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CLIENT: **ENSR**

PROJECT: **UPGRADIENT INVESTIGATION, TRONOX**

SDG: **06C096**

** - Not Requested

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

Date: 04-05-2006
EMAX Batch No.: 06C096

Attn: Linda Geddes

MWH
750 Royal Oaks Dr, Suite 100
Monrovia CA 91016-3629

Subject: Laboratory Report
Project: Upgradient Investigation, Tronox

Enclosed is the Laboratory report for samples received on 03/10/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
EB-1	C096-01	03/09/06	WATER	VOLATILE ORGANICS BY GC/MS
				GASOLINE RANGE ORGANICS
				DIESEL RANGE ORGANICS
				MOTOR OIL
				METHANOL & ETHANOL
				ETHYLENE GLYCOL

The results are summarized on the following pages.

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

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

J1/VW1-01

ENSR INTERNATIONAL

ENSR International
1220 Avenida Acaso
Camarillo, CA 93012-8738
Phone (805) 388-3775
Fax (805) 388-3577

ANALYTICAL LAB: EMAX Laboratories, Inc.
Attn: Ye Myint (310) 618-8889 x121
1835 West 205th Street
Torrance, CA 90501 SITE Henderson DATE 3/9/06 PAGE 1 OF 1

06C096

CLIENT Tronox LLC
PROJECT NAME: Upgradient Investigation
PROJECT MANAGER: D. Gerry
JOB #: 04020-023-150
COELT LOG CODE: YES / NO
SAMPLER SIGNATURE Brian Ho
Brian Ho

LINE ITEM	SAMPLE NO.	DATE	TIME	8260B / 5035 Volatile Organics	8260B BTEX / MTBE / Oxygenates	8015 Diesel / Gasoline / Full Range	8081A Pesticides	CAM 17 Metals	Perchlorate 314.0	Fuel Alcohols 8015B	Hex Chromium 7199	Wet Chem	Radionuclides	Methyl Hg 1630	PCBs 8082	OPPs 8141	% Moisture Content	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	OBSERVATIONS/ COMMENTS
1.	EB-1	3/9/06	14:00	X		X				X								W	G	12	
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

TURN-AROUND TIME: Standard

MATRIX TYPE: S - Soil, W - Water, O - Other
CONTAINER TYPE: G - Glass Bottle, P - Plastic, O - Other

PRESERVATIVES:
All samples are preserved on ice.
Water samples are preserved as indicated on the sample labels.

TEMPERATURE BLANK EACH COOLER: [X] YES [ ] NO

RELINQUISHED BY: Brian Ho	SIGNATURE Brian Ho	ENSR International	DATE 3/9/06	TIME 16:30	TOTAL NUMBER OF CONTAINERS:	
RECEIVED BY: Fed Ex #:	SIGNATURE 8555 1006 0	COMPANY 969	DATE 3/9/06	TIME 16:30	METHOD OF SHIPMENT Federal Express	
RELINQUISHED BY:	SIGNATURE	COMPANY	DATE	TIME	SPECIAL SHIMENT/HANDLING/STORAGE REQUIREMENTS:	
RECEIVED BY	SIGNATURE	COMPANY EMAX	DATE 3-10-06	TIME 9:15	T = 3.5 C	

DISTRIBUTION: White and Canary = Laboratory Pink = ENSR International

Serial No. 5133

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill		
☐ EMAX Courier		ECN	061096
☐ Client Delivery		Recepient	I-PATEL
☐ Third Party FEDEX	8555 1006 0969	Date	3-10-06
		Time	0915

COC Inspection

☑ Client Name	☑ Sampler Name	☑ Sampling Date/Time/Location
☑ Address	☐ Courier Signature/Date/Time	☑ Analysis Required
☑ Client PM/FC	☑ TAT	☑ Matrix
☑ Tel #/Fax #	☑ Sample ID	☐ Preservative (if any)
Safety Issues: ☑ None	☐ High Concentrations expected	☐ Superfund Site Samples
Comments: ☐ Rad Screening Required		

Packaging Inspection

Container	☑ Cooler	☐ Box	☐	☐
Condition	☐ Custody Seal	☐ Intact	☐ Damaged	☐
Packaging	☑ Bubble Pack	☐ Styrofoam	☑ Sufficient	☑ plastic bag
Temperatures	☑ Cooler 1 3.5°	☑ Cooler 2 ____	☐ Cooler 3 ____	☐ Cooler 4 ____
	☐ Cooler 5 ____	☐ Cooler 6 ____	☐ Cooler 7 ____	☐ Cooler 8 ____
	☐ Cooler 9 ____	☐ Cooler 10 ____	☐ Cooler 11 ____	☐ Cooler 12 ____

Comments:

LSCID	Client ID	Discrepancy	Corrective Action

LSCID : Lab Sample Container ID

REVIEWS

Sample Labeling _____
Date 3/10/06

SRF _____
Date 3/10/06

PM _____
Date 3/13/06

FedEx. US Airbill
Express

FedEx Tracking Number 8555 1006 0969

Form ID No. 0200

Recipient's Copy

1 From

Date 3/9/06

Sender's Name Brian Ho Phone 805 795-3334

06C096

Company ENSR

3-10-06 9:15M

Address 1220 Avenida Acaso

Dept./Floor/Suite/Room

City Camarillo State CA ZIP 93012

2 Your Internal Billing Reference 04020-023-150

3 To

Recipient's Name Ye Myint Phone 310 618-8809

Company EMAX Laboratories, Inc

Recipient's Address 1835 West 205th Street

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City Torrance State CA ZIP 90501

8555 1006 0969

4a Express Package Service — *Packages up to 150 lbs.*

- [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

*To most locations.

4b Express Freight Service — *Packages over 150 lbs.*

- [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

*Call for Confirmation:

**To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [X] Other

*Declared value limit $500.

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* — Enter FedEx Acct. No. or Credit Card No. below.

- [X] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Obtain Recip. Acct. No.
- [X] Cash/Check

Total Packages	Total Weight	Total Declared Value†	Total Charges
1	24	$ 300 .00	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

520

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

ENSR

UPGRADIENT INVESTIGATION, TRONOX

METHOD SW5030B/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 06C096

CASE NARRATIVE

CLIENT: **ENSR**

PROJECT: **UPGRADIENT INVESTIGATION, TRONOX**

SDG: **06C096**

METHOD SW5030B/8260B
VOLATILE ORGANICS BY GC/MS

One (1) water sample was received on 03/10/06 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blank was free of contamination at the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   No MS/MSD sample was designated in this SDG.

7. **Sample Analysis**

   Sample was analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : ENSR
Project : UPGRADIENT INVESTIGATION, TRONOX

SDG NO. : 06C096
Instrument ID : T-003

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V003C20B	1	NA	03/16/0603:23	03/16/0603:23	RCB251	RBB058	V003C20	Method Blank
LCS1W	V003C20L	1	NA	03/16/0600:54	03/16/0600:54	RCB247	RBB058	V003C20	Lab Control Sample (LCS)
LCD1W	V003C20C	1	NA	03/16/0601:31	03/16/0601:31	RCB248	RBB058	V003C20	LCS Duplicate
EB-1	C096-01	1	NA	03/16/0605:15	03/16/0605:15	RCB254	RBB058	V003C20	Field Sample

FN - Filename
% Moist - Percent Moisture

ENSR

SAMPLE RESULTS

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

Client	: ENSR	Date Collected:	03/09/06
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/10/06
Batch No.	: 06C096	Date Extracted:	03/16/06 05:15
Sample ID:	EB-1	Date Analyzed:	03/16/06 05:15
Lab Samp ID:	C096-01	Dilution Factor:	1
Lab File ID:	RCB254	Matrix	: WATER
Ext.Btch ID:	V003C20	% Moisture	: NA
Calib. Ref.:	RBB058	Instrument ID	: T-003

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	5	1
1,1,1-TRICHLOROETHANE	ND	5	1
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,2-TRICHLOROETHANE	ND	5	1
1,1-DICHLOROETHANE	ND	5	1
1,1-DICHLOROETHENE	ND	5	1
1,1-DICHLOROPROPENE	ND	5	1
1,2,3-TRICHLOROBENZENE	ND	5	1
1,2,3-TRICHLOROPROPANE	ND	5	1
1,2,4-TRICHLOROBENZENE	ND	5	1
1,2,4-TRIMETHYLBENZENE	ND	5	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	5	1
1,2-DICHLOROBENZENE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPANE	ND	5	1
1,2-DIBROMOETHANE	ND	5	1
1,3,5-TRIMETHYLBENZENE	ND	5	1
1,3-DICHLOROBENZENE	ND	5	1
1,3-DICHLOROPROPANE	ND	5	1
1,4-DICHLOROBENZENE	ND	5	1
1-CHLOROHEXANE	ND	5	1
2,2-DICHLOROPROPANE	ND	5	1
2-CHLOROTOLUENE	ND	5	1
4-CHLOROTOLUENE	ND	5	1
BENZENE	ND	5	1
BROMOBENZENE	ND	5	1
BROMOCHLOROMETHANE	ND	5	1
BROMODICHLOROMETHANE	ND	5	1
BROMOFORM	ND	5	1
BROMOMETHANE	ND	10	1
CARBON TETRACHLORIDE	ND	5	1
CHLOROBENZENE	ND	5	1
CHLOROETHANE	ND	5	1
CHLOROFORM	ND	5	1
CHLOROMETHANE	ND	5	1
CIS-1,2-DICHLOROETHENE	ND	5	1
CIS-1,3-DICHLOROPROPENE	ND	5	1
DIBROMOCHLOROMETHANE	ND	5	1
DIBROMOMETHANE	ND	5	1
DICHLORODIFLUOROMETHANE	ND	5	1
ETHYLBENZENE	ND	5	1
HEXACHLOROBUTADIENE	ND	10	1
ISOPROPYL BENZENE	ND	5	1
XYLENES	ND	10	2
METHYLENE CHLORIDE	ND	10	1
N-BUTYLBENZENE	ND	5	1
N-PROPYLBENZENE	ND	5	1
NAPHTHALENE	ND	5	1
P-ISOPROPYLTOLUENE	ND	5	1
SEC-BUTYLBENZENE	ND	5	1
STYRENE	ND	5	1
TERT-BUTYLBENZENE	ND	5	1
TETRACHLOROETHYLENE	ND	5	1
TOLUENE	ND	5	1
TRANS-1,2-DICHLOROETHENE	ND	5	1
TRANS-1,3-DICHLOROPROPENE	ND	5	1
TRICHLOROETHENE	ND	5	1
TRICHLOROFLUOROMETHANE	ND	5	1
VINYL CHLORIDE	ND	5	1
ACETONE	6.3J	10	5
2-BUTANONE	ND	10	5
MTBE	ND	5	1
4-METHYL-2-PENTANONE	ND	10	5
DIPE	ND	5	1
ETBE	ND	5	1
TAME	ND	5	1
TERT-BUTANOL	ND	50	10
2-HEXANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	70-140
4-BROMOFLUOROBENZENE	105	70-130
TOLUENE-D8	99	70-140

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB254.D Vial: 13
Acq On : 16 Mar 2006 5:15 am Operator: CGM
Sample : 06C096-01 5.0mL Inst : TO03
Misc : DF=1.0 EB Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 11:54 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.14	114	2360788	50.00	ug/l	-0.02
37) CHLOROBENZENE-D5	17.05	117	2341639	50.00	ug/l	-0.02
67) 1,2-DICHLOROBENZENE-D4	24.30	152	1188024	50.00	ug/l	-0.02
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.53	65	1285343	52.86	ug/l	-0.02
Spiked Amount 50.000			Recovery =	105.72%		
50) Toluene-d8	13.87	98	2634534	49.74	ug/l	-0.02
Spiked Amount 50.000			Recovery =	99.48%		
71) 4-Bromofluorobenzene	20.07	95	1410508	52.56	ug/l	-0.03
Spiked Amount 50.000			Recovery =	105.12%		
Target Compounds						Qvalue
11) Acetone	6.10	43	45786	6.27	ug/l	98

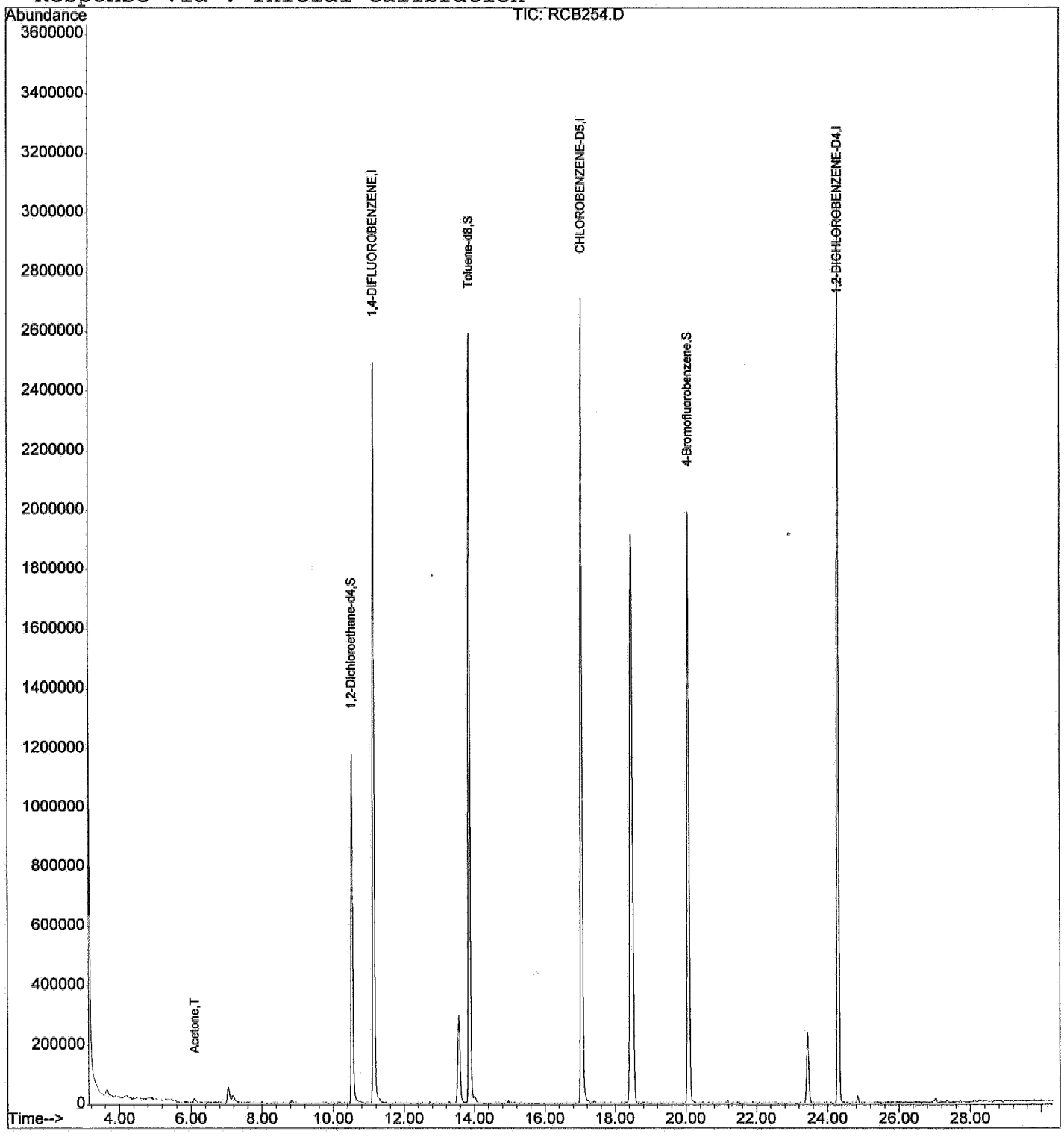
(#) = qualifier out of range (m) = manual integration

2005

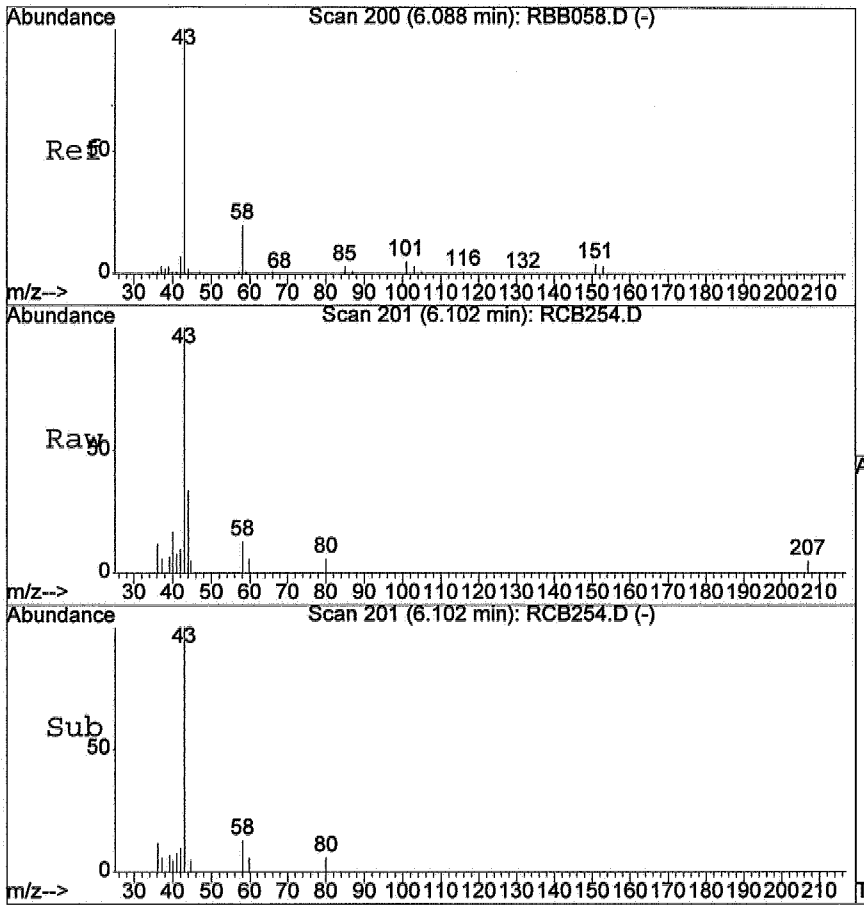
Quantitation Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB254.D Vial: 13
Acq On : 16 Mar 2006 5:15 am Operator: CGM
Sample : 06C096-01 5.0mL Inst : TO03
Misc : DF=1.0 EB Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 11:54 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



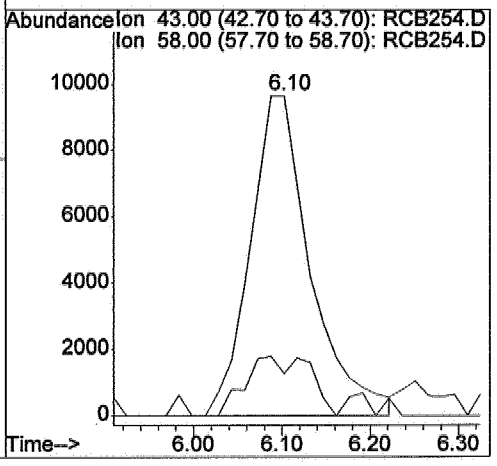
2006



#11
Acetone
Concen: 6.27 ug/l
RT: 6.10 min Scan# 201
Delta R.T. 0.01 min
Lab File: RCB254.D
Acq: 16 Mar 2006 5:15 am

Tgt Ion: 43 Resp: 45786

Ion	Ratio	Lower	Upper
43	100		
58	20.0	0.0	50.9



QC SUMMARIES

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

Client	: ENSR	Date Collected	: NA
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received	: 03/16/06
Batch No.	: 06C096	Date Extracted	: 03/16/06 03:23
Sample ID	: MBLK1W	Date Analyzed	: 03/16/06 03:23
Lab Samp ID	: V003C20B	Dilution Factor	: 1
Lab File ID	: RCB251	Matrix	: WATER
Ext Btch ID	: V003C20	% Moisture	: NA
Calib. Ref.	: RBB058	Instrument ID	: T-003

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	5	1
1,1,1-TRICHLOROETHANE	ND	5	1
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,2-TRICHLOROETHANE	ND	5	1
1,1-DICHLOROETHANE	ND	5	1
1,1-DICHLOROETHENE	ND	5	1
1,1-DICHLOROPROPENE	ND	5	1
1,2,3-TRICHLOROBENZENE	ND	5	1
1,2,3-TRICHLOROPROPANE	ND	5	1
1,2,4-TRICHLOROBENZENE	ND	5	1
1,2,4-TRIMETHYLBENZENE	ND	5	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	5	1
1,2-DICHLOROBENZENE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPANE	ND	5	1
1,2-DIBROMOETHANE	ND	5	1
1,3,5-TRIMETHYLBENZENE	ND	5	1
1,3-DICHLOROBENZENE	ND	5	1
1,3-DICHLOROPROPANE	ND	5	1
1,4-DICHLOROBENZENE	ND	5	1
1-CHLOROHEXANE	ND	5	1
2,2-DICHLOROPROPANE	ND	5	1
2-CHLOROTOLUENE	ND	5	1
4-CHLOROTOLUENE	ND	5	1
BENZENE	ND	5	1
BROMOBENZENE	ND	5	1
BROMOCHLOROMETHANE	ND	5	1
BROMODICHLOROMETHANE	ND	5	1
BROMOFORM	ND	5	1
BROMOMETHANE	ND	10	1
CARBON TETRACHLORIDE	ND	5	1
CHLOROBENZENE	ND	5	1
CHLOROETHANE	ND	5	1
CHLOROFORM	ND	5	1
CHLOROMETHANE	ND	5	1
CIS-1,2-DICHLOROETHENE	ND	5	1
CIS-1,3-DICHLOROPROPENE	ND	5	1
DIBROMOCHLOROMETHANE	ND	5	1
DIBROMOMETHANE	ND	5	1
DICHLORODIFLUOROMETHANE	ND	5	1
ETHYLBENZENE	ND	5	1
HEXACHLOROBUTADIENE	ND	10	1
ISOPROPYL BENZENE	ND	5	1
XYLENES	ND	10	2
METHYLENE CHLORIDE	ND	10	1
N-BUTYLBENZENE	ND	5	1
N-PROPYLBENZENE	ND	5	1
NAPHTHALENE	ND	5	1
P-ISOPROPYLTOLUENE	ND	5	1
SEC-BUTYLBENZENE	ND	5	1
STYRENE	ND	5	1
TERT-BUTYLBENZENE	ND	5	1
TETRACHLOROETHYLENE	ND	5	1
TOLUENE	ND	5	1
TRANS-1,2-DICHLOROETHENE	ND	5	1
TRANS-1,3-DICHLOROPROPENE	ND	5	1
TRICHLOROETHENE	ND	5	1
TRICHLOROFLUOROMETHANE	ND	5	1
VINYL CHLORIDE	ND	5	1
ACETONE	ND	10	5
2-BUTANONE	ND	10	5
MTBE	ND	5	1
4-METHYL-2-PENTANONE	ND	10	5
DIPE	ND	5	1
ETBE	ND	5	1
TAME	ND	5	1
TERT-BUTANOL	ND	50	10
2-HEXANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	70-140
4-BROMOFLUOROBENZENE	100	70-130
TOLUENE-D8	107	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ENSR
PROJECT: UPGRADIENT INVESTIGATION, TRONOX
BATCH NO.: 06C096
METHOD: SW 5030B/8260B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: V003C20B V003C20L V003C20C
LAB FILE ID: RCB251 RCB247 RCB248
DATE EXTRACTED: 03/16/0603:23 03/16/0600:54 03/16/0601:31 DATE COLLECTED: NA
DATE ANALYZED: 03/16/0603:23 03/16/0600:54 03/16/0601:31 DATE RECEIVED: 03/16/06
PREP. BATCH: V003C20 V003C20 V003C20
CALIB. REF: RBB058 RBB058 RBB058

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	20	20.9	105	20	20.2	101	3	70-130	30
1,1,1-Trichloroethane	ND	20	19.4	97	20	19.7	98	1	70-130	30
1,1,2,2-Tetrachloroethane	ND	20	19.8	99	20	18.2	91	8	70-130	30
1,1,2-Trichloroethane	ND	20	19.5	97	20	19.2	96	1	70-130	30
1,1-Dichloroethane	ND	20	20.1	100	20	20.1	100	0	70-130	30
1,1-Dichloroethene	ND	20	16.7	83	20	16.8	84	1	60-130	30
1,1-Dichloropropene	ND	20	17.6	88	20	17.4	87	1	70-140	30
1,2,3-Trichlorobenzene	ND	20	18.5	92	20	19.4	97	5	60-130	30
1,2,3-Trichloropropane	ND	20	19.8	99	20	18.3	92	8	70-140	30
1,2,4-Trichlorobenzene	ND	20	18.5	93	20	19.3	96	4	60-140	30
1,2,4-Trimethylbenzene	ND	20	19.7	99	20	19.7	98	0	70-130	30
1,2-Dibromo-3-chloropropane	ND	20	17	85	20	16.3	82	4	60-130	30
1,2-Dichlorobenzene	ND	20	19.6	98	20	19.4	97	1	70-130	30
1,2-Dichloroethane	ND	20	18.5	93	20	18.2	91	2	70-130	30
1,2-Dichloropropane	ND	20	18.7	93	20	18.9	94	1	70-130	30
1,2-Dibromoethane	ND	20	20	100	20	19	95	5	70-140	30
1,3,5-Trimethylbenzene	ND	20	20.3	101	20	20.4	102	0	70-130	30
1,3-Dichlorobenzene	ND	20	19.6	98	20	19.2	96	2	70-130	30
1,3-Dichloropropane	ND	20	19.8	99	20	19.4	97	2	70-130	30
1,4-Dichlorobenzene	ND	20	19.1	95	20	19	95	0	70-130	30
1-Chlorohexane	ND	20	20.2	101	20	20.1	101	0	70-130	30
2,2-Dichloropropane	ND	20	20	100	20	20.3	102	2	50-140	30
2-Chlorotoluene	ND	20	18.6	93	20	18.4	92	1	70-130	30
4-Chlorotoluene	ND	20	19.6	98	20	19.6	98	0	70-130	30
Benzene	ND	20	18.5	93	20	18.6	93	1	70-130	30
Bromobenzene	ND	20	20.3	101	20	20	100	1	70-130	30
Bromochloromethane	ND	20	17.8	89	20	18	90	1	70-130	30
Bromodichloromethane	ND	20	17.7	88	20	17.8	89	1	70-130	30
Bromoform	ND	20	17.3	86	20	16.4	82	5	60-140	30
Bromomethane	ND	20	18.4	92	20	17.6	88	4	50-140	30
Carbon Tetrachloride	ND	20	18.1	90	20	17.6	88	2	70-130	30
Chlorobenzene	ND	20	20	100	20	19.8	99	1	70-130	30
Chloroethane	ND	20	22.2	111	20	22.1	111	0	70-140	30
Chloroform	ND	20	19.9	100	20	20.5	102	3	70-130	30
Chloromethane	ND	20	18.2	91	20	19.5	98	7	60-130	30
cis-1,2-Dichloroethene	ND	20	19.5	97	20	19.6	98	0	70-130	30
cis-1,3-Dichloropropene	ND	20	18	90	20	18.2	91	1	70-130	30
Dibromochloromethane	ND	20	18.1	91	20	18	90	1	70-130	30
Dibromomethane	ND	20	19	95	20	18.4	92	3	70-140	30
Dichlorodifluoromethane	ND	20	17.9	90	20	17.8	89	1	50-140	30
Ethylbenzene	ND	20	20.2	101	20	20.1	101	0	70-130	30
Hexachlorobutadiene	ND	20	18.5	93	20	18.7	94	1	60-140	30
Isopropyl Benzene	ND	20	22.6	113	20	22.5	112	0	70-150	30
Xylenes	ND	60	61.4	102	60	61.4	102	0	70-130	30
Methylene Chloride	ND	20	18.6	93	20	18.5	93	1	70-130	30
n-Butylbenzene	ND	20	19.2	96	20	19.6	98	2	60-140	30
n-Propylbenzene	ND	20	20.2	101	20	20	100	1	70-130	30
Naphthalene	ND	20	19	95	20	18.6	93	2	50-140	30
p-Isopropyltoluene	ND	20	21.2	106	20	20.9	105	1	70-140	30
Sec-Butylbenzene	ND	20	19.3	96	20	19.1	95	1	70-130	30
Styrene	ND	20	18.8	94	20	19.1	95	1	70-130	30
Tert-Butylbenzene	ND	20	20.4	102	20	20.4	102	0	70-130	30
Tetrachloroethylene	ND	20	19.2	96	20	19.3	96	0	70-130	30
Toluene	ND	20	19.7	98	20	20.2	101	3	70-130	30
Trans-1,2-Dichloroethene	ND	20	18.8	94	20	18.8	94	0	70-130	30
Trans-1,3-Dichloropropene	ND	20	19.3	96	20	19.1	96	1	70-140	30
Trichloroethene	ND	20	18.2	91	20	18.6	93	2	70-130	30
Trichlorofluoromethane	ND	20	22.3	111	20	21.5	107	4	70-140	30
Vinyl Chloride	ND	20	18.1	91	20	18.1	91	0	60-150	30
Acetone	ND	80	83.4	104	80	73.5	92	13	50-150	30
2-Butanone	ND	80	85.3	107	80	75.9	95	12	60-140	30
MTBE	ND	20	20.9	105	20	19.5	98	7	70-140	30
4-Methyl-2-Pentanone	ND	80	84.5	106	80	78.5	98	7	60-140	30
DIPE	ND	20	21.4	107	20	21.1	105	2	70-140	30
ETBE	ND	20	22	110	20	21.7	108	2	60-140	30
TAME	ND	20	21.7	109	20	21.1	106	3	60-140	30
tert-Butanol	ND	100	118	118	100	104	104	12	60-150	30
2-Hexanone	ND	80	85.1	106	80	76.6	96	11	70-140	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	50	53.3	107	50	51.8	104	70-140
4-Bromofluorobenzene	50	53.5	107	50	54.3	109	70-130
Toluene-d8	50	51.7	103	50	53.2	106	70-130

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB251.D Vial: 10
Acq On : 16 Mar 2006 3:23 am Operator: CGM
Sample : VO03C20B 5.0mL Inst : TO03
Misc : DF=1.0 MB Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 11:43 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.14	114	2618264	50.00	ug/l	-0.02
37) CHLOROBENZENE-D5	17.05	117	2405505	50.00	ug/l	-0.02
67) 1,2-DICHLOROBENZENE-D4	24.31	152	1285395	50.00	ug/l	-0.02
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.53	65	1408623	52.23	ug/l	-0.02
Spiked Amount 50.000			Recovery =	104.46%		
50) Toluene-d8	13.87	98	2911131	53.50	ug/l	-0.02
Spiked Amount 50.000			Recovery =	107.00%		
71) 4-Bromofluorobenzene	20.07	95	1446103	49.80	ug/l	-0.03
Spiked Amount 50.000			Recovery =	99.60%		

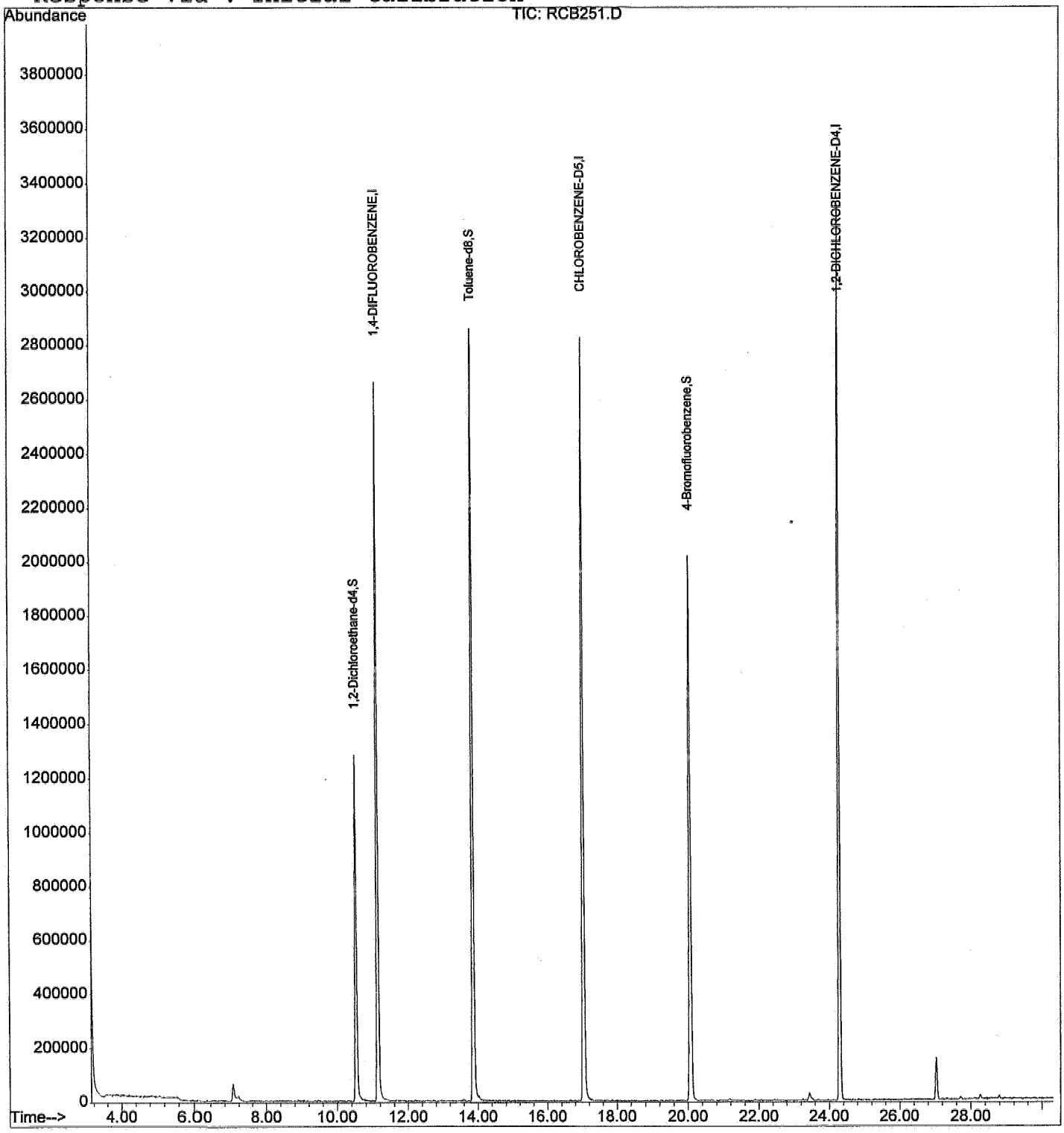
Target Compounds Qvalue

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB251.D Vial: 10
Acq On : 16 Mar 2006 3:23 am Operator: CGM
Sample : VO03C20B 5.0mL Inst : TO03
Misc : DF=1.0 MB Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 11:43 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



2012

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB247.D Vial: 6
Acq On : 16 Mar 2006 12:54 am Operator: CGM
Sample : VO03C20L 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2433336	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.05	117	2394909	50.00	ug/l	-0.02
67) 1,2-DICHLOROBENZENE-D4	24.30	152	1222595	50.00	ug/l	-0.02
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.52	65	1335523	53.29	ug/l	-0.02
Spiked Amount 50.000			Recovery =	106.58%		
50) Toluene-d8	13.87	98	2798123	51.65	ug/l	-0.02
Spiked Amount 50.000			Recovery =	103.30%		
71) 4-Bromofluorobenzene	20.06	95	1477958	53.51	ug/l	-0.04
Spiked Amount 50.000			Recovery =	107.02%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	405488	17.93	ug/l	99
3) Chloromethane	3.82	50	514409	18.18	ug/l	93
4) Vinyl chloride	4.02	62	349149	18.11	ug/l	99
5) Bromomethane	4.77	94	240563	18.41	ug/l	98
6) Chloroethane	4.89	64	239094	22.19	ug/l	97
7) Trichlorofluoromethane	5.32	101	543273	22.26	ug/l	100
9) Acrolein	5.98	56	185843	91.35	ug/l	86
10) 1,1,2-Trichloro-1,2,2-trif	6.02	151	224725	18.89	ug/l	98
11) Acetone	6.08	43	628197	83.44	ug/l	99
12) 1,1-Dichloroethene	6.29	61	614464	16.68	ug/l	99
13) tert-Butyl alcohol	6.42	59	156899	117.79	ug/l	78
15) Iodomethane	6.79	142	289134	18.91	ug/l	96
16) Methyl acetate	6.79	43	66107	3.50	ug/l	99
17) Methylene chloride	7.03	49	745519	18.63	ug/l	99
18) Carbon disulfide	7.12	76	752872	14.38	ug/l	100
19) Acrylonitrile	7.21	53	504968	82.89	ug/l	99
20) tert-Butyl methyl ether (M	7.29	73	753209	20.93	ug/l	99
21) trans-1,2-Dichloroethene	7.51	61	663483	18.76	ug/l	99
22) Isopropyl ether (DIPE)	7.97	45	1662789	21.41	ug/l	98
23) 1,1-Dichloroethane	8.16	63	774612	20.05	ug/l	99
24) Vinyl acetate	8.13	43	687659	16.61	ug/l	99
25) tert-Butyl ethyl ether (ET	8.62	59	1096120	22.04	ug/l	98
26) 2-Butanone	8.80	43	867743	85.32	ug/l	100
27) 2,2-Dichloropropane	9.07	77	336198	20.01	ug/l	93
28) cis-1,2-Dichloroethene	9.13	61	731815	19.48	ug/l	99
30) Chloroform	9.38	83	713409	19.93	ug/l	99
31) Bromochloromethane	9.65	49	389404	17.81	ug/l	98
33) 1,1,1-Trichloroethane	10.05	97	517213	19.37	ug/l	98
35) tert-Amyl methyl ether (TA	10.47	73	763208	21.73	ug/l	93

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

2014

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB247.D Vial: 6
Acq On : 16 Mar 2006 12:54 am Operator: CGM
Sample : VO03C20L 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	10.30	77	172775	17.61	ug/l	99
39)	Carbon tetrachloride	10.49	119	402839	18.06	ug/l	99
40)	1,2-Dichloroethane	10.67	62	668021	18.54	ug/l	100
41)	Benzene	10.75	78	1326063	18.53	ug/l	99
42)	Trichloroethene	11.76	130	340656	18.25	ug/l	98
44)	1,2-Dichloropropane	12.04	63	427630	18.68	ug/l	98
45)	Bromodichloromethane	12.44	83	472064	17.66	ug/l	99
46)	Dibromomethane	12.56	93	249701	19.03	ug/l	99
47)	2-Chloroethyl vinyl ether	12.89	63	198210	21.86	ug/l	99
48)	4-Methyl-2-pentanone	12.95	43	2145240	84.50	ug/l	100
49)	cis-1,3-Dichloropropene	13.36	75	489139	17.98	ug/l	97
51)	Toluene	14.02	91	1374012	19.68	ug/l	99
52)	Ethyl methacrylate	14.21	69	438475	19.45	ug/l	94
53)	trans-1,3-Dichloropropene	14.28	75	397806	19.29	ug/l	97
54)	1,1,2-Trichloroethane	14.63	97	291466	19.46	ug/l	99
55)	2-Hexanone	14.58	43	1437863	85.12	ug/l	98
56)	1,3-Dichloropropane	15.13	76	556564	19.82	ug/l	99
57)	Tetrachloroethene	15.35	164	307823	19.16	ug/l	98
58)	Dibromochloromethane	15.75	129	288982	18.10	ug/l	98
59)	1,2-Dibromoethane	16.20	107	281906	20.04	ug/l	97
60)	1-Chlorohexane	16.45	91	505555	20.15	ug/l	98
61)	Chlorobenzene	17.14	112	918956	19.96	ug/l	98
62)	1,1,1,2-Tetrachloroethane	17.21	131	314566	20.91	ug/l	98
63)	Ethylbenzene	17.23	91	1655737	20.20	ug/l	99
64)	m-Xylene & p-Xylene	17.40	91	2783782	41.33	ug/l	99
65)	o-Xylene	18.49	91	1398116	20.05	ug/l	100
66)	Styrene	18.56	104	900412	18.82	ug/l	100
68)	Bromoform	19.48	173	174091	17.26	ug/l	99
69)	Isopropylbenzene	19.38	105	1546871	22.56	ug/l	99
70)	1,1,2,2-Tetrachloroethane	19.81	83	411166	19.78	ug/l	99
72)	1,2,3-Trichloropropane	20.21	61	110705	19.76	ug/l	96
73)	trans-1,4-Dichloro-2-buten	20.36	53	88622	26.70	ug/l	94
74)	n-Propylbenzene	20.47	91	2011178	20.19	ug/l	99
75)	Bromobenzene	20.64	156	415342	20.29	ug/l	99
76)	2-Chlorotoluene	21.00	91	1163487	18.64	ug/l	100
77)	1,3,5-Trimethylbenzene	20.91	105	1345437	20.27	ug/l	99
78)	4-Chlorotoluene	21.13	91	1350590	19.61	ug/l	99
79)	tert-Butylbenzene	21.95	119	1088350	20.35	ug/l	99
80)	1,2,4-Trimethylbenzene	22.07	105	1335918	19.73	ug/l	100
81)	sec-Butylbenzene	22.59	105	1648987	19.28	ug/l	98
82)	p-Isopropyltoluene	22.98	119	1315036	21.18	ug/l	99

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

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB247.D Vial: 6
Acq On : 16 Mar 2006 12:54 am Operator: CGM
Sample : VO03C20L 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	1,3-Dichlorobenzene	23.26	146	727275	19.56	ug/l	99
84)	1,4-Dichlorobenzene	23.51	146	719970	19.09	ug/l	98
85)	n-Butylbenzene	23.99	91	1390512	19.24	ug/l	100
86)	1,2-Dichlorobenzene	24.36	146	703898	19.60	ug/l	98
87)	1,2-Dibromo-3-chloropropan	25.92	157	54942	17.02	ug/l	92
88)	1,2,4-Trichlorobenzene	27.72	180	531489	18.50	ug/l	99
89)	Hexachlorobutadiene	28.00	225	437012	18.52	ug/l	97
90)	Naphthalene	28.27	128	918126	19.02	ug/l	100
91)	1,2,3-Trichlorobenzene	28.79	180	481870	18.49	ug/l	100

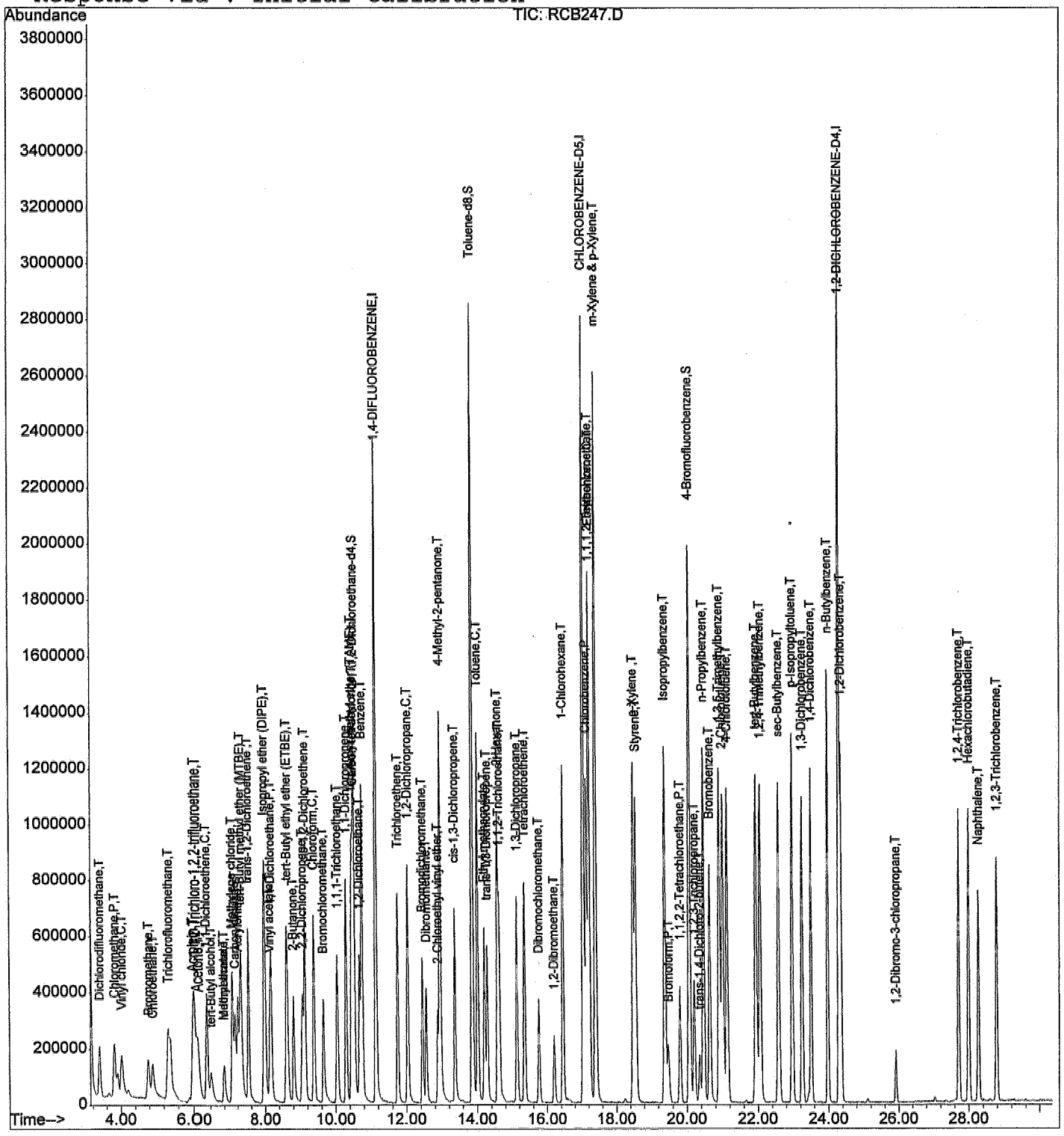
(#) = qualifier out of range (m) = manual integration

2016

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB247.D Vial: 6
Acq On : 16 Mar 2006 12:54 am Operator: CGM
Sample : VO03C20L 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB248.D Vial: 7
Acq On : 16 Mar 2006 1:31 am Operator: CGM
Sample : VO03C20C 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.14	114	2485206	50.00	ug/l	-0.02
37) CHLOROBENZENE-D5	17.05	117	2454138	50.00	ug/l	-0.02
67) 1,2-DICHLOROBENZENE-D4	24.31	152	1253123	50.00	ug/l	-0.02
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.53	65	1326145	51.81	ug/l	-0.02
Spiked Amount 50.000			Recovery =	103.62%		
50) Toluene-d8	13.87	98	2954912	53.23	ug/l	-0.02
Spiked Amount 50.000			Recovery =	106.46%		
71) 4-Bromofluorobenzene	20.07	95	1536727	54.29	ug/l	-0.03
Spiked Amount 50.000			Recovery =	108.58%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	411877	17.83	ug/l	98
3) Chloromethane	3.81	50	563886	19.51	ug/l	98
4) Vinyl chloride	4.01	62	356934	18.13	ug/l	99
5) Bromomethane	4.77	94	235417	17.64	ug/l	98
6) Chloroethane	4.90	64	243326	22.12	ug/l	99
7) Trichlorofluoromethane	5.32	101	535296	21.47	ug/l	98
9) Acrolein	5.98	56	170977	82.29	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	6.01	151	231936	19.08	ug/l	100
11) Acetone	6.09	43	565167	73.50	ug/l	100
12) 1,1-Dichloroethene	6.30	61	631026	16.77	ug/l	100
13) tert-Butyl alcohol	6.43	59	142068	104.43	ug/l	84
15) Iodomethane	6.80	142	285414	18.28	ug/l	98
16) Methyl acetate	6.80	43	76762	3.98	ug/l	98
17) Methylene chloride	7.04	49	757865	18.53	ug/l	99
18) Carbon disulfide	7.13	76	759850	14.21	ug/l	98
19) Acrylonitrile	7.22	53	452296	72.69	ug/l	97
20) tert-Butyl methyl ether (M	7.29	73	714986	19.54	ug/l	99
21) trans-1,2-Dichloroethene	7.51	61	677692	18.76	ug/l	99
22) Isopropyl ether (DIPE)	7.97	45	1671690	21.07	ug/l	98
23) 1,1-Dichloroethane	8.17	63	791261	20.06	ug/l	100
24) Vinyl acetate	8.12	43	661431	15.64	ug/l	99
25) tert-Butyl ethyl ether (ET	8.61	59	1100282	21.69	ug/l	99
26) 2-Butanone	8.81	43	788540	75.91	ug/l	99
27) 2,2-Dichloropropane	9.06	77	349036	20.35	ug/l	93
28) cis-1,2-Dichloroethene	9.13	61	750398	19.56	ug/l	99
30) Chloroform	9.39	83	748435	20.47	ug/l	99
31) Bromochloromethane	9.65	49	402409	18.02	ug/l	99
32) Tetrahydrofuran	9.77	42	3495	0.56	ug/l #	46
33) 1,1,1-Trichloroethane	10.04	97	536189	19.66	ug/l	99

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

2018

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB248.D Vial: 7
Acq On : 16 Mar 2006 1:31 am Operator: CGM
Sample : VO03C20C 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	tert-Amyl methyl ether (TA	10.46	73	757338	21.11	ug/l	94
38)	1,1-Dichloropropene	10.29	77	175337	17.44	ug/l	98
39)	Carbon tetrachloride	10.49	119	403115	17.64	ug/l	97
40)	1,2-Dichloroethane	10.68	62	672664	18.22	ug/l	98
41)	Benzene	10.75	78	1365913	18.63	ug/l	99
42)	Trichloroethene	11.75	130	356545	18.64	ug/l	96
44)	1,2-Dichloropropane	12.03	63	442489	18.86	ug/l	96
45)	Bromodichloromethane	12.45	83	486421	17.76	ug/l	99
46)	Dibromomethane	12.55	93	247776	18.43	ug/l	98
47)	2-Chloroethyl vinyl ether	12.88	63	199746	21.50	ug/l	99
48)	4-Methyl-2-pentanone	12.95	43	2042326	78.51	ug/l	100
49)	cis-1,3-Dichloropropene	13.37	75	508856	18.22	ug/l	98
51)	Toluene	14.02	91	1448154	20.24	ug/l	98
52)	Ethyl methacrylate	14.22	69	433020	18.74	ug/l	97
53)	trans-1,3-Dichloropropene	14.29	75	403974	19.15	ug/l	97
54)	1,1,2-Trichloroethane	14.63	97	294606	19.19	ug/l	98
55)	2-Hexanone	14.57	43	1325101	76.55	ug/l	99
56)	1,3-Dichloropropane	15.12	76	558580	19.41	ug/l	100
57)	Tetrachloroethene	15.35	164	316947	19.25	ug/l	98
58)	Dibromochloromethane	15.76	129	293875	17.98	ug/l	100
59)	1,2-Dibromoethane	16.21	107	273955	19.01	ug/l	98
60)	1-Chlorohexane	16.46	91	517036	20.11	ug/l	99
61)	Chlorobenzene	17.14	112	935041	19.82	ug/l	99
62)	1,1,1,2-Tetrachloroethane	17.22	131	311581	20.21	ug/l	98
63)	Ethylbenzene	17.23	91	1690050	20.12	ug/l	100
64)	m-Xylene & p-Xylene	17.41	91	2839285	41.13	ug/l	100
65)	o-Xylene	18.48	91	1444916	20.22	ug/l	100
66)	Styrene	18.55	104	936090	19.09	ug/l	99
68)	Bromoform	19.48	173	167432	16.43	ug/l	98
69)	Isopropylbenzene	19.39	105	1579016	22.47	ug/l	99
70)	1,1,2,2-Tetrachloroethane	19.80	83	388394	18.23	ug/l	99
72)	1,2,3-Trichloropropane	20.22	61	105097	18.30	ug/l	94
73)	trans-1,4-Dichloro-2-buten	20.35	53	79790	23.70	ug/l	89
74)	n-Propylbenzene	20.47	91	2039594	19.98	ug/l	100
75)	Bromobenzene	20.65	156	420507	20.04	ug/l	99
76)	2-Chlorotoluene	21.01	91	1175981	18.38	ug/l	99
77)	1,3,5-Trimethylbenzene	20.92	105	1385290	20.36	ug/l	99
78)	4-Chlorotoluene	21.13	91	1384393	19.61	ug/l	99
79)	tert-Butylbenzene	21.94	119	1118389	20.41	ug/l	96
80)	1,2,4-Trimethylbenzene	22.06	105	1366889	19.69	ug/l	99
81)	sec-Butylbenzene	22.60	105	1671271	19.06	ug/l	99

