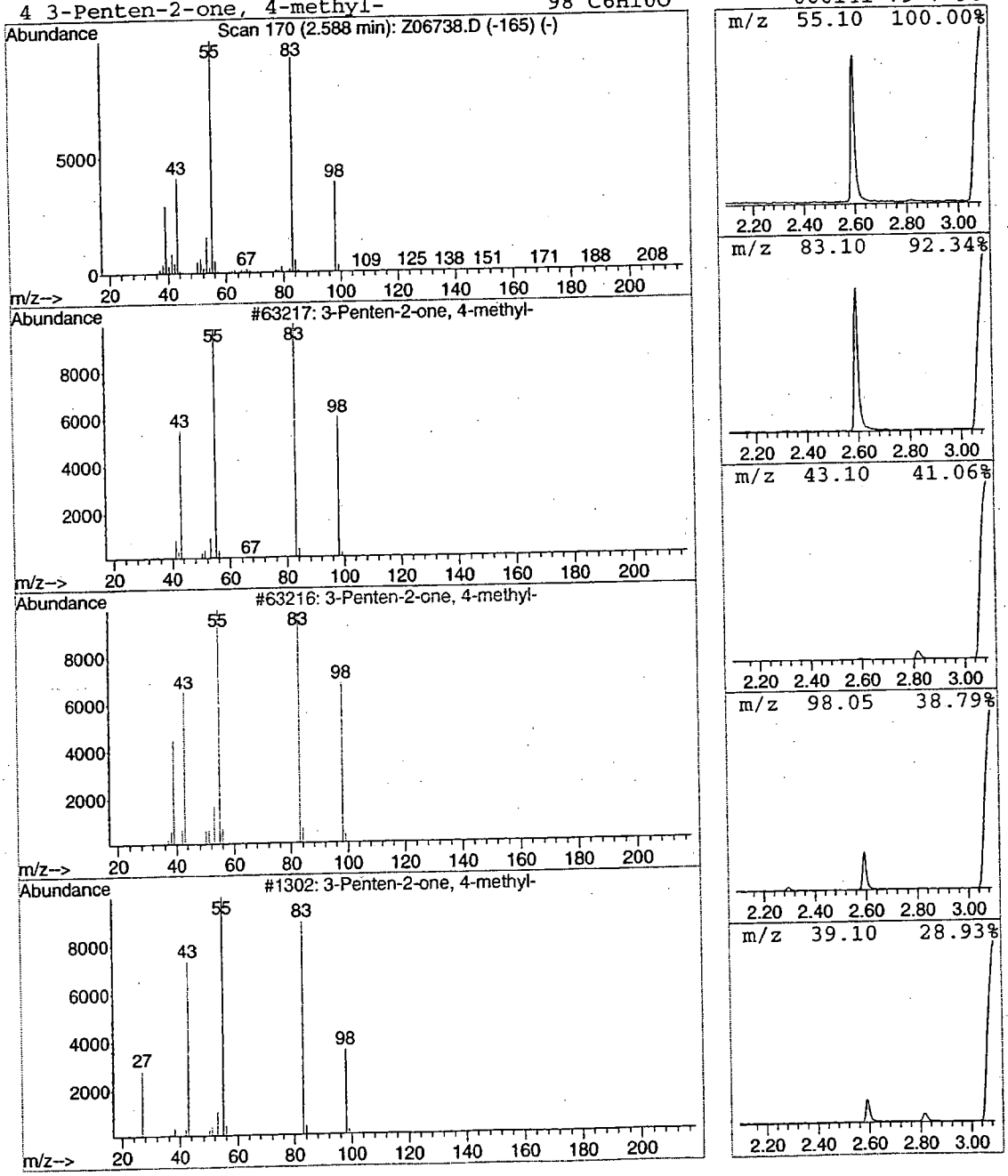
Quant Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 system artifact Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.59	10.26 ppb	141134	1,4-Dichlorobenzene-d4	5.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
4	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	90



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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Acq On : 2 Jun 2004 4:48 pm
Sample : OP17035-MB1
Misc : OP17035,EZ293,30.0,,,,
MS Integration Params: LSCINT.P

Vial: 8
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

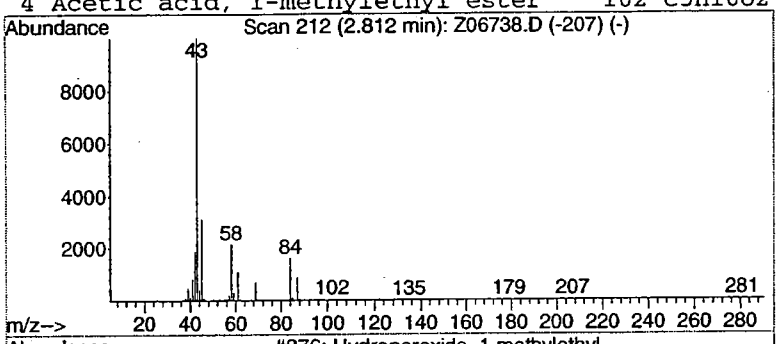
Quant Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NBS75K.L

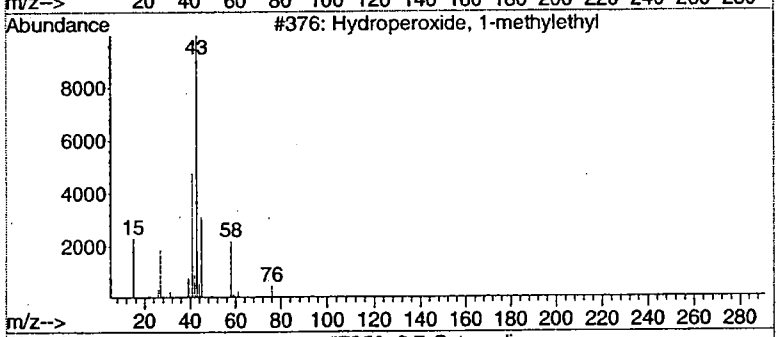
****

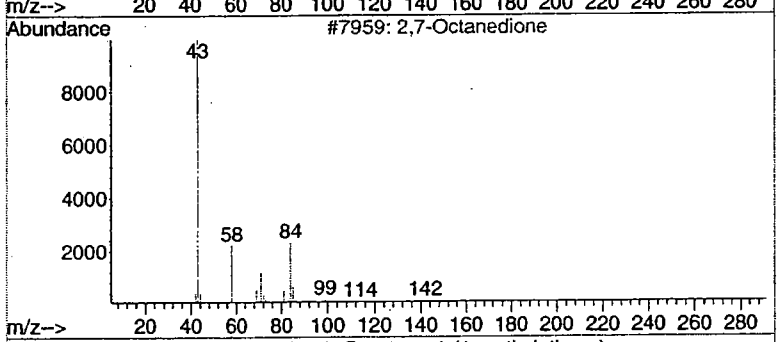
Peak Number 2 system artifact/aldol-conde... Concentration Rank 2

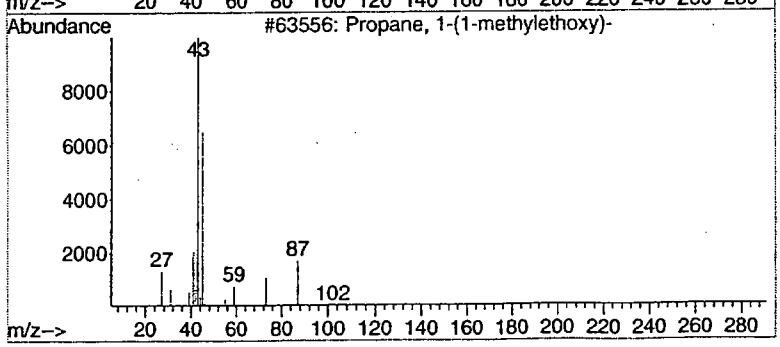
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.81	17.51 ppb	241018	1,4-Dichlorobenzene-d4	5.48

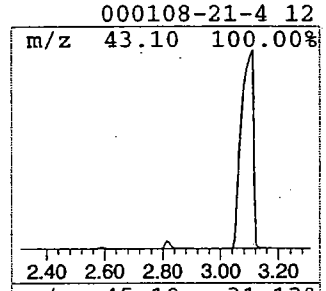
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	28
2	2,7-Octanedione	142	C8H14O2	001626-09-1	25
3	Propane, 1-(1-methylethoxy)-	102	C6H14O	000627-08-7	22
4	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	12

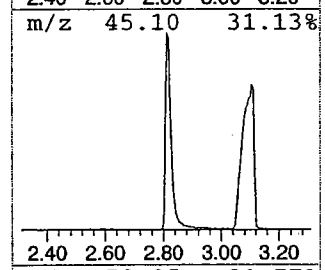


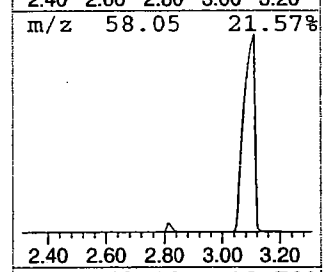


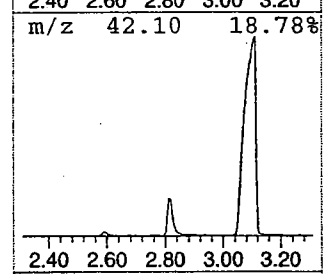


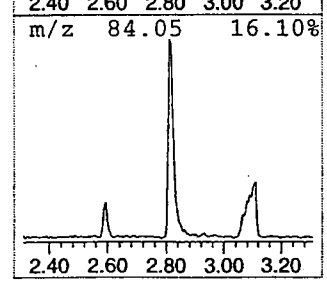












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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Acq On : 2 Jun 2004 4:48 pm
Sample : OP17035-MB1
Misc : OP17035,EZ293,30.0,,,,
MS Integration Params: LSCINT.P

Vial: 8
Operator: mingchil
Inst : GCMS Z
Multiplr: 1.00

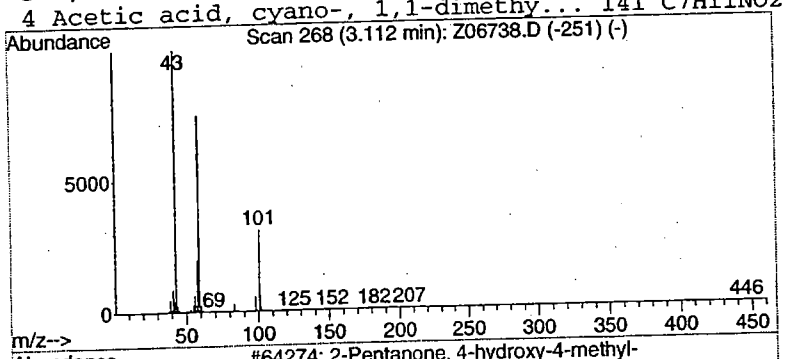
Quant Method : C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NBS75K.L

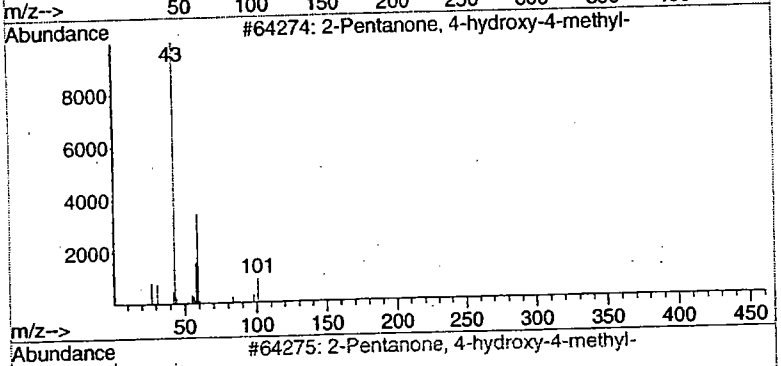
****

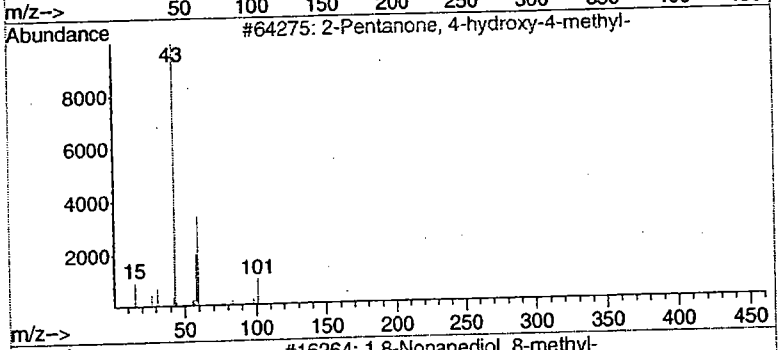
Peak Number 3 system artifact/aldol-conde... Concentration Rank 1

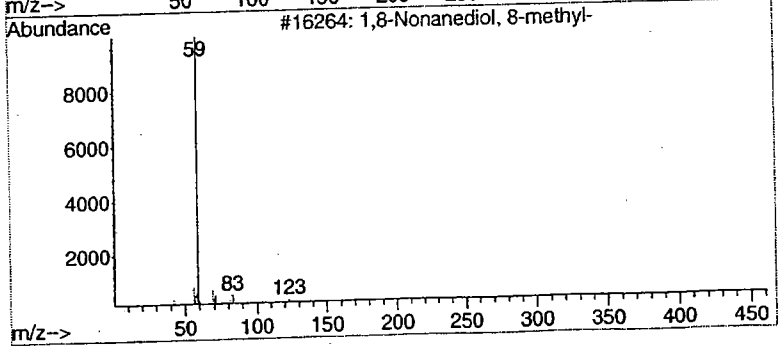
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.11	983.26 ppb	13530500	1,4-Dichlorobenzene-d4	5.48

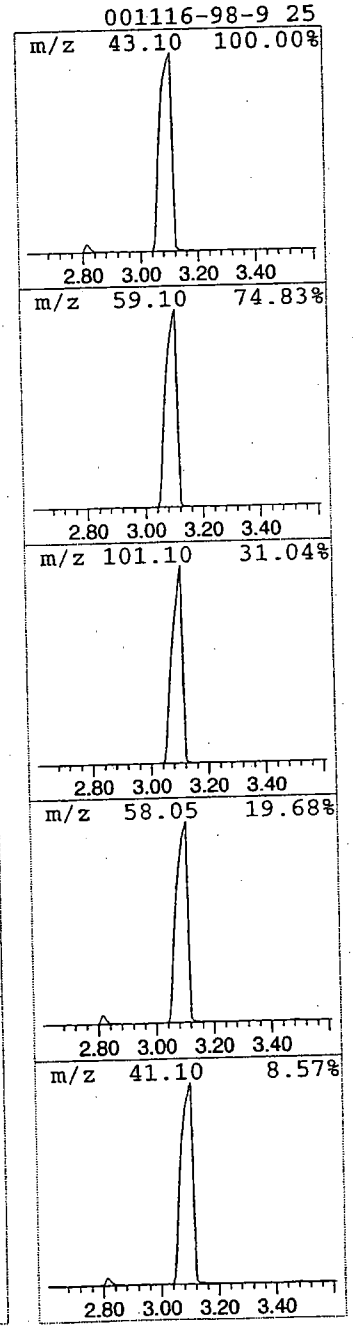
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	32
3	1,8-Nonanediol, 8-methyl-	174	C10H22O2	054725-73-4	28
4	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25











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Tentatively Identified Compound (LSC) summary

Operator ID: mingchil Date Acquired: 2 Jun 2004 4:48 pm
Data File: C:\MSDCHEM\1\DATA\EZ293D\Z06738.D
Name: OP17035-MB1
Misc: OP17035,EZ293,30.0,,,,
Method: C:\MSDCHEM\1\METHODS\MZ0274.M (RTE Integrator)
Title: Semi Volatile Extractables by GC/MS
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
system artifact	2.59	10.3	ppb	141134	1	5.48	550436	40.0
system artifact/a...	2.81	17.5	ppb	241018	1	5.48	550436	40.0
system artifact/a...	3.11	983.3	ppb	13530500	1	5.48	550436	40.0

GEN CHEM

ACCUTEST.

General Chemistry Case Narrative/Conformance/Non-Conformance Summary

	NO	YES
1. Blank levels below reporting limits?		✓
If no, list analytes above reporting limits:		
2. Spike blank or lab control data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
3. Matrix Spike data within acceptable limits?		✓*
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
4. Matrix duplicate data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
5. Samples prepared and analyzed within holding time?		✓
If holding times were not met, list analytes where holding times were exceeded and explain:		
6. All analytical criteria met (calibrations, CCV checks, etc.)?		✓
If no, list affected samples and elements:		

Additional Comments: * See footnote.

QC Review Signature: Mery Ham Date: 6/11/04

Form: RG07
Rev. Date: 2/10/00

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N67805
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Petroleum Hydrocarbons	GP23555/GN67718	25	<25	mg/kg	91.3	80-120%

Associated Samples:
Batch GP23555: N67805-1, N67805-10, N67805-11, N67805-2, N67805-3, N67805-4, N67805-5, N67805-6, N67805-7, N67805-8, N67805-9

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N67805
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP23555/GN67718	N67736-5	mg/kg	469	116	692	192.5(a)	52-132%

Associated Samples:
Batch GP23555: N67805-1, N67805-10, N67805-11, N67805-2, N67805-3, N67805-4, N67805-5, N67805-6, N67805-7, N67805-8, N67805-9
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N67805
Account: GODNJP - Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Petroleum Hydrocarbons	GP23555/GN67718	N67736-5	mg/kg	469	507	7.8	0-34%

Associated Samples:
Batch GP23555: N67805-1, N67805-10, N67805-11, N67805-2, N67805-3, N67805-4, N67805-5, N67805-6, N67805-7, N67805-8, N67805-9

ACCUTEST

Prep Log - TPH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Soil / Solid**
Analytical wavenumber: **2924 cm-1**
Balance #: **11-Jan**
Freon Used: **(virgin) MidAtlantic 407220A**
Spike Lot #: **GNE5-5556-PHC**

Analyst: **TEALE**
GN Batch ID: 67718
GP Batch ID: **GP23555**
Analysis Date: 5/22/04
Prep Date: **5/22/04 7:31**

	Cell #	BOT #	Sample ID	Sample Wt (g)	Dilution	Dilution Prep	Comments
1	A		GP23555-MB1				
2	B		GP23555-B1				
3	C		GP23555-S1(N67736-5	9.8000	1:5	5.0ml → 25ml freon	
4	D		GP23555-D1(n67736-5	9.6000	1:5	5.0ml → 25ml freon	
5	E	1	N67736-1 (A)	9.5000	1:25	1ml → 25ml freon	
6	F	1	N67736-2	9.8000	1:25	1ml → 25ml freon	
7	G	1	N67736-3	9.8000	1:5	5ml → 25ml freon	
8	H	1	N67736-4	9.6000	1:25	1ml → 25ml freon	
9	I	1	N67736-5 XX	9.7000	1:5	5ml → 25ml freon	Red, clumpy clay
10	J	1	N67736-6	10.0000	1:50	0.5ml → 25ml freon	
11	K	1	N67737-1	10.0000	1:50	0.5ml → 25ml freon	
12	L	1	N67737-2	9.6000	1:50	0.5ml → 25ml freon	
13	M	1	N67805-1	9.6000	1:50	0.5ml → 25ml freon	
14	N	1	N67805-10	9.6000	1:100	0.25ml → 25ml freon	
15	O	1	N67805-11	9.7000	1:50	0.5ml → 25ml freon	
16	P	1	N67805-2	9.7000	1:25	1ml → 25ml freon	
17	Q	1	N67805-3	9.7000			
18	R	1	N67805-4	10.0000	1:125	0.2ml → 25ml freon	
19	S	1	N67805-5	9.6000	1:50	0.5ml → 25ml freon	
20	T	1	N67805-6	9.5000			
21	U	1	N67805-7	9.7000	1:25	1ml → 25ml freon	
22	V	1	N67805-8	9.9000	1:25	1ml → 25ml freon	
23	W	1	N67805-9	9.7000			
24	X	1	N67806-1	9.6000	1:50	0.5ml → 25ml freon	

XX = QC Sample

Analyst: [signature] Date: 5/22/04 QC Reviewer: [signature] Date: 5/24/04

Total Petroleum Hydrocarbon Soils

Test Title: PHC
Analyst: SHIRLEY
Prep Date: 5/22/04
GP Batch #: GP23555

EPA 418.1 Mod

Analysis Date: 5/22/04
GN Batch: GN67718

Corr. Coef: 0.999805
Slope: 122.8005
Intercept: -0.72265

Check QC Sample	Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol.	Sam. Wt.	Dilution	Final Conc.	Units	DL	Factor
		Cal Blk	0	0.0							
		STD 1	0.045	5.00							
		STD 2	0.088	10.00							
		STD 3	0.173	20.00							
		STD 4	0.338	40.00							
		STD 5	0.497	60.00	Final Vol. (ml)	Sam Wt (g)	Dilution	Final Conc.	Units	DL	Factor
		STD 6	0.651	80.00							
	12:55	ICV	0.338	40.78	NA	NA	NA	NA	mg/l	0.5	NA
	12:55	CCV	0.337	40.66	NA	NA	NA	NA	mg/l	0.5	NA
MB		GP23555-MB1	0.024	2.22	25.0	10.00	1	5.6	mg/kg	25.0	1
BS		GP23555-B1	0.315	37.96	25.0	10.00	1	94.9	mg/kg	25.0	1
MS		GP23555-S1	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
DUP		GP23555-S1	0.41	49.63	25.0	9.80	5	633.0	mg/kg	25.0	1.020408
		GP23555-D1	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		GP23555-D1	0.296	35.63	25.0	9.60	5	463.9	mg/kg	25.0	1.041667
		N67736-1	OVR	#VALUE!	25.0	9.50	1			25.0	1.052632
		N67736-1	0.258	30.96	25.0	9.50	25	2036.8	mg/kg	25.0	1.052632
		N67736-2	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
		N67736-2	0.204	24.33	25.0	9.80	25	1551.6	mg/kg	25.0	1.020408
	13:07	CCV	0.335	40.42	NA	NA	NA	NA	mg/l	0.5	NA
		N67736-3	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
		N67736-3	0.206	24.57	25.0	9.80	5	313.4	mg/kg	25.0	1.020408
		N67736-4	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		N67736-4	0.264	31.70	25.0	9.60	25	2063.6	mg/kg	25.0	1.041667
		N67736-5	OVR	#VALUE!	25.0	9.70	1			25.0	1.030928
		N67736-5	0.277	33.29	25.0	9.70	5	429.0	mg/kg	25.0	1.030928
		N67736-6	OVR	#VALUE!	25.0	10.00	1			25.0	1
		N67736-6	0.288	34.64	25.0	10.00	50	4330.5	mg/kg	25.0	1
		N67737-1	OVR	#VALUE!	25.0	10.00	1			25.0	1
		N67737-1	0.379	45.82	25.0	10.00	50	5727.3	mg/kg	25.0	1
	13:35	CCV	0.338	40.78	NA	NA	NA	NA	mg/l	0.5	NA
		N67737-2	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		N67737-2	0.363	43.85	25.0	9.60	50	5710.1	mg/kg	25.0	1.041667
		N67805-1	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		N67805-1	0.259	31.08	25.0	9.60	50	4047.2	mg/kg	25.0	1.041667
		N67805-10	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		N67805-10	0.258	30.96	25.0	9.60	100	8062.5	mg/kg	25.0	1.041667
		N67805-11	OVR	#VALUE!	25.0	9.70	1			25.0	1.030928
		N67805-11	0.459	55.64	25.0	9.70	50	7170.5	mg/kg	25.0	1.030928
		N67805-2	OVR	#VALUE!	25.0	9.70	1			25.0	1.030928
		N67805-2	0.392	47.42	25.0	9.70	25	3055.1	mg/kg	25.0	1.030928
	13:55	CCV	0.339	40.91	NA	NA	NA	NA	mg/l	0.5	NA
		N67805-3	0.266	31.94	25.0	9.70	1	82.3	mg/kg	25.0	1.030928
		N67805-4	OVR	#VALUE!	25.0	10.00	1			25.0	1
		N67805-4	0.442	53.56	25.0	10.00	125	16736.0	mg/kg	25.0	1
		N67805-5	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		N67805-5	0.281	33.78	25.0	9.60	50	4399.0	mg/kg	25.0	1.041667
		N67805-6	0.364	43.98	25.0	9.50	1	115.7	mg/kg	25.0	1.052632
		N67805-7	OVR	#VALUE!	25.0	9.70	1			25.0	1.030928
		N67805-7	0.414	50.12	25.0	9.70	25	3229.2	mg/kg	25.0	1.030928
		N67805-8	OVR	#VALUE!	25.0	9.90	1			25.0	1.010101
		N67805-8	0.42	50.85	25.0	9.90	25	3210.5	mg/kg	25.0	1.010101
	14:52	CCV	0.339	40.91	NA	NA	NA	NA	mg/l	0.5	NA
		N67805-9	0.356	42.99	25.0	9.70	1	110.8	mg/kg	25.0	1.030928
		N67806-1	OVR	#VALUE!	25.0	9.60	1			25.0	1.041667
		N67806-1	0.224	26.78	25.0	9.60	50	3487.6	mg/kg	25.0	1.041667
				#VALUE!	25.0		1			25.0	#DIV/0!

