ATTACHMENT 2

LABORATORY ANALYTICAL RESULTS

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

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

SDG: **12I219**

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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: 10-18-2012
EMAX Batch No.: 12I219

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 09/25/12.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
09-25-12-CW-1	I219-01	09/25/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
09-25-12-CW-5	I219-02	09/25/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
09-25-12-CW-6	I219-03	09/25/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
09-25-12-CW-8	I219-04	09/25/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
09-25-12-CW-9	I219-05	09/25/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
09-25-12-CW-10	I219-06	09/25/12	WATER	CHLORINATED HERBICIDES VOLATILE ORGANICS BY GC/MS VOC SIM
09-25-12-FDUP-1	I219-07	09/25/12	WATER	CHLORINATED HERBICIDES

Sample ID	Control #	Col Date	Matrix	Analysis
				VOLATILE ORGANICS BY GC/MS
				VOC SIM
09-25-12-TB-1	I219-08	09/25/12	WATER	VOLATILE ORGANICS BY GC/MS
09-25-12-CW-6MS	I219-03M	09/25/12	WATER	CHLORINATED HERBICIDES
				VOLATILE ORGANICS BY GC/MS
				VOC SIM
09-25-12-CW-6MSD	I219-03S	09/25/12	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
SAMPLE STORAGE: Coolers
EMAX CONTROL NO. * 12I219
PROJECT CODE:

CLIENT: Eco & Assoc., Inc.
PROJECT: Arvin City Wells
COORDINATOR: Mitra Fiuzat
TEL: (714) 289-0995 FAX: (714) 289-0965 EMAIL: Mfiuzat@ecoinc
SEND REPORT TO: Mitra Fiuzat Mfiuzat@ecoinc.info
COMPANY: Eco & Associates, Inc.
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=	

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

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	8260B	8260 SIM	8151					COMMENTS
1	09-25-12-CW-1	Arvin	09-25-12	1009	8	Var	Var	GW		X	X	X					
2	09-25-12-CW-5			946	8					X	X	X					Level 4
3	09-25-12-CW-6			1119	24				✓	X	X	X					MS/MSD
4	09-25-12-CW-8			1056	8					X	X	X					
5	09-25-12-CW-9			1155	8					X	X	X					
6	09-25-12-CW-10			1039	8					X	X	X					
7	09-25-12-FOUP-1			—	8				✓	X	X	X					
8	09-25-12-TB-1			—	3	40ml	VOA	W	✓	X							
9																	
0																	

Instructions

Cooler #	Temp. (°C)	Sample #s
1	5.0	
2	4.5	
3	4.0	

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Omid Rabbani	09-25-12	1435	

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 12I219
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient I BATE2
☐ EMAX Courier ☑ Client Delivery		Date 9/25/12 Time 1435

COC Inspection

☑ Client Name	☑ Client PM/FC	KN ☑ Sampler Name	☑ Sampling Date/Time/Location	☑ Sample ID	☑ Matrix
☑ Address	☑ Tel # / Fax #	☑ Courier Signature	☑ Analysis Required	☐ Preservative (if any)	☑ PAT
afety 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	☑ plastic bag
Temperatures (Cool, ≤6 °C but not frozen)	C ☑ Cooler 1 5.0 °C	☑ Cooler 2 4.5 °C	☑ Cooler 3 4.0 °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*	*C - S/N 122091701*		

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

☐ Continue to next page.

REVIEWS

Sample Labeling [signature] Date 9/25/12 [signature] 9/25/12

SRF [signature] Date 9/26/12

PM RB Date 9/26/12

LEGEND:

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Project Management
A1	Analysis is not indicated in COC.	G1	Sample indicated in COC is not received.	R1	Hold sample(s); wait for further instructions
A2	Analysis is not indicated in label.	G2	MS/MSD is not indicated in COC.	R2	Proceed as indicated in COC and inform client.
A3	Analysis is inconsistent in COC vis-à-vis label.	G3	No identified trip blank, proceed as indicated in COC.	R3	Refer to attached instruction
B1	Sample ID is not indicated in COC.	G4	Trip Blank is designated in SDG _____	R4	Cancel the analysis
B2	Sample ID is not indicated in label.	G5	Trip Blank has no sampling date & time. Log-in with earliest sampling date and 0:00 time.	R5	Inform client.
B3	Sample ID is inconsistent in COC vis-à-vis label.	H1	_____	R6	Proceed as indicated in COC
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				

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#: 12I219

CASE NARRATIVE

Client : ECO & ASSOCIATES, INC.

Project : B & B, MONTHLY CITY WELL SAMPLING

SDG : 12I219

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

A total of eight (8) water samples were received on 09/25/12 for Volatile Organics by GC/MS analysis, Method 5030B/8260B 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 blank was analyzed at the frequency required by the project. For this SDG, one method blank was analyzed with the samples. Results were compliant to project requirement.

Lab Control Sample
A set of LCS/LCD was analyzed with the samples in this SDG.
Percent recoveries for VO06J01L/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 except for one result as qualified with [*] in I219-03 M/S 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. : 12I219
Instrument ID : T-006

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V006J01B	1	NA	10/01/1213:29	10/01/1213:29	RJW007	RHW008	V006J01	Method Blank
LCS1W	V006J01L	1	NA	10/01/1212:00	10/01/1212:00	RJW004	RHW008	V006J01	Lab Control Sample (LCS)
LCD1W	V006J01C	1	NA	10/01/1212:30	10/01/1212:30	RJW005	RHW008	V006J01	LCS Duplicate
09-25-12-CW-1	I219-01	1	NA	10/01/1217:29	10/01/1217:29	RJW015	RHW008	V006J01	Field Sample
09-25-12-CW-5	I219-02	1	NA	10/01/1217:59	10/01/1217:59	RJW016	RHW008	V006J01	Field Sample
09-25-12-CW-8	I219-04	1	NA	10/01/1218:29	10/01/1218:29	RJW017	RHW008	V006J01	Field Sample
09-25-12-CW-9	I219-05	1	NA	10/01/1218:59	10/01/1218:59	RJW018	RHW008	V006J01	Field Sample
09-25-12-CW-10	I219-06	1	NA	10/01/1219:28	10/01/1219:28	RJW019	RHW008	V006J01	Field Sample
09-25-12-FDUP-1	I219-07	1	NA	10/01/1219:59	10/01/1219:59	RJW020	RHW008	V006J01	Field Sample
09-25-12-TB-1	I219-08	1	NA	10/01/1220:29	10/01/1220:29	RJW021	RHW008	V006J01	Field Sample
09-25-12-CW-6	I219-03	1	NA	10/01/1220:58	10/01/1220:58	RJW022	RHW008	V006J01	Field Sample
09-25-12-CW-6MS	I219-03M	1	NA	10/01/1221:28	10/01/1221:28	RJW023	RHW008	V006J01	Matrix Spike Sample (MS)
09-25-12-CW-6MSD	I219-03S	1	NA	10/01/1221:58	10/01/1221:58	RJW024	RHW008	V006J01	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 17:29
Sample ID:	09-25-12-CW-1	Date Analyzed:	10/01/12 17:29
Lab Samp ID:	I219-01	Dilution Factor:	1
Lab File ID:	RJW015	Matrix	: WATER
Ext Btch ID:	V006J01	% Moisture	: NA
Calib. Ref.:	RHW008	Instrument ID	: 06

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	9.46	10.00	94.6	70-120
4-BROMOFLUOROBENZENE	8.69	10.00	86.9	75-120
TOLUENE-D8	10.4	10.00	104	85-120
DIBROMOFLUOROMETHANE	10.4	10.00	104	85-115

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 17:59
Sample ID:	09-25-12-CW-5	Date Analyzed:	10/01/12 17:59
Lab Samp ID:	I219-02	Dilution Factor:	1
Lab File ID:	RJW016	Matrix	: WATER
Ext Btch ID:	VO06J01	% Moisture	: NA
Calib. Ref.:	RHW008	Instrument ID	: 06

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	8.97	10.00	89.7	75-120
TOLUENE-D8	10.8	10.00	108	85-120
DIBROMOFLUOROMETHANE	10.9	10.00	109	85-115

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW016.D
Acq On : 1 Oct 2012 5:59 pm
Sample : 12I219-02 25mL
Misc : DF=1.0
MS Integration Params: RTE.P
Quant Time: Oct 2 16:21 2012

Vial: 16
Operator: WL
Inst : TO06
Multiplr: 1.00

Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.16	114	1816760	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.08	117	1572147	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	600713	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.67	111	597866	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.00%		
38) 1,2-Dichloroethane-d4	8.50	65	438647	9.57	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.70%		
54) Toluene-d8	11.62	98	2156933	10.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.50%		
76) 4-Bromofluorobenzene	16.05	95	670839	8.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.70%		

Target Compounds Qvalue

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

2006

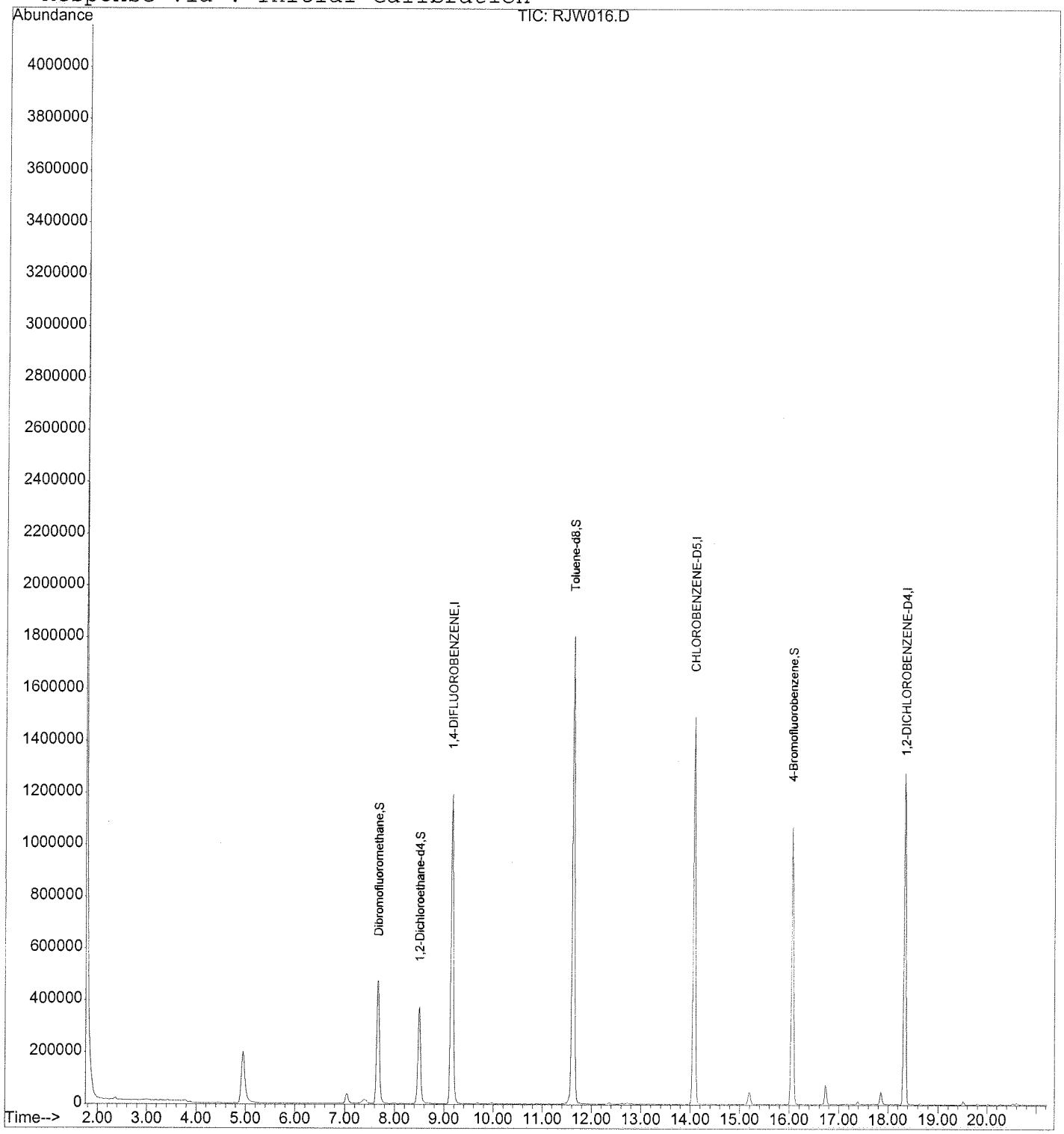
Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW016.D
Acq On : 1 Oct 2012 5:59 pm
Sample : 12I219-02 25mL
Misc : DF=1.0
MS Integration Params: RTE.P
Quant Time: Oct 2 16:21 2012

Vial: 16
Operator: WL
Inst : TO06
Multiplr: 1.00

Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



2007

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 20:58
Sample ID:	09-25-12-CW-6	Date Analyzed:	10/01/12 20:58
Lab Samp ID:	I219-03	Dilution Factor:	1
Lab File ID:	RJW022	Matrix	: WATER
Ext Btch ID:	VO06J01	% Moisture	: NA
Calib. Ref.:	RHW008	Instrument ID	: 06

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	0.25J	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	8.60	10.00	86.0	75-120
TOLUENE-D8	10.4	10.00	104	85-120
DIBROMOFLUOROMETHANE	11.0	10.00	110	85-115

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

Client : ECO & ASSOCIATES, INC.	Date Collected: 09/25/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 09/25/12
Batch No. : 12I219	Date Extracted: 10/01/12 18:29
Sample ID: 09-25-12-CW-8	Date Analyzed: 10/01/12 18:29
Lab Samp ID: I219-04	Dilution Factor: 1
Lab File ID: RJW017	Matrix : WATER
Ext Btch ID: VO06J01	% Moisture : NA
Calib. Ref.: RHW008	Instrument ID : 06

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	0.26J	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	9.68	10.00	96.8	70-120
4-BROMOFLUOROBENZENE	8.68	10.00	86.8	75-120
TOLUENE-D8	10.5	10.00	105	85-120
DIBROMOFLUOROMETHANE	10.7	10.00	107	85-115

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 18:59
Sample ID:	09-25-12-CW-9	Date Analyzed:	10/01/12 18:59
Lab Samp ID:	I219-05	Dilution Factor:	1
Lab File ID:	RJW018	Matrix	: WATER
Ext Btch ID:	VO06J01	% Moisture	: NA
Calib. Ref.:	RHW008	Instrument ID	: 06

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	0.34J	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	3.5	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	9.66	10.00	96.6	70-120
4-BROMOFLUOROBENZENE	8.72	10.00	87.2	75-120
TOLUENE-D8	10.9	10.00	109	85-120
DIBROMOFLUOROMETHANE	10.6	10.00	106	85-115

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

Client : ECO & ASSOCIATES, INC.	Date Collected: 09/25/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 09/25/12
Batch No. : 12I219	Date Extracted: 10/01/12 19:28
Sample ID: 09-25-12-CW-10	Date Analyzed: 10/01/12 19:28
Lab Samp ID: I219-06	Dilution Factor: 1
Lab File ID: RJW019	Matrix : WATER
Ext Btch ID: VO06J01	% Moisture : NA
Calib. Ref.: RHW008	Instrument ID : 06

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	9.85	10.00	98.5	70-120
4-BROMOFLUOROBENZENE	8.72	10.00	87.2	75-120
TOLUENE-D8	10.4	10.00	104	85-120
DIBROMOFLUOROMETHANE	10.8	10.00	108	85-115

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 19:59
Sample ID:	09-25-12-FDUP-1	Date Analyzed:	10/01/12 19:59
Lab Samp ID:	I219-07	Dilution Factor:	1
Lab File ID:	RJW020	Matrix	: WATER
Ext Btch ID:	VO06J01	% Moisture	: NA
Calib. Ref.:	RHW008	Instrument ID	: 06

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	9.62	10.00	96.2	70-120
4-BROMOFLUOROBENZENE	8.95	10.00	89.5	75-120
TOLUENE-D8	10.8	10.00	108	85-120
DIBROMOFLUOROMETHANE	10.8	10.00	108	85-115

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 20:29
Sample ID:	09-25-12-TB-1	Date Analyzed:	10/01/12 20:29
Lab Samp ID:	I219-08	Dilution Factor:	1
Lab File ID:	RJW021	Matrix	: WATER
Ext Btch ID:	V006J01	% Moisture	: NA
Calib. Ref.:	RHW008	Instrument ID	: 06

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	10.1	10.00	101	70-120
4-BROMOFLUOROBENZENE	9.00	10.00	90.0	75-120
TOLUENE-D8	10.9	10.00	109	85-120
DIBROMOFLUOROMETHANE	11.0	10.00	110	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:	10/01/12
Batch No.	: 12I219	Date Extracted:	10/01/12 13:29
Sample ID:	MBLK1W	Date Analyzed:	10/01/12 13:29
Lab Samp ID:	V006J01B	Dilution Factor:	1
Lab File ID:	RJW007	Matrix :	WATER
Ext Btch ID:	V006J01	% Moisture :	NA
Calib. Ref.:	RHW008	Instrument ID :	06

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	9.15	10.00	91.5	70-120
4-BROMOFLUOROBENZENE	8.84	10.00	88.4	75-120
TOLUENE-D8	10.7	10.00	107	85-120
DIBROMOFLUOROMETHANE	10.5	10.00	105	85-115

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 121219
METHOD: METHOD 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	VO06J01B	VO06J01L	VO06J01C		
LAB FILE ID:	RJW007	RJW004	RJW005		
DATE EXTRACTED:	10/01/1213:29	10/01/1212:00	10/01/1212:30	DATE COLLECTED:	NA
DATE ANALYZED:	10/01/1213:29	10/01/1212:00	10/01/1212:30	DATE RECEIVED:	10/01/12
PREP. BATCH:	VO06J01	VO06J01	VO06J01		
CALIB. REF:	RHW008	RHW008	RHW008		

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	10.2	102	10.0	10.4	104	2	80-130	30
1,1,1-Trichloroethane	ND	10.0	9.46	95	10.0	9.53	95	1	65-130	30
1,1,2,2-Tetrachloroethane	ND	10.0	9.47	95	10.0	10.0	100	6	65-130	30
1,1,2-Trichloroethane	ND	10.0	10.1	101	10.0	10.2	102	1	75-125	30
1,1-Dichloroethane	ND	10.0	9.72	97	10.0	9.83	98	1	70-135	30
1,1-Dichloroethene	ND	10.0	9.57	96	10.0	9.87	99	3	70-130	30
1,1-Dichloropropene	ND	10.0	11.1	111	10.0	11.2	112	1	75-130	30
1,2,3-Trichlorobenzene	ND	10.0	7.93	79	10.0	8.30	83	4	55-140	30
1,2,3-Trichloropropane	ND	10.0	9.11	91	10.0	9.66	97	6	75-125	30
1,2,4-Trichlorobenzene	ND	10.0	9.08	91	10.0	9.41	94	4	65-135	30
1,2,4-Trimethylbenzene	ND	10.0	9.81	98	10.0	10.0	100	2	75-130	30
1,2-Dibromo-3-chloropropane	ND	10.0	8.75	87	10.0	9.55	96	9	50-130	30
1,2-Dibromoethane	ND	10.0	10.3	103	10.0	10.3	103	1	80-120	30
1,2-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.7	107	2	70-120	30
1,2-Dichloroethane	ND	10.0	8.76	88	10.0	8.75	87	0	70-130	30
1,2-Dichloropropane	ND	10.0	9.92	99	10.0	10.2	102	3	75-125	30
1,3,5-Trimethylbenzene	ND	10.0	9.98	100	10.0	10.1	101	1	75-130	30
1,3-Dichlorobenzene	ND	10.0	10.7	107	10.0	11.1	111	3	75-125	30
1,3-Dichloropropane	ND	10.0	9.31	93	10.0	9.61	96	3	75-125	30
1,4-Dichlorobenzene	ND	10.0	10.8	108	10.0	11.2	112	4	75-125	30
2,2-Dichloropropane	ND	10.0	10.3	103	10.0	10.3	103	0	70-135	30
2-Butanone	ND	50.0	42.7	85	50.0	44.6	89	4	30-150	30
2-Chlorotoluene	ND	10.0	9.10	91	10.0	9.37	94	3	75-125	30
2-Hexanone	ND	50.0	46.1	92	50.0	47.1	94	2	55-130	30
4-Chlorotoluene	ND	10.0	9.69	97	10.0	9.94	99	3	75-130	30
Acetone	ND	50.0	44.1	88	50.0	45.7	91	3	40-140	30
Benzene	ND	10.0	10.0	100	10.0	10.2	102	2	80-120	30
Bromobenzene	ND	10.0	10.8	108	10.0	11.0	110	1	75-125	30
Bromochloromethane	ND	10.0	9.36	94	10.0	9.76	98	4	65-130	30
Bromodichloromethane	ND	10.0	9.43	94	10.0	9.35	94	1	75-120	30
Bromoform	ND	10.0	9.44	94	10.0	9.73	97	3	70-130	30
Bromomethane	ND	10.0	10.9	109	10.0	11.3	113	4	30-145	30
Carbon Disulfide	ND	10.0	9.55	95	10.0	10.8	108	12	35-160	30
Carbon Tetrachloride	ND	10.0	9.58	96	10.0	9.32	93	3	65-140	30
Chlorobenzene	ND	10.0	10.7	107	10.0	10.7	107	0	80-120	30
Chloroethane	ND	10.0	11.3	113	10.0	11.2	112	1	60-135	30
Chloroform	ND	10.0	9.26	93	10.0	9.57	96	3	65-135	30
Chloromethane	ND	10.0	11.7	117	10.0	11.2	112	4	40-125	30
cis-1,2-Dichloroethene	ND	10.0	10.4	104	10.0	10.9	109	5	70-125	30
cis-1,3-Dichloropropene	ND	10.0	9.95	100	10.0	9.82	98	1	70-130	30
Dibromochloromethane	ND	10.0	10.2	102	10.0	10.2	102	0	60-135	30
Dibromomethane	ND	10.0	9.74	97	10.0	10.0	100	3	75-125	30
Dichlorodifluoromethane	ND	10.0	10.8	108	10.0	10.7	107	2	30-155	30
Ethylbenzene	ND	10.0	9.88	99	10.0	10.2	102	3	75-125	30
Hexachlorobutadiene	ND	10.0	9.03	90	10.0	9.28	93	3	50-140	30
Isopropyl Benzene	ND	10.0	9.71	97	10.0	10.0	100	3	75-125	30
m,p-Xylenes	ND	20.0	19.2	96	20.0	19.2	96	0	75-130	30
MIBK	ND	50.0	41.2	82	50.0	42.1	84	2	60-135	30
Methylene Chloride	ND	10.0	10.5	105	10.0	11.2	112	6	55-140	30
MTBE	ND	10.0	9.37	94	10.0	9.71	97	4	65-125	30
Naphthalene	ND	10.0	8.21	82	10.0	8.49	85	3	55-140	30
n-Butylbenzene	ND	10.0	9.93	99	10.0	10.3	103	3	70-135	30
n-Propylbenzene	ND	10.0	10.1	101	10.0	10.2	102	1	70-130	30
o-Xylene	ND	10.0	9.94	99	10.0	10.2	102	3	80-120	30
p-Isopropyltoluene	ND	10.0	10.2	102	10.0	10.4	104	2	75-130	30
Sec-Butylbenzene	ND	10.0	10.0	100	10.0	10.5	105	5	70-125	30
Styrene	ND	10.0	10.7	107	10.0	11.0	110	3	65-135	30
Tert-Butylbenzene	ND	10.0	10.9	109	10.0	11.0	110	1	70-130	30
Tetrachloroethene	ND	10.0	11.2	112	10.0	11.2	112	0	45-150	30
Toluene	ND	10.0	9.91	99	10.0	10.3	103	4	75-120	30
Trans-1,2-Dichloroethene	ND	10.0	9.70	97	10.0	10.1	101	4	60-140	30
Trans-1,3-Dichloropropene	ND	10.0	9.53	95	10.0	9.45	95	1	55-140	30
Trichloroethene	ND	10.0	10.9	109	10.0	10.8	108	1	70-125	30
Trichlorofluoromethane	ND	10.0	9.48	95	10.0	9.24	92	3	60-145	30
Vinyl Chloride	ND	10.0	11.5	115	10.0	11.4	114	1	50-145	30
Freon113	ND	10.0	11.1	111	10.0	11.2	112	1	65-135	30
Vinyl Acetate	ND	10.0	10.4	104	10.0	10.5	105	1	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	9.14	91	10.0	9.12	91	70-120
4-Bromofluorobenzene	10.0	9.71	97	10.0	9.90	99	75-120
Toluene-d8	10.0	10.7	107	10.0	10.6	106	85-120
Dibromofluoromethane	10.0	10.5	105	10.0	10.5	105	85-115

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 121219
METHOD: METHOD 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	09-25-12-CW-6				
LAB SAMP ID:	I219-03	I219-03M	I219-03S		
LAB FILE ID:	RJW022	RJW023	RJW024		
DATE EXTRACTED:	10/01/1220:58	10/01/1221:28	10/01/1221:58	DATE COLLECTED:	09/25/12
DATE ANALYZED:	10/01/1220:58	10/01/1221:28	10/01/1221:58	DATE RECEIVED:	09/25/12
PREP. BATCH:	VO06J01	VO06J01	VO06J01		
CALIB. REF:	RHW008	RHW008	RHW008		

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	11.5	115	10.0	10.5	105	10	80-130	30
1,1,1-Trichloroethane	ND	10.0	10.5	105	10.0	9.70	97	8	65-130	30
1,1,2,2-Tetrachloroethane	ND	10.0	10.7	107	10.0	10.2	102	5	65-130	30
1,1,2-Trichloroethane	ND	10.0	11.4	114	10.0	10.7	107	7	75-125	30
1,1-Dichloroethane	ND	10.0	11.0	110	10.0	10.3	103	7	70-135	30
1,1-Dichloroethene	ND	10.0	10.5	105	10.0	9.82	98	7	70-130	30
1,1-Dichloropropene	ND	10.0	11.7	117	10.0	10.5	105	11	75-130	30
1,2,3-Trichlorobenzene	ND	10.0	8.46	85	10.0	8.09	81	5	55-140	30
1,2,3-Trichloropropane	ND	10.0	10.3	103	10.0	9.76	98	5	75-125	30
1,2,4-Trichlorobenzene	ND	10.0	9.43	94	10.0	8.93	89	5	65-135	30
1,2,4-Trimethylbenzene	ND	10.0	10.2	102	10.0	9.75	98	5	75-130	30
1,2-Dibromo-3-chloropropane	ND	10.0	9.64	96	10.0	9.53	95	1	50-130	30
1,2-Dibromoethane	ND	10.0	11.5	115	10.0	10.6	106	8	80-120	30
1,2-Dichlorobenzene	ND	10.0	11.1	111	10.0	10.6	106	5	70-120	30
1,2-Dichloroethane	ND	10.0	10.0	100	10.0	9.25	92	8	70-130	30
1,2-Dichloropropane	ND	10.0	11.1	111	10.0	10.3	103	8	75-125	30
1,3,5-Trimethylbenzene	ND	10.0	10.4	104	10.0	9.77	98	6	75-130	30
1,3-Dichlorobenzene	ND	10.0	11.6	116	10.0	10.7	107	8	75-125	30
1,3-Dichloropropane	ND	10.0	10.5	105	10.0	9.91	99	6	75-125	30
1,4-Dichlorobenzene	ND	10.0	11.2	112	10.0	10.9	109	3	75-125	30
2,2-Dichloropropane	ND	10.0	9.84	98	10.0	8.94	89	10	70-135	30
2-Butanone	ND	50.0	49.6	99	50.0	47.4	95	4	30-150	30
2-Chlorotoluene	ND	10.0	10.3	103	10.0	9.08	91	13	75-125	30
2-Hexanone	ND	50.0	54.2	108	50.0	51.2	102	6	55-130	30
4-Chlorotoluene	ND	10.0	9.90	99	10.0	9.97	100	1	75-130	30
Acetone	ND	50.0	49.9	100	50.0	49.9	100	0	40-140	30
Benzene	ND	10.0	11.0	110	10.0	10.3	103	7	80-120	30
Bromobenzene	ND	10.0	11.4	114	10.0	10.9	109	4	75-125	30
Bromochloromethane	ND	10.0	11.1	111	10.0	10.3	103	8	65-130	30
Bromodichloromethane	ND	10.0	10.7	107	10.0	9.62	96	11	75-120	30
Bromoform	ND	10.0	9.92	99	10.0	9.82	98	1	70-130	30
Bromomethane	ND	10.0	12.1	121	10.0	11.9	119	2	30-145	30
Carbon Disulfide	ND	10.0	10.9	109	10.0	9.78	98	11	35-160	30
Carbon Tetrachloride	ND	10.0	10.2	102	10.0	9.03	90	12	65-140	30
Chlorobenzene	ND	10.0	11.7	117	10.0	10.6	106	10	80-120	30
Chloroethane	ND	10.0	12.0	120	10.0	12.3	123	3	60-135	30
Chloroform	ND	10.0	10.8	108	10.0	10.0	100	7	65-135	30
Chloromethane	ND	10.0	12.6	126*	10.0	12.4	124	2	40-125	30
cis-1,2-Dichloroethene	ND	10.0	11.9	119	10.0	11.0	110	8	70-125	30
cis-1,3-Dichloropropene	ND	10.0	10.5	105	10.0	9.68	97	8	70-130	30
Dibromochloromethane	ND	10.0	11.2	112	10.0	10.3	103	9	60-135	30
Dibromomethane	ND	10.0	11.0	110	10.0	10.3	103	7	75-125	30
Dichlorodifluoromethane	ND	10.0	11.8	118	10.0	11.0	110	7	30-155	30
Ethylbenzene	ND	10.0	11.0	110	10.0	10.1	101	9	75-125	30
Hexachlorobutadiene	ND	10.0	9.10	91	10.0	8.60	86	6	50-140	30
Isopropyl Benzene	ND	10.0	10.5	105	10.0	9.80	98	7	75-125	30
m,p-Xylenes	ND	20.0	21.8	109	20.0	19.2	96	13	75-130	30
MIBK	ND	50.0	48.2	96	50.0	46.0	92	5	60-135	30
Methylene Chloride	ND	10.0	11.7	117	10.0	10.9	109	7	55-140	30
MTBE	ND	10.0	11.2	112	10.0	10.6	106	5	65-125	30
Naphthalene	ND	10.0	8.67	87	10.0	8.63	86	0	55-140	30
n-Butylbenzene	ND	10.0	10.4	104	10.0	9.55	96	8	70-135	30
n-Propylbenzene	ND	10.0	10.5	105	10.0	9.92	99	6	70-130	30
o-Xylene	ND	10.0	11.4	114	10.0	10.2	102	11	80-120	30
p-Isopropyltoluene	ND	10.0	10.8	108	10.0	10.0	100	8	75-130	30
Sec-Butylbenzene	ND	10.0	10.7	107	10.0	9.96	100	7	70-125	30
Styrene	ND	10.0	11.7	117	10.0	10.7	107	9	65-135	30
Tert-Butylbenzene	ND	10.0	11.5	115	10.0	10.7	107	7	70-130	30
Tetrachloroethene	0.252J	10.0	12.6	123	10.0	10.9	107	14	45-150	30
Toluene	ND	10.0	11.2	112	10.0	10.1	101	10	75-120	30
Trans-1,2-Dichloroethene	ND	10.0	11.0	110	10.0	10.2	102	7	60-140	30
Trans-1,3-Dichloropropene	ND	10.0	10.1	101	10.0	9.39	94	7	55-140	30
Trichloroethene	ND	10.0	11.6	116	10.0	10.6	106	9	70-125	30
Trichlorofluoromethane	ND	10.0	10.4	104	10.0	9.64	96	7	60-145	30
Vinyl Chloride	ND	10.0	12.7	127	10.0	12.0	120	6	50-145	30
Freon113	ND	10.0	12.2	122	10.0	10.9	109	11	65-135	30
Vinyl Acetate	ND	10.0	9.86	99	10.0	9.30	93	6	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	9.98	100	10.0	9.96	100	70-120
4-Bromofluorobenzene	10.0	9.51	95	10.0	9.55	95	75-120
Toluene-d8	10.0	10.7	107	10.0	10.4	104	85-120
Dibromofluoromethane	10.0	10.8	108	10.0	10.8	108	85-115

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW007.D Vial: 7
Acq On : 1 Oct 2012 1:29 pm Operator: WL
Sample : VO06J01B 25mL Inst : TO06
Misc : BLANK Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:51 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.14	114	1970093	10.00	ug/l	-0.01
39) CHLOROBENZENE-D5	14.07	117	1686044	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.32	152	648553	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.65	111	622968	10.47	ug/l	-0.01
Spiked Amount 10.000			Recovery	=	104.70%	
38) 1,2-Dichloroethane-d4	8.48	65	454645	9.15	ug/l	-0.01
Spiked Amount 10.000			Recovery	=	91.50%	
54) Toluene-d8	11.62	98	2304057	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery	=	107.10%	
76) 4-Bromofluorobenzene	16.05	95	713739	8.84	ug/l	0.00
Spiked Amount 10.000			Recovery	=	88.40%	

Target Compounds Qvalue

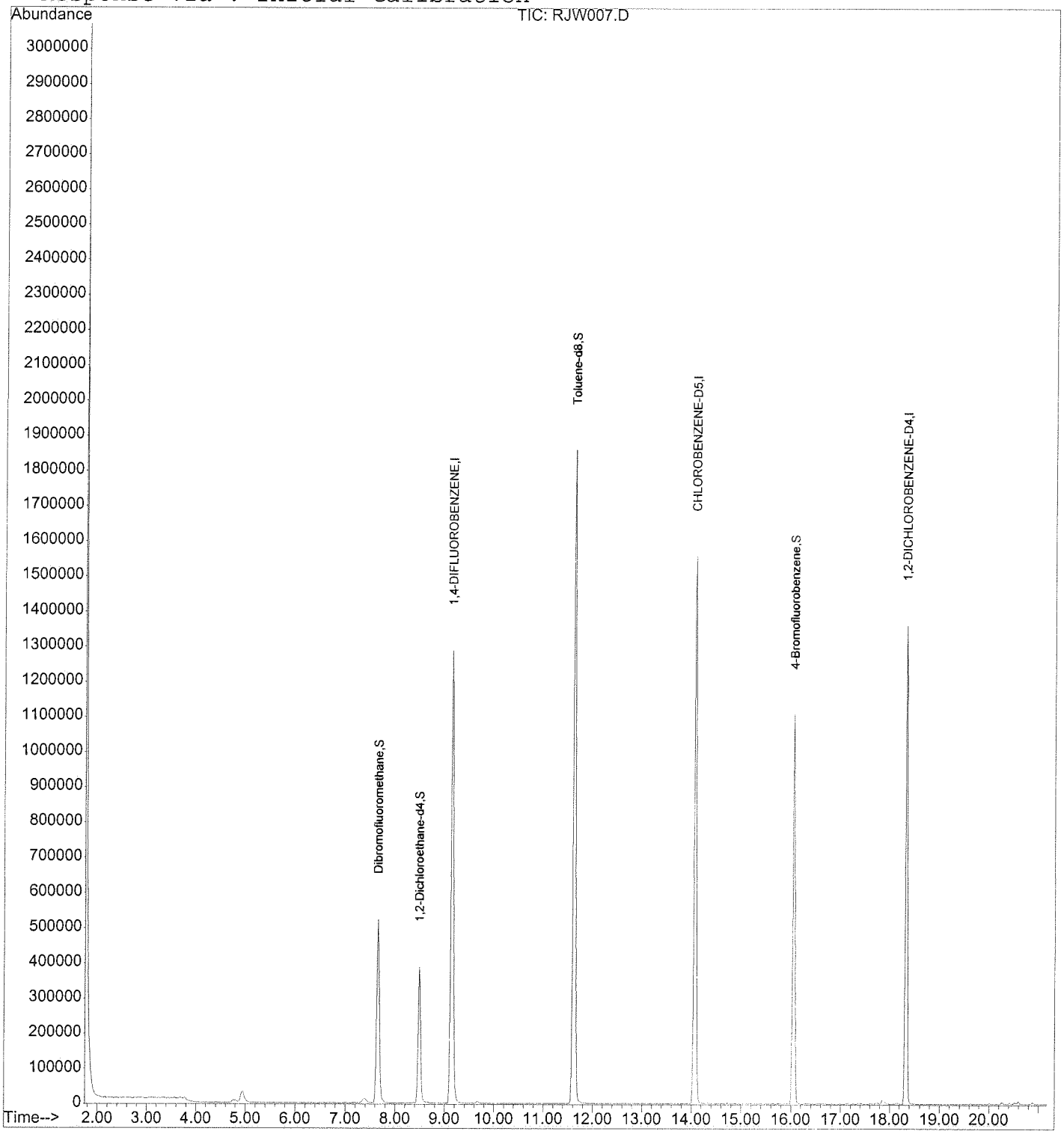
(#) = qualifier out of range (m) = manual integration

2019

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW007.D Vial: 7
Acq On : 1 Oct 2012 1:29 pm Operator: WL
Sample : VO06J01B 25mL Inst : TO06
Misc : BLANK Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:51 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



2020

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW004.D Vial: 4
Acq On : 1 Oct 2012 12:00 pm Operator: WL
Sample : VO06J01L Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.14	114	1764346	10.00	ug/l	-0.01
39) CHLOROBENZENE-D5	14.07	117	1485813	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.32	152	524023	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.65	111	557096	10.46	ug/l	-0.01
Spiked Amount 10.000			Recovery = 104.60%			
38) 1,2-Dichloroethane-d4	8.48	65	406872	9.14	ug/l	-0.01
Spiked Amount 10.000			Recovery = 91.40%			
54) Toluene-d8	11.62	98	2023695	10.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.70%			
76) 4-Bromofluorobenzene	16.05	95	633421	9.71	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.90	85	492660	10.83	ug/l	99
3) Chloromethane	2.15	50	640630	11.71	ug/l	100
4) Vinyl chloride	2.28	62	474016	11.54	ug/l	100
5) Bromomethane	2.82	94	358152	10.88	ug/l	100
6) Chloroethane	2.92	64	318558	11.34	ug/l	94
7) Dichlorofluoromethane	2.95	67	949574	9.80	ug/l	100
8) Trichlorofluoromethane	3.23	101	594249	9.48	ug/l	99
9) Acrolein	3.77	56	155658	71.81	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	328402	11.07	ug/l	99
11) Acetone	3.86	43	265137	44.12	ug/l	97
12) 1,1-Dichloroethene	4.07	61	886791	9.57	ug/l	95
13) tert-Butyl alcohol	4.16	59	78636	46.11	ug/l	93
16) Iodomethane	4.51	142	886097	11.15	ug/l	88
17) Methylene chloride	4.75	49	669761	10.51	ug/l	86
18) Carbon disulfide	4.78	76	1807941	9.55	ug/l	100
19) Acrylonitrile	4.97	53	378749	50.16	ug/l	98
20) tert-Butyl methyl ether (M	5.00	73	777032	9.37	ug/l	99
21) trans-1,2-Dichloroethene	5.23	61	952828	9.70	ug/l	93
22) Isopropyl ether (DIPE)	5.79	45	1870589	9.80	ug/l	97
23) Vinyl acetate	6.00	43	689269	10.39	ug/l	99
24) 1,1-Dichloroethane	5.97	63	1092334	9.72	ug/l	100
26) tert-Butyl ethyl ether (ET	6.52	59	1282059	9.19	ug/l	98
27) 2-Butanone	6.71	43	476771	42.75	ug/l	98
28) 2,2-Dichloropropane	6.94	77	578941	10.28	ug/l	98
29) cis-1,2-Dichloroethene	7.01	96	668483	10.37	ug/l	91
30) Chloroform	7.28	83	945342	9.26	ug/l	100
32) Bromochloromethane	7.55	49	420140	9.36	ug/l	90

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

2021

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW004.D
Acq On : 1 Oct 2012 12:00 pm
Sample : VO06J01L
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012

Vial: 4
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Tetrahydrofuran	7.60	42	60788	8.30 ug/l	99
35)	1,1,1-Trichloroethane	7.95	97	785558	9.46 ug/l	92
37)	tert-Amyl methyl ether (TA	8.42	87	202256	9.30 ug/l	94
41)	1,1-Dichloropropene	8.21	110	320563	11.09 ug/l	100
42)	Carbon tetrachloride	8.36	119	720226	9.58 ug/l	99
43)	1,2-Dichloroethane	8.65	62	477475	8.76 ug/l	99
44)	Benzene	8.65	78	2257441	10.05 ug/l	99
45)	Trichloroethene	9.66	130	698013	10.88 ug/l	94
47)	1,2-Dichloropropane	9.95	63	565096	9.92 ug/l	96
48)	1,4-Dioxane	10.37	88	34729	196.69 ug/l	92
49)	Bromodichloromethane	10.34	83	652871	9.43 ug/l	99
50)	Dibromomethane	10.41	93	240846	9.74 ug/l	92
52)	4-Methyl-2-pentanone	10.91	43	1209963	41.19 ug/l	93
53)	cis-1,3-Dichloropropene	11.23	75	796680	9.95 ug/l	97
55)	Toluene	11.74	91	2305329	9.91 ug/l	100
56)	Ethyl methacrylate	12.04	69	379229	9.94 ug/l	96
57)	trans-1,3-Dichloropropene	12.05	75	558459	9.53 ug/l	98
58)	1,1,2-Trichloroethane	12.29	97	294922	10.09 ug/l	98
59)	2-Hexanone	12.32	43	805830	46.09 ug/l	98
60)	1,3-Dichloropropane	12.70	76	566532	9.31 ug/l	99
61)	Tetrachloroethene	12.79	164	568624	11.24 ug/l	96
62)	Dibromochloromethane	13.12	129	400954	10.17 ug/l	100
64)	1,2-Dibromoethane	13.45	107	311884	10.25 ug/l	99
65)	1-Chlorohexane	13.72	91	1045252	10.66 ug/l	96
66)	Chlorobenzene	14.13	112	1490394	10.68 ug/l	94
67)	1,1,1,2-Tetrachloroethane	14.19	131	448651	10.15 ug/l	98
68)	Ethylbenzene	14.22	91	2581878	9.88 ug/l	98
69)	m-Xylene & p-Xylene	14.34	91	3851206	19.19 ug/l	95
70)	o-Xylene	15.04	91	1996923	9.94 ug/l	94
71)	Styrene	15.11	104	1483177	10.68 ug/l	96
73)	Isopropylbenzene	15.63	105	2383422	9.71 ug/l	97
74)	Bromoform	15.66	173	191206	9.44 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.92	83	310242	9.47 ug/l	99
77)	1,2,3-Trichloropropane	16.17	110	79967	9.11 ug/l	98
78)	trans-1,4-Dichloro-2-buten	16.27	53	83736	8.50 ug/l	96
79)	n-Propylbenzene	16.29	91	3309528	10.10 ug/l	96
80)	Bromobenzene	16.36	156	554512	10.85 ug/l	90
81)	1,3,5-Trimethylbenzene	16.54	105	1967269	9.98 ug/l	95
82)	2-Chlorotoluene	16.58	91	1860624	9.10 ug/l	94
83)	4-Chlorotoluene	16.66	91	1606115	9.69 ug/l	94
84)	tert-Butylbenzene	17.12	134	490850	10.85 ug/l #	87

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

2022

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW004.D
Acq On : 1 Oct 2012 12:00 pm
Sample : VO06J01L
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012

Vial: 4
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

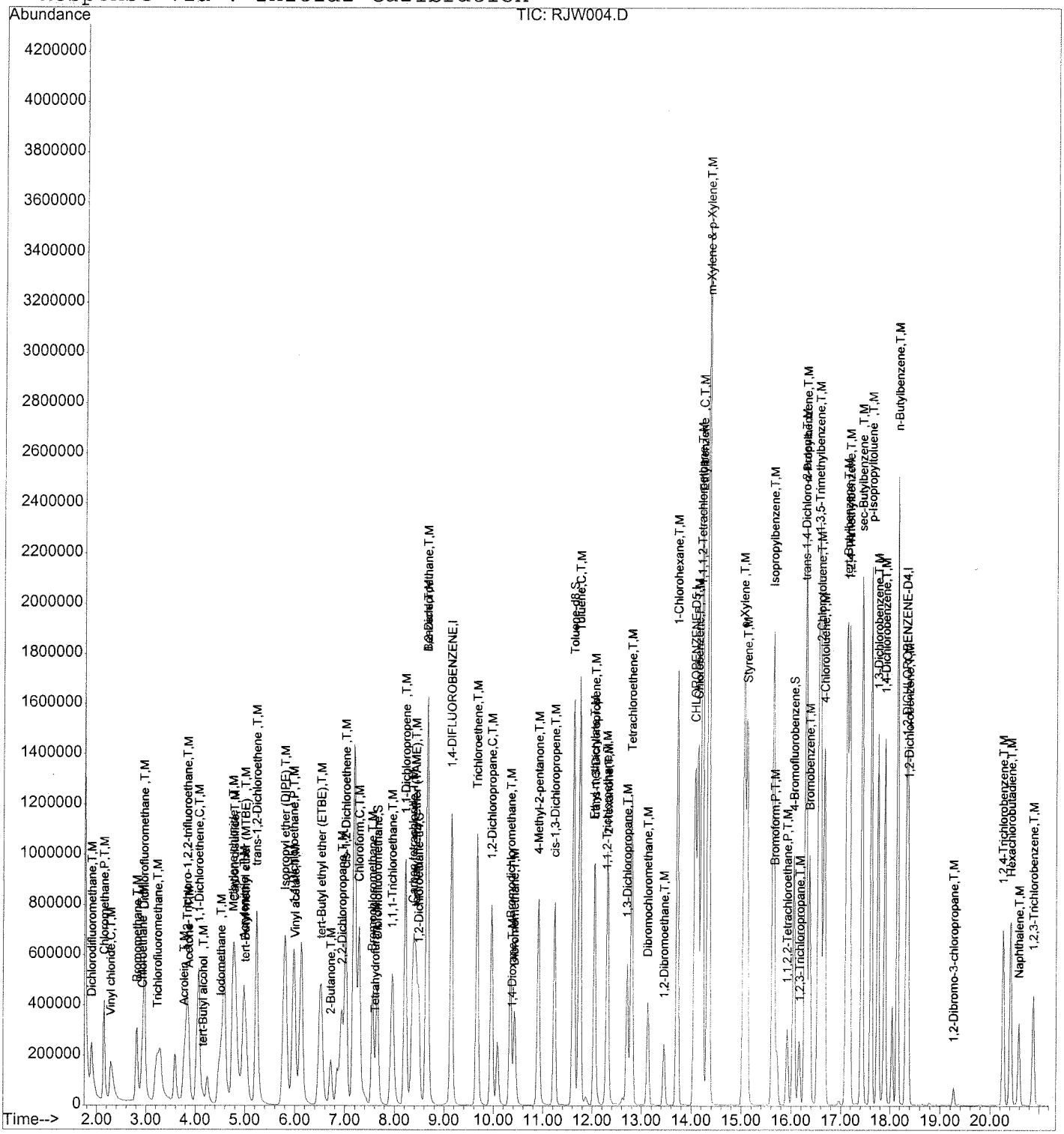
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) 1,2,4-Trimethylbenzene	17.16	105	1857360	9.81 ug/l	94
86) sec-Butylbenzene	17.42	105	2727704	10.03 ug/l	97
87) p-Isopropyltoluene	17.61	119	2118595	10.19 ug/l	96
88) 1,3-Dichlorobenzene	17.74	146	1085946	10.74 ug/l	98
89) 1,4-Dichlorobenzene	17.89	146	1037789	10.77 ug/l	97
91) n-Butylbenzene	18.15	91	2098917	9.93 ug/l	98
92) 1,2-Dichlorobenzene	18.37	146	809351	10.45 ug/l	96
93) 1,2-Dibromo-3-chloropropan	19.26	157	33232	8.75 ug/l	90
94) 1,2,4-Trichlorobenzene	20.26	180	441356	9.08 ug/l	98
95) Hexachlorobutadiene	20.42	225	310229	9.03 ug/l	99
96) Naphthalene	20.58	128	484422	8.21 ug/l	100
97) 1,2,3-Trichlorobenzene	20.88	180	288473	7.93 ug/l	99

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW004.D Vial: 4
Acq On : 1 Oct 2012 12:00 pm Operator: WL
Sample : VO06J01L Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



2824

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW005.D Vial: 5
Acq On : 1 Oct 2012 12:30 pm Operator: WL
Sample : VO06J01C Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1754277	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1532696	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.32	152	529882	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.65	111	555060	10.48	ug/l	-0.01
Spiked Amount 10.000			Recovery	=	104.80%	
38) 1,2-Dichloroethane-d4	8.48	65	403570	9.12	ug/l	-0.01
Spiked Amount 10.000			Recovery	=	91.20%	
54) Toluene-d8	11.62	98	2068623	10.58	ug/l	0.00
Spiked Amount 10.000			Recovery	=	105.80%	
76) 4-Bromofluorobenzene	16.05	95	652692	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery	=	99.00%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.90	85	482492	10.67	ug/l	99
3) Chloromethane	2.15	50	610472	11.23	ug/l	99
4) Vinyl chloride	2.30	62	465637	11.40	ug/l	99
5) Bromomethane	2.82	94	370541	11.33	ug/l	100
6) Chloroethane	2.92	64	312452	11.19	ug/l	95
7) Dichlorofluoromethane	2.97	67	958572	9.95	ug/l	100
8) Trichlorofluoromethane	3.23	101	576146	9.24	ug/l	99
9) Acrolein	3.77	56	156512	72.62	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	329345	11.17	ug/l	100
11) Acetone	3.86	43	272841	45.66	ug/l	96
12) 1,1-Dichloroethene	4.07	61	909602	9.87	ug/l	94
13) tert-Butyl alcohol	4.16	59	78731	46.43	ug/l	95
16) Iodomethane	4.53	142	903878	11.44	ug/l	88
17) Methylene chloride	4.76	49	705425	11.17	ug/l	98
18) Carbon disulfide	4.78	76	2027014	10.77	ug/l	99
19) Acrylonitrile	4.97	53	394866	52.60	ug/l	98
20) tert-Butyl methyl ether (M	5.00	73	801334	9.71	ug/l	98
21) trans-1,2-Dichloroethene	5.23	61	988655	10.13	ug/l	93
22) Isopropyl ether (DIPE)	5.81	45	1921649	10.12	ug/l	97
23) Vinyl acetate	6.00	43	695260	10.54	ug/l	100
24) 1,1-Dichloroethane	5.97	63	1097418	9.83	ug/l	99
26) tert-Butyl ethyl ether (ET	6.52	59	1368176	9.86	ug/l	99
27) 2-Butanone	6.71	43	494525	44.59	ug/l	96
28) 2,2-Dichloropropane	6.94	77	576220	10.29	ug/l	97
29) cis-1,2-Dichloroethene	7.01	96	698799	10.90	ug/l	90
30) Chloroform	7.28	83	970802	9.57	ug/l	99
32) Bromochloromethane	7.56	49	435774	9.76	ug/l	90

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

2025

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW005.D
Acq On : 1 Oct 2012 12:30 pm
Sample : VO06J01C
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012

Vial: 5
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	Tetrahydrofuran	7.62	42	64201	8.86 ug/l		98
35)	1,1,1-Trichloroethane	7.95	97	786608	9.53 ug/l		92
37)	tert-Amyl methyl ether (TA	8.42	87	214904	9.94 ug/l		96
41)	1,1-Dichloropropene	8.21	110	334241	11.21 ug/l		99
42)	Carbon tetrachloride	8.36	119	722925	9.32 ug/l		100
43)	1,2-Dichloroethane	8.65	62	492070	8.75 ug/l		99
44)	Benzene	8.66	78	2369986	10.23 ug/l		99
45)	Trichloroethene	9.67	130	712855	10.77 ug/l		94
47)	1,2-Dichloropropane	9.95	63	599562	10.20 ug/l		94
48)	1,4-Dioxane	10.38	88	36455	200.15 ug/l		90
49)	Bromodichloromethane	10.34	83	667597	9.35 ug/l		100
50)	Dibromomethane	10.41	93	255887	10.03 ug/l		92
52)	4-Methyl-2-pentanone	10.91	43	1275928	42.10 ug/l		93
53)	cis-1,3-Dichloropropene	11.23	75	810339	9.82 ug/l		97
55)	Toluene	11.74	91	2475274	10.31 ug/l		100
56)	Ethyl methacrylate	12.03	69	396285	10.07 ug/l		98
57)	trans-1,3-Dichloropropene	12.05	75	571596	9.45 ug/l		98
58)	1,1,2-Trichloroethane	12.30	97	306125	10.15 ug/l		97
59)	2-Hexanone	12.32	43	849671	47.11 ug/l		98
60)	1,3-Dichloropropane	12.70	76	603258	9.61 ug/l		100
61)	Tetrachloroethene	12.79	164	585265	11.21 ug/l		96
62)	Dibromochloromethane	13.12	129	413148	10.16 ug/l		99
64)	1,2-Dibromoethane	13.45	107	323677	10.31 ug/l		99
65)	1-Chlorohexane	13.71	91	1059663	10.48 ug/l		96
66)	Chlorobenzene	14.13	112	1543192	10.72 ug/l		93
67)	1,1,1,2-Tetrachloroethane	14.21	131	472021	10.36 ug/l		97
68)	Ethylbenzene	14.22	91	2742453	10.17 ug/l		96
69)	m-Xylene & p-Xylene	14.34	91	3980553	19.23 ug/l		95
70)	o-Xylene	15.05	91	2112633	10.20 ug/l		96
71)	Styrene	15.11	104	1582177	11.04 ug/l		95
73)	Isopropylbenzene	15.63	105	2481442	10.00 ug/l		97
74)	Bromoform	15.66	173	199378	9.73 ug/l		98
75)	1,1,2,2-Tetrachloroethane	15.92	83	332508	10.04 ug/l		99
77)	1,2,3-Trichloropropane	16.17	110	85764	9.66 ug/l		95
78)	trans-1,4-Dichloro-2-buten	16.27	53	87267	8.76 ug/l		97
79)	n-Propylbenzene	16.29	91	3395988	10.25 ug/l		96
80)	Bromobenzene	16.36	156	566138	10.95 ug/l		89
81)	1,3,5-Trimethylbenzene	16.54	105	2017575	10.12 ug/l		95
82)	2-Chlorotoluene	16.58	91	1937043	9.37 ug/l		93
83)	4-Chlorotoluene	16.66	91	1666202	9.94 ug/l		94
84)	tert-Butylbenzene	17.12	134	502902	11.00 ug/l	#	85

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW005.D Vial: 5
Acq On : 1 Oct 2012 12:30 pm Operator: WL
Sample : VO06J01C Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

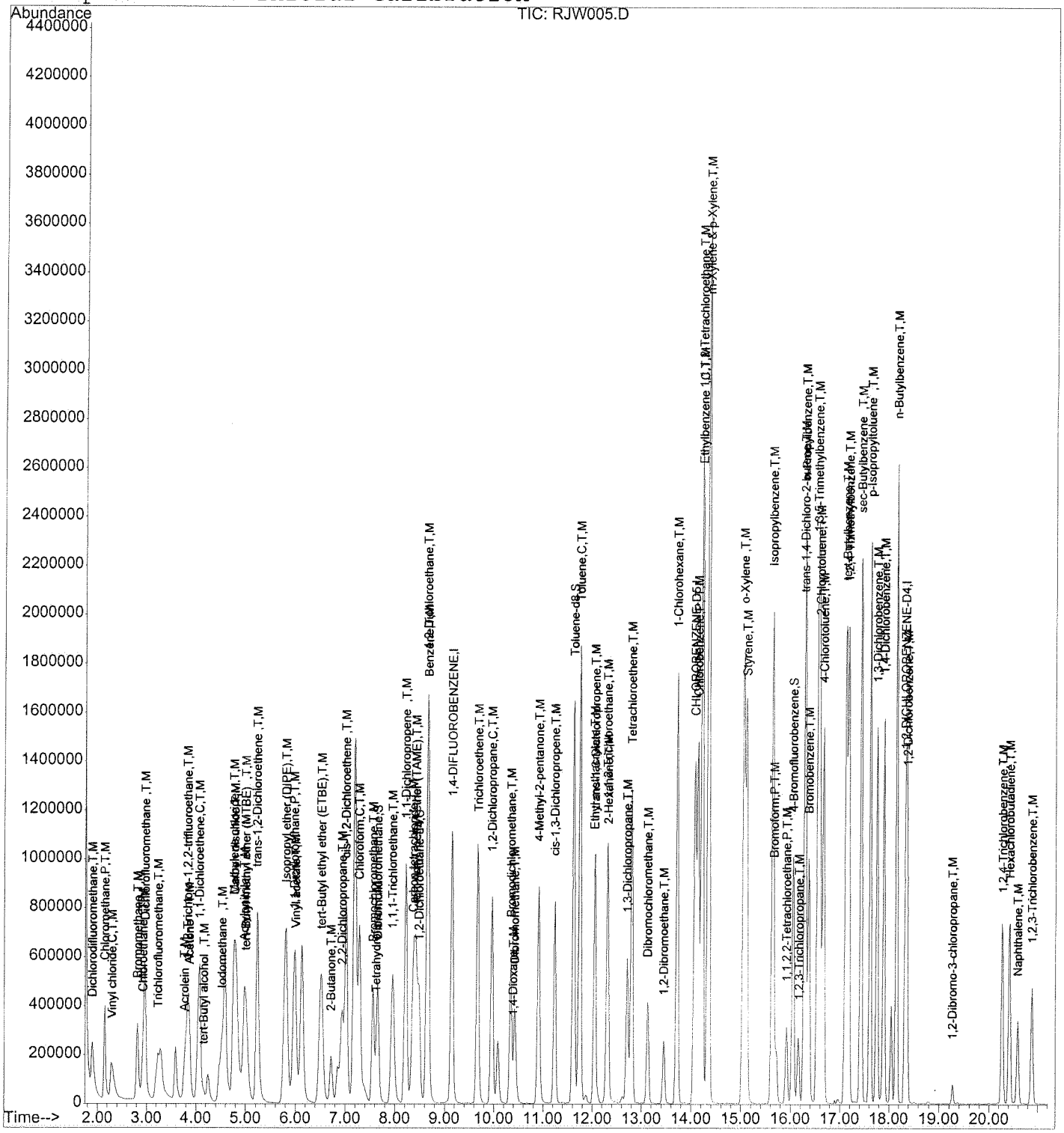
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85)	1,2,4-Trimethylbenzene	17.16	105	1921642	10.03 ug/l	95
86)	sec-Butylbenzene	17.42	105	2895857	10.53 ug/l	97
87)	p-Isopropyltoluene	17.61	119	2191607	10.42 ug/l	96
88)	1,3-Dichlorobenzene	17.74	146	1135014	11.11 ug/l	98
89)	1,4-Dichlorobenzene	17.89	146	1088318	11.17 ug/l	97
91)	n-Butylbenzene	18.15	91	2192087	10.26 ug/l	98
92)	1,2-Dichlorobenzene	18.37	146	835185	10.66 ug/l	97
93)	1,2-Dibromo-3-chloropropan	19.26	157	36697	9.55 ug/l	87
94)	1,2,4-Trichlorobenzene	20.27	180	462605	9.41 ug/l	98
95)	Hexachlorobutadiene	20.42	225	322140	9.28 ug/l	99
96)	Naphthalene	20.58	128	506382	8.49 ug/l	99
97)	1,2,3-Trichlorobenzene	20.88	180	305052	8.30 ug/l	98

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW005.D Vial: 5
Acq On : 1 Oct 2012 12:30 pm Operator: WL
Sample : VO06J01C Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:53 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



2828

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW022.D Vial: 22
Acq On : 1 Oct 2012 8:58 pm Operator: WL
Sample : 12I219-03 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:25 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.16	114	1719997	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.08	117	1518466	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.33	152	602760	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.65	111	569950	10.98	ug/l	0.00
Spiked Amount 10.000			Recovery	=	109.80%	
38) 1,2-Dichloroethane-d4	8.50	65	444145	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery	=	102.40%	
54) Toluene-d8	11.62	98	2017508	10.41	ug/l	0.00
Spiked Amount 10.000			Recovery	=	104.10%	
76) 4-Bromofluorobenzene	16.05	95	644835	8.60	ug/l	0.00
Spiked Amount 10.000			Recovery	=	86.00%	
Target Compounds						Qvalue
61) Tetrachloroethene	12.80	164	13043	0.25	ug/l	93

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

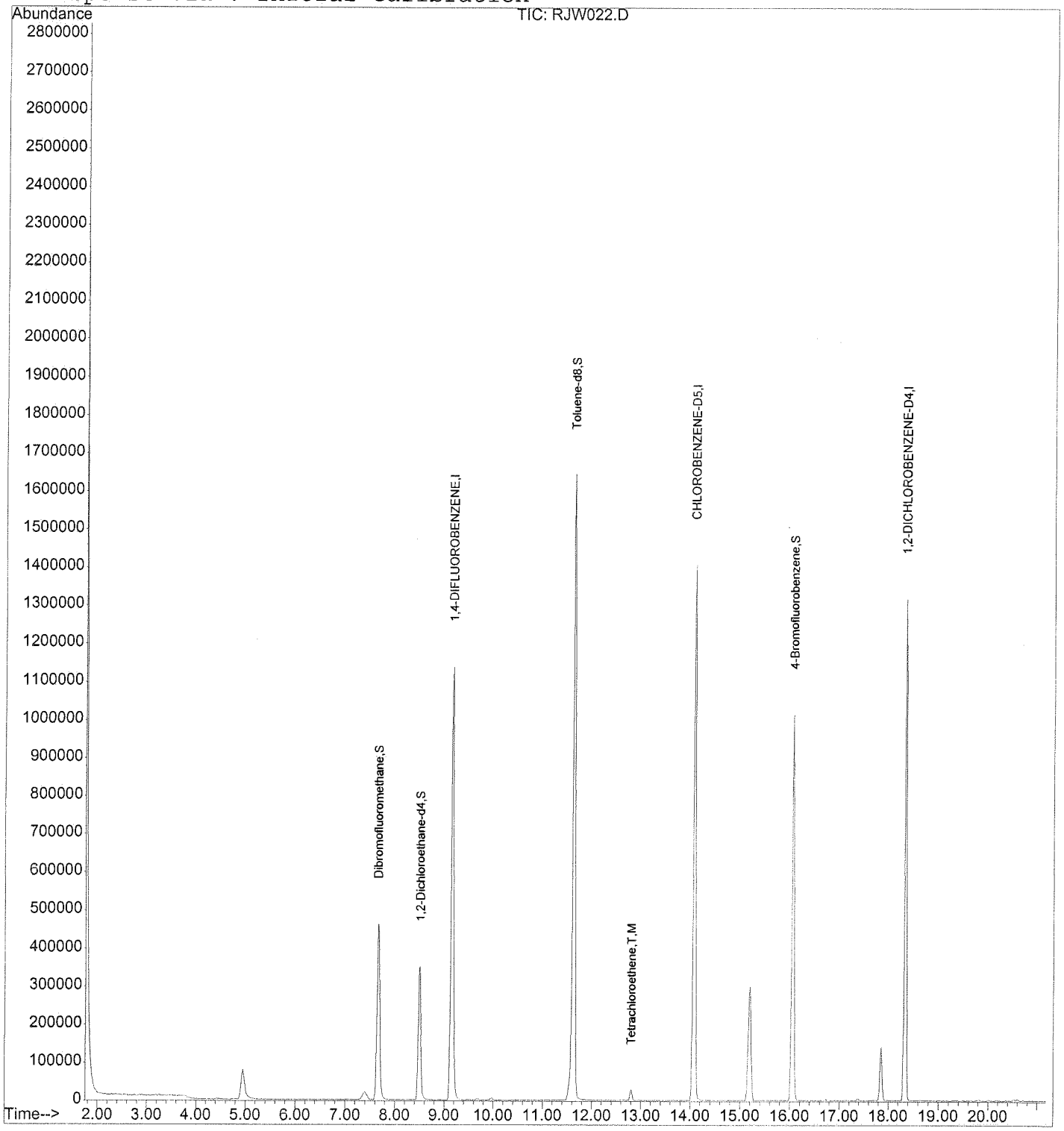
Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW022.D
Acq On : 1 Oct 2012 8:58 pm
Sample : 12I219-03 25mL
Misc : DF=1.0
MS Integration Params: RTE.P
Quant Time: Oct 2 16:25 2012

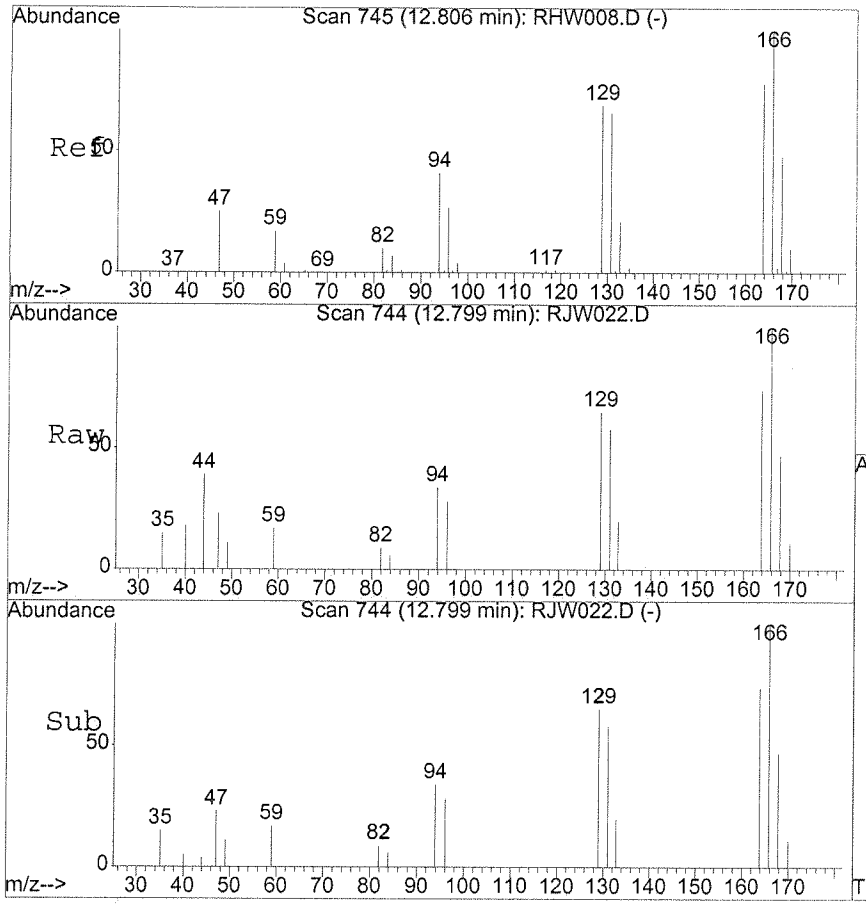
Vial: 22
Operator: WL
Inst : TO06
Multiplr: 1.00

Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



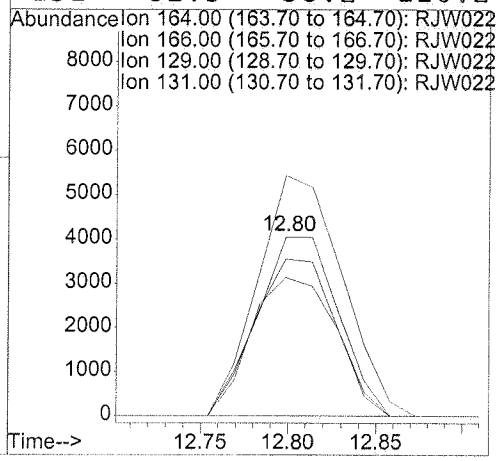
2038



#61
Tetrachloroethene
Concen: 0.25 ug/l
RT: 12.80 min Scan# 744
Delta R.T. -0.01 min
Lab File: RJW022.D
Acq: 1 Oct 2012 8:58 pm

Tgt Ion:164 Resp: 13043

Ion	Ratio	Lower	Upper
164	100		
166	139.5	98.0	158.0
129	87.5	60.3	120.3
131	81.3	56.2	116.2



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW023.D
Acq On : 1 Oct 2012 9:28 pm
Sample : 12I219-03M 25mL
Misc : DF=1.0
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012

Vial: 23
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1488070	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1300675	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	483577	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.66	111	485374	10.80	ug/l	0.00
Spiked Amount 10.000			Recovery	=	108.00%	
38) 1,2-Dichloroethane-d4	8.50	65	374497	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery	=	99.80%	
54) Toluene-d8	11.62	98	1781120	10.73	ug/l	0.00
Spiked Amount 10.000			Recovery	=	107.30%	
76) 4-Bromofluorobenzene	16.05	95	572636	9.51	ug/l	0.00
Spiked Amount 10.000			Recovery	=	95.10%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.90	85	453573	11.82	ug/l	99
3) Chloromethane	2.15	50	583319	12.65	ug/l	99
4) Vinyl chloride	2.30	62	441267	12.74	ug/l	98
5) Bromomethane	2.82	94	335578	12.09	ug/l	99
6) Chloroethane	2.92	64	283956	11.99	ug/l	96
7) Dichlorofluoromethane	2.97	67	887841	10.87	ug/l	98
8) Trichlorofluoromethane	3.23	101	548333	10.37	ug/l	99
9) Acrolein	3.78	56	123751	67.69	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.84	151	304926	12.19	ug/l	99
11) Acetone	3.86	43	253050	49.93	ug/l	99
12) 1,1-Dichloroethene	4.07	61	821571	10.51	ug/l	95
13) tert-Butyl alcohol	4.15	59	77419	53.83	ug/l	98
16) Iodomethane	4.53	142	818815	12.21	ug/l	89
17) Methylene chloride	4.76	49	626877	11.73	ug/l	98
18) Carbon disulfide	4.79	76	1739153	10.89	ug/l	99
19) Acrylonitrile	4.99	53	369715	58.06	ug/l	99
20) tert-Butyl methyl ether (M	5.02	73	782376	11.18	ug/l	99
21) trans-1,2-Dichloroethene	5.24	61	907311	10.96	ug/l	94
22) Isopropyl ether (DIPE)	5.81	45	1802526	11.19	ug/l	98
23) Vinyl acetate	6.01	43	551623	9.86	ug/l	99
24) 1,1-Dichloroethane	5.98	63	1045406	11.03	ug/l	100
26) tert-Butyl ethyl ether (ET	6.52	59	1282861	10.90	ug/l	99
27) 2-Butanone	6.73	43	466773	49.62	ug/l	96
28) 2,2-Dichloropropane	6.95	77	467280	9.84	ug/l	98
29) cis-1,2-Dichloroethene	7.02	96	648077	11.92	ug/l	90
30) Chloroform	7.29	83	925704	10.75	ug/l	99
32) Bromochloromethane	7.56	49	420972	11.11	ug/l	94

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW023.D Vial: 23
Acq On : 1 Oct 2012 9:28 pm Operator: WL
Sample : 12I219-03M 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	Tetrahydrofuran	7.62	42	61046	10.01 ug/l		98
35)	1,1,1-Trichloroethane	7.96	97	738636	10.55 ug/l		91
37)	tert-Amyl methyl ether (TA	8.44	87	205862	11.22 ug/l		96
41)	1,1-Dichloropropene	8.23	110	295477	11.68 ug/l		100
42)	Carbon tetrachloride	8.38	119	672246	10.21 ug/l		100
43)	1,2-Dichloroethane	8.64	62	477792	10.01 ug/l		99
44)	Benzene	8.66	78	2154722	10.96 ug/l		99
45)	Trichloroethene	9.67	130	650422	11.58 ug/l		95
47)	1,2-Dichloropropane	9.97	63	554123	11.11 ug/l		97
48)	1,4-Dioxane	10.38	88	32978	213.36 ug/l		92
49)	Bromodichloromethane	10.34	83	647746	10.69 ug/l		99
50)	Dibromomethane	10.43	93	237987	10.99 ug/l		91
51)	2-Chloroethyl vinyl ether	10.90	63	1616	0.10 ug/l	#	1
52)	4-Methyl-2-pentanone	10.90	43	1239834	48.21 ug/l		93
53)	cis-1,3-Dichloropropene	11.23	75	737137	10.52 ug/l		98
55)	Toluene	11.75	91	2287506	11.23 ug/l		100
56)	Ethyl methacrylate	12.05	69	375221	11.23 ug/l		99
57)	trans-1,3-Dichloropropene	12.05	75	518023	10.09 ug/l		98
58)	1,1,2-Trichloroethane	12.30	97	292571	11.43 ug/l		98
59)	2-Hexanone	12.32	43	829704	54.21 ug/l		99
60)	1,3-Dichloropropane	12.72	76	559393	10.50 ug/l		98
61)	Tetrachloroethene	12.81	164	556912	12.58 ug/l		96
62)	Dibromochloromethane	13.13	129	387646	11.24 ug/l		99
64)	1,2-Dibromoethane	13.46	107	305480	11.47 ug/l		99
65)	1-Chlorohexane	13.73	91	957212	11.15 ug/l		98
66)	Chlorobenzene	14.13	112	1433812	11.74 ug/l		95
67)	1,1,1,2-Tetrachloroethane	14.21	131	445855	11.53 ug/l		99
68)	Ethylbenzene	14.22	91	2526643	11.05 ug/l		97
69)	m-Xylene & p-Xylene	14.34	91	3829789	21.80 ug/l		96
70)	o-Xylene	15.05	91	2007565	11.42 ug/l		95
71)	Styrene	15.11	104	1416758	11.65 ug/l		96
73)	Isopropylbenzene	15.63	105	2370891	10.47 ug/l		97
74)	Bromoform	15.68	173	185539	9.92 ug/l		99
75)	1,1,2,2-Tetrachloroethane	15.93	83	323631	10.70 ug/l		100
77)	1,2,3-Trichloropropane	16.17	110	83411	10.29 ug/l		99
78)	trans-1,4-Dichloro-2-buten	16.27	53	79700	8.76 ug/l		95
79)	n-Propylbenzene	16.29	91	3180615	10.51 ug/l		97
80)	Bromobenzene	16.38	156	537860	11.40 ug/l		89
81)	1,3,5-Trimethylbenzene	16.55	105	1887950	10.38 ug/l		95
82)	2-Chlorotoluene	16.58	91	1943931	10.31 ug/l		94
83)	4-Chlorotoluene	16.66	91	1515054	9.90 ug/l		95

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW023.D Vial: 23
Acq On : 1 Oct 2012 9:28 pm Operator: WL
Sample : 12I219-03M 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

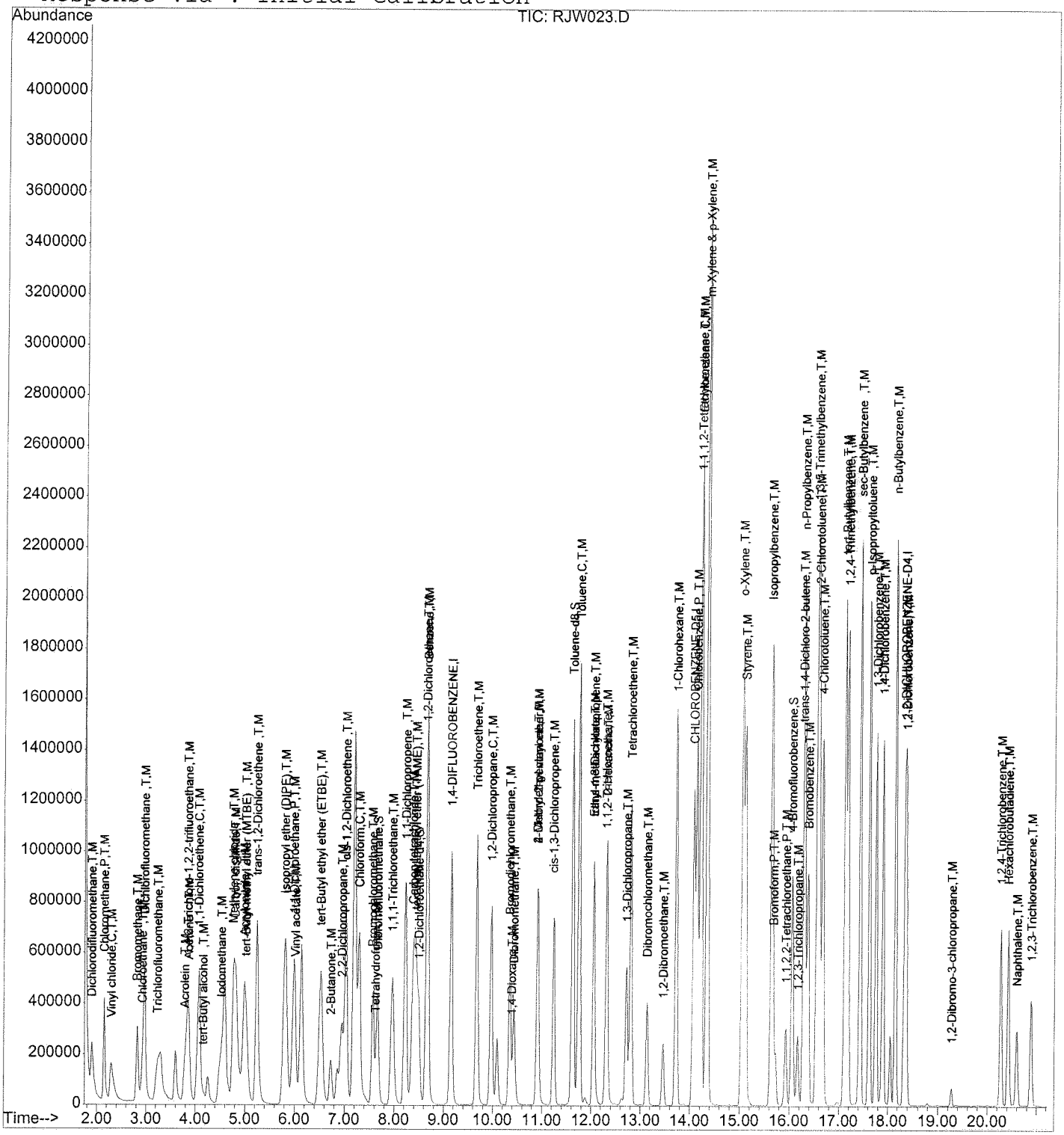
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
84)	tert-Butylbenzene	17.12	134	478866	11.47 ug/l	#	85
85)	1,2,4-Trimethylbenzene	17.18	105	1789532	10.24 ug/l		95
86)	sec-Butylbenzene	17.43	105	2679469	10.68 ug/l		98
87)	p-Isopropyltoluene	17.62	119	2072404	10.80 ug/l		96
88)	1,3-Dichlorobenzene	17.76	146	1081225	11.59 ug/l		98
89)	1,4-Dichlorobenzene	17.89	146	995832	11.20 ug/l		97
91)	n-Butylbenzene	18.15	91	2019371	10.36 ug/l		98
92)	1,2-Dichlorobenzene	18.37	146	793535	11.10 ug/l		97
93)	1,2-Dibromo-3-chloropropan	19.27	157	33786	9.64 ug/l		90
94)	1,2,4-Trichlorobenzene	20.27	180	422923	9.43 ug/l		99
95)	Hexachlorobutadiene	20.42	225	288329	9.10 ug/l		99
96)	Naphthalene	20.60	128	471581	8.67 ug/l		100
97)	1,2,3-Trichlorobenzene	20.90	180	283852	8.46 ug/l		99

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW023.D Vial: 23
Acq On : 1 Oct 2012 9:28 pm Operator: WL
Sample : 12I219-03M 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



2835

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW024.D
Acq On : 1 Oct 2012 9:58 pm
Sample : 12I219-03S 25mL
Misc : DF=1.0
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012

Vial: 24
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.14	114	1621731	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.08	117	1433904	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.33	152	509200	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.65	111	527685	10.78 ug/l	0.00
Spiked Amount 10.000			Recovery = 107.80%		
38) 1,2-Dichloroethane-d4	8.49	65	407319	9.96 ug/l	0.00
Spiked Amount 10.000			Recovery = 99.60%		
54) Toluene-d8	11.61	98	1902722	10.40 ug/l	0.00
Spiked Amount 10.000			Recovery = 104.00%		
76) 4-Bromofluorobenzene	16.05	95	605230	9.55 ug/l	0.00
Spiked Amount 10.000			Recovery = 95.50%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.90	85	459764	10.99 ug/l	99
3) Chloromethane	2.15	50	621498	12.36 ug/l	100
4) Vinyl chloride	2.30	62	452223	11.98 ug/l	99
5) Bromomethane	2.82	94	359337	11.88 ug/l	98
6) Chloroethane	2.93	64	317968	12.32 ug/l	95
7) Dichlorofluoromethane	2.96	67	919355	10.33 ug/l	100
8) Trichlorofluoromethane	3.24	101	555188	9.64 ug/l	100
9) Acrolein	3.77	56	133964	67.24 ug/l	93
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	296212	10.86 ug/l	100
11) Acetone	3.86	43	275734	49.92 ug/l	98
12) 1,1-Dichloroethene	4.07	61	836310	9.82 ug/l	95
13) tert-Butyl alcohol	4.16	59	76878	49.05 ug/l	95
16) Iodomethane	4.53	142	829279	11.35 ug/l	89
17) Methylene chloride	4.77	49	638693	10.92 ug/l	99
18) Carbon disulfide	4.79	76	1701682	9.78 ug/l	99
19) Acrylonitrile	4.98	53	397675	57.30 ug/l	98
20) tert-Butyl methyl ether (M	5.01	73	807155	10.58 ug/l	98
21) trans-1,2-Dichloroethene	5.23	61	923956	10.24 ug/l	94
22) Isopropyl ether (DIPE)	5.81	45	1824986	10.40 ug/l	97
23) Vinyl acetate	6.00	43	566770	9.30 ug/l	100
24) 1,1-Dichloroethane	5.97	63	1060764	10.27 ug/l	99
26) tert-Butyl ethyl ether (ET	6.52	59	1331547	10.38 ug/l	99
27) 2-Butanone	6.72	43	486372	47.44 ug/l	96
28) 2,2-Dichloropropane	6.94	77	462693	8.94 ug/l	96
29) cis-1,2-Dichloroethene	7.02	96	649116	10.95 ug/l	91
30) Chloroform	7.28	83	941011	10.03 ug/l	100
32) Bromochloromethane	7.57	49	425490	10.31 ug/l	92