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

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB248.D Vial: 7
Acq On : 16 Mar 2006 1:31 am Operator: CGM
Sample : VO03C20C 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

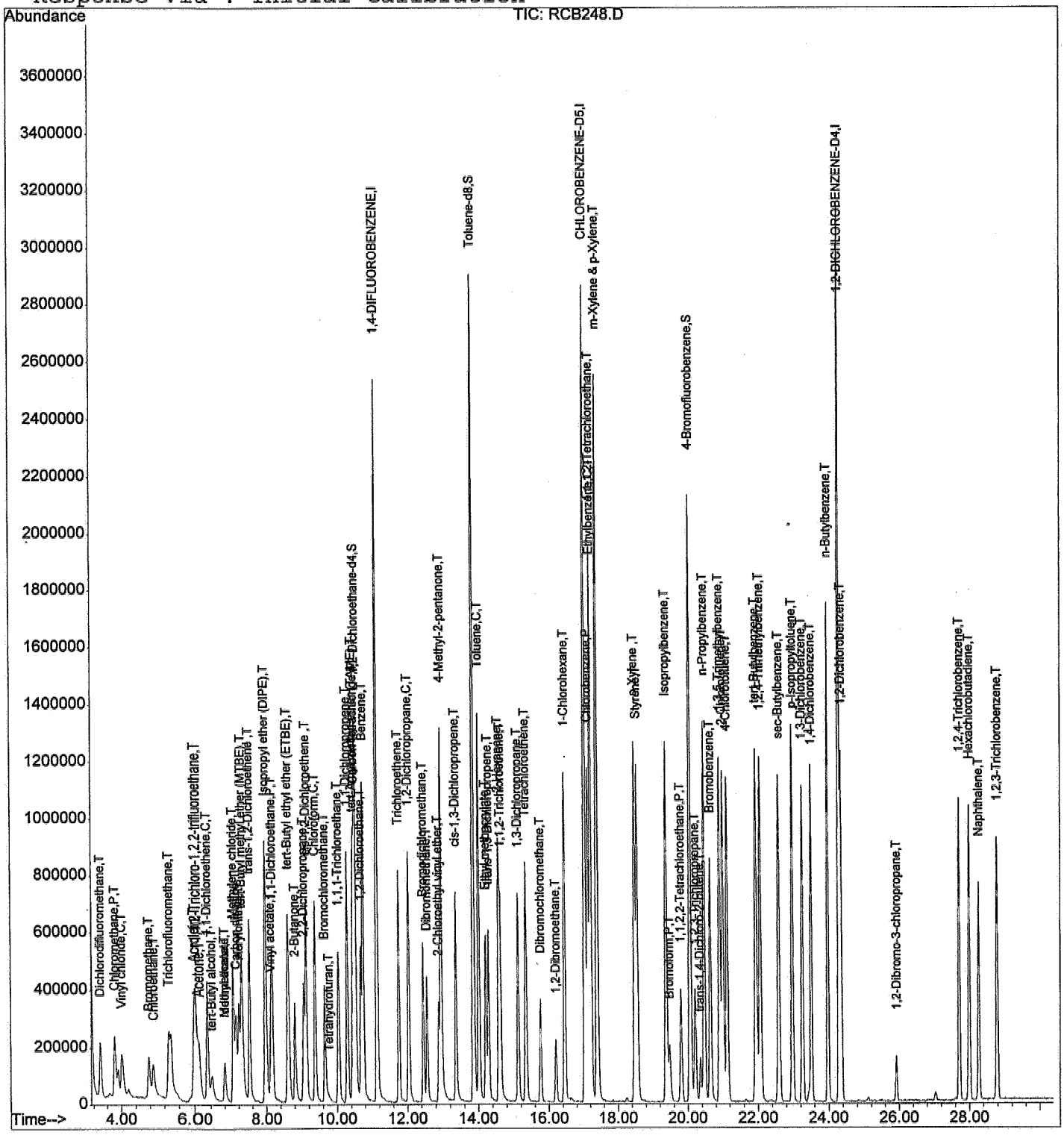
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82) p-Isopropyltoluene	22.98	119	1330616	20.91	ug/l	99
83) 1,3-Dichlorobenzene	23.25	146	732681	19.22	ug/l	99
84) 1,4-Dichlorobenzene	23.52	146	735365	19.02	ug/l	99
85) n-Butylbenzene	23.98	91	1451324	19.60	ug/l	100
86) 1,2-Dichlorobenzene	24.36	146	712502	19.36	ug/l	97
87) 1,2-Dibromo-3-chloropropan	25.92	157	53394	16.32	ug/l	97
88) 1,2,4-Trichlorobenzene	27.72	180	567462	19.27	ug/l	99
89) Hexachlorobutadiene	28.01	225	452563	18.71	ug/l	99
90) Naphthalene	28.27	128	918625	18.57	ug/l	99
91) 1,2,3-Trichlorobenzene	28.79	180	519470	19.45	ug/l	100

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB248.D Vial: 7
Acq On : 16 Mar 2006 1:31 am Operator: CGM
Sample : VO03C20C 5.0mL Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:48 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



INITIAL CALIBRATION

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RBB053
Instrument ID: T-003
GC Column:RTX502.2ID:0.32mm (mm)

Contract: UPGRADIENT INVESTIGATION, TRONOX
SAS No.: SDG No.: 06C096
BFB Injection Date : 02/03/06
BFB Injection Time : 13:03
Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.71
75	30.0 - 60.0% of mass 95	53.21
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.38
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	71.75
175	5.0 - 9.0% of mass 174	5.93(8.3)1
176	95.0 - 101.0% of mass 174	70.77(98.6)1
177	5.0 - 9.0% of mass 176	4.73(6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD02	VO03B031	RBB054	02/03/06	13:40
2	VSTD05	VO03B032	RBB055	02/03/06	14:17
3	VSTD010	VO03B033	RBB056	02/03/06	14:54
4	VSTD020	VO03B034	RBB057	02/03/06	15:32
5	VSTD050	VO03B035	RBB058	02/03/06	16:09
6	VSTD080	VO03B036	RBB059	02/03/06	16:46
7	VSTD100	VO03B037	RBB060	02/03/06	17:24
8	VSTD200	VO03B038	RBB061	02/03/06	18:01
9	VSTD300	VO03B039	RBB062	02/03/06	18:38
10	VSTD050	IVO03B031	RBB065	02/03/06	20:30

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :TOO3
Beginning DateTime :02/03/06 13:40
Spike Units :PPB
IC File :RBB058

Column Spec :RTX502.2 ID :0.32MM
Ending DateTime :02/03/06 18:38
HPChem Method :VOO3B03

M	IDX	Parameters	2 13:40 RBB054	5 14:17 RBB055	10 14:54 RBB056	20 15:32 RBB057	50 16:09 RBB058	80 16:46 RBB059	100 17:24 RBB060	200 18:01 RBB061	300 18:38 RBB062	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	0	11.1513
	2	Dichlorodifluoromethane	0.414	0.459	0.469	0.596	0.460	0.455	0.431	0.489	0.411	0.465	11.93	3.3883
	3	Chloromethane	0.617	0.548	0.574	0.661	0.532	0.539	0.518	0.643	0.601	0.581	8.88	3.8142
	4	Vinyl chloride	0.372	0.384	0.378	0.462	0.315	0.290	0.264	------	------	0.352	19.12	4.0089
	5	Bromomethane	0.247	0.240	0.264	0.329	0.270	0.270	0.264	0.298	0.237	0.269	10.88	4.7603
	6	Chloroethane	0.217	0.211	0.223	0.286	0.220	0.218	0.206	0.233	0.179	0.221	12.91	4.8890
	7	Trichlorofluoromethane	0.505	0.496	0.492	0.641	0.486	0.486	0.463	0.527	0.419	0.502	11.99	5.3200
	8	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
4	9	Acrolein	0.034	0.039	0.045	0.042	0.046	0.045	0.041	0.045	0.040	0.042	9.35	5.9853
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.276	0.241	0.246	0.274	0.255	0.230	0.207	0.263	0.209	0.245	10.44	6.0200
4	11	Acetone	0.181	0.153	0.162	0.155	0.155	0.152	0.139	0.154	0.142	0.155	7.85	6.0976
	12	1,1-Dichloroethene	0.844	0.786	0.772	0.829	0.759	0.705	0.650	0.810	0.658	0.757	9.41	6.3056
5	13	tert-Butyl alcohol	0.025	0.022	0.024	0.029	0.031	0.033	0.028	------	------	0.027	14.59	6.4458
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Iodomethane	0.274	0.286	0.325	0.379	0.337	0.303	0.275	0.336	------	0.314	11.66	6.8127
	16	Methyl acetate	0.447	0.341	0.354	0.377	0.395	0.404	0.374	0.422	0.378	0.388	8.51	6.7992
	17	Methylene chloride	------	1.116	0.906	0.894	0.781	0.703	0.633	0.770	------	0.829	19.22	7.0498
	18	Carbon disulfide	0.985	1.024	1.067	1.183	1.144	1.060	0.973	1.231	1.014	1.076	8.45	7.1295
4	19	Acrylonitrile	0.115	0.115	0.124	0.129	0.133	0.131	0.121	0.133	0.125	0.125	5.70	7.2170
	20	tert-Butyl methyl ether (MTBE)	0.506	0.547	0.588	0.699	0.772	0.743	0.669	0.889	0.763	0.686	17.81	7.3078
	21	trans-1,2-Dichloroethene	0.740	0.719	0.732	0.805	0.758	0.694	0.642	0.793	0.658	0.727	7.64	7.5240
	22	Isopropyl ether (DIPE)	1.416	1.433	1.513	1.736	1.723	1.647	1.496	1.860	1.540	1.596	9.58	7.9896
	23	1,1-Dichloroethane	0.794	0.789	0.788	0.886	0.831	0.769	0.704	0.871	0.711	0.794	7.88	8.1795
	24	Vinyl acetate	0.650	0.726	0.765	0.928	0.952	0.928	0.821	1.015	0.873	0.851	14.03	8.1366
	25	tert-Butyl ethyl ether (ETBE)	0.705	0.731	0.814	1.026	1.068	1.044	0.921	1.195	1.052	0.951	17.69	8.6303
4	26	2-Butanone	0.186	0.175	0.197	0.213	0.228	0.228	0.208	0.226	0.219	0.209	9.22	8.8201
	27	2,2-Dichloropropane	------	0.290	0.295	0.350	0.399	0.384	0.353	------	------	0.345	13.08	9.0736
	28	cis-1,2-Dichloroethene	0.745	0.740	0.780	0.849	0.813	0.750	0.686	0.864	0.718	0.772	7.77	9.1420
	29	tert-Butyl formate (TBF)	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	30	Chloroform	0.766	0.741	0.757	0.808	0.766	0.702	0.642	0.783	0.653	0.736	7.87	9.3980
	31	Bromochloromethane	0.480	0.455	0.465	0.491	0.464	0.423	0.382	0.480	0.403	0.449	8.40	9.6654
2	32	Tetrahydrofuran	0.131	0.103	0.108	0.113	0.134	0.135	0.125	0.141	0.132	0.125	10.76	9.7480
	33	1,1,1-Trichloroethane	0.472	0.509	0.532	0.595	0.600	0.557	0.510	0.631	0.533	0.549	9.38	10.0617
	34	Cyclohexane	0.657	0.676	0.748	0.782	0.777	0.772	0.755	0.818	0.671	0.740	7.75	10.1211
	35	tert-Amyl methyl ether (TAME)	------	0.565	0.615	0.738	0.802	0.768	0.678	0.852	0.756	0.722	13.34	10.4729
	36	1,2-Dichloroethane-d4	0.541	0.519	0.540	0.512	0.456	0.555	0.523	0.534	0.456	0.515	6.98	10.5421
	37	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	0	17.0669
	38	1,1-Dichloropropene	0.185	0.203	0.197	0.233	0.220	0.198	0.190	0.232	0.184	0.205	9.28	10.3044
	39	Carbon tetrachloride	------	0.369	0.406	0.526	0.509	0.472	0.451	0.555	0.437	0.466	13.45	10.4970
	40	1,2-Dichloroethane	0.757	0.771	0.753	0.848	0.775	0.722	0.691	0.807	0.645	0.752	8.06	10.6907
	41	Benzene	1.443	1.515	1.518	1.718	1.583	1.440	1.376	1.590	1.259	1.494	8.96	10.7650
	42	Trichloroethene	0.369	0.394	0.383	0.434	0.409	0.380	0.364	0.430	0.345	0.390	7.69	11.7705
	43	Methylcyclohexane	0.537	0.588	0.640	0.693	0.678	0.671	0.689	0.722	0.560	0.642	10.18	11.9092
	44	1,2-Dichloropropane	0.442	0.476	0.457	0.521	0.502	0.468	0.449	0.547	0.439	0.478	7.90	12.0495
	45	Bromodichloromethane	0.447	0.463	0.515	0.590	0.624	0.582	0.562	0.681	0.559	0.558	13.35	12.4589
	46	Dibromomethane	0.260	0.282	0.270	0.302	0.295	0.268	0.249	0.295	0.245	0.274	7.59	12.5630
	47	2-Chloroethyl vinyl ether	------	0.144	0.162	0.198	0.200	0.195	0.183	0.224	0.207	0.189	13.56	12.8931
4	48	4-Methyl-2-pentanone	0.426	0.458	0.518	0.556	0.594	0.582	0.550	0.564	0.521	0.530	10.60	12.9641
	49	cis-1,3-Dichloropropene	------	0.412	0.466	0.580	0.640	0.608	0.574	0.723	0.603	0.576	16.93	13.3797
	50	Toluene-d8	0.977	1.089	1.167	1.137	1.046	1.235	1.252	1.263	1.012	1.131	9.43	13.8854
	51	Toluene	1.456	1.470	1.523	1.585	1.549	1.433	1.332	1.539	1.234	1.458	7.74	14.0340
	52	Ethyl methacrylate	------	0.365	0.406	0.485	0.519	0.507	0.459	0.546	0.479	0.471	12.70	14.2248
	53	trans-1,3-Dichloropropene	------	0.269	0.307	0.412	0.494	0.468	0.443	0.573	0.502	0.434	23.51	14.3010
	54	1,1,2-Trichloroethane	0.307	0.299	0.320	0.325	0.337	0.310	0.289	0.343	0.286	0.313	6.46	14.6432
4	55	2-Hexanone	0.285	0.303	0.347	0.356	0.394	0.392	0.368	0.371	0.359	0.353	10.49	14.5937
	56	1,3-Dichloropropane	0.544	0.545	0.576	0.614	0.641	0.598	0.550	0.649	0.557	0.586	7.04	15.1484
	57	Tetrachloroethene	0.341	0.348	0.343	0.348	0.355	0.324	0.302	0.361	0.296	0.335	6.88	15.3680
	58	Dibromochloromethane	------	0.235	0.268	0.333	0.377	0.360	0.335	0.427	0.371	0.338	18.24	15.7720
	59	1,2-Dibromoethane	0.246	0.274	0.294	0.312	0.327	0.296	0.271	0.331	0.293	0.294	9.36	16.2183
	60	1-Chlorohexane	0.410	0.465	0.516	0.571	0.585	0.538	0.510	0.610	0.509	0.524	11.82	16.4709
	61	Chlorobenzene	1.010	1.015	1.003	1.034	1.010	0.916	0.848	0.992	0.823	0.961	8.21	17.1594
	62	1,1,1,2-Tetrachloroethane	0.250	0.267	0.293	0.336	0.355	0.334	0.306	0.372	0.314	0.314	12.71	17.2287
	63	Ethylbenzene	1.732	1.788	1.805	1.898	1.843	1.660	1.529	1.738	1.406	1.711	9.18	17.2436
2	64	m-Xylene & p-Xylene	1.445	1.501	1.510	1.584	1.543	1.365	1.270	1.376	1.063	1.406	11.53	17.4252
	65	o-Xylene	1.311	1.385	1.508	1.616	1.608	1.460	1.341	1.574	1.302	1.456	8.70	18.5049
	66	Styrene	0.857	0.949	1.001	1.102	1.107	1.005	0.934	1.107	0.927	0.999	9.09	18.5792
	67	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	0	24.3165
	68	Bromoform	------	0.248	0.291	0.386	0.479	0.484	0.444	0.587	0.508	0.428	26.59	19.4979
	69	Isopropylbenzene	2.500	2.797	2.744	3.097	3.071	2.866	2.643	3.091	2.427	2.804	8.98	19.4014
	70	1,1,2,2-Tetrachloroethane	0.743	0.815	0.818	0.882	0.909	0.892	0.797	0.955	0.838	0.850	7.66	19.8274
	71	4-Bromofluorobenzene	1.054	1.096	1.106	1.088	1.022	1.241	1.241	1.273	1.043	1.129	8.50	20.0949
	72	1,2,3-Trichloropropane	0.249	0.224	0.222	0.240	0.229	0.230	0.200	0.251	0.217	0.229	7.04	20.2286
	73	trans-1,4-Dichloro-2-butene	------	0.102	0.110	0.117	0.142	0.152	0.140	------	------	0.127	15.80	20.3789
	74	n-Propylbenzene	3.636	4.201	4.161	4.514	4.444	4.096	3.780	4.386	3.439	4.073	9.24	20.4944
	75	Bromobenzene	0.809	0.836	0.845	0.899	0.899	0.837	0.759	0.909	0.742	0.837	7.18	20.6694
	76	2-Chlorotoluene	3.133	2.513	2.470	2.609	2.565	2.374	2.152	2.501	2.657	2.553	10.31	21.0310
	77	1,3,5-Trimethylbenzene	2.394	2.678	2.734	2.986	2.981	2.757	2.522	2.995	2.390	2.715	8.95	20.9319
	78	4-Chlorotoluene	2.761	2.862	2.894	3.052	3.001	2.762	2.560	3.011	2.444	2.816	7.38	21.1548
	79	tert-Butylbenzene	1.946	2.155	2.187	2.421	2.375	2.200	2.044	2.405	1.951	2.187	8.44	21.9688
	80	1,2,4-Trimethylbenzene	2.584	2.822	2.813	3.033	2.969	2.772	2.537	2.980	2.418	2.770	7.76	22.0877
	81	sec-Butylbenzene	3.107	3.489	3.518	3.897	3.777	3.541	3.270	3.848	3.038	3.498	8.91	22.6077
	82	p-Isopropyltoluene	2.177	2.516	2.507	2.855	2.796	2.566	2.397	2.794	2.249	2.540	9.52	22.9941
	83	1,3-Dichlorobenzene	1.589	1.586	1.523	1.650	1.610	1.476	1.363	1.584	1.307	1.521	7.73	23.2731
	84	1,4-Dichlorobenzene	1.595	1.616	1.559	1.680	1.646	1.482	1.378	1.624	1.302	1.542	8.37	23.5290
	85	n-Butylbenzene	2.665	2.972	3.000	3.340	3.216	2.934	2.737	3.172	2.557	2.955	8.93	23.9929
	86	1,2-Dichlorobenzene	1.618	1.570	1.470	1.578	1.535	1.403	1.281	1.506	1.256	1.469	8.85	24.3760
	87	1,2-Dibromo-3-chloropropane	------	0.090	0.096	0.124	0.151	0.152	0.137	0.182	0.163	0.137	23.38	25.9357
	88	1,2,4-Trichlorobenzene	1.142	1.174	1.155	1.246	1.223	1.152	1.092	1.302	1.087	1.175	6.02	27.7341
	89	Hexachlorobutadiene	0.991	0.978	0.938	1.041	0.984	0.933	0.875	1.054	0.892	0.965	6.38	28.0164
	90	Naphthalene	1.642	1.737	1.899	2.108	2.174	2.081	1.899	2.265	1.961	1.974	10.32	28.2839
	91	1,2,3-Trichlorobenzene	1.040	1.028	1.039	1.140	1.118	1.062	0.982	1.171	1.011	1.066	5.96	28.8023

Spike Amount = Nominal Amount * M
Ave_%RSD : 10.6 Max_%RSD : 26.6

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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
4	Vinyl chloride	0.00963	0.29076	0.9833*
17	Methylene chloride	0.04162	0.71073	0.9951
20	tert-Butyl methyl ether (MTBE)	-0.02037	0.78823	0.9954
25	tert-Butyl ethyl ether (ETBE)	-0.02603	1.08082	0.9964
49	cis-1,3-Dichloropropene	-0.02733	0.64405	0.9955
53	trans-1,3-Dichloropropene	-0.03477	0.52061	0.9960
58	Dibromochloromethane	-0.01952	0.38720	0.9963
68	Bromoform	-0.04027	0.52930	0.9954
73	trans-1,4-Dichloro-2-butene	-0.00614	0.14726	0.9981
87	1,2-Dibromo-3-chloropropane	-0.01181	0.16672	0.9957

Use Quadratic Regression of inv conc w.f. for comps of linear reg of inv conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
4	Vinyl chloride	-0.00241	0.43478	-0.08811	0.9959

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Compound List Report TO03

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
Total Cpnds : 91

PK#			Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I		1,4-DIFLUOROBENZENE	114	11.16	1.000	A	1	A	B
2		T	Dichlorodifluoromethane	85	3.40	0.305	A	2	A	B
3		T	Chloromethane	50	3.81	0.342	A	1	A	B
4		T	Vinyl chloride	62	4.01	0.359	Q✓	1	A	B
5		T	Bromomethane	94	4.77	0.427	A	1	A	B
6		T	Chloroethane	64	4.90	0.439	A	2	A	B
7		T	Trichlorofluoromethane	101	5.33	0.478	A	1	A	B
8		T	sec-Propyl alcohol	45	5.06	0.454	A	1	A	B
9		T	Acrolein	56	5.98	0.536	A	1	A	B
10		T	1,1,2-Trichloro-1,2,2-trifluor	151	6.03	0.540	A	1	A	B
11		T	Acetone	43	6.09	0.546	A	1	A	B
12		T	1,1-Dichloroethene	61	6.31	0.566	A	2	A	B
13		T	tert-Butyl alcohol	59	6.44	0.578	A	1	A	B
14		T	Acetonitrile	39	7.29	0.654	A	2	A	B
15		T	Iodomethane	142	6.82	0.611	A	2	A	B
16		T	Methyl acetate	43	6.80	0.610	A	1	A	B
17		T	Methylene chloride	49	7.05	0.632	L✓	2	A	B
18		T	Carbon disulfide	76	7.13	0.639	A	1	A	B
19		T	Acrylonitrile	53	7.22	0.647	A	2	A	B
20		T	tert-Butyl methyl ether (MTBE)	73	7.31	0.655	L✓	1	A	B
21		T	trans-1,2-Dichloroethene	61	7.53	0.675	A	2	A	B
22		T	Isopropyl ether (DIPE)	45	7.99	0.716	A	1	A	B
23		T	1,1-Dichloroethane	63	8.18	0.734	A	2	A	B
24		T	Vinyl acetate	43	8.14	0.730	A	1	A	B
25		T	tert-Butyl ethyl ether (ETBE)	59	8.63	0.774	L✓	1	A	B
26		T	2-Butanone	43	8.81	0.790	A	1	A	B
27		T	2,2-Dichloropropane	77	9.07	0.813	A	3	A	B
28		T	cis-1,2-Dichloroethene	61	9.15	0.820	A	2	A	B
29		T	tert-Butyl formate (TBF)	59	9.15	0.820	A	2	A	B
30		T	Chloroform	83	9.40	0.843	A	2	A	B
31		T	Bromochloromethane	49	9.67	0.867	A	2	A	B
32		T	Tetrahydrofuran	42	9.74	0.873	A	1	A	B
33		T	1,1,1-Trichloroethane	97	10.06	0.901	A	2	A	B
34		T	Cyclohexane	56	10.12	0.907	A	2	A	B
35		T	tert-Amyl methyl ether (TAME)	73	10.47	0.939	A	2	A	B
36		S	1,2-Dichloroethane-d4	65	10.55	0.945	A	1	A	B
37	I		CHLOROBENZENE-D5	117	17.07	1.000	A	2	A	B
38		T	1,1-Dichloropropene	77	10.31	0.604	A	2	A	B
39		T	Carbon tetrachloride	119	10.50	0.615	A	1	A	B
40		T	1,2-Dichloroethane	62	10.69	0.627	A	2	A	B
41		T	Benzene	78	10.77	0.631	A	2	A	B
42		T	Trichloroethene	130	11.76	0.689	A	3	A	B
43		T	Methylcyclohexane	83	11.91	0.698	A	2	A	B
44		T	1,2-Dichloropropane	63	12.05	0.706	A	2	A	B
45		T	Bromodichloromethane	83	12.46	0.730	A	2	A	B
46		T	Dibromomethane	93	12.57	0.736	A	2	A	B
47		T	2-Chloroethyl vinyl ether	63	12.89	0.755	A	2	A	B
48		T	4-Methyl-2-pentanone	43	12.95	0.759	A	3	A	B
49		T	cis-1,3-Dichloropropene	75	13.38	0.784	L✓	3	A	B
50		S	Toluene-d8	98	13.89	0.814	A	1	A	B
51		T	Toluene	91	14.04	0.822	A	1	A	B
52		T	Ethyl methacrylate	69	14.22	0.833	A	2	A	B
53		T	trans-1,3-Dichloropropene	75	14.31	0.838	L✓	3	A	B
54		T	1,1,2-Trichloroethane	97	14.65	0.858	A	3	A	B
55		T	2-Hexanone	43	14.59	0.855	A	2	A	B
56		T	1,3-Dichloropropane	76	15.15	0.888	A	2	A	B
57		T	Tetrachloroethene	164	15.38	0.901	A	3	A	B
58		T	Dibromochloromethane	129	15.78	0.924	L✓	2	A	B
59		T	1,2-Dibromoethane	107	16.22	0.950	A	1	A	B
60		T	1-Chlorohexane	91	16.47	0.965	A	3	A	B
61	P		Chlorobenzene	112	17.16	1.005	A	3	A	B

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62	T	1,1,1,2-Tetrachloroethane	131	17.23	1.010	A	3	A	B
63	T	Ethylbenzene	91	17.25	1.010	A	1	A	B
64	T	m-Xylene & p-Xylene	91	17.43	1.021	A	1	A	B
65	T	o-Xylene	91	18.51	1.084	A	1	A	B
66	T	Styrene	104	18.58	1.089	A	2	A	B
67	I	1,2-DICHLOROBENZENE-D4	152	24.32	1.000	A	1	A	B
68	T	Bromoform	173	19.49	0.801	L ✓	2	A	B
69	T	Isopropylbenzene	105	19.40	0.798	A	3	A	B
70	T	1,1,2,2-Tetrachloroethane	83	19.83	0.815	A	2	A	B
71	S	4-Bromofluorobenzene	95	20.10	0.826	A	2	A	B
72	T	1,2,3-Trichloropropane	61	20.23	0.832	A	2	A	B
73	T	trans-1,4-Dichloro-2-butene	53	20.38	0.838	L ✓	1	A	B
74	T	n-Propylbenzene	91	20.49	0.842	A	2	A	B
75	T	Bromobenzene	156	20.66	0.850	A	2	A	B
76	T	2-Chlorotoluene	91	21.04	0.865	A	1	A	B
77	T	1,3,5-Trimethylbenzene	105	20.93	0.861	A	2	A	B
78	T	4-Chlorotoluene	91	21.16	0.870	A	1	A	B
79	T	tert-Butylbenzene	119	21.97	0.903	A	2	A	B
80	T	1,2,4-Trimethylbenzene	105	22.09	0.908	A	1	A	B
81	T	sec-Butylbenzene	105	22.61	0.930	A	1	A	B
82	T	p-Isopropyltoluene	119	23.00	0.946	A	2	A	B
83	T	1,3-Dichlorobenzene	146	23.28	0.957	A	2	A	B
84	T	1,4-Dichlorobenzene	146	23.53	0.968	A	2	A	B
85	T	n-Butylbenzene	91	23.99	0.987	A	2	A	B
86	T	1,2-Dichlorobenzene	146	24.38	1.002	A	2	A	B
87	T	1,2-Dibromo-3-chloropropane	157	25.94	1.067	L ✓	2	A	B
88	T	1,2,4-Trichlorobenzene	180	27.74	1.141	A	2	A	B
89	T	Hexachlorobutadiene	225	28.02	1.152	A	2	A	B
90	T	Naphthalene	128	28.29	1.163	A	1	A	B
91	T	1,2,3-Trichlorobenzene	180	28.81	1.185	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

VO03B03.M Mon Feb 06 13:21:35 2006

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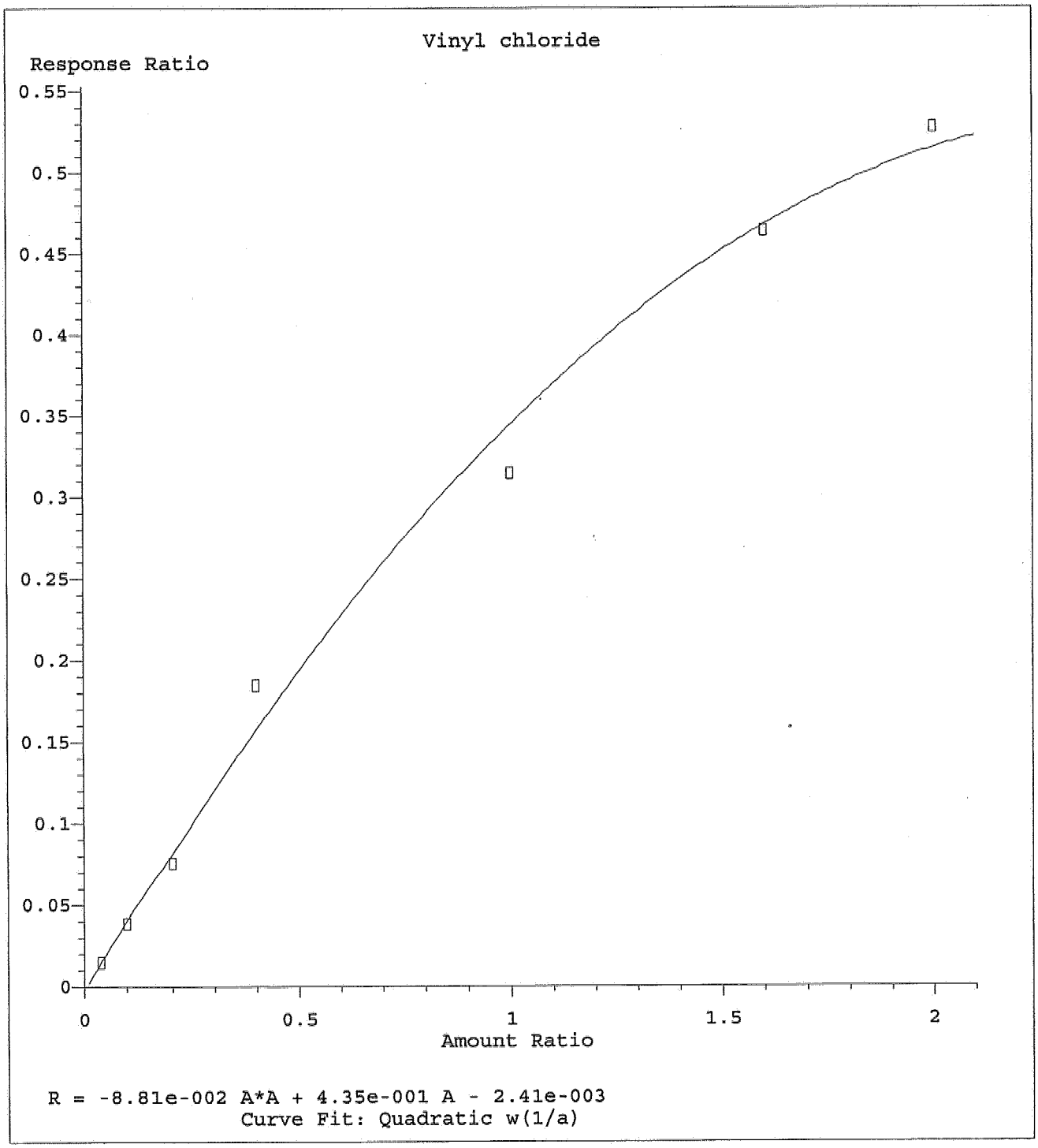
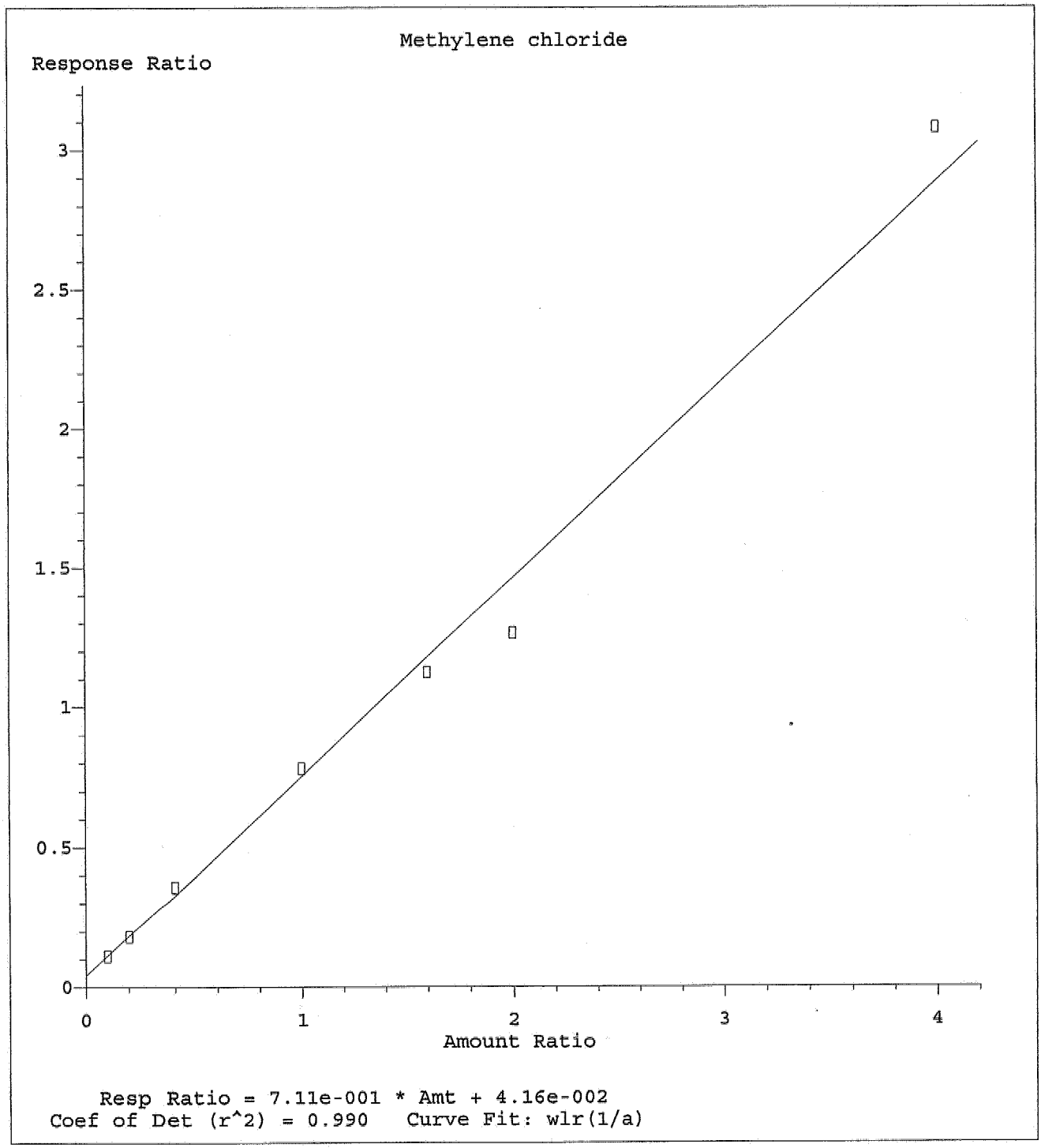
2827



Method Name: D:\HPCHEM\1\METHODS\VO03B03.M
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



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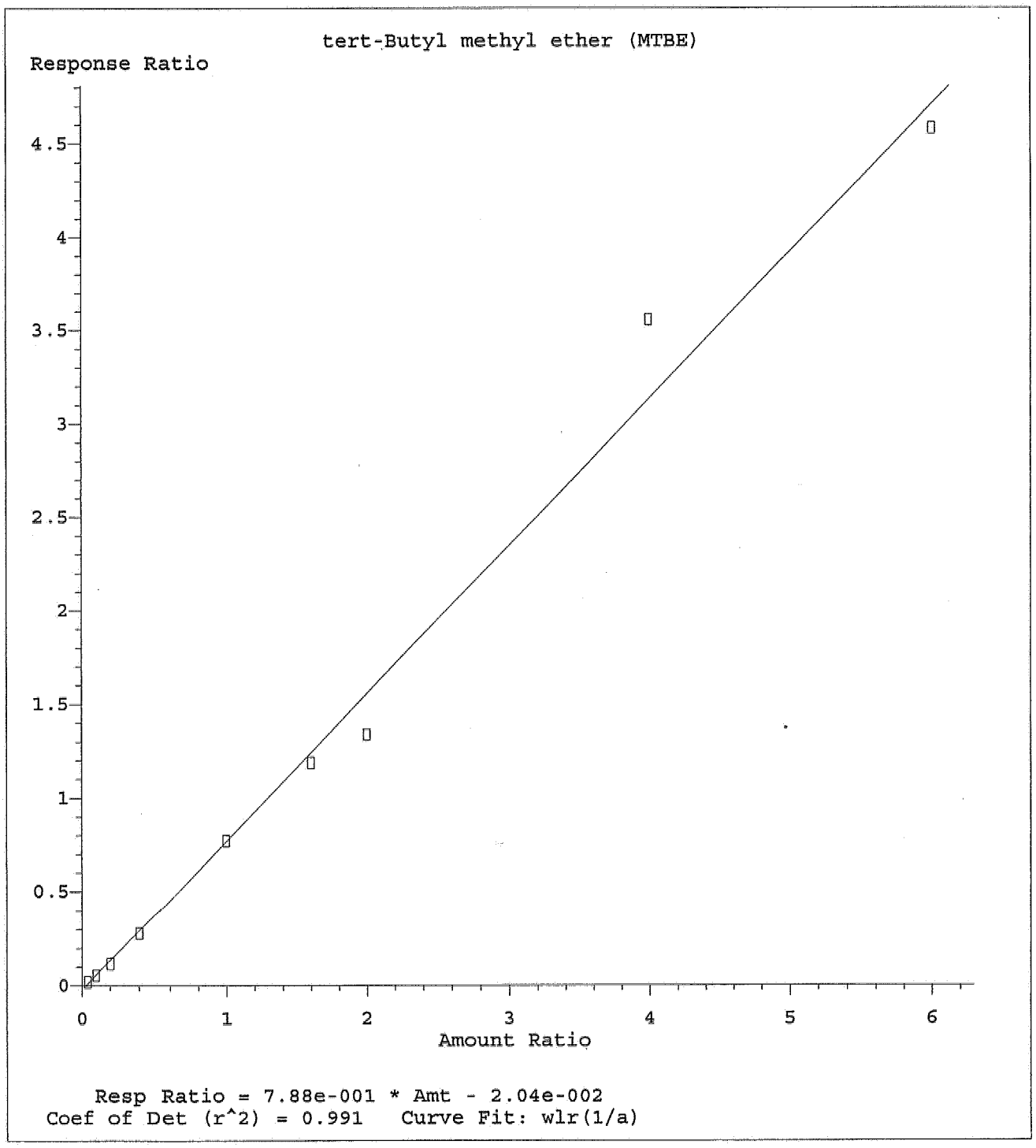
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



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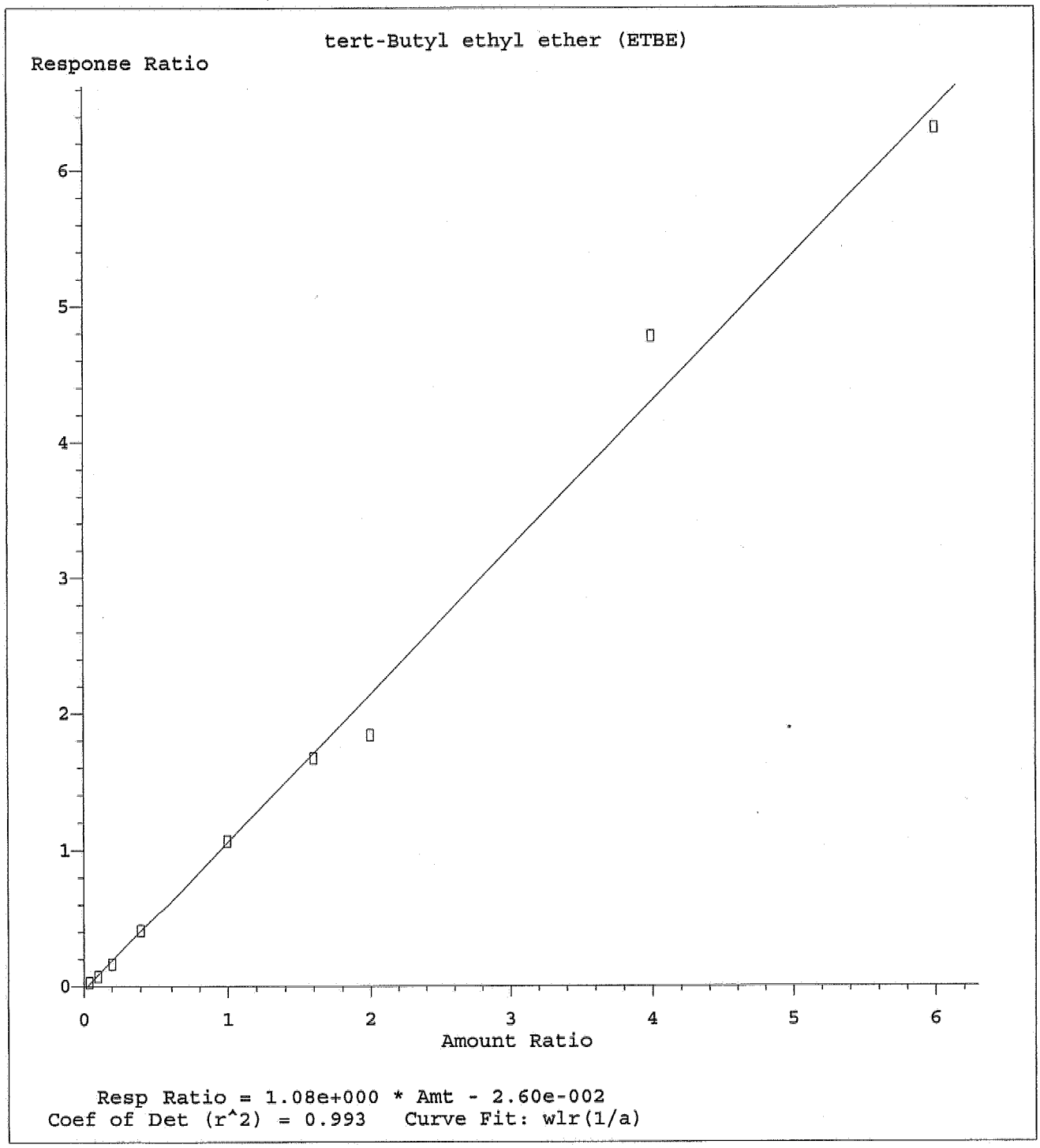
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



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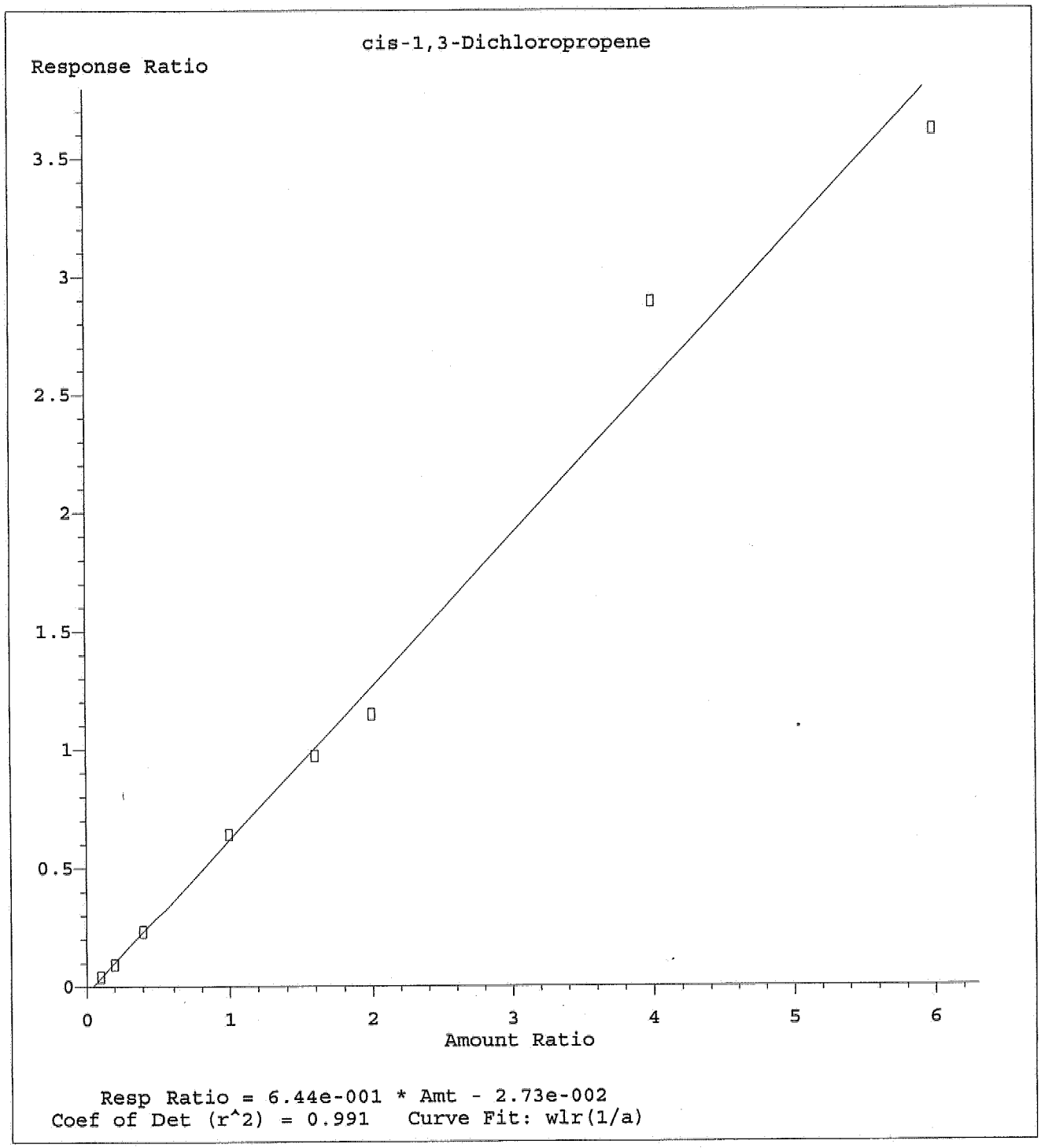
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



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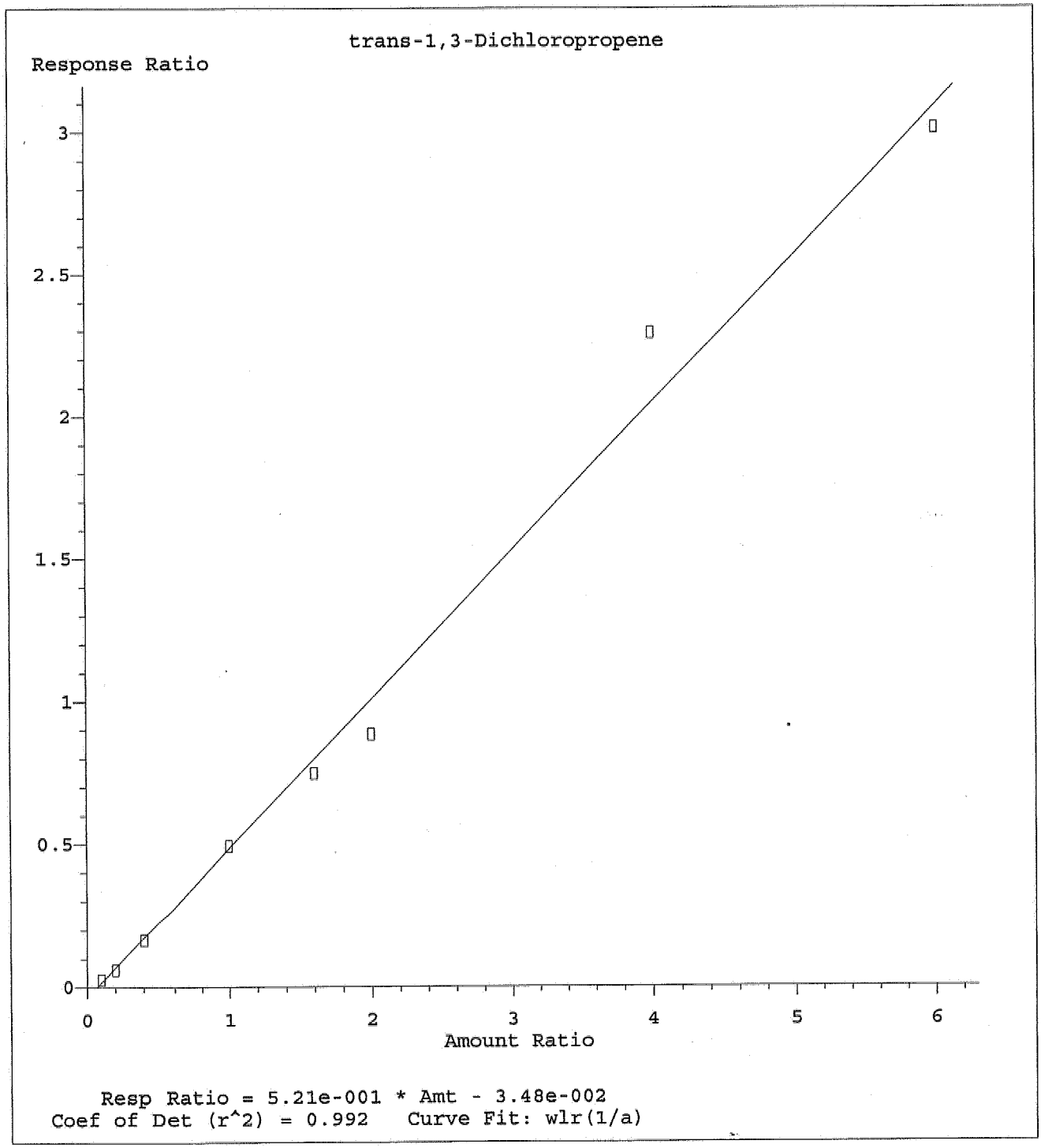
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