				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
7				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
0				#VALUE!	25.0		1			25.0	#DIV/0!
	15:13	CCV	0.338	40.78	NA	NA	NA	NA	mg/l	0.5	NA
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
3		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
5		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
9		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
0		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
		CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
2		CCV		#VALUE!	25.0	NA	1			25.0	#VALUE!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
5				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
9				#VALUE!	25.0		1			25.0	#DIV/0!
				#VALUE!	25.0		1			25.0	#DIV/0!
		CCV		#VALUE!	NA	NA	NA	NA		0.5	NA

mments:

ACCUTEST.

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**

Units: mg/kg

Analyst: BJ
GNBatch ID: 67718
GPBatch ID: 23555
Date:

Preparation Batch QC Summary Units = mg/kg

Method Blank ID: GP23555-MB1 Date: 5/22/04 Result: <25.0 DL: 25.0 <DL: yes
Spike Blank ID: GP23555-B1 Date: 5/22/04 Result: 94.9 Spike: 104 %Rec.: 91.3%
Duplicate ID: GP23555-D1 Samp. Result: 429 Dup. Result: 464 %RPD: 7.8%
MS ID: GP23555-S1 Samp. Result: 429 MS Result: 633 Spike: 106 %Rec: 192%

Method Blank ID: Date: Result: DL: <DL:
Spike Blank ID: Date: Result: Spike: %Rec.:
Duplicate ID: Samp. Result: Dup. Result: %RPD:
MS ID: Samp. Result: MS Result: Spike: %Rec:

Analysis Batch QC Summary Units = mg/ml

ICV (Ext): 5/22/04 Result: 4.08 TV: 4.0 %Rec: 102%

CCV : Result: 4.07 TV: %Rec.: 102%
CCV : Result: 4.04 TV: %Rec.: 101%
CCV : Result: 4.08 TV: %Rec.: 102%
CCV : Result: 4.09 TV: %Rec.: 102%
CCV : Result: 4.09 TV: %Rec.: 102%
CCV : Result: 4.08 TV: %Rec.: 102%

CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:

Reagent Reference Numbers:

See Attached Sheet

Freon Manufacturer: Lot Number:
Sodium Sulfate Manufacturer: Lot Number:
Silica Gel Manufacturer: Lot Number:

Analyst: BJ Date: 5/22/04

Comments:

Form: GN-109-01
Rev. Date:2/15/99

ACCUTEST

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHC

GN or GP Number: 67718

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
Dil. Std. Stock	GNE4-5415-PHC	10 000 ppm	10ml	FREON	100	1000 ppm	6/16/04		5/16/04
Dil. Ext. Stock	GNE4-5416-PHC	10 000 ppm	10.0ml	FREON	100	1000 ppm	6/16/04		5/16/04

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
Std 1	GNE5-5630-PHC	1000 ppm	0.5	FREON	100ml	5.0	6/16/04		5/16/04
Std 2	↓	↓	1.0	↓	↓	10.0	↓		↓
Std 3			2.0			20.0			
Std 4			4.0			40.0			
Std 5			6.0			60.0			
Std 6			8.0			80.0			
External (ICV)	GNE5-5631-PHC	1000 ppm	4.0	FREON	100ml	40.0	6/16/04		5/16/04

Form: GN121
Rev. Date:9/14/01

GN: 67718

ACCUTEST

Reagent Information Log - PHC

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Fluorocarbon - 113	407220A Mid Atlantic	
Spike Solution	GNES-5556-PHC	6/6/04
Sodium Sulfate	EMD 43329408	NA.
Hydromatrix	VARIAN 06504	NA.
Silica Gel	FISHER 020594	NA
ICV	GNES-5631-PHC	6/16/04
CCV	GNES-5630-PHC	6/16/04

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

Form: GN-087 1-45B
Rev. Date: 4/11/00

New Jersey
ACCUTEST
Laboratories

07/22/04

RECEIVED
JUL 26 2004

Technical Report for

Dewberry

Atlantic States Cast Iron Pipe, Phillipsburg, NJ

3852

Accutest Job Number: N69733

Sampling Date: 06/14/04

Report to:

Dewberry-Goodkind, Inc.
299 Webro Road
Parsippany, NJ 08054

ATTN: Larry Brunt

Total number of pages in report: 469

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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Accutest Laboratories

Sample Summary

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N69733-1	06/14/04	10:15	06/14/04	SO	Soil	TP-6 8-8.5
N69733-2	06/14/04	10:35	06/14/04	SO	Soil	TP-6 9.5-10
N69733-3	06/14/04	08:45	06/14/04	SO	Soil	TP-10 5.5-6
N69733-3R	06/14/04	08:45	06/14/04	SO	Soil	TP-10 5.5-6
N69733-4	06/14/04	09:15	06/14/04	SO	Soil	TP-10 8-8.5
N69733-5	06/14/04	09:30	06/14/04	SO	Soil	TP-10 9-9.5
N69733-6	06/14/04	10:50	06/14/04	SO	Soil	TP-12 1-1.5
N69733-6R	06/14/04	10:50	06/14/04	SO	Soil	TP-12 1-1.5
N69733-8	06/14/04	11:10	06/14/04	SO	Soil	TP-12 5.5-6
N69733-9	06/14/04	11:20	06/14/04	SO	Soil	TP-12 8-8.5
N69733-10	06/14/04	11:30	06/14/04	SO	Soil	TP-12 10.5-11
N69733-11	06/14/04	12:00	06/14/04	SO	Soil	TP-11 1-1.5
N69733-12	06/14/04	12:25	06/14/04	SO	Soil	TP-11 2.5-3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories

Sample Summary
(continued)

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N69733-13	06/14/04	12:25	06/14/04	SO	Soil	TP-11 5.5-6
N69733-14	06/14/04	12:38	06/14/04	SO	Soil	TP-11 8-8.5
N69733-15	06/14/04	12:45	06/14/04	SO	Soil	TP-11 9.5-10
N69733-15R	06/14/04	12:45	06/14/04	SO	Soil	TP-11 9.5-10
N69733-16	06/14/04	13:05	06/14/04	SO	Soil	TP-13 1-1.5
N69733-18	06/14/04	13:25	06/14/04	SO	Soil	TP-13 5.5-6
N69733-20	06/14/04	13:45	06/14/04	SO	Soil	TP-13 9.5-10
N69733-21	06/14/04	15:10	06/14/04	SO	Soil	TP-14 1-1.5
N69733-23	06/14/04	16:10	06/14/04	SO	Soil	TP-14 5.5-6
N69733-25	06/14/04	16:55	06/14/04	SO	Soil	TP-14 9.5-10
N69733-26	06/14/04	15:20	06/14/04	SO	Soil	PE-5
N69733-27	06/14/04	15:21	06/14/04	SO	Soil	PE-6
N69733-28	06/14/04	15:23	06/14/04	SO	Soil	PE-7

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N69733-29	06/14/04	15:25	06/14/04	SO	Soil	PE-8
N69733-30	06/14/04	15:27	06/14/04	SO	Soil	PE-9
N69733-30R	06/14/04	15:27	06/14/04	SO	Soil	PE-9
N69733-31	06/14/04	00:00	06/14/04	SO	Soil	DUP

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

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For
Non-USEPA/CLP Methods

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RESULTS

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-6 8-8.5		
Lab Sample ID:	N69733-1	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.4
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68596.D	1	06/15/04	SSW	06/15/04	OP17184	EH2930
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	57.5	75	22	ug/kg	J
208-96-8	Acenaphthylene	48.9	75	16	ug/kg	J
120-12-7	Anthracene	214	75	20	ug/kg	
56-55-3	Benzo(a)anthracene	949	75	21	ug/kg	
50-32-8	Benzo(a)pyrene	1060	75	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1080	75	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	883	75	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	886	75	30	ug/kg	
218-01-9	Chrysene	1100	75	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	316	75	28	ug/kg	
206-44-0	Fluoranthene	1460	75	18	ug/kg	
86-73-7	Fluorene	86.0	75	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	845	75	43	ug/kg	
91-20-3	Naphthalene	54.7	75	19	ug/kg	J
85-01-8	Phenanthrene	936	75	20	ug/kg	
129-00-0	Pyrene	1420	75	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		27-123%
321-60-8	2-Fluorobiphenyl	59%		40-113%
1718-51-0	Terphenyl-d14	66%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-6 9.5-10		
Lab Sample ID:	N69733-2	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	87.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68642.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	43.9	75	21	ug/kg	J
208-96-8	Acenaphthylene	50.5	75	16	ug/kg	J
120-12-7	Anthracene	173	75	20	ug/kg	
56-55-3	Benzo(a)anthracene	871	75	21	ug/kg	
50-32-8	Benzo(a)pyrene	1060	75	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1020	75	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	996	75	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	991	75	29	ug/kg	
218-01-9	Chrysene	1050	75	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	320	75	28	ug/kg	
206-44-0	Fluoranthene	1270	75	18	ug/kg	
86-73-7	Fluorene	60.1	75	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	851	75	43	ug/kg	
91-20-3	Naphthalene	67.8	75	19	ug/kg	J
85-01-8	Phenanthrene	732	75	20	ug/kg	
129-00-0	Pyrene	1230	75	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		27-123%
321-60-8	2-Fluorobiphenyl	64%		40-113%
1718-51-0	Terphenyl-d14	72%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	TP-10 5.5-6		
Lab Sample ID:	N69733-3	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	91.6
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z06942.D	1	06/15/04	MCL	06/15/04	OP17184	EZ301
Run #2	Z06945.D	5	06/15/04	MCL	06/15/04	OP17184	EZ301

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	331	72	21	ug/kg	
208-96-8	Acenaphthylene	211	72	15	ug/kg	
120-12-7	Anthracene	933	72	19	ug/kg	
56-55-3	Benzo(a)anthracene	2380	72	20	ug/kg	
50-32-8	Benzo(a)pyrene	2160	72	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	2660	72	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	977	72	29	ug/kg	
207-08-9	Benzo(k)fluoranthene	925	72	28	ug/kg	
218-01-9	Chrysene	2230	72	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	317	72	26	ug/kg	
206-44-0	Fluoranthene	6050 [a]	360	85	ug/kg	
86-73-7	Fluorene	449	72	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	898	72	41	ug/kg	
91-20-3	Naphthalene	295	72	18	ug/kg	
85-01-8	Phenanthrene	937	72	20	ug/kg	
129-00-0	Pyrene	4860 [a]	360	190	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%	59%	27-123%
321-60-8	2-Fluorobiphenyl	63%	66%	40-113%
1718-51-0	Terphenyl-d14	60%	71%	27-144%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	TP-10 5.5-6		
Lab Sample ID:	N69733-3R	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8082 SW846 3545	**Percent Solids:**	91.6
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB47742.D	1	06/26/04	OYA	06/24/04	OP17280	GAB2271
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	15	ug/kg	
11104-28-2	Aroclor 1221	ND	36	9.5	ug/kg	
11141-16-5	Aroclor 1232	ND	36	13	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	3.0	ug/kg	
11097-69-1	Aroclor 1254	ND	36	6.4	ug/kg	
11096-82-5	Aroclor 1260	ND	36	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		32-134%
877-09-8	Tetrachloro-m-xylene	67%		32-134%
2051-24-3	Decachlorobiphenyl	74%		22-154%
2051-24-3	Decachlorobiphenyl	62%		22-154%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-12 1-1.5		
Lab Sample ID:	N69733-6	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	87.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z06943.D	1	06/15/04	MCL	06/15/04	OP17184	EZ301
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	978	230	65	ug/kg	
208-96-8	Acenaphthylene	98.1	230	48	ug/kg	J
120-12-7	Anthracene	1730	230	61	ug/kg	
56-55-3	Benzo(a)anthracene	3260	230	64	ug/kg	
50-32-8	Benzo(a)pyrene	2530	230	54	ug/kg	
205-99-2	Benzo(b)fluoranthene	3780	230	55	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1420	230	90	ug/kg	
207-08-9	Benzo(k)fluoranthene	1150	230	89	ug/kg	
218-01-9	Chrysene	3260	230	63	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	456	230	83	ug/kg	
206-44-0	Fluoranthene	7940	230	54	ug/kg	
86-73-7	Fluorene	909	230	59	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1200	230	130	ug/kg	
91-20-3	Naphthalene	754	230	56	ug/kg	
85-01-8	Phenanthrene	6690	230	62	ug/kg	
129-00-0	Pyrene	6230	230	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		27-123%
321-60-8	2-Fluorobiphenyl	72%		40-113%
1718-51-0	Terphenyl-d14	71%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-12 1-1.5		
Lab Sample ID:	N69733-6R	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8082 SW846 3545	**Percent Solids:**	87.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB47744.D	1	06/26/04	OYA	06/24/04	OP17280	GAB2271
Run #2	AB47780.D	5	06/29/04	OYA	06/24/04	OP17280	GAB2272

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2	15.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	16	ug/kg	
11104-28-2	Aroclor 1221	ND	38	10	ug/kg	
11141-16-5	Aroclor 1232	ND	38	14	ug/kg	
53469-21-9	Aroclor 1242	4810 [a]	190	82	ug/kg	
12672-29-6	Aroclor 1248	ND	38	3.2	ug/kg	
11097-69-1	Aroclor 1254	950	38	6.8	ug/kg	
11096-82-5	Aroclor 1260	ND	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%	75%	32-134%
877-09-8	Tetrachloro-m-xylene	48%	75%	32-134%
2051-24-3	Decachlorobiphenyl	82%	99%	22-154%
2051-24-3	Decachlorobiphenyl	47%	67%	22-154%

(a) Result is from Run# 2

CC 13

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-12 5.5-6		
Lab Sample ID:	N69733-8	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	85.5
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68598.D	1	06/15/04	SSW	06/15/04	OP17184	EH2930
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	160	78	22	ug/kg	
208-96-8	Acenaphthylene	59.4	78	17	ug/kg	J
120-12-7	Anthracene	377	78	21	ug/kg	
56-55-3	Benzo(a)anthracene	1020	78	22	ug/kg	
50-32-8	Benzo(a)pyrene	1050	78	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1380	78	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	256	78	31	ug/kg	
207-08-9	Benzo(k)fluoranthene	640	78	31	ug/kg	
218-01-9	Chrysene	1140	78	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	114	78	29	ug/kg	
206-44-0	Fluoranthene	1610	78	18	ug/kg	
86-73-7	Fluorene	197	78	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	286	78	44	ug/kg	
91-20-3	Naphthalene	272	78	19	ug/kg	
85-01-8	Phenanthrene	1360	78	21	ug/kg	
129-00-0	Pyrene	1570	78	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		27-123%
321-60-8	2-Fluorobiphenyl	71%		40-113%
1718-51-0	Terphenyl-d14	67%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-12 8-8.5		
Lab Sample ID:	N69733-9	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	83.5
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68644.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	117	79	23	ug/kg	
208-96-8	Acenaphthylene	69.0	79	17	ug/kg	J
120-12-7	Anthracene	285	79	21	ug/kg	
56-55-3	Benzo(a)anthracene	1050	79	22	ug/kg	
50-32-8	Benzo(a)pyrene	784	79	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	976	79	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	572	79	31	ug/kg	
207-08-9	Benzo(k)fluoranthene	707	79	31	ug/kg	
218-01-9	Chrysene	1370	79	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	217	79	29	ug/kg	
206-44-0	Fluoranthene	1950	79	19	ug/kg	
86-73-7	Fluorene	125	79	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	542	79	45	ug/kg	
91-20-3	Naphthalene	181	79	20	ug/kg	
85-01-8	Phenanthrene	1210	79	21	ug/kg	
129-00-0	Pyrene	1750	79	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		27-123%
321-60-8	2-Fluorobiphenyl	68%		40-113%
1718-51-0	Terphenyl-d14	73%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-12 10.5-11		
Lab Sample ID:	N69733-10	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	86.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68706.D	1	06/18/04	SSW	06/18/04	OP17229	EH2933
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	76	22	ug/kg	
208-96-8	Acenaphthylene	ND	76	16	ug/kg	
120-12-7	Anthracene	ND	76	20	ug/kg	
56-55-3	Benzo(a)anthracene	27.5	76	21	ug/kg	J
50-32-8	Benzo(a)pyrene	23.8	76	18	ug/kg	J
205-99-2	Benzo(b)fluoranthene	27.6	76	18	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	76	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	76	30	ug/kg	
218-01-9	Chrysene	31.3	76	21	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	76	28	ug/kg	
206-44-0	Fluoranthene	41.6	76	18	ug/kg	J
86-73-7	Fluorene	ND	76	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	76	43	ug/kg	
91-20-3	Naphthalene	ND	76	19	ug/kg	
85-01-8	Phenanthrene	22.5	76	21	ug/kg	J
129-00-0	Pyrene	ND	76	41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		27-123%
321-60-8	2-Fluorobiphenyl	70%		40-113%
1718-51-0	Terphenyl-d14	79%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-11 1-1.5		
Lab Sample ID:	N69733-11	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.1
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z06944.D	1	06/15/04	MCL	06/15/04	OP17184	EZ301
Run #2							

	Initial Weight	Final Volume
Run #1	10.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	221	220	62	ug/kg	
208-96-8	Acenaphthylene	200	220	47	ug/kg	J
120-12-7	Anthracene	688	220	58	ug/kg	
56-55-3	Benzo(a)anthracene	1350	220	62	ug/kg	
50-32-8	Benzo(a)pyrene	1510	220	52	ug/kg	
205-99-2	Benzo(b)fluoranthene	2020	220	53	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1060	220	87	ug/kg	
207-08-9	Benzo(k)fluoranthene	656	220	86	ug/kg	
218-01-9	Chrysene	1530	220	61	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	320	220	80	ug/kg	
206-44-0	Fluoranthene	2970	220	52	ug/kg	
86-73-7	Fluorene	308	220	56	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	869	220	120	ug/kg	
91-20-3	Naphthalene	292	220	54	ug/kg	
85-01-8	Phenanthrene	2140	220	59	ug/kg	
129-00-0	Pyrene	2640	220	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		27-123%
321-60-8	2-Fluorobiphenyl	73%		40-113%
1718-51-0	Terphenyl-d14	73%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-11 2.5-3		
Lab Sample ID:	N69733-12	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8082 SW846 3545	**Percent Solids:**	89.4
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB47745.D	1	06/26/04	OYA	06/24/04	OP17280	GAB2271
Run #2	AB47781.D	40	06/29/04	OYA	06/24/04	OP17280	GAB2272

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2	15.1 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	15	ug/kg	
11104-28-2	Aroclor 1221	ND	37	9.8	ug/kg	
11141-16-5	Aroclor 1232	ND	37	14	ug/kg	
53469-21-9	Aroclor 1242	42600 [a]	1500	630	ug/kg	
12672-29-6	Aroclor 1248	ND	37	3.1	ug/kg	
11097-69-1	Aroclor 1254	ND	37	6.6	ug/kg	
11096-82-5	Aroclor 1260	ND	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%	67%	32-134%
877-09-8	Tetrachloro-m-xylene	111%	193% [b]	32-134%
2051-24-3	Decachlorobiphenyl	75%	108%	22-154%
2051-24-3	Decachlorobiphenyl	52%	232% [b]	22-154%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-11 5.5-6		
Lab Sample ID:	N69733-13	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.5
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68597.D	1	06/15/04	SSW	06/15/04	OP17184	EH2930
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	60.1	75	22	ug/kg	J
208-96-8	Acenaphthylene	56.3	75	16	ug/kg	J
120-12-7	Anthracene	225	75	20	ug/kg	
56-55-3	Benzo(a)anthracene	1060	75	21	ug/kg	
50-32-8	Benzo(a)pyrene	1140	75	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1180	75	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	854	75	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	867	75	30	ug/kg	
218-01-9	Chrysene	1170	75	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	303	75	28	ug/kg	
206-44-0	Fluoranthene	1670	75	18	ug/kg	
86-73-7	Fluorene	90.0	75	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	821	75	43	ug/kg	
91-20-3	Naphthalene	68.4	75	19	ug/kg	J
85-01-8	Phenanthrene	963	75	20	ug/kg	
129-00-0	Pyrene	1600	75	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		27-123%
321-60-8	2-Fluorobiphenyl	62%		40-113%
1718-51-0	Terphenyl-d14	70%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-11 8-8.5		
Lab Sample ID:	N69733-14	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.4
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68645.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	70.2	75	21	ug/kg	J
208-96-8	Acenaphthylene	59.2	75	16	ug/kg	J
120-12-7	Anthracene	279	75	20	ug/kg	
56-55-3	Benzo(a)anthracene	1250	75	21	ug/kg	
50-32-8	Benzo(a)pyrene	1350	75	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1550	75	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1140	75	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	938	75	30	ug/kg	
218-01-9	Chrysene	1490	75	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	405	75	28	ug/kg	
206-44-0	Fluoranthene	2060	75	18	ug/kg	
86-73-7	Fluorene	85.9	75	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1020	75	43	ug/kg	
91-20-3	Naphthalene	61.6	75	19	ug/kg	J
85-01-8	Phenanthrene	1120	75	20	ug/kg	
129-00-0	Pyrene	2040	75	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		27-123%
321-60-8	2-Fluorobiphenyl	67%		40-113%
1718-51-0	Terphenyl-d14	77%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-11 9.5-10		
Lab Sample ID:	N69733-15	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.0
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68707.D	1	06/18/04	SSW	06/18/04	OP17229	EH2933
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	52.0	76	22	ug/kg	J
208-96-8	Acenaphthylene	40.9	76	16	ug/kg	J
120-12-7	Anthracene	132	76	20	ug/kg	
56-55-3	Benzo(a)anthracene	702	76	21	ug/kg	
50-32-8	Benzo(a)pyrene	921	76	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1140	76	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	879	76	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	625	76	30	ug/kg	
218-01-9	Chrysene	926	76	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	286	76	28	ug/kg	
206-44-0	Fluoranthene	1000	76	18	ug/kg	
86-73-7	Fluorene	64.2	76	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	765	76	43	ug/kg	
91-20-3	Naphthalene	82.6	76	19	ug/kg	
85-01-8	Phenanthrene	665	76	20	ug/kg	
129-00-0	Pyrene	1010	76	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		27-123%
321-60-8	2-Fluorobiphenyl	70%		40-113%
1718-51-0	Terphenyl-d14	77%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-13 1-1.5		
Lab Sample ID:	N69733-16	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	82.8
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68646.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	293	240	68	ug/kg	
208-96-8	Acenaphthylene	178	240	51	ug/kg	J
120-12-7	Anthracene	659	240	64	ug/kg	
56-55-3	Benzo(a)anthracene	1750	240	67	ug/kg	
50-32-8	Benzo(a)pyrene	1730	240	56	ug/kg	
205-99-2	Benzo(b)fluoranthene	1880	240	58	ug/kg	
191-24-2	Benzo(g,h,i)perylene	476	240	95	ug/kg	
207-08-9	Benzo(k)fluoranthene	1020	240	94	ug/kg	
218-01-9	Chrysene	2060	240	66	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	197	240	88	ug/kg	J
206-44-0	Fluoranthene	3360	240	56	ug/kg	
86-73-7	Fluorene	398	240	62	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	491	240	140	ug/kg	
91-20-3	Naphthalene	228	240	60	ug/kg	J
85-01-8	Phenanthrene	2760	240	65	ug/kg	
129-00-0	Pyrene	3750	240	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		27-123%
321-60-8	2-Fluorobiphenyl	70%		40-113%
1718-51-0	Terphenyl-d14	71%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-13 5.5-6		
Lab Sample ID:	N69733-18	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	87.4
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68647.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	92.8	75	21	ug/kg	
208-96-8	Acenaphthylene	155	75	16	ug/kg	
120-12-7	Anthracene	547	75	20	ug/kg	
56-55-3	Benzo(a)anthracene	1850	75	21	ug/kg	
50-32-8	Benzo(a)pyrene	1880	75	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1870	75	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	996	75	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	1250	75	30	ug/kg	
218-01-9	Chrysene	1980	75	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	434	75	28	ug/kg	
206-44-0	Fluoranthene	2900	75	18	ug/kg	
86-73-7	Fluorene	184	75	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1010	75	43	ug/kg	
91-20-3	Naphthalene	68.4	75	19	ug/kg	J
85-01-8	Phenanthrene	1960	75	20	ug/kg	
129-00-0	Pyrene	2910	75	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		27-123%
321-60-8	2-Fluorobiphenyl	61%		40-113%
1718-51-0	Terphenyl-d14	67%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-13 9.5-10		
Lab Sample ID:	N69733-20	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	87.1
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68708.D	1	06/18/04	SSW	06/18/04	OP17229	EH2933
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	104	76	22	ug/kg	
208-96-8	Acenaphthylene	137	76	16	ug/kg	
120-12-7	Anthracene	419	76	20	ug/kg	
56-55-3	Benzo(a)anthracene	1600	76	22	ug/kg	
50-32-8	Benzo(a)pyrene	1700	76	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1670	76	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1210	76	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	1300	76	30	ug/kg	
218-01-9	Chrysene	1730	76	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	426	76	28	ug/kg	
206-44-0	Fluoranthene	2510	76	18	ug/kg	
86-73-7	Fluorene	174	76	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1140	76	43	ug/kg	
91-20-3	Naphthalene	106	76	19	ug/kg	
85-01-8	Phenanthrene	1570	76	21	ug/kg	
129-00-0	Pyrene	2430	76	41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		27-123%
321-60-8	2-Fluorobiphenyl	71%		40-113%
1718-51-0	Terphenyl-d14	78%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-14 1-1.5		
Lab Sample ID:	N69733-21	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	90.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68648.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	73	21	ug/kg	
208-96-8	Acenaphthylene	ND	73	16	ug/kg	
120-12-7	Anthracene	26.8	73	19	ug/kg	J
56-55-3	Benzo(a)anthracene	64.3	73	21	ug/kg	J
50-32-8	Benzo(a)pyrene	66.7	73	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	62.0	73	18	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	32.1	73	29	ug/kg	J
207-08-9	Benzo(k)fluoranthene	49.9	73	29	ug/kg	J
218-01-9	Chrysene	81.3	73	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	27	ug/kg	
206-44-0	Fluoranthene	136	73	17	ug/kg	
86-73-7	Fluorene	23.8	73	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	42	ug/kg	
91-20-3	Naphthalene	2590	73	18	ug/kg	
85-01-8	Phenanthrene	138	73	20	ug/kg	
129-00-0	Pyrene	145	73	39	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	107%		27-123%
321-60-8	2-Fluorobiphenyl	76%		40-113%
1718-51-0	Terphenyl-d14	73%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-14 5.5-6		
Lab Sample ID:	N69733-23	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	87.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68649.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931
Run #2	H68659.D	2	06/17/04	SSW	06/16/04	OP17173	EH2932

