ATTACHMENT 2

LABORATORY ANALYTICAL RESULTS

TABLE OF CONTENTS

CLIENT: **ECO & ASSOCIATES, INC.**

PROJECT: **B & B, MONTHLY CITY WELL SAMPLING**

SDG: **12F196**

SECTION		PAGE
Cover Letter, COC/Sample Receipt Form		1000 – 1004
GC/MS-VOA	METHOD 5030B/8260B METHOD 5030B/8260B SIM	2000 – 2112 2113 – 2193
GC/MS-SVOA	**	3000 –
GC-VOA	**	4000 –
GC-SVOA	METHOD 8151A	5000 – 5088
HPLC	**	6000 –
METALS	**	7000 –
WET	**	8000 –
OTHERS	**	9000 –

** - Not Requested

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 07-16-2012
EMAX Batch No.: 12F196

Mitra Fiuzat

Eco & Associates, Inc.
1855 W. Katella Ave, Suite 340
Orange, CA 92867

Subject: Laboratory Report
Project: B & B, Monthly City Well Sampling

Enclosed is the Laboratory report for samples received on 06/26/12.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
06-26-12-CW-1	F196-01	06/26/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
06-26-12-FDUP-1	F196-02	06/26/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
06-26-12-CW-5	F196-03	06/26/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
06-26-12-CW-6	F196-04	06/26/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
06-26-12-CW-8	F196-05	06/26/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
06-26-12-CW-9	F196-06	06/26/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
06-26-12-CW-10	F196-07	06/26/12	WATER	CHLORINATED HERBICIDES

Sample ID	Control #	Col Date	Matrix	Analysis
				VOLATILE ORGANICS BY GC/MS
				VOC SIM
06-26-12-TB-1	F196-08	06/26/12	WATER	VOLATILE ORGANICS BY GC/MS
06-26-12-CW-6MS	F196-04M	06/26/12	WATER	CHLORINATED HERBICIDES
				VOLATILE ORGANICS BY GC/MS
				VOC SIM
06-26-12-CW-6MSD	F196-04S	06/26/12	WATER	CHLORINATED HERBICIDES
				VOLATILE ORGANICS BY GC/MS
				VOC SIM

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all NELAC & DOD requirements unless noted in the Case Narrative.

NELAC Accredited Certificate Number 02116CA
L-A-B Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing

CHAIN OF CUSTODY

EMAX LABORATORIES, INC.
1835 W. 205th Street, Torrance, CA 90501
Tel #: 310-618-8889 Fax #: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER: Eco-11-482

EMAX CONTROL NO. * 12F196

SAMPLE STORAGE: Coolers

PROJECT CODE:

CLIENT: Eco & Assoc. Inc
PROJECT: B&B Monthly City Well Monitoring
COORDINATOR: Mitra Fiuzat
TEL: 714 289 0995 FAX: 714 289 0965 EMAIL:
SEND REPORT TO:
COMPANY:
ADDRESS: 1855 W. Katella Av. #340 Orange CA 92867
EMAX PM:

MATRIX CODE	PRESERVATIVE CODE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sludge	SH=NaOH
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure Products	ZA=Zinc Acetate
AR=Air	HS=H_2SO_4
O=	

ANALYSIS REQUIRED: 8260B, 8260 SIM, 8151

TAT:
- ☐ Rush ____hrs.
- ☐ Rush ____days
- ☐ 7 days
- ☐ 14 days
- ☐ 21 days
- ☐ 30 days
- ☐ ____days
- ☒ Normal

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	8260B	8260 SIM	8151	COMMENTS
1	06-26-12-CW-1	Arvin	6/26/12	1000	8	VAR	VAT	GW		X	X	X	
2	06-26-12-FDUP-1			—	8					X	X	X	
3	06-26-12-CW-5			0947	8					X	X	X	Level 4
4	06-26-12-CW-6			1105	24					X	X	X	MS/MSD
5	06-26-12-CW-8			1050	8					X	X	X	
6	06-26-12-CW-9			1125	8					X	X	X	
7	06-26-12-CW-10			1030	8					X	X	X	
8	06-26-12-TB-1			—	6	40mL	VOA	W	X	X			
9													
0													

Instructions

Cooler #	Temp. (°C)	Sample #s
1	3.7	
2	6.0	
3	4.5	

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[illegible] Argueta	6/26/12	1420	Keith Stant

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepacies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associted with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 12 F196
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient T PATEL
☐ EMAX Courier ☑ Client Delivery		Date 6/26/12 Time 1420

COC Inspection

☑ Client Name ☑ Client PM/FC NV ☐ Sampler Name ☑ Sampling Date/Time/Location ☑ Sample ID ☑ Matrix

☑ Address ☑ Tel # / Fax # ☑ Courier Signature ☑ Analysis Required ☐ Preservative (if any) ☑ TAT

Safety Issues (if any) ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☑ Intact	☐ Damaged		
Packaging	☐ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐
Temperatures (Cool, ≤6 °C but not frozen)	☐ Cooler 1 °C	☐ Cooler 2 °C	☐ Cooler 3 °C	☐ Cooler 4 °C	☐ Cooler 5 °C
	☐ Cooler 6 °C	☐ Cooler 7 °C	☐ Cooler 8 °C	☐ Cooler 9 °C	☐ Cooler 10 °C

Thermometer: *A - S/N 101541371* *B - S/N 101541382*

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note: **pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.**

DISCREPANCIES

LSID	LSCID	Description Code	Sample Label ID / Information	Corrective Action Code
2	9-16	D1	Label - 10:04	R2

☐ **Continue to next page.**

REVIEWS

Sample Labeling [signature] 6/28/12 Date 6/28/12

SRF [signature] Date 6/26/12

PM HOB for RB Date 6/27/12

LEGEND:

Code	Description- Sample Management
A1	Analysis is not indicated in COC.
A2	Analysis is not indicated in label.
A3	Analysis is inconsistent in COC vis-à-vis label.
B1	Sample ID is not indicated in COC.
B2	Sample ID is not indicated in label.
B3	Sample ID is inconsistent in COC vis-à-vis label.
C1	Improper container
C2	Broken container
C3	Leaking container
D1	Date and/or time is not indicated in COC.
D2	Date and/or time is not indicated in label.
D3	Date and/or time is inconsistent in COC vis-à-vis label.
F1	Improper preservation
F2	Insufficient Sample
F3	Bubble is > 6mm. Use vial with smallest bubble first.
F4	Bubble is > 6mm in all vials.
F5	>20 % solid particle
F6	Out of Holding Time

Code	Description-Sample Management
G1	Sample indicated in COC is not received.
G2	MS/MSD is not indicated in COC.
G3	No identified trip blank, proceed as indicated in COC.
G4	Trip Blank is designated in SDG _____
G5	Trip Blank has no sampling date & time. Log-in with earliest sampling date and 0:00 time.
H1	

Code	Description-Project Management
R1	Hold sample(s); wait for further instructions
R2	Proceed as indicated in COC and inform client.
R3	Refer to attached instruction
R4	Cancel the analysis
R5	Inform client.
R6	Proceed as indicated in COC

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

ECO & ASSOCIATES, INC.

B & B, MONTHLY CITY WELL SAMPLING

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 12F196

CASE NARRATIVE

Client : ECO & ASSOCIATES, INC.

Project : B & B, MONTHLY CITY WELL SAMPLING

SDG : 12F196

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

A total of eight (8) water samples were received on 06/26/12 for Volatile Organics by GC/MS analysis, Method 5030B/8260B in accordance Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 and QAPP09.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Instrument mass ratios were within specification. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried on at a frequency required by the project. All project calibration requirements were satisfied. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blanks were analyzed at the frequency required by the project. For this SDG, two (2) method blanks were analyzed with the samples. All results were compliant to project requirement. Refer to QC result summary form for details.

Lab Control Sample
Two (2) sets of LCS/LCD were analyzed with the samples in this SDG.
Percent recoveries for VOF3F04L/C were all within QC limits.
Percent recoveries for VOF3G04L/C were all within QC limits.

Matrix QC Sample
A set of MS/MSD was analyzed with the samples in this SDG.
Percent recoveries were within project QC limits in F196-04 M/S except for two results as qualified with [*] in F196-04 M summary form. Check QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. Surrogate recoveries were within project QC limits. Refer to sample result forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. All project requirements were met otherwise anomalies were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : ECO & ASSOCIATES, INC.
Project : B & B, MONTHLY CITY WELL SAMPLING

SDG NO. : 12F196
Instrument ID : F3

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VOF3F04B	1	NA	06/28/1212:25	06/28/1212:25	RFR066	RFR007	VOF3F04	Method Blank
LCS1W	VOF3F04L	1	NA	06/28/1210:40	06/28/1210:40	RFR063	RFR007	VOF3F04	Lab Control Sample (LCS)
LCD1W	VOF3F04C	1	NA	06/28/1211:14	06/28/1211:14	RFR064	RFR007	VOF3F04	LCS Duplicate
06-26-12-TB-1	F196-08	1	NA	06/28/1213:00	06/28/1213:00	RFR067	RFR007	VOF3F04	Field Sample
06-26-12-CW-1	F196-01	1	NA	06/28/1213:35	06/28/1213:35	RFR068	RFR007	VOF3F04	Field Sample
06-26-12-FDUP-1	F196-02	1	NA	06/28/1214:09	06/28/1214:09	RFR069	RFR007	VOF3F04	Field Sample
06-26-12-CW-5	F196-03	1	NA	06/28/1214:44	06/28/1214:44	RFR070	RFR007	VOF3F04	Field Sample
06-26-12-CW-6	F196-04	1	NA	06/28/1215:18	06/28/1215:18	RFR071	RFR007	VOF3F04	Field Sample
06-26-12-CW-6MS	F196-04M	1	NA	06/28/1215:51	06/28/1215:51	RFR072	RFR007	VOF3F04	Matrix Spike Sample (MS)
06-26-12-CW-9	F196-06	1	NA	06/28/1218:02	06/28/1218:02	RFR076	RFR007	VOF3F04	Field Sample
06-26-12-CW-10	F196-07	1	NA	06/28/1218:35	06/28/1218:35	RFR077	RFR007	VOF3F04	Field Sample
06-26-12-CW-6MSD	F196-04S	1	NA	06/28/1219:10	06/28/1219:10	RFR078	RFR007	VOF3F04	MS Duplicate (MSD)
MBLK2W	VOF3G04B	1	NA	07/06/1214:59	07/06/1214:59	RGR081	RFR007	VOF3G04	Method Blank
LCS2W	VOF3G04L	1	NA	07/06/1213:18	07/06/1213:18	RGR078	RFR007	VOF3G04	Lab Control Sample (LCS)
LCD2W	VOF3G04C	1	NA	07/06/1213:52	07/06/1213:52	RGR079	RFR007	VOF3G04	LCS Duplicate
06-26-12-CW-8	F196-05R	1	NA	07/06/1217:53	07/06/1217:53	RGR086	RFR007	VOF3G04	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 13:35
Sample ID:	06-26-12-CW-1	Date Analyzed:	06/28/12 13:35
Lab Samp ID:	F196-01	Dilution Factor:	1
Lab File ID:	RFR068	Matrix	: WATER
Ext Btch ID:	VOF3F04	% Moisture	: NA
Calib. Ref.:	RFR007	Instrument ID	: F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.57	10.00	95.7	70-120
4-BROMOFLUOROBENZENE	9.58	10.00	95.8	75-120
TOLUENE-D8	9.40	10.00	94.0	85-120
DIBROMOFLUOROMETHANE	9.97	10.00	99.7	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 14:09
Sample ID:	06-26-12-FDUP-1	Date Analyzed:	06/28/12 14:09
Lab Samp ID:	F196-02	Dilution Factor:	1
Lab File ID:	RFR069	Matrix	: WATER
Ext Btch ID:	VOF3F04	% Moisture	: NA
Calib. Ref.:	RFR007	Instrument ID	: F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.78	10.00	97.8	70-120
4-BROMOFLUOROBENZENE	9.62	10.00	96.2	75-120
TOLUENE-D8	9.64	10.00	96.4	85-120
DIBROMOFLUOROMETHANE	10.1	10.00	101	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 14:44
Sample ID:	06-26-12-CW-5	Date Analyzed:	06/28/12 14:44
Lab Samp ID:	F196-03	Dilution Factor:	1
Lab File ID:	RFR070	Matrix :	WATER
Ext Btch ID:	VOF3F04	% Moisture :	NA
Calib. Ref.:	RFR007	Instrument ID :	F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	10.2	10.00	102	70-120
4-BROMOFLUOROBENZENE	9.35	10.00	93.5	75-120
TOLUENE-D8	9.13	10.00	91.3	85-120
DIBROMOFLUOROMETHANE	10.3	10.00	103	85-115

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR070.D Vial: 10
Acq On : 28 Jun 2012 2:44 pm Operator: DN
Sample : 12F196-03 25ml Inst : F3
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 5 15:27 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.78	114	1557125	10.00	ug/l	-0.02
39) CHLOROBENZENE-D5	19.80	117	1255236	10.00	ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.77	152	365936	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.42	111	490274	10.28	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	102.80%	
37) 1,2-Dichloroethane-d4	15.09	65	297474	10.20	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	102.00%	
54) Toluene-d8	17.97	98	1644296	9.13	ug/l	0.00
Spiked Amount 10.000			Recovery	=	91.30%	
74) 4-Bromofluorobenzene	21.09	95	469233	9.35	ug/l	0.00
Spiked Amount 10.000			Recovery	=	93.50%	

Target Compounds Qvalue

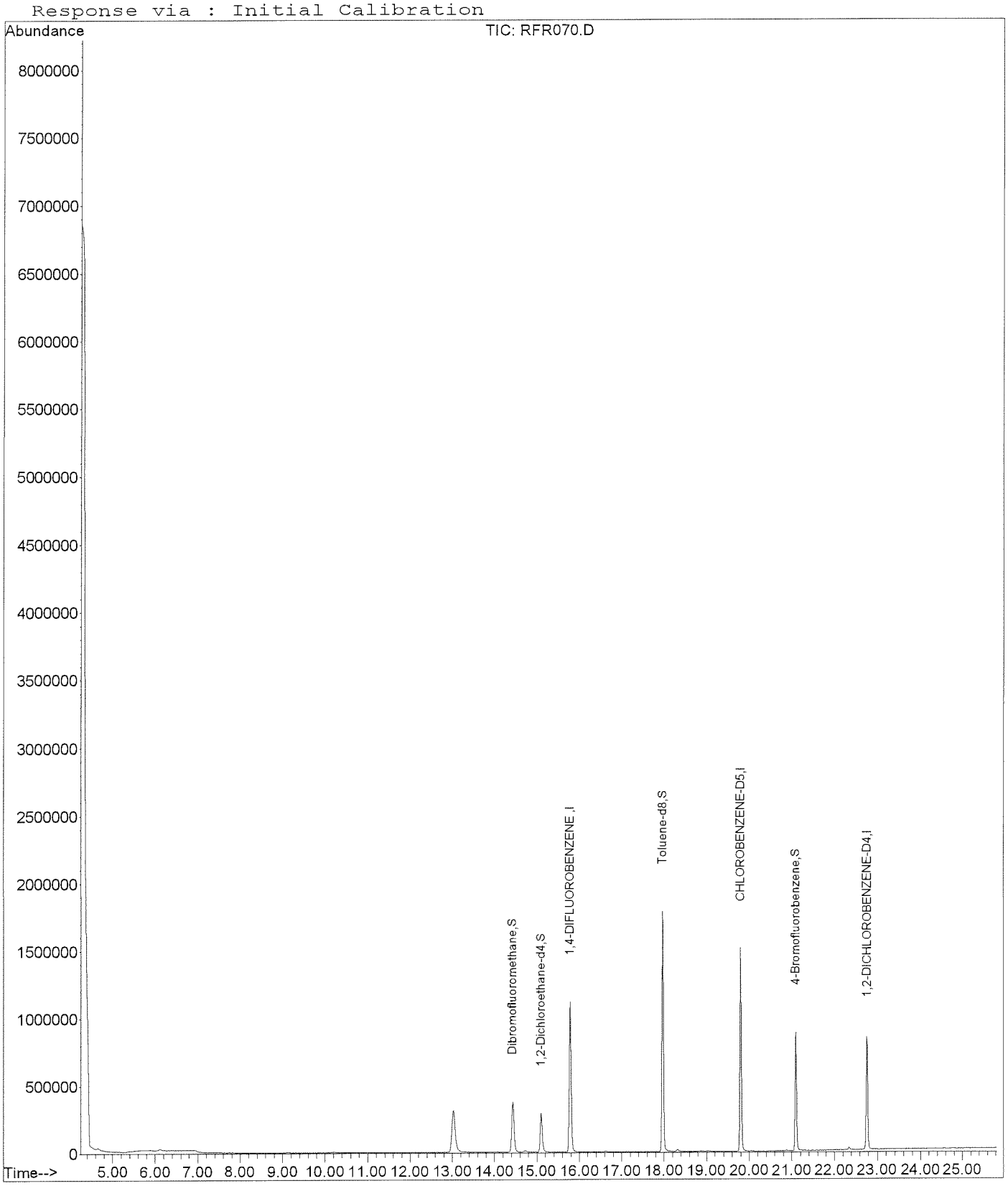
(#) = qualifier out of range (m) = manual integration
RFR070.D VOF3F22.M Thu Jul 05 15:27:13 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR070.D
Acq On : 28 Jun 2012 2:44 pm
Sample : 12F196-03 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jul 5 15:27 2012

Vial: 10
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:18
Sample ID	: 06-26-12-CW-6	Date Analyzed:	06/28/12 15:18
Lab Samp ID	: F196-04	Dilution Factor:	1
Lab File ID	: RFR071	Matrix	: WATER
Ext Btch ID	: VOF3F04	% Moisture	: NA
Calib. Ref.	: RFR007	Instrument ID	: F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	0.23J	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.60	10.00	96.0	70-120
4-BROMOFLUOROBENZENE	9.31	10.00	93.1	75-120
TOLUENE-D8	9.76	10.00	97.6	85-120
DIBROMOFLUOROMETHANE	9.87	10.00	98.7	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	07/06/12 17:53
Sample ID:	06-26-12-CW-8	Date Analyzed:	07/06/12 17:53
Lab Samp ID:	F196-05R	Dilution Factor:	1
Lab File ID:	RGR086	Matrix	: WATER
Ext Btch ID:	VOF3G04	% Moisture	: NA
Calib. Ref.:	RFR007	Instrument ID	: F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	0.53J	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.45	10.00	94.5	70-120
4-BROMOFLUOROBENZENE	9.34	10.00	93.4	75-120
TOLUENE-D8	9.25	10.00	92.5	85-120
DIBROMOFLUOROMETHANE	9.95	10.00	99.5	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 18:02
Sample ID:	06-26-12-CW-9	Date Analyzed:	06/28/12 18:02
Lab Samp ID:	F196-06	Dilution Factor:	1
Lab File ID:	RFR076	Matrix	: WATER
Ext Btch ID:	VOF3F04	% Moisture	: NA
Calib. Ref.:	RFR007	Instrument ID	: F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	0.39J	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	3.2	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.24	10.00	92.4	70-120
4-BROMOFLUOROBENZENE	9.47	10.00	94.7	75-120
TOLUENE-D8	9.66	10.00	96.6	85-120
DIBROMOFLUOROMETHANE	9.90	10.00	99.0	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 18:35
Sample ID:	06-26-12-CW-10	Date Analyzed:	06/28/12 18:35
Lab Samp ID:	F196-07	Dilution Factor:	1
Lab File ID:	RFR077	Matrix :	WATER
Ext Btch ID:	VOF3F04	% Moisture :	NA
Calib. Ref.:	RFR007	Instrument ID :	F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.57	10.00	95.7	70-120
4-BROMOFLUOROBENZENE	9.32	10.00	93.2	75-120
TOLUENE-D8	9.73	10.00	97.3	85-120
DIBROMOFLUOROMETHANE	10.1	10.00	101	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 13:00
Sample ID:	06-26-12-TB-1	Date Analyzed:	06/28/12 13:00
Lab Samp ID:	F196-08	Dilution Factor:	1
Lab File ID:	RFR067	Matrix :	WATER
Ext Btch ID:	VOF3F04	% Moisture :	NA
Calib. Ref.:	RFR007	Instrument ID :	F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	8.70	10.00	87.0	70-120
4-BROMOFLUOROBENZENE	10.2	10.00	102	75-120
TOLUENE-D8	9.66	10.00	96.6	85-120
DIBROMOFLUOROMETHANE	9.69	10.00	96.9	85-115

QC SUMMARIES

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	NA
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/28/12
Batch No.	: 12F196	Date Extracted:	06/28/12 12:25
Sample ID:	MBLK1W	Date Analyzed:	06/28/12 12:25
Lab Samp ID:	VOF3F04B	Dilution Factor:	1
Lab File ID:	RFR066	Matrix :	WATER
Ext Btch ID:	VOF3F04	% Moisture :	NA
Calib. Ref.:	RFR007	Instrument ID :	F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.77	10.00	97.7	70-120
4-BROMOFLUOROBENZENE	9.66	10.00	96.6	75-120
TOLUENE-D8	9.29	10.00	92.9	85-120
DIBROMOFLUOROMETHANE	10.0	10.00	100	85-115

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	VOF3F04B	VOF3F04L	VOF3F04C		
LAB FILE ID:	RFR066	RFR063	RFR064		
DATE EXTRACTED:	06/28/1212:25	06/28/1210:40	06/28/1211:14	DATE COLLECTED:	NA
DATE ANALYZED:	06/28/1212:25	06/28/1210:40	06/28/1211:14	DATE RECEIVED:	06/28/12
PREP. BATCH:	VOF3F04	VOF3F04	VOF3F04		
CALIB. REF:	RFR007	RFR007	RFR007		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1,1,2-Tetrachloroethane	ND	10.0	9.12	91	10.0	9.50	95	4	80-130	30
1,1,1-Trichloroethane	ND	10.0	9.30	93	10.0	9.43	94	1	65-130	30
1,1,2,2-Tetrachloroethane	ND	10.0	9.32	93	10.0	9.84	98	5	65-130	30
1,1,2-Trichloroethane	ND	10.0	9.10	91	10.0	10.1	101	11	75-125	30
1,1-Dichloroethane	ND	10.0	8.87	89	10.0	9.19	92	4	70-135	30
1,1-Dichloroethene	ND	10.0	8.56	86	10.0	8.85	89	3	70-130	30
1,1-Dichloropropene	ND	10.0	8.88	89	10.0	8.87	89	0	75-130	30
1,2,3-Trichlorobenzene	ND	10.0	8.58	86	10.0	8.97	90	4	55-140	30
1,2,3-Trichloropropane	ND	10.0	9.62	96	10.0	10.1	101	5	75-125	30
1,2,4-Trichlorobenzene	ND	10.0	8.72	87	10.0	8.66	87	1	65-135	30
1,2,4-Trimethylbenzene	ND	10.0	8.93	89	10.0	8.67	87	3	75-130	30
1,2-Dibromo-3-chloropropane	ND	10.0	10.0	100	10.0	10.6	106	5	50-130	30
1,2-Dibromoethane	ND	10.0	9.14	91	10.0	10.1	101	10	80-120	30
1,2-Dichlorobenzene	ND	10.0	9.14	91	10.0	9.19	92	1	70-120	30
1,2-Dichloroethane	ND	10.0	8.95	89	10.0	9.50	95	6	70-130	30
1,2-Dichloropropane	ND	10.0	8.93	89	10.0	9.34	93	4	75-125	30
1,3,5-Trimethylbenzene	ND	10.0	8.95	89	10.0	8.56	86	4	75-130	30
1,3-Dichlorobenzene	ND	10.0	9.15	91	10.0	8.99	90	2	75-125	30
1,3-Dichloropropane	ND	10.0	9.12	91	10.0	10.0	100	9	75-125	30
1,4-Dichlorobenzene	ND	10.0	9.19	92	10.0	9.06	91	1	75-125	30
2,2-Dichloropropane	ND	10.0	9.03	90	10.0	9.11	91	1	70-135	30
2-Butanone	ND	50.0	47.0	94	50.0	52.9	106	12	30-150	30
2-Chlorotoluene	ND	10.0	9.04	90	10.0	8.65	87	4	75-125	30
2-Hexanone	ND	50.0	46.7	93	50.0	54.3	109	15	55-130	30
4-Chlorotoluene	ND	10.0	9.11	91	10.0	8.77	88	4	75-130	30
Acetone	ND	50.0	42.3	85	50.0	45.9	92	8	40-140	30
Benzene	ND	10.0	8.58	86	10.0	8.80	88	3	80-120	30
Bromobenzene	ND	10.0	9.31	93	10.0	9.11	91	2	75-125	30
Bromochloromethane	ND	10.0	8.88	89	10.0	9.46	95	6	65-130	30
Bromodichloromethane	ND	10.0	9.15	91	10.0	9.43	94	3	75-120	30
Bromoform	ND	10.0	9.81	98	10.0	10.0	100	2	70-130	30
Bromomethane	ND	10.0	9.99	100	10.0	11.3	113	12	30-145	30
Carbon Disulfide	ND	10.0	9.02	90	10.0	9.29	93	3	35-160	30
Carbon Tetrachloride	ND	10.0	9.45	94	10.0	9.38	94	1	65-140	30
Chlorobenzene	ND	10.0	8.93	89	10.0	9.33	93	4	80-120	30
Chloroethane	ND	10.0	9.41	94	10.0	10.7	107	13	60-135	30
Chloroform	ND	10.0	8.95	90	10.0	9.17	92	2	65-135	30
Chloromethane	ND	10.0	8.97	90	10.0	10.0	100	11	40-125	30
cis-1,2-Dichloroethene	ND	10.0	8.87	89	10.0	9.02	90	2	70-125	30
cis-1,3-Dichloropropene	ND	10.0	9.10	91	10.0	9.66	97	6	70-130	30
Dibromochloromethane	ND	10.0	9.49	95	10.0	10.2	102	7	60-135	30
Dibromomethane	ND	10.0	9.32	93	10.0	10.0	100	7	75-125	30
Dichlorodifluoromethane	ND	10.0	9.18	92	10.0	10.1	101	9	30-155	30
Ethylbenzene	ND	10.0	9.12	91	10.0	9.10	91	0	75-125	30
Hexachlorobutadiene	ND	10.0	8.27	83	10.0	7.78	78	6	50-140	30
Isopropyl Benzene	ND	10.0	9.08	91	10.0	8.58	86	6	75-125	30
m,p-Xylenes	ND	20.0	17.7	88	20.0	18.0	90	2	75-130	30
MIBK	ND	50.0	46.7	93	50.0	53.3	107	13	60-135	30
Methylene Chloride	ND	10.0	8.94	89	10.0	9.53	95	6	55-140	30
MTBE	ND	10.0	9.50	95	10.0	10.7	107	12	65-125	30
Naphthalene	ND	10.0	8.86	89	10.0	9.25	93	4	55-140	30
n-Butylbenzene	ND	10.0	9.27	93	10.0	8.90	89	4	70-135	30
n-Propylbenzene	ND	10.0	9.02	90	10.0	8.61	86	5	70-130	30
o-Xylene	ND	10.0	8.86	89	10.0	9.26	93	4	80-120	30
p-Isopropyltoluene	ND	10.0	9.10	91	10.0	8.64	86	5	75-130	30
Sec-Butylbenzene	ND	10.0	8.81	88	10.0	8.38	84	5	70-125	30
Styrene	ND	10.0	9.15	91	10.0	9.78	98	7	65-135	30
Tert-Butylbenzene	ND	10.0	8.83	88	10.0	8.45	84	4	70-130	30
Tetrachloroethene	ND	10.0	8.70	87	10.0	8.78	88	1	45-150	30
Toluene	ND	10.0	8.76	88	10.0	8.96	90	2	75-120	30
Trans-1,2-Dichloroethene	ND	10.0	8.69	87	10.0	8.89	89	2	60-140	30
Trans-1,3-Dichloropropene	ND	10.0	9.22	92	10.0	10.0	100	9	55-140	30
Trichloroethene	ND	10.0	8.78	88	10.0	8.92	89	2	70-125	30
Trichlorofluoromethane	ND	10.0	10.2	102	10.0	11.1	111	9	60-145	30
Vinyl Chloride	ND	10.0	9.51	95	10.0	10.5	105	10	50-145	30
Freon113	ND	10.0	8.83	88	10.0	9.29	93	5	65-135	30
Vinyl Acetate	ND	10.0	10.1	101	10.0	11.4	114	12	65-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	9.66	97	10.0	10.0	100	70-120
4-Bromofluorobenzene	10.0	9.82	98	10.0	9.34	93	75-120
Toluene-d8	10.0	9.25	93	10.0	9.08	91	85-120
Dibromofluoromethane	10.0	9.93	99	10.0	10.1	101	85-115

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: ECO & ASSOCIATES, INC.	Date Collected:	NA
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	07/06/12
Batch No.	: 12F196	Date Extracted:	07/06/12 14:59
Sample ID:	MBLK2W	Date Analyzed:	07/06/12 14:59
Lab Samp ID:	VOF3G04B	Dilution Factor:	1
Lab File ID:	RGR081	Matrix	: WATER
Ext Btch ID:	VOF3G04	% Moisture	: NA
Calib. Ref.:	RFR007	Instrument ID	: F3

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,1-TRICHLOROETHANE	ND	1.0	0.20
1,1,2,2-TETRACHLOROETHANE	ND	1.0	0.20
1,1,2-TRICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHANE	ND	1.0	0.20
1,1-DICHLOROETHENE	ND	1.0	0.20
1,1-DICHLOROPROPENE	ND	1.0	0.20
1,2,3-TRICHLOROBENZENE	ND	1.0	0.30
1,2,3-TRICHLOROPROPANE	ND	1.0	0.50
1,2,4-TRICHLOROBENZENE	ND	1.0	0.30
1,2,4-TRIMETHYLBENZENE	ND	1.0	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	1.0	0.50
1,2-DIBROMOETHANE	ND	1.0	0.20
1,2-DICHLOROBENZENE	ND	1.0	0.20
1,2-DICHLOROETHANE	ND	1.0	0.20
1,2-DICHLOROPROPANE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	1.0	0.20
1,3-DICHLOROBENZENE	ND	1.0	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	1.0	0.20
2,2-DICHLOROPROPANE	ND	1.0	0.20
2-BUTANONE	ND	10	4.0
2-CHLOROTOLUENE	ND	1.0	0.20
2-HEXANONE	ND	10	4.0
4-CHLOROTOLUENE	ND	1.0	0.20
ACETONE	ND	10	5.0
BENZENE	ND	1.0	0.20
BROMOBENZENE	ND	1.0	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	1.0	0.20
BROMOFORM	ND	1.0	0.30
BROMOMETHANE	ND	1.0	0.30
CARBON DISULFIDE	ND	1.0	0.20
CARBON TETRACHLORIDE	ND	1.0	0.20
CHLOROBENZENE	ND	1.0	0.20
CHLOROETHANE	ND	1.0	0.30
CHLOROFORM	ND	1.0	0.20
CHLOROMETHANE	ND	1.0	0.30
CIS-1,2-DICHLOROETHENE	ND	1.0	0.20
CIS-1,3-DICHLOROPROPENE	ND	1.0	0.20
DIBROMOCHLOROMETHANE	ND	1.0	0.20
DIBROMOMETHANE	ND	1.0	0.20
DICHLORODIFLUOROMETHANE	ND	1.0	0.30
ETHYLBENZENE	ND	1.0	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.30
ISOPROPYL BENZENE	ND	1.0	0.20
M,P-XYLENES	ND	1.0	0.40
MIBK	ND	10	4.0
METHYLENE CHLORIDE	ND	1.0	0.50
MTBE	ND	1.0	0.20
NAPHTHALENE	ND	1.0	0.50
N-BUTYLBENZENE	ND	1.0	0.20
N-PROPYLBENZENE	ND	1.0	0.20
O-XYLENE	ND	1.0	0.20
P-ISOPROPYLTOLUENE	ND	1.0	0.20
SEC-BUTYLBENZENE	ND	1.0	0.20
STYRENE	ND	1.0	0.20
TERT-BUTYLBENZENE	ND	1.0	0.20
TETRACHLOROETHENE	ND	1.0	0.20
TOLUENE	ND	1.0	0.20
TRANS-1,2-DICHLOROETHENE	ND	1.0	0.20
TRANS-1,3-DICHLOROPROPENE	ND	1.0	0.20
TRICHLOROETHENE	ND	1.0	0.20
TRICHLOROFLUOROMETHANE	ND	1.0	0.30
VINYL CHLORIDE	ND	1.0	0.20
FREON113	ND	1.0	0.30
VINYL ACETATE	ND	2.0	0.50

SURROGATE PARAMETERS	RESULTS	SPK AMT	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	9.44	10.00	94.4	70-120
4-BROMOFLUOROBENZENE	9.38	10.00	93.8	75-120
TOLUENE-D8	9.37	10.00	93.7	85-120
DIBROMOFLUOROMETHANE	10.1	10.00	101	85-115

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2W				
LAB SAMP ID:	VOF3G04B	VOF3G04L	VOF3G04C		
LAB FILE ID:	RGR081	RGR078	RGR079		
DATE EXTRACTED:	07/06/1214:59	07/06/1213:18	07/06/1213:52	DATE COLLECTED:	NA
DATE ANALYZED:	07/06/1214:59	07/06/1213:18	07/06/1213:52	DATE RECEIVED:	07/06/12
PREP. BATCH:	VOF3G04	VOF3G04	VOF3G04		
CALIB. REF:	RFR007	RFR007	RFR007		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1,1,2-Tetrachloroethane	ND	10.0	9.71	97	10.0	9.89	99	2	80-130	30
1,1,1-Trichloroethane	ND	10.0	8.99	90	10.0	9.35	94	4	65-130	30
1,1,2,2-Tetrachloroethane	ND	10.0	9.77	98	10.0	9.24	92	6	65-130	30
1,1,2-Trichloroethane	ND	10.0	10.1	101	10.0	9.93	99	2	75-125	30
1,1-Dichloroethane	ND	10.0	9.02	90	10.0	9.25	93	3	70-135	30
1,1-Dichloroethene	ND	10.0	8.33	83	10.0	8.31	83	0	70-130	30
1,1-Dichloropropene	ND	10.0	8.40	84	10.0	9.55	95	13	75-130	30
1,2,3-Trichlorobenzene	ND	10.0	9.26	93	10.0	8.91	89	4	55-140	30
1,2,3-Trichloropropane	ND	10.0	10.1	101	10.0	9.69	97	5	75-125	30
1,2,4-Trichlorobenzene	ND	10.0	8.28	83	10.0	8.86	89	7	65-135	30
1,2,4-Trimethylbenzene	ND	10.0	7.98	80	10.0	8.56	86	7	75-130	30
1,2-Dibromo-3-chloropropane	ND	10.0	10.3	103	10.0	10.6	106	3	50-130	30
1,2-Dibromoethane	ND	10.0	10.5	105	10.0	10.1	101	4	80-120	30
1,2-Dichlorobenzene	ND	10.0	8.86	89	10.0	9.23	92	4	70-120	30
1,2-Dichloroethane	ND	10.0	9.40	94	10.0	9.65	96	3	70-130	30
1,2-Dichloropropane	ND	10.0	9.18	92	10.0	9.90	99	7	75-125	30
1,3,5-Trimethylbenzene	ND	10.0	8.01	80	10.0	8.70	87	8	75-130	30
1,3-Dichlorobenzene	ND	10.0	8.46	85	10.0	8.90	89	5	75-125	30
1,3-Dichloropropane	ND	10.0	9.97	100	10.0	9.77	98	2	75-125	30
1,4-Dichlorobenzene	ND	10.0	8.74	87	10.0	9.26	93	6	75-125	30
2,2-Dichloropropane	ND	10.0	8.95	90	10.0	8.79	88	2	70-135	30
2-Butanone	ND	50.0	60.3	121	50.0	49.7	99	19	30-150	30
2-Chlorotoluene	ND	10.0	8.01	80	10.0	8.61	86	7	75-125	30
2-Hexanone	ND	50.0	61.7	123	50.0	51.6	103	18	55-130	30
4-Chlorotoluene	ND	10.0	8.06	81	10.0	8.58	86	6	75-130	30
Acetone	ND	50.0	52.7	105	50.0	43.9	88	18	40-140	30
Benzene	ND	10.0	8.42	84	10.0	9.19	92	9	80-120	30
Bromobenzene	ND	10.0	8.89	89	10.0	9.26	93	4	75-125	30
Bromochloromethane	ND	10.0	9.48	95	10.0	9.17	92	3	65-130	30
Bromodichloromethane	ND	10.0	9.66	97	10.0	10.0	100	4	75-120	30
Bromoform	ND	10.0	10.6	106	10.0	10.3	103	2	70-130	30
Bromomethane	ND	10.0	11.8	118	10.0	9.97	100	17	30-145	30
Carbon Disulfide	ND	10.0	9.16	92	10.0	6.93	69	28	35-160	30
Carbon Tetrachloride	ND	10.0	8.90	89	10.0	10.1	101	13	65-140	30
Chlorobenzene	ND	10.0	9.03	90	10.0	9.37	94	4	80-120	30
Chloroethane	ND	10.0	10.7	107	10.0	9.45	95	12	60-135	30
Chloroform	ND	10.0	9.12	91	10.0	9.32	93	2	65-135	30
Chloromethane	ND	10.0	10.1	101	10.0	8.25	82	20	40-125	30
cis-1,2-Dichloroethene	ND	10.0	8.99	90	10.0	9.13	91	2	70-125	30
cis-1,3-Dichloropropene	ND	10.0	9.59	96	10.0	9.97	100	4	70-130	30
Dibromochloromethane	ND	10.0	10.4	104	10.0	10.3	103	0	60-135	30
Dibromomethane	ND	10.0	10.1	101	10.0	9.98	100	1	75-125	30
Dichlorodifluoromethane	ND	10.0	9.97	100	10.0	8.47	85	16	30-155	30
Ethylbenzene	ND	10.0	8.78	88	10.0	9.37	94	7	75-125	30
Hexachlorobutadiene	ND	10.0	7.66	77	10.0	8.85	89	14	50-140	30
Isopropyl Benzene	ND	10.0	8.16	82	10.0	9.00	90	10	75-125	30
m,p-Xylenes	ND	20.0	17.1	85	20.0	18.0	90	6	75-130	30
MIBK	ND	50.0	61.5	123	50.0	53.8	108	13	60-135	30
Methylene Chloride	ND	10.0	9.23	92	10.0	9.28	93	1	55-140	30
MTBE	ND	10.0	11.1	111	10.0	10.2	102	9	65-125	30
Naphthalene	ND	10.0	9.21	92	10.0	8.83	88	4	55-140	30
n-Butylbenzene	ND	10.0	7.74	77	10.0	8.67	87	11	70-135	30
n-Propylbenzene	ND	10.0	7.80	78	10.0	8.54	85	9	70-130	30
o-Xylene	ND	10.0	8.87	89	10.0	9.08	91	2	80-120	30
p-Isopropyltoluene	ND	10.0	7.84	78	10.0	8.64	86	10	75-130	30
Sec-Butylbenzene	ND	10.0	7.74	77	10.0	8.56	86	10	70-125	30
Styrene	ND	10.0	9.49	95	10.0	9.56	96	1	65-135	30
Tert-Butylbenzene	ND	10.0	7.97	80	10.0	8.74	87	9	70-130	30
Tetrachloroethene	ND	10.0	8.38	84	10.0	9.42	94	12	45-150	30
Toluene	ND	10.0	8.57	86	10.0	9.31	93	8	75-120	30
Trans-1,2-Dichloroethene	ND	10.0	8.46	85	10.0	8.74	87	3	60-140	30
Trans-1,3-Dichloropropene	ND	10.0	9.92	99	10.0	9.82	98	1	55-140	30
Trichloroethene	ND	10.0	8.55	85	10.0	9.54	95	11	70-125	30
Trichlorofluoromethane	ND	10.0	11.5	115	10.0	9.82	98	16	60-145	30
Vinyl Chloride	ND	10.0	10.6	106	10.0	8.92	89	18	50-145	30
Freon113	ND	10.0	8.75	87	10.0	8.95	89	2	65-135	30
Vinyl Acetate	ND	10.0	12.9	129	10.0	11.0	110	16	65-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	10.3	103	10.0	9.48	95	70-120
4-Bromofluorobenzene	10.0	9.11	91	10.0	9.17	92	75-120
Toluene-d8	10.0	8.90	89	10.0	9.36	94	85-120
Dibromofluoromethane	10.0	10.2	102	10.0	9.85	99	85-115

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	06-26-12-CW-6				
LAB SAMP ID:	F196-04	F196-04M	F196-04S		
LAB FILE ID:	RFR071	RFR072	RFR078		
DATE EXTRACTED:	06/28/1215:18	06/28/1215:51	06/28/1219:10	DATE COLLECTED:	06/26/12
DATE ANALYZED:	06/28/1215:18	06/28/1215:51	06/28/1219:10	DATE RECEIVED:	06/26/12
PREP. BATCH:	VOF3F04	VOF3F04	VOF3F04		
CALIB. REF:	RFR007	RFR007	RFR007		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1,1,2-Tetrachloroethane	ND	10.0	11.3	113	10.0	11.1	111	1	80-130	30
1,1,1-Trichloroethane	ND	10.0	10.6	106	10.0	11.4	114	7	65-130	30
1,1,2,2-Tetrachloroethane	ND	10.0	11.5	115	10.0	11.1	111	3	65-130	30
1,1,2-Trichloroethane	ND	10.0	11.7	117	10.0	11.2	112	4	75-125	30
1,1-Dichloroethane	ND	10.0	10.5	105	10.0	11.0	110	4	70-135	30
1,1-Dichloroethene	ND	10.0	9.56	96	10.0	10.7	107	11	70-130	30
1,1-Dichloropropene	ND	10.0	9.95	99	10.0	11.1	111	11	75-130	30
1,2,3-Trichlorobenzene	ND	10.0	10.3	103	10.0	9.40	94	10	55-140	30
1,2,3-Trichloropropane	ND	10.0	11.7	117	10.0	11.6	116	1	75-125	30
1,2,4-Trichlorobenzene	ND	10.0	10.2	102	10.0	9.63	96	6	65-135	30
1,2,4-Trimethylbenzene	ND	10.0	9.97	100	10.0	10.6	106	6	75-130	30
1,2-Dibromo-3-chloropropane	ND	10.0	11.9	119	10.0	11.4	114	4	50-130	30
1,2-Dibromoethane	ND	10.0	11.7	117	10.0	11.5	115	2	80-120	30
1,2-Dichlorobenzene	ND	10.0	10.9	109	10.0	10.8	108	0	70-120	30
1,2-Dichloroethane	ND	10.0	11.7	117	10.0	11.5	115	2	70-130	30
1,2-Dichloropropane	ND	10.0	11.0	110	10.0	11.3	113	2	75-125	30
1,3,5-Trimethylbenzene	ND	10.0	9.69	97	10.0	10.7	107	10	75-130	30
1,3-Dichlorobenzene	ND	10.0	10.1	101	10.0	10.7	107	5	75-125	30
1,3-Dichloropropane	ND	10.0	11.1	111	10.0	11.2	112	1	75-125	30
1,4-Dichlorobenzene	ND	10.0	10.6	106	10.0	11.0	110	3	75-125	30
2,2-Dichloropropane	ND	10.0	9.39	94	10.0	11.2	112	17	70-135	30
2-Butanone	ND	50.0	65.8	132	50.0	52.7	105	22	30-150	30
2-Chlorotoluene	ND	10.0	9.55	96	10.0	10.6	106	11	75-125	30
2-Hexanone	ND	50.0	67.6	135*	50.0	54.6	109	21	55-130	30
4-Chlorotoluene	ND	10.0	9.99	100	10.0	10.6	106	6	75-130	30
Acetone	ND	50.0	56.3	113	50.0	48.4	97	15	40-140	30
Benzene	ND	10.0	10.1	101	10.0	10.8	108	7	80-120	30
Bromobenzene	ND	10.0	10.3	103	10.0	10.8	108	5	75-125	30
Bromochloromethane	ND	10.0	10.7	107	10.0	11.1	111	4	65-130	30
Bromodichloromethane	ND	10.0	11.2	112	10.0	11.3	113	1	75-120	30
Bromoform	ND	10.0	11.8	118	10.0	11.7	117	1	70-130	30
Bromomethane	ND	10.0	13.7	137	10.0	12.5	125	9	30-145	30
Carbon Disulfide	ND	10.0	10.4	104	10.0	10.1	101	3	35-160	30
Carbon Tetrachloride	ND	10.0	11.0	110	10.0	11.9	119	7	65-140	30
Chlorobenzene	ND	10.0	10.7	107	10.0	10.8	108	1	80-120	30
Chloroethane	ND	10.0	12.4	124	10.0	11.6	116	6	60-135	30
Chloroform	ND	10.0	11.2	112	10.0	10.9	109	3	65-135	30
Chloromethane	ND	10.0	11.8	118	10.0	11.2	112	5	40-125	30
cis-1,2-Dichloroethene	ND	10.0	9.53	95	10.0	10.7	107	12	70-125	30
cis-1,3-Dichloropropene	ND	10.0	11.2	112	10.0	11.2	112	0	70-130	30
Dibromochloromethane	ND	10.0	11.8	118	10.0	11.5	115	2	60-135	30
Dibromomethane	ND	10.0	11.5	115	10.0	11.4	114	1	75-125	30
Dichlorodifluoromethane	ND	10.0	12.0	120	10.0	11.1	111	8	30-155	30
Ethylbenzene	ND	10.0	10.2	102	10.0	10.9	109	7	75-125	30
Hexachlorobutadiene	ND	10.0	9.32	93	10.0	9.88	99	6	50-140	30
Isopropyl Benzene	ND	10.0	10.5	105	10.0	10.9	109	3	75-125	30
m,p-Xylenes	ND	20.0	19.8	99	20.0	21.2	106	7	75-130	30
MIBK	ND	50.0	68.2	136*	50.0	56.3	113	19	60-135	30
Methylene Chloride	ND	10.0	10.5	105	10.0	11.1	111	5	55-140	30
MTBE	ND	10.0	12.5	125	10.0	11.4	114	9	65-125	30
Naphthalene	ND	10.0	10.4	104	10.0	9.60	96	8	55-140	30
n-Butylbenzene	ND	10.0	9.67	97	10.0	10.8	108	11	70-135	30
n-Propylbenzene	ND	10.0	9.36	94	10.0	10.6	106	12	70-130	30
o-Xylene	ND	10.0	10.0	100	10.0	10.7	107	7	80-120	30
p-Isopropyltoluene	ND	10.0	9.81	98	10.0	10.5	105	7	75-130	30
Sec-Butylbenzene	ND	10.0	9.48	95	10.0	10.5	105	11	70-125	30
Styrene	ND	10.0	11.2	112	10.0	11.0	110	2	65-135	30
Tert-Butylbenzene	ND	10.0	9.55	95	10.0	10.4	104	9	70-130	30
Tetrachloroethene	0.230J	10.0	10.5	102	10.0	11.1	109	6	45-150	30
Toluene	ND	10.0	9.98	100	10.0	10.7	107	7	75-120	30
Trans-1,2-Dichloroethene	ND	10.0	9.37	94	10.0	10.9	109	15	60-140	30
Trans-1,3-Dichloropropene	ND	10.0	11.8	118	10.0	11.4	114	3	55-140	30
Trichloroethene	ND	10.0	10.3	103	10.0	10.8	108	5	70-125	30
Trichlorofluoromethane	ND	10.0	13.0	130	10.0	12.6	126	3	60-145	30
Vinyl Chloride	ND	10.0	12.3	123	10.0	11.6	116	6	50-145	30
Freon113	ND	10.0	11.0	110	10.0	10.9	109	1	65-135	30
Vinyl Acetate	ND	10.0	13.1	131	10.0	12.3	123	7	65-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	10.8	108	10.0	10.3	103	70-120
4-Bromofluorobenzene	10.0	9.08	91	10.0	9.47	95	75-120
Toluene-d8	10.0	9.38	94	10.0	9.46	95	85-120
Dibromofluoromethane	10.0	10.6	106	10.0	10.1	101	85-115

QC DATA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR066.D
Acq On : 28 Jun 2012 12:25 pm
Sample : VOF3F04B 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jul 5 15:24 2012

Vial: 6
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.78	114	1654176	10.00 ug/l	-0.02
39) CHLOROBENZENE-D5	19.80	117	1304373	10.00 ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.76	152	366829	10.00 ug/l	-0.02
System Monitoring Compounds					
33) Dibromofluoromethane	14.43	111	509256	10.05 ug/l	-0.02
Spiked Amount 10.000			Recovery	= 100.50%	
37) 1,2-Dichloroethane-d4	15.10	65	302556	9.77 ug/l	-0.02
Spiked Amount 10.000			Recovery	= 97.70%	
54) Toluene-d8	17.97	98	1737283	9.29 ug/l	0.00
Spiked Amount 10.000			Recovery	= 92.90%	
74) 4-Bromofluorobenzene	21.09	95	485889	9.66 ug/l	0.00
Spiked Amount 10.000			Recovery	= 96.60%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RFR066.D VOF3F22.M Thu Jul 05 15:24:44 2012

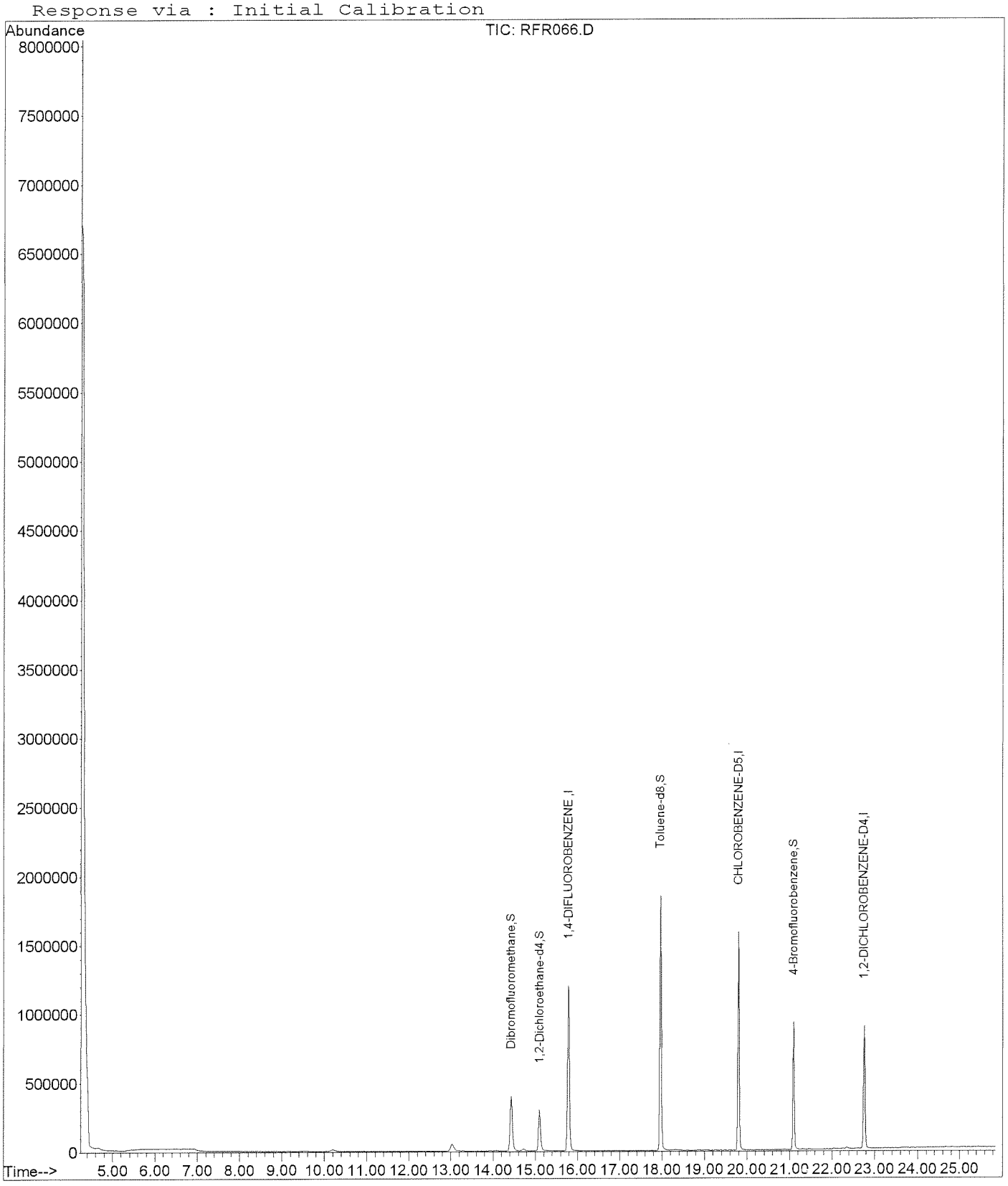
2021

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR066.D
Acq On : 28 Jun 2012 12:25 pm
Sample : VOF3F04B 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jul 5 15:24 2012

Vial: 6
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR063.D Vial: 3
Acq On : 28 Jun 2012 10:40 am Operator: DN
Sample : VOF3F04L Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 11:05 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.78	114	1534265	10.00	ug/l	-0.02
39) CHLOROBENZENE-D5	19.80	117	1219333	10.00	ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.76	152	339554	10.00	ug/l	-0.02
System Monitoring Compounds						
33) Dibromofluoromethane	14.43	111	466719	9.93	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	99.30%	
37) 1,2-Dichloroethane-d4	15.10	65	277684	9.66	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	96.60%	
54) Toluene-d8	17.97	98	1618609	9.25	ug/l	0.00
Spiked Amount 10.000			Recovery	=	92.50%	
74) 4-Bromofluorobenzene	21.09	95	457293	9.82	ug/l	0.00
Spiked Amount 10.000			Recovery	=	98.20%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.67	116	304374	7.30	ug/l	99
3) Dichlorodifluoromethane	4.77	85	504616	9.18	ug/l	100
4) Chloromethane	5.32	50	786188	8.97	ug/l	99
5) 2-Chloro-1,1,1-trifluoroet	5.98	118	555625	9.07	ug/l	98
6) Vinyl chloride	5.67	62	633206	9.51	ug/l	100
7) Bromomethane	6.65	94	377082	9.99	ug/l	100
8) Chloroethane	6.93	64	363704	9.41	ug/l	99
9) Dichlorofluoromethane	7.48	67	901414	8.78	ug/l	100
10) Trichlorofluoromethane	7.57	101	605785	10.16	ug/l	100
11) Acrolein	8.73	56	121737	44.81	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	8.86	151	296214	8.83	ug/l	100
13) 1,1-Dichloroethene	8.92	61	734671	8.56	ug/l	99
14) Acetone	9.10	43	198828	42.27	ug/l	97
15) Iodomethane	9.39	142	707620	8.94	ug/l	99
16) Methyl acetate	9.89	43	16166	1.00	ug/l	84
17) Carbon disulfide	9.53	76	1588636	9.02	ug/l	100
18) Methylene chloride	10.19	49	570670	8.94	ug/l	98
19) tert-Butyl alcohol	10.41	59	79877	45.64	ug/l	91
20) tert-Butyl methyl ether (M	10.72	73	574957	9.50	ug/l	98
21) trans-1,2-Dichloroethene	10.81	61	744866	8.69	ug/l	97
22) Acrylonitrile	10.84	53	287071	43.64	ug/l	94
23) Isopropyl ether (DIPE)	11.84	45	1501360	9.29	ug/l	99
24) 1,1-Dichloroethane	11.88	63	852560	8.87	ug/l	100
25) Vinyl acetate	11.93	43	546902	10.07	ug/l	98
26) tert-Butyl ethyl ether (ET	12.75	59	942646	9.96	ug/l	99
27) 2,2-Dichloropropane	13.30	77	422482	9.03	ug/l	99
28) 2-Butanone	13.36	43	374061	46.98	ug/l	99
29) cis-1,2-Dichloroethene	13.34	96	563723	8.87	ug/l	98
30) Bromochloromethane	13.94	49	332187	8.88	ug/l	97
31) Tetrahydrofuran	14.01	42	47061	8.48	ug/l	98
32) Chloroform	14.07	83	716577	8.95	ug/l	99
34) 1,1,1-Trichloroethane	14.43	97	591871	9.30	ug/l	100
36) tert-Amyl alcohol	15.08	59	4099	3.26	ug/l #	1
38) tert-Amyl methyl ether (TA	15.23	87	142198	10.08	ug/l	97
41) 1,1-Dichloropropene	14.74	110	268604	8.88	ug/l	99
42) Carbon tetrachloride	14.74	119	555463	9.45	ug/l	100
43) Benzene	15.16	78	1674690	8.58	ug/l	99
44) 1,2-Dichloroethane	15.23	62	306660	8.95	ug/l	97
45) Trichloroethene	16.23	130	540323	8.78	ug/l	99
47) 1,2-Dichloropropane	16.62	63	436187	8.93	ug/l	99

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

2023

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR063.D
Acq On : 28 Jun 2012 10:40 am
Sample : VOF3F04L
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 28 11:05 2012

Vial: 3
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

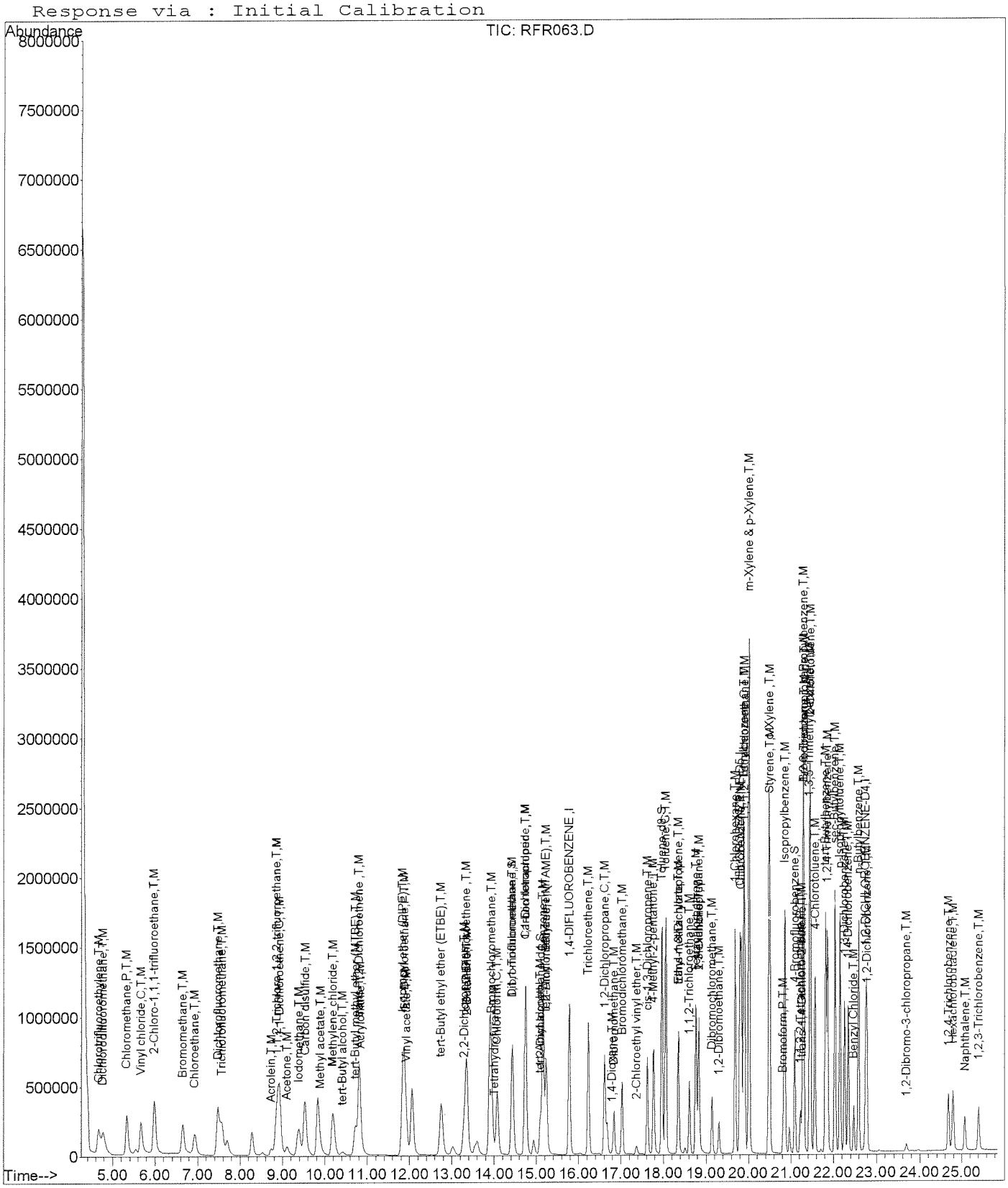
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
48)	1,4-Dioxane	16.79	88	27703	187.23 ug/l	94
49)	Dibromomethane	16.84	93	178825	9.32 ug/l	99
50)	Bromodichloromethane	17.03	83	492678	9.15 ug/l	100
51)	2-Chloroethyl vinyl ether	17.37	63	23041	6.36 ug/l	98
52)	cis-1,3-Dichloropropene	17.63	75	566211	9.10 ug/l	99
53)	4-Methyl-2-pentanone	17.76	43	869194	46.67 ug/l	99
55)	Toluene	18.06	91	1800014	8.76 ug/l	100
56)	Ethyl methacrylate	18.36	69	285426	9.27 ug/l	98
57)	trans-1,3-Dichloropropene	18.36	75	383694	9.22 ug/l	98
58)	1,1,2-Trichloroethane	18.61	97	239159	9.10 ug/l	99
59)	Tetrachloroethene	18.77	164	370763	8.70 ug/l	100
60)	2-Hexanone	18.83	43	545834	46.68 ug/l	98
61)	1,3-Dichloropropane	18.83	76	406800	9.12 ug/l	98
62)	Dibromochloromethane	19.14	129	316856	9.49 ug/l	100
63)	1,2-Dibromoethane	19.31	107	231726	9.14 ug/l	99
64)	1-Chlorohexane	19.68	91	783363	9.01 ug/l	99
65)	Chlorobenzene	19.83	112	1115679	8.93 ug/l	99
66)	Ethylbenzene	19.89	91	1972068	9.12 ug/l	99
67)	1,1,1,2-Tetrachloroethane	19.90	131	356385	9.12 ug/l	99
68)	m-Xylene & p-Xylene	20.01	91	2854229	17.66 ug/l	100
69)	o-Xylene	20.48	91	1404194	8.86 ug/l	100
70)	Styrene	20.50	104	1079499	9.15 ug/l	99
72)	Bromoform	20.81	173	132750	9.81 ug/l	99
73)	Isopropylbenzene	20.86	105	1742263	9.08 ug/l	100
75)	1,1,2,2-Tetrachloroethane	21.23	83	234719	9.32 ug/l	100
76)	trans-1,4-Dichloro-2-buten	21.26	53	57864	9.67 ug/l	100
77)	n-Propylbenzene	21.29	91	2237758	9.02 ug/l	99
78)	1,2,3-Trichloropropane	21.30	110	58992	9.62 ug/l	99
79)	Bromobenzene	21.30	156	354513	9.31 ug/l	97
80)	1,3,5-Trimethylbenzene	21.44	105	1335805	8.95 ug/l	100
81)	2-Chlorotoluene	21.45	91	1262630	9.04 ug/l	99
82)	4-Chlorotoluene	21.57	91	1111281	9.11 ug/l	100
83)	tert-Butylbenzene	21.81	134	326548	8.83 ug/l	98
84)	1,2,4-Trimethylbenzene	21.85	105	1253906	8.93 ug/l	100
85)	sec-Butylbenzene	22.03	105	1911738	8.81 ug/l	100
86)	p-Isopropyltoluene	22.15	119	1436854	9.10 ug/l	100
87)	1,3-Dichlorobenzene	22.25	146	681297	9.15 ug/l	99
88)	1,4-Dichlorobenzene	22.34	146	628119	9.19 ug/l	99
89)	Benzyl Chloride	22.48	91	331306	10.03 ug/l	99
90)	n-Butylbenzene	22.60	91	1321677	9.27 ug/l	99
91)	1,2-Dichlorobenzene	22.79	146	508077	9.14 ug/l	99
92)	1,2-Dibromo-3-chloropropan	23.68	157	25968	10.02 ug/l	91
93)	1,2,4-Trichlorobenzene	24.68	180	220556	8.72 ug/l	99
94)	Hexachlorobutadiene	24.78	225	147871	8.27 ug/l	98
95)	Naphthalene	25.08	128	357914	8.86 ug/l	99
96)	1,2,3-Trichlorobenzene	25.41	180	176197	8.58 ug/l	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR063.D Vial: 3
Acq On : 28 Jun 2012 10:40 am Operator: DN
Sample : VOF3F04L Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 11:05 2012 Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR064.D Vial: 4
Acq On : 28 Jun 2012 11:14 am Operator: DN
Sample : VOF3F04C Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 11:40 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.78	114	1563416	10.00	ug/l	-0.02
39) CHLOROBENZENE-D5	19.80	117	1255772	10.00	ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.76	152	383579	10.00	ug/l	-0.02
System Monitoring Compounds						
33) Dibromofluoromethane	14.43	111	483798	10.10	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	101.00%	
37) 1,2-Dichloroethane-d4	15.10	65	293378	10.02	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	100.20%	
54) Toluene-d8	17.97	98	1635017	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery	=	90.80%	
74) 4-Bromofluorobenzene	21.09	95	491595	9.34	ug/l	0.00
Spiked Amount 10.000			Recovery	=	93.40%	
Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.67	116	306314	7.21	ug/l	98
3) Dichlorodifluoromethane	4.77	85	563414	10.06	ug/l	100
4) Chloromethane	5.32	50	896906	10.04	ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	5.98	118	573212	9.18	ug/l	98
6) Vinyl chloride	5.67	62	715855	10.55	ug/l	100
7) Bromomethane	6.65	94	434775	11.30	ug/l	99
8) Chloroethane	6.93	64	421764	10.70	ug/l	99
9) Dichlorofluoromethane	7.48	67	974840	9.32	ug/l	100
10) Trichlorofluoromethane	7.57	101	674862	11.11	ug/l	100
11) Acrolein	8.73	56	134797	48.69	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	8.86	151	317512	9.29	ug/l	99
13) 1,1-Dichloroethene	8.92	61	774620	8.85	ug/l	99
14) Acetone	9.10	43	219792	45.86	ug/l	99
15) Iodomethane	9.39	142	765545	9.49	ug/l	98
16) Methyl acetate	9.88	43	19268	1.17	ug/l	85
17) Carbon disulfide	9.53	76	1667255	9.29	ug/l	100
18) Methylene chloride	10.19	49	617006	9.53	ug/l	98
19) tert-Butyl alcohol	10.41	59	91633	51.39	ug/l	99
20) tert-Butyl methyl ether (M	10.72	73	662064	10.73	ug/l	99
21) trans-1,2-Dichloroethene	10.80	61	776067	8.89	ug/l	98
22) Acrylonitrile	10.84	53	328335	48.98	ug/l	96
23) Isopropyl ether (DIPE)	11.84	45	1635718	9.93	ug/l	99
24) 1,1-Dichloroethane	11.88	63	900520	9.19	ug/l	100
25) Vinyl acetate	11.91	43	629578	11.38	ug/l	91
26) tert-Butyl ethyl ether (ET	12.75	59	1058794	10.98	ug/l	100
27) 2,2-Dichloropropane	13.30	77	434330	9.11	ug/l	100
28) 2-Butanone	13.36	43	429537	52.94	ug/l	98
29) cis-1,2-Dichloroethene	13.34	96	584010	9.02	ug/l	99
30) Bromochloromethane	13.94	49	360968	9.46	ug/l	96
31) Tetrahydrofuran	14.00	42	52097	9.27	ug/l	94
32) Chloroform	14.07	83	748225	9.17	ug/l	99
34) 1,1,1-Trichloroethane	14.43	97	611576	9.43	ug/l	100
36) tert-Amyl alcohol	15.10	59	4386	3.42	ug/l #	1
38) tert-Amyl methyl ether (TA	15.23	87	159999	11.13	ug/l	98
41) 1,1-Dichloropropene	14.74	110	276269	8.87	ug/l	100
42) Carbon tetrachloride	14.74	119	567611	9.37	ug/l	100
43) Benzene	15.16	78	1768796	8.80	ug/l	99
44) 1,2-Dichloroethane	15.23	62	335379	9.50	ug/l	99
45) Trichloroethene	16.23	130	565168	8.92	ug/l	99
47) 1,2-Dichloropropane	16.62	63	469459	9.34	ug/l	99

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

2026

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR064.D Vial: 4
Acq On : 28 Jun 2012 11:14 am Operator: DN
Sample : VOF3F04C Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 11:40 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

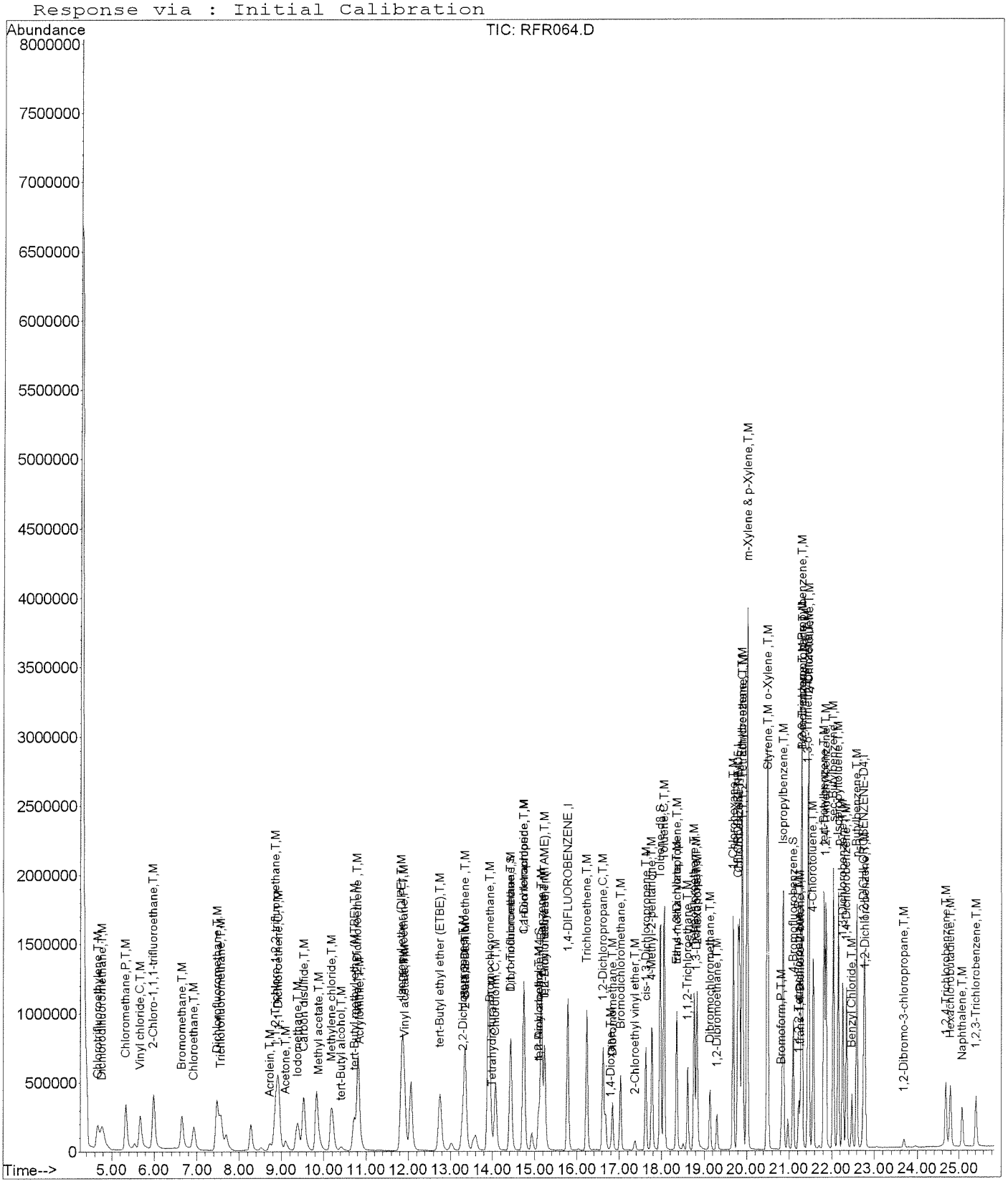
Compound	R.T.	QIon	Response	Conc Unit		Qvalue
48) 1,4-Dioxane	16.79	88	30645	201.11 ug/l		97
49) Dibromomethane	16.84	93	198110	10.02 ug/l		98
50) Bromodichloromethane	17.03	83	522965	9.43 ug/l		98
51) 2-Chloroethyl vinyl ether	17.37	63	28578	7.66 ug/l		99
52) cis-1,3-Dichloropropene	17.63	75	618464	9.66 ug/l		99
53) 4-Methyl-2-pentanone	17.76	43	1021801	53.27 ug/l		99
55) Toluene	18.06	91	1896488	8.96 ug/l		100
56) Ethyl methacrylate	18.36	69	334665	10.55 ug/l		97
57) trans-1,3-Dichloropropene	18.36	75	430602	10.05 ug/l		99
58) 1,1,2-Trichloroethane	18.61	97	273827	10.11 ug/l		98
59) Tetrachloroethene	18.76	164	385298	8.78 ug/l		99
60) 2-Hexanone	18.83	43	653816	54.29 ug/l		98
61) 1,3-Dichloropropane	18.82	76	460640	10.02 ug/l		99
62) Dibromochloromethane	19.15	129	349128	10.15 ug/l		99
63) 1,2-Dibromoethane	19.31	107	262551	10.06 ug/l		98
64) 1-Chlorohexane	19.68	91	815188	9.10 ug/l		99
65) Chlorobenzene	19.83	112	1200592	9.33 ug/l		98
66) Ethylbenzene	19.89	91	2026761	9.10 ug/l		100
67) 1,1,1,2-Tetrachloroethane	19.90	131	382475	9.50 ug/l		99
68) m-Xylene & p-Xylene	20.01	91	2997398	18.01 ug/l		99
69) o-Xylene	20.48	91	1511480	9.26 ug/l		100
70) Styrene	20.50	104	1188839	9.78 ug/l		99
72) Bromoform	20.81	173	153181	10.02 ug/l		99
73) Isopropylbenzene	20.86	105	1859251	8.58 ug/l		100
75) 1,1,2,2-Tetrachloroethane	21.23	83	279937	9.84 ug/l		100
76) trans-1,4-Dichloro-2-buten	21.26	53	67920	10.05 ug/l		99
77) n-Propylbenzene	21.29	91	2413837	8.61 ug/l		99
78) 1,2,3-Trichloropropane	21.30	110	70148	10.13 ug/l	#	89
79) Bromobenzene	21.30	156	391921	9.11 ug/l		99
80) 1,3,5-Trimethylbenzene	21.44	105	1443269	8.56 ug/l		100
81) 2-Chlorotoluene	21.45	91	1364817	8.65 ug/l		99
82) 4-Chlorotoluene	21.56	91	1207998	8.77 ug/l		99
83) tert-Butylbenzene	21.81	134	352809	8.45 ug/l		99
84) 1,2,4-Trimethylbenzene	21.85	105	1374865	8.67 ug/l		100
85) sec-Butylbenzene	22.03	105	2054711	8.38 ug/l		99
86) p-Isopropyltoluene	22.15	119	1540782	8.64 ug/l		100
87) 1,3-Dichlorobenzene	22.25	146	755946	8.99 ug/l		99
88) 1,4-Dichlorobenzene	22.34	146	699520	9.06 ug/l		100
89) Benzyl Chloride	22.48	91	384764	10.31 ug/l		99
90) n-Butylbenzene	22.60	91	1432557	8.90 ug/l		100
91) 1,2-Dichlorobenzene	22.79	146	576951	9.19 ug/l		100
92) 1,2-Dibromo-3-chloropropan	23.68	157	30985	10.59 ug/l		93
93) 1,2,4-Trichlorobenzene	24.68	180	247429	8.66 ug/l		99
94) Hexachlorobutadiene	24.78	225	157195	7.78 ug/l		99
95) Naphthalene	25.07	128	422535	9.25 ug/l		99
96) 1,2,3-Trichlorobenzene	25.41	180	208037	8.97 ug/l		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR064.D Vial: 4
Acq On : 28 Jun 2012 11:14 am Operator: DN
Sample : VOF3F04C Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 11:40 2012 Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR071.D
Acq On : 28 Jun 2012 3:18 pm
Sample : 12F196-04 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jul 5 15:27 2012

Vial: 11
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1637069	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1205759	10.00 ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	343295	10.00 ug/l	0.00
System Monitoring Compounds					
33) Dibromofluoromethane	14.44	111	495227	9.87 ug/l	0.00
Spiked Amount 10.000			Recovery	= 98.70%	
37) 1,2-Dichloroethane-d4	15.11	65	294400	9.60 ug/l	0.00
Spiked Amount 10.000			Recovery	= 96.00%	
54) Toluene-d8	17.96	98	1687816	9.76 ug/l	0.00
Spiked Amount 10.000			Recovery	= 97.60%	
74) 4-Bromofluorobenzene	21.09	95	438457	9.31 ug/l	0.00
Spiked Amount 10.000			Recovery	= 93.10%	
Target Compounds					Qvalue
59) Tetrachloroethene	18.78	164	9696	0.23 ug/l	98

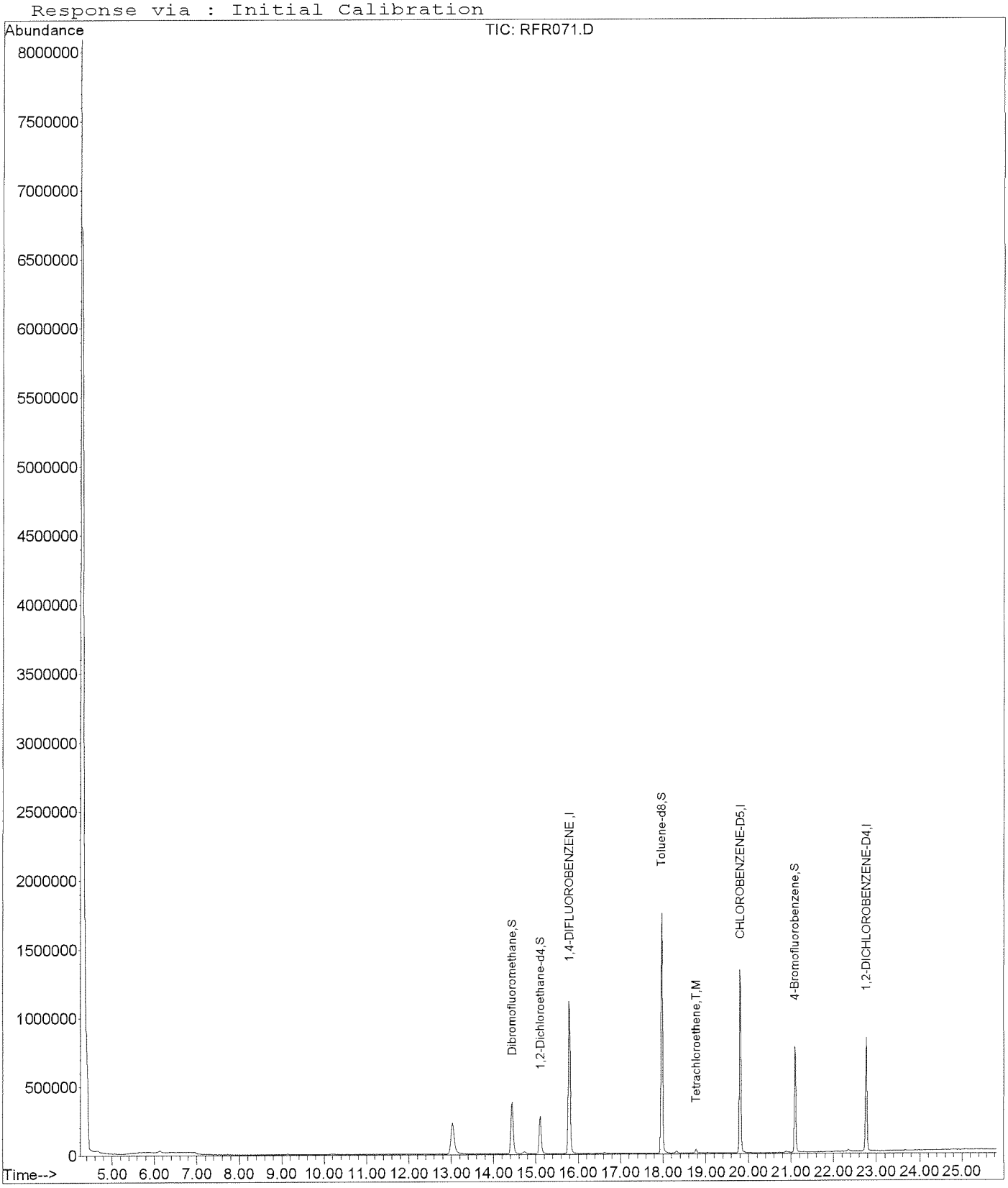
(#) = qualifier out of range (m) = manual integration

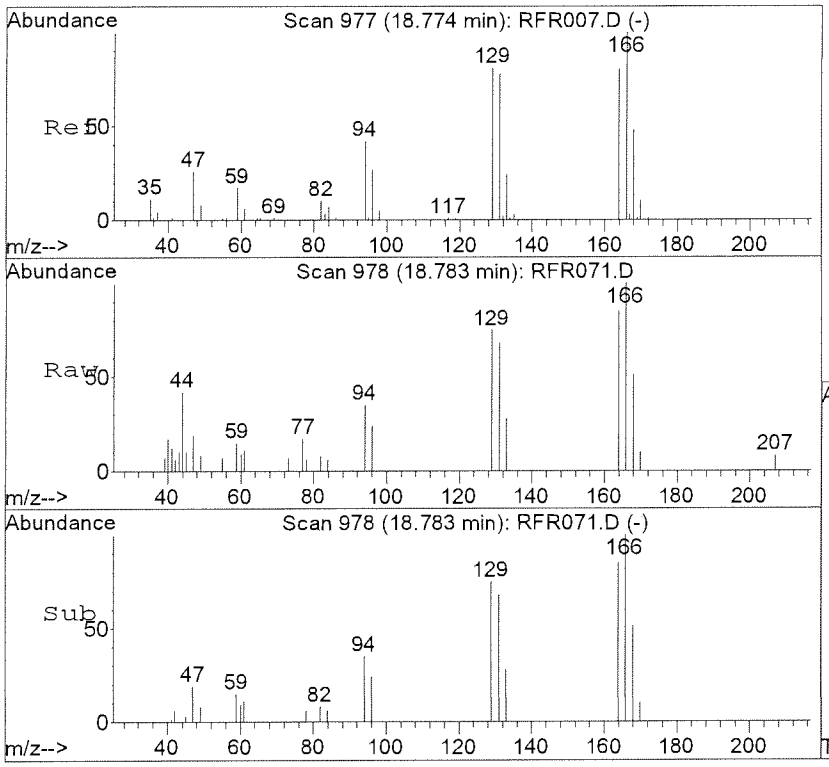
Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR071.D
Acq On : 28 Jun 2012 3:18 pm
Sample : 12F196-04 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jul 5 15:27 2012

Vial: 11
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration

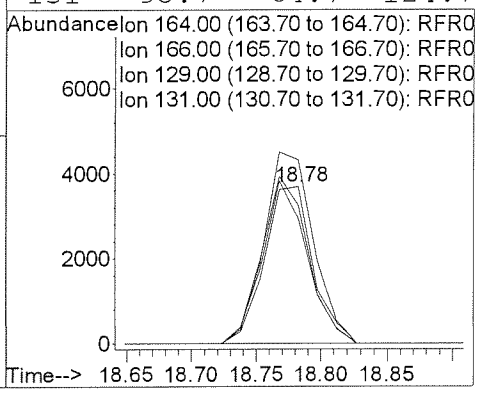




#59
Tetrachloroethene
Concen: 0.23 ug/l
RT: 18.78 min Scan# 978
Delta R.T. 0.01 min
Lab File: RFR071.D
Acq: 28 Jun 2012 3:18 pm

Tgt Ion:164 Resp: 9696

Ion	Ratio	Lower	Upper
164	100		
166	124.4	95.6	155.6
129	101.7	68.8	128.8
131	95.7	64.7	124.7



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR072.D Vial: 12
Acq On : 28 Jun 2012 3:51 pm Operator: DN
Sample : 12F196-04M 25ml Inst : F3
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 16:17 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1283986	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	19.79	117	1012575	10.00 ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.77	152	309451	10.00 ug/l	0.00
System Monitoring Compounds					
33) Dibromofluoromethane	14.44	111	418844	10.65 ug/l	0.00
Spiked Amount 10.000			Recovery	= 106.50%	
37) 1,2-Dichloroethane-d4	15.11	65	260294	10.82 ug/l	0.00
Spiked Amount 10.000			Recovery	= 108.20%	
54) Toluene-d8	17.96	98	1362108	9.38 ug/l	0.00
Spiked Amount 10.000			Recovery	= 93.80%	
74) 4-Bromofluorobenzene	21.09	95	385287	9.08 ug/l	0.00
Spiked Amount 10.000			Recovery	= 90.80%	

Target Compounds					Qvalue
2) Chlorotrifluoroethylene	4.68	116	305903	8.76 ug/l	98
3) Dichlorodifluoromethane	4.78	85	550955	11.97 ug/l	99
4) Chloromethane	5.33	50	864866	11.79 ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	576811	11.25 ug/l	97
6) Vinyl chloride	5.68	62	688292	12.35 ug/l	100
7) Bromomethane	6.66	94	431245	13.65 ug/l	100
8) Chloroethane	6.94	64	399625	12.35 ug/l	99
9) Dichlorofluoromethane	7.49	67	789861	9.19 ug/l	99
10) Trichlorofluoromethane	7.58	101	649121	13.01 ug/l	100
11) Acrolein	8.74	56	130906	57.57 ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	8.87	151	309383	11.02 ug/l	99
13) 1,1-Dichloroethene	8.95	61	687389	9.56 ug/l	98
14) Acetone	9.11	43	221779	56.34 ug/l	99
15) Iodomethane	9.40	142	748271	11.29 ug/l	99
16) Methyl acetate	9.90	43	12350	0.91 ug/l	66
17) Carbon disulfide	9.54	76	1529878	10.38 ug/l	100
18) Methylene chloride	10.20	49	556717	10.53 ug/l	99
19) tert-Butyl alcohol	10.42	59	87733	59.91 ug/l	97
20) tert-Butyl methyl ether (M	10.73	73	634851	12.53 ug/l	100
21) trans-1,2-Dichloroethene	10.82	61	671789	9.37 ug/l	98
22) Acrylonitrile	10.85	53	345189	62.70 ug/l	99
23) Isopropyl ether (DIPE)	11.85	45	1563569	11.56 ug/l	99
24) 1,1-Dichloroethane	11.90	63	848373	10.54 ug/l	100
25) Vinyl acetate	11.92	43	597380	13.15 ug/l	99
26) tert-Butyl ethyl ether (ET	12.76	59	1018424	12.85 ug/l	99
27) 2,2-Dichloropropane	13.31	77	367912	9.39 ug/l	99
28) 2-Butanone	13.37	43	438685	65.84 ug/l	99
29) cis-1,2-Dichloroethene	13.35	96	506953	9.53 ug/l	97
30) Bromochloromethane	13.95	49	334581	10.68 ug/l	96
31) Tetrahydrofuran	14.01	42	51708	11.34 ug/l	98
32) Chloroform	14.08	83	749140	11.18 ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	564086	10.59 ug/l	99
36) tert-Amyl alcohol	15.09	59	3962	3.77 ug/l #	1
38) tert-Amyl methyl ether (TA	15.24	87	154486	13.08 ug/l	94
40) 2,2,4-Trimethylpentane	15.24	57	20266	0.11 ug/l #	1
41) 1,1-Dichloropropene	14.75	110	249812	9.95 ug/l	99
42) Carbon tetrachloride	14.75	119	537226	11.00 ug/l	100
43) Benzene	15.17	78	1641951	10.13 ug/l	99
44) 1,2-Dichloroethane	15.24	62	333718	11.73 ug/l	100
45) Trichloroethene	16.24	130	527118	10.32 ug/l	99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR072.D Vial: 12
Acq On : 28 Jun 2012 3:51 pm Operator: DN
Sample : 12F196-04M 25ml Inst : F3
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 16:17 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47) 1,2-Dichloropropane	16.63	63	447103	11.03 ug/l		96
48) 1,4-Dioxane	16.80	88	26999	219.74 ug/l		93
49) Dibromomethane	16.83	93	182902	11.47 ug/l		97
50) Bromodichloromethane	17.03	83	501119	11.20 ug/l		99
52) cis-1,3-Dichloropropene	17.62	75	576188	11.16 ug/l		99
53) 4-Methyl-2-pentanone	17.77	43	1055078	68.22 ug/l		99
55) Toluene	18.05	91	1701970	9.98 ug/l		99
56) Ethyl methacrylate	18.35	69	288071	11.26 ug/l		96
57) trans-1,3-Dichloropropene	18.35	75	406293	11.76 ug/l		97
58) 1,1,2-Trichloroethane	18.62	97	255208	11.69 ug/l		99
59) Tetrachloroethene	18.77	164	370278	10.46 ug/l		98
60) 2-Hexanone	18.84	43	656109	67.56 ug/l		99
61) 1,3-Dichloropropane	18.83	76	411423	11.10 ug/l		98
62) Dibromochloromethane	19.14	129	326336	11.77 ug/l		100
63) 1,2-Dibromoethane	19.30	107	246275	11.70 ug/l		99
64) 1-Chlorohexane	19.69	91	776832	10.75 ug/l		97
65) Chlorobenzene	19.84	112	1106931	10.67 ug/l		99
66) Ethylbenzene	19.90	91	1830350	10.20 ug/l		98
67) 1,1,1,2-Tetrachloroethane	19.91	131	365408	11.25 ug/l		99
68) m-Xylene & p-Xylene	20.02	91	2657409	19.80 ug/l		98
69) o-Xylene	20.48	91	1318619	10.02 ug/l		98
70) Styrene	20.51	104	1099231	11.21 ug/l		99
72) Bromoform	20.82	173	145928	11.84 ug/l		99
73) Isopropylbenzene	20.85	105	1841409	10.53 ug/l		99
75) 1,1,2,2-Tetrachloroethane	21.22	83	263160	11.47 ug/l		99
76) trans-1,4-Dichloro-2-buten	21.27	53	59573	10.92 ug/l		96
77) n-Propylbenzene	21.30	91	2117013	9.36 ug/l		99
78) 1,2,3-Trichloropropane	21.30	110	65490	11.72 ug/l	#	82
79) Bromobenzene	21.31	156	358187	10.32 ug/l		98
80) 1,3,5-Trimethylbenzene	21.45	105	1317980	9.69 ug/l		99
81) 2-Chlorotoluene	21.46	91	1215640	9.55 ug/l		97
82) 4-Chlorotoluene	21.57	91	1110268	9.99 ug/l		98
83) tert-Butylbenzene	21.82	134	321826	9.55 ug/l		94
84) 1,2,4-Trimethylbenzene	21.86	105	1275348	9.97 ug/l		99
85) sec-Butylbenzene	22.04	105	1874695	9.48 ug/l		100
86) p-Isopropyltoluene	22.16	119	1411543	9.81 ug/l		99
87) 1,3-Dichlorobenzene	22.26	146	687465	10.13 ug/l		98
88) 1,4-Dichlorobenzene	22.35	146	661486	10.62 ug/l		100
89) Benzyl Chloride	22.49	91	334294	11.10 ug/l		98
90) n-Butylbenzene	22.59	91	1255782	9.67 ug/l		98
91) 1,2-Dichlorobenzene	22.79	146	549988	10.86 ug/l		99
92) 1,2-Dibromo-3-chloropropan	23.69	157	28177	11.93 ug/l		87
93) 1,2,4-Trichlorobenzene	24.69	180	234988	10.19 ug/l		99
94) Hexachlorobutadiene	24.79	225	151791	9.32 ug/l		98
95) Naphthalene	25.08	128	381515	10.36 ug/l		100
96) 1,2,3-Trichlorobenzene	25.42	180	193619	10.34 ug/l		99

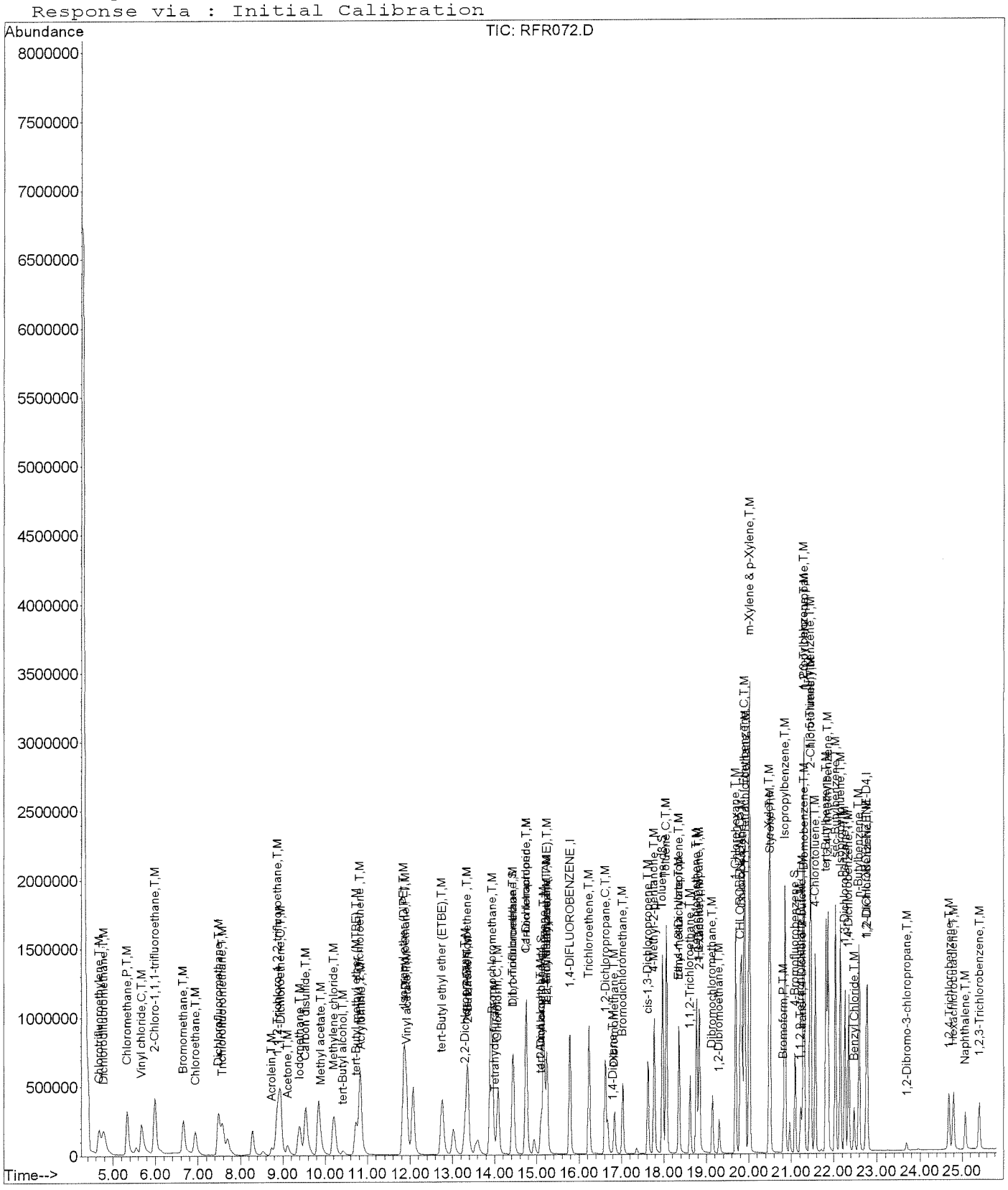
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR072.D
Acq On : 28 Jun 2012 3:51 pm
Sample : 12F196-04M 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jun 28 16:17 2012