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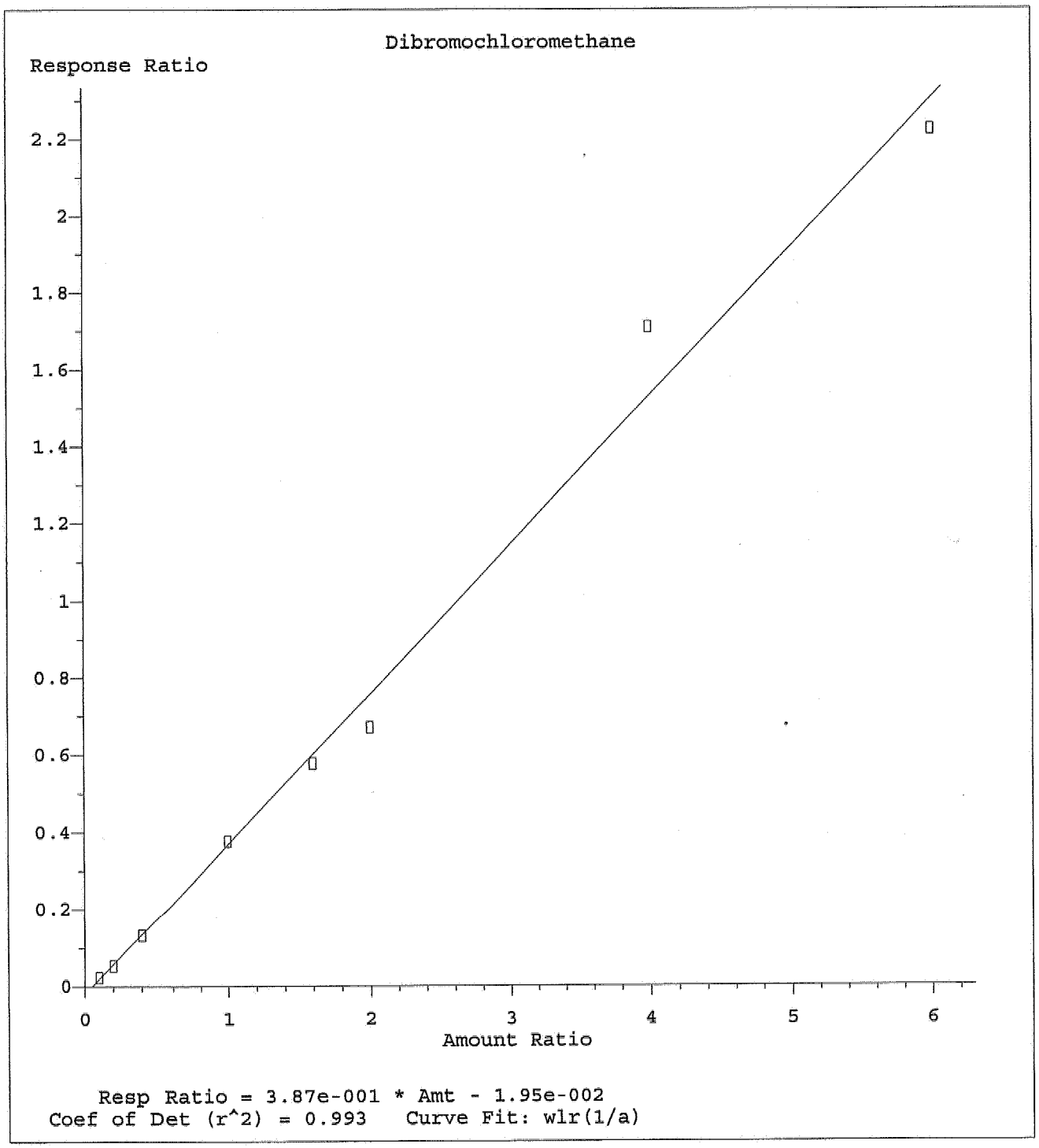
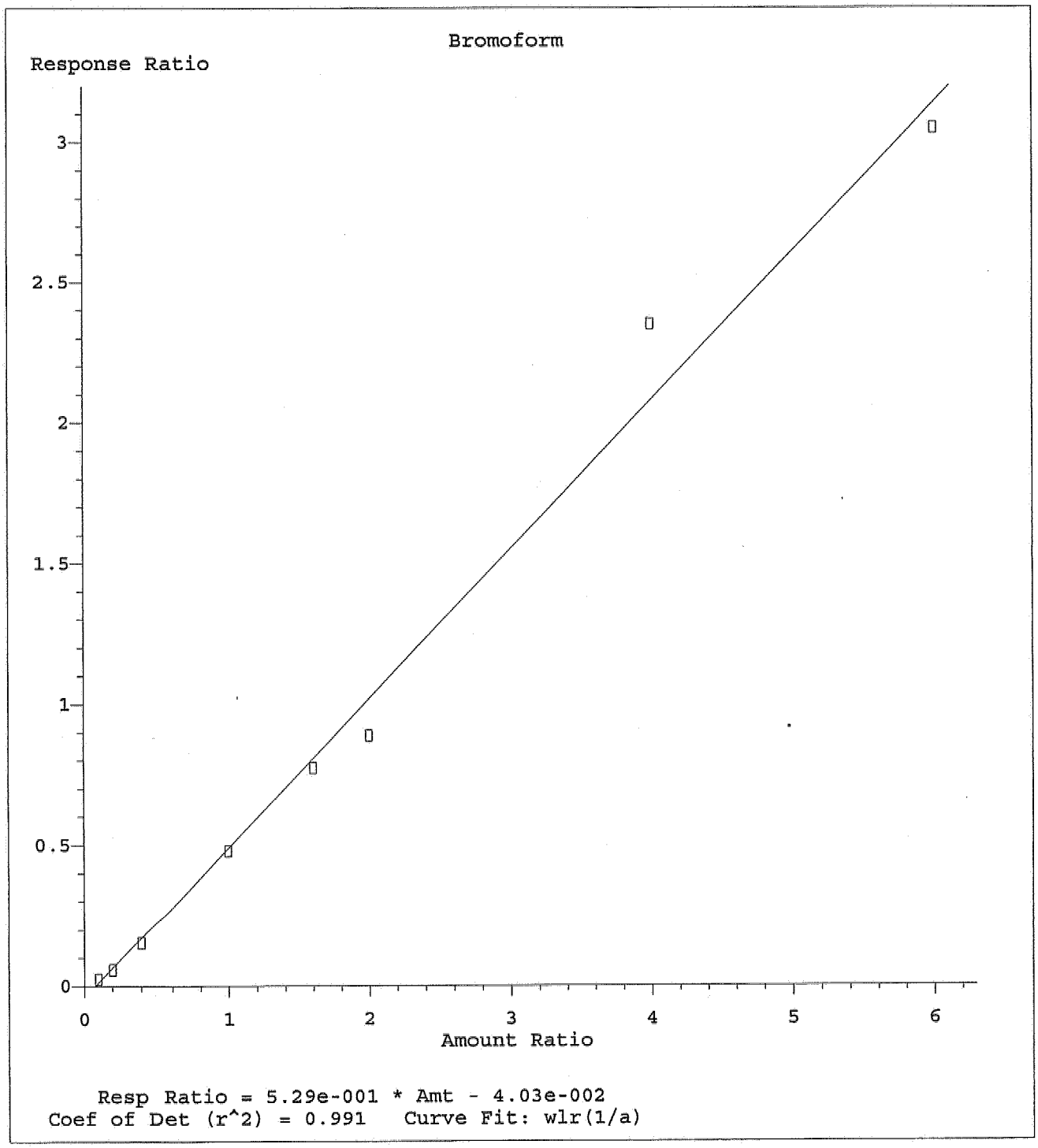
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

RR 2-9-06



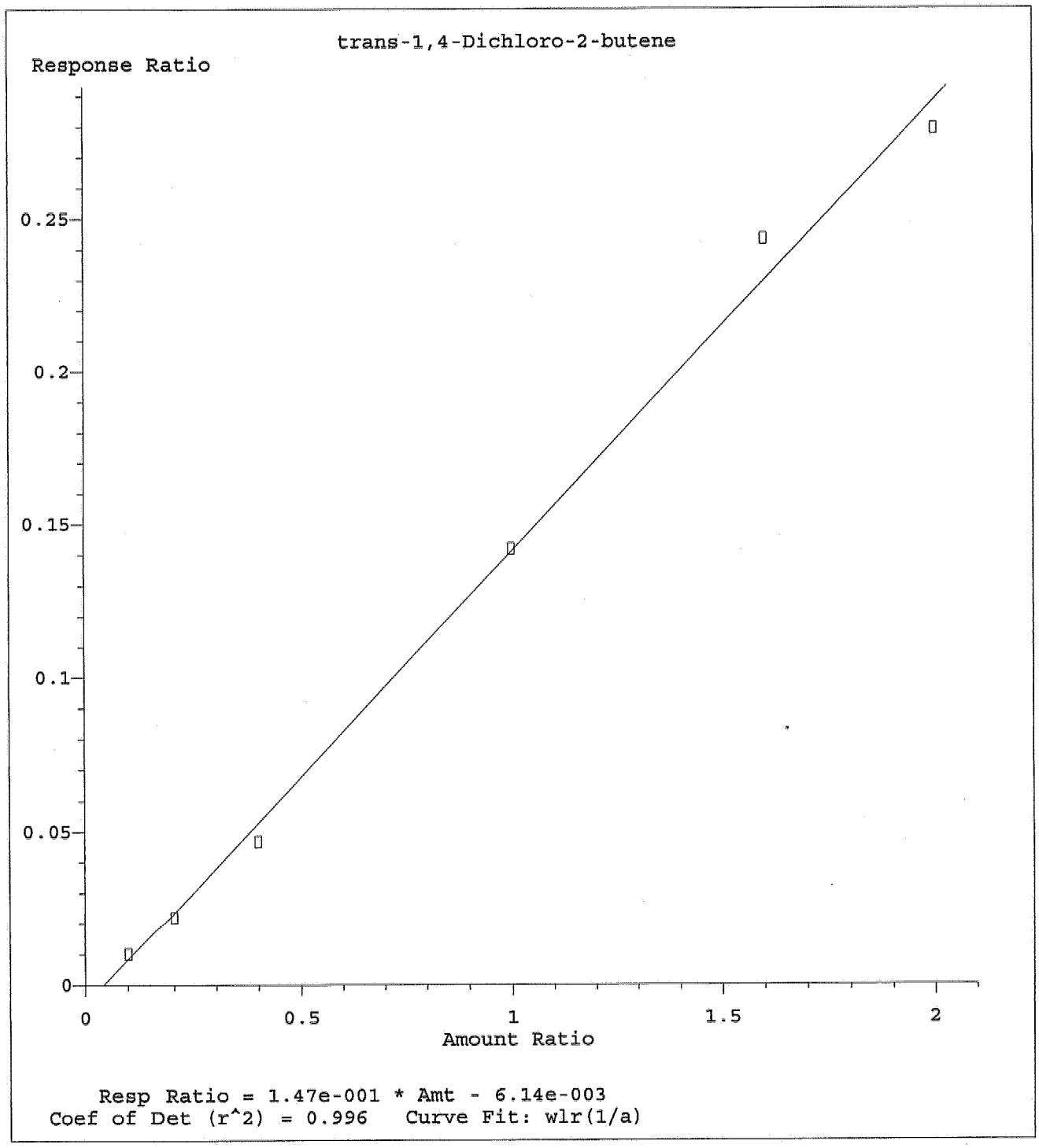
Method Name: D:\HPCHEM\1\METHODS\VO03B03.M
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



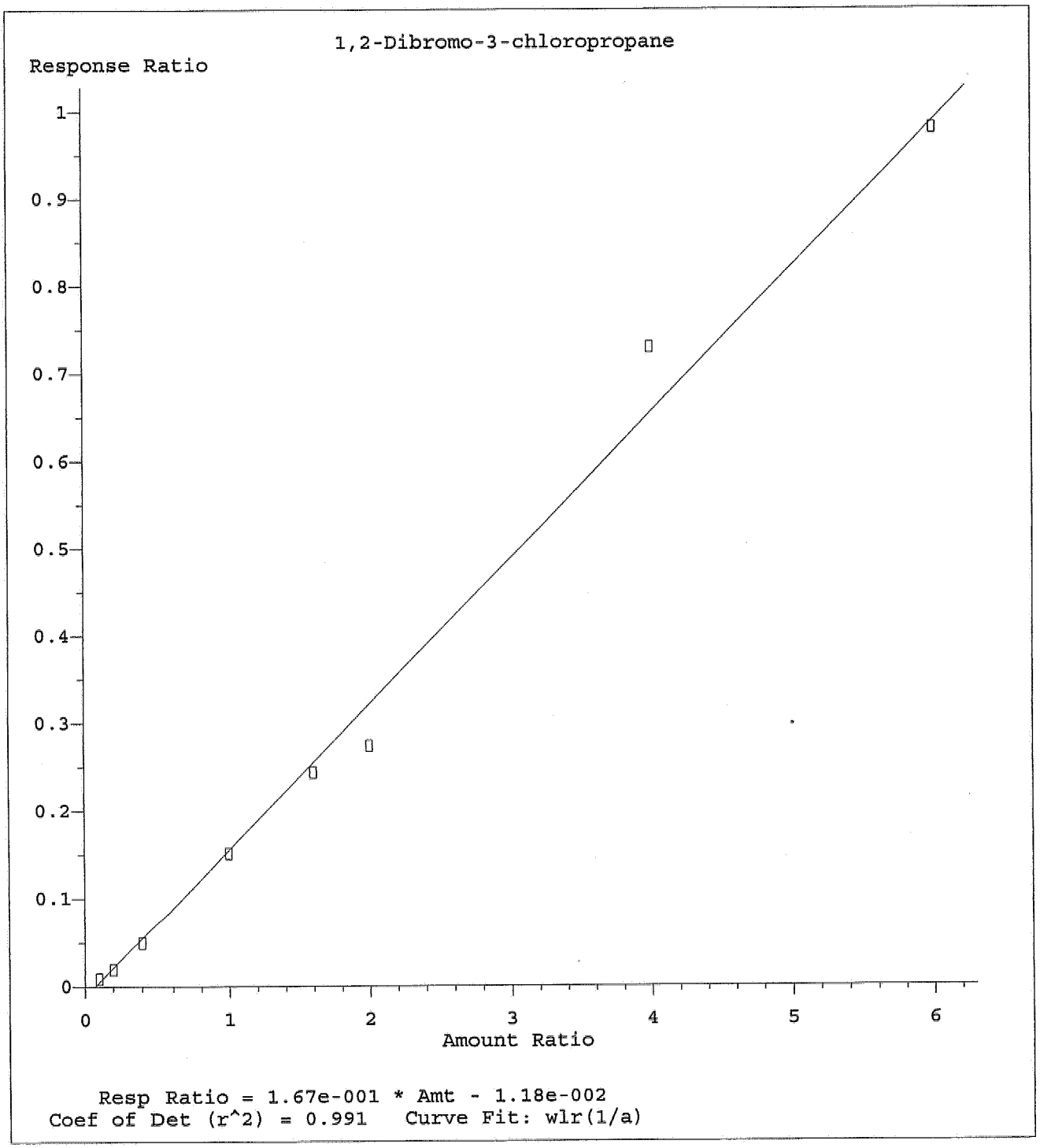
Method Name: D:\HPCHEM\1\METHODS\VO03B03.M
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



Method Name: D:\HPCHEM\1\METHODS\VO03B03.M
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

2-9-06



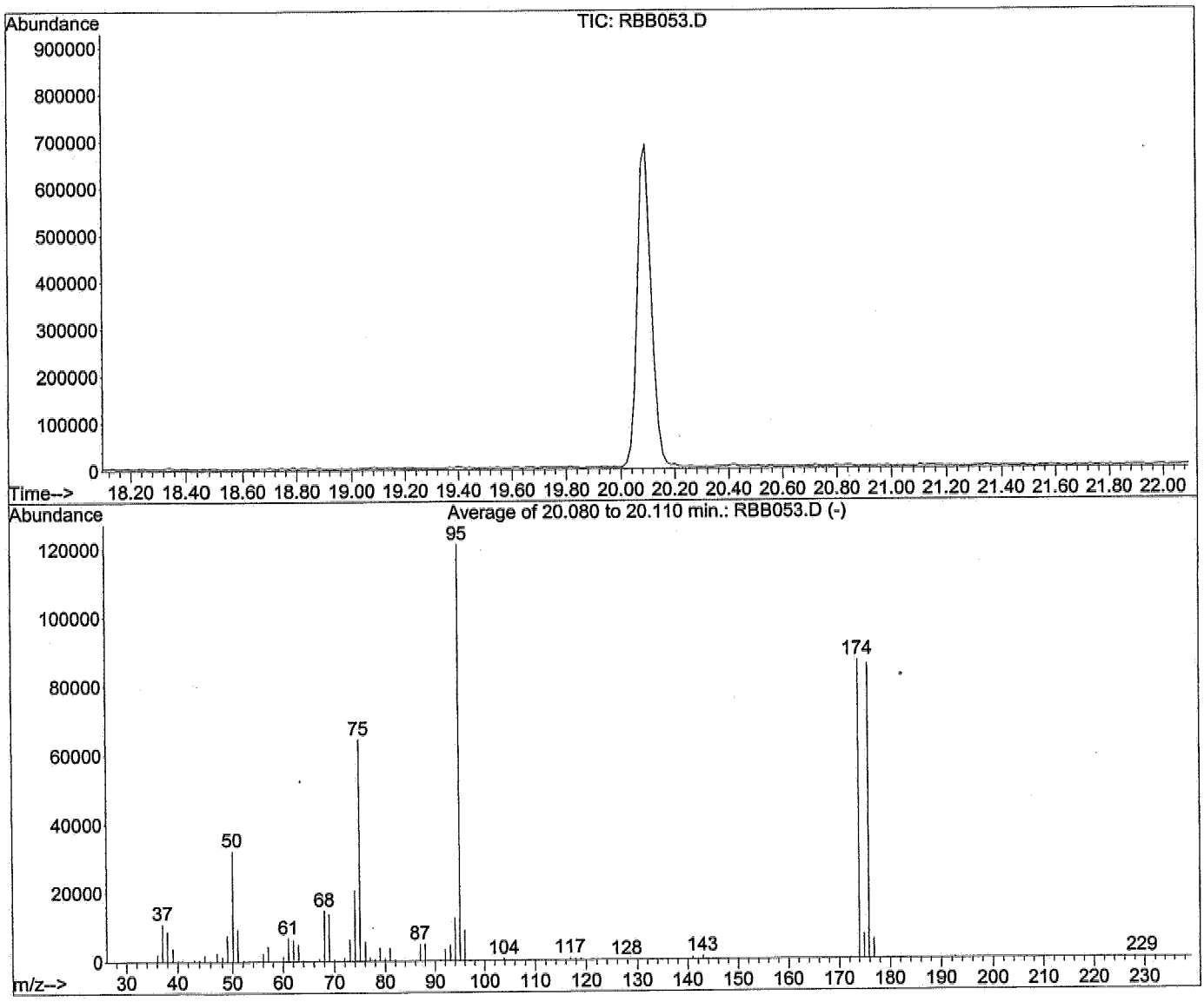
Method Name: D:\HPCHEM\1\METHODS\VO03B03.M
Calibration Table Last Updated: Mon Feb 06 13:18:50 2006

pw 2-9-06

BFB

Data File : D:\HPCHEM\1\DATA\06B03\RBB053.D
Acq On : 3 Feb 2006 1:03 pm
Sample : BFB03B05
Misc : T/CHECK
MS Integration Params: 524INT.P
Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: CGM
Inst : TO03
Multiplr: 1.00



AutoFind: Scans 1142, 1143, 1144; Background Corrected with Scan 1135

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.7	32400	PASS
75	95	30	60	53.2	64544	PASS
95	95	100	100	100.0	121299	PASS
96	95	5	9	7.4	8956	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.7	87029	PASS
175	174	5	9	8.3	7199	PASS
176	174	95	101	98.6	85840	PASS
177	176	5	9	6.7	5738	PASS

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RBB053.D VO03B03.M Mon Feb 06 19:20:37 2006

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB054.D Vial: 2
Acq On : 3 Feb 2006 1:40 pm Operator: CGM
Sample : VO03B031 2/8/10 Inst : TO03
Misc : 2ppb 8260/8ppb Ket-AA/10ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:38 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:36:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.16	114	2510783	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.07	117	2466285	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.32	152	1230324	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.55	65	54297	2.37	ug/l	0.00
Spiked Amount 50.000			Recovery =	4.74%		
50) Toluene-d8	13.89	98	96431	1.87	ug/l	0.00
Spiked Amount 50.000			Recovery =	3.74%		
71) 4-Bromofluorobenzene	20.10	95	51851	2.06	ug/l	0.00
Spiked Amount 50.000			Recovery =	4.12%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	41530	1.80	ug/l	91
3) Chloromethane	3.83	50	61997	2.32	ug/l	97
4) Vinyl chloride	4.01	62	37388	2.37	ug/l	93
5) Bromomethane	4.77	94	24763	1.83	ug/l	98
6) Chloroethane	4.90	64	21820	1.98	ug/l	98
7) Trichlorofluoromethane	5.33	101	50741	2.09	ug/l	97
9) Acrolein	5.98	56	13546	5.93	ug/l	86
10) 1,1,2-Trichloro-1,2,2-trif	6.03	151	27715	2.18	ug/l	88
11) Acetone	6.10	43	72761	9.35	ug/l	98
12) 1,1-Dichloroethene	6.31	61	84782	2.22	ug/l	97
13) tert-Butyl alcohol	6.47	59	12627	8.10	ug/l #	1
15) Iodomethane	6.82	142	27486	1.63	ug/l	94
16) Methyl acetate	6.80	43	44903	2.27	ug/l	89
17) Methylene chloride	7.05	49	185404	4.73	ug/l	98
18) Carbon disulfide	7.13	76	98885	1.72	ug/l	96
19) Acrylonitrile	7.22	53	46266	6.94	ug/l	93
20) tert-Butyl methyl ether (M	7.32	73	50829	1.32	ug/l	96
21) trans-1,2-Dichloroethene	7.53	61	74296	1.95	ug/l	98
22) Isopropyl ether (DIPE)	8.01	45	142177	1.65	ug/l	99
23) 1,1-Dichloroethane	8.18	63	79788	1.91	ug/l	97
24) Vinyl acetate	8.15	43	65241	1.37	ug/l	95
25) tert-Butyl ethyl ether (ET	8.64	59	70803	1.32	ug/l	96
26) 2-Butanone	8.84	43	74708	6.51	ug/l	95
27) 2,2-Dichloropropane	9.07	77	26979	1.35	ug/l	87
28) cis-1,2-Dichloroethene	9.15	61	74810	1.83	ug/l	98
30) Chloroform	9.40	83	76945	2.01	ug/l	98
31) Bromochloromethane	9.67	49	48182	2.08	ug/l	96
32) Tetrahydrofuran	9.77	42	26227	3.94	ug/l	77
33) 1,1,1-Trichloroethane	10.07	97	47404	1.57	ug/l	93
34) Cyclohexane	10.13	56	65987	1.69	ug/l	95
35) tert-Amyl methyl ether (TA	10.49	73	50766	1.26	ug/l	78
38) 1,1-Dichloropropene	10.31	77	18284	1.69	ug/l	98
39) Carbon tetrachloride	10.50	119	31323	1.25	ug/l	97
40) 1,2-Dichloroethane	10.69	62	74680	1.95	ug/l	97
41) Benzene	10.77	78	142375	1.83	ug/l	98
42) Trichloroethene	11.76	130	36376	1.81	ug/l	95
43) Methylcyclohexane	11.91	83	52954	1.58	ug/l	96
44) 1,2-Dichloropropane	12.05	63	43628	1.77	ug/l	90

(#) = qualifier out of range (m) = manual integration
RBB054.D VO03B03.M Mon Feb 06 19:20:49 2006

2-9-06

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB054.D Vial: 2
Acq On : 3 Feb 2006 1:40 pm Operator: CGM
Sample : VO03B031 2/8/10 Inst : TO03
Misc : 2ppb 8260/8ppb Ket-AA/10ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:38 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:36:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45)	Bromodichloromethane	12.46	83	44088	1.43 ug/l		93
46)	Dibromomethane	12.57	93	25628	1.76 ug/l		95
47)	2-Chloroethyl vinyl ether	12.91	63	11925	1.21 ug/l		89
48)	4-Methyl-2-pentanone	12.98	43	168116	5.74 ug/l		99
49)	cis-1,3-Dichloropropene	13.38	75	35343	1.12 ug/l		89
51)	Toluene	14.04	91	143682	1.88 ug/l		95
52)	Ethyl methacrylate	14.23	69	32855	1.29 ug/l		85
53)	trans-1,3-Dichloropropene	14.31	75	22811	0.94 ug/l		98
54)	1,1,2-Trichloroethane	14.65	97	30242	1.82 ug/l		91
55)	2-Hexanone	14.62	43	112289	5.80 ug/l		92
56)	1,3-Dichloropropane	15.15	76	53687	1.70 ug/l		96
57)	Tetrachloroethene	15.36	164	33684	1.93 ug/l		95
58)	Dibromochloromethane	15.79	129	20499	1.10 ug/l		94
59)	1,2-Dibromoethane	16.22	107	24227	1.50 ug/l		94
60)	1-Chlorohexane	16.47	91	40399	1.40 ug/l		89
61)	Chlorobenzene	17.16	112	99605	2.00 ug/l		96
62)	1,1,1,2-Tetrachloroethane	17.23	131	24678	1.41 ug/l	#	69
63)	Ethylbenzene	17.25	91	170862	1.88 ug/l		100
64)	m-Xylene & p-Xylene	17.43	91	285035	3.75 ug/l		100
65)	o-Xylene	18.50	91	129300	1.63 ug/l		100
66)	Styrene	18.57	104	84523	1.55 ug/l		97
68)	Bromoform	19.51	173	10496	0.89 ug/l		93
69)	Isopropylbenzene	19.40	105	123054	1.63 ug/l		97
70)	1,1,2,2-Tetrachloroethane	19.83	83	36570	1.63 ug/l		94
72)	1,2,3-Trichloropropane	20.23	61	12253	2.17 ug/l		83
73)	trans-1,4-Dichloro-2-buten	20.37	53	5886	1.68 ug/l	#	35
74)	n-Propylbenzene	20.49	91	178946	1.64 ug/l		98
75)	Bromobenzene	20.67	156	39836	1.80 ug/l		96
76)	2-Chlorotoluene	21.02	91	154178	2.47 ug/l		86
77)	1,3,5-Trimethylbenzene	20.93	105	117832	1.61 ug/l		99
78)	4-Chlorotoluene	21.16	91	135889	1.84 ug/l		97
79)	tert-Butylbenzene	21.97	119	95773	1.66 ug/l		94
80)	1,2,4-Trimethylbenzene	22.09	105	127179	1.74 ug/l		97
81)	sec-Butylbenzene	22.61	105	152893	1.64 ug/l		98
82)	p-Isopropyltoluene	23.00	119	107143	1.56 ug/l		97
83)	1,3-Dichlorobenzene	23.27	146	78202	1.97 ug/l		98
84)	1,4-Dichlorobenzene	23.53	146	78481	1.94 ug/l		97
85)	n-Butylbenzene	23.99	91	131162	1.66 ug/l		99
86)	1,2-Dichlorobenzene	24.38	146	79628	2.11 ug/l		76
87)	1,2-Dibromo-3-chloropropan	25.94	157	3800	1.02 ug/l	#	73
88)	1,2,4-Trichlorobenzene	27.74	180	56213	1.87 ug/l		98
89)	Hexachlorobutadiene	28.02	225	48785	2.02 ug/l		98
90)	Naphthalene	28.29	128	80814	1.51 ug/l		98
91)	1,2,3-Trichlorobenzene	28.79	180	51200	1.86 ug/l		98

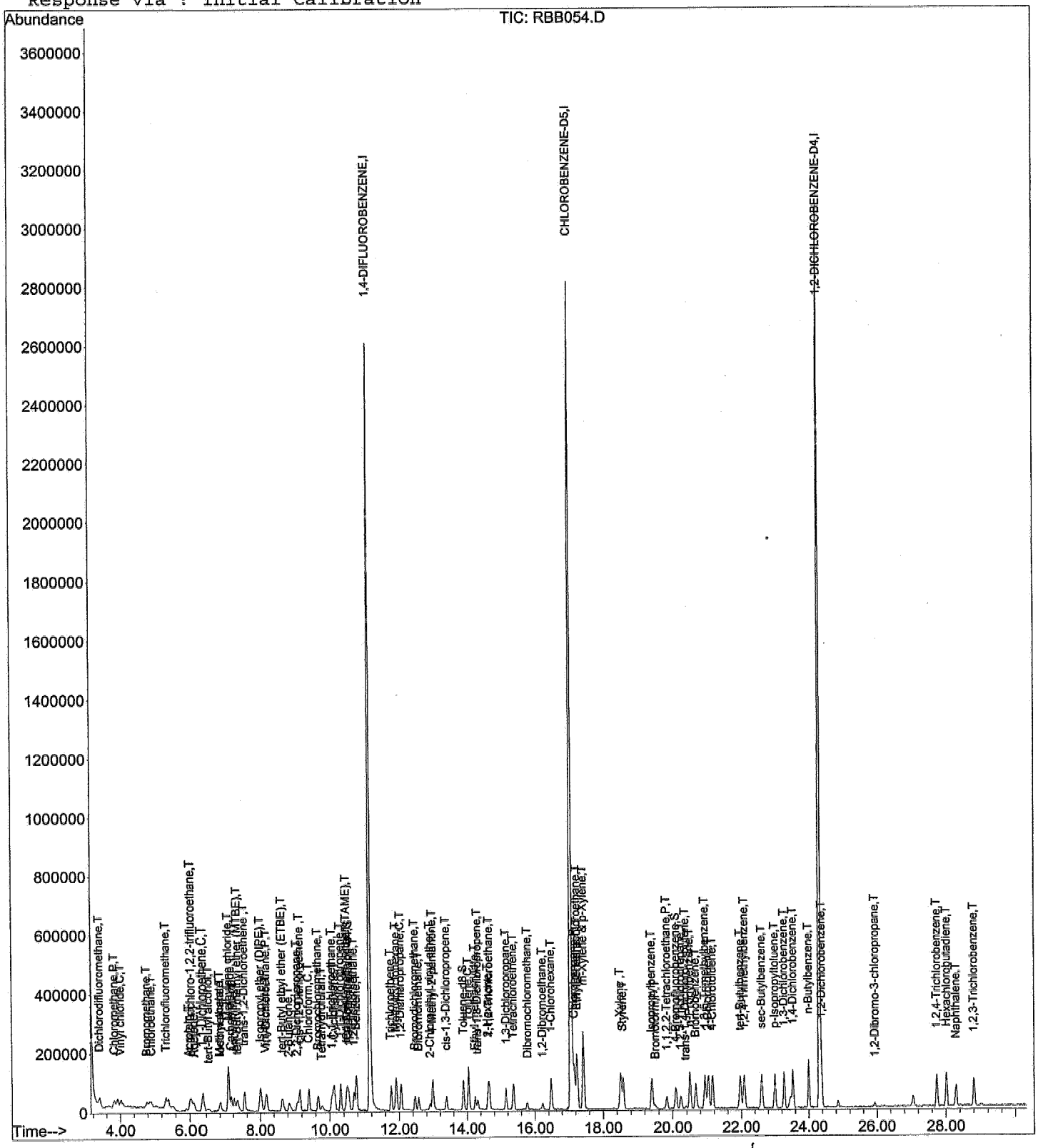
RW 2-9-06

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB054.D Vial: 2
Acq On : 3 Feb 2006 1:40 pm Operator: CGM
Sample : VO03B031 2/8/10 Inst : TO03
Misc : 2ppb 8260/8ppb Ket-AA/10ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:38 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB055.D Vial: 3
Acq On : 3 Feb 2006 2:17 pm Operator: CGM
Sample : VO03B032 5/20/25 Inst : TO03
Misc : 5ppb 8260/20ppb Ket-AA/25ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:39 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:39:18 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2540899	50.00	ug/l		0.00
37) CHLOROBENZENE-D5	17.07	117	2376505	50.00	ug/l		0.00
67) 1,2-DICHLOROBENZENE-D4	24.32	152	1156593	50.00	ug/l		0.00
System Monitoring Compounds							
36) 1,2-Dichloroethane-d4	10.54	65	131877	5.20	ug/l		0.00
Spiked Amount 50.000			Recovery =	10.40%			
50) Toluene-d8	13.89	98	258877	5.39	ug/l		0.00
Spiked Amount 50.000			Recovery =	10.78%			
71) 4-Bromofluorobenzene	20.08	95	126718	5.28	ug/l		-0.02
Spiked Amount 50.000			Recovery =	10.56%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.38	85	116580	5.25	ug/l		96
3) Chloromethane	3.81	50	139159	4.77	ug/l		94
4) Vinyl chloride	4.02	62	97621	5.60	ug/l		97
5) Bromomethane	4.76	94	60881	4.64	ug/l		92
6) Chloroethane	4.88	64	53701	4.85	ug/l		96
7) Trichlorofluoromethane	5.31	101	125984	5.01	ug/l		99
9) Acrolein	5.98	56	39293	19.52	ug/l		94
10) 1,1,2-Trichloro-1,2,2-trif	6.03	151	61117	4.54	ug/l		95
11) Acetone	6.10	43	155161	18.17	ug/l		100
12) 1,1-Dichloroethene	6.31	61	199681	4.90	ug/l		100
13) tert-Butyl alcohol	6.44	59	27805	19.48	ug/l	#	50
15) Iodomethane	6.81	142	72636	4.69	ug/l		96
16) Methyl acetate	6.80	43	86653	4.06	ug/l		98
17) Methylene chloride	7.05	49	283488	4.25	ug/l		98
18) Carbon disulfide	7.13	76	260280	4.81	ug/l		100
19) Acrylonitrile	7.22	53	116557	18.51	ug/l		97
20) tert-Butyl methyl ether (M	7.32	73	139038	4.29	ug/l		98
21) trans-1,2-Dichloroethene	7.53	61	182632	4.80	ug/l		98
22) Isopropyl ether (DIPE)	8.00	45	364077	4.57	ug/l		100
23) 1,1-Dichloroethane	8.18	63	200596	4.86	ug/l		99
24) Vinyl acetate	8.14	43	184403	4.54	ug/l		100
25) tert-Butyl ethyl ether (ET	8.64	59	185630	4.12	ug/l		97
26) 2-Butanone	8.84	43	178303	16.93	ug/l		99
27) 2,2-Dichloropropane	9.07	77	73601	4.34	ug/l		91
28) cis-1,2-Dichloroethene	9.13	61	188044	4.75	ug/l		99
30) Chloroform	9.40	83	188394	4.85	ug/l		98
31) Bromochloromethane	9.67	49	115668	4.84	ug/l		98
32) Tetrahydrofuran	9.76	42	52262	7.82	ug/l		98
33) 1,1,1-Trichloroethane	10.05	97	129262	4.74	ug/l		98
34) Cyclohexane	10.13	56	171642	4.71	ug/l		98
35) tert-Amyl methyl ether (TA	10.48	73	143548	4.32	ug/l		88
38) 1,1-Dichloropropene	10.31	77	48291	5.02	ug/l		93
39) Carbon tetrachloride	10.50	119	87734	4.47	ug/l		98
40) 1,2-Dichloroethane	10.69	62	183264	5.03	ug/l		100
41) Benzene	10.77	78	360108	5.01	ug/l		99
42) Trichloroethene	11.78	130	93578	5.07	ug/l		95
43) Methylcyclohexane	11.91	83	139745	4.84	ug/l		98
44) 1,2-Dichloropropane	12.04	63	113229	5.05	ug/l		96

(#) = qualifier out of range (m) = manual integration
RBB055.D VO03B03.M Mon Feb 06 19:21:45 2006

2-9-06

2012

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB055.D Vial: 3
Acq On : 3 Feb 2006 2:17 pm Operator: CGM
Sample : VO03B032 5/20/25 Inst : TO03
Misc : 5ppb 8260/20ppb Ket-AA/25ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:39 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:39:18 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	Bromodichloromethane	12.46	83	109961	4.32 ug/l	98
46)	Dibromomethane	12.56	93	66952	5.08 ug/l	91
47)	2-Chloroethyl vinyl ether	12.89	63	34134	4.47 ug/l	94
48)	4-Methyl-2-pentanone	12.97	43	435712	17.97 ug/l	99
49)	cis-1,3-Dichloropropene	13.38	75	97961	4.13 ug/l	94
51)	Toluene	14.04	91	349356	4.89 ug/l	100
52)	Ethyl methacrylate	14.23	69	86851	4.30 ug/l	94
53)	trans-1,3-Dichloropropene	14.30	75	63927	3.71 ug/l	86
54)	1,1,2-Trichloroethane	14.65	97	71042	4.65 ug/l	98
55)	2-Hexanone	14.60	43	288367	17.92 ug/l	97
56)	1,3-Dichloropropane	15.15	76	129595	4.60 ug/l	98
57)	Tetrachloroethene	15.36	164	82813	5.01 ug/l	98
58)	Dibromochloromethane	15.77	129	55818	4.02 ug/l	95
59)	1,2-Dibromoethane	16.22	107	65117	4.78 ug/l	98
60)	1-Chlorohexane	16.47	91	110416	4.67 ug/l	90
61)	Chlorobenzene	17.16	112	241217	5.03 ug/l	96
62)	1,1,1,2-Tetrachloroethane	17.23	131	63469	4.41 ug/l	93
63)	Ethylbenzene	17.25	91	424938	5.00 ug/l	99
64)	m-Xylene & p-Xylene	17.42	91	713271	10.05 ug/l	100
65)	o-Xylene	18.51	91	329150	4.75 ug/l	99
66)	Styrene	18.58	104	225529	4.84 ug/l	99
68)	Bromoform	19.49	173	28640	3.58 ug/l	95
69)	Isopropylbenzene	19.40	105	323554	5.02 ug/l	99
70)	1,1,2,2-Tetrachloroethane	19.82	83	94265	4.93 ug/l	98
72)	1,2,3-Trichloropropane	20.22	61	25866	4.68 ug/l	92
73)	trans-1,4-Dichloro-2-buten	20.38	53	11782	3.89 ug/l	74
74)	n-Propylbenzene	20.50	91	485844	5.20 ug/l	98
75)	Bromobenzene	20.66	156	96682	4.89 ug/l	97
76)	2-Chlorotoluene	21.03	91	290671	4.43 ug/l	100
77)	1,3,5-Trimethylbenzene	20.93	105	309747	4.98 ug/l	99
78)	4-Chlorotoluene	21.15	91	331072	4.97 ug/l	99
79)	tert-Butylbenzene	21.97	119	249263	5.02 ug/l	99
80)	1,2,4-Trimethylbenzene	22.09	105	326373	5.08 ug/l	99
81)	sec-Butylbenzene	22.61	105	403533	5.07 ug/l	99
82)	p-Isopropyltoluene	23.00	119	290997	5.06 ug/l	100
83)	1,3-Dichlorobenzene	23.26	146	183483	4.96 ug/l	99
84)	1,4-Dichlorobenzene	23.53	146	186857	4.99 ug/l	98
85)	n-Butylbenzene	23.99	91	343717	5.05 ug/l	99
86)	1,2-Dichlorobenzene	24.38	146	181614	4.98 ug/l	92
87)	1,2-Dibromo-3-chloropropan	25.94	157	10448	3.95 ug/l	91
88)	1,2,4-Trichlorobenzene	27.74	180	135751	4.96 ug/l	99
89)	Hexachlorobutadiene	28.02	225	113088	4.95 ug/l	98
90)	Naphthalene	28.29	128	200903	4.55 ug/l	99
91)	1,2,3-Trichlorobenzene	28.81	180	118881	4.76 ug/l	98

2-9-06

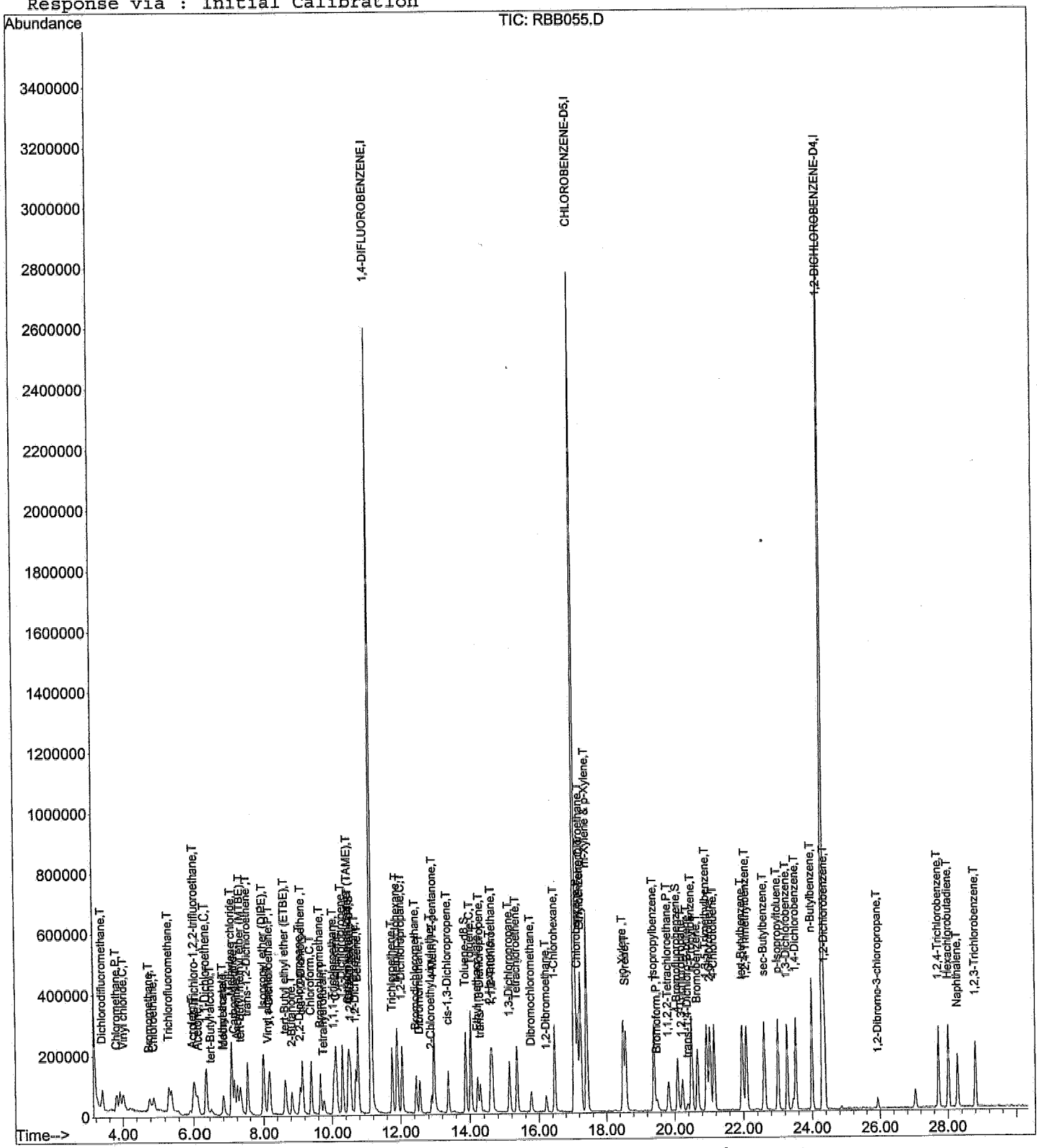
(#) = qualifier out of range (m) = manual integration
RBB055.D VO03B03.M Mon Feb 06 19:21:46 2006

2843

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB055.D Vial: 3
Acq On : 3 Feb 2006 2:17 pm Operator: CGM
Sample : VO03B032 5/20/25 Inst : TO03
Misc : 5ppb 8260/20ppb Ket-AA/25ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:39 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB056.D Vial: 4
Acq On : 3 Feb 2006 2:54 pm Operator: CGM
Sample : VO03B033 10/40/50 Inst : TO03
Misc : 10ppb 8260/40ppb Ket-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:40 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:39:55 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2171346	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.06	117	2063654	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.32	152	1078589	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	234412	10.68	ug/l	0.00
Spiked Amount 50.000			Recovery =	21.36%		
50) Toluene-d8	13.88	98	481762	11.25	ug/l	0.00
Spiked Amount 50.000			Recovery =	22.50%		
71) 4-Bromofluorobenzene	20.10	95	238624	10.47	ug/l	0.00
Spiked Amount 50.000			Recovery =	20.94%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	203692	10.56	ug/l	98
3) Chloromethane	3.81	50	249278	10.15	ug/l	99
4) Vinyl chloride	4.00	62	164287	10.60	ug/l	97
5) Bromomethane	4.78	94	114440	10.46	ug/l	94
6) Chloroethane	4.89	64	96661	10.31	ug/l	97
7) Trichlorofluoromethane	5.33	101	213710	9.94	ug/l	99
9) Acrolein	5.98	56	77389	45.35	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	6.02	151	106816	9.58	ug/l	96
11) Acetone	6.10	43	280770	39.69	ug/l	98
12) 1,1-Dichloroethene	6.31	61	335428	9.70	ug/l	99
13) tert-Butyl alcohol	6.44	59	51314	45.41	ug/l	73
15) Iodomethane	6.81	142	141106	10.89	ug/l	99
16) Methyl acetate	6.80	43	153823	8.99	ug/l	99
17) Methylene chloride	7.05	49	393557	7.26	ug/l	100
18) Carbon disulfide	7.14	76	463231	10.15	ug/l	99
19) Acrylonitrile	7.21	53	216131	41.18	ug/l	98
20) tert-Butyl methyl ether (M	7.32	73	255282	9.68	ug/l	98
21) trans-1,2-Dichloroethene	7.52	61	317921	9.91	ug/l	98
22) Isopropyl ether (DIPE)	7.98	45	657013	9.93	ug/l	100
23) 1,1-Dichloroethane	8.18	63	342130	9.79	ug/l	98
24) Vinyl acetate	8.13	43	332325	9.88	ug/l	100
25) tert-Butyl ethyl ether (ET	8.64	59	353601	9.76	ug/l	97
26) 2-Butanone	8.82	43	341531	39.99	ug/l	98
27) 2,2-Dichloropropane	9.08	77	127970	9.23	ug/l	93
28) cis-1,2-Dichloroethene	9.14	61	338939	10.19	ug/l	98
30) Chloroform	9.40	83	328881	10.00	ug/l	97
31) Bromochloromethane	9.66	49	202112	10.00	ug/l	98
32) Tetrahydrofuran	9.75	42	94205	17.78	ug/l	98
33) 1,1,1-Trichloroethane	10.07	97	230946	10.09	ug/l	98
34) Cyclohexane	10.12	56	324974	10.64	ug/l	98
35) tert-Amyl methyl ether (TA	10.48	73	266952	9.85	ug/l	92
38) 1,1-Dichloropropene	10.30	77	81413	9.73	ug/l	95
39) Carbon tetrachloride	10.50	119	167547	10.20	ug/l	98
40) 1,2-Dichloroethane	10.69	62	310742	9.81	ug/l	98
41) Benzene	10.76	78	626427	10.03	ug/l	99
42) Trichloroethene	11.77	130	158107	9.82	ug/l	98
43) Methylcyclohexane	11.91	83	264265	10.66	ug/l	99
44) 1,2-Dichloropropane	12.06	63	188743	9.66	ug/l	95

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB056.D Vial: 4
Acq On : 3 Feb 2006 2:54 pm Operator: CGM
Sample : VO03B033 10/40/50 Inst : TO03
Misc : 10ppb 8260/40ppb Ket-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:40 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:39:55 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Bromodichloromethane	12.46	83	212389	10.07 ug/l	99
46) Dibromomethane	12.56	93	111587	9.69 ug/l	98
47) 2-Chloroethyl vinyl ether	12.90	63	67031	10.48 ug/l	94
48) 4-Methyl-2-pentanone	12.96	43	855279	42.05 ug/l	100
49) cis-1,3-Dichloropropene	13.38	75	192168	9.91 ug/l	96
51) Toluene	14.03	91	628526	10.21 ug/l	97
52) Ethyl methacrylate	14.23	69	167451	10.01 ug/l	91
53) trans-1,3-Dichloropropene	14.30	75	126751	9.27 ug/l	93
54) 1,1,2-Trichloroethane	14.64	97	132103	10.19 ug/l	97
55) 2-Hexanone	14.60	43	573248	42.50 ug/l	97
56) 1,3-Dichloropropane	15.15	76	237806	9.99 ug/l	100
57) Tetrachloroethene	15.37	164	141445	9.84 ug/l	98
58) Dibromochloromethane	15.77	129	110517	9.80 ug/l	99
59) 1,2-Dibromoethane	16.22	107	121296	10.41 ug/l	99
60) 1-Chlorohexane	16.47	91	213045	10.61 ug/l	99
61) Chlorobenzene	17.17	112	414051	9.92 ug/l	97
62) 1,1,1,2-Tetrachloroethane	17.23	131	120862	10.07 ug/l	96
63) Ethylbenzene	17.24	91	745176	10.10 ug/l	100
64) m-Xylene & p-Xylene	17.42	91	1246072	20.19 ug/l	98
65) o-Xylene	18.51	91	622230	10.51 ug/l	99
66) Styrene	18.58	104	413068	10.31 ug/l	99
68) Bromoform	19.50	173	62805	9.29 ug/l	98
69) Isopropylbenzene	19.40	105	592005	9.84 ug/l	98
70) 1,1,2,2-Tetrachloroethane	19.83	83	176413	9.94 ug/l	97
72) 1,2,3-Trichloropropane	20.23	61	47952	9.50 ug/l	95
73) trans-1,4-Dichloro-2-buten	20.38	53	23788	9.10 ug/l	79
74) n-Propylbenzene	20.50	91	897677	10.17 ug/l	99
75) Bromobenzene	20.66	156	182216	9.96 ug/l	100
76) 2-Chlorotoluene	21.03	91	532850	9.05 ug/l	98
77) 1,3,5-Trimethylbenzene	20.93	105	589687	10.18 ug/l	98
78) 4-Chlorotoluene	21.15	91	624320	10.07 ug/l	100
79) tert-Butylbenzene	21.97	119	471677	10.17 ug/l	99
80) 1,2,4-Trimethylbenzene	22.09	105	606763	10.08 ug/l	98
81) sec-Butylbenzene	22.61	105	758828	10.17 ug/l	96
82) p-Isopropyltoluene	22.99	119	540720	10.04 ug/l	100
83) 1,3-Dichlorobenzene	23.27	146	328445	9.54 ug/l	98
84) 1,4-Dichlorobenzene	23.53	146	336283	9.63 ug/l	97
85) n-Butylbenzene	23.99	91	647100	10.16 ug/l	99
86) 1,2-Dichlorobenzene	24.37	146	317153	9.34 ug/l	96
87) 1,2-Dibromo-3-chloropropan	25.93	157	20748	9.05 ug/l	88
88) 1,2,4-Trichlorobenzene	27.73	180	249097	9.79 ug/l	96
89) Hexachlorobutadiene	28.01	225	202414	9.53 ug/l	99
90) Naphthalene	28.28	128	409594	10.26 ug/l	98
91) 1,2,3-Trichlorobenzene	28.80	180	224138	9.78 ug/l	100

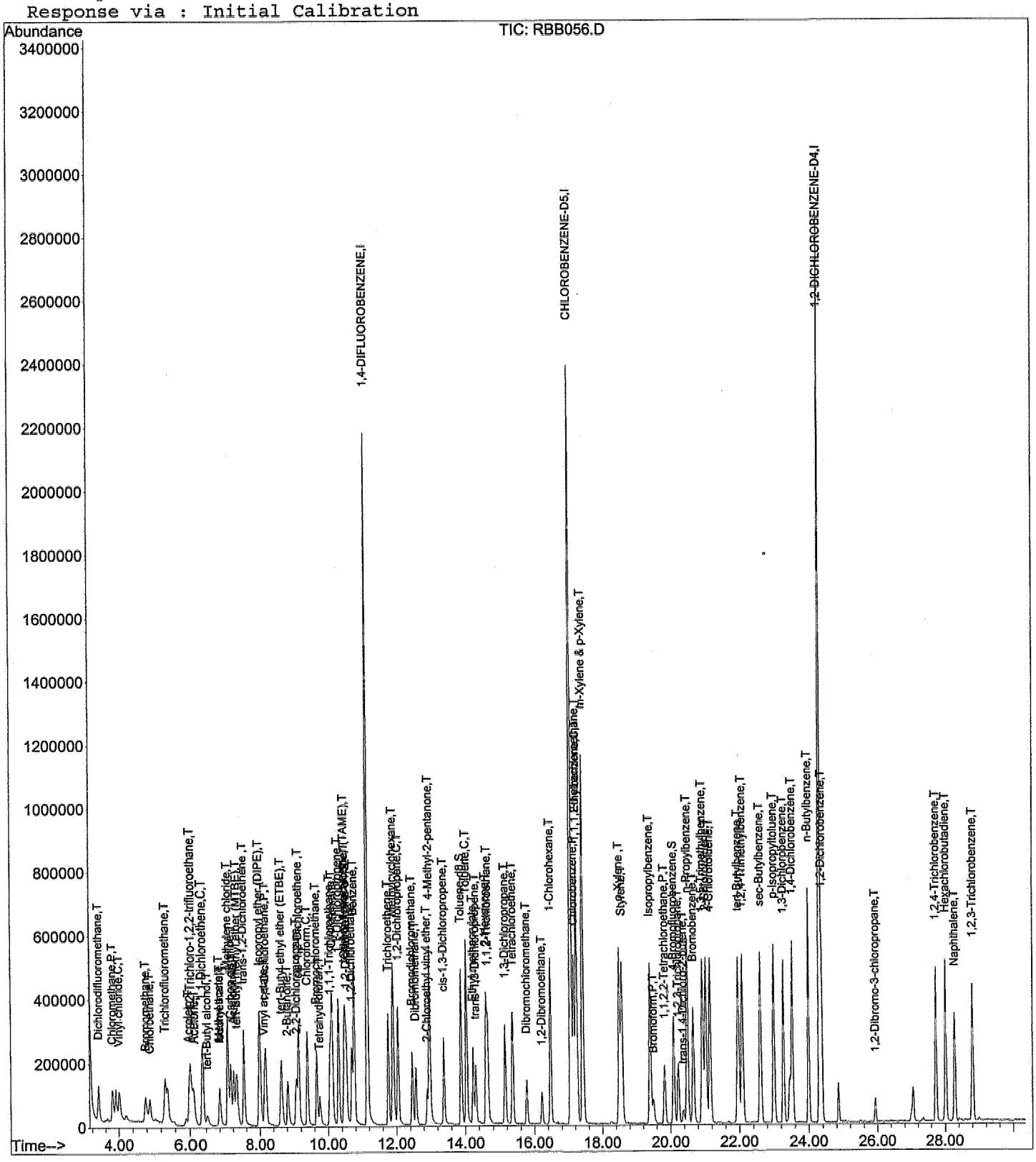
2-9-06

(#) = qualifier out of range (m) = manual integration
RBB056.D VO03B03.M Mon Feb 06 19:26:53 2006

