ACCUTEST

09/29/99

Technical Report for

IT Corporation

Bainbridge

Accutest Job Number: F4923

Report to:

IT Corporation
2790 Mosside Blvd.
Monroeville, PA 15146

ATTN: Larry Stearns

Total number of pages in report: 269

Harry Behzadi, Ph.D.
Laboratory Director

Results relate only to the items tested.
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Sample Summary

IT Corporation

Bainbridge

Job No: F4923

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F4923-1	09/21/99	09:30 SS	09/22/99	AQ	Ground Water	GP.08.01
F4923-2	09/21/99	14:45 SS	09/22/99	AQ	Ground Water	GP.06.01

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Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0010587.D	1	09/23/99	CJP	n/a	n/a	VG289
Run #2							

VOA 8260 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-116%
17060-07-0	1,2-Dichloroethane-D4	98%		74-120%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	102%		86-115%

ND = Not detected
RDL = Reported Detection 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

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV000066.D	1	09/22/99	RAW	n/a	n/a	GUV1
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		75-125%
98-08-8	aaa-Trifluorotoluene	91%		75-125%

ND = Not detected
RDL = Reported Detection 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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ACCUTEST

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 3510C/8081A	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST00672.D	1	09/23/99	SKW	09/23/99	OP956	GST26
Run #2							

Pesticide TCL List

CAS No.	Compound	Result	RDL	Units	Q
309-00-2	Aldrin	ND	0.050	ug/l	
319-84-6	alpha-BHC	ND	0.050	ug/l	
319-85-7	beta-BHC	ND	0.050	ug/l	
319-86-8	delta-BHC	ND	0.050	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.050	ug/l	
5103-71-9	alpha-Chlordane	ND	0.10	ug/l	
5103-74-2	gamma-Chlordane	ND	0.10	ug/l	
60-57-1	Dieldrin	ND	0.050	ug/l	
72-54-8	4,4'-DDD	ND	0.10	ug/l	
72-55-9	4,4'-DDE	ND	0.10	ug/l	
50-29-3	4,4'-DDT	ND	0.10	ug/l	
72-20-8	Endrin	ND	0.10	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.10	ug/l	
7421-93-4	Endrin aldehyde	ND	0.10	ug/l	
53494-70-5	Endrin ketone	ND	0.10	ug/l	
959-98-8	Endosulfan-I	ND	0.050	ug/l	
33213-65-9	Endosulfan-II	ND	0.10	ug/l	
76-44-8	Heptachlor	ND	0.050	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.050	ug/l	
72-43-5	Methoxychlor	ND	0.20	ug/l	
8001-35-2	Toxaphene	ND	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-160%
2051-24-3	Decachlorobiphenyl	57%		30-160%

ND = Not detected
RDL = Reported Detection 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:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ09659.D	1	09/23/99	ME	09/23/99	OP986	GIJ437
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		40-140%

(a) Sample not preserved, adjusted to pH < 2 prior to extraction.

ND = Not detected
RDL = Reported Detection 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

000006

ACCUTEST

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
		Percent Solids:	n/a
Project:	Bainbridge		

General Chemistry

Analyte	Result	RDL	Units	DF	Analyzed By	Method
Turbidity	133000	5000	NTU	5000	09/22/99 EP	EPA 180.1

RDL = Reported Detection Limit

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Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0010589.D	1	09/23/99	CJP	n/a	n/a	VG289
Run #2							

VOA 8260 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	3.2	2.0	ug/l	
100-41-4	Ethylbenzene	1.9	2.0	ug/l	J
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	3.7	4.0	ug/l	J
95-47-6	o-Xylene	1.1	2.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-116%
17060-07-0	1,2-Dichloroethane-D4	105%		74-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	98%		86-115%

ND = Not detected
RDL = Reported Detection 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

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV000073.D	10	09/22/99	RAW	n/a	n/a	GUV1
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-GRO (C6-C10)	5.60	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		75-125%
98-08-8	aaa-Trifluorotoluene	109%		75-125%

ND = Not detected
RDL = Reported Detection 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

000009

ACCUTEST

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 3510C/8081A	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	ST00674.D	20	09/23/99	SKW	09/23/99	OP956	GST26
Run #2							

Pesticide TCL List

CAS No.	Compound	Result	RDL	Units	Q
309-00-2	Aldrin	ND	1.0	ug/l	
319-84-6	alpha-BHC	ND	1.0	ug/l	
319-85-7	beta-BHC	ND	1.0	ug/l	
319-86-8	delta-BHC	ND	1.0	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	1.0	ug/l	
5103-71-9	alpha-Chlordane	ND	2.0	ug/l	
5103-74-2	gamma-Chlordane	ND	2.0	ug/l	
60-57-1	Dieldrin	ND	1.0	ug/l	
72-54-8	4,4'-DDD	ND	2.0	ug/l	
72-55-9	4,4'-DDE	ND	2.0	ug/l	
50-29-3	4,4'-DDT	ND	2.0	ug/l	
72-20-8	Endrin	ND	2.0	ug/l	
1031-07-8	Endosulfan sulfate	ND	2.0	ug/l	
7421-93-4	Endrin aldehyde	ND	2.0	ug/l	
53494-70-5	Endrin ketone	ND	2.0	ug/l	
959-98-8	Endosulfan-I	ND	1.0	ug/l	
33213-65-9	Endosulfan-II	ND	2.0	ug/l	
76-44-8	Heptachlor	ND	1.0	ug/l	
1024-57-3	Heptachlor epoxide	ND	1.0	ug/l	
72-43-5	Methoxychlor	ND	4.0	ug/l	
8001-35-2	Toxaphene	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88% [b]		30-160%
2051-24-3	Decachlorobiphenyl	60% [b]		30-160%

(a) Dilution required due to matrix interference.
(b) Surrogate recovery based on actual concentration.

ND = Not detected
RDL = Reported Detection 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

000010

ACCUTEST

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ09661.D	2	09/23/99	ME	09/23/99	OP986	GIJ437
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	3.05	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		40-140%

(a) Sample not preserved, adjusted to pH < 2 prior to extraction.

ND = Not detected
RDL = Reported Detection 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

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
		Percent Solids:	n/a
Project:	Bainbridge		

General Chemistry

Analyte	Result	RDL	Units	DF	Analyzed By	Method
Turbidity	64000	5000	NTU	5000	09/22/99 EP	EPA 180.1

RDL = Reported Detection Limit

000012

IN NATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No.

Page 1 of 1

Project Name/No. [1] Bainbridge

Sample Team Members [2] Seger

Profit Center No. [3] —

Project Manager [4] L Stearns

Purchase Order No. [6]

Required Report Date [11] 3 days

Samples Shipment Date [7] 9.21.99

Lab Destination [8] Accutest

Lab Contact [9] (407) 425 6700

Project Contact/Phone [12] Dick Treatel (410) 378 3450

Carrier/Waybill No. [13] FedEX 791793272873

Bill to: [5] IT Corp 2790 Mosside Blvd Monroeville, PA 15146

Report to: [10] Fax to (412) 380-2699 Larry Stearns IT Corp, 2790 Mosside Blvd Monroeville PA 15146

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]	Container Type [17]	Sample Volume [18]	Pre-servative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
GP08-01	Water	9/21/99 930	VOAS-4 Amber-2 Plastic-1	40ml x 4 500ml (2) 500ml (1)	HCL — —	BTEX, GRO (8260B, 5035M) Pesticides, DRO (8081, 8015M) Turbidity (EPA 180.1)	Fig 9/31	
GP06-01	Water	9/21/99 1445	VOAS-4 Amber-2 Plastic-1	40ml x 4 250ml (2) 500ml (1)	HCL — —	BTEX, GRO (8260B, 5035M) Pesticides, DRO (8081, 8015M) Turbidity (EPA 180.1)	-2	

Special Instructions: [23] Fax results to L Stearns (412) 380-2699 3 day TAT All samples BTEX, TURBIDITY TPH (DRO/GRO) PESTICIDES

Possible Hazard Identification: [24] Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: [25] Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

Turnaround Time Required: [26] Normal ☐ Rush ☒ 3 day

QC Level: [27] I. ☐ II. ☐ III. ☒ Project Specific (specify): Navy NFESC Level C

1. Relinquished by [26] (Signature/Affiliation) Susan Seger	Date: 9-21-99 Time: 1700	1. Received by [28] (Signature/Affiliation) [illegible]	Date: 9-22-99 Time: 1100
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation) [illegible]	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: [29] Also fax results to Dick Treatel & Frank Zeptka (410) 378-3232 (202) 433-7018

White: To accompany samples

Yellow: Field copy

*See back of form for special flow chart

MCA 3/15/91

Accutest Laboratories Southeast
Case Narrative

Job (SDG) No.: F4923

Samples: 2

Analysis Performed: See COC

1) **Sample Receipt Conformance / Non-Conformance Summary**

Custody Seals on Coolers?	Yes (✓)	No ( )
Custody Seals in Tact?	Yes (✓)	No ( )
Chain of Custody Sealed in Plastic?	Yes (✓)	No ( )
Chain of Custody Filled out Properly?	Yes (✓)	No ( )
Enough ice and Packing material?	Yes (✓)	No ( )
All Bottles Sealed?	Yes (✓)	No ( )
Any Bottles Broken?	Yes ( )	No (✓)
Labels in good condition?	Yes (✓)	No ( )
Labels agree with chain of custody?	Yes (✓)	No ( )
Correct Containers Used?	Yes (✓)	No ( )
Preserved Properly?	Yes (✓)	No ( )
Sufficient Sample?	Yes (✓)	No ( )

Comments: _____

ORGANICS RUN NARRATIVE

Instrument MS-G Date 9-23-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

✓

Continuing Calibration Check(s) met method criteria except as noted:

N/A

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

N/A

Method blank met method criteria except as noted:

✓

QC Samples met method criteria except as noted:

Acrolein + Acrylonitrile

Note any unusual run occurrences below:

none

~~006015~~

ORGANICS RUN NARRATIVE

Instrument: GC-UV

Date: 9-22-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

✓

Continuing Calibration Check(s) met method criteria except as noted:

✓

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

✓

Method blank met method criteria except as noted:

✓

DC Samples met method criteria except as noted:

N/A

Note any unusual run documented below:

NONE

000016

Analyst: RAW

Reviewer: MY

ORGANICS RUN NARRATIVE

Instrument FID1 Date 9/23/94

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

Continuing Calibration Check(s) met method criteria except as noted:

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

Method blank met method criteria except as noted:

QC Samples met method criteria except as noted:

Note any unusual run occurrences below:

N/A

ORGANICS RUN NARRATIVE

Instrument ECD3 Date 9-23-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

gamma-BHC, endrin aldehyde low

Continuing Calibration Check(s) met method criteria except as noted:

gamma-BHC, endrin aldehyde low

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

✓

Method blank met method criteria except as noted:

✓

QC Samples met method criteria except as noted:

✓

Note any unusual run occurrences below:

NA

000016

ORGANICS RUN NARRATIVE

Instrument MS-G Date 9-10-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

Continuing Calibration Check(s) met method criteria except as noted:

N/A

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

N/A

Method blank met method criteria except as noted:

QC Samples met method criteria except as noted.

N/A

Note any unusual run occurrences below:

none

000019

Analyst Claudia D Parrish Reviewer RAW

ORGANICS RUN NARRATIVE

Instrument FIDI Date 9-17-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

✓

Continuing Calibration Check(s) met method criteria except as noted:

✓

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

✓

Method blank met method criteria except as noted:

✓

QC Samples met method criteria except as noted:

✓

Note any unusual run occurrences below:

NA

000025

FIDI

Analyst

ORGANICS RUN NARRATIVE

Instrument ECD 3 Date 9-20-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

✓

Continuing Calibration Check(s) met method criteria except as noted:

✓ Endrin high

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

✓

Method blank met method criteria except as noted:

✓

QC Samples met method criteria except as noted:

✓

Note any unusual run occurrences below:

~~NA~~ Changed tox ~~quan~~ times for more accurate quan F4882-45

000021

ORGANICS RUN NARRATIVE

Instrument: GC-UV

Date: 9-16-99

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

✓

Continuing Calibration Check(s) met method criteria except as noted:

✓

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

✓

Method blank met method criteria except as noted:

✓

QC Samples met method criteria except as noted:

✓

Note any unusual run documented below:

NONE

000022

Analyst: EAW

Reviewer: MV

SAMPLE RESULT SUMMARY

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0010587.D	1	09/23/99	CJP	n/a	n/a	VG289
Run #2							

VOA 8260 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-116%
17060-07-0	1,2-Dichloroethane-D4	98%		74-120%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	102%		86-115%

000023

ND = Not detected
RDL = Reported Detection 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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010587.D Vial: 11
Acq On : 23 Sep 1999 10:41 am Operator: ClaudiaP
Sample : F4923 1,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 11:16 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.00	96	2928511	25.00	ug/L	0.00
39) Chlorobenzene-d5	16.09	117	2050377	25.00	ug/L	0.00
57) 1,4-Dichlorobenzene-d4	20.25	152	1221444	25.00	ug/L	0.00
System Monitoring Compounds						
25) Dibromofluoromethane	9.90	113	1392844	45.86		0.00
Spiked Amount 50.000	Range 80 - 110		Recovery = 91.72%			
28) 1,2-Dichloroethane-d4	10.44	65	816543	48.87		0.00
Spiked Amount 50.000	Range 74 - 120		Recovery = 97.74%			
40) Toluene-d8	13.63	98	2785075	51.97		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.94%			
59) 4-Bromofluorobenzene	18.16	95	1350944	51.17		0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 102.34%			

Target Compounds						Qvalue
23) Chloroform	9.64	83	814707	10.52	ug/L	94
35) Bromodichloromethane	12.44	83	78797	1.20	ug/L	93

000024

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

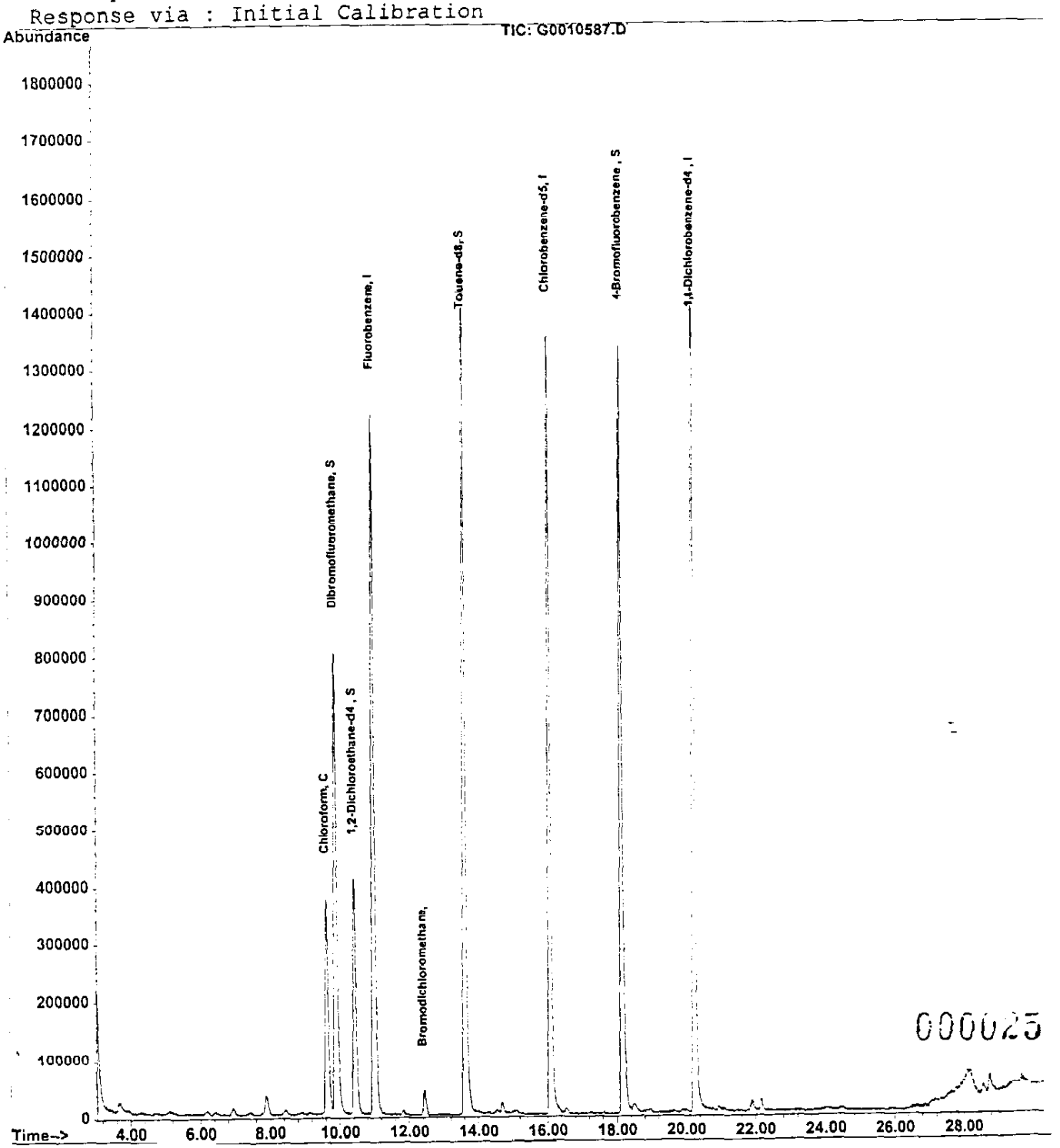
Quantitation Report

Data File : C:\HPCHEM\1\DATA\092399\G0010587.D
Acq On : 23 Sep 1999 10:41 am
Sample : F4923 1,10ml
Misc : ms380,vg289,,,,,
MS Integration Params: RTEINT.P
Quant Time: Sep 23 11:16 1999

Vial: 11
Operator: ClaudiaP
Inst : MSVOA1
Multiplr: 1.00

Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



000025

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0010589.D	1	09/23/99	CJP	n/a	n/a	VG289
Run #2							

VOA 8260 List

CAS No.	Compound	Result	RDL	Units	Q
71 43-2	Benzene	3.2	2.0	ug/l	
100-41-4	Ethylbenzene	1.9	2.0	ug/l	J
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	3.7	4.0	ug/l	J
95-47-6	o-Xylene	1.1	2.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-116%
17060-07-0	1,2-Dichloroethane-D4	105%		74-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	98%		86-115%

000026

ND = Not detected
RDL = Reported Detection 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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010589.D Vial: 13
Acq On : 23 Sep 1999 12:48 pm Operator: ClaudiaP
Sample : F4923-2,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 13:31 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.01	96	2931552	25.00	ug/L	0.02
39) Chlorobenzene-d5	16.09	117	2144537	25.00	ug/L	0.00
57) 1,4-Dichlorobenzene-d4	20.26	152	1344150	25.00	ug/L	0.02
System Monitoring Compounds						
25) Dibromofluoromethane	9.91	113	1447597	47.61		0.02
Spiked Amount 50.000	Range 80 - 116		Recovery = 95.22%			
28) 1,2-Dichloroethane-d4	10.45	65	876414	52.40		0.00
Spiked Amount 50.000	Range 74 - 120		Recovery = 104.80%			
40) Toluene-d8	13.63	98	2869306	51.19		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.38%			
59) 4-Bromofluorobenzene	18.16	95	1428131	49.16		0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.32%			
Target Compounds						Qvalue
23) Chloroform	9.65	83	630151	8.13	ug/L	85
29) Benzene	10.54	78	269222	3.17	ug/L	89
35) Bromodichloromethane	12.45	83	125931	1.92	ug/L	96
52) Ethylbenzene	16.32	91	280566	1.93	ug/L	91
53) m,p-Xylene	16.54	91	438802	3.69	ug/L	96
54) o-Xylene	17.24	91	129804	1.11	ug/L	95
58) Isopropylbenzene	17.88	105	472148	3.03	ug/L	99
63) n-Propylbenzene	18.63	91	2615315	13.59	ug/L	98
66) 1,3,5-Trimethylbenzene	18.81	105	5063622	38.88	ug/L	80
67) sec-Butylbenzene	19.94	105	661139	3.72	ug/L	98
69) 4-Isopropyltoluene	20.11	119	588707	4.12	ug/L	99
72) n-Butylbenzene	20.93	91	1428608	9.45	ug/L #	77
74) 1,2,4-Trimethylbenzene	19.62	105	2543375	19.80	ug/L	97

000027

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

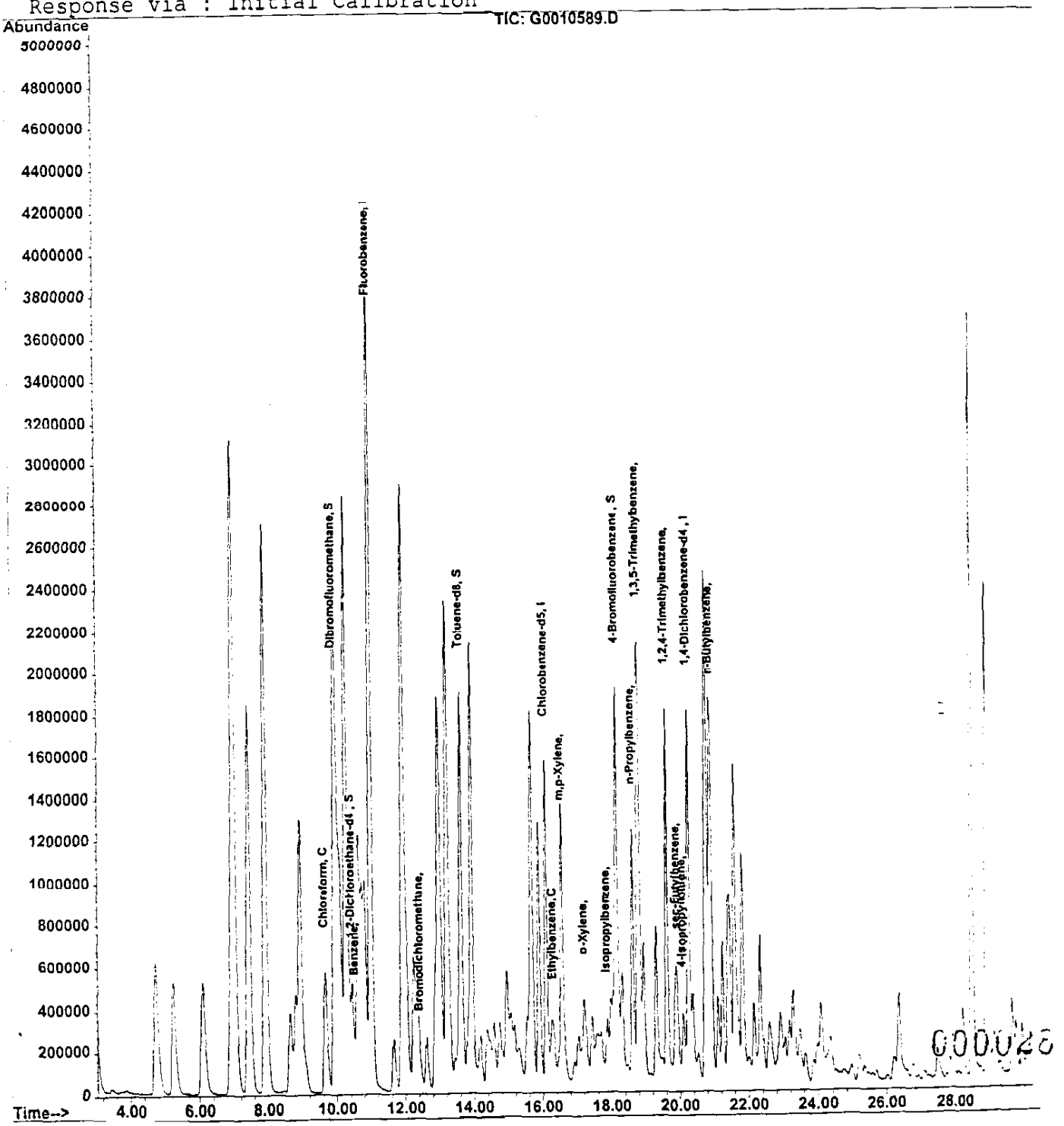
Quantitation Report

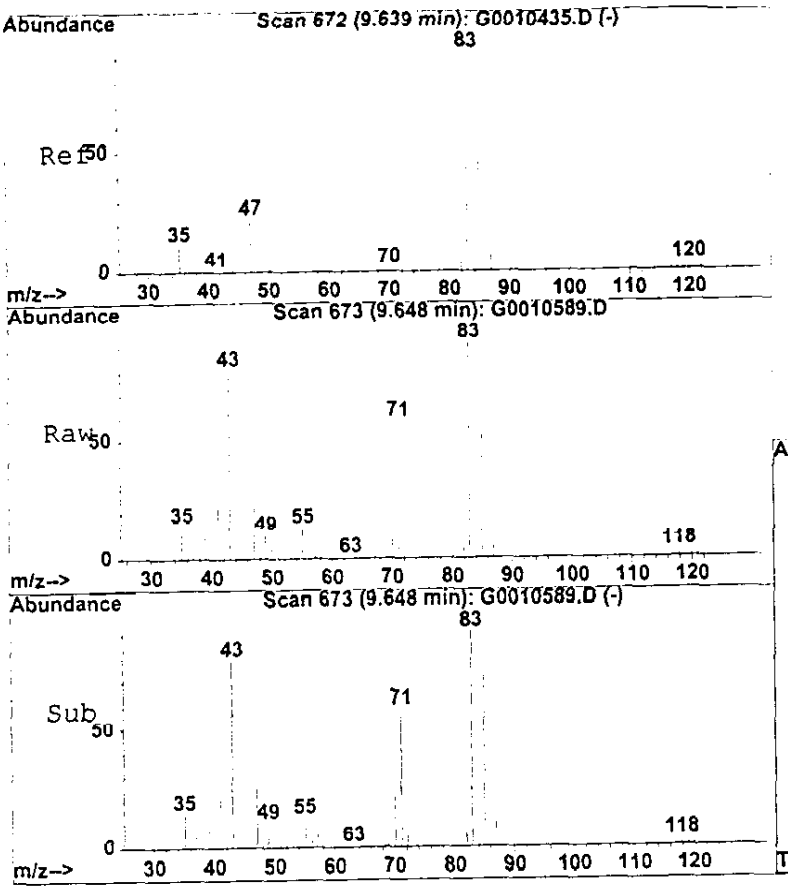
Data File : C:\HPCHEM\1\DATA\092399\G0010589.D
Acq On : 23 Sep 1999 12:48 pm
Sample : F4923-2,10ml
Misc : ms380,vg289,,,,,
MS Integration Params: RTEINT.P
Quant Time: Sep 23 13:31 1999

Vial: 13
Operator: ClaudiaP
Inst : MSVOA1
Multiplr: 1.00

Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration

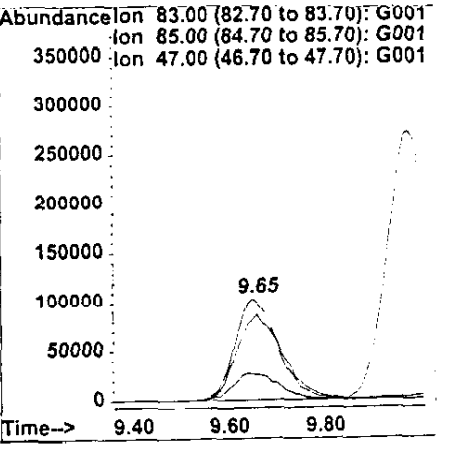


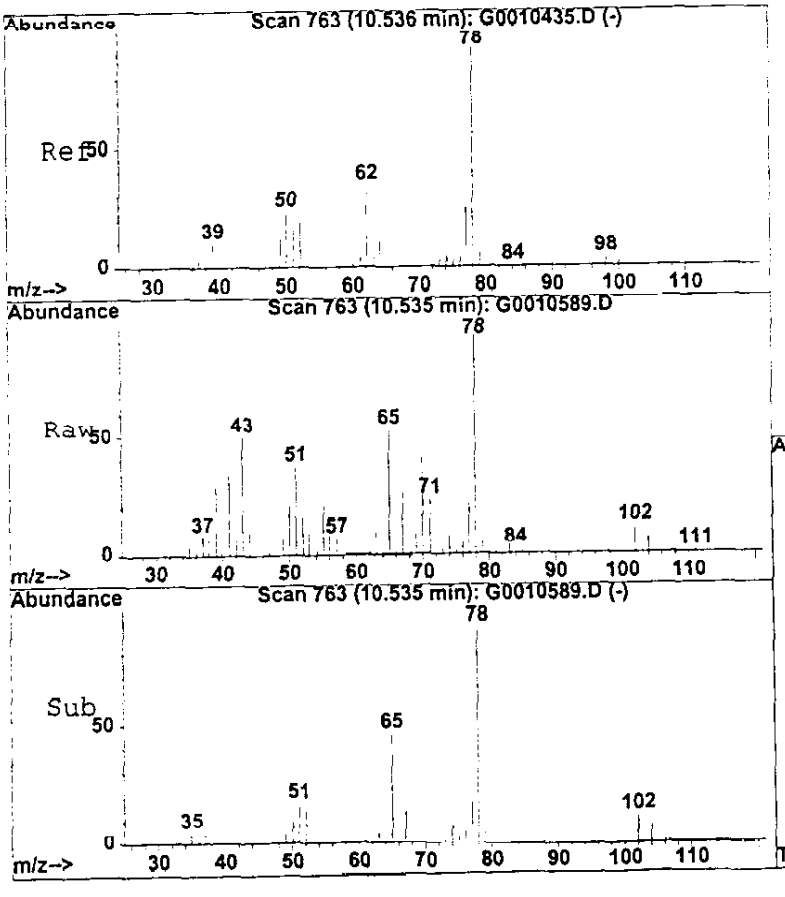


#23
Chloroform
Concen: 8.13 ug/L
RT: 9.65 min Scan# 673
Delta R.T. 0.01 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 83 Resp: 630151

Ion	Ratio	Lower	Upper
83	100		
85	78.7	43.7	83.7
47	25.5	3.8	43.8

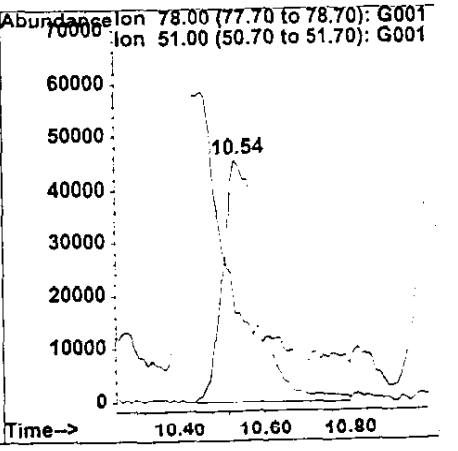


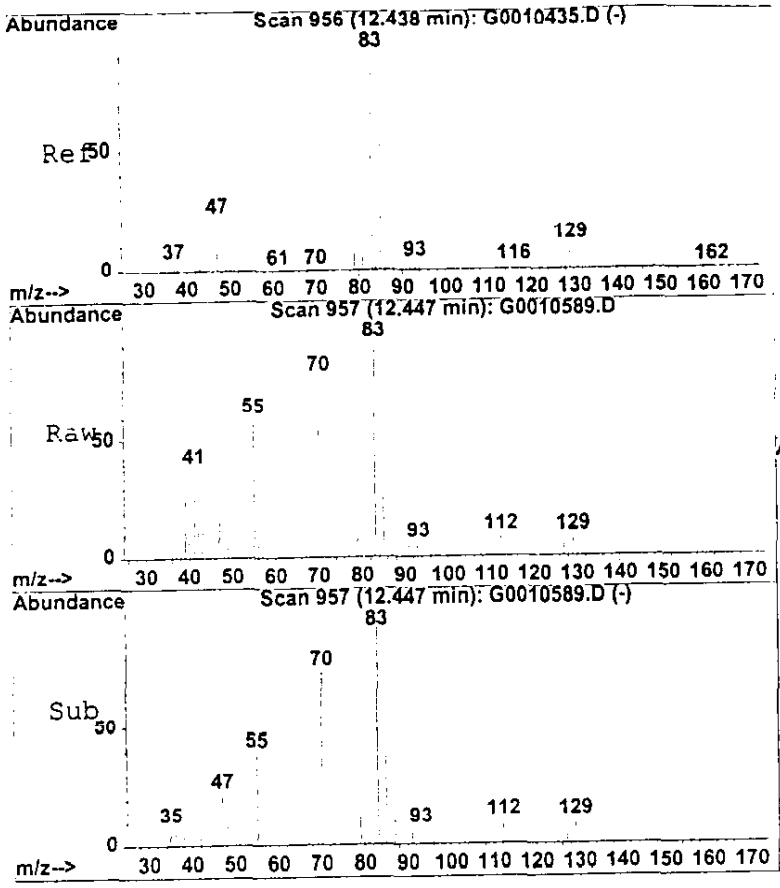


#29
Benzene
Concen: 3.17 ug/L
RT: 10.54 min Scan# 763
Delta R.T. -0.00 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 78 Resp: 269222

Ion	Ratio	Lower	Upper
78	100		
51	21.9	7.8	47.8

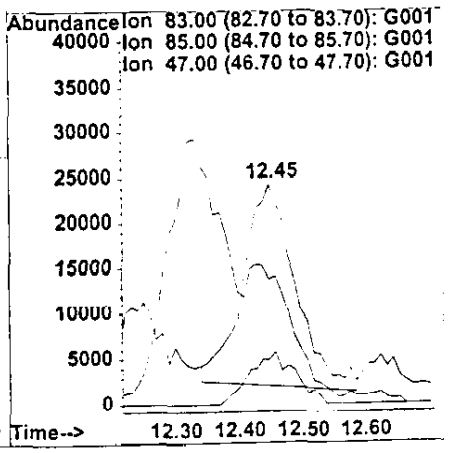


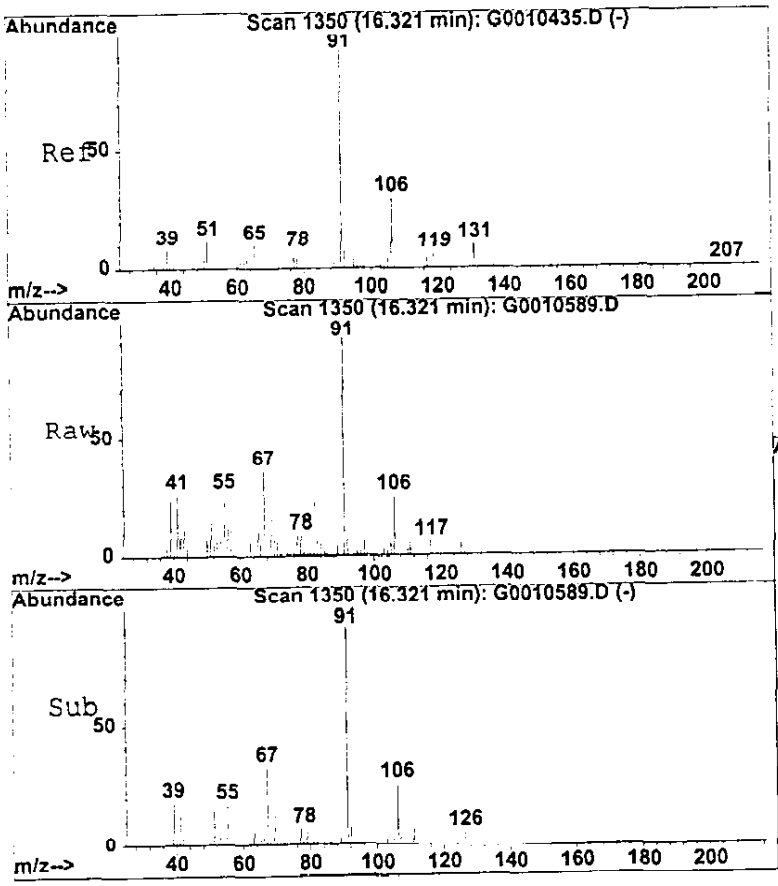


#35
Bromodichloromethane
Concen: 1.92 ug/L
RT: 12.45 min Scan# 957
Delta R.T. 0.01 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 83 Resp: 125931

Ion	Ratio	Lower	Upper
83	100		
85	59.3	50.5	75.7
47	22.3	17.7	26.5

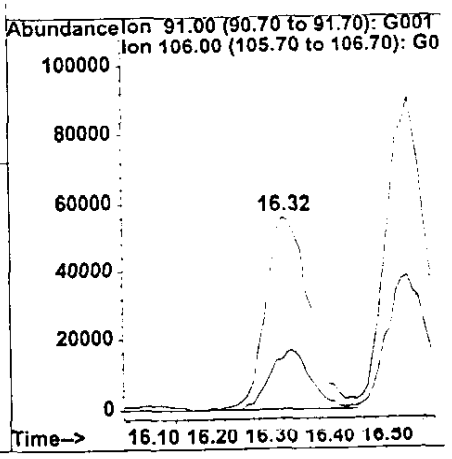


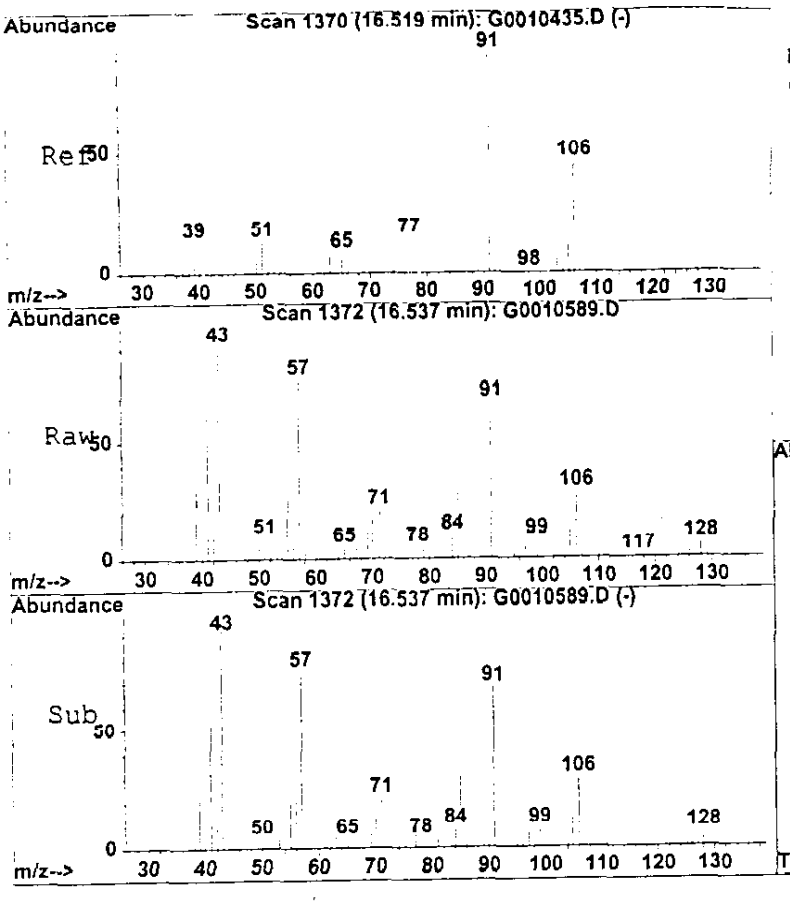


#52
Ethylbenzene
Concen: 1.93 ug/L
RT: 16.32 min Scan# 1350
Delta R.T. 0.00 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 91 Resp: 280566

Ion	Ratio	Lower	Upper
91	100		
106	24.9	9.6	49.6

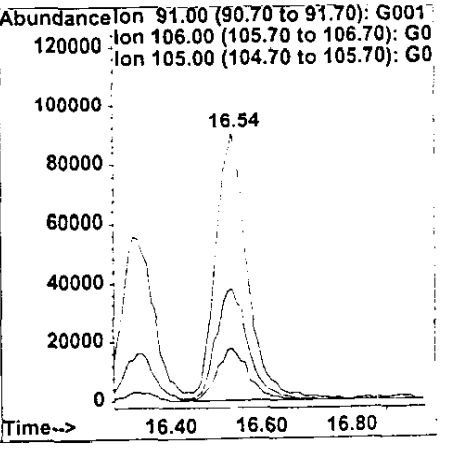


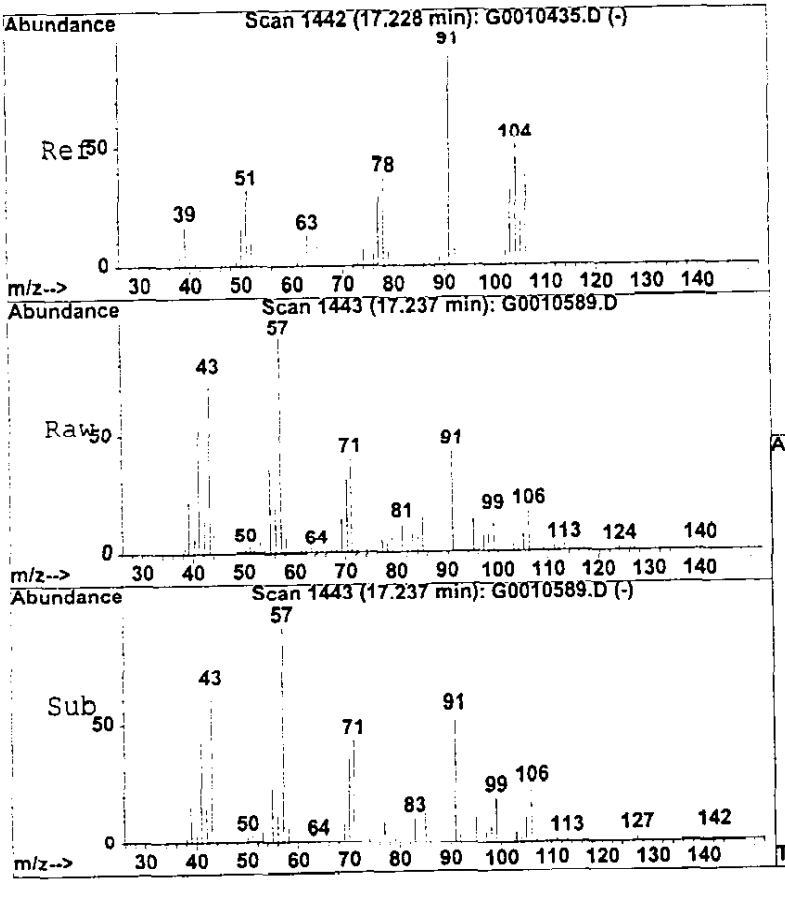


#53
m,p-Xylene
Concen: 3.69 ug/L
RT: 16.54 min Scan# 1372
Delta R.T. 0.02 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 91 Resp: 438802

Ion	Ratio	Lower	Upper
91	100		
106	42.3	25.0	65.0
105	19.6	1.2	41.2

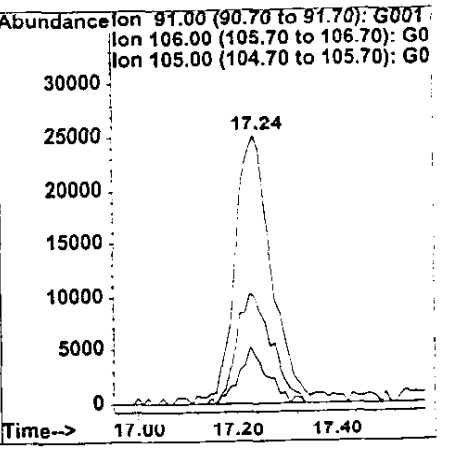


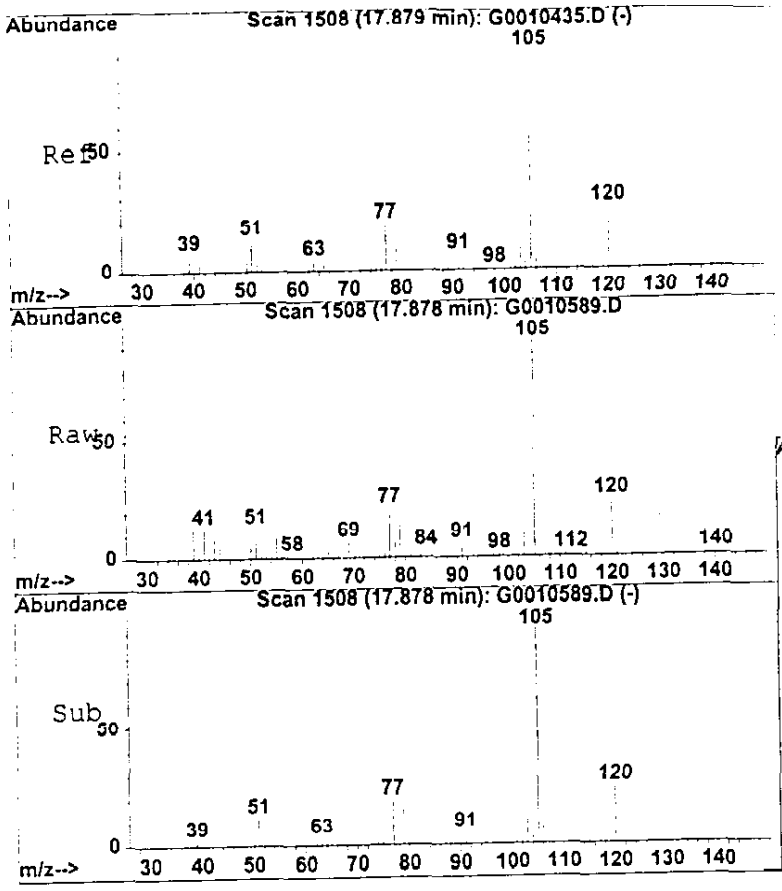


#54
o-Xylene
Concen: 1.11 ug/L
RT: 17.24 min Scan# 1443
Delta R.T. 0.01 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 91 Resp: 129804

Ion	Ratio	Lower	Upper
91	100		
106	39.9	21.7	61.7
105	17.5	1.9	41.9

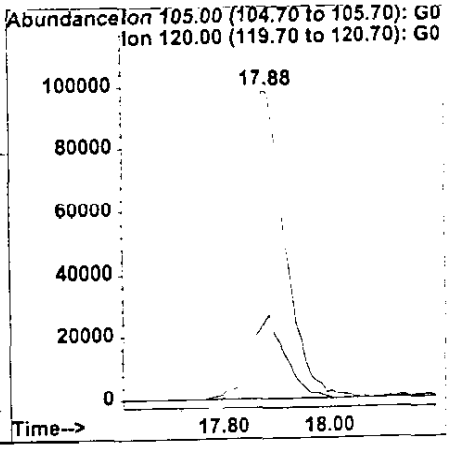


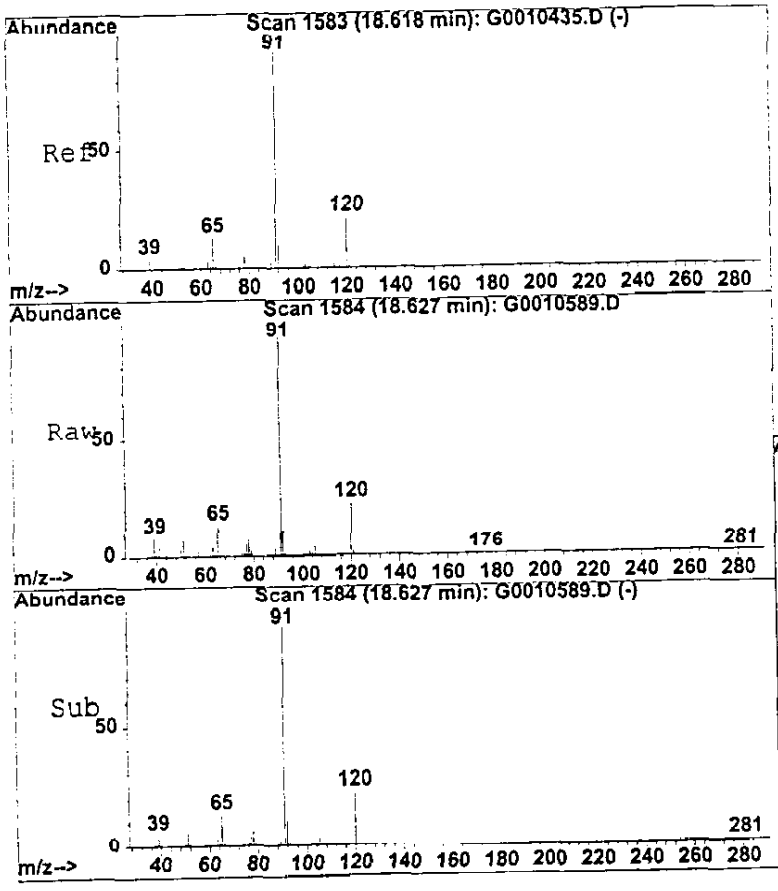


#58
Isopropylbenzene
Concen: 3.03 ug/L
RT: 17.88 min Scan# 1508
Delta R.T. -0.00 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion:105 Resp: 472148

Ion	Ratio	Lower	Upper
105	100		
120	24.0	4.5	44.5

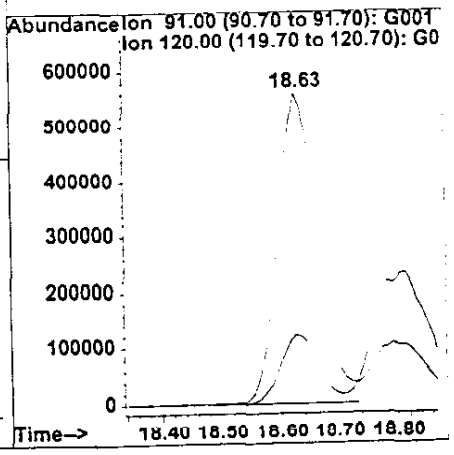


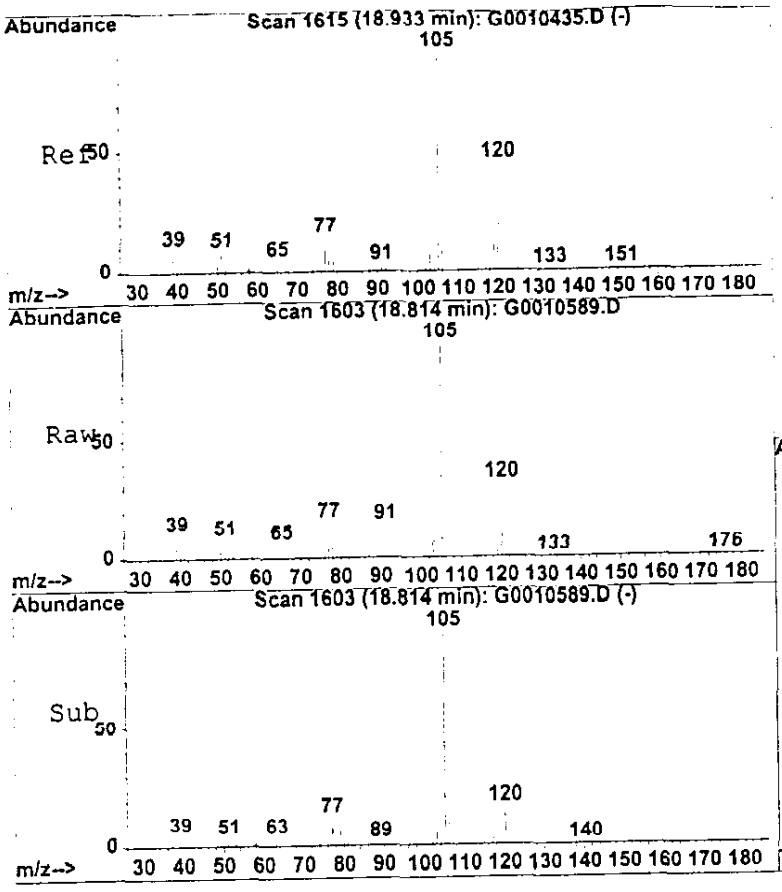


#63
n-Propylbenzene
Concen: 13.59 ug/L
RT: 18.63 min Scan# 1584
Delta R.T. 0.01 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 91 Resp: 2615315

Ion	Ratio	Lower	Upper
91	100		
120	21.7	0.6	40.6

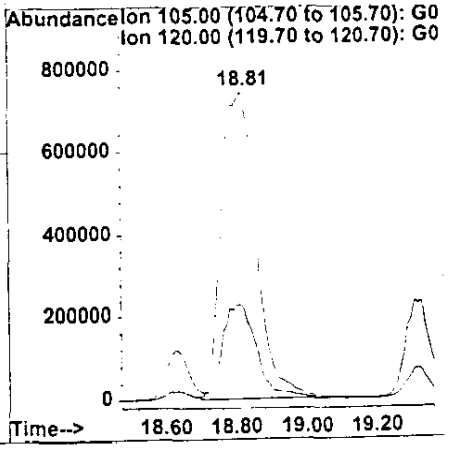


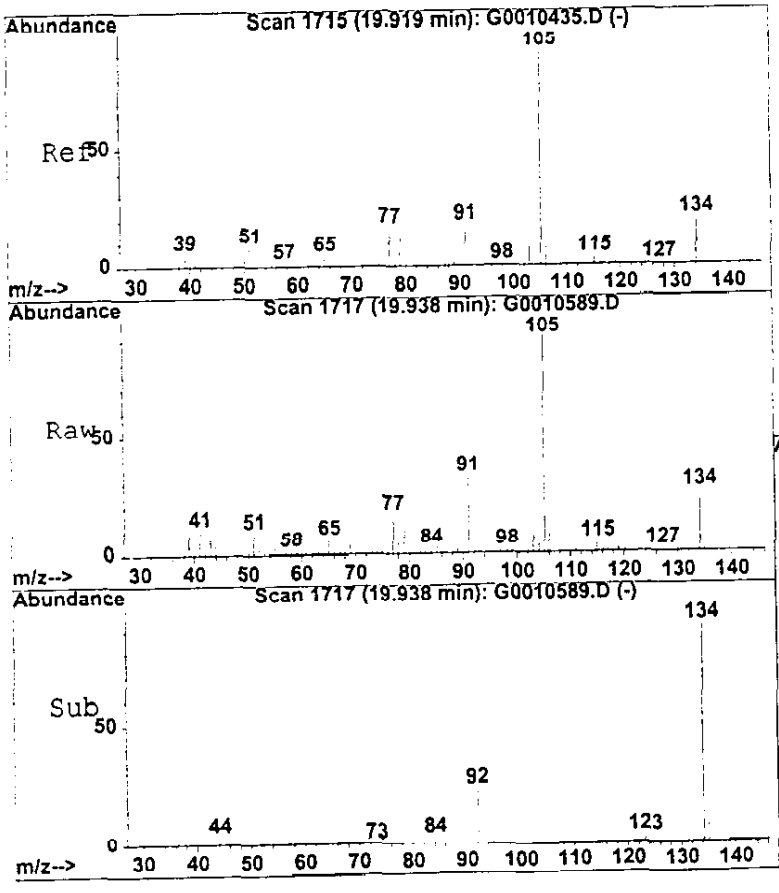


#66
1,3,5-Trimethylbenzene
Concen: 38.88 ug/L
RT: 18.81 min Scan# 1603
Delta R.T. -0.12 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion:105 Resp: 5063622

Ion	Ratio	Lower	Upper
105	100		
120	31.1	24.0	64.0

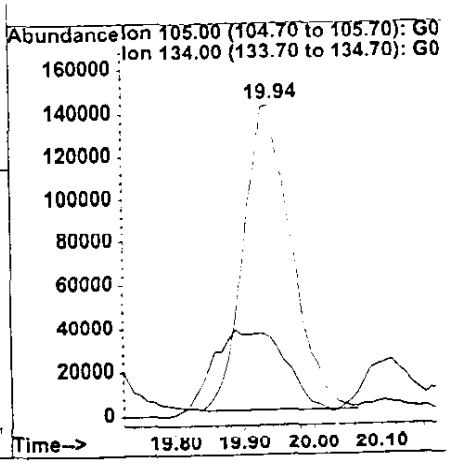


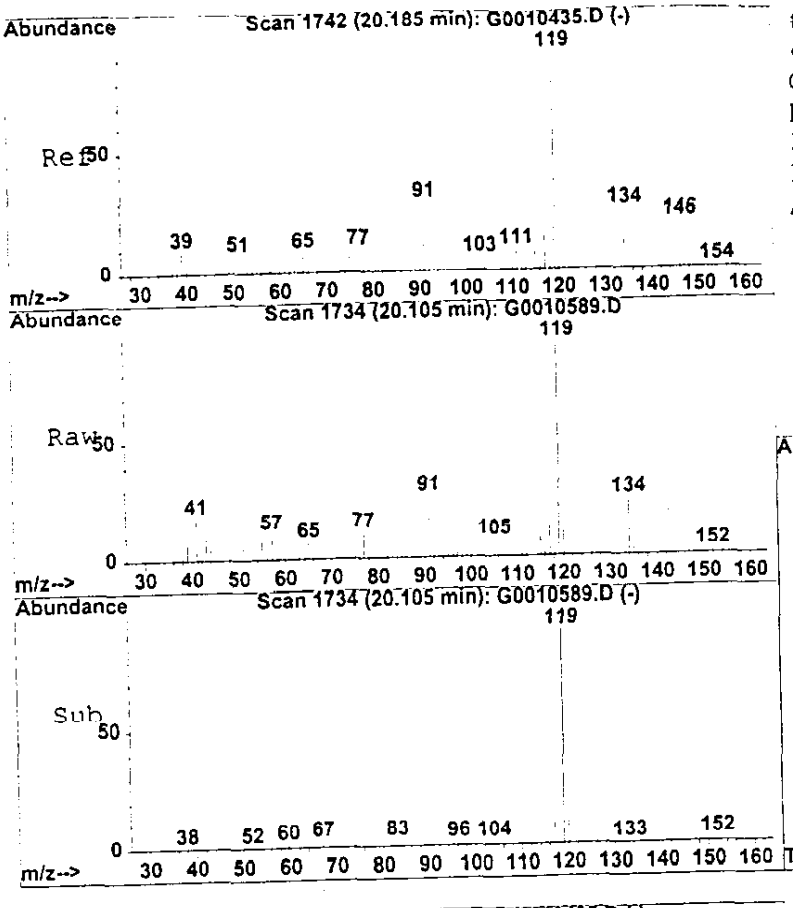


#67
sec-Butylbenzene
Concen: 3.72 ug/L
RT: 19.94 min Scan# 1717
Delta R.T. 0.02 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion:105 Resp: 661139

Ion	Ratio	Lower	Upper
105	100		
134	18.3	0.0	39.1

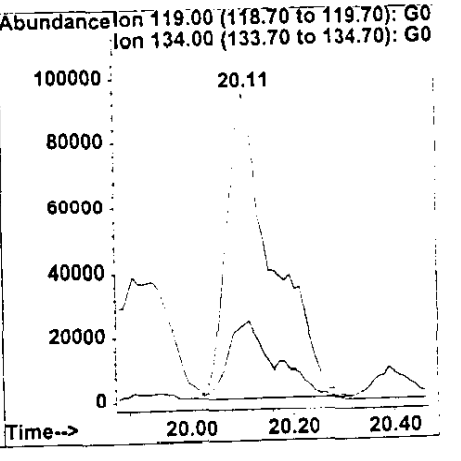


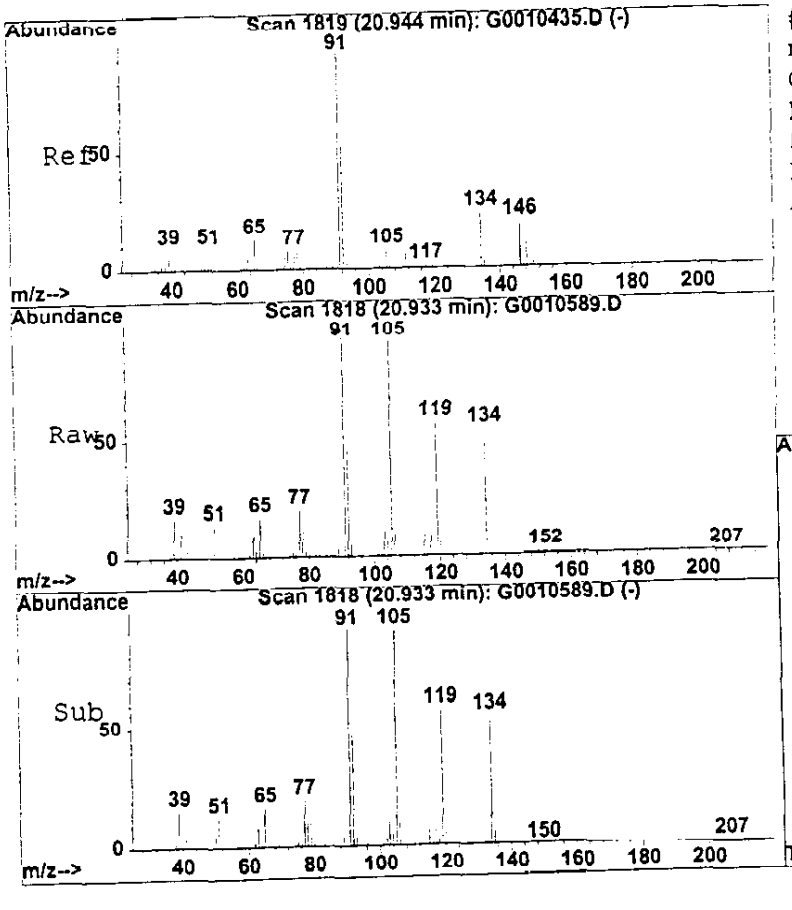


#69
4-Isopropyltoluene
Concen: 4.12 ug/L
RT: 20.11 min Scan# 1734
Delta R.T. -0.08 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion:119 Resp: 588707

Ion	Ratio	Lower	Upper
119	100		
134	24.6	5.2	45.2

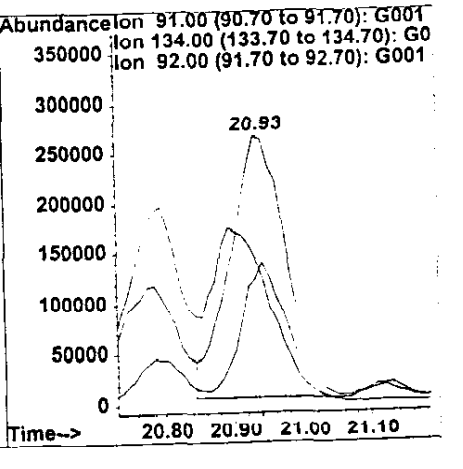


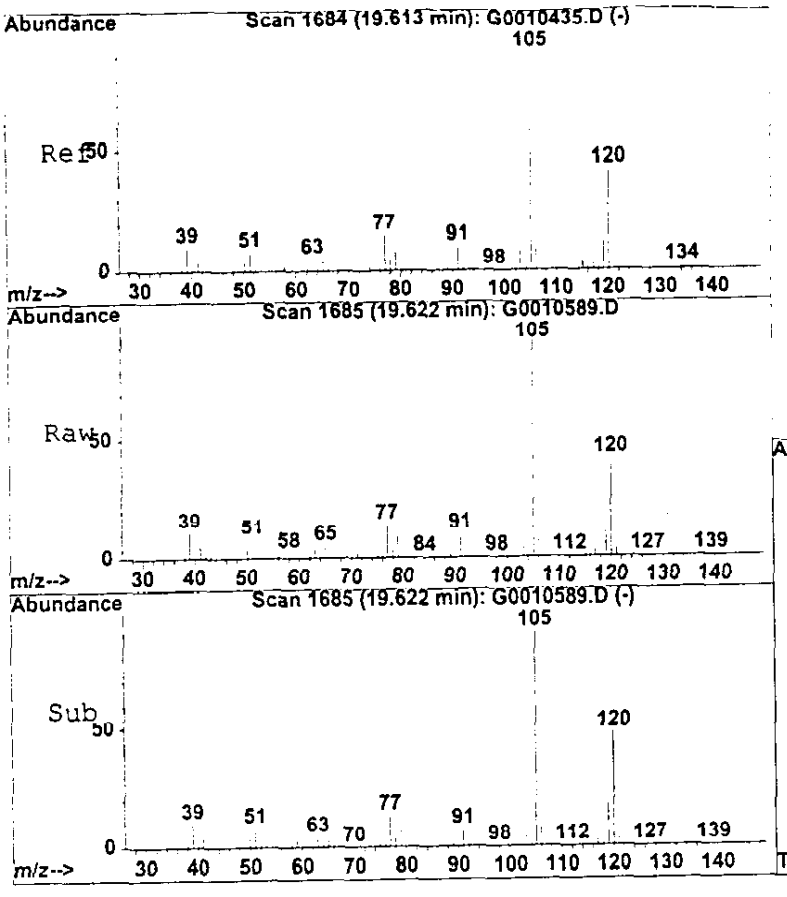


#72
n-Butylbenzene
Concen: 9.45 ug/L
RT: 20.93 min Scan# 1818
Delta R.T. -0.01 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion: 91 Resp: 1428608

Ion	Ratio	Lower	Upper
91	100		
134	52.9	3.2	43.2#
92	47.0	31.6	71.6

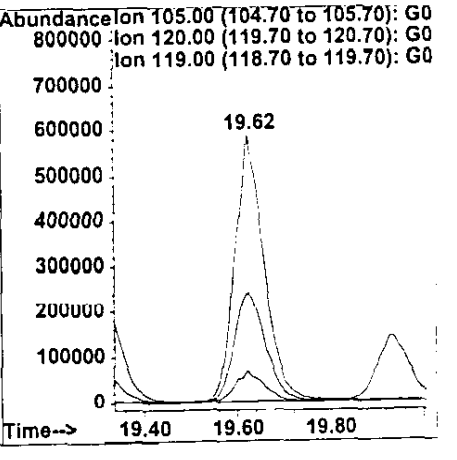




#74
1,2,4-Trimethylbenzene
Concen: 19.80 ug/L
RT: 19.62 min Scan# 1685
Delta R.T. 0.01 min
Lab File: G0010589.D
Acq: 23 Sep 1999 12:48 pm

Tgt Ion:105 Resp: 2543375

Ion	Ratio	Lower	Upper
105	100		
120	41.4	21.5	61.5
119	11.6	0.0	35.9



SURROGATE RECOVERIES SUMMARY

VOC.02

Volatile Surrogate Recovery Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F4923-1	G0010587.D	92.0	98.0	104.0	102.0
F4923-2	G0010589.D	95.0	105.0	102.0	98.0
F4907-1DUP	G0010581.D	93.0	111.0	102.0	102.0
F4907-4MS	G0010590.D	97.0	111.0	103.0	100.0
F4907-4MSD	G0010591.D	97.0	101.0	103.0	97.0
VG289-BS	G0010592.D	96.0	98.0	103.0	100.0
VG289-MB	G0010565.D	94.0	108.0	101.0	102.0
VG289-MB	G0010584.D	95.0	98.0	102.0	100.0
VG289-MB	G0010595.D	94.0	92.0	100.0	101.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-116%
S2 = 1,2-Dichloroethane-D4	74-120%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	86-115%

MATRIX SPIKE/ MATRIX SPIKE DUPLICATE/ BLANK SPIKE SUMMARY

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4907-4MS	G0010590.D	1	09/23/99	CJP	n/a	n/a	VG289
F4907-4MSD	G0010591.D	1	09/23/99	CJP	n/a	n/a	VG289
F4907-4	G0010585.D	1	09/23/99	CJP	n/a	n/a	VG289

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

F4923-1, F4923-2

CAS No.	Compound	F4907-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		50	57.1	114	56.0	112	2	64-127/21
100-41-4	Ethylbenzene	ND		50	52.4	105	51.5	103	2	75-125/20
108-88-3	Toluene	ND		50	54.0	108	53.5	107	1	74-125/20
	m,p-Xylene	ND		100	107	107	106	106	1	79-125/16
95-47-6	o-Xylene	ND		50	52.6	105	52.8	106	0	79-125/16

CAS No.	Surrogate Recoveries	MS	MSD	F4907-4	Limits
1868-53-7	Dibromofluoromethane	97%	97%	87%	80-116%
17060-07-0	1,2-Dichloroethane-D4	111%	101%	88%	74-120%
2037-26-5	Toluene-D8	103%	103%	104%	80-120%
460-00-4	4-Bromofluorobenzene	100%	97%	102%	86-115%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010590.D Vial: 14
Acq On : 23 Sep 1999 2:08 pm Operator: ClaudiaP
Sample : F4907-4ms,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:28 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.02	96	3057799	25.00	ug/L	0.03
39) Chlorobenzene-d5	16.12	117	2130694	25.00	ug/L	0.03
57) 1,4-Dichlorobenzene-d4	20.28	152	1344477	25.00	ug/L	0.04
System Monitoring Compounds						
25) Dibromofluoromethane	9.93	113	1532758	48.33		0.04
Spiked Amount 50.000	Range 80 - 116		Recovery = 96.66%			
28) 1,2-Dichloroethane-d4	10.49	65	965272	55.33		0.04
Spiked Amount 50.000	Range 74 - 120		Recovery = 110.66%			
40) Toluene-d8	13.66	98	2880524	51.72		0.04
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.44%			
59) 4-Bromofluorobenzene	18.19	95	1455455	50.09		0.04
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.18%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.24	85	2867995	46.69	ug/L	98
3) Chloromethane	3.67	50	1307597	45.35	ug/L	89
4) Vinyl Chloride	3.77	62	1805762	55.66	ug/L	95
5) Bromomethane	4.41	94	1599557	53.43	ug/L	95
6) Chloroethane	4.54	64	851739	49.86	ug/L	91
7) Trichlorofluoromethane	4.99	101	3269909	38.80	ug/L	93
8) Acrolein	5.91	56	287998	792.02	ug/L	79
9) 1,1-Dichloroethene	6.01	61	3101024	47.26	ug/L	97
10) Acetone	6.28	43	808643	214.25	ug/L	91
11) Carbon Disulfide	6.39	76	23132514	248.19	ug/L	97
12) Methylene Chloride	6.94	49	2262777	47.65	ug/L	98
13) trans-1,2-Dichloroethene	7.43	61	2988374	45.34	ug/L	97
14) Acrylonitrile	7.43	53	959594	541.06	ug/L	88
15) Methyl Tert Butyl Ether	7.52	73	15760414	227.60	ug/L	97
16) 1,1-Dichloroethane	8.16	63	3646310	49.41	ug/L	99
17) Vinyl acetate	8.35	43	14483999	245.05	ug/L	98
18) Di-isopropyl ether	8.36	45	31138539	241.88	ug/L #	57
19) 2,2-Dichloropropane	9.12	77	3415658	51.15	ug/L	99
20) cis-1,2-Dichloroethene	9.14	96	1909259	54.77	ug/L	94
21) 2-Butanone	9.21	43	1374975	220.65	ug/L	100
22) Bromochloromethane	9.53	128	1046694	47.17	ug/L	97
23) Chloroform	9.67	83	4059051	50.21	ug/L	99
24) 1,1,1-Trichloroethane	9.95	97	3590986	49.19	ug/L	95
26) 1,1-Dichloropropene	10.22	75	2660520	49.37	ug/L	96
27) Carbon Tetrachloride	10.23	117	3101042	46.62	ug/L	99
29) Benzene	10.55	78	5056841	57.10	ug/L	92

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010590.D Vial: 14
Acq On : 23 Sep 1999 2:08 pm Operator: ClaudiaP
Sample : F4907 4ms,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:28 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 1,2-Dichloroethane	10.59	62	2605251	58.17 ug/L	99
31) Trichloroethene	11.64	95	2483299	48.58 ug/L	99
32) 1,2-Dichloropropane	12.00	63	2105323	50.74 ug/L	97
33) Dibromomethane	12.22	93	1315158	45.50 ug/L	96
34) 1,4-Dioxane	12.31	88	148286	963.38 ug/L	89
35) Bromodichloromethane	12.48	83	3271156	47.78 ug/L	98
36) 2-Chloroethyl vinyl ether	12.99	63	16365	4.89 ug/L #	70
37) 4-Methyl-2-pentanone	13.47	43	4565474	234.50 ug/L	98
38) cis-1,3-Dichloropropene	13.21	75	2586394	47.73 ug/L	97
41) Toluene	13.77	91	6297955	53.97 ug/L	97
42) trans-1,3-Dichloropropene	14.13	75	2042384	52.30 ug/L	98
43) 1,1,2-Trichloroethane	14.44	83	1171335	50.66 ug/L	98
44) Tetrachloroethene	14.71	166	3454587	59.89 ug/L	97
45) 2-hexanone	14.87	43	2985562	247.23 ug/L	94
46) 1,3-Dichloropropane	14.72	76	2165438	50.60 ug/L	99
47) Dibromochloromethane	15.13	129	2147174	52.88 ug/L	97
48) 1,2-Dibromoethane	15.33	107	1705755	50.95 ug/L	99
49) 1-Chlorohexane	16.11	91	2994633	54.96 ug/L	94
50) Chlorobenzene	16.17	112	4380800	51.52 ug/L	98
51) 1,1,1,2-Tetrachloroethane	16.32	131	2159445	52.00 ug/L	98
52) Ethylbenzene	16.36	91	7569907	52.36 ug/L	96
53) m,p-Xylene	16.56	91	12696384	107.39 ug/L	98
54) o-Xylene	17.26	91	6114052	52.57 ug/L	98
55) Styrene	17.28	104	3880334	53.53 ug/L	84
56) Bromoform	17.63	173	1327226	54.14 ug/L	95
58) Isopropylbenzene	17.91	105	8056489	51.75 ug/L	97
60) Bromobenzene	18.47	156	2124503	50.14 ug/L	89
61) 1,1,2,2-Tetrachloroethane	18.43	83	1623743	49.79 ug/L	96
62) 1,2,3-Trichloropropane	18.51	110	409640	49.02 ug/L	92
63) n-Propylbenzene	18.65	91	10142124	52.70 ug/L	98
64) 2-Chlorotoluene	18.81	91	5855411	50.19 ug/L	97
65) 4-Chlorotoluene	19.00	91	6582752	49.81 ug/L	99
66) 1,3,5-Trimethylbenzene	18.96	105	6623077	50.85 ug/L	99
67) sec-Butylbenzene	19.95	105	9587901	53.88 ug/L	100
68) 1,3-Dichlorobenzene	20.16	146	3940852	50.32 ug/L	97
69) 4-Isopropyltoluene	20.20	119	7492013	52.39 ug/L	96
70) 1,4-Dichlorobenzene	20.33	146	4046680	49.72 ug/L	97
71) tert-Butylbenzene	19.55	91	5329563	50.75 ug/L	96
72) n-Butylbenzene	20.96	91	8122196	53.73 ug/L	96
73) 1,2-Dichlorobenzene	21.00	146	3275728	48.10 ug/L	97
74) 1,2,4-Trimethylbenzene	19.64	105	6532089	50.84 ug/L	99

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

000039

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010590.D Vial: 14
Acq On : 23 Sep 1999 2:08 pm Operator: ClaudiaP
Sample : F4907-4ms,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:28 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.43	75	269132	49.06 ug/L	91
76) 1,2,4-Trichlorobenzene	24.18	180	2774367	53.20 ug/L	95
77) Hexachlorobutadiene	24.59	225	2037900	53.42 ug/L	89
78) Naphthalene	24.74	128	2915291	51.57 ug/L	100
79) 1,2,3-Trichlorobenzene	25.35	180	2344371	52.30 ug/L	95

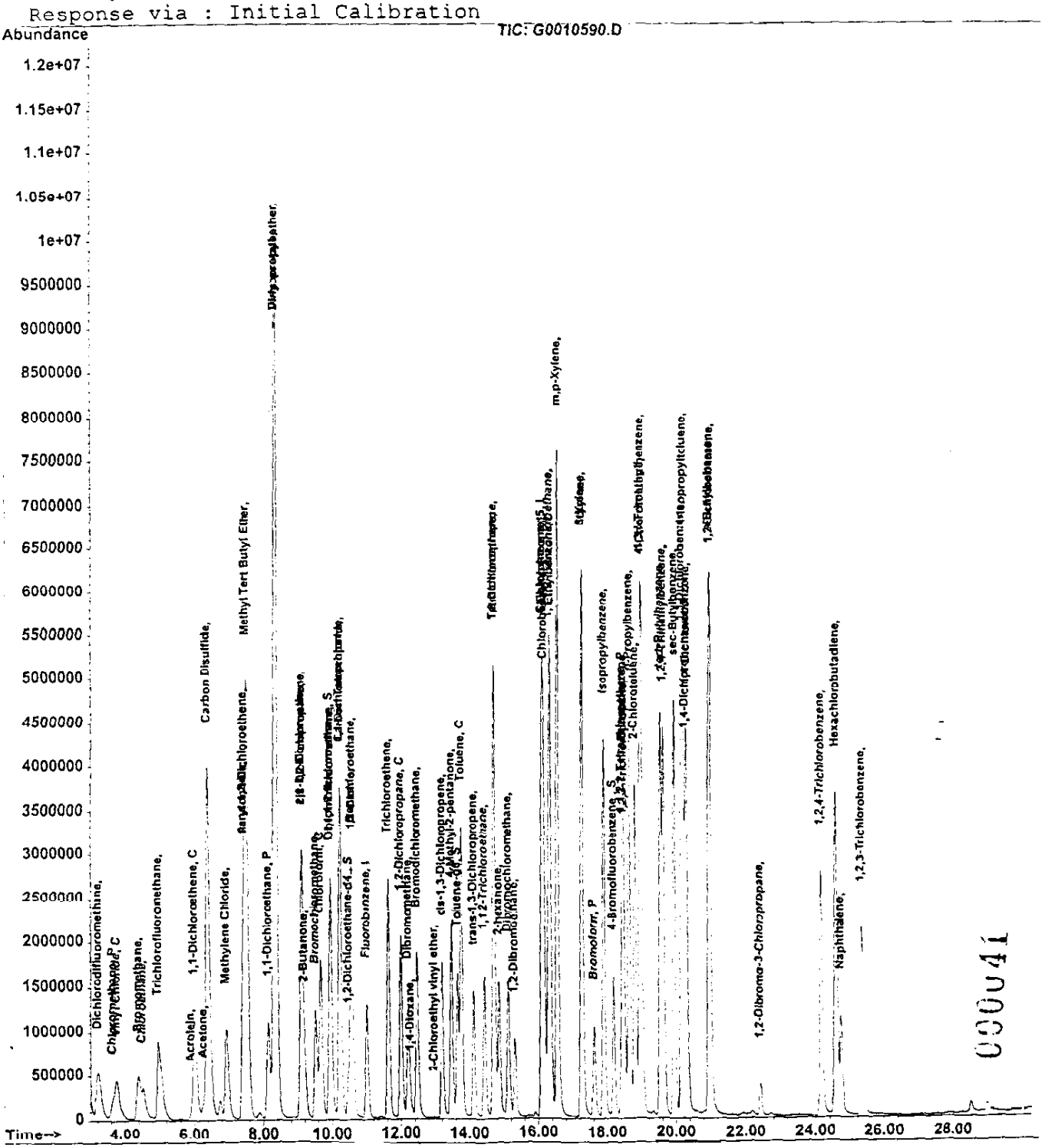
000040

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092399\G0010590.D Vial: 14
Acq On : 23 Sep 1999 2:08 pm Operator: ClaudiaP
Sample : F4907-4ms,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:28 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010591.D Vial: 15
Acq On : 23 Sep 1999 2:46 pm Operator: ClaudiaP
Sample : F4907-4msd,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.00	96	3130333	25.00 ug/L	0.01
39) Chlorobenzene-d5	16.11	117	2226828	25.00 ug/L	0.01
57) 1,4-Dichlorobenzene-d4	20.26	152	1392816	25.00 ug/L	0.02
System Monitoring Compounds					
25) Dibromofluoromethane	9.92	113	1571685	48.41	0.02
Spiked Amount 50.000	Range 80 - 116		Recovery = 96.82%		
28) 1,2-Dichloroethane-d4	10.46	65	906060	50.73	0.01
Spiked Amount 50.000	Range 74 - 120		Recovery = 101.46%		
40) Toluene-d8	13.64	98	2986148	51.30	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.60%		
59) 4-Bromofluorobenzene	18.17	95	1462181	48.57	0.02
Spiked Amount 50.000	Range 86 - 115		Recovery = 97.14%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.18	85	2912002	46.31 ug/L	97
3) Chloromethane	3.65	50	1293500	43.82 ug/L	92
4) Vinyl Chloride	3.75	62	1815680	54.67 ug/L	96
5) Bromomethane	4.35	94	1786287	58.28 ug/L	94
6) Chloroethane	4.51	64	853789	48.82 ug/L	90
7) Trichlorofluoromethane	4.98	101	3475834	40.29 ug/L	92
8) Acrolein	5.90	56	305093	819.59 ug/L	77
9) 1,1-Dichloroethene	5.98	61	3095789	46.08 ug/L	96
10) Acetone	6.26	43	842079	217.94 ug/L	91
11) Carbon Disulfide	6.37	76	23211571	243.27 ug/L	98
12) Methylene Chloride	6.91	49	2247722	46.24 ug/L	96
13) trans-1,2-Dichloroethene	7.40	61	2997914	44.43 ug/L	98
14) Acrylonitrile	7.40	53	985256	542.66 ug/L	91
15) Methyl Tert Butyl Ether	7.49	73	16091012	226.99 ug/L	96
16) 1,1-Dichloroethane	8.12	63	3675775	48.65 ug/L	98
17) Vinyl acetate	8.34	43	14795910	244.52 ug/L	98
18) Di-isopropyl ether	8.34	45	31379573	238.11 ug/L #	59
19) 2,2-Dichloropropane	9.10	77	3401602	49.76 ug/L	96
20) cis-1,2-Dichloroethene	9.11	96	1929875	54.08 ug/L	96
21) 2-Butanone	9.20	43	1472939	230.89 ug/L	99
22) Bromochloromethane	9.51	128	1086079	47.81 ug/L	95
23) Chloroform	9.66	83	4107871	49.64 ug/L	97
24) 1,1,1-Trichloroethane	9.94	97	3604872	48.24 ug/L	97
26) 1,1-Dichloropropene	10.20	75	2736646	49.60 ug/L	97
27) Carbon Tetrachloride	10.20	117	3200806	47.00 ug/L	100
29) Benzene	10.54	78	5075791	55.98 ug/L	93