Vial: 12
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR078.D Vial: 18
Acq On : 28 Jun 2012 7:10 pm Operator: DN
Sample : 12F196-04S 25ml Inst : F3
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 19:36 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1319170	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1026020	10.00 ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	293626	10.00 ug/l	0.00
System Monitoring Compounds					
33) Dibromofluoromethane	14.44	111	408509	10.11 ug/l	0.00
Spiked Amount 10.000			Recovery	= 101.10%	
37) 1,2-Dichloroethane-d4	15.11	65	254424	10.30 ug/l	0.00
Spiked Amount 10.000			Recovery	= 103.00%	
54) Toluene-d8	17.96	98	1392836	9.46 ug/l	0.00
Spiked Amount 10.000			Recovery	= 94.60%	
74) 4-Bromofluorobenzene	21.09	95	381565	9.47 ug/l	0.00
Spiked Amount 10.000			Recovery	= 94.70%	

Target Compounds					Qvalue
3) Dichlorodifluoromethane	4.78	85	524731	11.10 ug/l	100
4) Chloromethane	5.33	50	845012	11.21 ug/l	99
6) Vinyl chloride	5.68	62	665385	11.62 ug/l	99
7) Bromomethane	6.66	94	406695	12.53 ug/l	99
8) Chloroethane	6.94	64	385692	11.60 ug/l	99
9) Dichlorofluoromethane	7.49	67	941321	10.66 ug/l	100
10) Trichlorofluoromethane	7.58	101	646558	12.61 ug/l	100
11) Acrolein	8.74	56	48928	20.95 ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	8.87	151	313992	10.88 ug/l	98
13) 1,1-Dichloroethene	8.93	61	789732	10.70 ug/l	99
14) Acetone	9.11	43	195809	48.42 ug/l	99
15) Iodomethane	9.39	142	753453	11.07 ug/l	98
16) Methyl acetate	9.89	43	14074	1.01 ug/l	73
17) Carbon disulfide	9.54	76	1531293	10.11 ug/l	100
18) Methylene chloride	10.20	49	601432	11.10 ug/l	99
19) tert-Butyl alcohol	10.42	59	74838	49.74 ug/l	99
20) tert-Butyl methyl ether (M	10.73	73	593395	11.40 ug/l	99
21) trans-1,2-Dichloroethene	10.82	61	802702	10.89 ug/l	98
22) Acrylonitrile	10.85	53	285258	50.43 ug/l	97
23) Isopropyl ether (DIPE)	11.85	45	1548453	11.14 ug/l	99
24) 1,1-Dichloroethane	11.89	63	906196	10.96 ug/l	100
25) Vinyl acetate	11.92	43	573825	12.29 ug/l	98
26) tert-Butyl ethyl ether (ET	12.76	59	971703	11.94 ug/l	100
27) 2,2-Dichloropropane	13.31	77	450220	11.19 ug/l	99
28) 2-Butanone	13.37	43	360745	52.69 ug/l	99
29) cis-1,2-Dichloroethene	13.37	96	587138	10.75 ug/l	99
30) Bromochloromethane	13.95	49	356950	11.09 ug/l	99
31) Tetrahydrofuran	14.01	42	50993	10.86 ug/l	95
32) Chloroform	14.08	83	749532	10.89 ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	623195	11.38 ug/l	99
36) tert-Amyl alcohol	15.11	59	3238	3.00 ug/l #	6
38) tert-Amyl methyl ether (TA	15.24	87	143123	11.80 ug/l	94
41) 1,1-Dichloropropene	14.75	110	283498	11.14 ug/l	100
42) Carbon tetrachloride	14.75	119	586566	11.86 ug/l	99
43) Benzene	15.17	78	1781454	10.85 ug/l	99
44) 1,2-Dichloroethane	15.24	62	331105	11.48 ug/l	100
45) Trichloroethene	16.24	130	560676	10.83 ug/l	99
47) 1,2-Dichloropropane	16.63	63	462584	11.26 ug/l	98
48) 1,4-Dioxane	16.80	88	24787	199.09 ug/l	95
49) Dibromomethane	16.85	93	183352	11.35 ug/l	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR078.D
Acq On : 28 Jun 2012 7:10 pm
Sample : 12F196-04S 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jun 28 19:36 2012

Vial: 18
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
50)	Bromodichloromethane	17.03	83	513352	11.33 ug/l	99
52)	cis-1,3-Dichloropropene	17.64	75	584734	11.17 ug/l	99
53)	4-Methyl-2-pentanone	17.77	43	881765	56.27 ug/l	99
55)	Toluene	18.05	91	1858275	10.75 ug/l	99
56)	Ethyl methacrylate	18.35	69	291550	11.25 ug/l	100
57)	trans-1,3-Dichloropropene	18.37	75	400306	11.43 ug/l	98
58)	1,1,2-Trichloroethane	18.62	97	247302	11.18 ug/l	99
59)	Tetrachloroethene	18.77	164	398439	11.11 ug/l	99
60)	2-Hexanone	18.84	43	537667	54.64 ug/l	99
61)	1,3-Dichloropropane	18.83	76	421179	11.22 ug/l	98
62)	Dibromochloromethane	19.14	129	323425	11.51 ug/l	100
63)	1,2-Dibromoethane	19.30	107	244754	11.48 ug/l	97
64)	1-Chlorohexane	19.69	91	805889	11.01 ug/l	98
65)	Chlorobenzene	19.84	112	1136532	10.82 ug/l	99
66)	Ethylbenzene	19.90	91	1985297	10.91 ug/l	99
67)	1,1,1,2-Tetrachloroethane	19.91	131	366012	11.13 ug/l	99
68)	m-Xylene & p-Xylene	20.02	91	2879496	21.17 ug/l	99
69)	o-Xylene	20.48	91	1432358	10.74 ug/l	99
70)	Styrene	20.51	104	1092620	11.00 ug/l	100
72)	Bromoform	20.82	173	136881	11.70 ug/l	99
73)	Isopropylbenzene	20.85	105	1806075	10.89 ug/l	100
75)	1,1,2,2-Tetrachloroethane	21.22	83	242336	11.13 ug/l	99
76)	trans-1,4-Dichloro-2-buten	21.27	53	58136	11.23 ug/l	97
77)	n-Propylbenzene	21.30	91	2267427	10.57 ug/l	99
78)	1,2,3-Trichloropropane	21.30	110	61351	11.57 ug/l	99
79)	Bromobenzene	21.31	156	356989	10.84 ug/l	99
80)	1,3,5-Trimethylbenzene	21.45	105	1386409	10.74 ug/l	100
81)	2-Chlorotoluene	21.46	91	1283789	10.63 ug/l	98
82)	4-Chlorotoluene	21.56	91	1116346	10.59 ug/l	98
83)	tert-Butylbenzene	21.82	134	333484	10.43 ug/l	97
84)	1,2,4-Trimethylbenzene	21.86	105	1281822	10.56 ug/l	100
85)	sec-Butylbenzene	22.04	105	1979038	10.54 ug/l	100
86)	p-Isopropyltoluene	22.16	119	1438020	10.53 ug/l	100
87)	1,3-Dichlorobenzene	22.26	146	686532	10.66 ug/l	98
88)	1,4-Dichlorobenzene	22.35	146	649810	11.00 ug/l	99
89)	Benzyl Chloride	22.49	91	330374	11.56 ug/l	99
90)	n-Butylbenzene	22.59	91	1325596	10.75 ug/l	99
91)	1,2-Dichlorobenzene	22.78	146	520021	10.82 ug/l	99
92)	1,2-Dibromo-3-chloropropan	23.69	157	25637	11.44 ug/l	95
93)	1,2,4-Trichlorobenzene	24.69	180	210613	9.63 ug/l	99
94)	Hexachlorobutadiene	24.79	225	152755	9.88 ug/l	97
95)	Naphthalene	25.08	128	335513	9.60 ug/l	99
96)	1,2,3-Trichlorobenzene	25.42	180	166909	9.40 ug/l	99

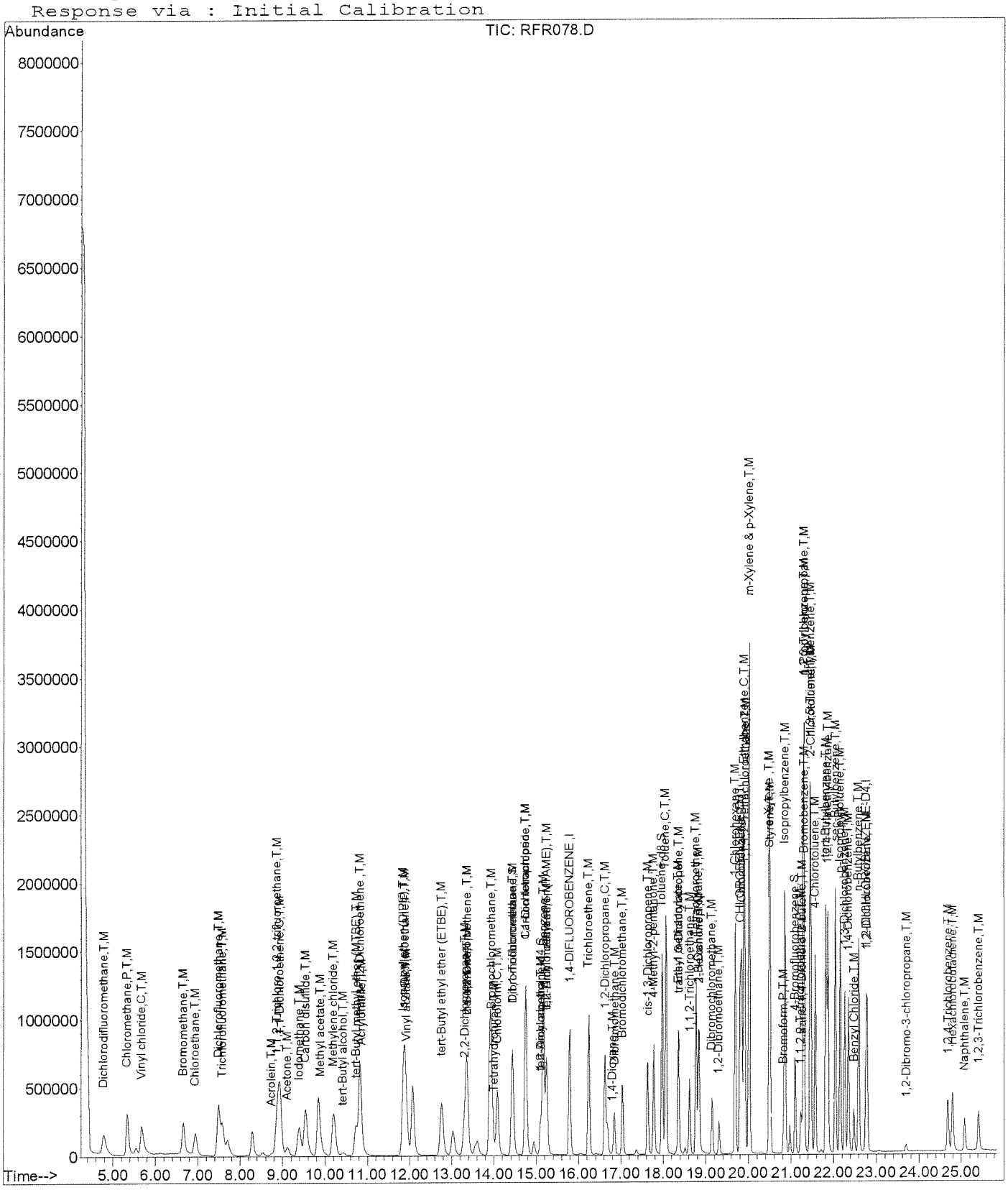
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR078.D
Acq On : 28 Jun 2012 7:10 pm
Sample : 12F196-04S 25ml
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jun 28 19:36 2012

Vial: 18
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



INITIAL CALIBRATION(S)

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RFR001
Instrument ID: F3
GC Column: ZB-624 ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 06/22/12
BFB Injection Time : 17:36
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.49
75	30.0 - 60.0% of mass 95	37.59
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.62
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	78.37
175	5.0 - 9.0% of mass 174	6.60(8.4)1
176	95.0 - 101.0% of mass 174	76.14(97.1)1
177	5.0 - 9.0% of mass 176	5.08(6.7)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
1	VSTD0.3	VOF3F221	RFR002	06/22/12	18:25
2	VSTD0.5	VOF3F222	RFR003	06/22/12	18:58
3	VSTD01	VOF3F223	RFR004	06/22/12	19:32
4	VSTD02	VOF3F224	RFR005	06/22/12	20:07
5	VSTD05	VOF3F225	RFR006	06/22/12	20:43
6	VSTD010	VOF3F226	RFR007	06/22/12	21:19
7	VSTD020	VOF3F227	RFR008	06/22/12	21:54
8	VSTD030	VOF3F228	RFR009	06/22/12	22:29
9	VSTD050	VOF3F229	RFR010	06/22/12	23:04
10	VSTD100	VOF3F2210	RFR011	06/22/12	23:40

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :F3
Beginning DateTime :06/22/12 18:25
Spike Units :PPB
IC File :RFR007

Column Spec :ZB-624 ID :0.25MM
Ending DateTime :06/22/12 23:40
HPChem Method :VOF3F22

M	IDX	Parameters	.3 18:25 RFR002	.5 18:58 RFR003	1 19:32 RFR004	2 20:07 RFR005	5 20:43 RFR006	10 21:19 RFR007	20 21:54 RFR008	30 22:29 RFR009	50 23:04 RFR010	100 23:40 RFR011	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	15.7983
	2	Chlorotrifluoroethylene	------	0.221	0.273	0.275	0.319	0.288	0.271	0.243	0.238	0.319	0.272	12.57	4.6833
	3	Dichlorodifluoromethane	0.442	0.371	0.336	0.361	0.405	0.380	0.343	0.294	0.290	0.362	0.358	12.94	4.7981
	4	Chloromethane	0.585	0.597	0.578	0.586	0.643	0.626	0.598	0.492	0.457	0.553	0.571	10.03	5.3426
	5	2-Chloro-1,1,1-trifluoroethane	0.310	0.370	0.423	0.415	0.470	0.439	0.407	0.362	0.345	0.454	0.399	12.76	6.0001
	6	Vinyl chloride	0.424	0.442	0.425	0.452	0.507	0.478	0.442	0.372	0.361	0.438	0.434	10.00	5.6907
	7	Bromomethane	0.266	0.240	0.234	0.247	0.285	0.270	0.260	0.213	0.199	------	0.246	11.19	6.6640
	8	Chloroethane	0.258	0.276	0.260	0.259	0.293	0.271	0.251	0.213	0.206	0.234	0.252	10.84	6.9478
	9	Dichlorofluoromethane	0.680	0.714	0.675	0.639	0.721	0.704	0.715	0.610	0.579	0.656	0.669	7.20	7.4953
	10	Trichlorofluoromethane	0.357	0.374	0.398	0.396	0.456	0.423	0.398	0.339	0.341	0.404	0.389	9.43	7.5890
5	11	Acrolein	------	------	0.022	0.017	0.018	0.018	0.018	0.014	0.015	0.018	0.018	13.36	8.7491
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.239	0.242	0.225	0.199	0.232	0.218	0.218	0.196	0.192	0.225	0.219	8.09	8.8908
	13	1,1-Dichloroethene	0.594	0.594	0.586	0.531	0.604	0.575	0.581	0.500	0.477	0.556	0.560	7.77	8.9563
5	14	Acetone	------	------	0.037	0.032	0.031	0.032	0.032	0.025	0.026	0.031	0.031	12.34	9.1247
	15	Iodomethane	0.536	0.527	0.524	0.471	0.529	0.521	0.541	0.485	0.480	0.546	0.516	5.22	9.4055
	16	Methyl acetate	------	0.114	0.111	0.105	0.106	0.108	0.110	0.090	0.095	0.111	0.105	7.58	9.8986
	17	Carbon disulfide	1.050	1.041	1.146	1.175	1.288	1.237	1.204	1.055	1.031	1.253	1.148	8.50	9.5573
	18	Methylene chloride	------	0.816	0.644	0.494	0.469	0.441	0.446	0.376	0.364	0.400	0.494	29.65	10.2126
5	19	tert-Butyl alcohol	------	0.011	0.012	0.011	0.012	0.013	0.013	0.010	0.010	0.011	0.011	9.36	10.4391
	20	tert-Butyl methyl ether (MTBE)	0.442	0.390	0.385	0.344	0.369	0.403	0.434	0.366	0.388	0.425	0.394	8.00	10.7475
	21	trans-1,2-Dichloroethene	0.616	0.588	0.602	0.540	0.576	0.565	0.577	0.508	0.493	0.520	0.559	7.41	10.8352
5	22	Acrylonitrile	0.036	0.039	0.044	0.041	0.044	0.049	0.047	0.038	0.041	0.049	0.043	10.39	10.8725
	23	Isopropyl ether (DIPE)	1.084	1.127	1.058	0.986	1.064	1.106	1.168	0.975	0.965	1.006	1.054	6.58	11.8737
	24	1,1-Dichloroethane	0.689	0.656	0.665	0.602	0.644	0.637	0.655	0.572	0.559	0.588	0.627	6.95	11.9124
	25	Vinyl acetate	------	0.272	0.288	0.320	0.378	0.412	0.421	0.344	0.356	0.394	0.354	14.90	11.9549
	26	tert-Butyl ethyl ether (ETBE)	0.589	0.580	0.599	0.544	0.605	0.648	0.699	0.605	0.619	0.683	0.617	7.68	12.7797
	27	2,2-Dichloropropane	------	0.379	0.323	0.295	0.308	0.296	0.285	0.248	------	------	0.305	13.13	13.3253
5	28	2-Butanone	0.041	0.046	0.051	0.051	0.055	0.061	0.060	0.048	0.050	0.056	0.052	11.99	13.3956
	29	cis-1,2-Dichloroethene	0.481	0.449	0.440	0.389	0.410	0.410	0.423	0.376	0.371	0.391	0.414	8.42	13.3763
	30	Bromochloromethane	0.281	0.250	0.254	0.232	0.244	0.256	0.260	0.218	0.216	0.228	0.244	8.28	13.9669
	31	Tetrahydrofuran	------	------	0.061	0.039	0.038	0.037	0.038	0.031	0.031	0.036	0.039	24.89	14.0193
	32	Chloroform	0.592	0.550	0.548	0.497	0.528	0.527	0.546	0.473	0.464	0.492	0.522	7.62	14.1008
	33	Dibromofluoromethane	0.322	0.283	0.316	0.290	0.330	0.319	0.321	0.282	0.282	0.318	0.306	6.31	14.4489
	34	1,1,1-Trichloroethane	0.456	0.440	0.460	0.406	0.437	0.429	0.433	0.370	0.354	0.364	0.415	9.40	14.4504
	35	Cyclohexane	0.624	0.659	0.756	0.725	0.785	0.692	0.689	0.608	0.591	0.689	0.682	9.24	14.5204
5	36	tert-Amyl alcohol	------	0.008	0.007	0.008	0.008	0.009	0.009	0.007	0.008	0.009	0.008	8.92	15.1139
	37	1,2-Dichloroethane-d4	0.191	0.173	0.201	0.176	0.202	0.199	0.197	0.170	0.170	0.194	0.187	7.23	15.1155
	38	tert-Amyl methyl ether (TAME)	0.100	0.086	0.098	0.080	0.086	0.091	0.100	0.087	0.090	0.101	0.092	8.14	15.2598
	39	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	19.8152
	40	2,2,4-Trimethylpentane	1.993	2.106	2.237	1.911	2.153	1.889	1.750	1.593	1.533	1.764	1.893	12.42	15.1690
	41	1,1-Dichloropropene	0.298	0.274	0.267	0.238	0.245	0.238	0.246	0.221	0.223	0.230	0.248	9.83	14.7643
	42	Carbon tetrachloride	0.503	0.512	0.528	0.469	0.501	0.490	0.495	0.435	0.438	0.451	0.482	6.66	14.7703
	43	Benzene	2.072	1.875	1.736	1.532	1.574	1.528	1.557	1.395	1.381	1.358	1.601	14.39	15.1779
	44	1,2-Dichloroethane	0.312	0.309	0.301	0.269	0.275	0.287	0.290	0.244	0.256	0.266	0.281	8.11	15.2568
	45	Trichloroethene	0.601	0.530	0.525	0.467	0.489	0.489	0.513	0.463	0.474	0.496	0.505	8.08	16.2476
	46	Methylcyclohexane	0.674	0.748	0.826	0.815	0.845	0.759	0.768	0.694	0.698	0.783	0.761	7.68	16.4975
	47	1,2-Dichloropropane	0.463	0.436	0.424	0.380	0.398	0.399	0.408	0.357	0.362	0.376	0.400	8.38	16.6315
20	48	1,4-Dioxane	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	12.96	16.8144
	49	Dibromomethane	0.164	0.159	0.158	0.146	0.157	0.162	0.170	0.144	0.152	0.163	0.157	5.33	16.8546
	50	Bromodichloromethane	0.479	0.471	0.461	0.416	0.437	0.449	0.464	0.402	0.411	0.426	0.442	6.13	17.0480
	51	2-Chloroethyl vinyl ether	------	------	0.024	0.028	0.029	0.032	0.032	0.028	0.030	0.035	0.030	11.48	17.3928
	52	cis-1,3-Dichloropropene	0.572	0.518	0.517	0.469	0.499	0.518	0.544	0.471	0.485	0.507	0.510	6.24	17.6431
5	53	4-Methyl-2-pentanone	0.122	0.138	0.157	0.148	0.163	0.172	0.174	0.138	0.149	0.166	0.153	11.08	17.7904
	54	Toluene-d8	1.935	1.484	1.510	1.371	1.471	1.392	1.371	1.238	1.230	1.343	1.434	13.91	17.9838
	55	Toluene	2.048	1.866	1.797	1.623	1.679	1.662	1.718	1.517	1.469	1.470	1.685	10.90	18.0731
	56	Ethyl methacrylate	0.259	0.270	0.245	0.228	0.243	0.263	0.278	0.233	0.246	0.260	0.253	6.41	18.3706
	57	trans-1,3-Dichloropropene	0.360	0.341	0.351	0.314	0.336	0.355	0.369	0.316	0.325	0.346	0.341	5.40	18.3721
	58	1,1,2-Trichloroethane	0.250	0.226	0.217	0.194	0.207	0.218	0.229	0.193	0.203	0.219	0.216	8.08	18.6280

SG
6/28/12

	59	Tetrachloroethene	0.426	0.383	0.369	0.325	0.335	0.331	0.346	0.317	0.316	0.346	0.350	9.90	18.7827
5	60	2-Hexanone	------	0.072	0.087	0.091	0.104	0.112	0.111	0.088	0.094	0.104	0.096	13.65	18.8514
	61	1,3-Dichloropropane	0.401	0.386	0.377	0.340	0.362	0.382	0.386	0.331	0.339	0.354	0.366	6.53	18.8467
	62	Dibromochloromethane	0.281	0.269	0.274	0.247	0.264	0.283	0.302	0.259	0.266	0.292	0.274	5.90	19.1606
	63	1,2-Dibromoethane	0.217	0.213	0.204	0.186	0.204	0.216	0.225	0.191	0.201	0.221	0.208	6.11	19.3227
	64	1-Chlorohexane	0.838	0.783	0.738	0.686	0.720	0.708	0.728	0.646	0.625	0.662	0.713	9.01	19.6977
	65	Chlorobenzene	1.230	1.082	1.058	0.954	1.009	1.021	1.068	0.941	0.909	0.970	1.024	9.03	19.8449
	66	Ethylbenzene	2.117	1.920	1.899	1.706	1.845	1.815	1.845	1.615	1.512	1.457	1.773	11.37	19.9045
	67	1,1,1,2-Tetrachloroethane	0.351	0.334	0.335	0.304	0.320	0.318	0.337	0.297	0.292	0.317	0.321	5.92	19.9267
2	68	m-Xylene & p-Xylene	1.575	1.429	1.400	1.288	1.347	1.328	1.342	1.151	1.070	------	1.326	11.20	20.0238
	69	o-Xylene	1.530	1.381	1.383	1.260	1.349	1.317	1.362	1.180	1.100	1.137	1.300	10.12	20.4966
	70	Styrene	1.003	1.003	0.993	0.911	1.002	1.015	1.059	0.916	0.868	0.910	0.968	6.37	20.5144
	71	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	22.7758
	72	Bromoform	0.379	0.379	0.385	0.360	0.370	0.403	0.450	0.390	0.406	0.462	0.398	8.41	20.8298
	73	Isopropylbenzene	6.521	6.382	6.110	5.560	5.535	5.572	5.950	5.147	4.823	4.898	5.650	10.43	20.8670
	74	4-Bromofluorobenzene	------	1.522	1.503	1.332	1.404	1.364	1.395	1.245	1.202	1.380	1.372	7.64	21.1044
	75	1,1,2,2-Tetrachloroethane	0.828	0.793	0.778	0.693	0.698	0.756	0.788	0.653	0.682	0.744	0.741	7.71	21.2374
	76	trans-1,4-Dichloro-2-butene	------	0.183	0.167	0.167	0.174	0.187	0.202	0.161	0.165	0.180	0.176	7.51	21.2731
	77	n-Propylbenzene	8.277	8.072	7.767	7.175	7.235	7.210	7.658	6.475	5.911	------	7.309	10.30	21.3033
	78	1,2,3-Trichloropropane	0.174	0.188	0.195	0.172	0.176	0.189	0.201	0.165	0.166	0.178	0.181	6.81	21.3148
	79	Bromobenzene	1.266	1.163	1.113	1.028	1.057	1.103	1.220	1.074	1.047	1.146	1.122	6.91	21.3178
	80	1,3,5-Trimethylbenzene	5.187	5.012	4.732	4.336	4.384	4.332	4.557	3.930	3.686	3.804	4.396	11.31	21.4532
	81	2-Chlorotoluene	4.746	4.635	4.457	4.135	4.066	4.108	4.323	3.673	3.443	3.534	4.112	10.93	21.4666
	82	4-Chlorotoluene	4.191	3.763	3.717	3.501	3.540	3.593	3.845	3.295	3.149	3.316	3.591	8.50	21.5796
	83	tert-Butylbenzene	1.256	1.192	1.149	1.051	1.076	1.051	1.110	0.999	0.960	1.047	1.089	8.23	21.8266
	84	1,2,4-Trimethylbenzene	4.884	4.577	4.450	4.048	4.108	4.087	4.293	3.714	3.501	3.677	4.134	10.45	21.8727
	85	sec-Butylbenzene	7.361	7.293	6.790	6.241	6.418	6.193	6.423	5.568	5.250	------	6.393	11.00	22.0471
	86	p-Isopropyltoluene	5.339	5.154	4.909	4.502	4.737	4.586	4.812	4.223	4.048	4.199	4.651	9.08	22.1658
	87	1,3-Dichlorobenzene	2.586	2.275	2.293	2.047	2.119	2.155	2.312	2.041	1.975	2.131	2.193	8.15	22.2744
	88	1,4-Dichlorobenzene	2.242	2.131	2.062	1.853	1.982	2.018	2.150	1.884	1.820	1.978	2.012	6.82	22.3622
	89	Benzyl Chloride	1.222	1.049	0.990	0.866	0.921	0.982	1.033	0.854	0.870	0.942	0.973	11.45	22.4931
	90	n-Butylbenzene	4.659	4.300	4.553	4.073	4.357	4.254	4.478	3.871	3.648	3.787	4.198	8.14	22.6091
	91	1,2-Dichlorobenzene	1.902	1.719	1.696	1.536	1.613	1.637	1.705	1.493	1.480	1.590	1.637	7.72	22.7995
	92	1,2-Dibromo-3-chloropropane	------	0.075	0.082	0.071	0.080	0.083	0.081	0.067	0.070	0.077	0.076	7.31	23.6964
	93	1,2,4-Trichlorobenzene	0.965	0.802	0.746	0.641	0.689	0.710	0.750	0.647	0.621	0.882	0.745	14.91	24.6949
	94	Hexachlorobutadiene	0.612	0.607	0.575	0.469	0.498	0.465	0.460	------	------	------	0.527	13.09	24.8030
	95	Naphthalene	1.457	1.220	1.255	1.077	1.085	1.146	1.207	1.012	1.017	1.428	1.190	13.16	25.0951
	96	1,2,3-Trichlorobenzene	0.755	0.632	0.624	0.537	0.536	0.577	0.633	0.545	0.524	0.686	0.605	12.49	25.4254

Spike Amount = Nominal Amount * M
Ave_%RSD : 9.7 Max_%RSD : 29.6

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
18	Methylene chloride	0.02428	0.38883	0.9980
31	Tetrahydrofuran	0.00219	0.03358	0.9965

SG
6/28/12

2391

Compound List Report F3

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
Total Cpnds : 96

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	15.80	1.000	A	1	A	B
2	T	Chlorotrifluoroethylene	116	4.68	0.297	A	2	A	B
3	T	Dichlorodifluoromethane	85	4.79	0.303	A	1	A	B
4	T	Chloromethane	50	5.34	0.338	A	1	A	B
5	T	2-Chloro-1,1,1-trifluoroethane	118	5.99	0.379	A	2	A	B
6	T	Vinyl chloride	62	5.68	0.360	A	1	A	B
7	T	Bromomethane	94	6.66	0.422	A	1	A	B
8	T	Chloroethane	64	6.95	0.440	A	2	A	B
9	T	Dichlorofluoromethane	67	7.50	0.475	A	1	A	B
10	T	Trichlorofluoromethane	101	7.59	0.480	A	1	A	B
11	T	Acrolein	56	8.75	0.554	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	8.88	0.562	A	1	A	B
13	T	1,1-Dichloroethene	61	8.96	0.567	A	2	A	B
14	T	Acetone	43	9.12	0.577	A	2	A	B
15	T	Iodomethane	142	9.40	0.595	A	1	A	B
16	T	Methyl acetate	43	9.89	0.626	A	1	A	B
17	T	Carbon disulfide	76	9.55	0.604	A	1	A	B
18	T	Methylene chloride	49	10.20	0.646	L	2	A	B
19	T	tert-Butyl alcohol	59	10.43	0.660	A	1	A	B
20	T	tert-Butyl methyl ether (MTBE)	73	10.74	0.680	A	1	A	B
21	T	trans-1,2-Dichloroethene	61	10.83	0.685	A	2	A	B
22	T	Acrylonitrile	53	10.86	0.687	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	11.87	0.751	A	1	A	B
24	T	1,1-Dichloroethane	63	11.90	0.753	A	2	A	B
25	T	Vinyl acetate	43	11.95	0.756	A	1	A	B
26	T	tert-Butyl ethyl ether (ETBE)	59	12.78	0.809	A	1	A	B
27	T	2,2-Dichloropropane	77	13.31	0.843	A	2	A	B
28	T	2-Butanone	43	13.37	0.847	A	1	A	B
29	T	cis-1,2-Dichloroethene	96	13.37	0.847	A	2	A	B
30	T	Bromochloromethane	49	13.95	0.883	A	2	A	B
31	T	Tetrahydrofuran	42	14.01	0.887	L	2	A	B
32	T	Chloroform	83	14.09	0.892	A	2	A	B
33	S	Dibromofluoromethane	111	14.44	0.914	A	2	A	B
34	T	1,1,1-Trichloroethane	97	14.44	0.914	A	2	A	B
35	T	Cyclohexane	56	14.52	0.919	A	2	A	B
36	T	tert-Amyl alcohol	59	15.10	0.956	A	2	A	B
37	S	1,2-Dichloroethane-d4	65	15.11	0.957	A	1	A	B
38	T	tert-Amyl methyl ether (TAME)	87	15.25	0.965	A	2	A	B
39	I	CHLOROBENZENE-D5	117	19.82	1.000	A	2	A	B
40	T	2,2,4-Trimethylpentane	57	15.16	0.765	A	3	A	B
41	T	1,1-Dichloropropene	110	14.76	0.745	A	1	A	B
42	T	Carbon tetrachloride	119	14.76	0.745	A	1	A	B
43	T	Benzene	78	15.17	0.766	A	2	A	B
44	T	1,2-Dichloroethane	62	15.25	0.770	A	1	A	B
45	T	Trichloroethene	130	16.25	0.820	A	3	A	B
46	T	Methylcyclohexane	83	16.50	0.833	A	2	A	B
47	T	1,2-Dichloropropane	63	16.63	0.839	A	2	A	B
48	T	1,4-Dioxane	88	16.81	0.848	A	1	A	B
49	T	Dibromomethane	93	16.86	0.851	A	2	A	B
50	T	Bromodichloromethane	83	17.05	0.860	A	1	A	B
51	T	2-Chloroethyl vinyl ether	63	17.39	0.878	A	2	A	B
52	T	cis-1,3-Dichloropropene	75	17.64	0.890	A	3	A	B
53	T	4-Methyl-2-pentanone	43	17.78	0.897	A	3	A	B
54	S	Toluene-d8	98	17.97	0.907	A	1	A	B
55	T	Toluene	91	18.06	0.911	A	1	A	B
56	T	Ethyl methacrylate	69	18.36	0.926	A	2	A	B
57	T	trans-1,3-Dichloropropene	75	18.37	0.927	A	2	A	B
58	T	1,1,2-Trichloroethane	97	18.63	0.940	A	3	A	B
59	T	Tetrachloroethene	164	18.77	0.947	A	3	A	B
60	T	2-Hexanone	43	18.85	0.951	A	2	A	B
61	T	1,3-Dichloropropane	76	18.83	0.950	A	1	A	B
62	T	Dibromochloromethane	129	19.16	0.967	A	1	A	B
63	T	1,2-Dibromoethane	107	19.31	0.974	A	1	A	B
64	T	1-Chlorohexane	91	19.70	0.994	A	3	A	B
65	P,M	Chlorobenzene	112	19.85	1.002	A	3	A	B

6/28/12

66		T	Ethylbenzene	91	19.90	1.005	A	1	A	B
67		T	1,1,1,2-Tetrachloroethane	131	19.92	1.005	A	3	A	B
68		T	m-Xylene & p-Xylene	91	20.02	1.010	A	1	A	B
69		T	o-Xylene	91	20.49	1.034	A	1	A	B
70		T	Styrene	104	20.51	1.035	A	2	A	B
71	I		1,2-DICHLOROBENZENE-D4	152	22.78	1.000	A	1	A	B
72		T	Bromoform	173	20.83	0.914	A	2	A	B
73		T	Isopropylbenzene	105	20.86	0.916	A	3	A	B
74		S	4-Bromofluorobenzene	95	21.09	0.926	A	2	A	B
75		T	1,1,2,2-Tetrachloroethane	83	21.23	0.932	A	1	A	B
76		T	trans-1,4-Dichloro-2-butene	53	21.27	0.934	A	1	A	B
77		T	n-Propylbenzene	91	21.30	0.935	A	2	A	B
78		T	1,2,3-Trichloropropane	110	21.30	0.935	A	2	A	B
79		T	Bromobenzene	156	21.32	0.936	A	2	A	B
80		T	1,3,5-Trimethylbenzene	105	21.45	0.942	A	2	A	B
81		T	2-Chlorotoluene	91	21.47	0.943	A	1	A	B
82		T	4-Chlorotoluene	91	21.57	0.947	A	1	A	B
83		T	tert-Butylbenzene	134	21.82	0.958	A	2	A	B
84		T	1,2,4-Trimethylbenzene	105	21.87	0.960	A	1	A	B
85		T	sec-Butylbenzene	105	22.05	0.968	A	1	A	B
86		T	p-Isopropyltoluene	119	22.17	0.973	A	2	A	B
87		T	1,3-Dichlorobenzene	146	22.27	0.978	A	2	A	B
88		T	1,4-Dichlorobenzene	146	22.36	0.982	A	2	A	B
89		T	Benzyl Chloride	91	22.49	0.988	A	3	A	B
90		T	n-Butylbenzene	91	22.60	0.992	A	2	A	B
91		T	1,2-Dichlorobenzene	146	22.79	1.001	A	2	A	B
92		T	1,2-Dibromo-3-chloropropane	157	23.70	1.040	A	2	A	B
93		T	1,2,4-Trichlorobenzene	180	24.70	1.084	A	2	A	B
94		T	Hexachlorobutadiene	225	24.80	1.089	A	2	A	B
95		T	Naphthalene	128	25.08	1.101	A	1	A	B
96		T	1,2,3-Trichlorobenzene	180	25.42	1.116	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

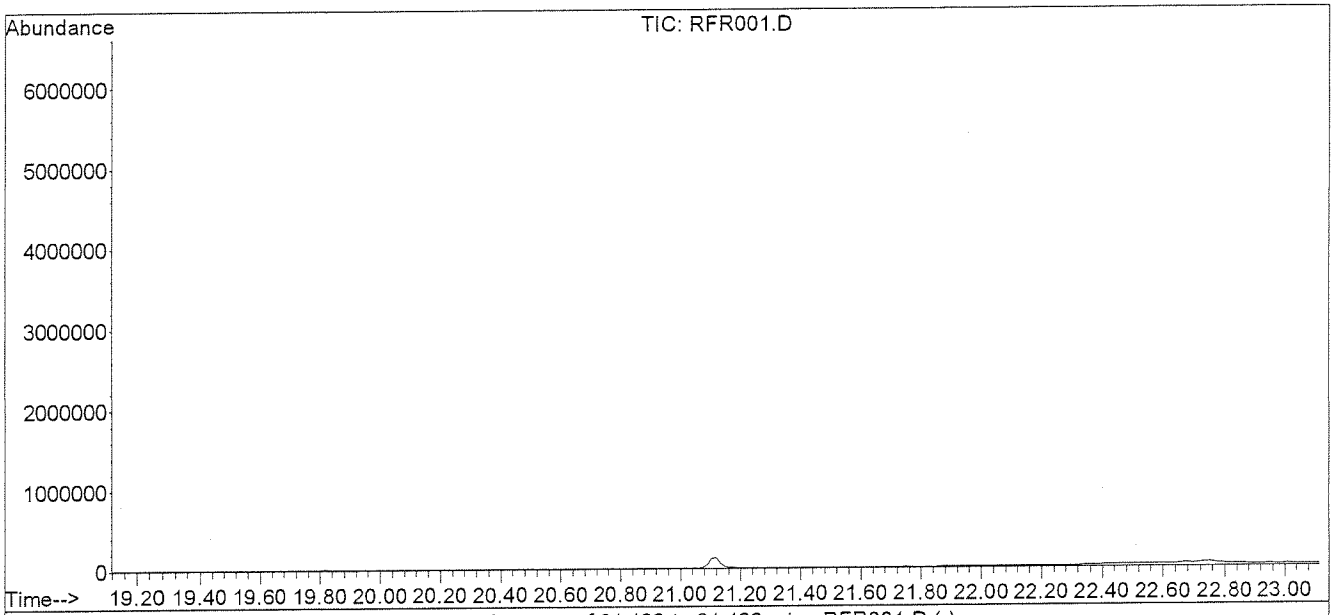
VOF3F22.M Wed Jun 27 11:46:21 2012

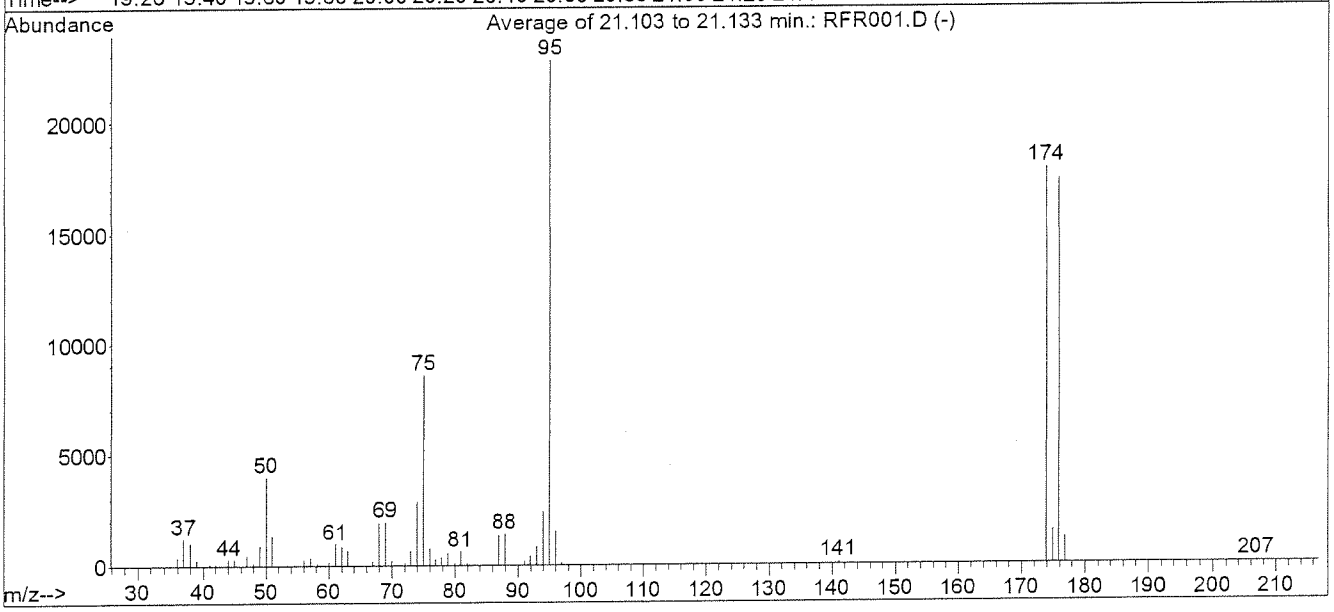
SL
6/28/12

BFB

Data File : C:\HPCHEM\1\DATA\12F22\RFR001.D
Acq On : 22 Jun 2012 5:36 pm
Sample : BFBF3F01
Misc : T/CHK
MS Integration Params: 524INT.P
Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML

Vial: 1
Operator: DN
Inst : F3
Multiplr: 1.00





AutoFind: Scans 1134, 1135, 1136; Background Corrected with Scan 1129

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	3987	PASS
75	95	30	60	37.6	8570	PASS
95	95	100	100	100.0	22797	PASS
96	95	5	9	6.6	1510	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.4	17867	PASS
175	174	5	9	8.4	1505	PASS
176	174	95	101	97.1	17357	PASS
177	176	5	9	6.7	1158	PASS

SG 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR002.D
Acq On : 22 Jun 2012 6:25 pm
Sample : VOF3F221
Misc : 0.3ppb 8260/1.5ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:47 2012

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.81	114	1525601	10.00	ug/l	0.02
39) CHLOROBENZENE-D5	19.83	117	1129062	10.00	ug/l	0.02
71) 1,2-DICHLOROBENZENE-D4	22.79	152	318455	10.00	ug/l	0.02
System Monitoring Compounds						
33) Dibromofluoromethane	14.46	111	14724	0.31	ug/l	0.02
Spiked Amount 10.000			Recovery	=	3.10%	
37) 1,2-Dichloroethane-d4	15.13	65	8737	0.31	ug/l	0.02
Spiked Amount 10.000			Recovery	=	3.10%	
54) Toluene-d8	18.00	98	65531	0.40	ug/l	0.03
Spiked Amount 10.000			Recovery	=	4.00%	
74) 4-Bromofluorobenzene	21.13	95	21556	0.49	ug/l	0.03
Spiked Amount 10.000			Recovery	=	4.90%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.70	116	8061	0.19	ug/l	95
3) Dichlorodifluoromethane	4.82	85	20228	0.37	ug/l	94
4) Chloromethane	5.36	50	26764	0.31	ug/l	94
5) 2-Chloro-1,1,1-trifluoroet	6.01	118	14207	0.23	ug/l	76
6) Vinyl chloride	5.70	62	19407	0.29	ug/l	90
7) Bromomethane	6.68	94	12180	0.32	ug/l	94
8) Chloroethane	6.96	64	11815	0.31	ug/l	80
9) Dichlorofluoromethane	7.51	67	31112	0.30	ug/l	93
10) Trichlorofluoromethane	7.59	101	16334	0.28	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	8.91	151	10919	0.33	ug/l	97
13) 1,1-Dichloroethene	8.97	61	27188	0.32	ug/l	94
14) Acetone	9.15	43	12130	2.59	ug/l	81
15) Iodomethane	9.42	142	24535	0.31	ug/l	99
16) Methyl acetate	9.92	43	6131	0.38	ug/l	85
17) Carbon disulfide	9.58	76	48077	0.27	ug/l	88
18) Methylene chloride	10.25	49	49598	0.21	ug/l	95
20) tert-Butyl methyl ether (M	10.77	73	20219	0.34	ug/l	88
21) trans-1,2-Dichloroethene	10.86	61	28176	0.33	ug/l	94
22) Acrylonitrile	10.90	53	8174	1.25	ug/l	84
23) Isopropyl ether (DIPE)	11.89	45	49592	0.31	ug/l	98
24) 1,1-Dichloroethane	11.93	63	31533	0.33	ug/l	96
26) tert-Butyl ethyl ether (ET	12.79	59	26945	0.29	ug/l	97
27) 2,2-Dichloropropane	13.36	77	18238	0.39	ug/l	93
28) 2-Butanone	13.45	43	9358	1.18	ug/l	91
29) cis-1,2-Dichloroethene	13.39	96	22013	0.35	ug/l	91
30) Bromochloromethane	13.98	49	12840	0.35	ug/l	95
31) Tetrahydrofuran	14.04	42	5732	0.47	ug/l	85
32) Chloroform	14.12	83	27104	0.34	ug/l	99
34) 1,1,1-Trichloroethane	14.46	97	20893	0.33	ug/l	99
35) Cyclohexane	14.53	56	28572	0.27	ug/l	98
38) tert-Amyl methyl ether (TA	15.28	87	4565	0.33	ug/l #	88
40) 2,2,4-Trimethylpentane	15.17	57	67521	0.32	ug/l	97
41) 1,1-Dichloropropene	14.77	110	10081	0.36	ug/l	98
42) Carbon tetrachloride	14.79	119	17021	0.31	ug/l	99
43) Benzene	15.19	78	70178	0.39	ug/l	96
44) 1,2-Dichloroethane	15.28	62	10573	0.33	ug/l	91
45) Trichloroethene	16.26	130	20351	0.36	ug/l	98
46) Methylcyclohexane	16.51	83	22839	0.27	ug/l	95
47) 1,2-Dichloropropane	16.65	63	15685	0.35	ug/l	92
49) Dibromomethane	16.87	93	5546	0.31	ug/l	96

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

SG 6/28/12

2045

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR002.D
Acq On : 22 Jun 2012 6:25 pm
Sample : VOF3F221
Misc : 0.3ppb 8260/1.5ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:47 2012

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	Bromodichloromethane	17.06	83	16225	0.33	ug/l		100
52)	cis-1,3-Dichloropropene	17.66	75	19367	0.34	ug/l		83
53)	4-Methyl-2-pentanone	17.81	43	20609	1.20	ug/l		94
55)	Toluene	18.09	91	69374	0.36	ug/l		99
56)	Ethyl methacrylate	18.39	69	8777	0.31	ug/l		95
57)	trans-1,3-Dichloropropene	18.39	75	12191	0.32	ug/l	#	44
58)	1,1,2-Trichloroethane	18.64	97	8480	0.35	ug/l		96
59)	Tetrachloroethene	18.79	164	14440	0.37	ug/l		97
60)	2-Hexanone	18.89	43	11260	1.04	ug/l		73
61)	1,3-Dichloropropane	18.86	76	13587	0.33	ug/l		89
62)	Dibromochloromethane	19.18	129	9508	0.31	ug/l		96
63)	1,2-Dibromoethane	19.34	107	7355	0.31	ug/l		97
64)	1-Chlorohexane	19.71	91	28391	0.35	ug/l		97
65)	Chlorobenzene	19.86	112	41663	0.36	ug/l		85
66)	Ethylbenzene	19.92	91	71697	0.36	ug/l		100
67)	1,1,1,2-Tetrachloroethane	19.93	131	11900	0.33	ug/l	#	67
68)	m-Xylene & p-Xylene	20.04	91	106727	0.71	ug/l		100
69)	o-Xylene	20.52	91	51816	0.35	ug/l		99
70)	Styrene	20.53	104	33982	0.31	ug/l		94
72)	Bromoform	20.84	173	3621	0.29	ug/l		99
73)	Isopropylbenzene	20.87	105	62301	0.35	ug/l		99
75)	1,1,2,2-Tetrachloroethane	21.24	83	7913	0.34	ug/l		93
77)	n-Propylbenzene	21.32	91	79077	0.34	ug/l		99
78)	1,2,3-Trichloropropane	21.32	110	1662	0.29	ug/l	#	28
79)	Bromobenzene	21.33	156	12096	0.34	ug/l		95
80)	1,3,5-Trimethylbenzene	21.47	105	49556	0.35	ug/l		97
81)	2-Chlorotoluene	21.48	91	45344	0.35	ug/l		99
82)	4-Chlorotoluene	21.59	91	40043	0.35	ug/l		98
83)	tert-Butylbenzene	21.84	134	12001	0.35	ug/l		97
84)	1,2,4-Trimethylbenzene	21.88	105	46660	0.35	ug/l		96
85)	sec-Butylbenzene	22.06	105	70323	0.35	ug/l		99
86)	p-Isopropyltoluene	22.18	119	51005	0.34	ug/l		97
87)	1,3-Dichlorobenzene	22.29	146	24702	0.35	ug/l		98
88)	1,4-Dichlorobenzene	22.37	146	21418	0.33	ug/l		94
89)	Benzyl Chloride	22.51	91	11675	0.38	ug/l		93
90)	n-Butylbenzene	22.63	91	44510	0.33	ug/l		95
91)	1,2-Dichlorobenzene	22.81	146	18174	0.35	ug/l		77
93)	1,2,4-Trichlorobenzene	24.71	180	9224	0.39	ug/l		93
94)	Hexachlorobutadiene	24.81	225	5850	0.35	ug/l		96
95)	Naphthalene	25.11	128	13919	0.37	ug/l		94
96)	1,2,3-Trichlorobenzene	25.44	180	7215	0.37	ug/l		97

SA 6/28/12

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

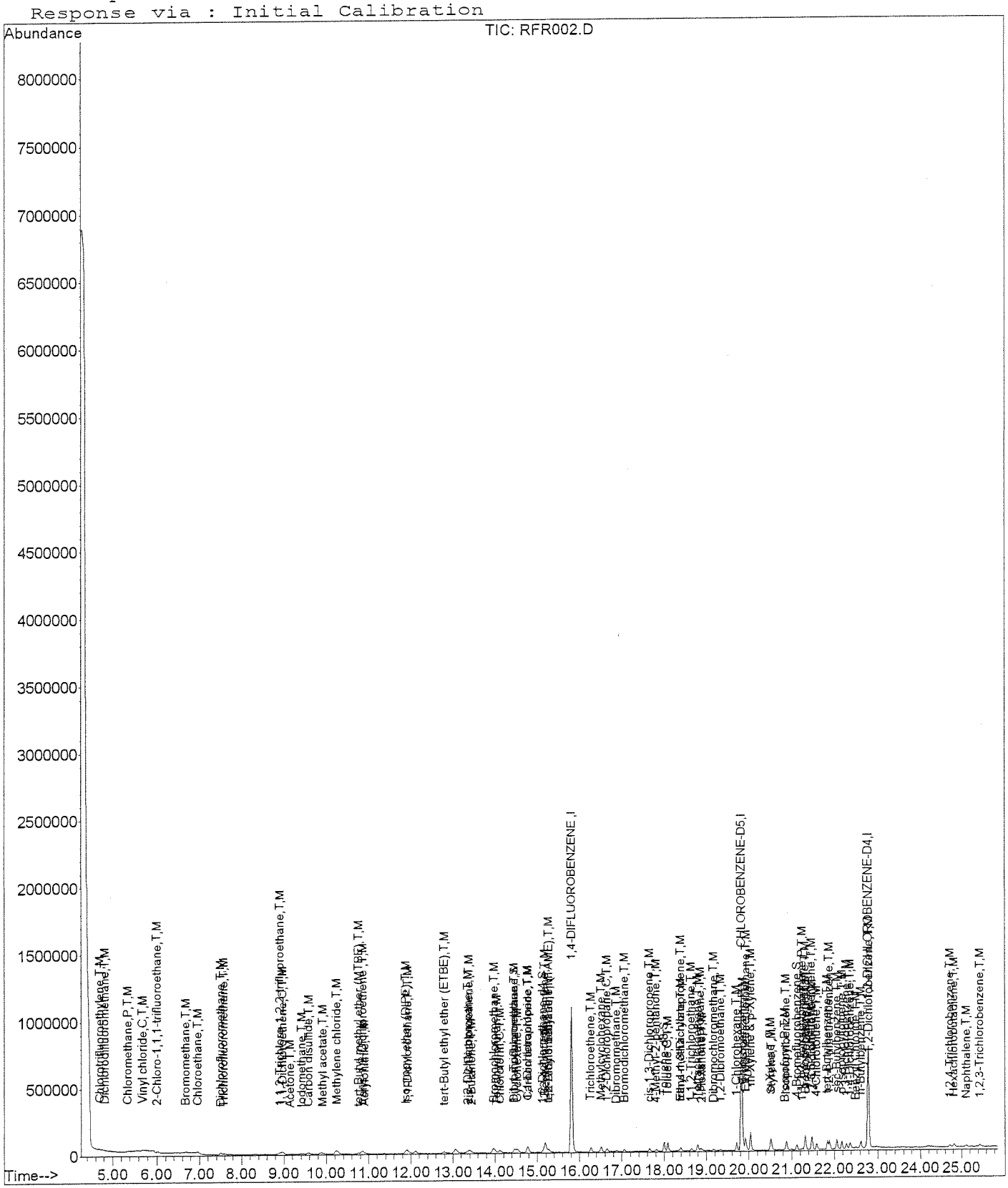
Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR002.D
Acq On : 22 Jun 2012 6:25 pm
Sample : VOF3F221
Misc : 0.3ppb 8260/1.5ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:47 2012

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



S 4 6/28/12 2047

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR003.D
Acq On : 22 Jun 2012 6:58 pm
Sample : VOF3F222
Misc : 0.5ppb 8260/2.5ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:52 2012

Vial: 3
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.81	114	1406990	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.82	117	1057140	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.78	152	291992	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.47	111	19940	0.46	ug/l	0.02
Spiked Amount 10.000			Recovery	=	4.60%	
37) 1,2-Dichloroethane-d4	15.12	65	12174	0.46	ug/l	0.00
Spiked Amount 10.000			Recovery	=	4.60%	
54) Toluene-d8	17.99	98	78439	0.52	ug/l	0.02
Spiked Amount 10.000			Recovery	=	5.20%	
74) 4-Bromofluorobenzene	21.10	95	22216	0.55	ug/l	0.00
Spiked Amount 10.000			Recovery	=	5.50%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.69	116	15548	0.41	ug/l	91
3) Dichlorodifluoromethane	4.81	85	26123	0.52	ug/l	99
4) Chloromethane	5.36	50	41983	0.52	ug/l	99
5) 2-Chloro-1,1,1-trifluoroet	6.02	118	26014	0.46	ug/l	93
6) Vinyl chloride	5.71	62	31114	0.51	ug/l	96
7) Bromomethane	6.69	94	16864	0.49	ug/l	86
8) Chloroethane	6.97	64	19429	0.55	ug/l	86
9) Dichlorofluoromethane	7.51	67	50233	0.53	ug/l	96
10) Trichlorofluoromethane	7.61	101	26303	0.48	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	8.90	151	17058	0.55	ug/l	97
13) 1,1-Dichloroethene	8.98	61	41753	0.53	ug/l	94
14) Acetone	9.16	43	14974	3.47	ug/l	93
15) Iodomethane	9.44	142	37075	0.51	ug/l	99
16) Methyl acetate	9.92	43	8002	0.54	ug/l	86
17) Carbon disulfide	9.59	76	73206	0.45	ug/l	94
18) Methylene chloride	10.23	49	57417	0.43	ug/l	96
19) tert-Butyl alcohol	10.45	59	3978	2.48	ug/l	91
20) tert-Butyl methyl ether (M	10.76	73	27420	0.49	ug/l	87
21) trans-1,2-Dichloroethene	10.85	61	41376	0.53	ug/l	95
22) Acrylonitrile	10.91	53	13777	2.28	ug/l	94
23) Isopropyl ether (DIPE)	11.89	45	79317	0.53	ug/l	100
24) 1,1-Dichloroethane	11.94	63	46163	0.52	ug/l	97
25) Vinyl acetate	12.00	43	19129	0.38	ug/l	97
26) tert-Butyl ethyl ether (ET	12.80	59	40784	0.47	ug/l	98
27) 2,2-Dichloropropane	13.34	77	26669	0.62	ug/l	92
28) 2-Butanone	13.46	43	16199	2.22	ug/l	98
29) cis-1,2-Dichloroethene	13.40	96	31609	0.54	ug/l	90
30) Bromochloromethane	13.98	49	17603	0.51	ug/l	98
31) Tetrahydrofuran	14.07	42	6444	0.71	ug/l	82
32) Chloroform	14.11	83	38706	0.53	ug/l	99
34) 1,1,1-Trichloroethane	14.47	97	30985	0.53	ug/l	98
35) Cyclohexane	14.54	56	46329	0.48	ug/l	99
36) tert-Amyl alcohol	15.14	59	2858	2.48	ug/l #	65
38) tert-Amyl methyl ether (TA	15.27	87	6060	0.47	ug/l	96
40) 2,2,4-Trimethylpentane	15.18	57	111296	0.56	ug/l	93
41) 1,1-Dichloropropene	14.78	110	14466	0.55	ug/l	99
42) Carbon tetrachloride	14.78	119	27053	0.53	ug/l	98
43) Benzene	15.20	78	99107	0.59	ug/l	94
44) 1,2-Dichloroethane	15.27	62	16351	0.55	ug/l	98
45) Trichloroethene	16.25	130	27992	0.52	ug/l	97

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

SU 6/28/12

2048

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR003.D
Acq On : 22 Jun 2012 6:58 pm
Sample : VOF3F222
Misc : 0.5ppb 8260/2.5ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:52 2012

Vial: 3
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46) Methylcyclohexane	16.51	83	39536	0.49 ug/l		95
47) 1,2-Dichloropropane	16.64	63	23034	0.54 ug/l		99
49) Dibromomethane	16.86	93	8403	0.50 ug/l		95
50) Bromodichloromethane	17.06	83	24891	0.53 ug/l		99
52) cis-1,3-Dichloropropene	17.65	75	27380	0.51 ug/l		84
53) 4-Methyl-2-pentanone	17.80	43	36490	2.26 ug/l		97
55) Toluene	18.08	91	98611	0.55 ug/l		99
56) Ethyl methacrylate	18.38	69	14277	0.53 ug/l		77
57) trans-1,3-Dichloropropene	18.38	75	18031	0.50 ug/l	#	66
58) 1,1,2-Trichloroethane	18.63	97	11968	0.53 ug/l		98
59) Tetrachloroethene	18.78	164	20258	0.55 ug/l		99
60) 2-Hexanone	18.89	43	18938	1.87 ug/l		80
61) 1,3-Dichloropropane	18.86	76	20418	0.53 ug/l		88
62) Dibromochloromethane	19.17	129	14241	0.49 ug/l		97
63) 1,2-Dibromoethane	19.33	107	11268	0.51 ug/l		95
64) 1-Chlorohexane	19.70	91	41379	0.55 ug/l		98
65) Chlorobenzene	19.85	112	57187	0.53 ug/l		87
66) Ethylbenzene	19.91	91	101488	0.54 ug/l		99
67) 1,1,1,2-Tetrachloroethane	19.93	131	17673	0.52 ug/l	#	82
68) m-Xylene & p-Xylene	20.03	91	151041	1.08 ug/l		99
69) o-Xylene	20.49	91	72995	0.53 ug/l		98
70) Styrene	20.52	104	53009	0.52 ug/l		97
72) Bromoform	20.84	173	5528	0.48 ug/l		98
73) Isopropylbenzene	20.86	105	93180	0.56 ug/l		99
75) 1,1,2,2-Tetrachloroethane	21.24	83	11576	0.53 ug/l		99
76) trans-1,4-Dichloro-2-buten	21.30	53	2670	0.52 ug/l		86
77) n-Propylbenzene	21.31	91	117853	0.55 ug/l		100
78) 1,2,3-Trichloropropane	21.33	110	2749	0.52 ug/l	#	72
79) Bromobenzene	21.33	156	16979	0.52 ug/l		94
80) 1,3,5-Trimethylbenzene	21.46	105	73166	0.57 ug/l		98
81) 2-Chlorotoluene	21.47	91	67675	0.56 ug/l		99
82) 4-Chlorotoluene	21.58	91	54931	0.52 ug/l		95
83) tert-Butylbenzene	21.83	134	17406	0.55 ug/l		96
84) 1,2,4-Trimethylbenzene	21.88	105	66829	0.55 ug/l		97
85) sec-Butylbenzene	22.06	105	106478	0.57 ug/l		98
86) p-Isopropyltoluene	22.17	119	75253	0.55 ug/l		98
87) 1,3-Dichlorobenzene	22.28	146	33208	0.52 ug/l		99
88) 1,4-Dichlorobenzene	22.37	146	31119	0.53 ug/l		98
89) Benzyl Chloride	22.50	91	15316	0.54 ug/l		96
90) n-Butylbenzene	22.61	91	62776	0.51 ug/l		98
91) 1,2-Dichlorobenzene	22.80	146	25099	0.53 ug/l		83
92) 1,2-Dibromo-3-chloropropan	23.71	157	1099	0.49 ug/l	#	41
93) 1,2,4-Trichlorobenzene	24.70	180	11713	0.54 ug/l		96
94) Hexachlorobutadiene	24.81	225	8855	0.58 ug/l		93
95) Naphthalene	25.10	128	17808	0.51 ug/l		93
96) 1,2,3-Trichlorobenzene	25.43	180	9233	0.52 ug/l		99

SV 6/28/12

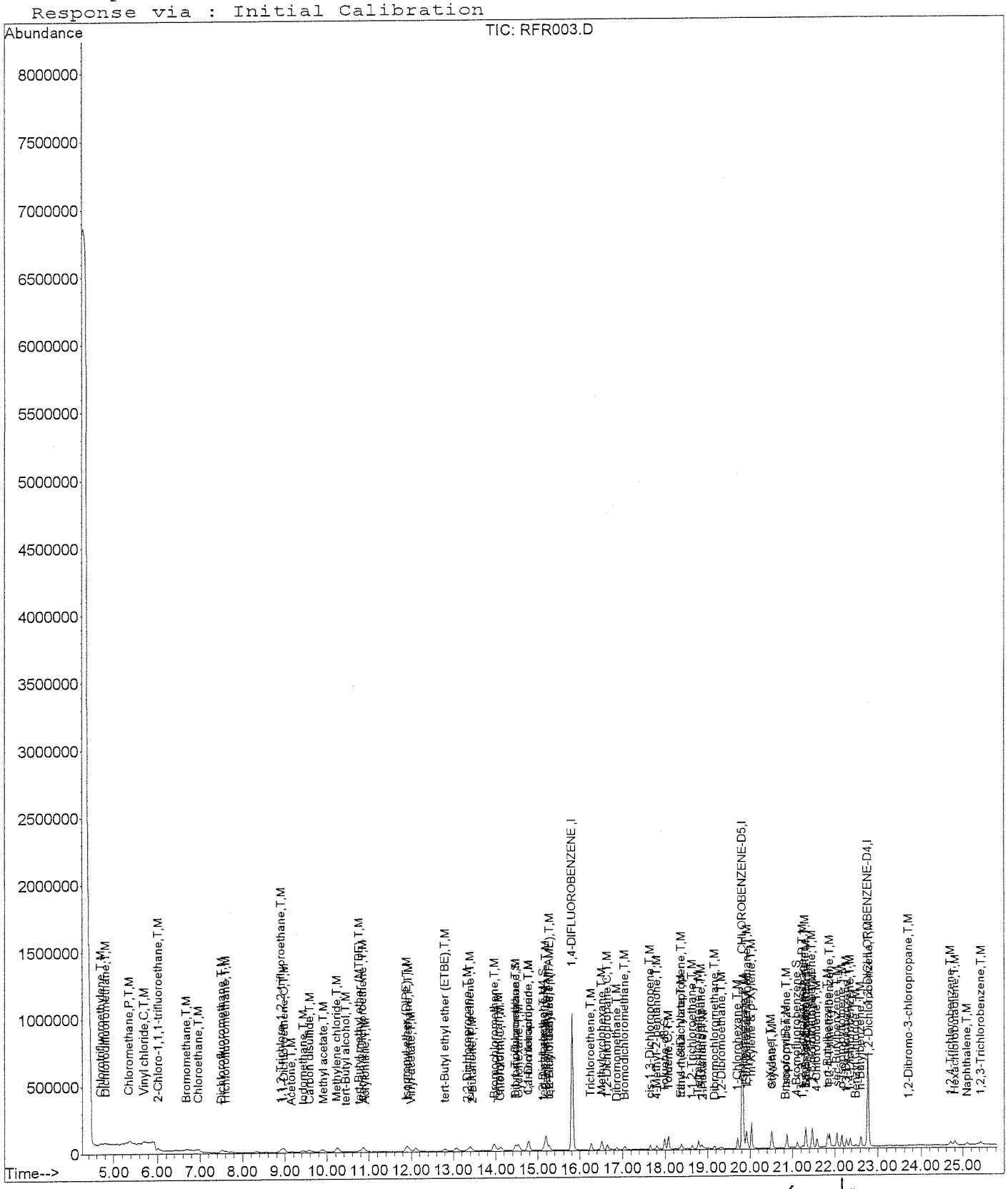
(#) = qualifier out of range (m) = manual integration
RFR003.D VOF3F22.M Wed Jun 27 11:52:44 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR003.D
Acq On : 22 Jun 2012 6:58 pm
Sample : VOF3F222
Misc : 0.5ppb 8260/2.5ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:52 2012

Vial: 3
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SU 6/28/12

2050

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR004.D
Acq On : 22 Jun 2012 7:32 pm
Sample : VOF3F223
Misc : 1.0ppb 8260/5.0ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:52 2012

Vial: 4
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.80	114	1324102	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.82	117	1011456	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.78	152	285265	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.46	111	41783	1.03	ug/l	0.01
Spiked Amount 10.000			Recovery	=	10.30%	
37) 1,2-Dichloroethane-d4	15.13	65	26623	1.07	ug/l	0.01
Spiked Amount 10.000			Recovery	=	10.70%	
54) Toluene-d8	17.99	98	152774	1.05	ug/l	0.01
Spiked Amount 10.000			Recovery	=	10.50%	
74) 4-Bromofluorobenzene	21.11	95	42876	1.10	ug/l	0.01
Spiked Amount 10.000			Recovery	=	11.00%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	36144	1.00	ug/l	97
3) Dichlorodifluoromethane	4.80	85	44447	0.94	ug/l	98
4) Chloromethane	5.35	50	76479	1.01	ug/l	98
5) 2-Chloro-1,1,1-trifluoroet	6.01	118	55987	1.06	ug/l	95
6) Vinyl chloride	5.68	62	56220	0.98	ug/l	95
7) Bromomethane	6.66	94	31017	0.95	ug/l	93
8) Chloroethane	6.96	64	34437	1.03	ug/l	92
9) Dichlorofluoromethane	7.50	67	89442	1.01	ug/l	96
10) Trichlorofluoromethane	7.60	101	52702	1.02	ug/l	97
11) Acrolein	8.76	56	14771	6.30	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	8.90	151	29840	1.03	ug/l	96
13) 1,1-Dichloroethene	8.95	61	77658	1.05	ug/l	98
14) Acetone	9.15	43	24534	6.04	ug/l	90
15) Iodomethane	9.42	142	69394	1.02	ug/l	97
16) Methyl acetate	9.92	43	14657	1.05	ug/l	95
17) Carbon disulfide	9.56	76	151789	1.00	ug/l	96
18) Methylene chloride	10.22	49	85276	1.03	ug/l	98
19) tert-Butyl alcohol	10.44	59	8023	5.31	ug/l	88
20) tert-Butyl methyl ether (M	10.75	73	50913	0.97	ug/l	90
21) trans-1,2-Dichloroethene	10.84	61	79679	1.08	ug/l	98
22) Acrylonitrile	10.89	53	29268	5.16	ug/l	91
23) Isopropyl ether (DIPE)	11.89	45	140060	1.00	ug/l	100
24) 1,1-Dichloroethane	11.92	63	88035	1.06	ug/l	99
25) Vinyl acetate	11.97	43	38195	0.82	ug/l	93
26) tert-Butyl ethyl ether (ET	12.78	59	79300	0.97	ug/l	98
27) 2,2-Dichloropropane	13.33	77	42776	1.06	ug/l	97
28) 2-Butanone	13.42	43	34043	4.95	ug/l	100
29) cis-1,2-Dichloroethene	13.39	96	58254	1.06	ug/l	96
30) Bromochloromethane	13.97	49	33670	1.04	ug/l	98
31) Tetrahydrofuran	14.06	42	8136	1.18	ug/l	83
32) Chloroform	14.10	83	72587	1.05	ug/l	100
34) 1,1,1-Trichloroethane	14.46	97	60873	1.11	ug/l	99
35) Cyclohexane	14.52	56	100045	1.11	ug/l	99
36) tert-Amyl alcohol	15.13	59	4787	4.41	ug/l #	58
38) tert-Amyl methyl ether (TA	15.26	87	13038	1.07	ug/l #	79
40) 2,2,4-Trimethylpentane	15.17	57	226246	1.18	ug/l	99
41) 1,1-Dichloropropene	14.77	110	27006	1.08	ug/l	100
42) Carbon tetrachloride	14.77	119	53430	1.10	ug/l	97
43) Benzene	15.19	78	175575	1.08	ug/l	95
44) 1,2-Dichloroethane	15.26	62	30473	1.07	ug/l	100

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

SU 6/28/12

2051

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR004.D
Acq On : 22 Jun 2012 7:32 pm
Sample : VOF3F223
Misc : 1.0ppb 8260/5.0ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:52 2012

Vial: 4
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Trichloroethene	16.26	130	53054	1.04 ug/l		97
46) Methylcyclohexane	16.50	83	83500	1.08 ug/l		98
47) 1,2-Dichloropropane	16.63	63	42884	1.06 ug/l		96
48) 1,4-Dioxane	16.82	88	2002	16.31 ug/l	#	24
49) Dibromomethane	16.85	93	15982	1.00 ug/l		95
50) Bromodichloromethane	17.05	83	46672	1.04 ug/l		99
51) 2-Chloroethyl vinyl ether	17.41	63	2399	0.80 ug/l	#	53
52) cis-1,3-Dichloropropene	17.64	75	52317	1.01 ug/l		97
53) 4-Methyl-2-pentanone	17.79	43	79639	5.16 ug/l		99
55) Toluene	18.07	91	181716	1.07 ug/l		99
56) Ethyl methacrylate	18.37	69	24751	0.97 ug/l		94
57) trans-1,3-Dichloropropene	18.37	75	35467	1.03 ug/l		80
58) 1,1,2-Trichloroethane	18.64	97	21995	1.01 ug/l		98
59) Tetrachloroethene	18.79	164	37342	1.06 ug/l		98
60) 2-Hexanone	18.86	43	44180	4.55 ug/l		89
61) 1,3-Dichloropropane	18.85	76	38159	1.03 ug/l		95
62) Dibromochloromethane	19.16	129	27761	1.00 ug/l		97
63) 1,2-Dibromoethane	19.32	107	20618	0.98 ug/l		99
64) 1-Chlorohexane	19.70	91	74692	1.04 ug/l		98
65) Chlorobenzene	19.84	112	106990	1.03 ug/l		94
66) Ethylbenzene	19.90	91	192037	1.07 ug/l		99
67) 1,1,1,2-Tetrachloroethane	19.92	131	33868	1.04 ug/l		93
68) m-Xylene & p-Xylene	20.02	91	283169	2.11 ug/l		99
69) o-Xylene	20.50	91	139835	1.06 ug/l		98
70) Styrene	20.51	104	100390	1.03 ug/l		97
72) Bromoform	20.83	173	10982	0.97 ug/l		99
73) Isopropylbenzene	20.87	105	174287	1.08 ug/l		99
75) 1,1,2,2-Tetrachloroethane	21.24	83	22199	1.05 ug/l		99
76) trans-1,4-Dichloro-2-buten	21.27	53	4754	0.95 ug/l		93
77) n-Propylbenzene	21.30	91	221563	1.06 ug/l		100
78) 1,2,3-Trichloropropane	21.32	110	5559	1.08 ug/l	#	89
79) Bromobenzene	21.32	156	31750	0.99 ug/l		93
80) 1,3,5-Trimethylbenzene	21.45	105	134976	1.08 ug/l		99
81) 2-Chlorotoluene	21.47	91	127154	1.08 ug/l		100
82) 4-Chlorotoluene	21.59	91	106026	1.04 ug/l		100
83) tert-Butylbenzene	21.82	134	32772	1.05 ug/l		98
84) 1,2,4-Trimethylbenzene	21.87	105	126936	1.08 ug/l		98
85) sec-Butylbenzene	22.05	105	193701	1.06 ug/l		98
86) p-Isopropyltoluene	22.17	119	140048	1.06 ug/l		98
87) 1,3-Dichlorobenzene	22.27	146	65419	1.05 ug/l		98
88) 1,4-Dichlorobenzene	22.36	146	58822	1.02 ug/l		98
89) Benzyl Chloride	22.49	91	28252	1.02 ug/l		97
90) n-Butylbenzene	22.61	91	129871	1.08 ug/l		100
91) 1,2-Dichlorobenzene	22.79	146	48391	1.04 ug/l		92
92) 1,2-Dibromo-3-chloropropan	23.70	157	2341	1.08 ug/l		80
93) 1,2,4-Trichlorobenzene	24.69	180	21274	1.00 ug/l		96
94) Hexachlorobutadiene	24.80	225	16415	1.09 ug/l		94
95) Naphthalene	25.10	128	35799	1.05 ug/l		95
96) 1,2,3-Trichlorobenzene	25.42	180	17799	1.03 ug/l		98

SW 6/28/12

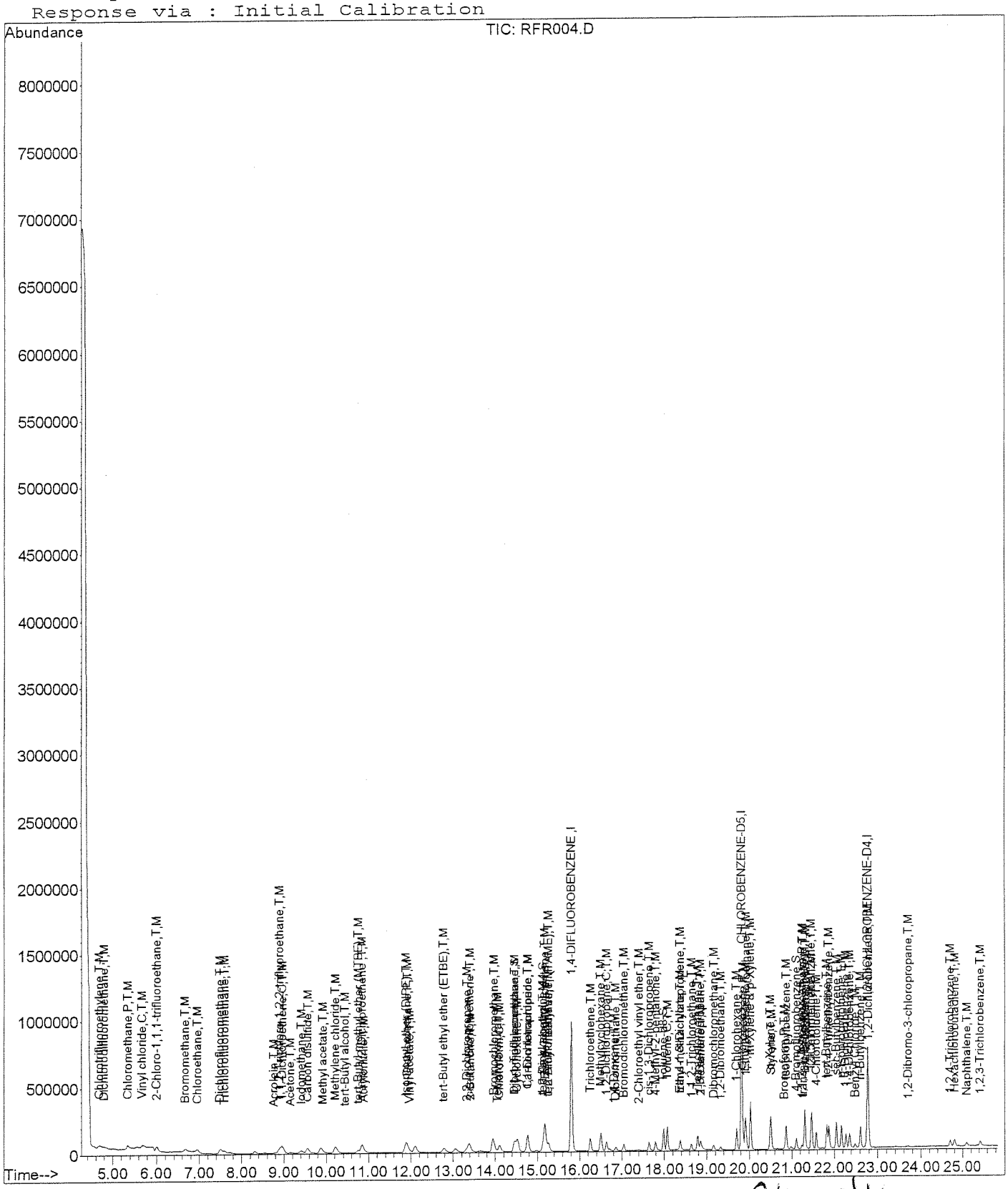
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR004.D
Acq On : 22 Jun 2012 7:32 pm
Sample : VOF3F223
Misc : 1.0ppb 8260/5.0ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:52 2012

Vial: 4
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SW 6/28/12

2053

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR005.D
Acq On : 22 Jun 2012 8:07 pm
Sample : VOF3F224
Misc : 2.0ppb 8260/10ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 5
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.80	114	1401692	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1083732	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	301078	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.44	111	81396	1.90	ug/l	0.00
Spiked Amount 10.000			Recovery	=	19.00%	
37) 1,2-Dichloroethane-d4	15.11	65	49242	1.88	ug/l	0.00
Spiked Amount 10.000			Recovery	=	18.80%	
54) Toluene-d8	17.98	98	297105	1.91	ug/l	0.01
Spiked Amount 10.000			Recovery	=	19.10%	
74) 4-Bromofluorobenzene	21.11	95	80236	1.94	ug/l	0.01
Spiked Amount 10.000			Recovery	=	19.40%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	77185	2.02	ug/l	98
3) Dichlorodifluoromethane	4.80	85	101252	2.02	ug/l	87
4) Chloromethane	5.34	50	164158	2.05	ug/l	99
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	116429	2.08	ug/l	95
6) Vinyl chloride	5.68	62	126660	2.08	ug/l	97
7) Bromomethane	6.66	94	69244	2.01	ug/l	98
8) Chloroethane	6.95	64	72568	2.05	ug/l	94
9) Dichlorofluoromethane	7.50	67	179075	1.91	ug/l	98
10) Trichlorofluoromethane	7.59	101	110993	2.04	ug/l	99
11) Acrolein	8.76	56	24512	9.88	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	8.89	151	55839	1.82	ug/l	99
13) 1,1-Dichloroethene	8.95	61	148724	1.90	ug/l	97
14) Acetone	9.13	43	45263	10.53	ug/l	92
15) Iodomethane	9.40	142	132022	1.83	ug/l	98
16) Methyl acetate	9.91	43	29544	2.00	ug/l	100
17) Carbon disulfide	9.55	76	329469	2.05	ug/l	99
18) Methylene chloride	10.20	49	138602	1.92	ug/l	99
19) tert-Butyl alcohol	10.44	59	15375	9.62	ug/l	90
20) tert-Butyl methyl ether (M	10.75	73	96441	1.74	ug/l	93
21) trans-1,2-Dichloroethene	10.83	61	151405	1.93	ug/l	99
22) Acrylonitrile	10.87	53	58143	9.67	ug/l	99
23) Isopropyl ether (DIPE)	11.87	45	276288	1.87	ug/l	99
24) 1,1-Dichloroethane	11.91	63	168708	1.92	ug/l	99
25) Vinyl acetate	11.96	43	89764	1.81	ug/l	93
26) tert-Butyl ethyl ether (ET	12.78	59	152594	1.76	ug/l	99
27) 2,2-Dichloropropane	13.33	77	82775	1.94	ug/l	99
28) 2-Butanone	13.40	43	71044	9.77	ug/l	99
29) cis-1,2-Dichloroethene	13.37	96	109180	1.88	ug/l	98
30) Bromochloromethane	13.97	49	65046	1.90	ug/l	98
31) Tetrahydrofuran	14.03	42	10921	1.67	ug/l	98
32) Chloroform	14.10	83	139444	1.91	ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	113803	1.96	ug/l	99
35) Cyclohexane	14.52	56	203337	2.13	ug/l	99
36) tert-Amyl alcohol	15.11	59	11542	10.05	ug/l #	81
38) tert-Amyl methyl ether (TA	15.25	87	22461	1.74	ug/l	98
40) 2,2,4-Trimethylpentane	15.16	57	414297	2.02	ug/l	98
41) 1,1-Dichloropropene	14.76	110	51688	1.92	ug/l	98
42) Carbon tetrachloride	14.77	119	101568	1.94	ug/l	100
43) Benzene	15.17	78	332015	1.91	ug/l	99
44) 1,2-Dichloroethane	15.26	62	58224	1.91	ug/l	94

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

Sw 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR005.D
Acq On : 22 Jun 2012 8:07 pm
Sample : VOF3F224
Misc : 2.0ppb 8260/10ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 5
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Trichloroethene	16.24	130	101241	1.85 ug/l		99
46) Methylcyclohexane	16.50	83	176686	2.14 ug/l		99
47) 1,2-Dichloropropane	16.63	63	82337	1.90 ug/l		98
48) 1,4-Dioxane	16.82	88	4492	34.16 ug/l		75
49) Dibromomethane	16.85	93	31583	1.85 ug/l		99
50) Bromodichloromethane	17.05	83	90200	1.88 ug/l		98
51) 2-Chloroethyl vinyl ether	17.40	63	5972	1.86 ug/l		85
52) cis-1,3-Dichloropropene	17.64	75	101561	1.84 ug/l		97
53) 4-Methyl-2-pentanone	17.79	43	160745	9.71 ug/l		99
55) Toluene	18.07	91	351840	1.93 ug/l		100
56) Ethyl methacrylate	18.37	69	49421	1.81 ug/l		95
57) trans-1,3-Dichloropropene	18.37	75	68085	1.84 ug/l		91
58) 1,1,2-Trichloroethane	18.62	97	41980	1.80 ug/l		99
59) Tetrachloroethene	18.77	164	70486	1.86 ug/l		99
60) 2-Hexanone	18.85	43	98572	9.48 ug/l		96
61) 1,3-Dichloropropane	18.85	76	73699	1.86 ug/l		95
62) Dibromochloromethane	19.16	129	53629	1.81 ug/l		100
63) 1,2-Dibromoethane	19.32	107	40381	1.79 ug/l		100
64) 1-Chlorohexane	19.70	91	148588	1.92 ug/l		98
65) Chlorobenzene	19.84	112	206741	1.86 ug/l		97
66) Ethylbenzene	19.90	91	369689	1.92 ug/l		100
67) 1,1,1,2-Tetrachloroethane	19.92	131	65853	1.90 ug/l		98
68) m-Xylene & p-Xylene	20.02	91	558152	3.89 ug/l		99
69) o-Xylene	20.50	91	273088	1.94 ug/l		97
70) Styrene	20.51	104	197359	1.88 ug/l		98
72) Bromoform	20.83	173	21697	1.81 ug/l		96
73) Isopropylbenzene	20.87	105	334824	1.97 ug/l		99
75) 1,1,2,2-Tetrachloroethane	21.23	83	41758	1.87 ug/l		99
76) trans-1,4-Dichloro-2-buten	21.27	53	10027	1.89 ug/l		92
77) n-Propylbenzene	21.30	91	432052	1.96 ug/l		100
78) 1,2,3-Trichloropropane	21.32	110	10358	1.91 ug/l	#	85
79) Bromobenzene	21.32	156	61928	1.83 ug/l		96
80) 1,3,5-Trimethylbenzene	21.45	105	261093	1.97 ug/l		99
81) 2-Chlorotoluene	21.47	91	248964	2.01 ug/l		99
82) 4-Chlorotoluene	21.57	91	210808	1.95 ug/l		100
83) tert-Butylbenzene	21.82	134	63295	1.93 ug/l		99
84) 1,2,4-Trimethylbenzene	21.87	105	243741	1.96 ug/l		99
85) sec-Butylbenzene	22.05	105	375834	1.95 ug/l		100
86) p-Isopropyltoluene	22.16	119	271087	1.94 ug/l		99
87) 1,3-Dichlorobenzene	22.27	146	123280	1.87 ug/l		99
88) 1,4-Dichlorobenzene	22.36	146	111565	1.84 ug/l		98
89) Benzyl Chloride	22.49	91	52175	1.78 ug/l		96
90) n-Butylbenzene	22.61	91	245272	1.94 ug/l		100
91) 1,2-Dichlorobenzene	22.80	146	92486	1.88 ug/l		96
92) 1,2-Dibromo-3-chloropropan	23.70	157	4296	1.87 ug/l		84
93) 1,2,4-Trichlorobenzene	24.69	180	38587	1.72 ug/l		100
94) Hexachlorobutadiene	24.80	225	28231	1.78 ug/l		98
95) Naphthalene	25.10	128	64864	1.81 ug/l		100
96) 1,2,3-Trichlorobenzene	25.42	180	32332	1.78 ug/l		96

SW 6/28/12

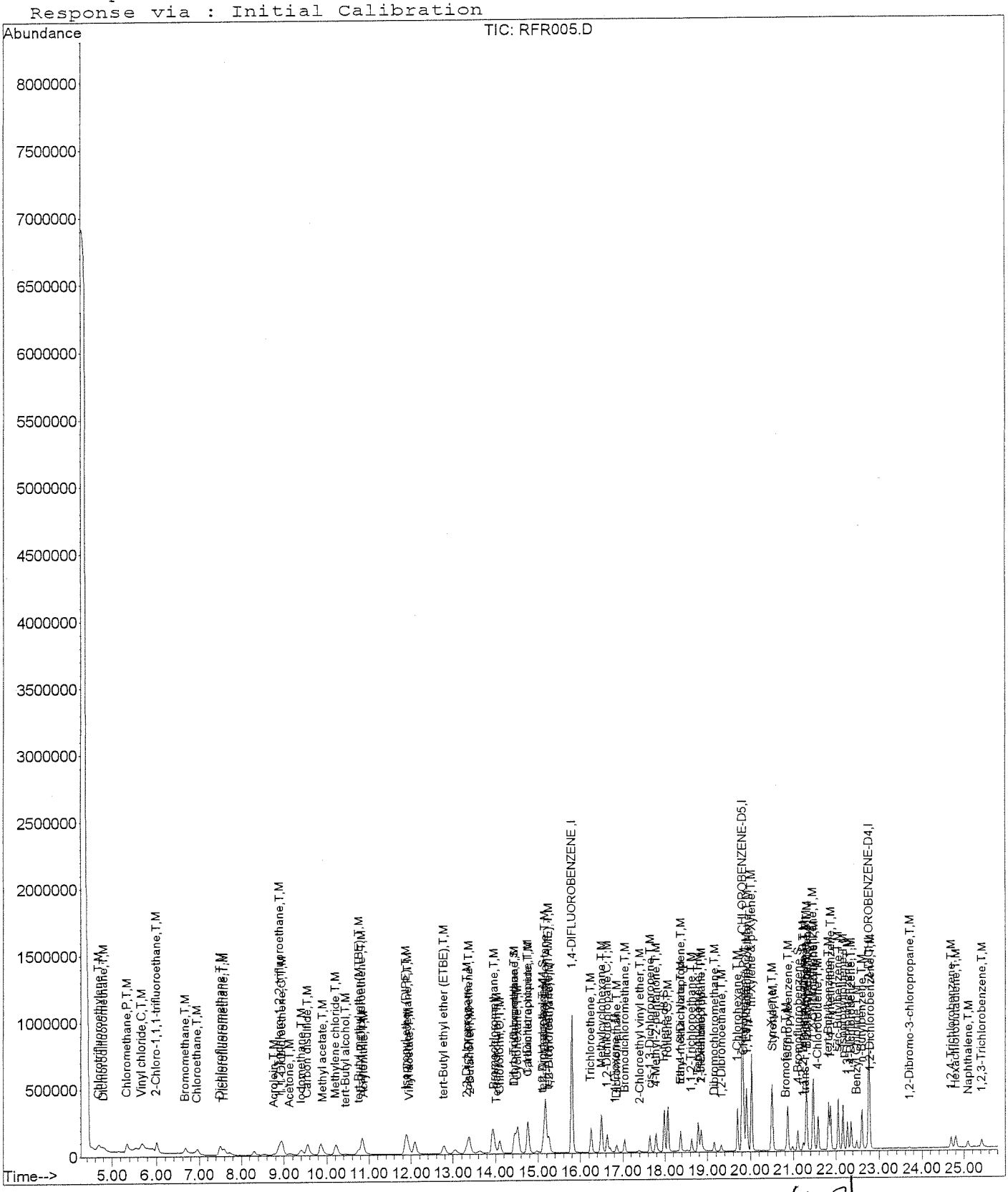
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR005.D
Acq On : 22 Jun 2012 8:07 pm
Sample : VOF3F224
Misc : 2.0ppb 8260/10ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 5
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SU 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR006.D
Acq On : 22 Jun 2012 8:43 pm
Sample : VOF3F225
Misc : 5.0ppb 8260/25ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 6
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1246428	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	986832	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	301960	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.45	111	205523	5.38	ug/l	0.00
Spiked Amount 10.000			Recovery	=	53.80%	
37) 1,2-Dichloroethane-d4	15.11	65	125716	5.38	ug/l	0.00
Spiked Amount 10.000			Recovery	=	53.80%	
54) Toluene-d8	17.98	98	725669	5.13	ug/l	0.00
Spiked Amount 10.000			Recovery	=	51.30%	
74) 4-Bromofluorobenzene	21.10	95	211945	5.12	ug/l	0.00
Spiked Amount 10.000			Recovery	=	51.20%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	198846	5.87	ug/l	99
3) Dichlorodifluoromethane	4.78	85	252154	5.65	ug/l	99
4) Chloromethane	5.33	50	400878	5.63	ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	6.00	118	292608	5.88	ug/l	99
6) Vinyl chloride	5.69	62	315802	5.84	ug/l	100
7) Bromomethane	6.66	94	177367	5.78	ug/l	100
8) Chloroethane	6.96	64	182306	5.80	ug/l	97
9) Dichlorofluoromethane	7.49	67	449634	5.39	ug/l	99
10) Trichlorofluoromethane	7.60	101	284208	5.87	ug/l	99
11) Acrolein	8.76	56	56321	25.52	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	8.89	151	144347	5.30	ug/l	99
13) 1,1-Dichloroethene	8.95	61	376351	5.39	ug/l	99
14) Acetone	9.13	43	95367	24.96	ug/l	97
15) Iodomethane	9.40	142	329421	5.12	ug/l	98
16) Methyl acetate	9.90	43	65779	5.00	ug/l	96
17) Carbon disulfide	9.56	76	802554	5.61	ug/l	100
18) Methylene chloride	10.21	49	292377	5.41	ug/l	99
19) tert-Butyl alcohol	10.44	59	36240	25.49	ug/l	98
20) tert-Butyl methyl ether (M	10.75	73	230199	4.68	ug/l	96
21) trans-1,2-Dichloroethene	10.84	61	358987	5.16	ug/l	99
22) Acrylonitrile	10.87	53	138471	25.91	ug/l	93
23) Isopropyl ether (DIPE)	11.87	45	663191	5.05	ug/l	100
24) 1,1-Dichloroethane	11.91	63	401318	5.14	ug/l	100
25) Vinyl acetate	11.95	43	235728	5.34	ug/l	98
26) tert-Butyl ethyl ether (ET	12.77	59	376881	4.90	ug/l	100
27) 2,2-Dichloropropane	13.32	77	192213	5.06	ug/l	99
28) 2-Butanone	13.38	43	172786	26.71	ug/l	99
29) cis-1,2-Dichloroethene	13.37	96	255617	4.95	ug/l	99
30) Bromochloromethane	13.96	49	152202	5.01	ug/l	100
31) Tetrahydrofuran	14.02	42	23594	4.99	ug/l	94
32) Chloroform	14.10	83	328774	5.06	ug/l	99
34) 1,1,1-Trichloroethane	14.45	97	272221	5.26	ug/l	100
35) Cyclohexane	14.51	56	489288	5.76	ug/l	99
36) tert-Amyl alcohol	15.11	59	24972	24.45	ug/l #	71
38) tert-Amyl methyl ether (TA	15.26	87	53366	4.66	ug/l	97
40) 2,2,4-Trimethylpentane	15.17	57	1062274	5.69	ug/l	99
41) 1,1-Dichloropropene	14.77	110	120799	4.94	ug/l	98
42) Carbon tetrachloride	14.77	119	247202	5.20	ug/l	100
43) Benzene	15.18	78	776569	4.92	ug/l	100
44) 1,2-Dichloroethane	15.26	62	135532	4.89	ug/l	97