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2	30.0 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	644	76	22	ug/kg	
208-96-8	Acenaphthylene	356	76	16	ug/kg	
120-12-7	Anthracene	2380	76	20	ug/kg	
56-55-3	Benzo(a)anthracene	2630	76	22	ug/kg	
50-32-8	Benzo(a)pyrene	2440	76	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	3130	76	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	418	76	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	1520	76	30	ug/kg	
218-01-9	Chrysene	2610	76	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	209	76	28	ug/kg	
206-44-0	Fluoranthene	5520 [a]	150	36	ug/kg	
86-73-7	Fluorene	1460	76	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	506	76	44	ug/kg	
91-20-3	Naphthalene	829	76	19	ug/kg	
85-01-8	Phenanthrene	6850 [a]	150	41	ug/kg	
129-00-0	Pyrene	4800 [a]	150	82	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%	74%	27-123%
321-60-8	2-Fluorobiphenyl	67%	68%	40-113%
1718-51-0	Terphenyl-d14	59%	63%	27-144%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TP-14 9.5-10		
Lab Sample ID:	N69733-25	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	90.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H68709.D	1	06/18/04	SSW	06/18/04	OP17229	EH2933
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	73	21	ug/kg	
208-96-8	Acenaphthylene	ND	73	16	ug/kg	
120-12-7	Anthracene	ND	73	20	ug/kg	
56-55-3	Benzo(a)anthracene	ND	73	21	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	29	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	29	ug/kg	
218-01-9	Chrysene	ND	73	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	27	ug/kg	
206-44-0	Fluoranthene	ND	73	17	ug/kg	
86-73-7	Fluorene	ND	73	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	42	ug/kg	
91-20-3	Naphthalene	ND	73	18	ug/kg	
85-01-8	Phenanthrene	ND	73	20	ug/kg	
129-00-0	Pyrene	ND	73	39	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		27-123%
321-60-8	2-Fluorobiphenyl	67%		40-113%
1718-51-0	Terphenyl-d14	75%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-5		
Lab Sample ID:	N69733-26	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	78.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	1670	790	mg/kg	25	06/15/04	HBA	EPA 418.1 M
Solids, Percent	78.3		%	1	06/15/04	MH	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-6		
Lab Sample ID:	N69733-27	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	83.3
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	3570	1500	mg/kg	50	06/15/04	HBA	EPA 418.1 M
Solids, Percent	83.3		%	1	06/15/04	MH	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-7		
Lab Sample ID:	N69733-28	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	77.9
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	10900	3900	mg/kg	125	06/15/04	HBA	EPA 418.1 M
Solids, Percent	77.9		%	1	06/15/04	MH	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-8		
Lab Sample ID:	N69733-29	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	73.4
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	21400	8800	mg/kg	250	06/15/04	HBA	EPA 418.1 M
Solids, Percent	73.4		%	1	06/15/04	MH	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-9		
Lab Sample ID:	N69733-30	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
		Percent Solids:	84.2
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	1490	750	mg/kg	25	06/15/04	HBA	EPA 418.1 M
Solids, Percent	84.2		%	1	06/15/04	MH	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-9		
Lab Sample ID:	N69733-30R	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8082 SW846 3545	**Percent Solids:**	84.2
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB47747.D	1	06/26/04	OYA	06/24/04	OP17280	GAB2271
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	16	ug/kg	
11104-28-2	Aroclor 1221	ND	39	10	ug/kg	
11141-16-5	Aroclor 1232	ND	39	14	ug/kg	
53469-21-9	Aroclor 1242	549	39	17	ug/kg	
12672-29-6	Aroclor 1248	ND	39	3.3	ug/kg	
11097-69-1	Aroclor 1254	671	39	7.0	ug/kg	
11096-82-5	Aroclor 1260	385	39	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		32-134%
877-09-8	Tetrachloro-m-xylene	38%		32-134%
2051-24-3	Decachlorobiphenyl	75%		22-154%
2051-24-3	Decachlorobiphenyl	48%		22-154%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	N69733-31	**Date Sampled:**	06/14/04
Matrix:	SO - Soil	**Date Received:**	06/14/04
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.7
Project:	Atlantic States Cast Iron Pipe, Phillipsburg, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z07023.D	1	06/22/04	PWK	06/18/04	OP17235	EZ305
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	30.8	75	21	ug/kg	J
208-96-8	Acenaphthylene	34.8	75	16	ug/kg	J
120-12-7	Anthracene	100	75	20	ug/kg	
56-55-3	Benzo(a)anthracene	520	75	21	ug/kg	
50-32-8	Benzo(a)pyrene	714	75	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	1100	75	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	639	75	30	ug/kg	
207-08-9	Benzo(k)fluoranthene	355	75	30	ug/kg	
218-01-9	Chrysene	633	75	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	186	75	28	ug/kg	
206-44-0	Fluoranthene	839	75	18	ug/kg	
86-73-7	Fluorene	37.4	75	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	539	75	43	ug/kg	
91-20-3	Naphthalene	46.7	75	19	ug/kg	J
85-01-8	Phenanthrene	458	75	20	ug/kg	
129-00-0	Pyrene	617	75	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	49%		27-123%
321-60-8	2-Fluorobiphenyl	51%		40-113%
1718-51-0	Terphenyl-d14	51%		27-144%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # N69733

Client / Reporting Information

Company Name: Dewberry-Goodkind, Inc
Address: 299 Webro Rd
City: Parsippany State: NJ Zip: 07054
Project Contact: MEHMET SECUMIS E-mail: msecumis@dewberry.com
Phone #: (973) 428 4909
Sampler's Name: MEHMET SECUMIS

Project Information

Project Name: ATLANTIC STATES CAST IRON PIPE
Street:
City: PHILLIPSBURG State: NJ
Project #: 3852
Fax #:
Client Purchase Order #:

Requested Analysis

8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PAUG ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐ PALG ☐
8250 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAP ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ BN ☐ PAH ☑ PADF ☐ +TICs ☐

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260 / 624 / 8021 / 602 / PAUG / BTEX / MTBE / TBA / NAP / PALG	8250 / 624 / TCL / PPL / STARS / MTBE / TBA / NAP / +10 / +15	8270 / 625 / TCL / PPL / STARS / ABN / BN / PAH / PADF / +TICs	LAB USE ONLY
-1	TP-6 8-8.5		6/14/04	10:15	MS	Soil	4											✓	QA4
-2	TP-6 9.5-10*		6/14/04	10:35	"	"	"											✓	
-3	TP-10 5.5-6		"	8:45	"	"	"											✓	
-4	TP-10 8-8.5*		"	9:15	"	"	"											✓	
-5	TP-10 9-9.5*		"	9:30	"	"	"											✓	
-6	TP-12 1-1.5		"	10:50	"	"	"											✓	
-7	TP-12 2.5-3*		"	10:55	"	"	"											✓	
-8	TP-12 5.5-6		"	11:10	"	"	"											✓	
-9	TP-12 8-8.5*		"	11:20	"	"	"											✓	
-10	TP-12 10.5-11*		"	11:30	"	"	"											✓	

Turnaround Time (Business Days)

☐ Std. 15 Business Days
☐ 10 Day RUSH
☐ 5 Day RUSH
☐ 3 Day EMERGENCY
☐ 2 Day EMERGENCY
☑ 1 Day EMERGENCY
☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

☐ Commercial "A"
☐ Commercial "B"
☐ NJ Reduced
☐ NJ Full
☐ Other _____
☐ FULL CLP
☐ NYASP Category A
☐ NYASP Category B
☐ State Forms
☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

* wait for authorization for analysis
⊕ O.K. TO ANALYZE [signature]

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 [signature]	6/14/04 2:40	1 Jesse Duncan	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐ On Ice ☐	Cooler Temp. ⊕ 27.8°C

1A

JD

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # N69733

Client / Reporting Information

Company Name	Dewberry-Goodland
Address	299 Wilbro Rd
City / State / Zip	Parsippany NJ 07054
Project Contact / E-mail	MEHMET SEGILMIS mseilmis@dewberry.com
Phone #	(973)4284909
Sampler's Name	MEHMET SEGILMIS

Project Information

Project Name	ATLANTIC STATES CAST IRON PIPE
Street	
City / State	PHILLIPSBURG NJ
Project #	3852
Fax #	
Client Purchase Order #	

Requested Analysis

8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PAUG ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐ PALG ☐

8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAP ☐ +10 ☐ +15 ☐

8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ BN ☐ PAH ☐ PADF ☐ +TICs ☐

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260 BTEX	8260 TBA	8270 ABN	LAB USE ONLY
-11	TP-11 1-1.5		6/14/04	12:00		Soil	1											✓	ER94
-12	TP-11 2.5-3*		"	12:05		"	"											✓	
-13	TP-11 5.5-6		"	12:25		"	"											✓	
-14	TP-11 8-8.5*		"	12:35		"	"											✓	
-15	TP-11 9.5-10*		"	12:45		"	"											✓	
-16	TP-13 1-1.5*		"	1:05		"	"											✓	
-17	TP-13 2.5-3*		"	1:15		"	"											✓	
-18	TP-13 5.5-6*		"	1:25		"	"											✓	
-19	TP-13 8-8.5*		"	1:35		"	"											✓	
-20	TP-13 9.5-10*		"	1:45		"	"											✓	

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☑ 1 Day *EMERGENCY*
- ☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

* Wait for authorization for analysis
⊕ O.K. TO ANALYZE [signature]

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 [signature]	6/14/04 2:40	1 Jesse Duncan	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐ On Ice ☐	Cooler Temp. ⊕ 27.8°C

50

ACCUTEST Laboratories

CHAIN OF CUSTODY

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # N69733

Client / Reporting Information

Company Name	Dewberry-Goodland, Inc.
Address	299 Webro Rd
City / State / Zip	Parsippany NJ 07054
Project Contact / E-mail	MEHMET SECKMIS mseckmis@dewberry.com
Phone #	(973) 4284909
Sampler's Name	MEHMET SECKMIS

Project Information

Project Name	ATLANTIC STATES CAST IRON PIPE
Street	
City / State	PHILLIPSBURG NJ
Project #	3852
Fax #	
Client Purchase Order #	

Requested Analysis

8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PALIG ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐ PALG ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAP ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ BN ☐ PAH ☐ PADF ☐ +TICs ☐

TPHC

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260	624	8270	TPHC	LAB USE ONLY
-21	TP-14 1-1.5*		6/14/04	3:10	MS	S,N	1											✓		FR44, H128
-22	TP-14 2.5-3*		"	3:50	"	"	"											✓		
-23	TP-14 5.5-6*		"	4:10	"	"	"											✓		
-24	TP-14 8-8.5*		"	4:30	"	"	"											✓		
-25	TP-14 9.5-10*		"	4:55	"	"	"											✓		
-26	PE-5		"	3:20	"	"	"												✓	
-27	PE-6		"	3:21	"	"	"												✓	
-28	PE-7		"	3:23	"	"	"												✓	
-29	PE-8		"	3:25	"	"	"												✓	
-30	PE-9		"	3:27	"	"	"												✓	

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☑ 1 Day *EMERGENCY*
- ☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

* Wait for authorization for analysis
⊕ O.K. TO ANALYZE [signature]
OK TO ADD "DUP" TO COC (PAH-HOLD) on pm N.Y. [initials] 6-15-04
-31 Δ RECD "DUP" (LABELED FOR PAH); ADDED TO C.O.C. BEND INT. REVIEW (JD 6/16/04)
(HOLD)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 [signature]	6/14/04 7:40	1 Jesse Duncan	2		2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐ On Ice ☐	Cooler Temp. ⊕ 27.8°C

JD

Accutest Laboratories

Internal Sample Tracking Chronicle

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N69733-1 Collected: 14-JUN-04 10:15 By: TP-6 8-8.5			Received: 14-JUN-04 By: JD			
N69733-1	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-1	SW846 8270C	15-JUN-04 15:06	SSW	15-JUN-04	CAS	B8270PAH
N69733-2 Collected: 14-JUN-04 10:35 By: TP-6 9.5-10			Received: 14-JUN-04 By: JD			
N69733-2	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-2	SW846 8270C	16-JUN-04 15:26	SSW	16-JUN-04	CAS	B8270PAH
N69733-3 Collected: 14-JUN-04 08:45 By: TP-10 5.5-6			Received: 14-JUN-04 By: JD			
N69733-3	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-3	SW846 8270C	15-JUN-04 15:55	MCL	15-JUN-04	CAS	B8270PAH
N69733-3	SW846 8270C	15-JUN-04 17:47	MCL	15-JUN-04	CAS	B8270PAH
N69733-4 Collected: 14-JUN-04 09:15 By: TP-10 8-8.5			Received: 14-JUN-04 By: JD			
N69733-4	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-4	SW846 8270C	16-JUN-04 16:39	SSW	16-JUN-04	CAS	B8270PAH
N69733-6 Collected: 14-JUN-04 10:50 By: TP-12 1-1.5			Received: 14-JUN-04 By: JD			
N69733-6	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-6	SW846 8270C	15-JUN-04 16:32	MCL	15-JUN-04	CAS	B8270PAH
N69733-8 Collected: 14-JUN-04 11:10 By: TP-12 5.5-6			Received: 14-JUN-04 By: JD			
N69733-8	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-8	SW846 8270C	15-JUN-04 16:20	SSW	15-JUN-04	CAS	B8270PAH
N69733-9 Collected: 14-JUN-04 11:20 By: TP-12 8-8.5			Received: 14-JUN-04 By: JD			

Internal Sample Tracking Chronicle

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N69733-9	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-9	SW846 8270C	16-JUN-04 17:15	SSW	16-JUN-04	CAS	B8270PAH
N69733-10 Collected: 14-JUN-04 11:30 By: TP-12 10.5-11			Received: 14-JUN-04 By: JD			
N69733-10	ASTM 4643-00	18-JUN-04	ADP			%SOL
N69733-10	SW846 8270C	18-JUN-04 21:20	SSW	18-JUN-04	GAA	B8270PAH
N69733-11 Collected: 14-JUN-04 12:00 By: TP-11 1-1.5			Received: 14-JUN-04 By: JD			
N69733-11	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-11	SW846 8270C	15-JUN-04 17:09	MCL	15-JUN-04	CAS	B8270PAH
N69733-12 Collected: 14-JUN-04 12:25 By: TP-11 2.5-3			Received: 14-JUN-04 By: JD			
N69733-12	ASTM 4643-00	25-JUN-04	ADP			%SOL
N69733-12	SW846 8082	26-JUN-04 15:29	OYA	24-JUN-04	GGP	P8082PCB
N69733-12	SW846 8082	29-JUN-04 07:33	OYA	24-JUN-04	GGP	P8082PCB
N69733-13 Collected: 14-JUN-04 12:25 By: TP-11 5.5-6			Received: 14-JUN-04 By: JD			
N69733-13	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-13	SW846 8270C	15-JUN-04 15:43	SSW	15-JUN-04	CAS	B8270PAH
N69733-14 Collected: 14-JUN-04 12:38 By: TP-11 8-8.5			Received: 14-JUN-04 By: JD			
N69733-14	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-14	SW846 8270C	16-JUN-04 18:27	SSW	16-JUN-04	CAS	B8270PAH
N69733-15 Collected: 14-JUN-04 12:45 By: TP-11 9.5-10			Received: 14-JUN-04 By: JD			
N69733-15	ASTM 4643-00	18-JUN-04	ADP			%SOL
N69733-15	SW846 8270C	18-JUN-04 21:57	SSW	18-JUN-04	GAA	B8270PAH

Internal Sample Tracking Chronicle

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N69733-16 Collected: 14-JUN-04 13:05 By: TP-13 1-1.5			Received: 14-JUN-04 By: JD			
N69733-16	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-16	SW846 8270C	16-JUN-04 19:03	SSW	16-JUN-04	CAS	B8270PAH
N69733-18 Collected: 14-JUN-04 13:25 By: TP-13 5.5-6			Received: 14-JUN-04 By: JD			
N69733-18	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-18	SW846 8270C	16-JUN-04 19:39	SSW	16-JUN-04	CAS	B8270PAH
N69733-20 Collected: 14-JUN-04 13:45 By: TP-13 9.5-10			Received: 14-JUN-04 By: JD			
N69733-20	ASTM 4643-00	18-JUN-04	ADP			%SOL
N69733-20	SW846 8270C	18-JUN-04 16:59	SSW	18-JUN-04	GAA	B8270PAH
N69733-21 Collected: 14-JUN-04 15:10 By: TP-14 1-1.5			Received: 14-JUN-04 By: JD			
N69733-21	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-21	SW846 8270C	16-JUN-04 20:15	SSW	16-JUN-04	CAS	B8270PAH
N69733-23 Collected: 14-JUN-04 16:10 By: TP-14 5.5-6			Received: 14-JUN-04 By: JD			
N69733-23	ASTM 4643-00	16-JUN-04	ADP			%SOL
N69733-23	SW846 8270C	16-JUN-04 20:51	SSW	16-JUN-04	CAS	B8270PAH
N69733-23	SW846 8270C	17-JUN-04 10:01	SSW	16-JUN-04	CAS	B8270PAH
N69733-25 Collected: 14-JUN-04 16:55 By: TP-14 9.5-10			Received: 14-JUN-04 By: JD			
N69733-25	ASTM 4643-00	18-JUN-04	ADP			%SOL
N69733-25	SW846 8270C	18-JUN-04 17:36	SSW	18-JUN-04	GAA	B8270PAH

Internal Sample Tracking Chronicle

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N69733-26 Collected: 14-JUN-04 15:20 By: PE-5			Received: 14-JUN-04 By: JD			
N69733-26	EPA 418.1 M	15-JUN-04	HBA	15-JUN-04	HBA	PHC
N69733-26	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-27 Collected: 14-JUN-04 15:21 By: PE-6			Received: 14-JUN-04 By: JD			
N69733-27	EPA 418.1 M	15-JUN-04	HBA	15-JUN-04	HBA	PHC
N69733-27	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-28 Collected: 14-JUN-04 15:23 By: PE-7			Received: 14-JUN-04 By: JD			
N69733-28	EPA 418.1 M	15-JUN-04	HBA	15-JUN-04	HBA	PHC
N69733-28	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-29 Collected: 14-JUN-04 15:25 By: PE-8			Received: 14-JUN-04 By: JD			
N69733-29	EPA 418.1 M	15-JUN-04	HBA	15-JUN-04	HBA	PHC
N69733-29	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-30 Collected: 14-JUN-04 15:27 By: PE-9			Received: 14-JUN-04 By: JD			
N69733-30	EPA 418.1 M	15-JUN-04	HBA	15-JUN-04	HBA	PHC
N69733-30	ASTM 4643-00	15-JUN-04	MH			%SOL
N69733-31 Collected: 14-JUN-04 00:00 By: DUP			Received: 14-JUN-04 By: JD			
N69733-31	ASTM 4643-00	19-JUN-04	TM			%SOL
N69733-31	SW846 8270C	22-JUN-04 00:50	PWK	18-JUN-04	ATH	B8270PAH
N69733-3R Collected: 14-JUN-04 08:45 By: TP-10 5.5-6			Received: 14-JUN-04 By: JD			

Internal Sample Tracking Chronicle

Dewberry

Job No: N69733

Atlantic States Cast Iron Pipe, Phillipsburg, NJ
Project No: 3852

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N69733-3R	SW846 8082	26-JUN-04 13:38	OYA	24-JUN-04	GGP	P8082PCB
N69733-6R Collected: 14-JUN-04 10:50 By: TP-12 1-1.5			Received: 14-JUN-04 By: JD			
N69733-6R	SW846 8082	26-JUN-04 14:52	OYA	24-JUN-04	GGP	P8082PCB
N69733-6R	SW846 8082	29-JUN-04 06:57	OYA	24-JUN-04	GGP	P8082PCB
N69733-30R Collected: 14-JUN-04 15:27 By: PE-9			Received: 14-JUN-04 By: JD			
N69733-30R	SW846 8082	26-JUN-04 16:42	OYA	24-JUN-04	GGP	P8082PCB

GC/MS

GC/MS
SEMIVOLATILE

ACCUTEST

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Semivolatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: Jim Date: 7-22-04

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17184-MB1	H68595.D	1	06/15/04	SSW	06/15/04	OP17184	EH2930

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-1, N69733-3, N69733-6, N69733-8, N69733-11, N69733-13

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	87%	34-114%
4165-62-2	Phenol-d5	91%	38-112%
118-79-6	2,4,6-Tribromophenol	83%	32-127%
4165-60-0	Nitrobenzene-d5	97%	27-123%
321-60-8	2-Fluorobiphenyl	77%	40-113%
1718-51-0	Terphenyl-d14	80%	27-144%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	4.27	340	ug/kg	J
	system artifact/aldol-condensation	4.84	870	ug/kg	J
	system artifact/aldol-condensation	5.46	53000	ug/kg	J
	system artifact/aldol-condensation	6.79	210	ug/kg	J
	unknown	20.81	140	ug/kg	J
	system artifact	21.35	320	ug/kg	J

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17184-MB1	H68595.D	1	06/15/04	SSW	06/15/04	OP17184	EH2930

The QC reported here applies to the following samples: **Method:**

N69733-1, N69733-3, N69733-6, N69733-8, N69733-11, N69733-13

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	22.04	530	ug/kg	J
	system artifact	22.78	160	ug/kg	J
	system artifact	23.63	670	ug/kg	J
	system artifact	24.65	530	ug/kg	J
	system artifact	25.89	360	ug/kg	J
	Total TIC, Semi-Volatile		140	ug/kg	J

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17173-MB2	H68640.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-2, N69733-4, N69733-9, N69733-14, N69733-16, N69733-18, N69733-21, N69733-23

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	87%	34-114%
4165-62-2	Phenol-d5	92%	38-112%
118-79-6	2,4,6-Tribromophenol	83%	32-127%
4165-60-0	Nitrobenzene-d5	90%	27-123%
321-60-8	2-Fluorobiphenyl	81%	40-113%
1718-51-0	Terphenyl-d14	82%	27-144%

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17173-MB2	H68879.D	1	06/29/04	SSW	06/16/04	OP17173	EH2940

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-2, N69733-4, N69733-9, N69733-14, N69733-16, N69733-18, N69733-21, N69733-23

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	104%	34-114%
4165-62-2	Phenol-d5	99%	38-112%
118-79-6	2,4,6-Tribromophenol	88%	32-127%
4165-60-0	Nitrobenzene-d5	77%	27-123%
321-60-8	2-Fluorobiphenyl	83%	40-113%
1718-51-0	Terphenyl-d14	88%	27-144%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol condensation	4.19	370	ug/kg	J
	system artifact/aldol condensation	4.77	980	ug/kg	J
	system artifact/aldol condensation	5.40	63000	ug/kg	J
	system artifact	6.78	170	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17173-MB1	P07375.D	1	06/15/04	NAP	06/14/04	OP17173	EP318

The QC reported here applies to the following samples: **Method:** SW846 8270C

OP17173-MS, OP17173-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	77%	34-114%
4165-62-2	Phenol-d5	76%	38-112%
118-79-6	2,4,6-Tribromophenol	78%	32-127%
4165-60-0	Nitrobenzene-d5	87%	27-123%
321-60-8	2-Fluorobiphenyl	80%	40-113%
1718-51-0	Terphenyl-d14	87%	27-144%

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17229-MB1	H68704.D	1	06/18/04	SSW	06/18/04	OP17229	EH2933

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-10, N69733-15, N69733-20, N69733-25