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB056.D Vial: 4
Acq On : 3 Feb 2006 2:54 pm Operator: CGM
Sample : VO03B033 10/40/50 Inst : TO03
Misc : 10ppb 8260/40ppb Ket-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:40 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



dw 2-9-06

2047

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB057.D Vial: 5
Acq On : 3 Feb 2006 3:32 pm Operator: CGM
Sample : VO03B034 20/80/100 Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:40 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:40:40 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2366101	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.06	117	2098123	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.31	152	1080497	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	484999	19.94	ug/l	0.00
Spiked Amount 50.000			Recovery = 39.88%			
50) Toluene-d8	13.88	98	954032	21.25	ug/l	0.00
Spiked Amount 50.000			Recovery = 42.50%			
71) 4-Bromofluorobenzene	20.09	95	470337	20.35	ug/l	0.00
Spiked Amount 50.000			Recovery = 40.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	563725	26.46	ug/l	98
3) Chloromethane	3.81	50	625415	23.28	ug/l	98
4) Vinyl chloride	4.02	62	437110	25.50	ug/l	99
5) Bromomethane	4.77	94	311032	25.79	ug/l	100
6) Chloroethane	4.89	64	271094	26.34	ug/l	97
7) Trichlorofluoromethane	5.32	101	606294	25.92	ug/l	100
9) Acrolein	5.99	56	160337	83.44	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	6.02	151	259735	21.60	ug/l	99
11) Acetone	6.10	43	587418	76.35	ug/l	100
12) 1,1-Dichloroethene	6.30	61	784676	20.98	ug/l	99
13) tert-Butyl alcohol	6.44	59	136302	113.28	ug/l	84
15) Iodomethane	6.81	142	358268	24.82	ug/l	99
16) Methyl acetate	6.79	43	356426	19.62	ug/l	99
17) Methylene chloride	7.05	49	845723	15.38	ug/l	99
18) Carbon disulfide	7.14	76	1119979	22.43	ug/l	100
19) Acrylonitrile	7.21	53	487144	84.56	ug/l	100
20) tert-Butyl methyl ether (M	7.30	73	661576	23.20	ug/l	98
21) trans-1,2-Dichloroethene	7.52	61	761750	21.84	ug/l	100
22) Isopropyl ether (DIPE)	7.98	45	1643259	22.84	ug/l	100
23) 1,1-Dichloroethane	8.18	63	838224	22.13	ug/l	100
24) Vinyl acetate	8.13	43	878361	24.03	ug/l	99
25) tert-Butyl ethyl ether (ET	8.62	59	970695	24.74	ug/l	99
26) 2-Butanone	8.82	43	807276	86.76	ug/l	100
27) 2,2-Dichloropropane	9.07	77	330792	22.33	ug/l	100
28) cis-1,2-Dichloroethene	9.14	61	803327	22.06	ug/l	99
30) Chloroform	9.40	83	765184	21.35	ug/l	100
31) Bromochloromethane	9.66	49	464473	21.09	ug/l	100
32) Tetrahydrofuran	9.75	42	213152	37.97	ug/l	97
33) 1,1,1-Trichloroethane	10.06	97	563043	22.52	ug/l	99
34) Cyclohexane	10.12	56	739793	21.88	ug/l	99
35) tert-Amyl methyl ether (TA	10.48	73	698175	23.73	ug/l	95
38) 1,1-Dichloropropene	10.30	77	195693	23.16	ug/l	95
39) Carbon tetrachloride	10.49	119	441398	26.29	ug/l	99
40) 1,2-Dichloroethane	10.69	62	712002	22.21	ug/l	99
41) Benzene	10.76	78	1442144	22.70	ug/l	100
42) Trichloroethene	11.77	130	364392	22.36	ug/l	99
43) Methylcyclohexane	11.91	83	581845	22.70	ug/l	99
44) 1,2-Dichloropropane	12.06	63	437328	22.21	ug/l	100

(#) = qualifier out of range (m) = manual integration
RBB057.D VO03B03.M Mon Feb 06 19:27:02 2006

2-9-06

2048

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB057.D Vial: 5
Acq On : 3 Feb 2006 3:32 pm Operator: CGM
Sample : VO03B034 20/80/100 Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:40 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:40:40 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Bromodichloromethane	12.46	83	495151	23.05 ug/l	100
46) Dibromomethane	12.56	93	253871	21.86 ug/l	99
47) 2-Chloroethyl vinyl ether	12.90	63	166497	25.30 ug/l	100
48) 4-Methyl-2-pentanone	12.96	43	1865728	89.08 ug/l	100
49) cis-1,3-Dichloropropene	13.38	75	486487	24.72 ug/l	99
51) Toluene	14.03	91	1330061	21.14 ug/l	99
52) Ethyl methacrylate	14.22	69	406934	23.92 ug/l	98
53) trans-1,3-Dichloropropene	14.30	75	345580	25.32 ug/l	97
54) 1,1,2-Trichloroethane	14.64	97	273018	20.61 ug/l	99
55) 2-Hexanone	14.60	43	1193785	85.71 ug/l	99
56) 1,3-Dichloropropane	15.15	76	515628	21.31 ug/l	99
57) Tetrachloroethene	15.37	164	292068	20.07 ug/l	97
58) Dibromochloromethane	15.77	129	279692	24.52 ug/l	99
59) 1,2-Dibromoethane	16.22	107	261767	21.88 ug/l	97
60) 1-Chlorohexane	16.47	91	479029	23.12 ug/l	99
61) Chlorobenzene	17.15	112	867970	20.49 ug/l	99
62) 1,1,1,2-Tetrachloroethane	17.23	131	282032	23.08 ug/l	98
63) Ethylbenzene	17.24	91	1593030	21.18 ug/l	100
64) m-Xylene & p-Xylene	17.42	91	2658567	42.26 ug/l	100
65) o-Xylene	18.50	91	1356278	22.25 ug/l	100
66) Styrene	18.58	104	925251	22.54 ug/l	98
68) Bromoform	19.50	173	166763	25.07 ug/l	99
69) Isopropylbenzene	19.40	105	1338735	22.30 ug/l	99
70) 1,1,2,2-Tetrachloroethane	19.83	83	381320	21.48 ug/l	98
72) 1,2,3-Trichloropropane	20.23	61	103716	20.78 ug/l	91
73) trans-1,4-Dichloro-2-buten	20.38	53	50669	19.80 ug/l	91
74) n-Propylbenzene	20.50	91	1950798	21.96 ug/l	99
75) Bromobenzene	20.67	156	388534	21.22 ug/l	100
76) 2-Chlorotoluene	21.03	91	1127409	19.58 ug/l	98
77) 1,3,5-Trimethylbenzene	20.93	105	1290748	22.15 ug/l	99
78) 4-Chlorotoluene	21.15	91	1319272	21.20 ug/l	100
79) tert-Butylbenzene	21.97	119	1046297	22.42 ug/l	98
80) 1,2,4-Trimethylbenzene	22.09	105	1310810	21.69 ug/l	99
81) sec-Butylbenzene	22.61	105	1684091	22.44 ug/l	100
82) p-Isopropyltoluene	22.99	119	1233751	22.85 ug/l	100
83) 1,3-Dichlorobenzene	23.27	146	713343	20.93 ug/l	100
84) 1,4-Dichlorobenzene	23.53	146	726060	20.95 ug/l	99
85) n-Butylbenzene	23.99	91	1443744	22.55 ug/l	99
86) 1,2-Dichlorobenzene	24.37	146	682053	20.38 ug/l	99
87) 1,2-Dibromo-3-chloropropan	25.93	157	53693	23.95 ug/l	93
88) 1,2,4-Trichlorobenzene	27.73	180	538580	21.24 ug/l	99
89) Hexachlorobutadiene	28.01	225	450080	21.41 ug/l	99
90) Naphthalene	28.28	128	911182	22.63 ug/l	99
91) 1,2,3-Trichlorobenzene	28.80	180	492887	21.59 ug/l	98

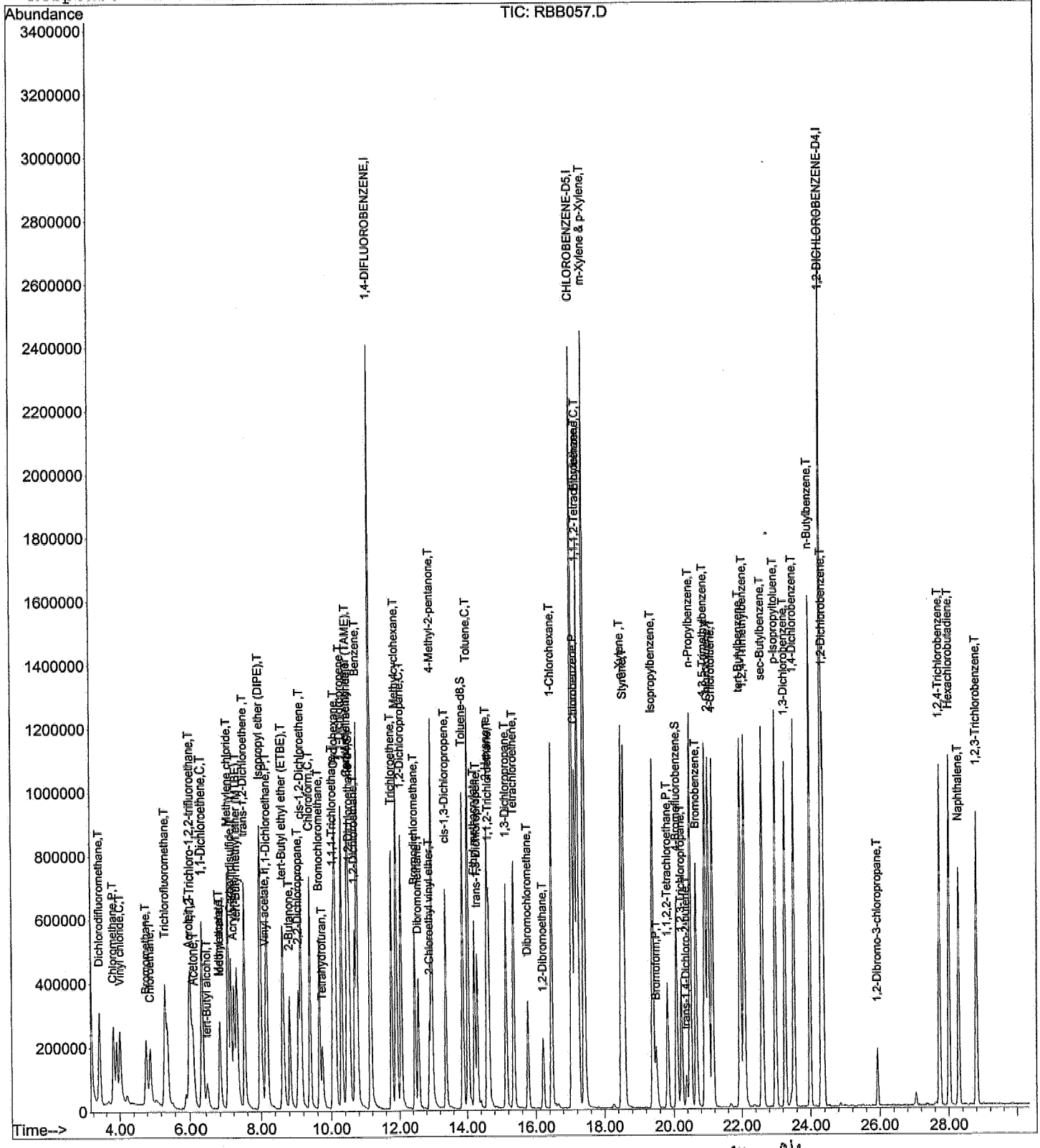
2-9-06

(#) = qualifier out of range (m) = manual integration
RBB057.D VO03B03.M Mon Feb 06 19:27:03 2006

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB057.D Vial: 5
Acq On : 3 Feb 2006 3:32 pm Operator: CGM
Sample : VO03B034 20/80/100 Inst : TO03
Misc : 20ppb 8260/80ppb Ket-AA/100ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:40 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



8-9-06

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB058.D Vial: 6
Acq On : 3 Feb 2006 4:09 pm Operator: CGM
Sample : VO03B035 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:42 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:41:56 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.16	114	2354321	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.07	117	2189381	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.32	152	1126337	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.55	65	1073153	44.37	ug/l	0.00
Spiked Amount 50.000			Recovery =	88.74%		
50) Toluene-d8	13.89	98	2290395	48.29	ug/l	0.00
Spiked Amount 50.000			Recovery =	96.58%		
71) 4-Bromofluorobenzene	20.10	95	1151509	47.64	ug/l	0.00
Spiked Amount 50.000			Recovery =	95.28%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.40	85	1082012	47.94	ug/l	100
3) Chloromethane	3.81	50	1252657	45.38	ug/l	100
4) Vinyl chloride	4.01	62	741077	41.18	ug/l	100
5) Bromomethane	4.77	94	636417	50.14	ug/l	100
6) Chloroethane	4.90	64	517218	47.49	ug/l	100
7) Trichlorofluoromethane	5.33	101	1143382	46.37	ug/l	100
9) Acrolein	5.98	56	429841	222.88	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	6.03	151	599636	49.33	ug/l	100
11) Acetone	6.09	43	1456645	192.03	ug/l	100
12) 1,1-Dichloroethene	6.31	61	1787468	47.56	ug/l	100
13) tert-Butyl alcohol	6.44	59	370074	301.12	ug/l	99
15) Iodomethane	6.82	142	793122	52.69	ug/l	100
16) Methyl acetate	6.80	43	929688	51.62	ug/l	100
17) Methylene chloride	7.05	49	1837928	35.21	ug/l	100
18) Carbon disulfide	7.13	76	2692318	52.90	ug/l	100
19) Acrylonitrile	7.22	53	1254428	216.37	ug/l	100
20) tert-Butyl methyl ether (M	7.31	73	1817569	62.07	ug/l	100
21) trans-1,2-Dichloroethene	7.53	61	1784573	50.49	ug/l	100
22) Isopropyl ether (DIPE)	7.99	45	4056317	55.09	ug/l	100
23) 1,1-Dichloroethane	8.18	63	1955622	50.80	ug/l	100
24) Vinyl acetate	8.14	43	2240720	59.22	ug/l	100
25) tert-Butyl ethyl ether (ET	8.63	59	2514934	61.50	ug/l	100
26) 2-Butanone	8.81	43	2148720	228.22	ug/l	100
27) 2,2-Dichloropropane	9.07	77	940312	62.34	ug/l	100
28) cis-1,2-Dichloroethene	9.15	61	1914210	51.76	ug/l	100
30) Chloroform	9.40	83	1803845	49.92	ug/l	100
31) Bromochloromethane	9.67	49	1091560	49.28	ug/l	100
32) Tetrahydrofuran	9.74	42	630928	114.12	ug/l	100
33) 1,1,1-Trichloroethane	10.06	97	1413656	55.43	ug/l	100
34) Cyclohexane	10.12	56	1829846	53.39	ug/l	100
35) tert-Amyl methyl ether (TA	10.47	73	1889320	62.21	ug/l	100
38) 1,1-Dichloropropene	10.31	77	480788	52.86	ug/l	100
39) Carbon tetrachloride	10.50	119	1113638	59.81	ug/l	100
40) 1,2-Dichloroethane	10.69	62	1697222	49.64	ug/l	100
41) Benzene	10.77	78	3466115	50.91	ug/l	100
42) Trichloroethene	11.76	130	895131	51.42	ug/l	100
43) Methylcyclohexane	11.91	83	1485332	54.08	ug/l	100
44) 1,2-Dichloropropane	12.05	63	1099251	52.34	ug/l	100

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

RBB058.D VO03B03.M Mon Feb 06 19:22:20 2006

2651

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB058.D Vial: 6
Acq On : 3 Feb 2006 4:09 pm Operator: CGM
Sample : VO03B035 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:42 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:41:56 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	Bromodichloromethane	12.46	83	1366004	59.13 ug/l	100
46)	Dibromomethane	12.57	93	646295	52.36 ug/l	100
47)	2-Chloroethyl vinyl ether	12.89	63	438700	60.67 ug/l	100
48)	4-Methyl-2-pentanone	12.95	43	5204851	232.87 ug/l	100
49)	cis-1,3-Dichloropropene	13.38	75	1401481	65.18 ug/l	100
51)	Toluene	14.04	91	3391321	51.08 ug/l	100
52)	Ethyl methacrylate	14.22	69	1135704	61.56 ug/l	99
53)	trans-1,3-Dichloropropene	14.31	75	1081020	72.07 ug/l	100
54)	1,1,2-Trichloroethane	14.65	97	737782	53.06 ug/l	100
55)	2-Hexanone	14.59	43	3447792	233.88 ug/l	100
56)	1,3-Dichloropropane	15.15	76	1403736	54.88 ug/l	100
57)	Tetrachloroethene	15.38	164	776673	51.11 ug/l	100
58)	Dibromochloromethane	15.78	129	824917	66.31 ug/l	100
59)	1,2-Dibromoethane	16.22	107	716163	56.30 ug/l	100
60)	1-Chlorohexane	16.47	91	1281288	57.46 ug/l	100
61)	Chlorobenzene	17.16	112	2211986	49.80 ug/l	100
62)	1,1,1,2-Tetrachloroethane	17.23	131	776911	59.10 ug/l	100
63)	Ethylbenzene	17.25	91	4034379	50.81 ug/l	100
64)	m-Xylene & p-Xylene	17.43	91	6757651	101.80 ug/l	100
65)	o-Xylene	18.51	91	3519717	54.12 ug/l	100
66)	Styrene	18.58	104	2422607	55.16 ug/l	100
68)	Bromoform	19.49	173	539845	74.09 ug/l	100
69)	Isopropylbenzene	19.40	105	3459493	54.03 ug/l	100
70)	1,1,2,2-Tetrachloroethane	19.83	83	1024353	54.55 ug/l	100
72)	1,2,3-Trichloropropane	20.23	61	258045	49.21 ug/l	100
73)	trans-1,4-Dichloro-2-buten	20.38	53	159959	60.08 ug/l	100
74)	n-Propylbenzene	20.49	91	5005390	53.02 ug/l	100
75)	Bromobenzene	20.66	156	1012346	52.40 ug/l	100
76)	2-Chlorotoluene	21.04	91	2888845	48.34 ug/l	99
77)	1,3,5-Trimethylbenzene	20.93	105	3357782	54.11 ug/l	100
78)	4-Chlorotoluene	21.16	91	3379606	51.48 ug/l	100
79)	tert-Butylbenzene	21.97	119	2674548	53.68 ug/l	100
80)	1,2,4-Trimethylbenzene	22.09	105	3343576	52.19 ug/l	100
81)	sec-Butylbenzene	22.61	105	4254673	53.09 ug/l	100
82)	p-Isopropyltoluene	23.00	119	3148885	54.39 ug/l	100
83)	1,3-Dichlorobenzene	23.28	146	1813579	50.58 ug/l	100
84)	1,4-Dichlorobenzene	23.53	146	1853418	50.82 ug/l	100
85)	n-Butylbenzene	23.99	91	3622779	52.92 ug/l	100
86)	1,2-Dichlorobenzene	24.38	146	1729152	49.38 ug/l	100
87)	1,2-Dibromo-3-chloropropan	25.94	157	170411	70.14 ug/l	100
88)	1,2,4-Trichlorobenzene	27.74	180	1377250	51.47 ug/l	100
89)	Hexachlorobutadiene	28.02	225	1107866	49.85 ug/l	100
90)	Naphthalene	28.29	128	2448686	56.85 ug/l	100
91)	1,2,3-Trichlorobenzene	28.81	180	1259559	52.10 ug/l	100

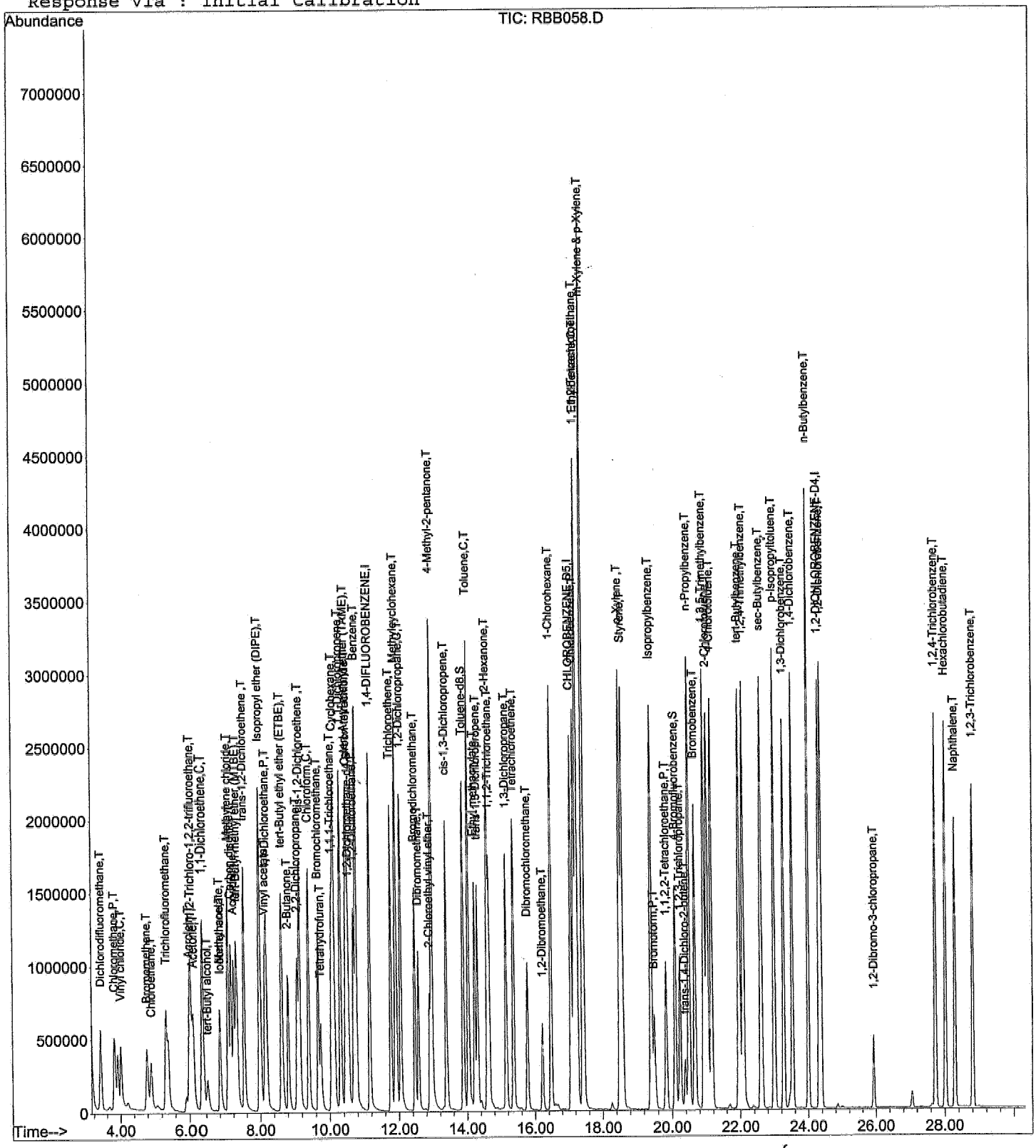
2-9-06

(#) = qualifier out of range (m) = manual integration
RBB058.D VO03B03.M Mon Feb 06 19:22:21 2006

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB058.D Vial: 6
Acq On : 3 Feb 2006 4:09 pm Operator: CGM
Sample : VO03B035 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:42 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



2-9-06

2505

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB059.D Vial: 7
Acq On : 3 Feb 2006 4:46 pm Operator: CGM
Sample : VO03B036 80/320/400 Inst : TO03
Misc : 80ppb 8260/320ppb Ket-AA/400ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:45 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:44:55 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2459458	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.06	117	2303321	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.32	152	1143708	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	2183070	86.42	ug/l	0.00
Spiked Amount 50.000			Recovery =	172.84%		
50) Toluene-d8	13.88	98	4552299	91.21	ug/l	0.00
Spiked Amount 50.000			Recovery =	182.42%		
71) 4-Bromofluorobenzene	20.10	95	2271289	92.52	ug/l	0.00
Spiked Amount 50.000			Recovery =	185.04%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	1790997	75.96	ug/l	99
3) Chloromethane	3.83	50	2119361	73.48	ug/l	97
4) Vinyl chloride	4.00	62	1141803	60.72	ug/l	99
5) Bromomethane	4.76	94	1060576	79.94	ug/l	99
6) Chloroethane	4.90	64	856375	75.22	ug/l	97
7) Trichlorofluoromethane	5.33	101	1913626	74.26	ug/l	99
9) Acrolein	5.98	56	704989	349.69	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	6.02	151	905451	71.26	ug/l	98
11) Acetone	6.10	43	2397060	302.58	ug/l	99
12) 1,1-Dichloroethene	6.31	61	2775174	70.69	ug/l	99
13) tert-Butyl alcohol	6.44	59	641985	498.51	ug/l	95
15) Iodomethane	6.81	142	1191056	75.67	ug/l	99
16) Methyl acetate	6.80	43	1590515	84.48	ug/l	100
17) Methylene chloride	7.05	49	2767252	50.75	ug/l	100
18) Carbon disulfide	7.14	76	4170439	78.47	ug/l	100
19) Acrylonitrile	7.21	53	2060467	339.92	ug/l	99
20) tert-Butyl methyl ether (M	7.30	73	2922536	95.45	ug/l	100
21) trans-1,2-Dichloroethene	7.53	61	2732008	73.99	ug/l	100
22) Isopropyl ether (DIPE)	7.99	45	6480614	84.23	ug/l	100
23) 1,1-Dichloroethane	8.18	63	3027752	75.28	ug/l	100
24) Vinyl acetate	8.13	43	3651444	92.32	ug/l	100
25) tert-Butyl ethyl ether (ET	8.62	59	4106818	96.11	ug/l	99
26) 2-Butanone	8.82	43	3596283	365.77	ug/l	100
27) 2,2-Dichloropropane	9.07	77	1511977	95.94	ug/l	97
28) cis-1,2-Dichloroethene	9.14	61	2951705	76.40	ug/l	100
30) Chloroform	9.40	83	2763880	73.17	ug/l	99
31) Bromochloromethane	9.66	49	1665779	71.91	ug/l	99
32) Tetrahydrofuran	9.74	42	1062001	183.44	ug/l	98
33) 1,1,1-Trichloroethane	10.07	97	2192200	82.29	ug/l	99
34) Cyclohexane	10.13	56	3037911	84.84	ug/l	100
35) tert-Amyl methyl ether (TA	10.47	73	3020926	95.21	ug/l	100
38) 1,1-Dichloropropene	10.30	77	730919	76.39	ug/l	97
39) Carbon tetrachloride	10.50	119	1737971	88.68	ug/l	100
40) 1,2-Dichloroethane	10.69	62	2662280	74.00	ug/l	98
41) Benzene	10.76	78	5307562	74.07	ug/l	99
42) Trichloroethene	11.77	130	1398807	76.35	ug/l	99
43) Methylcyclohexane	11.91	83	2474471	85.62	ug/l	98
44) 1,2-Dichloropropane	12.04	63	1723442	77.97	ug/l	99

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

2-9-06

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB059.D Vial: 7
Acq On : 3 Feb 2006 4:46 pm Operator: CGM
Sample : VO03B036 80/320/400 Inst : TO03
Misc : 80ppb 8260/320ppb Ket-AA/400ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:45 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:44:55 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	Bromodichloromethane	12.46	83	2145427	88.27 ug/l	100
46)	Dibromomethane	12.56	93	986344	75.95 ug/l	100
47)	2-Chloroethyl vinyl ether	12.89	63	719743	94.61 ug/l	99
48)	4-Methyl-2-pentanone	12.96	43	8574523	364.60 ug/l	99
49)	cis-1,3-Dichloropropene	13.38	75	2239402	98.97 ug/l	99
51)	Toluene	14.03	91	5280924	75.59 ug/l	99
52)	Ethyl methacrylate	14.23	69	1867977	96.19 ug/l	98
53)	trans-1,3-Dichloropropene	14.30	75	1725541	109.34 ug/l	99
54)	1,1,2-Trichloroethane	14.64	97	1141952	78.06 ug/l	98
55)	2-Hexanone	14.58	43	5777481	372.28 ug/l	100
56)	1,3-Dichloropropane	15.15	76	2204101	81.89 ug/l	99
57)	Tetrachloroethene	15.37	164	1193789	74.67 ug/l	99
58)	Dibromochloromethane	15.77	129	1327996	101.47 ug/l	100
59)	1,2-Dibromoethane	16.22	107	1089547	81.42 ug/l	98
60)	1-Chlorohexane	16.47	91	1983424	84.54 ug/l	99
61)	Chlorobenzene	17.15	112	3374519	72.21 ug/l	99
62)	1,1,1,2-Tetrachloroethane	17.23	131	1229394	88.90 ug/l	99
63)	Ethylbenzene	17.24	91	6119116	73.26 ug/l	99
64)	m-Xylene & p-Xylene	17.42	91	10063735	144.06 ug/l	99
65)	o-Xylene	18.51	91	5381097	78.64 ug/l	100
66)	Styrene	18.58	104	3705254	80.18 ug/l	100
68)	Bromoform	19.50	173	885252	119.66 ug/l	99
69)	Isopropylbenzene	19.40	105	5244561	80.67 ug/l	99
70)	1,1,2,2-Tetrachloroethane	19.83	83	1632218	85.61 ug/l	100
72)	1,2,3-Trichloropropane	20.23	61	421403	79.14 ug/l	93
73)	trans-1,4-Dichloro-2-buten	20.38	53	278332	102.94 ug/l	96
74)	n-Propylbenzene	20.50	91	7495898	78.19 ug/l	99
75)	Bromobenzene	20.68	156	1530964	78.05 ug/l	99
76)	2-Chlorotoluene	21.03	91	4345119	71.47 ug/l	99
77)	1,3,5-Trimethylbenzene	20.93	105	5044640	80.06 ug/l	100
78)	4-Chlorotoluene	21.15	91	5053460	75.81 ug/l	99
79)	tert-Butylbenzene	21.97	119	4025032	79.38 ug/l	99
80)	1,2,4-Trimethylbenzene	22.09	105	5072072	77.97 ug/l	99
81)	sec-Butylbenzene	22.61	105	6479793	79.63 ug/l	99
82)	p-Isopropyltoluene	22.99	119	4695629	79.88 ug/l	99
83)	1,3-Dichlorobenzene	23.28	146	2701725	74.20 ug/l	99
84)	1,4-Dichlorobenzene	23.53	146	2712315	73.24 ug/l	99
85)	n-Butylbenzene	23.99	91	5369735	77.25 ug/l	99
86)	1,2-Dichlorobenzene	24.38	146	2566708	72.19 ug/l	99
87)	1,2-Dibromo-3-chloropropan	25.94	157	278682	112.96 ug/l	95
88)	1,2,4-Trichlorobenzene	27.73	180	2107300	77.55 ug/l	99
89)	Hexachlorobutadiene	28.02	225	1706417	75.62 ug/l	99
90)	Naphthalene	28.28	128	3807703	87.06 ug/l	100
91)	1,2,3-Trichlorobenzene	28.80	180	1943321	79.16 ug/l	99

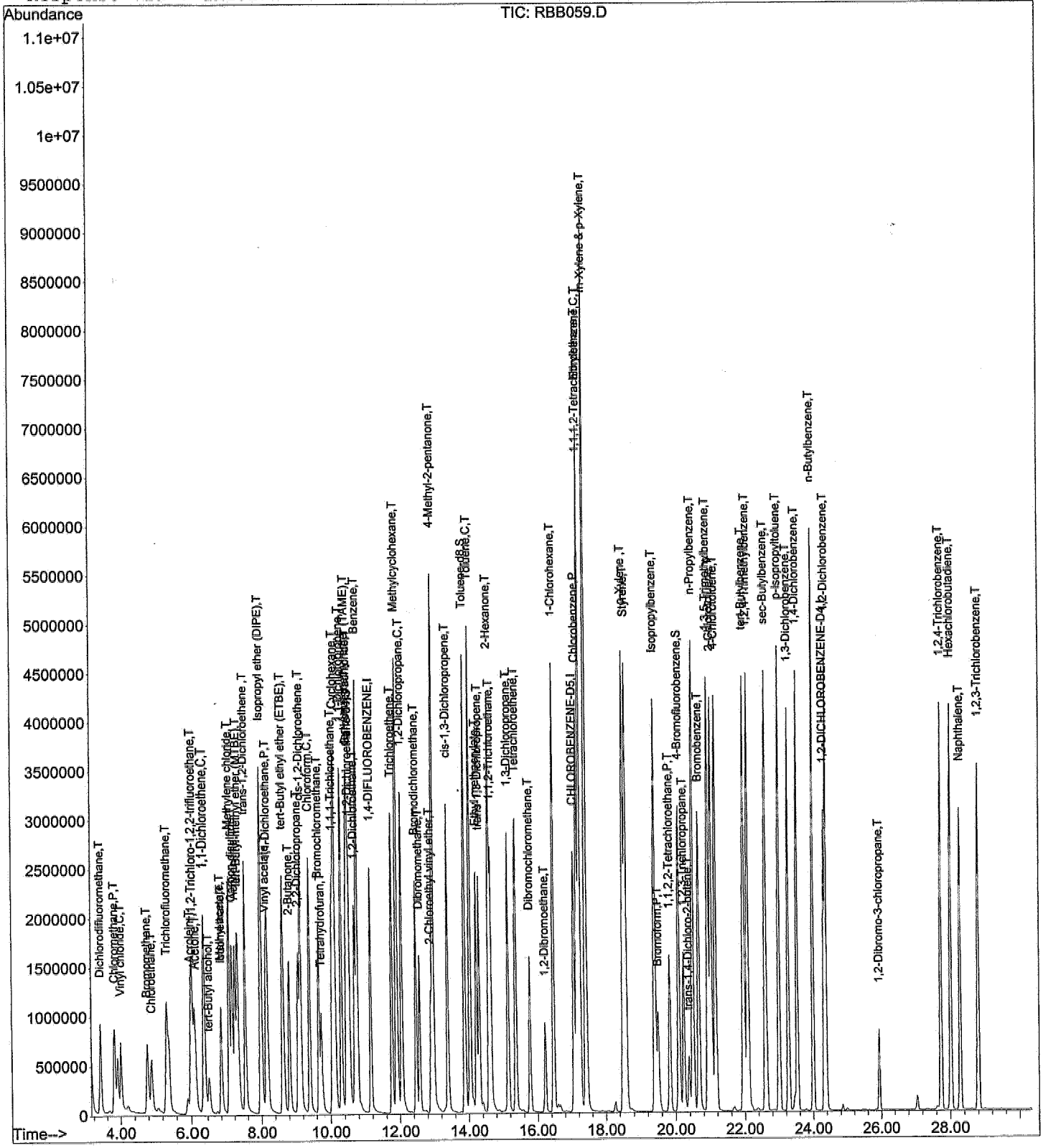
dw 2-9-06

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB059.D Vial: 7
Acq On : 3 Feb 2006 4:46 pm Operator: CGM
Sample : VO03B036 80/320/400 Inst : TO03
Misc : 80ppb 8260/320ppb Ket-AA/400ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:45 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



2-9-06

2851

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB060.D Vial: 8
Acq On : 3 Feb 2006 5:24 pm Operator: CGM
Sample : VO03B037 100/400/500 Inst : TO03
Misc : 100ppb 8260/400ppb Ket-AA/500ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:46 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:46:09 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2540569	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.06	117	2242170	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.32	152	1126128	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	2656779	100.47	ug/l	0.00
Spiked Amount 50.000			Recovery =	200.94%		
50) Toluene-d8	13.88	98	5612584	112.89	ug/l	0.00
Spiked Amount 50.000			Recovery =	225.78%		
71) 4-Bromofluorobenzene	20.10	95	2796014	112.73	ug/l	0.00
Spiked Amount 50.000			Recovery =	225.46%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	2190512	90.70	ug/l	99
3) Chloromethane	3.81	50	2630249	89.50	ug/l	96
4) Vinyl chloride	4.00	62	1339767	71.86	ug/l	100
5) Bromomethane	4.76	94	1342628	97.98	ug/l	99
6) Chloroethane	4.89	64	1044207	89.68	ug/l	98
7) Trichlorofluoromethane	5.33	101	2350372	89.36	ug/l	99
9) Acrolein	5.98	56	840243	397.33	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	6.02	151	1052187	81.65	ug/l	96
11) Acetone	6.10	43	2816550	347.33	ug/l	100
12) 1,1-Dichloroethene	6.31	61	3301015	83.01	ug/l	100
13) tert-Butyl alcohol	6.44	59	712848	514.73	ug/l	93
15) Iodomethane	6.81	142	1394856	86.57	ug/l	98
16) Methyl acetate	6.80	43	1902268	96.91	ug/l	100
17) Methylene chloride	7.05	49	3217376	60.83	ug/l	99
18) Carbon disulfide	7.14	76	4941719	90.30	ug/l	100
19) Acrylonitrile	7.21	53	2455627	388.15	ug/l	99
20) tert-Butyl methyl ether (M	7.30	73	3400984	104.18	ug/l	100
21) trans-1,2-Dichloroethene	7.52	61	3261024	86.58	ug/l	98
22) Isopropyl ether (DIPE)	7.98	45	7602310	94.82	ug/l	100
23) 1,1-Dichloroethane	8.18	63	3576397	86.94	ug/l	99
24) Vinyl acetate	8.13	43	4172665	99.57	ug/l	99
25) tert-Butyl ethyl ether (ET	8.62	59	4677979	102.54	ug/l	99
26) 2-Butanone	8.82	43	4223240	406.14	ug/l	100
27) 2,2-Dichloropropane	9.07	77	1796042	106.78	ug/l	97
28) cis-1,2-Dichloroethene	9.14	61	3486582	88.02	ug/l	100
30) Chloroform	9.40	83	3260366	84.76	ug/l	100
31) Bromochloromethane	9.66	49	1942499	82.57	ug/l	100
32) Tetrahydrofuran	9.74	42	1265757	206.61	ug/l	99
33) 1,1,1-Trichloroethane	10.07	97	2592020	93.75	ug/l	99
34) Cyclohexane	10.12	56	3837252	102.71	ug/l	99
35) tert-Amyl methyl ether (TA	10.47	73	3445732	101.90	ug/l	99
38) 1,1-Dichloropropene	10.30	77	852117	92.18	ug/l	96
39) Carbon tetrachloride	10.50	119	2024626	104.24	ug/l	100
40) 1,2-Dichloroethane	10.69	62	3097196	89.56	ug/l	98
41) Benzene	10.76	78	6172238	89.59	ug/l	98
42) Trichloroethene	11.77	130	1633306	92.28	ug/l	99
43) Methylcyclohexane	11.91	83	3091505	108.62	ug/l	100
44) 1,2-Dichloropropane	12.06	63	2012804	93.94	ug/l	99

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

2-9-06

2057

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB060.D Vial: 8
Acq On : 3 Feb 2006 5:24 pm Operator: CGM
Sample : VO03B037 100/400/500 Inst : TO03
Misc : 100ppb 8260/400ppb Ket-AA/500ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:46 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:46:09 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	Bromodichloromethane	12.46	83	2520737	104.73 ug/l	100
46)	Dibromomethane	12.56	93	1116522	89.07 ug/l	99
47)	2-Chloroethyl vinyl ether	12.89	63	821733	107.69 ug/l	99
48)	4-Methyl-2-pentanone	12.96	43	9869435	421.32 ug/l	99
49)	cis-1,3-Dichloropropene	13.38	75	2571821	112.32 ug/l	100
51)	Toluene	14.03	91	5972779	88.64 ug/l	100
52)	Ethyl methacrylate	14.23	69	2056489	105.23 ug/l	98
53)	trans-1,3-Dichloropropene	14.30	75	1985478	121.80 ug/l	99
54)	1,1,2-Trichloroethane	14.64	97	1294302	91.25 ug/l	98
55)	2-Hexanone	14.58	43	6598854	425.22 ug/l	100
56)	1,3-Dichloropropane	15.15	76	2467864	93.82 ug/l	99
57)	Tetrachloroethene	15.37	164	1355049	88.04 ug/l	99
58)	Dibromochloromethane	15.77	129	1503608	112.97 ug/l	100
59)	1,2-Dibromoethane	16.22	107	1215589	93.04 ug/l	96
60)	1-Chlorohexane	16.47	91	2288503	99.27 ug/l	99
61)	Chlorobenzene	17.15	112	3800498	84.92 ug/l	99
62)	1,1,1,2-Tetrachloroethane	17.23	131	1370847	99.98 ug/l	100
63)	Ethylbenzene	17.24	91	6855623	85.51 ug/l	99
64)	m-Xylene & p-Xylene	17.42	91	11389457	170.32 ug/l	99
65)	o-Xylene	18.51	91	6014497	90.55 ug/l	100
66)	Styrene	18.58	104	4189767	93.11 ug/l	100
68)	Bromoform	19.50	173	1001097	126.94 ug/l	100
69)	Isopropylbenzene	19.40	105	5953344	92.87 ug/l	99
70)	1,1,2,2-Tetrachloroethane	19.83	83	1795947	94.56 ug/l	99
72)	1,2,3-Trichloropropane	20.23	61	450102	86.00 ug/l	96
73)	trans-1,4-Dichloro-2-buten	20.38	53	314330	112.69 ug/l	98
74)	n-Propylbenzene	20.50	91	8512550	90.52 ug/l	99
75)	Bromobenzene	20.67	156	1709264	88.86 ug/l	99
76)	2-Chlorotoluene	21.03	91	4845933	82.42 ug/l	99
77)	1,3,5-Trimethylbenzene	20.93	105	5679526	91.53 ug/l	100
78)	4-Chlorotoluene	21.15	91	5765621	88.62 ug/l	100
79)	tert-Butylbenzene	21.97	119	4603844	92.33 ug/l	100
80)	1,2,4-Trimethylbenzene	22.09	105	5715086	89.60 ug/l	99
81)	sec-Butylbenzene	22.61	105	7365080	91.99 ug/l	100
82)	p-Isopropyltoluene	22.99	119	5399600	93.31 ug/l	99
83)	1,3-Dichlorobenzene	23.27	146	3068971	86.65 ug/l	99
84)	1,4-Dichlorobenzene	23.53	146	3103999	86.34 ug/l	99
85)	n-Butylbenzene	23.99	91	6165544	90.61 ug/l	99
86)	1,2-Dichlorobenzene	24.37	146	2884562	83.76 ug/l	100
87)	1,2-Dibromo-3-chloropropan	25.93	157	308576	118.87 ug/l	96
88)	1,2,4-Trichlorobenzene	27.73	180	2458882	92.37 ug/l	100
89)	Hexachlorobutadiene	28.02	225	1970013	89.48 ug/l	99
90)	Naphthalene	28.28	128	4276913	97.88 ug/l	99
91)	1,2,3-Trichlorobenzene	28.80	180	2212074	91.68 ug/l	99

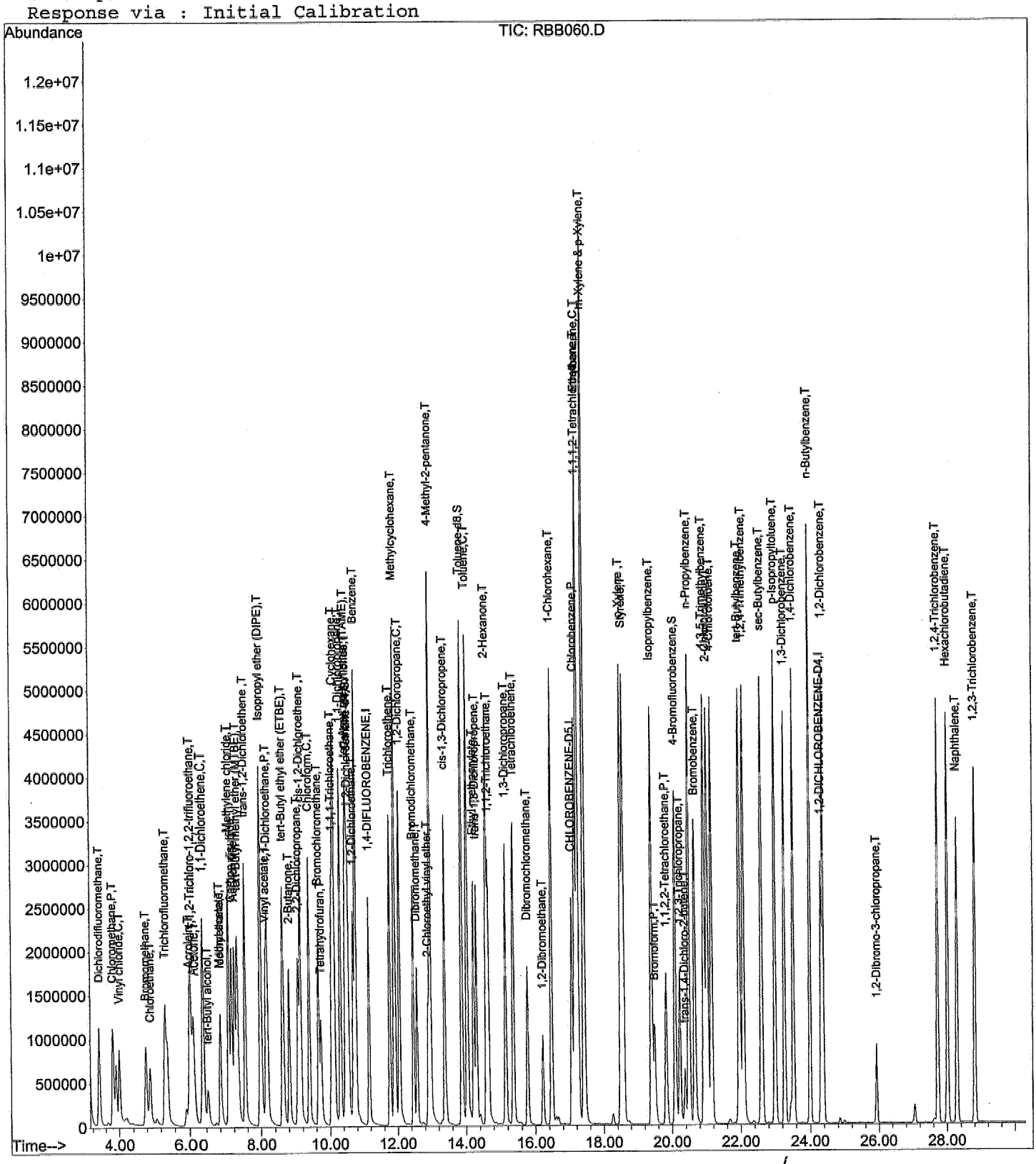
dv 2-9-06

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB060.D Vial: 8
Acq On : 3 Feb 2006 5:24 pm Operator: CGM
Sample : VO03B037 100/400/500 Inst : TO03
Misc : 100ppb 8260/400ppb Ket-AA/500ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:46 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



2-9-06

2868

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB061.D Vial: 9
Acq On : 3 Feb 2006 6:01 pm Operator: CGM
Sample : VO03B038 200/800/1000 Inst : TO03
Misc : 200ppb 8260/800ppb Ket-AA/1000ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:46 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:46:36 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2150874	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.08	117	1941589	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.31	152	979380	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	4594048	205.07	ug/l	0.00
Spiked Amount 50.000			Recovery = 410.14%			
50) Toluene-d8	13.88	98	9811400	223.77	ug/l	0.00
Spiked Amount 50.000			Recovery = 447.54%			
71) 4-Bromofluorobenzene	20.09	95	4988191	227.13	ug/l	0.00
Spiked Amount 50.000			Recovery = 454.26%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	4210631	208.71	ug/l	98
3) Chloromethane	3.81	50	5533434	225.78	ug/l	97
4) Vinyl chloride	4.00	62	2471142	163.11	ug/l	99
5) Bromomethane	4.74	94	2560123	221.31	ug/l	98
6) Chloroethane	4.88	64	2001046	206.03	ug/l	99
7) Trichlorofluoromethane	5.31	101	4529992	206.58	ug/l	100
9) Acrolein	5.99	56	1556914	870.44	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	6.01	151	2261491	212.87	ug/l	98
11) Acetone	6.10	43	5305491	787.62	ug/l	99
12) 1,1-Dichloroethene	6.30	61	6971220	212.21	ug/l	98
13) tert-Butyl alcohol	6.47	59	1631208	1385.43	ug/l	88
15) Iodomethane	6.81	142	2888428	215.89	ug/l	99
16) Methyl acetate	6.81	43	3632941	219.57	ug/l	99
17) Methylene chloride	7.05	49	6621843	156.65	ug/l	99
18) Carbon disulfide	7.12	76	10591785	231.82	ug/l	100
19) Acrylonitrile	7.23	53	4591916	860.97	ug/l	99
20) tert-Butyl methyl ether (M	7.30	73	7649434	275.13	ug/l	99
21) trans-1,2-Dichloroethene	7.52	61	6820297	218.06	ug/l	99
22) Isopropyl ether (DIPE)	7.98	45	16000222	237.48	ug/l	100
23) 1,1-Dichloroethane	8.18	63	7493418	219.26	ug/l	100
24) Vinyl acetate	8.13	43	8734580	246.35	ug/l	100
25) tert-Butyl ethyl ether (ET	8.62	59	10280106	265.19	ug/l	100
26) 2-Butanone	8.82	43	7779420	881.74	ug/l	99
27) 2,2-Dichloropropane	9.07	77	4207201	292.62	ug/l	97
28) cis-1,2-Dichloroethene	9.14	61	7437092	225.63	ug/l	98
30) Chloroform	9.40	83	6739495	211.57	ug/l	99
31) Bromochloromethane	9.66	49	4130769	212.69	ug/l	98
32) Tetrahydrofuran	9.74	42	2429823	466.28	ug/l	99
33) 1,1,1-Trichloroethane	10.06	97	5431426	234.12	ug/l	99
34) Cyclohexane	10.11	56	7036425	221.60	ug/l	99
35) tert-Amyl methyl ether (TA	10.47	73	7328677	255.30	ug/l	99
38) 1,1-Dichloropropene	10.30	77	1802146	227.67	ug/l	100
39) Carbon tetrachloride	10.50	119	4313160	254.90	ug/l	100
40) 1,2-Dichloroethane	10.69	62	6268991	212.51	ug/l	99
41) Benzene	10.76	78	12349354	210.13	ug/l	97
42) Trichloroethene	11.77	130	3339097	220.29	ug/l	99
43) Methylcyclohexane	11.91	83	5606514	224.71	ug/l	99
44) 1,2-Dichloropropane	12.06	63	4247625	230.93	ug/l	98

(#) = qualifier out of range (m) = manual integration
RBB061.D VO03B03.M Mon Feb 06 19:22:57 2006