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010591.D Vial: 15
Acq On : 23 Sep 1999 2:46 pm Operator: ClaudiaP
Sample : F4907-4msd,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	1,2-Dichloroethane	10.58	62	2652333	57.85 ug/L		97
31)	Trichloroethene	11.62	95	2583212	49.36 ug/L		97
32)	1,2-Dichloropropane	11.99	63	2166239	51.00 ug/L		97
33)	Dibromomethane	12.19	93	1400212	47.32 ug/L		97
34)	1,4-Dioxane	12.29	88	167625	1063.79 ug/L		90
35)	Bromodichloromethane	12.45	83	3412084	48.68 ug/L		98
36)	2-Chloroethyl vinyl ether	12.97	63	13330	3.89 ug/L	#	40
37)	4-Methyl-2-pentanone	13.45	43	4972272	249.48 ug/L		98
38)	cis-1,3-Dichloropropene	13.18	75	2689498	48.48 ug/L		99
41)	Toluene	13.75	91	6528389	53.53 ug/L		99
42)	trans-1,3-Dichloropropene	14.10	75	2100001	51.46 ug/L		95
43)	1,1,2-Trichloroethane	14.42	83	1254212	51.90 ug/L		97
44)	Tetrachloroethene	14.69	166	3494956	57.97 ug/L		96
45)	2-hexanone	14.84	43	3253213	257.77 ug/L		96
46)	1,3-Dichloropropane	14.70	76	2231230	49.89 ug/L		97
47)	Dibromochloromethane	15.10	129	2212449	52.14 ug/L		97
48)	1,2-Dibromoethane	15.30	107	1815912	51.90 ug/L		98
49)	1-Chlorohexane	16.10	91	3025547	53.13 ug/L		93
50)	Chlorobenzene	16.14	112	4535151	51.03 ug/L		99
51)	1,1,1,2-Tetrachloroethane	16.28	131	2206725	50.85 ug/L		98
52)	Ethylbenzene	16.32	91	7776220	51.47 ug/L		97
53)	m,p-Xylene	16.54	91	13081961	105.87 ug/L		96
54)	o-Xylene	17.24	91	6416116	52.79 ug/L		99
55)	Styrene	17.26	104	4083229	53.90 ug/L		90
56)	Bromoform	17.60	173	1384860	54.05 ug/L		97
58)	Isopropylbenzene	17.89	105	8238945	51.09 ug/L		96
60)	Bromobenzene	18.45	156	2148663	48.95 ug/L		83
61)	1,1,2,2-Tetrachloroethane	18.40	83	1742632	51.58 ug/L		94
62)	1,2,3-Trichloropropane	18.49	110	437954	50.59 ug/L		92
63)	n-Propylbenzene	18.63	91	10426771	52.30 ug/L		99
64)	2-Chlorotoluene	18.79	91	6168541	51.04 ug/L		94
65)	4-Chlorotoluene	18.98	91	6711145	49.02 ug/L		99
66)	1,3,5-Trimethylbenzene	18.94	105	6834389	50.65 ug/L		98
67)	sec-Butylbenzene	19.94	105	9817139	53.26 ug/L		99
68)	1,3-Dichlorobenzene	20.16	146	4086061	50.37 ug/L		99
69)	4-Isopropyltoluene	20.20	119	7788022	52.57 ug/L		100
70)	1,4-Dichlorobenzene	20.30	146	4189352	49.68 ug/L		97
71)	tert-Butylbenzene	19.53	91	5558355	51.09 ug/L		97
72)	n-Butylbenzene	20.94	91	8242520	52.64 ug/L		97
73)	1,2-Dichlorobenzene	20.99	146	3380204	47.91 ug/L		95
74)	1,2,4-Trimethylbenzene	19.62	105	6595993	49.55 ug/L		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010591.D Vial: 15
Acq On : 23 Sep 1999 2:46 pm Operator: ClaudiaP
Sample : P4907-4msd,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.41	75	301158	52.99 ug/L	85
76) 1,2,4-Trichlorobenzene	24.15	180	2828808	52.36 ug/L	96
77) Hexachlorobutadiene	24.55	225	2128339	53.85 ug/L	92
78) Naphthalene	24.71	128	3009030	51.38 ug/L	99
79) 1,2,3-Trichlorobenzene	25.32	180	2363629	50.90 ug/L	98

C00044

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

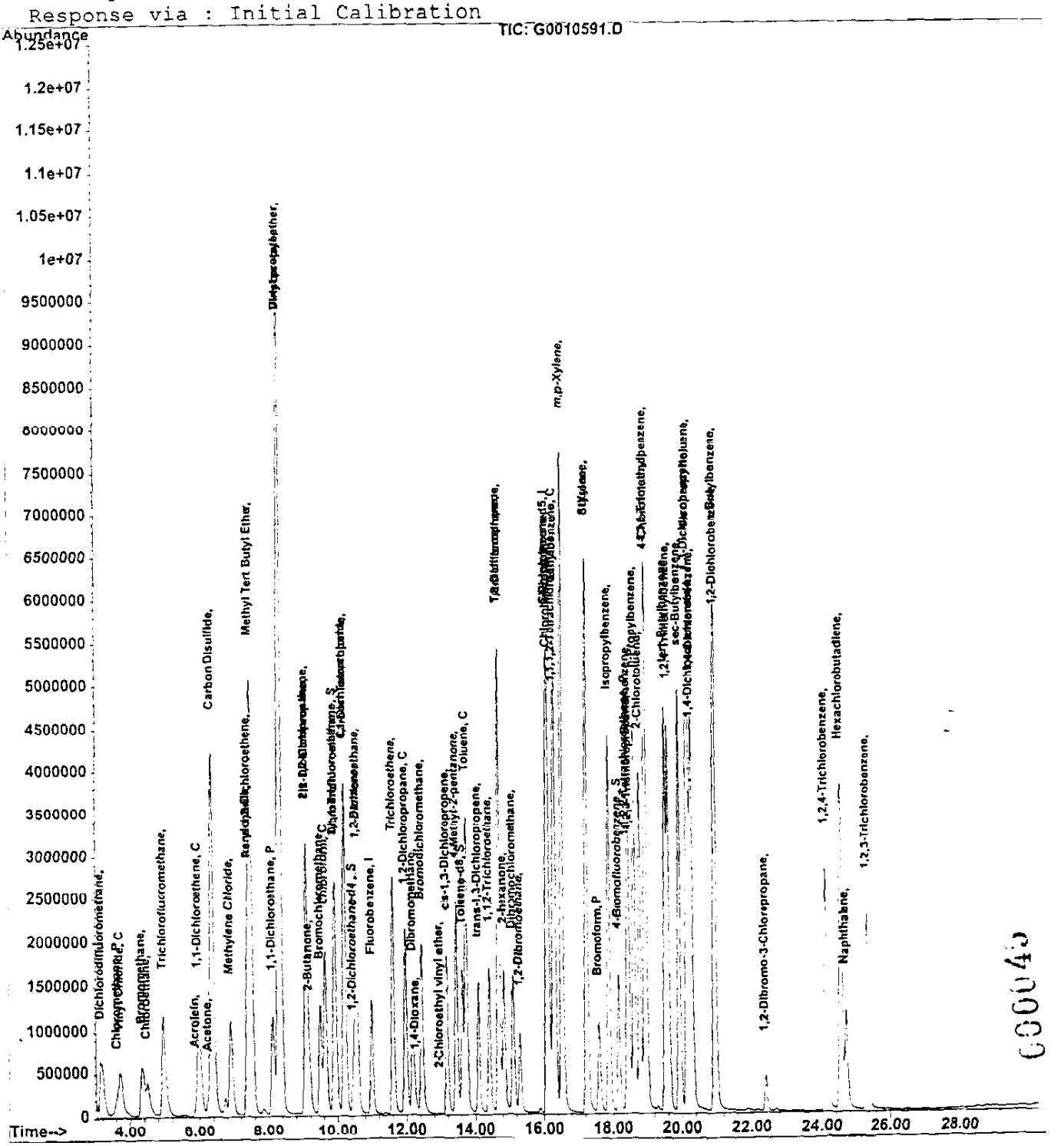
Quantitation Report

Data File : C:\HPCHEM\1\DATA\092399\G0010591.D
Acq On : 23 Sep 1999 2:46 pm
Sample : F4907-4msd,10ml
Misc : ms380,vg289,,,,,
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999

Vial: 15
Operator: ClaudiaP
Inst : MSVOA1
Multiplr: 1.00

Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Blank Spike Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG289-BS	G0010592.D	1	09/23/99	CJP	n/a	n/a	VG289

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

F4923-1, F4923-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	50.8	102	64-127
100-41-4	Ethylbenzene	50	50.6	101	75-125
108-88-3	Toluene	50	53.1	106	74-125
	m,p-Xylene	100	105	105	79-125
95-47-6	o-Xylene	50	52.4	105	79-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	80-116%
17060-07-0	1,2-Dichloroethane-D4	98%	74-120%
2037-26-5	Toluene-D8	103%	80-120%
460-00-4	4-Bromofluorobenzene	100%	86-115%

C00046

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010592.D Vial: 16
Acq On : 23 Sep 1999 3:25 pm Operator: ClaudiaP
Sample : BS,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.99	96	3192652	25.00 ug/L	0.00
39) Chlorobenzene-d5	16.09	117	2284397	25.00 ug/L	0.00
57) 1,4-Dichlorobenzene-d4	20.25	152	1419492	25.00 ug/L	0.00
System Monitoring Compounds					
25) Dibromofluoromethane	9.91	113	1598661	48.28	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	96.56%	
28) 1,2-Dichloroethane-d4	10.45	65	897727	49.28	0.00
Spiked Amount 50.000	Range 74 - 120		Recovery =	98.56%	
40) Toluene-d8	13.63	98	3069315	51.40	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	102.80%	
59) 4-Bromofluorobenzene	18.15	95	1536569	50.08	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery =	100.16%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.16	85	2927217	45.64 ug/L	97
3) Chloromethane	3.65	50	1285573	42.71 ug/L	95
4) Vinyl Chloride	3.72	62	1797661	53.07 ug/L	98
5) Bromomethane	4.35	94	1817812	58.15 ug/L	90
6) Chloroethane	4.50	64	851498	47.74 ug/L	90
7) Trichlorofluoromethane	4.97	101	3459294	39.32 ug/L	91
8) Acrolein	5.88	56	297779	784.32 ug/L #	69
9) 1,1-Dichloroethene	5.98	61	3107712	45.36 ug/L	92
10) Acetone	6.25	43	834053	211.65 ug/L	95
11) Carbon Disulfide	6.36	76	23449858	240.97 ug/L	97
12) Methylene Chloride	6.90	49	2289318	46.18 ug/L	96
13) trans-1,2-Dichloroethene	7.40	61	3054487	44.38 ug/L	97
14) Acrylonitrile	7.39	53	990522	534.91 ug/L	88
15) Methyl Tert Butyl Ether	7.49	73	16331233	225.88 ug/L	98
16) 1,1-Dichloroethane	8.12	63	3774851	48.99 ug/L	97
17) Vinyl acetate	8.33	43	15400639	249.55 ug/L	98
18) Di-isopropyl ether	8.32	45	32860143	244.48 ug/L #	57
19) 2,2-Dichloropropane	9.08	77	3388915	48.60 ug/L	97
20) cis-1,2-Dichloroethene	9.11	96	1967471	54.06 ug/L	93
21) 2-Butanone	9.19	43	1416080	217.65 ug/L	96
22) Bromochloromethane	9.49	128	1105165	47.70 ug/L	91
23) Chloroform	9.64	83	4085475	48.40 ug/L	97
24) 1,1,1-Trichloroethane	9.93	97	3648989	47.88 ug/L	93
26) 1,1-Dichloropropene	10.18	75	2767663	49.18 ug/L	96
27) Carbon Tetrachloride	10.20	117	3305141	47.59 ug/L	92
29) Benzene	10.53	78	4694831	50.77 ug/L	93

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

000047

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010592.D Vial: 16
Acq On : 23 Sep 1999 3:25 pm Operator: ClaudiaP
Sample : BS,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 1,2-Dichloroethane	10.57	62	2104153	45.00 ug/L	98
31) Trichloroethene	11.60	95	2599170	48.70 ug/L	97
32) 1,2-Dichloropropane	11.97	63	2257589	52.11 ug/L	99
33) Dibromomethane	12.17	93	1435790	47.58 ug/L	97
34) 1,4-Dioxane	12.28	88	167500	1042.25 ug/L	89
35) Bromodichloromethane	12.44	83	3503679	49.01 ug/L	99
36) 2-Chloroethyl vinyl ether	12.92	63	2066566	489.85 ug/L	94
37) 4-Methyl-2-pentanone	13.44	43	4961994	244.10 ug/L	98
38) cis-1,3-Dichloropropene	13.17	75	2806287	49.60 ug/L	98
41) Toluene	13.74	91	6643917	53.11 ug/L	100
42) trans-1,3-Dichloropropene	14.09	75	2149225	51.34 ug/L	99
43) 1,1,2-Trichloroethane	14.41	83	1285027	51.84 ug/L	95
44) Tetrachloroethene	14.69	166	3134492	50.68 ug/L	96
45) 2-hexanone	14.83	43	3270535	252.61 ug/L	96
46) 1,3-Dichloropropane	14.70	76	2303541	50.21 ug/L	96
47) Dibromochloromethane	15.10	129	2278086	52.33 ug/L	94
48) 1,2-Dibromoethane	15.30	107	1835502	51.14 ug/L	96
49) 1-Chlorohexane	16.08	91	3025199	51.78 ug/L	95
50) Chlorobenzene	16.13	112	4681185	51.35 ug/L	98
51) 1,1,1,2-Tetrachloroethane	16.28	131	2276360	51.13 ug/L	96
52) Ethylbenzene	16.32	91	7842055	50.59 ug/L	99
53) m,p-Xylene	16.53	91	13327710	105.14 ug/L	98
54) o-Xylene	17.22	91	6529999	52.37 ug/L	98
55) Styrene	17.25	104	4198325	54.02 ug/L	94
56) Bromoform	17.59	173	1454401	55.34 ug/L	97
58) Isopropylbenzene	17.88	105	8391976	51.06 ug/L	95
60) Bromobenzene	18.43	156	2237582	50.02 ug/L	91
61) 1,1,2,2-Tetrachloroethane	18.40	83	1787507	51.92 ug/L	94
62) 1,2,3-Trichloropropane	18.47	110	439066	49.77 ug/L	95
63) n-Propylbenzene	18.61	91	10578942	52.07 ug/L	98
64) 2-Chlorotoluene	18.78	91	6195067	50.30 ug/L	98
65) 4-Chlorotoluene	18.97	91	6897131	49.43 ug/L	98
66) 1,3,5-Trimethylbenzene	18.93	105	6998196	50.89 ug/L	100
67) sec-Butylbenzene	19.93	105	9881204	52.60 ug/L	99
68) 1,3-Dichlorobenzene	20.14	146	4188646	50.66 ug/L	96
69) 4-Isopropyltoluene	20.19	119	7736257	51.24 ug/L	94
70) 1,4-Dichlorobenzene	20.29	146	4275489	49.75 ug/L	98
71) tert-Butylbenzene	19.52	91	5602987	50.53 ug/L	97
72) n-Butylbenzene	20.93	91	8290228	51.95 ug/L	97
73) 1,2-Dichlorobenzene	20.98	146	3505817	48.76 ug/L	97
74) 1,2,4-Trimethylbenzene	19.60	105	6886975	50.76 ug/L	97

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

C00043

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010592.D Vial: 16
Acq On : 23 Sep 1999 3:25 pm Operator: ClaudiaP
Sample : BS,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

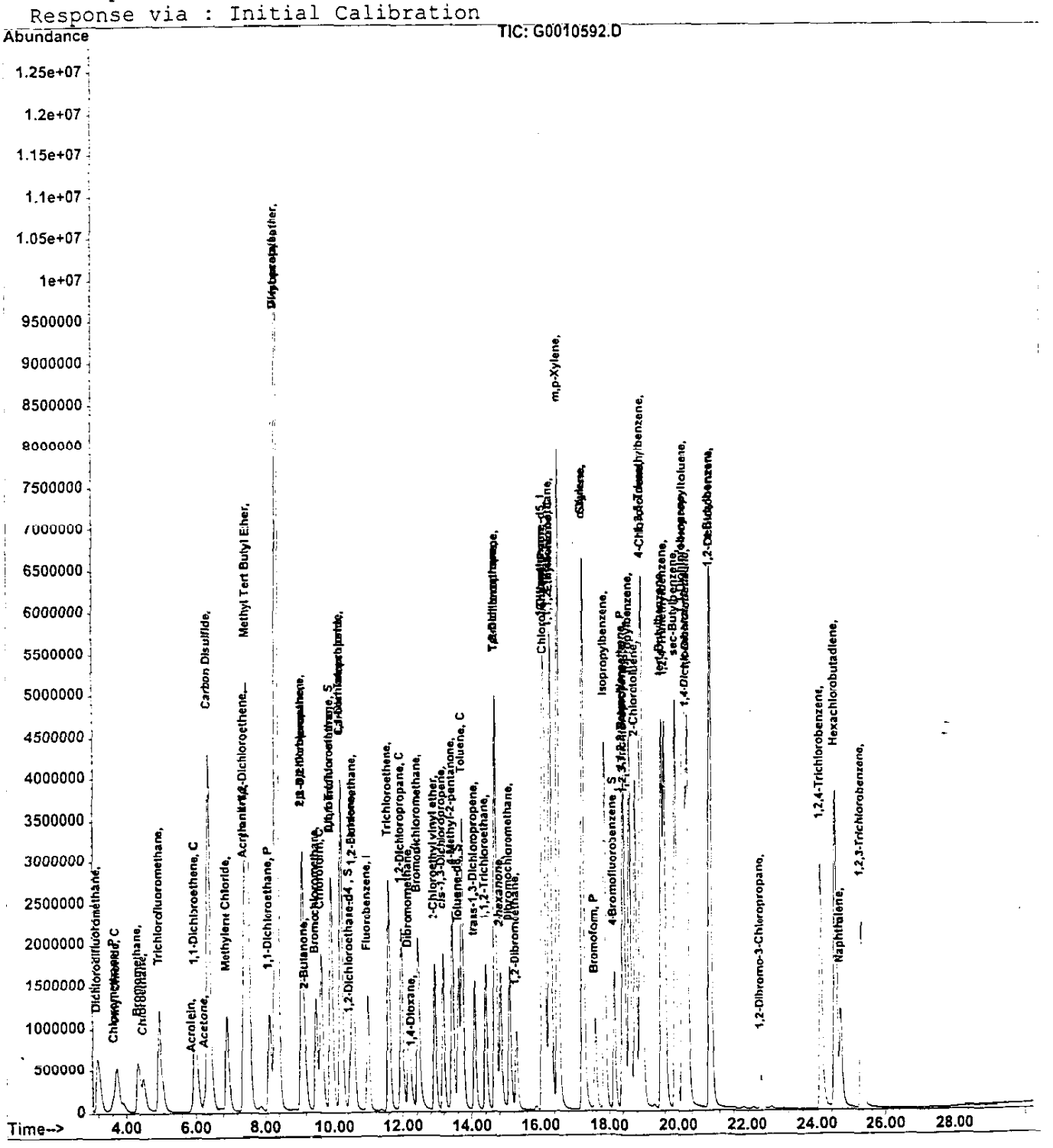
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.40	75	293502	50.67 ug/L	94
76) 1,2,4-Trichlorobenzene	24.13	180	2902881	52.72 ug/L	95
77) Hexachlorobutadiene	24.54	225	2098589	52.10 ug/L	92
78) Naphthalene	24.68	128	3100097	51.94 ug/L	98
79) 1,2,3-Trichlorobenzene	25.30	180	2411802	50.96 ug/L	94

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092399\G0010592.D Vial: 16
Acq On : 23 Sep 1999 3:25 pm Operator: ClaudiaP
Sample : BS,10ml Inst : MSVOA1
Misc : ms380,vg289,,,,, Multipir: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 24 7:27 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



METHOD BLANK SUMMARY

Method Blank Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG289-MB	G0010584.D	1	09/23/99	CJP	n/a	n/a	VG289

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

F4923-1, F4923-2

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868 53 7	Dibromofluoromethane	95%	80-116%
17060-07-0	1,2-Dichloroethane-D4	98%	74-120%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	100%	86-115%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010584.D Vial: 8
Acq On : 23 Sep 1999 8:36 am Operator: ClaudiaP
Sample : MB Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 9:35 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.99	96	2884527	25.00 ug/L	0.00
39) Chlorobenzene-d5	16.08	117	2090535	25.00 ug/L	-0.01
57) 1,4-Dichlorobenzene-d4	20.25	152	1272527	25.00 ug/L	0.00

System Monitoring Compounds

25) Dibromofluoromethane	9.91	113	1424812	47.62	0.02
Spiked Amount 50.000	Range 80 - 116		Recovery = 95.24%		
28) 1,2-Dichloroethane-d4	10.44	65	804155	48.86	-0.01
Spiked Amount 50.000	Range 74 - 120		Recovery = 97.72%		
40) Toluene-d8	13.62	98	2781375	50.90	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.80%		
59) 4-Bromofluorobenzene	18.15	95	1379482	50.16	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.32%		

Target Compounds Qvalue

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

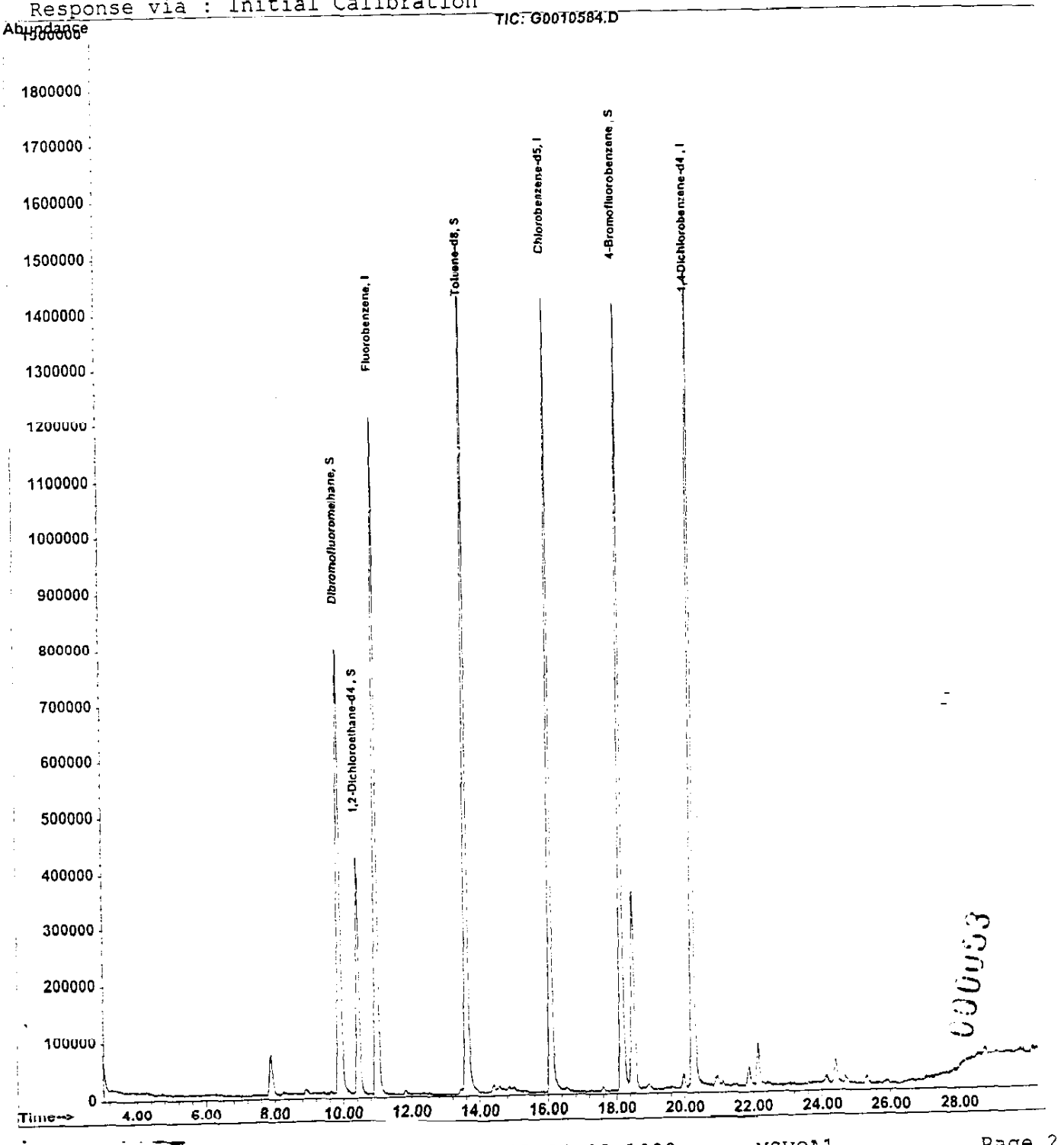
Quantitation Report

Data File : C:\HPCHEM\1\DATA\092399\G0010584.D
Acq On : 23 Sep 1999 8:36 am
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Sep 23 9:35 1999

Vial: 8
Operator: ClaudiaP
Inst : MSVOA1
Multiplr: 1.00

Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



TUNE SUMMARY

VOC.05

Instrument Performance Check (BFB)

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample:	VG289-BFB	**Injection Date:**	09/23/99
Lab File ID:	G0010582.D	**Injection Time:**	07:43
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26755	20.9		Pass
75	30.0 - 60.0% of mass 95	63760	49.7		Pass
95	Base peak, 100% relative abundance	128264	100.0		Pass
96	5.0 - 9.0% of mass 95	8105	6.3		Pass
173	Less than 2.0% of mass 174	295	0.23	(0.3) [a]	Pass
174	50.0 - 100.0% of mass 95	98464	76.8		Pass
175	5.0 - 9.0% of mass 174	8434	6.6	(8.6) [a]	Pass
176	95.0 - 101.0% of mass 174	94976	74.0	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	6515	5.1	(6.9) [b]	Pass

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

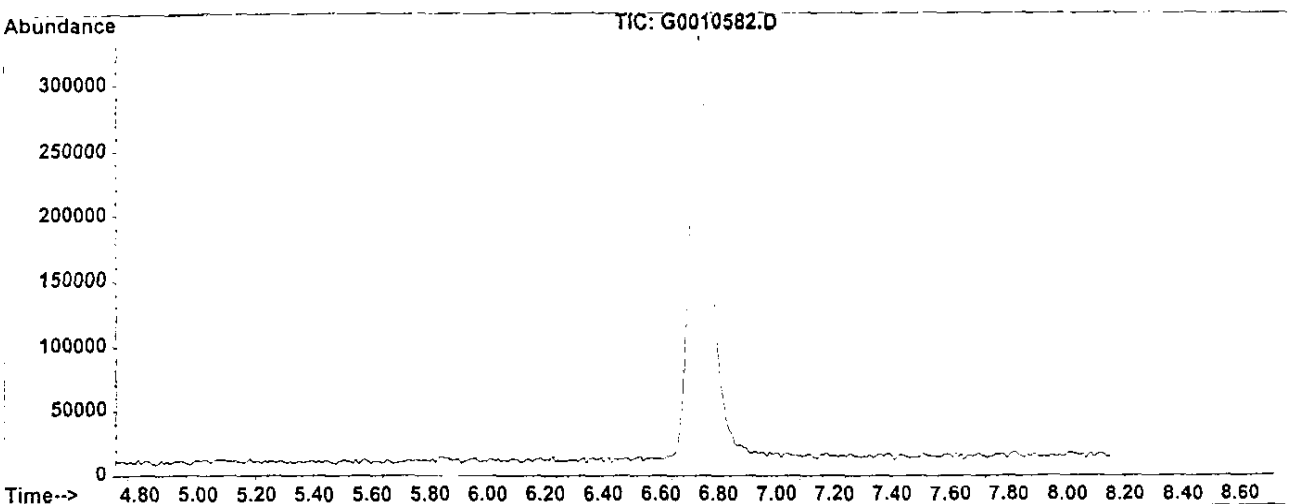
This check applies to the following Samples, MS, MSD, Blanks, and Standards:

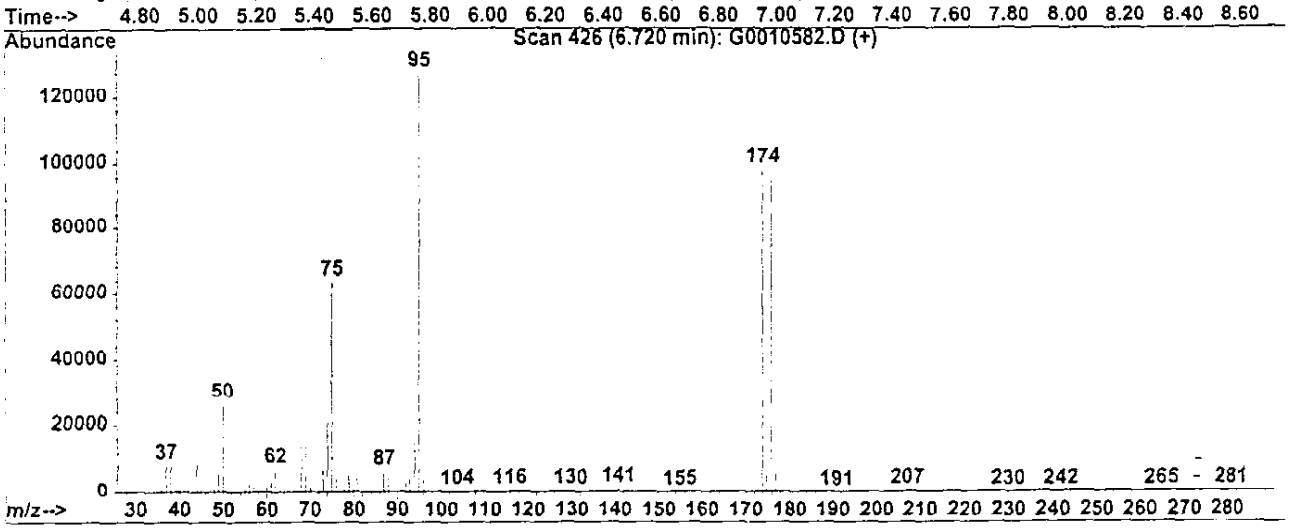
Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG289-CC285	G0010583.D	09/23/99	07:58	00:15	Continuing cal 20
VG289-MB	G0010584.D	09/23/99	08:36	00:53	Method Blank
F4907-4	G0010585.D	09/23/99	09:24	01:41	(used for QC only; not part of job F4923)
ZZZZZZ	G0010586.D	09/23/99	10:02	02:19	(unrelated sample)
F4923-1	G0010587.D	09/23/99	10:41	02:58	GP.08.01
F4923-2	G0010589.D	09/23/99	12:48	05:05	GP.06.01
F4907-4MS	G0010590.D	09/23/99	14:08	06:25	Matrix Spike
F4907-4MSD	G0010591.D	09/23/99	14:46	07:03	Matrix Spike Duplicate
VG289-BS	G0010592.D	09/23/99	15:25	07:42	Blank Spike

Methods: SW-846 8260B

Data File : C:\HPCHEM\1\DATA\092399\G0010582.D
Acq On : 23 Sep 1999 7:43 am
Sample : BFB tune
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)

Vial: 100
Operator: ClaudiaP
Inst : MSVOA1
Multiplr: 1.00





Spectrum Information: Scan 426

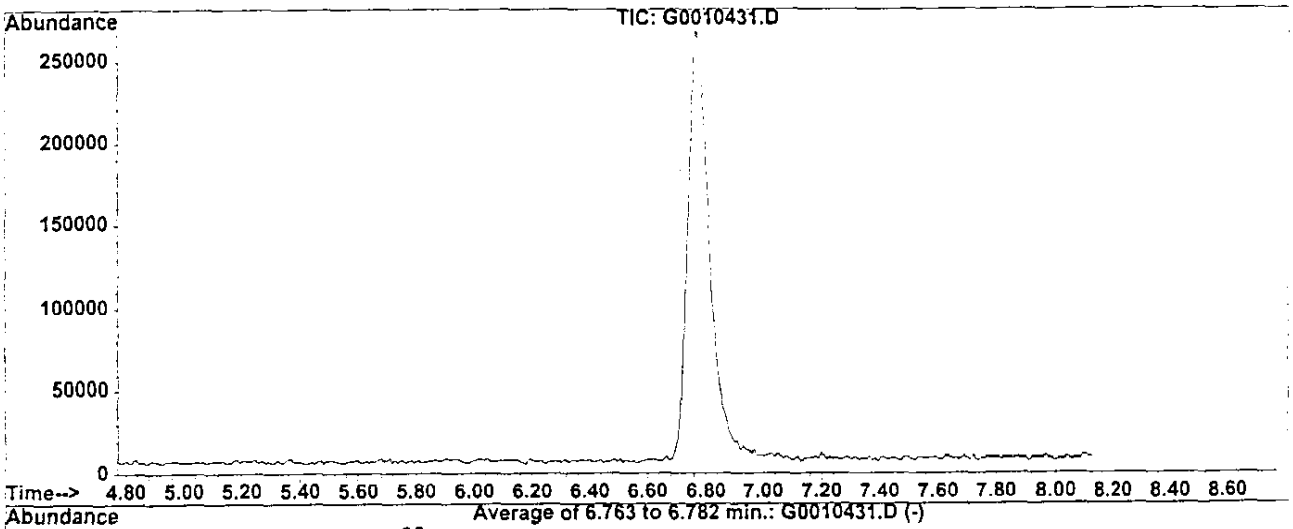
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	26755	PASS
75	95	30	60	49.7	63760	PASS
95	95	100	100	100.0	128264	PASS
96	95	5	9	6.3	8105	PASS
173	174	0.00	2	0.3	295	PASS
174	95	50	100	76.8	98464	PASS
175	174	5	9	8.6	8434	PASS
176	174	95	101	96.5	94976	PASS
177	176	5	9	6.9	6515	PASS

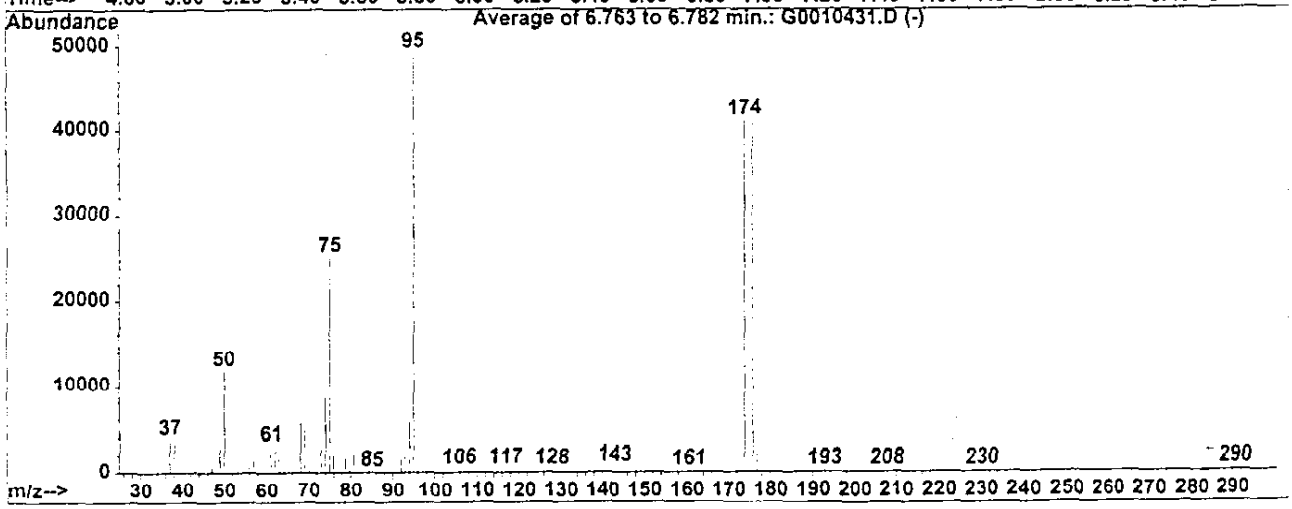
INITIAL CALIBRATION SUMMARY

Methods: SW-846 8260B

Data File : C:\HPCHEM\1\DATA\091099\G0010431.D
Acq On : 10 Sep 1999 1:17 pm
Sample : BFB tune
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)

Vial: 100
Operator: ClaudiaP
Inst : MSVOA1
Multiplr: 1.00





Spectrum Information: Average of 6.763 to 6.782 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	11789	PASS
75	95	30	60	50.8	24976	PASS
95	95	100	100	100.0	49165	PASS
96	95	5	9	6.7	3303	PASS
173	174	0.00	2	0.4	166	PASS
174	95	50	100	83.3	40933	PASS
175	174	5	9	7.2	2953	PASS
176	174	95	101	99.8	40864	PASS
177	176	5	9	6.6	2703	PASS

G0010431.D 8260LL.M Mon Sep 13 10:42:43 1999 MSVOA1

Response Factor Report MSVOA1

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:11:03 1999
Response via : Initial Calibration

Calibration Files
1 =G0010432.D 2 =G0010433.D 3 =G0010434.D
4 =G0010435.D 5 =G0010436.D 6 =G0010437.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	Fluorobenzene	----------	----------	----------	ISTD	----------	----------	----------	
2)		Dichlorodifluoromet	0.485	0.535	0.499	0.506	0.502	0.486	0.502	3.65
3)	P	Chloromethane	0.242	0.246	0.242	0.229	0.230	0.225	0.236	3.67
4)	C	Vinyl Chloride	0.237	0.273	0.261	0.274	0.273	0.273	0.265	5.60
5)		Bromomethane	0.229	0.248	0.241	0.243	0.255	0.254	0.245	3.99
6)		Chloroethane	0.165		0.140	0.132	0.132	0.129	0.140	10.44
7)		Trichlorofluorometh	0.612	0.750	0.703	0.698	0.701	0.669	0.689	6.64
8)		Acrolein		0.003	0.003	0.003	0.003	0.003	0.003	5.94
9)	C	1,1-Dichloroethene	0.506	0.577	0.534	0.530	0.539	0.532	0.537	4.30
10)		Acetone		0.034	0.032	0.031	0.029	0.028	0.031	7.92
11)		Carbon Disulfide	0.669	0.802	0.764	0.765	0.789	0.784	0.762	6.30
12)		Methylene Chloride		0.412	0.395	0.381	0.379	0.374	0.388	3.93
13)		trans-1,2-Dichloroe	0.512	0.560	0.531	0.542	0.547	0.541	0.539	3.01
14)		Acrylonitrile	0.014	0.015	0.015	0.014	0.015	0.014	0.015	2.69
15)		Methyl Tert Butyl E	0.558	0.588	0.564	0.553	0.567	0.566	0.566	2.12
	P	1,1-Dichloroethane	0.579	0.640	0.594	0.597	0.605	0.605	0.603	3.39
		Vinyl acetate	0.450	0.491	0.479		0.499	0.497	0.483	4.21
18)		Di-isopropyl ether	1.077	1.099	1.043	1.017	1.044	1.035	1.053	2.84
19)		2,2-Dichloropropane	0.517	0.583	0.537	0.546	0.551	0.542	0.546	3.96
20)		cis-1,2-Dichloroeth	0.300	0.291	0.278	0.282	0.281	0.278	0.285	3.00
21)		2-Butanone	0.055	0.054	0.048	0.050	0.049	0.049	0.051	5.91
22)		Bromochloromethane	0.164	0.192	0.179	0.185	0.184	0.185	0.181	5.16
23)	C	Chloroform	0.614	0.692	0.665	0.657	0.675	0.663	0.661	3.95
24)		1,1,1-Trichloroetha	0.535	0.648	0.594	0.599	0.609	0.595	0.597	6.11
25)	S	Dibromofluoromethan	0.252	0.263	0.258	0.255	0.262	0.265	0.259	1.90
26)		1,1-Dichloropropene	0.394	0.473	0.444	0.444	0.446	0.442	0.441	5.85
27)		Carbon Tetrachlorid		0.539	0.526	0.542	0.560	0.553	0.544	2.43
28)	S	1,2-Dichloroethane-	0.143	0.145	0.138	0.147	0.137	0.146	0.143	3.03
29)		Benzene	0.751	0.767	0.736	0.650	0.703	0.738	0.724	5.80
30)		1,2-Dichloroethane	0.380	0.378	0.374	0.341	0.359	0.364	0.366	3.98
31)		Trichloroethene	0.395	0.430	0.420	0.431	0.414	0.419	0.418	3.08
32)	C	1,2-Dichloropropane	0.325	0.353	0.334	0.338	0.342	0.344	0.339	2.79
33)		Dibromomethane	0.221	0.238	0.234	0.241	0.243	0.241	0.236	3.36
34)		1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	5.33
35)		Bromodichloromethan		0.534	0.538	0.558	0.585	0.584	0.560	4.36
36)		2-Chloroethyl vinyl	0.023	0.024	0.026	0.026	0.032	0.030	0.027	12.78
37)		4-Methyl-2-pentanon	0.132	0.163	0.167	0.163	0.166	0.165	0.159	8.45
38)		cis-1,3-Dichloropro		0.430	0.422	0.443	0.462	0.459	0.443	3.92
39)	I	Chlorobenzene-d5	----------	----------	----------	ISTD	----------	----------	----------	
40)	S	Toluene-d8	0.631	0.661	0.651	0.652	0.664	0.661	0.653	1.83
	C	Toluene	1.263	1.497	1.359	1.360	1.392	1.343	1.369	5.56
42)		trans-1,3-Dichlorop		0.429	0.429	0.452	0.490	0.490	0.458	6.70

(#) = Out of Range

Response Factor Report MSVOA1

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:11:03 1999
Response via : Initial Calibration

Calibration Files
1 =G0010432.D 2 =G0010433.D 3 =G0010434.D
4 =G0010435.D 5 =G0010436.D 6 =G0010437.D

		Compound	1	2	3	4	5	6	Avg	%RSD
43)		1,1,2-Trichloroetha	0.230	0.297	0.271	0.275	0.282	0.274	0.271	8.28
44)		Tetrachloroethene	0.636	0.723	0.675	0.681	0.686	0.661	0.677	4.25
45)		2-hexanone	0.128	0.148	0.143	0.145	0.144	0.142	0.142	4.80
46)		1,3-Dichloropropane	0.470	0.536	0.502	0.500	0.512	0.493	0.502	4.34
47)		Dibromochloromethan		0.434	0.437	0.488	0.513	0.510	0.476	8.06
48)		1,2-Dibromoethane		0.383	0.386	0.391	0.405	0.399	0.393	2.29
49)		1-Chlorohexane	0.607	0.678	0.638	0.631	0.660	0.623	0.639	4.03
50)	P	Chlorobenzene	0.968	1.064	0.990	0.989	0.990	0.985	0.998	3.39
51)		1,1,1,2-Tetrachloro		0.487	0.459	0.481	0.503	0.506	0.487	3.90
52)	C	Ethylbenzene	1.631	1.843	1.670	1.672	1.673	1.689	1.696	4.38
53)		m,p-Xylene	1.331	1.439	1.388	1.369	1.400	1.388	1.387	2.62
54)		o-Xylene	1.255	1.456	1.372	1.355	1.394	1.355	1.365	4.81
55)		Styrene	0.693	0.884	0.856	0.888	0.885	0.896	0.851	9.21
56)	P	Bromoform		0.252	0.262	0.289	0.316	0.319	0.288	10.57
57)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
)		Isopropylbenzene	2.832	3.032	2.908	2.822	2.875	2.899	2.895	2.61
59)	S	4-Bromofluorobenzen	0.548	0.546	0.534	0.527	0.542	0.545	0.540	1.57
60)		Bromobenzene	0.781	0.809	0.788	0.775	0.782	0.793	0.788	1.54
61)	P	1,1,2,2-Tetrachloro	0.557	0.632	0.615	0.579	0.628	0.626	0.606	5.08
62)		1,2,3-Trichloroprop	0.134	0.161	0.162	0.159	0.158	0.158	0.155	6.80
63)		n-Propylbenzene	3.622	3.748	3.543	3.508	3.521	3.528	3.578	2.58
64)		2-Chlorotoluene	2.234	2.271	2.186	2.090	2.131	2.103	2.169	3.39
65)		4-Chlorotoluene	2.526	2.562	2.436	2.391	2.432	2.398	2.458	2.85
66)		1,3,5-Trimethylbenz	2.406	2.547	2.430	2.373	2.389	2.386	2.422	2.66
67)		sec-Butylbenzene	3.312	3.468	3.306	3.148	3.267	3.352	3.309	3.17
68)		1,3-Dichlorobenzene	1.456	1.510	1.449	1.420	1.431	1.471	1.456	2.19
69)		4-Isopropyltoluene	2.636	2.827	2.691	2.588	2.624	2.588	2.659	3.41
70)		1,4-Dichlorobenzene	1.622	1.575	1.506	1.422	1.473	1.483	1.514	4.81
71)		tert-Butylbenzene	1.882	2.072	1.981	1.902	1.919	1.961	1.953	3.53
72)		n-Butylbenzene	2.751	2.989	2.775	2.690	2.809	2.850	2.811	3.65
73)		1,2-Dichlorobenzene	1.259	1.347	1.304	1.209	1.243	1.236	1.266	3.99
74)		1,2,4-Trimethylbenz	2.436	2.527	2.371	2.327	2.348	2.327	2.389	3.30
75)		1,2-Dibromo-3-Chlor		0.097	0.095	0.099	0.110	0.110	0.102	6.93
76)		1,2,4-Trichlorobenz	0.849	0.972	0.961	0.996	1.008	1.033	0.970	6.65
77)		Hexachlorobutadiene	0.705	0.765	0.687	0.684	0.728	0.686	0.709	4.52
78)		Naphthalene		0.955	1.018	1.066	1.108	1.108	1.051	6.22
79)		1,2,3-Trichlorobenz	0.709	0.834	0.843	0.850	0.867	0.897	0.834	7.78

000056

(#) = Out of Range

GC/MS QA-QC Check Report

une File : C:\HPCHEM\1\DATA\091099\G0010431.D
une Time : 10 Sep 1999 1:17 pm

aily Calibration File : C:\HPCHEM\1\DATA\091099\G0010432.D

						2380320	1821450	1072160
File	Sample	Surrogate Recovery %				Internal Standard Responses		
G0010432.D	IC285-1,	96	99	96	100	2380322	1821450	1072163
G0010433.D	IC285-5,	101	100	101	100	2293539	1705799	1065995
G0010434.D	IC285-10	99	95	100	97	2257956	1695418	1050102
G0010435.D	ICC285-2	98	101	100	96	2300028	1727821	1086085
G0010436.D	IC285-35	100	94	101	99	2290982	1707464	1080892
G0010437.D	IC285-50	101	100	101	100	2272240	1711492	1070056
G0010438.D	ICV-20,1	100	103	100	99	2318724	1717719	1079762
G0010439.D	MB,10ml	99	102	98	104	2334293	1761886	1027712

t - fails 12hr time check * - fails criteria

Created: Mon Sep 13 10:46:13 1999 MSVOA1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010432.D Vial: 1
Acq On : 10 Sep 1999 1:32 pm Operator: ClaudiaP
Sample : IC285 1,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:31 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.03	96	2380322	25.00 ug/L	0.04
39) Chlorobenzene-d5	16.12	117	1821450	25.00 ug/L	0.04
57) 1,4-Dichlorobenzene-d4	20.27	152	1072163	25.00 ug/L	0.02
System Monitoring Compounds					
25) Dibromofluoromethane	9.93	113	1200748	48.22	0.04
Spiked Amount 50.000	Range 80 - 116		Recovery =	96.44%	
28) 1,2-Dichloroethane-d4	10.47	65	682711	49.38	0.02
Spiked Amount 50.000	Range 74 - 120		Recovery =	98.76%	
40) Toluene-d8	13.65	98	2300085	48.24	0.03
Spiked Amount 50.000	Range 80 - 120		Recovery =	96.48%	
59) 4-Bromofluorobenzene	18.18	95	1176159	50.09	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery =	100.18%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.20	85	46212	1.57 ug/L	91
3) Chloromethane	3.64	50	22996	1.26 ug/L #	47
4) Vinyl Chloride	3.73	62	22530	1.03 ug/L	87
5) Bromomethane	4.38	94	21757	1.08 ug/L #	68
6) Chloroethane	4.59	64	15693m	1.21 ug/L	
7) Trichlorofluoromethane	5.09	101	58284	0.86 ug/L	96
9) 1,1-Dichloroethene	6.05	61	48204	0.92 ug/L	95
10) Acetone	6.18	43	19581	6.41 ug/L	80
11) Carbon Disulfide	6.45	76	318288	4.30 ug/L	92
12) Methylene Chloride	6.94	49	52940	1.36 ug/L	92
13) trans-1,2-Dichloroethene	7.44	61	48782	0.94 ug/L	93
14) Acrylonitrile	7.39	53	6760m	3.31 ug/L	
15) Methyl Tert Butyl Ether	7.46	73	53172	0.96 ug/L	94
16) 1,1-Dichloroethane	8.15	63	55156	0.98 ug/L	98
17) Vinyl acetate	8.26	43	214014	4.29 ug/L	97
18) Di-isopropyl ether	8.33	45	102551	0.98 ug/L	90
19) 2,2-Dichloropropane	9.14	77	49185	0.95 ug/L	97
20) cis-1,2-Dichloroethene	9.14	96	28529	1.06 ug/L #	77
21) 2-Butanone	9.19	43	26201	5.06 ug/L	88
22) Bromochloromethane	9.52	128	15636	0.93 ug/L #	74
23) Chloroform	9.68	83	58453	0.94 ug/L	92
24) 1,1,1-Trichloroethane	9.95	97	50959	0.87 ug/L	93
26) 1,1-Dichloropropene	10.23	75	37481	0.88 ug/L	89
27) Carbon Tetrachloride	10.25	117	38754	0.74 ug/L	90
29) Benzene	10.56	78	71505	1.16 ug/L #	9
30) 1,2-Dichloroethane	10.59	62	36191	1.16 ug/L	100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010432.D Vial: 1
Acq On : 10 Sep 1999 1:32 pm Operator: ClaudiaP
Sample : IC285-1,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:31 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	Trichloroethene	11.63	95	37640	0.93 ug/L	97
32)	1,2-Dichloropropane	12.00	63	30905	0.95 ug/L #	84
33)	Dibromomethane	12.21	93	21073	0.93 ug/L	85
35)	Bromodichloromethane	12.47	83	41044	0.77 ug/L #	95
36)	2-Chloroethyl vinyl ether	12.96	63	10869	4.30 ug/L	89
37)	4-Methyl-2-pentanone	13.47	43	62785	3.67 ug/L	90
38)	cis-1,3-Dichloropropene	13.21	75	32103	0.78 ug/L	95
41)	Toluene	13.77	91	92049	0.89 ug/L	87
42)	trans-1,3-Dichloropropene	14.13	75	26384	0.76 ug/L	93
43)	1,1,2-Trichloroethane	14.45	83	16727	0.83 ug/L	96
44)	Tetrachloroethene	14.71	166	46316	0.95 ug/L	94
45)	2-hexanone	14.87	43	46741	4.01 ug/L	90
46)	1,3-Dichloropropane	14.73	76	34223	0.90 ug/L	91
47)	Dibromochloromethane	15.13	129	24727	0.70 ug/L	83
48)	1,2-Dibromoethane	15.33	107	21385	0.73 ug/L	89
49)	1-Chlorohexane	16.11	91	44197	0.93 ug/L #	86
50)	Chlorobenzene	16.18	112	70503	0.98 ug/L	92
51)	1,1,1,2-Tetrachloroethane	16.30	131	27180	0.77 ug/L #	82
52)	Ethylbenzene	16.35	91	118833	0.94 ug/L	98
53)	m,p-Xylene	16.56	91	193913	1.88 ug/L	95
54)	o-Xylene	17.26	91	91422	0.91 ug/L	91
55)	Styrene	17.28	104	50494	0.78 ug/L	94
56)	Bromoform	17.61	173	12271	0.54 ug/L	88
58)	Isopropylbenzene	17.90	105	121446	0.96 ug/L	96
60)	Bromobenzene	18.46	156	33485	0.99 ug/L #	68
61)	1,1,2,2-Tetrachloroethane	18.43	83	23896	0.85 ug/L	99
62)	1,2,3-Trichloropropane	18.50	110	5746m	0.81 ug/L	
63)	n-Propylbenzene	18.64	91	155341	0.99 ug/L	98
64)	2-Chlorotoluene	18.80	91	95796	1.03 ug/L	94
65)	4-Chlorotoluene	19.00	91	108338	1.02 ug/L	100
66)	1,3,5-Trimethylbenzene	18.96	105	103203	0.98 ug/L	97
67)	sec-Butylbenzene	19.95	105	142019	0.99 ug/L	93
68)	1,3-Dichlorobenzene	20.15	146	62432	1.00 ug/L	88
69)	4-Isopropyltoluene	20.21	119	113053	0.98 ug/L	97
70)	1,4-Dichlorobenzene	20.31	146	69546m	1.08 ug/L	
71)	tert-Butylbenzene	19.56	91	80696	0.93 ug/L	96
72)	n-Butylbenzene	20.96	91	117969	0.96 ug/L	97
73)	1,2-Dichlorobenzene	21.00	146	54015	0.99 ug/L	85
74)	1,2,4-Trimethylbenzene	19.64	105	104487	1.00 ug/L	93
75)	1,2-Dibromo-3-Chloropropan	22.42	75	2280m	0.47 ug/L	
76)	1,2,4-Trichlorobenzene	24.16	180	36396	0.85 ug/L	87

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

G0010432

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010432.D Vial: 1
Acq On : 10 Sep 1999 1:32 pm Operator: ClaudiaP
Sample : IC285-1,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multipir: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:31 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

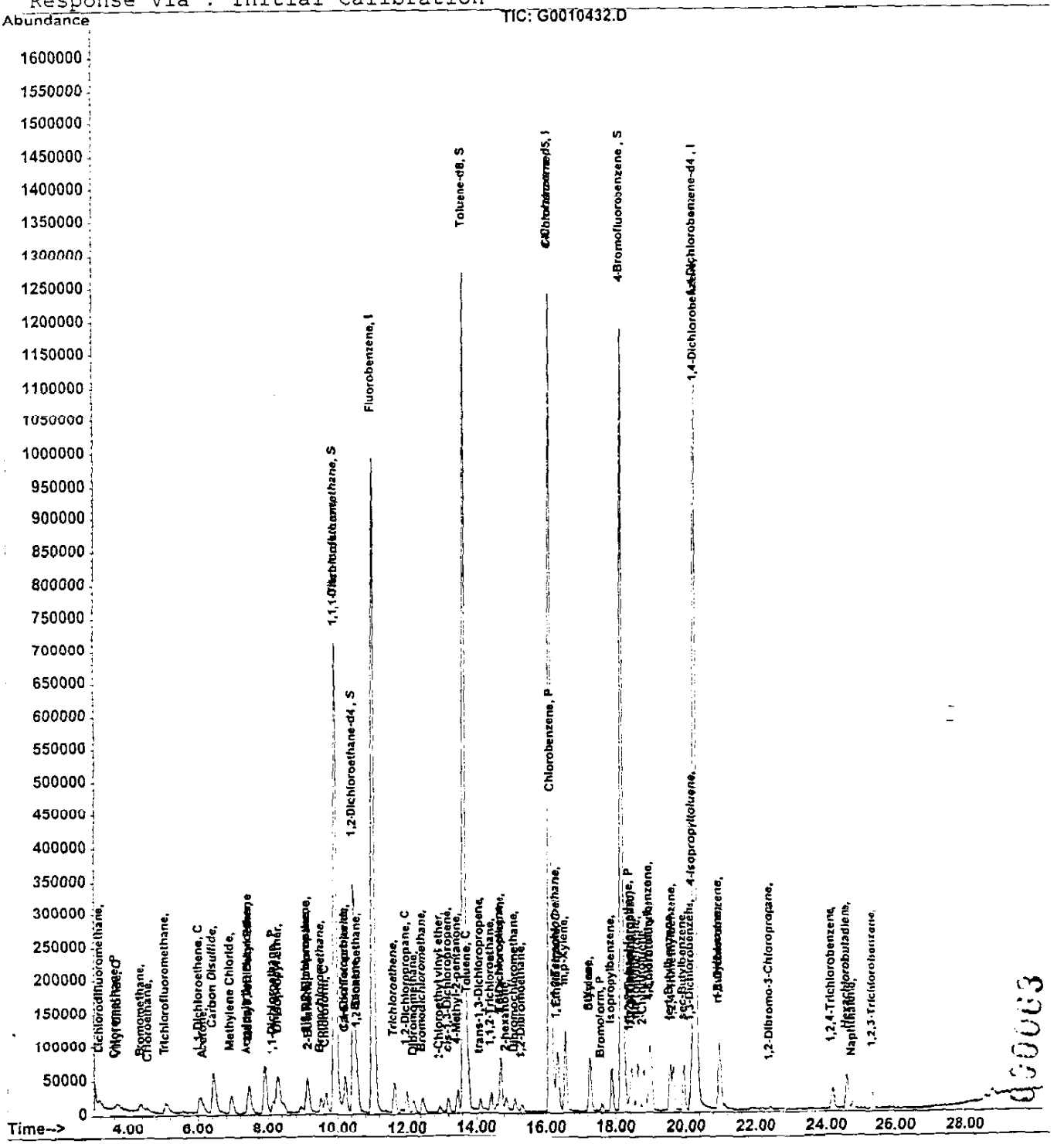
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) Hexachlorobutadiene	24.58	225	30238	1.08 ug/L	83
78) Naphthalene	24.76	128	34713m	0.76 ug/L	
79) 1,2,3-Trichlorobenzene	25.37	180	30416	0.85 ug/L	97

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091099\G0010432.D Vial: 1
Acq On : 10 Sep 1999 1:32 pm Operator: ClaudiaP
Sample : IC285-1,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:31 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010433.D Vial: 2
Acq On : 10 Sep 1999 2:11 pm Operator: ClaudiaP
Sample : IC285-5,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:33 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.00	96	2293539	25.00 ug/L	0.01
39) Chlorobenzene-d5	16.09	117	1705799	25.00 ug/L	0.01
57) 1,4 Dichlorobenzene-d4	20.26	152	1065995	25.00 ug/L	0.01
System Monitoring Compounds					
25) Dibromofluoromethane	9.91	113	1207978	50.34	0.02
Spiked Amount 50.000	Range 80 - 116		Recovery = 100.60%		
28) 1,2-Dichloroethane-d4	10.47	65	666750	50.05	0.02
Spiked Amount 50.000	Range 74 - 120		Recovery = 100.10%		
40) Toluene-d8	13.64	98	2256227	50.53	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.06%		
59) 4-Bromofluorobenzene	18.17	95	1165041	49.91	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.82%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.17	85	245627	8.66 ug/L	100
3) Chloromethane	3.66	50	112834	6.44 ug/L	98
4) Vinyl Chloride	3.73	62	125226	5.96 ug/L	95
5) Bromomethane	4.37	94	113623	5.88 ug/L	97
6) Chloroethane	4.54	64	86317m	6.89 ug/L	
7) Trichlorofluoromethane	5.10	101	344016	5.27 ug/L	94
8) Acrolein	5.90	56	7469m	14.93 ug/L	
9) 1,1-Dichloroethene	6.07	61	264823	5.25 ug/L	97
10) Acetone	6.19	43	78666	26.73 ug/L	98
11) Carbon Disulfide	6.44	76	1838429	25.80 ug/L	97
12) Methylene Chloride	6.94	49	188804	5.02 ug/L	87
13) trans-1,2-Dichloroethene	7.44	61	257077	5.15 ug/L	95
14) Acrylonitrile	7.36	53	34161	17.39 ug/L	95
15) Methyl Tert Butyl Ether	7.46	73	269740	5.06 ug/L	97
16) 1,1-Dichloroethane	8.15	63	293713	5.41 ug/L	94
17) Vinyl acetate	8.26	43	1127165	23.46 ug/L	99
18) Di-isopropyl ether	8.32	45	504057	4.99 ug/L	94
19) 2,2-Dichloropropane	9.10	77	267294	5.37 ug/L	99
20) cis-1,2-Dichloroethene	9.12	96	133449	5.16 ug/L	89
21) 2-Butanone	9.17	43	124965	25.02 ug/L	99
22) Bromochloromethane	9.52	128	87901	5.43 ug/L #	73
23) Chloroform	9.65	83	317572	5.29 ug/L	95
24) 1,1,1-Trichloroethane	9.94	97	297468	5.29 ug/L	97
26) 1,1-Dichloropropene	10.22	75	216989	5.27 ug/L	96
27) Carbon Tetrachloride	10.23	117	247111	4.93 ug/L	95
29) Benzene	10.55	78	351767	5.91 ug/L	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010433.D Vial: 2
Acq On : 10 Sep 1999 2:11 pm Operator: ClaudiaP
Sample : IC285-5,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:33 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 1,2-Dichloroethane	10.57	62	173483	5.76 ug/L	96
31) Trichloroethene	11.62	95	197047	5.04 ug/L	96
32) 1,2-Dichloropropane	11.97	63	161700	5.16 ug/L	94
33) Dibromomethane	12.17	93	109247	5.00 ug/L	96
34) 1,4-Dioxane	12.26	88	11037	91.46 ug/L #	79
35) Bromodichloromethane	12.45	83	244736	4.79 ug/L	90
36) 2-Chloroethyl vinyl ether	12.93	63	54002	22.51 ug/L #	75
37) 4-Methyl-2-pentanone	13.44	43	374135	22.70 ug/L	98
38) cis-1,3-Dichloropropene	13.19	75	197050	4.96 ug/L	97
41) Toluene	13.75	91	510743	5.29 ug/L	98
42) trans-1,3-Dichloropropene	14.10	75	146332	4.53 ug/L	97
43) 1,1,2-Trichloroethane	14.42	83	101238	5.36 ug/L	95
44) Tetrachloroethene	14.69	166	246549	5.41 ug/L	97
45) 2-hexanone	14.85	43	251712	23.08 ug/L	96
46) 1,3-Dichloropropane	14.69	76	182752	5.16 ug/L	96
47) Dibromochloromethane	15.11	129	148129	4.45 ug/L	96
48) 1,2-Dibromoethane	15.31	107	130645	4.77 ug/L	86
49) 1-Chlorohexane	16.08	91	231254	5.19 ug/L	92
50) Chlorobenzene	16.15	112	363141	5.38 ug/L	96
51) 1,1,1,2-Tetrachloroethane	16.29	131	166167	5.03 ug/L	96
52) Ethylbenzene	16.33	91	628710	5.32 ug/L	96
53) m,p-Xylene	16.54	91	981656	10.16 ug/L	99
54) o-Xylene	17.24	91	496822	5.25 ug/L	98
55) Styrene	17.26	104	301718	5.00 ug/L	99
56) Bromoform	17.60	173	86118	4.07 ug/L	94
58) Isopropylbenzene	17.89	105	646366	5.16 ug/L	98
60) Bromobenzene	18.44	156	172472	5.13 ug/L	90
61) 1,1,2,2-Tetrachloroethane	18.41	83	134721	4.80 ug/L	96
62) 1,2,3-Trichloropropane	18.47	110	34295	4.87 ug/L	86
63) n-Propylbenzene	18.62	91	799072	5.14 ug/L	96
64) 2-Chlorotoluene	18.78	91	484266	5.23 ug/L	97
65) 4-Chlorotoluene	18.98	91	546135	5.18 ug/L	97
66) 1,3,5-Trimethylbenzene	18.93	105	543083	5.20 ug/L	99
67) sec-Butylbenzene	19.92	105	739360	5.18 ug/L	97
68) 1,3-Dichlorobenzene	20.14	146	321898	5.17 ug/L	97
69) 4-Isopropyltoluene	20.18	119	602815	5.25 ug/L	100
70) 1,4-Dichlorobenzene	20.29	146	335891	5.26 ug/L	89
71) tert-Butylbenzene	19.52	91	441657	5.13 ug/L	97
72) n-Butylbenzene	20.95	91	637214	5.22 ug/L	92
73) 1,2-Dichlorobenzene	20.99	146	287196	5.27 ug/L	94
74) 1,2,4-Trimethylbenzene	19.62	105	538811	5.17 ug/L	91

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010433.D Vial: 2
Acq On : 10 Sep 1999 2:11 pm Operator: ClaudiaP
Sample : IC285-5,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:33 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

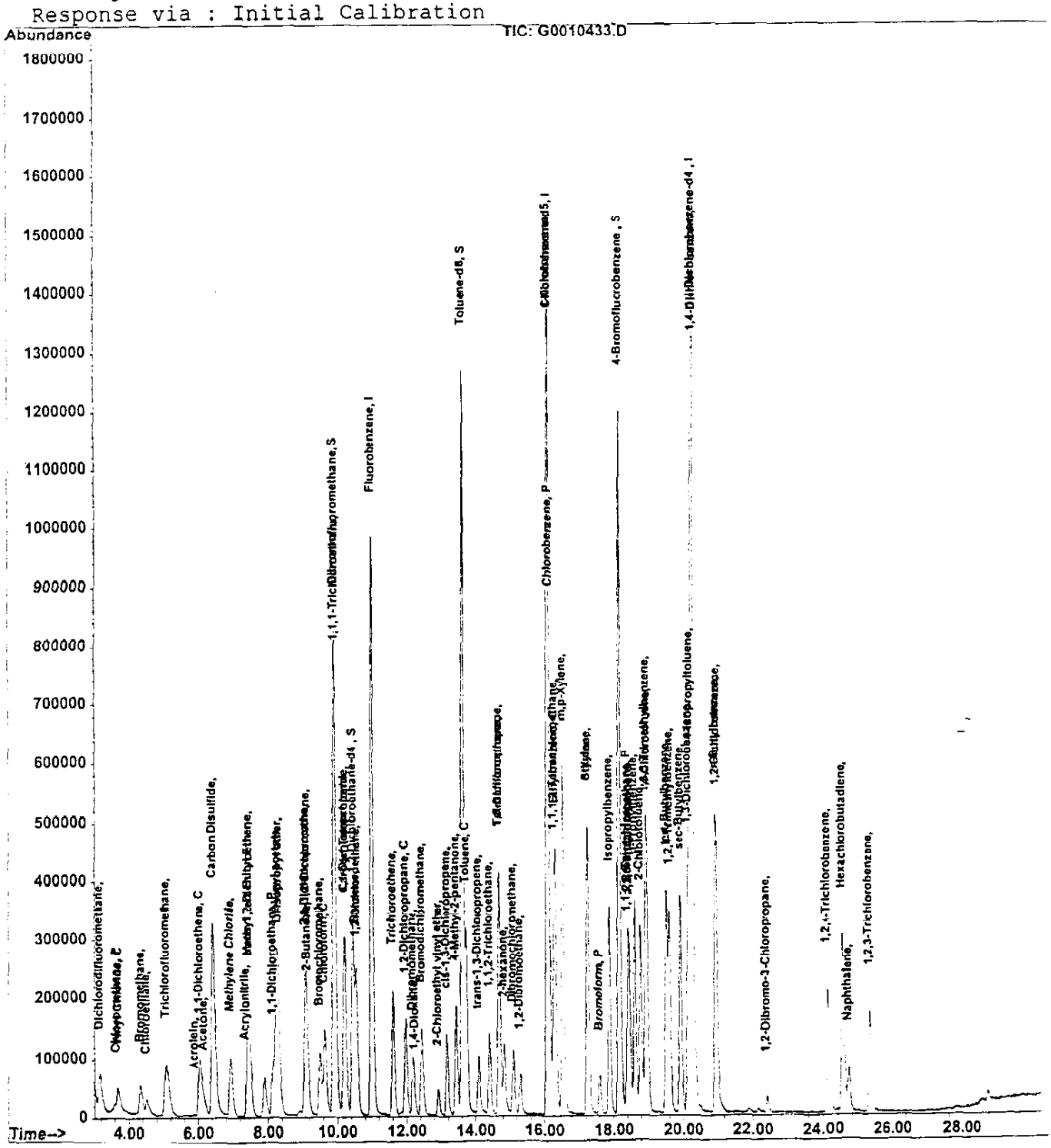
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.42	75	20620	4.26 ug/L #	86
76) 1,2,4-Trichlorobenzene	24.16	180	207308	4.85 ug/L	97
77) Hexachlorobutadiene	24.55	225	163131	5.89 ug/L	91
78) Naphthalene	24.73	128	203574	4.47 ug/L	98
79) 1,2,3-Trichlorobenzene	25.34	180	177825	4.98 ug/L	95

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091099\G0010433.D Vial: 2
Acq On : 10 Sep 1999 2:11 pm Operator: ClaudiaP
Sample : IC285-5,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:33 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010434.D Vial: 3
Acq On : 10 Sep 1999 2:50 pm Operator: ClaudiaP
Sample : IC285-10,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:35 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.99	96	2257956	25.00	ug/L	0.00
39) Chlorobenzene-d5	16.09	117	1695418	25.00	ug/L	0.00
57) 1,4-Dichlorobenzene-d4	20.27	152	1050102	25.00	ug/L	0.01
System Monitoring Compounds						
25) Dibromofluoromethane	9.91	113	1166291	49.37		0.01
Spiked Amount 50.000	Range 80 - 115		Recovery =	98.74%		
28) 1,2-Dichloroethane-d4	10.44	65	623198	47.51		0.00
Spiked Amount 50.000	Range 74 - 120		Recovery =	95.02%		
40) Toluene-d8	13.63	98	2208865	49.77		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery =	99.54%		
59) 4-Bromofluorobenzene	18.16	95	1120612	48.73		-0.01
Spiked Amount 50.000	Range 86 - 115		Recovery =	97.46%		

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.18	85	450922	16.15	ug/L	99
3) Chloromethane	3.62	50	218984	12.70	ug/L	99
4) Vinyl Chloride	3.72	62	235912	11.40	ug/L	99
5) Bromomethane	4.35	94	217654	11.43	ug/L	96
6) Chloroethane	4.54	64	126240	10.23	ug/L	89
7) Trichlorofluoromethane	5.06	101	635191	9.88	ug/L	88
8) Acrolein	5.86	56	13019m	26.44	ug/L	
9) 1,1-Dichloroethene	6.05	61	482353	9.72	ug/L	98
10) Acetone	6.19	43	142817	49.30	ug/L	98
11) Carbon Disulfide	6.43	76	3449949	49.19	ug/L	96
12) Methylene Chloride	6.92	49	357066	9.64	ug/L	94
13) trans-1,2-Dichloroethene	7.42	61	479600	9.75	ug/L	98
14) Acrylonitrile	7.38	53	66622	34.44	ug/L	89
15) Methyl Tert Butyl Ether	7.46	73	509283	9.70	ug/L	98
16) 1,1-Dichloroethane	8.15	63	536110	10.04	ug/L	93
17) Vinyl acetate	8.24	43	2164712	45.76	ug/L	98
18) Di-isopropyl ether	8.31	45	941909	9.47	ug/L	92
19) 2,2-Dichloropropane	9.09	77	485222	9.91	ug/L	100
20) cis-1,2-Dichloroethene	9.11	96	251142	9.86	ug/L	97
21) 2-Butanone	9.15	43	218807	44.51	ug/L	96
22) Bromochloromethane	9.50	128	161453	10.12	ug/L	90
23) Chloroform	9.63	83	600193	10.16	ug/L	98
24) 1,1,1-Trichloroethane	9.94	97	536251	9.69	ug/L	94
26) 1,1-Dichloropropene	10.21	75	401256	9.90	ug/L	96
27) Carbon Tetrachloride	10.21	117	474826	9.61	ug/L	94
29) Benzene	10.53	78	665121	11.36	ug/L	93

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010434.D Vial: 3
Acq On : 10 Sep 1999 2:50 pm Operator: ClaudiaP
Sample : IC285-10,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:35 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 1,2-Dichloroethane	10.57	62	337820	11.38 ug/L	99
31) Trichloroethene	11.60	95	378941	9.85 ug/L	93
32) 1,2-Dichloropropane	11.97	63	301726	9.78 ug/L	92
33) Dibromomethane	12.19	93	211324	9.83 ug/L	98
34) 1,4-Dioxane	12.26	88	21321	179.47 ug/L	92
35) Bromodichloromethane	12.44	83	486049	9.66 ug/L	98
36) 2-Chloroethyl vinyl ether	12.93	63	115283	48.10 ug/L	92
37) 4-Methyl-2-pentanone	13.45	43	752180	46.35 ug/L	99
38) cis-1,3-Dichloropropene	13.18	75	381567	9.76 ug/L	98
41) Toluene	13.74	91	921932	9.61 ug/L	99
42) trans-1,3-Dichloropropene	14.10	75	291114	9.07 ug/L	96
43) 1,1,2-Trichloroethane	14.41	83	183601	9.77 ug/L	97
44) Tetrachloroethene	14.69	166	457705	10.11 ug/L	98
45) 2-hexanone	14.84	43	484352	44.68 ug/L	98
46) 1,3-Dichloropropane	14.70	76	340557	9.67 ug/L	97
47) Dibromochloromethane	15.11	129	296509	8.96 ug/L	97
48) 1,2-Dibromoethane	15.30	107	261904	9.61 ug/L	97
49) 1-Chlorohexane	16.09	91	432333	9.76 ug/L	96
50) Chlorobenzene	16.14	112	671414	10.00 ug/L	98
51) 1,1,1,2-Tetrachloroethane	16.28	131	311127	9.47 ug/L	99
52) Ethylbenzene	16.34	91	1132273	9.63 ug/L	95
53) m,p-Xylene	16.53	91	1882856	19.61 ug/L	97
54) o-Xylene	17.23	91	930579	9.90 ug/L	96
55) Styrene	17.25	104	580623	9.68 ug/L	98
56) Bromoform	17.60	173	177515	8.44 ug/L	97
58) Isopropylbenzene	17.88	105	1221533	9.91 ug/L	96
60) Bromobenzene	18.44	156	330994	9.99 ug/L	88
61) 1,1,2,2-Tetrachloroethane	18.40	83	258418	9.35 ug/L	95
62) 1,2,3-Trichloropropane	18.47	110	67844	9.78 ug/L #	79
63) n-Propylbenzene	18.62	91	1488282	9.72 ug/L	99
64) 2-Chlorotoluene	18.77	91	918387	10.07 ug/L	98
65) 4-Chlorotoluene	18.98	91	1023283	9.86 ug/L	100
66) 1,3,5-Trimethylbenzene	18.95	105	1020854	9.92 ug/L	95
67) sec-Butylbenzene	19.93	105	1388554	9.87 ug/L	96
68) 1,3-Dichlorobenzene	20.16	146	608838	9.92 ug/L	95
69) 4-Isopropyltoluene	20.20	119	1130159	10.00 ug/L	97
70) 1,4-Dichlorobenzene	20.31	146	632607	10.05 ug/L	94
71) tert-Butylbenzene	19.54	91	832128	9.82 ug/L	99
72) n-Butylbenzene	20.94	91	1165644	9.70 ug/L	97
73) 1,2-Dichlorobenzene	20.99	146	547634	10.21 ug/L	98
74) 1,2,4-Trimethylbenzene	19.63	105	995720	9.70 ug/L	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010434.D Vial: 3
Acq On : 10 Sep 1999 2:50 pm Operator: ClaudiaP
Sample : IC285-10,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:35 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

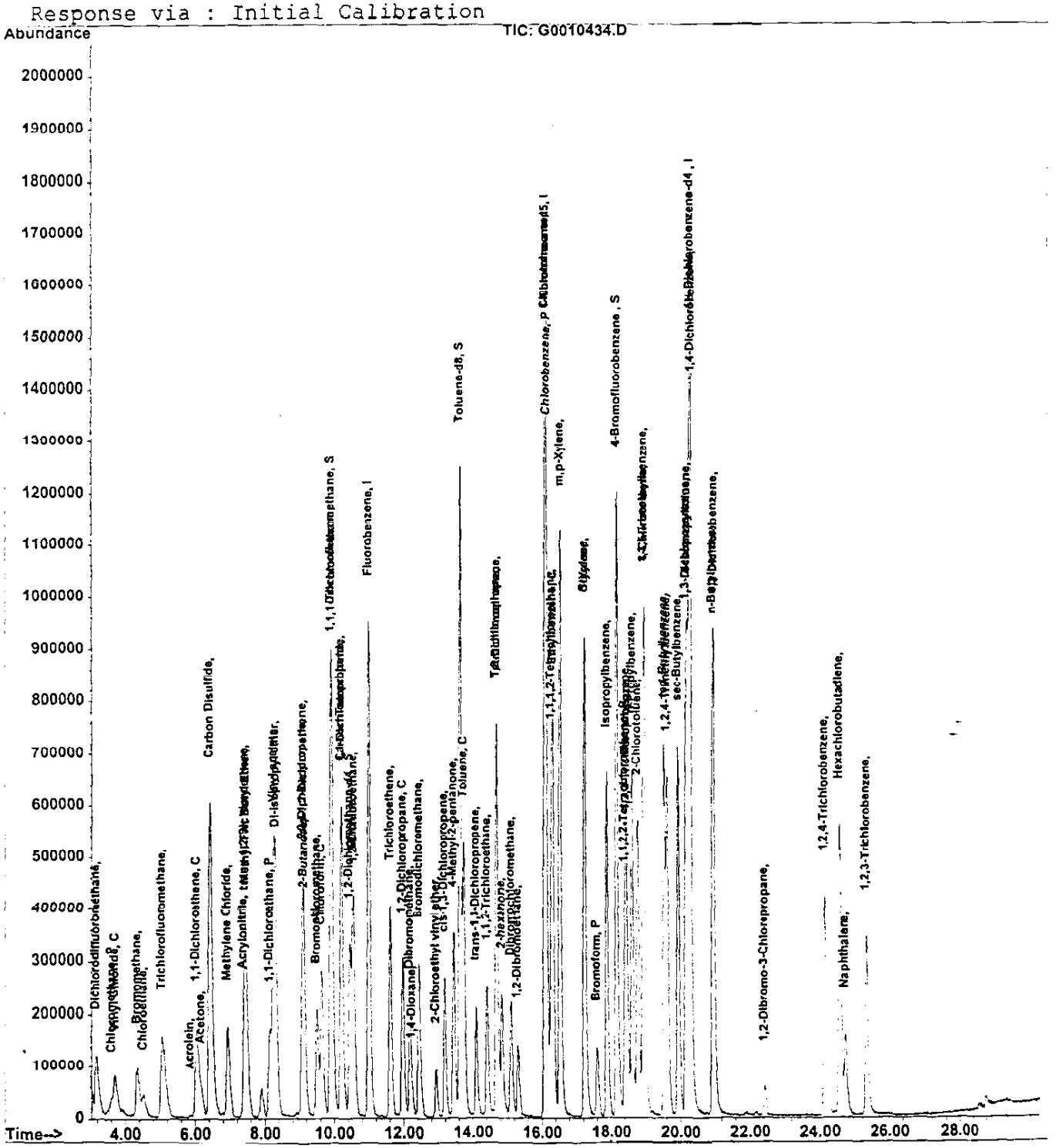
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.43	75	39917	8.37 ug/L #	82
76) 1,2,4-Trichlorobenzene	24.14	180	403747	9.58 ug/L	92
77) Hexachlorobutadiene	24.56	225	288538	10.57 ug/L	95
78) Naphthalene	24.71	128	427711	9.53 ug/L	99
79) 1,2,3-Trichlorobenzene	25.32	180	354257	10.07 ug/L	96

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091099\G0010434.D Vial: 3
Acq On : 10 Sep 1999 2:50 pm Operator: ClaudiaP
Sample : IC285 10,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 10 15:35 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010435.D Vial: 4
Acq On : 10 Sep 1999 3:29 pm Operator: ClaudiaP
Sample : ICC285-20,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:40 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.99	96	2300028	25.00 ug/L	0.00
39) Chlorobenzene-d5	16.09	117	1727821	25.00 ug/L	0.01
57) 1,4-Dichlorobenzene-d4	20.24	152	1086085	25.00 ug/L	0.00
System Monitoring Compounds					
25) Dibromofluoromethane	9.90	113	1173993	48.79	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery = 97.58%		
28) 1,2-Dichloroethane-d4	10.45	65	675313	50.55	0.00
Spiked Amount 50.000	Range 74 - 120		Recovery = 101.10%		
40) Toluene-d8	13.62	98	2252761	49.81	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.62%		
59) 4-Bromofluorobenzene	18.15	95	1144115	48.10	-0.02
Spiked Amount 50.000	Range 86 - 115		Recovery = 96.20%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.17	85	930645	32.71 ug/L	100
3) Chloromethane	3.63	50	421578	24.00 ug/L	100
4) Vinyl Chloride	3.72	62	504062	23.90 ug/L	97
5) Bromomethane	4.35	94	446410	23.02 ug/L	96
6) Chloroethane	4.51	64	243444	19.38 ug/L	90
7) Trichlorofluoromethane	5.05	101	1284431	19.60 ug/L	95
8) Acrolein	5.90	56	27774	55.37 ug/L	92
9) 1,1-Dichloroethene	6.03	61	975245	19.30 ug/L	99
10) Acetone	6.21	43	287152	97.31 ug/L	87
11) Carbon Disulfide	6.42	76	7035620	98.47 ug/L	98
12) Methylene Chloride	6.93	49	700899	18.58 ug/L	89
13) trans-1,2-Dichloroethene	7.42	61	996916	19.91 ug/L	98
14) Acrylonitrile	7.37	53	131280	66.62 ug/L	88
15) Methyl Tert Butyl Ether	7.47	73	1017428	19.03 ug/L	98
16) 1,1-Dichloroethane	8.13	63	1097688	20.17 ug/L	97
17) Vinyl acetate	8.25	43	3225572	66.93 ug/L	99
18) Di-isopropyl ether	8.31	45	1871915	18.47 ug/L	85
19) 2,2-Dichloropropane	9.10	77	1004979	20.15 ug/L	97
20) cis-1,2-Dichloroethene	9.10	96	519329	20.02 ug/L	94
21) 2-Butanone	9.16	43	460863	92.03 ug/L	94
22) Bromochloromethane	9.49	128	340778	20.97 ug/L	89
23) Chloroform	9.64	83	1209038	20.08 ug/L	97
24) 1,1,1-Trichloroethane	9.93	97	1102159	19.56 ug/L	93
26) 1,1-Dichloropropene	10.19	75	817878	19.81 ug/L	97
27) Carbon Tetrachloride	10.21	117	997172	19.82 ug/L	99
29) Benzene	10.54	78	1196247	20.06 ug/L	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010435.D Vial: 4
Acq On : 10 Sep 1999 3:29 pm Operator: ClaudiaP
Sample : ICC285-20,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multipir: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:40 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 1,2-Dichloroethane	10.57	62	628290	20.79 ug/L	97
31) Trichloroethene	11.60	95	792265	20.22 ug/L	99
32) 1,2-Dichloropropane	11.98	63	622541	19.81 ug/L	97
33) Dibromomethane	12.18	93	442902	20.22 ug/L	95
34) 1,4-Dioxane	12.25	88	46428	383.66 ug/L	86
35) Bromodichloromethane	12.44	83	1026901	20.04 ug/L	95
36) 2-Chloroethyl vinyl ether	12.91	63	240049	98.32 ug/L	91
37) 4-Methyl-2-pentanone	13.43	43	1497675	90.60 ug/L	98
38) cis-1,3-Dichloropropene	13.17	75	814243	20.44 ug/L	94
41) Toluene	13.74	91	1879363	19.23 ug/L	98
42) trans-1,3-Dichloropropene	14.08	75	625271	19.11 ug/L	95
43) 1,1,2-Trichloroethane	14.41	83	379895	19.84 ug/L	97
44) Tetrachloroethene	14.69	166	940747	20.39 ug/L	95
45) 2-hexanone	14.82	43	1000465	90.56 ug/L	99
46) 1,3-Dichloropropane	14.69	76	691294	19.26 ug/L	96
47) Dibromochloromethane	15.09	129	674417	19.99 ug/L	97
48) 1,2-Dibromoethane	15.30	107	540709	19.47 ug/L	96
49) 1-Chlorohexane	16.08	91	871587	19.30 ug/L	95
50) Chlorobenzene	16.14	112	1366833	19.98 ug/L	98
51) 1,1,1,2-Tetrachloroethane	16.28	131	665284	19.88 ug/L	98
52) Ethylbenzene	16.32	91	2311478	19.29 ug/L	100
53) m,p-Xylene	16.52	91	3785052	38.69 ug/L	99
54) o-Xylene	17.23	91	1873470	19.56 ug/L	97
55) Styrene	17.25	104	1227712	20.09 ug/L	93
56) Bromoform	17.60	173	399374	18.64 ug/L	94
58) Isopropylbenzene	17.88	105	2452265	19.23 ug/L	96
60) Bromobenzene	18.44	156	672960	19.64 ug/L	89
61) 1,1,2,2-Tetrachloroethane	18.40	83	503413	17.61 ug/L	97
62) 1,2,3-Trichloropropane	18.47	110	138298	19.28 ug/L #	88
63) n-Propylbenzene	18.62	91	3047870	19.24 ug/L	97
64) 2-Chlorotoluene	18.78	91	1815676	19.25 ug/L	96
65) 4-Chlorotoluene	18.96	91	2077588	19.36 ug/L	99
66) 1,3,5-Trimethylbenzene	18.93	105	2061993	19.37 ug/L	96
67) sec-Butylbenzene	19.92	105	2735228	18.79 ug/L	97
68) 1,3-Dichlorobenzene	20.14	146	1233838	19.44 ug/L	96
69) 4-Isopropyltoluene	20.18	119	2248814	19.24 ug/L	99
70) 1,4-Dichlorobenzene	20.29	146	1235531	18.98 ug/L	97
71) tert-Butylbenzene	19.52	91	1652864	18.86 ug/L	99
72) n-Butylbenzene	20.94	91	2337381	18.80 ug/L	97
73) 1,2-Dichlorobenzene	20.98	146	1050301	18.93 ug/L	93
74) 1,2,4-Trimethylbenzene	19.61	105	2021617	19.04 ug/L	96