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

SU 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR006.D
Acq On : 22 Jun 2012 8:43 pm
Sample : VOF3F225
Misc : 5.0ppb 8260/25ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 6
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Trichloroethene	16.25	130	241123	4.84 ug/l		99
46) Methylcyclohexane	16.49	83	416771	5.55 ug/l		99
47) 1,2-Dichloropropane	16.63	63	196608	4.98 ug/l		99
48) 1,4-Dioxane	16.82	88	12214	102.00 ug/l		92
49) Dibromomethane	16.85	93	77433	4.98 ug/l		99
50) Bromodichloromethane	17.04	83	215413	4.94 ug/l		100
51) 2-Chloroethyl vinyl ether	17.40	63	14439	4.93 ug/l		96
52) cis-1,3-Dichloropropene	17.64	75	246156	4.89 ug/l		100
53) 4-Methyl-2-pentanone	17.79	43	403191	26.75 ug/l		99
55) Toluene	18.07	91	828683	4.98 ug/l		100
56) Ethyl methacrylate	18.37	69	119687	4.80 ug/l		99
57) trans-1,3-Dichloropropene	18.37	75	166018	4.93 ug/l		98
58) 1,1,2-Trichloroethane	18.63	97	102026	4.80 ug/l		99
59) Tetrachloroethene	18.78	164	165051	4.79 ug/l		100
60) 2-Hexanone	18.84	43	256382	27.09 ug/l		99
61) 1,3-Dichloropropane	18.84	76	178844	4.95 ug/l		99
62) Dibromochloromethane	19.15	129	130267	4.82 ug/l		98
63) 1,2-Dibromoethane	19.32	107	100477	4.90 ug/l		100
64) 1-Chlorohexane	19.71	91	355090	5.04 ug/l		100
65) Chlorobenzene	19.84	112	497968	4.93 ug/l		99
66) Ethylbenzene	19.90	91	910127	5.20 ug/l		100
67) 1,1,1,2-Tetrachloroethane	19.93	131	158039	4.99 ug/l		99
68) m-Xylene & p-Xylene	20.02	91	1329544	10.16 ug/l		100
69) o-Xylene	20.49	91	665448	5.19 ug/l		99
70) Styrene	20.51	104	494620	5.18 ug/l		99
72) Bromoform	20.84	173	55834	4.64 ug/l		99
73) Isopropylbenzene	20.87	105	835738	4.90 ug/l		100
75) 1,1,2,2-Tetrachloroethane	21.24	83	105382	4.71 ug/l		98
76) trans-1,4-Dichloro-2-buten	21.27	53	26314	4.94 ug/l		98
77) n-Propylbenzene	21.30	91	1092293	4.95 ug/l		99
78) 1,2,3-Trichloropropane	21.31	110	26560	4.87 ug/l	#	88
79) Bromobenzene	21.31	156	159551	4.71 ug/l		98
80) 1,3,5-Trimethylbenzene	21.46	105	661821	4.99 ug/l		99
81) 2-Chlorotoluene	21.46	91	613881	4.94 ug/l		100
82) 4-Chlorotoluene	21.58	91	534414	4.93 ug/l		100
83) tert-Butylbenzene	21.83	134	162522	4.94 ug/l		99
84) 1,2,4-Trimethylbenzene	21.88	105	620203	4.97 ug/l		99
85) sec-Butylbenzene	22.04	105	968951	5.02 ug/l		100
86) p-Isopropyltoluene	22.16	119	715206	5.09 ug/l		100
87) 1,3-Dichlorobenzene	22.28	146	319878	4.83 ug/l		99
88) 1,4-Dichlorobenzene	22.37	146	299186	4.92 ug/l		100
89) Benzyl Chloride	22.49	91	139064	4.73 ug/l		99
90) n-Butylbenzene	22.61	91	657849	5.19 ug/l		99
91) 1,2-Dichlorobenzene	22.80	146	243485	4.93 ug/l		99
92) 1,2-Dibromo-3-chloropropan	23.69	157	12063	5.24 ug/l		96
93) 1,2,4-Trichlorobenzene	24.69	180	103968	4.62 ug/l		99
94) Hexachlorobutadiene	24.81	225	75218	4.73 ug/l		99
95) Naphthalene	25.09	128	163832	4.56 ug/l		99
96) 1,2,3-Trichlorobenzene	25.43	180	80885	4.43 ug/l		99

SK 6/28/12

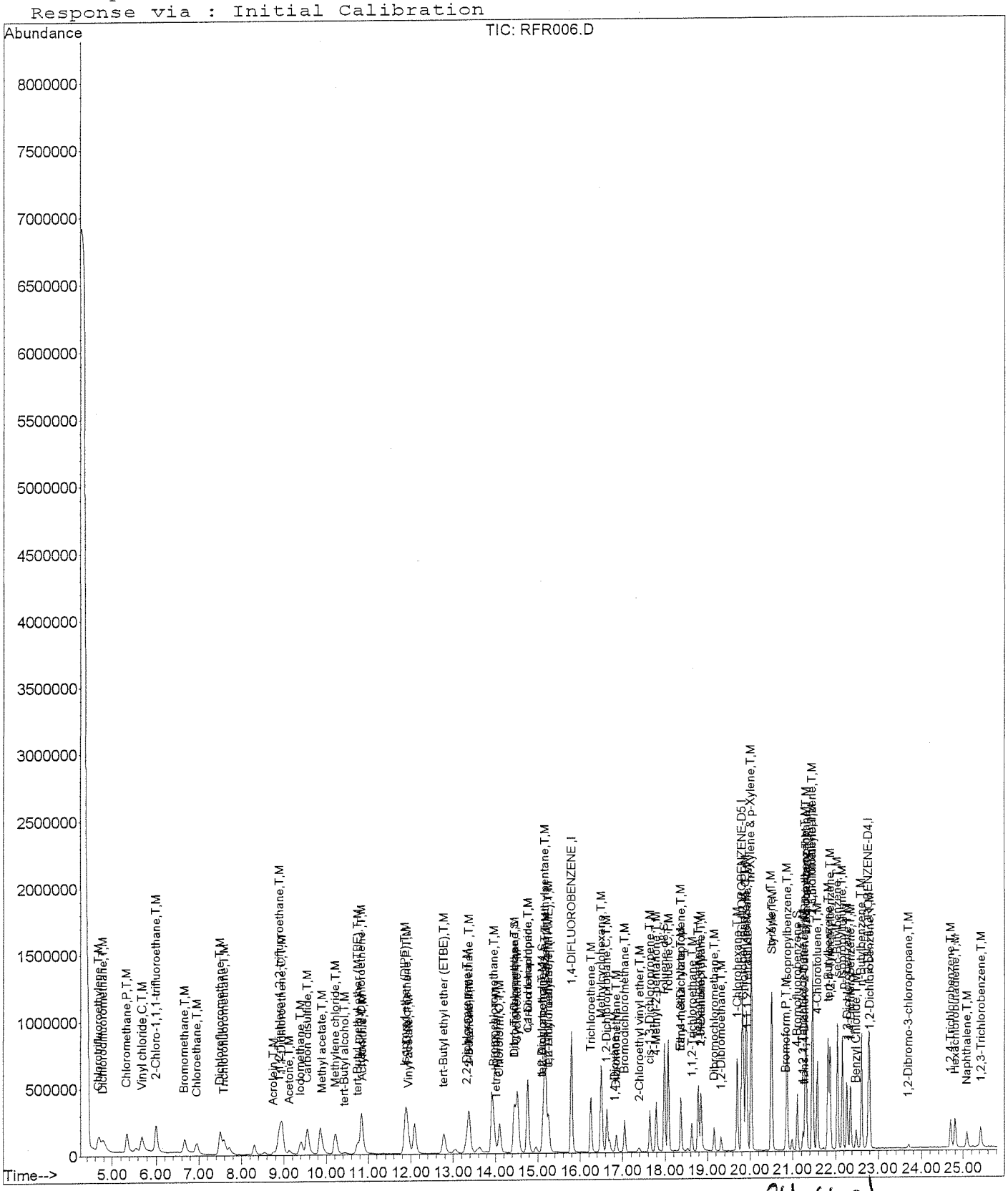
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR006.D
Acq On : 22 Jun 2012 8:43 pm
Sample : VOF3F225
Misc : 5.0ppb 8260/25ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 6
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SU 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR007.D
Acq On : 22 Jun 2012 9:19 pm
Sample : VOF3F226
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 7
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.80	114	1332948	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.82	117	1067554	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.78	152	316570	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.44	111	425846	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery	=	104.30%	
37) 1,2-Dichloroethane-d4	15.11	65	265542	10.64	ug/l	0.00
Spiked Amount 10.000			Recovery	=	106.40%	
54) Toluene-d8	17.97	98	1485699	9.70	ug/l	0.00
Spiked Amount 10.000			Recovery	=	97.00%	
74) 4-Bromofluorobenzene	21.10	95	431731	9.94	ug/l	0.00
Spiked Amount 10.000			Recovery	=	99.40%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.69	116	383842	10.59	ug/l	100
3) Dichlorodifluoromethane	4.79	85	506306	10.60	ug/l	100
4) Chloromethane	5.34	50	833933	10.95	ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	584951	10.99	ug/l	100
6) Vinyl chloride	5.68	62	637207	11.01	ug/l	100
7) Bromomethane	6.66	94	359532	10.96	ug/l	100
8) Chloroethane	6.95	64	360862	10.74	ug/l	100
9) Dichlorofluoromethane	7.50	67	938900	10.52	ug/l	100
10) Trichlorofluoromethane	7.59	101	563383	10.88	ug/l	100
11) Acrolein	8.75	56	123105	52.15	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	8.88	151	290163	9.95	ug/l	100
13) 1,1-Dichloroethene	8.96	61	766877	10.28	ug/l	100
14) Acetone	9.12	43	210279	51.46	ug/l	100
15) Iodomethane	9.40	142	694944	10.10	ug/l	100
16) Methyl acetate	9.89	43	143804	10.23	ug/l	100
17) Carbon disulfide	9.55	76	1649192	10.78	ug/l	100
18) Methylene chloride	10.20	49	587418	10.71	ug/l	100
19) tert-Butyl alcohol	10.43	59	85471	56.22	ug/l	100
20) tert-Butyl methyl ether (M	10.74	73	536661	10.21	ug/l	100
21) trans-1,2-Dichloroethene	10.83	61	753776	10.12	ug/l	100
22) Acrylonitrile	10.86	53	325010	56.86	ug/l	100
23) Isopropyl ether (DIPE)	11.87	45	1473628	10.49	ug/l	100
24) 1,1-Dichloroethane	11.90	63	849262	10.17	ug/l	100
25) Vinyl acetate	11.95	43	549045	11.64	ug/l	100
26) tert-Butyl ethyl ether (ET	12.78	59	863191	10.49	ug/l	100
27) 2,2-Dichloropropane	13.31	77	394768	9.71	ug/l	100
28) 2-Butanone	13.37	43	403325	58.31	ug/l	100
29) cis-1,2-Dichloroethene	13.37	96	546146	9.89	ug/l	100
30) Bromochloromethane	13.95	49	340755	10.48	ug/l	100
31) Tetrahydrofuran	14.01	42	49044	10.31	ug/l	100
32) Chloroform	14.09	83	702231	10.10	ug/l	100
34) 1,1,1-Trichloroethane	14.44	97	571394	10.33	ug/l	100
35) Cyclohexane	14.52	56	922460	10.15	ug/l	100
36) tert-Amyl alcohol	15.10	59	59126	54.12	ug/l	100
38) tert-Amyl methyl ether (TA	15.25	87	121880	9.94	ug/l	100
40) 2,2,4-Trimethylpentane	15.16	57	2017031	9.98	ug/l	100
41) 1,1-Dichloropropene	14.76	110	254337	9.61	ug/l	100
42) Carbon tetrachloride	14.76	119	522926	10.16	ug/l	100
43) Benzene	15.17	78	1630939	9.54	ug/l	100
44) 1,2-Dichloroethane	15.25	62	306912	10.23	ug/l	100

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

SK 6/28/12

2060

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR007.D
Acq On : 22 Jun 2012 9:19 pm
Sample : VOF3F226
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 7
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Trichloroethene	16.25	130	521575	9.68 ug/l	100
46) Methylcyclohexane	16.50	83	810681	9.98 ug/l	100
47) 1,2-Dichloropropane	16.63	63	426200	9.97 ug/l	100
48) 1,4-Dioxane	16.81	88	29622	228.67 ug/l	100
49) Dibromomethane	16.86	93	173420	10.32 ug/l	100
50) Bromodichloromethane	17.05	83	479703	10.17 ug/l	100
51) 2-Chloroethyl vinyl ether	17.39	63	33704	10.63 ug/l	100
52) cis-1,3-Dichloropropene	17.64	75	553445	10.16 ug/l	100
53) 4-Methyl-2-pentanone	17.78	43	917398	56.26 ug/l	100
55) Toluene	18.06	91	1774331	9.86 ug/l	100
56) Ethyl methacrylate	18.36	69	281079	10.42 ug/l	100
57) trans-1,3-Dichloropropene	18.37	75	378924	10.40 ug/l	100
58) 1,1,2-Trichloroethane	18.63	97	232721	10.11 ug/l	100
59) Tetrachloroethene	18.77	164	353573	9.48 ug/l	100
60) 2-Hexanone	18.85	43	598561	58.46 ug/l	100
61) 1,3-Dichloropropane	18.83	76	407742	10.44 ug/l	100
62) Dibromochloromethane	19.16	129	302435	10.34 ug/l	100
63) 1,2-Dibromoethane	19.31	107	230996	10.41 ug/l	100
64) 1-Chlorohexane	19.70	91	756228	9.93 ug/l	100
65) Chlorobenzene	19.85	112	1089904	9.97 ug/l	100
66) Ethylbenzene	19.90	91	1937489	10.24 ug/l	100
67) 1,1,1,2-Tetrachloroethane	19.92	131	339771	9.93 ug/l	100
68) m-Xylene & p-Xylene	20.02	91	2835275	20.04 ug/l	100
69) o-Xylene	20.49	91	1405914	10.13 ug/l	100
70) Styrene	20.51	104	1084006	10.49 ug/l	100
72) Bromoform	20.83	173	127567	10.11 ug/l	100
73) Isopropylbenzene	20.86	105	1763862	9.86 ug/l	100
75) 1,1,2,2-Tetrachloroethane	21.23	83	239262	10.19 ug/l	100
76) trans-1,4-Dichloro-2-buten	21.27	53	59299	10.63 ug/l	100
77) n-Propylbenzene	21.30	91	2282610	9.87 ug/l	100
78) 1,2,3-Trichloropropane	21.30	110	59952	10.49 ug/l	100
79) Bromobenzene	21.32	156	349235	9.83 ug/l	100
80) 1,3,5-Trimethylbenzene	21.45	105	1371283	9.85 ug/l	100
81) 2-Chlorotoluene	21.47	91	1300508	9.99 ug/l	100
82) 4-Chlorotoluene	21.57	91	1137487	10.01 ug/l	100
83) tert-Butylbenzene	21.82	134	332563	9.65 ug/l	100
84) 1,2,4-Trimethylbenzene	21.87	105	1293676	9.89 ug/l	100
85) sec-Butylbenzene	22.05	105	1960617	9.69 ug/l	100
86) p-Isopropyltoluene	22.17	119	1451714	9.86 ug/l	100
87) 1,3-Dichlorobenzene	22.27	146	682082	9.82 ug/l	100
88) 1,4-Dichlorobenzene	22.36	146	638867	10.03 ug/l	100
89) Benzyl Chloride	22.49	91	310864	10.09 ug/l	100
90) n-Butylbenzene	22.60	91	1346751	10.13 ug/l	100
91) 1,2-Dichlorobenzene	22.79	146	518074	10.00 ug/l	100
92) 1,2-Dibromo-3-chloropropan	23.70	157	26120	10.81 ug/l	100
93) 1,2,4-Trichlorobenzene	24.70	180	224757	9.53 ug/l	100
94) Hexachlorobutadiene	24.80	225	147182	8.83 ug/l	100
95) Naphthalene	25.08	128	362647	9.62 ug/l	100
96) 1,2,3-Trichlorobenzene	25.42	180	182557	9.53 ug/l	100

SU 6/28/12

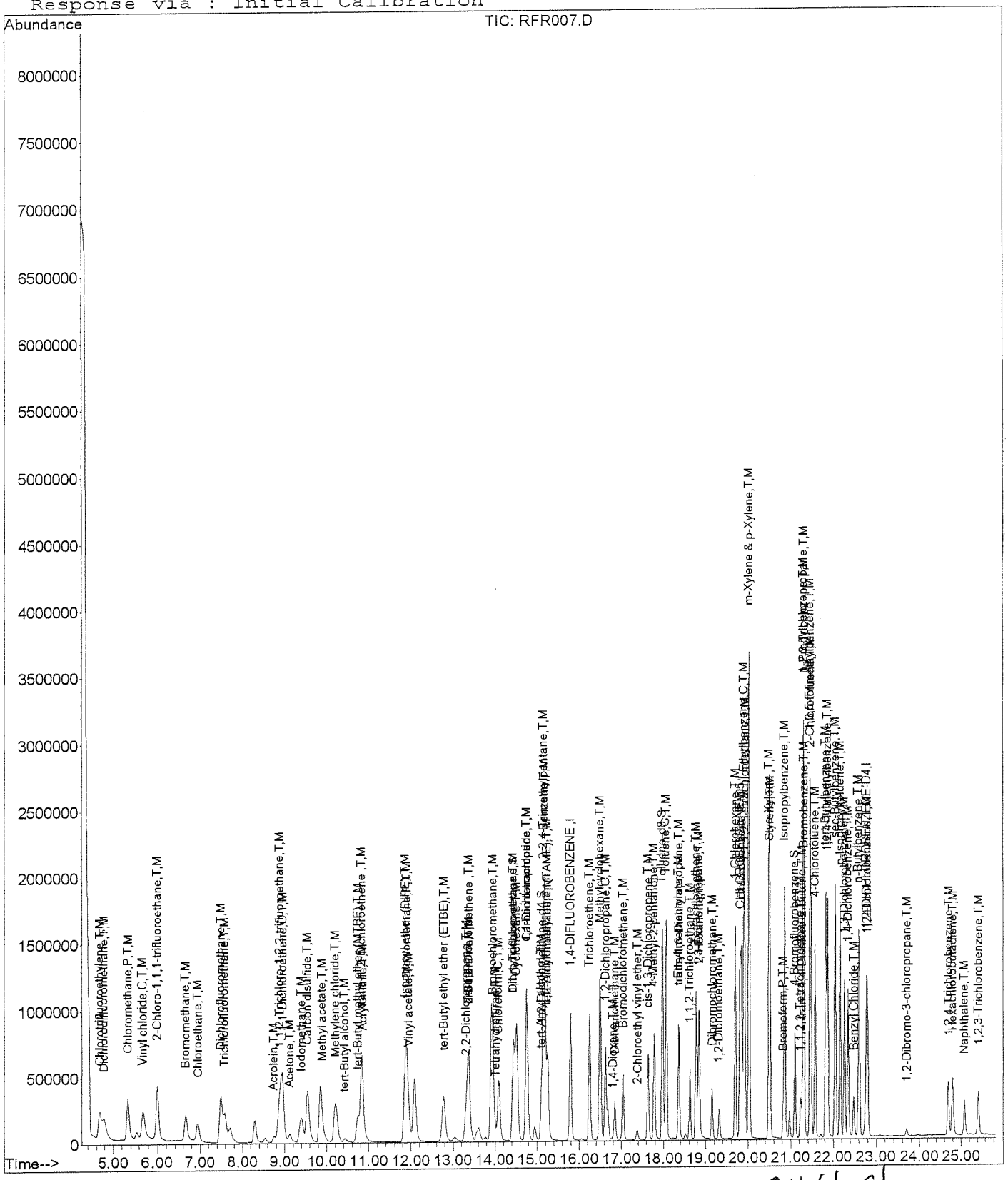
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR007.D
Acq On : 22 Jun 2012 9:19 pm
Sample : VOF3F226
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 7
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SU 6/28/12

2062

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR008.D
Acq On : 22 Jun 2012 9:54 pm
Sample : VOF3F227
Misc : 20ppb 8260/100ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 8
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1374305	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1112439	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	315490	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.44	111	883074	20.97	ug/l	0.00
Spiked Amount 10.000			Recovery	=	209.70%	
37) 1,2-Dichloroethane-d4	15.11	65	542119	21.06	ug/l	0.00
Spiked Amount 10.000			Recovery	=	210.60%	
54) Toluene-d8	17.98	98	3050018	19.11	ug/l	0.00
Spiked Amount 10.000			Recovery	=	191.10%	
74) 4-Bromofluorobenzene	21.10	95	879961	20.33	ug/l	0.00
Spiked Amount 10.000			Recovery	=	203.30%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	745257	19.94	ug/l	100
3) Dichlorodifluoromethane	4.80	85	942151	19.13	ug/l	99
4) Chloromethane	5.33	50	1643273	20.93	ug/l	99
5) 2-Chloro-1,1,1-trifluoroet	6.00	118	1118135	20.37	ug/l	99
6) Vinyl chloride	5.69	62	1216237	20.39	ug/l	100
7) Bromomethane	6.66	94	714714	21.14	ug/l	99
8) Chloroethane	6.94	64	689232	19.90	ug/l	100
9) Dichlorofluoromethane	7.49	67	1963962	21.35	ug/l	100
10) Trichlorofluoromethane	7.58	101	1094730	20.50	ug/l	100
11) Acrolein	8.74	56	249277	102.43	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	8.89	151	599673	19.95	ug/l	99
13) 1,1-Dichloroethene	8.95	61	1596332	20.75	ug/l	100
14) Acetone	9.11	43	442557	105.04	ug/l	96
15) Iodomethane	9.40	142	1486536	20.96	ug/l	99
16) Methyl acetate	9.89	43	303618	20.94	ug/l	100
17) Carbon disulfide	9.54	76	3309003	20.97	ug/l	100
18) Methylene chloride	10.21	49	1225769	22.31	ug/l	100
19) tert-Butyl alcohol	10.44	59	176812	112.80	ug/l	99
20) tert-Butyl methyl ether (M	10.73	73	1193691	22.02	ug/l	99
21) trans-1,2-Dichloroethene	10.82	61	1587214	20.68	ug/l	99
22) Acrylonitrile	10.85	53	644820	109.42	ug/l	96
23) Isopropyl ether (DIPE)	11.87	45	3210032	22.17	ug/l	100
24) 1,1-Dichloroethane	11.91	63	1799243	20.89	ug/l	99
25) Vinyl acetate	11.94	43	1155988	23.77	ug/l	96
26) tert-Butyl ethyl ether (ET	12.77	59	1922034	22.66	ug/l	100
27) 2,2-Dichloropropane	13.32	77	784054	18.70	ug/l	99
28) 2-Butanone	13.37	43	823550	115.47	ug/l	99
29) cis-1,2-Dichloroethene	13.37	96	1163435	20.44	ug/l	99
30) Bromochloromethane	13.96	49	713576	21.28	ug/l	98
31) Tetrahydrofuran	14.01	42	104549	22.01	ug/l	99
32) Chloroform	14.10	83	1500204	20.92	ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	1190969	20.88	ug/l	99
35) Cyclohexane	14.51	56	1892908	20.20	ug/l	100
36) tert-Amyl alcohol	15.11	59	125621	111.53	ug/l	90
38) tert-Amyl methyl ether (TA	15.26	87	276209	21.86	ug/l	97
40) 2,2,4-Trimethylpentane	15.17	57	3894040	18.49	ug/l	100
41) 1,1-Dichloropropene	14.77	110	547590	19.85	ug/l	99
42) Carbon tetrachloride	14.77	119	1101154	20.53	ug/l	100
43) Benzene	15.17	78	3464887	19.46	ug/l	100
44) 1,2-Dichloroethane	15.24	62	645257	20.64	ug/l	99

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

SU 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR008.D
Acq On : 22 Jun 2012 9:54 pm
Sample : VOF3F227
Misc : 20ppb 8260/100ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 8
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	Trichloroethene	16.24	130	1142434	20.35 ug/l	99
46)	Methylcyclohexane	16.49	83	1709060	20.19 ug/l	99
47)	1,2-Dichloropropane	16.63	63	908092	20.39 ug/l	98
48)	1,4-Dioxane	16.80	88	60075	445.04 ug/l	92
49)	Dibromomethane	16.85	93	378967	21.64 ug/l	98
50)	Bromodichloromethane	17.04	83	1032120	21.01 ug/l	99
51)	2-Chloroethyl vinyl ether	17.39	63	71438	21.63 ug/l	99
52)	cis-1,3-Dichloropropene	17.64	75	1210303	21.33 ug/l	99
53)	4-Methyl-2-pentanone	17.79	43	1933919	113.82 ug/l	99
55)	Toluene	18.07	91	3821880	20.39 ug/l	100
56)	Ethyl methacrylate	18.37	69	619142	22.03 ug/l	99
57)	trans-1,3-Dichloropropene	18.37	75	819885	21.60 ug/l	99
58)	1,1,2-Trichloroethane	18.62	97	508478	21.20 ug/l	99
59)	Tetrachloroethene	18.78	164	770919	19.83 ug/l	99
60)	2-Hexanone	18.84	43	1232701	115.54 ug/l	99
61)	1,3-Dichloropropane	18.84	76	857722	21.07 ug/l	99
62)	Dibromochloromethane	19.16	129	672329	22.07 ug/l	100
63)	1,2-Dibromoethane	19.32	107	499901	21.62 ug/l	98
64)	1-Chlorohexane	19.69	91	1619850	20.41 ug/l	99
65)	Chlorobenzene	19.84	112	2376427	20.86 ug/l	98
66)	Ethylbenzene	19.90	91	4105545	20.82 ug/l	99
67)	1,1,1,2-Tetrachloroethane	19.93	131	749150	21.00 ug/l	99
68)	m-Xylene & p-Xylene	20.02	91	5971065	40.49 ug/l	99
69)	o-Xylene	20.49	91	3031379	20.97 ug/l	100
70)	Styrene	20.51	104	2356941	21.89 ug/l	99
72)	Bromoform	20.82	173	283887	22.59 ug/l	99
73)	Isopropylbenzene	20.87	105	3754206	21.06 ug/l	100
75)	1,1,2,2-Tetrachloroethane	21.24	83	497466	21.27 ug/l	99
76)	trans-1,4-Dichloro-2-buten	21.27	53	127557	22.94 ug/l	97
77)	n-Propylbenzene	21.30	91	4831986	20.95 ug/l	99
78)	1,2,3-Trichloropropane	21.31	110	126974	22.29 ug/l	97
79)	Bromobenzene	21.31	156	770089	21.76 ug/l	98
80)	1,3,5-Trimethylbenzene	21.45	105	2875568	20.73 ug/l	100
81)	2-Chlorotoluene	21.46	91	2727989	21.03 ug/l	100
82)	4-Chlorotoluene	21.58	91	2426284	21.42 ug/l	100
83)	tert-Butylbenzene	21.82	134	700138	20.38 ug/l	98
84)	1,2,4-Trimethylbenzene	21.86	105	2708677	20.77 ug/l	99
85)	sec-Butylbenzene	22.04	105	4052899	20.09 ug/l	99
86)	p-Isopropyltoluene	22.16	119	3036463	20.69 ug/l	100
87)	1,3-Dichlorobenzene	22.26	146	1458528	21.08 ug/l	99
88)	1,4-Dichlorobenzene	22.35	146	1356307	21.37 ug/l	100
89)	Benzyl Chloride	22.49	91	652074	21.24 ug/l	100
90)	n-Butylbenzene	22.61	91	2825557	21.33 ug/l	100
91)	1,2-Dichlorobenzene	22.80	146	1076117	20.83 ug/l	100
92)	1,2-Dibromo-3-chloropropan	23.69	157	51177	21.26 ug/l	91
93)	1,2,4-Trichlorobenzene	24.69	180	472987	20.12 ug/l	99
94)	Hexachlorobutadiene	24.79	225	290151	17.47 ug/l	98
95)	Naphthalene	25.09	128	761566	20.28 ug/l	99
96)	1,2,3-Trichlorobenzene	25.42	180	399201	20.92 ug/l	99

SW 6/28/12

(#) = qualifier out of range (m) = manual integration
RFR008.D VOF3F22.M Wed Jun 27 11:54:00 2012

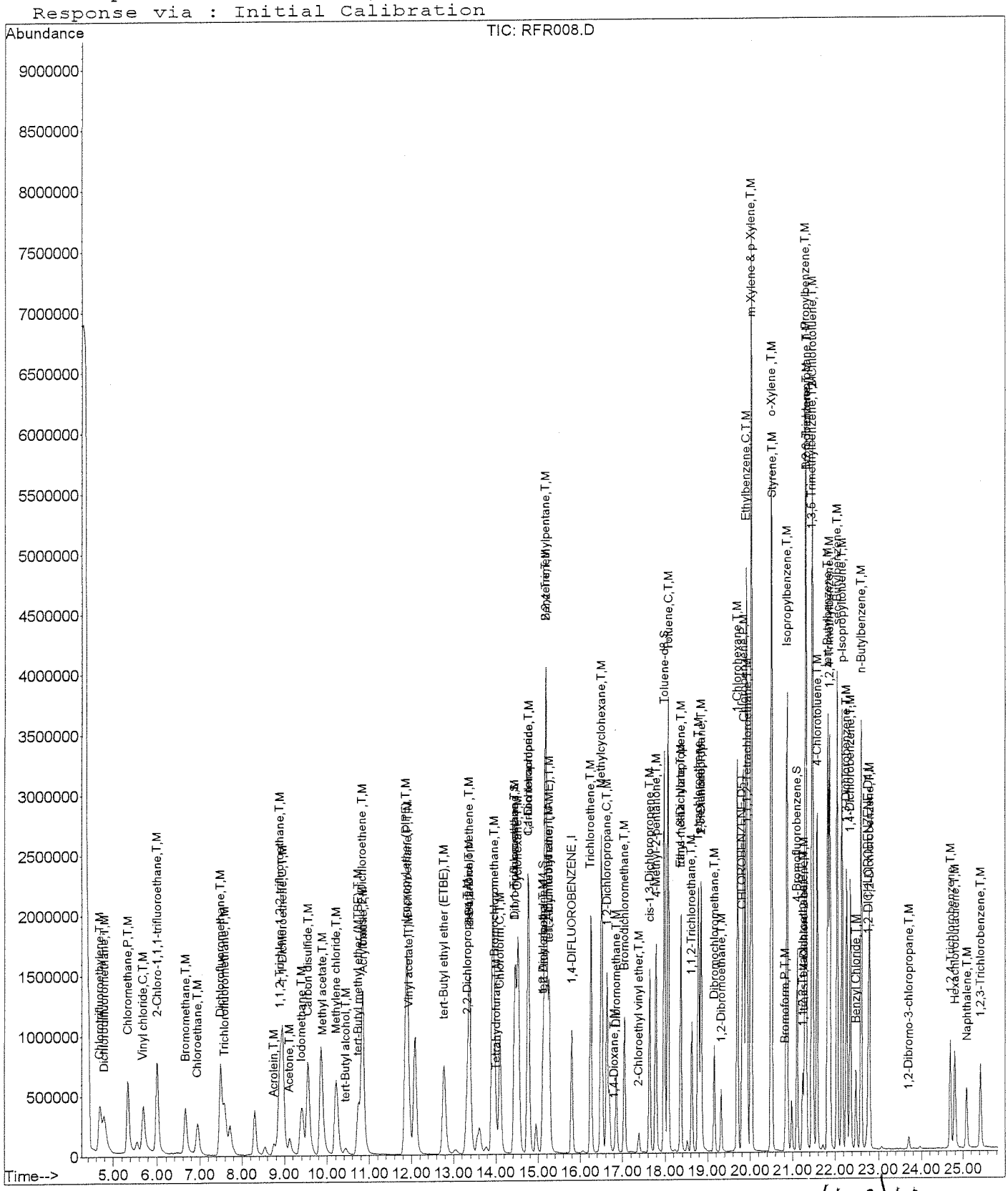
Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR008.D
Acq On : 22 Jun 2012 9:54 pm
Sample : VOF3F227
Misc : 20ppb 8260/100ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:53 2012

Vial: 8
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SA 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR009.D
Acq On : 22 Jun 2012 10:29 pm
Sample : VOF3F228
Misc : 30ppb 8260/150ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:54 2012

Vial: 9
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1661910	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1325737	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	373418	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.44	111	1408309	27.66	ug/l	0.00
Spiked Amount 10.000			Recovery	=	276.60%	
37) 1,2-Dichloroethane-d4	15.11	65	846347	27.19	ug/l	0.00
Spiked Amount 10.000			Recovery	=	271.90%	
54) Toluene-d8	17.98	98	4925020	25.90	ug/l	0.00
Spiked Amount 10.000			Recovery	=	259.00%	
74) 4-Bromofluorobenzene	21.10	95	1394200	27.22	ug/l	0.00
Spiked Amount 10.000			Recovery	=	272.20%	
Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	1211729	26.81	ug/l	99
3) Dichlorodifluoromethane	4.80	85	1464836	24.60	ug/l	99
4) Chloromethane	5.33	50	2455027	25.85	ug/l	99
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	1805994	27.20	ug/l	97
6) Vinyl chloride	5.69	62	1855646	25.72	ug/l	100
7) Bromomethane	6.66	94	1063782	26.02	ug/l	99
8) Chloroethane	6.94	64	1060293	25.32	ug/l	99
9) Dichlorofluoromethane	7.49	67	3042687	27.35	ug/l	100
10) Trichlorofluoromethane	7.58	101	1690050	26.17	ug/l	99
11) Acrolein	8.74	56	361326	122.78	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	8.89	151	975569	26.84	ug/l	99
13) 1,1-Dichloroethene	8.95	61	2493090	26.80	ug/l	99
14) Acetone	9.13	43	622603	122.20	ug/l	99
15) Iodomethane	9.40	142	2420416	28.22	ug/l	97
16) Methyl acetate	9.89	43	446777	25.48	ug/l	99
17) Carbon disulfide	9.54	76	5262266	27.58	ug/l	100
18) Methylene chloride	10.20	49	1872783	28.36	ug/l	98
19) tert-Butyl alcohol	10.44	59	244661	129.07	ug/l	95
20) tert-Butyl methyl ether (M	10.73	73	1825201	27.84	ug/l	99
21) trans-1,2-Dichloroethene	10.82	61	2533786	27.30	ug/l	98
22) Acrylonitrile	10.85	53	952887	133.72	ug/l	96
23) Isopropyl ether (DIPE)	11.86	45	4859835	27.75	ug/l	98
24) 1,1-Dichloroethane	11.91	63	2853374	27.40	ug/l	100
25) Vinyl acetate	11.94	43	1715053	29.16	ug/l	99
26) tert-Butyl ethyl ether (ET	12.77	59	3018013	29.43	ug/l	100
27) 2,2-Dichloropropane	13.32	77	1237208	24.40	ug/l	99
28) 2-Butanone	13.37	43	1189869	137.96	ug/l	97
29) cis-1,2-Dichloroethene	13.37	96	1875713	27.25	ug/l	98
30) Bromochloromethane	13.96	49	1088374	26.85	ug/l	96
31) Tetrahydrofuran	14.01	42	152587	26.69	ug/l	99
32) Chloroform	14.10	83	2359073	27.20	ug/l	99
34) 1,1,1-Trichloroethane	14.45	97	1846249	26.77	ug/l	99
35) Cyclohexane	14.51	56	3029711	26.74	ug/l	98
36) tert-Amyl alcohol	15.11	59	176795	129.80	ug/l	99
38) tert-Amyl methyl ether (TA	15.26	87	431674	28.25	ug/l	97
40) 2,2,4-Trimethylpentane	15.17	57	6336564	25.25	ug/l	99
41) 1,1-Dichloropropene	14.77	110	879529	26.75	ug/l	100
42) Carbon tetrachloride	14.77	119	1731059	27.08	ug/l	100
43) Benzene	15.17	78	5546784	26.14	ug/l	99
44) 1,2-Dichloroethane	15.26	62	972291	26.10	ug/l	98

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

SA 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR009.D
Acq On : 22 Jun 2012 10:29 pm
Sample : VOF3F228
Misc : 30ppb 8260/150ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:54 2012

Vial: 9
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Trichloroethene	16.24	130	1843365	27.55 ug/l		98
46) Methylcyclohexane	16.49	83	2759707	27.35 ug/l		98
47) 1,2-Dichloropropane	16.63	63	1419554	26.74 ug/l		97
48) 1,4-Dioxane	16.82	88	88080	547.52 ug/l		86
49) Dibromomethane	16.85	93	570737	27.34 ug/l		96
50) Bromodichloromethane	17.04	83	1598629	27.30 ug/l		99
51) 2-Chloroethyl vinyl ether	17.38	63	112209	28.51 ug/l		98
52) cis-1,3-Dichloropropene	17.64	75	1874898	27.73 ug/l		98
53) 4-Methyl-2-pentanone	17.79	43	2734346	135.04 ug/l		98
55) Toluene	18.07	91	6035202	27.02 ug/l		99
56) Ethyl methacrylate	18.37	69	927717	27.70 ug/l		97
57) trans-1,3-Dichloropropene	18.37	75	1256193	27.77 ug/l		97
58) 1,1,2-Trichloroethane	18.62	97	769366	26.92 ug/l		99
59) Tetrachloroethene	18.78	164	1259360	27.18 ug/l		98
60) 2-Hexanone	18.84	43	1754421	137.99 ug/l		97
61) 1,3-Dichloropropane	18.84	76	1318322	27.17 ug/l		99
62) Dibromochloromethane	19.15	129	1031170	28.40 ug/l		99
63) 1,2-Dibromoethane	19.32	107	760951	27.61 ug/l		99
64) 1-Chlorohexane	19.69	91	2567551	27.15 ug/l		98
65) Chlorobenzene	19.84	112	3742588	27.56 ug/l		97
66) Ethylbenzene	19.90	91	6422371	27.32 ug/l		98
67) 1,1,1,2-Tetrachloroethane	19.93	131	1182871	27.83 ug/l		99
68) m-Xylene & p-Xylene	20.02	91	9158647	52.12 ug/l		97
69) o-Xylene	20.49	91	4691510	27.23 ug/l		99
70) Styrene	20.51	104	3643272	28.39 ug/l		99
72) Bromoform	20.84	173	437241	29.39 ug/l		99
73) Isopropylbenzene	20.87	105	5766309	27.33 ug/l		99
75) 1,1,2,2-Tetrachloroethane	21.24	83	731914	26.44 ug/l		99
76) trans-1,4-Dichloro-2-buten	21.27	53	180218	27.38 ug/l		97
77) n-Propylbenzene	21.30	91	7253780	26.58 ug/l		98
78) 1,2,3-Trichloropropane	21.31	110	184944	27.44 ug/l	#	92
79) Bromobenzene	21.31	156	1203251	28.72 ug/l		94
80) 1,3,5-Trimethylbenzene	21.45	105	4402680	26.82 ug/l		98
81) 2-Chlorotoluene	21.46	91	4114870	26.80 ug/l		98
82) 4-Chlorotoluene	21.58	91	3691652	27.53 ug/l		98
83) tert-Butylbenzene	21.83	134	1119103	27.52 ug/l		95
84) 1,2,4-Trimethylbenzene	21.88	105	4161022	26.96 ug/l		98
85) sec-Butylbenzene	22.04	105	6237518	26.13 ug/l		98
86) p-Isopropyltoluene	22.16	119	4730909	27.24 ug/l		100
87) 1,3-Dichlorobenzene	22.28	146	2286930	27.92 ug/l		99
88) 1,4-Dichlorobenzene	22.37	146	2110216	28.09 ug/l		99
89) Benzyl Chloride	22.49	91	956145	26.32 ug/l		99
90) n-Butylbenzene	22.61	91	4336127	27.66 ug/l		99
91) 1,2-Dichlorobenzene	22.80	146	1672169	27.35 ug/l		99
92) 1,2-Dibromo-3-chloropropan	23.69	157	75470	26.49 ug/l		86
93) 1,2,4-Trichlorobenzene	24.69	180	724267	26.03 ug/l		99
95) Naphthalene	25.09	128	1133433	25.50 ug/l		99
96) 1,2,3-Trichlorobenzene	25.42	180	610036	27.01 ug/l		99

SW 6/28/12

(#) = qualifier out of range (m) = manual integration
RFR009.D VOF3F22.M Wed Jun 27 11:54:38 2012

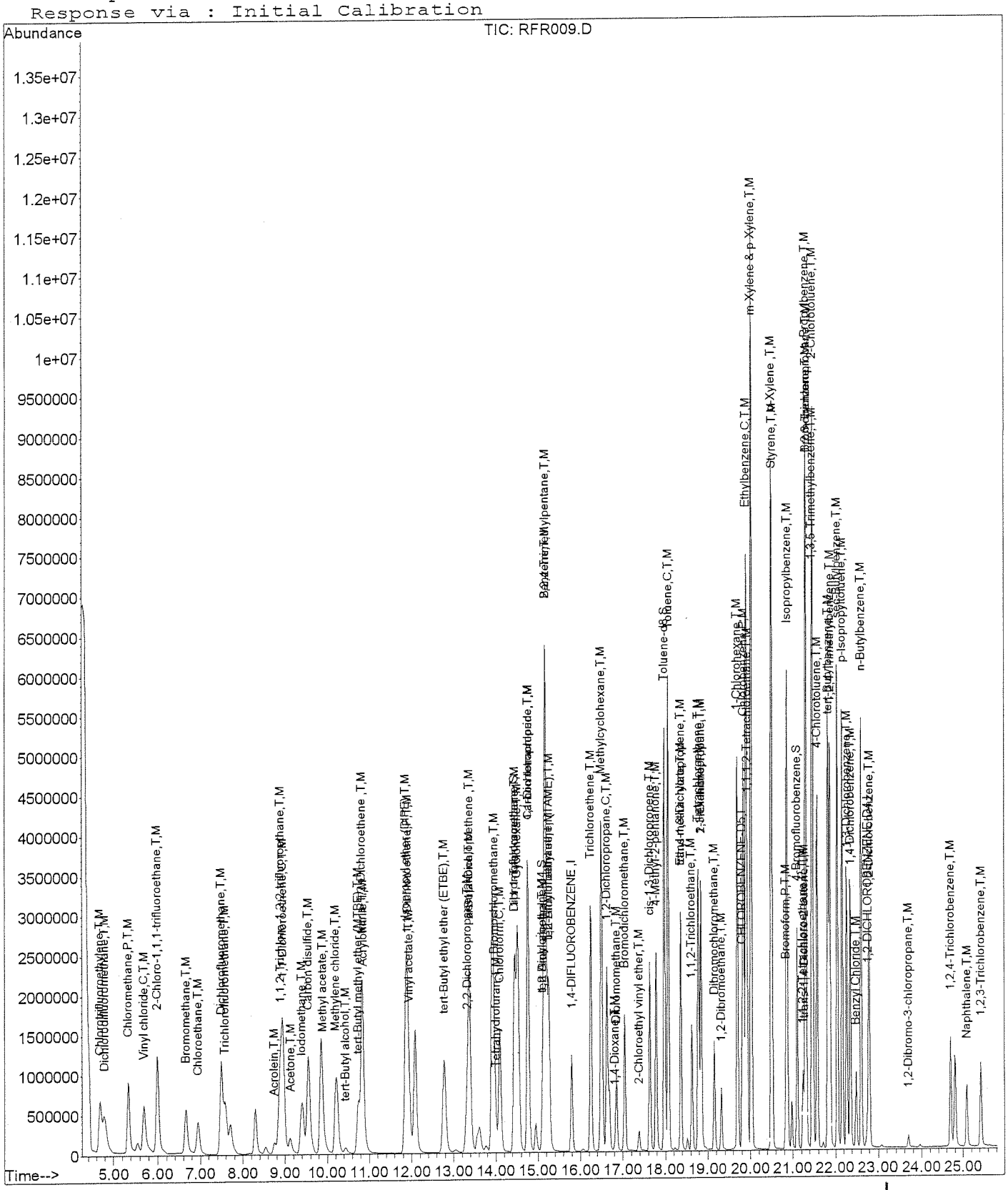
Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR009.D
Acq On : 22 Jun 2012 10:29 pm
Sample : VOF3F228
Misc : 30ppb 8260/150ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:54 2012

Vial: 9
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SK 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR010.D
Acq On : 22 Jun 2012 11:04 pm
Sample : VOF3F229
Misc : 50ppb 8260/250ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:55 2012

Vial: 10
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.79	114	1703182	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1311073	10.00	ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	370145	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.44	111	2399120	45.97	ug/l	0.00
Spiked Amount 10.000			Recovery	=	459.70%	
37) 1,2-Dichloroethane-d4	15.11	65	1447388	45.37	ug/l	0.00
Spiked Amount 10.000			Recovery	=	453.70%	
54) Toluene-d8	17.98	98	8063220	42.88	ug/l	0.01
Spiked Amount 10.000			Recovery	=	428.80%	
74) 4-Bromofluorobenzene	21.11	95	2225093	43.82	ug/l	0.01
Spiked Amount 10.000			Recovery	=	438.20%	

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	2022664	43.67	ug/l	99
3) Dichlorodifluoromethane	4.79	85	2471758	40.50	ug/l	99
4) Chloromethane	5.34	50	3892027	39.99	ug/l	99
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	2940199	43.21	ug/l	96
6) Vinyl chloride	5.69	62	3078482	41.64	ug/l	99
7) Bromomethane	6.65	94	1698530	40.53	ug/l	99
8) Chloroethane	6.94	64	1753800	40.86	ug/l	99
9) Dichlorofluoromethane	7.49	67	4928943	43.23	ug/l	100
10) Trichlorofluoromethane	7.58	101	2907311	43.93	ug/l	100
11) Acrolein	8.74	56	643999	213.53	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	8.88	151	1639262	44.01	ug/l	100
13) 1,1-Dichloroethene	8.95	61	4058839	42.58	ug/l	98
14) Acetone	9.11	43	1109620	212.51	ug/l	99
15) Iodomethane	9.40	142	4087841	46.51	ug/l	96
16) Methyl acetate	9.89	43	810947	45.14	ug/l	99
17) Carbon disulfide	9.55	76	8779475	44.90	ug/l	100
18) Methylene chloride	10.22	49	3098952	46.17	ug/l	96
19) tert-Butyl alcohol	10.44	59	434349	223.58	ug/l	99
20) tert-Butyl methyl ether (M	10.74	73	3300968	49.13	ug/l	98
21) trans-1,2-Dichloroethene	10.83	61	4195977	44.11	ug/l	97
22) Acrylonitrile	10.86	53	1758497	240.79	ug/l	99
23) Isopropyl ether (DIPE)	11.87	45	8214009	45.77	ug/l	97
24) 1,1-Dichloroethane	11.90	63	4757485	44.57	ug/l	99
25) Vinyl acetate	11.94	43	3030487	50.28	ug/l	98
26) tert-Butyl ethyl ether (ET	12.77	59	5267956	50.12	ug/l	99
27) 2,2-Dichloropropane	13.32	77	1961079	37.74	ug/l	98
28) 2-Butanone	13.37	43	2128862	240.85	ug/l	97
29) cis-1,2-Dichloroethene	13.37	96	3157441	44.77	ug/l	96
30) Bromochloromethane	13.96	49	1842749	44.35	ug/l	94
31) Tetrahydrofuran	14.01	42	266017	45.87	ug/l	97
32) Chloroform	14.10	83	3953837	44.49	ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	3016645	42.68	ug/l	99
35) Cyclohexane	14.52	56	5035475	43.37	ug/l	98
36) tert-Amyl alcohol	15.11	59	341268	244.49	ug/l	86
38) tert-Amyl methyl ether (TA	15.26	87	766315	48.93	ug/l	96
40) 2,2,4-Trimethylpentane	15.17	57	10052650	40.50	ug/l	100
41) 1,1-Dichloropropene	14.75	110	1462889	44.99	ug/l	100
42) Carbon tetrachloride	14.77	119	2873424	45.46	ug/l	100
43) Benzene	15.17	78	9054288	43.14	ug/l	99
44) 1,2-Dichloroethane	15.24	62	1677985	45.54	ug/l	99

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

6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR010.D
Acq On : 22 Jun 2012 11:04 pm
Sample : VOF3F229
Misc : 50ppb 8260/250ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:55 2012

Vial: 10
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Trichloroethene	16.24	130	3108325	46.98 ug/l	97
46) Methylcyclohexane	16.49	83	4577781	45.88 ug/l	97
47) 1,2-Dichloropropane	16.63	63	2376252	45.27 ug/l	98
48) 1,4-Dioxane	16.81	88	158691	997.48 ug/l	85
49) Dibromomethane	16.85	93	993175	48.12 ug/l	95
50) Bromodichloromethane	17.04	83	2697121	46.57 ug/l	99
51) 2-Chloroethyl vinyl ether	17.39	63	196733	50.54 ug/l	97
52) cis-1,3-Dichloropropene	17.64	75	3180720	47.56 ug/l	98
53) 4-Methyl-2-pentanone	17.79	43	4880095	243.71 ug/l	98
55) Toluene	18.07	91	9631062	43.60 ug/l	98
56) Ethyl methacrylate	18.37	69	1615721	48.79 ug/l	96
57) trans-1,3-Dichloropropene	18.37	75	2130524	47.62 ug/l	97
58) 1,1,2-Trichloroethane	18.62	97	1327731	46.97 ug/l	99
59) Tetrachloroethene	18.78	164	2073226	45.24 ug/l	97
60) 2-Hexanone	18.84	43	3072169	244.33 ug/l	96
61) 1,3-Dichloropropane	18.84	76	2224469	46.36 ug/l	99
62) Dibromochloromethane	19.16	129	1745084	48.60 ug/l	100
63) 1,2-Dibromoethane	19.32	107	1319956	48.43 ug/l	99
64) 1-Chlorohexane	19.69	91	4096843	43.81 ug/l	97
65) Chlorobenzene	19.84	112	5959877	44.38 ug/l	97
66) Ethylbenzene	19.90	91	9910009	42.64 ug/l	97
67) 1,1,1,2-Tetrachloroethane	19.93	131	1914920	45.55 ug/l	99
68) m-Xylene & p-Xylene	20.02	91	14030213	80.73 ug/l	96
69) o-Xylene	20.50	91	7208552	42.30 ug/l	98
70) Styrene	20.51	104	5689646	44.83 ug/l	99
72) Bromoform	20.82	173	750828	50.91 ug/l	99
73) Isopropylbenzene	20.87	105	8925922	42.68 ug/l	98
75) 1,1,2,2-Tetrachloroethane	21.24	83	1262893	46.02 ug/l	99
76) trans-1,4-Dichloro-2-buten	21.27	53	305984	46.90 ug/l	94
77) n-Propylbenzene	21.30	91	10940041	40.44 ug/l	97
78) 1,2,3-Trichloropropane	21.31	110	307321	45.99 ug/l	94
79) Bromobenzene	21.31	156	1937482	46.66 ug/l	92
80) 1,3,5-Trimethylbenzene	21.45	105	6821807	41.93 ug/l	98
81) 2-Chlorotoluene	21.46	91	6372050	41.86 ug/l	97
82) 4-Chlorotoluene	21.58	91	5827560	43.84 ug/l	98
83) tert-Butylbenzene	21.82	134	1775854	44.05 ug/l	93
84) 1,2,4-Trimethylbenzene	21.86	105	6479690	42.35 ug/l	97
85) sec-Butylbenzene	22.04	105	9715657	41.06 ug/l	98
86) p-Isopropyltoluene	22.16	119	7492020	43.52 ug/l	99
87) 1,3-Dichlorobenzene	22.27	146	3654818	45.02 ug/l	98
88) 1,4-Dichlorobenzene	22.36	146	3367607	45.22 ug/l	99
89) Benzyl Chloride	22.49	91	1610421	44.72 ug/l	99
90) n-Butylbenzene	22.61	91	6752188	43.45 ug/l	99
91) 1,2-Dichlorobenzene	22.80	146	2739653	45.21 ug/l	99
92) 1,2-Dibromo-3-chloropropan	23.69	157	130218	46.11 ug/l	87
93) 1,2,4-Trichlorobenzene	24.69	180	1148978	41.66 ug/l	99
95) Naphthalene	25.09	128	1881825	42.71 ug/l	98
96) 1,2,3-Trichlorobenzene	25.42	180	970557	43.35 ug/l	99

SW 6/28/12

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

2070

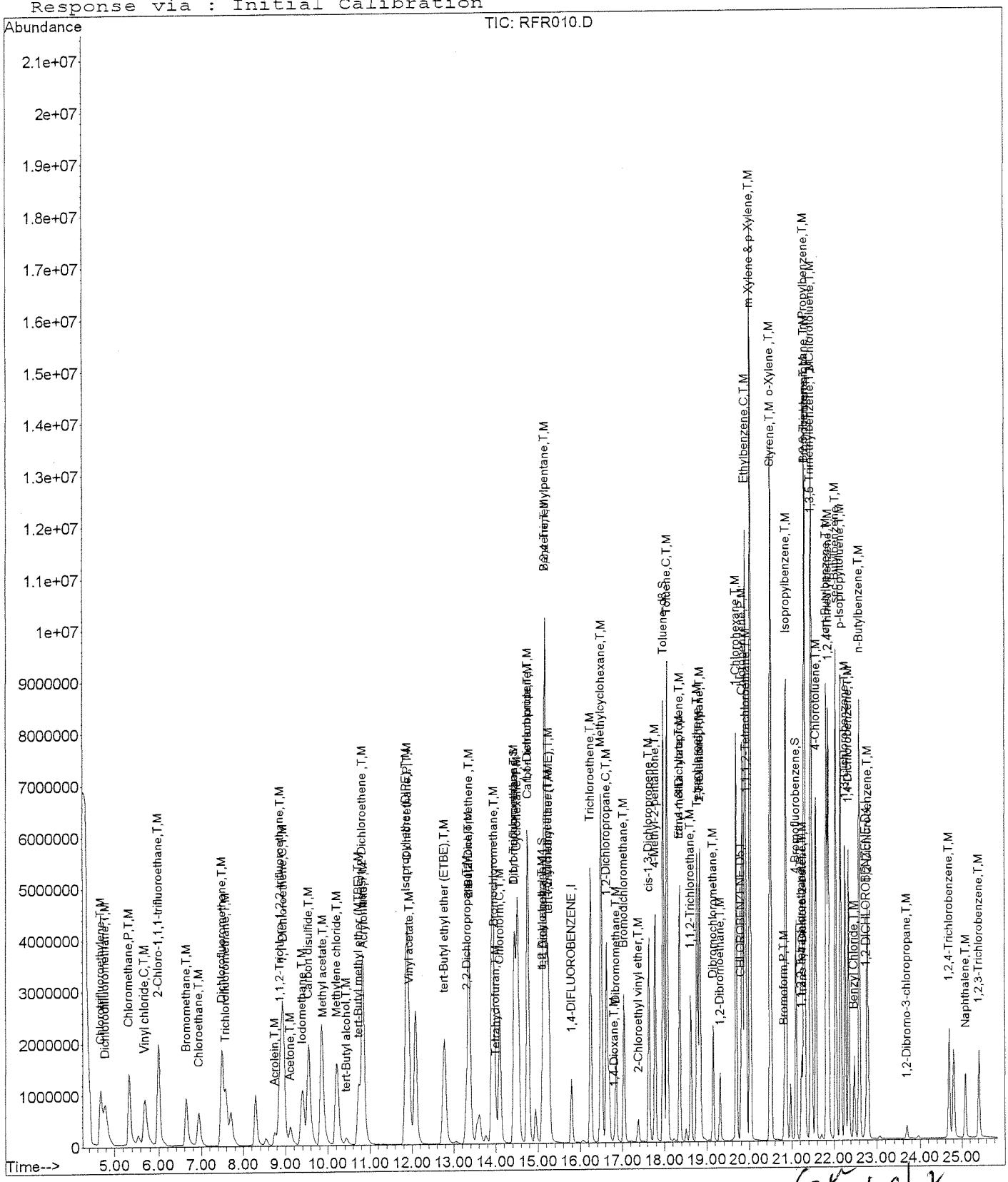
Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR010.D
Acq On : 22 Jun 2012 11:04 pm
Sample : VOF3F229
Misc : 50ppb 8260/250ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:55 2012

Vial: 10
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SW 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR011.D
Acq On : 22 Jun 2012 11:40 pm
Sample : VOF3F2210
Misc : 100ppb 8260/500ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:55 2012

Vial: 11
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.80	114	1362691	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	19.81	117	1085667	10.00 ug/l	0.00
71) 1,2-DICHLOROBENZENE-D4	22.77	152	310193	10.00 ug/l	0.00
System Monitoring Compounds					
33) Dibromofluoromethane	14.44	111	4338168	103.90 ug/l	0.00
Spiked Amount 10.000			Recovery	= 1039.00%	
37) 1,2-Dichloroethane-d4	15.11	65	2649976	103.83 ug/l	0.00
Spiked Amount 10.000			Recovery	= 1038.30%	
54) Toluene-d8	17.98	98	14575409	93.60 ug/l	0.01
Spiked Amount 10.000			Recovery	= 936.00%	
74) 4-Bromofluorobenzene	21.11	95	4279406	100.57 ug/l	0.01
Spiked Amount 10.000			Recovery	= 1005.70%	

Target Compounds					Qvalue
2) Chlorotrifluoroethylene	4.68	116	4351427	117.43 ug/l	98
3) Dichlorodifluoromethane	4.79	85	4931946	101.00 ug/l	99
4) Chloromethane	5.34	50	7531827	96.74 ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	6182605	113.58 ug/l	96
6) Vinyl chloride	5.69	62	5961926	100.78 ug/l	99
8) Chloroethane	6.91	64	3191557	92.94 ug/l	99
9) Dichlorofluoromethane	7.48	67	8942410	98.04 ug/l	100
10) Trichlorofluoromethane	7.58	101	5499542	103.86 ug/l	99
11) Acrolein	8.74	56	1196638	495.90 ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	8.88	151	3072863	103.12 ug/l	99
13) 1,1-Dichloroethene	8.95	61	7575044	99.32 ug/l	98
14) Acetone	9.12	43	2079270	497.71 ug/l	99
15) Iodomethane	9.40	142	7438144	105.78 ug/l	96
16) Methyl acetate	9.89	43	1510650	105.09 ug/l	98
17) Carbon disulfide	9.55	76	17077275	109.15 ug/l	100
18) Methylene chloride	10.22	49	5446338	102.17 ug/l	96
19) tert-Butyl alcohol	10.44	59	744221	478.82 ug/l	98
20) tert-Butyl methyl ether (M	10.74	73	5788312	107.68 ug/l	98
21) trans-1,2-Dichloroethene	10.83	61	7085545	93.09 ug/l	97
22) Acrylonitrile	10.86	53	3308864	566.29 ug/l	99
23) Isopropyl ether (DIPE)	11.87	45	13707818	95.47 ug/l	96
24) 1,1-Dichloroethane	11.90	63	8018826	93.90 ug/l	99
25) Vinyl acetate	11.94	43	5368303	111.32 ug/l	94
26) tert-Butyl ethyl ether (ET	12.77	59	9312602	110.75 ug/l	99
27) 2,2-Dichloropropane	13.33	77	3040746	73.15 ug/l	98
28) 2-Butanone	13.37	43	3835163	542.32 ug/l	95
29) cis-1,2-Dichloroethene	13.37	96	5331601	94.48 ug/l	96
30) Bromochloromethane	13.97	49	3110425	93.57 ug/l	92
31) Tetrahydrofuran	14.01	42	484760	105.30 ug/l	97
32) Chloroform	14.10	83	6709358	94.36 ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	4964692	87.78 ug/l	99
35) Cyclohexane	14.52	56	9386758	101.04 ug/l	96
36) tert-Amyl alcohol	15.11	59	615675	551.29 ug/l	91
38) tert-Amyl methyl ether (TA	15.26	87	1375797	109.79 ug/l	94
40) 2,2,4-Trimethylpentane	15.17	57	19150886	93.18 ug/l	99
41) 1,1-Dichloropropene	14.75	110	2496122	92.70 ug/l	100
42) Carbon tetrachloride	14.77	119	4894552	93.51 ug/l	100
43) Benzene	15.17	78	14743271	84.84 ug/l	99
44) 1,2-Dichloroethane	15.24	62	2892708	94.80 ug/l	98
45) Trichloroethene	16.24	130	5386031	98.31 ug/l	97

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

SU 6/28/12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F22\RFR011.D
Acq On : 22 Jun 2012 11:40 pm
Sample : VOF3F2210
Misc : 100ppb 8260/500ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:55 2012

Vial: 11
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Methylcyclohexane	16.49	83	8497446	102.85 ug/l		96
47)	1,2-Dichloropropane	16.63	63	4082632	93.92 ug/l		98
48)	1,4-Dioxane	16.81	88	301555	2289.02 ug/l		86
49)	Dibromomethane	16.85	93	1771851	103.66 ug/l		94
50)	Bromodichloromethane	17.04	83	4627817	96.51 ug/l		98
51)	2-Chloroethyl vinyl ether	17.39	63	381008	118.20 ug/l		97
52)	cis-1,3-Dichloropropene	17.64	75	5506183	99.43 ug/l		98
53)	4-Methyl-2-pentanone	17.79	43	9024273	544.23 ug/l		96
55)	Toluene	18.07	91	15957581	87.23 ug/l		96
56)	Ethyl methacrylate	18.37	69	2825775	103.04 ug/l		96
57)	trans-1,3-Dichloropropene	18.37	75	3756336	101.39 ug/l		97
58)	1,1,2-Trichloroethane	18.62	97	2375902	101.50 ug/l		98
59)	Tetrachloroethene	18.79	164	3756949	99.01 ug/l		96
60)	2-Hexanone	18.84	43	5663892	543.98 ug/l		96
61)	1,3-Dichloropropane	18.84	76	3846773	96.82 ug/l		99
62)	Dibromochloromethane	19.16	129	3168082	106.55 ug/l		100
63)	1,2-Dibromoethane	19.32	107	2397888	106.25 ug/l		99
64)	1-Chlorohexane	19.69	91	7183239	92.75 ug/l		97
65)	Chlorobenzene	19.84	112	10530678	94.71 ug/l		97
66)	Ethylbenzene	19.90	91	15813028	82.16 ug/l		92
67)	1,1,1,2-Tetrachloroethane	19.93	131	3445679	98.98 ug/l		98
69)	o-Xylene	20.50	91	12339067	87.45 ug/l		95
70)	Styrene	20.51	104	9878521	94.00 ug/l		99
72)	Bromoform	20.82	173	1434294	116.06 ug/l		99
73)	Isopropylbenzene	20.87	105	15193720	86.69 ug/l		95
75)	1,1,2,2-Tetrachloroethane	21.24	83	2307034	100.31 ug/l		99
76)	trans-1,4-Dichloro-2-buten	21.27	53	559783	102.38 ug/l		96
77)	n-Propylbenzene	21.30	91	16976836	74.88 ug/l		91
78)	1,2,3-Trichloropropane	21.31	110	553478	98.84 ug/l	#	87
79)	Bromobenzene	21.31	156	3556104	102.19 ug/l		87
80)	1,3,5-Trimethylbenzene	21.45	105	11799232	86.53 ug/l		96
81)	2-Chlorotoluene	21.46	91	10960832	85.93 ug/l		94
82)	4-Chlorotoluene	21.58	91	10286970	92.35 ug/l		96
83)	tert-Butylbenzene	21.82	134	3248975	96.17 ug/l		89
84)	1,2,4-Trimethylbenzene	21.88	105	11406825	88.96 ug/l		95
85)	sec-Butylbenzene	22.04	105	16093048	81.15 ug/l		92
86)	p-Isopropyltoluene	22.16	119	13025547	90.29 ug/l		98
87)	1,3-Dichlorobenzene	22.28	146	6611046	97.17 ug/l		97
88)	1,4-Dichlorobenzene	22.36	146	6135969	98.32 ug/l		99
89)	Benzyl Chloride	22.49	91	2920573	96.77 ug/l		99
90)	n-Butylbenzene	22.61	91	11745477	90.20 ug/l		97
91)	1,2-Dichlorobenzene	22.80	146	4932679	97.13 ug/l		98
92)	1,2-Dibromo-3-chloropropan	23.69	157	238132	100.62 ug/l		84
93)	1,2,4-Trichlorobenzene	24.69	180	2735476	118.34 ug/l		99
95)	Naphthalene	25.09	128	4430094	119.98 ug/l		99
96)	1,2,3-Trichlorobenzene	25.42	180	2128314	113.43 ug/l		99

SW 6/28/12

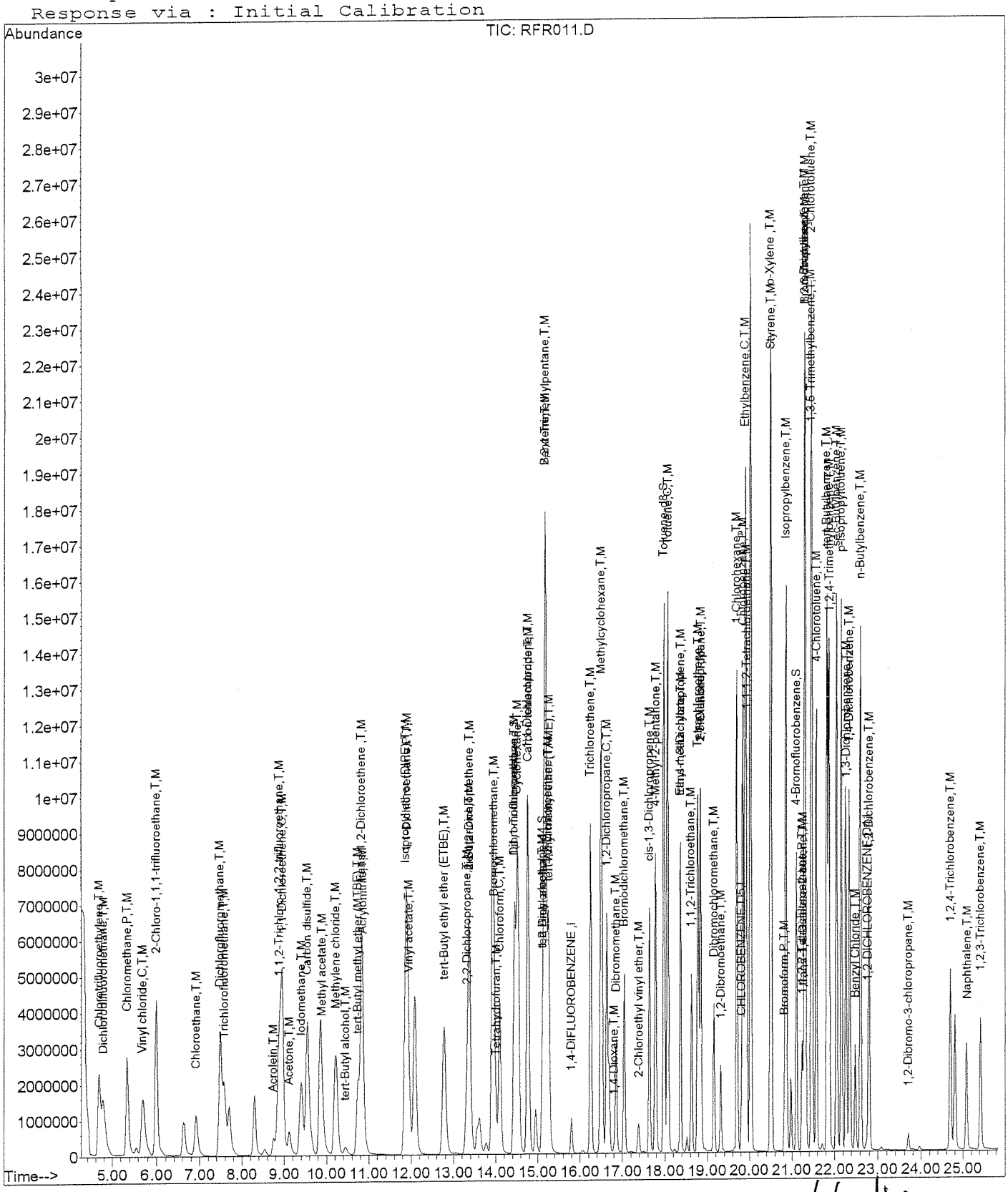
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F22\RFR011.D
Acq On : 22 Jun 2012 11:40 pm
Sample : VOF3F2210
Misc : 100ppb 8260/500ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 11:55 2012

Vial: 11
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SU 6/28/12

SECOND SOURCE VERIFICATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RFR017
Instrument ID: F3
GC Column: ZB-624 ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 06/26/12
BFB Injection Time : 12:17
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.49
75	30.0 - 60.0% of mass 95	37.40
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.57
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	77.10
175	5.0 - 9.0% of mass 174	6.09(7.9)1
176	95.0 - 101.0% of mass 174	74.70(96.9)1
177	5.0 - 9.0% of mass 176	5.34(7.2)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
1	VSTD010	IVOF3F2202	RFR018	06/26/12	12:53

FORM V VOA OLM02.0

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :F3
IC_Beginning DateTime :06/22/12 18:25
Spike Amount :10 PPB
CC/CV File :RFR018
IC File :RFR007

Column Spec :ZB-624 ID :0.25MM
IC_Ending DateTime :06/22/12 23:40
HPChem Method :VOF3F22
Date_Time :06/26/12 12:53

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1637974	1	1	15.782	15.798	0				
	2	Chlorotrifluoroethylene	9.241	-7.6	411600	0.251	0.272	4.683	4.683	12.57				
	3	Dichlorodifluoromethane	9.514	-4.9	558408	0.341	0.358	4.788	4.798	12.94				
	4	Chloromethane	9.221	-7.8	862945	0.527	0.571	5.338	5.343	10.03				
	5	2-Chloro-1,1,1-trifluoroethane	9.486	-5.1	620669	0.379	0.399	5.993	6.000	12.76				
	6	Vinyl chloride	9.797	-2.0	696617	0.425	0.434	5.680	5.691	10.00				
	7	Bromomethane	10.172	1.7	409937	0.250	0.246	6.662	6.664	11.19				
	8	Chloroethane	9.814	-1.9	405089	0.247	0.252	6.945	6.948	10.84				
	9	Dichlorofluoromethane	9.313	-6.9	1021136	0.623	0.669	7.481	7.495	7.20				
	10	Trichlorofluoromethane	10.432	4.3	663981	0.405	0.389	7.585	7.589	9.43				
5	11	Acrolein	42.558	-14.9	123442	0.015	0.018	8.745	8.749	13.36				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	9.538	-4.6	341620	0.209	0.219	8.879	8.891	8.09				
	13	1,1-Dichloroethene	9.128	-8.7	836839	0.511	0.560	8.938	8.956	7.77				
5	14	Acetone	43.141	-13.7	216640	0.026	0.031	9.117	9.125	12.34				
	15	Iodomethane	9.741	-2.6	823375	0.503	0.516	9.400	9.406	5.22				
	16	Methyl acetate	10.748	7.5	185716	0.113	0.105	9.876	9.899	7.58				
	17	Carbon disulfide	11.291	12.9	2123390	1.296	1.148	9.533	9.557	8.50				
	18	Methylene chloride	9.363	-6.4	636068	0.388	0.494	10.203	10.213	29.65	0.0243	0.3888		0.9980
5	19	tert-Butyl alcohol	52.248	4.5	97614	0.012	0.011	10.426	10.439	9.36				
	20	tert-Butyl methyl ether (MTBE)	10.229	2.3	660971	0.404	0.394	10.724	10.748	8.00				
	21	trans-1,2-Dichloroethene	9.274	-7.3	848424	0.518	0.559	10.813	10.835	7.41				
5	22	Acrylonitrile	44.478	-11.0	312389	0.038	0.043	10.843	10.873	10.39				
	23	Isopropyl ether (DIPE)	9.869	-1.3	1703347	1.040	1.054	11.854	11.874	6.58				
	24	1,1-Dichloroethane	9.509	-4.9	976112	0.596	0.627	11.899	11.912	6.95				
	25	Vinyl acetate	11.830	18.3	685756	0.419	0.354	11.929	11.955	14.90				
	26	tert-Butyl ethyl ether (ETBE)	10.383	3.8	1049480	0.641	0.617	12.762	12.780	7.68				
	27	2,2-Dichloropropane	8.921	-10.8	445765	0.272	0.305	13.312	13.325	13.13				
5	28	2-Butanone	48.040	-3.9	408362	0.050	0.052	13.372	13.396	11.99				
	29	cis-1,2-Dichloroethene	9.426	-5.7	639344	0.390	0.414	13.357	13.376	8.42				
	30	Bromochloromethane	9.420	-5.8	376392	0.230	0.244	13.952	13.967	8.28				
	31	Tetrahydrofuran	8.716	-12.8	51524	0.031	0.039	14.012	14.019	24.89	0.0022	0.0336		0.9965
	32	Chloroform	9.373	-6.3	801078	0.489	0.522	14.086	14.101	7.62				
	33	Dibromofluoromethane	9.846	-1.5	494180	0.302	0.306	14.443	14.449	6.31				
	34	1,1,1-Trichloroethane	9.423	-5.8	640575	0.391	0.415	14.443	14.450	9.40				
	35	Cyclohexane	10.431	4.3	1164758	0.711	0.682	14.517	14.520	9.24				
5	36	tert-Amyl alcohol	56.779	13.6	76220	0.009	0.008	15.098	15.114	8.92				
	37	1,2-Dichloroethane-d4	9.524	-4.8	292176	0.178	0.187	15.098	15.116	7.23				
	38	tert-Amyl methyl ether (TAME)	10.225	2.3	154015	0.094	0.092	15.246	15.260	8.14				
	39	CHLOROBENZENE-D5	10.000	0	1280154	1	1	19.799	19.815	0				
	40	2,2,4-Trimethylpentane	10.160	1.6	2462081	1.923	1.893	15.157	15.169	12.42				
	41	1,1-Dichloropropene	9.578	-4.2	304097	0.238	0.248	14.755	14.764	9.83				
	42	Carbon tetrachloride	9.716	-2.8	599670	0.468	0.482	14.755	14.770	6.66				
	43	Benzene	9.299	-7.0	1905451	1.488	1.601	15.172	15.178	14.39				
	44	1,2-Dichloroethane	9.416	-5.8	338764	0.265	0.281	15.246	15.257	8.11				
	45	Trichloroethene	9.703	-3.0	626862	0.490	0.505	16.243	16.248	8.08				
	46	Methylcyclohexane	11.570	15.7	1127150	0.880	0.761	16.496	16.497	7.68				
	47	1,2-Dichloropropane	9.642	-3.6	494209	0.386	0.400	16.615	16.632	8.38				
20	48	1,4-Dioxane	211.382	5.7	32836	0.001	0.001	16.809	16.814	12.96				
	49	Dibromomethane	9.942	-0.6	200364	0.157	0.157	16.838	16.855	5.33				
	50	Bromodichloromethane	9.683	-3.2	547534	0.428	0.442	17.032	17.048	6.13				
	51	2-Chloroethyl vinyl ether	8.370	-16.3	31813	0.025	0.030	17.389	17.393	11.48				
	52	cis-1,3-Dichloropropene	9.877	-1.2	644907	0.504	0.510	17.627	17.643	6.24				
5	53	4-Methyl-2-pentanone	46.838	-6.3	915795	0.143	0.153	17.775	17.790	11.08				
	54	Toluene-d8	9.512	-4.9	1746577	1.364	1.434	17.969	17.984	13.91				
	55	Toluene	9.568	-4.3	2063915	1.612	1.685	18.058	18.073	10.90				
	56	Ethyl methacrylate	10.363	3.6	335124	0.262	0.253	18.356	18.371	6.41				
	57	trans-1,3-Dichloropropene	10.019	0.2	437697	0.342	0.341	18.356	18.372	5.40				
	58	1,1,2-Trichloroethane	10.023	0.2	276635	0.216	0.216	18.624	18.628	8.08				
	59	Tetrachloroethene	9.741	-2.6	435824	0.340	0.350	18.772	18.783	9.90				
5	60	2-Hexanone	47.760	-4.5	586362	0.092	0.096	18.847	18.851	13.65				
	61	1,3-Dichloropropane	10.039	0.4	470346	0.367	0.366	18.832	18.847	6.53				
	62	Dibromochloromethane	10.184	1.8	357063	0.279	0.274	19.144	19.161	5.90				
	63	1,2-Dibromoethane	10.212	2.1	271764	0.212	0.208	19.308	19.323	6.11				
	64	1-Chlorohexane	9.653	-3.5	881527	0.689	0.713	19.695	19.698	9.01				
	65	Chlorobenzene	9.666	-3.3	1267359	0.990	1.024	19.844	19.845	9.03				
	66	Ethylbenzene	9.717	-2.8	2205411	1.723	1.773	19.903	19.904	11.37				
	67	1,1,1,2-Tetrachloroethane	9.836	-1.6	403757	0.315	0.321	19.918	19.927	5.92				
2	68	m-Xylene & p-Xylene	18.725	-6.4	3177453	1.241	1.326	20.022	20.024	11.20				
	69	o-Xylene	9.455	-5.4	1573214	1.229	1.300	20.483	20.497	10.12				
	70	Styrene	9.952	-0.5	1233273	0.963	0.968	20.513	20.514	6.37				
	71	1,2-DICHLOROBENZENE-D4	10.000	0	371895	1	1	22.774	22.776	0				
	72	Bromoform	10.660	6.6	157943	0.425	0.398	20.825	20.830	8.41				
	73	Isopropylbenzene	9.469	-5.3	1989583	5.350	5.650	20.855	20.867	10.43				
	74	4-Bromofluorobenzene	9.328	-6.7	475871	1.280	1.372	21.093	21.104	7.64				
	75	1,1,2,2-Tetrachloroethane	9.767	-2.3	269317	0.724	0.741	21.227	21.237	7.71				
	76	trans-1,4-Dichloro-2-butene	9.785	-2.1	64150	0.172	0.176	21.272	21.273	7.51				
	77	n-Propylbenzene	9.255	-7.5	2515620	6.764	7.309	21.301	21.303	10.30				
	78	1,2,3-Trichloropropane	10.147	1.5	68124	0.183	0.181	21.301	21.315	6.81				
	79	Bromobenzene	9.731	-2.7	406001	1.092	1.122	21.316	21.318	6.91				

SA
6/28/12

2077

80	1,3,5-Trimethylbenzene	9.151	-8.5	1495979	4.023	4.396	21.450	21.453	11.31				
81	2-Chlorotoluene	9.204	-8.0	1407532	3.785	4.112	21.465	21.467	10.93				
82	4-Chlorotoluene	9.350	-6.5	1248693	3.358	3.591	21.569	21.580	8.50				
83	tert-Butylbenzene	9.022	-9.8	365418	0.983	1.089	21.822	21.827	8.23				
84	1,2,4-Trimethylbenzene	9.258	-7.4	1423283	3.827	4.134	21.867	21.873	10.45				
85	sec-Butylbenzene	9.158	-8.4	2177490	5.855	6.393	22.045	22.047	11.00				
86	p-Isopropyltoluene	9.370	-6.3	1620754	4.358	4.651	22.164	22.166	9.08				
87	1,3-Dichlorobenzene	9.477	-5.2	773042	2.079	2.193	22.268	22.274	8.15				
88	1,4-Dichlorobenzene	9.775	-2.2	731379	1.967	2.012	22.358	22.362	6.82				
89	Benzyl Chloride	10.601	6.0	383600	1.031	0.973	22.492	22.493	11.45				
90	n-Butylbenzene	9.722	-2.8	1517801	4.081	4.198	22.596	22.609	8.14				
91	1,2-Dichlorobenzene	9.704	-3.0	590812	1.589	1.637	22.789	22.799	7.72				
92	1,2-Dibromo-3-chloropropane	11.122	11.2	31559	0.085	0.076	23.697	23.696	7.31				
93	1,2,4-Trichlorobenzene	9.404	-6.0	260613	0.701	0.745	24.693	24.695	14.91				
94	Hexachlorobutadiene	9.132	-8.7	178836	0.481	0.527	24.798	24.803	13.09				
95	Naphthalene	9.278	-7.2	410702	1.104	1.190	25.080	25.095	13.16				
96	1,2,3-Trichlorobenzene	9.411	-5.9	211697	0.569	0.605	25.422	25.425	12.49				

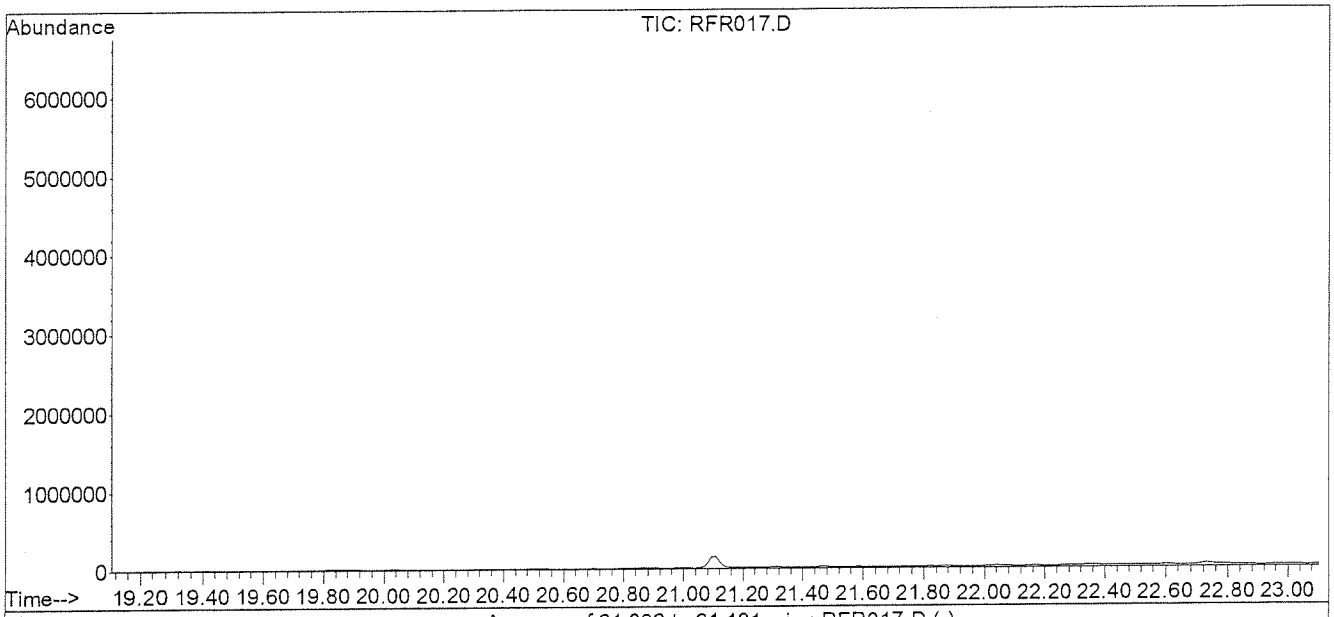
Spike Amount = Nominal Amount * M

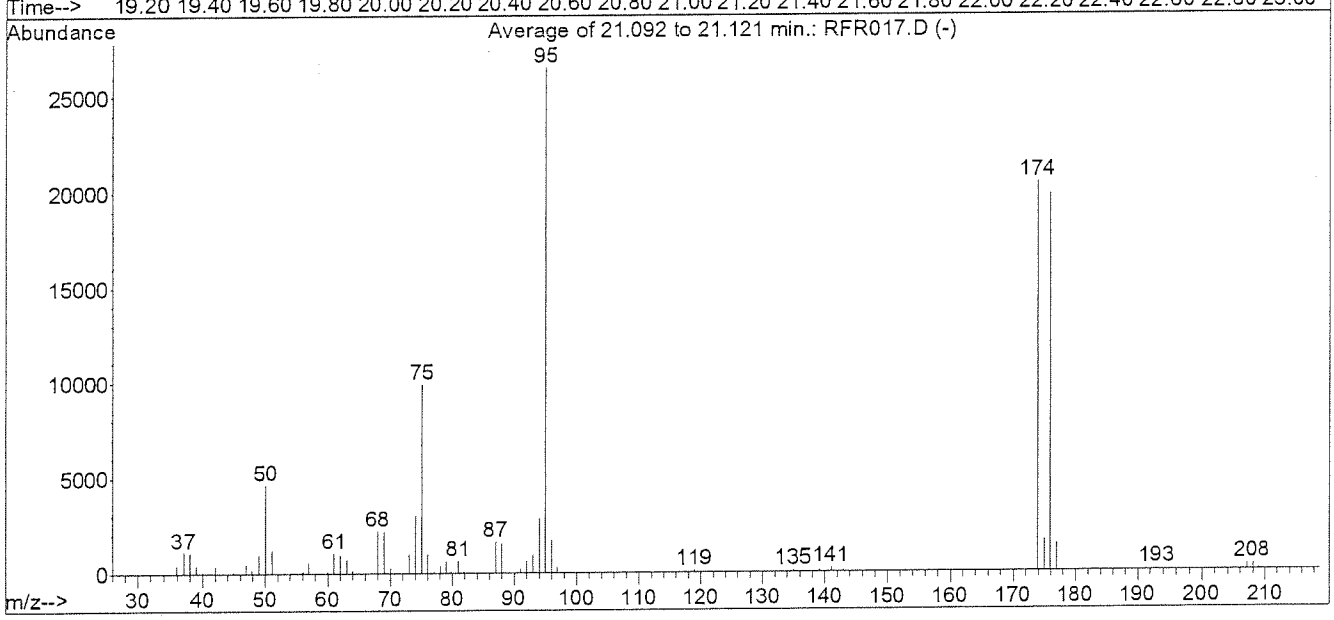
SW
6/28/12

BFB

Data File : C:\HPCHEM\1\DATA\12F26\RFR017.D
Acq On : 26 Jun 2012 12:17 pm
Sample : BFBF3F02
Misc : T/CHK
MS Integration Params: 524INT.P
Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML

Vial: 1
Operator: DN
Inst : F3
Multiplr: 1.00





AutoFind: Scans 1133, 1134, 1135; Background Corrected with Scan 1123

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	4634	PASS
75	95	30	60	37.4	9908	PASS
95	95	100	100	100.0	26495	PASS
96	95	5	9	6.6	1741	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.1	20427	PASS
175	174	5	9	7.9	1614	PASS
176	174	95	101	96.9	19792	PASS
177	176	5	9	7.2	1416	PASS

RFR017.D VOF3F22.M Wed Jun 27 12:15:19 2012

34 6/28/12

2079

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	123	-0.02
2	T,M	Chlorotrifluoroethylene	10.000	9.241	7.6	107	0.00
3	T,M	Dichlorodifluoromethane	10.000	9.514	4.9	110	0.00
4	P,T,M	Chloromethane	10.000	9.221	7.8	103	0.00
5	T,M	2-Chloro-1,1,1-trifluoroeth	10.000	9.486	5.1	106	0.00
6	C,T,M	Vinyl chloride	10.000	9.797	2.0	109	0.00
7	T,M	Bromomethane	10.000	10.172	-1.7	114	0.00
8	T,M	Chloroethane	10.000	9.814	1.9	112	0.00
9	T,M	Dichlorofluoromethane	10.000	9.313	6.9	109	-0.02
10	T,M	Trichlorofluoromethane	10.000	10.432	-4.3	118	0.00
11	T,M	Acrolein	50.000	42.558	14.9	100	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.538	4.6	118	0.00
13	C,T,M	1,1-Dichloroethene	10.000	9.128	8.7	109	-0.02
14	T,M	Acetone	50.000	43.142	13.7	103	0.00
15	T,M	Iodomethane	10.000	9.741	2.6	118	0.00
16	T,M	Methyl acetate	10.000	10.748	-7.5	129	-0.02
17	T,M	Carbon disulfide	10.000	11.291	-12.9	129	-0.02
18	T,M	Methylene chloride	10.000	9.363	6.4	108	0.00
19	T,M	tert-Butyl alcohol	50.000	52.248	-4.5	114	0.00
20	T,M	tert-Butyl methyl ether (MT	10.000	10.229	-2.3	123	-0.02
21	T,M	trans-1,2-Dichloroethene	10.000	9.274	7.3	113	-0.02
22	T,M	Acrylonitrile	50.000	44.478	11.0	96	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.869	1.3	116	-0.02
24	P,T,M	1,1-Dichloroethane	10.000	9.509	4.9	115	0.00
25	T,M	Vinyl acetate	10.000	11.830	-18.3	125	-0.02
26	T,M	tert-Butyl ethyl ether (ETB	10.000	10.383	-3.8	122	-0.02
27	T,M	2,2-Dichloropropane	10.000	8.921	10.8	113	0.00
28	T,M	2-Butanone	50.000	48.040	3.9	101	0.00
29	T,M	cis-1,2-Dichloroethene	10.000	9.426	5.7	117	-0.02
30	T,M	Bromochloromethane	10.000	9.420	5.8	110	0.00
31	T,M	Tetrahydrofuran	10.000	8.716	12.8	105	0.00
32	C,T,M	Chloroform	10.000	9.373	6.3	114	0.00
33	S	Dibromofluoromethane	10.000	9.846	1.5	116	0.00
34	T,M	1,1,1-Trichloroethane	10.000	9.423	5.8	112	0.00
35	T,M	Cyclohexane	10.000	10.431	-4.3	126	0.00
36	T,M	tert-Amyl alcohol	50.000	56.779	-13.6	129	0.00
37	S	1,2-Dichloroethane-d4	10.000	9.523	4.8	110	-0.02
38	T,M	tert-Amyl methyl ether (TAM	10.000	10.225	-2.2	126	0.00
39	I	CHLOROBENZENE-D5	10.000	10.000	0.0	120	-0.02
40	T,M	2,2,4-Trimethylpentane	10.000	10.160	-1.6	122	0.00
41	T,M	1,1-Dichloropropene	10.000	9.578	4.2	120	0.00
42	T,M	Carbon tetrachloride	10.000	9.716	2.8	115	0.00
43	T,M	Benzene	10.000	9.299	7.0	117	0.00
44	T,M	1,2-Dichloroethane	10.000	9.416	5.8	110	0.00
45	T,M	Trichloroethene	10.000	9.703	3.0	120	0.00
46	T,M	Methylcyclohexane	10.000	11.570	-15.7	139	0.00
47	C,T,M	1,2-Dichloropropane	10.000	9.642	3.6	116	-0.02
48	T,M	1,4-Dioxane	200.000	211.382	-5.7	111	0.00
49	T,M	Dibromomethane	10.000	9.942	0.6	116	-0.02
50	T,M	Bromodichloromethane	10.000	9.683	3.2	114	-0.02
51	T,M	2-Chloroethyl vinyl ether	10.000	8.370	16.3	94	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	9.877	1.2	117	-0.02
53	T,M	4-Methyl-2-pentanone	50.000	46.838	6.3	100	0.00

(#) = Out of Range

6/28/12

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
54	S	Toluene-d8	10.000	9.512	4.9	118	0.00
55	C,T,M	Toluene	10.000	9.569	4.3	116	0.00
56	T,M	Ethyl methacrylate	10.000	10.363	-3.6	119	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	10.019	-0.2	116	-0.02
58	T,M	1,1,2-Trichloroethane	10.000	10.023	-0.2	119	0.00
59	T,M	Tetrachloroethene	10.000	9.741	2.6	123	0.00
60	T,M	2-Hexanone	50.000	47.760	4.5	98	0.00
61	T,M	1,3-Dichloropropane	10.000	10.039	-0.4	115	0.00
62	T,M	Dibromochloromethane	10.000	10.184	-1.8	118	-0.02
63	T,M	1,2-Dibromoethane	10.000	10.213	-2.1	118	0.00
64	T,M	1-Chlorohexane	10.000	9.653	3.5	117	0.00
65	P,M	Chlorobenzene	10.000	9.666	3.3	116	0.00
66	C,T,M	Ethylbenzene	10.000	9.717	2.8	114	0.00
67	T,M	1,1,1,2-Tetrachloroethane	10.000	9.836	1.6	119	0.00
68	T,M	m-Xylene & p-Xylene	20.000	18.725	6.4	112	0.00
69	T,M	o-Xylene	10.000	9.455	5.4	112	0.00
70	T,M	Styrene	10.000	9.952	0.5	114	0.00
71	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	117	0.00
72	P,T,M	Bromoform	10.000	10.660	-6.6	124	0.00
73	T,M	Isopropylbenzene	10.000	9.469	5.3	113	0.00
74	S	4-Bromofluorobenzene	10.000	9.328	6.7	110	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.767	2.3	113	0.00
76	T,M	trans-1,4-Dichloro-2-butene	10.000	9.786	2.1	108	0.00
77	T,M	n-Propylbenzene	10.000	9.255	7.4	110	0.00
78	T,M	1,2,3-Trichloropropane	10.000	10.147	-1.5	114	0.00
79	T,M	Bromobenzene	10.000	9.731	2.7	116	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	9.151	8.5	109	0.00
81	T,M	2-Chlorotoluene	10.000	9.204	8.0	108	0.00
82	T,M	4-Chlorotoluene	10.000	9.350	6.5	110	0.00
83	T,M	tert-Butylbenzene	10.000	9.022	9.8	110	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.258	7.4	110	0.00
85	T,M	sec-Butylbenzene	10.000	9.159	8.4	111	0.00
86	T,M	p-Isopropyltoluene	10.000	9.370	6.3	112	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.477	5.2	113	0.00
88	T,M	1,4-Dichlorobenzene	10.000	9.775	2.2	114	0.00
89	T,M	Benzyl Chloride	10.000	10.601	-6.0	123	0.00
90	T,M	n-Butylbenzene	10.000	9.722	2.8	113	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.704	3.0	114	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	11.122	-11.2	121	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.404	6.0	116	0.00
94	T,M	Hexachlorobutadiene	10.000	9.132	8.7	122	0.00
95	T,M	Naphthalene	10.000	9.278	7.2	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	9.411	5.9	116	0.00