2-9-06

2060

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB061.D Vial: 9
Acq On : 3 Feb 2006 6:01 pm Operator: CGM
Sample : VO03B038 200/800/1000 Inst : TO03
Misc : 200ppb 8260/800ppb Ket-AA/1000ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:46 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 08:46:36 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Bromodichloromethane	12.46	83	5288455	252.04 ug/l	99
46) Dibromomethane	12.56	93	2287670	214.09 ug/l	99
47) 2-Chloroethyl vinyl ether	12.89	63	1739919	260.45 ug/l	99
48) 4-Methyl-2-pentanone	12.96	43	17533382	857.84 ug/l	98
49) cis-1,3-Dichloropropene	13.38	75	5615208	278.31 ug/l	100
51) Toluene	14.03	91	11954007	208.24 ug/l	100
52) Ethyl methacrylate	14.22	69	4240457	248.73 ug/l	97
53) trans-1,3-Dichloropropene	14.30	75	4452796	305.92 ug/l	98
54) 1,1,2-Trichloroethane	14.64	97	2663476	219.60 ug/l	99
55) 2-Hexanone	14.58	43	11531467	850.45 ug/l	99
56) 1,3-Dichloropropane	15.15	76	5042334	223.35 ug/l	99
57) Tetrachloroethene	15.37	164	2807209	214.29 ug/l	99
58) Dibromochloromethane	15.77	129	3319293	282.76 ug/l	99
59) 1,2-Dibromoethane	16.22	107	2569182	229.36 ug/l	98
60) 1-Chlorohexane	16.47	91	4738648	237.62 ug/l	99
61) Chlorobenzene	17.17	112	7701023	203.09 ug/l	98
62) 1,1,1,2-Tetrachloroethane	17.23	131	2891704	243.56 ug/l	99
63) Ethylbenzene	17.24	91	13500009	198.57 ug/l	97
64) m-Xylene & p-Xylene	17.43	91	21369874	377.03 ug/l	96
65) o-Xylene	18.50	91	12225549	215.46 ug/l	98
66) Styrene	18.58	104	8594531	222.75 ug/l	99
68) Bromoform	19.50	173	2301125	323.07 ug/l	100
69) Isopropylbenzene	19.41	105	12107152	219.40 ug/l	98
70) 1,1,2,2-Tetrachloroethane	19.83	83	3739864	228.19 ug/l	99
72) 1,2,3-Trichloropropane	20.23	61	983814	220.55 ug/l	92
73) trans-1,4-Dichloro-2-buten	20.38	53	820883	332.36 ug/l	100
74) n-Propylbenzene	20.50	91	17181688	212.97 ug/l	98
75) Bromobenzene	20.67	156	3562573	216.40 ug/l	99
76) 2-Chlorotoluene	21.03	91	9798517	196.55 ug/l	97
77) 1,3,5-Trimethylbenzene	20.94	105	11731443	220.05 ug/l	100
78) 4-Chlorotoluene	21.16	91	11793781	211.88 ug/l	100
79) tert-Butylbenzene	21.97	119	9419688	219.63 ug/l	99
80) 1,2,4-Trimethylbenzene	22.09	105	11674732	213.63 ug/l	100
81) sec-Butylbenzene	22.61	105	15074107	219.00 ug/l	99
82) p-Isopropyltoluene	22.99	119	10945729	219.59 ug/l	97
83) 1,3-Dichlorobenzene	23.27	146	6206377	205.41 ug/l	99
84) 1,4-Dichlorobenzene	23.53	146	6362639	207.56 ug/l	98
85) n-Butylbenzene	24.00	91	12427684	212.85 ug/l	97
86) 1,2-Dichlorobenzene	24.37	146	5899137	201.64 ug/l	99
87) 1,2-Dibromo-3-chloropropan	25.93	157	714427	308.14 ug/l	97
88) 1,2,4-Trichlorobenzene	27.73	180	5100246	222.74 ug/l	99
89) Hexachlorobutadiene	28.01	225	4130797	219.04 ug/l	100
90) Naphthalene	28.28	128	8874134	234.22 ug/l	99
91) 1,2,3-Trichlorobenzene	28.80	180	4587015	221.22 ug/l	98

-1

AE 2-9-06

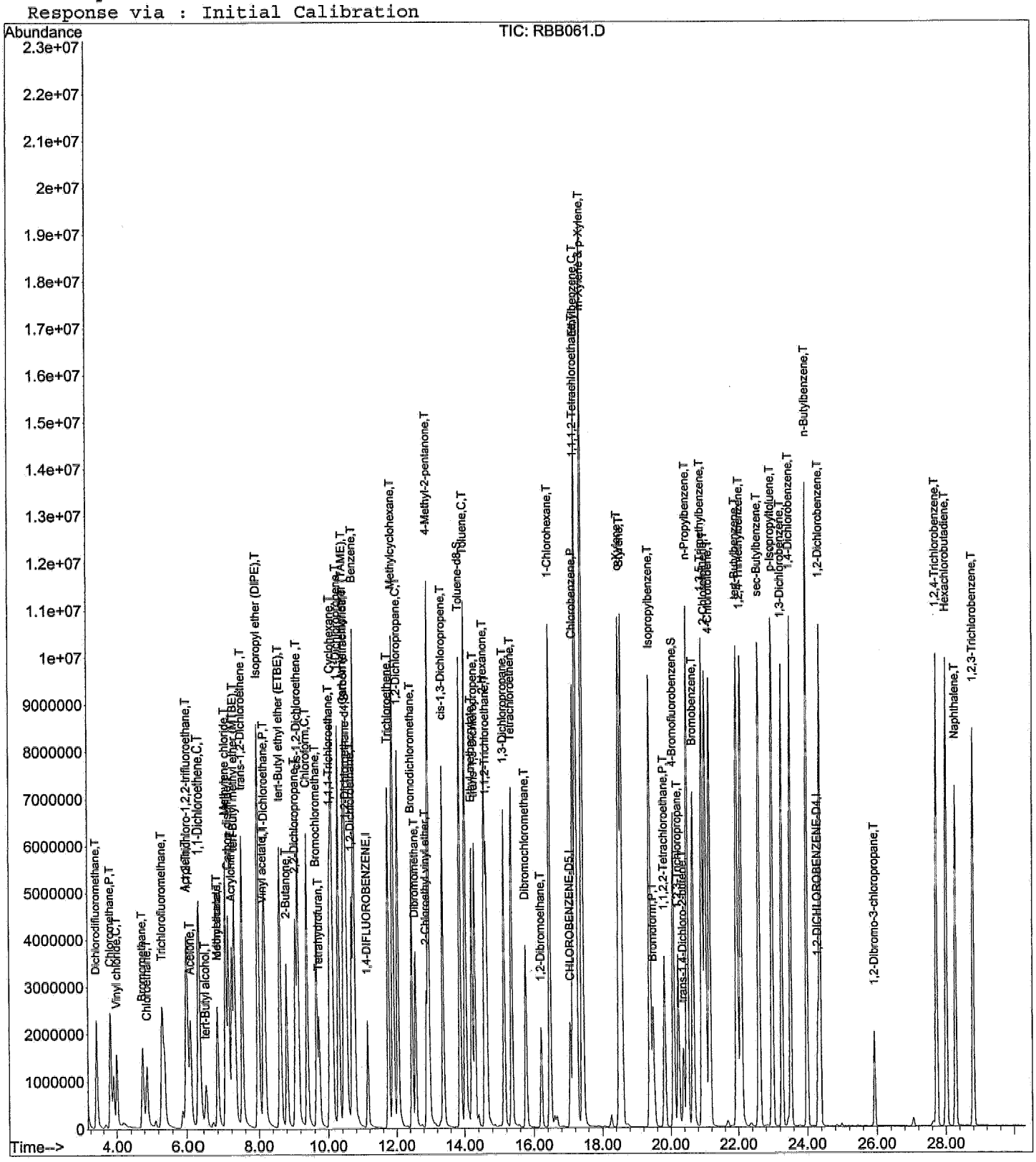
(#) = qualifier out of range (m) = manual integration

2861

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB061.D Vial: 9
Acq On : 3 Feb 2006 6:01 pm Operator: CGM
Sample : VO03B038 200/800/1000 Inst : TO03
Misc : 200ppb 8260/800ppb Ket-AA/1000ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 8:46 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB062.D Vial: 10
Acq On : 3 Feb 2006 6:38 pm Operator: CGM
Sample : VO03B039 300/1200/1500 Inst : TO03
Misc : 300ppb 8260/1200ppb Ket-AA/1500ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 9:19 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 09:16:22 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2112542	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.06	117	2001320	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.31	152	1065793	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	5773672	265.35	ug/l	0.00
Spiked Amount 50.000			Recovery =	530.70%		
50) Toluene-d8	13.88	98	12151699	268.42	ug/l	0.00
Spiked Amount 50.000			Recovery =	536.84%		
71) 4-Bromofluorobenzene	20.09	95	6672047	277.13	ug/l	0.00
Spiked Amount 50.000			Recovery =	554.26%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	5204219	265.03	ug/l	98
3) Chloromethane	3.81	50	7622439	310.30	ug/l	97
4) Vinyl chloride	3.99	62	3043568	295.15	ug/l	99
5) Bromomethane	4.73	94	3001754	264.57	ug/l	100
6) Chloroethane	4.86	64	2270907	242.81	ug/l	98
7) Trichlorofluoromethane	5.30	101	5308681	250.53	ug/l	99
9) Acrolein	5.99	56	2025109	1146.54	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	5.99	151	2648918	256.41	ug/l	97
11) Acetone	6.10	43	7198150	1101.30	ug/l	100
12) 1,1-Dichloroethene	6.29	61	8345590	260.88	ug/l	99
13) tert-Butyl alcohol	6.50	59	2385662	2062.98	ug/l	87
15) Iodomethane	6.80	142	3432760	258.67	ug/l	99
16) Methyl acetate	6.80	43	4797422	292.55	ug/l	99
17) Methylene chloride	7.03	49	8020238	264.15	ug/l	100
18) Carbon disulfide	7.11	76	12857044	282.91	ug/l	100
19) Acrylonitrile	7.23	53	6355443	1201.60	ug/l	99
20) tert-Butyl methyl ether (M	7.30	73	9676832	291.86	ug/l	98
21) trans-1,2-Dichloroethene	7.51	61	8341492	271.67	ug/l	98
22) Isopropyl ether (DIPE)	7.98	45	19525200	289.56	ug/l	100
23) 1,1-Dichloroethane	8.18	63	9013496	268.78	ug/l	99
24) Vinyl acetate	8.13	43	11068205	307.87	ug/l	99
25) tert-Butyl ethyl ether (ET	8.62	59	13335074	293.22	ug/l	99
26) 2-Butanone	8.82	43	11112415	1258.48	ug/l	100
27) 2,2-Dichloropropane	9.07	77	5170079	354.52	ug/l	96
28) cis-1,2-Dichloroethene	9.13	61	9097834	279.01	ug/l	99
30) Chloroform	9.40	83	8271418	266.17	ug/l	99
31) Bromochloromethane	9.66	49	5108936	269.14	ug/l	98
32) Tetrahydrofuran	9.74	42	3343332	635.27	ug/l	99
33) 1,1,1-Trichloroethane	10.05	97	6751257	291.17	ug/l	99
34) Cyclohexane	10.11	56	8506709	272.24	ug/l	99
35) tert-Amyl methyl ether (TA	10.47	73	9577721	314.13	ug/l	98
38) 1,1-Dichloropropene	10.30	77	2211110	269.75	ug/l	99
39) Carbon tetrachloride	10.50	119	5247374	281.54	ug/l	98
40) 1,2-Dichloroethane	10.69	62	7743928	257.21	ug/l	100
41) Benzene	10.76	78	15115278	252.82	ug/l	96
42) Trichloroethene	11.76	130	4146124	265.78	ug/l	99
43) Methylcyclohexane	11.91	83	6722206	261.53	ug/l	97
44) 1,2-Dichloropropane	12.04	63	5268192	275.39	ug/l	99

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

2053

JW 2-9-06

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB062.D Vial: 10
Acq On : 3 Feb 2006 6:38 pm Operator: CGM
Sample : VO03B039 300/1200/1500 Inst : TO03
Misc : 300ppb 8260/1200ppb Ket-AA/1500ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 9:19 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 09:16:22 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Bromodichloromethane	12.46	83	6708032	300.34 ug/l	99
46) Dibromomethane	12.56	93	2942609	268.33 ug/l	99
47) 2-Chloroethyl vinyl ether	12.89	63	2487815	328.30 ug/l	99
48) 4-Methyl-2-pentanone	12.96	43	25031774	1179.97 ug/l	97
49) cis-1,3-Dichloropropene	13.38	75	7240254	282.98 ug/l	99
51) Toluene	14.03	91	14818624	253.94 ug/l	98
52) Ethyl methacrylate	14.23	69	5752937	305.37 ug/l	96
53) trans-1,3-Dichloropropene	14.30	75	6028675	292.65 ug/l	98
54) 1,1,2-Trichloroethane	14.64	97	3430151	273.99 ug/l	97
55) 2-Hexanone	14.60	43	17223857	1220.15 ug/l	98
56) 1,3-Dichloropropane	15.15	76	6687726	285.02 ug/l	99
57) Tetrachloroethene	15.37	164	3554553	264.74 ug/l	99
58) Dibromochloromethane	15.77	129	4451176	289.73 ug/l	99
59) 1,2-Dibromoethane	16.22	107	3514373	299.02 ug/l	98
60) 1-Chlorohexane	16.47	91	6108991	291.41 ug/l	98
61) Chlorobenzene	17.17	112	9880884	256.85 ug/l	97
62) 1,1,1,2-Tetrachloroethane	17.23	131	3771461	300.01 ug/l	100
63) Ethylbenzene	17.24	91	16879231	246.46 ug/l	97
64) m-Xylene & p-Xylene	17.44	91	25536644	453.68 ug/l	93
65) o-Xylene	18.51	91	15634850	268.27 ug/l	97
66) Styrene	18.58	104	11134918	278.52 ug/l	98
68) Bromoform	19.50	173	3247390	291.63 ug/l	99
69) Isopropylbenzene	19.41	105	15519358	259.63 ug/l	96
70) 1,1,2,2-Tetrachloroethane	19.83	83	5358852	295.78 ug/l	100
72) 1,2,3-Trichloropropane	20.23	61	1386793	283.95 ug/l	94
73) trans-1,4-Dichloro-2-buten	20.38	53	1212554	388.37 ug/l	99
74) n-Propylbenzene	20.50	91	21993038	253.32 ug/l	97
75) Bromobenzene	20.67	156	4741896	265.73 ug/l	99
76) 2-Chlorotoluene	21.03	91	16988787	312.23 ug/l	88
77) 1,3,5-Trimethylbenzene	20.94	105	15282897	264.06 ug/l	99
78) 4-Chlorotoluene	21.16	91	15629319	260.35 ug/l	100
79) tert-Butylbenzene	21.97	119	12474102	267.60 ug/l	98
80) 1,2,4-Trimethylbenzene	22.09	105	15460885	261.88 ug/l	100
81) sec-Butylbenzene	22.61	105	19429486	260.56 ug/l	98
82) p-Isopropyltoluene	22.99	119	14381562	265.67 ug/l	96
83) 1,3-Dichlorobenzene	23.27	146	8356376	257.75 ug/l	99
84) 1,4-Dichlorobenzene	23.53	146	8323295	253.18 ug/l	96
85) n-Butylbenzene	24.00	91	16352260	259.61 ug/l	97
86) 1,2-Dichlorobenzene	24.37	146	8032760	256.61 ug/l	99
87) 1,2-Dibromo-3-chloropropan	25.93	157	1044370	297.42 ug/l	96
88) 1,2,4-Trichlorobenzene	27.73	180	6954202	277.73 ug/l	99
89) Hexachlorobutadiene	28.01	225	5701799	277.17 ug/l	100
90) Naphthalene	28.28	128	12542442	298.07 ug/l	97
91) 1,2,3-Trichlorobenzene	28.80	180	6462624	284.48 ug/l	99

2-9-06

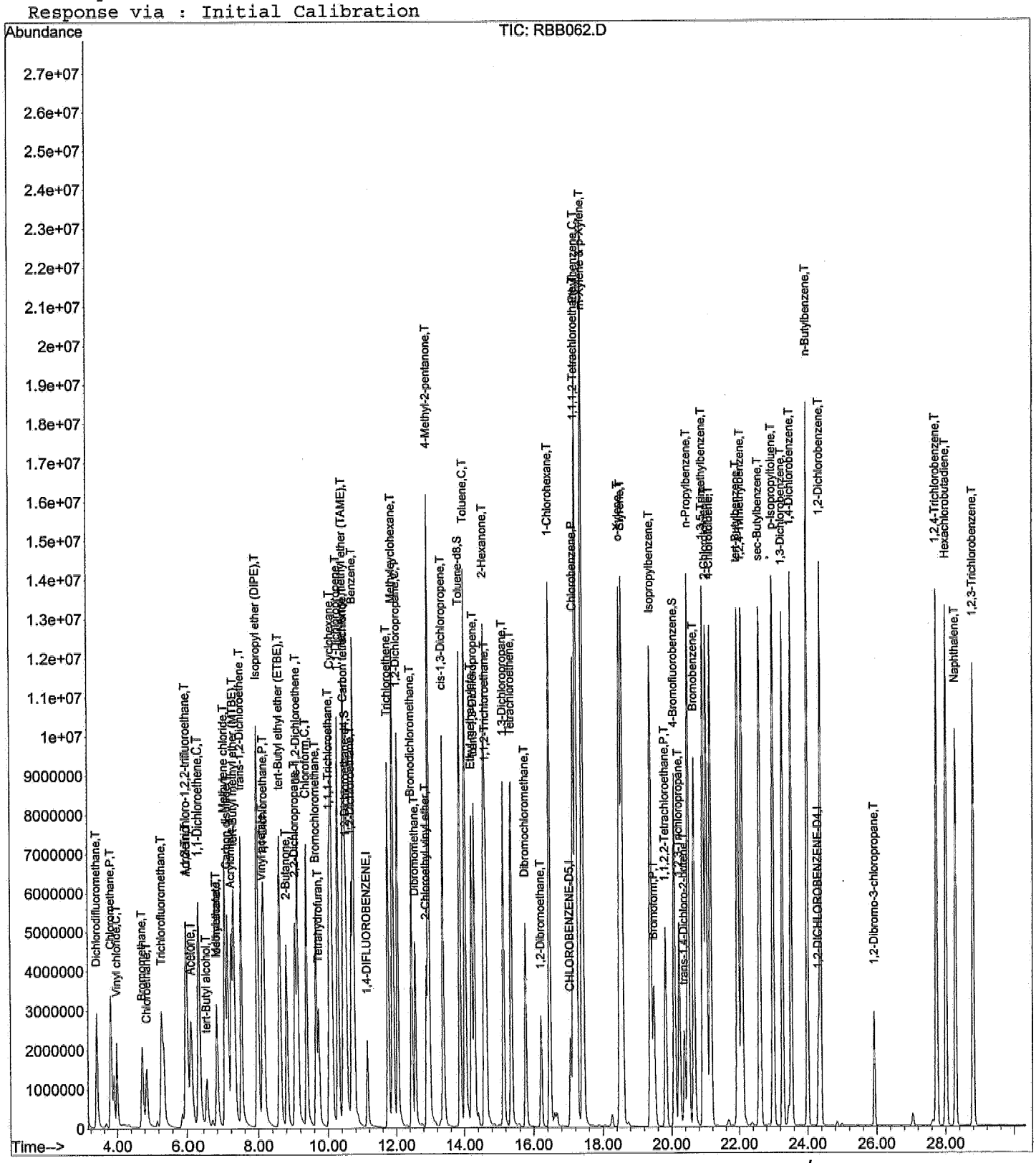
(#) = qualifier out of range (m) = manual integration
RBB062.D VO03B03.M Mon Feb 06 19:23:09 2006

2054

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB062.D Vial: 10
Acq On : 3 Feb 2006 6:38 pm Operator: CGM
Sample : VO03B039 300/1200/1500 Inst : TO03
Misc : 300ppb 8260/1200ppb Ket-AA/1500ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 9:19 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



2865

SECOND SOURCE VERIFICATION

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB065.D Vial: 13
Acq On : 3 Feb 2006 8:30 pm Operator: CGM
Sample : IVO03B031 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Multiple Level Calibration

* Not valid for Acrolein.

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	50.000	50.000		0.0	103	0.00
2	T	Dichlorodifluoromethane	50.000	44.633		10.7	93	-0.02
3	P,T	Chloromethane	50.000	43.649		12.7	98	0.00
4	C,T	Vinyl chloride	50.000	41.305		17.4	97	0.00
5	T	Bromomethane	50.000	45.234		9.5	92	0.00
6	T	Chloroethane	50.000	46.754		6.5	97	0.00
7	T	Trichlorofluoromethane	50.000	47.715		4.6	101	0.00
8	T	sec-Propyl alcohol	-1.000	0.000		0.0	110	0.00
9	T	Acrolein	200.000	261.514	*	-30.8#	123	0.00
10	T	1,1,2-Trichloro-1,2,2-trifl	50.000	47.141		5.7	93	0.00
11	T	Acetone	200.000	190.680		4.7	98	0.00
12	C,T	1,1-Dichloroethene	50.000	46.201		7.6	95	0.00
13	T	tert-Butyl alcohol	250.000	261.609		-4.6	94	0.00
14	T	Acetonitrile	-1.000	0.000		0.0	93	0.00
15	T	Iodomethane	50.000	62.362		-24.7#	120	0.00
17	T	Methylene chloride	50.000	48.323		3.4	96	0.00
18	T	Carbon disulfide	50.000	54.524		-9.0	105	0.00
19	T	Acrylonitrile	200.000	195.623		2.2	94	0.00
20	T	tert-Butyl methyl ether (MT	50.000	45.927		8.1	94	0.00
21	T	trans-1,2-Dichloroethene	50.000	48.895		2.2	96	0.00
22	T	Isopropyl ether (DIPE)	50.000	52.871		-5.7	101	0.00
23	P,T	1,1-Dichloroethane	50.000	49.446		1.1	97	0.00
24	T	Vinyl acetate	50.000	51.347		-2.7	94	0.00
25	T	tert-Butyl ethyl ether (ETB	50.000	48.744		2.5	99	0.00
26	T	2-Butanone	200.000	201.435		-0.7	95	0.00
27	T	2,2-Dichloropropane	50.000	54.521		-9.0	97	0.00
28	T	cis-1,2-Dichloroethene	50.000	48.941		2.1	96	0.00
29	T	tert-Butyl formate (TBF)	-1.000	0.000		0.0	95	-0.02
30	C,T	Chloroform	50.000	48.963		2.1	97	0.00
31	T	Bromochloromethane	50.000	46.360		7.3	92	0.00
32	T	Tetrahydrofuran	100.000	97.525		2.5	93	0.00
33	T	1,1,1-Trichloroethane	50.000	50.012		-0.0	94	0.00
35	T	tert-Amyl methyl ether (TAM	50.000	50.294		-0.6	93	0.00
36	S	1,2-Dichloroethane-d4	50.000	51.093		-2.2	119	0.00
37	I	CHLOROBENZENE-D5	50.000	50.000		0.0	100	0.00
38	T	1,1-Dichloropropene	50.000	49.532		0.9	92	0.00
39	T	Carbon tetrachloride	50.000	50.148		-0.3	92	0.00
40	T	1,2-Dichloroethane	50.000	48.004		4.0	93	0.00
41	T	Benzene	50.000	50.786		-1.6	96	0.00
42	T	Trichloroethene	50.000	48.587		2.8	93	0.00
44	C,T	1,2-Dichloropropane	50.000	50.166		-0.3	96	0.00
45	T	Bromodichloromethane	50.000	49.451		1.1	89	0.00
46	T	Dibromomethane	50.000	48.574		2.9	90	0.00
47	T	2-Chloroethyl vinyl ether	50.000	53.642		-7.3	101	0.00
48	T	4-Methyl-2-pentanone	200.000	208.169		-4.1	93	0.00
49	T	cis-1,3-Dichloropropene	50.000	45.871		8.3	88	0.00
50	S	Toluene-d8	50.000	55.532		-11.1	120	-0.02
51	C,T	Toluene	50.000	49.937		0.1	94	0.00
52	T	Ethyl methacrylate	50.000	50.297		-0.6	91	0.00
53	T	trans-1,3-Dichloropropene	50.000	46.835		6.3	92	0.00
54	T	1,1,2-Trichloroethane	50.000	47.515		5.0	88	0.00
55	T	2-Hexanone	200.000	208.121		-4.1	93	0.00
56	T	1,3-Dichloropropane	50.000	48.769		2.5	89	-0.02

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57	T	Tetrachloroethene	50.000	48.901	2.2	93	-0.02
58	T	Dibromochloromethane	50.000	45.382	9.2	88	0.00
59	T	1,2-Dibromoethane	50.000	48.061	3.9	86	0.00
60	T	1-Chlorohexane	50.000	51.752	-3.5	93	0.00
61	P	Chlorobenzene	50.000	47.817	4.4	91	0.00
62	T	1,1,1,2-Tetrachloroethane	50.000	50.746	-1.5	90	0.00
63	C,T	Ethylbenzene	50.000	49.788	0.4	93	0.00
64	T	m-Xylene & p-Xylene	100.000	102.884	-2.9	94	0.00
65	T	o-Xylene	50.000	50.839	-1.7	92	-0.02
66	T	Styrene	50.000	48.998	2.0	89	-0.02
67	I	1,2-DICHLOROBENZENE-D4	50.000	50.000	0.0	99	0.00
68	P,T	Bromoform	50.000	41.344	17.3	82	0.00
69	T	Isopropylbenzene	50.000	56.948	-13.9	103	0.00
70	P,T	1,1,2,2-Tetrachloroethane	50.000	46.984	6.0	87	-0.02
71	S	4-Bromofluorobenzene	50.000	55.270	-10.5	121	-0.02
72	T	1,2,3-Trichloropropane	50.000	43.531	12.9	86	-0.02
73	T	trans-1,4-Dichloro-2-butene	50.000	61.376	-22.8#	121	-0.02
74	T	n-Propylbenzene	50.000	51.563	-3.1	93	0.00
75	T	Bromobenzene	50.000	50.134	-0.3	92	0.00
76	T	2-Chlorotoluene	50.000	45.854	8.3	90	-0.02
77	T	1,3,5-Trimethylbenzene	50.000	52.283	-4.6	94	0.00
78	T	4-Chlorotoluene	50.000	50.893	-1.8	94	0.00
79	T	tert-Butylbenzene	50.000	51.701	-3.4	94	-0.02
80	T	1,2,4-Trimethylbenzene	50.000	50.541	-1.1	93	-0.02
81	T	sec-Butylbenzene	50.000	49.294	1.4	90	0.00
82	T	p-Isopropyltoluene	50.000	54.575	-9.2	98	0.00
83	T	1,3-Dichlorobenzene	50.000	49.332	1.3	92	-0.02
84	T	1,4-Dichlorobenzene	50.000	48.449	3.1	90	0.00
85	T	n-Butylbenzene	50.000	52.183	-4.4	95	0.00
86	T	1,2-Dichlorobenzene	50.000	48.528	2.9	92	0.00
87	T	1,2-Dibromo-3-chloropropane	50.000	42.348	15.3	84	0.00
88	T	1,2,4-Trichlorobenzene	50.000	49.403	1.2	94	0.00
89	T	Hexachlorobutadiene	50.000	48.272	3.5	94	0.00
90	T	Naphthalene	50.000	50.149	-0.3	90	0.00
91	T	1,2,3-Trichlorobenzene	50.000	49.601	0.8	93	0.00

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

RBB058.D VO03B03.M Mon Feb 06 19:27:45 2006

2-7-06

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB065.D Vial: 13
Acq On : 3 Feb 2006 8:30 pm Operator: CGM
Sample : IVO03B031 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 13:19 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.15	114	2420063	50.00	ug/l	0.00
37) CHLOROBENZENE-D5	17.06	117	2191990	50.00	ug/l	0.00
67) 1,2-DICHLOROBENZENE-D4	24.31	152	1112308	50.00	ug/l	0.00
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.54	65	1273535	51.09	ug/l	0.00
Spiked Amount 50.000			Recovery =	102.18%		
50) Toluene-d8	13.87	98	2753464	55.53	ug/l	-0.02
Spiked Amount 50.000			Recovery =	111.06%		
71) 4-Bromofluorobenzene	20.08	95	1388748	55.27	ug/l	-0.02
Spiked Amount 50.000			Recovery =	110.54%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	1004022	44.63	ug/l	99
3) Chloromethane	3.81	50	1228304	43.65	ug/l	99
4) Vinyl chloride	4.00	62	717859	41.30	ug/l	99
5) Bromomethane	4.76	94	587918	45.23	ug/l	99
6) Chloroethane	4.89	64	500911	46.75	ug/l	97
7) Trichlorofluoromethane	5.32	101	1158221	47.71	ug/l	99
9) Acrolein	5.98	56	529145	261.51	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	6.02	151	557893	47.14	ug/l	99
11) Acetone	6.08	43	1427712	190.68	ug/l	99
12) 1,1-Dichloroethene	6.31	61	1693111	46.20	ug/l	99
13) tert-Butyl alcohol	6.44	59	346568	261.61	ug/l	98
15) Iodomethane	6.81	142	948089	62.36	ug/l	99
16) Methyl acetate	6.80	43	113737	6.05	ug/l	99
17) Methylene chloride	7.05	49	1763056	48.32	ug/l	100
18) Carbon disulfide	7.12	76	2838558	54.52	ug/l	100
19) Acrylonitrile	7.21	53	1185298	195.62	ug/l	99
20) tert-Butyl methyl ether (M	7.30	73	1702902	45.93	ug/l	99
21) trans-1,2-Dichloroethene	7.52	61	1719814	48.90	ug/l	99
22) Isopropyl ether (DIPE)	7.98	45	4084159	52.87	ug/l	99
23) 1,1-Dichloroethane	8.18	63	1899543	49.45	ug/l	99
24) Vinyl acetate	8.13	43	2114667	51.35	ug/l	99
25) tert-Butyl ethyl ether (ET	8.62	59	2486947	48.74	ug/l	99
26) 2-Butanone	8.80	43	2037594	201.43	ug/l	100
27) 2,2-Dichloropropane	9.07	77	910827	54.52	ug/l	98
28) cis-1,2-Dichloroethene	9.14	61	1828137	48.94	ug/l	99
30) Chloroform	9.40	83	1743029	48.96	ug/l	99
31) Bromochloromethane	9.66	49	1008139	46.36	ug/l	99
32) Tetrahydrofuran	9.74	42	587977	97.52	ug/l	100
33) 1,1,1-Trichloroethane	10.05	97	1328403	50.01	ug/l	99
35) tert-Amyl methyl ether (TA	10.47	73	1756698	50.29	ug/l	99
38) 1,1-Dichloropropene	10.30	77	444694	49.53	ug/l	99
39) Carbon tetrachloride	10.50	119	1023701	50.15	ug/l	99
40) 1,2-Dichloroethane	10.69	62	1582982	48.00	ug/l	100
41) Benzene	10.76	78	3325660	50.79	ug/l	99
42) Trichloroethene	11.76	130	830154	48.59	ug/l	99
44) 1,2-Dichloropropane	12.04	63	1051093	50.17	ug/l	98
45) Bromodichloromethane	12.46	83	1209694	49.45	ug/l	100
46) Dibromomethane	12.56	93	583435	48.57	ug/l	100

(#) = qualifier out of range (m) = manual integration
RBB065.D VO03B03.M Mon Feb 06 19:28:40 2006

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2669

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06B03\RBB065.D Vial: 13
Acq On : 3 Feb 2006 8:30 pm Operator: CGM
Sample : IVO03B031 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 13:19 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
47)	2-Chloroethyl vinyl ether	12.89	63	445218	53.64 ug/l	100
48)	4-Methyl-2-pentanone	12.95	43	4836823	208.17 ug/l	99
49)	cis-1,3-Dichloropropene	13.38	75	1235270	45.87 ug/l	99
51)	Toluene	14.03	91	3191719	49.94 ug/l	99
52)	Ethyl methacrylate	14.21	69	1037826	50.30 ug/l	98
53)	trans-1,3-Dichloropropene	14.30	75	992730	46.84 ug/l	99
54)	1,1,2-Trichloroethane	14.64	97	651523	47.52 ug/l	98
55)	2-Hexanone	14.58	43	3217769	208.12 ug/l	98
56)	1,3-Dichloropropane	15.13	76	1253311	48.77 ug/l	99
57)	Tetrachloroethene	15.35	164	719117	48.90 ug/l	98
58)	Dibromochloromethane	15.77	129	727566	45.38 ug/l	99
59)	1,2-Dibromoethane	16.22	107	618683	48.06 ug/l	96
60)	1-Chlorohexane	16.47	91	1188291	51.75 ug/l	99
61)	Chlorobenzene	17.15	112	2014767	47.82 ug/l	98
62)	1,1,1,2-Tetrachloroethane	17.23	131	698721	50.75 ug/l	99
63)	Ethylbenzene	17.24	91	3734719	49.79 ug/l	100
64)	m-Xylene & p-Xylene	17.42	91	6342881	102.88 ug/l	100
65)	o-Xylene	18.49	91	3245220	50.84 ug/l	99
66)	Styrene	18.56	104	2145505	49.00 ug/l	100
68)	Bromoform	19.49	173	442030	41.34 ug/l	99
69)	Isopropylbenzene	19.40	105	3552553	56.95 ug/l	99
70)	1,1,2,2-Tetrachloroethane	19.81	83	888399	46.98 ug/l	100
72)	1,2,3-Trichloropropane	20.21	61	221884	43.53 ug/l	96
73)	trans-1,4-Dichloro-2-buten	20.36	53	194236	61.38 ug/l	96
74)	n-Propylbenzene	20.48	91	4672055	51.56 ug/l	99
75)	Bromobenzene	20.66	156	933650	50.13 ug/l	100
76)	2-Chlorotoluene	21.02	91	2603868	45.85 ug/l	99
77)	1,3,5-Trimethylbenzene	20.93	105	3157994	52.28 ug/l	99
78)	4-Chlorotoluene	21.15	91	3188604	50.89 ug/l	98
79)	tert-Butylbenzene	21.95	119	2515241	51.70 ug/l	98
80)	1,2,4-Trimethylbenzene	22.07	105	3114135	50.54 ug/l	100
81)	sec-Butylbenzene	22.61	105	3836283	49.29 ug/l	99
82)	p-Isopropyltoluene	22.99	119	3083309	54.58 ug/l	99
83)	1,3-Dichlorobenzene	23.26	146	1669201	49.33 ug/l	100
84)	1,4-Dichlorobenzene	23.53	146	1662288	48.45 ug/l	99
85)	n-Butylbenzene	23.99	91	3430354	52.18 ug/l	100
86)	1,2-Dichlorobenzene	24.37	146	1585422	48.53 ug/l	99
87)	1,2-Dibromo-3-chloropropan	25.93	157	143926	42.35 ug/l	97
88)	1,2,4-Trichlorobenzene	27.73	180	1291031	49.40 ug/l	99
89)	Hexachlorobutadiene	28.01	225	1036359	48.27 ug/l	99
90)	Naphthalene	28.28	128	2202291	50.15 ug/l	100
91)	1,2,3-Trichlorobenzene	28.80	180	1175973	49.60 ug/l	99

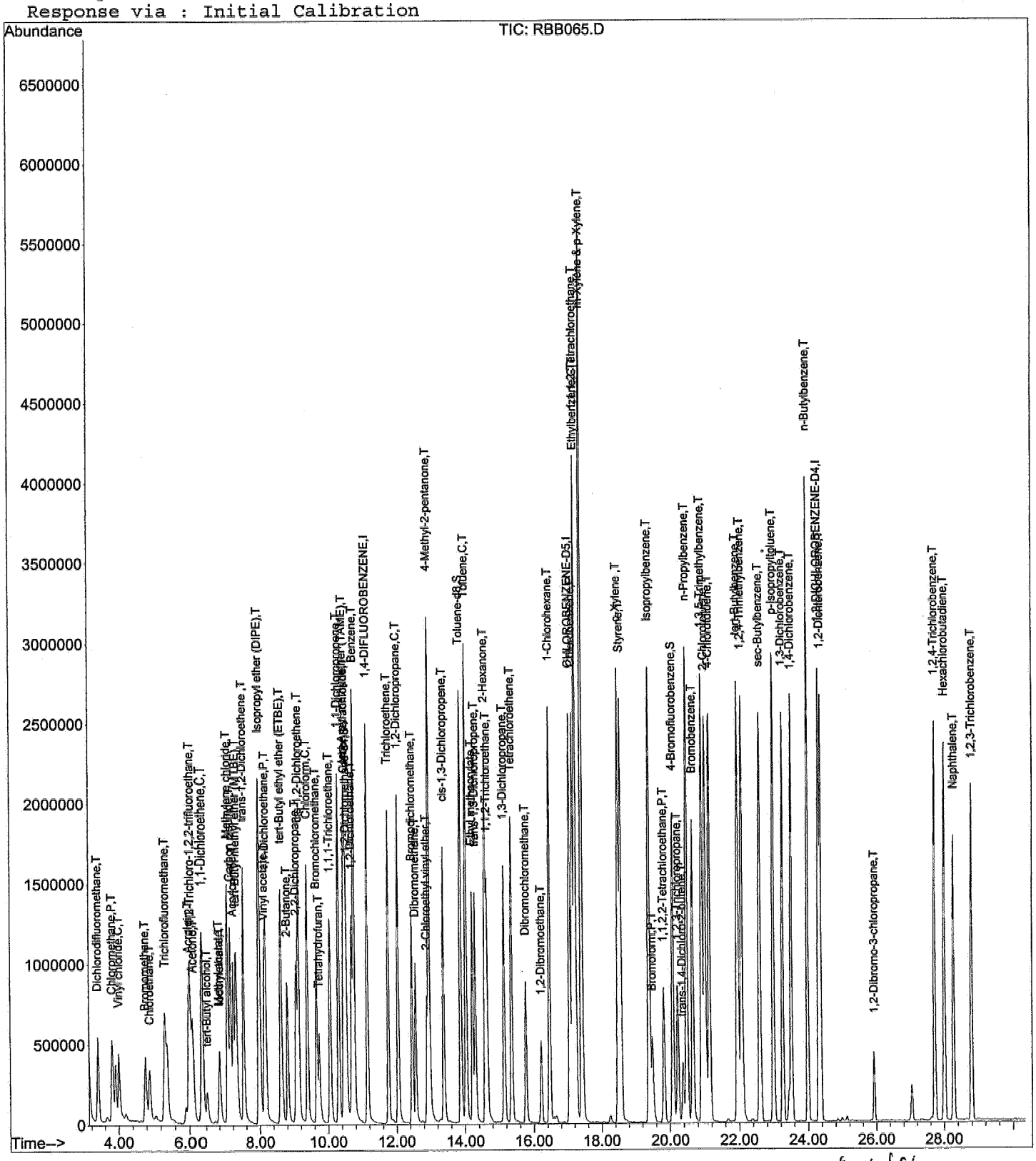
(#) = qualifier out of range (m) = manual integration

2678

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06B03\RBB065.D Vial: 13
Acq On : 3 Feb 2006 8:30 pm Operator: CGM
Sample : IVO03B031 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Feb 6 13:19 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



2/9/06

DAILY CALIBRATION

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RCB244
Instrument ID: T-003
GC Column:RTX502.2ID:0.32mm (mm)

Contract: UPGRADIENT INVESTIGATION, TRONOX
SAS No.: SDG No.: 06C096
BFB Injection Date : 03/15/06
BFB Injection Time : 23:03
Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.25
75	30.0 - 60.0% of mass 95	55.78
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.85
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	66.52
175	5.0 - 9.0% of mass 174	5.30(8.0)1
176	95.0 - 101.0% of mass 174	66.34(99.7)1
177	5.0 - 9.0% of mass 176	4.50(6.8)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	VSTD050	CV003B0378	RCB245	03/15/06	23:40
2	MBLK1W	V003C20B	RCB251	03/16/06	03:23
3	LCS1W	V003C20L	RCB247	03/16/06	00:54
4	LCD1W	V003C20C	RCB248	03/16/06	01:31
5	EB-1	C096-01	RCB254	03/16/06	05:15

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RBB058
Instrument ID: T-003
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: UPGRADIENT INVESTIGATION, TRONOX
SDG No.: 06C096
Date Analyzed: 02/03/06
Time Analyzed: 16:09
Heated Purge: (Y/N) Y

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2354321	11.16	2189381	17.07	1126337	24.32
	UPPER LIMIT	4708642	11.66	4378762	17.57	2252674	24.82
	LOWER LIMIT	1177161	10.66	1094691	16.57	563169	23.82
	SAMPLE ID						
1	VSTD050	2367559	11.14	2184835	17.05	1135376	24.30
2	MBLK1W	2618264	11.14	2405505	17.05	1285395	24.31
3	LCS1W	2433336	11.15	2394909	17.05	1222595	24.30
4	LCD1W	2485206	11.14	2454138	17.05	1253123	24.31
5	EB-1	2360788	11.14	2341639	17.05	1188024	24.30

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

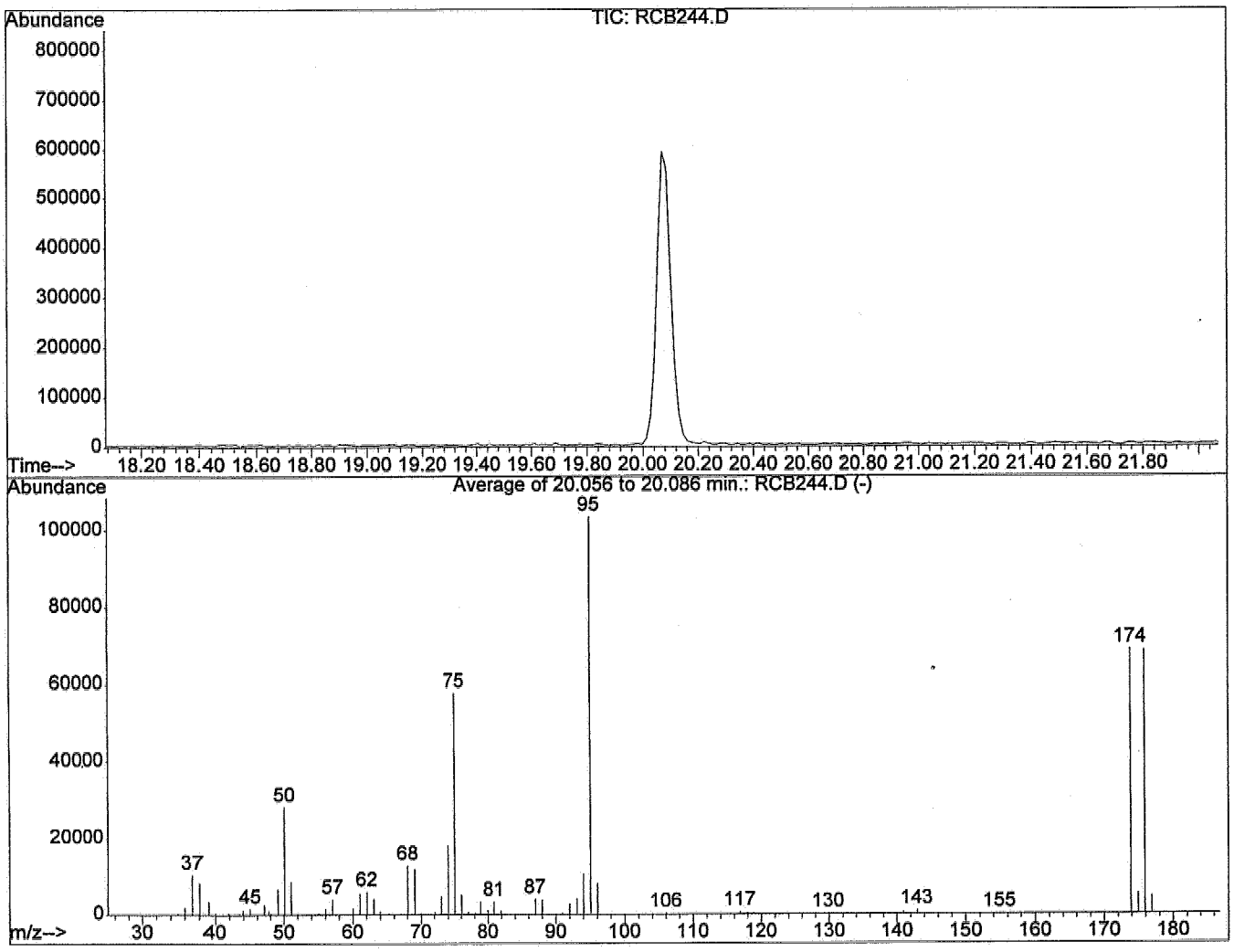
AREA UPPER LIMIT = + 100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
AREA UPPER LIMIT = + 50% of surrogate area
AREA LOWER LIMIT = - 50% of surrogate area

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

BFB

Data File : D:\HPCHEM\1\DATA\06C15\RCB244.D
Acq On : 15 Mar 2006 11:03 pm
Sample : BFB03C21
Misc : T/CHECK
MS Integration Params: 524INT.P
Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260

Vial: 3
Operator: CGM
Inst : TO03
Multiplr: 1.00



AutoFind: Scans 1140, 1141, 1142; Background Corrected with Scan 1134

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.2	28211	PASS
75	95	30	60	55.8	57749	PASS
95	95	100	100	100.0	103531	PASS
96	95	5	9	7.9	8130	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.5	68872	PASS
175	174	5	9	8.0	5488	PASS
176	174	95	101	99.7	68683	PASS
177	176	5	9	6.8	4659	PASS

RCB244.D VO03B03.M Thu Mar 16 11:42:33 2006

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
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	50.000	50.000	0.0	101	-0.02
2	T	Dichlorodifluoromethane	50.000	43.518	13.0	89	-0.02
3	P,T	Chloromethane	50.000	42.809	14.4	94	0.00
4	C,T	Vinyl chloride	50.000	44.120	11.8	100	0.00
5	T	Bromomethane	50.000	49.986	0.0	100	0.00
6	T	Chloroethane	50.000	54.485	-9.0	110	0.00
7	T	Trichlorofluoromethane	50.000	53.741	-7.5	112	0.00
8	T	sec-Propyl alcohol	-1.000	0.000	0.0	33	0.00
9	T	Acrolein	200.000	205.961	-3.0	95	0.00
10	T	1,1,2-Trichloro-1,2,2-trifl	50.000	52.026	-4.1	100	-0.02
11	T	Acetone	200.000	176.262	11.9	89	0.00
12	C,T	1,1-Dichloroethene	50.000	45.796	8.4	92	-0.02
13	T	tert-Butyl alcohol	250.000	257.715	-3.1	90	-0.02
14	T	Acetonitrile	-1.000	0.000	0.0	114	0.00
15	T	Iodomethane	50.000	41.531	16.9	78	-0.02
16	T	Methyl acetate	50.000	3.593	NT 92.8#	7	0.00
17	T	Methylene chloride	50.000	51.240	-2.5	99	-0.02
18	T	Carbon disulfide	50.000	46.123	7.8	87	0.00
19	T	Acrylonitrile	200.000	182.241	8.9	86	0.00
20	T	tert-Butyl methyl ether (MT	50.000	50.779	-1.6	102	-0.02
21	T	trans-1,2-Dichloroethene	50.000	49.713	0.6	96	-0.02
22	T	Isopropyl ether (DIPE)	50.000	53.036	-6.1	99	-0.02
23	P,T	1,1-Dichloroethane	50.000	50.999	-2.0	98	-0.02
24	T	Vinyl acetate	50.000	52.640	-5.3	95	-0.02
25	T	tert-Butyl ethyl ether (ETB	50.000	53.352	-6.7	106	-0.02
26	T	2-Butanone	200.000	185.264	7.4	85	0.00
27	T	2,2-Dichloropropane	50.000	60.215	-20.4#	105	-0.02
28	T	cis-1,2-Dichloroethene	50.000	52.585	-5.2	100	-0.02
29	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	101	-0.02
30	C,T	Chloroform	50.000	51.170	-2.3	99	-0.02
31	T	Bromochloromethane	50.000	47.575	4.8	93	-0.02
32	T	Tetrahydrofuran	100.000	2.031	NT 98.0#	2	0.02
33	T	1,1,1-Trichloroethane	50.000	53.549	-7.1	98	0.00
34	T	Cyclohexane	50.000	0.275	NT 99.5#	1	-0.06
35	T	tert-Amyl methyl ether (TAM	50.000	55.980	-12.0	101	-0.02
36	S	1,2-Dichloroethane-d4	50.000	51.888	-3.8	118	-0.02
37	I	CHLOROBENZENE-D5	50.000	50.000	0.0	100	-0.02
38	T	1,1-Dichloropropene	50.000	50.577	-1.2	94	-0.02
39	T	Carbon tetrachloride	50.000	55.410	-10.8	101	-0.02
40	T	1,2-Dichloroethane	50.000	52.264	-4.5	101	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
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	Benzene	50.000	52.468	-4.9	99	-0.02
42	T	Trichloroethene	50.000	52.893	-5.8	101	0.00
43	T	Methylcyclohexane	50.000	0.265	99.5#	0	0.13
44	C,T	1,2-Dichloropropane	50.000	51.326	-2.7	98	-0.02
45	T	Bromodichloromethane	50.000	55.372	-10.7	99	-0.02
46	T	Dibromomethane	50.000	52.710	-5.4	98	-0.02
47	T	2-Chloroethyl vinyl ether	50.000	55.684	-11.4	105	-0.02
48	T	4-Methyl-2-pentanone	200.000	200.138	-0.1	89	0.00
49	T	cis-1,3-Dichloropropene	50.000	51.565	-3.1	99	-0.02
50	S	Toluene-d8	50.000	53.359	-6.7	115	-0.02
51	C,T	Toluene	50.000	52.673	-5.3	99	-0.02
52	T	Ethyl methacrylate	50.000	51.887	-3.8	94	0.00
53	T	trans-1,3-Dichloropropene	50.000	51.148	-2.3	101	-0.02
54	T	1,1,2-Trichloroethane	50.000	52.347	-4.7	97	-0.02
55	T	2-Hexanone	200.000	195.287	2.4	87	-0.02
56	T	1,3-Dichloropropane	50.000	53.444	-6.9	98	-0.02
57	T	Tetrachloroethene	50.000	52.493	-5.0	99	-0.04
58	T	Dibromochloromethane	50.000	51.233	-2.5	100	-0.02
59	T	1,2-Dibromoethane	50.000	54.104	-8.2	97	-0.02
60	T	1-Chlorohexane	50.000	54.979	-10.0	98	-0.02
61	P	Chlorobenzene	50.000	52.617	-5.2	100	-0.02
62	T	1,1,1,2-Tetrachloroethane	50.000	57.366	-14.7	101	-0.02
63	C,T	Ethylbenzene	50.000	52.900	-5.8	98	-0.02
64	T	m-Xylene & p-Xylene	100.000	106.046	-6.0	96	-0.02
65	T	o-Xylene	50.000	53.027	-6.1	96	-0.02
66	T	Styrene	50.000	54.109	-8.2	97	-0.04
67	I	1,2-DICHLOROBENZENE-D4	50.000	50.000	0.0	101	-0.02
68	P,T	Bromoform	50.000	46.233	7.5	94	-0.02
69	T	Isopropylbenzene	50.000	53.355	-6.7	98	-0.02
70	P,T	1,1,2,2-Tetrachloroethane	50.000	49.579	0.8	93	-0.02
71	S	4-Bromofluorobenzene	50.000	52.535	-5.1	117	-0.04
72	T	1,2,3-Trichloropropane	50.000	46.672	6.7	94	-0.02
73	T	trans-1,4-Dichloro-2-butene	50.000	51.578	-3.2	103	-0.02
74	T	n-Propylbenzene	50.000	51.938	-3.9	96	-0.02
75	T	Bromobenzene	50.000	52.939	-5.9	99	-0.02
76	T	2-Chlorotoluene	50.000	47.787	4.4	96	-0.04
77	T	1,3,5-Trimethylbenzene	50.000	52.795	-5.6	97	-0.02
78	T	4-Chlorotoluene	50.000	49.876	0.2	94	-0.02
79	T	tert-Butylbenzene	50.000	54.027	-8.1	100	-0.02
80	T	1,2,4-Trimethylbenzene	50.000	51.290	-2.6	96	-0.04

(#) = Out of Range

2077

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
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	sec-Butylbenzene	50.000	52.449	-4.9	98	-0.02
82	T	p-Isopropyltoluene	50.000	53.526	-7.1	98	-0.02
83	T	1,3-Dichlorobenzene	50.000	50.187	-0.4	96	-0.02
84	T	1,4-Dichlorobenzene	50.000	49.836	0.3	94	-0.02
85	T	n-Butylbenzene	50.000	51.006	-2.0	94	-0.02
86	T	1,2-Dichlorobenzene	50.000	50.045	-0.1	97	-0.02
87	T	1,2-Dibromo-3-chloropropane	50.000	44.624	10.8	91	-0.02
88	T	1,2,4-Trichlorobenzene	50.000	50.158	-0.3	97	-0.02
89	T	Hexachlorobutadiene	50.000	51.473	-2.9	102	-0.02
90	T	Naphthalene	50.000	51.233	-2.5	94	-0.02
91	T	1,2,3-Trichlorobenzene	50.000	51.898	-3.8	100	-0.02