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW024.D Vial: 24
Acq On : 1 Oct 2012 9:58 pm Operator: WL
Sample : 12I219-03S 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Tetrahydrofuran	7.61	42	64586	9.70 ug/l	96
35) 1,1,1-Trichloroethane	7.95	97	740218	9.70 ug/l	90
37) tert-Amyl methyl ether (TA	8.44	87	207816	10.40 ug/l	94
41) 1,1-Dichloropropene	8.22	110	292203	10.48 ug/l	99
42) Carbon tetrachloride	8.37	119	655382	9.03 ug/l	100
43) 1,2-Dichloroethane	8.65	62	486704	9.25 ug/l	99
44) Benzene	8.67	78	2222451	10.25 ug/l	99
45) Trichloroethene	9.66	130	654102	10.57 ug/l	95
47) 1,2-Dichloropropane	9.96	63	564248	10.26 ug/l	95
48) 1,4-Dioxane	10.38	88	35799	210.09 ug/l	95
49) Bromodichloromethane	10.35	83	642186	9.62 ug/l	100
50) Dibromomethane	10.42	93	245199	10.27 ug/l	93
52) 4-Methyl-2-pentanone	10.91	43	1303472	45.98 ug/l	94
53) cis-1,3-Dichloropropene	11.24	75	747618	9.68 ug/l	99
55) Toluene	11.74	91	2278758	10.15 ug/l	100
56) Ethyl methacrylate	12.04	69	389630	10.58 ug/l	99
57) trans-1,3-Dichloropropene	12.06	75	531291	9.39 ug/l	98
58) 1,1,2-Trichloroethane	12.31	97	300494	10.65 ug/l	99
59) 2-Hexanone	12.32	43	863701	51.18 ug/l	99
60) 1,3-Dichloropropane	12.71	76	582075	9.91 ug/l	98
61) Tetrachloroethene	12.80	164	532601	10.91 ug/l	96
62) Dibromochloromethane	13.13	129	390778	10.28 ug/l	100
64) 1,2-Dibromoethane	13.45	107	312267	10.64 ug/l	99
65) 1-Chlorohexane	13.72	91	961575	10.16 ug/l	96
66) Chlorobenzene	14.14	112	1431845	10.63 ug/l	94
67) 1,1,1,2-Tetrachloroethane	14.21	131	445936	10.46 ug/l	98
68) Ethylbenzene	14.21	91	2557792	10.14 ug/l	97
69) m-Xylene & p-Xylene	14.35	91	3709653	19.15 ug/l	96
70) o-Xylene	15.06	91	1974883	10.19 ug/l	97
71) Styrene	15.12	104	1433437	10.69 ug/l	96
73) Isopropylbenzene	15.64	105	2338958	9.80 ug/l	98
74) Bromoform	15.67	173	193436	9.82 ug/l	98
75) 1,1,2,2-Tetrachloroethane	15.92	83	325301	10.22 ug/l	99
77) 1,2,3-Trichloropropane	16.17	110	83251	9.76 ug/l	99
78) trans-1,4-Dichloro-2-buten	16.28	53	79274	8.28 ug/l	96
79) n-Propylbenzene	16.29	91	3159504	9.92 ug/l	97
80) Bromobenzene	16.37	156	543034	10.93 ug/l	90
81) 1,3,5-Trimethylbenzene	16.55	105	1870605	9.77 ug/l	95
82) 2-Chlorotoluene	16.59	91	1802398	9.08 ug/l	95
83) 4-Chlorotoluene	16.66	91	1605926	9.97 ug/l	94
84) tert-Butylbenzene	17.13	134	468304	10.65 ug/l #	86

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW024.D Vial: 24
Acq On : 1 Oct 2012 9:58 pm Operator: WL
Sample : 12I219-03S 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

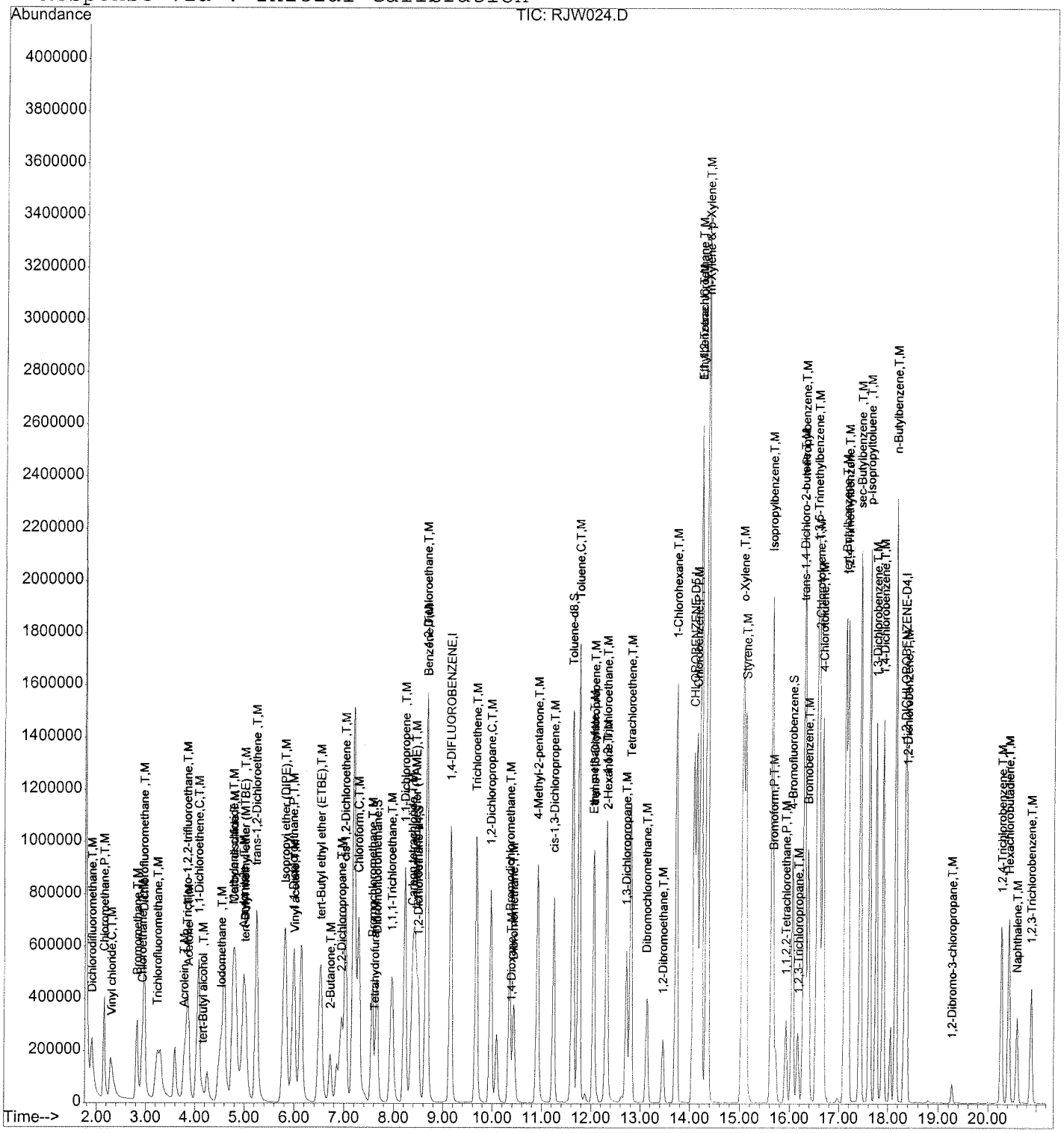
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85)	1,2,4-Trimethylbenzene	17.17	105	1794879	9.75 ug/l	95
86)	sec-Butylbenzene	17.42	105	2630494	9.96 ug/l	97
87)	p-Isopropyltoluene	17.62	119	2020871	10.00 ug/l	96
88)	1,3-Dichlorobenzene	17.75	146	1049415	10.69 ug/l	98
89)	1,4-Dichlorobenzene	17.90	146	1022004	10.91 ug/l	97
91)	n-Butylbenzene	18.15	91	1960901	9.55 ug/l	98
92)	1,2-Dichlorobenzene	18.37	146	796252	10.58 ug/l	96
93)	1,2-Dibromo-3-chloropropan	19.27	157	35180	9.53 ug/l	89
94)	1,2,4-Trichlorobenzene	20.28	180	421832	8.93 ug/l	97
95)	Hexachlorobutadiene	20.43	225	287013	8.60 ug/l	99
96)	Naphthalene	20.59	128	494595	8.63 ug/l	100
97)	1,2,3-Trichlorobenzene	20.89	180	285706	8.09 ug/l	98

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW024.D Vial: 24
Acq On : 1 Oct 2012 9:58 pm Operator: WL
Sample : 12I219-03S 25mL Inst : TO06
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 16:26 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



INITIAL CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RHW002
Instrument ID: 06
GC Column:RTX502.2ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 121219
BFB Injection Date : 08/15/12
BFB Injection Time : 18:53
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.75
75	30.0 - 60.0% of mass 95	45.15
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	5.79
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	76.82
175	5.0 - 9.0% of mass 174	5.66(7.4)1
176	95.0 - 101.0% of mass 174	77.21(100.5)1
177	5.0 - 9.0% of mass 176	5.31(6.9)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	V006H151	RHW003	08/15/12	19:22
2	VSTD0.5	V006H152	RHW004	08/15/12	19:53
3	VSTD01	V006H153	RHW005	08/15/12	20:23
4	VSTD02	V006H154	RHW006	08/15/12	20:54
5	VSTD05	V006H155	RHW007	08/15/12	21:23
6	VSTD010	V006H156	RHW008	08/15/12	21:54
7	VSTD020	V006H157	RHW009	08/15/12	22:23
8	VSTD030	V006H158	RHW010	08/15/12	22:53
9	VSTD050	V006H159	RHW011	08/15/12	23:24
10	VSTD100	V006H1510	RHW012	08/15/12	23:53

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T006
Beginning DateTime :08/15/12 19:22
Spike Units :PPB
IC File :rhw008

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :08/15/12 23:53
HPChem Method :vo06h15

M	IDX	Parameters	.3 19:22 rhw003	.5 19:53 rhw004	1 20:23 rhw005	2 20:54 rhw006	5 21:23 rhw007	10 21:54 rhw008	20 22:23 rhw009	30 22:53 rhw010	50 23:24 rhw011	100 23:53 rhw012	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.1495
	2	Dichlorodifluoromethane	0.287	0.246	0.236	0.255	0.283	0.258	0.244	0.257	0.261	0.251	0.258	6.32	1.8942
	3	Chloromethane	0.323	0.284	0.300	0.327	0.342	0.320	0.298	0.312	0.307	0.287	0.310	5.91	2.1470
	4	Vinyl chloride	0.237	0.239	0.230	0.264	0.275	0.236	0.200	0.181	------	------	0.233	13.19	2.2996
	5	Bromomethane	0.159	0.178	0.161	0.198	0.217	0.202	0.196	0.200	0.190	0.164	0.187	10.72	2.8115
	6	Chloroethane	0.161	0.140	0.144	0.173	0.177	0.174	0.163	0.164	0.161	0.134	0.159	9.41	2.9186
	7	Dichlorofluoromethane	0.581	0.572	0.599	0.516	0.558	0.574	0.564	0.559	0.533	0.433	0.549	8.55	2.9602
	8	Trichlorofluoromethane	0.328	0.320	0.313	0.371	0.414	0.374	0.359	0.365	0.364	0.345	0.355	8.43	3.2382
5	9	Acrolein	0.015	0.012	0.012	0.012	0.012	0.013	0.012	0.014	0.012	0.010	0.012	9.90	3.7720
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.187	0.169	0.168	0.146	0.169	0.169	0.170	0.174	0.176	0.155	0.168	6.69	3.8255
5	11	Acetone	------	------	------	0.041	0.033	0.034	0.031	0.035	0.030	------	0.034	12.26	3.8594
	12	1,1-Dichloroethene	0.541	0.516	0.544	0.491	0.534	0.534	0.533	0.542	0.541	0.475	0.525	4.54	4.0634
5	13	tert-Butyl alcohol	------	0.008	0.009	0.009	0.010	0.011	0.010	0.012	0.009	0.009	0.010	12.01	4.1607
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	0.139	0.122	0.119	0.118	0.104	0.098	0.116	0.097	0.088	0.111	14.21	4.5407
	16	Iodomethane	0.451	0.425	0.461	0.413	0.459	0.455	0.462	0.484	0.468	0.426	0.451	4.90	4.5258
	17	Methylene chloride	------	0.666	0.549	0.438	0.412	0.392	0.374	0.392	0.359	0.315	0.433	25.09	4.7885
	18	Carbon disulfide	0.929	0.919	1.035	1.105	1.134	1.134	1.090	1.152	1.192	1.042	1.073	8.57	4.7934
5	19	Acrylonitrile	0.042	0.045	0.043	0.046	0.042	0.044	0.041	0.048	0.040	0.037	0.043	7.45	4.9733
	20	tert-Butyl methyl ether (MTBE)	0.480	0.505	0.485	0.456	0.465	0.494	0.457	0.522	0.438	0.400	0.470	7.49	5.0178
	21	trans-1,2-Dichloroethene	0.595	0.552	0.584	0.529	0.574	0.559	0.566	0.572	0.552	0.482	0.556	5.77	5.2334
	22	Isopropyl ether (DIPE)	1.123	1.096	1.136	1.038	1.095	1.123	1.079	1.168	1.046	0.919	1.082	6.46	5.8043
	23	Vinyl acetate	------	0.349	0.355	0.410	0.409	0.397	0.364	0.406	0.361	0.334	0.376	7.83	6.0010
	24	1,1-Dichloroethane	0.639	0.646	0.669	0.623	0.665	0.649	0.642	0.650	0.628	0.556	0.637	5.00	5.9708
5	25	2-Butanol	------	------	0.009	0.010	0.010	0.009	0.009	0.011	0.009	0.009	0.009	9.21	6.3805
	26	tert-Butyl ethyl ether (ETBE)	0.810	0.803	0.811	0.770	0.784	0.814	0.794	0.876	0.767	0.679	0.791	6.29	6.5180
5	27	2-Butanone	0.078	0.068	0.068	0.063	0.057	0.062	0.057	0.069	0.058	0.053	0.063	11.92	6.7231
	28	2,2-Dichloropropane	0.368	0.337	0.356	0.310	0.339	0.331	0.317	0.310	0.292	0.232	0.319	11.92	6.9387
	29	cis-1,2-Dichloroethene	0.377	0.376	0.387	0.359	0.369	0.363	0.367	0.377	0.357	0.323	0.365	4.81	7.0235
	30	Chloroform	0.636	0.589	0.618	0.564	0.581	0.575	0.571	0.592	0.561	0.497	0.578	6.39	7.2911
5	31	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	32	Bromochloromethane	0.260	0.266	0.264	0.244	0.251	0.262	0.254	0.276	0.246	0.222	0.255	5.92	7.5587
	33	Tetrahydrofuran	------	------	0.069	0.049	0.042	0.041	0.036	0.042	------	------	0.047	25.79	7.6236
	34	Dibromofluoromethane	0.224	0.247	0.306	0.313	0.340	0.331	0.317	0.336	0.321	0.283	0.302	12.90	7.6568
	35	1,1,1-Trichloroethane	0.485	0.477	0.497	0.449	0.491	0.484	0.480	0.476	0.465	0.401	0.471	5.91	7.9571
	36	Cyclohexane	0.861	0.968	0.772	0.770	0.826	0.736	0.706	0.681	0.692	------	0.779	11.92	7.9733
	37	tert-Amyl methyl ether (TAME)	0.124	0.124	0.126	0.116	0.119	0.133	0.125	0.140	0.120	0.106	0.123	7.49	8.4329
	38	1,2-Dichloroethane-d4	0.201	0.223	0.272	0.266	0.279	0.278	0.257	0.275	0.249	0.222	0.252	11.03	8.4924
	39	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	14.0706
	40	2,2,4-Trimethylpentane	------	1.513	1.721	1.746	1.844	1.617	1.457	1.579	1.684	1.505	1.630	7.89	8.0906
	41	1,1-Dichloropropene	0.201	0.190	0.200	0.180	0.196	0.191	0.198	0.198	0.207	0.184	0.194	4.25	8.2203
	42	Carbon tetrachloride	0.511	0.485	0.518	0.443	0.509	0.510	0.524	0.522	0.552	0.486	0.506	5.79	8.3764
	43	1,2-Dichloroethane	0.401	0.381	0.396	0.352	0.365	0.366	0.361	0.381	0.352	0.315	0.367	6.76	8.6455
	44	Benzene	1.765	1.655	1.624	1.425	1.472	1.458	1.485	1.505	1.483	1.248	1.512	9.36	8.6589
	45	Trichloroethene	0.483	0.438	0.424	0.386	0.432	0.427	0.435	0.437	0.454	0.402	0.432	6.12	9.6699
	46	Methylcyclohexane	0.575	0.677	0.714	0.725	0.816	0.701	0.683	0.683	0.742	0.649	0.697	8.98	9.7576
	47	1,2-Dichloropropane	0.399	0.398	0.397	0.363	0.379	0.383	0.388	0.398	0.386	0.345	0.384	4.61	9.9642
20	48	1,4-Dioxane	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	11.65	10.3854
	49	Bromodichloromethane	0.463	0.438	0.453	0.426	0.461	0.477	0.494	0.509	0.488	0.449	0.466	5.58	10.3389
	50	Dibromomethane	0.171	0.167	0.169	0.152	0.165	0.168	0.171	0.183	0.167	0.152	0.166	5.54	10.4266
	51	2-Chloroethyl vinyl ether	0.116	0.112	0.116	0.111	0.123	0.132	0.129	0.147	0.129	0.125	0.124	8.84	10.8696
5	52	4-Methyl-2-pentanone	0.206	0.195	0.195	0.206	0.196	0.207	0.194	0.222	0.190	0.168	0.198	7.11	10.9068
	53	cis-1,3-Dichloropropene	0.539	0.516	0.516	0.494	0.543	0.558	0.560	0.596	0.560	0.505	0.539	5.79	11.2339
	54	Toluene-d8	1.073	1.150	1.304	1.319	1.454	1.354	1.289	1.334	1.325	1.158	1.276	8.94	11.6190
	55	Toluene	1.709	1.639	1.656	1.514	1.605	1.545	1.567	1.560	1.548	1.318	1.566	6.76	11.7483
	56	Ethyl methacrylate	0.261	0.249	0.249	0.236	0.252	0.273	0.264	0.294	0.260	0.231	0.257	7.04	12.0487
	57	trans-1,3-Dichloropropene	0.390	0.377	0.380	0.363	0.390	0.413	0.412	0.440	0.410	0.369	0.395	6.05	12.0487
	58	1,1,2-Trichloroethane	0.205	0.195	0.204	0.181	0.196	0.202	0.196	0.215	0.196	0.177	0.197	5.64	12.3014

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5	59	2-Hexanone	0.128	0.114	0.116	0.123	0.117	0.123	0.114	0.131	0.112	0.098	0.118	8.05	12.3207
	60	1,3-Dichloropropane	0.447	0.412	0.415	0.385	0.403	0.423	0.401	0.442	0.401	0.365	0.409	6.01	12.7147
	61	Tetrachloroethene	0.363	0.347	0.352	0.317	0.339	0.335	0.342	0.340	0.357	0.312	0.340	4.76	12.8039
	62	Dibromochloromethane	0.249	0.233	0.249	0.235	0.260	0.280	0.280	0.310	0.290	0.266	0.265	9.39	13.1339
	63	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	64	1,2-Dibromoethane	0.198	0.197	0.198	0.190	0.203	0.213	0.209	0.232	0.213	0.193	0.205	6.02	13.4581
	65	1-Chlorohexane	0.685	0.649	0.673	0.604	0.676	0.678	0.674	0.677	0.699	0.585	0.660	5.61	13.7197
	66	Chlorobenzene	1.040	0.972	0.975	0.887	0.933	0.915	0.949	0.963	0.942	0.814	0.939	6.36	14.1316
	67	1,1,1,2-Tetrachloroethane	0.295	0.290	0.300	0.282	0.297	0.308	0.306	0.317	0.308	0.271	0.297	4.58	14.2044
	68	Ethylbenzene	2.007	1.855	1.918	1.728	1.800	1.767	1.739	1.733	1.691	1.349	1.759	9.90	14.2193
2	69	m-Xylene & p-Xylene	1.532	1.415	1.460	1.281	1.367	1.312	1.293	1.277	1.220	------	1.351	7.48	14.3415
	70	o-Xylene	1.419	1.362	1.424	1.308	1.410	1.381	1.370	1.384	1.342	1.118	1.352	6.63	15.0518
	71	Styrene	0.993	0.934	0.949	0.890	0.985	0.970	0.947	0.958	0.935	0.788	0.935	6.35	15.1113
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.3375
	73	Isopropylbenzene	4.817	4.725	4.698	4.142	4.738	4.727	5.349	4.882	4.914	3.857	4.685	8.82	15.6391
	74	Bromoform	0.266	0.276	0.302	0.291	0.336	0.374	0.419	0.442	0.407	0.369	0.348	18.12	15.6733
	75	1,1,2,2-Tetrachloroethane	0.669	0.600	0.589	0.551	0.608	0.642	0.669	0.721	0.638	0.566	0.625	8.36	15.9260
	76	4-Bromofluorobenzene	1.199	1.104	1.211	1.160	1.341	1.297	1.381	1.352	1.302	1.100	1.245	8.32	16.0479
	77	1,2,3-Trichloropropane	0.152	0.159	0.159	0.154	0.167	0.175	0.179	0.200	0.175	0.156	0.168	8.94	16.1684
	78	trans-1,4-Dichloro-2-butene	------	0.187	0.181	0.154	0.188	0.198	0.210	0.218	0.194	0.164	0.188	10.76	16.2743
	79	n-Propylbenzene	6.526	6.372	6.494	5.677	6.439	6.376	6.983	6.429	6.432	4.826	6.255	9.47	16.2947
	80	Bromobenzene	1.016	0.938	0.977	0.873	0.950	0.979	1.083	1.051	1.014	0.874	0.975	7.12	16.3750
	81	1,3,5-Trimethylbenzene	3.974	3.801	3.943	3.418	3.821	3.725	4.133	3.854	3.840	3.096	3.761	7.92	16.5520
	82	2-Chlorotoluene	4.210	4.102	4.100	3.341	3.984	3.898	4.382	4.006	3.896	3.083	3.900	10.14	16.5847
	83	4-Chlorotoluene	3.413	3.269	3.388	3.069	3.028	3.084	3.349	3.188	3.200	2.644	3.163	7.18	16.6634
	84	tert-Butylbenzene	0.859	0.839	0.903	0.757	0.875	0.850	0.942	0.901	0.927	0.779	0.863	6.95	17.1184
	85	1,2,4-Trimethylbenzene	3.861	3.723	3.822	3.342	3.715	3.602	3.889	3.672	3.561	2.953	3.614	7.83	17.1779
	86	sec-Butylbenzene	5.526	5.294	5.427	4.864	5.364	5.139	5.573	5.267	5.291	4.137	5.188	8.10	17.4306
	87	p-Isopropyltoluene	4.295	3.940	4.162	3.688	4.082	3.947	4.234	3.991	4.044	3.310	3.969	7.26	17.6209
	88	1,3-Dichlorobenzene	2.082	1.903	2.018	1.757	1.921	1.909	2.097	2.021	1.957	1.621	1.929	7.62	17.7577
	89	1,4-Dichlorobenzene	2.002	1.877	1.880	1.671	1.847	1.822	1.971	1.917	1.851	1.555	1.839	7.30	17.8945
	90	Benzyl chloride	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	91	n-Butylbenzene	4.434	4.242	4.283	3.722	4.211	3.945	4.224	3.955	4.025	3.275	4.032	8.35	18.1531
	92	1,2-Dichlorobenzene	1.608	1.561	1.514	1.361	1.485	1.454	1.488	1.516	1.491	1.308	1.479	5.96	18.3673
	93	1,2-Dibromo-3-chloropropane	------	0.053	0.074	0.067	0.077	0.073	0.066	0.076	0.075	0.092	0.072	14.38	19.2726
	94	1,2,4-Trichlorobenzene	1.046	0.987	1.012	0.911	1.019	0.886	0.831	0.842	0.882	0.859	0.927	8.69	20.2703
	95	Hexachlorobutadiene	0.758	0.691	0.723	0.658	0.733	0.647	0.569	0.543	0.606	0.624	0.655	10.91	20.4204
	96	Naphthalene	------	1.272	1.306	1.174	1.268	1.128	0.961	1.029	0.977	1.014	1.125	12.07	20.5958
	97	1,2,3-Trichlorobenzene	0.768	0.746	0.786	0.708	0.773	0.661	0.563	0.547	------	------	0.694	13.66	20.8875

Spike Amount = Nominal Amount * M
Ave_%RSD : 8.6 Max_%RSD : 25.8

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
17	Methylene chloride	0.02114	0.34115	0.9963
33	Tetrahydrofuran	0.00261	0.03837	0.9958
74	Bromoform	-0.00618	0.39310	0.9971

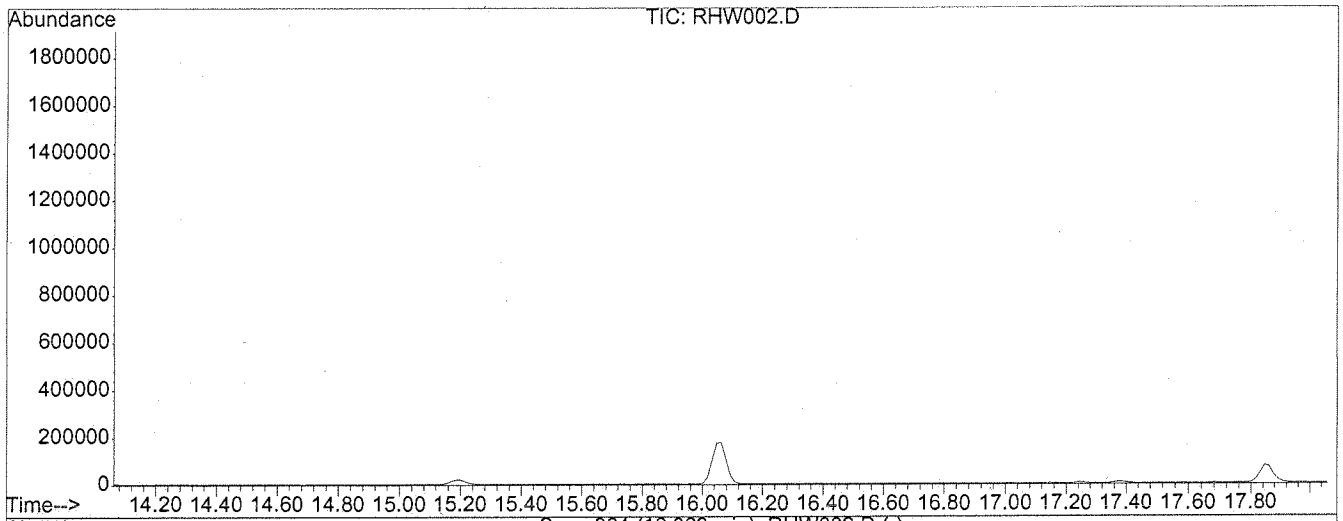
RU 8/21/11d

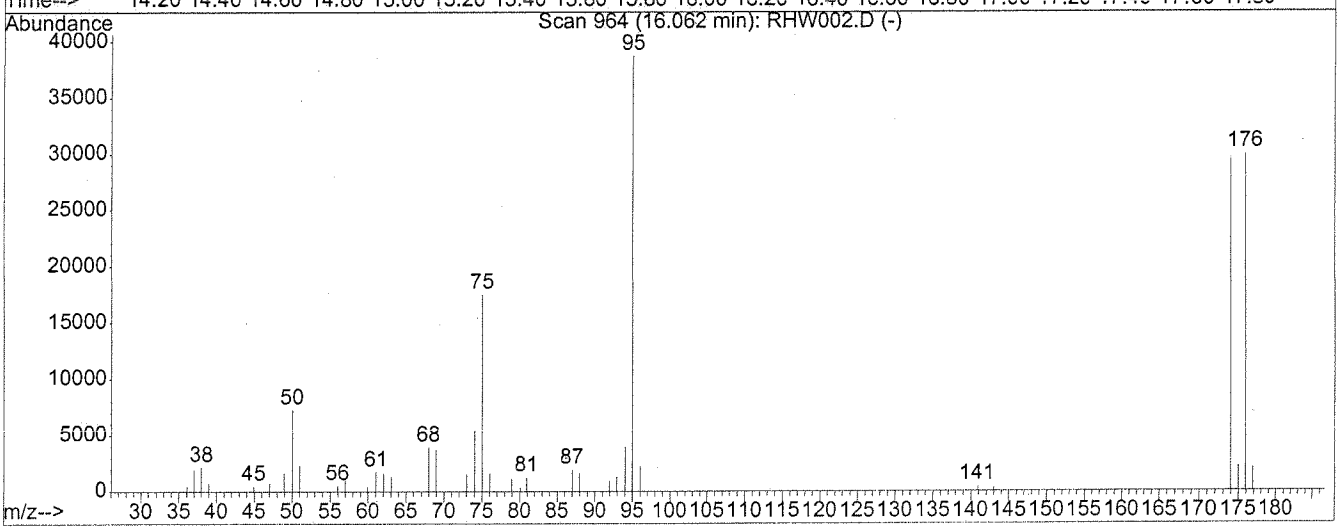
2843

BFB

Data File : D:\HPCHEM\1\DATA\12H15\RHW002.D
Acq On : 15 Aug 2012 6:53 pm
Sample : BFB06H01
Misc : T/ CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00





Spectrum Information: Scan 964 - Background Scan 957

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	7264	PASS
75	95	30	60	45.1	17496	PASS
95	95	100	100	100.0	38752	PASS
96	95	5	9	5.8	2244	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.8	29768	PASS
175	174	5	9	7.4	2193	PASS
176	174	95	101	100.5	29920	PASS
177	176	5	9	6.9	2057	PASS

RHW002.D VO06H15.M Thu Aug 16 16:14:02 2012

8-21-12

Compound List Report TO06

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
Total Cpnds : 97

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	9.15	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.89	0.207	A	1	A	B
3	T	Chloromethane	50	2.15	0.235	A	1	A	B
4	T	Vinyl chloride	62	2.29	0.251	A	1	A	B
5	T	Bromomethane	94	2.81	0.308	A	1	A	B
6	T	Chloroethane	64	2.92	0.319	A	2	A	B
7	T	Dichlorofluoromethane	67	2.96	0.324	A	1	A	B
8	T	Trichlorofluoromethane	101	3.25	0.355	A	1	A	B
9	T	Acrolein	56	3.77	0.412	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.83	0.418	A	1	A	B
11	T	Acetone	43	3.86	0.421	A	2	A	B
12	T	1,1-Dichloroethene	61	4.06	0.444	A	2	A	B
13	T	tert-Butyl alcohol	59	4.15	0.454	A	1	A	B
14	T	Acetonitrile	41	4.24	0.464	A	2	A	B
15	T	Methyl acetate	43	4.54	0.496	A	1	A	B
16	T	Iodomethane	142	4.52	0.495	A	1	A	B
17	T	Methylene chloride	49	4.76	0.521	L	2	A	B
18	T	Carbon disulfide	76	4.79	0.524	A	1	A	B
19	T	Acrylonitrile	53	4.97	0.543	A	2	A	B
20	T	tert-Butyl methyl ether (MTBE)	73	5.02	0.548	A	1	A	B
21	T	trans-1,2-Dichloroethene	61	5.24	0.573	A	2	A	B
22	T	Isopropyl ether (DIPE)	45	5.80	0.634	A	1	A	B
23	T	Vinyl acetate	43	6.00	0.655	A	1	A	B
24	T	1,1-Dichloroethane	63	5.97	0.652	A	2	A	B
25	T	2-Butanol	45	6.37	0.696	A	1	A	B
26	T	tert-Butyl ethyl ether (ETBE)	59	6.52	0.712	A	1	A	B
27	T	2-Butanone	43	6.72	0.735	A	1	A	B
28	T	2,2-Dichloropropane	77	6.93	0.758	A	2	A	B
29	T	cis-1,2-Dichloroethene	96	7.02	0.768	A	2	A	B
30	T	Chloroform	83	7.29	0.797	A	2	A	B
31	T	tert-Amyl alcohol	59	7.02	0.768	A	2	A	B
32	T	Bromochloromethane	49	7.56	0.826	A	2	A	B
33	T	Tetrahydrofuran	42	7.62	0.833	L	2	A	B
34	S	Dibromofluoromethane	111	7.66	0.837	A	2	A	B
35	T	1,1,1-Trichloroethane	97	7.96	0.870	A	2	A	B
36	T	Cyclohexane	56	7.97	0.872	A	2	A	B
37	T	tert-Amyl methyl ether (TAME)	87	8.43	0.922	A	2	A	B
38	S	1,2-Dichloroethane-d4	65	8.49	0.928	A	1	A	B
39	I	CHLOROBENZENE-D5	117	14.07	1.000	A	2	A	B
40	T	2,2,4-Trimethylpentane	57	8.09	0.575	A	3	A	B
41	T	1,1-Dichloropropene	110	8.21	0.584	A	1	A	B
42	T	Carbon tetrachloride	119	8.38	0.595	A	1	A	B
43	T	1,2-Dichloroethane	62	8.64	0.614	A	1	A	B
44	T	Benzene	78	8.66	0.615	A	2	A	B
45	T	Trichloroethene	130	9.67	0.687	A	3	A	B
46	T	Methylcyclohexane	83	9.76	0.694	A	2	A	B
47	T	1,2-Dichloropropane	63	9.97	0.708	A	2	A	B
48	T	1,4-Dioxane	88	10.38	0.738	A	1	A	B
49	T	Bromodichloromethane	83	10.34	0.735	A	1	A	B
50	T	Dibromomethane	93	10.43	0.741	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	10.87	0.773	A	2	A	B
52	T	4-Methyl-2-pentanone	43	10.90	0.775	A	3	A	B

2045

53	T	cis-1,3-Dichloropropene	75	11.23	0.798	A	3	A	B
54	S	Toluene-d8	98	11.62	0.826	A	1	A	B
55	T	Toluene	91	11.75	0.835	A	1	A	B
56	T	Ethyl methacrylate	69	12.05	0.856	A	2	A	B
57	T	trans-1,3-Dichloropropene	75	12.05	0.856	A	2	A	B
58	T	1,1,2-Trichloroethane	97	12.30	0.874	A	3	A	B
59	T	2-Hexanone	43	12.32	0.875	A	2	A	B
60	T	1,3-Dichloropropane	76	12.72	0.904	A	1	A	B
61	T	Tetrachloroethene	164	12.81	0.910	A	3	A	B
62	T	Dibromochloromethane	129	13.13	0.933	A	1	A	B
63	T	2-Ethyl-1-butanol	43	0.00	0.000	A	3	A	B
64	T	1,2-Dibromoethane	107	13.46	0.957	A	1	A	B
65	T	1-Chlorohexane	91	13.71	0.975	A	3	A	B
66	T	Chlorobenzene	112	14.13	1.004	A	3	A	B
67	T	1,1,1,2-Tetrachloroethane	131	14.20	1.010	A	3	A	B
68	T	Ethylbenzene	91	14.22	1.011	A	1	A	B
69	T	m-Xylene & p-Xylene	91	14.34	1.019	A	1	A	B
70	T	o-Xylene	91	15.05	1.070	A	1	A	B
71	T	Styrene	104	15.11	1.074	A	2	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.34	1.000	A	1	A	B
73	T	Isopropylbenzene	105	15.63	0.852	A	3	A	B
74	T	Bromoform	173	15.68	0.855	L	2	A	B
75	T	1,1,2,2-Tetrachloroethane	83	15.93	0.869	A	1	A	B
76	S	4-Bromofluorobenzene	95	16.05	0.875	A	2	A	B
77	T	1,2,3-Trichloropropane	110	16.17	0.882	A	2	A	B
78	T	trans-1,4-Dichloro-2-butene	53	16.27	0.887	A	1	A	B
79	T	n-Propylbenzene	91	16.28	0.888	A	2	A	B
80	T	Bromobenzene	156	16.37	0.893	A	2	A	B
81	T	1,3,5-Trimethylbenzene	105	16.55	0.903	A	2	A	B
82	T	2-Chlorotoluene	91	16.58	0.904	A	1	A	B
83	T	4-Chlorotoluene	91	16.66	0.908	A	1	A	B
84	T	tert-Butylbenzene	134	17.12	0.934	A	2	A	B
85	T	1,2,4-Trimethylbenzene	105	17.18	0.937	A	1	A	B
86	T	sec-Butylbenzene	105	17.43	0.951	A	1	A	B
87	T	p-Isopropyltoluene	119	17.62	0.961	A	2	A	B
88	T	1,3-Dichlorobenzene	146	17.76	0.968	A	2	A	B
89	T	1,4-Dichlorobenzene	146	17.89	0.976	A	2	A	B
90	T	Benzyl chloride	91	0.00	0.000	A	3	A	B
91	T	n-Butylbenzene	91	18.16	0.990	A	2	A	B
92	T	1,2-Dichlorobenzene	146	18.37	1.002	A	2	A	B
93	T	1,2-Dibromo-3-chloropropane	157	19.27	1.051	A	2	A	B
94	T	1,2,4-Trichlorobenzene	180	20.27	1.105	A	2	A	B
95	T	Hexachlorobutadiene	225	20.42	1.114	A	2	A	B
96	T	Naphthalene	128	20.60	1.123	A	1	A	B
97	T	1,2,3-Trichlorobenzene	180	20.89	1.139	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

VO06H15.M Mon Aug 20 16:00:47 2012

8-21-12

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW003.D Vial: 2
Acq On : 15 Aug 2012 7:22 pm Operator: WL
Sample : VO06H151 Inst : TO06
Misc : 0.3ppb 8260/1.5ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:18 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1684396	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1435167	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	517438	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.66	111	11318	0.22	ug/l	0.00
Spiked Amount 10.000			Recovery	=	2.20%	
38) 1,2-Dichloroethane-d4	8.49	65	10133	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery	=	2.40%	
54) Toluene-d8	11.63	98	46216	0.25	ug/l	0.02
Spiked Amount 10.000			Recovery	=	2.50%	
76) 4-Bromofluorobenzene	16.05	95	18608	0.29	ug/l	0.00
Spiked Amount 10.000			Recovery	=	2.90%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.89	85	14507	0.33	ug/l	95
3) Chloromethane	2.15	50	16324	0.31	ug/l	95
4) Vinyl chloride	2.30	62	11960	0.31	ug/l	96
5) Bromomethane	2.82	94	8015	0.26	ug/l	91
6) Chloroethane	2.92	64	8121	0.30	ug/l	74
7) Dichlorofluoromethane	2.96	67	29367	0.32	ug/l	99
8) Trichlorofluoromethane	3.23	101	16595	0.28	ug/l	97
9) Acrolein	3.78	56	3687	1.78	ug/l	65
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	9428	0.33	ug/l	88
11) Acetone	3.86	43	24185	4.22	ug/l	99
12) 1,1-Dichloroethene	4.06	61	27348	0.31	ug/l	96
13) tert-Butyl alcohol	4.17	59	2685	1.65	ug/l #	1
16) Iodomethane	4.53	142	22767	0.30	ug/l	98
17) Methylene chloride	4.76	49	46456	0.19	ug/l	86
18) Carbon disulfide	4.79	76	46963	0.26	ug/l	98
19) Acrylonitrile	4.99	53	10545	1.46	ug/l	93
20) tert-Butyl methyl ether (M	5.02	73	24246	0.31	ug/l	91
21) trans-1,2-Dichloroethene	5.24	61	30059	0.32	ug/l	99
22) Isopropyl ether (DIPE)	5.80	45	56746	0.31	ug/l	98
24) 1,1-Dichloroethane	5.98	63	32299	0.30	ug/l	97
26) tert-Butyl ethyl ether (ET	6.52	59	40951	0.31	ug/l	98
27) 2-Butanone	6.73	43	19744	1.85	ug/l	86
28) 2,2-Dichloropropane	6.95	77	18576	0.35	ug/l	90
29) cis-1,2-Dichloroethene	7.02	96	19051	0.31	ug/l	97
30) Chloroform	7.29	83	32140	0.33	ug/l	96
32) Bromochloromethane	7.56	49	13143	0.31	ug/l	97
33) Tetrahydrofuran	7.63	42	7189	0.43	ug/l	91

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

8-22-12

2047

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW003.D
Acq On : 15 Aug 2012 7:22 pm
Sample : VO06H151
Misc : 0.3ppb 8260/1.5ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:18 2012

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
35)	1,1,1-Trichloroethane	7.96	97	24502	0.31 ug/l		88
36)	Cyclohexane	7.97	56	43516	0.33 ug/l		78
37)	tert-Amyl methyl ether (TA	8.44	87	6256	0.30 ug/l	#	70
40)	2,2,4-Trimethylpentane	8.09	57	63588	0.27 ug/l	#	35
41)	1,1-Dichloropropene	8.23	110	8665	0.31 ug/l		100
42)	Carbon tetrachloride	8.39	119	21990	0.30 ug/l		98
43)	1,2-Dichloroethane	8.64	62	17269	0.33 ug/l		98
44)	Benzene	8.66	78	75983	0.35 ug/l		97
45)	Trichloroethene	9.67	130	20780	0.34 ug/l		97
46)	Methylcyclohexane	9.76	83	24772	0.25 ug/l		96
47)	1,2-Dichloropropane	9.97	63	17165	0.31 ug/l		97
49)	Bromodichloromethane	10.34	83	19925	0.30 ug/l		96
50)	Dibromomethane	10.43	93	7349	0.31 ug/l		97
51)	2-Chloroethyl vinyl ether	10.87	63	4981	0.28 ug/l	#	73
52)	4-Methyl-2-pentanone	10.90	43	44301	1.56 ug/l		96
53)	cis-1,3-Dichloropropene	11.25	75	23209	0.30 ug/l		97
55)	Toluene	11.75	91	73602	0.33 ug/l		100
56)	Ethyl methacrylate	12.05	69	11235	0.30 ug/l		92
57)	trans-1,3-Dichloropropene	12.05	75	16807	0.30 ug/l		92
58)	1,1,2-Trichloroethane	12.30	97	8823	0.31 ug/l		98
59)	2-Hexanone	12.33	43	27617	1.64 ug/l		97
60)	1,3-Dichloropropane	12.72	76	19240	0.33 ug/l		94
61)	Tetrachloroethene	12.81	164	15621	0.32 ug/l		96
62)	Dibromochloromethane	13.13	129	10708	0.28 ug/l		95
64)	1,2-Dibromoethane	13.46	107	8536	0.29 ug/l		95
65)	1-Chlorohexane	13.73	91	29482	0.31 ug/l		97
66)	Chlorobenzene	14.14	112	44784	0.33 ug/l		88
67)	1,1,1,2-Tetrachloroethane	14.20	131	12704	0.30 ug/l	#	73
68)	Ethylbenzene	14.22	91	86427	0.34 ug/l		98
69)	m-Xylene & p-Xylene	14.34	91	131936	0.68 ug/l		98
70)	o-Xylene	15.05	91	61093	0.31 ug/l		98
71)	Styrene	15.11	104	42762	0.32 ug/l		98
73)	Isopropylbenzene	15.65	105	74776	0.31 ug/l		99
74)	Bromoform	15.68	173	4130	0.36 ug/l		96
75)	1,1,2,2-Tetrachloroethane	15.93	83	10379	0.32 ug/l		95
77)	1,2,3-Trichloropropane	16.18	110	2356	0.27 ug/l		78
78)	trans-1,4-Dichloro-2-buten	16.29	53	2717	0.28 ug/l	#	36
79)	n-Propylbenzene	16.30	91	101305	0.31 ug/l		100
80)	Bromobenzene	16.37	156	15773	0.31 ug/l		96
81)	1,3,5-Trimethylbenzene	16.55	105	61684	0.32 ug/l		97
82)	2-Chlorotoluene	16.58	91	65346	0.32 ug/l		99

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

8-21-12

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW003.D
Acq On : 15 Aug 2012 7:22 pm
Sample : VO06H151
Misc : 0.3ppb 8260/1.5ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:18 2012

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83)	4-Chlorotoluene	16.67	91	52975	0.32 ug/l	98
84)	tert-Butylbenzene	17.12	134	13332	0.30 ug/l	97
85)	1,2,4-Trimethylbenzene	17.18	105	59939	0.32 ug/l	98
86)	sec-Butylbenzene	17.43	105	85786	0.32 ug/l	98
87)	p-Isopropyltoluene	17.62	119	66671	0.32 ug/l	99
88)	1,3-Dichlorobenzene	17.76	146	32320	0.32 ug/l	98
89)	1,4-Dichlorobenzene	17.89	146	31083	0.33 ug/l	100
91)	n-Butylbenzene	18.16	91	68824	0.33 ug/l	97
92)	1,2-Dichlorobenzene	18.37	146	24955	0.33 ug/l	79
94)	1,2,4-Trichlorobenzene	20.27	180	16240	0.34 ug/l	97
95)	Hexachlorobutadiene	20.42	225	11774	0.35 ug/l	97
96)	Naphthalene	20.60	128	21918	0.38 ug/l	98
97)	1,2,3-Trichlorobenzene	20.89	180	11923	0.33 ug/l	93

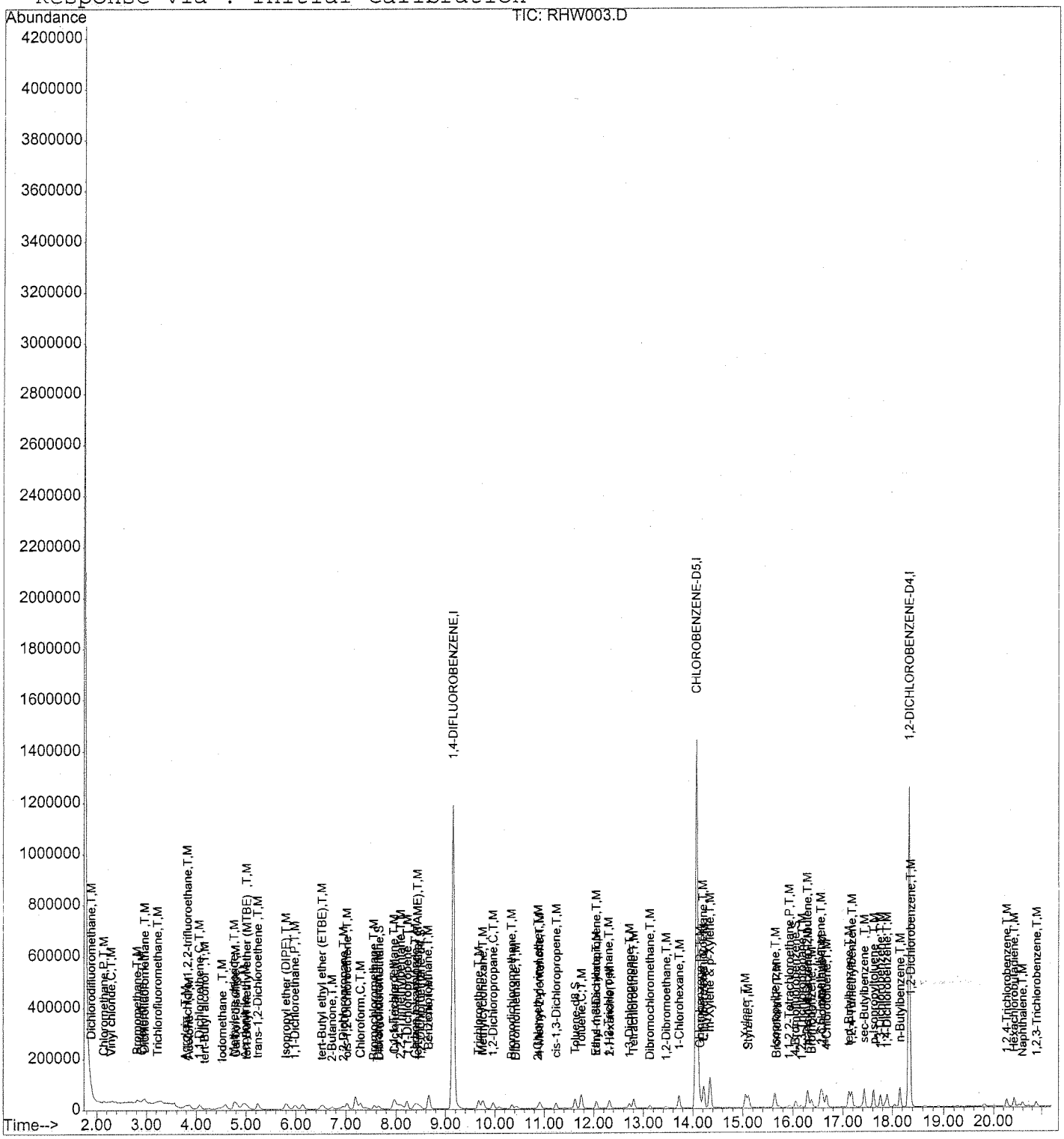
8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW003.D Vial: 2
Acq On : 15 Aug 2012 7:22 pm Operator: WL
Sample : VO06H151 Inst : TO06
Misc : 0.3ppb 8260/1.5ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:18 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2056

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW004.D
Acq On : 15 Aug 2012 7:53 pm
Sample : VO06H152
Misc : 0.5ppb 8260/2.5ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:22 2012

Vial: 3
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1703617	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1458151	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	509753	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.65	111	21073	0.41 ug/l	-0.01
Spiked Amount 10.000			Recovery	= 4.10%	
38) 1,2-Dichloroethane-d4	8.50	65	19012	0.44 ug/l	0.00
Spiked Amount 10.000			Recovery	= 4.40%	
54) Toluene-d8	11.62	98	83846	0.45 ug/l	0.00
Spiked Amount 10.000			Recovery	= 4.50%	
76) 4-Bromofluorobenzene	16.05	95	28145	0.44 ug/l	0.00
Spiked Amount 10.000			Recovery	= 4.40%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.89	85	20953	0.48 ug/l	92
3) Chloromethane	2.15	50	24168	0.46 ug/l	90
4) Vinyl chloride	2.30	62	20387	0.51 ug/l	93
5) Bromomethane	2.82	94	15156	0.48 ug/l	90
6) Chloroethane	2.92	64	11949	0.44 ug/l	83
7) Dichlorofluoromethane	2.96	67	48762	0.52 ug/l	100
8) Trichlorofluoromethane	3.23	101	27297	0.45 ug/l	95
9) Acrolein	3.78	56	4937	2.36 ug/l	81
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	14418	0.50 ug/l	96
11) Acetone	3.87	43	26187	4.51 ug/l	98
12) 1,1-Dichloroethene	4.06	61	43979	0.49 ug/l	99
13) tert-Butyl alcohol	4.15	59	3512	2.13 ug/l	79
15) Methyl acetate	4.54	43	11855	0.63 ug/l	77
16) Iodomethane	4.53	142	36240	0.47 ug/l	99
17) Methylene chloride	4.76	49	56739	0.36 ug/l	88
18) Carbon disulfide	4.79	76	78256	0.43 ug/l	99
19) Acrylonitrile	4.97	53	19079	2.62 ug/l	91
20) tert-Butyl methyl ether (M	5.03	73	43051	0.54 ug/l	100
21) trans-1,2-Dichloroethene	5.22	61	47008	0.50 ug/l	99
22) Isopropyl ether (DIPE)	5.82	45	93324	0.51 ug/l	97
23) Vinyl acetate	6.01	43	29698	0.46 ug/l	95
24) 1,1-Dichloroethane	5.97	63	55031	0.51 ug/l	97
26) tert-Butyl ethyl ether (ET	6.52	59	68382	0.51 ug/l	98
27) 2-Butanone	6.73	43	28920	2.69 ug/l	92
28) 2,2-Dichloropropane	6.93	77	28690	0.53 ug/l	96
29) cis-1,2-Dichloroethene	7.02	96	31993	0.51 ug/l	89
30) Chloroform	7.29	83	50132	0.51 ug/l	99

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW004.D Vial: 3
Acq On : 15 Aug 2012 7:53 pm Operator: WL
Sample : VO06H152 Inst : TO06
Misc : 0.5ppb 8260/2.5ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:22 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32)	Bromochloromethane	7.56	49	22619	0.52 ug/l		95
33)	Tetrahydrofuran	7.63	42	7871	0.52 ug/l		79
35)	1,1,1-Trichloroethane	7.96	97	40590	0.51 ug/l		99
36)	Cyclohexane	7.96	56	82429	0.62 ug/l		81
37)	tert-Amyl methyl ether (TA	8.44	87	10588	0.50 ug/l	#	85
40)	2,2,4-Trimethylpentane	8.08	57	110317	0.46 ug/l	#	65
41)	1,1-Dichloropropene	8.21	110	13848	0.49 ug/l		96
42)	Carbon tetrachloride	8.36	119	35393	0.48 ug/l		99
43)	1,2-Dichloroethane	8.64	62	27743	0.52 ug/l		97
44)	Benzene	8.66	78	120645	0.55 ug/l		99
45)	Trichloroethene	9.67	130	31959	0.51 ug/l		99
46)	Methylcyclohexane	9.76	83	49386	0.49 ug/l		98
47)	1,2-Dichloropropane	9.97	63	28981	0.52 ug/l		97
48)	1,4-Dioxane	10.40	88	1259	7.27 ug/l		98
49)	Bromodichloromethane	10.34	83	31930	0.47 ug/l		95
50)	Dibromomethane	10.41	93	12143	0.50 ug/l		98
51)	2-Chloroethyl vinyl ether	10.87	63	8158	0.45 ug/l		96
52)	4-Methyl-2-pentanone	10.92	43	71062	2.46 ug/l		98
53)	cis-1,3-Dichloropropene	11.23	75	37625	0.48 ug/l		97
55)	Toluene	11.75	91	119529	0.52 ug/l		98
56)	Ethyl methacrylate	12.05	69	18134	0.48 ug/l		95
57)	trans-1,3-Dichloropropene	12.05	75	27503	0.48 ug/l		95
58)	1,1,2-Trichloroethane	12.30	97	14233	0.50 ug/l		98
59)	2-Hexanone	12.33	43	41670	2.43 ug/l		98
60)	1,3-Dichloropropane	12.72	76	30041	0.50 ug/l		96
61)	Tetrachloroethene	12.81	164	25302	0.51 ug/l		99
62)	Dibromochloromethane	13.13	129	17004	0.44 ug/l		97
64)	1,2-Dibromoethane	13.46	107	14398	0.48 ug/l		98
65)	1-Chlorohexane	13.71	91	47313	0.49 ug/l		95
66)	Chlorobenzene	14.13	112	70862	0.52 ug/l		84
67)	1,1,1,2-Tetrachloroethane	14.20	131	21147	0.49 ug/l		90
68)	Ethylbenzene	14.22	91	135256	0.53 ug/l		99
69)	m-Xylene & p-Xylene	14.34	91	206361	1.05 ug/l		99
70)	o-Xylene	15.05	91	99288	0.50 ug/l		98
71)	Styrene	15.11	104	68116	0.50 ug/l		99
73)	Isopropylbenzene	15.65	105	120430	0.50 ug/l		99
74)	Bromoform	15.68	173	7043	0.51 ug/l		96
75)	1,1,2,2-Tetrachloroethane	15.91	83	15303	0.48 ug/l		97
77)	1,2,3-Trichloropropane	16.17	110	4052	0.47 ug/l		90
78)	trans-1,4-Dichloro-2-buten	16.29	53	4776	0.50 ug/l		81
79)	n-Propylbenzene	16.30	91	162398	0.51 ug/l		99

(#) = qualifier out of range (m) = manual integration
RHW004.D VO06H15.M Mon Aug 20 16:23:08 2012 PM 8-21-12 Page 2

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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW004.D
Acq On : 15 Aug 2012 7:53 pm
Sample : VO06H152
Misc : 0.5ppb 8260/2.5ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:22 2012

Vial: 3
Operator: WL
Inst : TO06
Multiplr: 1.00

Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) Bromobenzene	16.37	156	23899	0.48 ug/l	93
81) 1,3,5-Trimethylbenzene	16.55	105	96883	0.51 ug/l	99
82) 2-Chlorotoluene	16.58	91	104548	0.53 ug/l	97
83) 4-Chlorotoluene	16.66	91	83320	0.52 ug/l	99
84) tert-Butylbenzene	17.12	134	21385	0.49 ug/l	94
85) 1,2,4-Trimethylbenzene	17.18	105	94900	0.52 ug/l	98
86) sec-Butylbenzene	17.43	105	134927	0.51 ug/l	99
87) p-Isopropyltoluene	17.62	119	100414	0.50 ug/l	98
88) 1,3-Dichlorobenzene	17.76	146	48506	0.49 ug/l	97
89) 1,4-Dichlorobenzene	17.89	146	47842	0.51 ug/l	99
91) n-Butylbenzene	18.16	91	108127	0.53 ug/l	98
92) 1,2-Dichlorobenzene	18.37	146	39789	0.53 ug/l	89
93) 1,2-Dibromo-3-chloropropan	19.27	157	1350	0.37 ug/l	90
94) 1,2,4-Trichlorobenzene	20.27	180	25155	0.53 ug/l	99
95) Hexachlorobutadiene	20.42	225	17616	0.53 ug/l	98
96) Naphthalene	20.60	128	32432	0.57 ug/l	97
97) 1,2,3-Trichlorobenzene	20.88	180	19010	0.54 ug/l	98

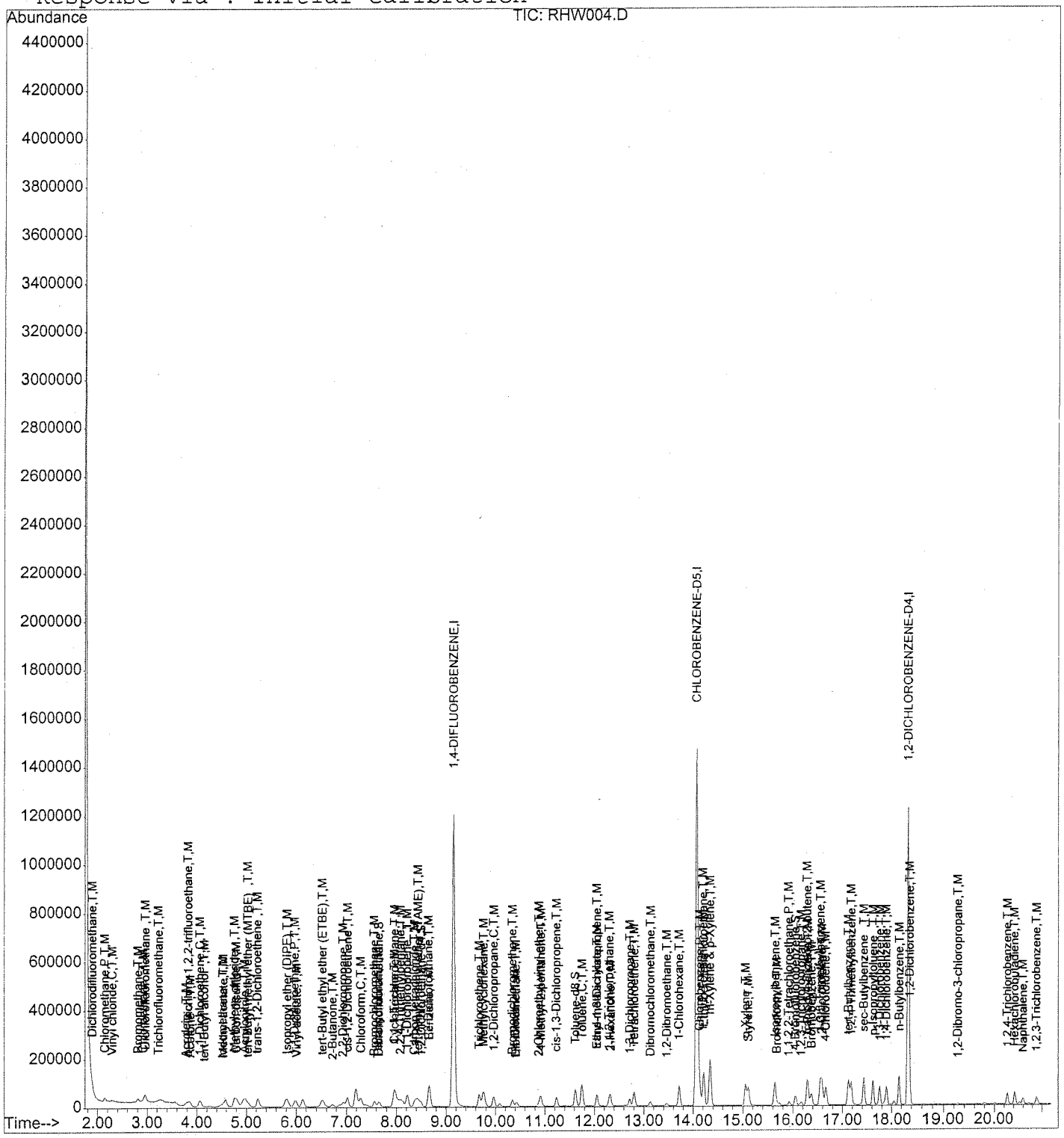
m 8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW004.D Vial: 3
Acq On : 15 Aug 2012 7:53 pm Operator: WL
Sample : VO06H152 Inst : TO06
Misc : 0.5ppb 8260/2.5ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:22 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2054

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW005.D Vial: 4
Acq On : 15 Aug 2012 8:23 pm Operator: WL
Sample : VO06H153 Inst : TO06
Misc : 1.0ppb 8260/5.0ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1673201	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1429024	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	505065	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.66	111	51245	1.01 ug/l	0.00
Spiked Amount 10.000			Recovery	= 10.10%	
38) 1,2-Dichloroethane-d4	8.50	65	45565	1.08 ug/l	0.00
Spiked Amount 10.000			Recovery	= 10.80%	
54) Toluene-d8	11.62	98	186357	1.02 ug/l	0.00
Spiked Amount 10.000			Recovery	= 10.20%	
76) 4-Bromofluorobenzene	16.05	95	61162	0.97 ug/l	0.00
Spiked Amount 10.000			Recovery	= 9.70%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.89	85	39436	0.91 ug/l	97
3) Chloromethane	2.15	50	50246	0.97 ug/l	98
4) Vinyl chloride	2.30	62	38471	0.99 ug/l	100
5) Bromomethane	2.82	94	26982	0.86 ug/l	97
6) Chloroethane	2.92	64	24082	0.90 ug/l	70
7) Dichlorofluoromethane	2.96	67	100275	1.09 ug/l	100
8) Trichlorofluoromethane	3.23	101	52299	0.88 ug/l	95
9) Acrolein	3.78	56	10247	4.98 ug/l	90
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	28048	1.00 ug/l	99
11) Acetone	3.87	43	40947	7.19 ug/l	94
12) 1,1-Dichloroethene	4.06	61	91023	1.04 ug/l	99
13) tert-Butyl alcohol	4.18	59	7773	4.81 ug/l #	1
15) Methyl acetate	4.54	43	20435	1.10 ug/l	88
16) Iodomethane	4.53	142	77217	1.02 ug/l	97
17) Methylene chloride	4.76	49	91847	0.99 ug/l	87
18) Carbon disulfide	4.79	76	173107	0.96 ug/l	99
19) Acrylonitrile	4.97	53	35595	4.97 ug/l	96
20) tert-Butyl methyl ether (M	5.02	73	81211	1.03 ug/l	96
21) trans-1,2-Dichloroethene	5.24	61	97779	1.05 ug/l	99
22) Isopropyl ether (DIPE)	5.80	45	190111	1.05 ug/l	100
23) Vinyl acetate	6.01	43	59347	0.94 ug/l	93
24) 1,1-Dichloroethane	5.98	63	111862	1.05 ug/l	98
25) 2-Butanol	6.40	45	7406	4.68 ug/l #	1
26) tert-Butyl ethyl ether (ET	6.52	59	135737	1.03 ug/l	99
27) 2-Butanone	6.73	43	56503	5.34 ug/l	95
28) 2,2-Dichloropropane	6.95	77	59565	1.12 ug/l	99
29) cis-1,2-Dichloroethene	7.02	96	64723	1.06 ug/l	92

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

2055

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW005.D
Acq On : 15 Aug 2012 8:23 pm
Sample : VO06H153
Misc : 1.0ppb 8260/5.0ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 4
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Chloroform	7.29	83	103368	1.07 ug/l		99
32)	Bromochloromethane	7.56	49	44249	1.04 ug/l		98
33)	Tetrahydrofuran	7.63	42	11616	1.13 ug/l		88
35)	1,1,1-Trichloroethane	7.96	97	83109	1.06 ug/l		98
36)	Cyclohexane	7.98	56	129179	0.99 ug/l		99
37)	tert-Amyl methyl ether (TA	8.44	87	20999	1.02 ug/l	#	87
40)	2,2,4-Trimethylpentane	8.08	57	245956	1.06 ug/l		98
41)	1,1-Dichloropropene	8.23	110	28608	1.03 ug/l		96
42)	Carbon tetrachloride	8.38	119	74094	1.02 ug/l		99
43)	1,2-Dichloroethane	8.66	62	56571	1.08 ug/l		98
44)	Benzene	8.66	78	232071	1.07 ug/l		99
45)	Trichloroethene	9.67	130	60521	0.98 ug/l		96
46)	Methylcyclohexane	9.76	83	102096	1.03 ug/l		100
47)	1,2-Dichloropropane	9.97	63	56714	1.03 ug/l		95
48)	1,4-Dioxane	10.40	88	2768	16.30 ug/l		83
49)	Bromodichloromethane	10.34	83	64730	0.97 ug/l		100
50)	Dibromomethane	10.43	93	24178	1.02 ug/l		99
51)	2-Chloroethyl vinyl ether	10.87	63	16592	0.94 ug/l		95
52)	4-Methyl-2-pentanone	10.92	43	139657	4.94 ug/l		98
53)	cis-1,3-Dichloropropene	11.25	75	73739	0.96 ug/l		97
55)	Toluene	11.75	91	236657	1.06 ug/l		97
56)	Ethyl methacrylate	12.05	69	35532	0.97 ug/l		96
57)	trans-1,3-Dichloropropene	12.05	75	54367	0.96 ug/l		99
58)	1,1,2-Trichloroethane	12.30	97	29119	1.04 ug/l		97
59)	2-Hexanone	12.33	43	83000	4.94 ug/l		97
60)	1,3-Dichloropropane	12.72	76	59265	1.01 ug/l		97
61)	Tetrachloroethene	12.81	164	50330	1.03 ug/l		98
62)	Dibromochloromethane	13.13	129	35608	0.94 ug/l		94
64)	1,2-Dibromoethane	13.46	107	28307	0.97 ug/l		95
65)	1-Chlorohexane	13.73	91	96208	1.02 ug/l		98
66)	Chlorobenzene	14.13	112	139335	1.04 ug/l		92
67)	1,1,1,2-Tetrachloroethane	14.20	131	42927	1.01 ug/l		95
68)	Ethylbenzene	14.22	91	274158	1.09 ug/l		100
69)	m-Xylene & p-Xylene	14.35	91	417376	2.16 ug/l		98
70)	o-Xylene	15.05	91	203488	1.05 ug/l		100
71)	Styrene	15.11	104	135649	1.02 ug/l		98
73)	Isopropylbenzene	15.65	105	237288	1.00 ug/l		99
74)	Bromoform	15.68	173	15268	0.93 ug/l		94
75)	1,1,2,2-Tetrachloroethane	15.93	83	29732	0.94 ug/l		95
77)	1,2,3-Trichloropropane	16.17	110	8010	0.95 ug/l		93
78)	trans-1,4-Dichloro-2-buten	16.29	53	9117	0.96 ug/l		85

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW005.D
Acq On : 15 Aug 2012 8:23 pm
Sample : VO06H153
Misc : 1.0ppb 8260/5.0ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 4
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.30	91	327991	1.04 ug/l	99
80)	Bromobenzene	16.38	156	49366	1.00 ug/l	97
81)	1,3,5-Trimethylbenzene	16.55	105	199135	1.05 ug/l	100
82)	2-Chlorotoluene	16.58	91	207086	1.05 ug/l	100
83)	4-Chlorotoluene	16.67	91	171135	1.07 ug/l	98
84)	tert-Butylbenzene	17.12	134	45587	1.05 ug/l	98
85)	1,2,4-Trimethylbenzene	17.18	105	193048	1.06 ug/l	98
86)	sec-Butylbenzene	17.43	105	274112	1.05 ug/l	99
87)	p-Isopropyltoluene	17.62	119	210230	1.05 ug/l	99
88)	1,3-Dichlorobenzene	17.76	146	101947	1.05 ug/l	99
89)	1,4-Dichlorobenzene	17.91	146	94960	1.02 ug/l	100
91)	n-Butylbenzene	18.16	91	216306	1.06 ug/l	99
92)	1,2-Dichlorobenzene	18.37	146	76455	1.02 ug/l	92
93)	1,2-Dibromo-3-chloropropan	19.27	157	3715	1.01 ug/l	95
94)	1,2,4-Trichlorobenzene	20.27	180	51109	1.09 ug/l	100
95)	Hexachlorobutadiene	20.43	225	36524	1.10 ug/l	98
96)	Naphthalene	20.60	128	65964	1.16 ug/l	99
97)	1,2,3-Trichlorobenzene	20.89	180	39673	1.13 ug/l	97

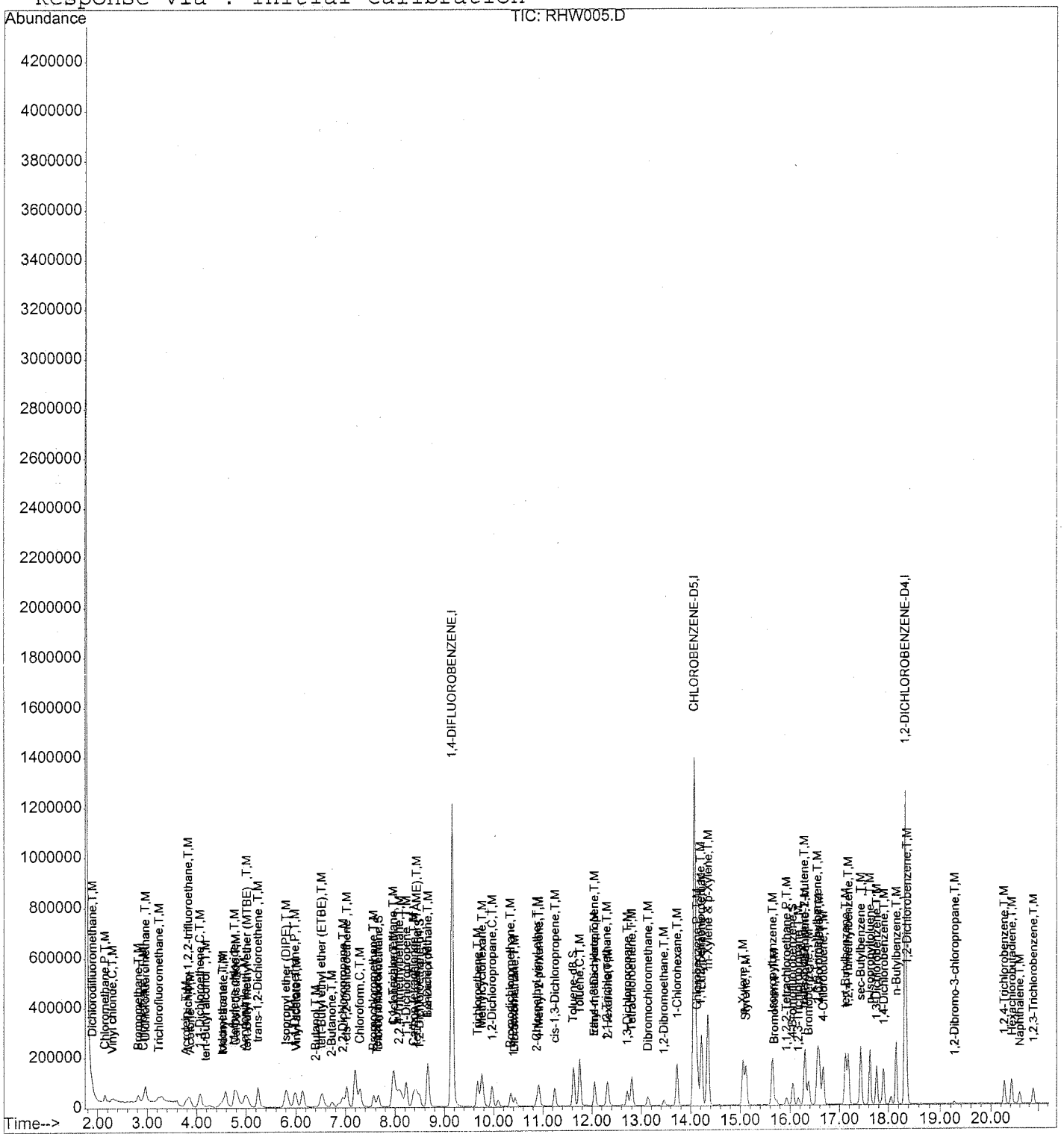
8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW005.D Vial: 4
Acq On : 15 Aug 2012 8:23 pm Operator: WL
Sample : VO06H153 Inst : TO06
Misc : 1.0ppb 8260/5.0ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2958

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW006.D
Acq On : 15 Aug 2012 8:54 pm
Sample : VO06H154
Misc : 2.0ppb 8260/10ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 5
Operator: WL
Inst : TO06
Multiplr: 1.00

Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1618568	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1396085	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	508493	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.65	111	101453	2.08 ug/l	0.00
Spiked Amount 10.000			Recovery	= 20.80%	
38) 1,2-Dichloroethane-d4	8.48	65	86205	2.11 ug/l	0.00
Spiked Amount 10.000			Recovery	= 21.10%	
54) Toluene-d8	11.62	98	368158	2.07 ug/l	0.00
Spiked Amount 10.000			Recovery	= 20.70%	
76) 4-Bromofluorobenzene	16.05	95	117946	1.86 ug/l	0.00
Spiked Amount 10.000			Recovery	= 18.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.90	85	82608	1.98 ug/l	96
3) Chloromethane	2.15	50	105880	2.11 ug/l	99
4) Vinyl chloride	2.30	62	85560	2.27 ug/l	99
5) Bromomethane	2.81	94	63968	2.12 ug/l	98
6) Chloroethane	2.92	64	55972	2.17 ug/l	96
7) Dichlorofluoromethane	2.95	67	167155	1.88 ug/l	99
8) Trichlorofluoromethane	3.24	101	120111	2.09 ug/l	99
9) Acrolein	3.77	56	19857	9.99 ug/l	88
10) 1,1,2-Trichloro-1,2,2-trif	3.82	151	47113	1.73 ug/l	99
11) Acetone	3.86	43	67002	12.15 ug/l	98
12) 1,1-Dichloroethene	4.07	61	159017	1.87 ug/l	99
13) tert-Butyl alcohol	4.16	59	14837	9.48 ug/l	89
15) Methyl acetate	4.54	43	38601	2.14 ug/l	93
16) Iodomethane	4.53	142	133840	1.84 ug/l	100
17) Methylene chloride	4.81	49	141893	1.95 ug/l	96
18) Carbon disulfide	4.80	76	357660	2.06 ug/l	98
19) Acrylonitrile	4.98	53	75207	10.86 ug/l	98
20) tert-Butyl methyl ether (M	5.02	73	147462	1.94 ug/l	98
21) trans-1,2-Dichloroethene	5.23	61	171235	1.90 ug/l	99
22) Isopropyl ether (DIPE)	5.81	45	335920	1.92 ug/l	100
23) Vinyl acetate	6.00	43	132604	2.18 ug/l	98
24) 1,1-Dichloroethane	5.97	63	201521	1.96 ug/l	98
25) 2-Butanol	6.39	45	16314	10.66 ug/l	100
26) tert-Butyl ethyl ether (ET	6.52	59	249404	1.95 ug/l	97
27) 2-Butanone	6.72	43	102090	9.98 ug/l	100
28) 2,2-Dichloropropane	6.94	77	100286	1.94 ug/l	97
29) cis-1,2-Dichloroethene	7.03	96	116215	1.96 ug/l	95

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

8-21-12

2059

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW006.D
Acq On : 15 Aug 2012 8:54 pm
Sample : VO06H154
Misc : 2.0ppb 8260/10ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 5
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Chloroform	7.30	83	182486	1.95 ug/l		99
32)	Bromochloromethane	7.56	49	79143	1.92 ug/l		97
33)	Tetrahydrofuran	7.64	42	15988	1.89 ug/l		92
35)	1,1,1-Trichloroethane	7.95	97	145342	1.91 ug/l		98
36)	Cyclohexane	7.98	56	249186	1.98 ug/l		98
37)	tert-Amyl methyl ether (TA	8.43	87	37682	1.89 ug/l	#	92
40)	2,2,4-Trimethylpentane	8.10	57	487559	2.14 ug/l	#	72
41)	1,1-Dichloropropene	8.22	110	50224	1.85 ug/l		98
42)	Carbon tetrachloride	8.38	119	123566	1.75 ug/l		98
43)	1,2-Dichloroethane	8.65	62	98273	1.92 ug/l		98
44)	Benzene	8.66	78	397990	1.89 ug/l		100
45)	Trichloroethene	9.67	130	107729	1.79 ug/l		98
46)	Methylcyclohexane	9.76	83	202463	2.08 ug/l		99
47)	1,2-Dichloropropane	9.96	63	101276	1.89 ug/l		98
48)	1,4-Dioxane	10.39	88	5668	34.16 ug/l		86
49)	Bromodichloromethane	10.34	83	118900	1.83 ug/l		98
50)	Dibromomethane	10.43	93	42323	1.82 ug/l		96
51)	2-Chloroethyl vinyl ether	10.86	63	30948	1.79 ug/l		96
52)	4-Methyl-2-pentanone	10.91	43	287213	10.41 ug/l		100
53)	cis-1,3-Dichloropropene	11.24	75	137917	1.83 ug/l		98
55)	Toluene	11.74	91	422830	1.93 ug/l		100
56)	Ethyl methacrylate	12.05	69	65922	1.84 ug/l		99
57)	trans-1,3-Dichloropropene	12.05	75	101468	1.84 ug/l		99
58)	1,1,2-Trichloroethane	12.31	97	50525	1.84 ug/l		98
59)	2-Hexanone	12.32	43	172004	10.47 ug/l		99
60)	1,3-Dichloropropane	12.71	76	107465	1.88 ug/l		99
61)	Tetrachloroethene	12.80	164	88580	1.86 ug/l		99
62)	Dibromochloromethane	13.14	129	65524	1.77 ug/l		100
64)	1,2-Dibromoethane	13.45	107	53132	1.86 ug/l		98
65)	1-Chlorohexane	13.72	91	168675	1.83 ug/l		98
66)	Chlorobenzene	14.13	112	247756	1.89 ug/l		97
67)	1,1,1,2-Tetrachloroethane	14.21	131	78848	1.90 ug/l		97
68)	Ethylbenzene	14.22	91	482379	1.96 ug/l		99
69)	m-Xylene & p-Xylene	14.34	91	715107	3.79 ug/l		99
70)	o-Xylene	15.06	91	365341	1.94 ug/l		99
71)	Styrene	15.12	104	248576	1.90 ug/l		99
73)	Isopropylbenzene	15.64	105	421211	1.77 ug/l		99
74)	Bromoform	15.67	173	29596	1.64 ug/l		94
75)	1,1,2,2-Tetrachloroethane	15.92	83	56006	1.76 ug/l		98
77)	1,2,3-Trichloropropane	16.17	110	15679	1.84 ug/l		96
78)	trans-1,4-Dichloro-2-buten	16.28	53	15639	1.64 ug/l		98

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

8-21-12

2060

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW006.D
Acq On : 15 Aug 2012 8:54 pm
Sample : VO06H154
Misc : 2.0ppb 8260/10ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 5
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.29	91	577309	1.81 ug/l	100
80)	Bromobenzene	16.38	156	88741	1.79 ug/l	99
81)	1,3,5-Trimethylbenzene	16.54	105	347648	1.82 ug/l	100
82)	2-Chlorotoluene	16.59	91	339754	1.71 ug/l	94
83)	4-Chlorotoluene	16.66	91	312137	1.94 ug/l	92
84)	tert-Butylbenzene	17.12	134	77031	1.76 ug/l	94
85)	1,2,4-Trimethylbenzene	17.18	105	339828	1.85 ug/l	99
86)	sec-Butylbenzene	17.43	105	494666	1.88 ug/l	98
87)	p-Isopropyltoluene	17.61	119	375039	1.86 ug/l	99
88)	1,3-Dichlorobenzene	17.76	146	178657	1.82 ug/l	100
89)	1,4-Dichlorobenzene	17.90	146	169913	1.82 ug/l	99
91)	n-Butylbenzene	18.15	91	378504	1.85 ug/l	99
92)	1,2-Dichlorobenzene	18.37	146	138371	1.84 ug/l	96
93)	1,2-Dibromo-3-chloropropan	19.26	157	6831	1.85 ug/l	93
94)	1,2,4-Trichlorobenzene	20.27	180	92641	1.96 ug/l	100
95)	Hexachlorobutadiene	20.42	225	66920	2.01 ug/l	99
96)	Naphthalene	20.59	128	119352	2.09 ug/l	99
97)	1,2,3-Trichlorobenzene	20.88	180	71975	2.04 ug/l	100

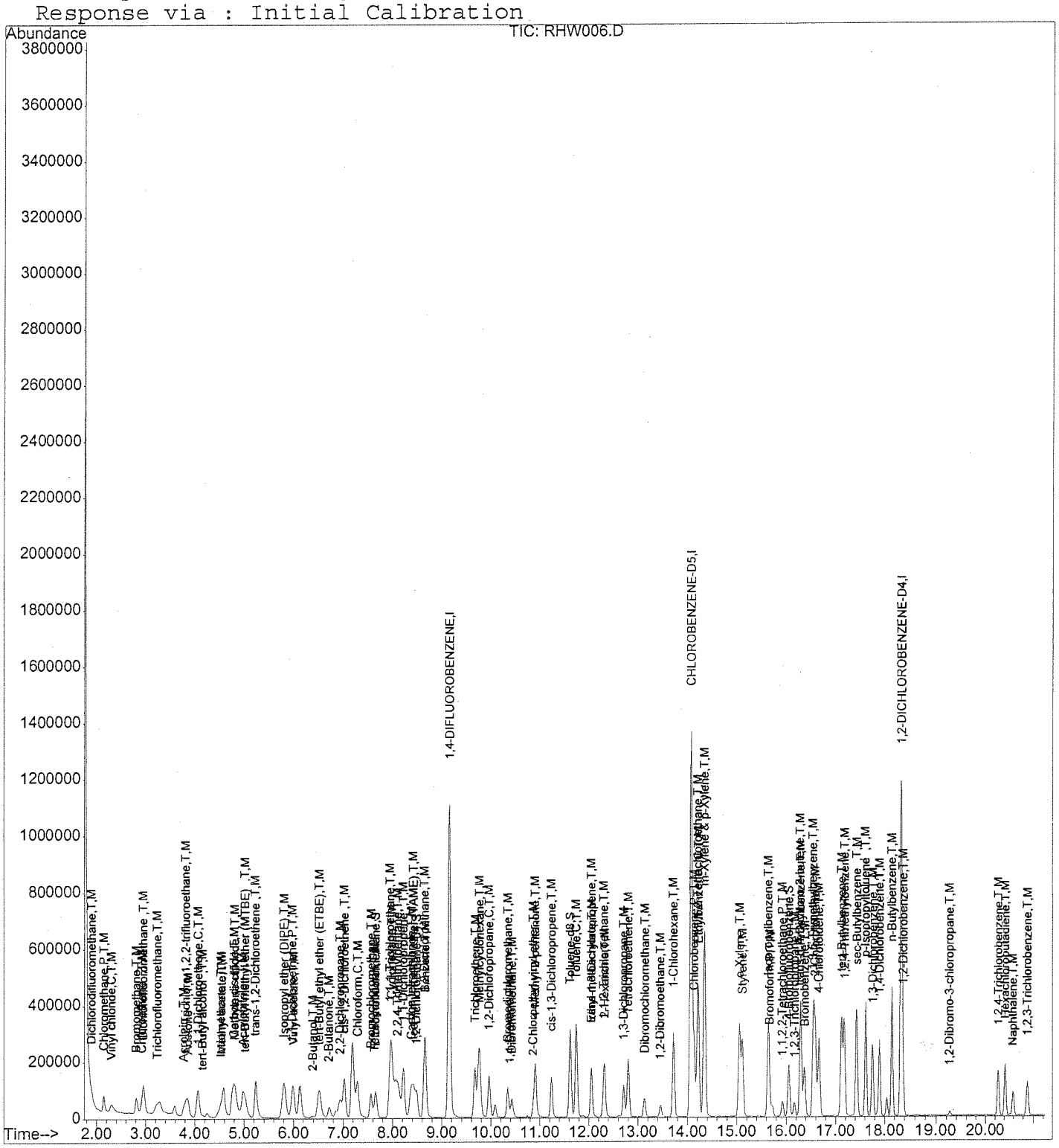
8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW006.D Vial: 5
Acq On : 15 Aug 2012 8:54 pm Operator: WL
Sample : VO06H154 Inst : TO06
Misc : 2.0ppb 8260/10ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2062

