TNN OC New
Ref 21 revisions
Lane

EPA Region 5 Records Ctr.
325076

RECEIVED
SEP 05 2007

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MANAGEMENT

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HERITAGE ENVIRONMENTAL SERVICES, LLC
COMMERCIAL LABORATORY OPERATIONS
7901 WEST MORRIS STREET
INDIANAPOLIS, INDIANA 46231
PHONE: (317) 390-3182
FAX: (317) 486-5095
Greg.Busch@Heritage-Enviro.com

APPROVED BY: G O Busch
PROJECT CHEMIST

Reference: 21

INN 00010229
Lane Street

HERITAGE®

RECEIVED
SEP 05 2007

TO:	**STEVE SOMMER** **Office of Land Quality**
PROJECT ID:	**N/A**
SAMPLE ID:	**LQ4537-LQ4545**
DESCRIPTION:	**N/A**
SECURITY LEVEL:	**CONFIDENTIAL**

INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT

REPORT PACKAGE #55698

SAMPLE #'s: A780299 – A780307

HERITAGE ENVIRONMENTAL SERVICES, LLC
COMMERCIAL LABORATORY OPERATIONS
7901 WEST MORRIS STREET
INDIANAPOLIS, INDIANA 46231
PHONE: (317) 390-3182
FAX: (317) 486-5095
Greg.Busch@Heritage-Enviro.com

APPROVED BY: G O Busch
PROJECT CHEMIST

Reference: 21

INN 00010229
Lane Street

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LIMS CERTIFICATE OF ANALYSIS REPORT 3

LIMS QUALITY ASSURANCE REPORT 4

GC/MS QA/QC REPORT 5

OneStep®

Heritage Environmental Services, LLC
7901 West Morris Street
Indianapolis, IN 46231
Phone: (317) 243-0811
Fax: (317) 486-5095

CASE NARRATIVE
SHIPPING AND RECEIVING

The following samples were received at Heritage Environmental Laboratory on August 23, 2007:

SAMPLE #'s: **A780299 – A780307**

IDEM ID #'S: **LQ4537 – LQ4545**

The samples were received within EPA recommended holding times and in good condition. If required, a pH screen confirmed that all samples were preserved to acceptable pH levels. Samples were analyzed within holding times as prescribed by the analytical method. Exceptions to these statements, additional information, and any analytical anomalies are noted on the accompanying Certificates of Analysis Reports.

Nancy J. Carman

Nancy J. Carman
Document Control Specialist

ACCREDITED IN ACCORDANCE WITH

SAMPLE CUSTODY CHAIN - IDEM OFFICE OF LAND QUALITY

State Form 42091 (R2 / 12-06)

01004125

Please Send Report to:
IDEM
OLQ Chemistry Section
Attn: QA Officer
MC 66-20 IGCN N1101
100 N Senate Avenue
Indianapolis, IN 46204-2251
www.idem.IN.gov

(1) SAMPLE CERTIFICATION - I certify the following samples were collected by me or in my presence:

Print Name: MARK JAWORSKI

Sample Date(s): 8-22-07, 8-23-07

Signature: Mark Jaworski

(2A-2C) SAMPLE INFORMATION			(2D) COUNTS				(2E-2F) ANALYSES REQUESTED	(2G) COMMENTS	(2H-2J) DATE & TIME			
Laboratory Control Number (Lab Use)	IDEM Sample Number	Matrix or Sample Type	Glass Bottles	Plastic Bottles	40 ml Vials	Other	VOC		Date	Time	AM	PM
	LQ4537	DRINKING WATER			4		X	A780299	8-23-07	12:53		X
	LQ4538	DRINKING WATER			4		X	300	8-23-07	12:58		X
	LQ4539	DRINKING WATER			4		X	301	8-23-07	12:45		X
	LQ4540	DRINKING WATER			4		X	302	8-23-07	1:15		X
	LQ4541	DRINKING WATER			4		X	303	8-23-07	1:30		X
	LQ4542	DRINKING WATER			4		X	304	8-23-07	1:35		X
	LQ4543	DRINKING WATER			4		X	305	8-23-07	2:10		X
	LQ4544	DRINKING WATER			8		X	MS/MSD 306	8-23-07	3:10		X
	LQ4545	DRINKING WATER			2		X	307	8-22-07	4:30		X

(3) REQUIRED TURNAROUND TIME (with full documentation)

30 days | 14 days | (7 days) | 2 days

(4) COMMENTS
DRINKING WATER ANALYSIS
524.2 METHOD
VERBALS ASAP
USE LQ4545 FOR MS/MSD

(5) TRANSFER OF CUSTODY - I certify that I received the above samples.

	Sign	Date	Time
Relinquished by:	Mark Jaworski	8-23-07	7:28 AM/PM
Received by:	Timothy R. Johnson		
Relinquished by:	Timothy R. Johnson	8/23/07	7:51 AM/PM
Received by:	Ben Parker		

(6) LABORATORY RECEIPT OF SAMPLES

I certify that I received the above samples. After recording these samples in the official logbook, they will remain in the custody of competent lab personnel or be secured in a locked area at all times.

	Sign	Date	Time
Received by:	Ben Parker	8/23/07	7:51 AM/PM
Laboratory:			
Address:			

FOR LABORATORY USE ONLY:

Cooler Temp:	Sample Condition:
10.1°C	NONE BROKEN / ON ICE

(7) DISTRIBUTION: PINK COPY - IDEM Sampler YELLOW COPY - Lab (Keep) WHITE COPY - Lab (To be Returned to IDEM with Data Package)

005

Carman, Nancy

From: Busch, Greg
Sent: Wednesday, August 22, 2007 4:28 PM
To: HARRISON, DAVID
Cc: Smith, Lisa; Carman, Nancy
Subject: RE: LQ 4537 - LQ4546

Thanks, David. We will.

From: HARRISON, DAVID [mailto:DHARRISO@idem.IN.gov]
Sent: Wednesday, August 22, 2007 4:26 PM
To: Busch, Greg
Subject: RE: LQ 4537 - LQ4546

Greg,
Thanks for the update. This is very helpful. This request is for analyses ASAP with a drinking water focus. Let's go with what Heritage is capable of doing. Thanks again.

Regards
David Harrison

From: Busch, Greg [mailto:Greg.Busch@heritage-enviro.com]
Sent: Wednesday, August 22, 2007 3:48 PM
To: HARRISON, DAVID
Cc: Smith, Lisa
Subject: RE: LQ 4537 - LQ4546

David, just to alert you to the problem areas with the IDEM contract's list for drinking waters, some of them are not the normal drinking water analytes, and some have detection limit issues. Here is what we said in our proposal:

> The detection limit requested using method 524.2 for the following listed analytes is not possible without estimating results down to the method detection limit and is contingent upon the latest MDL study results. Heritage will report results as low as possible, down to the MDL if required.
>
> Benzene
> Bromodichloromethane
> Chloroform
> Dibromochloromethane
> 1,2-Dibromo-3-Chloropropane
> 1,2-Dibromoethane (EDB)
> 1,4-Dichlorobenzene
> 1,2-Dichloropropane
> cis-1,3-Dichloropropene
> trans-1,3-Dichloropropene
> 2-Nitropropane (not a normal target)

We don't to 2-nitropropane------At ALL, any GC/MS method----------We have NO standards. Given the short hold time request, we have insufficient time to order and obtain a standard for it. We will be doing a library search and will report it as a TIC if that is all right. Also, we don't normally do CS2, MEK or Acetone by 524.2.....We will try them, but they often have QC problems for the 524.2. Just, FYI.
Thanks,
Greg Busch

From: HARRISON, DAVID [mailto:DHARRISO@idem.IN.gov]
Sent: Wednesday, August 22, 2007 3:04 PM
To: Busch, Greg
Cc: SOMMER, STEVE; HARRISON, DAVID
Subject: LQ 4537 - LQ4546

Greg,

Please find and review the request as we discussed. Thanks.

Regards
David Harrison

| | |

TITLE

Project No.

Book No.

Date	Time	Sample No.	Entire Contents Used (Y/N)	Initials	Group	IN/OUT
8-24-07	0800	A780299-A780307	—	JLK	RCUG	IN
8/28/07	0809	A780299-A780307	Y	[illegible]	VOLS	OUT
8/29/07	0729	A780300	Y	[illegible]	VOLS	OUT
8/29/07	0950	A780301, 303, 304	Y	[illegible]	VOLS	OUT

To Page

Witnessed & Understood by me,	Date	Invented by	Date

HERITAGE

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780299
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	23-AUG-07 12:53	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4537
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 09:49 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	.51	0.50	ug/L
1,1,1-TRICHLOROETHANE	3.4	0.50	ug/L
TRICHLOROETHENE	EX	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

009

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	13	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	114		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	82		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 14:58 Instrument: GC/MS VOA Test: O516.9.1

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
TRICHLOROETHENE	96	5.0	ug/L
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	96		% Rec
4-BROMOFLUOROBENZENE	90		% Rec

1:10 Dilution

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

EX Exceeds calibration range. See Replicate

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

The sample results relate only to the analytes of interest tested or to the sample as received by the lab.

Sample Comments

Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
Heritage Environmental Services, LLC is accredited under Illinois NELAC accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

012

HERITAGE

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780300
	Completed	**PO Number**	
	31-AUG-07	99-671609*	
	Printed	**Sampled**	
	31-AUG-07	23-AUG-07 12:58	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4538
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 14:33 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	BDL	0.50	ug/L
1,1,1-TRICHLOROETHANE	3.0	0.50	ug/L
TRICHLOROETHENE	EX	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

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1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	9.9	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	4.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	106		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	87		% Rec

TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 29-AUG-07 08:14 Instrument: GC/MS VOA Test: O516.9.1

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
TRICHLOROETHENE	120	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	84		% Rec

1:10 Dilution

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

EX Exceeds calibration range. See Replicate

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

The sample results relate only to the analytes of interest tested

015

Sample Comments

or to the sample as received by the lab.
Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
Heritage Environmental Services, LLC is accredited under Illinois NELAC accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GA Busch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780301
	Completed	**PO Number**	
	31-AUG-07	99-671609*	
	Printed	**Sampled**	
	31-AUG-07	23-AUG-07 12:45	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4539
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 10:40 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4--DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2--DICHLOROETHANE	BDL	0.50	ug/L
1,1--DICHLOROETHENE	.62	0.50	ug/L
1,1,1-TRICHLOROETHANE	21	0.50	ug/L
TRICHLOROETHENE	7.9	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2--DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2--DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

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1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	4.2	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

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2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	111		% Rec
TOLUENE-D8	96		% Rec
4-BROMOFLUOROBENZENE	86		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Note: Sample was rerun to confirm compounds.

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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The sample results relate only to the analytes of interest tested or to the sample as received by the lab.
Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
Heritage Environmental Services, LLC is accredited under Illinois NELAC accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

HERITAGE

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780302
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	23-AUG-07 13:15	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4540
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 11:06 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	1.0	0.50	ug/L
1,1,1-TRICHLOROETHANE	23	0.50	ug/L
TRICHLOROETHENE	EX	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	3.7	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	98		% Rec
4-BROMOFLUOROBENZENE	83		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 15:24 Instrument: GC/MS VOA Test: O516.9.1

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
TRICHLOROETHENE	300	5.0	ug/L
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	111		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	85		% Rec

1:10 Dilution

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

EX Exceeds calibration range. See Replicate

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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The sample results relate only to the analytes of interest tested or to the sample as received by the lab.

Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and

Sample Comments

Illinois EPA Part 186 unless otherwise explained or justified as to the
the exact nature of the deviations.
Heritage Environmental Services, LLC is accredited under Illinois NELAC
accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780303
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	23-AUG-07 13:30	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4541
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 11:32 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	.62	0.50	ug/L
1,1,1-TRICHLOROETHANE	1.7	0.50	ug/L
TRICHLOROETHENE	55	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	10	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	83		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Note: Sample was rerun to confirm compounds.

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
Heritage Environmental Services, LLC is accredited under Illinois NELAC accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780304
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	23-AUG-07 13:35	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4542
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 11:58 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	BDL	0.50	ug/L
1,1,1-TRICHLOROETHANE	BDL	0.50	ug/L
TRICHLOROETHENE	1.2	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	4.1	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS--1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	111		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	83		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Note: Sample was rerun to confirm compounds.

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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Heritage Environmental Services, LLC is accredited under Illinois NELAC accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780305
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	23-AUG-07 14:10	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4543
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 12:24 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	BDL	0.50	ug/L
1,1,1-TRICHLOROETHANE	BDL	0.50	ug/L
TRICHLOROETHENE	BDL	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

HERITAGE ENVIRONMENTAL SERVICES, LLC

Sample ID: A780305 LQ4543

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	94		% Rec
4-BROMOFLUOROBENZENE	84		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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Heritage Environmental Services, LLC is accredited under Illinois NELAC accreditation number 100401.
Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

032

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780306
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	23-AUG-07 15:10	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4544
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 12:49 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	BDL	0.50	ug/L
1,1,1-TRICHLOROETHANE	BDL	0.50	ug/L
TRICHLOROETHENE	BDL	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	9.8	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	2.5	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	26	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			
DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	94		% Rec
4-BROMOFLUOROBENZENE	80		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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Indiana SDWA Lab Accred. No. C-49-01

GA Busch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-AUG-07		A780307
	Completed	PO Number	
	31-AUG-07	99-671609*	
	Printed	Sampled	
	31-AUG-07	22-AUG-07 16:30	

Report To	Bill To
STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204	PAUL SERGUTA INDIANA DEPT. OF ENVIRONMENTAL MGMT 100 N. SENATE AVENUE ROOM 1101 INDIANAPOLIS, IN 46204

Sample Description

CLIENT ID: LQ4545
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER CODE: 7360
DESCRIPTION: LQ4537-LQ4546

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 NELAC:Y

Analyst: R. SHAMP Analysis Date: 28-AUG-07 13:15 Instrument: GC/MS VOA Test: O516.9.0

Parameter	Result	Det. Limit	Units
REGULATED CONTAMINANTS			
BENZENE	BDL	0.50	ug/L
CARBON TETRACHLORIDE	BDL	0.50	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	0.50	ug/L
1,2-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROETHENE	BDL	0.50	ug/L
1,1,1-TRICHLOROETHANE	BDL	0.50	ug/L
TRICHLOROETHENE	BDL	0.50	ug/L
VINYL CHLORIDE	BDL	0.20	ug/L
CHLOROBENZENE	BDL	0.50	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	0.50	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
CIS-1,2-DICHLOROETHENE	BDL	0.50	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	0.50	ug/L
1,2-DICHLOROPROPANE	BDL	0.50	ug/L
ETHYL BENZENE	BDL	0.50	ug/L
STYRENE	BDL	0.50	ug/L
1,1,2-TRICHLOROETHANE	BDL	0.50	ug/L
TETRACHLOROETHENE	BDL	0.50	ug/L
TOLUENE	BDL	0.50	ug/L
O-XYLENE	BDL	0.50	ug/L
M/P-XYLENE	BDL	0.50	ug/L

1,2,4-TRICHLOROBENZENE	BDL	0.50	ug/L
UNREGULATED - MONITORING REQUIRED			
BROMOBENZENE	BDL	0.50	ug/L
BROMODICHLOROMETHANE	BDL	0.50	ug/L
BROMOFORM	BDL	0.50	ug/L
BROMOMETHANE	BDL	0.50	ug/L
CHLORODIBROMOMETHANE	BDL	0.50	ug/L
CHLOROETHANE	BDL	0.50	ug/L
CHLOROFORM	BDL	0.50	ug/L
CHLOROMETHANE	BDL	0.50	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	0.50	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	0.50	ug/L
DIBROMOMETHANE	BDL	0.50	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	0.50	ug/L
1,1-DICHLOROETHANE	BDL	0.50	ug/L
1,1-DICHLOROPROPENE	BDL	0.50	ug/L
1,3-DICHLOROPROPANE	BDL	0.50	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	0.50	ug/L
2,2-DICHLOROPROPANE	BDL	0.50	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	0.50	ug/L
1,2,3-TRICHLOROPROPANE	BDL	0.50	ug/L
MONITORED AT STATE'S DISCRETION			
BROMOCHLOROMETHANE	BDL	0.50	ug/L
N-BUTYLBENZENE	BDL	0.50	ug/L
DICHLORODIFLUOROMETHANE	BDL	0.50	ug/L
TRICHLOROFLUOROMETHANE	BDL	0.50	ug/L
HEXACHLOROBUTADIENE	BDL	0.50	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	0.50	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	ug/L
NAPHTHALENE	BDL	0.50	ug/L
N-PROPYLBENZENE	BDL	0.50	ug/L
SEC-BUTYLBENZENE	BDL	0.50	ug/L
TERT-BUTYLBENZENE	BDL	0.50	ug/L
1,2,3-TRICHLOROBENZENE	BDL	0.50	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	0.50	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	0.50	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	ug/L

2-HEXANONE	BDL	2.0	ug/L
2-NITROPROPANE	*		
ACETONE (2-PROPANONE)	BDL	4.0	ug/L
2-BUTANONE	BDL	2.0	ug/L
CARBON DISULFIDE	*		
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	111		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	85		% Rec
TENTATIVELY IDENTIFIED COMPOUNDS			
NONE DETECTED			

Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Sample Comments

* See Note for Parameter

BDL Below Detection Limit

Sample was received on ice at temperature 10.1 C.
Sample chain of custody number IDEM.

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Indiana SDWA Lab Accred. No. C-49-01

GABusch, QAO

Approved by: GREGORY BUSCH 31-AUG-07

Quality Assurance Report

NJC55698

31-AUG-07

Service Location	Submitter
Heritage Environmental Services, LLC Commercial Laboratory Operations 7901 West Morris Street Indianapolis, IN 46231 (317) 243-8304	STEVE SOMMER INDIANA DEPARTMENT OF ENVIRONMENTAL MGT. 100 NORTH SENATE AVENUE INDIANAPOLIS, IN 46204

Sample ID	Client ID	Date/Time Sampled	Date Received	Date Complete
A780299	LQ4537.....	23-Aug-07 12:53	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780300	LQ4538.....	23-Aug-07 12:58	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780301	LQ4539.....	23-Aug-07 12:45	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780302	LQ4540.....	23-Aug-07 13:15	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780303	LQ4541.....	23-Aug-07 13:30	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780304	LQ4542.....	23-Aug-07 13:35	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780305	LQ4543.....	23-Aug-07 14:10	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780306	LQ4544.....	23-Aug-07 15:10	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		
A780307	LQ4545.....	22-Aug-07 16:30	23-Aug-07	31-Aug-07
	DESCRIPTION :	LQ4537-LQ4546		

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07 Instrument: GC/MS VOA
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q1991032		Analysis Date/Time: 27-Aug-07 08:52							
CAL01	Q1991032		BENZENE	0.9777						6.6
CAL01	Q1991032		CARBON TETRACHLORIDE	0.4395						5.7
CAL01	Q1991032		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	2.1051						6.8
CAL01	Q1991032		1,2-DICHLOROETHANE	0.4142						11.1
CAL01	Q1991032		1,1-DICHLOROETHENE	0.2390						9.4
CAL01	Q1991032		1,1,1-TRICHLOROETHANE	0.4592						6.2
CAL01	Q1991032		TRICHLOROETHENE	0.2783						6.4
CAL01	Q1991032		VINYL CHLORIDE	0.2658						6.9
CAL01	Q1991032		CHLOROBENZENE	1.9921						9.4
CAL01	Q1991032		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	2.0348						6.8
CAL01	Q1991032		TRANS-1,2-DICHLOROETHENE	0.2644						7.5
CAL01	Q1991032		CIS-1,2-DICHLOROETHENE	0.2744						7.5
CAL01	Q1991032		DICHLOROMETHANE (METHYLENE CHLORIDE)			QDR				1.000
CAL01	Q1991032		1,2-DICHLOROPROPANE	0.2224						8.2
CAL01	Q1991032		ETHYL BENZENE	0.9847						13.4
CAL01	Q1991032		STYRENE	2.0523						16.5
CAL01	Q1991032		1,1,2-TRICHLOROETHANE	0.2203						9.7
CAL01	Q1991032		TETRACHLOROETHENE	0.8492						7.8
CAL01	Q1991032		TOLUENE	0.9958						9.8
CAL01	Q1991032		O-XYLENE	1.2797						12.6
CAL01	Q1991032		M/P-XYLENE	1.2604						13.6
CAL01	Q1991032		1,2,4-TRICHLOROBENZENE	1.2610						14.8
CAL01	Q1991032		BROMOBENZENE	1.3053						7.6
CAL01	Q1991032		BROMODICHLOROMETHANE	0.3682						9.9
CAL01	Q1991032		BROMOFORM	0.5896						7.4
CAL01	Q1991032		BROMOMETHANE	0.1764						19.5
CAL01	Q1991032		CHLORODIBROMOMETHANE	0.8649						10.9
CAL01	Q1991032		CHLOROETHANE	0.1681						13.8
CAL01	Q1991032		CHLOROFORM	0.5325						11.9
CAL01	Q1991032		CHLOROMETHANE	0.2255						7.5
CAL01	Q1991032		2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.9137						7.7
CAL01	Q1991032		4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.9041						7.4
CAL01	Q1991032		DIBROMOMETHANE	0.1704						5.1
CAL01	Q1991032		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	2.0710						7.9
CAL01	Q1991032		1,1-DICHLOROETHANE	0.4717						6.6
CAL01	Q1991032		1,1-DICHLOROPROPENE	0.1214						10.6
CAL01	Q1991032		1,3-DICHLOROPROPANE	1.0401						10.3
CAL01	Q1991032		CIS-1,3-DICHLOROPROPENE	0.3304						14.1
CAL01	Q1991032		TRANS-1,3-DICHLOROPROPENE	0.3216						14.8
CAL01	Q1991032		1,1,1,2-TETRACHLOROETHANE	0.8148						8.7
CAL01	Q1991032		1,1,2,2-TETRACHLOROETHANE	1.0225						13.1
CAL01	Q1991032		1,2,3-TRICHLOROPROPANE	0.3717						15.8
CAL01	Q1991032		BROMOCHLOROMETHANE	0.1540						7.4

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q1991032		N-BUTYLBENZENE			LIN				0.998
CAL01	Q1991032		DICHLORODIFLUOROMETHANE	0.1599						5.9
CAL01	Q1991032		TRICHLOROFLUOROMETHANE	0.4523						8.7
CAL01	Q1991032		HEXACHLOROBUTADIENE	0.6439						7
CAL01	Q1991032		ISOPROPYLBENZENE (CUMENE)	3.5792						17.8
CAL01	Q1991032		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			LIN				0.998
CAL01	Q1991032		NAPHTHALENE			LIN				0.998
CAL01	Q1991032		N-PROPYLBENZENE	0.4433						12.9
CAL01	Q1991032		SEC-BUTYLBENZENE			LIN				0.998
CAL01	Q1991032		TERT-BUTYLBENZENE	2.9354						10.5
CAL01	Q1991032		1,2,3-TRICHLOROBENZENE	1.1778						12.4
CAL01	Q1991032		1,2,4-TRIMETHYLBENZENE	3.1619						17.4
CAL01	Q1991032		1,3,5-TRIMETHYLBENZENE	3.1005						16.5
CAL01	Q1991032		1,2-DIBROMOETHANE (EDB)	0.2343						6.8
CAL01	Q1991032		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.3024						14
CAL01	Q1991032		METHYL-T-BUTYL ETHER (MTBE)	0.7542						12.5
CAL01	Q1991032		2-HEXANONE	0.4584						9.8
CAL01	Q1991032		ACETONE (2-PROPANONE)	0.0959						18.2
CAL01	Q1991032		2-BUTANONE	0.1299						8.1
CAL01	Q1991032		DICHLOROETHANE-D4	0.3517						5
CAL01	Q1991032		TOLUENE-D8	0.9162						3.9
CAL01	Q1991032		4-BROMOFLUOROBENZENE	1.0345						3.8
CCVD	Q1991469		Analysis Date/Time: 28-Aug-07 07:41							
CCVD	Q1991469		BENZENE	0.9777			0.9232			5.6
CCVD	Q1991469		CARBON TETRACHLORIDE	0.4395			0.4042			8
CCVD	Q1991469		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	2.1051			1.9020			9.6
CCVD	Q1991469		1,2-DICHLOROETHANE	0.4142			0.4131			0.3
CCVD	Q1991469		1,1-DICHLOROETHENE	0.2390			0.2103			12
CCVD	Q1991469		1,1,1-TRICHLOROETHANE	0.4592			0.4451			3.1
CCVD	Q1991469		TRICHLOROETHENE	0.2783			0.2653			4.7
CCVD	Q1991469		VINYL CHLORIDE	0.2658			0.2346			11.7
CCVD	Q1991469		CHLOROBENZENE	1.9921			1.8060			9.3
CCVD	Q1991469		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	2.0348			1.8966			6.8
CCVD	Q1991469		TRANS-1,2-DICHLOROETHENE	0.2644			0.2501			5.4
CCVD	Q1991469		CIS-1,2-DICHLOROETHENE	0.2744			0.2483			9.5
CCVD	Q1991469		DICHLOROMETHANE (METHYLENE CHLORIDE)	2		QDR	2.14			7
CCVD	Q1991469		1,2-DICHLOROPROPANE	0.2224			0.2146			3.5
CCVD	Q1991469		ETHYL BENZENE	0.9847			0.7659			22.2
CCVD	Q1991469		STYRENE	2.0523			1.5032			26.8
CCVD	Q1991469		1,1,2-TRICHLOROETHANE	0.2203			0.2088			5.2
CCVD	Q1991469		TETRACHLOROETHENE	0.8492			0.8036			5.4
CCVD	Q1991469		TOLUENE	0.9958			0.8777			11.9
CCVD	Q1991469		O-XYLENE	1.2797			1.0167			20.6
CCVD	Q1991469		M/P-XYLENE	1.2604			1.0676			15.3
CCVD	Q1991469		1,2,4-TRICHLOROBENZENE	1.2610			1.0461			17

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q1991469		BROMOBENZENE	1.3053			1.2245			6.2
CCVD	Q1991469		BROMODICHLOROMETHANE	0.3682			0.3565			3.2
CCVD	Q1991469		BROMOFORM	0.5896			0.5667			3.9
CCVD	Q1991469		BROMOMETHANE	0.1764			0.1702			3.5
CCVD	Q1991469		CHLORODIBROMOMETHANE	0.8649			0.8116			6.2
CCVD	Q1991469		CHLOROETHANE	0.1681			0.1688			0.4
CCVD	Q1991469		CHLOROFORM	0.5325			0.5531			3.9
CCVD	Q1991469		CHLOROMETHANE	0.2255			0.2166			3.9
CCVD	Q1991469		2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.9137			0.8319			9
CCVD	Q1991469		4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.9041			0.7856			13.1
CCVD	Q1991469		DIBROMOMETHANE	0.1704			0.1790			5
CCVD	Q1991469		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	2.0710			1.8638			10
CCVD	Q1991469		1,1-DICHLOROETHANE	0.4717			0.4760			0.9
CCVD	Q1991469		1,1-DICHLOROPROPENE	0.1214			0.1081			11
CCVD	Q1991469		1,3-DICHLOROPROPANE	1.0401			0.9631			7.4
CCVD	Q1991469		CIS-1,3-DICHLOROPROPENE	0.3304			0.2989			9.5
CCVD	Q1991469		TRANS-1,3-DICHLOROPROPENE	0.3216			0.2704			15.9
CCVD	Q1991469		1,1,1,2-TETRACHLOROETHANE	0.8148			0.8178			0.4
CCVD	Q1991469		1,1,2,2-TETRACHLOROETHANE	1.0225			0.9928			2.9
CCVD	Q1991469		1,2,3-TRICHLOROPROPANE	0.3717			0.3772			1.5
CCVD	Q1991469		BROMOCHLOROMETHANE	0.1540			0.1605			4.2
CCVD	Q1991469		N-BUTYLBENZENE	2.0		LIN	1.18			41
CCVD	Q1991469		DICHLORODIFLUOROMETHANE	0.1599			0.1276			20.2
CCVD	Q1991469		TRICHLOROFLUOROMETHANE	0.4523			0.4047			10.5
CCVD	Q1991469		HEXACHLOROBUTADIENE	0.6439			0.5699			11.5
CCVD	Q1991469		ISOPROPYLBENZENE (CUMENE)	3.5792			2.8013			21.7
CCVD	Q1991469		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.0		LIN	1.21			39.5
CCVD	Q1991469		NAPHTHALENE	2.0		LIN	1.11			44.5
CCVD	Q1991469		N-PROPYLBENZENE	0.4433			0.3687			16.8
CCVD	Q1991469		SEC-BUTYLBENZENE	2.0		LIN	1.22			39
CCVD	Q1991469		TERT-BUTYLBENZENE	2.9354			2.6403			10.1
CCVD	Q1991469		1,2,3-TRICHLOROBENZENE	1.1778			0.9981			15.3
CCVD	Q1991469		1,2,4-TRIMETHYLBENZENE	3.1619			2.4547			22.4
CCVD	Q1991469		1,3,5-TRIMETHYLBENZENE	3.1005			2.3927			22.8
CCVD	Q1991469		1,2-DIBROMOETHANE (EDB)	0.2343			0.2222			5.2
CCVD	Q1991469		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.3024			0.2935			2.9
CCVD	Q1991469		METHYL-T-BUTYL ETHER (MTBE)	0.7542			0.6554			13.1
CCVD	Q1991469		2-HEXANONE	0.4584			0.4194			8.5
CCVD	Q1991469		ACETONE (2-PROPANONE)	0.0959			0.0969			1
CCVD	Q1991469		2-BUTANONE	0.1299			0.1320			1.6
CCVD	Q1991469		DICHLOROETHANE-D4	0.3517			0.3821			8.6
CCVD	Q1991469		TOLUENE-D8	0.9162			0.9039			1.3
CCVD	Q1991469		4-BROMOFLUOROBENZENE	1.0345			1.0008			3.3
BLA01	Q1991470		Analysis Date/Time: 28-Aug-07 08:22							
BLA01	Q1991470		BENZENE			BDL	0.50	ug/L		

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q1991470		CARBON TETRACHLORIDE			BDL	0.50	ug/L		
BLA01	Q1991470		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			BDL	0.50	ug/L		
BLA01	Q1991470		1,2-DICHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		1,1-DICHLOROETHENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,1,1-TRICHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		TRICHLOROETHENE			BDL	0.50	ug/L		
BLA01	Q1991470		VINYL CHLORIDE			BDL	0.20	ug/L		
BLA01	Q1991470		CHLOROBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			BDL	0.50	ug/L		
BLA01	Q1991470		TRANS-1,2-DICHLOROETHENE			BDL	0.50	ug/L		
BLA01	Q1991470		CIS-1,2-DICHLOROETHENE			BDL	0.50	ug/L		
BLA01	Q1991470		DICHLOROMETHANE (METHYLENE CHLORIDE)			BDL	0.50	ug/L		
BLA01	Q1991470		1,2-DICHLOROPROPANE			BDL	0.50	ug/L		
BLA01	Q1991470		ETHYL BENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		STYRENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,1,2-TRICHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		TETRACHLOROETHENE			BDL	0.50	ug/L		
BLA01	Q1991470		TOLUENE			BDL	0.50	ug/L		
BLA01	Q1991470		O-XYLENE			BDL	0.50	ug/L		
BLA01	Q1991470		M/P-XYLENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,2,4-TRICHLOROBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		BROMOBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		BROMODICHLOROMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		BROMOFORM			BDL	0.50	ug/L		
BLA01	Q1991470		BROMOMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		CHLORODIBROMOMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		CHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		CHLOROFORM			BDL	0.50	ug/L		
BLA01	Q1991470		CHLOROMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		2-CHLOROTOLUENE (O-CHLOROTOLUENE)			BDL	0.50	ug/L		
BLA01	Q1991470		4-CHLOROTOLUENE (P-CHLOROTOLUENE)			BDL	0.50	ug/L		
BLA01	Q1991470		DIBROMOMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			BDL	0.50	ug/L		
BLA01	Q1991470		1,1-DICHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		1,1-DICHLOROPROPENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,3-DICHLOROPROPANE			BDL	0.50	ug/L		
BLA01	Q1991470		CIS-1,3-DICHLOROPROPENE			BDL	0.50	ug/L		
BLA01	Q1991470		TRANS-1,3-DICHLOROPROPENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,1,1,2-TETRACHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		1,1,2,2-TETRACHLOROETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		1,2,3-TRICHLOROPROPANE			BDL	0.50	ug/L		
BLA01	Q1991470		BROMOCHLOROMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		N-BUTYLBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		DICHLORODIFLUOROMETHANE			BDL	0.50	ug/L		

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q1991470		TRICHLOROFLUOROMETHANE			BDL	0.50	ug/L		
BLA01	Q1991470		HEXACHLOROBUTADIENE			BDL	0.50	ug/L		
BLA01	Q1991470		ISOPROPYLBENZENE (CUMENE)			BDL	0.50	ug/L		
BLA01	Q1991470		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			BDL	0.50	ug/L		
BLA01	Q1991470		NAPHTHALENE			BDL	0.50	ug/L		
BLA01	Q1991470		N-PROPYLBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		SEC-BUTYLBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		TERT-BUTYLBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,2,3-TRICHLOROBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,2,4-TRIMETHYLBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,3,5-TRIMETHYLBENZENE			BDL	0.50	ug/L		
BLA01	Q1991470		1,2-DIBROMOETHANE (EDB)			BDL	0.50	ug/L		
BLA01	Q1991470		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			BDL	0.50	ug/L		
BLA01	Q1991470		METHYL-T-BUTYL ETHER (MTBE)			BDL	0.50	ug/L		
BLA01	Q1991470		2-HEXANONE			BDL	1.0	ug/L		
BLA01	Q1991470		ACETONE (2-PROPANONE)			BDL	1.0	ug/L		
BLA01	Q1991470		2-BUTANONE			BDL	1.0	ug/L		
BLA01	Q1991470		DICHLOROETHANE-D4						108	
BLA01	Q1991470		TOLUENE-D8						95	
BLA01	Q1991470		4-BROMOFLUOROBENZENE						89	
SAMPLE	A780299		Analysis Date/Time: 28-Aug-07 09:49							
SAMPLE	A780299		Analysis Date/Time: 28-Aug-07 14:58							
SAMPLE	A780299		See Certificate of Analysis, Rep: 0							
SAMPLE	A780301		Analysis Date/Time: 28-Aug-07 10:40							
SAMPLE	A780301		See Certificate of Analysis, Rep: 0							
SAMPLE	A780302		Analysis Date/Time: 28-Aug-07 11:06							
SAMPLE	A780302		Analysis Date/Time: 28-Aug-07 15:24							
SAMPLE	A780302		See Certificate of Analysis, Rep: 0							
SAMPLE	A780303		Analysis Date/Time: 28-Aug-07 11:32							
SAMPLE	A780303		See Certificate of Analysis, Rep: 0							
SAMPLE	A780304		Analysis Date/Time: 28-Aug-07 11:58							
SAMPLE	A780304		See Certificate of Analysis, Rep: 0							
SAMPLE	A780305		Analysis Date/Time: 28-Aug-07 12:24							
SAMPLE	A780305		See Certificate of Analysis, Rep: 0							
SAMPLE	A780306		Analysis Date/Time: 28-Aug-07 12:49							
SAMPLE	A780306		See Certificate of Analysis, Rep: 0							
SAMPLE	A780307		Analysis Date/Time: 28-Aug-07 13:15							
SAMPLE	A780307		See Certificate of Analysis, Rep: 0							
SPI01	Q1991471	A780306	Analysis Date/Time: 28-Aug-07 13:41							
SPI01	Q1991471	A780306	BENZENE	0	10		9.32	ug/L	93.2	
SPI01	Q1991471	A780306	CARBON TETRACHLORIDE	0	10		9.69	ug/L	96.9	
SPI01	Q1991471	A780306	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10		9.17	ug/L	91.7	
SPI01	Q1991471	A780306	1,2-DICHLOROETHANE	0	10		9.33	ug/L	93.3	
SPI01	Q1991471	A780306	1,1-DICHLOROETHENE	0	10		8.85	ug/L	88.5	
SPI01	Q1991471	A780306	1,1,1-TRICHLOROETHANE	0	10		9.67	ug/L	96.7	
SPI01	Q1991471	A780306	TRICHLOROETHENE	0	10		9.72	ug/L	97.2	

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI01	Q1991471	A780306	VINYL CHLORIDE	0	10		8.77	ug/L	87.7	
SPI01	Q1991471	A780306	CHLOROBENZENE	0	10		8.48	ug/L	84.8	
SPI01	Q1991471	A780306	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10		9.38	ug/L	93.8	
SPI01	Q1991471	A780306	TRANS-1,2-DICHLOROETHENE	0	10		9.47	ug/L	94.7	
SPI01	Q1991471	A780306	CIS-1,2-DICHLOROETHENE	0	10		8.93	ug/L	89.3	
SPI01	Q1991471	A780306	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		9	ug/L	90	
SPI01	Q1991471	A780306	1,2-DICHLOROPROPANE	0	10		9.16	ug/L	91.6	
SPI01	Q1991471	A780306	ETHYL BENZENE	0	10		8.66	ug/L	86.6	
SPI01	Q1991471	A780306	STYRENE	0	10	!	4.52	ug/L	45.2	
SPI01	Q1991471	A780306	1,1,2-TRICHLOROETHANE	0	10		9.39	ug/L	93.9	
SPI01	Q1991471	A780306	TETRACHLOROETHENE	0	10		8.99	ug/L	89.9	
SPI01	Q1991471	A780306	TOLUENE	0	10		9.1	ug/L	91	
SPI01	Q1991471	A780306	O-XYLENE	0	10		7.85	ug/L	78.5	
SPI01	Q1991471	A780306	M/P-XYLENE	0	10		17.1	ug/L	171	
SPI01	Q1991471	A780306	1,2,4-TRICHLOROBENZENE	0	10		8.42	ug/L	84.2	
SPI01	Q1991471	A780306	BROMOBENZENE	0	10		8.93	ug/L	89.3	
SPI01	Q1991471	A780306	BROMODICHLOROMETHANE	9.82	10		18.7	ug/L	88.8	
SPI01	Q1991471	A780306	BROMOFORM	0	10		7.96	ug/L	79.6	
SPI01	Q1991471	A780306	BROMOMETHANE	0	10		8.88	ug/L	88.8	
SPI01	Q1991471	A780306	CHLORODIBROMOMETHANE	2.48	10		11.2	ug/L	87.2	
SPI01	Q1991471	A780306	CHLOROETHANE	0	10		10.7	ug/L	107	
SPI01	Q1991471	A780306	CHLOROFORM	25.6	10		33.7	ug/L	81	
SPI01	Q1991471	A780306	CHLOROMETHANE	0	10		8.7	ug/L	87	
SPI01	Q1991471	A780306	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10		9.25	ug/L	92.5	
SPI01	Q1991471	A780306	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10		9.21	ug/L	92.1	
SPI01	Q1991471	A780306	DIBROMOMETHANE	0	10		9.62	ug/L	96.2	
SPI01	Q1991471	A780306	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10		9.16	ug/L	91.6	
SPI01	Q1991471	A780306	1,1-DICHLOROETHANE	0	10		9.35	ug/L	93.5	
SPI01	Q1991471	A780306	1,1-DICHLOROPROPENE	0	10		8.89	ug/L	88.9	
SPI01	Q1991471	A780306	1,3-DICHLOROPROPANE	0	10		8.69	ug/L	86.9	
SPI01	Q1991471	A780306	CIS-1,3-DICHLOROPROPENE	0	10		8.49	ug/L	84.9	
SPI01	Q1991471	A780306	TRANS-1,3-DICHLOROPROPENE	0	10		8.42	ug/L	84.2	
SPI01	Q1991471	A780306	1,1,1,2-TETRACHLOROETHANE	0	10		8.94	ug/L	89.4	
SPI01	Q1991471	A780306	1,1,2,2-TETRACHLOROETHANE	0	10		8.92	ug/L	89.2	
SPI01	Q1991471	A780306	1,2,3-TRICHLOROPROPANE	0	10		9.02	ug/L	90.2	
SPI01	Q1991471	A780306	BROMOCHLOROMETHANE	0	10		9.21	ug/L	92.1	
SPI01	Q1991471	A780306	N-BUTYLBENZENE	0	10		7.42	ug/L	74.2	
SPI01	Q1991471	A780306	DICHLORODIFLUOROMETHANE	0	10		8.96	ug/L	89.6	
SPI01	Q1991471	A780306	TRICHLOROFLUOROMETHANE	0	10		9.16	ug/L	91.6	
SPI01	Q1991471	A780306	HEXACHLOROBUTADIENE	0	10		9	ug/L	90	
SPI01	Q1991471	A780306	ISOPROPYLBENZENE (CUMENE)	0	10		8.39	ug/L	83.9	
SPI01	Q1991471	A780306	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	!	6.99	ug/L	69.9	
SPI01	Q1991471	A780306	NAPHTHALENE	0	10	!	6.51	ug/L	65.1	
SPI01	Q1991471	A780306	N-PROPYLBENZENE	0	10		9.17	ug/L	91.7	

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI01	Q1991471	A780306	SEC-BUTYLBENZENE	0	10		7.16	ug/L	71.6	
SPI01	Q1991471	A780306	TERT-BUTYLBENZENE	0	10		9.03	ug/L	90.3	
SPI01	Q1991471	A780306	1,2,3-TRICHLOROBENZENE	0	10		8.96	ug/L	89.6	
SPI01	Q1991471	A780306	1,2,4-TRIMETHYLBENZENE	0	10		7.47	ug/L	74.7	
SPI01	Q1991471	A780306	1,3,5-TRIMETHYLBENZENE	0	10	!	6.96	ug/L	69.6	
DPS01	Q1991472	A780306	Analysis Date/Time: 28-Aug-07 14:07							
DPS01	Q1991472	A780306	BENZENE	0	10		10	ug/L	100.4	7.4
DPS01	Q1991472	A780306	CARBON TETRACHLORIDE	0	10		10.3	ug/L	103.3	6.4
DPS01	Q1991472	A780306	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10		10.7	ug/L	107	15.4
DPS01	Q1991472	A780306	1,2-DICHLOROETHANE	0	10		10.1	ug/L	100.9	7.8
DPS01	Q1991472	A780306	1,1-DICHLOROETHENE	0	10		9.43	ug/L	94.3	6.3
DPS01	Q1991472	A780306	1,1,1-TRICHLOROETHANE	0	10		10.4	ug/L	104.3	7.6
DPS01	Q1991472	A780306	TRICHLOROETHENE	0	10		10.2	ug/L	102.2	5
DPS01	Q1991472	A780306	VINYL CHLORIDE	0	10		9.7	ug/L	97	10.1
DPS01	Q1991472	A780306	CHLOROBENZENE	0	10		10	ug/L	100.4	16.8
DPS01	Q1991472	A780306	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10		10.7	ug/L	107	13.1
DPS01	Q1991472	A780306	TRANS-1,2-DICHLOROETHENE	0	10		10	ug/L	100.1	5.5
DPS01	Q1991472	A780306	CIS-1,2-DICHLOROETHENE	0	10		10	ug/L	100.1	11.4
DPS01	Q1991472	A780306	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		10.3	ug/L	103.5	14
DPS01	Q1991472	A780306	1,2-DICHLOROPROPANE	0	10		9.99	ug/L	99.9	8.7
DPS01	Q1991472	A780306	ETHYL BENZENE	0	10		9.97	ug/L	99.7	14.1
DPS01	Q1991472	A780306	STYRENE	0	10	!	5.32	ug/L	53.2	16.3
DPS01	Q1991472	A780306	1,1,2-TRICHLOROETHANE	0	10		9.88	ug/L	98.8	5.1
DPS01	Q1991472	A780306	TETRACHLOROETHENE	0	10		10.3	ug/L	103.4	14
DPS01	Q1991472	A780306	TOLUENE	0	10		9.71	ug/L	97.1	6.5
DPS01	Q1991472	A780306	O-XYLENE	0	10		9.06	ug/L	90.6	14.3
DPS01	Q1991472	A780306	M/P-XYLENE	0	10		19.9	ug/L	199.3	15.1
DPS01	Q1991472	A780306	1,2,4-TRICHLOROBENZENE	0	10		9.96	ug/L	99.6	16.8
DPS01	Q1991472	A780306	BROMOBENZENE	0	10		10.2	ug/L	101.5	12.8
DPS01	Q1991472	A780306	BROMODICHLOROMETHANE	9.82	10		19.9	ug/L	101.3	13.6
DPS01	Q1991472	A780306	BROMOFORM	0	10		8.76	ug/L	87.6	9.6
DPS01	Q1991472	A780306	BROMOMETHANE	0	10		9.49	ug/L	94.9	6.6
DPS01	Q1991472	A780306	CHLORODIBROMOMETHANE	2.48	10		12.2	ug/L	97.2	11.2
DPS01	Q1991472	A780306	CHLOROETHANE	0	10		11.3	ug/L	112.6	5.5
DPS01	Q1991472	A780306	CHLOROFORM	25.6	10		35.9	ug/L	103.7	23.7
DPS01	Q1991472	A780306	CHLOROMETHANE	0	10		9.43	ug/L	94.3	8.1
DPS01	Q1991472	A780306	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10		10.6	ug/L	106	13.6
DPS01	Q1991472	A780306	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10		10.6	ug/L	105.6	13.7
DPS01	Q1991472	A780306	DIBROMOMETHANE	0	10		10.6	ug/L	106.2	9.9
DPS01	Q1991472	A780306	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10		10.3	ug/L	103.5	12.2
DPS01	Q1991472	A780306	1,1-DICHLOROETHANE	0	10		10.3	ug/L	102.9	9.6
DPS01	Q1991472	A780306	1,1-DICHLOROPROPENE	0	10		9.53	ug/L	95.3	6.9
DPS01	Q1991472	A780306	1,3-DICHLOROPROPANE	0	10		9.91	ug/L	99.1	13.1
DPS01	Q1991472	A780306	CIS-1,3-DICHLOROPROPENE	0	10		9.29	ug/L	92.9	9

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 O516.9

R524142 Analyst: R SHAMP Run Date: 28-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 *Continued*

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DPS01	Q1991472	A780306	TRANS-1,3-DICHLOROPROPENE	0	10		9.1	ug/L	91	7.8
DPS01	Q1991472	A780306	1,1,1,2-TETRACHLOROETHANE	0	10		10.2	ug/L	102.3	13.5
DPS01	Q1991472	A780306	1,1,2,2-TETRACHLOROETHANE	0	10		10.1	ug/L	101.2	12.6
DPS01	Q1991472	A780306	1,2,3-TRICHLOROPROPANE	0	10		10.4	ug/L	104.3	14.5
DPS01	Q1991472	A780306	BROMOCHLOROMETHANE	0	10		10.1	ug/L	100.9	9.1
DPS01	Q1991472	A780306	N-BUTYLBENZENE	0	10		8.74	ug/L	87.4	16.3
DPS01	Q1991472	A780306	DICHLORODIFLUOROMETHANE	0	10		8.86	ug/L	88.6	1.1
DPS01	Q1991472	A780306	TRICHLOROFLUOROMETHANE	0	10		9.62	ug/L	96.2	4.9
DPS01	Q1991472	A780306	HEXACHLOROBUTADIENE	0	10		10.4	ug/L	104.4	14.8
DPS01	Q1991472	A780306	ISOPROPYLBENZENE (CUMENE)	0	10		9.89	ug/L	98.9	16.4
DPS01	Q1991472	A780306	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10		8.26	ug/L	82.6	16.7
DPS01	Q1991472	A780306	NAPHTHALENE	0	10		7.56	ug/L	75.6	14.9
DPS01	Q1991472	A780306	N-PROPYLBENZENE	0	10		10.7	ug/L	106.9	15.3
DPS01	Q1991472	A780306	SEC-BUTYLBENZENE	0	10		8.2	ug/L	82	13.5
DPS01	Q1991472	A780306	TERT-BUTYLBENZENE	0	10		10.3	ug/L	102.7	12.8
DPS01	Q1991472	A780306	1,2,3-TRICHLOROBENZENE	0	10		10.5	ug/L	105.2	16
DPS01	Q1991472	A780306	1,2,4-TRIMETHYLBENZENE	0	10		8.73	ug/L	87.3	15.6
DPS01	Q1991472	A780306	1,3,5-TRIMETHYLBENZENE	0	10		8.18	ug/L	81.8	16.1
SAMPLE	A780300		Analysis Date/Time: 28-Aug-07 14:33							
SAMPLE	A780300		See Certificate of Analysis, Rep: 0							
SAMPLE	A780299		See Certificate of Analysis, Rep: 1							
SAMPLE	A780302		See Certificate of Analysis, Rep: 1							

Q1991032 Value reported for analytes calibrated by linear (LIN) or
Q1991032 quadratic (QDR) equations is r2 (Coef. of Determination).
Q1991469 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q1991469 equations is concentration ( ).

R524145 Analyst: R SHAMP Run Date: 29-Aug-07 Instrument: GC/MS VOA
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q1991032		Analysis Date/Time: 27-Aug-07 08:52							
CAL01	Q1991032		TRICHLOROETHENE	0.2783						6.4
CAL01	Q1991032		DICHLOROETHANE-D4	0.3517						5
CAL01	Q1991032		TOLUENE-D8	0.9162						3.9
CAL01	Q1991032		4-BROMOFLUOROBENZENE	1.0345						3.8
CCVD	Q1991480		Analysis Date/Time: 29-Aug-07 06:47							
CCVD	Q1991480		TRICHLOROETHENE	0.2783			0.2659			4.5
CCVD	Q1991480		DICHLOROETHANE-D4	0.3517			0.4001			13.8
CCVD	Q1991480		TOLUENE-D8	0.9162			0.9072			1
CCVD	Q1991480		4-BROMOFLUOROBENZENE	1.0345			0.9687			6.4
BLA01	Q1991481		Analysis Date/Time: 29-Aug-07 07:44							
BLA01	Q1991481		TRICHLOROETHENE			BDL	0.50	ug/L		
BLA01	Q1991481		DICHLOROETHANE-D4						112	
BLA01	Q1991481		TOLUENE-D8						95	
BLA01	Q1991481		4-BROMOFLUOROBENZENE						82	
SAMPLE	A780300		Analysis Date/Time: 29-Aug-07 08:14							

REGULATED & UNREGULATED VOC'S IN DRINKING WATER EPA 524.2 REV. 4.1 **O516.9**

R524145 Analyst: R SHAMP Run Date: 29-Aug-07
Analytical Reviewer: H WILLIAMS Review Date: 30-Aug-07 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A780300		See Certificate of Analysis, Rep: 1							

Q1991032 Value reported for analytes calibrated by linear (LIN) or
Q1991032 quadratic (QDR) equations is r2 (Coef. of Determination).
Q1991480 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q1991480 equations is concentration ( ).
Q1991480 CCV passes for TCE only.

RQL	Result Qualifier Definition
!	Outside Lab Generated Control Limits
BDL	Below Detection Limit
LIN	Linear Regression Used
QDR	Quadratic Equation Used

QC Type	Definition
SPI01	MATRIX SPIKE
BLA01	CALIBRATION (INSTRUMENT) BLANK
CAL01	INITIAL CALIBRATION
CCVD	CONTINUING CALIBRATION VERIFICATION (USING %D)
DPS01	DUPLICATE MATRIX SPIKE

GABusch, QAO

Approved By : GREGORY BUSCH

Heritage Environmental Services, LLC
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Phone: (317) 243-0811
Fax: (317) 486-5095

CASE NARRATIVE
GC/MS VOLATILES
EPA 524.2
A780299 – A780307
08/31/07

Samples A780299 – A780307 were analyzed for volatile organic compounds by GC/MS. The samples were analyzed and reported from two runs. Samples A780299 – A780307 were analyzed and reported from the first run. The MS and MSD analyzed on this run were prepared using sample A780306. The internal standard areas and surrogate recoveries for the method blank, LCS, MS, MSD and samples A780299 – A780307 were within method acceptance limits. The method blank was BDL for all compounds. The CCV (LCS) on this run was analyzed at the MRL (method reporting limit). The recoveries of all compounds were within QC acceptance limits in the CCV. The recoveries for styrene in the MS and MSD and 4-isopropyltoluene, naphthalene and 1,3,5-trichlorobenzene in the MS were below the method acceptance limits. The recoveries and RPDs for all other compounds were within the laboratory control limits in the MS and MSD. Samples A780299, A780302 and A780300 reported trichloroethene as exceeding the calibration range. Samples A780299 and A780302 were diluted 1:10 in order to report the trichloroethene within the calibration range. These dilutions were reported as a replicate analysis (Rep1).

The dilution for sample A780300 was analyzed and reported from the second run. The internal standard areas and surrogate recoveries for the method blank and sample A780300 were within method acceptance limits. The method blank was BDL for trichloroethene. The recovery of trichloroethene was within QC acceptance limits in the CCV (LCS). Sample A780300 was analyzed at a 1:10 dilution in order to report trichloroethene within the calibration range. This dilution was reported as a replicate analysis (Rep1). There were no other QC problems encountered with the volatile analysis of these samples.

Lisa A Smith
GCMS Group Supervisor

GC/MS VOLATILE QC PACKAGE
IDEM - OLQ

LAB # A780299 - A780307 PACKAGE: IDMR

GCMS #17

8/27/2007

BFB TUNE	FORM 5
BFB TUNE CHECK	1863V
INITIAL CALIBRATION	
VSTD 0.50	1864V
VSTD 025	1865V
VSTD010	1866V
VSTD020	1867V
VSTD 050	1868V
VSTD080	1869V

8/28/2007

BFB TUNE	FORM 5
INTERNAL STANDARD AREA SUMMARY	FORM 8
WATER SURROGATE RECOVERY	FORM 2A
INTERNAL STANDARD AREA SUMMARY	1892V
BFB TUNE CHECK	1889V
CALIBRATION CHECK STANDARD	1892V
METHOD BLANK	1893V
A780299 LQ4537 REP 0	1896V
A780301 LQ4539	1898V
A780302 LQ4540 REP 0	1899V
A780303 LQ4541	1900V
A780304 LQ4542	1901V
A780305 LQ4543	1902V
A780306 LQ4544	1903V

GC/MS VOLATILE QC PACKAGE
IDEM - OLQ

LAB # A780299 - A780307 PACKAGE: IDMR

8/28/2007 CC		
	A780307 LQ4545	1904V
	SAMPLE MS/MSD	FORM
	A780306 MATRIX SPIKE	1905V
	A780306 MATRIX SPIKE DUPLICATE	1906V
	A780300 LQ4538 REP 0	1907V
	A780299 LQ4537 REP 1	1908V
	A780302 LQ4540 REP 1	1909V
8/29/2007		
	BFB TUNE	FORM 5
	INTERNAL STANDARD AREA SUMMARY	FORM 8
	WATER SURROGATE RECOVERY	FORM 2A
	BFB TUNE CHECK	1919V
	CALIBRATION CHECK STANDARD	1920V
	METHOD BLANK	1921V
	A780300 LQ4538 REP 1	1922V
	QC CHECK STANDARD	1819V

ENFORCEMENT REQUIREMENTS

INTERNAL CHAIN OF CUSTODY

ACCURACY AND PRECISION - REGINA SHAMP

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

EPA Method 524.2 BROMOFLUOROBENZENE (BFB)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 1863V.D BFB Injection Date: 08/27/07

Instrument ID: GCMS#17 BFB Injection Time: 07:58

GC Column: CAP ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.3
75	30.0 - 80.0% of mass 95	50.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	78.4
175	5.0 - 9.0% of mass 174	5.4 (6.9)1
176	95.0 - 101.0% of mass 174	75.7 (96.6)1
177	5.0 - 9.0% of mass 176	5.3 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

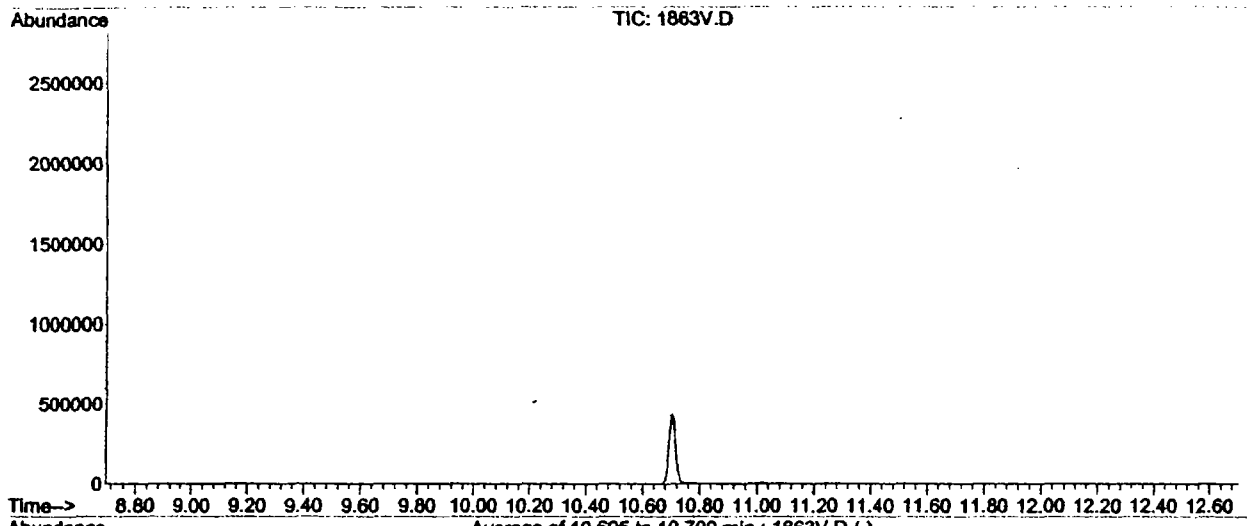
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

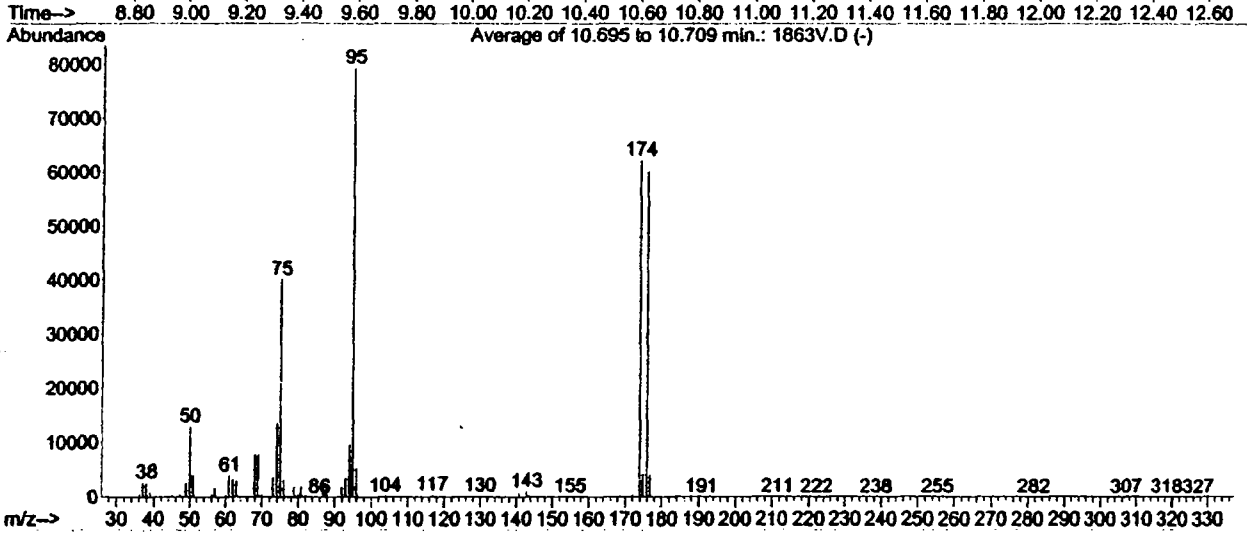
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.50	DW STD0.50	1864V.D	08/27/07	08:27
02	VSTD02	DW STD02	1865V.D	08/27/07	08:52
03	VSTD010	DW STD010	1866V.D	08/27/07	09:18
04	VSTD020	DW STD020	1867V.D	08/27/07	09:44
05	VSTD050	DW STD050	1868V.D	08/27/07	10:10
06	VSTD080	DW STD080	1869V.D	08/27/07	10:36
07	DW BLANK01	BLANK	1871V.D	08/27/07	11:27
08	A779814	A779814 1:100	1872V.D	08/27/07	12:49
09	A779815	A779815 1:100	1873V.D	08/27/07	13:15
10	A779895	A779895	1874V.D	08/27/07	13:40
11	A779899	A779899	1875V.D	08/27/07	14:06
12	A779897	A779897	1876V.D	08/27/07	14:32
13	A779898	A779898	1877V.D	08/27/07	14:58
14	A779900	A779900	1878V.D	08/27/07	15:24
15	A779901	A779901	1879V.D	08/27/07	15:50
16	A779902	A779902	1880V.D	08/27/07	16:15
17	A780058	A780058	1881V.D	08/27/07	16:41
18	A780068	A780068	1882V.D	08/27/07	17:07
19	A780069	A780069	1883V.D	08/27/07	17:33
20	A780505	A780505	1884V.D	08/27/07	17:59
21	A780479	A780479	1885V.D	08/27/07	18:24

BFB

Data File : C:\HPCHEM\DATA\V082707\1863V.D
Acq On : 27 Aug 2007 7:58
Sample : BLANK
Misc : 8/27/07
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES

Vial: 1
Operator: REGI
Inst : Instrumen
Multiplr: 1.00





Spectrum Information: Average of 10.695 to 10.709 min.

Target Mass'	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	12961	PASS
75	95	30	60	50.6	40240	PASS
95	95	100	100	100.0	79493	PASS
96	95	5	9	6.8	5401	PASS
173	174	0.00	2	0.2	143	PASS
174	95	50	100	78.4	62314	PASS
175	174	5	9	6.9	4320	PASS
176	174	95	101	96.6	60202	PASS
177	176	5	9	7.0	4206	PASS

1863V.D DWV.M Mon Aug 27 08:13:40 2007

Average of 10.695 to 10.709 min.: 1863V.D
BLANK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	681	47.25	633	56.10	647	67.00	306
37.10	2679	47.95	347	57.05	1792	68.05	7871
38.05	2718	48.20	171	57.80	106	69.00	7906
39.10	1199	49.05	2740	58.20	62	70.00	623
40.95	90	50.10	12961	60.10	605	71.90	87
42.80	38	51.05	4170	61.05	3995	72.15	352
44.00	319	52.15	143	62.05	3437	73.05	3791
44.90	68	53.10	92	63.05	3081	74.00	13643
45.05	545	54.90	114	63.90	239	75.10	40240
45.95	130	55.15	200	64.20	130	76.10	3220
47.10	144	55.90	355	65.10	268	76.90	367

Average of 10.695 to 10.709 min.: 1863V.D
BLANK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.20	341	88.60	45	104.90	64	117.85	467
78.00	298	91.00	287	106.00	145	119.05	438
78.15	247	92.05	2005	106.20	98	123.80	35
78.95	2051	93.05	3605	106.90	35	125.70	36
79.95	753	94.05	9663	109.90	42	126.85	110
80.90	1971	95.00	79493	111.90	40	128.05	278
81.95	442	96.00	5401	113.10	111	128.90	171
83.10	72	96.90	152	115.00	77	129.80	49
85.90	48	98.20	60	115.80	124	130.05	310
86.95	3011	99.80	33	116.00	205	130.90	56
87.85	2367	103.90	319	116.85	573	131.90	42

Average of 10.695 to 10.709 min.: 1863V.D
BLANK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.50	43	145.95	167	156.90	98	177.85	110
134.95	245	147.75	87	157.05	145	185.10	33
136.80	46	147.90	104	159.00	48	190.40	50
137.10	183	148.10	47	160.70	37	190.90	59
138.50	73	148.90	40	160.90	36	192.10	33
140.85	1057	150.10	122	171.95	609	206.80	48
141.95	119	152.00	33	173.00	143	209.00	33
142.20	65	153.75	92	173.95	62314	211.60	59
142.95	1088	154.60	74	174.95	4320	222.20	36
143.90	37	155.05	198	175.95	60202	236.30	41
144.85	173	156.05	121	176.90	4206	238.60	43

Average of 10.695 to 10.709 min.: 1863V.D
BLANK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
255.50	37						
262.40	33						
281.70	33						
307.30	53						
318.50	51						
327.40	41						

Response Factor Report Instrumen

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration

Calibration Files
0.50 =1864V.D 2.0 =1865V.D 10 =1866V.D
20 =1867V.D 50 =1868V.D 80 =1869V.D

	Compound	0.50	2.0	10	20	50	80	Avg	%RSD
1)I	FLUOROBENZENE	----------ISTD----------							
2)	Dichlorodifluoromet	0.1451	0.1723	0.1618	0.1562	0.1668	0.1572	0.1599	5.9
3)P	Chloromethane	0.2465	0.2444	0.2126	0.2025	0.2266	0.2179	0.2251	7.8
4)C	VINYL CHLORIDE	0.2868	0.2436	0.2548	0.2507	0.2813	0.2775	0.2658	6.8
5)	Bromomethane	0.2435	0.1779	0.1700	0.1550	0.1611	0.1508	0.1764	19.5#
6)	Chloroethane	0.1332	0.1919	0.1826	0.1764	0.1790	0.1452	0.1681	13.8
7)	Trichlorofluorometh	0.4545	0.4262	0.4104	0.4232	0.5008	0.4984	0.4523	8.7
8)	Acetone	0.1281	0.0830	0.0820	0.0851	0.0990	0.0980	0.0959	18.2#
9)C	1,1-DICHLOROETHENE	0.2599	0.2169	0.2183	0.2214	0.2529	0.2648	0.2390	9.4
10)	Methylene Chloride	r = 0.02693 + 0.24720*a + 0.00358*aE2 rE2 = 1.000							
11)	MTBE	0.6864	0.6585	0.6986	0.7433	0.8467	0.8919	0.7542	12.5
12)	trans-1,2-Dichloroe	0.2758	0.2322	0.2592	0.2538	0.2822	0.2833	0.2644	7.5
13)P	1,1-Dichloroethane	0.5016	0.4387	0.4475	0.4464	0.4875	0.5088	0.4717	6.6
14)	2-Butanone	0.1340	0.1150	0.1252	0.1233	0.1415	0.1408	0.1299	8.1
15)	cis-1,2-Dichloroeth	0.2910	0.2473	0.2594	0.2622	0.2905	0.2961	0.2744	7.5
16)C	CHLOROFORM	0.6583	0.5070	0.4913	0.4885	0.5247	0.5250	0.5325	11.9
17)	Tetrahydrofuran	0.0912	0.0738	0.0814	0.0831	0.0951	0.0950	0.0866	9.9
18)	Bromochloromethane	0.1719	0.1538	0.1423	0.1414	0.1553	0.1591	0.1540	7.4
19)	2,2-Dichloropropane	0.3188	0.3038	0.3000	0.2965	0.3309	0.3323	0.3137	5.0
20)	1,1,1-Trichloroetha	0.4837	0.4185	0.4443	0.4413	0.4823	0.4850	0.4592	6.2
21)S	Dibromofluoromethan	0.3214	0.3051	0.2924	0.3024	0.2868	0.2822	0.2984	4.8
22)	1,1-Dichloropropene	0.1266	0.1041	0.1130	0.1145	0.1341	0.1361	0.1214	10.6
23)S	1,2-Dichloroethane-	0.3735	0.3668	0.3552	0.3508	0.3377	0.3262	0.3517	5.0
24)	Carbon Tetrachlorid	0.4685	0.4073	0.4162	0.4259	0.4566	0.4585	0.4388	5.8
25)	1,2-Dichloroethane	0.5030	0.4135	0.3780	0.3806	0.4068	0.4034	0.4142	11.1
26)	Benzene	1.0002	0.9033	0.9255	0.9400	1.0325	1.0646	0.9777	6.6
27)	Trichloroethene	0.2738	0.2573	0.2703	0.2694	0.2945	0.3047	0.2783	6.3
28)C	1,2-DICHLOROPROPANE	0.2151	0.1940	0.2253	0.2165	0.2381	0.2455	0.2224	8.3
29)	Bromodichloromethan	0.4337	0.3377	0.3473	0.3383	0.3724	0.3800	0.3682	9.9
30)	Dibromomethane	0.1797	0.1585	0.1668	0.1637	0.1751	0.1788	0.1704	5.1
31)	4-Methyl-2-Pentanon	0.2263	0.1984	0.2270	0.2332	0.2697	0.2704	0.2375	11.8
32)	cis-1,3-Dichloropro	0.2881	0.2907	0.3068	0.3212	0.3753	0.4000	0.3303	14.1
33)S	Toluene-d8	0.8633	0.8833	0.9189	0.9385	0.9451	0.9482	0.9162	3.9
34)C	TOLUENE	0.9492	0.8875	0.9548	0.9527	1.0850	1.1458	0.9958	9.8
35)	trans-1,3-Dichlorop	0.3165	0.2525	0.2978	0.3126	0.3648	0.3852	0.3216	14.8
36)	1,1,2-Trichloroetha	0.2588	0.2128	0.2062	0.1986	0.2180	0.2271	0.2203	9.7
37)	1,2-Dibromoethane	0.2405	0.2201	0.2225	0.2200	0.2447	0.2583	0.2343	6.8
38)I	BROMO-1-CHLOROPROPANE	----------ISTD----------							
39)	2-Hexanone	0.4869	0.3853	0.4482	0.4382	0.5144	0.4770	0.4583	9.8
40)	1,3-Dichloropropane	1.2378	0.9659	0.9809	0.9485	1.0586	1.0489	1.0401	10.3
41)	Tetrachloroethene	0.9712	0.8038	0.8076	0.7969	0.8719	0.8439	0.8492	7.8
42)	Dibromochloromethan	1.0389	0.8083	0.8060	0.7820	0.8881	0.8660	0.8649	10.9
43)P	Chlorobenzene	2.1316	1.7509	1.8452	1.8814	2.1783	2.1651	1.9921	9.4
44)	1,1,1,2-Tetrachloro	0.9383	0.7825	0.7438	0.7648	0.8487	0.8105	0.8148	8.7
45)C	ETHYL BENZENE	0.8825	0.8099	0.9545	0.9946	1.1455	1.1210	0.9847	13.4

(#) = Out of Range (Advisory for non CCC, SPCC)

Response Factor Report Instrumen

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration

Calibration Files
0.50 =1864V.D 2.0 =1865V.D 10 =1866V.D
20 =1867V.D 50 =1868V.D 80 =1869V.D

Compound 0.50 2.0 10 20 50 80 Avg %RSD

46)	m,p-Xylene	1.0771	1.0548	1.2643	1.2715	1.4618	1.4331	1.2604	13.6
47)	o-Xylene	1.1649	1.0865	1.2066	1.2777	1.4894	1.4537	1.2798	12.6
48)	Styrene	1.6804	1.6647	2.0253	2.0898	2.4384	2.4154	2.0523	16.5#
49) P	Bromoform	0.6419	0.5430	0.5560	0.5545	0.6311	0.6108	0.5895	7.4
50) P	1,1,2,2-Tetrachloro	1.2837	0.9700	0.9329	0.9320	1.0356	0.9807	1.0225	13.1
51) S	4-Bromofluorobenzen	0.9712	1.0387	1.0346	1.0373	1.0960	1.0294	1.0345	3.8
52)	Isopropylbenzene	2.9657	2.8522	3.4024	3.6313	4.3661	4.2576	3.5792	17.8#
53)	Bromobenzene	1.4383	1.2285	1.2036	1.2264	1.3878	1.3474	1.3053	7.6
54)	1,2,3-Trichloroprop	0.4893	0.3573	0.3411	0.3348	0.3646	0.3433	0.3717	15.8#
55)	n-Propylbenzene	0.3593	0.4045	0.4391	0.4468	0.5165	0.4933	0.4433	12.9
56)	1,3,5-Trimethylbenz	2.5874	2.5314	2.9538	3.1563	3.7349	3.6392	3.1005	16.5#
57)	2-Chlorotoluene	0.8222	0.8785	0.8912	0.8965	1.0138	0.9799	0.9137	7.7
58)	4-Chlorotoluene	0.8378	0.8370	0.8955	0.8933	1.0065	0.9548	0.9042	7.4
59)	t-Butylbenzene	2.6924	2.5620	2.8596	2.9005	3.3528	3.2450	2.9354	10.5
60)	1,2,4-Trimethylbenz	2.5199	2.6183	3.0476	3.2026	3.8317	3.7516	3.1619	17.4#
61)	sec-Butylbenzene	r = 0.00000 + 4.81938*a + 0.00000*aE2 rE2 = 0.998 L							
62)	p-Isopropyltoluene	r = 0.00000 + 4.47535*a + 0.00000*aE2 rE2 = 0.998 L							
63)	1,3-Dichlorobenzene	2.2523	1.8853	1.9332	1.9621	2.2328	2.1603	2.0710	7.9
64)	1,4-Dichlorobenzene	2.1747	1.9735	1.9639	2.0012	2.3043	2.2109	2.1048	6.8
65)	n-Butylbenzene	r = 0.00000 + 2.06740*a + 0.00000*aE2 rE2 = 0.998 L							
66)	1,2-Dichlorobenzene	2.0555	1.8673	1.9390	1.9682	2.2426	2.1364	2.0348	6.8
67)	1,2-Dibromo-3-chlor	0.3453	0.2478	0.2680	0.2799	0.3426	0.3307	0.3024	14.0
68)	1,2,4-Trichlorobenz	1.1432	1.0698	1.1339	1.2373	1.5033	1.4785	1.2610	14.8
69)	Naphthalene	r = 0.00000 + 4.45343*a + 0.00000*aE2 rE2 = 0.998 L							
70)	Hexachlorobutadiene	0.6743	0.5858	0.6026	0.6321	0.7054	0.6633	0.6439	7.0
71)	1,2,3-Trichlorobenz	1.0830	1.0139	1.0879	1.1737	1.3686	1.3394	1.1778	12.4

(#) = Out of Range (Advisory for non CCC, SPCC) 0 SPCC fail 0 CCC fail

DWV.M Wed Aug 29 09:40:31 2007 RPT01

Average RSD= 11.53

Response Factor Report Instrumen

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:06:39 2007
Response via : Initial Calibration

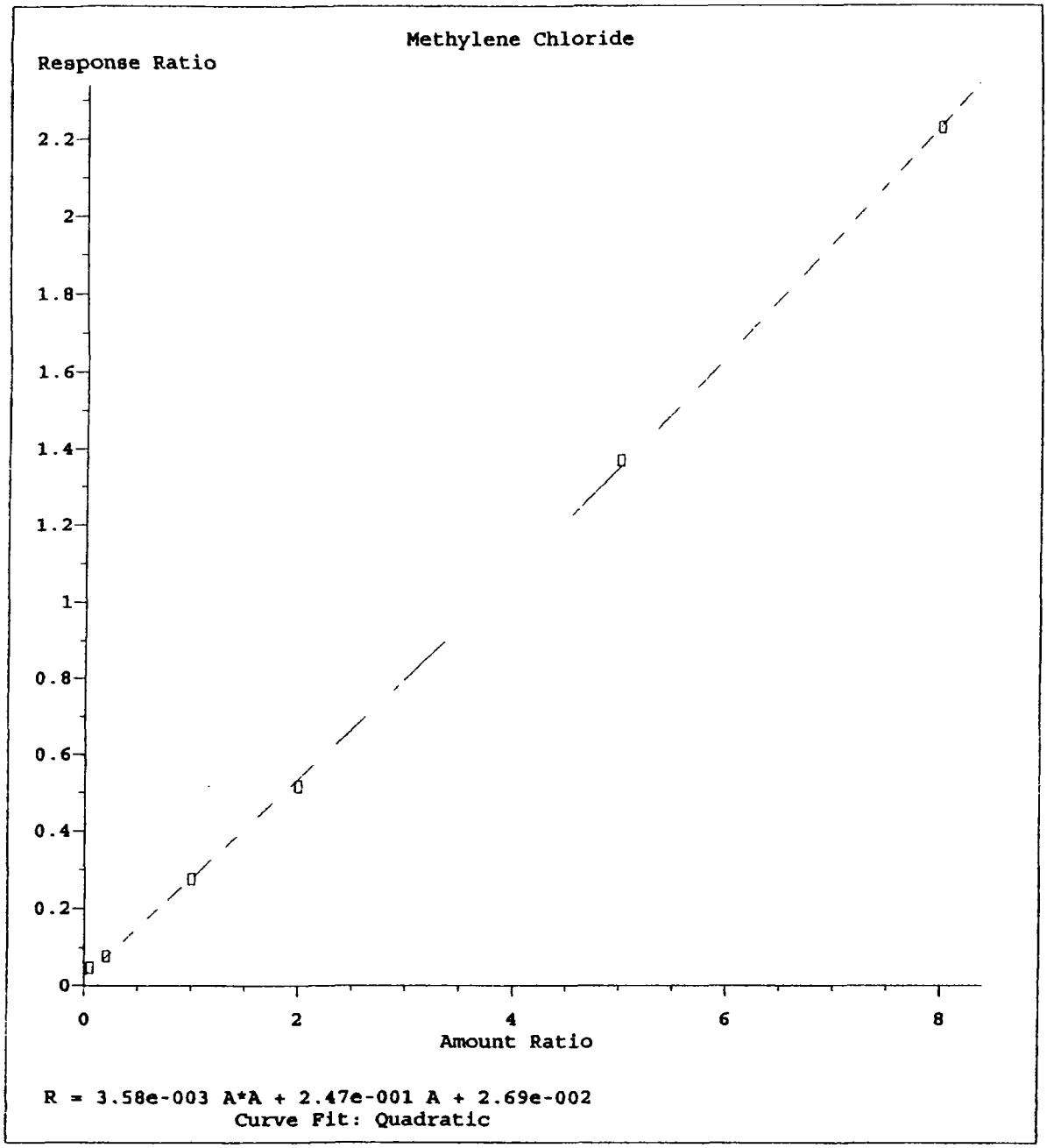
Calibration Files
0.50 =1864V.D 2.0 =1865V.D 10 =1866V.D
20 =1867V.D 50 =1868V.D 80 =1869V.D

		Compound	0.50	2.0	10	20	50	80	Avg	%RSD
1)	I	FLUOROBENZENE	----------ISTD----------							
2)		Dichlorodifluorom	0.145	0.172	0.162	0.156	0.167	0.157	0.160	5.89
3)	P	Chloromethane	0.247	0.244	0.213	0.203	0.227	0.218	0.225	7.83
4)	C	VINYL CHLORIDE	0.287	0.244	0.255	0.251	0.281	0.277	0.266	6.85#
5)		Bromomethane	0.243	0.178	0.170	0.155	0.161	0.151	0.176	19.46
6)		Chloroethane	0.133	0.192	0.183	0.176	0.179	0.145	0.168	13.85
7)		Trichlorofluorome	0.454	0.426	0.410	0.423	0.501	0.498	0.452	8.71
8)		Acetone	0.128	0.083	0.082	0.085	0.099	0.098	0.096	18.21
9)	C	1,1-DICHLOROETHEN	0.260	0.217	0.218	0.221	0.253	0.265	0.239	9.40#
10)		Methylene Chlorid	0.964	0.391	0.276	0.258	0.274	0.279	0.407	68.11 Q
11)		MTBE	0.686	0.658	0.699	0.743	0.847	0.892	0.754	12.51
12)		trans-1,2-Dichlor	0.276	0.232	0.259	0.254	0.282	0.283	0.264	7.53
13)	P	1,1-Dichloroethan	0.502	0.439	0.447	0.446	0.487	0.509	0.472	6.59
14)		2-Butanone	0.134	0.115	0.125	0.123	0.141	0.141	0.130	8.13
15)		cis-1,2-Dichloroe	0.291	0.247	0.259	0.262	0.291	0.296	0.274	7.51
16)	C	CHLOROFORM	0.658	0.507	0.491	0.488	0.525	0.525	0.532	11.94#
17)		Tetrahydrofuran	0.091	0.074	0.081	0.083	0.095	0.095	0.087	9.91
18)		Bromochloromethan	0.172	0.154	0.142	0.141	0.155	0.159	0.154	7.38
19)		2,2-Dichloropropa	0.319	0.304	0.300	0.297	0.331	0.332	0.314	5.04
20)		1,1,1-Trichloroet	0.484	0.419	0.444	0.441	0.482	0.485	0.459	6.16
21)	S	Dibromofluorometh	0.321	0.305	0.292	0.302	0.287	0.282	0.298	4.80
22)		1,1-Dichloroprope	0.127	0.104	0.113	0.114	0.134	0.136	0.121	10.56
23)	S	1,2-Dichloroethan	0.374	0.367	0.355	0.351	0.338	0.326	0.352	5.03
24)		Carbon Tetrachlor	0.469	0.407	0.416	0.426	0.457	0.458	0.439	5.82
25)		1,2-Dichloroethan	0.503	0.413	0.378	0.381	0.407	0.403	0.414	11.06
26)		Benzene	1.000	0.903	0.926	0.940	1.033	1.065	0.978	6.59
27)		Trichloroethene	0.274	0.257	0.270	0.269	0.294	0.305	0.278	6.34
28)	C	1,2-DICHLOROPROPA	0.215	0.194	0.225	0.217	0.238	0.246	0.222	8.26#
29)		Bromodichlorometh	0.434	0.338	0.347	0.338	0.372	0.380	0.368	9.95
30)		Dibromomethane	0.180	0.158	0.167	0.164	0.175	0.179	0.170	5.12
31)		4-Methyl-2-Pentan	0.226	0.198	0.227	0.233	0.270	0.270	0.238	11.75
32)		cis-1,3-Dichlorop	0.288	0.291	0.307	0.321	0.375	0.400	0.330	14.11
33)	S	Toluene-d8	0.863	0.883	0.919	0.938	0.945	0.948	0.916	3.86
34)	C	TOLUENE	0.949	0.887	0.955	0.953	1.085	1.146	0.996	9.83#
35)		trans-1,3-Dichlor	0.317	0.253	0.298	0.313	0.365	0.385	0.322	14.82
36)		1,1,2-Trichloroet	0.259	0.213	0.206	0.199	0.218	0.227	0.220	9.65
37)		1,2-Dibromoethane	0.240	0.220	0.222	0.220	0.245	0.258	0.234	6.80
38)	I	BROMO-1-CHLOROPROPANE	----------ISTD----------							
39)		2-Hexanone	0.487	0.385	0.448	0.438	0.514	0.477	0.458	9.83
40)		1,3-Dichloropropa	1.238	0.966	0.981	0.948	1.059	1.049	1.040	10.26
41)		Tetrachloroethene	0.971	0.804	0.808	0.797	0.872	0.844	0.849	7.80
42)		Dibromochlorometh	1.039	0.808	0.806	0.782	0.888	0.866	0.865	10.89
43)	P	Chlorobenzene	2.132	1.751	1.845	1.881	2.178	2.165	1.992	9.42
44)		1,1,1,2-Tetrachlo	0.938	0.783	0.744	0.765	0.849	0.811	0.815	8.68
45)	C	ETHYL BENZENE	0.882	0.810	0.955	0.995	1.146	1.121	0.985	13.35#
46)		m,p-Xylene	1.077	1.055	1.264	1.271	1.462	1.433	1.260	13.58
47)		o-Xylene	1.165	1.086	1.207	1.278	1.489	1.454	1.280	12.60
48)		Styrene	1.680	1.665	2.025	2.090	2.438	2.415	2.052	16.47
49)	P	Bromoform	0.642	0.543	0.556	0.555	0.631	0.611	0.590	7.37
50)	P	1,1,2,2-Tetrachlo	1.284	0.970	0.933	0.932	1.036	0.981	1.022	13.06
51)	S	4-Bromofluorobenz	0.971	1.039	1.035	1.037	1.096	1.029	1.035	3.83
52)		Isopropylbenzene	2.966	2.852	3.402	3.631	4.366	4.258	3.579	17.75
53)		Bromobenzene	1.438	1.228	1.204	1.226	1.388	1.347	1.305	7.56
54)		1,2,3-Trichloropr	0.489	0.357	0.341	0.335	0.365	0.343	0.372	15.77
55)		n-Propylbenzene	0.359	0.404	0.439	0.447	0.517	0.493	0.443	12.94
56)		1,3,5-Trimethylbe	2.587	2.531	2.954	3.156	3.735	3.639	3.100	16.47
57)		2-Chlorotoluene	0.822	0.879	0.891	0.897	1.014	0.980	0.914	7.71

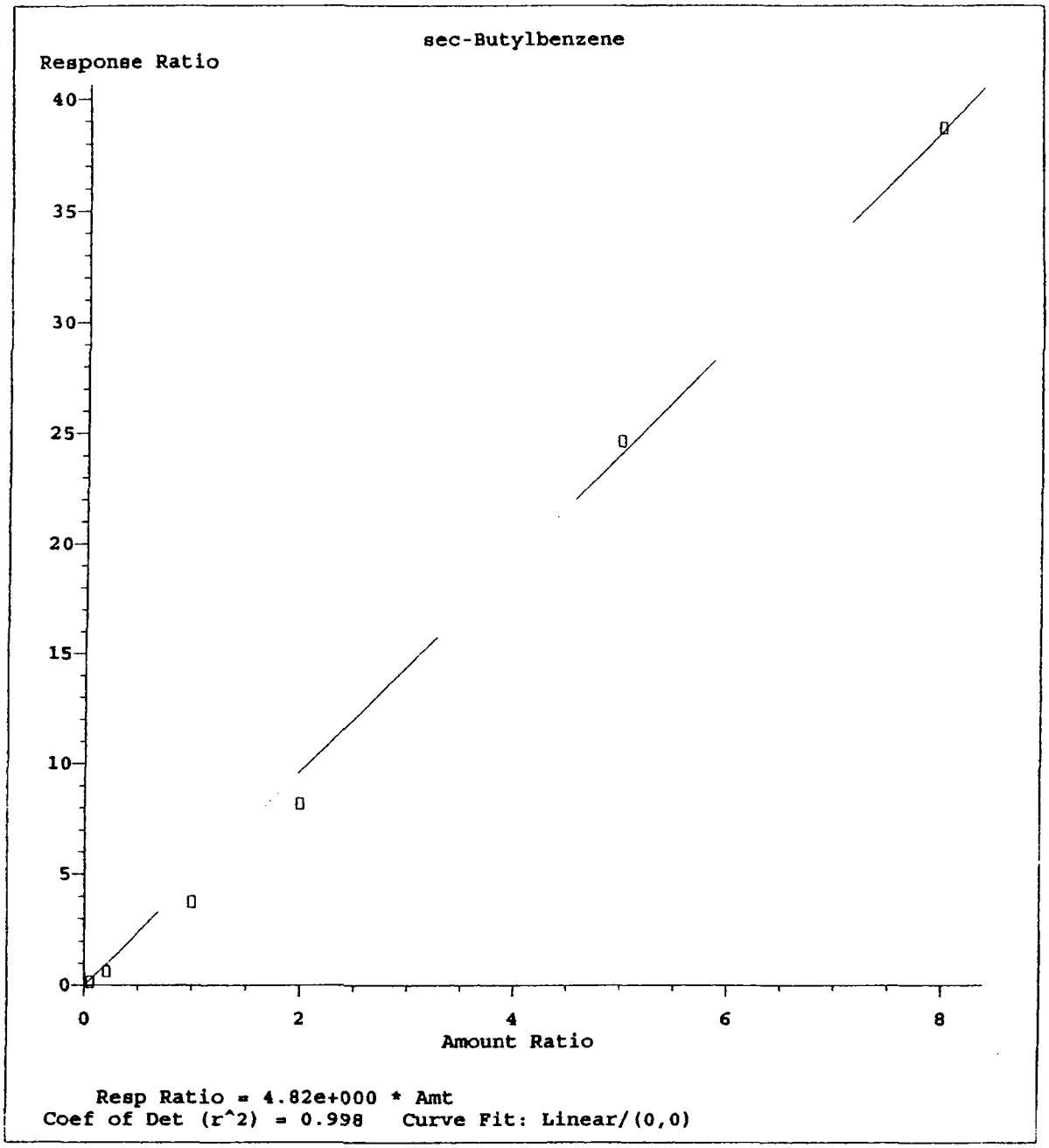
58)	4-Chlorotoluene	0.838	0.837	0.896	0.893	1.006	0.955	0.904	7.38
59)	t-Butylbenzene	2.692	2.562	2.860	2.901	3.353	3.245	2.935	10.51
60)	1,2,4-Trimethylbe	2.520	2.618	3.048	3.203	3.832	3.752	3.162	17.43
61)	sec-Butylbenzene	2.908	3.182	3.765	4.099	4.934	4.837	3.954	21.13 L
62)	p-Isopropyltoluen	2.809	2.842	3.498	3.778	4.594	4.489	3.668	21.09 L
63)	1,3-Dichlorobenze	2.252	1.885	1.933	1.962	2.233	2.160	2.071	7.86
64)	1,4-Dichlorobenze	2.175	1.974	1.964	2.001	2.304	2.211	2.105	6.84
65)	n-Butylbenzene	1.375	1.278	1.655	1.812	2.130	2.066	1.719	20.39 L
66)	1,2-Dichlorobenze	2.056	1.867	1.939	1.968	2.243	2.136	2.035	6.80
67)	1,2-Dibromo-3-chl	0.345	0.248	0.268	0.280	0.343	0.331	0.302	13.98
68)	1,2,4-Trichlorobe	1.143	1.070	1.134	1.237	1.503	1.479	1.261	14.76
69)	Naphthalene	2.546	2.371	3.100	3.576	4.476	4.522	3.432	27.08 L
70)	Hexachlorobutadie	0.674	0.586	0.603	0.632	0.705	0.663	0.644	7.05
71)	1,2,3-Trichlorobe	1.083	1.014	1.088	1.174	1.369	1.339	1.178	12.39