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
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	-0.02
2	T	Dichlorodifluoromethane	0.465	0.405	12.9	89	-0.02
3	P,T	Chloromethane	0.581	0.498	14.3	94	0.00
4	C,T	Vinyl chloride	0.352	0.313	11.1	100	0.00
5	T	Bromomethane	0.269	0.268	0.4	100	0.00
6	T	Chloroethane	0.221	0.241	-9.0	110	0.00
7	T	Trichlorofluoromethane	0.502	0.539	-7.4	112	0.00
8	T	sec-Propyl alcohol	0.000	0.000	0.0	33#	0.00
9	T	Acrolein	0.042	0.043	-2.4	95	0.00
10	T	1,1,2-Trichloro-1,2,2-trifl	0.245	0.254	-3.7	100	-0.02
11	T	Acetone	0.155	0.136	12.3	89	0.00
12	C,T	1,1-Dichloroethene	0.757	0.693	8.5	92	-0.02
13	T	tert-Butyl alcohol	0.027	0.028	-3.7	90	-0.02
14	T	Acetonitrile	0.000	0.000	0.0	114	0.00
15	T	Iodomethane	0.314	0.261	16.9	78	-0.02
16	T	Methyl acetate	0.388	0.028	92.8#	7#	0.00
17	T	Methylene chloride	0.829	0.770	7.1	99	-0.02
18	T	Carbon disulfide	1.076	0.992	7.8	87	0.00
19	T	Acrylonitrile	0.125	0.114	8.8	86	0.00
20	T	tert-Butyl methyl ether (MT	0.686	0.780	-13.7	102	-0.02
21	T	trans-1,2-Dichloroethene	0.727	0.723	0.6	96	-0.02
22	T	Isopropyl ether (DIPE)	1.596	1.693	-6.1	99	-0.02
23	P,T	1,1-Dichloroethane	0.794	0.810	-2.0	98	-0.02
24	T	Vinyl acetate	0.851	0.896	-5.3	95	-0.02
25	T	tert-Butyl ethyl ether (ETB	0.951	1.127	-18.5	106	-0.02
26	T	2-Butanone	0.209	0.194	7.2	85	0.00
27	T	2,2-Dichloropropane	0.345	0.416	-20.6#	105	-0.02
28	T	cis-1,2-Dichloroethene	0.772	0.812	-5.2	100	-0.02
29	T	tert-Butyl formate (TBF)	0.000	0.000	0.0	101	-0.02
30	C,T	Chloroform	0.736	0.753	-2.3	99	-0.02
31	T	Bromochloromethane	0.449	0.427	4.9	93	-0.02
32	T	Tetrahydrofuran	0.125	0.003	97.6#	2#	0.02
33	T	1,1,1-Trichloroethane	0.549	0.588	-7.1	98	0.00
34	T	Cyclohexane	0.740	0.004	99.5#	1#	-0.06
35	T	tert-Amyl methyl ether (TAM	0.722	0.808	-11.9	101	-0.02
36	S	1,2-Dichloroethane-d4	0.515	0.534	-3.7	118	-0.02
37	I	CHLOROBENZENE-D5	1.000	1.000	0.0	100	-0.02
38	T	1,1-Dichloropropene	0.205	0.207	-1.0	94	-0.02
39	T	Carbon tetrachloride	0.466	0.516	-10.7	101	-0.02
40	T	1,2-Dichloroethane	0.752	0.786	-4.5	101	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
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	Benzene	1.494	1.567	-4.9	99	-0.02
42	T	Trichloroethene	0.390	0.412	-5.6	101	0.00
43	T	Methylcyclohexane	0.642	0.003	NT 99.5#	0#	0.13
44	C,T	1,2-Dichloropropane	0.478	0.491	-2.7	98	-0.02
45	T	Bromodichloromethane	0.558	0.618	-10.8	99	-0.02
46	T	Dibromomethane	0.274	0.289	-5.5	98	-0.02
47	T	2-Chloroethyl vinyl ether	0.189	0.211	-11.6	105	-0.02
48	T	4-Methyl-2-pentanone	0.530	0.530	0.0	89	0.00
49	T	cis-1,3-Dichloropropene	0.576	0.637	-10.6	99	-0.02
50	S	Toluene-d8	1.131	1.207	-6.7	115	-0.02
51	C,T	Toluene	1.458	1.536	-5.3	99	-0.02
52	T	Ethyl methacrylate	0.471	0.488	-3.6	94	0.00
53	T	trans-1,3-Dichloropropene	0.434	0.498	-14.7	101	-0.02
54	T	1,1,2-Trichloroethane	0.313	0.327	-4.5	97	-0.02
55	T	2-Hexanone	0.353	0.344	2.5	87	-0.02
56	T	1,3-Dichloropropane	0.586	0.627	-7.0	98	-0.02
57	T	Tetrachloroethene	0.335	0.352	-5.1	99	-0.04
58	T	Dibromochloromethane	0.338	0.377	-11.5	100	-0.02
59	T	1,2-Dibromoethane	0.294	0.318	-8.2	97	-0.02
60	T	1-Chlorohexane	0.524	0.576	-9.9	98	-0.02
61	P	Chlorobenzene	0.961	1.011	-5.2	100	-0.02
62	T	1,1,1,2-Tetrachloroethane	0.314	0.360	-14.6	101	-0.02
63	C,T	Ethylbenzene	1.711	1.810	-5.8	98	-0.02
64	T	m-Xylene & p-Xylene	1.406	1.491	-6.0	96	-0.02
65	T	o-Xylene	1.456	1.544	-6.0	96	-0.02
66	T	Styrene	0.999	1.081	-8.2	97	-0.04
67	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	101	-0.02
68	P,T	Bromoform	0.428	0.449	-4.9	94	-0.02
69	T	Isopropylbenzene	2.804	2.992	-6.7	98	-0.02
70	P,T	1,1,2,2-Tetrachloroethane	0.850	0.843	0.8	93	-0.02
71	S	4-Bromofluorobenzene	1.129	1.187	-5.1	117	-0.04
72	T	1,2,3-Trichloropropane	0.229	0.214	6.6	94	-0.02
73	T	trans-1,4-Dichloro-2-butene	0.127	0.146	-15.0	103	-0.02
74	T	n-Propylbenzene	4.073	4.231	-3.9	96	-0.02
75	T	Bromobenzene	0.837	0.886	-5.9	99	-0.02
76	T	2-Chlorotoluene	2.553	2.440	4.4	96	-0.04
77	T	1,3,5-Trimethylbenzene	2.715	2.867	-5.6	97	-0.02
78	T	4-Chlorotoluene	2.816	2.809	0.2	94	-0.02
79	T	tert-Butylbenzene	2.187	2.363	-8.0	100	-0.02
80	T	1,2,4-Trimethylbenzene	2.770	2.841	-2.6	96	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
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	sec-Butylbenzene	3.498	3.670	-4.9	98	-0.02
82	T	p-Isopropyltoluene	2.540	2.719	-7.0	98	-0.02
83	T	1,3-Dichlorobenzene	1.521	1.527	-0.4	96	-0.02
84	T	1,4-Dichlorobenzene	1.542	1.537	0.3	94	-0.02
85	T	n-Butylbenzene	2.955	3.014	-2.0	94	-0.02
86	T	1,2-Dichlorobenzene	1.469	1.470	-0.1	97	-0.02
87	T	1,2-Dibromo-3-chloropropane	0.137	0.137	0.0	91	-0.02
88	T	1,2,4-Trichlorobenzene	1.175	1.178	-0.3	97	-0.02
89	T	Hexachlorobutadiene	0.965	0.993	-2.9	102	-0.02
90	T	Naphthalene	1.974	2.023	-2.5	94	-0.02
91	T	1,2,3-Trichlorobenzene	1.066	1.106	-3.8	100	-0.02

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:47 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.13	114	2367559	50.00	ug/l	-0.02
37) CHLOROBENZENE-D5	17.05	117	2184835	50.00	ug/l	-0.02
67) 1,2-DICHLOROBENZENE-D4	24.30	152	1135376	50.00	ug/l	-0.02
System Monitoring Compounds						
36) 1,2-Dichloroethane-d4	10.53	65	1265290	51.89	ug/l	-0.02
Spiked Amount 50.000			Recovery =	103.78%		
50) Toluene-d8	13.87	98	2637078	53.36	ug/l	-0.02
Spiked Amount 50.000			Recovery =	106.72%		
71) 4-Bromofluorobenzene	20.07	95	1347391	52.53	ug/l	-0.04
Spiked Amount 50.000			Recovery =	105.06%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	957703	43.52	ug/l	98
3) Chloromethane	3.81	50	1178527	42.81	ug/l	98
4) Vinyl chloride	4.00	62	740171	44.12	ug/l	99
5) Bromomethane	4.76	94	635591	49.99	ug/l	99
6) Chloroethane	4.89	64	571084	54.49	ug/l	99
7) Trichlorofluoromethane	5.33	101	1276211	53.74	ug/l	99
9) Acrolein	5.98	56	407697	205.96	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	6.01	151	602353	52.03	ug/l	98
11) Acetone	6.08	43	1291129	176.26	ug/l	99
12) 1,1-Dichloroethene	6.29	61	1641859	45.80	ug/l	99
13) tert-Butyl alcohol	6.42	59	334002	257.71	ug/l	86
15) Iodomethane	6.80	142	617698	41.53	ug/l	100
16) Methyl acetate	6.80	43	66042	3.59	ug/l	98
17) Methylene chloride	7.03	49	1822978	51.24	ug/l	100
18) Carbon disulfide	7.12	76	2349059	46.12	ug/l	100
19) Acrylonitrile	7.21	53	1080257	182.24	ug/l	97
20) tert-Butyl methyl ether (M	7.29	73	1847045	50.78	ug/l	99
21) trans-1,2-Dichloroethene	7.51	61	1710650	49.71	ug/l	98
22) Isopropyl ether (DIPE)	7.97	45	4008048	53.04	ug/l	99
23) 1,1-Dichloroethane	8.16	63	1916690	51.00	ug/l	99
24) Vinyl acetate	8.12	43	2120908	52.64	ug/l	99
25) tert-Butyl ethyl ether (ET	8.61	59	2668834	53.35	ug/l	100
26) 2-Butanone	8.80	43	1833363	185.26	ug/l	100
27) 2,2-Dichloropropane	9.05	77	984140	60.22	ug/l	96
28) cis-1,2-Dichloroethene	9.13	61	1921632	52.59	ug/l	100
30) Chloroform	9.38	83	1782096	51.17	ug/l	98
31) Bromochloromethane	9.65	49	1012131	47.58	ug/l	99
32) Tetrahydrofuran	9.77	42	11979	2.03	ug/l #	46
33) 1,1,1-Trichloroethane	10.05	97	1391486	53.55	ug/l	98

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

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:47 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35) tert-Amyl methyl ether (TA	10.45	73	1912862	55.98	ug/l	93
38) 1,1-Dichloropropene	10.29	77	452598	50.58	ug/l	97
39) Carbon tetrachloride	10.48	119	1127436	55.41	ug/l	100
40) 1,2-Dichloroethane	10.67	62	1717850	52.26	ug/l	99
41) Benzene	10.75	78	3424555	52.47	ug/l	99
42) Trichloroethene	11.76	130	900781	52.89	ug/l	98
44) 1,2-Dichloropropane	12.03	63	1071878	51.33	ug/l	96
45) Bromodichloromethane	12.44	83	1350120	55.37	ug/l	99
46) Dibromomethane	12.55	93	631036	52.71	ug/l	99
47) 2-Chloroethyl vinyl ether	12.87	63	460652	55.68	ug/l	99
48) 4-Methyl-2-pentanone	12.95	43	4635033	200.14	ug/l	99
49) cis-1,3-Dichloropropene	13.36	75	1391488	51.56	ug/l	98
51) Toluene	14.02	91	3355639	52.67	ug/l	98
52) Ethyl methacrylate	14.21	69	1067136	51.89	ug/l	97
53) trans-1,3-Dichloropropene	14.29	75	1087589	51.15	ug/l	97
54) 1,1,2-Trichloroethane	14.63	97	715427	52.35	ug/l	98
55) 2-Hexanone	14.57	43	3009492	195.29	ug/l	98
56) 1,3-Dichloropropane	15.13	76	1368978	53.44	ug/l	99
57) Tetrachloroethene	15.34	164	769424	52.49	ug/l	98
58) Dibromochloromethane	15.76	129	824186	51.23	ug/l	98
59) 1,2-Dibromoethane	16.20	107	694192	54.10	ug/l	95
60) 1-Chlorohexane	16.45	91	1258251	54.98	ug/l	99
61) Chlorobenzene	17.14	112	2209779	52.62	ug/l	99
62) 1,1,1,2-Tetrachloroethane	17.21	131	787299	57.37	ug/l	100
63) Ethylbenzene	17.23	91	3955219	52.90	ug/l	99
64) m-Xylene & p-Xylene	17.41	91	6516509	106.05	ug/l	99
65) o-Xylene	18.49	91	3373837	53.03	ug/l	99
66) Styrene	18.55	104	2361581	54.11	ug/l	99
68) Bromoform	19.47	173	509963	46.23	ug/l	98
69) Isopropylbenzene	19.38	105	3397476	53.36	ug/l	99
70) 1,1,2,2-Tetrachloroethane	19.81	83	956893	49.58	ug/l	99
72) 1,2,3-Trichloropropane	20.21	61	242824	46.67	ug/l	99
73) trans-1,4-Dichloro-2-buten	20.36	53	165501	51.58	ug/l	93
74) n-Propylbenzene	20.47	91	4803603	51.94	ug/l	99
75) Bromobenzene	20.64	156	1006337	52.94	ug/l	99
76) 2-Chlorotoluene	21.00	91	2769867	47.79	ug/l	99
77) 1,3,5-Trimethylbenzene	20.91	105	3255105	52.80	ug/l	100
78) 4-Chlorotoluene	21.14	91	3189646	49.88	ug/l	99
79) tert-Butylbenzene	21.95	119	2682919	54.03	ug/l	98
80) 1,2,4-Trimethylbenzene	22.06	105	3225791	51.29	ug/l	100
81) sec-Butylbenzene	22.59	105	4166425	52.45	ug/l	100

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

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:47 2006 Quant Results File: VO03B03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration
DataAcq Meth : VO03B03

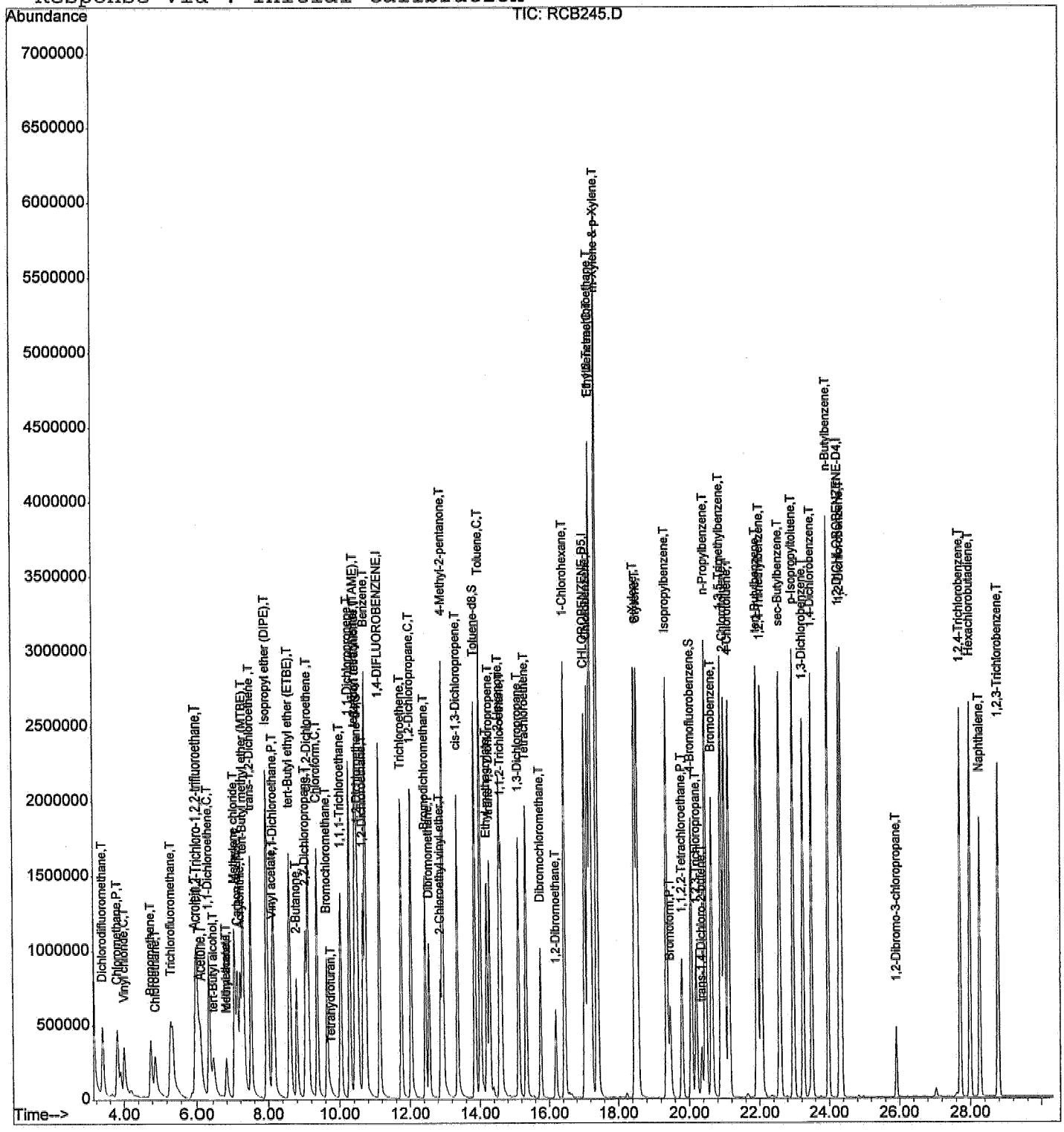
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82) p-Isopropyltoluene	22.98	119	3086725	53.53	ug/l	99
83) 1,3-Dichlorobenzene	23.26	146	1733320	50.19	ug/l	99
84) 1,4-Dichlorobenzene	23.51	146	1745347	49.84	ug/l	98
85) n-Butylbenzene	23.97	91	3422512	51.01	ug/l	100
86) 1,2-Dichlorobenzene	24.36	146	1668892	50.05	ug/l	99
87) 1,2-Dibromo-3-chloropropan	25.92	157	155526	44.62	ug/l	100
88) 1,2,4-Trichlorobenzene	27.72	180	1337945	50.16	ug/l	99
89) Hexachlorobutadiene	28.00	225	1127991	51.47	ug/l	98
90) Naphthalene	28.27	128	2296573	51.23	ug/l	100
91) 1,2,3-Trichlorobenzene	28.79	180	1255931	51.90	ug/l	100

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\06C15\RCB245.D Vial: 4
Acq On : 15 Mar 2006 11:40 pm Operator: CGM
Sample : CVO03B0378 50/200/250 Inst : TO03
Misc : 50ppb 8260/200ppb Ket-AA/250ppbTBA Multiplr: 1.00
MS Integration Params: 524INT.P
Quant Time: Mar 16 9:47 2006 Quant Results File: VO03B03.RES

Method : D:\HPCHEM\1\METHODS\VO03B03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Feb 06 13:18:50 2006
Response via : Initial Calibration



ANALYTICAL LOGS

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 2 ☐ EMAX-524.2 Rev.No. 3 ☐ EMAX-CLP-VOA ☐ EMAX 624 Rev.No. 1 ☐

Start Date: 2/3/06 ☑ 5-ml Purge ☐ 25-ml Purge

Book # A03 -024

BATCH VO03B03

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RBB053	BFB03B05 ✓	2 µL				~~8260 Kel/AA TOA~~
02	054	VO03B031 ✓	.04/.2/.08 µL				2 8 10 ppb
03	055	2 ✓	.1/.5/.2 µL				5 20 25
04	056	3 ✓	.2/1/.4 µL				10 40 50
05	057	4 ✓	.4/2/.8 µL				20 80 100
06	058	5 ✓	1/5/2 µL				50 200 250
07	059	6 ✓	1.6/8/3.2 µL				80 320 400
08	060	7 ✓	2/10/4 µL				100 400 500
09	061	8 ✓	4/20/8 µL				200 800 1000.
10	062	9 ✓	6/30/12 µL				300 1200 1500
11	063	15/ss check					
12	064	VO03B05B					
13	065	VO03B031 ✓ *	1/5/4 µL				CGM 2/3/06
14	066	2	↓				
15	067	3 ✓	5 µL				for 3 Addn'l. Cpds. only
16	068	4	↓				
17	069	Rinse					
18							
19							
20							
21							
22							
23							
24							
25							CGM 2/3/06

Instrument No.	03
INITIAL CALIBRATION REFERENCE	
DATE	2/3/06
ICAL ID	VO03B03

STANDARDS

NAME	ID	CONC. (mg/L)
DCC	SVIC - 10 - 45 - 2 28 - 3	
DCC	22 - 3 42 - 2	
DCC	44 - 1	
BFB	20 - 3	50/200/500
IS/SURR.	43 - 3	
LCS	25 - 3 29 - 1	
LCS	44 - 3 42 - 3	
LCS	41 - 2	

~~SOLVENT~~ 15	SVIC-10-45-2	ID
~~METHANOL~~ SS	43-1	2.0ppm

DATA FILE 06B03

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO03	

Comments:

* Not valid for Acrolein

Analyzed By: CGM

Date Disposed:

Disposed By:

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 2 ☐ EMAX-524.2 Rev.No. 3 ☐ EMAX-CLP-VOA ☐ EMAX 624 Rev.No. 1 ☐

Start Date: 3/15/06 ☑ 5-ml Purge ☐ 25-ml Purge **Book # A03 -025**

BATCH CV0306C15

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RCB243	BFB@3C20	2µL				
02	244	↓ 21 ✓	↓				23:03
03	245	CV0@3B@378 ✓	2/5/1µL				
04	246	↓ 79	↓				
05	247	V0@3C2@L ✓	1.6/2/.4µL	1.0			
06	248	↓ C ✓	↓	↓			
07	249	V0@3C21L ✓	↓	50			
08	250	↓ C ✓	↓	50			
09	251	V0@3C2@B ✓	5.0mL	1.0			
10	252	↓ Q	↓	↓			
11	253	V0@3C21B ✓	100µL	50			
12	254	06C096-01	5.0mL	1.0	12		
13	255	Rinse					
14	256	06C116-01T	2µL	2,500,000		Solvent	06:29
15	257	Rinse					
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							CGM 3/15/06

Instrument No.	03
INITIAL CALIBRATION REFERENCE	
DATE	2/3/06
ICAL ID	V0@3B@3

STANDARDS		
NAME	ID	CONC. (mg/L)
DCC	SV1C-10-22-3	
DCC	42-2	
DCC	44-1	
BFB	20-3	50/250/500
IS/SURR.	43-3	
LCS	44-3	
LCS	42-3	
LCS	44-2	

SOLVENT	ID
METHANOL	

DATA FILE	06C15

Electronic Data Archival	
Location	Date
HPCHEM_VOA/T003	

Comments:

Analyzed By: CGM

Date Disposed:

Disposed By:

LABORATORY REPORT FOR

ENSR

UPGRADIENT INVESTIGATION, TRONOX

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

SDG#: 06C096

CASE NARRATIVE

CLIENT: ENSR

PROJECT: UPGRADIENT INVESTIGATION, TRONOX

SDG: 06C096

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

One (1) water sample was received on 03/10/06 for Total Petroleum Hydrocarbons by Purge and Trap analysis by Method 5030B/8015B in accordance with SW846 3rd Edition.

1. Holding Time

Analytical holding time was met. The sample was preserved.

2. Calibration

Initial calibration was seven points. %RSD was within 20%. Continuing calibrations were carried out every 12 hours and at the end of the analysis sequence. All recoveries were within 85-115%.

3. Method Blank

Method Blank was free of contamination at the Reporting Limit.

4. Surrogate Recovery

Recoveries were within QC limits.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was spiked with this SDG.

7. Sample Analysis

Sample was analyzed according to the prescribed QC procedures. All criteria were met. Sample was quantitated from C_6 to C_{10} using GRO (C_6-C_{10}) calibration factor.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : ENSR
Project : UPGRADIENT INVESTIGATION, TRONOX

SDG NO. : 06C096
Instrument ID : GCT039

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VA39C06B	1	NA	03/13/0611:20	03/13/0611:20	EC13003A	EC13002A	VA39C06	Method Blank
LCS1W	VA39C06L	1	NA	03/13/0611:58	03/13/0611:58	EC13004A	EC13002A	VA39C06	Lab Control Sample (LCS)
LCD1W	VA39C06C	1	NA	03/13/0612:36	03/13/0612:36	EC13005A	EC13002A	VA39C06	LCS Duplicate
EB-1	C096-01	1	NA	03/13/0622:11	03/13/0622:11	EC13020A	EC13012A	VA39C06	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: ENSR	Date Collected:	03/09/06
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/10/06
Batch No.	: 06C096	Date Extracted:	03/13/06 22:11
Sample ID:	EB-1	Date Analyzed:	03/13/06 22:11
Lab Samp ID:	C096-01	Dilution Factor:	1
Lab File ID:	EC13020A	Matrix :	WATER
Ext Btch ID:	VA39C06	% Moisture :	NA ✓
Calib. Ref.:	EC13012A	Instrument ID :	GCT039

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GRO	ND	.1	.02

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOFLUOROBENZENE	86	60-140

RL : Reporting Limit ✓

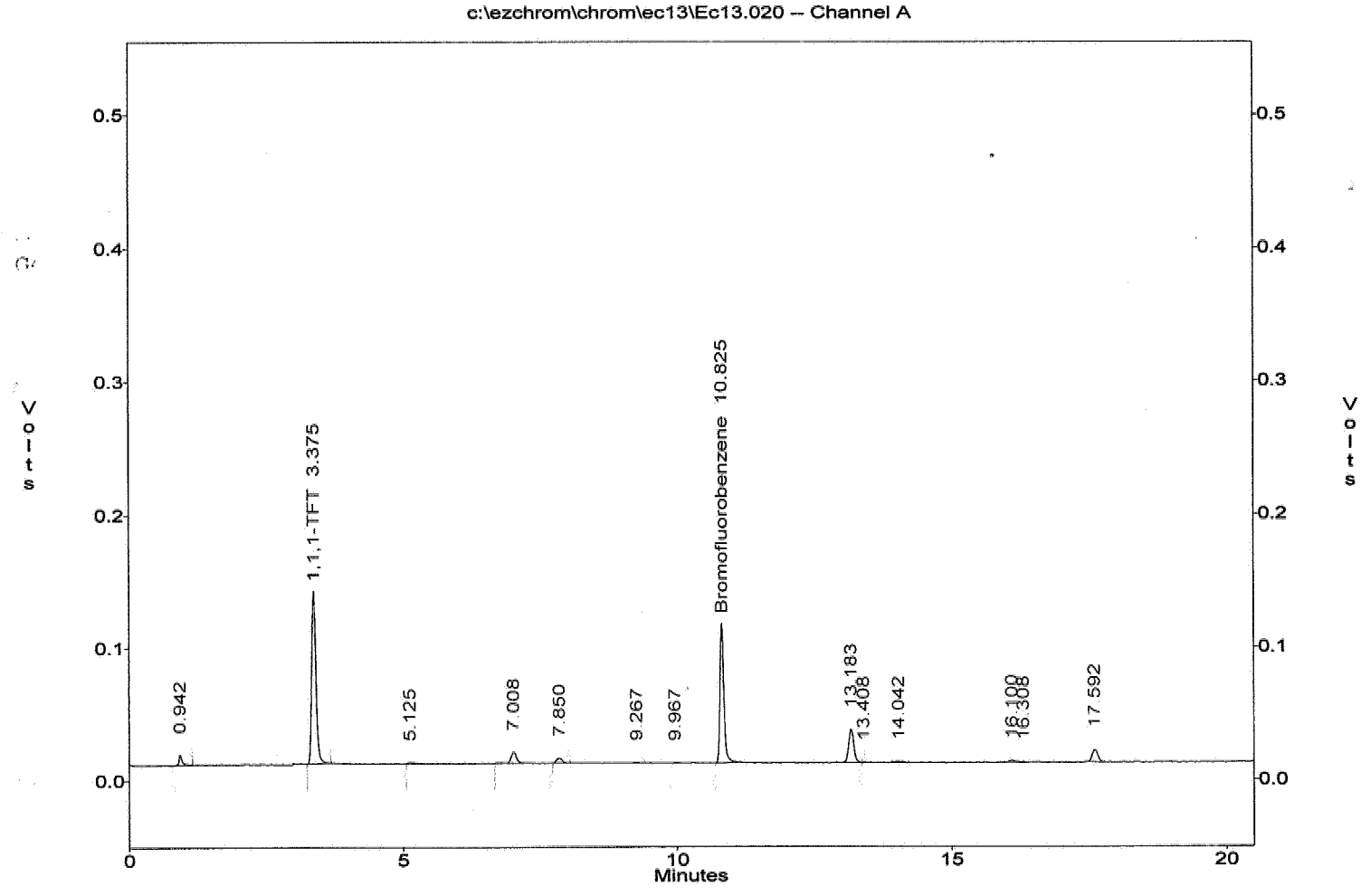
Parameter	H-C Range
GRO	C6-C10

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\Ec13.020
Method : c:\ezchrom\methods\Vg39c03.met
Sample ID : 06C096-01 5.0ML W
Acquired : Mar 13, 2006 22:11:22
Printed : Mar 13, 2006 22:31:54
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
2	1,1,1-TFT	3.375	704676.0	21531.8	32.73
8	Bromofluorobenzene	10.825	519443.0	15026.0	34.57
G1	GASOLINE(TOTAL)		346509.0	15352.4	22.57
G2	GRO(C6-C10)		99381.0	12418.6	8.00
G3	GRO(2MP-124TMB)		99381.0	12455.2	7.98
G4	GRO(C5-C12)		346509.0	15149.8	22.87



QC SUMMARIES

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: ENSR	Date Collected:	NA
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/13/06
Batch No.	: 06C096	Date Extracted:	03/13/06 11:20
Sample ID:	MBLK1W	Date Analyzed:	03/13/06 11:20
Lab Samp ID:	VA39C06B	Dilution Factor:	1
Lab File ID:	EC13003A	Matrix :	WATER
Ext Btch ID:	VA39C06	% Moisture :	NA
Calib. Ref.:	EC13002A	Instrument ID :	GCT039

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GRO	ND	.1	.02

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOFLUOROBENZENE	83	70-130

RL : Reporting Limit

Parameter	H-C Range
GRO	C6-C10

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ENSR
PROJECT: UPGRADIENT INVESTIGATION, TRONOX
BATCH NO.: 06C096
METHOD: METHOD 5030B/8015B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VA39C06B VA39C06L VA39C06C
LAB FILE ID: EC13003A EC13004A EC13005A
DATE EXTRACTED: 03/13/0611:20 03/13/0611:58 03/13/0612:36 DATE COLLECTED: NA
DATE ANALYZED: 03/13/0611:20 03/13/0611:58 03/13/0612:36 DATE RECEIVED: 03/13/06
PREP. BATCH: VA39C06 VA39C06 VA39C06
CALIB. REF: EC13002A EC13002A EC13002A

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
GRO	ND	.5	.512	102	.5	.5	100	2	60-130	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.04	.0403	101	.04	.0398	99	70-130

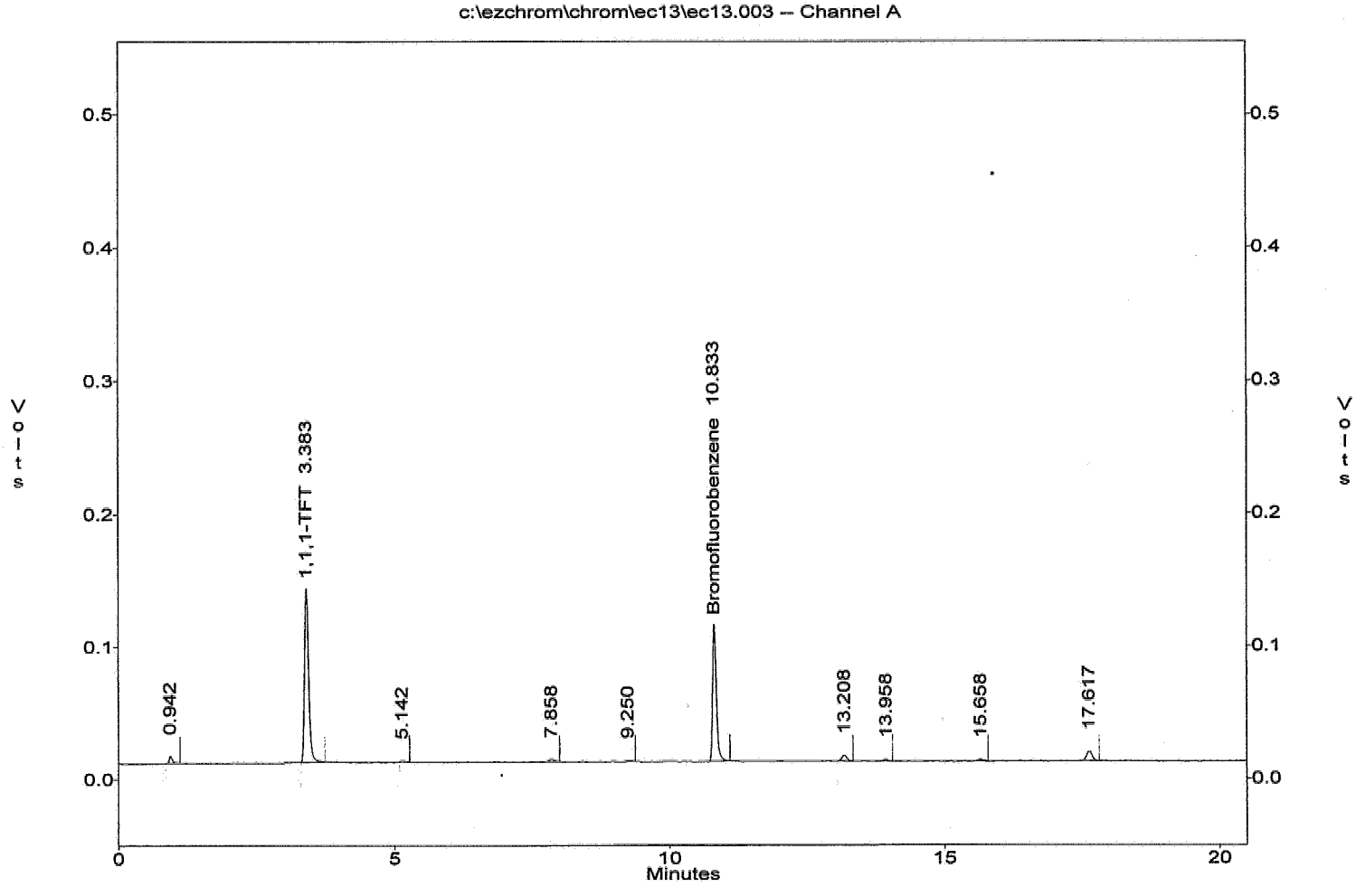
QC DATA

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\ec13.003
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VA39C06B 5.0ML W
Acquired : Mar 13, 2006 11:20:17
Printed : Mar 13, 2006 12:11:05
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
2	1,1,1-TFT	3.383	699864.0	21531.8	32.50
6	Bromofluorobenzene	10.833	500647.0	15026.0	33.32
G1	GASOLINE(TOTAL)		111106.0	15352.4	7.24
G2	GRO(C6-C10)		22512.0	12418.6	1.81
G3	GRO(2MP-124TMB)		22512.0	12455.2	1.81
G4	GRO(C5-C12)		111106.0	15149.8	7.33

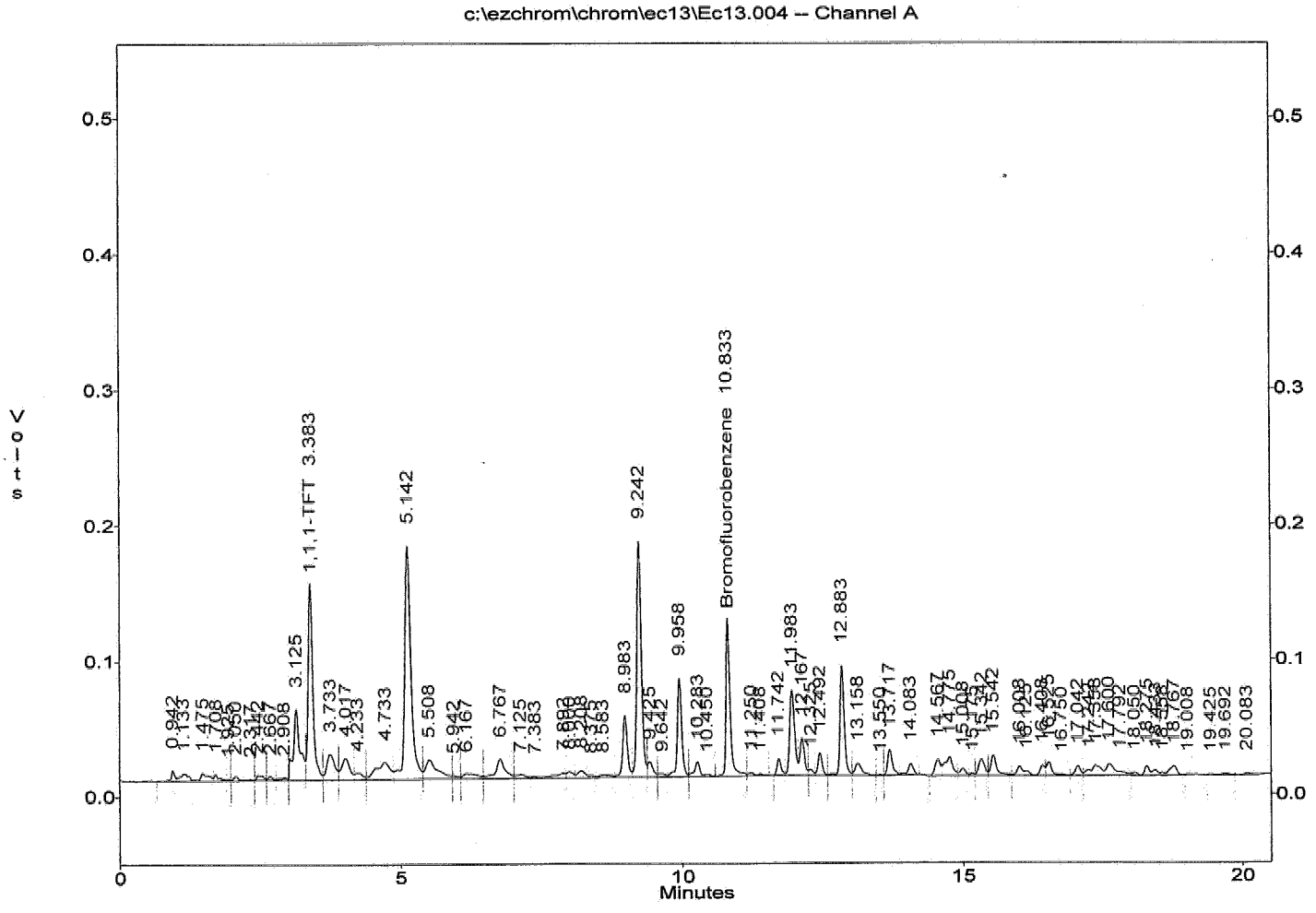


METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\Ec13.004
Method : c:\ezchrom\methods\Vg39c03.met
Sample ID : VA39C06L 5.0ML W
Acquired : Mar 13, 2006 11:58:29
Printed : Mar 13, 2006 12:19:00
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
12	1,1,1-TFT	3.383	852120.0	21531.8	39.57
36	Bromofluorobenzene	10.833	606282.0	15026.0	40.35
G1	GASOLINE(TOTAL)		7767404.0	15352.4	505.94
G2	GRO(C6-C10)		6359685.0	12418.6	512.11
G3	GRO(2MP-124TMB)		6334418.0	12455.2	508.58
G4	GRO(C5-C12)		7735626.0	15149.8	510.61

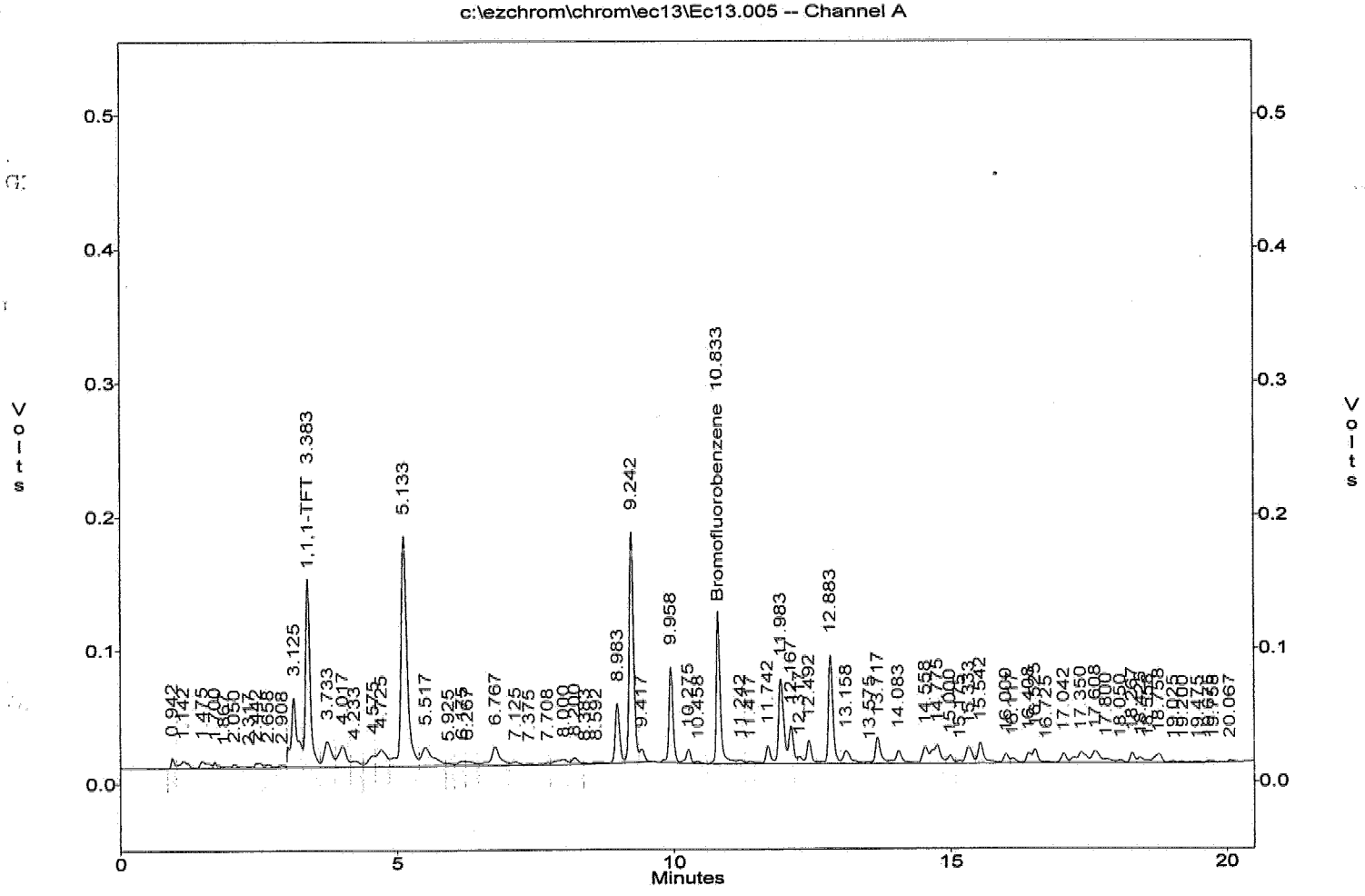


METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\Ec13.005
Method : c:\ezchrom\methods\Vg39c03.met
Sample ID : VA39C06C 5.0ML W
Acquired : Mar 13, 2006 12:36:40
Printed : Mar 13, 2006 12:57:12
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
12	1,1,1-TFT	3.383	831885.0	21531.8	38.64
37	Bromofluorobenzene	10.833	597750.0	15026.0	39.78
G1	GASOLINE(TOTAL)		7681401.0	15352.4	500.34
G2	GRO(C6-C10)		6205380.0	12418.6	499.68
G3	GRO(2MP-124TMB)		6165365.0	12455.2	495.00
G4	GRO(C5-C12)		7637274.0	15149.8	504.12



INITIAL CALIBRATION

INITIAL CALIBRATION
5030B/M8015

Lab Name : EMAX Inc
Instrument ID : GCT39
GC Column : DB-5
Column size ID : 30MX.53MM
LFID & Datetime: EC03019A 03/03/06 23:46
LFID & Datetime: EC03020A 03/04/06 00:24
LFID & Datetime: EC03021A 03/04/06 01:02
LFID & Datetime: EC03022A 03/04/06 01:40
LFID & Datetime: EC03023A 03/04/06 02:18
LFID & Datetime: EC03024A 03/04/06 02:57
LFID & Datetime: EC03025A 03/04/06 03:35
CONC UNIT: ppb

COMPOUND	CONC X	CALIBRATION FACTORS (AREA)/UNIT 1.00X	2.50X	5.00X	25.00X	50.00X	100.00X	150.00X	MEAN	%RSD
Gasoline(TOTAL)	20.00	12417	13454	15665	15778	16779	16708	16666	15352.4	11.3
GRO(C6-C10)	20.00	9660	10361	13007	12779	13750	13695	13678	12418.6	13.7
GRO(2MP-124TMB)	20.00	9660	10361	13148	12809	13777	13723	13709	12455.2	13.8
GRO(C5-C12)	20.00	11591	13210	15575	15708	16713	16645	16607	15149.8	13.1
SURROGATE	X	1.00X	2.00X	3.00X	4.00X	5.00X	7.50X	10.00X	MEAN	%RSD
Bromofluorobenzene	10.00	12063	13106	13108	14879	17078	17312	17635	15026.0	15.5
1,1,1-Trifluorotoluene	10.00	17166	19380	19227	21362	23275	24612	25700	21531.8	14.6

VG39C03.MET

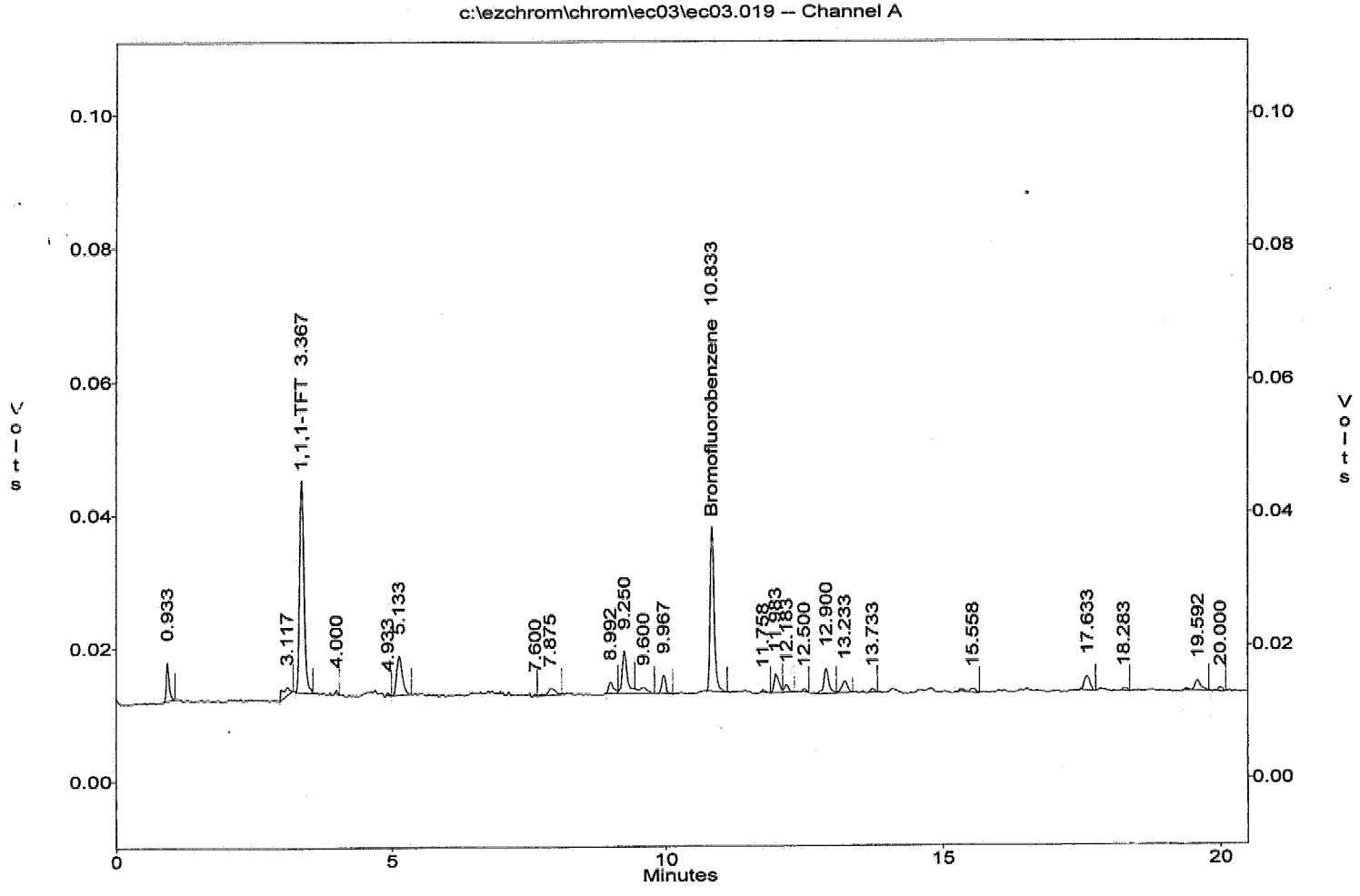
03/06/06

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.019
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-01 20/10
Acquired : Mar 03, 2006 23:46:19
Printed : Mar 06, 2006 12:14:18
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
3	1,1,1-TFT	3.367	171660.0	21531.8	10.00
13	Bromofluorobenzene	10.833	120632.0	15026.0	10.00
G1	GASOLINE(TOTAL)		248347.0	15352.4	20.00
G2	GRO(C6-C10)		193196.0	12418.6	20.00
G3	GRO(2MP-124TMB)		193196.0	12455.2	20.00
G4	GRO(C5-C12)		231819.0	15149.8	20.00