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW007.D Vial: 6
Acq On : 15 Aug 2012 9:23 pm Operator: WL
Sample : VO06H155 Inst : TO06
Misc : 5.0ppb 8260/25ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1604526	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1363601	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	475284	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.66	111	272737	5.63 ug/l	0.00
Spiked Amount 10.000			Recovery	= 56.30%	
38) 1,2-Dichloroethane-d4	8.49	65	223713	5.53 ug/l	0.00
Spiked Amount 10.000			Recovery	= 55.30%	
54) Toluene-d8	11.62	98	991496	5.70 ug/l	0.00
Spiked Amount 10.000			Recovery	= 57.00%	
76) 4-Bromofluorobenzene	16.05	95	318737	5.39 ug/l	0.00
Spiked Amount 10.000			Recovery	= 53.90%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.89	85	227348	5.49 ug/l	99
3) Chloromethane	2.15	50	274065	5.51 ug/l	99
4) Vinyl chloride	2.29	62	220559	5.91 ug/l	100
5) Bromomethane	2.82	94	174139	5.82 ug/l	98
6) Chloroethane	2.92	64	142362	5.57 ug/l	99
7) Dichlorofluoromethane	2.96	67	447796	5.08 ug/l	99
8) Trichlorofluoromethane	3.25	101	332011	5.82 ug/l	100
9) Acrolein	3.77	56	48101	24.40 ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	135307	5.02 ug/l	98
11) Acetone	3.87	43	133634	24.45 ug/l	99
12) 1,1-Dichloroethene	4.06	61	428148	5.08 ug/l	99
13) tert-Butyl alcohol	4.15	59	38933	25.10 ug/l	96
15) Methyl acetate	4.54	43	94696	5.30 ug/l	95
16) Iodomethane	4.53	142	368460	5.10 ug/l	100
17) Methylene chloride	4.76	49	330793	5.42 ug/l	88
18) Carbon disulfide	4.79	76	909489	5.28 ug/l	98
19) Acrylonitrile	4.97	53	169870	24.74 ug/l	99
20) tert-Butyl methyl ether (M	5.02	73	373095	4.95 ug/l	99
21) trans-1,2-Dichloroethene	5.24	61	460561	5.16 ug/l	99
22) Isopropyl ether (DIPE)	5.80	45	878334	5.06 ug/l	99
23) Vinyl acetate	6.00	43	327957	5.44 ug/l	99
24) 1,1-Dichloroethane	5.97	63	533874	5.23 ug/l	99
25) 2-Butanol	6.38	45	40749	26.87 ug/l	100
26) tert-Butyl ethyl ether (ET	6.52	59	628638	4.95 ug/l	100
27) 2-Butanone	6.73	43	229024	22.58 ug/l	99
28) 2,2-Dichloropropane	6.95	77	271706	5.31 ug/l	99
29) cis-1,2-Dichloroethene	7.02	96	296030	5.05 ug/l	98

(#) = qualifier out of range (m) = manual integration
RHW007.D VO06H15.M Mon Aug 20 16:26:55 2012 RM 8-21-12

2063

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW007.D
Acq On : 15 Aug 2012 9:23 pm
Sample : VO06H155
Misc : 5.0ppb 8260/25ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 6
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Chloroform	7.29	83	466289	5.02 ug/l		99
32)	Bromochloromethane	7.56	49	201195	4.93 ug/l		99
33)	Tetrahydrofuran	7.62	42	33501	4.76 ug/l		96
35)	1,1,1-Trichloroethane	7.96	97	394281	5.22 ug/l		99
36)	Cyclohexane	7.97	56	662284	5.30 ug/l		97
37)	tert-Amyl methyl ether (TA	8.44	87	95347	4.82 ug/l		97
40)	2,2,4-Trimethylpentane	8.06	57	1257309	5.66 ug/l	#	71
41)	1,1-Dichloropropene	8.23	110	133700	5.04 ug/l		99
42)	Carbon tetrachloride	8.38	119	347046	5.03 ug/l		100
43)	1,2-Dichloroethane	8.64	62	248640	4.97 ug/l		98
44)	Benzene	8.66	78	1003623	4.87 ug/l		99
45)	Trichloroethene	9.67	130	294680	5.01 ug/l		99
46)	Methylcyclohexane	9.74	83	556650	5.86 ug/l		99
47)	1,2-Dichloropropane	9.97	63	258681	4.95 ug/l		99
48)	1,4-Dioxane	10.38	88	17298	106.75 ug/l		93
49)	Bromodichloromethane	10.34	83	314611	4.95 ug/l		100
50)	Dibromomethane	10.43	93	112515	4.96 ug/l		100
51)	2-Chloroethyl vinyl ether	10.86	63	84096	4.98 ug/l		97
52)	4-Methyl-2-pentanone	10.90	43	666513	24.72 ug/l		99
53)	cis-1,3-Dichloropropene	11.23	75	370435	5.04 ug/l		99
55)	Toluene	11.75	91	1094034	5.12 ug/l		100
56)	Ethyl methacrylate	12.05	69	172024	4.91 ug/l		98
57)	trans-1,3-Dichloropropene	12.05	75	265645	4.94 ug/l		98
58)	1,1,2-Trichloroethane	12.30	97	133903	4.99 ug/l		99
59)	2-Hexanone	12.32	43	398004	24.80 ug/l		99
60)	1,3-Dichloropropane	12.72	76	274852	4.92 ug/l		99
61)	Tetrachloroethene	12.81	164	231048	4.98 ug/l		98
62)	Dibromochloromethane	13.13	129	177559	4.91 ug/l		100
64)	1,2-Dibromoethane	13.46	107	138373	4.96 ug/l		100
65)	1-Chlorohexane	13.71	91	460739	5.12 ug/l		99
66)	Chlorobenzene	14.13	112	636167	4.97 ug/l		99
67)	1,1,1,2-Tetrachloroethane	14.20	131	202193	4.99 ug/l		99
68)	Ethylbenzene	14.22	91	1226929	5.12 ug/l		99
69)	m-Xylene & p-Xylene	14.34	91	1863799	10.12 ug/l		99
70)	o-Xylene	15.05	91	961229	5.22 ug/l		98
71)	Styrene	15.11	104	671239	5.27 ug/l		99
73)	Isopropylbenzene	15.63	105	1125864	5.06 ug/l		100
74)	Bromoform	15.68	173	79924	4.44 ug/l		98
75)	1,1,2,2-Tetrachloroethane	15.93	83	144519	4.86 ug/l		99
77)	1,2,3-Trichloropropane	16.17	110	39777	4.99 ug/l		95
78)	trans-1,4-Dichloro-2-buten	16.27	53	44561	4.98 ug/l		94

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

PM 8-21-12

2064

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW007.D
Acq On : 15 Aug 2012 9:23 pm
Sample : VO06H155
Misc : 5.0ppb 8260/25ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 6
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.29	91	1530106	5.15 ug/l	100
80)	Bromobenzene	16.37	156	225647	4.87 ug/l	100
81)	1,3,5-Trimethylbenzene	16.55	105	908147	5.08 ug/l	99
82)	2-Chlorotoluene	16.58	91	946708	5.11 ug/l	100
83)	4-Chlorotoluene	16.66	91	719573	4.79 ug/l	100
84)	tert-Butylbenzene	17.12	134	207964	5.07 ug/l	98
85)	1,2,4-Trimethylbenzene	17.18	105	882877	5.14 ug/l	99
86)	sec-Butylbenzene	17.43	105	1274782	5.17 ug/l	99
87)	p-Isopropyltoluene	17.62	119	969946	5.14 ug/l	99
88)	1,3-Dichlorobenzene	17.76	146	456443	4.98 ug/l	99
89)	1,4-Dichlorobenzene	17.89	146	438860	5.02 ug/l	100
91)	n-Butylbenzene	18.14	91	1000797	5.22 ug/l	99
92)	1,2-Dichlorobenzene	18.37	146	352899	5.02 ug/l	99
93)	1,2-Dibromo-3-chloropropan	19.27	157	18345	5.33 ug/l	98
94)	1,2,4-Trichlorobenzene	20.27	180	242082	5.49 ug/l	99
95)	Hexachlorobutadiene	20.42	225	174184	5.59 ug/l	99
96)	Naphthalene	20.60	128	301325	5.63 ug/l	100
97)	1,2,3-Trichlorobenzene	20.89	180	183762	5.57 ug/l	99

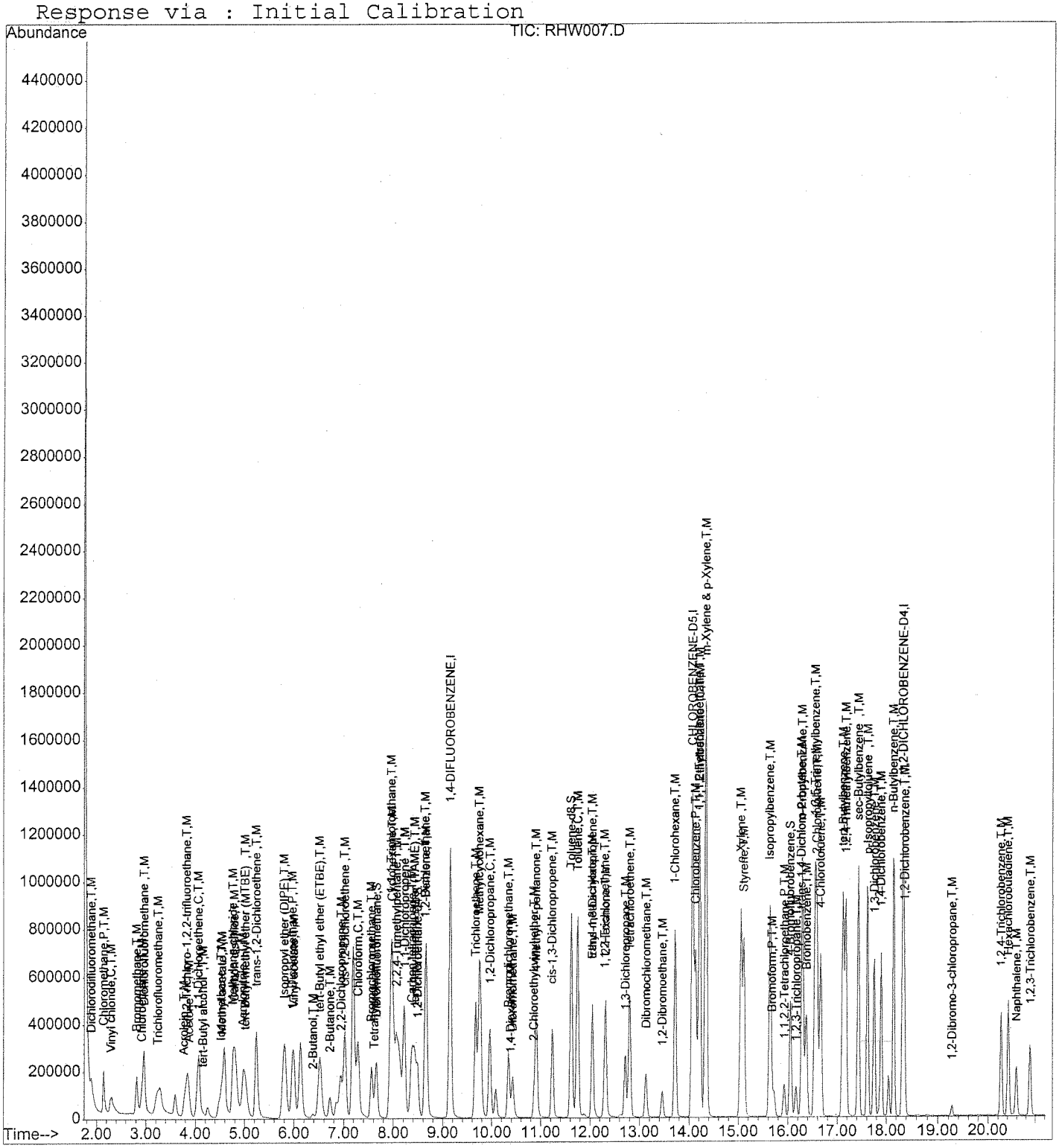
8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW007.D Vial: 6
Acq On : 15 Aug 2012 9:23 pm Operator: WL
Sample : VO06H155 Inst : TO06
Misc : 5.0ppb 8260/25ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-22-12

2666

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW008.D
Acq On : 15 Aug 2012 9:54 pm
Sample : VO06H156
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 7
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1654332	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1432235	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	489315	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.66	111	547360	10.96	ug/l	0.00
Spiked Amount 10.000			Recovery	=	109.60%	
38) 1,2-Dichloroethane-d4	8.49	65	460705	11.04	ug/l	0.00
Spiked Amount 10.000			Recovery	=	110.40%	
54) Toluene-d8	11.62	98	1938847	10.61	ug/l	0.00
Spiked Amount 10.000			Recovery	=	106.10%	
76) 4-Bromofluorobenzene	16.05	95	634772	10.42	ug/l	0.00
Spiked Amount 10.000			Recovery	=	104.20%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.89	85	427306	10.02	ug/l	100
3) Chloromethane	2.15	50	528794	10.31	ug/l	100
4) Vinyl chloride	2.29	62	390122	10.13	ug/l	100
5) Bromomethane	2.81	94	334700	10.85	ug/l	100
6) Chloroethane	2.92	64	288185	10.95	ug/l	100
7) Dichlorofluoromethane	2.96	67	949901	10.46	ug/l	100
8) Trichlorofluoromethane	3.25	101	618983	10.53	ug/l	100
9) Acrolein	3.77	56	103473	50.91	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	279245	10.04	ug/l	100
11) Acetone	3.86	43	281216	49.91	ug/l	100
12) 1,1-Dichloroethene	4.06	61	883388	10.17	ug/l	100
13) tert-Butyl alcohol	4.15	59	91451	57.19	ug/l	100
15) Methyl acetate	4.54	43	172219	9.36	ug/l	100
16) Iodomethane	4.52	142	752457	10.10	ug/l	100
17) Methylene chloride	4.76	49	648778	10.88	ug/l	100
18) Carbon disulfide	4.79	76	1876655	10.57	ug/l	100
19) Acrylonitrile	4.97	53	362605	51.22	ug/l	100
20) tert-Butyl methyl ether (M	5.02	73	817115	10.50	ug/l	100
21) trans-1,2-Dichloroethene	5.24	61	924416	10.04	ug/l	100
22) Isopropyl ether (DIPE)	5.80	45	1857211	10.37	ug/l	100
23) Vinyl acetate	6.00	43	656451	10.55	ug/l	100
24) 1,1-Dichloroethane	5.97	63	1073447	10.19	ug/l	100
25) 2-Butanol	6.37	45	73836	47.22	ug/l	100
26) tert-Butyl ethyl ether (ET	6.52	59	1345996	10.29	ug/l	100
27) 2-Butanone	6.72	43	512648	49.02	ug/l	100
28) 2,2-Dichloropropane	6.93	77	546977	10.36	ug/l	100
29) cis-1,2-Dichloroethene	7.02	96	600621	9.93	ug/l	100

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW008.D
Acq On : 15 Aug 2012 9:54 pm
Sample : VO06H156
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 7
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	Chloroform	7.29	83	951680	9.95 ug/l	100
32)	Bromochloromethane	7.56	49	433861	10.30 ug/l	100
33)	Tetrahydrofuran	7.62	42	67722	9.99 ug/l	100
35)	1,1,1-Trichloroethane	7.96	97	800820	10.29 ug/l	100
36)	Cyclohexane	7.97	56	1217420	9.45 ug/l	100
37)	tert-Amyl methyl ether (TA	8.43	87	219210	10.75 ug/l	100
40)	2,2,4-Trimethylpentane	8.09	57	2315931	9.92 ug/l	100
41)	1,1-Dichloropropene	8.21	110	273735	9.83 ug/l	100
42)	Carbon tetrachloride	8.38	119	729817	10.07 ug/l	100
43)	1,2-Dichloroethane	8.64	62	524892	9.98 ug/l	100
44)	Benzene	8.66	78	2088809	9.65 ug/l	100
45)	Trichloroethene	9.67	130	611201	9.89 ug/l	100
46)	Methylcyclohexane	9.76	83	1003583	10.06 ug/l	100
47)	1,2-Dichloropropane	9.97	63	548408	9.98 ug/l	100
48)	1,4-Dioxane	10.38	88	34812	204.54 ug/l	100
49)	Bromodichloromethane	10.34	83	683254	10.24 ug/l	100
50)	Dibromomethane	10.43	93	241256	10.12 ug/l	100
51)	2-Chloroethyl vinyl ether	10.87	63	188502	10.63 ug/l	100
52)	4-Methyl-2-pentanone	10.90	43	1480123	52.27 ug/l	100
53)	cis-1,3-Dichloropropene	11.23	75	798774	10.35 ug/l	100
55)	Toluene	11.75	91	2212675	9.86 ug/l	100
56)	Ethyl methacrylate	12.05	69	390843	10.62 ug/l	100
57)	trans-1,3-Dichloropropene	12.05	75	591390	10.47 ug/l	100
58)	1,1,2-Trichloroethane	12.30	97	289819	10.29 ug/l	100
59)	2-Hexanone	12.32	43	881961	52.33 ug/l	100
60)	1,3-Dichloropropane	12.72	76	606294	10.34 ug/l	100
61)	Tetrachloroethene	12.81	164	480324	9.85 ug/l	100
62)	Dibromochloromethane	13.13	129	400566	10.55 ug/l	100
64)	1,2-Dibromoethane	13.46	107	304845	10.39 ug/l	100
65)	1-Chlorohexane	13.71	91	970386	10.27 ug/l	100
66)	Chlorobenzene	14.13	112	1309865	9.74 ug/l	100
67)	1,1,1,2-Tetrachloroethane	14.20	131	440434	10.34 ug/l	100
68)	Ethylbenzene	14.22	91	2530951	10.05 ug/l	100
69)	m-Xylene & p-Xylene	14.34	91	3757093	19.42 ug/l	100
70)	o-Xylene	15.05	91	1977643	10.22 ug/l	100
71)	Styrene	15.11	104	1389288	10.38 ug/l	100
73)	Isopropylbenzene	15.63	105	2312854	10.09 ug/l	100
74)	Bromoform	15.68	173	182928	9.67 ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.93	83	314044	10.27 ug/l	100
77)	1,2,3-Trichloropropane	16.17	110	85665	10.45 ug/l	100
78)	trans-1,4-Dichloro-2-buten	16.27	53	96916	10.53 ug/l	100

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

8-21-12

2068

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW008.D
Acq On : 15 Aug 2012 9:54 pm
Sample : VO06H156
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 7
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.28	91	3119921	10.19 ug/l	100
80)	Bromobenzene	16.37	156	478948	10.04 ug/l	100
81)	1,3,5-Trimethylbenzene	16.55	105	1822878	9.91 ug/l	100
82)	2-Chlorotoluene	16.58	91	1907368	9.99 ug/l	100
83)	4-Chlorotoluene	16.66	91	1509268	9.75 ug/l	100
84)	tert-Butylbenzene	17.12	134	415879	9.85 ug/l	100
85)	1,2,4-Trimethylbenzene	17.18	105	1762714	9.97 ug/l	100
86)	sec-Butylbenzene	17.43	105	2514703	9.91 ug/l	100
87)	p-Isopropyltoluene	17.62	119	1931202	9.94 ug/l	100
88)	1,3-Dichlorobenzene	17.76	146	934080	9.90 ug/l	100
89)	1,4-Dichlorobenzene	17.89	146	891765	9.91 ug/l	100
91)	n-Butylbenzene	18.16	91	1930358	9.79 ug/l	100
92)	1,2-Dichlorobenzene	18.37	146	711399	9.83 ug/l	100
93)	1,2-Dibromo-3-chloropropan	19.27	157	35677	10.06 ug/l	100
94)	1,2,4-Trichlorobenzene	20.27	180	433509	9.55 ug/l	100
95)	Hexachlorobutadiene	20.42	225	316442	9.87 ug/l	100
96)	Naphthalene	20.60	128	551804	10.02 ug/l	100
97)	1,2,3-Trichlorobenzene	20.89	180	323344	9.52 ug/l	100

8-21-12

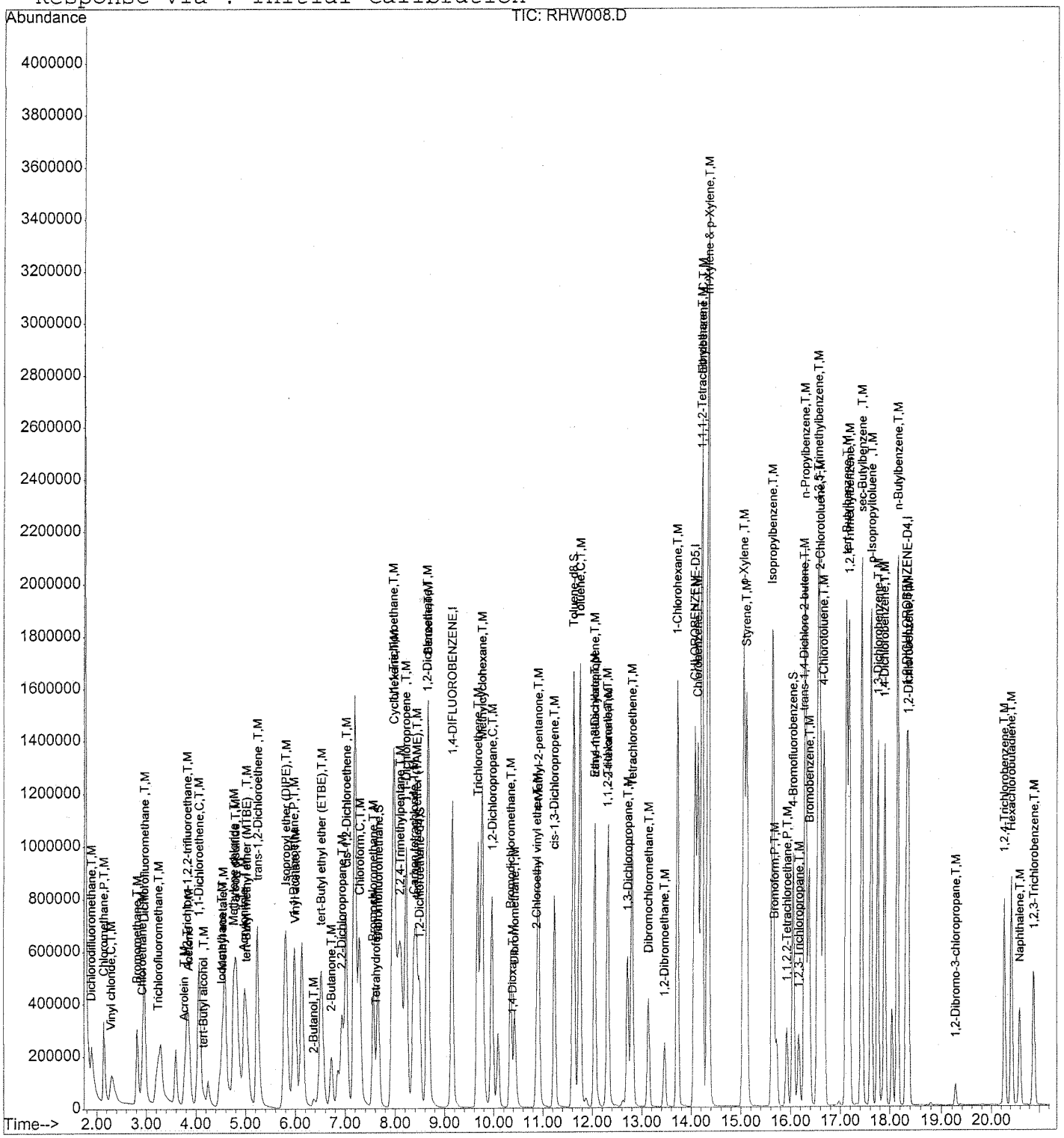
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW008.D
Acq On : 15 Aug 2012 9:54 pm
Sample : VO06H156
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:16 2012

Vial: 7
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2976

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW009.D
Acq On : 15 Aug 2012 10:23 pm
Sample : VO06H157
Misc : 20ppb 8260/100ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 8
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1702228	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1429844	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	426712	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.65	111	1079724	21.01	ug/l	-0.01
Spiked Amount 10.000			Recovery	=	210.10%	
38) 1,2-Dichloroethane-d4	8.48	65	873390	20.35	ug/l	-0.01
Spiked Amount 10.000			Recovery	=	203.50%	
54) Toluene-d8	11.62	98	3685826	20.20	ug/l	0.00
Spiked Amount 10.000			Recovery	=	202.00%	
76) 4-Bromofluorobenzene	16.05	95	1178645	22.19	ug/l	0.00
Spiked Amount 10.000			Recovery	=	221.90%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.90	85	830282	18.91	ug/l	99
3) Chloromethane	2.15	50	1015909	19.26	ug/l	100
4) Vinyl chloride	2.31	62	680702	17.18	ug/l	100
5) Bromomethane	2.82	94	668082	21.04	ug/l	100
6) Chloroethane	2.92	64	555917	20.52	ug/l	99
7) Dichlorofluoromethane	2.95	67	1919163	20.54	ug/l	100
8) Trichlorofluoromethane	3.23	101	1221096	20.19	ug/l	99
9) Acrolein	3.77	56	207737	99.33	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	580247	20.27	ug/l	99
11) Acetone	3.86	43	524561	90.48	ug/l	99
12) 1,1-Dichloroethene	4.07	61	1814652	20.30	ug/l	99
13) tert-Butyl alcohol	4.16	59	162216	98.60	ug/l	100
15) Methyl acetate	4.54	43	332823	17.57	ug/l	100
16) Iodomethane	4.53	142	1574187	20.53	ug/l	100
17) Methylene chloride	4.81	49	1274511	21.33	ug/l	98
18) Carbon disulfide	4.79	76	3711027	20.31	ug/l	100
19) Acrylonitrile	4.97	53	699233	95.99	ug/l	99
20) tert-Butyl methyl ether (M	5.02	73	1555724	19.44	ug/l	99
21) trans-1,2-Dichloroethene	5.23	61	1927347	20.35	ug/l	98
22) Isopropyl ether (DIPE)	5.79	45	3673351	19.94	ug/l	100
23) Vinyl acetate	6.00	43	1240010	19.38	ug/l	100
24) 1,1-Dichloroethane	5.97	63	2187069	20.18	ug/l	100
25) 2-Butanol	6.37	45	145463	90.40	ug/l	98
26) tert-Butyl ethyl ether (ET	6.52	59	2702939	20.08	ug/l	99
27) 2-Butanone	6.71	43	962544	89.45	ug/l	98
28) 2,2-Dichloropropane	6.94	77	1079048	19.87	ug/l	99
29) cis-1,2-Dichloroethene	7.03	96	1248250	20.07	ug/l	97

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

2071

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW009.D
Acq On : 15 Aug 2012 10:23 pm
Sample : VO06H157
Misc : 20ppb 8260/100ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 8
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	Chloroform	7.29	83	1945597	19.76 ug/l	100
32)	Bromochloromethane	7.56	49	864341	19.95 ug/l	99
33)	Tetrahydrofuran	7.62	42	121803	17.97 ug/l	97
35)	1,1,1-Trichloroethane	7.95	97	1635104	20.42 ug/l	99
36)	Cyclohexane	7.98	56	2404745	18.13 ug/l	100
37)	tert-Amyl methyl ether (TA	8.42	87	425315	20.27 ug/l	97
40)	2,2,4-Trimethylpentane	8.10	57	4166860	17.88 ug/l	94
41)	1,1-Dichloropropene	8.21	110	566065	20.35 ug/l	100
42)	Carbon tetrachloride	8.38	119	1499346	20.72 ug/l	100
43)	1,2-Dichloroethane	8.65	62	1031493	19.65 ug/l	99
44)	Benzene	8.66	78	4245350	19.64 ug/l	100
45)	Trichloroethene	9.67	130	1242633	20.13 ug/l	99
46)	Methylcyclohexane	9.76	83	1952582	19.60 ug/l	100
47)	1,2-Dichloropropane	9.95	63	1110418	20.25 ug/l	100
48)	1,4-Dioxane	10.39	88	71568	421.20 ug/l	98
49)	Bromodichloromethane	10.34	83	1411441	21.19 ug/l	99
50)	Dibromomethane	10.43	93	487601	20.49 ug/l	99
51)	2-Chloroethyl vinyl ether	10.86	63	367735	20.77 ug/l	99
52)	4-Methyl-2-pentanone	10.91	43	2775791	98.19 ug/l	99
53)	cis-1,3-Dichloropropene	11.23	75	1602324	20.80 ug/l	99
55)	Toluene	11.74	91	4481231	20.01 ug/l	100
56)	Ethyl methacrylate	12.05	69	754073	20.53 ug/l	99
57)	trans-1,3-Dichloropropene	12.05	75	1179460	20.91 ug/l	97
58)	1,1,2-Trichloroethane	12.30	97	559496	19.89 ug/l	99
59)	2-Hexanone	12.32	43	1636610	97.26 ug/l	100
60)	1,3-Dichloropropane	12.70	76	1147791	19.60 ug/l	100
61)	Tetrachloroethene	12.79	164	978703	20.10 ug/l	100
62)	Dibromochloromethane	13.14	129	800309	21.10 ug/l	100
64)	1,2-Dibromoethane	13.45	107	599055	20.46 ug/l	99
65)	1-Chlorohexane	13.72	91	1928084	20.43 ug/l	99
66)	Chlorobenzene	14.13	112	2714035	20.21 ug/l	98
67)	1,1,1,2-Tetrachloroethane	14.21	131	874511	20.57 ug/l	99
68)	Ethylbenzene	14.22	91	4973785	19.78 ug/l	99
69)	m-Xylene & p-Xylene	14.34	91	7392958	38.28 ug/l	99
70)	o-Xylene	15.05	91	3917118	20.27 ug/l	100
71)	Styrene	15.11	104	2708432	20.26 ug/l	100
73)	Isopropylbenzene	15.63	105	4564697	22.83 ug/l	99
74)	Bromoform	15.66	173	357667	21.48 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.93	83	570540	21.39 ug/l	100
77)	1,2,3-Trichloropropane	16.17	110	152569	21.33 ug/l	99
78)	trans-1,4-Dichloro-2-buten	16.27	53	178995	22.30 ug/l	97

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

8-21-12

2072

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW009.D
Acq On : 15 Aug 2012 10:23 pm
Sample : VO06H157
Misc : 20ppb 8260/100ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 8
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.29	91	5959397	22.33 ug/l	99
80)	Bromobenzene	16.38	156	924045	22.20 ug/l	99
81)	1,3,5-Trimethylbenzene	16.55	105	3527607	21.98 ug/l	99
82)	2-Chlorotoluene	16.58	91	3739562	22.47 ug/l	99
83)	4-Chlorotoluene	16.66	91	2857965	21.17 ug/l	100
84)	tert-Butylbenzene	17.12	134	803678	21.82 ug/l	97
85)	1,2,4-Trimethylbenzene	17.18	105	3319292	21.52 ug/l	100
86)	sec-Butylbenzene	17.43	105	4756148	21.48 ug/l	100
87)	p-Isopropyltoluene	17.61	119	3612980	21.33 ug/l	100
88)	1,3-Dichlorobenzene	17.76	146	1789970	21.75 ug/l	100
89)	1,4-Dichlorobenzene	17.89	146	1681857	21.43 ug/l	100
91)	n-Butylbenzene	18.15	91	3604934	20.95 ug/l	100
92)	1,2-Dichlorobenzene	18.37	146	1269889	20.13 ug/l	99
93)	1,2-Dibromo-3-chloropropan	19.28	157	56167	18.16 ug/l	98
94)	1,2,4-Trichlorobenzene	20.27	180	709001	17.91 ug/l	100
95)	Hexachlorobutadiene	20.42	225	485824	17.37 ug/l	99
96)	Naphthalene	20.60	128	820193	17.08 ug/l	100
97)	1,2,3-Trichlorobenzene	20.88	180	480501	16.23 ug/l	100

RW 8-21-12

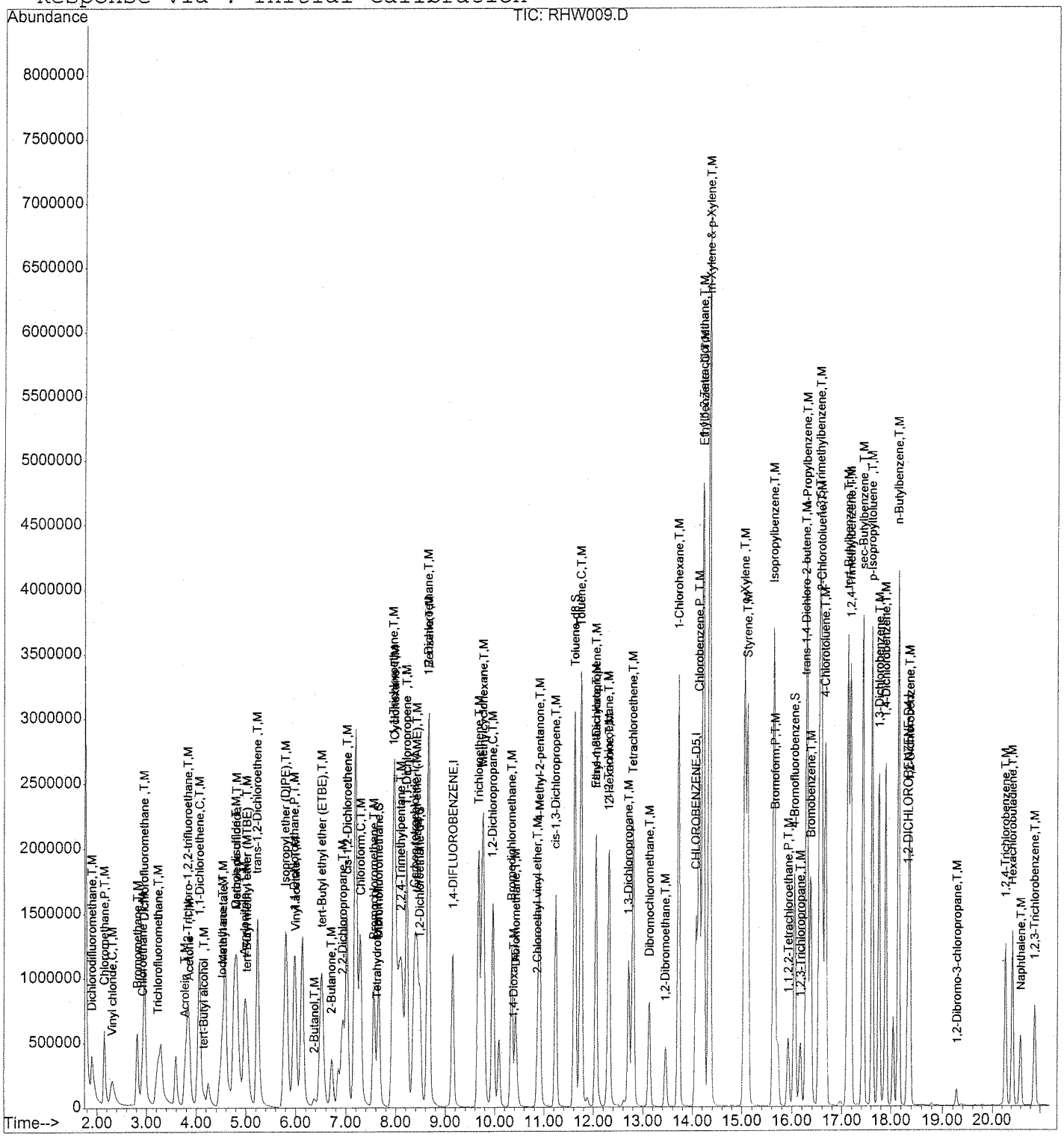
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW009.D
Acq On : 15 Aug 2012 10:23 pm
Sample : VO06H157
Misc : 20ppb 8260/100ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 8
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2874

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW010.D
Acq On : 15 Aug 2012 10:53 pm
Sample : VO06H158
Misc : 30ppb 8260/150ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 9
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1651261	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1410191	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	454935	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.66	111	1666483	33.43	ug/l	0.00
Spiked Amount 10.000			Recovery	=	334.30%	
38) 1,2-Dichloroethane-d4	8.49	65	1360934	32.68	ug/l	0.00
Spiked Amount 10.000			Recovery	=	326.80%	
54) Toluene-d8	11.62	98	5642516	31.36	ug/l	0.00
Spiked Amount 10.000			Recovery	=	313.60%	
76) 4-Bromofluorobenzene	16.05	95	1844820	32.58	ug/l	0.00
Spiked Amount 10.000			Recovery	=	325.80%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.89	85	1275311	29.95	ug/l	100
3) Chloromethane	2.15	50	1546366	30.21	ug/l	100
4) Vinyl chloride	2.31	62	897041	23.34	ug/l	100
5) Bromomethane	2.81	94	989584	32.13	ug/l	100
6) Chloroethane	2.92	64	811923	30.90	ug/l	99
7) Dichlorofluoromethane	2.96	67	2767050	30.52	ug/l	100
8) Trichlorofluoromethane	3.25	101	1806930	30.80	ug/l	100
9) Acrolein	3.77	56	339247	167.22	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	861137	31.02	ug/l	99
11) Acetone	3.86	43	874803	155.54	ug/l	99
12) 1,1-Dichloroethene	4.06	61	2682690	30.94	ug/l	99
13) tert-Butyl alcohol	4.15	59	297116	186.16	ug/l	96
15) Methyl acetate	4.54	43	572747	31.18	ug/l	98
16) Iodomethane	4.52	142	2397720	32.23	ug/l	99
17) Methylene chloride	4.81	49	1939444	33.81	ug/l	99
18) Carbon disulfide	4.79	76	5705494	32.20	ug/l	100
19) Acrylonitrile	4.97	53	1191290	168.58	ug/l	99
20) tert-Butyl methyl ether (M	5.02	73	2585720	33.30	ug/l	99
21) trans-1,2-Dichloroethene	5.24	61	2831262	30.81	ug/l	97
22) Isopropyl ether (DIPE)	5.80	45	5786168	32.38	ug/l	99
23) Vinyl acetate	6.00	43	2013120	32.43	ug/l	99
24) 1,1-Dichloroethane	5.97	63	3219862	30.63	ug/l	100
25) 2-Butanol	6.37	45	273158	175.00	ug/l	97
26) tert-Butyl ethyl ether (ET	6.52	59	4341556	33.24	ug/l	100
27) 2-Butanone	6.72	43	1708067	163.63	ug/l	99
28) 2,2-Dichloropropane	6.93	77	1537998	29.19	ug/l	99
29) cis-1,2-Dichloroethene	7.02	96	1868651	30.97	ug/l	96

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW010.D
Acq On : 15 Aug 2012 10:53 pm
Sample : VO06H158
Misc : 30ppb 8260/150ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 9
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	Chloroform	7.29	83	2931306	30.69 ug/l	99
32)	Bromochloromethane	7.56	49	1369146	32.57 ug/l	98
33)	Tetrahydrofuran	7.62	42	208700	32.26 ug/l	94
35)	1,1,1-Trichloroethane	7.96	97	2357923	30.35 ug/l	99
36)	Cyclohexane	7.97	56	3371958	26.21 ug/l	97
37)	tert-Amyl methyl ether (TA	8.43	87	695504	34.18 ug/l	96
40)	2,2,4-Trimethylpentane	8.09	57	6682091	29.08 ug/l	97
41)	1,1-Dichloropropene	8.23	110	837598	30.54 ug/l	100
42)	Carbon tetrachloride	8.38	119	2209232	30.96 ug/l	100
43)	1,2-Dichloroethane	8.64	62	1613405	31.17 ug/l	99
44)	Benzene	8.66	78	6368767	29.87 ug/l	100
45)	Trichloroethene	9.67	130	1847858	30.35 ug/l	99
46)	Methylcyclohexane	9.76	83	2890693	29.42 ug/l	99
47)	1,2-Dichloropropane	9.97	63	1684265	31.14 ug/l	98
48)	1,4-Dioxane	10.38	88	118429	706.71 ug/l	98
49)	Bromodichloromethane	10.34	83	2153010	32.78 ug/l	100
50)	Dibromomethane	10.43	93	775392	33.04 ug/l	99
51)	2-Chloroethyl vinyl ether	10.87	63	621401	35.58 ug/l	100
52)	4-Methyl-2-pentanone	10.90	43	4688824	168.17 ug/l	99
53)	cis-1,3-Dichloropropene	11.23	75	2520665	33.18 ug/l	99
55)	Toluene	11.75	91	6597671	29.87 ug/l	99
56)	Ethyl methacrylate	12.05	69	1243867	34.34 ug/l	100
57)	trans-1,3-Dichloropropene	12.05	75	1862112	33.47 ug/l	99
58)	1,1,2-Trichloroethane	12.30	97	907780	32.72 ug/l	99
59)	2-Hexanone	12.32	43	2768932	166.85 ug/l	99
60)	1,3-Dichloropropane	12.72	76	1870450	32.39 ug/l	99
61)	Tetrachloroethene	12.81	164	1440053	29.99 ug/l	100
62)	Dibromochloromethane	13.13	129	1313414	35.12 ug/l	99
64)	1,2-Dibromoethane	13.46	107	980338	33.95 ug/l	99
65)	1-Chlorohexane	13.71	91	2865406	30.79 ug/l	99
66)	Chlorobenzene	14.13	112	4073976	30.76 ug/l	99
67)	1,1,1,2-Tetrachloroethane	14.20	131	1342036	32.00 ug/l	99
68)	Ethylbenzene	14.22	91	7329738	29.55 ug/l	98
69)	m-Xylene & p-Xylene	14.34	91	10804861	56.73 ug/l	98
70)	o-Xylene	15.05	91	5855917	30.72 ug/l	99
71)	Styrene	15.11	104	4052241	30.74 ug/l	99
73)	Isopropylbenzene	15.63	105	6663214	31.26 ug/l	99
74)	Bromoform	15.68	173	603769	33.92 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.93	83	983894	34.59 ug/l	100
77)	1,2,3-Trichloropropane	16.17	110	273096	35.82 ug/l	98
78)	trans-1,4-Dichloro-2-buten	16.27	53	297132	34.72 ug/l	95

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW010.D
Acq On : 15 Aug 2012 10:53 pm
Sample : VO06H158
Misc : 30ppb 8260/150ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012

Vial: 9
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.30	91	8774815	30.83 ug/l	98
80)	Bromobenzene	16.37	156	1434106	32.32 ug/l	98
81)	1,3,5-Trimethylbenzene	16.55	105	5260120	30.75 ug/l	99
82)	2-Chlorotoluene	16.58	91	5467680	30.82 ug/l	98
83)	4-Chlorotoluene	16.66	91	4350802	30.23 ug/l	99
84)	tert-Butylbenzene	17.12	134	1229405	31.31 ug/l	96
85)	1,2,4-Trimethylbenzene	17.18	105	5012006	30.48 ug/l	98
86)	sec-Butylbenzene	17.43	105	7187835	30.45 ug/l	98
87)	p-Isopropyltoluene	17.62	119	5446422	30.16 ug/l	99
88)	1,3-Dichlorobenzene	17.76	146	2758213	31.44 ug/l	100
89)	1,4-Dichlorobenzene	17.89	146	2616885	31.27 ug/l	100
91)	n-Butylbenzene	18.14	91	5398158	29.43 ug/l	99
92)	1,2-Dichlorobenzene	18.37	146	2069671	30.77 ug/l	99
93)	1,2-Dibromo-3-chloropropan	19.27	157	103996	31.54 ug/l	98
94)	1,2,4-Trichlorobenzene	20.27	180	1149323	27.24 ug/l	100
95)	Hexachlorobutadiene	20.42	225	741384	24.87 ug/l	100
96)	Naphthalene	20.60	128	1403953	27.42 ug/l	99
97)	1,2,3-Trichlorobenzene	20.88	180	746543	23.65 ug/l	99

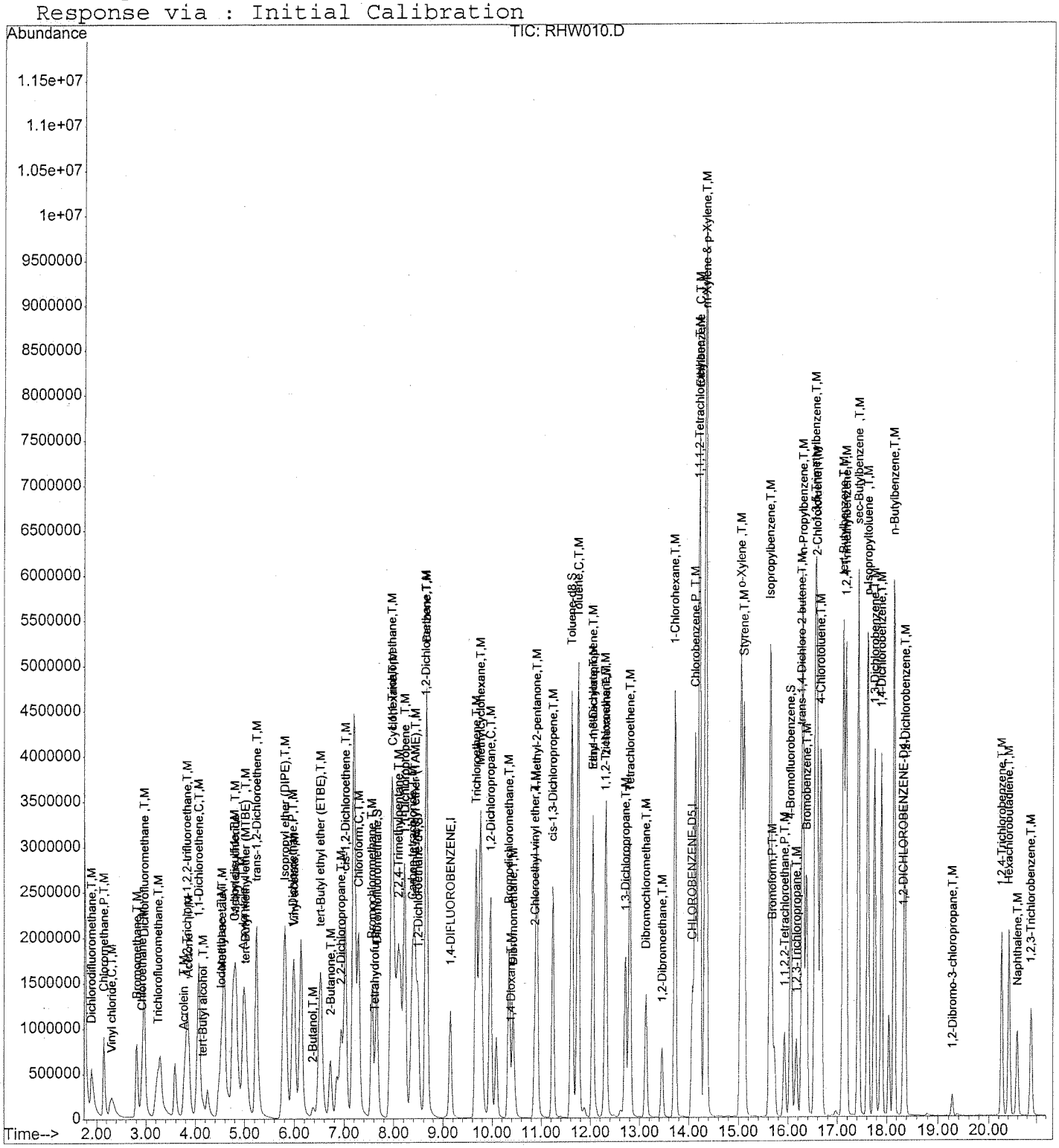
TM 8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW010.D Vial: 9
Acq On : 15 Aug 2012 10:53 pm Operator: WL
Sample : VO06H158 Inst : TO06
Misc : 30ppb 8260/150ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:29 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2678

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW011.D
Acq On : 15 Aug 2012 11:24 pm
Sample : VO06H159
Misc : 50ppb 8260/250ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 10
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1604978	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1309880	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	416256	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.66	111	2577109	53.18 ug/l	0.00
Spiked Amount 10.000			Recovery	= 531.80%	
38) 1,2-Dichloroethane-d4	8.49	65	1996317	49.32 ug/l	0.00
Spiked Amount 10.000			Recovery	= 493.20%	
54) Toluene-d8	11.62	98	8677452	51.92 ug/l	0.00
Spiked Amount 10.000			Recovery	= 519.20%	
76) 4-Bromofluorobenzene	16.05	95	2709042	52.29 ug/l	0.00
Spiked Amount 10.000			Recovery	= 522.90%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.89	85	2091234	50.53 ug/l	100
3) Chloromethane	2.15	50	2460705	49.47 ug/l	100
4) Vinyl chloride	2.31	62	1382123	37.00 ug/l	99
5) Bromomethane	2.80	94	1527871	51.04 ug/l	100
6) Chloroethane	2.92	64	1291157	50.55 ug/l	98
7) Dichlorofluoromethane	2.96	67	4273522	48.50 ug/l	100
8) Trichlorofluoromethane	3.25	101	2919370	51.19 ug/l	100
9) Acrolein	3.77	56	470119	238.41 ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	1413204	52.37 ug/l	100
11) Acetone	3.86	43	1184293	216.65 ug/l	99
12) 1,1-Dichloroethene	4.06	61	4342876	51.53 ug/l	98
13) tert-Butyl alcohol	4.17	59	370167	238.62 ug/l	95
15) Methyl acetate	4.54	43	780245	43.70 ug/l	97
16) Iodomethane	4.52	142	3754849	51.93 ug/l	99
17) Methylene chloride	4.81	49	2877389	51.93 ug/l	87
18) Carbon disulfide	4.79	76	9569287	55.56 ug/l	100
19) Acrylonitrile	4.97	53	1602092	233.26 ug/l	99
20) tert-Butyl methyl ether (M	5.01	73	3515638	46.58 ug/l	99
21) trans-1,2-Dichloroethene	5.24	61	4433671	49.64 ug/l	96
22) Isopropyl ether (DIPE)	5.80	45	8390456	48.31 ug/l	98
23) Vinyl acetate	6.00	43	2895132	47.98 ug/l	99
24) 1,1-Dichloroethane	5.97	63	5035917	49.29 ug/l	100
25) 2-Butanol	6.38	45	353232	232.83 ug/l	98
26) tert-Butyl ethyl ether (ET	6.52	59	6158753	48.52 ug/l	100
27) 2-Butanone	6.72	43	2317529	228.42 ug/l	98
28) 2,2-Dichloropropane	6.93	77	2339720	45.69 ug/l	98
29) cis-1,2-Dichloroethene	7.02	96	2868115	48.90 ug/l	96

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

8-21-12

2079

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW011.D
Acq On : 15 Aug 2012 11:24 pm
Sample : VO06H159
Misc : 50ppb 8260/250ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 10
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	Chloroform	7.29	83	4503324	48.51 ug/l	100
32)	Bromochloromethane	7.56	49	1970775	48.24 ug/l	97
33)	Tetrahydrofuran	7.62	42	266132	42.54 ug/l	93
35)	1,1,1-Trichloroethane	7.96	97	3730829	49.40 ug/l	99
36)	Cyclohexane	7.97	56	5554535	44.42 ug/l	95
37)	tert-Amyl methyl ether (TA	8.43	87	961306	48.60 ug/l	96
40)	2,2,4-Trimethylpentane	8.11	57	11028641	51.66 ug/l	98
41)	1,1-Dichloropropene	8.23	110	1354130	53.15 ug/l	100
42)	Carbon tetrachloride	8.37	119	3613270	54.51 ug/l	100
43)	1,2-Dichloroethane	8.64	62	2308306	48.01 ug/l	99
44)	Benzene	8.66	78	9709779	49.03 ug/l	99
45)	Trichloroethene	9.67	130	2976696	52.64 ug/l	99
46)	Methylcyclohexane	9.76	83	4861884	53.27 ug/l	98
47)	1,2-Dichloropropane	9.97	63	2531105	50.38 ug/l	98
48)	1,4-Dioxane	10.38	88	156804	1007.36 ug/l	96
49)	Bromodichloromethane	10.34	83	3193999	52.35 ug/l	99
50)	Dibromomethane	10.43	93	1095367	50.24 ug/l	99
51)	2-Chloroethyl vinyl ether	10.87	63	844103	52.04 ug/l	100
52)	4-Methyl-2-pentanone	10.90	43	6205771	239.62 ug/l	98
53)	cis-1,3-Dichloropropene	11.23	75	3664921	51.94 ug/l	98
55)	Toluene	11.75	91	10139191	49.42 ug/l	98
56)	Ethyl methacrylate	12.05	69	1701287	50.57 ug/l	99
57)	trans-1,3-Dichloropropene	12.05	75	2684174	51.93 ug/l	97
58)	1,1,2-Trichloroethane	12.30	97	1286163	49.91 ug/l	99
59)	2-Hexanone	12.31	43	3664526	237.73 ug/l	98
60)	1,3-Dichloropropane	12.72	76	2626624	48.97 ug/l	98
61)	Tetrachloroethene	12.81	164	2339199	52.45 ug/l	100
62)	Dibromochloromethane	13.13	129	1897530	54.62 ug/l	99
64)	1,2-Dibromoethane	13.46	107	1395880	52.04 ug/l	100
65)	1-Chlorohexane	13.73	91	4580273	52.98 ug/l	99
66)	Chlorobenzene	14.13	112	6172784	50.18 ug/l	98
67)	1,1,1,2-Tetrachloroethane	14.20	131	2017370	51.79 ug/l	99
68)	Ethylbenzene	14.22	91	11075532	48.08 ug/l	97
69)	m-Xylene & p-Xylene	14.35	91	15980464	90.32 ug/l	96
70)	o-Xylene	15.05	91	8788144	49.63 ug/l	98
71)	Styrene	15.11	104	6125199	50.02 ug/l	99
73)	Isopropylbenzene	15.64	105	10227480	52.45 ug/l	98
74)	Bromoform	15.67	173	846514	51.89 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.93	83	1327350	51.00 ug/l	99
77)	1,2,3-Trichloropropane	16.17	110	364678	52.27 ug/l	98
78)	trans-1,4-Dichloro-2-buten	16.27	53	403422	51.52 ug/l	95

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

8-21-12

2080

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW011.D
Acq On : 15 Aug 2012 11:24 pm
Sample : VO06H159
Misc : 50ppb 8260/250ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 10
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.30	91	13386211	51.41 ug/l	97
80)	Bromobenzene	16.37	156	2111145	52.00 ug/l	98
81)	1,3,5-Trimethylbenzene	16.55	105	7992956	51.06 ug/l	98
82)	2-Chlorotoluene	16.58	91	8108671	49.95 ug/l	98
83)	4-Chlorotoluene	16.67	91	6659828	50.58 ug/l	99
84)	tert-Butylbenzene	17.12	134	1929431	53.70 ug/l	93
85)	1,2,4-Trimethylbenzene	17.18	105	7411906	49.27 ug/l	98
86)	sec-Butylbenzene	17.43	105	11011197	50.99 ug/l	97
87)	p-Isopropyltoluene	17.62	119	8415862	50.94 ug/l	98
88)	1,3-Dichlorobenzene	17.76	146	4073894	50.74 ug/l	99
89)	1,4-Dichlorobenzene	17.89	146	3853044	50.32 ug/l	99
91)	n-Butylbenzene	18.16	91	8378120	49.92 ug/l	98
92)	1,2-Dichlorobenzene	18.37	146	3102409	50.41 ug/l	100
93)	1,2-Dibromo-3-chloropropan	19.27	157	155509	51.54 ug/l	99
94)	1,2,4-Trichlorobenzene	20.27	180	1835825	47.55 ug/l	100
95)	Hexachlorobutadiene	20.42	225	1261884	46.26 ug/l	100
96)	Naphthalene	20.60	128	2033623	43.41 ug/l	99
97)	1,2,3-Trichlorobenzene	20.89	180	1108419	38.37 ug/l	99

RM 8-21-12

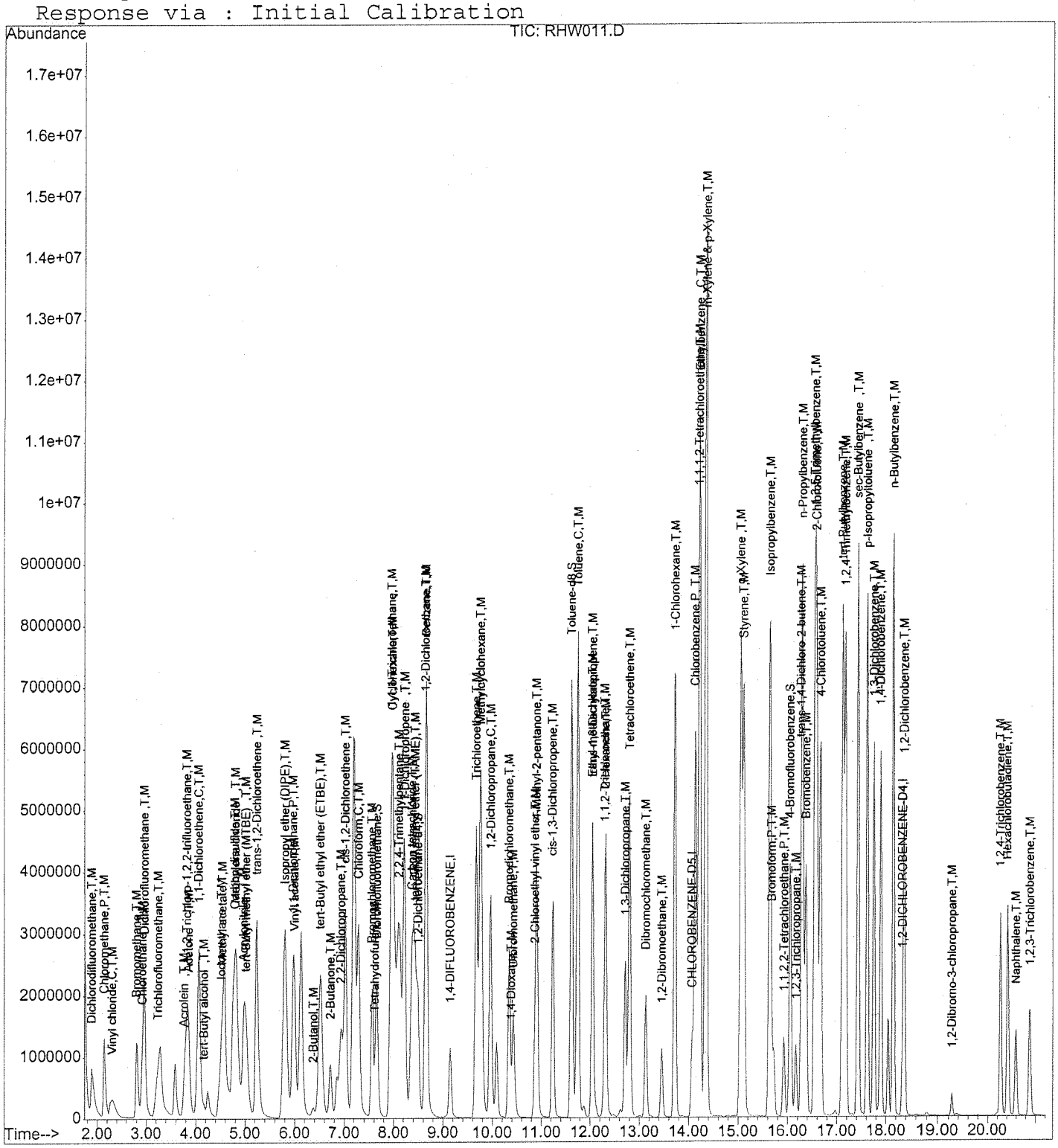
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW011.D
Acq On : 15 Aug 2012 11:24 pm
Sample : VO06H159
Misc : 50ppb 8260/250ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 10
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2082

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW012.D
Acq On : 15 Aug 2012 11:53 pm
Sample : VO06H1510
Misc : 100ppb 8260/500ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 11
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1719664	10.00 ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1382085	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	445959	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.65	111	4860243	93.61 ug/l	-0.01
Spiked Amount 10.000			Recovery	= 936.10%	
38) 1,2-Dichloroethane-d4	8.50	65	3818725	88.06 ug/l	0.00
Spiked Amount 10.000			Recovery	= 880.60%	
54) Toluene-d8	11.62	98	16009776	90.78 ug/l	0.00
Spiked Amount 10.000			Recovery	= 907.80%	
76) 4-Bromofluorobenzene	16.05	95	4904141	88.35 ug/l	0.00
Spiked Amount 10.000			Recovery	= 883.50%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.89	85	4320687	97.43 ug/l	99
3) Chloromethane	2.15	50	4933116	92.55 ug/l	100
4) Vinyl chloride	2.28	62	2346491	58.62 ug/l	100
5) Bromomethane	2.80	94	2817812	87.86 ug/l	100
6) Chloroethane	2.91	64	2303160	84.15 ug/l	99
7) Dichlorofluoromethane	2.95	67	7454435	78.96 ug/l	99
8) Trichlorofluoromethane	3.23	101	5938361	97.19 ug/l	100
9) Acrolein	3.77	56	863307	408.61 ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	2658235	91.93 ug/l	99
11) Acetone	3.86	43	2222601	379.47 ug/l	98
12) 1,1-Dichloroethene	4.05	61	8165514	90.43 ug/l	98
13) tert-Butyl alcohol	4.17	59	754243	453.78 ug/l	93
15) Methyl acetate	4.54	43	1512729	79.07 ug/l	96
16) Iodomethane	4.53	142	7322859	94.52 ug/l	99
17) Methylene chloride	4.81	49	5424133	91.84 ug/l	87
18) Carbon disulfide	4.79	76	17915771	97.08 ug/l	99
19) Acrylonitrile	4.97	53	3190840	433.59 ug/l	99
20) tert-Butyl methyl ether (M	5.02	73	6879340	85.08 ug/l	100
21) trans-1,2-Dichloroethene	5.22	61	8282899	86.56 ug/l	95
22) Isopropyl ether (DIPE)	5.80	45	15797039	84.89 ug/l	97
23) Vinyl acetate	6.00	43	5737917	88.75 ug/l	98
24) 1,1-Dichloroethane	5.97	63	9558443	87.31 ug/l	99
25) 2-Butanol	6.38	45	793325	488.04 ug/l	97
26) tert-Butyl ethyl ether (ET	6.52	59	11681467	85.89 ug/l	99
27) 2-Butanone	6.73	43	4569976	420.39 ug/l	98
28) 2,2-Dichloropropane	6.93	77	3992236	72.76 ug/l	97
29) cis-1,2-Dichloroethene	7.02	96	5550329	88.32 ug/l	94

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

2083

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW012.D
Acq On : 15 Aug 2012 11:53 pm
Sample : VO06H1510
Misc : 100ppb 8260/500ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 11
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Chloroform	7.29	83	8553553	85.99 ug/l		99
32)	Bromochloromethane	7.56	49	3817099	87.20 ug/l		97
33)	Tetrahydrofuran	7.62	42	509336	76.51 ug/l		92
35)	1,1,1-Trichloroethane	7.96	97	6900690	85.29 ug/l		94
36)	Cyclohexane	7.97	56	10261630	76.60 ug/l		93
37)	tert-Amyl methyl ether (TA	8.44	87	1822154	85.98 ug/l		92
40)	2,2,4-Trimethylpentane	8.11	57	20802353	92.36 ug/l	#	33
41)	1,1-Dichloropropene	8.21	110	2540445	94.51 ug/l		99
42)	Carbon tetrachloride	8.38	119	6717264	96.05 ug/l		100
43)	1,2-Dichloroethane	8.64	62	4358819	85.92 ug/l		98
44)	Benzene	8.66	78	17244630	82.52 ug/l		98
45)	Trichloroethene	9.67	130	5554293	93.09 ug/l		99
46)	Methylcyclohexane	9.76	83	8976625	93.22 ug/l		98
47)	1,2-Dichloropropane	9.97	63	4763576	89.86 ug/l		98
48)	1,4-Dioxane	10.38	88	329297	2004.99 ug/l		96
49)	Bromodichloromethane	10.34	83	6211336	96.49 ug/l		99
50)	Dibromomethane	10.43	93	2098696	91.24 ug/l		98
51)	2-Chloroethyl vinyl ether	10.87	63	1721581	100.58 ug/l		99
52)	4-Methyl-2-pentanone	10.90	43	11593873	424.27 ug/l		97
53)	cis-1,3-Dichloropropene	11.23	75	6973884	93.68 ug/l		98
55)	Toluene	11.75	91	18210927	84.13 ug/l		97
56)	Ethyl methacrylate	12.05	69	3198361	90.10 ug/l		98
57)	trans-1,3-Dichloropropene	12.05	75	5103338	93.58 ug/l		97
58)	1,1,2-Trichloroethane	12.30	97	2446955	90.00 ug/l		99
59)	2-Hexanone	12.32	43	6748509	414.93 ug/l		97
60)	1,3-Dichloropropane	12.72	76	5045895	89.16 ug/l		98
61)	Tetrachloroethene	12.81	164	4305847	91.50 ug/l		99
62)	Dibromochloromethane	13.13	129	3679972	100.39 ug/l		100
64)	1,2-Dibromoethane	13.46	107	2673316	94.46 ug/l		100
65)	1-Chlorohexane	13.73	91	8078546	88.57 ug/l		98
66)	Chlorobenzene	14.13	112	11254683	86.71 ug/l		98
67)	1,1,1,2-Tetrachloroethane	14.20	131	3745547	91.12 ug/l		98
68)	Ethylbenzene	14.22	91	18643656	76.70 ug/l		95
69)	m-Xylene & p-Xylene	14.35	91	25028802	134.07 ug/l		90
70)	o-Xylene	15.05	91	15444924	82.67 ug/l		96
71)	Styrene	15.11	104	10884514	84.24 ug/l		97
73)	Isopropylbenzene	15.65	105	17200094	82.33 ug/l		96
74)	Bromoform	15.68	173	1644719	93.98 ug/l		99
75)	1,1,2,2-Tetrachloroethane	15.93	83	2526155	90.60 ug/l		99
77)	1,2,3-Trichloropropane	16.17	110	695182	93.01 ug/l		99
78)	trans-1,4-Dichloro-2-buten	16.27	53	733068	87.39 ug/l		92

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H15\RHW012.D
Acq On : 15 Aug 2012 11:53 pm
Sample : VO06H1510
Misc : 100ppb 8260/500ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012

Vial: 11
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.30	91	21521353	77.15 ug/l	94
80)	Bromobenzene	16.37	156	3896257	89.57 ug/l	96
81)	1,3,5-Trimethylbenzene	16.55	105	13805252	82.32 ug/l	96
82)	2-Chlorotoluene	16.60	91	13750578	79.06 ug/l	96
83)	4-Chlorotoluene	16.67	91	11789041	83.57 ug/l	97
84)	tert-Butylbenzene	17.12	134	3475053	90.28 ug/l	91
85)	1,2,4-Trimethylbenzene	17.18	105	13169518	81.71 ug/l	95
86)	sec-Butylbenzene	17.43	105	18451317	79.75 ug/l	94
87)	p-Isopropyltoluene	17.62	119	14759441	83.39 ug/l	95
88)	1,3-Dichlorobenzene	17.76	146	7229650	84.05 ug/l	98
89)	1,4-Dichlorobenzene	17.91	146	6936890	84.56 ug/l	98
91)	n-Butylbenzene	18.16	91	14604029	81.23 ug/l	96
92)	1,2-Dichlorobenzene	18.37	146	5834486	88.49 ug/l	100
93)	1,2-Dibromo-3-chloropropan	19.27	157	409436	126.67 ug/l	98
94)	1,2,4-Trichlorobenzene	20.27	180	3831247	92.63 ug/l	99
95)	Hexachlorobutadiene	20.42	225	2784008	95.26 ug/l	99
96)	Naphthalene	20.60	128	4523270	90.12 ug/l	98
97)	1,2,3-Trichlorobenzene	20.89	180	2189042	70.74 ug/l	99

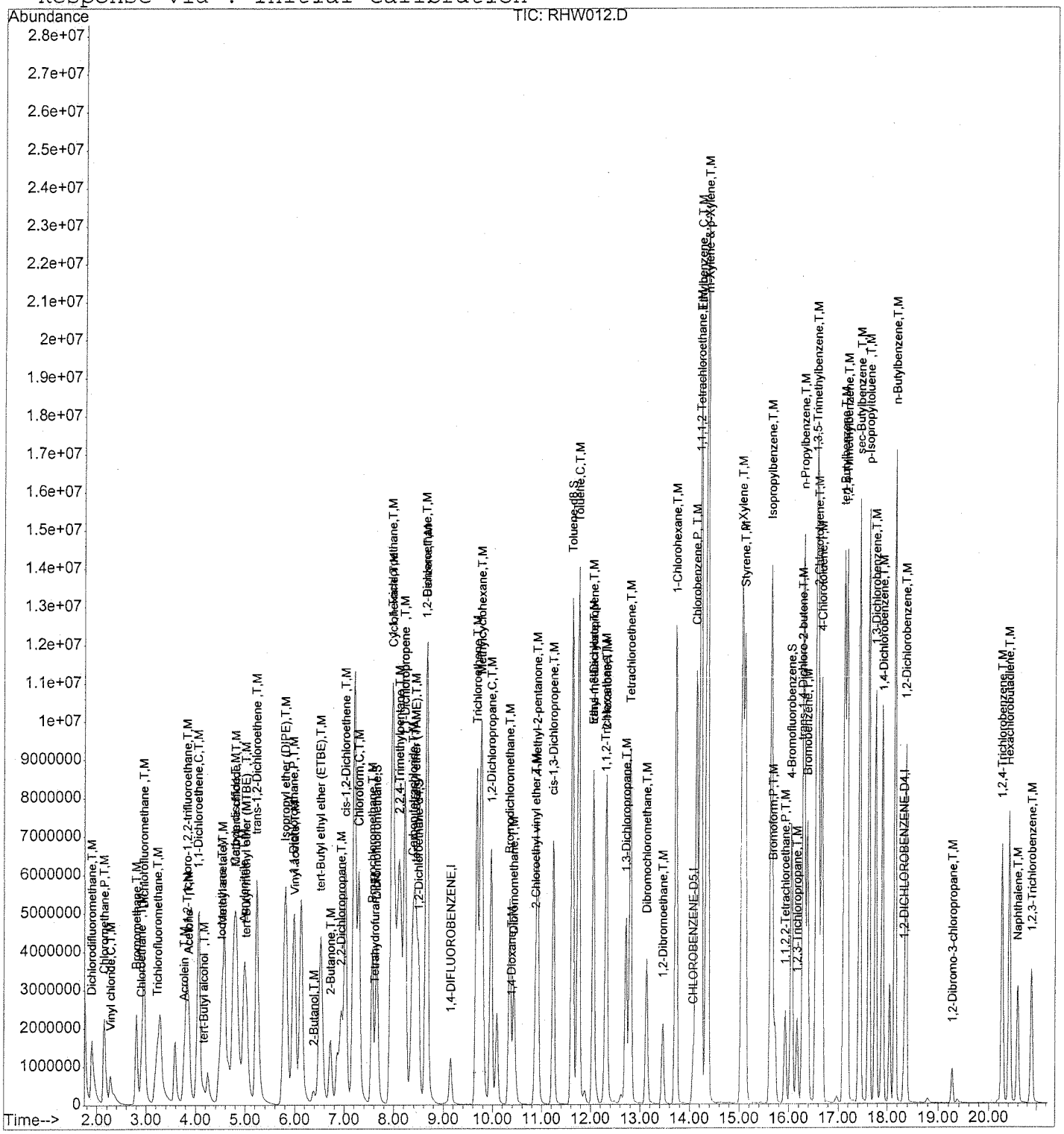
TM 8-21-12

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H15\RHW012.D Vial: 11
Acq On : 15 Aug 2012 11:53 pm Operator: WL
Sample : VO06H1510 Inst : TO06
Misc : 100ppb 8260/500ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 16:17 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



2686

SECOND SOURCE VERIFICATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RHW015
Instrument ID: 06
GC Column:RTX502.2ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 121219
BFB Injection Date : 08/16/12
BFB Injection Time : 09:31
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.62
75	30.0 - 60.0% of mass 95	48.50
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.99
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	71.35
175	5.0 - 9.0% of mass 174	5.40(7.6)1
176	95.0 - 101.0% of mass 174	70.48(98.8)1
177	5.0 - 9.0% of mass 176	4.57(6.5)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	IV006H1501	RHW016	08/16/12	10:02

FORM V VOA OLM02.0

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T006
IC_Beginning DateTime :08/15/12 19:22
Spike Amount :10 PPB
CC/CV File :RHW016
IC File :RHW008

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :08/15/12 23:53
HPChem Method :vo06h15
Date_Time :08/16/12 10:02

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	1860809	1	1	9.148	9.149	0				
	2	Dichlorodifluoromethane	9.824	-1.8	471407	0.253	0.258	1.893	1.894	6.32				
	3	Chloromethane	10.472	4.7	603952	0.325	0.310	2.145	2.147	5.91				
	4	Vinyl chloride	10.328	3.3	447330	0.240	0.233	2.309	2.300	13.19				
	5	Bromomethane	10.472	4.7	363435	0.195	0.187	2.815	2.812	10.72				
	6	Chloroethane	10.573	5.7	313116	0.168	0.159	2.919	2.919	9.41				
	7	Dichlorofluoromethane	9.964	-0.4	1017847	0.547	0.549	2.963	2.960	8.55				
	8	Trichlorofluoromethane	10.192	1.9	673832	0.362	0.355	3.231	3.238	8.43				
5	9	Acrolein	57.206	14.4	130783	0.014	0.012	3.766	3.772	9.90				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	10.065	0.6	314914	0.169	0.168	3.826	3.826	6.69				
5	11	Acetone	51.048	2.1	323536	0.035	0.034	3.855	3.859	12.26				
	12	1,1-Dichloroethene	10.137	1.4	990521	0.532	0.525	4.049	4.063	4.54				
5	13	tert-Butyl alcohol	56.186	12.4	101052	0.011	0.010	4.153	4.161	12.01				
	14	Acetonitrile												
	15	Methyl acetate	10.068	0.7	208432	0.112	0.111	4.539	4.541	14.21				
	16	Iodomethane	10.290	2.9	862656	0.464	0.451	4.524	4.526	4.90				
	17	Methylene chloride	10.870	8.7	729403	0.392	0.433	4.807	4.788	25.09	0.0211	0.3411		0.9963
	18	Carbon disulfide	11.695	16.9	2335412	1.255	1.073	4.777	4.793	8.57				
5	19	Acrylonitrile	53.093	6.2	422792	0.045	0.043	4.970	4.973	7.45				
	20	tert-Butyl methyl ether (MTBE)	10.073	0.7	881351	0.474	0.470	5.015	5.018	7.49				
	21	trans-1,2-Dichloroethene	10.028	0.3	1038370	0.558	0.556	5.223	5.233	5.77				
	22	Isopropyl ether (DIPE)	9.940	-0.6	2001510	1.076	1.082	5.803	5.804	6.46				
	23	Vinyl acetate	10.735	7.4	751016	0.404	0.376	5.996	6.001	7.83				
	24	1,1-Dichloroethane	9.548	-4.5	1131093	0.608	0.637	5.966	5.971	5.00				
5	25	2-Butanol	54.187	8.4	95311	0.010	0.009	6.368	6.380	9.21				
	26	tert-Butyl ethyl ether (ETBE)	10.081	0.8	1483732	0.797	0.791	6.502	6.518	6.29				
5	27	2-Butanone	51.017	2.0	600112	0.065	0.063	6.710	6.723	11.92				
	28	2,2-Dichloropropane	10.821	8.2	642452	0.345	0.319	6.933	6.939	11.92				
	29	cis-1,2-Dichloroethene	10.088	0.9	686039	0.369	0.365	7.022	7.023	4.81				
	30	Chloroform	9.714	-2.9	1045522	0.562	0.578	7.275	7.291	6.39				
5	31	tert-Amyl alcohol												
	32	Bromochloromethane	10.016	0.2	474413	0.255	0.255	7.557	7.559	5.92				
	33	Tetrahydrofuran	9.889	-1.1	75461	0.041	0.047	7.617	7.624	25.79	0.0026	0.0384		0.9958
	34	Dibromofluoromethane	10.596	6.0	595307	0.320	0.302	7.646	7.657	12.90				
	35	1,1,1-Trichloroethane	9.918	-0.8	868363	0.467	0.471	7.944	7.957	5.91				
	36	Cyclohexane	10.698	7.0	1550794	0.833	0.779	7.959	7.973	11.92				
	37	tert-Amyl methyl ether (TAME)	10.642	6.4	244051	0.131	0.123	8.434	8.433	7.49				
	38	1,2-Dichloroethane-d4	10.073	0.7	472685	0.254	0.252	8.479	8.492	11.03				
	39	CHLOROBENZENE-D5	10.000	0	1581053	1	1	14.069	14.071	0				
	40	2,2,4-Trimethylpentane	8.293	-17.1	2136863	1.352	1.630	8.092	8.091	7.89				
	41	1,1-Dichloropropene	10.114	1.1	311010	0.197	0.194	8.211	8.220	4.25				
	42	Carbon tetrachloride	9.911	-0.9	792907	0.502	0.506	8.360	8.376	5.79				
	43	1,2-Dichloroethane	9.612	-3.9	557820	0.353	0.367	8.643	8.646	6.76				
	44	Benzene	9.816	-1.8	2346500	1.484	1.512	8.657	8.659	9.36				
	45	Trichloroethene	10.006	0.1	682938	0.432	0.432	9.668	9.670	6.12				
	46	Methylcyclohexane	10.131	1.3	1115968	0.706	0.697	9.743	9.758	8.98				
	47	1,2-Dichloropropane	9.994	-0.1	606068	0.383	0.384	9.951	9.964	4.61				
20	48	1,4-Dioxane	222.394	11.2	41784	0.001	0.001	10.382	10.385	11.65				
	49	Bromodichloromethane	10.149	1.5	747350	0.473	0.466	10.337	10.339	5.58				
	50	Dibromomethane	10.358	3.6	272570	0.172	0.166	10.427	10.427	5.54				
	51	2-Chloroethyl vinyl ether	10.536	5.4	206300	0.130	0.124	10.858	10.870	8.84				
5	52	4-Methyl-2-pentanone	53.865	7.7	1683849	0.213	0.198	10.902	10.907	7.11				
	53	cis-1,3-Dichloropropene	10.612	6.1	903757	0.572	0.539	11.229	11.234	5.79				
	54	Toluene-d8	10.605	6.0	2139440	1.353	1.276	11.616	11.619	8.94				
	55	Toluene	9.869	-1.3	2443694	1.546	1.566	11.750	11.748	6.76				
	56	Ethyl methacrylate	10.733	7.3	435851	0.276	0.257	12.047	12.049	7.04				
	57	trans-1,3-Dichloropropene	10.482	4.8	653879	0.414	0.395	12.047	12.049	6.05				
	58	1,1,2-Trichloroethane	10.369	3.7	322523	0.204	0.197	12.300	12.301	5.64				
5	59	2-Hexanone	55.018	10.0	1023658	0.129	0.118	12.315	12.321	8.05				
	60	1,3-Dichloropropane	10.199	2.0	660249	0.418	0.409	12.701	12.715	6.01				
	61	Tetrachloroethene	9.998	-0.0	538206	0.340	0.340	12.791	12.804	4.76				
	62	Dibromochloromethane	10.525	5.2	441326	0.279	0.265	13.132	13.134	9.39				
	63	2-Ethyl-1-butanol												
	64	1,2-Dibromoethane	10.651	6.5	344825	0.218	0.205	13.445	13.458	6.02				
	65	1-Chlorohexane	10.209	2.1	1065278	0.674	0.660	13.712	13.720	5.61				
	66	Chlorobenzene	9.966	-0.3	1479703	0.936	0.939	14.129	14.132	6.36				
	67	1,1,1,2-Tetrachloroethane	10.275	2.8	483160	0.306	0.297	14.203	14.204	4.58				
	68	Ethylbenzene	10.056	0.6	2796277	1.769	1.759	14.218	14.219	9.90				
2	69	m-Xylene & p-Xylene	19.384	-3.1	4139569	1.309	1.351	14.337	14.342	7.48				
	70	o-Xylene	10.008	0.1	2138774	1.353	1.352	15.050	15.052	6.63				
	71	Styrene	10.422	4.2	1540593	0.974	0.935	15.110	15.111	6.35				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	526652	1	1	18.336	18.337	0				
	73	Isopropylbenzene	10.383	3.8	2561704	4.864	4.685	15.630	15.639	8.82				
	74	Bromoform	10.163	1.6	207142	0.393	0.348	15.660	15.673	18.12	-0.0062	0.3931		0.9971
	75	1,1,2,2-Tetrachloroethane	10.756	7.6	354162	0.672	0.625	15.913	15.926	8.36				
	76	4-Bromofluorobenzene	10.340	3.4	677781	1.287	1.245	16.046	16.048	8.32				
	77	1,2,3-Trichloropropane	10.734	7.3	94743	0.180	0.168	16.165	16.168	8.94				
	78	trans-1,4-Dichloro-2-butene	10.856	8.6	107548	0.204	0.188	16.270	16.274	10.76				
	79	n-Propylbenzene	10.233	2.3	3371039	6.401	6.255	16.284	16.295	9.47				