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010435.D Vial: 4
Acq On : 10 Sep 1999 3:29 pm Operator: ClaudiaP
Sample : ICC285 20,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:40 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

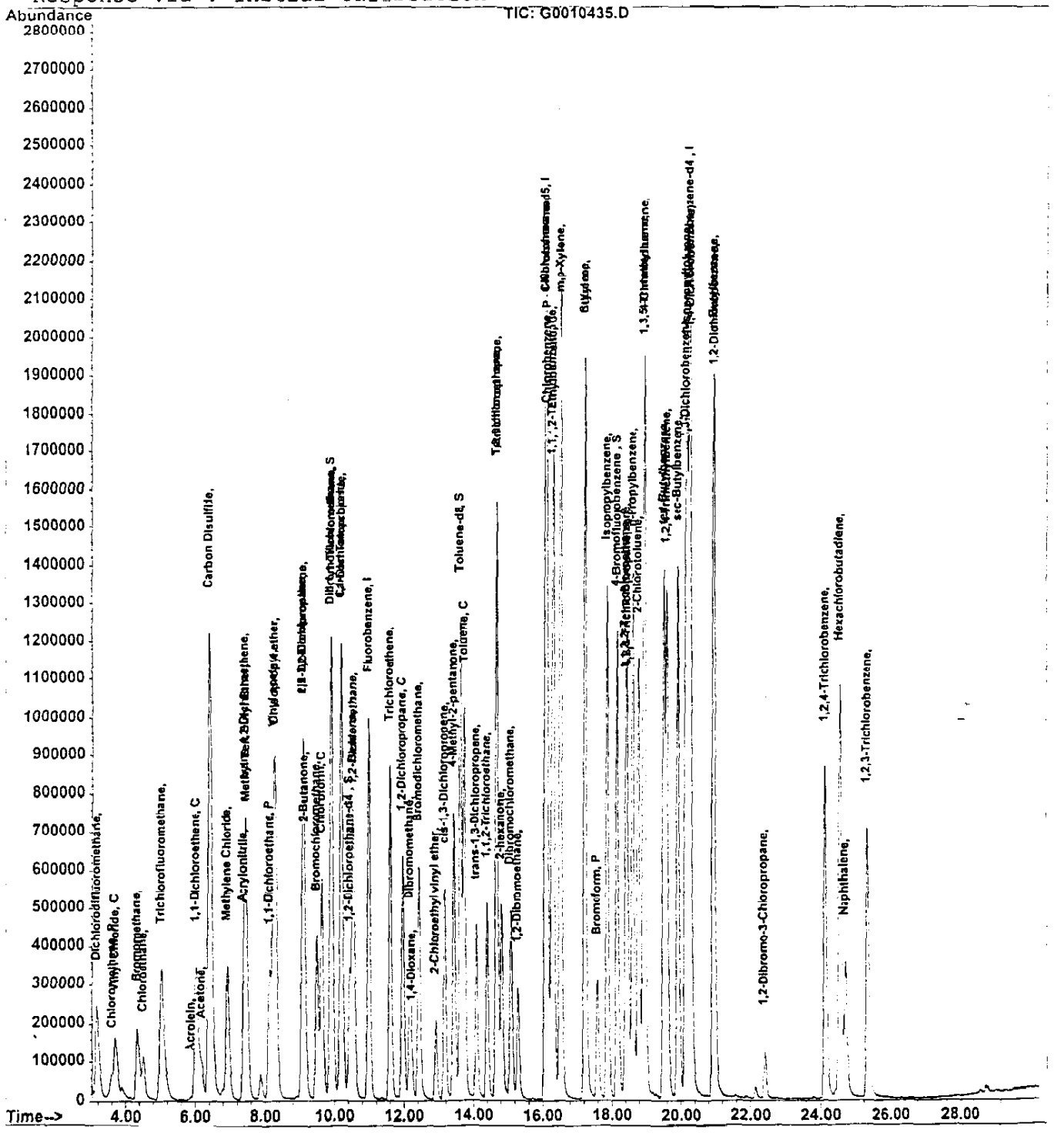
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.42	75	86151	17.47 ug/L #	82
76) 1,2,4-Trichlorobenzene	24.15	180	865086	19.85 ug/L	95
77) Hexachlorobutadiene	24.55	225	594649	21.06 ug/L	84
78) Naphthalene	24.71	128	926472	19.96 ug/L	100
79) 1,2,3-Trichlorobenzene	25.32	180	738300	20.29 ug/L	94

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091099\G0010435.D Vial: 4
Acq On : 10 Sep 1999 3:29 pm Operator: ClaudiaP
Sample : ICC285-20,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:40 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010436.D Vial: 5
Acq On : 10 Sep 1999 4:08 pm Operator: ClaudiaP
Sample : IC285 35,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:58 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.99	96	2290982	25.00 ug/L	0.00
39) Chlorobenzene-d5	16.10	117	1707464	25.00 ug/L	0.01
57) 1,4-Dichlorobenzene-d4	20.27	152	1080892	25.00 ug/L	0.01
System Monitoring Compounds					
25) Dibromofluoromethane	9.91	113	1200574	50.09	0.01
Spiked Amount 50.000	Range 80 - 116		Recovery = 100.18%		
28) 1,2-Dichloroethane-d4	10.45	65	625587	47.01	0.00
Spiked Amount 50.000	Range 74 - 120		Recovery = 94.02%		
40) Toluene-d8	13.63	98	2267665	50.74	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.48%		
59) 4-Bromofluorobenzene	18.16	95	1171417	49.49	-0.02
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.98%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.20	85	1608571	56.77 ug/L	100
3) Chloromethane	3.65	50	738772	42.22 ug/L	95
4) Vinyl Chloride	3.74	62	876801	41.74 ug/L	99
5) Bromomethane	4.37	94	817575	42.33 ug/L	99
6) Chloroethane	4.53	64	423642	33.85 ug/L	89
7) Trichlorofluoromethane	5.02	101	2248647	34.46 ug/L	98
8) Acrolein	5.89	56	44930m	89.93 ug/L	
9) 1,1-Dichloroethene	6.02	61	1729711	34.36 ug/L	99
10) Acetone	6.23	43	469272	159.65 ug/L	98
11) Carbon Disulfide	6.41	76	12654970	177.82 ug/L	97
12) Methylene Chloride	6.94	49	1215396	32.34 ug/L	93
13) trans-1,2-Dichloroethene	7.42	61	1755195	35.18 ug/L	98
14) Acrylonitrile	7.40	53	238677	121.60 ug/L	92
15) Methyl Tert Butyl Ether	7.47	73	1819438	34.17 ug/L	97
16) 1,1-Dichloroethane	8.15	63	1941467	35.82 ug/L	94
17) Vinyl acetate	8.25	43	8000780	166.68 ug/L	100
18) Di-isopropyl ether	8.32	45	3348513	33.18 ug/L	95
19) 2,2-Dichloropropane	9.10	77	1768291	35.59 ug/L	98
20) cis-1,2-Dichloroethene	9.12	96	900195	34.84 ug/L	93
21) 2-Butanone	9.17	43	784283	157.23 ug/L	92
22) Bromochloromethane	9.50	128	589845	36.45 ug/L	89
23) Chloroform	9.64	83	2163780	36.09 ug/L	98
24) 1,1,1-Trichloroethane	9.94	97	1954793	34.82 ug/L	97
26) 1,1-Dichloropropene	10.20	75	1430966	34.79 ug/L	98
27) Carbon Tetrachloride	10.20	117	1795105	35.82 ug/L	97
29) Benzene	10.54	78	2253407	37.93 ug/L	99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010436.D Vial: 5
Acq On : 10 Sep 1999 4:08 pm Operator: ClaudiaP
Sample : 10285-35,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:58 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	1,2-Dichloroethane	10.57	62	1152493	38.28 ug/L		98
31)	Trichloroethene	11.61	95	1327206	34.00 ug/L		98
32)	1,2-Dichloropropane	11.97	63	1097012	35.04 ug/L		96
33)	Dibromomethane	12.18	93	778327	35.68 ug/L		96
34)	1,4-Dioxane	12.26	88	85718	711.14 ug/L	#	78
35)	Bromodichloromethane	12.44	83	1877854	36.78 ug/L		93
36)	2-Chloroethyl vinyl ether	12.92	63	507996	208.90 ug/L		96
37)	4-Methyl-2-pentanone	13.44	43	2664631	161.84 ug/L		99
38)	cis-1,3-Dichloropropene	13.17	75	1480954	37.32 ug/L		98
41)	Toluene	13.74	91	3328565	34.47 ug/L		99
42)	trans-1,3-Dichloropropene	14.10	75	1171911	36.24 ug/L		99
43)	1,1,2-Trichloroethane	14.42	83	674250	35.64 ug/L		97
4)	Tetrachloroethene	14.69	166	1639312	35.95 ug/L		95
45)	2-hexanone	14.84	43	1723868	157.90 ug/L		98
46)	1,3-Dichloropropane	14.70	76	1224375	34.52 ug/L		96
47)	Dibromochloromethane	15.10	129	1225835	36.76 ug/L		96
48)	1,2-Dibromoethane	15.30	107	967498	35.26 ug/L		94
49)	1-Chlorohexane	16.09	91	1578255	35.37 ug/L		94
50)	Chlorobenzene	16.14	112	2366877	35.01 ug/L		99
51)	1,1,1,2-Tetrachloroethane	16.28	131	1202862	36.36 ug/L		92
52)	Ethylbenzene	16.32	91	3998829	33.78 ug/L		99
53)	m,p-Xylene	16.53	91	6732297	69.64 ug/L		99
54)	o-Xylene	17.23	91	3332677	35.21 ug/L		96
55)	Styrene	17.25	104	2115890	35.03 ug/L		96
56)	Bromoform	17.59	173	755553	35.68 ug/L		98
58)	Isopropylbenzene	17.88	105	4349978	34.27 ug/L		98
60)	Bromobenzene	18.44	156	1183661	34.71 ug/L		96
61)	1,1,2,2-Tetrachloroethane	18.39	83	950361	33.41 ug/L		99
62)	1,2,3-Trichloropropane	18.48	110	239754	33.58 ug/L	#	82
63)	n-Propylbenzene	18.62	91	5327976	33.79 ug/L		95
64)	2-Chlorotoluene	18.79	91	3225303	34.37 ug/L		99
65)	4-Chlorotoluene	18.97	91	3680218	34.46 ug/L		100
66)	1,3,5-Trimethylbenzene	18.94	105	3615707	34.12 ug/L		98
67)	sec-Butylbenzene	19.94	105	4943400	34.12 ug/L		99
68)	1,3-Dichlorobenzene	20.15	146	2165674	34.28 ug/L		98
69)	4-Isopropyltoluene	20.20	119	3971151	34.13 ug/L		95
70)	1,4-Dichlorobenzene	20.31	146	2229072	34.40 ug/L		97
71)	tert-Butylbenzene	19.53	91	2904282	33.30 ug/L		97
72)	n-Butylbenzene	20.95	91	4250360	34.35 ug/L		98
73)	1,2-Dichlorobenzene	20.99	146	1880721	34.06 ug/L		95
74)	1,2,4-Trimethylbenzene	19.62	105	3552772	33.63 ug/L		97

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

000077

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010436.D Vial: 5
Acq On : 10 Sep 1999 4:08 pm Operator: ClaudiaP
Sample : IC285-35,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:58 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

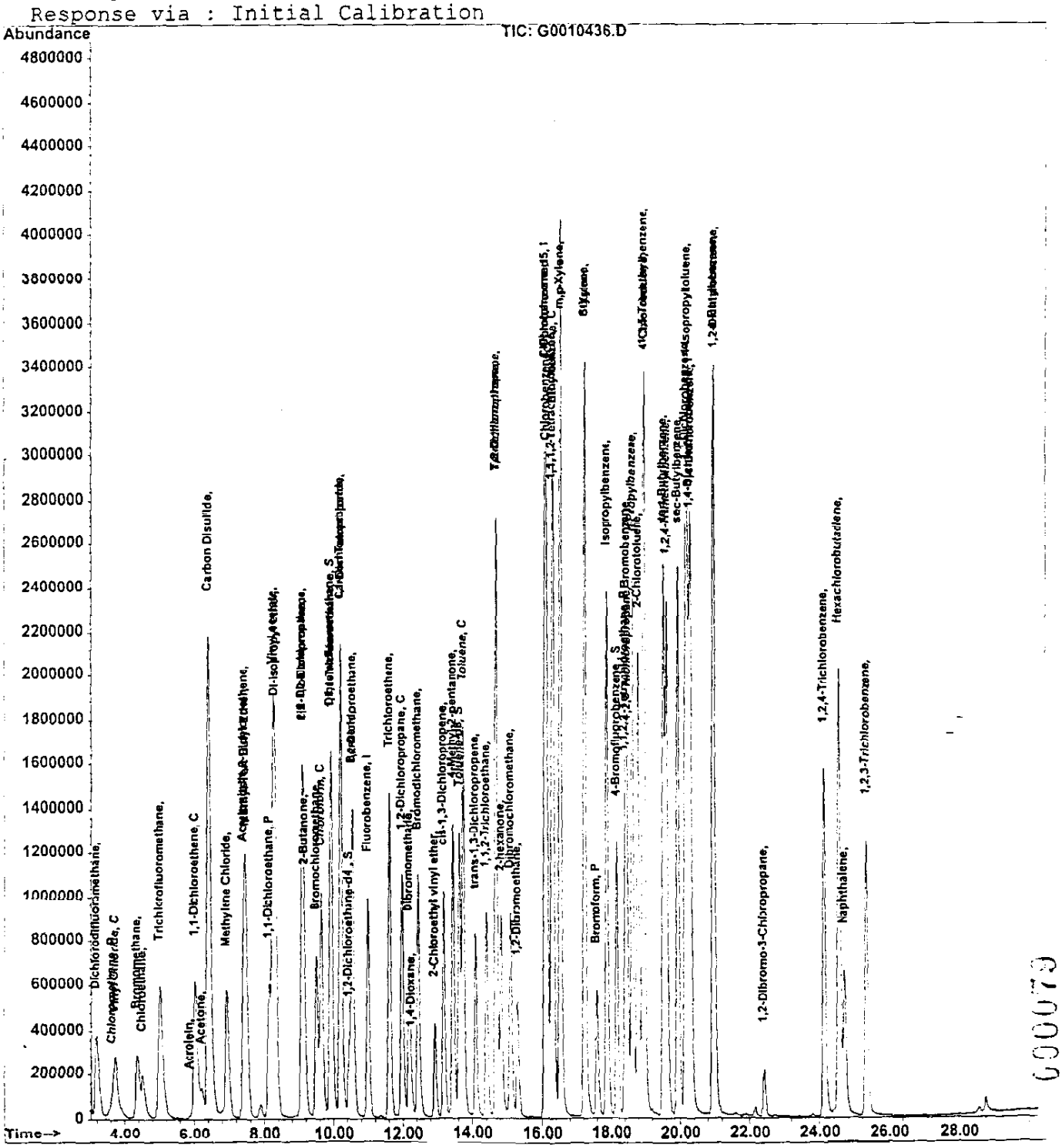
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.41	75	165856	33.80 ug/L #	84
76) 1,2,4-Trichlorobenzene	24.15	180	1524958	35.15 ug/L	96
77) Hexachlorobutadiene	24.55	225	1102221	39.23 ug/L	96
78) Naphthalene	24.71	128	1677239	36.32 ug/L	99
79) 1,2,3-Trichlorobenzene	25.33	180	1312583	36.24 ug/L	93

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091099\G0010436.D Vial: 5
Acq On : 10 Sep 1999 4:08 pm Operator: ClaudiaP
Sample : IC285-35,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:58 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010437.D Vial: 6
Acq On : 10 Sep 1999 4:47 pm Operator: ClaudiaP
Sample : IC285-50,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:41 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.99	96	2272240	25.00 ug/L	0.00
39) Chlorobenzene-d5	16.09	117	1711492	25.00 ug/L	0.00
57) 1,4-Dichlorobenzene-d4	20.25	152	1070056	25.00 ug/L	0.00
System Monitoring Compounds					
25) Dibromofluoromethane	9.90	113	1203105	50.61	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery = 101.22%		
28) 1,2-Dichloroethane-d4	10.45	65	662153	50.17	0.00
Spiked Amount 50.000	Range 74 - 120		Recovery = 100.34%		
40) Toluene-d8	13.63	98	2261177	50.47	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.94%		
59) 4-Bromofluorobenzene	18.17	95	1165953	49.76	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.52%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.18	85	2207591	78.55 ug/L	97
3) Chloromethane	3.64	50	1022199	58.90 ug/L	95
4) Vinyl Chloride	3.73	62	1242115	59.62 ug/L	94
5) Bromomethane	4.35	94	1153779	60.23 ug/L	92
6) Chloroethane	4.51	64	587883	47.36 ug/L	94
7) Trichlorofluoromethane	4.99	101	3041107	46.98 ug/L	99
8) Acrolein	5.89	56	66002	133.20 ug/L	85
9) 1,1-Dichloroethene	6.01	61	2417908	48.42 ug/L	97
10) Acetone	6.24	43	633716	217.37 ug/L	95
11) Carbon Disulfide	6.39	76	17817432	252.42 ug/L	96
12) Methylene Chloride	6.92	49	1701001	45.64 ug/L	91
13) trans-1,2-Dichloroethene	7.41	61	2456808	49.65 ug/L	98
14) Acrylonitrile	7.41	53	318141	163.43 ug/L	98
15) Methyl Tert Butyl Ether	7.50	73	2573471	48.72 ug/L	96
16) 1,1-Dichloroethane	8.14	63	2750028	51.16 ug/L	94
17) Vinyl acetate	8.26	43	11292866	237.20 ug/L	99
18) Di-isopropyl ether	8.32	45	4702914	46.98 ug/L	100
19) 2,2-Dichloropropane	9.10	77	2462465	49.97 ug/L	99
20) cis-1,2-Dichloroethene	9.11	96	1265586	49.38 ug/L	95
21) 2-Butanone	9.17	43	1106823	223.72 ug/L	100
22) Bromochloromethane	9.50	128	839486	52.30 ug/L	91
23) Chloroform	9.64	83	3014337	50.69 ug/L	94
24) 1,1,1-Trichloroethane	9.92	97	2703955	48.56 ug/L	99
26) 1,1-Dichloropropene	10.19	75	2009372	49.26 ug/L	98
27) Carbon Tetrachloride	10.21	117	2513806	50.57 ug/L	99
29) Benzene	10.53	78	3352201	56.89 ug/L	96

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

000030

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010437.D Vial: 6
Acq On : 10 Sep 1999 4:47 pm Operator: ClaudiaP
Sample : 10285-50,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:41 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 1,2-Dichloroethane	10.56	62	1653498	55.37 ug/L	99
31) Trichloroethene	11.60	95	1903255	49.16 ug/L	98
32) 1,2-Dichloropropane	11.97	63	1562907	50.34 ug/L	97
33) Dibromomethane	12.18	93	1095402	50.62 ug/L	93
34) 1,4-Dioxane	12.26	88	119150	996.66 ug/L #	82
35) Bromodichloromethane	12.44	83	2651912	52.37 ug/L	99
36) 2-Chloroethyl vinyl ether	12.92	63	672941	279.01 ug/L	96
37) 4-Methyl-2-pentanone	13.44	43	3738691	228.94 ug/L	99
38) cis-1,3-Dichloropropene	13.18	75	2085731	52.99 ug/L	98
41) Toluene	13.74	91	4595930	47.48 ug/L	92
42) trans-1,3-Dichloropropene	14.10	75	1677540	51.75 ug/L	95
43) 1,1,2-Trichloroethane	14.41	83	937363	49.43 ug/L	96
44) Tetrachloroethene	14.68	166	2264069	49.53 ug/L	96
45) 2-hexanone	14.83	43	2437866	222.78 ug/L	100
46) 1,3-Dichloropropane	14.69	76	1686359	47.43 ug/L	97
47) Dibromochloromethane	15.11	129	1745354	52.22 ug/L	98
48) 1,2-Dibromoethane	15.30	107	1365597	49.65 ug/L	92
49) 1-Chlorohexane	16.08	91	2133591	47.70 ug/L	96
50) Chlorobenzene	16.14	112	3372173	49.76 ug/L	98
51) 1,1,1,2-Tetrachloroethane	16.29	131	1731496	52.22 ug/L	94
52) Ethylbenzene	16.33	91	5782261	48.73 ug/L	98
53) m,p-Xylene	16.54	91	9504282	98.08 ug/L	93
54) o-Xylene	17.23	91	4636695	48.87 ug/L	97
55) Styrene	17.26	104	3068148	50.68 ug/L	95
56) Bromoform	17.60	173	1091764	51.44 ug/L	95
58) Isopropylbenzene	17.89	105	6204714	49.38 ug/L	97
60) Bromobenzene	18.45	156	1696954	50.27 ug/L	91
61) 1,1,2,2-Tetrachloroethane	18.40	83	1340745	47.61 ug/L	97
62) 1,2,3-Trichloropropane	18.48	110	338863	47.95 ug/L #	83
63) n-Propylbenzene	18.62	91	7549836	48.37 ug/L	99
64) 2-Chlorotoluene	18.78	91	4501309	48.45 ug/L	97
65) 4-Chlorotoluene	18.97	91	5132519	48.54 ug/L	100
66) 1,3,5-Trimethylbenzene	18.93	105	5106595	48.68 ug/L	98
67) sec-Butylbenzene	19.93	105	7173954	50.02 ug/L	99
68) 1,3-Dichlorobenzene	20.13	146	3147895	50.34 ug/L	95
69) 4-Isopropyltoluene	20.19	119	5538779	48.09 ug/L	100
70) 1,4-Dichlorobenzene	20.30	146	3173459	49.48 ug/L	94
71) tert-Butylbenzene	19.53	91	4195884	48.59 ug/L	97
72) n-Butylbenzene	20.95	91	6100159	49.81 ug/L	99
73) 1,2-Dichlorobenzene	20.99	146	2644157	48.38 ug/L	94
74) 1,2,4-Trimethylbenzene	19.62	105	4980506	47.62 ug/L	96

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091099\G0010437.D Vial: 6
Acq On : 10 Sep 1999 4:47 pm Operator: ClaudiaP
Sample : IC285-50,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:41 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Wed Aug 18 14:20:42 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

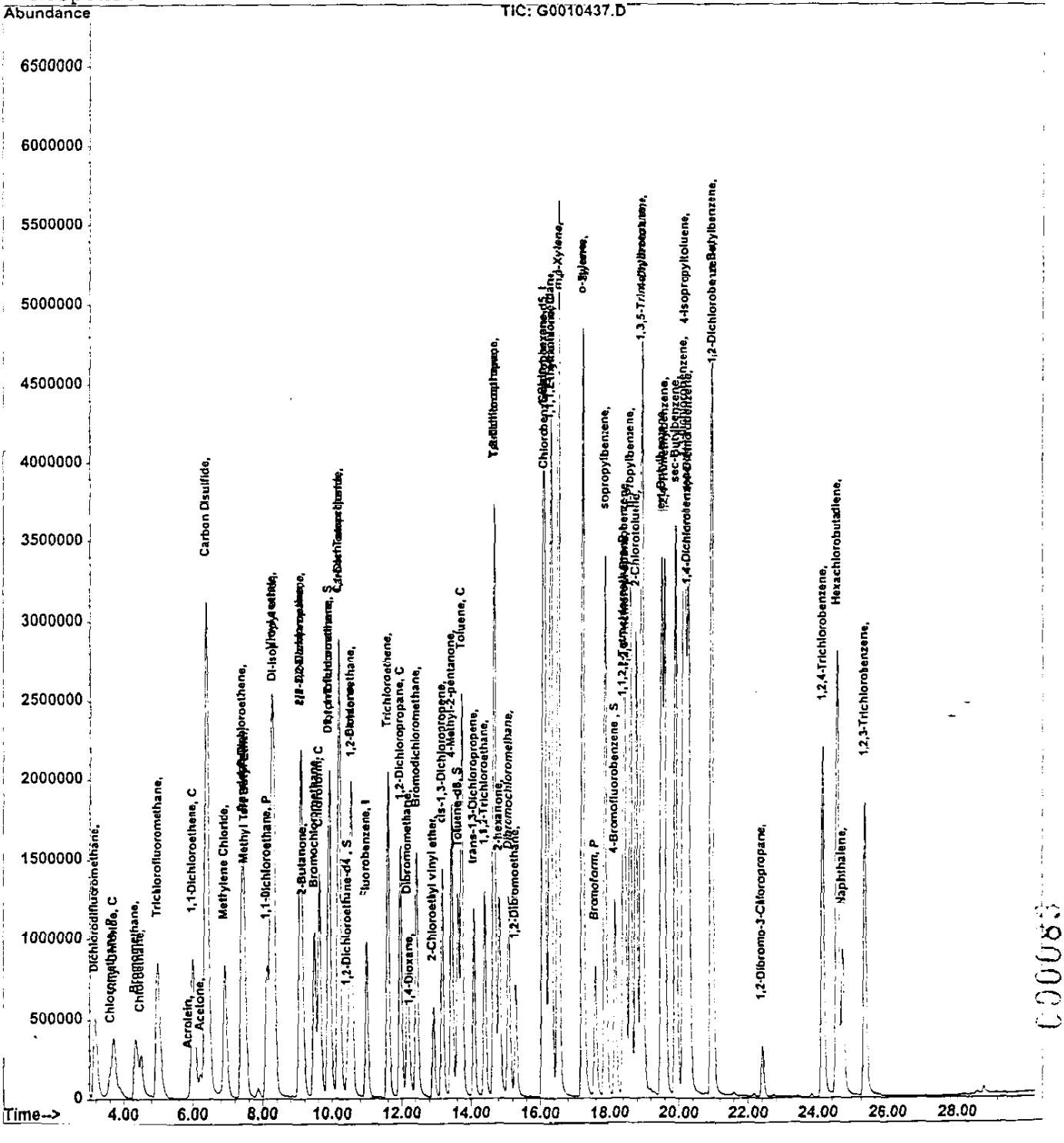
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.42	75	234505	48.27 ug/L #	87
76) 1,2,4-Trichlorobenzene	24.16	180	2209834	51.46 ug/L	94
77) Hexachlorobutadiene	24.56	225	1468856	52.80 ug/L	87
78) Naphthalene	24.71	128	2370989	51.86 ug/L	99
79) 1,2,3-Trichlorobenzene	25.33	180	1920717	53.56 ug/L	95

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091099\G0010437.D Vial: 6
Acq On : 10 Sep 1999 4:47 pm Operator: ClaudiaP
Sample : IC285-50,10ml Inst : MSVOA1
Misc : ms374,vg285,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 13 9:41 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



CONTINUING CALIBRATION SUMMARY

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092399\G0010583.D Vial: 7
Acq On : 23 Sep 1999 7:58 am Operator: ClaudiaP
Sample : CC285-20 Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	126	0.00
2		Dichlorodifluoromethane	0.502	0.439	12.5	109	0.00
3	P	Chloromethane	0.236	0.229	3.0	126	0.02
4	C	Vinyl Chloride	0.265	0.268	-1.1	123	0.00
5		Bromomethane	0.245	0.236	3.7	122	0.00
6		Chloroethane	0.140	0.139	0.7	132	0.00
7		Trichlorofluoromethane	0.689	0.717	-4.1	129	-0.01
8		Acrolein	0.003	0.002	33.3#	82	-0.02
9	C	1,1-Dichloroethene	0.537	0.507	5.6	120	-0.01
10		Acetone	0.031	0.024	22.6	95	-0.02
11		Carbon Disulfide	0.762	0.685	10.1	113	0.00
12		Methylene Chloride	0.388	0.359	7.5	119	0.00
[illegible]		trans-1,2-Dichloroethene	0.539	0.512	5.0	119	0.00
14		Acrylonitrile	0.015	0.012	20.0	108	0.00
15		Methyl Tert Butyl Ether	0.566	0.473	16.4	108	-0.01
16	P	1,1-Dichloroethane	0.603	0.563	6.6	119	0.00
17		Vinyl acetate	0.483	0.427	11.6	0#	-0.01
18		Di-isopropyl ether	1.053	0.957	9.1	118	-0.01
19		2,2-Dichloropropane	0.546	0.523	4.2	120	0.00
20		cis-1,2-Dichloroethene	0.285	0.264	7.4	117	0.00
21		2-Butanone	0.051	0.041	19.6	103	0.00
22		Bromochloromethane	0.181	0.166	8.3	112	0.00
23	C	Chloroform	0.661	0.603	8.8	115	0.00
24		1,1,1-Trichloroethane	0.597	0.540	9.5	113	0.02
25	S	Dibromofluoromethane	0.259	0.248	4.2	122	0.02
26		1,1-Dichloropropene	0.441	0.373	15.4	105	0.00
27		Carbon Tetrachloride	0.544	0.426	21.7	99	0.00
28	S	1,2-Dichloroethane-d4	0.143	0.149	-4.2	127	0.00
29		Benzene	0.724	0.803	-10.9	155	0.00
30		1,2-Dichloroethane	0.366	0.336	8.2	123	0.00
31		Trichloroethene	0.418	0.380	9.1	111	0.02
32	C	1,2-Dichloropropane	0.339	0.311	8.3	116	0.00
33		Dibromomethane	0.236	0.203	14.0	106	0.00
34		1,4-Dioxane	0.001	0.001	0.0	107	0.00
35		Bromodichloromethane	0.560	0.490	12.5	110	0.00
36		2-Chloroethyl vinyl ether	0.027	0.026	3.7	127	0.02
37		4-Methyl-2-pentanone	0.159	0.132	17.0	102	0.00
[illegible]		cis-1,3-Dichloropropene	0.443	0.389	12.2	110	0.00
39	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.00
40	S	Toluene-d8	0.653	0.681	-4.3	123	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092399\G0010583.D Vial: 7
Acq On : 23 Sep 1999 7:58 am Operator: ClaudiaP
ample : CCZ85-20 Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	C	Toluene	1.369	1.354	1.1	117	0.00
42		trans-1,3-Dichloropropene	0.458	0.416	9.2	108	0.02
43		1,1,2 Trichloroethane	0.271	0.251	7.4	107	0.00
44		Tetrachloroethene	0.677	0.668	1.3	115	0.00
45		2-hexanone	0.142	0.119	16.2	97	0.02
46		1,3-Dichloropropane	0.502	0.461	8.2	108	0.00
47		Dibromochloromethane	0.476	0.424	10.9	102	0.02
48		1,2-Dibromoethane	0.393	0.342	13.0	103	0.00
49		1-Chlorohexane	0.639	0.656	-2.7	122	0.00
50	P	Chlorobenzene	0.998	0.978	2.0	116	0.00
51		1,1,1,2-Tetrachloroethane	0.487	0.459	5.7	112	0.00
52	C	Ethylbenzene	1.696	1.666	1.8	117	0.00
		m,p-Xylene	1.387	1.321	4.8	113	0.02
54		o-Xylene	1.365	1.304	4.5	113	0.02
55		Styrene	0.851	0.867	-1.9	115	0.00
56	P	Bromoform	0.288	0.247	14.2	100	0.00
57	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	117	0.02
58		Isopropylbenzene	2.895	2.780	4.0	115	0.00
59	S	4-Bromofluorobenzene	0.540	0.537	0.6	119	0.00
60		Bromobenzene	0.788	0.762	3.3	115	0.00
61	P	1,1,2,2-Tetrachloroethane	0.606	0.528	12.9	106	0.00
62		1,2,3-Trichloropropane	0.155	0.138	11.0	101	0.00
63		n-Propylbenzene	3.578	3.495	2.3	116	0.00
64		2-Chlorotoluene	2.169	2.055	5.3	115	0.02
65		4-Chlorotoluene	2.458	2.338	4.9	114	0.02
66		1,3,5-Trimethylbenzene	2.422	2.281	5.8	112	0.00
67		sec-Butylbenzene	3.309	3.255	1.6	121	0.02
68		1,3-Dichlorobenzene	1.456	1.360	6.6	112	0.00
69		4-Isopropyltoluene	2.659	2.567	3.5	116	0.00
70		1,4-Dichlorobenzene	1.514	1.427	5.7	117	0.00
71		tert-Butylbenzene	1.953	1.908	2.3	117	0.00
72		n-Butylbenzene	2.811	2.759	1.8	120	0.00
73		1,2-Dichlorobenzene	1.266	1.160	8.4	112	0.00
74		1,2,4-Trimethylbenzene	2.389	2.210	7.5	111	0.00
75		1,2-Dibromo-3-Chloropropane	0.102	0.082	19.6	96	0.00
76		1,2,4-Trichlorobenzene	0.970	0.902	7.0	106	0.00
		Hexachlorobutadiene	0.709	0.700	1.3	119	0.00
		Naphthalene	1.051	0.863	17.9	94	0.00
79		1,2,3-Trichlorobenzene	0.834	0.767	8.0	105	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010583.D Vial: 7
Acq On : 23 Sep 1999 7:58 am Operator: ClaudiaP
Sample : CC285-20 Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 8:44 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.99	96	2889906	25.00	ug/L	0.00
39) Chlorobenzene-d5	16.09	117	2030144	25.00	ug/L	0.00
57) 1,4-Dichlorobenzene-d4	20.26	152	1266868	25.00	ug/L	0.02
System Monitoring Compounds						
25) Dibromofluoromethane	9.91	113	1432788	47.80		0.02
Spiked Amount 50.000	Range 80 - 116		Recovery = 95.60%			
28) 1,2-Dichloroethane-d4	10.44	65	859693	52.14		0.00
Spiked Amount 50.000	Range 74 - 120		Recovery = 104.28%			
40) Toluene-d8	13.63	98	2766051	52.13		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.26%			
59) 4-Bromofluorobenzene	18.16	95	1361662	49.73		0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.46%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.17	85	1014478	17.48	ug/L	96
3) Chloromethane	3.64	50	529827	19.44	ug/L	92
4) Vinyl Chloride	3.72	62	620682	20.24	ug/L	98
5) Bromomethane	4.34	94	546238	19.31	ug/L	96
6) Chloroethane	4.51	64	322206	19.96	ug/L	91
7) Trichlorofluoromethane	5.03	101	1658694	20.83	ug/L	99
8) Acrolein	5.88	56	22651	65.91	ug/L	79
9) 1,1-Dichloroethene	6.02	61	1172864	18.91	ug/L	98
10) Acetone	6.19	43	272677	76.44	ug/L	95
11) Carbon Disulfide	6.41	76	7915408	89.86	ug/L	99
12) Methylene Chloride	6.92	49	830749	18.51	ug/L	94
13) trans-1,2-Dichloroethene	7.42	61	1184589	19.02	ug/L	97
14) Acrylonitrile	7.37	53	142227	84.85	ug/L	88
15) Methyl Tert Butyl Ether	7.46	73	1094549	16.72	ug/L	97
16) 1,1-Dichloroethane	8.13	63	1302737	18.68	ug/L	95
17) Vinyl acetate	8.24	43	4934632	88.34	ug/L	98
18) Di-isopropyl ether	8.29	45	2212315	18.18	ug/L #	73
19) 2,2-Dichloropropane	9.09	77	1210105	19.17	ug/L	100
20) cis-1,2-Dichloroethene	9.10	96	609347	18.50	ug/L	98
21) 2-Butanone	9.16	43	472513	80.23	ug/L	97
22) Bromochloromethane	9.50	128	383071	18.27	ug/L	96
23) Chloroform	9.64	83	1393682	18.24	ug/L	96
24) 1,1,1-Trichloroethane	9.94	97	1249518	18.11	ug/L	98
26) 1,1 Dichloropropene	10.20	75	862518	16.93	ug/L	97
27) Carbon Tetrachloride	10.22	117	985213	15.67	ug/L	97
29) Benzene	10.54	78	1857306	22.19	ug/L	94

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

G0010583

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010583.D Vial: 7
Acq On : 23 Sep 1999 7:58 am Operator: ClaudiaP
Sample : CC285-20 Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 8:44 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	1,2-Dichloroethane	10.57	62	775739	18.33 ug/L	97
31)	Trichloroethene	11.63	95	879070	18.20 ug/L	96
32)	1,2-Dichloropropane	11.98	63	719331	18.34 ug/L	98
33)	Dibromomethane	12.19	93	470129	17.21 ug/L	97
34)	1,4-Dioxane	12.26	88	49587	340.87 ug/L	93
35)	Bromodichloromethane	12.44	83	1131809	17.49 ug/L	98
36)	2-Chloroethyl vinyl ether	12.93	63	304967	92.89 ug/L	93
37)	4-Methyl-2-pentanone	13.44	43	1524681	82.86 ug/L	98
38)	cis-1,3-Dichloropropene	13.17	75	898378	17.54 ug/L	99
41)	Toluene	13.74	91	2198614	19.78 ug/L	86
42)	trans-1,3-Dichloropropene	14.10	75	675037	18.14 ug/L	95
43)	1,1,2-Trichloroethane	14.40	83	407641	18.50 ug/L	97
44)	Tetrachloroethene	14.69	166	1084127	19.72 ug/L	96
45)	2-hexanone	14.84	43	966338	83.99 ug/L	96
46)	1,3-Dichloropropane	14.69	76	749144	18.37 ug/L	95
47)	Dibromochloromethane	15.10	129	689320	17.82 ug/L	96
48)	1,2-Dibromoethane	15.29	107	555531	17.42 ug/L	100
49)	1-Chlorohexane	16.08	91	1066051	20.53 ug/L	98
50)	Chlorobenzene	16.15	112	1587754	19.60 ug/L	97
51)	1,1,1,2-Tetrachloroethane	16.29	131	745097	18.83 ug/L	96
52)	Ethylbenzene	16.33	91	2705718	19.64 ug/L	99
53)	m,p-Xylene	16.53	91	4290212	38.08 ug/L	99
54)	o-Xylene	17.24	91	2118019	19.11 ug/L	98
55)	Styrene	17.25	104	1407967	20.38 ug/L	92
56)	Bromoform	17.60	173	400441	17.14 ug/L	96
58)	Isopropylbenzene	17.88	105	2817284	19.21 ug/L	95
60)	Bromobenzene	18.44	156	771943	19.33 ug/L	98
61)	1,1,2,2-Tetrachloroethane	18.41	83	535203	17.42 ug/L	98
62)	1,2,3-Trichloropropane	18.48	110	139964	17.78 ug/L	88
63)	n-Propylbenzene	18.62	91	3542068	19.53 ug/L	98
64)	2-Chlorotoluene	18.79	91	2082879	18.95 ug/L	96
65)	4-Chlorotoluene	18.98	91	2369813	19.03 ug/L	95
66)	1,3,5-Trimethylbenzene	18.94	105	2312002	18.04 ug/L	94
67)	sec-Butylbenzene	19.93	105	3298961	19.68 ug/L	98
68)	1,3-Dichlorobenzene	20.14	146	1377931	18.67 ug/L	97
69)	4-Isopropyltoluene	20.19	119	2602094	19.31 ug/L	96
70)	1,4-Dichlorobenzene	20.30	146	1446440	18.86 ug/L	94
71)	tert-Butylbenzene	19.52	91	1933267	19.54 ug/L	98
72)	n-Butylbenzene	20.94	91	2796639	19.64 ug/L	96
73)	1,2-Dichlorobenzene	20.98	146	1175176	18.31 ug/L	94
74)	1,2,4-Trimethylbenzene	19.61	105	2239724	18.50 ug/L	94

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092399\G0010583.D Vial: 7
Acq On : 23 Sep 1999 7:58 am Operator: ClaudiaP
Sample : CC285-20 Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 8:44 1999 Quant Results File: 8260LL.RES

Quant Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration
DataAcq Meth : 8260LL

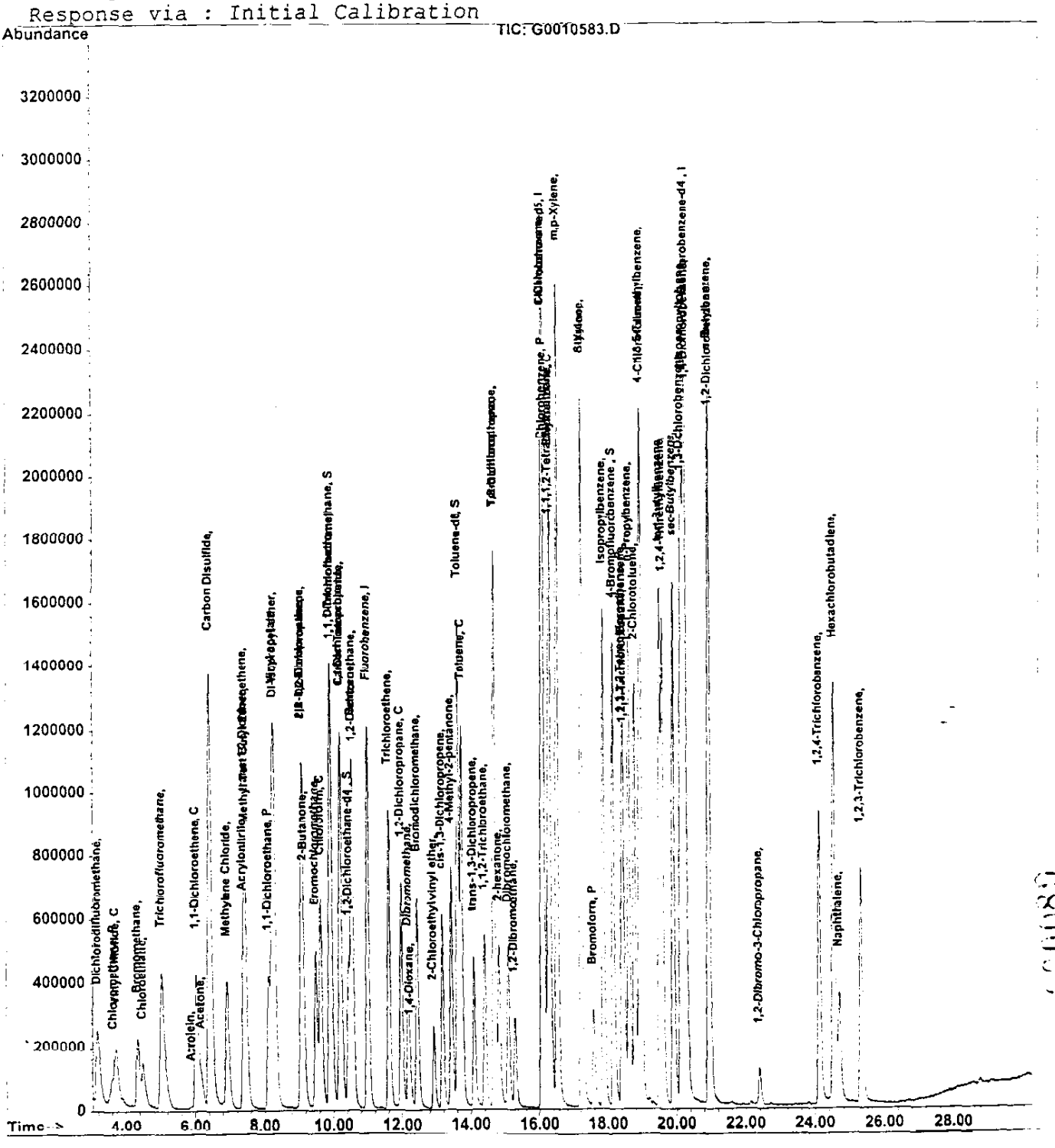
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) 1,2-Dibromo-3-Chloropropan	22.42	75	82673	15.99 ug/L	94
76) 1,2,4-Trichlorobenzene	24.14	180	913867	18.60 ug/L	97
77) Hexachlorobutadiene	24.56	225	709262	19.73 ug/L	92
78) Naphthalene	24.70	128	874231	16.41 ug/L	100
79) 1,2,3-Trichlorobenzene	25.33	180	777750	18.41 ug/L	92

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092399\G0010583.D Vial: 7
Acq On : 23 Sep 1999 7:58 am Operator: ClaudiaP
Sample : CC285-20 Inst : MSVOA1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 23 8:44 1999 Quant Results File: 8260LL.RES

Method : C:\HPCHEM\1\METHODS\8260LL.M (RTE Integrator)
Title : SW-846 Method 8260B & EPA 624 (low level)
Last Update : Mon Sep 13 10:21:19 1999
Response via : Initial Calibration



INTERNAL STANDARD/ RT SUMMARY

Volatile Internal Standard Area Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Check Std:	VG289-CC285	**Injection Date:**	09/23/99
Lab File ID:	G0010583.D	**Injection Time:**	07:58
Instrument ID:	GCMSG		

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	2[illegible]0206	10.99	2030144	16.09	1266868	20.26
Upper Limit [a]	5[illegible]912	11.49	4060288	16.59	2533736	20.76
Lower Limit [b]	1[illegible]53	10.49	1015072	15.59	633434	19.76

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VG289-MB	2984527	10.99	2090535	16.08	1272527	20.25
F4907-4	2942152	11.01	1945430	16.10	1106692	20.27
ZZZZZZ	3[illegible]07580	10.99	2187893	16.09	1293636	20.25
F4923-1	2[illegible]8511	11.00	2050377	16.09	1221444	20.25
F4923-2	2[illegible]1552	11.01	2144537	16.09	1344150	20.26
F4907-4MS	3[illegible]57759	11.02	2130694	16.12	1344477	20.28
F4907-4MSD	3[illegible]30333	11.00	2226828	16.11	1392816	20.26
VG289-BS	3[illegible]92652	10.99	2284397	16.09	1419492	20.25

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

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

000096

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\092399\G0010582.D
Tune Time : 23 Sep 1999 7:43 am

Data Calibration File : C:\HPCHEM\1\DATA\092299\G0010564.D

File	Sample	Surrogate Recovery %				Internal Standard Responses		
						2966770	2114790	1360320
G0010583.D	CC285-20	96	104	104	99	2889906	2030144	1266868
G0010584.D	MB	95	98	102	100	2884527	2090535	1272527
G0010585.D	F4907-4,	87	88	104	102	2842152	1945430	1106692
G0010586.D	F4907-11	94	97	101	103	3007580	2187893	1293636
G0010587.D	F4923-1,	92	98	104	102	2928511	2050377	1221444
G0010588.D	F4923-2,	95	95	103	100	2886700	2058588	1271536
G0010589.D	F4923-2,	95	105	102	98	2931552	2144537	1344150
G0010590.D	F4907-4m	97	111	103	100	3057799	2130694	1344477
G0010591.D	F4907-4m	97	101	103	97	3130333	2226828	1392816
G0010592.D	BS,10ml	97	99	103	100	3192652	2284397	1419492

t - fails 12hr time check * - fails criteria

Created: Fri Sep 24 07:42:39 1999 MSVOA1

SEQUENCE LOG SUMMARY

Sequence Name: C:\HPCHEM\1\SEQUENCE\092399.S
Comment:
Operator: ClaudiaP
Data Path: C:\HPCHEM\1\DATA\092399\
Pre-Seq Cmd:
Post-Seq Cmd:

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	BFB	100	G0010582	BFB	BFB tune
2	DailyCal	7	G0010583	8260LL	CC285-20
3	Blank	8	G0010584	8260LL	MB
4	Sample	9	G0010585	8260LL	F4907 4,10ml
5	Sample	10	G0010586	8260LL	F4907-11,2.5ml
6	Sample	11	G0010587	8260LL	F4923-1,10ml
7	Sample	12	G0010588	8260LL	F4923-2,0.5ml
8	Sample	13	G0010589	8260LL	F4923-2,10ml
9	Spike	14	G0010590	8260LL	F4907-4ms,10ml
10	Duplicate	15	G0010591	8260LL	F4907-4msd,10ml
11	Spike	16	G0010592	8260LL	BS,10ml
12					

000092

GC/MS Analysis Log

Date: 9-23-99 Analyst's Signature: Claudia J Panine

Analysis Method: 624/8200 Column: DB624 Detector: HP5970MSD

Method File: 8260LL Instrument: G Calibration Date: 9-10-99

Data File	Sample ID	Sample Amount	Matrix	PH	ALS #	Dil.	Comments
G0010582	BFB	2 ml					V1178
83	CC-20	10 ml	W	7	7	1	20µl V1174, V1179, V1159
84	MB	↓	↓	7	8	1	10µl V1186 ND
85	F4907-4	↓	↓	1	9	1	↓ MS350, VG289
86	F4907-11	2.5 ml	↓	1	10	4	↓
87	F4923-1	10 ml	↓	1	11	1	ND
88	F4923-2	0.5 ml	↓	1	12	20	RRIX
89	F4907-4 ms	10 ml	↓	1	13	1	
90	F4907-4msD	↓	↓	1	14	1	
91	LBS MSD	↓	↓	1	15	1	50µl V1151, V1149
92	BS	10 ml	W	7	16	1	100µl V1182

Note:

Matrix: Designate W for water, S for soil, O for Oil, A for air, SO for solid, L for non-aqueous liquid.

Sample amount: Initial sample weight (g) or volume (ml or cc or ul).

F

GC/MS Analysis Log

Date: 9-10-99 Analyst's Signature: Claudia J. Parnish

Analysis Method: 624/8260 Column: DB624 Detector: HP5970MSD

Method File: 8260LL Instrument: G Calibration Date: ~~8-18-99~~ 9-10-99 CP

Data File	Sample ID	Sample Amount	Matrix	PH	ALS #	Dil.	Comments
G0010431	BFB	2 µl					V1128
10432	CC-20	10 ml	W	7	15		
10433	MB	10 ml			16		
10434	F4864-4	5 ml			1	2	
10435							
10436							
G0010431	BFB	2 µl					V1128
10432	IC285-1	10 ml	W	7	1	1	10 µl V1126, V1169, V1159 → 100 ml
10433	-5				2		5 µl
10434	-10				3		10 µl
10435	-20				4		20 µl
10436	-35				5		35 µl
10437	-50				6		50 µl
10438	ICV-20				7		20 µl V1149, V1169, V1151
10439	MB				8		10 µl V1146

CP

Note:

Matrix: Designate W for water, S for soil, O for Oil, A for air, SO for solid, L for non-aqueous liquid.

Sample amount: Initial sample weight (g) or volume (ml or cc or ul).

Sequence Name: C:\HPCHEM\1\SEQUENCE\091099.S
Comment:
Operator: ClaudiaP
Data Path: C:\HPCHEM\1\DATA\091099\
Pre-Seq Cmd:
Post-Seq Cmd:

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	BFB	100	G0010431	BFB	BFB tune
2	Calibration	1	G0010432	8260LL	IC285-1,10ml
3	Calibration	2	G0010433	8260LL	IC285-5,10ml
4	Calibration	3	G0010434	8260LL	IC285-10,10ml
5	Calibration	4	G0010435	8260LL	ICC285-20,10ml
6	Calibration	5	G0010436	8260LL	IC285-35,10ml
7	Calibration	6	G0010437	8260LL	IC285-50,10ml
8	Sample	7	G0010438	8260LL	ICV-20,10ml
9	Blank	8	G0010439	8260LL	MB,10ml

000095

SAMPLE RESULT SUMMARY

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV000066.D	1	09/22/99	RAW	n/a	n/a	GUV1
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		75-125%
98-08-8	aaa-Trifluorotoluene	91%		75-125%

000096

ND = Not detected
RDL = Reported Detection 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

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000066.D\FID1B.CH Vial: 13
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000066.D\FID2A.CH
Acq On : 22 Sep 1999 3:24 pm Operator: RickW
Sample : F4923-1,5ml Inst : VOA4
Misc : gc662,guvi,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 16:37 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.55	15.55	75874	432148	19.766	18.178
Spiked Amount	20.000	Range 75 - 125		Recovery =	98.83%	90.89%
2) S BFB	24.65	24.65	214314	325366	18.487	18.532
Spiked Amount	20.000	Range 75 - 125		Recovery =	92.43%	92.66%
Target Compounds						
3) H TPH-GRO (C6-C10)	0.00	0.00	0	0	N.D.	N.D.

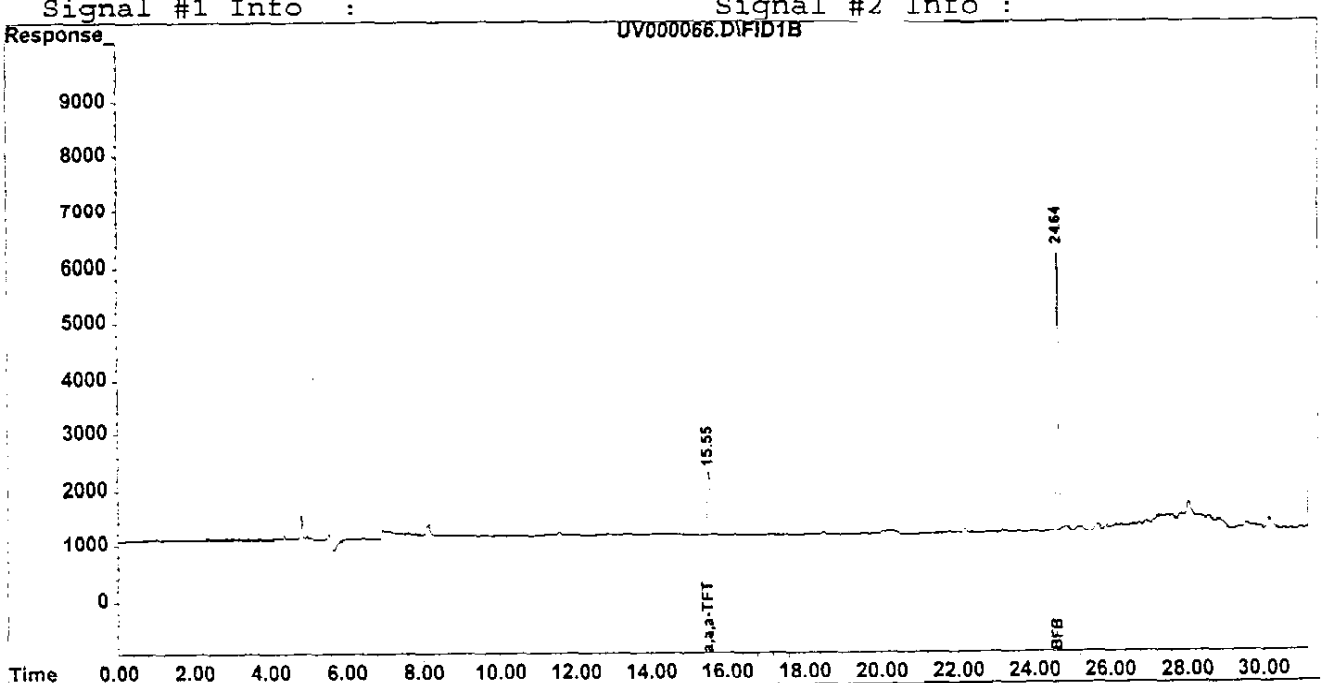
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

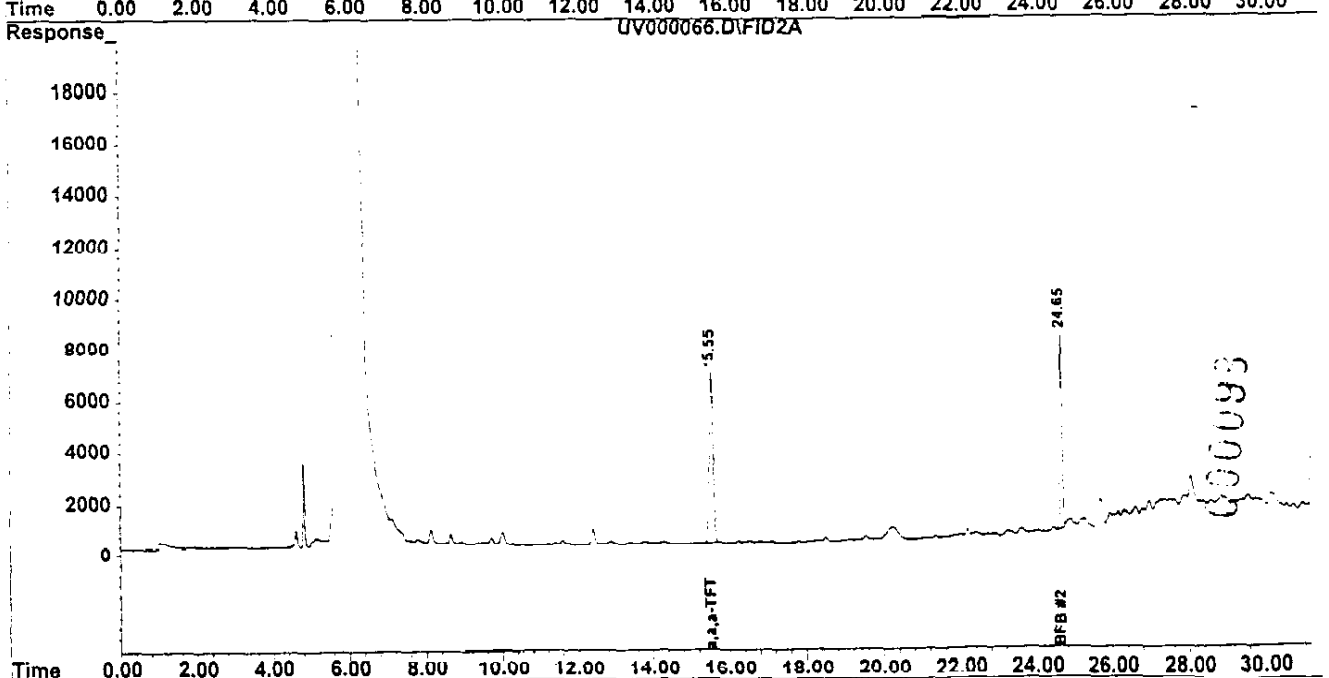
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000066.D\FID1B.CH Vial: 13
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000066.D\FID2A.CH
Acq On : 22 Sep 1999 3:24 pm Operator: RickW
Sample : F4923-1,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 16:37 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV000073.D	10	09/22/99	RAW	n/a	n/a	GUV1
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-GRO (C6-C10)	5.60	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		75-125%
98-08-8	aaa-Trifluorotoluene	109%		75-125%

ND = Not detected
RDL = Reported Detection 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

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000073.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000073.D\FID2A.CH
Acq On : 22 Sep 1999 7:53 pm Operator: RickW
Sample : F4923-2,500ul Inst : VOA4
Misc : gc662,guvl,,,,,10 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 8:31 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.58	15.58	80810	519234	21.052	21.841
Spiked Amount 20.000 Range 75 - 125 Recovery =					105.26%	109.21%
2) S BFB	24.67	24.67	225009	353526	19.410	20.136
Spiked Amount 20.000 Range 75 - 125 Recovery =					97.05%	100.68%
Target Compounds						
3) H TPH-GRO (C6-C10)	23.00	23.00	711819	10186953	81.873	560.453 #

000100

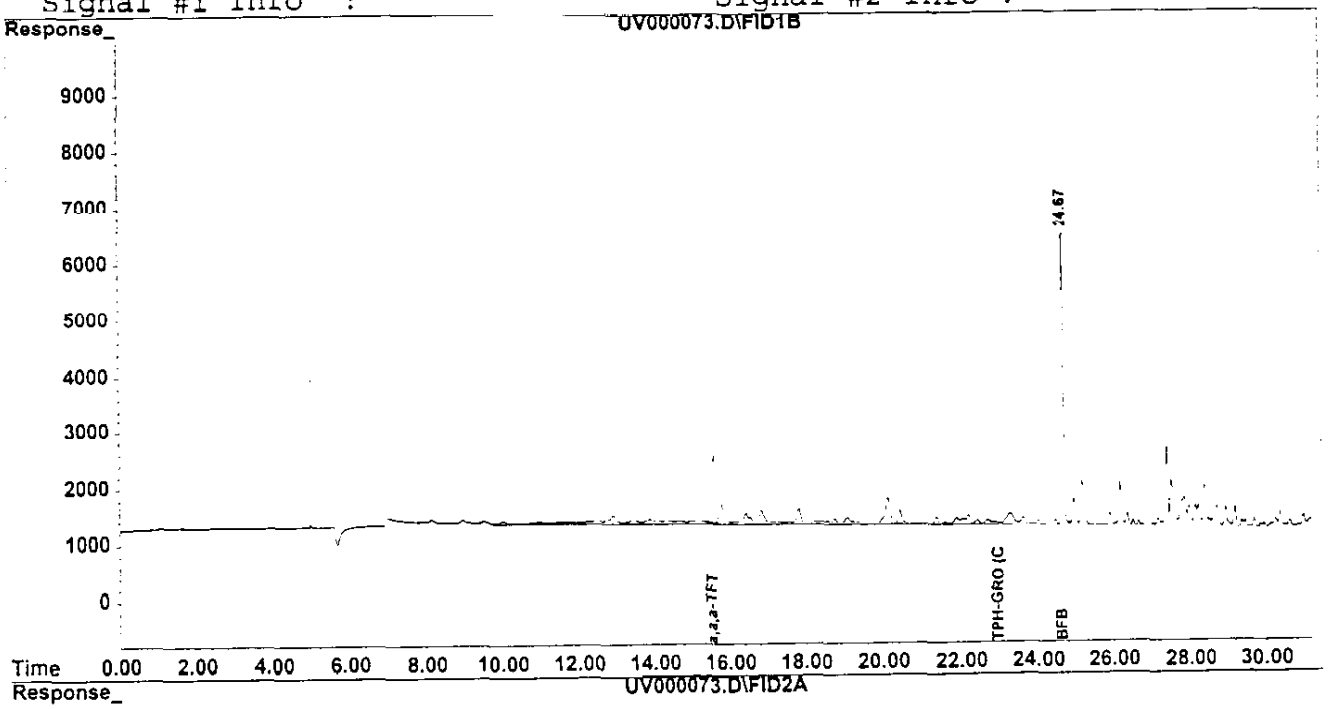
(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

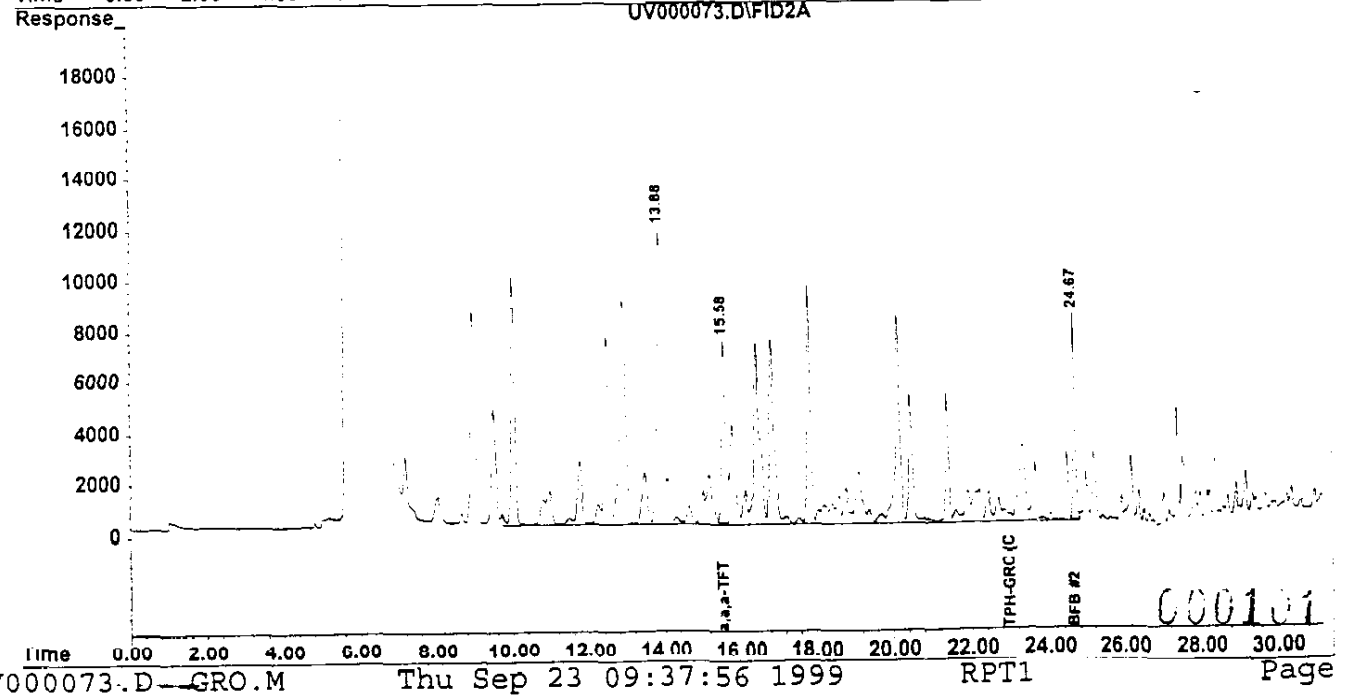
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000073.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000073.D\FID2A.CH
Acq On : 22 Sep 1999 7:53 pm Operator: RickW
Sample : F4923-2,500ul Inst : VOA4
Misc : gc662,guv1,,,,,10 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 8:31 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000101

SURROGATE RECOVERIES SUMMARY

VGC.02

Volatile Surrogate Recovery Summary

Job Number: F49[illegible]3
Account: ITP [illegible]MONR IT Corporation
Project: Bai[illegible]ridge

Method: SW846 8[illegible]5 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F4923-1	U[illegible]00066.D	93.0	91.0
F4923-2	U[illegible]0073.D	101.0	109.0
F4900-2MS	U[illegible]00043.D	100.0	103.0
F4900-2MSD	U[illegible]00044.D	100.0	99.0
GUV1-BS	U[illegible]045.D	101.0	97.0
GUV1-MB	U[illegible]40.D	97.0	93.0
GUV1-MB	U[illegible]000059.D	93.0	91.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluoro[illegible]zene	75-125%
S2 = aaa-Trifluorot[illegible]e	75-125%

(a) Recovery from GC [illegible]al #[illegible]

MATRIX SPIKE/ MARTIX SPIKE DUPLICATE/ BLANK SPIKE SUMMARY

VGC.03

Blank Spike Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV1-BS	UV000045.D	1	09/17/99	RAW	n/a	n/a	GUV1

The QC reported here applies to the following samples: **Method:** SW846 8015

F4923-1, F4923-2

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.412	103	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	75-125%
98-08-8	aaa-Trifluorotoluene	97%	75-125%

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091799\UV000045.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\091799\UV000045.D\FID2A.CH
Acq On : 17 Sep 1999 4:43 pm Operator: RickW
Sample : bs,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 11:17 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.47	15.47	76910	462590	20.036m	19.458
Spiked Amount	20.000	Range 75 - 125		Recovery =	100.18%	97.29%
2) S BFB	24.56	24.56	216142	355322	18.645	20.239
Spiked Amount	20.000	Range 75 - 125		Recovery =	93.23%	101.20%
Target Compounds						
II TPH-GRO	23.00	23.00	1492717	7785566	336.650	412.063

000104

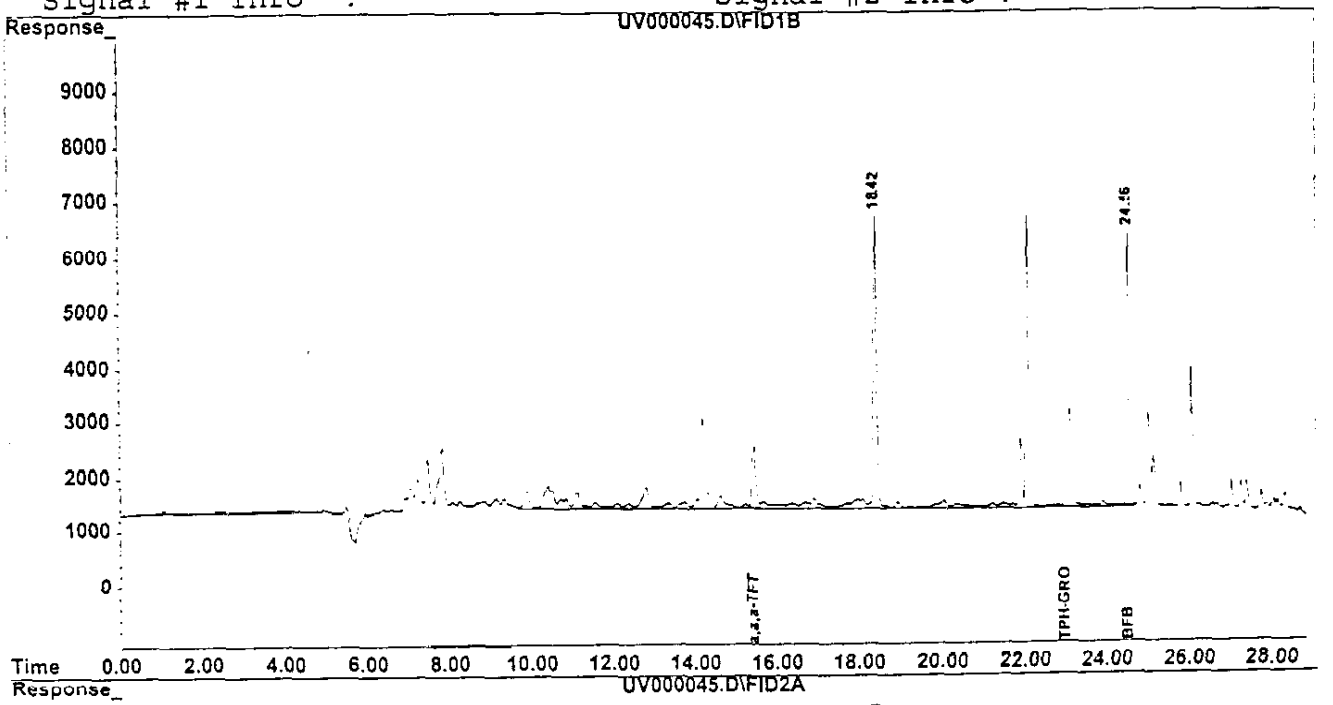
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

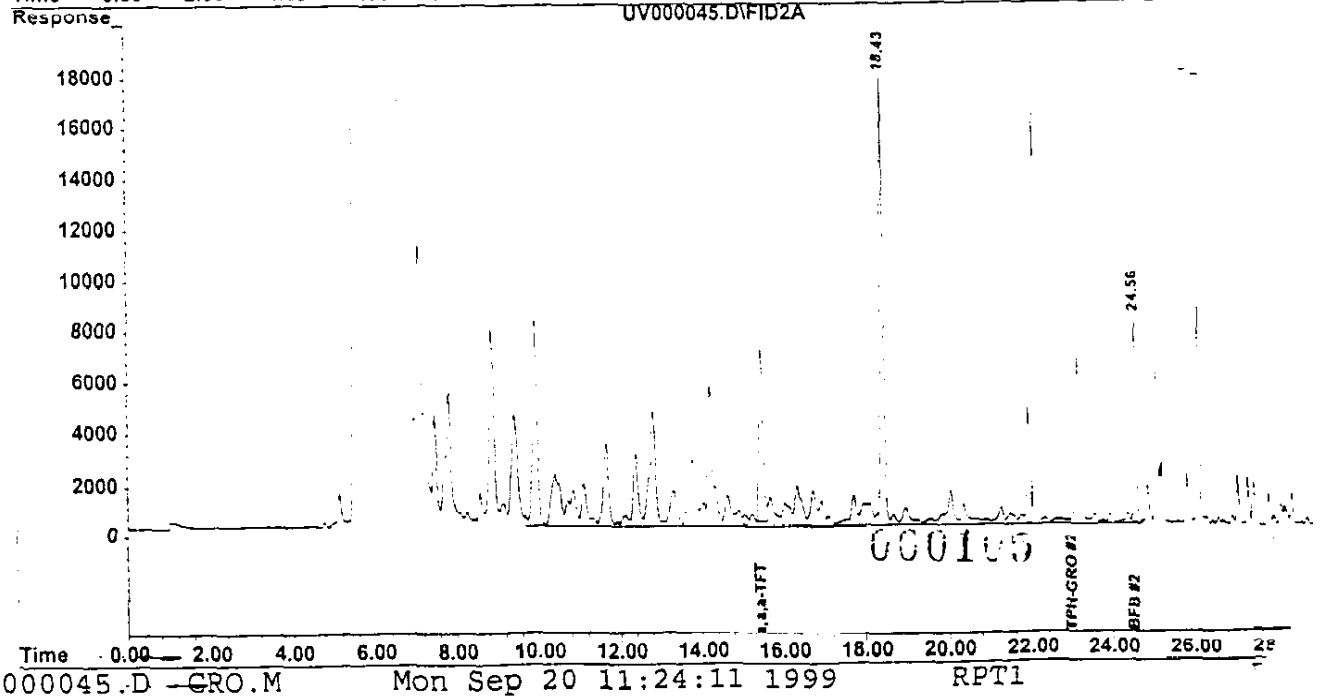
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091799\UV000045.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\091799\UV000045.D\FID2A.CH
Acq On : 17 Sep 1999 4:43 pm Operator: RickW
Sample : bs,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 11:17 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000105

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4900-2MS	UV000043.D	1	09/17/99	RAW	n/a	n/a	GUV1
F4900-2MSD	UV000044.D	1	09/17/99	RAW	n/a	n/a	GUV1
F4900-2	UV000042.D	1	09/17/99	RAW	n/a	n/a	GUV1

The QC reported here applies to the following samples: **Method:** SW846 8015

F4923-1, F4923-2

CAS No.	Compound	F4900-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.413	103	0.410	102	1	70-130/20

CAS No.	Surrogate Recoveries	MS	MSD	F4900-2	Limits
460-00-4	4-Bromofluorobenzene	100%	100%	97%	75-125%
98-08-8	aaa-Trifluorotoluene	103%	99%	96%	75-125%

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091799\UV000043.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\091799\UV000043.D\FID2A.CH
Acq On : 17 Sep 1999 3:32 pm Operator: RickW
Sample : F4900-2ms,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 16:55 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 14:15:13 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.48	15.48	72593	491855	18.911	20.689
Spiked Amount	20.000	Range	75 - 125	Recovery	=	94.56% 103.45%
2) S BFB	24.57	24.57	215997	351857	18.633	20.041
Spiked Amount	20.000	Range	75 - 125	Recovery	=	93.16% 100.21%
Target Compounds						
H TPH-GRO	23.00	23.00	1446055	7804071	321.426	413.207 #

00010

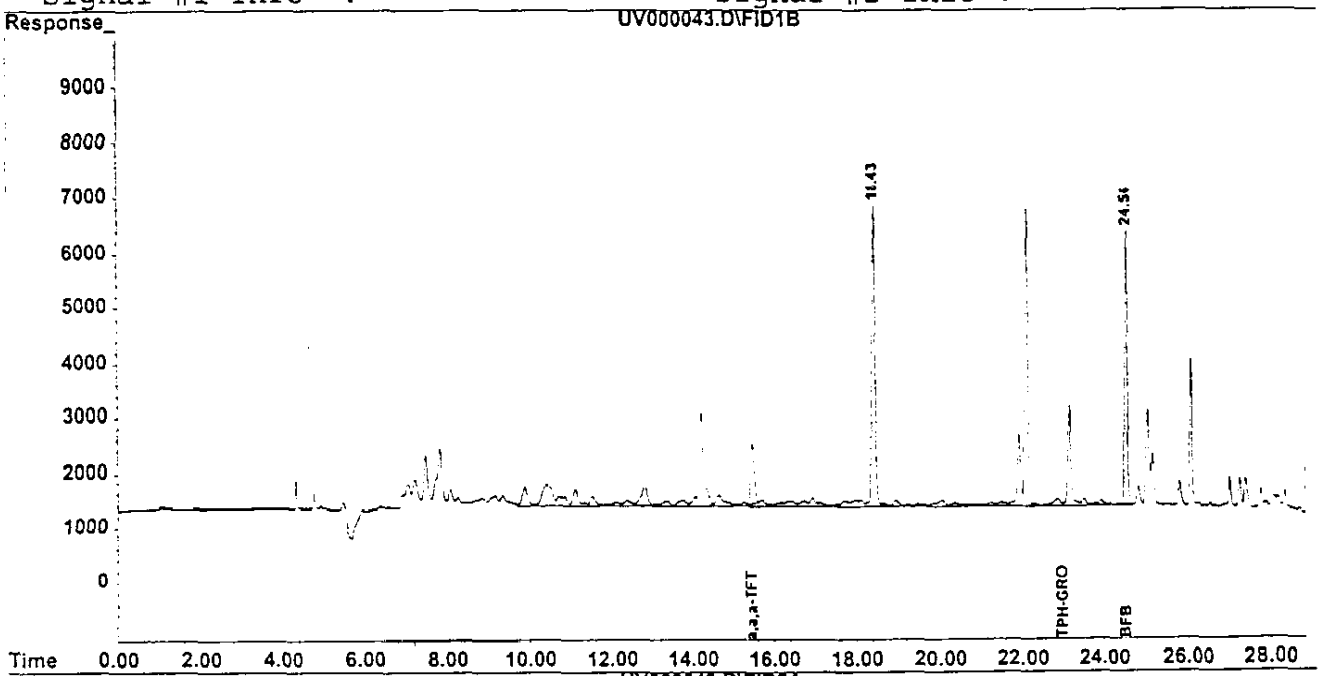
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

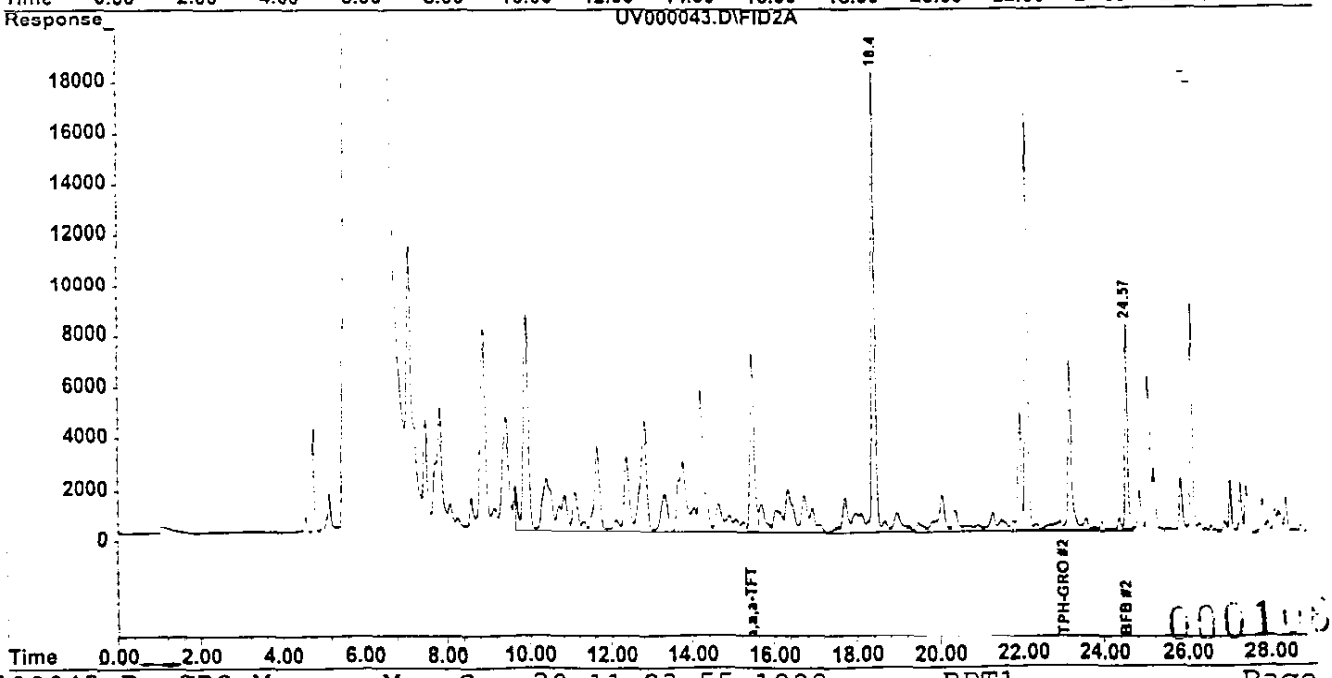
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091799\UV000043.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\091799\UV000043.D\FID2A.CH
Acq On : 17 Sep 1999 3:32 pm Operator: RickW
Sample : F4900-2ms,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 16:55 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 14:15:13 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091799\UV000044.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\091799\UV000044.D\FID2A.CH
Acq On : 17 Sep 1999 4:07 pm Operator: RickW
Sample : F4900-2msd,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 11:15 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.47	15.48	71314	470492	18.578	19.791
Spiked Amount	20.000	Range	75 - 125	Recovery	=	92.89% 98.96%
2) S BFB	24.56	24.56	212551	351682	18.335	20.031
Spiked Amount	20.000	Range	75 - 125	Recovery	=	91.68% 100.16%
Target Compounds						
H TPH-GRO	23.00	23.00	1480383	7754630	332.626	410.151

0001

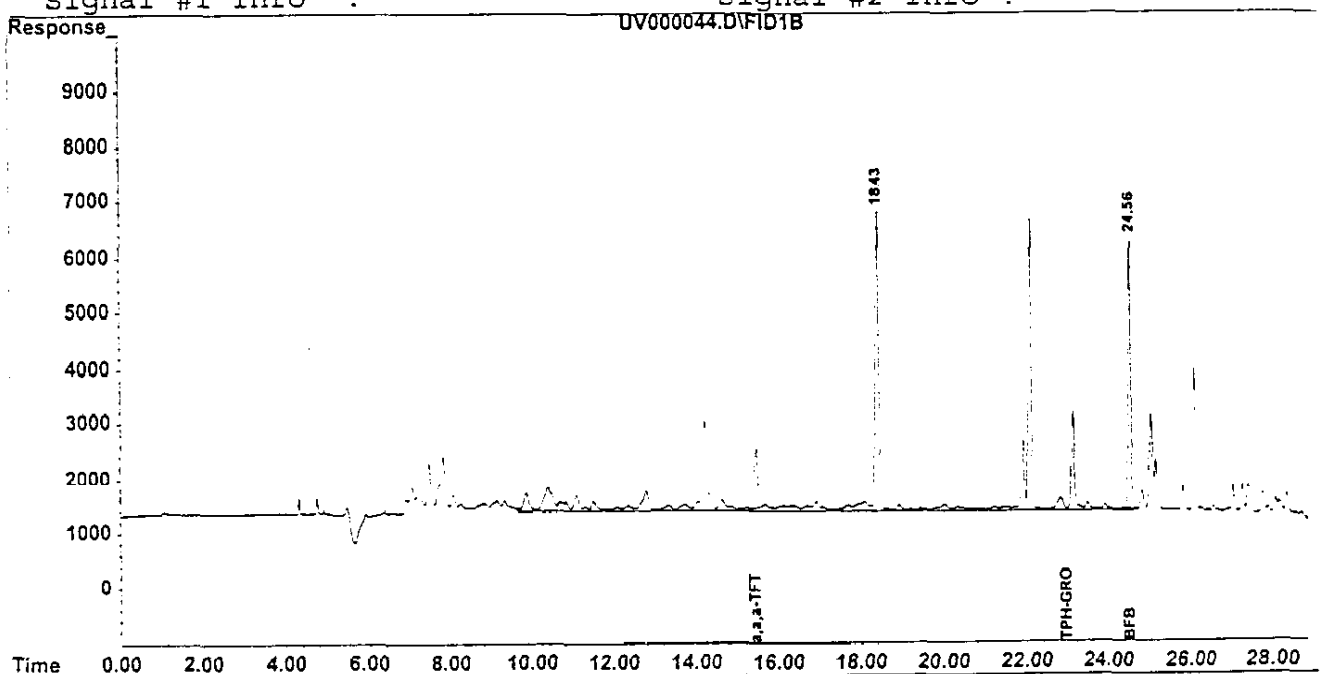
(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

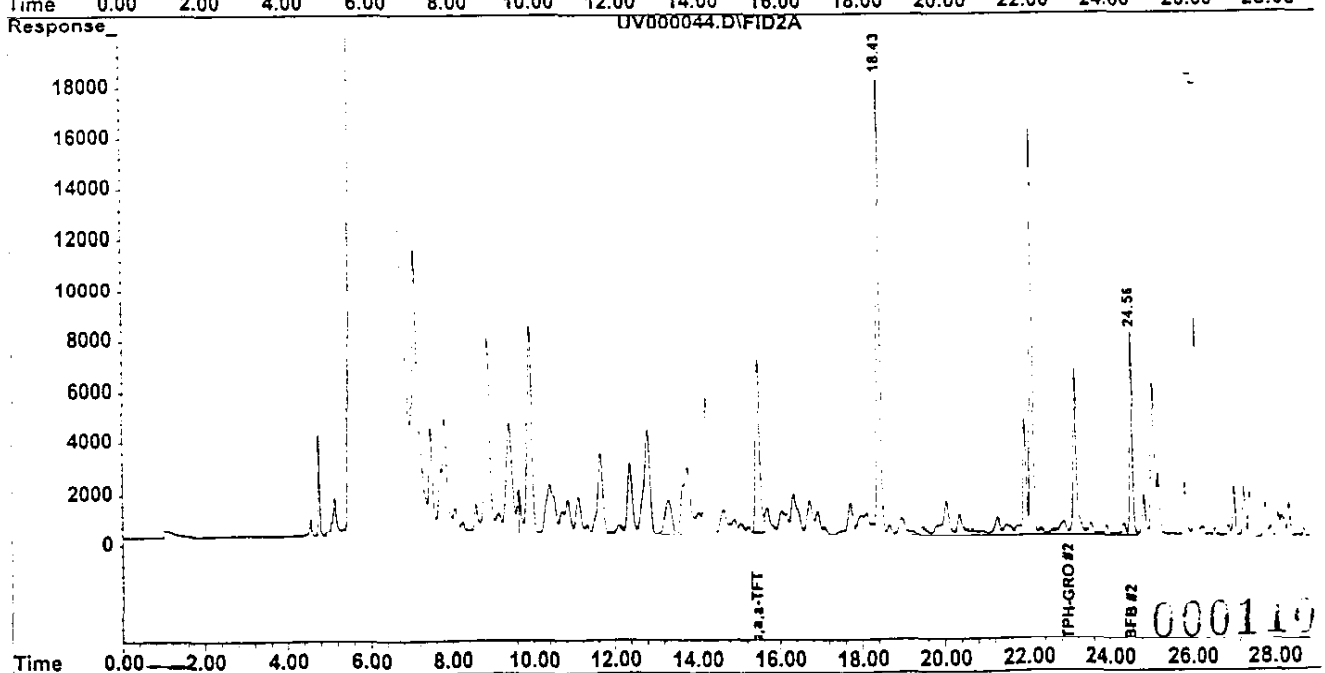
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091799\UV000044.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\091799\UV000044.D\FID2A.CH
Acq On : 17 Sep 1999 4:07 pm Operator: RickW
Sample : F4900-2msd,5ml Inst : VOA4
Misc : gc662,guv1,,,,, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 20 11:15 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000119

METHOD BLANK SUMMARY

Method Blank Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV1-MB	UV000050.D	1	09/22/99	RAW	n/a	n/a	GUV1

The QC reported here applies to the following samples: **Method:** SW846 8015

F4923-1, F4923-2

CAS No.	Compound	Result	RDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	93%	75-125%
98-08-8	aaa-Trifluorotoluene	91%	75-125%

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000059.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000059.D\FID2A.CH
Acq On : 22 Sep 1999 10:40 am Operator: RickW
Sample : MB Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 11:16 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Wed Sep 22 10:42:34 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.56	15.56	79461	432139	20.700	18.177
Spiked Amount	20.000	Range	75 - 125	Recovery	= 103.50%	90.88%
2) S BFB	24.66	24.66	232059	327366	20.018	18.646
Spiked Amount	20.000	Range	75 - 125	Recovery	= 100.09%	93.23%
Target Compounds						
3) H TPH-GRO (C6-C10)	23.00	23.00	375265	943596	N.D.	N.D.