= Out of Range

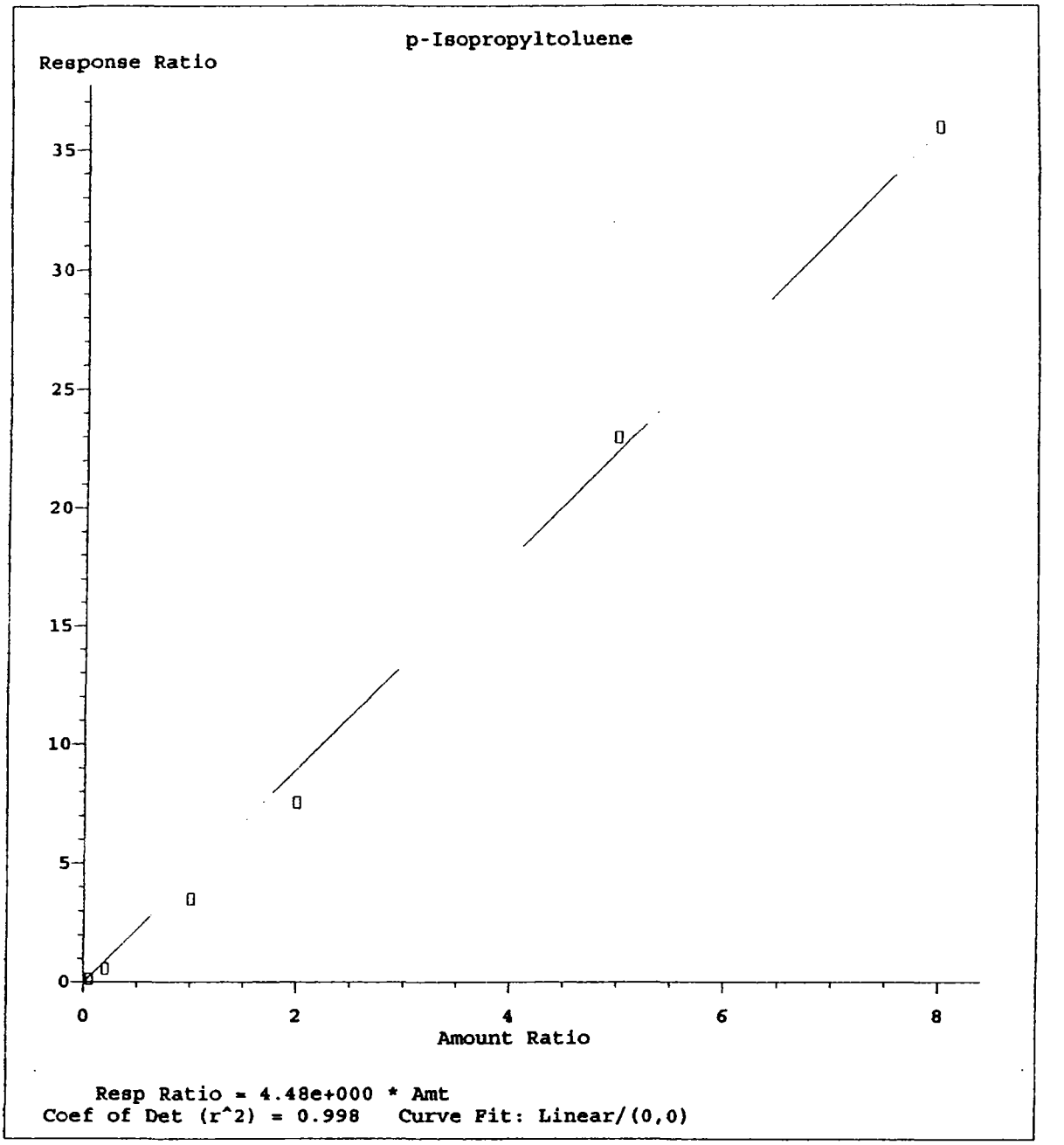
DWV.M Mon Aug 27 11:06:43 2007



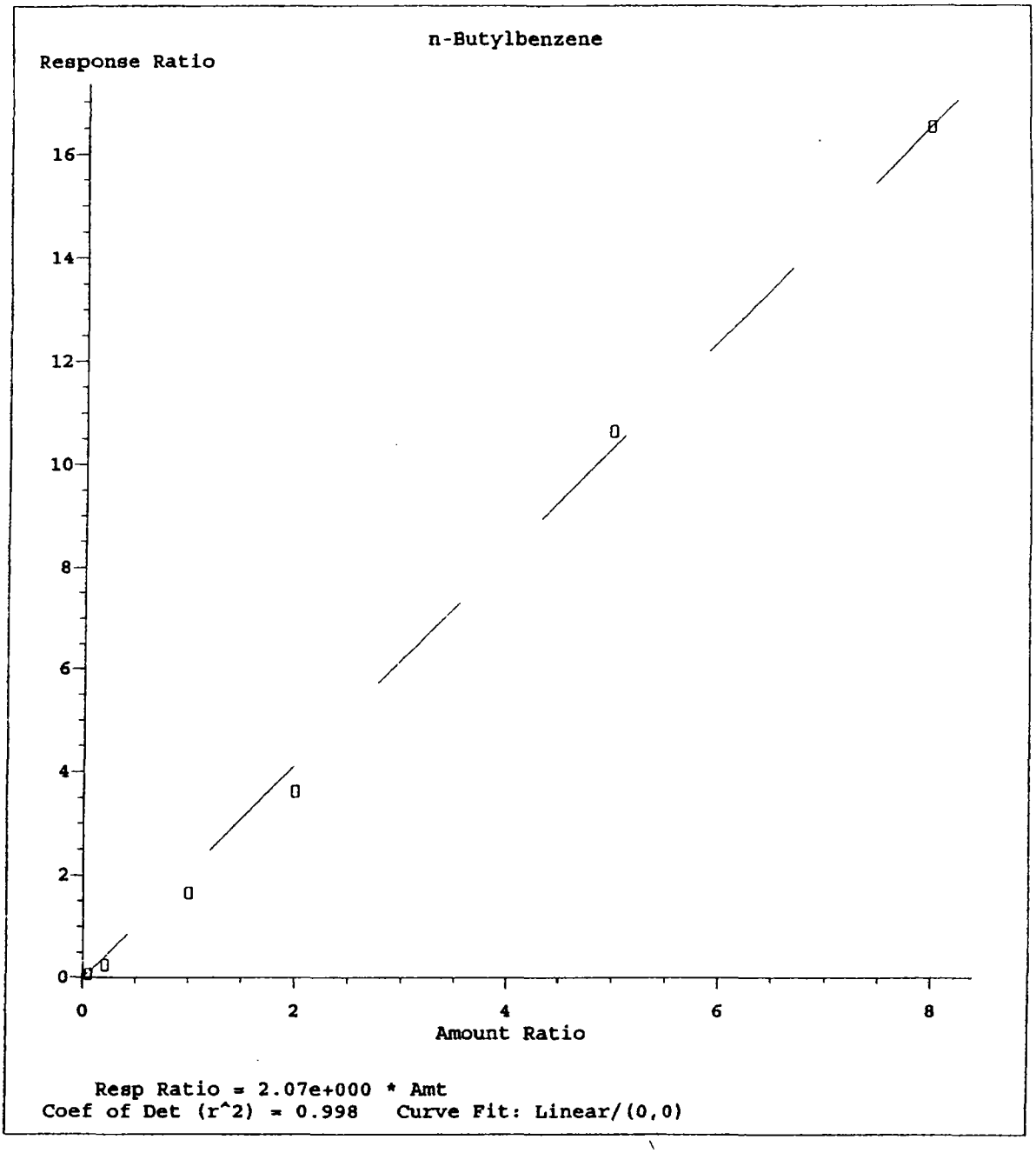
Method Name: C:\MSDCHEM\1\METHODS\DWV.M
Calibration Table Last Updated: Mon Aug 27 11:10:28 2007



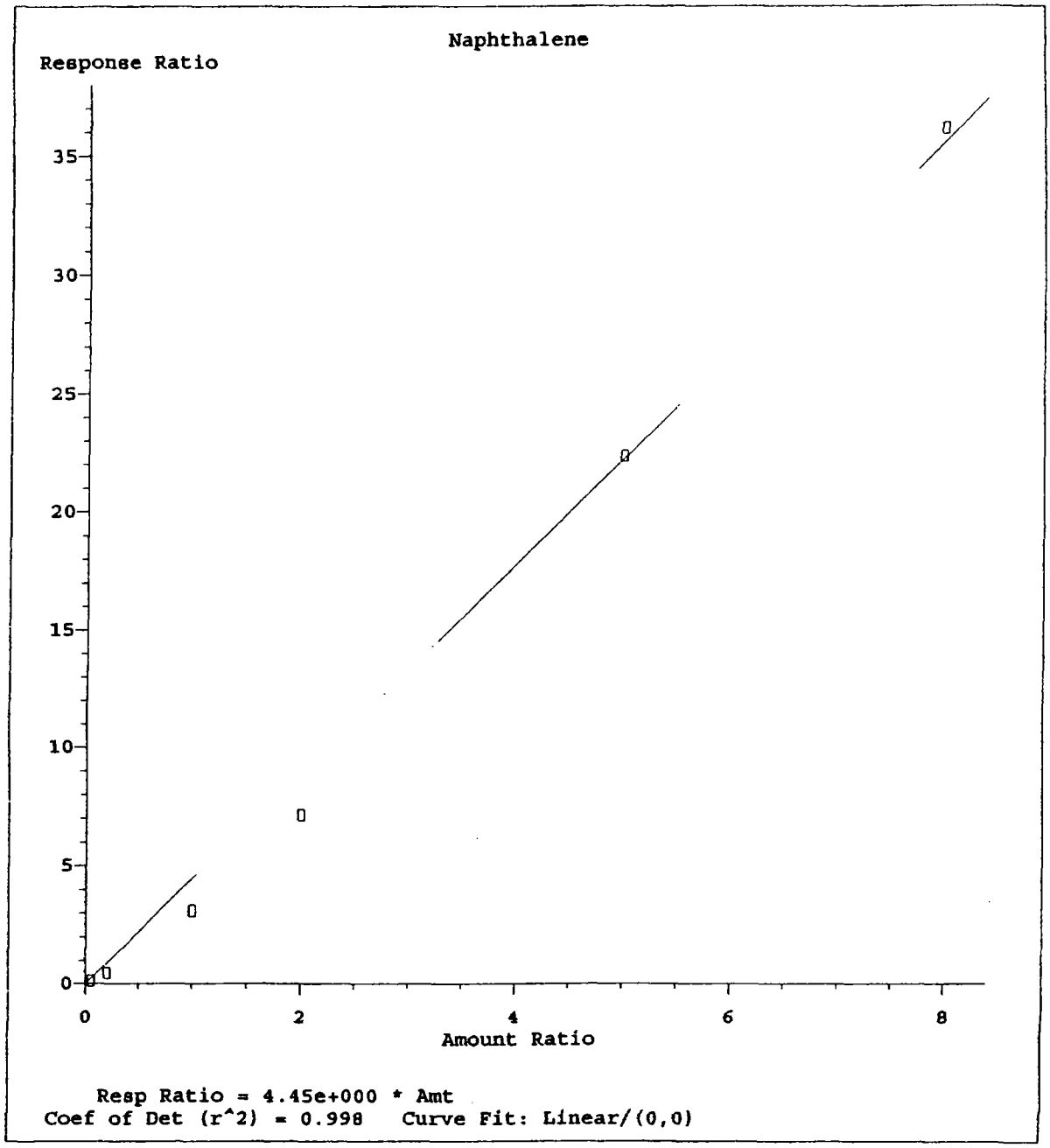
Method Name: C:\MSDCHEM\1\METHODS\DWV.M
Calibration Table Last Updated: Mon Aug 27 11:09:18 2007



Method Name: C:\MSDCHEM\1\METHODS\DWV.M
Calibration Table Last Updated: Mon Aug 27 11:09:50 2007



Method Name: C:\MSDCHEM\1\METHODS\DWV.M
Calibration Table Last Updated: Mon Aug 27 11:09:58 2007



Method Name: C:\MSDCHEM\1\METHODS\DWV.M
Calibration Table Last Updated: Mon Aug 27 11:10:11 2007

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1864V.D Vial: 1
Acq On : 27 Aug 2007 8:27 Operator: REGI
Sample : DW STD0.50 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:05:31 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:01:03 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	474765	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	154473	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	152612	10.77 UG/L	0.00
Spiked Amount 10.000			Recovery	= 107.70%	
23) 1,2-Dichloroethane-d4	5.25	65	177328	10.62 UG/L	0.00
Spiked Amount 10.000			Recovery	= 106.20%	
33) Toluene-d8	7.44	98	409846	9.42 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.20%	
51) 4-Bromofluorobenzene	10.70	95	150017	9.22 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.20%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.24	85	3444	0.45 UG/L	100
3) Chloromethane	1.36	50	5852	0.55 UG/L	100
4) VINYL CHLORIDE	1.46	62	6807	0.54 UG/L #	78
5) Bromomethane	1.77	94	5780	0.69 UG/L #	1
6) Chloroethane	1.86	64	3162	0.40 UG/L #	66
7) Trichlorofluoromethane	2.06	101	10789	0.50 UG/L	98
8) Acetone	2.67	43	6080	1.34 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	6169	0.54 UG/L	100
10) Methylene Chloride	3.07	84	22875	0.86 UG/L #	65
11) MTBE	3.33	73	32587	0.91 UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	6547	0.52 UG/L #	75
13) 1,1-Dichloroethane	3.77	63	11906	0.53 UG/L	100
14) 2-Butanone	4.42	43	6362	1.03 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	6909	0.53 UG/L #	62
16) CHLOROFORM	4.72	83	15626	0.62 UG/L	98
17) Tetrahydrofuran	4.67	42	4328	1.05 UG/L #	100
18) Bromochloromethane	4.62	128	4081	0.56 UG/L #	18
19) 2,2-Dichloropropane	4.35	77	7567	0.51 UG/L	99
20) 1,1,1-Trichloroethane	4.89	97	11482	0.53 UG/L	90
22) 1,1-Dichloropropene	5.08	110	3006	0.52 UG/L	100
24) Carbon Tetrachloride	5.06	117	11122	0.53 UG/L	96
25) 1,2-Dichloroethane	5.33	62	11941	0.61 UG/L	96
26) Benzene	5.30	78	23744	0.51 UG/L	100
27) Trichloroethene	6.01	130	6500	0.49 UG/L	85
28) 1,2-DICHLOROPROPANE	6.27	63	5106	0.48 UG/L	100
29) Bromodichloromethane	6.61	83	10296	0.59 UG/L	91
30) Dibromomethane	6.41	93	4266	0.53 UG/L	83
31) 4-Methyl-2-Pentanone	7.35	43	10744	0.95 UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	6839	0.44 UG/L	100
34) TOLUENE	7.53	91	22533	0.48 UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	7514	0.49 UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	6144	0.59 UG/L	100
37) 1,2-Dibromoethane	8.66	107	5708	0.51 UG/L	96
39) 2-Hexanone	8.40	43	7522	1.04 UG/L #	77
40) 1,3-Dichloropropane	8.26	76	9560	0.58 UG/L	100
41) Tetrachloroethene	8.18	166	7501	0.56 UG/L	97
42) Dibromochloromethane	8.54	129	8024	0.59 UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1864V.D Vial: 1
Acq On : 27 Aug 2007 8:27 Operator: REGI
Sample : DW STD0.50 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:05:31 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:01:03 2007
Response via : Initial Calibration
DataAcq Meth : DWV

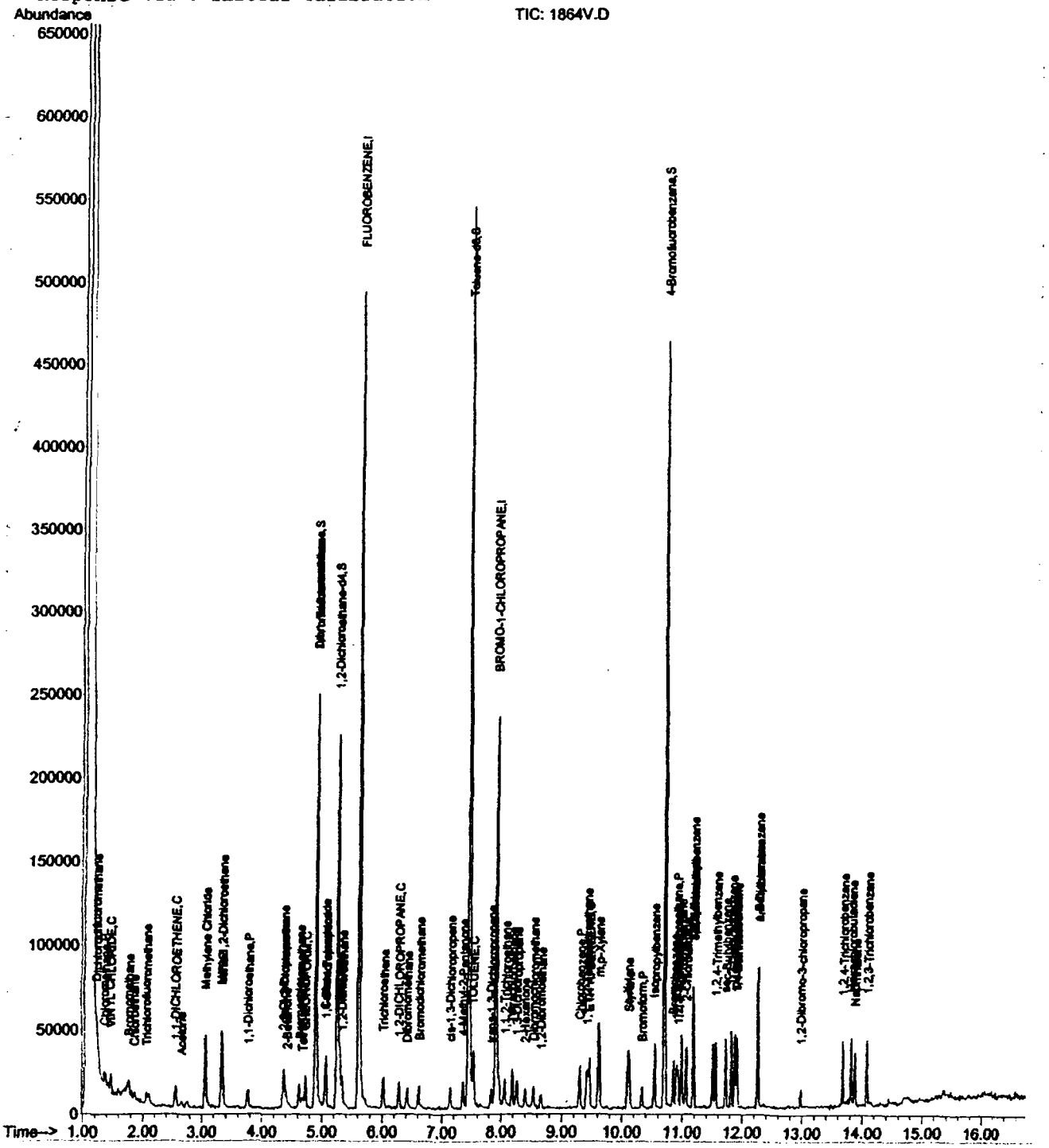
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	Chlorobenzene	9.30	112	16464	0.53 UG/L	98
44)	1,1,1,2-Tetrachloroethane	9.42	131	7247	0.56 UG/L	100
45)	ETHYL BENZENE	9.46	106	6816	0.44 UG/L	98
46)	m,p-Xylene	9.62	106	16639	0.84 UG/L	88
47)	o-Xylene	10.11	106	8997	0.45 UG/L	98
48)	Styrene	10.13	104	12979	0.40 UG/L	87
49)	Bromoform	10.33	173	4958	0.53 UG/L	100
50)	1,1,2,2-Tetrachloroethane	10.90	83	9915	0.61 UG/L	99
52)	Isopropylbenzene	10.54	105	22906	0.41 UG/L	100
53)	Bromobenzene	10.85	77	11109	0.54 UG/L	100
54)	1,2,3-Trichloropropane	10.94	110	3779	0.64 UG/L	100
55)	n-Propylbenzene	10.99	92	2775	0.40 UG/L	95
56)	1,3,5-Trimethylbenzene	11.18	105	19984	0.41 UG/L	100
57)	2-Chlorotoluene	11.07	126	6350	0.44 UG/L	100
58)	4-Chlorotoluene	11.19	126	6471	0.46 UG/L	100
59)	t-Butylbenzene	11.18	91	20795	0.45 UG/L #	2
60)	1,2,4-Trimethylbenzene	11.56	105	19463	0.39 UG/L	100
61)	sec-Butylbenzene	11.72	105	22457	0.36 UG/L	100
62)	p-Isopropyltoluene	11.87	119	21694	0.38 UG/L	100
63)	1,3-Dichlorobenzene	11.82	146	17396	0.53 UG/L	100
64)	1,4-Dichlorobenzene	11.91	146	16797	0.51 UG/L	100
65)	n-Butylbenzene	12.26	92	10622	0.39 UG/L	95
66)	1,2-Dichlorobenzene	12.25	146	15876	0.50 UG/L	100
67)	1,2-Dibromo-3-chloropropan	12.98	157	2667	0.56 UG/L	100
68)	1,2,4-Trichlorobenzene	13.67	180	8830	0.45 UG/L	100
69)	Naphthalene	13.88	128	19668	0.29 UG/L	100
70)	Hexachlorobutadiene	13.81	225	5208	0.51 UG/L	100
71)	1,2,3-Trichlorobenzene	14.07	180	8365	0.45 UG/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1864V.D Vial: 1
Acq On : 27 Aug 2007 8:27 Operator: REGI
Sample : DW STD0.50 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:05 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:01:03 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1865V.D Vial: 2
Acq On : 27 Aug 2007 8:52 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:06:02 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:05:52 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	510442	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	168740	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	155724	10.22 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.20%	
23) 1,2-Dichloroethane-d4	5.25	65	187228	10.43 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.30%	
33) Toluene-d8	7.45	98	450867	9.64 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.40%	
51) 4-Bromofluorobenzene	10.70	95	175269	9.96 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.24	85	17586	2.15 UG/L	100
3) Chloromethane	1.37	50	24954	2.17 UG/L	100
4) VINYL CHLORIDE	1.46	62	24870	1.83 UG/L #	88
5) Bromomethane	1.76	94	18163	2.02 UG/L #	1
6) Chloroethane	1.86	64	19593	2.28 UG/L	92
7) Trichlorofluoromethane	2.07	101	43511m	1.88 UG/L	
8) Acetone	2.67	43	16945	3.46 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	22145	1.82 UG/L	100
10) Methylene Chloride	3.07	84	39937	2.07 UG/L #	64
11) MTBE	3.34	73	134449	3.49 UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	23705	1.76 UG/L	83
13) 1,1-Dichloroethane	3.77	63	44790	1.86 UG/L	100
14) 2-Butanone	4.42	43	23481	3.54 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	25242	1.80 UG/L #	67
16) CHLOROFORM	4.72	83	51762	1.90 UG/L	99
17) Tetrahydrofuran	4.67	42	15060	3.41 UG/L #	100
18) Bromochloromethane	4.63	128	15701	2.00 UG/L #	22
19) 2,2-Dichloropropane	4.36	77	31012	1.94 UG/L	99
20) 1,1,1-Trichloroethane	4.89	97	42726	1.82 UG/L	87
22) 1,1-Dichloropropene	5.07	110	10624	1.71 UG/L	100
24) Carbon Tetrachloride	5.06	117	41580	1.86 UG/L	96
25) 1,2-Dichloroethane	5.33	62	42210	2.00 UG/L	97
26) Benzene	5.30	78	92217	1.85 UG/L	100
27) Trichloroethene	6.02	130	26269	1.85 UG/L	100
28) 1,2-DICHLOROPROPANE	6.28	63	19803	1.74 UG/L	100
29) Bromodichloromethane	*6.61*	*83*	*34475*	*1.83 UG/L*	*98*
30) Dibromomethane	6.42	93	16178	1.86 UG/L	94
31) 4-Methyl-2-Pentanone	7.36	43	40517	3.34 UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	29673	1.76 UG/L	100
34) TOLUENE	7.52	91	90601	1.78 UG/L	100
35) trans-1,3-Dichloropropene	7.83	75	25778	1.57 UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	21726	1.93 UG/L	100
37) 1,2-Dibromoethane	8.66	107	22465	1.88 UG/L	99
39) 2-Hexanone	8.39	43	26009	3.34 UG/L	89
40) 1,3-Dichloropropane	8.26	76	32597	1.84 UG/L	100
41) Tetrachloroethene	8.19	166	27125	1.88 UG/L	98
42) Dibromochloromethane	8.54	129	27280	1.86 UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1865V.D Vial: 2
Acq On : 27 Aug 2007 8:52 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:06:02 2007 Quant Results File: DWV.RES

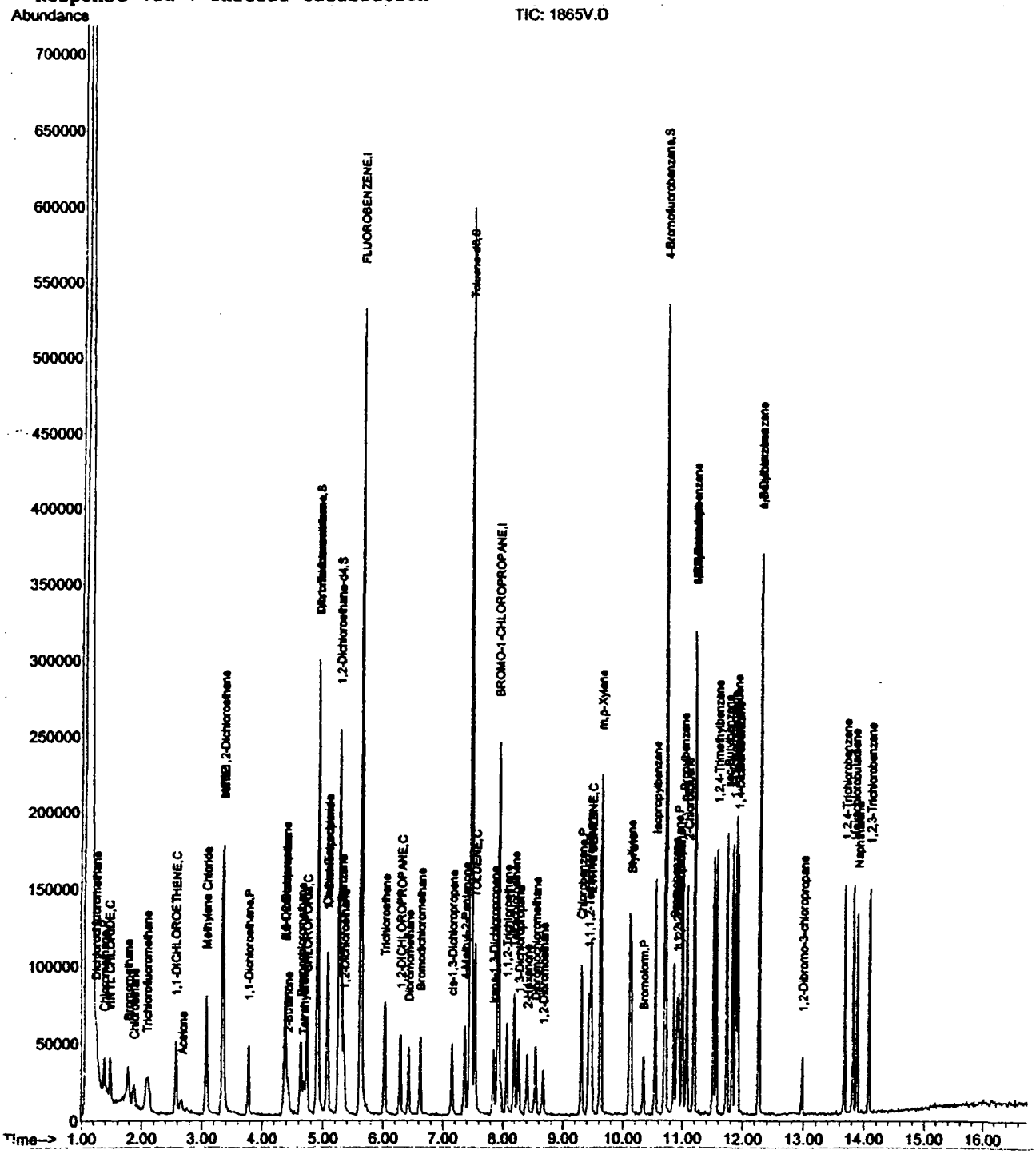
Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:05:52 2007
Response via : Initial Calibration
DataAcq Meth : DWV

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	Chlorobenzene	9.29	112	59090	1.75 UG/L	96
44)	1,1,1,2-Tetrachloroethane	9.42	131	26409	1.91 UG/L	100
45)	ETHYL BENZENE	9.46	106	27332	1.63 UG/L	97
46)	m,p-Xylene	9.62	106	71194	3.32 UG/L	91
47)	o-Xylene	10.10	106	36666	1.69 UG/L	93
48)	Styrene	10.12	104	56180	1.61 UG/L	92
49)	Bromoform	10.34	173	18324	1.83 UG/L	100
50)	1,1,2,2-Tetrachloroethane	10.90	83	32737	1.88 UG/L	96
52)	Isopropylbenzene	10.54	105	96255	1.58 UG/L	100
53)	Bromobenzene	10.85	77	41458	1.87 UG/L	100
54)	1,2,3-Trichloropropane	10.93	110	12058	1.91 UG/L	100
55)	n-Propylbenzene	10.99	92	13651	1.81 UG/L	73
56)	1,3,5-Trimethylbenzene	11.18	105	85428	1.62 UG/L	100
57)	2-Chlorotoluene	11.07	126	29649	1.91 UG/L	100
58)	4-Chlorotoluene	11.18	126	28248	1.84 UG/L	100
59)	t-Butylbenzene	11.18	91	86462	1.73 UG/L #	1
60)	1,2,4-Trimethylbenzene	11.56	105	88362	1.65 UG/L	100
61)	sec-Butylbenzene	11.72	105	107385	1.60 UG/L	100
62)	p-Isopropyltoluene	11.87	119	95902	1.54 UG/L	100
63)	1,3-Dichlorobenzene	11.82	146	63625	1.81 UG/L	100
64)	1,4-Dichlorobenzene	11.91	146	66602	1.86 UG/L	100
65)	n-Butylbenzene	12.26	92	43127	1.48 UG/L	91
66)	1,2-Dichlorobenzene	12.25	146	63017	1.82 UG/L	100
67)	1,2-Dibromo-3-chloropropan	12.97	157	8362	1.63 UG/L	100
68)	1,2,4-Trichlorobenzene	13.67	180	36102	1.69 UG/L	100
69)	Naphthalene	13.88	128	80026	1.06 UG/L	100
70)	Hexachlorobutadiene	13.81	225	19770	1.81 UG/L	100
71)	1,2,3-Trichlorobenzene	14.08	180	34217	1.71 UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1865V.D Vial: 2
Acq On : 27 Aug 2007 8:52 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:06 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:05:52 2007
Response via : Initial Calibration

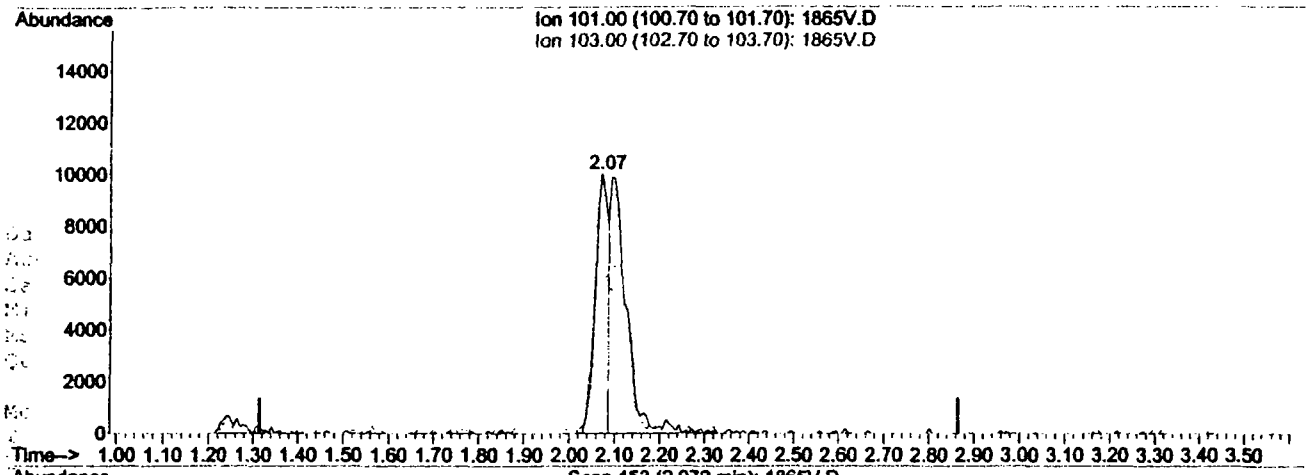


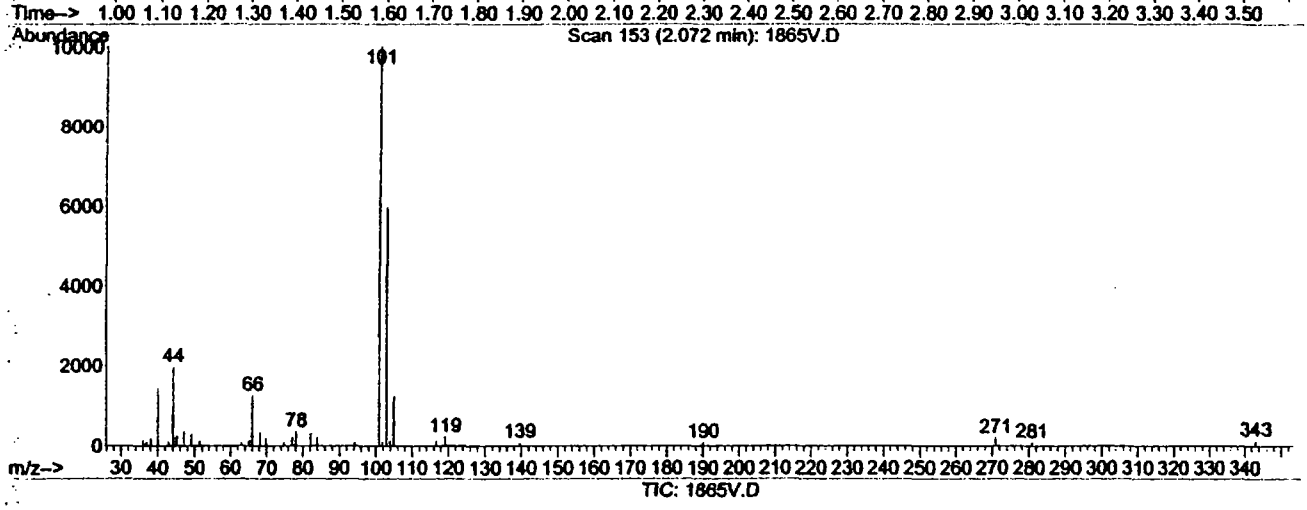
070

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1865V.D Vial: 2
Acq On : 27 Aug 2007 8:52 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:06 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:05:52 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.07min 0.87UG/L

response 20130

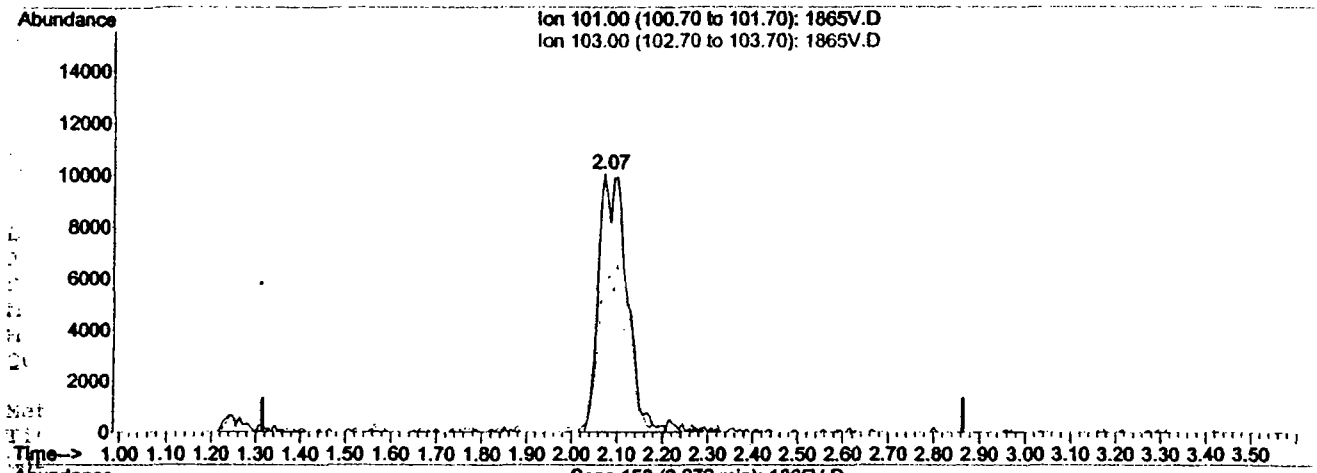
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	137.07#
0.00	0.00	0.00
0.00	0.00	0.00

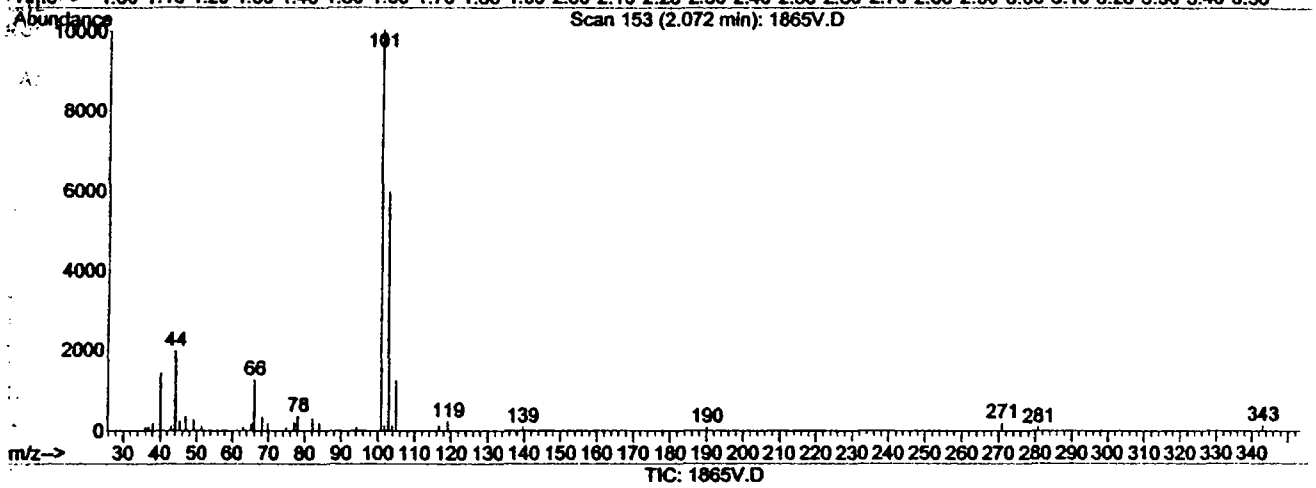
1865V.D DWV.M Mon Aug 27 11:06:15 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1865V.D Vial: 2
Acq On : 27 Aug 2007 8:52 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 11:06 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:05:52 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.07min 1.88UG/L m

response 43511

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	63.42
0.00	0.00	0.00
0.00	0.00	0.00

1865V.D DWV.M Mon Aug 27 11:06:21 2007

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1866V.D Vial: 3
Acq On : 27 Aug 2007 9:18 Operator: REGI
Sample : DW STD010 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 09:35:41 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	522310	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	174486	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	152725	10.58 UG/L	0.00
Spiked Amount 10.000			Recovery	= 105.80%	
23) 1,2-Dichloroethane-d4	5.25	65	185504	11.28 UG/L	0.00
Spiked Amount 10.000			Recovery	= 112.80%	
33) Toluene-d8	7.45	98	479968	10.31 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.10%	
51) 4-Bromofluorobenzene	10.70	95	180525	9.92 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.20%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.24	85	84500	10.67 UG/L	100
3) Chloromethane	1.37	50	111068	10.43 UG/L	100
4) VINYL CHLORIDE	1.47	62	133107	10.53 UG/L	96
5) Bromomethane	1.76	94	88808	11.56 UG/L #	1
6) Chloroethane	1.86	64	95391	11.36 UG/L	97
7) Trichlorofluoromethane	2.10	101	214370m	10.84 UG/L	
8) Acetone	2.65	43	85686	22.00 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	113998	10.54 UG/L	100
10) Methylene Chloride	3.06	84	143913	12.47 UG/L #	66
11) MTBE	3.34	73	729746	22.49 UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	135365	11.42 UG/L #	79
13) 1,1-Dichloroethane	3.77	63	233712	11.21 UG/L	100
14) 2-Butanone	4.41	43	130750	22.74 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	135473	11.40 UG/L #	67
16) CHLOROFORM	4.72	83	256611	11.55 UG/L	98
17) Tetrahydrofuran	4.67	42	84985	21.13 UG/L #	100
18) Bromochloromethane	4.62	128	74300	11.57 UG/L #	25
19) 2,2-Dichloropropane	4.36	77	156695	10.79 UG/L	100
20) 1,1,1-Trichloroethane	4.89	97	232045	11.99 UG/L	87
22) 1,1-Dichloropropene	5.07	110	59036	10.57 UG/L	100
24) Carbon Tetrachloride	5.05	117	217372	11.73 UG/L	98
25) 1,2-Dichloroethane	5.33	62	197418	13.19 UG/L	94
26) Benzene	5.30	78	483423	11.31 UG/L	100
27) Trichloroethene	6.02	130	141205	11.18 UG/L	96
28) 1,2-DICHLOROPROPANE	6.28	63	117671	11.88 UG/L	100
29) Bromodichloromethane	6.61	83	181410	12.57 UG/L	99
30) Dibromomethane	6.42	93	87129	12.09 UG/L	98
31) 4-Methyl-2-Pentanone	7.35	43	237110	22.13 UG/L #	100
32) cis-1,3-Dichloropropene	7.15	75	160237	11.11 UG/L	100
34) TOLUENE	7.53	91	498698	11.45 UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	155537	11.87 UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	107718	11.81 UG/L	100
37) 1,2-Dibromoethane	8.66	107	116189	11.94 UG/L	99
39) 2-Hexanone	8.40	43	156398	21.40 UG/L	89
40) 1,3-Dichloropropane	8.26	76	171157	11.33 UG/L	100
41) Tetrachloroethene	8.19	166	140923	11.18 UG/L	99
42) Dibromochloromethane	8.54	129	140641	11.84 UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1866V.D Vial: 3
Acq On : 27 Aug 2007 9:18 Operator: REGI
Sample : DW STD010 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 09:35:41 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

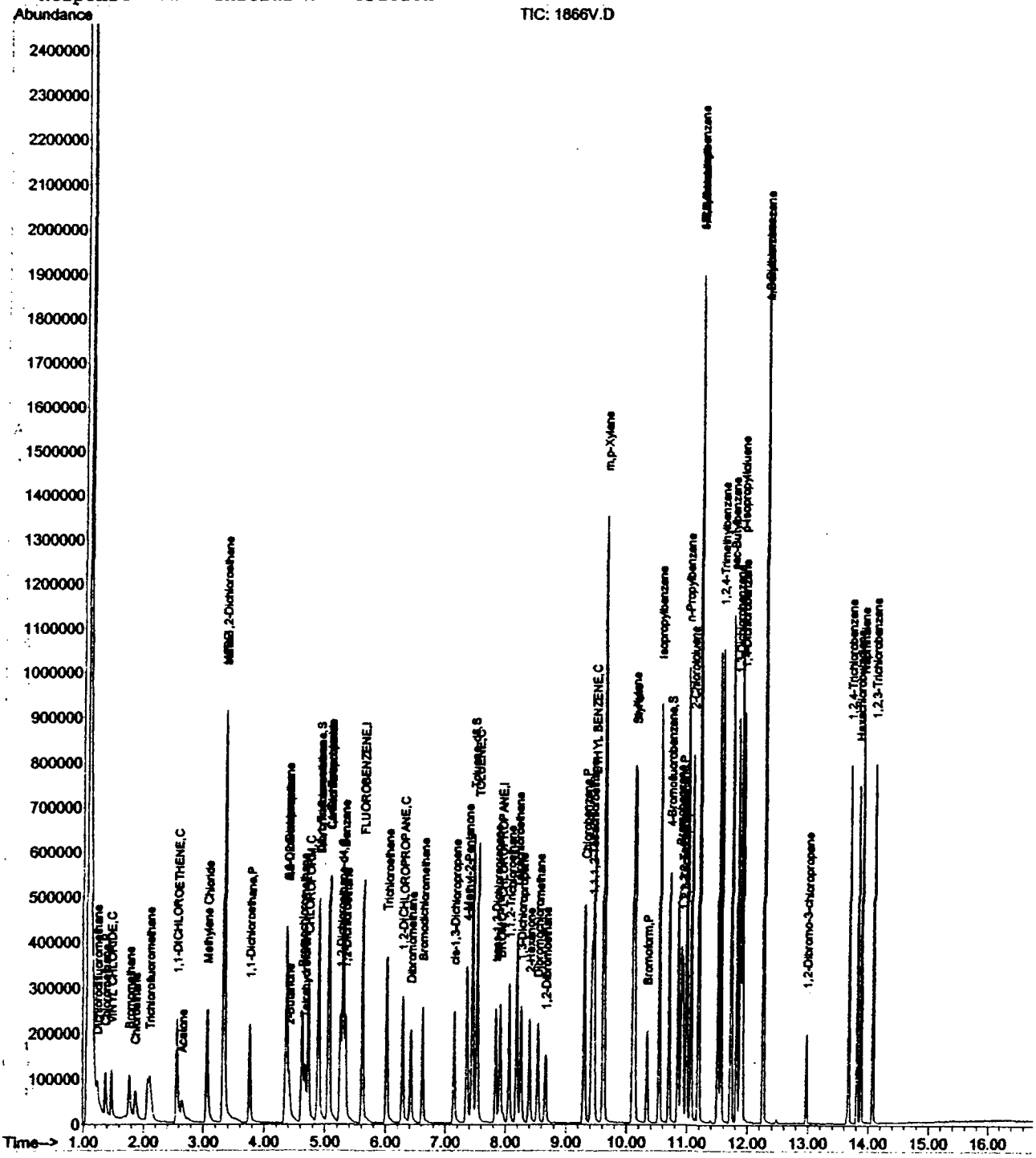
Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) Chlorobenzene	9.30	112	321958	10.62 UG/L		97
44) 1,1,1,2-Tetrachloroethane	9.42	131	129776	11.00 UG/L		100
45) ETHYL BENZENE	9.46	106	166550	10.60 UG/L		100
46) m,p-Xylene	9.62	106	441208	22.32 UG/L		97
47) o-Xylene	10.10	106	210535	10.55 UG/L		92
48) Styrene	10.13	104	353391	11.41 UG/L		96
49) Bromoform	10.34	173	97011	11.76 UG/L		100
50) 1,1,2,2-Tetrachloroethane	10.90	83	162781	10.74 UG/L		97
52) Isopropylbenzene	10.54	105	593666	10.61 UG/L		100
53) Bromobenzene	10.85	77	210018	10.77 UG/L		100
54) 1,2,3-Trichloropropane	10.93	110	59516	11.04 UG/L		100
55) n-Propylbenzene	10.99	92	76624	11.33 UG/L		83
56) 1,3,5-Trimethylbenzene	11.18	105	515404	10.88 UG/L		100
57) 2-Chlorotoluene	11.07	126	155500	11.17 UG/L		100
58) 4-Chlorotoluene	11.18	126	156257	11.46 UG/L		100
59) t-Butylbenzene	11.18	91	498966	11.33 UG/L	#	1
60) 1,2,4-Trimethylbenzene	11.56	105	531765	11.21 UG/L		100
61) sec-Butylbenzene	11.72	105	656881	10.82 UG/L		100
62) p-Isopropyltoluene	11.87	119	610298	11.03 UG/L		100
63) 1,3-Dichlorobenzene	11.82	146	337310	11.29 UG/L		100
64) 1,4-Dichlorobenzene	11.91	146	342672	11.35 UG/L		100
65) n-Butylbenzene	12.26	92	288770	10.98 UG/L		99
66) 1,2-Dichlorobenzene	12.25	146	338337	11.21 UG/L		100
67) 1,2-Dibromo-3-chloropropan	12.98	157	46754	9.70 UG/L		100
68) 1,2,4-Trichlorobenzene	13.67	180	197852	10.26 UG/L		100
69) Naphthalene	13.88	128	540862	9.91 UG/L		100
70) Hexachlorobutadiene	13.81	225	105152	10.27 UG/L		100
71) 1,2,3-Trichlorobenzene	14.08	180	189822	10.38 UG/L		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1866V.D Vial: 3
Acq On : 27 Aug 2007 9:18 Operator: REGI
Sample : DW STD010 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 9:59 2007 Quant Results File: DWV.RES

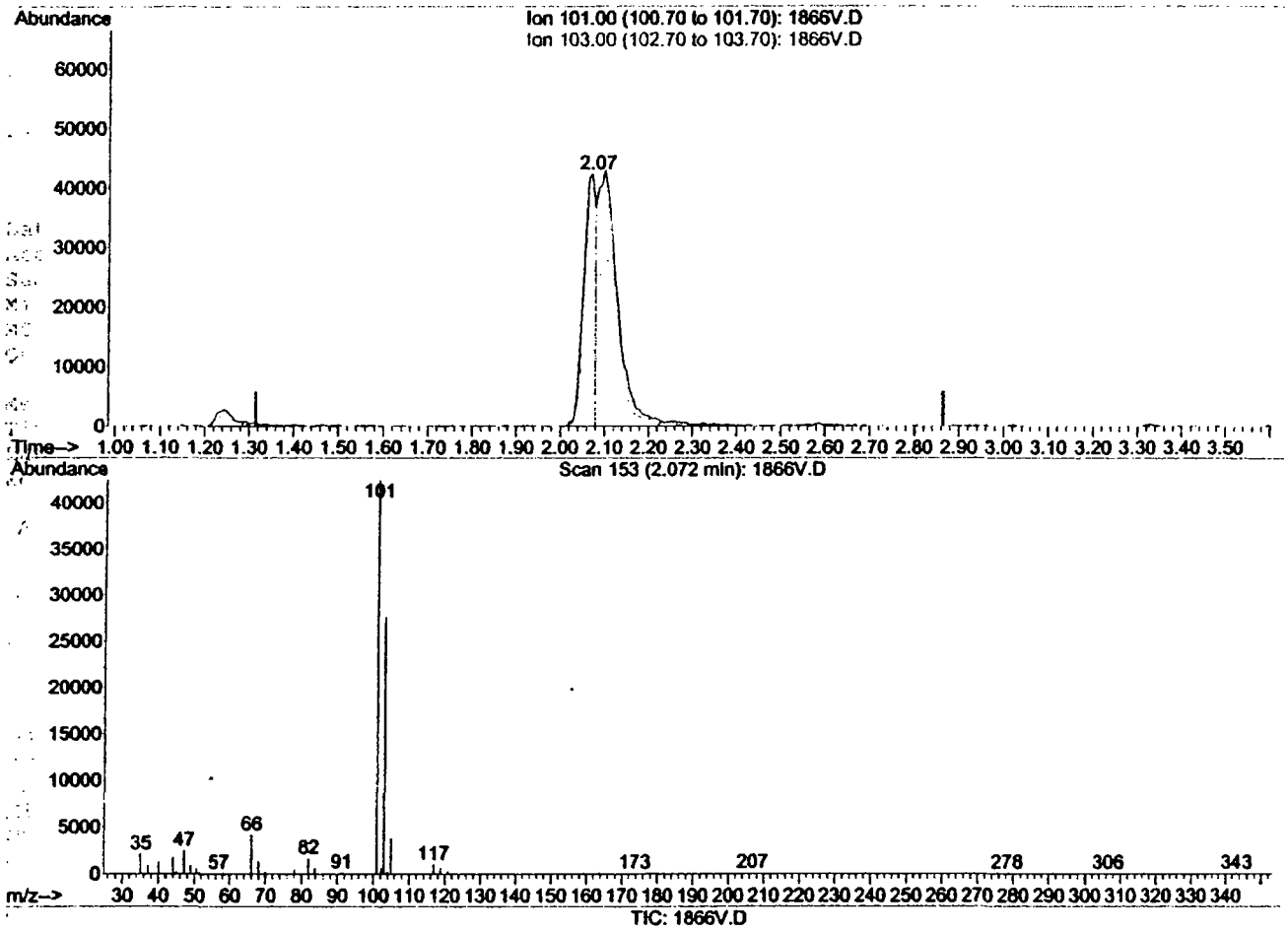
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 09:59:29 2007
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1866V.D Vial: 3
Acq On : 27 Aug 2007 9:18 Operator: REGI
Sample : DW STD010 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 9:35 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 09:59:29 2007
Response via : Multiple Level Calibration



(7) Trichlorofluoromethane

2.07min 4.19UG/L

response 82792

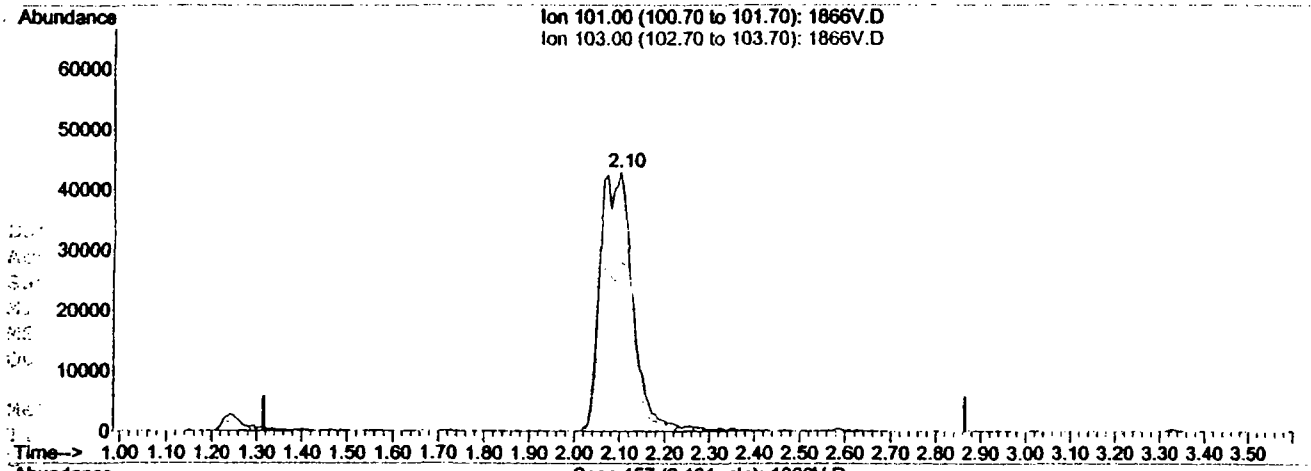
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	78.51#
0.00	0.00	0.00
0.00	0.00	0.00

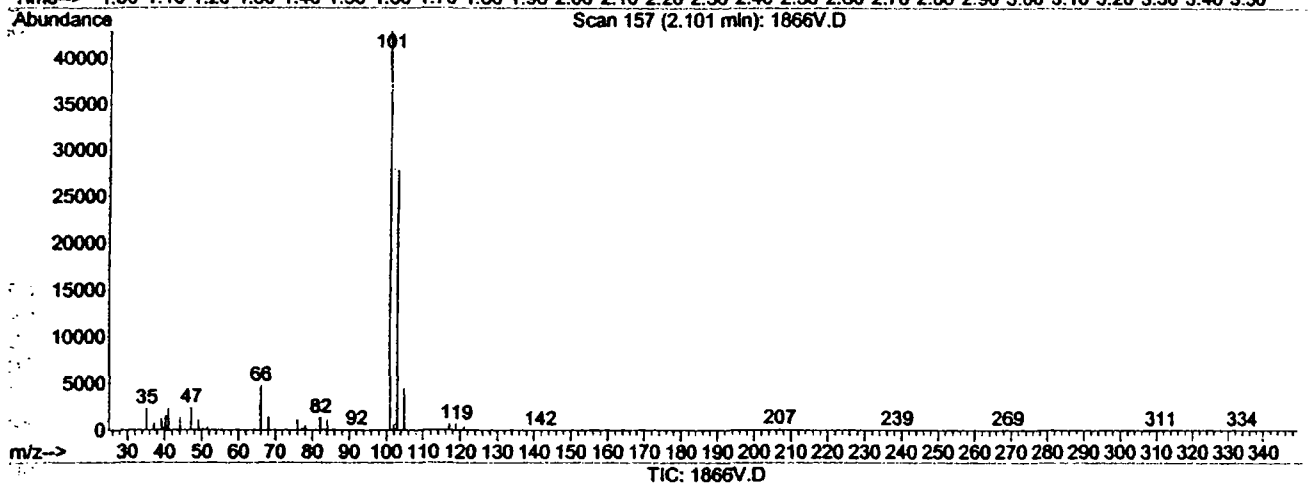
1866V.D DWV.M Mon Aug 27 09:59:38 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1866V.D Vial: 3
Acq On : 27 Aug 2007 9:18 Operator: REGI
Sample : DW STD010 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 9:59 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 09:59:29 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.10min 10.84UG/L m

response 214370

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	30.32#
0.00	0.00	0.00
0.00	0.00	0.00

1866V.D DWV.M Mon Aug 27 09:59:43 2007

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1867V.D Vial: 4
Acq On : 27 Aug 2007 9:44 Operator: REGI
Sample : DW STD020 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:01:28 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	553149	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	188713	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	167291	10.95	UG/L	0.00
Spiked Amount 10.000			Recovery	=	109.50%	
23) 1,2-Dichloroethane-d4	5.25	65	194058	11.14	UG/L	0.00
Spiked Amount 10.000			Recovery	=	111.40%	
33) Toluene-d8	7.45	98	519114	10.53	UG/L	0.00
Spiked Amount 10.000			Recovery	=	105.30%	
51) 4-Bromofluorobenzene	10.70	95	195751	9.95	UG/L	0.00
Spiked Amount 10.000			Recovery	=	99.50%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.24	85	172811	20.61	UG/L	100
3) Chloromethane	1.36	50	224036	19.87	UG/L	100
4) VINYL CHLORIDE	1.46	62	277370	20.72	UG/L	94
5) Bromomethane	1.76	94	171445	21.07	UG/L #	1
6) Chloroethane	1.86	64	195136	21.94	UG/L	97
7) Trichlorofluoromethane	2.10	101	468162m	22.35	UG/L	
8) Acetone	2.65	43	188336	45.36	UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	244886	21.37	UG/L	100
10) Methylene Chloride	3.07	84	285451	24.11	UG/L #	67
11) MTBE	3.34	73	1644730	47.86	UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	280806	22.37	UG/L #	79
13) 1,1-Dichloroethane	3.77	63	493886	22.37	UG/L	100
14) 2-Butanone	4.41	43	272749	44.79	UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	290048	23.06	UG/L #	66
16) CHLOROFORM	4.72	83	540409	22.98	UG/L	99
17) Tetrahydrofuran	4.67	42	183931	43.19	UG/L #	100
18) Bromochloromethane	4.62	128	156442	23.00	UG/L #	26
19) 2,2-Dichloropropane	4.36	77	328032	21.33	UG/L	100
20) 1,1,1-Trichloroethane	4.89	97	488223	23.83	UG/L	89
22) 1,1-Dichloropropene	5.07	110	126663	21.42	UG/L	100
24) Carbon Tetrachloride	5.06	117	471166	24.01	UG/L	93
25) 1,2-Dichloroethane	5.33	62	421109	26.59	UG/L	96
26) Benzene	5.29	78	1039889	22.96	UG/L	100
27) Trichloroethene	6.02	130	298054	22.29	UG/L	96
28) 1,2-DICHLOROPROPANE	6.28	63	239555	22.84	UG/L	100
29) Bromodichloromethane	6.61	83	374271	24.48	UG/L	99
30) Dibromomethane	6.41	93	181059	23.73	UG/L	97
31) 4-Methyl-2-Pentanone	7.36	43	516073	45.49	UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	355328	23.25	UG/L	100
34) TOLUENE	7.53	91	1053996	22.86	UG/L	100
35) trans-1,3-Dichloropropene	7.83	75	345793	24.92	UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	219741	22.76	UG/L	100
37) 1,2-Dibromoethane	8.66	107	243417	23.62	UG/L	98
39) 2-Hexanone	8.40	43	330800	41.86	UG/L #	87
40) 1,3-Dichloropropane	8.26	76	357984	21.91	UG/L	100
41) Tetrachloroethene	8.19	166	300776	22.07	UG/L	98
42) Dibromochloromethane	8.54	129	295141	22.97	UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1867V.D Vial: 4
Acq On : 27 Aug 2007 9:44 Operator: REGI
Sample : DW STD020 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:01:28 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

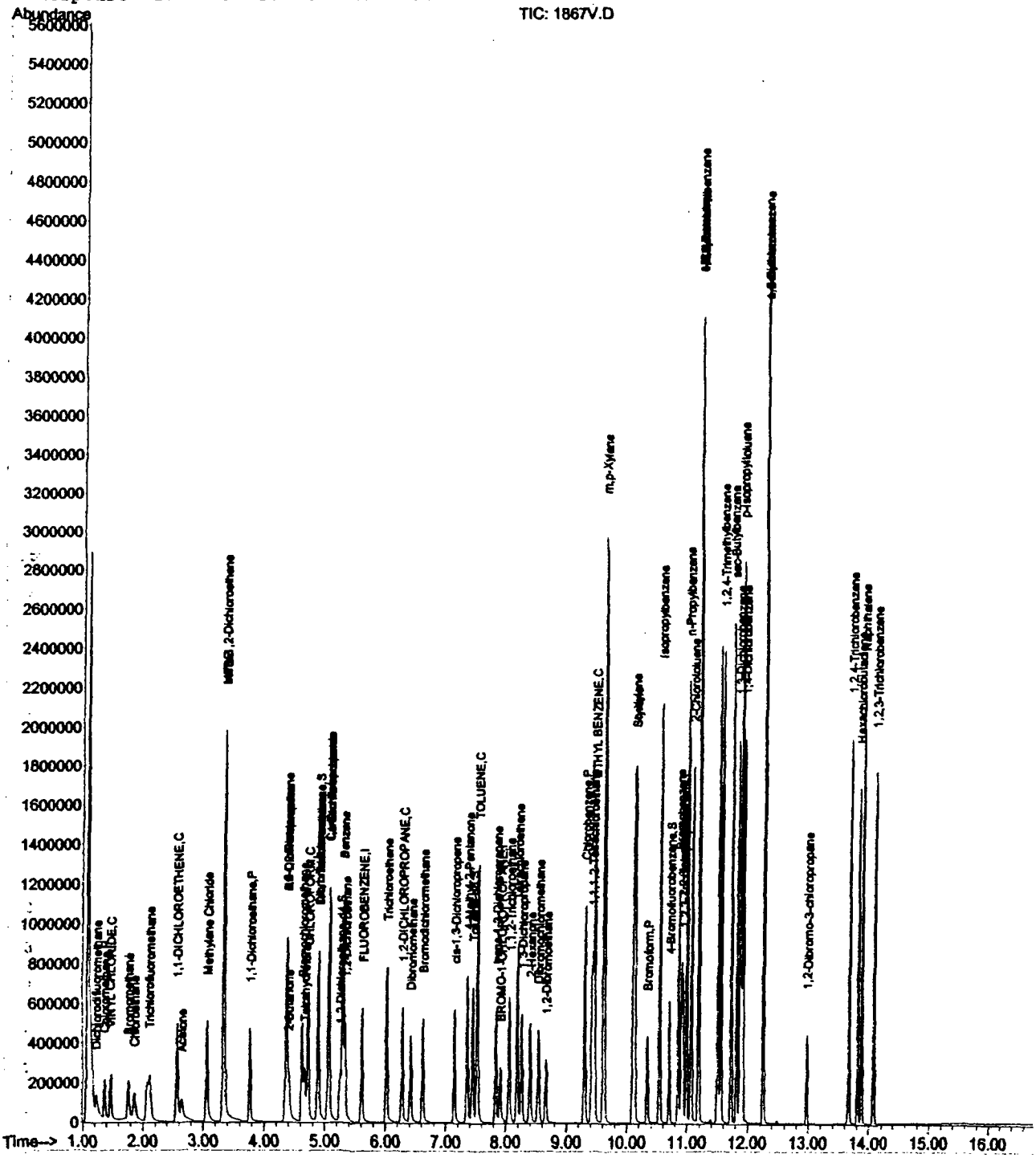
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	Chlorobenzene	9.30	112	710099	21.66 UG/L	98
44)	1,1,1,2-Tetrachloroethane	9.42	131	288658	22.63 UG/L	100
45)	ETHYL BENZENE	9.46	106	375390	22.09 UG/L	100
46)	m,p-Xylene	9.62	106	959761	44.89 UG/L	95
47)	o-Xylene	10.10	106	482250	22.33 UG/L	94
48)	Styrene	10.13	104	788740	23.54 UG/L	97
49)	Bromoform	10.34	173	209283	23.46 UG/L	100
50)	1,1,2,2-Tetrachloroethane	10.90	83	351749	21.46 UG/L	100
52)	Isopropylbenzene	10.54	105	1370530	22.64 UG/L	100
53)	Bromobenzene	10.85	77	462892	21.96 UG/L	100
54)	1,2,3-Trichloropropane	10.93	110	126381	21.68 UG/L	100
55)	n-Propylbenzene	10.99	92	168649	23.06 UG/L	87
56)	1,3,5-Trimethylbenzene	11.18	105	1191263	23.24 UG/L	100
57)	2-Chlorotoluene	11.07	126	338377	22.47 UG/L	100
58)	4-Chlorotoluene	11.18	126	337152	22.86 UG/L	100
59)	t-Butylbenzene	11.18	91	1094741	22.99 UG/L #	1
60)	1,2,4-Trimethylbenzene	11.56	105	1208727	23.57 UG/L	100
61)	sec-Butylbenzene	11.72	105	1546963	23.56 UG/L	100
62)	p-Isopropyltoluene	11.87	119	1425915	23.82 UG/L	100
63)	1,3-Dichlorobenzene	11.82	146	740531	22.91 UG/L	100
64)	1,4-Dichlorobenzene	11.91	146	755316	23.13 UG/L	100
65)	n-Butylbenzene	12.26	92	684048	24.04 UG/L	97
66)	1,2-Dichlorobenzene	12.26	146	742836	22.76 UG/L	100
67)	1,2-Dibromo-3-chloropropan	12.98	157	105658	20.27 UG/L	100
68)	1,2,4-Trichlorobenzene	13.67	180	466978	22.39 UG/L	100
69)	Naphthalene	13.88	128	1349557	22.86 UG/L	100
70)	Hexachlorobutadiene	13.81	225	238582	21.54 UG/L	100
71)	1,2,3-Trichlorobenzene	14.08	180	442977	22.41 UG/L	100

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

Quantification Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1867V.D Vial: 4
Acq On : 27 Aug 2007 9:44 Operator: REGI
Sample : DW STD020 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:14 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:00:01 2007
Response via : Initial Calibration

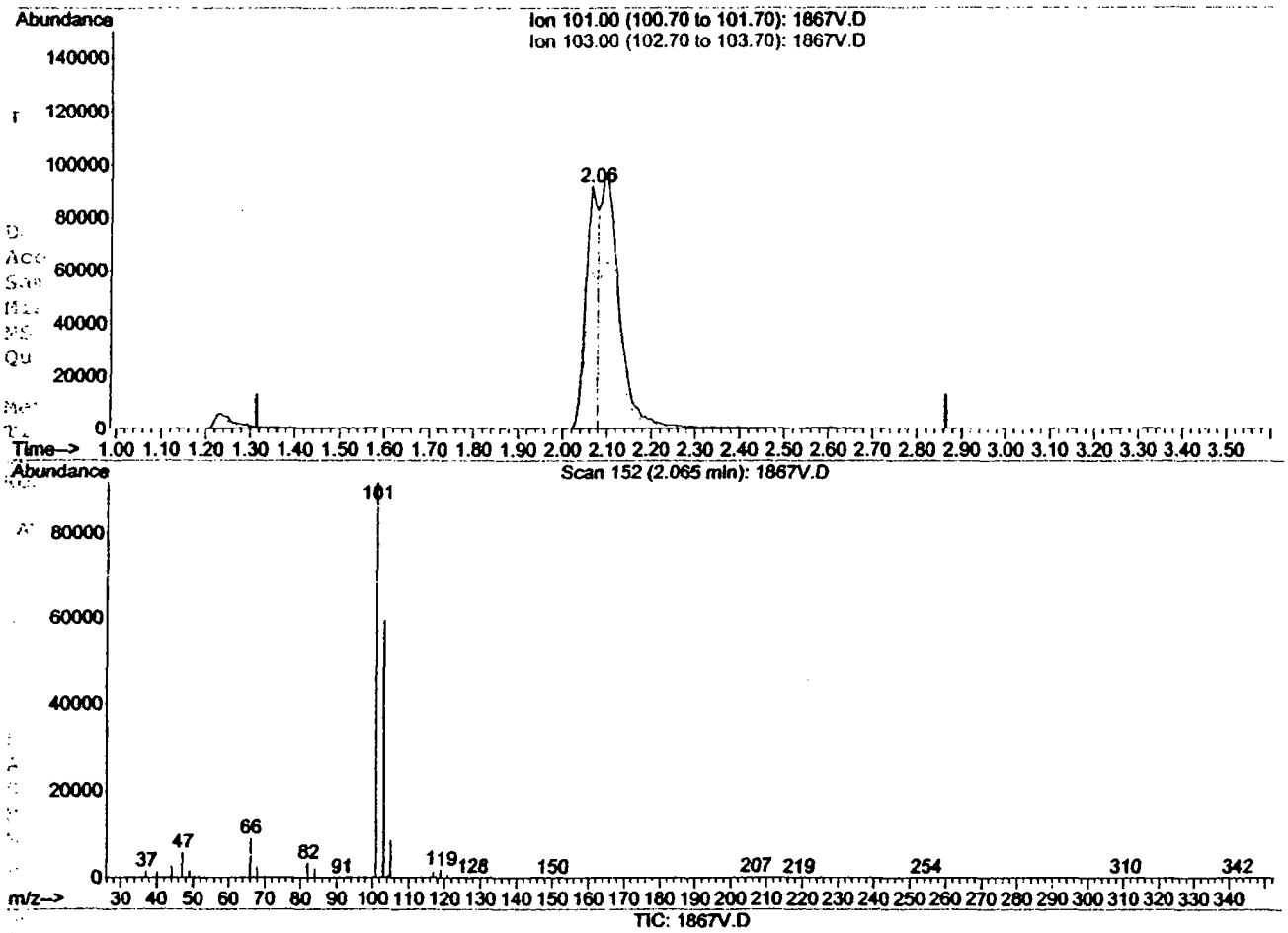


080

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1867V.D Vial: 4
Acq On : 27 Aug 2007 9:44 Operator: REGI
Sample : DW STD020 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:01 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:00:01 2007
Response via : Multiple Level Calibration



(7) Trichlorofluoromethane

2.06min 8.78UG/L

response 183976

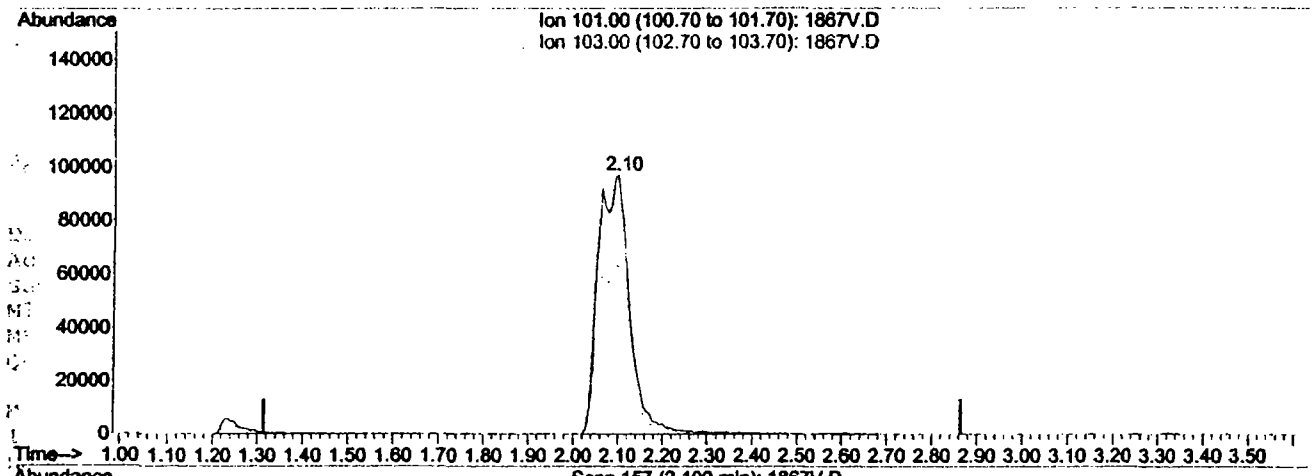
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

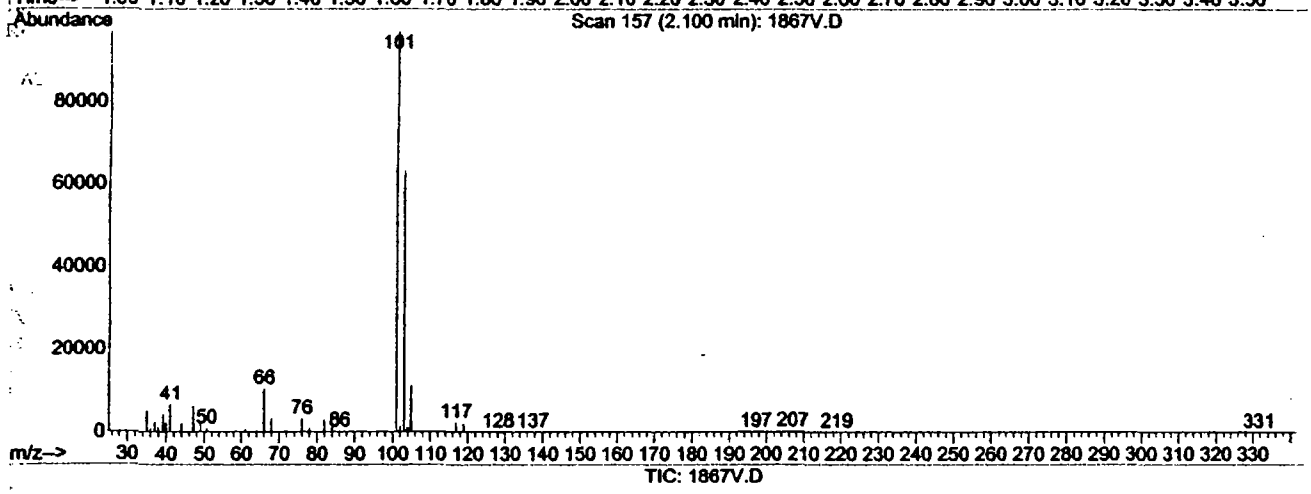
1867V.D DWV.M Mon Aug 27 10:14:40 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1867V.D Vial: 4
Acq On : 27 Aug 2007 9:44 Operator: REGI
Sample : DW STD020 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:14 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:00:01 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.10min 22.35UG/L m

response 468162

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

1867V.D DWV.M Mon Aug 27 10:14:46 2007

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1868V.D Vial: 5
Acq On : 27 Aug 2007 10:10 Operator: REGI
Sample : DW STD050 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:27:14 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	538898	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	182781	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	154563	10.38	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.80%	
23) 1,2-Dichloroethane-d4	5.25	65	181997	10.72	UG/L	0.00
Spiked Amount 10.000			Recovery	=	107.20%	
33) Toluene-d8	7.45	98	509331	10.60	UG/L	0.00
Spiked Amount 10.000			Recovery	=	106.00%	
51) 4-Bromofluorobenzene	10.70	95	200321	10.51	UG/L	0.00
Spiked Amount 10.000			Recovery	=	105.10%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.24	85	449321	55.01	UG/L	100
3) Chloromethane	1.36	50	610608	55.60	UG/L	100
4) VINYL CHLORIDE	1.47	62	758081	58.13	UG/L	95
5) Bromomethane	1.75	94	434183	54.78	UG/L #	1
6) Chloroethane	1.85	64	482237	55.65	UG/L	97
7) Trichlorofluoromethane	2.09	101	1349400m	66.12	UG/L	
8) Acetone	2.65	43	533600	121.78	UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	681331	61.03	UG/L	100
10) Methylene Chloride	3.06	84	737595	63.00	UG/L #	65
11) MTBE	3.34	73	4562892	136.30	UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	760489	62.19	UG/L #	79
13) 1,1-Dichloroethane	3.77	63	1313508	61.07	UG/L	100
14) 2-Butanone	4.41	43	762506	128.53	UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	782788	63.87	UG/L #	68
16) CHLOROFORM	4.72	83	1413670	61.70	UG/L	99
17) Tetrahydrofuran	4.67	42	512224	123.46	UG/L #	100
18) Bromochloromethane	4.62	128	418505	63.15	UG/L #	23
19) 2,2-Dichloropropane	4.36	77	891533	59.51	UG/L	99
20) 1,1,1-Trichloroethane	4.89	97	1299457	65.09	UG/L	88
22) 1,1-Dichloropropene	5.07	110	361213	62.70	UG/L	100
24) Carbon Tetrachloride	5.05	117	1230433	64.35	UG/L	96
25) 1,2-Dichloroethane	5.33	62	1096139	64.77	UG/L	96
26) Benzene	5.29	78	2782089	63.06	UG/L	100
27) Trichloroethene	6.02	130	793505	60.90	UG/L	96
28) 1,2-DICHLOROPROPANE	6.28	63	641620	62.79	UG/L	100
29) Bromodichloromethane	6.61	83	1003464	67.36	UG/L	99
30) Dibromomethane	6.41	93	471855	63.48	UG/L	95
31) 4-Methyl-2-Pentanone	7.36	43	1453333	131.49	UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	1011235	67.93	UG/L	100
34) TOLUENE	7.53	91	2923387	65.07	UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	982965	72.72	UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	587320	62.43	UG/L	100
37) 1,2-Dibromoethane	8.66	107	659446	65.68	UG/L	99
39) 2-Hexanone	8.40	43	940242	122.84	UG/L #	86
40) 1,3-Dichloropropane	8.26	76	967459	61.14	UG/L	100
41) Tetrachloroethene	8.19	166	796840	60.37	UG/L	99
42) Dibromochloromethane	8.54	129	811680	65.21	UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1868V.D Vial: 5
Acq On : 27 Aug 2007 10:10 Operator: REGI
Sample : DW STD050 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:27:14 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

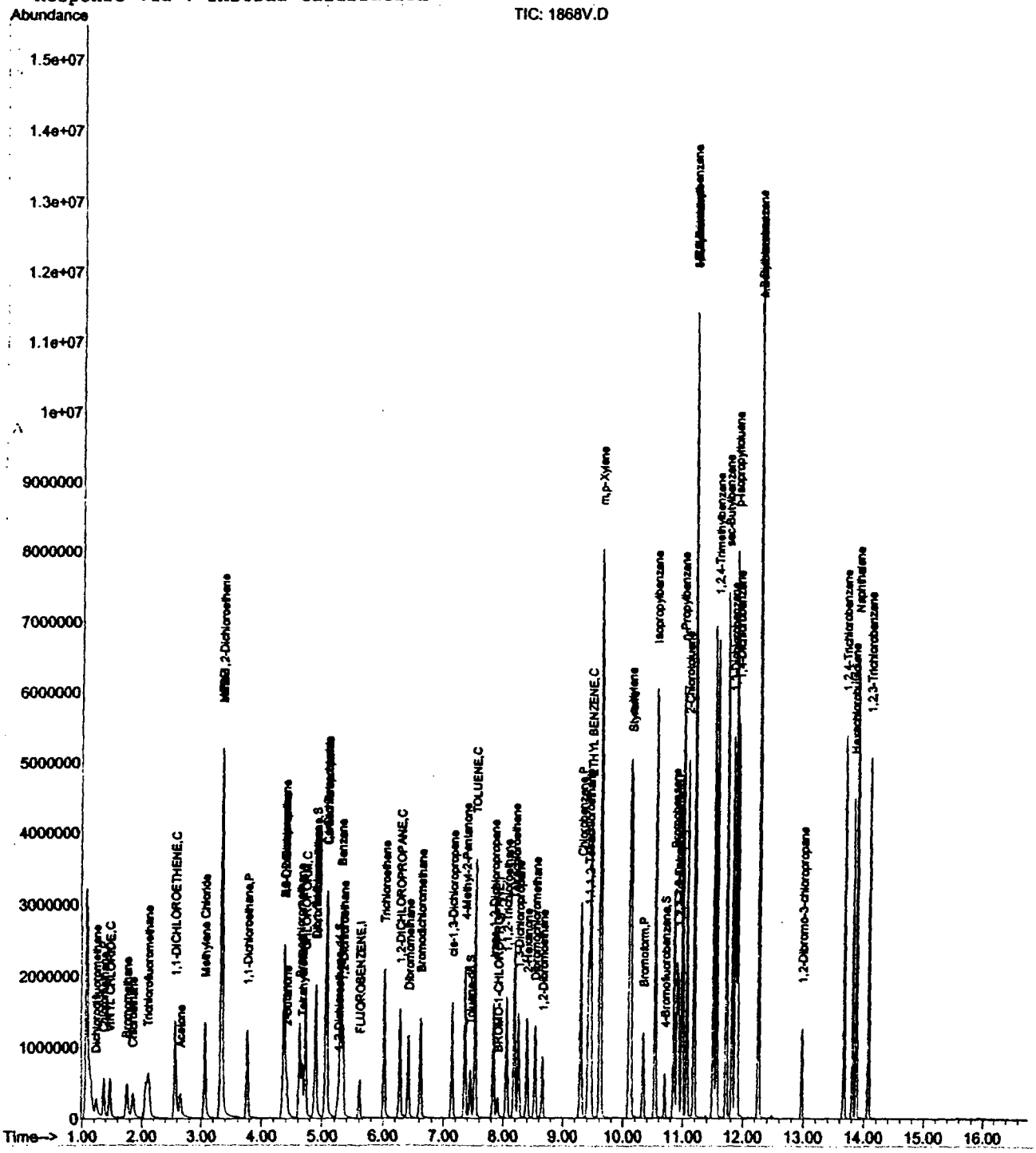
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	Chlorobenzene	9.30	112	1990786	62.71	UG/L		99
44)	1,1,1,2-Tetrachloroethane	9.42	131	775588	62.78	UG/L		100
45)	ETHYL BENZENE	9.46	106	1046892	63.60	UG/L		98
46)	m,p-Xylene	9.62	106	2671981	129.04	UG/L		95
47)	o-Xylene	10.10	106	1361143	65.08	UG/L		93
48)	Styrene	10.13	104	2228508	68.67	UG/L		98
49)	Bromoform	10.34	173	576800	66.75	UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.90	83	946471	59.62	UG/L		98
52)	Isopropylbenzene	10.54	105	3990237	68.05	UG/L		100
53)	Bromobenzene	10.85	77	1268334	62.11	UG/L		100
54)	1,2,3-Trichloropropane	10.93	110	333225	59.02	UG/L		100
55)	n-Propylbenzene	10.99	92	472039	66.64	UG/L		91
56)	1,3,5-Trimethylbenzene	11.18	105	3413315	68.76	UG/L		100
57)	2-Chlorotoluene	11.07	126	926515	63.53	UG/L		100
58)	4-Chlorotoluene	11.18	126	919832	64.40	UG/L		100
59)	t-Butylbenzene	11.18	91	3064186	66.43	UG/L	#	1
60)	1,2,4-Trimethylbenzene	11.56	105	3501793	70.50	UG/L		100
61)	sec-Butylbenzene	11.72	105	4509388	70.89	UG/L		100
62)	p-Isopropyltoluene	11.87	119	4198419	72.41	UG/L		100
63)	1,3-Dichlorobenzene	11.82	146	2040568	65.17	UG/L		100
64)	1,4-Dichlorobenzene	11.91	146	2105906	66.58	UG/L		100
65)	n-Butylbenzene	12.26	92	1946590	70.63	UG/L		100
66)	1,2-Dichlorobenzene	12.26	146	2049544	64.83	UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.98	157	313086	62.01	UG/L		100
68)	1,2,4-Trichlorobenzene	13.67	180	1373885	68.01	UG/L		100
69)	Naphthalene	13.88	128	4090358	71.54	UG/L		100
70)	Hexachlorobutadiene	13.81	225	644634	60.08	UG/L		100
71)	1,2,3-Trichlorobenzene	14.08	180	1250768	65.32	UG/L		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1868V.D Vial: 5
Acq On : 27 Aug 2007 10:10 Operator: REGI
Sample : DW STD050 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:37 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:15:54 2007
Response via : Initial Calibration

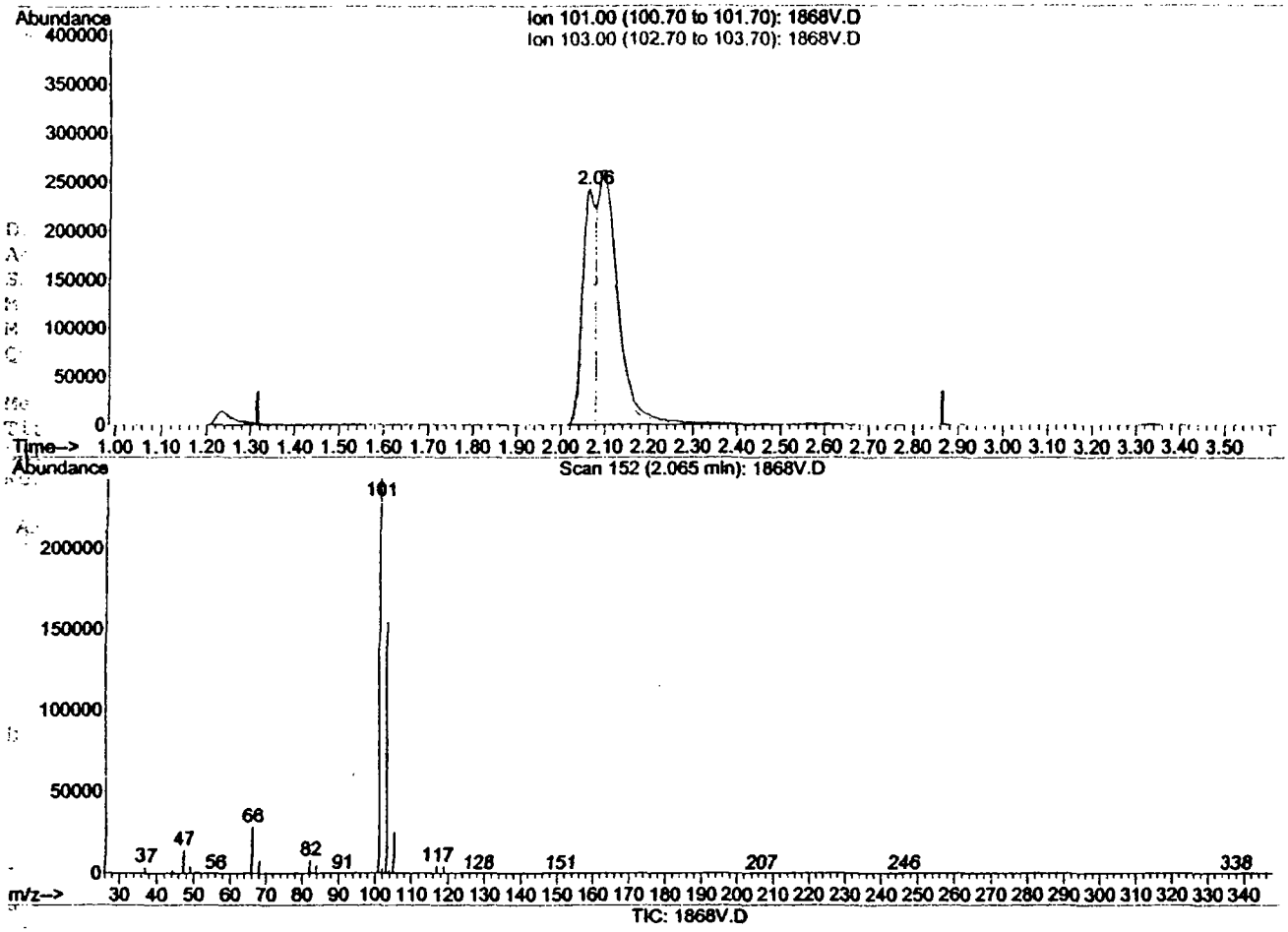


085

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1868V.D Vial: 5
Acq On : 27 Aug 2007 10:10 Operator: REGI
Sample : DW STD050 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:27 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:15:54 2007
Response via : Multiple Level Calibration



(7) Trichlorofluoromethane

2.06min 26.19UG/L

response 534480

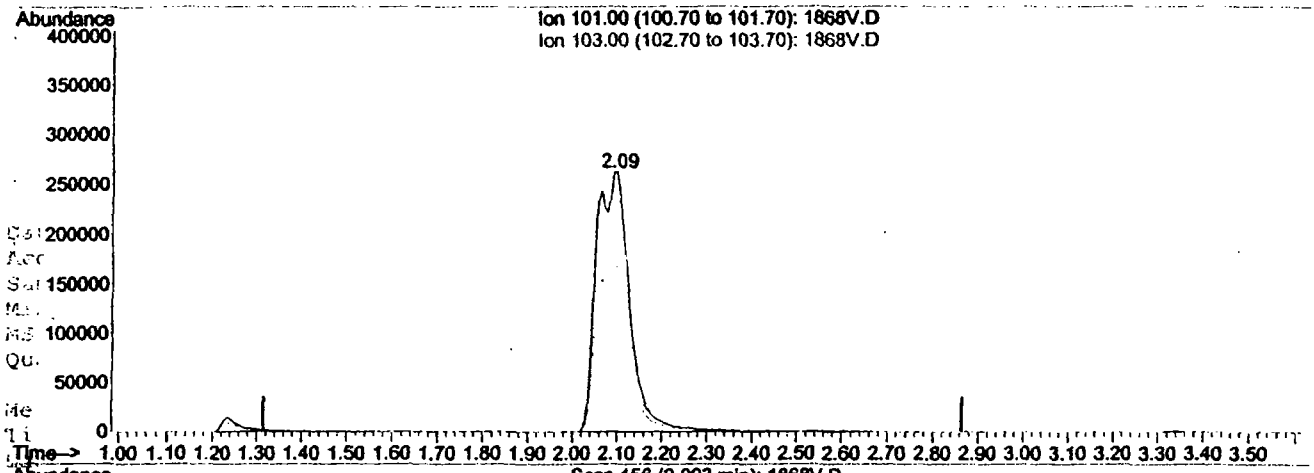
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	63.67
0.00	0.00	0.00
0.00	0.00	0.00