SW 6/28/12

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	123	-0.02
2	T,M	Chlorotrifluoroethylene	0.272	0.251	7.7	107	0.00
3	T,M	Dichlorodifluoromethane	0.358	0.341	4.7	110	0.00
4	P,T,M	Chloromethane	0.571 ✓	0.527	7.7	103	0.00
5	T,M	2-Chloro-1,1,1-trifluoroeth	0.399	0.379	5.0	106	0.00
6	C,T,M	Vinyl chloride	0.434	0.425	2.1	109	0.00
7	T,M	Bromomethane	0.246	0.250	-1.6	114	0.00
8	T,M	Chloroethane	0.252	0.247	2.0	112	0.00
9	T,M	Dichlorofluoromethane	0.669	0.623	6.9	109	-0.02
10	T,M	Trichlorofluoromethane	0.389	0.405	-4.1	118	0.00
11	T,M	Acrolein	0.018	0.015	16.7	100	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.219	0.209	4.6	118	0.00
13	C,T,M	1,1-Dichloroethene	0.560	0.511	8.8	109	-0.02
14	T,M	Acetone	0.031	0.026	16.1	103	0.00
15	T,M	Iodomethane	0.516	0.503	2.5	118	0.00
16	T,M	Methyl acetate	0.105	0.113	-7.6	129	-0.02
17	T,M	Carbon disulfide	1.148	1.296	-12.9	129	-0.02
18	T,M	Methylene chloride	0.494	0.388	21.5#	108	0.00
19	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	114	0.00
20	T,M	tert-Butyl methyl ether (MT	0.394	0.404	-2.5	123	-0.02
21	T,M	trans-1,2-Dichloroethene	0.559	0.518	7.3	113	-0.02
22	T,M	Acrylonitrile	0.043	0.038	11.6	96	-0.02
23	T,M	Isopropyl ether (DIPE)	1.054	1.040	1.3	116	-0.02
24	P,T,M	1,1-Dichloroethane	0.627 ✓	0.596	4.9	115	0.00
25	T,M	Vinyl acetate	0.354	0.419	-18.4	125	-0.02
26	T,M	tert-Butyl ethyl ether (ETB	0.617	0.641	-3.9	122	-0.02
27	T,M	2,2-Dichloropropane	0.305	0.272	10.8	113	0.00
28	T,M	2-Butanone	0.052	0.050	3.8	101	0.00
29	T,M	cis-1,2-Dichloroethene	0.414	0.390	5.8	117	-0.02
30	T,M	Bromochloromethane	0.244	0.230	5.7	110	0.00
31	T,M	Tetrahydrofuran	0.039	0.031	20.5#	105	0.00
32	C,T,M	Chloroform	0.522	0.489	6.3	114	0.00
33	S	Dibromofluoromethane	0.306	0.302	1.3	116	0.00
34	T,M	1,1,1-Trichloroethane	0.415	0.391	5.8	112	0.00
35	T,M	Cyclohexane	0.682	0.711	-4.3	126	0.00
36	T,M	tert-Amyl alcohol	0.008	0.009	-12.5	129	0.00
37	S	1,2-Dichloroethane-d4	0.187	0.178	4.8	110	-0.02
38	T,M	tert-Amyl methyl ether (TAM	0.092	0.094	-2.2	126	0.00
39	I	CHLOROBENZENE-D5	1.000	1.000	0.0	120	-0.02
40	T,M	2,2,4-Trimethylpentane	1.893	1.923	-1.6	122	0.00
41	T,M	1,1-Dichloropropene	0.248	0.238	4.0	120	0.00
42	T,M	Carbon tetrachloride	0.482	0.468	2.9	115	0.00
43	T,M	Benzene	1.601	1.488	7.1	117	0.00
44	T,M	1,2-Dichloroethane	0.281	0.265	5.7	110	0.00
45	T,M	Trichloroethene	0.505	0.490	3.0	120	0.00
46	T,M	Methylcyclohexane	0.761	0.880	-15.6	139	0.00
47	C,T,M	1,2-Dichloropropane	0.400	0.386	3.5	116	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	111	0.00
49	T,M	Dibromomethane	0.157	0.157	0.0	116	-0.02
50	T,M	Bromodichloromethane	0.442	0.428	3.2	114	-0.02
51	T,M	2-Chloroethyl vinyl ether	0.030	0.025	16.7	94	0.00
52	T,M	cis-1,3-Dichloropropene	0.510	0.504	1.2	117	-0.02
53	T,M	4-Methyl-2-pentanone	0.153	0.143	6.5	100	0.00

(#) = Out of Range

SM 6/28/12

2082

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	S	Toluene-d8	1.434	1.364	4.9	118	0.00
55	C,T,M	Toluene	1.685	1.612	4.3	116	0.00
56	T,M	Ethyl methacrylate	0.253	0.262	-3.6	119	0.00
57	T,M	trans-1,3-Dichloropropene	0.341	0.342	-0.3	116	-0.02
58	T,M	1,1,2-Trichloroethane	0.216	0.216	0.0	119	0.00
59	T,M	Tetrachloroethene	0.350	0.340	2.9	123	0.00
60	T,M	2-Hexanone	0.096	0.092	4.2	98	0.00
61	T,M	1,3-Dichloropropane	0.366	0.367	-0.3	115	0.00
62	T,M	Dibromochloromethane	0.274	0.279	-1.8	118	-0.02
63	T,M	1,2-Dibromoethane	0.208	0.212	-1.9	118	0.00
64	T,M	1-Chlorohexane	0.713	0.689	3.4	117	0.00
65	P,M	Chlorobenzene	1.024	0.990	3.3	116	0.00
66	C,T,M	Ethylbenzene	1.773	1.723	2.8	114	0.00
67	T,M	1,1,1,2-Tetrachloroethane	0.321	0.315	1.9	119	0.00
68	T,M	m-Xylene & p-Xylene	1.326	1.241	6.4	112	0.00
69	T,M	o-Xylene	1.300	1.229	5.5	112	0.00
70	T,M	Styrene	0.968	0.963	0.5	114	0.00
71	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	117	0.00
72	P,T,M	Bromoform	0.398	0.425	-6.8	124	0.00
73	T,M	Isopropylbenzene	5.650	5.350	5.3	113	0.00
74	S	4-Bromofluorobenzene	1.372	1.280	6.7	110	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	0.741	0.724	2.3	113	0.00
76	T,M	trans-1,4-Dichloro-2-butene	0.176	0.172	2.3	108	0.00
77	T,M	n-Propylbenzene	7.309	6.764	7.5	110	0.00
78	T,M	1,2,3-Trichloropropane	0.181	0.183	-1.1	114	0.00
79	T,M	Bromobenzene	1.122	1.092	2.7	116	0.00
80	T,M	1,3,5-Trimethylbenzene	4.396	4.023	8.5	109	0.00
81	T,M	2-Chlorotoluene	4.112	3.785	8.0	108	0.00
82	T,M	4-Chlorotoluene	3.591	3.358	6.5	110	0.00
83	T,M	tert-Butylbenzene	1.089	0.983	9.7	110	0.00
84	T,M	1,2,4-Trimethylbenzene	4.134	3.827	7.4	110	0.00
85	T,M	sec-Butylbenzene	6.393	5.855	8.4	111	0.00
86	T,M	p-Isopropyltoluene	4.651	4.358	6.3	112	0.00
87	T,M	1,3-Dichlorobenzene	2.193	2.079	5.2	113	0.00
88	T,M	1,4-Dichlorobenzene	2.012	1.967	2.2	114	0.00
89	T,M	Benzyl Chloride	0.973	1.031	-6.0	123	0.00
90	T,M	n-Butylbenzene	4.198	4.081	2.8	113	0.00
91	T,M	1,2-Dichlorobenzene	1.637	1.589	2.9	114	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.076	0.085	-11.8	121	0.00
93	T,M	1,2,4-Trichlorobenzene	0.745	0.701	5.9	116	0.00
94	T,M	Hexachlorobutadiene	0.527	0.481	8.7	122	0.00
95	T,M	Naphthalene	1.190	1.104	7.2	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.605	0.569	6.0	116	0.00

SA 6/28/12

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 12:15 2012

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.78	114	1637974	10.00	ug/l	-0.02
39) CHLOROBENZENE-D5	19.80	117	1280154	10.00	ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.77	152	371895	10.00	ug/l	0.00
System Monitoring Compounds						
33) Dibromofluoromethane	14.44	111	494180	9.85	ug/l	0.00
Spiked Amount 10.000			Recovery	=	98.50%	
37) 1,2-Dichloroethane-d4	15.10	65	292176	9.52	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	95.20%	
54) Toluene-d8	17.97	98	1746577	9.51	ug/l	0.00
Spiked Amount 10.000			Recovery	=	95.10%	
74) 4-Bromofluorobenzene	21.09	95	475871	9.33	ug/l	0.00
Spiked Amount 10.000			Recovery	=	93.30%	
Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.68	116	411600	9.24	ug/l	99
3) Dichlorodifluoromethane	4.79	85	558408	9.51	ug/l	99
4) Chloromethane	5.34	50	862945	9.22	ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	620669	9.49	ug/l	97
6) Vinyl chloride	5.68	62	696617	9.80	ug/l	100
7) Bromomethane	6.66	94	409937	10.17	ug/l	100
8) Chloroethane	6.94	64	405089	9.81	ug/l	98
9) Dichlorofluoromethane	7.48	67	1021136	9.31	ug/l	99
10) Trichlorofluoromethane	7.58	101	663981	10.43	ug/l	99
11) Acrolein	8.75	56	123442	42.56	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	8.88	151	341620	9.54	ug/l	99
13) 1,1-Dichloroethene	8.94	61	836839	9.13	ug/l	98
14) Acetone	9.12	43	216640	43.14	ug/l	98
15) Iodomethane	9.40	142	823375	9.74	ug/l	98
16) Methyl acetate	9.88	43	185716	10.75	ug/l	99
17) Carbon disulfide	9.53	76	2123390	11.29	ug/l	100
18) Methylene chloride	10.20	49	636068	9.36	ug/l	97
19) tert-Butyl alcohol	10.43	59	97614	52.25	ug/l	99
20) tert-Butyl methyl ether (M	10.72	73	660971	10.23	ug/l	99
21) trans-1,2-Dichloroethene	10.81	61	848424	9.27	ug/l	97
22) Acrylonitrile	10.84	53	312389	44.48	ug/l	95
23) Isopropyl ether (DIPE)	11.85	45	1703347	9.87	ug/l	98
24) 1,1-Dichloroethane	11.90	63	976112	9.51	ug/l	100
25) Vinyl acetate	11.93	43	685756	11.83	ug/l	94
26) tert-Butyl ethyl ether (ET	12.76	59	1049480	10.38	ug/l	99
27) 2,2-Dichloropropane	13.31	77	445765	8.92	ug/l	99
28) 2-Butanone	13.37	43	408362	48.04	ug/l	98
29) cis-1,2-Dichloroethene	13.36	96	639344	9.43	ug/l	98
30) Bromochloromethane	13.95	49	376392	9.42	ug/l	94
31) Tetrahydrofuran	14.01	42	51524	8.72	ug/l	91
32) Chloroform	14.09	83	801078	9.37	ug/l	99
34) 1,1,1-Trichloroethane	14.44	97	640575	9.42	ug/l	99
35) Cyclohexane	14.52	56	1164758	10.43	ug/l	98
36) tert-Amyl alcohol	15.10	59	76220	56.78	ug/l	86
38) tert-Amyl methyl ether (TA	15.25	87	154015	10.23	ug/l	96
40) 2,2,4-Trimethylpentane	15.16	57	2462081	10.16	ug/l	99
41) 1,1-Dichloropropene	14.76	110	304097	9.58	ug/l	99
42) Carbon tetrachloride	14.76	119	599670	9.72	ug/l	99
43) Benzene	15.17	78	1905451	9.30	ug/l	99
44) 1,2-Dichloroethane	15.25	62	338764	9.42	ug/l	99

(#) = qualifier out of range (m) = manual integration SA 6/28/12

2084

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 12:15 2012

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	Trichloroethene	16.24	130	626862	9.70 ug/l	98
46)	Methylcyclohexane	16.50	83	1127150	11.57 ug/l	98
47)	1,2-Dichloropropane	16.62	63	494209	9.64 ug/l	99
48)	1,4-Dioxane	16.81	88	32836	211.38 ug/l	100
49)	Dibromomethane	16.84	93	200364	9.94 ug/l	95
50)	Bromodichloromethane	17.03	83	547534	9.68 ug/l	100
51)	2-Chloroethyl vinyl ether	17.39	63	31813	8.37 ug/l	97
52)	cis-1,3-Dichloropropene	17.63	75	644907	9.88 ug/l	98
53)	4-Methyl-2-pentanone	17.78	43	915795	46.84 ug/l	99
55)	Toluene	18.06	91	2063915	9.57 ug/l	100
56)	Ethyl methacrylate	18.36	69	335124	10.36 ug/l	97
57)	trans-1,3-Dichloropropene	18.36	75	437697	10.02 ug/l	97
58)	1,1,2-Trichloroethane	18.62	97	276635	10.02 ug/l	99
59)	Tetrachloroethene	18.77	164	435824	9.74 ug/l	97
60)	2-Hexanone	18.85	43	586362	47.76 ug/l	97
61)	1,3-Dichloropropane	18.83	76	470346	10.04 ug/l	99
62)	Dibromochloromethane	19.14	129	357063	10.18 ug/l	98
63)	1,2-Dibromoethane	19.31	107	271764	10.21 ug/l	100
64)	1-Chlorohexane	19.69	91	881527	9.65 ug/l	98
65)	Chlorobenzene	19.84	112	1267359	9.67 ug/l	98
66)	Ethylbenzene	19.90	91	2205411	9.72 ug/l	99
67)	1,1,1,2-Tetrachloroethane	19.92	131	403757	9.84 ug/l	98
68)	m-Xylene & p-Xylene	20.02	91	3177453	18.72 ug/l	99
69)	o-Xylene	20.48	91	1573214	9.46 ug/l	99
70)	Styrene	20.51	104	1233273	9.95 ug/l	99
72)	Bromoform	20.83	173	157943	10.66 ug/l	99
73)	Isopropylbenzene	20.86	105	1989583	9.47 ug/l	100
75)	1,1,2,2-Tetrachloroethane	21.23	83	269317	9.77 ug/l	100
76)	trans-1,4-Dichloro-2-buten	21.27	53	64150	9.79 ug/l	97
77)	n-Propylbenzene	21.30	91	2515620	9.25 ug/l	99
78)	1,2,3-Trichloropropane	21.30	110	68124	10.15 ug/l	96
79)	Bromobenzene	21.32	156	406001	9.73 ug/l	96
80)	1,3,5-Trimethylbenzene	21.45	105	1495979	9.15 ug/l	99
81)	2-Chlorotoluene	21.47	91	1407532	9.20 ug/l	99
82)	4-Chlorotoluene	21.57	91	1248693	9.35 ug/l	99
83)	tert-Butylbenzene	21.82	134	365418	9.02 ug/l	98
84)	1,2,4-Trimethylbenzene	21.87	105	1423283	9.26 ug/l	100
85)	sec-Butylbenzene	22.05	105	2177490	9.16 ug/l	100
86)	p-Isopropyltoluene	22.16	119	1620754	9.37 ug/l	100
87)	1,3-Dichlorobenzene	22.27	146	773042	9.48 ug/l	98
88)	1,4-Dichlorobenzene	22.36	146	731379	9.78 ug/l	99
89)	Benzyl Chloride	22.49	91	383600	10.60 ug/l	99
90)	n-Butylbenzene	22.60	91	1517801	9.72 ug/l	100
91)	1,2-Dichlorobenzene	22.79	146	590812	9.70 ug/l	99
92)	1,2-Dibromo-3-chloropropan	23.70	157	31559	11.12 ug/l	91
93)	1,2,4-Trichlorobenzene	24.69	180	260613	9.40 ug/l	99
94)	Hexachlorobutadiene	24.80	225	178836	9.13 ug/l	98
95)	Naphthalene	25.08	128	410702	9.28 ug/l	98
96)	1,2,3-Trichlorobenzene	25.42	180	211697	9.41 ug/l	99

SW 6/28/12

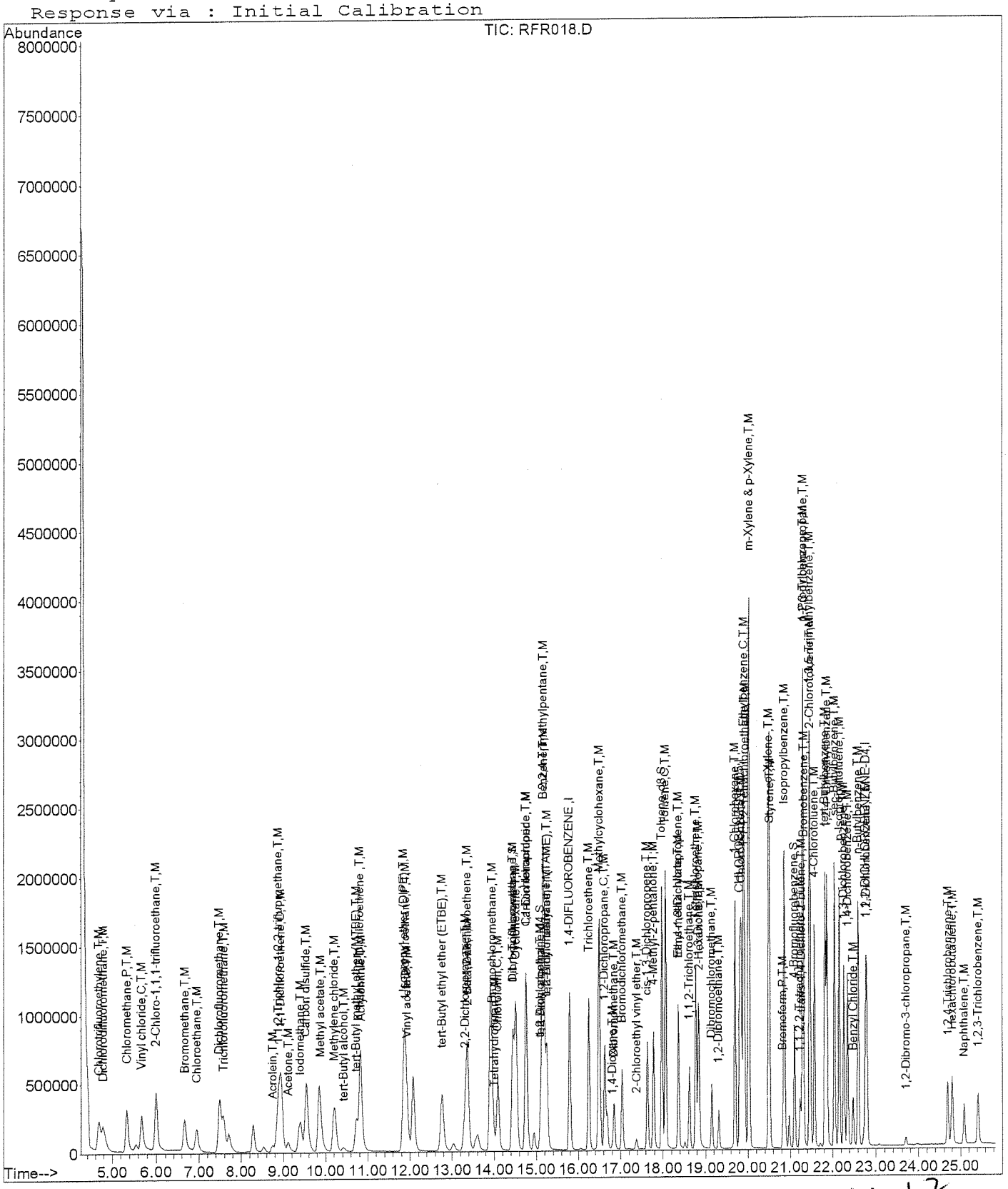
(#) = qualifier out of range (m) = manual integration
RFR018.D VOF3F22.M Wed Jun 27 12:16:09 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F26\RFR018.D
Acq On : 26 Jun 2012 12:53 pm
Sample : IVOF3F2202
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P
Quant Time: Jun 27 12:15 2012

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00
Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



SM 6/28/12

DAILY CALIBRATION(S)

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RFR061
Instrument ID: F3
GC Column: ZB-624 ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 06/28/12
BFB Injection Time : 09:29
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.89
75	30.0 - 60.0% of mass 95	36.49
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.51
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	69.25
175	5.0 - 9.0% of mass 174	5.92(8.5)1
176	95.0 - 101.0% of mass 174	68.35(98.7)1
177	5.0 - 9.0% of mass 176	4.90(7.2)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
1	VSTD010	CVOF3F2203	RFR062	06/28/12	10:05
2	MBLK1W	VOF3F04B	RFR066	06/28/12	12:25
3	LCS1W	VOF3F04L	RFR063	06/28/12	10:40
4	LCD1W	VOF3F04C	RFR064	06/28/12	11:14
5	06-26-12-TB-1	F196-08	RFR067	06/28/12	13:00
6	06-26-12-CW-1	F196-01	RFR068	06/28/12	13:35
7	06-26-12-FDUP-1	F196-02	RFR069	06/28/12	14:09
8	06-26-12-CW-5	F196-03	RFR070	06/28/12	14:44
9	06-26-12-CW-6	F196-04	RFR071	06/28/12	15:18
10	06-26-12-CW-6MS	F196-04M	RFR072	06/28/12	15:51
11	06-26-12-CW-9	F196-06	RFR076	06/28/12	18:02
12	06-26-12-CW-10	F196-07	RFR077	06/28/12	18:35
13	06-26-12-CW-6MSD	F196-04S	RFR078	06/28/12	19:10

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFR007
Instrument ID: F3
GC Column: ZB-624 ID: 0.25mm (mm)

Project: B & B, MONTHLY CITY WELL SAMPLING
SDG No.: 12F196
Date Analyzed: 06/22/12
Time Analyzed: 21:19
Heated Purge: (Y/N) N

	IS1(DBF)		IS2(CBZ)		IS3(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	1332948	15.80	1067554	19.82	316570	22.78
UPPER LIMIT	2665896	16.30	2135108	20.32	633140	23.28
LOWER LIMIT	666474	15.30	533777	19.32	158285	22.28
SAMPLE ID						
1 VSTD010	1384025	15.78	1093150	19.80	332472	22.76
2 MBLK1W	1654176	15.78	1304373	19.80	366829	22.76
3 LCS1W	1534265	15.78	1219333	19.80	339554	22.76
4 LCD1W	1563416	15.78	1255772	19.80	383579	22.76
5 06-26-12-TB-1	1567535	15.78	1178736	19.80	301716	22.76
6 06-26-12-CW-1	1509614	15.78	1184153	19.79	331659	22.77
7 06-26-12-FDUP-1	1569446	15.78	1194397	19.80	334098	22.77
8 06-26-12-CW-5	1557125	15.78	1255236	19.80	365936	22.77
9 06-26-12-CW-6	1637069	15.79	1205759	19.81	343295	22.77
10 06-26-12-CW-6MS	1283986	15.79	1012575	19.79	309451	22.77
11 06-26-12-CW-9	1584157	15.79	1204185	19.81	335702	22.77
12 06-26-12-CW-10	1571451	15.79	1189922	19.81	342262	22.77
13 06-26-12-CW-6MSD	1319170	15.79	1026020	19.81	293626	22.77

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-d4

AREA UPPER LIMIT = + 100% of internal standard area
AREA LOWER LIMIT = - 50% 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 used to flag internal standard area values with an asterisk
* Values outside of QC limits.

FORM VIII VOA-8260 1/2000

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :F3
IC_Beginning DateTime :06/22/12 18:25
SpTke Amount :10 PPB
CC/CV File :RFR062
IC File :RFR007

Column Spec :ZB-624 ID :0.25MM
IC_Ending DateTime :06/22/12 23:40
HPChem Method :VOF3F22
Date_Time :06/28/12 10:05

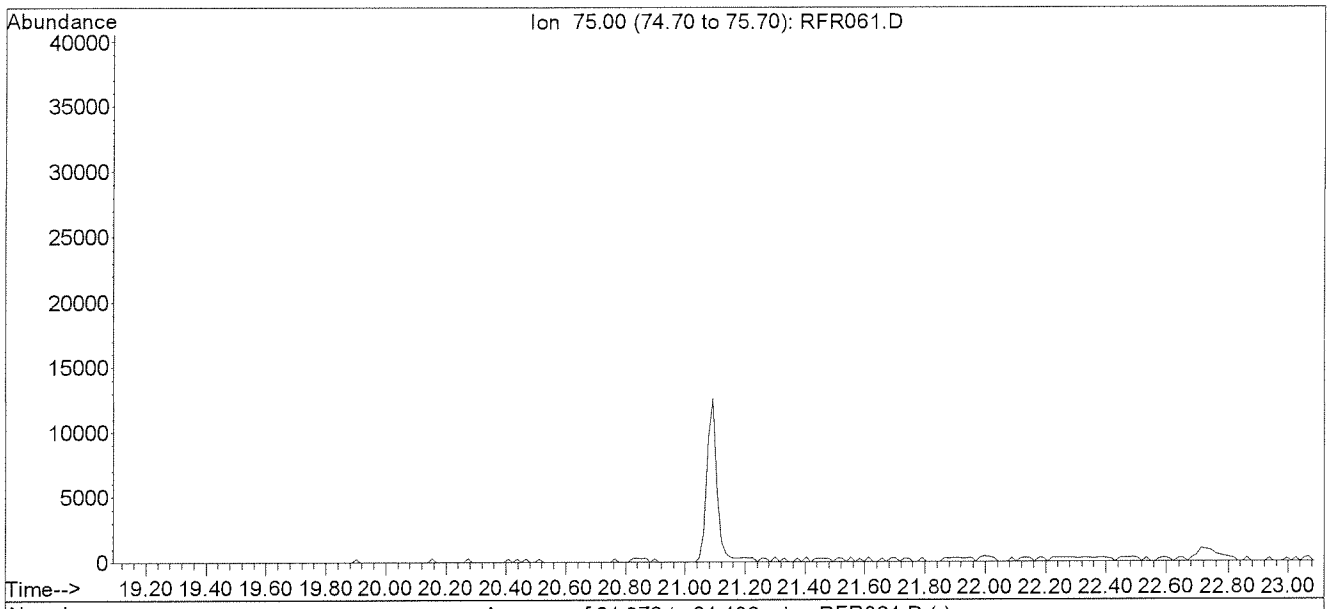
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AVRRF	CC_Rtm	AVRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1384025	1	1	15.782	15.798	0				
	2	Chlorotrifluoroethylene	8.199	-18.0	308608	0.223	0.272	4.668	4.683	12.57				
	3	Dichlorodifluoromethane	9.739	-2.6	483040	0.349	0.358	4.787	4.798	12.94				
	4	Chloromethane	8.917	-10.8	705207	0.510	0.571	5.338	5.343	10.03				
	5	2-Chloro-1,1,1-trifluoroethane	10.216	2.2	564848	0.408	0.399	5.993	6.000	12.76				
	6	Vinyl chloride	9.517	-4.8	571861	0.413	0.434	5.680	5.691	10.00				
	7	Bromomethane	10.569	5.7	359895	0.260	0.246	6.647	6.664	11.19				
	8	Chloroethane	9.827	-1.7	342756	0.248	0.252	6.930	6.948	10.84				
	9	Dichlorofluoromethane	9.186	-8.1	851077	0.615	0.669	7.480	7.495	7.20				
	10	Trichlorofluoromethane	10.995	9.9	591338	0.427	0.389	7.569	7.589	9.43				
5	11	Acrolein	48.842	-2.3	119704	0.017	0.018	8.730	8.749	13.36				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	9.137	-8.6	276544	0.200	0.219	8.879	8.891	8.09				
	13	1,1-Dichloroethene	8.978	-10.2	695502	0.503	0.560	8.923	8.956	7.77				
5	14	Acetone	46.858	-6.3	198823	0.029	0.031	9.102	9.125	12.34				
	15	Iodomethane	9.406	-5.9	671786	0.485	0.516	9.385	9.406	5.22				
	16	Methyl acetate	0.935	-90.7	13665	0.010	0.105	9.875	9.899	7.58				
	17	Carbon disulfide	9.084	-9.2	1443479	1.043	1.148	9.533	9.557	8.50				
	18	Methylene chloride	9.585	-4.1	549452	0.397	0.494	10.188	10.213	29.65	0.0243	0.3888		0.9980
5	19	tert-Butyl alcohol	47.606	-4.8	75153	0.011	0.011	10.411	10.439	9.36				
	20	tert-Butyl methyl ether (MTBE)	10.571	5.7	577180	0.417	0.394	10.724	10.748	8.00				
	21	trans-1,2-Dichloroethene	9.140	-8.6	706583	0.511	0.559	10.813	10.835	7.41				
5	22	Acrylonitrile	50.610	1.2	300346	0.043	0.043	10.842	10.873	10.39				
	23	Isopropyl ether (DIPE)	9.912	-0.9	1445623	1.045	1.054	11.839	11.874	6.58				
	24	1,1-Dichloroethane	9.314	-6.9	807862	0.584	0.627	11.884	11.912	6.95				
	25	Vinyl acetate	11.348	13.5	555870	0.402	0.354	11.914	11.955	14.90				
	26	tert-Butyl ethyl ether (ETBE)	10.895	9.0	930462	0.672	0.617	12.747	12.780	7.68				
	27	2,2-Dichloropropane	9.675	-3.2	408488	0.295	0.305	13.297	13.325	13.13				
5	28	2-Butanone	53.075	6.2	381218	0.055	0.052	13.357	13.396	11.99				
	29	cis-1,2-Dichloroethene	9.273	-7.3	531471	0.384	0.414	13.342	13.376	8.42				
	30	Bromochloromethane	9.698	-3.0	327441	0.237	0.244	13.937	13.967	8.28				
	31	Tetrahydrofuran	9.171	-8.3	45650	0.033	0.039	13.997	14.019	24.89	0.0022	0.0336		0.9965
	32	Chloroform	9.638	-3.6	696095	0.503	0.522	14.071	14.101	7.62				
	33	Dibromofluoromethane	10.190	1.9	432143	0.312	0.306	14.428	14.449	6.31				
	34	1,1,1-Trichloroethane	9.819	-1.8	564033	0.408	0.415	14.428	14.450	9.40				
	35	Cyclohexane												
5	36	tert-Amyl alcohol	2.826	-94.3	3206	0.000	0.008	15.097	15.114	8.92				
	37	1,2-Dichloroethane-d4	10.168	1.7	263609	0.190	0.187	15.097	15.116	7.23				
	38	tert-Amyl methyl ether (TAME)	10.866	8.7	138301	0.100	0.092	15.231	15.260	8.14				
	39	CHLOROBENZENE-D5	10.000	0	1093150	1	1	19.799	19.815	0				
	40	2,2,4-Trimethylpentane												
	41	1,1-Dichloropropene	9.304	-7.0	252252	0.231	0.248	14.740	14.764	9.83				
	42	Carbon tetrachloride	10.064	0.6	530456	0.485	0.482	14.740	14.770	6.66				
	43	Benzene	9.066	-9.3	1586522	1.451	1.601	15.157	15.178	14.39				
	44	1,2-Dichloroethane	9.879	-1.2	303534	0.278	0.281	15.231	15.257	8.11				
	45	Trichloroethene	9.325	-6.8	514423	0.471	0.505	16.228	16.248	8.08				
	46	Methylcyclohexane												
	47	1,2-Dichloropropane	9.528	-4.7	417081	0.382	0.400	16.615	16.632	8.38				
20	48	1,4-Dioxane	194.809	-2.6	25841	0.001	0.001	16.794	16.814	12.96				
	49	Dibromomethane	9.996	-0.0	172042	0.157	0.157	16.838	16.855	5.33				
	50	Bromodichloromethane	9.893	-1.1	477675	0.437	0.442	17.031	17.048	6.13				
	51	2-Chloroethyl vinyl ether	7.063	-29.4	22926	0.021	0.030	17.374	17.393	11.48				
	52	cis-1,3-Dichloropropene	9.864	-1.4	550029	0.503	0.510	17.627	17.643	6.24				
5	53	4-Methyl-2-pentanone	53.021	6.0	885249	0.162	0.153	17.775	17.790	11.08				
	54	Toluene-d8	9.305	-6.9	1459081	1.335	1.434	17.969	17.984	13.91				
	55	Toluene	9.299	-7.0	1712797	1.567	1.685	18.058	18.073	10.90				
	56	Ethyl methacrylate	10.241	2.4	282806	0.259	0.253	18.356	18.371	6.41				
	57	trans-1,3-Dichloropropene	10.140	1.4	378277	0.346	0.341	18.356	18.372	5.40				
	58	1,1,2-Trichloroethane	10.097	1.0	237981	0.218	0.216	18.608	18.628	8.08				
	59	Tetrachloroethene	9.055	-9.4	345997	0.317	0.350	18.772	18.783	9.90				
5	60	2-Hexanone	52.967	5.9	555292	0.102	0.096	18.832	18.851	13.65				
	61	1,3-Dichloropropane	10.003	0.0	400199	0.366	0.366	18.832	18.847	6.53				
	62	Dibromochloromethane	10.393	3.9	311171	0.285	0.274	19.144	19.161	5.90				
	63	1,2-Dibromoethane	9.997	-0.0	227171	0.208	0.208	19.308	19.323	6.11				
	64	1-Chlorohexane	9.317	-6.8	726583	0.665	0.713	19.680	19.698	9.01				
	65	Chlorobenzene	9.298	-7.0	1041019	0.952	1.024	19.828	19.845	9.03				
	66	Ethylbenzene	9.272	-7.3	1797069	1.644	1.773	19.888	19.904	11.37				
	67	1,1,1,2-Tetrachloroethane	9.640	-3.6	337904	0.309	0.321	19.918	19.927	5.92				
2	68	m-Xylene & p-Xylene	18.326	-8.4	2655594	1.215	1.326	20.007	20.024	11.20				
	69	o-Xylene	9.214	-7.9	1309122	1.198	1.300	20.483	20.497	10.12				
	70	Styrene	9.632	-3.7	1019331	0.932	0.968	20.498	20.514	6.37				
	71	1,2-DICHLOROBENZENE-D4	10.000	0	332472	1	1	22.759	22.776	0				
	72	Bromoform	9.688	-3.1	128325	0.386	0.398	20.825	20.830	8.41				
	73	Isopropylbenzene	8.663	-13.4	1627370	4.895	5.650	20.855	20.867	10.43				
	74	4-Bromofluorobenzene	9.110	-8.9	415495	1.250	1.372	21.093	21.104	7.64				
	75	1,1,2,2-Tetrachloroethane	9.411	-5.9	232006	0.698	0.741	21.227	21.237	7.71				
	76	trans-1,4-Dichloro-2-butene	9.686	-3.1	56771	0.171	0.176	21.257	21.273	7.51				
	77	n-Propylbenzene	8.683	-13.2	2110104	6.347	7.309	21.286	21.303	10.30				
	78	1,2,3-Trichloropropane	9.899	-1.0	59419	0.179	0.181	21.301	21.315	6.81				
	79	Bromobenzene	9.037	-9.6	337085	1.014	1.122	21.301	21.318	6.91				
	80	1,3,5-Trimethylbenzene	8.692	-13.1	1270438	3.821	4.396	21.435	21.453	11.31				
	81	2-Chlorotoluene	8.701	-13.0	1189661	3.578	4.112	21.450	21.467	10.93				
	82	4-Chlorotoluene	8.842	-11.6	1055749	3.175	3.591	21.569	21.580	8.50				
	83	tert-Butylbenzene	8.713	-12.9	315520	0.949	1.089	21.807	21.827	8.23				
	84	1,2,4-Trimethylbenzene	8.822	-11.8	1212585	3.647	4.134	21.867	21.873	10.45				
	85	sec-Butylbenzene	8.661	-13.4	1840933	5.537	6.393	22.030	22.047	11.00				
	86	p-Isopropyltoluene	8.954	-10.5	1384710	4.165	4.651	22.149	22.166	9.08				
	87	1,3-Dichlorobenzene	9.136	-8.6	666266	2.004	2.193	22.268	22.274	8.15				
	88	1,4-Dichlorobenzene	9.230	-7.7	617420	1.857	2.012	22.358	22.362	6.82				
	89	Benzyl Chloride	10.767	7.7	348293	1.048	0.973	22.477	22.493	11.45				
	90	n-Butylbenzene	9.368	-6.3	1307588	3.933	4.198	22.596	22.609	8.14				
	91	1,2-Dichlorobenzene	9.393	-6.1	511288	1.538	1.637	22.789	22.799	7.72				
	92	1,2-Dibromo-3-chloropropane	10.703	7.0	27151	0.082	0.076	23.682	23.696	7.31				
	93	1,2,4-Trichlorobenzene	8.887	-11.1	220178	0.662	0.745	24.678	24.695	14.91				
	94	Hexachlorobutadiene	8.461	-15.4	148135	0.446	0.527	24.783	24.803	13.09				
	95	Naphthalene	9.053	-9.5	358287	1.078	1.190	25.080	25.095	13.16				
	96	1,2,3-Trichlorobenzene	8.888	-11.1	178743	0.538	0.605	25.407	25.425	12.49				

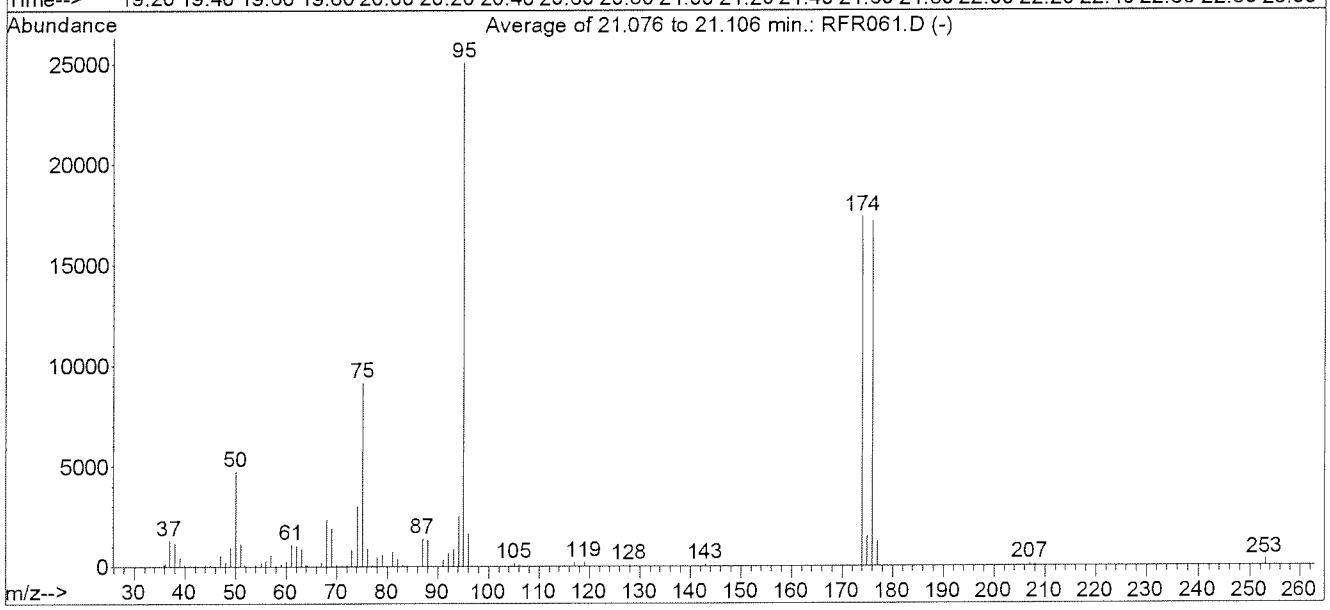
Spike Amount = Nominal Amount * M

BFB

Data File : C:\HPCHEM\1\DATA\12F28\RFR061.D
Acq On : 28 Jun 2012 9:29 am
Sample : BFBF3F04
Misc : T/CHK
MS Integration Params: 524INT.P
Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML

Vial: 1
Operator: DN
Inst : F3
Multiplr: 1.00





AutoFind: Scans 1132, 1133, 1134; Background Corrected with Scan 1127

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	4737	PASS
75	95	30	60	36.5	9151	PASS
95	95	100	100	100.0	25075	PASS
96	95	5	9	6.5	1633	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	69.2	17364	PASS
175	174	5	9	8.5	1484	PASS
176	174	95	101	98.7	17139	PASS
177	176	5	9	7.2	1228	PASS

RFR061.D VOF3F22.M Thu Jul 05 15:23:07 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	104	-0.02
2	T,M	Chlorotrifluoroethylene	10.000	8.200	18.0	80	-0.02
3	T,M	Dichlorodifluoromethane	10.000	9.740	2.6	95	0.00
4	P,T,M	Chloromethane	10.000	8.918	10.8	85	0.00
5	T,M	2-Chloro-1,1,1-trifluoroeth	10.000	10.217	-2.2	97	0.00
6	C,T,M	Vinyl chloride	10.000	9.518	4.8	90	0.00
7	T,M	Bromomethane	10.000	10.569	-5.7	100	-0.02
8	T,M	Chloroethane	10.000	9.827	1.7	95	-0.02
9	T,M	Dichlorofluoromethane	10.000	9.187	8.1	91	-0.02
10	T,M	Trichlorofluoromethane	10.000	10.996	-10.0	105	-0.02
11	T,M	Acrolein	50.000	48.842	2.3	97	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.137	8.6	95	0.00
13	C,T,M	1,1-Dichloroethene	10.000	8.978	10.2	91	-0.03
14	T,M	Acetone	50.000	46.858	6.3	95	-0.02
15	T,M	Iodomethane	10.000	9.406	5.9	97	-0.02
16	T,M	Methyl acetate	10.000	0.936	90.6#	10	-0.02
17	T,M	Carbon disulfide	10.000	9.084	9.2	88	-0.02
18	T,M	Methylene chloride	10.000	9.586	4.1	94	-0.02
19	T,M	tert-Butyl alcohol	50.000	47.607	4.8	88	-0.02
20	T,M	tert-Butyl methyl ether (MT	10.000	10.572	-5.7	108	-0.02
21	T,M	trans-1,2-Dichloroethene	10.000	9.140	8.6	94	-0.02
22	T,M	Acrylonitrile	50.000	50.610	-1.2	92	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.913	0.9	98	-0.03
24	P,T,M	1,1-Dichloroethane	10.000	9.314	6.9	95	-0.02
25	T,M	Vinyl acetate	10.000	11.349	-13.5	101	-0.03
26	T,M	tert-Butyl ethyl ether (ETB	10.000	10.895	-8.9	108	-0.03
27	T,M	2,2-Dichloropropane	10.000	9.675	3.2	103	-0.02
28	T,M	2-Butanone	50.000	53.076	-6.2	95	-0.02
29	T,M	cis-1,2-Dichloroethene	10.000	9.273	7.3	97	-0.03
30	T,M	Bromochloromethane	10.000	9.698	3.0	96	-0.02
31	T,M	Tetrahydrofuran	10.000	9.171	8.3	93	-0.02
32	C,T,M	Chloroform	10.000	9.639	3.6	99	-0.02
33	S	Dibromofluoromethane	10.000	10.190	-1.9	101	-0.02
34	T,M	1,1,1-Trichloroethane	10.000	9.819	1.8	99	-0.02
35	T,M	Cyclohexane	10.000	0.047	99.5#	0	-0.03
36	T,M	tert-Amyl alcohol	50.000	2.826	94.3#	5	0.00
37	S	1,2-Dichloroethane-d4	10.000	10.169	-1.7	99	-0.02
38	T,M	tert-Amyl methyl ether (TAM	10.000	10.867	-8.7	113	-0.02
39	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	-0.02
40	T,M	2,2,4-Trimethylpentane	10.000	0.043	99.6#	0	-0.03
41	T,M	1,1-Dichloropropene	10.000	9.304	7.0	99	-0.02
42	T,M	Carbon tetrachloride	10.000	10.065	-0.6	101	-0.02
43	T,M	Benzene	10.000	9.067	9.3	97	-0.02
44	T,M	1,2-Dichloroethane	10.000	9.880	1.2	99	-0.02
45	T,M	Trichloroethene	10.000	9.325	6.8	99	-0.02
46	T,M	Methylcyclohexane	10.000	0.041	99.6#	0	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	9.529	4.7	98	-0.02
48	T,M	1,4-Dioxane	200.000	194.809	2.6	87	-0.02
49	T,M	Dibromomethane	10.000	9.997	0.0	99	-0.02
50	T,M	Bromodichloromethane	10.000	9.893	1.1	100	-0.02
51	T,M	2-Chloroethyl vinyl ether	10.000	7.063	29.4#	68	-0.02
52	T,M	cis-1,3-Dichloropropene	10.000	9.865	1.3	99	-0.02
53	T,M	4-Methyl-2-pentanone	50.000	53.021	-6.0	96	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
54	S	Toluene-d8	10.000	9.305	7.0	98	0.00
55	C,T,M	Toluene	10.000	9.299	7.0	97	0.00
56	T,M	Ethyl methacrylate	10.000	10.241	-2.4	101	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	10.140	-1.4	100	-0.02
58	T,M	1,1,2-Trichloroethane	10.000	10.097	-1.0	102	-0.02
59	T,M	Tetrachloroethene	10.000	9.056	9.4	98	0.00
60	T,M	2-Hexanone	50.000	52.967	-5.9	93	-0.02
61	T,M	1,3-Dichloropropane	10.000	10.003	-0.0	98	0.00
62	T,M	Dibromochloromethane	10.000	10.393	-3.9	103	-0.02
63	T,M	1,2-Dibromoethane	10.000	9.997	0.0	98	0.00
64	T,M	1-Chlorohexane	10.000	9.318	6.8	96	-0.02
65	P,M	Chlorobenzene	10.000	9.298	7.0	96	-0.02
66	C,T,M	Ethylbenzene	10.000	9.273	7.3	93	-0.02
67	T,M	1,1,1,2-Tetrachloroethane	10.000	9.640	3.6	99	0.00
68	T,M	m-Xylene & p-Xylene	20.000	18.326	8.4	94	-0.02
69	T,M	o-Xylene	10.000	9.214	7.9	93	0.00
70	T,M	Styrene	10.000	9.633	3.7	94	-0.02
71	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	105	-0.02
72	P,T,M	Bromoform	10.000	9.688	3.1	101	0.00
73	T,M	Isopropylbenzene	10.000	8.663	13.4	92	0.00
74	S	4-Bromofluorobenzene	10.000	9.110	8.9	96	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.412	5.9	97	0.00
76	T,M	trans-1,4-Dichloro-2-butene	10.000	9.687	3.1	96	-0.02
77	T,M	n-Propylbenzene	10.000	8.683	13.2	92	-0.02
78	T,M	1,2,3-Trichloropropane	10.000	9.900	1.0	99	0.00
79	T,M	Bromobenzene	10.000	9.038	9.6	97	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	8.693	13.1	93	-0.02
81	T,M	2-Chlorotoluene	10.000	8.702	13.0	91	-0.02
82	T,M	4-Chlorotoluene	10.000	8.843	11.6	93	0.00
83	T,M	tert-Butylbenzene	10.000	8.714	12.9	95	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	8.823	11.8	94	0.00
85	T,M	sec-Butylbenzene	10.000	8.661	13.4	94	-0.02
86	T,M	p-Isopropyltoluene	10.000	8.955	10.4	95	-0.02
87	T,M	1,3-Dichlorobenzene	10.000	9.137	8.6	98	0.00
88	T,M	1,4-Dichlorobenzene	10.000	9.230	7.7	97	0.00
89	T,M	Benzyl Chloride	10.000	10.767	-7.7	112	-0.02
90	T,M	n-Butylbenzene	10.000	9.369	6.3	97	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.393	6.1	99	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.703	-7.0	104	-0.02
93	T,M	1,2,4-Trichlorobenzene	10.000	8.887	11.1	98	-0.02
94	T,M	Hexachlorobutadiene	10.000	8.461	15.4	101	-0.02
95	T,M	Naphthalene	10.000	9.053	9.5	99	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.888	11.1	98	-0.02

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	104	-0.02
2	T,M	Chlorotrifluoroethylene	0.272	0.223	18.0	80	-0.02
3	T,M	Dichlorodifluoromethane	0.358	0.349	2.5	95	0.00
4	P,T,M	Chloromethane	0.571	0.510	10.7	85	0.00
5	T,M	2-Chloro-1,1,1-trifluoroeth	0.399	0.408	-2.3	97	0.00
6	C,T,M	Vinyl chloride	0.434	0.413	4.8	90	0.00
7	T,M	Bromomethane	0.246	0.260	-5.7	100	-0.02
8	T,M	Chloroethane	0.252	0.248	1.6	95	-0.02
9	T,M	Dichlorofluoromethane	0.669	0.615	8.1	91	-0.02
10	T,M	Trichlorofluoromethane	0.389	0.427	-9.8	105	-0.02
11	T,M	Acrolein	0.018	0.017	5.6	97	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.219	0.200	8.7	95	0.00
13	C,T,M	1,1-Dichloroethene	0.560	0.503	10.2	91	-0.03
14	T,M	Acetone	0.031	0.029	6.5	95	-0.02
15	T,M	Iodomethane	0.516	0.485	6.0	97	-0.02
16	T,M	Methyl acetate	0.105	0.010	90.5#	10#	-0.02
17	T,M	Carbon disulfide	1.148	1.043	9.1	88	-0.02
18	T,M	Methylene chloride	0.494	0.397	19.6	94	-0.02
19	T,M	tert-Butyl alcohol	0.011	0.011	0.0	88	-0.02
20	T,M	tert-Butyl methyl ether (MT	0.394	0.417	-5.8	108	-0.02
21	T,M	trans-1,2-Dichloroethene	0.559	0.511	8.6	94	-0.02
22	T,M	Acrylonitrile	0.043	0.043	0.0	92	-0.02
23	T,M	Isopropyl ether (DIPE)	1.054	1.045	0.9	98	-0.03
24	P,T,M	1,1-Dichloroethane	0.627	0.584	6.9	95	-0.02
25	T,M	Vinyl acetate	0.354	0.402	-13.6	101	-0.03
26	T,M	tert-Butyl ethyl ether (ETB	0.617	0.672	-8.9	108	-0.03
27	T,M	2,2-Dichloropropane	0.305	0.295	3.3	103	-0.02
28	T,M	2-Butanone	0.052	0.055	-5.8	95	-0.02
29	T,M	cis-1,2-Dichloroethene	0.414	0.384	7.2	97	-0.03
30	T,M	Bromochloromethane	0.244	0.237	2.9	96	-0.02
31	T,M	Tetrahydrofuran	0.039	0.033	15.4	93	-0.02
32	C,T,M	Chloroform	0.522	0.503	3.6	99	-0.02
33	S	Dibromofluoromethane	0.306	0.312	-2.0	101	-0.02
34	T,M	1,1,1-Trichloroethane	0.415	0.408	1.7	99	-0.02
35	T,M	Cyclohexane	0.682	0.003	99.6#	0#	-0.03
36	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	5#	0.00
37	S	1,2-Dichloroethane-d4	0.187	0.190	-1.6	99	-0.02
38	T,M	tert-Amyl methyl ether (TAM	0.092	0.100	-8.7	113	-0.02
39	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	-0.02
40	T,M	2,2,4-Trimethylpentane	1.893	0.008	99.6#	0#	-0.03
41	T,M	1,1-Dichloropropene	0.248	0.231	6.9	99	-0.02
42	T,M	Carbon tetrachloride	0.482	0.485	-0.6	101	-0.02
43	T,M	Benzene	1.601	1.451	9.4	97	-0.02
44	T,M	1,2-Dichloroethane	0.281	0.278	1.1	99	-0.02
45	T,M	Trichloroethene	0.505	0.471	6.7	99	-0.02
46	T,M	Methylcyclohexane	0.761	0.003	99.6#	0#	-0.02
47	C,T,M	1,2-Dichloropropane	0.400	0.382	4.5	98	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	87	-0.02
49	T,M	Dibromomethane	0.157	0.157	0.0	99	-0.02
50	T,M	Bromodichloromethane	0.442	0.437	1.1	100	-0.02
51	T,M	2-Chloroethyl vinyl ether	0.030	0.021	30.0#	68	-0.02
52	T,M	cis-1,3-Dichloropropene	0.510	0.503	1.4	99	-0.02
53	T,M	4-Methyl-2-pentanone	0.153	0.162	-5.9	96	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	S	Toluene-d8	1.434	1.335	6.9	98	0.00
55	C,T,M	Toluene	1.685	1.567	7.0	97	0.00
56	T,M	Ethyl methacrylate	0.253	0.259	-2.4	101	0.00
57	T,M	trans-1,3-Dichloropropene	0.341	0.346	-1.5	100	-0.02
58	T,M	1,1,2-Trichloroethane	0.216	0.218	-0.9	102	-0.02
59	T,M	Tetrachloroethene	0.350	0.317	9.4	98	0.00
60	T,M	2-Hexanone	0.096	0.102	-6.2	93	-0.02
61	T,M	1,3-Dichloropropane	0.366	0.366	0.0	98	0.00
62	T,M	Dibromochloromethane	0.274	0.285	-4.0	103	-0.02
63	T,M	1,2-Dibromoethane	0.208	0.208	0.0	98	0.00
64	T,M	1-Chlorohexane	0.713	0.665	6.7	96	-0.02
65	P,M	Chlorobenzene	1.024	0.952	7.0	96	-0.02
66	C,T,M	Ethylbenzene	1.773	1.644	7.3	93	-0.02
67	T,M	1,1,1,2-Tetrachloroethane	0.321	0.309	3.7	99	0.00
68	T,M	m-Xylene & p-Xylene	1.326	1.215	8.4	94	-0.02
69	T,M	o-Xylene	1.300	1.198	7.8	93	0.00
70	T,M	Styrene	0.968	0.932	3.7	94	-0.02
71	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	105	-0.02
72	P,T,M	Bromoform	0.398	0.386	3.0	101	0.00
73	T,M	Isopropylbenzene	5.650	4.895	13.4	92	0.00
74	S	4-Bromofluorobenzene	1.372	1.250	8.9	96	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	0.741	0.698	5.8	97	0.00
76	T,M	trans-1,4-Dichloro-2-butene	0.176	0.171	2.8	96	-0.02
77	T,M	n-Propylbenzene	7.309	6.347	13.2	92	-0.02
78	T,M	1,2,3-Trichloropropane	0.181	0.179	1.1	99	0.00
79	T,M	Bromobenzene	1.122	1.014	9.6	97	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.396	3.821	13.1	93	-0.02
81	T,M	2-Chlorotoluene	4.112	3.578	13.0	91	-0.02
82	T,M	4-Chlorotoluene	3.591	3.175	11.6	93	0.00
83	T,M	tert-Butylbenzene	1.089	0.949	12.9	95	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.134	3.647	11.8	94	0.00
85	T,M	sec-Butylbenzene	6.393	5.537	13.4	94	-0.02
86	T,M	p-Isopropyltoluene	4.651	4.165	10.4	95	-0.02
87	T,M	1,3-Dichlorobenzene	2.193	2.004	8.6	98	0.00
88	T,M	1,4-Dichlorobenzene	2.012	1.857	7.7	97	0.00
89	T,M	Benzyl Chloride	0.973	1.048	-7.7	112	-0.02
90	T,M	n-Butylbenzene	4.198	3.933	6.3	97	0.00
91	T,M	1,2-Dichlorobenzene	1.637	1.538	6.0	99	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.076	0.082	-7.9	104	-0.02
93	T,M	1,2,4-Trichlorobenzene	0.745	0.662	11.1	98	-0.02
94	T,M	Hexachlorobutadiene	0.527	0.446	15.4	101	-0.02
95	T,M	Naphthalene	1.190	1.078	9.4	99	0.00
96	T,M	1,2,3-Trichlorobenzene	0.605	0.538	11.1	98	-0.02

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 10:31 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	15.78	114	1384025	10.00	ug/l	-0.02
39) CHLOROBENZENE-D5	19.80	117	1093150	10.00	ug/l	-0.02
71) 1,2-DICHLOROBENZENE-D4	22.76	152	332472	10.00	ug/l	-0.02
System Monitoring Compounds						
33) Dibromofluoromethane	14.43	111	432143	10.19	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.90%			
37) 1,2-Dichloroethane-d4	15.10	65	263609	10.17	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.70%			
54) Toluene-d8	17.97	98	1459081	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery = 93.10%			
74) 4-Bromofluorobenzene	21.09	95	415495	9.11	ug/l	0.00
Spiked Amount 10.000			Recovery = 91.10%			

Target Compounds						Qvalue
2) Chlorotrifluoroethylene	4.67	116	308608	8.20	ug/l	100
3) Dichlorodifluoromethane	4.79	85	483040	9.74	ug/l	100
4) Chloromethane	5.34	50	705207	8.92	ug/l	100
5) 2-Chloro-1,1,1-trifluoroet	5.99	118	564848	10.22	ug/l	100
6) Vinyl chloride	5.68	62	571861	9.52	ug/l	100
7) Bromomethane	6.65	94	359895	10.57	ug/l	99
8) Chloroethane	6.93	64	342756	9.83	ug/l	100
9) Dichlorofluoromethane	7.48	67	851077	9.19	ug/l	99
10) Trichlorofluoromethane	7.57	101	591338	11.00	ug/l	99
11) Acrolein	8.73	56	119704	48.84	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	8.88	151	276544	9.14	ug/l	99
13) 1,1-Dichloroethene	8.92	61	695502	8.98	ug/l	99
14) Acetone	9.10	43	198823	46.86	ug/l	98
15) Iodomethane	9.38	142	671786	9.41	ug/l	99
16) Methyl acetate	9.88	43	13665	0.94	ug/l	72
17) Carbon disulfide	9.53	76	1443479	9.08	ug/l	100
18) Methylene chloride	10.19	49	549452	9.59	ug/l	98
19) tert-Butyl alcohol	10.41	59	75153	47.61	ug/l	99
20) tert-Butyl methyl ether (M	10.72	73	577180	10.57	ug/l	98
21) trans-1,2-Dichloroethene	10.81	61	706583	9.14	ug/l	98
22) Acrylonitrile	10.84	53	300346	50.61	ug/l	99
23) Isopropyl ether (DIPE)	11.84	45	1445623	9.91	ug/l	99
24) 1,1-Dichloroethane	11.88	63	807862	9.31	ug/l	100
25) Vinyl acetate	11.91	43	555870	11.35	ug/l	92
26) tert-Butyl ethyl ether (ET	12.75	59	930462	10.89	ug/l	100
27) 2,2-Dichloropropane	13.30	77	408488	9.68	ug/l	100
28) 2-Butanone	13.36	43	381218	53.08	ug/l	100
29) cis-1,2-Dichloroethene	13.34	96	531471	9.27	ug/l	99
30) Bromochloromethane	13.94	49	327441	9.70	ug/l	97
31) Tetrahydrofuran	14.00	42	45650	9.17	ug/l	96
32) Chloroform	14.07	83	696095	9.64	ug/l	99
34) 1,1,1-Trichloroethane	14.43	97	564033	9.82	ug/l	99
36) tert-Amyl alcohol	15.10	59	3206	2.83	ug/l #	8
38) tert-Amyl methyl ether (TA	15.23	87	138301	10.87	ug/l	96
41) 1,1-Dichloropropene	14.74	110	252252	9.30	ug/l	99
42) Carbon tetrachloride	14.74	119	530456	10.06	ug/l	100
43) Benzene	15.16	78	1586522	9.07	ug/l	100
44) 1,2-Dichloroethane	15.23	62	303534	9.88	ug/l	99
45) Trichloroethene	16.23	130	514423	9.33	ug/l	99
47) 1,2-Dichloropropane	16.61	63	417081	9.53	ug/l	99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 10:31 2012 Quant Results File: VOF3F22.RES

Quant Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration
DataAcq Meth : VOF3F22

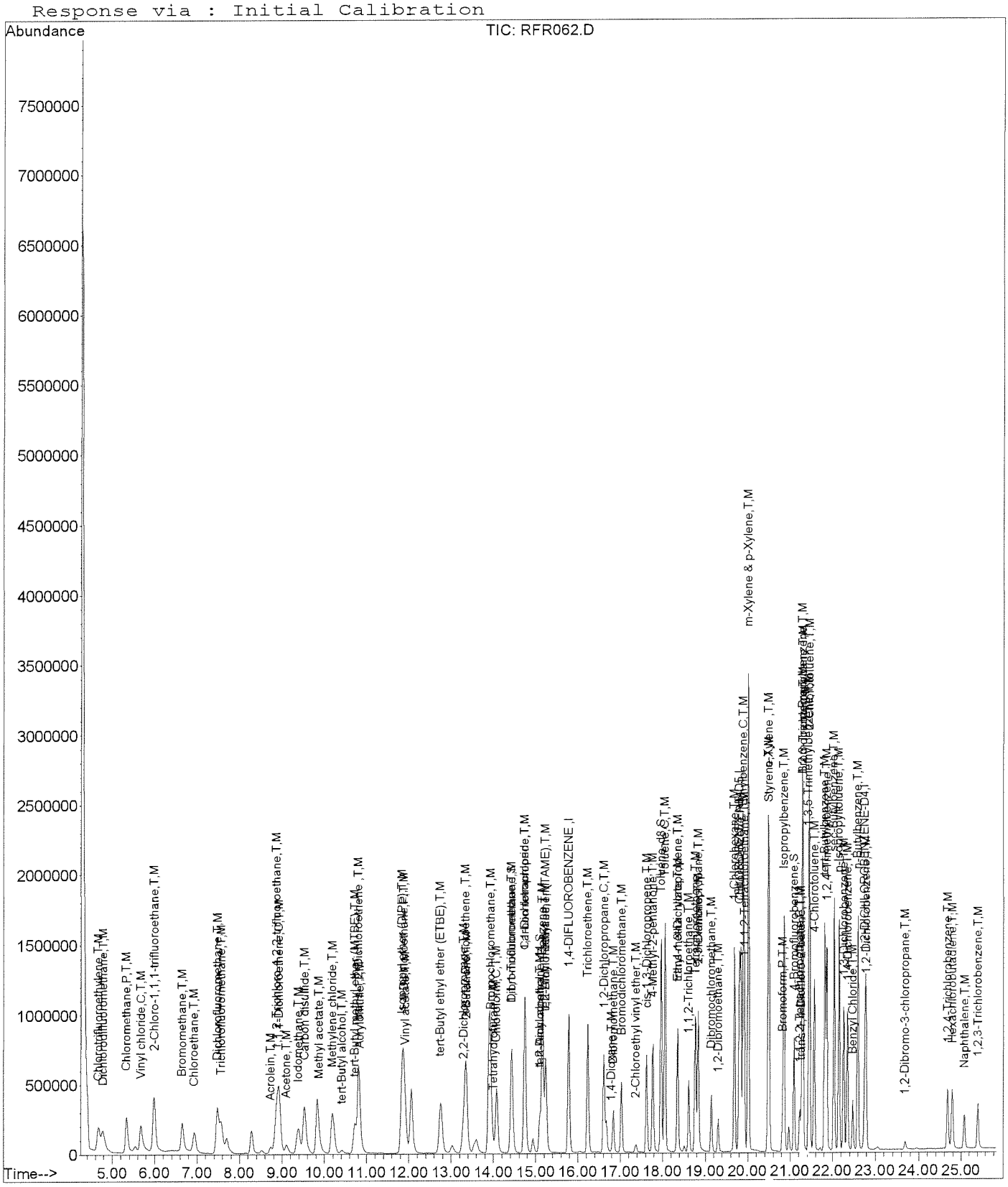
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
48) 1,4-Dioxane	16.79	88	25841	194.81 ug/l	100
49) Dibromomethane	16.84	93	172042	10.00 ug/l	99
50) Bromodichloromethane	17.03	83	477675	9.89 ug/l	99
51) 2-Chloroethyl vinyl ether	17.37	63	22926	7.06 ug/l	96
52) cis-1,3-Dichloropropene	17.63	75	550029	9.86 ug/l	100
53) 4-Methyl-2-pentanone	17.78	43	885249	53.02 ug/l	99
55) Toluene	18.06	91	1712797	9.30 ug/l	100
56) Ethyl methacrylate	18.36	69	282806	10.24 ug/l	98
57) trans-1,3-Dichloropropene	18.36	75	378277	10.14 ug/l	98
58) 1,1,2-Trichloroethane	18.61	97	237981	10.10 ug/l	98
59) Tetrachloroethene	18.77	164	345997	9.06 ug/l	99
60) 2-Hexanone	18.83	43	555292	52.97 ug/l	99
61) 1,3-Dichloropropane	18.83	76	400199	10.00 ug/l	100
62) Dibromochloromethane	19.14	129	311171	10.39 ug/l	100
63) 1,2-Dibromoethane	19.31	107	227171	10.00 ug/l	97
64) 1-Chlorohexane	19.68	91	726583	9.32 ug/l	99
65) Chlorobenzene	19.83	112	1041019	9.30 ug/l	98
66) Ethylbenzene	19.89	91	1797069	9.27 ug/l	100
67) 1,1,1,2-Tetrachloroethane	19.92	131	337904	9.64 ug/l	100
68) m-Xylene & p-Xylene	20.01	91	2655594	18.33 ug/l	100
69) o-Xylene	20.48	91	1309122	9.21 ug/l	100
70) Styrene	20.50	104	1019331	9.63 ug/l	100
72) Bromoform	20.83	173	128325	9.69 ug/l	99
73) Isopropylbenzene	20.85	105	1627370	8.66 ug/l	100
75) 1,1,2,2-Tetrachloroethane	21.23	83	232006	9.41 ug/l	100
76) trans-1,4-Dichloro-2-buten	21.26	53	56771	9.69 ug/l	95
77) n-Propylbenzene	21.29	91	2110104	8.68 ug/l	100
78) 1,2,3-Trichloropropane	21.30	110	59419	9.90 ug/l #	89
79) Bromobenzene	21.30	156	337085	9.04 ug/l	98
80) 1,3,5-Trimethylbenzene	21.44	105	1270438	8.69 ug/l	100
81) 2-Chlorotoluene	21.45	91	1189661	8.70 ug/l	99
82) 4-Chlorotoluene	21.57	91	1055749	8.84 ug/l	99
83) tert-Butylbenzene	21.81	134	315520	8.71 ug/l	98
84) 1,2,4-Trimethylbenzene	21.87	105	1212585	8.82 ug/l	100
85) sec-Butylbenzene	22.03	105	1840933	8.66 ug/l	99
86) p-Isopropyltoluene	22.15	119	1384710	8.95 ug/l	100
87) 1,3-Dichlorobenzene	22.27	146	666266	9.14 ug/l	99
88) 1,4-Dichlorobenzene	22.36	146	617420	9.23 ug/l	99
89) Benzyl Chloride	22.48	91	348293	10.77 ug/l	99
90) n-Butylbenzene	22.60	91	1307588	9.37 ug/l	100
91) 1,2-Dichlorobenzene	22.79	146	511288	9.39 ug/l	100
92) 1,2-Dibromo-3-chloropropan	23.68	157	27151	10.70 ug/l	91
93) 1,2,4-Trichlorobenzene	24.68	180	220178	8.89 ug/l	99
94) Hexachlorobutadiene	24.78	225	148135	8.46 ug/l	99
95) Naphthalene	25.08	128	358287	9.05 ug/l	99
96) 1,2,3-Trichlorobenzene	25.41	180	178743	8.89 ug/l	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\12F28\RFR062.D Vial: 2
Acq On : 28 Jun 2012 10:05 am Operator: DN
Sample : CVOF3F2203 Inst : F3
Misc : 10ppb 8260/50ppb TBA-KET-AA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 28 10:31 2012 Quant Results File: VOF3F22.RES

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Initial Calibration



5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGR076
Instrument ID: F3
GC Column: ZB-624 ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 07/06/12
BFB Injection Time : 12:07
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.51
75	30.0 - 60.0% of mass 95	38.74
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.54
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	67.18
175	5.0 - 9.0% of mass 174	5.72(8.5)1
176	95.0 - 101.0% of mass 174	64.69(96.3)1
177	5.0 - 9.0% of mass 176	5.14(8.0)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
1	VSTD010	CVOF3F2208	RGR077	07/06/12	12:45
2	MBLK2W	VOF3G04B	RGR081	07/06/12	14:59
3	LCS2W	VOF3G04L	RGR078	07/06/12	13:18
4	LCD2W	VOF3G04C	RGR079	07/06/12	13:52
5	06-26-12-CW-8	F196-05R	RGR086	07/06/12	17:53

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFR007
Instrument ID: F3
GC Column: ZB-624 ID: 0.25mm (mm)

Project: B & B, MONTHLY CITY WELL SAMPLING
SDG No.: 12F196
Date Analyzed: 06/22/12
Time Analyzed: 21:19
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1332948	15.80	1067554	19.82	316570	22.78
	UPPER LIMIT	2665896	16.30	2135108	20.32	633140	23.28
	LOWER LIMIT	666474	15.30	533777	19.32	158285	22.28
	SAMPLE ID						
1	VSTD010	1571451	15.79	1189922	19.81	342262	22.77
2	MBLK2W	1684873	15.79	1272913	19.81	355997	22.77
3	LCS2W	1521816	15.79	1224813	19.80	378350	22.77
4	LCD2W	1535623	15.79	1153930	19.81	342627	22.77
5	06-26-12-CW-8	1561117	15.79	1176881	19.81	334696	22.77

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-d4

AREA UPPER LIMIT = + 100% of internal standard area
AREA LOWER LIMIT = - 50% 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 used to flag internal standard area values with an asterisk
* Values outside of QC limits.

FORM VIII VOA-8260 1/2000

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :F3
IC_Beginning DateTime :06/22/12 18:25
Spike Amount :10_PPB
CC/CV File :RGR077
IC File :RFR007

Column Spec :ZB-624 ID :0.25MM
IC_Ending DateTime :06/22/12 23:40
HPChem Method :VOF3F22
Date_Time :07/06/12 12:45

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AVRRF	CC_Rtm	AVRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1409998	1	1	15.780	15.798	0				
	2	Chlorotrifluoroethylene	8.658	-13.4	331979	0.235	0.272	4.667	4.683	12.57				
	3	Dichlorodifluoromethane	9.478	-5.2	478885	0.340	0.358	4.786	4.798	12.94				
	4	Chloromethane	9.525	-4.8	767381	0.544	0.571	5.336	5.343	10.03				
	5	2-Chloro-1,1,1-trifluoroethane	11.354	13.5	639554	0.454	0.399	5.991	6.000	12.76				
	6	Vinyl chloride	10.132	1.3	620226	0.440	0.434	5.678	5.691	10.00				
	7	Bromomethane	10.913	9.1	378601	0.269	0.246	6.645	6.664	11.19				
	8	Chloroethane	9.998	-0.0	355294	0.252	0.252	6.928	6.948	10.84				
	9	Dichlorofluoromethane	9.149	-8.5	863517	0.612	0.669	7.478	7.495	7.20				
	10	Trichlorofluoromethane	11.242	12.4	615940	0.437	0.389	7.568	7.589	9.43				
5	11	Acrolein	39.316	-21.4	98166	0.014	0.018	8.728	8.749	13.36				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	9.125	-8.8	281351	0.200	0.219	8.877	8.891	8.09				
	13	1,1-Dichloroethene	8.696	-13.0	686352	0.487	0.560	8.936	8.956	7.77				
5	14	Acetone	49.645	-0.7	214604	0.030	0.031	9.100	9.125	12.34				
	15	Iodomethane	9.266	-7.3	674248	0.478	0.516	9.383	9.406	5.22				
	16	Methyl acetate	0.972	-90.3	14461	0.010	0.105	9.874	9.899	7.58				
	17	Carbon disulfide	9.940	-0.6	1609254	1.141	1.148	9.532	9.557	8.50				
	18	Methylene chloride	9.116	-8.8	534049	0.379	0.494	10.186	10.213	29.65	0.0243	0.3888		0.9980
5	19	tert-Butyl alcohol	45.138	-9.7	72594	0.010	0.011	10.409	10.439	9.36				
	20	tert-Butyl methyl ether (MTBE)	10.136	1.4	563823	0.400	0.394	10.722	10.748	8.00				
	21	trans-1,2-Dichloroethene	8.797	-12.0	692867	0.491	0.559	10.811	10.835	7.41				
5	22	Acrylonitrile	53.067	6.1	320837	0.046	0.043	10.841	10.873	10.39				
	23	Isopropyl ether (DIPE)	9.379	-6.2	1393543	0.988	1.054	11.852	11.874	6.58				
	24	1,1-Dichloroethane	9.161	-8.4	809555	0.574	0.627	11.882	11.912	6.95				
	25	Vinyl acetate	11.567	15.7	577230	0.409	0.354	11.927	11.955	14.90				
	26	tert-Butyl ethyl ether (ETBE)	10.610	6.1	923154	0.655	0.617	12.760	12.780	7.68				
	27	2,2-Dichloropropane	9.346	-6.5	402026	0.285	0.305	13.295	13.325	13.13				
5	28	2-Butanone	55.853	11.7	408700	0.058	0.052	13.355	13.396	11.99				
	29	cis-1,2-Dichloroethene	9.093	-9.1	530938	0.377	0.414	13.355	13.376	8.42				
	30	Bromochloromethane	9.128	-8.7	313989	0.223	0.244	13.935	13.967	8.28				
	31	Tetrahydrofuran	9.141	-8.6	46363	0.033	0.039	14.010	14.019	24.89	0.0022	0.0336		0.9965
	32	Chloroform	9.268	-7.3	681900	0.484	0.522	14.084	14.101	7.62				
	33	Dibromofluoromethane	9.710	-2.9	419552	0.298	0.306	14.426	14.449	6.31				
	34	1,1,1-Trichloroethane	9.443	-5.6	552645	0.392	0.415	14.426	14.450	9.40				
	35	Cyclohexane												
5	36	tert-Amyl alcohol	3.561	-92.9	4116	0.001	0.008	15.096	15.114	8.92				
	37	1,2-Dichloroethane-d4	9.625	-3.8	254199	0.180	0.187	15.096	15.116	7.23				
	38	tert-Amyl methyl ether (TAME)	10.514	5.1	136325	0.097	0.092	15.244	15.260	8.14				
	39	CHLOROBENZENE-D5	10.000	0	1087642	1	1	19.797	19.815	0				
	40	2,2,4-Trimethylpentane	10.244	2.4	2109339	1.939	1.893	15.155	15.169	12.42				
	41	1,1-Dichloropropene	9.351	-6.5	252258	0.232	0.248	14.753	14.764	9.83				
	42	Carbon tetrachloride	9.978	-0.2	523272	0.481	0.482	14.753	14.770	6.66				
	43	Benzene	8.987	-10.1	1564735	1.439	1.601	15.155	15.178	14.39				
	44	1,2-Dichloroethane	9.398	-6.0	287287	0.264	0.281	15.244	15.257	8.11				
	45	Trichloroethene	9.323	-6.8	511719	0.470	0.505	16.241	16.248	8.08				
	46	Methylcyclohexane												
	47	1,2-Dichloropropane	9.542	-4.6	415555	0.382	0.400	16.613	16.632	8.38				
20	48	1,4-Dioxane	212.283	6.1	28017	0.001	0.001	16.807	16.814	12.96				
	49	Dibromomethane	9.873	-1.3	169060	0.155	0.157	16.836	16.855	5.33				
	50	Bromodichloromethane	9.838	-1.6	472656	0.435	0.442	17.030	17.048	6.13				
	51	2-Chloroethyl vinyl ether	7.907	-20.9	25536	0.023	0.030	17.387	17.393	11.48				
	52	cis-1,3-Dichloropropene	9.713	-2.9	538862	0.495	0.510	17.625	17.643	6.24				
5	53	4-Methyl-2-pentanone	58.270	16.5	967989	0.178	0.153	17.774	17.790	11.08				
	54	Toluene-d8	9.211	-7.9	1437074	1.321	1.434	17.967	17.984	13.91				
	55	Toluene	9.277	-7.2	1700111	1.563	1.685	18.056	18.073	10.90				
	56	Ethyl methacrylate	10.076	0.8	276860	0.255	0.253	18.354	18.371	6.41				
	57	trans-1,3-Dichloropropene	9.855	-1.5	365816	0.336	0.341	18.354	18.372	5.40				
	58	1,1,2-Trichloroethane	9.808	-1.9	230005	0.211	0.216	18.622	18.628	8.08				
	59	Tetrachloroethene	9.387	-6.1	356846	0.328	0.350	18.770	18.783	9.90				
5	60	2-Hexanone	58.681	17.4	612099	0.113	0.096	18.845	18.851	13.65				
	61	1,3-Dichloropropane	9.875	-1.3	393088	0.361	0.366	18.830	18.847	6.53				
	62	Dibromochloromethane	10.299	3.0	306799	0.282	0.274	19.142	19.161	5.90				
	63	1,2-Dibromoethane	10.090	0.9	228141	0.210	0.208	19.306	19.323	6.11				
	64	1-Chlorohexane	9.439	-5.6	732386	0.673	0.713	19.693	19.698	9.01				
	65	Chlorobenzene	9.569	-4.3	1065985	0.980	1.024	19.841	19.845	9.03				
	66	Ethylbenzene	9.517	-4.8	1835146	1.687	1.773	19.901	19.904	11.37				
	67	1,1,1,2-Tetrachloroethane	9.985	-0.2	348251	0.320	0.321	19.916	19.927	5.92				
2	68	m-Xylene & p-Xylene	18.722	-6.4	2699359	1.241	1.326	20.020	20.024	11.20				
	69	o-Xylene	9.483	-5.2	1340640	1.233	1.300	20.481	20.497	10.12				
	70	Styrene	9.987	-0.1	1051510	0.967	0.968	20.511	20.514	6.37				
	71	1,2-DICHLOROBENZENE-D4	10.000	0	332919	1	1	22.772	22.776	0				
	72	Bromoform	10.110	1.1	134105	0.403	0.398	20.823	20.830	8.41				
	73	Isopropylbenzene	9.083	-9.2	1708616	5.132	5.650	20.853	20.867	10.43				
	74	4-Bromofluorobenzene	9.347	-6.5	426899	1.282	1.372	21.091	21.104	7.64				
	75	1,1,2,2-Tetrachloroethane	9.578	-4.2	236431	0.710	0.741	21.225	21.237	7.71				
	76	trans-1,4-Dichloro-2-butene	9.279	-7.2	54455	0.164	0.176	21.270	21.273	7.51				
	77	n-Propylbenzene	8.853	-11.5	2154421	6.471	7.309	21.299	21.303	10.30				
	78	1,2,3-Trichloropropane	9.822	-1.8	59036	0.177	0.181	21.299	21.315	6.81				
	79	Bromobenzene	9.233	-7.7	344839	1.036	1.122	21.314	21.318	6.91				
	80	1,3,5-Trimethylbenzene	9.014	-9.9	1319244	3.963	4.396	21.448	21.453	11.31				
	81	2-Chlorotoluene	8.909	-10.9	1219669	3.664	4.112	21.463	21.467	10.93				
	82	4-Chlorotoluene	8.985	-10.2	1074166	3.227	3.591	21.567	21.580	8.50				
	83	tert-Butylbenzene	9.008	-9.9	326631	0.981	1.089	21.820	21.827	8.23				
	84	1,2,4-Trimethylbenzene	8.895	-11.0	1224204	3.677	4.134	21.865	21.873	10.45				
	85	sec-Butylbenzene	8.931	-10.7	1901050	5.710	6.393	22.043	22.047	11.00				
	86	p-Isopropyltoluene	8.925	-10.7	1382056	4.151	4.651	22.162	22.166	9.08				
	87	1,3-Dichlorobenzene	9.191	-8.1	671183	2.016	2.193	22.267	22.274	8.15				
	88	1,4-Dichlorobenzene	9.320	-6.8	624277	1.875	2.012	22.356	22.362	6.82				
	89	Benzyl Chloride	9.814	-1.9	317924	0.955	0.973	22.490	22.493	11.45				
	90	n-Butylbenzene	9.136	-8.6	1276928	3.836	4.198	22.594	22.609	8.14				
	91	1,2-Dichlorobenzene	9.393	-6.1	511965	1.538	1.637	22.787	22.799	7.72				
	92	1,2-Dibromo-3-chloropropane	10.392	3.9	26399	0.079	0.076	23.695	23.696	7.31				
	93	1,2,4-Trichlorobenzene	8.899	-11.0	220784	0.663	0.745	24.691	24.695	14.91				
	94	Hexachlorobutadiene	9.257	-7.4	162291	0.487	0.527	24.796	24.803	13.09				
	95	Naphthalene	8.732	-12.7	346057	1.039	1.190	25.078	25.095	13.16				
	96	1,2,3-Trichlorobenzene	8.982	-10.2	180882	0.543	0.605	25.420	25.425	12.49				

Spike Amount = Nominal Amount * M

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12G06\RGR077.D
Acq On : 6 Jul 2012 12:45 pm
Sample : CVOF3F2208
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	106	-0.02
2	T,M	Chlorotrifluoroethylene	10.000	8.658	13.4	86	-0.02
3	T,M	Dichlorodifluoromethane	10.000	9.478	5.2	95	0.00
4	P,T,M	Chloromethane	10.000	9.525	4.7	92	0.00
5	T,M	2-Chloro-1,1,1-trifluoroeth	10.000	11.355	-13.6	109	0.00
6	C,T,M	Vinyl chloride	10.000	10.133	-1.3	97	0.00
7	T,M	Bromomethane	10.000	10.914	-9.1	105	-0.02
8	T,M	Chloroethane	10.000	9.999	0.0	98	-0.02
9	T,M	Dichlorofluoromethane	10.000	9.149	8.5	92	-0.02
10	T,M	Trichlorofluoromethane	10.000	11.242	-12.4	109	-0.02
11	T,M	Acrolein	50.000	39.316	21.4#	80	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.125	8.8	97	0.00
13	C,T,M	1,1-Dichloroethene	10.000	8.697	13.0	89	-0.02
14	T,M	Acetone	50.000	49.646	0.7	102	-0.02
15	T,M	Iodomethane	10.000	9.267	7.3	97	-0.02
16	T,M	Methyl acetate	10.000	0.972	90.3#	10	-0.02
17	T,M	Carbon disulfide	10.000	9.941	0.6	98	-0.02
18	T,M	Methylene chloride	10.000	9.117	8.8	91	-0.02
19	T,M	tert-Butyl alcohol	50.000	45.138	9.7	85	-0.02
20	T,M	tert-Butyl methyl ether (MT	10.000	10.137	-1.4	105	-0.02
21	T,M	trans-1,2-Dichloroethene	10.000	8.798	12.0	92	-0.02
22	T,M	Acrylonitrile	50.000	53.067	-6.1	99	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.379	6.2	95	-0.02
24	P,T,M	1,1-Dichloroethane	10.000	9.162	8.4	95	-0.02
25	T,M	Vinyl acetate	10.000	11.568	-15.7	105	-0.02
26	T,M	tert-Butyl ethyl ether (ETB	10.000	10.610	-6.1	107	-0.02
27	T,M	2,2-Dichloropropane	10.000	9.347	6.5	102	-0.02
28	T,M	2-Butanone	50.000	55.854	-11.7	101	-0.02
29	T,M	cis-1,2-Dichloroethene	10.000	9.093	9.1	97	-0.02
30	T,M	Bromochloromethane	10.000	9.128	8.7	92	-0.02
31	T,M	Tetrahydrofuran	10.000	9.141	8.6	95	0.00
32	C,T,M	Chloroform	10.000	9.268	7.3	97	0.00
33	S	Dibromofluoromethane	10.000	9.711	2.9	99	-0.02
34	T,M	1,1,1-Trichloroethane	10.000	9.444	5.6	97	-0.02
35	T,M	Cyclohexane	10.000	0.067	99.3#	1	-0.02
36	T,M	tert-Amyl alcohol	50.000	3.562	92.9#	7	0.00
~~37~~	~~S~~	~~1,2-Dichloroethane-d4~~	~~10.000~~	~~9.625~~	~~3.8~~	~~96~~	~~-0.02~~
38	T,M	tert-Amyl methyl ether (TAM	10.000	10.514	-5.1	112	0.00
39	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	-0.02
40	T,M	2,2,4-Trimethylpentane	10.000	10.245	-2.4	105	0.00
41	T,M	1,1-Dichloropropene	10.000	9.351	6.5	99	0.00
42	T,M	Carbon tetrachloride	10.000	9.979	0.2	100	0.00
43	T,M	Benzene	10.000	8.987	10.1	96	-0.02
44	T,M	1,2-Dichloroethane	10.000	9.398	6.0	94	0.00
45	T,M	Trichloroethene	10.000	9.323	6.8	98	0.00
46	T,M	Methylcyclohexane	10.000	0.056	99.4#	1	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	9.542	4.6	98	-0.02
48	T,M	1,4-Dioxane	200.000	212.283	-6.1	95	0.00
49	T,M	Dibromomethane	10.000	9.873	1.3	97	-0.02
50	T,M	Bromodichloromethane	10.000	9.839	1.6	99	-0.02
51	T,M	2-Chloroethyl vinyl ether	10.000	7.907	20.9#	76	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	9.713	2.9	97	-0.02
53	T,M	4-Methyl-2-pentanone	50.000	58.271	-16.5	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12G06\RGR077.D
Acq On : 6 Jul 2012 12:45 pm
Sample : CVOF3F2208
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
54	S	Toluene-d8	10.000	9.211	7.9	97	0.00
55	C,T,M	Toluene	10.000	9.277	7.2	96	0.00
56	T,M	Ethyl methacrylate	10.000	10.077	-0.8	98	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	9.856	1.4	97	-0.02
58	T,M	1,1,2-Trichloroethane	10.000	9.808	1.9	99	0.00
59	T,M	Tetrachloroethene	10.000	9.387	6.1	101	0.00
60	T,M	2-Hexanone	50.000	58.681	-17.4	102	0.00
61	T,M	1,3-Dichloropropane	10.000	9.875	1.3	96	0.00
62	T,M	Dibromochloromethane	10.000	10.299	-3.0	101	-0.02
63	T,M	1,2-Dibromoethane	10.000	10.091	-0.9	99	0.00
64	T,M	1-Chlorohexane	10.000	9.440	5.6	97	0.00
65	P,M	Chlorobenzene	10.000	9.569	4.3	98	0.00
66	C,T,M	Ethylbenzene	10.000	9.517	4.8	95	0.00
67	T,M	1,1,1,2-Tetrachloroethane	10.000	9.986	0.1	102	0.00
68	T,M	m-Xylene & p-Xylene	20.000	18.723	6.4	95	0.00
69	T,M	o-Xylene	10.000	9.484	5.2	95	0.00
70	T,M	Styrene	10.000	9.987	0.1	97	0.00
71	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	105	0.00
72	P,T,M	Bromoform	10.000	10.111	-1.1	105	0.00
73	T,M	Isopropylbenzene	10.000	9.084	9.2	97	0.00
74	S	4-Bromofluorobenzene	10.000	9.348	6.5	99	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.578	4.2	99	0.00
76	T,M	trans-1,4-Dichloro-2-butene	10.000	9.279	7.2	92	0.00
77	T,M	n-Propylbenzene	10.000	8.854	11.5	94	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.823	1.8	98	0.00
79	T,M	Bromobenzene	10.000	9.233	7.7	99	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	9.015	9.8	96	0.00
81	T,M	2-Chlorotoluene	10.000	8.909	10.9	94	0.00
82	T,M	4-Chlorotoluene	10.000	8.985	10.2	94	0.00
83	T,M	tert-Butylbenzene	10.000	9.009	9.9	98	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	8.895	11.1	95	0.00
85	T,M	sec-Butylbenzene	10.000	8.932	10.7	97	0.00
86	T,M	p-Isopropyltoluene	10.000	8.926	10.7	95	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.192	8.1	98	0.00
88	T,M	1,4-Dichlorobenzene	10.000	9.320	6.8	98	0.00
89	T,M	Benzyl Chloride	10.000	9.815	1.9	102	0.00
90	T,M	n-Butylbenzene	10.000	9.137	8.6	95	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.393	6.1	99	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.393	-3.9	101	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	8.900	11.0	98	0.00
94	T,M	Hexachlorobutadiene	10.000	9.257	7.4	110	0.00
95	T,M	Naphthalene	10.000	8.733	12.7	95	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.982	10.2	99	0.00

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12G06\RGR077.D
Acq On : 6 Jul 2012 12:45 pm
Sample : CVOF3F2208
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	106	-0.02
2	T,M	Chlorotrifluoroethylene	0.272	0.235	13.6	86	-0.02
3	T,M	Dichlorodifluoromethane	0.358	0.340	5.0	95	0.00
4	P,T,M	Chloromethane	0.571	0.544	4.7	92	0.00
5	T,M	2-Chloro-1,1,1-trifluoroeth	0.399	0.454	-13.8	109	0.00
6	C,T,M	Vinyl chloride	0.434	0.440	-1.4	97	0.00
7	T,M	Bromomethane	0.246	0.269	-9.3	105	-0.02
8	T,M	Chloroethane	0.252	0.252	0.0	98	-0.02
9	T,M	Dichlorofluoromethane	0.669	0.612	8.5	92	-0.02
10	T,M	Trichlorofluoromethane	0.389	0.437	-12.3	109	-0.02
11	T,M	Acrolein	0.018	0.014	22.2#	80	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.219	0.200	8.7	97	0.00
13	C,T,M	1,1-Dichloroethene	0.560	0.487	13.0	89	-0.02
14	T,M	Acetone	0.031	0.030	3.2	102	-0.02
15	T,M	Iodomethane	0.516	0.478	7.4	97	-0.02
16	T,M	Methyl acetate	0.105	0.010	90.5#	10#	-0.02
17	T,M	Carbon disulfide	1.148	1.141	0.6	98	-0.02
18	T,M	Methylene chloride	0.494	0.379	23.3#	91	-0.02
19	T,M	tert-Butyl alcohol	0.011	0.010	9.1	85	-0.02
20	T,M	tert-Butyl methyl ether (MT	0.394	0.400	-1.5	105	-0.02
21	T,M	trans-1,2-Dichloroethene	0.559	0.491	12.2	92	-0.02
22	T,M	Acrylonitrile	0.043	0.046	-7.0	99	-0.02
23	T,M	Isopropyl ether (DIPE)	1.054	0.988	6.3	95	-0.02
24	P,T,M	1,1-Dichloroethane	0.627	0.574	8.5	95	-0.02
25	T,M	Vinyl acetate	0.354	0.409	-15.5	105	-0.02
26	T,M	tert-Butyl ethyl ether (ETB	0.617	0.655	-6.2	107	-0.02
27	T,M	2,2-Dichloropropane	0.305	0.285	6.6	102	-0.02
28	T,M	2-Butanone	0.052	0.058	-11.5	101	-0.02
29	T,M	cis-1,2-Dichloroethene	0.414	0.377	8.9	97	-0.02
30	T,M	Bromochloromethane	0.244	0.223	8.6	92	-0.02
31	T,M	Tetrahydrofuran	0.039	0.033	15.4	95	0.00
32	C,T,M	Chloroform	0.522	0.484	7.3	97	0.00
33	S	Dibromofluoromethane	0.306	0.298	2.6	99	-0.02
34	T,M	1,1,1-Trichloroethane	0.415	0.392	5.5	97	-0.02
35	T,M	Cyclohexane	0.682	0.005	99.3#	1#	-0.02
36	T,M	tert-Amyl alcohol	0.008	0.001	87.5#	7#	0.00
37	S	1,2-Dichloroethane-d4	0.187	0.180	3.7	96	-0.02
38	T,M	tert-Amyl methyl ether (TAM	0.092	0.097	-5.4	112	0.00
39	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	-0.02
40	T,M	2,2,4-Trimethylpentane	1.893	1.939	-2.4	105	0.00
41	T,M	1,1-Dichloropropene	0.248	0.232	6.5	99	0.00
42	T,M	Carbon tetrachloride	0.482	0.481	0.2	100	0.00
43	T,M	Benzene	1.601	1.439	10.1	96	-0.02
44	T,M	1,2-Dichloroethane	0.281	0.264	6.0	94	0.00
45	T,M	Trichloroethene	0.505	0.470	6.9	98	0.00
46	T,M	Methylcyclohexane	0.761	0.004	99.5#	1#	-0.02
47	C,T,M	1,2-Dichloropropane	0.400	0.382	4.5	98	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	95	0.00
49	T,M	Dibromomethane	0.157	0.155	1.3	97	-0.02
50	T,M	Bromodichloromethane	0.442	0.435	1.6	99	-0.02
51	T,M	2-Chloroethyl vinyl ether	0.030	0.023	23.3#	76	0.00
52	T,M	cis-1,3-Dichloropropene	0.510	0.495	2.9	97	-0.02
53	T,M	4-Methyl-2-pentanone	0.153	0.178	-16.3	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\12G06\RGR077.D
Acq On : 6 Jul 2012 12:45 pm
Sample : CVOF3F2208
Misc : 10ppb 8260/50ppb TBA-KET-AA
MS Integration Params: 524INT.P

Vial: 2
Operator: DN
Inst : F3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOF3F22.M (RTE Integrator)
Title : METHOD 8260 25ML
Last Update : Wed Jun 27 11:45:02 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	S	Toluene-d8	1.434	1.321	7.9	97	0.00
55	C,T,M	Toluene	1.685	1.563	7.2	96	0.00
56	T,M	Ethyl methacrylate	0.253	0.255	-0.8	98	0.00
57	T,M	trans-1,3-Dichloropropene	0.341	0.336	1.5	97	-0.02
58	T,M	1,1,2-Trichloroethane	0.216	0.211	2.3	99	0.00
59	T,M	Tetrachloroethene	0.350	0.328	6.3	101	0.00
60	T,M	2-Hexanone	0.096	0.113	-17.7	102	0.00
61	T,M	1,3-Dichloropropane	0.366	0.361	1.4	96	0.00
62	T,M	Dibromochloromethane	0.274	0.282	-2.9	101	-0.02
63	T,M	1,2-Dibromoethane	0.208	0.210	-1.0	99	0.00
64	T,M	1-Chlorohexane	0.713	0.673	5.6	97	0.00
65	P,M	Chlorobenzene	1.024	0.980	4.3	98	0.00
66	C,T,M	Ethylbenzene	1.773	1.687	4.9	95	0.00
67	T,M	1,1,1,2-Tetrachloroethane	0.321	0.320	0.3	102	0.00
68	T,M	m-Xylene & p-Xylene	1.326	1.241	6.4	95	0.00
69	T,M	o-Xylene	1.300	1.233	5.2	95	0.00
70	T,M	Styrene	0.968	0.967	0.1	97	0.00
71	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	105	0.00
72	P,T,M	Bromoform	0.398	0.403	-1.3	105	0.00
73	T,M	Isopropylbenzene	5.650	5.132	9.2	97	0.00
74	S	4-Bromofluorobenzene	1.372	1.282	6.6	99	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	0.741	0.710	4.2	99	0.00
76	T,M	trans-1,4-Dichloro-2-butene	0.176	0.164	6.8	92	0.00
77	T,M	n-Propylbenzene	7.309	6.471	11.5	94	0.00
78	T,M	1,2,3-Trichloropropane	0.181	0.177	2.2	98	0.00
79	T,M	Bromobenzene	1.122	1.036	7.7	99	0.00
80	T,M	1,3,5-Trimethylbenzene	4.396	3.963	9.8	96	0.00
81	T,M	2-Chlorotoluene	4.112	3.664	10.9	94	0.00
82	T,M	4-Chlorotoluene	3.591	3.227	10.1	94	0.00
83	T,M	tert-Butylbenzene	1.089	0.981	9.9	98	0.00
84	T,M	1,2,4-Trimethylbenzene	4.134	3.677	11.1	95	0.00
85	T,M	sec-Butylbenzene	6.393	5.710	10.7	97	0.00
86	T,M	p-Isopropyltoluene	4.651	4.151	10.8	95	0.00
87	T,M	1,3-Dichlorobenzene	2.193	2.016	8.1	98	0.00
88	T,M	1,4-Dichlorobenzene	2.012	1.875	6.8	98	0.00
89	T,M	Benzyl Chloride	0.973	0.955	1.8	102	0.00
90	T,M	n-Butylbenzene	4.198	3.836	8.6	95	0.00
91	T,M	1,2-Dichlorobenzene	1.637	1.538	6.0	99	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.076	0.079	-3.9	101	0.00
93	T,M	1,2,4-Trichlorobenzene	0.745	0.663	11.0	98	0.00
94	T,M	Hexachlorobutadiene	0.527	0.487	7.6	110	0.00
95	T,M	Naphthalene	1.190	1.039	12.7	95	0.00
96	T,M	1,2,3-Trichlorobenzene	0.605	0.543	10.2	99	0.00