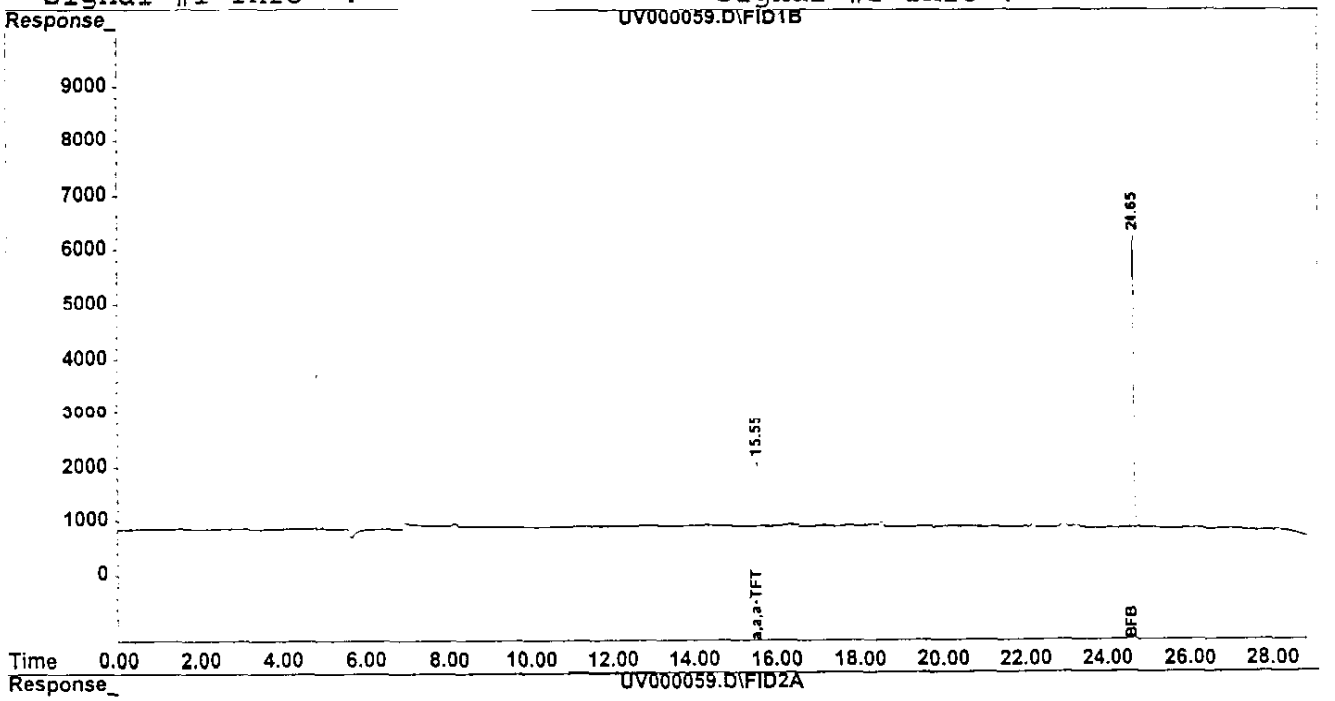
(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

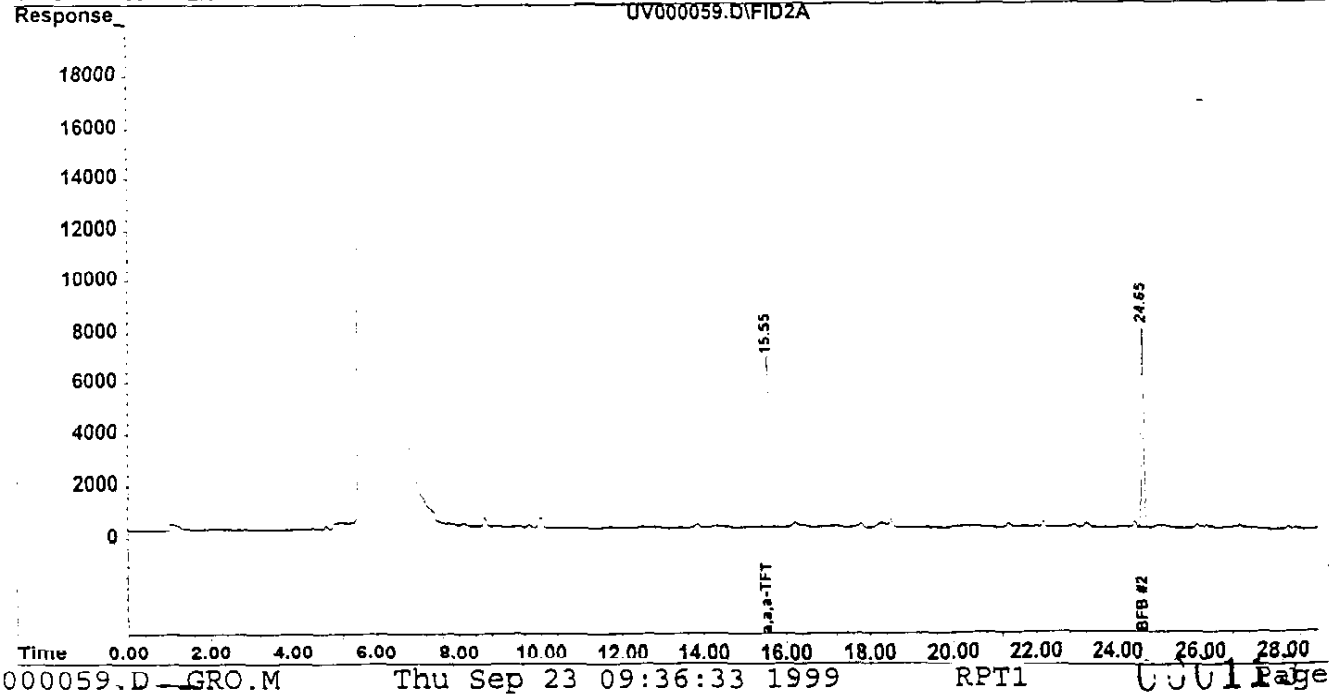
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000059.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000059.D\FID2A.CH
Acq On : 22 Sep 1999 10:40 am Operator: RickW
Sample : MB Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 11:16 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Wed Sep 22 10:42:34 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INITIAL CALIBRATION SUMMARY

VGC.05

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000021.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000021.D\FID2A.CH
Acq On : 16 Sep 1999 10:46 am Operator: RickW
Sample : C6-C10 alkanes Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 16 12:59 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Thu Sep 16 12:59:24 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 20.000			Recovery	=	0.00%	0.00%
2) S BFB	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 20.000			Recovery	=	0.00%	0.00%
Target Compounds						
H TPH-GRO	23.00	23.00	604416	15202053	N.D.	747.211

000115

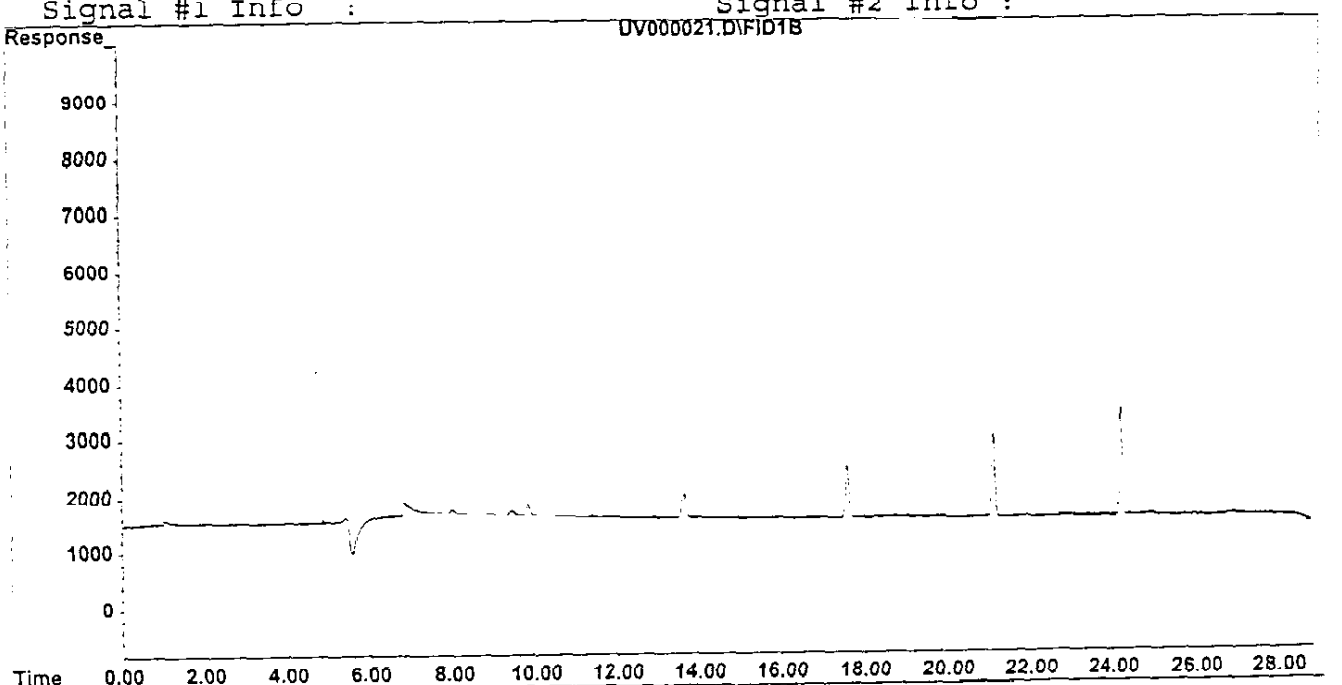
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

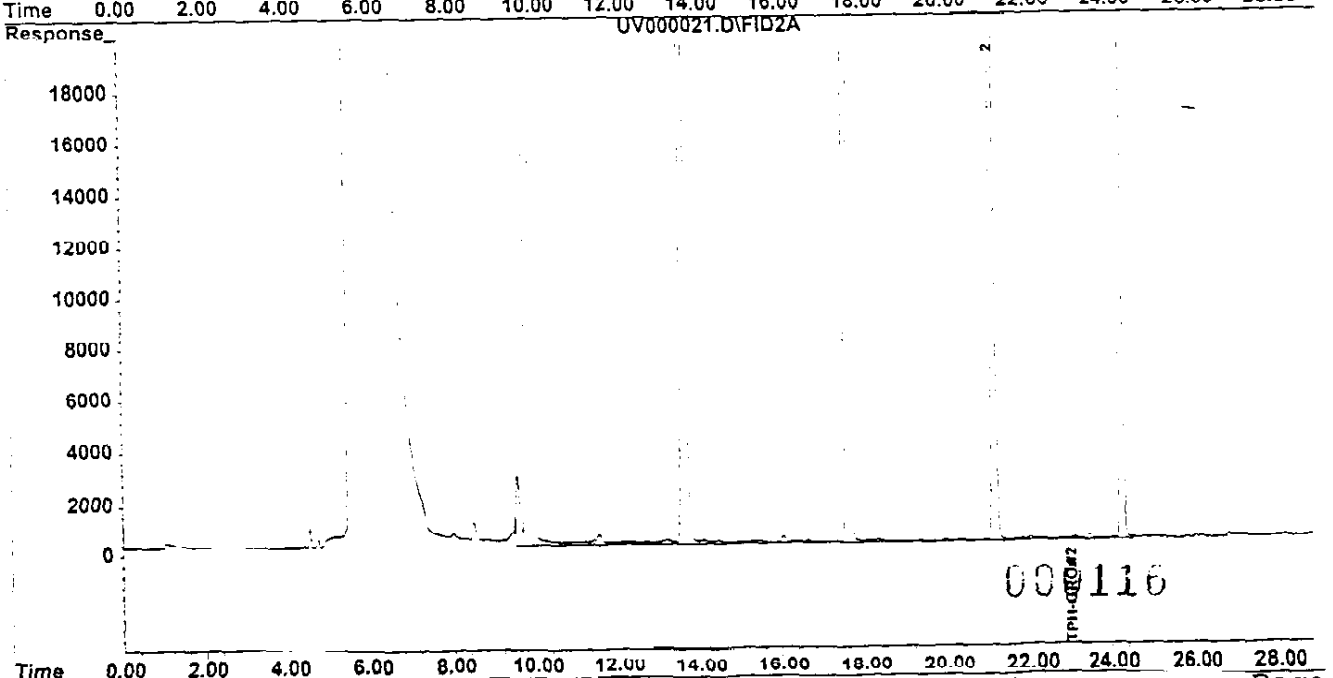
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000021.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000021.D\FID2A.CH
Acq On : 16 Sep 1999 10:46 am Operator: RickW
Sample : C6-C10 alkanes Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 16 12:59 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Thu Sep 16 12:59:24 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000022.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000022.D\FID2A.CH
Acq On : 16 Sep 1999 3:03 pm Operator: RickW
Sample : 100ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 16 16:02 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Thu Sep 16 16:02:24 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a TFT	15.41	15.41	83248	472635	18.662	18.168
Spiked Amount 20.000			Recovery	=	93.31%	90.84%
2) S BFB	24.51	24.51	243675	355307	18.022	17.414
Spiked Amount 20.000			Recovery	=	90.11%	87.07%
Target Compounds						
H TPH-GRO	23.00	23.00	734281	2605364	30.019	43.665 #

000117

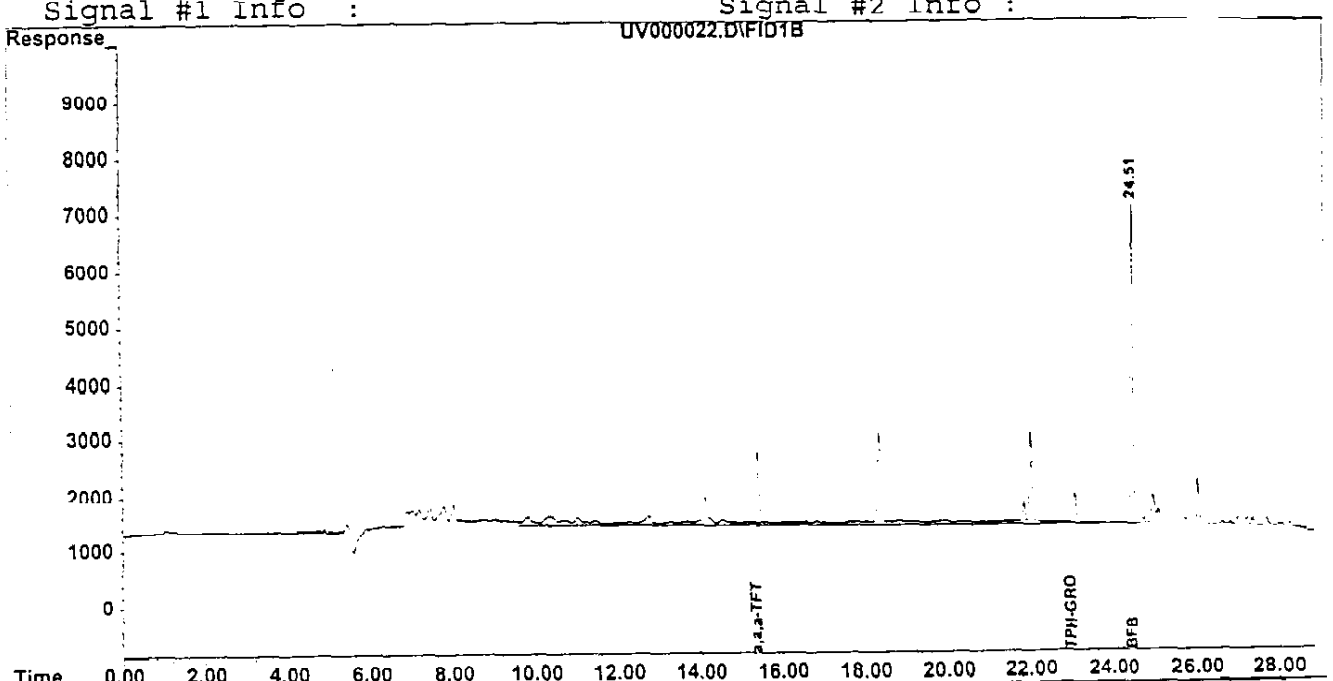
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

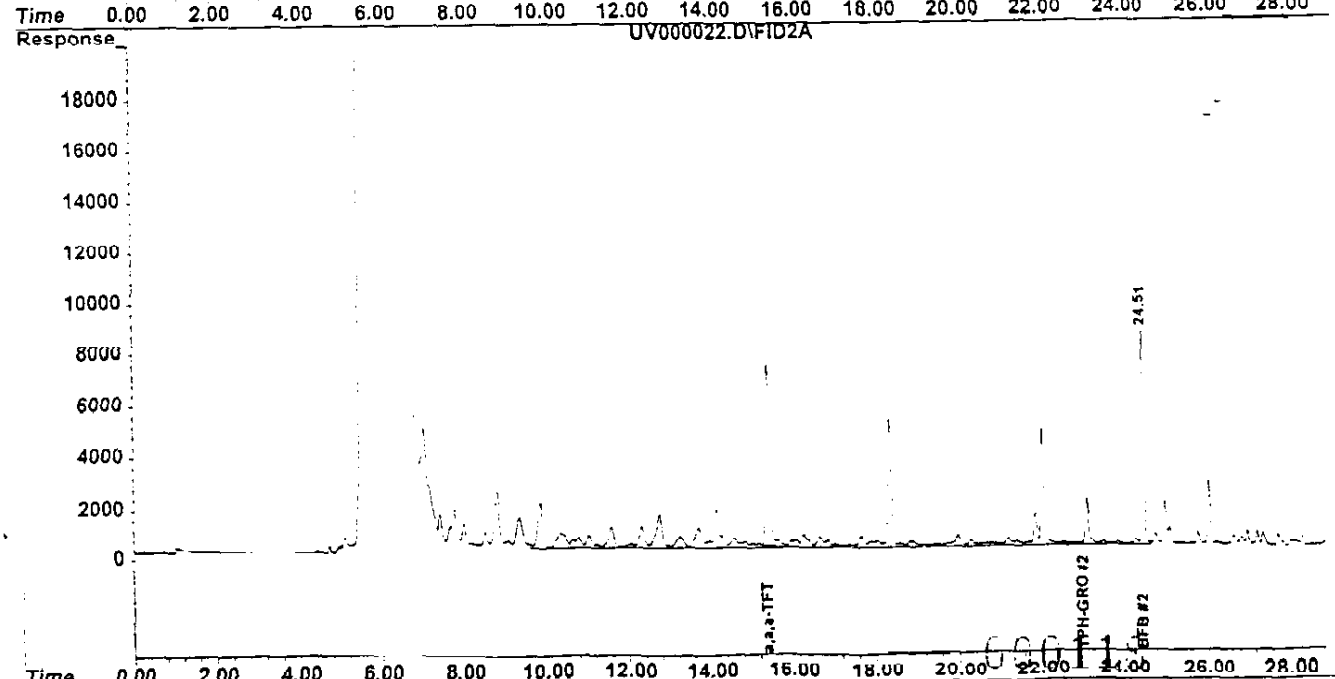
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000022.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000022.D\FID2A.CH
Acq On : 16 Sep 1999 3:03 pm Operator: RickW
Sample : 100ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 16 16:02 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Thu Sep 16 16:02:24 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000023.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000023.D\FID2A.CH
Acq On : 16 Sep 1999 3:39 pm Operator: RickW
Sample : 200ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 8:53 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Thu Sep 16 16:02:24 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.46	15.46	80037	460612	18.170	17.799
Spiked Amount 20.000			Recovery	=	90.85%	89.00%
2) S BFB	24.55	24.55	235472	354571	17.663	17.580
Spiked Amount 20.000			Recovery	=	88.32%	87.90%
Target Compounds						
H TPH-GRO	23.00	23.00	1085800	4319557	151.719	162.674

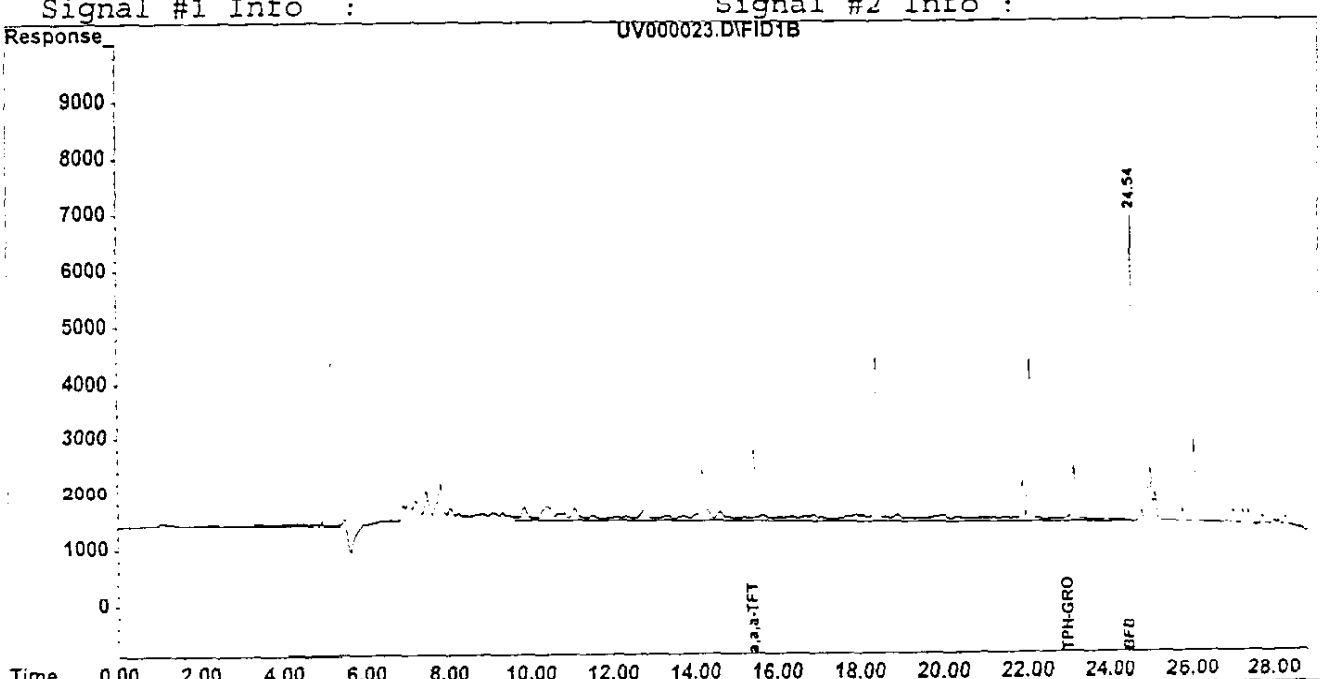
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

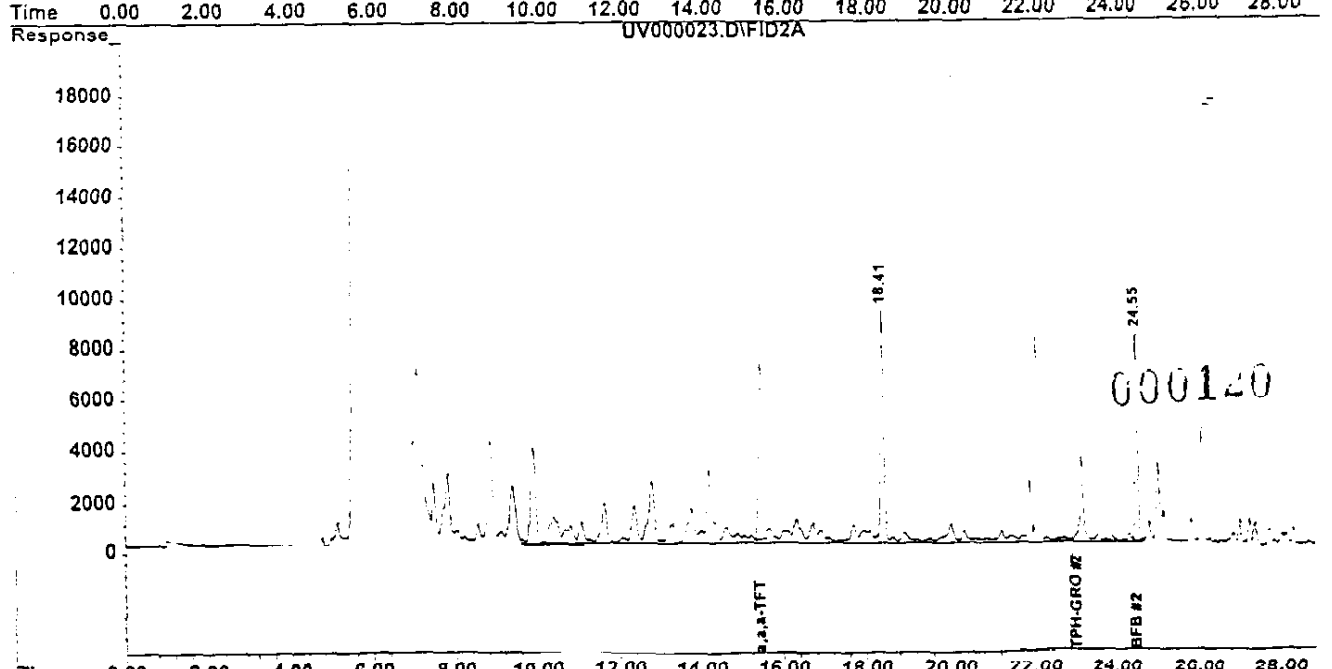
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000023.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000023.D\FID2A.CH
Acq On : 16 Sep 1999 3:39 pm Operator: RickW
Sample : 200ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 8:53 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Thu Sep 16 16:02:24 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000120

Response Factor Report VOA4

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
ast Update : Fri Sep 17 10:55:16 1999

%RSD > 15 3Y QUAN CURVE. FAW

Calibration Files
1 =UV000022.D 2 =UV000023.D 3 =UV000024.D
4 =UV000025.D 5 =UV000026.D 6 =UV000027.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1) S	a,a,a-TFT	4.162	4.002	3.771	3.781	3.678	3.637	3.839	E3	5.28
2) S	BFB	1.218	1.177	1.172	1.141	1.136	1.111	1.159	E4	3.28
3) H	TPH-GRO	7.343	5.429	4.256	3.823	3.724	3.471	4.674	E3	31.64

Signal #2 Calibration Files
1 =UV000022.D 2 =UV000023.D 3 =UV000024.D
4 =UV000025.D 5 =UV000026.D 6 =UV000027.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1) S	a,a,a-TFT	2.363	2.303	2.328	2.385	2.578	2.307	2.377	E4	4.36
2) S	BFB	1.777	1.773	1.807	1.791	1.701	1.685	1.756	E4	2.85
3) H	TPH-GRO	2.605	2.160	1.918	1.792	1.835	1.683	1.999	E4	16.88

(#) = Out of Range

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000024.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000024.D\FID2A.CH
Acq On : 16 Sep 1999 4:15 pm Operator: RickW
Sample : 400ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:51 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 08:54:08 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.46	15.46	75426	465554	17.463	18.313
Spiked Amount 20.000			Recovery	=	87.32%	91.57%
2) S BFB	24.55	24.55	234449	361422	18.063	18.300
Spiked Amount 20.000			Recovery	=	90.31%	91.50%
Target Compounds						
3) H TPH-GRO	23.00	23.00	1702538	7673851	313.228	355.597

CCC1.1

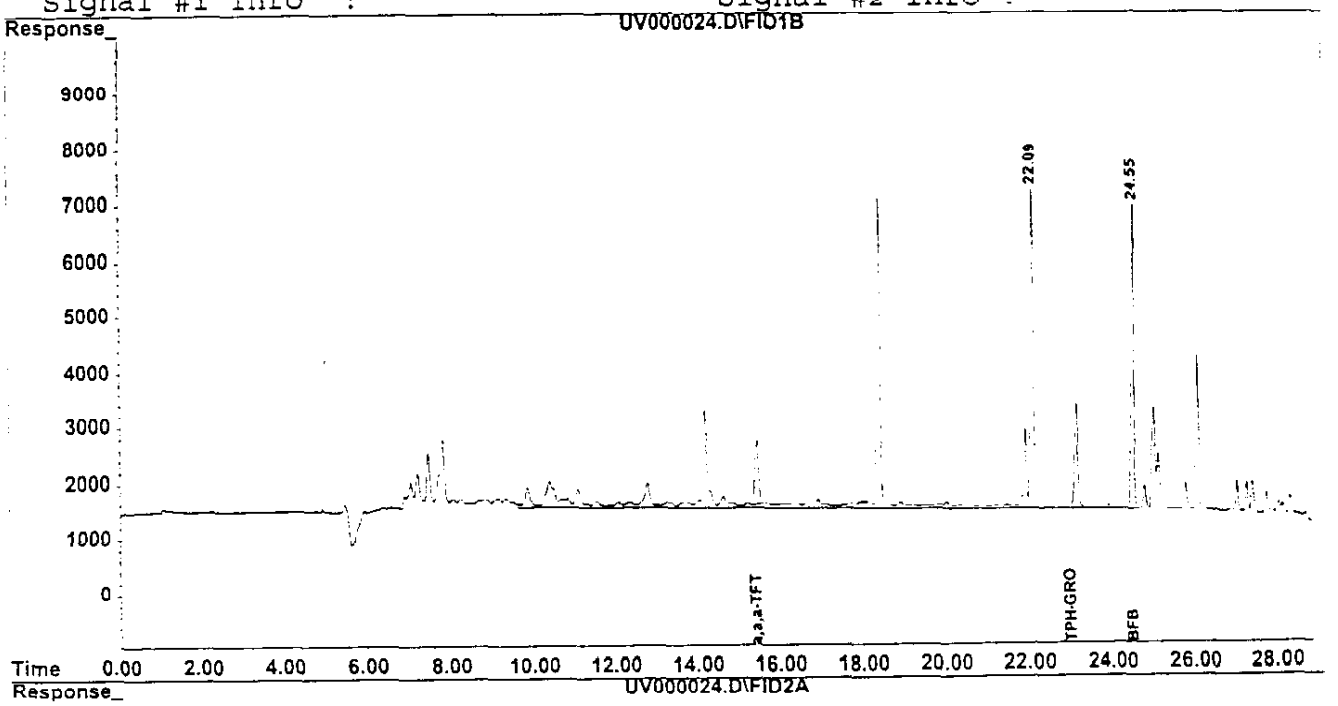
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

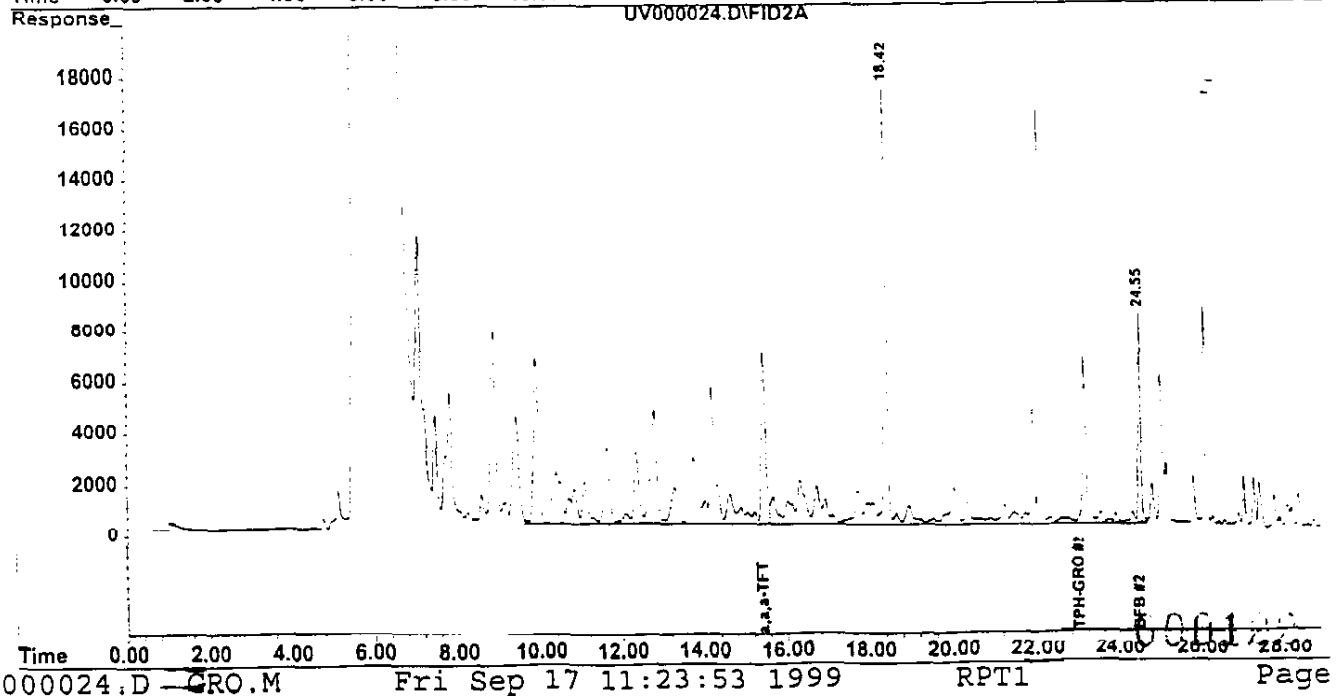
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000024.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000024.D\FID2A.CH
Acq On : 16 Sep 1999 4:15 pm Operator: RickW
Sample : 400ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:51 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 08:54:08 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000025.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000025.D\FID2A.CH
Acq On : 16 Sep 1999 4:50 pm Operator: RickW
Sample : 600ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:52 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 08:54:08 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.45	15.45	75623	476994	18.021	19.258
Spiked Amount 20.000			Recovery	=	90.11%	96.29%
2) S BFB	24.54	24.54	228105	358199	17.995	18.635
Spiked Amount 20.000			Recovery	=	89.98%	93.18%
Target Compounds						
?) H TPH-GRO	23.00	23.00	2294007	10752693	457.630	528.943

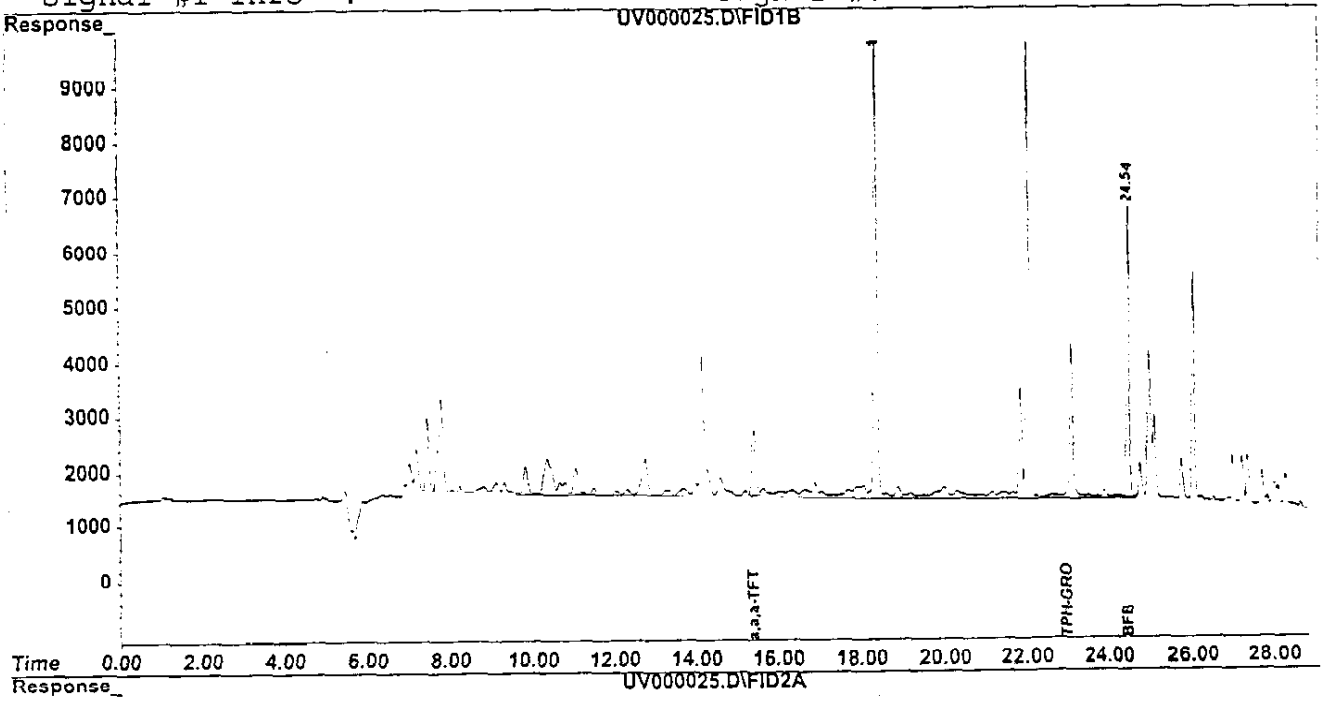
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

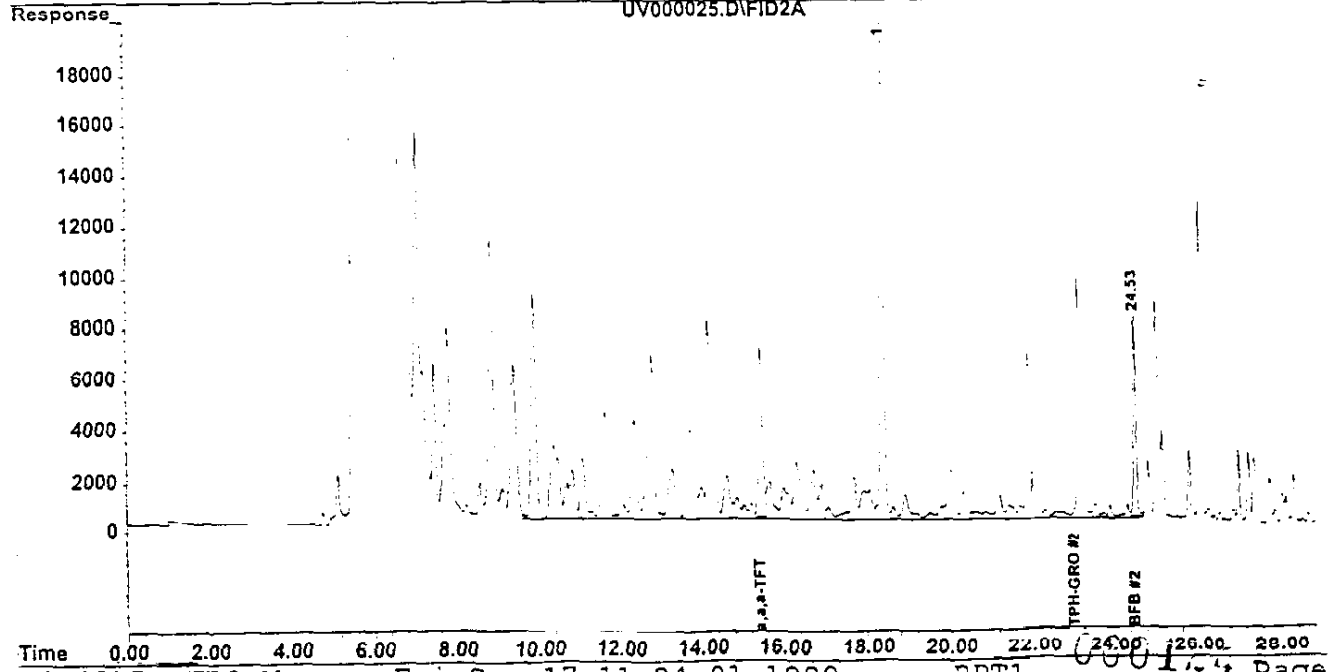
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000025.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000025.D\FID2A.CH
Acq On : 16 Sep 1999 4:50 pm Operator: RickW
Sample : 600ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:52 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 08:54:08 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000026.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000026.D\FID2A.CH
Acq On : 16 Sep 1999 5:26 pm Operator: RickW
Sample : 800ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:54 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:53:32 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.45	15.44	73570	515689	18.057	21.102
Spiked Amount 20.000			Recovery	=	90.29%	105.51%
2) S BFB	24.54	24.53	227273	340267	18.399	17.854m
Spiked Amount 20.000			Recovery	=	92.00%	89.27%
Target Compounds						
H TPH-GRO	23.00	23.00	2978965	14683833	632.121	756.291

000125

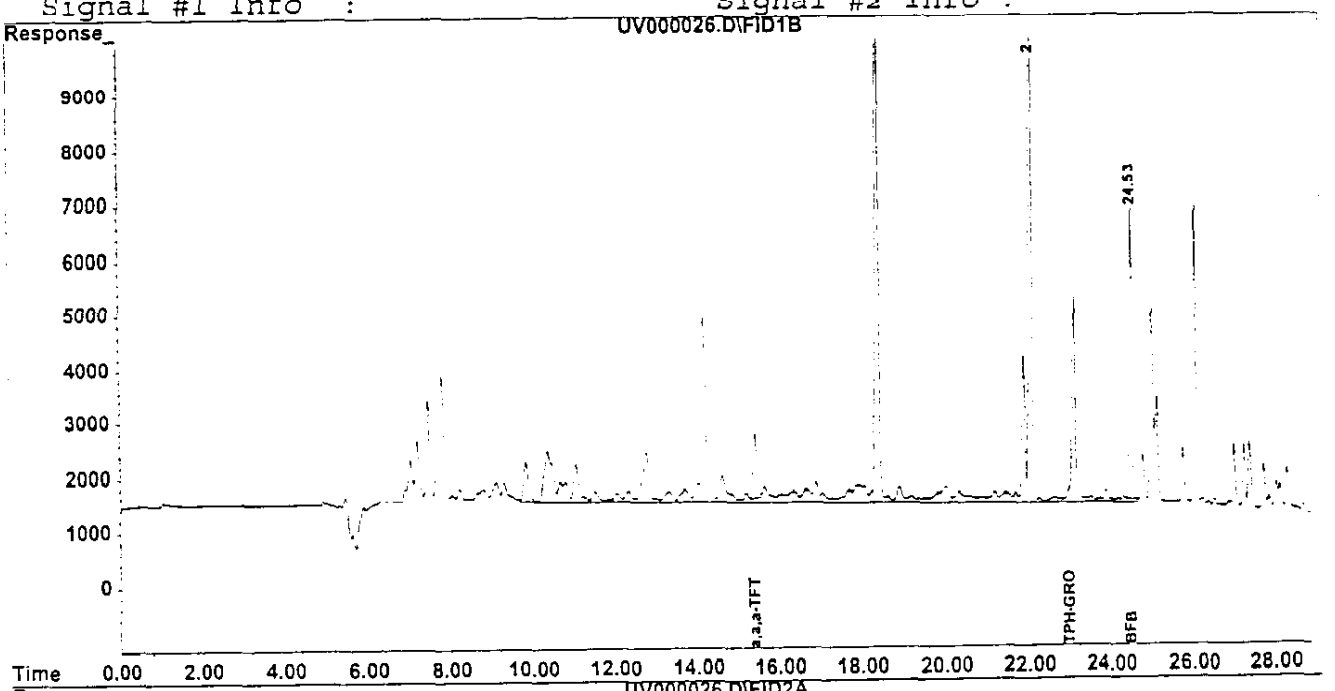
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

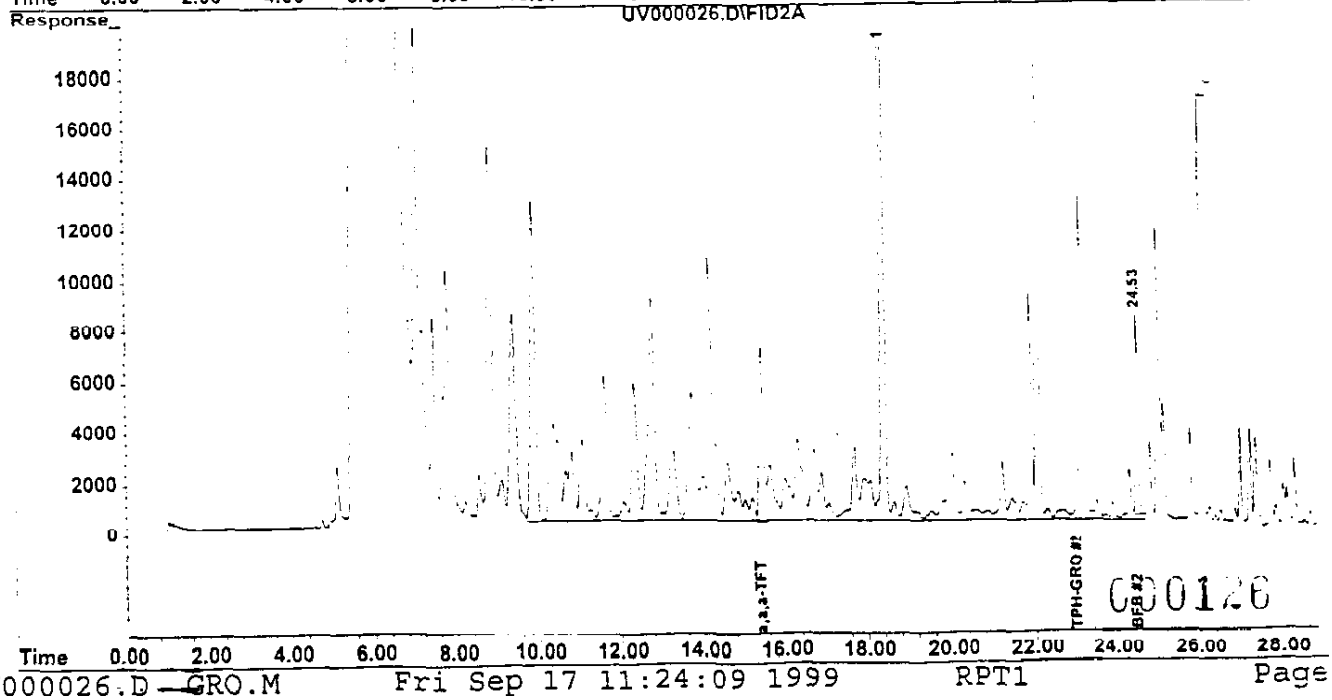
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000026.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000026.D\FID2A.CH
Acq On : 16 Sep 1999 5:26 pm Operator: RickW
Sample : 800ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:54 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:53:32 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000126

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000027.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000027.D\FID2A.CH
Acq On : 16 Sep 1999 6:02 pm Operator: RickW
Sample : 1000ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:58 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.47	15.46	72732	461349	18.434m	18.923m
Spiked Amount 20.000			Recovery	=	92.17%	94.61%
2) S BFB	24.55	24.55	222111	337022	18.474	18.783m
Spiked Amount 20.000			Recovery	=	92.37%	93.92%
Target Compounds						
?) H TPH-GRO	23.00	23.00	3471243	16834836	791.418	881.033

000127

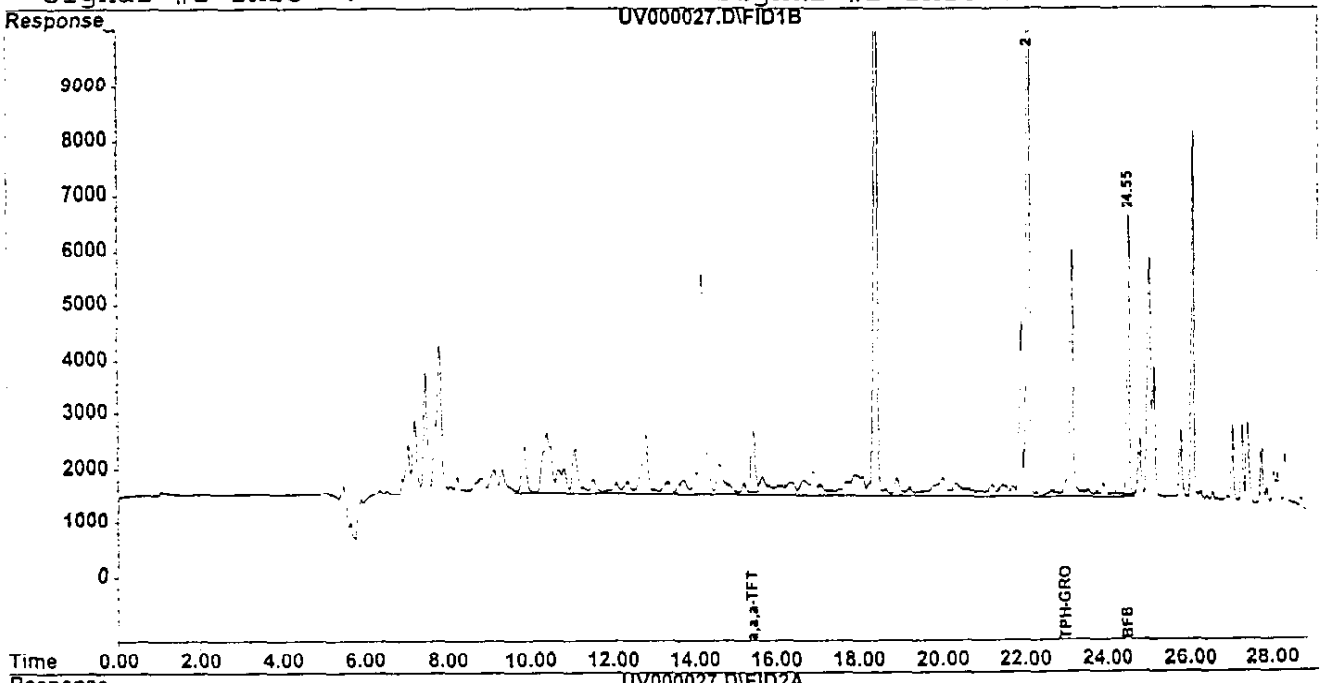
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

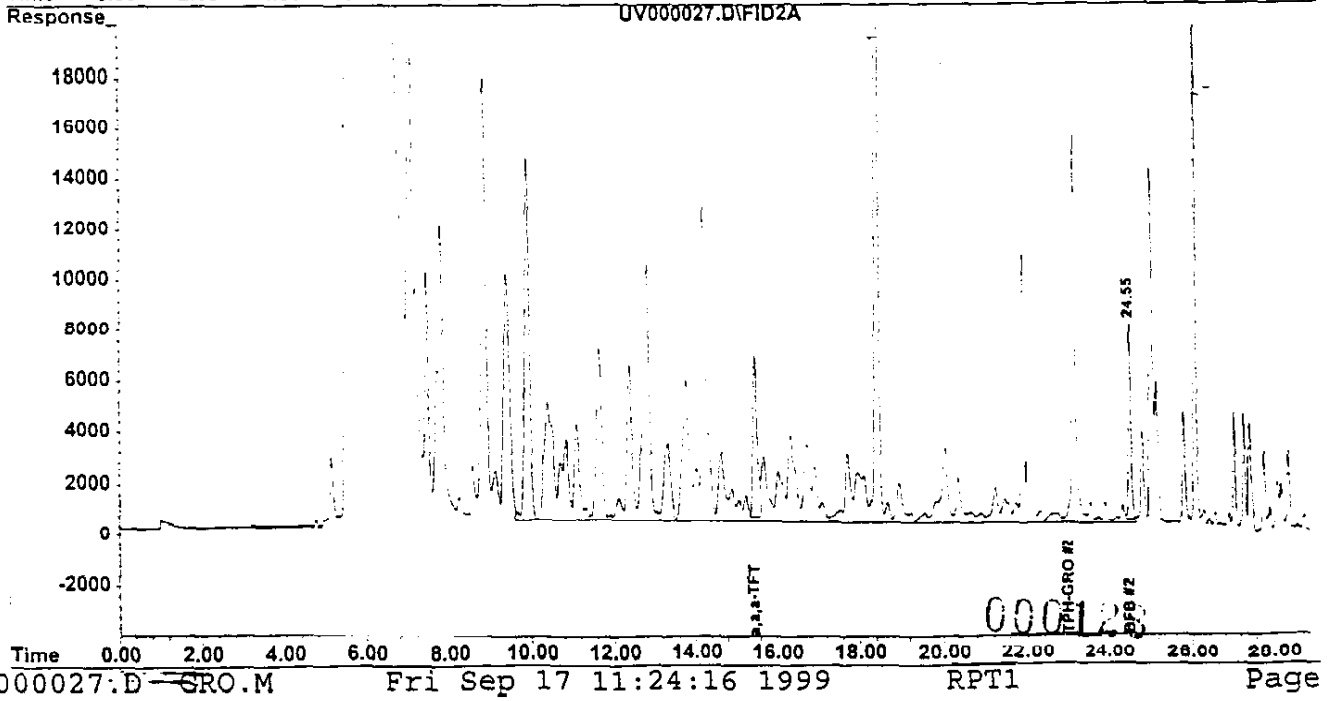
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000027.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000027.D\FID2A.CH
Acq On : 16 Sep 1999 6:02 pm Operator: RickW
Sample : 1000ppb STD Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 10:58 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000028.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000028.D\FID2A.CH
Acq On : 16 Sep 1999 6:38 pm Operator: RickW
Sample : ICV 400ppb Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:06 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.46	15.46	72771	478673	18.957	20.135
Spiked Amount 20.000			Recovery	=	94.79%	100.68%
2) S BFB	24.54	24.54	231514	349492	19.971	19.907m
Spiked Amount 20.000			Recovery	=	99.86%	99.54%
Target Compounds						
3) H TPH-GRO	23.00	23.00	1491003	6982099	336.091	362.414

000120

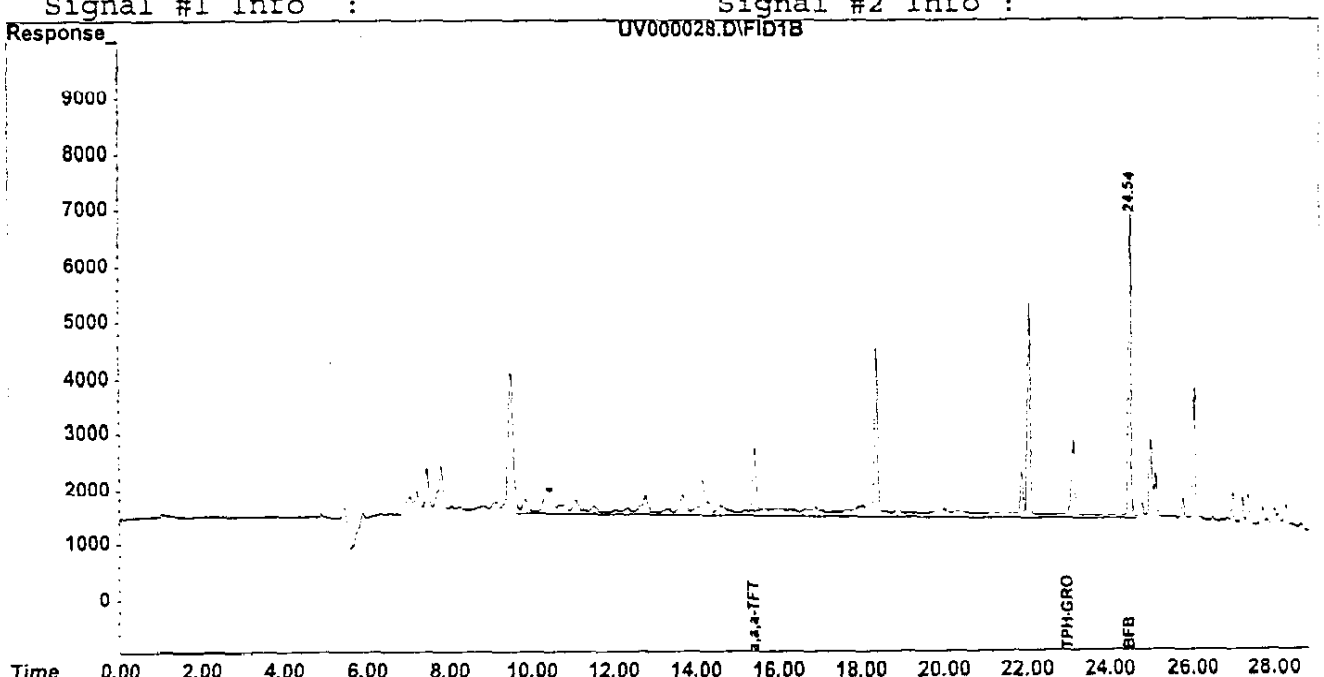
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

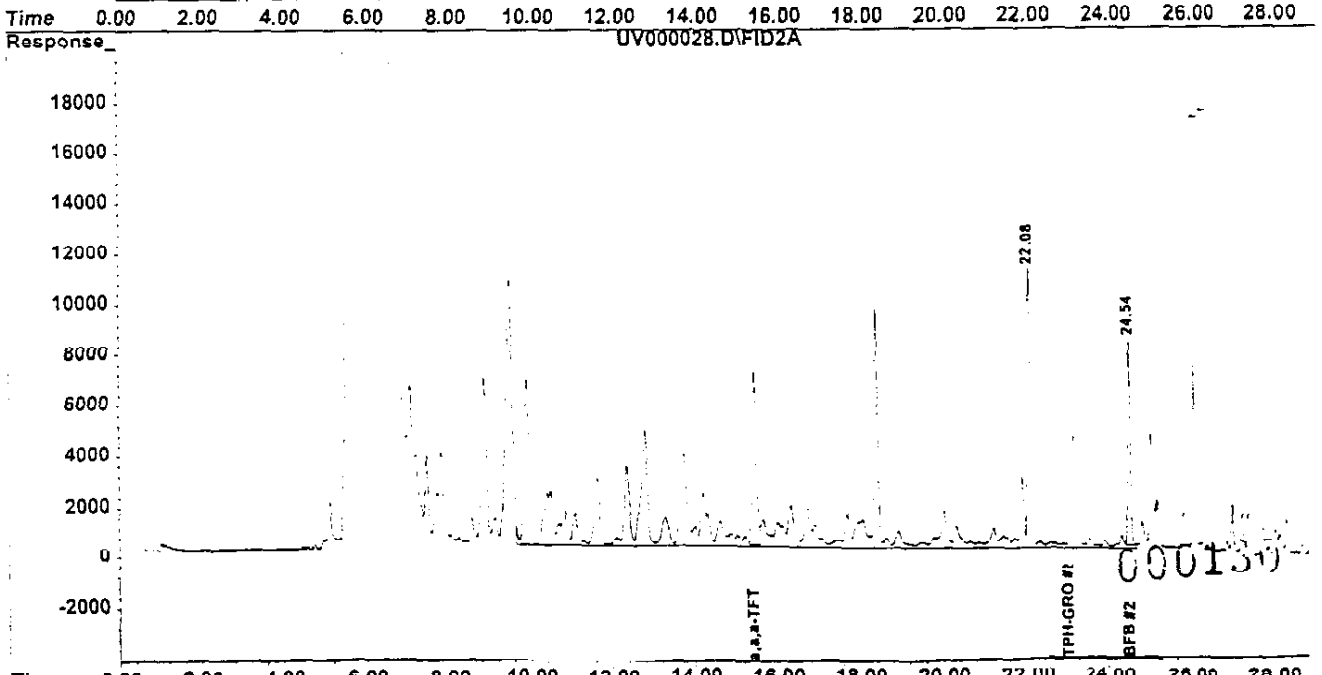
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\091699\UV000028.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\091699\UV000028.D\FID2A.CH
Acq On : 16 Sep 1999 6:38 pm Operator: RickW
Sample : ICV 400ppb Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 11:06 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000130

CONTINUING CALIBRATION SUMMARY

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000057.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000057.D\FID2A.CH
Acq On : 22 Sep 1999 9:28 am Operator: RickW
Sample : C6-C10 alkanes Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 10:00 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Mon Sep 20 12:55:03 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	20.000	Range	75 - 125	Recovery	= 0.00%#	0.00%#
2) S BFB	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	20.000	Range	75 - 125	Recovery	= 0.00%#	0.00%#
Target Compounds						
3) H TPH-GRO (C6-C10)	23.00	23.00	571435	16019123	36.071	920.844 #

000131

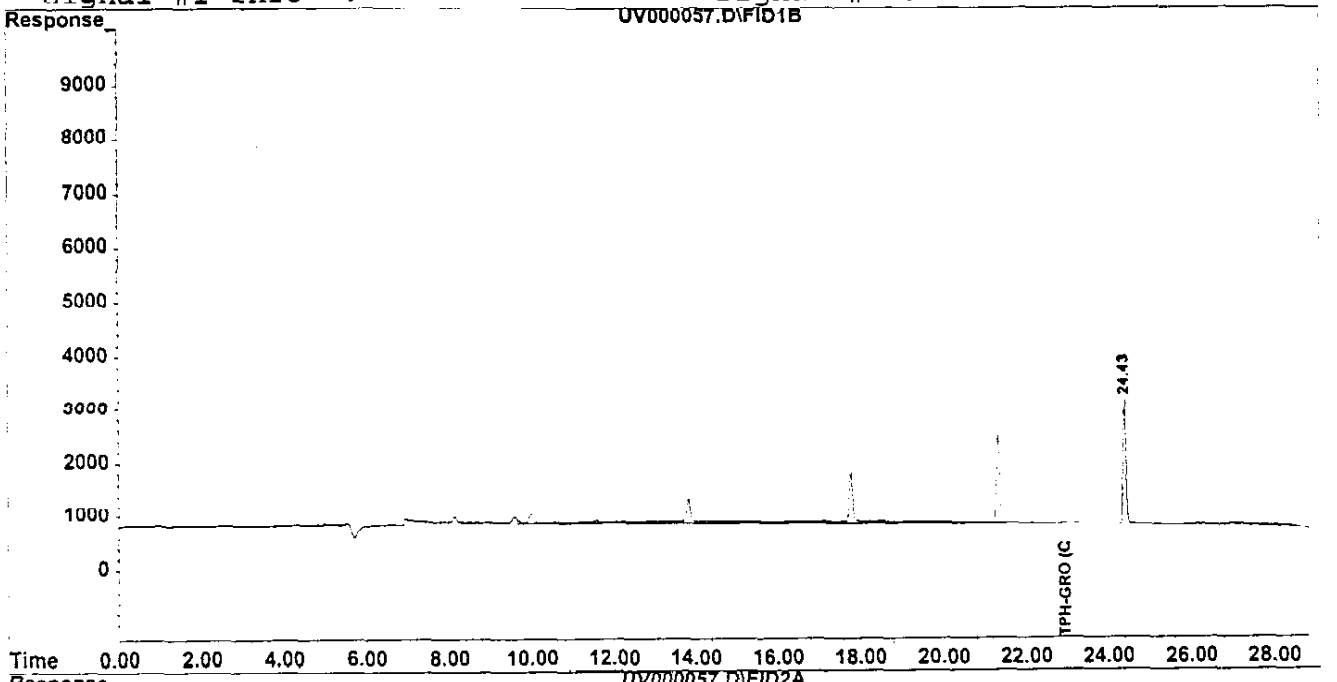
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

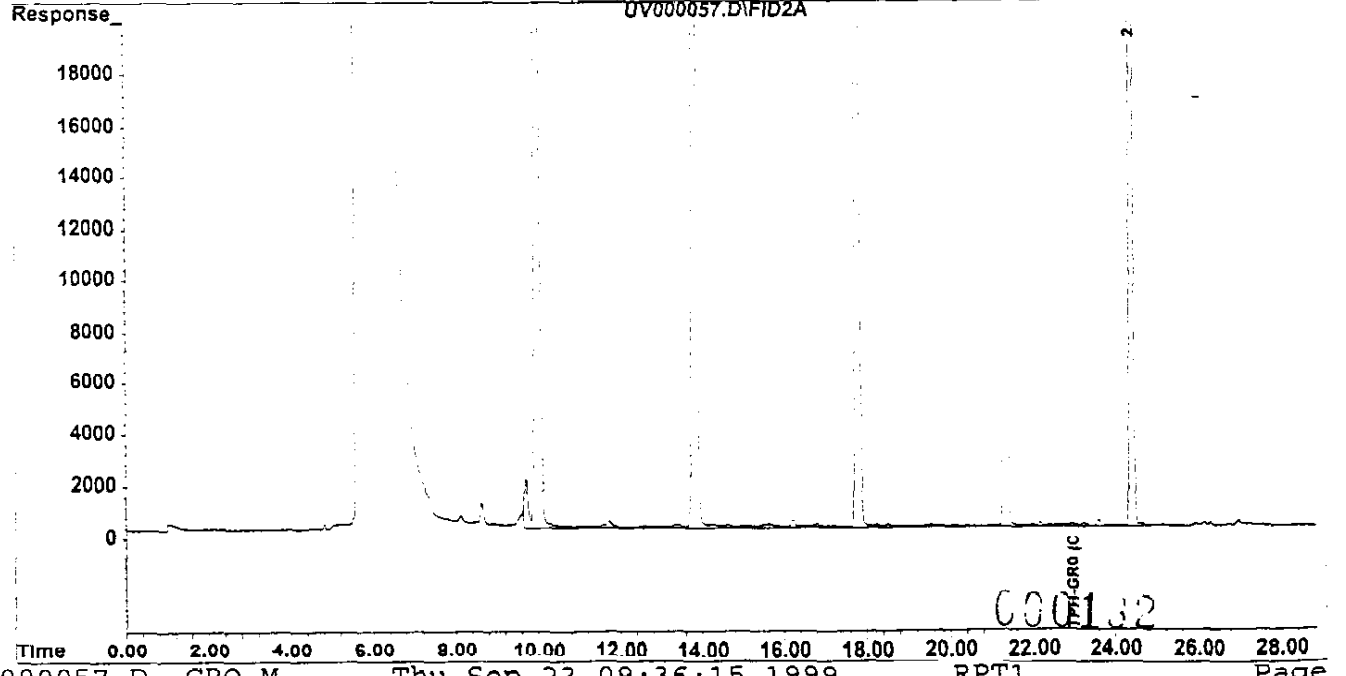
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000057.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000057.D\FID2A.CH
Acq On : 22 Sep 1999 9:28 am Operator: RickW
Sample : C6-C10 alkanes Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 10:00 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Mon Sep 20 12:55:03 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000132

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID2A.CH
Acq On : 22 Sep 1999 10:04 am Operator: RickW
Sample : 400ppb CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 10:42 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Wed Sep 22 10:42:34 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.54	15.54	73308	448098	19.097	18.849
Spiked Amount	20.000	Range	75 - 125	Recovery	= 95.49%	94.25%
2) S BFB	24.64	24.64	231357	332165	19.958	18.920
Spiked Amount	20.000	Range	75 - 125	Recovery	= 99.79%	94.60%
Target Compounds						
3) H TPH-GRO (C6-C10)	23.00	23.00	1633118	7473150	382.458	392.758

000133

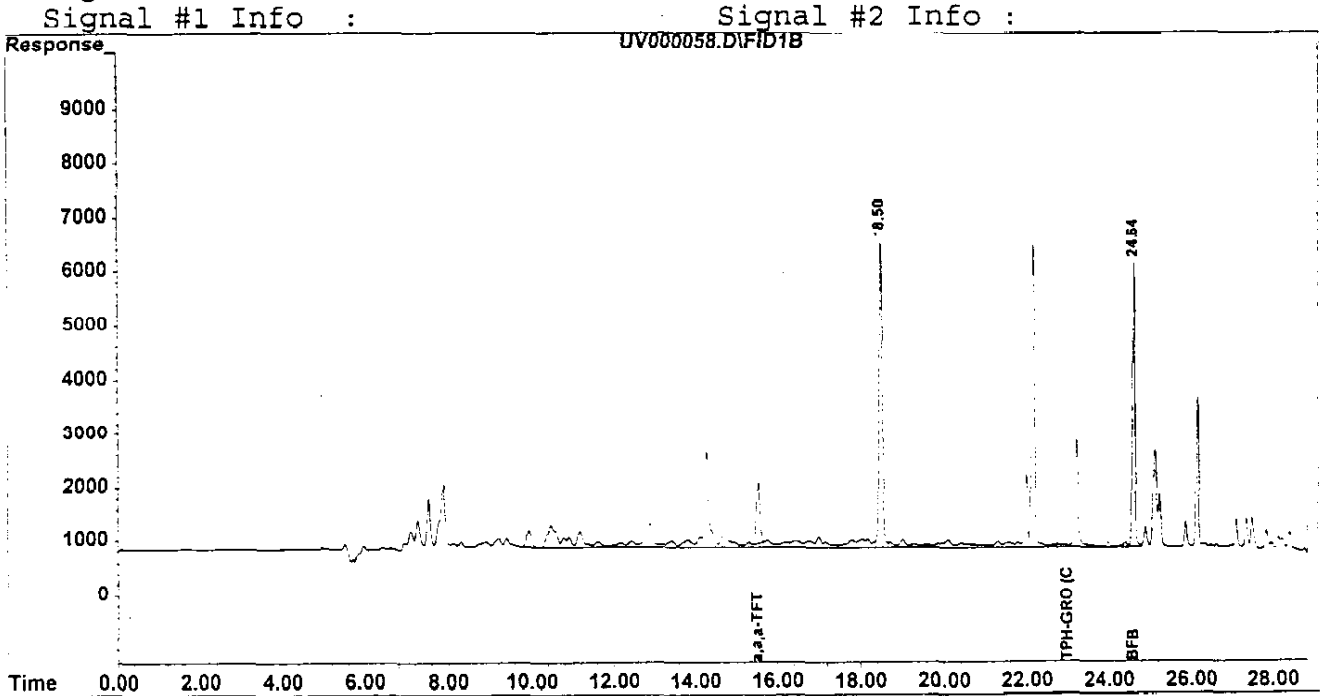
(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

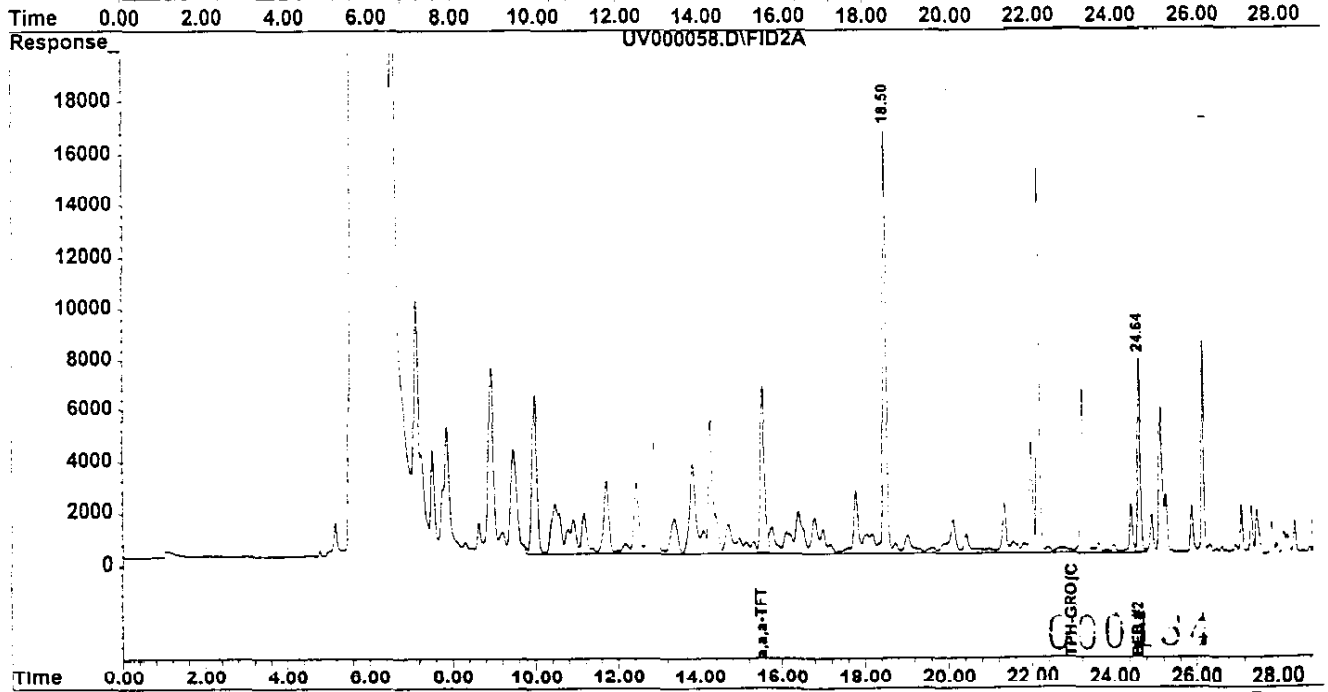
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID2A.CH
Acq On : 22 Sep 1999 10:04 am Operator: RickW
Sample : 400ppb CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 22 10:42 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Wed Sep 22 10:42:34 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID2A.CH
Acq On : 22 Sep 1999 10:04 am Operator: RickW
Sample : 400ppb CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	a,a,a-TFT	20.000	19.097	4.5	97	0.00
2	S	BFB	20.000	19.958	0.2	99	0.00
3	H	TPH-GRO (C6-C10)	400.000	382.458	4.4	96	0.00

Signal #2

1	S	a,a,a-TFT	20.000	18.849	5.8	96	0.00
2	S	BFB	20.000	18.920	5.4	92	0.00
3	H	TPH-GRO (C6-C10)	400.000	392.758	1.8	97	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000058.D\FID2A.CH
Acq On : 22 Sep 1999 10:04 am Operator: RickW
Sample : 400ppb CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

Signal #2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID2A.CH
Acq On : 22 Sep 1999 5:20 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 8:31 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.57	15.57	74157	465358	19.319	19.575
Spiked Amount	20.000	Range	75 - 125	Recovery	= 96.60%	97.88%
2) S BFB	24.66	24.66	224924	341413	19.403	19.446
Spiked Amount	20.000	Range	75 - 125	Recovery	= 97.02%	97.23%
Target Compounds						
3) H TPH-GRO (C6-C10)	23.00	23.00	1607379	7545683	374.060	397.240

000137

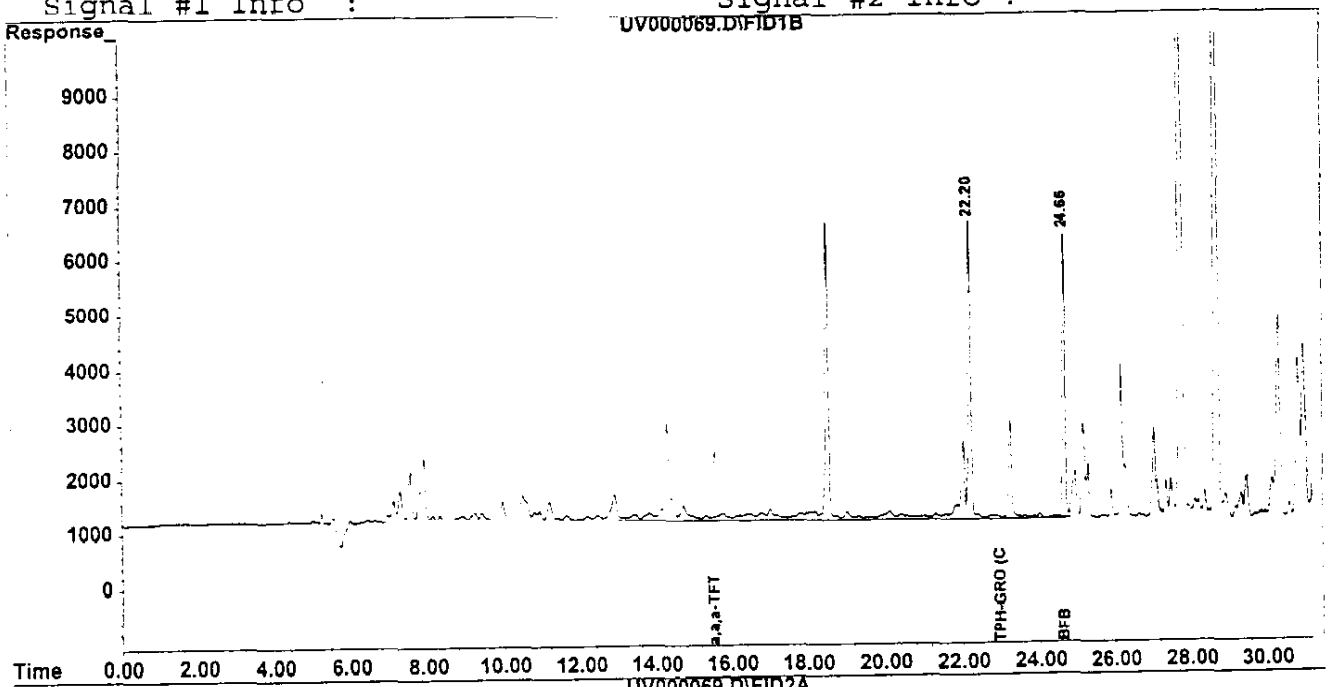
(f).=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

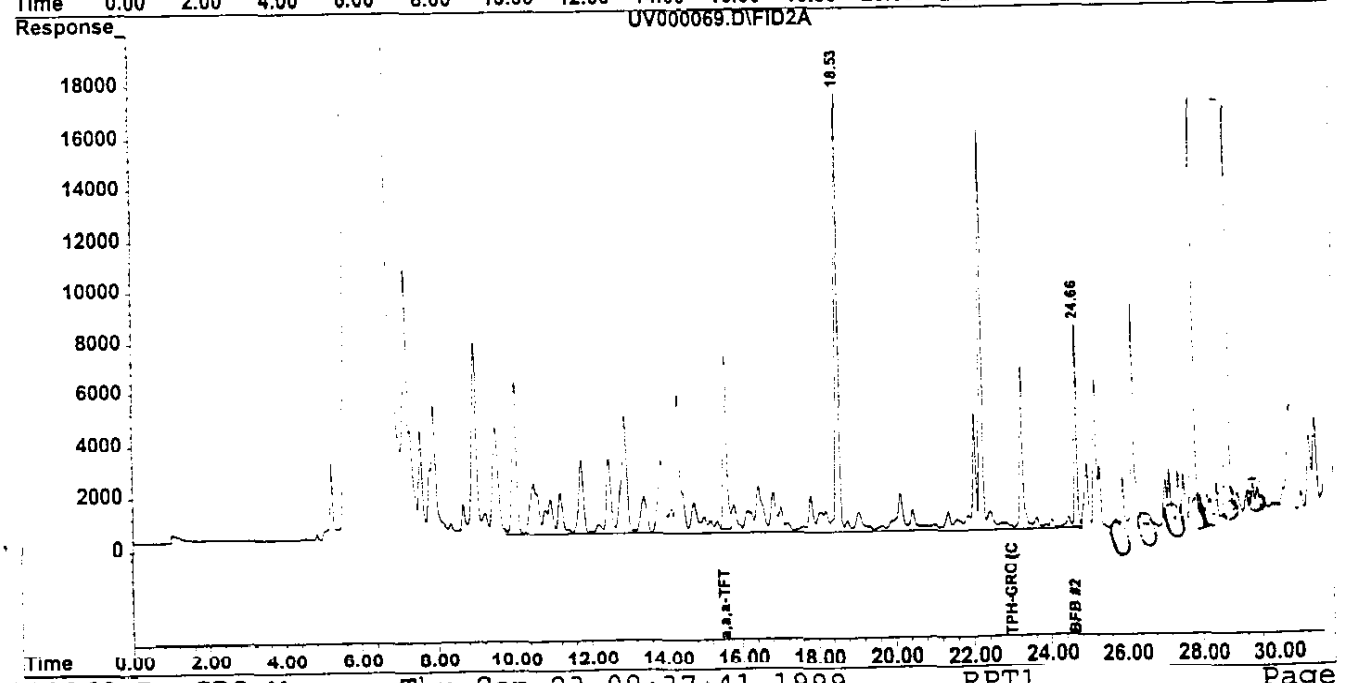
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID2A.CH
Acq On : 22 Sep 1999 5:20 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 8:31 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID2A.CH
Acq On : 22 Sep 1999 5:20 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	a,a,a-TFT	20.000	19.319	3.4	98	0.03
2	S	BFB	20.000	19.403	3.0	96	0.02
3	H	TPH-GRO (C6-C10)	400.000	374.060	6.5	94	0.00

Signal #2

1	S	a,a,a-TFT	20.000	19.575	2.1	100	0.03
2	S	BFB	20.000	19.446	2.8	94	0.02
3	H	TPH-GRO (C6-C10)	400.000	397.240	0.7	98	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000069.D\FID2A.CH
Acq On : 22 Sep 1999 5:20 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

Signal #2

000140

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID2A.CH
Acq On : 22 Sep 1999 9:10 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : gc663,guv2,soil,,,,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 8:31 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Initial Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S a,a,a-TFT	15.58	15.58	66042	426641	17.204	17.946
Spiked Amount 20.000 Range 50 - 125 Recovery =					86.02%	89.73%
2) S BFB	24.68	24.68	209519	335175	18.074	19.091
Spiked Amount 20.000 Range 50 - 125 Recovery =					90.37%	95.46%
Target Compounds						
3) H TPH-GRO (C6-C10)	23.00	23.00	1542314	7512790	352.832	395.207

000141

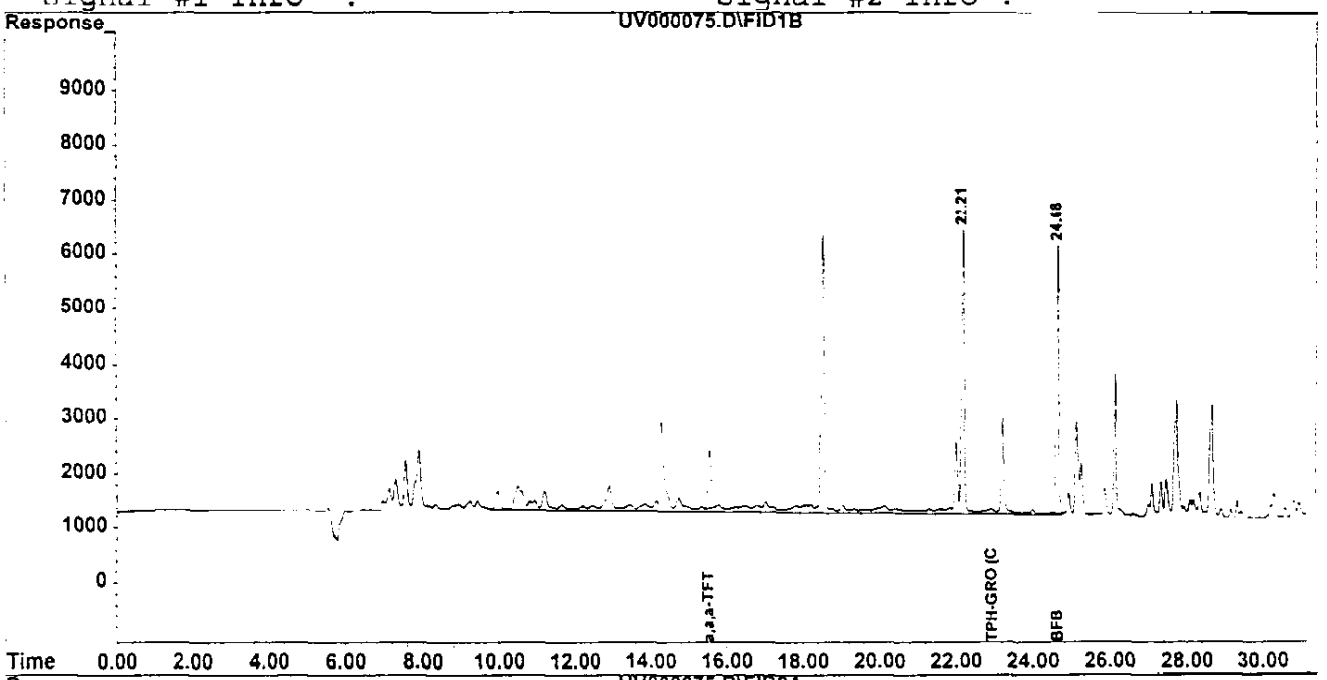
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

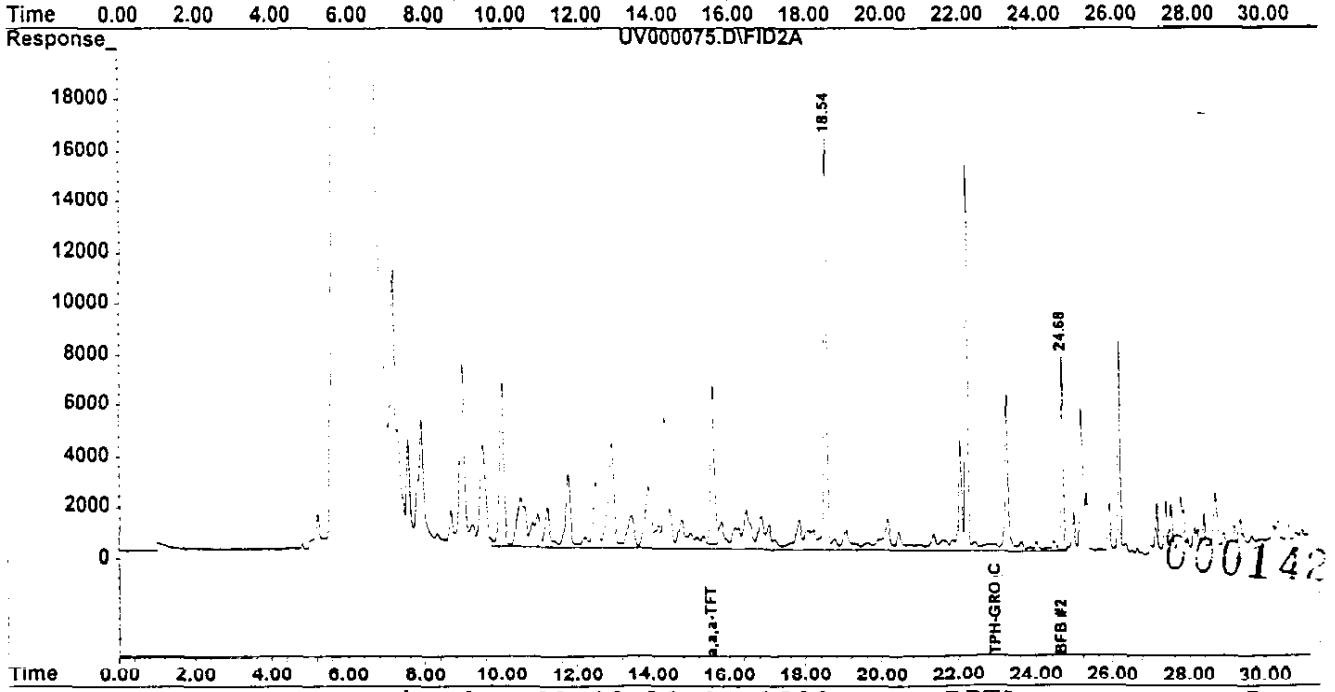
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID2A.CH
Acq On : 22 Sep 1999 9:10 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : gc663,guv2,soil,,,,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 8:31 1999 Quant Results File: GRO.RES

Quant Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration
DataAcq Meth : GRO.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000142

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID2A.CH
Acq On : 22 Sep 1999 9:10 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : gc663,guv2,soil,,,,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	a,a,a-TFT	20.000	17.204	14.0	88	0.04
2	S	BFB	20.000	18.074	9.6	89	0.04
3	H	TPH-GRO (C6-C10)	400.000	352.832	11.8	91	0.00

Signal #2

1	S	a,a,a-TFT	20.000	17.946	10.3	92	0.04
2	S	BFB	20.000	19.091	4.5	93	0.04
3	H	TPH-GRO (C6-C10)	400.000	395.207	1.2	98	0.00

000143

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

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\092299\UV000075.D\FID2A.CH
Acq On : 22 Sep 1999 9:10 pm Operator: RickW
Sample : CCV Inst : VOA4
Misc : gc663,guv2,soil,,,,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B Gasoline Range Organics
Last Update : Fri Sep 17 10:55:16 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

Signal #2

000144

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

SEQUENCE LOG SUMMARY

VGC.07

Sequence Name: C:\HPCHEM\2\SEQUENCE\092299.S
Comment:
Operator: RickW
Data Path: C:\HPCHEM\2\DATA\092299\
Pre-Seq Cmd:
Post-Seq Cmd:

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	DailyCal	4	UV000057	GRO	C6-C10 alkanes
2	DailyCal	5	UV000058	GRO	400ppb CCV
3	Blank	6	UV000059	GRO	MB
4	Sample	7	UV000060	GRO	F4916-1,5ml
5	Sample	8	UV000061	GRO	F4916-2,5ml
6	Sample	9	UV000062	GRO	F4911-1,5ml
7	Sample	10	UV000063	GRO	F4911-2,5ml
8	Sample	11	UV000064	GRO	F4922-3,5ml
9	Pause	- F4922-3,5ml			
10	Sample	12	UV000065	GRO	F4922-4,5ml
11	Sample	13	UV000066	GRO	F4923-1,5ml
12	Sample	14	UV000067	GRO	F4923-2,5ml
13	Blank	15	UV000068	GRO	MB,5g/5ml-100ul
14	DailyCal	16	UV000069	GRO	CCV
15	Sample	1	UV000070	GRO	F4915-1,6.06g/5ml-100ul
16	Sample	2	UV000071	GRO	F4915-2,6.15g/5ml-100ul
17	Sample	3	UV000072	GRO	F4911-2,5ml
18	Sample	4	UV000073	GRO	F4923-2,500ul
19	Blank	5	UV000074	GRO	MB,5g/5ml-100ul
20	DailyCal	6	UV000075	GRO	CCV
21	Sample	7	UV000076	GRO	F4922-1,6.03g/5ml-100ul
22	Sample	8	UV000077	GRO	F4922-2,6.14g/5ml-100ul
23	Sample	9	UV000078	GRO	CCV

000145

W

GC Analysis Log

Date: 9-22-99 Analyst's Signature: [signature]

Analysis Method: 8015B Column: RTX 502.2 Detector: PID/FID

Method File: GRO Instrument: UV Calibration Date: 9-16-99

Data File	Sample ID	Sample Amount	Matrix	PH	ALS #	Dil.	Comments
UV000057	C6-C10	5ml	W	7	4	1	25ml V1167
58	CCV			7	5		20ml V1165
59	MB			7	6		10ml V1177
60	F4916-1			1	7		ND GC62, UV1
61	-2			1	8		ND
62	F4911-1			4	9		PH! ND
63	-2			1	10		✓ CARRYOVER?, RERUN
64	F4922-3			6	11		PH! ✓
65	-4			1.5	12		ND
66	F4923-1			1.5	13		ND
67	-2	↓	↓	1	14	↓	RUN @ 10X
68	MB	10ml	S		15	50	CARRYOVER, RERUN
69	CCV	5ml	W	7	16	1	20ml V1165
70	F4915-1	10ml	S		1	50	ND GC63, UV2
71	-2	10ml	↓		2	50	ND
72	F4911-2	5ml	W	1	3	1	ND GC62, UV1
73	F4923-2	50ml	1	1	4	10	✓
74	MB	10ml	S		5	50	ND
75	CCV	5ml	W	7	6	1	20ml V1165
76	F4922-1	10ml	S		7	50	ND GC63, UV2
77	-2	10ml	1		8	50	ND
78	CCV	5ml	W	7	9	1	20ml V1165

Note:

000142

Matrix: Designate W for water, S for soil, and O for oil.