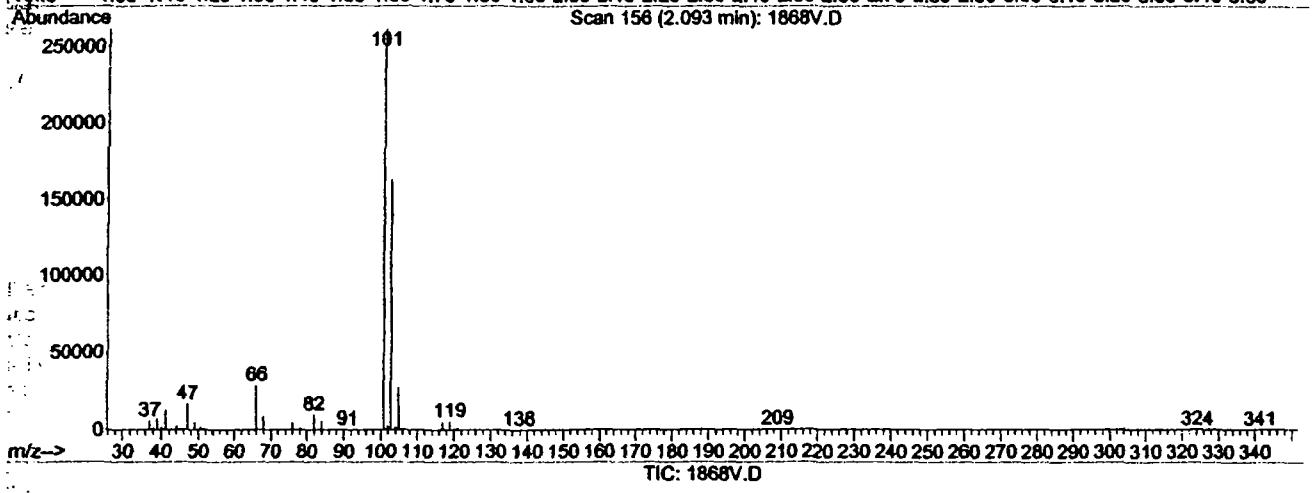
1868V.D DWV.M Mon Aug 27 10:37:21 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1868V.D Vial: 5
Acq On : 27 Aug 2007 10:10 Operator: REGI
Sample : DW STD050 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:37 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:15:54 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.09min 66.12UG/L m

response 1349400

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	25.22#
0.00	0.00	0.00
0.00	0.00	0.00

1868V.D DWV.M Mon Aug 27 10:37:26 2007

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1869V.D Vial: 6
Acq On : 27 Aug 2007 10:36 Operator: REGI
Sample : DW STD080 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:53:06 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	645462	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	233062	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	182144	10.21	UG/L	0.00
Spiked Amount 10.000			Recovery =	102.10%		
23) 1,2-Dichloroethane-d4	5.25	65	210541	10.36	UG/L	0.00
Spiked Amount 10.000			Recovery =	103.60%		
33) Toluene-d8	7.45	98	611999	10.64	UG/L	0.00
Spiked Amount 10.000			Recovery =	106.40%		
51) 4-Bromofluorobenzene	10.70	95	239914	9.87	UG/L	0.00
Spiked Amount 10.000			Recovery =	98.70%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.24	85	811785	82.98	UG/L	100
3) Chloromethane	1.37	50	1125160	85.54	UG/L	100
4) VINYL CHLORIDE	1.48	62	1432764	91.72	UG/L	96
5) Bromomethane	1.75	94	778467	82.00	UG/L #	1
6) Chloroethane	1.85	64	749736	72.24	UG/L	97
7) Trichlorofluoromethane	2.10	101	2573055m	105.26	UG/L	
8) Acetone	2.65	43	1012447	180.84	UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	1367566	102.28	UG/L	100
10) Methylene Chloride	3.06	84	1438423	99.15	UG/L #	63
11) MTBE	3.34	73	9211020	229.71	UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	1463080	99.89	UG/L #	79
13) 1,1-Dichloroethane	3.77	63	2627218	101.98	UG/L	100
14) 2-Butanone	4.41	43	1453708	204.59	UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	1529099	104.16	UG/L #	66
16) CHLOROFORM	4.72	83	2711020	98.78	UG/L	98
17) Tetrahydrofuran	4.67	42	981430	197.50	UG/L #	100
18) Bromochloromethane	4.62	128	821575	103.51	UG/L #	20
19) 2,2-Dichloropropane	4.36	77	1716057	95.64	UG/L	100
20) 1,1,1-Trichloroethane	4.89	97	2504477	104.74	UG/L	88
22) 1,1-Dichloropropene	5.07	110	702733	101.84	UG/L	100
24) Carbon Tetrachloride	5.05	117	2367315	103.36	UG/L	95
25) 1,2-Dichloroethane	5.33	62	2082819	94.88	UG/L	96
26) Benzene	5.29	78	5497024	104.03	UG/L	100
27) Trichloroethene	6.02	130	1573130	100.81	UG/L	96
28) 1,2-DICHLOROPROPANE	6.28	63	1267940	103.60	UG/L	100
29) Bromodichloromethane	6.61	83	1962028	109.97	UG/L	99
30) Dibromomethane	6.41	93	923378	103.71	UG/L	96
31) 4-Methyl-2-Pentanone	7.36	43	2792086	210.91	UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	2065246	115.82	UG/L	100
34) TOLUENE	7.53	91	5916643	109.96	UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	1989067	122.85	UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	1172539	104.06	UG/L	100
37) 1,2-Dibromoethane	8.66	107	1333646	110.90	UG/L	100
39) 2-Hexanone	8.40	43	1778722	182.25	UG/L #	83
40) 1,3-Dichloropropane	8.26	76	1955578	96.93	UG/L	100
41) Tetrachloroethene	8.19	166	1573432	93.49	UG/L	99
42) Dibromochloromethane	8.54	129	1614641	101.74	UG/L	100

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

Data File : C:\HPCHEM\DATA\V082707\1869V.D Vial: 6
Acq On : 27 Aug 2007 10:36 Operator: REGI
Sample : DW STD080 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:53:06 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

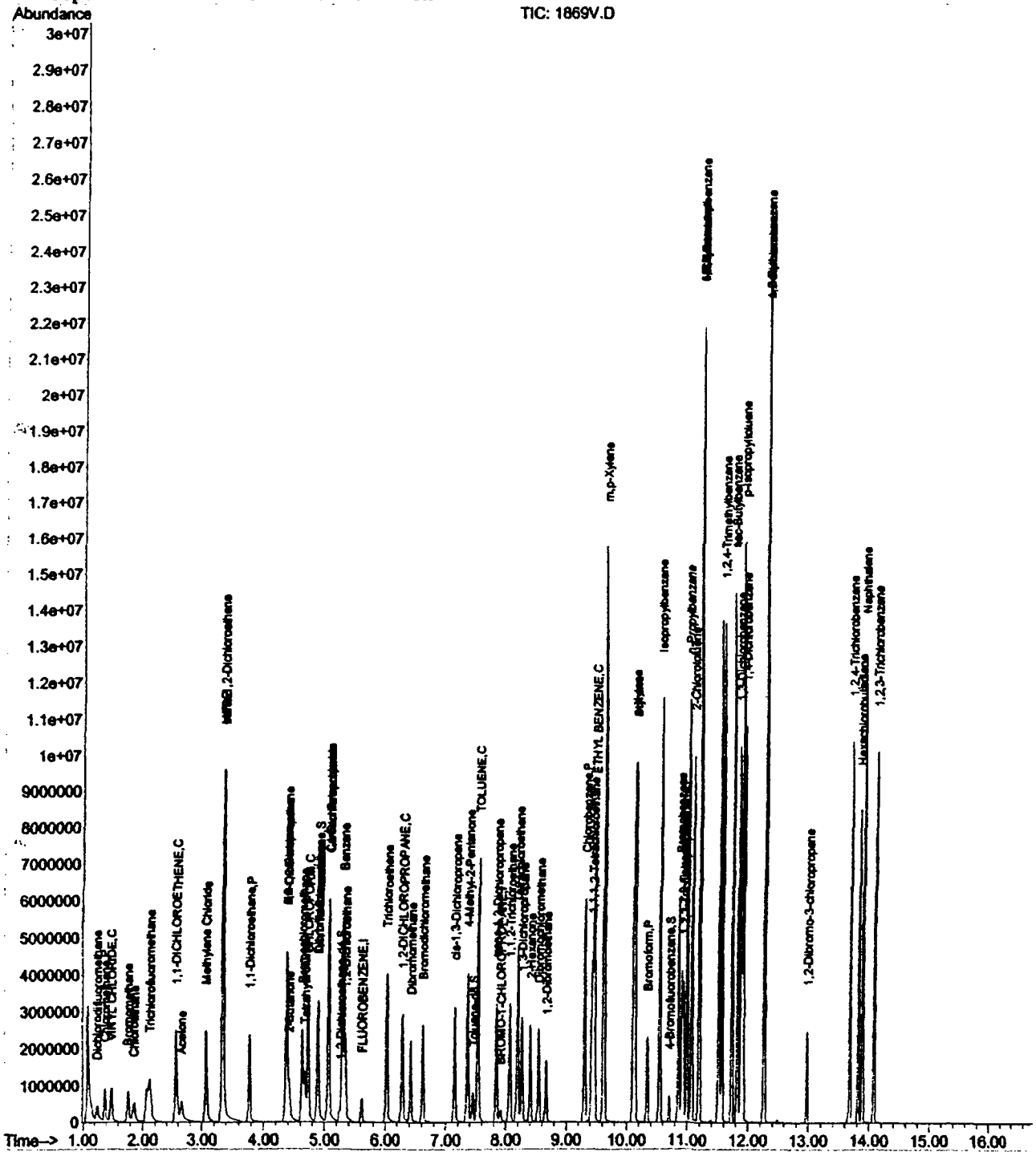
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	Chlorobenzene	9.30	112	4036871	99.72 UG/L		99
44)	1,1,1,2-Tetrachloroethane	9.42	131	1511245	95.94 UG/L		100
45)	ETHYL BENZENE	9.46	106	2090042	99.57 UG/L		98
46)	m,p-Xylene	9.62	106	5344120	202.41 UG/L		94
47)	o-Xylene	10.10	106	2710334	101.63 UG/L		93
48)	Styrene	10.13	104	4503521	108.84 UG/L		100
49)	Bromoform	10.34	173	1138758	103.35 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.90	83	1828467	90.32 UG/L		99
52)	Isopropylbenzene	10.54	105	7938332	106.18 UG/L		100
53)	Bromobenzene	10.85	77	2512254	96.49 UG/L		100
54)	1,2,3-Trichloropropane	10.93	110	640103	88.91 UG/L		100
55)	n-Propylbenzene	10.99	92	919758	101.83 UG/L		97
56)	1,3,5-Trimethylbenzene	11.18	105	6785327	107.20 UG/L		100
57)	2-Chlorotoluene	11.07	126	1827091	98.25 UG/L		100
58)	4-Chlorotoluene	11.18	126	1780260	97.76 UG/L		100
59)	t-Butylbenzene	11.18	91	6050238	102.86 UG/L	#	1
60)	1,2,4-Trimethylbenzene	11.56	105	6994826	110.44 UG/L		100
61)	sec-Butylbenzene	11.72	105	9018841	111.20 UG/L		100
62)	p-Isopropyltoluene	11.87	119	8369674	113.22 UG/L		100
63)	1,3-Dichlorobenzene	11.82	146	4027826	100.89 UG/L		100
64)	1,4-Dichlorobenzene	11.91	146	4122256	102.21 UG/L		100
65)	n-Butylbenzene	12.26	92	3851777	109.60 UG/L		100
66)	1,2-Dichlorobenzene	12.26	146	3983309	98.82 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.98	157	616603	95.78 UG/L		100
68)	1,2,4-Trichlorobenzene	13.67	180	2756671	107.02 UG/L		100
69)	Naphthalene	13.88	128	8431476	115.66 UG/L		100
70)	Hexachlorobutadiene	13.81	225	1236736	90.39 UG/L		100
71)	1,2,3-Trichlorobenzene	14.08	180	2497383	102.29 UG/L		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082707\1869V.D Vial: 6
Acq On : 27 Aug 2007 10:36 Operator: REGI
Sample : DW STD080 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:56 2007 Quant Results File: DWV.RES

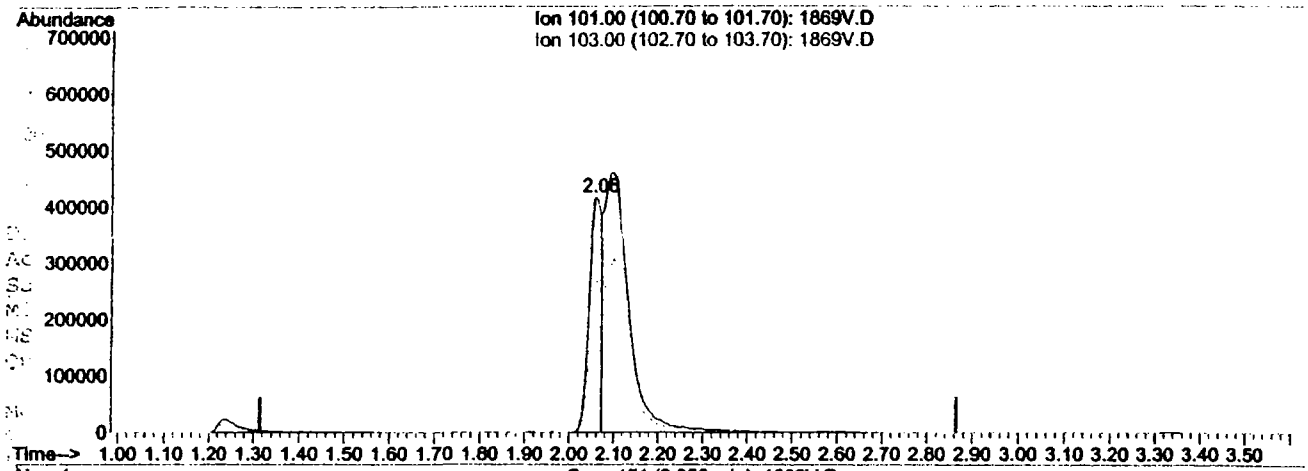
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:37:44 2007
Response via : Initial Calibration

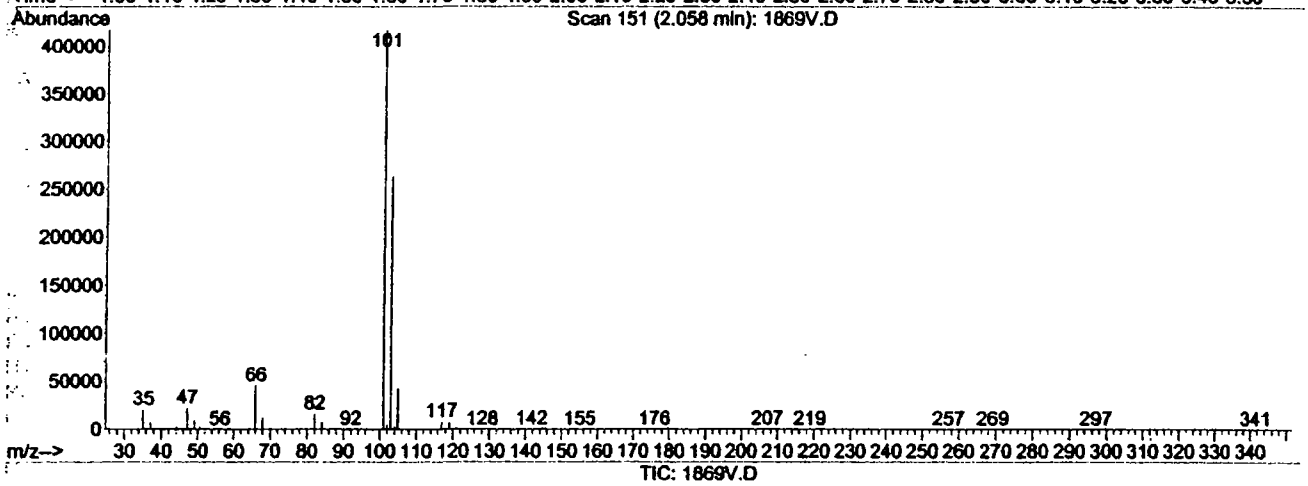


090

Data File : C:\HPCHEM\DATA\V082707\1869V.D Vial: 6
Acq On : 27 Aug 2007 10:36 Operator: REGI
Sample : DW STD080 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:53 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:37:44 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.06min 33.89UG/L

response 828364

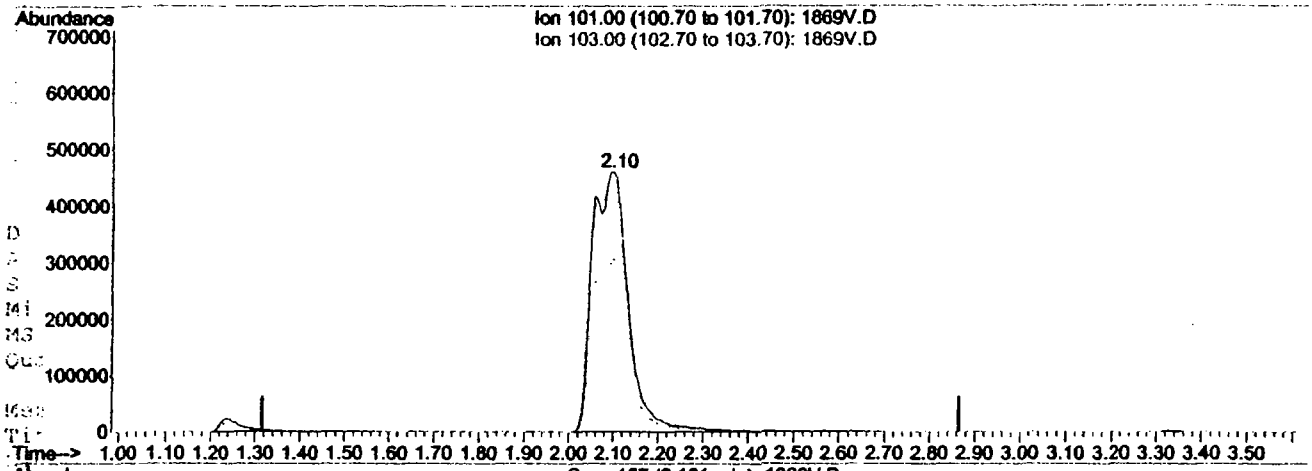
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	64.46
0.00	0.00	0.00
0.00	0.00	0.00

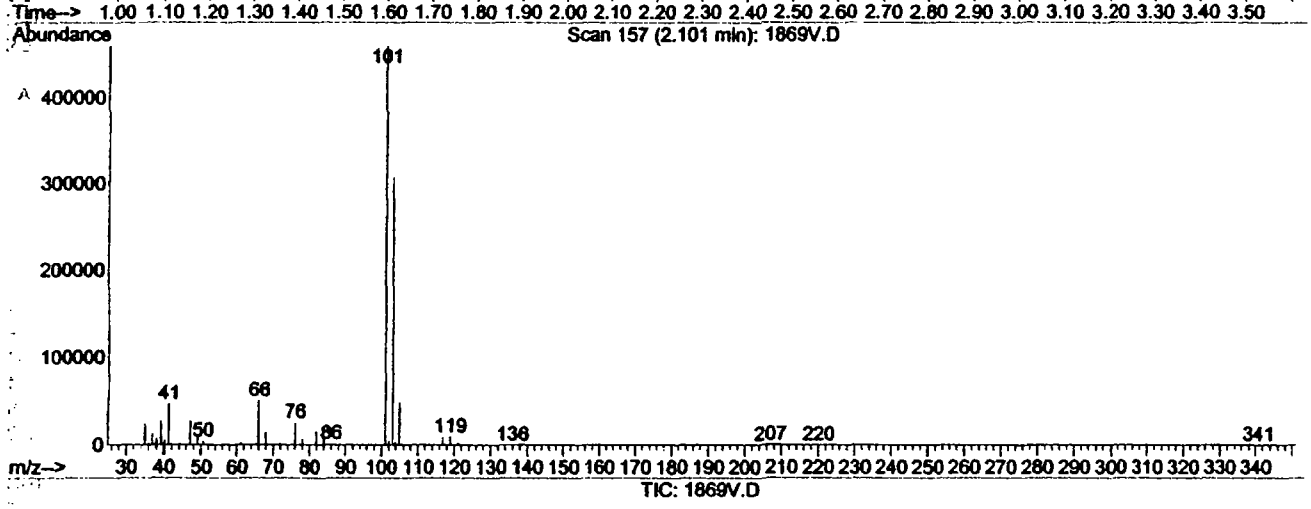
1869V.D DWV.M Mon Aug 27 10:56:04 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082707\1869V.D Vial: 6
Acq On : 27 Aug 2007 10:36 Operator: REGI
Sample : DW STD080 Inst : Instrumen
Misc : 8/27/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 27 10:56 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 10:37:44 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.10min 105.26UG/L m

response 2573055

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	20.75#
0.00	0.00	0.00
0.00	0.00	0.00

1869V.D DWV.M Mon Aug 27 10:56:09 2007

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

EPA Method 524.2 BROMOFLUOROBENZENE (BFB)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 1889V.D BFB Injection Date: 08/28/07

Instrument ID: GCMS#17 BFB Injection Time: 06:19

GC Column: CAP ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.9
75	30.0 - 80.0% of mass 95	49.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	82.4
175	5.0 - 9.0% of mass 174	5.9 (7.1)1
176	95.0 - 101.0% of mass 174	78.4 (95.1)1
177	5.0 - 9.0% of mass 176	5.1 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD02	DW STD02	1892V.D	08/28/07	07:41
02	DW BLANK01	DW BLANK	1893V.D	08/28/07	08:22
03	A779901	A779901 1:5 REP1	1894V.D	08/28/07	08:57
04	A779902	A779902 1:5 REP1	1895V.D	08/28/07	09:23
05	A780299	A780299 LQ4537	1896V.D	08/28/07	09:49
06	A780300	A780300 LQ4538	1897V.D	08/28/07	10:15
07	A780301	A780301 LQ4539	1898V.D	08/28/07	10:40
08	A780302	A780302 LQ4540	1899V.D	08/28/07	11:06
09	A780303	A780303 LQ4541	1900V.D	08/28/07	11:32
10	A780304	A780304 LQ4542	1901V.D	08/28/07	11:58
11	A780305	A780305 LQ4543	1902V.D	08/28/07	12:24
12	A780306	A780306 LQ4544	1903V.D	08/28/07	12:49
13	A780307	A780307 LQ4545	1904V.D	08/28/07	13:15
14	A780306 MS	A780306 MS LQ4544	1905V.D	08/28/07	13:41
15	A780306 MSD	A780306 MSD LQ454	1906V.D	08/28/07	14:07
16	A780300	A780300 LQ4538	1907V.D	08/28/07	14:33
17	A780299	A780299 1:10 LQ453	1908V.D	08/28/07	14:58
18	A780302	A780302 1:10 LQ454	1909V.D	08/28/07	15:24

8/30/07

8A

EPA Method 524.2 VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 1892V.D Date Analyzed: 08/28/07

Instrument ID: GCMS#17 Time Analyzed: 07:41

GC Column: CAP ID: 0.25 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	495453	5.61	163868	7.91		
	UPPER LIMIT	743180	6.11	245802	8.41		
	LOWER LIMIT	346817	5.11	114708	7.41		
	EPA SAMPLE NO.						
01	DW BLANK01	493087	5.61	162647	7.91		
02	A779901	458037	5.61	157062	7.91		
03	A779902	464365	5.61	159587	7.91		
04	A780299	438697	5.61	149099	7.91		
05	A780300	980253	5.61	321277	7.91		
06	A780301	452417	5.61	151404	7.91		
07	A780302	452893	5.61	155096	7.91		
08	A780303	452909	5.61	150659	7.91		
09	A780304	452752	5.61	152069	7.91		
10	A780305	449970	5.61	149337	7.91		
11	A780306	435069	5.61	150383	7.91		
12	A780307	438175	5.61	144685	7.91		
13	A780306 MS	485060	5.61	168780	7.91		
14	A780306 MSD	473120	5.61	156332	7.91		
15	A780300	483748	5.61	161364	7.91		
16	A780299	473167	5.61	149552	7.91		
17	A780302	441379	5.61	145153	7.91		

IS1 = FLUOROBENZENE
IS2 = BROMO-1-CHLOROPROPANE

AREA UPPER LIMIT = +50% of internal standard area
AREA LOWER LIMIT = - 30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8/30/07

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Date Injected: 28-Aug-07 Instrument: GCMS#17

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	TOT OUT
01	DW BLANK01	108	95	89	0
02	A779901	106	96	83	0
03	A779902	111	94	83	0
04	A780299	114	95	82	0
05	A780300	102	97	92	0
06	A780301	111	96	86	0
07	A780302	113	98	83	0
08	A780303	110	92	83	0
09	A780304	111	95	83	0
10	A780305	110	94	84	0
11	A780306	115	94	80	0
12	A780307	111	95	85	0
13	A780306 MS	109	103	98	0
14	A780306 MSD	106	102	103	0
15	A780300	106	95	87	0
16	A780299	109	96	90	0
17	A780302	111	95	85	0

8/30/07

QC LIMITS

SMC1	=	1,2-Dichloroethane-d4	(80-120)
SMC2	=	Toluene-d8	(80-120)
SMC3	=	4-Bromofluorobenzene	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

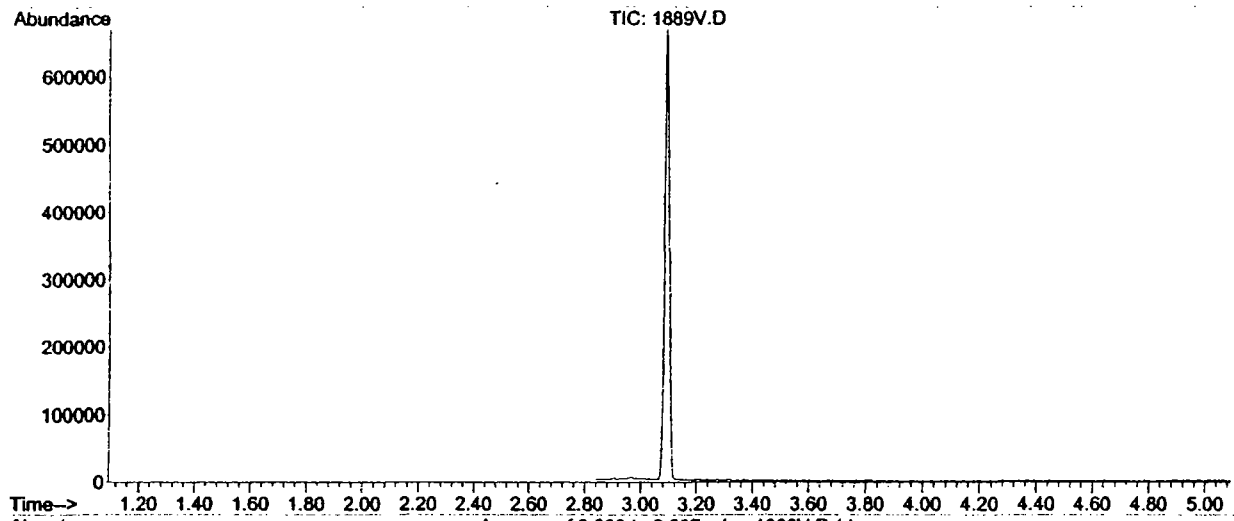
D System Monitoring Compound diluted out

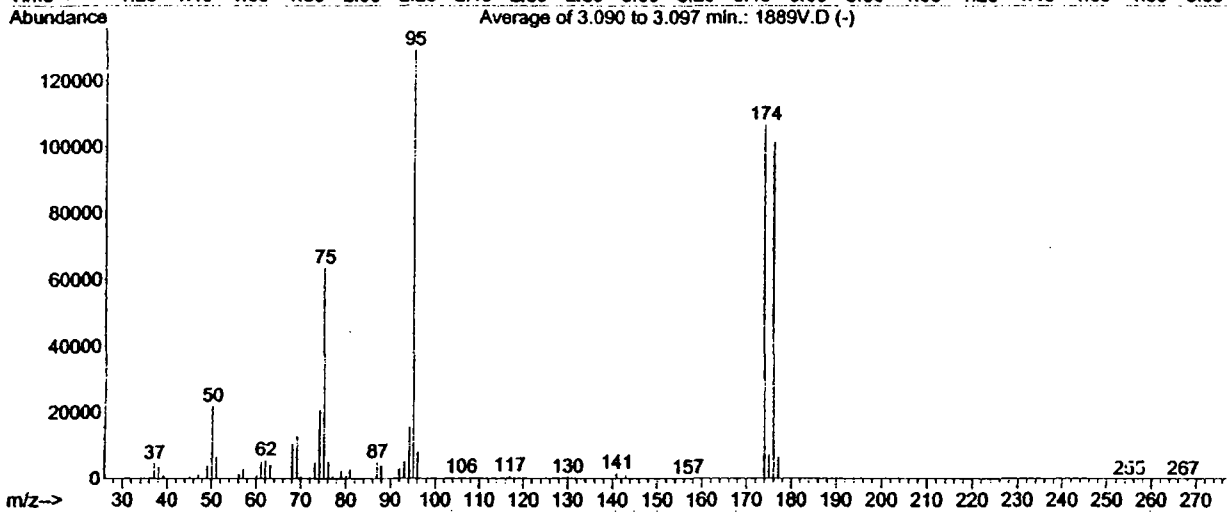
 FORM II VOA-1 3/90

8/30/07

BFB

Data File : C:\HPCHEM\DATA\V082807\1889V.D Vial: 1
Acq On : 28 Aug 2007 6:19 Operator: REGI
Sample : BFB TUNE CHECK Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES





Spectrum Information: Average of 3.090 to 3.097 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	21970	PASS
75	95	30	60	49.0	63573	PASS
95	95	100	100	100.0	129688	PASS
96	95	5	9	6.4	8335	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.4	106818	PASS
175	174	5	9	7.1	7623	PASS
176	174	95	101	95.1	101616	PASS
177	176	5	9	6.6	6667	PASS

1889V.D DWV.M Tue Aug 28 06:26:13 2007

8/30/07

Average of 3.090 to 3.097 min.: 1889V.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	790	50.10	21970	62.10	5762	73.10	4948
37.10	4762	51.10	6934	63.10	4350	74.10	20864
38.10	3737	52.00	379	64.10	389	75.10	63573
39.10	1484	52.90	56	64.30	54	76.10	5472
40.00	113	54.90	70	65.10	348	77.10	1030
44.10	266	55.10	189	66.00	55	78.05	673
45.15	1013	56.10	1852	67.00	257	79.00	2944
47.05	1571	57.10	3123	68.10	11297	80.05	1089
47.90	395	58.00	60	69.10	13077	80.95	3056
48.10	435	60.10	1363	70.05	952	82.05	628
49.05	4277	61.10	5335	72.05	607	83.40	50

Average of 3.090 to 3.097 min.: 1889V.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.90	224	97.20	205	115.95	514	131.00	168
87.00	5131	102.90	55	116.95	996	134.00	95
88.00	4367	103.90	126	117.95	683	134.85	200
89.00	69	104.05	347	118.95	532	135.10	63
90.80	174	104.95	155	124.00	54	136.20	51
91.10	198	106.00	531	126.05	116	136.90	101
92.05	3199	107.05	148	126.60	60	137.15	198
93.05	5395	111.00	50	128.00	451	140.10	80
94.10	15989	111.90	72	128.95	199	140.95	1882
95.10	129688	114.80	57	130.00	659	142.00	56
96.10	8335	115.00	94	130.80	89	142.95	1701

Average of 3.090 to 3.097 min.: 1889V.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.10	60	158.95	207				
144.85	184	160.85	237				
145.85	206	171.95	415				
147.00	64	172.20	167				
147.85	307	174.00	106818				
150.10	75	175.00	7623				
152.80	106	176.00	101616				
154.00	77	177.00	6667				
155.05	307	178.00	258				
155.80	54	255.00	59				
156.95	322	267.10	62				

R524142 Heritage Environmental Services, LLC Q1991469

QC Report

QCType CCVD | Duplicate SampleID | DataFile 1892V.D
Date Entered 30Aug07 | Duplicate QCSampleID | Analyst 1062 R. SHAMP
Analysis Date/Time 28Aug0707:41:00 | Method | Matrix 1 | Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE	0.1599		0.1276			20.2
236	CHLOROMETHANE	0.2255		0.2166			3.9
768	VINYL CHLORIDE	0.2658		0.2346			11.7
198	BROMOMETHANE	0.1764		0.1702			3.5
234	CHLOROETHANE	0.1681		0.1688			.4
372	TRICHLOROFLUOROMETHANE	0.4523		0.4047			10.5
8	1,1-DICHLOROETHENE	0.2390		0.2103			12
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	2		2.14	QDR		7
746	TRANS-1,2-DICHLOROETHENE	0.2644		0.2501			5.4
7	1,1-DICHLOROETHANE	0.4717		0.4760			.9
246	CIS-1,2-DICHLOROETHENE	0.2744		0.2483			9.5
235	CHLOROFORM	0.5325		0.5531			3.9
194	BROMOCHLOROMETHANE	0.1540		0.1605			4.2
2	1,1,1-TRICHLOROETHANE	0.4592		0.4451			3.1
10	1,1-DICHLOROPROPENE	0.1214		0.1081			11
217	CARBON TETRACHLORIDE	0.4395		0.4042			8
21	1,2-DICHLOROETHANE	0.4142		0.4131			.3
151	BENZENE	0.9777		0.9232			5.6
750	TRICHLOROETHENE	0.2783		0.2653			4.7
23	1,2-DICHLOROPROPANE	0.2224		0.2146			3.5
299	DICHLOROBROMOMETHANE	0.3682		0.3565			3.2
296	DIBROMOMETHANE	0.1704		0.1790			5
247	CIS-1,3-DICHLOROPROPENE	0.3304		0.2989			9.5
724	TOLUENE	0.9958		0.8777			11.9
747	TRANS-1,3-DICHLOROPROPENE	0.3216		0.2704			15.9
4	1,1,2-TRICHLOROETHANE	0.2203		0.2088			5.2
27	1,3-DICHLOROPROPANE	1.0401		0.9631			7.4
703	TETRACHLOROETHENE	0.8492		0.8036			5.4
295	DIBROMOCHLOROMETHANE	0.8649		0.8116			6.2
18	1,2-DIBROMOETHANE (EDB)	0.2343		0.2222			5.2
231	CHLOROBENZENE	1.9921		1.8060			9.3
349	ETHYL BENZENE	0.9847		0.7659			22.2
1	1,1,1,2-TETRACHLOROETHANE	0.8148		0.8178			.4
492	M/P-XYLENE	1.2604		1.0676			15.3
549	O-XYLENE	1.2797		1.0167			20.6
680	STYRENE	2.0523		1.5032			26.8
432	ISOPROPYLBENZENE (CUMENE)	3.5792		2.8013			21.7
197	BROMOFORM	0.5896		0.5667			3.9
3	1,1,2,2-TETRACHLOROETHANE	1.0225		0.9928			2.9
532	N-PROPYLBENZENE	0.4433		0.3687			16.8
193	BROMOBENZENE	1.3053		1.2245			6.2
25	1,3,5-TRIMETHYLBENZENE	3.1005		2.3927			22.8
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.9137		0.8319			9
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.9041		0.7856			13.1

8/30/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE	2.9354		2.6403			10.1
17	1,2,4-TRIMETHYLBENZENE	3.1619		2.4547			22.4
644	SEC-BUTYLBENZENE	2.0		1.22	LIN		39
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.0		1.21	LIN		39.5
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	2.0710		1.8638			10
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	2.1051		1.9020			9.6
519	N-BUTYLBENZENE	2.0		1.18	LIN		41
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	2.0348		1.8966			6.8
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.3024		0.2935			2.9
16	1,2,4-TRICHLOROBENZENE	1.2610		1.0461			17
398	HEXACHLOROBUTADIENE	0.6439		0.5699			11.5
493	NAPHTHALENE	2.0		1.11	LIN		44.5
13	1,2,3-TRICHLOROBENZENE	1.1778		0.9981			15.3
14	1,2,3-TRICHLOROPROPANE	0.3717		0.3772			1.5
99	ACETONE (2-PROPANONE)	0.0959		0.0969			1
52	2-BUTANONE	0.1299		0.1320			1.6
91	4-METHYL-2-PENTANONE	0.2375		0.2030			14.5
709	TETRAHYDROFURAN	0.0866		0.0765			11.7
60	2-HEXANONE	0.4584		0.4194			8.5
859	METHYL-T-BUTYL ETHER (MTBE)	0.7542		0.6554			13.1
301	DICHLOROETHANE-D4	0.3517		0.3821			8.6
726	TOLUENE-D8	0.9162		0.9039			1.3
196	4-BROMOFLUOROBENZENE	1.0345		1.0008			3.3

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is concentration ( ).

Qualifiers

QDR Quadratic Equation Used
LIN Linear Regression Used

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1892V.D Vial: 1
Acq On : 28 Aug 2007 7:41 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 07:57:04 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	495453	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	163868	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	153911	10.41 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.10%	
23) 1,2-Dichloroethane-d4	5.25	65	189292	10.86 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.60%	
33) Toluene-d8	7.45	98	447827	9.87 UG/L	0.00
Spiked Amount 10.000			Recovery	= 98.70%	
51) 4-Bromofluorobenzene	10.70	95	164000	9.67 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.70%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.24	85	12644	1.60 UG/L	100
3) Chloromethane	1.37	50	21461	1.92 UG/L	100
4) VINYL CHLORIDE	1.46	62	23245	1.77 UG/L	91
5) Bromomethane	1.76	94	16865	1.93 UG/L #	1
6) Chloroethane	1.86	64	16724	2.01 UG/L	97
7) Trichlorofluoromethane	2.09	101	40103m	1.79 UG/L	
8) Acetone	2.66	43	19202	4.04 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	20838	1.76 UG/L	100
10) Methylene Chloride	3.07	84	39655	2.14 UG/L #	64
11) MTBE	3.34	73	129879	3.48 UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	24787	1.89 UG/L #	77
13) 1,1-Dichloroethane	3.77	63	47167	2.02 UG/L	100
14) 2-Butanone	4.42	43	26156	4.06 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	24607	1.81 UG/L #	72
16) CHLOROFORM	4.72	83	54806	2.08 UG/L	96
17) Tetrahydrofuran	4.67	42	15160	3.53 UG/L #	100
18) Bromochloromethane	4.63	128	15901	2.08 UG/L #	20
19) 2,2-Dichloropropane	4.36	77	29889	1.92 UG/L	98
20) 1,1,1-Trichloroethane	4.89	97	44103	1.94 UG/L	86
22) 1,1-Dichloropropene	5.06	110	10708	1.78 UG/L	100
24) Carbon Tetrachloride	5.06	117	40056	1.84 UG/L	96
25) 1,2-Dichloroethane	5.33	62	40933	1.99 UG/L	98
26) Benzene	5.29	78	91485	1.89 UG/L	100
27) Trichloroethene	6.02	130	26291	1.91 UG/L	97
28) 1,2-DICHLOROPROPANE	6.28	63	21262	1.93 UG/L	100
29) Bromodichloromethane	6.61	83	35326	1.94 UG/L	94
30) Dibromomethane	6.42	93	17740	2.10 UG/L	94
31) 4-Methyl-2-Pentanone	7.35	43	40225	3.42 UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	29618	1.81 UG/L	100
34) TOLUENE	7.53	91	86976	1.76 UG/L	100
35) trans-1,3-Dichloropropene	7.83	75	26791	1.68 UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	20695	1.90 UG/L	100
37) 1,2-Dibromoethane	8.66	107	22017	1.90 UG/L	95
39) 2-Hexanone	8.40	43	27490	3.66 UG/L	90
40) 1,3-Dichloropropane	8.26	76	31565	1.85 UG/L	100
41) Tetrachloroethene	8.19	166	26338	1.89 UG/L	93
42) Dibromochloromethane	8.54	129	26598	1.88 UG/L	100

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

Data File : C:\HPCHEM\DATA\V082807\1892V.D Vial: 1
Acq On : 28 Aug 2007 7:41 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 07:57:04 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

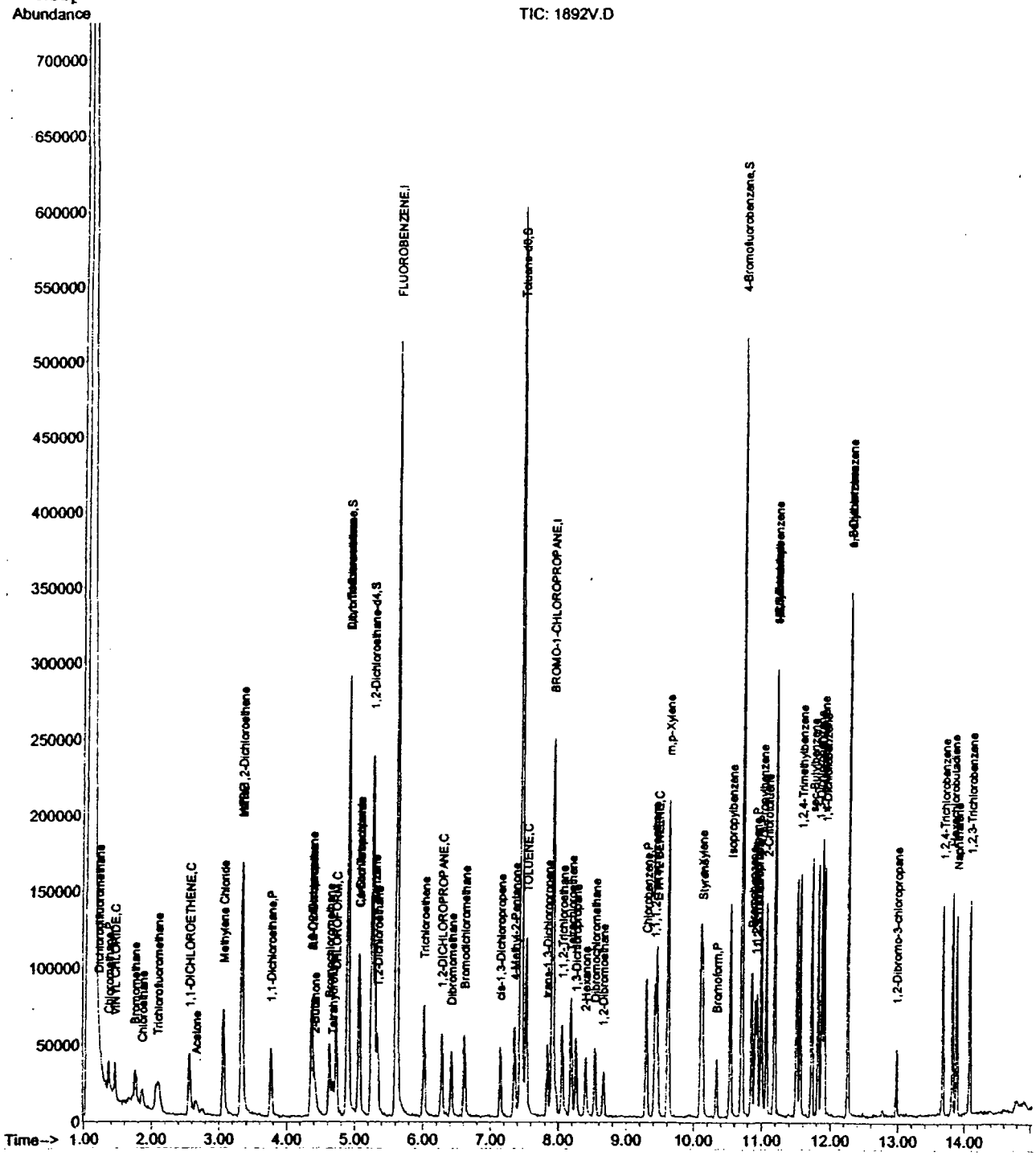
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	Chlorobenzene	9.30	112	59189	1.81 UG/L		100
44)	1,1,1,2-Tetrachloroethane	9.42	131	26802	2.01 UG/L		100
45)	ETHYL BENZENE	9.46	106	25101	1.56 UG/L		94
46)	m,p-Xylene	9.62	106	69979	3.39 UG/L		99
47)	o-Xylene	10.10	106	33320	1.59 UG/L		95
48)	Styrene	10.13	104	49265	1.46 UG/L	#	84
49)	Bromoform	10.34	173	18573	1.92 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.90	83	32537	1.94 UG/L		97
52)	Isopropylbenzene	10.54	105	91809	1.57 UG/L		100
53)	Bromobenzene	10.85	77	40130	1.88 UG/L		100
54)	1,2,3-Trichloropropane	10.93	110	12362	2.03 UG/L		100
55)	n-Propylbenzene	10.99	92	12085	1.66 UG/L		72
56)	1,3,5-Trimethylbenzene	11.18	105	78416	1.54 UG/L		100
57)	2-Chlorotoluene	11.07	126	27265	1.82 UG/L		100
58)	4-Chlorotoluene	11.18	126	25746	1.74 UG/L		100
59)	t-Butylbenzene	11.18	91	86531	1.80 UG/L	#	1
60)	1,2,4-Trimethylbenzene	11.56	105	80449	1.55 UG/L		100
61)	sec-Butylbenzene	11.72	105	96229	1.22 UG/L		100
62)	p-Isopropyltoluene	11.87	119	88976	1.21 UG/L		100
63)	1,3-Dichlorobenzene	11.82	146	61083	1.80 UG/L		100
64)	1,4-Dichlorobenzene	11.91	146	62335	1.81 UG/L		100
65)	n-Butylbenzene	12.26	92	39832	1.18 UG/L		95
66)	1,2-Dichlorobenzene	12.26	146	62160	1.86 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.98	157	9619	1.94 UG/L		100
68)	1,2,4-Trichlorobenzene	13.67	180	34286	1.66 UG/L		100
69)	Naphthalene	13.88	128	80876	1.11 UG/L		100
70)	Hexachlorobutadiene	13.81	225	18677	1.77 UG/L		100
71)	1,2,3-Trichlorobenzene	14.08	180	32712	1.69 UG/L		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1892V.D Vial: 1
Acq On : 28 Aug 2007 7:41 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 7:57 2007 Quant Results File: DWV.RES

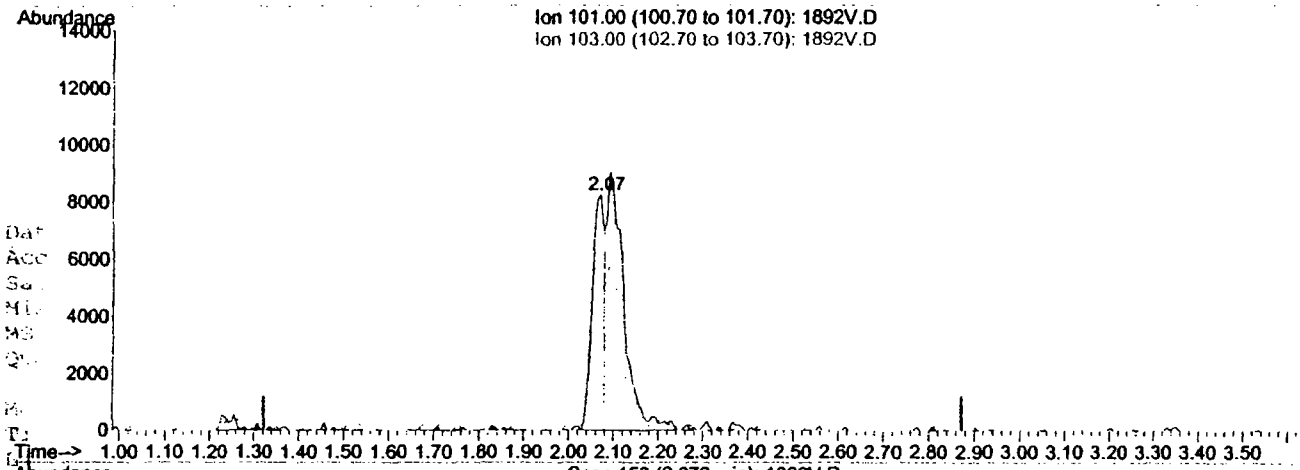
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

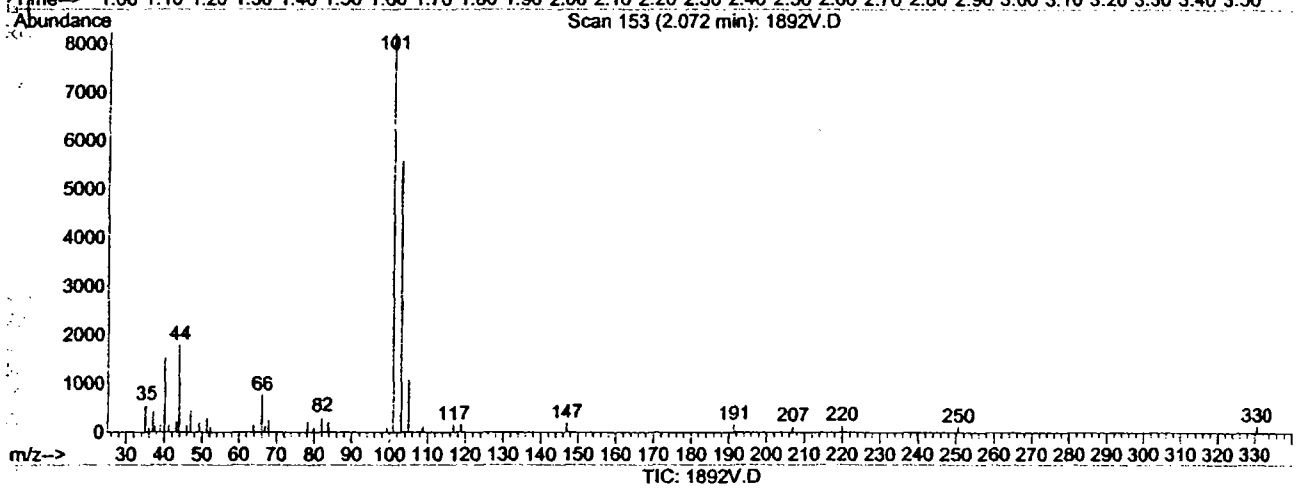


Quantification Report (Qedit)

Data File : C:\HPCHEM\DATA\V082807\1892V.D Vial: 1
Acq On : 28 Aug 2007 7:41 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 7:57 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.07min 0.70UG/L

response 15733

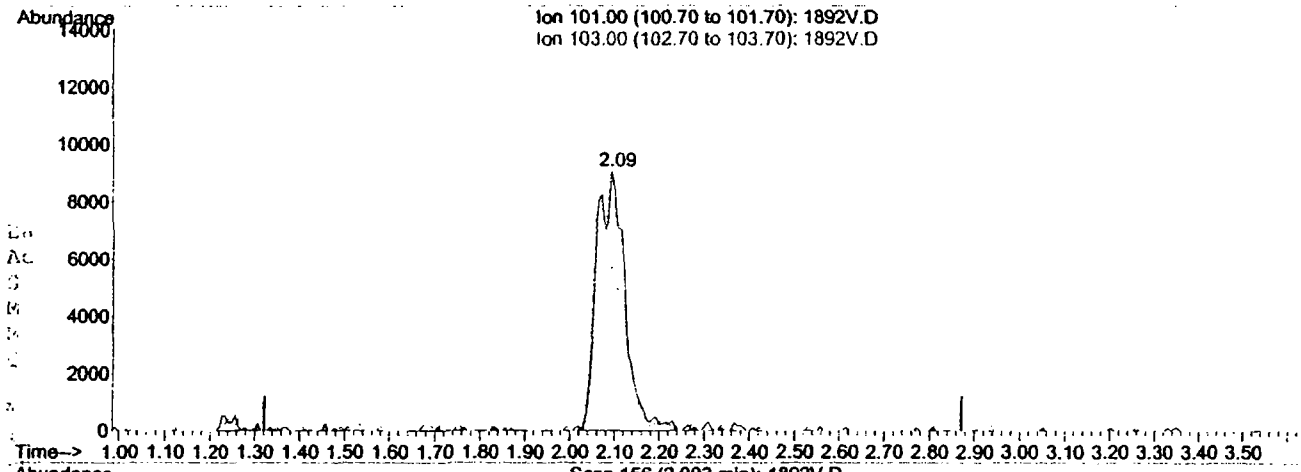
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	66.71
0.00	0.00	0.00
0.00	0.00	0.00

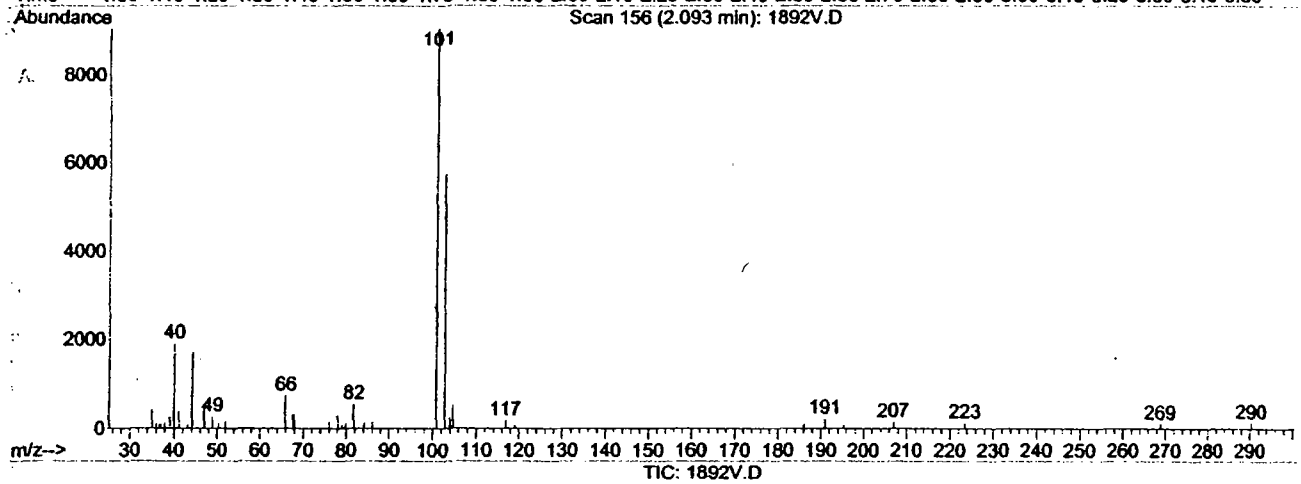
1892V.D DWV.M Tue Aug 28 07:57:37 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082807\1892V.D Vial: 1
Acq On : 28 Aug 2007 7:41 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 7:57 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.09min 1.79UG/L m

response 40103

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	26.17#
0.00	0.00	0.00
0.00	0.00	0.00

1892V.D DWV.M Tue Aug 28 07:57:43 2007

R524142 Heritage Environmental Services, LLC Q1991470

QC Report

QCType BLA01 Duplicate SampleID DataFile 1893V.D
Date Entered 30Aug07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 28Aug0708:22:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE			0.50	BDL		
236	CHLOROMETHANE			0.50	BDL		
768	VINYL CHLORIDE			0.20	BDL		
198	BROMOMETHANE			0.50	BDL		
234	CHLOROETHANE			0.50	BDL		
372	TRICHLOROFLUOROMETHANE			0.50	BDL		
8	1,1-DICHLOROETHENE			0.50	BDL		
302	DICHLOROMETHANE (METHYLENE CHLORIDE)			0.50	BDL		
746	TRANS-1,2-DICHLOROETHENE			0.50	BDL		
7	1,1-DICHLOROETHANE			0.50	BDL		
246	CIS-1,2-DICHLOROETHENE			0.50	BDL		
235	CHLOROFORM			0.50	BDL		
194	BROMOCHLOROMETHANE			0.50	BDL		
2	1,1,1-TRICHLOROETHANE			0.50	BDL		
10	1,1-DICHLOROPROPENE			0.50	BDL		
217	CARBON TETRACHLORIDE			0.50	BDL		
21	1,2-DICHLOROETHANE			0.50	BDL		
151	BENZENE			0.50	BDL		
750	TRICHLOROETHENE			0.50	BDL		
23	1,2-DICHLOROPROPANE			0.50	BDL		
299	DICHLOROBROMOMETHANE			0.50	BDL		
296	DIBROMOMETHANE			0.50	BDL		
247	CIS-1,3-DICHLOROPROPENE			0.50	BDL		
724	TOLUENE			0.50	BDL		
747	TRANS-1,3-DICHLOROPROPENE			0.50	BDL		
4	1,1,2-TRICHLOROETHANE			0.50	BDL		
27	1,3-DICHLOROPROPANE			0.50	BDL		
703	TETRACHLOROETHENE			0.50	BDL		
295	DIBROMOCHLOROMETHANE			0.50	BDL		
18	1,2-DIBROMOETHANE (EDB)			0.50	BDL		
231	CHLOROBENZENE			0.50	BDL		
349	ETHYL BENZENE			0.50	BDL		
1	1,1,1,2-TETRACHLOROETHANE			0.50	BDL		
492	M/P-XYLENE			0.50	BDL		
549	O-XYLENE			0.50	BDL		
680	STYRENE			0.50	BDL		
432	ISOPROPYLBENZENE (CUMENE)			0.50	BDL		
197	BROMOFORM			0.50	BDL		
3	1,1,2,2-TETRACHLOROETHANE			0.50	BDL		
532	N-PROPYLBENZENE			0.50	BDL		
193	BROMOBENZENE			0.50	BDL		
25	1,3,5-TRIMETHYLBENZENE			0.50	BDL		
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)			0.50	BDL		
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)			0.50	BDL		

8/30/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE			0.50	BDL		
17	1,2,4-TRIMETHYLBENZENE			0.50	BDL		
644	SEC-BUTYLBENZENE			0.50	BDL		
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			0.50	BDL		
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			0.50	BDL		
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			0.50	BDL		
519	N-BUTYLBENZENE			0.50	BDL		
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			0.50	BDL		
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			0.50	BDL		
16	1,2,4-TRICHLOROBENZENE			0.50	BDL		
398	HEXACHLOROBUTADIENE			0.50	BDL		
493	NAPHTHALENE			0.50	BDL		
13	1,2,3-TRICHLOROBENZENE			0.50	BDL		
14	1,2,3-TRICHLOROPROPANE			0.50	BDL		
99	ACETONE (2-PROPANONE)			1.0	BDL		
52	2-BUTANONE			1.0	BDL		
91	4-METHYL-2-PENTANONE			2.0	BDL		
709	TETRAHYDROFURAN			5.0	BDL		
60	2-HEXANONE			1.0	BDL		
859	METHYL-T-BUTYL ETHER (MTBE)			0.50	BDL		
301	DICHLOROETHANE-D4					108	
726	TOLUENE-D8					95	
196	4-BROMOFLUOROBENZENE					89	

Qualifiers

BDL Below Detection Limit

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1893V.D Vial: 1
Acq On : 28 Aug 2007 8:22 Operator: REGI
Sample : DW BLANK Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 08:42:37 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

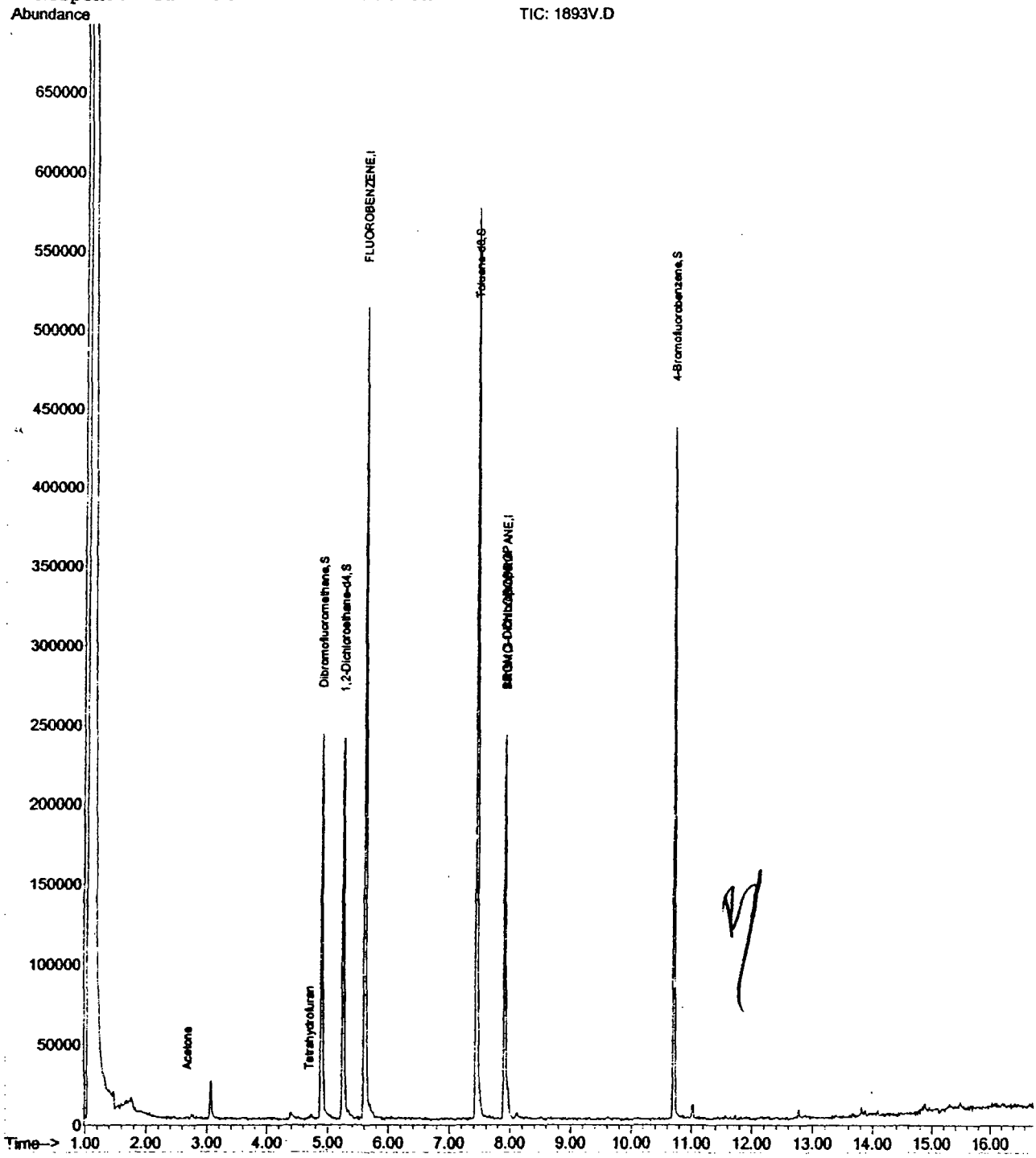
Q199470

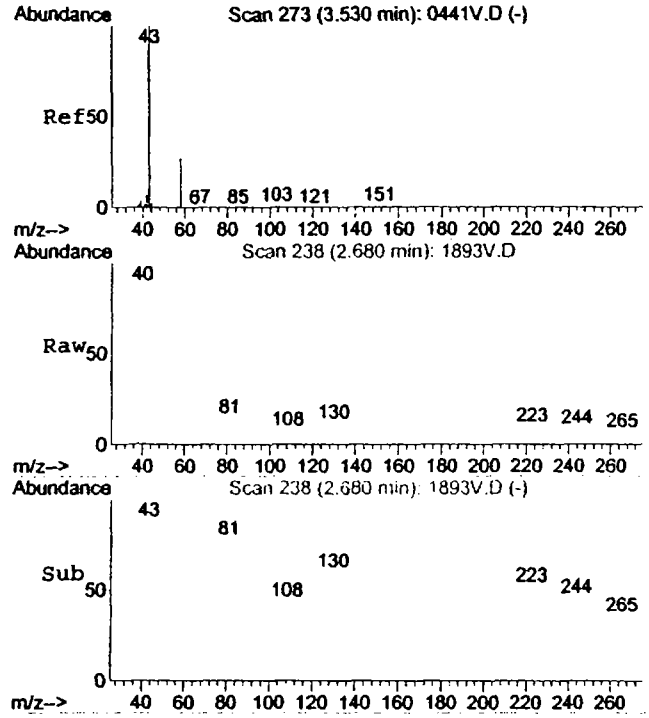
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	493087	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	162647	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	159183	10.82 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.20%	
23) 1,2-Dichloroethane-d4	5.25	65	187948	10.84 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.40%	
33) Toluene-d8	7.45	98	427889	9.47 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.70%	
51) 4-Bromofluorobenzene	10.70	95	148840	8.85 UG/L	0.00
Spiked Amount 10.000			Recovery	= 88.50%	
Target Compounds					Qvalue
8) Acetone	2.68	43	1291	0.27 UG/L #	100
10) Methylene Chloride	3.07	84	11791	Below Cal #	68
17) Tetrahydrofuran	4.68	42	701	0.16 UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	3719	0.23 UG/L	100

(#) = qualifier out of range (m) = manual integration
1893V.D DWV.M Tue Aug 28 08:42:39 2007

Data File : C:\HPCHEM\DATA\V082807\1893V.D Vial: 1
Acq On : 28 Aug 2007 8:22 Operator: REGI
Sample : DW BLANK Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 8:42 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

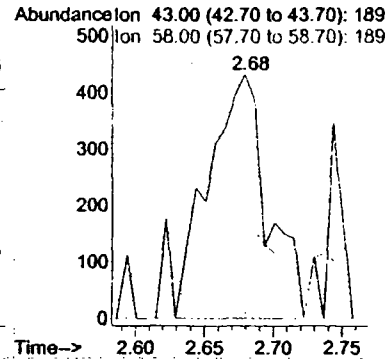


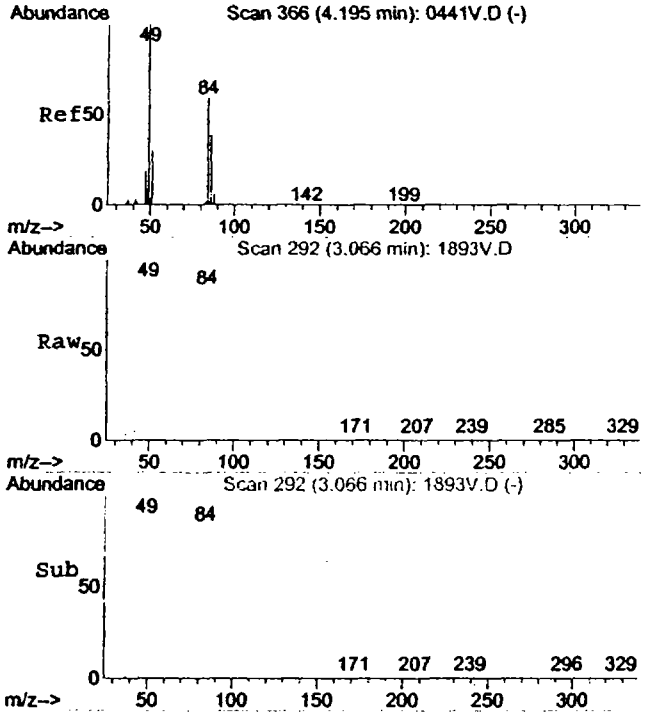


#8
Acetone
Concen: 0.27 UG/L
RT: 2.68 min Scan# 238
Delta R.T. 0.01 min
Lab File: 1893V.D
Acq: 28 Aug 2007 8:22

Tgt Ion: 43 Resp: 1291

Ion	Ratio	Lower	Upper
43	100		
58	25.3	0.0	0.0#

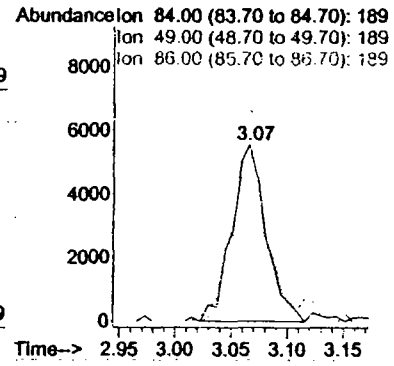


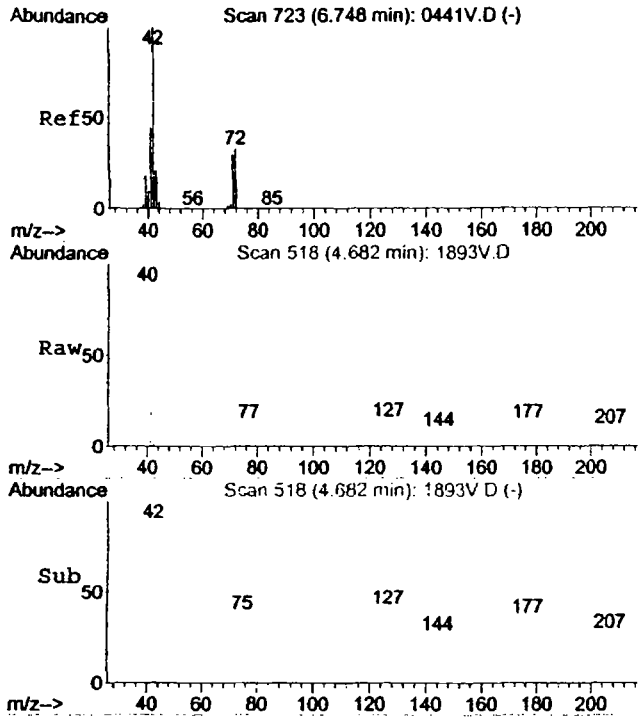


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1893V.D
Acq: 28 Aug 2007 8:22

Tgt Ion: 84 Resp: 11791

Ion	Ratio	Lower	Upper
84	100		
49	130.2	150.7	226.1#
86	68.7	50.5	75.7

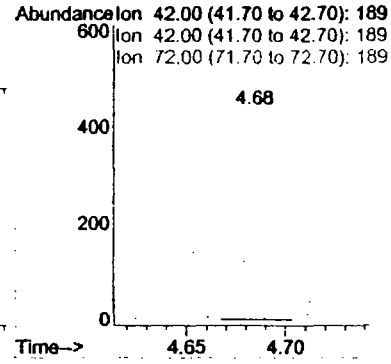


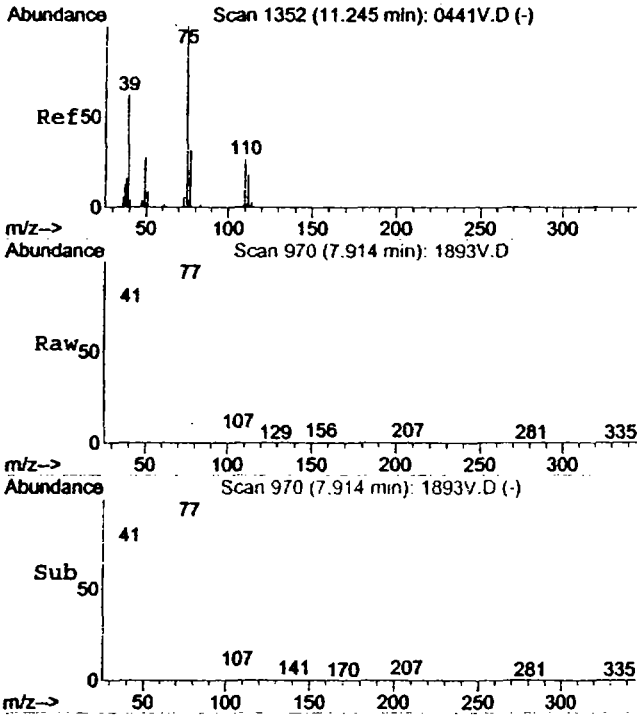


#17
Tetrahydrofuran
Concen: 0.16 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1893V.D
Acq: 28 Aug 2007 8:22

Tgt Ion: 42 Resp: 701

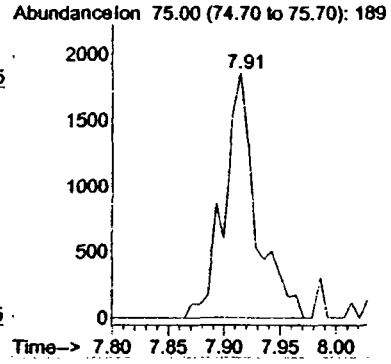
Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	15.1	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.23 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1893V.D
Acq: 28 Aug 2007 8:22

Tgt Ion: 75 Resp: 3719



R524142 Heritage Environmental Services, LLC A780299

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4537
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1896V.D Date/Time 28Aug07 09:49:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE	.51		0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	3.4		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		EX	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	13		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

8/30/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	114			% RECOVERY	
2037-26-5	726	TOLUENE-D8	95			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	82			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

- * See Note for Parameter
- BDL Below Detection Limit
- EX Exceeds calibration range. See Replicate

Comments to Laboratory (do not record)

4-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1896V.D Vial: 3
Acq On : 28 Aug 2007 9:49 Operator: REGI
Sample : A780299 LQ4537 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 10:06:11 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

0816 RW 11:10

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	438697	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	149099	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	144138	11.01 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.10%	
23) 1,2-Dichloroethane-d4	5.25	65	175883	11.40 UG/L	0.00
Spiked Amount 10.000			Recovery	= 114.00%	
33) Toluene-d8	7.45	98	381786	9.50 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.00%	
51) 4-Bromofluorobenzene	10.70	95	126491	8.20 UG/L	0.00
Spiked Amount 10.000			Recovery	= 82.00%	
Target Compounds					Qvalue
3) ~~Chloromethane~~	1.36	50	2054	0.21 UG/L	100
6) ~~Chloroethane~~	1.86	64	811	0.11 UG/L #	69
8) ~~Acetone~~	2.68	43	2340	0.56 UG/L #	100
9) 1,1-DICHLOROETHENE 0.51	2.57	96	5388	0.51 UG/L	100
10) ~~Methylene Chloride~~	3.06	84	7467	Below Cal #	65
13) 1,1-Dichloroethane 13	3.77	63	259825	12.55 UG/L	100
14) ~~2-Butanone~~	4.42	43	897	0.16 UG/L #	100
15) ~~cis-1,2-Dichloro~~ethene	4.37	96	5208	0.43 UG/L #	57
17) ~~Tetrahydrofuran~~	4.68	42	5788	1.52 UG/L #	100
20) 1,1,1-Trichloroethane 3.4	4.88	97	68711	3.41 UG/L	90
27) Trichloroethene EX	6.02	130	1622062	132.84 UG/L	95
31) ~~4-Methyl-2-Pent~~anone	7.45	43	1397	0.13 UG/L #	100
35) ~~trans-1,3-Dichl~~oropropene	7.91	75	3759	0.27 UG/L	100

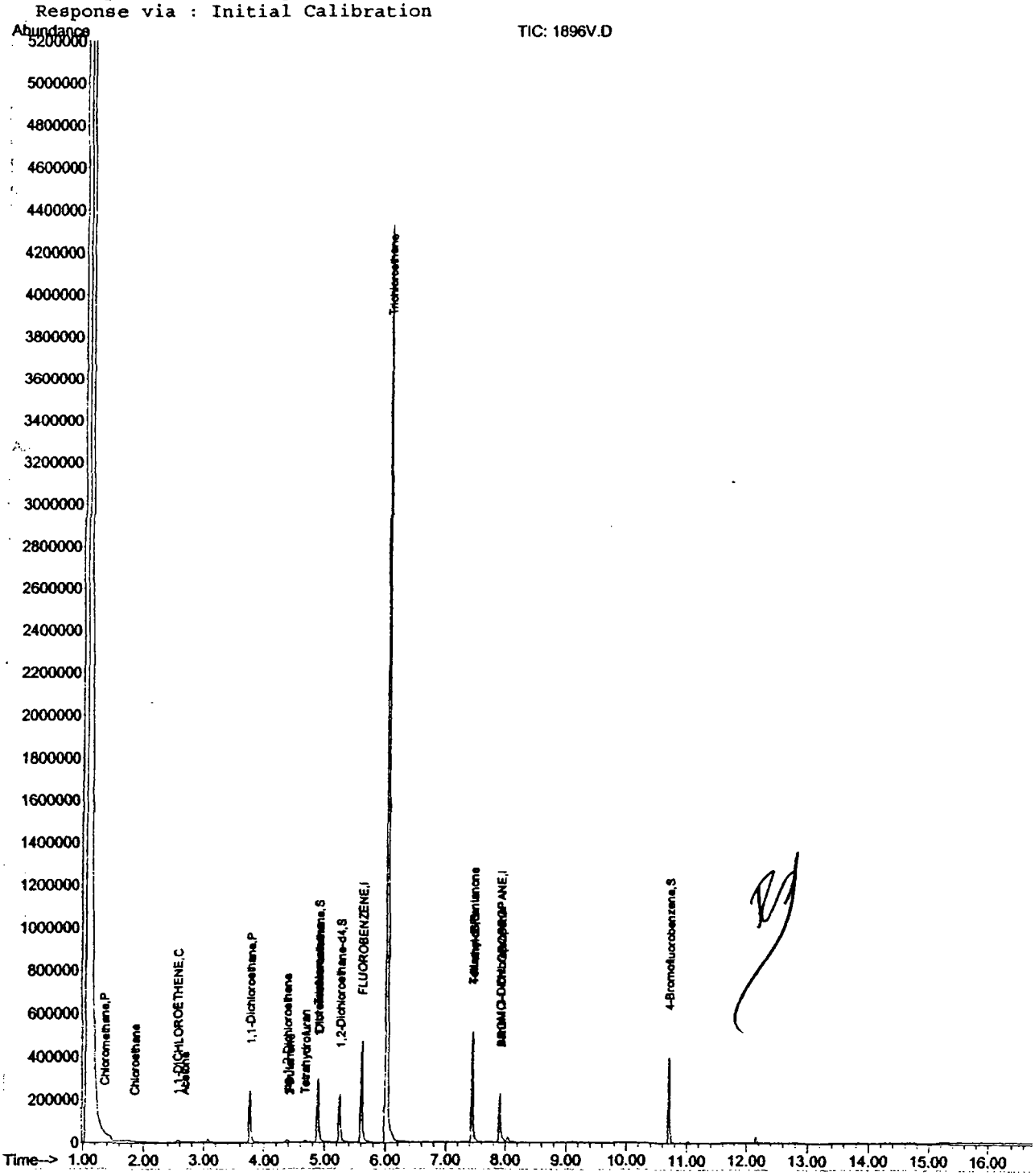
NO TICs

(#) = qualifier out of range (m) = manual integration
1896V.D DWV.M Tue Aug 28 10:06:14 2007

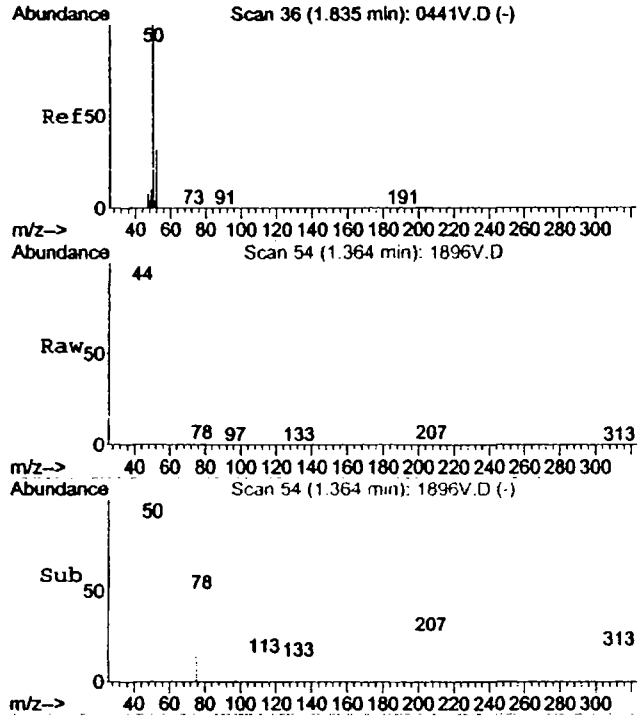
Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1896V.D Vial: 3
Acq On : 28 Aug 2007 9:49 Operator: REGI
Sample : A780299 LQ4537 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 10:06 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

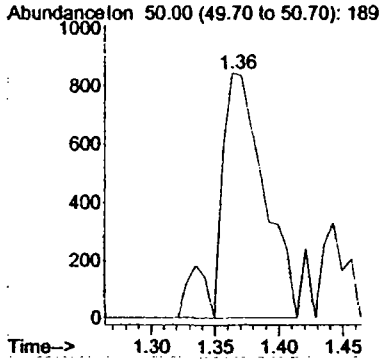


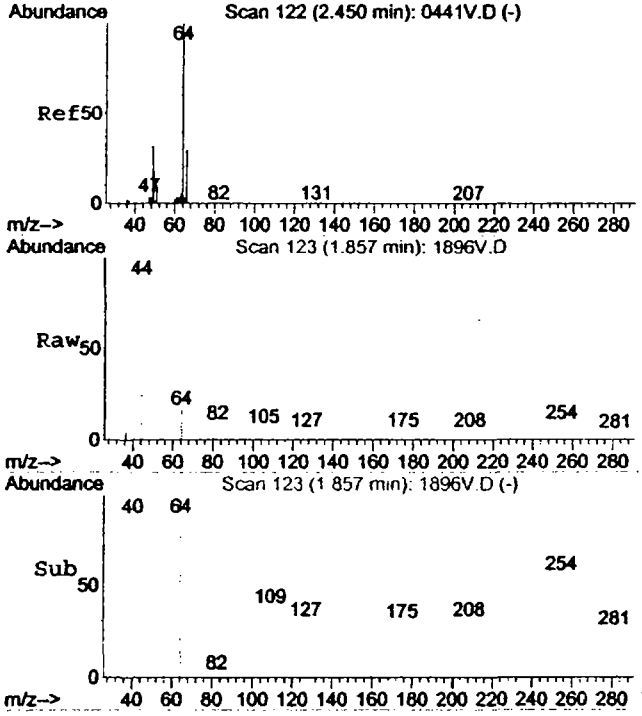
1896V.D DWV.M Tue Aug 28 10:06:15 2007 Page 2



#3
Chloromethane
Concen: 0.21 UG/L
RT: 1.36 min Scan# 54
Delta R.T. -0.01 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 50 Resp: 2054

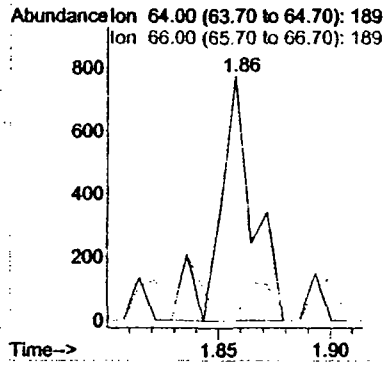


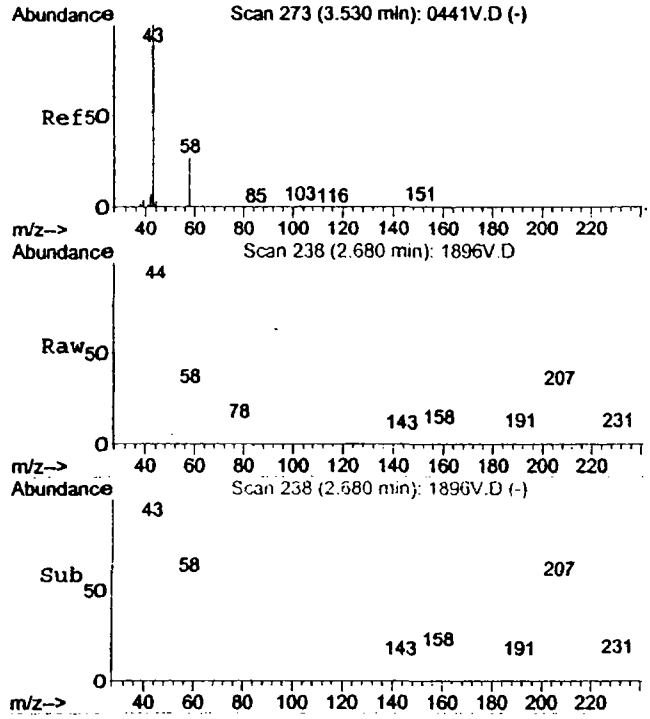


#6
Chloroethane
Concen: 0.11 UG/L
RT: 1.86 min Scan# 123
Delta R.T. 0.00 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 64 Resp: 811

Ion	Ratio	Lower	Upper
64	100		
66	12.2	23.2	34.8#

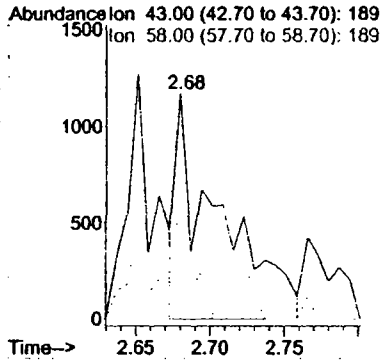


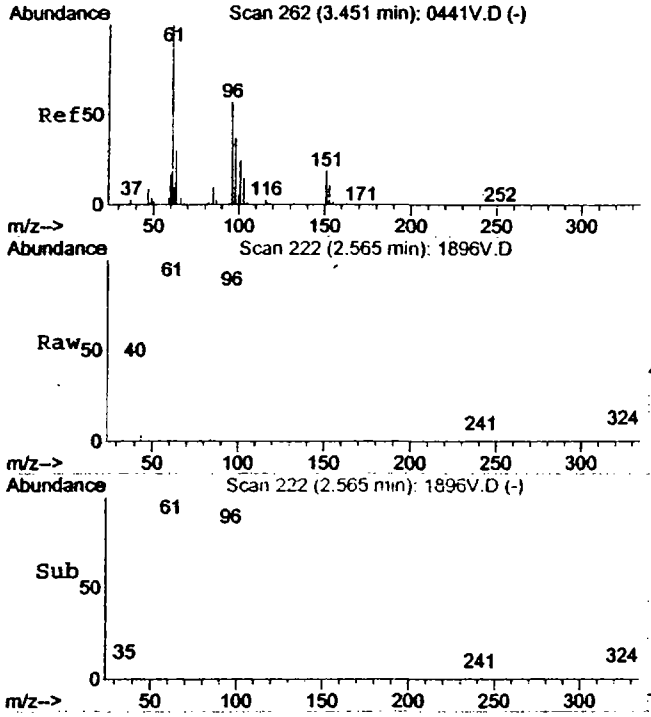


#8
Acetone
Concen: 0.56 UG/L
RT: 2.68 min Scan# 238
Delta R.T. 0.01 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 43 Resp: 2340

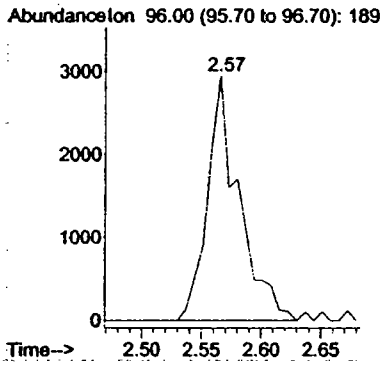
Ion	Ratio	Lower	Upper
43	100		
58	29.2	0.0	0.0#

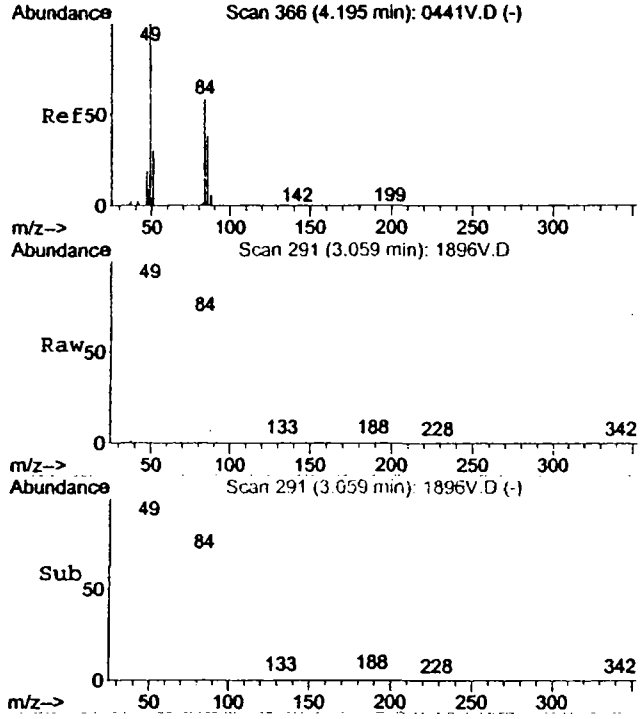




#9
1,1-DICHLOROETHENE
Concen: 0.51 UG/L
RT: 2.57 min Scan# 222
Delta R.T. 0.00 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 96 Resp: 5388

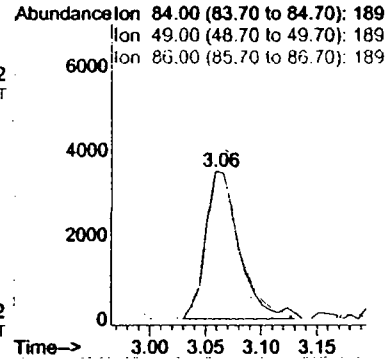


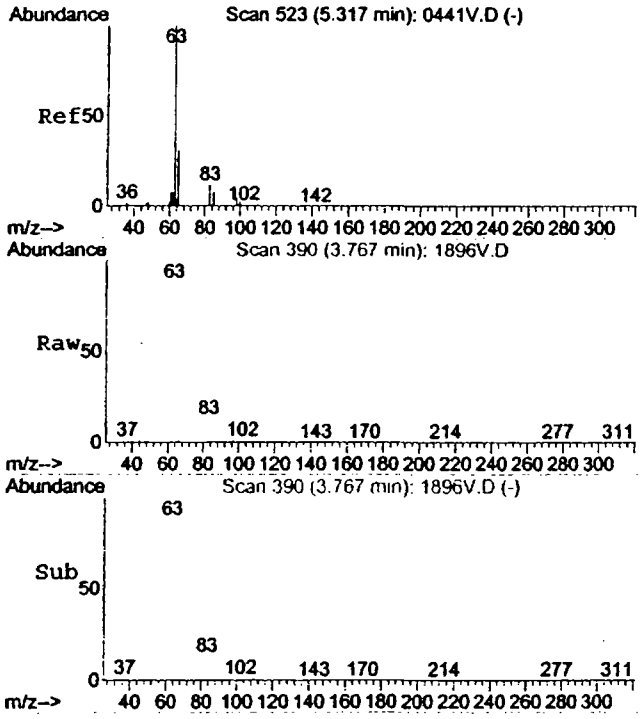


#10
Methylene Chloride
Concen: Below Cal
RT: 3.06 min Scan# 291
Delta R.T. -0.01 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 84 Resp: 7467

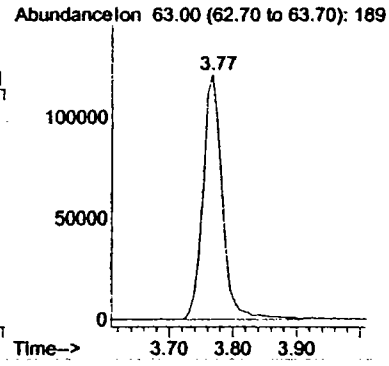
Ion	Ratio	Lower	Upper
84	100		
49	127.0	150.7	226.1#
86	72.6	50.5	75.7