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

ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 8 ☐ EMAX-524.2 Rev.No. 7 ☐ EMAX-624 Rev.No. 4 ☐ EMAX-8260SIM Rev.No. 1 ☐ EMAX-TCPSIM Rev.No. 2 ☐ EMAX-M8260SIM Rev.No. 0 ☐

Start Date: 7/6/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # AF3 -006

BATCH CVOF3F2208

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RGR076	BFB F3G04	1ul					1207
02	077	CVOF3F2208	5/5/1/1ul					
03	078	VOF3G04L						
04	079	C						
05	080	RINSE	25ml					
06	081	VOF3G04B	25ml					
07	082	12F233-01R	25ml	1.0	/	/		
08	083	-15R			/	/		
09	084	12F198-06R			/	/		
10	085	12F247-01			/	/		
11	086	12F196-05R			/	/		
12	087	12F241-01			/	/		
13	088	12G006-23			/	/		
14	089	-24			/	/		
15	090	12G019-15			/	/		
16	091	12G014-04			/	/		
17	092	-01			/	/		
18	093	-02			/	/		
19	094	-03			/	/		
20	095	12F217-04R			/	/		
21	096	-05R			/	/		23:43
22	097	RINSE						
23	098							
24	099							
25								
26								
27								
28								
29								
30								

ck 7/09/12

Instrument No.	F3
INITIAL CALIBRATION REFERENCE	
DATE	6/22/12
ICAL ID	VOF3 F22

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC	SV1-19-69-2	1	250
	-90-1	5	250
DCC	-76-3	5	50/250
	-74-1	1	250
DCC	-55-1	1	
	-79-2	1	
DCC	-30-1	5	
	-82-3	1	
BFB	-68-2	1	50
IS/SURR.	-84-2	1	250
ICV/LCS	-69-3	1	
	-71-3	5	
ICV/LCS	-77-3	5	50/250
	-75-3	1	250
ICV/LCS	SV1-12-55-2	1	250
	-34-18	0.25	1000
ICV/LCS	-33-7	1.25	
	-32-11	0.25	
	-32-12	0.25	

DATA FILE FOLDER	12G06
Electronic Data Archival	
Location	Date
HPCHEM_VOA/TOF3	

Comments:

Analyzed By: DM

Date Disposed: 7/9/12

Disposed By: DM

21017

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 8 ☐ EMAX-524.2 Rev.No. 7 ☐ EMAX-624 Rev.No. 4 ☐ EMAX-8260SIM Rev.No. 1 ☐ EMAX-TCPSIM Rev.No. 2 ☐ EMAX-M8260SIM Rev.No. 0 ☐

Book # AF3 -005

Start Date: 6/22/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

BATCH VOF3F22

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
								5:36 pm
01	RFR001	BFB@3 F01 ✓	1µl	NA	NA			GAS, 8260 / Ket-AA-TBA-TAA
02	002	VOF3F22 1 /	A B .03 .15					.3 1.5ppb
03	003	2 /	.05 .25					.5 2.5
04	004	3 /	.1 .5					1 5
05	005	4 /	.2 1					2 10
06	006	5 /	.5 2.5					5 25
07	007	6 /	1 5					10 50
08	008	7 /	2 10					20 100
09	009	8 /	3 15					30 150
10	010	9 /	5 25					50 250
11	011	10 /	10 50					100 500
12	012	IS/SS	25mL					
13	013	VOF3F01B	↓					
14	014	I VOF3F22-01		↓	↓			bad spike → not used (1:200)
15	015	BLNKT						
16	016	↓						
17								
18								A: SS, CS, GAS, Freons
19								224TMP, 3all.
20								B: Ket-AA, 8260, TAA
21								
22								
23								
24								
25								
26								
27								
28								
29								DH 6/25/12
30								

Instrument No.	F3
INITIAL CALIBRATION REFERENCE	
DATE	6/22/12
ICAL ID	VOF3F22

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 Ket-AA	SV1-19-69-2	*	250
DCC 8260 GAS	-90-1		1250
DCC 3all 224TMP	-76-3		50/250
DCC TAA Freons	-74-1		250
BFB	-55-1		250
IS/SURR. ISS SSL	-79-2		250
ICV/LCS CS2 Ket-AA	-30-1		250
ICV/LCS 8260 GAS	-82-3		250
ICV/LCS 3all 224TMP	-68-2	1	50
ICV/LCS TAA CTFE	-84-1	*	250
2el-111TFA	-83-3	1	250
	-69-3	1	250
	-71-3	5	250
	-77-3	5	250
	-75-3	1	250
	-55-2	1	250
	SV1-12-34-18	.15	1000
	-33-7	1.25	
	-32-11	.25	
	-32-12	.25	

DATA FILE FOLDER 12F22

Electronic Data Archival

Location	Date
HPCHEM_VOA/TOF3	

Comments:

* Varied amount

Analyzed By: DH

Date Disposed: 6/25/12

Disposed By: DH

21008

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 8 ☐ EMAX-524.2 Rev.No. 7 ☐ EMAX-624 Rev.No. 4 ☐ EMAX-8260SIM Rev.No. 1 ☐ EMAX-TCPSIM Rev.No. 2 ☐ EMAX-M8260SIM Rev.No. 0 ☐

Start Date: 6/26/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # AF3 -005

BATCH 10F3F22

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	12F017	PFBF3F02 ✓	µL					12:17 pm
02	018	ILOF3F2202 ✓						
03	019	CLOF3F2201 ✓						
04	020	LOF3F22L ✓						
05	021	↓ C ✓						
06	022	Rinse	25mL					
07	023	LOF3F22B ✓	↓	1.0				
08	024	12F175-05 ✓	25mL	1.0	6	✓		
09	025	-06 ✓			<2	✓		
10	026	-01 ✓			✓	✓		
11	027	-02 ✓			✓	✓		
12	028	-03 ✓			✓	✓		
13	029	↓ -04 ✓			✓	✓		
14	030	12F188-01 ✓			✓	✓		
15	031	-02 ✓			✓	✓		
16	032	-03 ✓			✓	✓		
17	033	-04 ✓			✓	✓		
18	034	-05 ✓			✓	✓		
19	035	-06 ✓			✓	✓		
20	036	-07 ✓			✓	✓		
21	037	↓ -08 ✓	↓	↓	✓	✓		11:49 pm
22	038	Rinse						
23	039	↓						
24								
25								
26								
27								
28								
29								
30								

DY 6/27/12

Instrument No.	F3
INITIAL CALIBRATION REFERENCE	
DATE	6/27/12
ICAL ID	LOF3F22

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC	SM-19-67-7	1	50
	-80-1	5	250
DCC	-76-3	5	10/50
	-74-1	1	250
DCC	-55-1	1	250
	-79-2	1	250
DCC	-30-1	5	250
	-82-3	1	250
BFB	-68-2	1	50
IS/SURR.	-84-2	1	250
ICV/LCS	-69-3	1	250
	-71-3	5	250
ICV/LCS	-77-3	5	50/250
	-75-3	1	250
ICV/LCS	-55-2	1	250
	SM-12-34-18	.75	1000
ICV/LCS	-33-7	1.75	
	-32-11	.75	
	-32-12	.75	

DATA FILE FOLDER

Electronic Data Archival

Location	Date
HPCHEM_VOA/TOF3	

Comments:

Analyzed By: DY

Date Disposed: 6/27/12

Disposed By: DY

21 09

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 8 ☐ EMAX-524.2 Rev.No. 7 ☐ EMAX-624 Rev.No. 4 ☐ EMAX-8260SIM Rev.No. 1 ☐ EMAX-TCPSIM Rev.No. 2 ☐ EMAX-M8260SIM Rev.No. 0 ☐

Start Date: 6/28/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge Book # AF3 -005

BATCH CVOF3F2203

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RFR061	BFBF3F04	1ul					0929 AM
02	062	CVOF3F2203	5/5/1/1ul					
03	063	VOF3F04L	5/5/1/1ul					
04	064	C						
05	065	RINSE						
06	066	VOF3F04B	25mL	1.0				
07	067	12F196-08	25mL	1.0	/	/		
08	068	-01			/	/		
09	069	-02			/	/		
10	070	-03			/	/		
11	071	-04			/	/		
12	072	-04M			/	/		
13	073	-04S			/	/		bad spike
14	074	RINSE						
15	075	12F196-05		1.0	/	/		c/o
16	076	-06			/	/		
17	077	-07			/	/		
18	078	-04S			/	/		
19	079	RINSE						
20	080	12F186-01T	0.5mL	50	/	/		
21	081	-02T	0.5mL	50	/	/		
22	082	-03T	0.5mL	50	/	/		0930 PM
23	083	RINSE	25mL					
24	084	RINSE	25mL					
25								
26								
27								
28								
29								
30								

Instrument No.	F3
INITIAL CALIBRATION REFERENCE	
DATE	6/22/12
ICAL ID	VOF3F22

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC	SV-19-69-2	1	250
	-90-1	5	250
DCC	-76-3	5	50/250
	-74-1	1	250
DCC	-55-1	1	
	-79-2	1	
DCC	-30-1	5	
	-82-3	1	
BFB	-65-2	1	50
IS/SURR.	-84-2	1	250
ICV/LCS	-69-3	1	250
	-71-3	5	250
ICV/LCS	-77-3	5	50/250
	-75-3	1	250
ICV/LCS	-55-2	1	250
	SV1-12-34-18	0.25	1000
ICV/LCS	-33-7	1.25	
	-32-11	0.25	
	-32-12	0.25	
DATA FILE FOLDER	12F28		

Electronic Data Archival

Location	Date
HPCHEM_VOA/TOF3	

Comments:

Analyzed By: TH

Date Disposed: 6/28/12

Disposed By: [illegible]

CR 7/5/12

Injection Log

Directory: C:\HPCHEM\1\DATA\12F28

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rfr061.d	1.	BFBF3F04	T/CHK	28 Jun 2012 09:29
2	2	Rfr062.d	1.	CVOF3F2203	10ppb 8260/50ppb ...	28 Jun 2012 10:05
3	3	Rfr063.d	1.	VOF3F04L	10ppb 8260/50ppb ...	28 Jun 2012 10:40
4	4	Rfr064.d	1.	VOF3F04C	10ppb 8260/50ppb ...	28 Jun 2012 11:14
5	5	Rfr065.d	1.	RINSE 25ml	DF=1.0	28 Jun 2012 11:50
6	6	Rfr066.d	1.	VOF3F04B 25ml	DF=1.0	28 Jun 2012 12:25
7	7	Rfr067.d	1.	12F196-08 25ml	DF=1.0	28 Jun 2012 13:00
8	8	Rfr068.d	1.	12F196-01 25ml	DF=1.0	28 Jun 2012 13:35
9	9	Rfr069.d	1.	12F196-02 25ml	DF=1.0	28 Jun 2012 14:09
10	10	Rfr070.d	1.	12F196-03 25ml	DF=1.0	28 Jun 2012 14:44
11	11	Rfr071.d	1.	12F196-04 25ml	DF=1.0	28 Jun 2012 15:18
12	12	Rfr072.d	1.	12F196-04M 25ml	DF=1.0	28 Jun 2012 15:51
13	13	Rfr073.d	1.	12F196-04S 25ml (badspike)	DF=1.0	28 Jun 2012 16:24
14	14	Rfr074.d	1.	RINSE 25ml	DF=1.0	28 Jun 2012 16:57
15	15	Rfr075.d	1.	12F196-05 25ml	DF=1.0	28 Jun 2012 17:30
16	16	Rfr076.d	1.	12F196-06 25ml	DF=1.0	28 Jun 2012 18:02
17	17	Rfr077.d	1.	12F196-07 25ml	DF=1.0	28 Jun 2012 18:35
18	18	Rfr078.d	1.	12F196-04S 25ml	DF=1.0	28 Jun 2012 19:10
19	19	Rfr079.d	1.	RINSE 25ml	DF=1.0	28 Jun 2012 19:46
20	20	Rfr080.d	1.	12F186-01T 0.5ml	DF=50	28 Jun 2012 20:20
21	21	Rfr081.d	1.	12F186-02T 0.5ml	DF=50	28 Jun 2012 20:54
22	22	Rfr082.d	1.	12F186-03T 0.5ml	DF=50	28 Jun 2012 21:30
23	23	Rfr083.d	1.	RINSE	DF=50	28 Jun 2012 22:05
24	24	Rfr084.d	1.	RINSE	DF=50	28 Jun 2012 22:39

10 Jul 2012 09:33

2111

Injection Log

Directory: C:\HPCHEM\1\DATA\12G06

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rgr076.d	1.	BFBF3G04	T/CHK	6 Jul 2012 12:07
2	2	Rgr077.d	1.	CVOF3F2208	10ppb 8260/50ppb ...	6 Jul 2012 12:45
3	3	Rgr078.d	1.	VOF3G04L	10ppb 8260/50ppb ...	6 Jul 2012 13:18
4	4	Rgr079.d	1.	VOF3G04C	10ppb 8260/50ppb ...	6 Jul 2012 13:52
5	5	Rgr080.d	1.	RINSE 25ml	DF=1.0	6 Jul 2012 14:26
6	6	Rgr081.d	1.	VOF3G04B 25ml	DF=1.0	6 Jul 2012 14:59
7	7	Rgr082.d	1.	12F233-01R 25ml	DF=1.0	6 Jul 2012 15:39
8	8	Rgr083.d	1.	12F233-15R 25ml	DF=1.0	6 Jul 2012 16:12
9	9	Rgr084.d	1.	12F198-06R 25ml	DF=1.0	6 Jul 2012 16:46
10	10	Rgr085.d	1.	12F247-01 25ml	DF=1.0	6 Jul 2012 17:19
11	11	Rgr086.d	1.	12F196-05R 25ml	DF=1.0	6 Jul 2012 17:53
12	12	Rgr087.d	1.	12F241-01 25ml	DF=1.0	6 Jul 2012 18:27
13	13	Rgr088.d	1.	12G006-23 25ml	DF=1.0	6 Jul 2012 19:02
14	14	Rgr089.d	1.	12G006-24 25ml	DF=1.0	6 Jul 2012 19:37
15	15	Rgr090.d	1.	12G019-15 25ml	DF=1.0	6 Jul 2012 20:13
16	16	Rgr091.d	1.	12G014-04 25ml	DF=1.0	6 Jul 2012 20:48
17	17	Rgr092.d	1.	12G014-01 25ml	DF=1.0	6 Jul 2012 21:22
18	18	Rgr093.d	1.	12G014-02 25ml	DF=1.0	6 Jul 2012 21:57
19	19	Rgr094.d	1.	12G014-03 25ml	DF=1.0	6 Jul 2012 22:33
20	20	Rgr095.d	1.	12F217-04R 25ml	DF=1.0	6 Jul 2012 23:09
21	21	Rgr096.d	1.	12F217-05R 25ml	DF=1.0	6 Jul 2012 23:43
22	22	Rgr097.d	1.	RINSE	DF=1.0	7 Jul 2012 00:18
23	23	Rgr098.d	1.	RINSE	DF=1.0	7 Jul 2012 00:54
24	24	Rgr099.d	1.	RINSE	DF=1.0	7 Jul 2012 01:30

LABORATORY REPORT FOR

ECO & ASSOCIATES, INC.

B & B, MONTHLY CITY WELL SAMPLING

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

SDG#: 12F196

CASE NARRATIVE

Client : ECO & ASSOCIATES, INC.

Project : B & B, MONTHLY CITY WELL SAMPLING

SDG : 12F196

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

A total of seven (7) water samples were received on 06/26/12 for VOC SIM analysis, Method 5030B/8260B SIM in accordance with Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 and QAPP09.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Instrument mass ratios were within specification. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried on at a frequency required by the project. All project calibration requirements were satisfied. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blanks were analyzed at the frequency required by the project. For this SDG, two (2) method blanks were analyzed with the samples. All results were compliant to project requirement. Refer to QC result summary form for details.

Lab Control Sample
Two (2) sets of LCS/LCD were analyzed with the samples in this SDG.
Percent recoveries for VO05F21L/C were all within QC limits.
Percent recoveries for VO05G01L/C were all within QC limits.

Matrix QC Sample
A set of MS/MSD was analyzed with the samples in this SDG.
Percent recoveries for F196-04M/S were within project QC limits.

Surrogate
Surrogate was added on QC and field samples. Surrogate recoveries were within project QC limits. Refer to sample result forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. All project requirements were met otherwise anomalies were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS SIM

Client : ECO & ASSOCIATES, INC.
Project : B & B, MONTHLY CITY WELL SAMPLING

SDG NO. : 12F196
Instrument ID : T-005

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V005F21B	1	NA	06/29/1209:18	06/29/1209:18	RFQ446	RGQ296	V005F21	Method Blank
LCS1W	V005F21L	1	NA	06/29/1207:51	06/29/1207:51	RFQ443	RGQ296	V005F21	Lab Control Sample (LCS)
LCD1W	V005F21C	1	NA	06/29/1208:20	06/29/1208:20	RFQ444	RGQ296	V005F21	LCS Duplicate
06-26-12-CW-1	F196-01	1	NA	06/29/1216:40	06/29/1216:40	RFQ461	RGQ296	V005F21	Field Sample
06-26-12-CW-5	F196-03	1	NA	06/29/1217:38	06/29/1217:38	RFQ463	RGQ296	V005F21	Field Sample
06-26-12-CW-8	F196-05	1	NA	06/29/1218:08	06/29/1218:08	RFQ464	RGQ296	V005F21	Field Sample
MBLK2W	V005G01B	1	NA	07/02/1212:25	07/02/1212:25	RGQ010	RGQ296	V005G01	Method Blank
LCS2W	V005G01L	1	NA	07/02/1208:59	07/02/1208:59	RGQ003	RGQ296	V005G01	Lab Control Sample (LCS)
LCD2W	V005G01C	1	NA	07/02/1209:28	07/02/1209:28	RGQ004	RGQ296	V005G01	LCS Duplicate
06-26-12-CW-9	F196-06	1	NA	07/02/1214:20	07/02/1214:20	RGQ012	RGQ296	V005G01	Field Sample
06-26-12-CW-10	F196-07	1	NA	07/02/1214:49	07/02/1214:49	RGQ013	RGQ296	V005G01	Field Sample
06-26-12-FDUP-1	F196-02R	1	NA	07/02/1215:18	07/02/1215:18	RGQ014	RGQ296	V005G01	Field Sample
06-26-12-CW-6	F196-04R	1	NA	07/02/1215:47	07/02/1215:47	RGQ015	RGQ296	V005G01	Field Sample
06-26-12-CW-6MS	F196-04M	1	NA	07/02/1216:16	07/02/1216:16	RGQ016	RGQ296	V005G01	Matrix Spike Sample (MS)
06-26-12-CW-6MSD	F196-04S	1	NA	07/02/1216:45	07/02/1216:45	RGQ017	RGQ296	V005G01	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/29/12 16:40
Sample ID	: 06-26-12-CW-1	Date Analyzed:	06/29/12 16:40
Lab Samp ID	: F196-01	Dilution Factor:	1
Lab File ID	: RFQ461	Matrix :	WATER
Ext Btch ID	: VO05F21	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.054	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0848	0.1000	84.8	80-120

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client : ECO & ASSOCIATES, INC.	Date Collected: 06/26/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 06/26/12
Batch No. : 12F196	Date Extracted: 07/02/12 15:18
Sample ID: 06-26-12-FDUP-1	Date Analyzed: 07/02/12 15:18
Lab Samp ID: F196-02R	Dilution Factor: 1
Lab File ID: RGQ014	Matrix : WATER
Ext Btch ID: VO05G01	% Moisture : NA
Calib. Ref.: RGQ296	Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.055	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0918	0.1000	91.8	80-120

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/29/12 17:38
Sample ID	: 06-26-12-CW-5	Date Analyzed:	06/29/12 17:38
Lab Samp ID	: F196-03	Dilution Factor:	1
Lab File ID	: RFQ463	Matrix :	WATER
Ext Btch ID	: VO05F21	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.096	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0837	0.1000	83.7	80-120

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12F29\RFQ463.D Vial: 24
Acq On : 29 Jun 2012 5:38 pm Operator: SD
Sample : 12F196-03 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 2 7:14 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

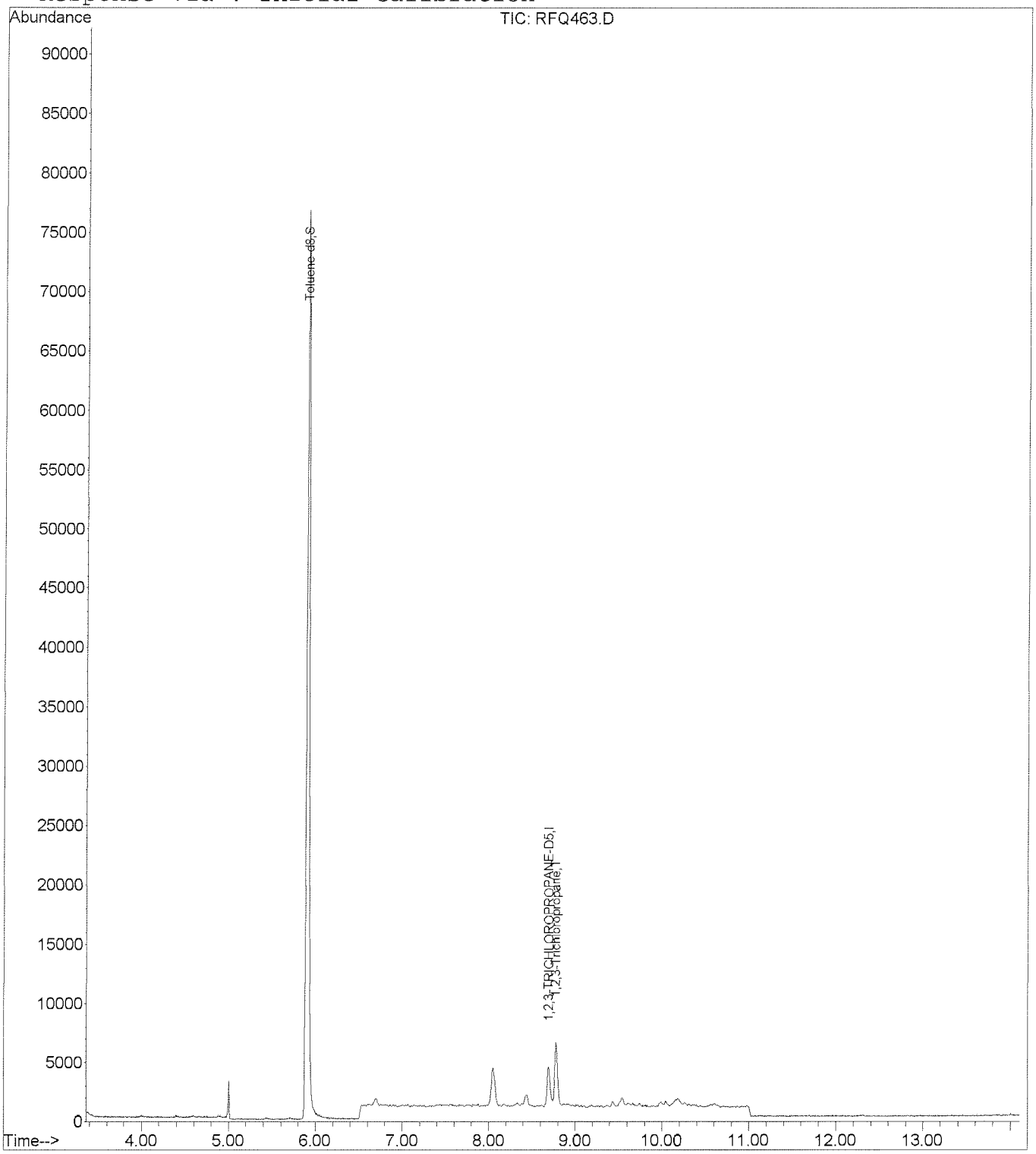
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.70	79	5923	50.00 ng/l	-0.02
System Monitoring Compounds					
3) Toluene-d8	5.90	98	98348	83.66 ng/l	-0.02
Spiked Amount 100.000			Recovery	= 83.66%	
Target Compounds					Qvalue
6) 1,2,3-Trichloropropane	8.77	75	8953	96.15 ng/l	87

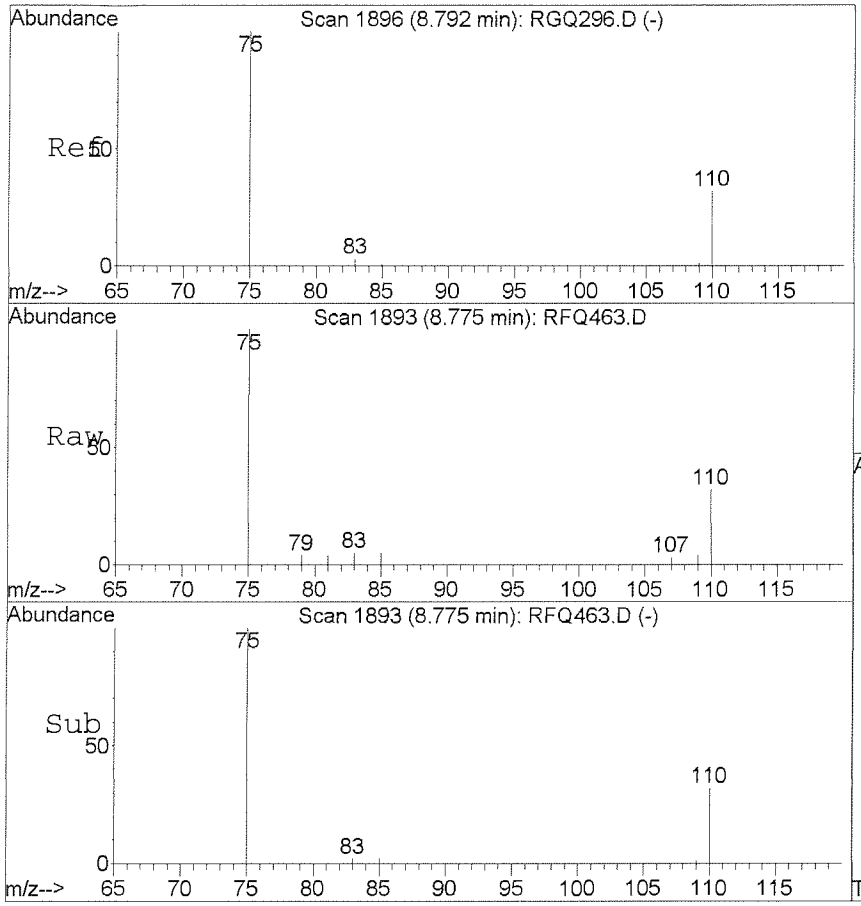
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ463.D Vial: 24
Acq On : 29 Jun 2012 5:38 pm Operator: SD
Sample : 12F196-03 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 2 7:14 2012 Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration

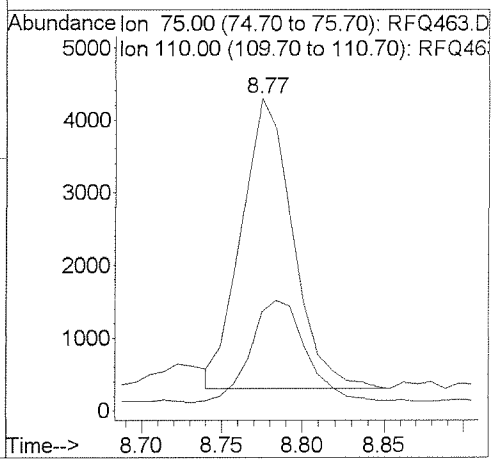




#6
1,2,3-Trichloropropane
Concen: 96.15 ng/l
RT: 8.77 min Scan# 1893
Delta R.T. -0.02 min
Lab File: RFQ463.D
Acq: 29 Jun 2012 5:38 pm

Tgt Ion: 75 Resp: 8953

Ion	Ratio	Lower	Upper
75	100		
110	38.3	17.1	77.1



METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	07/02/12 15:47
Sample ID	: 06-26-12-CW-6	Date Analyzed:	07/02/12 15:47
Lab Samp ID	: F196-04R	Dilution Factor:	1
Lab File ID	: RGQ015	Matrix :	WATER
Ext Btch ID	: VO05G01	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.035	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0880	0.1000	88.0	80-120

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/29/12 18:08
Sample ID	: 06-26-12-CW-8	Date Analyzed:	06/29/12 18:08
Lab Samp ID	: F196-05	Dilution Factor:	1
Lab File ID	: RFQ464	Matrix :	WATER
Ext Btch ID	: VO05F21	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.0063	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0832	0.1000	83.2	80-120

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	07/02/12 14:20
Sample ID	: 06-26-12-CW-9	Date Analyzed:	07/02/12 14:20
Lab Samp ID	: F196-06	Dilution Factor:	1
Lab File ID	: RGQ012	Matrix :	WATER
Ext Btch ID	: VO05G01	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.35	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0845	0.1000	84.5	80-120

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	07/02/12 14:49
Sample ID	: 06-26-12-CW-10	Date Analyzed:	07/02/12 14:49
Lab Samp ID	: F196-07	Dilution Factor:	1
Lab File ID	: RGQ013	Matrix :	WATER
Ext Btch ID	: V005G01	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0904	0.1000	90.4	80-120

QC SUMMARIES

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client	: ECO & ASSOCIATES, INC.	Date Collected:	NA
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/29/12
Batch No.	: 12F196	Date Extracted:	06/29/12 09:18
Sample ID	: MBLK1W	Date Analyzed:	06/29/12 09:18
Lab Samp ID	: V005F21B	Dilution Factor:	1
Lab File ID	: RFQ446	Matrix :	WATER
Ext Btch ID	: V005F21	% Moisture :	NA
Calib. Ref.	: RGQ296	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0852	0.1000	85.2	80-120

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 5030B/8260B SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	VO05F21B	VO05F21L	VO05F21C		
LAB FILE ID:	RFQ446	RFQ443	RFQ444		
DATE EXTRACTED:	06/29/1209:18	06/29/1207:51	06/29/1208:20	DATE COLLECTED:	NA
DATE ANALYZED:	06/29/1209:18	06/29/1207:51	06/29/1208:20	DATE RECEIVED:	06/29/12
PREP. BATCH:	VO05F21	VO05F21	VO05F21		
CALIB. REF:	RGQ296	RGQ296	RGQ296		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,3-Trichloropropane	ND	0.100	0.0981	98	0.100	0.0998	100	2	75-125	30
1,2-Dibromo-3-chloropropane	ND	0.100	0.0853	85	0.100	0.0828	83	3	50-130	30
1,2-Dibromoethane	ND	0.100	0.102	102	0.100	0.0999	100	2	80-120	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
Toluene-d8	0.100	0.0941	94	0.100	0.0887	89	80-120

METHOD 5030B/8260B SIM
VOLATILE ORGANICS BY GC/MS SIM

Client : ECO & ASSOCIATES, INC.	Date Collected: NA
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 07/02/12
Batch No. : 12F196	Date Extracted: 07/02/12 12:25
Sample ID: MBLK2W	Date Analyzed: 07/02/12 12:25
Lab Samp ID: VO05G01B	Dilution Factor: 1
Lab File ID: RGQ010	Matrix : WATER
Ext Btch ID: VO05G01	% Moisture : NA
Calib. Ref.: RGQ296	Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	0.0050	0.0025
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.050	0.020
1,2-DIBROMOETHANE	ND	0.050	0.020

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
TOLUENE-D8	0.0953	0.1000	95.3	80-120

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 5030B/8260B SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2W				
LAB SAMP ID:	VO05G01B	VO05G01L	VO05G01C		
LAB FILE ID:	RGQ010	RGQ003	RGQ004		
DATE EXTRACTED:	07/02/1212:25	07/02/1208:59	07/02/1209:28	DATE COLLECTED:	NA
DATE ANALYZED:	07/02/1212:25	07/02/1208:59	07/02/1209:28	DATE RECEIVED:	07/02/12
PREP. BATCH:	VO05G01	VO05G01	VO05G01		
CALIB. REF:	RGQ296	RGQ296	RGQ296		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,3-Trichloropropane	ND	0.100	0.0928	93	0.100	0.0943	94	2	75-125	30
1,2-Dibromo-3-chloropropane	ND	0.100	0.0860	86	0.100	0.0893	89	4	50-130	30
1,2-Dibromoethane	ND	0.100	0.0941	94	0.100	0.101	101	7	80-120	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
Toluene-d8	0.100	0.0919	92	0.100	0.0944	94	80-120

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 5030B/8260B SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	06-26-12-CW-6				
LAB SAMP ID:	F196-04R	F196-04M	F196-04S		
LAB FILE ID:	RGQ015	RGQ016	RGQ017		
DATE EXTRACTED:	07/02/1215:47	07/02/1216:16	07/02/1216:45	DATE COLLECTED:	06/26/12
DATE ANALYZED:	07/02/1215:47	07/02/1216:16	07/02/1216:45	DATE RECEIVED:	06/26/12
PREP. BATCH:	V005G01	V005G01	V005G01		
CALIB. REF:	RGQ296	RGQ296	RGQ296		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,3-Trichloropropane	0.0347	0.100	0.133	98	0.100	0.136	102	3	75-125	30
1,2-Dibromo-3-chloropropane	ND	0.100	0.0912	91	0.100	0.0894	89	2	50-130	30
1,2-Dibromoethane	ND	0.100	0.0962	96	0.100	0.103	103	7	80-120	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
Toluene-d8	0.100	0.0924	92	0.100	0.0969	97	80-120

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12F29\RFQ446.D Vial: 7
Acq On : 29 Jun 2012 9:18 am Operator: SD
Sample : VO05F21B Inst : TO05
Misc : BLANK Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 29 9:32 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.68	79	6150	50.00	ng/l	-0.03

System Monitoring Compounds

3) Toluene-d8	5.90	98	104019	85.22	ng/l	-0.02

Spiked Amount 100.000 Recovery = 85.22%

Target Compounds Qvalue

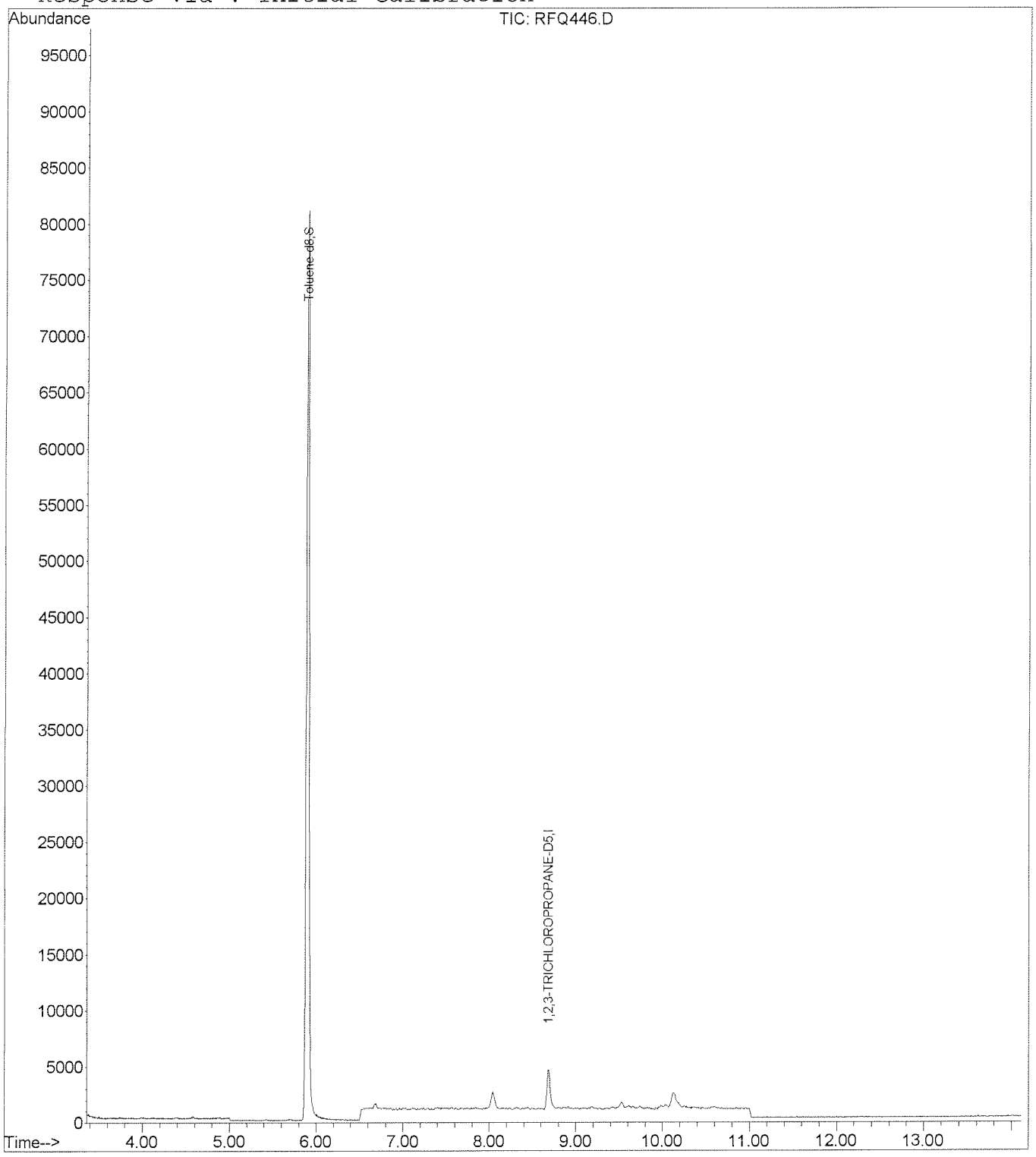
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ446.D
Acq On : 29 Jun 2012 9:18 am
Sample : VO05F21B
Misc : BLANK
MS Integration Params: 524INT.P
Quant Time: Jun 29 9:32 2012

Vial: 7
Operator: SD
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12F29\RFQ443.D Vial: 4
Acq On : 29 Jun 2012 7:51 am Operator: SD
Sample : VO05F21L Inst : TO05
Misc : 100ppt Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 29 8:05 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

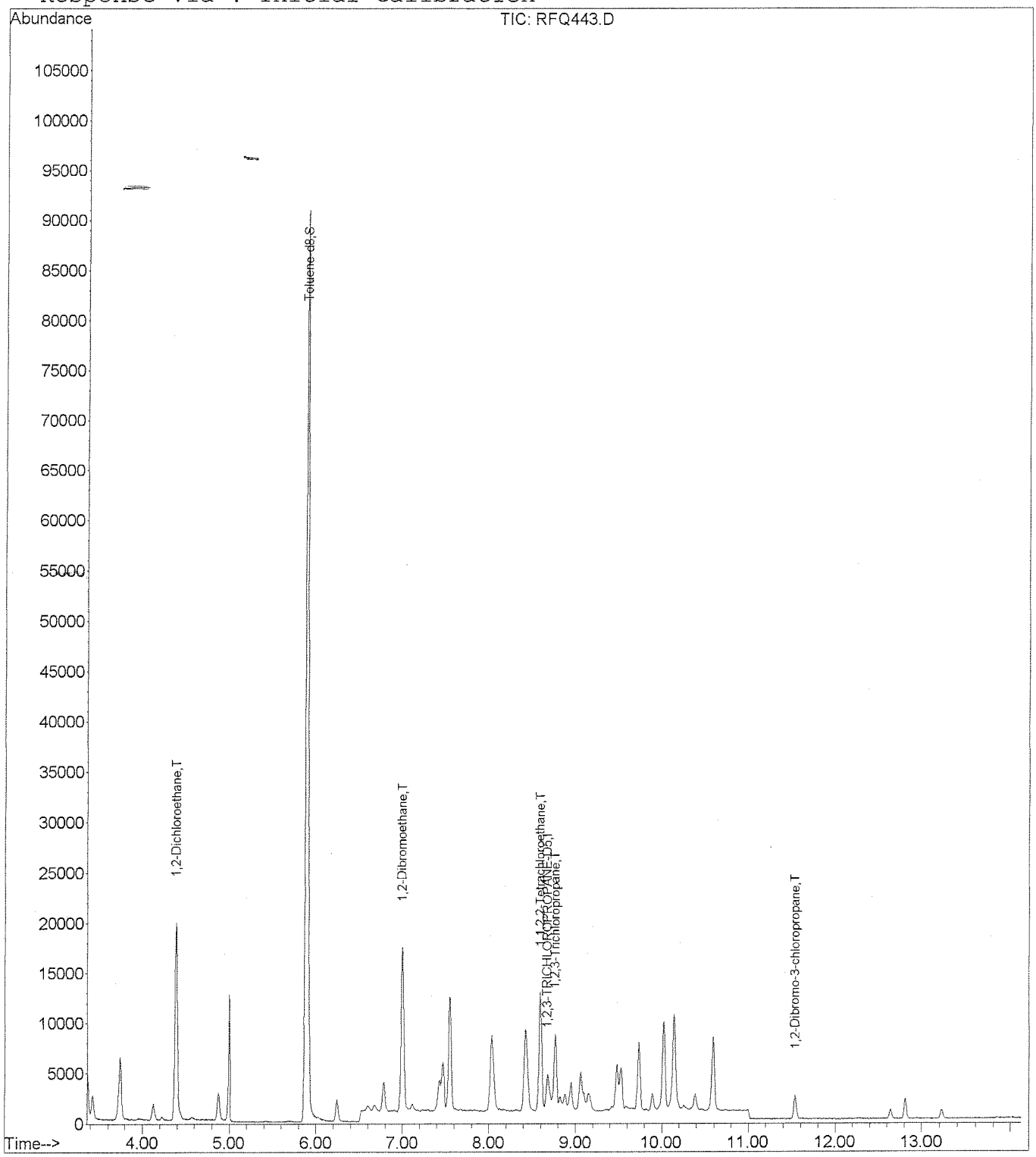
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.68	79	6094	50.00	ng/l	-0.04
System Monitoring Compounds						
3) Toluene-d8	5.89	98	113868	94.15	ng/l	-0.03
Spiked Amount 100.000			Recovery	=	94.15%	
Target Compounds						Qvalue
2) 1,2-Dichloroethane	4.38	62	30248	118.07	ng/l	98
4) 1,2-Dibromoethane	6.99	107	18243	101.53	ng/l	99
5) 1,1,2,2-Tetrachloroethane	8.59	83	16644	94.63	ng/l	96
6) 1,2,3-Trichloropropane	8.77	75	9395	98.07	ng/l	94
7) 1,2-Dibromo-3-chloropropan	11.54	157	2058	85.25	ng/l	89

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ443.D Vial: 4
Acq On : 29 Jun 2012 7:51 am Operator: SD
Sample : VO05F21L Inst : TO05
Misc : 100ppt Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 29 8:05 2012 Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12F29\RFQ444.D Vial: 5
Acq On : 29 Jun 2012 8:20 am Operator: SD
Sample : VO05F21C Inst : TO05
Misc : 100ppt Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 29 8:34 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.68	79	6380	50.00	ng/l	-0.04
System Monitoring Compounds						
3) Toluene-d8	5.89	98	112318	88.70	ng/l	-0.03
Spiked Amount 100.000			Recovery =	88.70%		
Target Compounds						Qvalue
2) 1,2-Dichloroethane	4.39	62	30616	114.15	ng/l	95
4) 1,2-Dibromoethane	7.00	107	18789	99.88	ng/l	99
5) 1,1,2,2-Tetrachloroethane	8.60	83	17669	95.96	ng/l	95
6) 1,2,3-Trichloropropane	8.76	75	10007	99.77	ng/l	98
7) 1,2-Dibromo-3-chloropropan	11.54	157	2092	82.78	ng/l	95

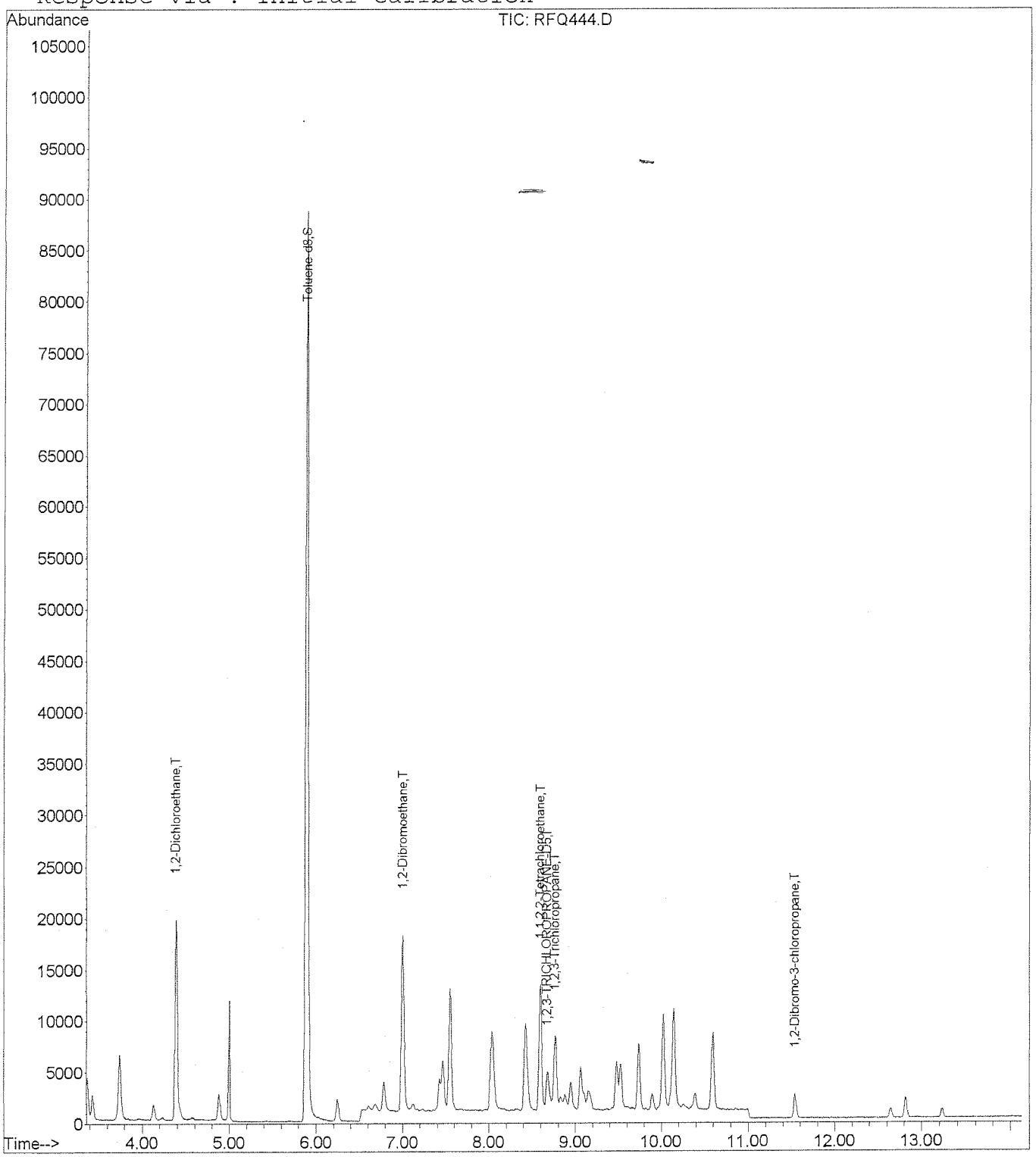
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ444.D
Acq On : 29 Jun 2012 8:20 am
Sample : VO05F21C
Misc : 100ppt
MS Integration Params: 524INT.P
Quant Time: Jun 29 8:34 2012

Vial: 5
Operator: SD
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12G02\RGQ015.D Vial: 15
Acq On : 2 Jul 2012 3:47 pm Operator: SD
Sample : 12F196-04R 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 3 6:32 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.70	79	5926	50.00	ng/l	-0.02
System Monitoring Compounds						
3) Toluene-d8	5.90	98	103515	88.01	ng/l	-0.01
Spiked Amount 100.000			Recovery =	88.01%		
Target Compounds						Qvalue
6) 1,2,3-Trichloropropane	8.77	75	3235	34.73	ng/l	91

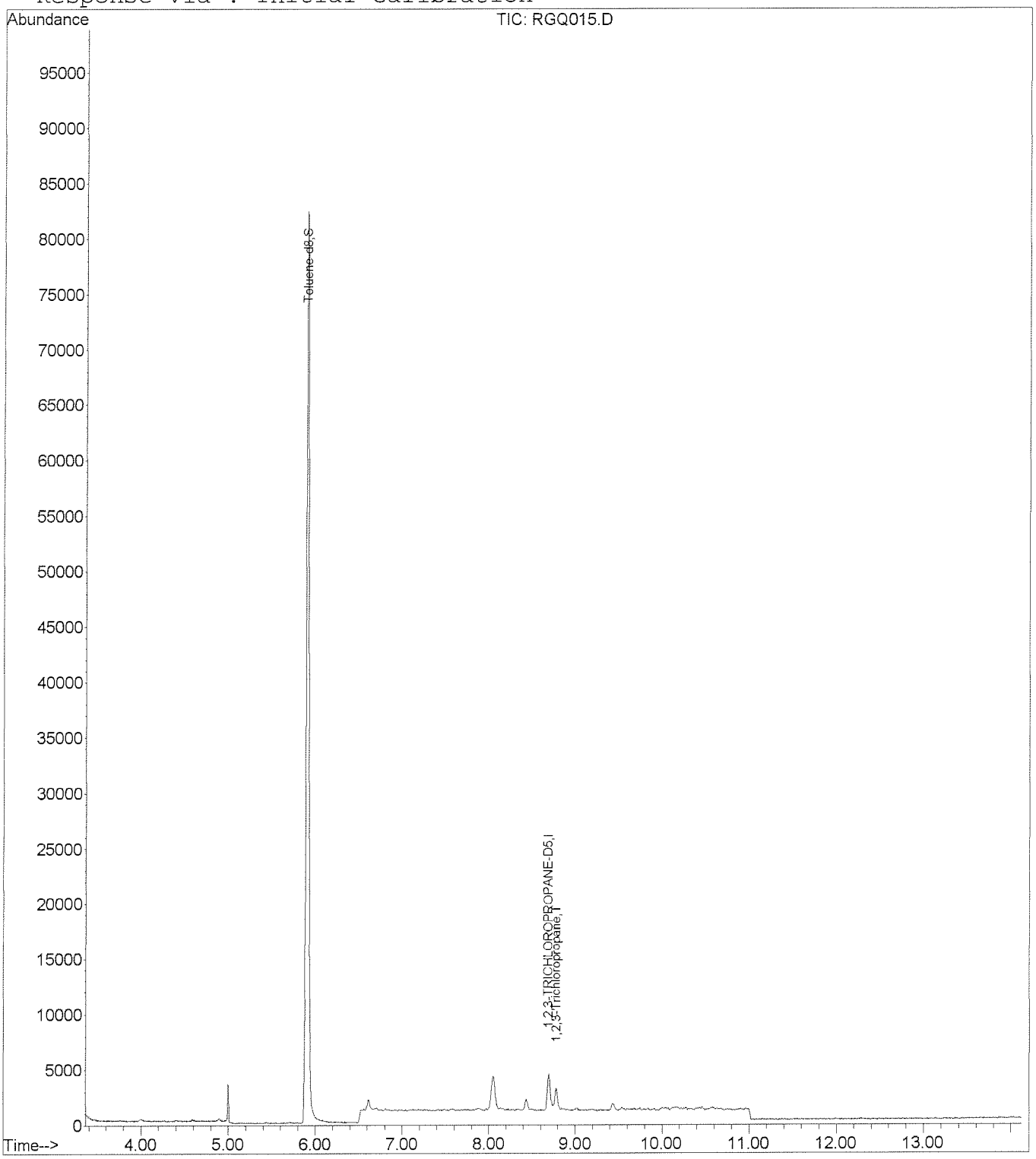
(#) = qualifier out of range (m) = manual integration

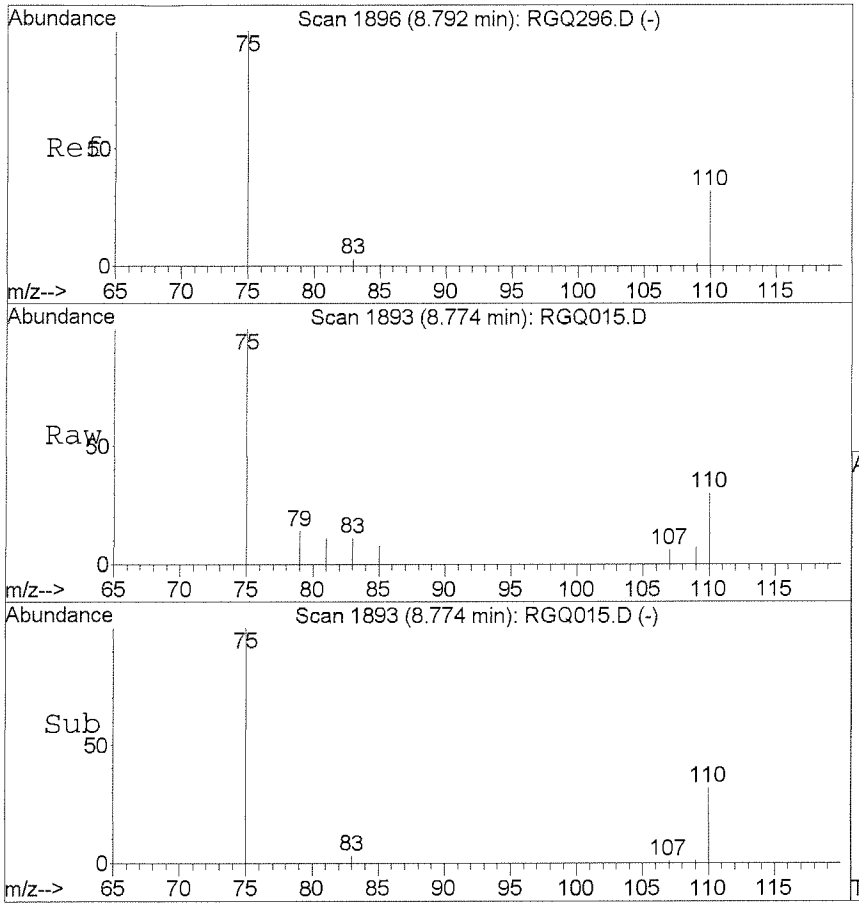
Quantitation Report

Data File : D:\HPCHEM\1\DATA\12G02\RGQ015.D
Acq On : 2 Jul 2012 3:47 pm
Sample : 12F196-04R 25mL
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jul 3 6:32 2012

Vial: 15
Operator: SD
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration

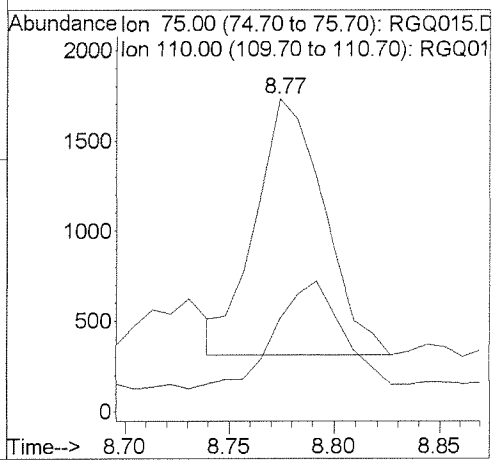




#6
1,2,3-Trichloropropane
Concen: 34.73 ng/l
RT: 8.77 min Scan# 1893
Delta R.T. -0.02 min
Lab File: RGQ015.D
Acq: 2 Jul 2012 3:47 pm

Tgt Ion: 75 Resp: 3235

Ion	Ratio	Lower	Upper
75	100		
110	41.3	17.1	77.1



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12G02\RGQ016.D Vial: 16
Acq On : 2 Jul 2012 4:16 pm Operator: SD
Sample : 12F196-04M 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 3 6:32 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

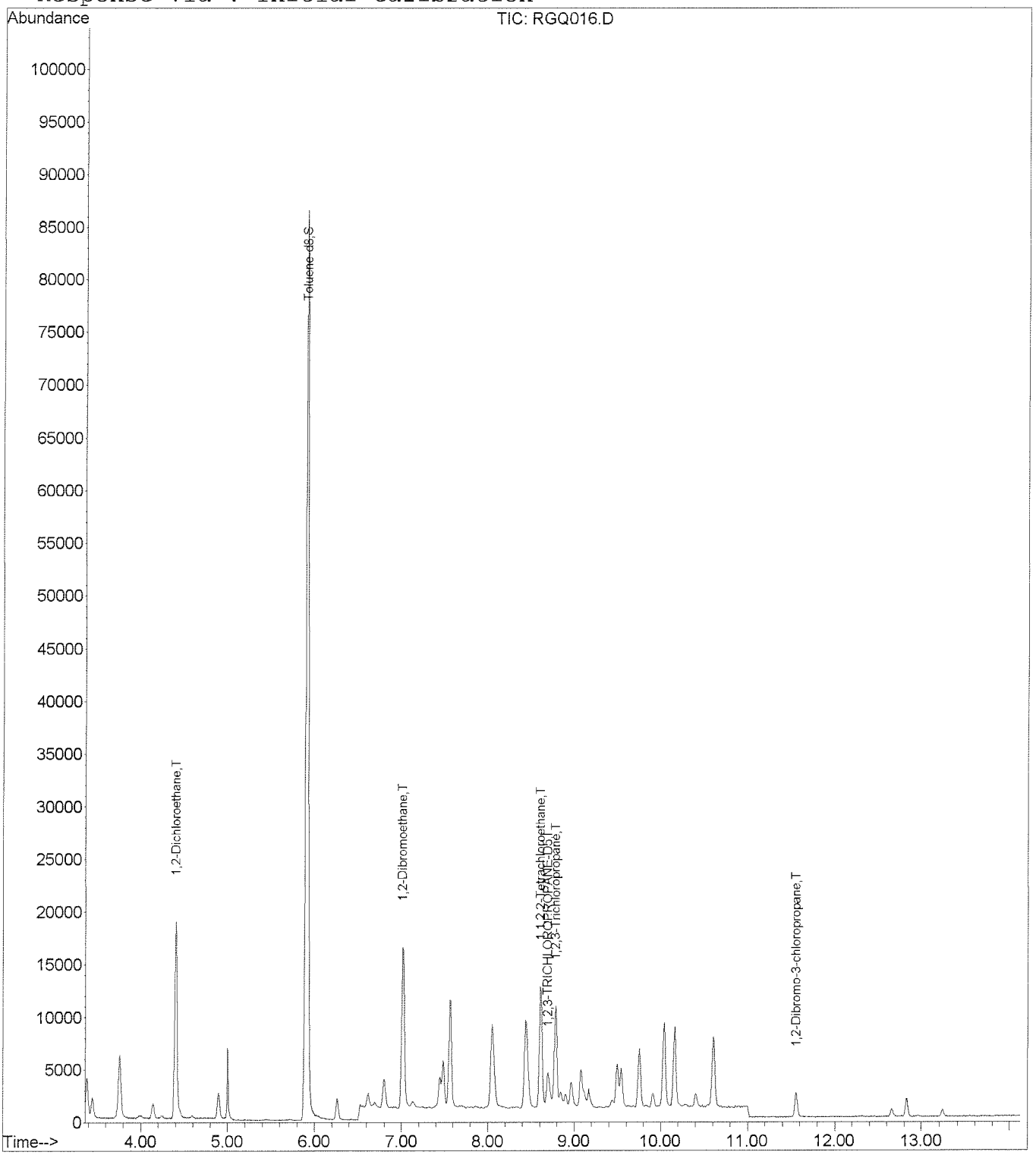
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.70	79	6073	50.00	ng/l	-0.02
System Monitoring Compounds						
3) Toluene-d8	5.91	98	111365	92.40	ng/l	-0.01
Spiked Amount 100.000			Recovery = 92.40%			
Target Compounds						Qvalue
2) 1,2-Dichloroethane	4.40	62	28270	110.73	ng/l	99
4) 1,2-Dibromoethane	7.01	107	17233	96.24	ng/l	100
5) 1,1,2,2-Tetrachloroethane	8.61	83	16312	93.06	ng/l	98
6) 1,2,3-Trichloropropane	8.78	75	12668	132.69	ng/l	100
7) 1,2-Dibromo-3-chloropropan	11.55	157	2193	91.16	ng/l	84

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12G02\RGQ016.D Vial: 16
Acq On : 2 Jul 2012 4:16 pm Operator: SD
Sample : 12F196-04M 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 3 6:32 2012 Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12G02\RGQ017.D Vial: 17
Acq On : 2 Jul 2012 4:45 pm Operator: SD
Sample : 12F196-04S 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 3 6:32 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

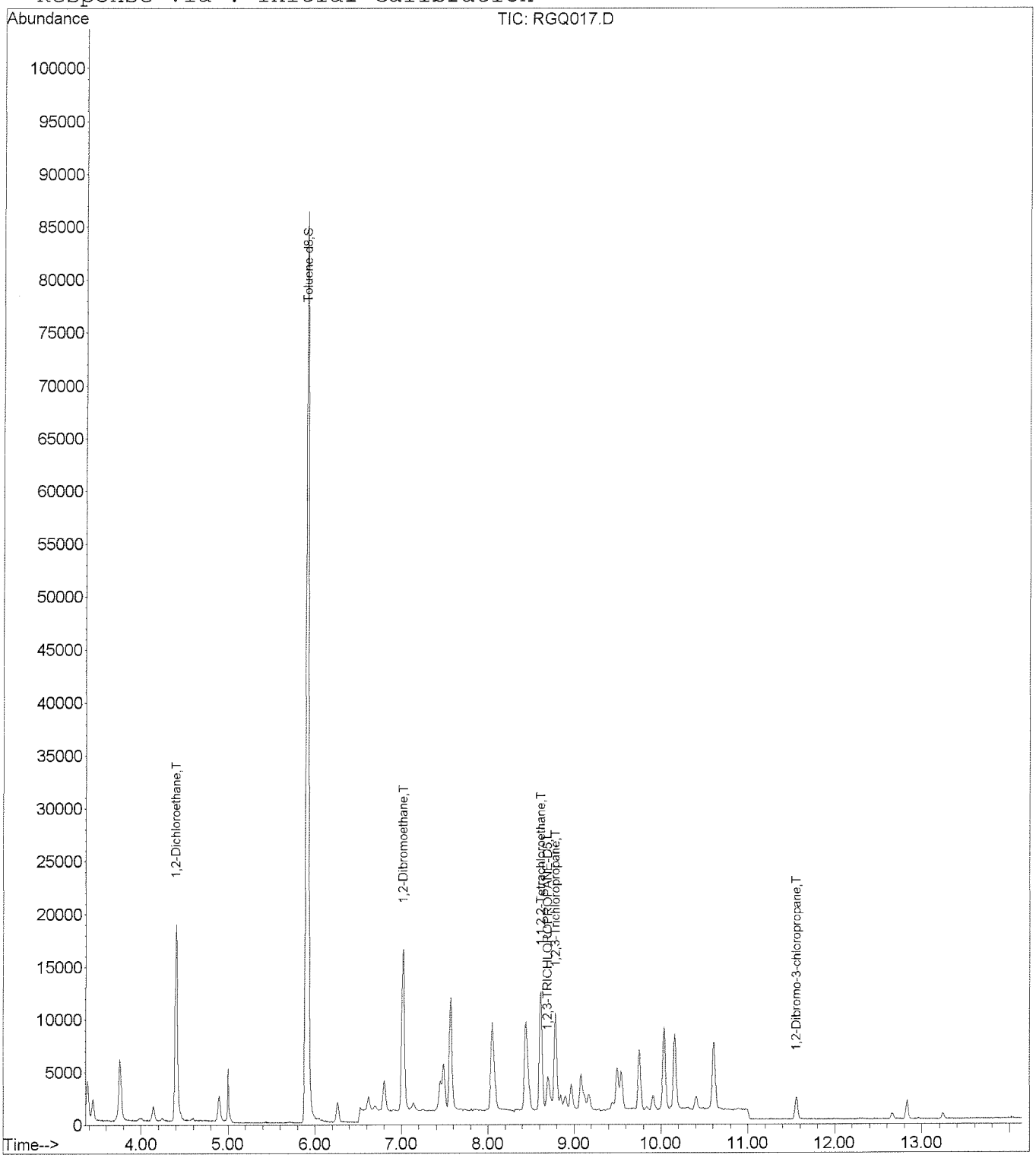
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.70	79	5641	50.00 ng/l	-0.02
System Monitoring Compounds					
3) Toluene-d8	5.91	98	108540	96.95 ng/l	-0.01
Spiked Amount 100.000			Recovery =	96.95%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.40	62	28170	118.79 ng/l	93
4) 1,2-Dibromoethane	7.02	107	17150	103.11 ng/l	99
5) 1,1,2,2-Tetrachloroethane	8.62	83	15897	97.64 ng/l	99
6) 1,2,3-Trichloropropane	8.78	75	12095	136.39 ng/l	99
7) 1,2-Dibromo-3-chloropropan	11.56	157	1997	89.37 ng/l	88

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12G02\RGQ017.D Vial: 17
Acq On : 2 Jul 2012 4:45 pm Operator: SD
Sample : 12F196-04S 25mL Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jul 3 6:32 2012 Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



INITIAL CALIBRATION(S)

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGQ290
Instrument ID: TO05
GC Column:RTX502.2ID:0.32mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 07/28/11
BFB Injection Time : 18:29
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.04
75	30.0 - 60.0% of mass 95	43.60
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.53
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	77.22
175	5.0 - 9.0% of mass 174	6.03(7.8)1
176	95.0 - 101.0% of mass 174	75.16(97.3)1
177	5.0 - 9.0% of mass 176	4.63(6.2)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
1	VSTD05	VO05G281	RGQ292	07/28/11	19:28
2	VSTD010	VO05G282	RGQ293	07/28/11	19:57
3	VSTD020	VO05G283	RGQ294	07/28/11	20:26
4	VSTD050	VO05G284	RGQ295	07/28/11	20:56
5	VSTD100	VO05G285	RGQ296	07/28/11	21:25
6	VSTD200	VO05G286	RGQ297	07/28/11	21:54
7	VSTD400	VO05G287	RGQ298	07/28/11	22:23
8	VSTD1000	VO05G288	RGQ299	07/28/11	22:52
9	VSTD200	IVO05G2801	RGQ302	07/29/11	00:21

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T005
Beginning DateTime :07/28/11 19:28
Spike Units :PPT
IC File :RGQ296

Column Spec :RTX502.2 ID :0.32MM
Ending DateTime :07/28/11 22:52
HPChem Method :V005G28

M IDX	Parameters	5 19:28 RGQ292	10 19:57 RGQ293	20 20:26 RGQ294	50 20:56 RGQ295	100 21:25 RGQ296	200 21:54 RGQ297	400 22:23 RGQ298	1000 22:52 RGQ299	Av_RRF	%_RSD	Av_Rt_M
1	1,2,3-TRICHLOROPROPANE-D5	1	1	1	1	1	1	1	1	1	0	8.7120
2	1,2-Dichloroethane	1.874	1.656	1.799	2.378	2.351	2.300	2.267	2.193	2.102	13.40	4.4126
3	Toluene-d8	------	11.864	11.956	9.775	8.624	8.967	8.842	9.435	9.923	14.21	5.9194
4	1,2-Dibromoethane	1.481	1.340	1.189	1.578	1.598	1.554	1.529	1.526	1.474	9.52	7.0312
5	1,1,2,2-Tetrachloroethane	------	1.378	1.339	1.482	1.548	1.477	1.430	1.448	1.443	4.82	8.6272
6	1,2,3-Trichloropropane	0.749	0.702	0.612	0.770	0.826	0.905	0.938	------	0.786	14.49	8.7953
7	1,2-Dibromo-3-chloropropane	------	------	0.165	0.204	0.216	0.189	0.204	0.210	0.198	9.43	11.5709

Ave_%RSD : 11 Max_%RSD : 14.5

SC
8/24/11

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :TO05
Beginning DateTime :07/28/11 19:28
Spike Units :PPT
IC File :RGQ296

Column Spec :RTX502.2 ID :0.32MM
Ending DateTime :07/28/11 22:52
HPChem Method :VO05G28

M IDX	Parameters	5 19:28 RGQ292	10 19:57 RGQ293	20 20:26 RGQ294	50 20:56 RGQ295	100 21:25 RGQ296	200 21:54 RGQ297	400 22:23 RGQ298	1000 22:52 RGQ299	AvDRec	%_RSD	Av_Rt_M
1	1,2,3-TRICHLOROPROPANE-D5	1	1	1	1	1	1	1	1	1	0	8.7120
2	1,2-Dichloroethane	89	79	86	113	112	109	108	104	11.6	13.40	4.4126
3	Toluene-d8	------	120	120	99	87	90	89	95	11.4	14.21	5.9194
4	1,2-Dibromoethane	100	91	81	107	108	105	104	104	7.1	9.52	7.0312
5	1,1,2,2-Tetrachloroethane	------	95	93	103	107	102	99	100	3.6	4.82	8.6272
6	1,2,3-Trichloropropane	95	89	78	98	105	115	119	------	11.3	14.49	8.7953
7	1,2-Dibromo-3-chloropropane	------	------	83	103	109	95	103	106	7.1	9.43	11.5709

SW
8/29/11

Compound List Report TO05

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
Total Cpnds : 7

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,2,3-TRICHLOROPROPANE-D5	79	8.71	1.000	A	1	A	B
2	T	1,2-Dichloroethane	62	4.42	0.507	A	1	A	B
3	S	Toluene-d8	98	5.92	0.679	A	1	A	B
4	T	1,2-Dibromoethane	107	7.03	0.807	A	1	A	B
5	T	1,1,2,2-Tetrachloroethane	83	8.63	0.990	A	1	A	B
6	T	1,2,3-Trichloropropane	75	8.79	1.009	A	1	A	B
7	T	1,2-Dibromo-3-chloropropane	157	11.57	1.327	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

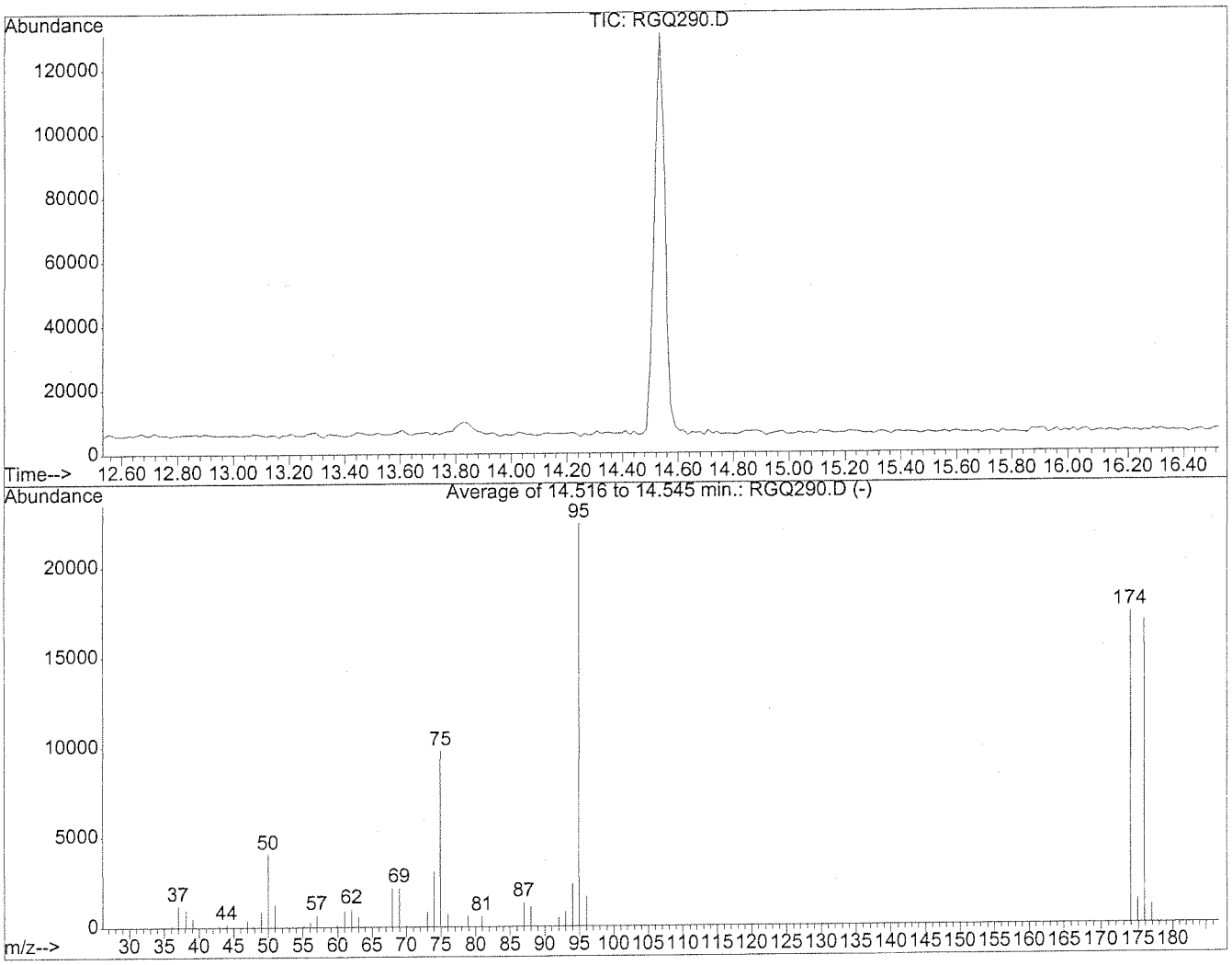
VO05G28.M Mon Aug 01 14:21:34 2011

SC
8/24/11

BFB

Data File : D:\HPCHEM\1\DATA\11G28\RGQ290.D
Acq On : 28 Jul 2011 6:29 pm
Sample : BFB05G16
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO05G15.M (RTE Integrator)
Title : METHOD 8260

Vial: 12
Operator: DN
Inst : TO05
Multiplr: 1.00



AutoFind: Scans 859, 860, 861; Background Corrected with Scan 854

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	4040	PASS
75	95	30	60	43.6	9767	PASS
95	95	100	100	100.0	22400	PASS
96	95	5	9	7.5	1687	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	17298	PASS
175	174	5	9	7.8	1350	PASS
176	174	95	101	97.3	16835	PASS
177	176	5	9	6.2	1038	PASS

SW 8/24/11

RGQ290.D VO05G15.M Mon Aug 01 13:02:05 2011

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ292.D
Acq On : 28 Jul 2011 7:28 pm
Sample : VO05G281
Misc : 5.0PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 14:20 2011

Vial: 15
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	8374	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	0.00	98	0d	0.00 ng/l	
Spiked Amount 100.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	1569	4.46 ng/l	55
4) 1,2-Dibromoethane	7.03	107	1240	5.02 ng/l	97
6) 1,2,3-Trichloropropane	8.80	75	627	4.76 ng/l	92

Sc
8/24/11

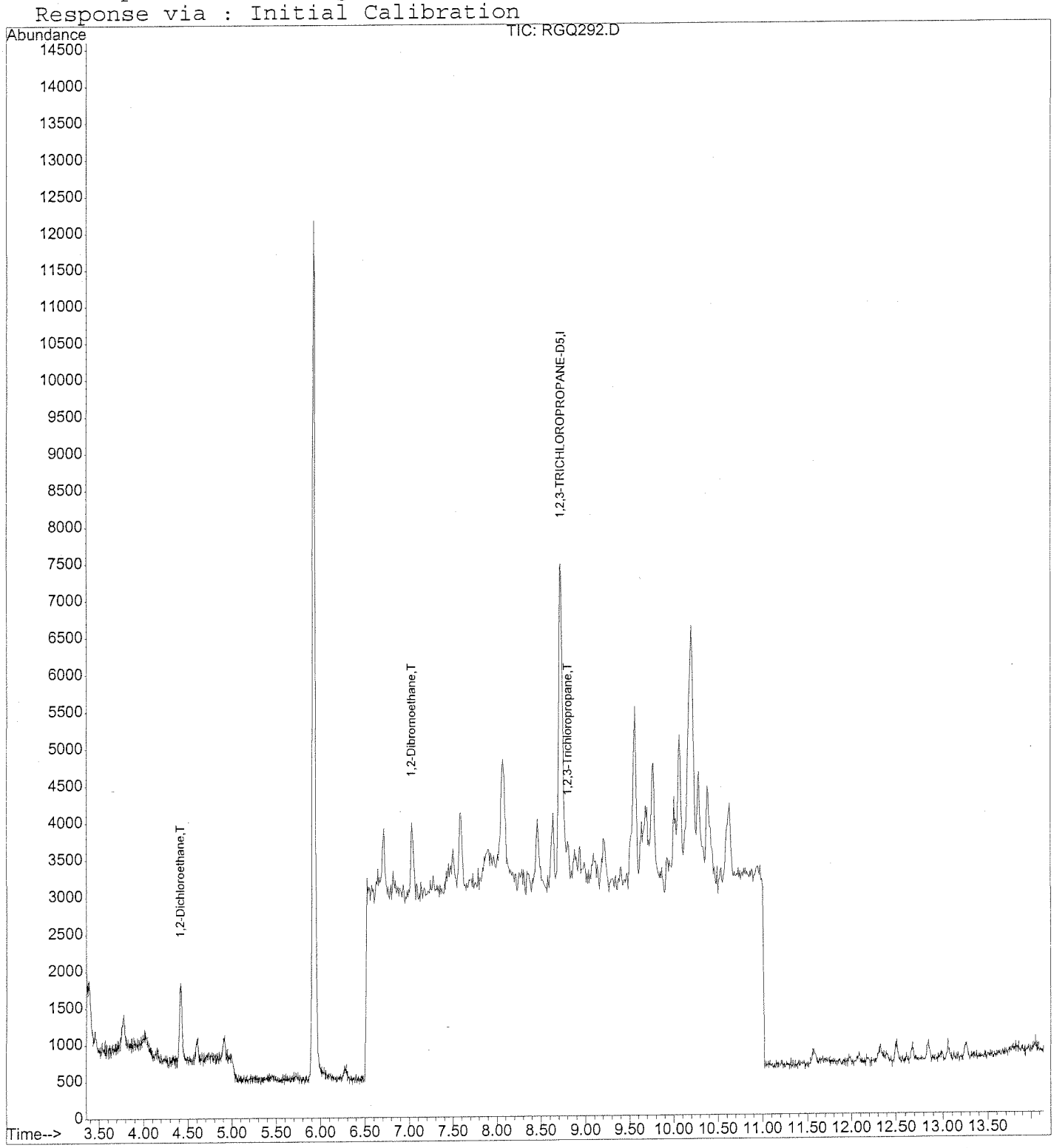
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ292.D
Acq On : 28 Jul 2011 7:28 pm
Sample : VO05G281
Misc : 5.0PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 14:20 2011

Vial: 15
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



SW 8/24/11

2154

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ293.D
Acq On : 28 Jul 2011 7:57 pm
Sample : VO05G282
Misc : 10PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 14:20 2011

Vial: 16
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	8508	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	20188	11.96 ng/l	0.00
Spiked Amount 100.000			Recovery	= 11.96%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.42	62	2818	7.88 ng/l	62
4) 1,2-Dibromoethane	7.03	107	2280	9.09 ng/l	96
5) 1,1,2,2-Tetrachloroethane	8.63	83	2344	9.55 ng/l	96
6) 1,2,3-Trichloropropane	8.79	75	1195	8.93 ng/l	79

SW 8/24/11

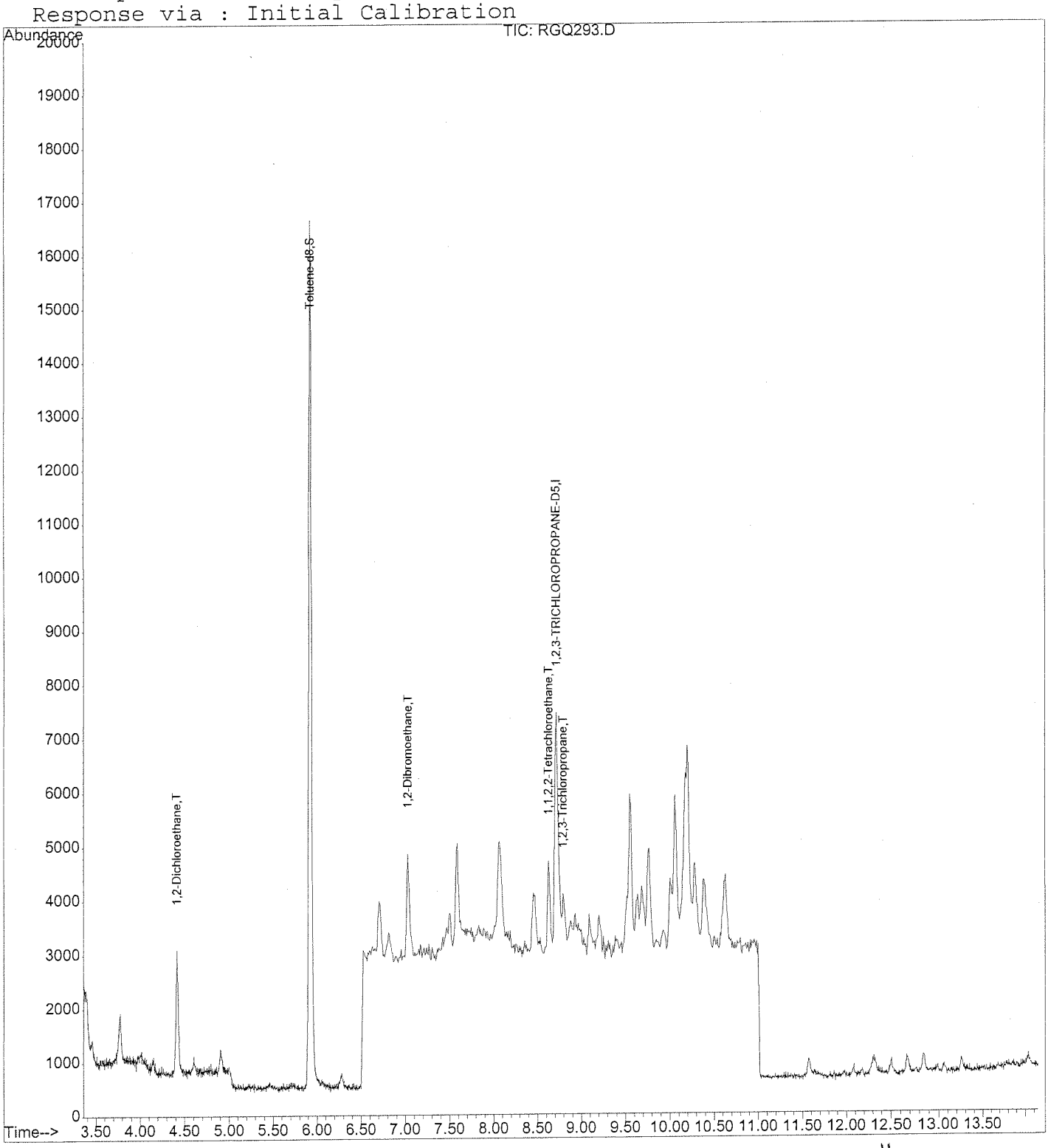
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ293.D
Acq On : 28 Jul 2011 7:57 pm
Sample : VO05G282
Misc : 10PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 14:20 2011

Vial: 16
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



SV 8/24/11

2156

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ294.D
Acq On : 28 Jul 2011 8:26 pm
Sample : VO05G283
Misc : 20PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 17
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	8167	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	39057	24.10 ng/l	0.00
Spiked Amount 100.000			Recovery	= 24.10%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	5876	17.11 ng/l	95
4) 1,2-Dibromoethane	7.04	107	3883	16.12 ng/l	94
5) 1,1,2,2-Tetrachloroethane	8.63	83	4373	18.55 ng/l	90
6) 1,2,3-Trichloropropane	8.80	75	1998	15.56 ng/l	88
7) 1,2-Dibromo-3-chloropropan	11.57	157	538	16.63 ng/l	94

SW 8/24/11

(#) = qualifier out of range (m) = manual integration
RGQ294.D VO05G28.M Mon Aug 01 14:20:58 2011

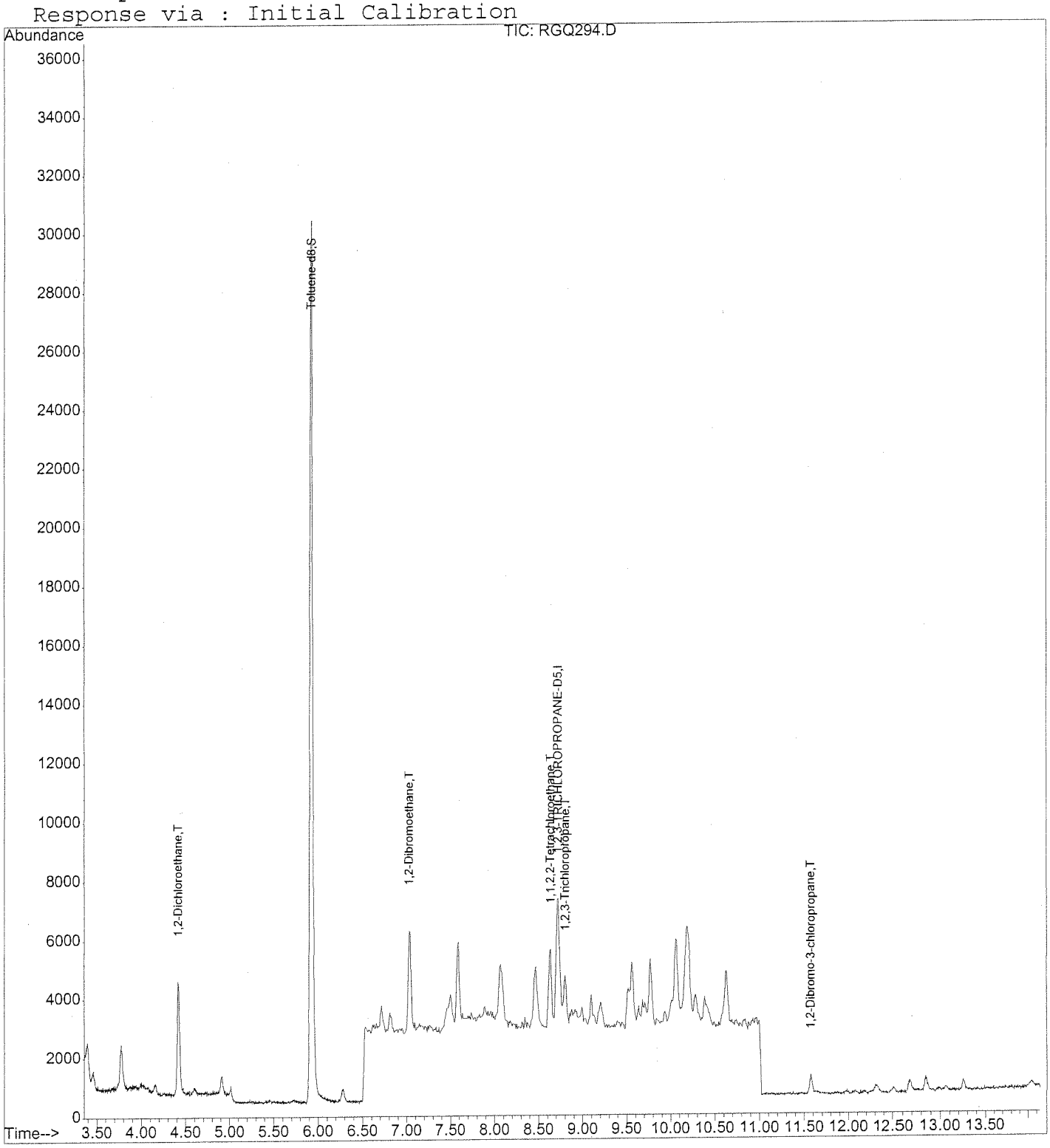
Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ294.D
Acq On : 28 Jul 2011 8:26 pm
Sample : VO05G283
Misc : 20PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 17
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



SW 8/24/11

2158

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ295.D
Acq On : 28 Jul 2011 8:56 pm
Sample : VO05G284
Misc : 50PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 18
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	7811	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	76352	49.25 ng/l	0.00
Spiked Amount 100.000			Recovery	= 49.25%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	18572	56.56 ng/l	97
4) 1,2-Dibromoethane	7.03	107	12327	53.52 ng/l	99
5) 1,1,2,2-Tetrachloroethane	8.63	83	11579	51.36 ng/l	99
6) 1,2,3-Trichloropropane	8.80	75	6018	49.01 ng/l	98
7) 1,2-Dibromo-3-chloropropan	11.57	157	1594	51.52 ng/l	90

SA 8/24/11

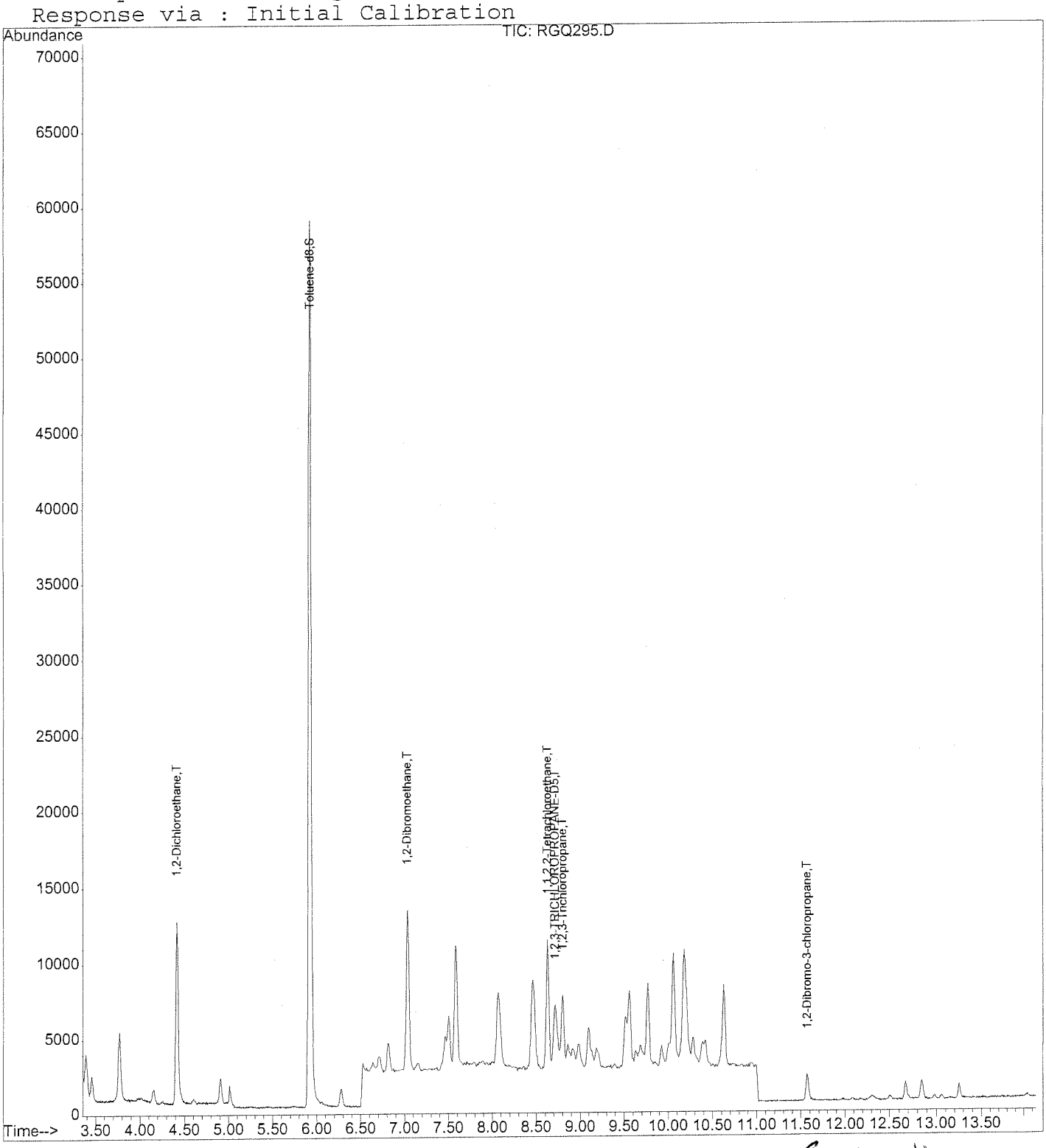
(#) = qualifier out of range (m) = manual integration
RGQ295.D VO05G28.M Mon Aug 01 14:21:01 2011

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ295.D
Acq On : 28 Jul 2011 8:56 pm
Sample : VO05G284
Misc : 50PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 18
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



Sw 8/24/11

2160

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ296.D
Acq On : 28 Jul 2011 9:25 pm
Sample : VO05G285
Misc : 100PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 19
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	8389	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	144687	86.90 ng/l	0.00
Spiked Amount 100.000			Recovery	= 86.90%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.42	62	39439	111.83 ng/l	100
4) 1,2-Dibromoethane	7.03	107	26806	108.37 ng/l	100
5) 1,1,2,2-Tetrachloroethane	8.63	83	25965	107.24 ng/l	100
6) 1,2,3-Trichloropropane	8.79	75	13865	105.13 ng/l	100
7) 1,2-Dibromo-3-chloropropan	11.57	157	3628	109.17 ng/l	100