03/06/06

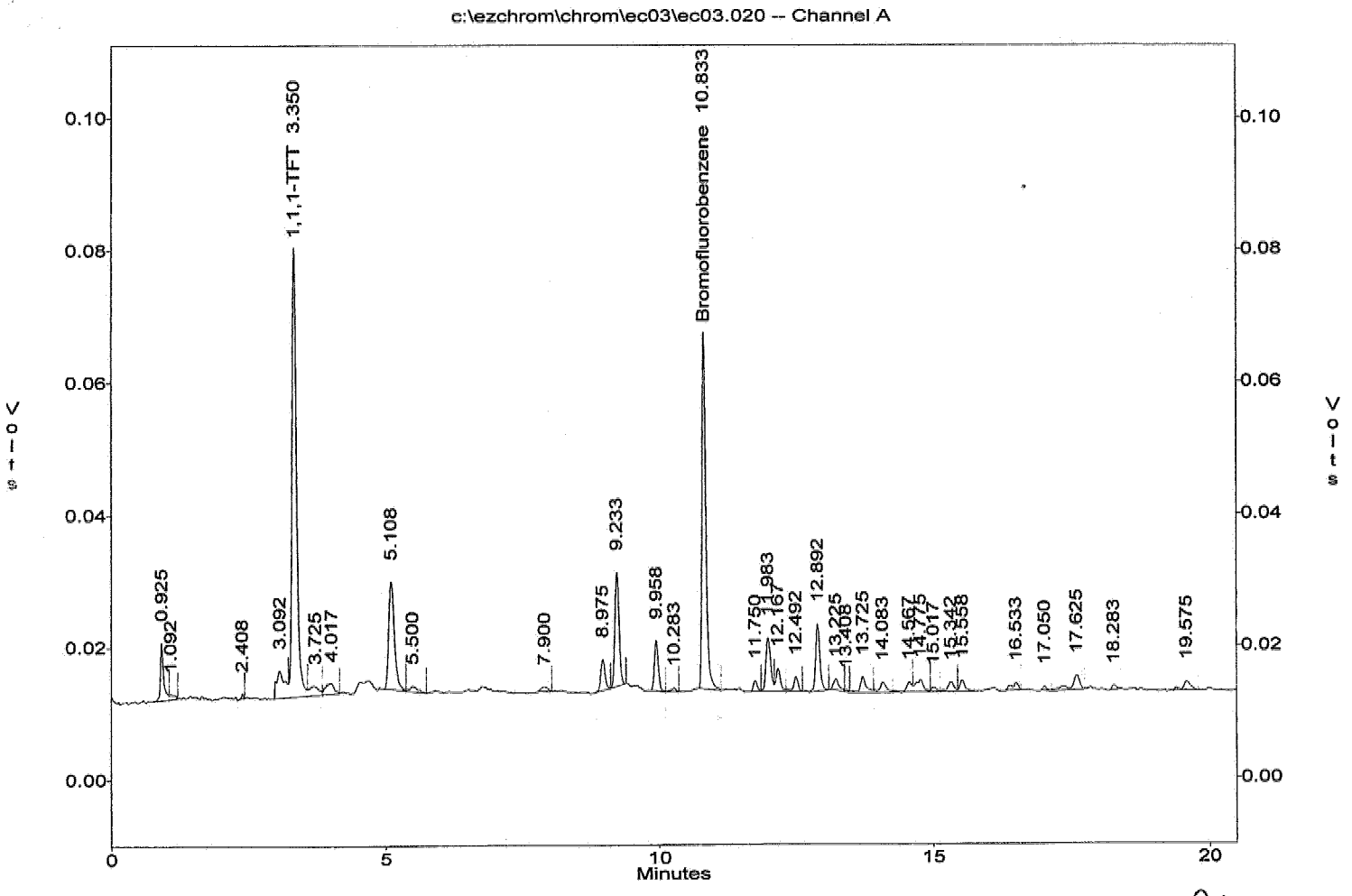
4615

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.020
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-02 50/20
Acquired : Mar 04, 2006 00:24:42
Printed : Mar 06, 2006 12:14:41
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
5	1,1,1-TFT	3.350	387603.0	21531.8	20.00
15	Bromofluorobenzene	10.833	262122.0	15026.0	20.00
G1	GASOLINE(TOTAL)		672683.0	15352.4	50.00
G2	GRO(C6-C10)		518064.0	12418.6	50.00
G3	GRO(2MP-124TMB)		518064.0	12455.2	50.00
G4	GRO(C5-C12)		660488.0	15149.8	50.00



03/06/06

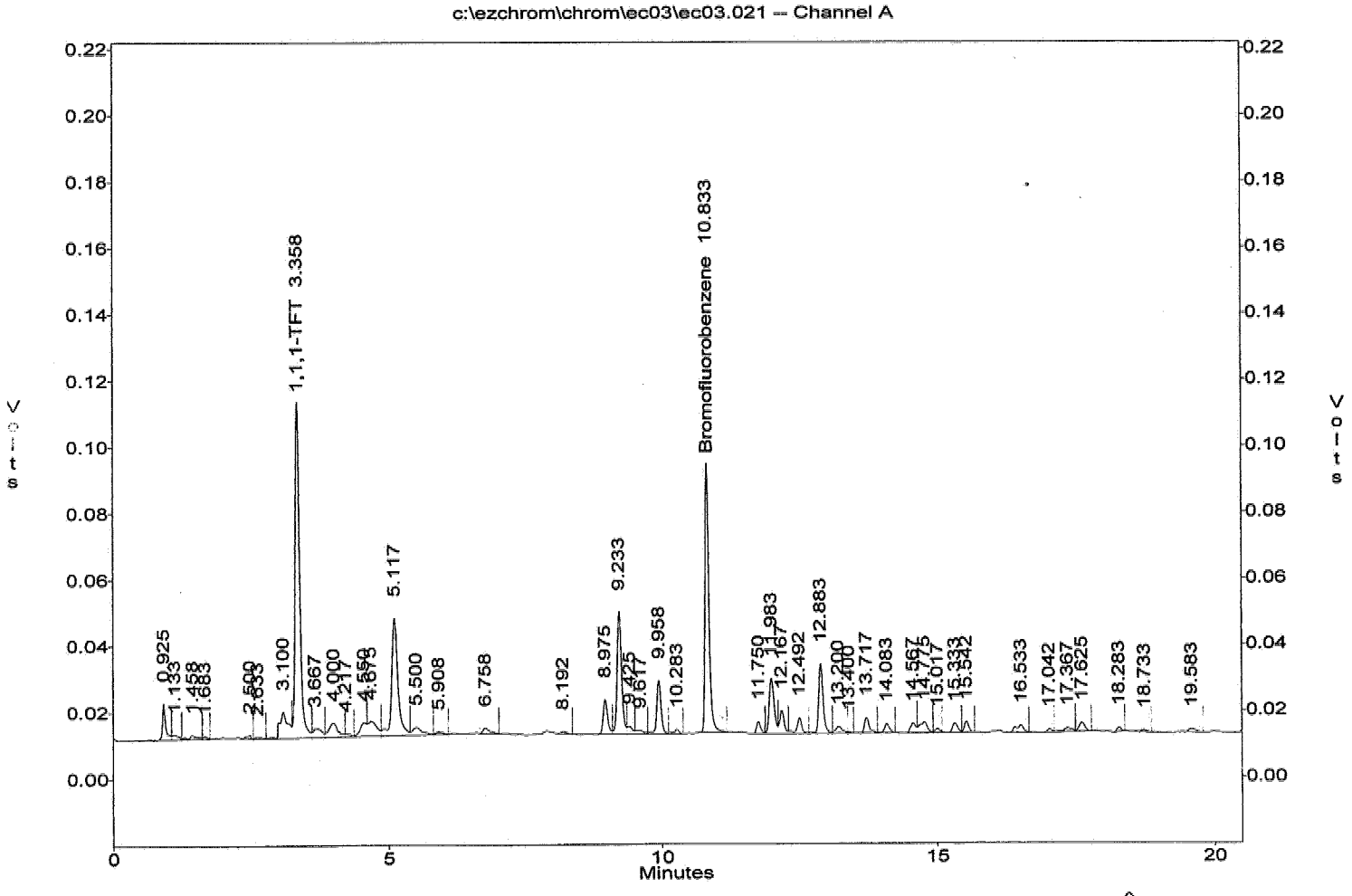
4016

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.021
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-03 100/30
Acquired : Mar 04, 2006 01:02:51
Printed : Mar 06, 2006 12:17:19
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
8	1,1,1-TFT	3.358	576813.0	21531.8	30.00
25	Bromofluorobenzene	10.833	393242.0	15026.0	30.00
G1	GASOLINE(TOTAL)		1566460.0	15352.4	100.00
G2	GRO(C6-C10)		1300710.0	12418.6	100.00
G3	GRO(2MP-124TMB)		1314789.0	12455.2	100.00
G4	GRO(C5-C12)		1557478.0	15149.8	100.00



03/06/06

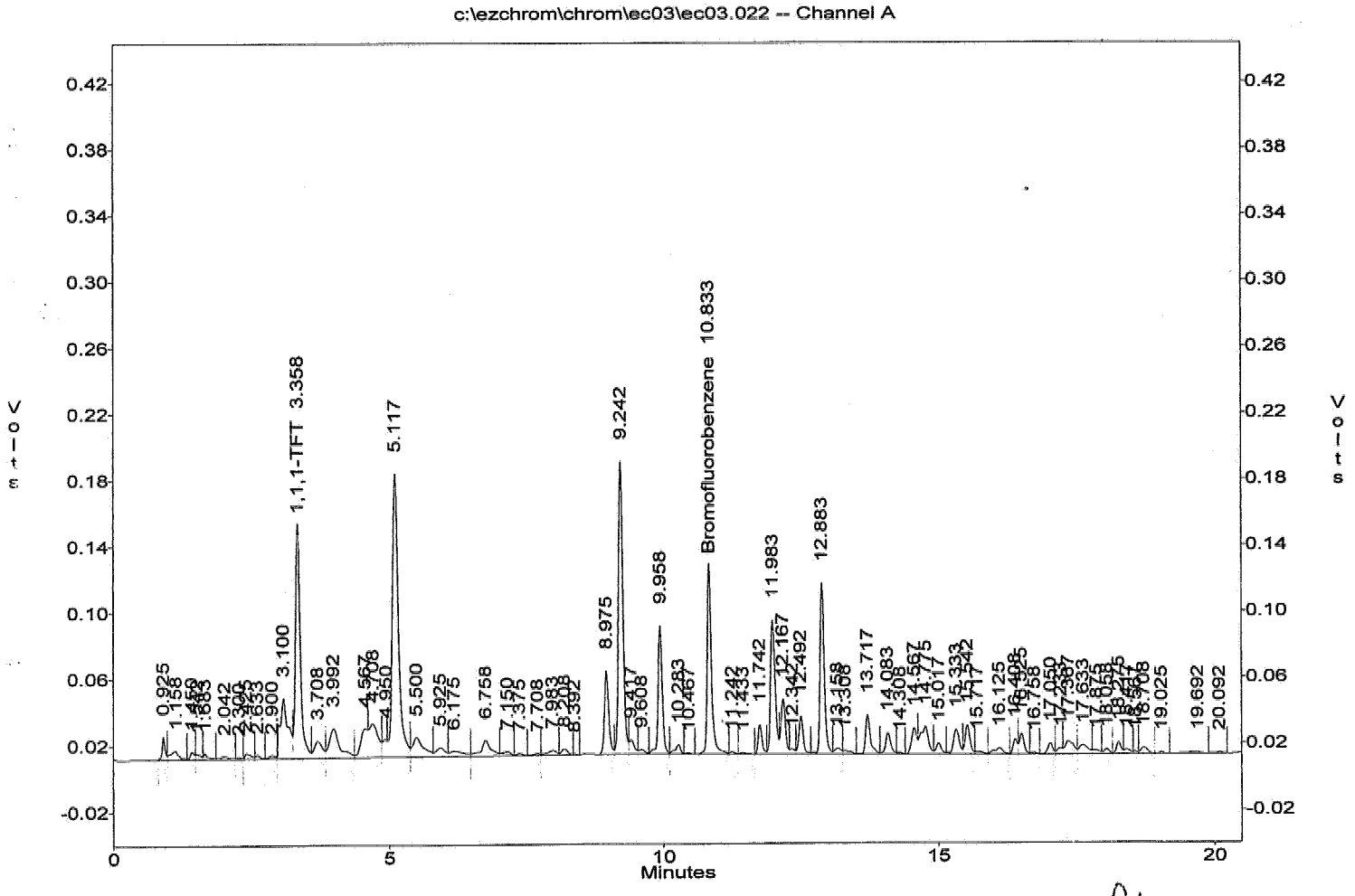
4017

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.022
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-04 500/40
Acquired : Mar 04, 2006 01:40:58
Printed : Mar 06, 2006 12:18:47
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
12	1,1,1-TFT	3.358	854497.0	21531.8	40.00
36	Bromofluorobenzene	10.833	595155.0	15026.0	40.00
G1	GASOLINE(TOTAL)		7888862.0	15352.4	500.00
G2	GRO(C6-C10)		6389639.0	12418.6	500.00
G3	GRO(2MP-124TMB)		6404459.0	12455.2	500.00
G4	GRO(C5-C12)		7853986.0	15149.8	500.00



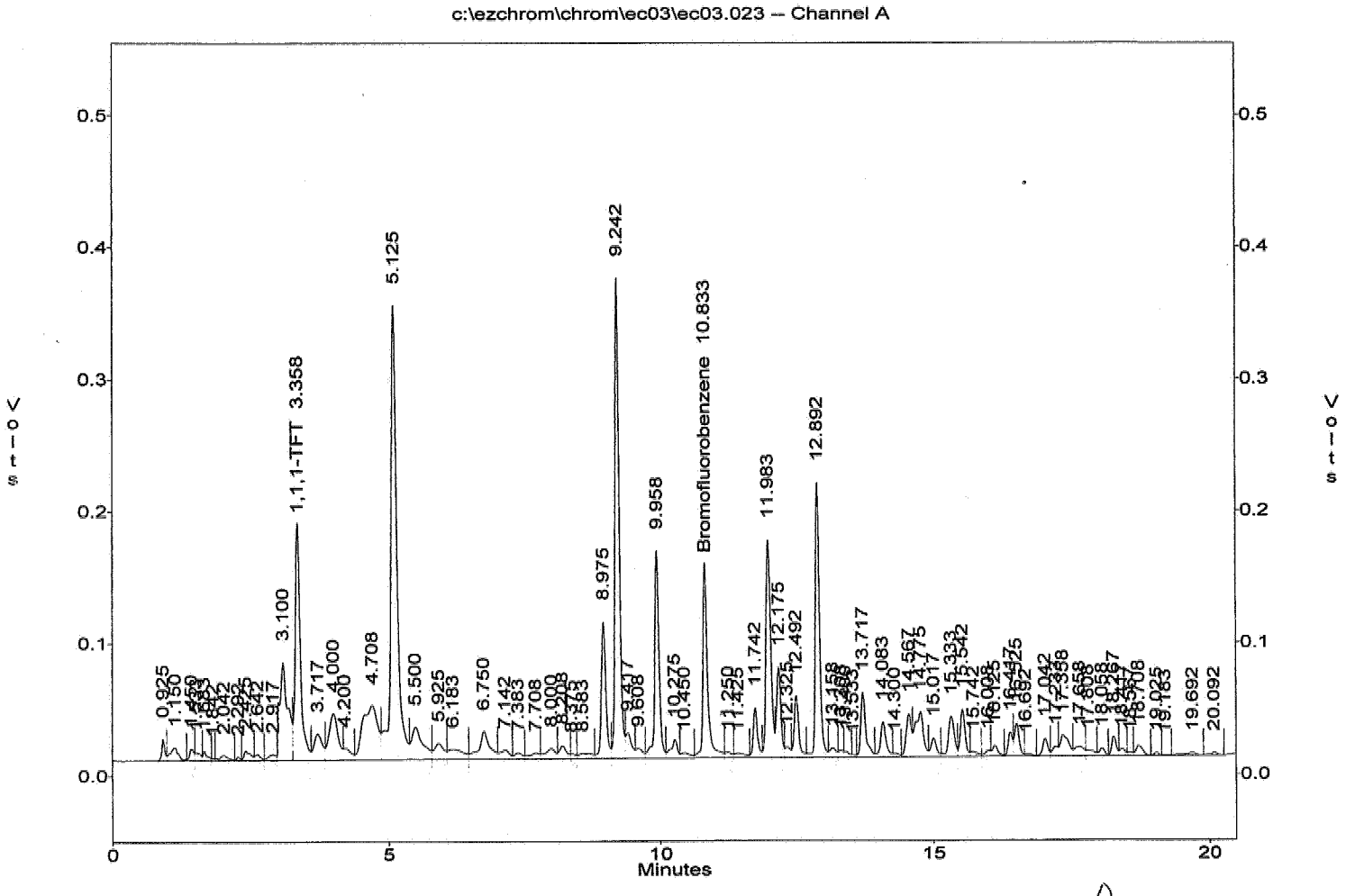
03/06/06

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.023
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-05 1000/50
Acquired : Mar 04, 2006 02:18:59
Printed : Mar 06, 2006 12:20:22
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
13	1,1,1-TFT	3.358	1163757.0	21531.8	50.00
37	Bromofluorobenzene	10.833	853904.0	15026.0	50.00
G1	GASOLINE(TOTAL)		16778924.0	15352.4	1000.00
G2	GRO(C6-C10)		13749773.0	12418.6	1000.00
G3	GRO(2MP-124TMB)		13776743.0	12455.2	1000.00
G4	GRO(C5-C12)		16712874.0	15149.8	1000.00



RA
03/06/06

4619

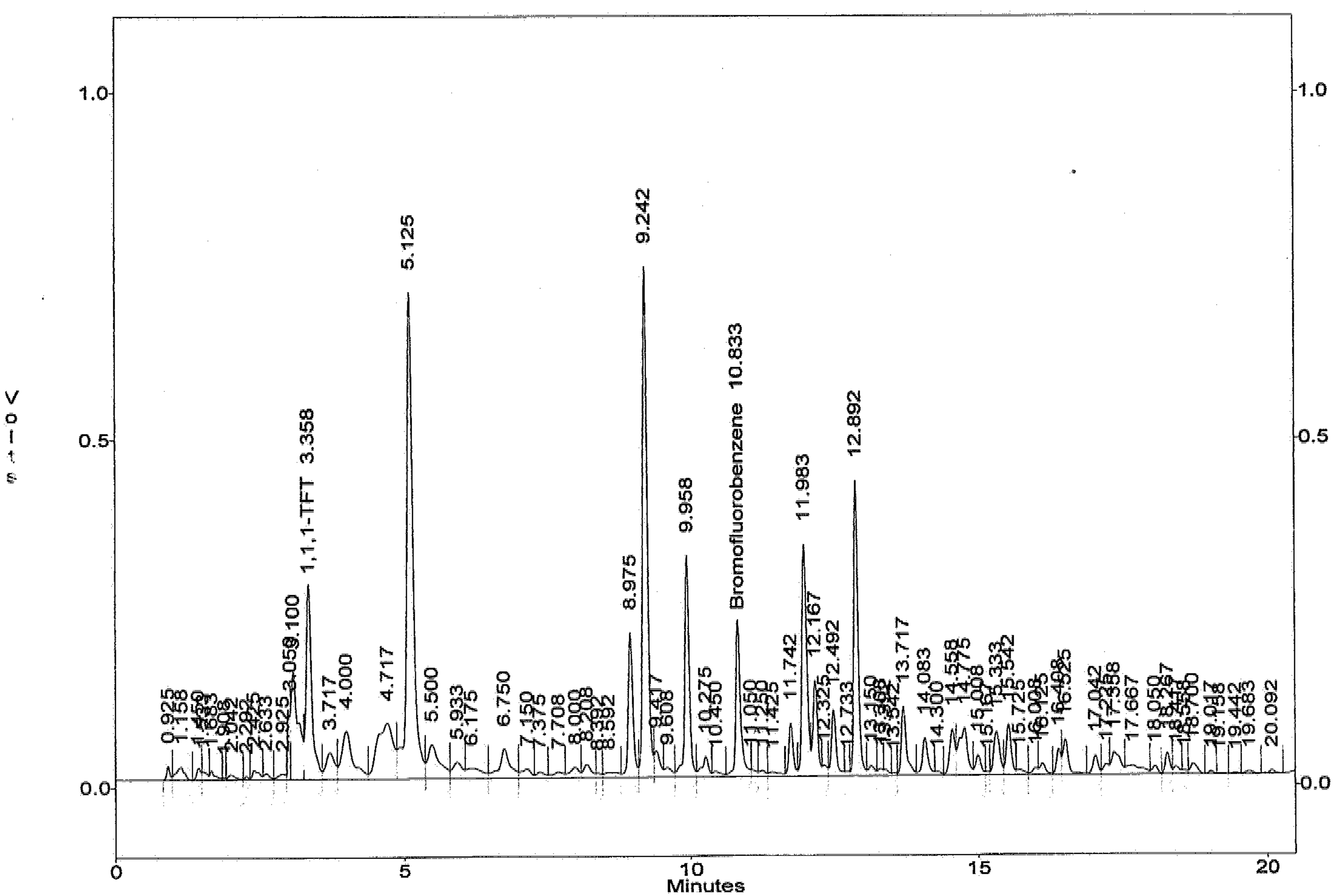
METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.024
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-06 2000/75
Acquired : Mar 04, 2006 02:57:07
Printed : Mar 06, 2006 12:21:39
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
14	1,1,1-TFT	3.358	1845865.0	21531.8	75.00
37	Bromofluorobenzene	10.833	1298426.0	15026.0	75.00
G1	GASOLINE(TOTAL)		33415984.0	15352.4	2000.00
G2	GRO(C6-C10)		27390820.0	12418.6	2000.00
G3	GRO(2MP-124TMB)		27446880.0	12455.2	2000.00
G4	GRO(C5-C12)		33290400.0	15149.8	2000.00

c:\ezchrom\chrom\ec03\ec03.024 -- Channel A



AS 03/06/06

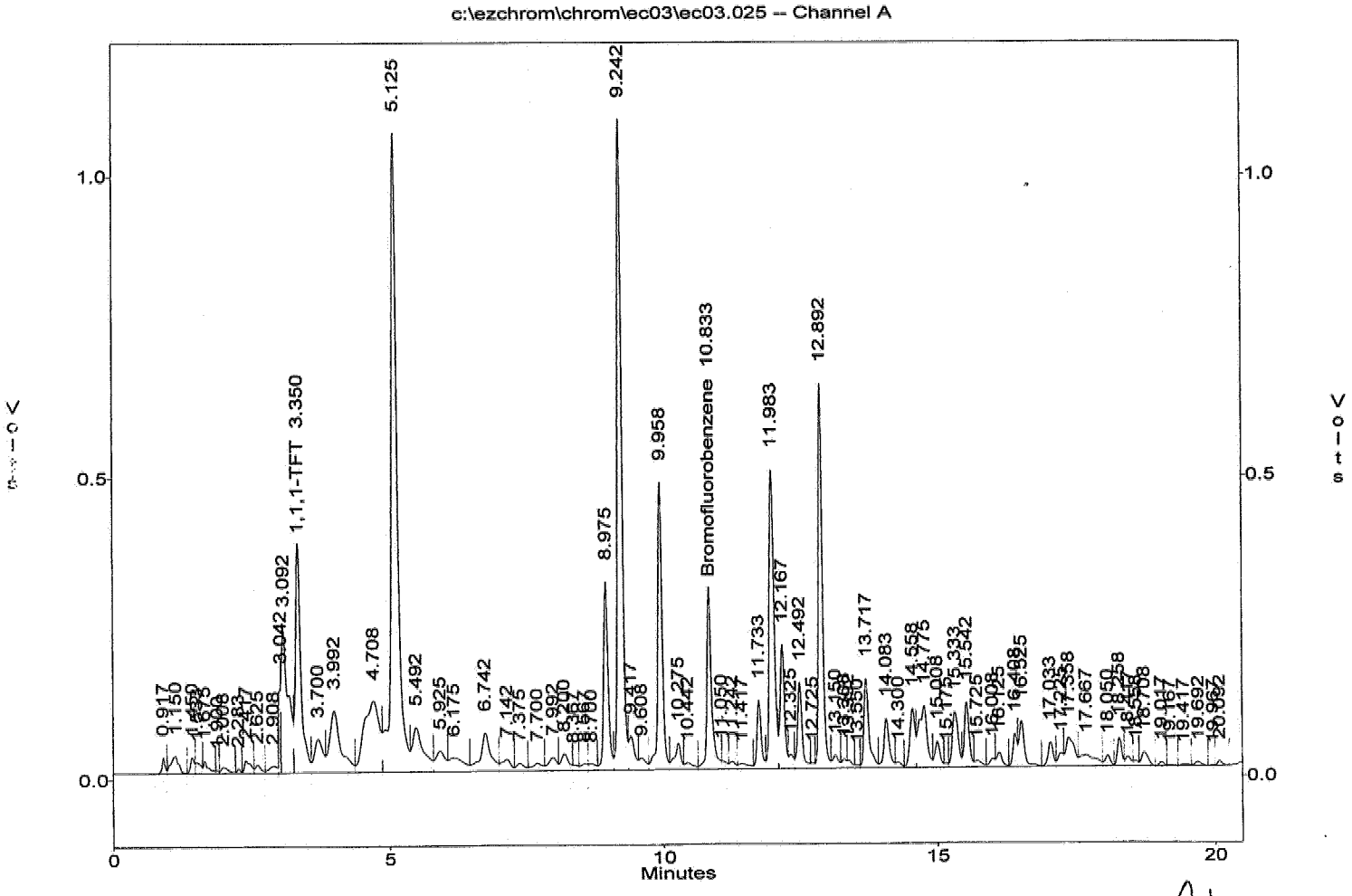
4020

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.025
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : VG39C03-07 3000/100
Acquired : Mar 04, 2006 03:35:22
Printed : Mar 06, 2006 12:22:07
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
14	1,1,1-TFT	3.350	2570044.0	21531.8	100.00
38	Bromofluorobenzene	10.833	1763520.0	15026.0	100.00
G1	GASOLINE(TOTAL)		49999240.0	15352.4	3000.00
G2	GRO(C6-C10)		41032744.0	12418.6	3000.00
G3	GRO(2MP-124TMB)		41125540.0	12455.2	3000.00
G4	GRO(C5-C12)		49821432.0	15149.8	3000.00



Rst
03/06/06

SECOND SOURCE

INITIAL CALIBRATION VERIFICATION
5030B/M8015

Lab Name : EMAX
Instrument ID : GCT39
GC Columm : DB-5
Column size ID : 30MX.53MM
Mid Conc Init LFID & Datetime: EC03022A 03/04/2006 01:40
Conc Cont LFID & Datetime: EC03026A 03/04/2006 04:13
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Gasoline(TOTAL)	0.000	0.000	0.000	500.0	15352.4	7188130	468.21	-6		15
GRO(C6-C10)	0.000	0.000	0.000	500.0	12418.6	5837213	470.04	-6		15
GRO(2MP-124TMB)	0.000	0.000	0.000	500.0	12455.2	5812679	466.69	-7		15
GRO(C5-C12)	0.000	0.000	0.000	500.0	15149.8	7136784	471.08	-6		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
Bromofluorobenzene	10.833	10.771	10.895	40.0	15026.0	621377	41.35	3		15
1,1,1-Trifluorotoluene	3.358	3.257	3.459	40.0	21531.8	834546	38.76	-3		15

VG39C03.MET

AA
03/06/04

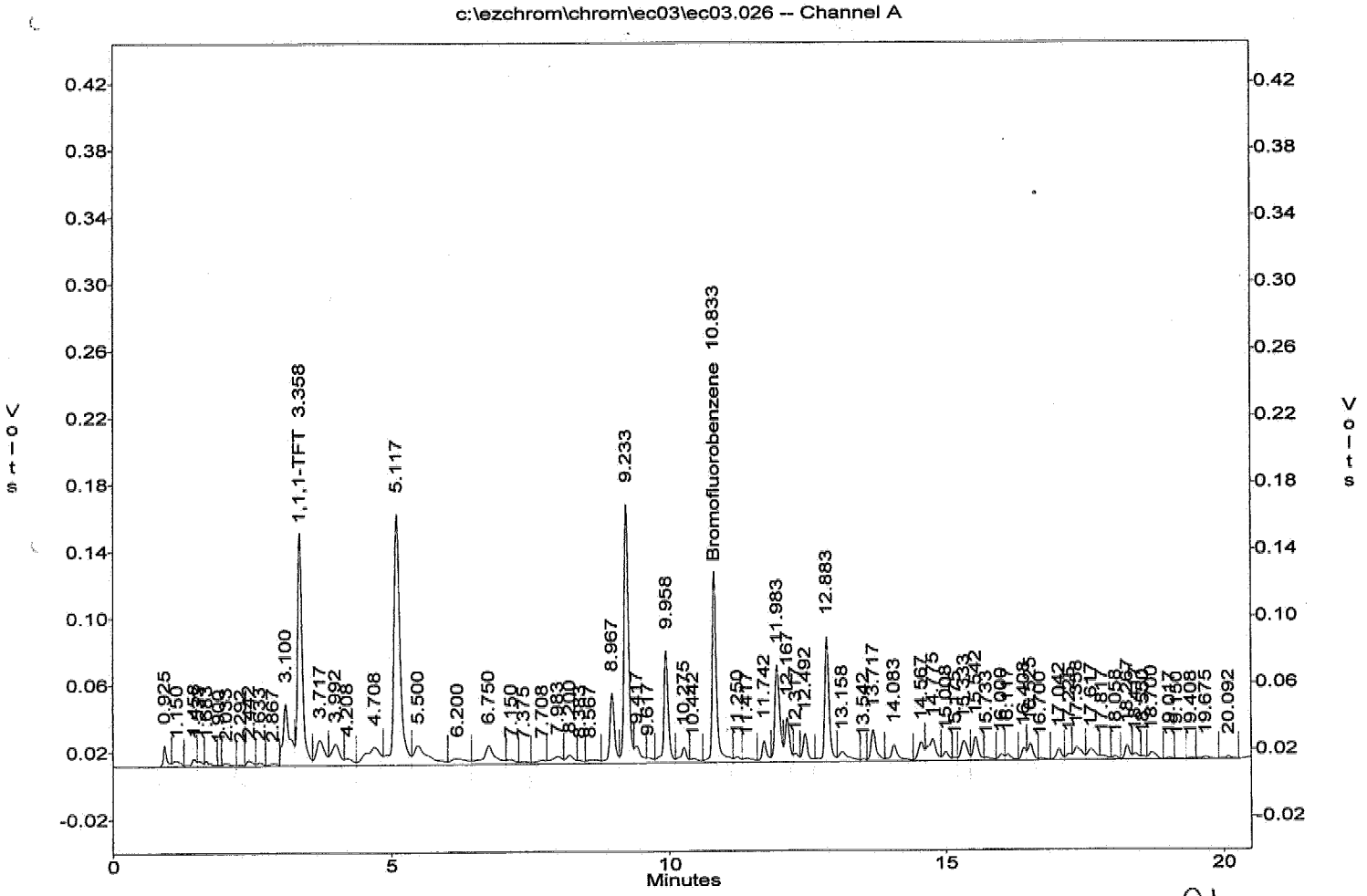
4023

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.026
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : IVG39C0301 500/40
Acquired : Mar 04, 2006 04:13:31
Printed : Mar 06, 2006 12:24:44
User : SERGIO

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
13	1,1,1-TFT	3.358	834546.0	21531.8	38.76
36	Bromofluorobenzene	10.833	621377.0	15026.0	41.35
G1	GASOLINE(TOTAL)		7188130.0	15352.4	468.21
G2	GRO(C6-C10)		5837213.0	12418.6	470.04
G3	GRO(2MP-124TMB)		5812679.0	12455.2	466.69
G4	GRO(C5-C12)		7136784.0	15149.8	471.08



03/06/06

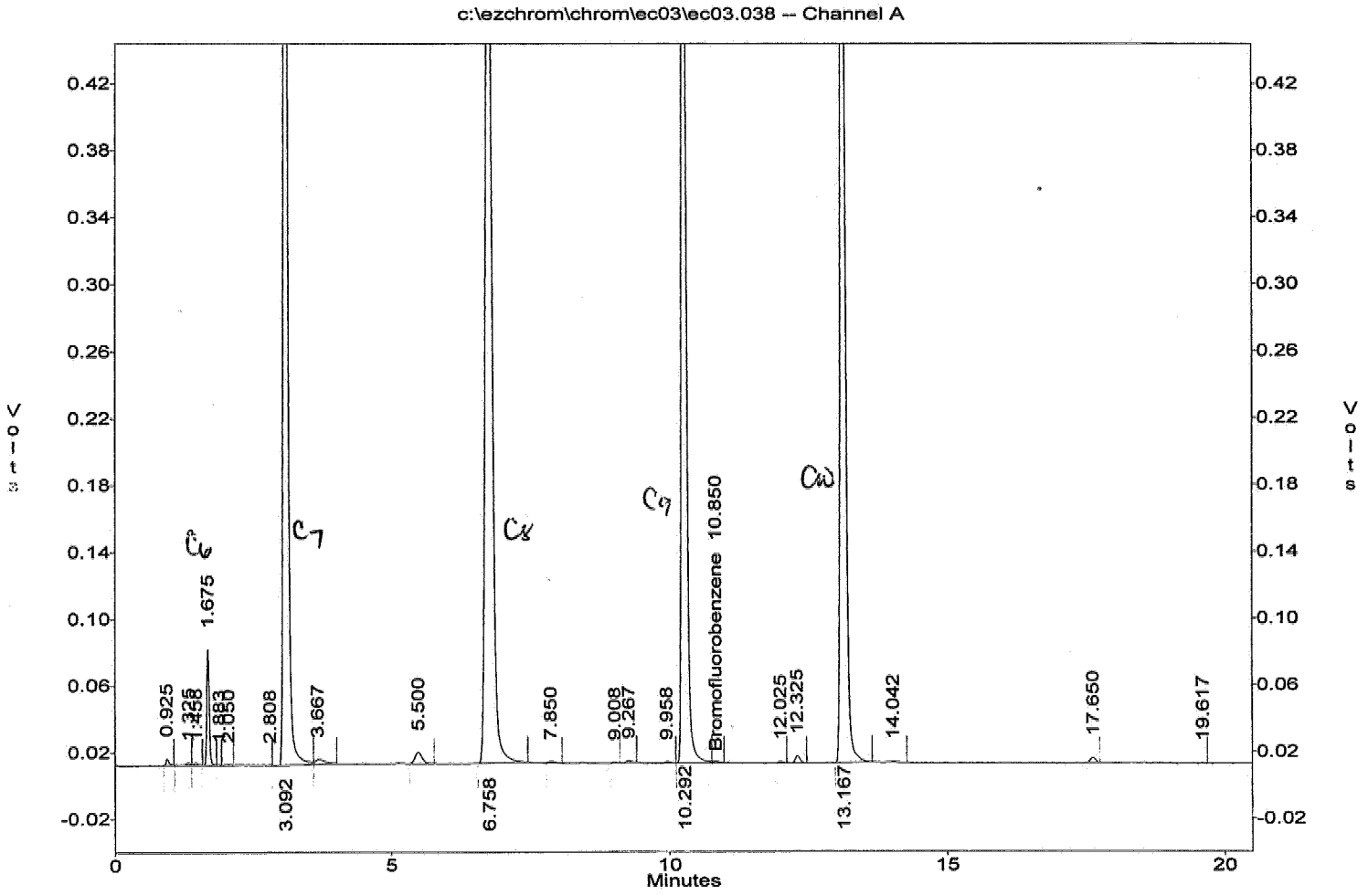
4024

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec03\ec03.038
Method : c:\ezchrom\methods\vg39c03.met
Sample ID : GRO
Acquired : Mar 04, 2006 11:51:49
Printed : Mar 07, 2006 09:10:15
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
--	1,1,1-TFT	3.330	0.0	0.0	0.00
17	Bromofluorobenzene	10.850	7464.0	15026.0	0.50
G1	GASOLINE(TOTAL)		19320312.0	15352.4	1258.46
G2	GRO(C6-C10)		19276316.0	12418.6	1552.21
G3	GRO(2MP-124TMB)		14900208.0	12455.2	1196.30
G4	GRO(C5-C12)		19318510.0	15149.8	1275.17



DAILY CALIBRATION

CONTINUE CALIBRATION
5030B/M8015

Lab Name : EMAX
Instrument ID : GCT39
GC Columm : DB-5
Column size ID : 30MX.53MM
Mid Conc Init LFID & Datetime: EC03022A 03/04/2006 01:40
Conc Cont LFID & Datetime: EC13002A 03/13/2006 10:42
CONC UNIT : ppb

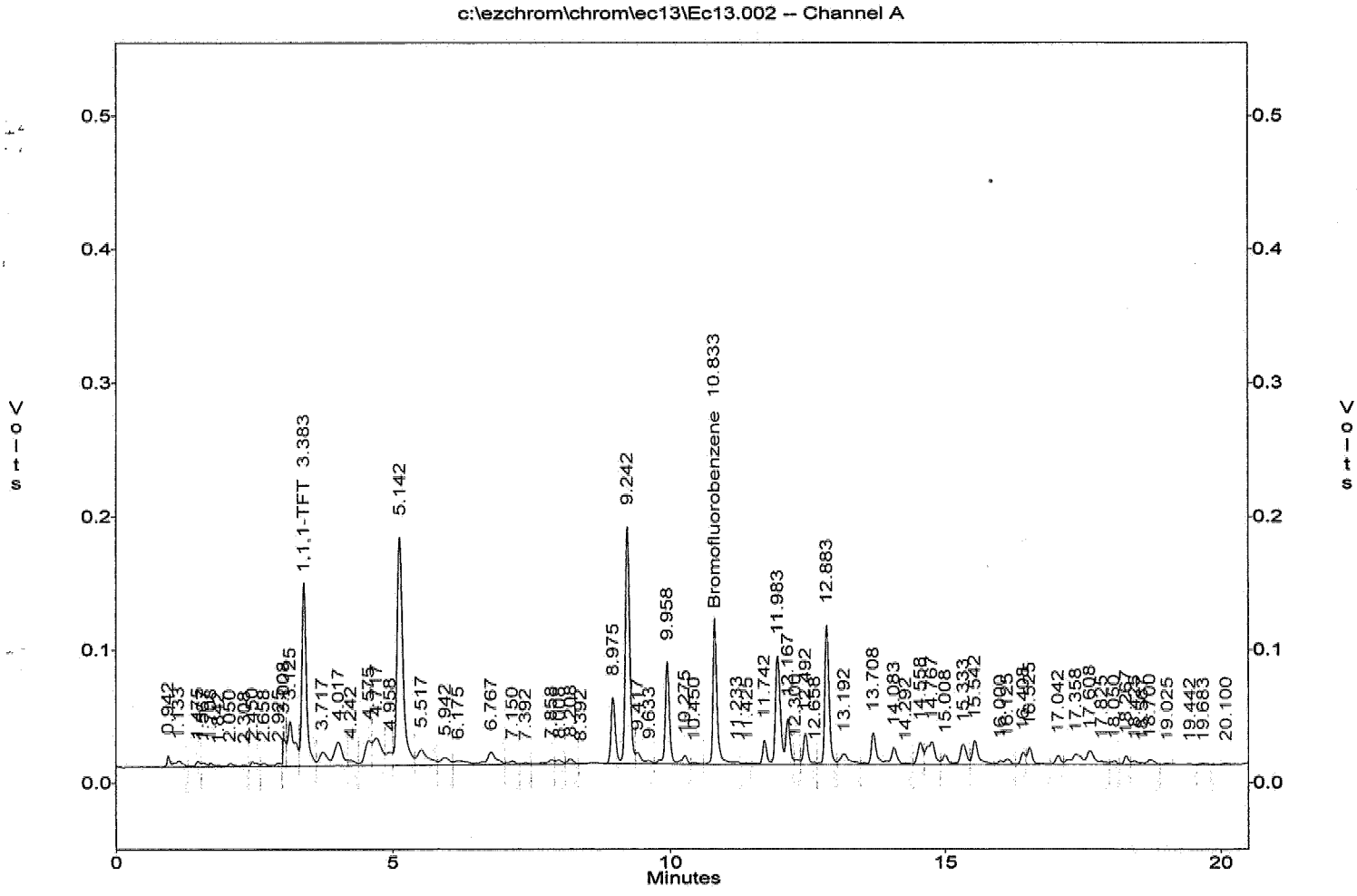
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Gasoline(TOTAL)	0.000	0.000	0.000	500.0	15352.4	7953322	518.05	4		15
GRO(C6-C10)	0.000	0.000	0.000	500.0	12418.6	6361409	512.25	2		15
GRO(2MP-124TMB)	0.000	0.000	0.000	500.0	12455.2	6404390	514.19	3		15
GRO(C5-C12)	0.000	0.000	0.000	500.0	15149.8	7925380	523.13	5		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
Bromofluorobenzene	10.833	10.771	10.895	40.0	15026.0	580363	38.62	-3		15
1,1,1-Trifluorotoluene	3.383	3.282	3.484	40.0	21531.8	798433	37.08	-7		15

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\Ec13.002
Method : c:\ezchrom\methods\Vg39c03.met
Sample ID : CVG39C03757 500/40
Acquired : Mar 13, 2006 10:42:05
Printed : Mar 13, 2006 11:02:37
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
14	1,1,1-TFT	3.383	798433.0	21531.8	37.08
39	Bromofluorobenzene	10.833	580363.0	15026.0	38.62
G1	GASOLINE(TOTAL)		7953322.0	15352.4	518.05
G2	GRO(C6-C10)		6361409.0	12418.6	512.25
G3	GRO(2MP-124TMB)		6404390.0	12455.2	514.19
G4	GRO(C5-C12)		7925380.0	15149.8	523.13



CONTINUE CALIBRATION
5030B/M8015

Lab Name : EMAX
Instrument ID : GCT39
GC Column : DB-5
Column size ID : 30MX.53MM
Mid Conc Init LFID & Datetime: EC03022A 03/04/2006 01:40
Conc Cont LFID & Datetime: EC13012A 03/13/2006 17:04
CONC UNIT : ppb

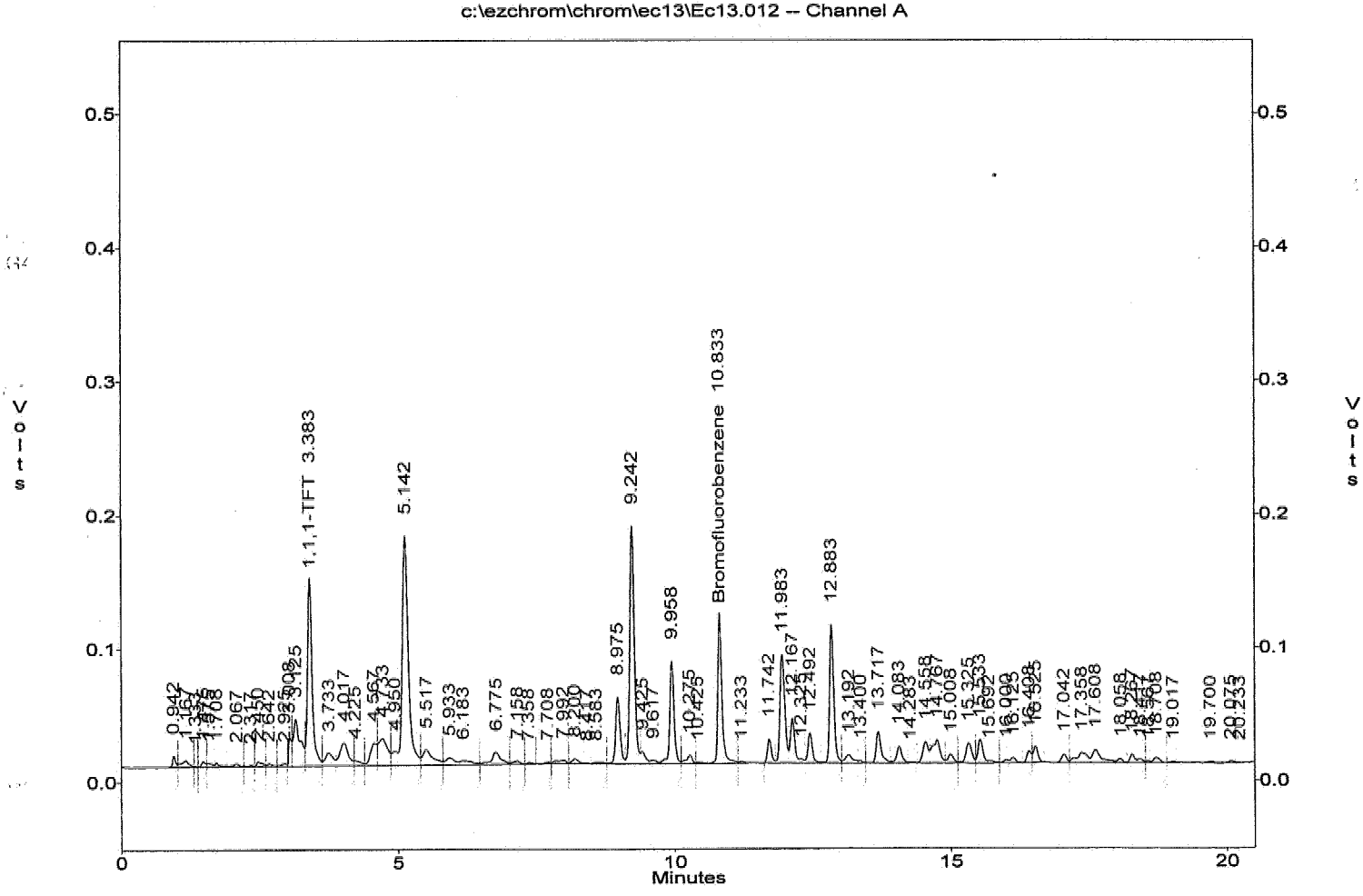
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Gasoline(TOTAL)	0.000	0.000	0.000	500.0	15352.4	7853784	511.57	2		15
GRO(C6-C10)	0.000	0.000	0.000	500.0	12418.6	6350078	511.34	2		15
GRO(2MP-124TMB)	0.000	0.000	0.000	500.0	12455.2	6388971	512.96	3		15
GRO(C5-C12)	0.000	0.000	0.000	500.0	15149.8	7823610	516.42	3		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
Bromofluorobenzene	10.833	10.771	10.895	40.0	15026.0	592862	39.46	-1		15
1,1,1-Trifluorotoluene	3.383	3.282	3.484	40.0	21531.8	833607	38.72	-3		15

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\Ec13.012
Method : c:\ezchrom\methods\Vg39c03.met
Sample ID : CVG39C03758 500/40
Acquired : Mar 13, 2006 17:04:49
Printed : Mar 13, 2006 17:25:21
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
14	1,1,1-TFT	3.383	833607.0	21531.8	38.72
40	Bromofluorobenzene	10.833	592862.0	15026.0	39.46
G1	GASOLINE(TOTAL)		7853784.0	15352.4	511.57
G2	GRO(C6-C10)		6350078.0	12418.6	511.34
G3	GRO(2MP-124TMB)		6388971.0	12455.2	512.96
G4	GRO(C5-C12)		7823610.0	15149.8	516.42



CONTINUE CALIBRATION
5030B/M8015

Lab Name : EMAX
Instrument ID : GCT39
GC Column : DB-5
Column size ID : 30MX.53MM
Mid Conc Init LFID & Datetime: EC03022A 03/04/2006 01:40
Conc Cont LFID & Datetime: EC13023A 03/14/2006 00:05
CONC UNIT : ppb

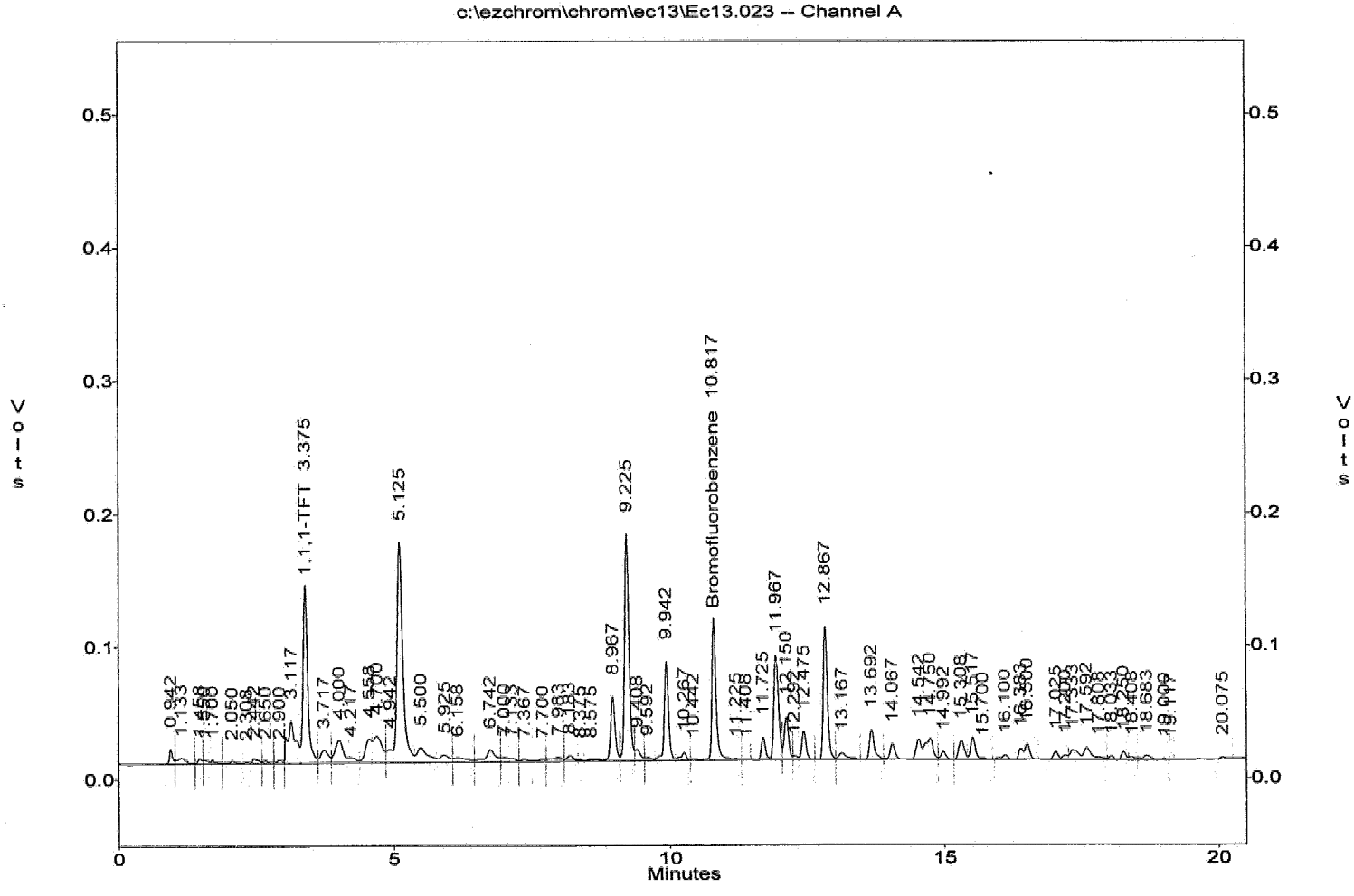
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Gasoline(TOTAL)	0.000	0.000	0.000	500.0	15352.4	7644687	497.95	-0		15
GRO(C6-C10)	0.000	0.000	0.000	500.0	12418.6	6312760	508.33	2		15
GRO(2MP-124TMB)	0.000	0.000	0.000	500.0	12455.2	6295174	505.42	1		15
GRO(C5-C12)	0.000	0.000	0.000	500.0	15149.8	7623643	503.22	1		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
Bromofluorobenzene	10.817	10.755	10.879	40.0	15026.0	563771	37.52	-6		15
1,1,1-Trifluorotoluene	3.375	3.274	3.476	40.0	21531.8	796108	36.97	-8		15

METHOD 8015 by FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ec13\Ec13.023
Method : c:\ezchrom\methods\Vg39c03.met
Sample ID : CVG39C03759 500/40
Acquired : Mar 14, 2006 00:05:41
Printed : Mar 14, 2006 00:26:14
User : MICHAEL

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(PPB)
12	1,1,1-TFT	3.375	796108.0	21531.8	36.97
39	Bromofluorobenzene	10.817	563771.0	15026.0	37.52
G1	GASOLINE(TOTAL)		7644687.0	15352.4	497.95
G2	GRO(C6-C10)		6312760.0	12418.6	508.33
G3	GRO(2MP-124TMB)		6295174.0	12455.2	505.42
G4	GRO(C5-C12)		7623643.0	15149.8	503.22



ANALYTICAL LOGS

ANALYSIS RUN LOG FOR NONHALOGENATED VOLATILES

SOP: ☑ EMAX-5030B Rev. No. 1 ☑ EMAX-BTEXM Rev. No. 1 ☑ EMAX-8015G Rev. No. 1 ☐ sc 3/06/04 13:46

Starting Date: 3/03/06 Time: 23:07 Ending Date: ~~3/03/06~~ 3/04/06 Time: ~~22:29~~ sc 3/06/04 Book # A39-024

ANALYTICAL BATCH # N/A

	Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	Purge Volume	pH	Matrix	Notes
*01		EC03-018	LB39C735	5.0ml	5.0ml	N/A	W	
*02		-019	VG39C03-01	.04ml/1ml				20/10
*03		-020	-02	.1ml/2ml				50/20
*04		-021	-03	.2ml/3ml				100/30
*05		-022	-04	1ml/4ml				500/40 GAS
*06		-023	-05	2ml/5ml				1000/50 ICAL
*07		-024	-06	4ml/7.5ml				2000/75
*08		-025	-07	6ml/10ml				3000/100
*09		-026	LVG39C0301	.5ml/4ml				500/40 GAS ICV
*10		-027	LVG39C0302	1ml/5ml				1000/50 GAS ICV
*11		-028	LB39C736 sc 3/04/06 ~~TEST~~	5.0ml				
*12		-029	VA39C03-01	.05ml				.5 PPB
*13		-030	-02	.1ml				1 PPB
*14		-031	-03	.5ml				5 PPB
*15		-032	-04	2ml				20 PPB BTEXM
*16		-033	-05	4ml				40 PPB ICAL
*17		-034	-06	7.5ml				75 PPB
*18		-035	-07	10ml				100 PPB
*19		-036	LVA39C0303	2ml				BTEX ICV 20/20
*20		-037	LVA39C0304	4ml				BTEX ICV 40/40
*21		-038	GRO	.5ml				
*22		-039	2MP/1,2,4-TMB	1ml/.5ml				
*23		-040	PENTANE/NAPHTHALENE	3ml/.5ml				
*24		-041	DRO	.5ml				
*25								
*26								
*27								
*28								sc 3/03/06
*29								
*30								

Instrument No:		39
Initial Calibration Reference		
	FIDChannel A	PIDChannel B
Method File	VG39C03	VG39C03
Date	3/03/06	3/03/06
ICAL ID	VG39C03-GAS	
	VA39C03-BTEXM	
ICV ID	LVG39C0301/02 GAS	
	LVA39C0303/-04 BTEXM	
Std.	ID	Conc.(mg/L)
DCC GAS ICAL	SV2A-04-58	2500
DCC BTEX ICAL	SV2C-04-30-3	50
BFB/TFT	SV2C-04-31-3	50
LCS/LCSD GAS ICV	SV2A-04-67	5000
MS/MSD	—	—
BTEX LCS/ICV	SV2C-04-31-1	50
Solvent	ID	
Methanol		

Electronic Data Archival		
	Location	Date
	EZC-3-BTEX	

Comments:

Analyzed By: sc

Disposed on: 3/06/06 By: sc

ANALYSIS RUN LOG FOR NONHALOGENATED VOLATILES

SOP: ☑ EMAX-5030B Rev. No. 1 ☐ EMAX-BTEXM Rev. No. 1 ☑ EMAX-8015G Rev. No. 1 ☐

Starting Date: 3/13/06 Time: 10:03 Ending Date: 3/14/06 Time: 04:32 Book # A39-024

ANALYTICAL BATCH * VA39C06 ** VMC008S

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	Purge Volume	pH	Matrix	Notes
*01	EC13. 001	LB39C757	5.0ml	5.0ml	N/A		
*02	.002	CVG39C03757	1ul/1ul	↓	↓		500/40 GAS
✱*03	.003	VA39C06 B	5.0ml			W	
*04	.004	L	5ul/1ul			↓	
*05	.005 ~~006~~	↓ C	↓		↓		
*06	.006 ~~007~~	06 C080-01	5.0ml		<2		
*07	.007 ~~008~~	-01M					
*08	.008 ~~009~~	-01S					
*09	.009 ~~010~~	-03					
*10	.010 ~~011~~	-05					
*11	.011 ~~012~~	↓ -09	↓		↓	↓	
*12	.012 ~~013~~	CVG39C03758	1ul/1ul		N/A		500/40 GAS
*13	.013 ~~014~~	06C080-16	5.0ml		<2	W	RR saturated Peak
*14	.014 ~~015~~	RINSE			N/A		
*15	.015 ~~016~~	06 C080-20			<2		
*16	.016 ~~017~~	-21					RR over range
*17	.017 ~~018~~	↓ -23					RR over range
*18	.018 ~~019~~	06 C098-12					RR over range, saturated Peak
*19	.019 ~~020~~	06 C081-11					RR Possible Carryover
*20	.020 ~~021~~	06 C096-01	↓				
*21	.021 ~~022~~	06 C090-12 I	100ul		↓		RR too dilute, Not evaluated
*22	.022 ~~023~~	RINSE	5.0ml		N/A	↓	
*23	.023 ~~024~~	CVG39C03759	1ul/1ul				500/40 GAS
↓*24	.024 ~~025~~	CVG39C03760	↓				↓
✱*25	.025 ~~026~~	VMC008SB (SC 3/14/06)	100ul			S	
*26	.026 ~~027~~	L					
*27	.027 ~~028~~	↓ C					
*28	.028 ~~029~~	06 C081-01					
*29	.029	-02					
↓*30	↓ .030	↓ -03	↓	↓	↓	↓	

Instrument No:	39	
Initial Calibration Reference		
	FIDChannel A	PIDChannel B
Method File	VG39C03	—
Date	3/03/06	—
ICAL ID	—	
	—	
ICV ID	—	
	—	
Std.	ID	Conc.(mg/L)
DCC GAS	SV2A-04-58	2500
DCC BTEX	—	—
BFB/TFT	SV2C-04-32-1	200
LCS/LCSD	SV2A-04-67	5000
MS/MSD	SV2A-04-67	5000
Solvent	ID	
Methanol		
Electronic Data Archival		
Location	Date	
EZC-3-BTEX		

Comments:

Analyzed By: SC

Disposed on: 3/14/06 By: SC

LABORATORY REPORT FOR

ENSR

UPGRADIENT INVESTIGATION, TRONOX

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 06C096

CASE NARRATIVE

CLIENT: ENSR

PROJECT: UPGRADIENT INVESTIGATION, TRONOX

SDG: 06C096

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One (1) water sample was received on 03/10/06 for Total Petroleum Hydrocarbons by Extraction analysis by Method 3520C/8015B in accordance with SW846, 3rd edition.