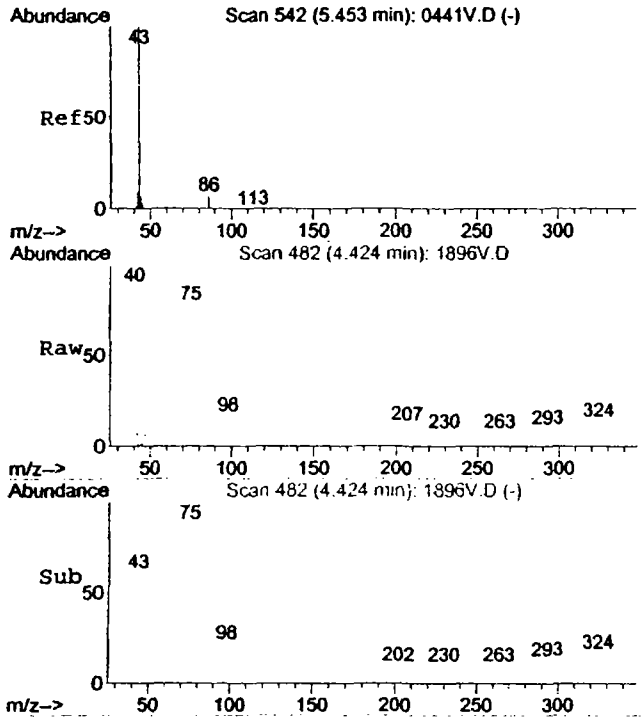




#13
1,1-Dichloroethane
Concen: 12.55 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 63 Resp: 259825

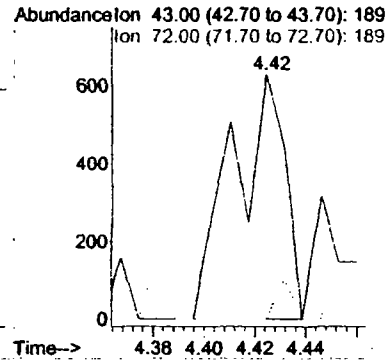


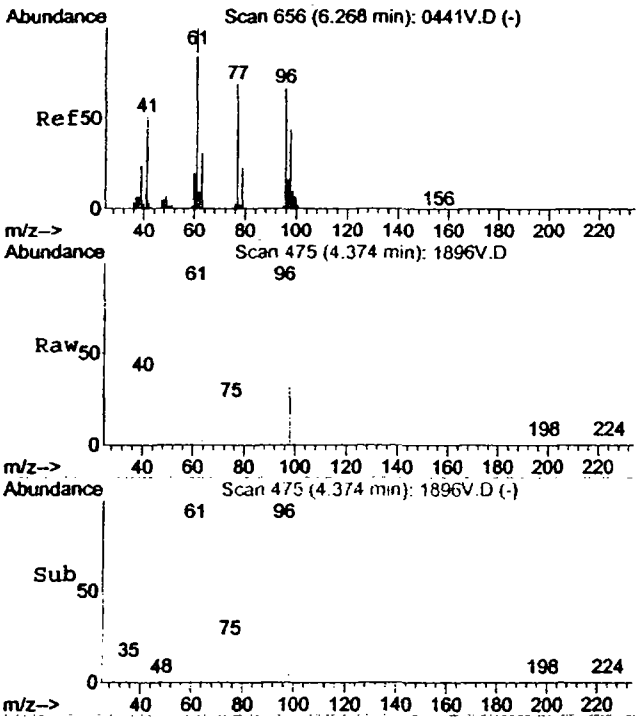


#14
2-Butanone
Concen: 0.16 UG/L
RT: 4.42 min Scan# 482
Delta R.T. 0.01 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 43 Resp: 897

Ion	Ratio	Lower	Upper
43	100		
72	4.9	0.0	0.0#

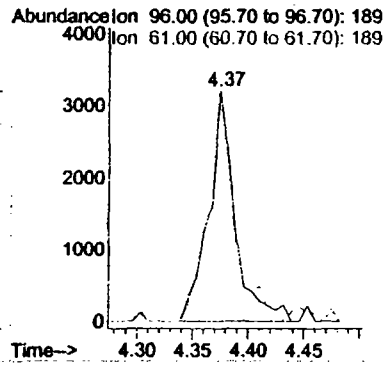


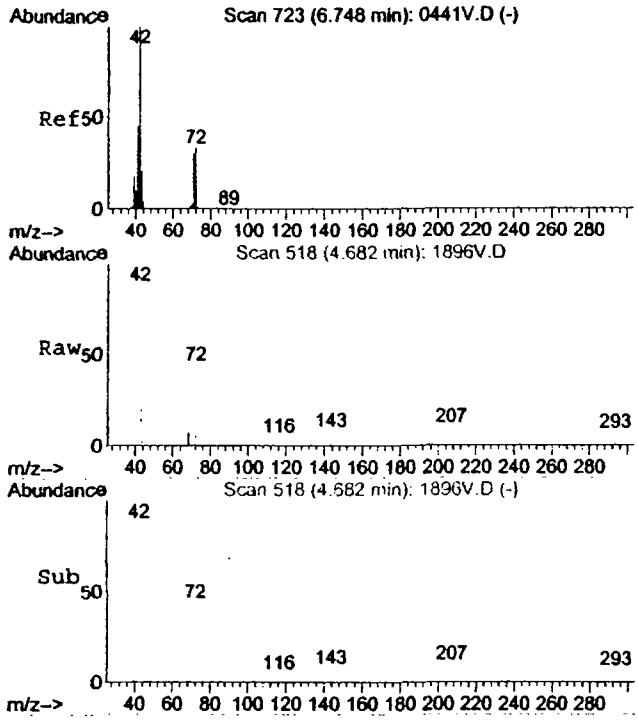


#15
cis-1,2-Dichloroethene
Concen: 0.43 UG/L
RT: 4.37 min Scan# 475
Delta R.T. 0.00 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 96 Resp: 5208

Ion	Ratio	Lower	Upper
96	100		
61	131.5	156.7	235.1#

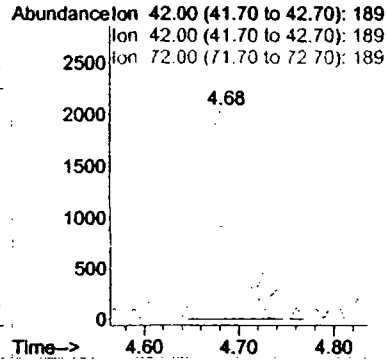


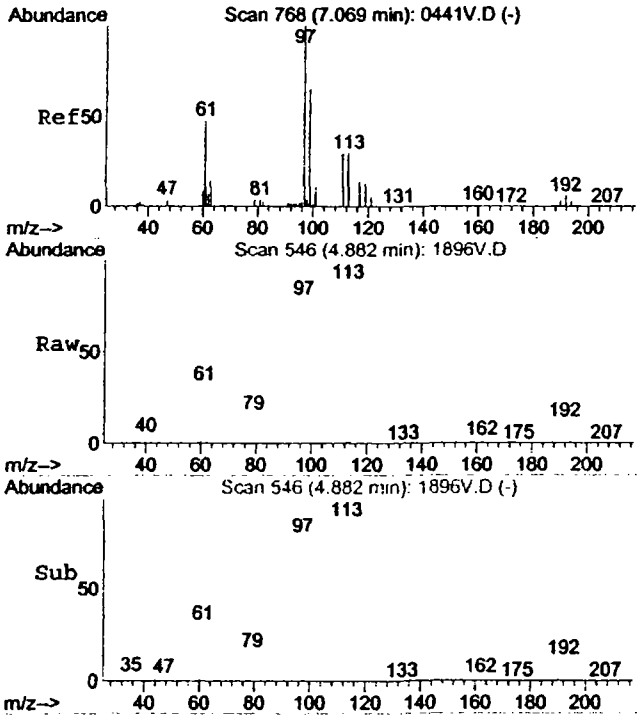


#17
Tetrahydrofuran
Concen: 1.52 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 42 Resp: 5788

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	0.0	0.0	0.0

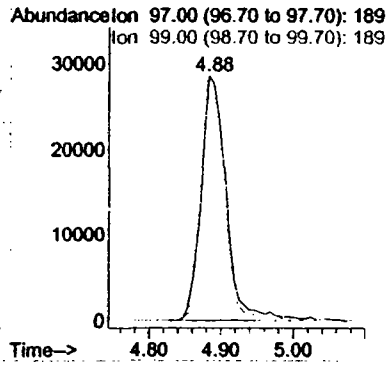


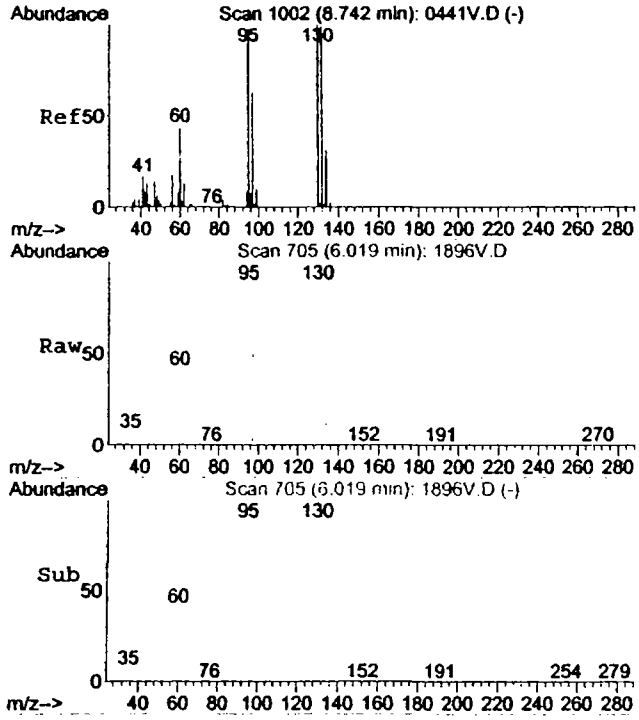


#20
1,1,1-Trichloroethane
Concen: 3.41 UG/L
RT: 4.88 min Scan# 546
Delta R.T. -0.01 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 97 Resp: 68711

Ion	Ratio	Lower	Upper
97	100		
99	66.2	59.9	89.9

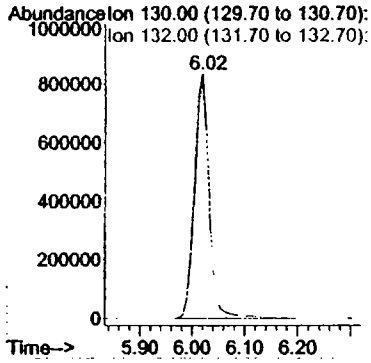


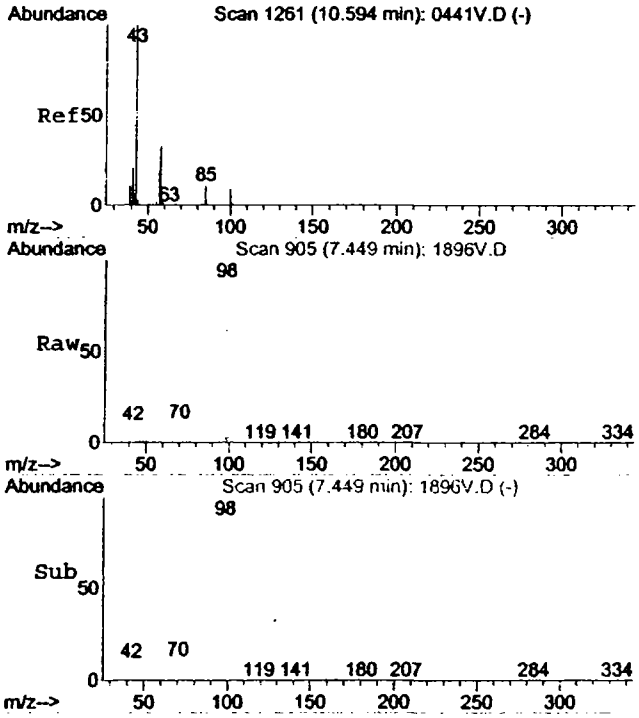


#27
Trichloroethene
Concen: 132.84 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion:130 Resp: 1622062

Ion	Ratio	Lower	Upper
130	100		
132	95.9	80.7	121.1

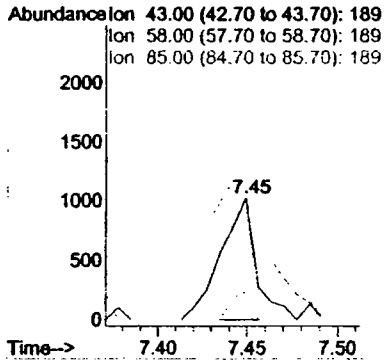


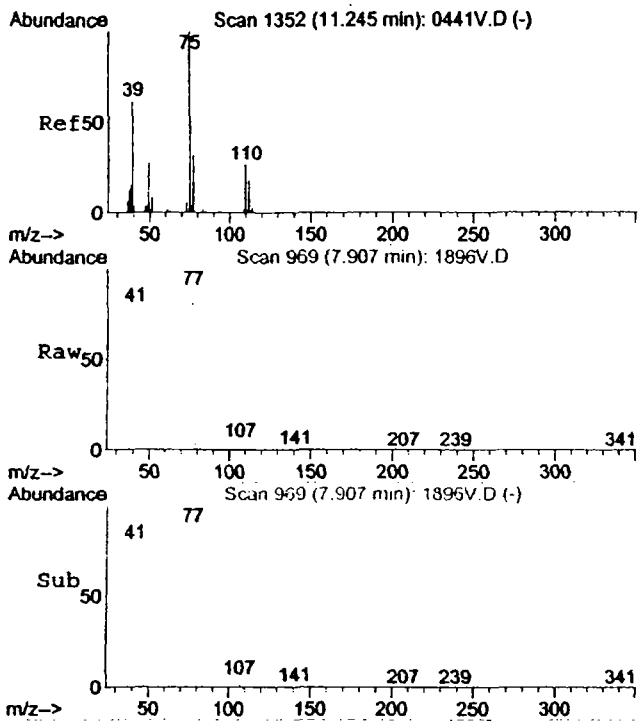


#31
4-Methyl-2-Pentanone
Concen: 0.13 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 43 Resp: 1397

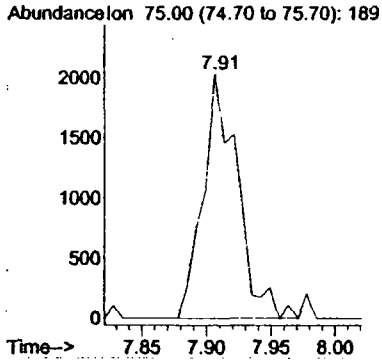
Ion	Ratio	Lower	Upper
43	100		
58	228.6	0.0	0.0#
85	12.7	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.27 UG/L
RT: 7.91 min Scan# 969
Delta R.T. 0.07 min
Lab File: 1896V.D
Acq: 28 Aug 2007 9:49

Tgt Ion: 75 Resp: 3759



R524142 Heritage Environmental Services, LLC A780301

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4539
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1898V.D Date/Time 28Aug07 10:40:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE	.62		0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	21		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	7.9		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	4.2		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

KW 8/30/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	111			% RECOVERY	
2037-26-5	726	TOLUENE-D8	96			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	86			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm compounds.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1898V.D Vial: 5
Acq On : 28 Aug 2007 10:40 Operator: REGI
Sample : A780301 LQ4539 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 10:57:38 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

FC 777

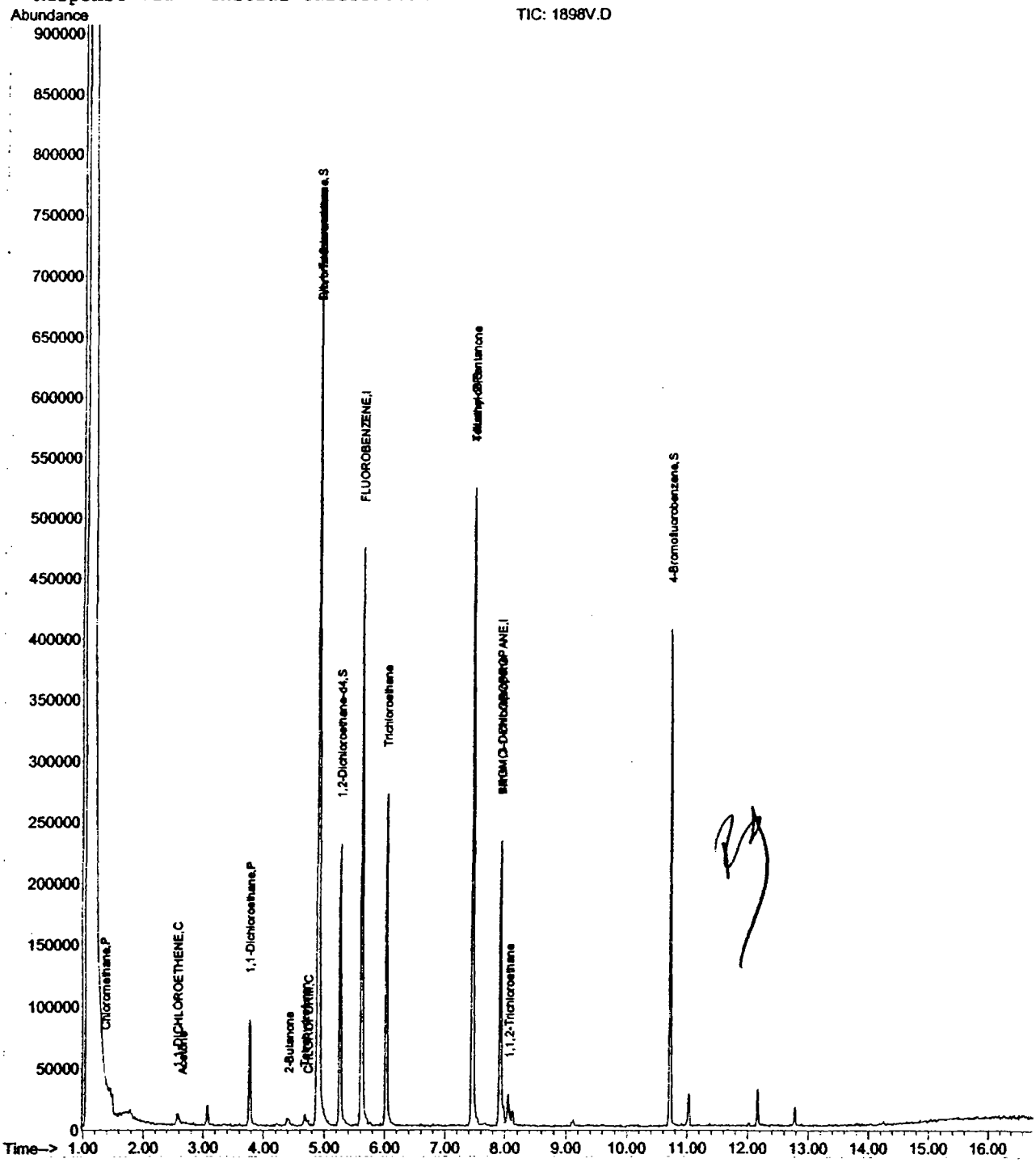
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	452417	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	151404	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	147323	10.91 UG/L	0.00
Spiked Amount 10.000			Recovery	= 109.10%	
23) 1,2-Dichloroethane-d4	5.25	65	175809	11.05 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.50%	
33) Toluene-d8	7.45	98	398549	9.61 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.10%	
51) 4-Bromofluorobenzene	10.70	95	134322	8.58 UG/L	0.00
Spiked Amount 10.000			Recovery	= 85.80%	
Target Compounds					Qvalue
3) ~~Chloromethane~~	1.37	50	2783	0.27 UG/L	100
8) ~~Acetone~~	2.66	43	4277	0.99 UG/L #	100
9) 1,1-DICHLOROETHENE 0.42	2.58	96	6728	0.62 UG/L	100
10) ~~Methylene Chloride~~	3.07	84	7479	Below Cal #	77
13) 1,1-Dichloroethane 4.2	3.77	63	88696	4.16 UG/L	100
14) ~~2-Butanone~~	4.42	43	1714	0.29 UG/L #	100
16) ~~CHLOROFORM~~	4.72	83	3230	0.13 UG/L	95
17) ~~Tetrahydrofuran~~	4.67	42	6303	1.61 UG/L #	100
20) 1,1,1-Trichloroethane 21	4.89	97	438486	21.11 UG/L	86
27) Trichloroethene 7-9	6.02	130	98824	7.85 UG/L	98
31) ~~4-Methyl-2-Pentanone~~	7.45	43	1210	0.11 UG/L #	100
35) ~~trans-1,3-Dichloropropene~~	7.91	75	3856	0.27 UG/L	100
36) ~~1,1,2-Trichloroethane~~	8.06	97	2000	0.20 UG/L	100

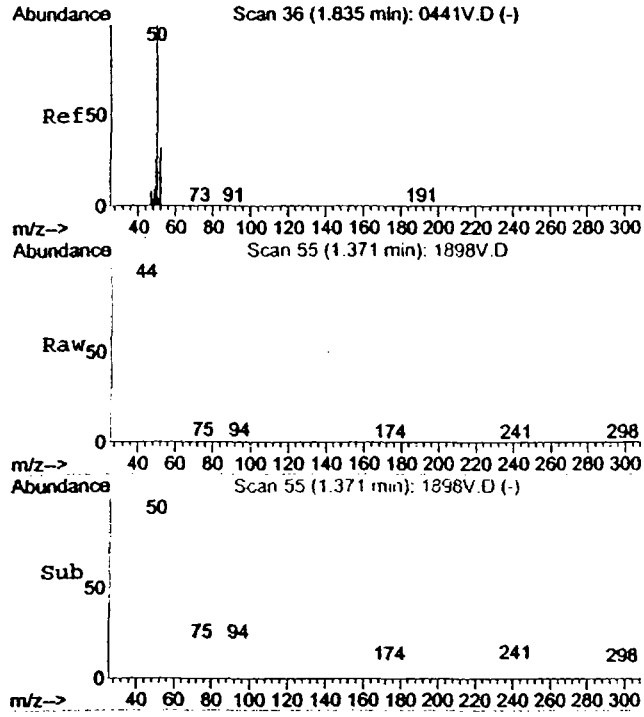
no MCS

(#) = qualifier out of range (m) = manual integration
1898V.D DWV.M Tue Aug 28 10:57:41 2007

Data File : C:\HPCHEM\DATA\V082807\1898V.D Vial: 5
Acq On : 28 Aug 2007 10:40 Operator: REGI
Sample : A780301 LQ4539 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 10:57 2007 Quant Results File: DWV.RES

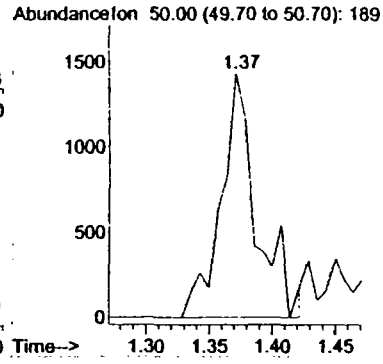
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

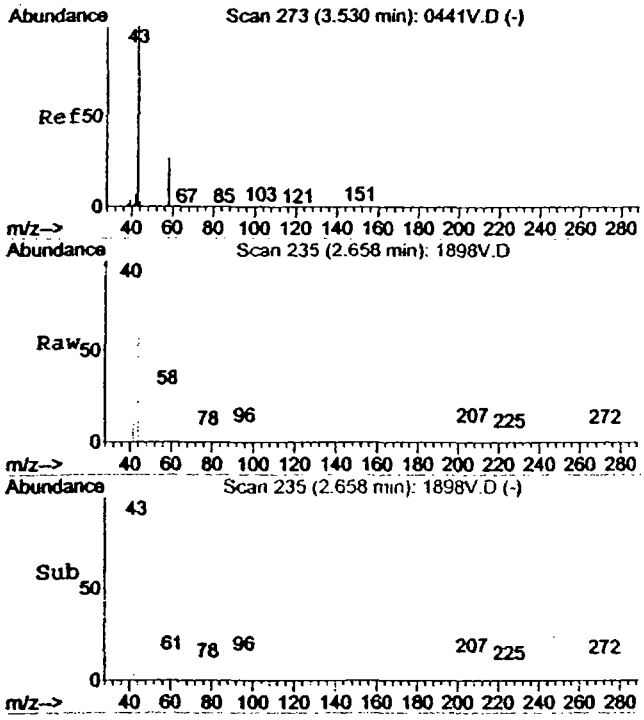




#3
Chloromethane
Concen: 0.27 UG/L
RT: 1.37 min Scan# 55
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 50 Resp: 2783

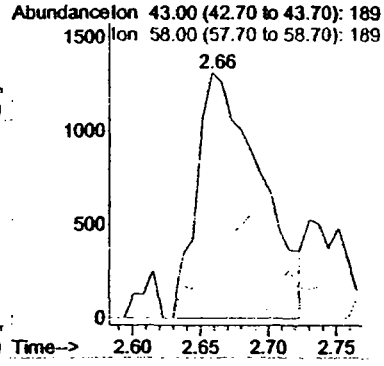


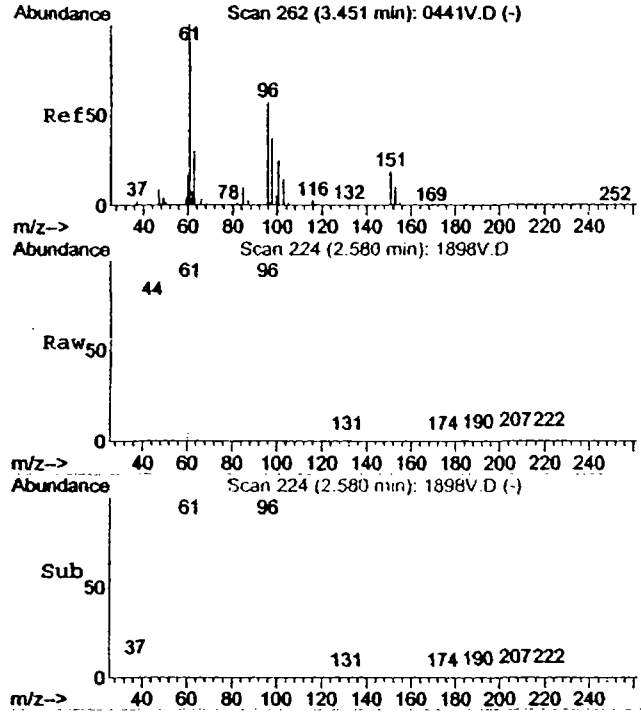


#8
Acetone
Concen: 0.99 UG/L
RT: 2.66 min Scan# 235
Delta R.T. -0.01 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 43 Resp: 4277

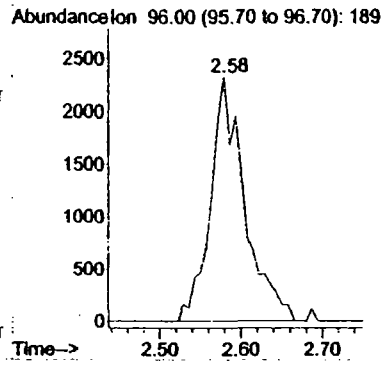
Ion	Ratio	Lower	Upper
43	100		
58	34.9	0.0	0.0#

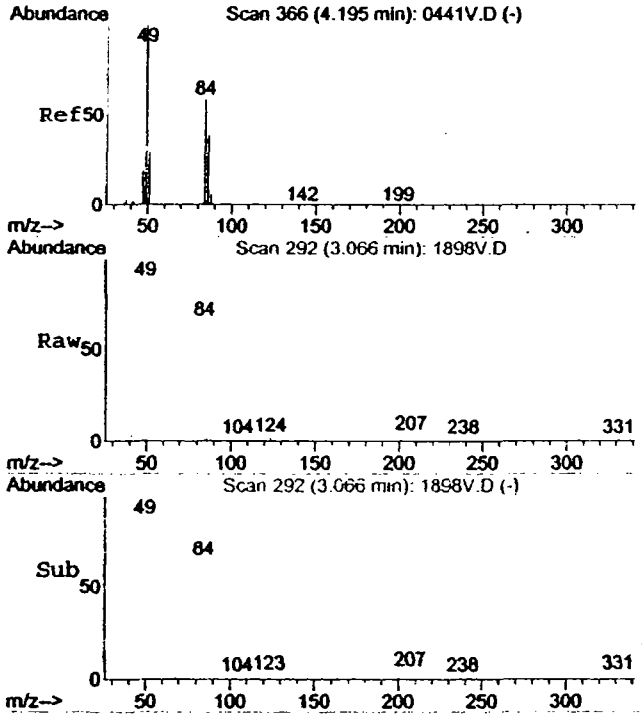




#9
1,1-DICHLOROETHENE
Concen: 0.62 UG/L
RT: 2.58 min Scan# 224
Delta R.T. 0.01 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 96 Resp: 6728

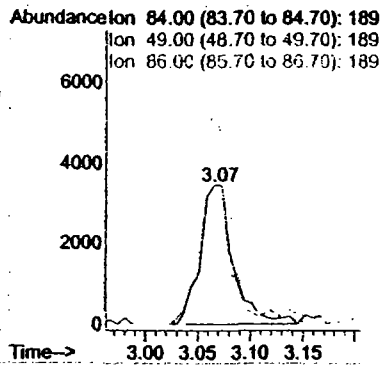


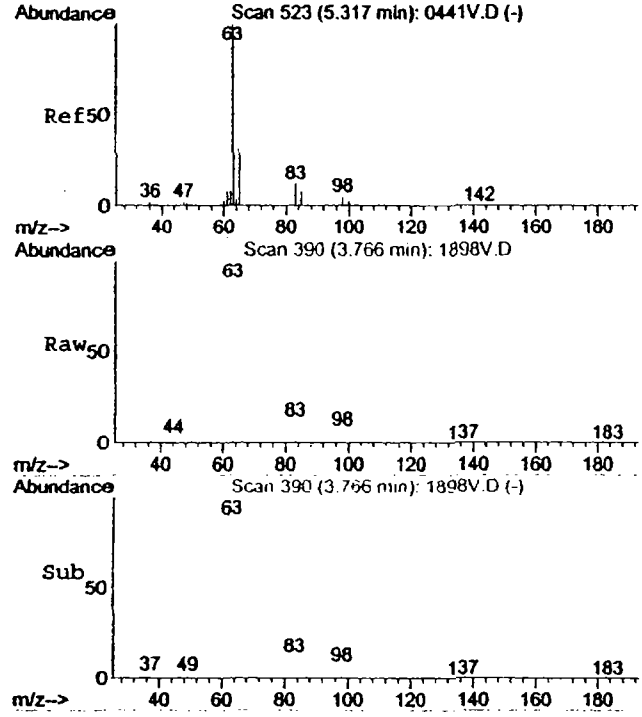


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 84 Resp: 7479

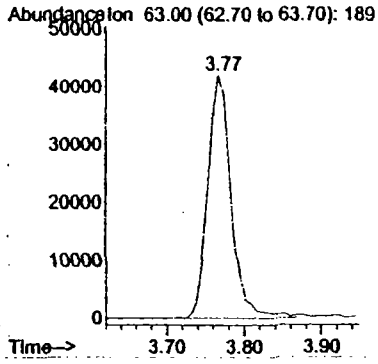
Ion	Ratio	Lower	Upper
84	100		
49	145.3	150.7	226.1#
86	66.6	50.5	75.7

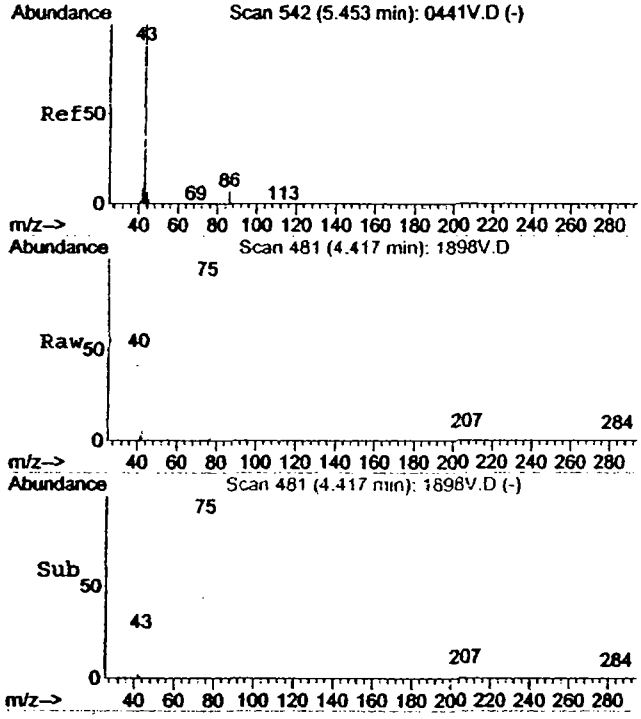




#13
1,1-Dichloroethane
Concen: 4.16 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 63 Resp: 88696

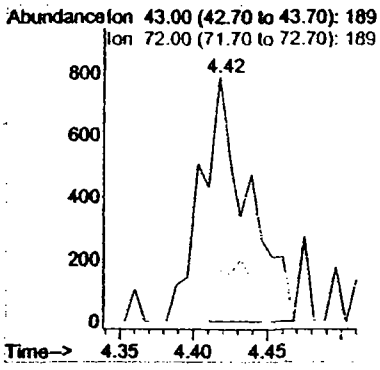


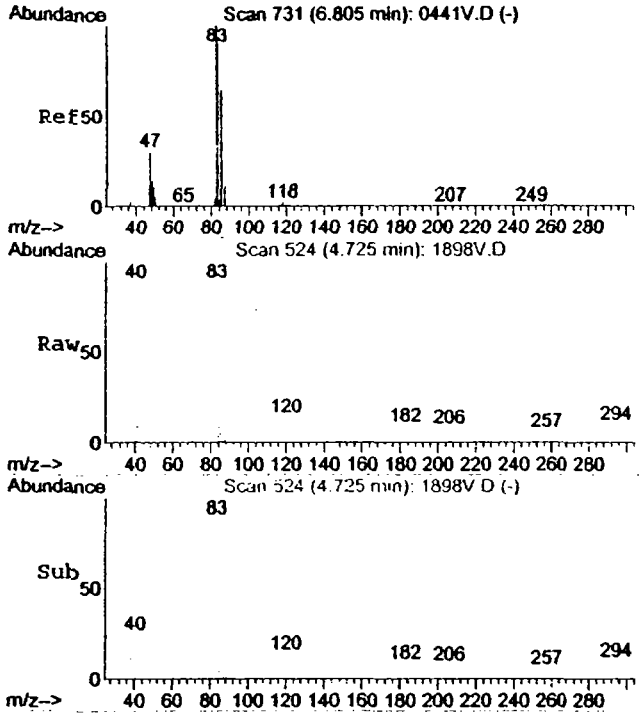


#14
2-Butanone
Concen: 0.29 UG/L
RT: 4.42 min Scan# 481
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 43 Resp: 1714

Ion	Ratio	Lower	Upper
43	100		
72	16.4	0.0	0.0#

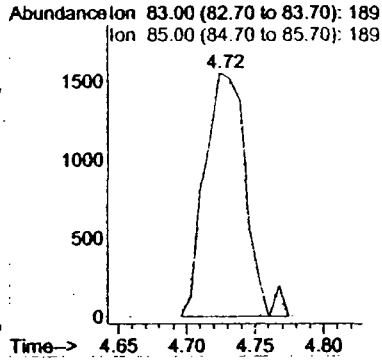


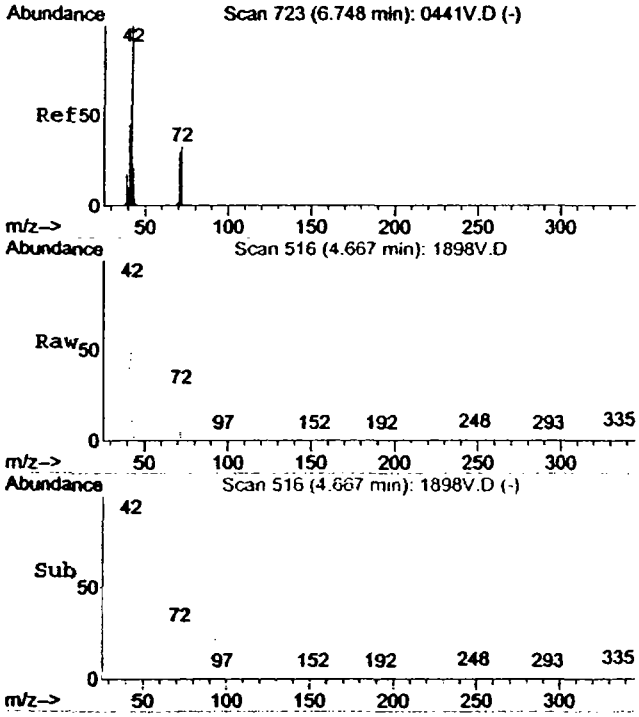


#16
CHLOROFORM
Concen: 0.13 UG/L
RT: 4.72 min Scan# 524
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 83 Resp: 3230

Ion	Ratio	Lower	Upper
83	100		
85	59.3	50.7	76.1

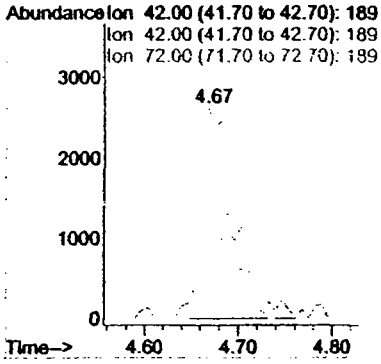


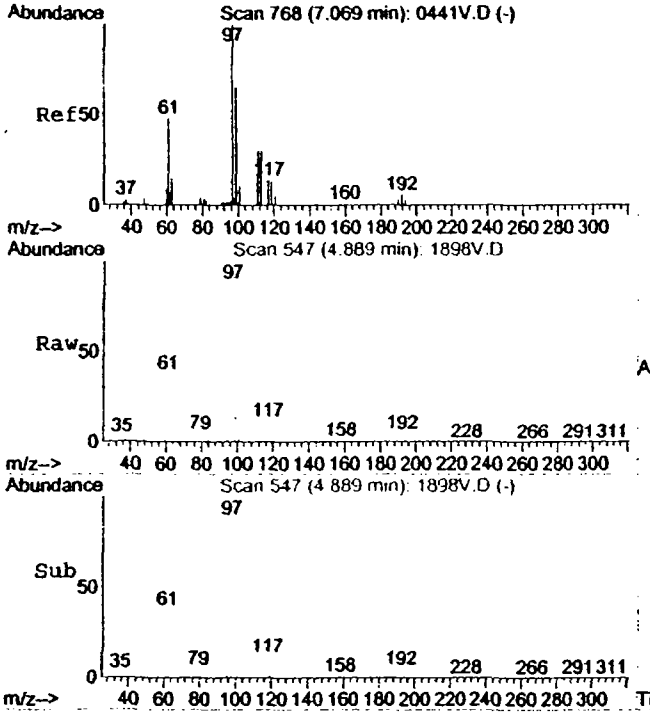


#17
Tetrahydrofuran
Concen: 1.61 UG/L
RT: 4.67 min Scan# 516
Delta R.T. -0.01 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 42 Resp: 6303

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	44.2	0.0	0.0#

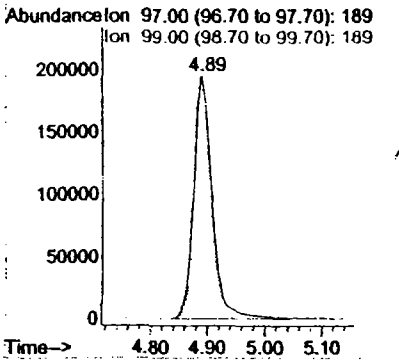


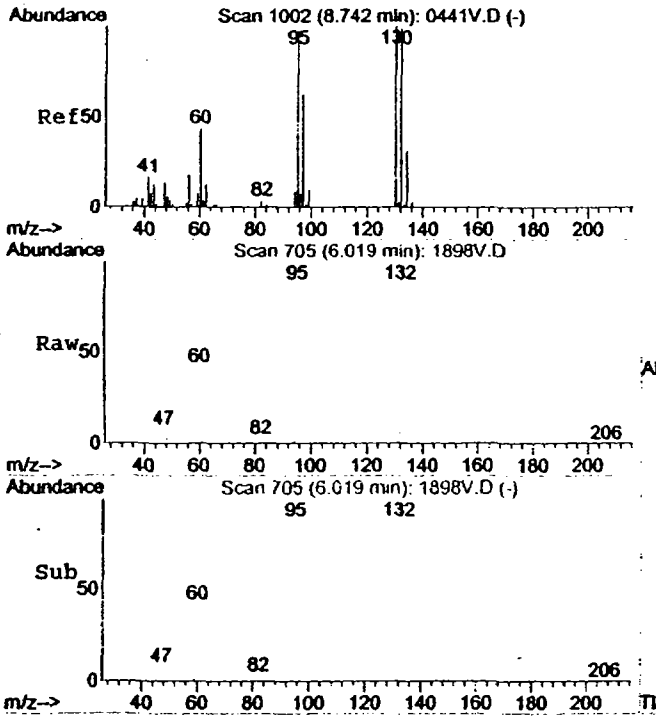


#20
1,1,1-Trichloroethane
Concen: 21.11 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 97 Resp: 438486

Ion	Ratio	Lower	Upper
97	100		
99	63.0	59.9	89.9

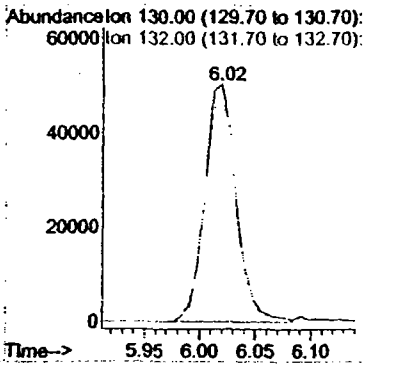


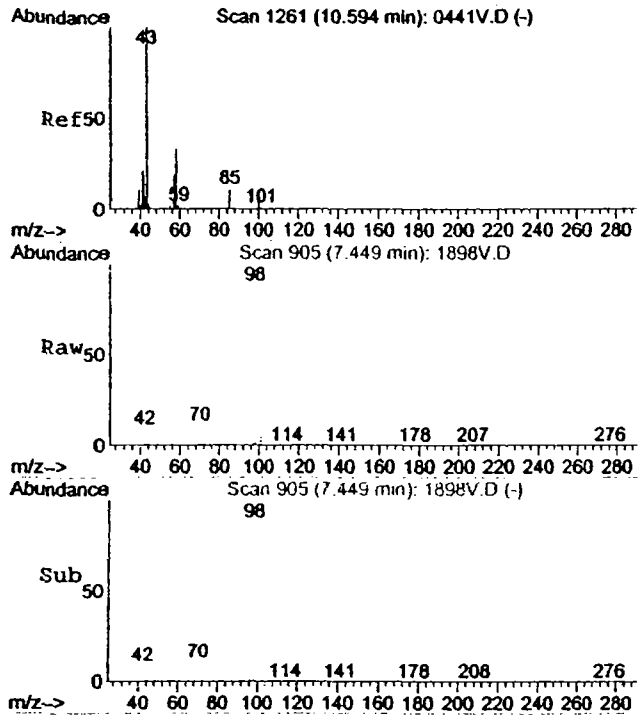


#27
Trichloroethene
Concen: 7.85 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion:130 Resp: 98824

Ion	Ratio	Lower	Upper
130	100		
132	99.1	80.7	121.1

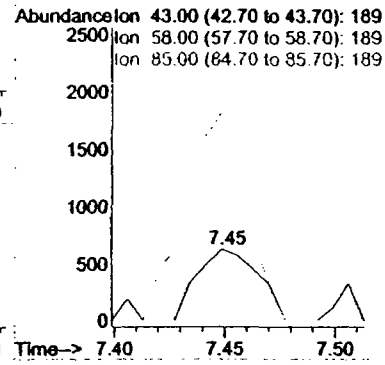


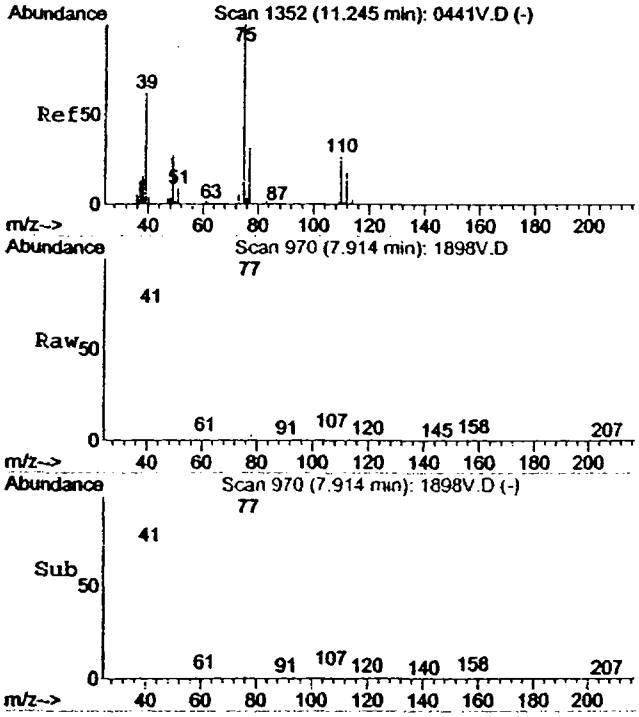


#31
4-Methyl-2-Pentanone
Concen: 0.11 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 43 Resp: 1210

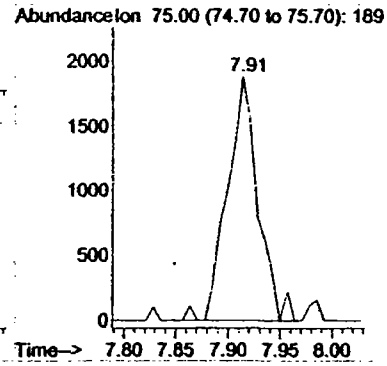
Ion	Ratio	Lower	Upper
43	100		
58	279.1	0.0	0.0#
85	0.0	0.0	0.0

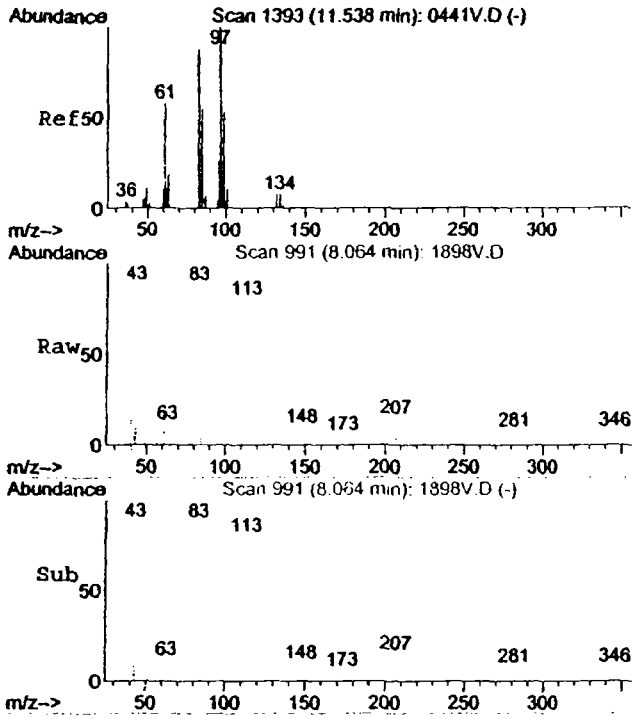




#35
trans-1,3-Dichloropropene
Concen: 0.27 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

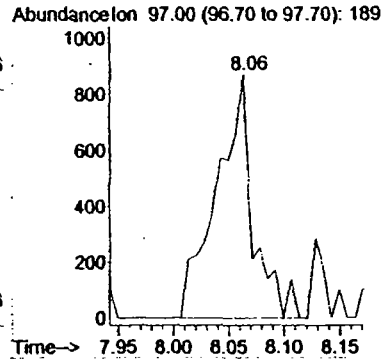
Tgt Ion: 75 Resp: 3856





#36
1,1,2-Trichloroethane
Concen: 0.20 UG/L
RT: 8.06 min Scan# 991
Delta R.T. 0.00 min
Lab File: 1898V.D
Acq: 28 Aug 2007 10:40

Tgt Ion: 97 Resp: 2000



Quantification Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1923V.D Vial: 1
Acq On : 29 Aug 2007 10:17 Operator: REGI
Sample : A780301 LQ4539 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 10:34:43 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration
DataAcq Meth : DWV

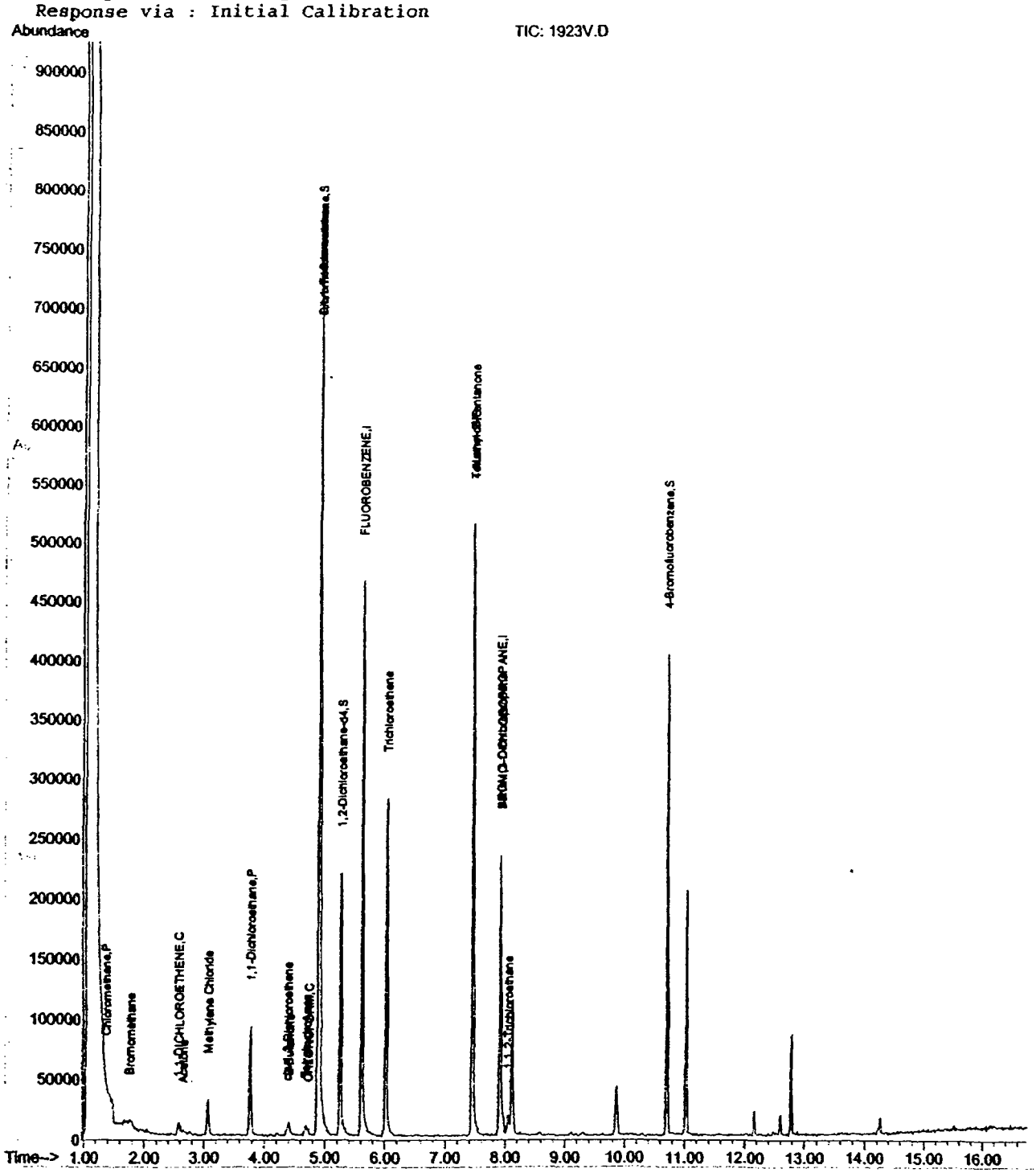
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	438221	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	142351	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	146765	11.22 UG/L	0.00
Spiked Amount 10.000			Recovery	= 112.20%	
23) 1,2-Dichloroethane-d4	5.25	65	174216	11.30 UG/L	0.00
Spiked Amount 10.000			Recovery	= 113.00%	
33) Toluene-d8	7.45	98	391673	9.76 UG/L	0.00
Spiked Amount 10.000			Recovery	= 97.60%	
51) 4-Bromofluorobenzene	10.70	95	133089	9.04 UG/L	0.00
Spiked Amount 10.000			Recovery	= 90.40%	
Target Compounds					Qvalue
3) Chloromethane	1.37	50	3196	0.32 UG/L	100
5) Bromomethane	1.77	94	1251	0.16 UG/L #	7
8) Acetone	2.65	43	6300	1.50 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	7281	0.70 UG/L	100
10) Methylene Chloride	3.07	84	15005	0.30 UG/L #	70
13) 1,1-Dichloroethane	3.77	63	93409	4.52 UG/L	100
14) 2-Butanone	4.41	43	1477	0.26 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	1337	0.11 UG/L #	1
16) CHLOROFORM	4.72	83	3335	0.14 UG/L	90
17) Tetrahydrofuran	4.67	42	6565	1.73 UG/L #	100
20) 1,1,1-Trichloroethane	4.89	97	452588	22.49 UG/L	86
27) Trichloroethene	6.02	130	108527	8.90 UG/L	94
31) 4-Methyl-2-Pentanone	7.44	43	1675	0.16 UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	4059	0.29 UG/L	100
36) 1,1,2-Trichloroethane	8.05	97	1798	0.19 UG/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1923V.D Vial: 1
Acq On : 29 Aug 2007 10:17 Operator: REGI
Sample : A780301 LQ4539 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 10:34 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration



R524142 Heritage Environmental Services, LLC A780302

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4540
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1899V.D Date/Time 28Aug07 11:06:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE	1.0		0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	23		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		EX	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	3.7		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

AW 9/20/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	113			% RECOVERY	
2037-26-5	726	TOLUENE-D8	98			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	83			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment NA

Qualifiers

EX Exceeds calibration range. See Replicate
BDL Below Detection Limit
* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1899V.D Vial: 6
Acq On : 28 Aug 2007 11:06 Operator: REGI
Sample : A780302 LQ4540 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 11:23:27 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	452893	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	155096	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	147797	10.94	UG/L	0.00
Spiked Amount 10.000			Recovery	=	109.40%	
23) 1,2-Dichloroethane-d4	5.25	65	179581	11.27	UG/L	0.00
Spiked Amount 10.000			Recovery	=	112.70%	
33) Toluene-d8	7.45	98	405852	9.78	UG/L	0.00
Spiked Amount 10.000			Recovery	=	97.80%	
51) 4-Bromofluorobenzene	10.70	95	132696	8.27	UG/L	0.00
Spiked Amount 10.000			Recovery	=	82.70%	

Target Compounds						Qvalue
3) ~~Chloromethane~~	1.39	50	1843	0.18	UG/L	100
8) ~~Acetone~~	2.67	43	1849	0.43	UG/L #	100
9) 1,1-DICHLOROETHENE 1.0	2.57	96	11191	1.03	UG/L	100
10) ~~Methylene Chloride~~	3.07	84	6477	Below	Cal #	66
13) 1,1-Dichloroethane 3.7	3.77	63	79906	3.74	UG/L	100
14) ~~2-Butanone~~	4.42	43	967	0.16	UG/L #	100
15) ~~cis-1,2-Dichloroethene~~	4.37	96	5879	0.47	UG/L #	54
17) ~~Tetrahydrofuran~~	4.68	42	4895	1.25	UG/L #	100
20) 1,1,1-Trichloroethane 23	4.89	97	472253	22.71	UG/L	88
27) Trichloroethene e	6.02	130	4674979	370.86	UG/L	96
31) ~~4-Methyl-2-Pentanone~~	7.45	43	1329	0.12	UG/L #	100
35) ~~trans-1,3-Dichloro~~propene	7.91	75	3049	0.21	UG/L	100

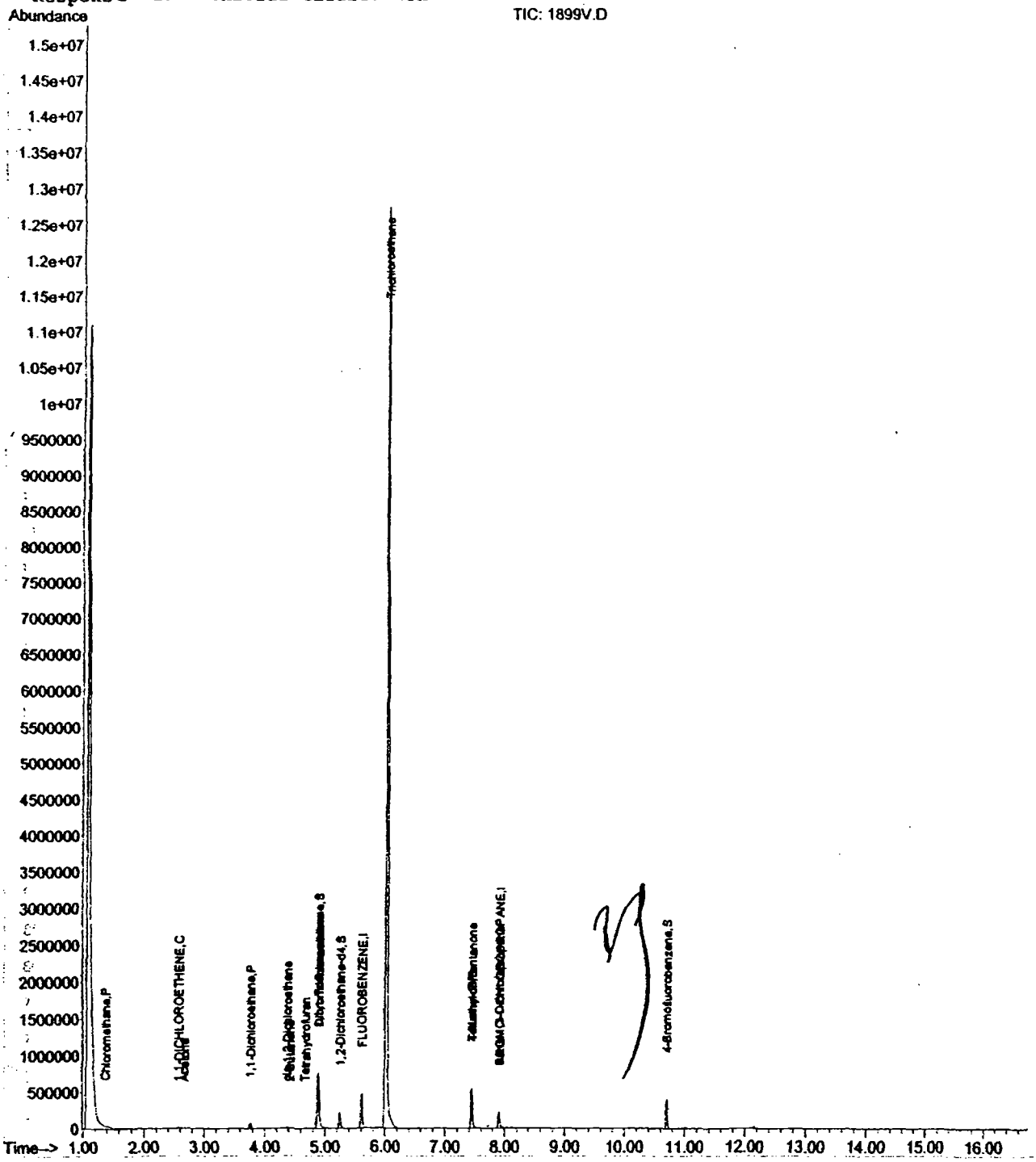
No TICs

(#) = qualifier out of range (m) = manual integration
1899V.D DWV.M Tue Aug 28 11:23:29 2007

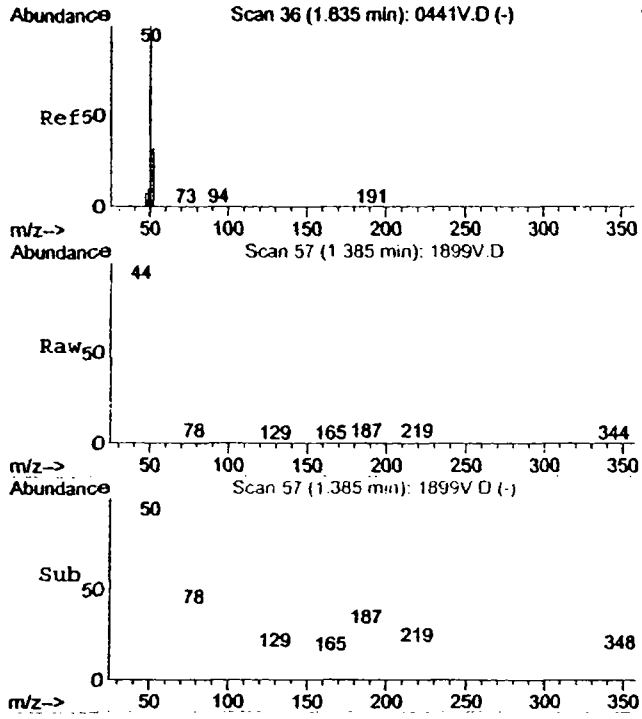
Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1899V.D Vial: 6
Acq On : 28 Aug 2007 11:06 Operator: REGI
Sample : A780302 LQ4540 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 11:23 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

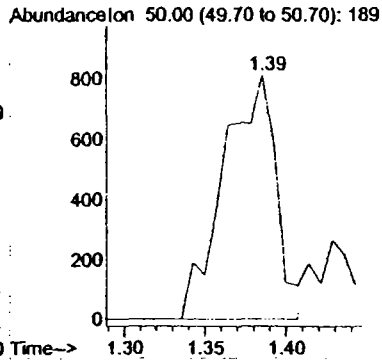


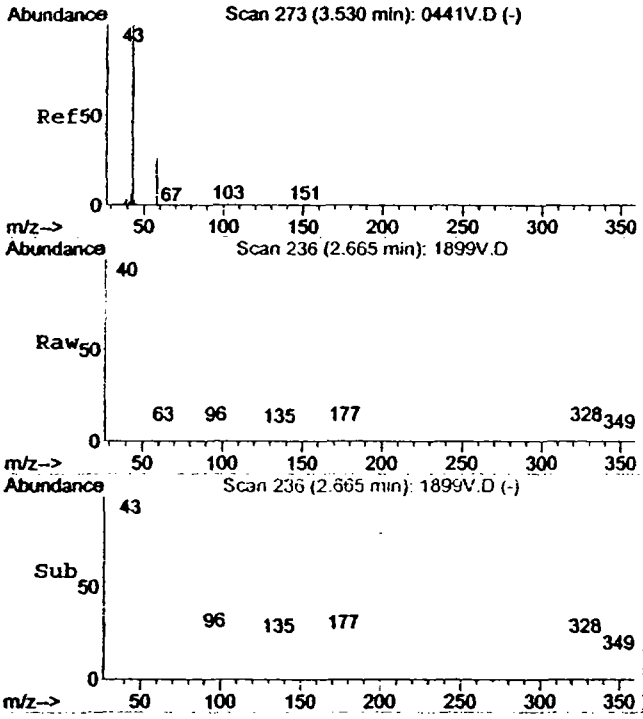
1899V.D DWV.M Tue Aug 28 11:23:30 2007 Page 2



#3
Chloromethane
Concen: 0.18 UG/L
RT: 1.39 min Scan# 57
Delta R.T. 0.01 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 50 Resp: 1843

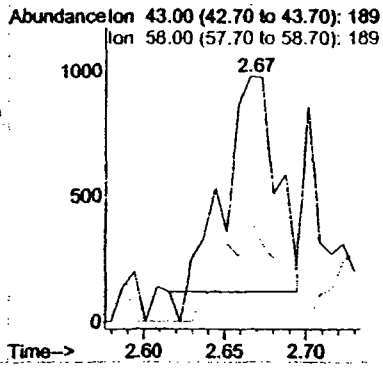


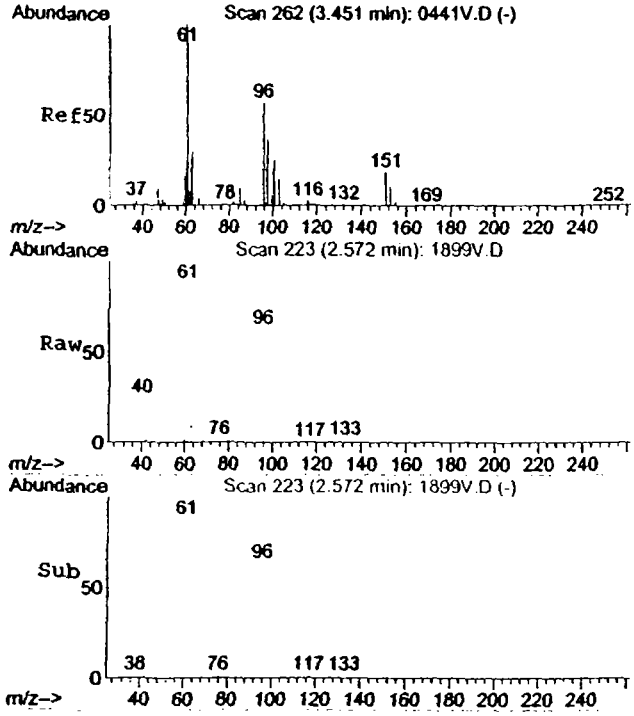


#8
Acetone
Concen: 0.43 UG/L
RT: 2.67 min Scan# 236
Delta R.T. -0.01 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 43 Resp: 1849

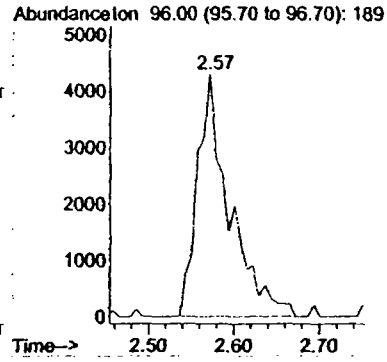
Ion	Ratio	Lower	Upper
43	100		
58	55.4	0.0	0.0#

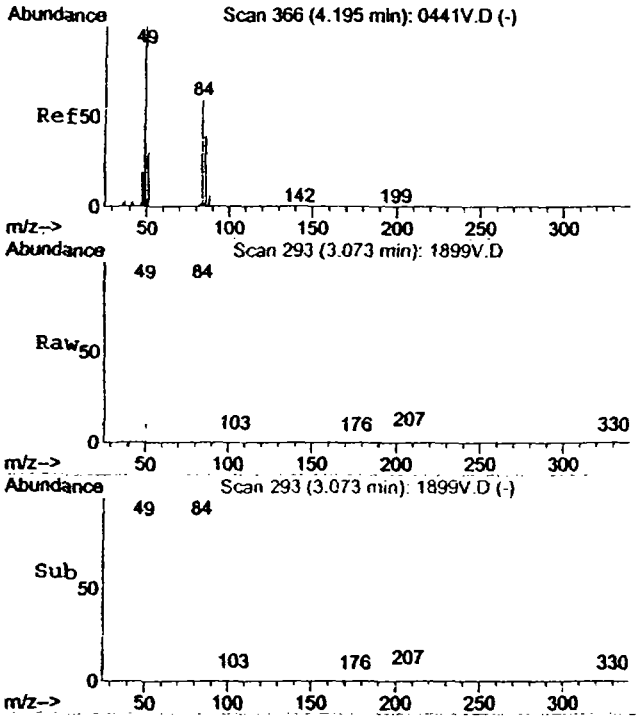




#9
1,1-DICHLOROETHENE
Concen: 1.03 UG/L
RT: 2.57 min Scan# 223
Delta R.T. 0.01 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 96 Resp: 11191

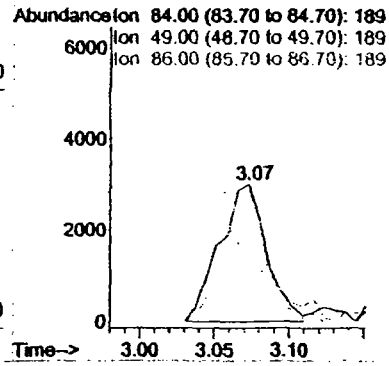


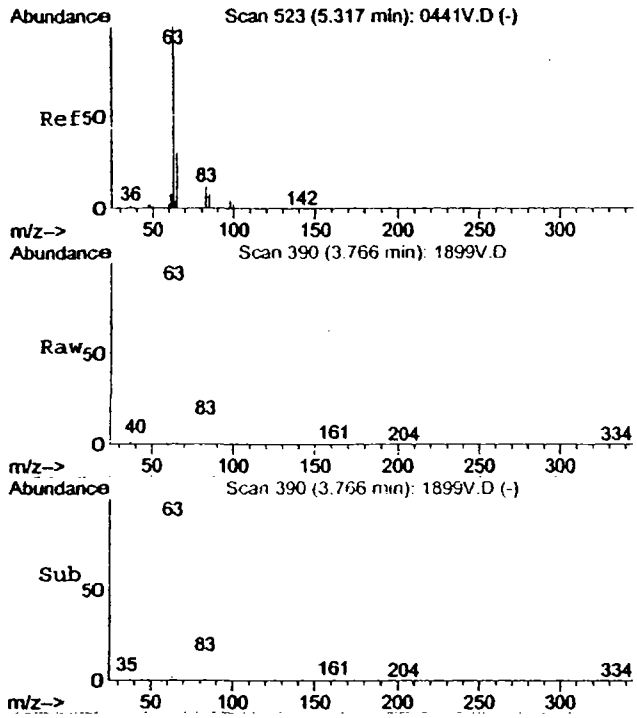


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 293
Delta R.T. 0.01 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 84 Resp: 6477

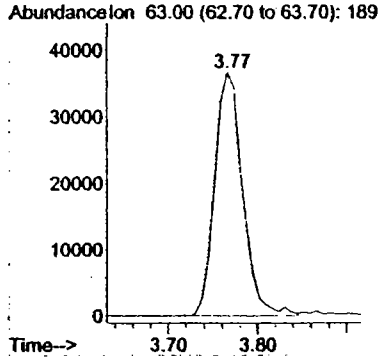
Ion	Ratio	Lower	Upper
84	100		
49	127.9	150.7	226.1#
86	71.3	50.5	75.7

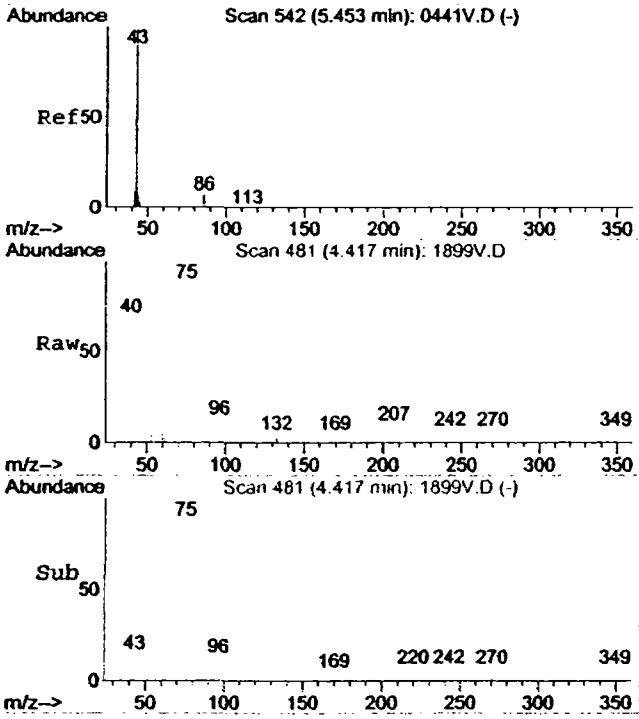




#13
1,1-Dichloroethane
Concen: 3.74 UG/L
RT: 3.77 min Scan# 390
Delta R.T. -0.00 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 63 Resp: 79906

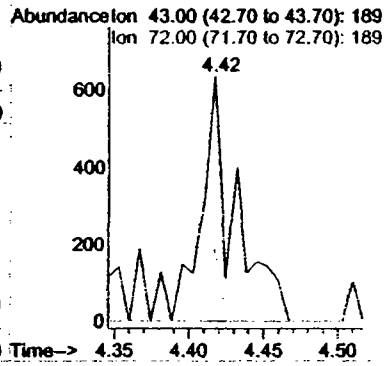


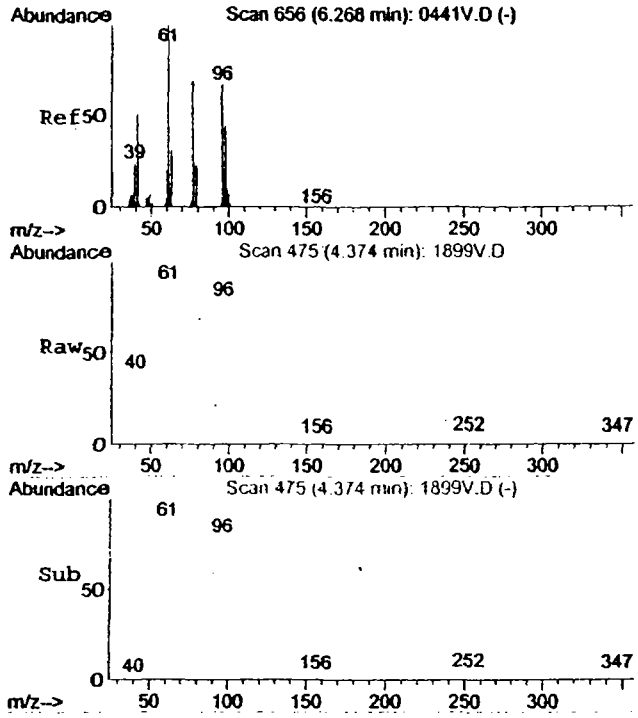


#14
2-Butanone
Concen: 0.16 UG/L
RT: 4.42 min Scan# 481
Delta R.T. 0.00 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 43 Resp: 967

Ion	Ratio	Lower	Upper
43	100		
72	8.5	0.0	0.0#

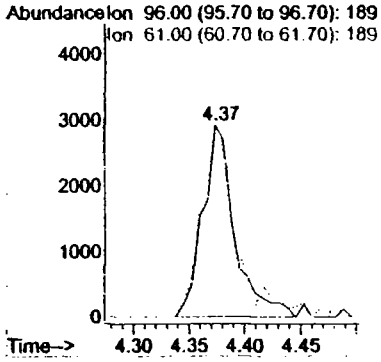


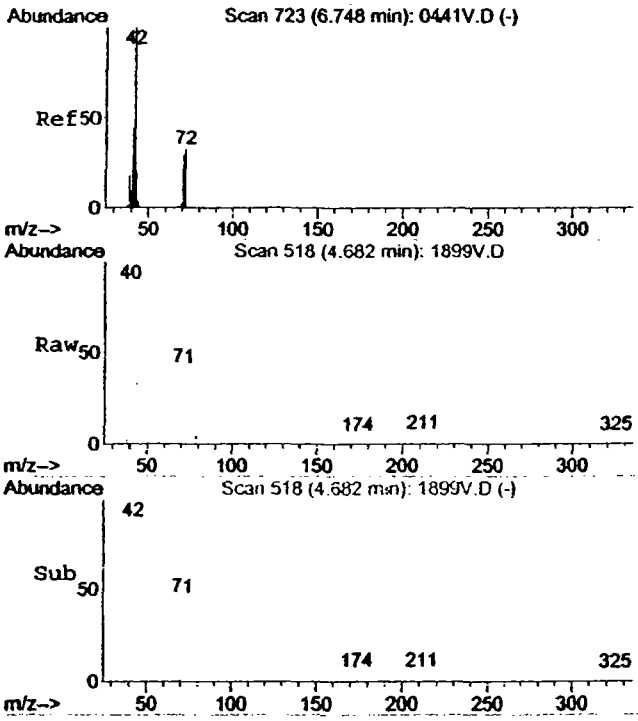


#15
cis-1,2-Dichloroethene
Concen: 0.47 UG/L
RT: 4.37 min Scan# 475
Delta R.T. 0.00 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 96 Resp: 5879

Ion	Ratio	Lower	Upper
96	100		
61	126.6	156.7	235.1#

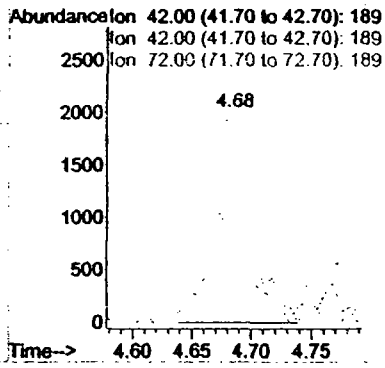


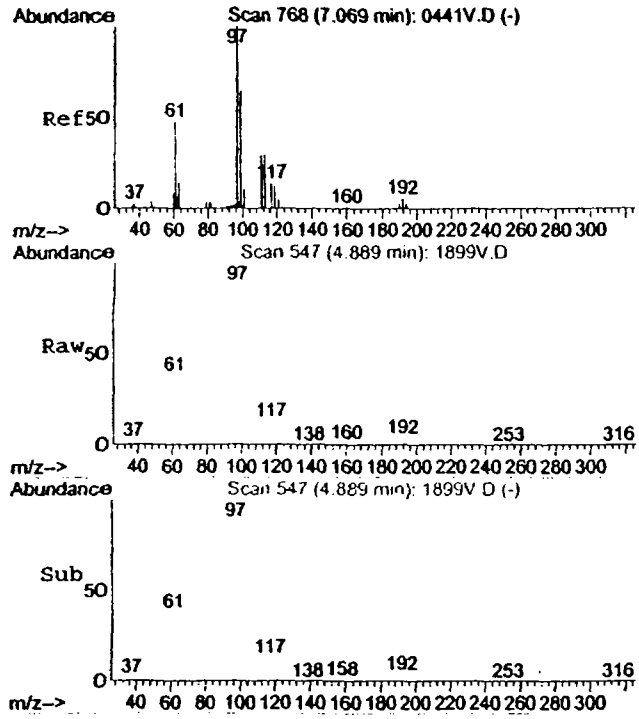


#17
Tetrahydrofuran
Concen: 1.25 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 42 Resp: 4895

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	54.0	0.0	0.0#

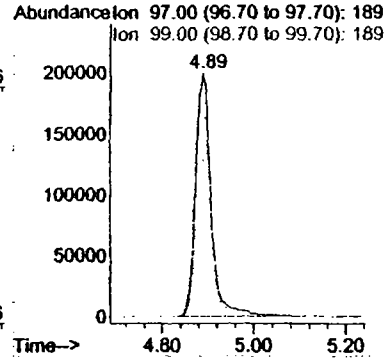


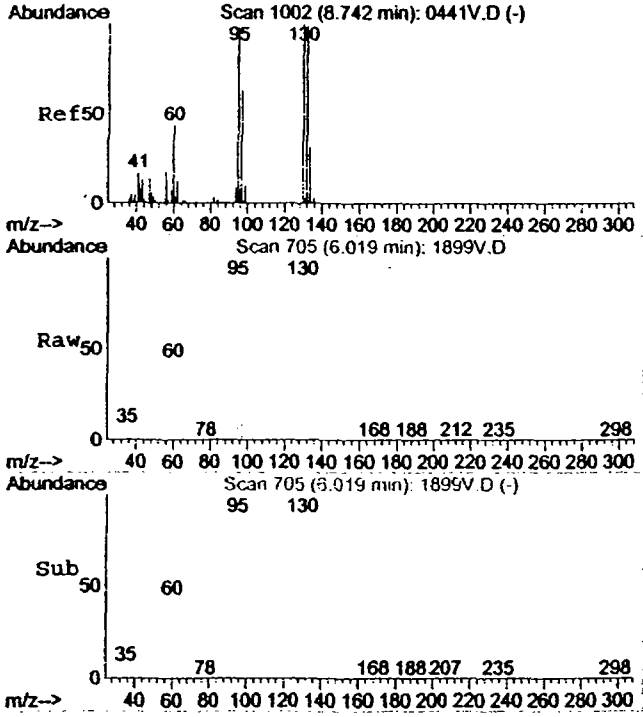


#20
1,1,1-Trichloroethane
Concen: 22.71 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 97 Resp: 472253

Ion	Ratio	Lower	Upper
97	100		
99	65.1	59.9	89.9

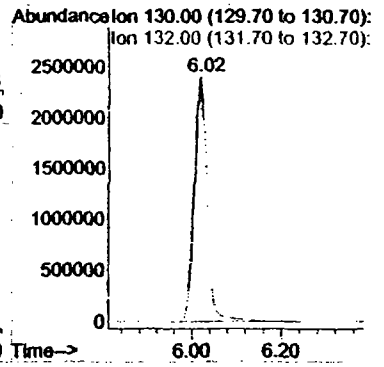


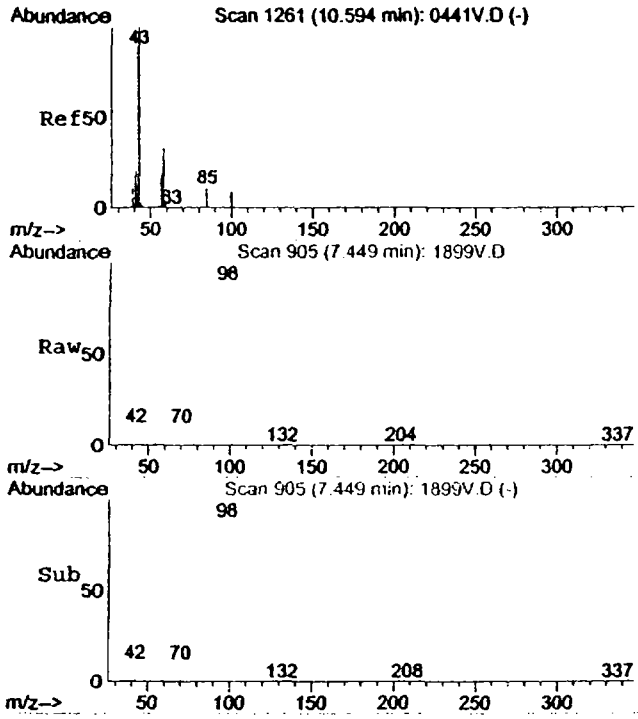


#27
Trichloroethene
Concen: 370.86 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion:130 Resp: 4674979

Ion	Ratio	Lower	Upper
130	100		
132	96.8	80.7	121.1

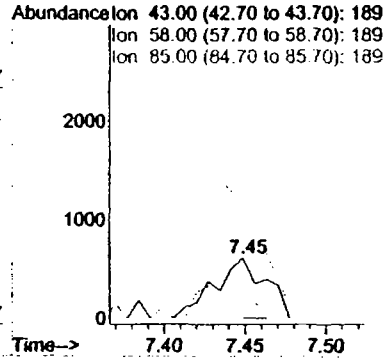


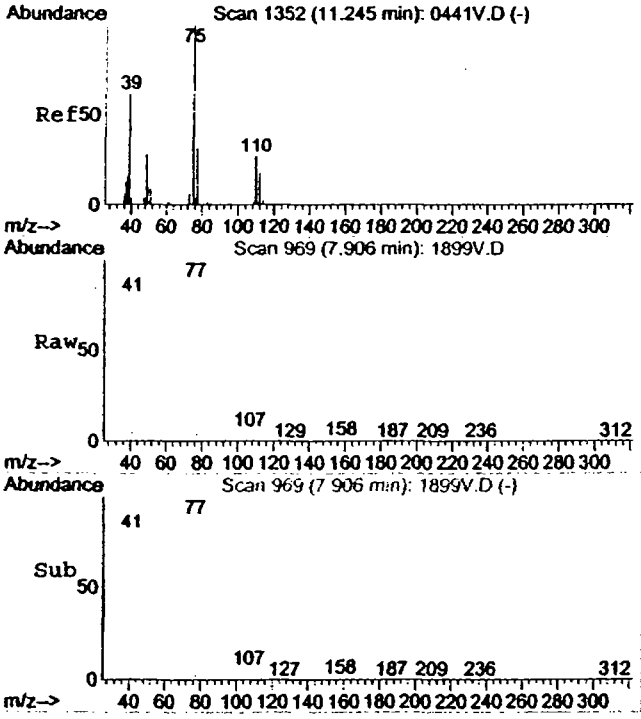


#31
4-Methyl-2-Pentanone
Concen: 0.12 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 43 Resp: 1329

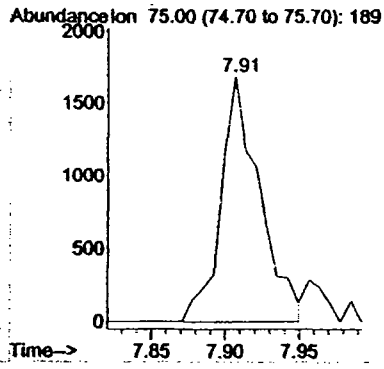
Ion	Ratio	Lower	Upper
43	100		
58	241.2	0.0	0.0#
85	5.5	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.21 UG/L
RT: 7.91 min Scan# 969
Delta R.T. 0.07 min
Lab File: 1899V.D
Acq: 28 Aug 2007 11:06

Tgt Ion: 75 Resp: 3049



R524142 Heritage Environmental Services, LLC A780303

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4541
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1900V.D Date/Time 28Aug07 11:32:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE	.62		0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	1.7		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	55		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	10		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

RW 8/28/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	110			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	83			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm compounds.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1900V.D Vial: 7
Acq On : 28 Aug 2007 11:32 Operator: REGI
Sample : A780303 LQ4541 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 11:49:14 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

TC#31

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	452909	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	150659	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	148196	10.97 UG/L	0.00
Spiked Amount 10.000			Recovery	= 109.70%	
23) 1,2-Dichloroethane-d4	5.25	65	175201	11.00 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.00%	
33) Toluene-d8	7.45	98	381924	9.20 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.00%	
51) 4-Bromofluorobenzene	10.70	95	129098	8.28 UG/L	0.00
Spiked Amount 10.000			Recovery	= 82.80%	
Target Compounds					Qvalue
3) ~~Chloromethane~~	1.37	50	2616	0.26 UG/L	100
5) ~~Bromomethane~~	1.75	94	810	0.10 UG/L #	1
8) ~~Acetone~~	2.67	43	3429	0.79 UG/L #	100
9) 1,1-DICHLOROETHENE 0.62	2.56	96	6703	0.62 UG/L	100
10) ~~Methylene Chloride~~	3.07	84	8100	Below Cal #	66
13) 1,1-Dichloroethane 10	3.77	63	220182	10.31 UG/L	100
14) ~~2-Butanone~~	4.42	43	1784	0.30 UG/L #	100
15) ~~cis-1,2-Dichloro~~ethene	4.37	96	4296	0.35 UG/L #	50
17) ~~Tetrahydrofuran~~	4.67	42	5665	1.44 UG/L #	100
20) 1,1,1-Trichloroethane 1.7	4.89	97	35067	1.69 UG/L	87
27) Trichloroethene 55	6.02	130	690574	54.78 UG/L	96
31) ~~4-Methyl-2-Pen~~tanone	7.44	43	1698	0.16 UG/L #	100
35) tr~~ans-1,3-Dich~~loropropene	7.91	75	4081	0.28 UG/L	100

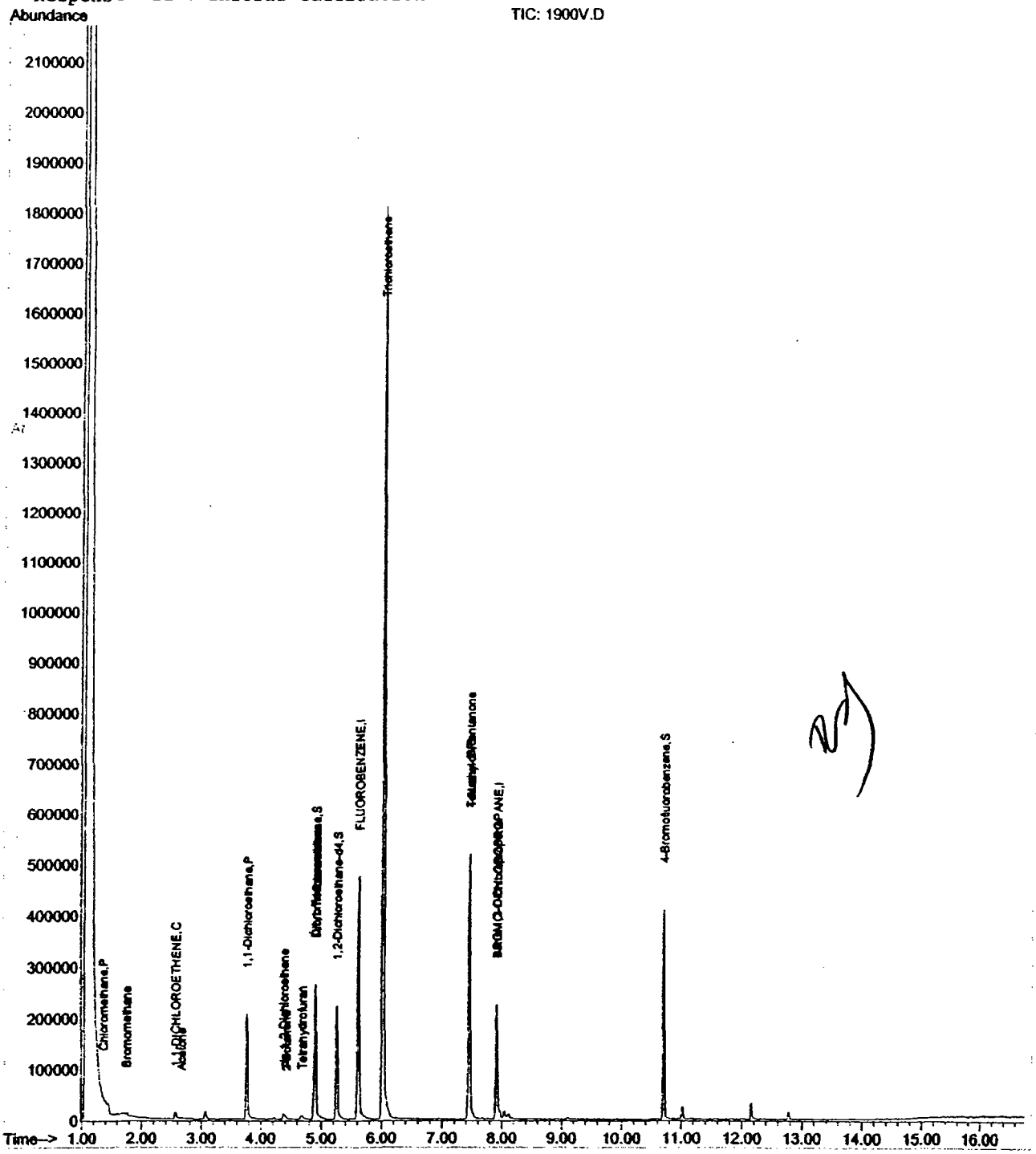
No TICs

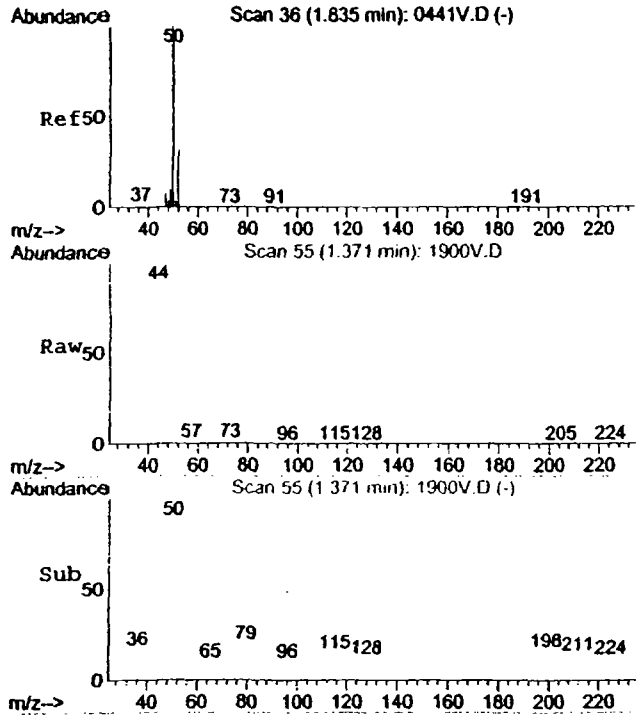
(#) = qualifier out of range (m) = manual integration
1900V.D DWV.M Tue Aug 28 11:49:17 2007