Sample amount: Initial sample weight (g) or volume (ml) / Final volume.

TH

GC Analysis Log

Date: 9-16-99 Analyst's Signature: [illegible]

Analysis Method: 8015 Column: RTX 502.2 Detector: PID/FID

Method File: GPO Instrument: UV Calibration Date: 9-17-99

Data File	Sample ID	Sample Amount	Matrix	PH	ALS #	Dil.	Comments
UV00021	C6-C10				16		25ul V1167
22	100 ppb	5ml	W		1	1	5ul V1165
23	200				2		10
24	400				3		20
25	600				4		30
26	800				5		40
27	1000				6		50
28	ICV 400				7		20ul V1166
29	MB	10ml	S		8	50	10ul V1143
30	MDL 1				9		✓
31	2				10		✓
32	3				11		✓
33	4				12		✓
34	5				13		✓
35	6				14		✓
36	7				15		✓
37	CCV	5ml	W		16		20ul V1165

Reviewed

Matrix: Designate W for water, S for soil, and O for oil.

Sample amount: Initial sample weight (g) or volume (ml) / Final volume.

000127

Sequence Name: C:\HPCHEM\2\OLDDATA\091699.S
Comment:
Operator: RickW
Data Path: C:\HPCHEM\2\DATA\091699\
Pre-Seq Cmd:
Post-Seq Cmd:

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	DailyCal	16	UV000021	GRO	C6-C10 alkanes
2	Calibration	1	UV000022	GRO	100ppb STD
3	Calibration	2	UV000023	GRO	200ppb STD
4	Calibration	3	UV000024	GRO	400ppb STD
5	Calibration	4	UV000025	GRO	600ppb STD
6	Calibration	5	UV000026	GRO	800ppb STD
7	Calibration	6	UV000027	GRO	1000ppb STD
8	Calibration	7	UV000028	GRO	ICV 400ppb
9	Blank	8	UV000029	GRO	MB
10	Sample	9	UV000030	GRO	MDL 1
11	Sample	10	UV000031	GRO	MDL 2
12	Sample	11	UV000032	GRO	MDL 3
13	Sample	12	UV000033	GRO	MDL 4
14	Sample	13	UV000034	GRO	MDL 5
15	Sample	14	UV000035	GRO	MDL 6
16	Sample	15	UV000036	GRO	MDL 7
17	DailyCal	16	UV000037	GRO	CCV
18					

SAMPLE RESULT SUMMARY

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 3510C/8081A	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST00672.D	1	09/23/99	SKW	09/23/99	OP956	GST26
Run #2							

Pesticide TCL List

CAS No.	Compound	Result	RDL	Units	Q
309-00-2	Aldrin	ND	0.050	ug/l	
319-84-6	alpha-BHC	ND	0.050	ug/l	
319-85-7	beta-BHC	ND	0.050	ug/l	
319-86-8	delta-BHC	ND	0.050	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.050	ug/l	
5103-71-9	alpha-Chlordane	ND	0.10	ug/l	
5103-74-2	gamma-Chlordane	ND	0.10	ug/l	
60-57-1	Dieldrin	ND	0.050	ug/l	
72-54-8	4,4'-DDD	ND	0.10	ug/l	
72-55-9	4,4'-DDE	ND	0.10	ug/l	
50-29-3	4,4'-DDT	ND	0.10	ug/l	
72-20-8	Endrin	ND	0.10	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.10	ug/l	
7421-93-4	Endrin aldehyde	ND	0.10	ug/l	
53494-70-5	Endrin ketone	ND	0.10	ug/l	
959-98-8	Endosulfan-I	ND	0.050	ug/l	
33213-65-9	Endosulfan-II	ND	0.10	ug/l	
76-44-8	Heptachlor	ND	0.050	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.050	ug/l	
72-43-5	Methoxychlor	ND	0.20	ug/l	
8001-35-2	Toxaphene	ND	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-160%
2051-24-3	Decachlorobiphenyl	57%		30-160%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

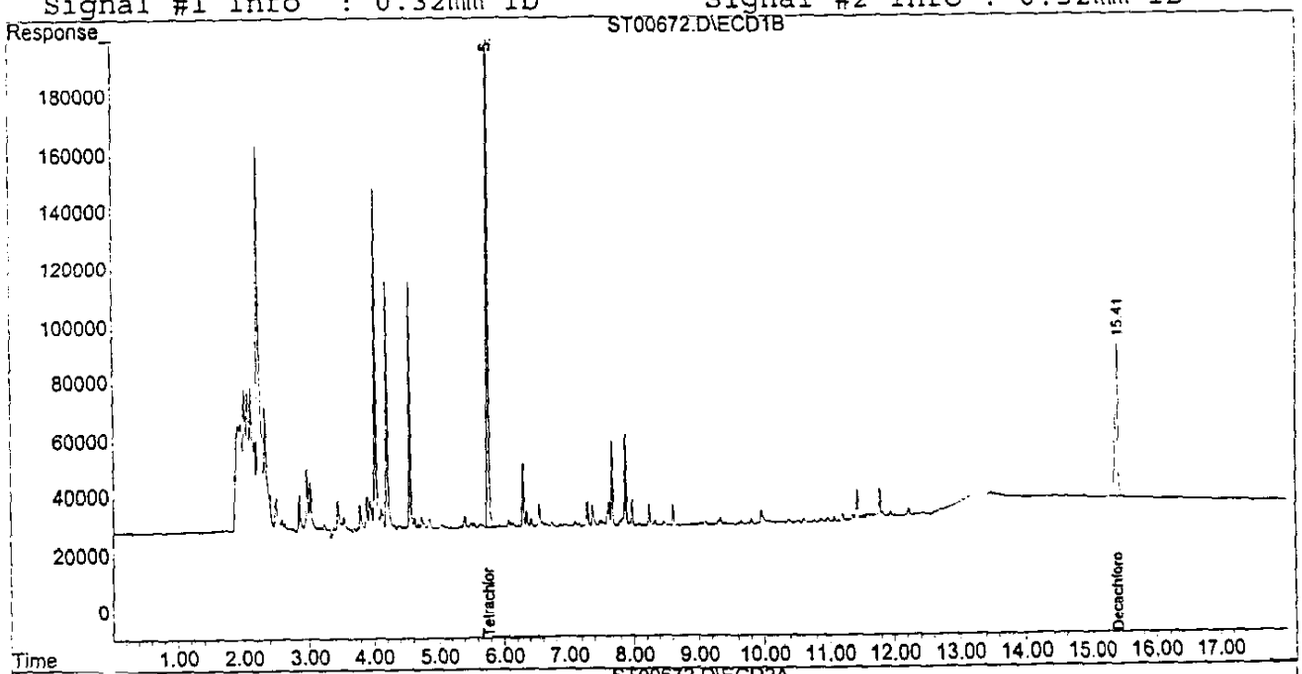
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

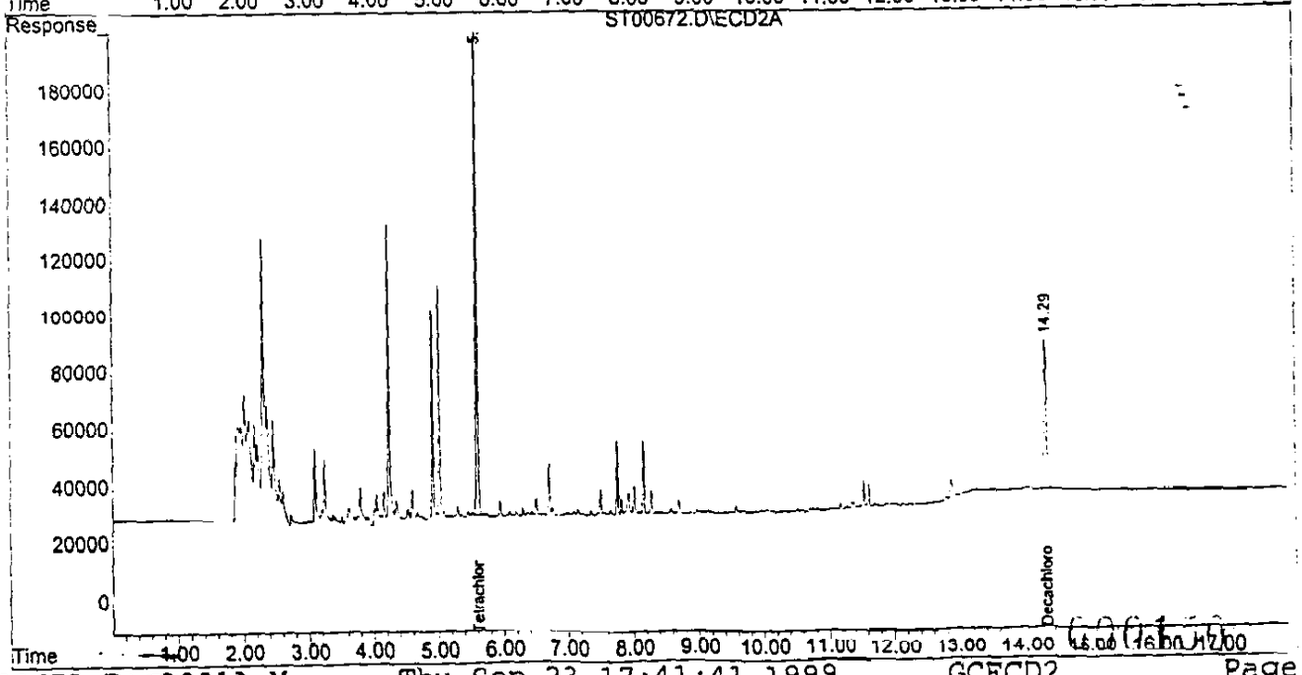
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00672.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00672.D\ECD2A.CH
Acq On : 9-23-99 2:45:02 PM Operator: stephw
Sample : F4923-1 Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:36 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:33:37 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00672.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00672.D\ECD2A.CH
Acq On : 9-23-99 2:45:02 PM Operator: stephw
Sample : F4923-1 Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:36 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:33:37 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.60	267831	221936	39.998	39.843
Spiked Amount 50.000 Range 30 - 160 Recovery =					80.00%	79.69%
29) SC Decachlorobiphen	15.41	14.29	53529	53277	28.534	28.699
Spiked Amount 50.000 Range 30 - 160 Recovery =					57.07%	57.40%
Target Compounds						
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000

000151

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 3510C/8081A	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	ST00674.D	20	09/23/99	SKW	09/23/99	OP956	GST26
Run #2							

Pesticide TCL List

CAS No.	Compound	Result	RDL	Units	Q
309-00-2	Aldrin	ND	1.0	ug/l	
319-84-6	alpha-BHC	ND	1.0	ug/l	
319-85-7	beta-BHC	ND	1.0	ug/l	
319-86-8	delta-BHC	ND	1.0	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	1.0	ug/l	
5103-71-9	alpha-Chlordane	ND	2.0	ug/l	
5103-74-2	gamma-Chlordane	ND	2.0	ug/l	
60-57-1	Dieldrin	ND	1.0	ug/l	
72-54-8	4,4'-DDD	ND	2.0	ug/l	
72-55-9	4,4'-DDE	ND	2.0	ug/l	
50-29-3	4,4'-DDT	ND	2.0	ug/l	
72-20-8	Endrin	ND	2.0	ug/l	
1031-07-8	Endosulfan sulfate	ND	2.0	ug/l	
7421-93-4	Endrin aldehyde	ND	2.0	ug/l	
53494-70-5	Endrin ketone	ND	2.0	ug/l	
959-98-8	Endosulfan-I	ND	1.0	ug/l	
33213-65-9	Endosulfan-II	ND	2.0	ug/l	
76-44-8	Heptachlor	ND	1.0	ug/l	
1024-57-3	Heptachlor epoxide	ND	1.0	ug/l	
72-43-5	Methoxychlor	ND	4.0	ug/l	
8001-35-2	Toxaphene	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88% [b]		30-160%
2051-24-3	Decachlorobiphenyl	60% [b]		30-160%

(a) Dilution required due to matrix interference.
(b) Surrogate recovery based on actual concentration.

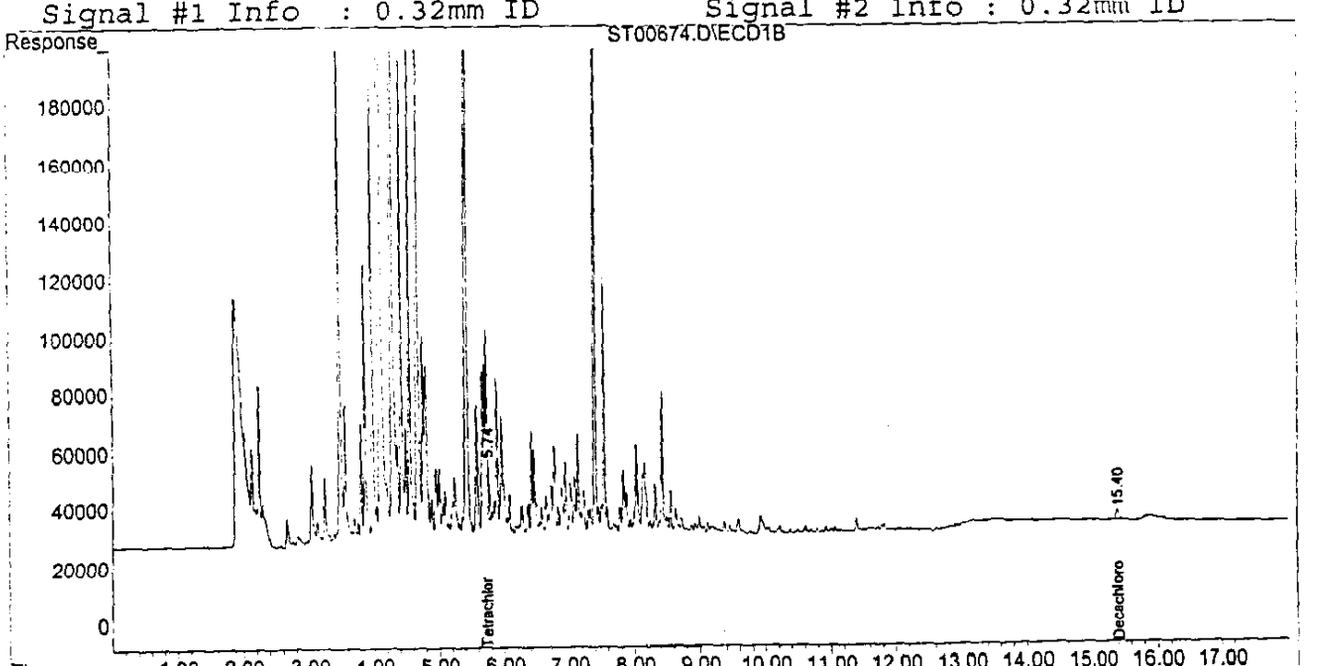
ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

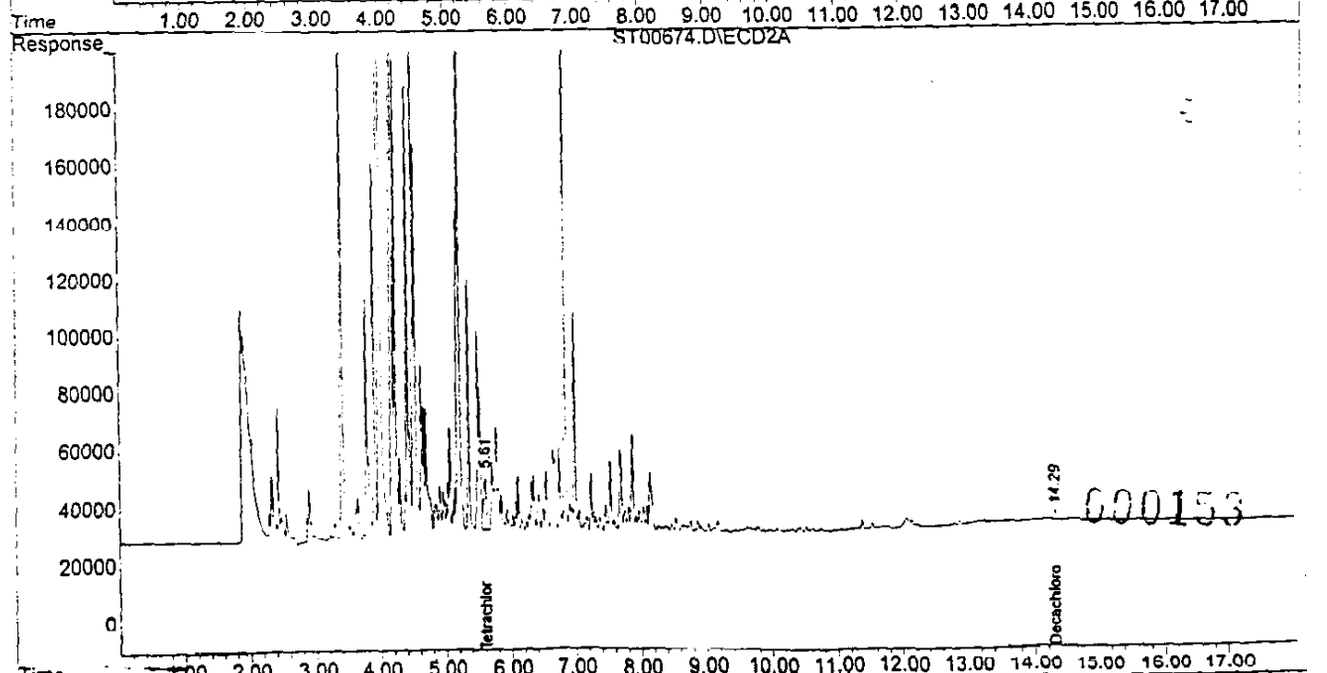
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00674.D\ECD1B.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00674.D\ECD2A.CH
Acq On : 9-23 99 3:48:15 PM Operator: stephw
Sample : F4923-2,20x Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 24 8:34 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000153

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00674.D\ECD1B.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00674.D\ECD2A.CH
Acq On : 9-23-99 3:48:15 PM Operator: stephw
Sample : F4923-2,20x Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 24 8:34 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.74	5.61	18439	17953	2.754m	3.223
Spiked Amount 50.000 Range 30 - 160 Recovery =					5.51%#	6.45%#
29) SC Decachlorobiphen	15.40	14.29	3500	3583	1.866m	1.930m
Spiked Amount 50.000 Range 30 - 160 Recovery =					3.73%#	3.86%#
Target Compounds						
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000

400ml → 4ml Surr 0.5 ml added.

TCMX = 4.41% 5.16%
88.2 103

DCBP = 2.98% 3.09%
59.6 61.8

ND matrix

000154

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

SURROGATE RECOVERIES SUMMARY

Semivolatile Surrogate Recovery Summary

Job Number: F4923
Account: ITPA/ONR IT Corporation
Project: Bainbridge

Method: SW846 3510C/8081A **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F4923-1	ST[illegible]072.D	80.0	57.0
F4923-2	S[illegible]74.D	88.0 [b]	60.0 [b]
OP956-BS4	ST[illegible]69.D	86.0	94.0
OP956-MB4	ST[illegible]68.D	80.0	95.0
OP956-MS	S[illegible]36.D	78.0	64.0
OP956-MSD	ST[illegible]7.D	78.0	61.0
OP956-MB	ST[illegible]35.D	79.0	77.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-160%
S2 = Decachlorobiphenyl	30-160%

(a) Recovery from C[illegible]nal #1
(b) Surrogate recov[illegible]ed on [illegible]nal concentration.

MATRIX SPIKE/ MATRIX SPIKE DUPLICATE/ BLANK SPIKE SUMMARY

SGC.03

Blank Spike Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP956-BS4	ST00669.D	1	09/23/99	SKW	09/23/99	OP956	GST26

The QC reported here applies to the following samples: **Method:** SW846 3510C/8081A

F4923-1, F4923-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.5	0.36	72	34-132
319-84-6	alpha-BHC	0.5	0.45	90	39-132
319-85-7	beta-BHC	0.5	0.49	98	28-151
319-86-8	delta-BHC	0.5	0.35	70	16-137
58-89-9	gamma-BHC (Lindane)	0.5	0.41	82	31-127
5103-71-9	alpha-Chlordane	0.5	0.44	88	45-128
5103-74-2	gamma-Chlordane	0.5	0.47	94	45-128
60-57-1	Dieldrin	0.5	0.42	84	43-139
72-54-8	4,4'-DDD	0.5	0.42	84	35-138
72-55-9	4,4'-DDE	0.5	0.39	78	45-139
50-29-3	4,4'-DDT	0.5	0.45	90	33-149
72-20-8	Endrin	0.5	0.52	104	35-151
1031-07-8	Endosulfan sulfate	0.5	0.42	84	26-140
7421-93-4	Endrin aldehyde	0.5	0.066	13	10-141
53494-70-5	Endrin ketone	0.5	0.48	96	35-141
959-98-8	Endosulfan-I	0.5	0.45	90	55-143
33213-65-9	Endosulfan-II	0.5	0.46	92	35-186
76-44-8	Heptachlor	0.5	0.44	88	31-125
1024-57-3	Heptachlor epoxide	0.5	0.46	92	69-129
72-43-5	Methoxychlor	0.5	0.46	92	40-138

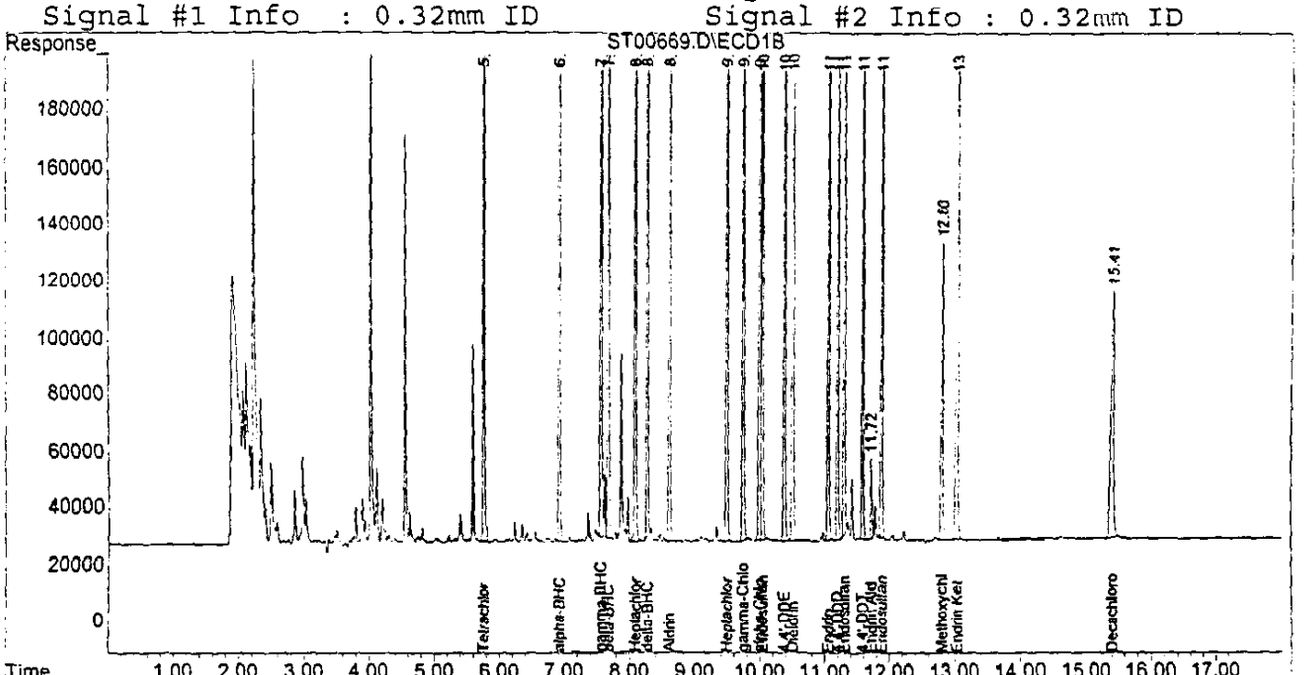
CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	86%	30-160%
2051-24-3	Decachlorobiphenyl	94%	30-160%

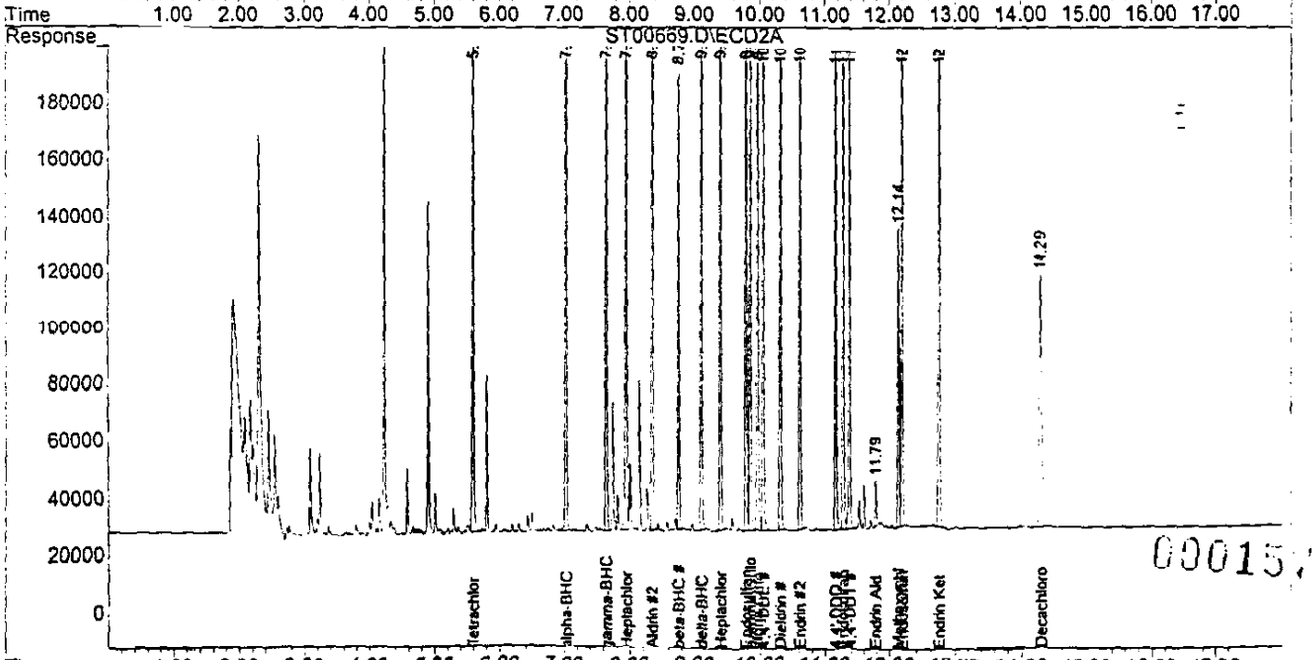
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00669.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00669.D\ECD2A.CH
Acq On : 9-23-99 1:41:24 PM Operator: stephw
Sample : op956-bs4 Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:34 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:33:37 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





00015

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00669.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00669.D\ECD2A.CH
Acq On : 9-23-99 1:41:24 PM Operator: stephw
Sample : op956-bs4 Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:34 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:33:37 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.76	5.60	287781	239796	42.977	43.049
Spiked Amount	50.000 Range	30 - 160		Recovery	=	85.95%	86.10%
29) SC	Decachlorobiphen	15.41	14.29	87825	88620	46.816	47.738
Spiked Amount	50.000 Range	30 - 160		Recovery	=	93.63%	95.48%
	Target Compounds						
2	alpha-BHC	6.92	7.03	518086	405406	44.723	40.649
3)	gamma-BHC (Linda	7.57	7.65	453245	380846	41.085	42.054
4)	beta-BHC	7.68	8.76	222060	160404	49.172	41.810
5)	Heptachlor	8.09	7.95	354976	294909	44.279	43.262
6)	delta-BHC	8.27	9.11	342721	270250	34.746	31.794
7)	Aldrin	8.62	8.36	317040	281370	35.508	42.141
8)	Heptachlor Epoxi	9.49	9.40	335200	282132	45.672	46.038
9)	gamma-Chlordane	9.75	9.86	337803	275256	47.361	46.297
10)	alpha-Chlordane	9.99	9.97	314168	263099	44.180	44.009
11)	Endosulfan I	10.04	9.79	297087	253580	45.488	46.024
12)	4,4'-DDE	10.38	10.06	315264	259402	39.201	41.000
13)	Dieldrin	10.51	10.32	330609	274963	41.861	45.833
14)	Endrin	11.06	10.62	265748	224292	51.524	51.003
15)	4,4'-DDD	11.20	11.17	279921	221890	41.601	46.521
16)	Endosulfan II	11.31	11.28	284225	248631	46.350	47.572
17)	4,4'-DDT	11.59	11.38	253926	205845	44.760	46.037
18)	Endrin Aldehyde	11.72	11.79	28844	15925	6.654	6.474
19)	Endosulfan Sulfa	11.88	12.20	238664	192347	41.754	41.847
20)	Methoxychlor	12.80	12.14	105332	105323	46.598	47.844
21)	Endrin Ketone	13.04	12.76	247974	204603	47.518	45.989
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000156

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP956-MS	ST00306.D	4	09/01/99	SKW	08/31/99	OP956	GST13
OP956-MSD	ST00307.D	4	09/01/99	SKW	08/31/99	OP956	GST13
F4801-1 [a]	ST00303.D	10	09/01/99	SKW	08/31/99	OP956	GST13

The QC reported here applies to the following samples: **Method:** SW846 3510C/8081A

F4923-1, F4923-2

CAS No.	Compound	F4801-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.5	0.54	108	0.51	102	6	34-132/20
319-84-6	alpha-BHC	ND		0.5	0.46	92	0.44	88	4	39-132/23
319-85-7	beta-BHC	ND		0.5	0.57	114	0.54	108	5	28-151/28
319-86-8	delta-BHC	ND		0.5	0.46	92	0.44	88	4	16-137/27
58-89-9	gamma-BHC (Lindane)	ND		0.5	0.47	94	0.45	90	4	31-127/24
5103-71-9	alpha-Chlordane	ND		0.5	0.68	136*	0.64	128	6	45-128/18
5103-74-2	gamma-Chlordane	ND		0.5	0.88	176*	0.83	166*	6	45-128/18
60-57-1	Dieldrin	ND		0.5	0.53	106	0.49	98	8	43-139/24
72-54-8	4,4'-DDD	ND		0.5	0.56	112	0.53	106	6	35-138/26
72-55-9	4,4'-DDE	ND		0.5	0.60	120	0.58	116	3	45-139/24
50-29-3	4,4'-DDT	ND		0.5	0.51	102	0.49	98	4	33-149/29
72-20-8	Endrin	ND		0.5	0.46	92	0.44	88	4	35-151/27
1031-07-8	Endosulfan sulfate	ND		0.5	0.61	122	0.58	116	5	26-140/28
7421-93-4	Endrin aldehyde	ND		0.5	0.27	54	0.26	52	4	10-141/27
53494-70-5	Endrin ketone	ND		0.5	0.54	108	0.51	102	6	35-141/27
959-98-8	Endosulfan-I	ND		0.5	0.57	114	0.54	108	5	55-143/22
33213-65-9	Endosulfan-II	ND		0.5	0.51	102	0.49	98	4	35-186/45
76-44-8	Heptachlor	ND		0.5	0.47	94	0.46	92	2	31-125/20
1024-57-3	Heptachlor epoxide	ND		0.5	0.62	124	0.59	118	5	69-129/13
72-43-5	Methoxychlor	ND		0.5	0.50	100	0.47	94	6	40-138/25

CAS No.	Surrogate Recoveries	MS	MSD	F4801-1	Limits
877-09-8	Tetrachloro-m-xylene	78%	78%	99%	30-160%
2051-24-3	Decachlorobiphenyl	64%	61%	54%	30-160%

(a) Dilution required due to matrix interference.

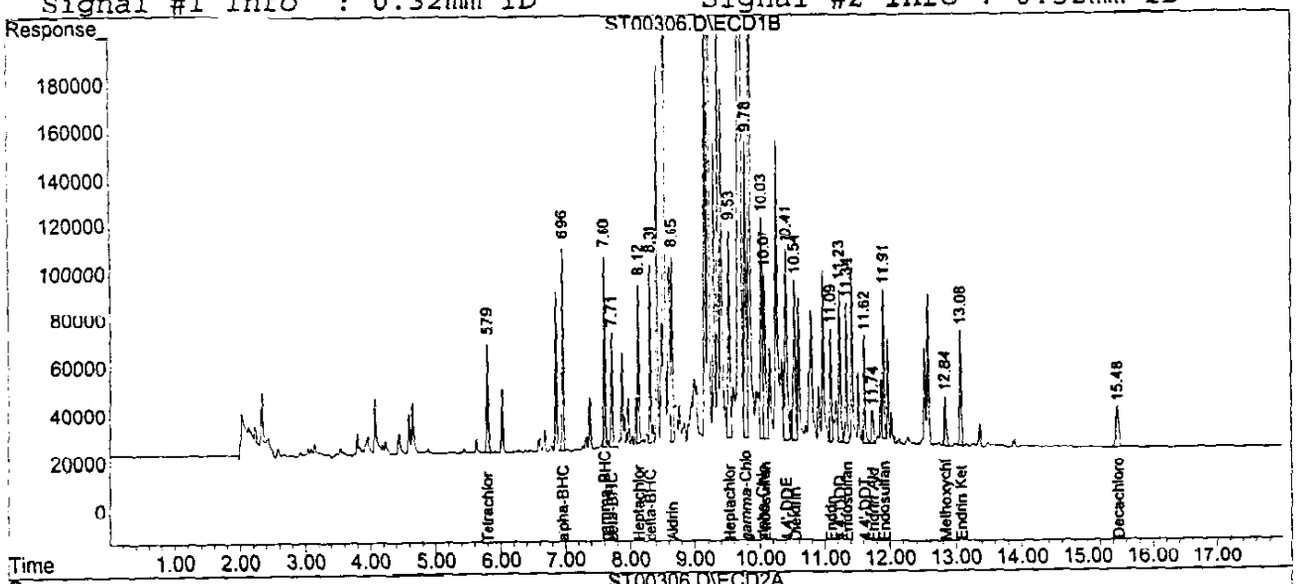
Quantitation Report

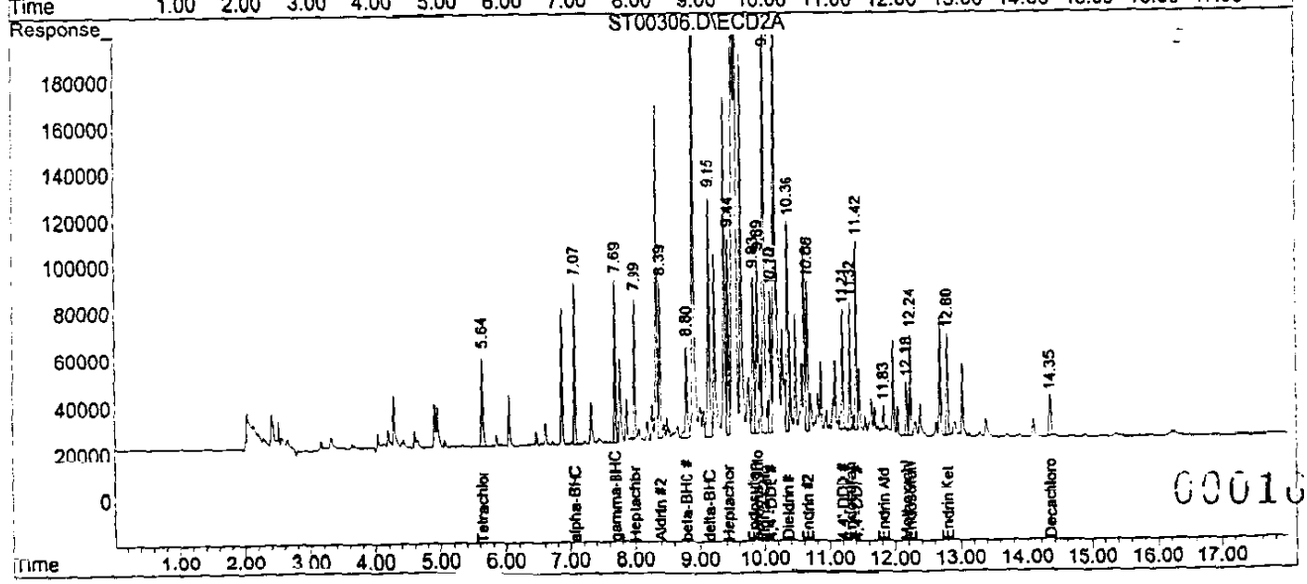
Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00306.D\ECD1B.CH Vial: 21
Acq On : 9-1-99 3:51:26 PM Operator: stephw
Sample : op956-ms,4x Inst : ECD 3
Misc : op956,gst13,water,,,10,4 Multiplr: 0.04
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00306.D\ECD2A.CH Vial: 21
Acq On : 9-1-99 3:51:26 PM Operator: stephw
Sample : op956-ms,4x Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.04
IntFile : EVENTS2.E
Quant Time: Sep 2 12:31 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Wed Sep 01 13:46:30 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000100

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00306.D\ECD1B.CH Vial: 21
Acq On : 9-1-99 3:51:26 PM Operator: stephw
Sample : op956-ms,4x Inst : ECD 3
Misc : op956,gst13,water,,,10,4 Multiplr: 0.04
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00306.D\ECD2A.CH Vial: 21
Acq On : 9-1-99 3:51:26 PM Operator: stephw
Sample : op956-ms,4x Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.04
IntFile : EVENTS2.E
Quant Time: Sep 2 12:31 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Wed Sep 01 13:46:30 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.79	5.64	44632	38061	9.745	9.863
	Spiked Amount 50.000 Range 30 - 160 Recovery =					19.49%#	19.73%#
29)	SC Decachlorobiphen	15.48	14.35	16617	17529	8.009	8.001
	Spiked Amount 50.000 Range 30 - 160 Recovery =					16.02%#	16.00%#
	Target Compounds						
2)	alpha-BHC	6.96	7.07	85033	68506	11.616	11.433
3)	gamma-BHC (Linda	7.60	7.69	79929	69713	11.764	11.859
4)	beta-BHC	7.71	8.80	47516	39203	14.371	13.657
5)	Heptachlor	8.12	8.00	67033	58835	11.783	11.498
6)	delta-BHC	8.31	9.15	75554	102594	11.401	17.082 #
7)	Aldrin	8.65	8.39	77885	66830	13.475	12.834
8)	Heptachlor Epoxi	9.53	9.44	88166	85675	15.581	16.897
9)	gamma-Chlordane	9.78	9.90	125614	75081	22.120	15.819 #
10)	alpha-Chlordane	10.03	9.99	93835	225254	17.145	42.890 #
11)	Endosulfan I	10.07	9.83	70028	68151	14.351	15.169
12)	4,4'-DDE	10.41	10.10	80594	61234	15.142	13.981
13)	Dieldrin	10.54	10.36	68024	91001	13.221	18.213 #
14)	Endrin	11.09	10.66	48107	64682	11.391	15.335 #
15)	4,4'-DDD	11.23	11.21	66354	51097	14.039	12.590
16)	Endosulfan II	11.34	11.32	59066	54458	12.860	13.134
17)	4,4'-DDT	11.62	11.42	45955	81637	12.833	21.949 #
18)	Endrin Aldehyde	11.74	11.83	13595	10103	6.724	8.063
19)	Endosulfan Sulfa	11.91	12.24	62907	43896	15.286	12.803
20)	Methoxychlor	12.84	12.18	20520	23260	12.489	12.917
21)	Endrin Ketone	13.08	12.80	49068	43695	13.476	13.214
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000161

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

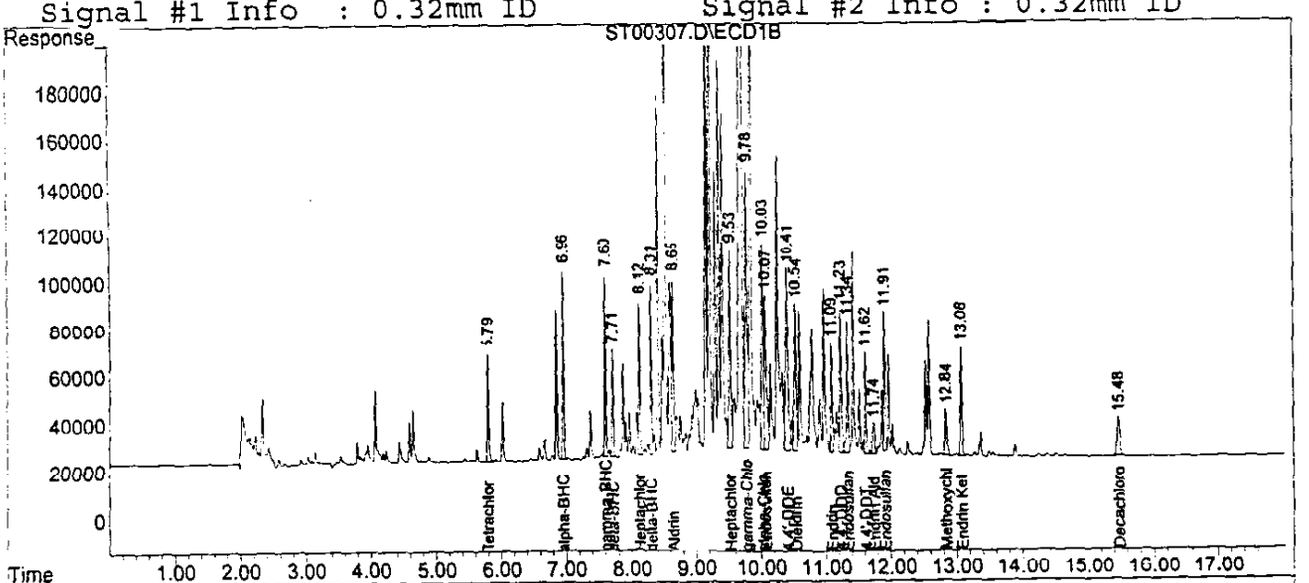
Quantitation Report

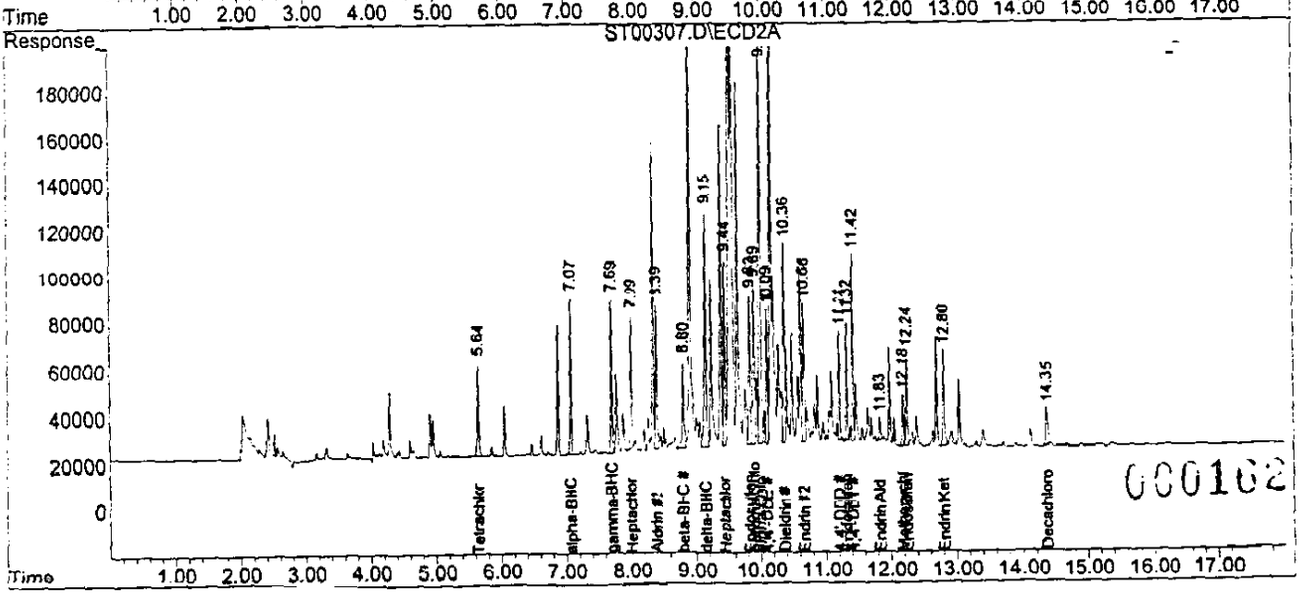
Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00307.D\ECD1B.CH Vial: 22
Acq On : 9-1-99 4:12:36 PM Operator: stephw
Sample : op956-msd,4x Inst : ECD 3
Misc : op956,gst13,water,,,10,4 Multiplr: 0.04
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00307.D\ECD2A.CH Vial: 22
Acq On : 9-1-99 4:12:36 PM Operator: stephw
Sample : op956-msd,4x Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.04
IntFile : EVENTS2.E
Quant Time: Sep 2 12:32 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Wed Sep 01 13:46:30 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000162

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00307.D\ECD1B.CH Vial: 22
Acq On : 9-1-99 4:12:36 PM Operator: stephw
Sample : op956-msd,4x Inst : ECD 3
Misc : op956,gst13,water,,,10,4 Multiplr: 0.04
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00307.D\ECD2A.CH Vial: 22
Acq On : 9-1-99 4:12:36 PM Operator: stephw
Sample : op956-msd,4x Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.04
IntFile : EVENTS2.E
Quant Time: Sep 2 12:32 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Wed Sep 01 13:46:30 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	5.79	5.64	44568	38845	9.733	10.035	
	Spiked Amount 50.000 Range 30 - 160 Recovery =					19.47%#	20.07%#	
2)	SC Decachlorobiphen	15.48	14.35	15849	16546	7.589	7.511	
	Spiked Amount 50.000 Range 30 - 160 Recovery =					15.18%#	15.02%#	
	Target Compounds							
2)	alpha-BHC	6.96	7.07	78890	66673	11.031	11.210	
3)	gamma-BHC (Linda	7.60	7.69	75961	65823	11.336	11.355	
4)	beta-BHC	7.71	8.80	44637	36459	13.590	12.762	
5)	Heptachlor	8.12	7.99	64181	55968	11.409	11.069	
6)	delta-BHC	8.31	9.15	71183	100027	10.940	16.733	#
7)	Aldrin	8.65	8.39	72212	61700	12.698	12.053	
8)	Heptachlor Epoxi	9.53	9.44	82761	79281	14.768	15.820	
9)	gamma-Chlordane	9.78	9.89	116514	68161	20.735	14.607	#
10)	alpha-Chlordane	10.03	9.99	87411	220276	16.134	41.989	#
11)	Endosulfan I	10.07	9.83	65283	63873	13.539	14.345	
12)	4,4'-DDE	10.41	10.09	76403	57545	14.511	13.329	
13)	Dieldrin	10.54	10.36	62170	86166	12.352	17.390	#
14)	Endrin	11.09	10.66	46620	60401	11.117	14.483	#
15)	4,4'-DDD	11.23	11.21	61851	46657	13.263	11.689	
16)	Endosulfan II	11.34	11.32	55461	50685	12.201	12.386	
17)	4,4'-DDT	11.62	11.42	43270	80566	12.302	21.700	#
18)	Endrin Aldehyde	11.74	11.83	12606	9586	6.392	7.752	
19)	Endosulfan Sulfa	11.91	12.24	58808	40068	14.430	11.853	
20)	Methoxychlor	12.84	12.18	18991	22408	11.673	12.482	
21)	Endrin Ketone	13.08	12.80	46244	41110	12.840	12.527	
	Sum Chlordane-A			0	0	N.D.	N.D.	
	Average Chlordane-A					0.000	0.000	

000163

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

METHOD BLANK SUMMARY

SGC.04

Method Blank Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP956-MB	ST00296.D	1	09/01/99	SKW	08/31/99	OP956	GST13

The QC reported here applies to the following samples: **Method:** SW846 3510C/8081A

OP956-MS, OP956-MSD

CAS No.	Compound	Result	RDL	Units	Q
309-00-2	Aldrin	ND	0.050	ug/l	
319-84-6	alpha-BHC	ND	0.050	ug/l	
319-85-7	beta-BHC	ND	0.050	ug/l	
319-86-8	delta-BHC	ND	0.050	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.050	ug/l	
5103-71-9	alpha-Chlordane	ND	0.10	ug/l	
5103-74-2	gamma-Chlordane	ND	0.10	ug/l	
60-57-1	Dieldrin	ND	0.050	ug/l	
72-54-8	4,4'-DDD	ND	0.10	ug/l	
72-55-9	4,4'-DDE	ND	0.10	ug/l	
50-29-3	4,4'-DDT	ND	0.10	ug/l	
72-20-8	Endrin	ND	0.10	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.10	ug/l	
7421-93-4	Endrin aldehyde	ND	0.10	ug/l	
53494-70-5	Endrin ketone	ND	0.10	ug/l	
959-98-8	Endosulfan-I	ND	0.050	ug/l	
33213-65-9	Endosulfan-II	ND	0.10	ug/l	
76-44-8	Heptachlor	ND	0.050	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.050	ug/l	
72-43-5	Methoxychlor	ND	0.20	ug/l	
8001-35-2	Toxaphene	ND	2.5	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	79%	30-160%
2051-24-3	Decachlorobiphenyl	77%	30-160%

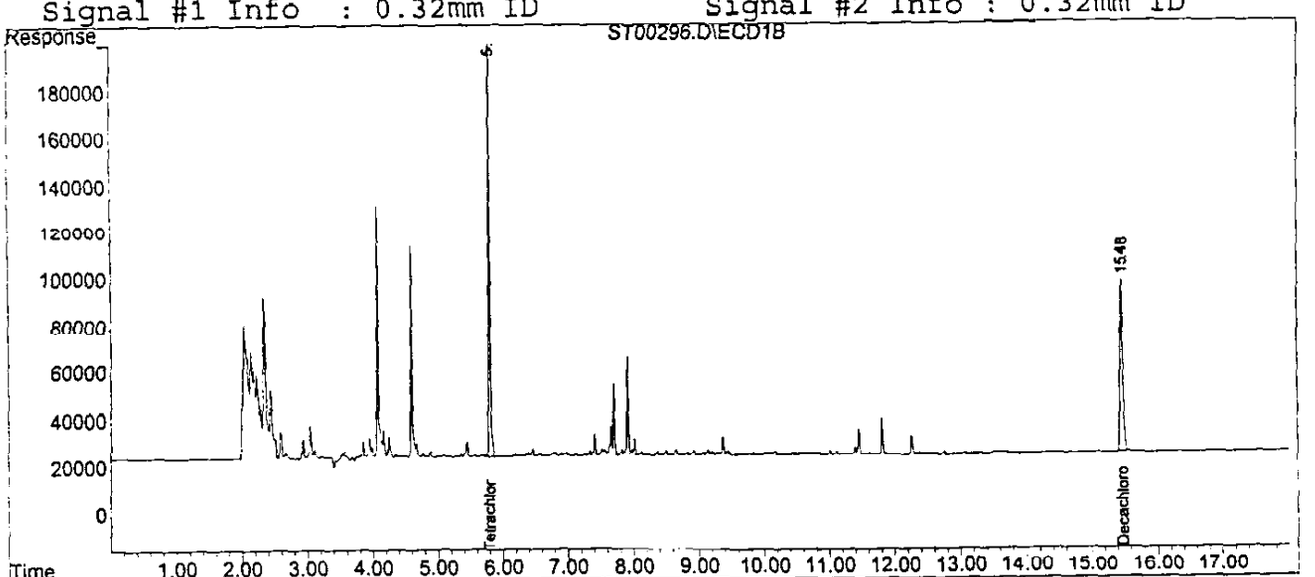
Quantitation Report

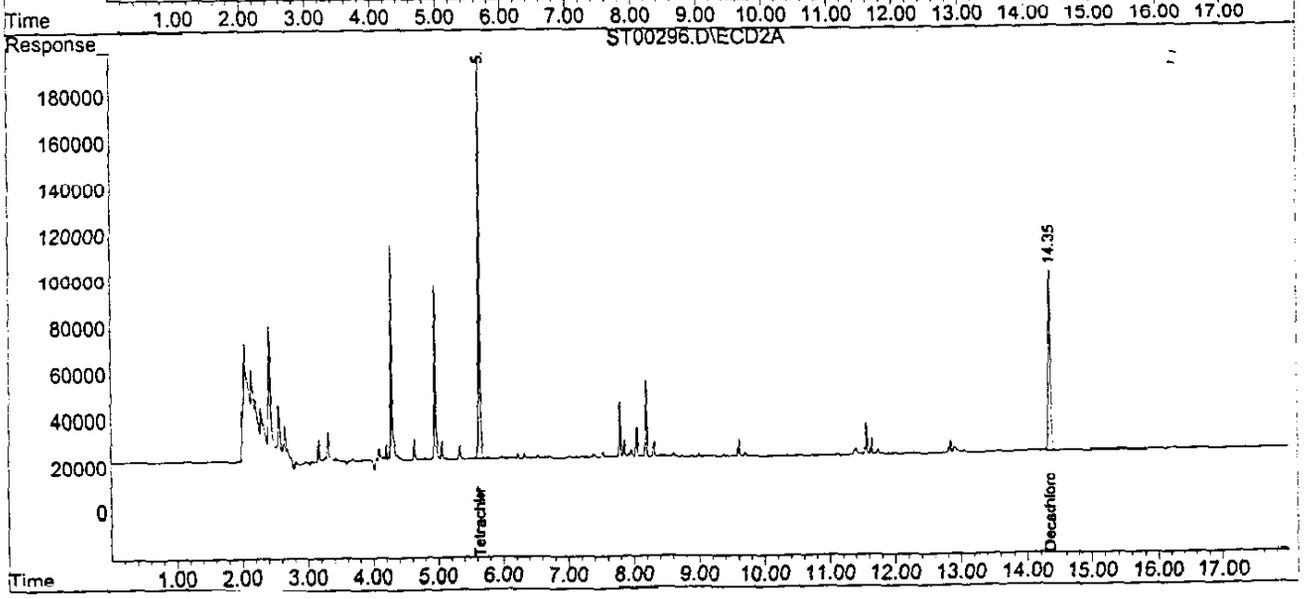
Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00296.D\ECD1B.CH Vial: 11
Acq On : 9-1-99 12:00:24 PM Operator: stephw
Sample : op956-mb Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.01
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00296.D\ECD2A.CH Vial: 11
Acq On : 9-1-99 12:00:24 PM Operator: stephw
Sample : op956-mb Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.01
IntFile : EVENTS2.E
Quant Time: Sep 3 13:55 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Wed Sep 01 13:46:30 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00296.D\ECD1B.CH Vial: 11
Acq On : 9-1-99 12:00:24 PM Operator: stephw
Sample : op956-mb Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.01
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\OLDDATA\0901PEST\ST00296.D\ECD2A.CH Vial: 11
Acq On : 9-1-99 12:00:24 PM Operator: stephw
Sample : op956-mb Inst : ECD 3
Misc : op956,gst13,water,,,10, Multiplr: 0.01
IntFile : EVENTS2.E
Quant Time: Sep 3 13:55 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Wed Sep 01 13:46:30 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.80	5.65	209150	174437	39.582	39.814
iked Amount	50.000	Range	30 - 160	Recovery	= 79.16%	79.63%
2) SC Decachlorobiphen	15.48	14.35	72534	78194	38.555	38.227
Spiked Amount	50.000	Range	30 - 160	Recovery	= 77.11%	76.45%
Target Compounds						
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000

000166

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Method Blank Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP956-MB4	ST00668.D	1	09/23/99	SKW	09/23/99	OP956	GST26

The QC reported here applies to the following samples: **Method:** SW846 3510C/8081A

F4923-1, F4923-2

CAS No.	Compound	Result	RDL	Units	Q
309-00-2	Aldrin	ND	0.050	ug/l	
319-84-6	alpha-BHC	ND	0.050	ug/l	
319-85-7	beta-BHC	ND	0.050	ug/l	
319-86-8	delta-BHC	ND	0.050	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.050	ug/l	
5103-71-9	alpha-Chlordane	ND	0.10	ug/l	
5103-74-2	gamma-Chlordane	ND	0.10	ug/l	
60-57-1	Dieldrin	ND	0.050	ug/l	
72-54-8	4,4'-DDD	ND	0.10	ug/l	
72-55-9	4,4' DDE	ND	0.10	ug/l	
50-29-3	4,4'-DDT	ND	0.10	ug/l	
72-20-8	Endrin	ND	0.10	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.10	ug/l	
7421-93-4	Endrin aldehyde	ND	0.10	ug/l	
53494-70-5	Endrin ketone	ND	0.10	ug/l	
959-98-8	Endosulfan-I	ND	0.050	ug/l	
33213-65-9	Endosulfan-II	ND	0.10	ug/l	
76-44-8	Heptachlor	ND	0.050	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.050	ug/l	
72-43-5	Methoxychlor	ND	0.20	ug/l	
8001-35-2	Toxaphene	ND	2.5	ug/l	

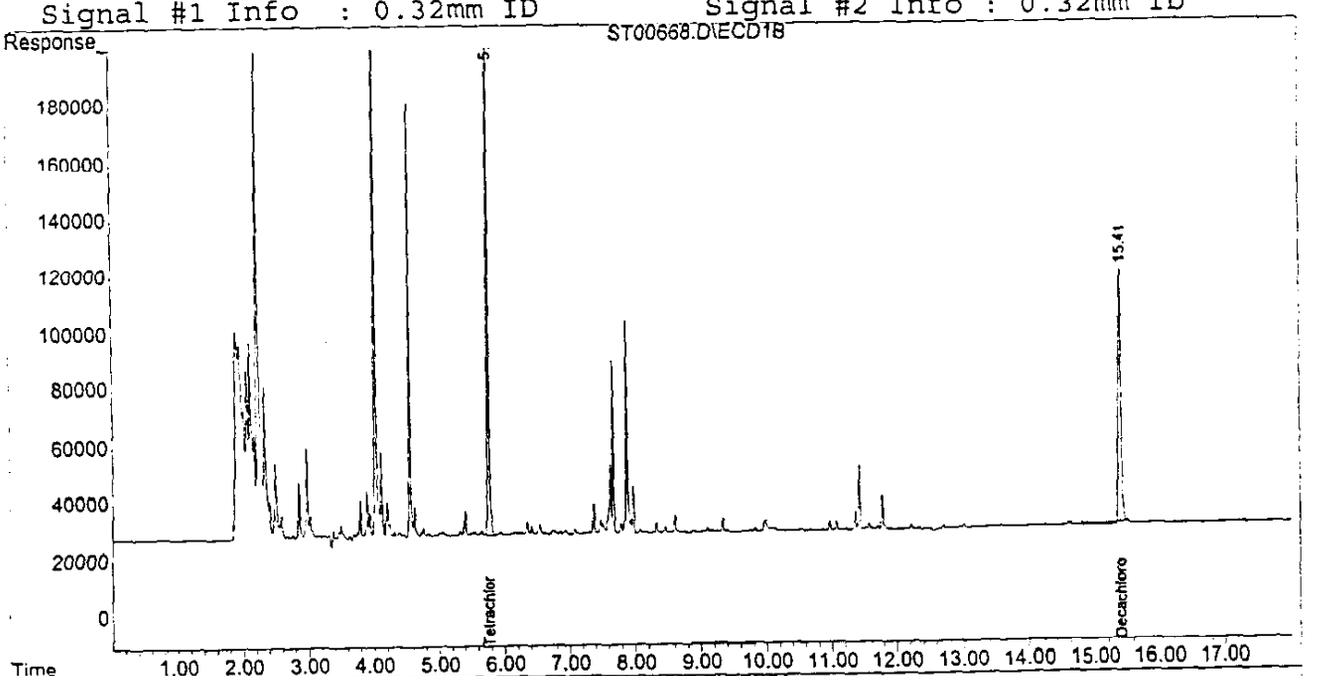
CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	80%	30-160%
2051-24-3	Decachlorobiphenyl	95%	30-160%

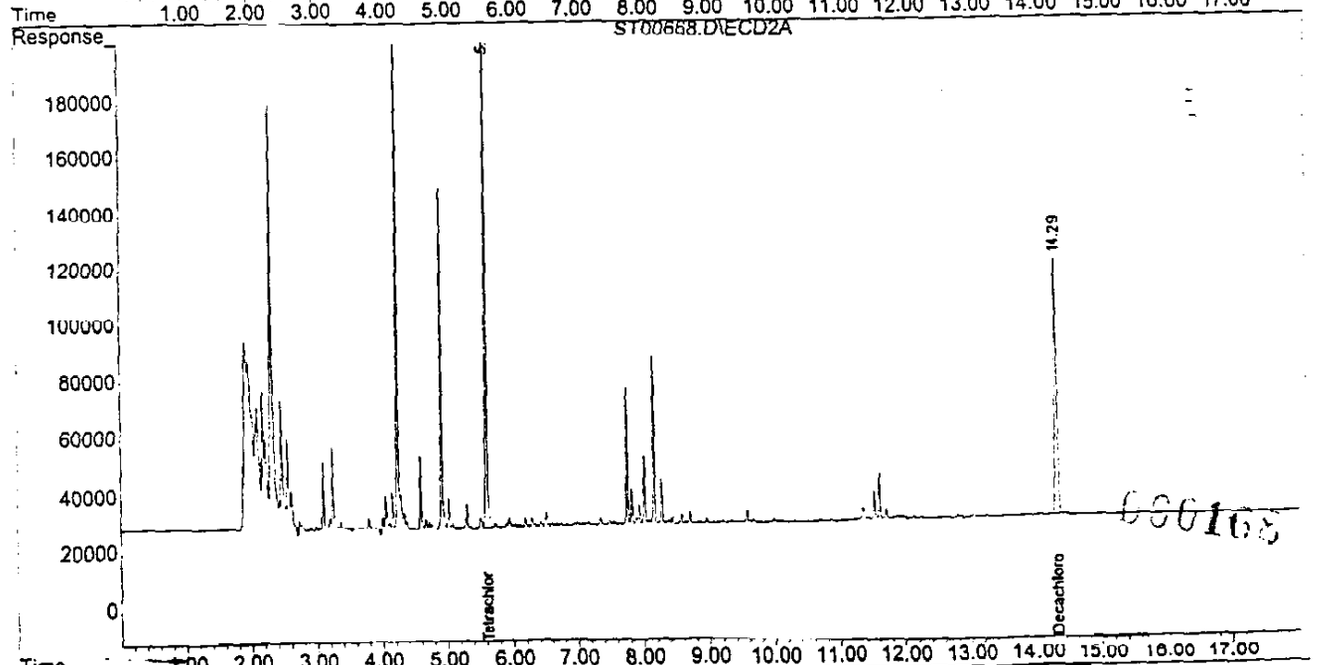
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00668.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00668.D\ECD2A.CH
Acq On : 9-23 99 1:20:08 PM Operator: stephw
Sample : op956-mb4 Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:34 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:33:37 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000165

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00668.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00668.D\ECD2A.CH
Acq On : 9-23-99 1:20:08 PM Operator: stephw
Sample : op956-mb4 Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:34 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:33:37 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.60	266661	220552	39.823	39.594
Spiked Amount 50.000 Range 30 - 160 Recovery =					79.65%	79.19%
29) SC Decachlorobiphen	15.41	14.29	89531	90031	47.725	48.498
Spiked Amount 50.000 Range 30 - 160 Recovery =					95.45%	97.00%
Target Compounds						
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000

000169

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

INITIAL CALIBRATION SUMMARY

SGC.05

Pesticide Initial Calibration Summary

Datafile	Amount
ST00617	5ppb
ST00618	10ppb
ST00619	20ppb
ST00616	40ppb
ST00620	60ppb
ST00621	80ppb

	Correlation coefficient r^2	
	Signal 1	Signal 2
Tetrachloro-m-xylene	12.3%	8.4%
alpha-BHC	11.3%	0.998
gamma-BHC (Lindane)	0.998	0.999
beta-BHC	8.8%	6.4%
Heptachlor	15.3%	13.3%
delta-BHC	14.3%	0.997
Aldrin	0.999	14.8%
Heptachlor Epoxide	12.4%	11.1%
gamma-Chlordane	14.8%	13.1%
alpha-Chlordane	14.4%	11.0%
Endosulfan I	13.1%	10.5%
4,4'-DDE	0.999	0.999
Dieldrin	1.000	12.8%
Endrin	12.4%	11.8%
4,4'-DDD	0.999	14.2%
Endosulfan II	10.3%	9.5%
4,4'-DDT	16.4%	12.7%
Endrin Aldehyde	10.1%	9.4%
Endosulfan Sulfate	9.5%	7.2%
Methoxychlor	6.2%	6.5%
Endrin Ketone	10.1%	9.5%
Decachlorobiphenyl	4.9%	6.8%

Response Factor Report ECD 3

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 15:06:21 1999

Calibration Files
5 =ST00617.D 10 =ST00618.D 20 =ST00619.D
40 =ST00616.D 60 =ST00620.D 80 =ST00621.D

		Compound	5	10	20	40	60	80	Avg		%RSD
1)	S	Tetrachloro-m-xylen	5.208	6.489	6.838	7.213	6.835	7.595	6.696	E3	12.26
2)		alpha-BHC		0.953	1.133	1.177	1.226	1.304	1.158	E4	11.33
3)	.998	gamma-BHC (Lindane)	0.678	0.876	1.002	1.029	1.075	1.149	0.968	E4	17.39
4)		beta-BHC	3.785	4.358	4.643	4.676	4.773	4.861	4.516	E3	8.78
5)		Heptachlor	6.048	7.191	7.932	8.699	8.934	9.296	8.017	E3	15.28
6)		delta-BHC		0.791	0.901	1.018	1.083	1.139	0.986	E4	14.28
7)	.999	Aldrin	5.621	6.914	7.654	8.383	8.893	9.209	7.779	E3	17.32
8)		Heptachlor Epoxide	5.763	6.910	7.465	7.644	7.887	8.367	7.339	E3	12.39
9)		gamma-Chlordane	5.358	6.566	7.357	7.323	7.819	8.374	7.133	E3	14.80
10)		alpha-Chlordane	5.409	6.576	7.081	7.484	7.782	8.334	7.111	E3	14.43
11)		Endosulfan I	5.071	6.136	6.576	6.811	7.075	7.518	6.531	E3	13.06
12)	.999	4,4'-DDE	4.797	6.159	6.935	7.506	7.961	8.334	6.940	E3	18.77
13)	1.000	Dieldrin	5.184	6.537	7.076	7.560	7.893	8.068	7.053	E3	15.21
14)		Endrin	4.095	4.793	5.110	5.580	5.512	5.857	5.158	E3	12.43
15)	0.999	4,4'-DDD	4.503	5.404	5.957	6.255	6.792	6.889	5.967	E3	15.13
16)		Endosulfan II	5.132	5.780	6.056	6.282	6.687	6.856	6.132	E3	10.27
[illegible]		4,4'-DDT	4.265	5.152	5.358	6.013	6.479	6.771	5.673	E3	16.40
[illegible]		Endrin Aldehyde	3.620	4.137	4.527	4.235	4.646	4.844	4.335	E3	10.08
19)		Endosulfan Sulfate	4.772	5.628	5.579	5.864	6.264	6.189	5.716	E3	9.46
20)		Methoxychlor	1.982	2.259	2.305	2.330	2.326	2.361	2.260	E3	6.22
21)		Endrin Ketone	4.323	5.143	5.151	5.227	5.581	5.888	5.219	E3	10.13
22)	L1	Chlordane-A							2.504	E2	0.0
23)	L1	Chlordane-B							3.065	E2	0.0
24)	L1	Chlordane-C							7.414	E2	0.0
25)	L1	Chlordane-D							4.241	E2	0.0
26)	L1	Chlordane-E							5.985	E2	0.0
27)	L1	Chlordane-F							2.656	E2	0.0
28)	H	Toxaphene							7.278	E4	0.0
29)	SC	Decachlorobiphenyl	1.821	1.992	1.935	1.934	1.829	1.745	1.876	E3	4.9

Signal #2 Calibration Files
5 =ST00617.D 10 =ST00618.D 20 =ST00619.D
40 =ST00616.D 60 =ST00620.D 80 =ST00621.D 000171

		Compound	5	10	20	40	60	80	Avg		%RS
1)	S	Tetrachloro-m-xylen	4.766	5.528	5.691	5.761	5.485	6.190	5.570	E3	8.3
2)	0.998	alpha-BHC	0.590	0.769	0.869	0.942	0.975	1.037	0.864	E4	18.6
3)	0.999	gamma-BHC (Lindane)	5.818	7.211	8.040	8.548	9.106	9.260	7.997	E3	16.3
4)		beta-BHC	3.361	3.887	3.952	3.803	3.965	4.050	3.837	E3	6.4
5)		Heptachlor	5.324	6.288	6.826	7.165	7.466	7.831	6.817	E3	13.2
6)	0.997	delta-BHC	5.106	6.310	7.104	7.758	8.412	8.870	7.260	E3	19.2
7)		Aldrin	5.022	6.099	6.679	7.201	7.377	7.683	6.677	E3	14.7
8)		Heptachlor Epoxide	4.946	5.835	6.130	6.350	6.724	6.785	6.128	E3	11.1
9)		gamma-Chlordane	4.697	5.513	5.894	6.104	6.733	6.732	5.945	E3	13.