TW 8-21-12

80	Bromobenzene	10.213	2.1	524642	0.996	0.975	16.374	16.375	7.12				
81	1,3,5-Trimethylbenzene	10.066	0.7	1993640	3.785	3.761	16.552	16.552	7.92				
82	2-Chlorotoluene	10.344	3.4	2124758	4.034	3.900	16.582	16.585	10.14				
83	4-Chlorotoluene	9.430	-5.7	1570957	2.983	3.163	16.656	16.663	7.18				
84	tert-Butylbenzene	10.076	0.8	458066	0.870	0.863	17.117	17.118	6.95				
85	1,2,4-Trimethylbenzene	9.991	-0.1	1901812	3.611	3.614	17.176	17.178	7.83				
86	sec-Butylbenzene	9.937	-0.6	2715256	5.156	5.188	17.429	17.431	8.10				
87	p-Isopropyltoluene	10.031	0.3	2096778	3.981	3.969	17.608	17.621	7.26				
88	1,3-Dichlorobenzene	10.013	0.1	1017050	1.931	1.929	17.756	17.758	7.62				
89	1,4-Dichlorobenzene	10.199	2.0	988001	1.876	1.839	17.890	17.895	7.30				
90	Benzyl chloride												
91	n-Butylbenzene	10.078	0.8	2139780	4.063	4.032	18.143	18.153	8.35				
92	1,2-Dichlorobenzene	9.944	-0.6	774306	1.470	1.479	18.366	18.367	5.96				
93	1,2-Dibromo-3-chloropropane	10.737	7.4	40985	0.078	0.072	19.273	19.273	14.38				
94	1,2,4-Trichlorobenzene	9.828	-1.7	480032	0.911	0.927	20.269	20.270	8.69				
95	Hexachlorobutadiene	9.875	-1.3	340815	0.647	0.655	20.417	20.420	10.91				
96	Naphthalene	10.328	3.3	612170	1.162	1.125	20.596	20.596	12.07				
97	1,2,3-Trichlorobenzene	9.754	-2.5	356463	0.677	0.694	20.878	20.888	13.66				

Spike Amount = Nominal Amount * M

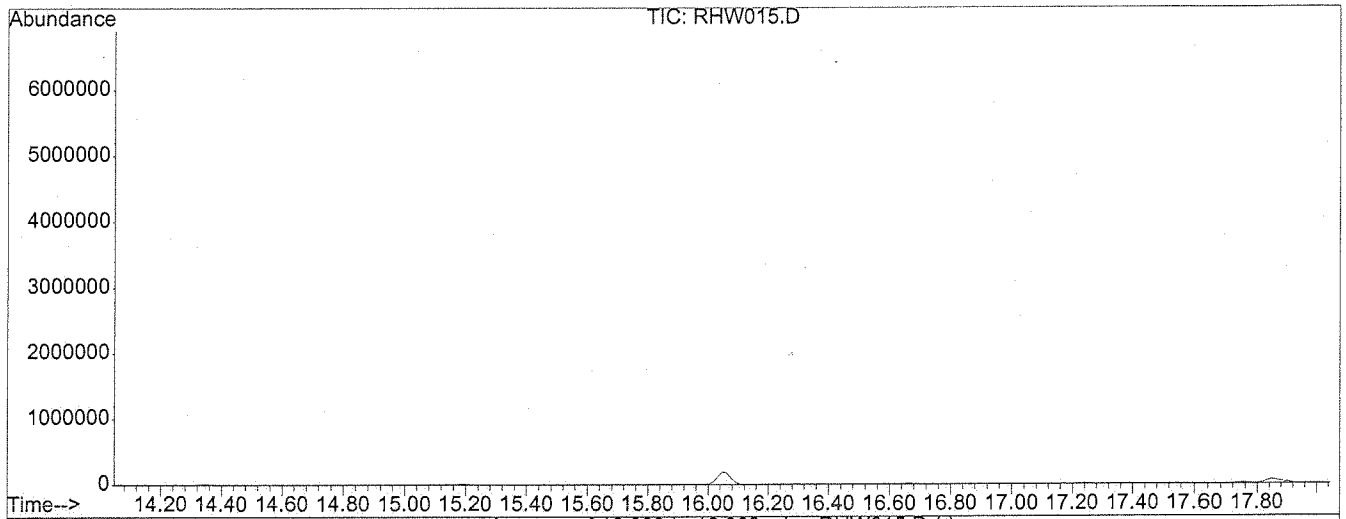
RL 8-24-12

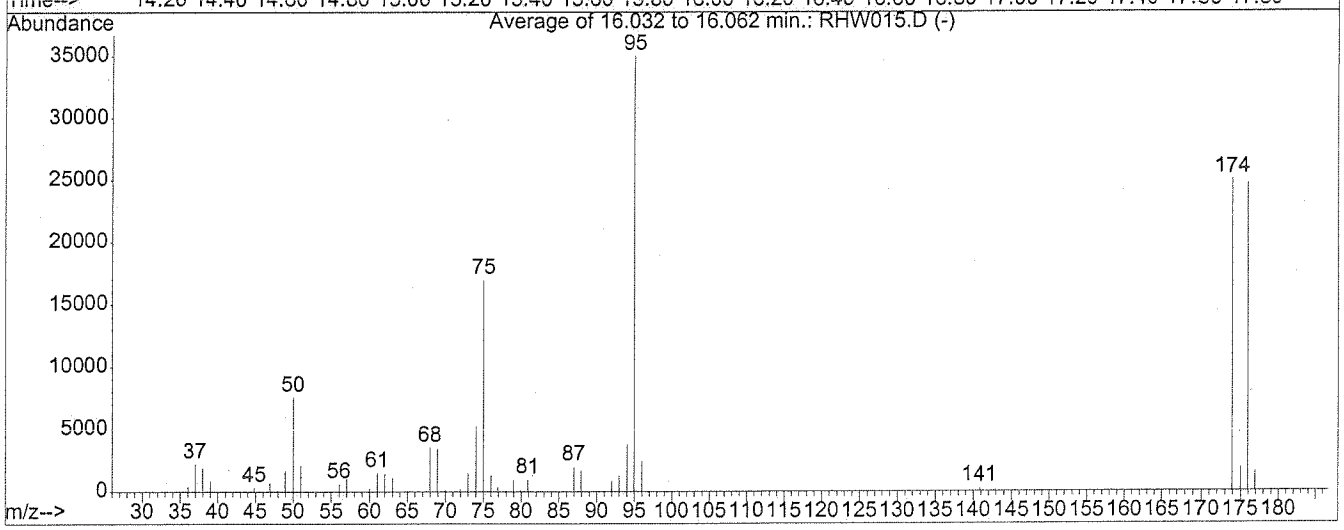
2898

BFB

Data File : D:\HPCHEM\1\DATA\12H16\RHW015.D
Acq On : 16 Aug 2012 9:31 am
Sample : BFB06H02
Misc : T/ CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: WL
Inst : TO06
Multiplr: 1.00





AutoFind: Scans 962, 963, 964; Background Corrected with Scan 958

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.6	7573	PASS
75	95	30	60	48.5	16989	PASS
95	95	100	100	100.0	35029	PASS
96	95	5	9	7.0	2449	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.4	24994	PASS
175	174	5	9	7.6	1892	PASS
176	174	95	101	98.8	24687	PASS
177	176	5	9	6.5	1601	PASS

RHW015.D VO06H15.M Mon Aug 20 17:27:19 2012

RW 8-21-12

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D
Acq On : 16 Aug 2012 10:02 am
Sample : IVO06H1501
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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	112	0.00
2	T,M	Dichlorodifluoromethane	10.000	9.824	1.8	110	0.00
3	P,T,M	Chloromethane	10.000	10.472	-4.7	114	0.00
4	C,T,M	Vinyl chloride	10.000	10.328	-3.3	115	0.02
5	T,M	Bromomethane	10.000	10.472	-4.7	109	0.00
6	T,M	Chloroethane	10.000	10.573	-5.7	109	0.00
7	T,M	Dichlorofluoromethane	10.000	9.964	0.4	107	0.00
8	T,M	Trichlorofluoromethane	10.000	10.192	-1.9	109	-0.02
9	T,M	Acrolein	50.000	57.206	-14.4	126	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.065	-0.6	113	0.00
11	T,M	Acetone	50.000	51.048	-2.1	115	0.00
12	C,T,M	1,1-Dichloroethene	10.000	10.137	-1.4	112	-0.02
13	T,M	tert-Butyl alcohol	50.000	56.186	-12.4	110	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	113	0.00
15	T,M	Methyl acetate	10.000	10.068	-0.7	121	0.00
16	T,M	Iodomethane	10.000	10.290	-2.9	115	0.00
17	T,M	Methylene chloride	10.000	10.870	-8.7	112	0.04
18	T,M	Carbon disulfide	10.000	11.695	-17.0	124	-0.02
19	T,M	Acrylonitrile	50.000	53.093	-6.2	117	0.00
20	T,M	tert-Butyl methyl ether (MT	10.000	10.073	-0.7	108	0.00
21	T,M	trans-1,2-Dichloroethene	10.000	10.028	-0.3	112	-0.02
22	T,M	Isopropyl ether (DIPE)	10.000	9.940	0.6	108	0.00
23	T,M	Vinyl acetate	10.000	10.735	-7.3	114	0.00
24	P,T,M	1,1-Dichloroethane	10.000	9.548	4.5	105	0.00
25	T,M	2-Butanol	50.000	54.187	-8.4	129	0.00
26	T,M	tert-Butyl ethyl ether (ETB	10.000	10.081	-0.8	110	-0.02
27	T,M	2-Butanone	50.000	51.017	-2.0	117	-0.02
28	T,M	2,2-Dichloropropane	10.000	10.821	-8.2	117	0.00
29	T,M	cis-1,2-Dichloroethene	10.000	10.088	-0.9	114	0.00
30	C,T,M	Chloroform	10.000	9.714	2.9	110	-0.02
31	T,M	tert-Amyl alcohol	-1.000	0.000	0.0	105	0.00
32	T,M	Bromochloromethane	10.000	10.016	-0.2	109	0.00
33	T,M	Tetrahydrofuran	10.000	9.888	1.1	111	0.00
34	S	Dibromofluoromethane	10.000	10.596	-6.0	109	-0.02
35	T,M	1,1,1-Trichloroethane	10.000	9.918	0.8	108	-0.02
36	T,M	Cyclohexane	10.000	10.698	-7.0	127	-0.01
37	T,M	tert-Amyl methyl ether (TAM	10.000	10.642	-6.4	111	0.00
38	S	1,2-Dichloroethane-d4	10.000	10.073	-0.7	103	-0.02
39	I	CHLOROBENZENE-D5	10.000	10.000	0.0	110	0.00
40	T,M	2,2,4-Trimethylpentane	10.000	8.293	17.1	92	0.00

(#) = Out of Range

PU 8-21-12

2092

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D Vial: 2
Acq On : 16 Aug 2012 10:02 am Operator: WL
Sample : IVO06H1501 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
41	T,M	1,1-Dichloropropene	10.000	10.114	-1.1	114	0.00
42	T,M	Carbon tetrachloride	10.000	9.911	0.9	109	-0.02
43	T,M	1,2-Dichloroethane	10.000	9.612	3.9	106	0.00
44	T,M	Benzene	10.000	9.816	1.8	112	0.00
45	T,M	Trichloroethene	10.000	10.006	-0.1	112	0.00
46	T,M	Methylcyclohexane	10.000	10.131	-1.3	111	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	9.994	0.1	111	-0.02
48	T,M	1,4-Dioxane	200.000	222.394	-11.2	120	0.00
49	T,M	Bromodichloromethane	10.000	10.149	-1.5	109	0.00
50	T,M	Dibromomethane	10.000	10.358	-3.6	113	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	10.536	-5.4	109	-0.02
52	T,M	4-Methyl-2-pentanone	50.000	53.865	-7.7	114	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	10.612	-6.1	113	0.00
54	S	Toluene-d8	10.000	10.605	-6.1	110	0.00
55	C,T,M	Toluene	10.000	9.869	1.3	110	0.00
56	T,M	Ethyl methacrylate	10.000	10.733	-7.3	112	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	10.482	-4.8	111	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.369	-3.7	111	0.00
59	T,M	2-Hexanone	50.000	55.018	-10.0	116	0.00
60	T,M	1,3-Dichloropropane	10.000	10.199	-2.0	109	-0.02
61	T,M	Tetrachloroethene	10.000	9.998	0.0	112	-0.02
62	T,M	Dibromochloromethane	10.000	10.525	-5.3	110	0.00
63	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
64	T,M	1,2-Dibromoethane	10.000	10.651	-6.5	113	-0.02
65	T,M	1-Chlorohexane	10.000	10.209	-2.1	110	0.00
66	P, T,M	Chlorobenzene	10.000	9.966	0.3	113	0.00
67	T,M	1,1,1,2-Tetrachloroethane	10.000	10.275	-2.8	110	0.00
68	C,T,M	Ethylbenzene	10.000	10.056	-0.6	110	0.00
69	T,M	m-Xylene & p-Xylene	20.000	19.384	3.1	110	0.00
70	T,M	o-Xylene	10.000	10.008	-0.1	108	0.00
71	T,M	Styrene	10.000	10.422	-4.2	111	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	108	0.00
73	T,M	Isopropylbenzene	10.000	10.383	-3.8	111	0.00
74	P,T,M	Bromoform	10.000	10.163	-1.6	113	-0.02
75	P,T,M	1,1,2,2-Tetrachloroethane	10.000	10.756	-7.6	113	-0.02
76	S	4-Bromofluorobenzene	10.000	10.340	-3.4	107	0.00
77	T,M	1,2,3-Trichloropropane	10.000	10.734	-7.3	111	0.00
78	T,M	trans-1,4-Dichloro-2-butene	10.000	10.856	-8.6	111	0.00
79	T,M	n-Propylbenzene	10.000	10.233	-2.3	108	0.00
80	T,M	Bromobenzene	10.000	10.213	-2.1	110	0.00

(#) = Out of Range

2093

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D Vial: 2
Acq On : 16 Aug 2012 10:02 am Operator: WL
Sample : IVO06H1501 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
81	T,M	1,3,5-Trimethylbenzene	10.000	10.066	-0.7	109	0.00
82	T,M	2-Chlorotoluene	10.000	10.344	-3.4	111	0.00
83	T,M	4-Chlorotoluene	10.000	9.430	5.7	104	0.00
84	T,M	tert-Butylbenzene	10.000	10.076	-0.8	110	0.00
85	T,M	1,2,4-Trimethylbenzene	10.000	9.992	0.1	108	0.00
86	T,M	sec-Butylbenzene	10.000	9.937	0.6	108	0.00
87	T,M	p-Isopropyltoluene	10.000	10.031	-0.3	109	-0.02
88	T,M	1,3-Dichlorobenzene	10.000	10.013	-0.1	109	0.00
89	T,M	1,4-Dichlorobenzene	10.000	10.199	-2.0	111	0.00
90	T,M	Benzyl chloride	-1.000	0.000	0.0	0	0.00
91	T,M	n-Butylbenzene	10.000	10.078	-0.8	111	-0.02
92	T,M	1,2-Dichlorobenzene	10.000	9.944	0.6	109	0.00
93	T,M	1,2-Dibromo-3-chloropropane	10.000	10.737	-7.4	115	0.00
94	T,M	1,2,4-Trichlorobenzene	10.000	9.828	1.7	111	0.00
95	T,M	Hexachlorobutadiene	10.000	9.875	1.3	108	0.00
96	T,M	Naphthalene	10.000	10.328	-3.3	111	0.00
97	T,M	1,2,3-Trichlorobenzene	10.000	9.754	2.5	110	-0.02

8-21-12

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D Vial: 2
Acq On : 16 Aug 2012 10:02 am Operator: WL
Sample : IVO06H1501 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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	112	0.00
2	T,M	Dichlorodifluoromethane	0.258	0.253	1.9	110	0.00
3	P,T,M	Chloromethane	0.310	0.325	-4.8	114	0.00
4	C,T,M	Vinyl chloride	0.233	0.240	-3.0	115	0.02
5	T,M	Bromomethane	0.187	0.195	-4.3	109	0.00
6	T,M	Chloroethane	0.159	0.168	-5.7	109	0.00
7	T,M	Dichlorofluoromethane	0.549	0.547	0.4	107	0.00
8	T,M	Trichlorofluoromethane	0.355	0.362	-2.0	109	-0.02
9	T,M	Acrolein	0.012	0.014	-16.7	126	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.168	0.169	-0.6	113	0.00
11	T,M	Acetone	0.034	0.035	-2.9	115	0.00
12	C,T,M	1,1-Dichloroethene	0.525	0.532	-1.3	112	-0.02
13	T,M	tert-Butyl alcohol	0.010	0.011	-10.0	110	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	113	0.00
15	T,M	Methyl acetate	0.111	0.112	-0.9	121	0.00
16	T,M	Iodomethane	0.451	0.464	-2.9	115	0.00
17	T,M	Methylene chloride	0.433	0.392	9.5	112	0.04
18	T,M	Carbon disulfide	1.073	1.255	-17.0	124	-0.02
19	T,M	Acrylonitrile	0.043	0.045	-4.7	117	0.00
20	T,M	tert-Butyl methyl ether (MT	0.470	0.474	-0.9	108	0.00
21	T,M	trans-1,2-Dichloroethene	0.556	0.558	-0.4	112	-0.02
22	T,M	Isopropyl ether (DIPE)	1.082	1.076	0.6	108	0.00
23	T,M	Vinyl acetate	0.376	0.404	-7.4	114	0.00
24	P,T,M	1,1-Dichloroethane	0.637	0.608	4.6	105	0.00
25	T,M	2-Butanol	0.009	0.010	-11.1	129	0.00
26	T,M	tert-Butyl ethyl ether (ETB	0.791	0.797	-0.8	110	-0.02
27	T,M	2-Butanone	0.063	0.065	-3.2	117	-0.02
28	T,M	2,2-Dichloropropane	0.319	0.345	-8.2	117	0.00
29	T,M	cis-1,2-Dichloroethene	0.365	0.369	-1.1	114	0.00
30	C,T,M	Chloroform	0.578	0.562	2.8	110	-0.02
31	T,M	tert-Amyl alcohol	0.000	0.000	0.0	105	0.00
32	T,M	Bromochloromethane	0.255	0.255	0.0	109	0.00
33	T,M	Tetrahydrofuran	0.047	0.041	12.8	111	0.00
34	S	Dibromofluoromethane	0.302	0.320	-6.0	109	-0.02
35	T,M	1,1,1-Trichloroethane	0.471	0.467	0.8	108	-0.02
36	T,M	Cyclohexane	0.779	0.833	-6.9	127	-0.01
37	T,M	tert-Amyl methyl ether (TAM	0.123	0.131	-6.5	111	0.00
38	S	1,2-Dichloroethane-d4	0.252	0.254	-0.8	103	-0.02
39	I	CHLOROBENZENE-D5	1.000	1.000	0.0	110	0.00
40	T,M	2,2,4-Trimethylpentane	1.630	1.352	17.1	92	0.00

(#) = Out of Range

PM 8-21-12

2095

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D Vial: 2
Acq On : 16 Aug 2012 10:02 am Operator: WL
Sample : IVO06H1501 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
41	T,M	1,1-Dichloropropene	0.194	0.197	-1.5	114	0.00
42	T,M	Carbon tetrachloride	0.506	0.502	0.8	109	-0.02
43	T,M	1,2-Dichloroethane	0.367	0.353	3.8	106	0.00
44	T,M	Benzene	1.512	1.484	1.9	112	0.00
45	T,M	Trichloroethene	0.432	0.432	0.0	112	0.00
46	T,M	Methylcyclohexane	0.697	0.706	-1.3	111	-0.02
47	C,T,M	1,2-Dichloropropane	0.384	0.383	0.3	111	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	120	0.00
49	T,M	Bromodichloromethane	0.466	0.473	-1.5	109	0.00
50	T,M	Dibromomethane	0.166	0.172	-3.6	113	0.00
51	T,M	2-Chloroethyl vinyl ether	0.124	0.130	-4.8	109	-0.02
52	T,M	4-Methyl-2-pentanone	0.198	0.213	-7.6	114	0.00
53	T,M	cis-1,3-Dichloropropene	0.539	0.572	-6.1	113	0.00
54	S	Toluene-d8	1.276	1.353	-6.0	110	0.00
55	C,T,M	Toluene	1.566	1.546	1.3	110	0.00
56	T,M	Ethyl methacrylate	0.257	0.276	-7.4	112	0.00
57	T,M	trans-1,3-Dichloropropene	0.395	0.414	-4.8	111	0.00
58	T,M	1,1,2-Trichloroethane	0.197	0.204	-3.6	111	0.00
59	T,M	2-Hexanone	0.118	0.129	-9.3	116	0.00
60	T,M	1,3-Dichloropropane	0.409	0.418	-2.2	109	-0.02
61	T,M	Tetrachloroethene	0.340	0.340	0.0	112	-0.02
62	T,M	Dibromochloromethane	0.265	0.279	-5.3	110	0.00
63	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
64	T,M	1,2-Dibromoethane	0.205	0.218	-6.3	113	-0.02
65	T,M	1-Chlorohexane	0.660	0.674	-2.1	110	0.00
66	P, T,M	Chlorobenzene	0.939	0.936	0.3	113	0.00
67	T,M	1,1,1,2-Tetrachloroethane	0.297	0.306	-3.0	110	0.00
68	C,T,M	Ethylbenzene	1.759	1.769	-0.6	110	0.00
69	T,M	m-Xylene & p-Xylene	1.351	1.309	3.1	110	0.00
70	T,M	o-Xylene	1.352	1.353	-0.1	108	0.00
71	T,M	Styrene	0.935	0.974	-4.2	111	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	108	0.00
73	T,M	Isopropylbenzene	4.685	4.864	-3.8	111	0.00
74	P,T,M	Bromoform	0.348	0.393	-12.9	113	-0.02
75	P,T,M	1,1,2,2-Tetrachloroethane	0.625	0.672	-7.5	113	-0.02
76	S	4-Bromofluorobenzene	1.245	1.287	-3.4	107	0.00
77	T,M	1,2,3-Trichloropropane	0.168	0.180	-7.1	111	0.00
78	T,M	trans-1,4-Dichloro-2-butene	0.188	0.204	-8.5	111	0.00
79	T,M	n-Propylbenzene	6.255	6.401	-2.3	108	0.00
80	T,M	Bromobenzene	0.975	0.996	-2.2	110	0.00

(#) = Out of Range

2055

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D Vial: 2
Acq On : 16 Aug 2012 10:02 am Operator: WL
Sample : IVO06H1501 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
81	T,M	1,3,5-Trimethylbenzene	3.761	3.785	-0.6	109	0.00
82	T,M	2-Chlorotoluene	3.900	4.034	-3.4	111	0.00
83	T,M	4-Chlorotoluene	3.163	2.983	5.7	104	0.00
84	T,M	tert-Butylbenzene	0.863	0.870	-0.8	110	0.00
85	T,M	1,2,4-Trimethylbenzene	3.614	3.611	0.1	108	0.00
86	T,M	sec-Butylbenzene	5.188	5.156	0.6	108	0.00
87	T,M	p-Isopropyltoluene	3.969	3.981	-0.3	109	-0.02
88	T,M	1,3-Dichlorobenzene	1.929	1.931	-0.1	109	0.00
89	T,M	1,4-Dichlorobenzene	1.839	1.876	-2.0	111	0.00
90	T,M	Benzyl chloride	0.000	0.000	0.0	0#	0.00
91	T,M	n-Butylbenzene	4.032	4.063	-0.8	111	-0.02
92	T,M	1,2-Dichlorobenzene	1.479	1.470	0.6	109	0.00
93	T,M	1,2-Dibromo-3-chloropropane	0.072	0.078	-8.3	115	0.00
94	T,M	1,2,4-Trichlorobenzene	0.927	0.911	1.7	111	0.00
95	T,M	Hexachlorobutadiene	0.655	0.647	1.2	108	0.00
96	T,M	Naphthalene	1.125	1.162	-3.3	111	0.00
97	T,M	1,2,3-Trichlorobenzene	0.694	0.677	2.4	110	-0.02

JM 8-21-12

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

2097

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D Vial: 2
Acq On : 16 Aug 2012 10:02 am Operator: WL
Sample : IVO06H1501 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 20 15:53 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.15	114	1860809	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.07	117	1581053	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.34	152	526652	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.65	111	595307	10.60	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	106.00%	
38) 1,2-Dichloroethane-d4	8.48	65	472685	10.07	ug/l	-0.02
Spiked Amount 10.000			Recovery	=	100.70%	
54) Toluene-d8	11.62	98	2139440	10.60	ug/l	0.00
Spiked Amount 10.000			Recovery	=	106.00%	
76) 4-Bromofluorobenzene	16.05	95	677781	10.34	ug/l	0.00
Spiked Amount 10.000			Recovery	=	103.40%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.89	85	471407	9.82	ug/l	100
3) Chloromethane	2.15	50	603952	10.47	ug/l	100
4) Vinyl chloride	2.31	62	447330	10.33	ug/l	100
5) Bromomethane	2.81	94	363435	10.47	ug/l	97
6) Chloroethane	2.92	64	313116	10.57	ug/l	97
7) Dichlorofluoromethane	2.96	67	1017847	9.96	ug/l	99
8) Trichlorofluoromethane	3.23	101	673832	10.19	ug/l	99
9) Acrolein	3.77	56	130783	57.21	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	314914	10.07	ug/l	100
11) Acetone	3.86	43	323536	51.05	ug/l	98
12) 1,1-Dichloroethene	4.05	61	990521	10.14	ug/l	98
13) tert-Butyl alcohol	4.15	59	101052	56.19	ug/l	95
15) Methyl acetate	4.54	43	208432	10.07	ug/l	100
16) Iodomethane	4.52	142	862656	10.29	ug/l	97
17) Methylene chloride	4.81	49	729403	10.87	ug/l	98
18) Carbon disulfide	4.78	76	2335412	11.69	ug/l	100
19) Acrylonitrile	4.97	53	422792	53.09	ug/l	99
20) tert-Butyl methyl ether (M	5.01	73	881351	10.07	ug/l	98
21) trans-1,2-Dichloroethene	5.22	61	1038370	10.03	ug/l	96
22) Isopropyl ether (DIPE)	5.80	45	2001510	9.94	ug/l	98
23) Vinyl acetate	6.00	43	751016	10.74	ug/l	98
24) 1,1-Dichloroethane	5.97	63	1131093	9.55	ug/l	98
25) 2-Butanol	6.37	45	95311	54.19	ug/l	98
26) tert-Butyl ethyl ether (ET	6.50	59	1483732	10.08	ug/l	100
27) 2-Butanone	6.71	43	600112	51.02	ug/l	100
28) 2,2-Dichloropropane	6.93	77	642452	10.82	ug/l	99
29) cis-1,2-Dichloroethene	7.02	96	686039	10.09	ug/l	96

(#) = qualifier out of range (m) = manual integration
RHW016.D VO06H15.M Mon Aug 20 16:00:28 2012 8-21-12

2098

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D
Acq On : 16 Aug 2012 10:02 am
Sample : IVO06H1501
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 15:53 2012

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Chloroform	7.27	83	1045522	9.71 ug/l		99
32)	Bromochloromethane	7.56	49	474413	10.02 ug/l		97
33)	Tetrahydrofuran	7.62	42	75461	9.89 ug/l		99
35)	1,1,1-Trichloroethane	7.94	97	868363	9.92 ug/l		99
36)	Cyclohexane	7.96	56	1550794	10.70 ug/l		92
37)	tert-Amyl methyl ether (TA	8.43	87	244051	10.64 ug/l		99
40)	2,2,4-Trimethylpentane	8.09	57	2136863	8.29 ug/l	#	47
41)	1,1-Dichloropropene	8.21	110	311010	10.11 ug/l		99
42)	Carbon tetrachloride	8.36	119	792907	9.91 ug/l		100
43)	1,2-Dichloroethane	8.64	62	557820	9.61 ug/l		98
44)	Benzene	8.66	78	2346500	9.82 ug/l		100
45)	Trichloroethene	9.67	130	682938	10.01 ug/l		99
46)	Methylcyclohexane	9.74	83	1115968	10.13 ug/l		98
47)	1,2-Dichloropropane	9.95	63	606068	9.99 ug/l		96
48)	1,4-Dioxane	10.38	88	41784	222.39 ug/l		99
49)	Bromodichloromethane	10.34	83	747350	10.15 ug/l		99
50)	Dibromomethane	10.43	93	272570	10.36 ug/l		99
51)	2-Chloroethyl vinyl ether	10.86	63	206300	10.54 ug/l		99
52)	4-Methyl-2-pentanone	10.90	43	1683849	53.87 ug/l		98
53)	cis-1,3-Dichloropropene	11.23	75	903757	10.61 ug/l		98
55)	Toluene	11.75	91	2443694	9.87 ug/l		100
56)	Ethyl methacrylate	12.05	69	435851	10.73 ug/l		98
57)	trans-1,3-Dichloropropene	12.05	75	653879	10.48 ug/l		98
58)	1,1,2-Trichloroethane	12.30	97	322523	10.37 ug/l		99
59)	2-Hexanone	12.31	43	1023658	55.02 ug/l		99
60)	1,3-Dichloropropane	12.70	76	660249	10.20 ug/l		100
61)	Tetrachloroethene	12.79	164	538206	10.00 ug/l		100
62)	Dibromochloromethane	13.13	129	441326	10.52 ug/l		100
64)	1,2-Dibromoethane	13.44	107	344825	10.65 ug/l		100
65)	1-Chlorohexane	13.71	91	1065278	10.21 ug/l		97
66)	Chlorobenzene	14.13	112	1479703	9.97 ug/l		97
67)	1,1,1,2-Tetrachloroethane	14.20	131	483160	10.28 ug/l		100
68)	Ethylbenzene	14.22	91	2796277	10.06 ug/l		99
69)	m-Xylene & p-Xylene	14.34	91	4139569	19.38 ug/l		99
70)	o-Xylene	15.05	91	2138774	10.01 ug/l		98
71)	Styrene	15.11	104	1540593	10.42 ug/l		98
73)	Isopropylbenzene	15.63	105	2561704	10.38 ug/l		99
74)	Bromoform	15.66	173	207142	10.16 ug/l		100
75)	1,1,2,2-Tetrachloroethane	15.91	83	354162	10.76 ug/l		99
77)	1,2,3-Trichloropropane	16.17	110	94743	10.73 ug/l		98
78)	trans-1,4-Dichloro-2-buten	16.27	53	107548	10.86 ug/l		99

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

8-21-12

2099

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D
Acq On : 16 Aug 2012 10:02 am
Sample : IVO06H1501
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 15:53 2012

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	n-Propylbenzene	16.28	91	3371039	10.23 ug/l	99
80)	Bromobenzene	16.37	156	524642	10.21 ug/l	97
81)	1,3,5-Trimethylbenzene	16.55	105	1993640	10.07 ug/l	98
82)	2-Chlorotoluene	16.58	91	2124758	10.34 ug/l	99
83)	4-Chlorotoluene	16.66	91	1570957	9.43 ug/l	99
84)	tert-Butylbenzene	17.12	134	458066	10.08 ug/l	97
85)	1,2,4-Trimethylbenzene	17.18	105	1901812	9.99 ug/l	100
86)	sec-Butylbenzene	17.43	105	2715256	9.94 ug/l	100
87)	p-Isopropyltoluene	17.61	119	2096778	10.03 ug/l	99
88)	1,3-Dichlorobenzene	17.76	146	1017050	10.01 ug/l	100
89)	1,4-Dichlorobenzene	17.89	146	988001	10.20 ug/l	99
91)	n-Butylbenzene	18.14	91	2139780	10.08 ug/l	99
92)	1,2-Dichlorobenzene	18.37	146	774306	9.94 ug/l	99
93)	1,2-Dibromo-3-chloropropan	19.27	157	40985	10.74 ug/l	98
94)	1,2,4-Trichlorobenzene	20.27	180	480032	9.83 ug/l	100
95)	Hexachlorobutadiene	20.42	225	340815	9.87 ug/l	99
96)	Naphthalene	20.60	128	612170	10.33 ug/l	100
97)	1,2,3-Trichlorobenzene	20.88	180	356463	9.75 ug/l	100

8-21-12

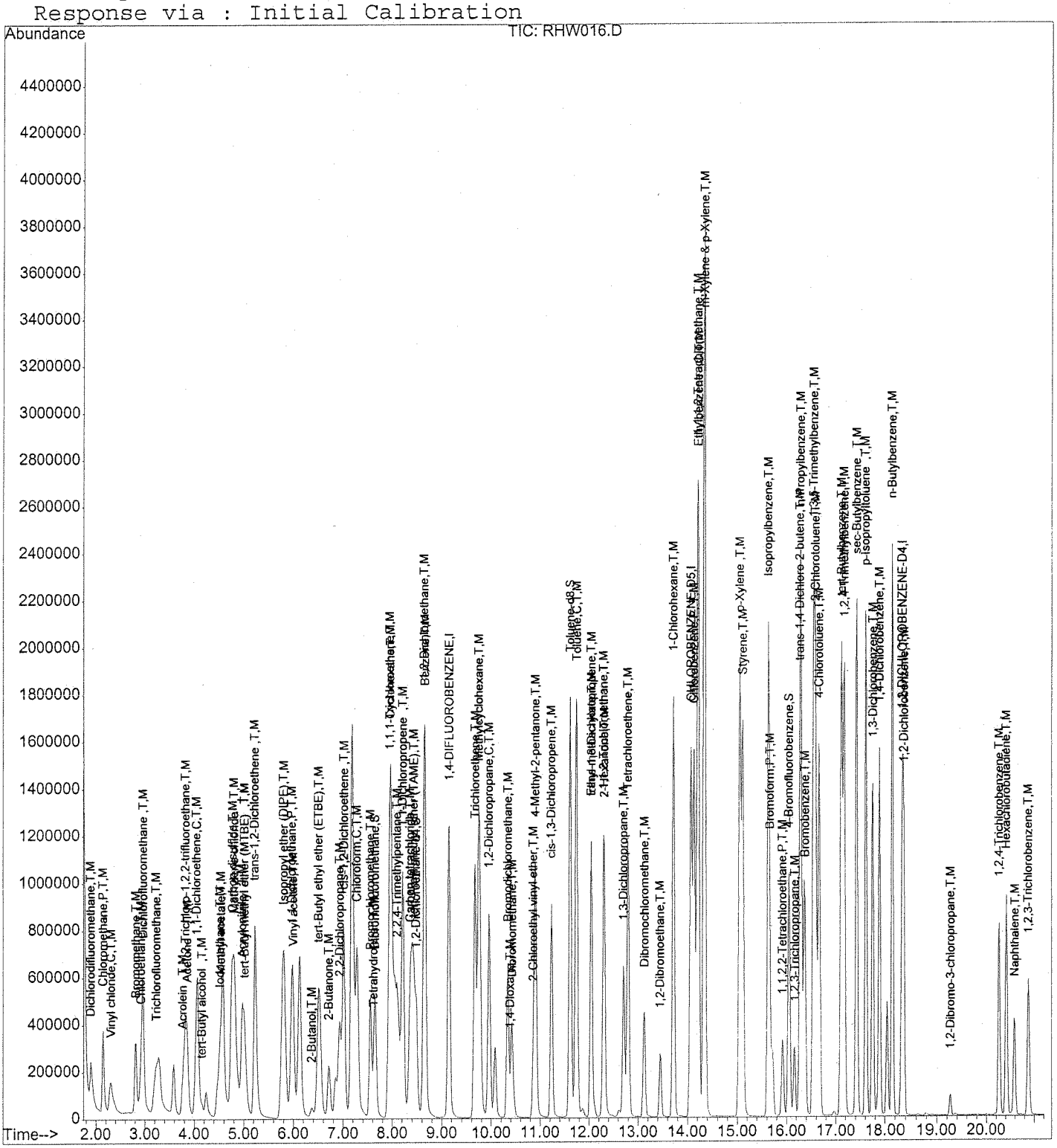
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12H16\RHW016.D
Acq On : 16 Aug 2012 10:02 am
Sample : IVO06H1501
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Aug 20 15:53 2012

Vial: 2
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



8-21-12

2101

DAILY CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RJW001
Instrument ID: 06
GC Column:RTX502.2ID:0.25mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 121219
BFB Injection Date : 10/01/12
BFB Injection Time : 10:07
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.53
75	30.0 - 60.0% of mass 95	45.01
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.24
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	91.47
175	5.0 - 9.0% of mass 174	6.45(7.0)1
176	95.0 - 101.0% of mass 174	88.88(97.2)1
177	5.0 - 9.0% of mass 176	5.55(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	VSTD010	CV006H1532	RJW003	10/01/12	11:15
2	MBLK1W	V006J01B	RJW007	10/01/12	13:29
3	LCS1W	V006J01L	RJW004	10/01/12	12:00
4	LCD1W	V006J01C	RJW005	10/01/12	12:30
5	09-25-12-CW-1	I219-01	RJW015	10/01/12	17:29
6	09-25-12-CW-5	I219-02	RJW016	10/01/12	17:59
7	09-25-12-CW-8	I219-04	RJW017	10/01/12	18:29
8	09-25-12-CW-9	I219-05	RJW018	10/01/12	18:59
9	09-25-12-CW-10	I219-06	RJW019	10/01/12	19:28
10	09-25-12-FDUP-1	I219-07	RJW020	10/01/12	19:59
11	09-25-12-TB-1	I219-08	RJW021	10/01/12	20:29
12	09-25-12-CW-6	I219-03	RJW022	10/01/12	20:58
13	09-25-12-CW-6MS	I219-03M	RJW023	10/01/12	21:28
14	09-25-12-CW-6MSD	I219-03S	RJW024	10/01/12	21:58

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RHW008
Instrument ID: 06
GC Column: RTX502.2 ID: 0.25mm (mm)

Project: B & B, MONTHLY CITY WELL SAMPLING
SDG No.: 12I219
Date Analyzed: 08/15/12
Time Analyzed: 21:54
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1654332	9.15	1432235	14.07	489315	18.34
	UPPER LIMIT	3308664	9.65	2864470	14.57	978630	18.84
	LOWER LIMIT	827166	8.65	716118	13.57	244658	17.84
	SAMPLE ID						
1	VSTD010	1666701	9.14	1441053	14.06	506570	18.33
2	MBLK1W	1970093	9.14	1686044	14.07	648553	18.32
3	LCS1W	1764346	9.14	1485813	14.07	524023	18.32
4	LCD1W	1754277	9.15	1532696	14.07	529882	18.32
5	09-25-12-CW-1	1889792	9.15	1611219	14.07	645695	18.34
6	09-25-12-CW-5	1816760	9.16	1572147	14.08	600713	18.34
7	09-25-12-CW-8	1886678	9.16	1622201	14.08	633064	18.34
8	09-25-12-CW-9	1922750	9.15	1618430	14.07	633274	18.34
9	09-25-12-CW-10	1775893	9.15	1571838	14.07	610315	18.34
10	09-25-12-FDUP-1	1800481	9.15	1542110	14.07	595241	18.34
11	09-25-12-TB-1	1739085	9.15	1499915	14.07	589151	18.34
12	09-25-12-CW-6	1719997	9.16	1518466	14.08	602760	18.33
13	09-25-12-CW-6MS	1488070	9.15	1300675	14.07	483577	18.34
14	09-25-12-CW-6MSD	1621731	9.14	1433904	14.08	509200	18.33

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 :T006
IC Beginning DateTime :08/15/12 19:22
Spike Amount :10 PPB
CC/CV File :RJW003
IC File :RHW008

Column Spec :RTX502.2 ID :0.25MM
IC Ending DateTime :08/15/12 23:53
HPChem Method :vo06h15
Date_Time :10/01/12 11:15

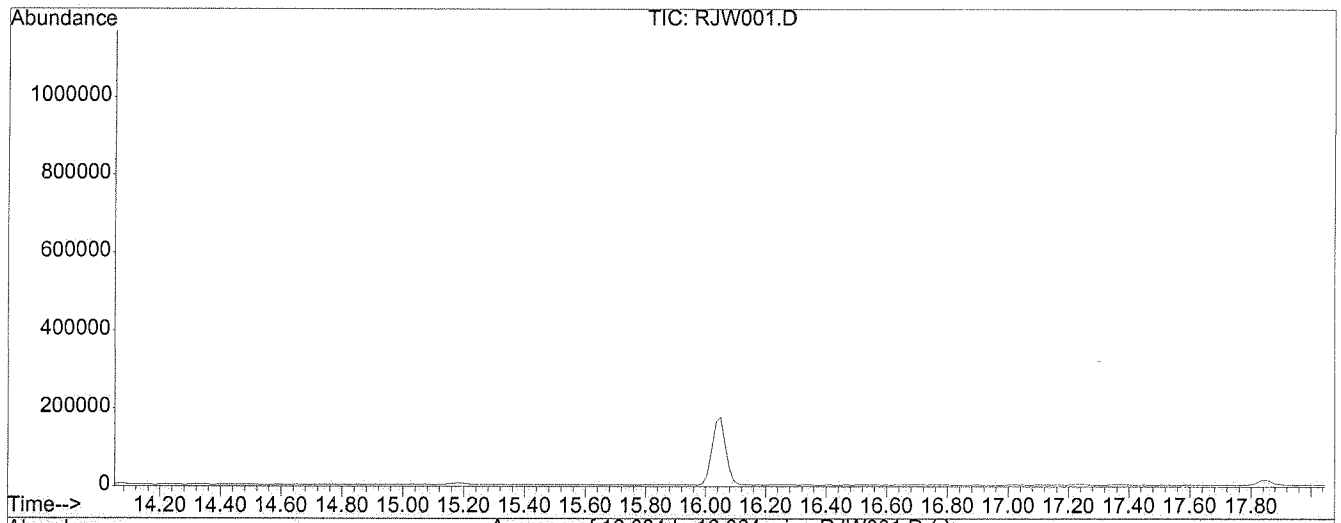
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1666701	1	1	9.141	9.149	0				
	2	Dichlorodifluoromethane	10.534	5.3	452774	0.272	0.258	1.901	1.894	6.32				
	3	Chloromethane	11.529	15.3	595615	0.357	0.310	2.139	2.147	5.91				
	4	Vinyl chloride	11.368	13.7	441026	0.265	0.233	2.287	2.300	13.19				
	5	Bromomethane	10.946	9.5	340253	0.204	0.187	2.808	2.812	10.72				
	6	Chloroethane	10.993	9.9	291601	0.175	0.159	2.912	2.919	9.41				
	7	Dichlorofluoromethane	10.029	0.3	917687	0.551	0.549	2.956	2.960	8.55				
	8	Trichlorofluoromethane	9.358	-6.4	554207	0.333	0.355	3.224	3.238	8.43				
5	9	Acrolein	72.502	45.0	148463	0.018	0.012	3.759	3.772	9.90				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	11.292	12.9	316469	0.190	0.168	3.833	3.826	6.69				
5	11	Acetone	45.157	-9.7	256346	0.031	0.034	3.863	3.859	12.26				
	12	1,1-Dichloroethene	9.807	-1.9	858348	0.515	0.525	4.056	4.063	4.54				
5	13	tert-Butyl alcohol	50.902	1.8	82000	0.010	0.010	4.161	4.161	12.01				
	14	Acetonitrile												
	15	Methyl acetate												
	16	Iodomethane	11.489	14.9	862700	0.518	0.451	4.517	4.526	4.90				
	17	Methylene chloride	11.027	10.3	662259	0.397	0.433	4.755	4.788	25.09	0.0211	0.3411		0.9963
	18	Carbon disulfide	10.302	3.0	1842708	1.106	1.073	4.770	4.793	8.57				
5	19	Acrylonitrile	51.409	2.8	366677	0.044	0.043	4.963	4.973	7.45				
	20	tert-Butyl methyl ether (MTBE)	9.933	-0.7	778486	0.467	0.470	5.008	5.018	7.49				
	21	trans-1,2-Dichloroethene	9.974	-0.3	925132	0.555	0.556	5.231	5.233	5.77				
	22	Isopropyl ether (DIPE)	9.965	-0.3	1797248	1.078	1.082	5.796	5.804	6.46				
	23	Vinyl acetate	10.188	1.9	638423	0.383	0.376	5.989	6.001	7.83				
	24	1,1-Dichloroethane	9.830	-1.7	1043121	0.626	0.637	5.960	5.971	5.00				
5	25	2-Butanol												
	26	tert-Butyl ethyl ether (ETBE)	9.887	-1.1	1303405	0.782	0.791	6.510	6.518	6.29				
5	27	2-Butanone	44.702	-10.6	470988	0.057	0.063	6.718	6.723	11.92				
	28	2,2-Dichloropropane	10.658	6.6	566802	0.340	0.319	6.926	6.939	11.92				
	29	cis-1,2-Dichloroethene	10.721	7.2	653049	0.392	0.365	7.015	7.023	4.81				
	30	Chloroform	9.689	-3.1	934137	0.560	0.578	7.283	7.291	6.39				
5	31	tert-Amyl alcohol												
	32	Bromochloromethane	9.949	-0.5	422122	0.253	0.255	7.550	7.559	5.92				
	33	Tetrahydrofuran	8.637	-13.6	59588	0.036	0.047	7.610	7.624	25.79	0.0026	0.0384		0.9958
	34	Dibromofluoromethane	10.461	4.6	526416	0.316	0.302	7.640	7.657	12.90				
	35	1,1,1-Trichloroethane	9.939	-0.6	779446	0.468	0.471	7.937	7.957	5.91				
	36	Cyclohexane												
	37	tert-Amyl methyl ether (TAME)	10.169	1.7	208889	0.125	0.123	8.427	8.433	7.49				
	38	1,2-Dichloroethane-d4	9.621	-3.8	404402	0.243	0.252	8.487	8.492	11.03				
	39	CHLOROBENZENE-D5	10.000	0	1441053	1	1	14.062	14.071	0				
	40	2,2,4-Trimethylpentane												
	41	1,1-Dichloropropene	10.922	9.2	306139	0.212	0.194	8.205	8.220	4.25				
	42	Carbon tetrachloride	9.603	-4.0	700229	0.486	0.506	8.368	8.376	5.79				
	43	1,2-Dichloroethane	9.006	-9.9	476366	0.331	0.367	8.636	8.646	6.76				
	44	Benzene	10.124	1.2	2205883	1.531	1.512	8.651	8.659	9.36				
	45	Trichloroethene	10.805	8.1	672177	0.466	0.432	9.661	9.670	6.12				
	46	Methylcyclohexane												
	47	1,2-Dichloropropane	9.983	-0.2	551813	0.383	0.384	9.959	9.964	4.61				
20	48	1,4-Dioxane	204.004	2.0	34935	0.001	0.001	10.375	10.385	11.65				
	49	Bromodichloromethane	9.508	-4.9	638184	0.443	0.466	10.331	10.339	5.58				
	50	Dibromomethane	9.957	-0.4	238834	0.166	0.166	10.420	10.427	5.54				
	51	2-Chloroethyl vinyl ether												
5	52	4-Methyl-2-pentanone	43.046	-13.9	1226488	0.170	0.198	10.896	10.907	7.11				
	53	cis-1,3-Dichloropropene	10.221	2.2	793376	0.551	0.539	11.223	11.234	5.79				
	54	Toluene-d8	10.694	6.9	1966518	1.365	1.276	11.609	11.619	8.94				
	55	Toluene	10.124	1.2	2284968	1.586	1.566	11.743	11.748	6.76				
	56	Ethyl methacrylate	10.138	1.4	375258	0.260	0.257	12.040	12.049	7.04				
	57	trans-1,3-Dichloropropene	9.736	-2.6	553629	0.384	0.395	12.040	12.049	6.05				
	58	1,1,2-Trichloroethane	10.216	2.2	289617	0.201	0.197	12.293	12.301	5.64				
5	59	2-Hexanone	47.597	-4.8	807166	0.112	0.118	12.308	12.321	8.05				
	60	1,3-Dichloropropane	9.593	-4.1	566073	0.393	0.409	12.709	12.715	6.01				
	61	Tetrachloroethene	11.660	16.6	572137	0.397	0.340	12.799	12.804	4.76				
	62	Dibromochloromethane	10.536	5.4	402698	0.279	0.265	13.126	13.134	9.39				
	63	2-Ethyl-1-butanol												
	64	1,2-Dibromoethane	10.381	3.8	306328	0.213	0.205	13.453	13.458	6.02				
	65	1-Chlorohexane	10.591	5.9	1007271	0.699	0.660	13.720	13.720	5.61				
	66	Chlorobenzene	10.653	6.5	1441770	1.000	0.939	14.122	14.132	6.36				
	67	1,1,1,2-Tetrachloroethane	10.572	5.7	453128	0.314	0.297	14.196	14.204	4.58				
	68	Ethylbenzene	10.327	3.3	2617379	1.816	1.759	14.211	14.219	9.90				
2	69	m-Xylene & p-Xylene	19.713	-1.4	3837094	1.331	1.351	14.330	14.342	7.48				
	70	o-Xylene	10.224	2.2	1991516	1.382	1.352	15.043	15.052	6.63				
	71	Styrene	11.122	11.2	1498436	1.040	0.935	15.103	15.111	6.35				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	506570	1	1	18.329	18.337	0				
	73	Isopropylbenzene	9.886	-1.1	2346337	4.632	4.685	15.623	15.639	8.82				
	74	Bromoform	9.765	-2.3	191331	0.378	0.348	15.668	15.673	18.12	-0.0062	0.3931		0.9971
	75	1,1,2,2-Tetrachloroethane	9.916	-0.8	314063	0.620	0.625	15.921	15.926	8.36				
	76	4-Bromofluorobenzene	9.963	-0.4	628185	1.240	1.245	16.040	16.048	8.32				
	77	1,2,3-Trichloropropane	9.400	-6.0	79812	0.158	0.168	16.159	16.168	8.94				
	78	trans-1,4-Dichloro-2-butene	8.893	-11.1	84747	0.167	0.188	16.278	16.274	10.76				
	79	n-Propylbenzene	10.199	2.0	3231876	6.380	6.255	16.278	16.295	9.47				
	80	Bromobenzene	10.916	9.2	539383	1.065	0.975	16.367	16.375	7.12				
	81	1,3,5-Trimethylbenzene	10.179	1.8	1939291	3.828	3.761	16.545	16.552	7.92				
	82	2-Chlorotoluene	9.828	-1.7	1941869	3.833	3.900	16.575	16.585	10.14				
	83	4-Chlorotoluene	9.468	-5.3	1517248	2.995	3.163	16.649	16.663	7.18				
	84	tert-Butylbenzene	10.794	7.9	472012	0.932	0.863	17.110	17.118	6.95				
	85	1,2,4-Trimethylbenzene	9.879	-1.2	1808811	3.571	3.614	17.170	17.178	7.83				
	86	sec-Butylbenzene	10.136	1.4	2664107	5.259	5.188	17.422	17.431	8.10				
	87	p-Isopropyltoluene	10.301	3.0	2071262	4.089	3.969	17.615	17.621	7.26				
	88	1,3-Dichlorobenzene	10.827	8.3	1057816	2.088	1.929	17.749	17.758	7.62				
	89	1,4-Dichlorobenzene	10.924	9.2	1017948	2.009	1.839	17.883	17.895	7.30				
	90	Benzyl chloride												
	91	n-Butylbenzene	10.151	1.5	2073164	4.093	4.032	18.151	18.153	8.35				
	92	1,2-Dichlorobenzene	10.505	5.1	786818	1.553	1.479	18.359	18.367	5.96				
	93	1,2-Dibromo-3-chloropropane	9.273	-7.3	34050	0.067	0.072	19.266	19.273	14.38				
	94	1,2,4-Trichlorobenzene	9.118	-8.8	428431	0.846	0.927	20.262	20.270	8.69				
	95	Hexachlorobutadiene	8.963	-10.4	297585	0.587	0.655	20.411	20.420	10.91				
	96	Naphthalene	8.312	-16.9	473908	0.936	1.125	20.589	20.596	12.07				
	97	1,2,3-Trichlorobenzene	7.973	-20.3	280264	0.553	0.694	20.886	20.888	13.66				

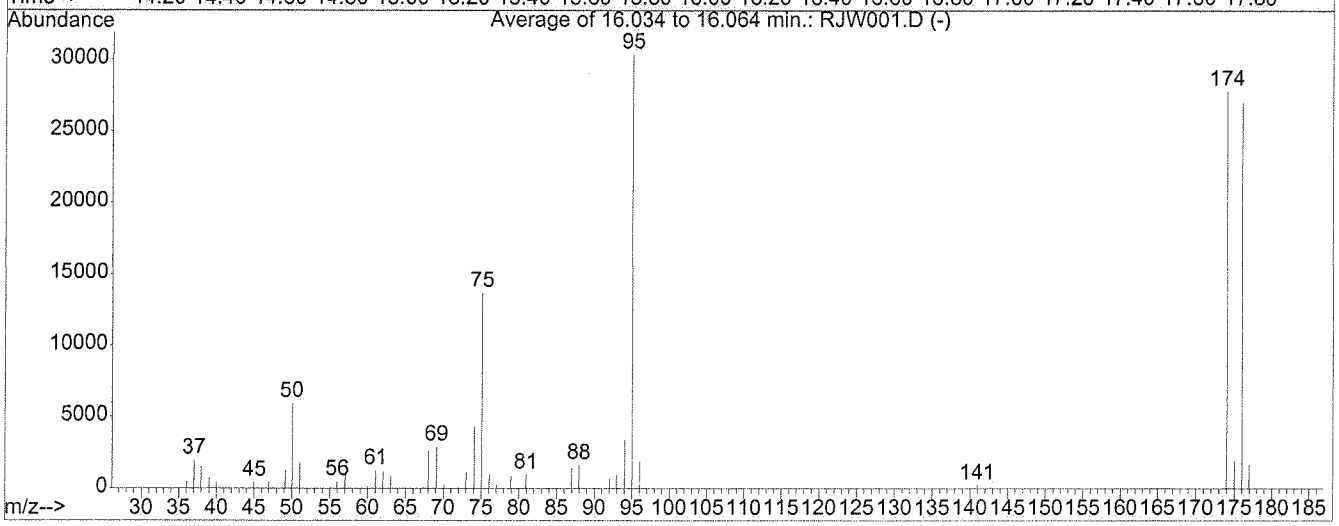
Spike Amount = Nominal Amount * M

BFB

Data File : D:\HPCHEM\1\DATA\12J01\RJW001.D
Acq On : 1 Oct 2012 10:07 am
Sample : BFB06J01
Misc : T/ CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: WL
Inst : TO06
Multiplr: 1.00





AutoFind: Scans 962, 963, 964; Background Corrected with Scan 957

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	5937	PASS
75	95	30	60	45.0	13681	PASS
95	95	100	100	100.0	30397	PASS
96	95	5	9	6.2	1898	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	91.5	27803	PASS
175	174	5	9	7.0	1960	PASS
176	174	95	101	97.2	27016	PASS
177	176	5	9	6.2	1686	PASS

RJW001.D VO06H15.M Tue Oct 02 15:49:28 2012

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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	101	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.534	-5.3	106	0.00
3	P,T,M	Chloromethane	10.000	11.530	-15.3	113	0.00
4	C,T,M	Vinyl chloride	10.000	11.369	-13.7	113	0.00
5	T,M	Bromomethane	10.000	10.946	-9.5	102	0.00
6	T,M	Chloroethane	10.000	10.993	-9.9	101	0.00
7	T,M	Dichlorofluoromethane	10.000	10.029	-0.3	97	0.00
8	T,M	Trichlorofluoromethane	10.000	9.359	6.4	90	-0.02
9	T,M	Acrolein	50.000	72.503	-45.0#	143	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.293	-12.9	113	0.00
11	T,M	Acetone	50.000	45.157	9.7	91	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.808	1.9	97	0.00
13	T,M	tert-Butyl alcohol	50.000	50.902	-1.8	90	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	86	0.00
15	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.54#
16	T,M	Iodomethane	10.000	11.489	-14.9	115	0.00
17	T,M	Methylene chloride	10.000	11.028	-10.3	102	0.00
18	T,M	Carbon disulfide	10.000	10.302	-3.0	98	-0.02
19	T,M	Acrylonitrile	50.000	51.409	-2.8	101	0.00
20	T,M	tert-Butyl methyl ether (MT	10.000	9.933	0.7	95	0.00
21	T,M	trans-1,2-Dichloroethene	10.000	9.975	0.3	100	0.00
22	T,M	Isopropyl ether (DIPE)	10.000	9.965	0.4	97	0.00
23	T,M	Vinyl acetate	10.000	10.189	-1.9	97	0.00
24	P,T,M	1,1-Dichloroethane	10.000	9.831	1.7	97	0.00
25	T,M	2-Butanol	50.000	0.000	100.0#	0	-6.37#
26	T,M	tert-Butyl ethyl ether (ETB	10.000	9.888	1.1	97	0.00
27	T,M	2-Butanone	50.000	44.703	10.6	92	0.00
28	T,M	2,2-Dichloropropane	10.000	10.658	-6.6	104	0.00
29	T,M	cis-1,2-Dichloroethene	10.000	10.722	-7.2	109	0.00
30	C,T,M	Chloroform	10.000	9.689	3.1	98	0.00
31	T,M	tert-Amyl alcohol	-1.000	0.000	0.0	88	0.00
32	T,M	Bromochloromethane	10.000	9.950	0.5	97	0.00
33	T,M	Tetrahydrofuran	10.000	8.637	13.6	88	0.00
34	S	Dibromofluoromethane	10.000	10.461	-4.6	96	-0.02
35	T,M	1,1,1-Trichloroethane	10.000	9.939	0.6	97	-0.02
36	T,M	Cyclohexane	10.000	0.000	100.0#	0	-7.97#
37	T,M	tert-Amyl methyl ether (TAM	10.000	10.169	-1.7	95	0.00
38	S	1,2-Dichloroethane-d4	10.000	9.622	3.8	88	0.00
39	I	CHLOROBENZENE-D5	10.000	10.000	0.0	101	0.00
40	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-8.09#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
41	T,M	1,1-Dichloropropene	10.000	10.923	-9.2	112	0.00
42	T,M	Carbon tetrachloride	10.000	9.603	4.0	96	0.00
43	T,M	1,2-Dichloroethane	10.000	9.006	9.9	91	0.00
44	T,M	Benzene	10.000	10.124	-1.2	106	0.00
45	T,M	Trichloroethene	10.000	10.805	-8.0	110	0.00
46	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-9.76#
47	C,T,M	1,2-Dichloropropane	10.000	9.983	0.2	101	0.00
48	T,M	1,4-Dioxane	200.000	204.004	-2.0	100	0.00
49	T,M	Bromodichloromethane	10.000	9.508	4.9	93	0.00
50	T,M	Dibromomethane	10.000	9.958	0.4	99	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-10.87#
52	T,M	4-Methyl-2-pentanone	50.000	43.046	13.9	83	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	10.221	-2.2	99	0.00
54	S	Toluene-d8	10.000	10.695	-7.0	101	0.00
55	C,T,M	Toluene	10.000	10.125	-1.3	103	0.00
56	T,M	Ethyl methacrylate	10.000	10.138	-1.4	96	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	9.737	2.6	94	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.216	-2.2	100	0.00
59	T,M	2-Hexanone	50.000	47.597	4.8	92	0.00
60	T,M	1,3-Dichloropropane	10.000	9.594	4.1	93	0.00
61	T,M	Tetrachloroethene	10.000	11.661	-16.6	119	0.00
62	T,M	Dibromochloromethane	10.000	10.536	-5.4	101	0.00
63	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
64	T,M	1,2-Dibromoethane	10.000	10.381	-3.8	100	0.00
65	T,M	1-Chlorohexane	10.000	10.591	-5.9	104	0.00
66	P, T,M	Chlorobenzene	10.000	10.654	-6.5	110	0.00
67	T,M	1,1,1,2-Tetrachloroethane	10.000	10.573	-5.7	103	0.00
68	C,T,M	Ethylbenzene	10.000	10.327	-3.3	103	0.00
69	T,M	m-Xylene & p-Xylene	20.000	19.713	1.4	102	0.00
70	T,M	o-Xylene	10.000	10.224	-2.2	101	0.00
71	T,M	Styrene	10.000	11.122	-11.2	108	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	104	0.00
73	T,M	Isopropylbenzene	10.000	9.887	1.1	101	0.00
74	P,T,M	Bromoform	10.000	9.765	2.3	105	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.917	0.8	100	0.00
76	S	4-Bromofluorobenzene	10.000	9.963	0.4	99	0.00
77	T,M	1,2,3-Trichloropropane	10.000	9.401	6.0	93	0.00
78	T,M	trans-1,4-Dichloro-2-butene	10.000	8.894	11.1	87	0.00
79	T,M	n-Propylbenzene	10.000	10.199	-2.0	104	0.00
80	T,M	Bromobenzene	10.000	10.917	-9.2	113	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
81	T,M	1,3,5-Trimethylbenzene	10.000	10.180	-1.8	106	0.00
82	T,M	2-Chlorotoluene	10.000	9.829	1.7	102	0.00
83	T,M	4-Chlorotoluene	10.000	9.469	5.3	101	0.00
84	T,M	tert-Butylbenzene	10.000	10.795	-7.9	113	0.00
85	T,M	1,2,4-Trimethylbenzene	10.000	9.880	1.2	103	0.00
86	T,M	sec-Butylbenzene	10.000	10.137	-1.4	106	0.00
87	T,M	p-Isopropyltoluene	10.000	10.302	-3.0	107	0.00
88	T,M	1,3-Dichlorobenzene	10.000	10.827	-8.3	113	0.00
89	T,M	1,4-Dichlorobenzene	10.000	10.924	-9.2	114	0.00
90	T,M	Benzyl chloride	-1.000	0.000	0.0	0	0.00
91	T,M	n-Butylbenzene	10.000	10.151	-1.5	107	0.00
92	T,M	1,2-Dichlorobenzene	10.000	10.505	-5.1	111	0.00
93	T,M	1,2-Dibromo-3-chloropropane	10.000	9.274	7.3	95	0.00
94	T,M	1,2,4-Trichlorobenzene	10.000	9.119	8.8	99	0.00
95	T,M	Hexachlorobutadiene	10.000	8.964	10.4	94	0.00
96	T,M	Naphthalene	10.000	8.313	16.9	86	0.00
97	T,M	1,2,3-Trichlorobenzene	10.000	7.973	20.3#	87	0.00

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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	101	0.00
2	T,M	Dichlorodifluoromethane	0.258	0.272	-5.4	106	0.00
3	P,T,M	Chloromethane	0.310	0.357	-15.2	113	0.00
4	C,T,M	Vinyl chloride	0.233	0.265	-13.7	113	0.00
5	T,M	Bromomethane	0.187	0.204	-9.1	102	0.00
6	T,M	Chloroethane	0.159	0.175	-10.1	101	0.00
7	T,M	Dichlorofluoromethane	0.549	0.551	-0.4	97	0.00
8	T,M	Trichlorofluoromethane	0.355	0.333	6.2	90	-0.02
9	T,M	Acrolein	0.012	0.018	-50.0#	143	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.168	0.190	-13.1	113	0.00
11	T,M	Acetone	0.034	0.031	8.8	91	0.00
12	C,T,M	1,1-Dichloroethene	0.525	0.515	1.9	97	0.00
13	T,M	tert-Butyl alcohol	0.010	0.010	0.0	90	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	86	0.00
15	T,M	Methyl acetate	0.111	0.000	100.0#	0#	-4.54#
16	T,M	Iodomethane	0.451	0.518	-14.9	115	0.00
17	T,M	Methylene chloride	0.433	0.397	8.3	102	0.00
18	T,M	Carbon disulfide	1.073	1.106	-3.1	98	-0.02
19	T,M	Acrylonitrile	0.043	0.044	-2.3	101	0.00
20	T,M	tert-Butyl methyl ether (MT	0.470	0.467	0.6	95	0.00
21	T,M	trans-1,2-Dichloroethene	0.556	0.555	0.2	100	0.00
22	T,M	Isopropyl ether (DIPE)	1.082	1.078	0.4	97	0.00
23	T,M	Vinyl acetate	0.376	0.383	-1.9	97	0.00
24	P,T,M	1,1-Dichloroethane	0.637	0.626	1.7	97	0.00
25	T,M	2-Butanol	0.009	0.000	100.0#	0#	-6.37#
26	T,M	tert-Butyl ethyl ether (ETB	0.791	0.782	1.1	97	0.00
27	T,M	2-Butanone	0.063	0.057	9.5	92	0.00
28	T,M	2,2-Dichloropropane	0.319	0.340	-6.6	104	0.00
29	T,M	cis-1,2-Dichloroethene	0.365	0.392	-7.4	109	0.00
30	C,T,M	Chloroform	0.578	0.560	3.1	98	0.00
31	T,M	tert-Amyl alcohol	0.000	0.000	0.0	88	0.00
32	T,M	Bromochloromethane	0.255	0.253	0.8	97	0.00
33	T,M	Tetrahydrofuran	0.047	0.036	23.4#	88	0.00
34	S	Dibromofluoromethane	0.302	0.316	-4.6	96	-0.02
35	T,M	1,1,1-Trichloroethane	0.471	0.468	0.6	97	-0.02
36	T,M	Cyclohexane	0.779	0.000	100.0#	0#	-7.97#
37	T,M	tert-Amyl methyl ether (TAM	0.123	0.125	-1.6	95	0.00
38	S	1,2-Dichloroethane-d4	0.252	0.243	3.6	88	0.00
39	I	CHLOROBENZENE-D5	1.000	1.000	0.0	101	0.00
40	T,M	2,2,4-Trimethylpentane	1.630	0.000	100.0#	0#	-8.09#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
41	T,M	1,1-Dichloropropene	0.194	0.212	-9.3	112	0.00
42	T,M	Carbon tetrachloride	0.506	0.486	4.0	96	0.00
43	T,M	1,2-Dichloroethane	0.367	0.331	9.8	91	0.00
44	T,M	Benzene	1.512	1.531	-1.3	106	0.00
45	T,M	Trichloroethene	0.432	0.466	-7.9	110	0.00
46	T,M	Methylcyclohexane	0.697	0.000	100.0#	0#	-9.76#
47	C,T,M	1,2-Dichloropropane	0.384	0.383	0.3	101	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	100	0.00
49	T,M	Bromodichloromethane	0.466	0.443	4.9	93	0.00
50	T,M	Dibromomethane	0.166	0.166	0.0	99	0.00
51	T,M	2-Chloroethyl vinyl ether	0.124	0.000	100.0#	0#	-10.87#
52	T,M	4-Methyl-2-pentanone	0.198	0.170	14.1	83	0.00
53	T,M	cis-1,3-Dichloropropene	0.539	0.551	-2.2	99	0.00
54	S	Toluene-d8	1.276	1.365	-7.0	101	0.00
55	C,T,M	Toluene	1.566	1.586	-1.3	103	0.00
56	T,M	Ethyl methacrylate	0.257	0.260	-1.2	96	0.00
57	T,M	trans-1,3-Dichloropropene	0.395	0.384	2.8	94	0.00
58	T,M	1,1,2-Trichloroethane	0.197	0.201	-2.0	100	0.00
59	T,M	2-Hexanone	0.118	0.112	5.1	92	0.00
60	T,M	1,3-Dichloropropane	0.409	0.393	3.9	93	0.00
61	T,M	Tetrachloroethene	0.340	0.397	-16.8	119	0.00
62	T,M	Dibromochloromethane	0.265	0.279	-5.3	101	0.00
63	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
64	T,M	1,2-Dibromoethane	0.205	0.213	-3.9	100	0.00
65	T,M	1-Chlorohexane	0.660	0.699	-5.9	104	0.00
66	P, T,M	Chlorobenzene	0.939	1.000	-6.5	110	0.00
67	T,M	1,1,1,2-Tetrachloroethane	0.297	0.314	-5.7	103	0.00
68	C,T,M	Ethylbenzene	1.759	1.816	-3.2	103	0.00
69	T,M	m-Xylene & p-Xylene	1.351	1.331	1.5	102	0.00
70	T,M	o-Xylene	1.352	1.382	-2.2	101	0.00
71	T,M	Styrene	0.935	1.040	-11.2	108	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	104	0.00
73	T,M	Isopropylbenzene	4.685	4.632	1.1	101	0.00
74	P,T,M	Bromoform	0.348	0.378	-8.6	105	0.00
75	P,T,M	1,1,2,2-Tetrachloroethane	0.625	0.620	0.8	100	0.00
76	S	4-Bromofluorobenzene	1.245	1.240	0.4	99	0.00
77	T,M	1,2,3-Trichloropropane	0.168	0.158	6.0	93	0.00
78	T,M	trans-1,4-Dichloro-2-butene	0.188	0.167	11.2	87	0.00
79	T,M	n-Propylbenzene	6.255	6.380	-2.0	104	0.00
80	T,M	Bromobenzene	0.975	1.065	-9.2	113	0.00

(#) = Out of Range

2111

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 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)
81	T,M	1,3,5-Trimethylbenzene	3.761	3.828	-1.8	106	0.00
82	T,M	2-Chlorotoluene	3.900	3.833	1.7	102	0.00
83	T,M	4-Chlorotoluene	3.163	2.995	5.3	101	0.00
84	T,M	tert-Butylbenzene	0.863	0.932	-8.0	113	0.00
85	T,M	1,2,4-Trimethylbenzene	3.614	3.571	1.2	103	0.00
86	T,M	sec-Butylbenzene	5.188	5.259	-1.4	106	0.00
87	T,M	p-Isopropyltoluene	3.969	4.089	-3.0	107	0.00
88	T,M	1,3-Dichlorobenzene	1.929	2.088	-8.2	113	0.00
89	T,M	1,4-Dichlorobenzene	1.839	2.009	-9.2	114	0.00
90	T,M	Benzyl chloride	0.000	0.000	0.0	0#	0.00
91	T,M	n-Butylbenzene	4.032	4.093	-1.5	107	0.00
92	T,M	1,2-Dichlorobenzene	1.479	1.553	-5.0	111	0.00
93	T,M	1,2-Dibromo-3-chloropropane	0.072	0.067	6.9	95	0.00
94	T,M	1,2,4-Trichlorobenzene	0.927	0.846	8.7	99	0.00
95	T,M	Hexachlorobutadiene	0.655	0.587	10.4	94	0.00
96	T,M	Naphthalene	1.125	0.936	16.8	86	0.00
97	T,M	1,2,3-Trichlorobenzene	0.694	0.553	20.3#	87	0.00

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:50 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.14	114	1666701	10.00	ug/l	0.00
39) CHLOROBENZENE-D5	14.06	117	1441053	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.33	152	506570	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.64	111	526416	10.46	ug/l	-0.02
Spiked Amount 10.000			Recovery = 104.60%			
38) 1,2-Dichloroethane-d4	8.49	65	404402	9.62	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.20%			
54) Toluene-d8	11.61	98	1966518	10.69	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.90%			
76) 4-Bromofluorobenzene	16.04	95	628185	9.96	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.90	85	452774	10.53	ug/l	99
3) Chloromethane	2.14	50	595615	11.53	ug/l	99
4) Vinyl chloride	2.29	62	441026	11.37	ug/l	98
5) Bromomethane	2.81	94	340253	10.95	ug/l	99
6) Chloroethane	2.91	64	291601	10.99	ug/l	95
7) Dichlorofluoromethane	2.96	67	917687	10.03	ug/l	100
8) Trichlorofluoromethane	3.22	101	554207	9.36	ug/l	100
9) Acrolein	3.76	56	148463	72.50	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.83	151	316469	11.29	ug/l	99
11) Acetone	3.86	43	256346	45.16	ug/l	96
12) 1,1-Dichloroethene	4.06	61	858348	9.81	ug/l	95
13) tert-Butyl alcohol	4.16	59	82000	50.90	ug/l	94
16) Iodomethane	4.52	142	862700	11.49	ug/l	90
17) Methylene chloride	4.76	49	662259	11.03	ug/l	96
18) Carbon disulfide	4.77	76	1842708	10.30	ug/l	99
19) Acrylonitrile	4.96	53	366677	51.41	ug/l	98
20) tert-Butyl methyl ether (M	5.01	73	778486	9.93	ug/l	99
21) trans-1,2-Dichloroethene	5.23	61	925132	9.97	ug/l	94
22) Isopropyl ether (DIPE)	5.80	45	1797248	9.97	ug/l	97
23) Vinyl acetate	5.99	43	638423	10.19	ug/l	99
24) 1,1-Dichloroethane	5.96	63	1043121	9.83	ug/l	100
26) tert-Butyl ethyl ether (ET	6.51	59	1303405	9.89	ug/l	99
27) 2-Butanone	6.72	43	470988	44.70	ug/l	96
28) 2,2-Dichloropropane	6.93	77	566802	10.66	ug/l	98
29) cis-1,2-Dichloroethene	7.02	96	653049	10.72	ug/l	92
30) Chloroform	7.28	83	934137	9.69	ug/l	99
32) Bromochloromethane	7.55	49	422122	9.95	ug/l	91

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D
Acq On : 1 Oct 2012 11:15 am
Sample : CVO06H1532
Misc : 10ppb 8260/50ppb KET-AA-TBA
MS Integration Params: RTE.P
Quant Time: Oct 2 15:50 2012

Vial: 3
Operator: WL
Inst : TO06
Multiplr: 1.00
Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	Tetrahydrofuran	7.61	42	59588	8.64 ug/l		97
35)	1,1,1-Trichloroethane	7.94	97	779446	9.94 ug/l		92
37)	tert-Amyl methyl ether (TA	8.43	87	208889	10.17 ug/l		95
41)	1,1-Dichloropropene	8.20	110	306139	10.92 ug/l		99
42)	Carbon tetrachloride	8.37	119	700229	9.60 ug/l		100
43)	1,2-Dichloroethane	8.64	62	476366	9.01 ug/l		99
44)	Benzene	8.65	78	2205883	10.12 ug/l		99
45)	Trichloroethene	9.66	130	672177	10.80 ug/l		94
47)	1,2-Dichloropropane	9.96	63	551813	9.98 ug/l		96
48)	1,4-Dioxane	10.38	88	34935	204.00 ug/l		91
49)	Bromodichloromethane	10.33	83	638184	9.51 ug/l		99
50)	Dibromomethane	10.42	93	238834	9.96 ug/l		91
52)	4-Methyl-2-pentanone	10.90	43	1226488	43.05 ug/l		94
53)	cis-1,3-Dichloropropene	11.22	75	793376	10.22 ug/l		98
55)	Toluene	11.74	91	2284968	10.12 ug/l		100
56)	Ethyl methacrylate	12.04	69	375258	10.14 ug/l		99
57)	trans-1,3-Dichloropropene	12.04	75	553629	9.74 ug/l		98
58)	1,1,2-Trichloroethane	12.29	97	289617	10.22 ug/l		98
59)	2-Hexanone	12.31	43	807166	47.60 ug/l		99
60)	1,3-Dichloropropane	12.71	76	566073	9.59 ug/l		99
61)	Tetrachloroethene	12.80	164	572137	11.66 ug/l		96
62)	Dibromochloromethane	13.13	129	402698	10.54 ug/l		99
64)	1,2-Dibromoethane	13.45	107	306328	10.38 ug/l		99
65)	1-Chlorohexane	13.72	91	1007271	10.59 ug/l		96
66)	Chlorobenzene	14.12	112	1441770	10.65 ug/l		95
67)	1,1,1,2-Tetrachloroethane	14.20	131	453128	10.57 ug/l		96
68)	Ethylbenzene	14.21	91	2617379	10.33 ug/l		96
69)	m-Xylene & p-Xylene	14.33	91	3837094	19.71 ug/l		96
70)	o-Xylene	15.04	91	1991516	10.22 ug/l		95
71)	Styrene	15.10	104	1498436	11.12 ug/l		95
73)	Isopropylbenzene	15.62	105	2346337	9.89 ug/l		97
74)	Bromoform	15.67	173	191331	9.77 ug/l		99
75)	1,1,2,2-Tetrachloroethane	15.92	83	314063	9.92 ug/l		99
77)	1,2,3-Trichloropropane	16.16	110	79812	9.40 ug/l		99
78)	trans-1,4-Dichloro-2-buten	16.28	53	84747	8.89 ug/l		97
79)	n-Propylbenzene	16.28	91	3231876	10.20 ug/l		97
80)	Bromobenzene	16.37	156	539383	10.92 ug/l		90
81)	1,3,5-Trimethylbenzene	16.55	105	1939291	10.18 ug/l		95
82)	2-Chlorotoluene	16.57	91	1941869	9.83 ug/l		94
83)	4-Chlorotoluene	16.65	91	1517248	9.47 ug/l		94
84)	tert-Butylbenzene	17.11	134	472012	10.79 ug/l	#	86

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:50 2012 Quant Results File: VO06H15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration
DataAcq Meth : VO06H15

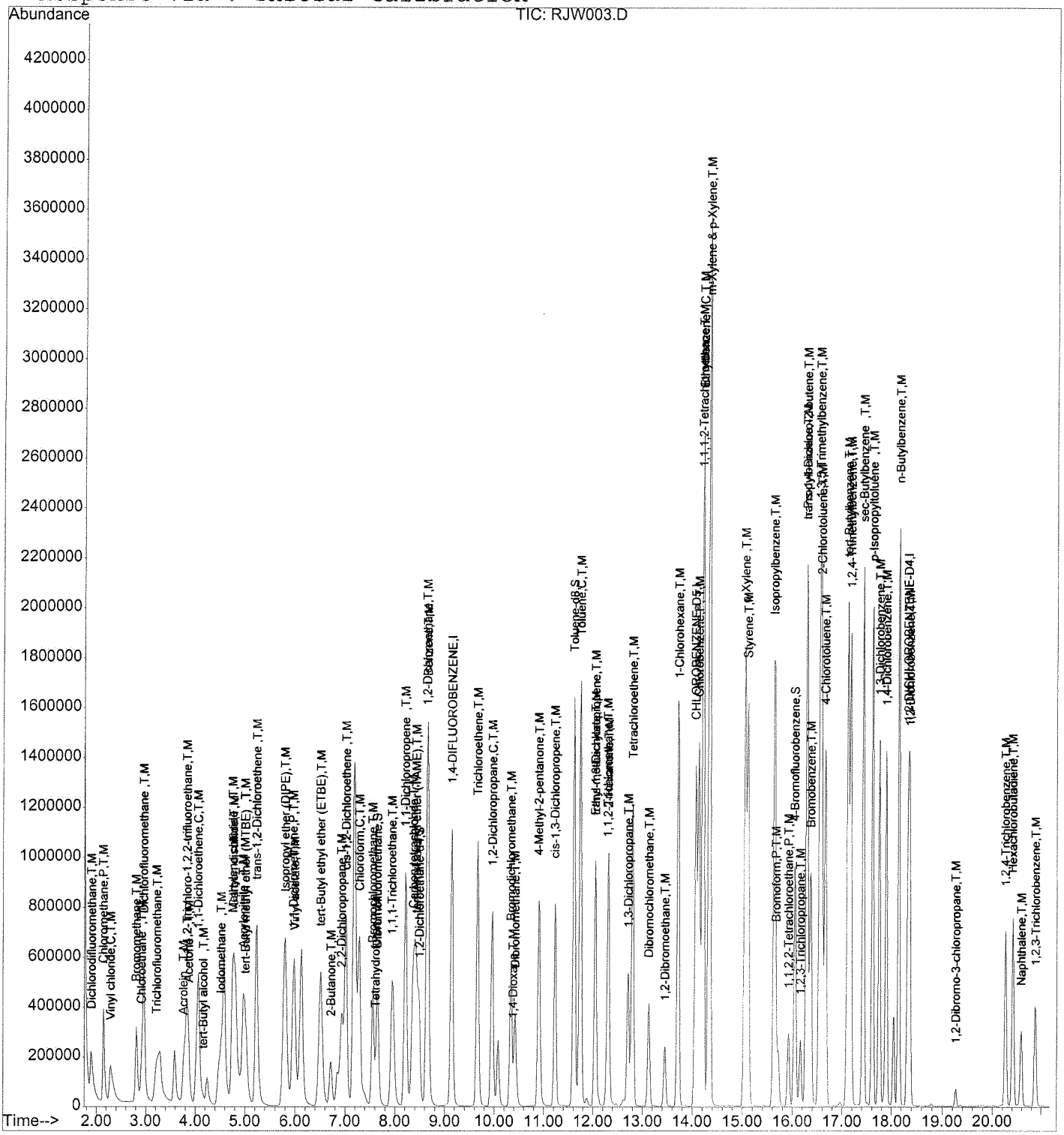
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85)	1,2,4-Trimethylbenzene	17.17	105	1808811	9.88	ug/l	95
86)	sec-Butylbenzene	17.42	105	2664107	10.14	ug/l	97
87)	p-Isopropyltoluene	17.62	119	2071262	10.30	ug/l	96
88)	1,3-Dichlorobenzene	17.75	146	1057816	10.83	ug/l	98
89)	1,4-Dichlorobenzene	17.88	146	1017948	10.92	ug/l	98
91)	n-Butylbenzene	18.15	91	2073164	10.15	ug/l	98
92)	1,2-Dichlorobenzene	18.36	146	786818	10.51	ug/l	96
93)	1,2-Dibromo-3-chloropropan	19.27	157	34050	9.27	ug/l	89
94)	1,2,4-Trichlorobenzene	20.26	180	428431	9.12	ug/l	98
95)	Hexachlorobutadiene	20.41	225	297585	8.96	ug/l	99
96)	Naphthalene	20.59	128	473908	8.31	ug/l	100
97)	1,2,3-Trichlorobenzene	20.89	180	280264	7.97	ug/l	98

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\12J01\RJW003.D Vial: 3
Acq On : 1 Oct 2012 11:15 am Operator: WL
Sample : CVO06H1532 Inst : TO06
Misc : 10ppb 8260/50ppb KET-AA-TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 15:50 2012 Quant Results File: VO06H15.RES

Method : D:\HPCHEM\1\METHODS\VO06H15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Aug 20 15:50:24 2012
Response via : Initial Calibration



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: 8/15/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # A06 -050

BATCH V006H15B

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RHW 001	Rinse		NA	NA	NA		
02	002	BFB06H01	1 µL					CS2/Gases, 8260, 224TMP, 4-Add KET/AA/BA 1-Butanol
03	003	V006H151	*a b c d e f µL .03/.01/.15/.15/.03/.03					~~0.3~~ (ppb) ~~1.5~~ ~~6~~
04	004	2	.05/.05/.25/.25/.05/.05				WL	~~0.5~~ 0.3 1.5 6
05	005	3	.1/.1/.5/.5/.1/.1			8/17/12		~~1~~ 0.5 2.5 10
06	006	4	.2/.2/1/1/.2/.2					~~2~~ 1 5 20
07	007	5	.5/.5/2.5/2.5/.5/.5					~~5~~ 2 10 40
08	008	6	1/1/5/5/1/1					~~10~~ 5 25 100
09	009	7	2/2/10/10/2/2					~~20~~ 10 50 200
10	010	8	3/3/15/15/3/3					~~30~~ 20 100 400
11	011	9	5/5/25/25/5/5					30 150 600
12	012	10	10/10/50/50/10/10					50 250 1000
13	013	IS/SS						100 500 2000
14	014	V006H15B						
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								WL 8/17/12

Instrument No.	06

INITIAL CALIBRATION REFERENCE

DATE	~~V006H~~ 8/15/12 (WL 8/16/12)
ICAL ID	V006H15

STANDARDS (WL 8/16/12)

NAME	ID	Amount (µL)	Conc. (mg/L)
(a) DCC CS2	SV1-20-8-2	250	*
(b) DCC Gases	-7-1	250	
(c,d) KET-AA DCC 8260	-9-2	250	
	-9-3	50/250	
(e,f) 224TMP DCC 4-Add	SV1-19-79-2	250	
	-94-2	250	
BFB	-68-2	50	1 µL
IS/SURR. IS SS IS/SS	SV1-20-7-3	250	1
	-8-1		*
	-6-1		
ICV/LCS CS2	-1-2	250	1
ICV/LCS Gases	-4-1	250	1
ICV/LCS KET-AA 8260	SV1-20-5-3	250	5
	SV1-19-78-3	50/250	6
ICV/LCS 224TMP 3-Add	-80-1	250	1
	SV1-19-55-02	250	1
2-butanol	SV1-12-36-15	1000	~~0.25~~ 1.25
DATA FILE FOLDER	12H15		WL 9/11/12

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO06	

Comments: * varied amount

Analyzed By: WL

Date Disposed: 8/16/12

Disposed By: WL

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: 8/16/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # A06 -050

BATCH 1V006H1501

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RHW015	BFB06H02	1mL					9:31am
02	↓ 016	1V006H1501	1/1/5/5/1/1/0	25mL				10:02 am
03	↓ 017	Rinse						
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
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18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								WL 8/17/12

Instrument No.	06
INITIAL CALIBRATION REFERENCE	
DATE	8/15/12
ICAL ID	V006H15

STANDARDS

NAME	ID	Amount (uL)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-19-68-2	1	50
IS/SURR.	SV1-20-6-1	1	250
ICV/LCS	↓ -1-2	1	250
ICV/LCS	↓ -4-1	1	250
ICV/LCS	SV1-20-5-3 SV1-19-78-3	5 5	250 50/250
ICV/LCS	↓ -80-1 -55-2	1 1	250 250
	SV1-12-36-15	~~0.75~~ 1.25	1000
DATA FILE FOLDER	12H16	WL 8/11/12	

Electronic Data Archival

Location	Date
HP.CHEM_VOA/TO06	

Comments:

Analyzed By: WL

Date Disposed: 8/17/12

Disposed By: WL

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: 10/1/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge Book # A06 -050

BATCH CV006H1532

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RJW 001	BFB06J01 ✓	1µL					10:07AM
02	002	std mix						
03	003	CV006H1532 ✓	1/1/5/15 ul					
04	004	V006J01L ✓	↓					
05	005	↓ C ✓	↓					
06	006	Rinse						
07	007	V006J01 B ✓	25mL					
08	008	LOD/LOQ verif 1						0.2ppb 8260/4.0ppb ketone
09	009	2						0.3 4.0
10	010	3						0.5 5.0
11	011	4						1.0 5.0
12	012	5						2.0 10
13	013	6						4.0 4.0
14	014	12I193-04T	2.5mL	10	✓	✓		confirmation only
15	015	12J219 -01 ✓	25mL	1.0	✓	✓		
16	016	-02 ✓			✓	✓		
17	017	-04 ✓			✓	✓		
18	018	-05 ✓			✓	✓		
19	019	-06 ✓			✓	✓		
20	020	-07 ✓			✓	✓		
21	021	-08 ✓			✓	✓		
22	022	-03 ✓			✓	✓		
23	023	-03M ✓			✓	✓		
24	024	↓ -03S ✓	↓	↓	✓	✓		9:58pm
25	↓ 025-029	Rinse						
26								
27								
28								
29								
30								NL 10/2/12

Instrument No.	06
INITIAL CALIBRATION REFERENCE	
DATE	8/15/12
ICAL ID	V006H15

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC	SV1-20-8-2	1	
DCC	-7-1	1	
DCC	-9-2	5	
DCC	-9-3	5	
BFB	SV1-19-68-2	1	50/250
IS/SURR.	SV1-20-16-3	1	
ICV/LCS	-1-2	1	
ICV/LCS	-4-1	1	
ICV/LCS	-5-3	5	
ICV/LCS	-18-1	5	

DATA FILE FOLDER 12J01

Electronic Data Archival

Location	Date
HPCHEM_VOA/T006	

Comments:

Analyzed By: NL

Date Disposed: 10/2/12

Disposed By: NL

2126

Injection Log

Directory: D:\HPCHEM\1\DATA\12J01

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RJW001.D	1.	BFB06J01	T/ CHK	1 Oct 2012 10:07
2	2	RJW002.D	1.	STD CHK	10ppb 8260/50ppb KET-AA-TBA	1 Oct 2012 10:42
3	3	RJW003.D	1.	CVO06H1532	10ppb 8260/50ppb KET-AA-TBA	1 Oct 2012 11:15
4	4	RJW004.D	1.	VO06J01L	10ppb 8260/50ppb KET-AA-TBA	1 Oct 2012 12:00
5	5	RJW005.D	1.	VO06J01C	10ppb 8260/50ppb KET-AA-TBA	1 Oct 2012 12:30
6	6	RJW006.D	1.	RINSE	10ppb 8260/50ppb KET-AA-TBA	1 Oct 2012 13:00
7	7	RJW007.D	1.	VO06J01B 25mL	BLANK	1 Oct 2012 13:29
8	8	RJW008.D	1.	LOD/LOQ VERF 1	0.2ppb 8260/4.0ppb KET-AA-TBA	1 Oct 2012 13:59
9	9	RJW009.D	1.	LOD/LOQ VERF 2	0.3ppb 8260/4.0ppb KET-AA-TBA	1 Oct 2012 14:29
10	10	RJW010.D	1.	LOD/LOQ VERF 3	0.5ppb 8260/5.0ppb KET-AA-TBA	1 Oct 2012 14:59
11	11	RJW011.D	1.	LOD/LOQ VERF 4	1.0ppb 8260/5.0ppb KET-AA-TBA	1 Oct 2012 15:29
12	12	RJW012.D	1.	LOD/LOQ VERF 5	2.0ppb 8260/10ppb KET-AA-TBA	1 Oct 2012 15:59
13	13	RJW013.D	1.	LOD/LOQ VERF 6	4.0ppb 8260/4.0ppb KET-AA-TBA	1 Oct 2012 16:29
14	14	RJW014.D	1.	12I193-04T 2.5mL	DF=10	1 Oct 2012 16:59
15	15	RJW015.D	1.	12I219-01 25mL	DF=1.0	1 Oct 2012 17:29
16	16	RJW016.D	1.	12I219-02 25mL	DF=1.0	1 Oct 2012 17:59
17	17	RJW017.D	1.	12I219-04 25mL	DF=1.0	1 Oct 2012 18:29
18	18	RJW018.D	1.	12I219-05 25mL	DF=1.0	1 Oct 2012 18:59
19	19	RJW019.D	1.	12I219-06 25mL	DF=1.0	1 Oct 2012 19:28
20	20	RJW020.D	1.	12I219-07 25mL	DF=1.0	1 Oct 2012 19:59
21	21	RJW021.D	1.	12I219-08 25mL	DF=1.0	1 Oct 2012 20:29
22	22	RJW022.D	1.	12I219-03 25mL	DF=1.0	1 Oct 2012 20:58
23	23	RJW023.D	1.	12I219-03M 25mL	DF=1.0	1 Oct 2012 21:28
24	24	RJW024.D	1.	12I219-03S 25mL	DF=1.0	1 Oct 2012 21:58
25	25	RJW025.D	1.	RINSE	DF=1.0	1 Oct 2012 22:28
26	26	RJW026.D	1.	RINSE	DF=1.0	1 Oct 2012 22:58
27	27	RJW027.D	1.	RINSE	DF=1.0	1 Oct 2012 23:28
28	28	RJW028.D	1.	RINSE	DF=1.0	1 Oct 2012 23:58
29	29	RJW029.D	1.	RINSE	DF=1.0	2 Oct 2012 00:28

LABORATORY REPORT FOR

ECO & ASSOCIATES, INC.