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	89%	34-114%
4165-62-2	Phenol-d5	92%	38-112%
118-79-6	2,4,6-Tribromophenol	71%	32-127%
4165-60-0	Nitrobenzene-d5	102%	27-123%
321-60-8	2-Fluorobiphenyl	77%	40-113%
1718-51-0	Terphenyl-d14	81%	27-144%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	4.26	480	ug/kg	J
	system artifact/aldol-condensation	4.83	1100	ug/kg	J
	system artifact/aldol-condensation	5.45	70000	ug/kg	J
	system artifact/aldol-condensation	6.78	200	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17235-MB1	Z07022.D	1	06/22/04	PWK	06/18/04	OP17235	EZ305

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-31

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	80%	27-123%
321-60-8	2-Fluorobiphenyl	80%	40-113%
1718-51-0	Terphenyl-d14	78%	27-144%

Method Blank Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17235-MB1	R39383.D	1	07/09/04	WHS	06/18/04	OP17235	ER1293

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-31

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	19	ug/kg	
208-96-8	Acenaphthylene	ND	67	14	ug/kg	
120-12-7	Anthracene	ND	67	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	26	ug/kg	
218-01-9	Chrysene	ND	67	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	24	ug/kg	
206-44-0	Fluoranthene	ND	67	16	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	38	ug/kg	
91-20-3	Naphthalene	ND	67	17	ug/kg	
85-01-8	Phenanthrene	ND	67	18	ug/kg	
129-00-0	Pyrene	ND	67	36	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	44%	27-123%
321-60-8	2-Fluorobiphenyl	40%	40-113%
1718-51-0	Terphenyl-d14	42%	27-144%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.71	220	ug/kg	J
	system artifact	2.86	270	ug/kg	J
	system artifact/aldol-condensation	3.08	12000	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Blank Spike Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17184-BS1	R39355.D	1	07/08/04	WHS	06/15/04	OP17184	ER1292

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-1, N69733-3, N69733-6, N69733-8, N69733-11, N69733-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1660	1460	88	58-110
208-96-8	Acenaphthylene	1660	1370	82	53-103
120-12-7	Anthracene	1660	1580	95	61-117
56-55-3	Benzo(a)anthracene	1660	1530	92	58-117
50-32-8	Benzo(a)pyrene	1660	1550	93	57-119
205-99-2	Benzo(b)fluoranthene	1660	1540	93	55-123
191-24-2	Benzo(g,h,i)perylene	1660	1220	73	49-130
207-08-9	Benzo(k)fluoranthene	1660	1620	98	51-127
218-01-9	Chrysene	1660	1560	94	57-118
53-70-3	Dibenzo(a,h)anthracene	1660	1390	84	50-129
206-44-0	Fluoranthene	1660	1570	95	60-119
86-73-7	Fluorene	1660	1510	91	59-113
193-39-5	Indeno(1,2,3-cd)pyrene	1660	1550	93	50-127
91-20-3	Naphthalene	1660	1290	78	50-105
85-01-8	Phenanthrene	1660	1540	93	59-114
129-00-0	Pyrene	1660	1530	92	55-117

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	100%	34-114%
4165-62-2	Phenol-d5	99%	38-112%
118-79-6	2,4,6-Tribromophenol	106%	32-127%
4165-60-0	Nitrobenzene-d5	83%	27-123%
321-60-8	2-Fluorobiphenyl	91%	40-113%
1718-51-0	Terphenyl-d14	93%	27-144%

Blank Spike Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17173-BS2	H68641.D	1	06/16/04	SSW	06/16/04	OP17173	EH2931

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-2, N69733-4, N69733-9, N69733-14, N69733-16, N69733-18, N69733-21, N69733-23

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1370	82	58-110
208-96-8	Acenaphthylene	1670	1230	74	53-103
120-12-7	Anthracene	1670	1520	91	61-117
56-55-3	Benzo(a)anthracene	1670	1490	89	58-117
50-32-8	Benzo(a)pyrene	1670	1550	93	57-119
205-99-2	Benzo(b)fluoranthene	1670	1400	84	55-123
191-24-2	Benzo(g,h,i)perylene	1670	1450	87	49-130
207-08-9	Benzo(k)fluoranthene	1670	1700	102	51-127
218-01-9	Chrysene	1670	1590	95	57-118
53-70-3	Dibenzo(a,h)anthracene	1670	1480	89	50-129
206-44-0	Fluoranthene	1670	1530	92	60-119
86-73-7	Fluorene	1670	1430	86	59-113
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1410	85	50-127
91-20-3	Naphthalene	1670	1320	79	50-105
85-01-8	Phenanthrene	1670	1470	88	59-114
129-00-0	Pyrene	1670	1480	89	55-117

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	83%	34-114%
4165-62-2	Phenol-d5	84%	38-112%
118-79-6	2,4,6-Tribromophenol	89%	32-127%
4165-60-0	Nitrobenzene-d5	89%	27-123%
321-60-8	2-Fluorobiphenyl	80%	40-113%
1718-51-0	Terphenyl-d14	89%	27-144%

Blank Spike Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17229-BS1	H68705.D	1	06/18/04	SSW	06/18/04	OP17229	EH2933

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-10, N69733-15, N69733-20, N69733-25

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1430	86	58-110
208-96-8	Acenaphthylene	1670	1300	78	53-103
120-12-7	Anthracene	1670	1560	94	61-117
56-55-3	Benzo(a)anthracene	1670	1480	89	58-117
50-32-8	Benzo(a)pyrene	1670	1510	91	57-119
205-99-2	Benzo(b)fluoranthene	1670	1520	91	55-123
191-24-2	Benzo(g,h,i)perylene	1670	1460	88	49-130
207-08-9	Benzo(k)fluoranthene	1670	1460	88	51-127
218-01-9	Chrysene	1670	1550	93	57-118
53-70-3	Dibenzo(a,h)anthracene	1670	1480	89	50-129
206-44-0	Fluoranthene	1670	1550	93	60-119
86-73-7	Fluorene	1670	1430	86	59-113
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1440	86	50-127
91-20-3	Naphthalene	1670	1290	77	50-105
85-01-8	Phenanthrene	1670	1540	92	59-114
129-00-0	Pyrene	1670	1510	91	55-117

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	83%	34-114%
4165-62-2	Phenol-d5	90%	38-112%
118-79-6	2,4,6-Tribromophenol	81%	32-127%
4165-60-0	Nitrobenzene-d5	88%	27-123%
321-60-8	2-Fluorobiphenyl	81%	40-113%
1718-51-0	Terphenyl-d14	84%	27-144%

Blank Spike Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17235-BS1	R39384.D	1	07/09/04	WHS	06/18/04	OP17235	ER1293

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-31

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1380	83	58-110
208-96-8	Acenaphthylene	1670	1280	77	53-103
120-12-7	Anthracene	1670	1470	88	61-117
56-55-3	Benzo(a)anthracene	1670	1420	85	58-117
50-32-8	Benzo(a)pyrene	1670	1460	88	57-119
205-99-2	Benzo(b)fluoranthene	1670	1400	84	55-123
191-24-2	Benzo(g,h,i)perylene	1670	1390	83	49-130
207-08-9	Benzo(k)fluoranthene	1670	1470	88	51-127
218-01-9	Chrysene	1670	1460	88	57-118
53-70-3	Dibenzo(a,h)anthracene	1670	1430	86	50-129
206-44-0	Fluoranthene	1670	1410	85	60-119
86-73-7	Fluorene	1670	1420	85	59-113
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1630	98	50-127
91-20-3	Naphthalene	1670	1280	77	50-105
85-01-8	Phenanthrene	1670	1410	85	59-114
129-00-0	Pyrene	1670	1440	86	55-117

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	79%	27-123%
321-60-8	2-Fluorobiphenyl	87%	40-113%
1718-51-0	Terphenyl-d14	90%	27-144%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17184-MS	R39357.D	1	07/08/04	WHS	06/15/04	OP17184	ER1292
OP17184-MSD	R39358.D	1	07/08/04	WHS	06/15/04	OP17184	ER1292
N69692-2	R39356.D	1	07/08/04	WHS	06/15/04	OP17184	ER1292

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-1, N69733-3, N69733-6, N69733-8, N69733-11, N69733-13

CAS No.	Compound	N69692-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1860	1440	77	1350	72	6	41-113/29
208-96-8	Acenaphthylene	ND		1860	1320	71	1270	68	4	40-103/25
120-12-7	Anthracene	ND		1860	1570	84	1500	80	5	36-128/37
56-55-3	Benzo(a)anthracene	ND		1860	1570	84	1500	80	5	37-125/35
50-32-8	Benzo(a)pyrene	ND		1860	1580	85	1500	80	5	36-126/35
205-99-2	Benzo(b)fluoranthene	ND		1860	1580	85	1510	81	5	32-142/37
191-24-2	Benzo(g,h,i)perylene	ND		1860	1150	62	1000	54	14	4-135/38
207-08-9	Benzo(k)fluoranthene	ND		1860	1600	86	1540	83	4	28-138/33
218-01-9	Chrysene	ND		1860	1590	85	1510	81	5	35-126/33
53-70-3	Dibenzo(a,h)anthracene	ND		1860	1360	73	1230	66	10	17-130/31
206-44-0	Fluoranthene	ND		1860	1710	92	1620	87	5	33-131/41
86-73-7	Fluorene	ND		1860	1530	82	1460	78	5	43-116/33
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1860	1270	68	1130	61	12	13-133/35
91-20-3	Naphthalene	ND		1860	1290	69	1220	65	6	31-109/34
85-01-8	Phenanthrene	ND		1860	1530	82	1460	78	5	35-125/41
129-00-0	Pyrene	ND		1860	1720	92	1620	87	6	29-135/41

CAS No.	Surrogate Recoveries	MS	MSD	N69692-2	Limits
367-12-4	2-Fluorophenol	82%	77%	74%	34-114%
4165-62-2	Phenol-d5	82%	77%	74%	38-112%
118-79-6	2,4,6-Tribromophenol	88%	84%	77%	32-127%
4165-60-0	Nitrobenzene-d5	71%	68%	71%	27-123%
321-60-8	2-Fluorobiphenyl	77%	71%	70%	40-113%
1718-51-0	Terphenyl-d14	88%	84%	85%	27-144%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17173-MS	P07379.D	1	06/15/04	NAP	06/14/04	OP17173	EP318
OP17173-MSD	P07380.D	1	06/15/04	NAP	06/14/04	OP17173	EP318
N69637-3	P07378.D	1	06/15/04	NAP	06/14/04	OP17173	EP318

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-2, N69733-4, N69733-9, N69733-14, N69733-16, N69733-18, N69733-21, N69733-23

CAS No.	Compound	N69637-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		2130	1510	71	1470	69	3	41-113/29
208-96-8	Acenaphthylene	ND		2130	1360	64	1340	63	1	40-103/25
120-12-7	Anthracene	ND		2130	1580	74	1520	71	4	36-128/37
56-55-3	Benzo(a)anthracene	ND		2130	1580	74	1500	70	5	37-125/35
50-32-8	Benzo(a)pyrene	ND		2130	1580	74	1510	71	5	36-126/35
205-99-2	Benzo(b)fluoranthene	ND		2130	1590	75	1530	72	4	32-142/37
191-24-2	Benzo(g,h,i)perylene	ND		2130	1660	78	1590	75	4	4-135/38
207-08-9	Benzo(k)fluoranthene	ND		2130	1580	74	1530	72	3	28-138/33
218-01-9	Chrysene	ND		2130	1590	75	1550	73	3	35-126/33
53-70-3	Dibenzo(a,h)anthracene	ND		2130	1670	78	1600	75	4	17-130/31
206-44-0	Fluoranthene	ND		2130	1550	73	1500	70	3	33-131/41
86-73-7	Fluorene	ND		2130	1560	73	1510	71	3	43-116/33
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2130	1590	75	1550	73	3	13-133/35
91-20-3	Naphthalene	ND		2130	1300	61	1340	63	3	31-109/34
85-01-8	Phenanthrene	ND		2130	1580	74	1510	71	5	35-125/41
129-00-0	Pyrene	ND		2130	1590	75	1530	72	4	29-135/41

CAS No.	Surrogate Recoveries	MS	MSD	N69637-3	Limits
367-12-4	2-Fluorophenol	60%	63%	62%	34-114%
4165-62-2	Phenol-d5	66%	66%	64%	38-112%
118-79-6	2,4,6-Tribromophenol	74%	71%	72%	32-127%
4165-60-0	Nitrobenzene-d5	68%	69%	69%	27-123%
321-60-8	2-Fluorobiphenyl	71%	69%	70%	40-113%
1718-51-0	Terphenyl-d14	73%	69%	73%	27-144%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17229-MS	H68736.D	1	06/21/04	SSW	06/18/04	OP17229	EH2934
OP17229-MSD	H68737.D	1	06/21/04	SSW	06/18/04	OP17229	EH2934
N70044-1 [a]	H68738.D	1	06/21/04	SSW	06/18/04	OP17229	EH2934

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-10, N69733-15, N69733-20, N69733-25

CAS No.	Compound	N70044-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	57.9	J	1660	1340	77	1300	75	3	41-113/29
208-96-8	Acenaphthylene	ND		1660	1160	70	1110	67	4	40-103/25
120-12-7	Anthracene	63.0	J	1660	1410	81	1330	77	6	36-128/37
56-55-3	Benzo(a)anthracene	319		1660	1640	80	1620	79	1	37-125/35
50-32-8	Benzo(a)pyrene	302		1660	1600	78	1560	76	3	36-126/35
205-99-2	Benzo(b)fluoranthene	287		1660	1430	69	1470	72	3	32-142/37
191-24-2	Benzo(g,h,i)perylene	143		1660	1220	65	1070	56	13	4-135/38
207-08-9	Benzo(k)fluoranthene	291		1660	1630	81	1490	73	9	28-138/33
218-01-9	Chrysene	378		1660	1760	83	1710	81	3	35-126/33
53-70-3	Dibenzo(a,h)anthracene	62.5	J	1660	1250	71	1110	63	12	17-130/31
206-44-0	Fluoranthene	699		1660	1900	72	1860	70	2	33-131/41
86-73-7	Fluorene	36.0	J	1660	1330	78	1250	74	6	43-116/33
193-39-5	Indeno(1,2,3-cd)pyrene	147		1660	1260	67	1130	60	11	13-133/35
91-20-3	Naphthalene	ND		1660	1160	70	1150	70	1	31-109/34
85-01-8	Phenanthrene	447		1660	1770	80	1700	76	4	35-125/41
129-00-0	Pyrene	636		1660	2090	88	2050	86	2	29-135/41

CAS No.	Surrogate Recoveries	MS	MSD	N70044-1	Limits
367-12-4	2-Fluorophenol	76%	75%	68%	34-114%
4165-62-2	Phenol-d5	82%	80%	74%	38-112%
118-79-6	2,4,6-Tribromophenol	68%	63%	59%	32-127%
4165-60-0	Nitrobenzene-d5	74%	72%	69%	27-123%
321-60-8	2-Fluorobiphenyl	74%	68%	64%	40-113%
1718-51-0	Terphenyl-d14	79%	75%	71%	27-144%

(a) for QC MS/MSD purpose only.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17235-MS	R39423.D	1	07/10/04	WHS	06/18/04	OP17235	ER1293
OP17235-MSD	R39424.D	1	07/10/04	WHS	06/18/04	OP17235	ER1293
N70030-25	R39386.D	100	07/09/04	WHS	06/18/04	OP17235	ER1293

The QC reported here applies to the following samples: **Method:** SW846 8270C

N69733-31

CAS No.	Compound	N70030-25 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		2220	1360	61	1560	70	14	41-113/29
208-96-8	Acenaphthylene	ND		2220	1260	57	1430	64	13	40-103/25
120-12-7	Anthracene	ND		2220	1410	63	1630	73	14	36-128/37
56-55-3	Benzo(a)anthracene	ND		2220	1460	66	1680	76	14	37-125/35
50-32-8	Benzo(a)pyrene	ND		2220	1560	70	1740	78	11	36-126/35
205-99-2	Benzo(b)fluoranthene	ND		2220	2030	91	2250	101	10	32-142/37
191-24-2	Benzo(g,h,i)perylene	ND		2220	663	30	783	35	17	4-135/38
207-08-9	Benzo(k)fluoranthene	ND		2220	2120	95	2340	105	10	28-138/33
218-01-9	Chrysene	ND		2220	1430	64	1630	73	13	35-126/33
53-70-3	Dibenzo(a,h)anthracene	ND		2220	742	33	898	40	19	17-130/31
206-44-0	Fluoranthene	ND		2220	1360	61	1570	71	14	33-131/41
86-73-7	Fluorene	ND		2220	1390	63	1600	72	14	43-116/33
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2220	691	31	824	37	18	13-133/35
91-20-3	Naphthalene	ND		2220	1280	58	1410	63	10	31-109/34
85-01-8	Phenanthrene	ND		2220	1430	64	1650	74	14	35-125/41
129-00-0	Pyrene	ND		2220	1990	90	2270	102	13	29-135/41

CAS No.	Surrogate Recoveries	MS	MSD	N70030-25	Limits
4165-60-0	Nitrobenzene-d5	55%	62%	90%	27-123%
321-60-8	2-Fluorobiphenyl	62%	70%	78%	40-113%
1718-51-0	Terphenyl-d14	91%	103%	83%	27-144%

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2925-DFTPP	**Injection Date:**	06/08/04
Lab File ID:	H68430.D	**Injection Time:**	16:56
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	49998	47.0		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	54767	51.5		Pass
70	Less than 2.0% of mass 69	987	0.93	(1.8) [a]	Pass
127	40.0 - 60.0% of mass 198	53987	50.8		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	106325	100.0		Pass
199	5.0 - 9.0% of mass 198	7129	6.7		Pass
275	10.0 - 30.0% of mass 198	23709	22.3		Pass
365	1.0 - 100.0% of mass 198	2619	2.5		Pass
441	Present, but less than mass 443	11208	10.5	(76.4) [b]	Pass
442	40.0 - 100.0% of mass 198	76333	71.8		Pass
443	17.0 - 23.0% of mass 442	14667	13.8	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2925-ICC2925	H68431.D	06/08/04	17:15	00:19	Initial cal 50
EH2925-IC2925	H68432.D	06/08/04	17:51	00:55	Initial cal 100
EH2925-IC2925	H68433.D	06/08/04	18:28	01:32	Initial cal 10
EH2925-IC2925	H68434.D	06/08/04	19:04	02:08	Initial cal 25
EH2925-IC2925	H68435.D	06/08/04	19:40	02:44	Initial cal 80
EH2925-IC2925	H68436.D	06/08/04	20:16	03:20	Initial cal 5
EH2925-IC2925	H68437.D	06/08/04	20:51	03:55	Initial cal 2

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2930-DFTPP
Lab File ID: H68590.D
Instrument ID: GCMSH
Injection Date: 06/15/04
Injection Time: 11:43

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	70562	49.2	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
69	Mass 69 relative abundance	73537	51.2	Pass
70	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	70621	49.2	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	143560	100.0	Pass
199	5.0 - 9.0% of mass 198	9419	6.6	Pass
275	10.0 - 30.0% of mass 198	29973	20.9	Pass
365	1.0 - 100.0% of mass 198	2552	1.8	Pass
441	Present, but less than mass 443	2052	1.4 (12.8) [b]	Pass
442	40.0 - 100.0% of mass 198	83243	58.0	Pass
443	17.0 - 23.0% of mass 442	16033	11.2 (19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2930-CC2925	H68591.D	06/15/04	12:01	00:18	Continuing cal 25
ZZZZZZ	H68592.D	06/15/04	12:39	00:56	(unrelated sample)
ZZZZZZ	H68593.D	06/15/04	13:16	01:33	(unrelated sample)
ZZZZZZ	H68594.D	06/15/04	13:53	02:10	(unrelated sample)
OP17184-MB1	H68595.D	06/15/04	14:29	02:46	Method Blank
N69733-1	H68596.D	06/15/04	15:06	03:23	TP-6 8-8.5
N69733-13	H68597.D	06/15/04	15:43	04:00	TP-11 5.5-6
N69733-8	H68598.D	06/15/04	16:20	04:37	TP-12 5.5-6
OP17101-MB4	H68611.D	06/16/04	02:04	14:21	Method Blank
ZZZZZZ	H68613.D	06/16/04	03:17	15:34	(unrelated sample)
OP17178-MB1	H68614.D	06/16/04	03:53	16:10	Method Blank
OP17178-BS1	H68615.D	06/16/04	04:29	16:46	Blank Spike
ZZZZZZ	H68616.D	06/16/04	05:05	17:22	(unrelated sample)
N69488-1	H68617.D	06/16/04	05:41	17:58	(used for QC only; not part of job N69733)
OP17178-MS	H68618.D	06/16/04	06:17	18:34	Matrix Spike
OP17178-MSD	H68619.D	06/16/04	06:53	19:10	Matrix Spike Duplicate
ZZZZZZ	H68620.D	06/16/04	07:29	19:46	(unrelated sample)
ZZZZZZ	H68621.D	06/16/04	08:04	20:21	(unrelated sample)
ZZZZZZ	H68622.D	06/16/04	08:40	20:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2930-DFTPP	**Injection Date:**	06/15/04
Lab File ID:	H68590.D	**Injection Time:**	11:43
Instrument ID:	GCMSH		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	H68623.D	06/16/04	09:16	21:33	(unrelated sample)
ZZZZZZ	H68624.D	06/16/04	09:52	22:09	(unrelated sample)
ZZZZZZ	H68625.D	06/16/04	10:28	22:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2931-DFTPP	**Injection Date:**	06/16/04
Lab File ID:	H68626.D	**Injection Time:**	12:45
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	67756	48.1		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	71606	50.8		Pass
70	Less than 2.0% of mass 69	428	0.3	(0.6) [a]	Pass
127	40.0 - 60.0% of mass 198	67556	47.9		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	140987	100.0		Pass
199	5.0 - 9.0% of mass 198	9611	6.8		Pass
275	10.0 - 30.0% of mass 198	30483	21.6		Pass
365	1.0 - 100.0% of mass 198	2819	2.0		Pass
441	Present, but less than mass 443	3076	2.2	(17.6) [b]	Pass
442	40.0 - 100.0% of mass 198	91840	65.1		Pass
443	17.0 - 23.0% of mass 442	17439	12.4	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2931-CC2925	H68627.D	06/16/04	13:01	00:16	Continuing cal 50
ZZZZZZ	H68628.D	06/16/04	13:37	00:52	(unrelated sample)
OP17173-MB2	H68640.D	06/16/04	14:14	01:29	Method Blank
OP17173-BS2	H68641.D	06/16/04	14:50	02:05	Blank Spike
N69733-2	H68642.D	06/16/04	15:26	02:41	TP-6 9.5-10
ZZZZZZ	H68650.D	06/16/04	16:02	03:17	(unrelated sample)
N69733-4	H68643.D	06/16/04	16:39	03:54	TP-10 8-8.5
N69733-9	H68644.D	06/16/04	17:15	04:30	TP-12 8-8.5
ZZZZZZ	H68656.D	06/16/04	17:51	05:06	(unrelated sample)
N69733-14	H68645.D	06/16/04	18:27	05:42	TP-11 8-8.5
N69733-16	H68646.D	06/16/04	19:03	06:18	TP-13 1-1.5
N69733-18	H68647.D	06/16/04	19:39	06:54	TP-13 5.5-6
N69733-21	H68648.D	06/16/04	20:15	07:30	TP-14 1-1.5
N69733-23	H68649.D	06/16/04	20:51	08:06	TP-14 5.5-6
ZZZZZZ	H68629.D	06/16/04	21:27	08:42	(unrelated sample)
ZZZZZZ	H68630.D	06/16/04	22:03	09:18	(unrelated sample)
ZZZZZZ	H68631.D	06/16/04	22:39	09:54	(unrelated sample)
N68776-9	H68632.D	06/16/04	23:15	10:30	(used for QC only; not part of job N69733)
OP17087-MS	H68633.D	06/16/04	23:51	11:06	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2931-DFTPP
Lab File ID: H68626.D
Instrument ID: GCMSH
Injection Date: 06/16/04
Injection Time: 12:45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP17087-MSD	H68634.D	06/17/04	00:27	11:42	Matrix Spike Duplicate
ZZZZZZ	H68652.D	06/17/04	03:26	14:41	(unrelated sample)
ZZZZZZ	H68653.D	06/17/04	04:02	15:17	(unrelated sample)
ZZZZZZ	H68654.D	06/17/04	04:38	15:53	(unrelated sample)
ZZZZZZ	H68655.D	06/17/04	05:14	16:29	(unrelated sample)
ZZZZZZ	H68651.D	06/17/04	05:50	17:05	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2932-DFTPP	**Injection Date:**	06/17/04
Lab File ID:	H68657.D	**Injection Time:**	09:01
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	43721	49.6		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	46095	52.3		Pass
70	Less than 2.0% of mass 69	63	0.07	(0.14) [a]	Pass
127	40.0 - 60.0% of mass 198	43861	49.8		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	88115	100.0		Pass
199	5.0 - 9.0% of mass 198	6179	7.0		Pass
275	10.0 - 30.0% of mass 198	17919	20.3		Pass
365	1.0 - 100.0% of mass 198	1581	1.8		Pass
441	Present, but less than mass 443	7856	8.9	(77.2) [b]	Pass
442	40.0 - 100.0% of mass 198	50920	57.8		Pass
443	17.0 - 23.0% of mass 442	10176	11.5	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2932-CC2925	H68658.D	06/17/04	09:19	00:18	Continuing cal 25
N69733-23	H68659.D	06/17/04	10:01	01:00	TP-14 5.5-6
ZZZZZZ	H68660.D	06/17/04	10:37	01:36	(unrelated sample)
ZZZZZZ	H68661.D	06/17/04	11:14	02:13	(unrelated sample)
ZZZZZZ	H68662.D	06/17/04	11:50	02:49	(unrelated sample)
ZZZZZZ	H68663.D	06/17/04	12:26	03:25	(unrelated sample)
ZZZZZZ	H68664.D	06/17/04	13:02	04:01	(unrelated sample)
OP17143-MB1	H68665.D	06/17/04	13:39	04:38	Method Blank
OP17143-MS	H68667.D	06/17/04	14:53	05:52	Matrix Spike
OP17143-MSD	H68668.D	06/17/04	15:30	06:29	Matrix Spike Duplicate
OP17213-MB1	H68690.D	06/17/04	16:06	07:05	Method Blank
ZZZZZZ	H68691.D	06/17/04	16:43	07:42	(unrelated sample)
N69259-1	H68669.D	06/17/04	17:21	08:20	(used for QC only; not part of job N69733)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2933-DFTPP	**Injection Date:**	06/18/04
Lab File ID:	H68702.D	**Injection Time:**	16:05
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	68730	58.0		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	68983	58.2		Pass
70	Less than 2.0% of mass 69	98	0.08	(0.14) [a]	Pass
127	40.0 - 60.0% of mass 198	62146	52.4		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	118579	100.0		Pass
199	5.0 - 9.0% of mass 198	7595	6.4		Pass
275	10.0 - 30.0% of mass 198	22954	19.4		Pass
365	1.0 - 100.0% of mass 198	1940	1.6		Pass
441	Present, but less than mass 443	8735	7.4	(79.8) [b]	Pass
442	40.0 - 100.0% of mass 198	57019	48.1		Pass
443	17.0 - 23.0% of mass 442	10950	9.2	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2933-CC2925	H68703.D	06/18/04	16:22	00:17	Continuing cal 50
N69733-20	H68708.D	06/18/04	16:59	00:54	TP-13 9.5-10
N69733-25	H68709.D	06/18/04	17:36	01:31	TP-14 9.5-10
OP17197-MB1	H68714.D	06/18/04	18:13	02:08	Method Blank
OP17197-BS1	H68715.D	06/18/04	18:50	02:45	Blank Spike
N69762-1	H68718.D	06/18/04	19:30	03:25	(used for QC only; not part of job N69733)
OP17229-MB1	H68704.D	06/18/04	20:07	04:02	Method Blank
OP17229-BS1	H68705.D	06/18/04	20:43	04:38	Blank Spike
N69733-10	H68706.D	06/18/04	21:20	05:15	TP-12 10.5-11
N69733-15	H68707.D	06/18/04	21:57	05:52	TP-11 9.5-10
OP17197-MS	H68716.D	06/19/04	00:59	08:54	Matrix Spike
OP17197-MSD	H68717.D	06/19/04	01:36	09:31	Matrix Spike Duplicate
ZZZZZZ	H68719.D	06/19/04	02:12	10:07	(unrelated sample)
ZZZZZZ	H68720.D	06/19/04	02:49	10:44	(unrelated sample)
ZZZZZZ	H68721.D	06/19/04	03:25	11:20	(unrelated sample)
ZZZZZZ	H68722.D	06/19/04	04:01	11:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2934-DFTPP	**Injection Date:**	06/21/04
Lab File ID:	H68723.D	**Injection Time:**	09:55
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	68488	55.1	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
69	Mass 69 relative abundance	69161	55.6	Pass
70	Less than 2.0% of mass 69	245	0.2 (0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	66722	53.7	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	124304	100.0	Pass
199	5.0 - 9.0% of mass 198	8096	6.5	Pass
275	10.0 - 30.0% of mass 198	24347	19.6	Pass
365	1.0 - 100.0% of mass 198	1922	1.5	Pass
441	Present, but less than mass 443	9345	7.5 (77.4) [b]	Pass
442	40.0 - 100.0% of mass 198	63053	50.7	Pass
443	17.0 - 23.0% of mass 442	12070	9.7 (19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2934-CC2925	H68724.D	06/21/04	11:26	01:31	Continuing cal 25
ZZZZZZ	H68725.D	06/21/04	12:15	02:20	(unrelated sample)
ZZZZZZ	H68726.D	06/21/04	12:51	02:56	(unrelated sample)
ZZZZZZ	H68727.D	06/21/04	13:27	03:32	(unrelated sample)
ZZZZZZ	H68728.D	06/21/04	14:04	04:09	(unrelated sample)
OP17249-MB1	H68730.D	06/21/04	15:17	05:22	Method Blank
OP17249-BS1	H68731.D	06/21/04	15:53	05:58	Blank Spike
ZZZZZZ	H68732.D	06/21/04	16:29	06:34	(unrelated sample)
ZZZZZZ	H68733.D	06/21/04	17:06	07:11	(unrelated sample)
ZZZZZZ	H68734.D	06/21/04	17:42	07:47	(unrelated sample)
ZZZZZZ	H68735.D	06/21/04	18:19	08:24	(unrelated sample)
ZZZZZZ	H68744.D	06/21/04	19:32	09:37	(unrelated sample)
OP17229-MS	H68736.D	06/21/04	20:08	10:13	Matrix Spike
OP17229-MSD	H68737.D	06/21/04	20:45	10:50	Matrix Spike Duplicate
N70044-1	H68738.D	06/21/04	21:21	11:26	(used for QC only; not part of job N69733)
OP17210-MB1	H68745.D	06/22/04	02:10	16:15	Method Blank
ZZZZZZ	H68746.D	06/22/04	02:46	16:51	(unrelated sample)
ZZZZZZ	H68747.D	06/22/04	03:22	17:27	(unrelated sample)
ZZZZZZ	H68748.D	06/22/04	03:58	18:03	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2934-DFTPP	**Injection Date:**	06/21/04
Lab File ID:	H68723.D	**Injection Time:**	09:55
Instrument ID:	GCMSH		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	H68749.D	06/22/04	04:33	18:38	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2940-DFTPP
Lab File ID: H68868.D
Instrument ID: GCMSH
Injection Date: 06/29/04
Injection Time: 10:18