Data File : C:\HPCHEM\DATA\V082807\1900V.D
Acq On : 28 Aug 2007 11:32
Sample : A780303 LQ4541
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 28 11:49 2007

Vial: 7
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

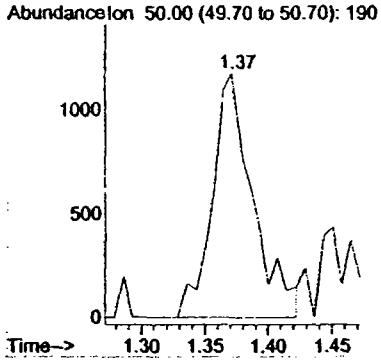
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

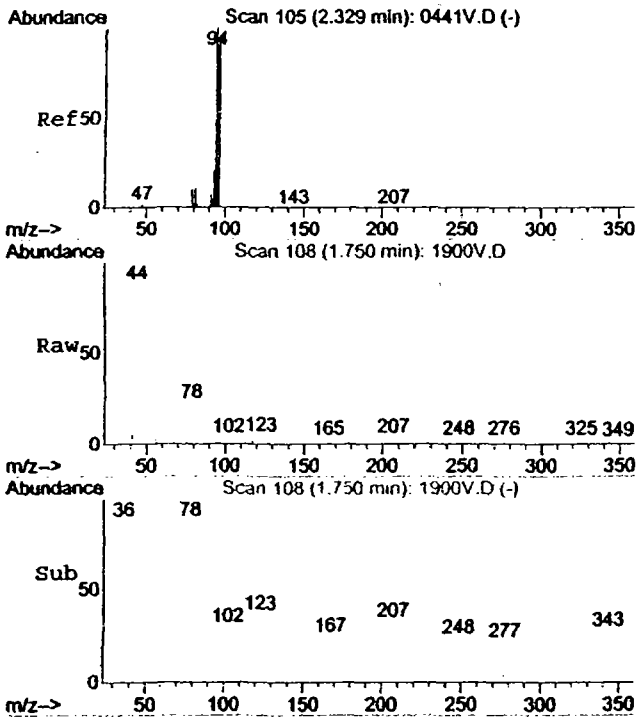




#3
Chloromethane
Concen: 0.26 UG/L
RT: 1.37 min Scan# 55
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 50 Resp: 2616

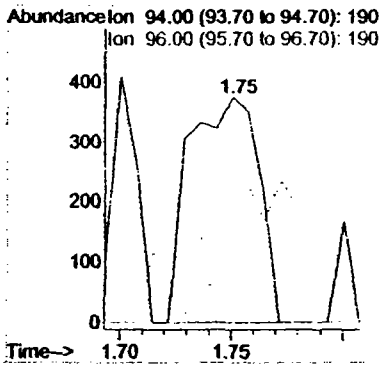


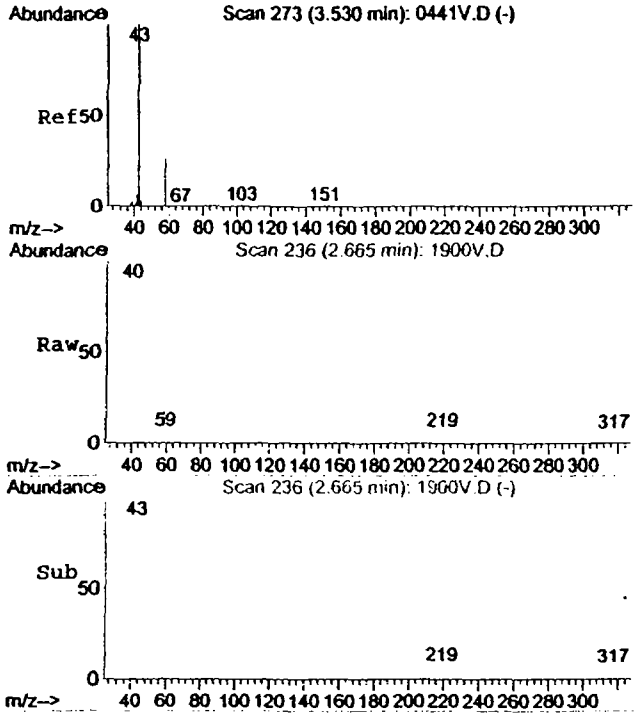


#5
Bromomethane
Concen: 0.10 UG/L
RT: 1.75 min Scan# 108
Delta R.T. -0.01 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 94 Resp: 810

Ion	Ratio	Lower	Upper
94	100		
96	58.5	6.9	10.3#

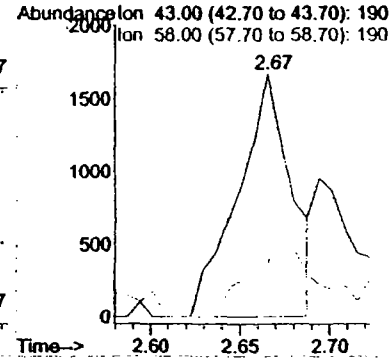


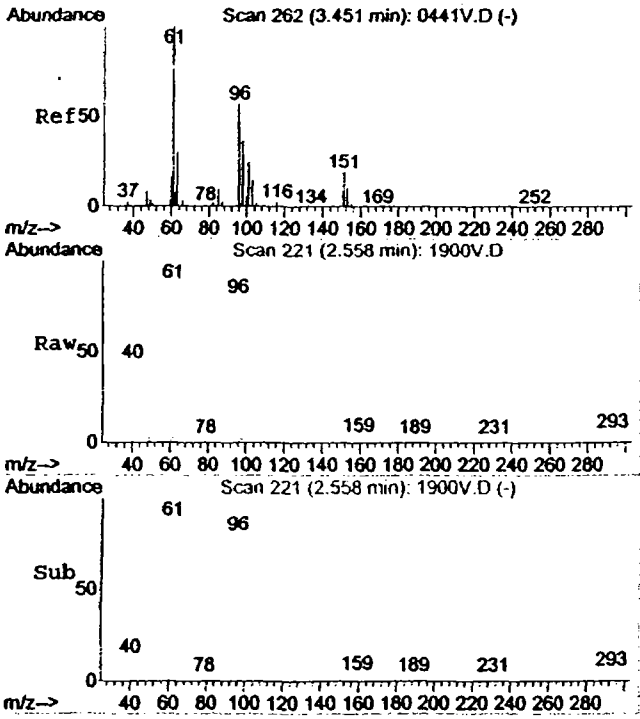


#8
Acetone
Concen: 0.79 UG/L
RT: 2.67 min Scan# 236
Delta R.T. -0.01 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 43 Resp: 3429

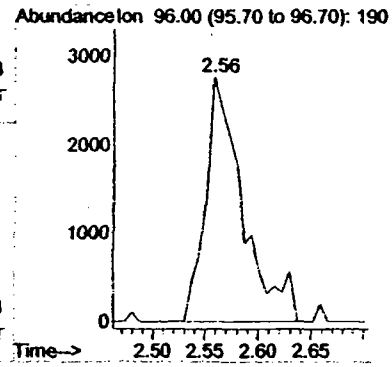
Ion	Ratio	Lower	Upper
43	100		
58	50.6	0.0	0.0#

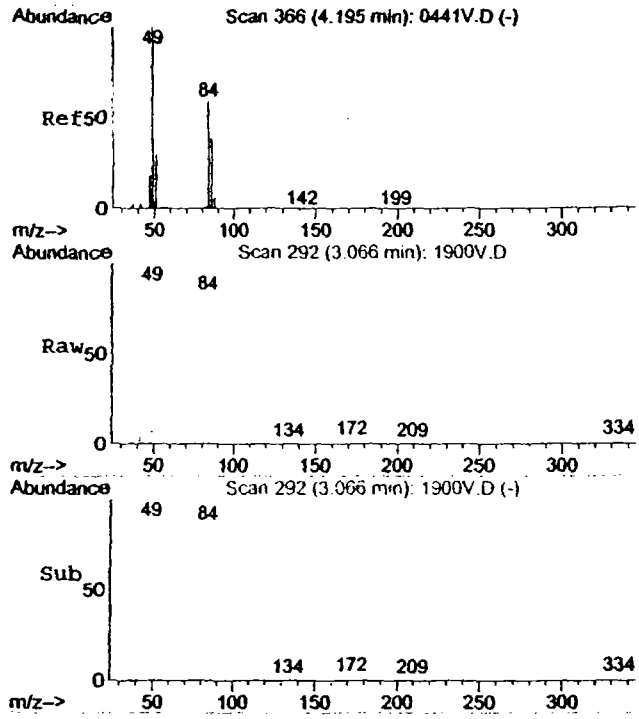




#9
1,1-DICHLOROETHENE
Concen: 0.62 UG/L
RT: 2.56 min Scan# 221
Delta R.T. -0.01 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 96 Resp: 6703

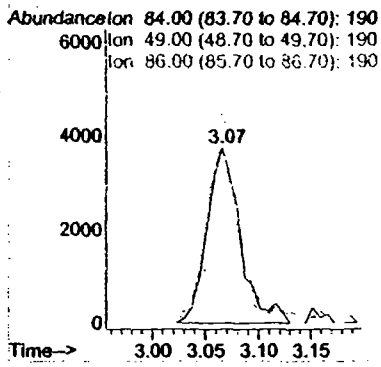


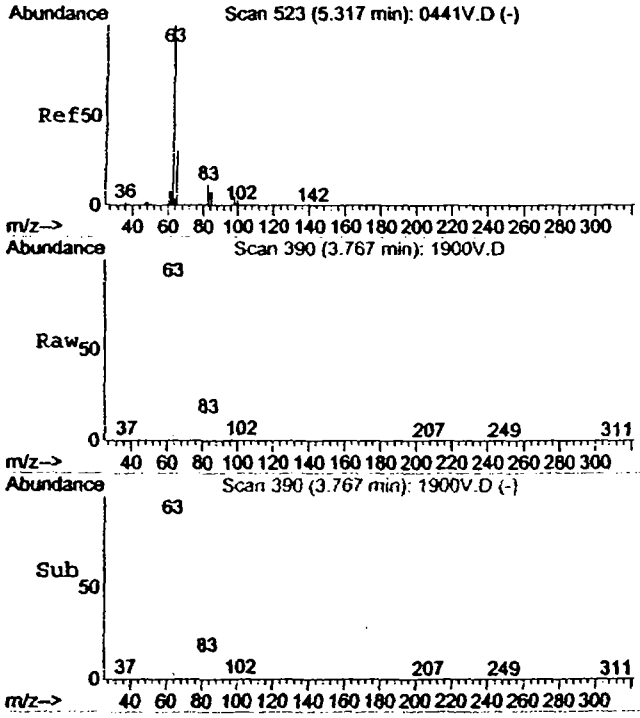


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 84 Resp: 8100

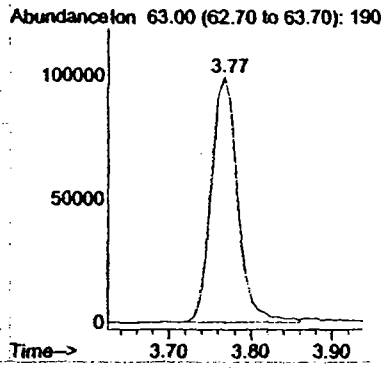
Ion	Ratio	Lower	Upper
84	100		
49	121.6	150.7	226.1#
86	63.2	50.5	75.7

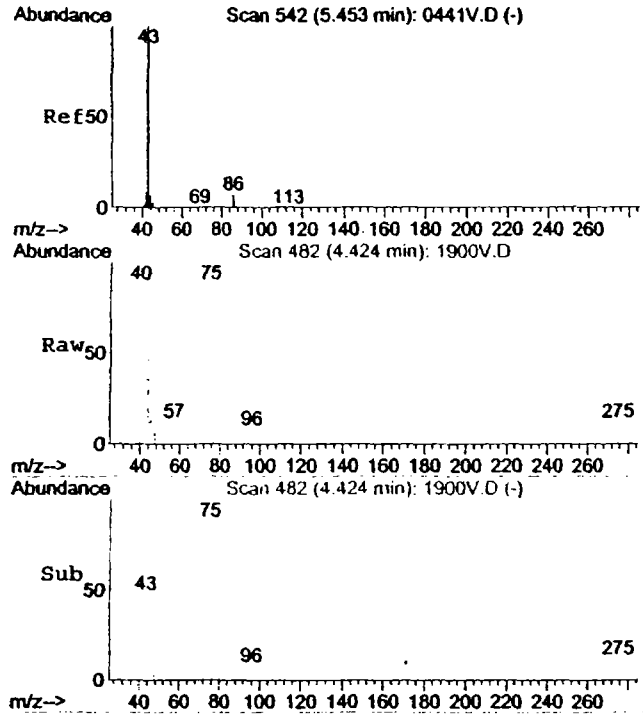




#13
1,1-Dichloroethane
Concen: 10.31 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 63 Resp: 220182

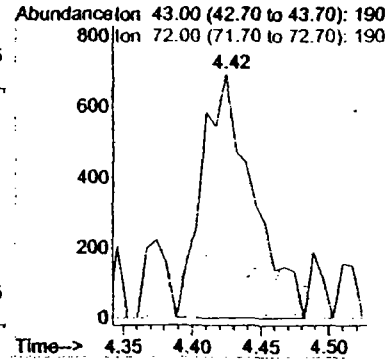


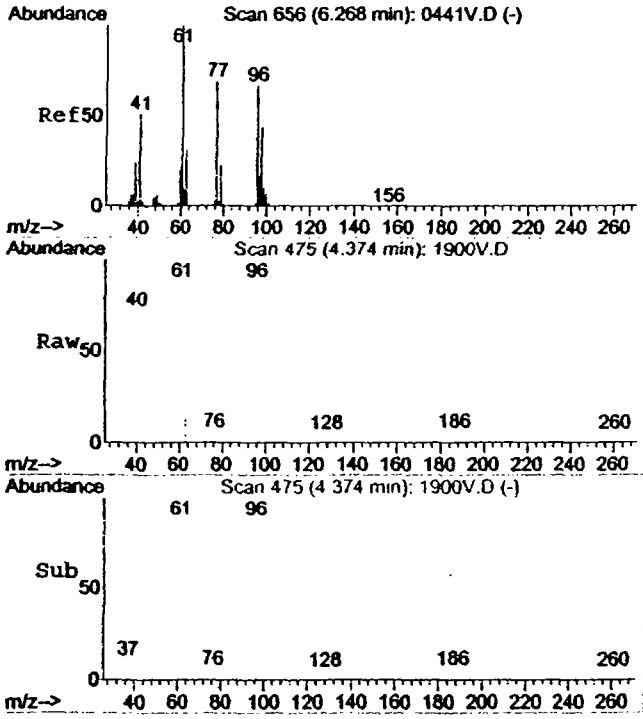


#14
2-Butanone
Concen: 0.30 UG/L
RT: 4.42 min Scan# 482
Delta R.T. 0.01 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 43 Resp: 1784

Ion	Ratio	Lower	Upper
43	100		
72	27.0	0.0	0.0#

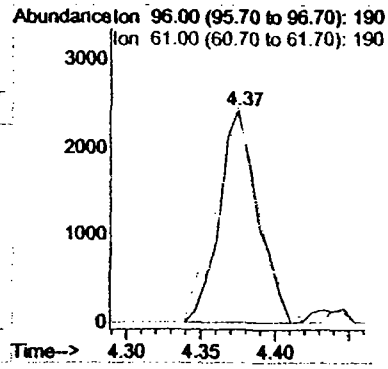


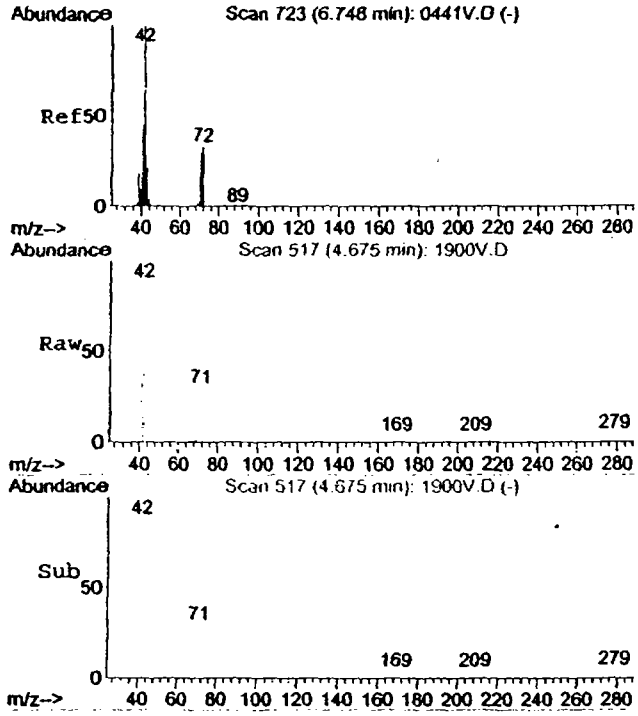


#15
cis-1,2-Dichloroethene
Concen: 0.35 UG/L
RT: 4.37 min Scan# 475
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 96 Resp: 4296

Ion	Ratio	Lower	Upper
96	100		
61	121.8	156.7	235.1#

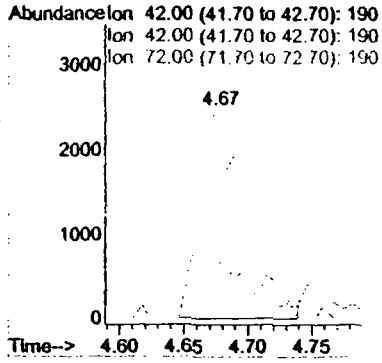


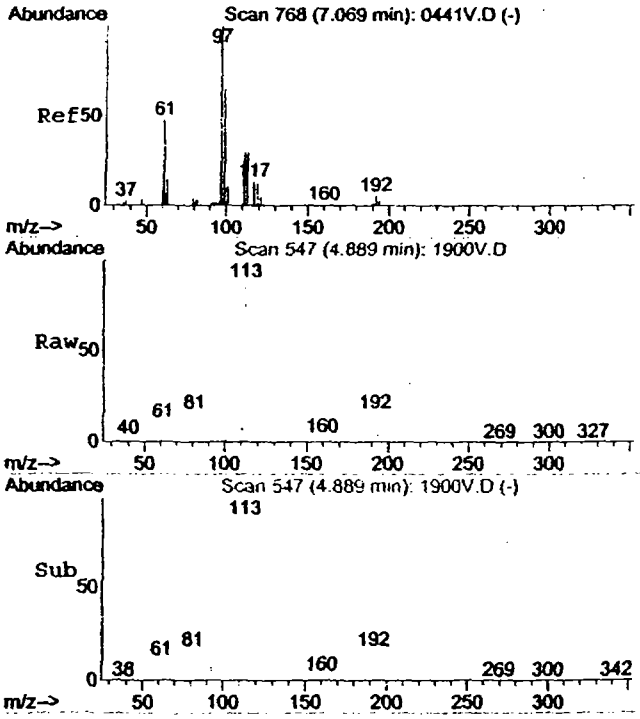


#17
Tetrahydrofuran
Concen: 1.44 UG/L
RT: 4.67 min Scan# 517
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 42 Resp: 5665

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	0.0	0.0	0.0

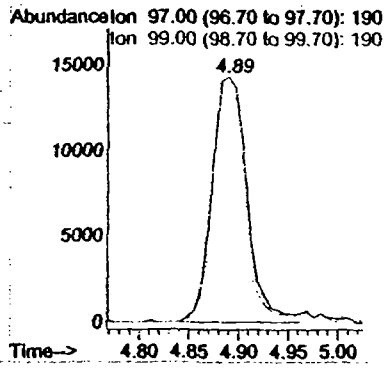




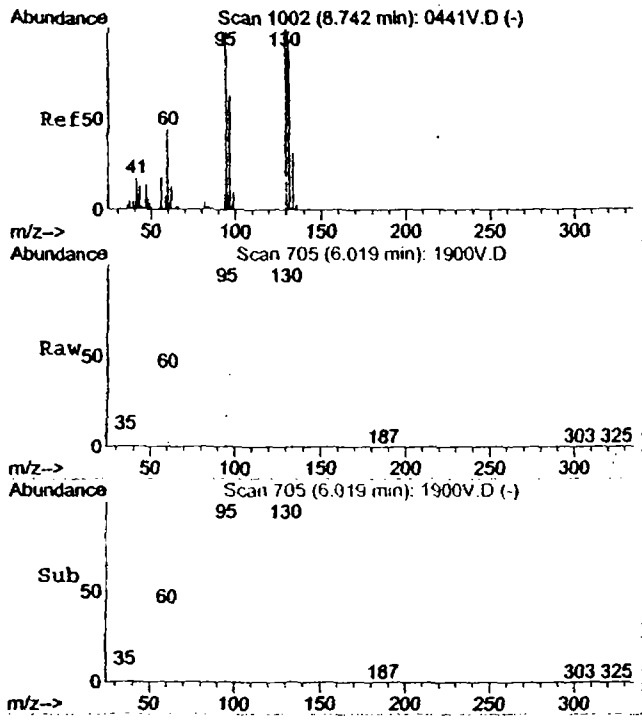
#20
1,1,1-Trichloroethane
Concen: 1.69 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 97 Resp: 35067

Ion	Ratio	Lower	Upper
97	100		
99	63.6	59.9	89.9



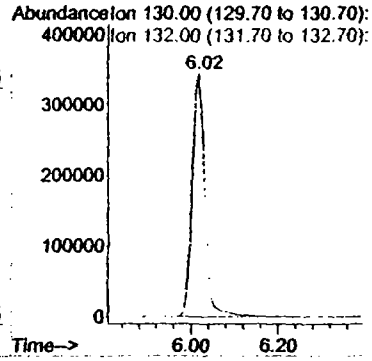
152A

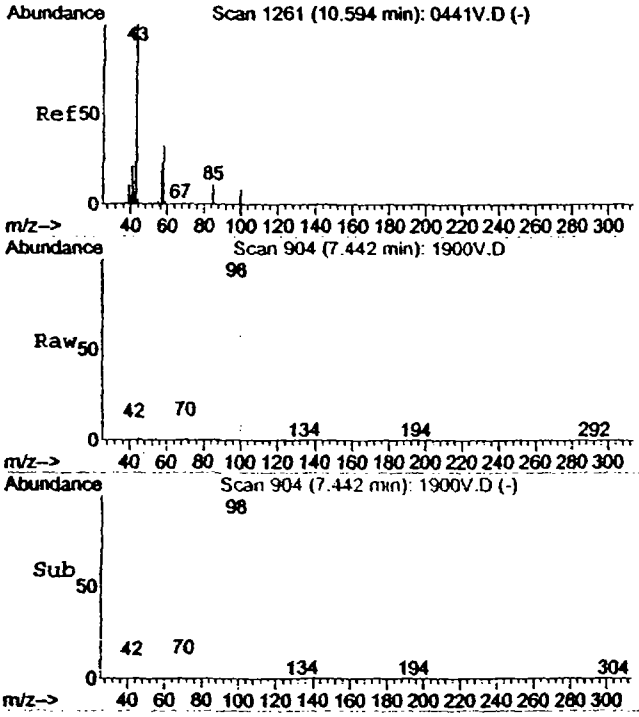


#27
Trichloroethene
Concen: 54.78 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion:130 Resp: 690574

Ion	Ratio	Lower	Upper
130	100		
132	96.5	80.7	121.1

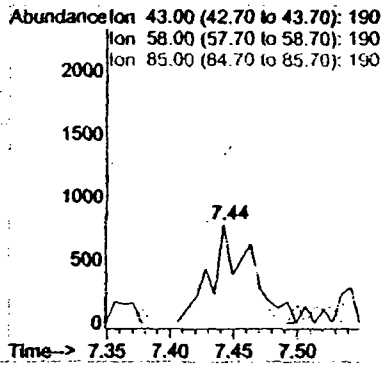




#31
4-Methyl-2-Pentanone
Concen: 0.16 UG/L
RT: 7.44 min Scan# 904
Delta R.T. 0.09 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 43 Resp: 1698

Ion	Ratio	Lower	Upper
43	100		
58	184.8	0.0	0.0#
85	0.0	0.0	0.0



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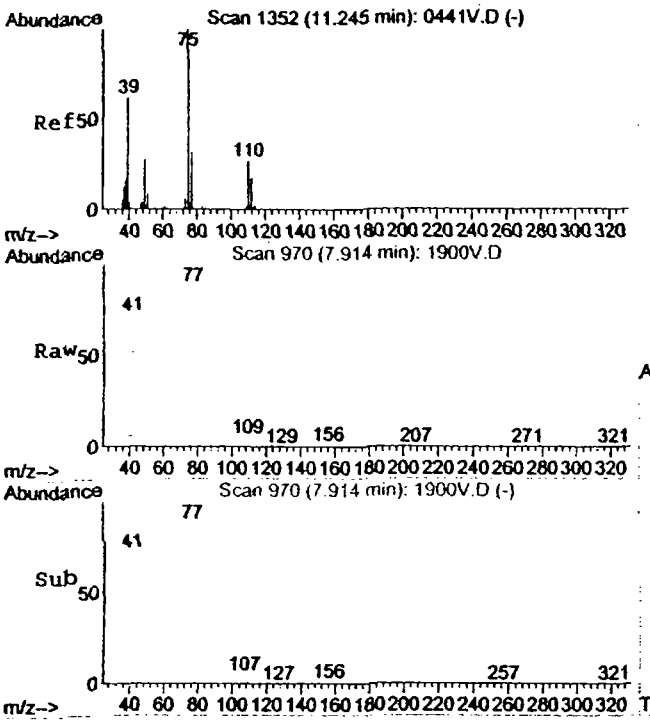
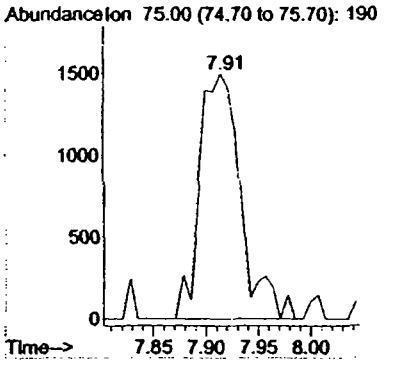


#35
trans-1,3-Dichloropropene
Concen: 0.28 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1900V.D
Acq: 28 Aug 2007 11:32

Tgt Ion: 75 Resp: 4081



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1924V.D Vial: 2
Acq On : 29 Aug 2007 10:43 Operator: REGI
Sample : A780303 LQ4541 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 11:00:03 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration
DataAcq Meth : DWV

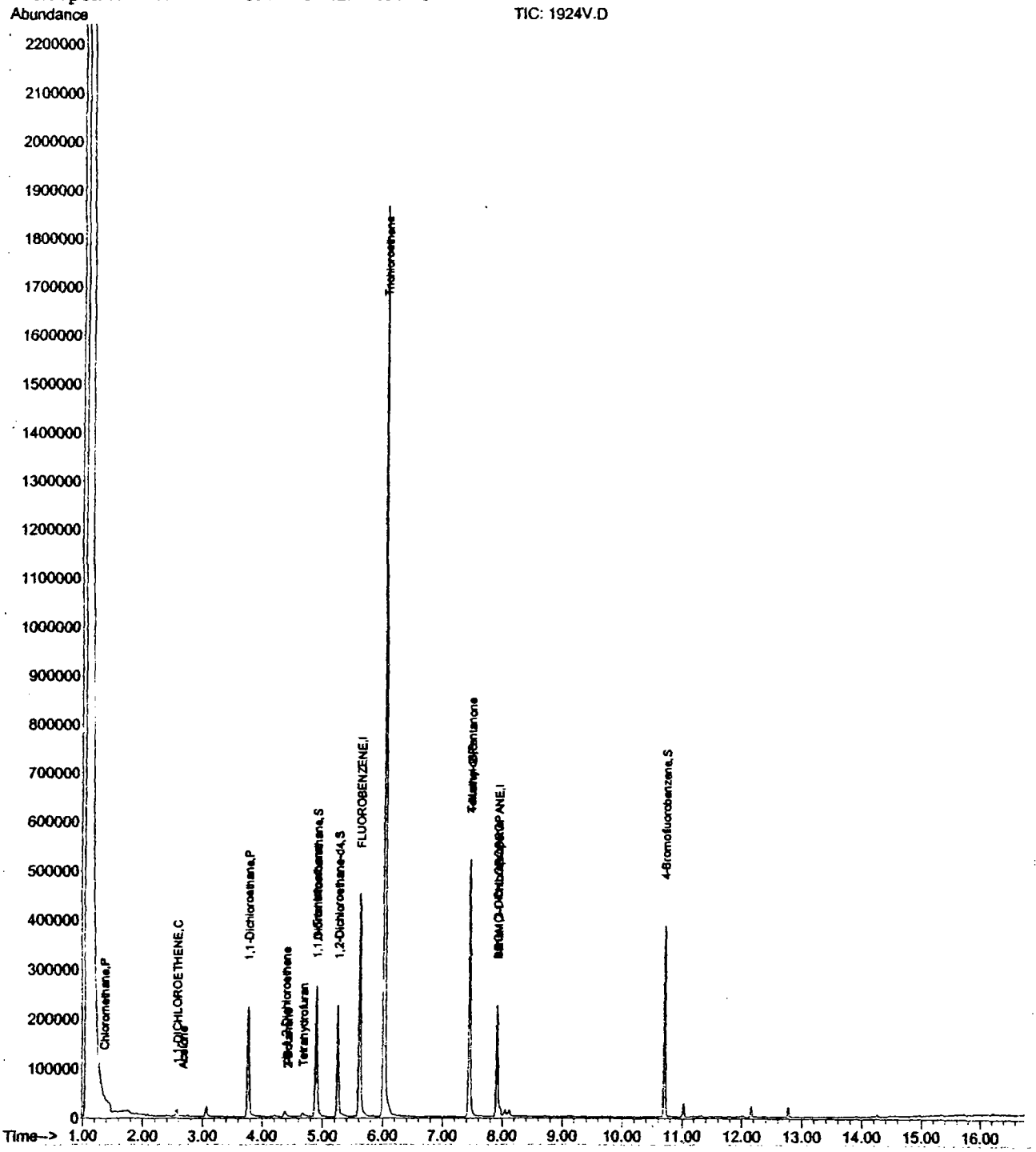
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	444402	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	147383	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	142869	10.77 UG/L	0.00
Spiked Amount 10.000			Recovery	= 107.70%	
23) 1,2-Dichloroethane-d4	5.25	65	173943	11.13 UG/L	0.00
Spiked Amount 10.000			Recovery	= 111.30%	
33) Toluene-d8	7.45	98	381677	9.37 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.70%	
51) 4-Bromofluorobenzene	10.70	95	124162	8.14 UG/L	0.00
Spiked Amount 10.000			Recovery	= 81.40%	
Target Compounds					Qvalue
3) Chloromethane	1.36	50	1973	0.20 UG/L	100
8) Acetone	2.67	43	2263	0.53 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	6447	0.61 UG/L	100
10) Methylene Chloride	3.07	84	11523	Below Cal #	65
13) 1,1-Dichloroethane	3.77	63	239841	11.44 UG/L	100
14) 2-Butanone	4.42	43	643	0.11 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	4740	0.39 UG/L #	46
17) Tetrahydrofuran	4.67	42	4903	1.27 UG/L #	100
20) 1,1,1-Trichloroethane	4.88	97	37506	1.84 UG/L	83
27) Trichloroethene	6.02	130	702807	56.82 UG/L	95
31) 4-Methyl-2-Pentanone	7.44	43	1518	0.14 UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	3496	0.24 UG/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1924V.D Vial: 2
Acq On : 29 Aug 2007 10:43 Operator: REGI
Sample : A780303 LQ4541 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 11:00 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration



R524142 Heritage Environmental Services, LLC A780304

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4542
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1901V.D Date/Time 28Aug07 11:58:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	1.2		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	4.1		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

AW 8/30/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	111			% RECOVERY	
2037-26-5	726	TOLUENE-D8	95			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	83			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm compounds.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1901V.D Vial: 8
Acq On : 28 Aug 2007 11:58 Operator: REGI
Sample : A780304 LQ4542 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 12:14:59 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

TC #328

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	452752	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	152069	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	146942	10.88 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.80%	
23) 1,2-Dichloroethane-d4	5.25	65	177344	11.14 UG/L	0.00
Spiked Amount 10.000			Recovery	= 111.40%	
33) Toluene-d8	7.45	98	394000	9.50 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.00%	
51) 4-Bromofluorobenzene	10.70	95	131252	8.34 UG/L	0.00
Spiked Amount 10.000			Recovery	= 83.40%	
Target Compounds					Qvalue
3) ~~Chloromethane~~	1.37	50	2171	0.21 UG/L	100
8) ~~Acetone~~	2.66	43	2859	0.66 UG/L #	100
9) ~~1,1-DICHLOROETHENE~~	2.57	96	2954	0.27 UG/L	100
10) ~~Methylene Chloride~~	3.06	84	6703	Below Cal #	61
13) 1,1-Dichloroethane 4.1	3.77	63	87002	4.07 UG/L	100
14) ~~2-Butanone~~	4.45	43	1159	0.20 UG/L #	100
15) ~~cis-1,2-Dichloroethene~~	4.37	96	4309	0.35 UG/L #	59
17) ~~Tetrahydrofuran~~	4.67	42	5770	1.47 UG/L #	100
27) Trichloroethene 1.2	6.02	130	15267	1.21 UG/L	95
31) ~~4-Methyl-2-Pentanone~~	7.45	43	1859	0.17 UG/L #	100
35) ~~trans-1,3-Dichloropropene~~	7.91	75	3604	0.25 UG/L	100

NO TICs

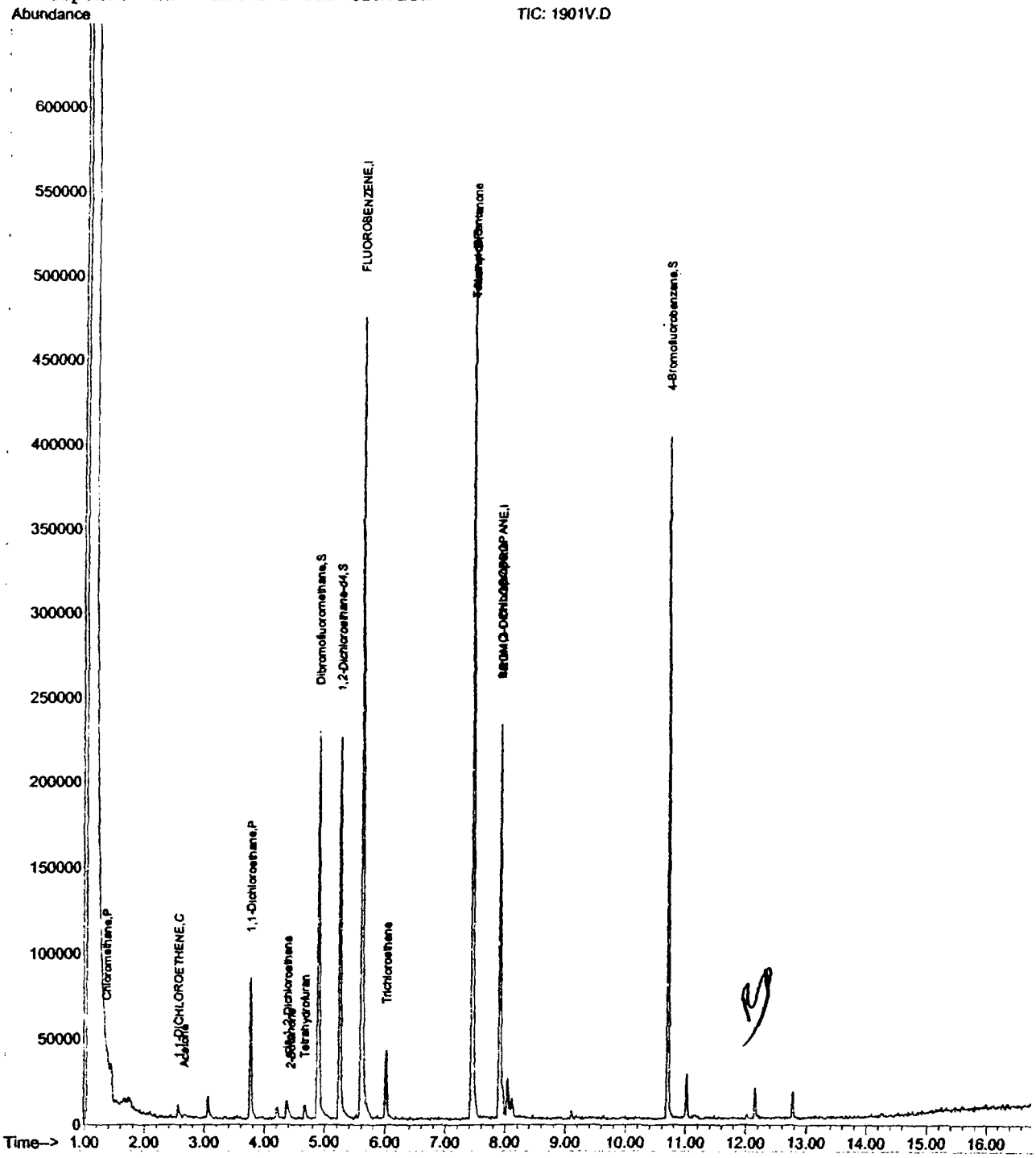
(#) = qualifier out of range (m) = manual integration
1901V.D DWV.M Tue Aug 28 12:15:01 2007

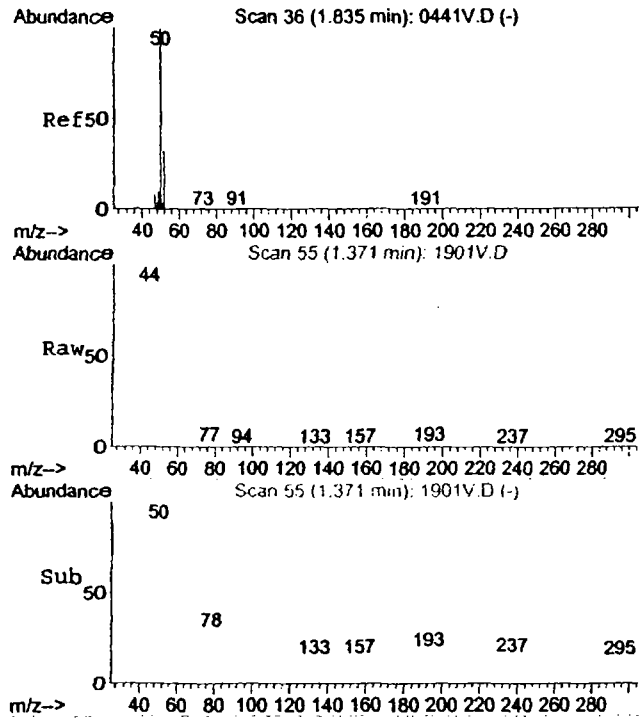
160

Quantification Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1901V.D Vial: 8
Acq On : 28 Aug 2007 11:58 Operator: REGI
Sample : A780304 LQ4542 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 12:14 2007 Quant Results File: DWV.RES

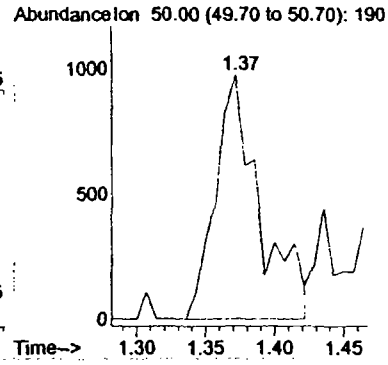
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

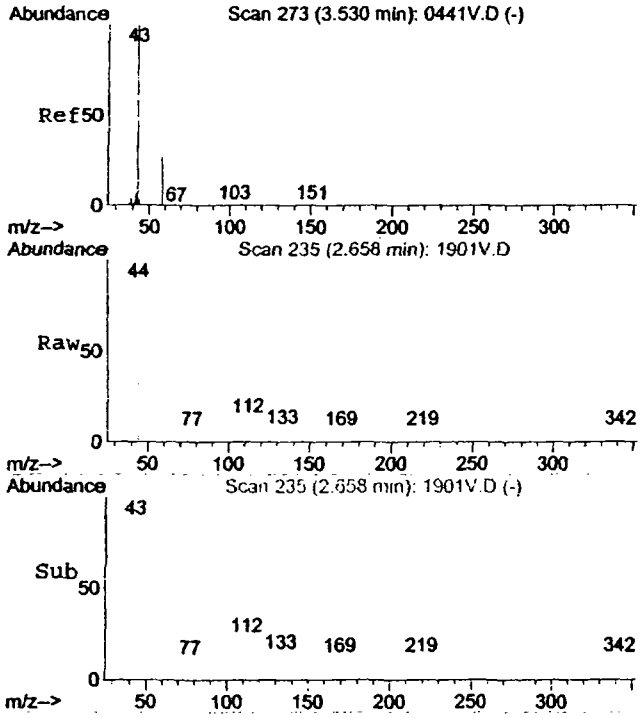




#3
Chloromethane
Concen: 0.21 UG/L
RT: 1.37 min Scan# 55
Delta R.T. 0.00 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 50 Resp: 2171

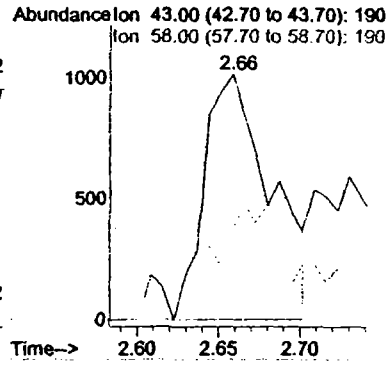


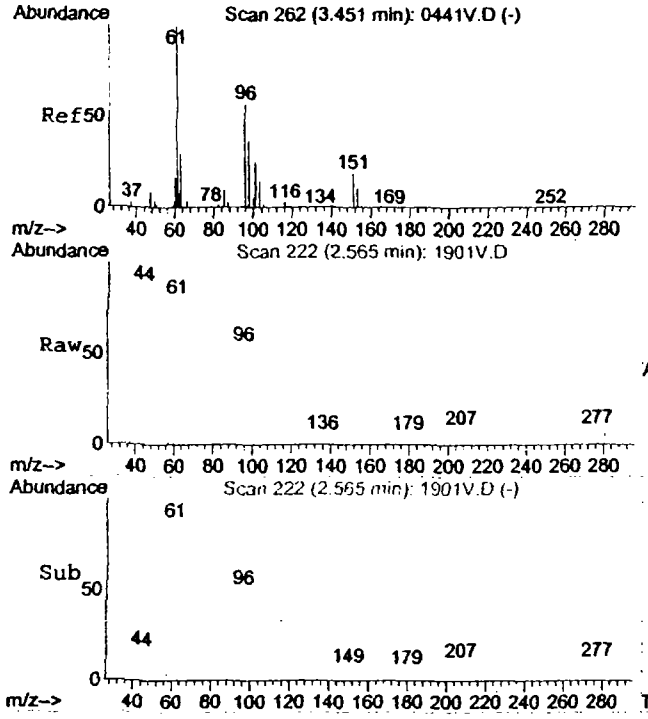


#8
Acetone
Concen: 0.66 UG/L
RT: 2.66 min Scan# 235
Delta R.T. -0.01 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 43 Resp: 2859

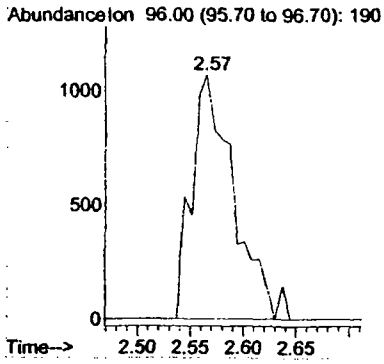
Ion	Ratio	Lower	Upper
43	100		
58	43.8	0.0	0.0#

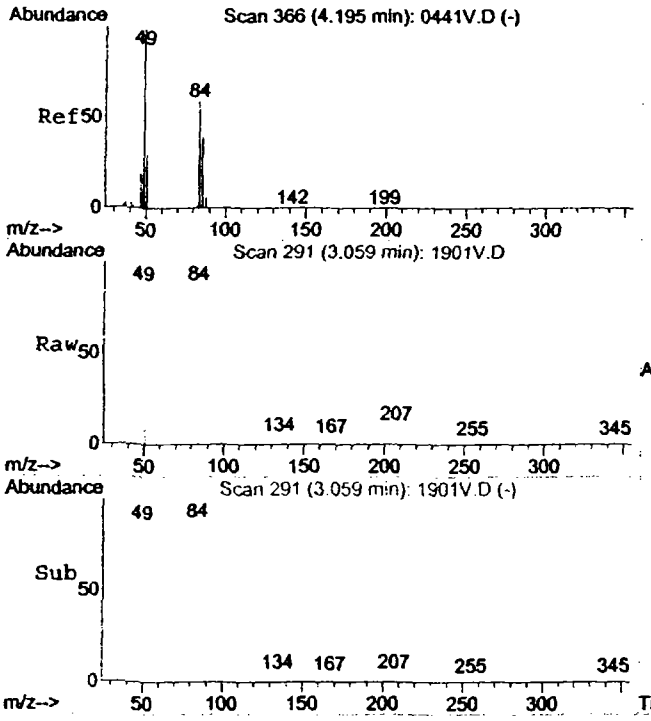




#9
1,1-DICHLOROETHENE
Concen: 0.27 UG/L
RT: 2.57 min Scan# 222
Delta R.T. 0.00 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 96 Resp: 2954

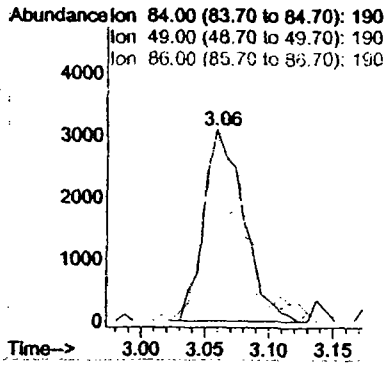


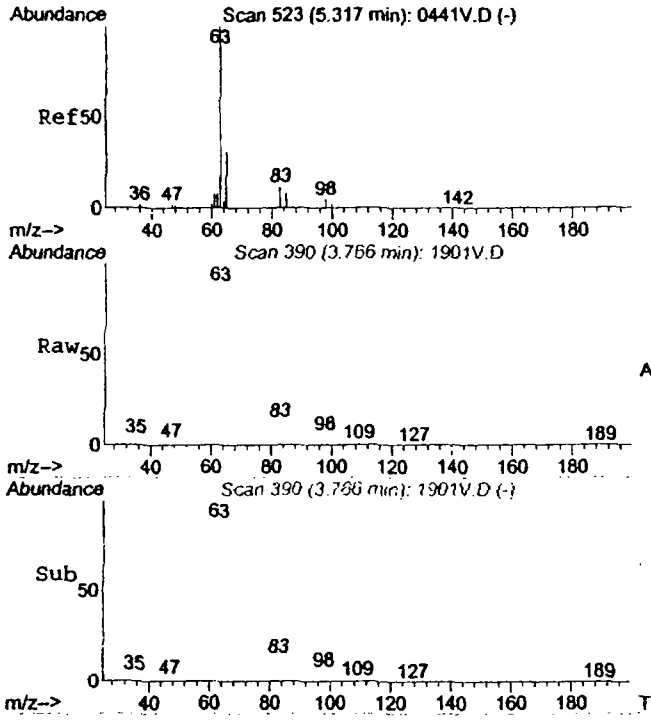


#10
Methylene Chloride
Concen: Below Cal
RT: 3.06 min Scan# 291
Delta R.T. -0.01 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 84 Resp: 6703

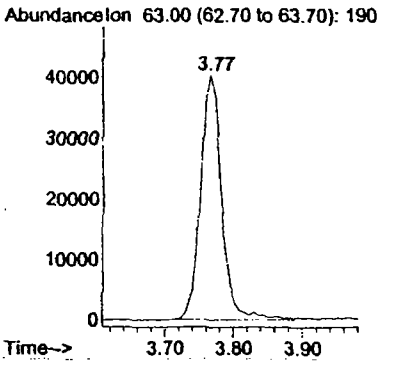
Ion	Ratio	Lower	Upper
84	100		
49	116.8	150.7	226.1#
86	69.0	50.5	75.7

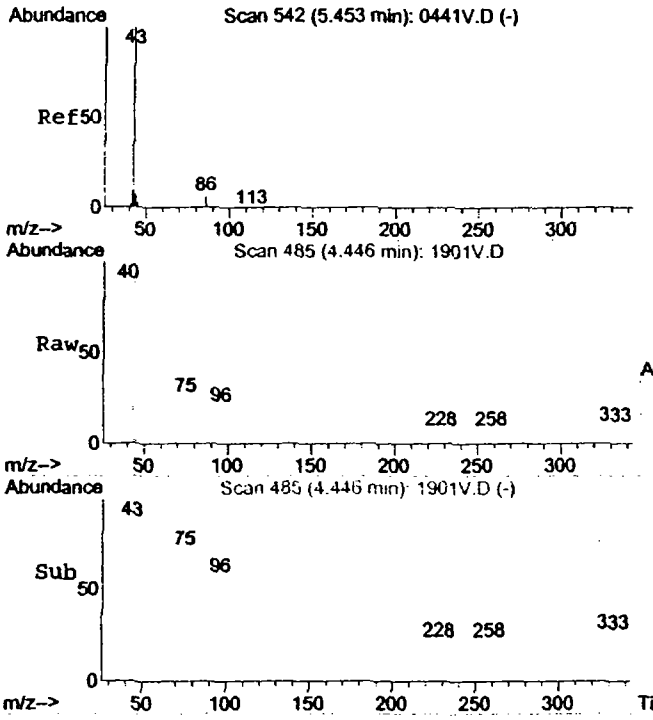




#13
1,1-Dichloroethane
Concen: 4.07 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 63 Resp: 87002

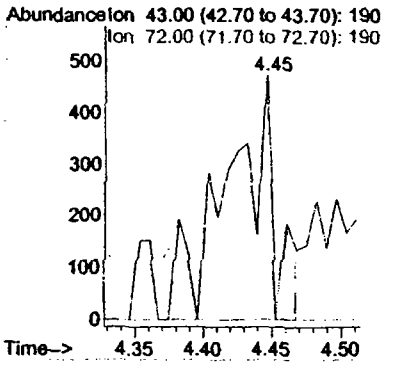


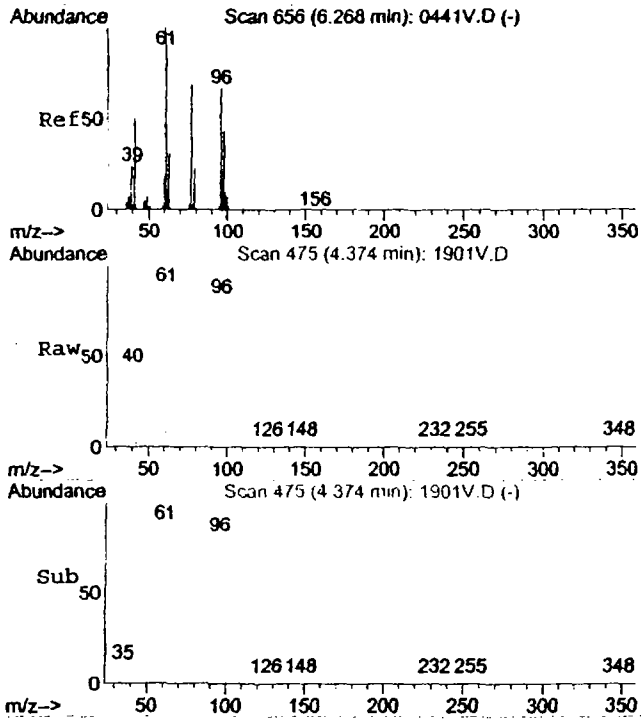


#14
2-Butanone
Concen: 0.20 UG/L
RT: 4.45 min Scan# 485
Delta R.T. 0.03 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 43 Resp: 1159

Ion	Ratio	Lower	Upper
43	100		
72	10.2	0.0	0.0#

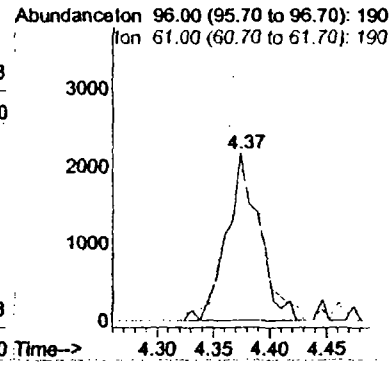


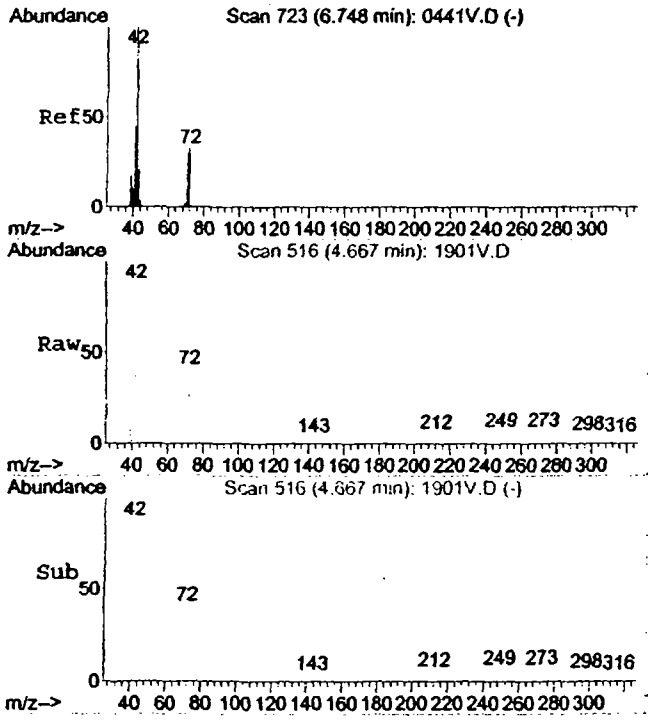


#15
cis-1,2-Dichloroethene
Concen: 0.35 UG/L
RT: 4.37 min Scan# 475
Delta R.T. 0.00 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 96 Resp: 4309

Ion	Ratio	Lower	Upper
96	100		
61	134.6	156.7	235.1#

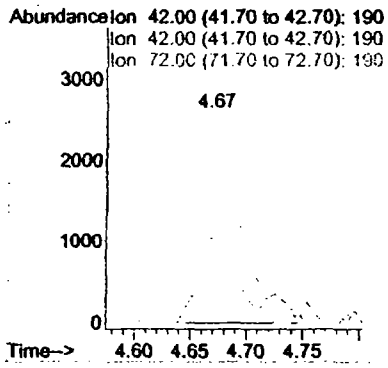


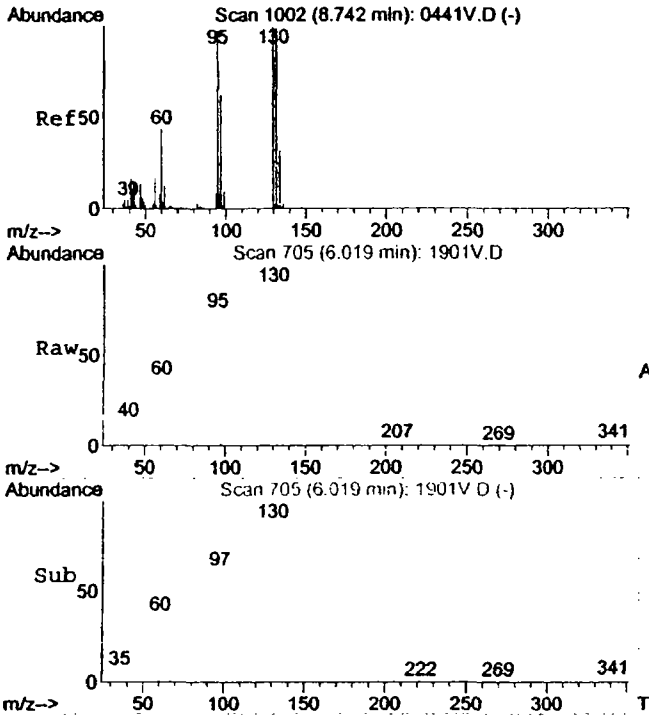


#17
Tetrahydrofuran
Concen: 1.47 UG/L
RT: 4.67 min Scan# 516
Delta R.T. -0.01 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 42 Resp: 5770

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	45.4	0.0	0.0#

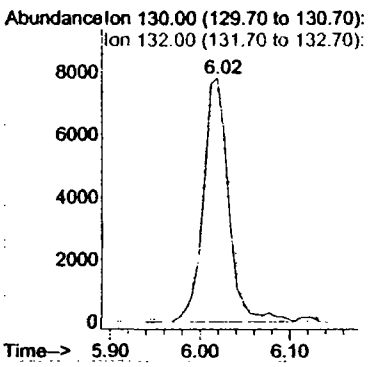


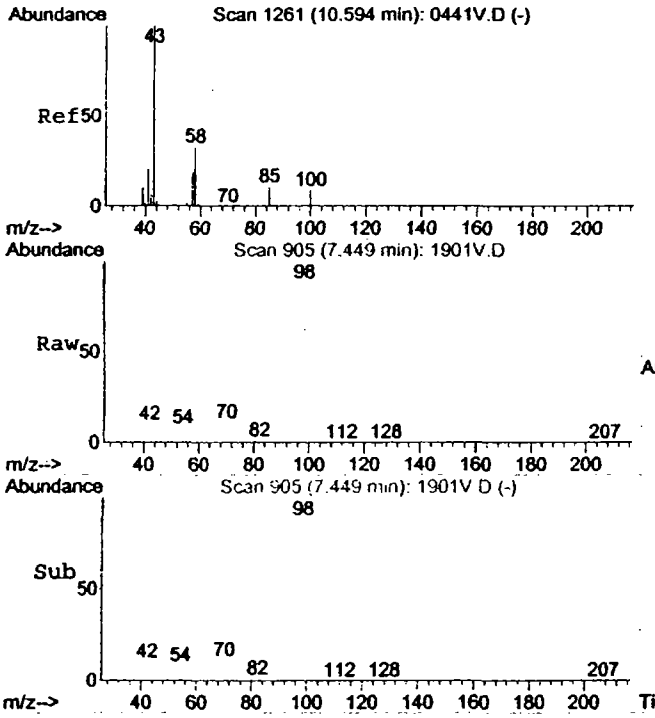


#27
Trichloroethene
Concen: 1.21 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion:130 Resp: 15267

Ion	Ratio	Lower	Upper
130	100		
132	95.9	80.7	121.1

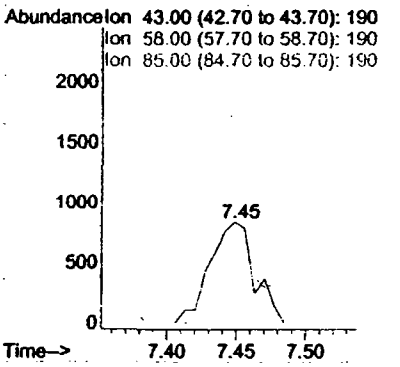


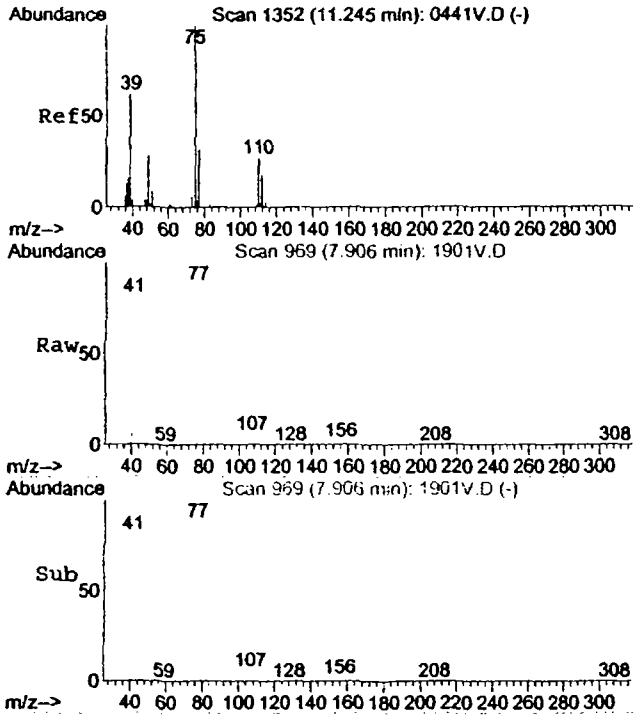


#31
4-Methyl-2-Pentanone
Concen: 0.17 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 43 Resp: 1859

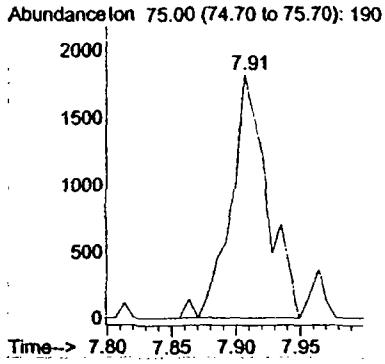
Ion	Ratio	Lower	Upper
43	100		
58	178.8	0.0	0.0#
85	0.0	0.0	0.0





#35
trans-1,3-Dichloropropene
Concen: 0.25 UG/L
RT: 7.91 min Scan# 969
Delta R.T. 0.07 min
Lab File: 1901V.D
Acq: 28 Aug 2007 11:58

Tgt Ion: 75 Resp: 3604



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1925V.D Vial: 3
Acq On : 29 Aug 2007 11:08 Operator: REGI
Sample : A780304 LQ4542 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 11:25:46 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration
DataAcq Meth : DWV

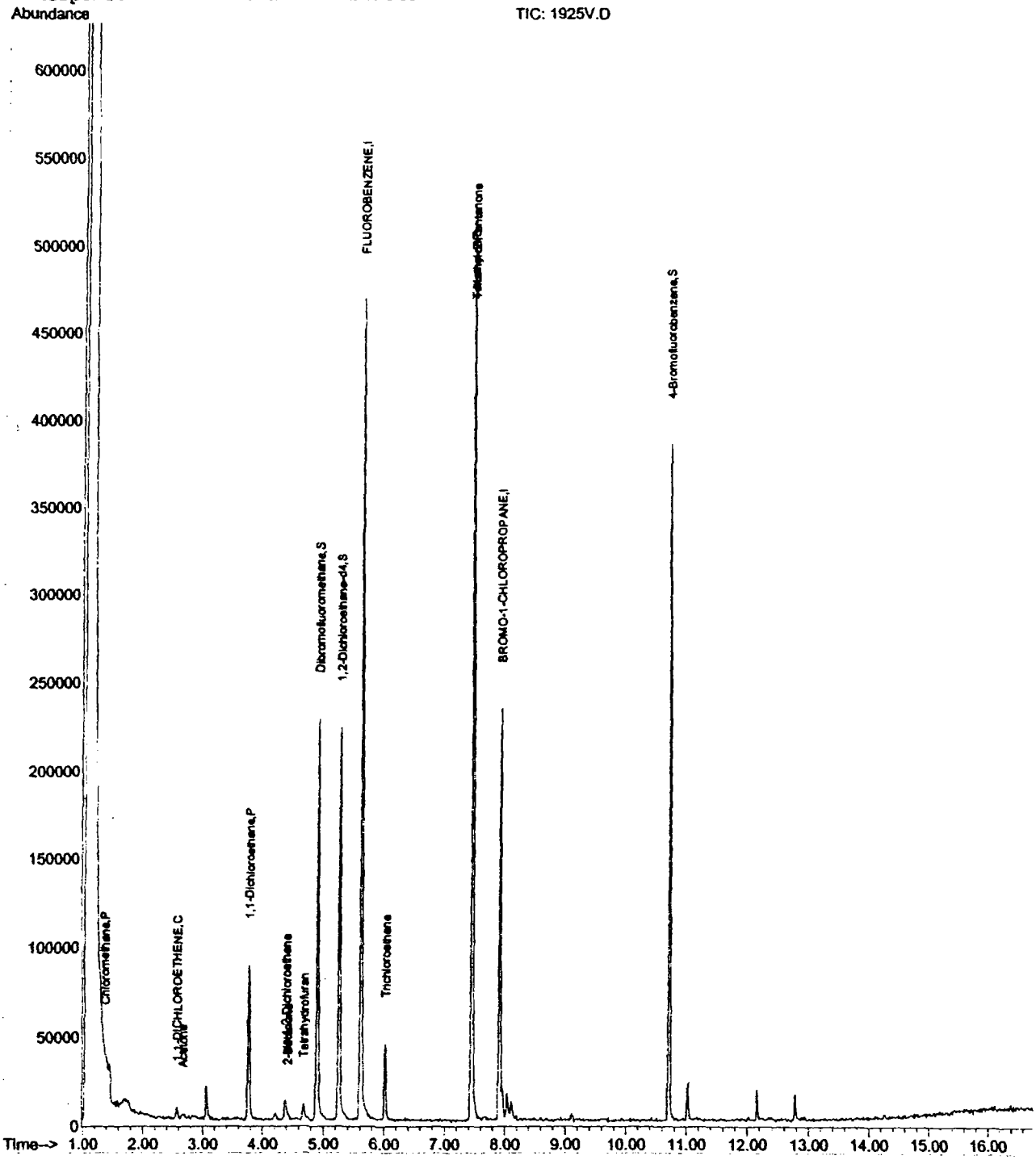
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	444292	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	149914	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	143902	10.85 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.50%	
23) 1,2-Dichloroethane-d4	5.25	65	172780	11.06 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.60%	
33) Toluene-d8	7.45	98	382238	9.39 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.90%	
51) 4-Bromofluorobenzene	10.70	95	128168	8.26 UG/L	0.00
Spiked Amount 10.000			Recovery	= 82.60%	
Target Compounds					Qvalue
3) Chloromethane	1.37	50	3682	0.37 UG/L	100
8) Acetone	2.66	43	7342	1.72 UG/L #	100
9) 1,1-DICHLOROETHENE	2.56	96	3307	0.31 UG/L	100
10) Methylene Chloride	3.07	84	10152	Below Cal #	65
13) 1,1-Dichloroethane	3.77	63	91562	4.37 UG/L	100
14) 2-Butanone	4.42	43	2229	0.39 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	4714	0.39 UG/L #	45
17) Tetrahydrofuran	4.67	42	6018	1.56 UG/L #	100
27) Trichloroethene	6.02	130	15873	1.28 UG/L	94
31) 4-Methyl-2-Pentanone	7.45	43	1498	0.14 UG/L #	100

(#) = qualifier out of range (m) = manual integration
1925V.D DWV.M Wed Aug 29 11:25:48 2007

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1925V.D Vial: 3
Acq On : 29 Aug 2007 11:08 Operator: REGI
Sample : A780304 LQ4542 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 11:25 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration



R524142 Heritage Environmental Services, LLC A780305

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4543
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1902V.D Date/Time 28Aug07 12:24:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

HW 8/30/07

Heritage Environmental Services, LLC

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	110			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	84			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* *See Note for Parameter*

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1902V.D
Acq On : 28 Aug 2007 12:24
Sample : A780305 LQ4543
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 28 12:39:28 2007

Vial: 9
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	449970	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	149337	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	146893	10.94 UG/L	0.00
Spiked Amount 10.000			Recovery	= 109.40%	
23) 1,2-Dichloroethane-d4	5.25	65	173462	10.96 UG/L	0.00
Spiked Amount 10.000			Recovery	= 109.60%	
33) Toluene-d8	7.45	98	387373	9.40 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.00%	
51) 4-Bromofluorobenzene	10.71	95	129834	8.40 UG/L	0.00
Spiked Amount 10.000			Recovery	= 84.00%	
Target Compounds					Qvalue
3) Chloromethane	1.38	50	2175	0.21 UG/L	100
8) Acetone	2.67	43	3204	0.74 UG/L #	100
10) Methylene Chloride	3.07	84	6856	Below Cal #	52
14) 2-Butanone	4.42	43	748	0.13 UG/L #	100
17) Tetrahydrofuran	4.67	42	5188	1.33 UG/L #	100
31) 4-Methyl-2-Pentanone	7.45	43	2491	0.23 UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	4005	0.28 UG/L	100

no TICs

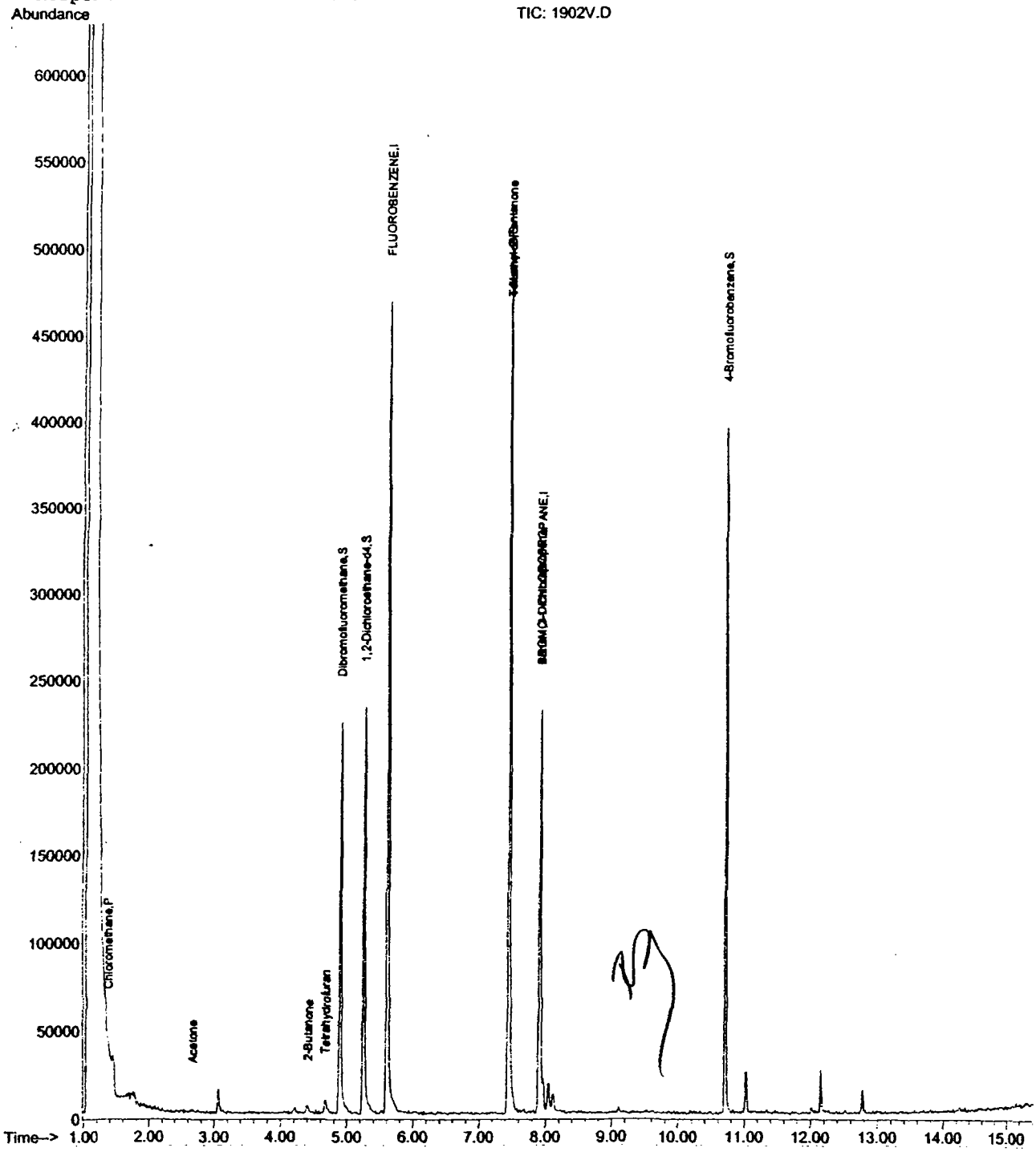
(#) = qualifier out of range (m) = manual integration

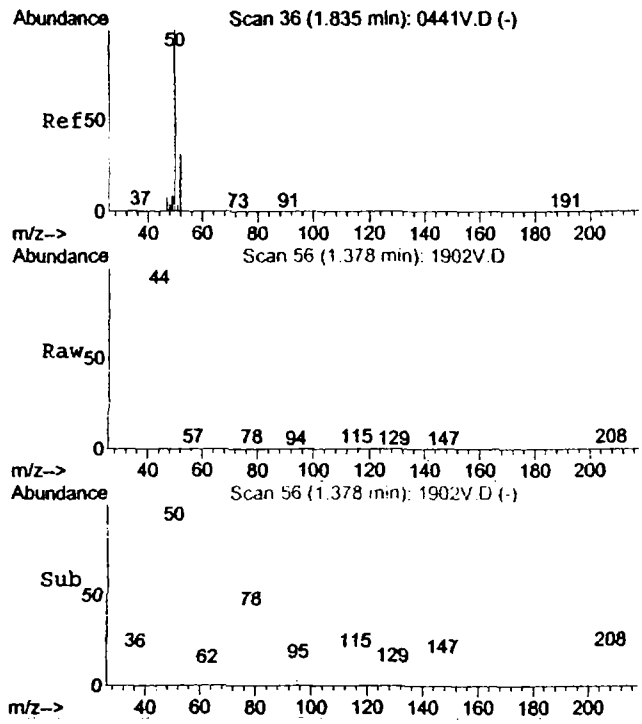
Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1902V.D
Acq On : 28 Aug 2007 12:24
Sample : A780305 LQ4543
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 28 12:39 2007

Vial: 9
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

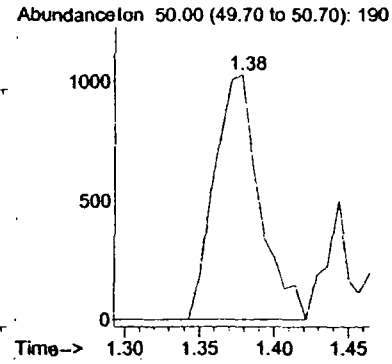
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

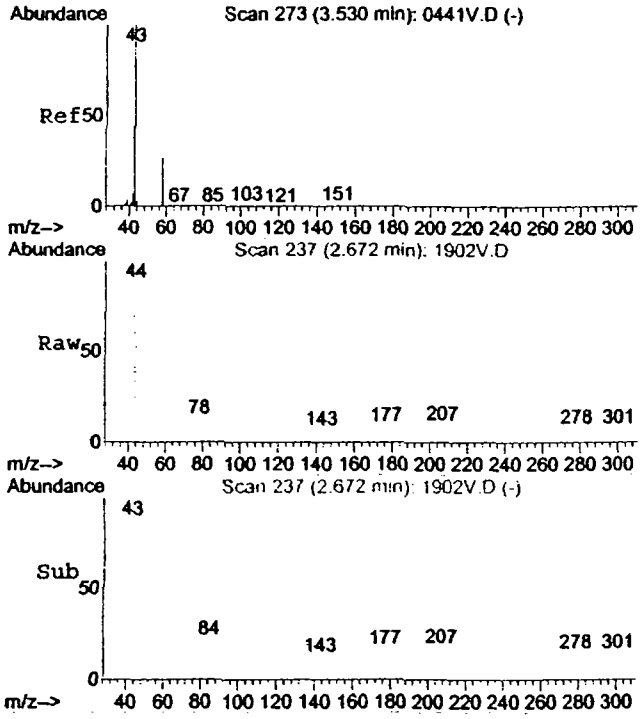




#3
Chloromethane
Concen: 0.21 UG/L
RT: 1.38 min Scan# 56
Delta R.T. 0.01 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 50 Resp: 2175

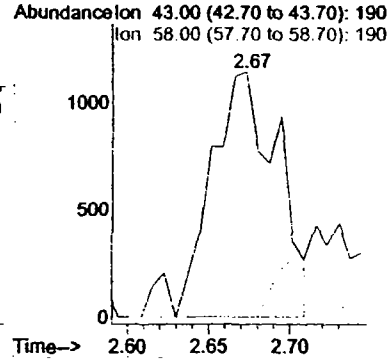


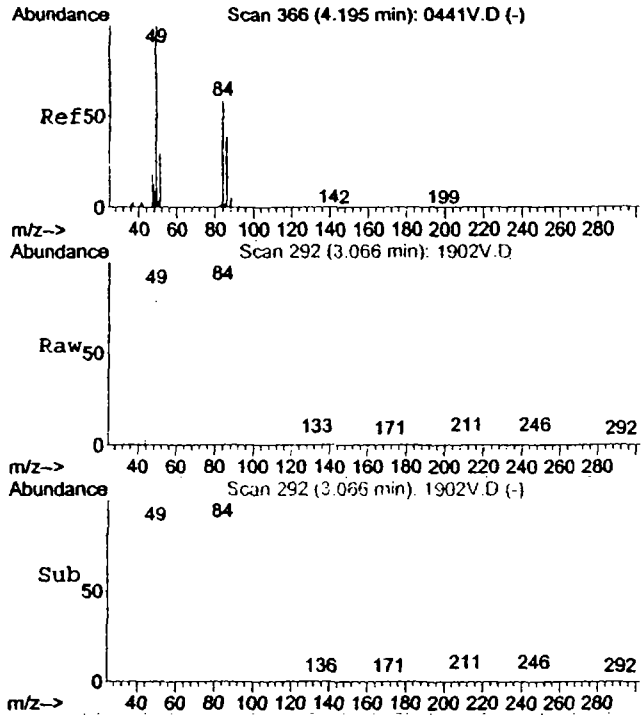


#8
Acetone
Concen: 0.74 UG/L
RT: 2.67 min Scan# 237
Delta R.T. 0.00 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 43 Resp: 3204

Ion	Ratio	Lower	Upper
43	100		
58	19.2	0.0	0.0#

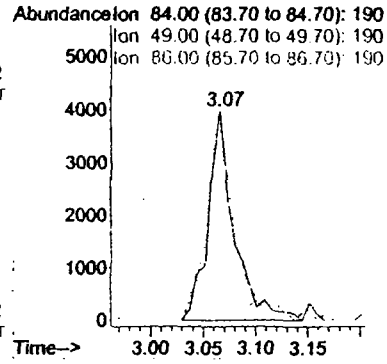


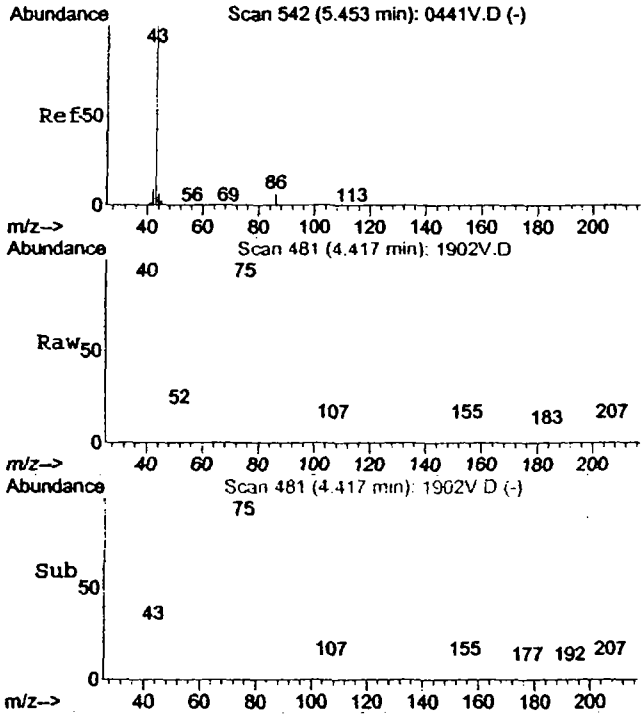


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 84 Resp: 6856

Ion	Ratio	Lower	Upper
84	100		
49	100.6	150.7	226.1#
86	71.6	50.5	75.7

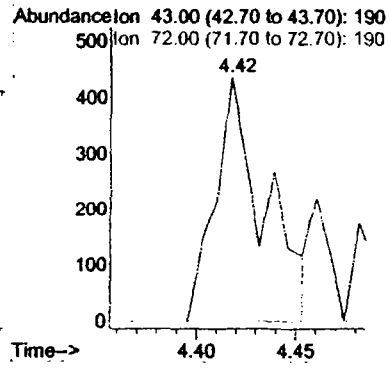


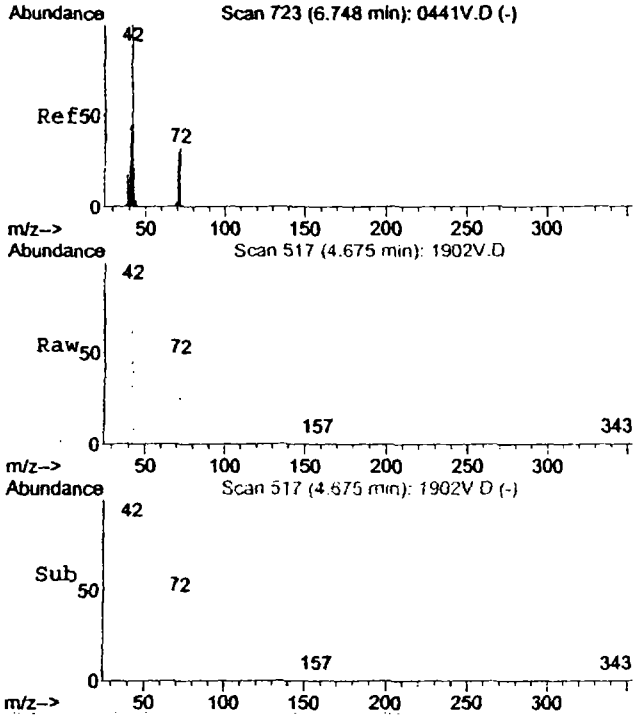


#14
2-Butanone
Concen: 0.13 UG/L
RT: 4.42 min Scan# 481
Delta R.T. 0.00 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 43 Resp: 748

Ion	Ratio	Lower	Upper
43	100		
72	6.4	0.0	0.0#

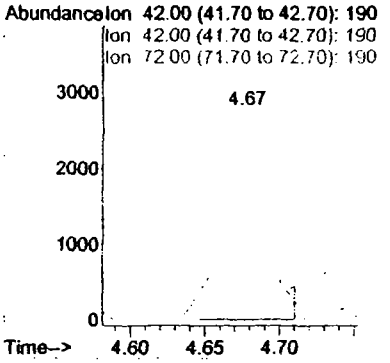


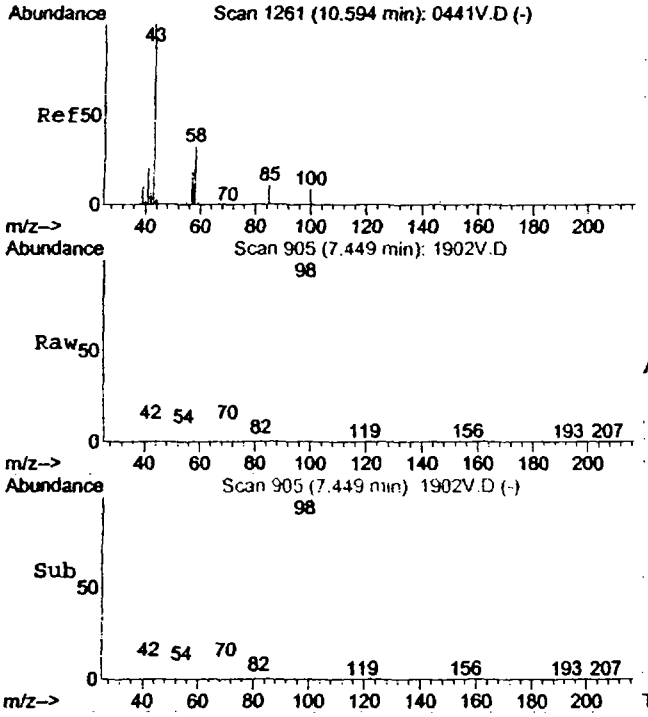


#17
Tetrahydrofuran
Concen: 1.33 UG/L
RT: 4.67 min Scan# 517
Delta R.T. 0.00 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 42 Resp: 5188

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	50.7	0.0	0.0#

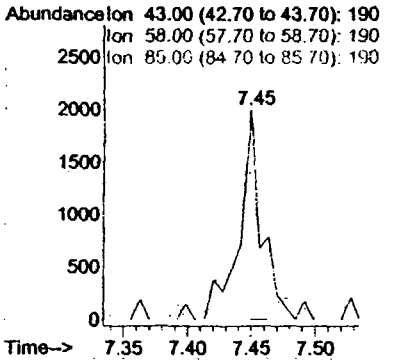


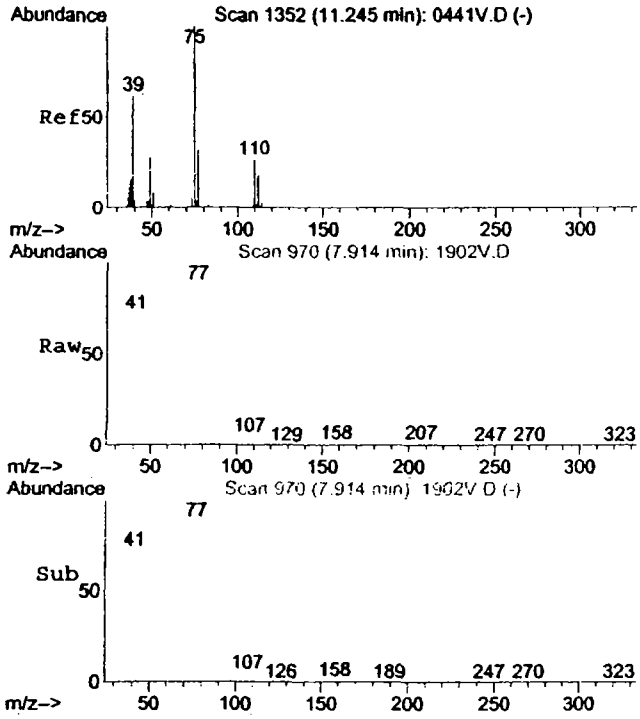


#31
4-Methyl-2-Pentanone
Concen: 0.23 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 43 Resp: 2491

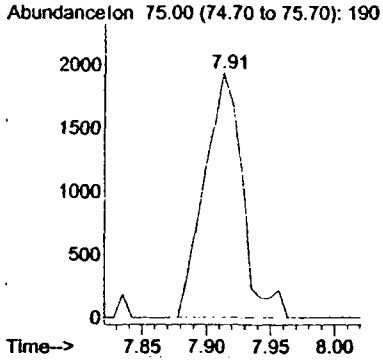
Ion	Ratio	Lower	Upper
43	100		
58	119.7	0.0	0.0#
85	4.2	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.28 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1902V.D
Acq: 28 Aug 2007 12:24

Tgt Ion: 75 Resp: 4005



R524142 Heritage Environmental Services, LLC A780306

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4544
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1903V.D Date/Time 28Aug07 12:49:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE	9.8		0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE	2.5		0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM	26		0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

AW 8/30/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	115			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	80			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