B & B, MONTHLY CITY WELL SAMPLING

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

SDG#: 12I219

CASE NARRATIVE

Client : ECO & ASSOCIATES, INC.

Project : B & B, MONTHLY CITY WELL SAMPLING

SDG : 12I219

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

A total of seven (7) water samples were received on 09/25/12 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 blank was analyzed at the frequency required by the project. For this SDG, one method blank was analyzed with the samples. Results were compliant to project requirement.

Lab Control Sample
A set of LCS/LCD was analyzed with the samples in this SDG.
Percent recoveries for VOF4J01L/Y were all within QC limits.

Matrix QC Sample
A set of MS/MSD was analyzed with the samples in this SDG.
Percent recoveries for I219-03M/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. : 12I219
Instrument ID : F4

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VOF4J01B	1	NA	10/05/1216:09	10/05/1216:09	RJN009	RCN071	VOF4J01	Method Blank
LCS1W	VOF4J01L	1	NA	10/05/1214:11	10/05/1214:11	RJN004	RCN071	VOF4J01	Lab Control Sample (LCS)
LCD1W	VOF4J01Y	1	NA	10/05/1215:45	10/05/1215:45	RJN008	RCN071	VOF4J01	LCS Duplicate
09-25-12-CW-6MS	I219-03M	1	NA	10/05/1218:30	10/05/1218:30	RJN015	RCN071	VOF4J01	Matrix Spike Sample (MS)
09-25-12-CW-6MSD	I219-03S	1	NA	10/05/1218:53	10/05/1218:53	RJN016	RCN071	VOF4J01	MS Duplicate (MSD)
09-25-12-CW-6	I219-03	1	NA	10/05/1219:17	10/05/1219:17	RJN017	RCN071	VOF4J01	Field Sample
09-25-12-CW-1	I219-01	1	NA	10/05/1219:41	10/05/1219:41	RJN018	RCN071	VOF4J01	Field Sample
09-25-12-CW-5	I219-02	1	NA	10/05/1220:04	10/05/1220:04	RJN019	RCN071	VOF4J01	Field Sample
09-25-12-CW-8	I219-04	1	NA	10/05/1220:28	10/05/1220:28	RJN020	RCN071	VOF4J01	Field Sample
09-25-12-CW-9	I219-05	1	NA	10/05/1220:51	10/05/1220:51	RJN021	RCN071	VOF4J01	Field Sample
09-25-12-CW-10	I219-06	1	NA	10/05/1221:15	10/05/1221:15	RJN022	RCN071	VOF4J01	Field Sample
09-25-12-FDUP-1	I219-07	1	NA	10/05/1221:39	10/05/1221:39	RJN023	RCN071	VOF4J01	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client : ECO & ASSOCIATES, INC.	Date Collected: 09/25/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 09/25/12
Batch No. : 12I219	Date Extracted: 10/05/12 19:41
Sample ID: 09-25-12-CW-1	Date Analyzed: 10/05/12 19:41
Lab Samp ID: I219-01	Dilution Factor: 1
Lab File ID: RJN018	Matrix : WATER
Ext Btch ID: VOF4J01	% Moisture : NA
Calib. Ref.: RCN071	Instrument ID : TOF4

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	0.0871	0.1000	87.1	80-120

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

Client : ECO & ASSOCIATES, INC.	Date Collected: 09/25/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 09/25/12
Batch No. : 12I219	Date Extracted: 10/05/12 20:04
Sample ID: 09-25-12-CW-5	Date Analyzed: 10/05/12 20:04
Lab Samp ID: I219-02	Dilution Factor: 1
Lab File ID: RJN019	Matrix : WATER
Ext Btch ID: VOF4J01	% Moisture : NA
Calib. Ref.: RCN071	Instrument ID : TOF4

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.078	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	0.0892	0.1000	89.2	80-120

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN019.D
Acq On : 5 Oct 2012 8:04 pm
Operator : DN
Sample : 12I219-02
Misc : DF=1.0
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 16 14:29:49 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

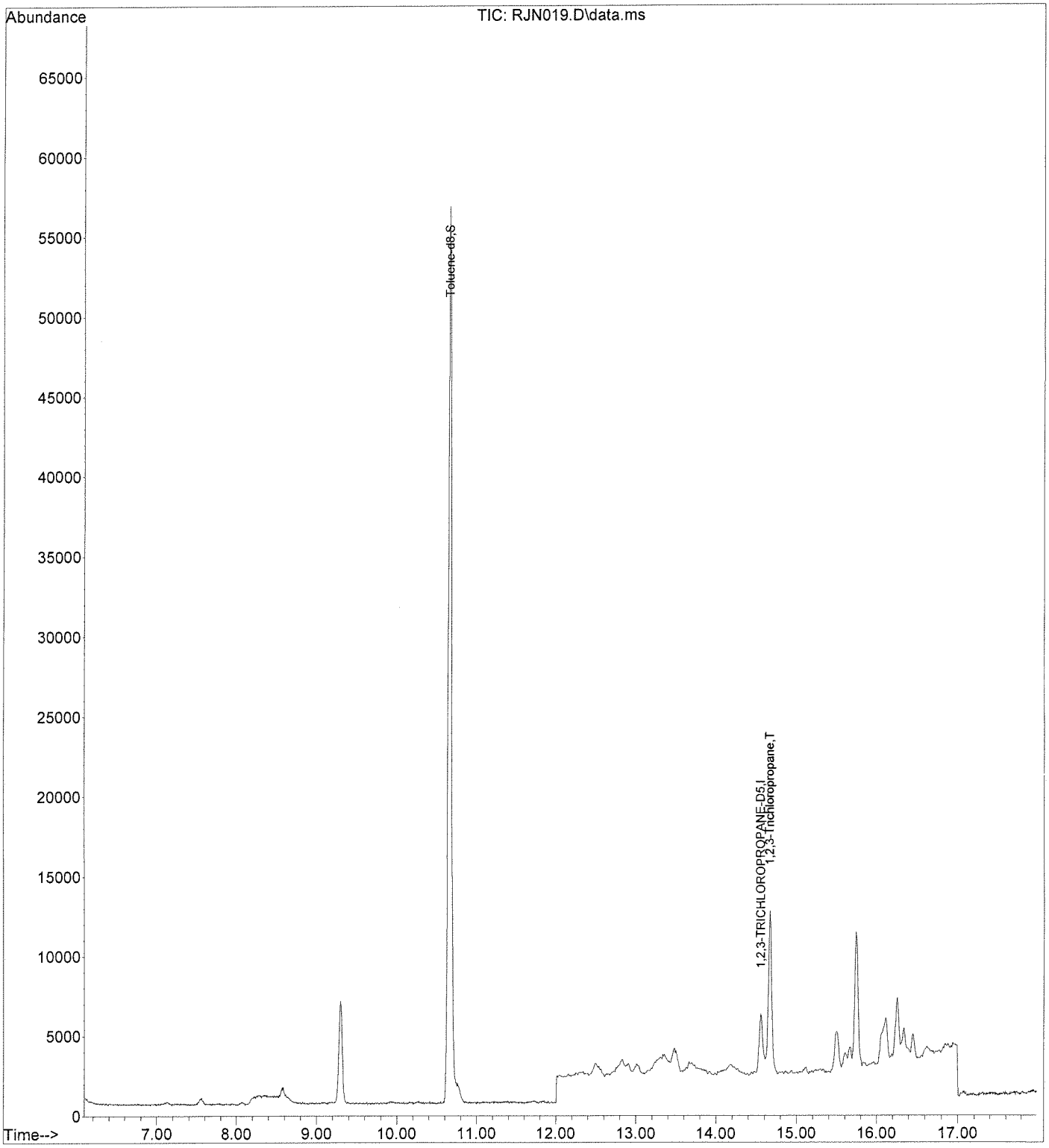
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7442	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.656	98	97978	89.21 ng/l	0.00
Spiked Amount 100.000			Recovery =	89.21%	
Target Compounds					Qvalue
6) 1,2,3-Trichloropropane	14.668	75	12252	77.71 ng/L	88

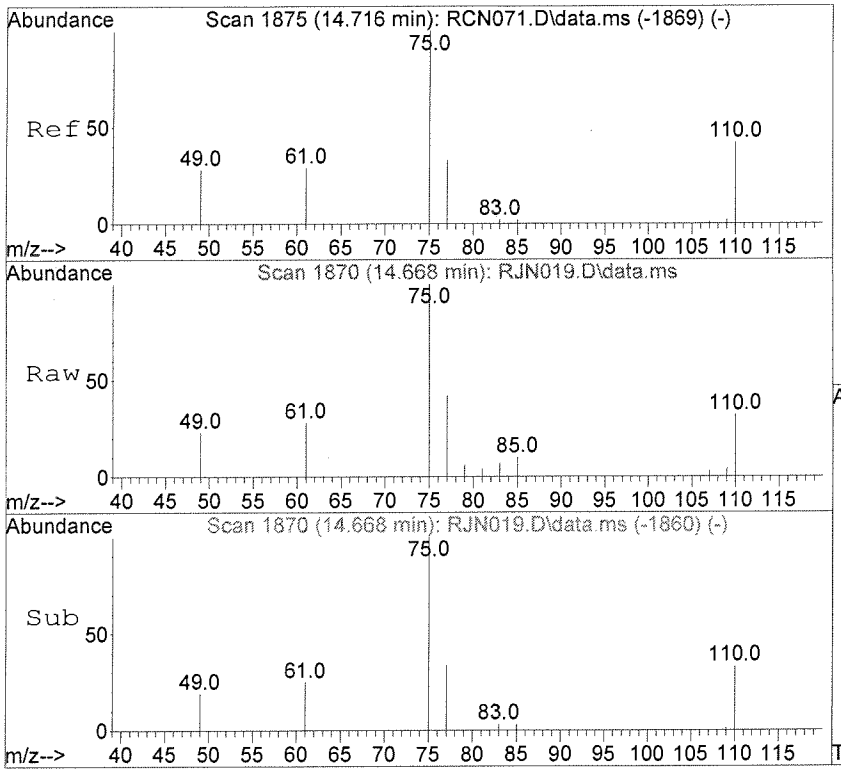
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN019.D
Acq On : 5 Oct 2012 8:04 pm
Operator : DN
Sample : 12I219-02
Misc : DF=1.0
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 16 14:29:49 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

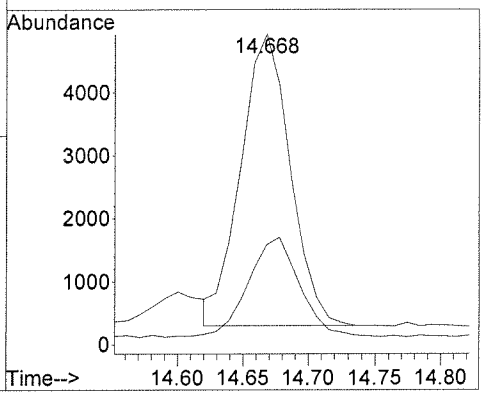




#6
1,2,3-Trichloropropane
Concen: 77.71 ng/L
RT: 14.668 min Scan# 1870
Delta R.T. 0.000 min
Lab File: RJN019.D
Acq: 5 Oct 2012 8:04 pm

Tgt Ion: 75 Resp: 12252

Ion	Ratio	Lower	Upper
75	100		
110	35.1	12.8	72.8



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

Client : ECO & ASSOCIATES, INC.	Date Collected: 09/25/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 09/25/12
Batch No. : 12I219	Date Extracted: 10/05/12 19:17
Sample ID: 09-25-12-CW-6	Date Analyzed: 10/05/12 19:17
Lab Samp ID: I219-03	Dilution Factor: 1
Lab File ID: RJN017	Matrix : WATER
Ext Btch ID: VOF4J01	% Moisture : NA
Calib. Ref.: RCN071	Instrument ID : TOF4

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.031	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	0.0995	0.1000	99.5	80-120

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/05/12 20:28
Sample ID	: 09-25-12-CW-8	Date Analyzed:	10/05/12 20:28
Lab Samp ID	: I219-04	Dilution Factor:	1
Lab File ID	: RJN020	Matrix :	WATER
Ext Btch ID	: VOF4J01	% Moisture :	NA
Calib. Ref.	: RCN071	Instrument ID :	TOF4

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.0044J	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	0.102	0.1000	102	80-120

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/05/12 20:51
Sample ID	: 09-25-12-CW-9	Date Analyzed:	10/05/12 20:51
Lab Samp ID	: I219-05	Dilution Factor:	1
Lab File ID	: RJN021	Matrix :	WATER
Ext Btch ID	: VOF4J01	% Moisture :	NA
Calib. Ref.	: RCN071	Instrument ID :	TOF4

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.30	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	0.0934	0.1000	93.4	80-120

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/05/12 21:15
Sample ID	: 09-25-12-CW-10	Date Analyzed:	10/05/12 21:15
Lab Samp ID	: I219-06	Dilution Factor:	1
Lab File ID	: RJN022	Matrix :	WATER
Ext Btch ID	: VOF4J01	% Moisture :	NA
Calib. Ref.	: RCN071	Instrument ID :	TOF4

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	0.0899	0.1000	89.9	80-120

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

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/05/12 21:39
Sample ID:	09-25-12-FDUP-1	Date Analyzed:	10/05/12 21:39
Lab Samp ID:	I219-07	Dilution Factor:	1
Lab File ID:	RJN023	Matrix :	WATER
Ext Btch ID:	VOF4J01	% Moisture :	NA
Calib. Ref.:	RCN071	Instrument ID :	TOF4

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	0.036	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	0.0922	0.1000	92.2	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:	10/05/12
Batch No.	: 12I219	Date Extracted:	10/05/12 16:09
Sample ID	: MBLK1W	Date Analyzed:	10/05/12 16:09
Lab Samp ID	: VOF4J01B	Dilution Factor:	1
Lab File ID	: RJN009	Matrix :	WATER
Ext Btch ID	: VOF4J01	% Moisture :	NA
Calib. Ref.	: RCN071	Instrument ID :	TOF4

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	0.102	0.1000	102	80-120

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12I219
METHOD: METHOD 5030B/8260B SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	VOF4J01B	VOF4J01L	VOF4J01Y		
LAB FILE ID:	RJN009	RJN004	RJN008		
DATE EXTRACTED:	10/05/1216:09	10/05/1214:11	10/05/1215:45	DATE COLLECTED:	NA
DATE ANALYZED:	10/05/1216:09	10/05/1214:11	10/05/1215:45	DATE RECEIVED:	10/05/12
PREP. BATCH:	VOF4J01	VOF4J01	VOF4J01		
CALIB. REF:	RCN071	RCN071	RCN071		

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	0.114	114	0.100	0.118	118	3	75-125	30
1,2-Dibromo-3-chloropropane	ND	0.100	0.112	112	0.100	0.0988	99	13	50-130	30
1,2-Dibromoethane	ND	0.100	0.0867	87	0.100	0.0887	89	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	0.114	114	0.100	0.0999	100	80-120

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12I219
METHOD: METHOD 5030B/8260B SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	09-25-12-CW-6				
LAB SAMP ID:	I219-03	I219-03M	I219-03S		
LAB FILE ID:	RJN017	RJN015	RJN016		
DATE EXTRACTED:	10/05/1219:17	10/05/1218:30	10/05/1218:53	DATE COLLECTED:	09/25/12
DATE ANALYZED:	10/05/1219:17	10/05/1218:30	10/05/1218:53	DATE RECEIVED:	09/25/12
PREP. BATCH:	VOF4J01	VOF4J01	VOF4J01		
CALIB. REF:	RCN071	RCN071	RCN071		

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	0.0309	0.100	0.145	114	0.100	0.147	116	1	75-125	30
1,2-Dibromo-3-chloropropane	ND	0.100	0.105	105	0.100	0.105	105	1	50-130	30
1,2-Dibromoethane	ND	0.100	0.0877	88	0.100	0.0891	89	2	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	0.0895	90	0.100	0.109	109	80-120

QC DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN009.D
Acq On : 5 Oct 2012 4:09 pm
Operator : DN
Sample : VOF4J01B
Misc : DF=1.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 15 13:19:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

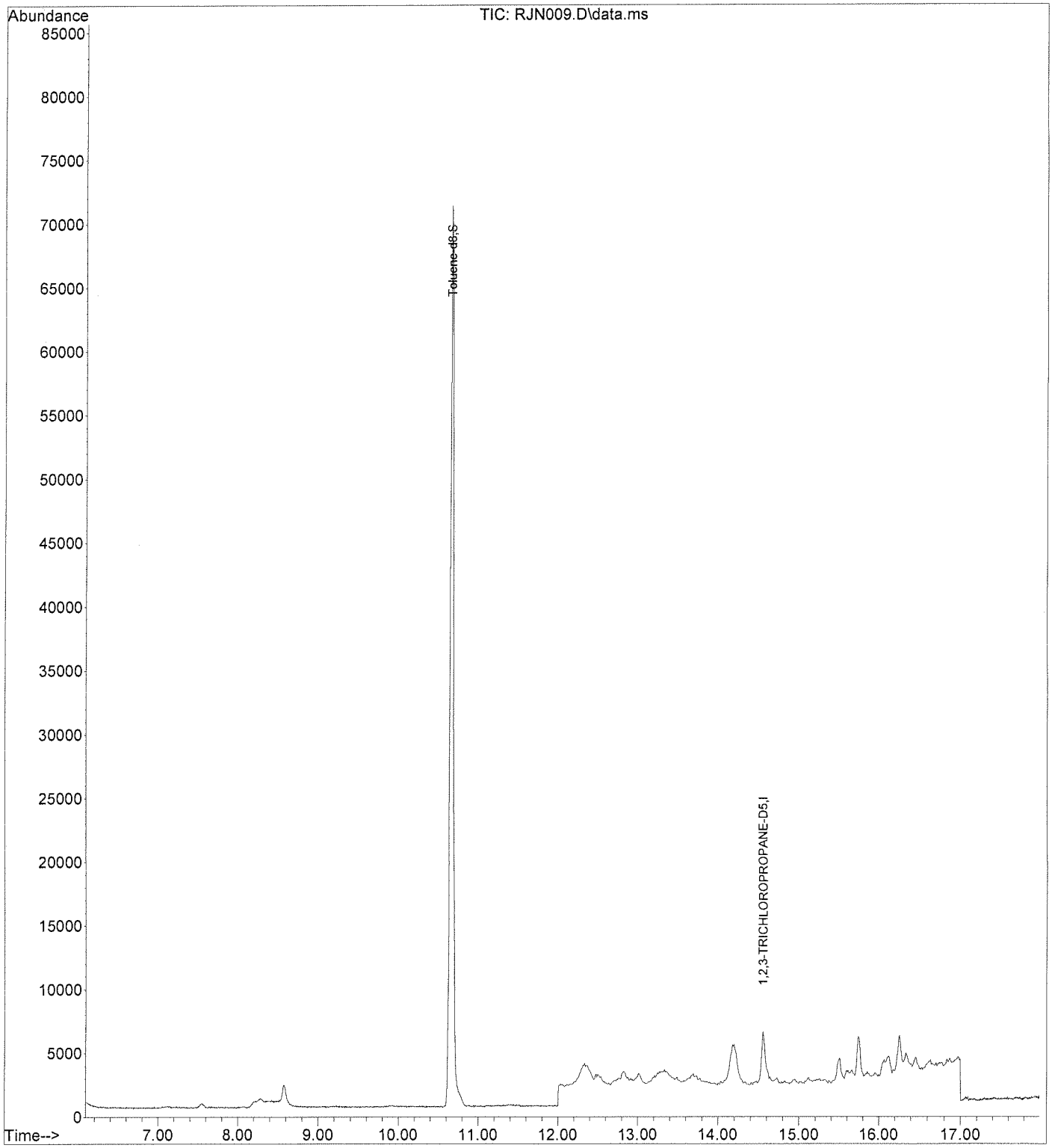
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	8238	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.656	98	124580	102.48 ng/l	0.00
Spiked Amount 100.000			Recovery =	102.48%	
Target Compounds					Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN009.D
Acq On : 5 Oct 2012 4:09 pm
Operator : DN
Sample : VOF4J01B
Misc : DF=1.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 15 13:19:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN004.D
Acq On : 5 Oct 2012 2:11 pm
Operator : DN
Sample : VOF4J01L
Misc : 100PPT
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 14:23:41 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

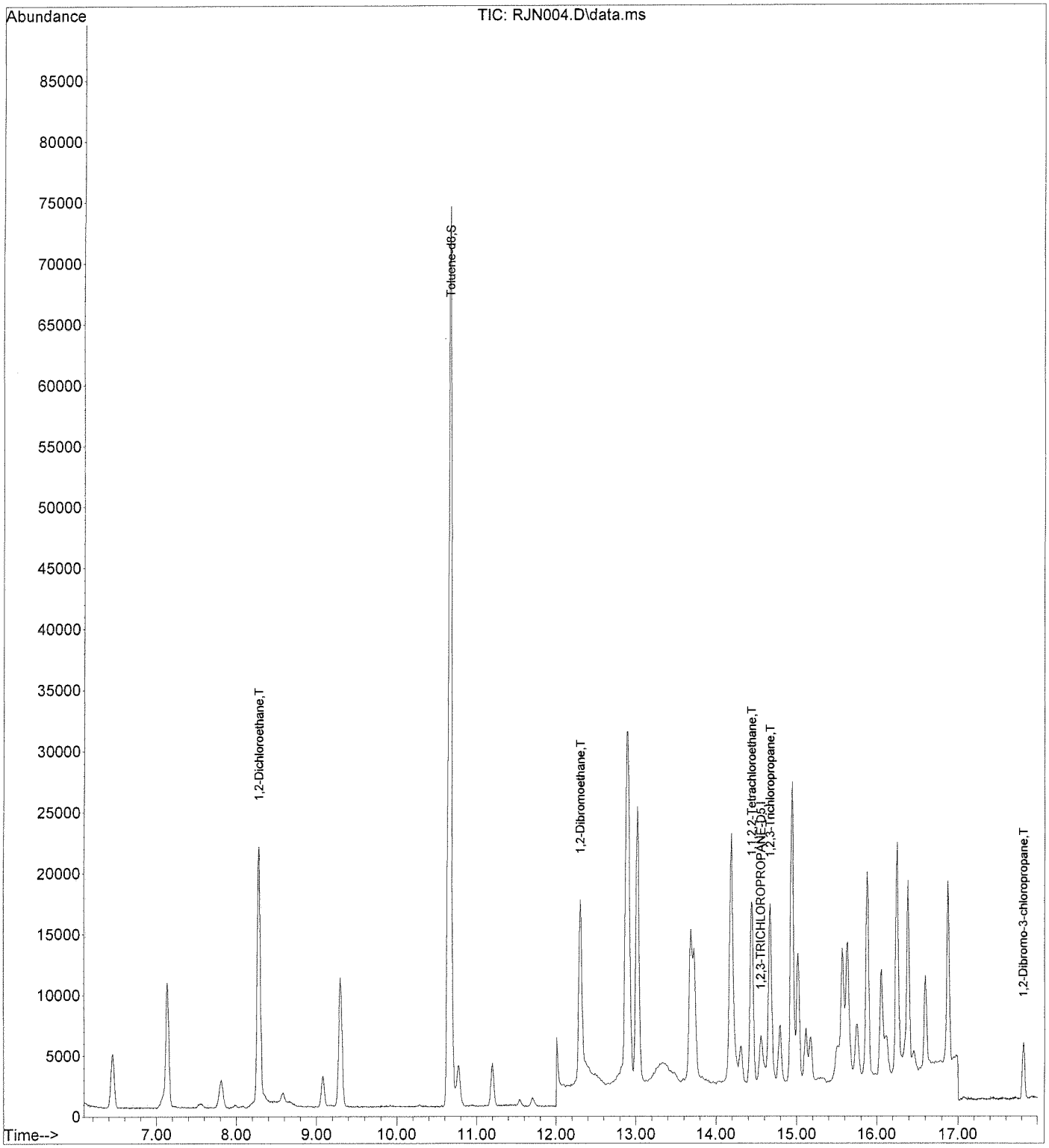
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7439	50.00	ng/l	0.00
System Monitoring Compounds						
3) Toluene-d8	10.660	98	125573	114.39	ng/l	0.00
Spiked Amount 100.000			Recovery	=	114.39%	
Target Compounds						Qvalue
2) 1,2-Dichloroethane	8.279	62	40648	103.46	ng/L	97
4) 1,2-Dibromoethane	12.304	107	18272	86.68	ng/L	95
5) 1,1,2,2-Tetrachloroethane	14.436	83	23609	101.96	ng/L	99
6) 1,2,3-Trichloropropane	14.668	75	18037	114.45	ng/L	87
7) 1,2-Dibromo-3-chloropr...	17.819	157	3881	112.36	ng/L	86

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN004.D
Acq On : 5 Oct 2012 2:11 pm
Operator : DN
Sample : VOF4J01L
Misc : 100PPT
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 14:23:41 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN008.D
Acq On : 5 Oct 2012 3:45 pm
Operator : DN
Sample : VOF4J01Y
Misc : 100PPT
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 17:05:59 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

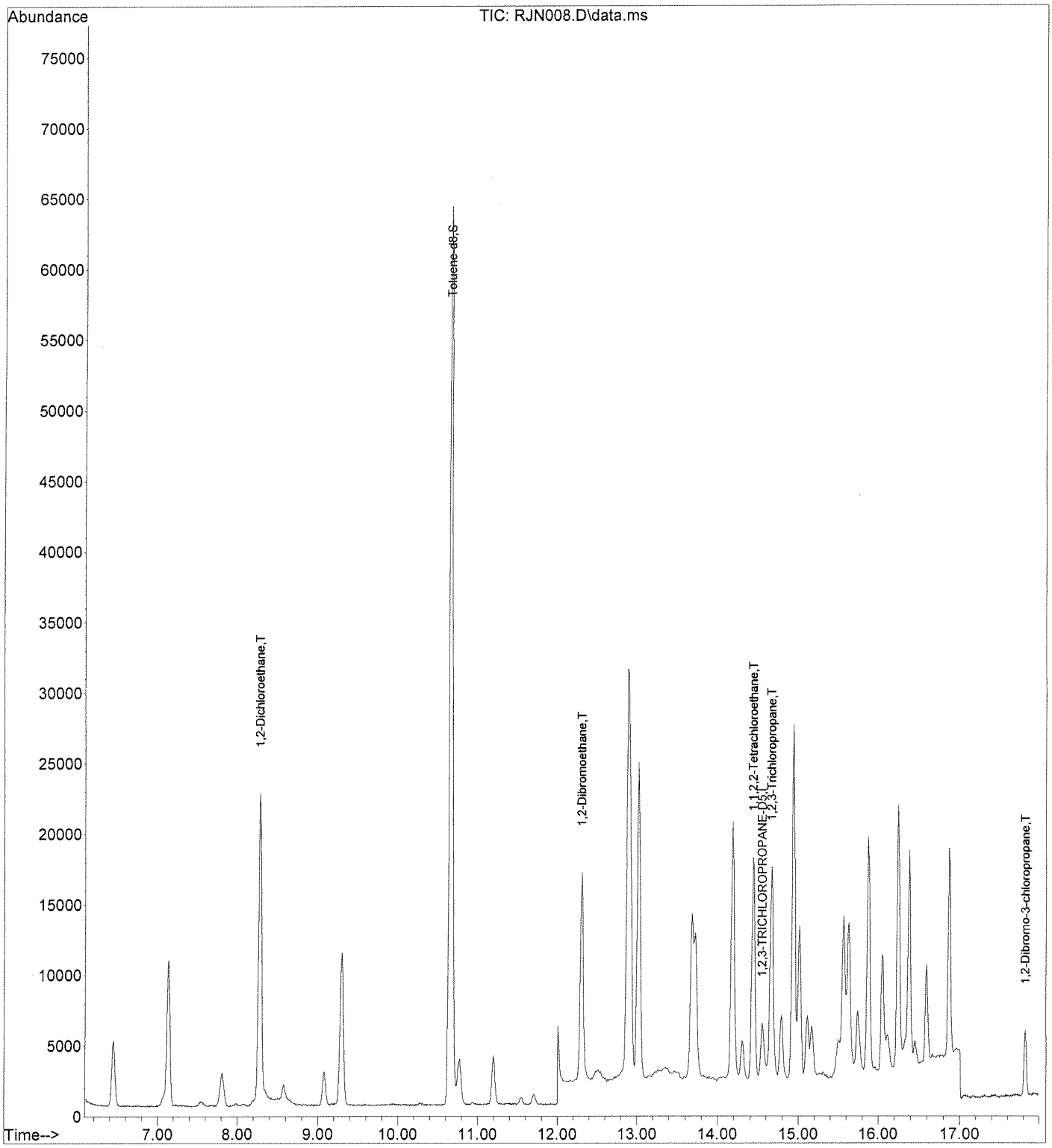
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7441	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.656	98	109710	99.91 ng/l	0.00
Spiked Amount 100.000			Recovery	= 99.91%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.279	62	41496	105.59 ng/L	99
4) 1,2-Dibromoethane	12.304	107	18705	88.71 ng/L	91
5) 1,1,2,2-Tetrachloroethane	14.436	83	24166	104.34 ng/L	97
6) 1,2,3-Trichloropropane	14.668	75	18660	118.38 ng/L	86
7) 1,2-Dibromo-3-chloropr...	17.826	157	3415	98.84 ng/L #	79

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN008.D
Acq On : 5 Oct 2012 3:45 pm
Operator : DN
Sample : VOF4J01Y
Misc : 100PPT
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 17:05:59 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN017.D
Acq On : 5 Oct 2012 7:17 pm
Operator : DN
Sample : 12I219-03
Misc : DF=1.0
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 16 14:29:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

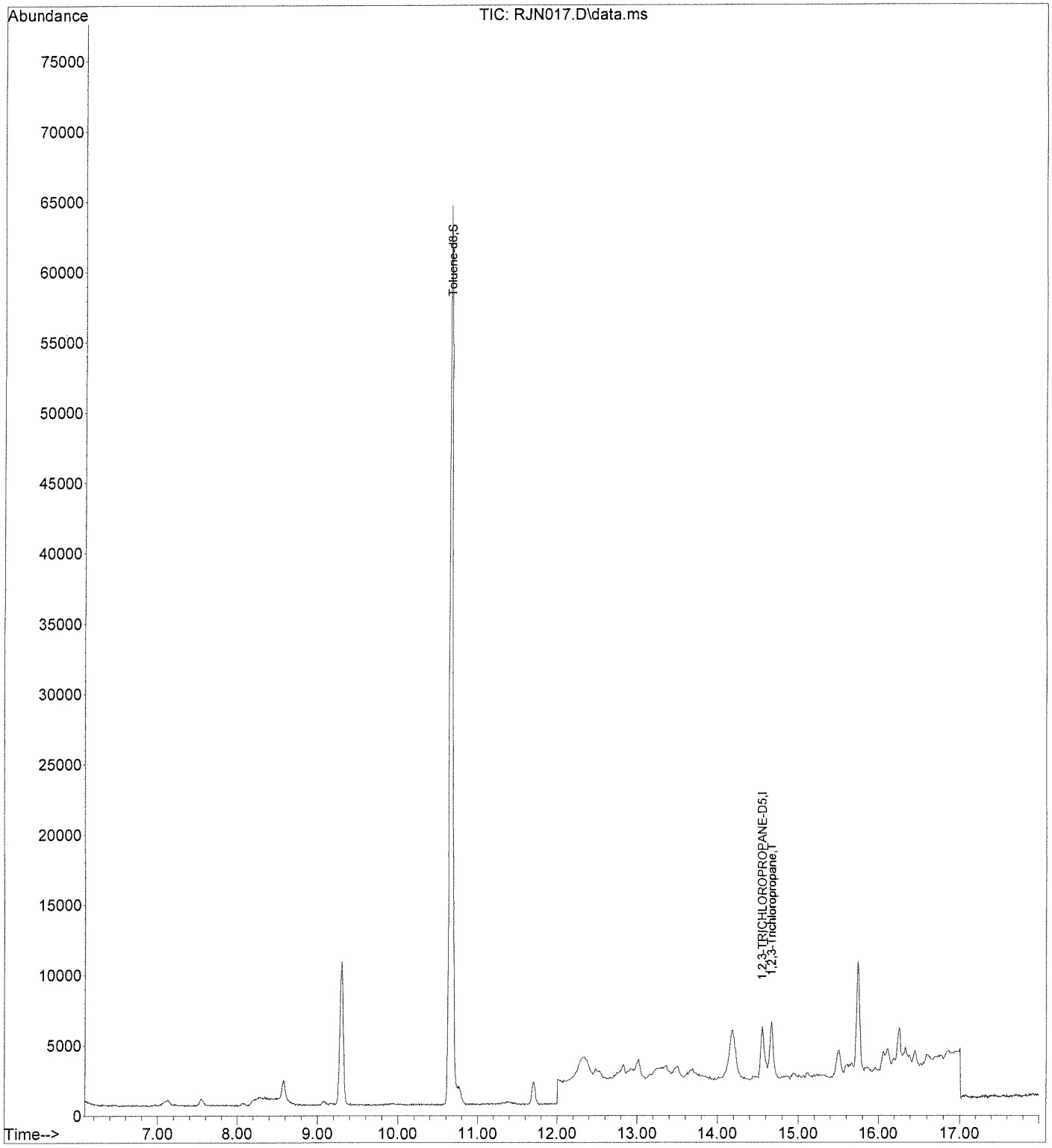
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7549	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.660	98	110887	99.54 ng/l	0.00
Spiked Amount 100.000			Recovery	= 99.54%	
Target Compounds					Qvalue
6) 1,2,3-Trichloropropane	14.668	75	4943	30.91 ng/L	91

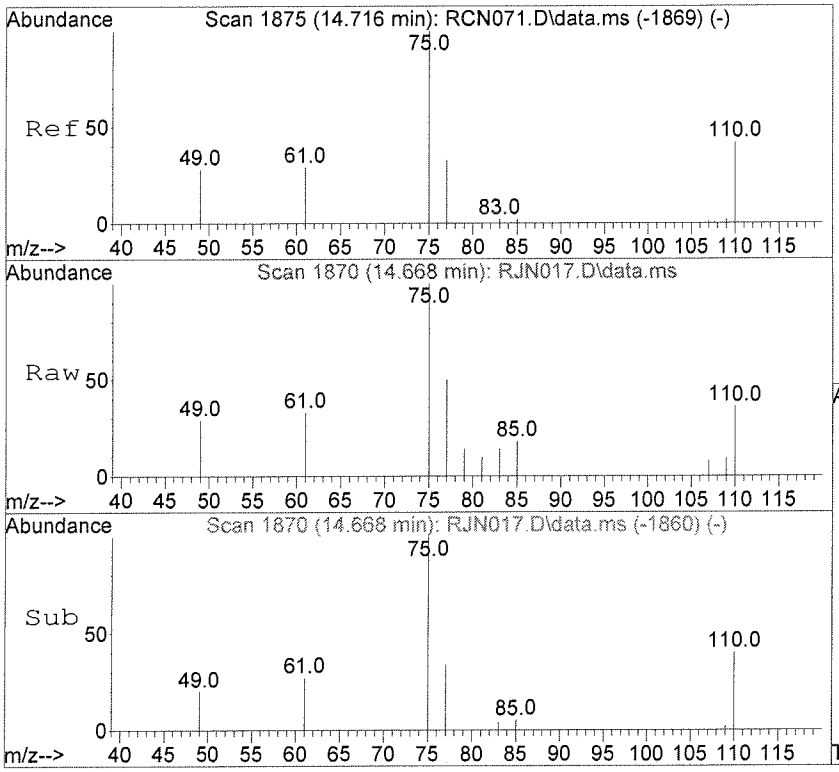
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN017.D
Acq On : 5 Oct 2012 7:17 pm
Operator : DN
Sample : 12I219-03
Misc : DF=1.0
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 16 14:29:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

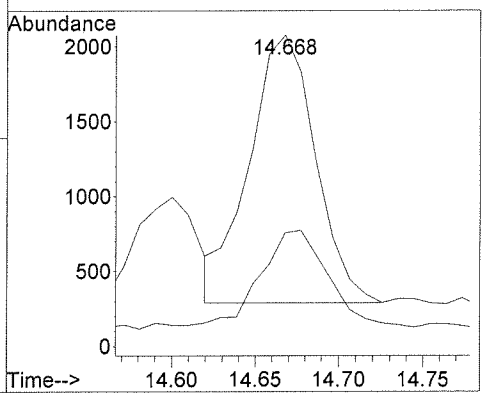




#6
1,2,3-Trichloropropane
Concen: 30.91 ng/L
RT: 14.668 min Scan# 1870
Delta R.T. -0.000 min
Lab File: RJN017.D
Acq: 5 Oct 2012 7:17 pm

Tgt Ion: 75 Resp: 4943

Ion	Ratio	Lower	Upper
75	100		
110	36.9	12.8	72.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN015.D
Acq On : 5 Oct 2012 6:30 pm
Operator : DN
Sample : 12I219-03M
Misc : DF=1.0
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 05 18:42:20 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

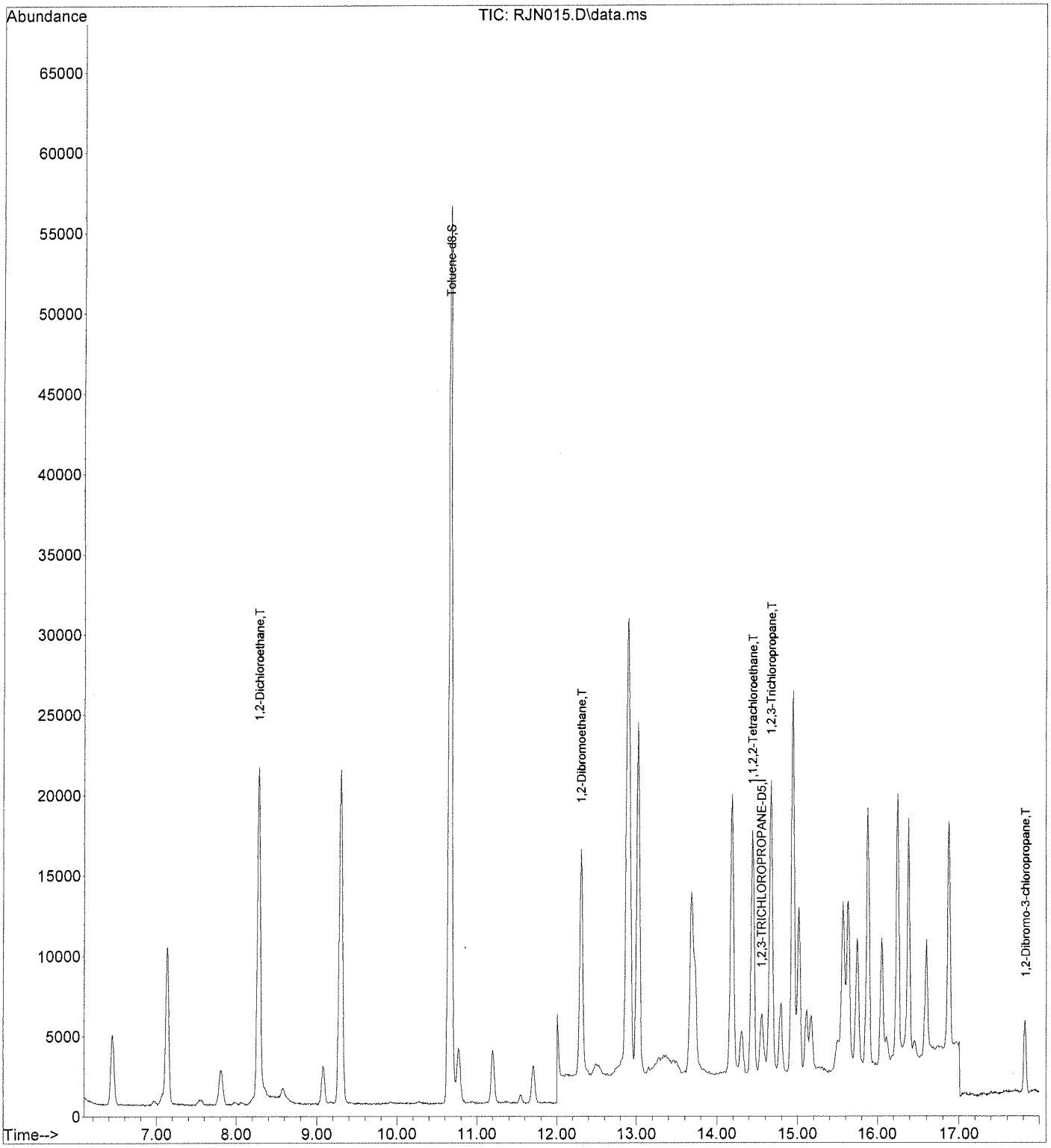
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7353	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.656	98	97145	89.53 ng/l	0.00
Spiked Amount 100.000			Recovery	= 89.53%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.279	62	44380	114.28 ng/L	90
4) 1,2-Dibromoethane	12.304	107	18268	87.67 ng/L	93
5) 1,1,2,2-Tetrachloroethane	14.436	83	23375	102.13 ng/L	97
6) 1,2,3-Trichloropropane	14.668	75	22587	145.00 ng/L	88
7) 1,2-Dibromo-3-chloropr...	17.829	157	3571	104.59 ng/L	82

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN015.D
Acq On : 5 Oct 2012 6:30 pm
Operator : DN
Sample : 12I219-03M
Misc : DF=1.0
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 05 18:42:20 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN016.D
Acq On : 5 Oct 2012 6:53 pm
Operator : DN
Sample : 12I219-03S
Misc : DF=1.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 05 19:05:51 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

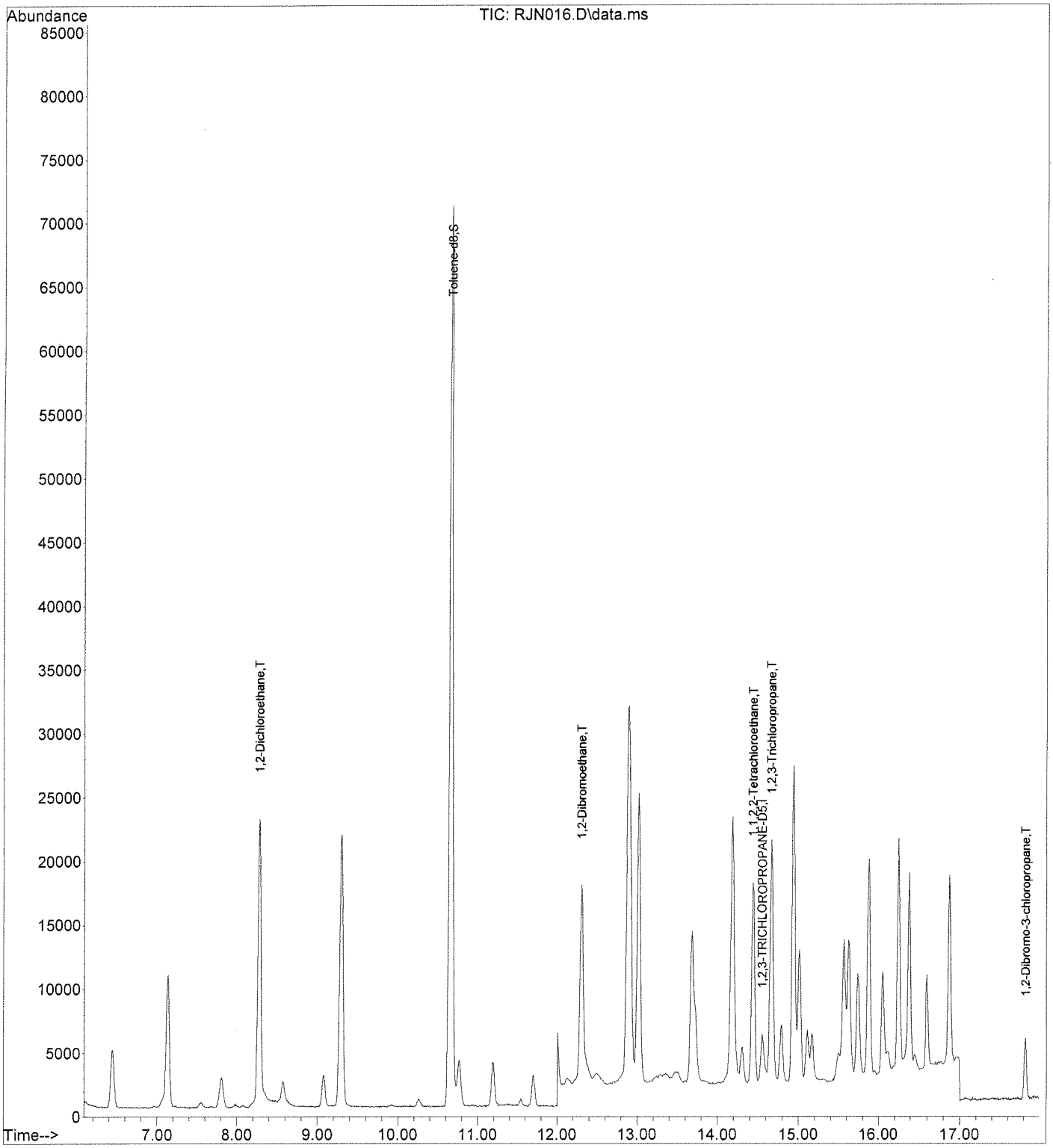
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7615	50.00	ng/l	0.00
System Monitoring Compounds						
3) Toluene-d8	10.660	98	121962	108.53	ng/l	0.00
Spiked Amount 100.000			Recovery	=	108.53%	
Target Compounds						Qvalue
2) 1,2-Dichloroethane	8.279	62	48394	120.33	ng/L	91
4) 1,2-Dibromoethane	12.304	107	19236	89.14	ng/L	91
5) 1,1,2,2-Tetrachloroethane	14.436	83	24505	103.38	ng/L	99
6) 1,2,3-Trichloropropane	14.668	75	23639	146.53	ng/L	87
7) 1,2-Dibromo-3-chloropr...	17.828	157	3726	105.38	ng/L	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN016.D
Acq On : 5 Oct 2012 6:53 pm
Operator : DN
Sample : 12I219-03S
Misc : DF=1.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 05 19:05:51 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration



INITIAL CALIBRATIONS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RCN065
Instrument ID: TOF4
GC Column:RTX502.2ID:0.32mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12I219
BFB Injection Date : 03/12/12
BFB Injection Time : 18:19
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.89
75	30.0 - 60.0% of mass 95	47.14
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.98
173	Less than 2.0% of mass 174	0.79(0.8)1
174	Greater than 50% of mass 95	93.70
175	5.0 - 9.0% of mass 174	7.30(7.8)1
176	95.0 - 101.0% of mass 174	92.09(98.3)1
177	5.0 - 9.0% of mass 176	6.07(6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD05	VOF4C121	RCN067	03/12/12	19:03
2	VSTD010	VOF4C122	RCN068	03/12/12	19:27
3	VSTD020	VOF4C123	RCN069	03/12/12	19:51
4	VSTD050	VOF4C124	RCN070	03/12/12	20:15
5	VSTD100	VOF4C125	RCN071	03/12/12	20:38
6	VSTD200	VOF4C126	RCN072	03/12/12	21:02
7	VSTD400	VOF4C127	RCN073	03/12/12	21:26
8	VSTD1000	VOF4C128	RCN074	03/12/12	21:49
9	VSTD100	IVOF4C1201	RCN076	03/12/12	22:36

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :F4
Beginning DateTime :03/12/12 19:03
Spike Units :PPT
IC File :RCN071

Column Spec :RTX-502.2 ID :0.32MM
Ending DateTime :03/12/12 21:49
HPChem Method :VOF4C12

M IDX	Parameters	5 19:03 RCN067	10 19:27 RCN068	20 19:51 RCN069	50 20:15 RCN070	100 20:38 RCN071	200 21:02 RCN072	400 21:26 RCN073	1000 21:49 RCN074	Av_RRF	%_RSD	Av_Rt_M
1	1,2,3-TRICHLOROPROPANE-D5	1	1	1	1	1	1	1	1	1	0	14.6002
2	1,2-Dichloroethane	2.511	2.957	2.864	2.656	2.392	2.653	2.742	2.351	2.641	8.14	8.3190
3	Toluene-d8	------	------	8.044	7.828	6.870	7.098	7.745	6.686	7.379	7.66	10.7014
4	1,2-Dibromoethane	1.497	1.634	1.352	1.443	1.279	1.396	1.422	1.313	1.417	7.96	12.3521
5	1,1,2,2-Tetrachloroethane	1.864	1.630	1.481	1.512	1.406	1.555	1.535	1.468	1.556	9.03	14.4856
6	1,2,3-Trichloropropane	1.161	1.008	1.101	1.055	0.981	1.076	1.074	1.018	1.059	5.42	14.7160
7	1,2-Dibromo-3-chloropropane	------	0.199	0.225	0.246	0.217	0.237	0.249	0.251	0.232	8.30	17.8695

Ave_%RSD : 7.8 Max_%RSD : 9

SA
3/16/12

Compound List Report F4

Method Path : C:\MSDCHEM\1\METHODS\
Method File : VOF4C12.M
Title : METHOD TCPSIM 25mL
Last Update : Thu Mar 15 15:21:33 2012
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	14.600	1.000	A	1	A	B
2	T	1,2-Dichloroethane	62	8.319	0.570	A	1	A	B
3	S	Toluene-d8	98	10.701	0.733	A	1	A	B
4	T	1,2-Dibromoethane	107	12.352	0.846	A	1	A	B
5	T	1,1,2,2-Tetrachloroethane	83	14.494	0.993	A	1	A	B
6	T	1,2,3-Trichloropropane	75	14.716	1.008	A	1	A	B
7	T	1,2-Dibromo-3-chloropropane	157	17.871	1.224	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

VOF4C12.M Thu Mar 15 15:29:40 2012 F4

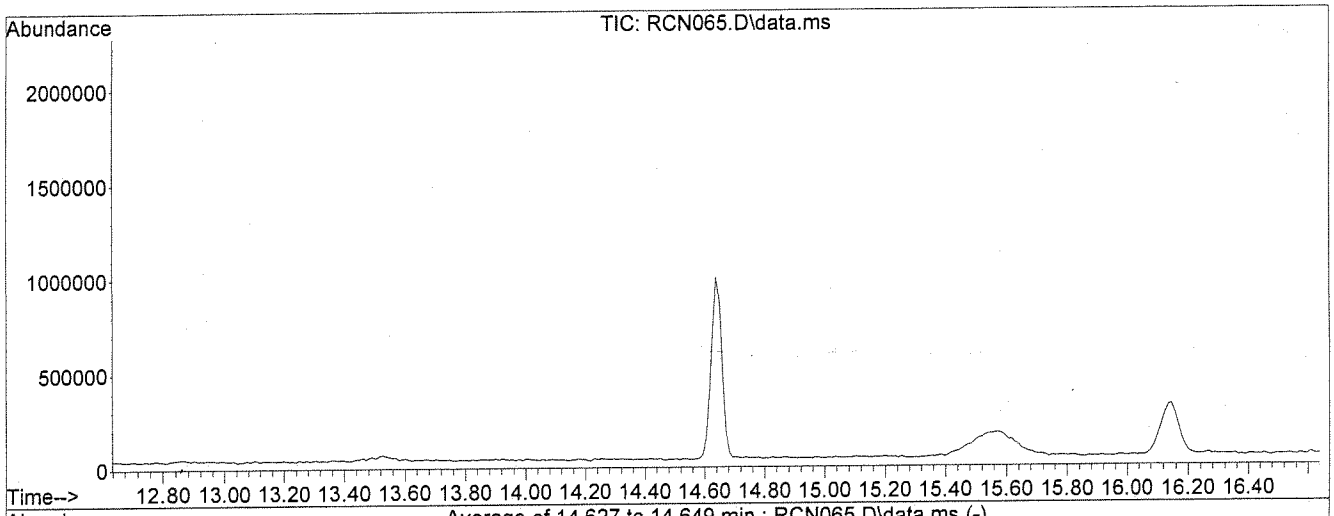
SA
3/16/12

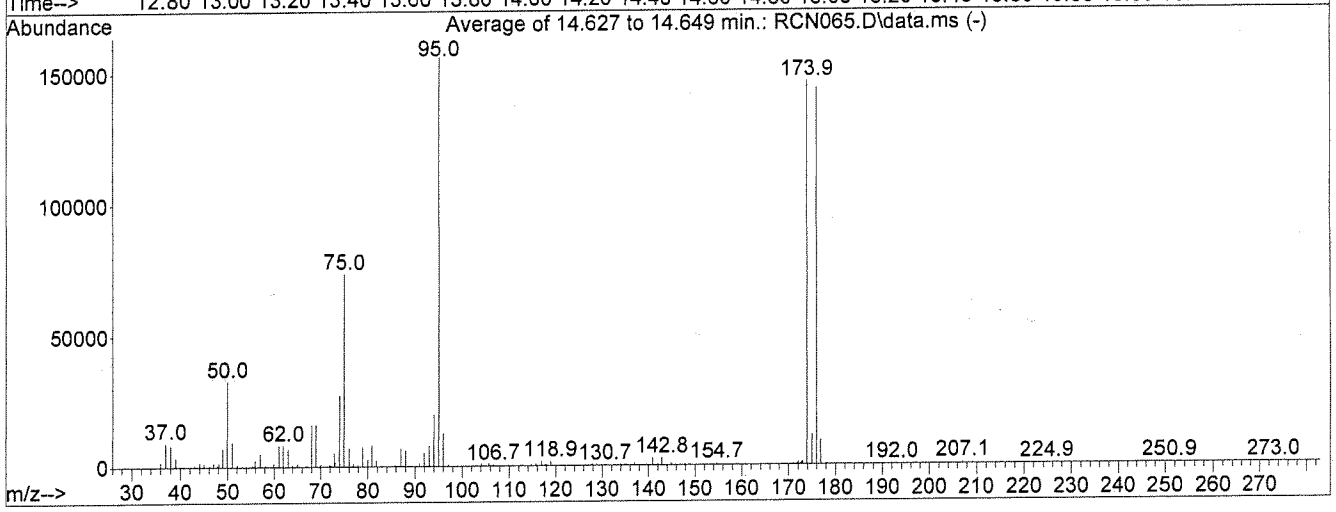
BFB

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN065.D
Acq On : 12 Mar 2012 6:19 pm
Operator : DN
Sample : BFBF4C06
Misc : T/CHK
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\VOF4C12A.M
Title : METHOD BFB 25mL
Last Update : Thu Mar 15 12:44:46 2012





AutoFind: Scans 776, 777, 778; Background Corrected with Scan 769

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	32648	PASS
75	95	30	60	47.1	73662	PASS
95	95	100	100	100.0	156267	PASS
96	95	5	9	8.0	12474	PASS
173	174	0.00	2	0.8	1231	PASS
174	95	50	100	93.7	146421	PASS
175	174	5	9	7.8	11403	PASS
176	174	95	101	98.3	143909	PASS
177	176	5	9	6.6	9481	PASS

SW 3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN067.D
Acq On : 12 Mar 2012 7:03 pm
Operator : DN
Sample : VOF4C121
Misc : 5.0 PPT
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 15 15:25:40 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	6305	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.701	98	8958	9.63 ng/l	0.00
Spiked Amount 100.000			Recovery =	9.63%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.320	62	1583	4.75 ng/L	86
4) 1,2-Dibromoethane	12.352	107	944	5.28 ng/L	79
5) 1,1,2,2-Tetrachloroethane	14.485	83	1175	5.99 ng/L	91
6) 1,2,3-Trichloropropane	14.716	75	732	5.48 ng/L	91

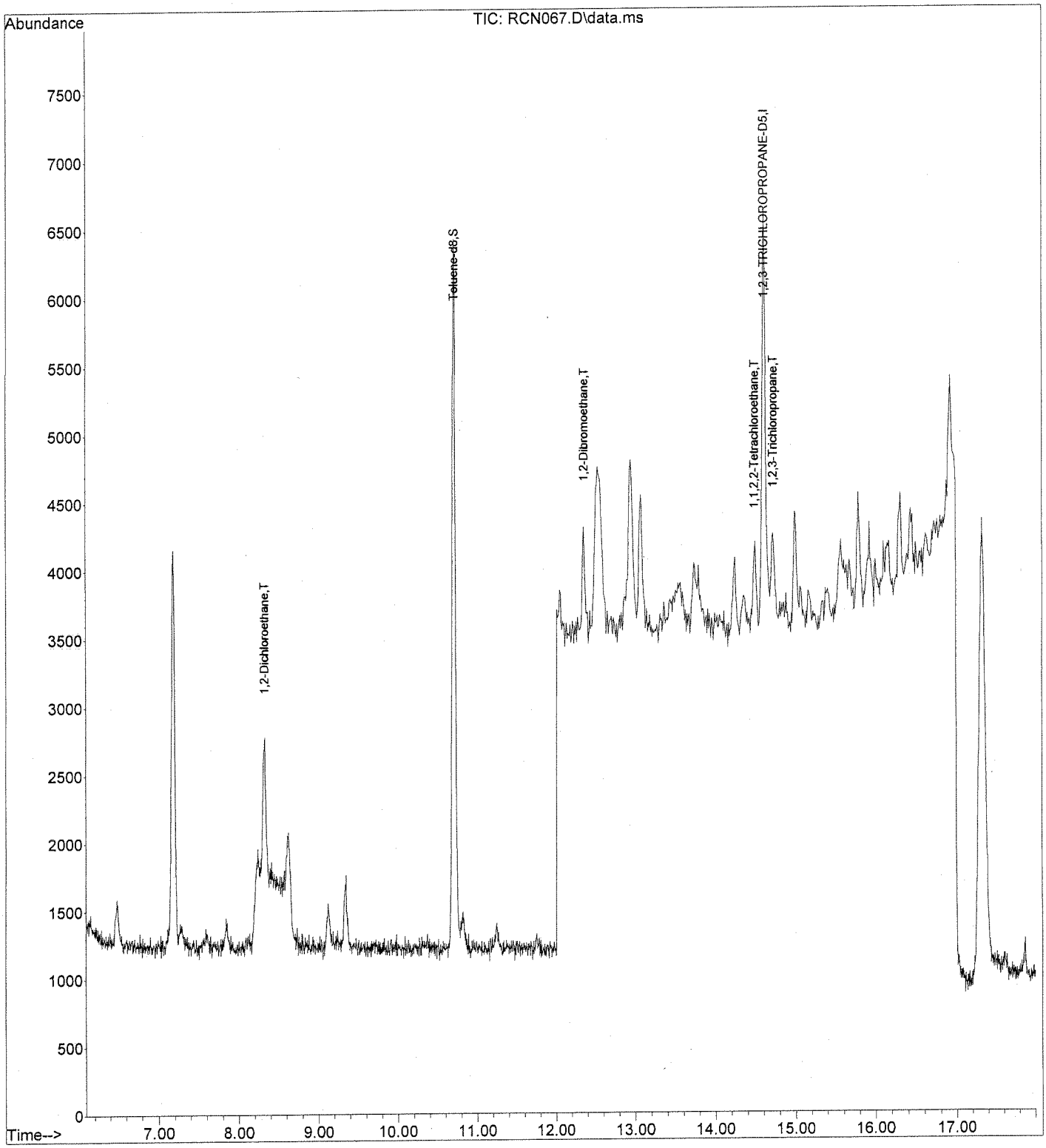
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SV
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN067.D
Acq On : 12 Mar 2012 7:03 pm
Operator : DN
Sample : VOF4C121
Misc : 5.0 PPT
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 15 15:25:40 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN068.D
Acq On : 12 Mar 2012 7:27 pm
Operator : DN
Sample : VOF4C122
Misc : 10 PPT
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 15 15:25:49 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	5823	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.704	98	12730	14.81 ng/l	0.00
Spiked Amount 100.000			Recovery	= 14.81%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.323	62	3444	11.20 ng/L	98
4) 1,2-Dibromoethane	12.352	107	1903	11.53 ng/L	77
5) 1,1,2,2-Tetrachloroethane	14.484	83	1898	10.47 ng/L	94
6) 1,2,3-Trichloropropane	14.716	75	1174	9.52 ng/L	87
7) 1,2-Dibromo-3-chloropr...	17.871	157	232	8.58 ng/L #	54

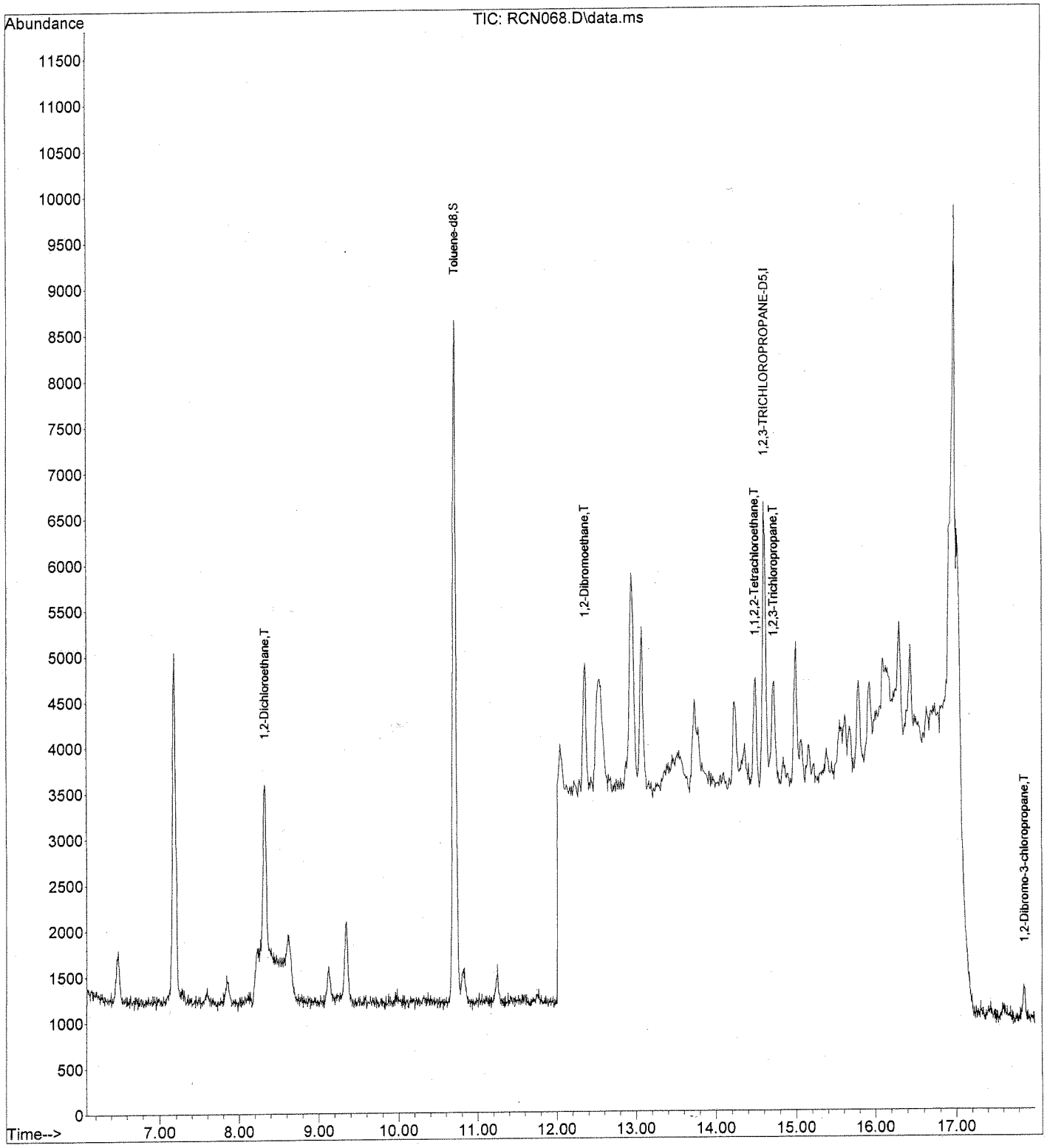
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SU 3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN068.D
Acq On : 12 Mar 2012 7:27 pm
Operator : DN
Sample : VOF4C122
Misc : 10 PPT
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 15 15:25:49 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



SG 3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN069.D
Acq On : 12 Mar 2012 7:51 pm
Operator : DN
Sample : VOF4C123
Misc : 20 PPT
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 15 15:26:02 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	6503	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.704	98	20925	21.80 ng/l	0.00
Spiked Amount 100.000			Recovery	= 21.80%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.319	62	7449	21.69 ng/L	92
4) 1,2-Dibromoethane	12.352	107	3516	19.08 ng/L	100
5) 1,1,2,2-Tetrachloroethane	14.484	83	3853	19.03 ng/L	100
6) 1,2,3-Trichloropropane	14.716	75	2864	20.79 ng/L	99
7) 1,2-Dibromo-3-chloropr...	17.871	157	585	19.37 ng/L	87

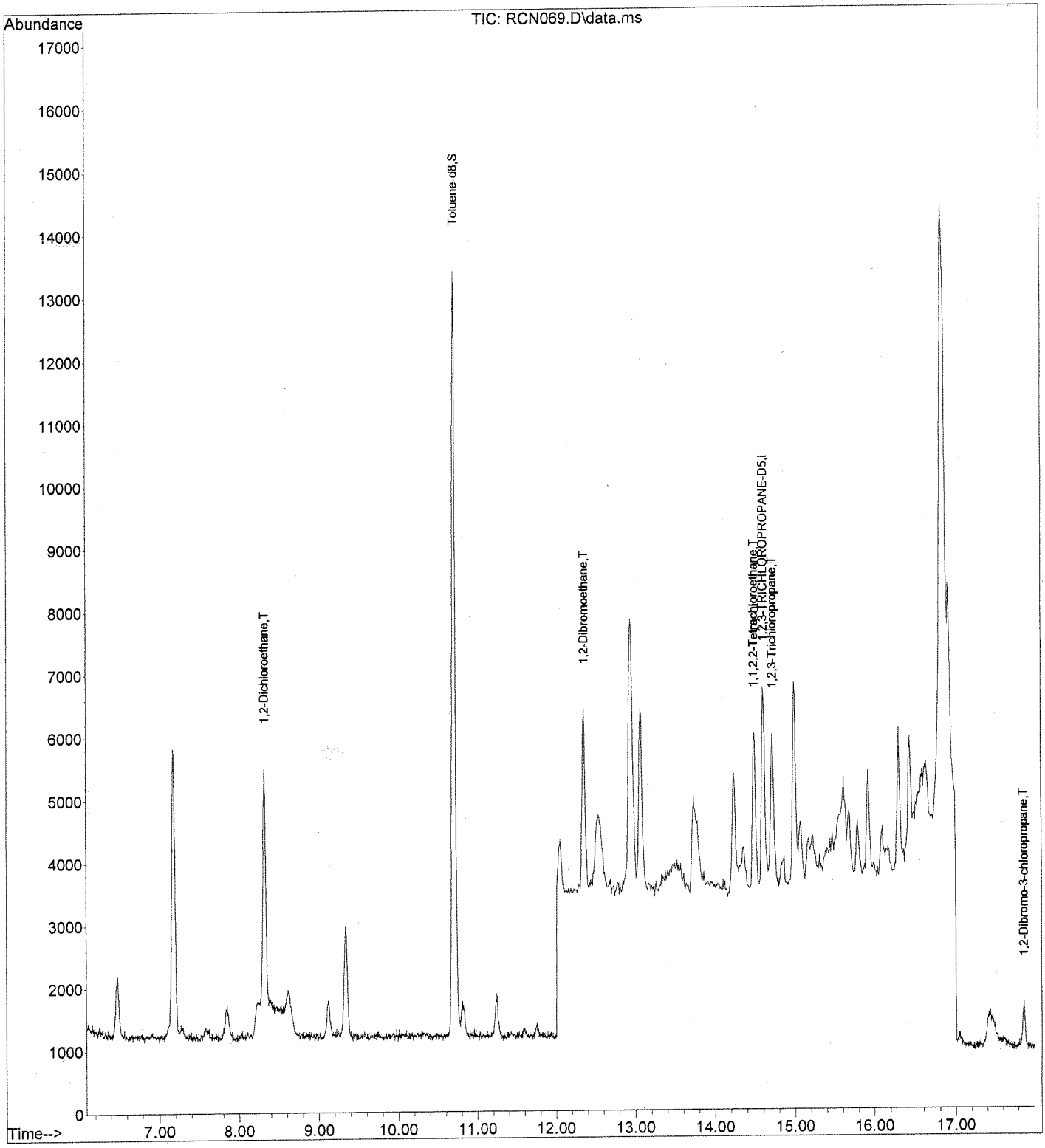
(#) = qualifier out of range (m) = manual integration (+) = signals summed

5u
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN069.D
Acq On : 12 Mar 2012 7:51 pm
Operator : DN
Sample : VOF4C123
Misc : 20 PPT
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 15 15:26:02 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



gh 3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN070.D
Acq On : 12 Mar 2012 8:15 pm
Operator : DN
Sample : VOF4C124
Misc : 50 PPT
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 15 15:26:19 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	6009	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.701	98	47041	53.05 ng/l	0.00
Spiked Amount 100.000			Recovery	= 53.05%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.320	62	15958	50.29 ng/L	99
4) 1,2-Dibromoethane	12.352	107	8671	50.92 ng/L	99
5) 1,1,2,2-Tetrachloroethane	14.484	83	9087	48.58 ng/L	97
6) 1,2,3-Trichloropropane	14.716	75	6342	49.82 ng/L	92
7) 1,2-Dibromo-3-chloropr...	17.868	157	1479	53.01 ng/L	99

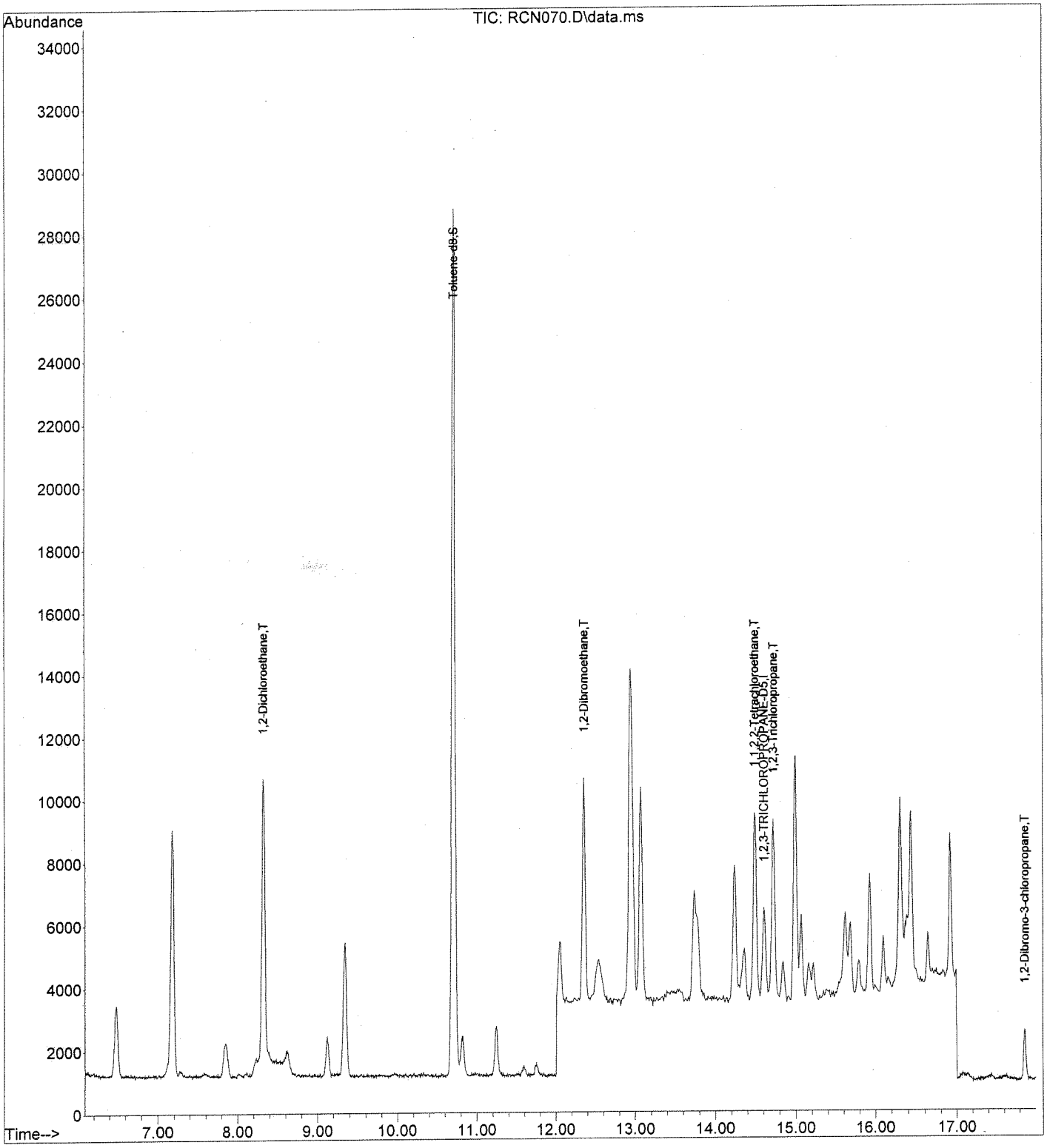
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SW
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN070.D
Acq On : 12 Mar 2012 8:15 pm
Operator : DN
Sample : VOF4C124
Misc : 50 PPT
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 15 15:26:19 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



SG 3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN071.D
Acq On : 12 Mar 2012 8:38 pm
Operator : DN
Sample : VOF4C125
Misc : 100 PPT
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 15 15:26:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	6474	50.00	ng/l	0.00
System Monitoring Compounds						
3) Toluene-d8	10.701	98	88957	93.11	ng/l	0.00
Spiked Amount 100.000			Recovery = 93.11%			
Target Compounds						Qvalue
2) 1,2-Dichloroethane	8.319	62	30977	90.60	ng/L	100
4) 1,2-Dibromoethane	12.352	107	16558	90.26	ng/L	100
5) 1,1,2,2-Tetrachloroethane	14.494	83	18208	90.35	ng/L	100
6) 1,2,3-Trichloropropane	14.716	75	12700	92.60	ng/L	100
7) 1,2-Dibromo-3-chloropr...	17.871	157	2813	93.58	ng/L	100