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	91912	42.0		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	95647	43.7		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	95560	43.7		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	218677	100.0		Pass
199	5.0 - 9.0% of mass 198	15509	7.1		Pass
275	10.0 - 30.0% of mass 198	43963	20.1		Pass
365	1.0 - 100.0% of mass 198	3416	1.6		Pass
441	Present, but less than mass 443	14949	6.8	(77.3) [b]	Pass
442	40.0 - 100.0% of mass 198	97693	44.7		Pass
443	17.0 - 23.0% of mass 442	19342	8.8	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2940-IC2940	H68869.D	06/29/04	10:50	00:32	Initial cal 2
EH2940-IC2940	H68875.D	06/29/04	11:26	01:08	Initial cal 100
EH2940-IC2940	H68870.D	06/29/04	12:02	01:44	Initial cal 5
EH2940-IC2940	H68871.D	06/29/04	12:38	02:20	Initial cal 10
EH2940-ICC2940	H68872.D	06/29/04	13:12	02:54	Initial cal 25
EH2940-IC2940	H68873.D	06/29/04	13:48	03:30	Initial cal 50
EH2940-IC2940	H68874.D	06/29/04	15:33	05:15	Initial cal 80

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EH2940-DFTPP	**Injection Date:**	06/29/04
Lab File ID:	H68877.D	**Injection Time:**	17:21
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	101009	42.0	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
69	Mass 69 relative abundance	103592	43.0	Pass
70	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	107503	44.7	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	240747	100.0	Pass
199	5.0 - 9.0% of mass 198	17446	7.2	Pass
275	10.0 - 30.0% of mass 198	44875	18.6	Pass
365	1.0 - 100.0% of mass 198	3559	1.5	Pass
441	Present, but less than mass 443	15495	6.4 (81.9) [b]	Pass
442	40.0 - 100.0% of mass 198	97693	40.6	Pass
443	17.0 - 23.0% of mass 442	18927	7.9 (19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH2940-CC2940	H68878.D	06/29/04	17:40	00:19	Continuing cal 25
OP17173-MB2	H68879.D	06/29/04	18:16	00:55	Method Blank
OP17143-BS1	H68880.D	06/29/04	19:27	02:06	Blank Spike
ZZZZZZ	H68883.D	06/29/04	20:03	02:42	(unrelated sample)
ZZZZZZ	H68884.D	06/29/04	20:39	03:18	(unrelated sample)
ZZZZZZ	H68881.D	06/29/04	21:14	03:53	(unrelated sample)
ZZZZZZ	H68882.D	06/29/04	21:50	04:29	(unrelated sample)
ZZZZZZ	H68885.D	06/29/04	22:26	05:05	(unrelated sample)
OP17314-MB1	H68886.D	06/29/04	23:37	06:16	Method Blank
ZZZZZZ	H68887.D	06/30/04	00:12	06:51	(unrelated sample)
ZZZZZZ	H68888.D	06/30/04	00:47	07:26	(unrelated sample)
ZZZZZZ	H68889.D	06/30/04	01:23	08:02	(unrelated sample)
ZZZZZZ	H68890.D	06/30/04	01:58	08:37	(unrelated sample)
ZZZZZZ	H68891.D	06/30/04	02:33	09:12	(unrelated sample)
ZZZZZZ	H68892.D	06/30/04	03:09	09:48	(unrelated sample)
ZZZZZZ	H68893.D	06/30/04	03:44	10:23	(unrelated sample)
ZZZZZZ	H68894.D	06/30/04	04:19	10:58	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EP314-DFTPP	**Injection Date:**	06/08/04
Lab File ID:	P07227.D	**Injection Time:**	14:48
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23430	48.0		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	19109	39.1		Pass
70	Less than 2.0% of mass 69	97	0.2	(0.51) [a]	Pass
127	40.0 - 60.0% of mass 198	25843	52.9		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	48861	100.0		Pass
199	5.0 - 9.0% of mass 198	3438	7.0		Pass
275	10.0 - 30.0% of mass 198	11302	23.1		Pass
365	1.0 - 100.0% of mass 198	1054	2.2		Pass
441	Present, but less than mass 443	5799	11.9	(75.0) [b]	Pass
442	40.0 - 100.0% of mass 198	40048	82.0		Pass
443	17.0 - 23.0% of mass 442	7733	15.8	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP314-ICC0314	P07228.D	06/08/04	15:05	00:17	Initial cal 50
EP314-IC0314	P07229.D	06/08/04	15:47	00:59	Initial cal 100
EP314-IC0314	P07230.D	06/08/04	16:24	01:36	Initial cal 2
EP314-IC0314	P07231.D	06/08/04	17:01	02:13	Initial cal 5
EP314-IC0314	P07232.D	06/08/04	17:38	02:50	Initial cal 10
EP314-IC0314	P07233.D	06/08/04	18:15	03:27	Initial cal 80
EP314-IC0314	P07234.D	06/08/04	18:52	04:04	Initial cal 25
OP17030-MB1	P07236.D	06/08/04	20:06	05:18	Method Blank
OP17030-BS1	P07237.D	06/08/04	20:43	05:55	Blank Spike
N68245-8	P07238.D	06/08/04	21:20	06:32	(used for QC only; not part of job N69733)
OP17030-MS	P07239.D	06/08/04	21:56	07:08	Matrix Spike
OP17030-MSD	P07240.D	06/08/04	22:33	07:45	Matrix Spike Duplicate
ZZZZZZ	P07241.D	06/08/04	23:10	08:22	(unrelated sample)
ZZZZZZ	P07242.D	06/08/04	23:46	08:58	(unrelated sample)
ZZZZZZ	P07243.D	06/09/04	00:23	09:35	(unrelated sample)
ZZZZZZ	P07244.D	06/09/04	00:59	10:11	(unrelated sample)
ZZZZZZ	P07245.D	06/09/04	01:36	10:48	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EP318-DFTPP	**Injection Date:**	06/15/04
Lab File ID:	P07372.D	**Injection Time:**	11:00
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	16827	52.7	Pass
68	Less than 2.0% of mass 69	41	0.13 (0.32) [a]	Pass
69	Mass 69 relative abundance	12705	39.8	Pass
70	Less than 2.0% of mass 69	67	0.21 (0.53) [a]	Pass
127	40.0 - 60.0% of mass 198	16952	53.1	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	31930	100.0	Pass
199	5.0 - 9.0% of mass 198	2217	6.9	Pass
275	10.0 - 30.0% of mass 198	7337	23.0	Pass
365	1.0 - 100.0% of mass 198	836	2.6	Pass
441	Present, but less than mass 443	3718	11.6 (76.2) [b]	Pass
442	40.0 - 100.0% of mass 198	25023	78.4	Pass
443	17.0 - 23.0% of mass 442	4881	15.3 (19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP318-CC0314	P07373.D	06/15/04	11:18	00:18	Continuing cal 25
ZZZZZZ	P07374.D	06/15/04	11:57	00:57	(unrelated sample)
OP17173-MB1	P07375.D	06/15/04	12:36	01:36	Method Blank
OP17173-BS1	P07376.D	06/15/04	13:15	02:15	Blank Spike
ZZZZZZ	P07377.D	06/15/04	13:55	02:55	(unrelated sample)
ZZZZZZ	P07392.D	06/15/04	14:34	03:34	(unrelated sample)
N69637-3	P07378.D	06/15/04	15:14	04:14	(used for QC only; not part of job N69733)
OP17173-MS	P07379.D	06/15/04	15:54	04:54	Matrix Spike
OP17173-MSD	P07380.D	06/15/04	16:33	05:33	Matrix Spike Duplicate
ZZZZZZ	P07381.D	06/15/04	17:13	06:13	(unrelated sample)
ZZZZZZ	P07382.D	06/15/04	17:53	06:53	(unrelated sample)
ZZZZZZ	P07383.D	06/15/04	18:32	07:32	(unrelated sample)
ZZZZZZ	P07384.D	06/15/04	19:12	08:12	(unrelated sample)
ZZZZZZ	P07385.D	06/15/04	19:52	08:52	(unrelated sample)
ZZZZZZ	P07386.D	06/15/04	20:31	09:31	(unrelated sample)
ZZZZZZ	P07387.D	06/15/04	21:10	10:10	(unrelated sample)
ZZZZZZ	P07388.D	06/15/04	21:49	10:49	(unrelated sample)
ZZZZZZ	P07389.D	06/15/04	22:28	11:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	ER1291-DFTPP	**Injection Date:**	07/07/04
Lab File ID:	R39330.D	**Injection Time:**	12:18
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37456	38.7		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	44560	46.0		Pass
70	Less than 2.0% of mass 69	65	0.07	(0.15) [a]	Pass
127	40.0 - 60.0% of mass 198	47491	49.0		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	96907	100.0		Pass
199	5.0 - 9.0% of mass 198	6867	7.1		Pass
275	10.0 - 30.0% of mass 198	24976	25.8		Pass
365	1.0 - 100.0% of mass 198	2719	2.8		Pass
441	Present, but less than mass 443	14552	15.0	(74.2) [b]	Pass
442	40.0 - 100.0% of mass 198	96165	99.2		Pass
443	17.0 - 23.0% of mass 442	19621	20.2	(20.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER1291-IC1291	R39337.D	07/07/04	12:33	00:15	Initial cal 2
ER1291-ICC1291	R39331.D	07/07/04	13:09	00:51	Initial cal 50
ER1291-IC1291	R39332.D	07/07/04	13:45	01:27	Initial cal 100
ER1291-IC1291	R39333.D	07/07/04	14:21	02:03	Initial cal 80
ER1291-IC1291	R39334.D	07/07/04	14:58	02:40	Initial cal 25
ER1291-IC1291	R39335.D	07/07/04	15:34	03:16	Initial cal 10
ER1291-IC1291	R39336.D	07/07/04	16:11	03:53	Initial cal 5
ZZZZZZ	R39351.D	07/07/04	17:24	05:06	(unrelated sample)
OP17259-LB8A	R39339.D	07/07/04	18:00	05:42	Leachate Blank
OP17259-LS5A	R39340.D	07/07/04	18:36	06:18	Leachate Spike
ZZZZZZ	R39341.D	07/07/04	19:12	06:54	(unrelated sample)
ZZZZZZ	R39342.D	07/07/04	19:49	07:31	(unrelated sample)
ZZZZZZ	R39343.D	07/07/04	20:25	08:07	(unrelated sample)
ZZZZZZ	R39344.D	07/07/04	21:02	08:44	(unrelated sample)
ZZZZZZ	R39345.D	07/07/04	21:38	09:20	(unrelated sample)
ZZZZZZ	R39346.D	07/07/04	22:14	09:56	(unrelated sample)
ZZZZZZ	R39347.D	07/07/04	22:50	10:32	(unrelated sample)
ZZZZZZ	R39348.D	07/07/04	23:26	11:08	(unrelated sample)
ZZZZZZ	R39349.D	07/08/04	00:02	11:44	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: ER1292-DFTPP
Lab File ID: R39352.D
Instrument ID: GCMSR
Injection Date: 07/08/04
Injection Time: 12:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	32580	37.8		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	37365	43.3		Pass
70	Less than 2.0% of mass 69	235	0.27	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	42186	48.9		Pass
197	Less than 1.0% of mass 198	284	0.33		Pass
198	Base peak, 100% relative abundance	86267	100.0		Pass
199	5.0 - 9.0% of mass 198	6201	7.2		Pass
275	10.0 - 30.0% of mass 198	20133	23.3		Pass
365	1.0 - 100.0% of mass 198	2200	2.6		Pass
441	Present, but less than mass 443	10859	12.6	(79.7) [b]	Pass
442	40.0 - 100.0% of mass 198	70416	81.6		Pass
443	17.0 - 23.0% of mass 442	13622	15.8	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER1292-CC1291	R39353.D	07/08/04	13:09	00:16	Continuing cal 25
OP17184-BS1	R39355.D	07/08/04	14:22	01:29	Blank Spike
N69692-2	R39356.D	07/08/04	14:58	02:05	(used for QC only; not part of job N69733)
OP17184-MS	R39357.D	07/08/04	15:34	02:41	Matrix Spike
OP17184-MSD	R39358.D	07/08/04	16:10	03:17	Matrix Spike Duplicate
ZZZZZZ	R39359.D	07/08/04	16:46	03:53	(unrelated sample)
ZZZZZZ	R39360.D	07/08/04	17:22	04:29	(unrelated sample)
ZZZZZZ	R39361.D	07/08/04	17:58	05:05	(unrelated sample)
ZZZZZZ	R39362.D	07/08/04	18:34	05:41	(unrelated sample)
ZZZZZZ	R39363.D	07/08/04	19:11	06:18	(unrelated sample)
ZZZZZZ	R39364.D	07/08/04	19:47	06:54	(unrelated sample)
ZZZZZZ	R39365.D	07/08/04	20:24	07:31	(unrelated sample)
ZZZZZZ	R39366.D	07/08/04	21:00	08:07	(unrelated sample)
ZZZZZZ	R39367.D	07/08/04	21:37	08:44	(unrelated sample)
ZZZZZZ	R39368.D	07/08/04	22:13	09:20	(unrelated sample)
ZZZZZZ	R39369.D	07/08/04	22:49	09:56	(unrelated sample)
ZZZZZZ	R39370.D	07/08/04	23:26	10:33	(unrelated sample)
ZZZZZZ	R39371.D	07/09/04	00:02	11:09	(unrelated sample)
ZZZZZZ	R39372.D	07/09/04	00:38	11:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	ER1293-DFTPP	**Injection Date:**	07/09/04
Lab File ID:	R39373.D	**Injection Time:**	11:33
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35106	36.2		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	40592	41.8		Pass
70	Less than 2.0% of mass 69	317	0.33	(0.78) [a]	Pass
127	40.0 - 60.0% of mass 198	47733	49.2		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	97019	100.0		Pass
199	5.0 - 9.0% of mass 198	6718	6.9		Pass
275	10.0 - 30.0% of mass 198	22528	23.2		Pass
365	1.0 - 100.0% of mass 198	2378	2.5		Pass
441	Present, but less than mass 443	12063	12.4	(76.6) [b]	Pass
442	40.0 - 100.0% of mass 198	79957	82.4		Pass
443	17.0 - 23.0% of mass 442	15745	16.2	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER1293-CC1291	R39374.D	07/09/04	11:48	00:15	Continuing cal 50
OP17236-MB2	R39376.D	07/09/04	13:00	01:27	Method Blank
OP17236-BS2	R39377.D	07/09/04	13:36	02:03	Blank Spike
ZZZZZZ	R39378.D	07/09/04	14:12	02:39	(unrelated sample)
ZZZZZZ	R39380.D	07/09/04	15:24	03:51	(unrelated sample)
ZZZZZZ	R39381.D	07/09/04	16:00	04:27	(unrelated sample)
ZZZZZZ	R39382.D	07/09/04	16:36	05:03	(unrelated sample)
OP17235-MB1	R39383.D	07/09/04	17:12	05:39	Method Blank
OP17235-BS1	R39384.D	07/09/04	17:48	06:15	Blank Spike
ZZZZZZ	R39385.D	07/09/04	18:24	06:51	(unrelated sample)
N70030-25	R39386.D	07/09/04	19:01	07:28	(used for QC only; not part of job N69733)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	ER1293-DFTPP	**Injection Date:**	07/10/04
Lab File ID:	R39415.D	**Injection Time:**	13:43
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29770	33.6		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	35648	40.2		Pass
70	Less than 2.0% of mass 69	236	0.27	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	41448	46.7		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	88733	100.0		Pass
199	5.0 - 9.0% of mass 198	6095	6.9		Pass
275	10.0 - 30.0% of mass 198	21821	24.6		Pass
365	1.0 - 100.0% of mass 198	2118	2.4		Pass
441	Present, but less than mass 443	11887	13.4	(76.9) [b]	Pass
442	40.0 - 100.0% of mass 198	80741	91.0		Pass
443	17.0 - 23.0% of mass 442	15464	17.4	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER1293-CC1291	R39416.D	07/10/04	13:59	00:16	Continuing cal 50
ZZZZZZ	R39417.D	07/10/04	14:35	00:52	(unrelated sample)
OP17235-MS	R39423.D	07/10/04	16:23	02:40	Matrix Spike
OP17235-MSD	R39424.D	07/10/04	16:59	03:16	Matrix Spike Duplicate
ZZZZZZ	R39427.D	07/10/04	18:47	05:04	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EZ274-DFTPP	**Injection Date:**	05/03/04
Lab File ID:	Z06210.D	**Injection Time:**	12:27
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	21231	48.4	Pass
68	Less than 2.0% of mass 69	258	0.59 (1.3) [a]	Pass
69	Mass 69 relative abundance	19518	44.5	Pass
70	Less than 2.0% of mass 69	133	0.3 (0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	25109	57.2	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	43901	100.0	Pass
199	5.0 - 9.0% of mass 198	3064	7.0	Pass
275	10.0 - 30.0% of mass 198	8438	19.2	Pass
365	1.0 - 100.0% of mass 198	1093	2.5	Pass
441	Present, but less than mass 443	4668	10.6 (77.7) [b]	Pass
442	40.0 - 100.0% of mass 198	30090	68.5	Pass
443	17.0 - 23.0% of mass 442	6009	13.7 (20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ274-IC274	Z06211.D	05/03/04	14:09	01:42	Initial cal 2
EZ274-IC274	Z06212.D	05/03/04	14:45	02:18	Initial cal 5
EZ274-IC274	Z06213.D	05/03/04	15:20	02:53	Initial cal 10
EZ274-ICC274	Z06214.D	05/03/04	15:54	03:27	Initial cal 25
EZ274-IC274	Z06215.D	05/03/04	16:29	04:02	Initial cal 50
EZ274-IC274	Z06216.D	05/03/04	17:04	04:37	Initial cal 80
EZ274-IC274	Z06217.D	05/03/04	17:39	05:12	Initial cal 100