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

Response Factor Report ECD 3

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 15:06:21 1999

Calibration Files
5 =ST00617.D 10 =ST00618.D 20 =ST00619.D
40 =ST00616.D 60 =ST00620.D 80 =ST00621.D

		Compound	5	10	20	40	60	80	Avg		%RSD
10)		alpha-Chlordane	4.861	5.646	6.083	6.150	6.391	6.739	5.978	E3	10.97
11)		Endosulfan I	4.520	5.267	5.480	5.691	5.963	6.137	5.510	E3	10.49
12)	0.999	4,4'-DDE	3.967	5.107	5.554	5.959	6.348	6.483	5.570	E3	16.80
13)		Dieldrin	4.724	5.518	6.074	6.240	6.703	6.735	5.999	E3	12.82
14)		Endrin	3.515	4.083	4.444	4.792	4.651	4.901	4.398	E3	11.83
15)		4,4'-DDD	3.569	4.506	4.793	5.024	5.286	5.440	4.770	E3	14.19
16)		Endosulfan II	4.341	5.071	5.260	5.357	5.583	5.746	5.226	E3	9.47
17)		4,4'-DDT	3.627	4.145	4.335	4.550	4.990	5.181	4.471	E3	12.72
18)		Endrin Aldehyde	2.007	2.462	2.567	2.482	2.613	2.627	2.460	E3	9.41
19)		Endosulfan Sulfate	3.989	4.550	4.653	4.625	4.825	4.937	4.596	E3	7.18
20)		Methoxychlor	1.914	2.220	2.281	2.272	2.256	2.265	2.201	E3	6.46
21)		Endrin Ketone	3.701	4.352	4.499	4.468	4.745	4.929	4.449	E3	9.48
22)	L1	Chlordane-A							2.090	E2	0.00
23)	L1	Chlordane-B							2.670	E2	0.00
24)	L1	Chlordane-C							5.864	E2	0.00
25)	L1	Chlordane-D							5.276	E2	0.00
)	L1	Chlordane-E							3.561	E2	0.00
)	L1	Chlordane-F							2.099	E2	0.00
28)	H	Toxaphene							5.989	E4	0.00
29)	SC	Decachlorobiphenyl	1.783	2.043	1.946	1.895	1.755	1.716	1.856	E3	6.81

000172

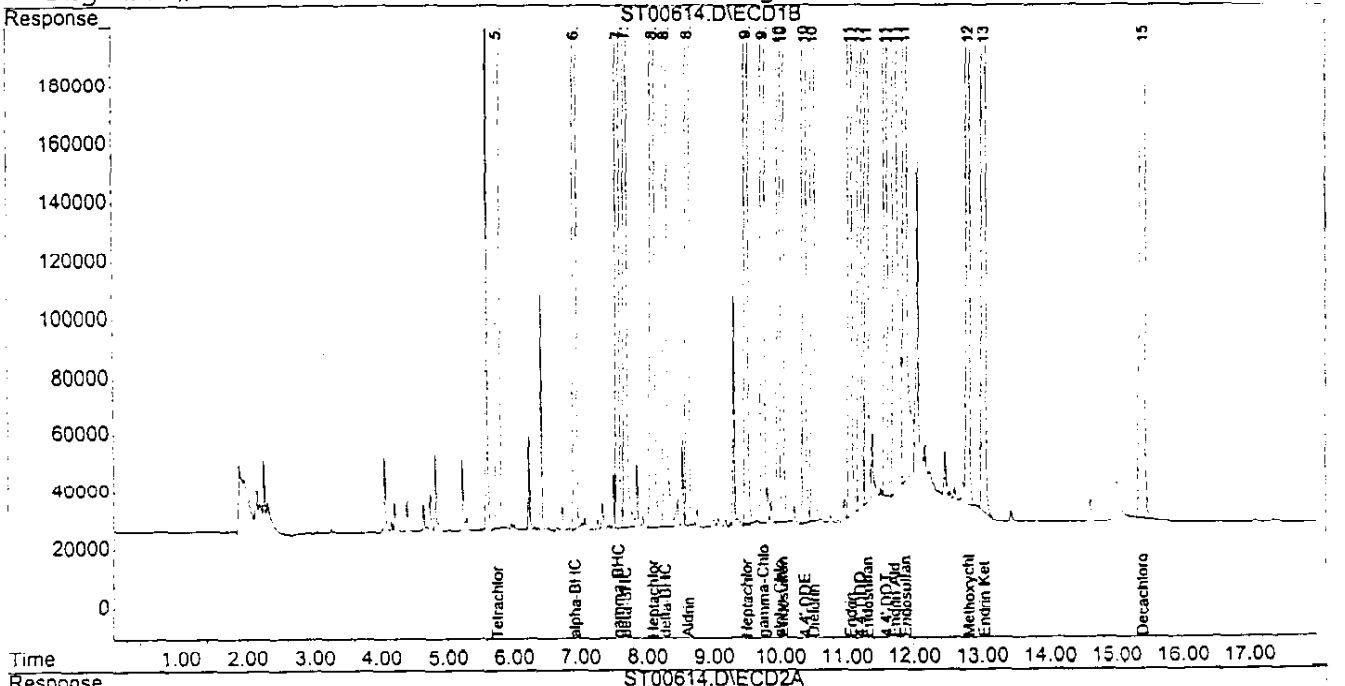
(#) = Out of Range ### Number of calibration levels exceeded format ###

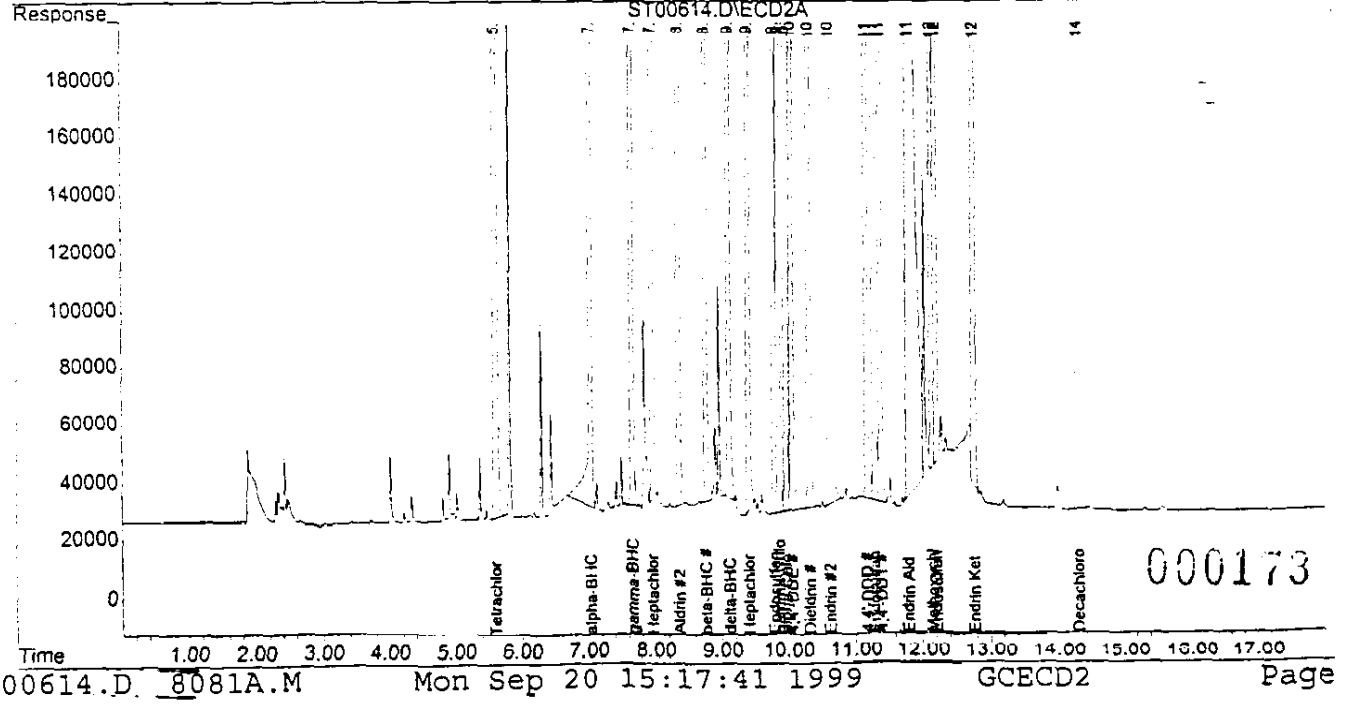
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00614.D\ECD1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00614.D\ECD2A.CH
Acq On : 9-20-99 8:44:20 AM Operator: stephw
Sample : cond std Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:52 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Sat Sep 18 12:40:24 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000173

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00614.D\ECD1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00614.D\ECD2A.CH
Acq On : 9-20-99 8:44:20 AM Operator: stephw
Sample : cond std Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:52 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Sat Sep 18 12:40:24 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.76	5.61	6423071	5485179	976.847	1037.742
	Spiked Amount 50.000 Range 40 - 150 Recovery = 1953.69%# 2075.48%#						
29)	SC Decachlorobiphen	15.41	14.29	1918309	1820818	1032.689	1005.569
	Spiked Amount 50.000 Range 30 - 160 Recovery = 2065.38%# 2011.14%#						
	Target Compounds						
2)	alpha-BHC	6.92	7.04	10644842	8776020	1006.757	1059.852
	gamma-BHC (Linda	7.57	7.66	10004952	8579974	1058.069	1114.830
4)	beta-BHC	7.68	8.77	4804690	4021896	1162.688	1149.825
5)	Heptachlor	8.09	7.96	7674117	6633663	1006.429	1024.093
6)	delta BHC	8.27	9.12	10253875	8402515	1149.775	1211.455
7)	Aldrin	8.62	8.36	7691622	6535449	1013.206	1021.135
8)	Heptachlor Epoxi	9.50	9.41	7186144	6031128	1022.779	1044.612
9)	gamma-Chlordane	9.75	9.86	7625624	6427485	1126.136	1164.679
10)	alpha-Chlordane	10.00	9.97	7415815	6114851	1110.827	1094.581
11)	Endosulfan I	10.04	9.80	6475424	5370908	1033.360	1049.875
12)	4,4'-DDE	10.38	10.06	7538880	6082638	1152.702	1187.454
13)	Dieldrin	10.51	10.33	7240805	6162432	1093.043	1105.556
14)	Endrin	11.06	10.63	6508272	5322771	1191.856	1159.223
15)	4,4'-DDD	11.20	11.18	6323929	5361634	1103.613	1182.286
16)	Endosulfan II	11.31	11.29	6444137	5328937	1122.786	1092.897
17)	4,4'-DDT	11.59	11.39	6794777	5383456	1423.600	1404.816
18)	Endrin Aldehyde	11.72	11.80	4600978	2729900	1351.488	1498.847
19)	Endosulfan Sulfa	11.88	12.21	6299429	4805148	1221.085	1196.964
20)	Methoxychlor	12.81	12.15	2611177	2473605	1325.542	1295.091
21)	Endrin Ketone	13.04	12.76	5482194	4485805	1185.488	1169.309
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000174

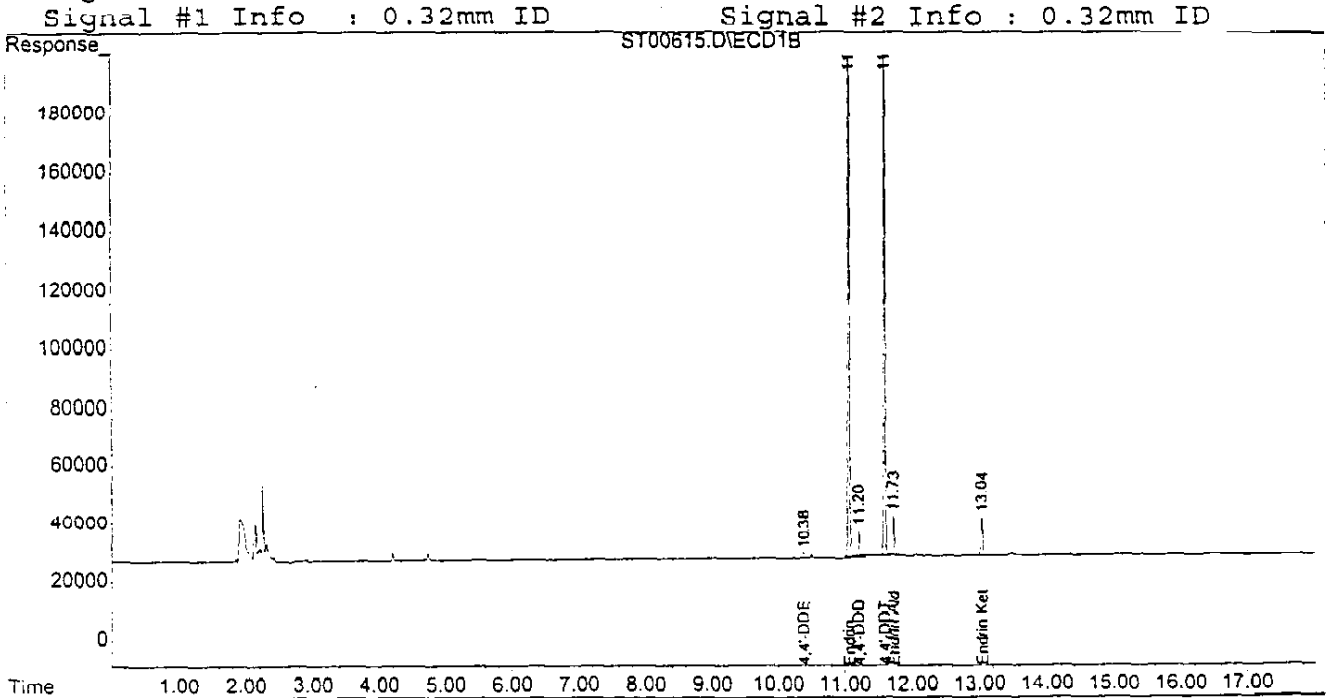
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

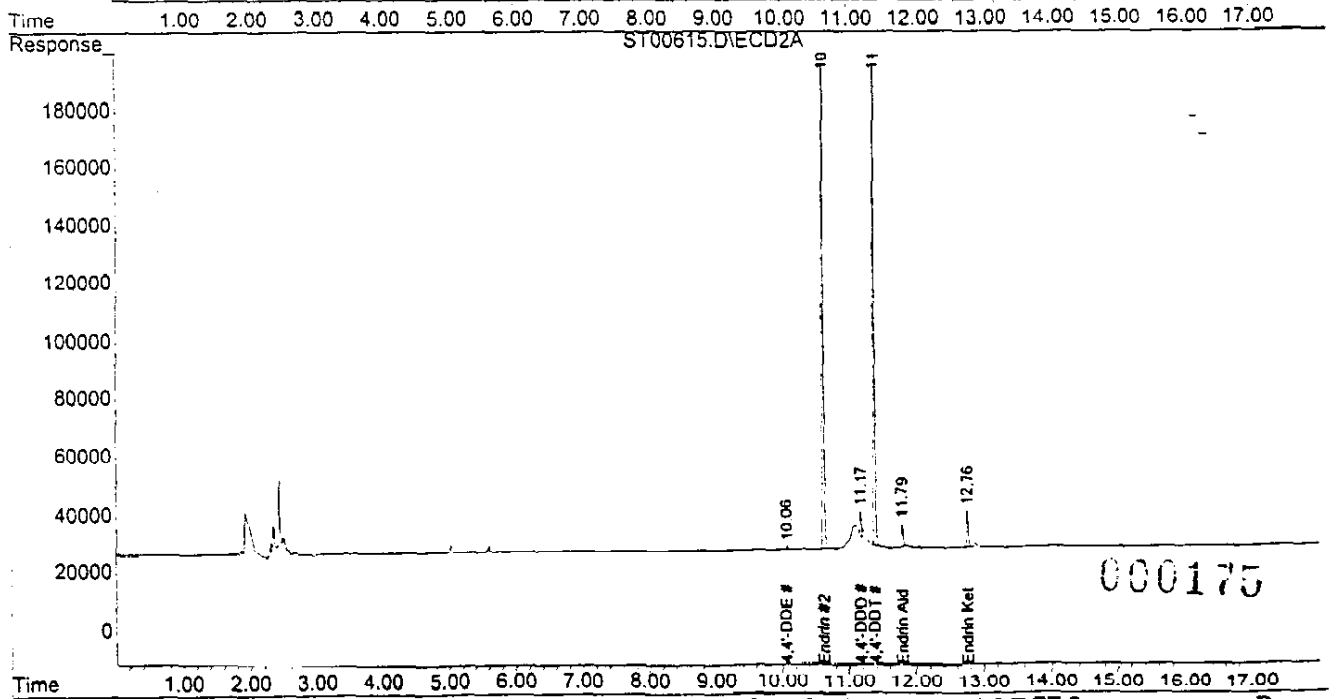
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00615.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00615.D\ECD2A.CH
Acq On : 9-20-99 9:05:27 AM Operator: stephw
Sample : ddt/endrin breakdown p458 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 10:51 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Sat Sep 18 12:40:24 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000175

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00615.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00615.D\ECD2A.CH
Acq On : 9-20-99 9:05:27 AM Operator: stephw
Sample : ddt/endrin breakdown p458 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 10:51 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Sat Sep 18 12:40:24 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	Target Compounds						
12)	4,4'-DDE	10.38	10.06	1840	1469	0.281m	0.287m
14)	Endrin	11.06	10.63	265057	223650	48.540	48.708
15)	4,4'-DDD	11.21	11.17	9792	8262	1.709	1.822m
17)	4,4'-DDT	11.59	11.39	256051	202392	53.646	52.814
1	Endrin Aldehyde	11.73	11.80	14139	7796	4.153	4.280
2	Endrin Ketone	13.04	12.76	13933	12338	3.013	3.216
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

Endrin = 9.6%, 8.2%

DDT = 4.3%, 4.6%

000176

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Endrin & DDT Column Breakdown

Data File:	ST00615	Inst.:	ST
Date of Analysis	9/20/99	Time of Analysis	9:05

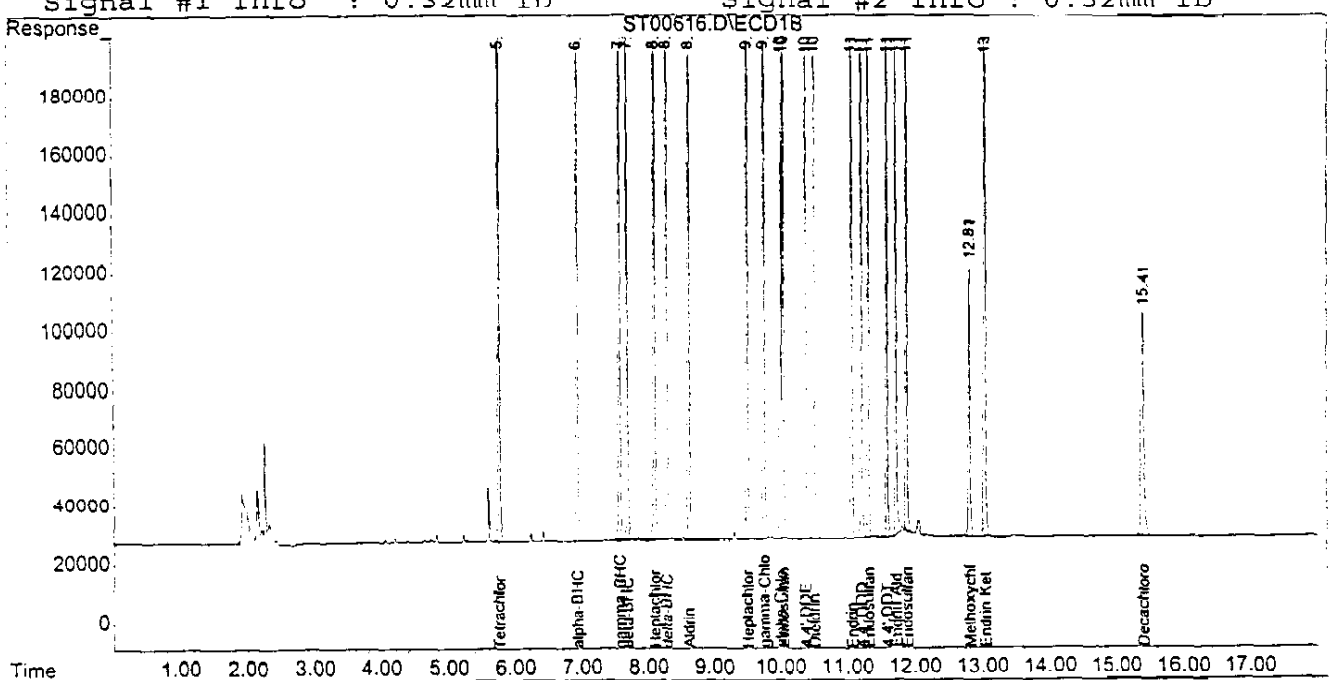
	Column 1		Column 2
Endrin	9.6		8.2
DDT	4.3		4.6

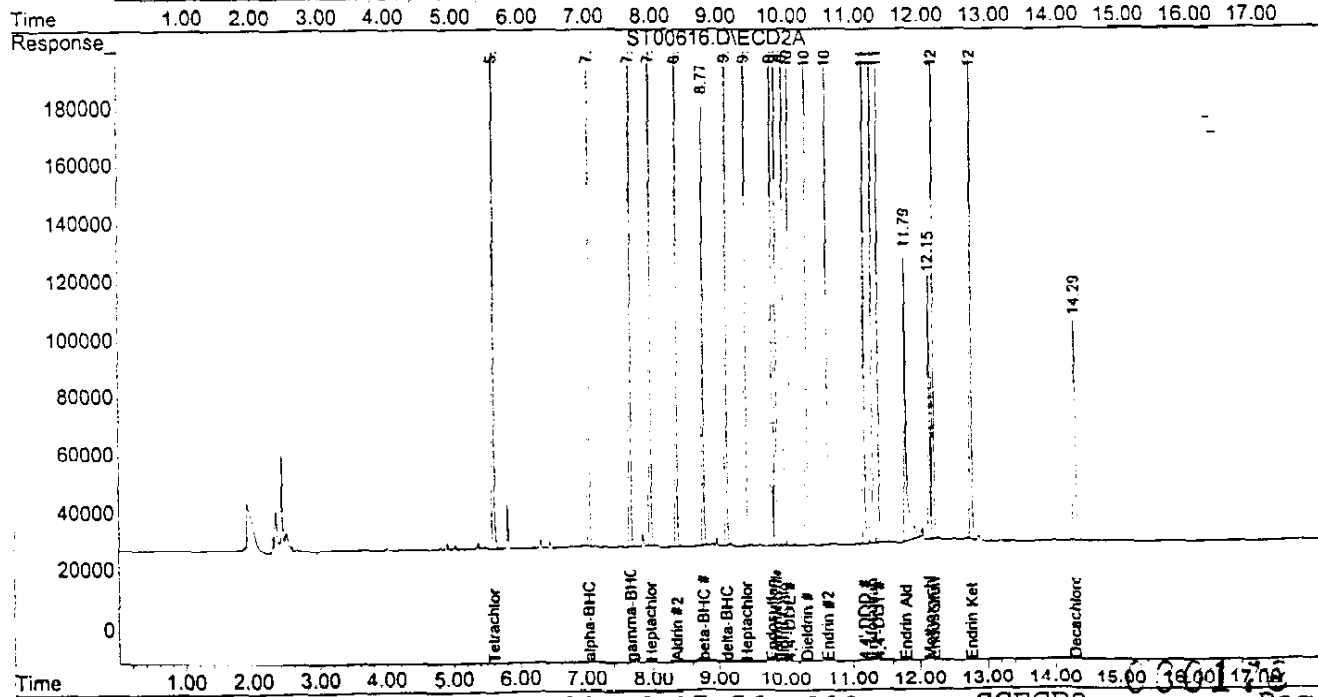
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00616.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00616.D\ECD2A.CH
Acq On : 9-20-99 9:26:37 AM Operator: stephw
Sample : 40ppb ccv p459 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:52 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Sat Sep 18 12:40:24 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00616.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00616.D\ECD2A.CH
Acq On : 9-20-99 9:26:37 AM Operator: stephw
Sample : 40ppb ccv p459 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:52 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Sat Sep 18 12:40:24 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.76	5.61	288520	230444	43.879	43.598
	Spiked Amount 50.000 Range 40 - 150 Recovery -					87.76%	87.20%
29)	SC Decachlorobiphen	15.41	14.29	77354	75816	41.642	41.870
	Spiked Amount 50.000 Range 30 - 160 Recovery =					83.28%	83.74%
	Target Compounds						
3)	alpha-BHC	6.93	7.04	470709	376736	44.518	45.497
	gamma-BHC (Linda	7.57	7.66	411621	341934	43.531	44.429
4)	beta-BHC	7.69	8.77	187041	152138	45.262	43.495
5)	Heptachlor	8.09	7.96	347975	286599	45.635	44.245
6)	delta BHC	8.28	9.11	407015	310323	45.639	44.742
7)	Aldrin	8.62	8.36	335306	288034	44.169	45.004
8)	Heptachlor Epoxi	9.50	9.40	305757	254010	43.517	43.995
9)	gamma-Chlordane	9.75	9.86	292909	244165	43.256	44.243
10)	alpha-Chlordane	10.00	9.97	299366	246004	44.842	44.036
11)	Endosulfan I	10.04	9.79	272456	227641	43.479	44.498
12)	4,4'-DDE	10.38	10.06	300243	238352	45.907	46.531
13)	Dieldrin	10.51	10.33	302387	249613	45.647	44.781
14)	Endrin	11.06	10.63	223193	191692	40.873	41.748
15)	4,4'-DDD	11.21	11.17	250184	200952	43.661	44.312
16)	Endosulfan II	11.31	11.29	251269	214277	43.779	43.945
17)	4,4'-DDT	11.59	11.39	240529	181991	50.394	47.491
18)	Endrin Aldehyde	11.72	11.79	169394	99297	49.758	54.519
19)	Endosulfan Sulfa	11.88	12.20	234544	184992	45.464	46.082
20)	Methoxychlor	12.81	12.15	93210	90874	47.318	47.579
21)	Endrin Ketone	13.04	12.76	209065	178708	45.209	46.584
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000179

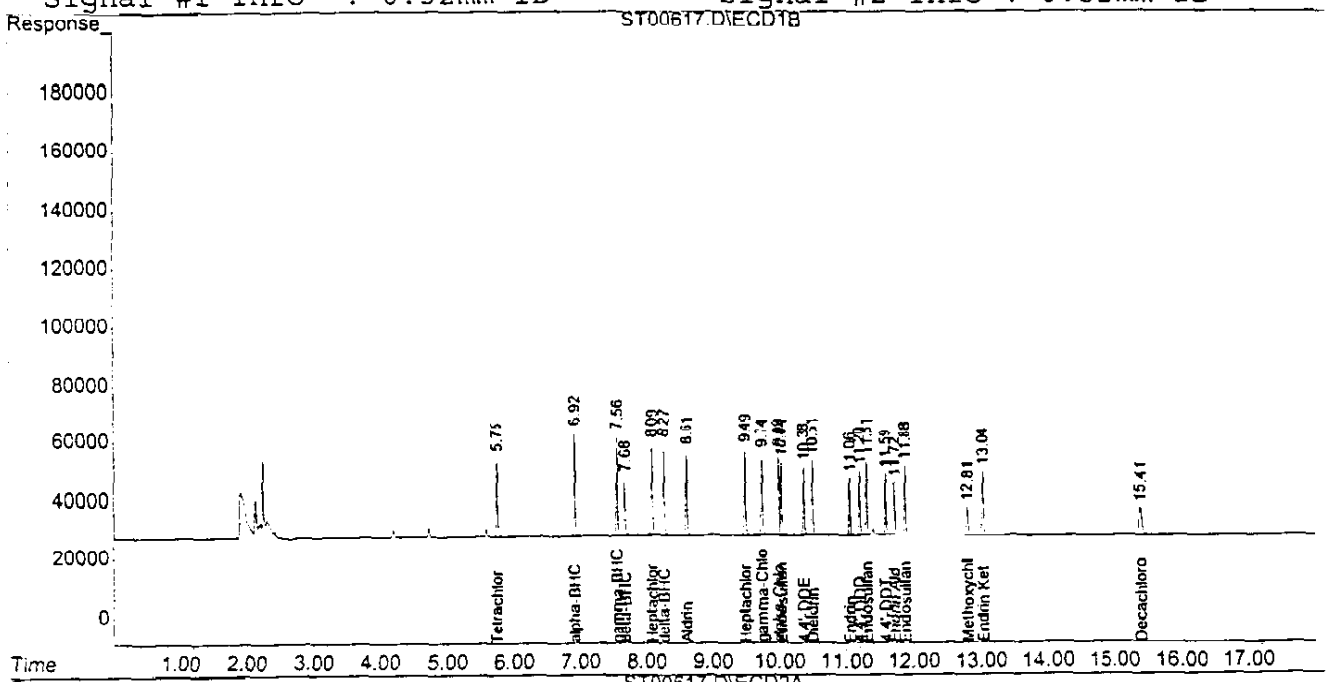
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

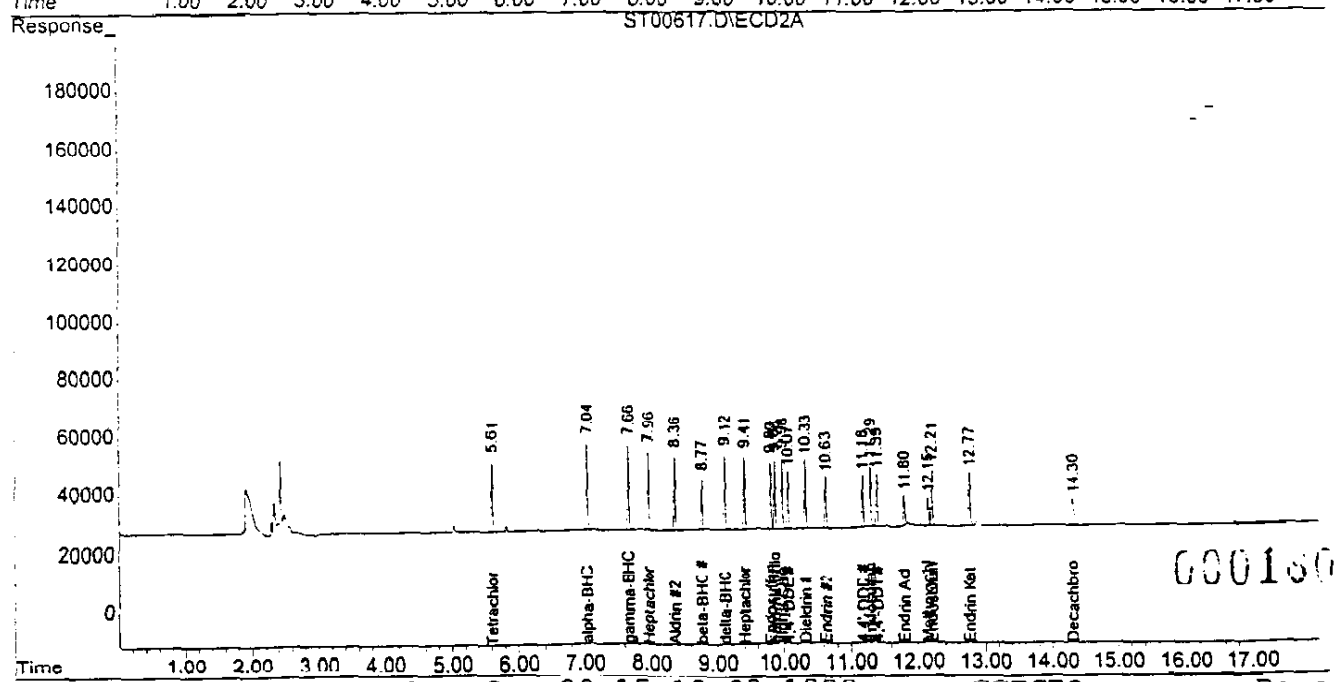
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00617.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00617.D\ECD2A.CH
Acq On : 9-20-99 10:20:49 AM Operator: stephw
Sample : 5ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:53 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:53:00 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00617.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00617.D\ECD2A.CH
Acq On : 9-20-99 10:20:49 AM Operator: stephw
Sample : 5ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:53 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:53:00 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.75	5.61	26040	23828	3.890	4.439
Spiked Amount	50.000 Range	40 - 150		Recovery	=	7.78%#	8.88%#
29) SC	Decachlorobiphen	15.41	14.30	9103	8914	4.861	4.872
Spiked Amount	50.000 Range	30 - 160		Recovery	=	9.72%#	9.74%#
	Target Compounds						
2)	alpha-BHC	6.92	7.04	35446	29507	3.313	3.513
	gamma-BHC (Linda	7.56	7.66	33897	29091	3.561	3.736
4)	beta-BHC	7.68	8.77	18925	16805	4.474	4.725
5)	Heptachlor	8.09	7.96	30240	26622	3.889	4.053
6)	delta-BHC	8.27	9.12	30624	25531	3.398	3.659
7)	Aldrin	8.61	8.36	28105	25108	3.667	3.874
8)	Heptachlor Epoxi	9.49	9.41	28814	24729	4.073	4.238
9)	gamma-Chlordane	9.75	9.86	26788	23483	3.931	4.188
10)	alpha-Chlordane	9.99	9.98	27047	24304	3.992	4.298
11)	Endosulfan I	10.04	9.80	25354	22599	4.002	4.352
12)	4,4'-DDE	10.38	10.07	23986	19833	3.617	3.790
13)	Dieldrin	10.51	10.33	25922	23621	3.845	4.180
14)	Endrin	11.06	10.63	20476	17574	3.756	3.816
15)	4,4'-DDD	11.20	11.18	22517	17845	3.917	3.905
16)	Endosulfan II	11.31	11.29	25662	21704	4.421	4.391
17)	4,4'-DDT	11.59	11.39	21323	18137	4.325	4.577
18)	Endrin Aldehyde	11.72	11.80	18099	10037	5.103	5.205
19)	Endosulfan Sulfa	11.88	12.21	23859	19944	4.525	4.843
20)	Methoxychlor	12.81	12.15	9908	9572	4.899	4.855
21)	Endrin Ketone	13.04	12.77	21614	18504	4.612	4.704
Sum	Chlordane-A			0	0	N.D.	N.D.
Average	Chlordane-A					0.000	0.000

000181

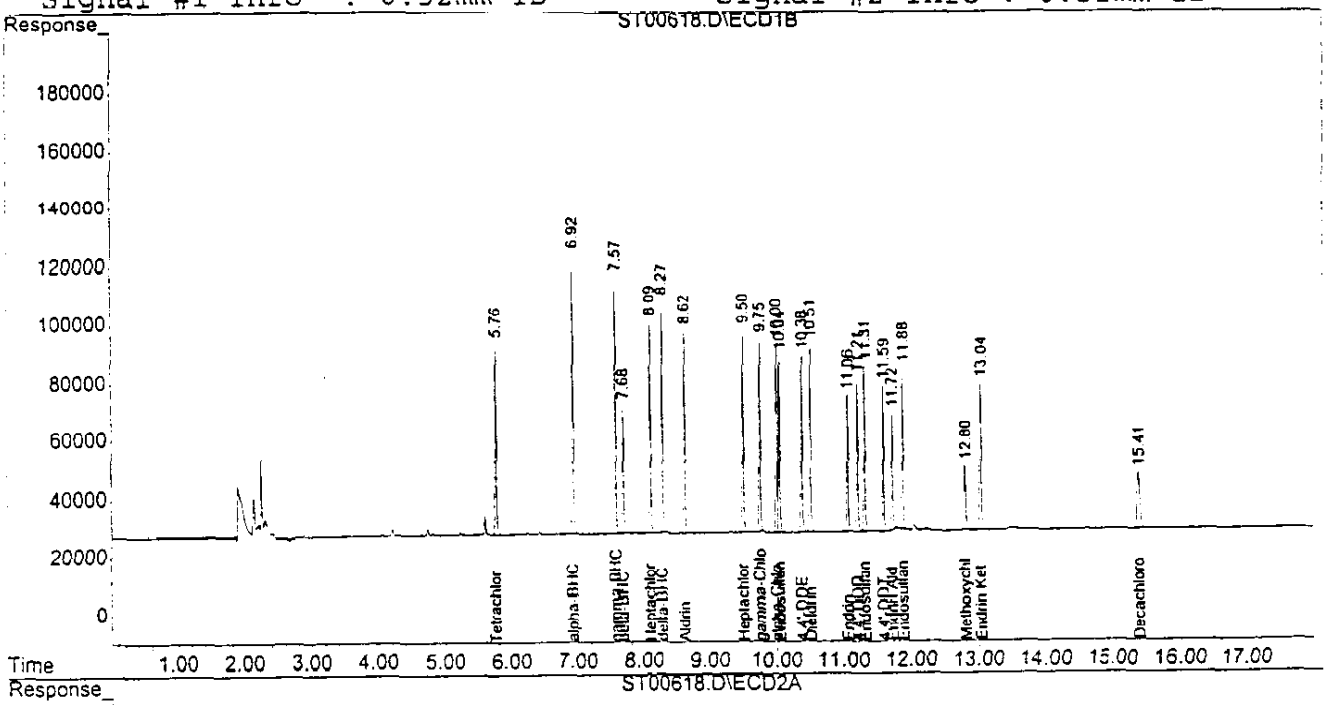
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

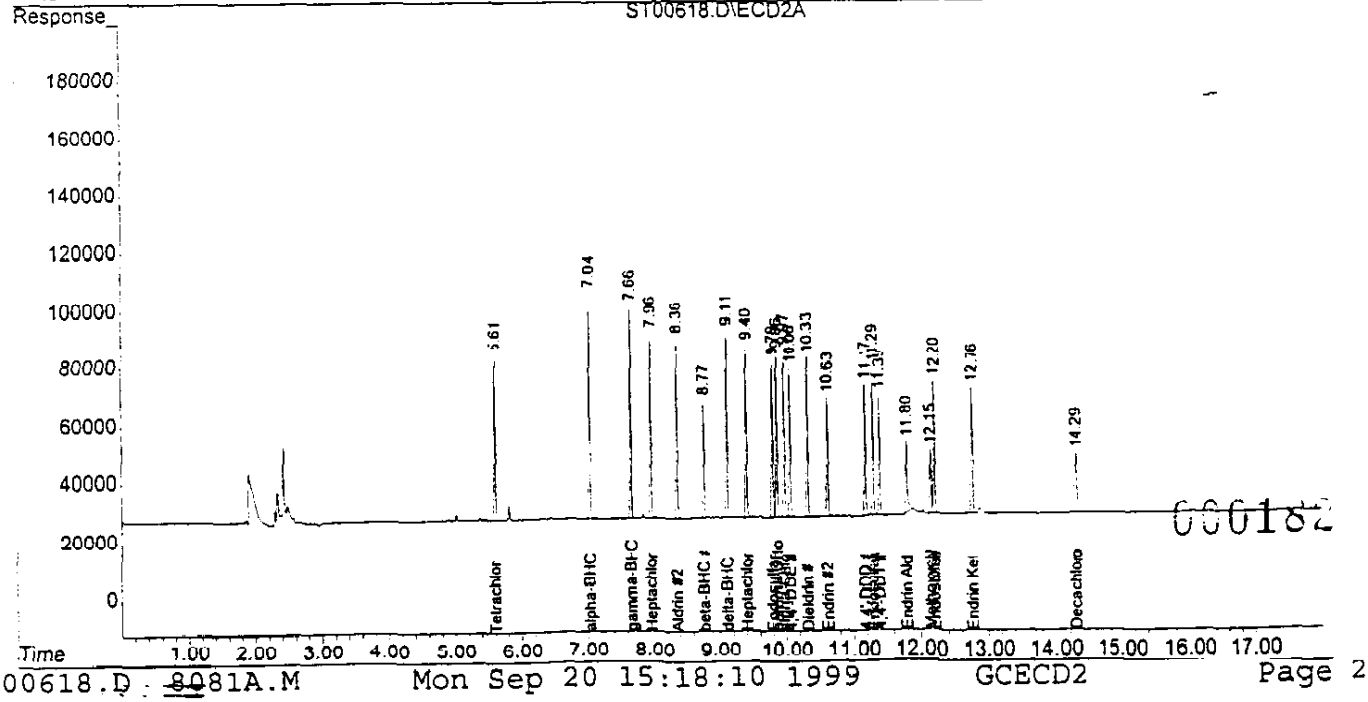
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00618.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00618.D\ECD2A.CH
Acq On : 9-20-99 10:41:59 AM Operator: stephw
Sample : 10ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:54 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:53:52 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000182

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00618.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00618.D\ECD2A.CH
Acq On : 9-20-99 10:41:59 AM Operator: stephw
Sample : 10ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:54 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:53:52 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.76	5.61	64887	55282	9.808	10.290
	Spiked Amount 50.000 Range 40 - 150 Recovery =					19.62%#	20.58%#
29) SC	Decachlorobiphen	15.41	14.29	19922	20433	10.644	11.201
	Spiked Amount 50.000 Range 30 - 160 Recovery =					21.29%#	22.40%#
	Target Compounds						
2)	alpha-BHC	6.92	7.04	95298	76855	9.006	9.195
3	gamma-BHC (Linda	7.57	7.66	87575	72111	9.275	9.300
4,	beta-BHC	7.68	8.77	43581	38871	10.294	10.909
5)	Heptachlor	8.09	7.96	71913	62875	9.267	9.586
6)	delta-BHC	8.28	9.11	79071	63097	8.807	9.049
7)	Aldrin	8.62	8.36	69142	60991	9.094	9.433
8)	Heptachlor Epoxi	9.50	9.40	69099	58348	9.740	9.985
9)	gamma-Chlordane	9.75	9.86	65658	55135	9.620	9.786
10)	alpha-Chlordane	10.00	9.97	65761	56460	9.751	9.940
11)	Endosulfan I	10.04	9.79	61357	52673	9.722	10.069
12)	4,4'-DDE	10.38	10.06	61587	51073	9.294	9.714
13)	Dieldrin	10.51	10.33	65366	55185	9.652	9.684
14)	Endrin	11.06	10.63	47929	40831	8.859	8.949
15)	4,4'-DDD	11.21	11.17	54037	45061	9.332	9.846
16)	Endosulfan II	11.31	11.29	57799	50715	9.843	10.181
17)	4,4'-DDT	11.59	11.39	51521	41446	10.254	10.366
18)	Endrin Aldehyde	11.72	11.80	41372	24621	11.323	12.308
19)	Endosulfan Sulfa	11.88	12.20	56279	45498	10.560	10.875
20)	Methoxychlor	12.81	12.15	22592	22198	11.007	11.096
21)	Endrin Ketone	13.04	12.76	51425	43524	10.722	10.829
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000183

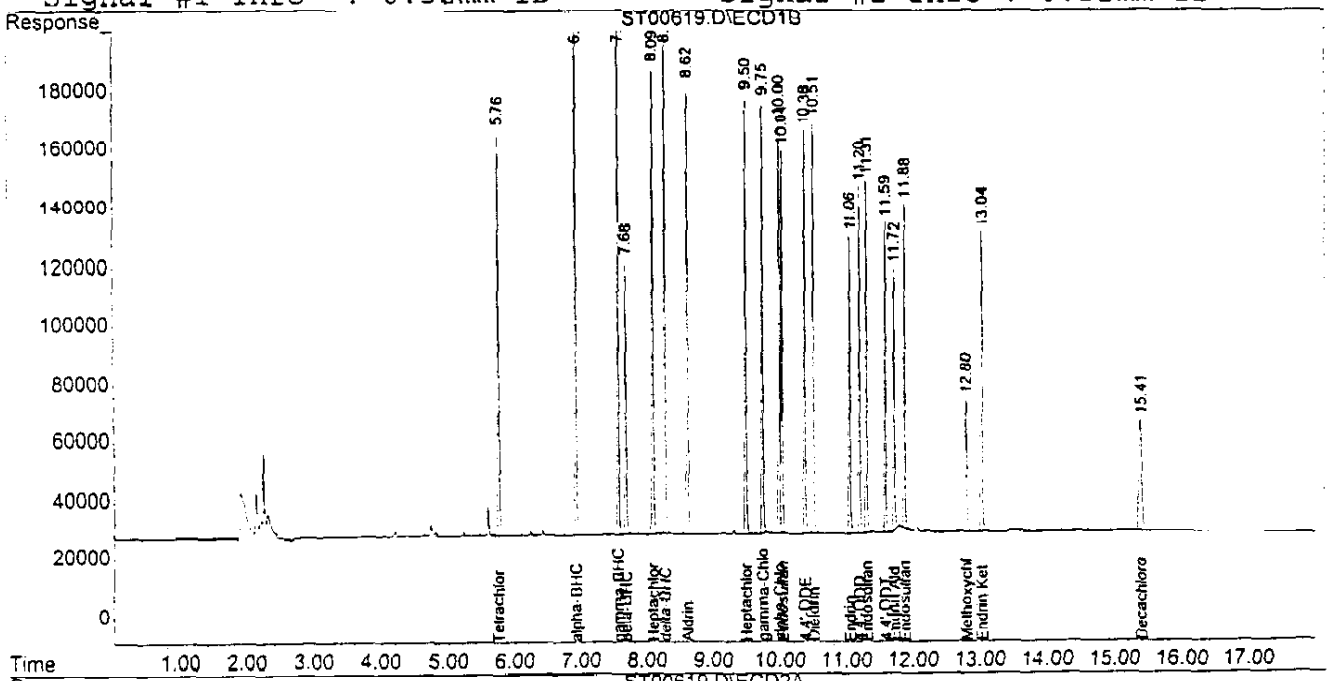
(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

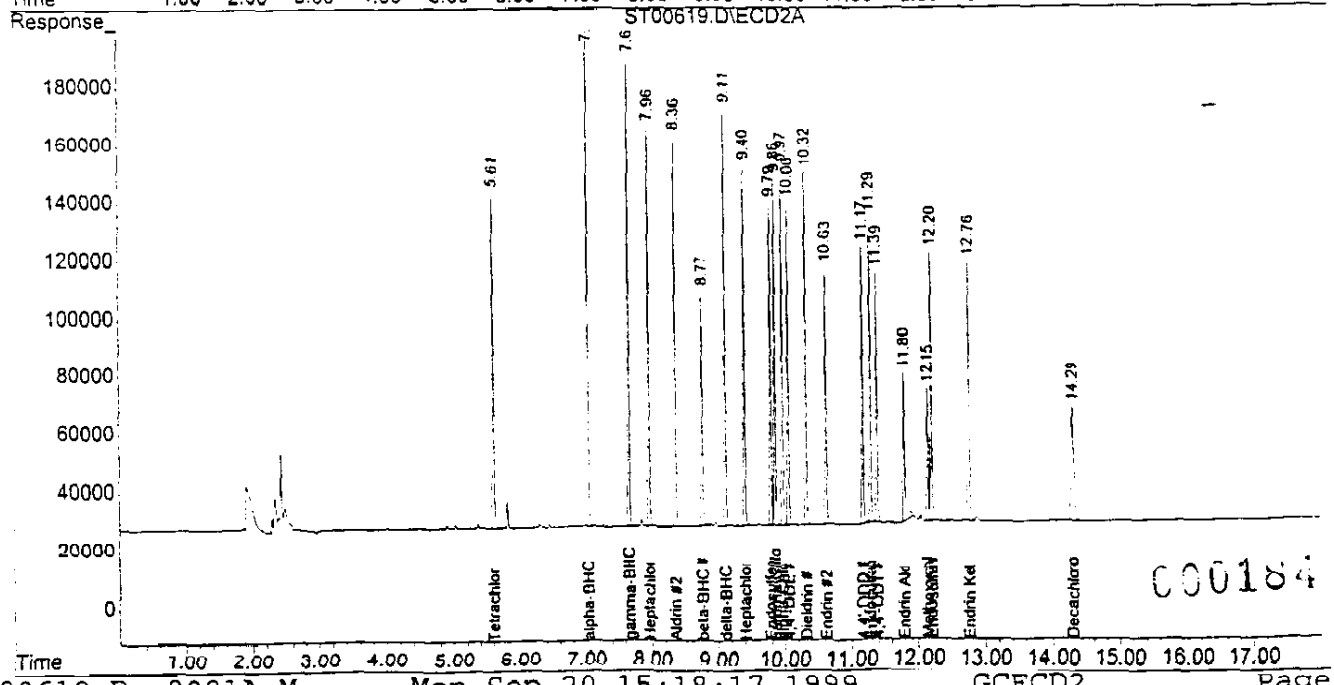
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00619.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00619.D\ECD2A.CH
Acq On : 9-20-99 11:03:07 AM Operator: stephw
Sample : 20ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:54 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:54:18 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000184

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00619.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00619.D\ECD2A.CH
Acq On : 9-20-99 11:03:07 AM Operator: stephw
Sample : 20ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:54 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:54:18 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.61	136753	113827	20.642	20.974
Spiked Amount 50.000 Range 40 150 Recovery =					41.28%	41.95%
29) SC Decachlorobiphen	15.41	14.29	38708	38917	20.570	20.916
Spiked Amount 50.000 Range 30 - 160 Recovery =					41.14%	41.83%
Target Compounds						
2) alpha-BHC	6.92	7.04	226592	173900	21.381	20.730
3 gamma-BHC (Linda	7.57	7.66	200398	160798	21.174	20.641
4) beta-BHC	7.69	8.77	92851	79048	21.667	21.816
5) Heptachlor	8.09	7.96	158650	136526	20.350	20.714
6) delta-BHC	8.28	9.11	180192	142081	20.083	20.335
7) Aldrin	8.62	8.36	153084	133585	20.137	20.579
8) Heptachlor Epoxi	9.50	9.40	149298	122593	20.889	20.847
9) gamma-Chlordane	9.75	9.86	147137	117877	21.368	20.778
10) alpha-Chlordane	10.00	9.97	141611	121657	20.868	21.239
11) Endosulfan I	10.04	9.79	131526	109598	20.737	20.785
12) 4,4'-DDE	10.38	10.06	138691	111088	20.794	20.881
13) Dieldrin	10.51	10.32	141521	121479	20.663	21.173
14) Endrin	11.06	10.63	102201	88875	19.099	19.644
15) 4,4'-DDD	11.21	11.17	119135	95864	20.547	20.791
16) Endosulfan II	11.31	11.29	121116	105194	20.529	20.882
17) 4,4'-DDT	11.59	11.39	107159	86698	20.741	21.132
18) Endrin Aldehyde	11.73	11.80	90538	51340	23.970	24.227
19) Endosulfan Sulfa	11.88	12.20	111588	93061	20.554	21.799
20) Methoxychlor	12.81	12.15	46093	45616	21.791	22.132
21) Endrin Ketone	13.04	12.76	103026	89974	21.057	21.879
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000

000185

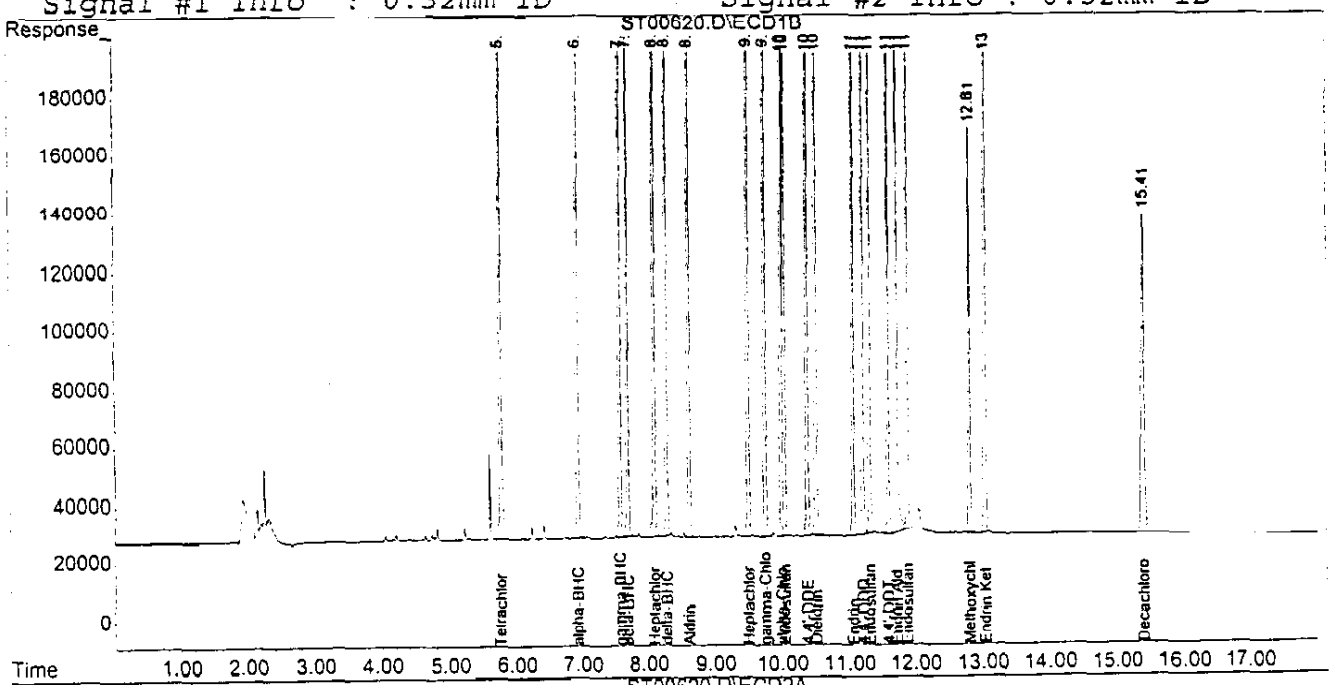
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

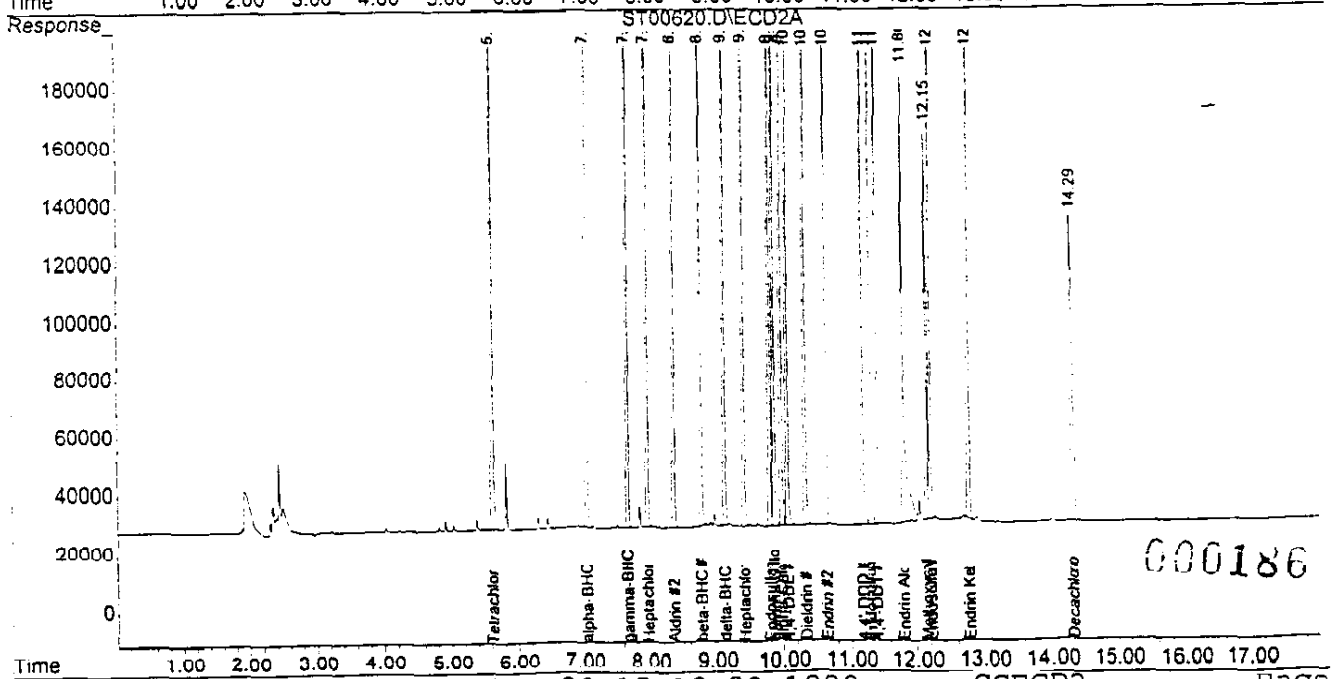
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00620.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00620.D\ECD2A.CH
Acq On : 9-20-99 11:24:25 AM Operator: stephw
Sample : 60ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:55 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:54:46 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000186

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00620.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00620.D\ECD2A.CH
Acq On : 9-20-99 11:24:25 AM Operator: stephw
Sample : 60ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:55 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:54:46 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.61	410094	329121	61.701	59.950
Spiked Amount 50.000 Range 40 - 150 Recovery =					123.40%	119.90%
29) SC Decachlorobiphen	15.41	14.29	109712	105307	58.931	56.879
Spiked Amount 50.000 Range 30 - 160 Recovery =					117.86%	113.76%
Target Compounds						
2) alpha-BHC	6.93	7.04	735370	585005	68.413	69.111
3) gamma-BHC (Linda	7.57	7.66	644810	546348	67.480	69.626
4) beta-BHC	7.69	8.77	286374	237887	65.435	64.403
5) Heptachlor	8.09	7.96	536044	447965	68.228	67.345
6) delta-BHC	8.28	9.11	649950	504695	72.290	71.732
7) Aldrin	8.62	8.36	533607	442633	69.994	67.759
8) Heptachlor Epoxi	9.50	9.40	473209	403444	65.297	67.837
9) gamma-Chlordane	9.75	9.86	469112	403969	67.190	70.362
10) alpha-Chlordane	10.00	9.97	466945	383465	67.879	66.081
11) Endosulfan I	10.04	9.79	424471	357803	66.304	67.119
12) 4,4'-DDE	10.38	10.06	477640	380884	70.740	70.574
13) Dieldrin	10.51	10.33	473563	402170	67.885	68.936
14) Endrin	11.06	10.63	330690	279058	62.644	62.242
15) 4,4'-DDD	11.21	11.17	407520	317141	69.821	68.173
16) Endosulfan II	11.31	11.29	401192	334989	67.352	65.645
17) 4,4'-DDT	11.59	11.39	388749	299429	73.616	71.277
18) Endrin Aldehyde	11.73	11.80	278770	156774	70.224	70.344
19) Endosulfan Sulfa	11.88	12.20	375826	289528	68.491	66.187
20) Methoxychlor	12.81	12.15	139547	135385	64.551	64.445
21) Endrin Ketone	13.04	12.76	334832	284703	67.294	67.484
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000

000187

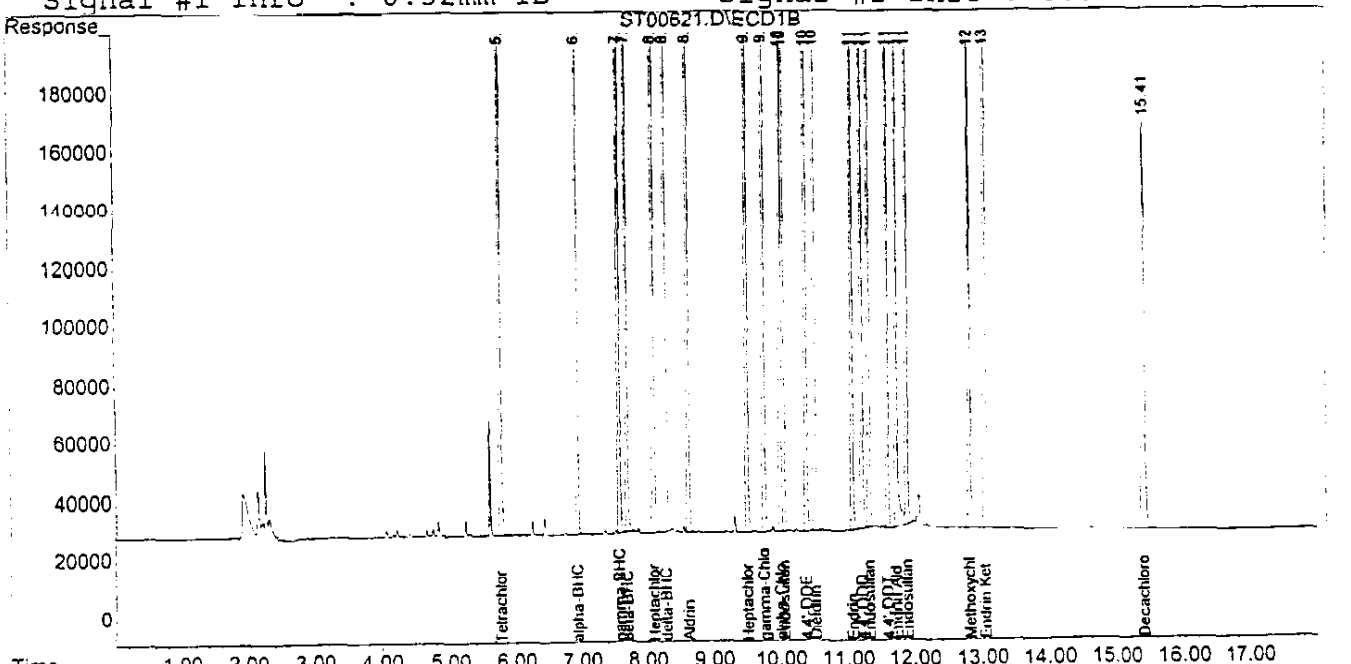
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

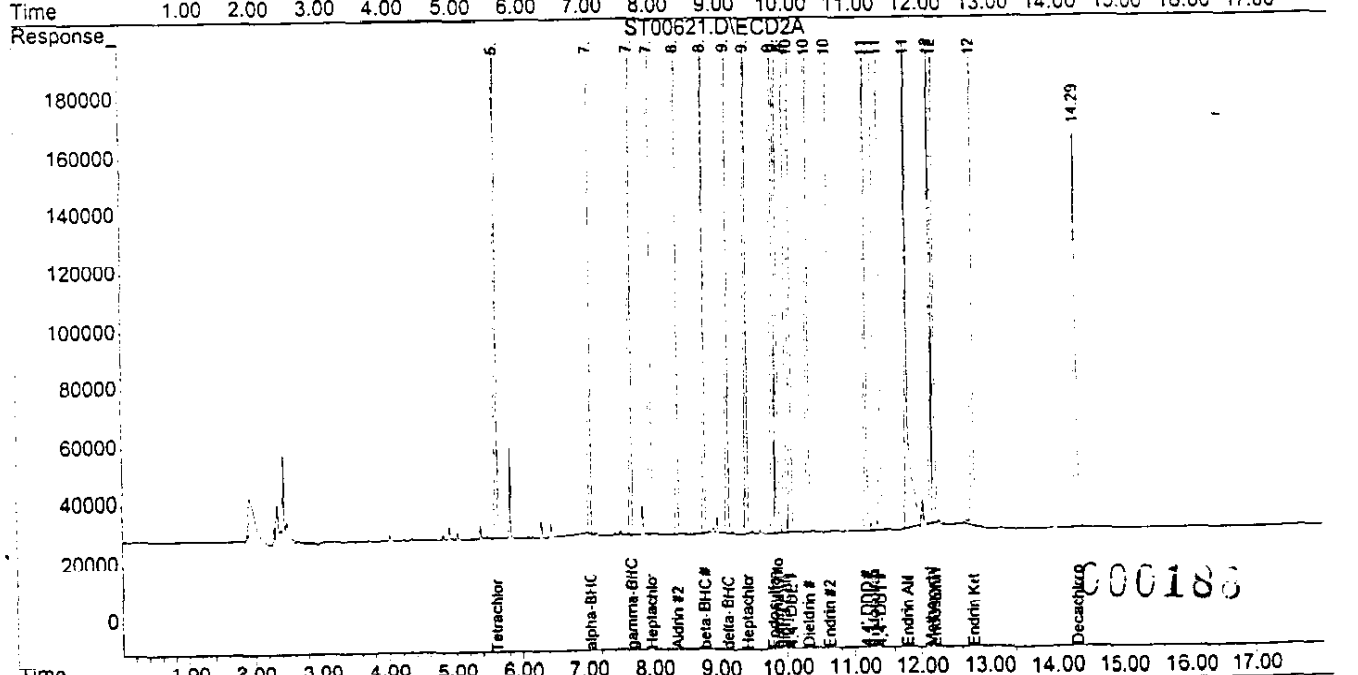
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00621.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00621.D\ECD2A.CH
Acq On : 9-20-99 11:45:34 AM Operator: stephw
Sample : 80ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:55 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:55:17 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000186

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00621.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00621.D\ECD2A.CH
Acq On : 9-20-99 11:45:34 AM Operator: stephw
Sample : 80ppb pest p457 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 14:55 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 14:55:17 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.76	5.61	607574	495214	91.941	90.383
Spiked Amount	50.000 Range	40 - 150	Recovery	=		183.88%#	180.77%#
29) SC	Decachlorobiphen	15.41	14.29	139624	137276	74.442	73.913
Spiked Amount	50.000 Range	30 - 160	Recovery	=		148.88%	147.83%
	Target Compounds						
2)	alpha-BHC	6.93	7.04	1043098	829520	97.122	97.519
	gamma-BHC (Linda	7.57	7.66	919426	740817	96.241	93.434
4)	beta-BHC	7.69	8.77	388892	324038	87.699	86.226
5)	Heptachlor	8.09	7.96	743645	626487	93.775	93.488
6)	delta-BHC	8.28	9.12	911533	709588	100.309	99.607
7)	Aldrin	8.62	8.36	736724	614653	95.921	93.094
8)	Heptachlor Epoxi	9.50	9.40	669375	542772	92.264	89.812
9)	gamma-Chlordane	9.75	9.86	669892	538529	95.115	91.875
10)	alpha-Chlordane	10.00	9.97	666682	539117	95.512	91.887
11)	Endosulfan I	10.04	9.79	601432	490951	93.506	90.721
12)	4,4'-DDE	10.38	10.06	666692	518675	97.593	94.519
13)	Dieldrin	10.51	10.33	645470	538823	92.046	91.161
14)	Endrin	11.06	10.63	468541	392055	90.324	88.575
15)	4,4'-DDD	11.21	11.17	551152	435203	93.528	92.606
16)	Endosulfan II	11.31	11.29	548502	459709	90.540	89.385
17)	4,4'-DDT	11.59	11.39	541711	414443	99.085	95.786
18)	Endrin Aldehyde	11.73	11.80	387550	210160	93.563	89.860
19)	Endosulfan Sulfa	11.88	12.20	495107	394950	88.142	88.198
20)	Methoxychlor	12.81	12.15	188891	181212	86.036	84.300
21)	Endrin Ketone	13.04	12.76	471008	394317	93.193	91.184
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000180

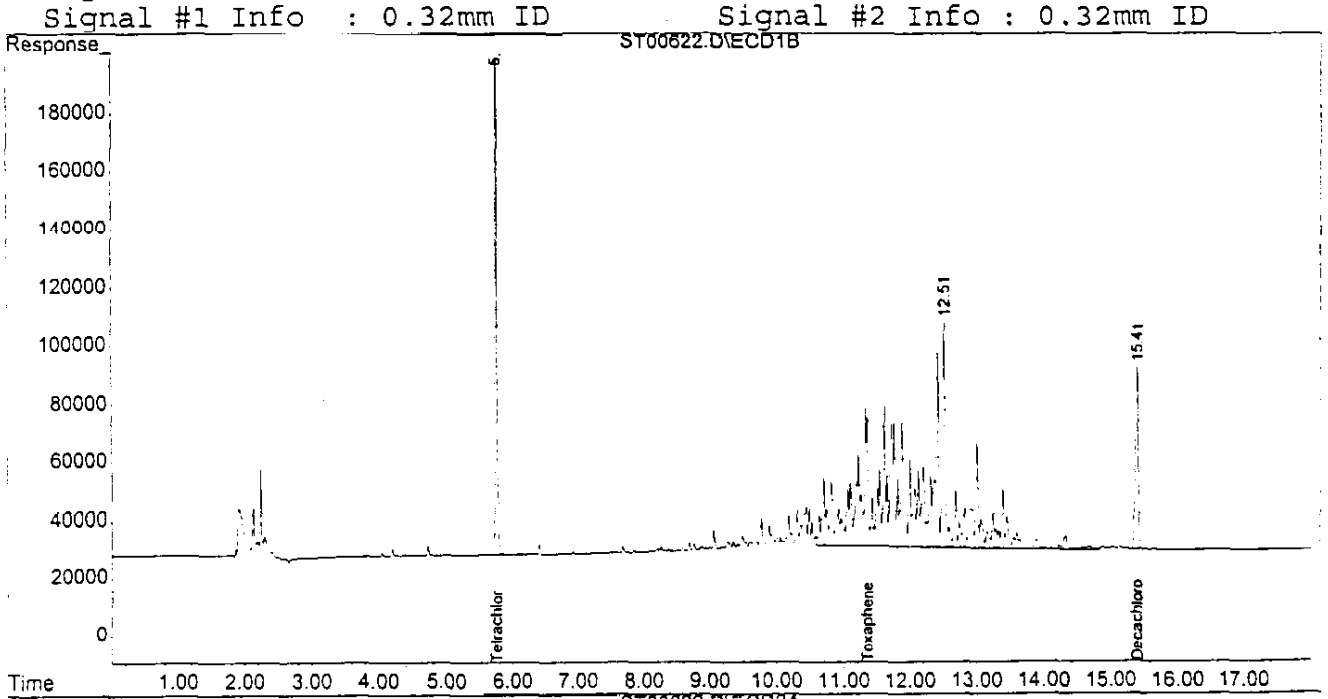
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

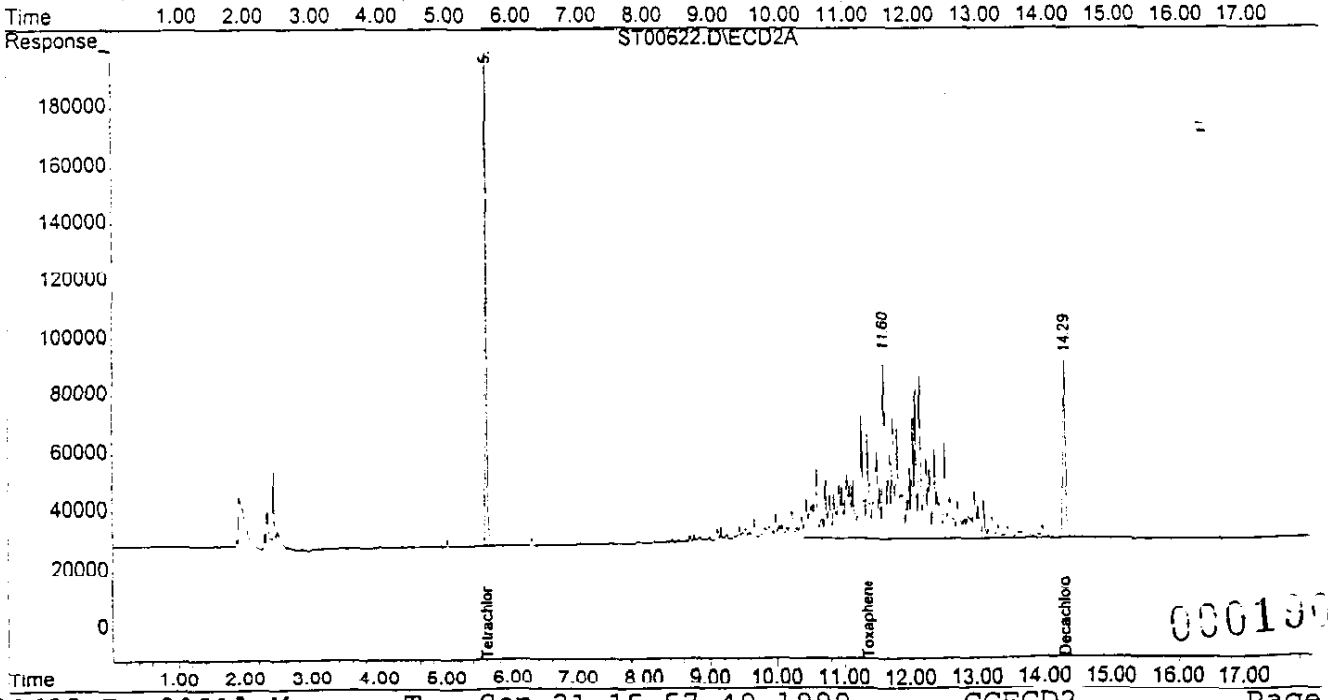
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00622.D\ECD1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00622.D\ECD2A.CH
Acq On : 9-20-99 12:06:45 PM Operator: stephw
Sample : 500ppb toxaphene p459 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 21 15:57 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:57:19 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000130

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00622.D\ECD1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00622.D\ECD2A.CH
Acq On : 9-20-99 12:06:45 PM Operator: stephw
Sample : 500ppb toxaphene p459 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 21 15:57 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:57:19 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.61	295818	245365	44.177	44.049
Spiked Amount 50.000 Range 40 - 150 Recovery =					88.35%	88.10%
29) SC Decachlorobiphen	15.41	14.29	63047	62278	33.608	33.548
Spiked Amount 50.000 Range 30 - 160 Recovery =					67.22%	67.10%
Target Compounds						
Sum Chlordane-A			0	0	N.D.	N.D.
A ·age Chlordane-A					0.000	0.000
28) H Toxaphene	11.35	11.35	27298240	23967828	373.764	399.623

tox w/ updated times for quan.

Better quant for samples w/ chlordane + Toxaphene

000191

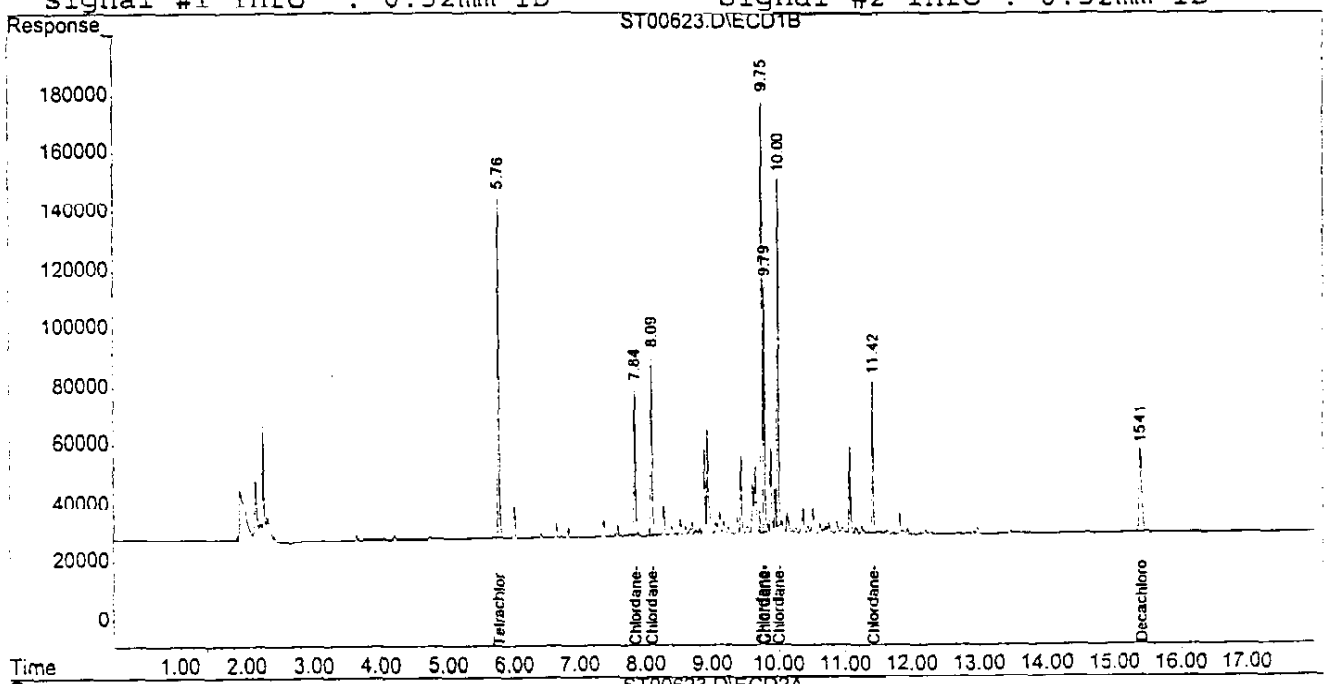
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

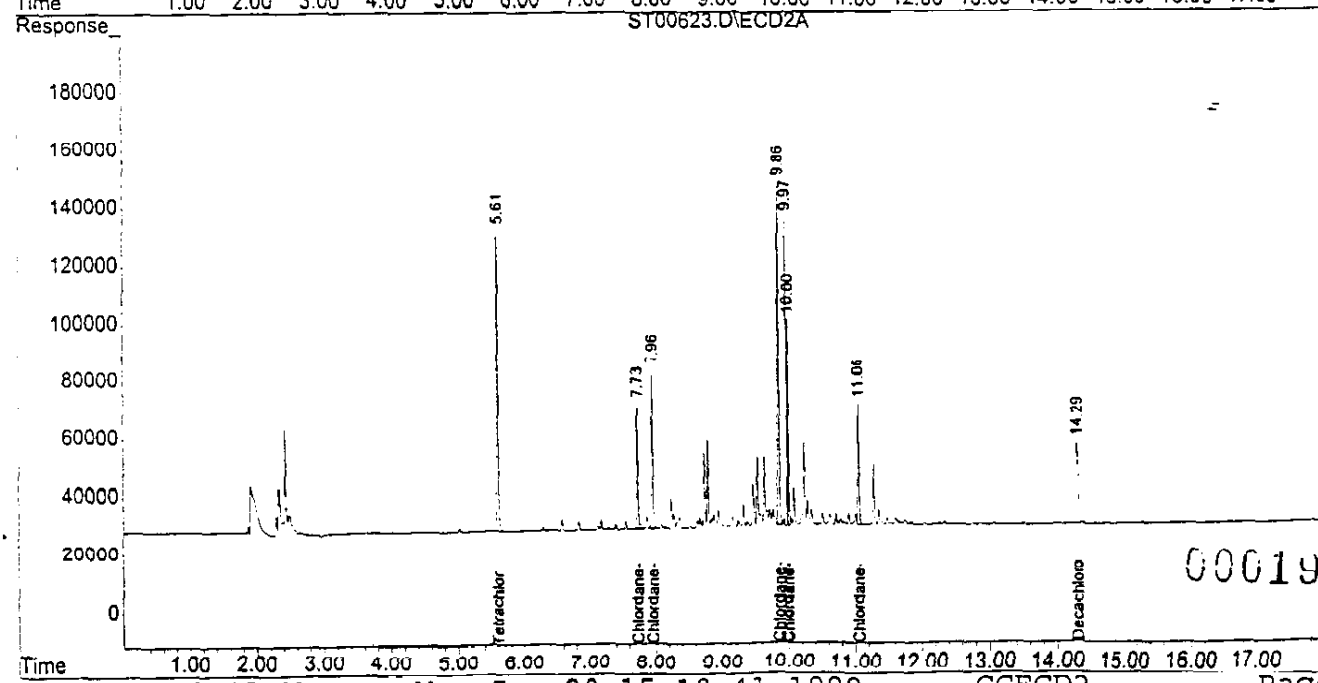
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00623.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00623.D\ECD2A.CH
Acq On : 9-20-99 12:28:03 PM Operator: stephw
Sample : 200ppb chlordane p460 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 15:00 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 15:00:04 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000192

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0920PEST\ST00623.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0920PEST\ST00623.D\ECD2A.CH
Acq On : 9-20-99 12:28:03 PM Operator: stephw
Sample : 200ppb chlordane p460 Inst : ECD 3
Misc : op982,gst24,soil,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 20 15:00 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Mon Sep 20 15:00:04 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.61	116680	102370	17.425	18.378
Spiked Amount 50.000 Range 40 - 150 Recovery =					34.85%#	36.76%#
29) SC Decachlorobiphen	15.41	14.29	28368	27870	15.122	15.013
Spiked Amount 50.000 Range 30 - 160 Recovery =					30.24%	30.03%
Target Compounds						
22) L1 Chlordane-A	7.84	7.73	50082	41808	201.349	207.154
23) L1 Chlordane-B	8.09	7.96	61294	53409	215.014	210.553
24) L1 Chlordane-C	9.75	9.86	148286	117281	214.239	215.578
25) L1 Chlordane-D	9.79	9.97	84815	105529	218.388	224.788m
26) L1 Chlordane-E	10.00	10.00	119699	71211	216.683	218.358m
27) L1 Chlordane-F	11.42	11.06	53128	41982	229.843	228.067
Sum Chlordane-A			517304	431220	N.D.	N.D.
Average Chlordane-A					215.920	217.416

000193

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

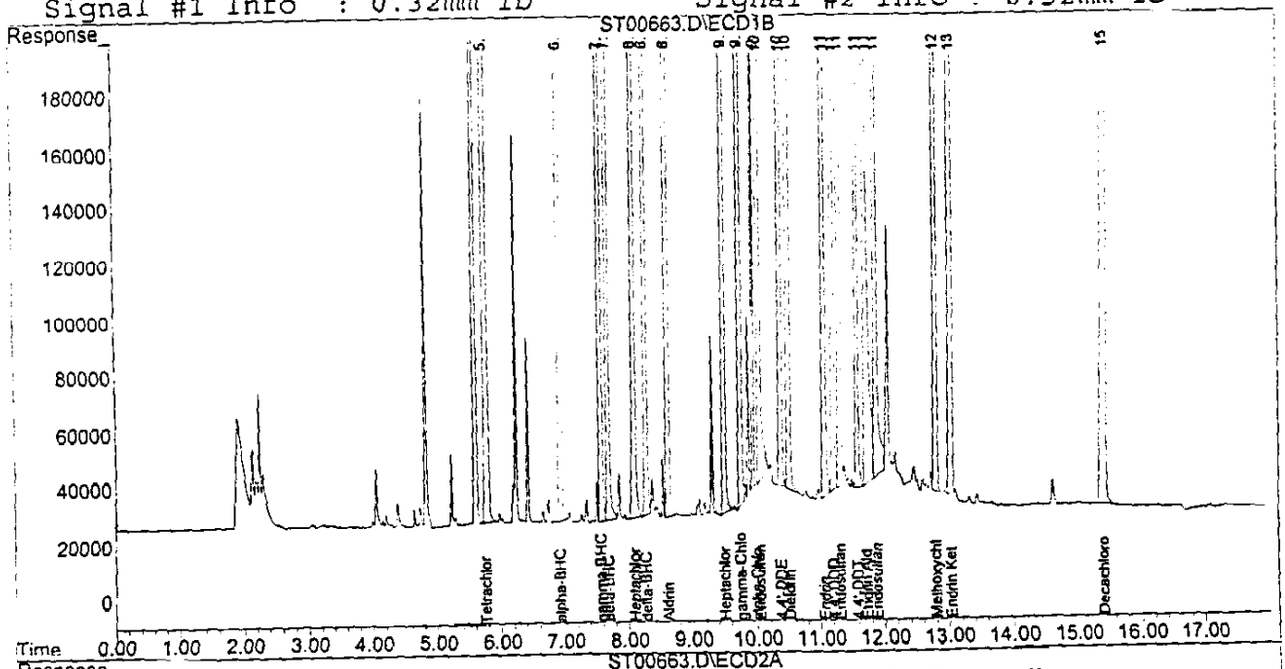
CONTINUING CALIBRATION SUMMARY

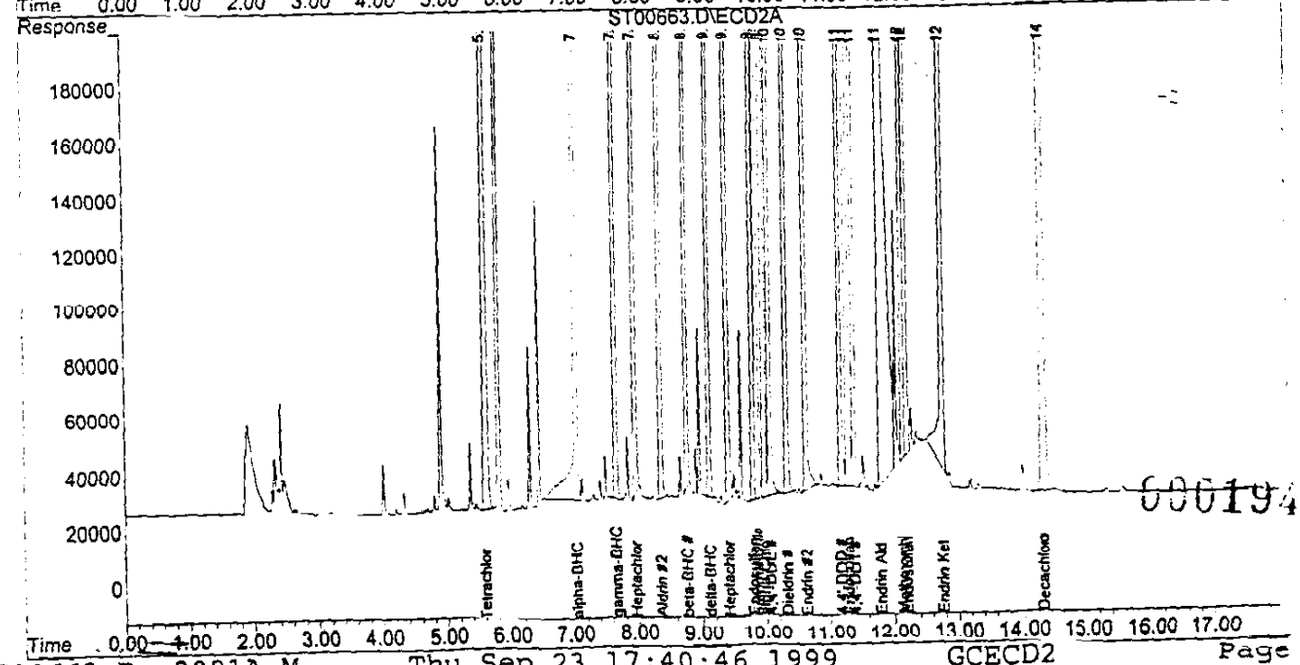
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00663.D\ECD1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00663.D\ECD2A.CH
Acq On : 9-23-99 11:27:58 AM Operator: stephw
Sample : cond std Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:31 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000194