SW 8/24/11

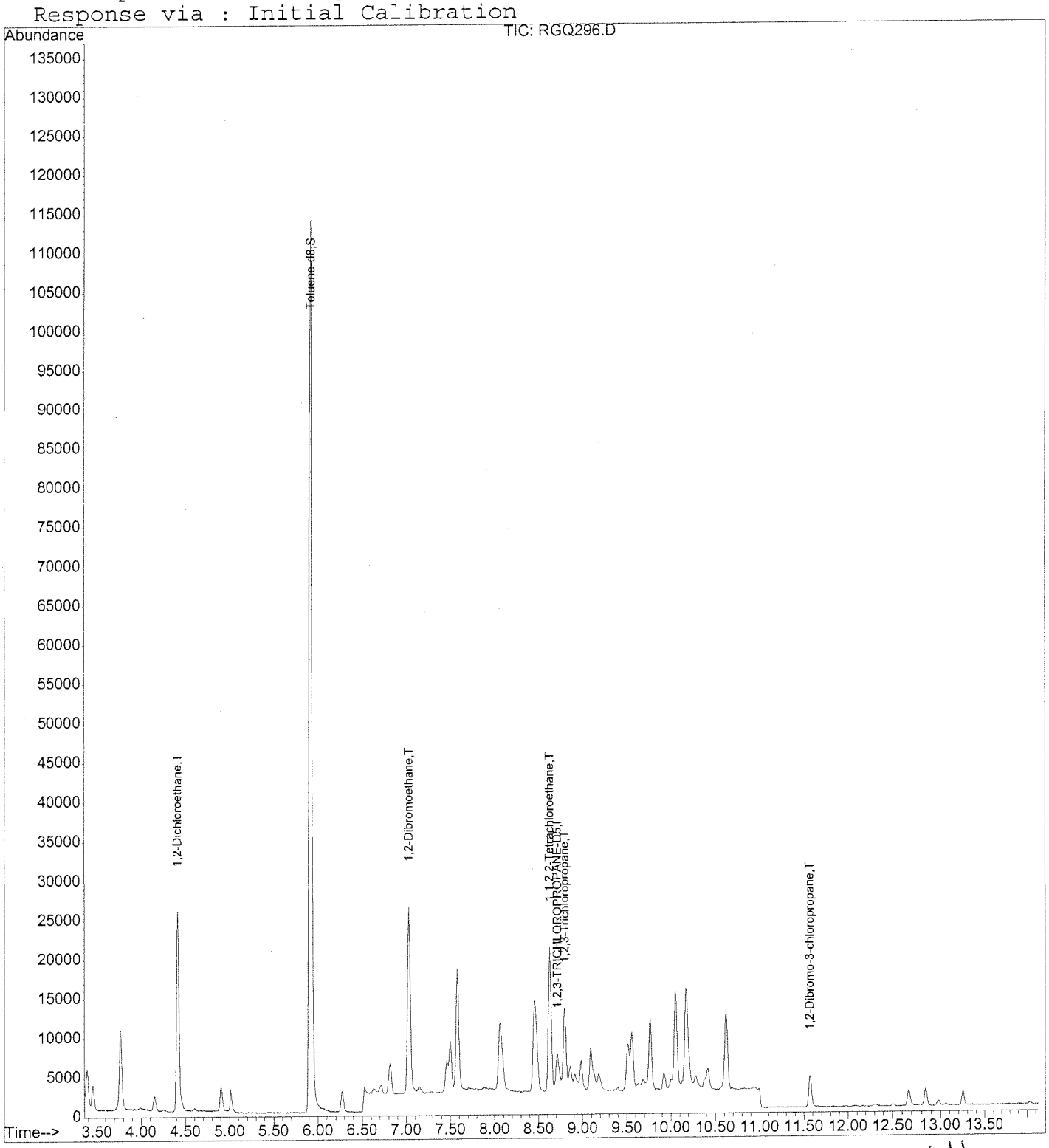
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ296.D
Acq On : 28 Jul 2011 9:25 pm
Sample : VO05G285
Misc : 100PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 19
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



SW 8/24/11

2162

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ297.D
Acq On : 28 Jul 2011 9:54 pm
Sample : VO05G286
Misc : 200PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 20
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	7911	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	283762	180.73 ng/l	0.00
Spiked Amount 100.000			Recovery	= 180.73%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	72766	218.80 ng/l	100
4) 1,2-Dibromoethane	7.03	107	49189	210.87 ng/l	100
5) 1,1,2,2-Tetrachloroethane	8.63	83	46745	204.73 ng/l	99
6) 1,2,3-Trichloropropane	8.79	75	28635	230.25 ng/l	92
7) 1,2-Dibromo-3-chloropropan	11.57	157	5985	190.98 ng/l	99

SG 8/24/11

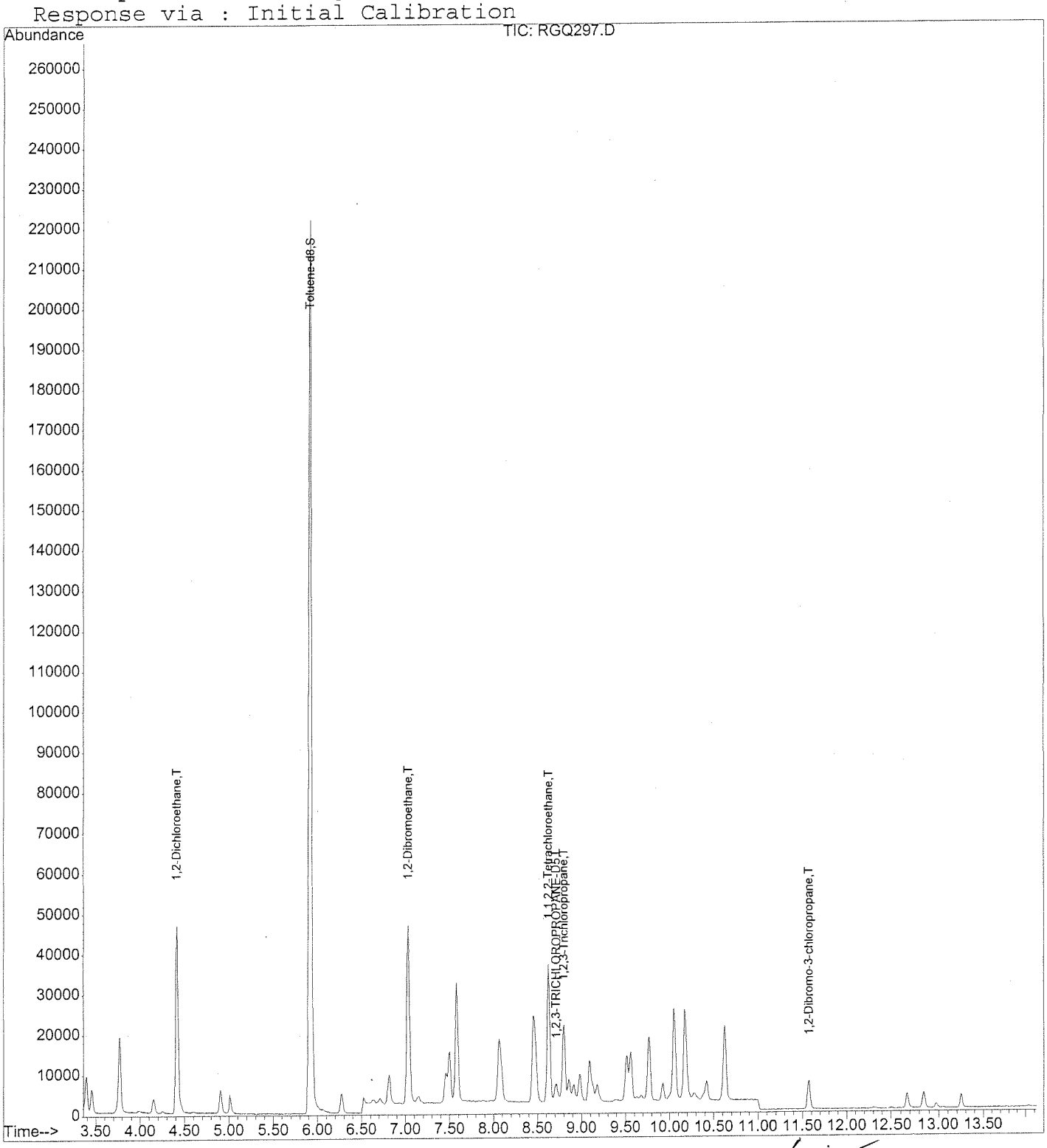
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ297.D
Acq On : 28 Jul 2011 9:54 pm
Sample : VO05G286
Misc : 200PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 20
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



Sw 8/24/11

2164

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ298.D
Acq On : 28 Jul 2011 10:23 pm
Sample : VO05G287
Misc : 400PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 21
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	7921	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	560318	356.43 ng/l	0.00
Spiked Amount 100.000			Recovery	= 356.43%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	143625	431.31 ng/l	99
4) 1,2-Dibromoethane	7.03	107	96868	414.75 ng/l	100
5) 1,1,2,2-Tetrachloroethane	8.63	83	90615	396.37 ng/l	99
6) 1,2,3-Trichloropropane	8.79	75	59428	477.25 ng/l	88
7) 1,2-Dibromo-3-chloropropan	11.57	157	12926	411.95 ng/l	96

SW 8/24/11

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

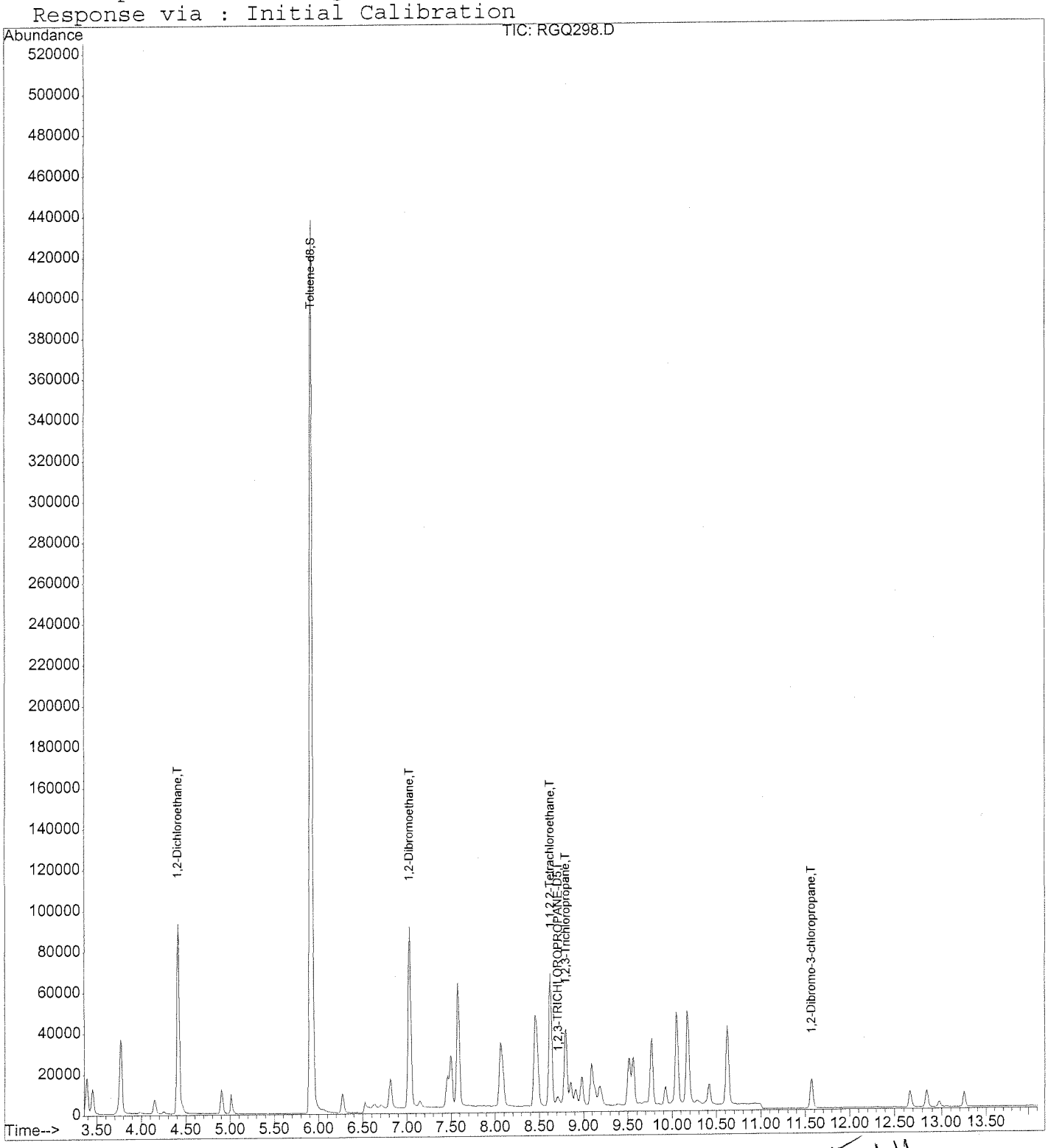
Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ298.D
Acq On : 28 Jul 2011 10:23 pm
Sample : VO05G287
Misc : 400PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 13:02 2011

Vial: 21
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



8/24/11

2166

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ299.D
Acq On : 28 Jul 2011 10:52 pm
Sample : VO05G288
Misc : 1000PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 14:20 2011

Vial: 22
Operator: DN
Inst : TO05
Multiplr: 1.00

Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.70	79	8507	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	1605286	950.80 ng/l	0.00
Spiked Amount 100.000			Recovery	= 950.80%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	373118	1043.31 ng/l	99
4) 1,2-Dibromoethane	7.03	107	259652	1035.14 ng/l	99
5) 1,1,2,2-Tetrachloroethane	8.63	83	246415	1003.62 ng/l	98
7) 1,2-Dibromo-3-chloropropan	11.57	157	35776	1061.64 ng/l	96

SW 8/24/11

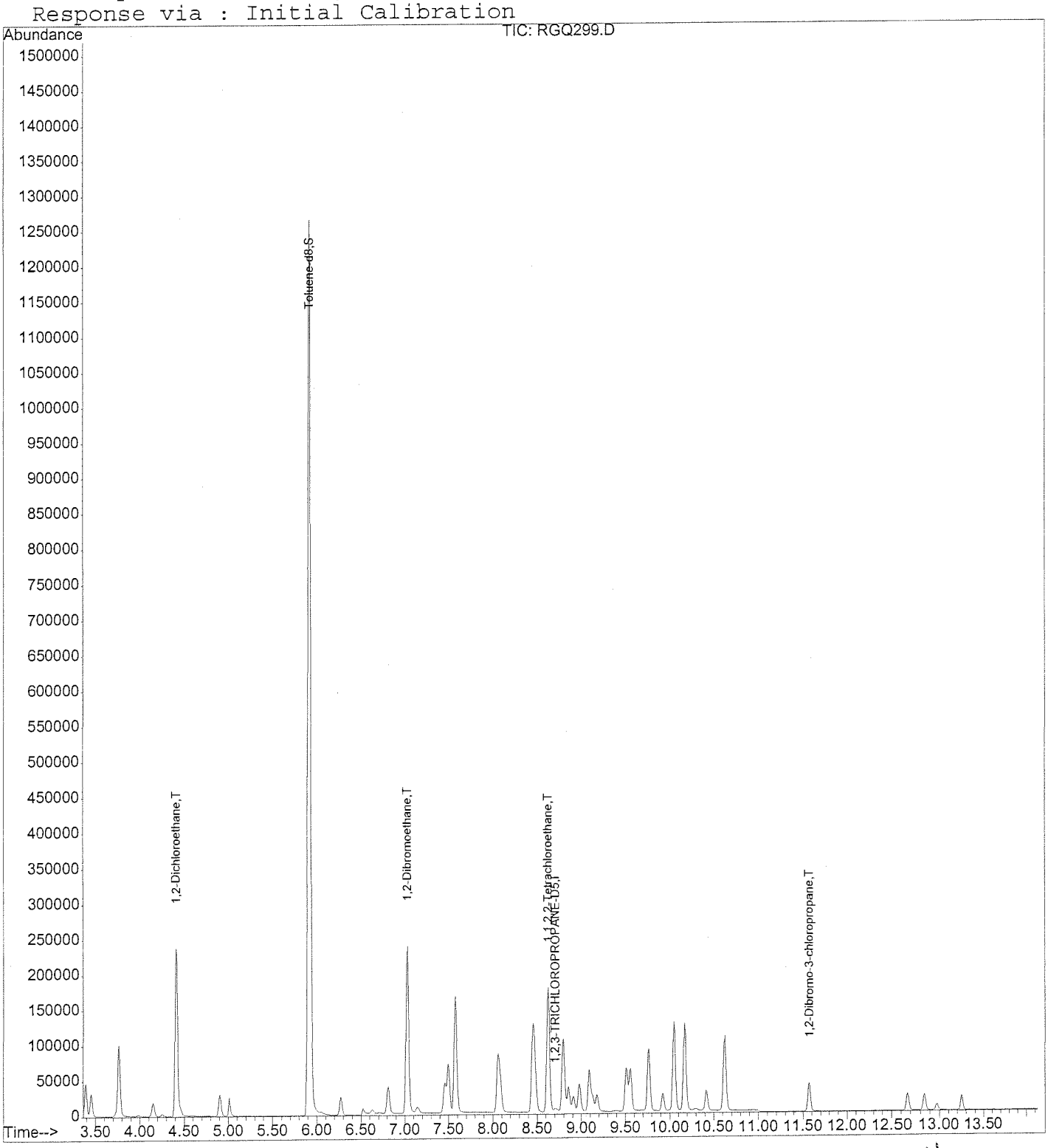
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ299.D
Acq On : 28 Jul 2011 10:52 pm
Sample : VO05G288
Misc : 1000PPT
MS Integration Params: 524INT.P
Quant Time: Aug 1 14:20 2011

Vial: 22
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



8/24/11

2168

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :TO05
IC_Beginning DateTime :07/28/11 19:28
Spike Amount :200 PPT /100 PPT surrogate
CC/CV File :RGQ302
IC File :RGQ296

Column Spec :RTX502.2 ID :0.32MM
IC_Ending DateTime :07/28/11 22:52
HPChem Method :VO05G28
Date_Time :07/29/11 00:21

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,2,3-TRICHLOROPROPANE-D5	50.000	0	8488	1	1	8.713	8.712	0				
2	2	1,2-Dichloroethane	207.697	3.8	74113	2.183	2.102	4.413	4.413	13.40				
	3	Toluene-d8	86.937	-13.1	146453	8.627	9.923	5.919	5.919	14.21				
2	4	1,2-Dibromoethane	199.200	-0.4	49855	1.468	1.474	7.030	7.031	9.52				
2	5	1,1,2,2-Tetrachloroethane	193.805	-3.1	47478	1.398	1.443	8.626	8.627	4.82				
2	6	1,2,3-Trichloropropane	219.686	9.8	29314	0.863	0.786	8.791	8.795	14.49				
2	7	1,2-Dibromo-3-chloropropane	188.589	-5.7	6341	0.187	0.198	11.574	11.571	9.43				

Spike Amount = Nominal Amount * M

SCA
8/24/11

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ302.D
Acq On : 29 Jul 2011 12:21 am
Sample : IVO05G2801
Misc : 100PPT Surrogate/200ppT SW 6/20/12
MS Integration Params: 524INT.P

Vial: 25
Operator: DN
Inst : TO05
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,2,3-TRICHLOROPROPANE-D5	50.000	50.000	0.0	107	0.00
2	T	1,2-Dichloroethane	200.000	207.698	-3.8	102	0.00
3	S	Toluene-d8	100 ~~200~~.000	86.937	13.1	~~56.5#~~ 52	0.00
4	T	1,2-Dibromoethane	200.000	199.200	0.4	101	0.00
5	T	1,1,2,2-Tetrachloroethane	200.000	193.805	3.1	102	0.00
6	T	1,2,3-Trichloropropane	200.000	219.685	-9.8	102	0.00
7	T	1,2-Dibromo-3-chloropropane	200.000	188.589	5.7	106	0.00

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

SW 8/24/11

2170

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ302.D
Acq On : 29 Jul 2011 12:21 am
Sample : IVO05G2801
Misc : 100PPT Surrogate /200ppT SU 6/20/12
MS Integration Params: 524INT.P

Vial: 25
Operator: DN
Inst : TO05
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,2,3-TRICHLOROPROPANE-D5	1.000	1.000	0.0	107	0.00
2	T	1,2-Dichloroethane	2.102	2.183	-3.9	102	0.00
3	S	Toluene-d8	9.923	~~4.314~~ 8.627	~~56.5#~~ 13.1	52	0.00
4	T	1,2-Dibromoethane	1.474	1.468	0.4	101	0.00
5	T	1,1,2,2-Tetrachloroethane	1.443	1.398	3.1	102	0.00
6	T	1,2,3-Trichloropropane	0.786	0.863	-9.8	102	0.00
7	T	1,2-Dibromo-3-chloropropane	0.198	0.187	5.6	106	0.00

Dup 8.23.11

SU 8/24/11

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\11G28\RGQ302.D
Acq On : 29 Jul 2011 12:21 am
Sample : IVO05G2801
Misc : 100PPT Surrogate 1/200 ppT S 6/20/12
MS Integration Params: 524INT.P
Quant Time: Aug 23 14:38 2011

Vial: 25
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.71	79	8488	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	5.92	98	146453	86.94 ng/l	0.00
Spiked Amount 100.000			Recovery	= 86.94%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	4.41	62	74113	207.70 ng/l	99
4) 1,2-Dibromoethane	7.03	107	49855	199.20 ng/l	100
5) 1,1,2,2-Tetrachloroethane	8.63	83	47478	193.80 ng/l	98
6) 1,2,3-Trichloropropane	8.79	75	29314	219.69 ng/l	91
7) 1,2-Dibromo-3-chloropropan	11.57	157	6341	188.59 ng/l	99

SW 8/24/11

(#) = qualifier out of range (m) = manual integration
RGQ302.D VO05G28.M Tue Aug 23 14:38:58 2011

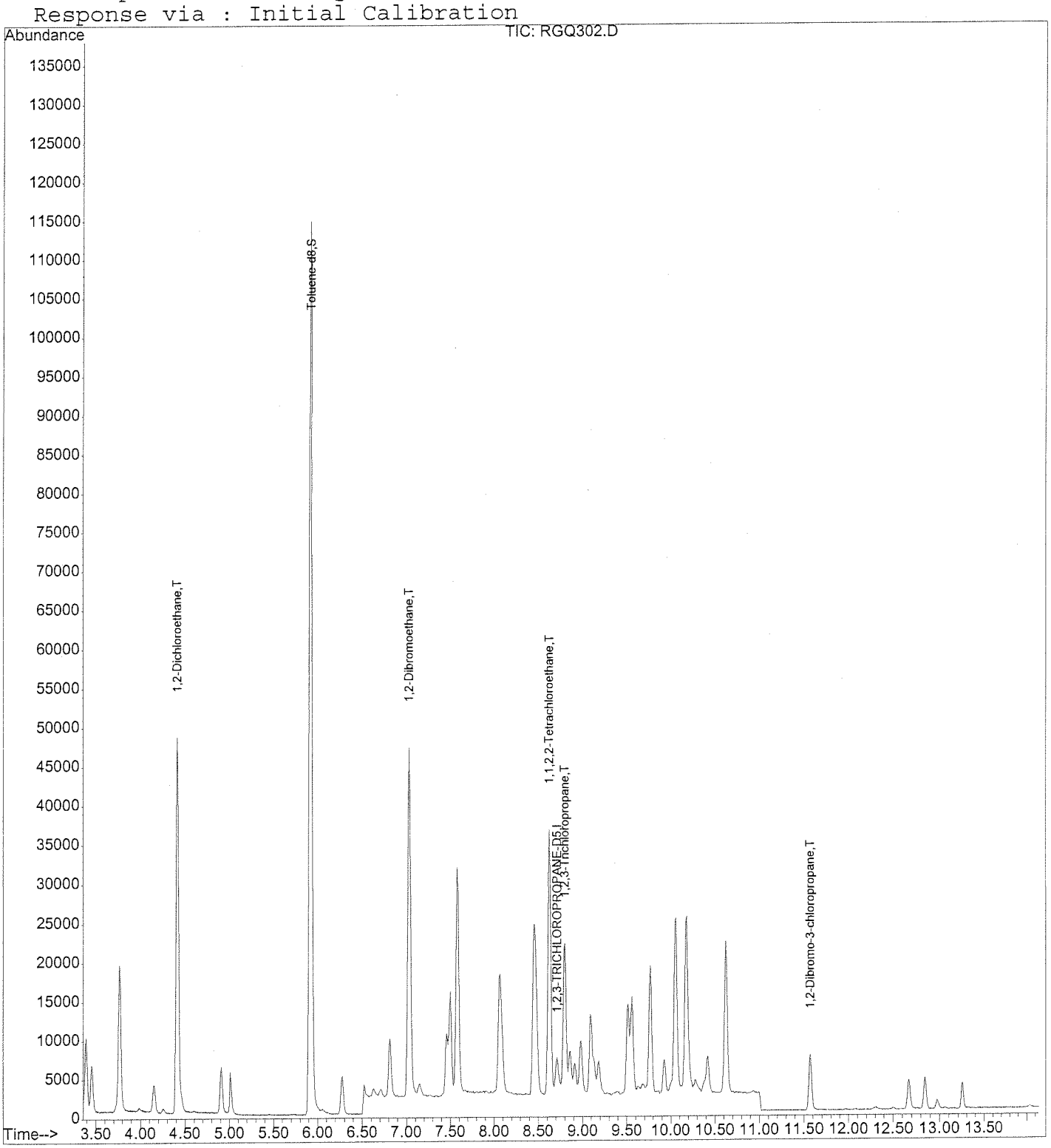
2172

Quantitation Report

Data File : D:\HPCHEM\1\DATA\11G28\RGQ302.D
Acq On : 29 Jul 2011 12:21 am
Sample : IVO05G2801
Misc : 100PPT Surrogate /200ppt SW 6/20/12
MS Integration Params: 524INT.P
Quant Time: Aug 23 14:38 2011

Vial: 25
Operator: DN
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RES

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



2173

DAILY CALIBRATION(S)

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RFQ441
Instrument ID: TO05
GC Column:RTX502.2ID:0.32mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 06/29/12
BFB Injection Time : 06:45
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.74
75	30.0 - 60.0% of mass 95	42.36
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.13
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	99.04
175	5.0 - 9.0% of mass 174	8.19(8.3)1
176	95.0 - 101.0% of mass 174	96.12(97.1)1
177	5.0 - 9.0% of mass 176	7.15(7.4)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
1	VSTD100	CV005G2811	RFQ442	06/29/12	07:16
2	MBLK1W	V005F21B	RFQ446	06/29/12	09:18
3	LCS1W	V005F21L	RFQ443	06/29/12	07:51
4	LCD1W	V005F21C	RFQ444	06/29/12	08:20
5	06-26-12-CW-1	F196-01	RFQ461	06/29/12	16:40
6	06-26-12-CW-5	F196-03	RFQ463	06/29/12	17:38
7	06-26-12-CW-8	F196-05	RFQ464	06/29/12	18:08

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGQ296
Instrument ID: T005

Project: B & B, MONTHLY CITY WELL SAMPLING
SDG No.: 12F196
Date Analyzed: 07/28/11
Time Analyzed: 21:25

		IS1(TCP) AREA #	RT #
	12 HOUR STD	8389	8.71
	UPPER LIMIT	16778	9.21
	LOWER LIMIT	4195	8.21
	SAMPLE ID		
1	VSTD100	5211	8.68
2	MBLK1W	6150	8.68
3	LCS1W	6094	8.68
4	LCD1W	6380	8.68
5	06-26-12-CW-1	6002	8.69
6	06-26-12-CW-5	5923	8.70
7	06-26-12-CW-8	5890	8.69

IS1 (TCP) = 1,2,3-Trichloropropane-d5

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% 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 used to flag internal standard area values with an asterisk
* Values outside of QC limits.

FORM VIII VOSIM OLM02.0

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :TO05
IC_Beginning DateTime :07/28/11 19:28
Spike Amount :100 PPT
CC/CV File :RFQ442
IC File :RGQ296

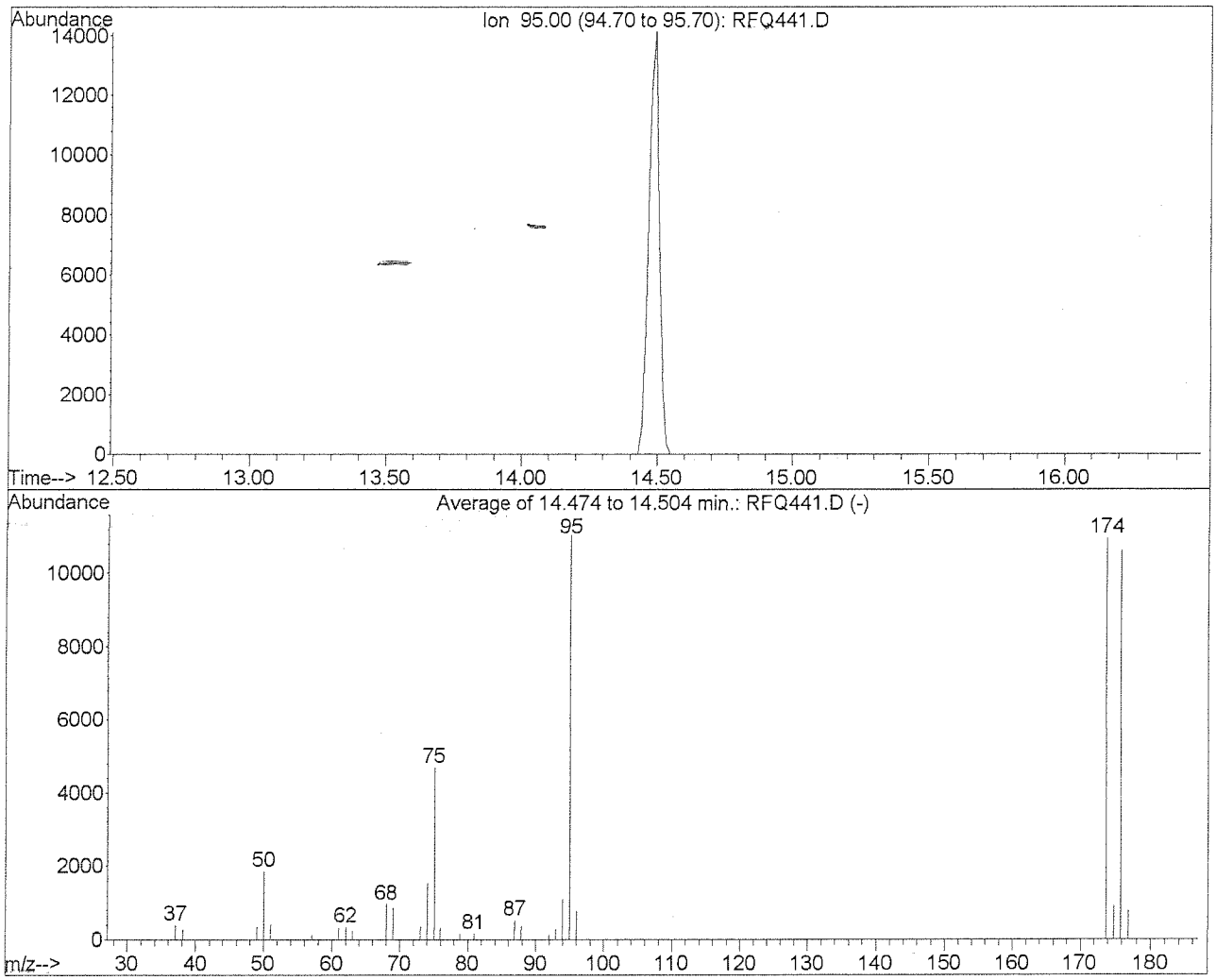
Column Spec :RTX502.2 ID :0.32MM
IC_Ending DateTime :07/28/11 22:52
HPChem Method :VO05G28
Date_Time :06/29/12 07:16

M IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,2,3-TRICHLOROPROPANE-D5	50.000	0	5211	1	1	8.678	8.712	0				
2	1,2-Dichloroethane	133.538	33.5	29254	2.807	2.102	4.390	4.413	13.40				
3	Toluene-d8	86.160	-13.8	89107	8.550	9.923	5.892	5.919	14.21				
4	1,2-Dibromoethane	106.084	6.1	16300	1.564	1.474	6.995	7.031	9.52				
5	1,1,2,2-Tetrachloroethane	104.283	4.3	15684	1.505	1.443	8.591	8.627	4.82				
6	1,2,3-Trichloropropane	108.643	8.6	8900	0.854	0.786	8.765	8.795	14.49				
7	1,2-Dibromo-3-chloropropane	91.802	-8.2	1895	0.182	0.198	11.538	11.571	9.43				

BFB

Data File : D:\HPCHEM\1\DATA\12F29\RFQ441.D
Acq On : 29 Jun 2012 6:45 am
Sample : BFB05F21
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO05F22.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: SD
Inst : TO05
Multiplr: 1.00



AutoFind: Scans 860, 861, 862; Background Corrected with Scan 855

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	1852	PASS
75	95	30	60	42.4	4687	PASS
95	95	100	100	100.0	11064	PASS
96	95	5	9	7.1	789	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	99.0	10958	PASS
175	174	5	9	8.3	906	PASS
176	174	95	101	97.1	10635	PASS
177	176	5	9	7.4	791	PASS

RFQ441.D VO05F22.M Mon Jul 02 08:16:51 2012

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ442.D Vial: 2
Acq On : 29 Jun 2012 7:16 am Operator: SD
Sample : CVO05G2811 Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,2,3-TRICHLOROPROPANE-D5	50.000	50.000	0.0	62	-0.04
2	T	1,2-Dichloroethane	100.000	133.539	-33.5#	74	-0.03
3	S	Toluene-d8	100.000	86.160	13.8	62	-0.03
4	T	1,2-Dibromoethane	100.000	106.084	-6.1	61	-0.04
5	T	1,1,2,2-Tetrachloroethane	100.000	104.283	-4.3	60	-0.04
6	T	1,2,3-Trichloropropane	100.000	108.643	-8.6	64	-0.03
7	T	1,2-Dibromo-3-chloropropane	100.000	91.802	8.2	52	-0.03

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ442.D Vial: 2
Acq On : 29 Jun 2012 7:16 am Operator: SD
Sample : CVO05G2811 Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,2,3-TRICHLOROPROPANE-D5	1.000	1.000	0.0	62	-0.04
2	T	1,2-Dichloroethane	2.102	2.807	-33.5#	74	-0.03
3	S	Toluene-d8	9.923	8.550	13.8	62	-0.03
4	T	1,2-Dibromoethane	1.474	1.564	-6.1	61	-0.04
5	T	1,1,2,2-Tetrachloroethane	1.443	1.505	-4.3	60	-0.04
6	T	1,2,3-Trichloropropane	0.786	0.854	-8.7	64	-0.03
7	T	1,2-Dibromo-3-chloropropane	0.198	0.182	8.1	52	-0.03

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12F29\RFQ442.D Vial: 2
Acq On : 29 Jun 2012 7:16 am Operator: SD
Sample : CVO05G2811 Inst : TO05
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Jun 29 7:30 2012 Quant Results File: VO05G28.RES

Quant Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration
DataAcq Meth : VO05G28

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,2,3-TRICHLOROPROPANE-D5	8.68	79	5211	50.00	ng/l	-0.04
System Monitoring Compounds						
3) Toluene-d8	5.89	98	89107	86.16	ng/l	-0.03
Spiked Amount 100.000			Recovery	=	86.16%	
Target Compounds						Qvalue
2) 1,2-Dichloroethane	4.39	62	29254	133.54	ng/l	97
4) 1,2-Dibromoethane	7.00	107	16300	106.08	ng/l	97
5) 1,1,2,2-Tetrachloroethane	8.59	83	15684	104.28	ng/l	95
6) 1,2,3-Trichloropropane	8.77	75	8900	108.64	ng/l	99
7) 1,2-Dibromo-3-chloropropan	11.54	157	1895	91.80	ng/l	89

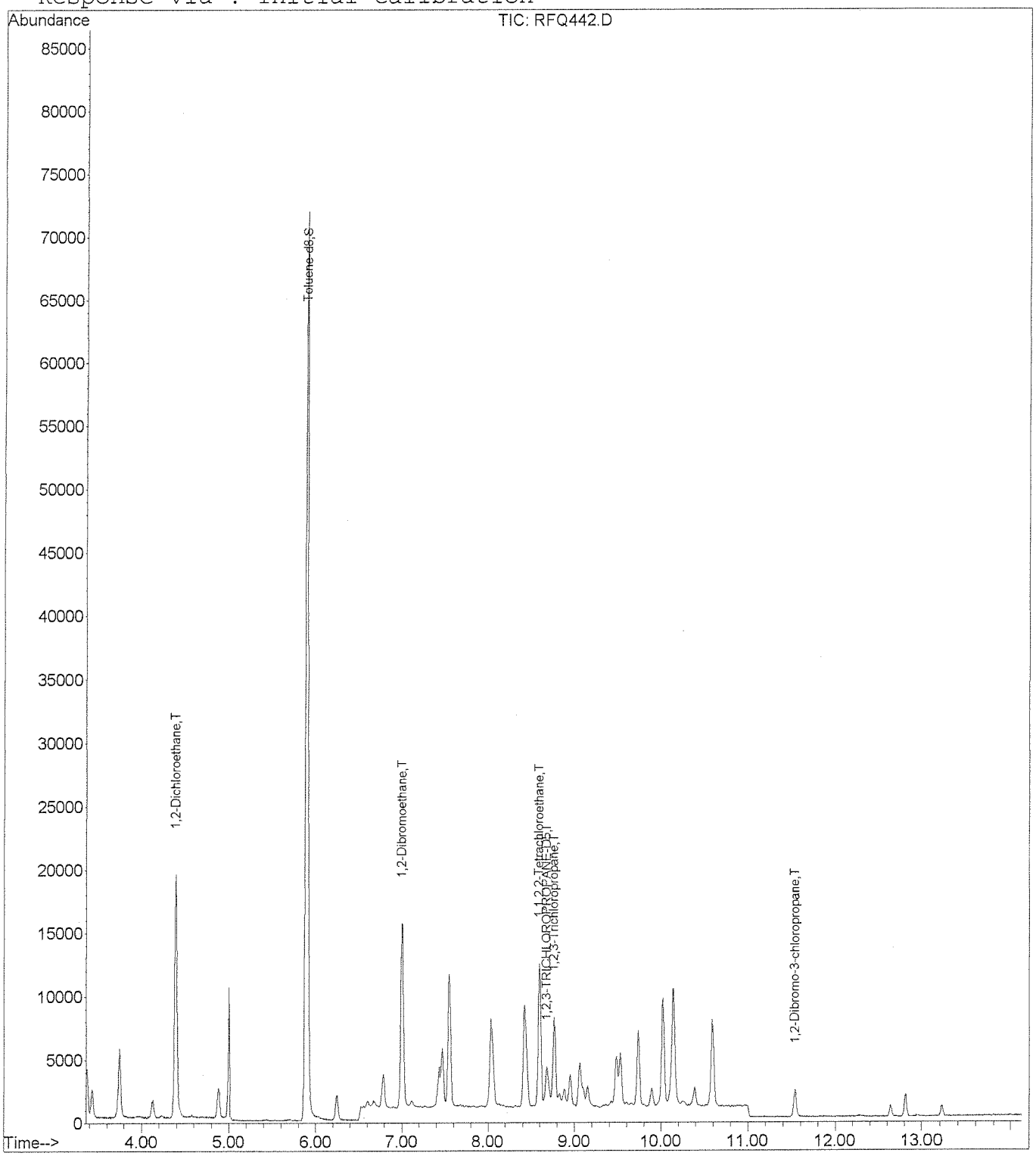
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12F29\RFQ442.D
Acq On : 29 Jun 2012 7:16 am
Sample : CVO05G2811
Misc : DF=1.0
MS Integration Params: 524INT.P
Quant Time: Jun 29 7:30 2012

Vial: 2
Operator: SD
Inst : TO05
Multiplr: 1.00
Quant Results File: VO05G28.RE

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Initial Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGQ001
Instrument ID: T005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12F196
BFB Injection Date : 07/02/12
BFB Injection Time : 07:50
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.76
75	30.0 - 60.0% of mass 95	40.66
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.21
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	97.89
175	5.0 - 9.0% of mass 174	7.22(7.4)1
176	95.0 - 101.0% of mass 174	93.35(95.4)1
177	5.0 - 9.0% of mass 176	6.83(7.3)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
1	VSTD100	CV005G2812	RGQ002	07/02/12	08:25
2	MBLK2W	V005G01B	RGQ010	07/02/12	12:25
3	LCS2W	V005G01L	RGQ003	07/02/12	08:59
4	LCD2W	V005G01C	RGQ004	07/02/12	09:28
5	06-26-12-CW-9	F196-06	RGQ012	07/02/12	14:20
6	06-26-12-CW-10	F196-07	RGQ013	07/02/12	14:49
7	06-26-12-FDUP-1	F196-02R	RGQ014	07/02/12	15:18
8	06-26-12-CW-6	F196-04R	RGQ015	07/02/12	15:47
9	06-26-12-CW-6MS	F196-04M	RGQ016	07/02/12	16:16
10	06-26-12-CW-6MSD	F196-04S	RGQ017	07/02/12	16:45

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGQ296
Instrument ID: T005

Project: B & B, MONTHLY CITY WELL SAMPLING
SDG No.: 12F196
Date Analyzed: 07/28/11
Time Analyzed: 21:25

		IS1(TCP) AREA #	RT #
	12 HOUR STD	8389	8.71
	UPPER LIMIT	16778	9.21
	LOWER LIMIT	4195	8.21
	SAMPLE ID		
1	VSTD100	5589	8.69
2	MBLK2W	5660	8.69
3	LCS2W	5761	8.69
4	LCD2W	5545	8.70
5	06-26-12-CW-9	6245	8.70
6	06-26-12-CW-10	5690	8.70
7	06-26-12-FDUP-1	5692	8.70
8	06-26-12-CW-6	5926	8.70
9	06-26-12-CW-6MS	6073	8.70
10	06-26-12-CW-6MSD	5641	8.70

IS1 (TCP) = 1,2,3-Trichloropropane-d5

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% 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 used to flag internal standard area values with an asterisk
* Values outside of QC limits.

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T005
IC_Beginning DateTime :07/28/11 19:28
Spike Amount :100 PPT
CC/CV File :RGQ002
IC File :RGQ296

Column Spec :RTX502.2 ID :0.32MM
IC_Ending DateTime :07/28/11 22:52
HPChem Method :V005G28
Date_Time :07/02/12 08:25

M IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,2,3-TRICHLOROPROPANE-D5	50.000	0	5589	1	1	8.695	8.712	0				
2	1,2-Dichloroethane	127.584	27.6	29977	2.682	2.102	4.398	4.413	13.40				
3	Toluene-d8	94.529	-5.5	104854	9.380	9.923	5.905	5.919	14.21				
4	1,2-Dibromoethane	104.808	4.8	17272	1.545	1.474	7.012	7.031	9.52				
5	1,1,2,2-Tetrachloroethane	101.557	1.6	16382	1.466	1.443	8.608	8.627	4.82				
6	1,2,3-Trichloropropane	104.960	5.0	9222	0.825	0.786	8.773	8.795	14.49				
7	1,2-Dibromo-3-chloropropane	91.600	-8.4	2028	0.181	0.198	11.557	11.571	9.43				

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12G02\RGQ002.D Vial: 2
Acq On : 2 Jul 2012 8:25 am Operator: SD
Sample : CVO05G2812 Inst : TO05
Misc : 100ppt Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,2,3-TRICHLOROPROPANE-D5	50.000	50.000	0.0	67	-0.02
2	T	1,2-Dichloroethane	100.000	127.584	-27.6#	76	-0.02
3	S	Toluene-d8	100.000	94.529	5.5	72	-0.01
4	T	1,2-Dibromoethane	100.000	104.808	-4.8	64	-0.02
5	T	1,1,2,2-Tetrachloroethane	100.000	101.557	-1.6	63	-0.02
6	T	1,2,3-Trichloropropane	100.000	104.960	-5.0	67	-0.02
7	T	1,2-Dibromo-3-chloropropane	100.000	91.600	8.4	56	0.00

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12G02\RGQ002.D Vial: 2
Acq On : 2 Jul 2012 8:25 am Operator: SD
Sample : CVO05G2812 Inst : TO05
Misc : 100ppt Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO05G28.M (RTE Integrator)
Title : METHOD 8260 SIM
Last Update : Mon Aug 01 13:00:43 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,2,3-TRICHLOROPROPANE-D5	1.000	1.000	0.0	67	-0.02
2	T	1,2-Dichloroethane	2.102	2.682	-27.6#	76	-0.02
3	S	Toluene-d8	9.923	9.380	5.5	72	-0.01
4	T	1,2-Dibromoethane	1.474	1.545	-4.8	64	-0.02
5	T	1,1,2,2-Tetrachloroethane	1.443	1.466	-1.6	63	-0.02
6	T	1,2,3-Trichloropropane	0.786	0.825	-5.0	67	-0.02
7	T	1,2-Dibromo-3-chloropropane	0.198	0.181	8.6	56	0.00

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

ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☐ EMAX-8260 Rev.No. 8 ☐ EMAX-524.2 Rev.No. 7 ☐ EMAX-624 Rev.No. 4 ☐ EMAX-8260SIM Rev.No. 1 ☑ EMAX-TCPSIM Rev.No. 2 ☐ EMAX-M8260SIM Rev.No. 0 ☐

Start Date: 6/29/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # A05 -060

BATCH CV005G28-11

	Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01		RFQ 441	BFB05 ~~G28-11F2~~ sd 7/2/12	0.5mL					
02		442	CV005G28-11	1mL					6:45am
03		443	V005F21L	↓					
04		444	↓ C	↓					
05		445	RINSE						
06		446	V005F21B	25mL					
07		447	12F176-02	↓	1.0	✓	✓		
08		448	-04	↓	↓	✓	✓		
09		449	-06	↓	↓	✓	✓		
10		450	-10	↓	↓	✓	✓		
11		451	-03	↓	↓	✓	✓		
12		452	-07	↓	↓	✓	✓		
13		453	-08	↓	↓	✓	✓		
14		454	-12	↓	↓	✓	✓		
15		455	-11	↓	↓	✓	✓		
16		456	-11M	↓	↓	✓	✓		
17		457	-11S	↓	↓	✓	✓		
18		458	12F196-04M	↓	↓	✓	✓		
19		459	-04S	↓	↓	✓	✓		tol.dd 85 low, RR
20		460	-04	↓	↓	✓	✓		↓
21		461	-01 ✓	↓	↓	✓	✓		
22		462	-02	↓	↓	✓	✓		
23		463	-03 ✓	↓	↓	✓	✓		tol.dd 85 low, RR to confirm
24		464	-05 ✓	↓	↓	✓	✓		
25		↓ 465-469	RINSE	↓	↓	✓	✓		6:08pm
26									
27									
28									
29									
30									sd 7/2/12

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/28/11
ICAL ID	V005G28

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC	SV1-19-90-01	1mL	2.5
BFB	-68-02	0.5	50
IS/SURR.	-85-03	1	1.25
ICV/LCS	-49-03	1	2.5
ICV/LCS	-86-02	1	2.5
ICV/LCS			
ICV/LCS			
ICV/LCS			

DATA FILE FOLDER	12F29

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO05	

Comments:

Analyzed By: sd

Date Disposed: 7/2/12

Disposed By: sd

2186

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☐ EMAX-8260 Rev.No. 8 ☐ EMAX-524.2 Rev.No. 7 ☐ EMAX-624 Rev.No. 4 ☐ EMAX-8260SIM Rev.No. 1 ☑ EMAX-TCPSIM Rev.No. 2 ☐ EMAX-M8260SIM Rev.No. 0 ☐

Start Date: 7/2/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # A05 -060

BATCH CV005G28/12

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RGQ001	BFB05G01	0.5mL					7:50am
02	002	CV005G28/12	5mL					
03	003	V005G01L						
04	004	↓ C	↓					
05	005	2.5ppb	0.05mL					
06	006	5.0	0.05mL					
07	007	10	0.1mL					
08	008	20	0.2mL					
09	009	50	0.5mL					
10	010	V005G01R	25mL					
11	011	RINSE						
12	012	12F196-06	25mL	1.0	✓	✓		
13	013	-07			✓	✓		
14	014	-02R			✓	✓		
15	015	-04R			✓	✓		
16	016	-04M			✓	✓		
17	017	-04S			✓	✓		9:45pm
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								SD 7/3/12

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/28/11
ICAL ID	V005G28

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC	SV1-19-90-01	1	2.5
BFB	-68-02	0.5	50
IS/SURR.	-85-03	1	12.5
	-49-03	1	25
ICV/LCS	-86-02	1	50
ICV/LCS			
ICV/LCS			
ICV/LCS			

DATA FILE FOLDER 12G02

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO05	

Comments:

Analyzed By: SD

Date Disposed: 7/3/12

Disposed By: SD

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☐ EMAX-8260 Rev.No. 6 ☐ EMAX-524.2 Rev.No. 5 ☐ EMAX-624 Rev.No. 2 ☐ EMAX-8260SIM Rev.No.0 ☑ EMAX-TCPSIM Rev.No.1 ☐ EMAX-M8260SIM Rev.No.0 ☐

Start Date: 7/28/11 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # A05 -057

BATCH V005G285

	Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RCQ280		BFB05G15	0.5mL	N/A	N/A	N/A		6:29pm
02		291	RINSE	5mL					
03		292	V005G281	25/5mL .1/.05mL	~~5/10mL~~				
04		293	2	.2/.1mL	~~2/5mL~~				5ppt
05		294	3	.4/.2mL	~~4/10mL~~				10
06		295	4	.1/.5mL	~~7/mL~~	51			20
07		296	5	2/1mL	~~2/2mL~~	7/1/11			50
08		297	6	4/2mL	~~4/4mL~~				100
09		298	7	8/4mL	~~8/8mL~~				200
10		299	8	20/10mL	~~20/20mL~~				400
11		300	RINSE						1000
12		301	↓						
13		302	IV005G2801	2mL					200ppb.
14		303	RINSE						
15		304	LOD	0.2/0.625mL					10ppb tol-ds 2.5ppb sim
16									1:21am
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									8/1/11

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/28/11
ICAL ID	V005G28

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC sim 1°	SV1-17-57-03	*	2500ppb
BFB	-45-03	0.5mL	50ppm
IS/SURR 55/55	-75-01 / -74-01 / -74-02	*	1250ppb 1250ppb 1250/2500ppb
ICV/LCS sim 20	-58-01	2	2500ppb
ICV/LCS			
ICV/LCS			
ICV/LCS			

Date File Folder 11628

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO05	

Comments: * : varies, see calibration level

Analyzed By: DH

Date Disposed: 7/29/11

Disposed By: DH

Injection Log

Directory: D:\HPCHEM\1\DATA\12G02

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RGQ001.D	1.	BFB05G01	T/CHK	2 Jul 2012 07
2	2	RGQ002.D	1.	CVO05G2812	100ppt	2 Jul 2012 08
3	3	RGQ003.D	1.	VO05G01L	100ppt	2 Jul 2012 08
4	4	RGQ004.D	1.	VO05G01C	100ppt	2 Jul 2012 09
5	5	RGQ005.D	1.	2.5		2 Jul 2012 09
6	6	RGQ006.D	1.	5.0		2 Jul 2012 10
7	7	RGQ007.D	1.	10		2 Jul 2012 10
8	8	RGQ008.D	1.	20		2 Jul 2012 11
9	9	RGQ009.D	1.	50		2 Jul 2012 11
10	10	RGQ010.D	1.	VO05G01B	BLANK	2 Jul 2012 12
11	11	RGQ011.D	1.	RINSE	DF=1.0	2 Jul 2012 13
12	12	RGQ012.D	1.	12F196-06 25mL	DF=1.0	2 Jul 2012 14
13	13	RGQ013.D	1.	12F196-07 25mL	DF=1.0	2 Jul 2012 14
14	14	RGQ014.D	1.	12F196-02R 25mL	DF=1.0	2 Jul 2012 15
15	15	RGQ015.D	1.	12F196-04R 25mL	DF=1.0	2 Jul 2012 15
16	16	RGQ016.D	1.	12F196-04M 25mL	DF=1.0	2 Jul 2012 16
17	17	RGQ017.D	1.	12F196-04S 25mL	DF=1.0	2 Jul 2012 16
18	1	RGQ018.D	1.	BFB05G02	T/CHK	2 Jul 2012 17
19	2	RGQ019.D	1.	CVO05F2003	500ppt	2 Jul 2012 18
20	3	RGQ020.D	1.	VO05G02L	500ppt	2 Jul 2012 18
21	4	RGQ021.D	1.	VO05G02C	500ppt	2 Jul 2012 19
22	5	RGQ022.D	1.	VO05G02B	BLANK	2 Jul 2012 19
23	6	RGQ023.D	1.	20ppt		2 Jul 2012 20
24	7	RGQ024.D	1.	50ppt		2 Jul 2012 20
25	8	RGQ025.D	1.	100ppt		2 Jul 2012 21

Injection Log

Directory: D:\HPCHEM\1\DATA\12F29

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFQ441.D	1.	BFB05F21	T/CHK	29 Jun 2012 0
2	2	RFQ442.D	1.	CVO05G2811	DF=1.0	29 Jun 2012 0
3	4	RFQ443.D	1.	VO05F21L	100ppt	29 Jun 2012 0
4	5	RFQ444.D	1.	VO05F21C	100ppt	29 Jun 2012 0
5	6	RFQ445.D	1.	RINSE	BLANK	29 Jun 2012 0
6	7	RFQ446.D	1.	VO05F21B	BLANK	29 Jun 2012 0
7	8	RFQ447.D	1.	12F176-02 25mL	DF=1.0	29 Jun 2012 0
8	9	RFQ448.D	1.	12F176-04 25mL	DF=1.0	29 Jun 2012 1
9	10	RFQ449.D	1.	12F176-06 25mL	DF=1.0	29 Jun 2012 1
10	11	RFQ450.D	1.	12F176-10 25mL	DF=1.0	29 Jun 2012 1
11	12	RFQ451.D	1.	12F176-03 25mL	DF=1.0	29 Jun 2012 1
12	13	RFQ452.D	1.	12F176-07 25mL	DF=1.0	29 Jun 2012 1
13	14	RFQ453.D	1.	12F176-08 25mL	DF=1.0	29 Jun 2012 1
14	15	RFQ454.D	1.	12F176-12 25mL	DF=1.0	29 Jun 2012 1
15	16	RFQ455.D	1.	12F176-11 25mL	DF=1.0	29 Jun 2012 1
16	17	RFQ456.D	1.	12F176-11M 25mL	DF=1.0	29 Jun 2012 1
17	18	RFQ457.D	1.	12F176-11S 25mL	DF=1.0	29 Jun 2012 1
18	19	RFQ458.D	1.	12F196-04M 25mL	DF=1.0	29 Jun 2012 1
19	20	RFQ459.D	1.	12F196-04S 25mL	DF=1.0	29 Jun 2012 1
20	21	RFQ460.D	1.	12F196-04 25mL	DF=1.0	29 Jun 2012 1
21	22	RFQ461.D	1.	12F196-01 25mL	DF=1.0	29 Jun 2012 1
22	23	RFQ462.D	1.	12F196-02 25mL	DF=1.0	29 Jun 2012 1
23	24	RFQ463.D	1.	12F196-03 25mL	DF=1.0	29 Jun 2012 1
24	25	RFQ464.D	1.	12F196-05 25mL	DF=1.0	29 Jun 2012 1
25	26	RFQ465.D	1.	RINSE	DF=1.0	29 Jun 2012 1
26	27	RFQ466.D	1.	RINSE	DF=1.0	29 Jun 2012 1
27	28	RFQ467.D	1.	RINSE	DF=1.0	29 Jun 2012 1
28	29	RFQ468.D	1.	RINSE	DF=1.0	29 Jun 2012 2
29	30	RFQ469.D	1.	RINSE	DF=1.0	29 Jun 2012 2

LABORATORY REPORT FOR

ECO & ASSOCIATES, INC.

B & B, MONTHLY CITY WELL SAMPLING

METHOD 8151A
HERBICIDES

SDG#: 12F196

CASE NARRATIVE

Client : ECO & ASSOCIATES, INC.

Project : B & B, MONTHLY CITY WELL SAMPLING

SDG : 12F196

METHOD 8151A
HERBICIDES

A total of seven (7) water samples were received on 06/26/12 for Chlorinated Herbicides analysis, Method 8151A in accordance with Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 and QAPP09.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was analyzed at the frequency required by the project. For this SDG, one method blank was analyzed with the samples. Result was compliant to project requirement.

Lab Control Sample
A set of LCS/LCD was analyzed with the samples in this SDG.
Percent recoveries for HEF006WL/C were all within QC limits.

Matrix QC Sample
A set of MS/MSD was analyzed with the samples in this SDG.
Percent recoveries for F196-04M/S were within project QC limits.

Surrogate
Surrogate was added on QC and field samples. Surrogate recoveries were within project QC limits. Refer to sample result forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. All project requirements were met otherwise anomalies were discussed within the associated QC parameter.

LAB CHRONICLE
HERBICIDES

Client : ECO & ASSOCIATES, INC.
Project : B & B, MONTHLY CITY WELL SAMPLING

SDG NO. : 12F196
Instrument ID : GCT016

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	HEF006WB	1	NA	06/29/1211:09	06/28/1215:48	WF29006A	WF29005A	HEF006W	Method Blank
LCS1W	HEF006WL	1	NA	06/29/1211:31	06/28/1215:48	WF29007A	WF29005A	HEF006W	Lab Control Sample (LCS)
LCD1W	HEF006WC	1	NA	06/29/1211:52	06/28/1215:48	WF29008A	WF29005A	HEF006W	LCS Duplicate
06-26-12-CW-1	F196-01	1	NA	06/29/1214:01	06/28/1215:48	WF29014A	WF29005A	HEF006W	Field Sample
06-26-12-FDUP-1	F196-02	1	NA	06/29/1214:22	06/28/1215:48	WF29015A	WF29005A	HEF006W	Field Sample
06-26-12-CW-5	F196-03	1	NA	06/29/1215:48	06/28/1215:48	WF29019A	WF29017A	HEF006W	Field Sample
06-26-12-CW-6	F196-04	1	NA	06/29/1213:39	06/28/1215:48	WF29013A	WF29005A	HEF006W	Field Sample
06-26-12-CW-8	F196-05	1	NA	06/29/1216:09	06/28/1215:48	WF29020A	WF29017A	HEF006W	Field Sample
06-26-12-CW-9	F196-06	1	NA	06/29/1216:31	06/28/1215:48	WF29021A	WF29017A	HEF006W	Field Sample
06-26-12-CW-10	F196-07	1	NA	06/29/1216:52	06/28/1215:48	WF29022A	WF29017A	HEF006W	Field Sample
06-26-12-CW-6MS	F196-04M	1	NA	06/29/1212:57	06/28/1215:48	WF29011A	WF29005A	HEF006W	Matrix Spike Sample (MS)
06-26-12-CW-6MSD	F196-04S	1	NA	06/29/1213:18	06/28/1215:48	WF29012A	WF29005A	HEF006W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-CW-1	Date Analyzed:	06/29/12 14:01
Lab Samp ID:	F196-01	Dilution Factor:	1
Lab File ID:	WF29014A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29005A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	10.56|(10.79)	10.00	106|(108)	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-FDUP-1	Date Analyzed:	06/29/12 14:22
Lab Samp ID:	F196-02	Dilution Factor:	1
Lab File ID:	WF29015A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29005A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	(9.943)|9.740	10.00	(99.4)|97.4	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-CW-5	Date Analyzed:	06/29/12 15:48
Lab Samp ID:	F196-03	Dilution Factor:	1
Lab File ID:	WF29019A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29017A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	10.16|(10.26)	10.00	102|(103)	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

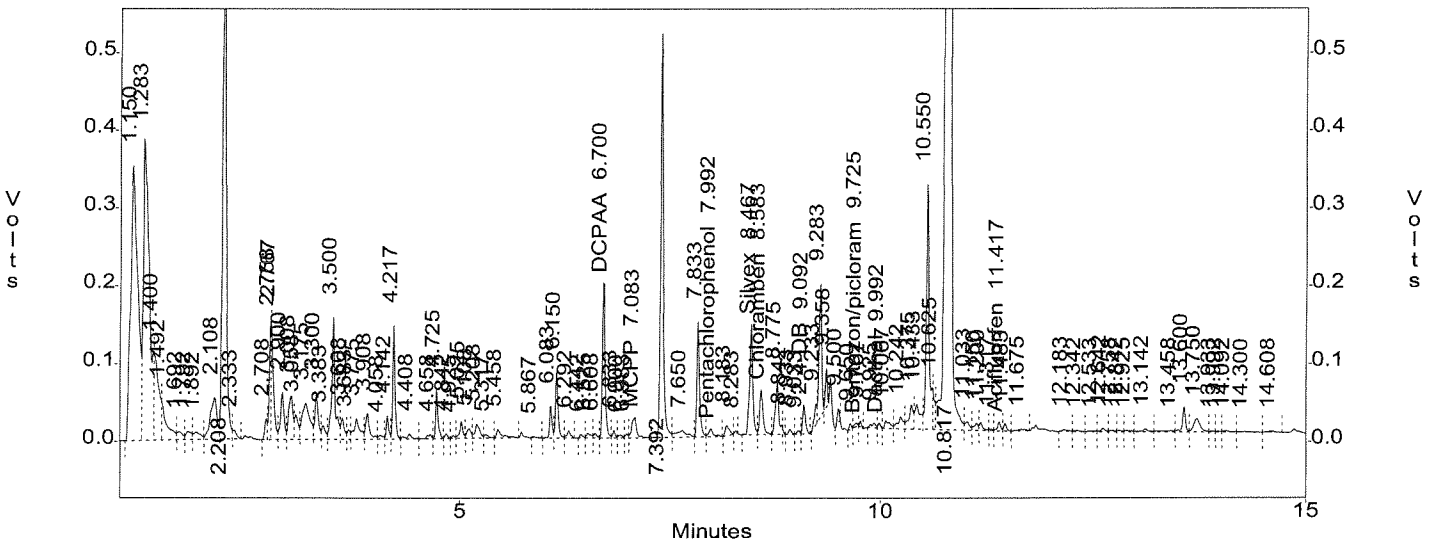
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.019
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-03
Acquired : Jun 29, 2012 15:48:18
Printed : Jun 29, 2012 16:44:27
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.625	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	5.942	0.0	0.00	0.00	--
4-Nitrophenol	6.483	0.0	0.00	0.00	--
DCPAA	6.700	451936.0	444.68	1016.33	VV
Dicamba	6.875	0.0	0.00	0.00	--
MCPP	7.083	106028.0	3.59	29527.17	SV
MCPA	7.225	0.0	0.00	0.00	--
DCP	7.567	0.0	0.00	0.00	--
2,4-D	7.767	0.0	0.00	0.00	--
Pentachlorophenol	7.992	37624.0	6248.45	6.02	VV
Silvex	8.467	363227.0	2612.09	139.06	BV
Chloramben	8.583	166376.0	1994.14	83.43	VV
2,4,5-T	8.683	0.0	0.00	0.00	--
2,4-DB	9.092	85483.0	459.56	186.01	SV
Bentazon/picloram	9.725	10188.0	1780.81	5.72	SS
Dinoseb	9.808	0.0	0.00	0.00	--
Dacthal	9.992	12310.0	2900.82	4.24	VV
Acifluorfen	11.417	30844.0	2077.16	14.85	VV

c:\ezchrom\chrom\wf29\wf29.019 -- Channel A

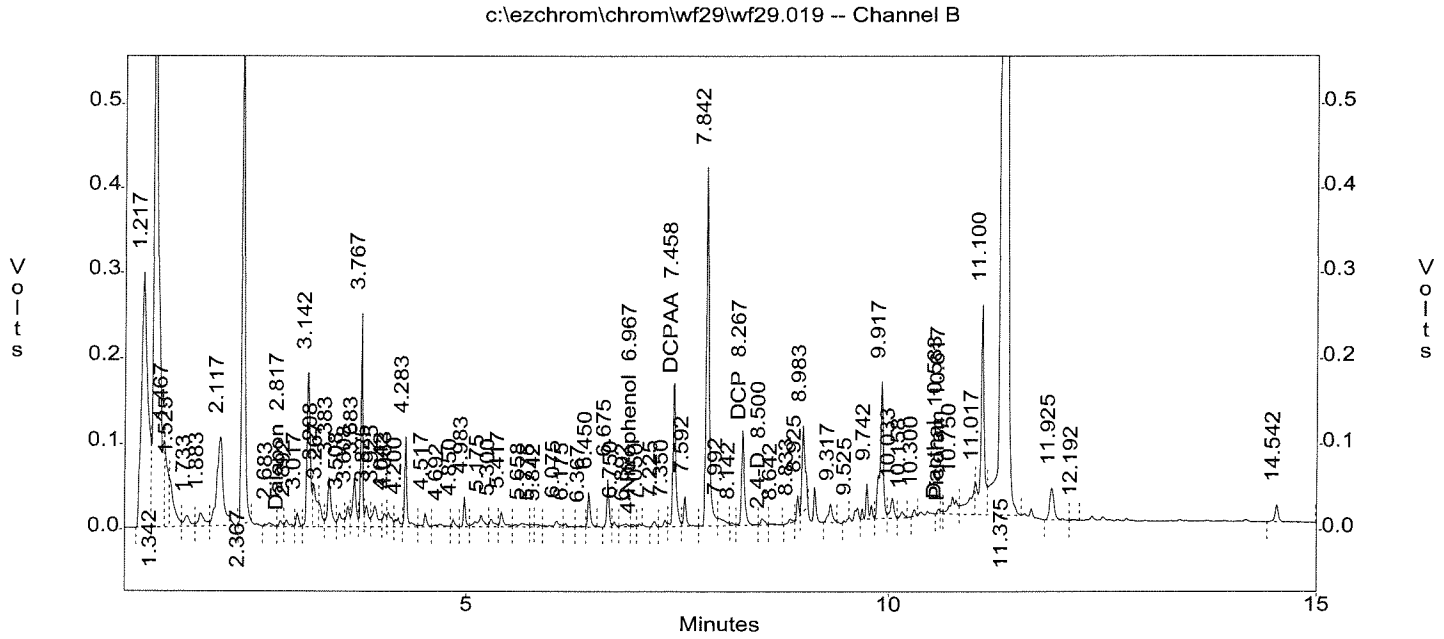


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.019
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-03
Acquired : Jun 29, 2012 15:48:18
Printed : Jun 29, 2012 16:44:27
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.817	17641.0	821.24	21.48	VV
3,5 Dichlorobenzoic	6.417	0.0	0.00	0.00	--
4-Nitrophenol	6.967	6790.0	310.37	21.88	VV
DCPAA	7.458	417645.0	407.10	1025.91	SV
Dicamba	7.633	0.0	0.00	0.00	--
MCPP	7.733	0.0	0.00	0.00	--
MCPA	7.950	0.0	0.00	0.00	--
DCP	8.267	275320.0	611.26	450.42	VV
2,4-D	8.500	25321.0	701.42	36.10	VV
Pentachlorophenol	8.875	0.0	0.00	0.00	--
Silvex	9.158	0.0	0.00	0.00	--
2,4,5-T	9.433	0.0	0.00	0.00	--
Chloramben	9.475	0.0	0.00	0.00	--
2,4-DB	9.783	0.0	0.00	0.00	--
Dinoseb	10.000	0.0	0.00	0.00	--
Bentazon	10.358	0.0	0.00	0.00	--
Dacthal	10.583	10147.0	1999.91	5.07	xx
Picloram	10.617	5533.0	3082.04	1.80	xS
Acifluorfen	11.783	0.0	0.00	0.00	--



5008

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-CW-6	Date Analyzed:	06/29/12 13:39
Lab Samp ID:	F196-04	Dilution Factor:	1
Lab File ID:	WF29013A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29005A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	9.360|(9.573)	10.00	93.6|(95.7)	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-CW-8	Date Analyzed:	06/29/12 16:09
Lab Samp ID:	F196-05	Dilution Factor:	1
Lab File ID:	WF29020A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29017A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	(8.995)|8.953	10.00	(90.0)|89.5	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-CW-9	Date Analyzed:	06/29/12 16:31
Lab Samp ID:	F196-06	Dilution Factor:	1
Lab File ID:	WF29021A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29017A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	8.123|(8.152)	10.00	81.2|(81.5)	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	06/26/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/26/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	06-26-12-CW-10	Date Analyzed:	06/29/12 16:52
Lab Samp ID:	F196-07	Dilution Factor:	1
Lab File ID:	WF29022A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29017A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|0.81	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	10.06|(10.14)	10.00	101|(101)	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

QC SUMMARIES

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	NA
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	06/28/12
Batch No.	: 12F196	Date Extracted:	06/28/12 15:48
Sample ID:	MBLK1W	Date Analyzed:	06/29/12 11:09
Lab Samp ID:	HEF006WB	Dilution Factor:	1
Lab File ID:	WF29006A	Matrix :	WATER
Ext Btch ID:	HEF006W	% Moisture :	NA
Calib. Ref.:	WF29005A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
DINOSEB	(ND)|ND	0.40	0.20|0.20

SURROGATE PARAMETERS	RESULTS	SPK_AMT	% RECOVERY	QC LIMIT
2,4-DCPAA	(10.44)|10.30	10.00	(104)|103	40-140

Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 8151A

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	HEF006WB	HEF006WL	HEF006WC		
LAB FILE ID:	WF29006A	WF29007A	WF29008A		
DATE EXTRACTED:	06/28/1215:48	06/28/1215:48	06/28/1215:48	DATE COLLECTED:	NA
DATE ANALYZED:	06/29/1211:09	06/29/1211:31	06/29/1211:52	DATE RECEIVED:	06/28/12
PREP. BATCH:	HEF006W	HEF006W	HEF006W		
CALIB. REF:	WF29005A	WF29005A	WF29005A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Dinoseb	(ND)|ND	1.00	0.783|(0.962)	78|(96)	1.00	0.700|(0.826)	70|(83)	11|(15)	20-100	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4-DCPAA	10.00	10.98|(11.32)	110|(113)	10.00	10.11|(10.12)	101|(101)	40-140

5815

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12F196
METHOD: METHOD 8151A

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	06-26-12-CW-6				
LAB SAMP ID:	F196-04	F196-04M	F196-04S		
LAB FILE ID:	WF29013A	WF29011A	WF29012A		
DATE EXTRACTED:	06/28/1215:48	06/28/1215:48	06/28/1215:48	DATE COLLECTED:	06/26/12
DATE ANALYZED:	06/29/1213:39	06/29/1212:57	06/29/1213:18	DATE RECEIVED:	06/26/12
PREP. BATCH:	HEF006W	HEF006W	HEF006W		
CALIB. REF:	WF29005A	WF29005A	WF29005A		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Dinoseb	(ND)|ND	1.00	0.717|(0.787)	72|(79)	1.00	0.619|(0.768)	62|(77)	15|(2)	20-100	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
2,4-DCPAA	10.00	10.93|(11.16)	109|(112)	10.00	10.03|(10.27)	100|(103)	40-140

5915

QC DATA

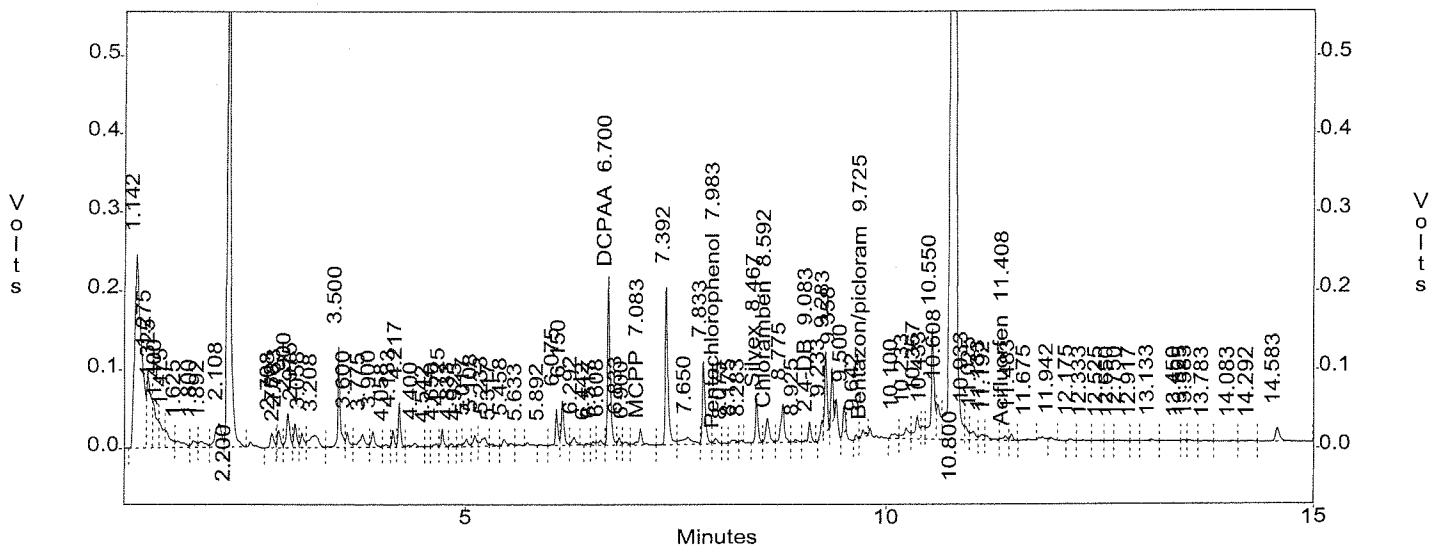
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.006
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HEF006WB
Acquired : Jun 29, 2012 11:09:57
Printed : Jun 29, 2012 12:08:51
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.625	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	5.933	0.0	0.00	0.00	--
4-Nitrophenol	6.483	0.0	0.00	0.00	--
DCPAA	6.700	464072.0	444.68	1043.62	VV
Dicamba	6.875	0.0	0.00	0.00	--
MCPP	7.083	65036.0	3.59	18111.53	VV
MCPA	7.217	0.0	0.00	0.00	--
DCP	7.567	0.0	0.00	0.00	--
2,4-D	7.767	0.0	0.00	0.00	--
Pentachlorophenol	7.983	21959.0	6248.45	3.51	VV
Silvex	8.467	119563.0	2612.09	45.77	BV
Chloramben	8.592	93087.0	1994.14	46.68	VV
2,4,5-T	8.675	0.0	0.00	0.00	--
2,4-DB	9.083	59330.0	459.56	129.10	VV
Bentazon/picloram	9.725	24910.0	1780.81	13.99	VS
Dinoseb	9.808	0.0	0.00	0.00	--
Dacthal	9.983	0.0	0.00	0.00	--
Acifluorfen	11.408	22772.0	2077.16	10.96	VV

c:\ezchrom\chrom\wf29\wf29.006 -- Channel A



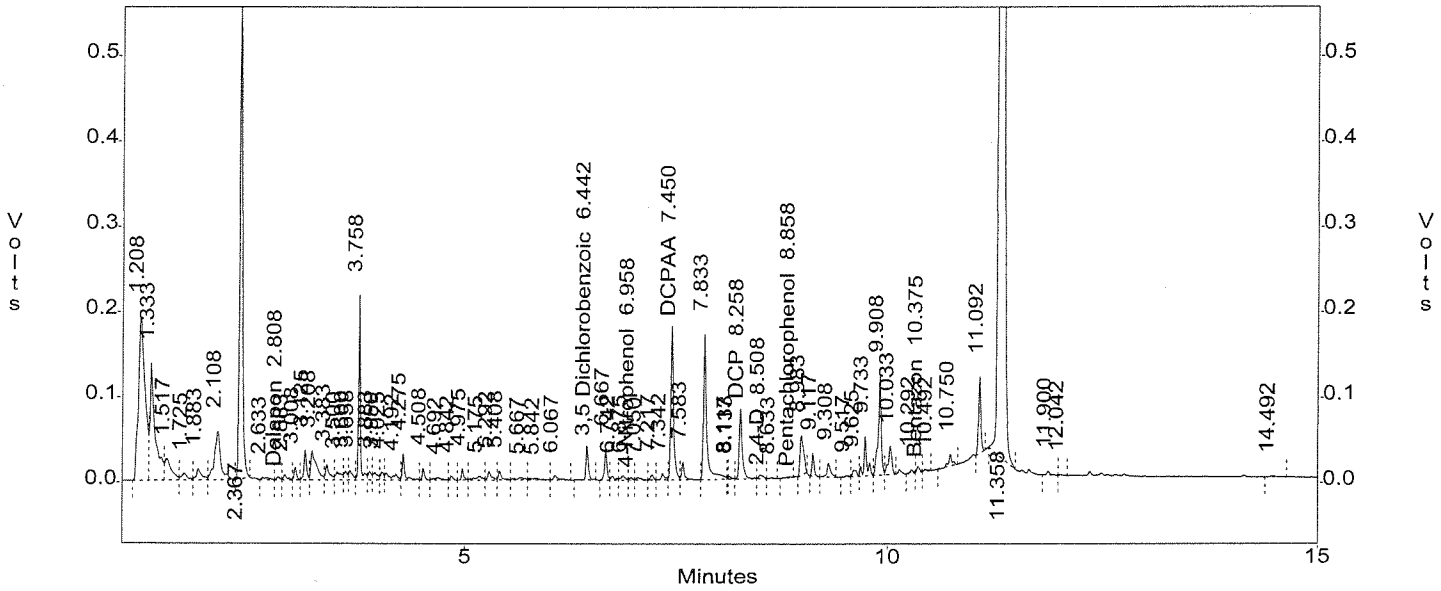
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.006
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HEF006WB
Acquired : Jun 29, 2012 11:09:57
Printed : Jun 29, 2012 12:08:51
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.808	7968.0	821.24	9.70	VV
3,5 Dichlorobenzoic	6.442	84204.0	816.54	103.12	Bx
4-Nitrophenol	6.958	7443.0	310.37	23.98	VV
DCPAA	7.450	419159.0	407.10	1029.63	SV
Dicamba	7.625	0.0	0.00	0.00	--
MCPP	7.733	0.0	0.00	0.00	--
MCPA	7.950	0.0	0.00	0.00	--
DCP	8.258	207556.0	611.26	339.56	VV
2,4-D	8.508	15913.0	701.42	22.69	VV
Pentachlorophenol	8.858	5060.0	5409.44	0.94	VV
Silvex	9.150	0.0	0.00	0.00	--
2,4,5-T	9.433	0.0	0.00	0.00	--
Chloramben	9.475	0.0	0.00	0.00	--
2,4-DB	9.783	0.0	0.00	0.00	--
Dinoseb	9.992	0.0	0.00	0.00	--
Bentazon	10.375	15376.0	277.43	55.42	SS
Dacthal	10.583	0.0	0.00	0.00	--
Picloram	10.625	0.0	0.00	0.00	--
Acifluorfen	11.783	0.0	0.00	0.00	--

c:\ezchrom\chrom\wf29\wf29.006 -- Channel B



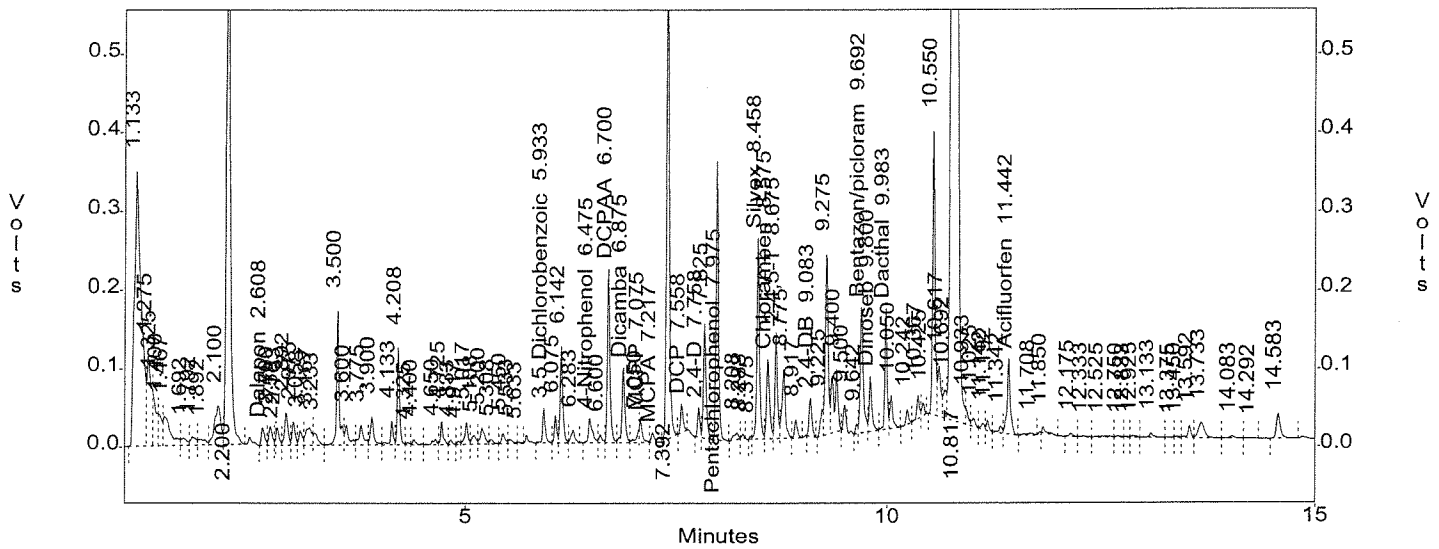
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.007
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HEF006WL
Acquired : Jun 29, 2012 11:31:24
Printed : Jun 29, 2012 13:33:34
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.608	60463.0	976.55	61.91	BV
3,5 Dichlorobenzoic	5.933	97885.0	978.08	100.08	BV
4-Nitrophenol	6.475	101926.0	520.59	195.79	BV
DCPAA	6.700	488127.0	444.68	1097.71	VV
Dicamba	6.875	227183.0	1901.24	119.49	VV
MCPP	7.075	67147.0	3.59	18699.41	xV
MCPA	7.217	32735.0	6.12	5347.10	VV
DCP	7.558	79912.0	669.59	119.34	BI
2,4-D	7.758	71979.0	814.28	88.40	BS
Pentachlorophenol	7.975	741104.0	6248.45	118.61	VV
Silvex	8.458	567198.0	2612.09	217.14	SV
Chloramben	8.575	254600.0	1994.14	127.67	VV
2,4,5-T	8.675	286913.0	2904.83	98.77	VV
2,4-DB	9.083	115180.0	459.56	250.63	BV
Bentazon/picloram	9.692	416843.0	1780.81	234.07	SV
Dinoseb	9.800	156685.0	2000.79	78.31	VV
Dacthal	9.983	299978.0	2900.82	103.41	VV
Acifluorfen	11.442	254510.0	2077.16	122.53	SV

c:\ezchrom\chrom\wf29\wf29.007 -- Channel A



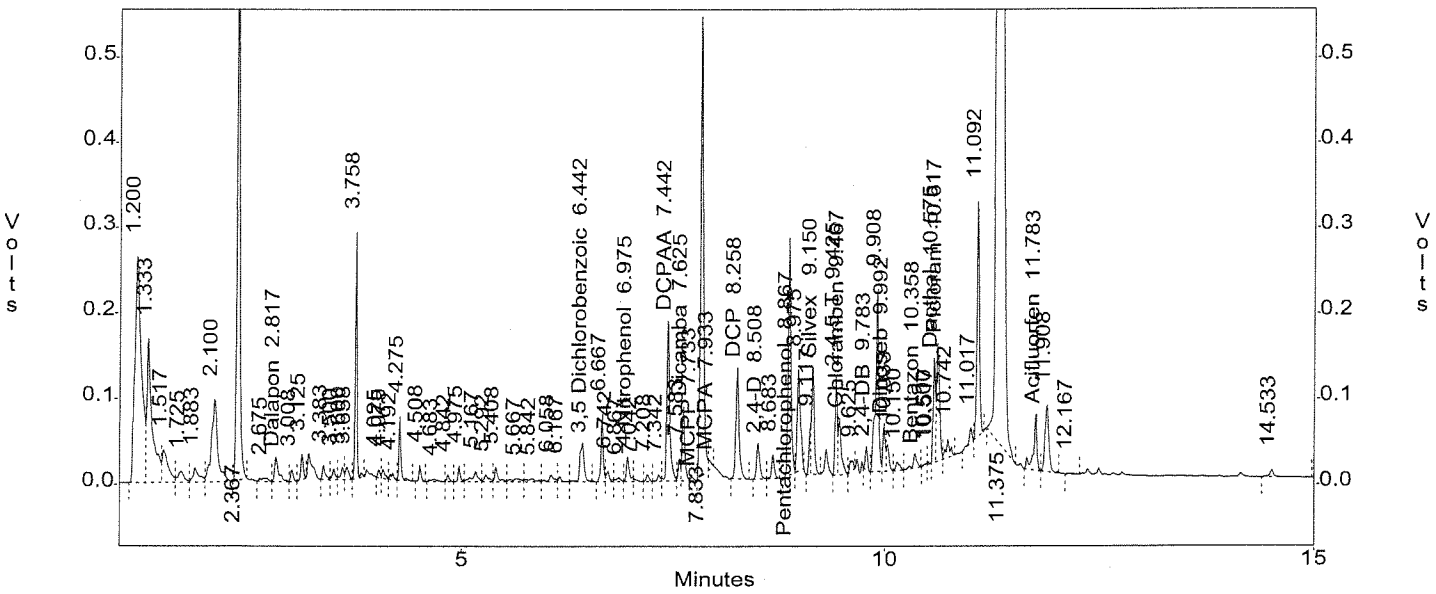
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.007
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HEF006WL
Acquired : Jun 29, 2012 11:31:24
Printed : Jun 29, 2012 13:33:34
User : Supakit

Channel B Results

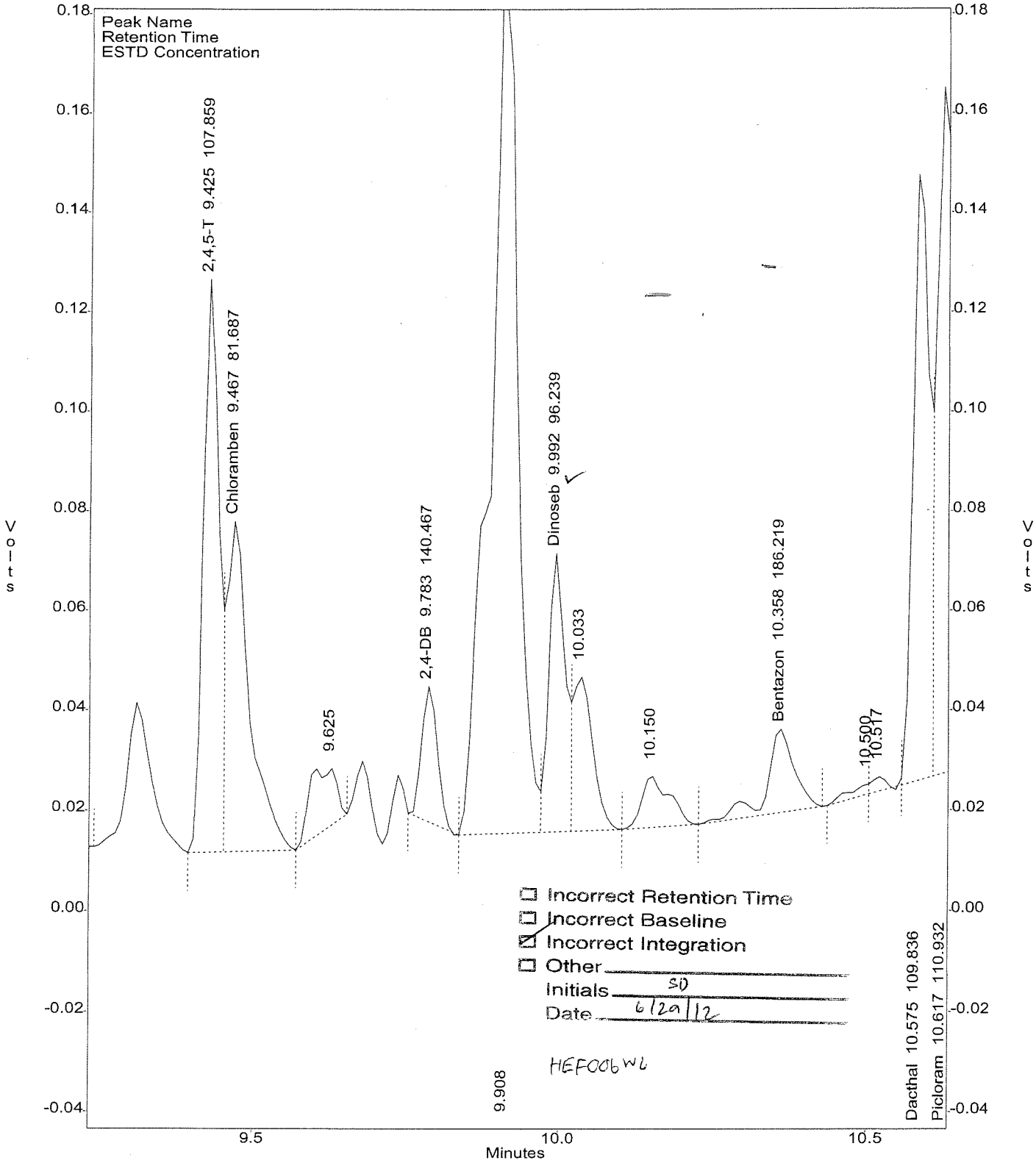
Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.817	97627.0	821.24	118.88	VV
3,5 Dichlorobenzoic	6.442	161384.0	816.54	197.64	Vx
4-Nitrophenol	6.975	72218.0	310.37	232.68	VS
DCPAA	7.442	460920.0	407.10	1132.21	SV
Dicamba	7.625	184442.0	1619.92	113.86	SV
MCPP	7.733	10722.0	2.62	4097.28	VV
MCPA	7.933	22924.0	5.12	4476.43	ff
DCP	8.258	326681.0	611.26	534.44	BV
2,4-D	8.508	110311.0	701.42	157.27	VV
Pentachlorophenol	8.867	597656.0	5409.44	110.48	VV
Silvex	9.150	279192.0	2165.67	128.92	xV
2,4,5-T	9.425	202058.0	1873.35	107.86	Sx
Chloramben	9.467	168970.0	2068.50	81.69	xV
2,4-DB	9.783	47666.0	339.34	140.47	MM
Dinoseb	9.992	103772.0	1078.27	96.24	fx
Bentazon	10.358	51663.0	277.43	186.22	VV
Dacthal	10.575	219662.0	1999.91	109.84	xx
Picloram	10.617	341896.0	3082.04	110.93	xV
Acifluorfen	11.783	188369.0	1140.55	165.16	BV

c:\ezchrom\chrom\wf29\wf29.007 -- Channel B

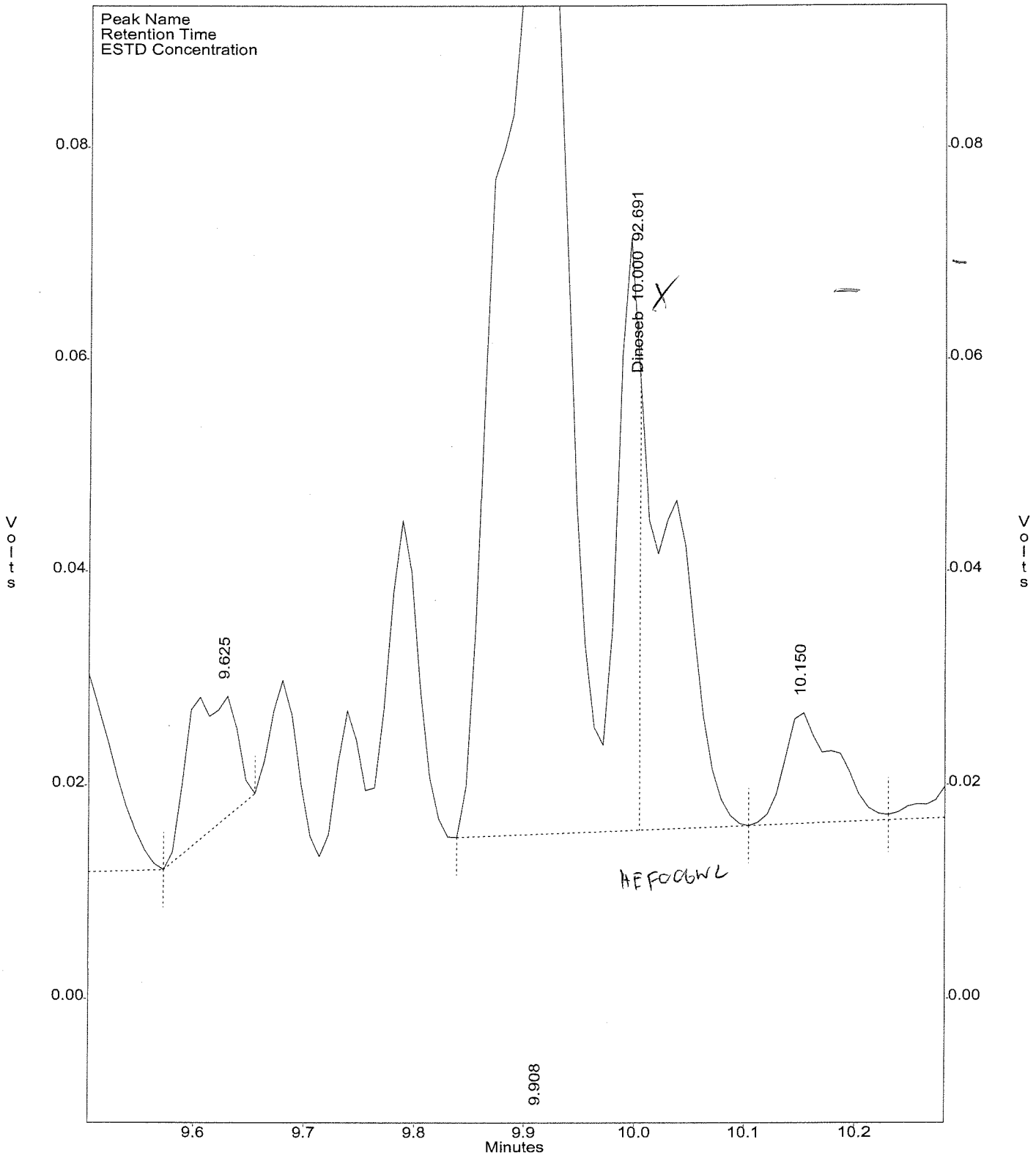


5021

c:\ezchrom\chrom\wf29\wf29.007, Channel B



c:\ezchrom\chrom\wf29\wf29.007, Channel B



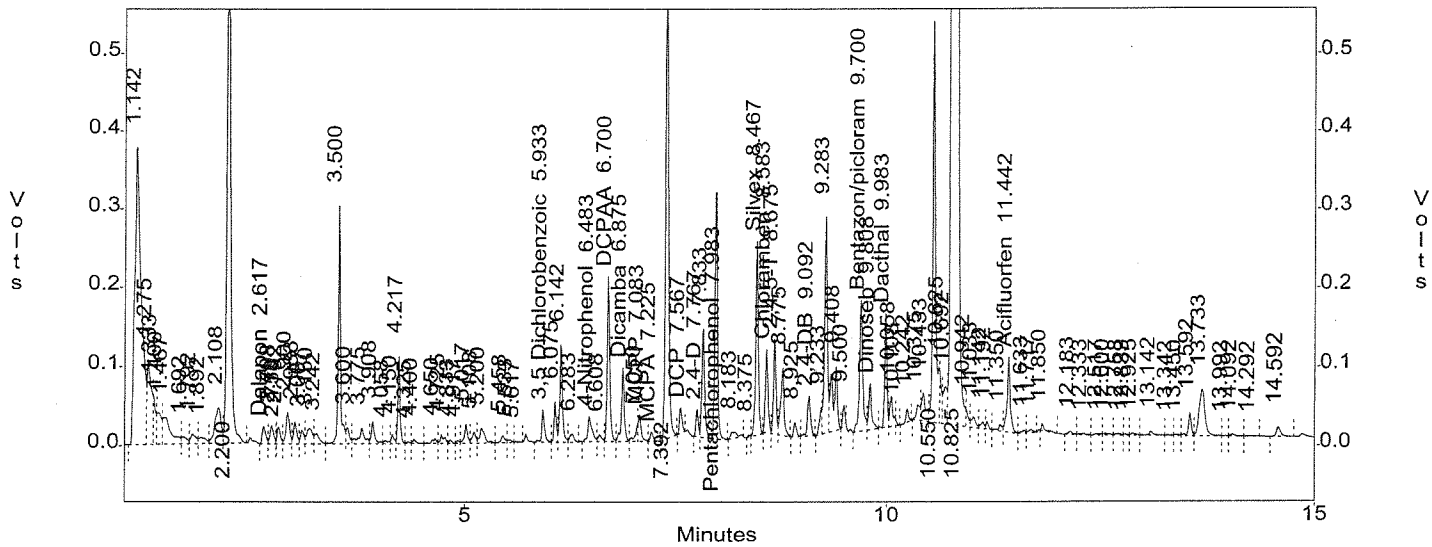
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.008
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HEF006WC
Acquired : Jun 29, 2012 11:52:44
Printed : Jun 29, 2012 13:30:06
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	58976.0	976.55	60.39	BV
3,5 Dichlorobenzoic	5.933	97038.0	978.08	99.21	BV
4-Nitrophenol	6.483	110768.0	520.59	212.77	BV
DCPAA	6.700	449525.0	444.68	1010.91	VV
Dicamba	6.875	221829.0	1901.24	116.68	VV
MCPP	7.083	85365.0	3.59	23772.84	xV
MCPA	7.225	30779.0	6.12	5027.59	VV
DCP	7.567	68617.0	669.59	102.48	BI
2,4-D	7.767	70107.0	814.28	86.10	BS
Pentachlorophenol	7.983	691850.0	6248.45	110.72	VV
Silvex	8.467	534912.0	2612.09	204.78	SI
Chloramben	8.583	235835.0	1994.14	118.26	BV
2,4,5-T	8.675	252596.0	2904.83	86.96	VV
2,4-DB	9.092	132426.0	459.56	288.16	VV
Bentazon/picloram	9.700	447714.0	1780.81	251.41	SV
Dinoseb	9.808	140137.0	2000.79	70.04	VV
Dacthal	9.983	267597.0	2900.82	92.25	VV
Acifluorfen	11.442	245716.0	2077.16	118.29	SV

c:\ezchrom\chrom\wf29\wf29.008 -- Channel A



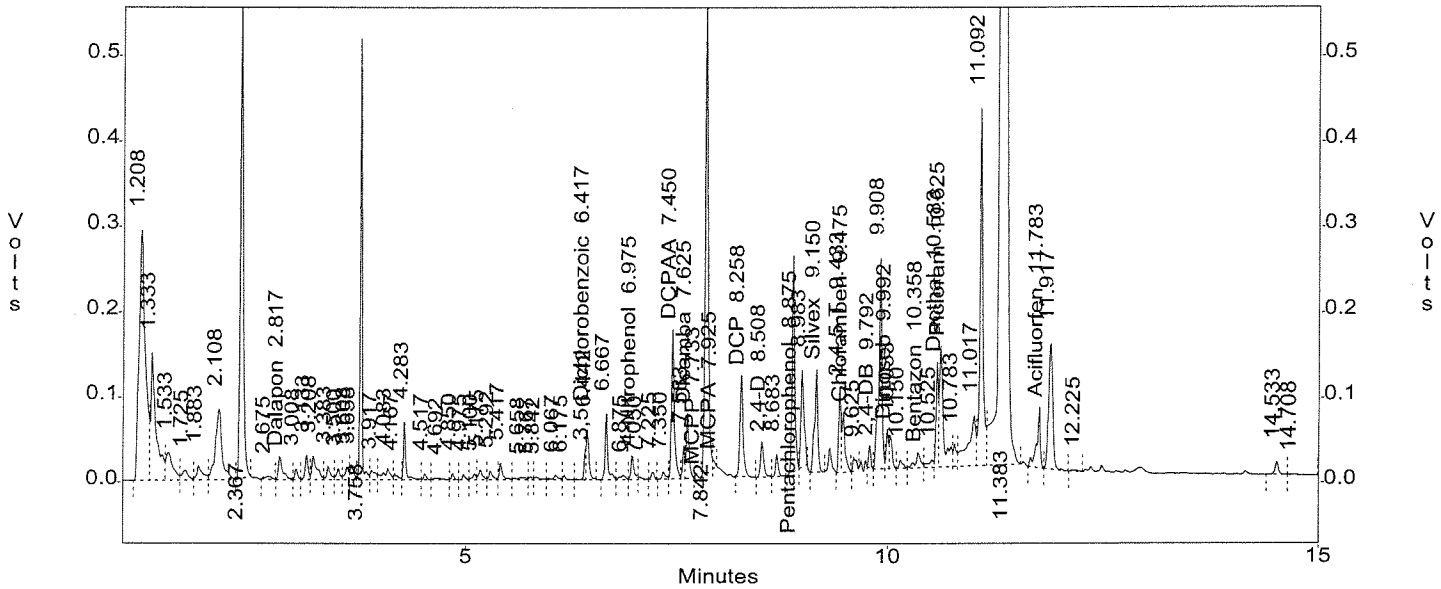
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.008
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HEF006WC
Acquired : Jun 29, 2012 11:52:44
Printed : Jun 29, 2012 13:30:06
User : Supakit