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EZ301-DFTPP	**Injection Date:**	06/15/04
Lab File ID:	Z06929.D	**Injection Time:**	11:54
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	14522	40.1	Pass
68	Less than 2.0% of mass 69	65	0.18 (0.45) [a]	Pass
69	Mass 69 relative abundance	14522	40.1	Pass
70	Less than 2.0% of mass 69	39	0.11 (0.27) [a]	Pass
127	40.0 - 60.0% of mass 198	19389	53.6	Pass
197	Less than 1.0% of mass 198	96	0.27	Pass
198	Base peak, 100% relative abundance	36184	100.0	Pass
199	5.0 - 9.0% of mass 198	2466	6.8	Pass
275	10.0 - 30.0% of mass 198	7394	20.4	Pass
365	1.0 - 100.0% of mass 198	933	2.6	Pass
441	Present, but less than mass 443	3501	9.7 (76.0) [b]	Pass
442	40.0 - 100.0% of mass 198	24407	67.5	Pass
443	17.0 - 23.0% of mass 442	4604	12.7 (18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ301-CC274	Z06930.D	06/15/04	12:09	00:15	Continuing cal 50
ZZZZZZ	Z06931.D	06/15/04	12:50	00:56	(unrelated sample)
ZZZZZZ	Z06932.D	06/15/04	13:27	01:33	(unrelated sample)
ZZZZZZ	Z06933.D	06/15/04	14:04	02:10	(unrelated sample)
ZZZZZZ	Z06934.D	06/15/04	14:40	02:46	(unrelated sample)
ZZZZZZ	Z06935.D	06/15/04	15:18	03:24	(unrelated sample)
N69733-3	Z06942.D	06/15/04	15:55	04:01	TP-10 5.5-6
N69733-6	Z06943.D	06/15/04	16:32	04:38	TP-12 1-1.5
N69733-11	Z06944.D	06/15/04	17:09	05:15	TP-11 1-1.5
N69733-3	Z06945.D	06/15/04	17:47	05:53	TP-10 5.5-6
ZZZZZZ	Z06936.D	06/15/04	18:24	06:30	(unrelated sample)
ZZZZZZ	Z06937.D	06/15/04	19:02	07:08	(unrelated sample)
ZZZZZZ	Z06938.D	06/15/04	19:39	07:45	(unrelated sample)
ZZZZZZ	Z06939.D	06/15/04	20:17	08:23	(unrelated sample)
ZZZZZZ	Z06940.D	06/15/04	20:54	09:00	(unrelated sample)
ZZZZZZ	Z06941.D	06/15/04	21:30	09:36	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample:	EZ305-DFTPP	**Injection Date:**	06/21/04
Lab File ID:	Z07006.D	**Injection Time:**	14:38
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	16960	45.3		Pass
68	Less than 2.0% of mass 69	98	0.26	(0.6) [a]	Pass
69	Mass 69 relative abundance	16359	43.7		Pass
70	Less than 2.0% of mass 69	70	0.19	(0.43) [a]	Pass
127	40.0 - 60.0% of mass 198	20684	55.3		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	37402	100.0		Pass
199	5.0 - 9.0% of mass 198	2743	7.3		Pass
275	10.0 - 30.0% of mass 198	7711	20.6		Pass
365	1.0 - 100.0% of mass 198	1011	2.7		Pass
441	Present, but less than mass 443	3653	9.8	(75.8) [b]	Pass
442	40.0 - 100.0% of mass 198	25037	66.9		Pass
443	17.0 - 23.0% of mass 442	4818	12.9	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ305-CC274	Z07007.D	06/21/04	14:52	00:14	Continuing cal 50
ZZZZZZ	Z07008.D	06/21/04	15:41	01:03	(unrelated sample)
ZZZZZZ	Z07009.D	06/21/04	16:17	01:39	(unrelated sample)
OP17249-MB1	Z07010.D	06/21/04	16:53	02:15	Method Blank
ZZZZZZ	Z07011.D	06/21/04	17:28	02:50	(unrelated sample)
ZZZZZZ	Z07012.D	06/21/04	18:05	03:27	(unrelated sample)
OP17167-MB1	Z07013.D	06/21/04	18:41	04:03	Method Blank
ZZZZZZ	Z07014.D	06/21/04	19:17	04:39	(unrelated sample)
ZZZZZZ	Z07015.D	06/21/04	19:53	05:15	(unrelated sample)
ZZZZZZ	Z07021.D	06/21/04	20:37	05:59	(unrelated sample)
ZZZZZZ	Z07016.D	06/21/04	21:13	06:35	(unrelated sample)
ZZZZZZ	Z07017.D	06/21/04	21:49	07:11	(unrelated sample)
ZZZZZZ	Z07018.D	06/21/04	22:25	07:47	(unrelated sample)
ZZZZZZ	Z07019.D	06/21/04	23:01	08:23	(unrelated sample)
OP17235-MB1	Z07022.D	06/22/04	00:14	09:36	Method Blank
N69733-31	Z07023.D	06/22/04	00:50	10:12	DUP
ZZZZZZ	Z07024.D	06/22/04	01:27	10:49	(unrelated sample)
ZZZZZZ	Z07025.D	06/22/04	02:03	11:25	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EH2930-CC2925	**Injection Date:**	06/15/04
Lab File ID:	H68591.D	**Injection Time:**	12:01
Instrument ID:	GCMSH	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	119691	8.13	464568	10.25	209066	13.13	284968	15.51	271668	20.46	192124	22.86
Upper Limit [a]	239382	8.63	929136	10.75	418132	13.63	569936	16.01	543336	20.96	384248	23.36
Lower Limit [b]	59846	7.63	232284	9.75	104533	12.63	142484	15.01	135834	19.96	96062	22.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	149258	8.14	549321	10.25	265681	13.13	372149	15.51	344435	20.45	220673	22.86
ZZZZZZ	148762	8.14	557454	10.25	266435	13.13	387322	15.51	339379	20.45	220184	22.86
ZZZZZZ	148162	8.14	555275	10.25	264889	13.13	364453	15.51	339147	20.45	216952	22.87
OP17184-MB1	148092	8.14	527667	10.25	268625	13.13	377564	15.52	344621	20.46	218795	22.86
N69733-1	145608	8.15	560151	10.25	257835	13.13	358864	15.52	272029	20.45	213212	22.87
N69733-13	151703	8.14	592749	10.25	274616	13.13	374414	15.51	276516	20.46	210778	22.88
N69733-8	145947	8.15	560656	10.25	249632	13.13	328449	15.52	241396	20.49	190657	22.94
OP17101-MB4	154984	8.15	565458	10.26	275144	13.15	382968	15.54	377423	20.58	245282	23.32
ZZZZZZ	174700	8.14	640538	10.25	307894	13.14	422898	15.54	407154	20.52	251337	23.07
OP17178-MB1	202471	8.15	758980	10.26	364436	13.14	494340	15.54	439882	20.50	263755	23.02
OP17178-BS1	192831	8.15	772595	10.26	338434	13.15	469736	15.54	425816	20.50	285692	22.95
ZZZZZZ	177969	8.14	646279	10.25	317700	13.14	462849	15.54	461492	20.48	286795	22.91
N69488-1	174280	8.14	630796	10.25	309795	13.14	445870	15.53	427979	20.48	273967	22.89
OP17178-MS	188762	8.15	759356	10.26	323162	13.14	459104	15.53	447929	20.49	307965	22.90
OP17178-MSD	186357	8.14	722590	10.26	319354	13.14	445150	15.53	455087	20.48	306068	22.89
ZZZZZZ	189067	8.13	730744	10.25	346086	13.13	465706	15.52	461409	20.47	267709	22.88
ZZZZZZ	162202	8.14	577036	10.25	285113	13.13	413989	15.52	411549	20.45	262893	22.87
ZZZZZZ	165857	8.14	594822	10.25	290582	13.13	403115	15.52	391734	20.45	249814	22.87
ZZZZZZ	183708	8.14	673932	10.24	315027	13.13	438825	15.51	429622	20.46	274991	22.86
ZZZZZZ	184012	8.13	709641	10.24	326672	13.13	425958	15.51	399301	20.46	274446	22.87
ZZZZZZ	150598	8.13	588317	10.24	268752	13.12	370922	15.51	331789	20.46	229859	22.86

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EH2931-CC2925	**Injection Date:**	06/16/04
Lab File ID:	H68627.D	**Injection Time:**	13:01
Instrument ID:	GCMSH	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	169513	8.13	598995	10.23	296309	13.11	421766	15.50	368872	20.44	238549	22.84
Upper Limit [a]	339026	8.63	1197990	10.73	592618	13.61	843532	16.00	737744	20.94	477098	23.34
Lower Limit [b]	84757	7.63	299498	9.73	148155	12.61	210883	15.00	184436	19.94	119275	22.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	141364	8.12	492485	10.22	257707	13.10	360512	15.48	332892	20.42	208083	22.82
OP17173-MB2	134955	8.13	521856	10.23	240848	13.10	338855	15.49	320546	20.42	204266	22.83
OP17173-BS2	136119	8.12	510170	10.22	242700	13.10	346122	15.50	316124	20.43	200641	22.84
N69733-2	138877	8.12	481648	10.22	244542	13.10	346325	15.50	269222	20.43	182952	22.84
ZZZZZZ	129861	8.12	480690	10.22	248090	13.10	334212	15.50	244515	20.44	189922	22.88
N69733-4	132790	8.13	479281	10.23	243626	13.11	343308	15.49	258135	20.42	171732	22.83
N69733-9	137346	8.12	511269	10.22	252399	13.10	333847	15.50	238979	20.44	179186	22.86
ZZZZZZ	165058	8.13	593326	10.23	298958	13.11	402505	15.49	287328	20.44	223185	22.86
N69733-14	129914	8.13	473500	10.23	242974	13.11	329655	15.49	242209	20.44	176616	22.84
N69733-16	127942	8.13	463066	10.23	226204	13.11	296210	15.50	216061	20.46	151931	22.91
N69733-18	144440	8.12	524079	10.22	257885	13.10	346295	15.50	248251	20.44	200836	22.86
N69733-21	129174	8.19	498892	10.26	236085	13.10	308804	15.50	224796	20.45	181490	22.87
N69733-23	137722	8.13	508900	10.23	227780	13.11	296032	15.51	219751	20.49	113886*	22.97
ZZZZZZ	166585	8.13	596054	10.23	290127	13.11	386591	15.49	282032	20.43	216893	22.84
ZZZZZZ	136153	8.13	475477	10.23	246734	13.11	338433	15.49	275474	20.42	210551	22.83
ZZZZZZ	147849	8.12	545464	10.22	268599	13.10	365920	15.50	292957	20.43	218931	22.84
N68776-9	140562	8.12	520818	10.22	256493	13.10	351570	15.50	285974	20.43	207658	22.84
OP17087-MS	148346	8.13	508960	10.23	264002	13.11	362271	15.50	294066	20.44	220430	22.84
OP17087-MSD	150065	8.13	548649	10.23	267577	13.11	373144	15.50	303625	20.44	226531	22.84
ZZZZZZ	145360	8.13	533220	10.23	254687	13.11	346532	15.50	326346	20.44	214087	22.85
ZZZZZZ	150859	8.12	573508	10.24	264461	13.12	371315	15.50	331859	20.44	236012	22.85
ZZZZZZ	155652	8.12	590825	10.23	268398	13.11	372691	15.50	352863	20.44	236431	22.85
ZZZZZZ	143742	8.12	553220	10.23	256924	13.11	365179	15.50	350291	20.43	227740	22.85
ZZZZZZ	172101	8.12	651775	10.24	303809	13.11	428263	15.50	376183	20.44	260564	22.86

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EH2932-CC2925	**Injection Date:**	06/17/04
Lab File ID:	H68658.D	**Injection Time:**	09:19
Instrument ID:	GCMSH	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	157293	8.11	628406	10.23	280652	13.11	392663	15.50	357108	20.43	231871	22.84
Upper Limit [a]	314586	8.61	1256812	10.73	561304	13.61	785326	16.00	714216	20.93	463742	23.34
Lower Limit [b]	78647	7.61	314203	9.73	140326	12.61	196332	15.00	178554	19.93	115936	22.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
N69733-23	119911	8.11	472951	10.22	207779	13.10	280651	15.50	219950	20.45	176483	22.93
ZZZZZZ	137216	8.13	438664	10.25	181737	13.15	243767	15.54	242361	20.45	199220	22.85
ZZZZZZ	127995	8.12	362123	10.26	149330	13.18	206234	15.56	236055	20.45	196726	22.86
ZZZZZZ	138260	8.12	495850	10.22	225697	13.11	290284	15.50	248180	20.50	127681	22.98
ZZZZZZ	148230	8.12	526436	10.23	241210	13.11	291331	15.52	263882	20.61	71580*	23.05
ZZZZZZ	118145	8.12	439369	10.24	190932	13.13	241576	15.54	229857	20.58	89360*	23.02
OP17143-MB1	129790	8.12	489938	10.24	222804	13.11	300309	15.50	262585	20.44	214714	22.86
OP17143-MS	123310	8.13	460883	10.25	247145	13.13	274454	15.52	259903	20.46	205817	22.88
OP17143-MSD	142200	8.14	513943	10.25	287182	13.14	303620	15.52	284373	20.47	227807	22.89
OP17213-MB1	143521	8.13	497185	10.23	246342	13.11	349478	15.50	266439	20.44	207463	22.85
ZZZZZZ	147799	8.12	559343	10.23	249820	13.11	338341	15.50	272456	20.44	220260	22.86
N69259-1	121823	8.13	453576	10.25	187730	13.13	273183	15.52	253966	20.45	200802	22.86

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EH2933-CC2925	**Injection Date:**	06/18/04
Lab File ID:	H68703.D	**Injection Time:**	16:22
Instrument ID:	GCMSH	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	154981	8.12	602843	10.24	273276	13.11	393295	15.51	337494	20.44	216018	22.85
Upper Limit [a]	309962	8.62	1205686	10.74	546552	13.61	786590	16.01	674988	20.94	432036	23.35
Lower Limit [b]	77491	7.62	301422	9.74	136638	12.61	196648	15.01	168747	19.94	108009	22.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
N69733-20	124430	8.13	443460	10.23	228107	13.11	322179	15.49	238227	20.44	171947	22.85
N69733-25	127005	8.13	463046	10.23	229056	13.11	337969	15.50	279951	20.43	176579	22.84
OP17197-MB1	116752	8.12	414028	10.23	211785	13.11	299437	15.50	256067	20.43	164140	22.84
OP17197-BS1	159981	8.13	635973	10.24	292513	13.12	413858	15.50	349390	20.44	213456	22.84
N69762-1	117932	8.12	434475	10.22	214721	13.11	289244	15.50	223357	20.44	165799	22.85
OP17229-MB1	112998	8.12	403530	10.24	205667	13.10	297150	15.50	260099	20.43	158340	22.84
OP17229-BS1	116996	8.12	477467	10.23	213439	13.11	300312	15.50	273433	20.43	167221	22.84
N69733-10	123932	8.12	470219	10.24	225448	13.10	319932	15.50	263632	20.43	160264	22.84
N69733-15	119149	8.13	402788	10.23	214693	13.11	313292	15.50	237213	20.43	159399	22.84
OP17197-MS	157388	8.12	596728	10.23	276295	13.11	370586	15.51	274423	20.45	193854	22.86
OP17197-MSD	144066	8.12	555577	10.23	260246	13.11	339993	15.51	247637	20.45	175596	22.86
ZZZZZZ	135989	8.13	518364	10.24	250590	13.12	361691	15.50	277442	20.43	182498	22.84
ZZZZZZ	109191	8.12	396794	10.23	200119	13.11	281474	15.50	233879	20.43	156683	22.84
ZZZZZZ	116336	8.13	455457	10.24	189783	13.13	254700	15.52	217670	20.46	164878	22.87
ZZZZZZ	151888	8.13	571205	10.23	282770	13.11	405029	15.50	274302	20.44	188091	22.84

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EH2934-CC2925	**Injection Date:**	06/21/04
Lab File ID:	H68724.D	**Injection Time:**	11:26
Instrument ID:	GCMSH	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	148422	8.11	589822	10.22	255489	13.10	352591	15.48	316319	20.41	196428	22.81
Upper Limit [a]	296844	8.61	1179644	10.72	510978	13.60	705182	15.98	632638	20.91	392856	23.31
Lower Limit [b]	74211	7.61	294911	9.72	127745	12.60	176296	14.98	158160	19.91	98214	22.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	146829	8.11	531006	10.23	247080	13.10	316508	15.50	254323	20.44	223101	22.87
ZZZZZZ	150159	8.11	491859	10.24	251761	13.11	321883	15.50	252922	20.45	211898	22.86
ZZZZZZ	123453	8.11	488213	10.22	215788	13.10	291674	15.48	220579	20.41	174133	22.82
ZZZZZZ	146142	8.11	561251	10.21	256232	13.09	337303	15.49	245647	20.42	194791	22.83
OP17249-MB1	134407	8.11	516987	10.21	234364	13.09	331010	15.47	241641	20.41	169608	22.81
OP17249-BS1	131249	8.12	543373	10.22	240046	13.10	328281	15.48	268643	20.42	180521	22.82
ZZZZZZ	132557	8.12	512966	10.22	239439	13.10	328690	15.48	255924	20.41	180226	22.82
ZZZZZZ	127143	8.12	501180	10.22	231185	13.10	313659	15.48	242442	20.41	169355	22.82
ZZZZZZ	131292	8.11	512060	10.21	234128	13.09	338874	15.47	256018	20.41	172396	22.81
ZZZZZZ	122136	8.11	500632	10.21	230412	13.09	316822	15.49	253518	20.41	172641	22.81
ZZZZZZ	151788	8.11	597957	10.22	272252	13.09	358268	15.49	279582	20.42	213126	22.82
OP17229-MS	123188	8.11	505113	10.22	216528	13.09	297240	15.48	215465	20.42	160401	22.82
OP17229-MSD	124864	8.11	503489	10.22	223918	13.09	306896	15.49	219587	20.42	162247	22.83
N70044-1	131144	8.11	502852	10.21	236593	13.09	316748	15.47	230332	20.41	168310	22.81
OP17210-MB1	136062	8.12	514309	10.22	247921	13.10	335255	15.48	288969	20.41	178067	22.82
ZZZZZZ	149207	8.12	563421	10.22	265608	13.10	355745	15.48	308658	20.41	194897	22.82
ZZZZZZ	121034	8.12	443168	10.22	212052	13.10	289387	15.48	250705	20.41	160255	22.82
ZZZZZZ	160447	8.11	597181	10.22	283772	13.09	378131	15.49	320642	20.42	204232	22.83
ZZZZZZ	151711	8.12	567331	10.22	266108	13.10	362620	15.48	312739	20.41	189165	22.82

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EH2940-CC2940	**Injection Date:**	06/29/04
Lab File ID:	H68878.D	**Injection Time:**	17:40
Instrument ID:	GCMSH	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	291663	8.06	1104946	10.17	519822	13.05	760282	15.44	660266	20.37	424071	22.76
Upper Limit [a]	583326	8.56	2209892	10.67	1039644	13.55	1520564	15.94	1320532	20.87	848142	23.26
Lower Limit [b]	145832	7.56	552473	9.67	259911	12.55	380141	14.94	330133	19.87	212036	22.26

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP17173-MB2	256843	8.06	1048637	10.17	469377	13.04	737406	15.44	609860	20.36	385595	22.75
OP17143-BS1	307655	8.06	1229857	10.17	566199	13.05	872233	15.44	730748	20.38	443859	22.76
ZZZZZZ	274709	8.07	1121150	10.17	504829	13.05	784451	15.43	628154	20.37	391889	22.76
ZZZZZZ	269587	8.07	1116932	10.17	509365	13.05	778164	15.43	598461	20.37	408954	22.77
ZZZZZZ	259416	8.06	1079299	10.17	491067	13.05	723032	15.43	626905	20.37	434688	22.77
ZZZZZZ	255978	8.07	1020994	10.17	493711	13.05	699251	15.46	454657	20.57	116589*	22.89
ZZZZZZ	345803	8.06	1340012	10.17	591338	13.04	882558	15.43	731623	20.37	501515	22.76
OP17314-MB1	307398	8.07	1185135	10.17	504317	13.05	775629	15.43	610218	20.37	413510	22.76
ZZZZZZ	290246	8.06	1166608	10.17	514863	13.05	737518	15.44	657905	20.37	464115	22.77
ZZZZZZ	300685	8.06	1211737	10.17	527712	13.05	764932	15.44	645157	20.37	464731	22.77
ZZZZZZ	307930	8.07	1218068	10.17	535060	13.04	819755	15.43	690766	20.37	488379	22.76
ZZZZZZ	299003	8.06	1192074	10.16	523885	13.04	769095	15.44	698661	20.37	503342	22.77
ZZZZZZ	259226	8.06	1038404	10.16	456415	13.04	673565	15.43	589232	20.36	425551	22.77
ZZZZZZ	292962	8.07	1175433	10.17	508912	13.05	722782	15.44	632540	20.38	472219	22.78
ZZZZZZ	283179	8.07	1129150	10.17	492156	13.05	727844	15.43	677819	20.38	502977	22.78
ZZZZZZ	300133	8.06	1189107	10.16	518754	13.04	765852	15.44	629661	20.37	464826	22.79

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EP318-CC0314	**Injection Date:**	06/15/04
Lab File ID:	P07373.D	**Injection Time:**	11:18
Instrument ID:	GCMSP	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	129392	5.92	514012	8.51	267626	12.56	428501	16.08	423629	21.68	264235	23.95
Upper Limit [a]	258784	6.42	1028024	9.01	535252	13.06	857002	16.58	847258	22.18	528470	24.45
Lower Limit [b]	64696	5.42	257006	8.01	133813	12.06	214251	15.58	211815	21.18	132118	23.45

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	114178	5.92	462501	8.51	242851	12.56	384225	16.08	359890	21.68	236706	23.95
OP17173-MB1	122990	5.92	488823	8.51	251756	12.56	403741	16.08	401552	21.68	256732	23.95
OP17173-BS1	121570	5.92	480636	8.51	245820	12.56	393991	16.08	400158	21.68	254539	23.95
ZZZZZZ	121745	5.92	485055	8.51	252211	12.56	398598	16.08	404053	21.68	256426	23.95
ZZZZZZ	117003	5.92	470620	8.51	239920	12.56	385082	16.08	367996	21.68	244762	23.95
N69637-3	121732	5.92	481352	8.51	249557	12.56	400585	16.08	402754	21.67	258718	23.95
OP17173-MS	128401	5.92	509097	8.51	263763	12.56	422872	16.08	425791	21.68	271578	23.95
OP17173-MSD	121120	5.92	481720	8.51	248032	12.56	403411	16.08	412063	21.68	265861	23.95
ZZZZZZ	118130	5.92	470606	8.51	243156	12.56	394975	16.08	391976	21.68	253870	23.95
ZZZZZZ	124290	5.92	498682	8.51	259133	12.56	417278	16.08	407747	21.68	274121	23.95
ZZZZZZ	119207	5.92	477313	8.51	247933	12.56	395510	16.08	382780	21.69	261055	23.96
ZZZZZZ	119189	5.92	477828	8.51	247621	12.56	396256	16.08	370286	21.69	264665	23.97
ZZZZZZ	123255	5.92	485732	8.51	250117	12.56	404484	16.08	388447	21.68	261344	23.96
ZZZZZZ	128496	5.92	514233	8.51	265586	12.56	432683	16.08	416781	21.68	275806	23.96
ZZZZZZ	132074	5.92	529200	8.51	278820	12.56	446547	16.08	441009	21.68	293724	23.96
ZZZZZZ	262952*	5.92	1042453*	8.51	536758*	12.57	862942*	16.09	829658	21.69	558436*	23.97
ZZZZZZ	130910	5.92	520822	8.51	268893	12.57	432457	16.09	430136	21.69	283756	23.96

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	ER1292-CC1291	**Injection Date:**	07/08/04
Lab File ID:	R39353.D	**Injection Time:**	13:09
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	320124	4.39	1363093	5.95	702858	9.15	1188507	12.50	1350244	19.05	884771	22.35
Upper Limit [a]	640248	4.89	2726186	6.45	1405716	9.65	2377014	13.00	2700488	19.55	1769542	22.85
Lower Limit [b]	160062	3.89	681547	5.45	351429	8.65	594254	12.00	675122	18.55	442386	21.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP17184-BS1	309682	4.39	1396167	5.95	678166	9.16	1140251	12.49	1337883	19.05	899630	22.36
N69692-2	340375	4.39	1246810	5.95	689920	9.15	1240860	12.49	1311527	19.04	820489	22.35
OP17184-MS	328331	4.39	1456264	5.95	724843	9.16	1265537	12.50	1357645	19.05	898210	22.36
OP17184-MSD	326164	4.39	1423960	5.95	715136	9.16	1246387	12.50	1364962	19.05	892375	22.36
ZZZZZZ	309724	4.38	1134505	5.94	630341	9.15	1057577	12.49	1195321	19.04	714785	22.34
ZZZZZZ	343144	4.38	1256436	5.95	695367	9.15	1171878	12.49	1335630	19.04	853782	22.35
ZZZZZZ	298109	4.39	1177418	5.95	664214	9.17	967450	12.53	313949*	19.23	93314*	22.44
ZZZZZZ	314143	4.39	1189000	5.95	694608	9.16	1209990	12.52	628475*	19.09	144836*	22.39
ZZZZZZ	275210	4.40	1055394	5.96	617866	9.17	1125769	12.53	524354*	19.12	112961*	22.39
ZZZZZZ	294640	4.40	1141283	5.96	641608	9.16	1128426	12.51	653763*	19.08	185261*	22.37
ZZZZZZ	335668	4.39	1244181	5.96	721235	9.16	1203676	12.50	794355	19.05	223289*	22.36
ZZZZZZ	287265	4.39	1099922	5.95	624972	9.16	1051783	12.50	724035	19.05	228497*	22.35
ZZZZZZ	296783	4.39	1109765	5.95	639255	9.16	1068181	12.50	704183	19.04	219959*	22.35
ZZZZZZ	334678	4.39	1256683	5.96	785205	9.20	1349246	12.56	833232	19.07	237724*	22.36
ZZZZZZ	294980	4.39	1097463	5.95	620036	9.16	1065979	12.51	574031*	19.06	154540*	22.36
ZZZZZZ	310359	4.39	1096748	5.96	663980	9.18	1098291	12.54	729430	19.09	196946*	22.38
ZZZZZZ	297789	4.39	1112917	5.95	610067	9.16	998580	12.51	534105*	19.06	123664*	22.36
ZZZZZZ	293937	4.39	1108498	5.95	620165	9.16	983979	12.50	491829*	19.06	128098*	22.37