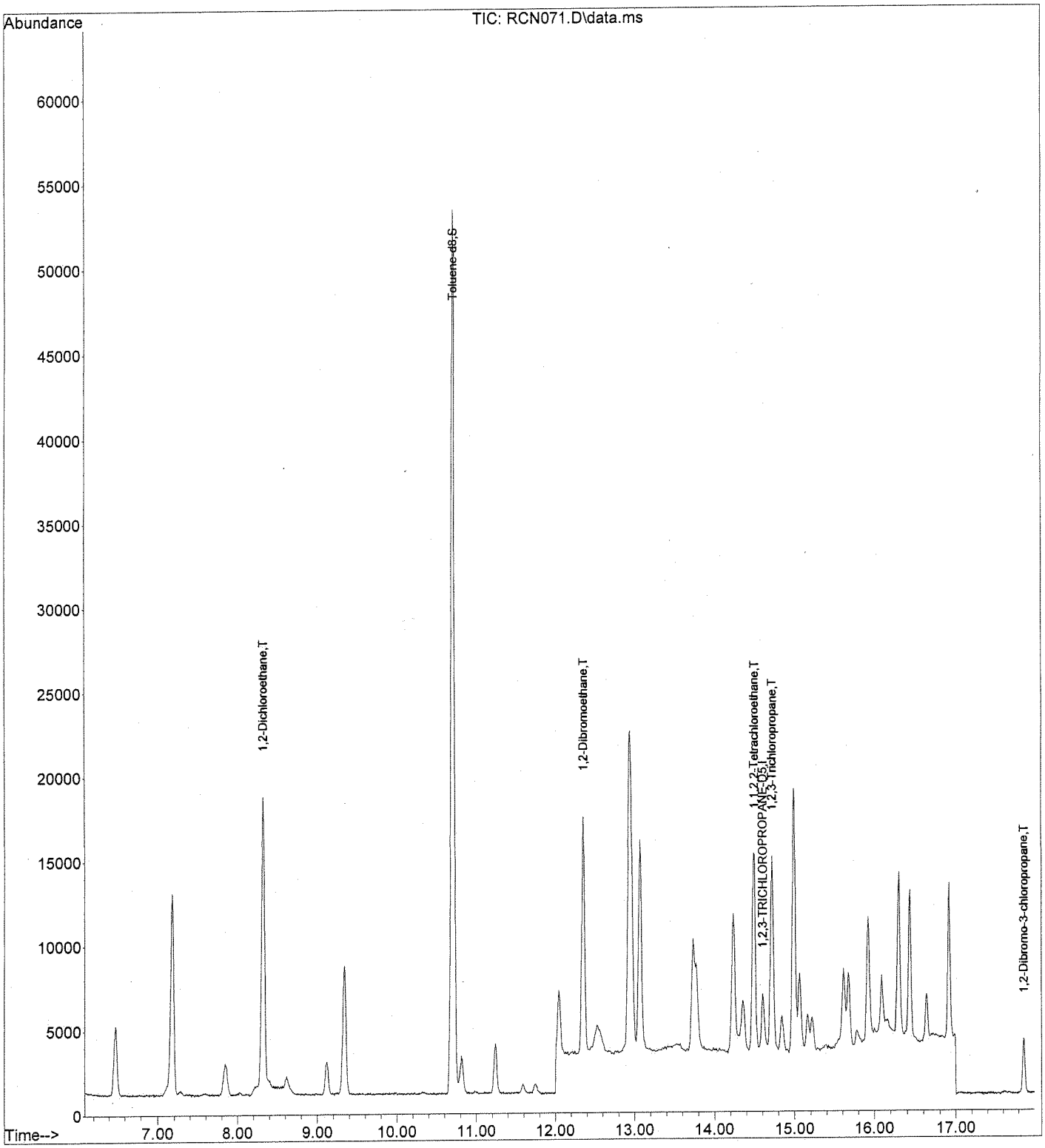
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SO
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN071.D
Acq On : 12 Mar 2012 8:38 pm
Operator : DN
Sample : VOF4C125
Misc : 100 PPT
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 15 15:26:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



SU 3/16/12

2168

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN072.D
Acq On : 12 Mar 2012 9:02 pm
Operator : DN
Sample : VOF4C126
Misc : 200 PPT
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 15 15:26:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	6775	50.00	ng/l	0.00
System Monitoring Compounds						
3) Toluene-d8	10.701	98	192347	192.39	ng/l	0.00
Spiked Amount 100.000			Recovery	=	192.39%	
Target Compounds						Qvalue
2) 1,2-Dichloroethane	8.316	62	71887	200.91	ng/L	100
4) 1,2-Dibromoethane	12.352	107	37820	196.99	ng/L	96
5) 1,1,2,2-Tetrachloroethane	14.484	83	42138	199.81	ng/L	99
6) 1,2,3-Trichloropropane	14.716	75	29148	203.09	ng/L	99
7) 1,2-Dibromo-3-chloropr...	17.871	157	6433	204.50	ng/L	98

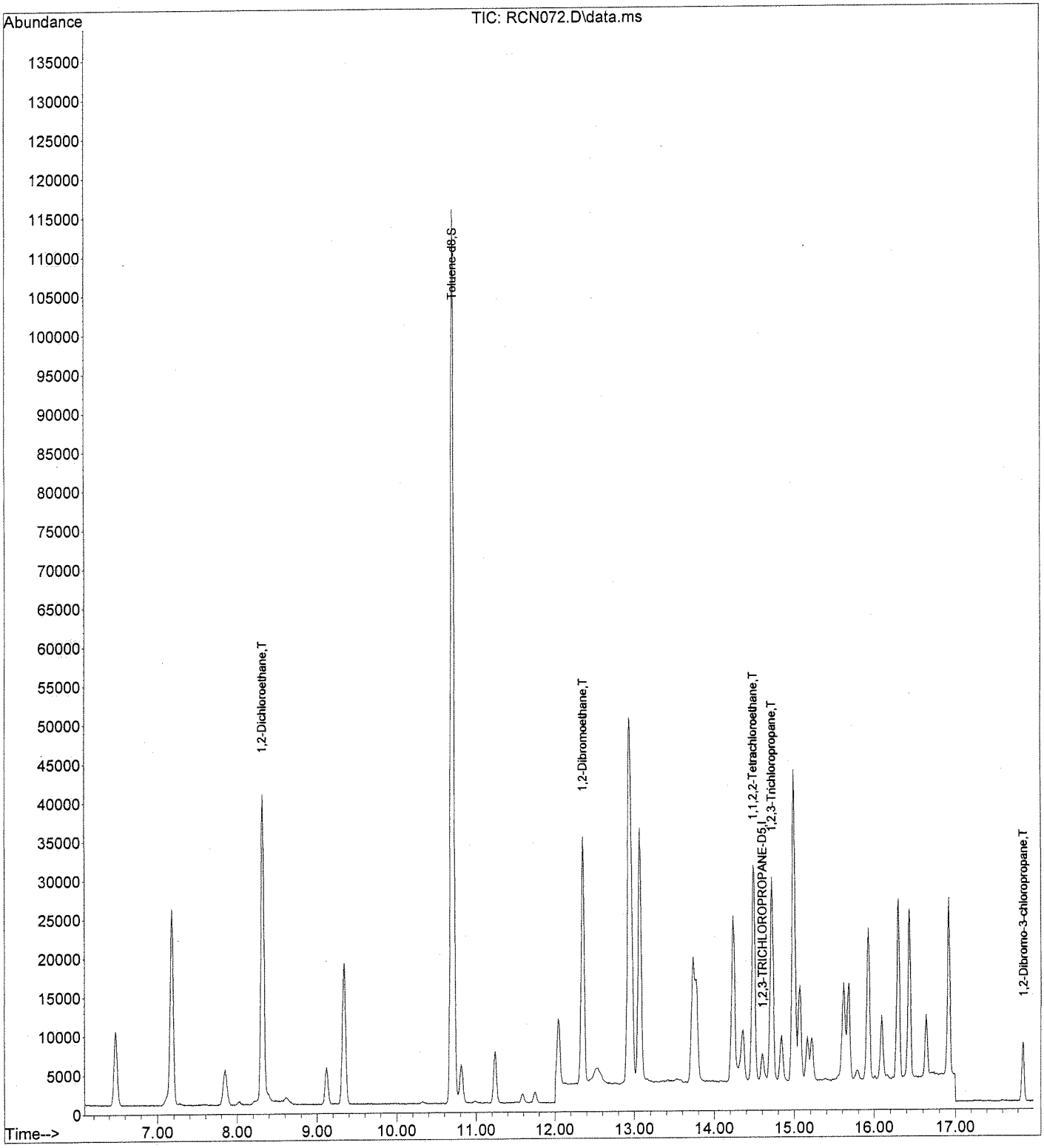
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SA
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN072.D
Acq On : 12 Mar 2012 9:02 pm
Operator : DN
Sample : VOF4C126
Misc : 200 PPT
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 15 15:26:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



SU 3/16/12

2176

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN073.D
Acq On : 12 Mar 2012 9:26 pm
Operator : DN
Sample : VOF4C127
Misc : 400 PPT
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 15 15:27:10 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	6310	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.701	98	390962	419.86 ng/l	0.00
Spiked Amount 100.000			Recovery	= 419.86%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.319	62	138416	415.36 ng/L	96
4) 1,2-Dibromoethane	12.352	107	71781	401.44 ng/L	96
5) 1,1,2,2-Tetrachloroethane	14.484	83	77468	394.42 ng/L	99
6) 1,2,3-Trichloropropane	14.716	75	54228	405.67 ng/L	99
7) 1,2-Dibromo-3-chloropr...	17.868	157	12585	429.54 ng/L	96

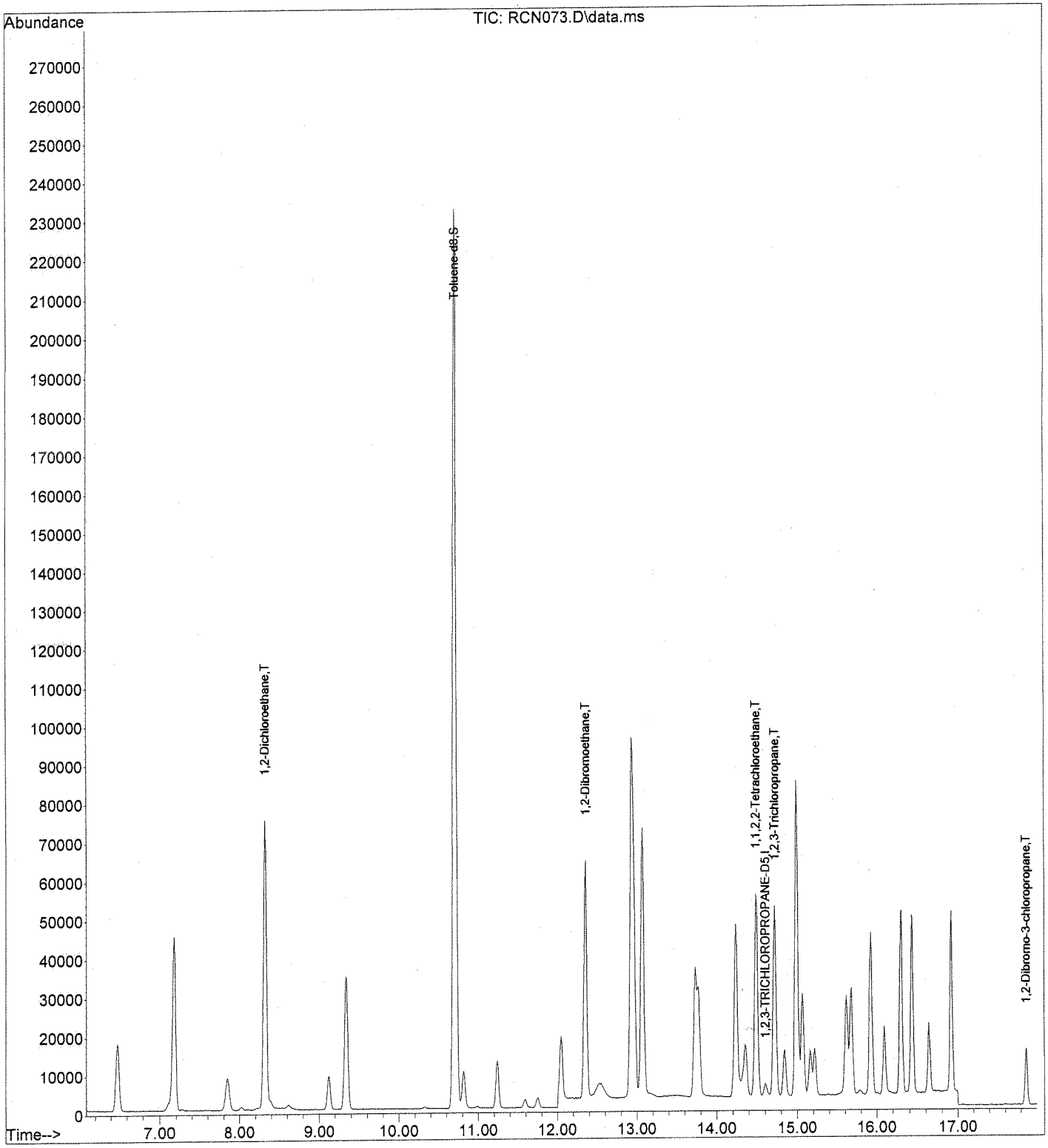
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SU
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN073.D
Acq On : 12 Mar 2012 9:26 pm
Operator : DN
Sample : VOF4C127
Misc : 400 PPT
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 15 15:27:10 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN074.D
Acq On : 12 Mar 2012 9:49 pm
Operator : DN
Sample : VOF4C128
Misc : 1000 PPT
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 15 15:27:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	7933	50.00	ng/l	0.00
System Monitoring Compounds						
3) Toluene-d8	10.701	98	1060802	906.13	ng/l	0.00
Spiked Amount 100.000			Recovery	=	906.13%	
Target Compounds						Qvalue
2) 1,2-Dichloroethane	8.316	62	372931	890.14	ng/L	98
4) 1,2-Dibromoethane	12.352	107	208256	926.41	ng/L	96
5) 1,1,2,2-Tetrachloroethane	14.485	83	232952	943.39	ng/L	98
6) 1,2,3-Trichloropropane	14.716	75	161457	960.73	ng/L	99
7) 1,2-Dibromo-3-chloropr...	17.868	157	39817	1080.96	ng/L	95

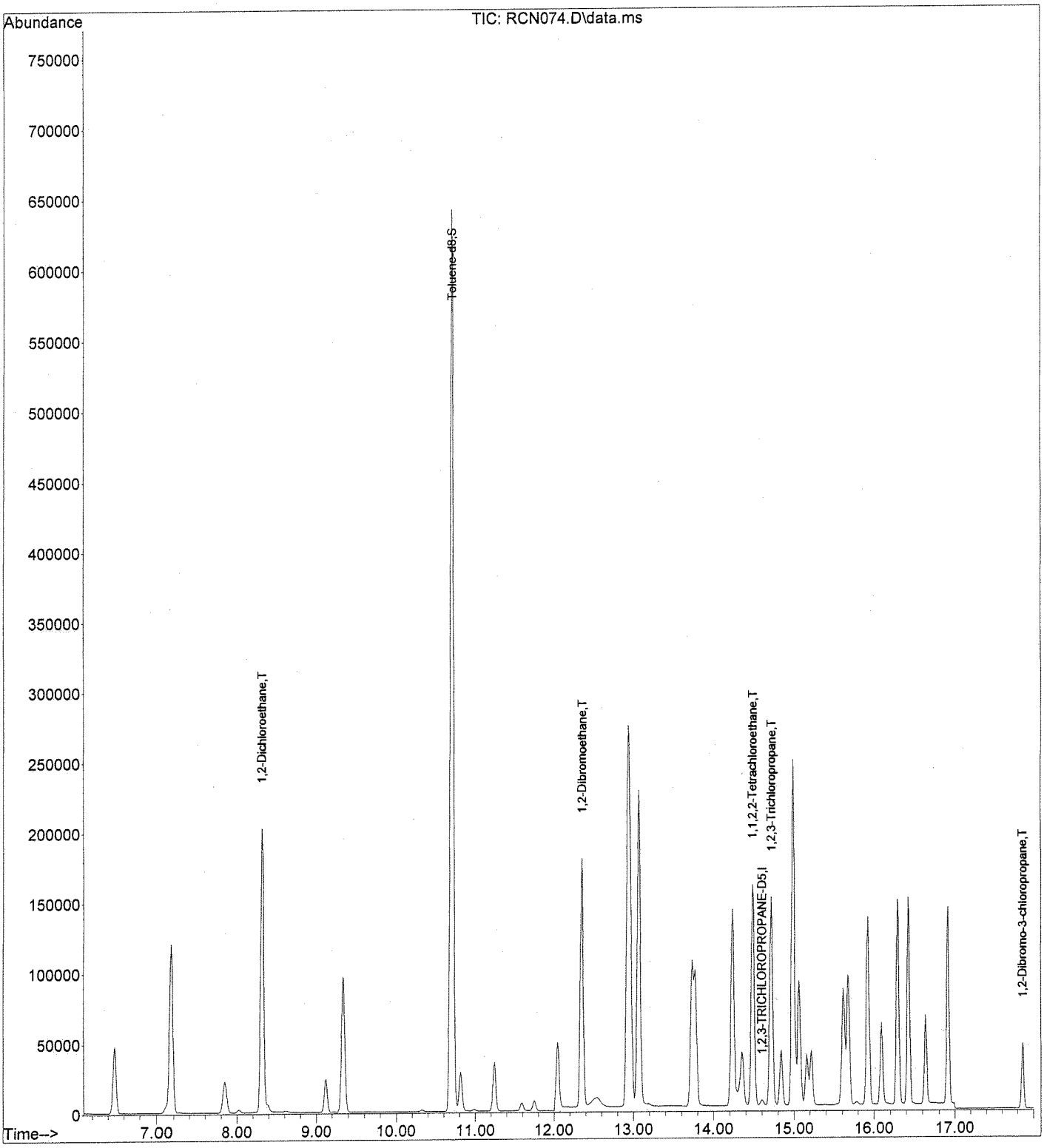
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SG
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN074.D
Acq On : 12 Mar 2012 9:49 pm
Operator : DN
Sample : VOF4C128
Misc : 1000 PPT
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 15 15:27:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



SU 3/16/12

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :F4
IC_Beginning DateTime :03/12/12 19:03
Spike Amount :100 PPT
CC/CV File :RCN076
IC File :RCN071

Column Spec :RTX-502.2 ID :0.32MM
IC_Ending DateTime :03/12/12 21:49
HPChem Method :VOF4C12
Date_Time :03/12/12 22:36

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	7083	1	1	14.600	14.600	0				
2	1,2-Dichloroethane	94.571	-5.4	35376	2.497	2.641	8.320	8.319	8.14				
3	Toluene-d8	87.986	-12.0	91968	6.492	7.379	10.701	10.701	7.66				
4	1,2-Dibromoethane	89.242	-10.8	17912	1.264	1.417	12.352	12.352	7.96				
5	1,1,2,2-Tetrachloroethane	86.006	-14.0	18962	1.339	1.556	14.484	14.486	9.03				
6	1,2,3-Trichloropropane	90.823	-9.2	13628	0.962	1.059	14.716	14.716	5.42				
7	1,2-Dibromo-3-chloropropane	94.229	-5.8	3099	0.219	0.232	17.871	17.869	8.30				

SG
3/16/12

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN076.D
Acq On : 12 Mar 2012 10:36 pm
Operator : DN
Sample : IVOF4C1201
Misc : 100 PPT
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 15 15:28:17 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial 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	109	0.00
2	T	1,2-Dichloroethane	100.000	94.571	5.4	114	0.00
3	S	Toluene-d8	100.000	87.986	12.0	103	0.00
4	T	1,2-Dibromoethane	100.000	89.242	10.8	108	0.00
5	T	1,1,2,2-Tetrachloroethane	100.000	86.006	14.0	104	0.00
6	T	1,2,3-Trichloropropane	100.000	90.823	9.2	107	0.00
7	T	1,2-Dibromo-3-chloropropane	100.000	94.229	5.8	110	0.00

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

SL 3/16/12

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN076.D
Acq On : 12 Mar 2012 10:36 pm
Operator : DN
Sample : IVOF4C1201
Misc : 100 PPT
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 15 15:28:17 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial 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	109	0.00
2	T	1,2-Dichloroethane	2.641	2.497	5.5	114	0.00
3	S	Toluene-d8	7.379	6.492	12.0	103	0.00
4	T	1,2-Dibromoethane	1.417	1.264	10.8	108	0.00
5	T	1,1,2,2-Tetrachloroethane	1.556	1.339	13.9	104	0.00
6	T	1,2,3-Trichloropropane	1.059	0.962	9.2	107	0.00
7	T	1,2-Dibromo-3-chloropropane	0.232	0.219	5.6	110	0.00

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

SL
3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN076.D
Acq On : 12 Mar 2012 10:36 pm
Operator : DN
Sample : IVOF4C1201
Misc : 100 PPT
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 15 15:28:17 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration ✓

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.600	79	7083	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.701	98	91968	87.99 ng/l	0.00
Spiked Amount 100.000			Recovery	= 87.99%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.320	62	35376	94.57 ng/L	96
4) 1,2-Dibromoethane	12.352	107	17912	89.24 ng/L	99
5) 1,1,2,2-Tetrachloroethane	14.484	83	18962	86.01 ng/L	99
6) 1,2,3-Trichloropropane	14.716	75	13628	90.82 ng/L	99
7) 1,2-Dibromo-3-chloropr...	17.871	157	3099	94.23 ng/L	94

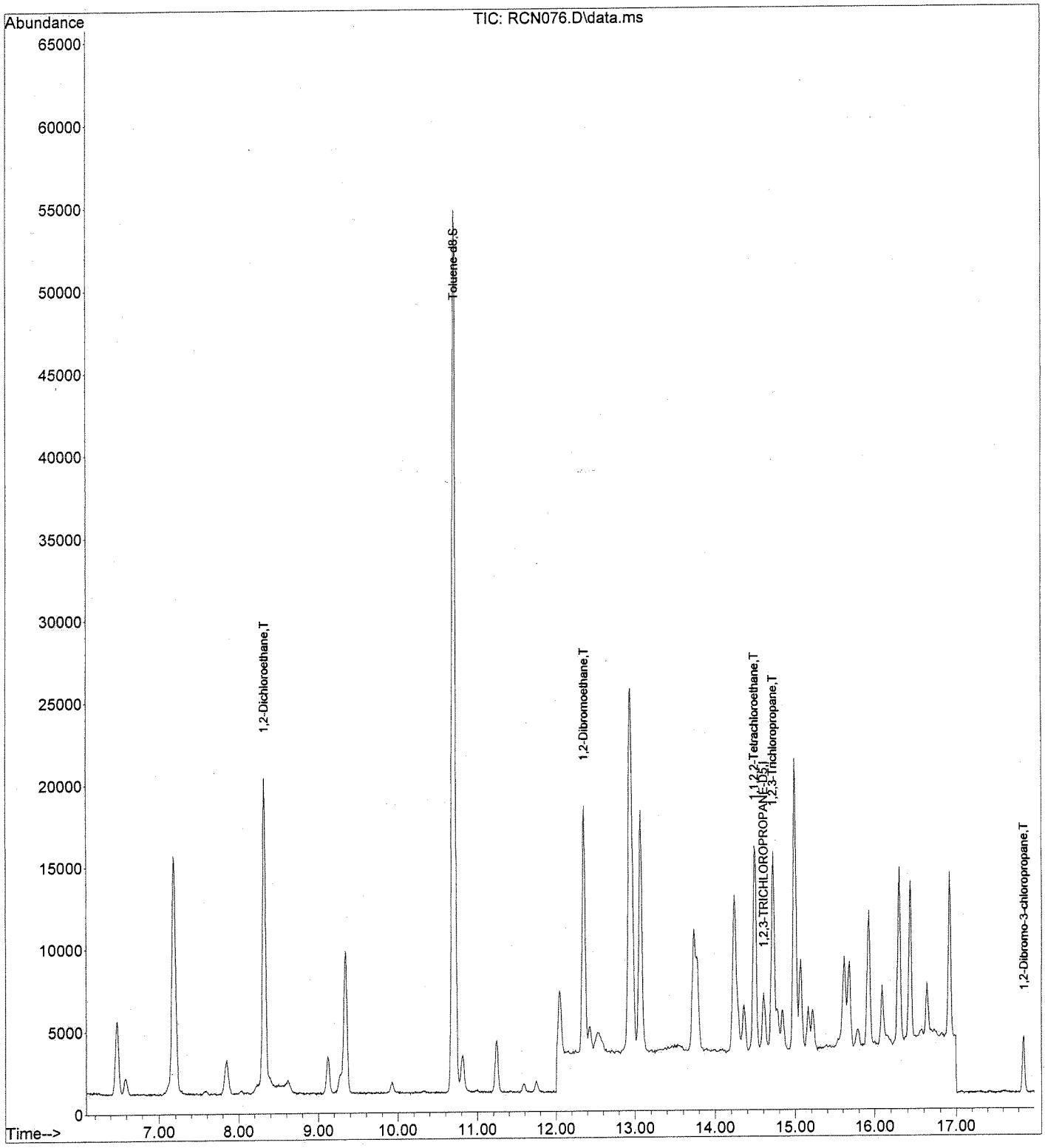
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SG 3/16/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12C12\
Data File : RCN076.D
Acq On : 12 Mar 2012 10:36 pm
Operator : DN
Sample : IVOF4C1201
Misc : 100 PPT
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 15 15:28:17 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Thu Mar 15 15:21:33 2012
Response via : Initial Calibration



SU 3/16/12

DAILY CALIBRATIONS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RJN001
Instrument ID: TOF4
GC Column:RTX502.2ID:0.32mm (mm)

Contract: B & B, MONTHLY CITY WELL SAMPLING
SAS No.: SDG No.: 12I219
BFB Injection Date : 10/05/12
BFB Injection Time : 11:43
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.60
75	30.0 - 60.0% of mass 95	54.62
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.61
173	Less than 2.0% of mass 174	0.16(0.2)1
174	Greater than 50% of mass 95	81.30
175	5.0 - 9.0% of mass 174	6.69(8.2)1
176	95.0 - 101.0% of mass 174	77.24(95.0)1
177	5.0 - 9.0% of mass 176	4.50(5.8)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	CVOF4C1220	RJN003	10/05/12	13:14
2	MBLK1W	VOF4J01B	RJN009	10/05/12	16:09
3	LCS1W	VOF4J01L	RJN004	10/05/12	14:11
4	LCD1W	VOF4J01Y	RJN008	10/05/12	15:45
5	09-25-12-CW-6MS	I219-03M	RJN015	10/05/12	18:30
6	09-25-12-CW-6MSD	I219-03S	RJN016	10/05/12	18:53
7	09-25-12-CW-6	I219-03	RJN017	10/05/12	19:17
8	09-25-12-CW-1	I219-01	RJN018	10/05/12	19:41
9	09-25-12-CW-5	I219-02	RJN019	10/05/12	20:04
10	09-25-12-CW-8	I219-04	RJN020	10/05/12	20:28
11	09-25-12-CW-9	I219-05	RJN021	10/05/12	20:51
12	09-25-12-CW-10	I219-06	RJN022	10/05/12	21:15
13	09-25-12-FDUP-1	I219-07	RJN023	10/05/12	21:39

FORM V VOA OLM02.0

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RCN071
Instrument ID: TOF4

Project: B & B, MONTHLY CITY WELL SAMPLING
SDG No.: 12I219
Date Analyzed: 03/12/12
Time Analyzed: 20:38

		IS1(TCP) AREA #	RT #
	12 HOUR STD	6474	14.60
	UPPER LIMIT	12948	15.10
	LOWER LIMIT	3237	14.10
	SAMPLE ID		
1	VSTD100	7245	14.55
2	MBLK1W	8238	14.55
3	LCS1W	7439	14.55
4	LCD1W	7441	14.55
5	09-25-12-CW-6MS	7353	14.55
6	09-25-12-CW-6MSD	7615	14.55
7	09-25-12-CW-6	7549	14.55
8	09-25-12-CW-1	7443	14.55
9	09-25-12-CW-5	7442	14.55
10	09-25-12-CW-8	7798	14.55
11	09-25-12-CW-9	7487	14.55
12	09-25-12-CW-10	7428	14.55
13	09-25-12-FDUP-1	7611	14.55

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 :F4
IC_Beginning DateTime :03/12/12 19:03
Spike Amount :100 PPT
CC/CV File :RJN003
IC File :RCN071

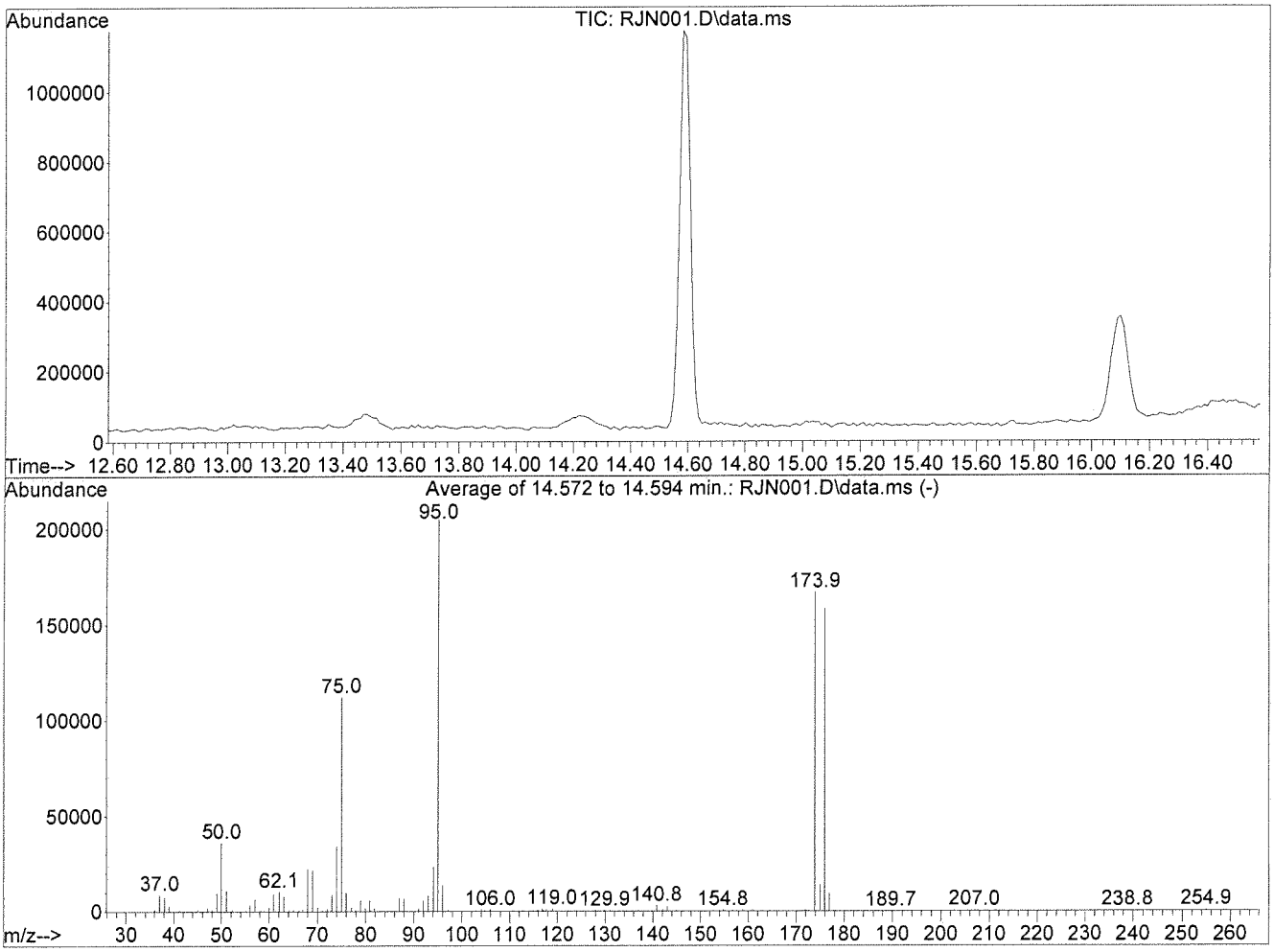
Column Spec :RTX-502.2 ID :0.32MM
IC_Ending DateTime :03/12/12 21:49
HPChem Method :VOF4C12
Date_Time :10/05/12 13:14

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	7245	1	1	14.552	14.600	0				
	2	1,2-Dichloroethane	112.865	12.9	43185	2.980	2.641	8.279	8.319	8.14				
	3	Toluene-d8	116.224	16.2	124263	8.576	7.379	10.656	10.701	7.66				
	4	1,2-Dibromoethane	90.797	-9.2	18641	1.286	1.417	12.304	12.352	7.96				
	5	1,1,2,2-Tetrachloroethane	104.121	4.1	23481	1.620	1.556	14.436	14.486	9.03				
	6	1,2,3-Trichloropropane	118.496	18.5	18187	1.255	1.059	14.668	14.716	5.42				
	7	1,2-Dibromo-3-chloropropane	112.394	12.4	3781	0.261	0.232	17.822	17.869	8.30				

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN001.D
Acq On : 5 Oct 2012 11:43 am
Operator : DN
Sample : BFBF4J01
Misc : T/CHK
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\VOF4C12A.M
Title : METHOD BFB 25mL
Last Update : Thu Mar 15 12:44:46 2012



AutoFind: Scans 771, 772, 773; Background Corrected with Scan 763

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	36063	PASS
75	95	30	60	54.6	111935	PASS
95	95	100	100	100.0	204928	PASS
96	95	5	9	6.6	13557	PASS
173	174	0.00	2	0.2	324	PASS
174	95	50	100	81.3	166611	PASS
175	174	5	9	8.2	13714	PASS
176	174	95	101	95.0	158291	PASS
177	176	5	9	5.8	9222	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN003.D
Acq On : 5 Oct 2012 1:14 pm
Operator : DN
Sample : CVOF4C1220
Misc : 100PPT
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 13:26:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial 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	112	0.00
2	T	1,2-Dichloroethane	100.000	112.865	-12.9	139	0.00
3	S	Toluene-d8	100.000	116.225	-16.2	140	0.00
4	T	1,2-Dibromoethane	100.000	90.797	9.2	113	0.00
5	T	1,1,2,2-Tetrachloroethane	100.000	104.121	-4.1	129	0.00
6	T	1,2,3-Trichloropropane	100.000	118.496	-18.5	143	0.00
7	T	1,2-Dibromo-3-chloropropane	100.000	112.395	-12.4	134	0.00

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN003.D
Acq On : 5 Oct 2012 1:14 pm
Operator : DN
Sample : CVOF4C1220
Misc : 100PPT
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 13:26:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial 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	112	0.00
2	T	1,2-Dichloroethane	2.641	2.980	-12.8	139	0.00
3	S	Toluene-d8	7.379	8.576	-16.2	140	0.00
4	T	1,2-Dibromoethane	1.417	1.286	9.2	113	0.00
5	T	1,1,2,2-Tetrachloroethane	1.556	1.620	-4.1	129	0.00
6	T	1,2,3-Trichloropropane	1.059	1.255	-18.5	143	0.00
7	T	1,2-Dibromo-3-chloropropane	0.232	0.261	-12.5	134	0.00

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN003.D
Acq On : 5 Oct 2012 1:14 pm
Operator : DN
Sample : CVOF4C1220
Misc : 100PPT
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 13:26:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration

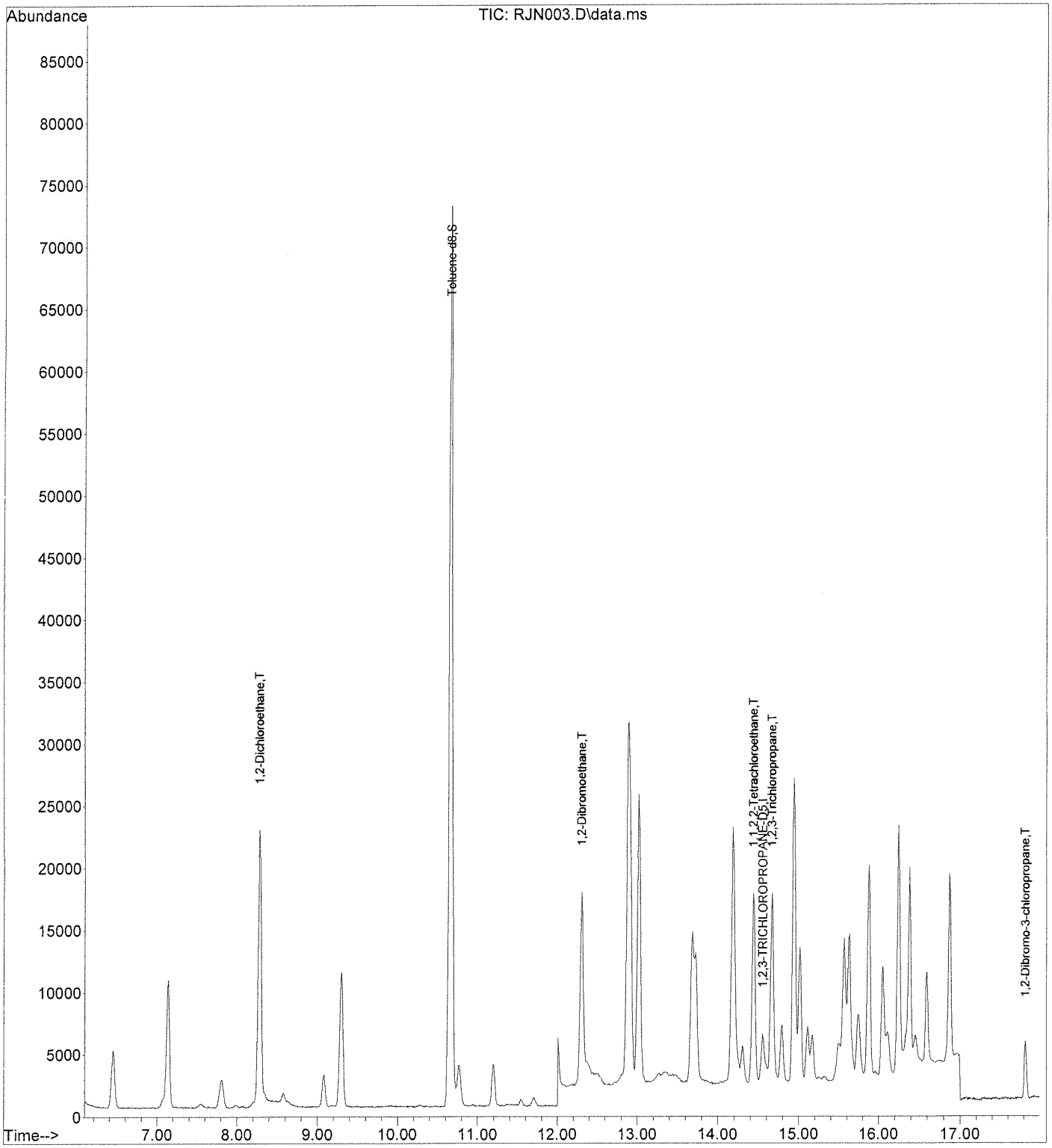
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,2,3-TRICHLOROPROPANE-D5	14.552	79	7245	50.00 ng/l	0.00
System Monitoring Compounds					
3) Toluene-d8	10.656	98	124263	116.22 ng/l	0.00
Spiked Amount 100.000			Recovery	= 116.22%	
Target Compounds					Qvalue
2) 1,2-Dichloroethane	8.279	62	43185	112.87 ng/L	95
4) 1,2-Dibromoethane	12.304	107	18641	90.80 ng/L	93
5) 1,1,2,2-Tetrachloroethane	14.436	83	23481	104.12 ng/L	99
6) 1,2,3-Trichloropropane	14.668	75	18187	118.50 ng/L	89
7) 1,2-Dibromo-3-chloropr...	17.822	157	3781	112.39 ng/L	82

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\12J05\
Data File : RJN003.D
Acq On : 5 Oct 2012 1:14 pm
Operator : DN
Sample : CVOF4C1220
Misc : 100PPT
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 13:26:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\VOF4C12.M
Quant Title : METHOD TCPSIM 25mL
QLast Update : Fri Sep 28 17:42:11 2012
Response via : Initial Calibration



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: 10/5/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book # AF4 -003

BATCH CWF4 C1220

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RJN001	BFBF4J01 ✓	1µl					11:43 am
02	002	TEST						
03	003	CWF4 C1220 ✓	1µl					
04	004	WF4 J01L ✓						
05	005	C						sub in →
06	006	Blank	25ml					
07	007	LOD VERF. 1 ✓	.025µl					
08	008	WF4 J01 Y ✓	1µl					
09	009	B ✓	25ml					
10	010	LOD/LOQ VERF. 2 ✓	.05µl/.2µl					
11	011	3 ✓	.1/.2µl					
12	012	4 ✓	.2/.2µl					
13	013	5 ✓	.5/.2µl					
14	014	LOD VERF. 6 ✓	.1µl					
15	015	12I219-03M ✓	25ml	1.0	✓	✓		
16	016	-03S ✓			✓	✓		
17	017	-03 ✓			✓	✓		
18	018	-01 ✓			✓	✓		
19	019	-02 ✓			✓	✓		
20	020	-04 ✓			✓	✓		
21	021	-05 ✓			✓	✓		
22	022	-06 ✓			✓	✓		
23	023	-07 ✓			✓	✓		
24	024	12I271-11R			✓	✓		wrong spike → not used
25	025	-11M ✓			✓	✓		
26	026	-11S ✓			✓	✓		10:49 pm
27	027	Blank						
28								
29	032							
30								

Instrument No.	F4
INITIAL CALIBRATION REFERENCE	
DATE	3/12/12
ICAL ID	WF4 Q2

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC	SM-20-24-2	1	25
BFB	-22-1	1	50
IS/SURR.	-26-1	1	1.4/25
ICV/LCS	-26-3	1	21
ICV/LCS			
ICV/LCS			
ICV/LCS			

DATA FILE FOLDER: 12JUS

Electronic Data Archival

Location	Date
HPCHEM_VOA/TOF4	

Comments:

pH Lot # HC13767

Na2 Lot # 2220

Analyzed By: DM

Date Disposed: 10/9/12

Disposed By: DM

DM 10/9/12

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: 3/12/12 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge Book # AF4 -002

BATCH VOF4C12 5

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH <2	Matrix W Cl <5ppm	Matrix S	Notes
01	RCN 065	BFB F4C06 ✓	1µl	NA	NA			(VOF4C12A) 18:19 pm
02	066	TEST	25ml					
03	067	VOF4C12 1 ✓	.05/.05µl					5.0 ppt
04	068	2 ✓	.1/.1µl					10
05	069	3 ✓	.2/.2µl					20
06	070	4 ✓	.5/.5µl					50
07	071	5 ✓	1/1µl					100
08	072	6 ✓	2/2µl					200
09	073	7 ✓	4/4µl					400
10	074	8 ✓	10/10µl					1000
11	075	IS/SS	25ml					
12	076	IVOF4C1201 ✓	1/1µl					100ppt
13	077	Blank	25ml					11:00 pm
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28						DI		3/12/12
29								
30								

Instrument No.	F4
INITIAL CALIBRATION REFERENCE	
DATE	3/12/12
ICAL ID	VOF4C12

STANDARDS

NAME	ID	Amount (µL)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC	SV1-19-49-1	*	2.5
BFB	-16-2	1	50
IS/SURR.	-49-2 -49-3	1 *	1.25 2.5
ICV/LCS	-03-1	1	2.5
ICV/LCS			
ICV/LCS			
ICV/LCS			

DATA FILE FOLDER	12C12
Electronic Data Archival	
Location	Date
HPCHEM_VOA/TOF4	

Comments: * varied amount

Analyzed By: DI

Date Disposed: 3/13/12

Disposed By: DI

21.92

Injection Log

Directory: C:\msdchem\1\DATA\12J05

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rjn001.d	1.	BFBF4J01	T/CHK	5 Oct 2012 11:43
2	2	Rjn002.d	1.	TEST	100PPT	5 Oct 2012 12:27
3	3	Rjn003.d	1.	CVOF4C1220	100PPT	5 Oct 2012 13:14
4	4	Rjn004.d	1.	VOF4J01L	100PPT	5 Oct 2012 14:11
5	5	Rjn005.d	1.	VOF4J01C SS hi → air	100PPT	5 Oct 2012 14:35
6	6	Rjn006.d	1.	RINSE	DF=1.0	5 Oct 2012 14:58
7	7	Rjn007.d	1.	LOD VERF. 1	2.5ppt	5 Oct 2012 15:22
8	8	Rjn008.d	1.	VOF4J01Y	100PPT	5 Oct 2012 15:45
9	9	Rjn009.d	1.	VOF4J01B	DF=1.0	5 Oct 2012 16:09
10	10	Rjn010.d	1.	LOD/LOQ VERF. 2	5.0ppt/20ppt	5 Oct 2012 16:32
11	11	Rjn011.d	1.	LOD/LOQ VERF. 3	10ppt/20ppt	5 Oct 2012 16:56
12	12	Rjn012.d	1.	LOD/LOQ VERF. 4	20ppt/20ppt	5 Oct 2012 17:19
13	13	Rjn013.d	1.	LOD/LOQ VERF. 5	50ppt/20ppt	5 Oct 2012 17:43
14	14	Rjn014.d	1.	LOD VERF. 6	10ppt SURR	5 Oct 2012 18:06
15	15	Rjn015.d	1.	12I219-03M	DF=1.0	5 Oct 2012 18:30
16	16	Rjn016.d	1.	12I219-03S	DF=1.0	5 Oct 2012 18:53
17	17	Rjn017.d	1.	12I219-03	DF=1.0	5 Oct 2012 19:17
18	18	Rjn018.d	1.	12I219-01	DF=1.0	5 Oct 2012 19:41
19	19	Rjn019.d	1.	12I219-02	DF=1.0	5 Oct 2012 20:04
20	20	Rjn020.d	1.	12I219-04	DF=1.0	5 Oct 2012 20:28
21	21	Rjn021.d	1.	12I219-05	DF=1.0	5 Oct 2012 20:51
22	22	Rjn022.d	1.	12I219-06	DF=1.0	5 Oct 2012 21:15
23	23	Rjn023.d	1.	12I219-07	DF=1.0	5 Oct 2012 21:39
24	24	Rjn024.d	1.	12I271-11R wrong spike → w/ tube	DF=1.0	5 Oct 2012 22:02
25	25	Rjn025.d	1.	12I271-11M	DF=1.0	5 Oct 2012 22:26
26	26	Rjn026.d	1.	12I271-11S	DF=1.0	5 Oct 2012 22:49
27	27	Rjn027.d	1.	RINSE	DF=1.0	5 Oct 2012 23:13
28	28	Rjn028.d	1.	RINSE	DF=1.0	5 Oct 2012 23:36
29	29	Rjn029.d	1.	RINSE	DF=1.0	6 Oct 2012 00:00
30	30	Rjn030.d	1.	RINSE	DF=1.0	6 Oct 2012 00:24
31	31	Rjn031.d	1.	RINSE	DF=1.0	6 Oct 2012 00:47
32	32	Rjn032.d	1.	RINSE	DF=1.0	6 Oct 2012 01:11

LABORATORY REPORT FOR

ECO & ASSOCIATES, INC.

B & B, MONTHLY CITY WELL SAMPLING

EPA METHOD 8151A
HERBICIDES

SDG#: 12I219

CASE NARRATIVE

Client : ECO & ASSOCIATES, INC.

Project : B & B, MONTHLY CITY WELL SAMPLING

SDG : 12I219

METHOD 8151A
HERBICIDES

A total of seven (7) water samples were received on 09/25/12 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 except recovery of Dinoseb in column A of closing CCV-QJ02025 was out of QC limit. The results of the associated samples I219-02, 04, 05, 06, and 07 were reported from the in-control column B. 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 HEJ001WL/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 I219-03M/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. : 12I219
Instrument ID : GCT009

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	HEJ001WB	1	NA	10/02/1216:51	10/01/1209:56	QJ02003A	QJ02002A	HEJ001W	Method Blank
LCS1W	HEJ001WL	1	NA	10/02/1217:13	10/01/1209:56	QJ02004A	QJ02002A	HEJ001W	Lab Control Sample (LCS)
LCD1W	HEJ001WC	1	NA	10/02/1217:34	10/01/1209:56	QJ02005A	QJ02002A	HEJ001W	LCS Duplicate
09-25-12-CW-1	I219-01	1	NA	10/02/1220:06	10/01/1209:56	QJ02012A	QJ02002A	HEJ001W	Field Sample
09-25-12-CW-5	I219-02	1	NA	10/02/1221:11	10/01/1209:56	QJ02015B	QJ02014B	HEJ001W	Field Sample
09-25-12-CW-6	I219-03	1	NA	10/02/1219:44	10/01/1209:56	QJ02011A	QJ02002A	HEJ001W	Field Sample
09-25-12-CW-8	I219-04	1	NA	10/02/1221:33	10/01/1209:56	QJ02016B	QJ02014B	HEJ001W	Field Sample
09-25-12-CW-9	I219-05	1	NA	10/02/1221:55	10/01/1209:56	QJ02017B	QJ02014B	HEJ001W	Field Sample
09-25-12-CW-10	I219-06	1	NA	10/02/1222:16	10/01/1209:56	QJ02018B	QJ02014B	HEJ001W	Field Sample
09-25-12-FDUP-1	I219-07	1	NA	10/02/1222:38	10/01/1209:56	QJ02019B	QJ02014B	HEJ001W	Field Sample
09-25-12-CW-6MS	I219-03M	1	NA	10/02/1219:01	10/01/1209:56	QJ02009A	QJ02002A	HEJ001W	Matrix Spike Sample (MS)
09-25-12-CW-6MSD	I219-03S	1	NA	10/02/1219:22	10/01/1209:56	QJ02010A	QJ02002A	HEJ001W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 09:56
Sample ID:	09-25-12-CW-1	Date Analyzed:	10/02/12 20:06
Lab Samp ID:	I219-01	Dilution Factor:	1
Lab File ID:	QJ02012A	Matrix :	WATER
Ext Btch ID:	HEJ001W	% Moisture :	NA
Calib. Ref.:	QJ02002A	Instrument ID :	GCT009

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	(10.23)|10.22	10.00	(102)|102	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:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 09:56
Sample ID:	09-25-12-CW-5	Date Analyzed:	10/02/12 21:11
Lab Samp ID:	I219-02	Dilution Factor:	1
Lab File ID:	QJ02015B	Matrix :	WATER
Ext Btch ID:	HEJ001W	% Moisture :	NA
Calib. Ref.:	QJ02014B	Instrument ID :	GCT009

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	9.166|(9.187)	10.00	91.7|(91.9)	40-140

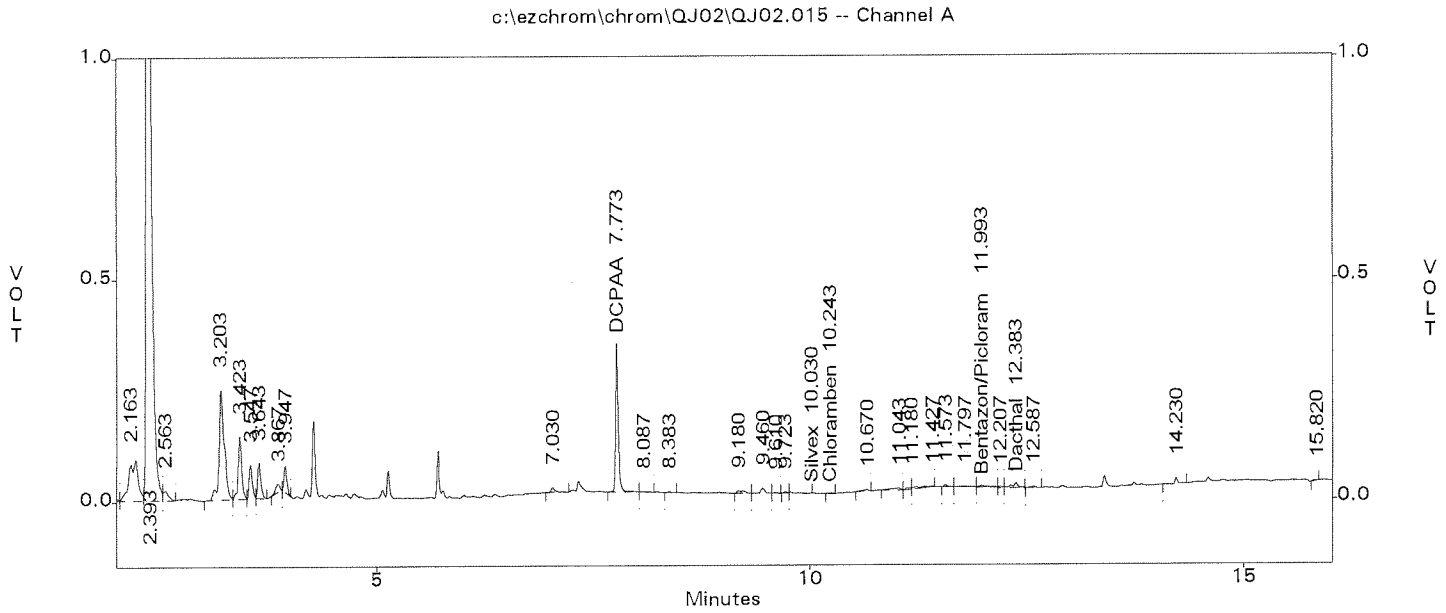
Left of | is related to first column; Right of | related to second column
Final result indicated by ( )

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

File : c:\ezchrom\chrom\QJ02\QJ02.015
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-02
Acquired : Oct 02, 2012 21:11:41
Printed : Oct 03, 2012 13:57:11
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.997	0.0	0.00	0.00	--
3,5 Dichlorobenzo	7.000	0.0	0.00	0.00	--
4-Nitrophenol	7.553	0.0	0.00	0.00	--
DCPAA	7.773	702575.0	766.49	916.62	BV
Dicamba	7.947	0.0	0.00	0.00	--
MCPP	8.150	0.0	0.00	0.00	--
MCPA	8.300	0.0	0.00	0.00	--
DCP	8.697	0.0	0.00	0.00	--
2,4-D	8.960	0.0	0.00	0.00	--
Pentachlorophenol	9.230	0.0	0.00	0.00	--
Silvex	10.030	2195.0	5970.67	0.37	SV
Chloramben	10.243	4710.0	4188.55	1.12	VV
2,4,5-T	10.417	0.0	0.00	0.00	--
2,4-DB	11.090	0.0	0.00	0.00	--
Bentazon/Picloram	11.993	39399.0	3723.00	10.58	VV
Dinoseb	12.140	0.0	0.00	0.00	--
Dacthal	12.383	60849.0	7080.86	8.59	VV
Acifluorfen	14.207	0.0	0.00	0.00	--



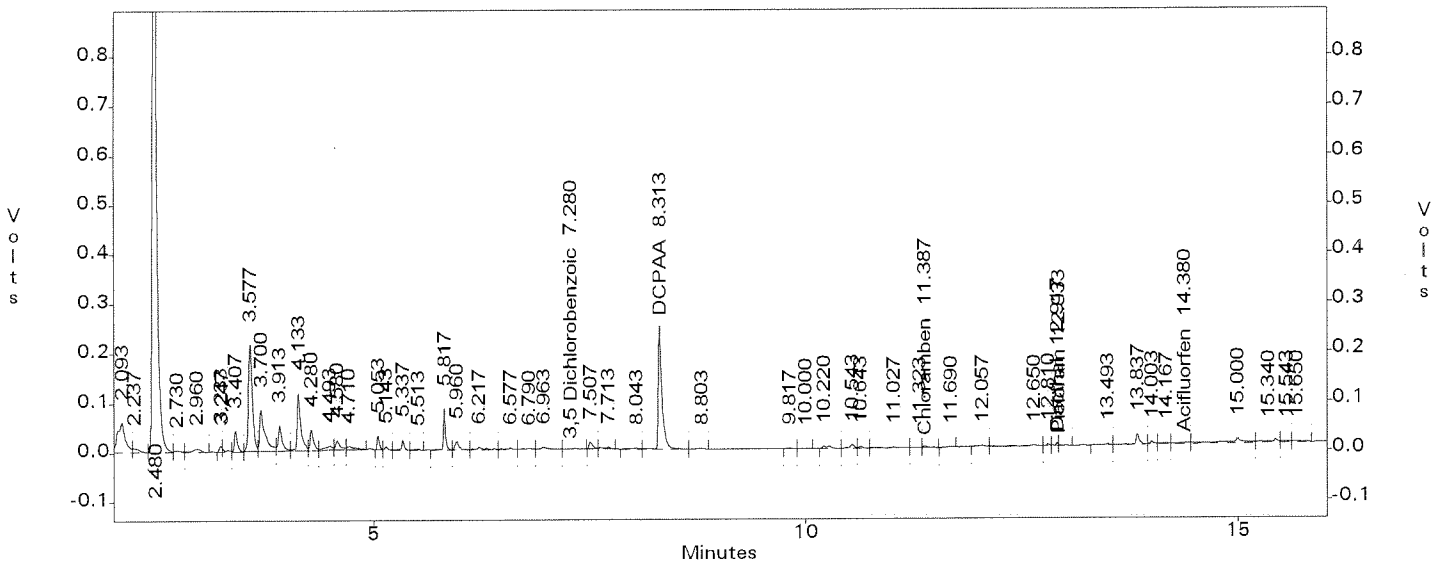
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\QJ02\QJ02.015
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-02
Acquired : Oct 02, 2012 21:11:41
Printed : Oct 03, 2012 13:57:11
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.140	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	7.280	8450.0	1476.64	5.72	vv
4-Nitrophenol	7.827	0.0	0.00	0.00	--
DCPAA	8.313	732578.0	797.39	918.72	VV
Dicamba	8.517	0.0	0.00	0.00	--
MCPP	8.647	0.0	0.00	0.00	--
MCPA	8.923	0.0	0.00	0.00	--
DCP	9.353	0.0	0.00	0.00	--
2,4-D	9.780	0.0	0.00	0.00	--
Pentachlorophenol	10.373	0.0	0.00	0.00	--
Silvex	10.900	0.0	0.00	0.00	--
2,4,5-T	11.340	0.0	0.00	0.00	--
Chloramben	11.387	23948.0	5352.20	4.47	xV
2,4-DB	11.863	0.0	0.00	0.00	--
Dinoseb	12.150	0.0	0.00	0.00	--
Bentazon	12.603	0.0	0.00	0.00	--
Dacthal	12.917	11053.0	3925.66	2.82	Sx
Picloram	12.933	4858.0	6563.67	0.74	xV
Acifluorfen	14.380	27928.0	2712.42	10.30	VV

c:\ezchrom\chrom\QJ02\QJ02.015 -- Channel B



METHOD 8151A
HERBICIDES

Client	: ECO & ASSOCIATES, INC.	Date Collected:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 09:56
Sample ID:	09-25-12-CW-6	Date Analyzed:	10/02/12 19:44
Lab Samp ID:	I219-03	Dilution Factor:	1
Lab File ID:	QJ02011A	Matrix :	WATER
Ext Btch ID:	HEJ001W	% Moisture :	NA
Calib. Ref.:	QJ02002A	Instrument ID :	GCT009

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	(9.273)|9.261	10.00	(92.7)|92.6	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:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 09:56
Sample ID:	09-25-12-CW-8	Date Analyzed:	10/02/12 21:33
Lab Samp ID:	I219-04	Dilution Factor:	1
Lab File ID:	QJ02016B	Matrix :	WATER
Ext Btch ID:	HEJ001W	% Moisture :	NA
Calib. Ref.:	QJ02014B	Instrument ID :	GCT009

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	8.989|(9.070)	10.00	89.9|(90.7)	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:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 12I219	Date Extracted:	10/01/12 09:56
Sample ID:	09-25-12-CW-9	Date Analyzed:	10/02/12 21:55
Lab Samp ID:	I219-05	Dilution Factor:	1
Lab File ID:	QJ02017B	Matrix :	WATER
Ext Btch ID:	HEJ001W	% Moisture :	NA
Calib. Ref.:	QJ02014B	Instrument ID :	GCT009

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	(9.752)|9.589	10.00	(97.5)|95.9	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: 09/25/12
Project : B & B, MONTHLY CITY WELL SAMPLING	Date Received: 09/25/12
Batch No. : 12I219	Date Extracted: 10/01/12 09:56
Sample ID: 09-25-12-CW-10	Date Analyzed: 10/02/12 22:16
Lab Samp ID: I219-06	Dilution Factor: 1
Lab File ID: QJ02018B	Matrix : WATER
Ext Btch ID: HEJ001W	% Moisture : NA
Calib. Ref.: QJ02014B	Instrument ID : GCT009

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	(10.31)|9.914	10.00	(103)|99.1	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:	09/25/12
Project	: B & B, MONTHLY CITY WELL SAMPLING	Date Received:	09/25/12
Batch No.	: 121219	Date Extracted:	10/01/12 09:56
Sample ID:	09-25-12-FDUP-1	Date Analyzed:	10/02/12 22:38
Lab Samp ID:	I219-07	Dilution Factor:	1
Lab File ID:	QJ02019B	Matrix :	WATER
Ext Btch ID:	HEJ001W	% Moisture :	NA
Calib. Ref.:	QJ02014B	Instrument ID :	GCT009

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	(9.216)|8.704	10.00	(92.2)|87.0	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: 10/01/12
Batch No. : 12I219	Date Extracted: 10/01/12 09:56
Sample ID: MBLK1W	Date Analyzed: 10/02/12 16:51
Lab Samp ID: HEJ001WB	Dilution Factor: 1
Lab File ID: QJ02003A	Matrix : WATER
Ext Btch ID: HEJ001W	% Moisture : NA
Calib. Ref.: QJ02002A	Instrument ID : GCT009

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	9.219|(9.233)	10.00	92.2|(92.3)	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.: 12I219
METHOD: METHOD 8151A

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	HEJ001WB	HEJ001WL	HEJ001WC		
LAB FILE ID:	QJ02003A	QJ02004A	QJ02005A		
DATE EXTRACTED:	10/01/1209:56	10/01/1209:56	10/01/1209:56	DATE COLLECTED:	NA
DATE ANALYZED:	10/02/1216:51	10/02/1217:13	10/02/1217:34	DATE RECEIVED:	10/01/12
PREP. BATCH:	HEJ001W	HEJ001W	HEJ001W		
CALIB. REF:	QJ02002A	QJ02002A	QJ02002A		

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	0.503|(0.592)	50|(59)	1.00	0.475|(0.633)	48|(63)	6|(7)	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	(8.185)|8.009	(81.8)|80.1	10.00	(9.616)|9.458	(96.2)|94.6	40-140

5815

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ECO & ASSOCIATES, INC.
PROJECT: B & B, MONTHLY CITY WELL SAMPLING
BATCH NO.: 12I219
METHOD: METHOD 8151A

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	09-25-12-CW-6				
LAB SAMP ID:	I219-03	I219-03M	I219-03S		
LAB FILE ID:	QJ02011A	QJ02009A	QJ02010A		
DATE EXTRACTED:	10/01/1209:56	10/01/1209:56	10/01/1209:56	DATE COLLECTED:	09/25/12
DATE ANALYZED:	10/02/1219:44	10/02/1219:01	10/02/1219:22	DATE RECEIVED:	09/25/12
PREP. BATCH:	HEJ001W	HEJ001W	HEJ001W		
CALIB. REF:	QJ02002A	QJ02002A	QJ02002A		

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	0.506|(0.593)	51|(59)	1.00	0.566|(0.672)	57|(67)	11|(12)	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	10.24|(10.27)	102|(103)	10.00	10.35|(10.37)	103|(104)	40-140

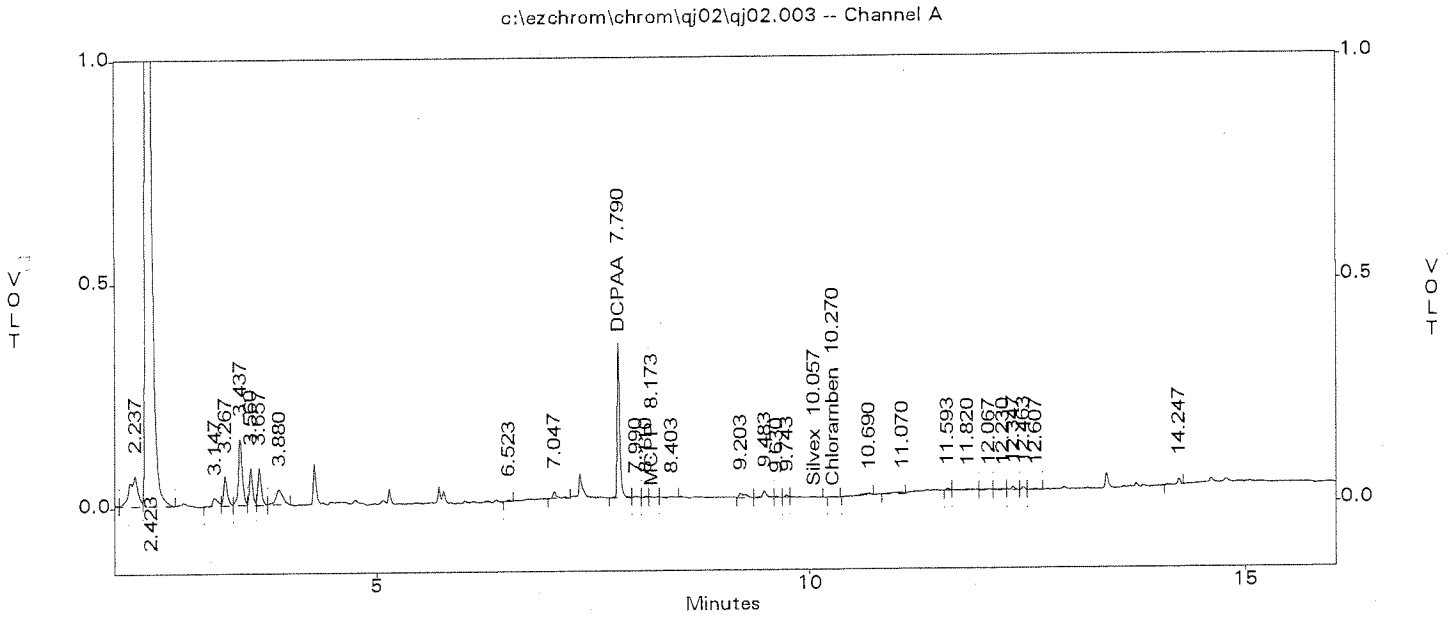
QC DATA

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

File : c:\ezchrom\chrom\qj02\qj02.003
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HEJ001WB
Acquired : Oct 02, 2012 16:51:43
Printed : Oct 03, 2012 13:25:36
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.010	0.0	0.00	0.00	--
3,5 Dichlorobenzo	7.013	0.0	0.00	0.00	--
4-Nitrophenol	7.570	0.0	0.00	0.00	--
DCPAA	7.790	706603.0	766.49	921.87	BV
Dicamba	7.963	0.0	0.00	0.00	--
MCPP	8.173	4500.0	4.25	1058.35	Sx
MCPA	8.317	0.0	0.00	0.00	--
DCP	8.720	0.0	0.00	0.00	--
2,4-D	8.983	0.0	0.00	0.00	--
Pentachlorophenol	9.253	0.0	0.00	0.00	--
Silvex	10.057	18126.0	5970.67	3.04	SV
Chloramben	10.270	8846.0	4188.55	2.11	VV
2,4,5-T	10.443	0.0	0.00	0.00	--
2,4-DB	11.110	0.0	0.00	0.00	--
Bentazon/Picloram	12.007	0.0	0.00	0.00	--
Dinoseb	12.157	0.0	0.00	0.00	--
Dacthal	12.403	0.0	0.00	0.00	--
Acifluorfen	14.223	0.0	0.00	0.00	--



5018

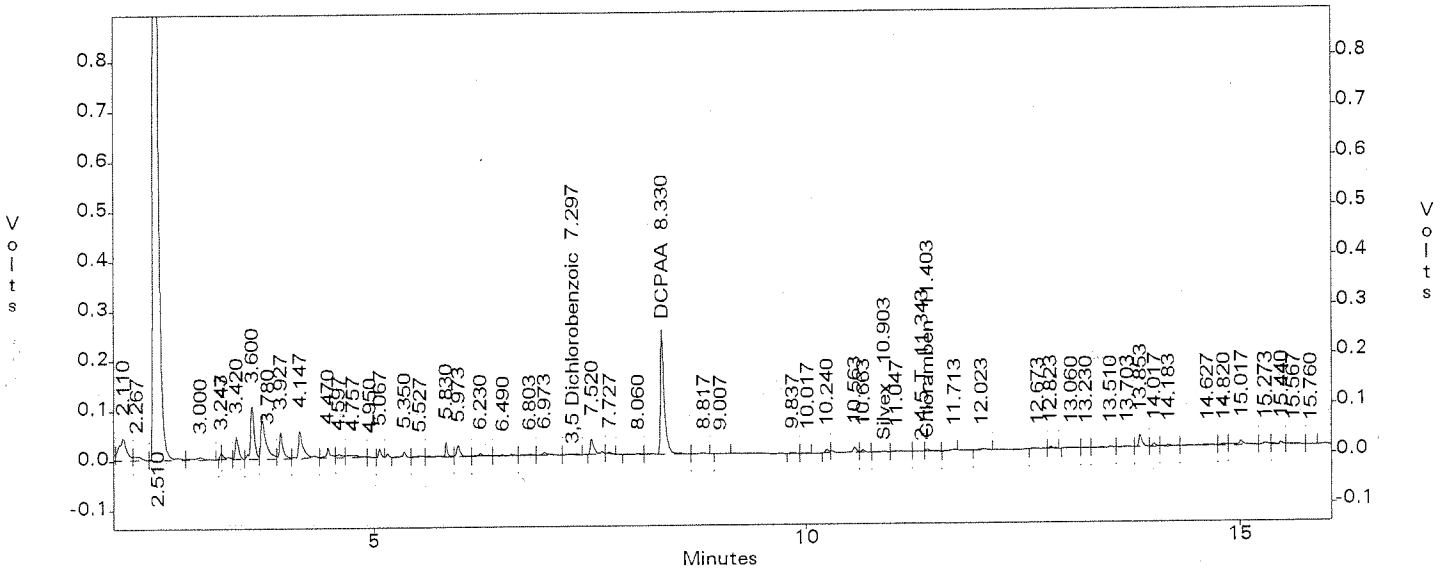
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.003
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HEJ001WB
Acquired : Oct 02, 2012 16:51:43
Printed : Oct 03, 2012 13:25:37
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.153	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	7.297	12069.0	1476.64	8.17	vv
4-Nitrophenol	7.840	0.0	0.00	0.00	--
DCPAA	8.330	736260.0	797.39	923.34	VV
Dicamba	8.530	0.0	0.00	0.00	--
MCPP	8.663	0.0	0.00	0.00	--
MCPA	8.940	0.0	0.00	0.00	--
DCP	9.373	0.0	0.00	0.00	--
2,4-D	9.803	0.0	0.00	0.00	--
Pentachlorophenol	10.393	0.0	0.00	0.00	--
Silvex	10.903	6754.0	4257.76	1.59	vv
2,4,5-T	11.343	6578.0	2507.76	2.62	Vx
Chloramben	11.403	25218.0	5352.20	4.71	xV
2,4-DB	11.877	0.0	0.00	0.00	--
Dinoseb	12.163	0.0	0.00	0.00	--
Bentazon	12.617	0.0	0.00	0.00	--
Dacthal	12.930	0.0	0.00	0.00	--
Picloram	12.967	0.0	0.00	0.00	--
Acifluorfen	14.397	0.0	0.00	0.00	--

c:\ezchrom\chrom\qj02\qj02.003 -- Channel B

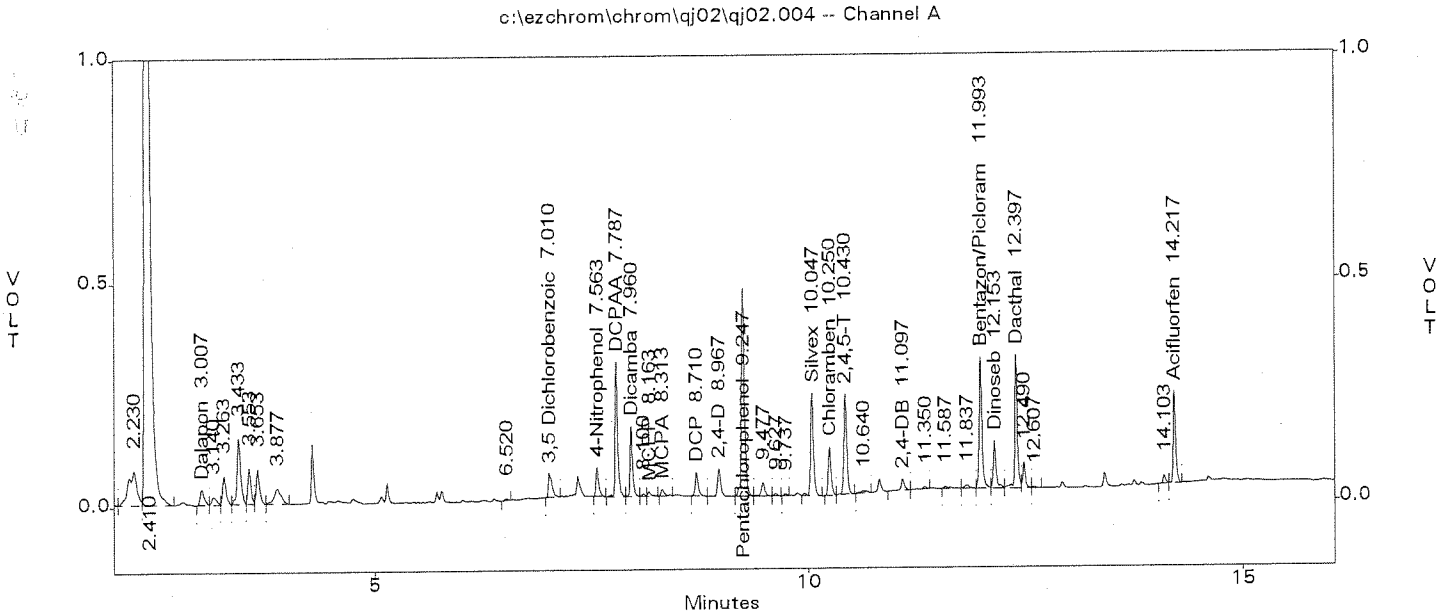


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.004
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HEJ001WL
Acquired : Oct 02, 2012 17:13:19
Printed : Oct 03, 2012 13:26:52
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.007	115217.0	1873.07	61.51	BV
3,5 Dichlorobenzo	7.010	164405.0	1597.51	102.91	BV
4-Nitrophenol	7.563	145114.0	1033.35	140.43	BV
DCPAA	7.787	627340.0	766.49	818.46	VV
Dicamba	7.960	317795.0	3581.89	88.72	VV
MCPP	8.163	22627.0	4.25	5321.63	Sx
MCPA	8.313	38606.0	8.72	4427.11	VV
DCP	8.710	128625.0	1265.43	101.65	BV
2,4-D	8.967	158242.0	1617.85	97.81	VV
Pentachlorophenol	9.247	1188964.0	14795.63	80.36	VV
Silvex	10.047	557598.0	5970.67	93.39	SV
Chloramben	10.250	264559.0	4188.55	63.16	VV
2,4,5-T	10.430	539024.0	6271.40	85.95	VV
2,4-DB	11.097	66643.0	778.86	85.56	BV
Bentazon/Picloram	11.993	667876.0	3723.00	179.39	VV
Dinoseb	12.153	243469.0	4843.66	50.27	VV
Dacthal	12.397	614823.0	7080.86	86.83	VS
Acifluorfen	14.217	412437.0	4510.31	91.44	VV



5628

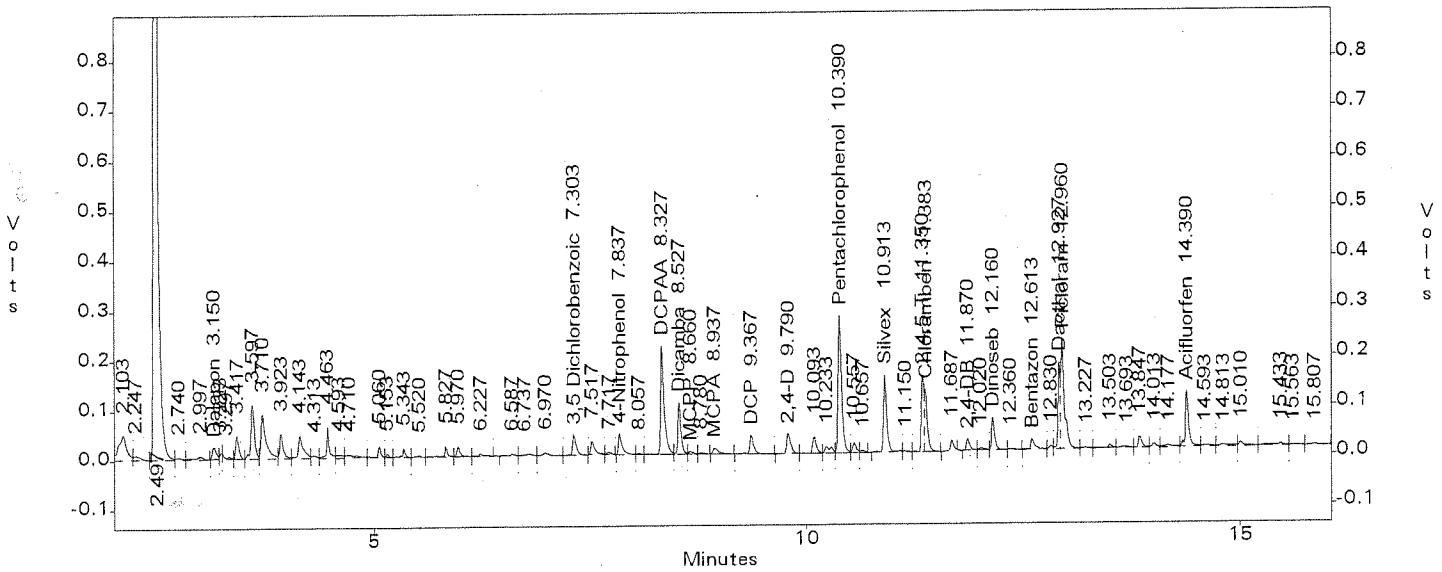
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.004
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HEJ001WL
Acquired : Oct 02, 2012 17:13:19
Printed : Oct 03, 2012 13:26:52
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.150	75349.0	1309.41	57.54	hh
3,5 Dichlorobenzoic	7.303	111462.0	1476.64	75.48	vv
4-Nitrophenol	7.837	123563.0	827.10	149.39	xV
DCPAA	8.327	638666.0	797.39	800.95	VV
Dicamba	8.527	265130.0	3014.19	87.96	VS
MCPP	8.660	19316.0	5.21	3709.73	SV
MCPA	8.937	55556.0	11.43	4861.58	VV
DCP	9.367	129263.0	1172.43	110.25	xV
2,4-D	9.790	134065.0	1426.08	94.01	VV
Pentachlorophenol	10.390	795596.0	10952.56	72.64	VV
Silvex	10.913	415131.0	4257.76	97.50	vv
2,4,5-T	11.350	299053.0	2507.76	119.25	Vx
Chloramben	11.383	318569.0	5352.20	59.52	xV
2,4-DB	11.870	62669.0	717.52	87.34	BV
Dinoseb	12.160	162518.0	2744.69	59.21	VV
Bentazon	12.613	66816.0	526.04	127.02	VV
Dacthal	12.927	285812.0	3925.66	72.81	Sx
Picloram	12.960	654836.0	6563.67	99.77	xV
Acifluorfen	14.390	299952.0	2712.42	110.58	VV

c:\ezchrom\chrom\qj02\qj02.004 -- Channel B

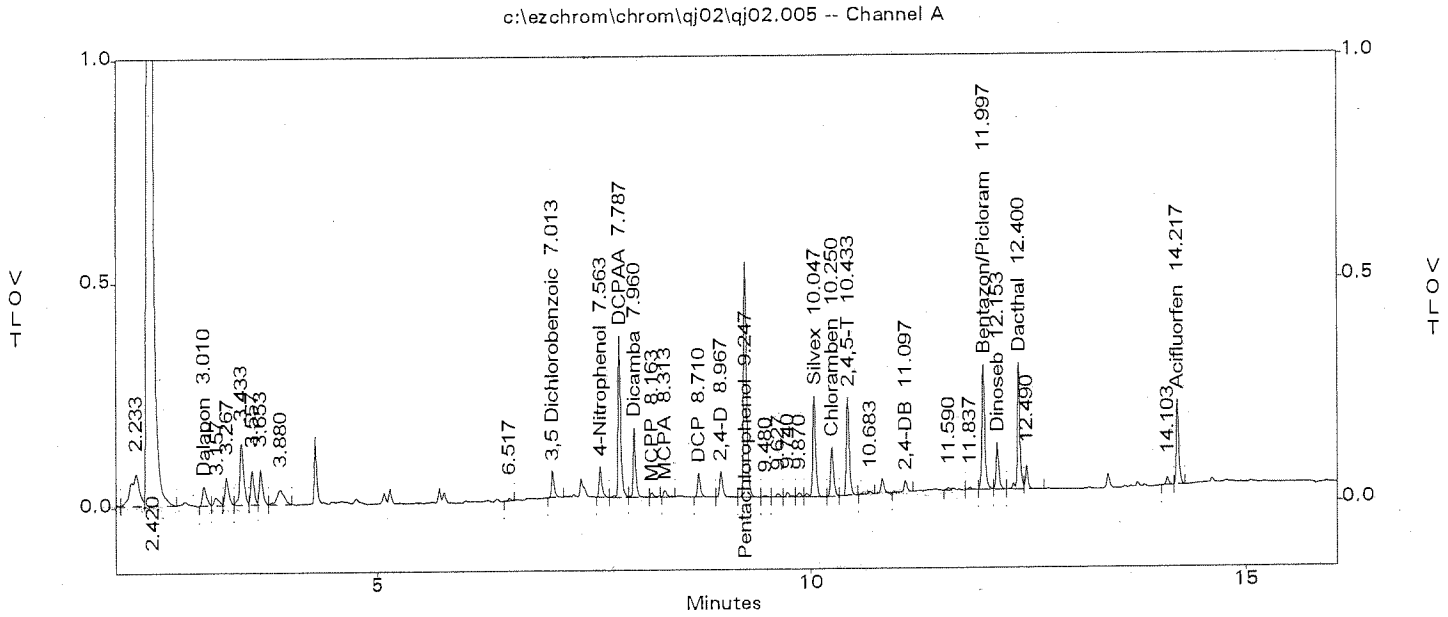


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.005
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HEJ001WC
Acquired : Oct 02, 2012 17:34:53
Printed : Oct 11, 2012 11:00:36
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.010	141724.0	1873.07	75.66	BV
3,5 Dichlorobenzo	7.013	133256.0	1597.51	83.42	BV
4-Nitrophenol	7.563	153475.0	1033.35	148.52	BV
DCPAA	7.787	737024.0	766.49	961.56	VV
Dicamba	7.960	322523.0	3581.89	90.04	VV
MCPP	8.163	27052.0	4.25	6362.35	Vx
MCPA	8.313	38360.0	8.72	4398.90	VV
DCP	8.710	126475.0	1265.43	99.95	BV
2,4-D	8.967	148730.0	1617.85	91.93	VV
Pentachlorophenol	9.247	1300864.0	14795.63	87.92	VV
Silvex	10.047	561967.0	5970.67	94.12	VV
Chloramben	10.250	266361.0	4188.55	63.59	VV
2,4,5-T	10.433	524908.0	6271.40	83.70	VV
2,4-DB	11.097	61210.0	778.86	78.59	BV
Bentazon/Picloram	11.997	643877.0	3723.00	172.95	VV
Dinoseb	12.153	230141.0	4843.66	47.51	VV
Dacthal	12.400	583624.0	7080.86	82.42	VS
Acifluorfen	14.217	385294.0	4510.31	85.43	VV