8-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

**********MS/MSD THIS SAMPLE**********

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1903V.D Vial: 10
Acq On : 28 Aug 2007 12:49 Operator: REGI
Sample : A780306 LQ4544 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 13:06:35 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	435069	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	150383	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	141336	10.89 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.90%	
23) 1,2-Dichloroethane-d4	5.25	65	176376	11.53 UG/L	0.00
Spiked Amount 10.000			Recovery	= 115.30%	
33) Toluene-d8	7.45	98	372566	9.35 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.50%	
51) 4-Bromofluorobenzene	10.70	95	123747	7.95 UG/L	0.00
Spiked Amount 10.000			Recovery	= 79.50%	
Target Compounds					Qvalue
3) ~~Chloromethane~~	1.36	50	2273	0.23 UG/L	100
8) ~~Acetone~~	2.66	43	6109	1.46 UG/L #	100
10) ~~Methylene Chloride~~	3.07	84	6935	Below Cal #	68
14) ~~2-Butanone~~	4.43	43	2090	0.37 UG/L #	100
16) CHLOROFORM 2u	4.72	83	592123	25.56 UG/L	97
17) ~~Tetrahydrofuran~~	4.68	42	6221	1.65 UG/L #	100
27) ~~Trichloroethene~~	6.02	130	1381	0.11 UG/L	88
29) ~~Br~~omodichloromethane 9.8	6.61	83	157317	9.82 UG/L	95
31) ~~4-Methyl-2-Pent~~anone	7.36	43	2453	0.24 UG/L #	100
42) ~~Dib~~romochloromethane 2.5	8.54	129	32244	2.48 UG/L	100
49) ~~Bromoform~~	10.34	173	1219	0.14 UG/L	100

no RCS

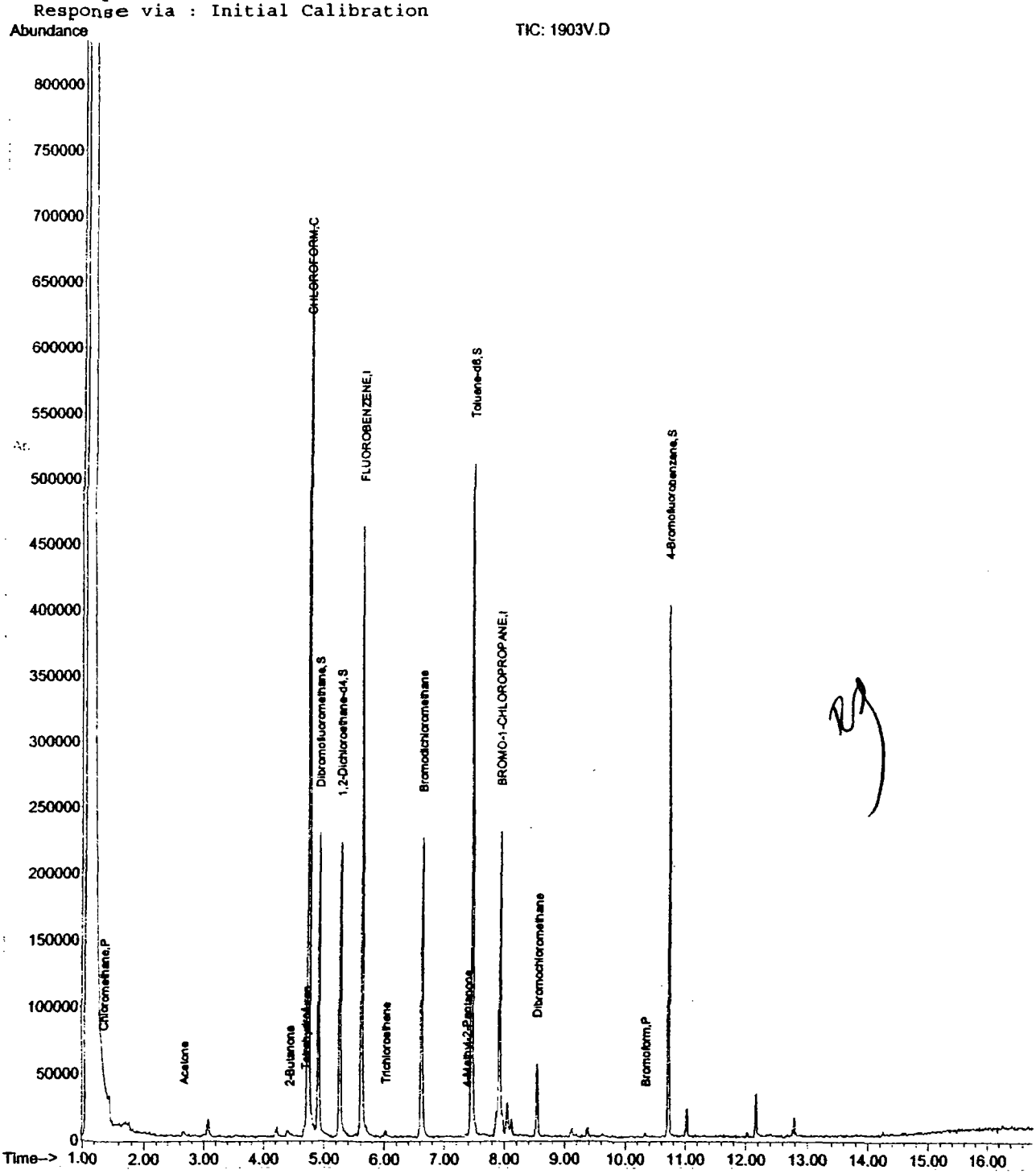
(#) = qualifier out of range (m) = manual integration
1903V.D DWV.M Tue Aug 28 13:06:37 2007

Quantitation Report (Not Reviewed)

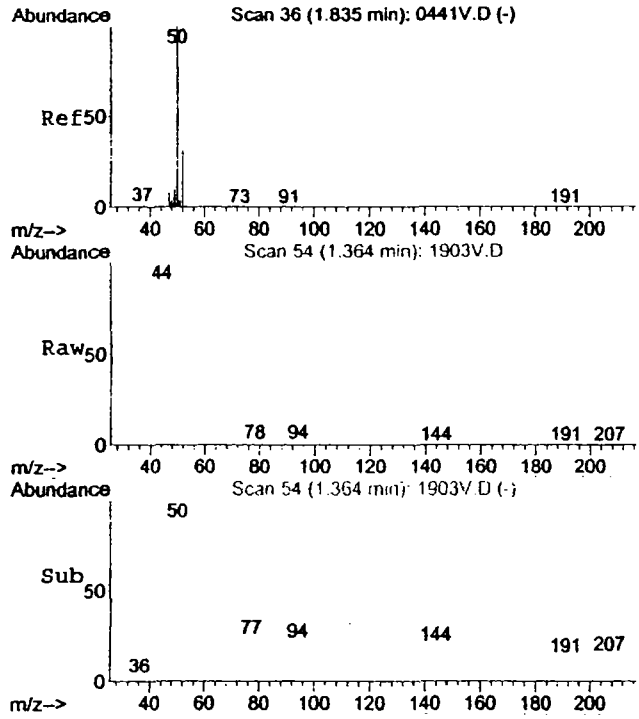
Data File : C:\HPCHEM\DATA\V082807\1903V.D
Acq On : 28 Aug 2007 12:49
Sample : A780306 LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 28 13:06 2007

Vial: 10
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

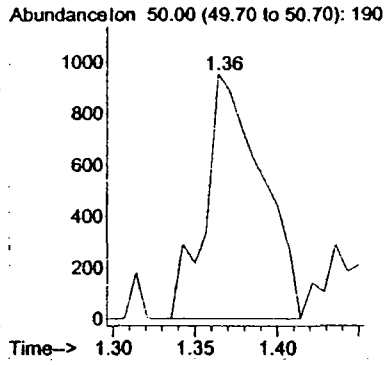


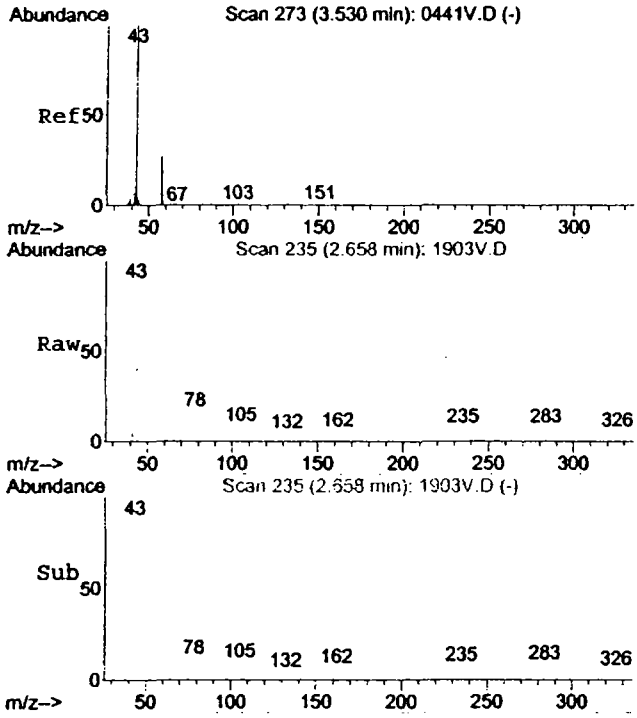
1903V.D DWV.M Tue Aug 28 13:06:39 2007 Page 2



#3
Chloromethane
Concen: 0.23 UG/L
RT: 1.36 min Scan# 54
Delta R.T. -0.01 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 50 Resp: 2273

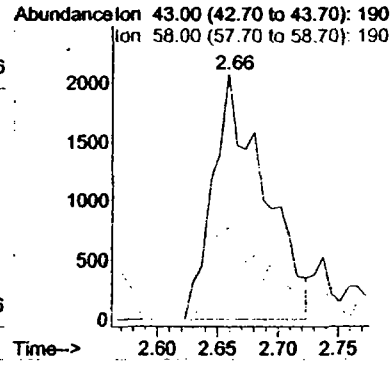


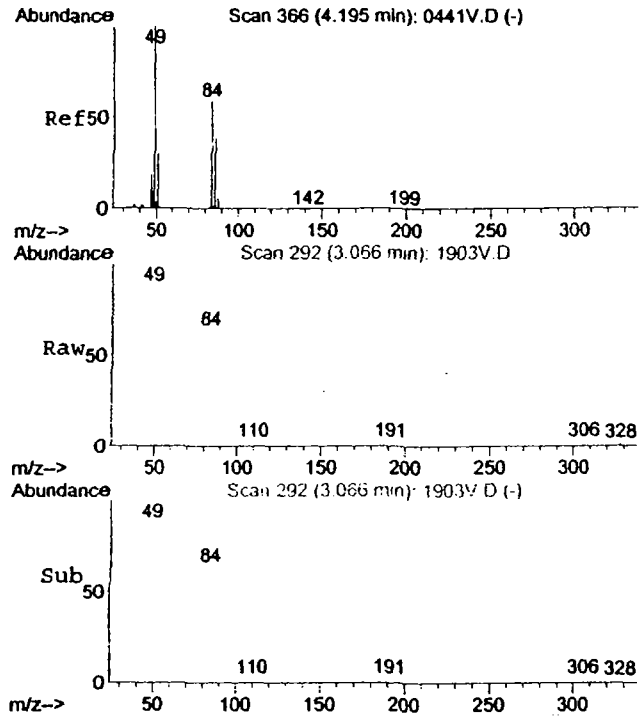


#8
Acetone
Concen: 1.46 UG/L
RT: 2.66 min Scan# 235
Delta R.T. -0.01 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 43 Resp: 6109

Ion	Ratio	Lower	Upper
43	100		
58	43.7	0.0	0.0#

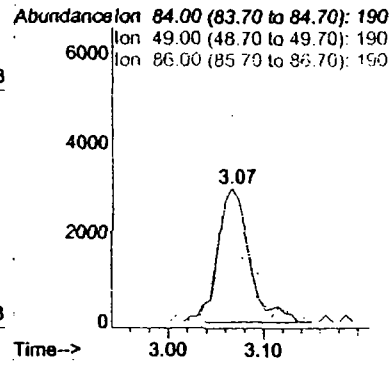


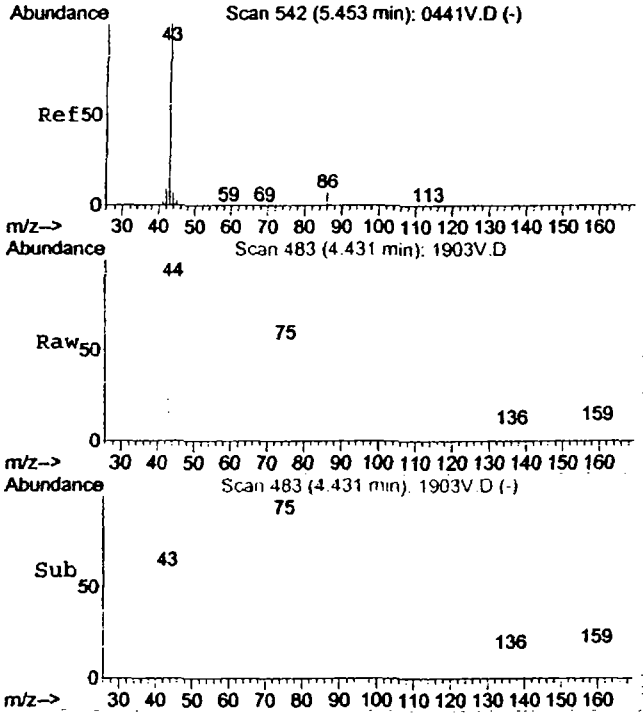


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 84 Resp: 6935

Ion	Ratio	Lower	Upper
84	100		
49	129.7	150.7	226.1#
86	68.5	50.5	75.7

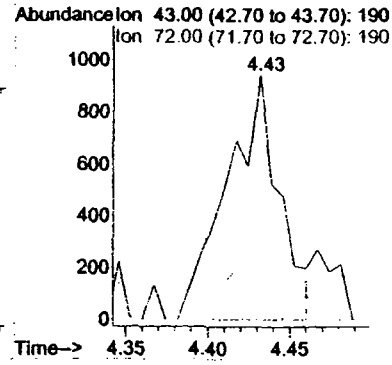


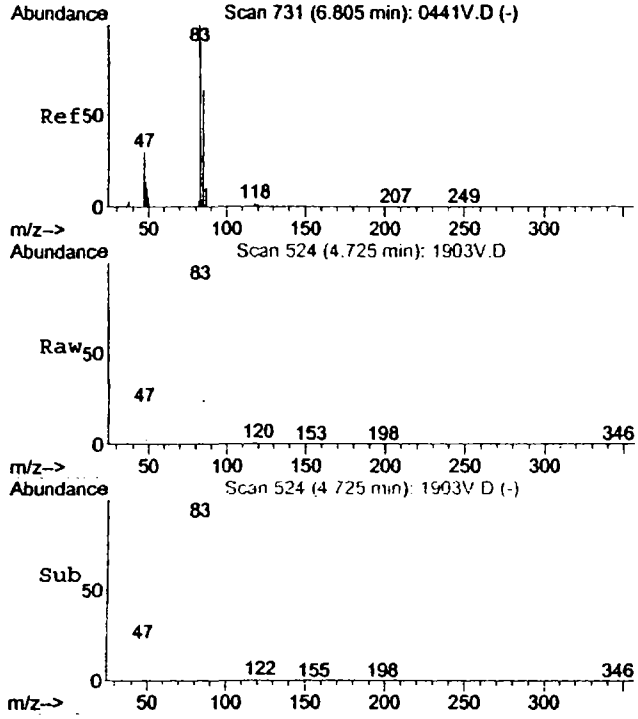


#14
2-Butanone
Concen: 0.37 UG/L
RT: 4.43 min Scan# 483
Delta R.T. 0.01 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 43 Resp: 2090

Ion	Ratio	Lower	Upper
43	100		
72	19.3	0.0	0.0#

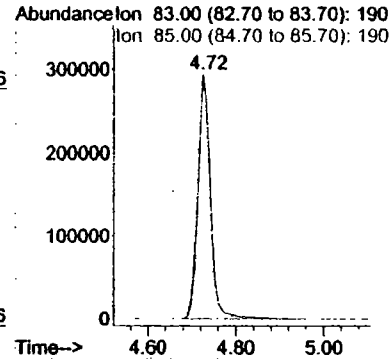


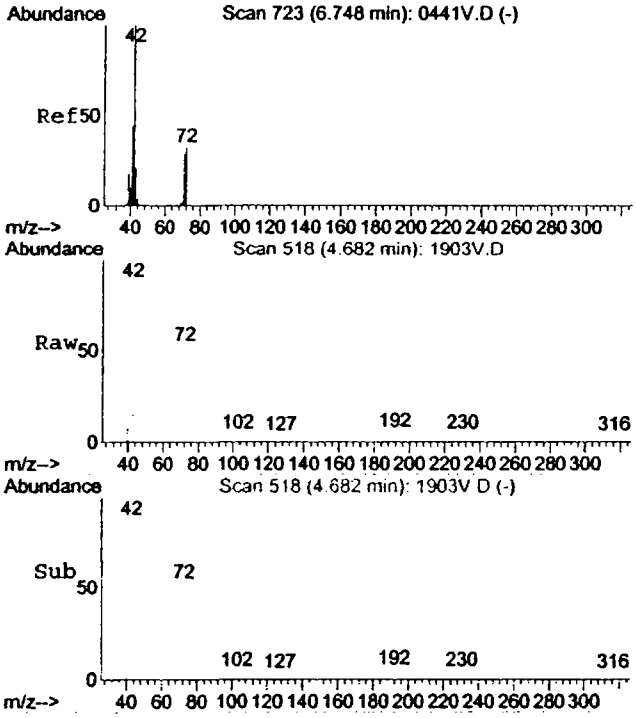


#16
CHLOROFORM
Concen: 25.56 UG/L
RT: 4.72 min Scan# 524
Delta R.T. 0.00 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 83 Resp: 592123

Ion	Ratio	Lower	Upper
83	100		
85	65.6	50.7	76.1

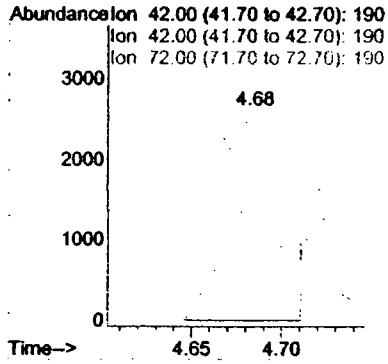


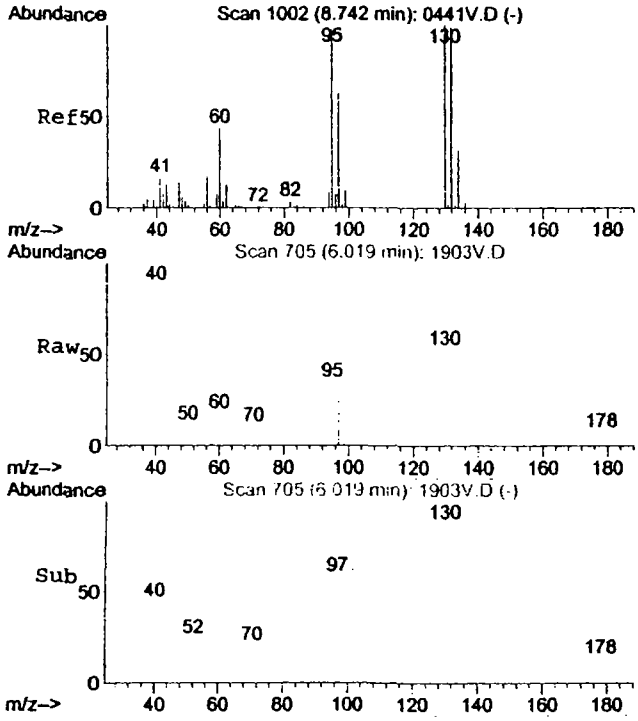


#17
Tetrahydrofuran
Concen: 1.65 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 42 Resp: 6221

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	53.2	0.0	0.0#

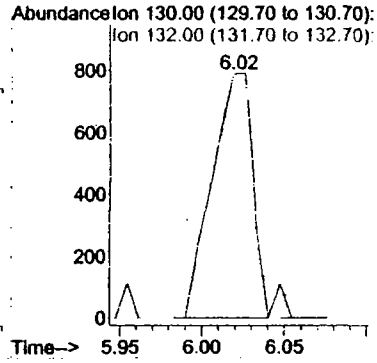


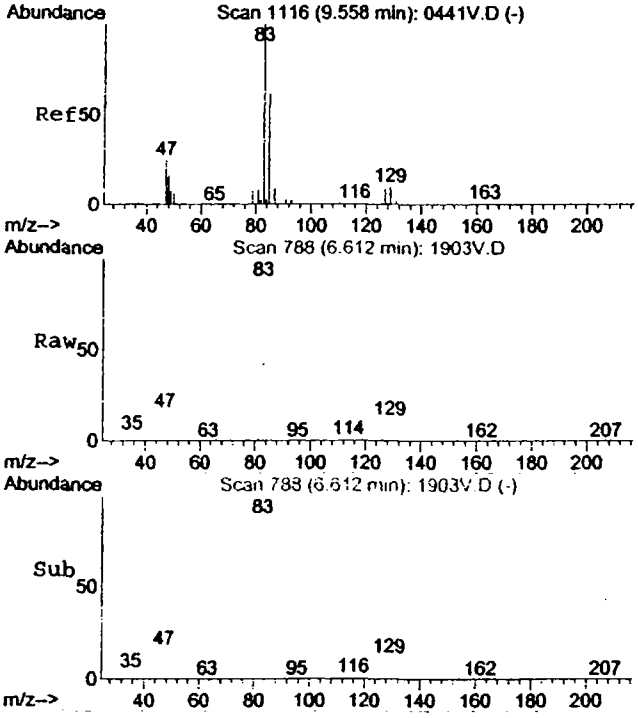


#27
Trichloroethene
Concen: 0.11 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion:130 Resp: 1381

Ion	Ratio	Lower	Upper
130	100		
132	112.7	80.7	121.1

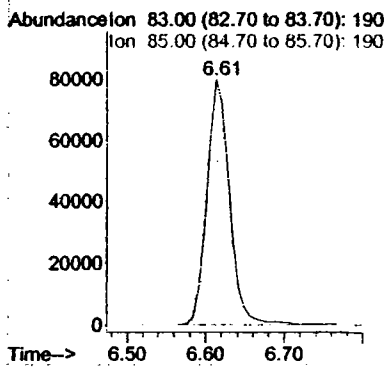


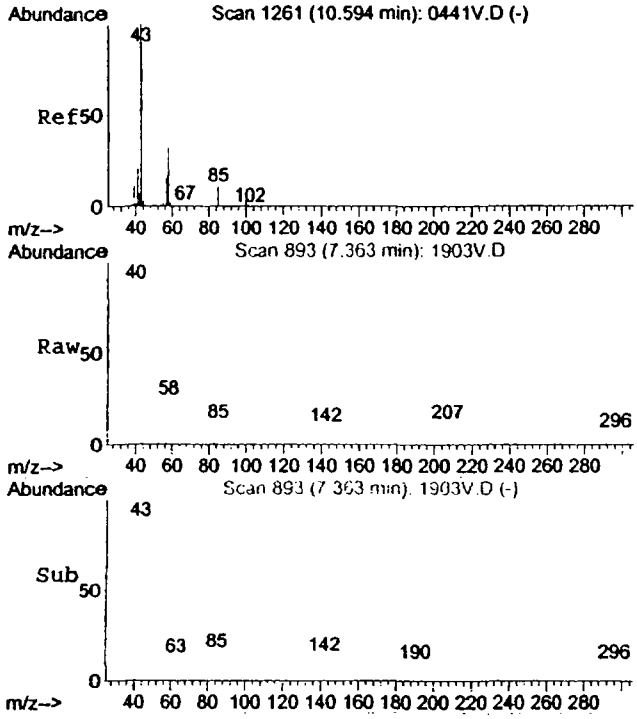


#29
Bromodichloromethane
Concen: 9.82 UG/L
RT: 6.61 min Scan# 788
Delta R.T. 0.00 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 83 Resp: 157317

Ion	Ratio	Lower	Upper
83	100		
85	66.7	50.6	75.8

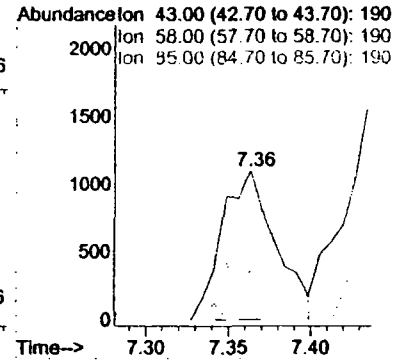


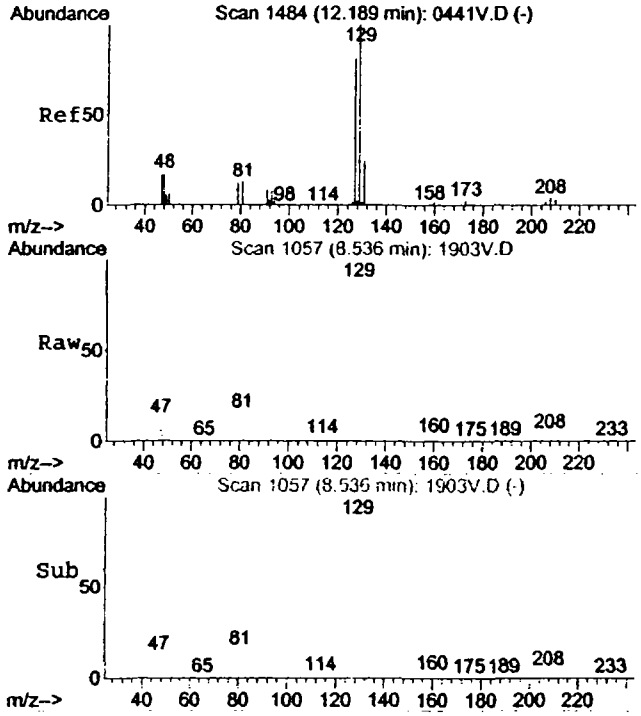


#31
4-Methyl-2-Pentanone
Concen: 0.24 UG/L
RT: 7.36 min Scan# 893
Delta R.T. 0.01 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion: 43 Resp: 2453

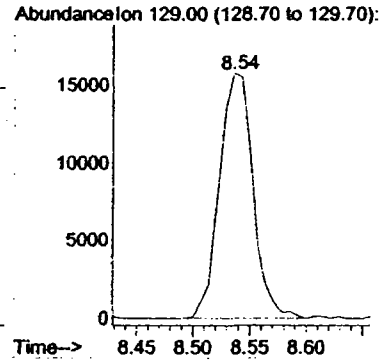
Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	0.0
85	3.1	0.0	0.0#

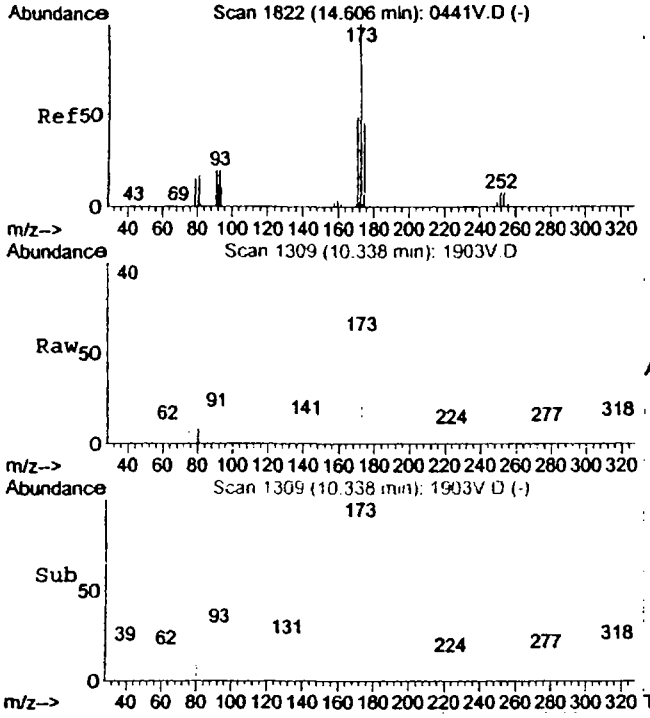




#42
Dibromochloromethane
Concen: 2.48 UG/L
RT: 8.54 min Scan# 1057
Delta R.T. 0.00 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

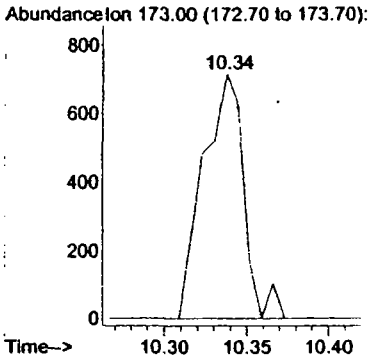
Tgt Ion:129 Resp: 32244





#49
Bromoform
Concen: 0.14 UG/L
RT: 10.34 min Scan# 1309
Delta R.T. 0.00 min
Lab File: 1903V.D
Acq: 28 Aug 2007 12:49

Tgt Ion:173 Resp: 1219



R524142 Heritage Environmental Services, LLC A780307

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4545
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1904V.D Date/Time 28Aug07 13:15:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

AW 8/30/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	111			% RECOVERY	
2037-26-5	726	TOLUENE-D8	95			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	85			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

2-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1904V.D Vial: 11
Acq On : 28 Aug 2007 13:15 Operator: REGI
Sample : A780307 LQ4545 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 13:32:27 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

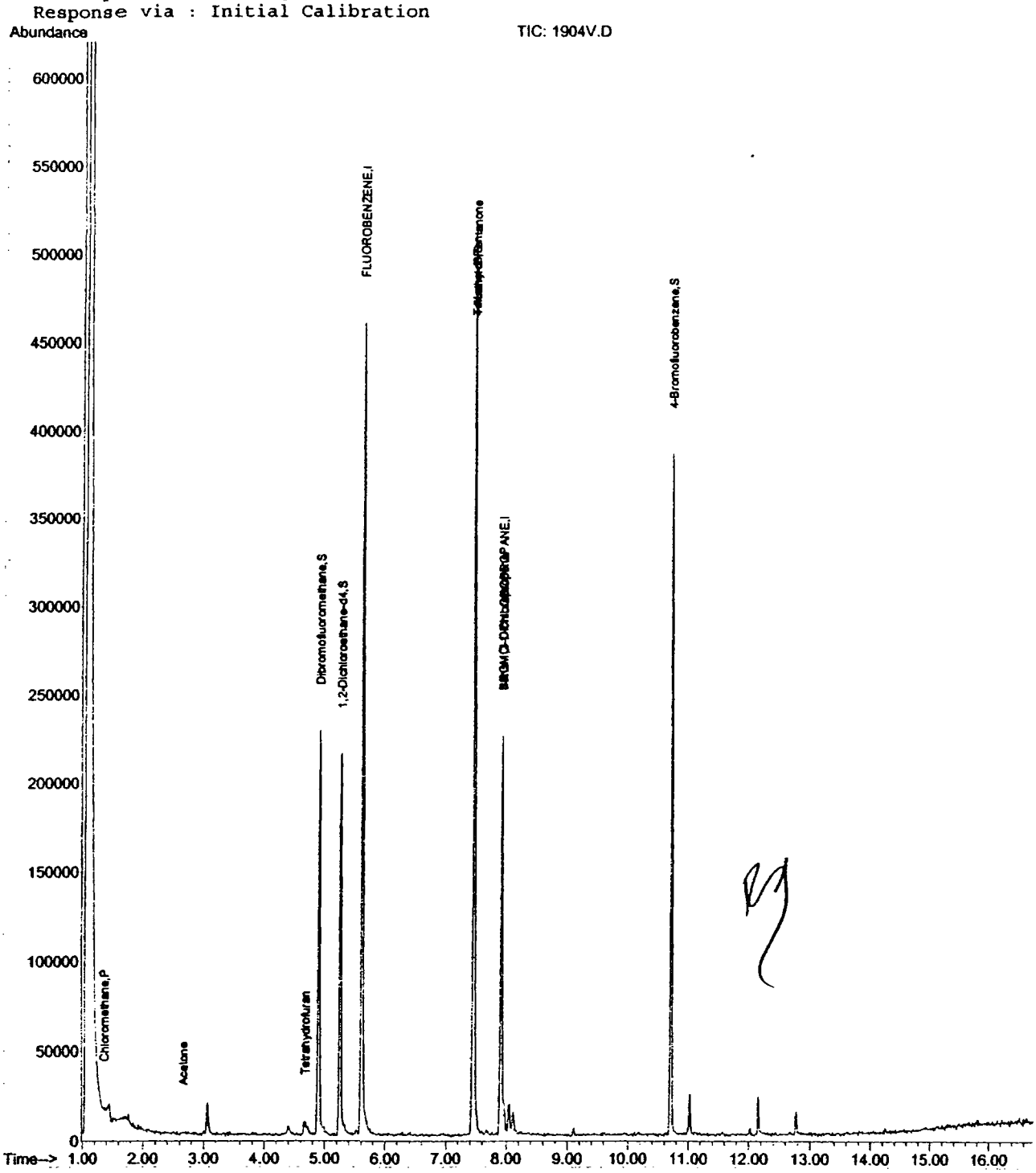
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	438175	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	144685	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	139397	10.66 UG/L	0.00
Spiked Amount 10.000			Recovery	= 106.60%	
23) 1,2-Dichloroethane-d4	5.25	65	170963	11.09 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.90%	
33) Toluene-d8	7.45	98	380421	9.48 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.80%	
51) 4-Bromofluorobenzene	10.70	95	126724	8.47 UG/L	0.00
Spiked Amount 10.000			Recovery	= 84.70%	
Target Compounds					Qvalue
3) Chloromethane	1.36	50	1648	0.17 UG/L	100
8) Acetone	2.67	43	1446	0.34 UG/L #	100
10) Methylene Chloride	3.07	84	9970	Below Cal #	62
17) Tetrahydrofuran	4.68	42	6347	1.67 UG/L #	100
31) 4-Methyl-2-Pentanone	7.45	43	1606	0.15 UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	3753	0.27 UG/L	100

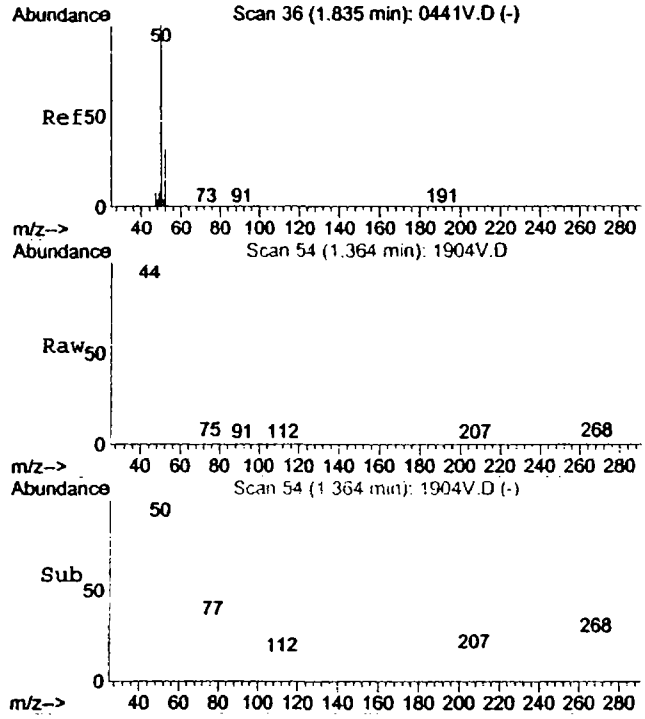
NO TICs

(#) = qualifier out of range (m) = manual integration
1904V.D DWV.M Tue Aug 28 13:32:29 2007

Data File : C:\HPCHEM\DATA\V082807\1904V.D Vial: 11
Acq On : 28 Aug 2007 13:15 Operator: REGI
Sample : A780307 LQ4545 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 13:32 2007 Quant Results File: DWV.RES

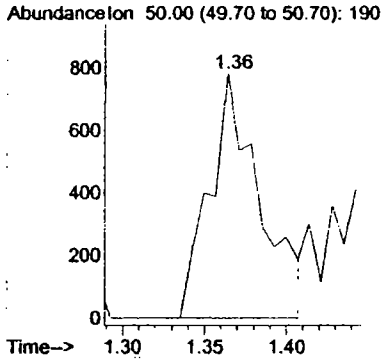
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

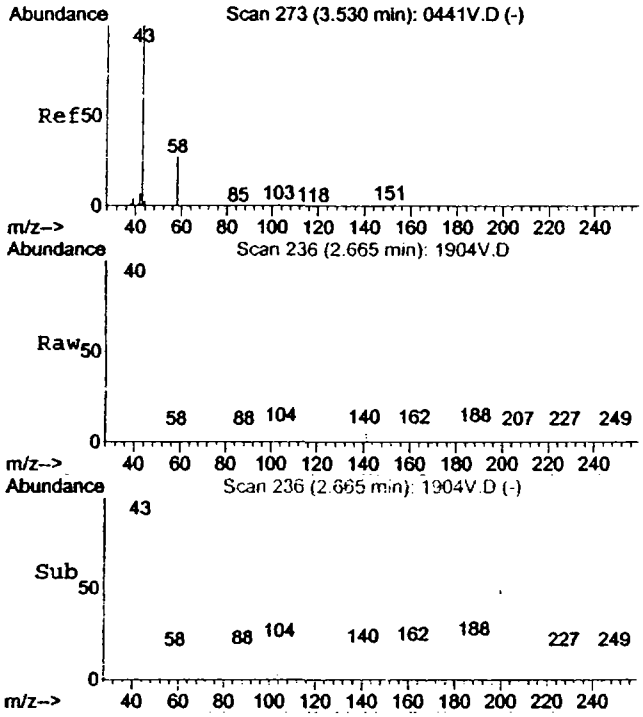




#3
Chloromethane
Concen: 0.17 UG/L
RT: 1.36 min Scan# 54
Delta R.T. -0.01 min
Lab File: 1904V.D
Acq: 28 Aug 2007 13:15

Tgt Ion: 50 Resp: 1648

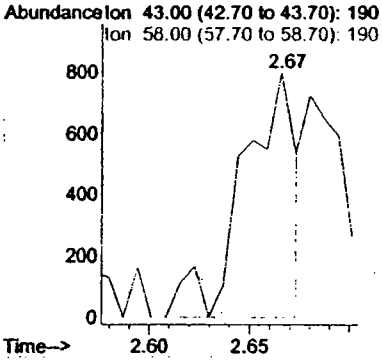


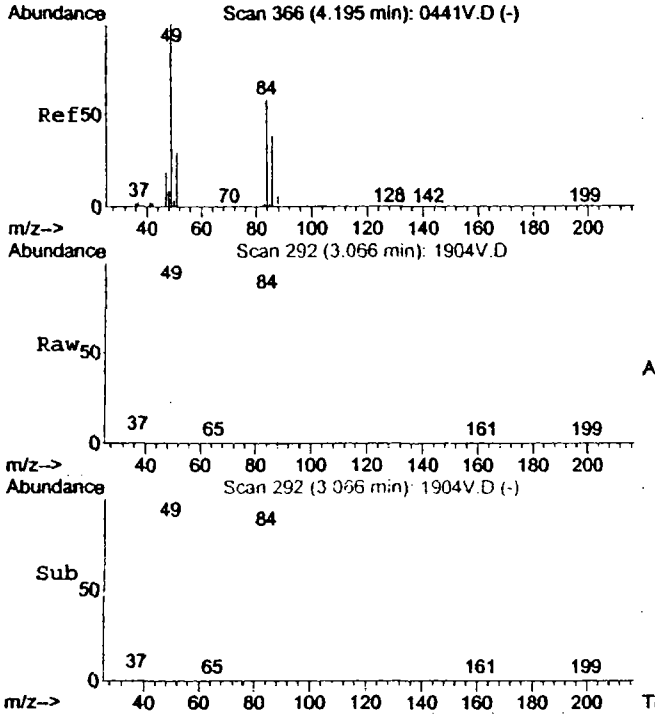


#8
Acetone
Concen: 0.34 UG/L
RT: 2.67 min Scan# 236
Delta R.T. -0.01 min
Lab File: 1904V.D
Acq: 28 Aug 2007 13:15

Tgt Ion: 43 Resp: 1446

Ion	Ratio	Lower	Upper
43	100		
58	26.8	0.0	0.0#

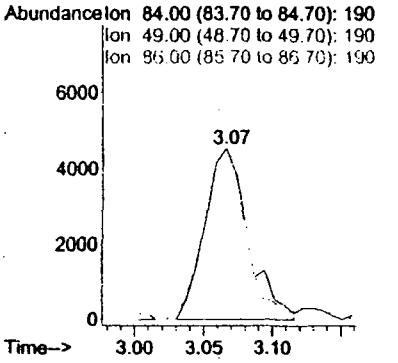


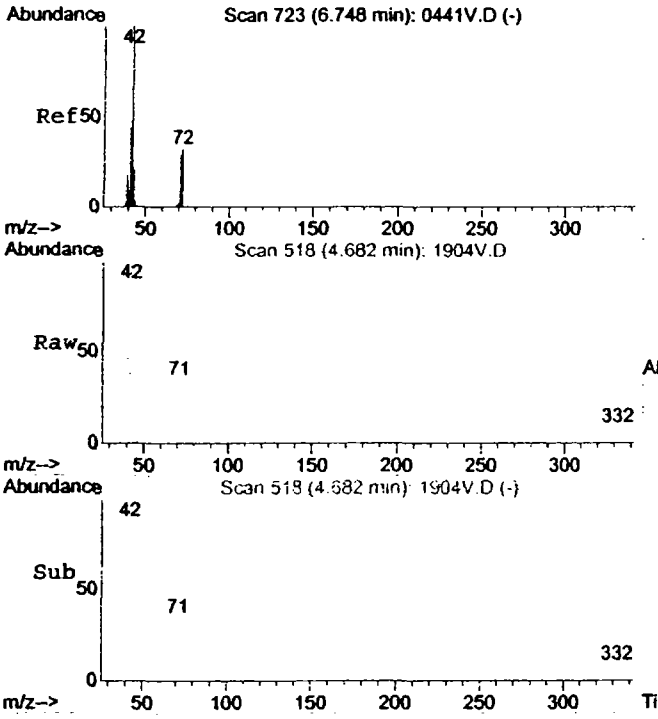


#10
Methylene Chloride
Concen: Below Cal
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1904V.D
Acq: 28 Aug 2007 13:15

Tgt Ion: 84 Resp: 9970

Ion	Ratio	Lower	Upper
84	100		
49	114.0	150.7	226.1#
86	63.8	50.5	75.7

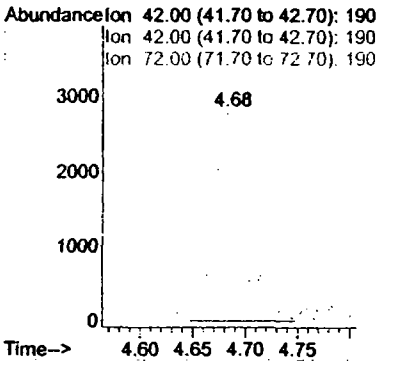


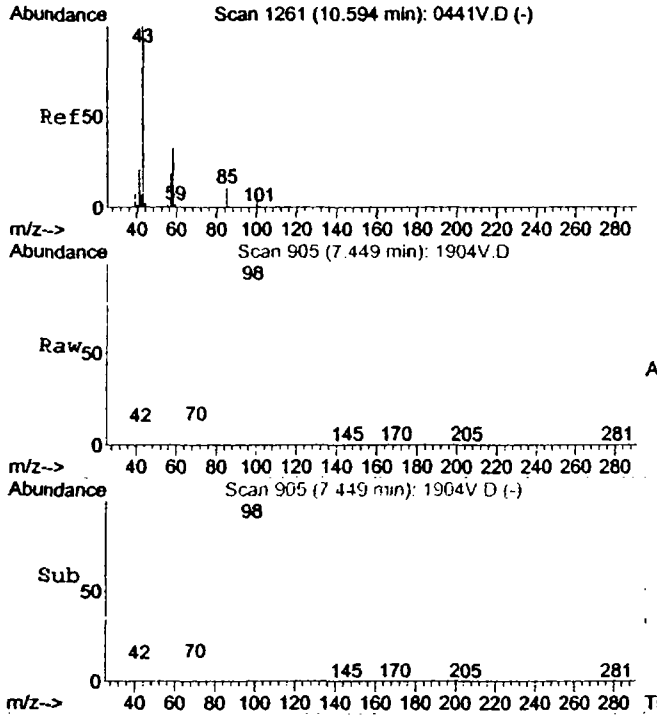


#17
Tetrahydrofuran
Concen: 1.67 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1904V.D
Acq: 28 Aug 2007 13:15

Tgt Ion: 42 Resp: 6347

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	37.0	0.0	0.0#

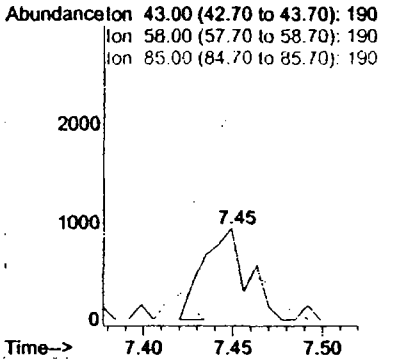


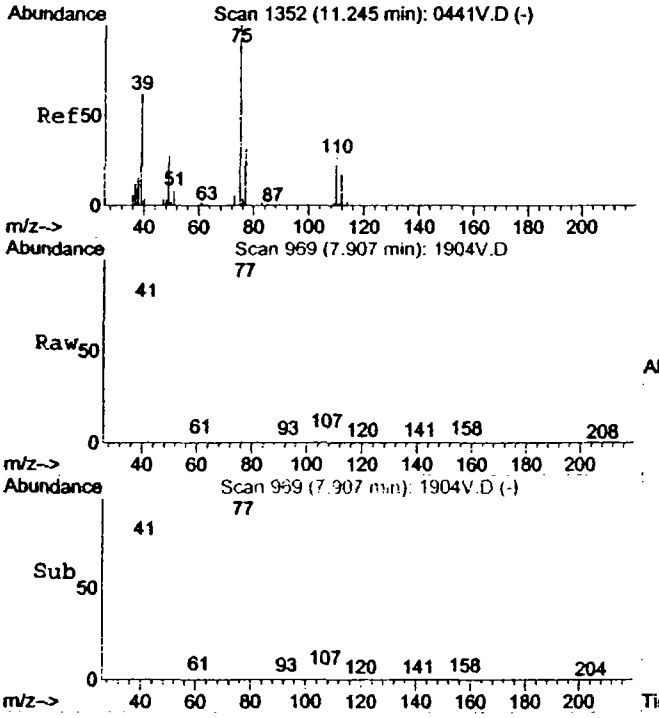


#31
4-Methyl-2-Pentanone
Concen: 0.15 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1904V.D
Acq: 28 Aug 2007 13:15

Tgt Ion: 43 Resp: 1606

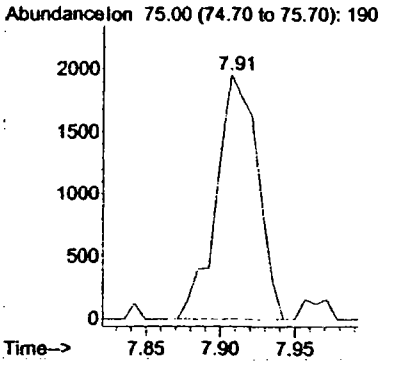
Ion	Ratio	Lower	Upper
43	100		
58	247.2	0.0	0.0#
85	2.7	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.27 UG/L
RT: 7.91 min Scan# 969
Delta R.T. 0.07 min
Lab File: 1904V.D
Acq: 28 Aug 2007 13:15

Tgt Ion: 75 Resp: 3753



QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A780306 LQ4544 Q1991471 Q1991472
Data File :1903V. MS Data File : 1905V. MSD Data File : 1906V.
Date/Time : 082807 12:49 MS Date/Time : 082807 13:41 MSD Date/Time : 082807 14:07
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery	Max Recovery *
Benzene	0	9.32	93.2	10	100.0	7.0	70.0	130.0
Carbon Tetrachloride	0	9.69	96.9	10.3	103.0	6.1	70.0	130.0
1,4-Dichlorobenzene	0	9.17	91.7	10.7	107.0	15.4	70.0	130.0
1,2-Dichloroethane	0	9.33	93.3	10.1	101.0	7.9	70.0	130.0
1,1-DICHLOROETHENE	0	8.85	88.5	9.43	94.3	6.3	70.0	130.0
1,1,1-Trichloroethane	0	9.67	96.7	10.4	104.0	7.3	70.0	130.0
Trichloroethene	0	9.72	97.2	10.2	102.0	4.8	70.0	130.0
VINYL CHLORIDE	0	8.77	87.7	9.7	97.0	10.1	70.0	130.0
Bromobenzene	0	8.93	89.3	10.2	102.0	13.3	70.0	130.0
Bromodichloromethane	9.8	18.7	89.0	20	102.0	13.6	70.0	130.0
Bromoform	0	7.96	79.6	8.76	87.6	9.6	70.0	130.0
Bromomethane	0	8.88	88.8	9.49	94.9	6.6	70.0	130.0
Chlorobenzene	0	8.48	84.8	10	100.0	16.5	70.0	130.0
Dibromochloromethane	2.5	11.2	87.0	12.2	97.0	10.9	70.0	130.0
Chloroethane	0	10.7	107.0	11.3	113.0	5.5	70.0	130.0
CHLOROFORM	26	33.7	77.0	35.9	99.0	25.0	70.0	130.0
Chloromethane	0	8.7	87.0	9.43	94.3	8.1	70.0	130.0
2-Chlorotoluene	0	9.25	92.5	10.6	106.0	13.6	70.0	130.0
4-Chlorotoluene	0	9.21	92.1	10.6	106.0	14.0	70.0	130.0
Dibromomethane	0	9.62	96.2	10.6	106.0	9.7	70.0	130.0
1,3-Dichlorobenzene	0	9.16	91.6	10.4	104.0	12.7	70.0	130.0
1,2-Dichlorobenzene	0	9.38	93.8	10.7	107.0	13.1	70.0	130.0
trans-1,2-Dichloroethene	0	9.47	94.7	10	100.0	5.4	70.0	130.0
cis-1,2-Dichloroethene	0	8.93	89.3	10	100.0	11.3	70.0	130.0
Methylene Chloride	0	9	90.0	10.4	104.0	14.4	70.0	130.0
1,1-Dichloroethane	0	9.35	93.5	10.3	103.0	9.7	70.0	130.0
1,1-Dichloropropene	0	8.89	88.9	9.53	95.3	6.9	70.0	130.0
1,2-DICHLOROPROPANE	0	9.16	91.6	9.99	99.9	8.7	70.0	130.0
1,3-Dichloropropane	0	8.69	86.9	9.91	99.1	13.1	70.0	130.0
cis-1,3-Dichloropropene	0	8.49	84.9	9.29	92.9	9.0	70.0	130.0
trans-1,3-Dichloropropene	0	8.42	84.2	9.1	91.0	7.8	70.0	130.0
2,2-Dichloropropane	0	8.75	87.5	9.6	96.0	9.3	70.0	130.0
ETHYL BENZENE	0	8.66	86.6	9.97	99.7	14.1	70.0	130.0
Styrene	0	4.52	45.2 *	5.32	53.2 *	16.3	70.0	130.0
1,1,2-Trichloroethane	0	9.39	93.9	9.88	98.8	5.1	70.0	130.0
1,1,1,2-Tetrachloroethane	0	8.94	89.4	10.2	102.0	13.2	70.0	130.0
1,1,2,2-Tetrachloroethane	0	8.92	89.2	10.1	101.0	12.4	70.0	130.0
Tetrachloroethene	0	8.99	89.9	10.3	103.0	13.6	70.0	130.0
1,2,3-Trichloropropane	0	9.02	90.2	10.4	104.0	14.2	70.0	130.0

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A780306 LQ4544
Data File :1903V. MS Data File : 1905V. MSD Data File : 1906V.
Date/Time : 082807 12:49 MS Date/Time : 082807 13:41 MSD Date/Time : 082807 14:07
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max
TOLUENE	0	9.1	91.0	9.71	97.1	6.5	70.0	130.0
o-Xylene	0	7.85	78.5	9.06	90.6	14.3	70.0	130.0
m,p-Xylene	0	17.1	85.5	19.9	99.5	15.1	70.0	130.0
Bromochloromethane	0	9.21	92.1	10.1	101.0	9.2	70.0	130.0
n-Butylbenzene	0	7.42	74.2	8.74	87.4	16.3	70.0	130.0
Dichlorodifluoromethane	0	8.96	89.6	8.86	88.6	1.1	70.0	130.0
Trichlorofluoromethane	0	~~3.59~~ 9.16	~~35.9~~ 91.6	~~4.73~~ 9.02	90.2 ~~47.3~~ *	27.4	70.0	130.0
Hexachlorobutadiene	0	9	90.0	10.4	104.0	14.4	70.0	130.0
Isopropylbenzene	0	8.39	83.9	9.89	98.9	16.4	70.0	130.0
p-Isopropyltoluene	0	6.99	69.9 *	8.26	82.6	16.7	70.0	130.0
Naphthalene	0	6.51	65.1 *	7.56	75.6	14.9	70.0	130.0
n-Propylbenzene	0	9.17	91.7	10.7	107.0	15.4	70.0	130.0
sec-Butylbenzene	0	7.16	71.6	8.2	82.0	13.5	70.0	130.0
t-Butylbenzene	0	9.03	90.3	10.3	103.0	13.1	70.0	130.0
1,2,3-Trichlorobenzene	0	8.96	89.6	10.5	105.0	15.8	70.0	130.0
1,2,4-Trichlorobenzene	0	8.42	84.2	9.96	99.6	16.8	70.0	130.0
1,2,4-Trimethylbenzene	0	7.47	74.7	8.73	87.3	15.6	70.0	130.0
1,3,5-Trimethylbenzene	0	6.96	69.6 *	8.18	81.8	16.1	70.0	130.0

* Advisory Limits Updated 9/05 , 80 - 120% minimum range.

R524142 Heritage Environmental Services, LLC Q1991471

QC Report

QCType SPI01 Duplicate SampleID A780306 DataFile 1905V.D
Date Entered 30Aug07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 28Aug07 13:41:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.32		93.2	
217	CARBON TETRACHLORIDE	0	10	9.69		96.9	
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	9.17		91.7	
21	1,2-DICHLOROETHANE	0	10	9.33		93.3	
8	1,1-DICHLOROETHENE	0	10	8.85		88.5	
2	1,1,1-TRICHLOROETHANE	0	10	9.67		96.7	
750	TRICHLOROETHENE	0	10	9.72		97.2	
768	VINYL CHLORIDE	0	10	8.77		87.7	
193	BROMOBENZENE	0	10	8.93		89.3	
195	BROMODICHLOROMETHANE	9.82	10	18.7		88.8	
197	BROMOFORM	0	10	7.96		79.6	
198	BROMOMETHANE	0	10	8.88		88.8	
231	CHLOROBENZENE	0	10	8.48		84.8	
295	DIBROMOCHLOROMETHANE	2.48	10	11.2		87.2	
234	CHLOROETHANE	0	10	10.7		107	
235	CHLOROFORM	25.6	10	33.7		81	
236	CHLOROMETHANE	0	10	8.7		87	
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	9.25		92.5	
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	9.21		92.1	
296	DIBROMOMETHANE	0	10	9.62		96.2	
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	9.16		91.6	
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	9.38		93.8	
746	TRANS-1,2-DICHLOROETHENE	0	10	9.47		94.7	
246	CIS-1,2-DICHLOROETHENE	0	10	8.93		89.3	
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	9		90	
7	1,1-DICHLOROETHANE	0	10	9.35		93.5	
10	1,1-DICHLOROPROPENE	0	10	8.89		88.9	
23	1,2-DICHLOROPROPANE	0	10	9.16		91.6	
27	1,3-DICHLOROPROPANE	0	10	8.69		86.9	
247	CIS-1,3-DICHLOROPROPENE	0	10	8.49		84.9	
747	TRANS-1,3-DICHLOROPROPENE	0	10	8.42		84.2	
349	ETHYL BENZENE	0	10	8.66		86.6	
680	STYRENE	0	10	4.52	!	45.2	LS 8-31-07
4	1,1,2-TRICHLOROETHANE	0	10	9.39		93.9	
1	1,1,1,2-TETRACHLOROETHANE	0	10	8.94		89.4	
3	1,1,2,2-TETRACHLOROETHANE	0	10	8.92		89.2	
703	TETRACHLOROETHENE	0	10	8.99		89.9	
14	1,2,3-TRICHLOROPROPANE	0	10	9.02		90.2	
724	TOLUENE	0	10	9.1		91	
549	O-XYLENE	0	10	7.85		78.5	
492	M/P-XYLENE	0	10	17.1		171	
194	BROMOCHLOROMETHANE	0	10	9.21		92.1	
519	N-BUTYLBENZENE	0	10	7.42		74.2	
300	DICHLORODIFLUOROMETHANE	0	10	8.96		89.6	

AW 8/30/07

R524142 Heritage Environmental Services, LLC Q1991471

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	9.16		91.6	
398	HEXACHLOROBUTADIENE	0	10	9		90	
432	ISOPROPYLBENZENE (CUMENE)	0	10	8.39		83.9	
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	6.99	!	69.9	
493	NAPHTHALENE	0	10	6.51	!	65.1	
532	N-PROPYLBENZENE	0	10	9.17		91.7	
644	SEC-BUTYLBENZENE	0	10	7.16		71.6	
702	TERT-BUTYLBENZENE	0	10	9.03		90.3	
13	1,2,3-TRICHLOROBENZENE	0	10	8.96		89.6	
16	1,2,4-TRICHLOROBENZENE	0	10	8.42		84.2	
17	1,2,4-TRIMETHYLBENZENE	0	10	7.47		74.7	
25	1,3,5-TRIMETHYLBENZENE	0	10	6.96	!	69.6	

Quantitation Report (QT Reviewed)

Data File : E:\V082807\1905V.D
Acq On : 28 Aug 07 13:41
Sample : A780306 MS LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 29 13:32 19107

Vial: 12
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	485060	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	168780	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	151582	10.47	UG/L	0.00
Spiked Amount 10.000			Recovery = 104.70%			
23) 1,2-Dichloroethane-d4	5.25	65	185621	10.88	UG/L	0.00
Spiked Amount 10.000			Recovery = 108.80%			
33) Toluene-d8	7.45	98	457793	10.30	UG/L	0.00
Spiked Amount 10.000			Recovery = 103.00%			
51) 4-Bromofluorobenzene	10.70	95	170747	9.78	UG/L	0.00
Spiked Amount 10.000			Recovery = 97.80%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.24	85	69458	8.96	UG/L	100
3) Chloromethane	1.37	50	94988	8.70	UG/L	100
4) VINYL CHLORIDE	1.46	62	113122	8.77	UG/L	92
5) Bromomethane	1.76	94	75995	8.88	UG/L #	1
6) Chloroethane	1.86	64	86900	10.66	UG/L	96
7) Trichlorofluoromethane	2.10	101	200925m	9.16	UG/L	84
8) Acetone	2.65	43	87810	18.88	UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	102594	8.85	UG/L	100
10) Methylene Chloride	3.07	84	122357	9.00	UG/L #	69
11) MTBE	3.34	73	645808	17.65	UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	121406	9.47	UG/L #	76
13) 1,1-Dichloroethane	3.77	63	214062	9.35	UG/L	100
14) 2-Butanone	4.41	43	122042	19.36	UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	118913	8.93	UG/L #	67
16) CHLOROFORM	4.72	83	871115	33.73	UG/L	100
17) Tetrahydrofuran	4.67	42	85473	20.35	UG/L #	100
18) Bromochloromethane	4.62	128	68750	9.21	UG/L #	24
19) 2,2-Dichloropropane	4.36	77	133111	8.75	UG/L	99
20) 1,1,1-Trichloroethane	4.89	97	215292	9.67	UG/L	87
22) 1,1-Dichloropropene	5.07	110	52337	8.89	UG/L	100
24) Carbon Tetrachloride	5.06	117	206304	9.69	UG/L	91
25) 1,2-Dichloroethane	5.33	62	187484	9.33	UG/L	96
26) Benzene	5.30	78	441990	9.32	UG/L	100
27) Trichloroethene	6.02	130	131223	9.72	UG/L	94
28) 1,2-DICHLOROPROPANE	6.28	63	98878	9.16	UG/L	100
29) Bromodichloromethane	6.61	83	333226	18.66	UG/L	98
30) Dibromomethane	6.42	93	79565	9.62	UG/L	96
31) 4-Methyl-2-Pentanone	7.36	43	224497	19.49	UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	136029	8.49	UG/L	100
34) TOLUENE	7.53	91	439730	9.10	UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	131375	8.42	UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	100356	9.39	UG/L	100
37) 1,2-Dibromoethane	8.66	107	106401	9.36	UG/L	99
39) 2-Hexanone	8.40	43	141439	18.28	UG/L	89
40) 1,3-Dichloropropane	8.26	76	152567	8.69	UG/L	100
41) Tetrachloroethene	8.19	166	128919	8.99	UG/L	99

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

198A

Quantitation Report (QT Reviewed)

Data File : E:\V082807\1905V.D
Acq On : 28 Aug 07 13:41
Sample : A780306 MS LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 29 13:32 19107

Vial: 12
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Dibromochloromethane	8.54	129	163103	11.17 UG/L		100
43)	Chlorobenzene	9.30	112	285127	8.48 UG/L		98
44)	1,1,1,2-Tetrachloroethane	9.42	131	122967	8.94 UG/L		100
45)	ETHYL BENZENE	9.46	106	144001	8.66 UG/L		97
46)	m,p-Xylene	9.62	106	364722	17.14 UG/L		97
47)	o-Xylene	10.10	106	169645	7.85 UG/L		94
48)	Styrene	10.12	104	156476	4.52 UG/L	#	85
49)	Bromoform	10.34	173	79238	7.96 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.90	83	153941	8.92 UG/L		97
52)	Isopropylbenzene	10.54	105	506698	8.39 UG/L		100
53)	Bromobenzene	10.85	77	196821	8.93 UG/L		100
54)	1,2,3-Trichloropropane	10.93	110	56604	9.02 UG/L		100
55)	n-Propylbenzene	10.99	92	68636	9.17 UG/L		81
56)	1,3,5-Trimethylbenzene	11.18	105	364294	6.96 UG/L		100
57)	2-Chlorotoluene	11.07	126	142636	9.25 UG/L		100
58)	4-Chlorotoluene	11.18	126	140507	9.21 UG/L		100
59)	t-Butylbenzene	11.18	91	447220	9.03 UG/L	#	1
60)	1,2,4-Trimethylbenzene	11.56	105	398836	7.47 UG/L		100
61)	sec-Butylbenzene	11.72	105	582545	7.16 UG/L		100
62)	p-Isopropyltoluene	11.87	119	527731	6.99 UG/L		100
63)	1,3-Dichlorobenzene	11.82	146	320029	9.16 UG/L		100
64)	1,4-Dichlorobenzene	11.91	146	325785	9.17 UG/L		100
65)	n-Butylbenzene	12.26	92	258862	7.42 UG/L		99
66)	1,2-Dichlorobenzene	12.25	146	322221	9.38 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.98	157	44750	8.77 UG/L		100
68)	1,2,4-Trichlorobenzene	13.67	180	179135	8.42 UG/L		100
69)	Naphthalene	13.88	128	489490	6.51 UG/L		100
70)	Hexachlorobutadiene	13.81	225	97804	9.00 UG/L		100
71)	1,2,3-Trichlorobenzene	14.08	180	178113	8.96 UG/L		100

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

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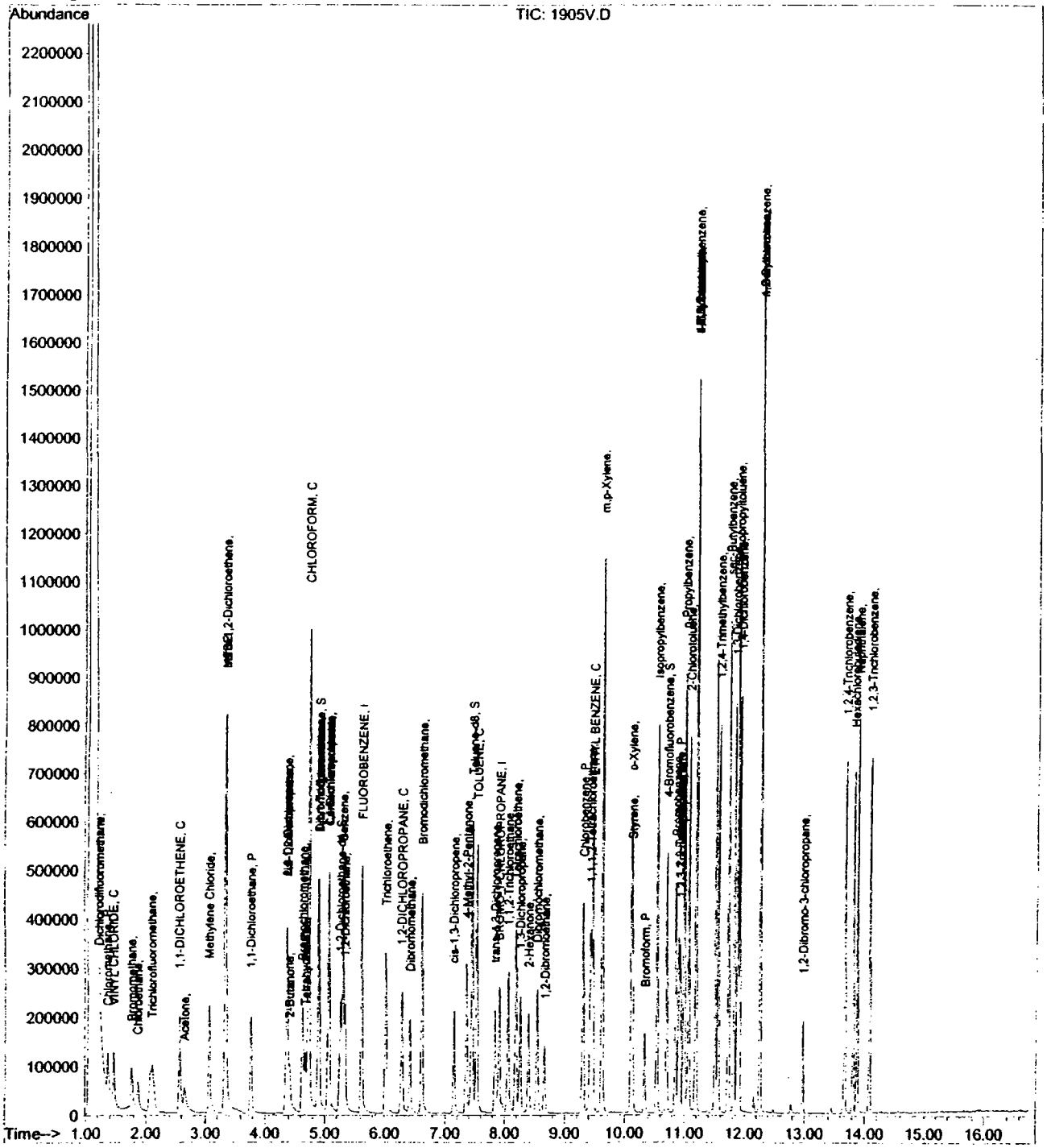
Quantitation Report

Data File : E:\V082807\1905V.D
Acq On : 28 Aug 07 13:41
Sample : A780306 MS LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 29 13:32 19107

Vial: 12
Operator: REGI
Inst : Instrumen
Multiplr: 1.00

Quant Results File: DWV.RES

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration

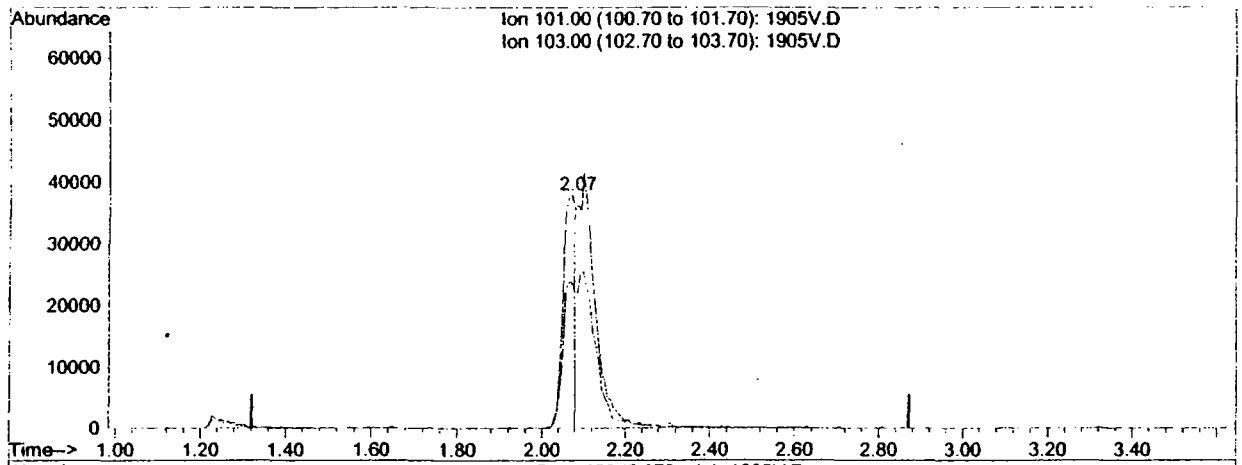


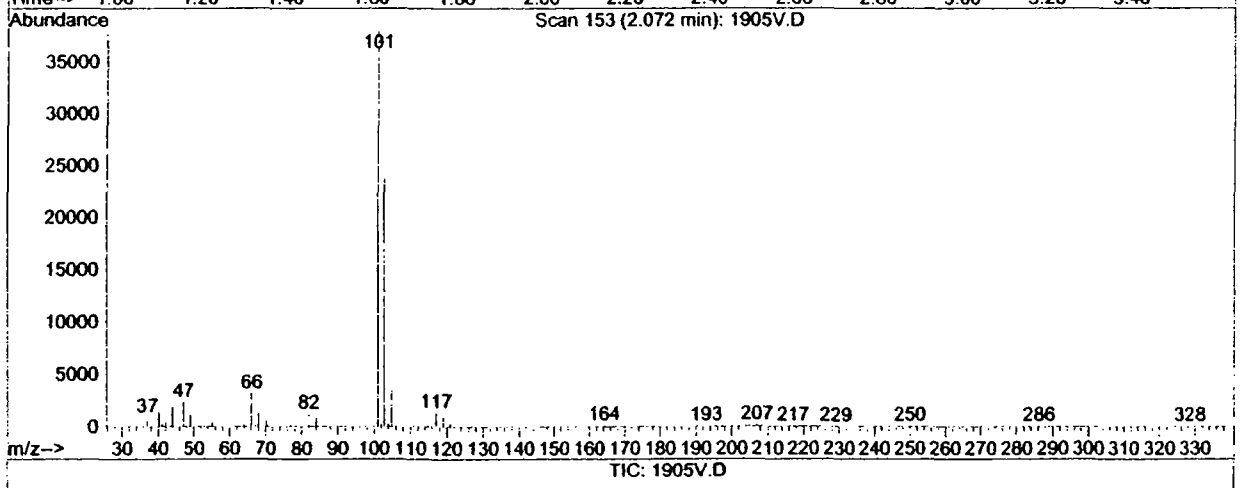
Quantitation Report

Data File : E:\V082807\1905V.D
Acq On : 28 Aug 07 13:41
Sample : A780306 MS LQ4544
Misc : 8/28/07
Quant Time: Aug 28 13:58 19107

Vial: 12
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: temp.res

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.07min 3.59UG/L

response 78706

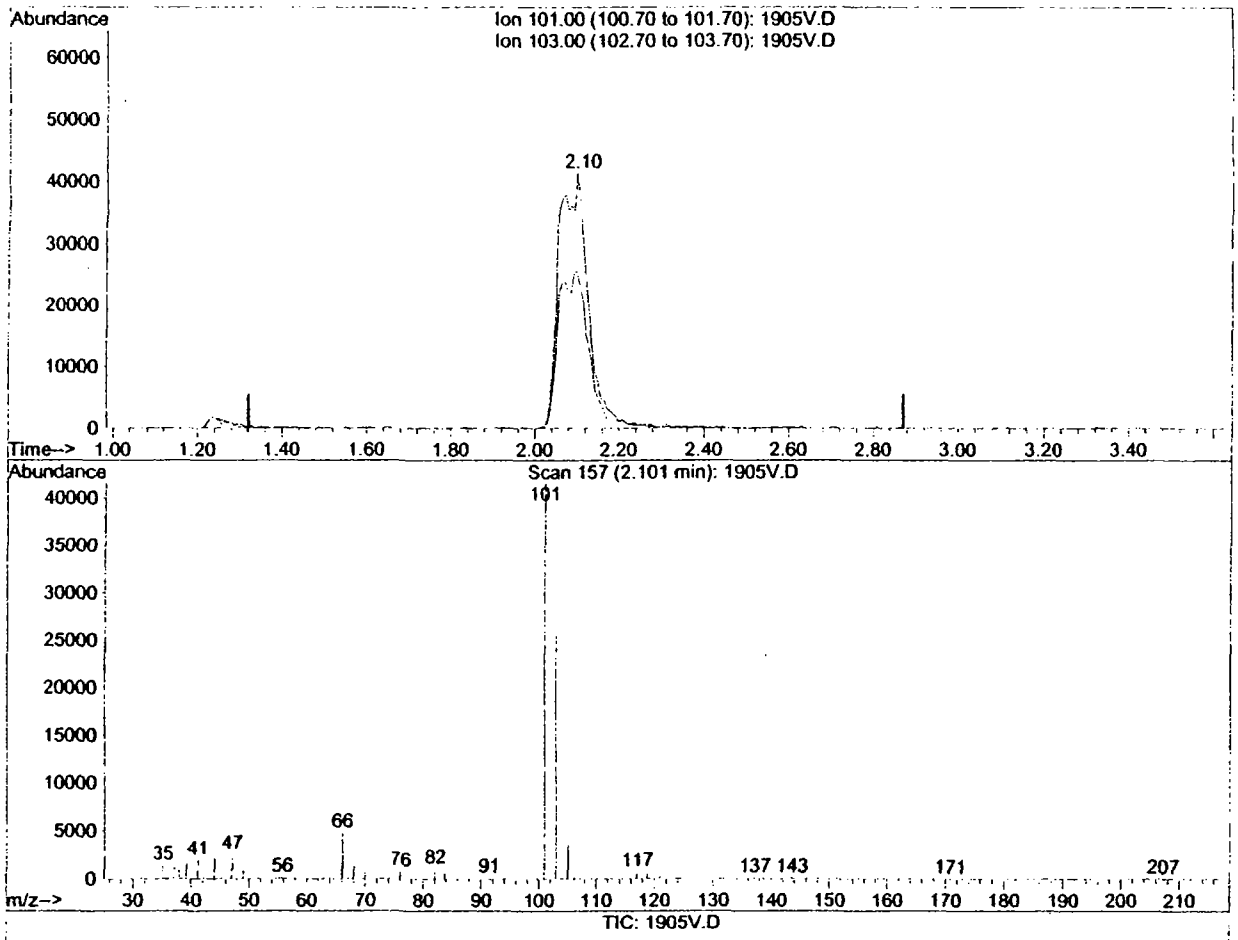
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	75.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : E:\V082807\1905V.D
Acq On : 28 Aug 07 13:41
Sample : A780306 MS LQ4544
Misc : 8/28/07
Quant Time: Aug 29 13:32 19107

Vial: 12
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: temp.res

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Multiple Level Calibration



(7) Trichlorofluoromethane

2.10min 9.16UG/L m

response 200925

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	29.57#
0.00	0.00	0.00
0.00	0.00	0.00

R524142 Heritage Environmental Services, LLC Q1991472

QC Report

QCType DPS01 Duplicate SampleID A780306 DataFile 1906V.D
Date Entered 30Aug07 Duplicate QCSampleID Q1991471 Analyst 1062 R. SHAMP
Analysis Date/Time 28Aug0714:07:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	10		100.4	7.4
217	CARBON TETRACHLORIDE	0	10	10.3		103.3	6.4
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	10.7		107	15.4
21	1,2-DICHLOROETHANE	0	10	10.1		100.9	7.8
8	1,1-DICHLOROETHENE	0	10	9.43		94.3	6.3
2	1,1,1-TRICHLOROETHANE	0	10	10.4		104.3	7.6
750	TRICHLOROETHENE	0	10	10.2		102.2	5
768	VINYL CHLORIDE	0	10	9.7		97	10.1
193	BROMOBENZENE	0	10	10.2		101.5	12.8
195	BROMODICHLOROMETHANE	9.82	10	19.9		101.3	13.6
197	BROMOFORM	0	10	8.76		87.6	9.6
198	BROMOMETHANE	0	10	9.49		94.9	6.6
231	CHLOROBENZENE	0	10	10		100.4	16.8
295	DIBROMOCHLOROMETHANE	2.48	10	12.2		97.2	11.2
234	CHLOROETHANE	0	10	11.3		112.6	5.5
235	CHLOROFORM	25.6	10	35.9		103.7	23.7
236	CHLOROMETHANE	0	10	9.43		94.3	8.1
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	10.6		106	13.6
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	10.6		105.6	13.7
296	DIBROMOMETHANE	0	10	10.6		106.2	9.9
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	10.3		103.5	12.2
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	10.7		107	13.1
746	TRANS-1,2-DICHLOROETHENE	0	10	10		100.1	5.5
246	CIS-1,2-DICHLOROETHENE	0	10	10		100.1	11.4
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	10.3		103.5	14
7	1,1-DICHLOROETHANE	0	10	10.3		102.9	9.6
10	1,1-DICHLOROPROPENE	0	10	9.53		95.3	6.9
23	1,2-DICHLOROPROPANE	0	10	9.99		99.9	8.7
27	1,3-DICHLOROPROPANE	0	10	9.91		99.1	13.1
247	CIS-1,3-DICHLOROPROPENE	0	10	9.29		92.9	9
747	TRANS-1,3-DICHLOROPROPENE	0	10	9.1		91	7.8
349	ETHYL BENZENE	0	10	9.97		99.7	14.1
680	STYRENE	0	10	5.32	!	53.2	16.3
4	1,1,2-TRICHLOROETHANE	0	10	9.88		98.8	5.1
1	1,1,1,2-TETRACHLOROETHANE	0	10	10.2		102.3	13.5
3	1,1,2,2-TETRACHLOROETHANE	0	10	10.1		101.2	12.6
703	TETRACHLOROETHENE	0	10	10.3		103.4	14
14	1,2,3-TRICHLOROPROPANE	0	10	10.4		104.3	14.5
724	TOLUENE	0	10	9.71		97.1	6.5
549	O-XYLENE	0	10	9.06		90.6	14.3
492	M/P-XYLENE	0	10	19.9		199.3	15.1
194	BROMOCHLOROMETHANE	0	10	10.1		100.9	9.1
519	N-BUTYLBENZENE	0	10	8.74		87.4	16.3
300	DICHLORODIFLUOROMETHANE	0	10	8.86		88.6	1.1

8.31.07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	9.62		96.2	4.9
398	HEXACHLOROBUTADIENE	0	10	10.4		104.4	14.8
432	ISOPROPYLBENZENE (CUMENE)	0	10	9.89		98.9	16.4
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	8.26		82.6	16.7
493	NAPHTHALENE	0	10	7.56		75.6	14.9
532	N-PROPYLBENZENE	0	10	10.7		106.9	15.3
644	SEC-BUTYLBENZENE	0	10	8.2		82	13.5
702	TERT-BUTYLBENZENE	0	10	10.3		102.7	12.8
13	1,2,3-TRICHLOROBENZENE	0	10	10.5		105.2	16
16	1,2,4-TRICHLOROBENZENE	0	10	9.96		99.6	16.8
17	1,2,4-TRIMETHYLBENZENE	0	10	8.73		87.3	15.6
25	1,3,5-TRIMETHYLBENZENE	0	10	8.18		81.8	16.1

Quantitation Report (QT Reviewed)

Data File : E:\V082807\1906V.D
Acq On : 28 Aug 07 14:07
Sample : A780306 MSD LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 29 13:32 19107

Vial: 13
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	473120	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	156332	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	147205	10.43	UG/L	0.00
Spiked Amount 10.000			Recovery	=	104.30%	
23) 1,2-Dichloroethane-d4	5.25	65	175820	10.57	UG/L	0.00
Spiked Amount 10.000			Recovery	=	105.70%	
33) Toluene-d8	7.44	98	440222	10.16	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.60%	
51) 4-Bromofluorobenzene	10.70	95	167352	10.35	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.50%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.24	85	67052	8.86	UG/L	100
3) Chloromethane	1.36	50	100420	9.43	UG/L	100
4) VINYL CHLORIDE	1.46	62	121952	9.70	UG/L	95
5) Bromomethane	1.76	94	79200	9.49	UG/L #	1
6) Chloroethane	1.86	64	89549	11.26	UG/L	93
7) Trichlorofluoromethane	2.09	101	205935m	9.62	UG/L	12
8) Acetone	2.65	43	94847	20.91	UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	106610	9.43	UG/L	100
10) Methylene Chloride	3.07	84	135587	10.35	UG/L #	65
11) MTBE	3.34	73	695433	19.49	UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	125215	10.01	UG/L #	80
13) 1,1-Dichloroethane	3.77	63	229765	10.29	UG/L	100
14) 2-Butanone	4.42	43	127777	20.78	UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	129932	10.01	UG/L #	66
16) CHLOROFORM	4.72	83	905042	35.93	UG/L	99
17) Tetrahydrofuran	4.67	42	88463	21.60	UG/L #	100
18) Bromochloromethane	4.62	128	73500	10.09	UG/L #	25
19) 2,2-Dichloropropane	4.36	77	142512	9.60	UG/L	98
20) 1,1,1-Trichloroethane	4.89	97	226519	10.43	UG/L	87
22) 1,1-Dichloropropene	5.07	110	54708	9.53	UG/L	100
24) Carbon Tetrachloride	5.06	117	214563	10.33	UG/L	91
25) 1,2-Dichloroethane	5.33	62	197754	10.09	UG/L	95
26) Benzene	5.29	78	464400	10.04	UG/L	100
27) Trichloroethene	6.02	130	134639	10.22	UG/L	98
28) 1,2-DICHLOROPROPANE	6.28	63	105114	9.99	UG/L	100
29) Bromodichloromethane	6.61	83	347562	19.95	UG/L	100
30) Dibromomethane	6.41	93	85665	10.62	UG/L	95
31) 4-Methyl-2-Pentanone	7.35	43	231699	20.62	UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	145148	9.29	UG/L	100
34) TOLUENE	7.52	91	457251	9.71	UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	138439	9.10	UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	102972	9.88	UG/L	100
37) 1,2-Dibromoethane	8.66	107	108677	9.80	UG/L	97
39) 2-Hexanone	8.39	43	145694	20.33	UG/L	88
40) 1,3-Dichloropropane	8.26	76	161063	9.91	UG/L	100
41) Tetrachloroethene	8.19	166	137225	10.34	UG/L	98

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

Quantitation Report (QT Reviewed)

Data File : E:\V082807\1906V.D
Acq On : 28 Aug 07 14:07
Sample : A780306 MSD LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 29 13:32 19107

Vial: 13
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Dibromochloromethane	8.54	129	164897	12.20 UG/L		100
43)	Chlorobenzene	9.30	112	312693	10.04 UG/L		99
44)	1,1,1,2-Tetrachloroethane	9.42	131	130287	10.23 UG/L		100
45)	ETHYL BENZENE	9.46	106	153522	9.97 UG/L		100
46)	m,p-Xylene	9.62	106	392749	19.93 UG/L		98
47)	o-Xylene	10.10	106	181287	9.06 UG/L		92
48)	Styrene	10.12	104	170674	5.32 UG/L		87
49)	Bromoform	10.34	173	80748	8.76 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.90	83	161722	10.12 UG/L		99
52)	Isopropylbenzene	10.54	105	553658	9.89 UG/L		100
53)	Bromobenzene	10.85	77	207159	10.15 UG/L		100
54)	1,2,3-Trichloropropane	10.93	110	60637	10.43 UG/L		100
55)	n-Propylbenzene	10.99	92	74052	10.69 UG/L		77
56)	1,3,5-Trimethylbenzene	11.18	105	396697	8.18 UG/L		100
57)	2-Chlorotoluene	11.07	126	151442	10.60 UG/L		100
58)	4-Chlorotoluene	11.18	126	149260	10.56 UG/L		100
59)	t-Butylbenzene	11.18	91	471085	10.27 UG/L	#	1
60)	1,2,4-Trimethylbenzene	11.55	105	431691	8.73 UG/L		100
61)	sec-Butylbenzene	11.72	105	618122	8.20 UG/L		100
62)	p-Isopropyltoluene	11.87	119	577825	8.26 UG/L		100
63)	1,3-Dichlorobenzene	11.82	146	335087	10.35 UG/L		100
64)	1,4-Dichlorobenzene	11.91	146	351971	10.70 UG/L		100
65)	n-Butylbenzene	12.26	92	282320	8.74 UG/L		97
66)	1,2-Dichlorobenzene	12.25	146	340529	10.70 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.98	157	46256	9.79 UG/L		100
68)	1,2,4-Trichlorobenzene	13.67	180	196338	9.96 UG/L		100
69)	Naphthalene	13.88	128	526429	7.56 UG/L		100
70)	Hexachlorobutadiene	13.81	225	105111	10.44 UG/L		100
71)	1,2,3-Trichlorobenzene	14.08	180	193666	10.52 UG/L		100

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

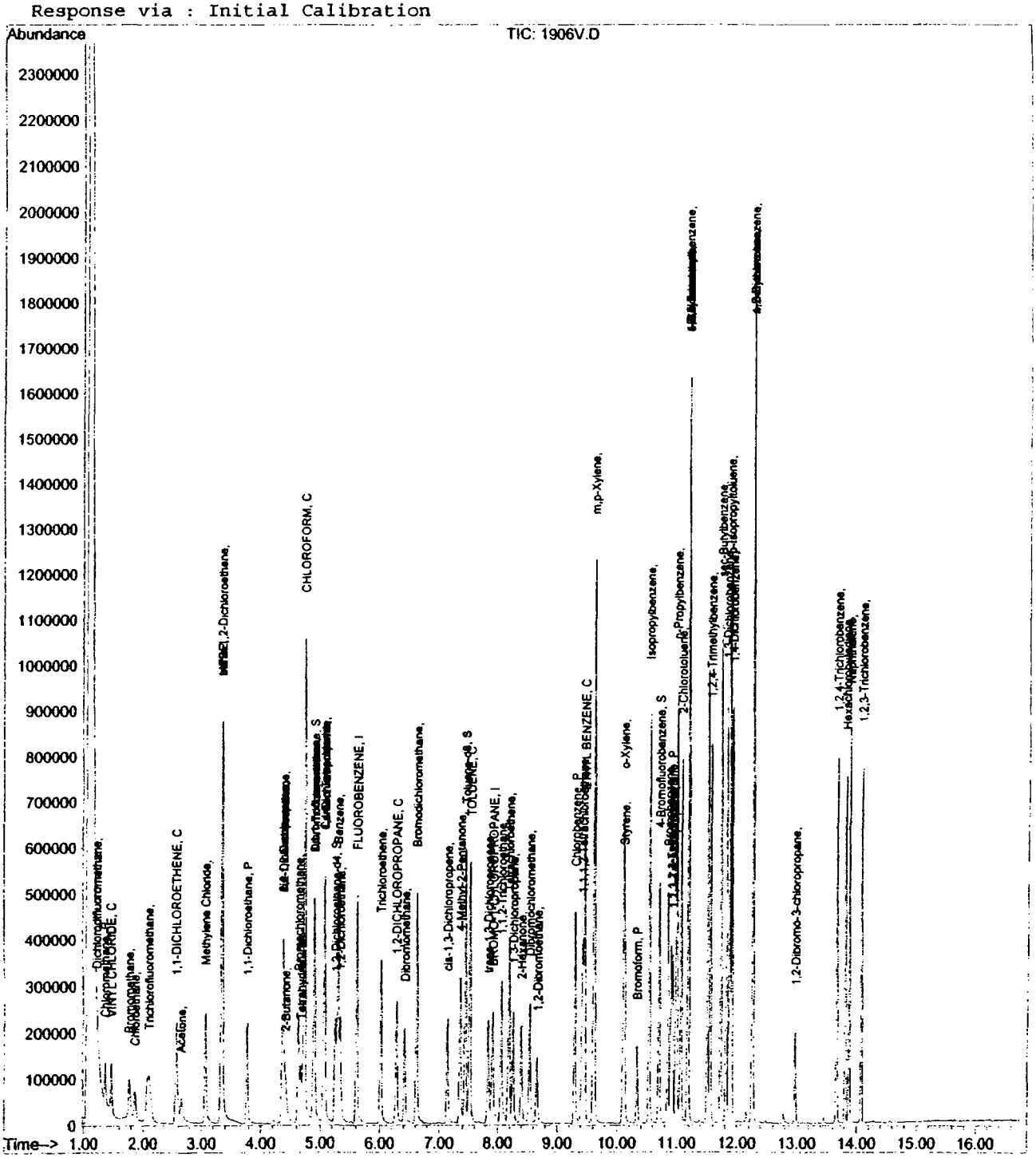
Quantitation Report

Data File : E:\V082807\1906V.D
Acq On : 28 Aug 07 14:07
Sample : A780306 MSD LQ4544
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 29 13:32 19107

Vial: 13
Operator: REGI
Inst : Instrumen
Multiplr: 1.00

Quant Results File: DWV.RES

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Initial Calibration

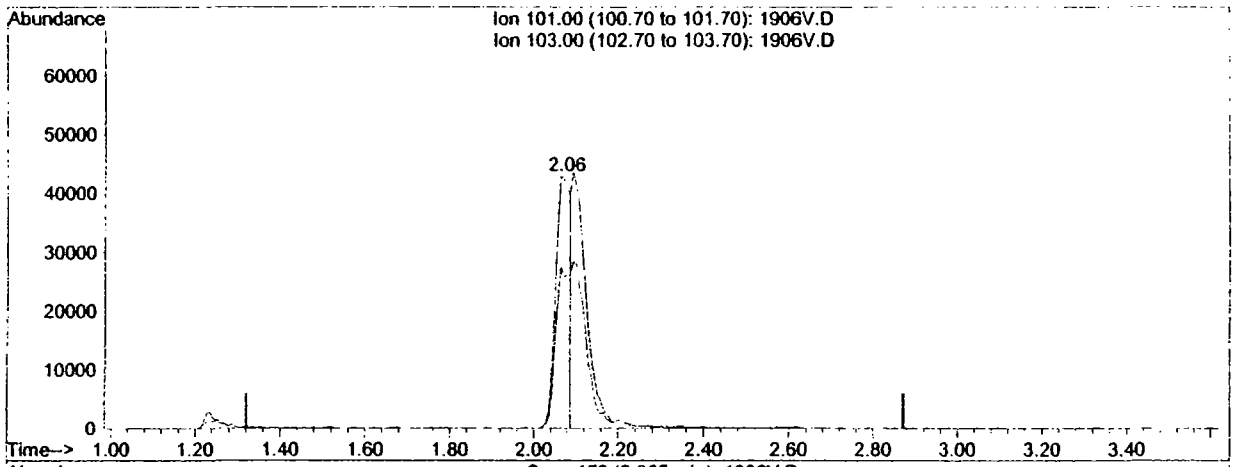


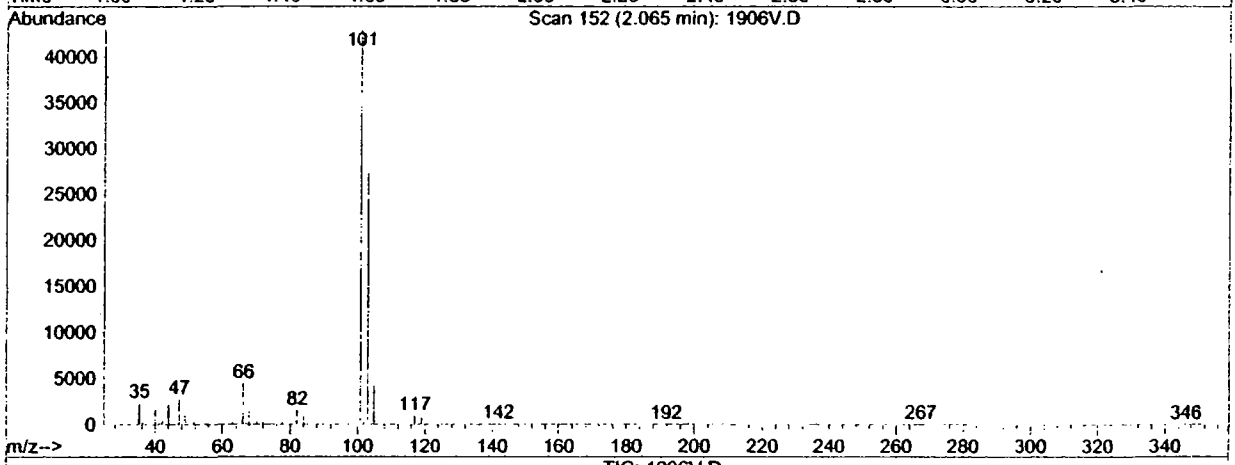
Quantitation Report

Data File : E:\V082807\1906V.D
Acq On : 28 Aug 07 14:07
Sample : A780306 MSD LQ4544
Misc : 8/28/07
Quant Time: Aug 28 14:24 19107