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00663.D\ECD1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00663.D\ECD2A.CH
Acq On : 9-23-99 11:27:58 AM Operator: stephw
Sample : cond std Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:31 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.75	5.61	5798923	4718725	866.009	847.121
	Spiked Amount 50.000 Range 30 - 160 Recovery =					1732.02%#	1694.24%#
29)	SC Decachlorobiphen	15.41	14.29	2242077	2209276	1195.156	1190.090
	Spiked Amount 50.000 Range 30 - 160 Recovery =					2390.31%#	2380.18%#
	Target Compounds						
	alpha-BHC	6.92	7.04	9434852	8042736	814.445	806.433
3)	gamma-BHC (Linda	7.56	7.66	8320075	7486073	754.189	826.627
4)	beta-BHC	7.68	8.77	3961458	3506347	877.216	913.936
5)	Heptachlor	8.09	7.96	7331734	6129477	914.547	899.180
6)	delta-BHC	8.27	9.11	5608617	4407589	568.610	518.543
7)	Aldrin	8.61	8.36	6954618	6051473	778.908	906.333
8)	Heptachlor Epoxi	9.49	9.40	6532195	5491718	890.034	896.137
9)	gamma-Chlordane	9.74	9.86	6451488	5617341	904.517	944.821
10)	alpha-Chlordane	9.99	9.97	6435183	5437463	904.958	909.534
11)	Endosulfan I	10.04	9.79	5744453	4963493	879.552	900.859
12)	4,4'-DDE	10.38	10.06	6772005	5693639	842.047	899.920
13)	Dieldrin	10.51	10.33	6721519	5626970	851.065	937.958
14)	Endrin	11.06	10.63	6190663	5187609	1200.271	1179.648
15)	4,4'-DDD	11.20	11.17	5702157	4669424	847.429	978.988
16)	Endosulfan II	11.31	11.29	6138391	5123551	1001.026	980.319
17)	4,4'-DDT	11.59	11.39	6150525	4810920	1084.162	1075.963
18)	Endrin Aldehyde	11.72	11.80	4017713	2293724	926.835	932.483
19)	Endosulfan Sulfa	11.88	12.20	3956476	3049954	692.189	663.546
20)	Methoxychlor	12.80	12.15	2556281	2416066	1130.881	1097.516
21)	Endrin Ketone	13.03	12.76	5012523	4228884	960.520	950.543
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000195

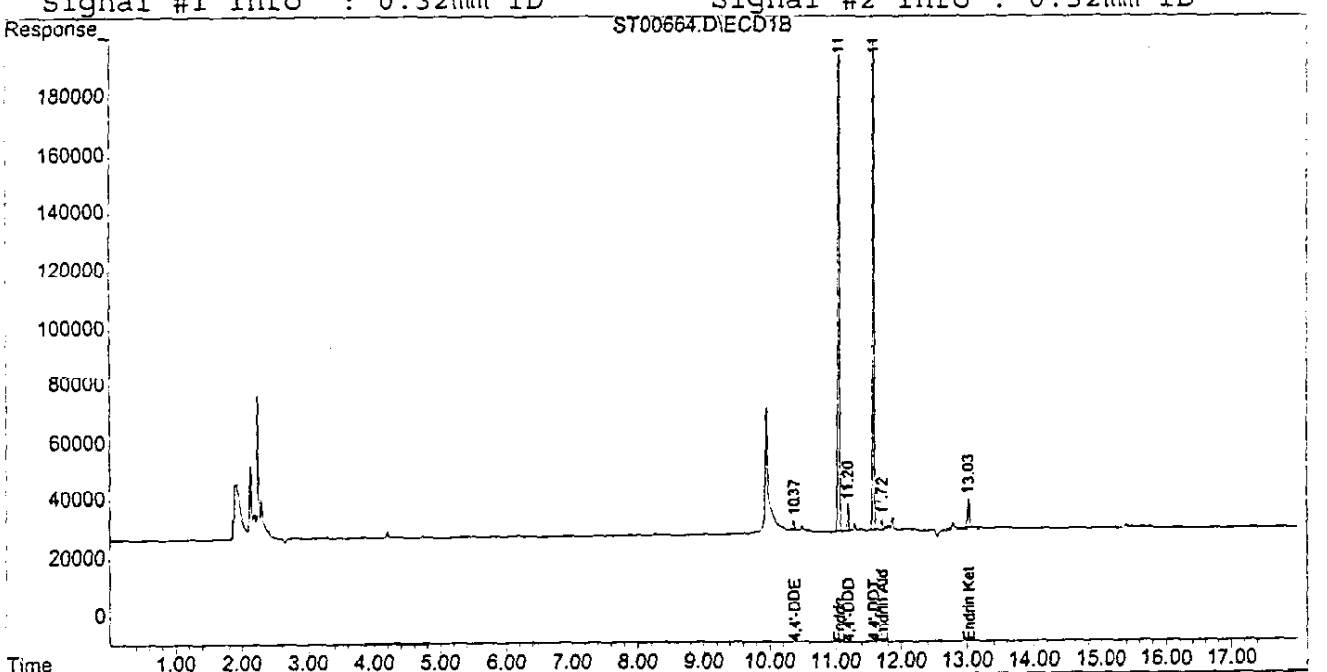
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

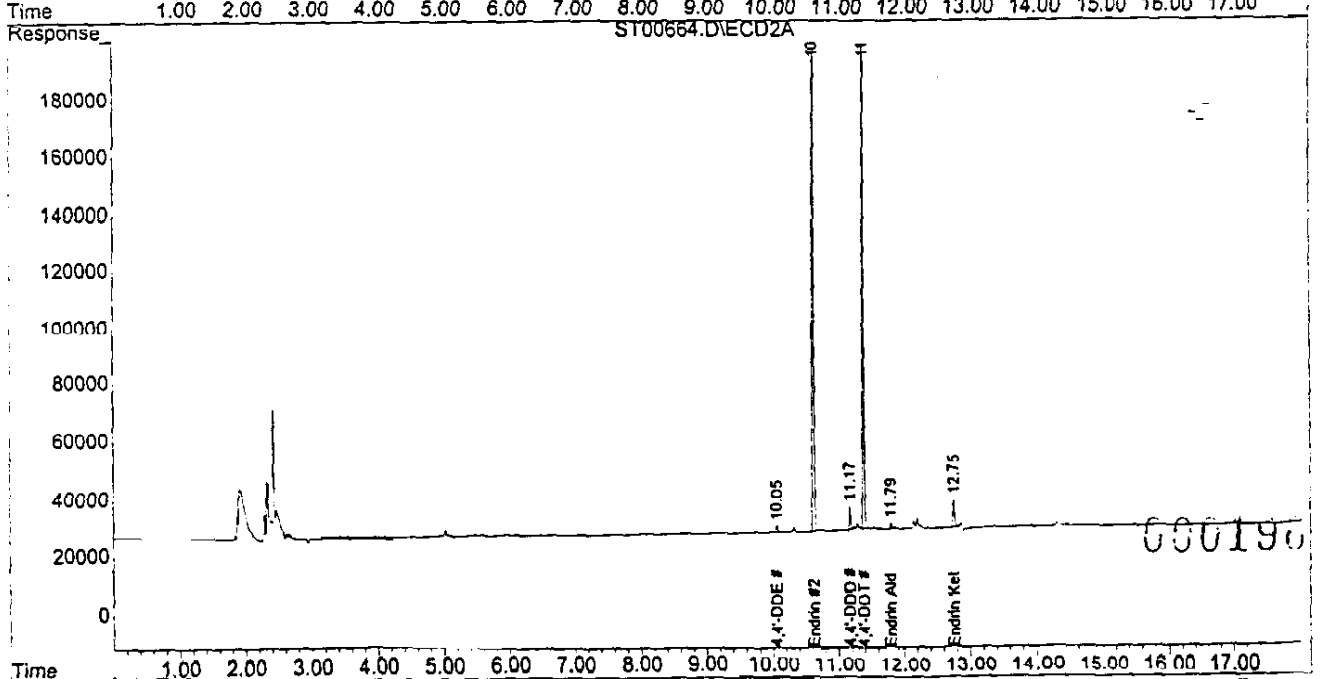
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00664.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00664.D\ECD2A.CH
Acq On : 9-23-99 11:49:04 AM Operator: stephw
Sample : ddt/endrin breakdown p458 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:32 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000190

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00664.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00664.D\ECD2A.CH
Acq On : 9-23-99 11:49:04 AM Operator: stephw
Sample : ddt/endrin breakdown p458 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:32 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	Target Compounds						
12)	4,4'-DDE	10.37	10.05	2933	2464	0.365m	0.389m
14)	Endrin	11.06	10.62	288491	259769	55.934	59.071
15)	4,4'-DDD	11.20	11.17	9308	7925	1.383	1.662
17)	4,4'-DDT	11.59	11.38	274523	221195	48.391	49.470
1	Endrin Aldehyde	11.72	11.79	3381	1855	0.780m	0.754m
21,	Endrin Ketone	13.03	12.75	11023	9479	2.112	2.131
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

Endrin = 4.8%, 4.2%

DDT = 4.3%, 4.5%

000197

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Endrin & DDT Column Breakdown

Data File:	ST00664
Date of Analysis	9/23/99

Inst.:	ST
Time of Analysis	11:49

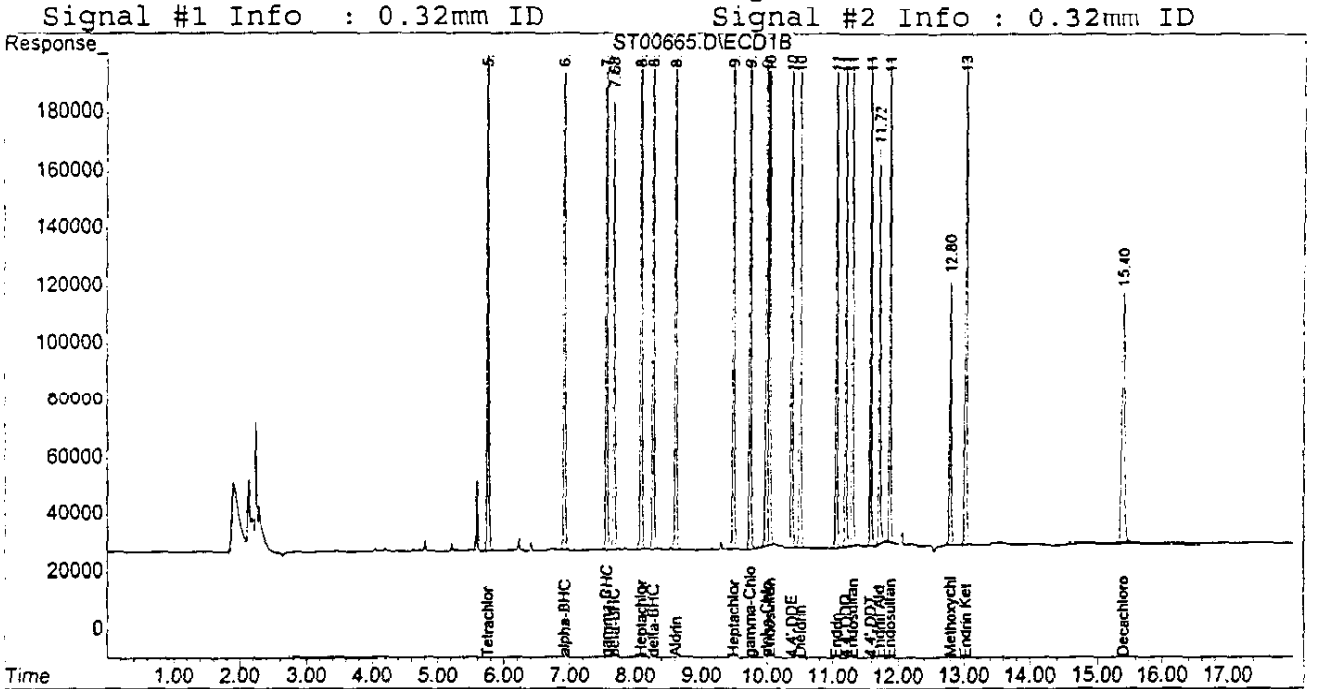
	Column 1		Column 2
Endrin	4.8		4.2
DDT	4.3		4.5

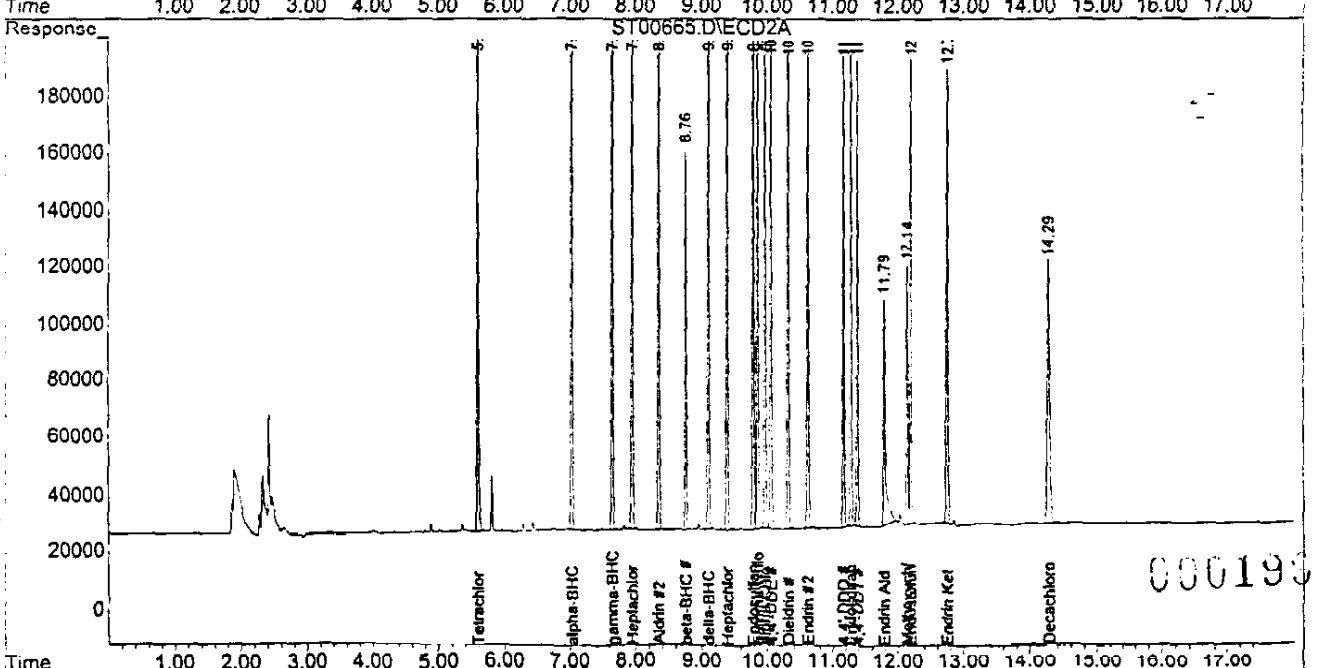
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD2A.CH
Acq On : 9-23-99 12:10:15 PM Operator: stephw
Sample : 40ppb ccv p471 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 12:30 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000193

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD2A.CH
Acq On : 9-23-99 12:10:15 PM Operator: stephw
Sample : 40ppb ccv p471 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 12:30 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.76	5.60	257674	206267	38.481	37.030
	Spiked Amount 50.000 Range 30 - 160 Recovery =					76.96%	74.06%
29)	SC Decachlorobiphen	15.40	14.29	88044	92144	46.932	49.636
	Spiked Amount 50.000 Range 30 - 160 Recovery =					93.86%	99.27%
	Target Compounds						
	alpha-BHC	6.92	7.03	407046	329563	35.137	33.045
3)	gamma-BHC (Linda	7.57	7.65	366970	304044	33.265	33.573
4)	beta-BHC	7.68	8.76	158002	131856	34.988	34.368
5)	Heptachlor	8.09	7.95	303330	262718	37.837	38.540
6)	delta-BHC	8.27	9.11	337461	263067	34.212	30.949
7)	Aldrin	8.61	8.36	288486	253835	32.310	38.017
8)	Heptachlor Epoxi	9.49	9.40	265899	228046	36.230	37.212
9)	gamma-Chlordane	9.74	9.86	255355	217603	35.801	36.600
10)	alpha-Chlordane	9.99	9.97	259963	217945	36.558	36.456
11)	Endosulfan I	10.04	9.79	239884	201039	36.729	36.488
12)	4,4'-DDE	10.38	10.06	252449	215274	31.390	34.026
13)	Dieldrin	10.51	10.32	258305	225174	32.706	37.534
14)	Endrin	11.06	10.62	238338	198932	46.210	45.237
15)	4,4'-DDD	11.20	11.17	219734	173668	32.656	36.411
16)	Endosulfan II	11.31	11.28	232306	200111	37.884	38.288
17)	4,4'-DDT	11.59	11.38	210154	170238	37.044	38.074
18)	Endrin Aldehyde	11.72	11.79	137785	79088	31.785	42.152
19)	Endosulfan Sulfa	11.88	12.20	204157	162395	35.717	35.330
20)	Methoxychlor	12.80	12.14	93406	90404	41.322	41.067
21)	Endrin Ketone	13.03	12.76	193564	158542	37.092	35.636
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000200

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD2A.CH
Acq On : 9-23-99 12:10:15 PM Operator: stephw
Sample : 40ppb ccv p471 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
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	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	40.000	38.481	3.8	89	0.00
2		alpha-BHC	40.000	35.137	12.2	86	0.00
3		gamma-BHC (Lindane)	40.000	33.265	16.8#	89	0.00
4		beta-BHC	40.000	34.988	12.5	84	0.00
5		Heptachlor	40.000	37.837	5.4	87	0.00
6		delta-BHC	40.000	34.212	14.5	83	0.00
7		Aldrin	40.000	32.310	19.2#	86	0.00
8		Heptachlor Epoxide	40.000	36.230	9.4	87	0.00
9		gamma-Chlordane	40.000	35.801	10.5	87	0.00
10		alpha-Chlordane	40.000	36.558	8.6	87	0.00
11		Endosulfan I	40.000	36.729	8.2	88	0.00
		4,4'-DDE	40.000	31.390	21.5#	84	0.00
13		Dieldrin	40.000	32.706	18.2#	85	0.00
14		Endrin	40.000	46.210	-15.5#	107	0.00
15		4,4'-DDD	40.000	32.656	18.4#	88	0.00
16		Endosulfan II	40.000	37.884	5.3	92	0.00
17		4,4'-DDT	40.000	37.044	7.4	87	0.00
18		Endrin Aldehyde	40.000	31.785	20.5#	81	0.00
19		Endosulfan Sulfate	40.000	35.717	10.7	87	0.00
20		Methoxychlor	40.000	41.322	-3.3	100	0.00
21		Endrin Ketone	40.000	37.092	7.3	93	0.00
29	SC	Decachlorobiphenyl	40.000	46.932	-17.3	114	0.00
		Signal #2					
1	S	Tetrachloro-m-xylene	40.000	37.030	7.4	90	0.00
2		alpha-BHC	40.000	33.045	17.4#	87	0.00
3		gamma-BHC (Lindane)	40.000	33.573	16.1#	89	0.00
4		beta-BHC	40.000	34.368	14.1	87	0.00
5		Heptachlor	40.000	38.540	3.7	92	0.00
6		delta-BHC	40.000	30.949	22.6#	85	0.00
7		Aldrin	40.000	38.017	5.0	88	0.00
8		Heptachlor Epoxide	40.000	37.212	7.0	90	0.00
9		gamma-Chlordane	40.000	36.600	8.5	89	0.00
10		alpha-Chlordane	40.000	36.456	8.9	89	0.00
11		Endosulfan I	40.000	36.488	8.8	88	0.00
		4,4'-DDE	40.000	34.026	14.9	90	0.00
13		Dieldrin	40.000	37.534	6.2	90	0.00
14		Endrin	40.000	45.237	-13.1	104	0.00
15		4,4'-DDD	40.000	36.411	9.0	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00665.D\ECD2A.CH
q On : 9-23-99 12:10:15 PM Operator: stephw
mple : 40ppb ccv p471 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Tue Sep 21 15:58:46 1999
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	Amount	Calc.	%Dev	Area%	Dev(min)
16		Endosulfan II	40.000	38.288	4.3	93	0.00
17		4,4'-DDT	40.000	38.074	4.8	94	0.00
18		Endrin Aldehyde	40.000	32.152	19.6#	80	0.00
19		Endosulfan Sulfate	40.000	35.330	11.7	88	0.00
20		Methoxychlor	40.000	41.067	-2.7	99	0.00
21		Endrin Ketone	40.000	35.636	10.9	89	0.00
29	SC	Decachlorobiphenyl	40.000	49.636	-24.1	122	0.00

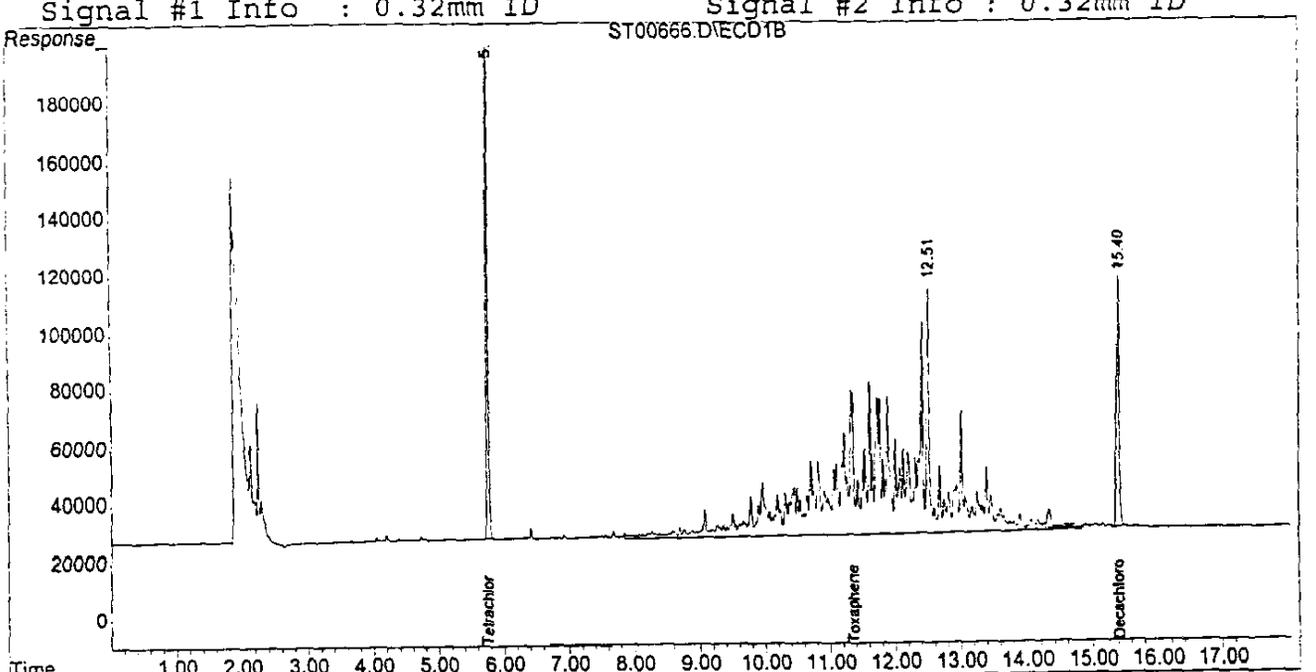
000202

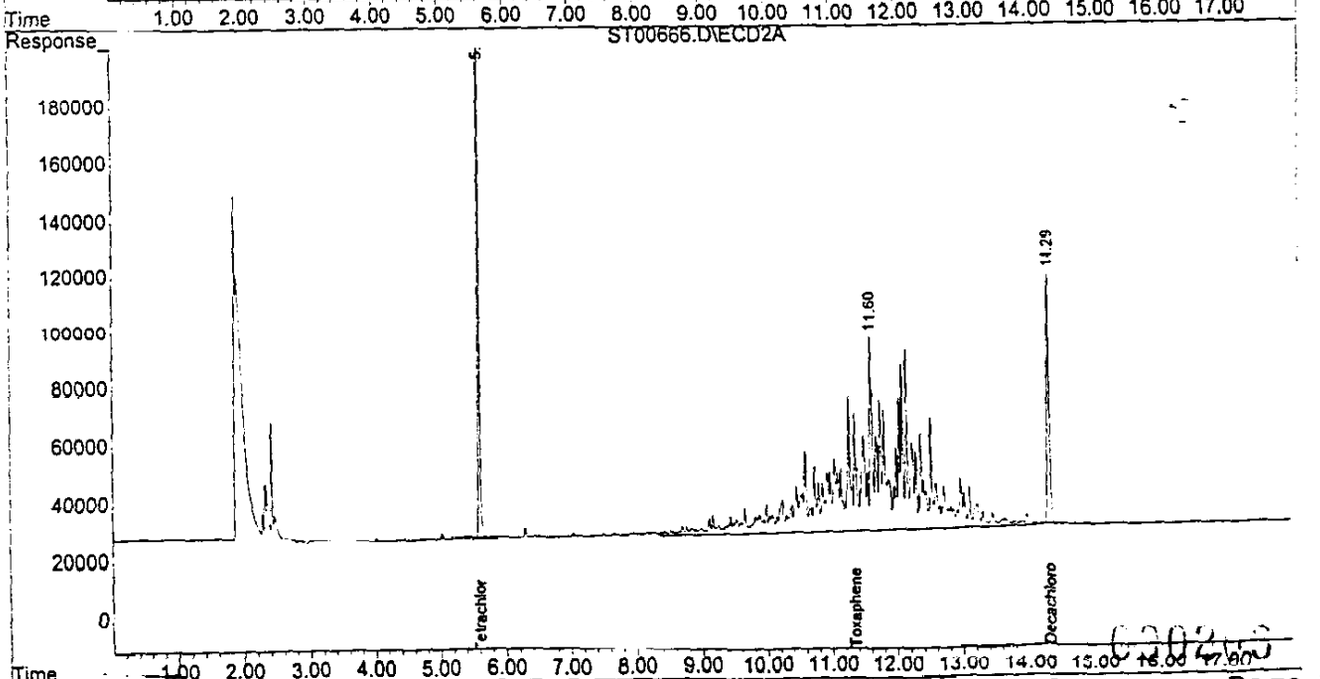
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00666.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00666.D\ECD2A.CH
Acq On : 9-23-99 12:37:47 PM Operator: stephw
Sample : 500ppb toxaphene p459 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:56 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:56:28 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00666.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00666.D\ECD2A.CH
Acq On : 9-23-99 12:37:47 PM Operator: stephw
Sample : 500ppb toxaphene p459 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 17:56 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:56:28 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.75	5.61	334831	271541	50.004	48.748
Spiked Amount 50.000 Range 30 - 160 Recovery =					100.01%	97.50%
29) SC Decachlorobiphen	15.41	14.29	88184	87765	47.007	47.277
Spiked Amount 50.000 Range 30 - 160 Recovery =					94.01%	94.55%
Target Compounds						
Sum Chlordane-A			0	0	N.D.	N.D.
Average Chlordane-A					0.000	0.000
28) H Toxaphene	11.35	11.35	38921240	31679851	683.238	622.351

000204

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

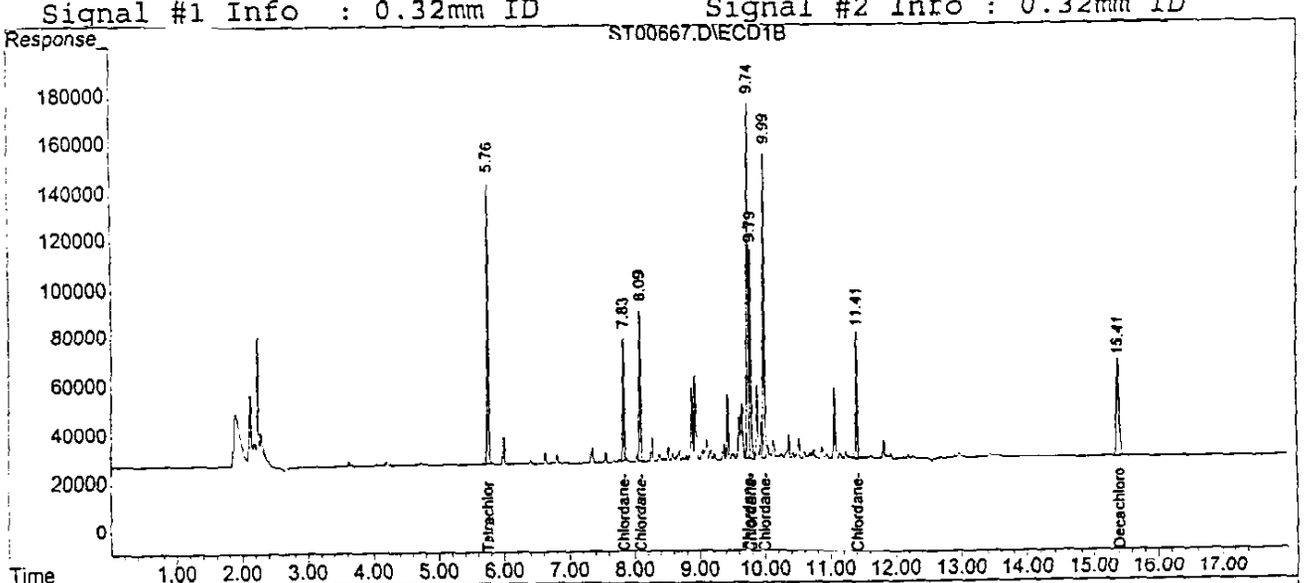
Quantitation Report

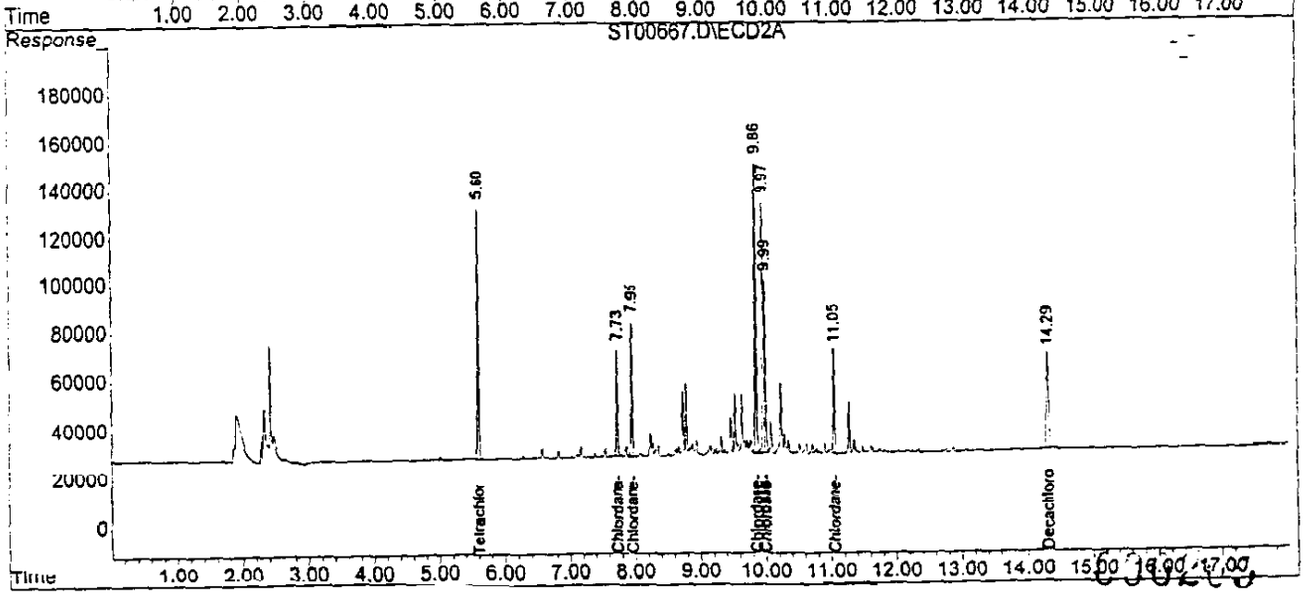
Data File : C:\HPCHEM\1\DATA\0923PEST\ST00667.D\ECD1B.CH Vial: 5
Acq On : 9-23-99 12:58:58 PM Operator: stephw
Sample : 200ppb chlordane p460 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\DATA\0923PEST\ST00667.D\ECD2A.CH Vial: 5
Acq On : 9-23-99 12:58:57 PM Operator: stephw
Sample : 200ppb chlordane p460 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile : EVENTS2.E
Quant Time: Sep 23 17:33 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:32:58 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\0923PEST\ST00667.D\ECD1B.CH Vial: 5
Acq On : 9-23-99 12:58:58 PM Operator: stephw
Sample : 200ppb chlordane p460 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\DATA\0923PEST\ST00667.D\ECD2A.CH Vial: 5
Acq On : 9-23-99 12:58:57 PM Operator: stephw
Sample : 200ppb chlordane p460 Inst : ECD 3
Misc : op,gst26,water,,,10, Multiplr: 1.00
IntFile : EVENTS2.E
Quant Time: Sep 23 17:33 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:32:58 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.76	5.60	116037	103315	17.329	18.547
Spiked Amount 50.000 Range 30 - 160 Recovery =					34.66%	37.09%
29) SC Decachlorobiphen	15.41	14.29	39379	39741	20.991	21.408
Spiked Amount 50.000 Range 30 - 160 Recovery =					41.98%	42.82%
Target Compounds						
22) L1 Chlordane-A	7.84	7.73	51144	43493	206.226	205.342
23) L1 Chlordane-B	8.09	7.95	62252	55114	198.284	201.961
24) L1 Chlordane-C	9.74	9.86	146418	120726	200.667	210.129
25) L1 Chlordane-D	9.79	9.97	85875	103717	210.622	204.136
26) L1 Chlordane-E	9.99	9.99	125826	71958	214.955	209.503
27) L1 Chlordane-F	11.41	11.05	52495	42989	208.279	210.396
Sum Chlordane-A			524011	437998	N.D.	N.D.
Average Chlordane-A					206.506	206.911

000266

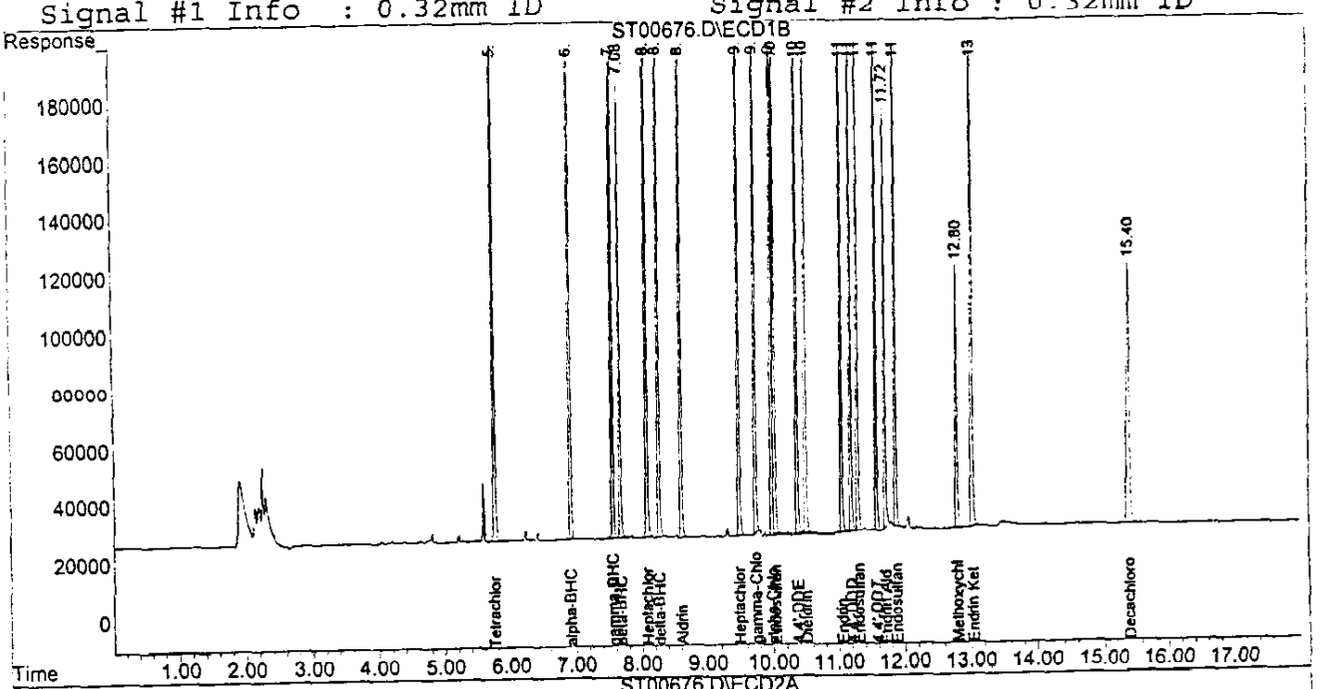
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

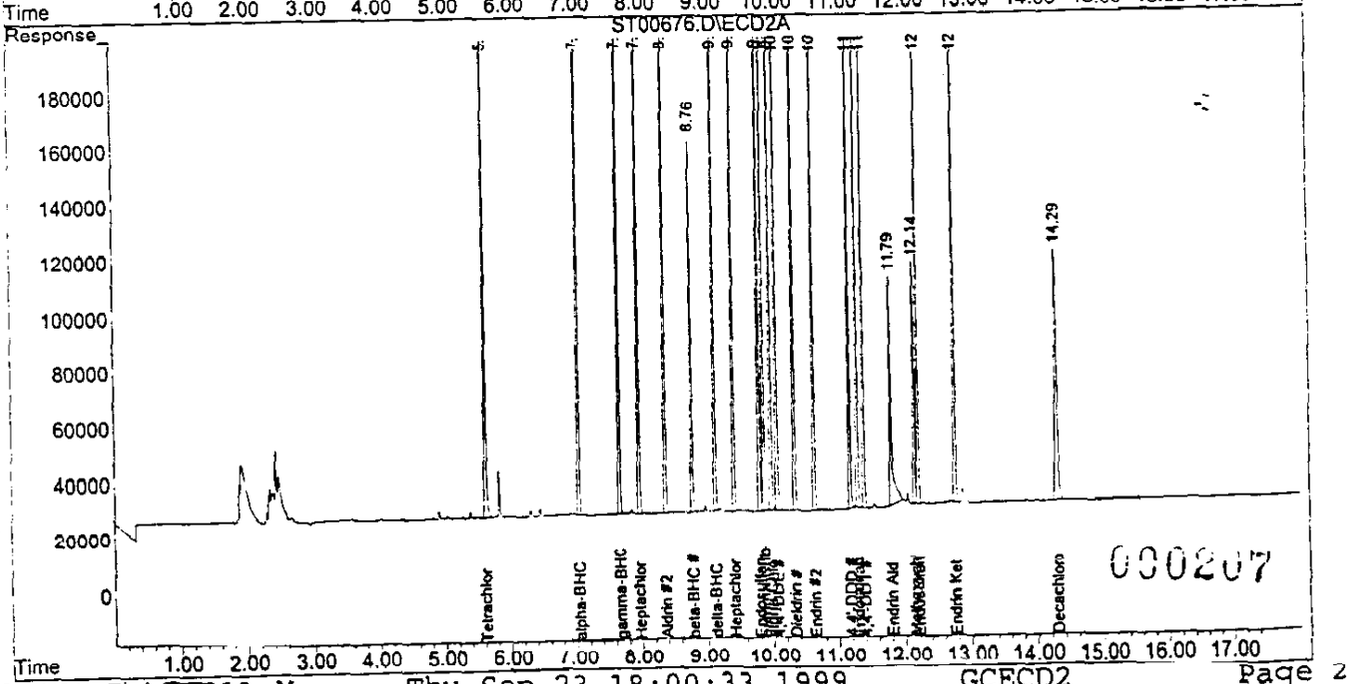
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD1B.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD2A.CH
Acq On : 9-23-99 5:41:24 PM Operator: stephw
Sample : 40ppb ccv Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 18:00 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:56:57 1999
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000207

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD1B.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD2A.CH
Acq On : 9-23-99 5:41:24 PM Operator: stephw
Sample : 40ppb ccv Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Sep 23 18:00 1999 Quant Results File: 8081A.RES

Quant Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:56:57 1999
Response via : Initial Calibration
DataAcq Meth : ACQ_PEST.M

Volume Inj. : 1uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.75	5.60	240873	192594	35.972	34.575
Spiked Amount		50.000	Range	30 - 160	Recovery	= 71.94%	69.15%
9) SC	Decachlorobiphen	15.40	14.29	91167	90559	48.597	48.782
Spiked Amount		50.000	Range	30 - 160	Recovery	= 97.19%	97.56%
	Target Compounds						
2	alpha-BHC	6.92	7.03	410127	328588	35.403	32.947
3)	gamma-BHC (Linda	7.56	7.66	361216	304402	32.743	33.613
4)	beta-BHC	7.68	8.77	158612	133615	35.123	34.827
5)	Heptachlor	8.09	7.96	318001	263916	39.667	38.716
6)	delta-BHC	8.27	9.11	345653	271278	35.043	31.915
7)	Aldrin	8.61	8.36	298419	254501	33.422	38.117
8)	Heptachlor Epoxi	9.49	9.40	280148	232846	38.171	37.996
9)	gamma-Chlordane	9.74	9.86	265178	217226	37.179	36.537
.0)	alpha-Chlordane	9.99	9.97	263023	223341	36.988	37.359
.1)	Endosulfan I	10.04	9.79	249704	206353	38.233	37.452
.2)	4,4'-DDE	10.38	10.06	280108	217186	34.829	34.328
.3)	Dieldrin	10.51	10.32	272719	222730	34.531	37.127
.4)	Endrin	11.06	10.63	239179	193993	46.373	44.114
.5)	4,4'-DDD	11.20	11.17	232493	184233	34.552	38.626
.6)	Endosulfan II	11.31	11.29	238300	206695	38.861	39.548
17)	4,4'-DDT	11.59	11.39	230315	174433	40.598	39.012
18)	Endrin Aldehyde	11.72	11.79	146216	81835	33.730	33.269
19)	Endosulfan Sulfa	11.88	12.20	220468	168670	38.571	36.696
20)	Methoxychlor	12.80	12.14	91972	87102	40.688	39.567
21)	Endrin Ketone	13.03	12.76	197857	167383	37.914	37.623
	Sum Chlordane-A			0	0	N.D.	N.D.
	Average Chlordane-A					0.000	0.000

000208

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD1B.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD2A.CH
Acq On : 9-23-99 5:41:24 PM Operator: stephw
Sample : 40ppb ccv Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:56:57 1999
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	Amount	Calc.	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	40.000	35.972	10.1	83	0.00
2		alpha-BHC	40.000	35.403	11.5	87	0.00
3		gamma-BHC (Lindane)	40.000	32.743	18.1#	88	0.00
4		beta-BHC	40.000	35.123	12.2	85	0.00
5		Heptachlor	40.000	39.667	0.8	91	0.00
6		delta-BHC	40.000	35.043	12.4	85	0.00
7		Aldrin	40.000	33.422	16.4#	89	0.00
8		Heptachlor Epoxide	40.000	38.171	4.6	92	0.00
9		gamma-Chlordane	40.000	37.179	7.1	91	0.00
10		alpha-Chlordane	40.000	36.988	7.5	88	0.00
11		Endosulfan I	40.000	38.233	4.4	92	0.00
12		4,4'-DDE	40.000	34.829	12.9	93	0.00
13		Dieldrin	40.000	34.531	13.7	90	0.00
14		Endrin	40.000	46.373	-15.9#	107	0.00
15		4,4'-DDD	40.000	34.552	13.6	93	0.00
16		Endosulfan II	40.000	38.861	2.8	95	0.00
17		4,4'-DDT	40.000	40.598	-1.5	96	0.00
18		Endrin Aldehyde	40.000	33.730	15.7#	86	0.00
19		Endosulfan Sulfate	40.000	38.571	3.6	94	0.00
20		Methoxychlor	40.000	40.688	-1.7	99	0.00
21		Endrin Ketone	40.000	37.914	5.2	95	0.00
29	SC	Decachlorobiphenyl	40.000	48.597	-21.5	118	0.00
		Signal #2					
1	S	Tetrachloro-m-xylene	40.000	34.575	13.6	84	0.00
2		alpha-BHC	40.000	32.947	17.6#	87	0.00
3		gamma-BHC (Lindane)	40.000	33.613	16.0#	89	0.00
4		beta-BHC	40.000	34.827	12.9	88	0.00
5		Heptachlor	40.000	38.716	3.2	92	0.00
6		delta-BHC	40.000	31.915	20.2#	87	0.00
7		Aldrin	40.000	38.117	4.7	88	0.00
8		Heptachlor Epoxide	40.000	37.996	5.0	92	0.00
9		gamma-Chlordane	40.000	36.537	8.7	89	0.00
10		alpha-Chlordane	40.000	37.359	6.6	91	0.00
11		Endosulfan I	40.000	37.452	6.4	91	0.00
12		4,4'-DDE	40.000	34.328	14.2	91	0.00
13		Dieldrin	40.000	37.127	7.2	89	0.00
14		Endrin	40.000	44.114	-10.3	101	0.00
15		4,4'-DDD	40.000	38.626	3.4	92	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD1B.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0923PEST\ST00676.D\ECD2A.CH
Acq On : 9-23-99 5:41:24 PM Operator: stephw
Sample : 40ppb ccv Inst : ECD 3
Misc : op956,gst26,water,,,10, Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Thu Sep 23 17:56:57 1999
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	Amount	Calc.	%Dev	Area%	Dev(min)
16		Endosulfan II	40.000	39.548	1.1	96	0.00
17		4,4'-DDT	40.000	39.012	2.5	96	0.00
18		Endrin Aldehyde	40.000	33.269	16.8#	82	0.00
19		Endosulfan Sulfate	40.000	36.696	8.3	91	0.00
20		Methoxychlor	40.000	39.567	1.1	96	0.00
21		Endrin Ketone	40.000	37.623	5.9	94	0.00
29	SC	Decachlorobiphenyl	40.000	48.782	-22.0	119	0.00

000210

SEQUENCE LOG SUMMARY

SGC.07

Sequence Name: C:\HPCHEM\1\SEQUENCE\0923pest.S
Comment:
Operator: stephw
Data Path: C:\HPCHEM\1\DATA\0923pest\
Pre-Seq Cmd:
Post-Seq Cmd:

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	ST00663	ACQ_PEST	cond std
2	Sample	2	ST00664	ACQ_PEST	ddt/endrin breakdown p458
3	Sample	3	ST00665	ACQ_PEST	40ppb ccv p471
4	Sample	4	ST00666	ACQ_PEST	500ppb toxaphene p459
5	Sample	5	ST00667	ACQ_PEST	200ppb chlordane p460
6	Sample	6	ST00668	ACQ_PEST	op956-mb4
7	Sample	7	ST00669	ACQ_PEST	op956-bs4
8	Sample	8	ST00670	ACQ_PEST	F4916-1
9	Sample	9	ST00671	ACQ_PEST	F4916-2
10	Sample	10	ST00672	ACQ_PEST	F4923-1
11	Sample	11	ST00673	ACQ_PEST	F4923-2
12	Sample	12	ST00674	ACQ_PEST	F4923-2,20x
13	Sample	13	ST00675	ACQ_PEST	F4916-2,2x
14	Sample	14	ST00676	ACQ_PEST	40ppb ccv
15					

000211

GC ANALYSIS LOG

DATE: 9-20-99	METHODS: 8081	ANALYST: SW
COLUMN TYPE: DB17/1701	METHOD FILE: 8081A	RUN BATCH: 9St26
INSTRUMENT: ECD 3	CALIB. DATE: 9-20-99	AMOUNT INJECTED: 1 ul

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	SAMPLE AMOUNT	MATRIX	EXT. BATCH	DILUTION FACTOR	RUN OK	COMMENTS
ST00663	1	cond Std	8081					✓	
664	2	ddt/endrin std			p458		50:500	✓	passed
665	3	40 ppb CCV			p471		40:1000	✓	passed
666	4	500 ppb tox			p459		50:500	✓	updated
667	5	200 ppb Chlor			p466		40:1000	✓	↓
668	6	OP956-mb4		500ml/5ml	W	OP956	1x	✓	ND
669	7	-bs4						✓	✓
670	8	F4916-1						✓	ND
671	9	-2						✓	RR2x beta-BHC, alpha, delta BHC diff.
672	10	F4923-1						✓	ND
673	11	-2		400ml/4ml				✓	RR 20x
674	12	-2					20x	✓	ND matrix, Surr
675	13	F4916-2		500ml/5ml			2x	✓	beta-BHC = 43
676	14	40 ppb CCV						✓	passed

Matrix: Designate "W" for Water, "S" for Soil, and "O" for Oil

Sample Amount: Initial Sample Weight (g) or Volume (ml) / Final Volume (ml)

Analyst's Signature: [signature]

EXTRACTION LOG SUMMARY

SGC.08

LIQUID SAMPLE PREP REPORT

Date: 9-23-99 Method: 8081-PEST Analyst: NJ/VM MS/RA Batch#: OP956

Batch Started On: 8-31-99 Prior Number Of Samples in Batch: 12 Closed:

Sample ID	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP956-MB4	500 ml	7	ND	0.5 ml		5.0 ml	
-BS4					0.5 ml		
F4916-1							
-2							
F4923-1							
-2	ny					4.0 ml ny	400 ml of sample-Sediment bottle.

Surrogate ID: E465 Conc: 500 ppb Exp. Date*: 3-22-00

Spike ID: E456 Conc: 500 ppb Exp. Date*: 3-10-00

*Expiration Date is 6 months from the date made or last verified.

000213

CH2CL2 Lot #: 994655 Hexane Lot #: 39116 Other (specify)

Comments: Bath temp at 70°C final @ 90°C

Relinquished By: [signature] Date: 9-22-99

Accepted By: [signature] Date: 9/22/99

Sequence Name: C:\HPCHEM\1\SEQUENCE\0920pest.S
Comment:
Operator: stephw
Data Path: C:\HPCHEM\1\DATA\0920pest\
Pre-Seq Cmd:
Post-Seq Cmd:

gst 24

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	ST00614	ACQ_PEST	cond std
2	Sample	2	ST00615	ACQ_PEST	ddt/endrin breakdown p458
3	Sample	3	ST00616	ACQ_PEST	40ppb ccv p457
4	Sample	4	ST00617	ACQ_PEST	5ppb pest p457
5	Sample	5	ST00618	ACQ_PEST	10ppb pest p457
6	Sample	6	ST00619	ACQ_PEST	20ppb pest p457
7	Sample	7	ST00620	ACQ_PEST	60ppb pest p457
8	Sample	8	ST00621	ACQ_PEST	80ppb pest p457
9	Sample	9	ST00622	ACQ_PEST	500ppb toxaphene p459
10	Sample	10	ST00623	ACQ_PEST	200ppb chlordane p460
11	Sample	11	ST00624	ACQ_PEST	op982-mb
12	Sample	12	ST00625	ACQ_PEST	F4877-3,100x
13	Sample	13	ST00626	ACQ_PEST	F4877-4
14	Sample	14	ST00627	ACQ_PEST	F4882-1,500x
15	Sample	15	ST00628	ACQ_PEST	F4882-5,200x
16	Sample	16	ST00629	ACQ_PEST	F4882-5,20x
17	Sample	17	ST00630	ACQ_PEST	F4882-10,500x
18	Sample	18	ST00631	ACQ_PEST	F4877-3,200x
19	Sample	19	ST00632	ACQ_PEST	F4882-1,2000x
20	Sample	20	ST00633	ACQ_PEST	F4882-10,2500x
21	Sample	21	ST00634	ACQ_PEST	40ppb ccv
22	Sample	22	ST00635	ACQ_PEST	op982-ms,50x
23	Sample	23	ST00636	ACQ_PEST	op982-msd,50x
24	Sample	24	ST00637	ACQ_PEST	40ppb ccv
25	Sample	25	ST00638	ACQ_PEST	F4882-2
26	Sample	26	ST00639	ACQ_PEST	F4882-3
27	Sample	27	ST00640	ACQ_PEST	F4882-4
28	Sample	28	ST00641	ACQ_PEST	40ppb ccv

000214

GC ANALYSIS LOG

DATE: 9-20-99
COLUMN TYPE: DB17/1701
INSTRUMENT: ECD3

METHODS: 8081
METHOD FILE: 8081A
CALIB. DATE: 9-20-99

ANALYST: SW
RUN BATCH: 9ST24
AMOUNT INJECTED: 1 ul

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	SAMPLE AMOUNT	MATRIX	EXT. BATCH	DILUTION FACTOR	RUN OK	COMMENTS
1ST00614	1	cond std	8081					✓	
615	2	dbt/endrin bd			p458		50:500	✓	passed
616	3	40 ppb ccv			p457		40:1000	✓	
617	4	5 ppb pest					5:1000	✓	
618	5	10 ppb pest					10:1000	✓	
619	6	20 ppb pest					20:1000	✓	
620	7	60 ppb pest					60:1000	✓	
621	8	80 ppb pest					80:1000	✓	passed
622	9	500 ppb tox			p459		50:500	✓	updated
623	10	200 ppb Chlor			p460		40:1000	✓	↓
624	11	OP982-mb		30g/10ml	S	OP982	1x	✓	ND
625	12	F4877-3					100x	✓	RR 200x
626	13	-4					1x	✓	alpha, gamma chlordane
627	14	F4882-1					500x	✓	RR 2000x
628	15	-5					200x	✓	DDT=68
629	16	-5					20x	✓	Report tox only
630	17	-10					500x	✓	RR 2500x
631	18	F4877-3					200x	✓	alpha, gamma chlor
632	19	F4882-1					2000x	✓	alpha, gamma chlor
633	20	-10		↓	↓	↓	2500x	✓	alpha, gamma chlor
634	21	40 ppb ccv						✓	passed
635	22	OP982-ms		30g/10ml	S	OP982	50x	✓	✓ matrix
636	23	-msd		↓	↓	↓	↓	✓	✓ matrix
637	24	40 ppb ccv						✓	passed

Matrix: Designate "W" for Water, "S" for Soil, and "O" for Oil
Sample Amount: Initial Sample Weight (g) or Volume (ml) / Final Volume (ml)

Analyst's Signature: [signature]

006215

GC ANALYSI OG

DATE: 9-20-99
COLUMN TYPE: DB17/1701
INSTRUMENT: ECD 3

METHODS: 8081
METHOD FILE: 8081A
CALIB. DATE: 9-20-99

ANALYST: BW
RUN BATCH: 9ST24
AMOUNT INJECTED: 1 ul

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	SAMPLE AMOUNT	MATRIX	EXT. BATCH	DILUTION FACTOR	RUN OK	COMMENTS
ST00638	25	F4882 -2	8081	30g/10mL	S	00982	1x	✓	ND
639	26	-3	↓	↓	↓	↓	↓	✓	DDE, DDT, DIELDRIN
640	27	-4	↓	↓	↓	↓	↓	✓	Pests/Report from Sx also
641	28	40 ppb CCV	↓					✓	passed
								BW	

BW

000216

Matrix: Designate "W" for Water, "S" for Soil, and "O" for Oil
Sample Amount: Initial Sample Weight (g) or Volume (ml) / Final Volume (ml)

Analyst's Signature

SAMPLE RESULT SUMMARY

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ09659.D	1	09/23/99	ME	09/23/99	OP986	GIJ437
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		40-140%

(a) Sample not preserved, adjusted to pH < 2 prior to extraction.

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

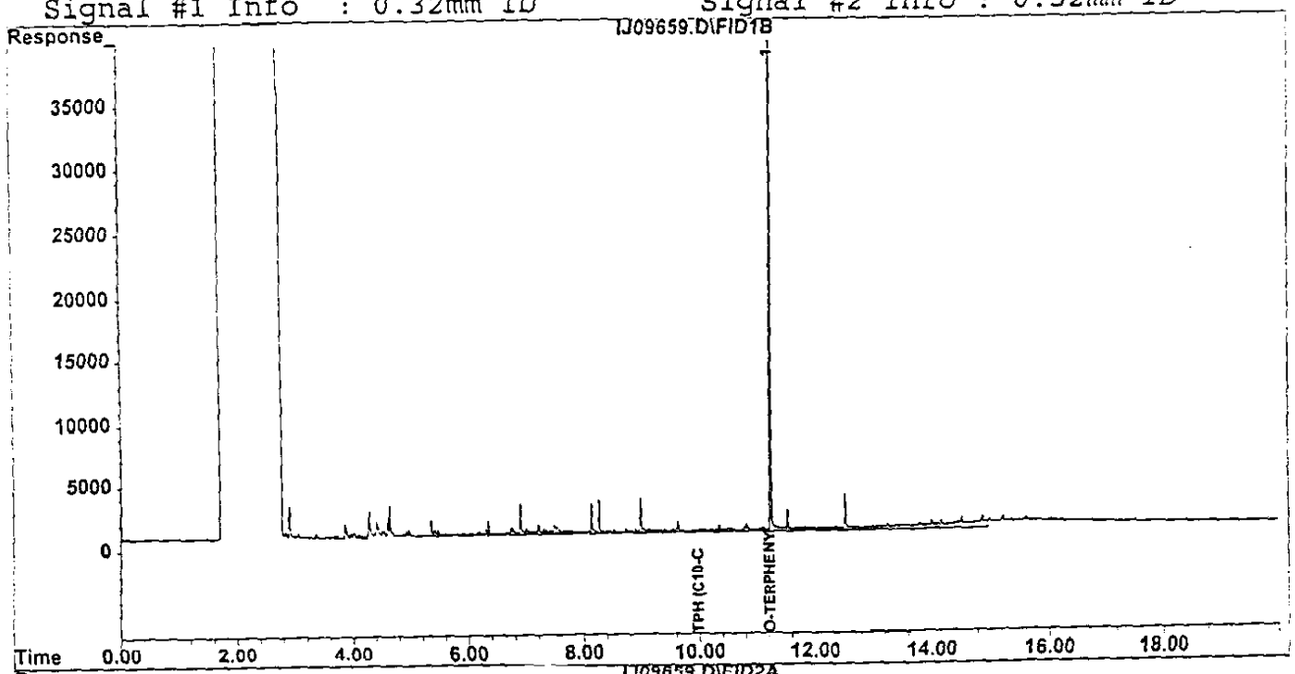
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

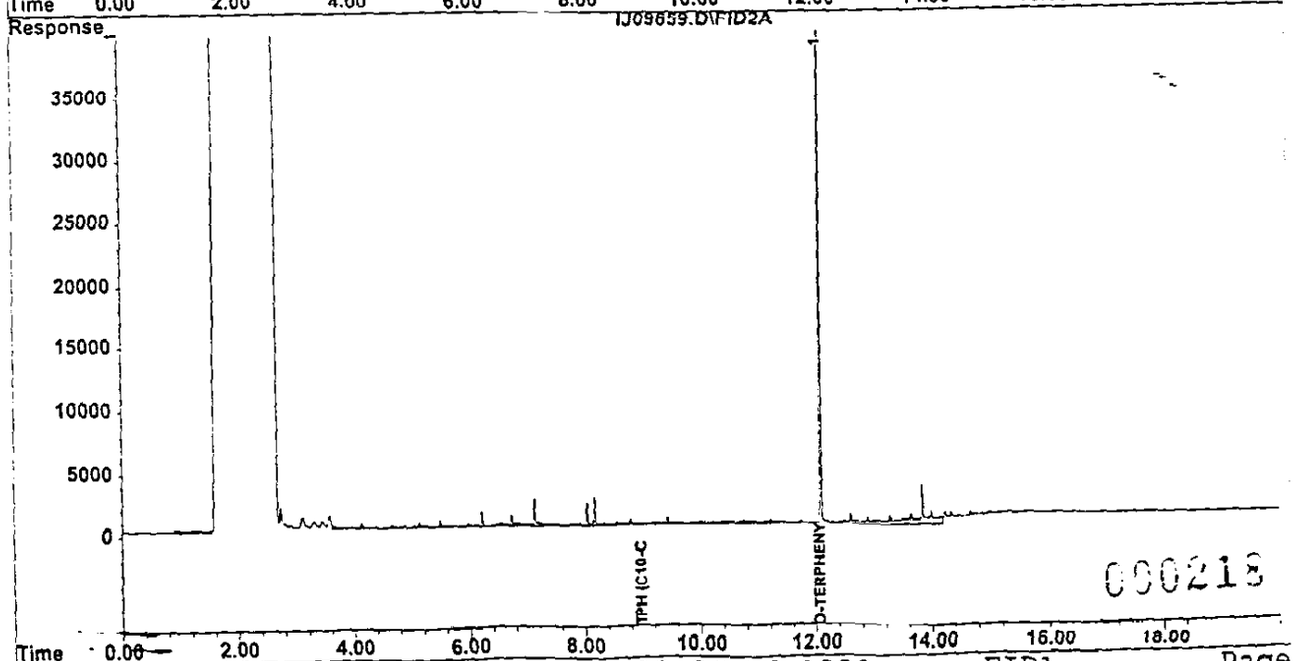
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09659.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09659.D\FID2A.CH
Acq On : 23 Sep 1999 1:05 pm Operator: marke
Sample : f4923-1 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 13:26 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000213

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09659.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09659.D\FID2A.CH
Acq On : 23 Sep 1999 1:05 pm Operator: marke
Sample : f4923-1 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 13:26 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.10	1074087	1127533	47.794	45.536
Spiked Amount 50.000 Range 40 - 140 Recovery =					95.59%	91.07%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	1408354	1061330	~~68.788~~	~~54.263~~

BDL

000219

(f)=RT Delta> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
FID1 Page 1

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	n/a
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ09661.D	2	09/23/99	ME	09/23/99	OP986	GIJ437
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	3.05	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		40-140%

(a) Sample not preserved, adjusted to pH < 2 prior to extraction.

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

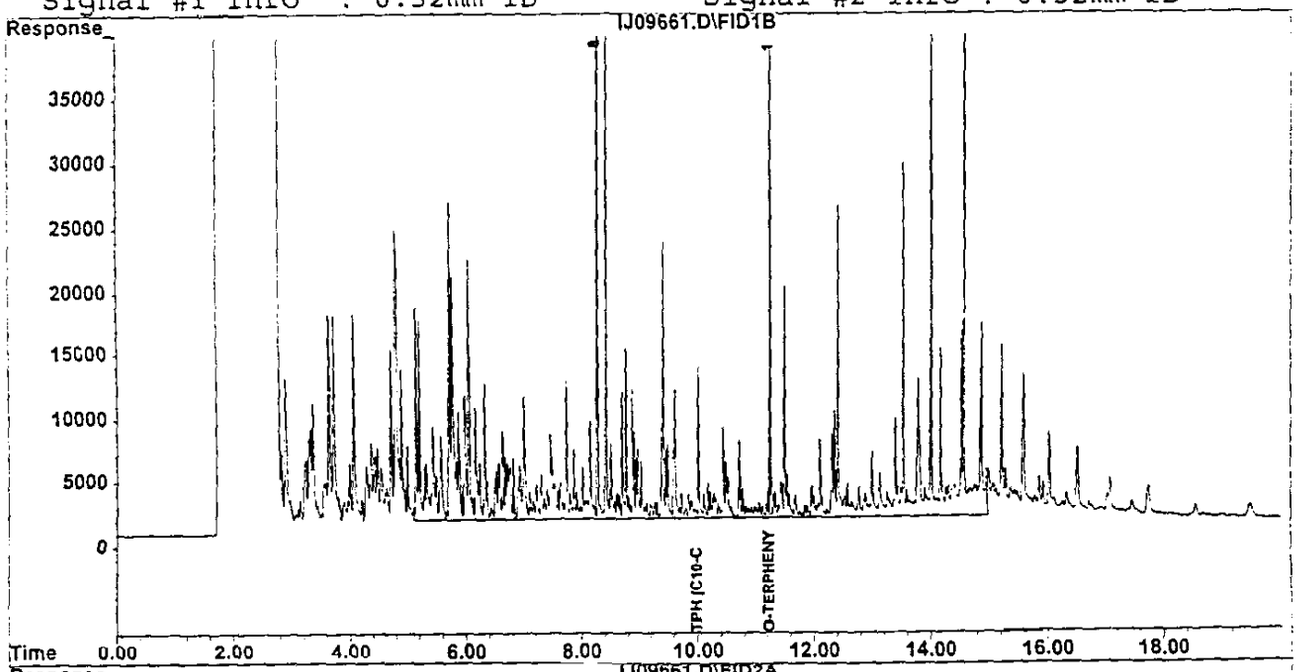
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

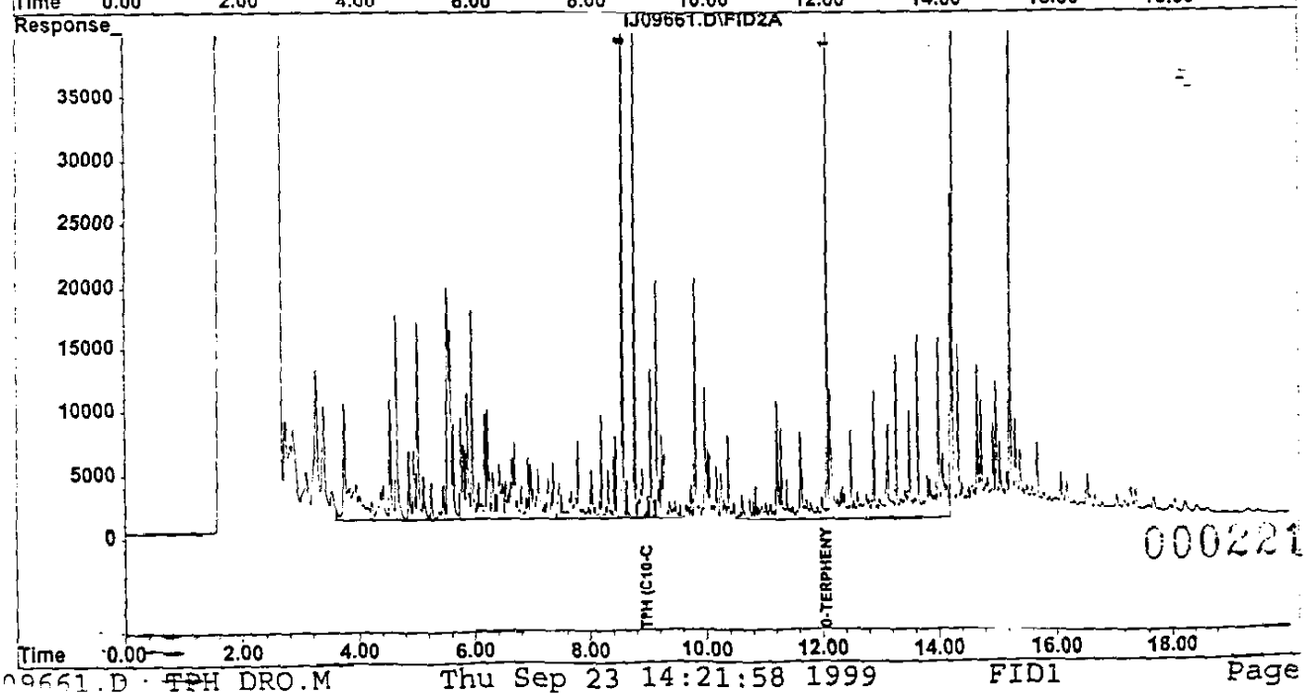
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09661.D\FID1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09661.D\FID2A.CH
Acq On : 23 Sep 1999 2:00 pm Operator: marke
Sample : f4923-2,2 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 14:21 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000221

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09661.D\FID1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09661.D\FID2A.CH
Acq On : 23 Sep 1999 2:00 pm Operator: marke
Sample : f4923-2,2 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 14:21 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.10	383422	481448	17.061	19.444
Spiked Amount 50.000 Range 40 - 140 Recovery =					34.12%#	38.89%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	15593346	13545146	761.623 / 500	692.531

TPH DRO = 1.5(2)

000222

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

SURROGATE RECOVERIES SUMMARY

Semivolatile Surrogate Recovery Summary

Job Number: F492[illegible]
Account: ITPA[illegible]ONR IT Corporation
Project: Bainbridge

Method: SW846 8015 M **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab [illegible]D	S1 [a]
F4923-1	IJ[illegible]59.D	96.0
F4923-2	I[illegible]61.D	68.0
OP986-BS2	I[illegible]656.D	101.0
OP986-MB2	I[illegible]55.D	106.0
OP986-MS	I[illegible]31.D	92.0
OP986-MSD	I[illegible]32.D	99.0
OP986-MB	I[illegible]027.D	100.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%

(a) Recovery from [illegible]gnal #1

MATRIX SPIKE/ MATRIX SPIKE DUPLICATE/ BLANK SPIKE SUMMARY

SGC.03

Blank Spike Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP986-BS2	IJ09656.D	1	09/23/99	ME	09/23/99	OP986	GIJ437

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F4923-1, F4923-2

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C28)	2	1.89	94	40-140

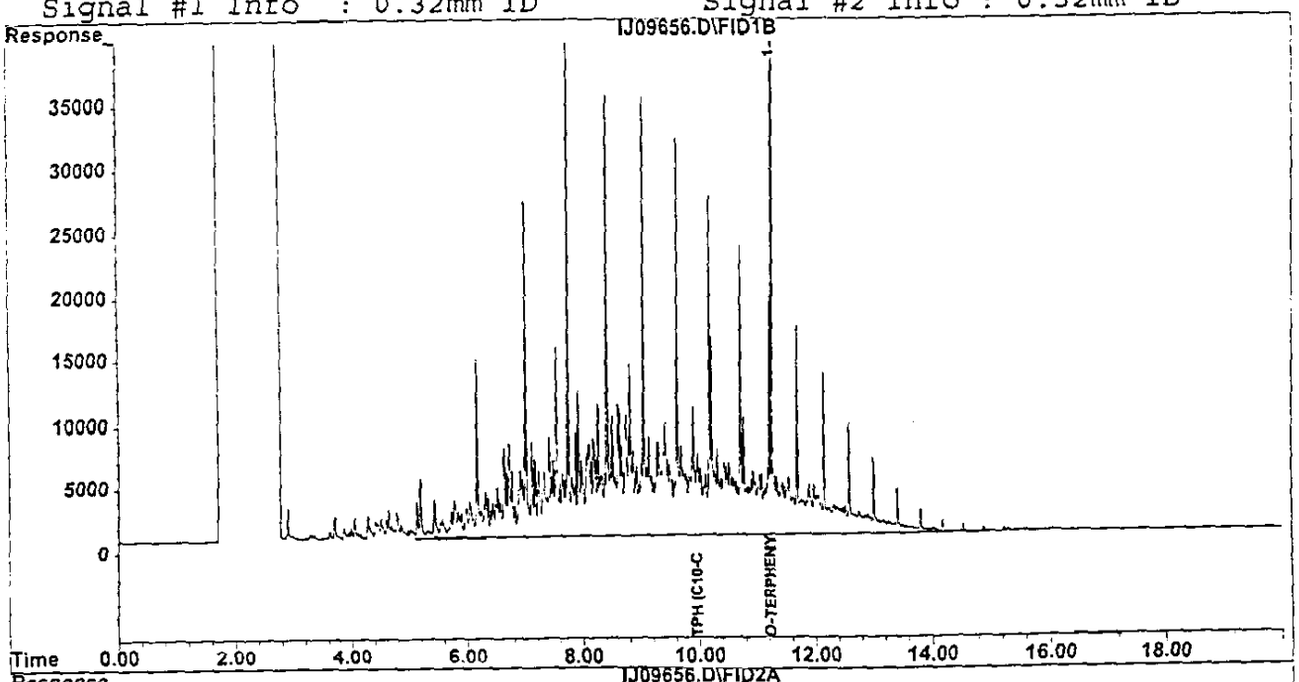
CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	101%	40-140%

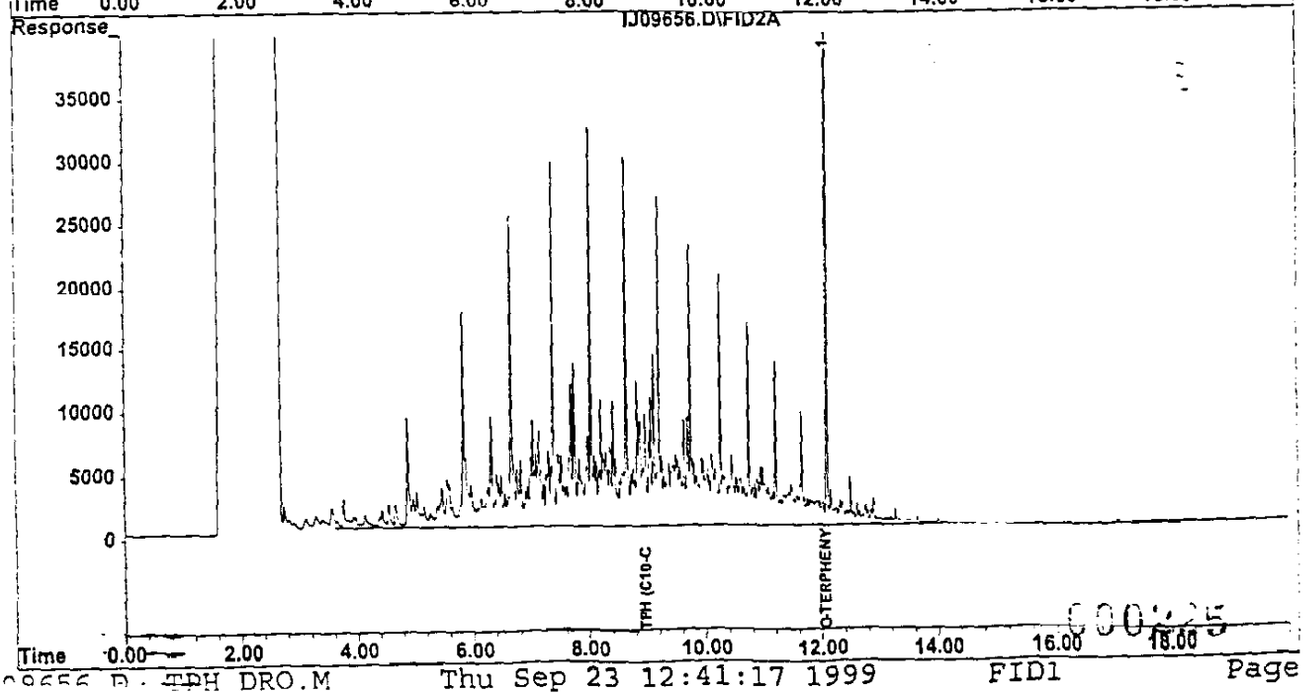
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09656.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09656.D\FID2A.CH
Acq On : 23 Sep 1999 11:48 am Operator: marke
Sample : op986-bs2 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:08 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09656.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09656.D\FID2A.CH
Acq On : 23 Sep 1999 11:48 am Operator: marke
Sample : op986-bs2 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:08 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.26	12.10	1131580	1249429	50.352	50.459
Spiked Amount 50.000 Range 40 - 140 Recovery = 100.70% 100.92%						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	19387740	18391922	946.952	940.335

000226

(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP986-MS	IJ09631.D	1	09/17/99	ME	09/17/99	OP986	GIJ435
OP986-MSD	IJ09632.D	1	09/17/99	ME	09/17/99	OP986	GIJ435
F4900-2 [a]	IJ09630.D	1	09/17/99	ME	09/17/99	OP986	GIJ435

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F4923-1, F4923-2

CAS No.	Compound	F4900-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		4	4.06	102	4.13	103	2	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	F4900-2	Limits
84-15-1	o-Terphenyl	92%	99%	96%	40-140%

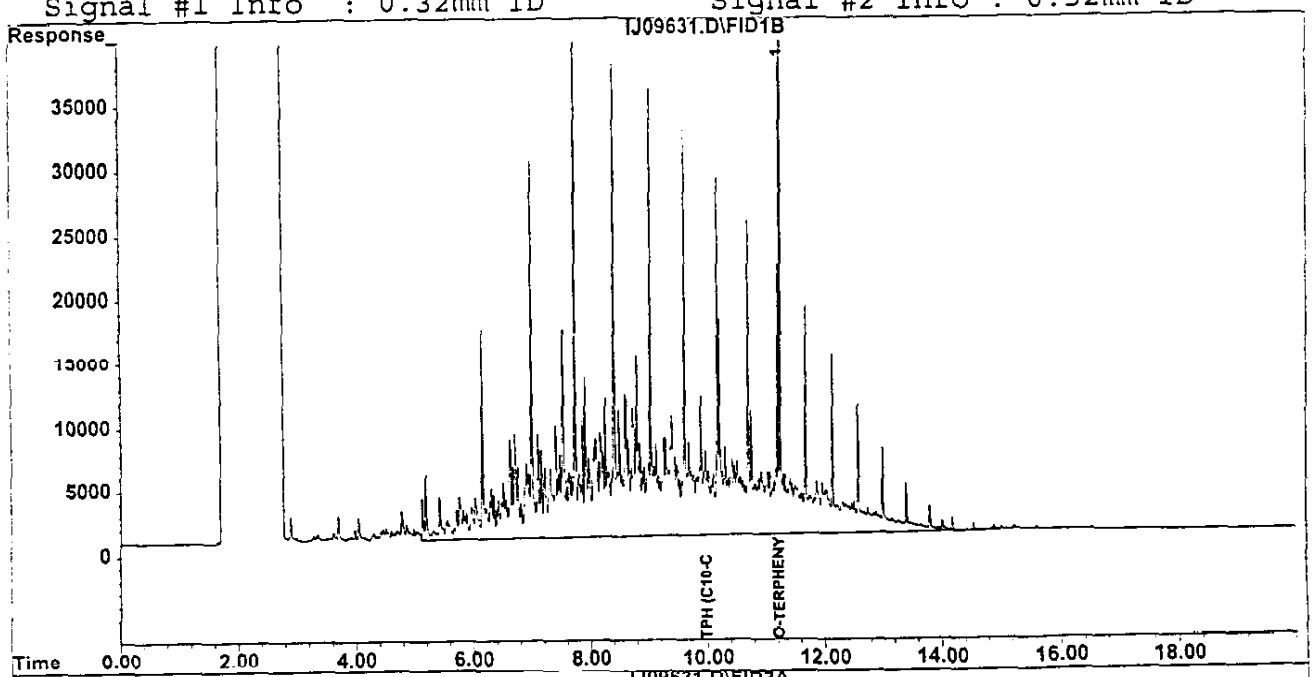
(a) Sample not preserved, adjusted to pH < 2 prior to extraction.