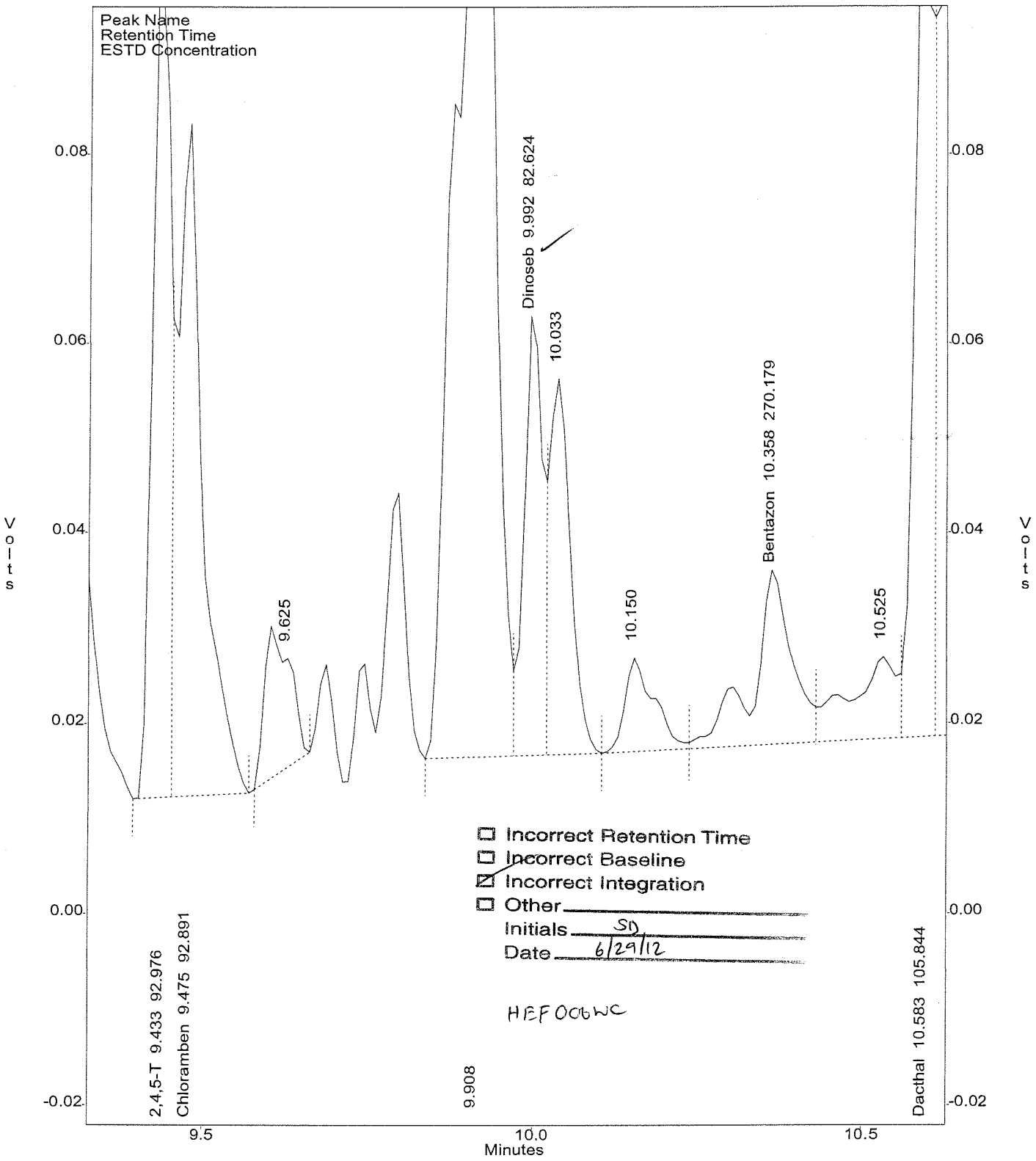
Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.817	95707.0	821.24	116.54	VV
3,5 Dichlorobenzoic	6.417	47772.0	816.54	58.51	Vx
4-Nitrophenol	6.975	73992.0	310.37	238.40	VS
DCPAA	7.450	412141.0	407.10	1012.39	VV
Dicamba	7.625	181615.0	1619.92	112.11	SV
MCPP	7.733	10064.0	2.62	3845.83	VV
MCPA	7.925	19279.0	5.12	3764.66	xI
DCP	8.258	312934.0	611.26	511.95	BV
2,4-D	8.508	111328.0	701.42	158.72	VV
Pentachlorophenol	8.875	558164.0	5409.44	103.18	VV
Silvex	9.150	315878.0	2165.67	145.86	BV
2,4,5-T	9.433	174176.0	1873.35	92.98	Sx
Chloramben	9.475	192146.0	2068.50	92.89	xV
2,4-DB	9.792	48511.0	339.34	142.96	MM
Dinoseb	9.992	89091.0	1078.27	82.62	fx
Bentazon	10.358	74956.0	277.43	270.18	VV
Dacthal	10.583	211678.0	1999.91	105.84	xx
Picloram	10.625	491685.0	3082.04	159.53	xV
Acifluorfen	11.783	216396.0	1140.55	189.73	BV

c:\ezchrom\chrom\wf29\wf29.008 -- Channel B



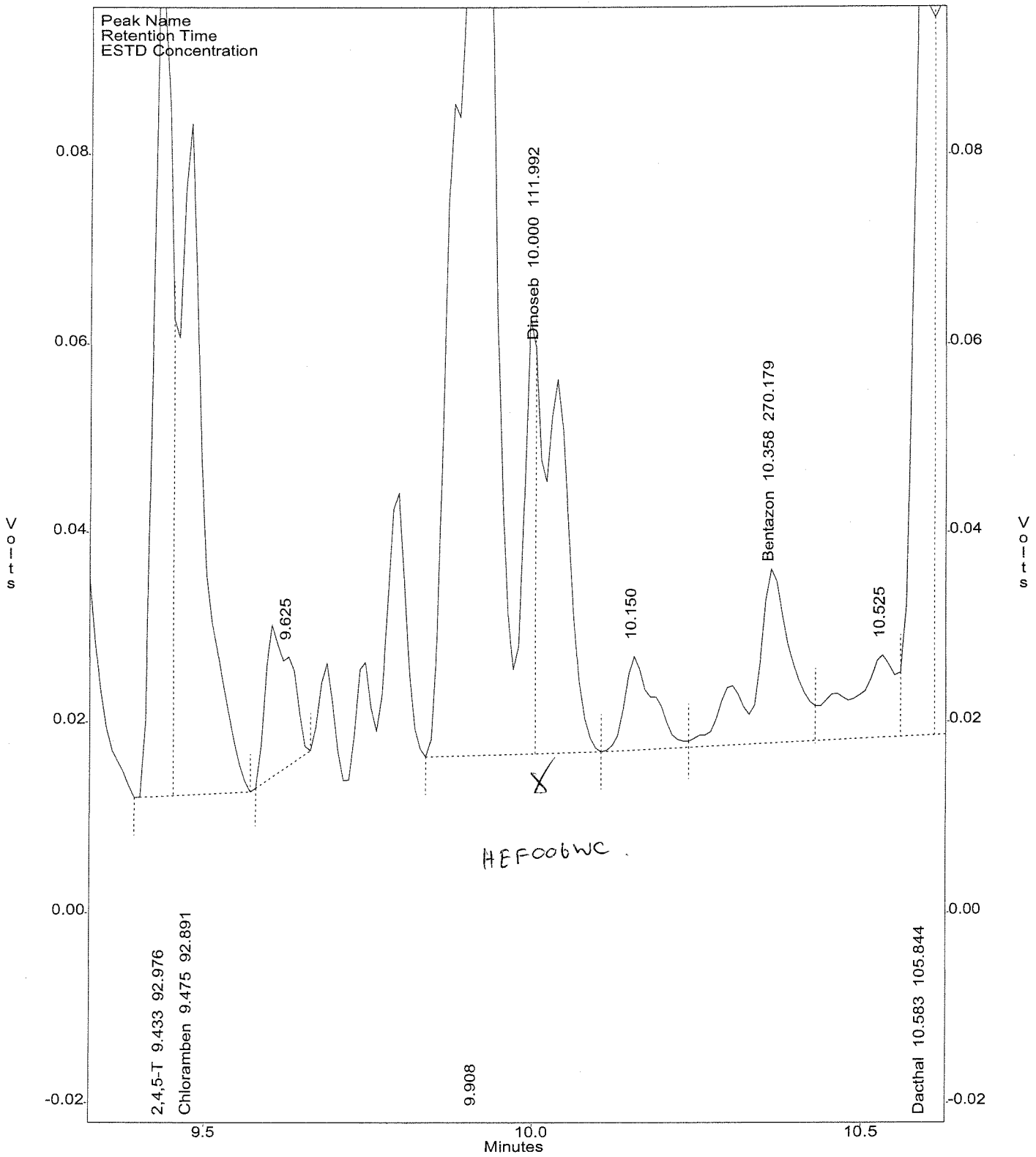
c:\ezchrom\chrom\wf29\wf29.008, Channel B



☐ Incorrect Retention Time
☐ Incorrect Baseline
☑ Incorrect Integration
☐ Other _____
Initials SD
Date 6/29/12

HEF006WC

c:\ezchrom\chrom\wf29\wf29.008, Channel B



HEF006WC.

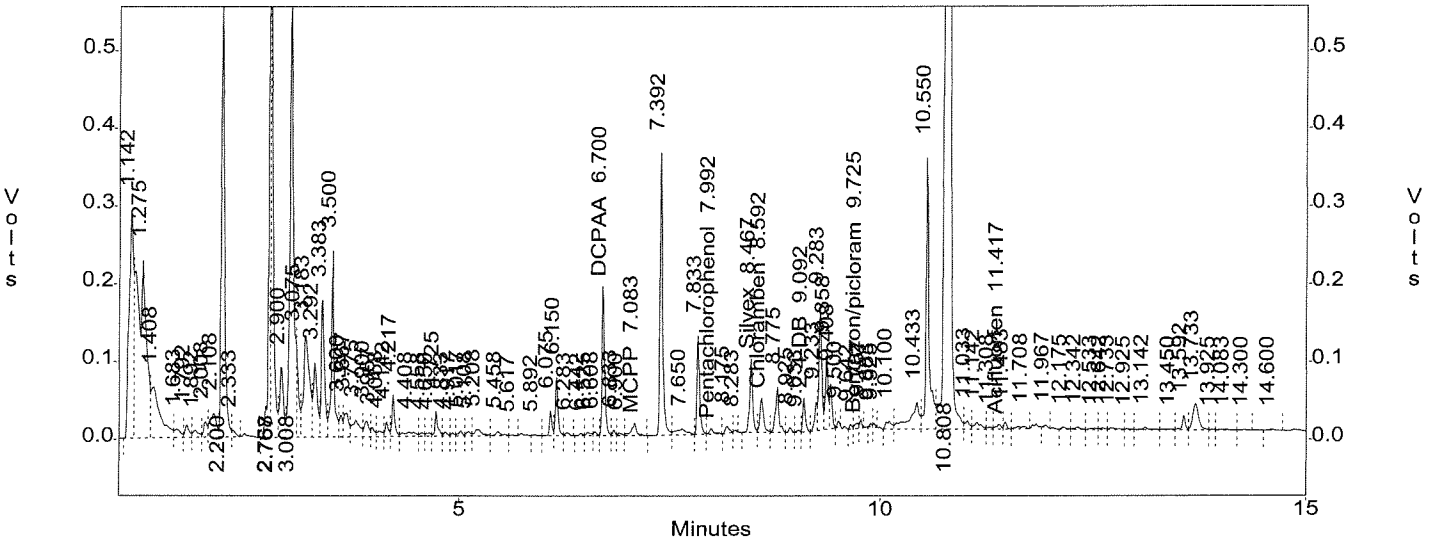
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.013
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-04
Acquired : Jun 29, 2012 13:39:48
Printed : Jun 29, 2012 15:08:44
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.625	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	5.933	0.0	0.00	0.00	--
4-Nitrophenol	6.483	0.0	0.00	0.00	--
DCPAA	6.700	416232.0	444.68	936.03	VV
Dicamba	6.875	0.0	0.00	0.00	--
MCPP	7.083	65042.0	3.59	18113.20	VV
MCPA	7.217	0.0	0.00	0.00	--
DCP	7.567	0.0	0.00	0.00	--
2,4-D	7.767	0.0	0.00	0.00	--
Pentachlorophenol	7.992	26183.0	6248.45	4.19	VV
Silvex	8.467	234126.0	2612.09	89.63	BV
Chloramben	8.592	134006.0	1994.14	67.20	VV
2,4,5-T	8.675	0.0	0.00	0.00	--
2,4-DB	9.092	93237.0	459.56	202.88	SV
Bentazon/picloram	9.725	20845.0	1780.81	11.71	SS
Dinoseb	9.808	0.0	0.00	0.00	--
Dacthal	9.983	0.0	0.00	0.00	--
Acifluorfen	11.417	25812.0	2077.16	12.43	VV

c:\ezchrom\chrom\wf29\wf29.013 -- Channel A



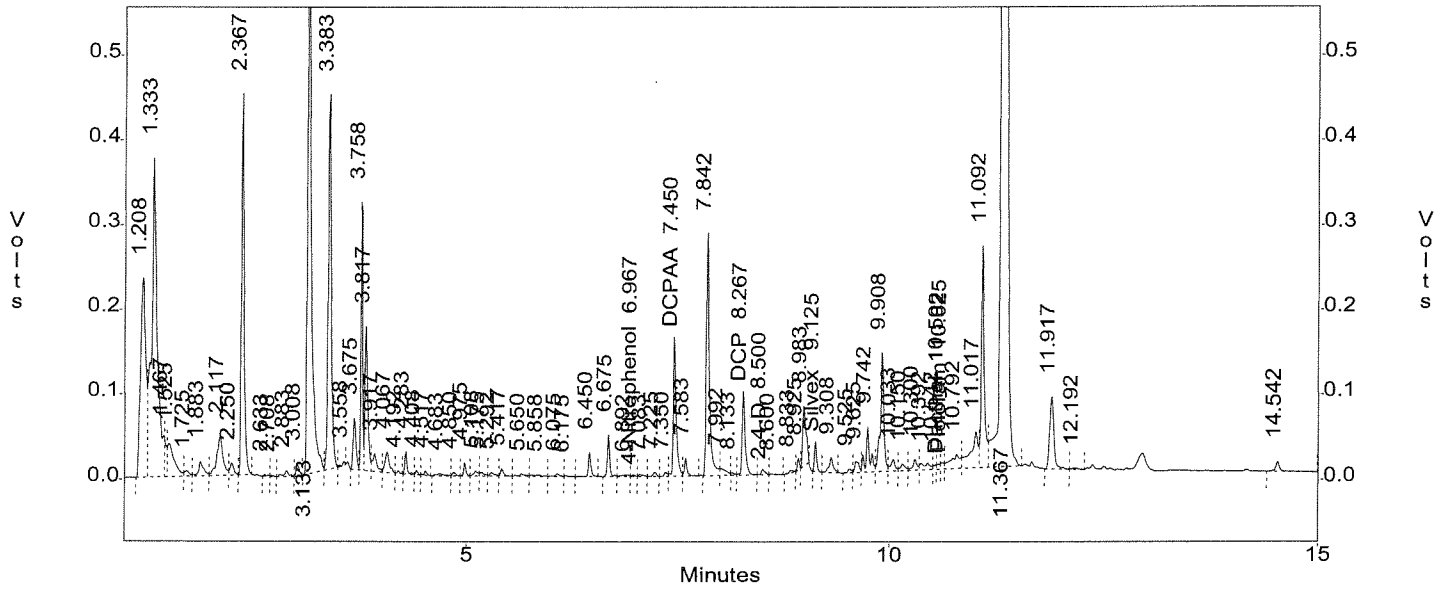
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.013
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-04
Acquired : Jun 29, 2012 13:39:48
Printed : Jun 29, 2012 15:08:45
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	6.417	0.0	0.00	0.00	--
4-Nitrophenol	6.967	4753.0	310.37	15.31	VV
DCPAA	7.450	389698.0	407.10	957.26	SV
Dicamba	7.625	0.0	0.00	0.00	--
MCPP	7.733	0.0	0.00	0.00	--
MCPA	7.950	0.0	0.00	0.00	--
DCP	8.267	241243.0	611.26	394.67	VV
2,4-D	8.500	19692.0	701.42	28.07	VV
Pentachlorophenol	8.875	0.0	0.00	0.00	--
Silvex	9.125	63278.0	2165.67	29.22	BV
2,4,5-T	9.433	0.0	0.00	0.00	--
Chloramben	9.475	0.0	0.00	0.00	--
2,4-DB	9.783	0.0	0.00	0.00	--
Dinoseb	9.992	0.0	0.00	0.00	--
Bentazon	10.358	0.0	0.00	0.00	--
Dacthal	10.592	17017.0	1999.91	8.51	xx
Picloram	10.625	20991.0	3082.04	6.81	xS
Acifluorfen	11.783	0.0	0.00	0.00	--

c:\ezchrom\chrom\wf29\wf29.013 -- Channel B

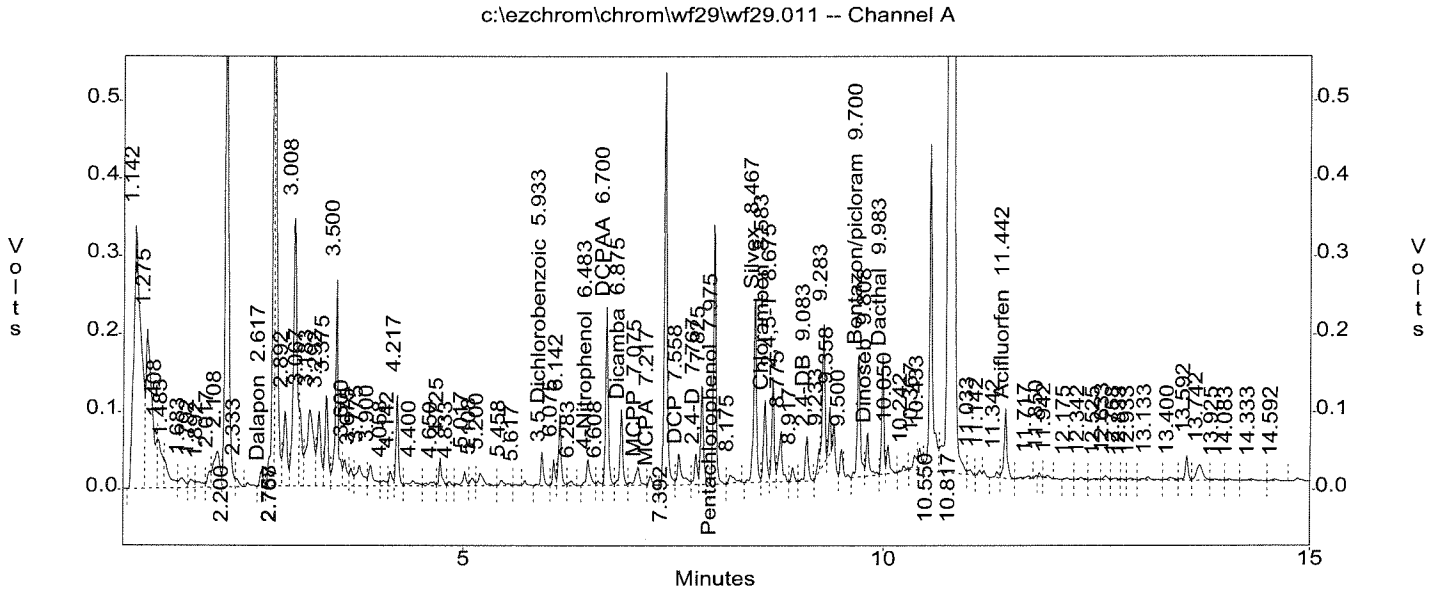


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.011
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-04M
Acquired : Jun 29, 2012 12:57:04
Printed : Jun 29, 2012 14:58:07
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	49826.0	976.55	51.02	BV
3,5 Dichlorobenzoic	5.933	96188.0	978.08	98.34	BV
4-Nitrophenol	6.483	108855.0	520.59	209.10	BV
DCPAA	6.700	486123.0	444.68	1093.21	VV
Dicamba	6.875	221777.0	1901.24	116.65	VV
MCPP	7.075	91714.0	3.59	25540.94	VV
MCPA	7.217	30737.0	6.12	5020.73	VV
DCP	7.558	149325.0	669.59	223.01	VV
2,4-D	7.767	94390.0	814.28	115.92	VS
Pentachlorophenol	7.975	718398.0	6248.45	114.97	VV
Silvex	8.467	574915.0	2612.09	220.10	BV
Chloramben	8.583	257965.0	1994.14	129.36	VV
2,4,5-T	8.675	276865.0	2904.83	95.31	VV
2,4-DB	9.083	143741.0	459.56	312.78	VV
Bentazon/picloram	9.700	399728.0	1780.81	224.46	BV
Dinoseb	9.808	143403.0	2000.79	71.67	VV
Dacthal	9.983	274424.0	2900.82	94.60	VS
Acifluorfen	11.442	213485.0	2077.16	102.78	SV



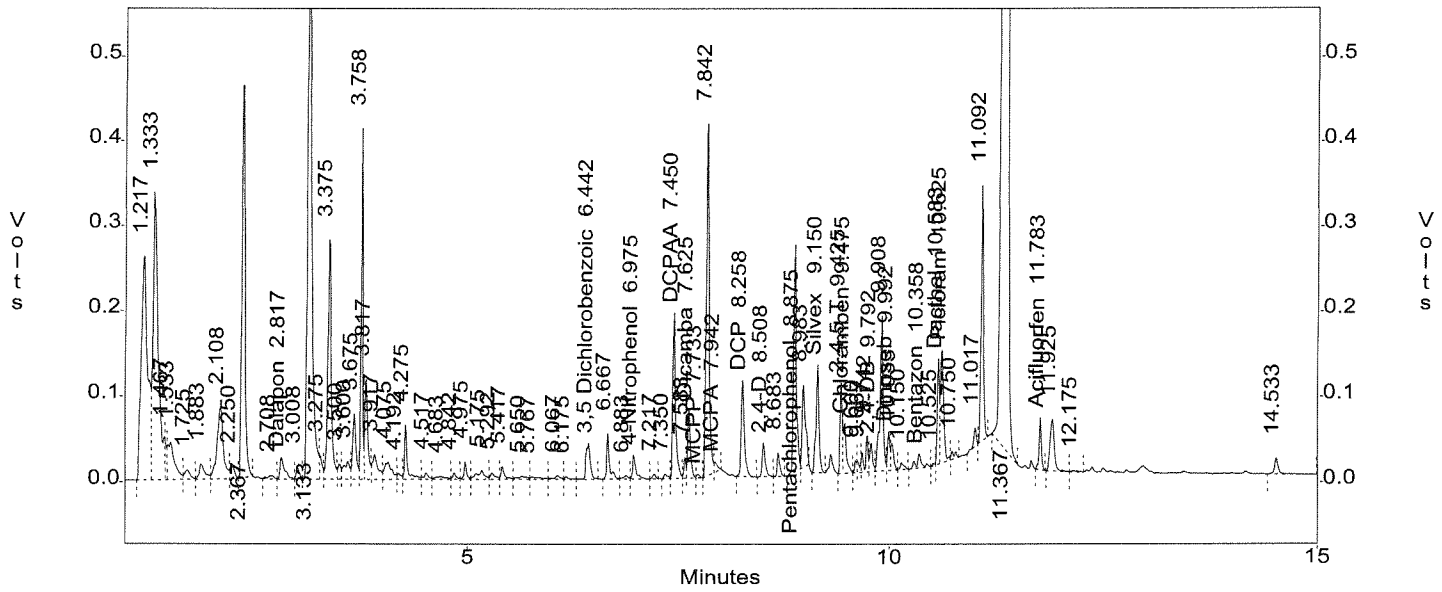
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.011
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-04M
Acquired : Jun 29, 2012 12:57:04
Printed : Jun 29, 2012 14:58:07
User : Supakit

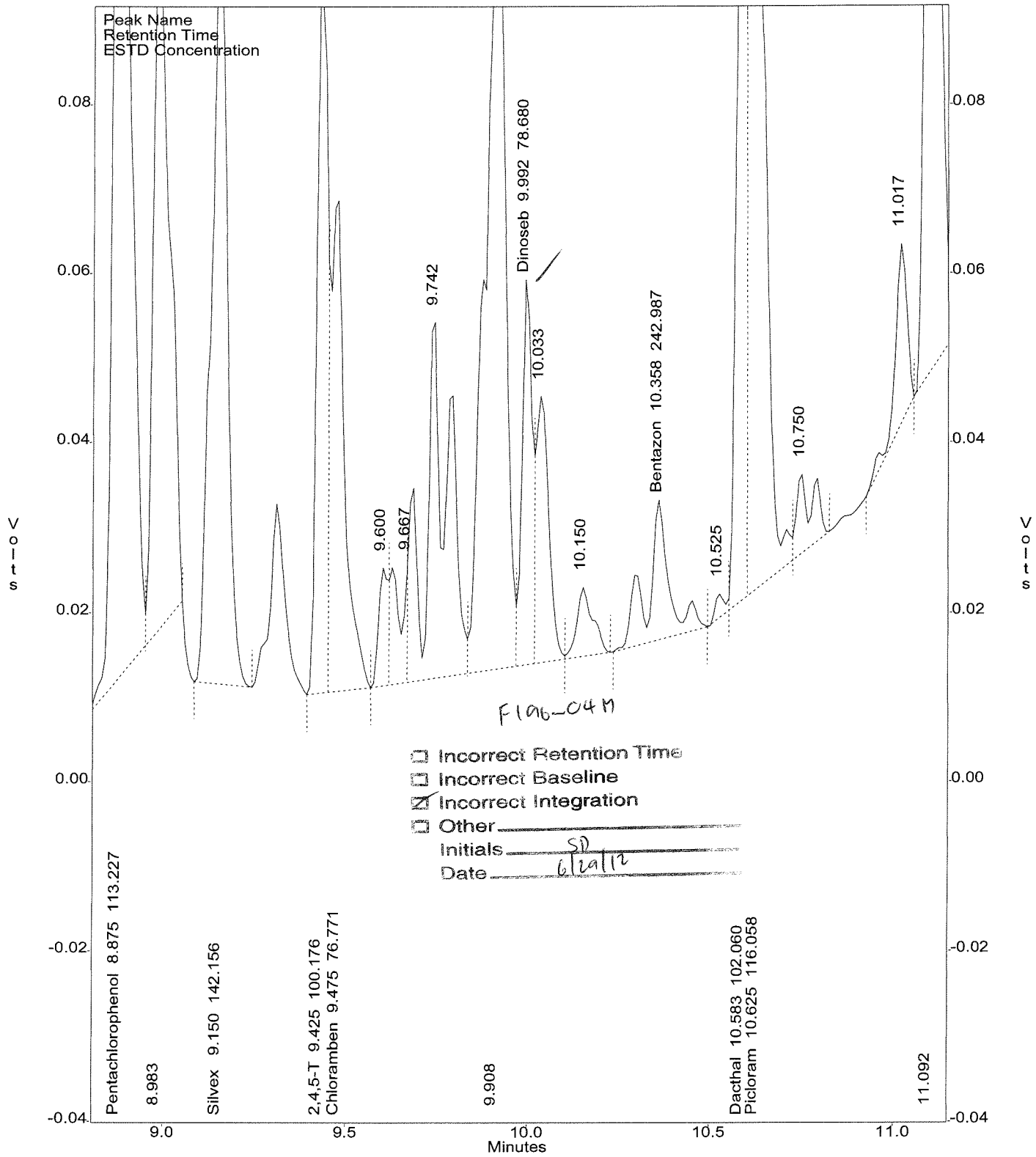
Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.817	96152.0	821.24	117.08	VV
3,5 Dichlorobenzoic	6.442	145993.0	816.54	178.79	Vx
4-Nitrophenol	6.975	76951.0	310.37	247.93	VV
DCPAA	7.450	454345.0	407.10	1116.06	VV
Dicamba	7.625	179507.0	1619.92	110.81	SV
MCPP	7.733	10045.0	2.62	3838.57	VV
MCPA	7.942	30555.0	5.12	5966.55	fI
DCP	8.258	292304.0	611.26	478.20	BV
2,4-D	8.508	101059.0	701.42	144.08	VV
Pentachlorophenol	8.875	612495.0	5409.44	113.23	VV
Silvex	9.150	307862.0	2165.67	142.16	BV
2,4,5-T	9.425	187664.0	1873.35	100.18	Sx
Chloramben	9.475	158800.0	2068.50	76.77	xV
2,4-DB	9.792	79786.0	339.34	235.12	xV
Dinoseb	9.992	84839.0	1078.27	78.68	fx
Bentazon	10.358	67412.0	277.43	242.99	VV
Dacthal	10.583	204110.0	1999.91	102.06	xx
Picloram	10.625	357695.0	3082.04	116.06	xV
Acifluorfen	11.783	110268.0	1140.55	96.68	SV

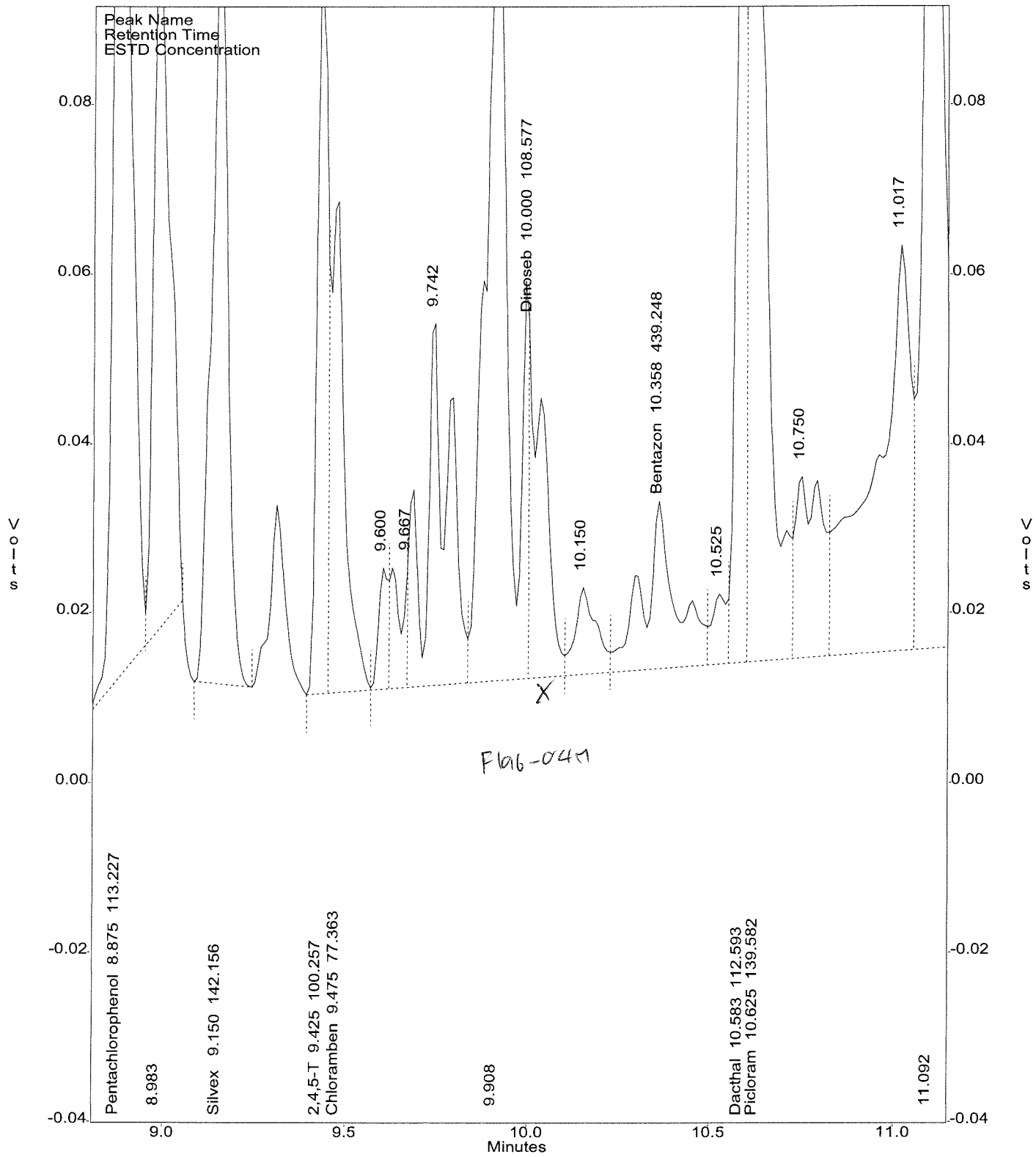
c:\ezchrom\chrom\wf29\wf29.011 -- Channel B



c:\ezchrom\chrom\wf29\wf29.011, Channel B



c:\ezchrom\chrom\wf29\wf29.011, Channel B



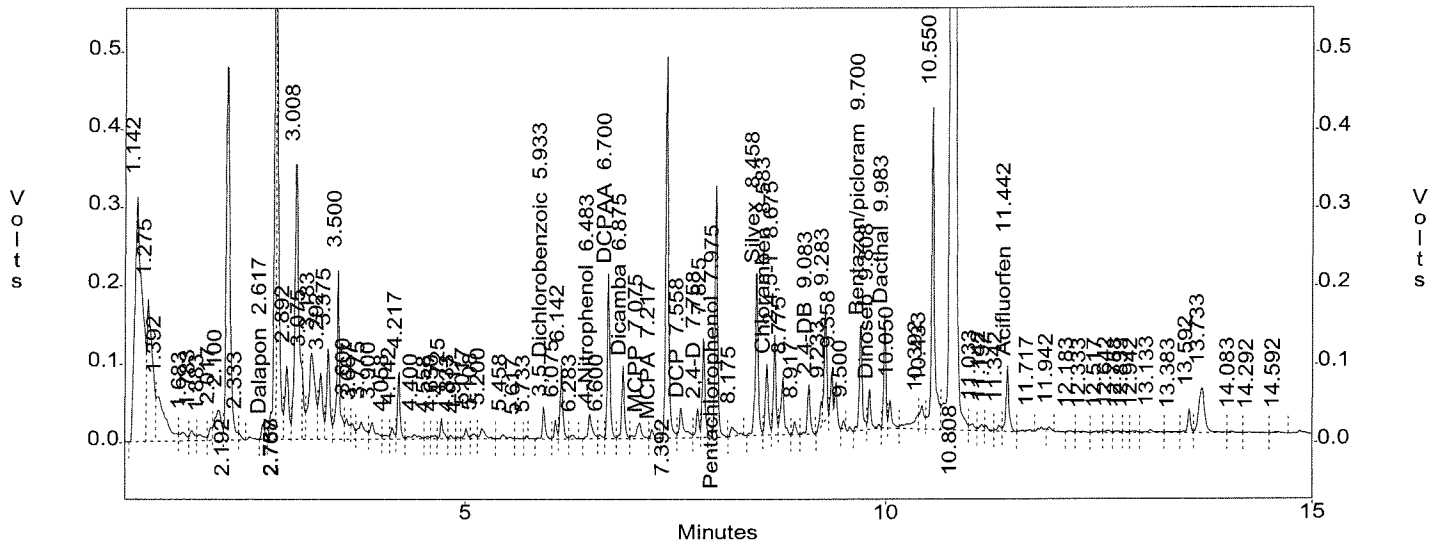
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.012
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-04S
Acquired : Jun 29, 2012 13:18:24
Printed : Jun 29, 2012 15:06:02
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	51319.0	976.55	52.55	BV
3,5 Dichlorobenzoic	5.933	90672.0	978.08	92.70	BV
4-Nitrophenol	6.483	97374.0	520.59	187.05	BV
DCPAA	6.700	446223.0	444.68	1003.48	VV
Dicamba	6.875	205795.0	1901.24	108.24	VV
MCPP	7.075	82535.0	3.59	22984.73	VV
MCPA	7.217	29372.0	6.12	4797.77	VV
DCP	7.558	144616.0	669.59	215.98	VV
2,4-D	7.758	89434.0	814.28	109.83	VS
Pentachlorophenol	7.975	685179.0	6248.45	109.66	VV
Silvex	8.458	505442.0	2612.09	193.50	BV
Chloramben	8.583	226289.0	1994.14	113.48	VV
2,4,5-T	8.675	260547.0	2904.83	89.69	VV
2,4-DB	9.083	152468.0	459.56	331.77	VV
Bentazon/picloram	9.700	334691.0	1780.81	187.94	BV
Dinoseb	9.808	123942.0	2000.79	61.95	Vf
Dacthal	9.983	262586.0	2900.82	90.52	SS
Acifluorfen	11.442	198411.0	2077.16	95.52	SV

c:\ezchrom\chrom\wf29\wf29.012 -- Channel A

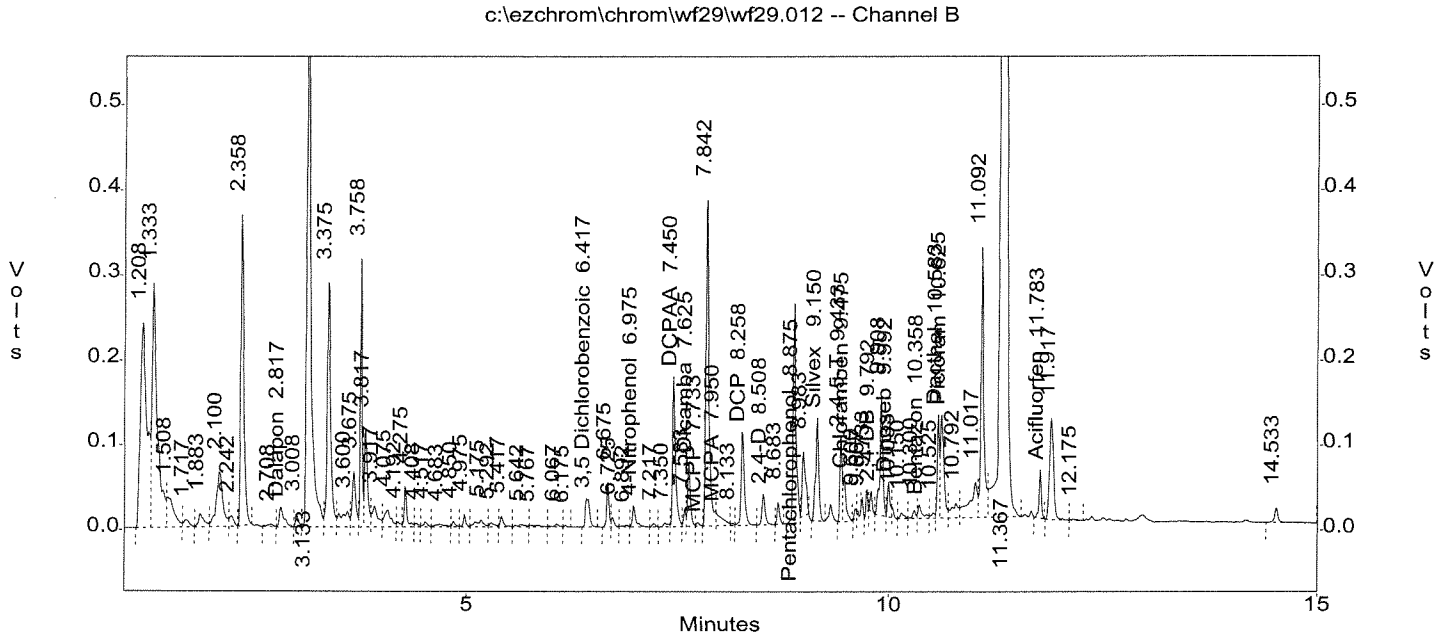


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

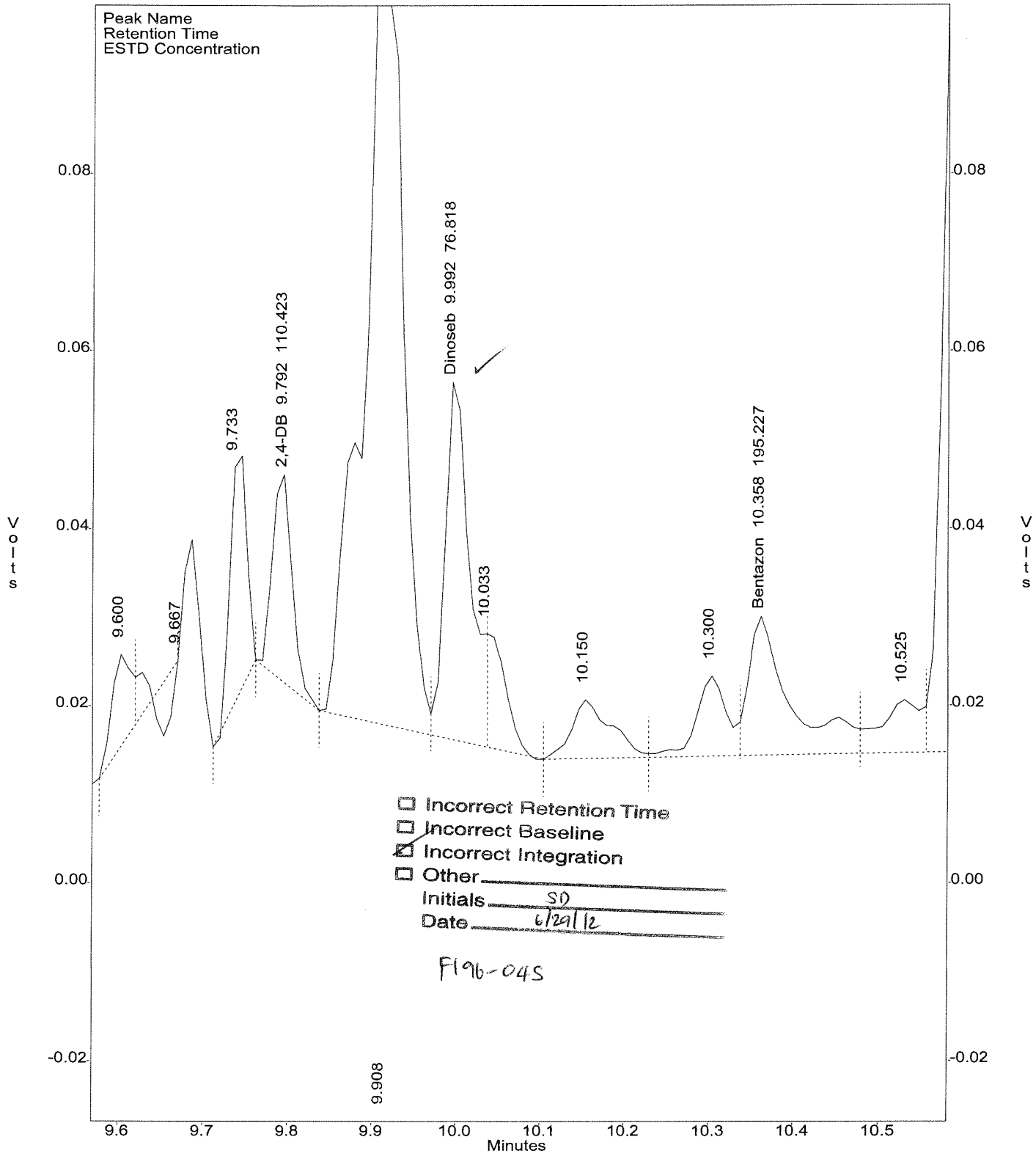
File : c:\ezchrom\chrom\wf29\wf29.012
Method : c:\ezchrom\methods\he16f21.met
Sample ID : F196-04S
Acquired : Jun 29, 2012 13:18:24
Printed : Jun 29, 2012 15:06:02
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.817	92521.0	821.24	112.66	VV
3,5 Dichlorobenzoic	6.417	119116.0	816.54	145.88	Bx
4-Nitrophenol	6.975	70133.0	310.37	225.96	VV
DCPAA	7.450	418204.0	407.10	1027.28	SV
Dicamba	7.625	168709.0	1619.92	104.15	SV
MCPP	7.733	10326.0	2.62	3945.95	VV
MCPA	7.950	80569.0	5.12	15732.91	SS
DCP	8.258	296242.0	611.26	484.64	VV
2,4-D	8.508	93126.0	701.42	132.77	VV
Pentachlorophenol	8.875	580329.0	5409.44	107.28	VV
Silvex	9.150	311562.0	2165.67	143.86	BV
2,4,5-T	9.433	175339.0	1873.35	93.60	Sx
Chloramben	9.475	139516.0	2068.50	67.45	xV
2,4-DB	9.792	37471.0	339.34	110.42	MM
Dinoseb	9.992	82831.0	1078.27	76.82	fx
Bentazon	10.358	54162.0	277.43	195.23	xV
Dacthal	10.583	204441.0	1999.91	102.23	xx
Picloram	10.625	353279.0	3082.04	114.63	xV
Acifluorfen	11.783	101788.0	1140.55	89.24	MM



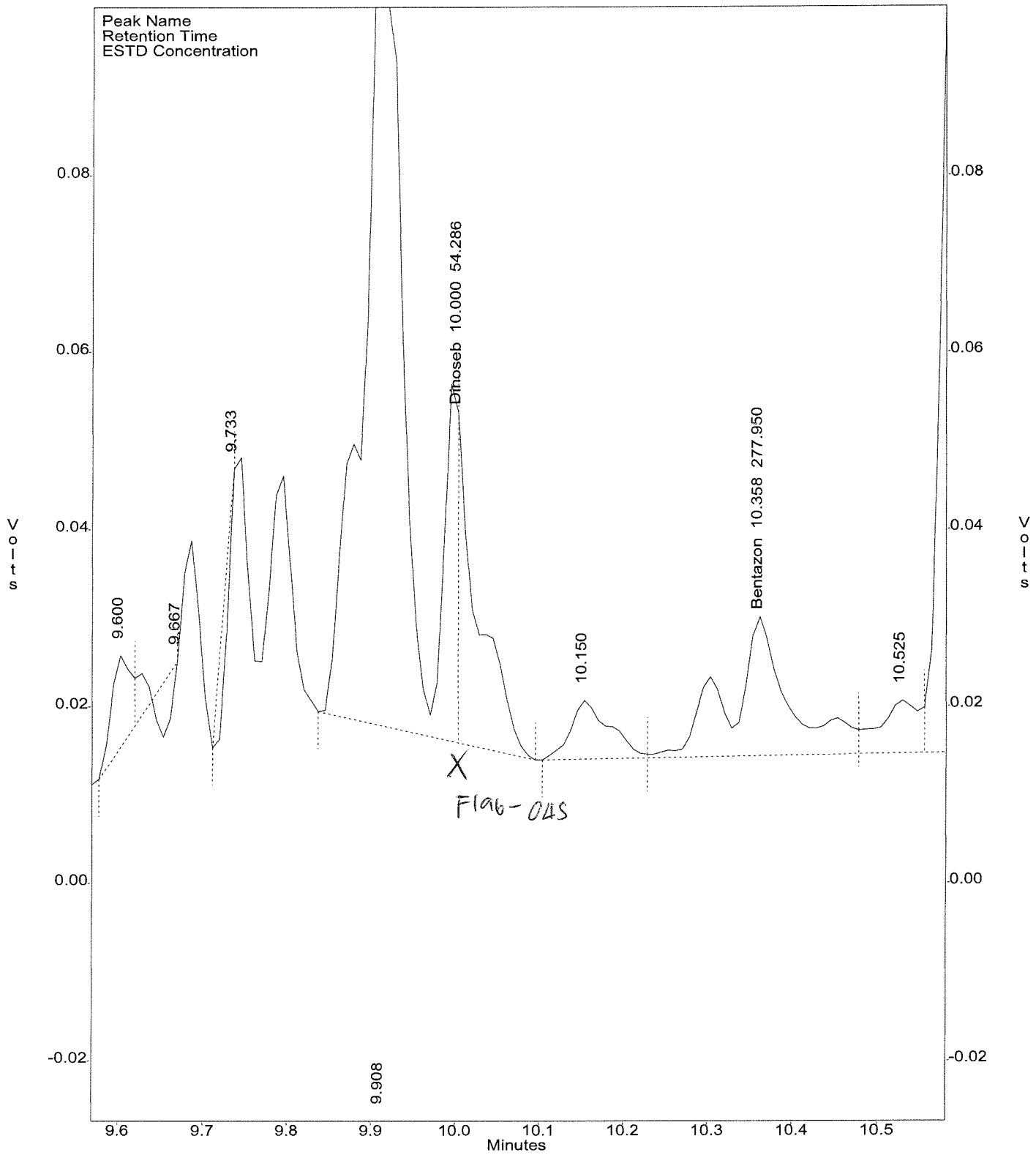
c:\ezchrom\chrom\wf29\wf29.012, Channel B



☐ Incorrect Retention Time
☐ Incorrect Baseline
☑ Incorrect Integration
☐ Other _____
Initials SD
Date 6/29/12

F196-045

c:\ezchrom\chrom\wf29\wf29.012, Channel B



INITIAL CALIBRATIONS

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
LFID & Datetime: WF21002A 06/21/12 10:26
LFID & Datetime: WF21003A 06/21/12 10:48
LFID & Datetime: WF21004A 06/21/12 11:09
LFID & Datetime: WF21005A 06/21/12 11:30
LFID & Datetime: WF21006A 06/21/12 11:52
LFID & Datetime: WF21007A 06/21/12 12:13
LFID & Datetime: WF21010A 06/21/12 13:27
LFID & Datetime: WF21011A 06/21/12 13:48
CONC UNIT: ppb

COMPOUND	CONC X	CALIBRATION FACTORS (AREA)/UNIT 1.00X	2.00X	4.00X	7.00X	10.00X	13.00X	16.00X	20.00X	MEAN	%RSD
Dalapon	10.00	0	1074	984	972	925	873	1020	988	976.6	6.6
3,5-Dichlorobenzo	10.00	0	1212	1105	1014	946	880	862	828	978.1	14.4
4-Nitrophenol	10.00	0	595	588	546	513	479	469	455	520.6	11.0
Dicamba	10.00	0	2096	2116	1989	1881	1772	1752	1704	1901.2	8.9
MCPP	500.00	0	0	3	4	4	4	4	4	3.6	3.0
MCPA	500.00	0	0	8	7	6	6	5	5	6.1	15.5
Dichloroprop	10.00	0	787	750	696	655	616	601	583	669.6	11.6
2,4-D	10.00	0	934	903	845	799	756	742	721	814.3	10.1
Pentachlorophenol	10.00	7266	7099	6809	6338	5944	5619	5535	5376	6248.4	11.9
2,4,5-TP(Silvex)	10.00	0	2861	2857	2726	2585	2466	2428	2362	2612.1	7.9
Chloramben	10.00	0	2026	2083	2052	2000	1943	1941	1914	1994.1	3.2
2,4,5-T	10.00	0	3251	3201	3035	2857	2721	2677	2592	2904.8	9.0
2,4-DB	10.00	0	529	503	478	442	427	422	416	459.6	9.6
Bentazon/Picloram	20.00	1924	1864	1865	1796	1745	1690	1690	1673	1780.8	5.4
Dinoseb	10.00	0	2365	2222	2057	1942	1851	1802	1766	2000.8	11.3
Dacthal	10.00	0	3213	3191	3014	2847	2737	2678	2625	2900.8	8.3
Acifluorfen	10.00	0	2212	2221	2116	2038	2004	1953	1996	2077.2	5.2
SURROGATE	**X**	**1.00X**	**2.00X**	**4.00X**	**7.00X**	**10.00X**	**13.00X**	**16.00X**	**20.00X**	**MEAN**	**%RSD**
2,4-DCPAA	100.00	0	563	514	459	424	394	386	373	444.7	16.0

6/25/12

5039

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
LFID & Datetime: WF21002B 06/21/12 10:26
LFID & Datetime: WF21003B 06/21/12 10:48
LFID & Datetime: WF21004B 06/21/12 11:09
LFID & Datetime: WF21005B 06/21/12 11:30
LFID & Datetime: WF21006B 06/21/12 11:52
LFID & Datetime: WF21007B 06/21/12 12:13
LFID & Datetime: WF21010B 06/21/12 13:27
LFID & Datetime: WF21011B 06/21/12 13:48
CONC UNIT: ppb

COMPOUND	CONC X	CALIBRATION FACTORS (AREA)/UNIT 1.00X	2.00X	4.00X	7.00X	10.00X	13.00X	16.00X	20.00X	MEAN	%RSD
Dalapon	10.00	0	753	745	913	868	820	828	821	821.2	7.2
3,5-Dichlorobenzo	10.00	0	957	897	841	796	751	747	727	816.5	10.5
4-Nitrophenol	10.00	0	342	331	318	305	291	294	292	310.4	6.6
Dicamba	10.00	0	1698	1711	1670	1612	1549	1561	1538	1619.9	4.5
MCPP	500.00	0	0	2	3	3	3	3	3	2.6	7.2
MCPA	500.00	0	0	6	6	5	5	5	4	5.1	12.7
Dichloroprop	10.00	0	673	649	665	609	571	570	543	611.3	8.5
2,4-D	10.00	0	776	769	744	689	650	649	632	701.4	8.7
Pentachlorophenol	10.00	5675	5713	5731	5544	5316	5118	5135	5042	5409.4	5.4
2,4,5-TP(Silvex)	10.00	0	2234	2250	2213	2150	2100	2117	2095	2165.7	3.0
Chloramben	10.00	0	1886	2030	2082	2064	2064	2047	2306	2068.5	6.0
2,4,5-T	10.00	0	2006	1995	1935	1881	1814	1881	1602	1873.4	7.3
2,4-DB	10.00	0	374	361	345	331	322	323	319	339.3	6.4
Dinoseb	10.00	0	1142	1118	1076	1049	1035	1051	1077	1078.3	3.6
Bentazon	10.00	0	322	295	273	262	259	266	264	277.4	8.3
Dacthal	10.00	0	1962	2299	1851	2161	2109	1822	1796	1999.9	9.7
Picloram	10.00	0	3004	2817	3269	2908	2909	3297	3370	3082.0	7.3
Acifluorfen	10.00	0	1239	1200	1122	1098	1096	1095	1134	1140.5	5.0
SURROGATE	**X**	**1.00X**	**2.00X**	**4.00X**	**7.00X**	**10.00X**	**13.00X**	**16.00X**	**20.00X**	**MEAN**	**%RSD**
2,4-DCPAA	100.00	0	496	455	417	391	368	365	356	407.1	12.8

6/25/12
5940

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Column : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
LFID & Datetime: WF21002A 06/21/12 10:26
LFID & Datetime: WF21003A 06/21/12 10:48
LFID & Datetime: WF21004A 06/21/12 11:09
LFID & Datetime: WF21005A 06/21/12 11:30
LFID & Datetime: WF21006A 06/21/12 11:52
LFID & Datetime: WF21007A 06/21/12 12:13
LFID & Datetime: WF21010A 06/21/12 13:27
LFID & Datetime: WF21011A 06/21/12 13:48

COMPOUND	RT OF STANDARDS (MIN) 1.0X	2.0X	4.0X	7.0X	10.0X	13.0X	16.0X	20.0X	MEAN RT	RT WINDOW FROM	TO	RTWINDOW WIDTH
Dalapon	2.617	2.617	2.617	2.617	2.617	2.617	2.617	2.617	2.617	2.597	2.637	0.020
3,5-Dichlorobenzo	5.942	5.942	5.942	5.942	5.942	5.942	5.942	5.942	5.942	5.922	5.962	0.020
4-Nitrophenol	6.500	6.492	6.492	6.492	6.492	6.492	6.492	6.492	6.492	6.472	6.512	0.020
Dicamba	6.883	6.883	6.883	6.883	6.883	6.883	6.883	6.883	6.883	6.863	6.903	0.020
MCPP	0.000	7.083	7.083	7.083	7.083	7.083	7.083	7.083	7.083	7.063	7.103	0.020
MCPA	7.233	7.233	7.233	7.233	7.233	7.233	7.225	7.225	7.230	7.210	7.250	0.020
Dichloroprop	7.575	7.575	7.575	7.575	7.575	7.575	7.575	7.575	7.575	7.545	7.605	0.030
2,4-D	7.775	7.775	7.775	7.775	7.775	7.775	7.775	7.775	7.775	7.745	7.805	0.030
Pentachlorophenol	7.992	7.983	7.983	7.983	7.983	7.983	7.983	7.983	7.984	7.964	8.004	0.020
2,4,5-TP(Silvex)	8.475	8.475	8.475	8.475	8.475	8.475	8.475	8.475	8.475	8.455	8.495	0.020
Chloramben	8.592	8.592	8.592	8.592	8.592	8.592	8.592	8.592	8.592	8.562	8.622	0.030
2,4,5-T	8.692	8.683	8.683	8.683	8.683	8.683	8.683	8.683	8.683	8.663	8.703	0.020
2,4-DB	9.083	9.083	9.083	9.083	9.092	9.083	9.083	9.083	9.084	9.054	9.114	0.030
Bentazon/Picloram	9.708	9.708	9.708	9.708	9.708	9.708	9.700	9.700	9.706	9.676	9.736	0.030
Dinoseb	9.817	9.817	9.817	9.817	9.817	9.817	9.817	9.817	9.817	9.787	9.847	0.030
Dacthal	9.992	9.992	9.992	9.992	9.992	9.992	9.992	9.992	9.992	9.962	10.022	0.030
Acifluorfen	11.450	11.450	11.450	11.450	11.450	11.450	11.450	11.450	11.450	11.410	11.490	0.040

SURROGATE	1.0X	2.0X	4.0X	7.0X	10.0X	13.0X	16.0X	20.0X	RT	FROM	TO	WIDTH
2,4-DCPAA	6.717	6.708	6.708	6.708	6.708	6.708	6.708	6.708	6.708	6.688	6.728	0.020

6/25/12

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
LFID & Datetime: WF21002B 06/21/12 10:26
LFID & Datetime: WF21003B 06/21/12 10:48
LFID & Datetime: WF21004B 06/21/12 11:09
LFID & Datetime: WF21005B 06/21/12 11:30
LFID & Datetime: WF21006B 06/21/12 11:52
LFID & Datetime: WF21007B 06/21/12 12:13
LFID & Datetime: WF21010B 06/21/12 13:27
LFID & Datetime: WF21011B 06/21/12 13:48

COMPOUND	RT OF STANDARDS (MIN) 1.0X	2.0X	4.0X	7.0X	10.0X	13.0X	16.0X	20.0X	MEAN RT	RT WINDOW FROM	TO	RTWINDOW WIDTH
Dalapon	2.825	2.825	2.825	2.825	2.825	2.825	2.825	2.825	2.825	2.805	2.845	0.020
3,5-Dichlorobenzo	6.433	6.425	6.425	6.433	6.425	6.425	6.425	6.425	6.426	6.396	6.456	0.030
4-Nitrophenol	6.992	6.992	6.992	6.992	6.992	6.992	6.992	6.992	6.992	6.962	7.022	0.030
Dicamba	7.642	7.642	7.642	7.642	7.642	7.642	7.642	7.642	7.642	7.622	7.662	0.020
MCPP	0.000	0.000	7.742	7.742	7.742	7.742	7.742	7.742	7.742	7.722	7.762	0.020
MCPA	0.000	7.958	7.958	7.958	7.958	7.958	7.958	7.958	7.958	7.938	7.978	0.020
Dichloroprop	8.267	8.258	8.258	8.267	8.267	8.267	8.258	8.258	8.262	8.242	8.282	0.020
2,4-D	8.525	8.525	8.525	8.525	8.525	8.525	8.525	8.525	8.525	8.505	8.545	0.020
Pentachlorophenol	8.883	8.883	8.883	8.883	8.883	8.883	8.883	8.883	8.883	8.863	8.903	0.020
2,4,5-TP(Silvex)	9.158	9.158	9.158	9.158	9.167	9.167	9.158	9.158	9.161	9.131	9.191	0.030
Chloramben	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.463	9.503	0.020
2,4,5-T	9.442	9.442	9.442	9.442	9.442	9.442	9.442	9.442	9.442	9.412	9.472	0.030
2,4-DB	9.792	9.792	9.792	9.792	9.792	9.792	9.792	9.792	9.792	9.762	9.822	0.030
Dinoseb	10.000	10.000	10.008	10.008	10.008	10.008	10.008	10.008	10.007	9.977	10.037	0.030
Bentazon	10.367	10.367	10.367	10.367	10.367	10.367	10.367	10.367	10.367	10.337	10.397	0.030
Dacthal	10.592	10.592	10.592	10.592	10.592	10.592	10.592	10.592	10.592	10.562	10.622	0.030
Picloram	10.633	10.633	10.633	10.633	10.633	10.633	10.633	10.633	10.633	10.603	10.663	0.030
Acifluorfen	11.792	11.792	11.792	11.792	11.792	11.792	11.792	11.792	11.792	11.762	11.822	0.030

SURROGATE	1.0X	2.0X	4.0X	7.0X	10.0X	13.0X	16.0X	20.0X	RT	FROM	TO	WIDTH
2,4-DCPAA	7.467	7.458	7.458	7.458	7.458	7.458	7.458	7.458	7.458	7.438	7.478	0.020

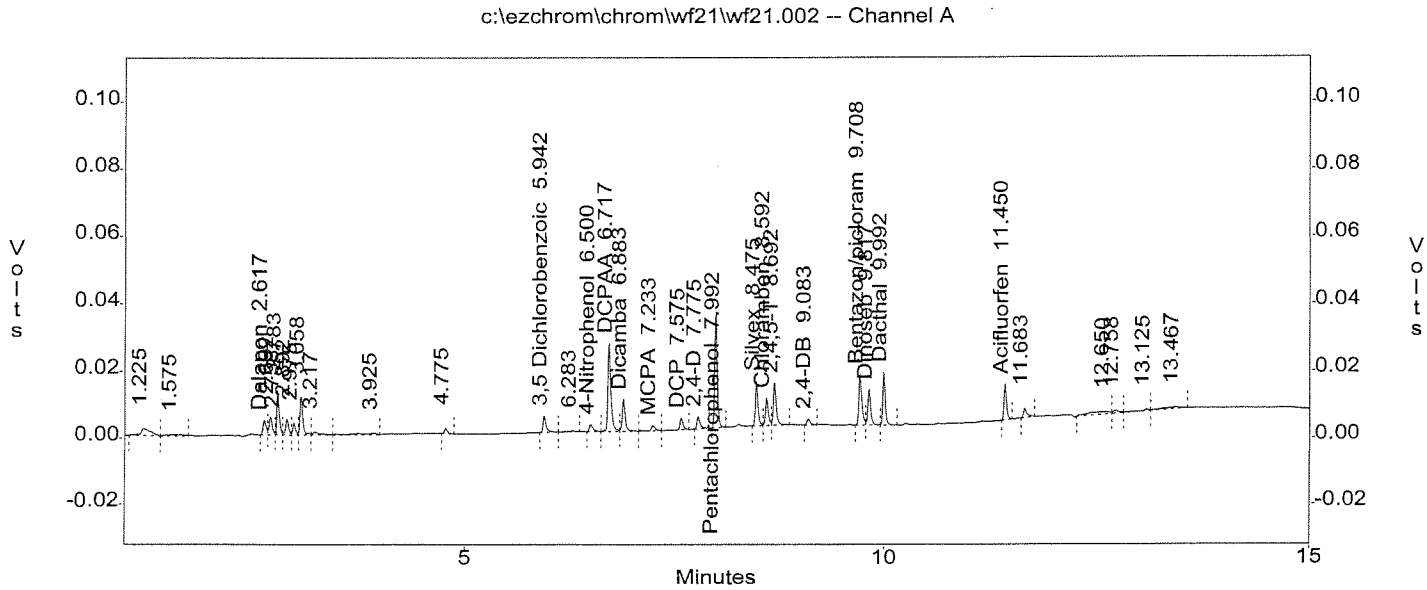
6/25/12
5042

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.002
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2101
Acquired : Jun 21, 2012 10:26:57
Printed : Jun 21, 2012 15:01:51
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	10687.0	976.55	-1.00	BS
3,5 Dichlorobenzoic	5.942	13443.0	978.08	-1.00	BV
4-Nitrophenol	6.500	6773.0	520.59	-1.00	BV
DCPAA	6.717	67337.0	444.68	-1.00	VV
Dicamba	6.883	24922.0	1901.24	-1.00	VV
MCPP	7.083	0.0	0.00	0.00	--
MCPA	7.233	5956.0	6.12	-1.00	VV
DCP	7.575	7718.0	669.59	-1.00	VV
2,4-D	7.775	9921.0	814.28	-1.00	VV
Pentachlorophenol	7.992	72663.0	6248.45	10.00	VV
Silvex	8.475	28294.0	2612.09	-1.00	BV
Chloramben	8.592	19407.0	1994.14	-1.00	VV
2,4,5-T	8.692	31503.0	2904.83	-1.00	VI
2,4-DB	9.083	4903.0	459.56	-1.00	BV
Bentazon/picloram	9.708	38485.0	1780.81	20.00	BV
Dinoseb	9.817	25356.0	2000.79	-1.00	VV
Dacthal	9.992	32223.0	2900.82	-1.00	VB
Acifluorfen	11.450	22227.0	2077.16	-1.00	BV



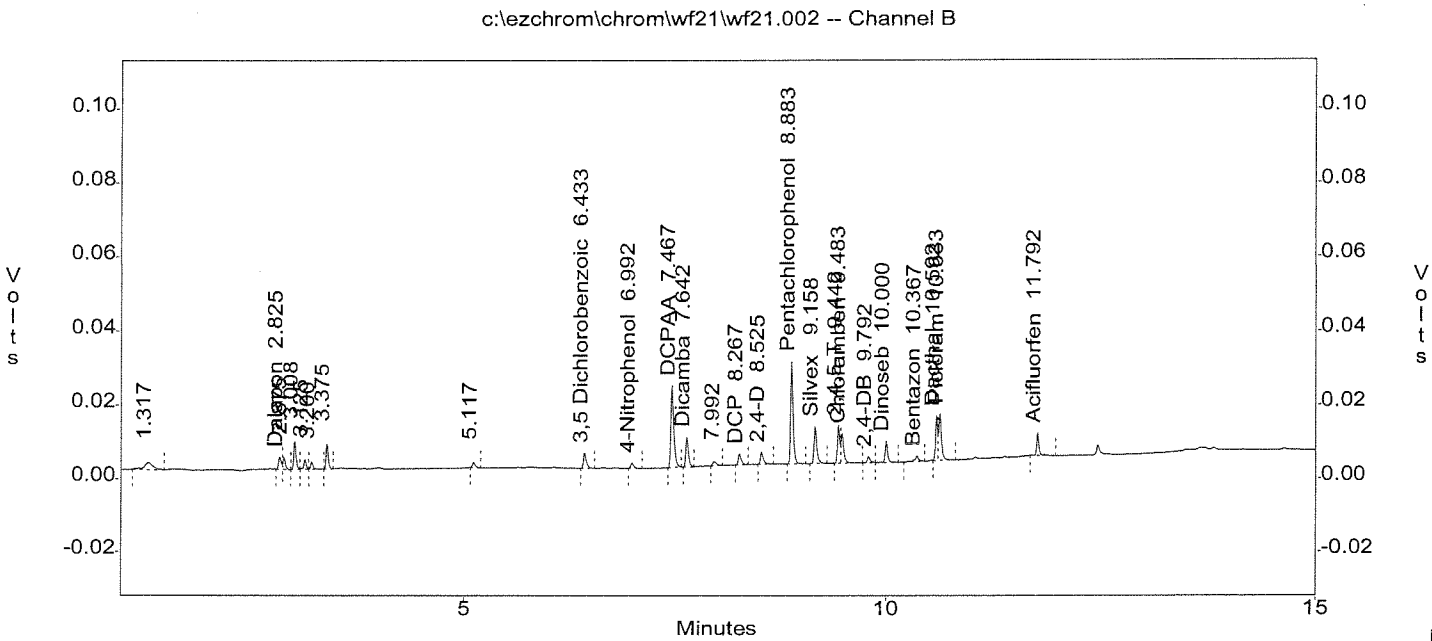
6/25/12
5043

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.002
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2101
Acquired : Jun 21, 2012 10:26:57
Printed : Jun 21, 2012 15:01:51
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	7012.0	821.24	-1.00	Bx
3,5 Dichlorobenzoic	6.433	10186.0	816.54	-1.00	Bx
4-Nitrophenol	6.992	3510.0	310.37	-1.00	BV
DCPAA	7.467	54884.0	407.10	-1.00	VI
Dicamba	7.642	17784.0	1619.92	-1.00	fV
MCPP	7.742	0.0	0.00	0.00	--
MCPA	7.958	0.0	0.00	0.00	--
DCP	8.267	7149.0	611.26	-1.00	BV
2,4-D	8.525	8079.0	701.42	-1.00	BI
Pentachlorophenol	8.883	56754.0	5409.44	10.00	BI
Silvex	9.158	22838.0	2165.67	-1.00	BV
2,4,5-T	9.442	19694.0	1873.35	-1.00	xx
Chloramben	9.483	18591.0	2068.50	-1.00	xV
2,4-DB	9.792	3965.0	339.34	-1.00	VV
Dinoseb	10.000	11923.0	1078.27	-1.00	VV
Bentazon	10.367	4488.0	277.43	-1.00	VV
Dacthal	10.592	19306.0	1999.91	-1.00	xx
Picloram	10.633	30285.0	3082.04	-1.00	xV
Acifluorfen	11.792	11915.0	1140.55	-1.00	BV



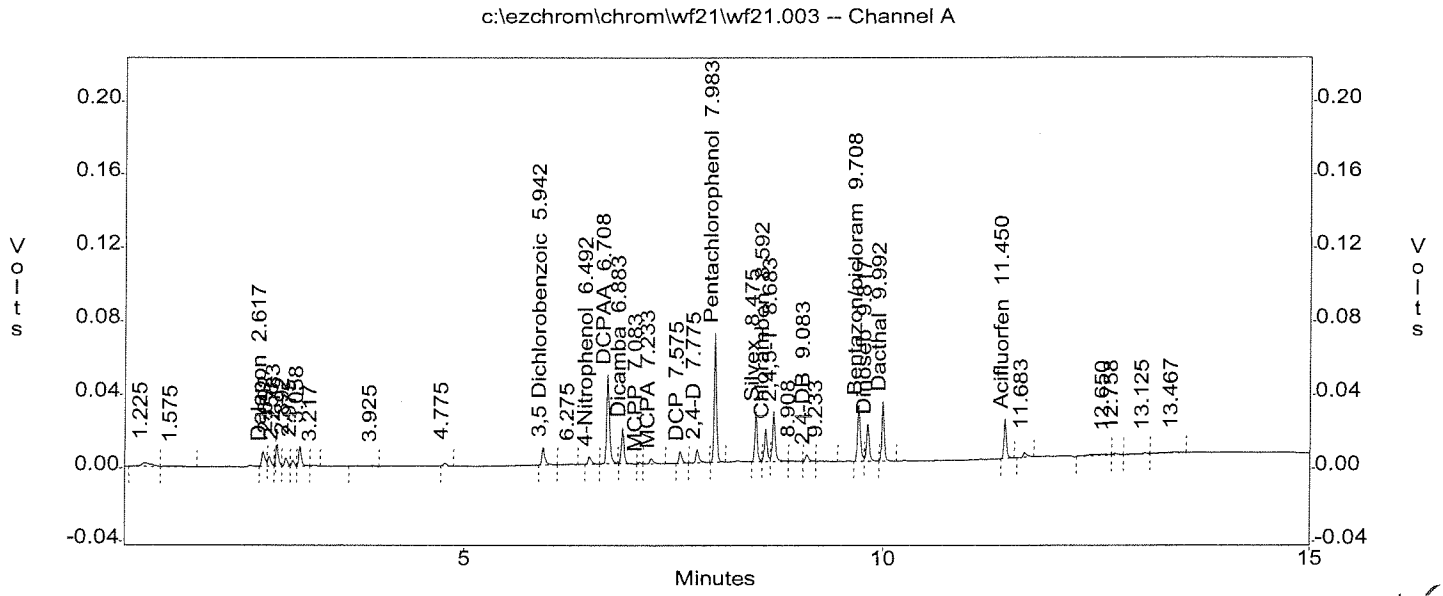
6/25/12
5044

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.003
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2102
Acquired : Jun 21, 2012 10:48:21
Printed : Jun 21, 2012 15:02:15
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	21482.0	976.55	20.00	BS
3,5 Dichlorobenzoic	5.942	24230.0	978.08	20.00	BV
4-Nitrophenol	6.492	11902.0	520.59	20.00	BV
DCPAA	6.708	112575.0	444.68	200.00	VI
Dicamba	6.883	41925.0	1901.24	20.00	BV
MCPP	7.083	2273.0	3.59	-1.00	VV
MCPA	7.233	9338.0	6.12	-1.00	VV
DCP	7.575	15749.0	669.59	20.00	VV
2,4-D	7.775	18686.0	814.28	20.00	VV
Pentachlorophenol	7.983	141989.0	6248.45	20.00	VV
Silvex	8.475	57221.0	2612.09	20.00	BV
Chloramben	8.592	40511.0	1994.14	20.00	VV
2,4,5-T	8.683	65019.0	2904.83	20.00	VV
2,4-DB	9.083	10583.0	459.56	20.00	VV
Bentazon/picloram	9.708	74541.0	1780.81	40.00	VV
Dinoseb	9.817	47302.0	2000.79	20.00	VV
Dacthal	9.992	64253.0	2900.82	20.00	VB
Acifluorfen	11.450	44232.0	2077.16	20.00	BV



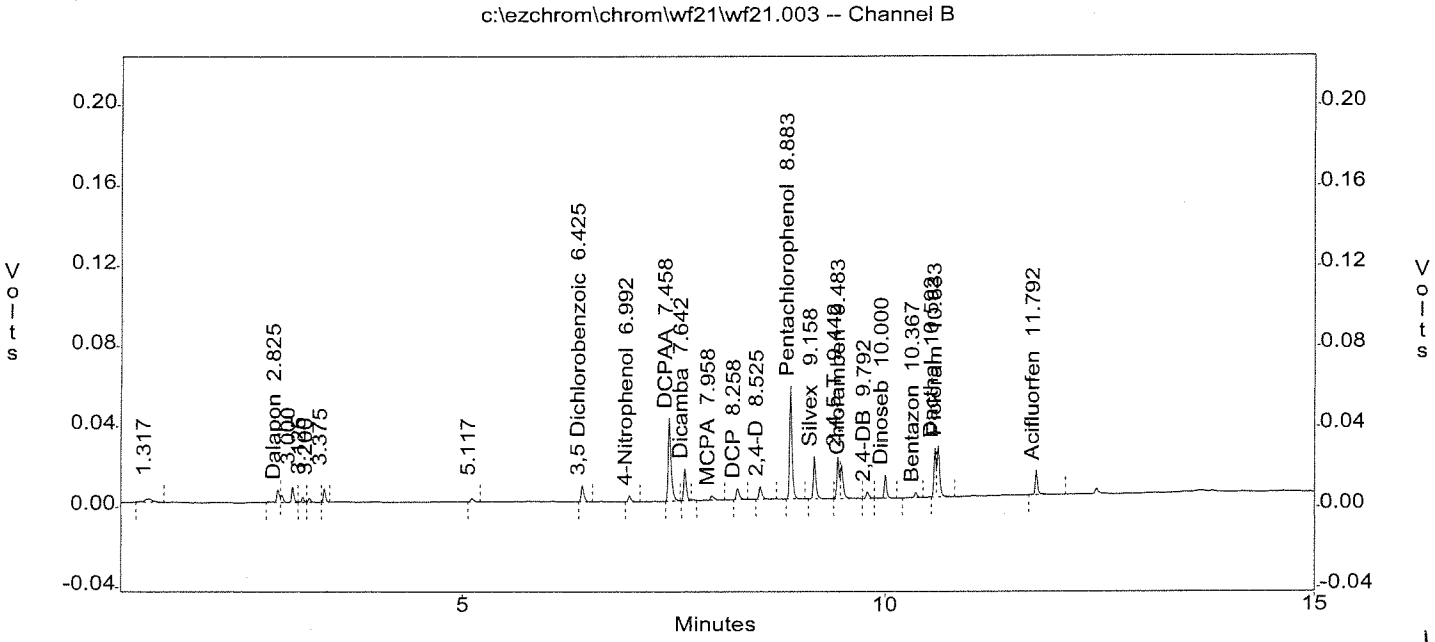
5045

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.003
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2102
Acquired : Jun 21, 2012 10:48:21
Printed : Jun 21, 2012 15:02:15
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	15069.0	821.24	20.00	BS
3,5 Dichlorobenzoic	6.425	19140.0	816.54	20.00	Bx
4-Nitrophenol	6.992	6839.0	310.37	20.00	BV
DCPAA	7.458	99215.0	407.10	200.00	BI
Dicamba	7.642	33964.0	1619.92	20.00	fV
MCPP	7.742	0.0	0.00	0.00	--
MCPA	7.958	6534.0	5.12	-1.00	SI
DCP	8.258	13469.0	611.26	20.00	BV
2,4-D	8.525	15529.0	701.42	20.00	BI
Pentachlorophenol	8.883	114259.0	5409.44	20.00	BI
Silvex	9.158	44689.0	2165.67	20.00	BV
2,4,5-T	9.442	40128.0	1873.35	20.00	Vx
Chloramben	9.483	37728.0	2068.50	20.00	xV
2,4-DB	9.792	7489.0	339.34	20.00	VV
Dinoseb	10.000	22841.0	1078.27	20.00	VV
Bentazon	10.367	6439.0	277.43	20.00	VV
Dacthal	10.592	39240.0	1999.91	20.00	xx
Picloram	10.633	60085.0	3082.04	20.00	xV
Acifluorfen	11.792	24787.0	1140.55	20.00	BV



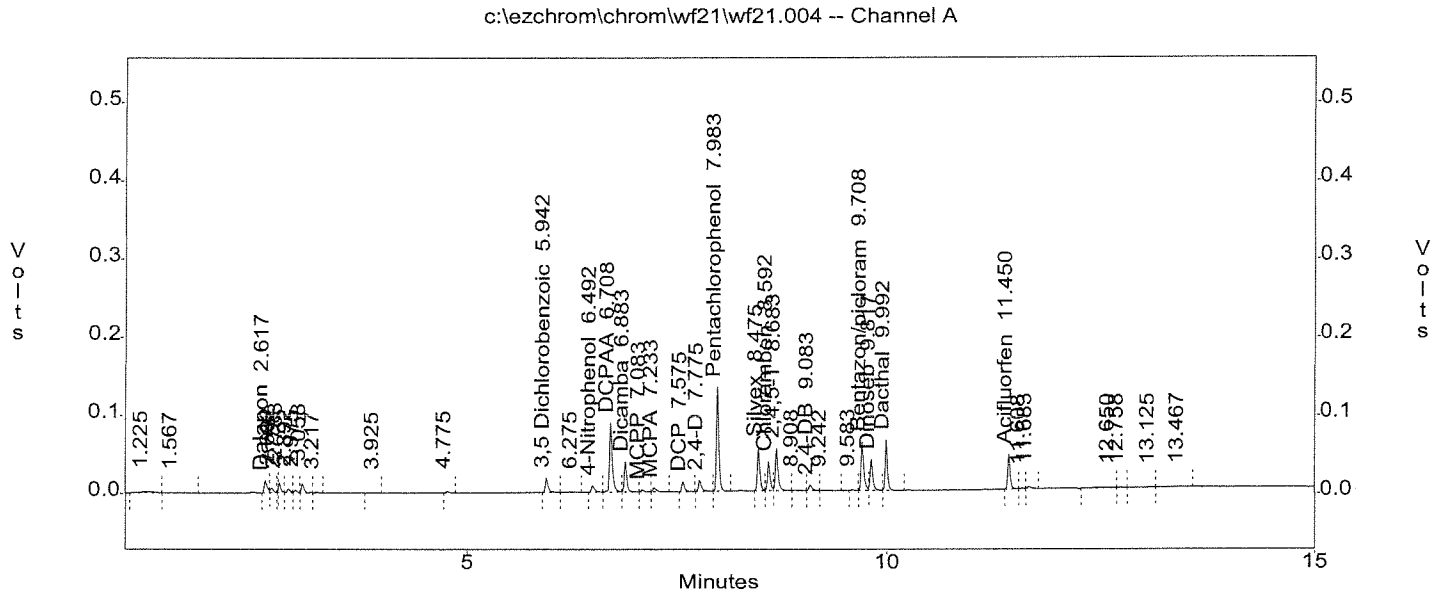
6/25/12
046

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.004
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2103
Acquired : Jun 21, 2012 11:09:40
Printed : Jun 21, 2012 14:58:17
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	39355.0	976.55	40.00	MM
3,5 Dichlorobenzoic	5.942	44211.0	978.08	40.00	BV
4-Nitrophenol	6.492	23529.0	520.59	40.00	BV
DCPAA	6.708	205563.0	444.68	400.00	VV
Dicamba	6.883	84620.0	1901.24	40.00	VV
MCPP	7.083	6790.0	3.59	2000.00	VV
MCPA	7.233	15277.0	6.12	2000.00	VV
DCP	7.575	30002.0	669.59	40.00	VV
2,4-D	7.775	36103.0	814.28	40.00	VV
Pentachlorophenol	7.983	272369.0	6248.45	40.00	VV
Silvex	8.475	114294.0	2612.09	40.00	BV
Chloramben	8.592	83315.0	1994.14	40.00	VV
2,4,5-T	8.683	128048.0	2904.83	40.00	VV
2,4-DB	9.083	20104.0	459.56	40.00	VV
Bentazon/picloram	9.708	149162.0	1780.81	80.00	VV
Dinoseb	9.817	88893.0	2000.79	40.00	VV
Dacthal	9.992	127656.0	2900.82	40.00	VV
Acifluorfen	11.450	88834.0	2077.16	40.00	BV



6/25/12
5047

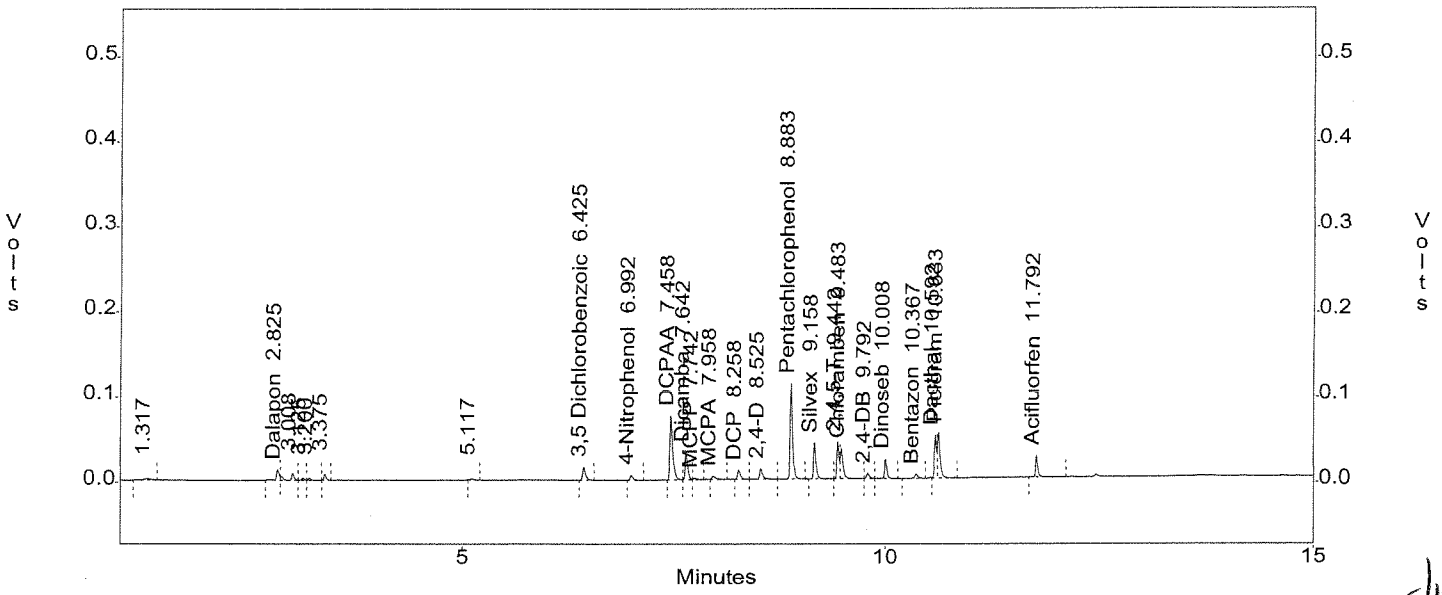
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.004
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2103
Acquired : Jun 21, 2012 11:09:40
Printed : Jun 21, 2012 14:58:18
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	29812.0	821.24	40.00	BS
3,5 Dichlorobenzoic	6.425	35889.0	816.54	40.00	Bx
4-Nitrophenol	6.992	13242.0	310.37	40.00	BV
DCPAA	7.458	181984.0	407.10	400.00	BV
Dicamba	7.642	68422.0	1619.92	40.00	VV
MCPP	7.742	4503.0	2.62	2000.00	VV
MCPA	7.958	11804.0	5.12	2000.00	xI
DCP	8.258	25942.0	611.26	40.00	BV
2,4-D	8.525	30755.0	701.42	40.00	VV
Pentachlorophenol	8.883	229256.0	5409.44	40.00	VI
Silvex	9.158	90002.0	2165.67	40.00	BV
2,4,5-T	9.442	79791.0	1873.35	40.00	Vx
Chloramben	9.483	81217.0	2068.50	40.00	xV
2,4-DB	9.792	14447.0	339.34	40.00	VV
Dinoseb	10.008	44706.0	1078.27	40.00	VV
Bentazon	10.367	11798.0	277.43	40.00	VV
Dacthal	10.592	91945.0	1999.91	40.00	xx
Picloram	10.633	112699.0	3082.04	40.00	xV
Acifluorfen	11.792	47985.0	1140.55	40.00	BV

c:\ezchrom\chrom\wf21\wf21.004 -- Channel B



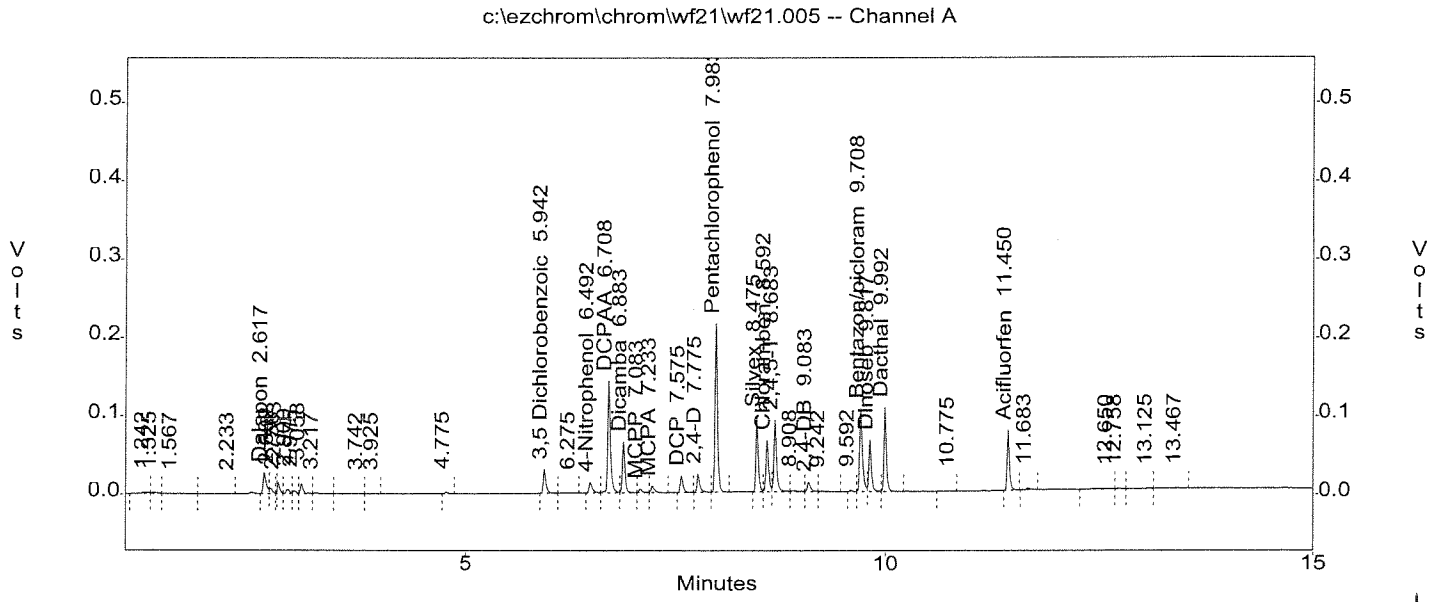
6/25/12
5048

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.005
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2104
Acquired : Jun 21, 2012 11:30:56
Printed : Jun 21, 2012 14:58:24
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	68032.0	976.55	70.00	BS
3,5 Dichlorobenzoic	5.942	70996.0	978.08	70.00	BV
4-Nitrophenol	6.492	38185.0	520.59	70.00	BV
DCPAA	6.708	321293.0	444.68	700.00	VV
Dicamba	6.883	139209.0	1901.24	70.00	VV
MCPP	7.083	12745.0	3.59	3500.00	VV
MCPA	7.233	23647.0	6.12	3500.00	VV
DCP	7.575	48696.0	669.59	70.00	VV
2,4-D	7.775	59169.0	814.28	70.00	VV
Pentachlorophenol	7.983	443684.0	6248.45	70.00	VV
Silvex	8.475	190819.0	2612.09	70.00	BV
Chloramben	8.592	143644.0	1994.14	70.00	VV
2,4,5-T	8.683	212420.0	2904.83	70.00	VV
2,4-DB	9.083	33433.0	459.56	70.00	VV
Bentazon/picloram	9.708	251499.0	1780.81	140.00	VV
Dinoseb	9.817	143979.0	2000.79	70.00	VV
Dacthal	9.992	210970.0	2900.82	70.00	VV
Acifluorfen	11.450	148130.0	2077.16	70.00	BV