Vial: 13
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: temp.res

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Multiple Level Calibration





TIC: 1906V.D

(7) Trichlorofluoromethane

2.06min 4.73UG/L

response 101297

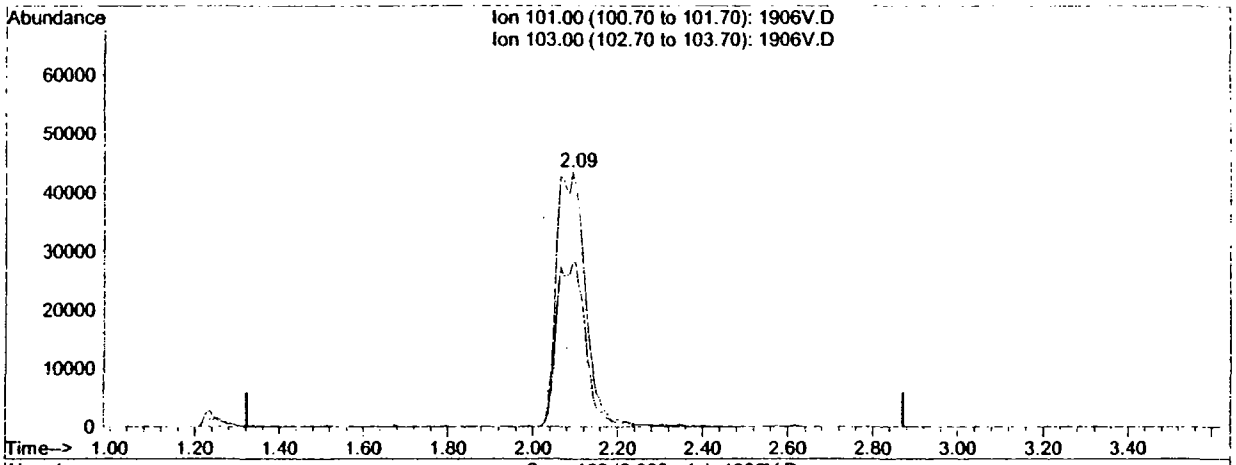
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	131.54#
0.00	0.00	0.00
0.00	0.00	0.00

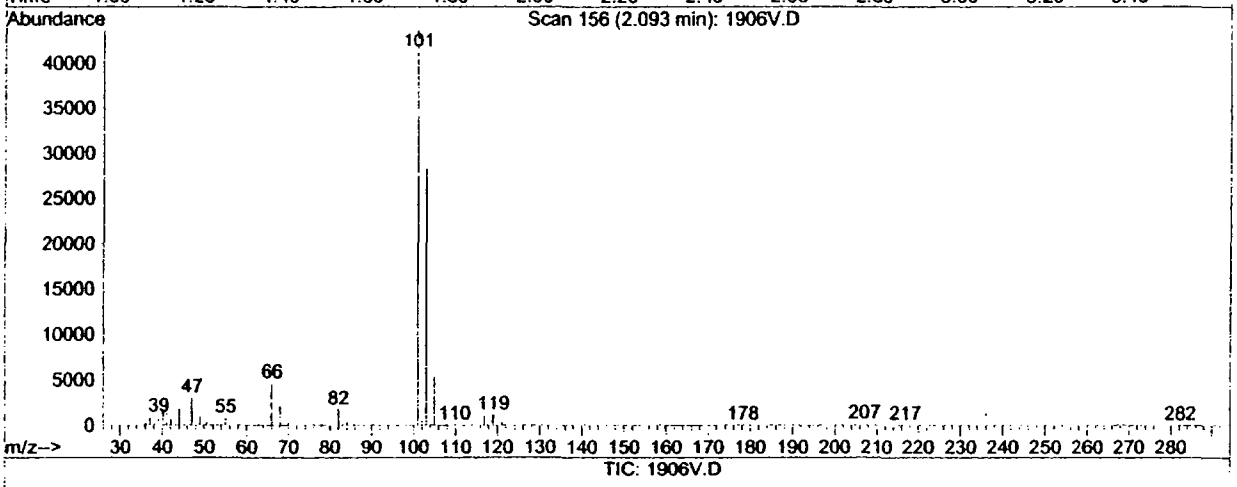
Quantitation Report

Data File : E:\V082807\1906V.D
Acq On : 28 Aug 07 14:07
Sample : A780306 MSD LQ4544
Misc : 8/28/07
Quant Time: Aug 29 13:32 19107

Vial: 13
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: temp.res

Method : L:\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Wed Aug 29 08:15:39 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.09min 9.62UG/L m

response 205935

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	64.70
0.00	0.00	0.00
0.00	0.00	0.00

R524142 Heritage Environmental Services, LLC A780300

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4538
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 1907V.D Date/Time 28Aug07 14:33:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	3.0		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		EX	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	9.9		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

FW 8/30/07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	4.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	106			% RECOVERY	
2037-26-5	726	TOLUENE-D8	95			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	87			% RECOVERY	
	972	————————					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit
* See Note for Parameter
EX Exceeds calibration range. See Replicate

Comments to Laboratory (do not record)

4-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1907V.D
Acq On : 28 Aug 2007 14:33
Sample : A780300 LQ4538
Misc : 8/28/07
MS Integration Params: RTEINT.P
Quant Time: Aug 28 14:49:51 2007

Vial: 14
Operator: REGI
Inst : Instrumen
Multiplr: 1.00
Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	483748	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	161364	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	155806	10.79	UG/L	0.00
Spiked Amount 10.000			Recovery	=	107.90%	
23) 1,2-Dichloroethane-d4	5.25	65	180769	10.63	UG/L	0.00
Spiked Amount 10.000			Recovery	=	106.30%	
33) Toluene-d8	7.45	98	422173	9.53	UG/L	0.00
Spiked Amount 10.000			Recovery	=	95.30%	
51) 4-Bromofluorobenzene	10.70	95	144434	8.65	UG/L	0.00
Spiked Amount 10.000			Recovery	=	86.50%	

Target Compounds						Qvalue
3) ~~Chloromethane~~	1.36	50	2177	0.20	UG/L	100
5) ~~Bromomethane~~	1.76	94	1062	0.12	UG/L #	5
8) ~~Acetone~~	2.67	43	4529	0.98	UG/L #	100
9) ~~1,1-DICHLOROETHENE~~	2.57	96	5066	0.44	UG/L	100
13) 1,1-Dichloroethane 9.9	3.77	63	226669	9.93	UG/L	100
14) ~~2-Butanone~~	4.42	43	2062	0.33	UG/L #	100
15) ~~cis-1,2-Dichloroethene~~	4.37	96	5001	0.38	UG/L #	48
17) ~~Tetrahydrofuran~~	4.68	42	6268	1.50	UG/L #	100
20) 1,1,1-Trichloroethane 3.0	4.89	97	67059	3.02	UG/L	88
27) Trichloroethene EX	6.02	130	1415512	105.13	UG/L	96
35) ~~trans-1,3-Dichloropropene~~	7.91	75	3565	0.23	UG/L	100
39) ~~2-Hexanone~~	8.59	43	1413	0.19	UG/L #	37
68) 1,~~2,4-Trichloro~~benzene	13.67	180	2622	0.13	UG/L	100
70) ~~Hexachloro~~butadiene	13.81	225	2503	0.24	UG/L	100
71) 1,~~2,3-Trichlo~~robenzene	14.08	180	3663	0.19	UG/L	100

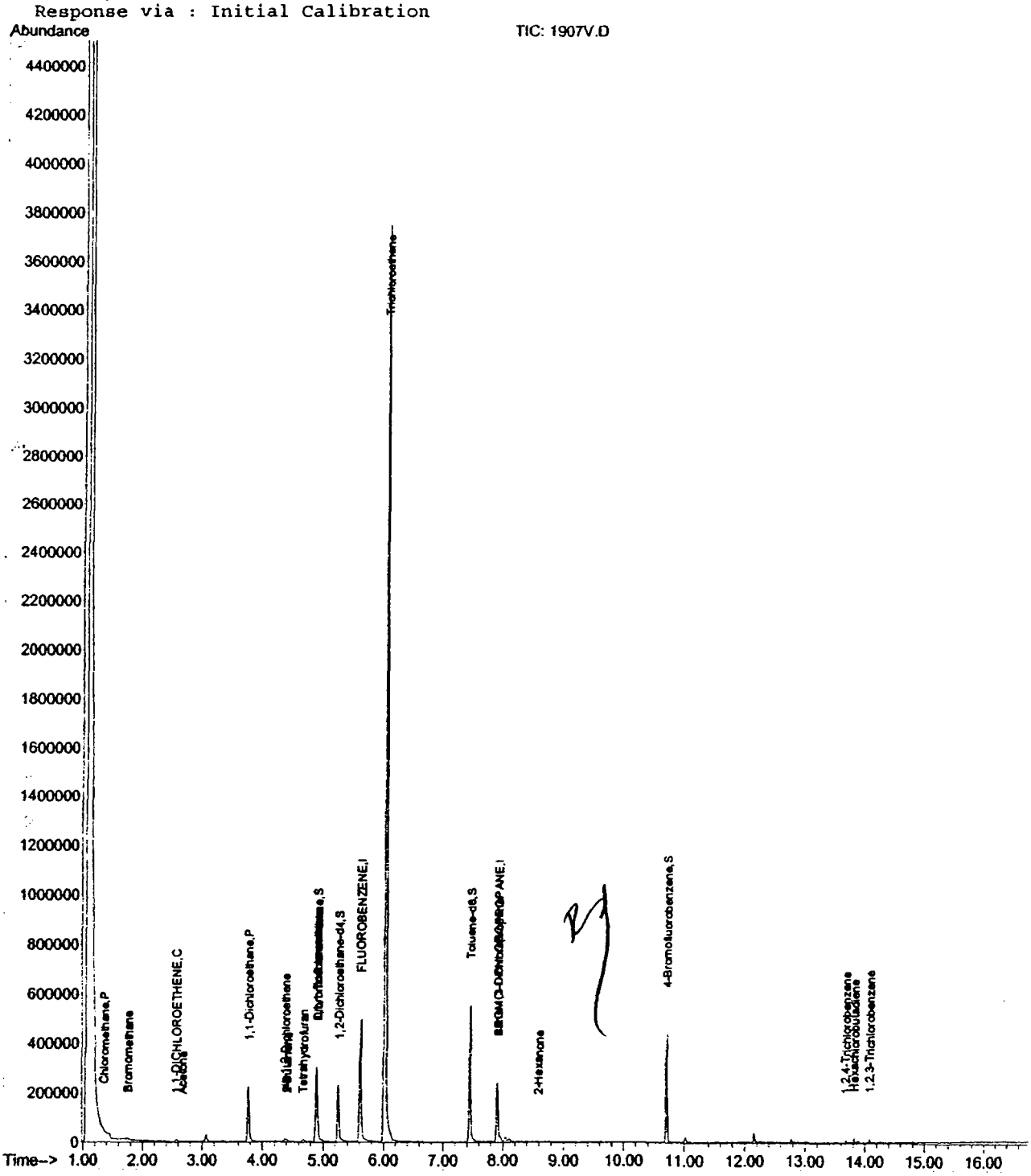
NO TICS

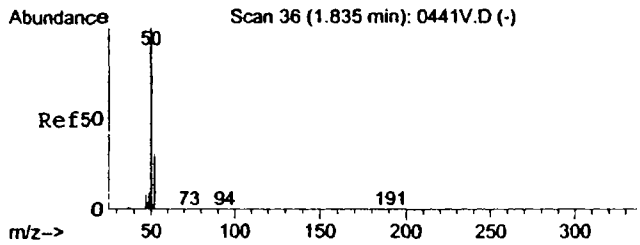
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1907V.D Vial: 14
Acq On : 28 Aug 2007 14:33 Operator: REGI
Sample : A780300 LQ4538 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 14:49 2007 Quant Results File: DWV.RES

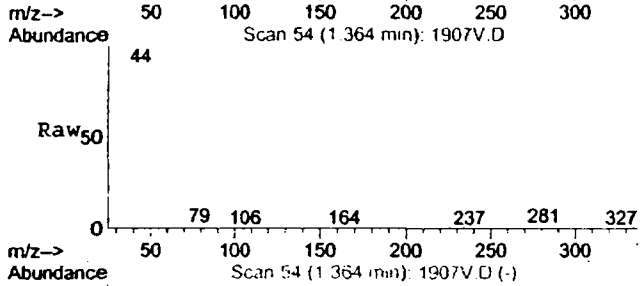
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

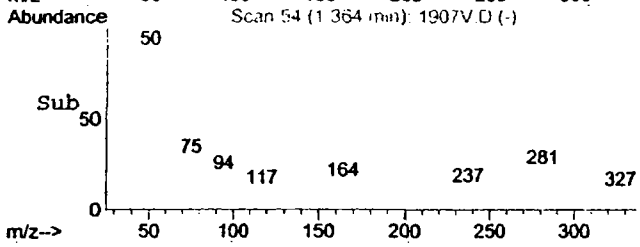


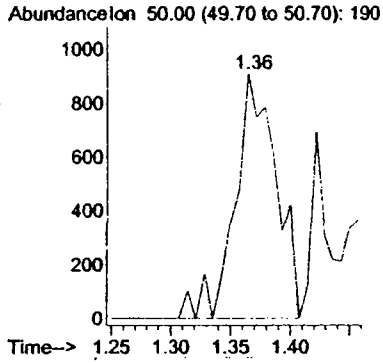


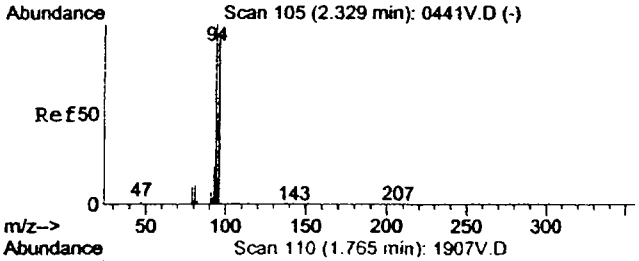
#3
Chloromethane
Concen: 0.20 UG/L
RT: 1.36 min Scan# 54
Delta R.T. -0.01 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 50 Resp: 2177





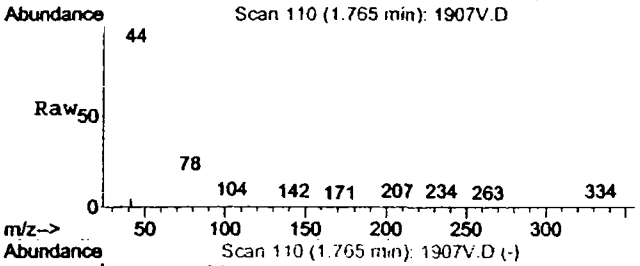


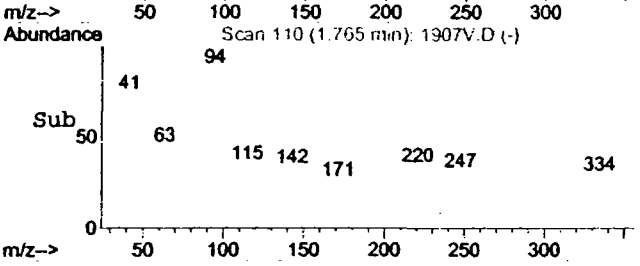


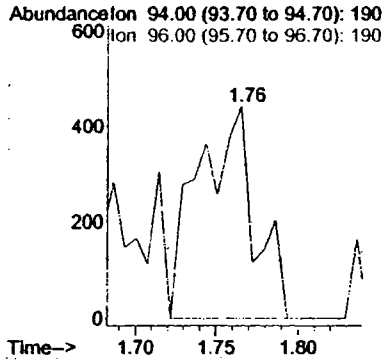
#5
Bromomethane
Concen: 0.12 UG/L
RT: 1.76 min Scan# 110
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

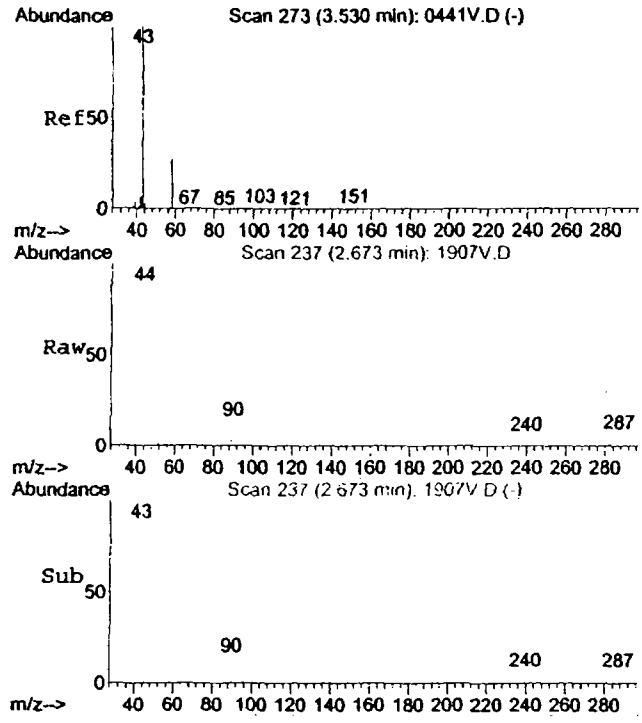
Tgt Ion: 94 Resp: 1062

Ion	Ratio	Lower	Upper
94	100		
96	42.7	6.9	10.3#





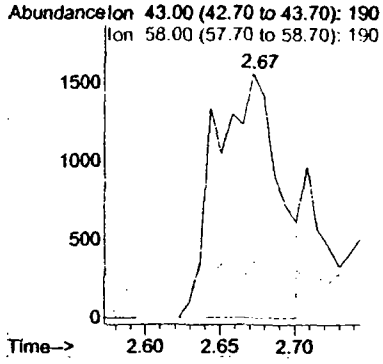


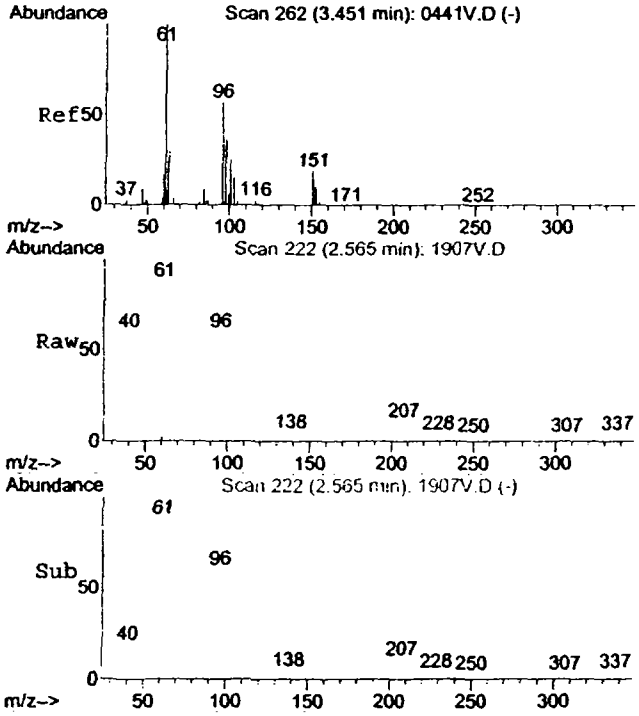


#8
Acetone
Concen: 0.98 UG/L
RT: 2.67 min Scan# 237
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 43 Resp: 4529

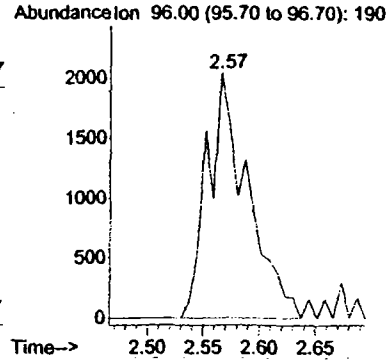
Ion	Ratio	Lower	Upper
43	100		
58	26.6	0.0	0.0#

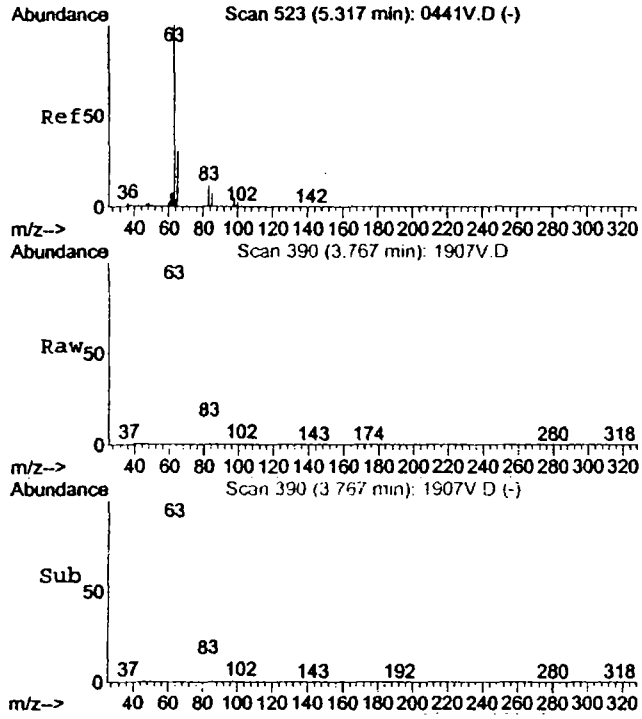




#9
1,1-DICHLOROETHENE
Concen: 0.44 UG/L
RT: 2.57 min Scan# 222
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

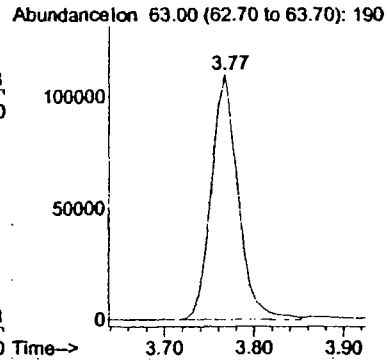
Tgt Ion: 96 Resp: 5066

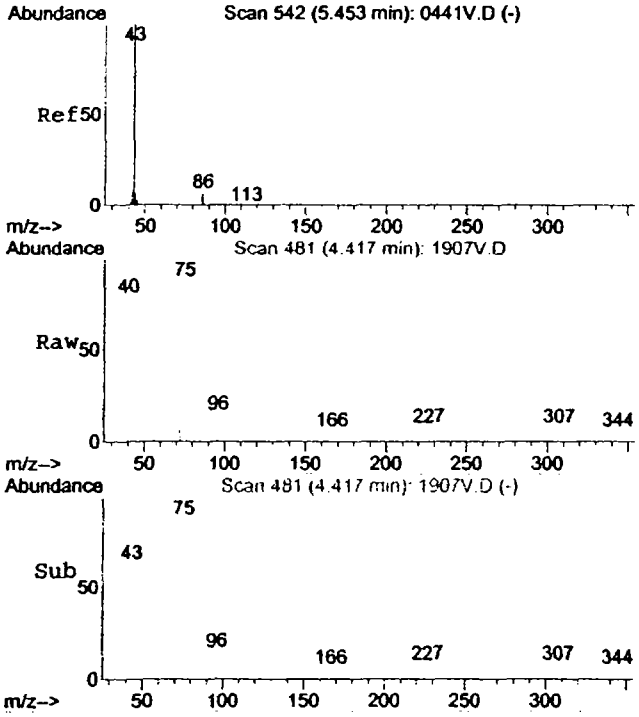




#13
1,1-Dichloroethane
Concen: 9.93 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 63 Resp: 226669

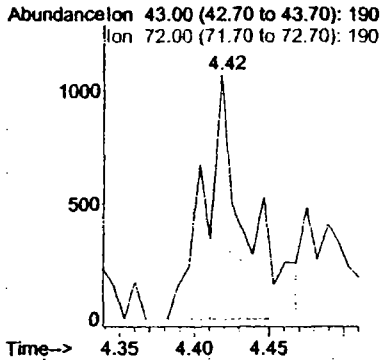




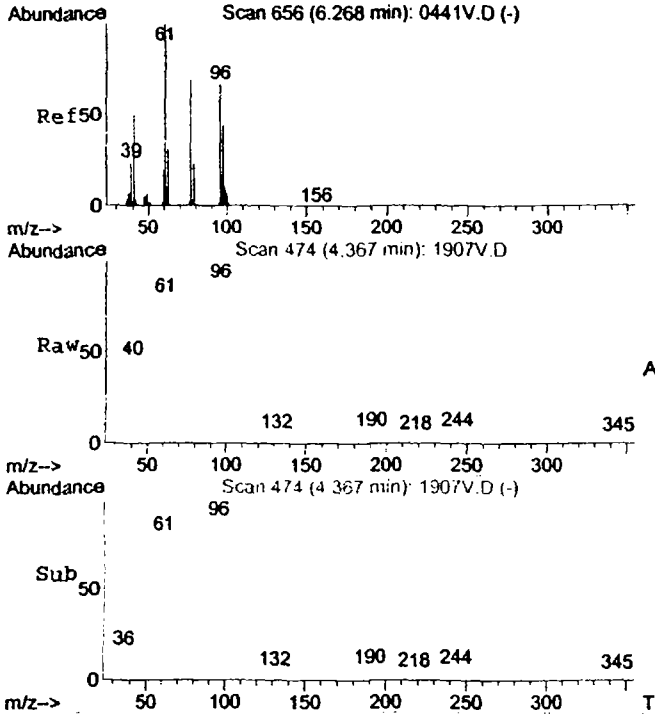
#14
2-Butanone
Concen: 0.33 UG/L
RT: 4.42 min Scan# 481
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 43 Resp: 2062

Ion	Ratio	Lower	Upper
43	100		
72	28.5	0.0	0.0#



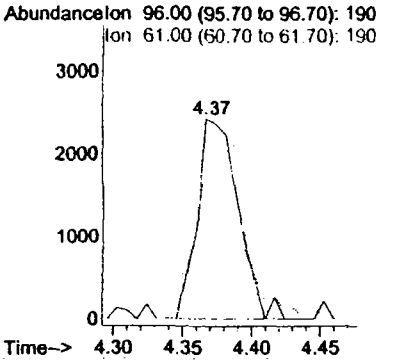
RZ

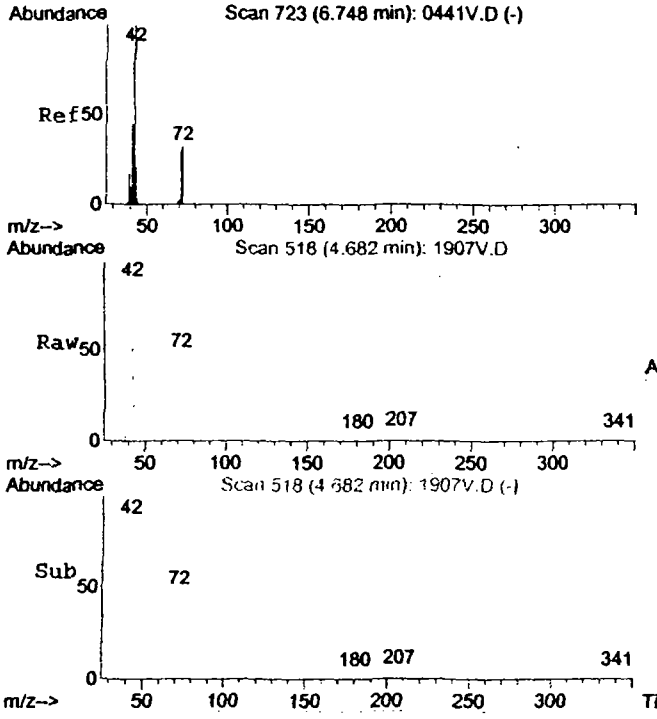


#15
cis-1,2-Dichloroethene
Concen: 0.38 UG/L
RT: 4.37 min Scan# 474
Delta R.T. -0.01 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 96 Resp: 5001

Ion	Ratio	Lower	Upper
96	100		
61	118.7	156.7	235.1#

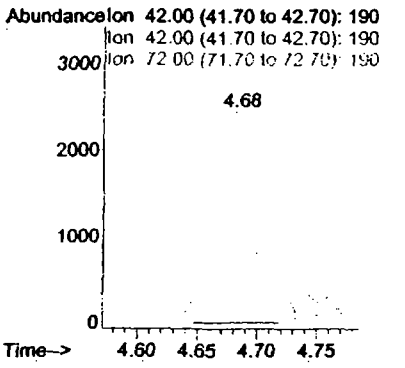


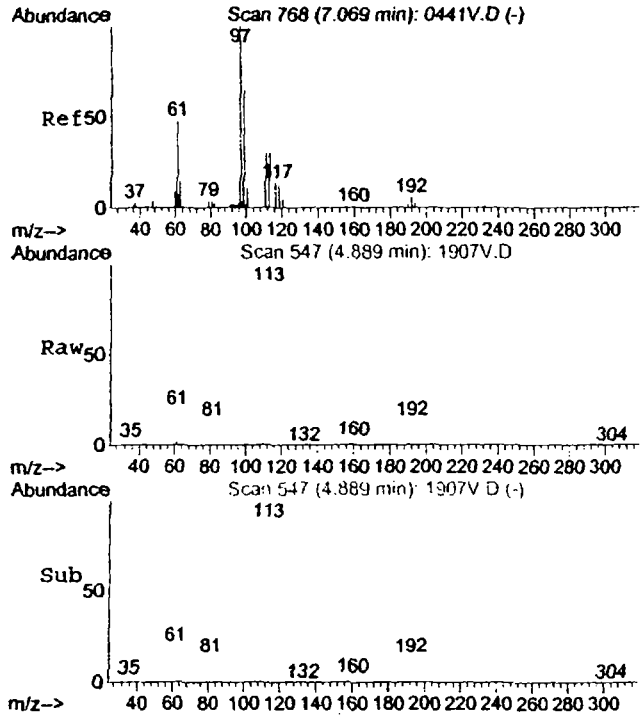


#17
Tetrahydrofuran
Concen: 1.50 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 42 Resp: 6268

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	46.8	0.0	0.0#

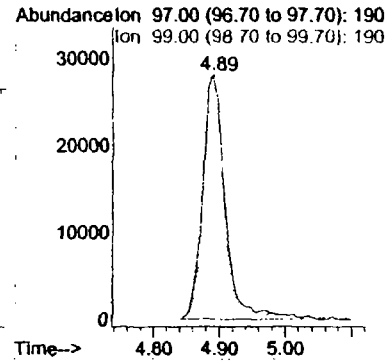


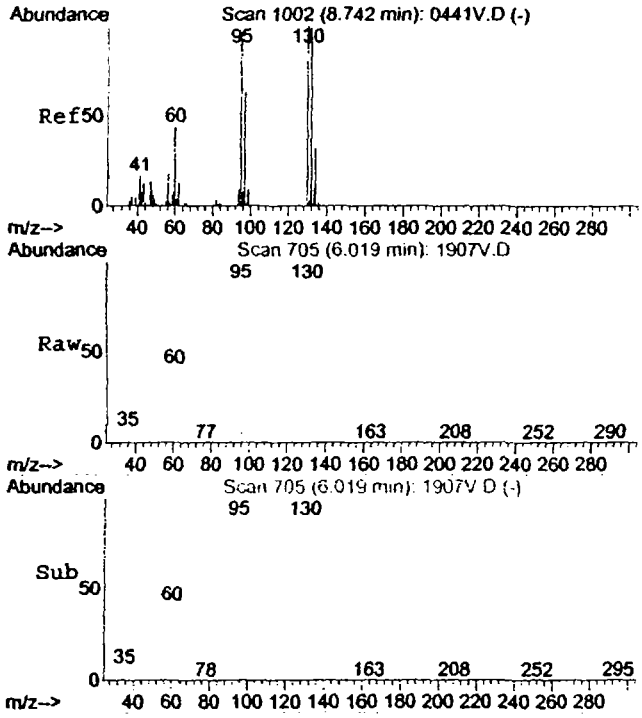


#20
1,1,1-Trichloroethane
Concen: 3.02 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 97 Resp: 67059

Ion	Ratio	Lower	Upper
97	100		
99	64.8	59.9	89.9

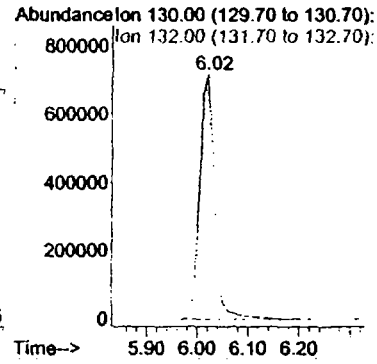


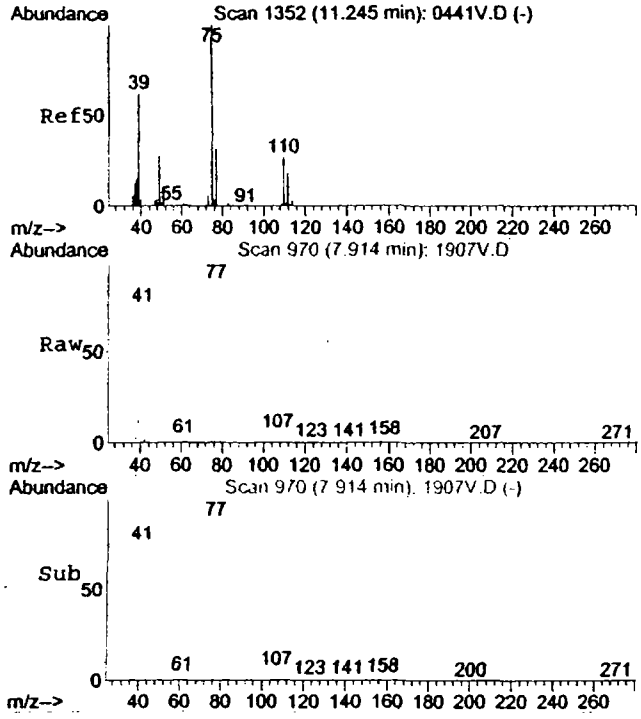


#27
Trichloroethene
Concen: 105.13 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion:130 Resp: 1415512

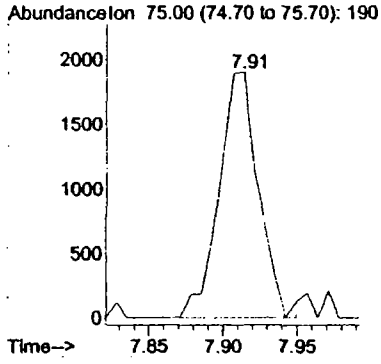
Ion	Ratio	Lower	Upper
130	100		
132	96.9	80.7	121.1

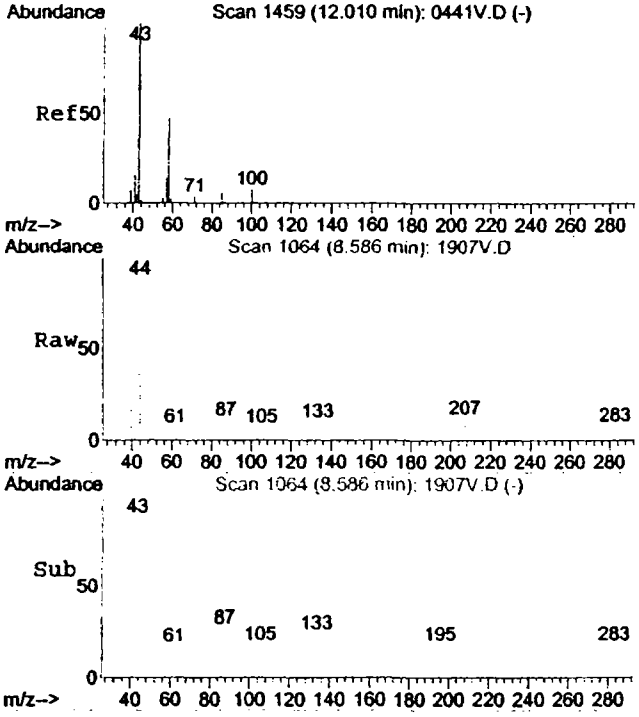




#35
trans-1,3-Dichloropropene
Concen: 0.23 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 75 Resp: 3565

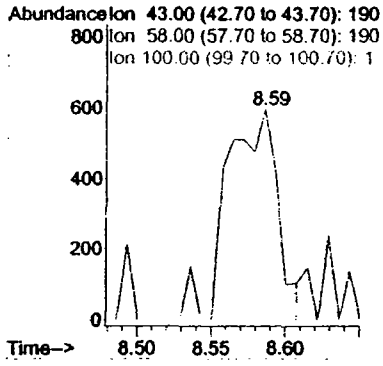


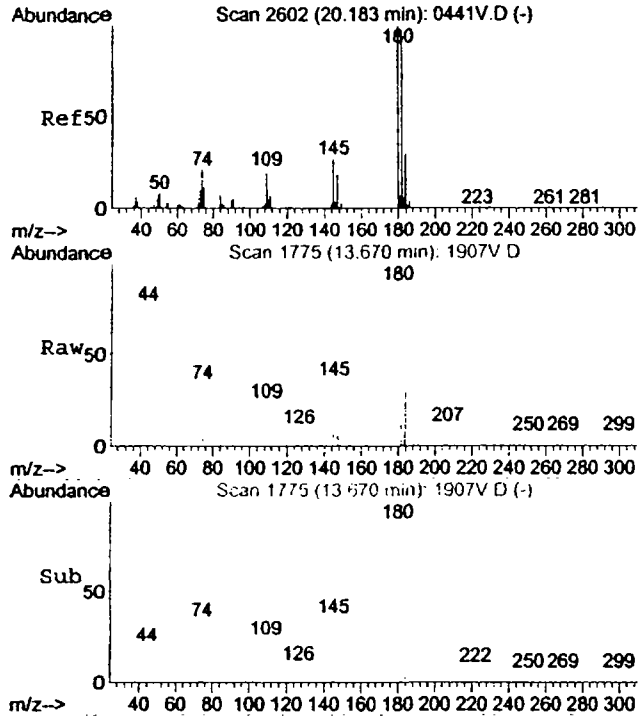


#39
2-Hexanone
Concen: 0.19 UG/L
RT: 8.59 min Scan# 1064
Delta R.T. 0.19 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion: 43 Resp: 1413

Ion	Ratio	Lower	Upper
43	100		
58	3.2	42.2	63.4#
100	0.0	11.4	17.0#

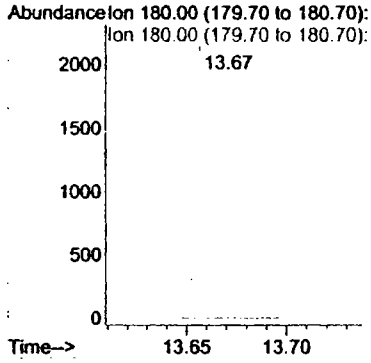


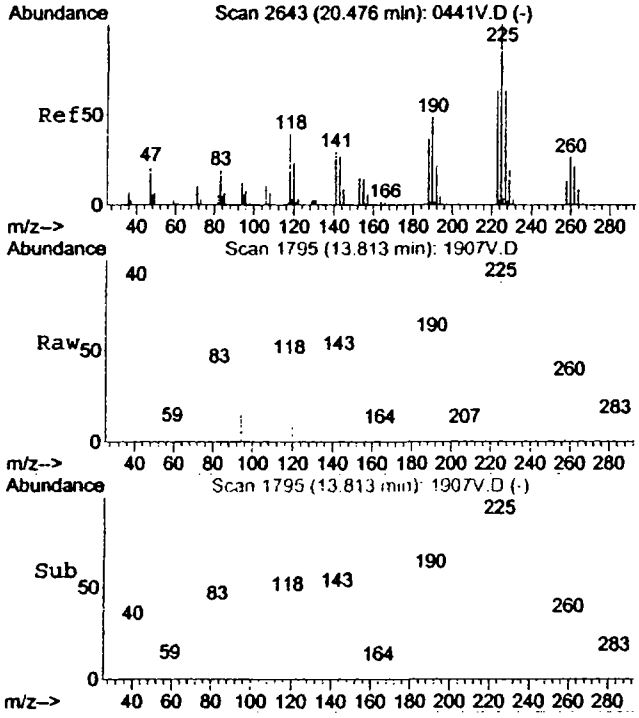


#68
1,2,4-Trichlorobenzene
Concen: 0.13 UG/L
RT: 13.67 min Scan# 1775
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion:180 Resp: 2622

Ion	Ratio	Lower	Upper
180	100		
180	100.0	80.0	120.0

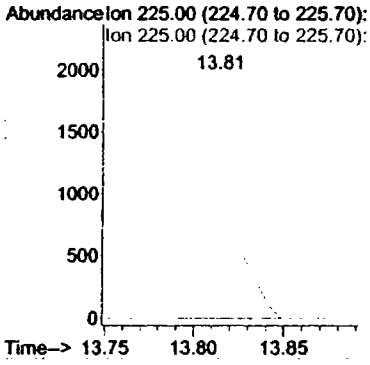


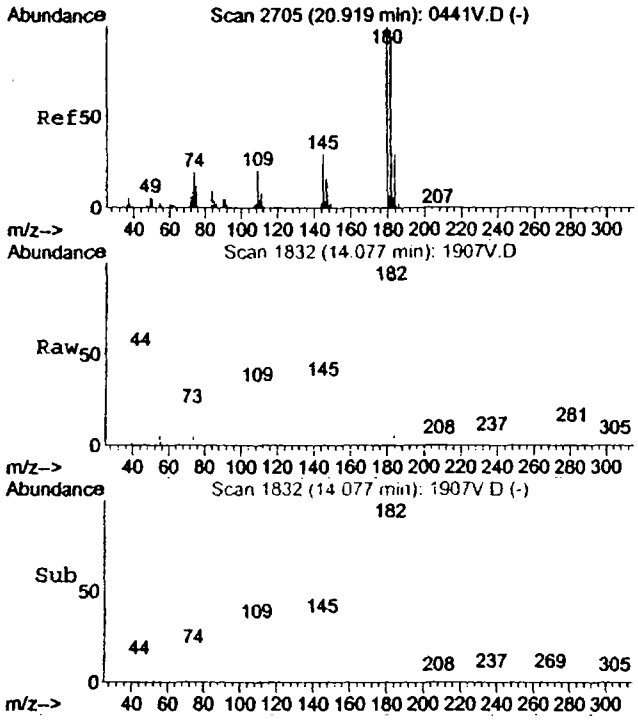


#70
Hexachlorobutadiene
Concen: 0.24 UG/L
RT: 13.81 min Scan# 1795
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion:225 Resp: 2503

Ion	Ratio	Lower	Upper
225	100		
225	100.0	80.0	120.0

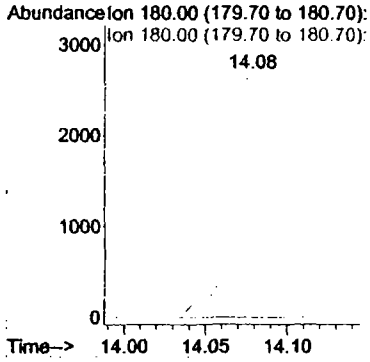




#71
1,2,3-Trichlorobenzene
Concen: 0.19 UG/L
RT: 14.08 min Scan# 1832
Delta R.T. 0.00 min
Lab File: 1907V.D
Acq: 28 Aug 2007 14:33

Tgt Ion:180 Resp: 3663

Ion	Ratio	Lower	Upper
180	100		
180	100.0	80.0	120.0



R524142 Heritage Environmental Services, LLC A780299

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4537
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 1908V.D Date/Time 28Aug07 14:58:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
79-01-6	750	TRICHLOROETHENE	96		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	109			% RECOVERY	
2037-26-5	726	TOLUENE-D8	96			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	90			% RECOVERY	

Comment 1:10 Dilution

HW 8/30/07

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1908V.D Vial: 15
Acq On : 28 Aug 2007 14:58 Operator: REGI
Sample : A780299 1:10 LQ4537 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 15:15:43 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

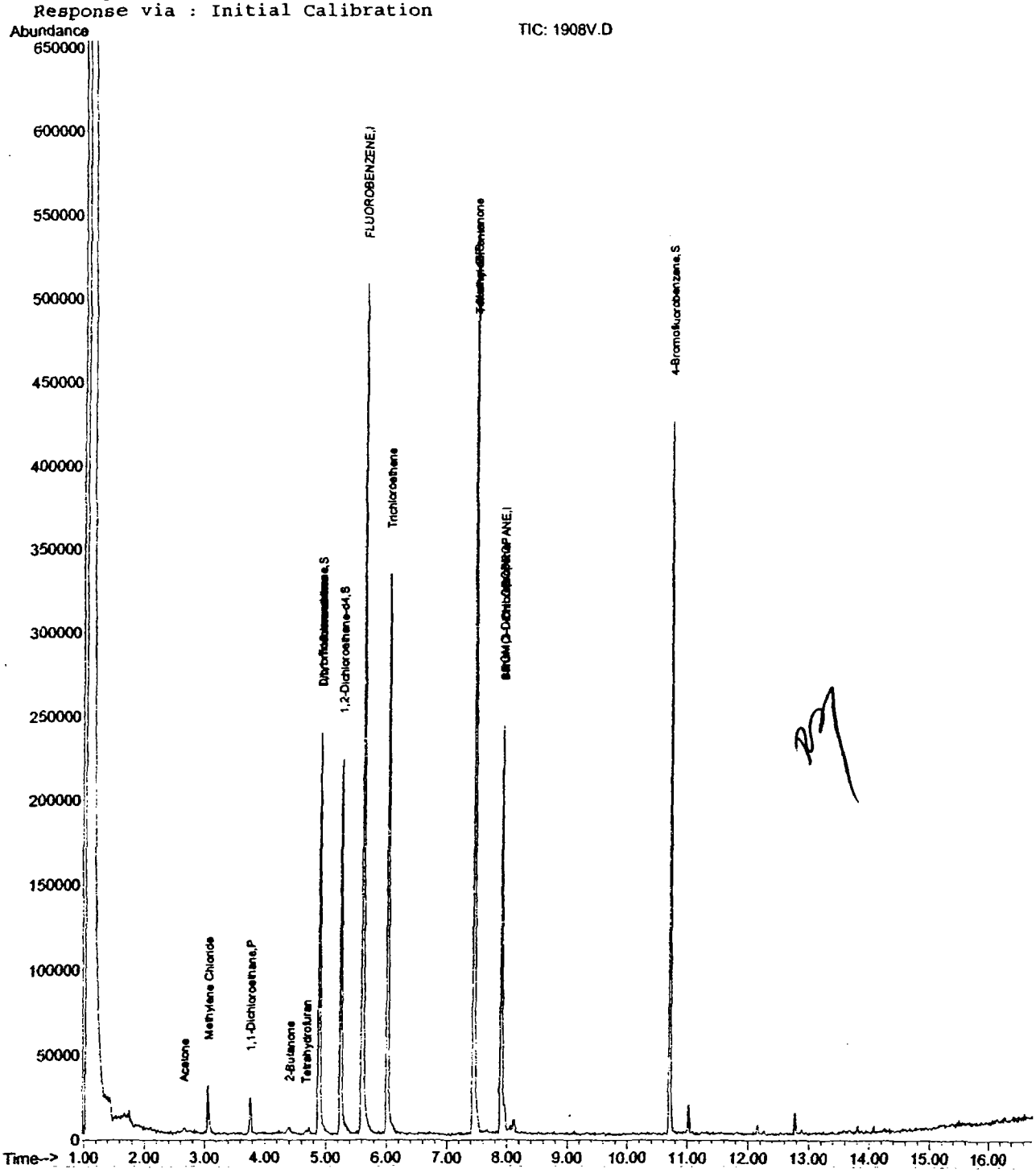
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	473167	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	149552	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	152654	10.81	UG/L	0.00
Spiked Amount 10.000			Recovery	=	108.10%	
23) 1,2-Dichloroethane-d4	5.25	65	181918	10.93	UG/L	0.00
Spiked Amount 10.000			Recovery	=	109.30%	
33) Toluene-d8	7.45	98	416596	9.61	UG/L	0.00
Spiked Amount 10.000			Recovery	=	96.10%	
51) 4-Bromofluorobenzene	10.70	95	139771	9.03	UG/L	0.00
Spiked Amount 10.000			Recovery	=	90.30%	
Target Compounds						Qvalue
8) Acetone	2.66	43	7841	1.73	UG/L #	100
10) Methylene Chloride	3.06	84	15205	0.21	UG/L #	66
13) 1,1-Dichloroethane	3.77	63	22262	1.00	UG/L	100
14) 2-Butanone	4.42	43	1078	0.18	UG/L #	100
17) Tetrahydrofuran	4.68	42	965	0.24	UG/L #	100
20) 1,1,1-Trichloroethane	4.89	97	5400	0.25	UG/L	84
27) Trichloroethene 94	6.02	130	126499	9.60	UG/L	97
31) 4-Methyl-2-Pentanone	7.45	43	1825	0.16	UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	3764	0.25	UG/L	100

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

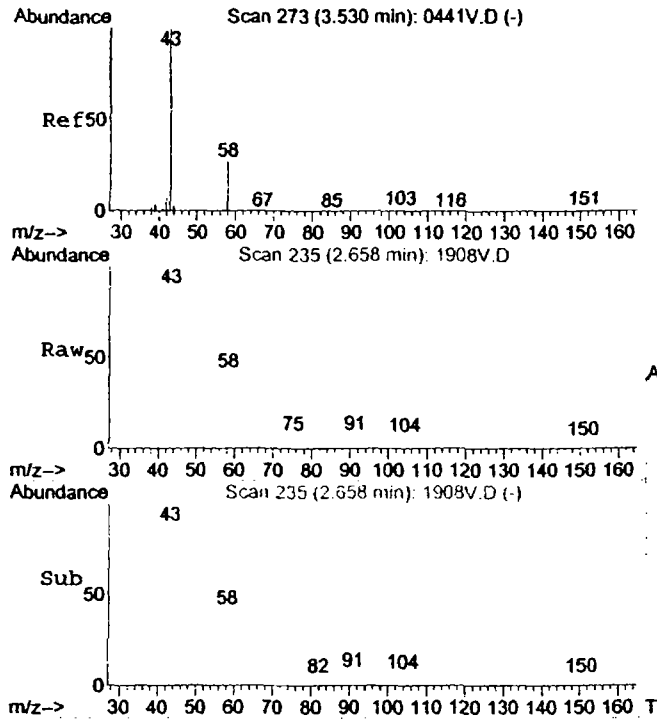
Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1908V.D Vial: 15
Acq On : 28 Aug 2007 14:58 Operator: REGI
Sample : A780299 1:10 LQ4537 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 15:15 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration



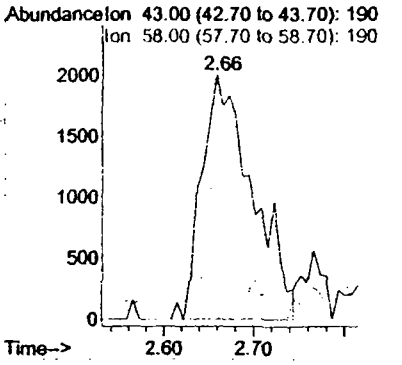
225

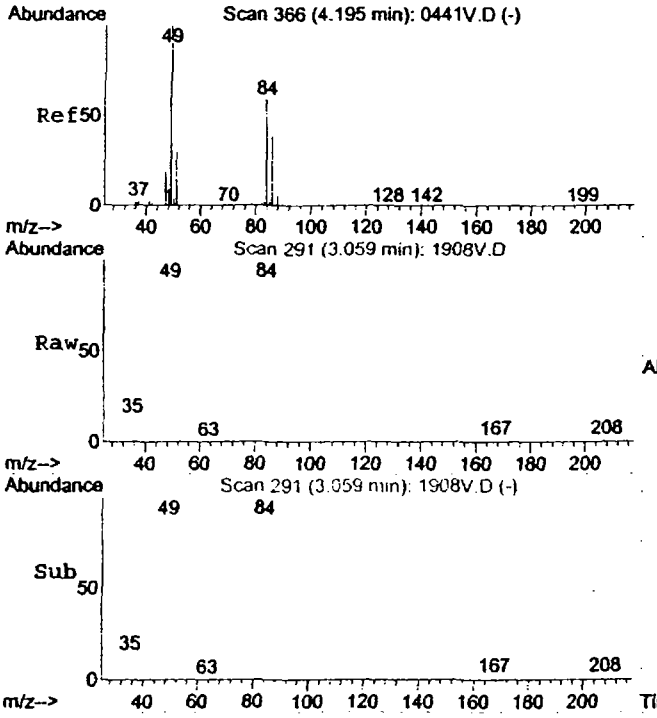


#8
Acetone
Concen: 1.73 UG/L
RT: 2.66 min Scan# 235
Delta R.T. -0.01 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 43 Resp: 7841

Ion	Ratio	Lower	Upper
43	100		
58	30.7	0.0	0.0#

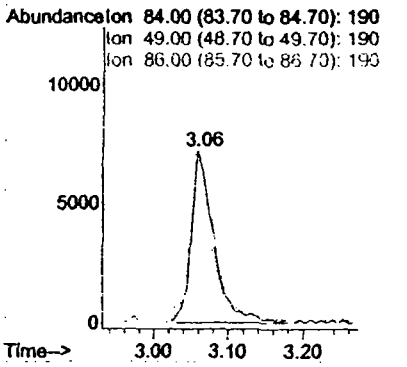


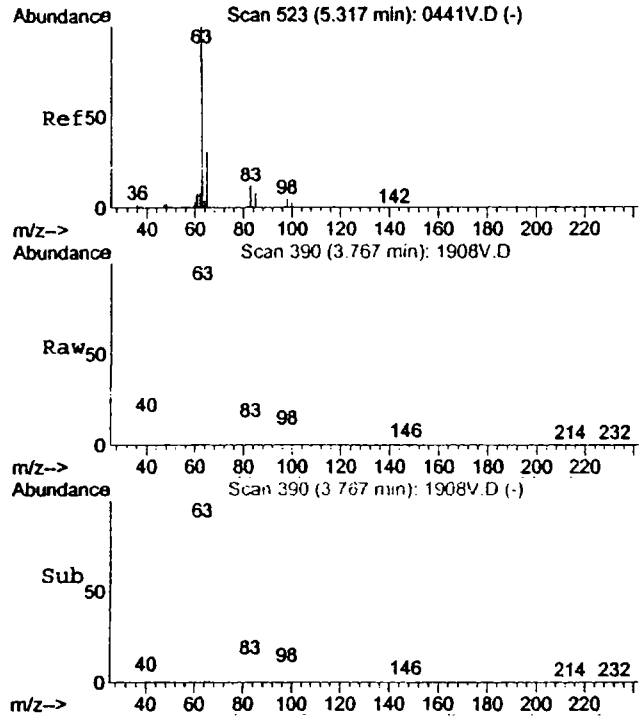


#10
Methylene Chloride
Concen: 0.21 UG/L
RT: 3.06 min Scan# 291
Delta R.T. -0.01 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 84 Resp: 15205

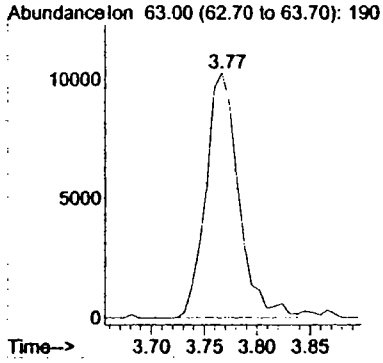
Ion	Ratio	Lower	Upper
84	100		
49	122.2	150.7	226.1#
86	63.3	50.5	75.7

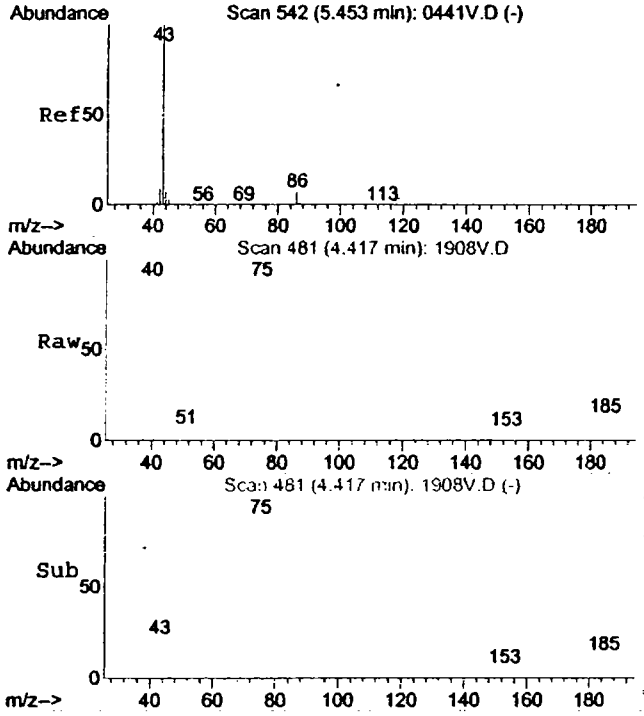




#13
1,1-Dichloroethane
Concen: 1.00 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 63 Resp: 22262

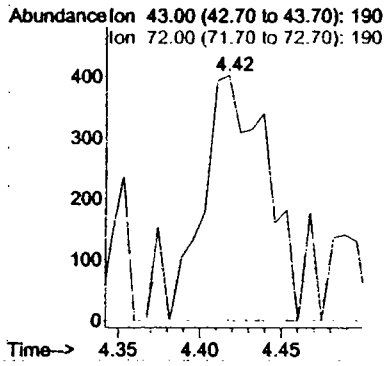


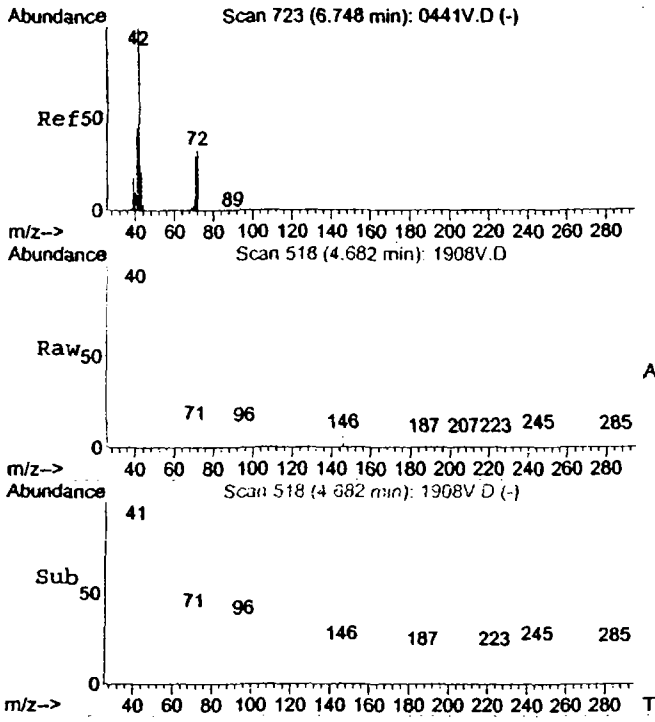


#14
2-Butanone
Concen: 0.18 UG/L
RT: 4.42 min Scan# 481
Delta R.T. 0.00 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 43 Resp: 1078

Ion	Ratio	Lower	Upper
43	100		
72	8.3	0.0	0.0#

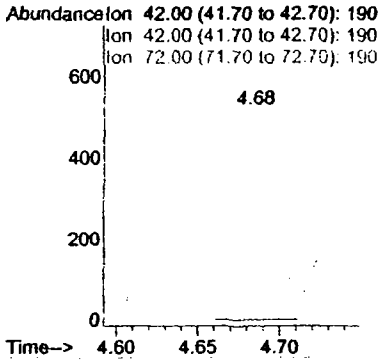


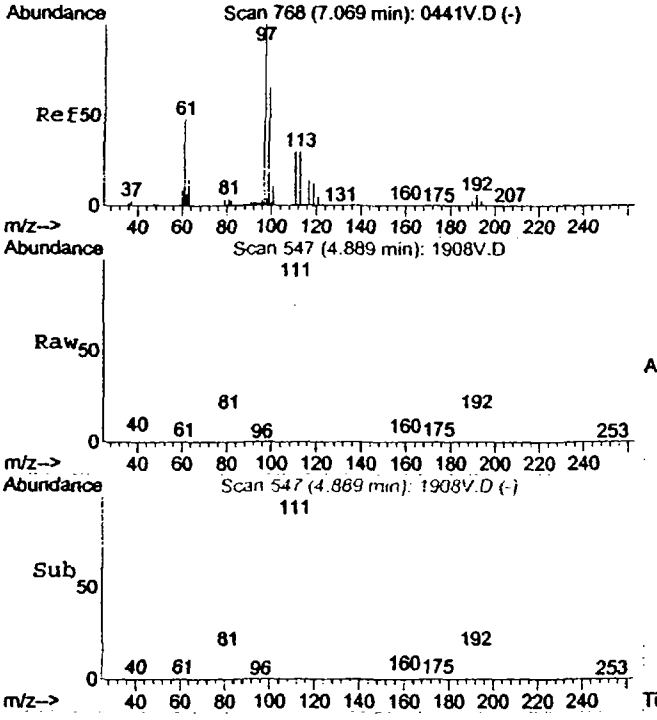


#17
Tetrahydrofuran
Concen: 0.24 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 42 Resp: 965

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	0.0	0.0	0.0

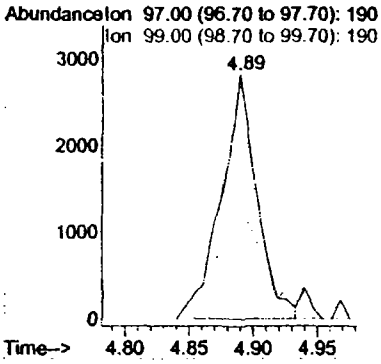


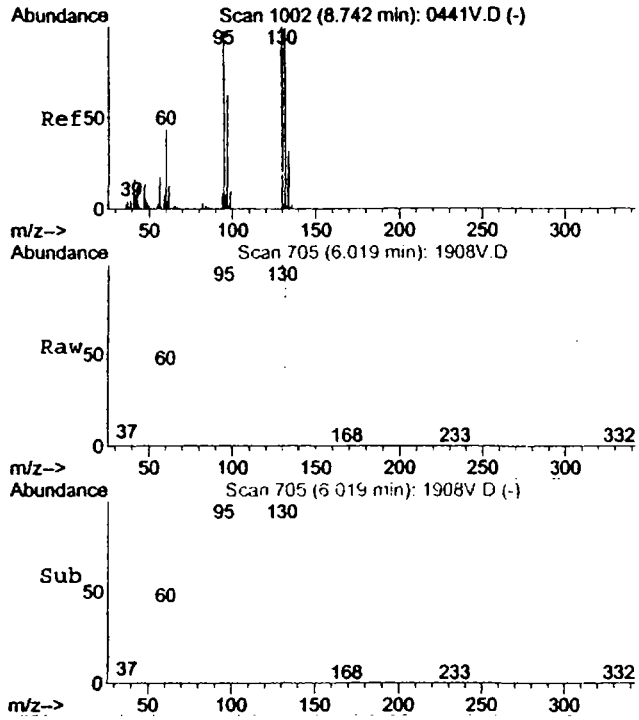


#20
1,1,1-Trichloroethane
Concen: 0.25 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 97 Resp: 5400

Ion	Ratio	Lower	Upper
97	100		
99	60.9	59.9	89.9

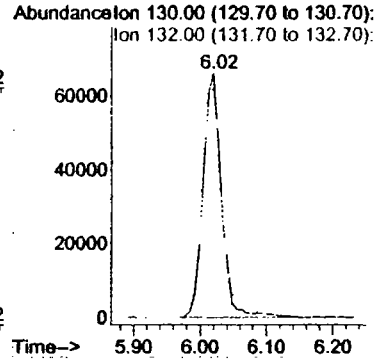


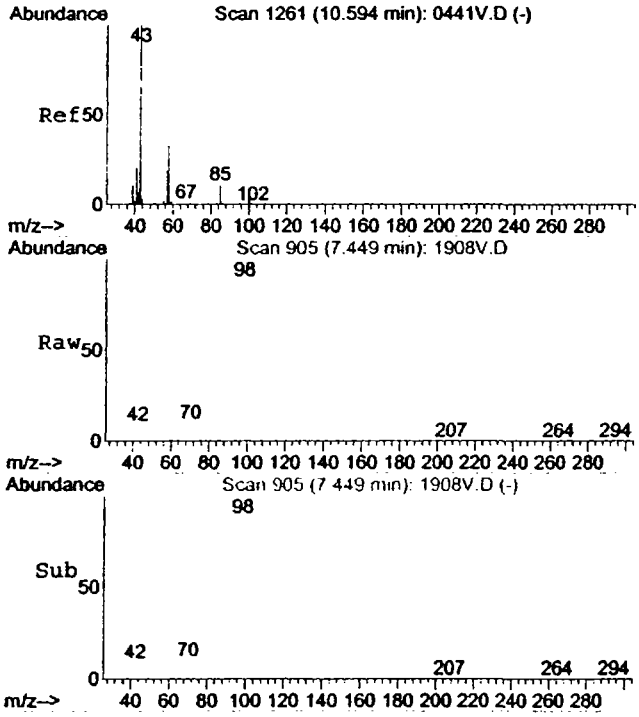


#27
Trichloroethene
Concen: 9.60 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion:130 Resp: 126499

Ion	Ratio	Lower	Upper
130	100		
132	98.3	80.7	121.1

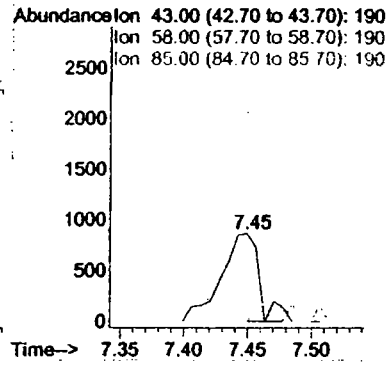


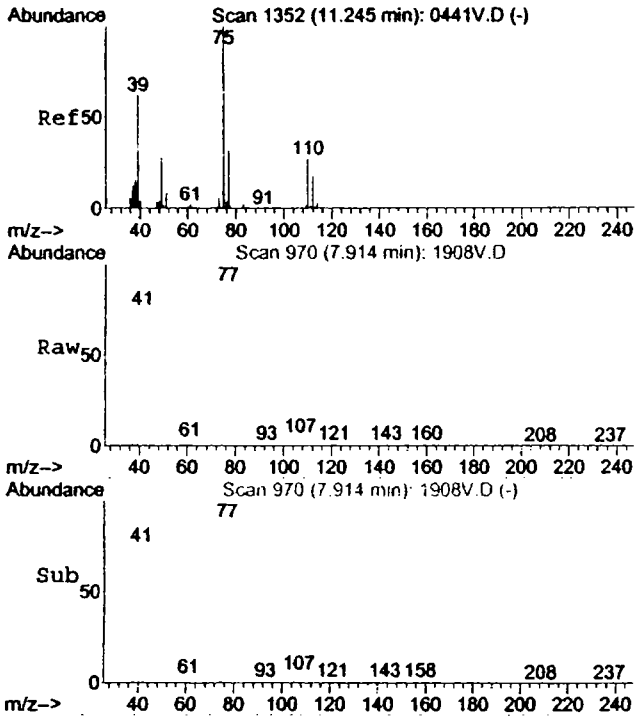


#31
4-Methyl-2-Pentanone
Concen: 0.16 UG/L
RT: 7.45 min Scan# 905
Delta R.T. 0.09 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 43 Resp: 1825

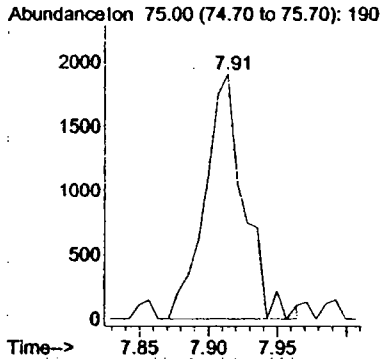
Ion	Ratio	Lower	Upper
43	100		
58	213.7	0.0	0.0#
85	2.9	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.25 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1908V.D
Acq: 28 Aug 2007 14:58

Tgt Ion: 75 Resp: 3764



R524142 Heritage Environmental Services, LLC A780302

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4540
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 1909V.D Date/Time 28Aug07 15:24:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
79-01-6	750	TRICHLOROETHENE	300		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	111			% RECOVERY	
2037-26-5	726	TOLUENE-D8	95			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	85			% RECOVERY	

Comment 1:10 Dilution

AW 8/30/07

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1909V.D Vial: 16
Acq On : 28 Aug 2007 15:24 Operator: REGI
Sample : A780302 1:10 LQ4540 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 15:41:29 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

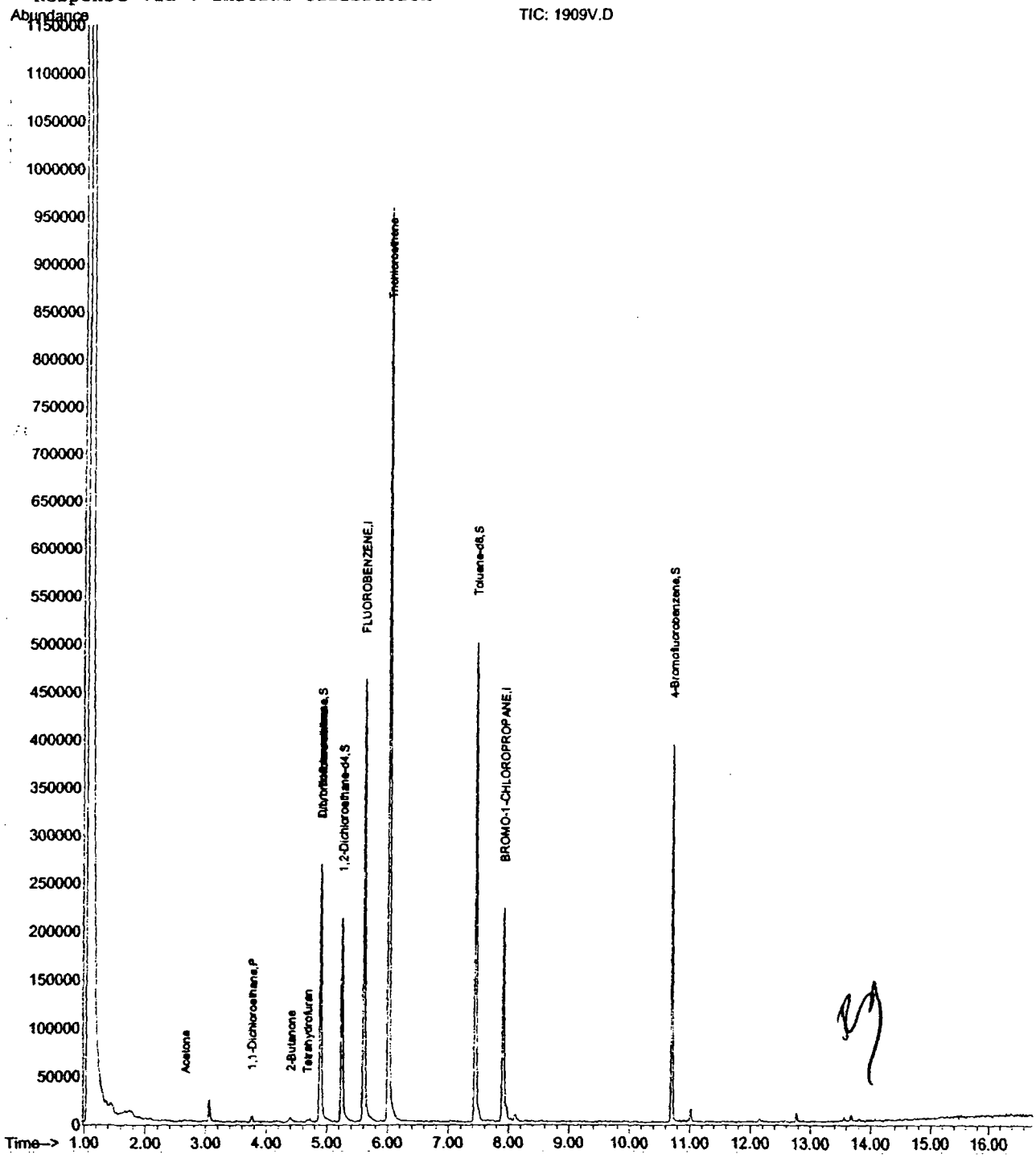
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	441379	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	145153	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	142259	10.80 UG/L	0.00
Spiked Amount 10.000			Recovery	= 108.00%	
23) 1,2-Dichloroethane-d4	5.25	65	171477	11.05 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.50%	
33) Toluene-d8	7.45	98	384433	9.51 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.10%	
51) 4-Bromofluorobenzene	10.70	95	127618	8.50 UG/L	0.00
Spiked Amount 10.000			Recovery	= 85.00%	
Target Compounds					Qvalue
8) Acetone	2.67	43	4113	0.97 UG/L #	100
13) 1,1-Dichloroethane	3.77	63	6395	0.31 UG/L	100
14) 2-Butanone	4.41	43	937	0.16 UG/L #	100
17) Tetrahydrofuran	4.68	42	1021	0.27 UG/L #	100
20) 1,1,1-Trichloroethane	4.89	97	36695	1.81 UG/L	85
27) Trichloroethene 300	6.02	130	365042	29.71 UG/L	96

(#) = qualifier out of range (m) = manual integration
1909V.D DWV.M Tue Aug 28 15:41:31 2007

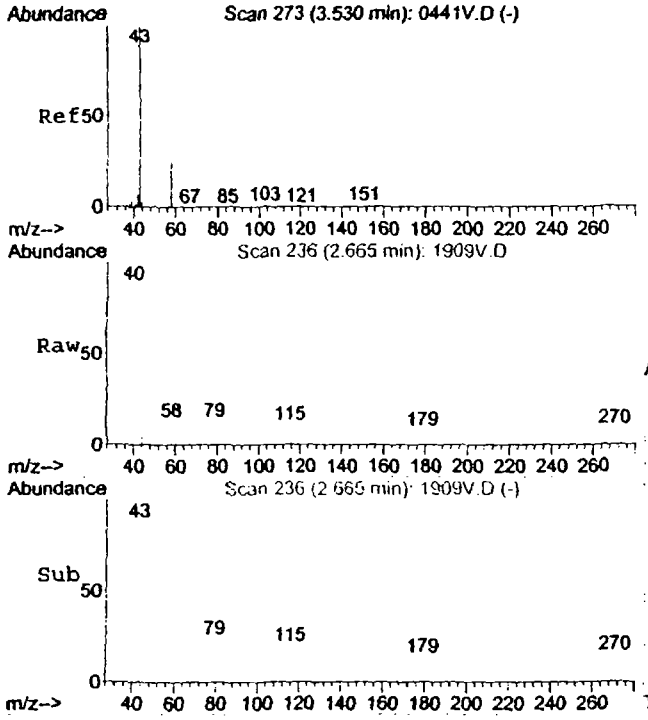
Quantification Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082807\1909V.D Vial: 16
Acq On : 28 Aug 2007 15:24 Operator: REGI
Sample : A780302 1:10 LQ4540 Inst : Instrumen
Misc : 8/28/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 28 15:41 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration



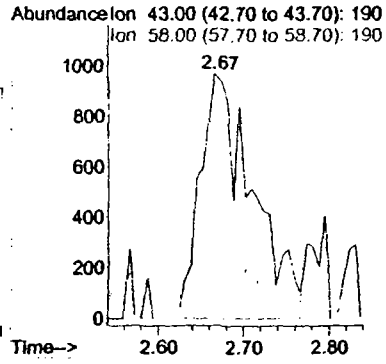
33

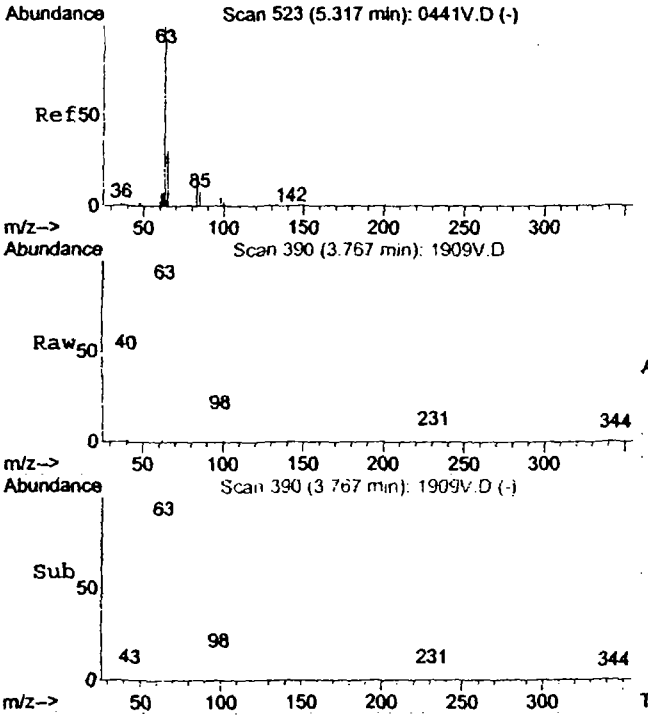


#8
Acetone
Concen: 0.97 UG/L
RT: 2.67 min Scan# 236
Delta R.T. -0.01 min
Lab File: 1909V.D
Acq: 28 Aug 2007 15:24

Tgt Ion: 43 Resp: 4113

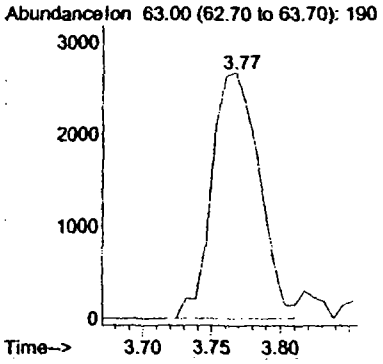
Ion	Ratio	Lower	Upper
43	100		
58	18.5	0.0	0.0#

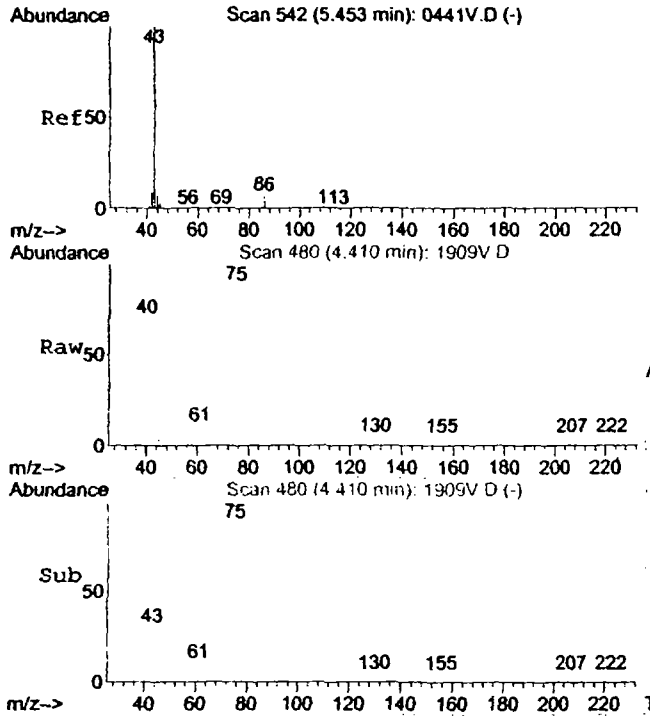




#13
1,1-Dichloroethane
Concen: 0.31 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1909V.D
Acq: 28 Aug 2007 15:24

Tgt Ion: 63 Resp: 6395

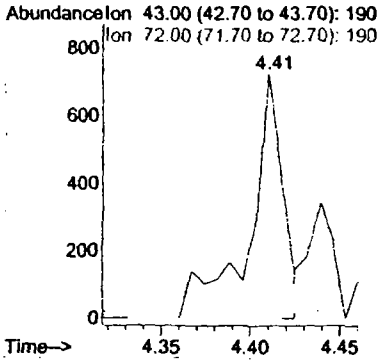


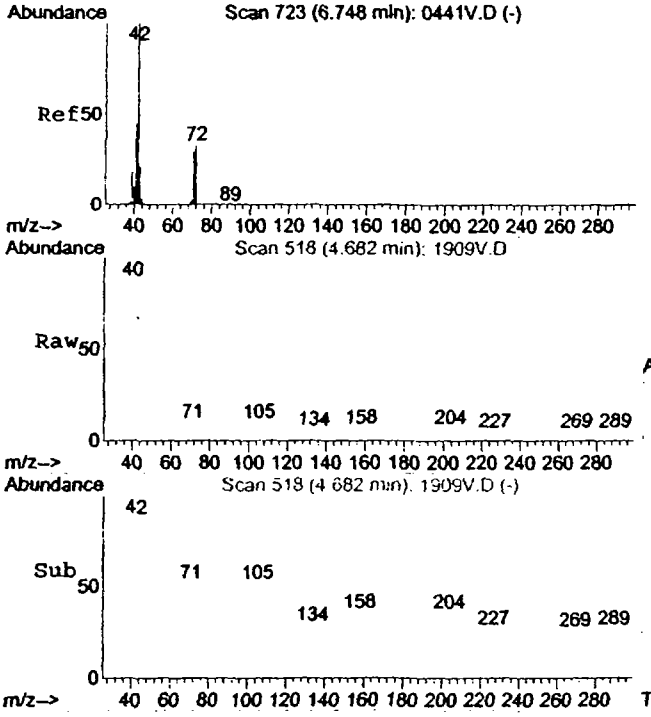


#14
2-Butanone
Concen: 0.16 UG/L
RT: 4.41 min Scan# 480
Delta R.T. -0.01 min
Lab File: 1909V.D
Acq: 28 Aug 2007 15:24

Tgt Ion: 43 Resp: 937

Ion	Ratio	Lower	Upper
43	100		
72	10.7	0.0	0.0#

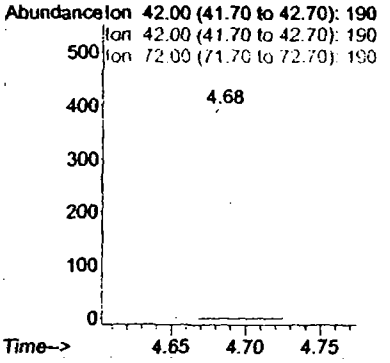


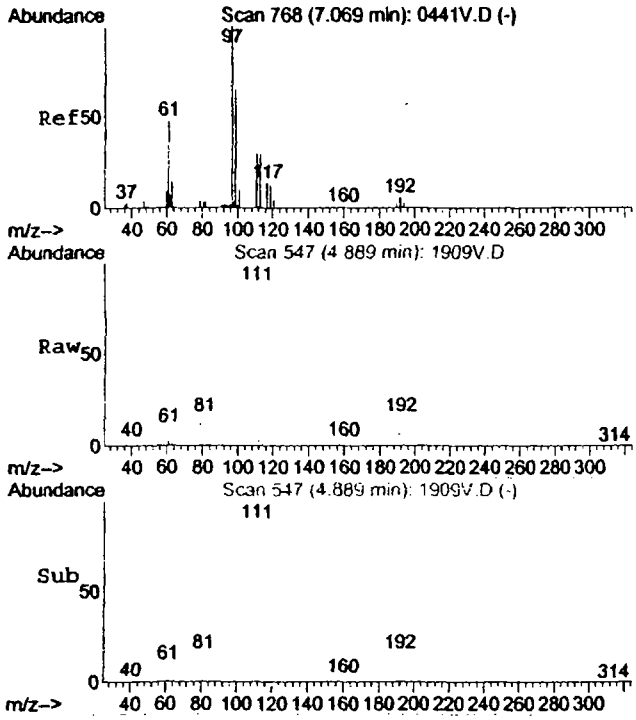


#17
Tetrahydrofuran
Concen: 0.27 UG/L
RT: 4.68 min Scan# 518
Delta R.T. 0.01 min
Lab File: 1909V.D
Acq: 28 Aug 2007 15:24

Tgt Ion: 42 Resp: 1021

Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	18.0	0.0	0.0#

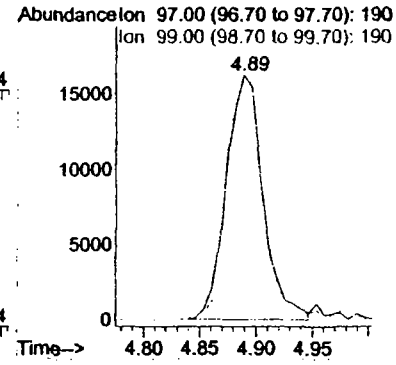


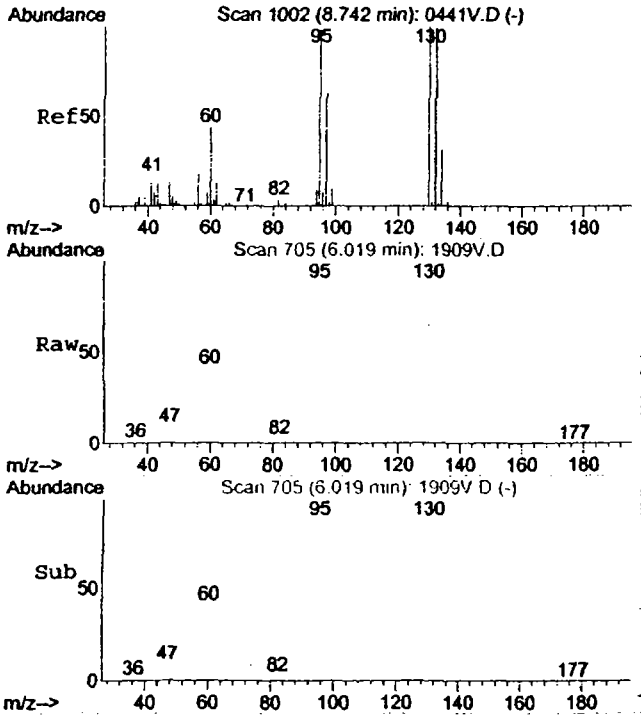


#20
1,1,1-Trichloroethane
Concen: 1.81 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1909V.D
Acq: 28 Aug 2007 15:24

Tgt Ion: 97 Resp: 36695

Ion	Ratio	Lower	Upper
97	100		
99	62.2	59.9	89.9

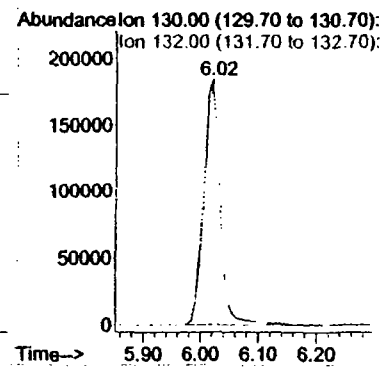




#27
Trichloroethene
Concen: 29.71 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1909V.D
Acq: 28 Aug 2007 15:24

Tgt Ion:130 Resp: 365042

Ion	Ratio	Lower	Upper
130	100		
132	96.9	80.7	121.1



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

EPA Method 524.2 BROMOFLUOROBENZENE (BFB)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 1919V.D BFB Injection Date: 08/29/07

Instrument ID: GCMS#17 BFB Injection Time: 06:28

GC Column: CAP ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 80.0% of mass 95	47.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	78.6
175	5.0 - 9.0% of mass 174	5.6 (7.2)1
176	95.0 - 101.0% of mass 174	79.1 (100.5)1
177	5.0 - 9.0% of mass 176	5.0 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD02	DW STD02	1920V.D	08/29/07	06:47
02	DW BLANK01	DW BLANK	1921V.D	08/29/07	07:44
03	A780300	A780300 1:10 LQ4538	1922V.D	08/29/07	08:14

HW 8/30/07

8A

EPA Method 524.2 VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 1920V.D Date Analyzed: 08/29/07

Instrument ID: GCMS#17 Time Analyzed: 06:47

GC Column: CAP ID: 0.25 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	473442	5.61	160116	7.91		
	UPPER LIMIT	710163	6.11	240174	8.41		
	LOWER LIMIT	331409	5.11	112081	7.41		
	EPA SAMPLE NO.						
01	DW BLANK01	444222	5.61	147989	7.91		
02	A780300	456908	5.61	151863	7.91		

IS1 = FLUOROBENZENE
IS2 = BROMO-1-CHLOROPROPANE

AREA UPPER LIMIT = +50% of internal standard area
AREA LOWER LIMIT = - 30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

 # Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

HW 8/30/07

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Date Injected: 29-Aug-07 Instrument: GCMS#17

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	TOT OUT
01	DW BLANK01	112	95	82	0
02	A780300	115	97	84	0

QC LIMITS

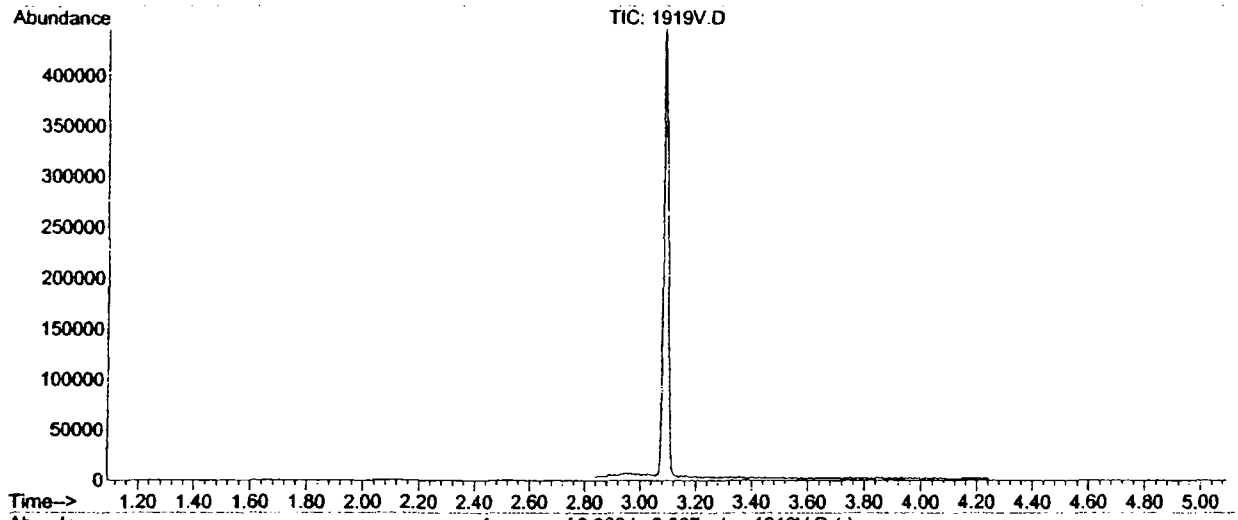
SMC1	=	1,2-Dichloroethane-d4	(80-120)
SMC2	=	Toluene-d8	(80-120)
SMC3	=	4-Bromofluorobenzene	(80-120)

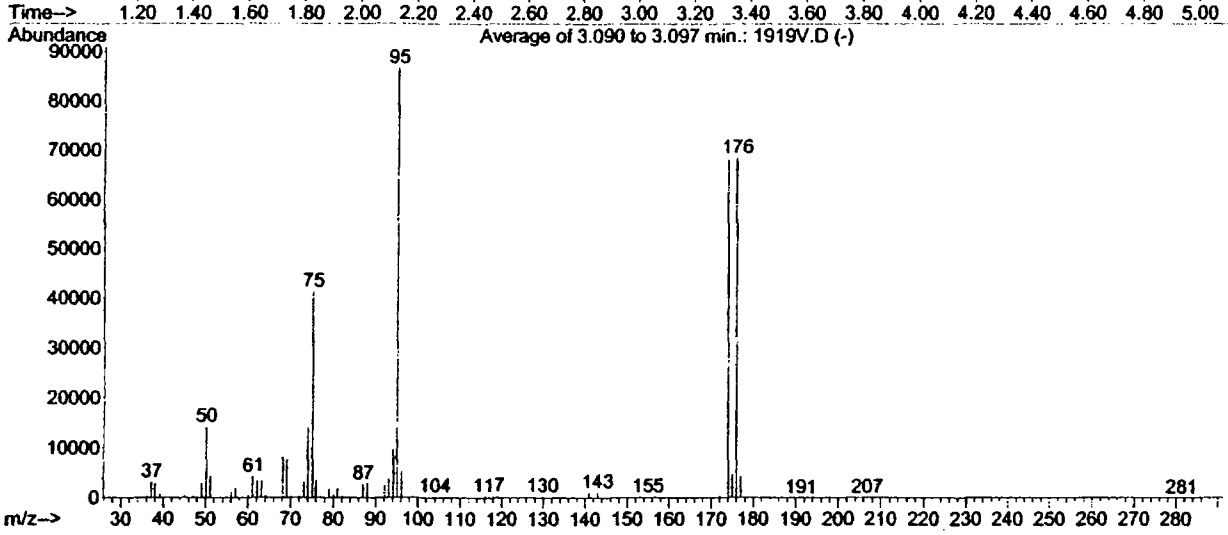
Column to be used to flag recovery values
* Values outside of contract required QC limits
D System Monitoring Compound diluted out

HW 8/30/07

BFB

Data File : C:\HPCHEM\DATA\V082907\1919V.D Vial: 17
Acq On : 29 Aug 2007 6:28 Operator: REGI
Sample : BFB TUNE CHECK Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES





Spectrum Information: Average of 3.090 to 3.097 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	14351	PASS
75	95	30	60	47.7	41408	PASS
95	95	100	100	100.0	86738	PASS
96	95	5	9	6.3	5448	PASS
173	174	0.00	2	0.2	167	PASS
174	95	50	100	78.6	68208	PASS
175	174	5	9	7.2	4882	PASS
176	174	95	101	100.5	68570	PASS
177	176	5	9	6.3	4324	PASS

1919V.D DWV.M Wed Aug 29 06:33:36 2007

8/30/07

Average of 3.090 to 3.097 min.: 1919V.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	164	48.05	421	61.10	4392	73.10	3361
36.15	486	49.15	3009	62.10	3506	74.10	14111
37.10	3238	50.10	14351	63.10	3585	75.10	41408
38.05	2953	51.15	4564	64.15	511	76.00	3650
39.10	896	52.05	235	65.00	228	76.95	642
40.00	120	53.10	62	65.20	131	77.90	262
44.10	117	55.10	354	67.05	287	78.10	253
45.05	692	56.10	1253	68.10	8334	79.00	1830
46.20	84	57.10	2237	69.10	8179	80.05	659
47.00	603	58.20	121	70.10	657	81.00	1984
47.20	305	60.05	898	72.00	550	82.05	533

Average of 3.090 to 3.097 min.: 1919V.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.00	87	103.80	151	127.50	57	145.80	84
87.00	2874	104.05	332	127.90	337	148.00	269
88.00	3191	104.80	57	129.85	396	153.10	162
90.80	161	105.90	289	131.00	258	155.00	279
91.00	228	106.10	83	133.20	71	155.90	91
92.10	2449	112.00	70	134.90	204	156.10	107
93.05	3888	116.00	391	137.10	50	156.70	54
94.10	9665	116.95	419	140.95	1117	157.30	86
95.10	86738	117.95	406	142.00	71	157.90	73
96.10	5448	118.85	417	143.00	1201	158.70	58
97.00	246	127.30	56	144.90	167	162.15	146

Average of 3.090 to 3.097 min.: 1919V.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.00	664	281.30	57				
172.80	167						
174.00	68208						
175.00	4882						
176.00	68570						
177.00	4324						
178.10	107						
188.90	50						
191.20	55						
206.80	93						
207.00	53						

R524145 Heritage Environmental Services, LLC Q1991480

QC Report

QCType CCVD Duplicate SampleID DataFile 1920V.D
Date Entered 30Aug07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 29Aug0706:47:00 Method Matrix 1 Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE	0.1599		0.1279			20
236	CHLOROMETHANE	0.2255		0.2275			.9
768	VINYL CHLORIDE	0.2658		0.2593			2.4
198	BROMOMETHANE	0.1764		0.1762			.1
234	CHLOROETHANE	0.1681		0.1974			17.4
372	TRICHLOROFLUOROMETHANE	0.4523		0.4588			1.4
8	1,1-DICHLOROETHENE	0.2390		0.2279			4.6
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	2.0		2.81	QDR		40.5
746	TRANS-1,2-DICHLOROETHENE	0.2644		0.2597			1.8
7	1,1-DICHLOROETHANE	0.4717		0.4698			.4
246	CIS-1,2-DICHLOROETHENE	0.2744		0.2478			9.7
235	CHLOROFORM	0.5325		0.5553			4.3
194	BROMOCHLOROMETHANE	0.1540		0.1530			.6
2	1,1,1-TRICHLOROETHANE	0.4592		0.4419			3.8
10	1,1-DICHLOROPROPENE	0.1214		0.1071			11.8
217	CARBON TETRACHLORIDE	0.4395		0.3819			13.1
21	1,2-DICHLOROETHANE	0.4142		0.3949			4.7
151	BENZENE	0.9777		0.9233			5.6
750	TRICHLOROETHENE	0.2783		0.2659			4.5
23	1,2-DICHLOROPROPANE	0.2224		0.2059			7.4
299	DICHLOROBROMOMETHANE	0.3682		0.2949			19.9
296	DIBROMOMETHANE	0.1704		0.1694			.6
247	CIS-1,3-DICHLOROPROPENE	0.3304		0.2443			26.1
724	TOLUENE	0.9958		0.8480			14.8
747	TRANS-1,3-DICHLOROPROPENE	0.3216		0.2405			25.2
4	1,1,2-TRICHLOROETHANE	0.2203		0.2188			.7
27	1,3-DICHLOROPROPANE	1.0401		0.8906			14.4
703	TETRACHLOROETHENE	0.8492		0.7733			8.9
295	DIBROMOCHLOROMETHANE	0.8649		0.6226			28
18	1,2-DIBROMOETHANE (EDB)	0.2343		0.2008			14.3
231	CHLOROBENZENE	1.9921		1.6375			17.8
349	ETHYL BENZENE	0.9847		0.7577			23.1
1	1,1,1,2-TETRACHLOROETHANE	0.8148		0.6893			15.4
492	M/P-XYLENE	1.2604		0.9401			25.4
549	O-XYLENE	1.2797		0.9559			25.3
680	STYRENE	2.0523		1.4254			30.5
432	ISOPROPYLBENZENE (CUMENE)	3.5792		2.5904			27.6
197	BROMOFORM	0.5896		0.3470			41.1
3	1,1,2,2-TETRACHLOROETHANE	1.0225		0.9318			8.9
532	N-PROPYLBENZENE	0.4433		0.3580			19.2
193	BROMOBENZENE	1.3053		1.1257			13.8
25	1,3,5-TRIMETHYLBENZENE	3.1005		2.1968			29.1
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.9137		0.7509			17.8
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.9041		0.7612			15.8

8/30/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE	2.9354		2.3130			21.2
17	1,2,4-TRIMETHYLBENZENE	3.1619		2.2025			30.3
644	SEC-BUTYLBENZENE	2.0		1.13	LIN		43.5
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.0		1.08	LIN		46
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	2.0710		1.6779			19
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	2.1051		1.7737			15.7
519	N-BUTYLBENZENE	2.0		1.18	LIN		41
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	2.0348		1.7180			15.6
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.3024		0.2326			23.1
16	1,2,4-TRICHLOROBENZENE	1.2610		0.9359			25.8
398	HEXACHLOROBUTADIENE	0.6439		0.6130			4.8
493	NAPHTHALENE	2.0		0.904	LIN		54.8
13	1,2,3-TRICHLOROBENZENE	1.1778		0.8778			25.5
14	1,2,3-TRICHLOROPROPANE	0.3717		0.3248			12.6
99	ACETONE (2-PROPANONE)	0.0959		0.0968			.9
52	2-BUTANONE	0.1299		0.1278			1.6
91	4-METHYL-2-PENTANONE	0.2375		0.1881			20.8
709	TETRAHYDROFURAN	0.0866		0.0798			7.9
60	2-HEXANONE	0.4584		0.3676			19.8
859	METHYL-T-BUTYL ETHER (MTBE)	0.7542		0.6327			16.1
301	DICHLOROETHANE-D4	0.3517		0.4001			13.8
726	TOLUENE-D8	0.9162		0.9072			1
196	4-BROMOFLUOROBENZENE	1.0345		0.9687			6.4

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is concentration ( ). CCV passes for TCE only.