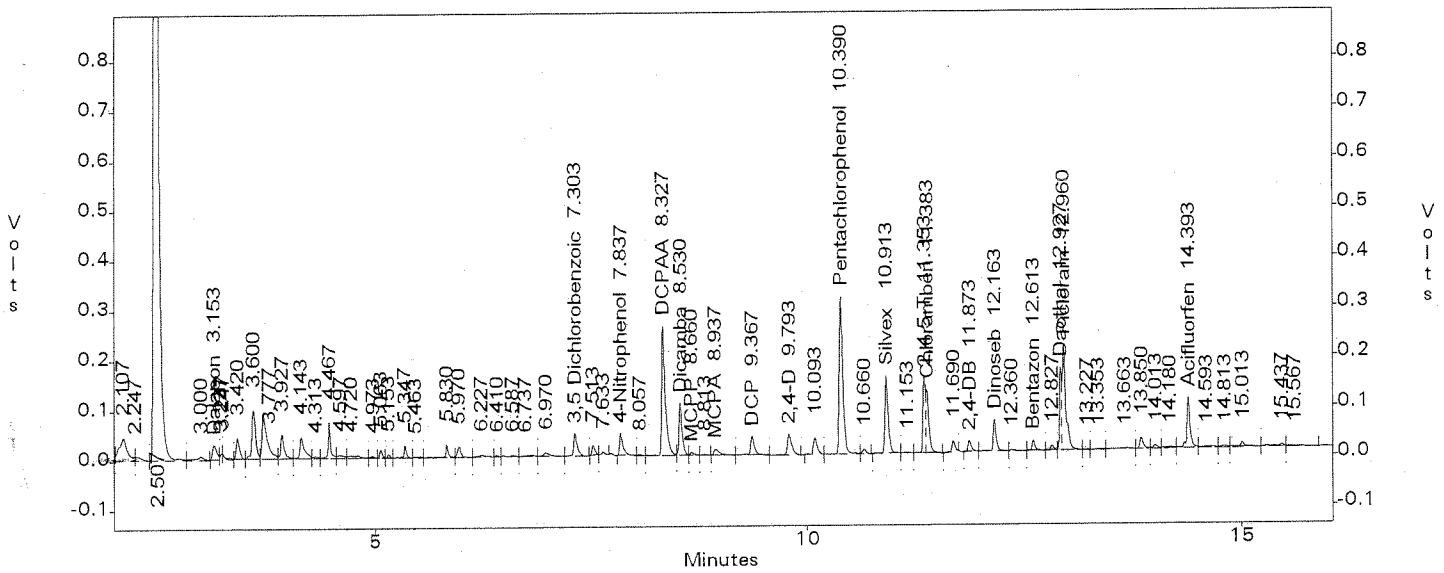
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.005
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HEJ001WC
Acquired : Oct 02, 2012 17:34:53
Printed : Oct 11, 2012 11:00:36
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.153	93351.0	1309.41	71.29	hh
3,5 Dichlorobenzoic	7.303	127245.0	1476.64	86.17	vv
4-Nitrophenol	7.837	112584.0	827.10	136.12	xV
DCPAA	8.327	757311.0	797.39	949.74	VV
Dicamba	8.530	257806.0	3014.19	85.53	VV
MCPP	8.660	18655.0	5.21	3582.78	VV
MCPA	8.937	56463.0	11.43	4940.95	VV
DCP	9.367	125714.0	1172.43	107.23	VV
2,4-D	9.793	138594.0	1426.08	97.19	VV
Pentachlorophenol	10.390	917660.0	10952.56	83.78	VV
Silvex	10.913	416591.0	4257.76	97.84	vv
2,4,5-T	11.353	281153.0	2507.76	112.11	Vx
Chloramben	11.383	339027.0	5352.20	63.34	xV
2,4-DB	11.873	61193.0	717.52	85.28	BV
Dinoseb	12.163	173751.0	2744.69	63.30	VV
Bentazon	12.613	53423.0	526.04	101.56	VV
Dacthal	12.927	243538.0	3925.66	62.04	Sx
Picloram	12.960	633456.0	6563.67	96.51	xV
Acifluorfen	14.393	274710.0	2712.42	101.28	VV

c:\ezchrom\chrom\qj02\qj02.005 -- Channel B



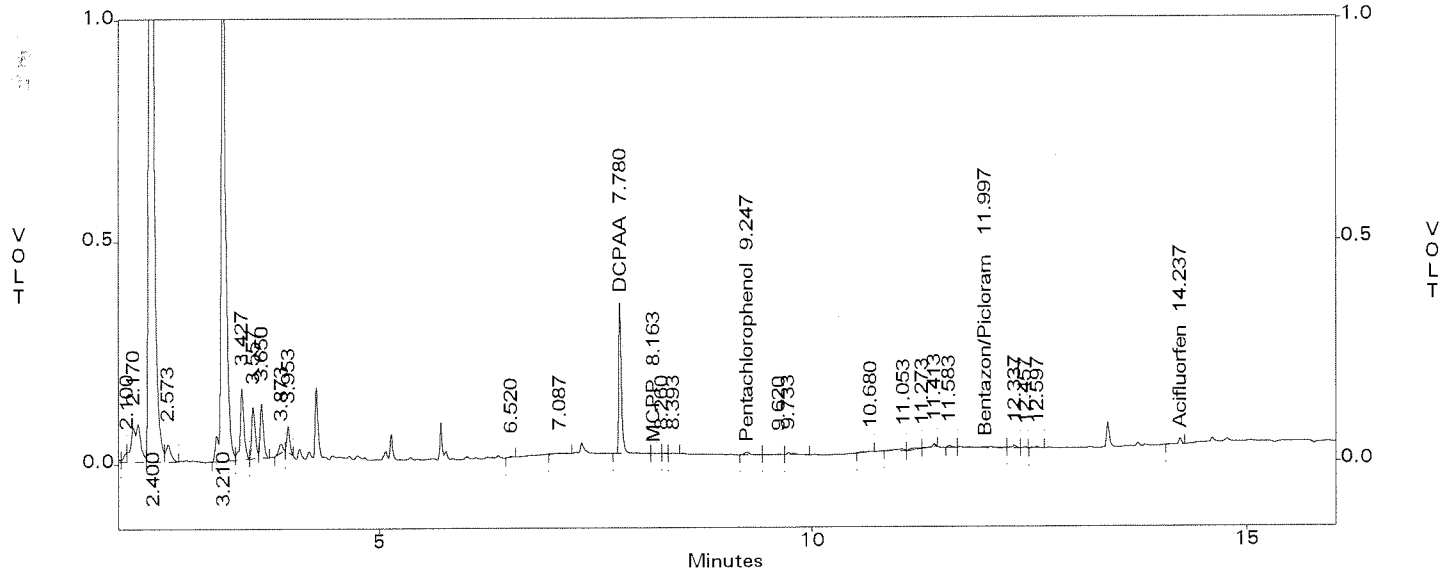
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.011
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-03
Acquired : Oct 02, 2012 19:44:37
Printed : Oct 03, 2012 14:00:09
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.010	0.0	0.00	0.00	--
3,5 Dichlorobenzo	7.013	0.0	0.00	0.00	--
4-Nitrophenol	7.570	0.0	0.00	0.00	--
DCPAA	7.780	710731.0	766.49	927.26	BV
Dicamba	7.963	0.0	0.00	0.00	--
MCPP	8.163	8145.0	4.25	1915.62	Vx
MCPA	8.317	0.0	0.00	0.00	--
DCP	8.720	0.0	0.00	0.00	--
2,4-D	8.983	0.0	0.00	0.00	--
Pentachlorophenol	9.247	21024.0	14795.63	1.42	BV
Silvex	10.057	0.0	0.00	0.00	--
Chloramben	10.260	0.0	0.00	0.00	--
2,4,5-T	10.443	0.0	0.00	0.00	--
2,4-DB	11.110	0.0	0.00	0.00	--
Bentazon/Picloram	11.997	48888.0	3723.00	13.13	VV
Dinoseb	12.157	0.0	0.00	0.00	--
Dacthal	12.403	0.0	0.00	0.00	--
Acifluorfen	14.237	27931.0	4510.31	6.19	BV

c:\ezchrom\chrom\qj02\qj02.011 -- Channel A



5624

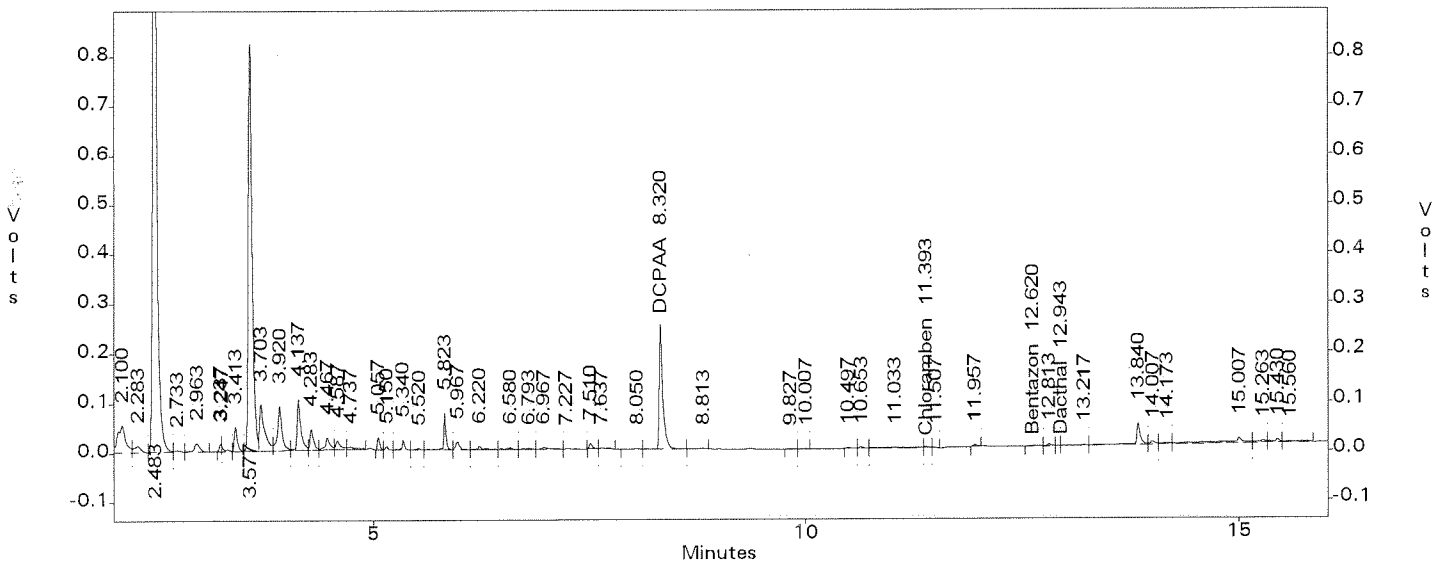
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.011
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-03
Acquired : Oct 02, 2012 19:44:37
Printed : Oct 03, 2012 14:00:09
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.153	0.0	0.00	0.00	--
3,5 Dichlorobenzoic	7.307	0.0	0.00	0.00	--
4-Nitrophenol	7.840	0.0	0.00	0.00	--
DCPAA	8.320	738500.0	797.39	926.15	VV
Dicamba	8.530	0.0	0.00	0.00	--
MCPP	8.663	0.0	0.00	0.00	--
MCPA	8.940	0.0	0.00	0.00	--
DCP	9.373	0.0	0.00	0.00	--
2,4-D	9.803	0.0	0.00	0.00	--
Pentachlorophenol	10.393	0.0	0.00	0.00	--
Silvex	10.917	0.0	0.00	0.00	--
2,4,5-T	11.357	0.0	0.00	0.00	--
Chloramben	11.393	5154.0	5352.20	0.96	xV
2,4-DB	11.877	0.0	0.00	0.00	--
Dinoseb	12.163	0.0	0.00	0.00	--
Bentazon	12.620	8844.0	526.04	16.81	BV
Dacthal	12.943	2693.0	3925.66	0.69	Vx
Picloram	12.967	0.0	0.00	0.00	--
Acifluorfen	14.397	0.0	0.00	0.00	--

c:\ezchrom\chrom\qj02\qj02.011 -- Channel B

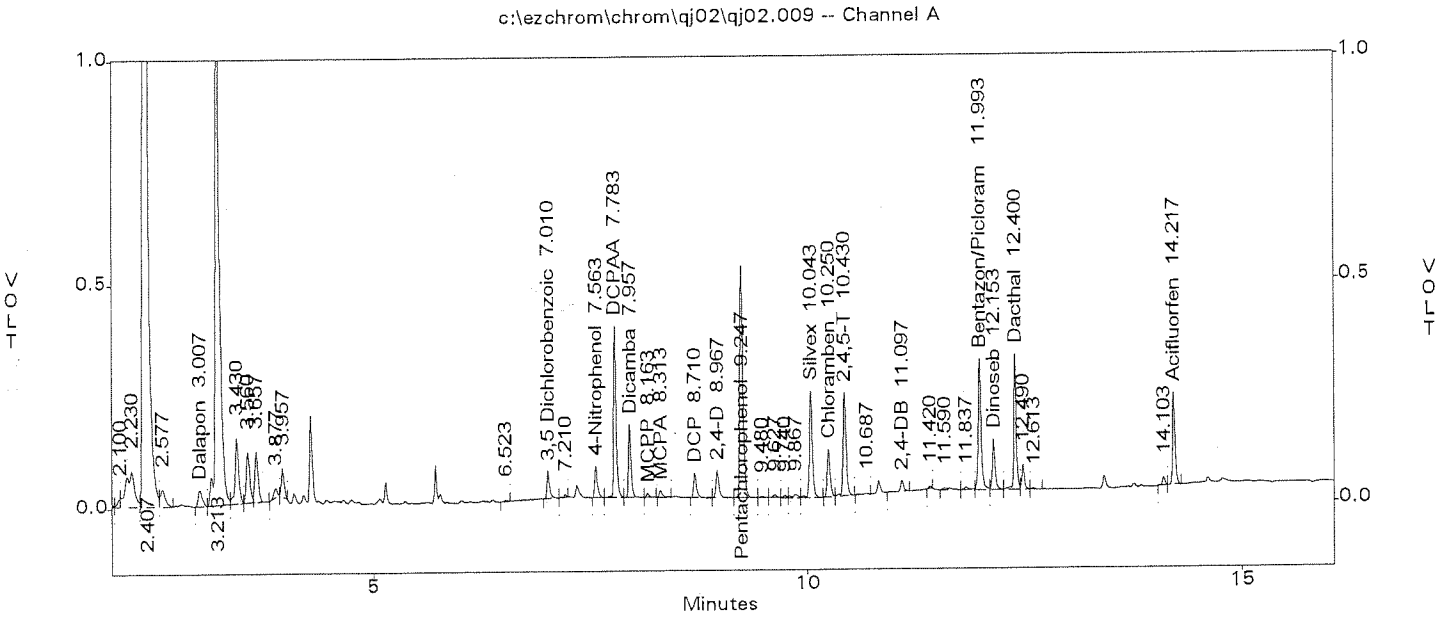


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.009
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-03M
Acquired : Oct 02, 2012 19:01:17
Printed : Oct 03, 2012 13:47:43
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.007	112383.0	1873.07	60.00	BV
3,5 Dichlorobenzo	7.010	134285.0	1597.51	84.06	BV
4-Nitrophenol	7.563	156709.0	1033.35	151.65	BV
DCPAA	7.783	784553.0	766.49	1023.57	VV
Dicamba	7.957	332928.0	3581.89	92.95	VV
MCPP	8.163	21548.0	4.25	5067.86	Vx
MCPA	8.313	39629.0	8.72	4544.42	VV
DCP	8.710	127783.0	1265.43	100.98	BV
2,4-D	8.967	152071.0	1617.85	94.00	VV
Pentachlorophenol	9.247	1287852.0	14795.63	87.04	VV
Silvex	10.043	576954.0	5970.67	96.63	VV
Chloramben	10.250	255327.0	4188.55	60.96	VV
2,4,5-T	10.430	562292.0	6271.40	89.66	VV
2,4-DB	11.097	64963.0	778.86	83.41	BV
Bentazon/Picloram	11.993	672783.0	3723.00	180.71	VV
Dinoseb	12.153	244984.0	4843.66	50.58	VV
Dacthal	12.400	607637.0	7080.86	85.81	VS
Acifluorfen	14.217	421546.0	4510.31	93.46	VV



5826

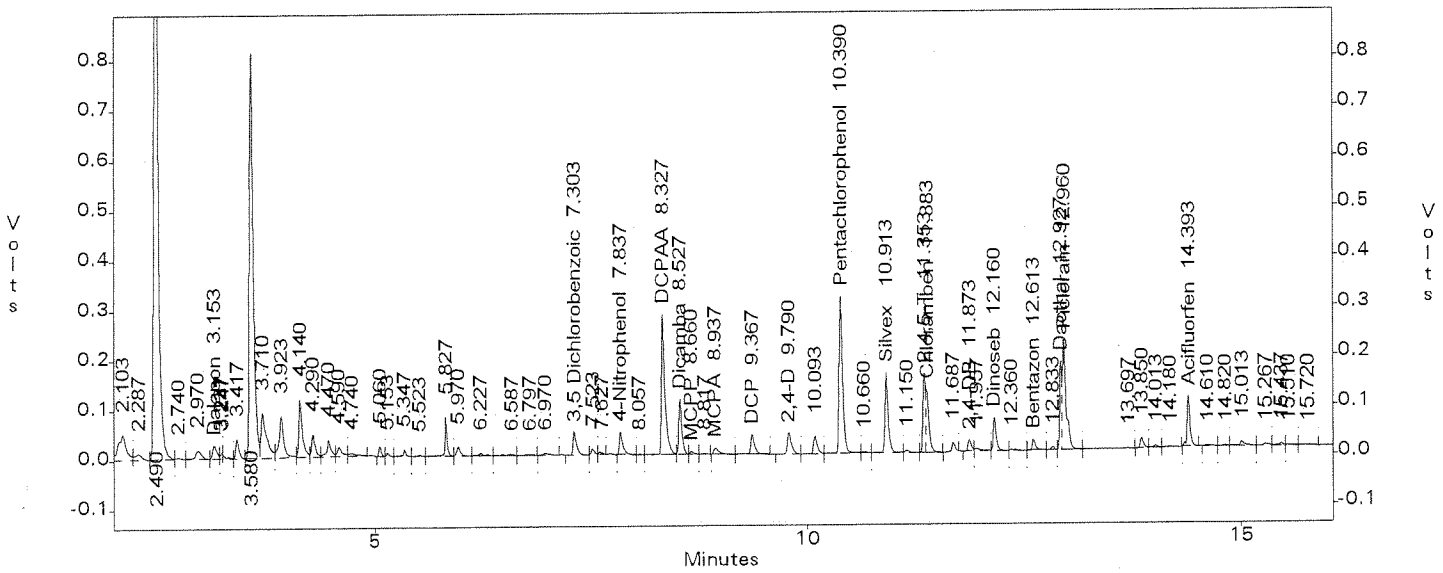
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.009
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-03M
Acquired : Oct 02, 2012 19:01:17
Printed : Oct 03, 2012 13:47:43
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.153	86161.0	1309.41	65.80	hh
3,5 Dichlorobenzoic	7.303	123897.0	1476.64	83.90	vv
4-Nitrophenol	7.837	119105.0	827.10	144.00	xV
DCPAA	8.327	818787.0	797.39	1026.84	VV
Dicamba	8.527	273850.0	3014.19	90.85	VV
MCPP	8.660	19555.0	5.21	3755.63	VV
MCPA	8.937	54250.0	11.43	4747.29	Vx
DCP	9.367	128584.0	1172.43	109.67	VV
2,4-D	9.790	136744.0	1426.08	95.89	VV
Pentachlorophenol	10.390	911787.0	10952.56	83.25	VV
Silvex	10.913	425403.0	4257.76	99.91	vv
2,4,5-T	11.353	296468.0	2507.76	118.22	Vx
Chloramben	11.383	328838.0	5352.20	61.44	xV
2,4-DB	11.873	60301.0	717.52	84.04	BS
Dinoseb	12.160	162826.0	2744.69	59.32	VV
Bentazon	12.613	56191.0	526.04	106.82	VV
Dacthal	12.927	262917.0	3925.66	66.97	Sx
Picloram	12.960	663843.0	6563.67	101.14	xV
Acifluorfen	14.393	232649.0	2712.42	85.77	VI

c:\ezchrom\chrom\qj02\qj02.009 -- Channel B



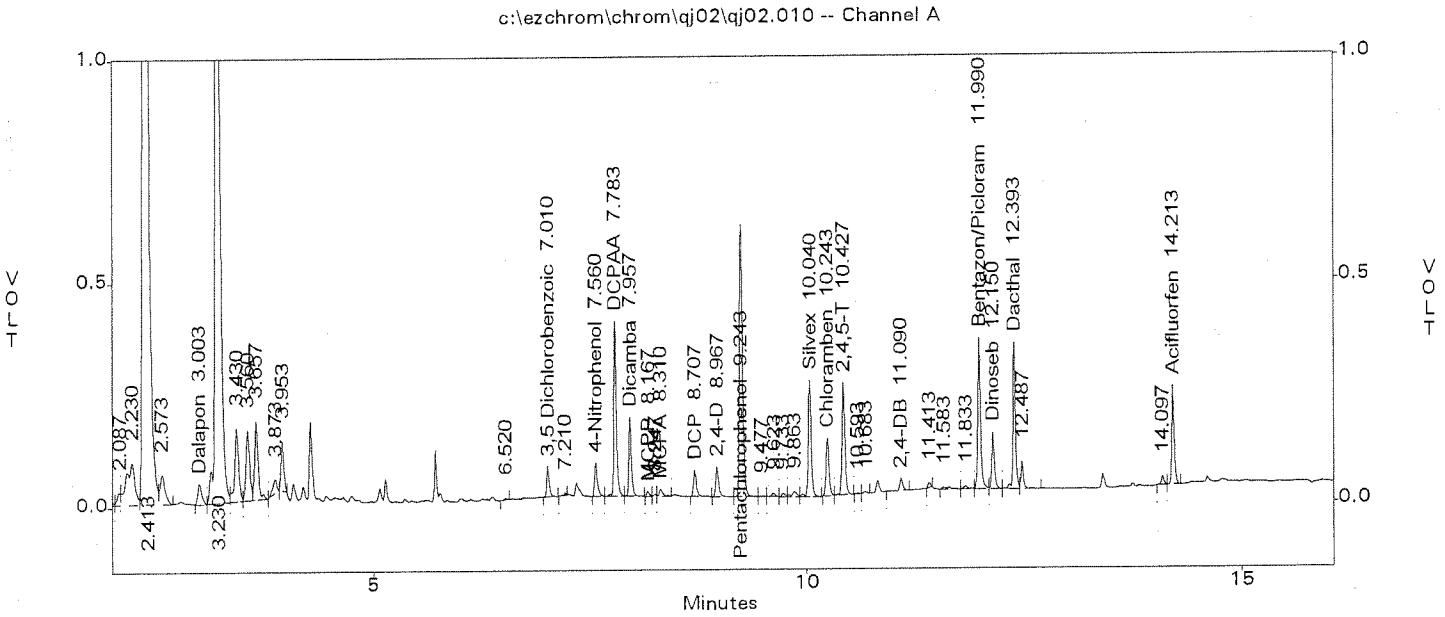
5027

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

File : c:\ezchrom\chrom\qj02\qj02.010
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-03S
Acquired : Oct 02, 2012 19:22:53
Printed : Oct 03, 2012 13:51:41
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.003	139977.0	1873.07	74.73	BV
3,5 Dichlorobenzo	7.010	145326.0	1597.51	90.97	BV
4-Nitrophenol	7.560	168934.0	1033.35	163.48	BV
DCPAA	7.783	793265.0	766.49	1034.94	VV
Dicamba	7.957	357946.0	3581.89	99.93	VV
MCPP	8.167	24225.0	4.25	5697.47	VS
MCPA	8.310	44855.0	8.72	5143.71	xV
DCP	8.707	136792.0	1265.43	108.10	SV
2,4-D	8.967	162252.0	1617.85	100.29	VV
Pentachlorophenol	9.243	1489376.0	14795.63	100.66	VV
Silvex	10.040	629754.0	5970.67	105.47	VV
Chloramben	10.243	312981.0	4188.55	74.72	VV
2,4,5-T	10.427	601089.0	6271.40	95.85	VV
2,4-DB	11.090	71120.0	778.86	91.31	BV
Bentazon/Picloram	11.990	765123.0	3723.00	205.51	VV
Dinoseb	12.150	273986.0	4843.66	56.57	VV
Dacthal	12.393	662258.0	7080.86	93.53	VS
Acifluorfen	14.213	440668.0	4510.31	97.70	SV

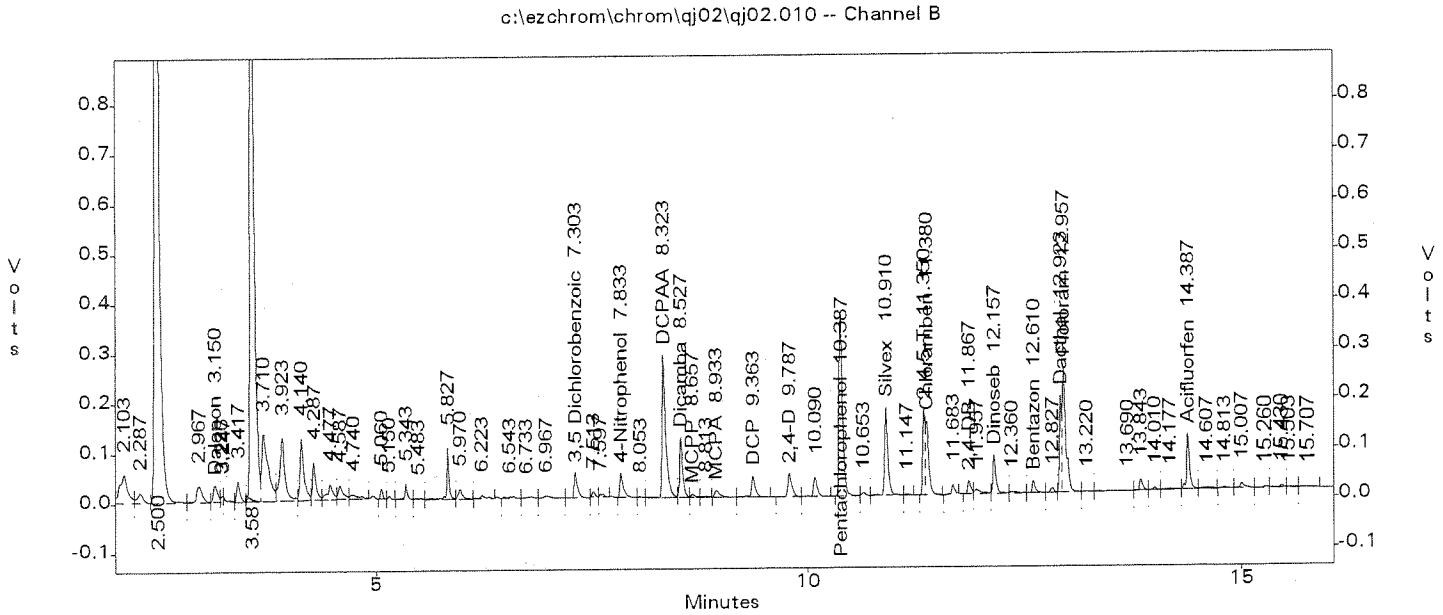


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.010
Method : c:\ezchrom\methods\he09i26.met
Sample ID : I219-03S
Acquired : Oct 02, 2012 19:22:53
Printed : Oct 03, 2012 13:51:41
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.150	113505.0	1309.41	86.68	hh
3,5 Dichlorobenzoic	7.303	142968.0	1476.64	96.82	vv
4-Nitrophenol	7.833	127474.0	827.10	154.12	xV
DCPAA	8.323	826572.0	797.39	1036.60	VV
Dicamba	8.527	294405.0	3014.19	97.67	VV
MCPP	8.657	19964.0	5.21	3834.18	VV
MCPA	8.933	56771.0	11.43	4967.90	VV
DCP	9.363	134770.0	1172.43	114.95	VV
2,4-D	9.787	149725.0	1426.08	104.99	VV
Pentachlorophenol	10.387	1067842.0	10952.56	97.50	VV
Silvex	10.910	475125.0	4257.76	111.59	vv
2,4,5-T	11.350	295571.0	2507.76	117.86	Vx
Chloramben	11.380	413111.0	5352.20	77.19	xV
2,4-DB	11.867	64807.0	717.52	90.32	BS
Dinoseb	12.157	184380.0	2744.69	67.18	VV
Bentazon	12.610	58991.0	526.04	112.14	VV
Dacthal	12.923	318615.0	3925.66	81.16	Sx
Picloram	12.957	719599.0	6563.67	109.63	xV
Acifluorfen	14.387	259649.0	2712.42	95.73	VV



5029

INITIAL CALIBRATIONS

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
LFID & Datetime: QI26002A 09/26/12 12:16
LFID & Datetime: QI26003A 09/26/12 12:38
LFID & Datetime: QI26004A 09/26/12 13:00
LFID & Datetime: QI26005A 09/26/12 13:21
LFID & Datetime: QI26006A 09/26/12 13:43
LFID & Datetime: QI26007A 09/26/12 14:04
LFID & Datetime: QI26008A 09/26/12 14:26
LFID & Datetime: QI26009A 09/26/12 14:47
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	2108	2012	1900	1838	1795	1746	1711	1873.1	7.7
3,5-Dichlorobenzo	10.00	0	1946	1786	1626	1538	1479	1427	1380	1597.5	12.8
4-Nitrophenol	10.00	0	1048	1149	1093	1035	998	973	937	1033.3	7.0
Dicamba	10.00	0	3665	3973	3720	3568	3474	3372	3300	3581.9	6.4
MCPP	500.00	0	0	3	4	4	4	5	5	4.3	10.2
MCPA	500.00	0	0	10	9	9	8	8	8	8.7	12.5
Dichloroprop	10.00	0	1336	1380	1324	1261	1225	1184	1149	1265.4	6.7
2,4-D	10.00	0	1698	1734	1684	1619	1578	1529	1484	1617.8	5.7
Pentachlorophenol	10.00	15231	15847	15962	15283	14642	14266	13769	13364	14795.6	6.4
2,4,5-TP(Silvex)	10.00	0	5341	5855	6153	6186	6198	6069	5993	5970.7	5.1
Chloramben	10.00	0	3123	3710	4185	4421	4591	4615	4676	4188.6	13.8
2,4,5-T	10.00	0	5847	6287	6508	6459	6413	6252	6134	6271.4	3.6
2,4-DB	10.00	0	759	783	783	771	767	758	830	778.9	3.2
Bentazon/Picloram	20.00	2732	2933	3448	3887	4084	4189	4219	4291	3723.0	16.4
Dinoseb	10.00	0	5701	5305	5020	4738	4563	4369	4210	4843.7	11.0
Dacthal	10.00	0	7181	7366	7324	7124	7045	6817	6709	7080.9	3.5
Acifluorfen	10.00	0	4022	4448	4565	4620	4643	4630	4644	4510.3	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	926	888	792	735	702	673	650	766.5	13.9

10/1/12
5031

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
LFID & Datetime: QI26002B 09/26/12 12:16
LFID & Datetime: QI26003B 09/26/12 12:38
LFID & Datetime: QI26004B 09/26/12 13:00
LFID & Datetime: QI26005B 09/26/12 13:21
LFID & Datetime: QI26006B 09/26/12 13:43
LFID & Datetime: QI26007B 09/26/12 14:04
LFID & Datetime: QI26008B 09/26/12 14:26
LFID & Datetime: QI26009B 09/26/12 14:47
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	1385	1354	1278	1306	1285	1292	1265	1309.4	3.4
3,5-Dichlorobenzo	10.00	0	1674	1581	1498	1445	1415	1376	1347	1476.6	7.9
4-Nitrophenol	10.00	0	981	881	808	815	797	767	741	827.1	9.7
Dicamba	10.00	0	3089	3098	3049	3004	2996	2939	2925	3014.2	2.3
MCPP	500.00	0	0	5	5	5	5	5	5	5.2	2.2
MCPA	500.00	0	0	15	13	11	11	10	9	11.4	17.0
Dichloroprop	10.00	0	1328	1254	1199	1146	1126	1088	1066	1172.4	8.0
2,4-D	10.00	0	1576	1529	1463	1405	1375	1330	1305	1426.1	7.1
Pentachlorophenol	10.00	9767	10499	11211	11426	11318	11314	11084	11000	10952.6	5.1
2,4,5-TP(Silvex)	10.00	0	3851	4117	4295	4352	4422	4377	4391	4257.8	4.8
Chloramben	10.00	0	4702	4981	5601	5581	5573	5408	5619	5352.2	6.8
2,4,5-T	10.00	0	2294	2620	2371	2504	2610	2682	2474	2507.8	5.6
2,4-DB	10.00	0	792	778	725	709	685	671	662	717.5	7.1
Dinoseb	10.00	0	2755	2725	2748	2741	2765	2741	2737	2744.7	0.5
Bentazon	10.00	0	544	528	523	518	523	520	526	526.0	1.6
Dacthal	10.00	0	4033	4064	4133	3863	3875	3897	3614	3925.7	4.4
Picloram	10.00	0	4835	5898	6445	6978	7186	7131	7473	6563.7	14.1
Acifluorfen	10.00	0	2309	2543	2621	2716	2906	3010	2881	2712.4	9.0

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	965	880	811	767	744	716	698	797.4	12.1

10/1/12
5802

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
LFID & Datetime: QI26002A 09/26/12 12:16
LFID & Datetime: QI26003A 09/26/12 12:38
LFID & Datetime: QI26004A 09/26/12 13:00
LFID & Datetime: QI26005A 09/26/12 13:21
LFID & Datetime: QI26006A 09/26/12 13:43
LFID & Datetime: QI26007A 09/26/12 14:04
LFID & Datetime: QI26008A 09/26/12 14:26
LFID & Datetime: QI26009A 09/26/12 14:47

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	3.050	3.043	3.043	3.043	3.043	3.047	3.043	3.043	3.044	3.030	3.058	0.014
3,5-Dichlorobenzo	7.050	7.047	7.047	7.043	7.043	7.043	7.040	7.043	7.044	7.030	7.058	0.014
4-Nitrophenol	7.637	7.610	7.607	7.603	7.603	7.603	7.600	7.600	7.604	7.590	7.618	0.014
Dicamba	8.007	8.000	8.000	7.997	7.997	7.997	7.997	7.997	7.998	7.984	8.012	0.014
MCPP	0.000	0.000	8.207	8.203	8.203	8.203	8.203	8.203	8.204	8.190	8.218	0.014
MCPA	8.380	8.370	8.363	8.357	8.357	8.357	8.353	8.357	8.357	8.341	8.373	0.016
Dichloroprop	0.000	8.767	8.763	8.757	8.757	8.757	8.757	8.757	8.759	8.745	8.773	0.014
2,4-D	9.053	9.040	9.033	9.027	9.023	9.020	9.020	9.020	9.026	9.010	9.042	0.016
Pentachlorophenol	9.313	9.307	9.303	9.300	9.300	9.300	9.300	9.300	9.303	9.287	9.319	0.016
2,4,5-TP(Silvex)	0.000	10.123	10.120	10.117	10.113	10.113	10.113	10.113	10.116	10.100	10.132	0.016
Chloramben	10.373	10.357	10.347	10.337	10.330	10.327	10.327	10.323	10.335	10.319	10.351	0.016
2,4,5-T	10.537	10.523	10.517	10.507	10.503	10.503	10.500	10.500	10.508	10.492	10.524	0.016
2,4-DB	0.000	11.210	11.193	11.180	11.177	11.170	11.170	11.167	11.181	11.165	11.197	0.016
Bentazon/Picloram	12.100	12.090	12.080	12.070	12.067	12.063	12.060	12.057	12.073	12.059	12.087	0.014
Dinoseb	12.210	12.207	12.203	12.200	12.200	12.200	12.200	12.200	12.201	12.185	12.217	0.016
Dacthal	12.457	12.453	12.450	12.447	12.447	12.447	12.447	12.443	12.448	12.432	12.464	0.016
Acifluorfen	14.270	14.270	14.267	14.263	14.263	14.263	14.263	14.263	14.265	14.251	14.279	0.014
SURROGATE	1.0X	2.0X	4.0X	7.0X	10.0X	13.0X	16.0X	20.0X	RT	FROM	TO	WIDTH
2,4-DCPAA	7.833	7.827	7.827	7.823	7.823	7.823	7.823	7.823	7.824	7.808	7.840	0.016

10/1/12
5833

INITIAL CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
LFID & Datetime: QI26002B 09/26/12 12:16
LFID & Datetime: QI26003B 09/26/12 12:38
LFID & Datetime: QI26004B 09/26/12 13:00
LFID & Datetime: QI26005B 09/26/12 13:21
LFID & Datetime: QI26006B 09/26/12 13:43
LFID & Datetime: QI26007B 09/26/12 14:04
LFID & Datetime: QI26008B 09/26/12 14:26
LFID & Datetime: QI26009B 09/26/12 14:47

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	3.183	3.183	3.183	3.180	3.180	3.187	3.180	3.183	3.182	3.166	3.198	0.016
3,5-Dichlorobenzo	7.340	7.337	7.337	7.333	7.333	7.333	7.333	7.333	7.334	7.318	7.350	0.016
4-Nitrophenol	7.883	7.880	7.877	7.873	7.873	7.873	7.870	7.870	7.874	7.858	7.890	0.016
Dicamba	8.573	8.570	8.570	8.567	8.567	8.567	8.567	8.567	8.568	8.552	8.584	0.016
MCPP	0.000	8.707	8.703	8.700	8.700	8.700	8.700	8.700	8.701	8.685	8.717	0.016
MCPA	0.000	8.993	8.987	8.983	8.980	8.980	8.980	8.980	8.982	8.966	8.998	0.016
Dichloroprop	9.427	9.423	9.420	9.413	9.413	9.413	9.413	9.413	9.415	9.401	9.429	0.014
2,4-D	9.870	9.863	9.857	9.850	9.847	9.847	9.847	9.843	9.851	9.837	9.865	0.014
Pentachlorophenol	10.447	10.443	10.443	10.440	10.440	10.440	10.440	10.440	10.442	10.428	10.456	0.014
2,4,5-TP(Silvex)	10.970	10.967	10.967	10.963	10.960	10.960	10.960	10.960	10.962	10.948	10.976	0.014
Chloramben	11.450	11.443	11.440	11.437	11.433	11.433	11.433	11.433	11.436	11.406	11.466	0.030
2,4,5-T	0.000	11.423	11.420	11.407	11.403	11.403	11.400	11.400	11.408	11.392	11.424	0.016
2,4-DB	11.953	11.947	11.940	11.933	11.930	11.927	11.923	11.923	11.932	11.908	11.956	0.024
Dinoseb	12.210	12.207	12.207	12.203	12.203	12.203	12.200	12.200	12.203	12.187	12.219	0.016
Bentazon	12.663	12.660	12.657	12.653	12.653	12.653	12.653	12.653	12.655	12.639	12.671	0.016
Dacthal	12.970	12.970	12.967	12.967	12.967	12.967	12.963	12.963	12.966	12.950	12.982	0.016
Picloram	13.017	13.017	13.020	13.013	13.010	13.010	13.007	13.007	13.012	12.988	13.036	0.024
Acifluorfen	14.443	14.437	14.437	14.433	14.433	14.433	14.430	14.430	14.433	14.419	14.447	0.014
SURROGATE	1.0X	2.0X	4.0X	7.0X	10.0X	13.0X	16.0X	20.0X	RT	FROM	TO	WIDTH
2,4-DCPAA	8.373	8.370	8.367	8.363	8.363	8.363	8.363	8.363	8.365	8.349	8.381	0.016

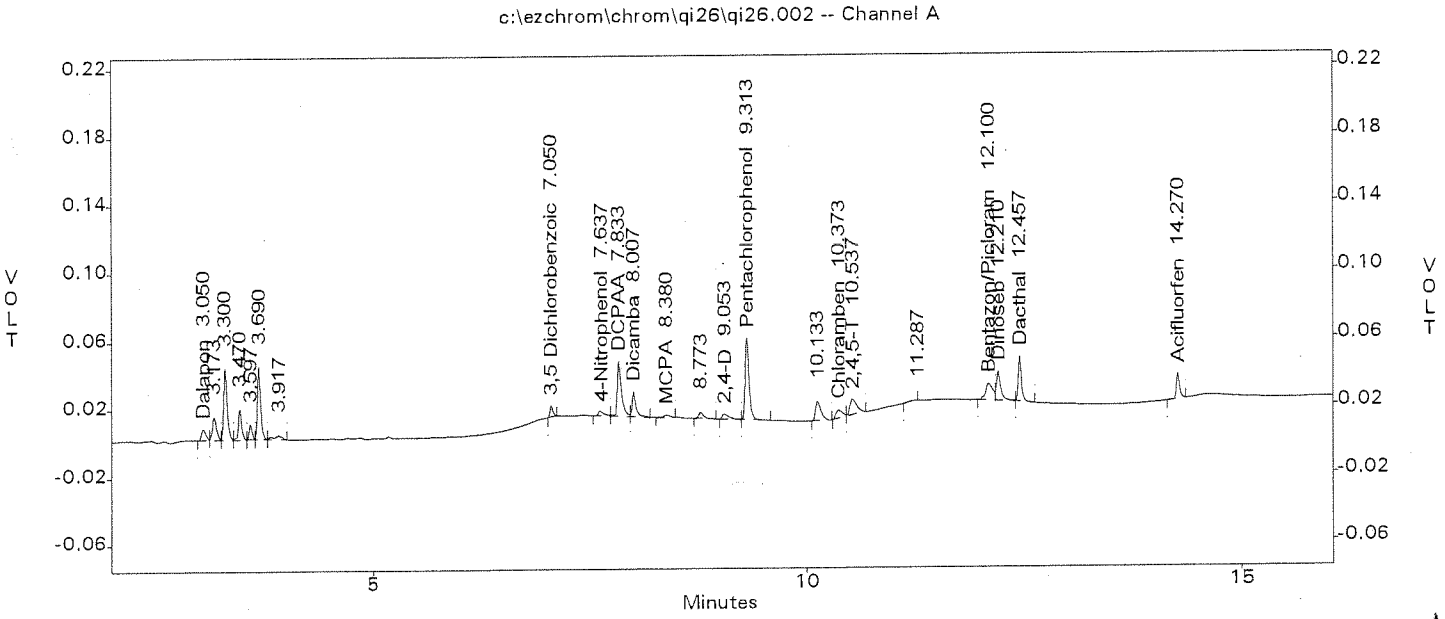
5834

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

File : c:\ezchrom\chrom\qi26\qi26.002
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2601
Acquired : Sep 26, 2012 12:16:59
Printed : Oct 01, 2012 11:00:36
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.050	21807.0	1873.07	-1.00	BV
3,5 Dichlorobenzo	7.050	15477.0	1597.51	-1.00	BS
4-Nitrophenol	7.637	12854.0	1033.35	-1.00	BS
DCPAA	7.833	114849.0	766.49	-1.00	SV
Dicamba	8.007	49565.0	3581.89	-1.00	VV
MCPP	8.203	0.0	0.00	0.00	--
MCPA	8.380	8369.0	8.72	-1.00	xI
DCP	8.757	0.0	0.00	0.00	--
2,4-D	9.053	16726.0	1617.85	-1.00	VV
Pentachlorophenol	9.313	152313.0	14795.63	10.00	VB
Silvex	10.113	0.0	0.00	0.00	--
Chloramben	10.373	26180.0	4188.55	-1.00	VV
2,4,5-T	10.537	51304.0	6271.40	-1.00	VV
2,4-DB	11.177	0.0	0.00	0.00	--
Bentazon/Picloram	12.100	54638.0	3723.00	20.00	xS
Dinoseb	12.210	59236.0	4843.66	-1.00	SV
Dacthal	12.457	69171.0	7080.86	-1.00	VI
Acifluorfen	14.270	38134.0	4510.31	-1.00	BV

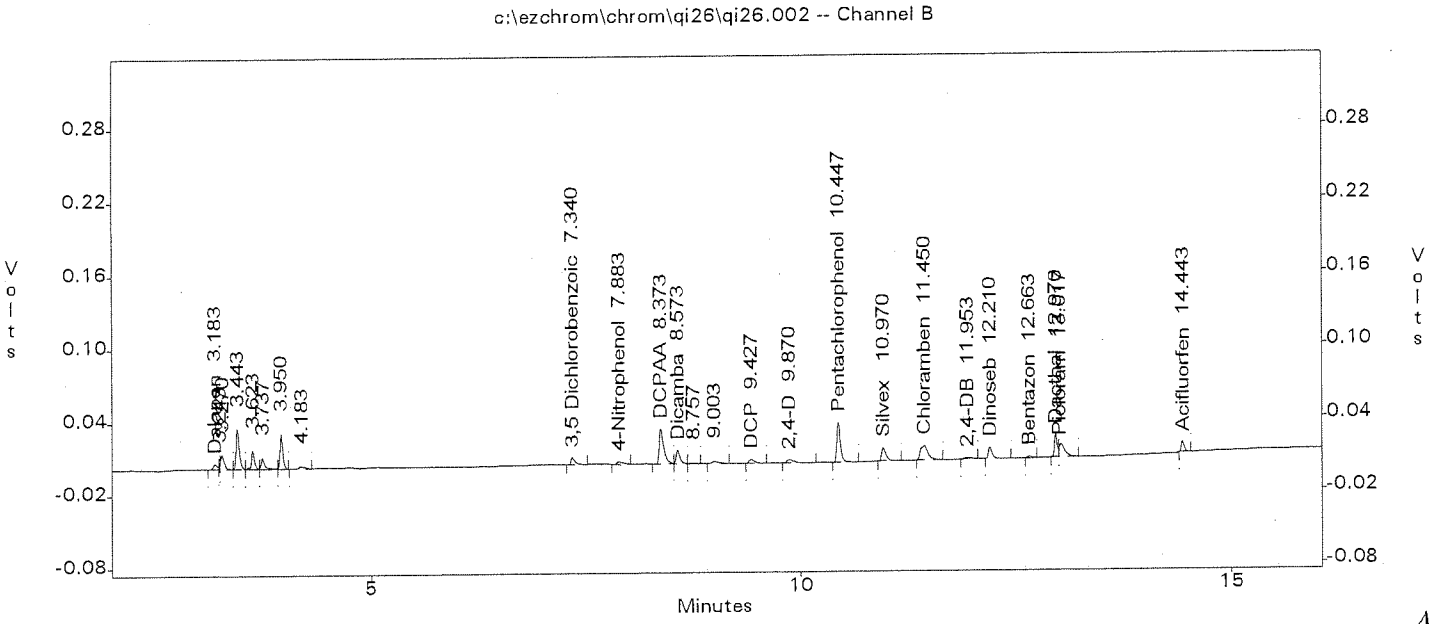


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.002
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2601
Acquired : Sep 26, 2012 12:16:59
Printed : Oct 01, 2012 11:00:37
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.183	13757.0	1309.41	-1.00	hh
3,5 Dichlorobenzoic	7.340	17372.0	1476.64	-1.00	vv
4-Nitrophenol	7.883	9889.0	827.10	-1.00	xx
DCPAA	8.373	105310.0	797.39	-1.00	xV
Dicamba	8.573	32446.0	3014.19	-1.00	VV
MCPP	8.700	0.0	0.00	0.00	--
MCPA	8.980	0.0	0.00	0.00	--
DCP	9.427	12869.0	1172.43	-1.00	VB
2,4-D	9.870	16170.0	1426.08	-1.00	BV
Pentachlorophenol	10.447	97670.0	10952.56	10.00 ✓	VV
Silvex	10.970	38187.0	4257.76	-1.00	vv
2,4,5-T	11.423	0.0	0.00	0.00	--
Chloramben	11.450	68772.0	5352.20	-1.00	BV
2,4-DB	11.953	7203.0	717.52	-1.00	Bx
Dinoseb	12.210	27988.0	2744.69	-1.00	VV
Bentazon	12.663	5507.0	526.04	-1.00	xx
Dacthal	12.970	41486.0	3925.66	-1.00	MM
Picloram	13.017	45691.0	6563.67	-1.00	MM
Acifluorfen	14.443	22016.0	2712.42	-1.00	BS



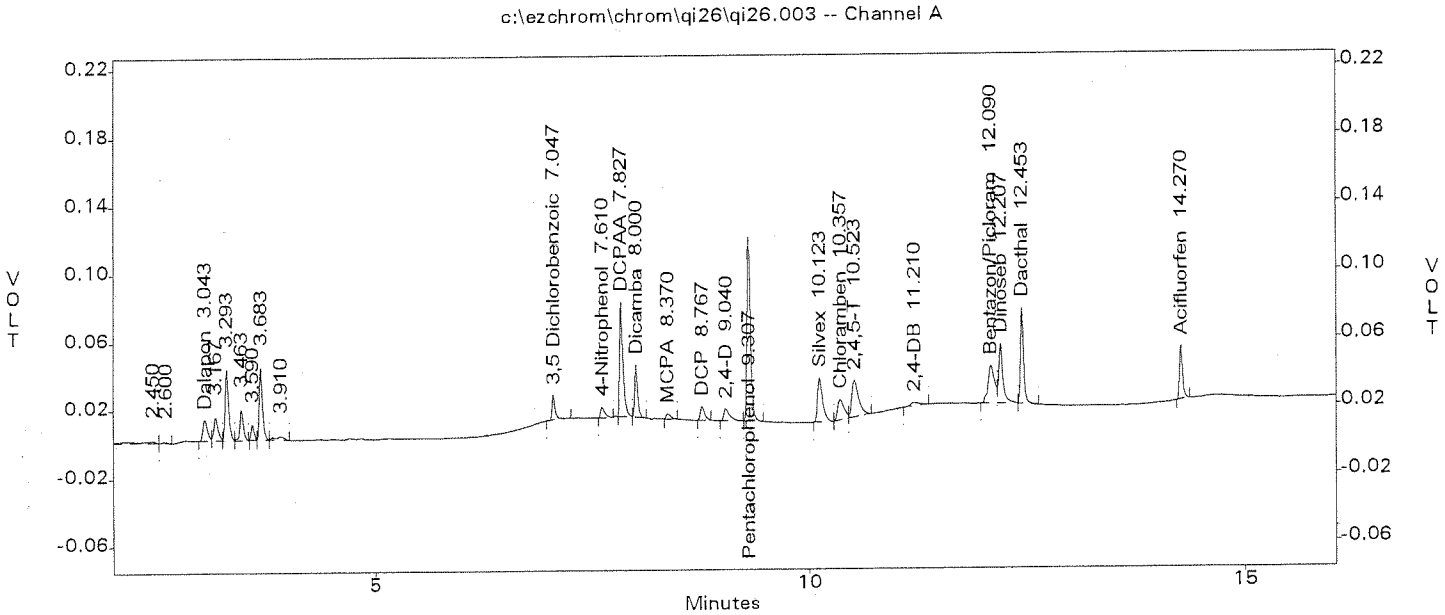
5656

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

File : c:\ezchrom\chrom\qi26\qi26.003
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2602
Acquired : Sep 26, 2012 12:38:34
Printed : Oct 01, 2012 11:00:43
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	42164.0	1873.07	20.00	BV
3,5 Dichlorobenzo	7.047	38916.0	1597.51	20.00	BI
4-Nitrophenol	7.610	20957.0	1033.35	20.00	BV
DCPAA	7.827	185151.0	766.49	200.00	BV
Dicamba	8.000	73304.0	3581.89	20.00	VI
MCPP	8.203	0.0	0.00	0.00	--
MCPA	8.370	11259.0	8.72	-1.00	BI
DCP	8.767	26728.0	1265.43	20.00	BI
2,4-D	9.040	33957.0	1617.85	20.00	BV
Pentachlorophenol	9.307	316942.0	14795.63	20.00	VI
Silvex	10.123	106825.0	5970.67	20.00	BV
Chloramben	10.357	62453.0	4188.55	20.00	VV
2,4,5-T	10.523	116937.0	6271.40	20.00	VI
2,4-DB	11.210	15187.0	778.86	20.00	BV
Bentazon/Picloram	12.090	117318.0	3723.00	40.00	xS
Dinoseb	12.207	114010.0	4843.66	20.00	SV
Dacthal	12.453	143620.0	7080.86	20.00	VI
Acifluorfen	14.270	80434.0	4510.31	20.00	BV



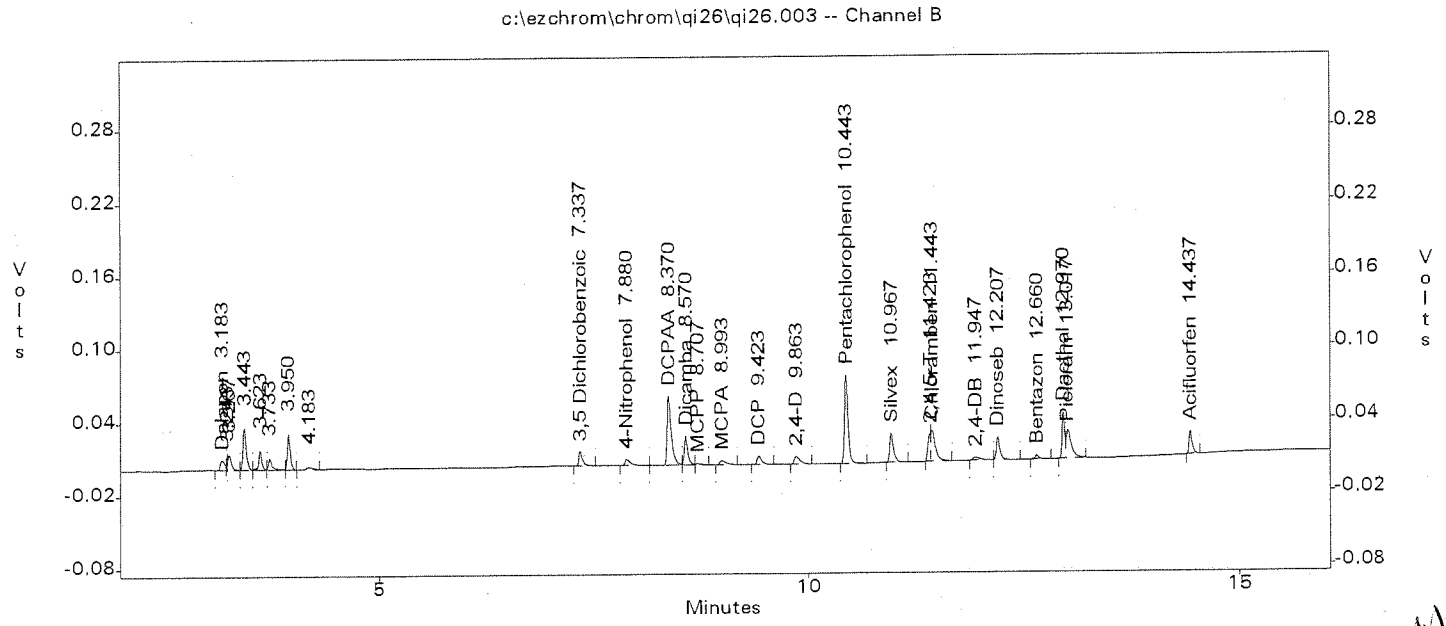
5037

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

File : c:\ezchrom\chrom\qi26\qi26.003
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2602
Acquired : Sep 26, 2012 12:38:34
Printed : Oct 01, 2012 11:00:44
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.183	27705.0	1309.41	20.00	hh
3,5 Dichlorobenzoic	7.337	33482.0	1476.64	20.00	vv
4-Nitrophenol	7.880	19619.0	827.10	20.00	xV
DCPAA	8.370	193063.0	797.39	200.00	VV
Dicamba	8.570	61775.0	3014.19	20.00	VV
MCPP	8.707	2739.0	5.21	-1.00	Vx
MCPA	8.993	15777.0	11.43	-1.00	xx
DCP	9.423	26560.0	1172.43	20.00	Bx
2,4-D	9.863	31521.0	1426.08	20.00	Vx
Pentachlorophenol	10.443	209984.0	10952.56	20.00	VV
Silvex	10.967	77027.0	4257.76	20.00	vv
2,4,5-T	11.423	45889.0	2507.76	20.00	Bx
Chloramben	11.443	94034.0	5352.20	20.00	xV
2,4-DB	11.947	15831.0	717.52	20.00	BV
Dinoseb	12.207	55100.0	2744.69	20.00	VV
Bentazon	12.660	10884.0	526.04	20.00	VS
Dacthal	12.970	80655.0	3925.66	20.00	MM
Picloram	13.017	96691.0	6563.67	20.00	MM
Acifluorfen	14.437	46186.0	2712.42	20.00	SV



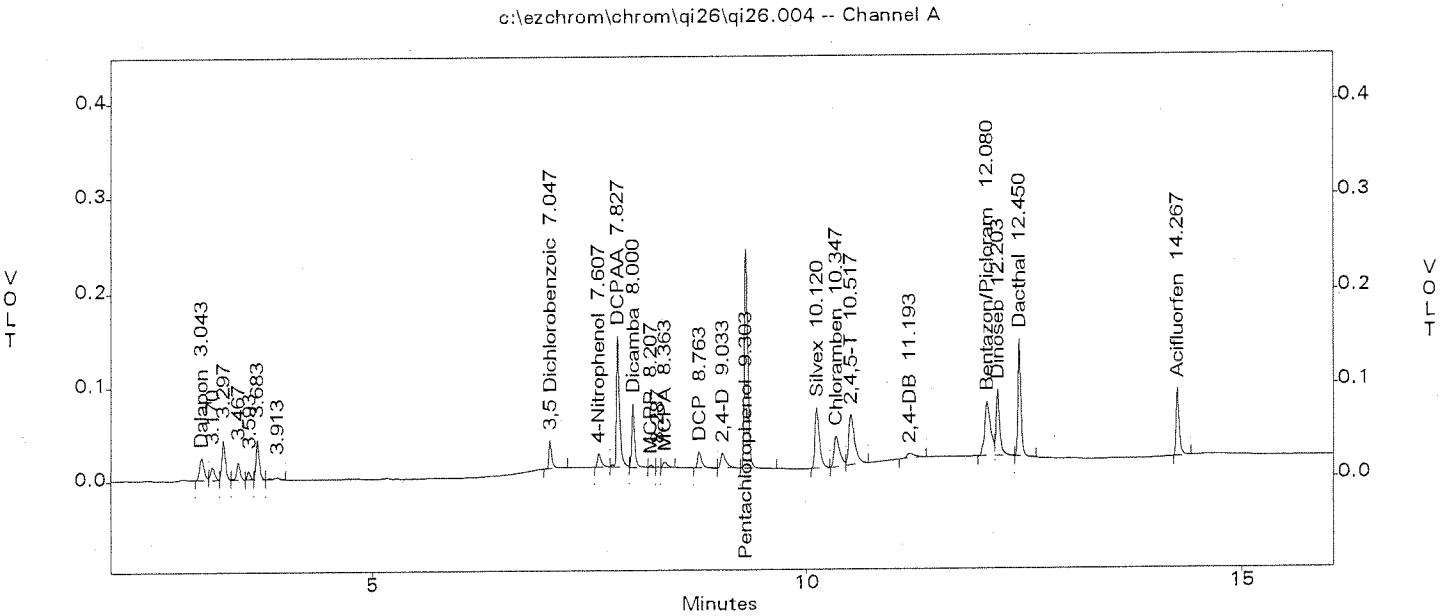
5038

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

File : c:\ezchrom\chrom\qi26\qi26.004
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2603
Acquired : Sep 26, 2012 13:00:10
Printed : Oct 01, 2012 11:03:40
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	80478.0	1873.07	40.00	BV
3,5 Dichlorobenzo	7.047	71427.0	1597.51	40.00	BI
4-Nitrophenol	7.607	45955.0	1033.35	40.00	BV
DCPAA	7.827	355267.0	766.49	400.00	VV
Dicamba	8.000	158933.0	3581.89	40.00	VV
MCPP	8.207	6883.0	4.25	2000.00	Vx
MCPA	8.363	20929.0	8.72	2000.00	VI
DCP	8.763	55185.0	1265.43	40.00	BV
2,4-D	9.033	69354.0	1617.85	40.00	VV
Pentachlorophenol	9.303	638477.0	14795.63	40.00	VB
Silvex	10.120	234201.0	5970.67	40.00	BV
Chloramben	10.347	148385.0	4188.55	40.00	VV
2,4,5-T	10.517	251475.0	6271.40	40.00	VI
2,4-DB	11.193	31337.0	778.86	40.00	BV
Bentazon/Picloram	12.080	275875.0	3723.00	80.00	xV
Dinoseb	12.203	212204.0	4843.66	40.00	VV
Dacthal	12.450	294655.0	7080.86	40.00	VI
Acifluorfen	14.267	177920.0	4510.31	40.00	BV



5699

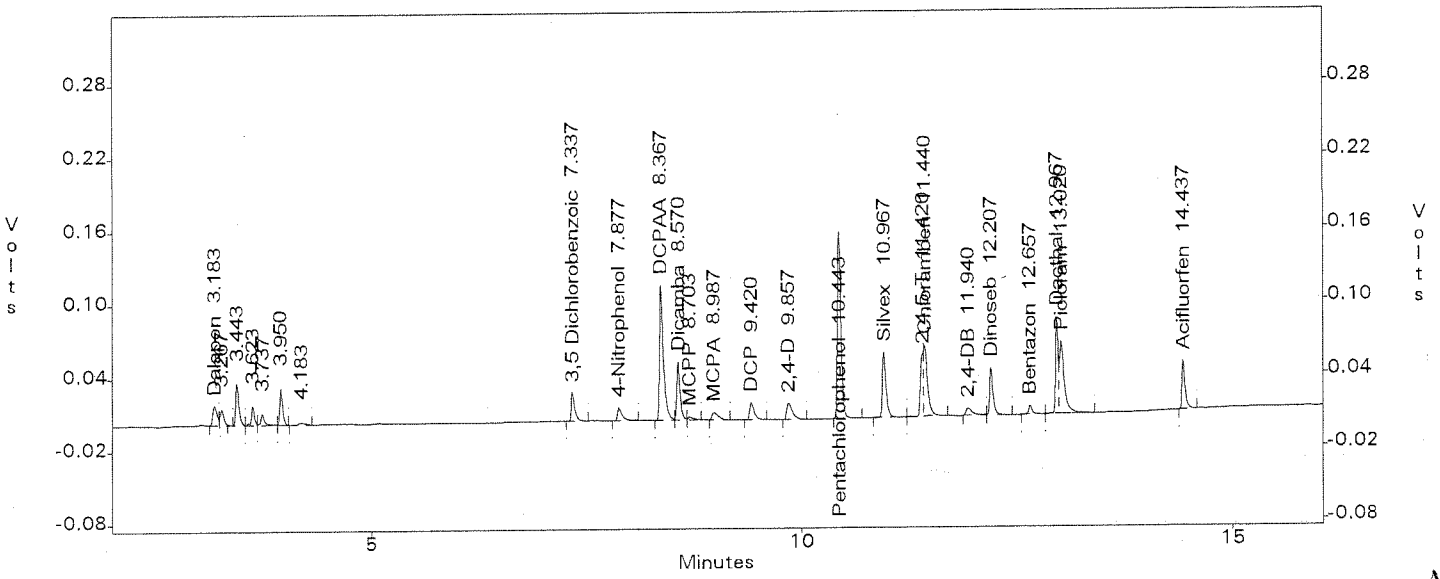
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.004
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2603
Acquired : Sep 26, 2012 13:00:10
Printed : Oct 01, 2012 11:03:40
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.183	54175.0	1309.41	40.00	MM
3,5 Dichlorobenzoic	7.337	63242.0	1476.64	40.00	vv
4-Nitrophenol	7.877	35232.0	827.10	40.00	xB
DCPAA	8.367	352022.0	797.39	400.00	BV
Dicamba	8.570	123917.0	3014.19	40.00	VV
MCPP	8.703	10546.0	5.21	2000.00	Vx
MCPA	8.987	29194.0	11.43	2000.00	xx
DCP	9.420	50179.0	1172.43	40.00	Bx
2,4-D	9.857	61149.0	1426.08	40.00	Vx
Pentachlorophenol	10.443	448451.0	10952.56	40.00	VV
Silvex	10.967	164666.0	4257.76	40.00	vv
2,4,5-T	11.420	104798.0	2507.76	40.00	Vx
Chloramben	11.440	199240.0	5352.20	40.00	xV
2,4-DB	11.940	31135.0	717.52	40.00	BV
Dinoseb	12.207	109011.0	2744.69	40.00	VV
Bentazon	12.657	21119.0	526.04	40.00	VV
Dacthal	12.967	162566.0	3925.66	40.00	Vx
Picloram	13.020	235914.0	6563.67	40.00	xV
Acifluorfen	14.437	101724.0	2712.42	40.00	BV

c:\ezchrom\chrom\qi26\qi26.004 -- Channel B



10/1/12

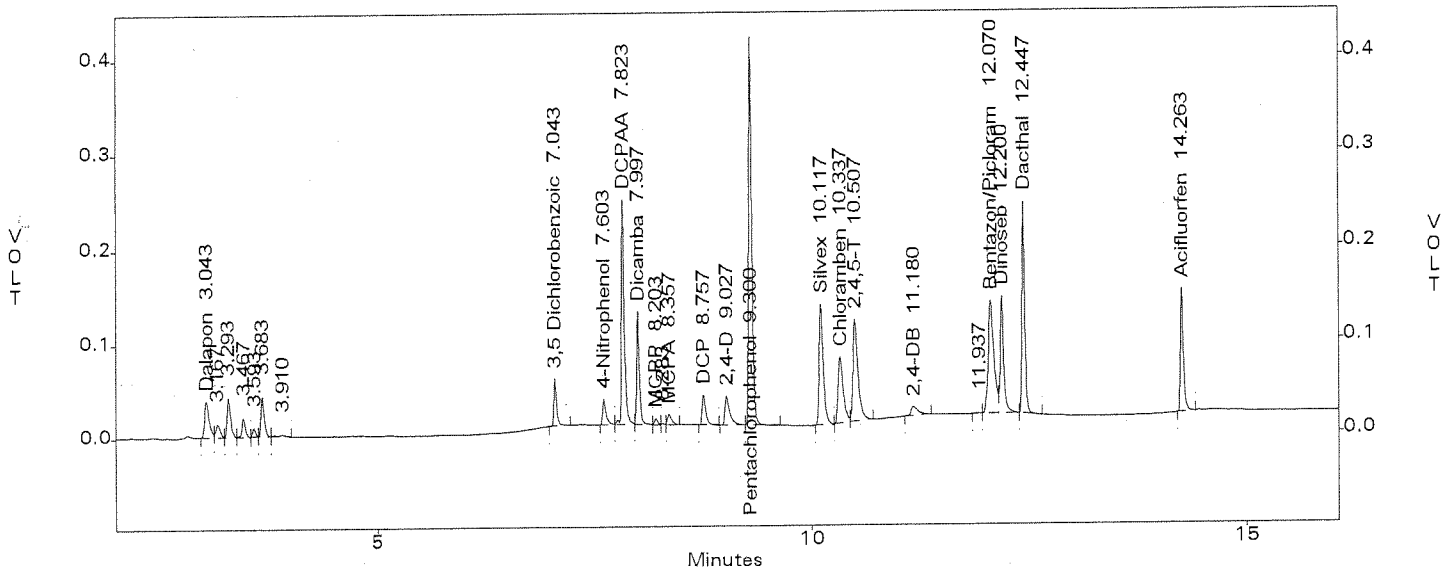
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.005
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2604
Acquired : Sep 26, 2012 13:21:41
Printed : Oct 01, 2012 11:04:34
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	133025.0	1873.07	70.00	BV
3,5 Dichlorobenzo	7.043	113846.0	1597.51	70.00	BV
4-Nitrophenol	7.603	76526.0	1033.35	70.00	BV
DCPAA	7.823	554652.0	766.49	700.00	VV
Dicamba	7.997	260401.0	3581.89	70.00	VV
MCPP	8.203	14444.0	4.25	3500.00	Vx
MCPA	8.357	33057.0	8.72	3500.00	VI
DCP	8.757	92650.0	1265.43	70.00	BV
2,4-D	9.027	117893.0	1617.85	70.00	VV
Pentachlorophenol	9.300	1069790.0	14795.63	70.00	VB
Silvex	10.117	430688.0	5970.67	70.00	BV
Chloramben	10.337	292932.0	4188.55	70.00	VV
2,4,5-T	10.507	455594.0	6271.40	70.00	VI
2,4-DB	11.180	54795.0	778.86	70.00	BV
Bentazon/Picloram	12.070	544214.0	3723.00	140.00	xV
Dinoseb	12.200	351412.0	4843.66	70.00	VV
Dacthal	12.447	512680.0	7080.86	70.00	VI
Acifluorfen	14.263	319566.0	4510.31	70.00	BV

c:\ezchrom\chrom\qi26\qi26.005 -- Channel A



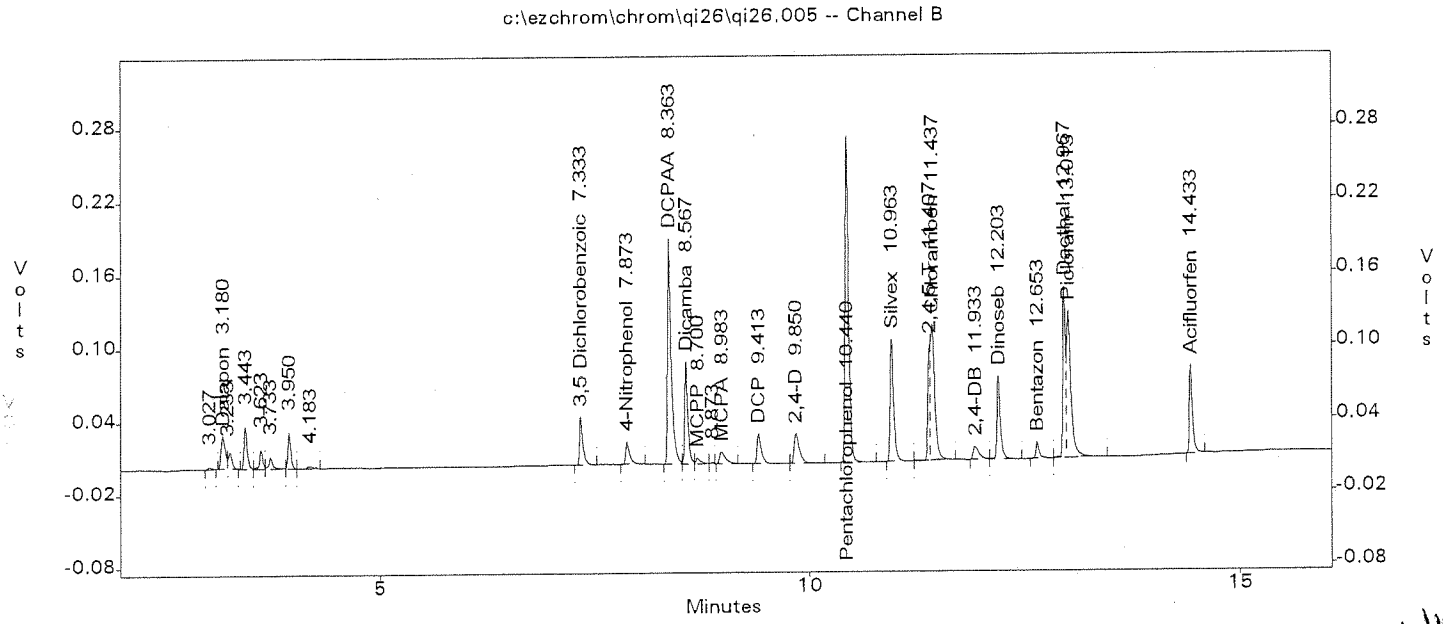
10/1/12
5641

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

File : c:\ezchrom\chrom\qi26\qi26.005
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2604
Acquired : Sep 26, 2012 13:21:41
Printed : Oct 01, 2012 11:04:34
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.180	89461.0	1309.41	70.00	MM
3,5 Dichlorobenzoic	7.333	104886.0	1476.64	70.00	vv
4-Nitrophenol	7.873	56544.0	827.10	70.00	xB
DCPAA	8.363	567512.0	797.39	700.00	BV
Dicamba	8.567	213397.0	3014.19	70.00	VV
MCPP	8.700	18703.0	5.21	3500.00	VV
MCPA	8.983	44437.0	11.43	3500.00	xx
DCP	9.413	83904.0	1172.43	70.00	BV
2,4-D	9.850	102423.0	1426.08	70.00	VV
Pentachlorophenol	10.440	799821.0	10952.56	70.00	VV
Silvex	10.963	300619.0	4257.76	70.00	vv
2,4,5-T	11.407	165963.0	2507.76	70.00	Vx
Chloramben	11.437	392088.0	5352.20	70.00	xV
2,4-DB	11.933	50772.0	717.52	70.00	BV
Dinoseb	12.203	192352.0	2744.69	70.00	VV
Bentazon	12.653	36613.0	526.04	70.00	VV
Dacthal	12.967	289286.0	3925.66	70.00	Vx
Picloram	13.013	451154.0	6563.67	70.00	xB
Acifluorfen	14.433	183475.0	2712.42	70.00	BV



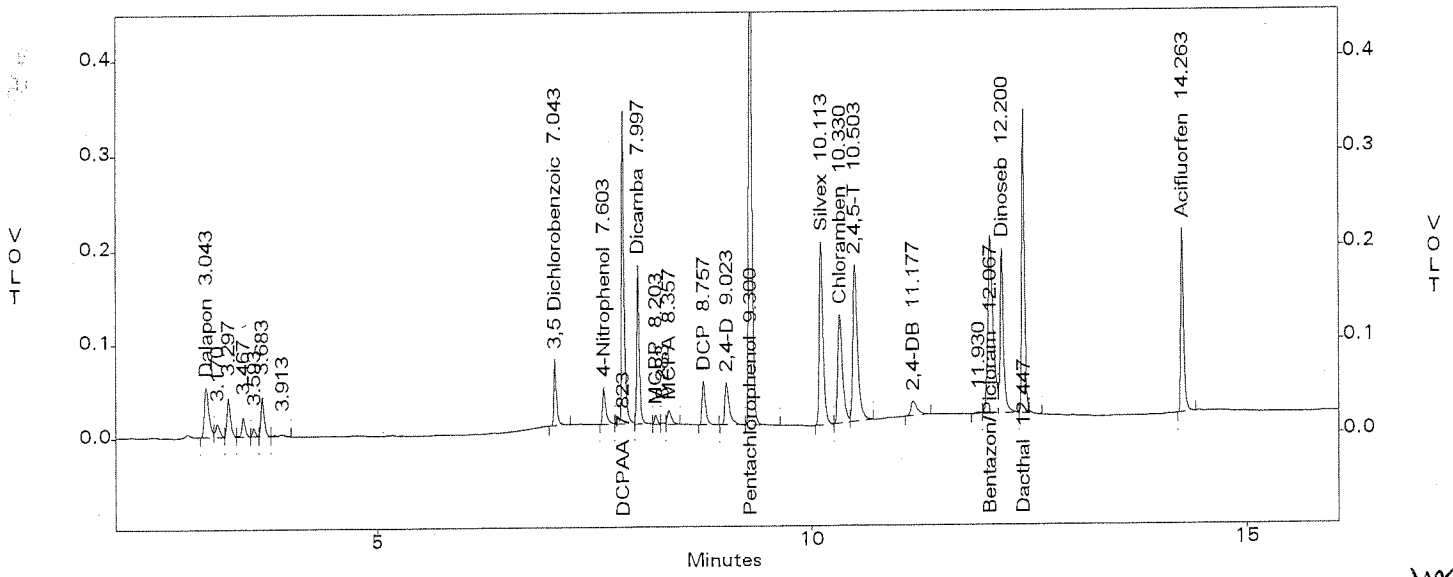
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.006
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2605
Acquired : Sep 26, 2012 13:43:15
Printed : Oct 01, 2012 11:05:21
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	183845.0	1873.07	100.00	BV
3,5 Dichlorobenzo	7.043	153782.0	1597.51	100.00	BV
4-Nitrophenol	7.603	103509.0	1033.35	100.00	BV
DCPAA	7.823	734654.0	766.49	1000.00	VV
Dicamba	7.997	356780.0	3581.89	100.00	VV
MCPP	8.203	21654.0	4.25	5000.00	Vx
MCPA	8.357	43865.0	8.72	5000.00	VI
DCP	8.757	126128.0	1265.43	100.00	BV
2,4-D	9.023	161857.0	1617.85	100.00	VV
Pentachlorophenol	9.300	1464205.0	14795.63	100.00	VB
Silvex	10.113	618582.0	5970.67	100.00	BV
Chloramben	10.330	442056.0	4188.55	100.00	VV
2,4,5-T	10.503	645909.0	6271.40	100.00	VI
2,4-DB	11.177	77081.0	778.86	100.00	BV
Bentazon/Picloram	12.067	816886.0	3723.00	200.00	xV
Dinoseb	12.200	473793.0	4843.66	100.00	VV
Dacthal	12.447	712411.0	7080.86	100.00	VI
Acifluorfen	14.263	462005.0	4510.31	100.00	BV

c:\ezchrom\chrom\qi26\qi26.006 -- Channel A



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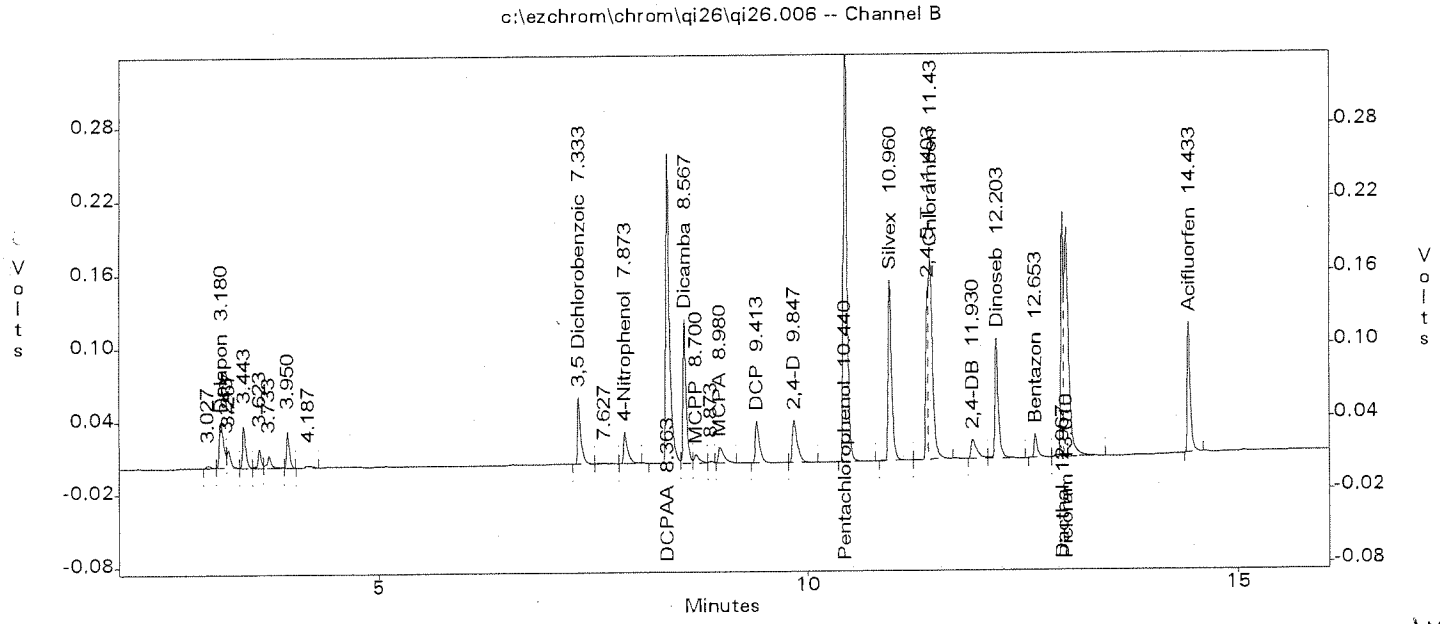
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.006
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2605
Acquired : Sep 26, 2012 13:43:15
Printed : Oct 01, 2012 11:05:21
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.180	130641.0	1309.41	100.00	hh
3,5 Dichlorobenzoic	7.333	144477.0	1476.64	100.00	vv
4-Nitrophenol	7.873	81546.0	827.10	100.00	xx
DCPAA	8.363	767347.0	797.39	1000.00	VV
Dicamba	8.567	300399.0	3014.19	100.00	VV
MCPP	8.700	26349.0	5.21	5000.00	VV
MCPA	8.980	56919.0	11.43	5000.00	xx
DCP	9.413	114606.0	1172.43	100.00	BV
2,4-D	9.847	140481.0	1426.08	100.00	VV
Pentachlorophenol	10.440	1131831.0	10952.56	100.00	VV
Silvex	10.960	435152.0	4257.76	100.00	vv
2,4,5-T	11.403	250371.0	2507.76	100.00	Vx
Chloramben	11.433	558062.0	5352.20	100.00	xV
2,4-DB	11.930	70944.0	717.52	100.00	BV
Dinoseb	12.203	274108.0	2744.69	100.00	VV
Bentazon	12.653	51785.0	526.04	100.00	VV
Dacthal	12.967	386338.0	3925.66	100.00	Vx
Picloram	13.010	697806.0	6563.67	100.00	xB
Acifluorfen	14.433	271629.0	2712.42	100.00	BB



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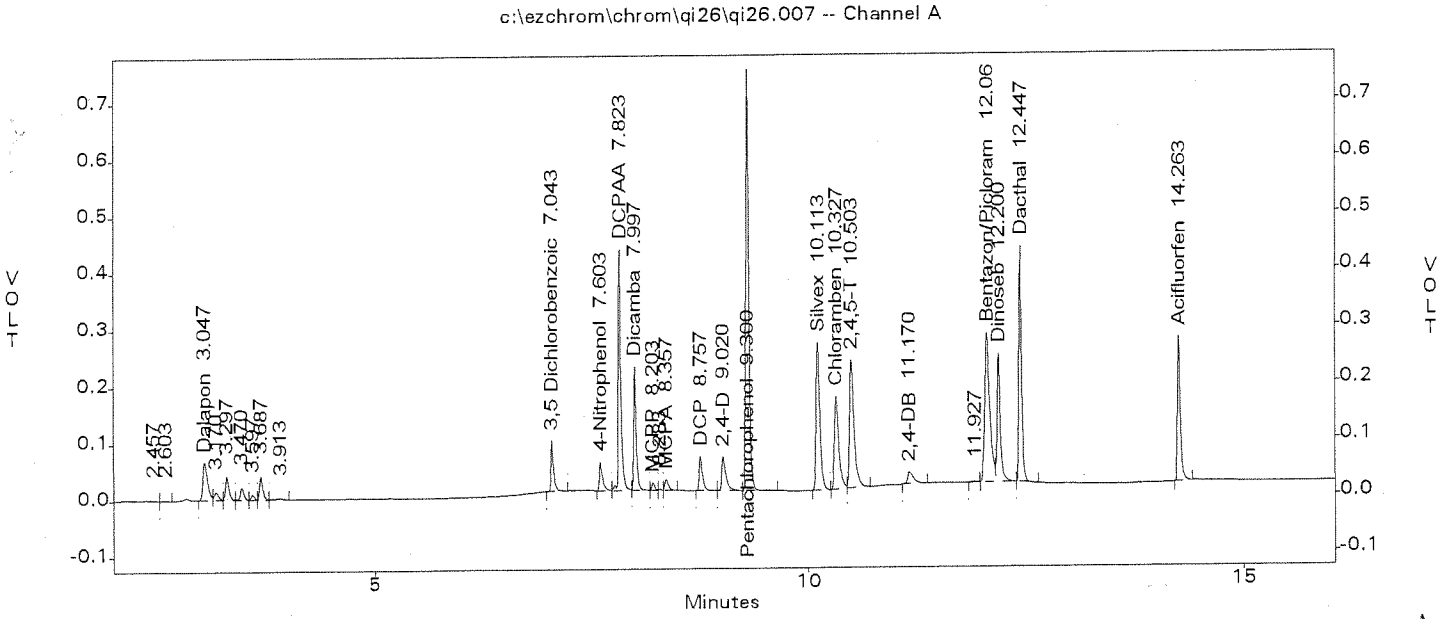
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.007
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2606
Acquired : Sep 26, 2012 14:04:49
Printed : Oct 01, 2012 11:09:15
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.047	233378.0	1873.07	130.00	BS
3,5 Dichlorobenzo	7.043	192326.0	1597.51	130.00	BV
4-Nitrophenol	7.603	129790.0	1033.35	130.00	BV
DCPAA	7.823	912036.0	766.49	1300.00	VV
Dicamba	7.997	451624.0	3581.89	130.00	VV
MCPP	8.203	28660.0	4.25	6500.00	Vx
MCPA	8.357	53282.0	8.72	6500.00	VI
DCP	8.757	159188.0	1265.43	130.00	BV
2,4-D	9.020	205097.0	1617.85	130.00	VV
Pentachlorophenol	9.300	1854633.0	14795.63	130.00	VV
Silvex	10.113	805691.0	5970.67	130.00	BV
Chloramben	10.327	596825.0	4188.55	130.00	VV
2,4,5-T	10.503	833689.0	6271.40	130.00	VI
2,4-DB	11.170	99752.0	778.86	130.00	BV
Bentazon/Picloram	12.063	1089103.0	3723.00	260.00	SV
Dinoseb	12.200	593175.0	4843.66	130.00	VV
Dacthal	12.447	915821.0	7080.86	130.00	VI
Acifluorfen	14.263	603584.0	4510.31	130.00	BV