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	ER1293-CC1291	**Injection Date:**	07/09/04
Lab File ID:	R39374.D	**Injection Time:**	11:48
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	361216	4.39	1600913	5.96	801713	9.16	1364025	12.51	1512587	19.07	1044418	22.38
Upper Limit [a]	722432	4.89	3201826	6.46	1603426	9.66	2728050	13.01	3025174	19.57	2088836	22.88
Lower Limit [b]	180608	3.89	800457	5.46	400857	8.66	682013	12.01	756294	18.57	522209	21.88

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP17236-MB2	341531	4.38	1256315	5.94	726805	9.15	1216187	12.49	1398319	19.05	889707	22.37
OP17236-BS2	339072	4.39	1476822	5.95	742617	9.16	1233465	12.50	1406433	19.06	976929	22.37
ZZZZZZ	316049	4.39	1161938	5.95	668570	9.15	1093540	12.50	1249214	19.05	794342	22.36
ZZZZZZ	314234	4.39	1155486	5.95	662739	9.15	1129678	12.50	1256833	19.05	796232	22.36
ZZZZZZ	315309	4.39	1155213	5.95	659916	9.15	1109956	12.49	1255410	19.05	781571	22.36
ZZZZZZ	349423	4.38	1266868	5.95	738606	9.15	1248322	12.50	1387210	19.05	918345	22.37
OP17235-MB1	719614	4.38	2597575	5.95	1495917	9.16	2479965	12.51	2859338	19.07	1928162	22.38
OP17235-BS1	353317	4.38	1554763	5.95	781807	9.16	1288388	12.50	1459084	19.06	1029171	22.38
ZZZZZZ	345018	4.38	1231932	5.95	686424	9.15	1144044	12.50	1254419	19.06	680698	22.37
N70030-25	319653	4.38	1132347	5.95	662788	9.15	1113251	12.50	1260350	19.05	766192	22.36

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	ER1293-CC1291	**Injection Date:**	07/10/04
Lab File ID:	R39416.D	**Injection Time:**	13:59
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	365966	4.39	1628244	5.96	810372	9.16	1379482	12.51	1421571	19.07	701889	22.37
Upper Limit [a]	731932	4.89	3256488	6.46	1620744	9.66	2758964	13.01	2843142	19.57	1403778	22.87
Lower Limit [b]	182983	3.89	814122	5.46	405186	8.66	689741	12.01	710786	18.57	350945	21.87

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
ZZZZZZ	349121	4.38	1256272	5.95	706899	9.15	1175624	12.50	1226206	19.05	542243	22.36
OP17235-MS	335930	4.38	1405490	5.95	733293	9.16	1175133	12.50	892795	19.06	249844*	22.38
OP17235-MSD	308603	4.39	1294737	5.95	673332	9.16	1081077	12.51	835722	19.06	247191*	22.37
ZZZZZZ	318007	4.38	1193296	5.95	674393	9.16	1094131	12.50	719192	19.06	187620*	22.36

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EZ301-CC274	**Injection Date:**	06/15/04
Lab File ID:	Z06930.D	**Injection Time:**	12:09
Instrument ID:	GCMSZ	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	77407	5.56	310352	8.13	157005	12.16	271659	15.68	279438	21.34	203760	23.63
Upper Limit [a]	154814	6.06	620704	8.63	314010	12.66	543318	16.18	558876	21.84	407520	24.13
Lower Limit [b]	38704	5.06	155176	7.63	78503	11.66	135830	15.18	139719	20.84	101880	23.13

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	76385	5.56	325216	8.13	169903	12.16	309821	15.68	332651	21.34	216108	23.63
ZZZZZZ	90571	5.56	377137	8.14	190394	12.17	325645	15.69	282908	21.36	209854	23.64
ZZZZZZ	71238	5.56	310432	8.13	162204	12.16	298092	15.67	302784	21.34	180998	23.63
ZZZZZZ	81528	5.56	336372	8.13	169129	12.16	287656	15.68	268540	21.37	196839	23.66
ZZZZZZ	74997	5.56	317077	8.14	162206	12.17	282137	15.68	275137	21.34	182920	23.64
N69733-3	56831	5.56	254976	8.13	146879	12.16	294619	15.68	346145	21.35	210855	23.64
N69733-6	85410	5.56	359735	8.13	181183	12.16	301832	15.68	261757	21.36	178662	23.66
N69733-11	86595	5.57	364585	8.14	183615	12.17	304475	15.69	275079	21.36	179867	23.66
N69733-3	87690	5.56	389477	8.14	211851	12.17	408230	15.69	405915	21.36	211357	23.65
ZZZZZZ	69523	5.56	306916	8.14	167876	12.17	321740	15.69	326910	21.36	171617	23.64
ZZZZZZ	81281	5.56	361185	8.15	210773	12.18	395859	15.70	332374	21.37	190520	23.65
ZZZZZZ	86444	5.56	334247	8.18	208981	12.18	370419	15.71	277448	21.38	190555	23.66
ZZZZZZ	90661	5.56	386180	8.13	201588	12.17	349668	15.69	281821	21.36	197689	23.65
ZZZZZZ	82689	5.57	315930	8.18	179237	12.18	161080	15.72	231966	21.40	196116	23.68
ZZZZZZ	86431	5.57	232845	8.23	179000	12.20	266887	15.73	253810	21.41	193886	23.69

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Check Std:	EZ305-CC274	**Injection Date:**	06/21/04
Lab File ID:	Z07007.D	**Injection Time:**	14:52
Instrument ID:	GCMSZ	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	70283	5.48	282095	8.04	142568	12.07	250078	15.57	246319	21.25	178512	23.55
Upper Limit [a]	140566	5.98	564190	8.54	285136	12.57	500156	16.07	492638	21.75	357024	24.05
Lower Limit [b]	35142	4.98	141048	7.54	71284	11.57	125039	15.07	123160	20.75	89256	23.05

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	80241	5.48	329737	8.04	161569	12.07	281584	15.58	272395	21.25	210071	23.55
ZZZZZZ	74062	5.48	308550	8.04	152918	12.07	265905	15.57	255931	21.25	182631	23.55
OP17249-MB1	81174	5.48	330498	8.04	160070	12.07	275126	15.57	257452	21.25	180725	23.55
ZZZZZZ	68674	5.48	286552	8.04	140921	12.07	243052	15.57	225297	21.25	161227	23.55
ZZZZZZ	70499	5.48	292461	8.04	143811	12.07	251967	15.57	240418	21.25	167165	23.55
OP17167-MB1	68908	5.48	280344	8.04	135596	12.07	230087	15.57	215577	21.25	148744	23.55
ZZZZZZ	78911	5.48	320212	8.04	157963	12.07	265336	15.57	245024	21.25	173943	23.55
ZZZZZZ	83926	5.48	345069	8.04	169322	12.07	285363	15.57	269248	21.25	186889	23.55
ZZZZZZ	67960	5.48	284759	8.04	137354	12.07	239371	15.57	227378	21.25	161366	23.55
ZZZZZZ	77278	5.48	323036	8.04	156898	12.07	271283	15.57	248956	21.25	171364	23.55
ZZZZZZ	78481	5.48	328285	8.04	162064	12.07	274696	15.57	260443	21.25	182574	23.55
ZZZZZZ	77107	5.48	315166	8.04	155518	12.06	262822	15.57	250609	21.25	169960	23.55
ZZZZZZ	72801	5.48	298619	8.04	147437	12.07	248990	15.57	236805	21.25	152472	23.55
OP17235-MB1	82056	5.48	335277	8.04	159817	12.07	268584	15.57	248880	21.25	170830	23.55
N69733-31	74595	5.48	300239	8.04	150176	12.07	265923	15.57	261592	21.25	191062	23.55
ZZZZZZ	81110	5.48	327595	8.04	164458	12.09	258370	15.60	310524	21.26	221659	23.55
ZZZZZZ	86049	5.48	355910	8.04	174429	12.07	296497	15.58	296827	21.26	213333	23.56

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Method: SW846 8270C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
N69733-1	H68596.D	63.0	59.0	66.0
N69733-2	H68642.D	76.0	64.0	72.0
N69733-3	Z06942.D	63.0	63.0	60.0
N69733-3	Z06945.D	59.0	66.0	71.0
N69733-4	H68643.D	82.0	67.0	73.0
N69733-6	Z06943.D	68.0	72.0	71.0
N69733-8	H68598.D	79.0	71.0	67.0
N69733-9	H68644.D	80.0	68.0	73.0
N69733-10	H68706.D	84.0	70.0	79.0
N69733-11	Z06944.D	66.0	73.0	73.0
N69733-13	H68597.D	65.0	62.0	70.0
N69733-14	H68645.D	78.0	67.0	77.0
N69733-15	H68707.D	87.0	70.0	77.0
N69733-16	H68646.D	82.0	70.0	71.0
N69733-18	H68647.D	66.0	61.0	67.0
N69733-20	H68708.D	86.0	71.0	78.0
N69733-21	H68648.D	107.0	76.0	73.0
N69733-23	H68659.D	74.0	68.0	63.0
N69733-23	H68649.D	71.0	67.0	59.0
N69733-25	H68709.D	87.0	67.0	75.0
N69733-31	Z07023.D	49.0	51.0	51.0
OP17173-BS2	H68641.D	89.0	80.0	89.0
OP17173-MB2	H68640.D	90.0	81.0	82.0
OP17173-MB2	H68879.D	77.0	83.0	88.0
OP17173-MS	P07379.D	68.0	71.0	73.0
OP17173-MSD	P07380.D	69.0	69.0	69.0
OP17184-BS1	R39355.D	83.0	91.0	93.0
OP17184-MB1	H68595.D	97.0	77.0	80.0
OP17184-MS	R39357.D	71.0	77.0	88.0
OP17184-MSD	R39358.D	68.0	71.0	84.0
OP17229-BS1	H68705.D	88.0	81.0	84.0
OP17229-MB1	H68704.D	102.0	77.0	81.0
OP17229-MS	H68736.D	74.0	74.0	79.0
OP17229-MSD	H68737.D	72.0	68.0	75.0
OP17235-BS1	R39384.D	79.0	87.0	90.0
OP17235-MB1	Z07022.D	80.0	80.0	78.0
OP17235-MB1	R39383.D	44.0	40.0	42.0
OP17235-MS	R39423.D	55.0	62.0	91.0
OP17235-MSD	R39424.D	62.0	70.0	103.0
OP17173-MB1	P07375.D	87.0	80.0	87.0

Semivolatile Surrogate Recovery Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Method: SW846 8270C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
OP17173-MB1	F43078.D	82.0	80.0	96.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	27-123%
S2 = 2-Fluorobiphenyl	40-113%
S3 = Terphenyl-d14	27-144%

Initial Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2925-ICC2925
Lab FileID: H68431.D

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\MH2925.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jun 09 08:49:13 2004
Response via : Initial Calibration

Calibration Files
2 =H68437.D 5 =H68436.D 50 =H68431.D
25 =H68434.D 80 =H68435.D 100 =H68432.D 10 =H68433.D

Compound	2	5	50	25	80	100	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------								
2)t 1,4-Dioxane	0.768	0.665	0.576	0.596	0.575	0.578	0.574	0.619	11.85
3)t Pyridine	1.842	1.809	1.654	1.660	1.541	1.571	1.542	1.660	7.43
4)t N-Nitrosodimethyl	1.114	1.054	0.963	0.946	0.896	0.914	0.893	0.968	8.75
5)S 2-Fluorophenol	1.514	1.620	1.569	1.543	1.500	1.509	1.422	1.525	4.05
6)t Indene	3.054	3.062	2.526	2.639	2.358	2.332	2.621	2.656	11.26
7)t Cumene	3.387	3.420	2.951	2.967	2.759	2.712	2.859	3.008	9.50
8)S Phenol-d5	1.866	2.052	1.913	1.944	1.785	1.712	1.816	1.870	6.00
9)t Phenol	2.051	2.302	2.022	2.003	1.848	1.801	1.962	1.999	8.12
10)t Aniline	2.096	2.465	2.241	2.279	2.056	2.058	2.171	2.195	6.71
11)t bis(2-Chloroethyl	1.995	1.984	1.553	1.555	1.456	1.539	1.669	1.679	13.17
12) Benzaldehyde	0.512	0.914	0.273	0.516	0.336		0.785	0.556	44.97
13)t 2-Chlorophenol	1.864	1.947	1.682	1.717	1.543	1.499	1.691	1.706	9.38
14)t Decane	2.958	2.843	2.456	2.548	2.390	2.310	2.445	2.564	9.47
15)t 1,3-Dichlorobenze	2.150	2.136	1.808	1.855	1.707	1.700	1.809	1.881	9.99
16)t 1,4-Dichlorobenze	2.175	2.234	1.881	1.894	1.739	1.682	1.921	1.932	10.65
17)t Benzyl alcohol	0.332	0.644	0.874	0.815	0.761	0.789	0.746	0.709	25.45
----- Linear regression ----- Coefficient = 0.9956									
Response Ratio = 0.00031 + 0.79099 *A									
18)t 1,2-Dichlorobenze	2.117	2.088	1.687	1.778	1.556	1.462	1.702	1.770	14.09
19)t Acetophenone	2.266	2.298	2.020	2.059	1.869	1.833	1.952	2.042	8.91
20)t 2-Methylphenol	1.976	1.827	1.373	1.467	1.335	1.236	1.436	1.521	17.96
----- Linear regression ----- Coefficient = 0.9963									
Response Ratio = 0.08466 + 1.24816 *A									
21)t 2,2'-oxybis(1-Chl	0.591	0.636	0.519	0.514	0.480	0.463	0.508	0.530	11.64
22)t 3&4-Methylphenol	1.396	1.529	1.399	1.456	1.264	1.158	1.301	1.357	9.22
23)t n-Nitroso-di-n-pr	1.206	1.191	1.045	1.093	0.943	0.886	1.020	1.055	11.29
24)t Hexachloroethane	0.795	0.821	0.693	0.722	0.627	0.583	0.699	0.706	12.01
25) I Naphthalene-d8	----------ISTD----------								
26)S Nitrobenzene-d5	0.400	0.409	0.366	0.367	0.365	0.356	0.355	0.374	5.76
27)t Nitrobenzene	0.284	0.280	0.245	0.244	0.242	0.233	0.240	0.253	8.14
28)t Quinoline	0.879	0.885	0.759	0.790	0.764	0.749	0.758	0.798	7.35
29)t Isophorone	0.939	0.940	0.799	0.805	0.769	0.769	0.771	0.828	9.45
30)t 2-Nitrophenol	0.268	0.270	0.241	0.250	0.237	0.221	0.246	0.248	7.04
31)t 2,4-Dimethylpheno	0.391	0.364	0.343	0.352	0.346	0.324	0.338	0.351	6.15
32)t Benzoic acid		0.136	0.180	0.177	0.201	0.219	0.135	0.175	19.37
----- Linear regression ----- Coefficient = 0.9931									
Response Ratio = -0.02479 + 0.21985 *A									
33)t bis(2-Chloroethox	0.503	0.504	0.454	0.466	0.437	0.425	0.442	0.461	6.77
34)t 2,4-Dichloropheno	0.314	0.315	0.296	0.304	0.298	0.285	0.284	0.300	4.16
35)t 1,3,5-Trichlorobe	0.346	0.346	0.293	0.301	0.291	0.277	0.29[illegible]	0.308	8.89
36)T 1,2,4-Trichlorobe	0.376	0.367	0.316	0.324	0.307	0.300	0.315	0.329	9.05

Initial Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2925-ICC2925
Lab FileID: H68431.D

37)T	1,2,3-Trichlorobe	0.328	0.320	0.264	0.278	0.258	0.247	0.267	0.280	11.15
38)t	alpha-Terpineol	0.483	0.449	0.390	0.397	0.380	0.355	0.384	0.405	10.98
39)t	Naphthalene	1.302	1.270	1.076	1.107	1.057	1.016	1.075	1.129	9.84
40)t	4-Chloroaniline	0.564	0.559	0.476	0.496	0.467	0.439	0.487	0.498	9.39
41)t	2,3-Dichloroanili	0.431	0.414	0.334	0.352	0.329	0.314	0.351	0.361	12.27
42)t	Caprolactam	0.274	0.261	0.221	0.230	0.227	0.226	0.221	0.237	9.03
43)t	Hexachlorobutadie	0.177	0.169	0.147	0.150	0.144	0.140	0.143	0.153	9.32
44)t	4-Chloro-3-methyl	0.350	0.348	0.299	0.312	0.297	0.288	0.294	0.312	8.36
45)t	2-Methylnaphthale	0.780	0.796	0.662	0.679	0.654	0.628	0.671	0.696	9.34
46)t	1-Methylnaphthale	0.742	0.816	0.657	0.678	0.640	0.606	0.648	0.684	10.50
47)t	Dimethylnaphthale	0.632	0.626	0.499	0.519	0.481	0.464	0.522	0.534	12.66
48) I	Acenaphthene-d10	----------ISTD----------								
49)t	Hexachlorocyclope		0.165	0.314	0.255	0.314	0.320	0.194	0.260	25.99
	----- Linear regression ----- Coefficient = 0.9990									
	Response Ratio = -0.06405 + 0.33195 *A									
50)t	2,4,6-Trichloroph	0.366	0.393	0.399	0.379	0.383	0.375	0.360	0.379	3.65
51)t	2,4,5-Trichloroph	0.438	0.429	0.442	0.417	0.429	0.410	0.395	0.423	3.95
52)S	2-Fluorobiphenyl	1.689	1.558	1.427	1.377	1.334	1.250	1.385	1.431	10.28
53)t	2-Chloronaphthale	1.680	1.604	1.485	1.451	1.398	1.323	1.430	1.482	8.27
54)t	Biphenyl	1.944	1.887	1.733	1.683	1.618	1.506	1.680	1.721	8.78
55)t	2-Nitroaniline	0.549	0.545	0.472	0.469	0.455	0.440	0.453	0.483	9.27
56)t	Dimethylphthalate	1.816	1.745	1.631	1.586	1.557	1.511	1.528	1.625	7.10
57)t	Acenaphthylene	2.560	2.479	2.237	2.174	2.147	2.046	2.127	2.253	8.53
58)t	2,6-Dinitrotoluen	0.475	0.469	0.456	0.443	0.431	0.417	0.418	0.444	5.36
59)t	3-Nitroaniline	0.540	0.546	0.515	0.502	0.502	0.487	0.469	0.509	5.38
60)t	Acenaphthene	1.531	1.465	1.302	1.294	1.265	1.204	1.259	1.331	8.99
61)t	2,4-Dinitrophenol		0.124	0.262	0.236	0.263	0.261	0.182	0.221	25.67
	----- Linear regression ----- Coefficient = 0.9996									
	Response Ratio = -0.03762 + 0.27056 *A									
62)t	4-Nitrophenol		0.116	0.152	0.122	0.156	0.154	0.105	0.134	16.69
	----- Linear regression ----- Coefficient = 0.9983									
	Response Ratio = -0.01271 + 0.15996 *A									
63)t	Dibenzofuran	2.021	1.993	1.777	1.707	1.725	1.645	1.709	1.796	8.29
64)t	2,4-Dinitrotoluen	0.665	0.628	0.657	0.612	0.631	0.597	0.599	0.627	4.26
65)t	Diethylphthalate	1.915	1.827	1.679	1.611	1.639	1.546	1.578	1.685	8.07
66)t	Fluorene	1.625	1.558	1.333	1.351	1.271	1.185	1.346	1.381	11.29
67)t	4-Chlorophenyl-ph	0.669	0.632	0.569	0.567	0.538	0.506	0.554	0.577	9.72
68)t	4-Nitroaniline	0.581	0.573	0.548	0.521	0.531	0.509	0.525	0.541	5.06
69) I	Phenanthrene-d10	----------ISTD----------								
70)t	4,6-Dinitro-2-met		0.163	0.225	0.207	0.223	0.215	0.164	0.200	14.22
71)t	Atrazine	0.089	0.093	0.088	0.089	0.079	0.079	0.085	0.086	6.21
72)t	n-Nitrosodiphenyl	0.770	0.786	0.703	0.715	0.673	0.638	0.682	0.710	7.45
73)t	1,2-Diphenylhydra	1.288	1.364	1.170	1.194	1.123	1.087	1.148	1.196	8.15
74)S	2,4,6-Tribromophe	0.174	0.194	0.207	0.191	0.202	0.205	0.178	0.193	6.67
75)t	4-Bromophenyl-phe	0.273	0.288	0.267	0.264	0.266	0.265	0.252	0.268	4.06
76)t	Hexachlorobenzene	0.384	0.431	0.388	0.377	0.372	0.371	0.362	0.384	5.95
77)t	Pentachlorophenol			0.164	0.129	0.170	0.175	0.087	0.145	25.59
	----- Linear regression ----- Coefficient = 0.9994									
	Response Ratio = -0.05889 + 0.18581 *A									
78)t	Phenanthrene	1.446	1.498	1.260	1.289	1.211	1.173	1.261	1.306	9.26
79)t	Anthracene	1.551	1.594	1.328	1.387	1.295	1.220	1.318	1.385	9.96
80)t	Carbazole	1.437	1.499	1.271	1.287	1.225	1.179	1.270	1.310	8.81
81)t	Di-n-butylphthala	2.290	2.340	1.994	2.013	1.949	1.897	1.969	2.065	8.50
82)t	Fluoranthene	1.321	1.387	1.176	1.192	1.189	1.158	1.155	1.225	7.43

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Initial Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2925-ICC2925
Lab FileID: H68431.D

83)t Octadecane	1.075	1.078	0.891	0.934	0.845	0.780	0.889	0.928	12.10
84) I Chrysene-d12	----------ISTD----------								
85)t Benzidine	0.367	0.395	0.305	0.327	0.310	0.312	0.319	0.334	10.26
86)t Pyrene	1.588	1.600	1.355	1.348	1.413	1.403	1.351	1.437	7.68
87)S Terphenyl-d14	1.108	1.084	0.992	0.979	0.968	0.979	0.939	1.007	6.31
88)t Butylbenzylphthal	1.096	1.074	1.002	0.980	0.964	0.967	0.931	1.002	6.07
89)t Butyl stearate	0.120	0.118	0.108	0.106	0.108	0.104	0.103	0.109	6.23
90)t Benzo[a]anthracen	1.423	1.367	1.176	1.203	1.132	1.132	1.198	1.233	9.36
91)t 3,3'-Dichlorobenz	0.605	0.607	0.460	0.466	0.434	0.421	0.500	0.499	15.45

----- Linear regression ----- Coefficient = 0.9986
Response Ratio = 0.02406 + 0.41919 *A

92)t Chrysene	1.276	1.298	1.110	1.117	1.074	1.064	1.078	1.145	8.63
93)t bis(2-Ethylhexyl)	1.457	1.416	1.283	1.263	1.210	1.190	1.213	1.290	8.18
94) I Perylene-d12	----------ISTD----------								
95)t Di-n-octylphthala	3.587	3.609	3.083	3.086	3.044	2.973	3.064	3.207	8.43
96)t Benzo[b]fluoranth	2.165	2.054	1.960	1.803	1.834	2.091	1.750	1.951	8.17
97)t Benzo[k]fluoranth	1.813	1.747	1.370	1.553	1.420		1.580	1.580	11.06
98)t Benzo[a]pyrene	1.780	1.759	1.544	1.574	1.544	1.489	1.498	1.598	7.56
99)T 3-methylcholanthr	0.881	0.928	0.819	0.811	0.789	0.780	0.790	0.828	6.70
100)t Indeno[1,2,3-cd]p	2.081	2.179	1.998	1.950	1.947	1.973	1.841	1.996	5.41
101)t Dibenz(a,h)acridi	1.647	1.648	1.570	1.515	1.537	1.530	1.448	1.556	4.65
102)t Dibenz[a,h]anthra	1.743	1.748	1.614	1.604	1.576	1.603	1.511	1.628	5.34
103)t 7,12-Dimethylbenz	0.892	0.844	0.732	0.750	0.729	0.716	0.751	0.773	8.68
104)t Benzo[g,h,i]peryl	1.846	1.742	1.708	1.621	1.680	1.701	1.549	1.692	5.51

Average % RSD = 9.9

(10.2 %) 10 of 98 compounds'% RSD > 15

(#) = Out of Range

MH2925.M Wed Jun 09 09:04:26 2004 RPT1

Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2930-CC2925
Lab FileID: H68591.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EH2930\H68591.D
Acq On : 15 Jun 2004 12:01 pm
Sample : CC2925-25
Misc : OP17087,EH2930
MS Integration Params: RTEINT.P