Qualifiers

QDR Quadratic Equation Used
LIN Linear Regression Used

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1920V.D Vial: 17
Acq On : 29 Aug 2007 6:47 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 07:07:12 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	473442	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	160116	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	158418	11.21	UG/L	0.00
Spiked Amount 10.000			Recovery	=	112.10%	
23) 1,2-Dichloroethane-d4	5.25	65	189436	11.38	UG/L	0.00
Spiked Amount 10.000			Recovery	=	113.80%	
33) Toluene-d8	7.45	98	429489	9.90	UG/L	0.00
Spiked Amount 10.000			Recovery	=	99.00%	
51) 4-Bromofluorobenzene	10.70	95	155107	9.36	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.60%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.24	85	12108	1.60	UG/L	100
3) Chloromethane	1.37	50	21545	2.02	UG/L	100
4) VINYL CHLORIDE	1.47	62	24548	1.95	UG/L	96
5) Bromomethane	1.76	94	16681	2.00	UG/L #	1
6) Chloroethane	1.86	64	18688	2.35	UG/L	98
7) Trichlorofluoromethane	2.09	101	43439	2.03	UG/L #	65
8) Acetone	2.66	43	18324	4.04	UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	21581	1.91	UG/L	100
10) Methylene Chloride	3.06	84	45817	2.81	UG/L #	68
11) MTBE	3.34	73	119824	3.36	UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	24586	1.96	UG/L	81
13) 1,1-Dichloroethane	3.77	63	44482	1.99	UG/L	100
14) 2-Butanone	4.42	43	24202	3.93	UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	23462	1.81	UG/L #	69
16) CHLOROFORM	4.72	83	52579	2.09	UG/L	96
17) Tetrahydrofuran	4.67	42	15103	3.68	UG/L #	100
18) Bromochloromethane	4.63	128	14489	1.99	UG/L #	28
19) 2,2-Dichloropropane	4.36	77	28539	1.92	UG/L	94
20) 1,1,1-Trichloroethane	4.89	97	41846	1.92	UG/L	86
22) 1,1-Dichloropropene	5.07	110	10145	1.77	UG/L	100
24) Carbon Tetrachloride	5.06	117	36158	1.74	UG/L	98
25) 1,2-Dichloroethane	5.33	62	37390	1.91	UG/L	92
26) Benzene	5.29	78	87422	1.89	UG/L	100
27) Trichloroethene	6.02	130	25175	1.91	UG/L	96
28) 1,2-DICHLOROPROPANE	6.28	63	19495	1.85	UG/L	100
29) Bromodichloromethane	6.62	83	27923	1.60	UG/L	91
30) Dibromomethane	6.41	93	16037	1.99	UG/L	95
31) 4-Methyl-2-Pentanone	7.36	43	35618	3.17	UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	23133	1.48	UG/L	100
34) TOLUENE	7.52	91	80292	1.70	UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	22771	1.50	UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	20718	1.99	UG/L	100
37) 1,2-Dibromoethane	8.66	107	19010	1.71	UG/L	92
39) 2-Hexanone	8.39	43	23545	3.21	UG/L	96
40) 1,3-Dichloropropane	8.26	76	28519	1.71	UG/L	100
41) Tetrachloroethene	8.19	166	24764	1.82	UG/L	99
42) Dibromochloromethane	8.54	129	19939	1.44	UG/L	100

(#) = qualifier out of range (m) = manual integration
1920V.D DWV.M Wed Aug 29 07:09:23 2007

Data File : C:\HPCHEM\DATA\V082907\1920V.D Vial: 17
Acq On : 29 Aug 2007 6:47 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 07:07:12 2007 Quant Results File: DWV.RES

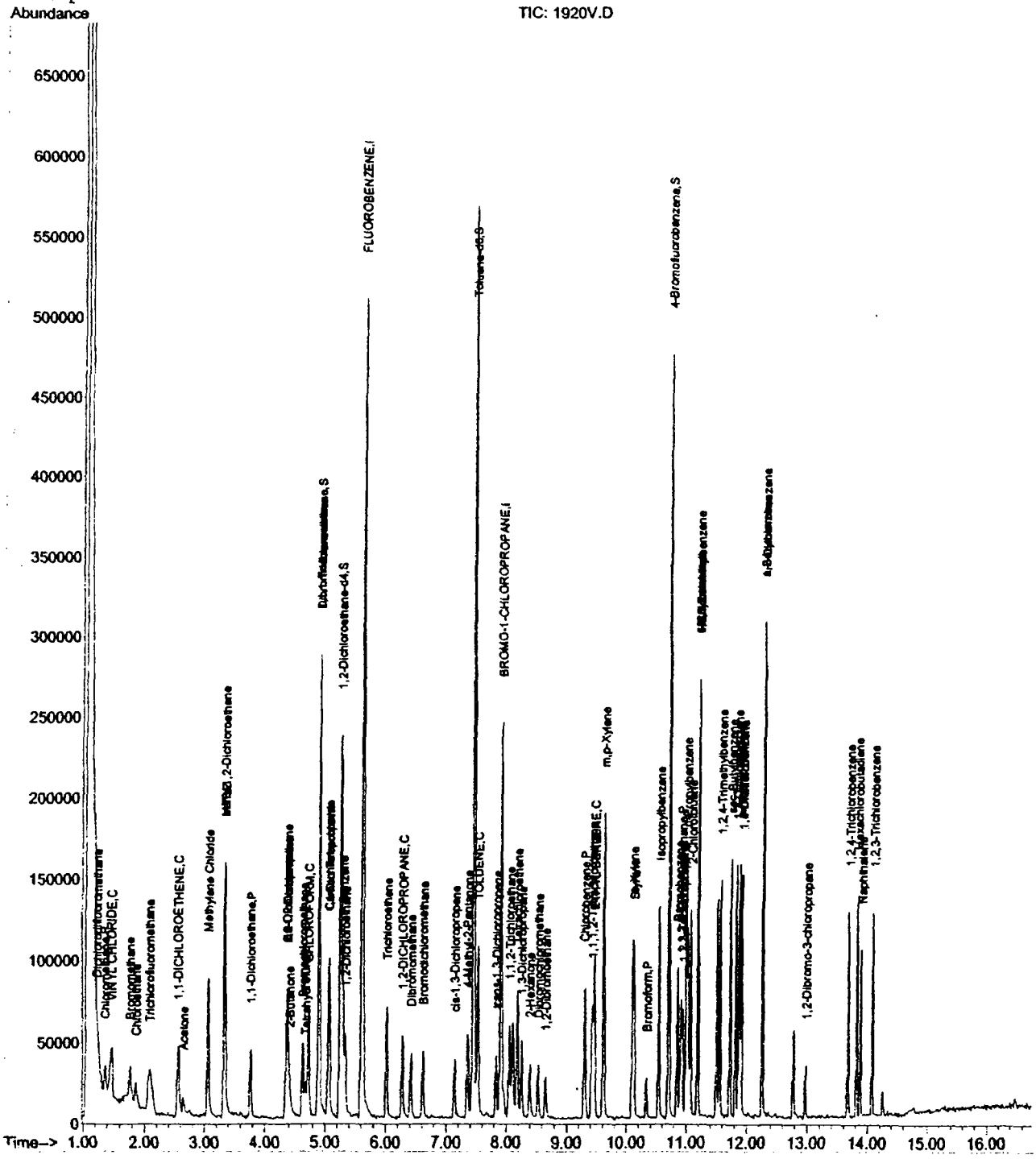
Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	Chlorobenzene	9.29	112	52437	1.64	UG/L		100
44)	1,1,1,2-Tetrachloroethane	9.42	131	22073	1.69	UG/L		100
45)	ETHYL BENZENE	9.46	106	24264	1.54	UG/L		95
46)	m,p-Xylene	9.62	106	60212	2.98	UG/L		95
47)	o-Xylene	10.10	106	30612	1.49	UG/L		96
48)	Styrene	10.12	104	45647	1.39	UG/L		90
49)	Bromoform	10.33	173	11111	1.18	UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.90	83	29839	1.82	UG/L		99
52)	Isopropylbenzene	10.54	105	82954	1.45	UG/L		100
53)	Bromobenzene	10.85	77	36048	1.72	UG/L		100
54)	1,2,3-Trichloropropane	10.93	110	10401	1.75	UG/L		100
55)	n-Propylbenzene	10.99	92	11464	1.62	UG/L		68
56)	1,3,5-Trimethylbenzene	11.18	105	70348	1.42	UG/L		100
57)	2-Chlorotoluene	11.07	126	24046	1.64	UG/L		100
58)	4-Chlorotoluene	11.18	126	24376	1.68	UG/L		100
59)	t-Butylbenzene	11.18	91	74069	1.58	UG/L	#	1
60)	1,2,4-Trimethylbenzene	11.56	105	70530	1.39	UG/L		100
61)	sec-Butylbenzene	11.72	105	87493	1.13	UG/L		100
62)	p-Isopropyltoluene	11.87	119	77496	1.08	UG/L		100
63)	1,3-Dichlorobenzene	11.82	146	53732	1.62	UG/L		100
64)	1,4-Dichlorobenzene	11.91	146	56801	1.69	UG/L		100
65)	n-Butylbenzene	12.26	92	39156	1.18	UG/L		99
66)	1,2-Dichlorobenzene	12.26	146	55017	1.69	UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.98	157	7449	1.54	UG/L		100
68)	1,2,4-Trichlorobenzene	13.67	180	29970	1.48	UG/L		100
69)	Naphthalene	13.88	128	64470	0.90	UG/L		100
70)	Hexachlorobutadiene	13.81	225	19629	1.90	UG/L		100
71)	1,2,3-Trichlorobenzene	14.08	180	28110	1.49	UG/L		100

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

Data File : C:\HPCHEM\DATA\V082907\1920V.D Vial: 17
Acq On : 29 Aug 2007 6:47 Operator: REGI
Sample : DW STD02 Inst : Instrumen
Misc : CALIBRATION CHECK 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 7:07 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration



246

R524145 Heritage Environmental Services, LLC Q1991481

QC Report

QCType BLA01 Duplicate SampleID DataFile 1921V.D
Date Entered 30Aug07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 29Aug0707:44:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE			0.50	BDL		
236	CHLOROMETHANE			0.50	BDL		
768	VINYL CHLORIDE			0.20	BDL		
198	BROMOMETHANE			0.50	BDL		
234	CHLOROETHANE			0.50	BDL		
372	TRICHLOROFLUOROMETHANE			0.50	BDL		
8	1,1-DICHLOROETHENE			0.50	BDL		
302	DICHLOROMETHANE (METHYLENE CHLORIDE)			0.53			
746	TRANS-1,2-DICHLOROETHENE			0.50	BDL		
7	1,1-DICHLOROETHANE			0.50	BDL		
246	CIS-1,2-DICHLOROETHENE			0.50	BDL		
235	CHLOROFORM			0.50	BDL		
194	BROMOCHLOROMETHANE			0.50	BDL		
2	1,1,1-TRICHLOROETHANE			0.50	BDL		
10	1,1-DICHLOROPROPENE			0.50	BDL		
217	CARBON TETRACHLORIDE			0.50	BDL		
21	1,2-DICHLOROETHANE			0.50	BDL		
151	BENZENE			0.50	BDL		
750	TRICHLOROETHENE			0.50	BDL		
23	1,2-DICHLOROPROPANE			0.50	BDL		
299	DICHLOROBROMOMETHANE			0.50	BDL		
296	DIBROMOMETHANE			0.50	BDL		
247	CIS-1,3-DICHLOROPROPENE			0.50	BDL		
724	TOLUENE			0.50	BDL		
747	TRANS-1,3-DICHLOROPROPENE			0.50	BDL		
4	1,1,2-TRICHLOROETHANE			0.50	BDL		
27	1,3-DICHLOROPROPANE			0.50	BDL		
703	TETRACHLOROETHENE			0.50	BDL		
295	DIBROMOCHLOROMETHANE			0.50	BDL		
18	1,2-DIBROMOETHANE (EDB)			0.50	BDL		
231	CHLOROBENZENE			0.50	BDL		
349	ETHYL BENZENE			0.50	BDL		
1	1,1,1,2-TETRACHLOROETHANE			0.50	BDL		
492	M/P-XYLENE			0.50	BDL		
549	O-XYLENE			0.50	BDL		
680	STYRENE			0.50	BDL		
432	ISOPROPYLBENZENE (CUMENE)			0.50	BDL		
197	BROMOFORM			0.50	BDL		
3	1,1,2,2-TETRACHLOROETHANE			0.50	BDL		
532	N-PROPYLBENZENE			0.50	BDL		
193	BROMOBENZENE			0.50	BDL		
25	1,3,5-TRIMETHYLBENZENE			0.50	BDL		
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)			0.50	BDL		
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)			0.50	BDL		

RW 8/30/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE			0.50	BDL		
17	1,2,4-TRIMETHYLBENZENE			0.50	BDL		
644	SEC-BUTYLBENZENE			0.50	BDL		
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			0.50	BDL		
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			0.50	BDL		
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			0.50	BDL		
519	N-BUTYLBENZENE			0.50	BDL		
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			0.50	BDL		
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			0.50	BDL		
16	1,2,4-TRICHLOROBENZENE			0.50	BDL		
398	HEXACHLOROBUTADIENE			0.50	BDL		
493	NAPHTHALENE			0.50	BDL		
13	1,2,3-TRICHLOROBENZENE			0.50	BDL		
14	1,2,3-TRICHLOROPROPANE			0.50	BDL		
99	ACETONE (2-PROPANONE)			4.0	BDL		
52	2-BUTANONE			2.0	BDL		
91	4-METHYL-2-PENTANONE			2.0	BDL		
709	TETRAHYDROFURAN			5.0	BDL		
60	2-HEXANONE			2.0	BDL		
859	METHYL-T-BUTYL ETHER (MTBE)			0.50	BDL		
301	DICHLOROETHANE-D4					112	
726	TOLUENE-D8					95	
196	4-BROMOFLUOROBENZENE					82	

Qualifiers

BDL Below Detection Limit

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1921V.D Vial: 17
Acq On : 29 Aug 2007 7:44 Operator: REGI
Sample : DW BLANK Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 08:00:08 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Q199148 1

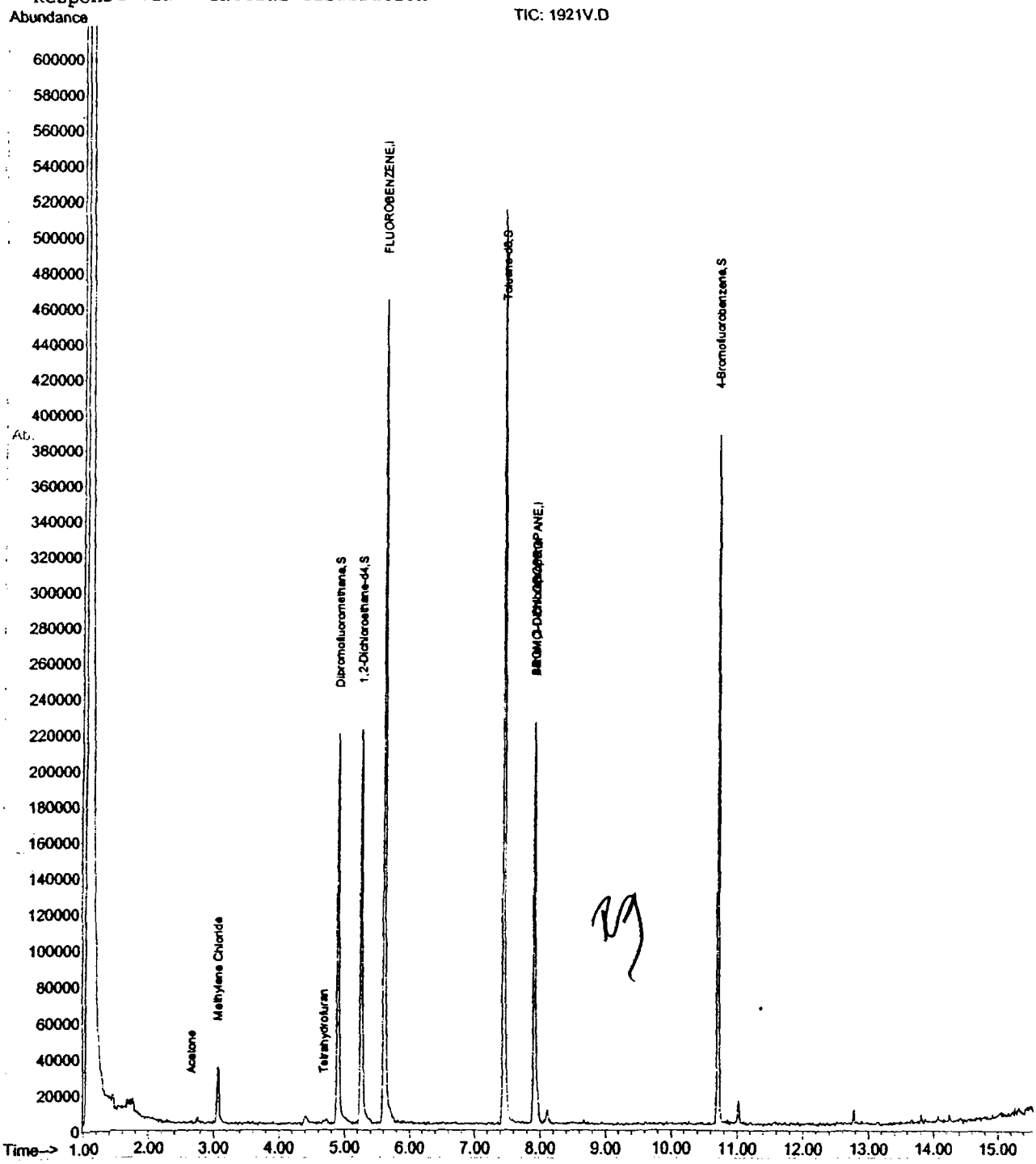
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	444222	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	147989	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	142687	10.76 UG/L	0.00
Spiked Amount 10.000			Recovery	= 107.60%	
23) 1,2-Dichloroethane-d4	5.25	65	174434	11.17 UG/L	0.00
Spiked Amount 10:000			Recovery	= 111.70%	
33) Toluene-d8	7.45	98	387517	9.52 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.20%	
51) 4-Bromofluorobenzene	10.70	95	124784	8.15 UG/L	0.00
Spiked Amount 10.000			Recovery	= 81.50%	
Target Compounds					Qvalue
8) Acetone	2.65	43	1320	0.31 UG/L #	100
10) Methylene Chloride 0.53	3.07	84	17753	0.53 UG/L #	66
17) Tetrahydrofuran	4.67	42	462	0.12 UG/L #	100
35) trans-1,3-Dichloropropene	7.91	75	3550	0.25 UG/L	100

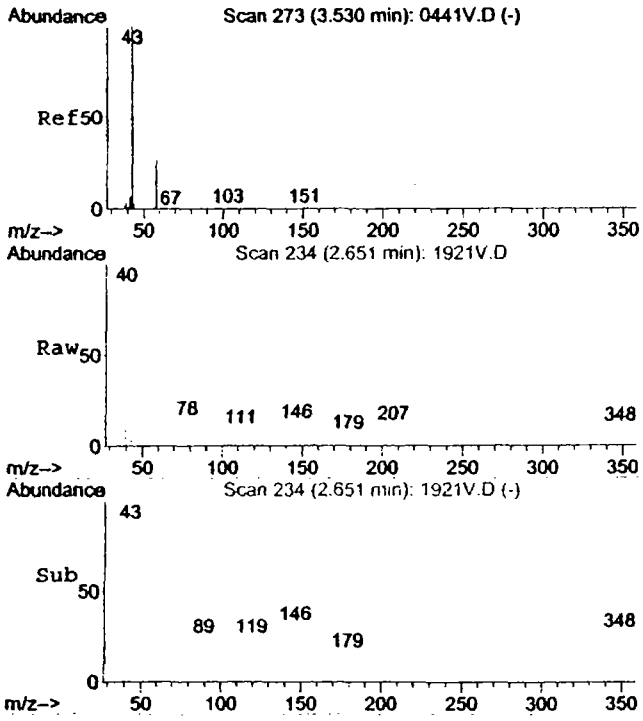
(#) = qualifier out of range (m) = manual integration
1921V.D DWV.M Wed Aug 29 08:00:11 2007

Quantification Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1921V.D Vial: 17
Acq On : 29 Aug 2007 7:44 Operator: REGI
Sample : DW BLANK Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 8:00 2007 Quant Results File: DWV.RES

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

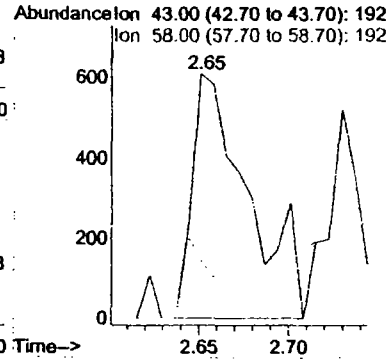


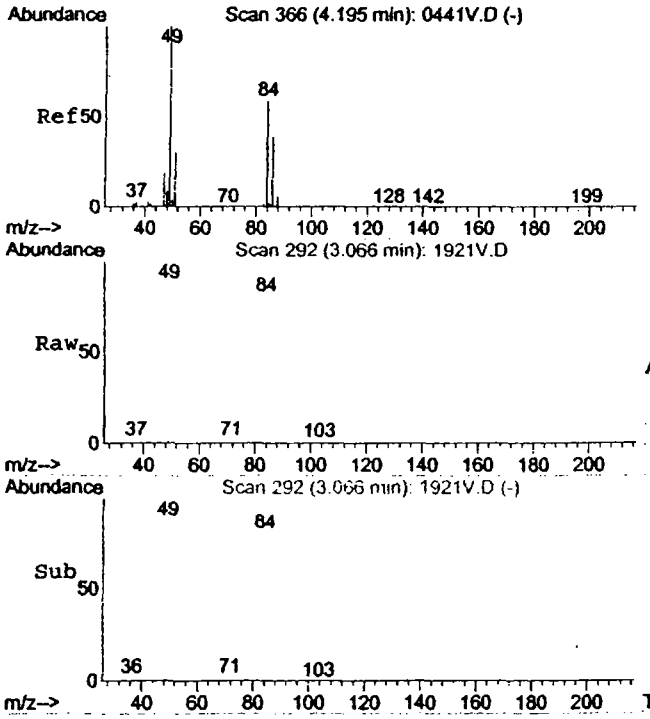


#8
Acetone
Concen: 0.31 UG/L
RT: 2.65 min Scan# 234
Delta R.T. -0.02 min
Lab File: 1921V.D
Acq: 29 Aug 2007 7:44

Tgt Ion: 43 Resp: 1320

Ion	Ratio	Lower	Upper
43	100		
58	28.2	0.0	0.0#

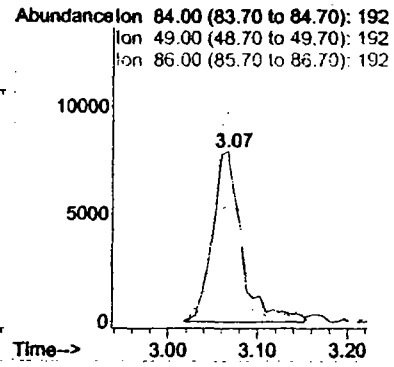


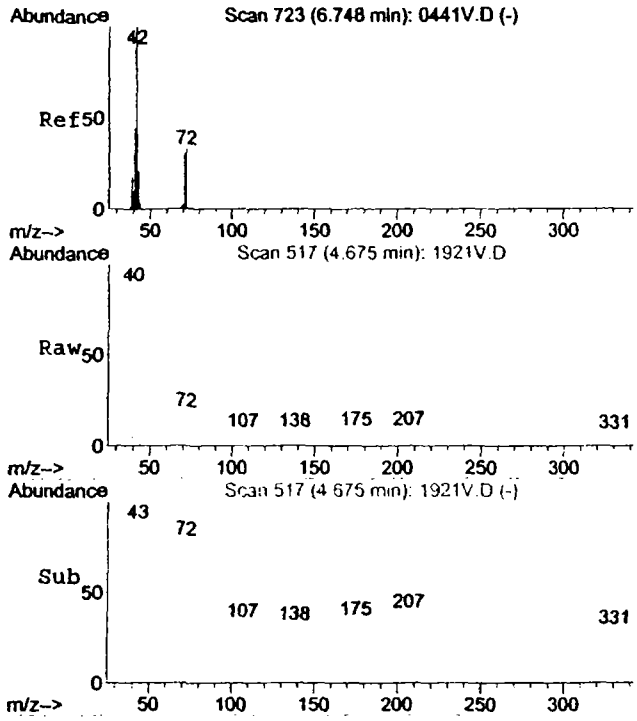


#10
Methylene Chloride
Concen: 0.53 UG/L
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1921V.D
Acq: 29 Aug 2007 7:44

Tgt Ion: 84 Resp: 17753

Ion	Ratio	Lower	Upper
84	100		
49	123.8	150.7	226.1#
86	64.4	50.5	75.7

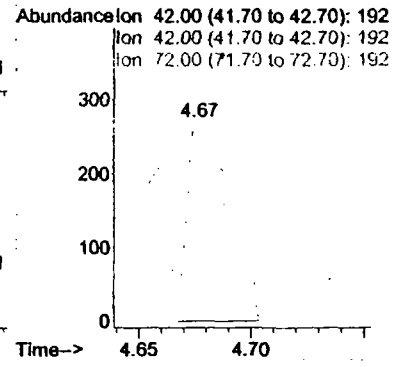


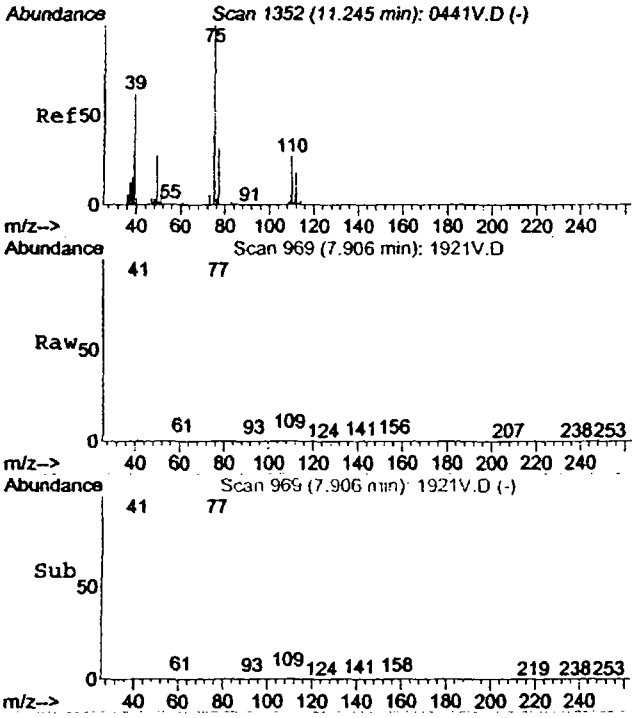


#17
Tetrahydrofuran
Concen: 0.12 UG/L
RT: 4.67 min Scan# 517
Delta R.T. 0.00 min
Lab File: 1921V.D
Acq: 29 Aug 2007 7:44

Tgt Ion: 42 Resp: 462

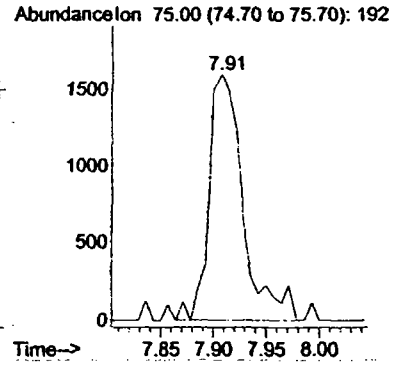
Ion	Ratio	Lower	Upper
42	100		
42	100.0	0.0	0.0#
72	80.3	0.0	0.0#





#35
trans-1,3-Dichloropropene
Concen: 0.25 UG/L
RT: 7.91 min Scan# 969
Delta R.T. 0.07 min
Lab File: 1921V.D
Acq: 29 Aug 2007 7:44

Tgt Ion: 75 Resp: 3550



R524145 Heritage Environmental Services, LLC A780300

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4538
Submitter IDEM - OLQ
Instrument 346 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 1922V.D Date/Time 29Aug07 08:14:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
79-01-6	750	TRICHLOROETHENE	120		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	115			% RECOVERY	
2037-26-5	726	TOLUENE-D8	97			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	84			% RECOVERY	

Comment 1:10 Dilution

HW 8/30/07

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\DATA\V082907\1922V.D Vial: 17
Acq On : 29 Aug 2007 8:14 Operator: REGI
Sample : A780300 1:10 LQ4538 REP1 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 08:32:18 2007 Quant Results File: DWV.RES

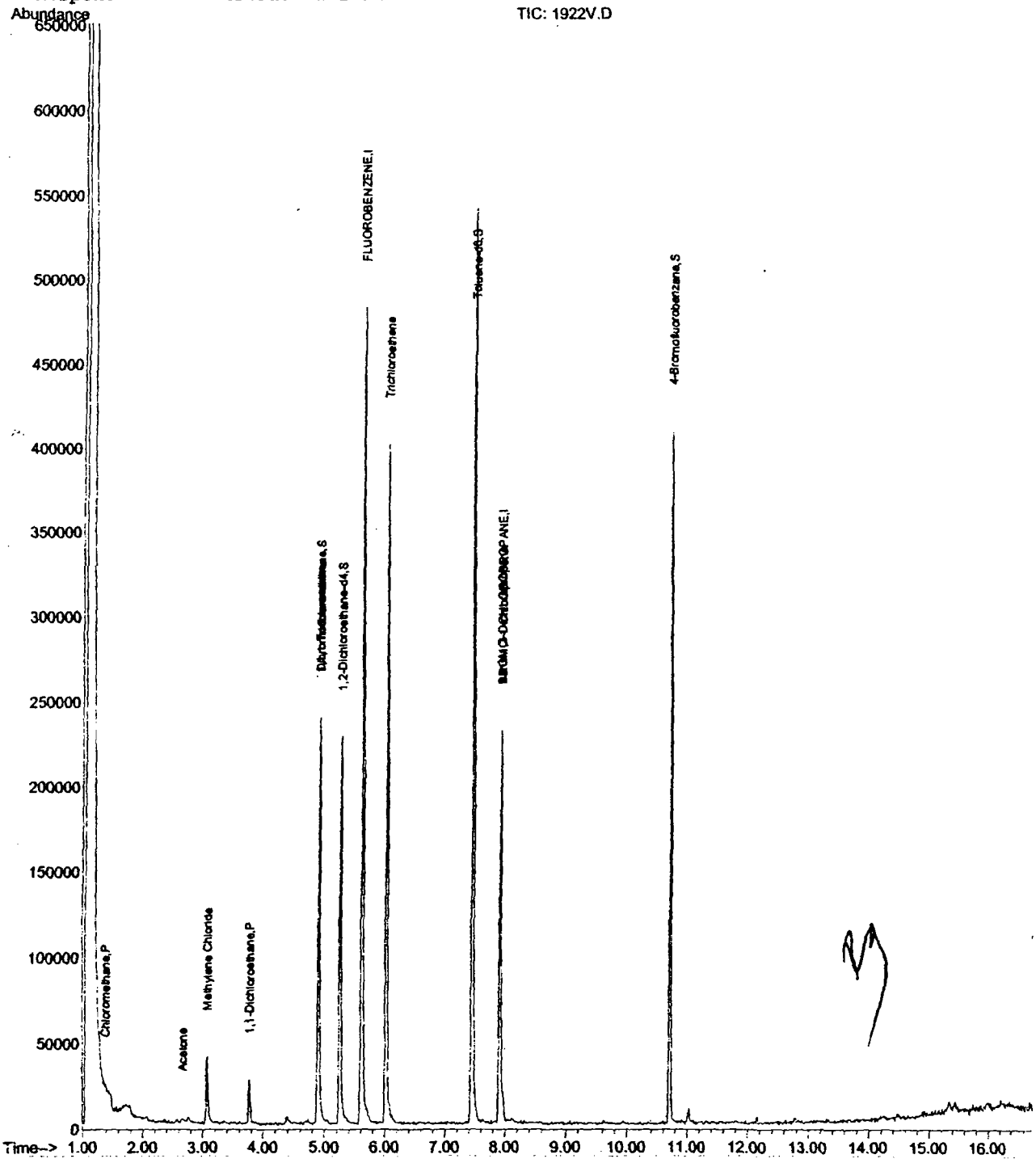
Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration
DataAcq Meth : DWV

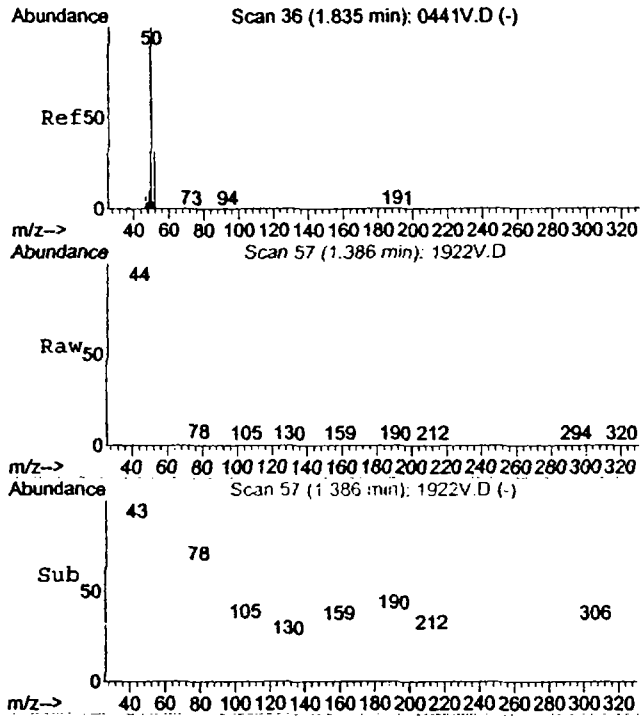
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	456908	10.00	UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	151863	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.90	113	150703	11.05	UG/L	0.00
Spiked Amount 10.000			Recovery	=	110.50%	
23) 1,2-Dichloroethane-d4	5.25	65	184024	11.45	UG/L	0.00
Spiked Amount 10.000			Recovery	=	114.50%	
33) Toluene-d8	7.45	98	406933	9.72	UG/L	0.00
Spiked Amount 10.000			Recovery	=	97.20%	
51) 4-Bromofluorobenzene	10.70	95	132456	8.43	UG/L	0.00
Spiked Amount 10.000			Recovery	=	84.30%	
Target Compounds						Qvalue
3) Chloromethane	1.39	50	1279	0.12	UG/L	100
8) Acetone	2.66	43	3218	0.73	UG/L #	100
10) Methylene Chloride	3.07	84	20309	0.71	UG/L #	68
13) 1,1-Dichloroethane	3.77	63	24794	1.15	UG/L	100
20) 1,1,1-Trichloroethane	4.89	97	7974	0.38	UG/L	89
27) Trichloroethene 120	6.02	130	148079	11.64	UG/L	96
35) trans-1,3-Dichloropropene	7.91	75	3706	0.25	UG/L	100

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

Data File : C:\HPCHEM\DATA\V082907\1922V.D Vial: 17
Acq On : 29 Aug 2007 8:14 Operator: REGI
Sample : A780300 1:10 LQ4538 REP1 Inst : Instrumen
Misc : 8/29/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 29 8:32 2007 Quant Results File: DWV.RES

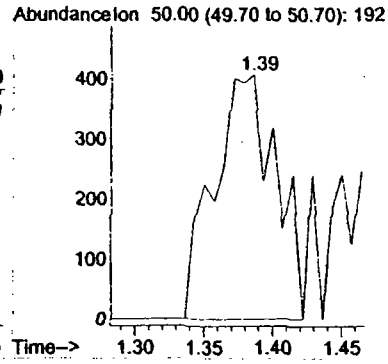
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Mon Aug 27 11:49:31 2007
Response via : Initial Calibration

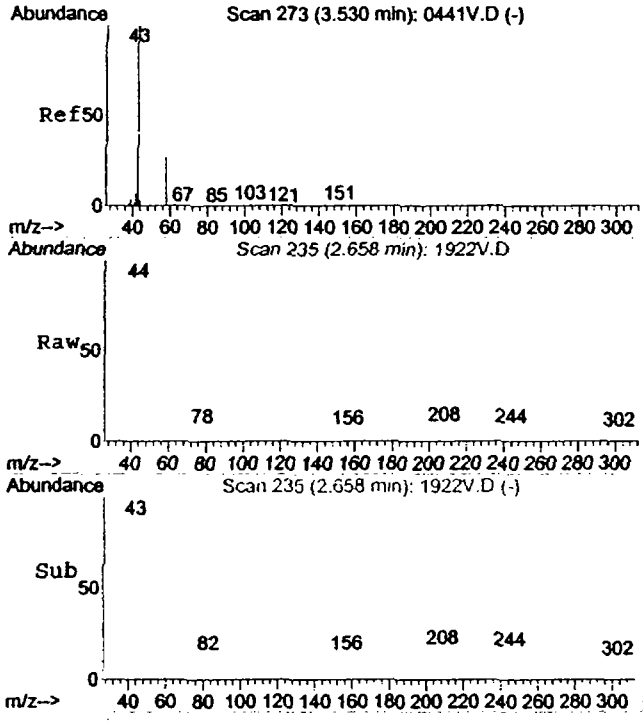




#3
Chloromethane
Concen: 0.12 UG/L
RT: 1.39 min Scan# 57
Delta R.T. 0.01 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion: 50 Resp: 1279

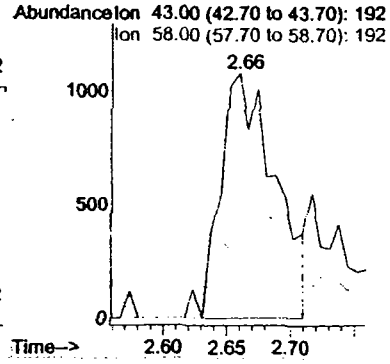


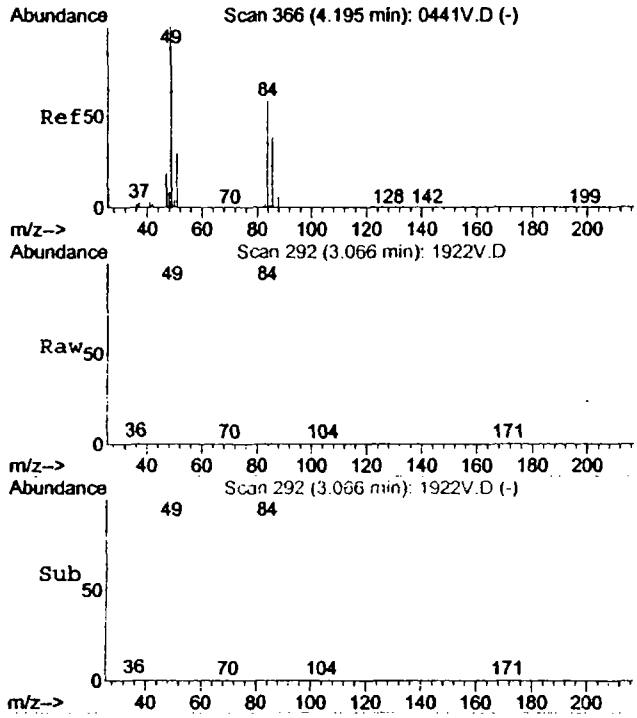


#8
Acetone
Concen: 0.73 UG/L
RT: 2.66 min Scan# 235
Delta R.T. -0.01 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion: 43 Resp: 3218

Ion	Ratio	Lower	Upper
43	100		
58	22.3	0.0	0.0#

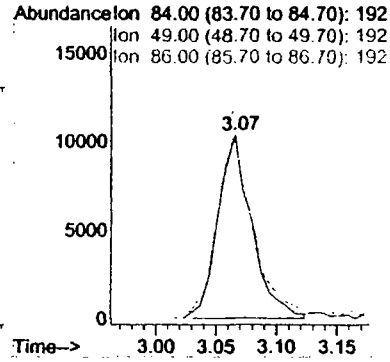


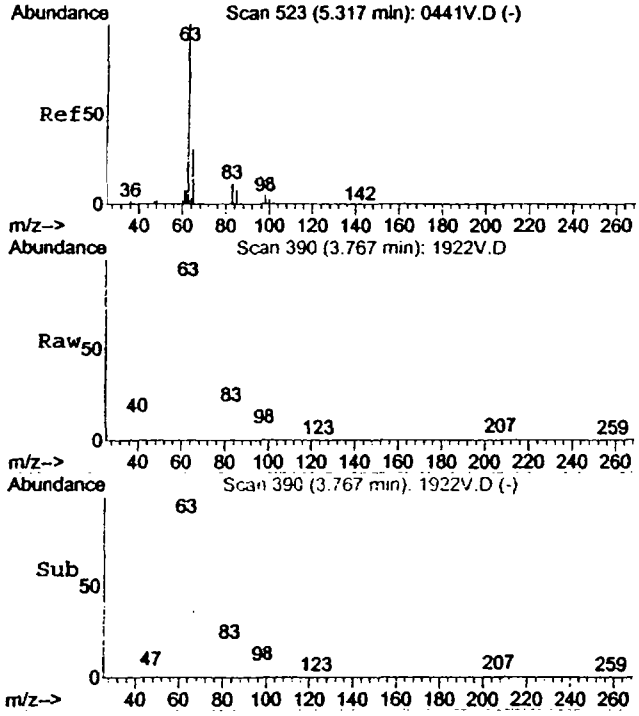


#10
Methylene Chloride
Concen: 0.71 UG/L
RT: 3.07 min Scan# 292
Delta R.T. 0.00 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion: 84 Resp: 20309

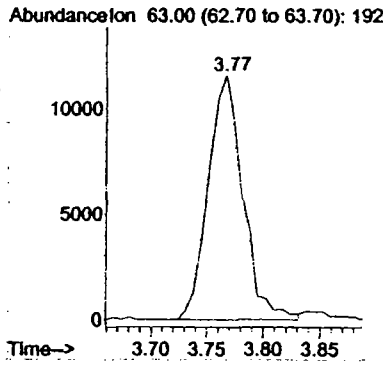
Ion	Ratio	Lower	Upper
84	100		
49	127.6	150.7	226.1#
86	66.7	50.5	75.7

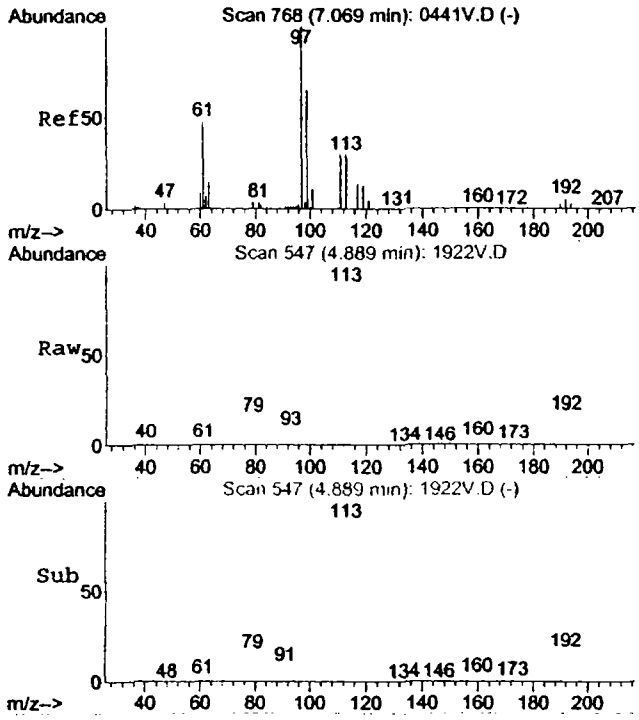




#13
1,1-Dichloroethane
Concen: 1.15 UG/L
RT: 3.77 min Scan# 390
Delta R.T. 0.00 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion: 63 Resp: 24794

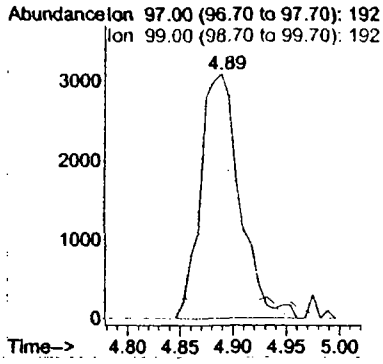


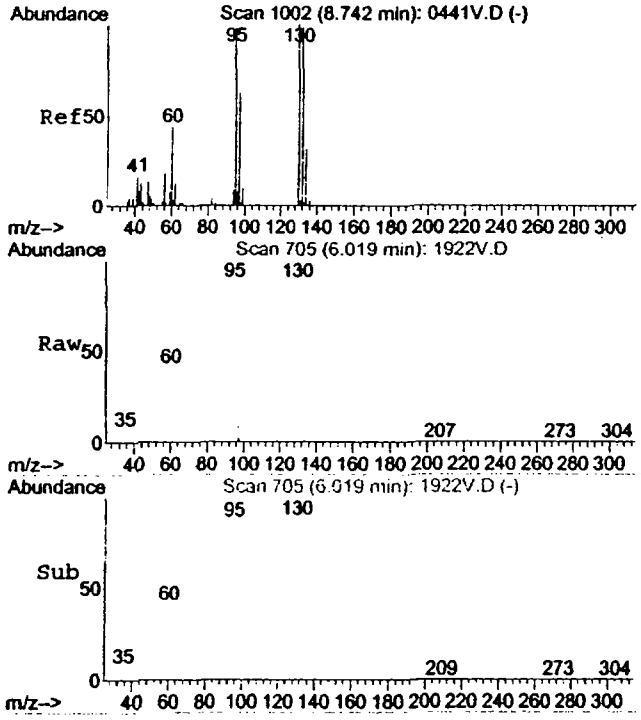


#20
1,1,1-Trichloroethane
Concen: 0.38 UG/L
RT: 4.89 min Scan# 547
Delta R.T. 0.00 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion: 97 Resp: 7974

Ion	Ratio	Lower	Upper
97	100		
99	65.5	59.9	89.9

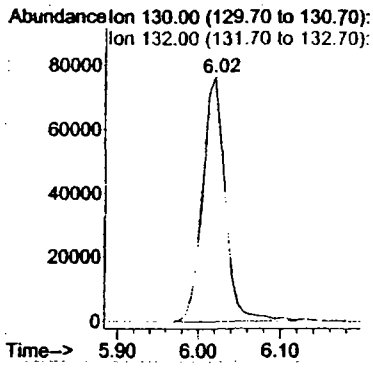


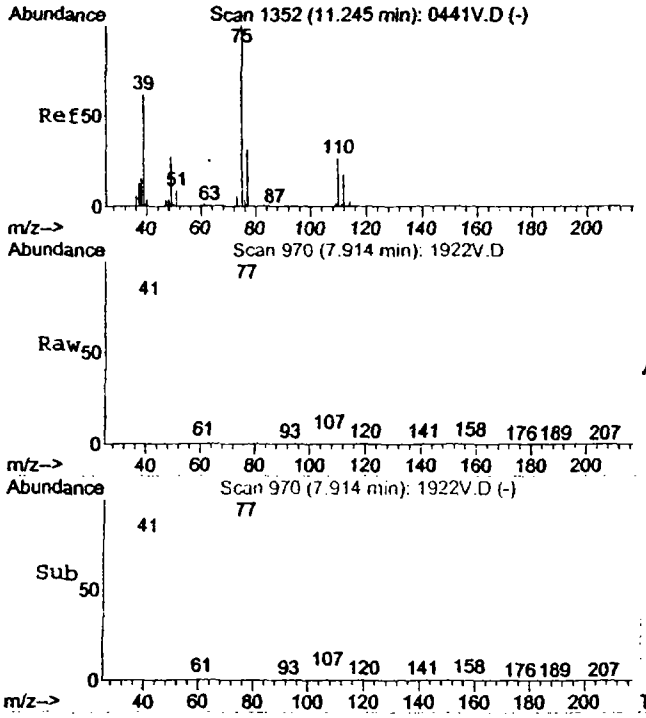


#27
Trichloroethene
Concen: 11.64 UG/L
RT: 6.02 min Scan# 705
Delta R.T. 0.00 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion:130 Resp: 148079

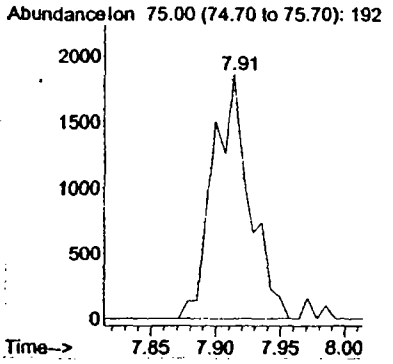
Ion	Ratio	Lower	Upper
130	100		
132	96.5	80.7	121.1





#35
trans-1,3-Dichloropropene
Concen: 0.25 UG/L
RT: 7.91 min Scan# 970
Delta R.T. 0.08 min
Lab File: 1922V.D
Acq: 29 Aug 2007 8:14

Tgt Ion: 75 Resp: 3706



QC Check Std

QC Std# 239
Method# 296

Heritage Environmental Services, Indianapolis
LCS01 Volatile QC Report-EPA Method 524
Drinking Water

LCS Data File : 1819V.
LCS Date/Time : 082107 14:49
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Spike Conc	Spike % Rec	Min Recovery *	Max Recovery *
Benzene	10.1	101.0	85.0	116.4
Carbon Tetrachloride	9.82	98.2	81.0	114.2
1,4-Dichlorobenzene	9.49	94.9	88.5	113.9
1,2-Dichloroethane	11.6	116.0	83.3	117.7
1,1-DICHLOROETHENE	9.24	92.4	84.0	120.4
1,1,1-Trichloroethane	10.3	103.0	88.6	117.2
Trichloroethene	9.72	97.2	87.4	115.8
VINYL CHLORIDE	9.71	97.1	84.8	113.0
Bromobenzene	9.8	98.0	84.5	113.5
Bromodichloromethane	10.8	108.0	84.3	116.3
Bromoform	8.79	87.9	83.9	117.9
Bromomethane	10	100.0	60.5	165.7
Chlorobenzene	9.3	93.0	85.4	113.6
Dibromochloromethane	9.71	97.1	86.6	117.2
Chloroethane	10	100.0	88.3	120.5
CHLOROFORM	9.77	97.7	89.7	118.7
Chloromethane	9.52	95.2	78.6	121.8
2-Chlorotoluene	9.53	95.3	88.3	113.9
4-Chlorotoluene	9.75	97.5	83.6	115.8
Dibromomethane	10.5	105.0	88.1	121.7
1,3-Dichlorobenzene	9.46	94.6	88.9	114.5
1,2-Dichlorobenzene	9.38	93.8	90.9	120.5
trans-1,2-Dichloroethene	9.51	95.1	91.6	117.8
cis-1,2-Dichloroethene	10.2	102.0	90.5	121.3
Methylene Chloride	10.7	107.0	75.4	115.2
1,1-Dichloroethane	9.92	99.2	89.4	120.2
1,1-Dichloropropene	10.1	101.0	86.2	114.8
1,2-DICHLOROPROPANE	10.3	103.0	84.6	118.6
1,3-Dichloropropane	10.5	105.0	85.0	117.0
cis-1,3-Dichloropropene	9.89	98.9	85.2	115.4
trans-1,3-Dichloropropene	9.17	91.7	81.0	110.8
2,2-Dichloropropane	8.52	85.2	86.0	117.0
ETHYL BENZENE	9.58	95.8	85.8	112.8
Styrene	9.96	99.6	86.6	114.0
1,1,2-Trichloroethane	10.4	104.0	88.1	119.5
1,1,1,2-Tetrachloroethane	10	100.0	86.3	115.7
1,1,2,2-Tetrachloroethane	10	100.0	81.3	117.1
Tetrachloroethene	10.2	102.0	83.4	113.0
1,2,3-Trichloropropane	10.1	101.0	79.5	108.3

QC Std# 239
Method# 296

Heritage Environmental Services, Indianapolis
LCS01 Volatile QC Report-EPA Method 524
Drinking Water

LCS Data File : 1819V.
LCS Date/Time : 082107 14:49
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Spike Conc	Spike % Rec	Min Recovery *	Max Recovery *
TOLUENE	9.88	98.8	83.9	114.1
o-Xylene	9.14	91.4	87.7	113.7
m,p-Xylene	19.4	97.0	83.4	110.6
Bromochloromethane	10.1	101.0	95.9	123.5
n-Butylbenzene	9.26	92.6	82.1	114.9
Dichlorodifluoromethane	13.1	131.0 *	67.4	115.4
Trichlorofluoromethane	8.18	81.8	82.2	113.6
Hexachlorobutadiene	8.09	80.9	78.5	130.7
Isopropylbenzene	7.74	77.4 *	82.6	112.2
p-Isopropyltoluene	9.18	91.8	85.5	114.5
Naphthalene	8.76	87.6	86.3	152.5
n-Propylbenzene	10.2	102.0	82.6	109.6
sec-Butylbenzene	9.64	96.4	85.2	112.0
t-Butylbenzene	9.56	95.6	85.9	115.5
1,2,3-Trichlorobenzene	8.53	85.3	97.8	146.0
1,2,4-Trichlorobenzene	8.4	84.0	93.1	136.3
1,2,4-Trimethylbenzene	9.91	99.1	86.9	114.1
1,3,5-Trimethylbenzene	9.76	97.6	87.2	111.8

* Advisory Limits Updated 9/05 , 80 - 120% minimum range.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082107\1819V.D Vial: 11
Acq On : 21 Aug 2007 14:49 Operator: REGI
Sample : QC CHECK STD Inst : Instrumen
Misc : 8/21/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 21 15:05:48 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.61	96	603537	10.00 UG/L	0.00
38) BROMO-1-CHLOROPROPANE	7.91	77	197670	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.90	113	172757	10.36 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.60%	
23) 1,2-Dichloroethane-d4	5.25	65	201113	10.58 UG/L	0.00
Spiked Amount 10.000			Recovery	= 105.80%	
33) Toluene-d8	7.45	98	551815	10.26 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.60%	
51) 4-Bromofluorobenzene	10.70	95	212092	10.29 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.90%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.24	85	119753	13.09 UG/L	100
3) Chloromethane	1.37	50	117058	9.52 UG/L	100
4) VINYL CHLORIDE	1.47	62	141884	9.71 UG/L	93
5) Bromomethane	1.76	94	88859	10.01 UG/L #	1
6) Chloroethane	1.86	64	97219	10.02 UG/L	99
7) Trichlorofluoromethane	2.10	101	186907m	8.18 UG/L	
8) Acetone	2.65	43	220863	48.63 UG/L #	100
9) 1,1-DICHLOROETHENE	2.57	96	115468	9.24 UG/L	100
10) Methylene Chloride	3.07	84	143924	10.65 UG/L #	67
11) MTBE	3.34	73	353425	9.43 UG/L	100
12) trans-1,2-Dichloroethene	3.33	96	130302	9.51 UG/L	84
13) 1,1-Dichloroethane	3.77	63	238877	9.92 UG/L	100
14) 2-Butanone	4.41	43	308484	46.43 UG/L #	100
15) cis-1,2-Dichloroethene	4.37	96	140043	10.20 UG/L #	66
16) CHLOROFORM	4.72	83	250657	9.77 UG/L	98
17) Tetrahydrofuran	4.67	42	538371	115.87 UG/L #	100
18) Bromochloromethane	4.63	128	74850	10.09 UG/L #	34
19) 2,2-Dichloropropane	4.36	77	142913	8.52 UG/L	100
20) 1,1,1-Trichloroethane	4.89	97	229778	10.28 UG/L	88
22) 1,1-Dichloropropene	5.07	110	65145	10.10 UG/L	100
24) Carbon Tetrachloride	5.05	117	210204	9.82 UG/L	97
25) 1,2-Dichloroethane	5.33	62	201795	11.59 UG/L	96
26) Benzene	5.30	78	499694	10.11 UG/L	100
27) Trichloroethene	6.02	130	141882	9.72 UG/L	97
28) 1,2-DICHLOROPROPANE	6.28	63	117998	10.31 UG/L	100
29) Bromodichloromethane	6.61	83	180682	10.83 UG/L	99
30) Dibromomethane	6.42	93	87547	10.52 UG/L	100
31) 4-Methyl-2-Pentanone	7.36	43	641351	51.81 UG/L #	100
32) cis-1,3-Dichloropropene	7.14	75	164947	9.89 UG/L	100
34) TOLUENE	7.53	91	497020	9.88 UG/L	100
35) trans-1,3-Dichloropropene	7.84	75	138888	9.17 UG/L	100
36) 1,1,2-Trichloroethane	8.06	97	109966	10.44 UG/L	100
37) 1,2-Dibromoethane	8.66	107	118808	10.57 UG/L	99
39) 2-Hexanone	8.40	43	424405	51.27 UG/L #	87
40) 1,3-Dichloropropane	8.26	76	179887	10.51 UG/L	100
41) Tetrachloroethene	8.19	166	145903	10.22 UG/L	99
42) Dibromochloromethane	8.54	129	130721	9.71 UG/L	100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082107\1819V.D Vial: 11
Acq On : 21 Aug 2007 14:49 Operator: REGI
Sample : QC CHECK STD Inst : Instrumen
Misc : 8/21/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 21 15:05:48 2007 Quant Results File: DWV.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration
DataAcq Meth : DWV

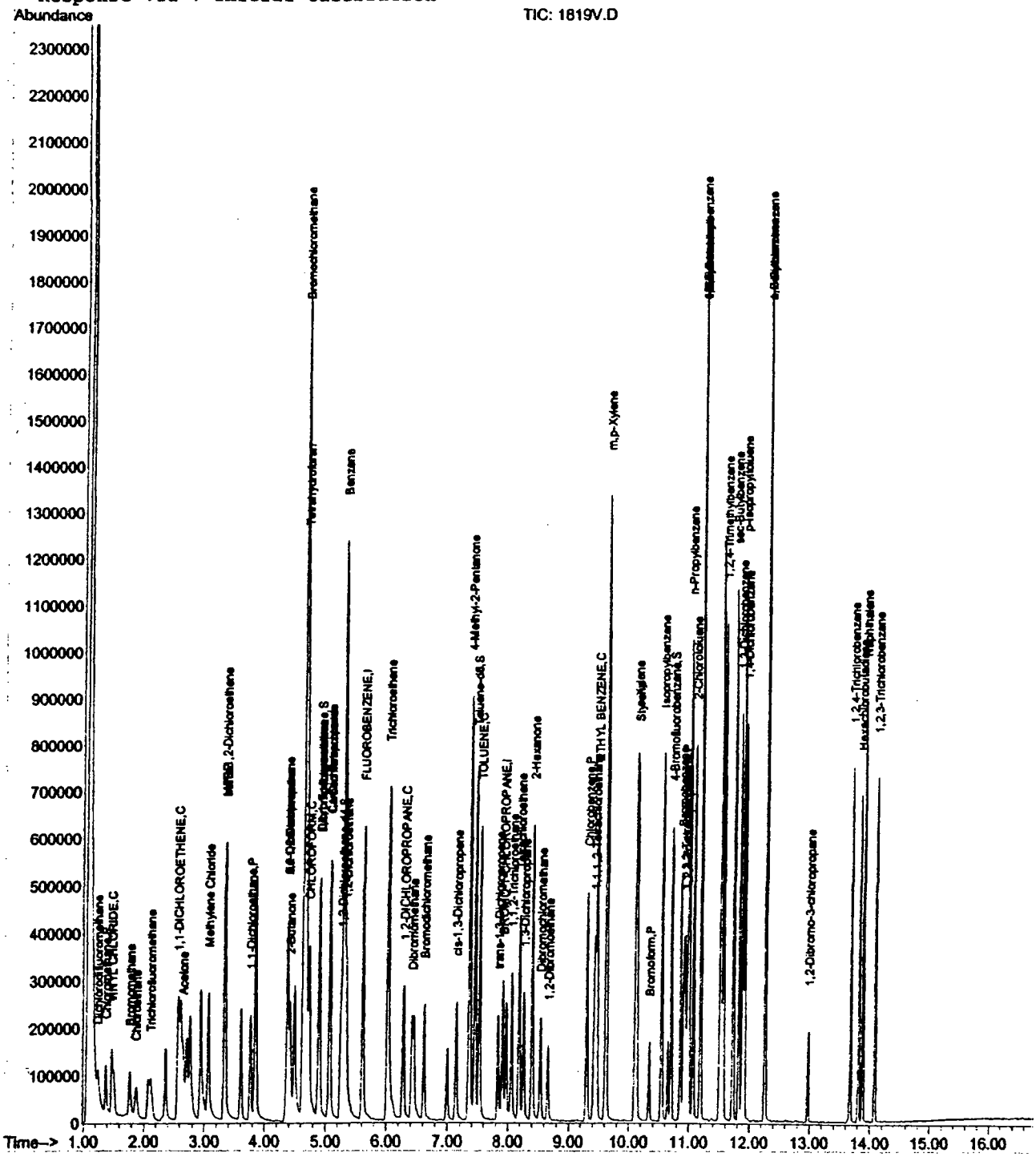
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) Chlorobenzene	9.30	112	319230	9.30 UG/L	100
44) 1,1,1,2-Tetrachloroethane	9.42	131	133694	10.01 UG/L	100
45) ETHYL BENZENE	9.46	106	170622	9.58 UG/L	95
46) m,p-Xylene	9.62	106	434684	19.41 UG/L	99
47) o-Xylene	10.10	106	206753	9.14 UG/L	98
48) Styrene	10.13	104	349378	9.96 UG/L	97
49) Bromoform	10.34	173	82105	8.79 UG/L	100
50) 1,1,2,2-Tetrachloroethane	10.90	83	172206	10.03 UG/L	98
52) Isopropylbenzene	10.54	105	490503	7.74 UG/L	100
53) Bromobenzene	10.85	77	216421	9.80 UG/L	100
54) 1,2,3-Trichloropropane	10.93	110	61485	10.07 UG/L	100
55) n-Propylbenzene	10.99	92	77911	10.17 UG/L	85
56) 1,3,5-Trimethylbenzene	11.18	105	523720	9.76 UG/L	100
57) 2-Chlorotoluene	11.07	126	150326	9.53 UG/L	100
58) 4-Chlorotoluene	11.18	126	150570	9.75 UG/L	100
59) t-Butylbenzene	11.18	91	476827	9.56 UG/L #	1
60) 1,2,4-Trimethylbenzene	11.56	105	532342	9.91 UG/L	100
61) sec-Butylbenzene	11.72	105	662801	9.64 UG/L	100
62) p-Isopropyltoluene	11.87	119	575317	9.18 UG/L	100
63) 1,3-Dichlorobenzene	11.82	146	320161	9.46 UG/L	100
64) 1,4-Dichlorobenzene	11.91	146	324702	9.49 UG/L	100
65) n-Butylbenzene	12.26	92	276073	9.26 UG/L	99
66) 1,2-Dichlorobenzene	12.26	146	320632	9.38 UG/L	100
67) 1,2-Dibromo-3-chloropropan	12.98	157	46804	8.57 UG/L	100
68) 1,2,4-Trichlorobenzene	13.67	180	183522	8.40 UG/L	100
69) Naphthalene	13.88	128	541845	8.76 UG/L	100
70) Hexachlorobutadiene	13.81	225	93876	8.09 UG/L	100
71) 1,2,3-Trichlorobenzene	14.08	180	176696	8.53 UG/L	100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\DATA\V082107\1819V.D Vial: 11
Acq On : 21 Aug 2007 14:49 Operator: REGI
Sample : QC CHECK STD Inst : Instrumen
Misc : 8/21/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 5:56 2007 Quant Results File: DWV.RES

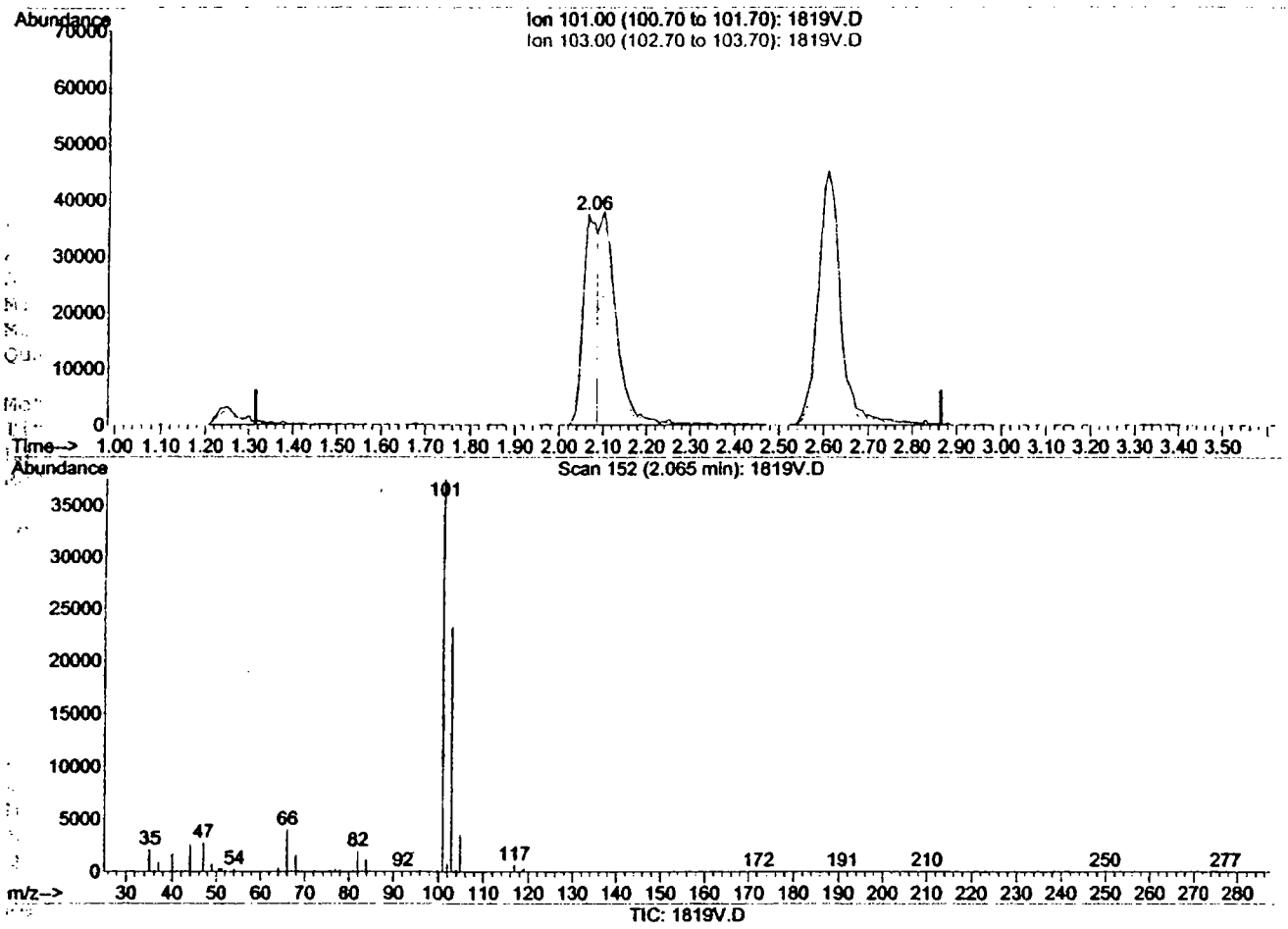
Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082107\1819V.D Vial: 11
Acq On : 21 Aug 2007 14:49 Operator: REGI
Sample : QC CHECK STD Inst : Instrumen
Misc : 8/21/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 21 15:05 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Multiple Level Calibration



(7) Trichlorofluoromethane

2.06min 3.73UG/L

response 85290

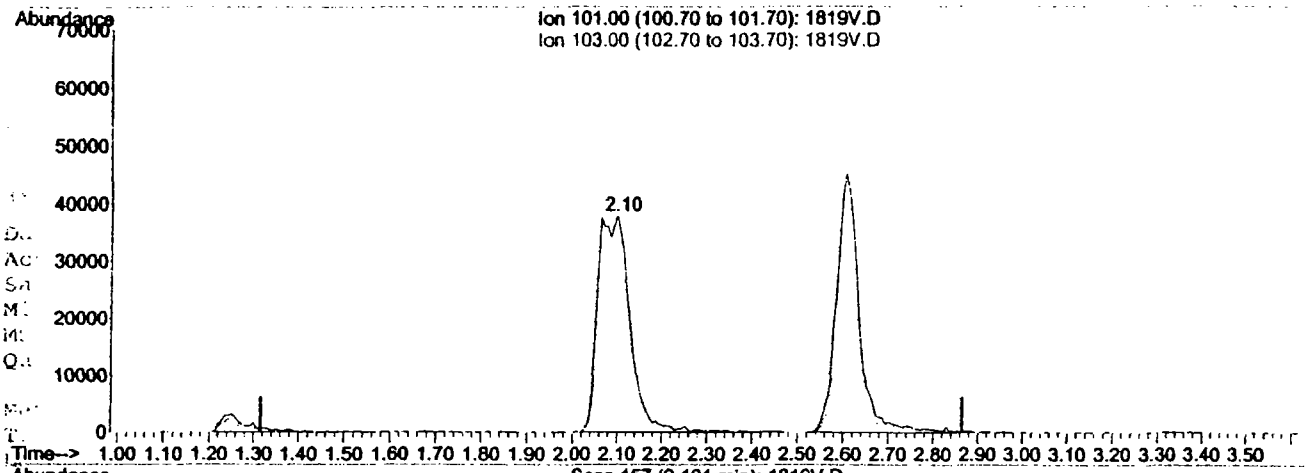
Ion	Exp%	Act%
101.00	100	100
103.00	63.20	62.48
0.00	0.00	0.00
0.00	0.00	0.00

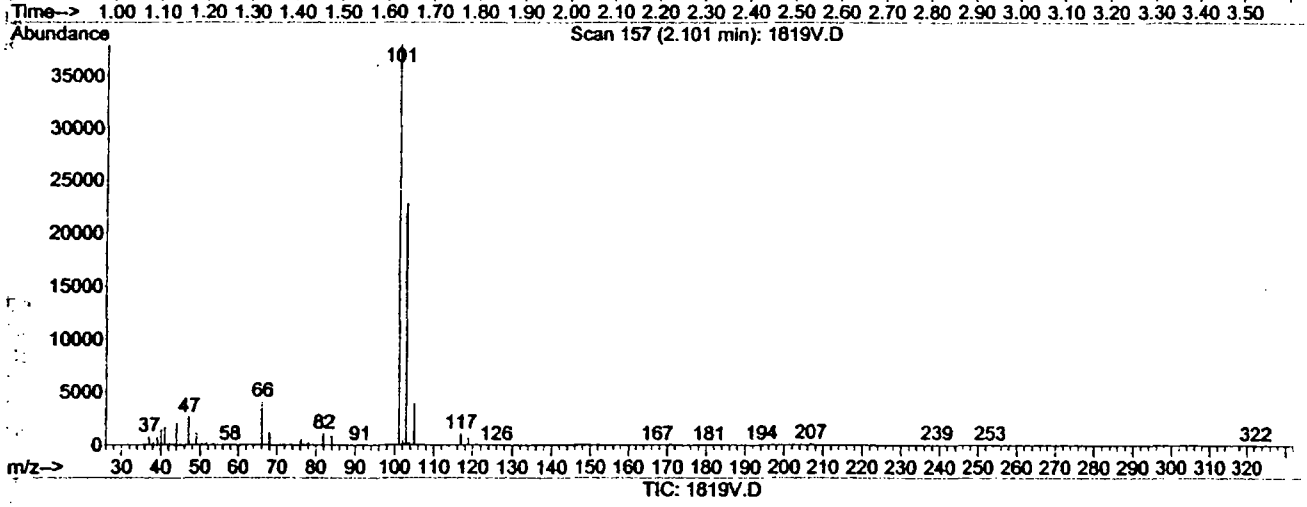
1819V.D DWV.M Wed Aug 22 05:56:27 2007

Quantitation Report (Qedit)

Data File : C:\HPCHEM\DATA\V082107\1819V.D Vial: 11
Acq On : 21 Aug 2007 14:49 Operator: REGI
Sample : QC CHECK STD Inst : Instrumen
Misc : 8/21/07 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 5:56 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWV.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Aug 21 09:49:54 2007
Response via : Multiple Level Calibration





(7) Trichlorofluoromethane

2.10min 8.18UG/L m

response 186907

Ion	Exp%	Act%
101.00	100	100
103.00	63.20	28.51#
0.00	0.00	0.00
0.00	0.00	0.00

1819V.D DWV.M Wed Aug 22 05:56:34 2007

Accuracy and Precision for Method 524.2

Heritage Environmental Services, LLC

Regina Shamp GCMS#9 1UG/L

Mar 18,1999 ISTD and Std used: #031699

PARAMETERS	6040J	6041J	6042J	6043J	% rec	% rec	% rec	% rec	Average	Std. Dev.	
Dichlorodifluoromethane	0.66	0.61	0.72	0.68	66	61	72	68	66.75	4.57	
Chloromethane	0.58	0.59	0.61	0.59	58	59	61	59	59.25	1.26	
Vinyl Chloride	0.53	0.55	0.65	0.62	53	55	65	62	58.75	5.68	
Bromomethane	0.89	0.90	1.00	0.99	89	90	100	99	94.50	5.80	
Chloroethane	0.62	0.61	0.70	0.68	62	61	70	68	65.25	4.43	
Trichlorofluoromethane	0.87	0.84	0.98	0.90	87	84	98	90	89.75	6.02	
1,1-Dichloroethene	0.67	0.64	0.71	0.64	67	64	71	64	66.50	3.32	
Methylene Chloride	1.41	1.24	1.16	1.20	141	124	116	120	125.25	11.00	
1,2-Dichloroethene(trans)	0.71	0.70	0.72	0.74	71	70	72	74	71.75	1.71	
1,1-Dichloroethane	0.71	0.72	0.79	0.78	71	72	79	78	75.00	4.08	
MTBE	1.80	1.87	1.93	1.95	90	94	97	98	94.38	3.38	2PPB
2,2-Dichloropropane	0.99	0.99	0.98	0.97	99	99	98	97	98.25	0.96	
2-butanone	1.67	1.56	1.38	1.19	84	78	69	60	72.50	10.53	2PPB
1,2-Dichloroethene(cis)	0.77	0.77	0.81	0.81	77	77	81	81	79.00	2.31	
Chloroform	0.94	0.95	1.02	1.02	94	95	102	102	98.25	4.35	
Tetrahydrofuran	1.74	1.03	1.22	0.41	87	52	61	21	55.00	27.46	2PPB
Bromochloromethane	0.73	0.84	0.90	0.91	37	84	90	91	75.38	26.10	
1,1,1-Trichloroethane	1.02	0.97	1.03	1.03	102	97	103	103	101.25	2.87	
1,1-Dichloropropene	0.73	0.66	0.73	0.70	73	66	73	70	70.50	3.32	
Carbon Tetrachloride	1.02	0.95	1.01	1.01	102	95	101	101	99.75	3.20	
1,2-Dichloroethane	0.97	0.99	1.15	1.11	97	99	115	111	105.50	8.85	
Benzene	0.87	0.81	0.82	0.83	87	81	82	83	83.25	2.63	
Trichloroethene	0.85	0.79	0.83	0.81	85	79	83	81	82.00	2.58	
1,2-Dichloropropane	0.90	0.83	0.88	0.95	90	83	88	95	89.00	4.97	
Bromodichloromethane	0.94	0.96	0.98	0.98	94	96	98	98	96.50	1.91	
Dibromomethane	0.78	0.78	0.88	0.88	78	78	88	88	83.00	5.77	
cis-1,3-Dichloropropene	0.84	0.80	0.84	0.86	84	80	84	86	83.50	2.52	
4-methyl-2-pentanone	1.33	1.53	1.58	1.64	67	77	79	82	76.00	6.72	2PPB
Toluene	0.94	0.89	0.93	0.92	94	89	93	92	92.00	2.16	

2-hexanone	1.12	1.33	1.44	1.58	56	67	72	79	68.38	9.71	2PPB
trans-1,3-Dichloropropene	0.87	0.95	1.03	0.88	87	95	103	88	93.25	7.41	
1,1,2-Trichloroethane	0.81	0.78	0.83	0.82	81	78	83	82	81.00	2.16	
1,3-Dichloropropane	0.87	0.90	0.97	0.93	87	90	97	93	91.75	4.27	
Tetrachloroethene	0.94	0.92	1.00	0.92	94	92	100	92	94.50	3.79	
Dibromochloromethane	0.99	0.98	1.00	1.07	99	98	100	107	101.00	4.08	
1,2-Dibromomethane	0.83	0.84	0.88	0.81	83	84	88	81	84.00	2.94	
Chlorobenzene	0.97	0.89	0.94	0.96	97	89	94	96	94.00	3.56	
1,1,1,2-Tetrachloroethane	1.00	1.01	1.00	1.02	100	101	100	102	100.75	0.96	
Ethyl Benzene	0.93	0.88	0.91	0.92	93	88	91	92	91.00	2.16	
m,p-Xylene	1.85	1.77	1.87	1.88	93	89	94	94	92.13	2.50	2PPB
o-Xylene	0.92	0.87	0.92	0.95	92	87	92	95	91.50	3.32	
Styrene	0.88	0.87	0.89	0.91	88	87	89	91	88.75	1.71	
Bromoform	0.97	1.02	0.99	1.00	97	102	99	100	99.50	2.08	
Isopropylbenzene	0.92	0.87	0.91	0.91	92	87	91	91	90.25	2.22	
1,1,2,2-Tetrachloroethane	0.79	0.82	0.77	0.81	79	82	77	81	79.75	2.22	
1,2,3-Trichloropropane	0.85	0.81	0.86	0.83	85	81	86	83	83.75	2.22	
n-Propylbenzene	0.86	0.76	0.84	0.85	86	76	84	85	82.75	4.57	
Bromobenzene	0.97	0.92	0.96	0.98	97	92	96	98	95.75	2.63	
1,3,5-Trimethylbenzene	1.01	1.00	1.03	1.05	101	100	103	105	102.25	2.22	
2-Chlorotoluene	0.94	0.99	0.97	0.97	94	99	97	97	96.75	2.06	
4-Chlorotoluene	0.92	1.31	1.07	1.10	92	131	107	110	110.00	16.06	
t-Butylbenzene	0.98	0.93	0.97	1.01	98	93	97	101	97.25	3.30	
1,2,4-Trimethylbenzene	1.03	0.98	1.01	1.04	103	98	101	104	101.50	2.65	
sec-Butylbenzene	0.94	0.87	0.89	0.91	94	87	89	91	90.25	2.99	
p-Isopropyltoluene	1.03	0.94	0.98	1.01	103	94	98	101	99.00	3.92	
1,3-Dichlorobenzene	1.03	0.99	1.00	1.04	103	99	100	104	101.50	2.38	
1,4-Dichlorobenzene	1.06	1.00	1.01	1.09	106	100	101	109	104.00	4.24	
n-Butylbenzene	0.91	0.83	0.85	0.85	91	83	85	85	86.00	3.46	
1,2-Dichlorobenzene	1.02	0.99	1.02	1.09	102	99	102	109	103.00	4.24	
1,2,4-Trichlorobenzene	1.17	1.03	0.86	1.13	117	103	86	113	104.75	13.82	
Hexachlorobutadiene	1.22	1.00	0.81	0.99	122	100	81	99	100.50	16.78	
Naphthalene	1.13	0.98	0.87	1.08	113	98	87	108	101.50	11.50	
1,2,3-Trichlorobenzene	1.29	1.03	0.87	1.19	129	103	87	119	109.50	18.43	

Regina Shamp
GCMS#9
5ppb

MAR 23,1999
DW Accuracy and Precision
ISTD and Std used : #032399

	6060J	6061J	6063J	6064J	% rec	% rec	% rec	% rec	average	std dev	
Acetone	8.48	10.19	10.2	10.66	84.8	101.9	102	106.6	98.83	9.60	10PPB

Regina Shamp
GCMS#9
1ppb

AUG 3,1999
DW Accuracy and Precision
ISTD and Std used: 109 and 141

	7390J	7391J	7392J	7393J						
1,2-Dibromochloropropane	0.74	0.53	0.63	0.56	74	53	63	56	61.50	9.33

SAVED AS DWAPJ.XLS

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