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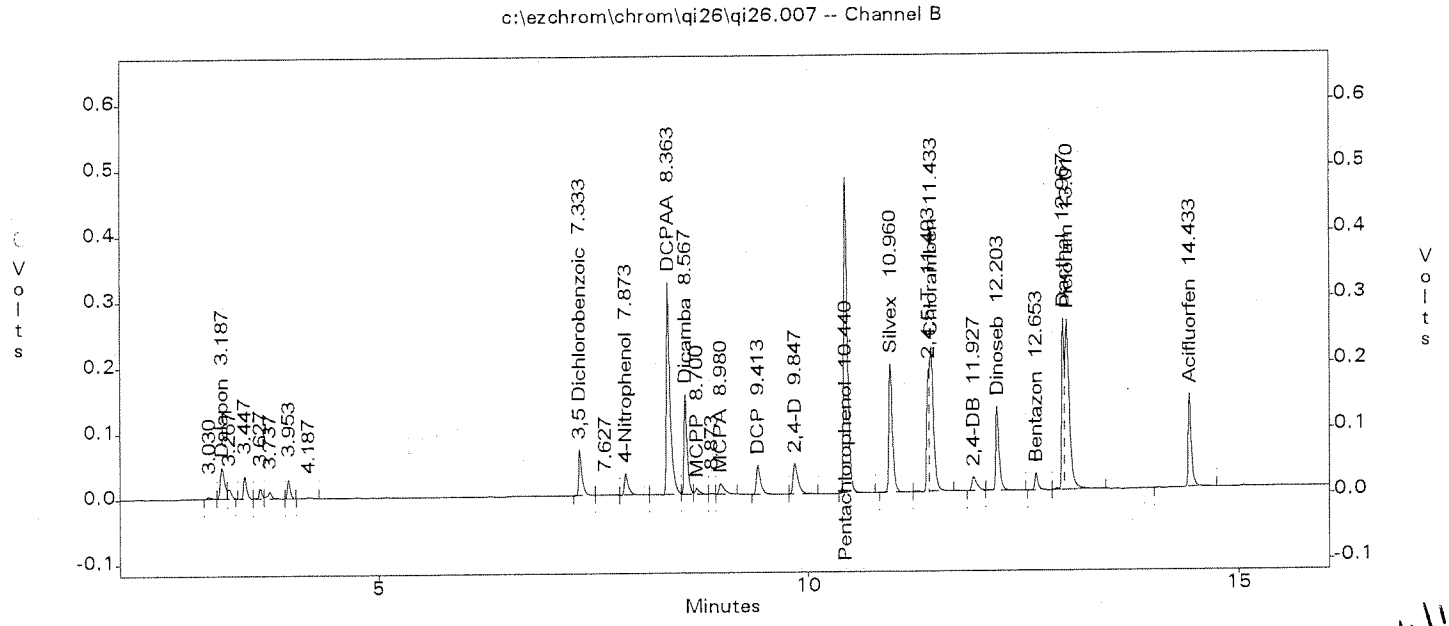
5645

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

File : c:\ezchrom\chrom\qi26\qi26.007
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2606
Acquired : Sep 26, 2012 14:04:49
Printed : Oct 01, 2012 11:09:15
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.187	167080.0	1309.41	130.00	MM
3,5 Dichlorobenzoic	7.333	183940.0	1476.64	130.00	vv
4-Nitrophenol	7.873	103578.0	827.10	130.00	xV
DCPAA	8.363	966861.0	797.39	1300.00	VV
Dicamba	8.567	389483.0	3014.19	130.00	VV
MCPP	8.700	33945.0	5.21	6500.00	VV
MCPA	8.980	69119.0	11.43	6500.00	xx
DCP	9.413	146331.0	1172.43	130.00	BV
2,4-D	9.847	178738.0	1426.08	130.00	VV
Pentachlorophenol	10.440	1470864.0	10952.56	130.00	VV
Silvex	10.960	574824.0	4257.76	130.00	vv
2,4,5-T	11.403	339268.0	2507.76	130.00	Vx
Chloramben	11.433	724521.0	5352.20	130.00	xV
2,4-DB	11.927	89052.0	717.52	130.00	BV
Dinoseb	12.203	359453.0	2744.69	130.00	VV
Bentazon	12.653	68018.0	526.04	130.00	VV
Dacthal	12.967	503793.0	3925.66	130.00	Vx
Picloram	13.010	934164.0	6563.67	130.00	xB
Acifluorfen	14.433	377799.0	2712.42	130.00	BV



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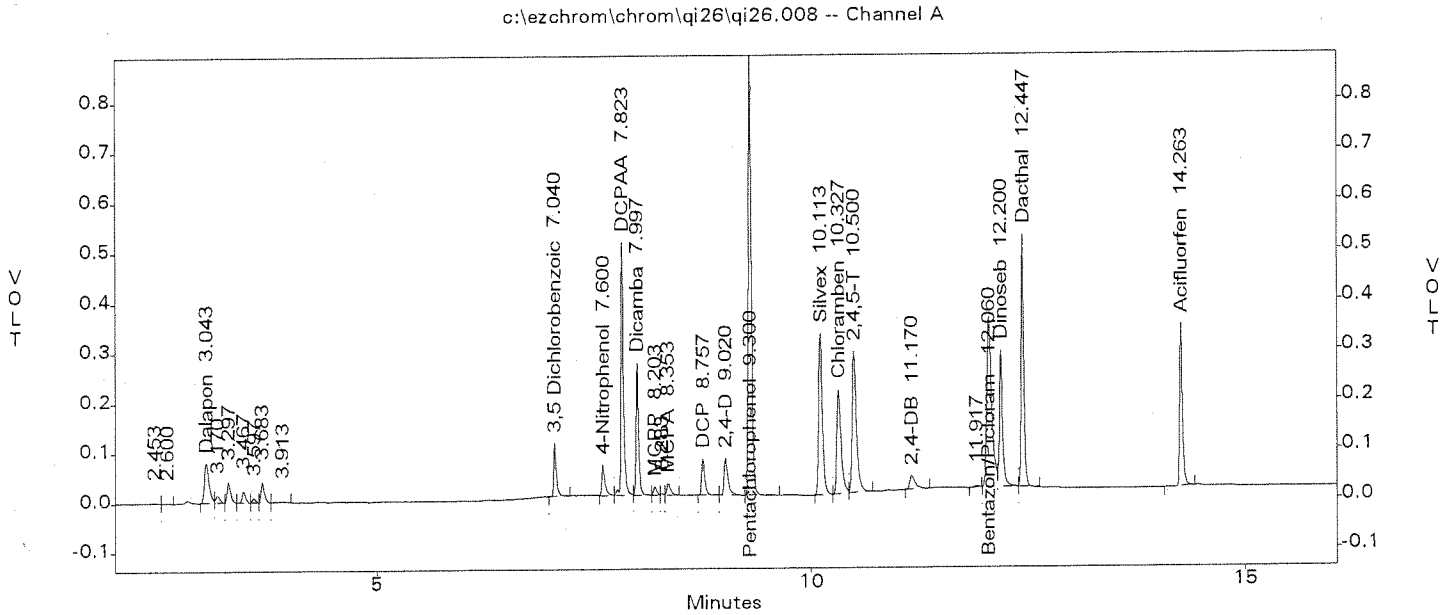
5045

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

File : c:\ezchrom\chrom\qi26\qi26.008
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2607
Acquired : Sep 26, 2012 14:26:26
Printed : Oct 01, 2012 11:10:17
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	279376.0	1873.07	160.00	BS
3,5 Dichlorobenzo	7.040	228317.0	1597.51	160.00	BV
4-Nitrophenol	7.600	155616.0	1033.35	160.00	BV
DCPAA	7.823	1076001.0	766.49	1600.00	VV
Dicamba	7.997	539591.0	3581.89	160.00	VV
MCPP	8.203	36758.0	4.25	8000.00	Vx
MCPA	8.353	63299.0	8.72	8000.00	VI
DCP	8.757	189438.0	1265.43	160.00	BV
2,4-D	9.020	244574.0	1617.85	160.00	VV
Pentachlorophenol	9.300	2203066.0	14795.63	160.00	VV
Silvex	10.113	971039.0	5970.67	160.00	BV
Chloramben	10.327	738380.0	4188.55	160.00	VV
2,4,5-T	10.500	1000284.0	6271.40	160.00	VI
2,4-DB	11.170	121295.0	778.86	160.00	BV
Bentazon/Picloram	12.060	1349986.0	3723.00	320.00	SV
Dinoseb	12.200	699034.0	4843.66	160.00	VV
Dacthal	12.447	1090724.0	7080.86	160.00	VI
Acifluorfen	14.263	740809.0	4510.31	160.00	BV



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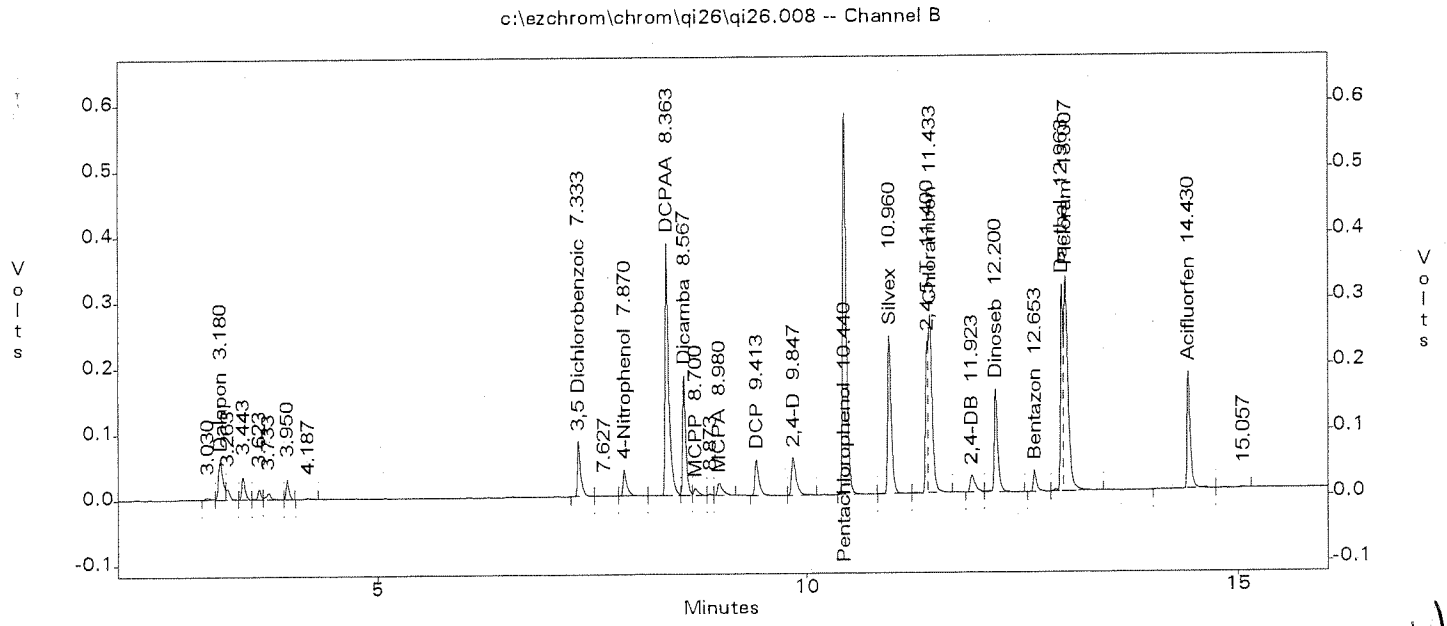
5647

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

File : c:\ezchrom\chrom\qi26\qi26.008
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2607
Acquired : Sep 26, 2012 14:26:26
Printed : Oct 01, 2012 11:10:17
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.180	206665.0	1309.41	160.00	hx
3,5 Dichlorobenzoic	7.333	220158.0	1476.64	160.00	vv
4-Nitrophenol	7.870	122694.0	827.10	160.00	xV
DCPAA	8.363	1146361.0	797.39	1600.00	VV
Dicamba	8.567	470190.0	3014.19	160.00	VV
MCPP	8.700	40718.0	5.21	8000.00	VV
MCPA	8.980	79494.0	11.43	8000.00	xx
DCP	9.413	174053.0	1172.43	160.00	BV
2,4-D	9.847	212855.0	1426.08	160.00	VV
Pentachlorophenol	10.440	1773499.0	10952.56	160.00	VV
Silvex	10.960	700349.0	4257.76	160.00	vv
2,4,5-T	11.400	429059.0	2507.76	160.00	Vx
Chloramben	11.433	865300.0	5352.20	160.00	xV
2,4-DB	11.923	107311.0	717.52	160.00	BV
Dinoseb	12.200	438627.0	2744.69	160.00	VV
Bentazon	12.653	83235.0	526.04	160.00	VV
Dacthal	12.963	623513.0	3925.66	160.00	Vx
Picloram	13.007	1141003.0	6563.67	160.00	xB
Acifluorfen	14.430	481627.0	2712.42	160.00	BV



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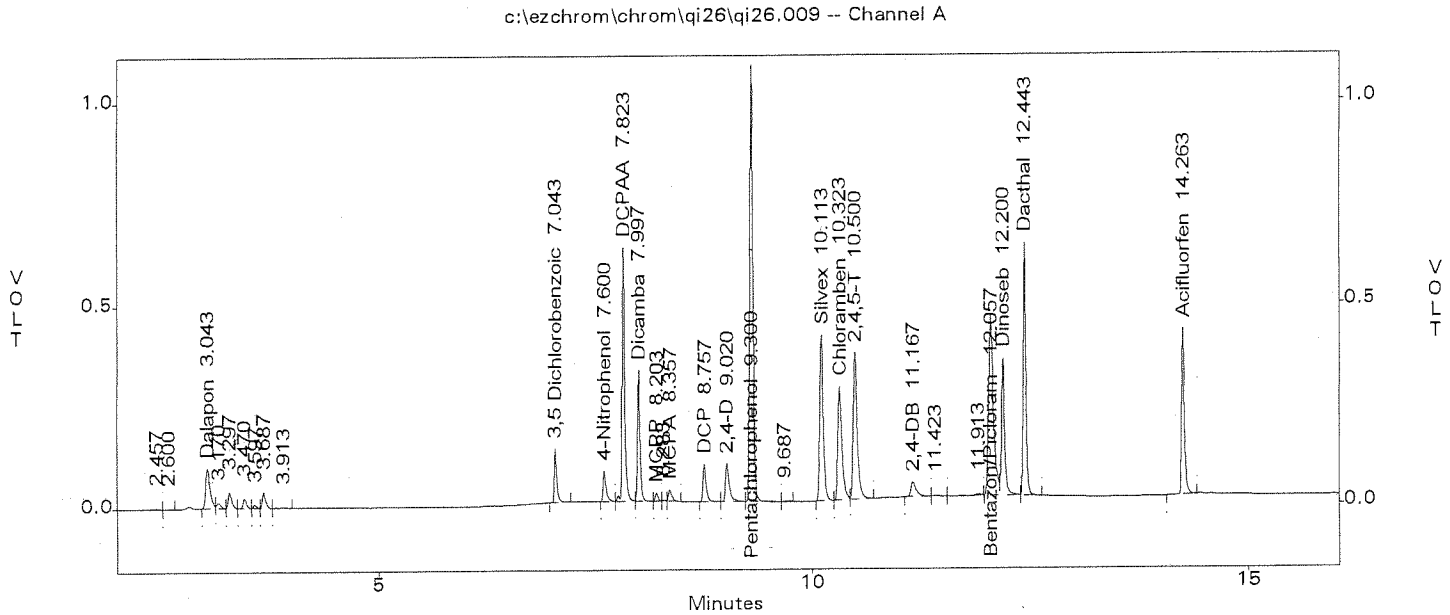
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.009
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2608
Acquired : Sep 26, 2012 14:47:58
Printed : Oct 01, 2012 11:12:34
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	342237.0	1873.07	200.00	BS
3,5 Dichlorobenzo	7.043	276093.0	1597.51	200.00	BV
4-Nitrophenol	7.600	187481.0	1033.35	200.00	BV
DCPAA	7.823	1300786.0	766.49	2000.00	VV
Dicamba	7.997	660079.0	3581.89	200.00	VV
MCPP	8.203	46082.0	4.25	10000.00	Vx
MCPA	8.357	75302.0	8.72	10000.00	VI
DCP	8.757	229726.0	1265.43	200.00	BV
2,4-D	9.020	296847.0	1617.85	200.00	VV
Pentachlorophenol	9.300	2672872.0	14795.63	200.00	VV
Silvex	10.113	1198654.0	5970.67	200.00	VV
Chloramben	10.323	935290.0	4188.55	200.00	VV
2,4,5-T	10.500	1226739.0	6271.40	200.00	VI
2,4-DB	11.167	166049.0	778.86	200.00	BV
Bentazon/Picloram	12.057	1716591.0	3723.00	400.00	SV
Dinoseb	12.200	842010.0	4843.66	200.00	VV
Dacthal	12.443	1341748.0	7080.86	200.00	VI
Acifluorfen	14.263	928840.0	4510.31	200.00	BV



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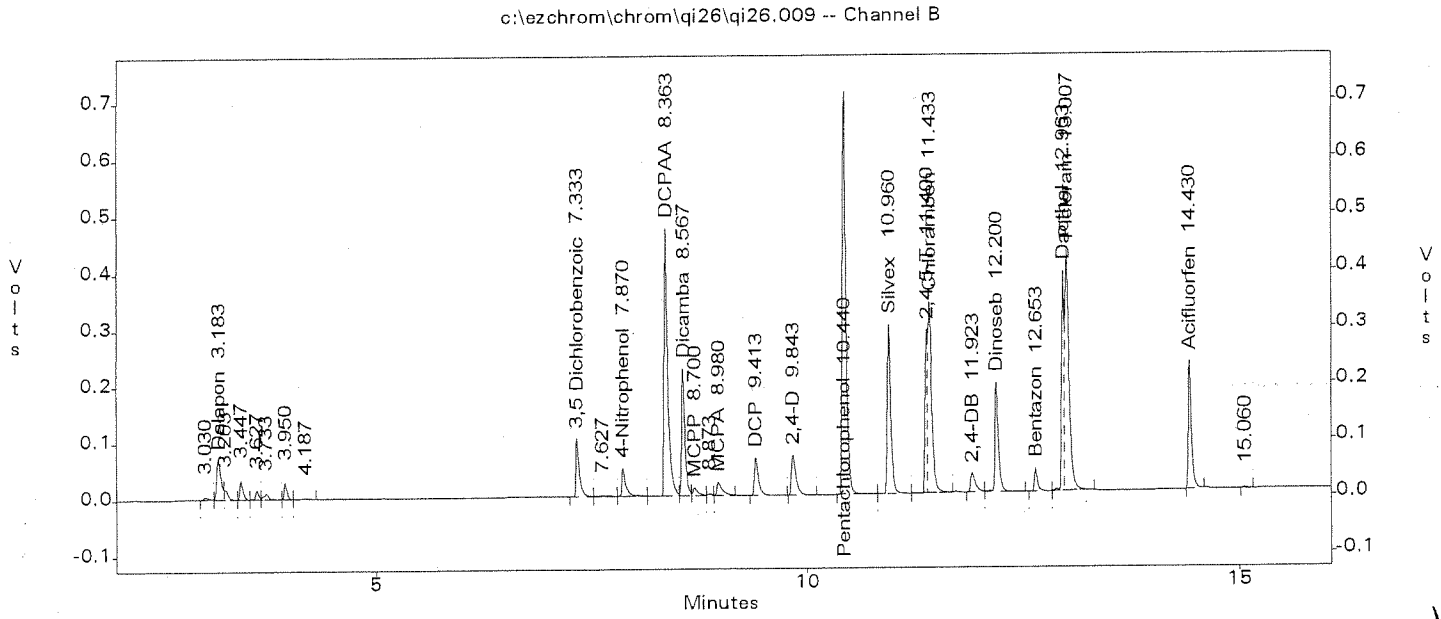
5649

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

File : c:\ezchrom\chrom\qi26\qi26.009
Method : c:\ezchrom\methods\he09i26.met
Sample ID : HE09I2608
Acquired : Sep 26, 2012 14:47:58
Printed : Oct 01, 2012 11:12:35
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.183	252980.0	1309.41	200.00	hx
3,5 Dichlorobenzoic	7.333	269459.0	1476.64	200.00	vv
4-Nitrophenol	7.870	148227.0	827.10	200.00	xV
DCPAA	8.363	1396110.0	797.39	2000.00	VV
Dicamba	8.567	585080.0	3014.19	200.00	VS
MCPP	8.700	50425.0	5.21	10000.00	SV
MCPA	8.980	93179.0	11.43	10000.00	xx
DCP	9.413	213277.0	1172.43	200.00	BV
2,4-D	9.843	260911.0	1426.08	200.00	VV
Pentachlorophenol	10.440	2199999.0	10952.56	200.00	VV
Silvex	10.960	878266.0	4257.76	200.00	vv
2,4,5-T	11.400	494789.0	2507.76	200.00	Vx
Chloramben	11.433	1123891.0	5352.20	200.00	xV
2,4-DB	11.923	132453.0	717.52	200.00	BV
Dinoseb	12.200	547431.0	2744.69	200.00	VV
Bentazon	12.653	105151.0	526.04	200.00	VV
Dacthal	12.963	722875.0	3925.66	200.00	Vx
Picloram	13.007	1494602.0	6563.67	200.00	xI
Acifluorfen	14.430	576167.0	2712.42	200.00	BI



10/1/12

SECOND SOURCE VERIFICATION

INITIAL CALIBRATION VERIFICATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: QI26006A 09/26/2012 13:43
Conc Cont LFID & Datetime: QI26010A 09/26/2012 15:09
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	3.043	3.029	3.057	100.0	1873.1	190667	101.79	2		15
3,5-Dichlorobenzo	7.040	7.026	7.054	100.0	1597.5	158351	99.12	-1		15
4-Nitrophenol	7.600	7.586	7.614	100.0	1033.3	102576	99.27	-1		15
Dicamba	7.997	7.983	8.011	100.0	3581.9	364093	101.65	2		15
Dichloroprop	8.753	8.739	8.767	100.0	1265.4	135486	107.07	7		15
2,4-D	9.017	9.001	9.033	100.0	1617.8	167633	103.61	4		15
Pentachlorophenol	9.300	9.284	9.316	100.0	14795.6	1547069	104.56	5		15
2,4,5-TP(Silvex)	10.110	10.094	10.126	100.0	5970.7	654808	109.67	10		15
Chloramben	10.327	10.311	10.343	100.0	4188.6	478795	114.31	14		15
2,4,5-T	10.500	10.484	10.516	100.0	6271.4	704704	112.37	12		15
2,4-DB	11.170	11.154	11.186	100.0	778.900	82665	106.14	6		15
Bentazon/Picloram	12.060	12.046	12.074	200.0	3723.0	857112	230.22	15		15
Dinoseb	12.197	12.181	12.213	100.0	4843.7	433990	89.60	-10		15
Dacthal	12.443	12.427	12.459	100.0	7080.9	776882	109.72	10		15
Acifluorfen	14.260	14.246	14.274	100.0	4510.3	502996	111.52	12		15

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	7.820	7.804	7.836	1000.0	766.500	763444	996.03	-0		15

10/11/12

5852

INITIAL CALIBRATION VERIFICATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
Mid Conc Init LFID & Datetime: QI26006B 09/26/2012 13:43
Conc Cont LFID & Datetime: QI26010B 09/26/2012 15:09
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	3.180	3.164	3.196	100.0	1309.4	135892	103.78	4		15
3,5-Dichlorobenzo	7.330	7.314	7.346	100.0	1476.6	145000	98.20	-2		15
4-Nitrophenol	7.870	7.854	7.886	100.0	827.100	85024	102.80	3		15
Dicamba	8.563	8.547	8.579	100.0	3014.2	308490	102.35	2		15
Dichloroprop	9.410	9.396	9.424	100.0	1172.4	121646	103.76	4		15
2,4-D	9.843	9.829	9.857	100.0	1426.1	147539	103.46	3		15
Pentachlorophenol	10.437	10.423	10.451	100.0	10952.6	1217432	111.15	11		15
2,4,5-TP(Silvex)	10.957	10.943	10.971	100.0	4257.8	470418	110.49	10		15
Chloramben	11.430	11.400	11.460	100.0	5352.2	601094	112.31	12		15
2,4,5-T	11.400	11.384	11.416	100.0	2507.8	249249	99.39	-1		15
2,4-DB	11.923	11.899	11.947	100.0	717.500	72047	100.41	0		15
Dinoseb	12.200	12.184	12.216	100.0	2744.7	281163	102.44	2		15
Bentazon	12.653	12.637	12.669	100.0	526.000	54331	103.28	3		15
Dacthal	12.963	12.947	12.979	100.0	3925.7	412456	105.07	5		15
Picloram	13.007	12.983	13.031	100.0	6563.7	724430	110.37	10		15
Acifluorfen	14.430	14.416	14.444	100.0	2712.4	308643	113.79	14		15

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	8.360	8.344	8.376	1000.0	797.400	807842	1013.11	1		15

10/1/12

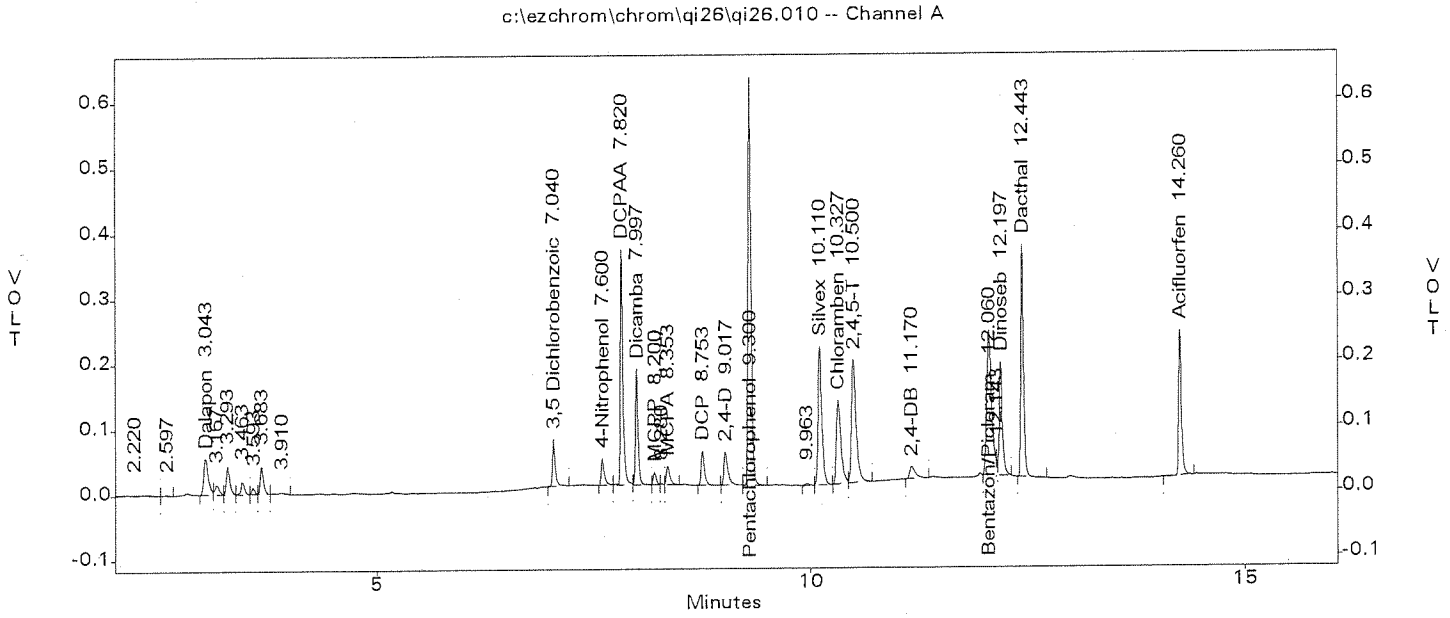
5853

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

File : c:\ezchrom\chrom\qi26\qi26.010
Method : c:\ezchrom\methods\he09i26.met
Sample ID : IHE09I2601
Acquired : Sep 26, 2012 15:09:31
Printed : Oct 01, 2012 11:14:06
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	190667.0	1873.07	101.79	BV
3,5 Dichlorobenzo	7.040	158351.0	1597.51	99.12	BV
4-Nitrophenol	7.600	102576.0	1033.35	99.27	BV
DCPAA	7.820	763444.0	766.49	996.03	VV
Dicamba	7.997	364093.0	3581.89	101.65	VV
MCPP	8.200	44148.0	4.25	10383.15	Vx
MCPA	8.353	77827.0	8.72	8924.75	VI
DCP	8.753	135486.0	1265.43	107.07	BV
2,4-D	9.017	167633.0	1617.85	103.61	VV
Pentachlorophenol	9.300	1547069.0	14795.63	104.56	VI
Silvex	10.110	654808.0	5970.67	109.67	VV
Chloramben	10.327	478795.0	4188.55	114.31	VV
2,4,5-T	10.500	704704.0	6271.40	112.37	VI
2,4-DB	11.170	82665.0	778.86	106.14	BV
Bentazon/Picloram	12.060	857112.0	3723.00	230.22	Bx
Dinoseb	12.197	433990.0	4843.66	89.60	VI
Dacthal	12.443	776882.0	7080.86	109.72	BI
Acifluorfen	14.260	502996.0	4510.31	111.52	BV



10/1/12

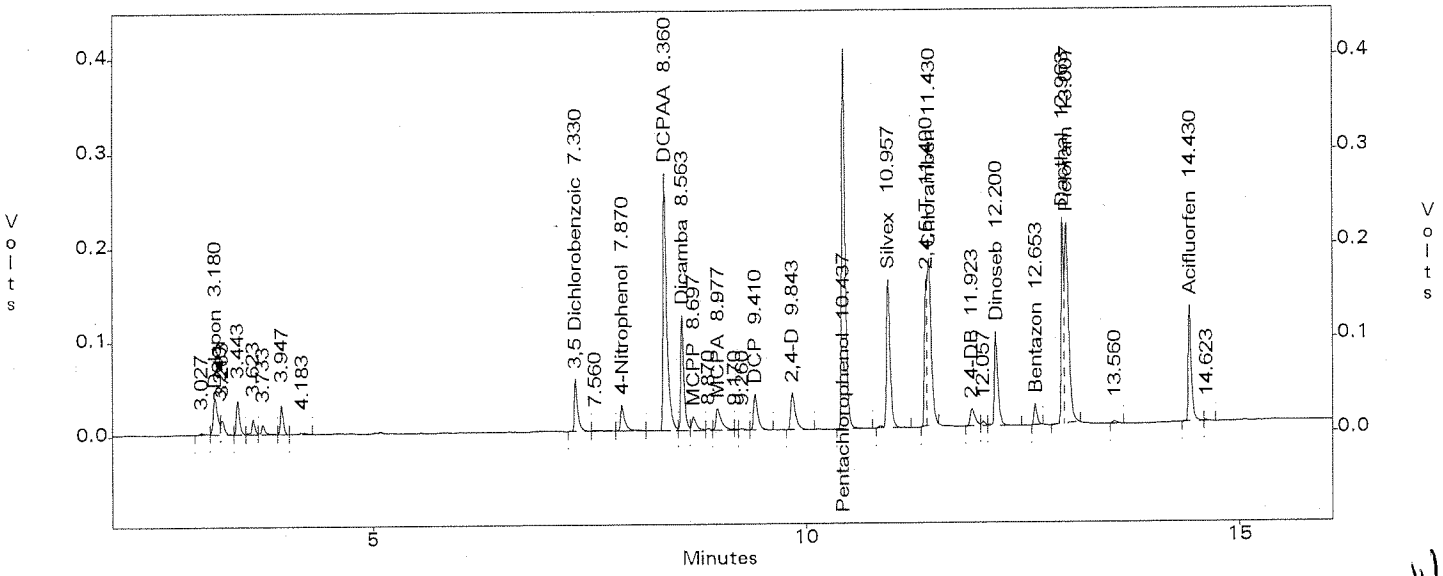
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qi26\qi26.010
Method : c:\ezchrom\methods\he09i26.met
Sample ID : IHE09I2601
Acquired : Sep 26, 2012 15:09:31
Printed : Oct 01, 2012 11:14:07
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.180	135892.0	1309.41	103.78	hh
3,5 Dichlorobenzoic	7.330	145000.0	1476.64	98.20	vv
4-Nitrophenol	7.870	85024.0	827.10	102.80	xV
DCPAA	8.360	807842.0	797.39	1013.11	VV
Dicamba	8.563	308490.0	3014.19	102.35	VV
MCPP	8.697	49885.0	5.21	9580.66	VV
MCPA	8.977	98823.0	11.43	8647.77	xx
DCP	9.410	121646.0	1172.43	103.76	VB
2,4-D	9.843	147539.0	1426.08	103.46	BV
Pentachlorophenol	10.437	1217432.0	10952.56	111.15	VV
Silvex	10.957	470418.0	4257.76	110.48	vv
2,4,5-T	11.400	249249.0	2507.76	99.39	Bx
Chloramben	11.430	601094.0	5352.20	112.31	xI
2,4-DB	11.923	72047.0	717.52	100.41	BS
Dinoseb	12.200	281163.0	2744.69	102.44	VV
Bentazon	12.653	54331.0	526.04	103.28	VI
Dacthal	12.963	412456.0	3925.66	105.07	Bx
Picloram	13.007	724430.0	6563.67	110.37	xI
Acifluorfen	14.430	308643.0	2712.42	113.79	BV

c:\ezchrom\chrom\qi26\qi26.010 -- Channel B



10/1/12

INITIAL CALIBRATION VERIFICATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Column : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: QI26006A 09/26/2012 13:43
Conc Cont LFID & Datetime: QI26011A 09/26/2012 15:31
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	8.203	8.189	8.217	5000.0	4.300	20416	4801.63	-4		15
MCPA	8.357	8.341	8.373	5000.0	8.700	44489	5101.74	2		15

10/1/12

5656

INITIAL CALIBRATION VERIFICATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
Mid Conc Init LFID & Datetime: QI26006B 09/26/2012 13:43
Conc Cont LFID & Datetime: QI26011B 09/26/2012 15:31
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	8.700	8.684	8.716	5000.0	5.200	24994	4800.22	-4		15
MCPA	8.980	8.964	8.996	5000.0	11.400	58983	5161.46	3		15

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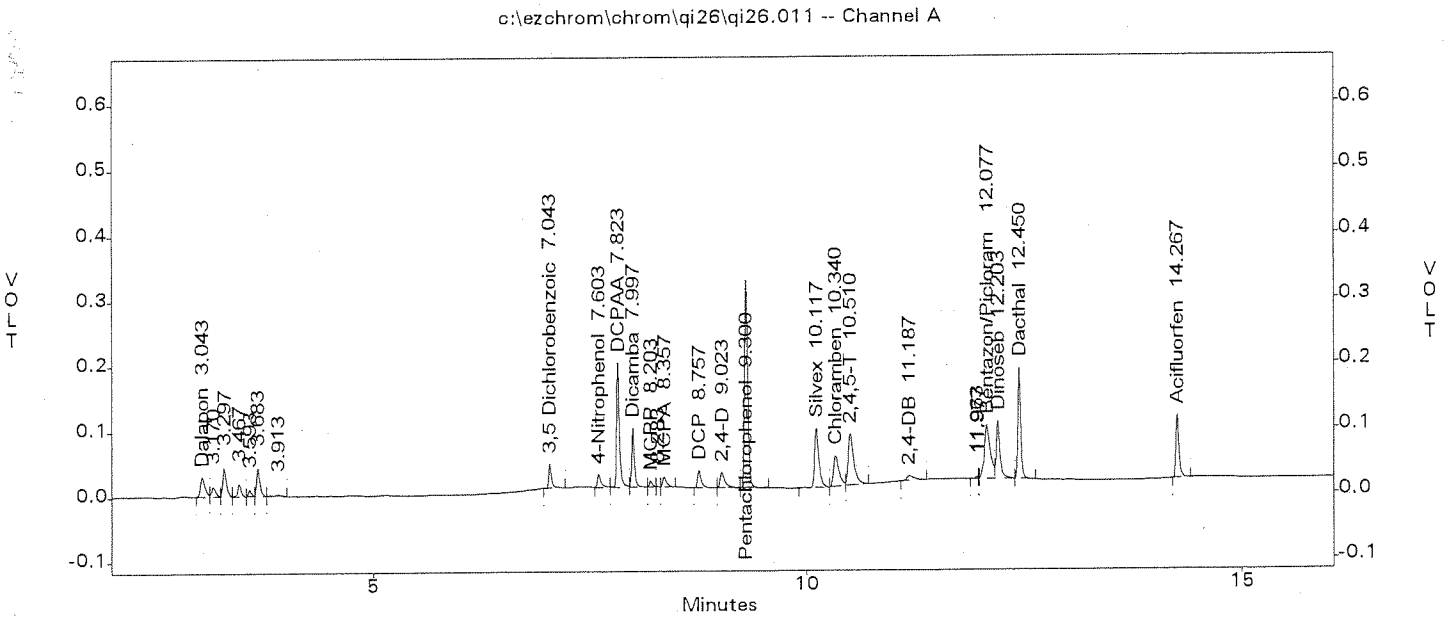
5857

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

File : c:\ezchrom\chrom\qi26\qi26.011
Method : c:\ezchrom\methods\he09i26.met
Sample ID : IHE09I2601
Acquired : Sep 26, 2012 15:31:06
Printed : Oct 01, 2012 11:15:27
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.043	101507.0	1873.07	54.19	BV
3,5 Dichlorobenzo	7.043	86197.0	1597.51	53.96	BV
4-Nitrophenol	7.603	55159.0	1033.35	53.38	BV
DCPAA	7.823	431844.0	766.49	563.41	VV
Dicamba	7.997	191968.0	3581.89	53.59	VV
MCPP	8.203	20416.0	4.25	4801.63	Vx
MCPA	8.357	44489.0	8.72	5101.74	VI
DCP	8.757	72590.0	1265.43	57.36	BV
2,4-D	9.023	89221.0	1617.85	55.15	VV
Pentachlorophenol	9.300	825057.0	14795.63	55.76	VV
Silvex	10.117	315632.0	5970.67	52.86	BV
Chloramben	10.340	206729.0	4188.55	49.36	VV
2,4,5-T	10.510	347176.0	6271.40	55.36	VI
2,4-DB	11.187	40494.0	778.86	51.99	BV
Bentazon/Picloram	12.077	389569.0	3723.00	104.64	xV
Dinoseb	12.203	259015.0	4843.66	53.48	VV
Dacthal	12.450	399471.0	7080.86	56.42	VI
Acifluorfen	14.267	238701.0	4510.31	52.92	BV



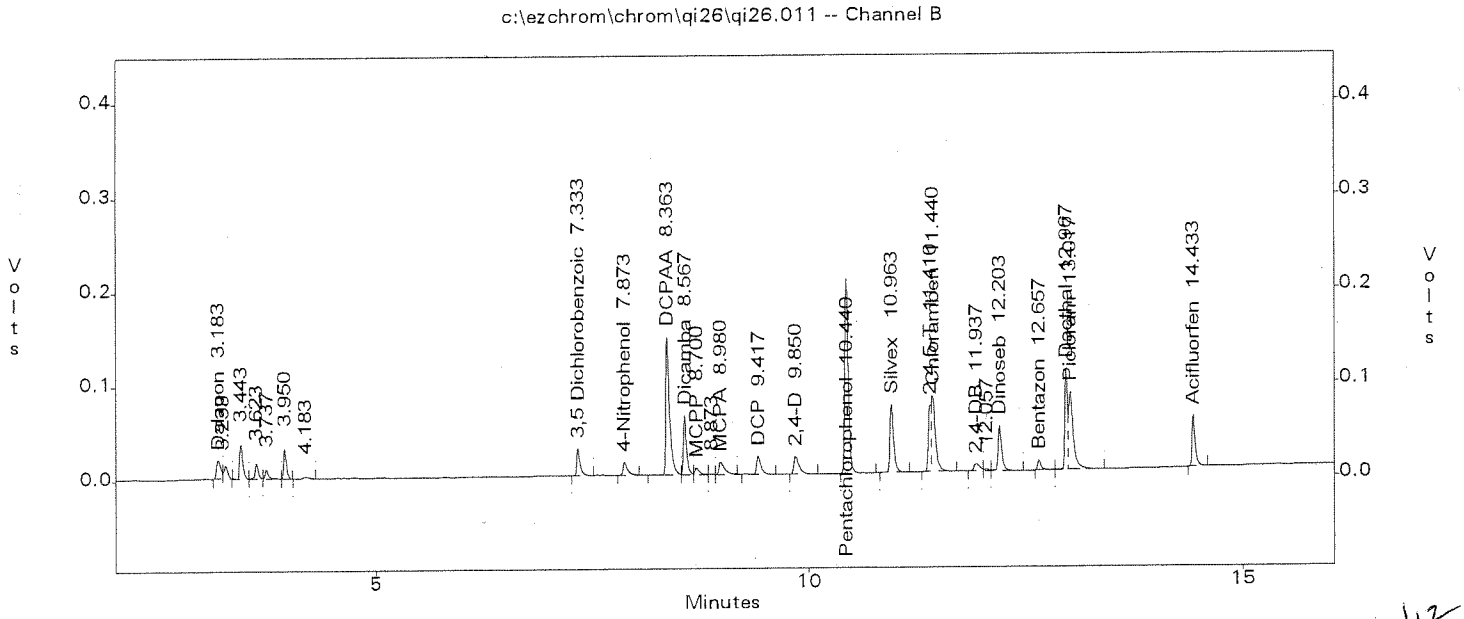
10/1/12
5858

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

File : c:\ezchrom\chrom\qi26\qi26.011
Method : c:\ezchrom\methods\he09i26.met
Sample ID : IHE09I2601
Acquired : Sep 26, 2012 15:31:06
Printed : Oct 01, 2012 11:15:28
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.183	64889.0	1309.41	49.56	MM
3,5 Dichlorobenzoic	7.333	76347.0	1476.64	51.70	vv
4-Nitrophenol	7.873	43454.0	827.10	52.54	xS
DCPAA	8.363	442408.0	797.39	554.82	SV
Dicamba	8.567	155566.0	3014.19	51.61	VV
MCPP	8.700	24994.0	5.21	4800.22	Vx
MCPA	8.980	58983.0	11.43	5161.46	xx
DCP	9.417	65518.0	1172.43	55.88	VB
2,4-D	9.850	78241.0	1426.08	54.86	BV
Pentachlorophenol	10.440	605063.0	10952.56	55.24	VV
Silvex	10.963	220257.0	4257.76	51.73	vv
2,4,5-T	11.410	142468.0	2507.76	56.81	Bx
Chloramben	11.440	273285.0	5352.20	51.06	xB
2,4-DB	11.937	34628.0	717.52	48.26	Bx
Dinoseb	12.203	140376.0	2744.69	51.14	VV
Bentazon	12.657	29696.0	526.04	56.45	VV
Dacthal	12.967	224820.0	3925.66	57.27	Vx
Picloram	13.017	319627.0	6563.67	48.70	xV
Acifluorfen	14.433	140164.0	2712.42	51.67	VV



10/1/12
5659

DAILY CALIBRATIONS

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Column : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: QI26006A 09/26/2012 13:43
Conc Cont LFID & Datetime: QJ02002A 10/02/2012 16:30
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
2,4-D	8.983	8.967	8.999	100.0	1617.8	154525	95.51	-4		20
2,4,5-TP(Silvex)	10.057	10.041	10.073	100.0	5970.7	608904	101.98	2		20
2,4,5-T	10.443	10.427	10.459	100.0	6271.4	609668	97.21	-3		20
Dinoseb	12.157	12.141	12.173	100.0	4843.7	446153	92.11	-8		20

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	7.790	7.774	7.806	1000.0	766.500	728263	950.13	-5		20

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
Mid Conc Init LFID & Datetime: QI26006B 09/26/2012 13:43
Conc Cont LFID & Datetime: QJ02002B 10/02/2012 16:30
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
2,4-D	9.803	9.789	9.817	100.0	1426.1	138714	97.27	-3		20
2,4,5-TP(Silvex)	10.917	10.903	10.931	100.0	4257.8	435937	102.39	2		20
2,4,5-T	11.357	11.341	11.373	100.0	2507.8	288281	114.96	15		20
Dinoseb	12.163	12.147	12.179	100.0	2744.7	313400	114.18	14		20

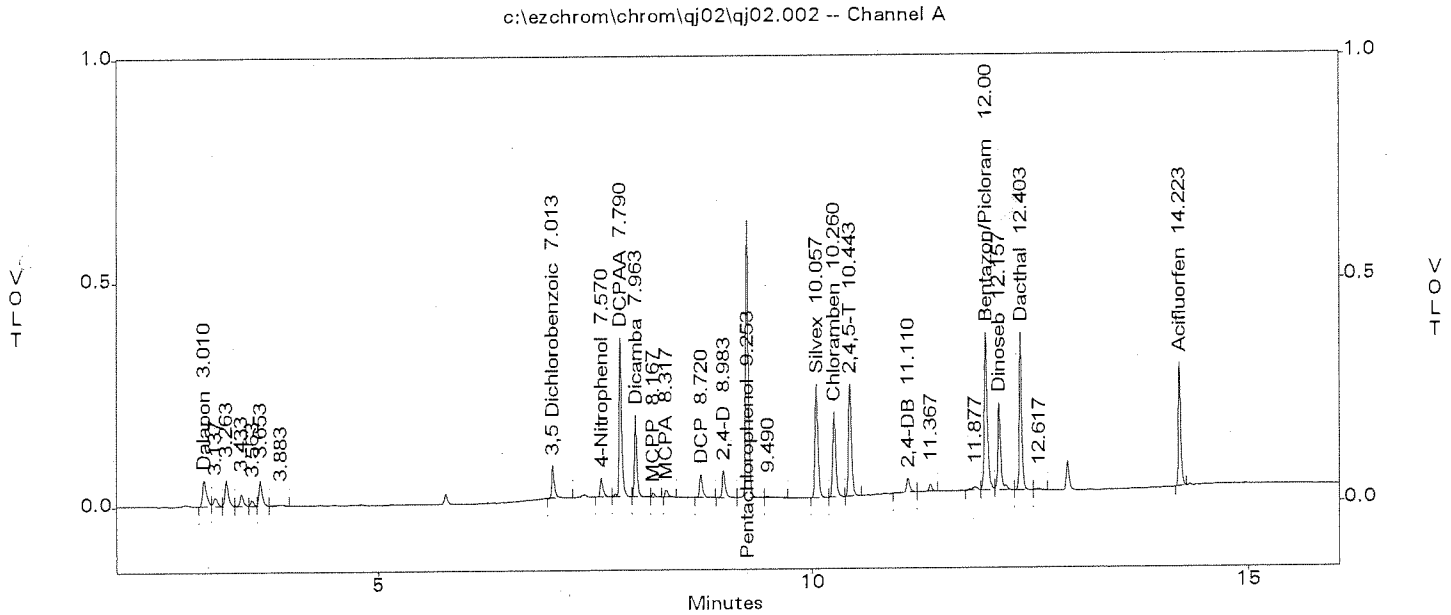
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	8.330	8.314	8.346	1000.0	797.400	766082	960.74	-4		20

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

File : c:\ezchrom\chrom\qj02\qj02.002
Method : c:\ezchrom\methods\he09i26.met
Sample ID : CHE09I2614
Acquired : Oct 02, 2012 16:30:07
Printed : Oct 03, 2012 13:09:36
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.010	186537.0	1873.07	99.59	BV
3,5 Dichlorobenzo	7.013	162758.0	1597.51	101.88	BV
4-Nitrophenol	7.570	101018.0	1033.35	97.76	BV
DCPAA	7.790	728263.0	766.49	950.13	VV
Dicamba	7.963	366356.0	3581.89	102.28	VV
MCPP	8.167	21357.0	4.25	5022.94	Vx
MCPA	8.317	40047.0	8.72	4592.36	VI
DCP	8.720	125315.0	1265.43	99.03	BV
2,4-D	8.983	154525.0	1617.85	95.51	VV
Pentachlorophenol	9.253	1389495.0	14795.63	93.91	VV
Silvex	10.057	608904.0	5970.67	101.98	BV
Chloramben	10.260	479858.0	4188.55	114.56	VV
2,4,5-T	10.443	609668.0	6271.40	97.21	VV
2,4-DB	11.110	87610.0	778.86	112.48	BV
Bentazon/Picloram	12.007	878507.0	3723.00	235.97	SV
Dinoseb	12.157	446153.0	4843.66	92.11	VV
Dacthal	12.403	684608.0	7080.86	96.68	VV
Acifluorfen	14.223	517009.0	4510.31	114.63	BS



5863

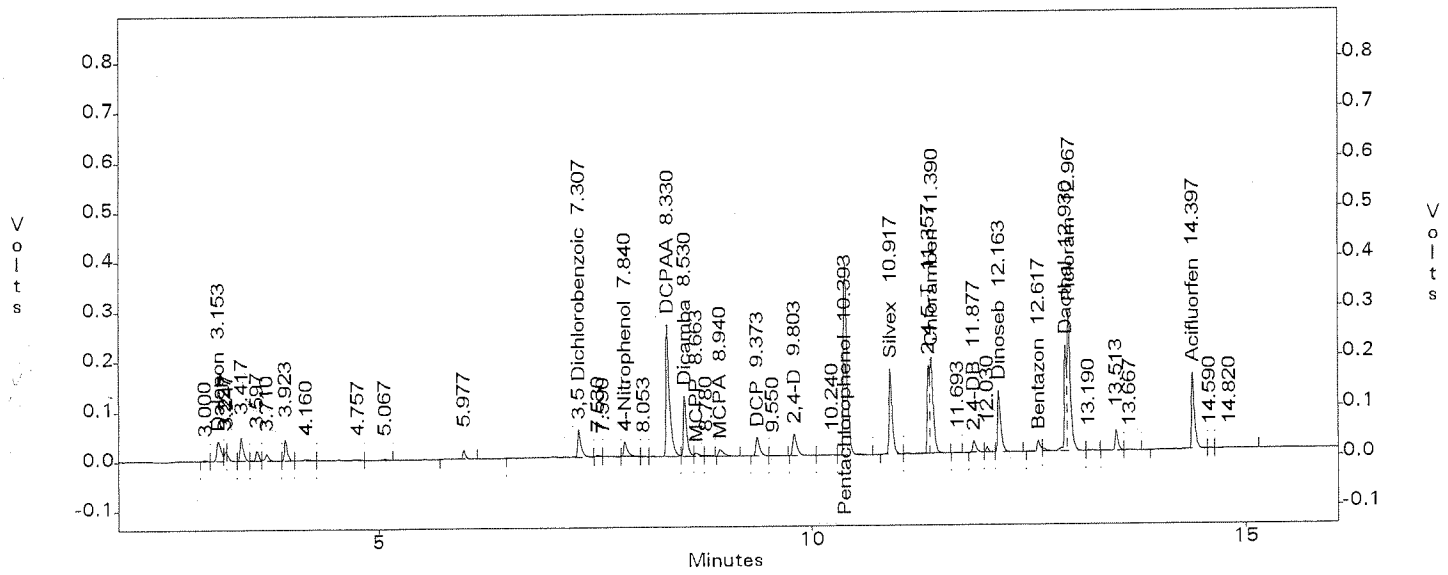
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.002
Method : c:\ezchrom\methods\he09i26.met
Sample ID : CHE09I2614
Acquired : Oct 02, 2012 16:30:07
Printed : Oct 03, 2012 13:09:36
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.153	134102.0	1309.41	102.41	hh
3,5 Dichlorobenzoic	7.307	178054.0	1476.64	120.58	vv
4-Nitrophenol	7.840	83975.0	827.10	101.53	xV
DCPAA	8.330	766082.0	797.39	960.74	VV
Dicamba	8.530	302954.0	3014.19	100.51	VS
MCPP	8.663	24168.0	5.21	4641.58	SV
MCPA	8.940	54969.0	11.43	4810.21	Vx
DCP	9.373	112556.0	1172.43	96.00	BV
2,4-D	9.803	138714.0	1426.08	97.27	VV
Pentachlorophenol	10.393	1134051.0	10952.56	103.54	VV
Silvex	10.917	435937.0	4257.76	102.39	vv
2,4,5-T	11.357	288281.0	2507.76	114.96	Vx
Chloramben	11.390	535871.0	5352.20	100.12	xV
2,4-DB	11.877	68745.0	717.52	95.81	BV
Dinoseb	12.163	313400.0	2744.69	114.18	VV
Bentazon	12.617	52910.0	526.04	100.58	VS
Dacthal	12.930	408055.0	3925.66	103.95	Sx
Picloram	12.967	741375.0	6563.67	112.95	xV
Acifluorfen	14.397	373251.0	2712.42	137.61	VV

c:\ezchrom\chrom\qj02\qj02.002 -- Channel B



CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: QI26006A 09/26/2012 13:43
Conc Cont LFID & Datetime: QJ02014A 10/02/2012 20:49
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
2,4-D	8.960	8.944	8.976	100.0	1617.8	157634	97.43	-3		20
2,4,5-TP(Silvex)	10.030	10.014	10.046	100.0	5970.7	622782	104.31	4		20
2,4,5-T	10.417	10.401	10.433	100.0	6271.4	625394	99.72	-0		20
Dinoseb	12.140	12.124	12.156	100.0	4843.7	400577	82.70	-17		20

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	7.773	7.757	7.789	1000.0	766.500	748916	977.08	-2		20

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
Mid Conc Init LFID & Datetime: QI26006B 09/26/2012 13:43
Conc Cont LFID & Datetime: QJ02014B 10/02/2012 20:49
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
2,4-D	9.780	9.766	9.794	100.0	1426.1	140970	98.85	-1		20
2,4,5-TP(Silvex)	10.900	10.886	10.914	100.0	4257.8	444670	104.44	4		20
2,4,5-T	11.340	11.324	11.356	100.0	2507.8	280831	111.99	12		20
Dinoseb	12.150	12.134	12.166	100.0	2744.7	281595	102.60	3		20

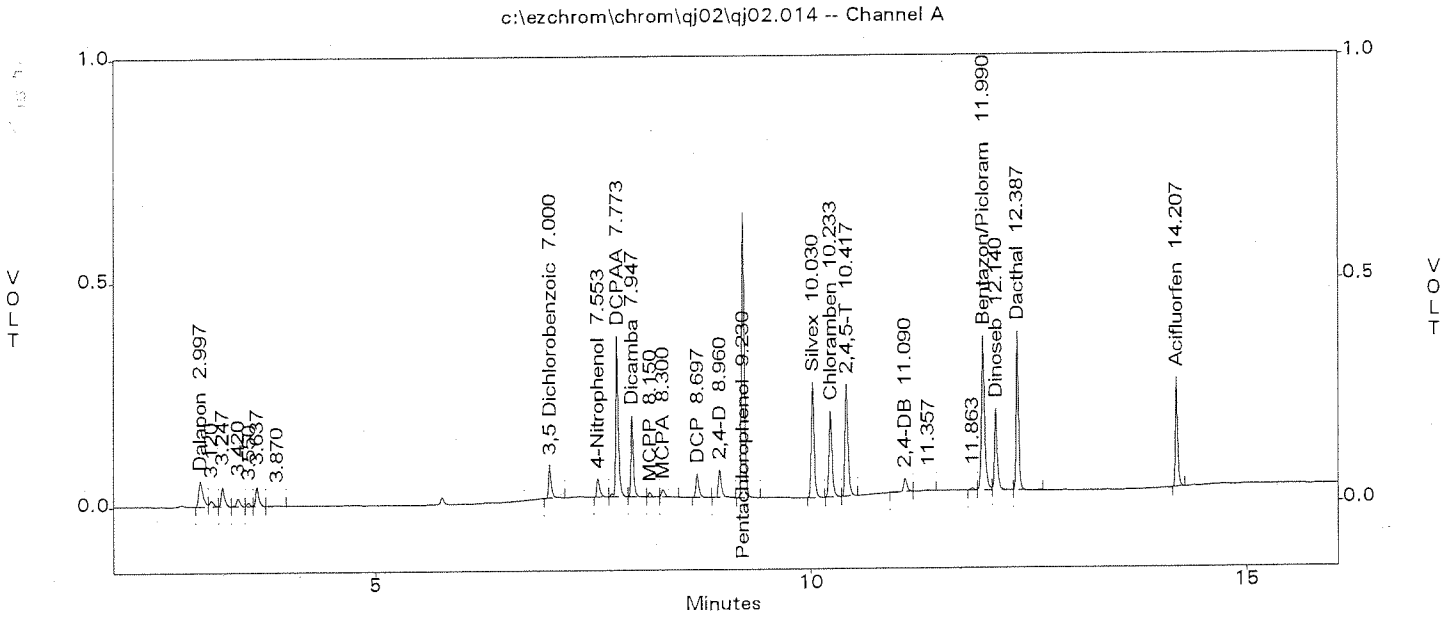
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	8.313	8.297	8.329	1000.0	797.400	782735	981.62	-2		20

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

File : c:\ezchrom\chrom\qj02\qj02.014
Method : c:\ezchrom\methods\he09i26.met
Sample ID : CHE09I2615
Acquired : Oct 02, 2012 20:49:57
Printed : Oct 04, 2012 13:51:28
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.997	189538.0	1873.07	101.19	BV
3,5 Dichlorobenzo	7.000	159957.0	1597.51	100.13	BV
4-Nitrophenol	7.553	99847.0	1033.35	96.62	BV
DCPAA	7.773	748916.0	766.49	977.08	VV
Dicamba	7.947	367454.0	3581.89	102.59	VV
MCPP	8.150	25867.0	4.25	6083.65	Vx
MCPA	8.300	44086.0	8.72	5055.52	VI
DCP	8.697	126262.0	1265.43	99.78	BV
2,4-D	8.960	157634.0	1617.85	97.43	VV
Pentachlorophenol	9.230	1430049.0	14795.63	96.65	VB
Silvex	10.030	622782.0	5970.67	104.31	BV
Chloramben	10.233	485172.0	4188.55	115.83	VV
2,4,5-T	10.417	625394.0	6271.40	99.72	VV
2,4-DB	11.090	89085.0	778.86	114.38	BV
Bentazon/Picloram	11.990	888656.0	3723.00	238.69	SV
Dinoseb	12.140	400577.0	4843.66	82.70	VV
Dacthal	12.387	692353.0	7080.86	97.78	VI
Acifluorfen	14.207	464612.0	4510.31	103.01	BV



5867

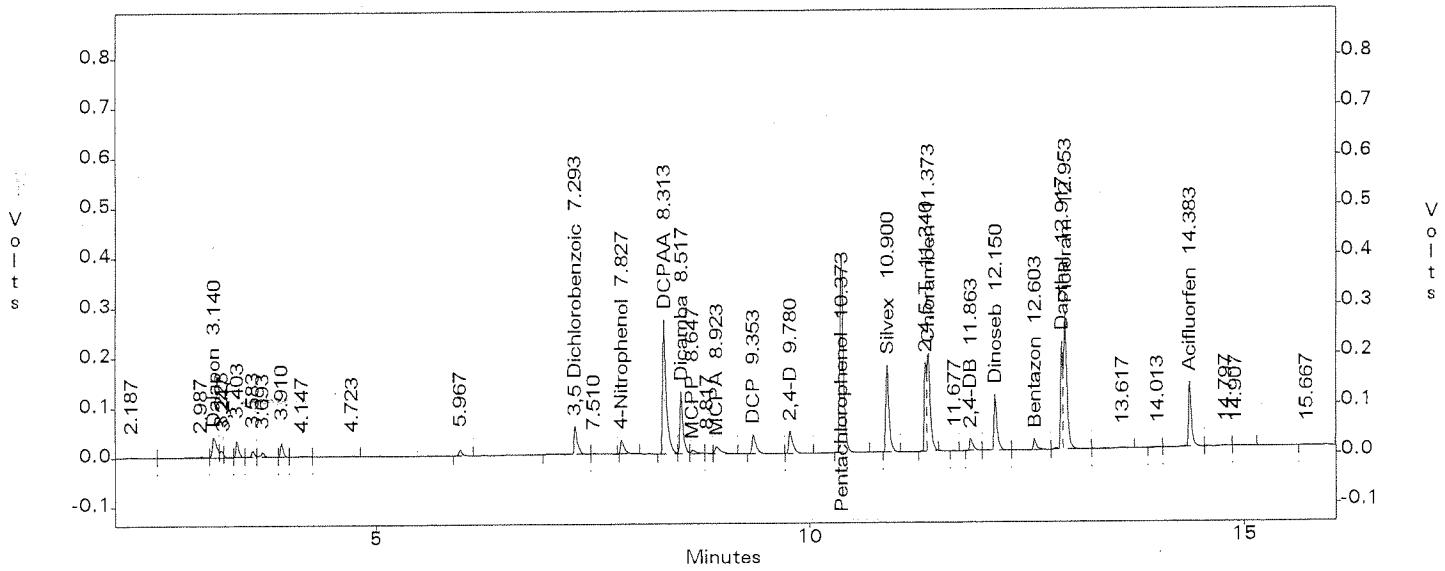
EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.014
Method : c:\ezchrom\methods\he09i26.met
Sample ID : CHE09I2615
Acquired : Oct 02, 2012 20:49:57
Printed : Oct 04, 2012 13:51:28
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.140	139041.0	1309.41	106.19	VS
3,5 Dichlorobenzoic	7.293	154502.0	1476.64	104.63	vv
4-Nitrophenol	7.827	79745.0	827.10	96.42	xB
DCPAA	8.313	782735.0	797.39	981.62	BV
Dicamba	8.517	308834.0	3014.19	102.46	VV
MCPP	8.647	26613.0	5.21	5111.16	VV
MCPA	8.923	56938.0	11.43	4982.51	xx
DCP	9.353	116967.0	1172.43	99.76	BV
2,4-D	9.780	140970.0	1426.08	98.85	VV
Pentachlorophenol	10.373	1148453.0	10952.56	104.86	VV
Silvex	10.900	444670.0	4257.76	104.44	vv
2,4,5-T	11.340	280831.0	2507.76	111.98	Bx
Chloramben	11.373	547669.0	5352.20	102.33	xI
2,4-DB	11.863	69295.0	717.52	96.58	BV
Dinoseb	12.150	281595.0	2744.69	102.60	VV
Bentazon	12.603	57781.0	526.04	109.84	VV
Dacthal	12.917	362929.0	3925.66	92.45	Vx
Picloram	12.953	742863.0	6563.67	113.18	xV
Acifluorfen	14.383	323531.0	2712.42	119.28	VV

c:\ezchrom\chrom\qj02\qj02.014 -- Channel B



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CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QA GCT09
GC Columm : STX-CLPEST
Column size ID : 30MX0.32MM 0.32UM
Mid Conc Init LFID & Datetime: QI26006A 09/26/2012 13:43
Conc Cont LFID & Datetime: QJ02025A 10/03/2012 00:48
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
2,4-D	8.957	8.941	8.973	100.0	1617.8	152252	94.11	-6		20
2,4,5-TP(Silvex)	10.027	10.011	10.043	100.0	5970.7	627531	105.10	5		20
2,4,5-T	10.417	10.401	10.433	100.0	6271.4	627080	99.99	-0		20
Dinoseb	12.140	12.124	12.156	100.0	4843.7	381166	78.69	-21	*	20

SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	7.773	7.757	7.789	1000.0	766.500	769765	1004.28	0		20

CONTINUE CALIBRATION
METHOD 8151

Lab Name : EMAX Inc
Instrument ID : GC-QB GCT09
GC Columm : STX-CLPESTII
Column size ID : 30MX0.32MM 0.25UM
Mid Conc Init LFID & Datetime: QI26006B 09/26/2012 13:43
Conc Cont LFID & Datetime: QJ02025B 10/03/2012 00:48
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
2,4-D	9.780	9.766	9.794	100.0	1426.1	132390	92.83	-7		20
2,4,5-TP(Silvex)	10.900	10.886	10.914	100.0	4257.8	433835	101.89	2		20
2,4,5-T	11.340	11.324	11.356	100.0	2507.8	273507	109.06	9		20
Dinoseb	12.150	12.134	12.166	100.0	2744.7	263724	96.08	-4		20

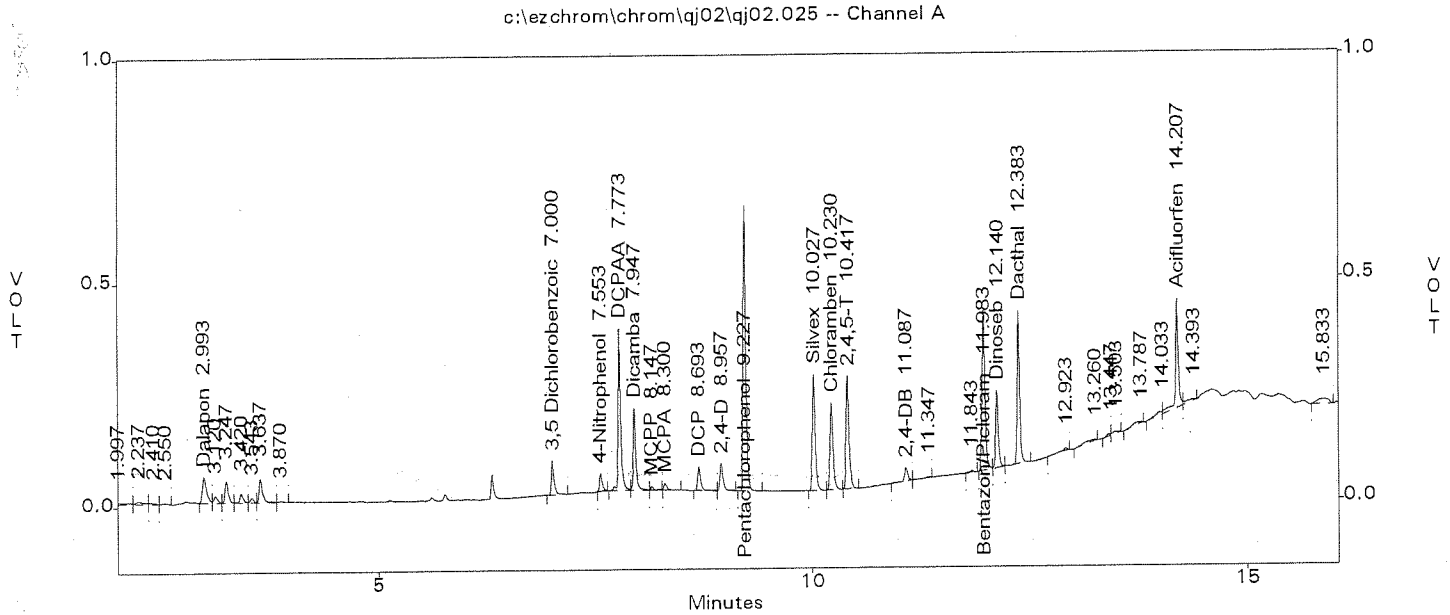
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
2,4-DCPAA	8.313	8.297	8.329	1000.0	797.400	766558	961.34	-4		20

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

File : c:\ezchrom\chrom\qj02\qj02.025
Method : c:\ezchrom\methods\he09i26.met
Sample ID : CHE09I2616
Acquired : Oct 03, 2012 00:48:38
Printed : Oct 11, 2012 09:38:36
User : Supakit

Channel A Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	2.993	180565.0	1873.07	96.40	BV
3,5 Dichlorobenzo	7.000	162141.0	1597.51	101.50	BV
4-Nitrophenol	7.553	88105.0	1033.35	85.26	BI
DCPAA	7.773	769765.0	766.49	1004.28	BV
Dicamba	7.947	391789.0	3581.89	109.38	VV
MCPP	8.147	20540.0	4.25	4830.79	Vx
MCPA	8.300	37239.0	8.72	4270.35	VI
DCP	8.693	121880.0	1265.43	96.32	BV
2,4-D	8.957	152252.0	1617.85	94.11	VV
Pentachlorophenol	9.227	1448852.0	14795.63	97.92	VV
Silvex	10.027	627531.0	5970.67	105.10	BV
Chloramben	10.230	495826.0	4188.55	118.38	VV
2,4,5-T	10.417	627080.0	6271.40	99.99	VV
2,4-DB	11.087	80490.0	778.86	103.34	BV
Bentazon/Picloram	11.983	877501.0	3723.00	235.70	SV
Dinoseb	12.140	381166.0	4843.66	78.69	VV
Dacthal	12.383	704590.0	7080.86	99.51	VV
Acifluorfen	14.207	572957.0	4510.31	127.03	SV

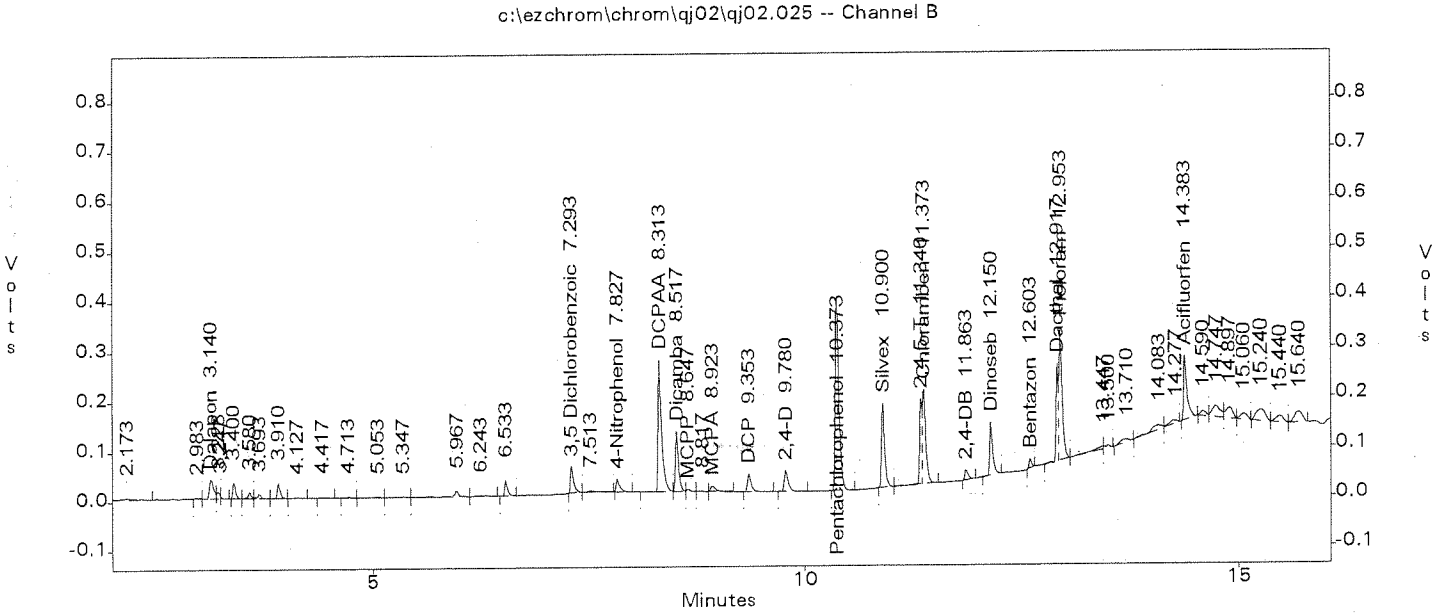


EPA 8151 by GC/ECD
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\qj02\qj02.025
Method : c:\ezchrom\methods\he09i26.met
Sample ID : CHE09I2616
Acquired : Oct 03, 2012 00:48:38
Printed : Oct 11, 2012 09:38:36
User : Supakit

Channel B Results

Peak Name	RT(min)	Area	Average RF	ESTD Conc(ppb)	ICODE
Dalapon	3.140	133973.0	1309.41	102.32	SS
3,5 Dichlorobenzoic	7.293	136173.0	1476.64	92.22	vv
4-Nitrophenol	7.827	69511.0	827.10	84.04	xV
DCPAA	8.313	766558.0	797.39	961.34	VV
Dicamba	8.517	301764.0	3014.19	100.11	VS
MCPP	8.647	14138.0	5.21	2715.27	SV
MCPA	8.923	46865.0	11.43	4101.05	xx
DCP	9.353	109104.0	1172.43	93.06	BV
2,4-D	9.780	132390.0	1426.08	92.83	VV
Pentachlorophenol	10.373	1126512.0	10952.56	102.85	VV
Silvex	10.900	433835.0	4257.76	101.89	vv
2,4,5-T	11.340	273507.0	2507.76	109.06	Vx
Chloramben	11.373	536059.0	5352.20	100.16	xV
2,4-DB	11.863	56293.0	717.52	78.45	BV
Dinoseb	12.150	263724.0	2744.69	96.09	VV
Bentazon	12.603	38650.0	526.04	73.47	BS
Dacthal	12.917	325091.0	3925.66	82.81	Bx
Picloram	12.953	692551.0	6563.67	105.51	xV
Acifluorfen	14.383	352869.0	2712.42	130.09	SI



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ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
PCB CONGENERS/HERBICIDES/EDB and DBCP

Note: For samples and relevant QC/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A09-015
Instrument No.:	09
Analytical Sequence:	QI2600-SD 9/26/12
Method File:	HE09I26
Analytical Batch:	QI26002

SOP #	Rev. #
☑ EMAX-8151	3
☐ EMAX-8082CON	0
☐ EMAX-504.1	3
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
HE09I26	QI26	9/26/12

STANDARDS ID	Conc (µg/L)
Hexane 91257	N.A
DCC 8151 SS4C-02-50-3	100/5,000/1,000
8151 ICAL SS4B-03-51-1	10 - 200
↓	500 - 10,000
↓	100 - 2,000
8151 ICV SS4B-03-51-2	100/10,000/1,000
↓	50/5,000/500

Column	☑ A. STX CLPEST I ☑ STX CLPEST II

ELECTRONIC DATA ARCHIVAL

Location	Date
☐ EZC6HERB	
☐	

Analyzed By: SD / [illegible] Date: 9/26/12

Disposed By: SD Date Disposed: 10/1/12

This page is checked during data review.

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Run	Sample ID	Method	Filename	Mult.	Description
1	IB09I2601	he09i26.met	QI26.001	1	
2	HE09I2601	he09i26.met	QI26.002	1	
3	HE09I2602	he09i26.met	QI26.003	1	
4	HE09I2603	he09i26.met	QI26.004	1	
5	HE09I2604	he09i26.met	QI26.005	1	
6	HE09I2605	he09i26.met	QI26.006	1	
7	HE09I2606	he09i26.met	QI26.007	1	
8	HE09I2607	he09i26.met	QI26.008	1	
9	HE09I2608	he09i26.met	QI26.009	1	
10	IHE09I2601	he09i26.met	QI26.010	1	
11	IHE09I2601	he09i26.met	QI26.011	1	
12	CHE09I2601	he09i26.met	QI26.012	1	
13	LOQ-04	he09i26.met	QI26.013	1	rerun for 2,4-DB
14	LOD-04	he09i26.met	QI26.014	1	rerun for 2,4-DB
15	HEI009WB	he09i26.met	QI26.015	1	
16	HEI009WL	he09i26.met	QI26.016	1	
17	HEI009WC	he09i26.met	QI26.017	1	
18	I128-01	he09i26.met	QI26.018	1	
19	I128-02	he09i26.met	QI26.019	1	
20	I128-03	he09i26.met	QI26.020	1	
21	I128-05	he09i26.met	QI26.021	1	
22	I128-05M	he09i26.met	QI26.022	1	
23	IB09I2602	he09i26.met	QI26.023	1	
24	CHE09I2602	he09i26.met	QI26.024	1	
25	I128-05S	he09i26.met	QI26.025	1	

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
PCB CONGENERS/HERBICIDES/EDB and DBCP

Note: For samples and relevant QC/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A09-015
Instrument No.: 09
Analytical Sequence: QJ02
Method File: HE09I26
Analytical Batch: QJ02002

SOP #	Rev. #
☑ EMAX-8151	3
☐ EMAX-8082CON	0
☐ EMAX-504.1	3
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
HE09I26	QI26	9/26/12

STANDARDS ID	Conc (µg/L)
Hexane 51257	N.A.
DCC 8151 SS4C-02-50-3	100/5000/1000.

Column	☑ A. STX CLPEST I ☑ STX CLPEST II

ELECTRONIC DATA ARCHIVAL

Location	Date
☐ EZC6HERB	
☐	

Analyzed By: SD Date: 10/02/12
Disposed By: SD Date Disposed: 10/03/12

This page is checked during data review.

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Run	Sample ID	Method	Filename	Mult.	Description
1	IB09I2614	he09i26.met	QJ02.001	1	
2	CHE09I2614	he09i26.met	QJ02.002	1	
3	HEJ001WB	he09i26.met	QJ02.003	1	
4	HEJ001WL	he09i26.met	QJ02.004	1	
5	HEJ001WC	he09i26.met	QJ02.005	1	
6	HEI007WQ	he09i26.met	QJ02.006	1	
7	HEI007WX	he09i26.met	QJ02.007	1	
8	HEI007WY	he09i26.met	QJ02.008	1	
9	I219-03M	he09i26.met	QJ02.009	1	
10	I219-03S	he09i26.met	QJ02.010	1	
11	I219-03	he09i26.met	QJ02.011	1	
12	I219-01	he09i26.met	QJ02.012	1	
13	IB09I2615	he09i26.met	QJ02.013	1	
14	CHE09I2615	he09i26.met	QJ02.014	1	
15	I219-02	he09i26.met	QJ02.015	1	
16	I219-04	he09i26.met	QJ02.016	1	
17	I219-05	he09i26.met	QJ02.017	1	
18	I219-06	he09i26.met	QJ02.018	1	
19	I219-07	he09i26.met	QJ02.019	1	
20	I221-03	he09i26.met	QJ02.020	1	
21	I221-04	he09i26.met	QJ02.021	1	
22	I261-01	he09i26.met	QJ02.022	1	
23	I262-01	he09i26.met	QJ02.023	1	
24	IB09I2616	he09i26.met	QJ02.024	1	

Run	Sample ID	Method	Filename	Mult.	Description
25	CHE09I2616	he09i26.met	QJ02.025	1	Channel A-Dinoseb low,
26	I221-01	he09i26.met	QJ02.026	1	
27	RINSE	he09i26.met	QJ02.027	1	
28	RINSE	he09i26.met	QJ02.028	1	
29	IB09I2617	he09i26.met	QJ02.029	1	
30	CHE09I2617	he09i26.met	QJ02.030	1	
31	IB	he09i26.met	QJ02.031	1	
32	IB	he09i26.met	QJ02.032	1	
33	IB	he09i26.met	QJ02.033	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-016
Preparation Batch: HEJ001W
Matrix: WATER
Micropipette ID: PE00-04 (1000 mL)
Micropipette ID:

Standards	ID	Amount Added (ml)
Surrogate	SS4B-02-50-2	1.0
LCS/MS	SS4B-02-50-3	0.25

Reagent	Lot # / ID
CH_2Cl_2	—
Hexane	51257
Ethyl Ether	DC659
Acified Na_2SO_4	SP1B-04-262
H_2SO_4	3111070
KOH	—
Diazo-methane	SP1B-04-274
Methanol	51145
Iso Octane	SP1A-03-035
Silica Sand	—
Silicic Acid	SP1A-03-041
Reagent Water	SW1A-04-547
Residual Chlorine Strip	20221
pH strips	TUNING HC248798

Sonicator #	Reading
	N/A
	↓

Lab Sample ID	Sonicator #	Concentrator #
HEJ001-WB	N/A	1
-WL		1
-WC		1
I219-01		2
-02		2
-03		2
-03M		2
-03S		2
-04		2
-05		3
-06		3
-07		3
I221-01		4
-03		4
-04		4
I261-01		4
I262-01		4

Concentrator	Water Bath Temperature Setting(°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3	35	35
4	35	35
5		
6		

Test Thermometer = SVOC-T_1

Prepared By: ML/CS
Standard Added By: ML
Witnessed By: CS
Checked By: JM
Extract Received By: [illegible]
Extract Location: SE04-8151-04
Disposal Date:
Disposed By:

FileID: HEJ001W

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR HERBICIDES

PrepBatchID	LabSampleID	Aliquot	Unit	DateTime	Ve(ml)	ExpAmt	ExpVe(ml)	PrepFctr	Comments
12HEJ001W01	HEJ001WB	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W02	HEJ001WL	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W03	HEJ001WC	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W04	I219-01	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W05	I219-02	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W06	I219-03	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W07	I219-03M	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W08	I219-03S	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W09	I219-04	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W10	I219-05	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W11	I219-06	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W12	I219-07	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W13	I221-01	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W14	I221-03	500	ml	10/1/12 9:56	5	500	5	1	Cl = 5ppm ✓
12HEJ001W15	I221-04	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W16	I261-01	500	ml	10/1/12 9:56	5	500	5	1	
12HEJ001W17	I262-01	500	ml	10/1/12 9:56	5	500	5	1	
									Note: Cl not detected in other samples

Ve=extract volume

PrepFctr=(ExpAmt/Aliquot)(Ve/ExpVe)

☑ Extraction Started @ 10/1/12 9:56

Prepared By: ML

☑ Extraction Ended @ 10/1/12 16:19

Checked By: JM

Comments:

Date 10/1/12

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