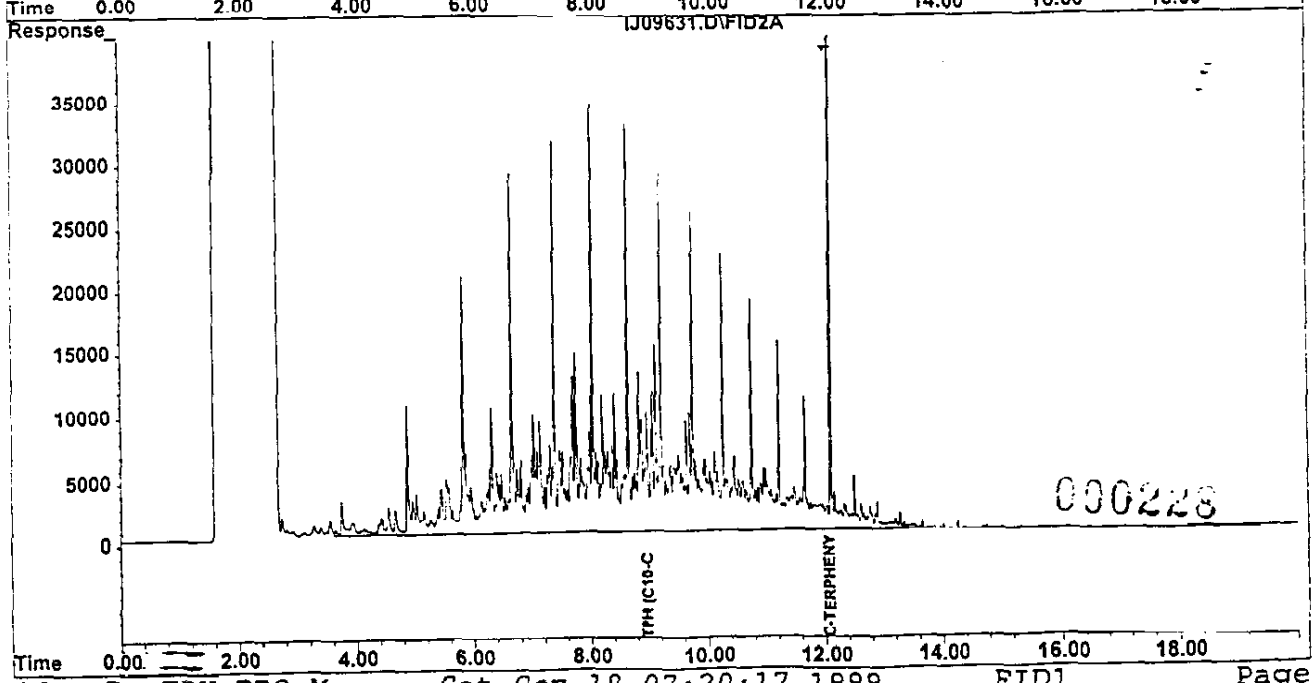
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09631.D\FID1B.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09631.D\FID2A.CH
Acq On : 17 Sep 1999 7:33 pm Operator: marke
Sample : op986-ms Inst : FID 1
Misc : op986,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 19:53 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000228

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09631.D\FID1B.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09631.D\FID2A.CH
Acq On : 17 Sep 1999 7:33 pm Operator: marke
Sample : op986-ms Inst : FID 1
Misc : op986,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 19:53 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.10	1038242	1185721	46.199	47.886
Spiked Amount 50.000 Range 40 - 140 Recovery =					92.40%	95.77%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	20794195	19944273	1015.647	1019.703

000229

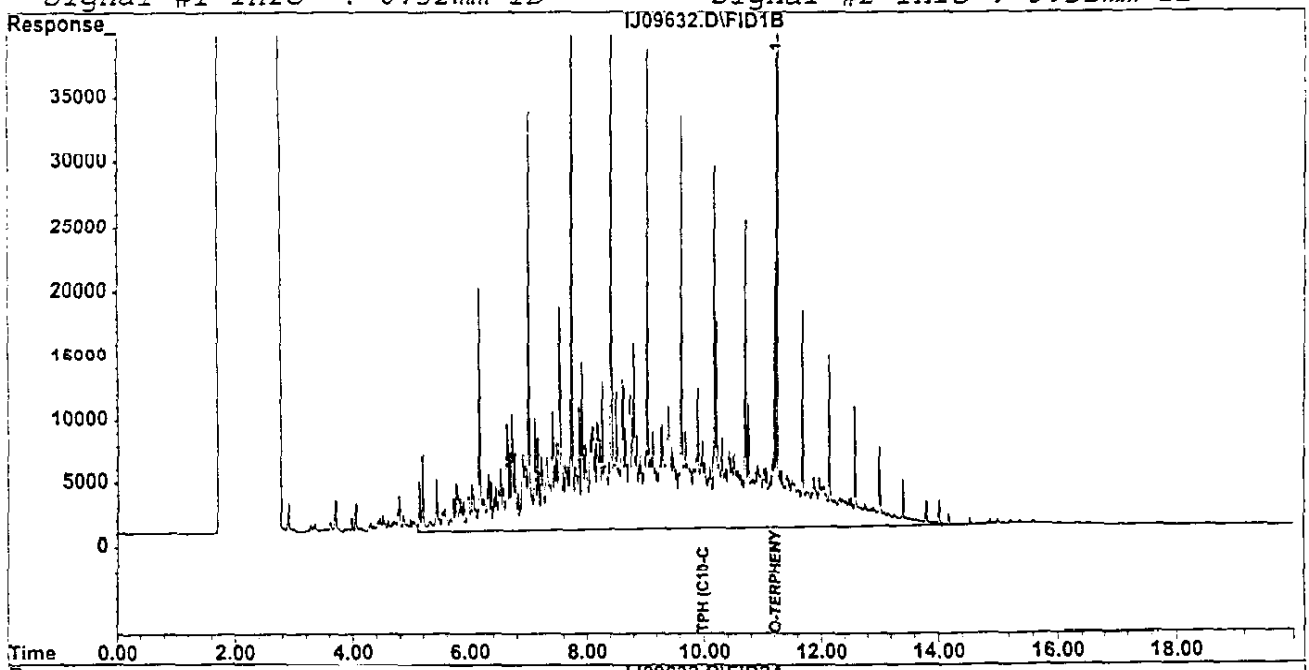
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

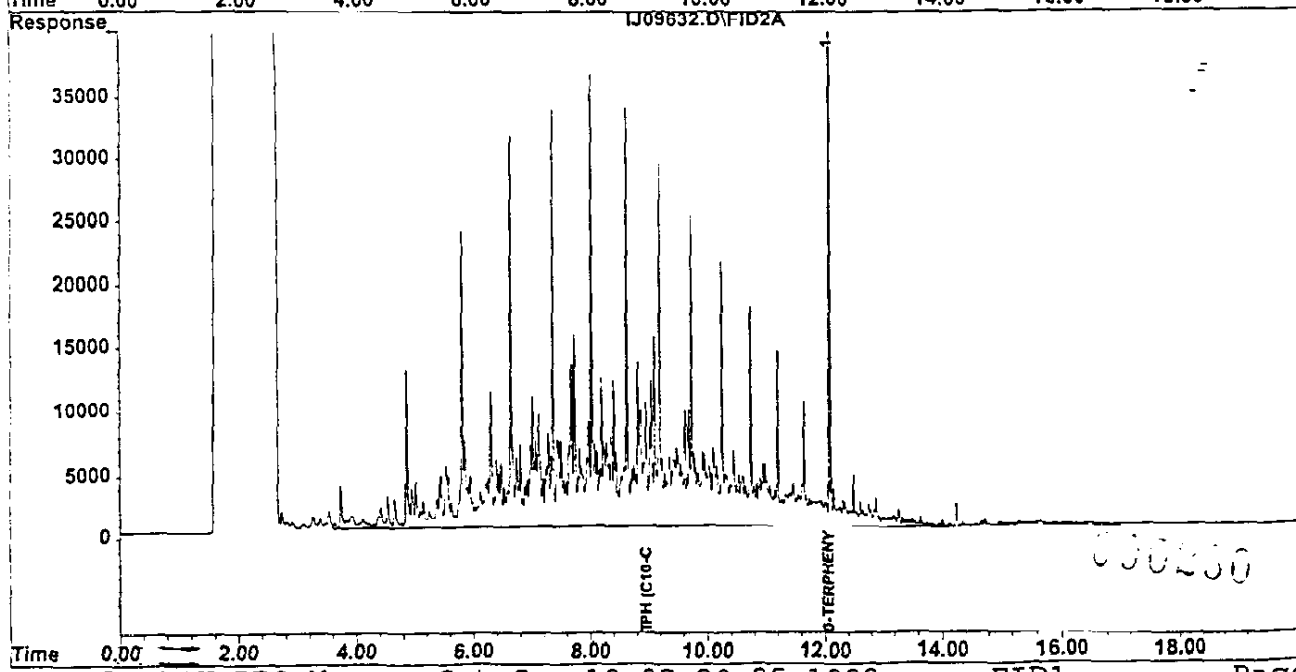
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09632.D\FID1B.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09632.D\FID2A.CH
Acq On : 17 Sep 1999 7:59 pm Operator: marke
Sample : op986-msd Inst : FID 1
Misc : op986,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 20:19 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09632.D\FID1B.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09632.D\FID2A.CH
Acq On : 17 Sep 1999 7:59 pm Operator: marke
Sample : op986-msd Inst : FID 1
Misc : op986,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 20:19 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.09	1113506	1187473	49.548	47.957
Spiked Amount 50.000 Range 40 - 140 Recovery =					99.10%	95.91%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	21161656	20404070	1033.595	1043.211

000231

(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

METHOD BLANK SUMMARY

SGC.04

Method Blank Summary

Job Number: F4923
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP986-MB2	IJ09655.D	1	09/23/99	ME	09/23/99	OP986	GIJ437

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F4923-1, F4923-2

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	ND	0.50	mg/l	

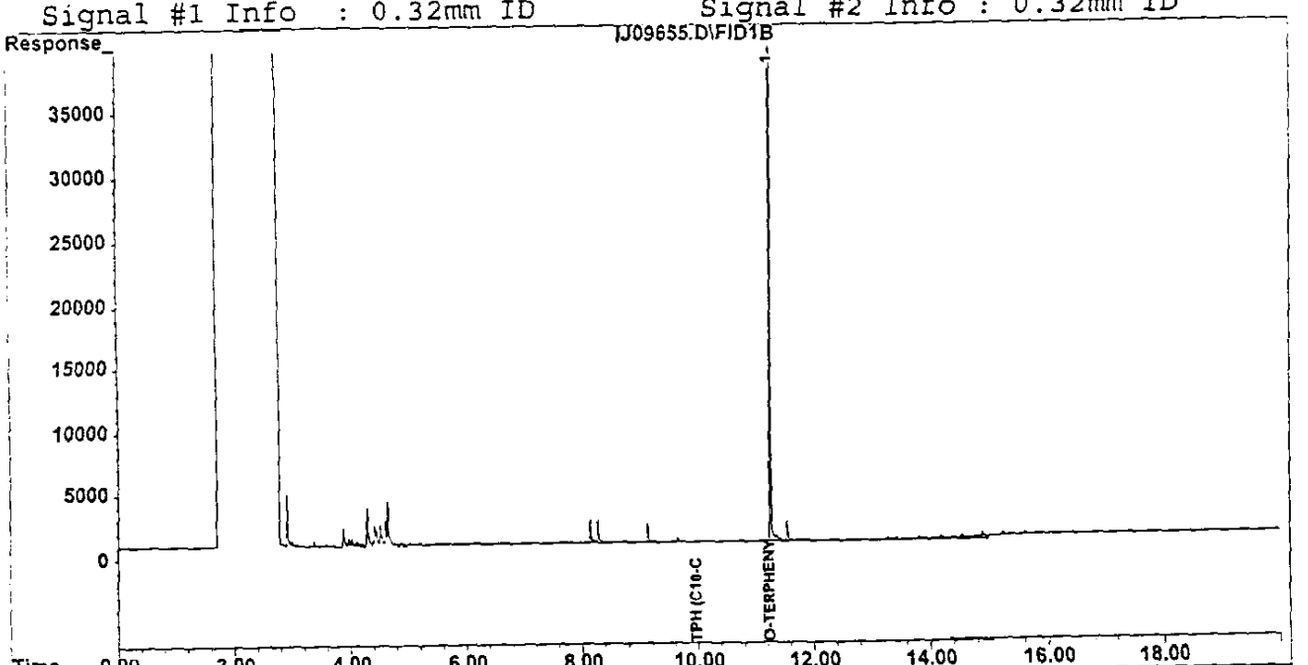
CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	106%	40-140%

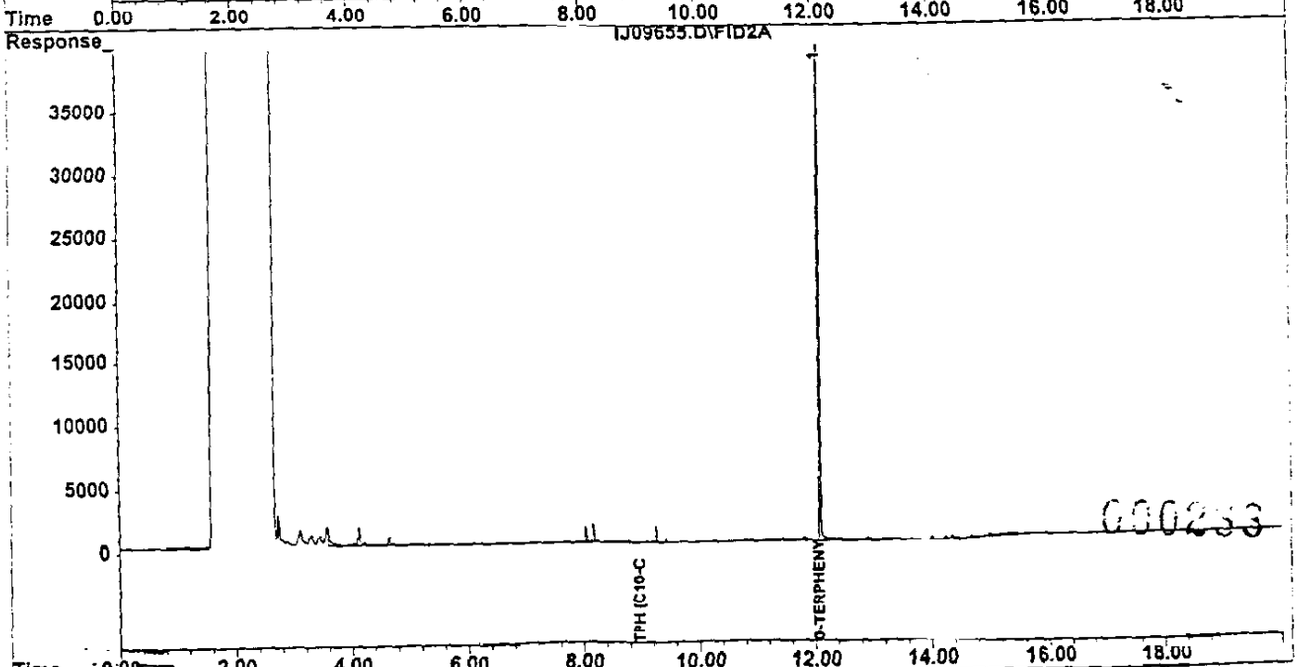
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09655.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09655.D\FID2A.CH
Acq On : 23 Sep 1999 11:22 am Operator: marke
Sample : op986-mb2 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 11:42 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000253

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09655.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09655.D\FID2A.CH
Acq On : 23 Sep 1999 11:22 am Operator: marke
Sample : op986-mb2 Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 11:42 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.26	12.10	1191712	1260442	53.020	50.904
Spiked Amount 50.000 Range 40 - 140 Recovery =					106.06%	101.81%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	472299	402097	~~23.068~~	~~20.358~~

BN

000234

(f)=RT Delta> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
Sep 23 12:40:51 1999 FID1 Page 1

INITIAL CALIBRATION SUMMARY

SGC.05

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:58 1999

Calibration Files
1 =IJ09621.D 2 =IJ09622.D 3 =IJ09623.D
4 =IJ09624.D 5 =IJ09625.D

	Compound	1	2	3	4	5	Avg	%RSD
1) S	O-TERPHENYL	2.234	2.098	2.255	2.209	2.440	2.247 E4	5.50
2) H	TPH (C10-C28)	2.130	1.986	2.136	1.934	2.051	2.047 E4	4.33

Signal #2 Calibration Files
1 =IJ09621.D 2 =IJ09622.D 3 =IJ09623.D
4 =IJ09624.D 5 =IJ09625.D

	Compound	1	2	3	4	5	Avg	%RSD
1) S	O-TERPHENYL	2.491	2.344	2.525	2.373	2.648	2.476 E4	4.95
2) H	TPH (C10-C28)	1.938	1.885	2.064	1.884	2.008	1.956 E4	4.02

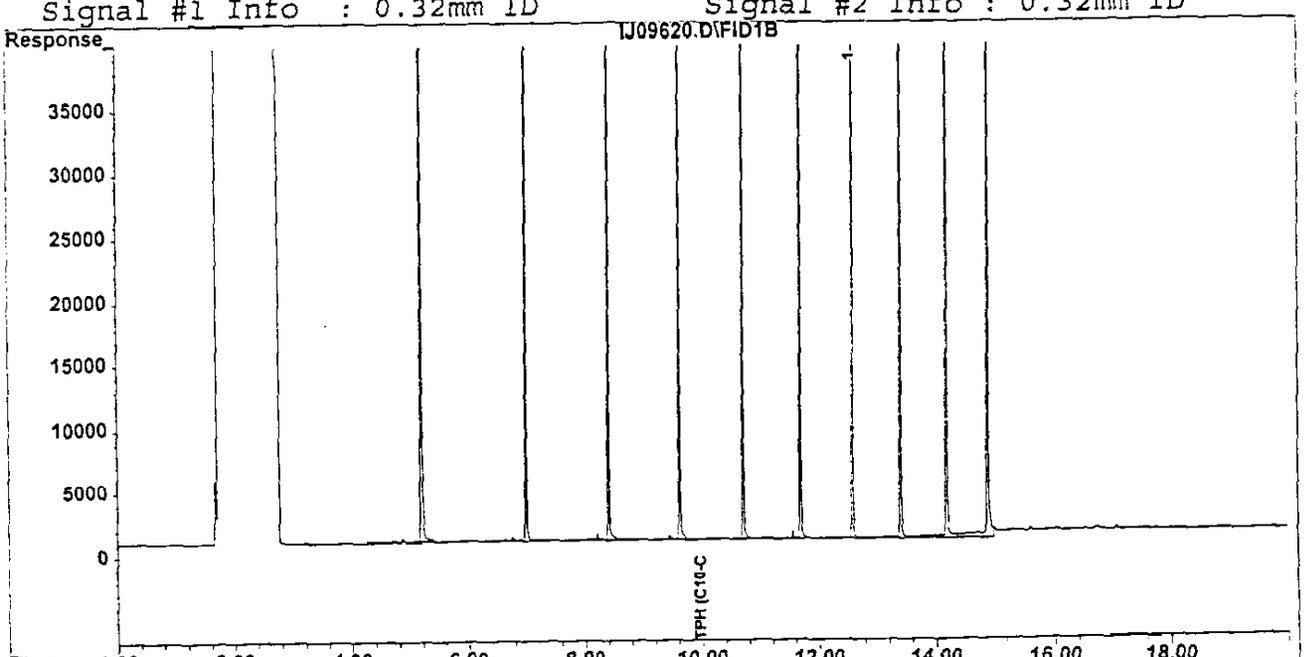
(#) = Out of Range

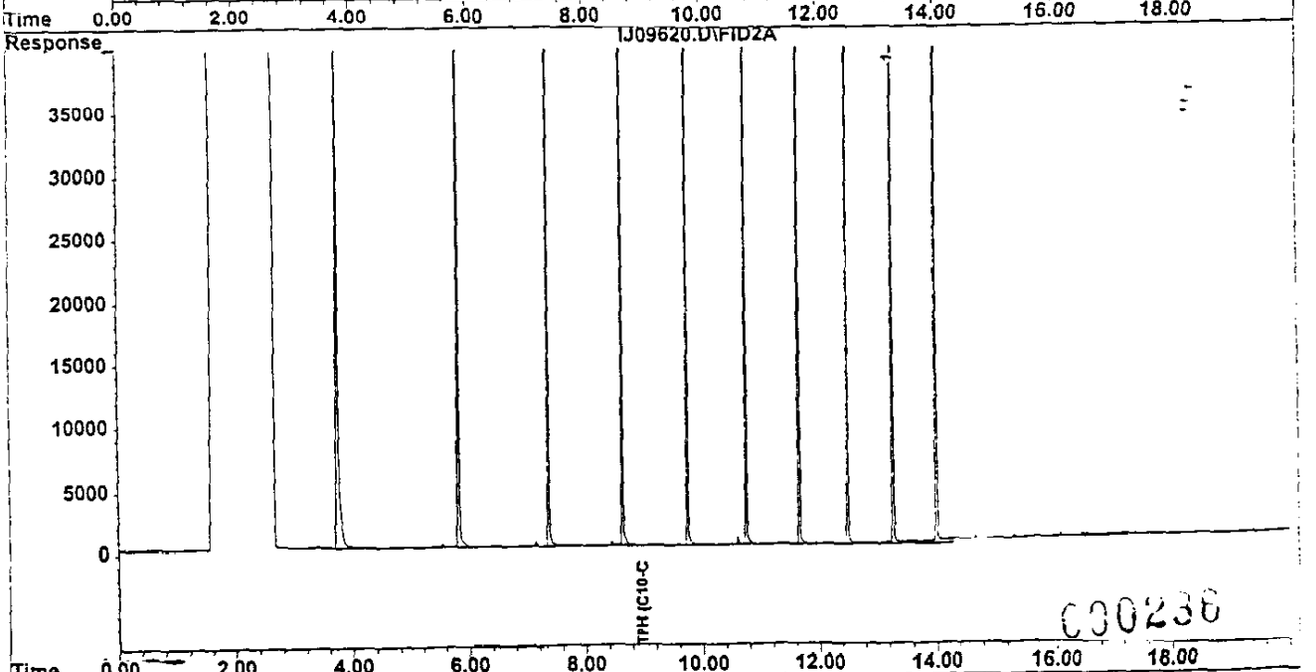
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09620.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09620.D\FID2A.CH
Acq On : 17 Sep 1999 12:55 pm Operator: marke
Sample : 50ppm rt std Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 13:26 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:26:03 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





C00236

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09620.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09620.D\FID2A.CH
Acq On : 17 Sep 1999 12:55 pm Operator: marke
Sample : 50ppm rt std Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 13:26 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:26:03 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	50.000	Range	40 - 140	Recovery	=	0.00%# 0.00%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	11282757	11647887	323.863	341.260

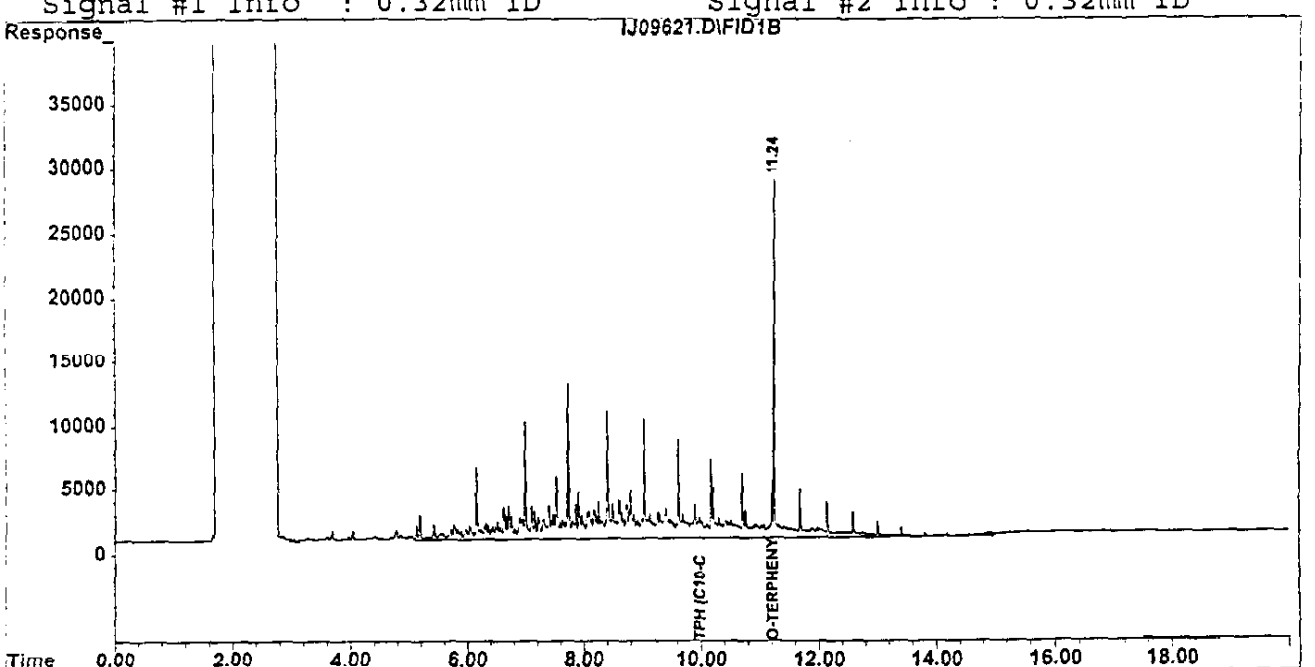
(f)=RT Delta-> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

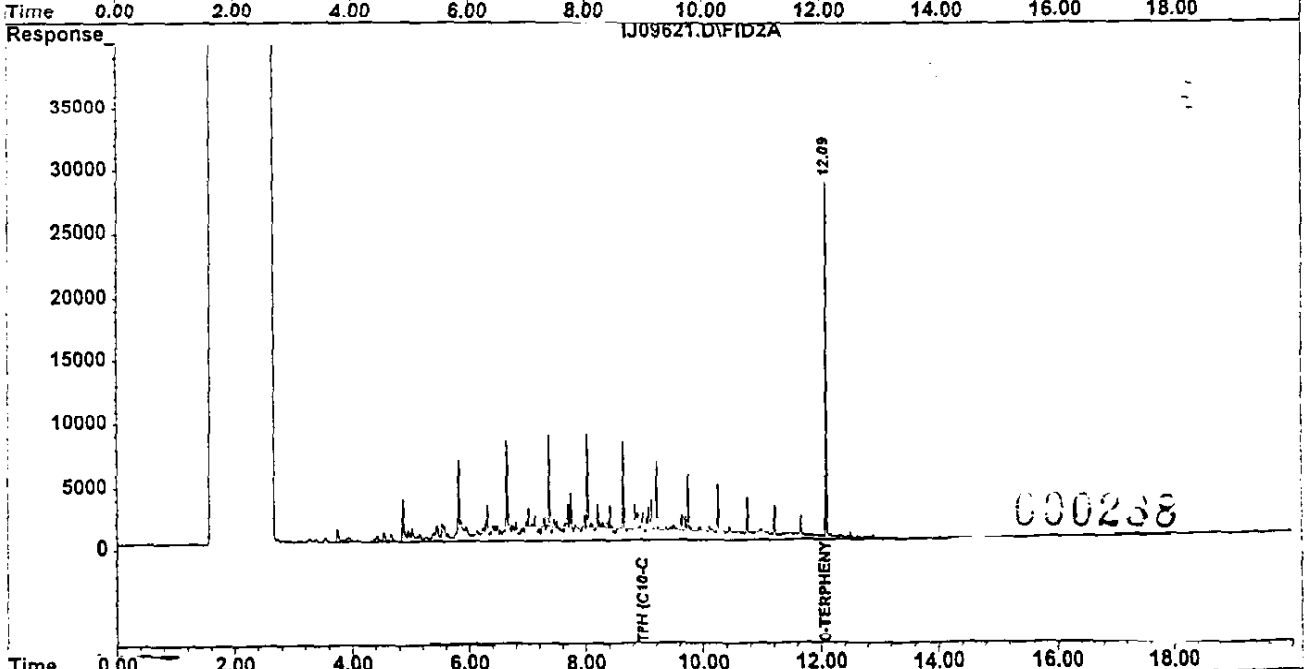
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09621.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09621.D\FID2A.CH
Acq On : 17 Sep 1999 1:30 pm Operator: marke
Sample : 250ppm DRO s650 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 13:54 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000238

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09621.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09621.D\FID2A.CH
Acq On : 17 Sep 1999 1:30 pm Operator: marke
Sample : 250ppm DRO s650 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 13:54 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.09	279246	311408	7.820	7.951
Spiked Amount 50.000 Range 40 - 140 Recovery =					15.64%#	15.90%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	5325155	4845159	152.854	141.953

000239

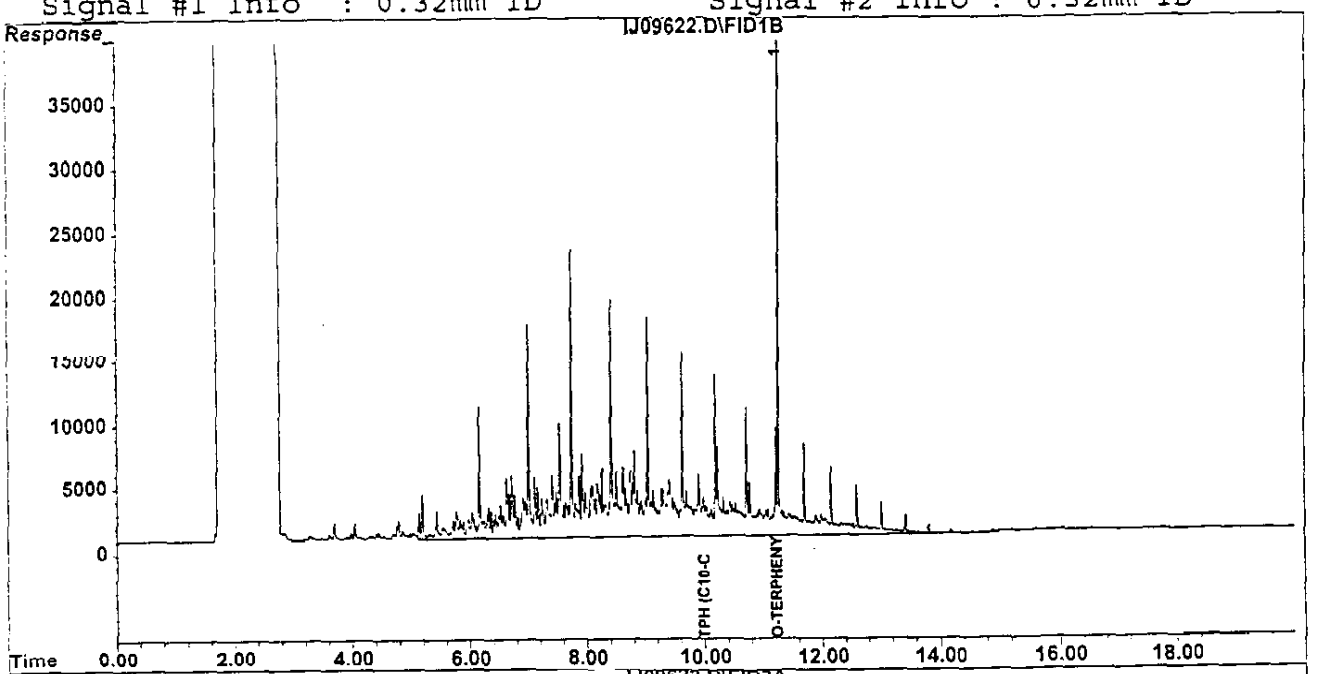
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

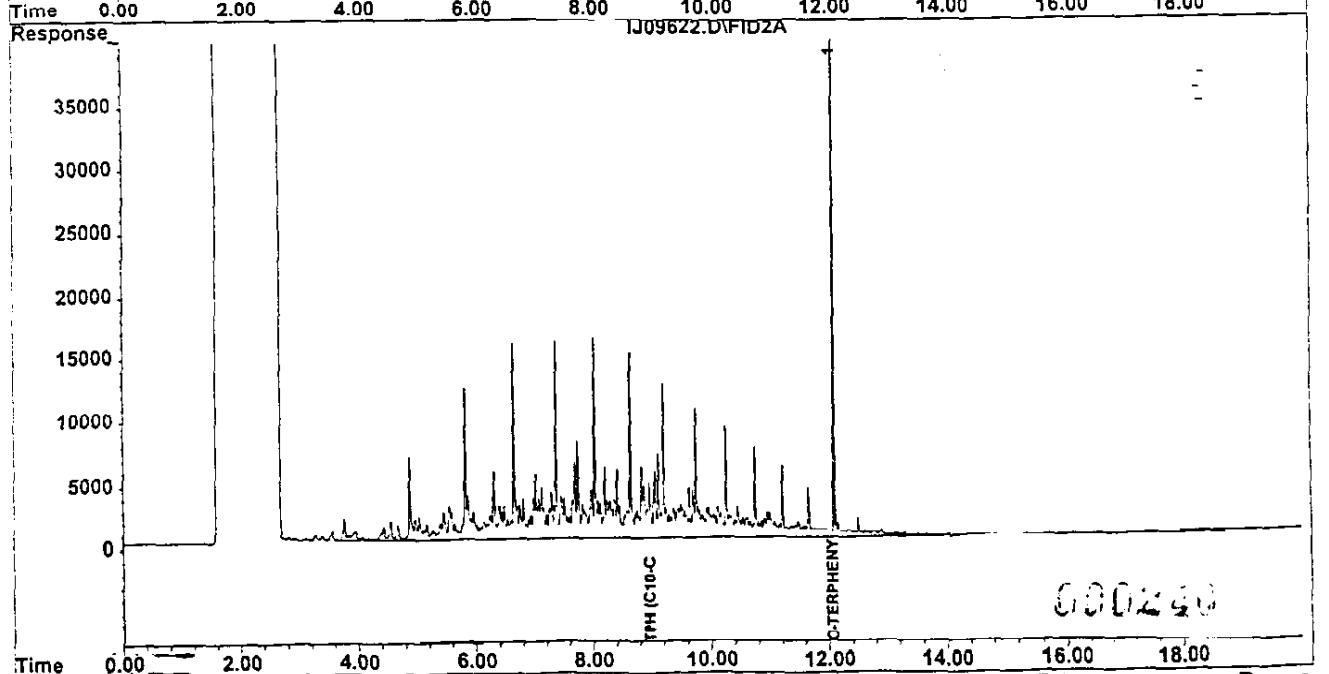
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09622.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09622.D\FID2A.CH
Acq On : 17 Sep 1999 1:56 pm Operator: marke
Sample : 500ppm DRO s649 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 14:38 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09622.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09622.D\FID2A.CH
Acq On : 17 Sep 1999 1:56 pm Operator: marke
Sample : 500ppm DRO s649 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 14:38 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.09	524550	586000	16.923	17.061
Spiked Amount 50.000 Range 40 - 140 Recovery =					33.85%#	34.12%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	9931136	9426756	333.559	324.193

000241

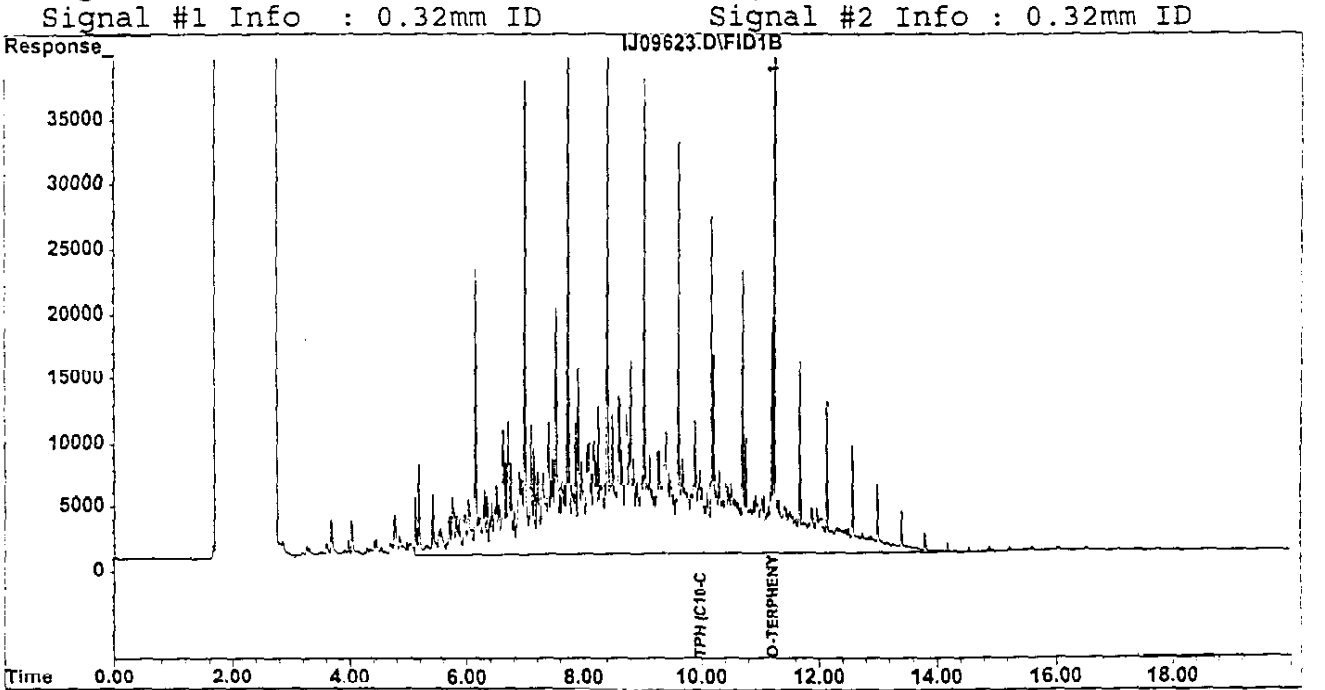
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

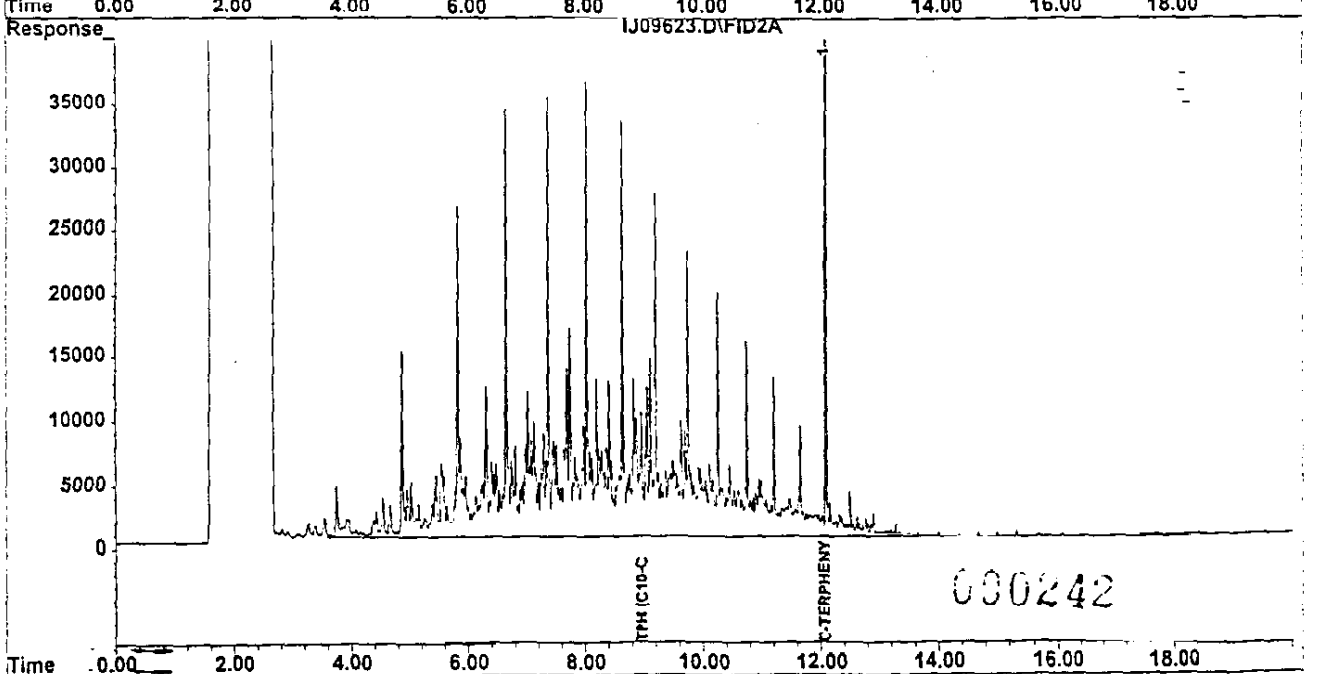
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09623.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09623.D\FID2A.CH
Acq On : 17 Sep 1999 2:22 pm Operator: marke
Sample : 1000ppm DRO s648 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 14:59 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000242

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09623.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09623.D\FID2A.CH
Acq On : 17 Sep 1999 2:22 pm Operator: marke
Sample : 1000ppm DRO s648 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 14:59 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.10	1127682	1262622	36.381	36.760
Spiked Amount 50.000 Range 40 - 140 Recovery =					72.76%	73.52%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	21362514	20635417	717.521	709.726

000243

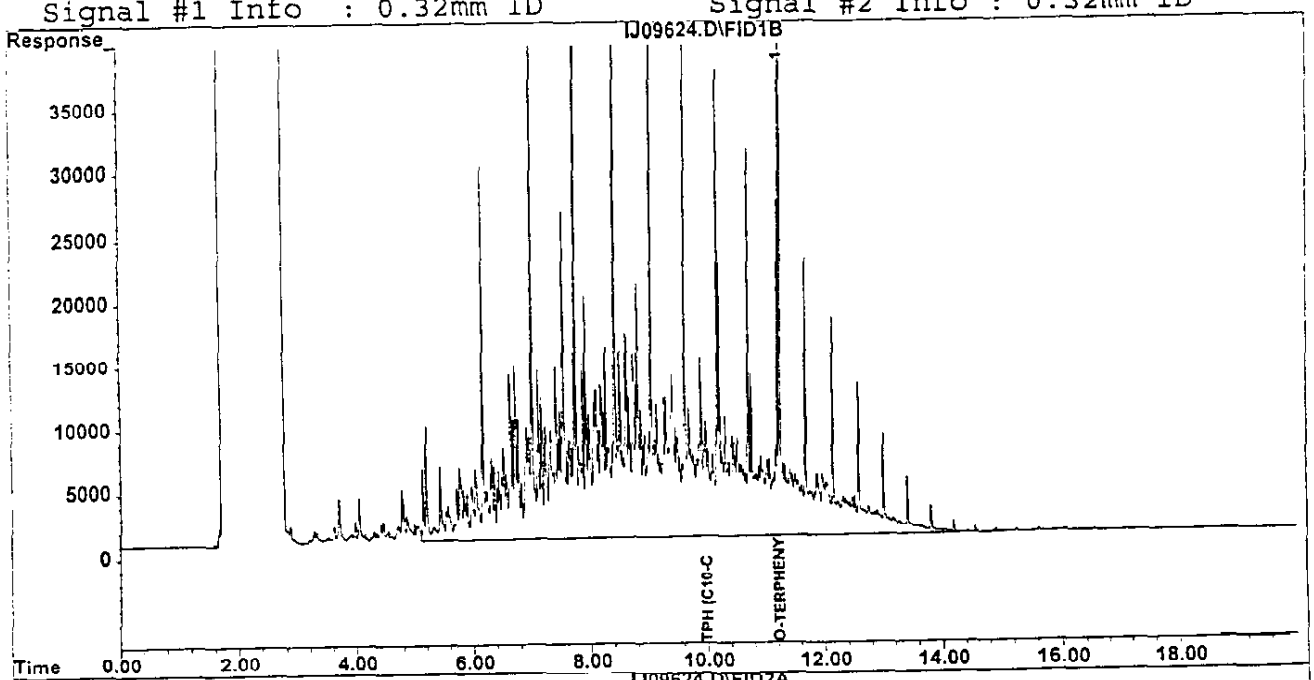
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

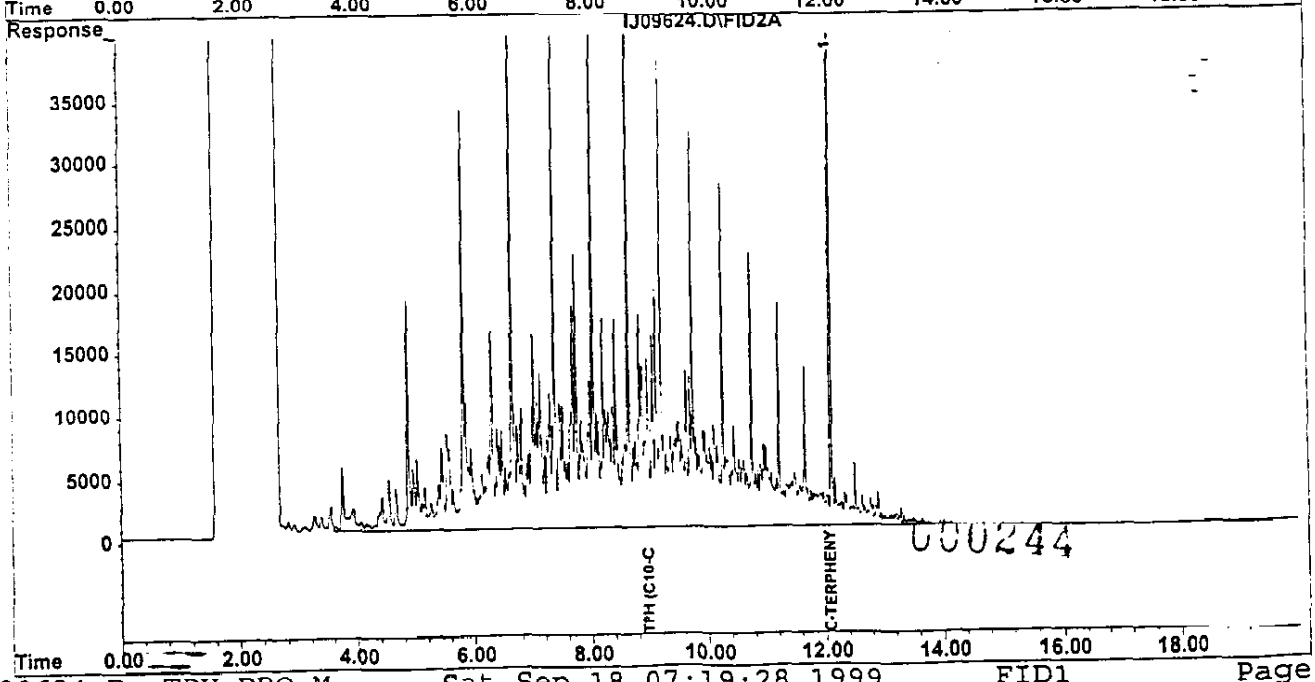
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09624.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09624.D\FID2A.CH
Acq On : 17 Sep 1999 2:48 pm Operator: marke
Sample : 1500ppm DRO s647 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 17:18 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000244

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09624.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09624.D\FID2A.CH
Acq On : 17 Sep 1999 2:48 pm Operator: marke
Sample : 1500ppm DRO s647 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 17:18 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.10	1656585	1779458	58.569	56.894
Spiked Amount 50.000 Range 40 - 140 Recovery = 117.14% 113.79%						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	29007193	28262946	1078.477	1081.308

000245

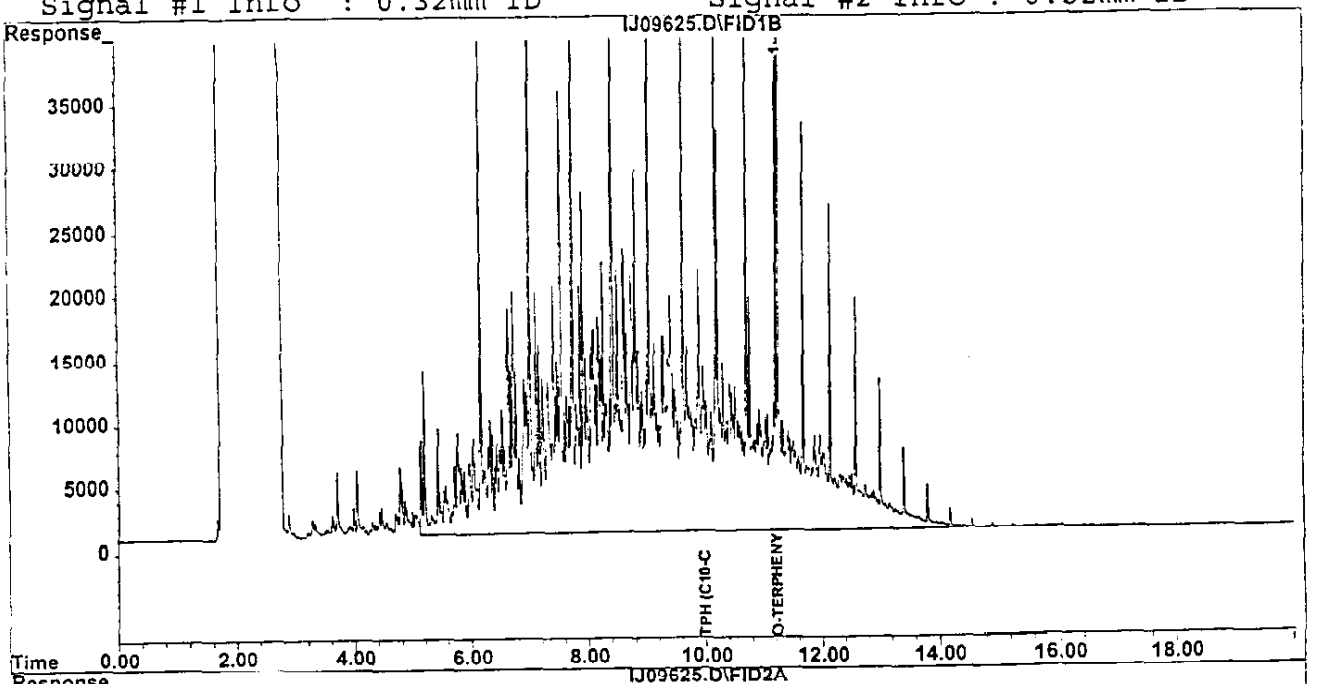
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

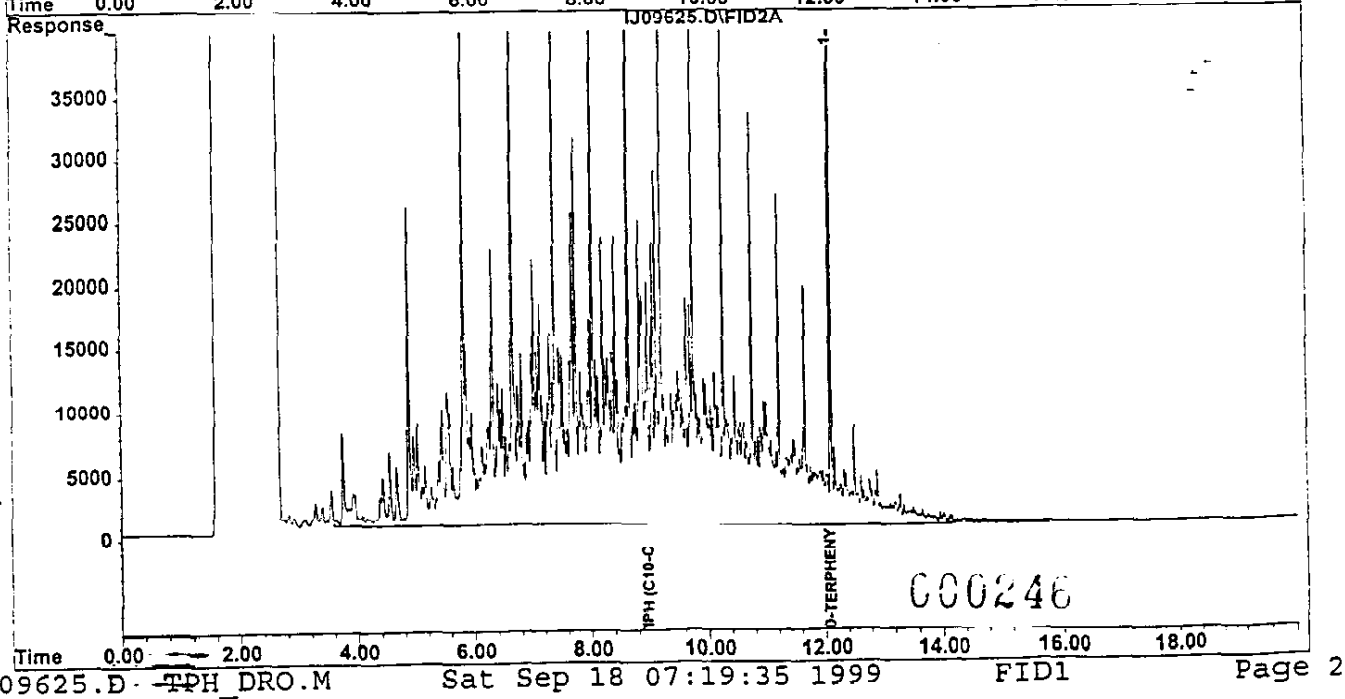
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09625.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09625.D\FID2A.CH
Acq On : 17 Sep 1999 3:14 pm Operator: marke
Sample : 2000ppm DRO s646 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 17:18 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000246

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0917DRO\IJ09625.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0917DRO\IJ09625.D\FID2A.CH
Acq On : 17 Sep 1999 3:14 pm Operator: marke
Sample : 2000ppm DRO s646 Inst : FID 1
Misc : op977,gij435,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 17 17:18 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 13:27:44 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.25	12.10	2440341	2647502	86.279	84.648
Spiked Amount 50.000 Range 40 - 140 Recovery = 172.56%# 169.30%#						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	41011285	40166030	1524.784	1536.706

000247

(f)=RT Delta> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
[illegible] Sat Sep 18 07:19:34 1999 FID1 Page 1

CONTINUING CALIBRATION SUMMARY

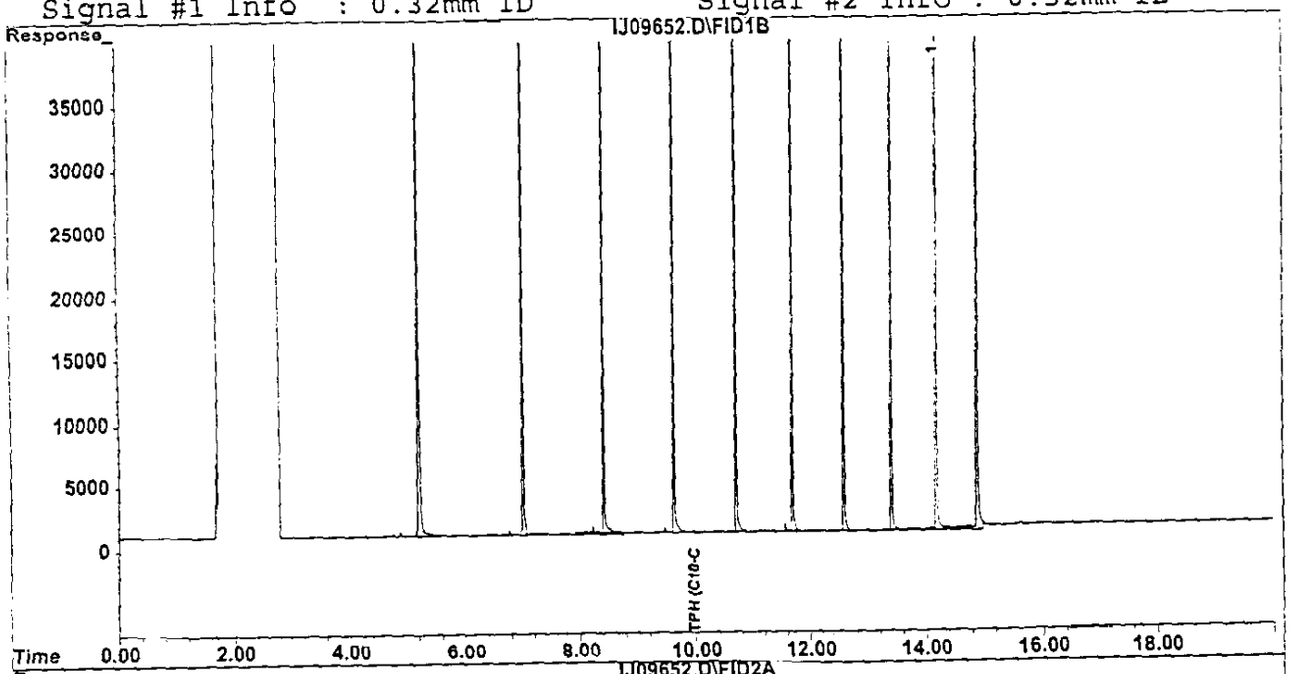
SGC.06

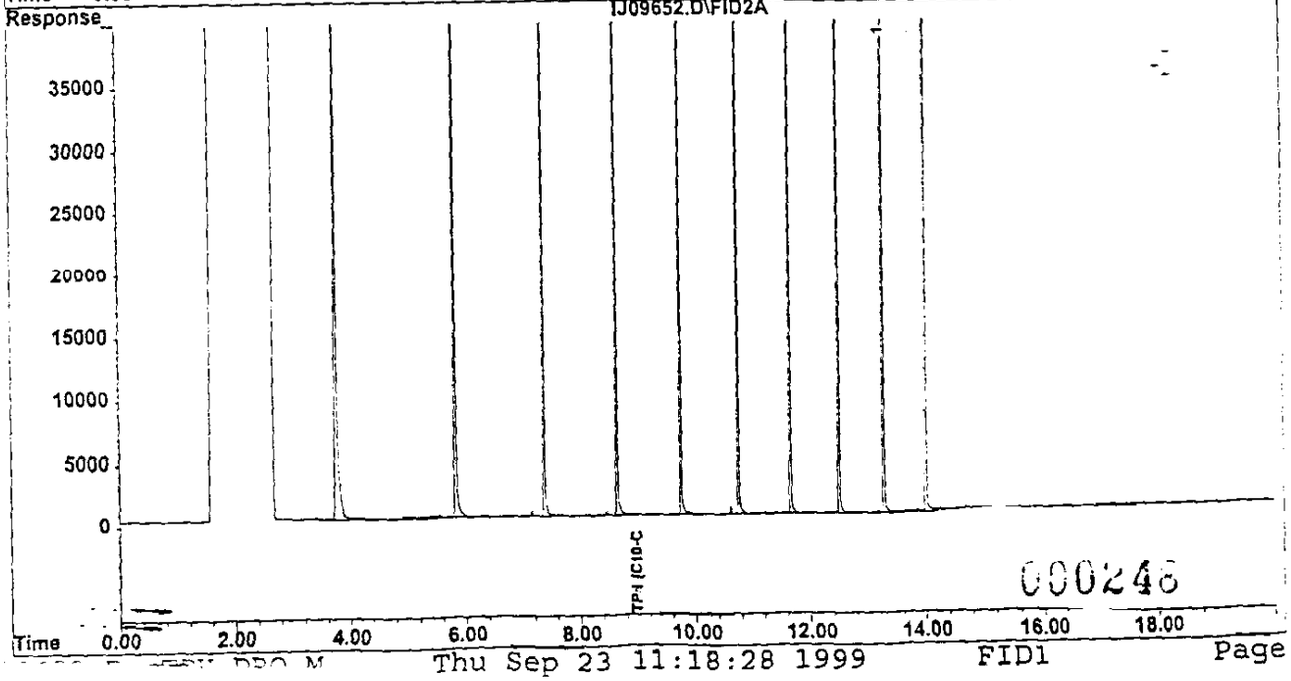
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09652.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09652.D\FID2A.CH
Acq On : 23 Sep 1999 10:04 am Operator: marke
Sample : rt std dro c10-c28 Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:25 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000246

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09652.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09652.D\FID2A.CH
Acq On : 23 Sep 1999 10:04 am Operator: marke
Sample : rt std dro c10-c28 Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:25 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 50.000	Range	40 - 140	Recovery	=	0.00%#	0.00%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	11615677	12036426	567.342	615.394

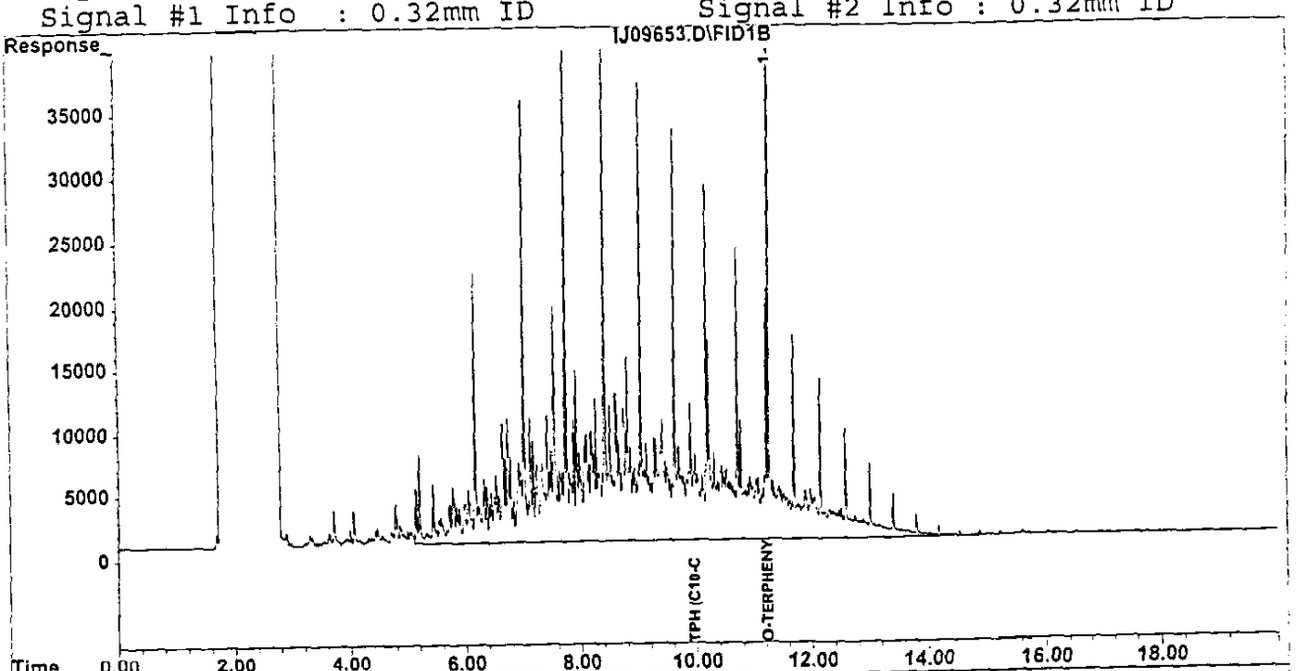
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

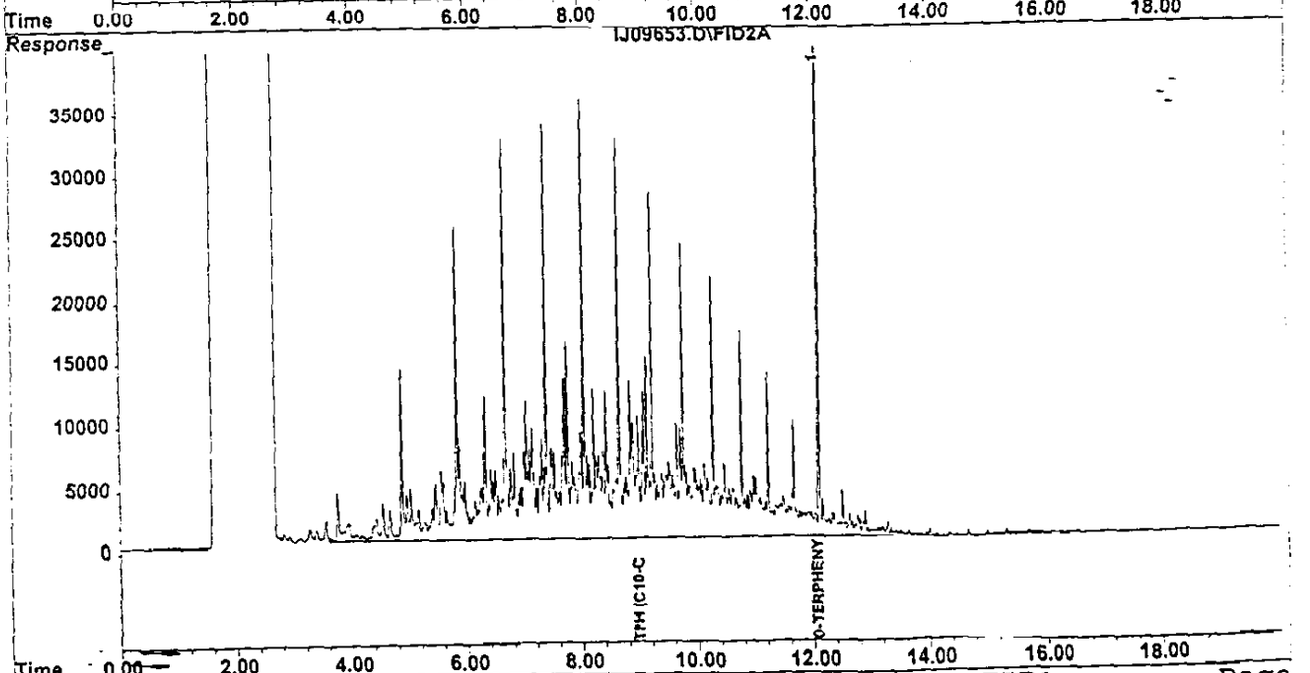
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09653.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09653.D\FID2A.CH
Acq On : 23 Sep 1999 10:30 am Operator: marke
Sample : 1000ppm DRO ccv s648 Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:51 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09653.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09653.D\FID2A.CH
Acq On : 23 Sep 1999 10:30 am Operator: marke
Sample : 1000ppm DRO ccv s648 Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:51 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.26	12.10	1234601	1346233	54.936	54.369
Spiked Amount 50.000 Range 40 - 140 Recovery = 109.87% 108.74%						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	21510458	20829683	1050.632	1064.972

> 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09653.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09653.D\FID2A.CH
Acq On : 23 Sep 1999 10:30 am Operator: marke
Sample : 1000ppm DRO ccv s648 Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	O-TERPHENYL	22.473	24.692 E3	-9.9	109	0.00
2	H	TPH (C10-C28)	20.474	21.510 E3	-5.1	101	0.00

Signal #2

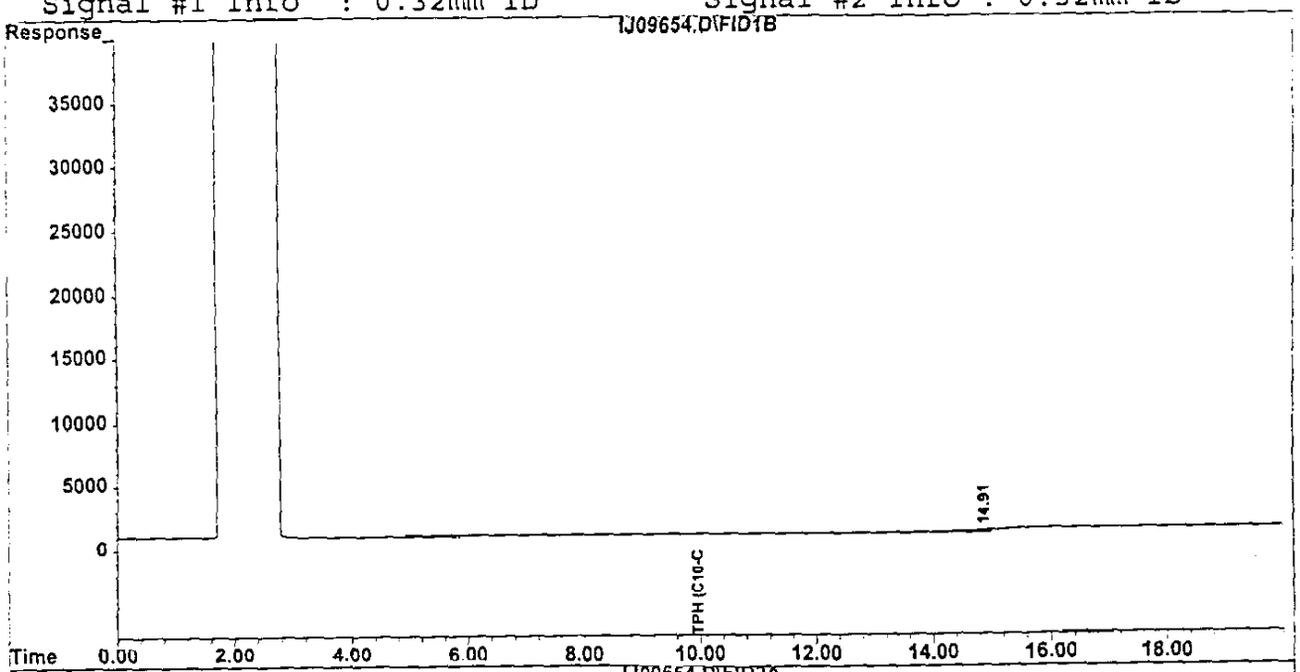
1	S	O-TERPHENYL	24.761	26.925 E3	-8.7	107	0.00
2	H	TPH (C10-C28)	19.559	20.830 E3	-6.5	101	0.00

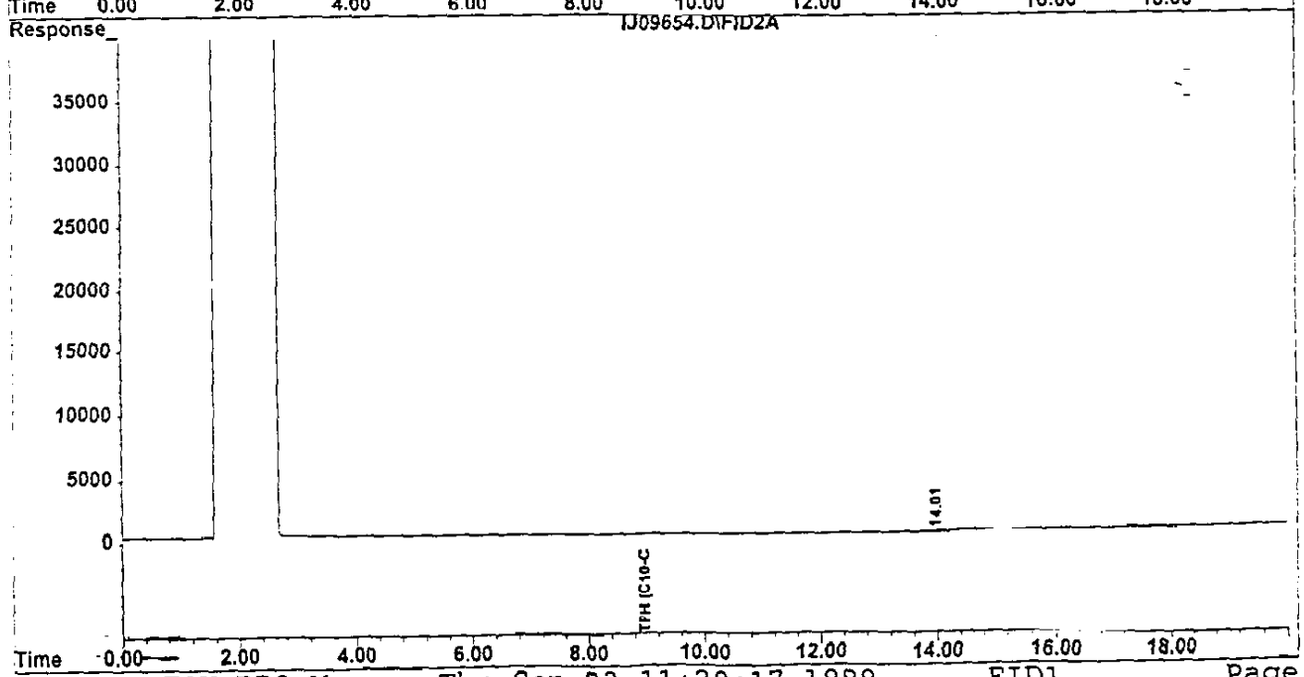
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09654.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09654.D\FID2A.CH
Acq On : 23 Sep 1999 10:56 am Operator: marke
Sample : solvent blank Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 11:19 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09654.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09654.D\FID2A.CH
Acq On : 23 Sep 1999 10:56 am Operator: marke
Sample : solvent blank Inst : FID 1
Misc : op990,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 11:19 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 50.000	Range	40 - 140	Recovery	=	0.00%#	0.00%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	275885	190479	~~13.475~~	~~9.739~~ #

BAV

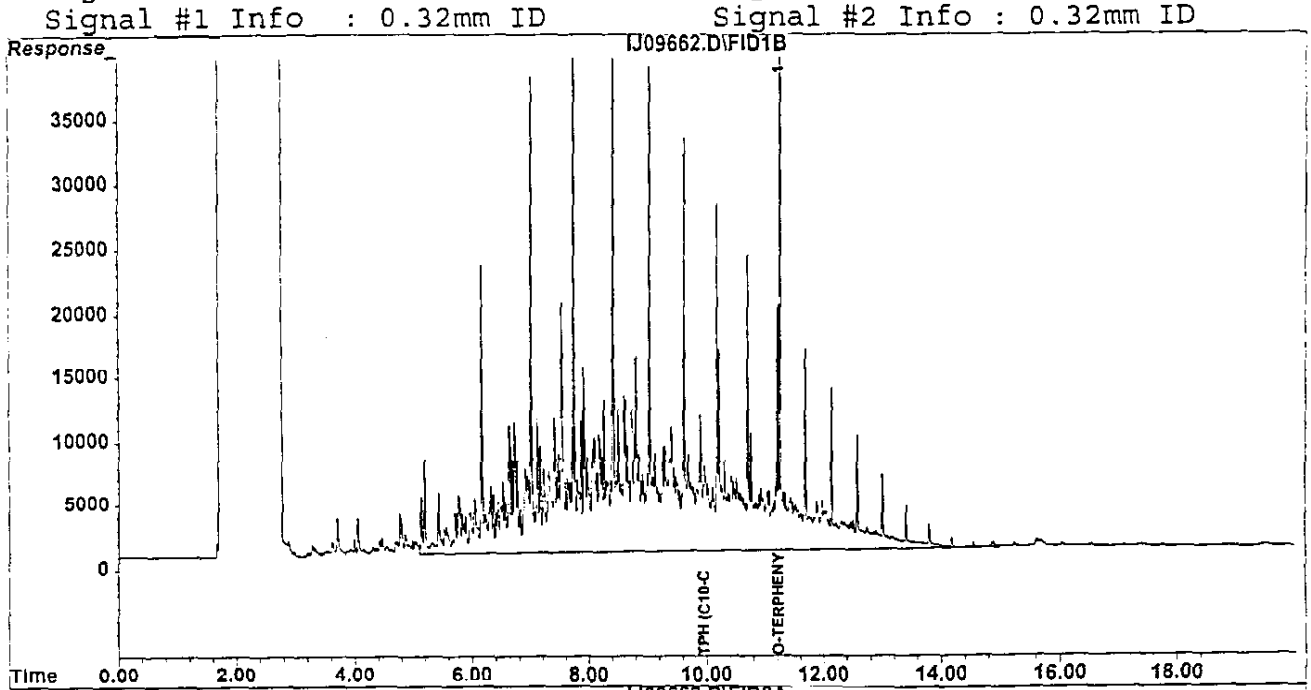
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

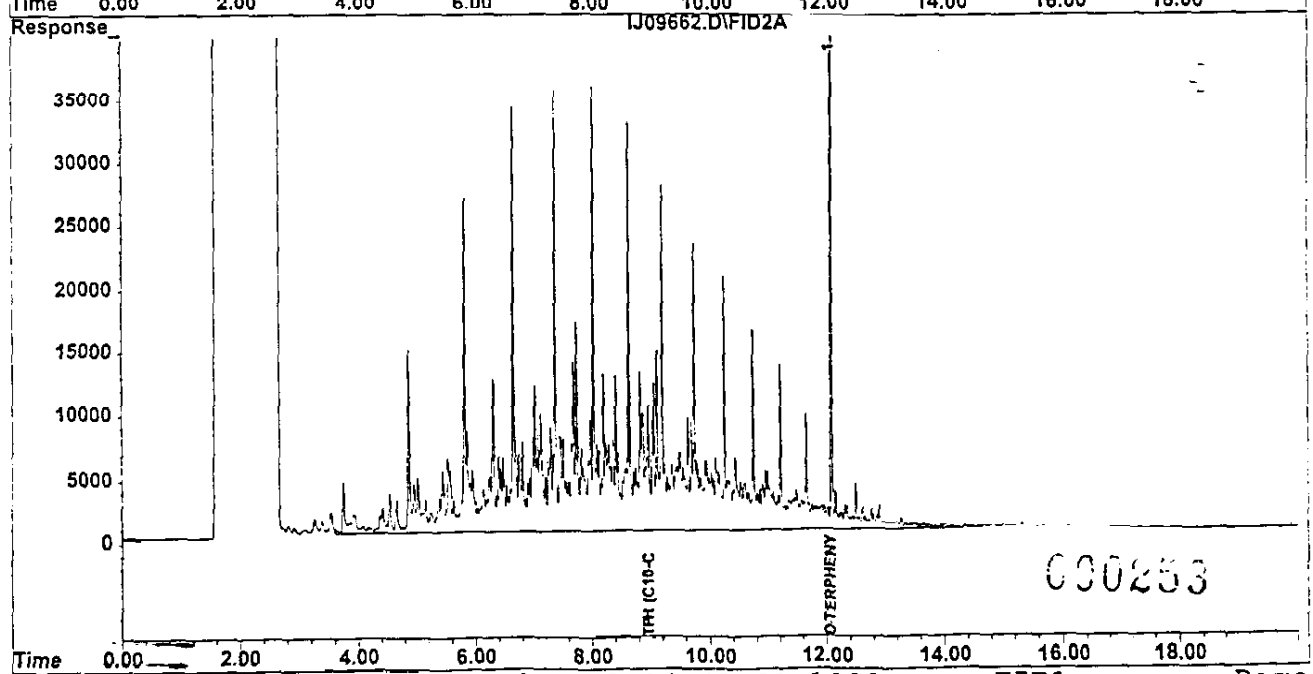
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09662.D\FID1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09662.D\FID2A.CH
Acq On : 23 Sep 1999 2:26 pm Operator: marke
Sample : 1000ppm DRO ccv Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 14:46 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000253

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09662.D\FID1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09662.D\FID2A.CH
Acq On : 23 Sep 1999 2:26 pm Operator: marke
Sample : 1000ppm DRO ccv Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 14:46 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.26	12.10	1237131	1371809	55.049	55.401
Spiked Amount 50.000 Range 40 - 140 Recovery = 110.10% 110.80%						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	22224615	21170537	1085.513	1082.399

000254

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923DRO\IJ09662.D\FID1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0923DRO\IJ09662.D\FID2A.CH
Inj On : 23 Sep 1999 2:26 pm Operator: marke
Sample : 1000ppm DRO ccv Inst : FID 1
Misc : op986,gij437,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Fri Sep 17 17:20:15 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	O-TERPHENYL	22.473	24.743 E3	-10.1	110	0.01
2	H	TPH (C10-C28)	20.474	22.225 E3	-8.6	104	0.00

Signal #2

1	S	O-TERPHENYL	24.761	27.436 E3	-10.8	109	0.00
2	H	TPH (C10-C28)	19.559	21.171 E3	-8.2	103	0.00

000255

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

SEQUENCE LOG SUMMARY

SGC.07

Sequence Name: C:\HPCHEM\1\SEQUENCE\0923DRO.S
Comment:
Operator: marke
Data Path: C:\HPCHEM\1\DATA\0923DRO\
Pre-Seq Cmd:
Post-Seq Cmd:

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	IJ09652	TPH_DRO	rt std dro c10-c28
2	Sample	2	IJ09653	TPH_DRO	1000ppm DRO ccv s648
3	Sample	3	IJ09654	TPH_DRO	solvent blank
4	Sample	4	IJ09655	TPH_DRO	op986-mb2
5	Sample	5	IJ09656	TPH_DRO	op986-bs2
6	Sample	6	IJ09657	TPH_DRO	f4916-1
7	Sample	7	IJ09658	TPH_DRO	f4916-2
8	Sample	8	IJ09659	TPH_DRO	f4923-1
9	Sample	9	IJ09660	TPH_DRO	f4923-2,5
10	Sample	10	IJ09661	TPH_DRO	f4923-2,2
11	Sample	11	IJ09662	TPH_DRO	1000ppm DRO ccv
12					

000256

GC ANALYSIS LOG

DATE: 9/23/94
COLUMN TYPE: DB-5/17
INSTRUMENT: FID1

METHODS: TPH DRO
METHOD FILE: TPH-DRO
CALIB. DATE: 9/7/94

ANALYST: [illegible]
RUN BATCH: GJJ437
AMOUNT INJECTED: .2 ul

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	SAMPLE AMOUNT	MATRIX	EXT. BATCH	DILUTION FACTOR	RUN OK	COMMENTS
IJ09652	1	BTSTD CID-628	TPH-DRO					—	
S3	2	100ppm DRO CCV						—	S648 passed
S4	3	Solvent Blank						—	BDL
S5	4	01486-MB2		500ml/1ml	W	01486	x1	—	BDL
S6	5	-BS2						—	✓
S7	6	F4416-1						—	BDL
S8	7	-2						—	BDL
S9	8	F4423-1						—	BDL
60	9	-2					x5	—	(3.7x2)
61	10	-2					x2	—	DRO=1.5(2)
62	11	100ppm DRO CCV						—	S648 passed

9/23/94

Matrix: Designate "W" for Water, "S" for Soil, and "O" for Oil
Sample Amount: Initial Sample Weight (g) or Volume (ml) / Final Volume (ml)

Analyst's Signature: [illegible]

Sequence Name: C:\HPCHEM\1\SEQUENCE\0917DRO.S
Comment:
Operator: marke
Data Path: C:\HPCHEM\1\DATA\0917DRO\
Pre-Seq Cmd:
Post-Seq Cmd:

cow 435
9/, ~~345~~

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

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

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	IJ09620	TPH_DRO	50ppm rt std
2	Sample	2	IJ09621	TPH_DRO	250ppm DRO s650
3	Sample	3	IJ09622	TPH_DRO	500ppm DRO s649
4	Sample	4	IJ09623	TPH_DRO	1000ppm DRO s648
5	Sample	5	IJ09624	TPH_DRO	1500ppm DRO s647
6	Sample	6	IJ09625	TPH_DRO	2000ppm DRO s646
7	Sample	7	IJ09626	TPH_DRO	solvent blank
8	Sample	8	IJ09627	TPH_DRO	op986-mb
9	Sample	9	IJ09628	TPH_DRO	op986-bs
10	Sample	10	IJ09629	TPH_DRO	F4900-1
11	Sample	11	IJ09630	TPH_DRO	F4900-2
12	Sample	12	IJ09631	TPH_DRO	op986-ms
13	Sample	13	IJ09632	TPH_DRO	op986-msd
14	Sample	14	IJ09633	TPH_DRO	F4900-3
15	Sample	15	IJ09634	TPH_DRO	1000ppm ccv
16	Sample	15	IJ09635	TPH_DRO	1000ppm ccv

000258

GC ANALYSIS LOG

DATE: 9/17/09
COLUMN TYPE: DB 5/17
INSTRUMENT: FID1

METHODS: TPH DRO
METHOD FILE: TPH-DRO
CALIB. DATE: 9/17/09

ANALYST: AE
RUN BATCH: GRT435
AMOUNT INJECTED: 2 ul

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	SAMPLE AMOUNT	MATRIX	EXT. BATCH	DILUTION FACTOR	RUN OK	COMMENTS
20	1	50 ppm BT std	TPH-DRO					✓	
21	2	250 ppm DRO			S650			✓	
22	3	500			S649			✓	
23	4	1000			S648			✓	
24	5	1500			S647			✓	
25	6	2000			S646			✓	passed, RSD<10%
26	7	Solvent Blank						✓	BDL
27	8	OP986 MB		500ml/1ml	W	OP986	1x	✓	BDL
28	9	-DS						✓	✓
29	10	F4960-1						✓	BDL
30	11	-2						✓	BDL
31	12	OP986-MS		250ml/1ml				✓	✓
32	13	-MSd						✓	✓
33	14	F4900-3		500ml/1ml				✓	DRO=0.75
34	15	1000 ppm CCV						✓	passed
35	15	1000 ppm CCV						X	passed

Matrix: Designate "W" for Water, "S" for Soil, and "O" for Oil
Sample Amount: Initial Sample Weight (g) or Volume (ml) / Final Volume (ml)

Analyst's Signature: [signature]

EXTRACTION LOG SUMMARY

SGC.08

LIQUID SAMPLE PREP REPORT

Date: 9-17-99 Method: DRO Analyst: NS/VM/MS/RP Batch#: OP986

Batch Started On: 9-17-99 Prior Number Of Samples in Batch : 17 Closed: _____

Sample ID	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP986-MB	500 mL	7	<2	0.5 mL		1.0 mL	
-BS	↓	↓	↓	↓	0.5 mL	↓	
F4900-1	↓	↓	↓	↓	↓	↓	
-2	↓	↓	↓	↓	↓	↓	
-3	↓	↓	↓	↓	↓	↓	
OP986-MS	250 mL	↓	↓	↓	0.5 mL	↓	F4900-2
-MSD	↓	↓	↓	↓	↓	↓	↓

Surrogate ID: E458 Conc: 100 ppm Exp. Date*: ~~7/ms~~ 3/16/2000

Spike ID: E432 Conc: 2000 ppm Exp. Date*: 2/11/00

*Expiration Date is 6 months from the date made or last verified.

CH2CL2 Lot #: 994231 Hexane Lot #_____ Other (specify)_____

Comments: Bath temp at 70 °C

Relinquished By: [signature] Date: 9-17-99

Accepted By: [signature] Date: 9/17/99

000200

LIQUID SAMPLE PREP REPORT

Date: 9-23-99 Method: DRO Analyst: NT/VM Batch#: OP986

Batch Started On: 9-17-99 Prior Number Of Samples in Batch: 3 (MS / RA) Closed:

Sample ID	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP986-MS2	500 ml	7	<2	0.5 ml		1.0 ml	
-BS2					0.5 ml		
F4916-1							
-2							
F4923-1							
-2							Sediment in bottle/sample

Surrogate ID: E458 Conc: 100 ppm Exp. Date*: 3-16-00

Spike ID: E462 Conc: 2000 ppm Exp. Date*: 2-8-00

*Expiration Date is 6 months from the date made or last verified.

CH2CL2 Lot #: 994655 Hexane Lot #: Other (specify):

Comments: Bath temp at 75°C

Relinquished By: Naresh Gianna Date: 9-22-99

Accepted By: [signature] Date: 9/23/99

000201

SAMPLE RESULT SUMMARY

Report of Analysis

Client Sample ID:	GP.08.01		
Lab Sample ID:	F4923-1	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
		Percent Solids:	n/a
Project:	Bainbridge		

General Chemistry

Analyte	Result	RDL	Units	DF	Analyzed By	Method
Turbidity	133000	5000	NTU	5000	09/22/99 EP	EPA 180.1

RDL = Reported Detection Limit

Report of Analysis

Client Sample ID:	GP.06.01		
Lab Sample ID:	F4923-2	**Date Sampled:**	09/21/99
Matrix:	AQ - Ground Water	**Date Received:**	09/22/99
		Percent Solids:	n/a
Project:	Bainbridge		

General Chemistry

Analyte	Result	RDL	Units	DF	Analyzed By	Method
Turbidity	64000	5000	NTU	5000	09/22/99 EP	EPA 180.1

RDL = Reported Detection Limit

CALIBRATION STANDARD SUMMARY

NOT APPLICABLE TO THIS REPORT

METHOD BLANK SUMMARY

NOT APPLICABLE TO THIS REPORT

SPIKE SAMPLE RECOVERIES

NOT APPLICABLE TO THIS REPORT

LABORATORY DUPLICATE SAMPLE RECOVERIES

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F4923
Account: ITPAMONR - IT Corporation
Project: ITPAMONR1597 - Bainbridge

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Turbidity	GN4425	F4916-1	NTU	49000	48400	1.2	0-10%

Associated Samples:
Batch GN4425: F4923-1, F4923-2

LABORATORY CONTROL (BLANK SPIKE) SAMPLE RECOVERIES

GEN.06

NOT APPLICABLE TO THIS REPORT

000268

PREPARATION LOG

GEN.07

Turbidity: _____ method: 180.1

	Blk	STD1	STD2	STD3	Units: NTU	MDL: 1.0
CONC:	0.00	4.00	40.0			
Reading	0.00	4.00	40.0			

sample #	Turbidity Reading	Dilution	Final Result	MDL	Units
F4916-1	24.5	1:2000	49000	2000	NTU
-2	18.6	1:5000	93000	5000	
-1 dup	24.2	1:2000	48400	2000	1.2 RF
F4923-1	26.6	1:5000	133000	5000	
-2	12.8		64000		

000260

Analyst's Signature: [signature] Date: 9/22/99

QC Reviewer: _____ Date: _____

Comments: GU4425