Vial: 2
Operator: SEANWE
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MH2925.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jun 09 09:03:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 45% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	78	0.00	8.13
2	t	1,4-Dioxane	0.619	0.368	40.5#	50	-0.17	1.47
3	t	Pyridine	1.660	0.815	50.9#	39#	-0.20	2.50
4	t	N-Nitrosodimethylamine	0.968	0.545	43.7#	44#	-0.19	2.52
5	S	2-Fluorophenol	1.525	0.749	50.9#	37#	-0.07	6.06
6	t	Indene	2.656	1.354	49.0#	42#	-0.06	8.60
7	t	Cumene	3.008	1.543	48.7#	41#	-0.08	6.82
8	S	Phenol-d5	1.870	0.994	46.8#	41#	0.01	7.74
9	t	Phenol	1.999	1.064	46.8#	41#	-0.05	7.77
10	t	Aniline	2.195	1.176	46.4#	41#	0.00	7.69
11	t	bis(2-Chloroethyl)ether	1.679	0.864	48.5#	44#	-0.05	7.79
12		Benzaldehyde	0.556	0.282	49.3#	81	-0.06	7.44
13	t	2-Chlorophenol	1.706	0.844	50.5#	39#	-0.05	7.88
14	t	Decane	2.564	1.478	42.4#	47	-0.14	7.92
15	t	1,3-Dichlorobenzene	1.881	0.968	48.5#	42#	-0.06	8.07
16	t	1,4-Dichlorobenzene	1.932	0.962	50.2#	40#	-0.06	8.16
		----------	True	Calc.	% Drift	----------		
17	t	Benzyl alcohol	50.000	31.138	37.7#	44	-0.08	8.47
		----------	AvgRF	CCRF	% Dev	----------		
18	t	1,2-Dichlorobenzene	1.770	0.911	48.5#	42#	-0.06	8.47
19	t	Acetophenone	2.042	0.996	51.2#	39#	-0.05	8.87
		----------	True	Calc.	% Drift	----------		
20	t	2-Methylphenol	50.000	24.789	50.4#	39	-0.05	8.73
		----------	AvgRF	CCRF	% Dev	----------		
21	t	2,2'-oxybis(1-Chloropropa	0.530	0.275	48.1#	41#	-0.05	8.69
22	t	3&4-Methylphenol	1.357	0.742	45.3#	42#	-0.04	8.97
23	t	n-Nitroso-di-n-propylamin	1.055	0.578	45.2#	43#	-0.06	8.93
24	t	Hexachloroethane	0.706	0.368	47.9#	42#	-0.06	8.96
25	I	Naphthalene-d8	1.000	1.000	0.0	77	0.03	10.25
26	S	Nitrobenzene-d5	0.374	0.202	46.0#	42#	-0.05	9.12
27	t	Nitrobenzene	0.253	0.131	48.2#	41#	-0.06	9.14
28	t	Quinoline	0.798	0.390	51.1#	40#	-0.08	10.85
29	t	Isophorone	0.828	0.434	47.6#	42#	-0.06	9.53
30	t	2-Nitrophenol	0.248	0.126	49.2#	40#	-0.06	9.67
31	t	2,4-Dimethylphenol	0.351	0.182	48.1#	41#	-0.06	9.80
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2930-CC2925
Lab FileID: H68591.D

32	t	Benzoic acid	50.000	33.600	32.8#	55	-0.06	10.06
		----------	AvgRF	CCRF	% Dev	----------		
33	t	bis(2-Chloroethoxy)methan	0.461	0.244	47.1#	41#	-0.05	9.91
34	t	2,4-Dichlorophenol	0.300	0.156	48.0#	41#	-0.05	10.10
35	t	1,3,5-Trichlorobenzene	0.308	0.157	49.0#	41#	-0.05	9.67
36	T	1,2,4-Trichlorobenzene	0.329	0.163	50.5#	40#	-0.06	10.18
37	T	1,2,3-Trichlorobenzene	0.280	0.144	48.6#	42#	-0.06	10.58
38	t	alpha-Terpineol	0.405	0.225	44.4#	44#	-0.06	10.30
39	t	Naphthalene	1.129	0.579	48.7#	42#	-0.06	10.27
40	t	4-Chloroaniline	0.498	0.252	49.4#	41#	-0.05	10.44
41	t	2,3-Dichloroaniline	0.361	0.181	49.9#	42#	-0.04	11.94
42	t	Caprolactam	0.237	0.126	46.8#	44#	0.00	11.00
43	t	Hexachlorobutadiene	0.153	0.077	49.7#	41#	-0.05	10.58
44	t	4-Chloro-3-methylphenol	0.312	0.162	48.1#	42#	-0.05	11.30
45	t	2-Methylnaphthalene	0.696	0.357	48.7#	42#	-0.05	11.41
46	t	1-Methylnaphthalene	0.684	0.346	49.4#	41#	-0.05	11.58
47	t	Dimethylnaphthalene	0.534	0.277	48.1#	43#	-0.06	12.43
48	I	Acenaphthene-d10	1.000	1.000	0.0	84	-0.05	13.13
		----------	True	Calc.	% Drift	----------		
49	t	Hexachlorocyclopentadiene	100.000	43.746	56.3#	32	-0.05	11.78
		----------	AvgRF	CCRF	% Dev	----------		
50	t	2,4,6-Trichlorophenol	0.379	0.201	47.0#	42#	-0.05	11.96
51	t	2,4,5-Trichlorophenol	0.423	0.211	50.1#	40#	-0.05	12.05
52	S	2-Fluorobiphenyl	1.431	0.696	51.4#	41#	-0.05	12.05
53	t	2-Chloronaphthalene	1.482	0.735	50.4#	41#	-0.05	12.20
54	t	Biphenyl	1.721	0.855	50.3#	41#	-0.06	12.18
55	t	2-Nitroaniline	0.483	0.247	48.9#	44#	-0.05	12.45
56	t	Dimethylphthalate	1.625	0.785	51.7#	40#	-0.05	12.78
57	t	Acenaphthylene	2.253	1.125	50.1#	42#	-0.05	12.88
58	t	2,6-Dinitrotoluene	0.444	0.225	49.3#	41#	-0.06	12.89
59	t	3-Nitroaniline	0.509	0.255	49.9#	41#	-0.04	13.14
60	t	Acenaphthene	1.331	0.677	49.1#	44#	-0.06	13.18
		----------	True	Calc.	% Drift	----------		
61	t	2,4-Dinitrophenol	100.000	47.834	52.2#	37	-0.05	13.32
62	t	4-Nitrophenol	50.000	21.805	56.4#	33	0.00	13.55
		----------	AvgRF	CCRF	% Dev	----------		
63	t	Dibenzofuran	1.796	0.897	50.1#	42#	-0.05	13.45
64	t	2,4-Dinitrotoluene	0.627	0.309	50.7#	39#	-0.05	13.55
65	t	Diethylphthalate	1.685	0.809	52.0#	40#	-0.06	13.92
66	t	Fluorene	1.381	0.683	50.5#	43#	-0.06	14.00
67	t	4-Chlorophenyl-phenylethe	0.577	0.294	49.0#	43#	-0.05	14.01
68	t	4-Nitroaniline	0.541	0.255	52.9#	39#	-0.06	14.15
69	I	Phenanthrene-d10	1.000	1.000	0.0	81	-0.06	15.51
70	t	4,6-Dinitro-2-methylpheno	0.200	0.107	46.5#	39#	-0.06	14.21
71	t	Atrazine	0.086	0.042#	51.2#	39#	-0.05	15.15
72	t	n-Nitrosodiphenylamine	0.710	0.359	49.4#	41#	-0.06	14.23
73	t	1,2-Diphenylhydrazine	1.196	0.651	45.6#	45	-0.06	14.26
74	S	2,4,6-Tribromophenol	0.193	0.096	50.3#	37#	-0.06	14.44
75	t	4-Bromophenyl-phenylether	0.268	0.138	48.5#	42#	-0.05	14.79
76	t	Hexachlorobenzene	0.384	0.187	51.3#	39#	-0.06	15.03
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	100.000	52.337	47.7#	34	-0.07	15.34

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Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2930-CC2925
Lab FileID: H68591.D

			AvgRF	CCRF	% Dev			
78	t	Phenanthrene	1.306	0.684	47.6#	44#	-0.05	15.56
79	t	Anthracene	1.385	0.732	47.1#	45#	-0.06	15.63
80	t	Carbazole	1.310	0.686	47.6#	44#	-0.05	15.92
81	t	Di-n-butylphthalate	2.065	1.079	47.7#	44#	-0.05	16.56
82	t	Fluoranthene	1.225	0.646	47.3#	45#	-0.06	17.55
83	t	Octadecane	0.928	0.537	42.1#	49	-0.06	15.35
84	I	Chrysene-d12	1.000	1.000	0.0	95	-0.05	20.46
85	t	Benzidine	0.334	0.184	44.9#	57	-0.06	17.84
86	t	Pyrene	1.437	0.698	51.4#	49	-0.07	17.97
87	S	Terphenyl-d14	1.007	0.472	53.1#	45#	-0.07	18.35
88	t	Butylbenzylphthalate	1.002	0.481	52.0#	45	-0.06	19.49
89	t	Butyl stearate	0.109	0.051	53.2#	45#	-0.07	19.57
90	t	Benzo[a]anthracene	1.233	0.609	50.6#	49	-0.05	20.42
			True	Calc.	% Drift			
91	t	3,3'-Dichlorobenzidine	50.000	27.218	45.6#	51	-0.06	20.42
			AvgRF	CCRF	% Dev			
92	t	Chrysene	1.145	0.584	49.0#	50	-0.06	20.50
93	t	bis(2-Ethylhexyl)phthalat	1.290	0.694	46.2#	51	-0.06	20.63
94	I	Perylene-d12	1.000	1.000	0.0	97	-0.06	22.86
95	t	Di-n-octylphthalate	3.207	1.630	49.2#	51	-0.05	21.61
96	t	Benzo[b]fluoranthene	1.951	0.817	58.1#	40#	-0.06	22.21
97	t	Benzo[k]fluoranthene	1.580	0.909	42.5#	64	-0.08	22.24
98	t	Benzo[a]pyrene	1.598	0.817	48.9#	51	-0.06	22.76
99	T	3-methylcholanthrene	0.828	0.403	51.3#	48	-0.08	23.46
100	t	Indeno[1,2,3-cd]pyrene	1.996	0.928	53.5#	45	-0.11	25.12
101	t	Dibenz(a,h)acridine	1.556	0.717	53.9#	44#	-0.09	24.58
102	t	Dibenz[a,h]anthracene	1.628	0.753	53.7#	45	-0.12	25.13
103	t	7,12-Dimethylbenz(a)anthr	0.773	0.393	49.2#	52	-0.06	22.22
104	t	Benzo[g,h,i]perylene	1.692	0.770	54.5#	44#	-0.11	25.77

Average % D = 48.8

(100.0 %) 98 of 98 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
H68431.D MH2925.M Wed Jun 16 14:19:25 2004 RPT1

Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2931-CC2925
Lab FileID: H68627.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EH2931\H68627.D
Acq On : 16 Jun 2004 1:01 pm
Sample : CC2925-50
Misc : OP17087,EH2931
MS Integration Params: RTEINT.P

Vial: 2
Operator: SEANWE
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MH2925.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Jun 18 10:04:33 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 45% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	8.13
2	t	1,4-Dioxane	0.619	0.684	-10.5	132	-0.08	1.56
3	t	Pyridine	1.660	1.625	2.1	109	-0.14	2.56
4	t	N-Nitrosodimethylamine	0.968	1.022	-5.6	118	-0.10	2.61
5	S	2-Fluorophenol	1.525	1.556	-2.0	110	-0.08	6.05
6	t	Indene	2.656	2.494	6.1	110	-0.06	8.59
7	t	Cumene	3.008	2.905	3.4	109	-0.08	6.82
8	S	Phenol-d5	1.870	1.921	-2.7	111	0.00	7.73
9	t	Phenol	1.999	2.049	-2.5	112	-0.06	7.76
10	t	Aniline	2.195	2.049	6.7	101	0.00	7.68
11	t	bis(2-Chloroethyl)ether	1.679	1.599	4.8	114	-0.06	7.78
12		Benzaldehyde	0.556	0.586	-5.4	238	-0.08	7.42
13	t	2-Chlorophenol	1.706	1.661	2.6	110	-0.06	7.87
14	t	Decane	2.564	2.821	-10.0	127	-0.15	7.91
15	t	1,3-Dichlorobenzene	1.881	1.801	4.3	110	0.00	8.06
16	t	1,4-Dichlorobenzene	1.932	1.834	5.1	108	-0.07	8.15
		----------	True	Calc.	% Drift		----------	
17	t	Benzyl alcohol	50.000	59.529	-19.1	119	-0.09	8.46
		----------	AvgRF	CCRF	% Dev		----------	
18	t	1,2-Dichlorobenzene	1.770	1.664	6.0	109	-0.07	8.46
19	t	Acetophenone	2.042	2.014	1.4	111	-0.06	8.86
		----------	True	Calc.	% Drift		----------	
20	t	2-Methylphenol	50.000	50.213	-0.4	107	-0.06	8.72
		----------	AvgRF	CCRF	% Dev		----------	
21	t	2,2'-oxybis(1-Chloropropa	0.530	0.512	3.4	109	-0.07	8.67
22	t	3&4-Methylphenol	1.357	1.370	-1.0	109	-0.07	8.95
23	t	n-Nitroso-di-n-propylamin	1.055	1.146	-8.6	122	-0.06	8.93
24	t	Hexachloroethane	0.706	0.655	7.2	105	-0.07	8.95
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00	10.23
26	S	Nitrobenzene-d5	0.374	0.436	-16.6	119	-0.06	9.11
27	t	Nitrobenzene	0.253	0.270	-6.7	110	-0.07	9.13
28	t	Quinoline	0.798	0.856	-7.3	112	-0.04	10.88
29	t	Isophorone	0.828	0.952	-15.0	118	-0.06	9.53
30	t	2-Nitrophenol	0.248	0.264	-6.5	109	-0.06	9.67
31	t	2,4-Dimethylphenol	0.351	0.384	-9.4	111	-0.07	9.79
		----------	True	Calc.	% Drift		----------	

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Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2931-CC2925
Lab FileID: H68627.D

32 t	Benzoic acid	50.000	72.830	-45.7#	166	0.00	10.13
	----------	AvgRF	CCRF	% Dev	----------		
33 t	bis(2-Chloroethoxy)methan	0.461	0.521	-13.0	114	-0.06	9.90
34 t	2,4-Dichlorophenol	0.300	0.323	-7.7	109	-0.07	10.08
35 t	1,3,5-Trichlorobenzene	0.308	0.329	-6.8	112	-0.07	9.65
36 T	1,2,4-Trichlorobenzene	0.329	0.350	-6.4	110	-0.07	10.17
37 T	1,2,3-Trichlorobenzene	0.280	0.299	-6.8	113	-0.07	10.57
38 t	alpha-Terpineol	0.405	0.458	-13.1	117	-0.07	10.29
39 t	Naphthalene	1.129	1.155	-2.3	107	-0.07	10.26
40 t	4-Chloroaniline	0.498	0.524	-5.2	110	-0.07	10.42
41 t	2,3-Dichloroaniline	0.361	0.379	-5.0	113	-0.07	11.92
42 t	Caprolactam	0.237	0.201	15.2	91	0.02	11.02
43 t	Hexachlorobutadiene	0.153	0.165	-7.8	111	-0.07	10.56
44 t	4-Chloro-3-methylphenol	0.312	0.351	-12.5	117	-0.07	11.28
45 t	2-Methylnaphthalene	0.696	0.746	-7.2	112	-0.07	11.39
46 t	1-Methylnaphthalene	0.684	0.718	-5.0	109	-0.08	11.56
47 t	Dimethylnaphthalene	0.534	0.576	-7.9	115	-0.07	12.42
48 I	Acenaphthene-d10	1.000	1.000	0.0	119	-0.07	13.11
	----------	True	Calc.	% Drift	----------		
49 t	Hexachlorocyclopentadiene	100.000	95.800	4.2	110	-0.07	11.75
	----------	AvgRF	CCRF	% Dev	----------		
50 t	2,4,6-Trichlorophenol	0.379	0.403	-6.3	120	-0.07	11.93
51 t	2,4,5-Trichlorophenol	0.423	0.432	-2.1	116	-0.07	12.03
52 S	2-Fluorobiphenyl	1.431	1.342	6.2	111	-0.07	12.03
53 t	2-Chloronaphthalene	1.482	1.403	5.3	112	-0.07	12.18
54 t	Biphenyl	1.721	1.624	5.6	111	-0.07	12.17
55 t	2-Nitroaniline	0.483	0.500	-3.5	126	-0.07	12.43
56 t	Dimethylphthalate	1.625	1.552	4.5	113	-0.06	12.77
57 t	Acenaphthylene	2.253	2.171	3.6	115	-0.07	12.86
58 t	2,6-Dinitrotoluene	0.444	0.454	-2.3	118	-0.07	12.88
59 t	3-Nitroaniline	0.509	0.505	0.8	116	-0.06	13.12
60 t	Acenaphthene	1.331	1.275	4.2	116	-0.07	13.17
	----------	True	Calc.	% Drift	----------		
61 t	2,4-Dinitrophenol	100.000	101.762	-1.8	118	-0.07	13.30
62 t	4-Nitrophenol	50.000	47.734	4.5	111	-0.06	13.49
	----------	AvgRF	CCRF	% Dev	----------		
63 t	Dibenzofuran	1.796	1.717	4.4	115	-0.07	13.43
64 t	2,4-Dinitrotoluene	0.627	0.625	0.3	113	-0.06	13.54
65 t	Diethylphthalate	1.685	1.593	5.5	113	-0.06	13.92
66 t	Fluorene	1.381	1.305	5.5	116	-0.07	13.99
67 t	4-Chlorophenyl-phenylethe	0.577	0.555	3.8	116	-0.07	13.99
68 t	4-Nitroaniline	0.541	0.531	1.8	115	-0.06	14.15
69 I	Phenanthrene-d10	1.000	1.000	0.0	120	-0.07	15.50
70 t	4,6-Dinitro-2-methylpheno	0.200	0.222	-11.0	119	-0.07	14.20
71 t	Atrazine	0.086	0.071	17.4	97	-0.07	15.13
72 t	n-Nitrosodiphenylamine	0.710	0.658	7.3	112	-0.07	14.22
73 t	1,2-Diphenylhydrazine	1.196	1.169	2.3	120	-0.07	14.25
74 S	2,4,6-Tribromophenol	0.193	0.195	-1.0	113	-0.08	14.42
75 t	4-Bromophenyl-phenylether	0.268	0.256	4.5	116	-0.07	14.77
76 t	Hexachlorobenzene	0.384	0.361	6.0	112	-0.08	15.01
	----------	True	Calc.	% Drift	----------		
77 t	Pentachlorophenol	100.000	104.936	-4.9	126	-0.08	15.33

Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2931-CC2925
Lab FileID: H68627.D

			AvgRF	CCRF	% Dev			
78	t	Phenanthrene	1.306	1.276	2.3	122	-0.07	15.54
79	t	Anthracene	1.385	1.336	3.5	121	-0.07	15.62
80	t	Carbazole	1.310	1.281	2.2	121	-0.07	15.90
81	t	Di-n-butylphthalate	2.065	1.976	4.3	119	-0.07	16.54
82	t	Fluoranthene	1.225	1.226	-0.1	125	-0.08	17.52
83	t	Octadecane	0.928	0.911	1.8	123	-0.07	15.34
84	I	Chrysene-d12	1.000	1.000	0.0	128	-0.08	20.44
85	t	Benzidine	0.334	0.217	35.0#	91	-0.09	17.81
86	t	Pyrene	1.437	1.427	0.7	135	-0.09	17.95
87	S	Terphenyl-d14	1.007	0.948	5.9	123	-0.10	18.33
88	t	Butylbenzylphthalate	1.002	0.973	2.9	125	-0.08	19.47
89	t	Butyl stearate	0.109	0.103	5.5	123	-0.09	19.55
90	t	Benzo[a]anthracene	1.233	1.187	3.7	130	-0.07	20.40
			True	Calc.	% Drift			
91	t	3,3'-Dichlorobenzidine	50.000	53.923	-7.8	132	-0.08	20.40
			AvgRF	CCRF	% Dev			
92	t	Chrysene	1.145	1.136	0.8	131	-0.08	20.48
93	t	bis(2-Ethylhexyl)phthalat	1.290	1.322	-2.5	132	-0.08	20.61
94	I	Perylene-d12	1.000	1.000	0.0	121	-0.08	22.84
95	t	Di-n-octylphthalate	3.207	3.397	-5.9	133	-0.08	21.59
96	t	Benzo[b]fluoranthene	1.951	1.678	14.0	103	-0.07	22.20
97	t	Benzo[k]fluoranthene	1.580	1.731	-9.6	152	-0.09	22.23
98	t	Benzo[a]pyrene	1.598	1.580	1.1	123	-0.08	22.74
99	T	3-methylcholanthrene	0.828	0.789	4.7	116	-0.10	23.44
100	t	Indeno[1,2,3-cd]pyrene	1.996	1.963	1.7	118	-0.13	25.10
101	t	Dibenz(a,h)acridine	1.556	1.517	2.5	117	-0.11	24.56
102	t	Dibenz[a,h]anthracene	1.628	1.598	1.8	119	-0.13	25.12
103	t	7,12-Dimethylbenz(a)anthr	0.773	0.774	-0.1	128	-0.08	22.20
104	t	Benzo[g,h,i]perylene	1.692	1.703	-0.7	120	-0.13	25.74

Average % D = 6.1

(2.0 %) 2 of 98 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
H68431.D MH2925.M Fri Jun 18 11:51:00 2004 RPT1

Continuing Calibration Summary

Job Number: N69733
Account: GODNJP Dewberry
Project: Atlantic States Cast Iron Pipe, Phillipsburg, NJ

Sample: EH2932-CC2925
Lab FileID: H68658.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EH2932\H68658.D
Acq On : 17 Jun 2004 9:19 am
Sample : CC2925-25
Misc : OP17087,EH2932
MS Integration Params: RTEINT.P

Vial: 2
Operator: SEANWE
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MH2925.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jun 09 09:03:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 45% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	8.11
2	t	1,4-Dioxane	0.619	0.707	-14.2	123	-0.15	1.49
3	t	Pyridine	1.660	1.802	-8.6	112	-0.19	2.51
4	t	N-Nitrosodimethylamine	0.968	1.027	-6.1	112	-0.18	2.53
5	S	2-Fluorophenol	1.525	1.568	-2.8	105	-0.08	6.05
6	t	Indene	2.656	2.677	-0.8	105	-0.08	8.58
7	t	Cumene	3.008	3.077	-2.3	107	-0.09	6.80
8	S	Phenol-d5	1.870	1.980	-5.9	105	0.00	7.73
9	t	Phenol	1.999	2.143	-7.2	111	-0.06	7.75
10	t	Aniline	2.195	2.110	3.9	96	-0.02	7.66
11	t	bis(2-Chloroethyl)ether	1.679	1.683	-0.2	112	-0.08	7.76
12		Benzaldehyde	0.556	0.625	-12.4	125	-0.08	7.41
13	t	2-Chlorophenol	1.706	1.735	-1.7	105	-0.08	7.85
14	t	Decane	2.564	2.981	-16.3	121	-0.15	7.91
15	t	1,3-Dichlorobenzene	1.881	1.912	-1.6	107	-0.08	8.05
16	t	1,4-Dichlorobenzene	1.932	1.976	-2.3	108	-0.08	8.14
		----------	True	Calc.	% Drift	----------		
17	t	Benzyl alcohol	25.000	31.559	-26.2#	127	-0.10	8.44
		----------	AvgRF	CCRF	% Dev	----------		
18	t	1,2-Dichlorobenzene	1.770	1.821	-2.9	106	-0.08	8.45
19	t	Acetophenone	2.042	2.151	-5.3	108	-0.08	8.85
		----------	True	Calc.	% Drift	----------		
20	t	2-Methylphenol	25.000	24.712	1.2	97	-0.06	8.71
		----------	AvgRF	CCRF	% Dev	----------		
21	t	2,2'-oxybis(1-Chloropropa	0.530	0.543	-2.5	109	-0.08	8.67
22	t	3&4-Methylphenol	1.357	1.484	-9.4	105	-0.07	8.95
23	t	n-Nitroso-di-n-propylamin	1.055	1.171	-11.0	111	-0.08	8.90
24	t	Hexachloroethane	0.706	0.734	-4.0	105	-0.07	8.95
25	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	10.23
26	S	Nitrobenzene-d5	0.374	0.398	-6.4	114	-0.07	9.10
27	t	Nitrobenzene	0.253	0.256	-1.2	110	-0.07	9.13
28	t	Quinoline	0.798	0.781	2.1	104	-0.08	10.85
29	t	Isophorone	0.828	0.858	-3.6	112	-0.08	9.51
30	t	2-Nitrophenol	0.248	0.251	-1.2	106	-0.07	9.66
31	t	2,4-Dimethylphenol	0.351	0.346	1.4	103	-0.07	9.79
		----------	True	Calc.	% Drift	----------		

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