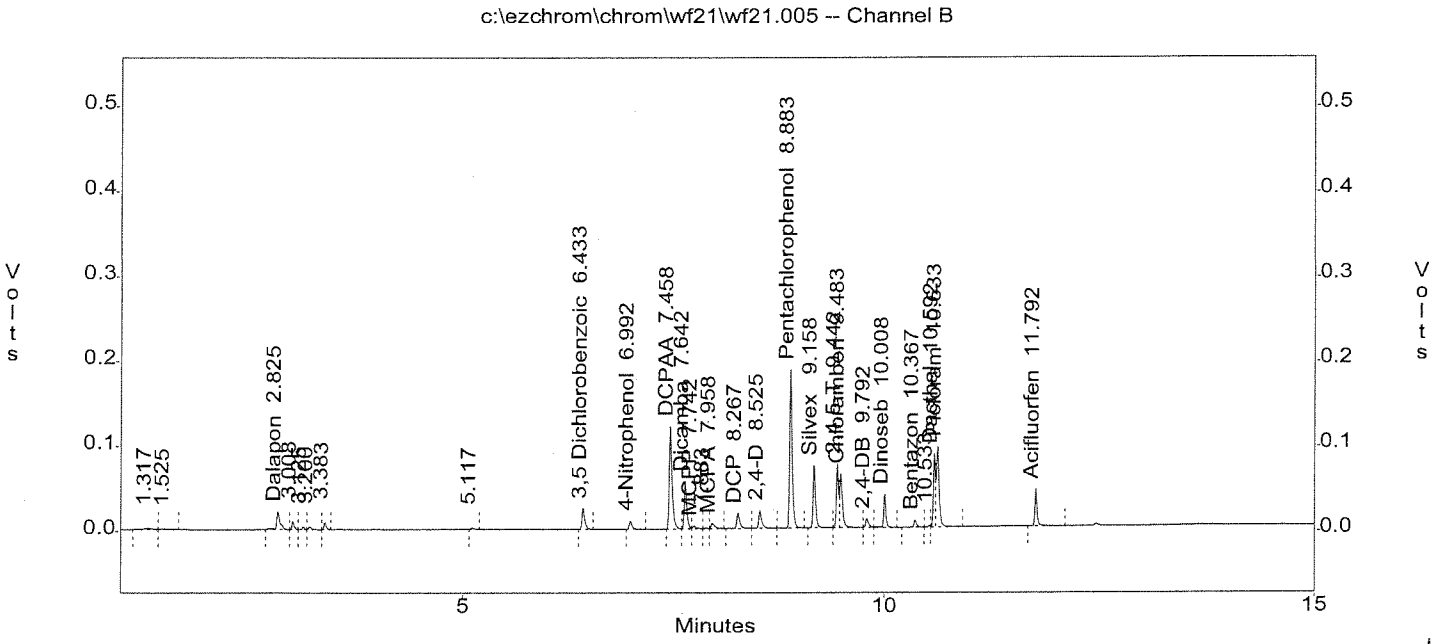
6/25/12
5649

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.005
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2104
Acquired : Jun 21, 2012 11:30:56
Printed : Jun 21, 2012 14:58:24
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	63879.0	821.24	70.00	BV
3,5 Dichlorobenzoic	6.433	58878.0	816.54	70.00	Bx
4-Nitrophenol	6.992	22280.0	310.37	70.00	BV
DCPAA	7.458	292189.0	407.10	700.00	BV
Dicamba	7.642	116905.0	1619.92	70.00	VV
MCPP	7.742	9781.0	2.62	3500.00	VV
MCPA	7.958	20481.0	5.12	3500.00	SV
DCP	8.267	46549.0	611.26	70.00	xV
2,4-D	8.525	52095.0	701.42	70.00	VV
Pentachlorophenol	8.883	388070.0	5409.44	70.00	VI
Silvex	9.158	154906.0	2165.67	70.00	BV
2,4,5-T	9.442	135415.0	1873.35	70.00	Vx
Chloramben	9.483	145743.0	2068.50	70.00	xV
2,4-DB	9.792	24174.0	339.34	70.00	VV
Dinoseb	10.008	75307.0	1078.27	70.00	VV
Bentazon	10.367	19113.0	277.43	70.00	VV
Dacthal	10.592	129579.0	1999.91	70.00	xx
Picloram	10.633	228820.0	3082.04	70.00	xV
Acifluorfen	11.792	78514.0	1140.55	70.00	BV



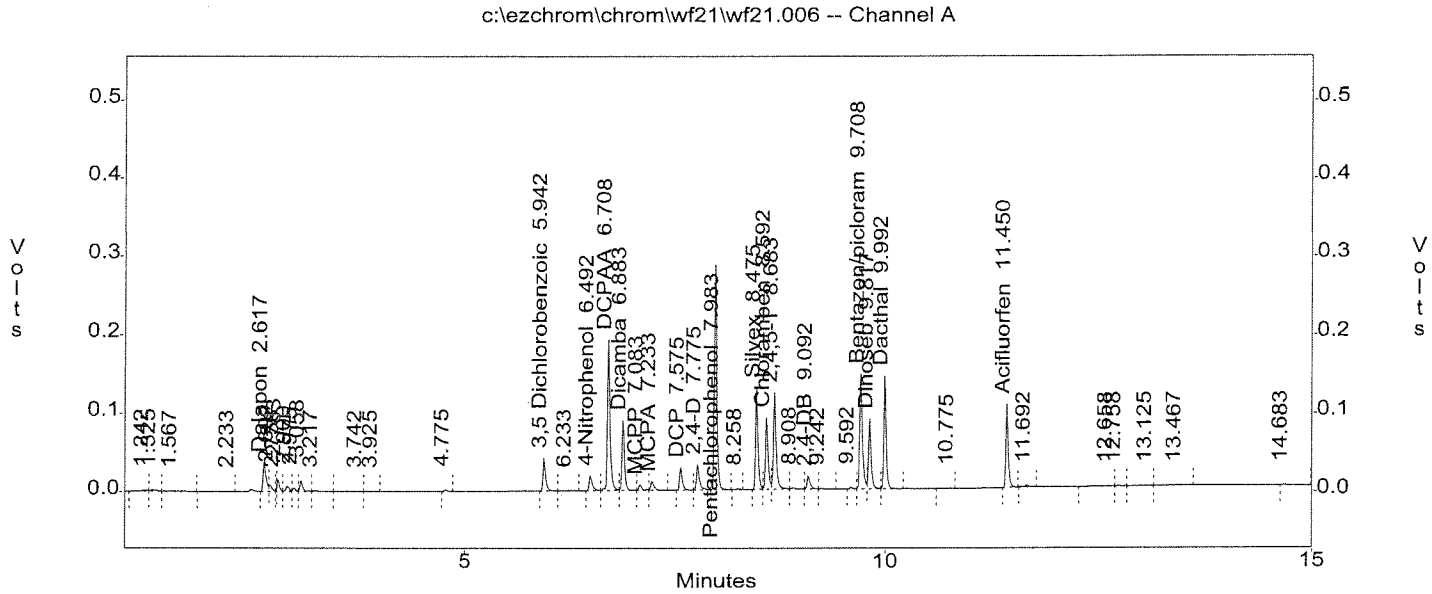
6/25/12

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.006
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2105
Acquired : Jun 21, 2012 11:52:14
Printed : Jun 21, 2012 14:58:30
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	92514.0	976.55	100.00	BS
3,5 Dichlorobenzoic	5.942	94603.0	978.08	100.00	BV
4-Nitrophenol	6.492	51296.0	520.59	100.00	BV
DCPAA	6.708	423626.0	444.68	1000.00	VV
Dicamba	6.883	188060.0	1901.24	100.00	VV
MCPP	7.083	18540.0	3.59	5000.00	VV
MCPA	7.233	31026.0	6.12	5000.00	VV
DCP	7.575	65452.0	669.59	100.00	VV
2,4-D	7.775	79864.0	814.28	100.00	VV
Pentachlorophenol	7.983	594367.0	6248.45	100.00	VV
Silvex	8.475	258467.0	2612.09	100.00	BV
Chloramben	8.592	199966.0	1994.14	100.00	VV
2,4,5-T	8.683	285681.0	2904.83	100.00	VV
2,4-DB	9.092	44225.0	459.56	100.00	VV
Bentazon/picloram	9.708	348910.0	1780.81	200.00	VV
Dinoseb	9.817	194177.0	2000.79	100.00	VV
Dacthal	9.992	284719.0	2900.82	100.00	VV
Acifluorfen	11.450	203845.0	2077.16	100.00	BV



6/25/12
5851

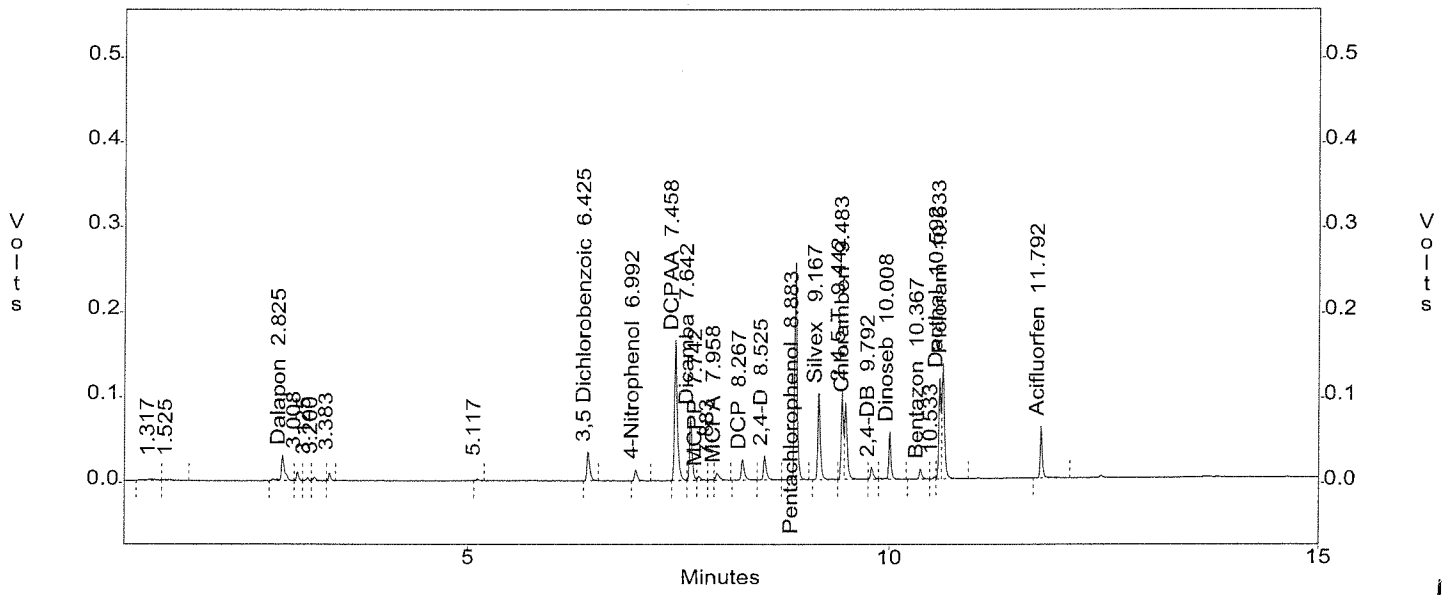
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.006
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2105
Acquired : Jun 21, 2012 11:52:14
Printed : Jun 21, 2012 14:58:31
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	86799.0	821.24	100.00	BV
3,5 Dichlorobenzoic	6.425	79582.0	816.54	100.00	Bx
4-Nitrophenol	6.992	30479.0	310.37	100.00	BV
DCPAA	7.458	391362.0	407.10	1000.00	BV
Dicamba	7.642	161229.0	1619.92	100.00	VV
MCPP	7.742	13544.0	2.62	5000.00	VV
MCPA	7.958	26087.0	5.12	5000.00	Sx
DCP	8.267	60867.0	611.26	100.00	VV
2,4-D	8.525	68862.0	701.42	100.00	VV
Pentachlorophenol	8.883	531647.0	5409.44	100.00	VI
Silvex	9.167	215037.0	2165.67	100.00	BV
2,4,5-T	9.442	188088.0	1873.35	100.00	Vx
Chloramben	9.483	206399.0	2068.50	100.00	xV
2,4-DB	9.792	33050.0	339.34	100.00	VV
Dinoseb	10.008	104919.0	1078.27	100.00	VV
Bentazon	10.367	26230.0	277.43	100.00	VV
Dacthal	10.592	216070.0	1999.91	100.00	xx
Picloram	10.633	290775.0	3082.04	100.00	xV
Acifluorfen	11.792	109840.0	1140.55	100.00	BV

c:\ezchrom\chrom\wf21\wf21.006 -- Channel B



6/25/12
5952

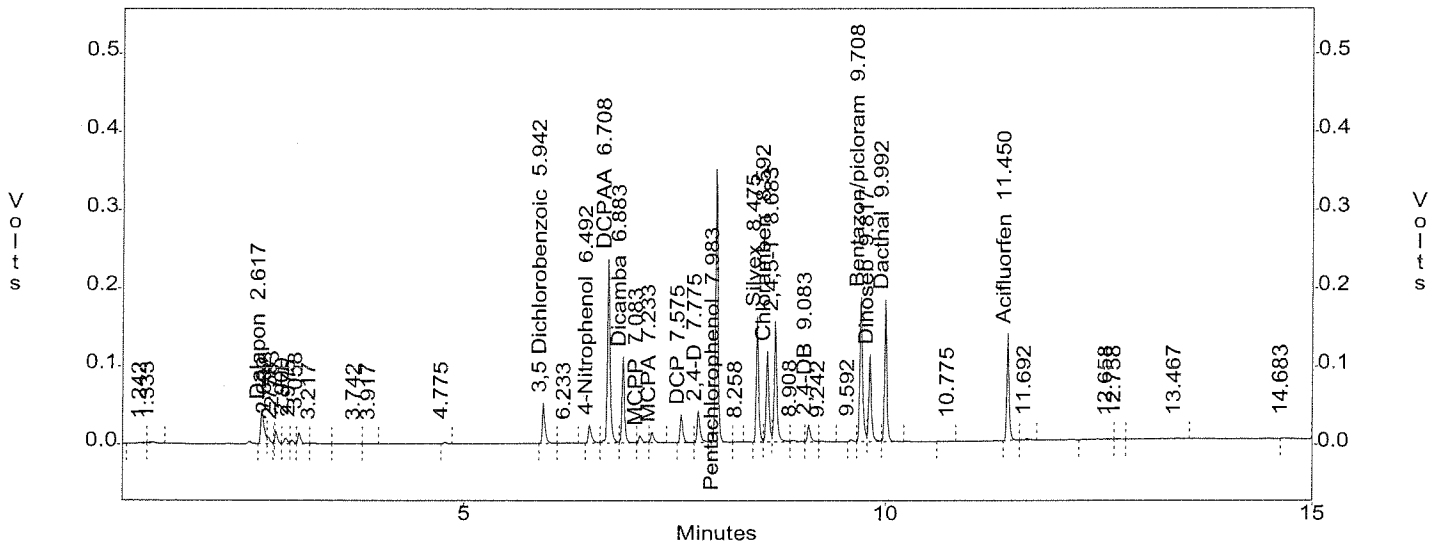
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.007
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2106
Acquired : Jun 21, 2012 12:13:28
Printed : Jun 21, 2012 14:58:37
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	113443.0	976.55	130.00	BS
3,5 Dichlorobenzoic	5.942	114405.0	978.08	130.00	BV
4-Nitrophenol	6.492	62283.0	520.59	130.00	BV
DCPAA	6.708	512641.0	444.68	1300.00	VV
Dicamba	6.883	230313.0	1901.24	130.00	VV
MCPP	7.083	23236.0	3.59	6500.00	VV
MCPA	7.233	36507.0	6.12	6500.00	VB
DCP	7.575	80040.0	669.59	130.00	BV
2,4-D	7.775	98287.0	814.28	130.00	VV
Pentachlorophenol	7.983	730455.0	6248.45	130.00	VV
Silvex	8.475	320573.0	2612.09	130.00	BV
Chloramben	8.592	252630.0	1994.14	130.00	VV
2,4,5-T	8.683	353701.0	2904.83	130.00	VV
2,4-DB	9.083	55541.0	459.56	130.00	VV
Bentazon/picloram	9.708	439411.0	1780.81	260.00	VV
Dinoseb	9.817	240682.0	2000.79	130.00	VV
Dacthal	9.992	355854.0	2900.82	130.00	VV
Acifluorfen	11.450	260568.0	2077.16	130.00	VV

c:\ezchrom\chrom\wf21\wf21.007 -- Channel A



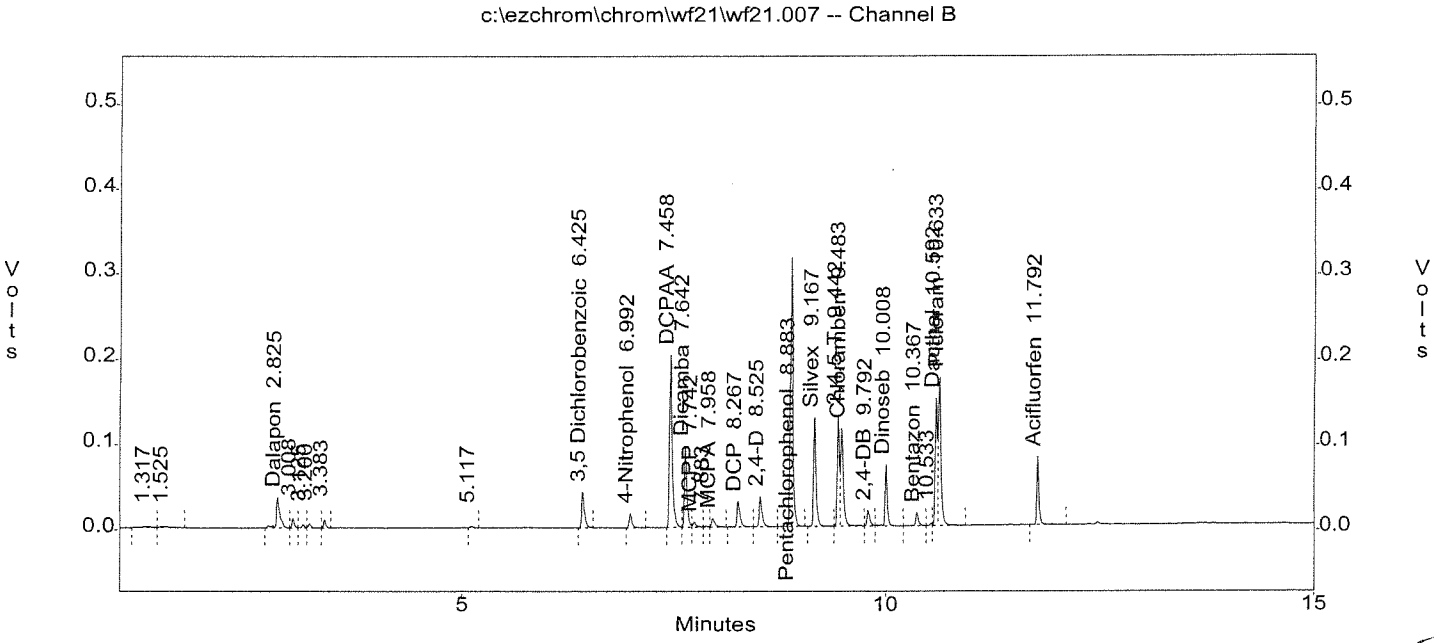
6/26/12
5053

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.007
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2106
Acquired : Jun 21, 2012 12:13:28
Printed : Jun 21, 2012 14:58:37
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	106637.0	821.24	130.00	BV
3,5 Dichlorobenzoic	6.425	97572.0	816.54	130.00	Bx
4-Nitrophenol	6.992	37821.0	310.37	130.00	BV
DCPAA	7.458	478575.0	407.10	1300.00	BV
Dicamba	7.642	201356.0	1619.92	130.00	VV
MCPP	7.742	17168.0	2.62	6500.00	VV
MCPA	7.958	30950.0	5.12	6500.00	Sx
DCP	8.267	74221.0	611.26	130.00	VV
2,4-D	8.525	84547.0	701.42	130.00	VV
Pentachlorophenol	8.883	665396.0	5409.44	130.00	VI
Silvex	9.167	272975.0	2165.67	130.00	BV
2,4,5-T	9.442	235867.0	1873.35	130.00	Vx
Chloramben	9.483	268273.0	2068.50	130.00	xV
2,4-DB	9.792	41850.0	339.34	130.00	VV
Dinoseb	10.008	134589.0	1078.27	130.00	VV
Bentazon	10.367	33658.0	277.43	130.00	VV
Dacthal	10.592	274233.0	1999.91	130.00	xx
Picloram	10.633	378214.0	3082.04	130.00	xV
Acifluorfen	11.792	142459.0	1140.55	130.00	BV



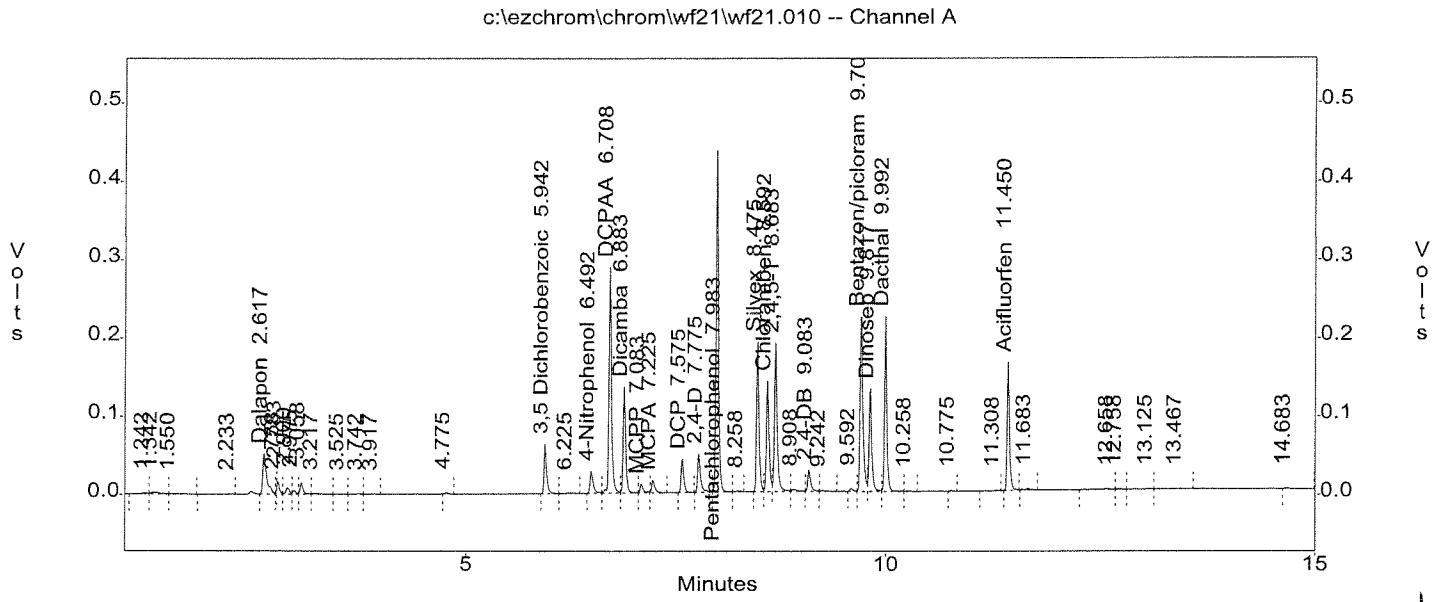
6/25/12
5054

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.010
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2107
Acquired : Jun 21, 2012 13:27:31
Printed : Jun 21, 2012 14:58:44
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	163214.0	976.55	160.00	BV
3,5 Dichlorobenzoic	5.942	137882.0	978.08	160.00	BV
4-Nitrophenol	6.492	74981.0	520.59	160.00	BV
DCPAA	6.708	617942.0	444.68	1600.00	VV
Dicamba	6.883	280355.0	1901.24	160.00	VV
MCPP	7.083	28675.0	3.59	8000.00	VV
MCPA	7.225	42762.0	6.12	8000.00	VB
DCP	7.575	96169.0	669.59	160.00	BV
2,4-D	7.775	118698.0	814.28	160.00	VV
Pentachlorophenol	7.983	885661.0	6248.45	160.00	VV
Silvex	8.475	388481.0	2612.09	160.00	BV
Chloramben	8.592	310618.0	1994.14	160.00	VV
2,4,5-T	8.683	428342.0	2904.83	160.00	VV
2,4-DB	9.083	67586.0	459.56	160.00	VV
Bentazon/picloram	9.700	540918.0	1780.81	320.00	VV
Dinoseb	9.817	288277.0	2000.79	160.00	VV
Dacthal	9.992	428464.0	2900.82	160.00	VV
Acifluorfen	11.450	312505.0	2077.16	160.00	VV



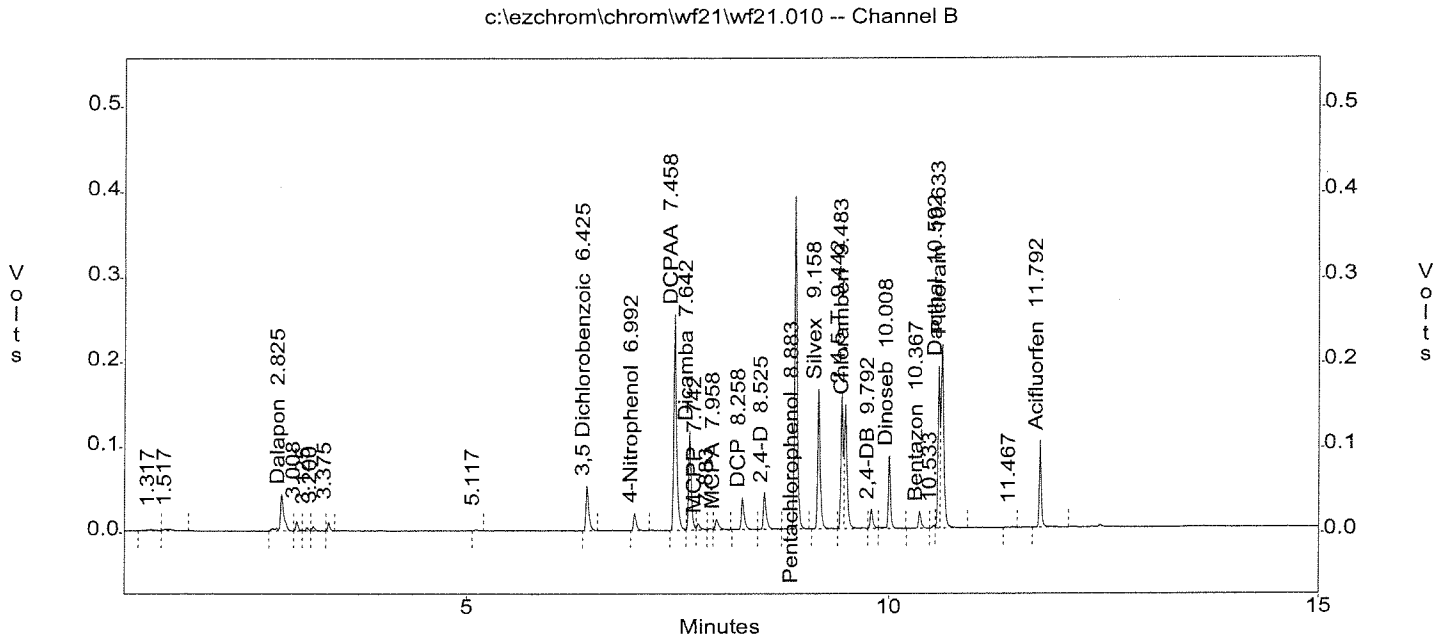
6/25/12
5055

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.010
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2107
Acquired : Jun 21, 2012 13:27:31
Printed : Jun 21, 2012 14:58:44
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	132526.0	821.24	160.00	BV
3,5 Dichlorobenzoic	6.425	119529.0	816.54	160.00	Bx
4-Nitrophenol	6.992	46989.0	310.37	160.00	BV
DCPAA	7.458	584500.0	407.10	1600.00	BV
Dicamba	7.642	249803.0	1619.92	160.00	VV
MCPP	7.742	21402.0	2.62	8000.00	VV
MCPA	7.958	37338.0	5.12	8000.00	Sx
DCP	8.258	91137.0	611.26	160.00	VV
2,4-D	8.525	103904.0	701.42	160.00	VV
Pentachlorophenol	8.883	821563.0	5409.44	160.00	VI
Silvex	9.158	338654.0	2165.67	160.00	BV
2,4,5-T	9.442	300901.0	1873.35	160.00	Vx
Chloramben	9.483	327450.0	2068.50	160.00	xV
2,4-DB	9.792	51605.0	339.34	160.00	VV
Dinoseb	10.008	168171.0	1078.27	160.00	VV
Bentazon	10.367	42633.0	277.43	160.00	VV
Dacthal	10.592	291454.0	1999.91	160.00	xx
Picloram	10.633	527452.0	3082.04	160.00	xV
Acifluorfen	11.792	175229.0	1140.55	160.00	BV



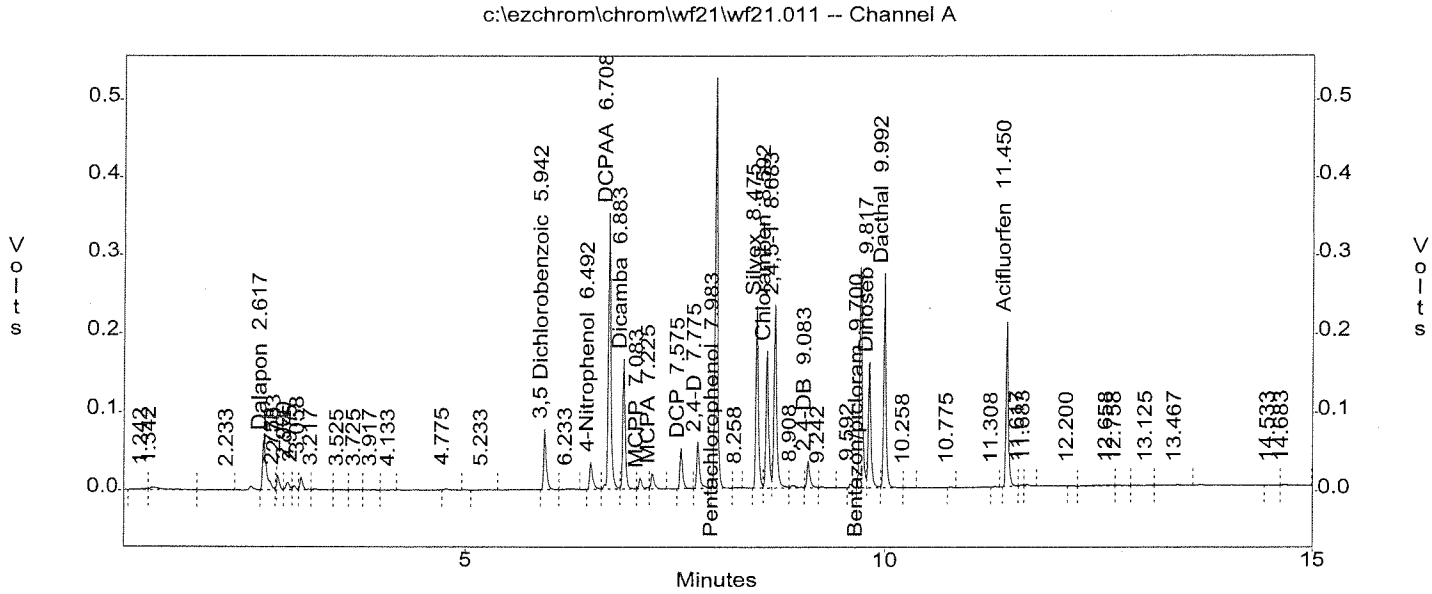
6/25/12
5056

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.011
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2108
Acquired : Jun 21, 2012 13:48:52
Printed : Jun 21, 2012 14:58:52
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	197629.0	976.55	200.00	BV
3,5 Dichlorobenzoic	5.942	165542.0	978.08	200.00	BV
4-Nitrophenol	6.492	90924.0	520.59	200.00	BV
DCPAA	6.708	745557.0	444.68	2000.00	VV
Dicamba	6.883	340751.0	1901.24	200.00	VV
MCPP	7.083	36416.0	3.59	10000.00	VV
MCPA	7.225	51704.0	6.12	10000.00	VB
DCP	7.575	116543.0	669.59	200.00	BV
2,4-D	7.775	144257.0	814.28	200.00	VV
Pentachlorophenol	7.983	1075262.0	6248.45	200.00	VV
Silvex	8.475	472324.0	2612.09	200.00	BV
Chloramben	8.592	382840.0	1994.14	200.00	VV
2,4,5-T	8.683	518475.0	2904.83	200.00	VV
2,4-DB	9.083	83135.0	459.56	200.00	VV
Bentazon/picloram	9.700	669134.0	1780.81	400.00	VV
Dinoseb	9.817	353267.0	2000.79	200.00	VV
Dacthal	9.992	525087.0	2900.82	200.00	VV
Acifluorfen	11.450	399113.0	2077.16	200.00	VV



6/25/12
5957

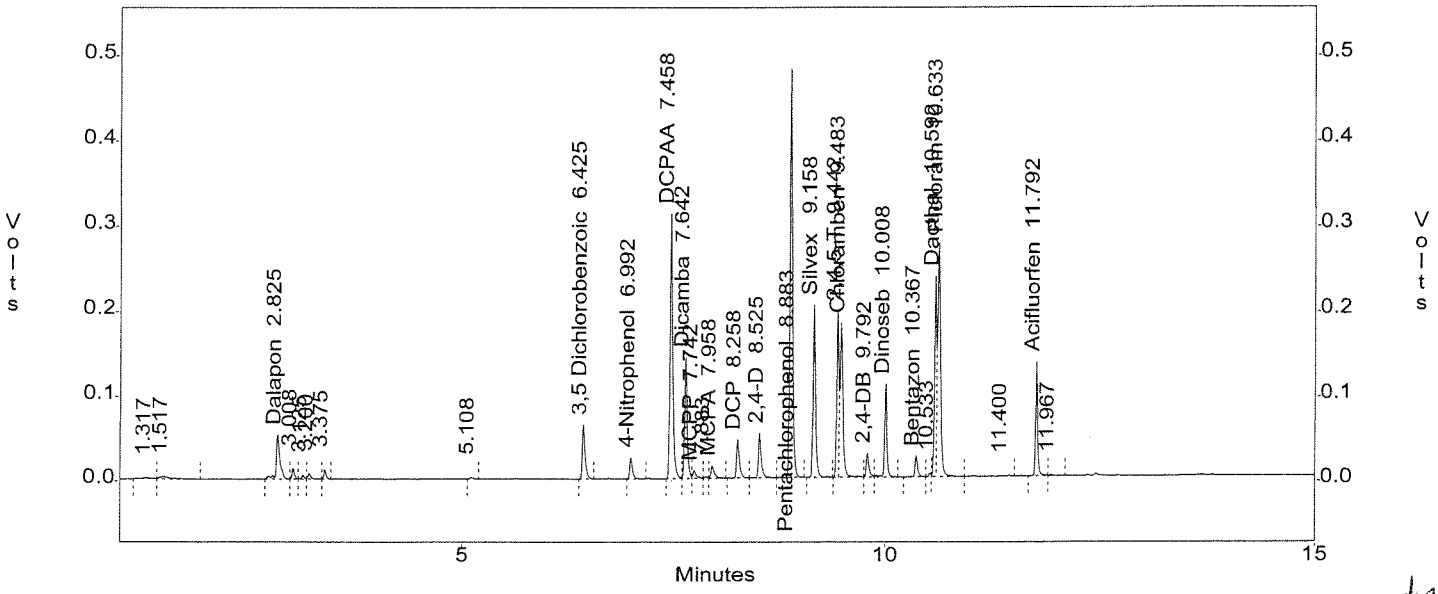
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.011
Method : c:\ezchrom\methods\he16f21.met
Sample ID : HE16F2108
Acquired : Jun 21, 2012 13:48:52
Printed : Jun 21, 2012 14:58:52
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	164163.0	821.24	200.00	BV
3,5 Dichlorobenzoic	6.425	145401.0	816.54	200.00	Bx
4-Nitrophenol	6.992	58385.0	310.37	200.00	BV
DCPAA	7.458	712840.0	407.10	2000.00	SV
Dicamba	7.642	307630.0	1619.92	200.00	VV
MCPP	7.742	26298.0	2.62	10000.00	VV
MCPA	7.958	43264.0	5.12	10000.00	Sx
DCP	8.258	108523.0	611.26	200.00	VV
2,4-D	8.525	126406.0	701.42	200.00	VV
Pentachlorophenol	8.883	1008443.0	5409.44	200.00	VI
Silvex	9.158	419096.0	2165.67	200.00	BV
2,4,5-T	9.442	320382.0	1873.35	200.00	xx
Chloramben	9.483	461290.0	2068.50	200.00	xV
2,4-DB	9.792	63892.0	339.34	200.00	SV
Dinoseb	10.008	215369.0	1078.27	200.00	VV
Bentazon	10.367	52882.0	277.43	200.00	VV
Dacthal	10.592	359164.0	1999.91	200.00	xx
Picloram	10.633	674001.0	3082.04	200.00	xV
Acifluorfen	11.792	226762.0	1140.55	200.00	BS

c:\ezchrom\chrom\wf21\wf21.011 -- Channel B



6/25/12
5058

SECOND SOURCE VERIFICATION

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006A 06/21/2012 11:52
Conc Cont LFID & Datetime: WF21012A 06/21/2012 14:10
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dalapon	2.617	2.597	2.637	100.0	976.600	103667	106.16	6		15
3,5-Dichlorobenzo	5.942	5.922	5.962	100.0	978.100	91566	93.62	-6		15
4-Nitrophenol	6.492	6.472	6.512	100.0	520.600	48626	93.40	-7		15
Dicamba	6.883	6.863	6.903	100.0	1901.2	183201	96.36	-4		15
Dichloroprop	7.567	7.537	7.597	100.0	669.600	66791	99.75	-0		15
2,4-D	7.775	7.745	7.805	100.0	814.300	78529	96.44	-4		15
Pentachlorophenol	7.983	7.963	8.003	100.0	6248.4	603343	96.56	-3		15
2,4,5-TP(Silvex)	8.467	8.447	8.487	100.0	2612.1	260649	99.79	-0		15
Chloramben	8.592	8.562	8.622	100.0	1994.1	202598	101.60	2		15
2,4,5-T	8.683	8.663	8.703	100.0	2904.8	292938	100.85	1		15
2,4-DB	9.083	9.053	9.113	100.0	459.600	44576	97.00	-3		15
Bentazon/Picloram	9.700	9.670	9.730	200.0	1780.8	363012	203.85	2		15
Dinoseb	9.808	9.778	9.838	100.0	2000.8	188895	94.41	-6		15
Dacthal	9.992	9.962	10.022	100.0	2900.8	298784	103.00	3		15
Acifluorfen	11.450	11.410	11.490	100.0	2077.2	205220	98.80	-1		15

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	6.708	6.688	6.728	1000.0	444.700	419738	943.92	-6		15

6/25/12

5060

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Column : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006B 06/21/2012 11:52
Conc Cont LFID & Datetime: WF21012B 06/21/2012 14:10
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dalapon	2.825	2.805	2.845	100.0	821.200	89888	109.45	9		15
3,5-Dichlorobenzo	6.425	6.395	6.455	100.0	816.500	76083	93.18	-7		15
4-Nitrophenol	6.992	6.962	7.022	100.0	310.400	31240	100.65	1		15
Dicamba	7.642	7.622	7.662	100.0	1619.9	156028	96.32	-4		15
Dichloroprop	8.258	8.238	8.278	100.0	611.300	59865	97.94	-2		15
2,4-D	8.525	8.505	8.545	100.0	701.400	68360	97.46	-3		15
Pentachlorophenol	8.883	8.863	8.903	100.0	5409.4	547229	101.16	1		15
2,4,5-TP(Silvex)	9.158	9.128	9.188	100.0	2165.7	224339	103.59	4		15
Chloramben	9.483	9.463	9.503	100.0	2068.5	227569	110.02	10		15
2,4,5-T	9.442	9.412	9.472	100.0	1873.4	182931	97.65	-2		15
2,4-DB	9.792	9.762	9.822	100.0	339.300	34237	100.89	1		15
Dinoseb	10.000	9.970	10.030	100.0	1078.3	111146	103.08	3		15
Bentazon	10.367	10.337	10.397	100.0	277.400	29291	105.58	6		15
Dacthal	10.592	10.562	10.622	100.0	1999.9	206646	103.33	3		15
Picloram	10.625	10.595	10.655	100.0	3082.0	325776	105.70	6		15
Acifluorfen	11.792	11.762	11.822	100.0	1140.5	118079	103.53	4		15

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	7.458	7.438	7.478	1000.0	407.100	388882	955.26	-4		15

6/25/12

5061

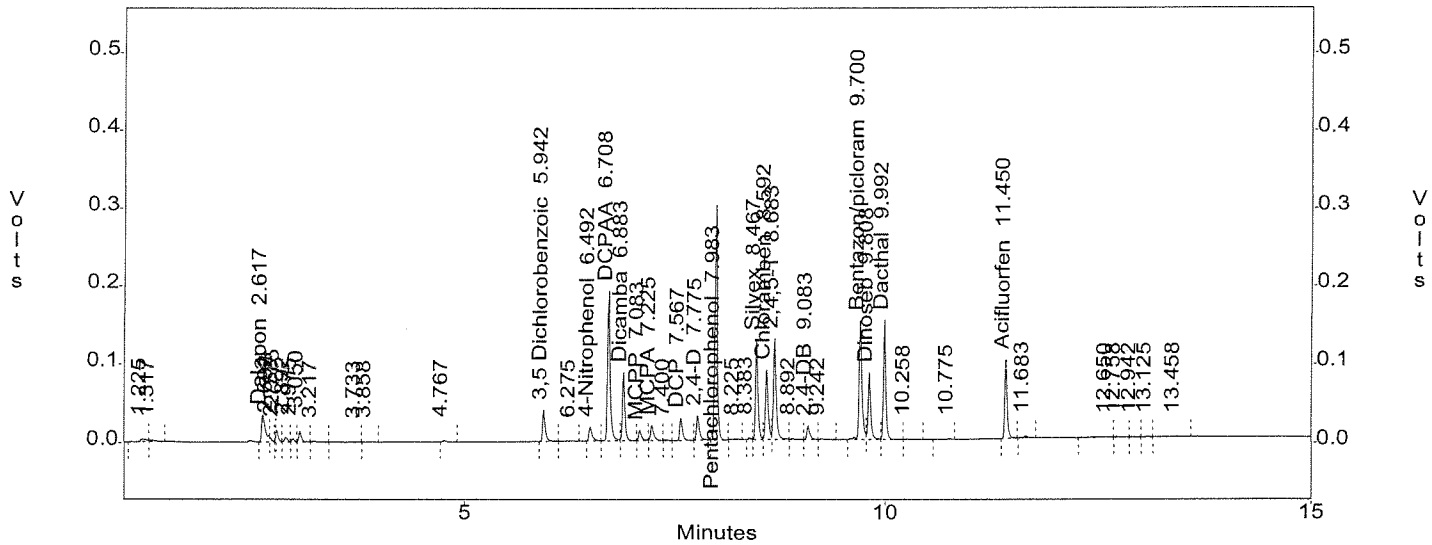
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.012
Method : c:\ezchrom\methods\he16f21.met
Sample ID : IHE16F2101
Acquired : Jun 21, 2012 14:10:16
Printed : Jun 21, 2012 14:59:25
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	103667.0	976.55	106.16	BS
3,5 Dichlorobenzoic	5.942	91566.0	978.08	93.62	BV
4-Nitrophenol	6.492	48626.0	520.59	93.41	BV
DCPAA	6.708	419738.0	444.68	943.92	VV
Dicamba	6.883	183201.0	1901.24	96.36	VV
MCPP	7.083	32275.0	3.59	8988.09	VV
MCPA	7.225	52168.0	6.12	8521.38	VV
DCP	7.567	66791.0	669.59	99.75	VV
2,4-D	7.775	78529.0	814.28	96.44	VV
Pentachlorophenol	7.983	603343.0	6248.45	96.56	VV
Silvex	8.467	260649.0	2612.09	99.79	SV
Chloramben	8.592	202598.0	1994.14	101.60	VV
2,4,5-T	8.683	292938.0	2904.83	100.85	VV
2,4-DB	9.083	44576.0	459.56	97.00	VV
Bentazon/picloram	9.700	363012.0	1780.81	203.85	BV
Dinoseb	9.808	188895.0	2000.79	94.41	VV
Dacthal	9.992	298784.0	2900.82	103.00	VV
Acifluorfen	11.450	205220.0	2077.16	98.80	VV

c:\ezchrom\chrom\wf21\wf21.012 -- Channel A



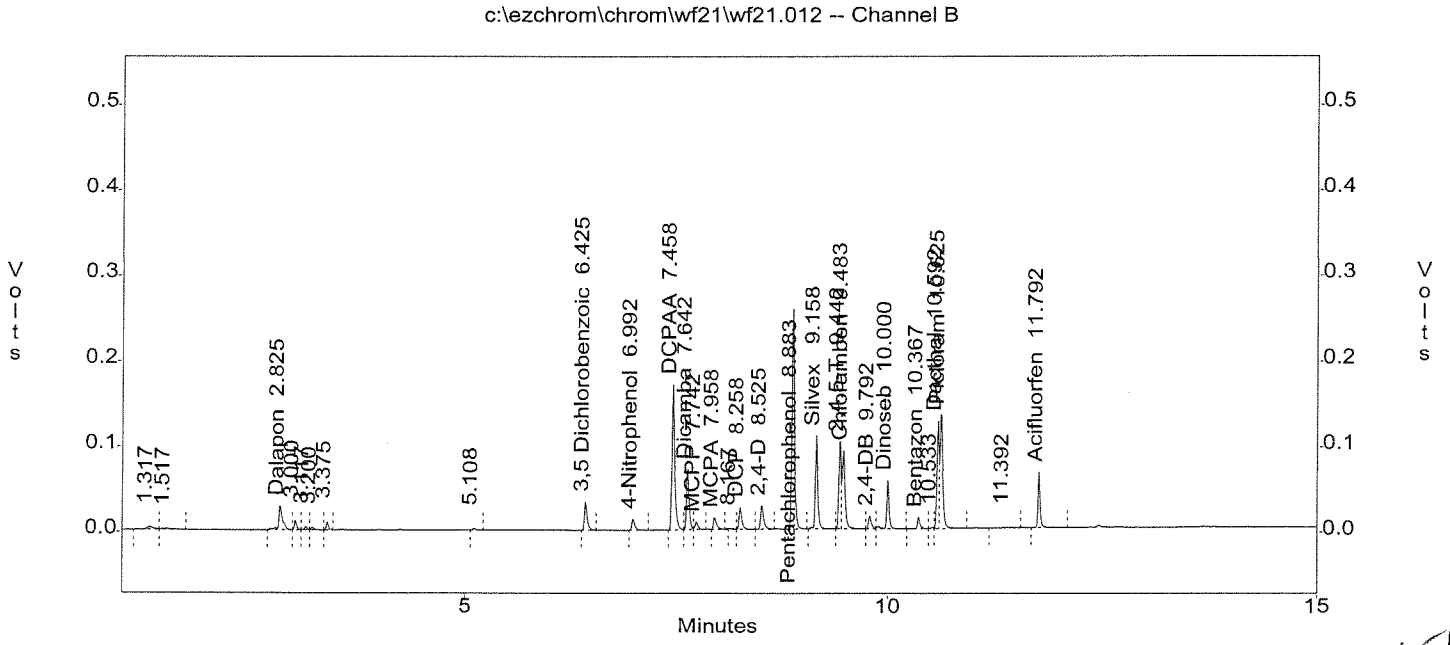
6/25/12
5062

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.012
Method : c:\ezchrom\methods\he16f21.met
Sample ID : IHE16F2101
Acquired : Jun 21, 2012 14:10:16
Printed : Jun 21, 2012 14:59:25
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	89888.0	821.24	109.45	BV
3,5 Dichlorobenzoic	6.425	76083.0	816.54	93.18	Bx
4-Nitrophenol	6.992	31240.0	310.37	100.65	BV
DCPAA	7.458	388882.0	407.10	955.26	BV
Dicamba	7.642	156028.0	1619.92	96.32	VV
MCPP	7.742	21330.0	2.62	8150.99	VV
MCPA	7.958	38807.0	5.12	7577.94	SV
DCP	8.258	59865.0	611.26	97.94	VV
2,4-D	8.525	68360.0	701.42	97.46	VV
Pentachlorophenol	8.883	547229.0	5409.44	101.16	VI
Silvex	9.158	224339.0	2165.67	103.59	BV
2,4,5-T	9.442	182931.0	1873.35	97.65	Vx
Chloramben	9.483	227569.0	2068.50	110.02	xV
2,4-DB	9.792	34237.0	339.34	100.89	VV
Dinoseb	10.000	111146.0	1078.27	103.08	VV
Bentazon	10.367	29291.0	277.43	105.58	VV
Dacthal	10.592	206646.0	1999.91	103.33	xx
Picloram	10.625	325776.0	3082.04	105.70	xV
Acifluorfen	11.792	118079.0	1140.55	103.53	BV



6/25/12

5063

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006A 06/21/2012 11:52
Conc Cont LFID & Datetime: WF21013A 06/21/2012 14:31
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
MCPP	7.083	7.063	7.103	5000.0	3.600	16785	4674.37	-7		15
MCPA	7.225	7.205	7.245	5000.0	6.100	30797	5030.53	1		15

2 6/25/12

5064

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006B 06/21/2012 11:52
Conc Cont LFID & Datetime: WF21013B 06/21/2012 14:31
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
MCPP	7.742	7.722	7.762	5000.0	2.600	11746	4488.59	-10		15
MCPA	7.958	7.938	7.978	5000.0	5.100	28185	5503.75	10		15

6/25/12

5065

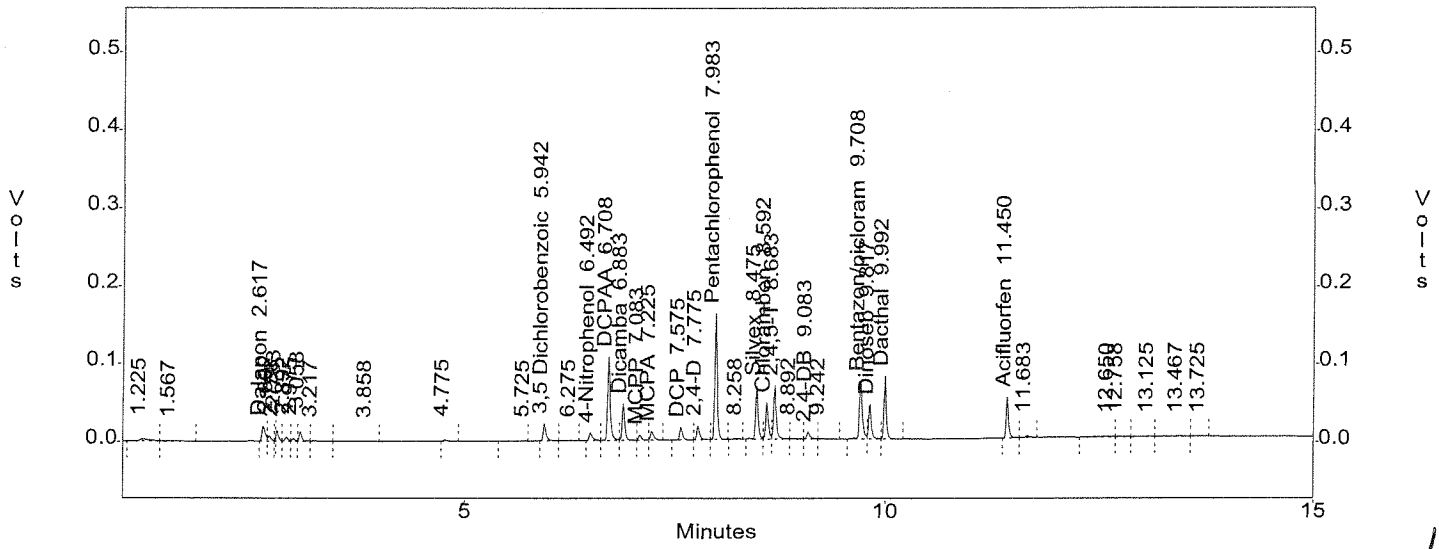
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.013
Method : c:\ezchrom\methods\he16f21.met
Sample ID : IHE16F2102
Acquired : Jun 21, 2012 14:31:39
Printed : Jun 21, 2012 15:00:54
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.617	49032.0	976.55	50.21	BS
3,5 Dichlorobenzoic	5.942	51539.0	978.08	52.69	BV
4-Nitrophenol	6.492	26837.0	520.59	51.55	BV
DCPAA	6.708	240725.0	444.68	541.35	VV
Dicamba	6.883	99468.0	1901.24	52.32	VV
MCPP	7.083	16785.0	3.59	4674.37	VV
MCPA	7.225	30797.0	6.12	5030.53	VV
DCP	7.575	36901.0	669.59	55.11	VV
2,4-D	7.775	42751.0	814.28	52.50	VV
Pentachlorophenol	7.983	330227.0	6248.45	52.85	VV
Silvex	8.475	140727.0	2612.09	53.88	BV
Chloramben	8.592	102051.0	1994.14	51.18	VV
2,4,5-T	8.683	157926.0	2904.83	54.37	VV
2,4-DB	9.083	23728.0	459.56	51.63	VV
Bentazon/picloram	9.708	185058.0	1780.81	103.92	BV
Dinoseb	9.817	100140.0	2000.79	50.05	VV
Dacthal	9.992	157235.0	2900.82	54.20	VV
Acifluorfen	11.450	104596.0	2077.16	50.36	BV

c:\ezchrom\chrom\wf21\wf21.013 -- Channel A



6/25/12
5066

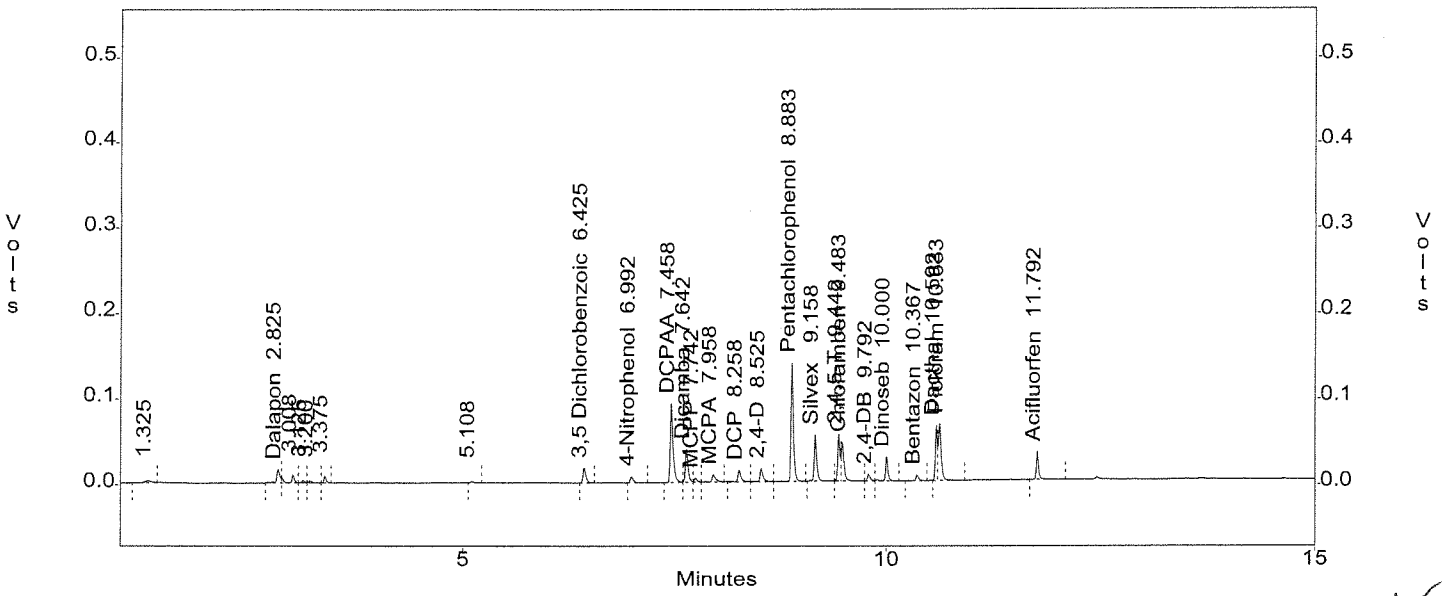
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf21\wf21.013
Method : c:\ezchrom\methods\he16f21.met
Sample ID : IHE16F2102
Acquired : Jun 21, 2012 14:31:39
Printed : Jun 21, 2012 15:00:54
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	40625.0	821.24	49.47	BS
3,5 Dichlorobenzoic	6.425	41471.0	816.54	50.79	Bx
4-Nitrophenol	6.992	16973.0	310.37	54.69	BV
DCPAA	7.458	217887.0	407.10	535.22	VV
Dicamba	7.642	82353.0	1619.92	50.84	VV
MCPP	7.742	11746.0	2.62	4488.59	VV
MCPA	7.958	28185.0	5.12	5503.75	VV
DCP	8.258	37711.0	611.26	61.69	xV
2,4-D	8.525	39920.0	701.42	56.91	VV
Pentachlorophenol	8.883	286898.0	5409.44	53.04	VI
Silvex	9.158	113537.0	2165.67	52.43	BV
2,4,5-T	9.442	103786.0	1873.35	55.40	Vx
Chloramben	9.483	100560.0	2068.50	48.61	xV
2,4-DB	9.792	17793.0	339.34	52.43	VV
Dinoseb	10.000	58380.0	1078.27	54.14	VV
Bentazon	10.367	15000.0	277.43	54.07	VV
Dacthal	10.592	99975.0	1999.91	49.99	xx
Picloram	10.633	161970.0	3082.04	52.55	xV
Acifluorfen	11.792	61510.0	1140.55	53.93	BV

c:\ezchrom\chrom\wf21\wf21.013 -- Channel B



6/25/12
5067

DAILY CALIBRATIONS

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006A 06/21/2012 11:52
Conc Cont LFID & Datetime: WF29005A 06/29/2012 10:48
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dinoseb	9.808	9.778	9.838	100.0	2000.8	216811	108.36	8		20
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
2,4-DCPAA	6.700	6.680	6.720	1000.0	444.700	464808	1045.27	5		20

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006B 06/21/2012 11:52
Conc Cont LFID & Datetime: WF29005B 06/29/2012 10:48
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dinoseb	9.992	9.962	10.022	100.0	1078.3	109082	101.16	1		20
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
2,4-DCPAA	7.450	7.430	7.470	1000.0	407.100	417156	1024.71	2		20

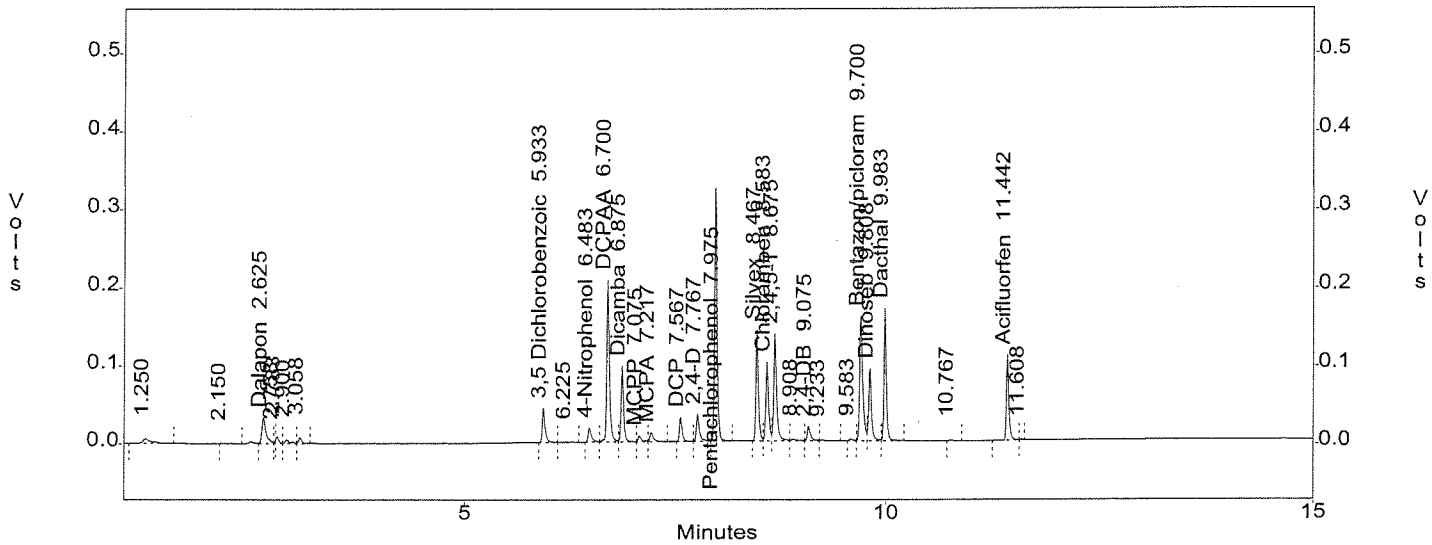
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.005
Method : c:\ezchrom\methods\he16f21.met
Sample ID : CHE16F2108
Acquired : Jun 29, 2012 10:48:24
Printed : Jun 29, 2012 12:06:28
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.625	111608.0	976.55	114.29	BV
3,5 Dichlorobenzoic	5.933	102359.0	978.08	104.65	BV
4-Nitrophenol	6.483	52833.0	520.59	101.49	BV
DCPAA	6.700	464808.0	444.68	1045.27	VV
Dicamba	6.875	208033.0	1901.24	109.42	VV
MCPP	7.075	20943.0	3.59	5832.30	VV
MCPA	7.217	33814.0	6.12	5523.34	VV
DCP	7.567	72726.0	669.59	108.61	VV
2,4-D	7.767	89035.0	814.28	109.34	VV
Pentachlorophenol	7.975	673906.0	6248.45	107.85	VV
Silvex	8.467	296277.0	2612.09	113.43	BV
Chloramben	8.583	232493.0	1994.14	116.59	VV
2,4,5-T	8.675	335242.0	2904.83	115.41	VV
2,4-DB	9.075	52111.0	459.56	113.39	VV
Bentazon/picloram	9.700	413714.0	1780.81	232.32	VV
Dinoseb	9.808	216811.0	2000.79	108.36	VV
Dacthal	9.983	340959.0	2900.82	117.54	VV
Acifluorfen	11.442	222482.0	2077.16	107.11	BV

c:\ezchrom\chrom\wf29\wf29.005 -- Channel A

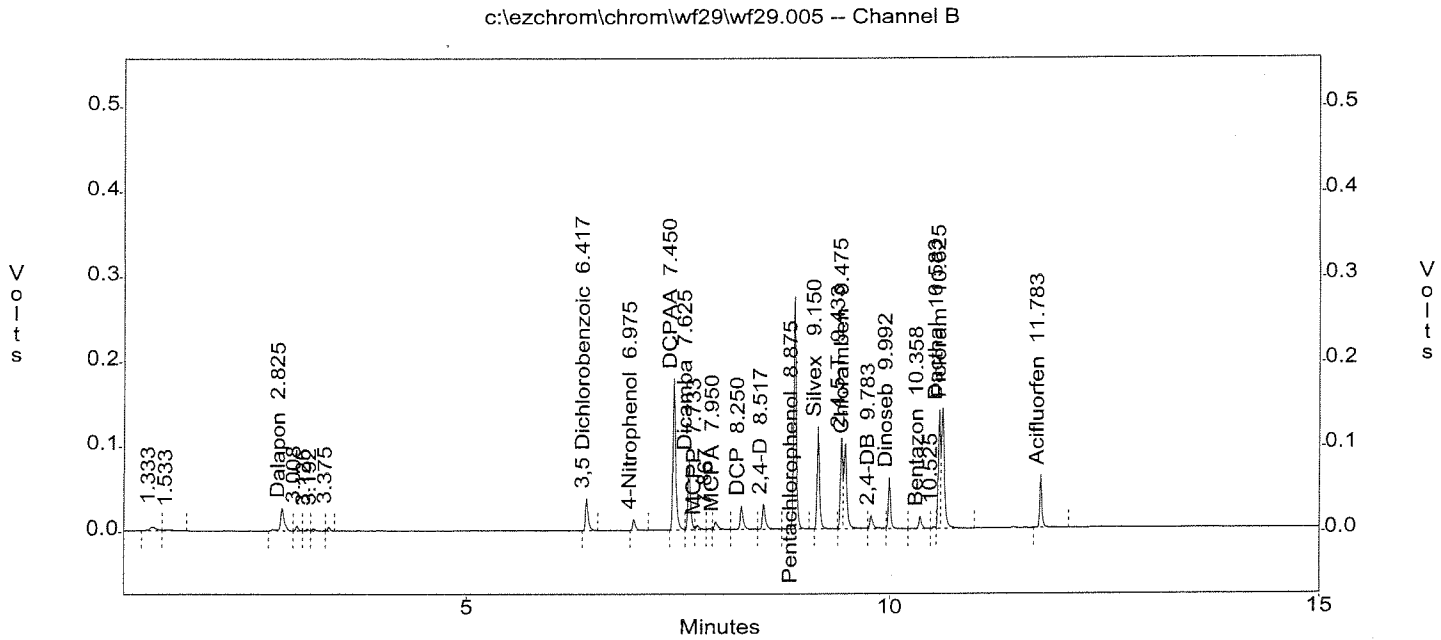


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.005
Method : c:\ezchrom\methods\he16f21.met
Sample ID : CHE16F2108
Acquired : Jun 29, 2012 10:48:24
Printed : Jun 29, 2012 12:06:28
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	86304.0	821.24	105.09	BV
3,5 Dichlorobenzoic	6.417	85238.0	816.54	104.39	Bx
4-Nitrophenol	6.975	31032.0	310.37	99.98	BV
DCPAA	7.450	417156.0	407.10	1024.71	BV
Dicamba	7.625	175044.0	1619.92	108.06	VV
MCPP	7.733	16019.0	2.62	6121.46	VV
MCPA	7.950	29764.0	5.12	5812.09	SV
DCP	8.250	68518.0	611.26	112.09	VV
2,4-D	8.517	75852.0	701.42	108.14	VV
Pentachlorophenol	8.875	590537.0	5409.44	109.17	VI
Silvex	9.150	241895.0	2165.67	111.70	BV
2,4,5-T	9.433	192566.0	1873.35	102.79	xx
Chloramben	9.475	258363.0	2068.50	124.90	xV
2,4-DB	9.783	42474.0	339.34	125.17	VV
Dinoseb	9.992	109082.0	1078.27	101.16	VV
Bentazon	10.358	31816.0	277.43	114.68	VV
Dacthal	10.583	227684.0	1999.91	113.85	xx
Picloram	10.625	369609.0	3082.04	119.92	xV
Acifluorfen	11.783	115365.0	1140.55	101.15	BV



CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006A 06/21/2012 11:52
Conc Cont LFID & Datetime: WF29017A 06/29/2012 15:05
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dinoseb	9.808	9.778	9.838	100.0	2000.8	196473	98.20	-2		20
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
2,4-DCPAA	6.700	6.680	6.720	1000.0	444.700	463295	1041.87	4		20

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006B 06/21/2012 11:52
Conc Cont LFID & Datetime: WF29017B 06/29/2012 15:05
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dinoseb	10.000	9.970	10.030	100.0	1078.3	116053	107.63	8		20
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
2,4-DCPAA	7.450	7.430	7.470	1000.0	407.100	421555	1035.52	4		20

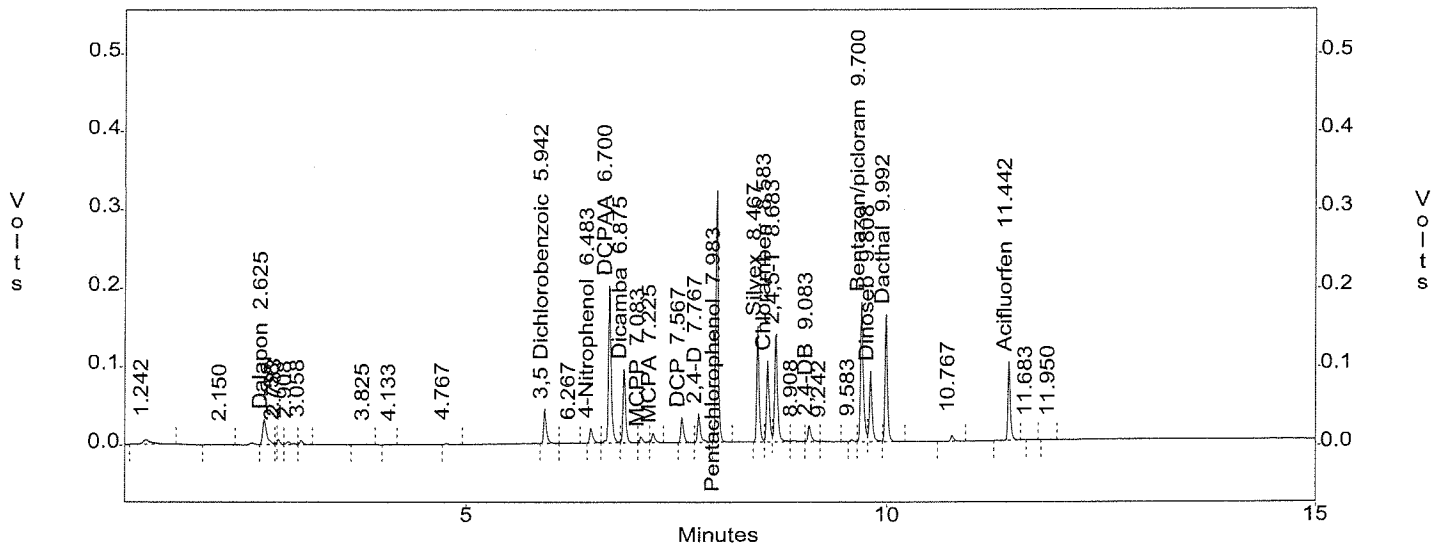
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.017
Method : c:\ezchrom\methods\he16f21.met
Sample ID : CHE16F2109
Acquired : Jun 29, 2012 15:05:34
Printed : Jun 29, 2012 16:08:41
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.625	105780.0	976.55	108.32	BV
3,5 Dichlorobenzoic	5.942	101356.0	978.08	103.63	BV
4-Nitrophenol	6.483	52356.0	520.59	100.57	BV
DCPAA	6.700	463295.0	444.68	1041.87	VV
Dicamba	6.875	206763.0	1901.24	108.75	VV
MCPP	7.083	20095.0	3.59	5596.15	VV
MCPA	7.225	33037.0	6.12	5396.43	VV
DCP	7.567	72541.0	669.59	108.34	VV
2,4-D	7.767	90797.0	814.28	111.51	VV
Pentachlorophenol	7.983	665338.0	6248.45	106.48	VV
Silvex	8.467	294530.0	2612.09	112.76	BV
Chloramben	8.583	231616.0	1994.14	116.15	VV
2,4,5-T	8.683	329418.0	2904.83	113.40	VV
2,4-DB	9.083	52423.0	459.56	114.07	VV
Bentazon/picloram	9.700	428536.0	1780.81	240.64	VV
Dinoseb	9.808	196473.0	2000.79	98.20	VV
Dacthal	9.992	331793.0	2900.82	114.38	VV
Acifluorfen	11.442	199057.0	2077.16	95.83	VV

c:\ezchrom\chrom\wf29\wf29.017 -- Channel A



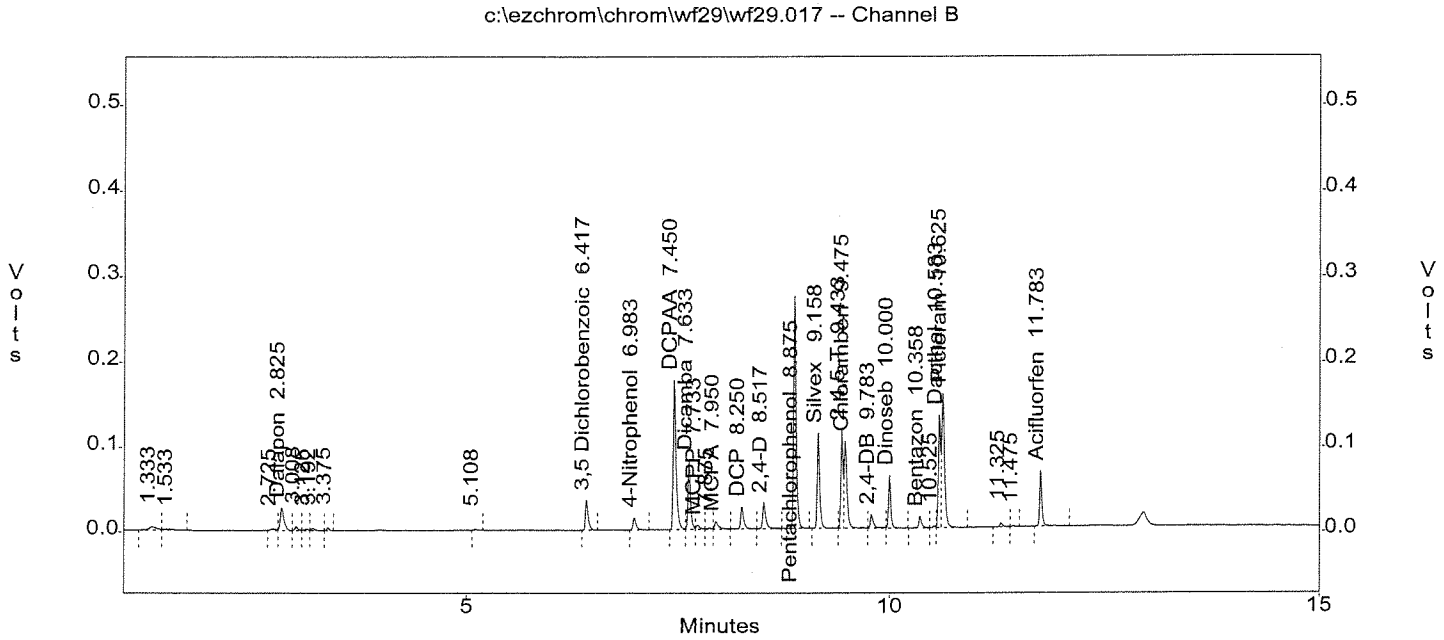
5975

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.017
Method : c:\ezchrom\methods\he16f21.met
Sample ID : CHE16F2109
Acquired : Jun 29, 2012 15:05:34
Printed : Jun 29, 2012 16:08:41
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.825	82103.0	821.24	99.97	VV
3,5 Dichlorobenzoic	6.417	84809.0	816.54	103.86	Bx
4-Nitrophenol	6.983	36057.0	310.37	116.17	BV
DCPAA	7.450	421555.0	407.10	1035.52	BV
Dicamba	7.633	173352.0	1619.92	107.01	VV
MCPP	7.733	14421.0	2.62	5510.81	VV
MCPA	7.950	29253.0	5.12	5712.30	SV
DCP	8.250	68484.0	611.26	112.04	VV
2,4-D	8.517	77607.0	701.42	110.64	VV
Pentachlorophenol	8.875	578710.0	5409.44	106.98	VI
Silvex	9.158	240965.0	2165.67	111.27	BV
2,4,5-T	9.433	212389.0	1873.35	113.37	Vx
Chloramben	9.475	243258.0	2068.50	117.60	xV
2,4-DB	9.783	42357.0	339.34	124.82	VV
Dinoseb	10.000	116053.0	1078.27	107.63	VV
Bentazon	10.358	31555.0	277.43	113.74	VV
Dacthal	10.583	242910.0	1999.91	121.46	xx
Picloram	10.625	366277.0	3082.04	118.84	xV
Acifluorfen	11.783	123382.0	1140.55	108.18	BV



5075

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006A 06/21/2012 11:52
Conc Cont LFID & Datetime: WF29024A 06/29/2012 17:35
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dinoseb	9.808	9.778	9.838	100.0	2000.8	183648	91.79	-8		20
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
2,4-DCPAA	6.700	6.680	6.720	1000.0	444.700	454222	1021.47	2		20

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-W GC16
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: WF21006B 06/21/2012 11:52
Conc Cont LFID & Datetime: WF29024B 06/29/2012 17:35
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Dinoseb	9.992	9.962	10.022	100.0	1078.3	109465	101.52	2		20

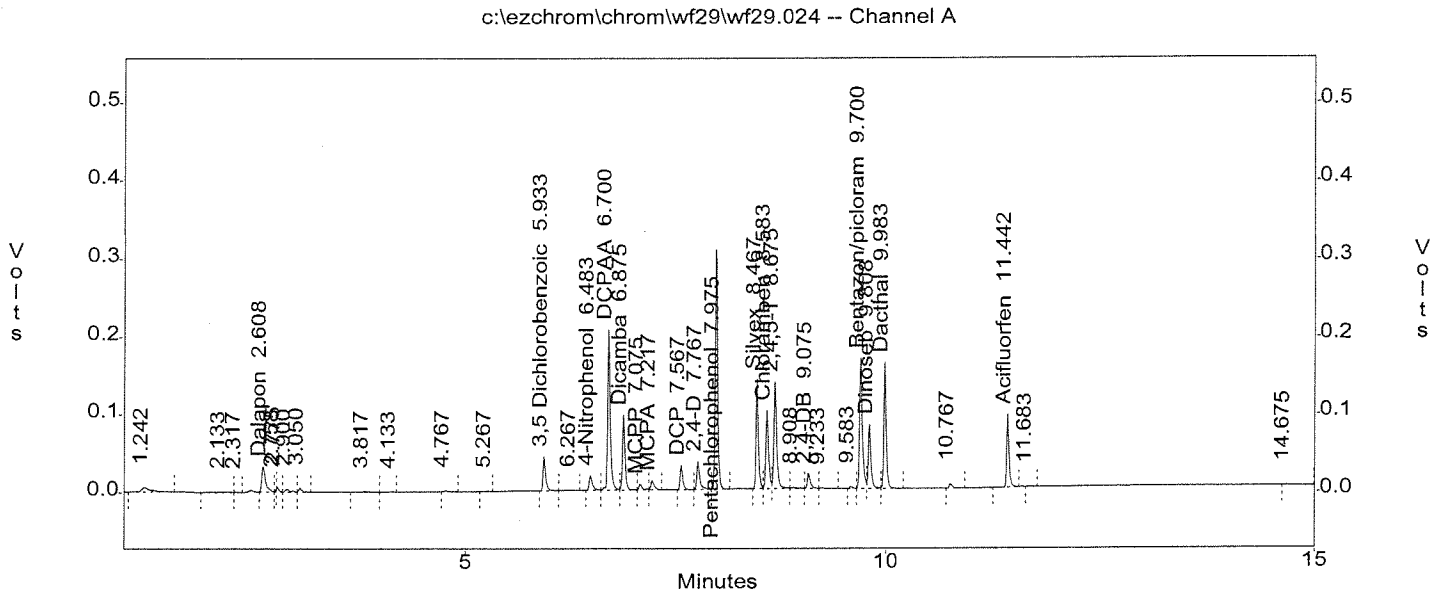
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	7.450	7.430	7.470	1000.0	407.100	412712	1013.79	1		20

EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.024
Method : c:\ezchrom\methods\he16f21.met
Sample ID : CHE16F2110
Acquired : Jun 29, 2012 17:35:15
Printed : Jul 02, 2012 08:36:06
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.608	102869.0	976.55	105.34	BV
3,5 Dichlorobenzoic	5.933	99681.0	978.08	101.92	BV
4-Nitrophenol	6.483	50916.0	520.59	97.80	BV
DCPAA	6.700	454222.0	444.68	1021.47	VV
Dicamba	6.875	202040.0	1901.24	106.27	VV
MCPP	7.075	19214.0	3.59	5350.80	VV
MCPA	7.217	31835.0	6.12	5200.08	VV
DCP	7.567	70622.0	669.59	105.47	VV
2,4-D	7.767	88260.0	814.28	108.39	VV
Pentachlorophenol	7.975	648323.0	6248.45	103.76	VV
Silvex	8.467	285915.0	2612.09	109.46	BV
Chloramben	8.583	223841.0	1994.14	112.25	VV
2,4,5-T	8.675	318938.0	2904.83	109.80	VV
2,4-DB	9.075	50266.0	459.56	109.38	VV
Bentazon/picloram	9.700	411069.0	1780.81	230.83	VV
Dinoseb	9.808	183648.0	2000.79	91.79	VV
Dacthal	9.983	319143.0	2900.82	110.02	VV
Acifluorfen	11.442	181747.0	2077.16	87.50	VV

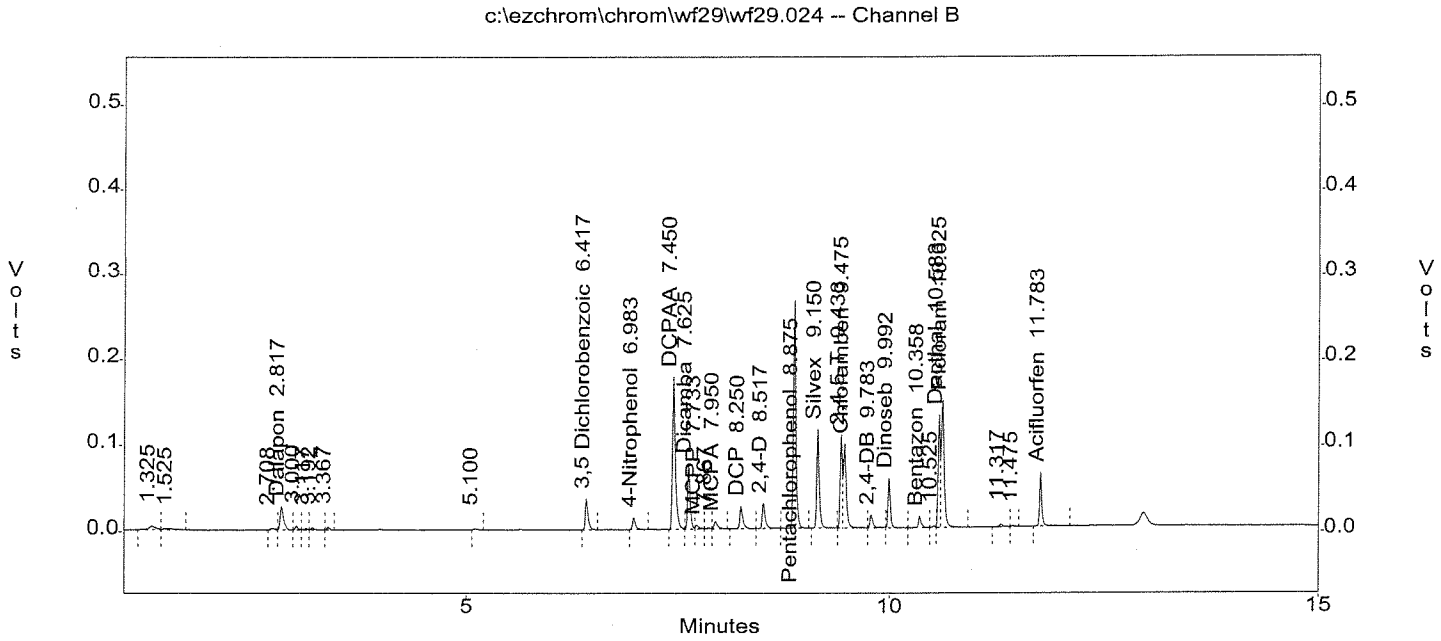


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\wf29\wf29.024
Method : c:\ezchrom\methods\he16f21.met
Sample ID : CHE16F2110
Acquired : Jun 29, 2012 17:35:15
Printed : Jul 02, 2012 08:36:06
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.817	80138.0	821.24	97.58	VV
3,5 Dichlorobenzoic	6.417	82816.0	816.54	101.42	Bx
4-Nitrophenol	6.983	34495.0	310.37	111.14	BV
DCPAA	7.450	412712.0	407.10	1013.79	BV
Dicamba	7.625	169968.0	1619.92	104.92	VV
MCPP	7.733	13583.0	2.62	5190.57	VV
MCPA	7.950	28130.0	5.12	5493.01	SV
DCP	8.250	66640.0	611.26	109.02	xV
2,4-D	8.517	75509.0	701.42	107.65	VV
Pentachlorophenol	8.875	563188.0	5409.44	104.11	VI
Silvex	9.150	233132.0	2165.67	107.65	BV
2,4,5-T	9.433	186542.0	1873.35	99.58	xx
Chloramben	9.475	250637.0	2068.50	121.17	xV
2,4-DB	9.783	40621.0	339.34	119.71	VV
Dinoseb	9.992	109465.0	1078.27	101.52	VV
Bentazon	10.358	30806.0	277.43	111.04	VV
Dacthal	10.583	207802.0	1999.91	103.91	xx
Picloram	10.625	372305.0	3082.04	120.80	xV
Acifluorfen	11.783	114437.0	1140.55	100.34	BV



5080

ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
PESTICIDES/PCBs / Herbicides

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A16-023
Instrument No.:	16
Analytical Sequence:	WF21
Method File:	HE16F21
Analytical Batch:	WF21002

SOP #	Rev. #
☐ EMAX-8081	7
☐ EMAX-8082	3
☐ EMAX-608	1
☑ EMAX- 8151	3

ICAL REFERENCE

ICAL ID	BATCH	DATE
HE16F21	WF21	6/21/12

STANDARDS ID	Conc (µg/L)
Hexane 51257	N.A
8151 ICAL SS4C-02-44-3	10-200
↓	500-10000
	100-2,000
8151 ICV SS4C-02-45-1	100/10,000/1000
	50/5,000/500
8151 DCC SS4C-02-45-2	100/5000/1000

Column	A. RTX CLPEST I B. RTX CLPEST II
	(A) STX CLPEST I (B) STX CLPEST II

ELECTRONIC DATA ARCHIVAL

Location	Date
☑ EZC_4_Pesticides	
☐ EZC_10_Pesticides	

Analyzed By: SD Date: 6/21/12

Date Disposed: Disposed By:

This page is checked during data review.

Run	Sample ID	Method	Filename	Mult.	Description
1	IB16F2101	he16f21.met	WF21.001	1	
2	HE16F2101	he16f21.met	WF21.002	1	
3	HE16F2102	he16f21.met	WF21.003	1	
4	HE16F2103	he16f21.met	WF21.004	1	
5	HE16F2104	he16f21.met	WF21.005	1	
6	HE16F2105	he16f21.met	WF21.006	1	
7	HE16F2106	he16f21.met	WF21.007	1	
8	HE16F2107 not used power out.	he16f21.met	WF21.008	1	
9	HEXANE	he16f21.met	WF21.009	1	
10	HE16F2107	he16f21.met	WF21.010	1	
11	HE16F2108	he16f21.met	WF21.011	1	
12	IHE16F2101	he16f21.met	WF21.012	1	
13	IHE16F2102	he16f21.met	WF21.013	1	
14	IB	he16f21.met	WF21.014	1	

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
PESTICIDES/PCBs / Herbicides

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A16-023
Instrument No.:	16
Analytical Sequence:	WF29
Method File:	HE16F21
Analytical Batch:	WF29004

SOP #	Rev. #
☐ EMAX-8081	7
☐ EMAX-8082	3
☐ EMAX-608	1
☑ EMAX- 8151	3

ICAL REFERENCE

ICAL ID	BATCH	DATE
HE16F21	WF21	6/21/12

STANDARDS ID		Conc (µg/L)
Hexane	51257	N.A.
8151 DCC	554C-02-45-2	100/5000/1000

Column	A. RTX CLPEST I B. RTX CLPEST II
	(A.) STX CLPEST I (B.) STX CLPEST II

ELECTRONIC DATA ARCHIVAL

Location	Date
☑ EZC_4_Pesticides	7/8/12
☐ EZC_10_Pesticides	

Analyzed By: SD Date: 6/29/12

Date Disposed: 7/2/12 Disposed By: SD

This page is checked during data review.

Run	Sample ID	Method	Filename	Mult.	Description
1	HEXANE	he16f21.met	WF29.001	1	
2	HEXANE	he16f21.met	WF29.002	1	
3	IB16F2107	he16f21.met	WF29.003	1	
4	CHE16F2107 x not used see re-run.	he16f21.met	WF29.004	1	
5	CHE16F2108	he16f21.met	WF29.005	1	
6	HEF006WB	he16f21.met	WF29.006	1	
7	HEF006WL	he16f21.met	WF29.007	1	
8	HEF006WC	he16f21.met	WF29.008	1	
9	F229-01	he16f21.met	WF29.009	1	
10	F228-01	he16f21.met	WF29.010	1	
11	F196-04M	he16f21.met	WF29.011	1	
12	F196-04S	he16f21.met	WF29.012	1	
13	F196-04	he16f21.met	WF29.013	1	
14	F196-01	he16f21.met	WF29.014	1	
15	F196-02	he16f21.met	WF29.015	1	
16	IB16F2109	he16f21.met	WF29.016	1	
17	CHE16F2109	he16f21.met	WF29.017	1	
18	solution test	he16f21.met	WF29.018	1	
19	F196-03	he16f21.met	WF29.019	1	
20	F196-05	he16f21.met	WF29.020	1	
21	F196-06	he16f21.met	WF29.021	1	
22	F196-07	he16f21.met	WF29.022	1	
23	IB16F2110	he16f21.met	WF29.023	1	
24	CHE16F2110	he16f21.met	WF29.024	1	

EXTRACTION LOGS

EMAX LABORATORIES, INC.

EXTRACTION LOG
for
HERBICIDES

SOP	Rev. #
☑ EMAX-8151	3
☐ EMAX-	

Note: For samples, relevant QCs/Standards extracted, refer to attached extraction sequence.

Comments:

Book #.: EHE-015
Preparation Batch: HEF006W
Matrix: water; QC ethyl ether, acetone
Micropipette ID:
Micropipette ID: PE00-04

Standards	ID	Amount Added (ml)
Surrogate	SS4B-02-49-3	1.0
LCS/MS	SS4B-02-48-2	0.25

Lab Sample ID	Sonicator #	Concentrator #
HEF006-WB	N/A	2
-WL		1
-WC		3
12F196-01		2
-02		3
-03		1
-04		3
-04M		1
-04S		2
-05		2
-06		1
-07		2
12F229-01		3
12F228-01		1

Reagent	Lot # / ID
CH_2Cl_2	—
Hexane	51257
Ethyl Ether	DG045
Acified Na_2SO_4	SP1B-04-164
H_2SO_4	SP1B-04-188
KOH	—
Diazo-methane	SP1B-04-204
Methanol	51145
Iso Octane	SP1A-03-035
Silica Sand	—
Silicic Acid	SP1A-03-041

TUNING

Sonicator #	Reading
	N/A

Concentrator Water Bath Temperature (°C)

1	35	35
2	35	35
3	35	35

Test Thermometer = T_1

Prepared By: YK Standard Added By: YK

Witnessed By: YD Checked By: ML

Extract Received By: SD Extract Location: SEO4-H-7

Disposal Date: Disposed By:

FileID: HEF006W

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR HERBICIDES

PrepBatchID	LabSampleID	Aliquot	Unit	DateTime	Ve(ml)	ExpAmt	ExpVe(ml)	PrepFctr	Comments
12HEF006W01	HEF006WB	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W02	HEF006WL	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W03	HEF006WC	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W04	F196-01	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W05	F196-02	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W06	F196-03	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W07	F196-04	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W08	F196-04M	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W09	F196-04S	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W10	F196-05	500	ml	6/28/12 15:37	5	500	5	1	
12HEF006W11	F196-06	500	ml	6/28/12 15:38	5	500	5	1	
12HEF006W12	F196-07	500	ml	6/28/12 15:38	5	500	5	1	
12HEF006W13	F229-01	200	ml	6/28/12 18:45	5	500	5	2.5	QC for ethyl ether SW1A-04-532 Lot#52095
12HEF006W14	F228-01	20	ml	6/28/12 18:46	5	500	5	25	QC for acetone SW1A-04-531 Lot#52102

Ve=extract volume

PrepFctr=(ExpAmt/Aliquot)(Ve/ExpVe)

☑ Extraction Started @ 6/28/12 15:48

Prepared By: YK

☑ Extraction Ended @ 6/28/12 19:49

Checked By: ML

Comments: No residual chlorine was detected.

Date 6/29/12

5088