1. Holding Time

Analytical holding time was met. Extraction was performed on 03/14/06 and completed on 03/15/06.

2. Calibration

Initial calibration was seven points for Diesel and Motor Oil. %RSDs were within 20%. Continuing calibrations were carried out at every 12-hour interval and all recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

All recoveries were within QC limits.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No sample was designated for MS/MSD.

7. Sample Analysis

Sample was analyzed according to the prescribed QC procedures. All criteria were met. Sample result was quantitated from C_{10} to C_{28} using Diesel (C_{10}-C_{28}) calibration factor and from C_{28} to C_{38} using Motor Oil calibration factor.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : ENSR
Project : UPGRADIENT INVESTIGATION, TRONOX

SDG NO. : 06C096
Instrument ID : GCT050

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSC009WB	1	NA	03/15/0614:21	03/14/0615:30	TC15005A	TC15002A	DSC009W	Method Blank
LCS1W	DSC009WL	1	NA	03/15/0615:03	03/14/0615:30	TC15006A	TC15002A	DSC009W	Lab Control Sample (LCS)
LCD1W	DSC009WC	1	NA	03/15/0615:45	03/14/0615:30	TC15007A	TC15002A	DSC009W	LCS Duplicate
EB-1	C096-01	.94	NA	03/15/0620:39	03/14/0615:30	TC15014A	TC15002A	DSC009W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B

TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: ENSR	Date Collected:	03/09/06
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/10/06
Batch No.	: 06C096	Date Extracted:	03/14/06 15:30
Sample ID:	EB-1	Date Analyzed:	03/15/06 20:39
Lab Samp ID:	C096-01	Dilution Factor:	.94
Lab File ID:	TC15014A	Matrix :	WATER
Ext Btch ID:	DSC009W	% Moisture :	NA
Calib. Ref.:	TC15002A	Instrument ID :	GCT050

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DRO	ND	.47	.094
ORO	ND	.94	.094

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	57	45-154
HEXACOSANE	102	63-165

RL : Reporting Limit

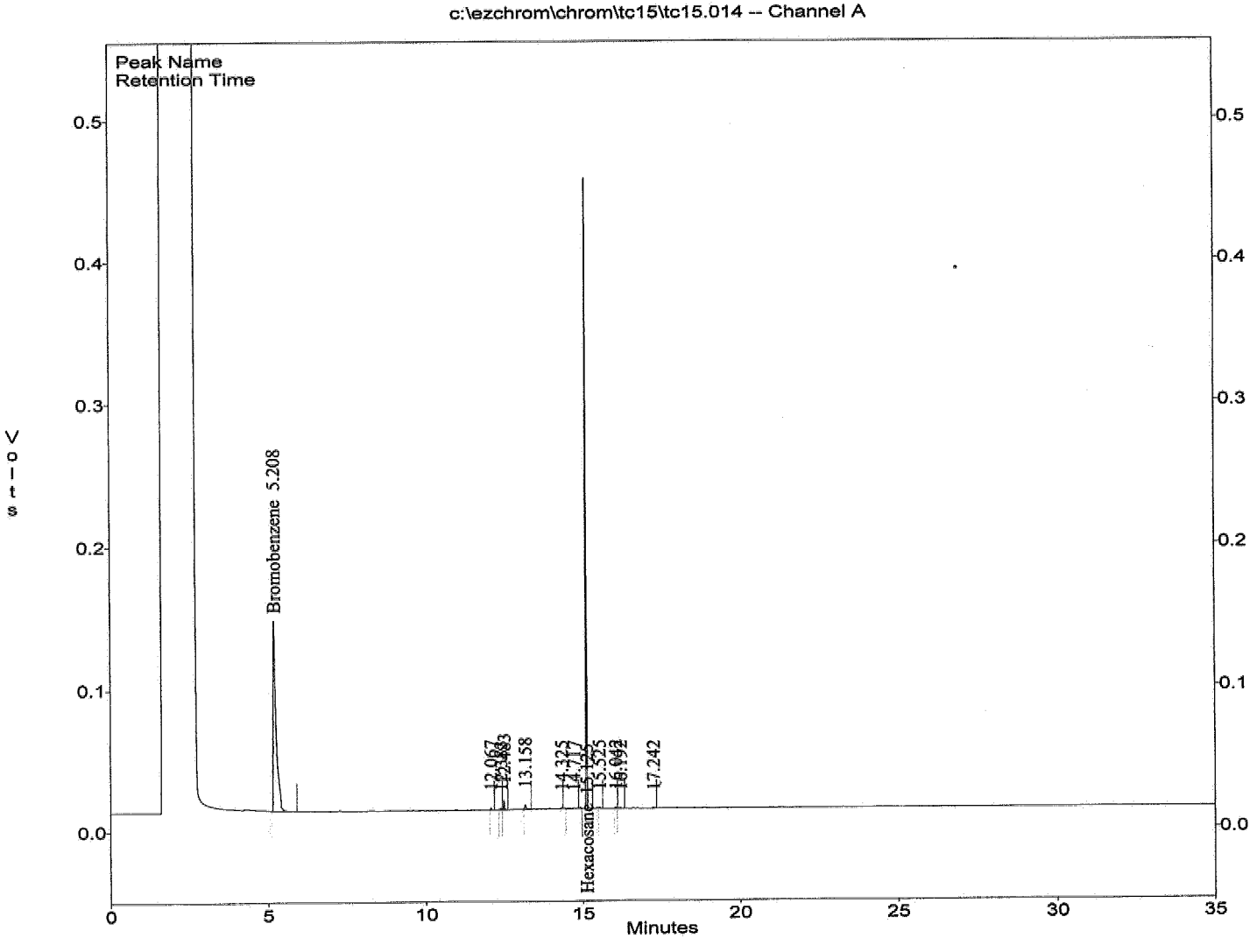
Parameter	H-C Range
DRO	C10-C28
ORO	C28-C38

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\tc15.014
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : 06C096-01
Acquired : Mar 15, 2006 20:39:42
Printed : Mar 16, 2006 11:41:07
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
1	Bromobenzene	5.208	817162	14214.3	57.5
8	Hexacosane	15.125	740045	28984.5	25.5
G1	Diesel(TOTAL)		38801	26500.7	1.5
G2	Diesel(C10-C24)		28224	26460.6	1.1
G3	Diesel(C10-C28)		37599	26478.8	1.4



QC SUMMARIES

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: ENSR	Date Collected:	NA
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/14/06
Batch No.	: 06C096	Date Extracted:	03/14/06 15:30
Sample ID:	MBLK1W	Date Analyzed:	03/15/06 14:21
Lab Samp ID:	DSC009WB	Dilution Factor:	1
Lab File ID:	TC15005A	Matrix :	WATER
Ext Btch ID:	DSC009W	% Moisture :	NA
Calib. Ref.:	TC15002A	Instrument ID :	GCT050

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DRO	ND	.5	.1
ORO	ND	1	.1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	52	50-140
HEXACOSANE	101	70-150

RL : Reporting Limit

Parameter	H-C Range
DRO	C10-C28
ORO	C28-C38

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ENSR
PROJECT: UPGRADIENT INVESTIGATION, TRONOX
BATCH NO.: 06C096
METHOD: METHOD 3520C/8015B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DSC009WB	DSC009WL	DSC009WC		
LAB FILE ID:	TC15005A	TC15006A	TC15007A		
DATE EXTRACTED:	03/14/0615:30	03/14/0615:30	03/14/0615:30	DATE COLLECTED:	NA
DATE ANALYZED:	03/15/0614:21	03/15/0615:03	03/15/0615:45	DATE RECEIVED:	03/14/06
PREP. BATCH:	DSC009W	DSC009W	DSC009W		
CALIB. REF:	TC15002A	TC15002A	TC15002A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
DRO	ND	5	4.32	86	5	4.31	86	0	60-140	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	.687	69	1	.711	71	50-140
Hexacosane	.25	.247	99	.25	.251	100	70-150

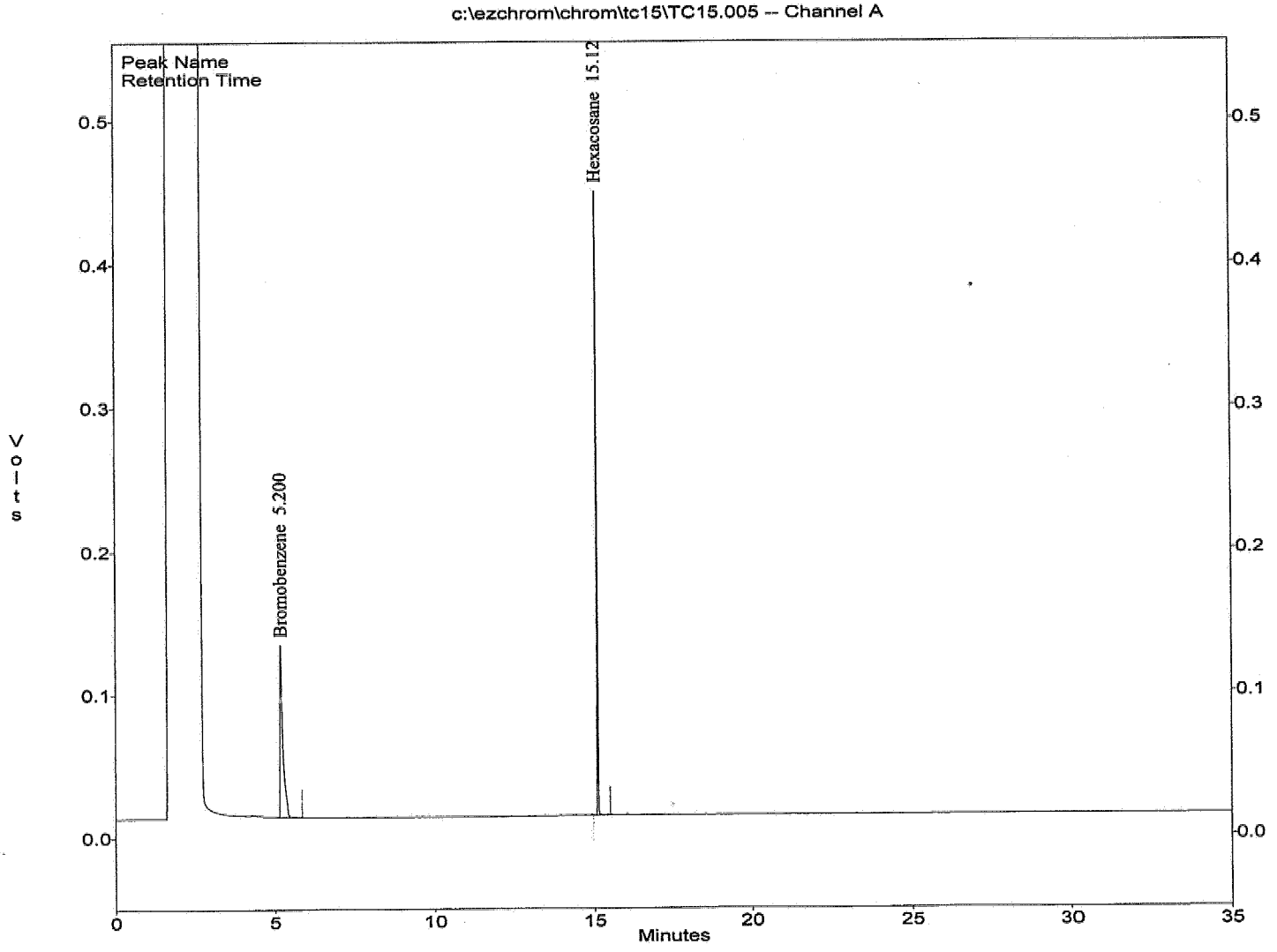
QC DATA

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\TC15.005
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DSC009WB
Acquired : Mar 15, 2006 14:21:35
Printed : Mar 16, 2006 14:16:27
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Bromobenzene	5.200	732375	14214.3	51.5
2	Hexacosane	15.125	730398	28984.5	25.2
G1	Diesel(TOTAL)		0	26500.7	0.0
G2	Diesel(C10-C24)		0	26460.6	0.0
G3	Diesel(C10-C28)		0	26478.8	0.0

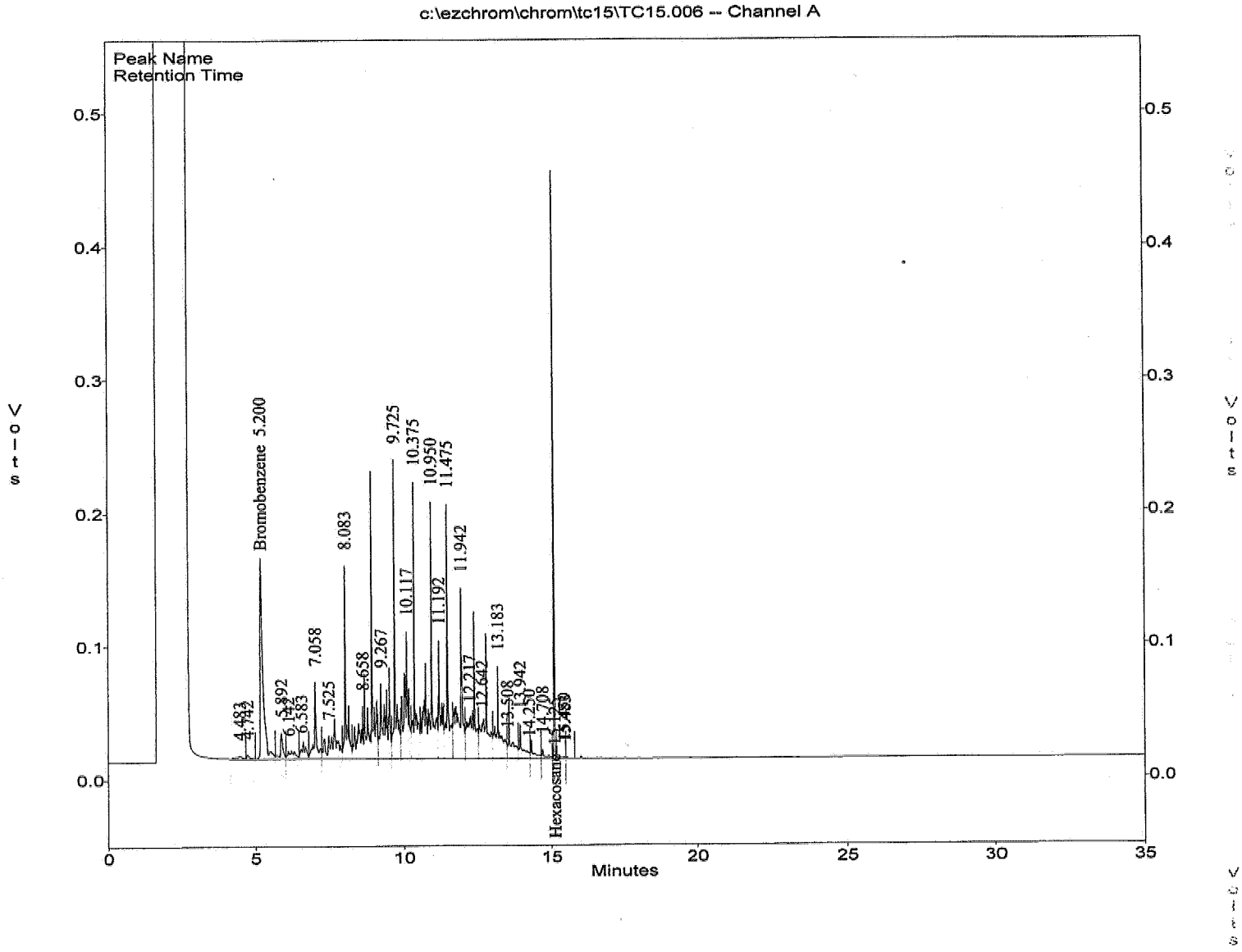


METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\TC15.006
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DSC009WL
Acquired : Mar 15, 2006 15:03:35
Printed : Mar 16, 2006 11:30:21
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
3	Bromobenzene	5.200	976217	14214.3	68.7
26	Hexacosane	15.125	716960	28984.5	24.7
G1	Diesel(TOTAL)		11612385	26500.7	438.2
G2	Diesel(C10-C24)		11375668	26460.6	429.9
G3	Diesel(C10-C28)		11432785	26478.8	431.8

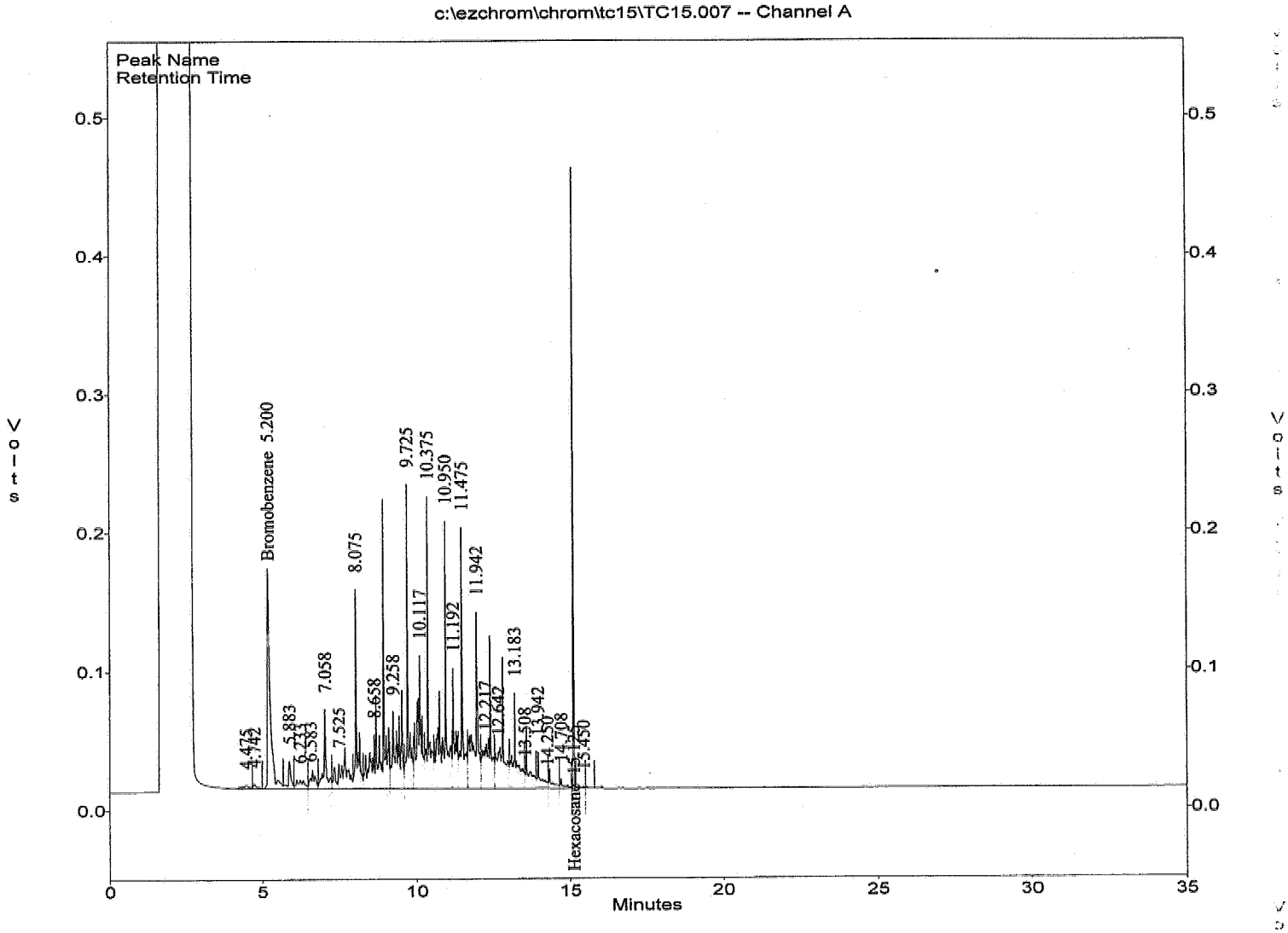


METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\TC15.007
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DSC009WC
Acquired : Mar 15, 2006 15:45:37
Printed : Mar 16, 2006 11:30:22
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
3	Bromobenzene	5.200	1011186	14214.3	71.1
26	Hexacosane	15.125	727317	28984.5	25.1
G1	Diesel(TOTAL)		11603437	26500.7	437.9
G2	Diesel(C10-C24)		11362274	26460.6	429.4
G3	Diesel(C10-C28)		11419287	26478.8	431.3



INITIAL CALIBRATION

INITIAL CALIBRATION
METHOD M8015

Lab Name : EMAX Inc
Instrument ID : GCT050
GC Columm : DB-5
Column size ID : 30MX0.25MM
LFID & Datetime: TA31009A 01/31/06 19:57
LFID & Datetime: TA31010A 01/31/06 20:39
LFID & Datetime: TA31004A 01/31/06 16:26
LFID & Datetime: TA31005A 01/31/06 17:08
LFID & Datetime: TA31006A 01/31/06 17:51
LFID & Datetime: TA31007A 01/31/06 18:33
LFID & Datetime: TA31008A 01/31/06 19:15
CONC UNIT: ppm

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.00X	10.00X	20.00X	100.00X	300.00X	600.00X	MEAN	%RSD
DIESEL(TOTAL)	5.00	29695	33603	21928	26105	23350	24931	25894	26500.7	15.0
DIESEL(C10-C24)	5.00	29695	33603	21896	26080	23330	24845	25775	26460.6	15.1
DIESEL(C10-C28)	5.00	29695	33603	21928	26105	23350	24872	25800	26478.8	15.0
SURROGATE	X	0.50X	1.00X	2.00X	3.00X	5.00X	7.00X	11.00X	MEAN	%RSD
BROMOBENZENE	20.00	-1	13517	14356	15142	13341	14495	14436	14214.3	4.7
HEXACOSANE	5.00	-1	29580	29371	31178	27128	28544	28106	28984.5	4.8

DS50A31.MET

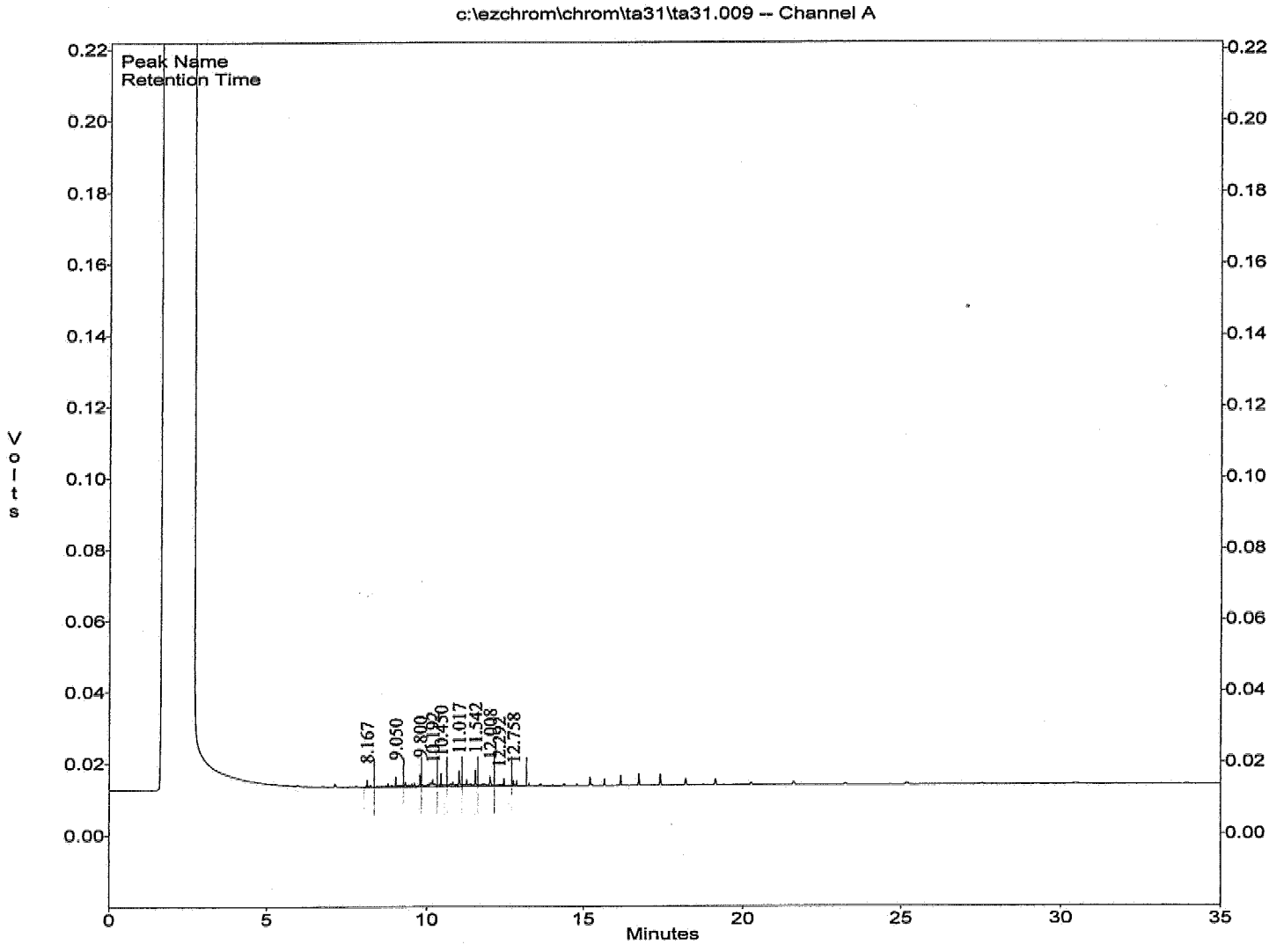
2/1/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.009
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3101 5PPM
Acquired : Jan 31, 2006 19:57:35
Printed : Feb 01, 2006 09:34:38
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
--	Bromobenzene	5.283	0	0.0	0.0
--	Hexacosane	15.233	0	0.0	0.0
G1	Diesel(TOTAL)		148474	26500.7	5.0
G2	Diesel(C10-C24)		148474	26460.6	5.0
G3	Diesel(C10-C28)		148474	26478.8	5.0



02/01/06

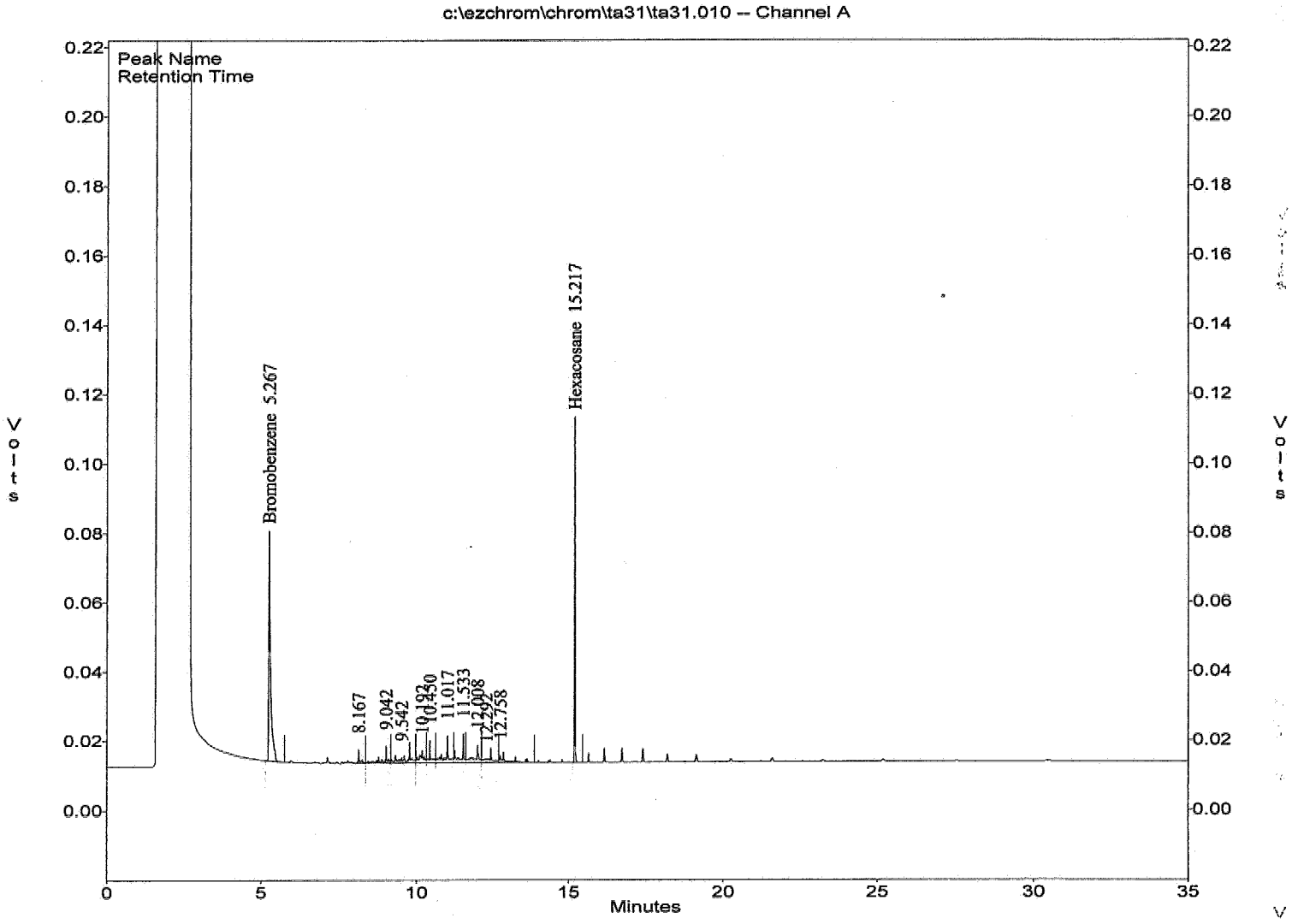
5015

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.010
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3102 10/20/5
Acquired : Jan 31, 2006 20:39:42
Printed : Feb 01, 2006 09:34:43
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
1	Bromobenzene	5.267	270334	14214.3	20.0
12	Hexacosane	15.217	147901	28984.5	5.0
G1	Diesel(TOTAL)		336030	26500.7	10.0
G2	Diesel(C10-C24)		336030	26460.6	10.0
G3	Diesel(C10-C28)		336030	26478.8	10.0



DA 02/01/06

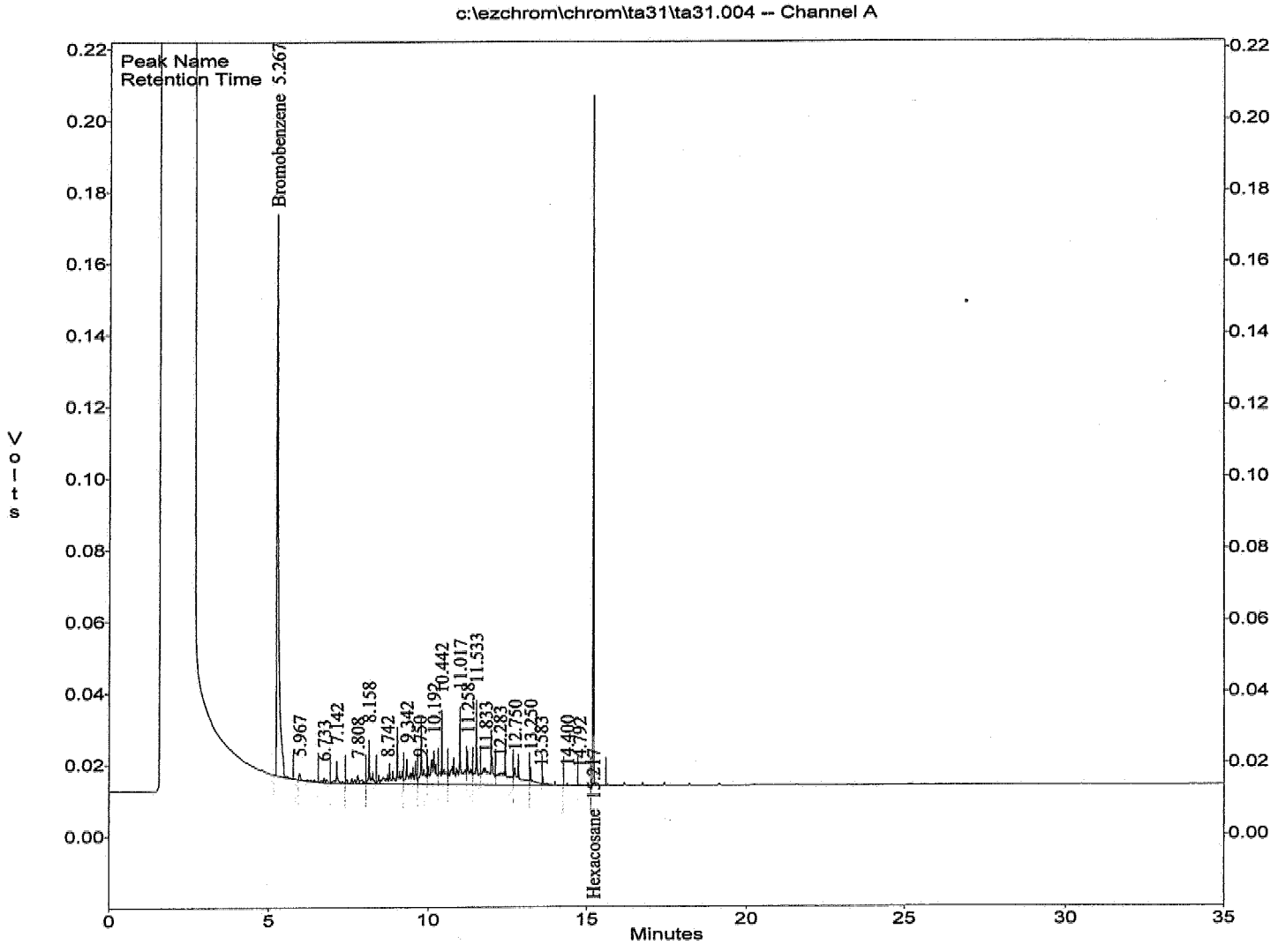
5015

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.004
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3103 50/40/10
Acquired : Jan 31, 2006 16:26:47
Printed : Feb 01, 2006 09:34:49
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
1	Bromobenzene	5.267	574237	14214.3	40.0
22	Hexacosane	15.217	293707	28984.5	10.0
G1	Diesel(TOTAL)		1096379	26500.7	50.0
G2	Diesel(C10-C24)		1094793	26460.6	50.0
G3	Diesel(C10-C28)		1096379	26478.8	50.0



02/01/06

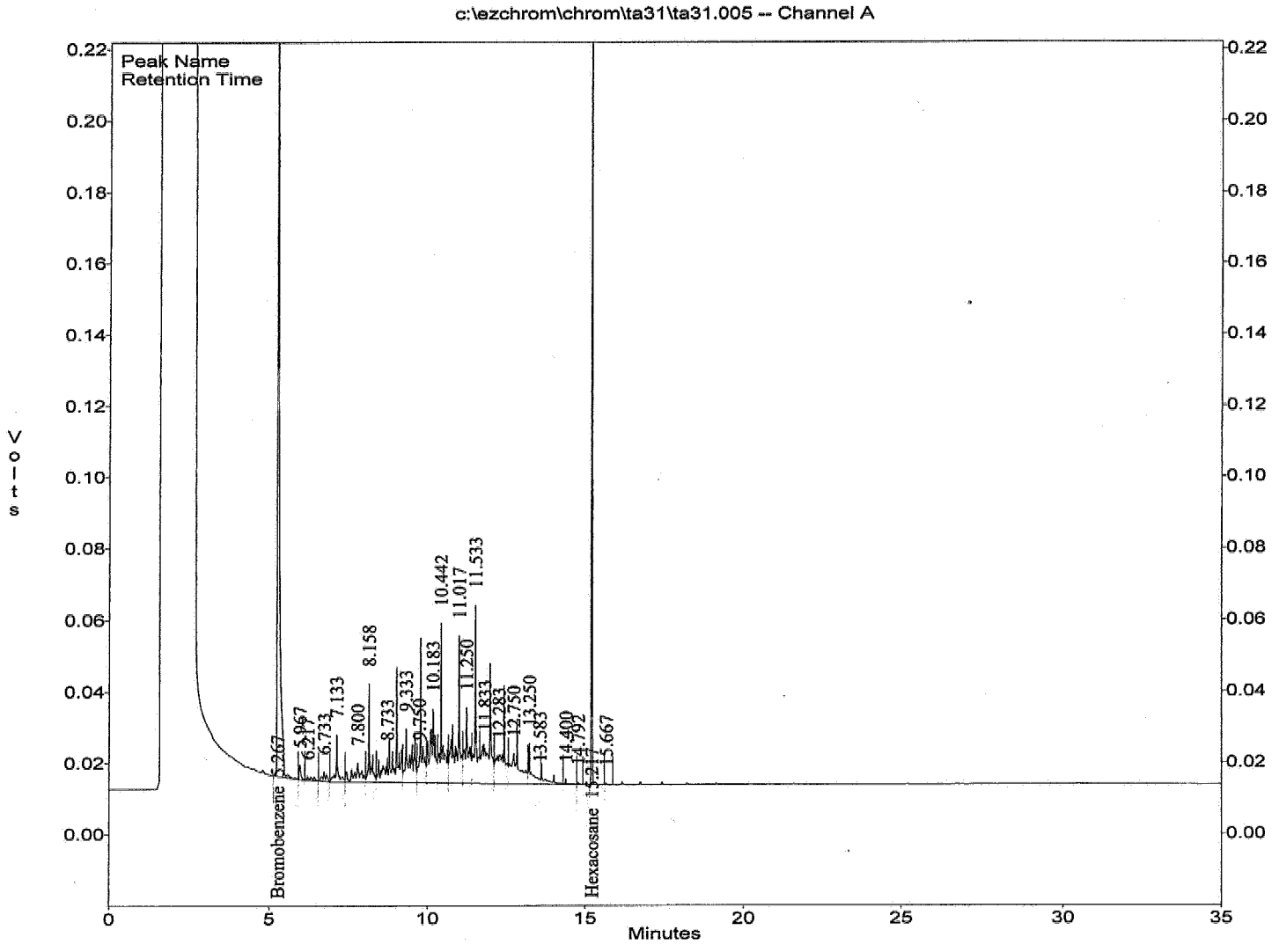
5017

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.005
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3104 100/60/15
Acquired : Jan 31, 2006 17:08:56
Printed : Feb 01, 2006 09:35:08
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
1	Bromobenzene	5.267	908499	14214.3	60.0
23	Hexacosane	15.217	467670	28984.5	15.0
G1	Diesel(TOTAL)		2610524	26500.7	100.0
G2	Diesel(C10-C24)		2608042	26460.6	100.0
G3	Diesel(C10-C28)		2610524	26478.8	100.0



02/01/06

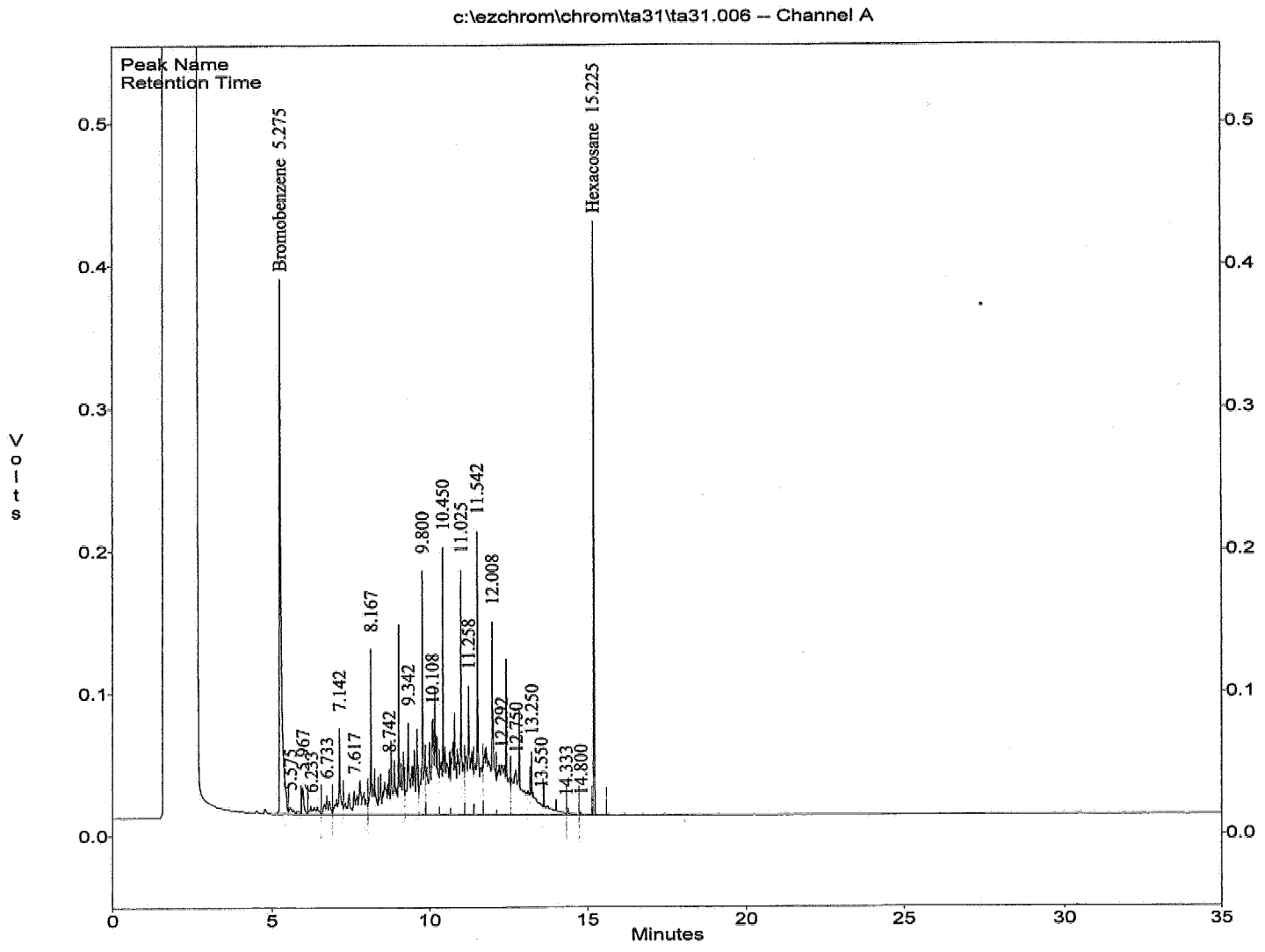
5018

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.006
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3105 500/100/2
Acquired : Jan 31, 2006 17:51:21
Printed : Feb 01, 2006 09:35:17
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
1	Bromobenzene	5.275	1334115	14214.3	100.0
24	Hexacosane	15.225	678205	28984.5	25.0
G1	Diesel(TOTAL)		11674800	26500.7	500.0
G2	Diesel(C10-C24)		11665009	26460.6	500.0
G3	Diesel(C10-C28)		11674800	26478.8	500.0



02/01/06

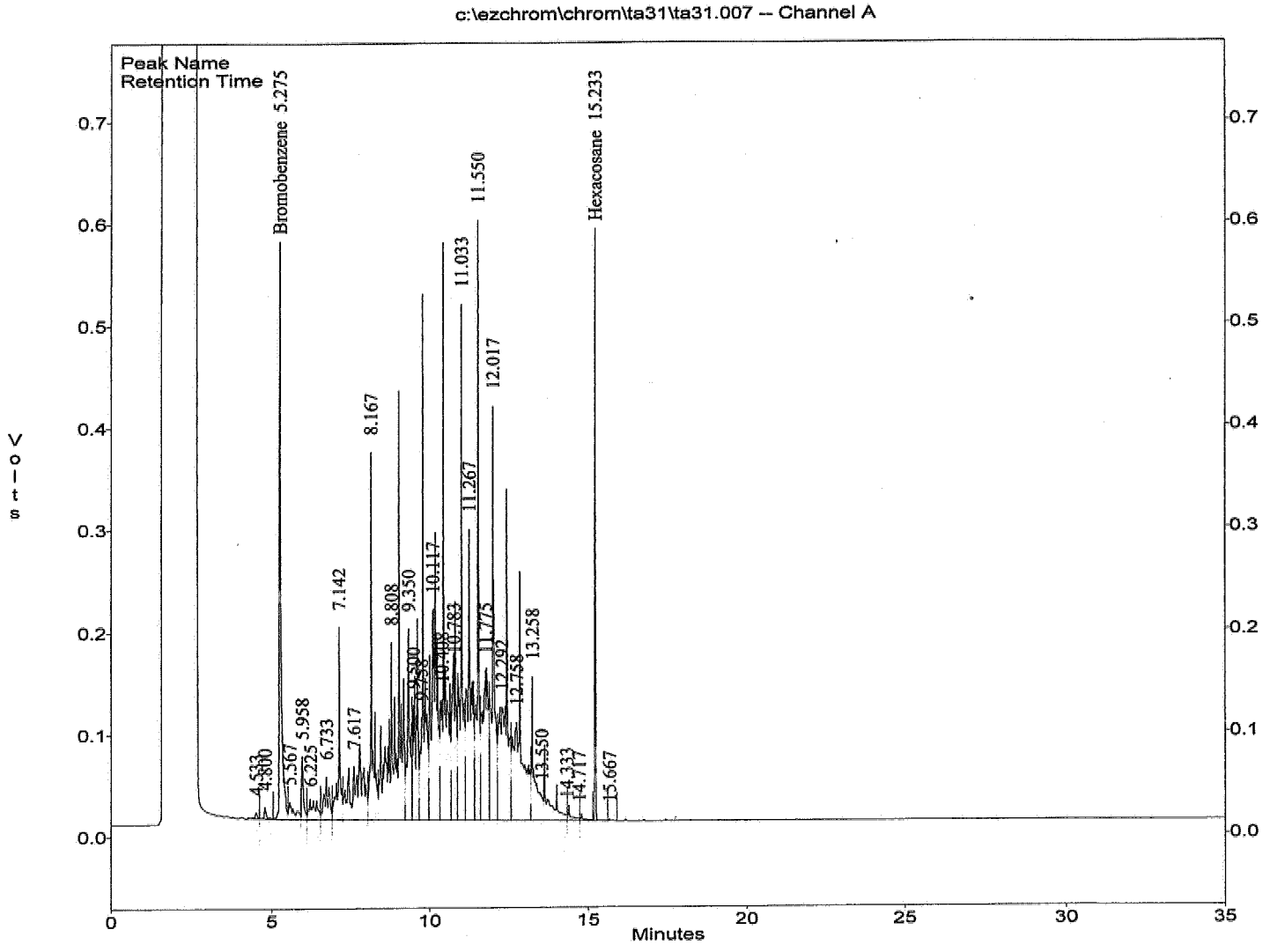
5615

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.007
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3106 1500/140/
Acquired : Jan 31, 2006 18:33:25
Printed : Feb 01, 2006 09:35:43
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
3	Bromobenzene	5.275	2029250	14214.3	140.0
29	Hexacosane	15.233	999027	28984.5	35.0
G1	Diesel(TOTAL)		37395864	26500.7	1500.0
G2	Diesel(C10-C24)		37267404	26460.6	1500.0
G3	Diesel(C10-C28)		37307612	26478.8	1500.0



AA 02/01/06

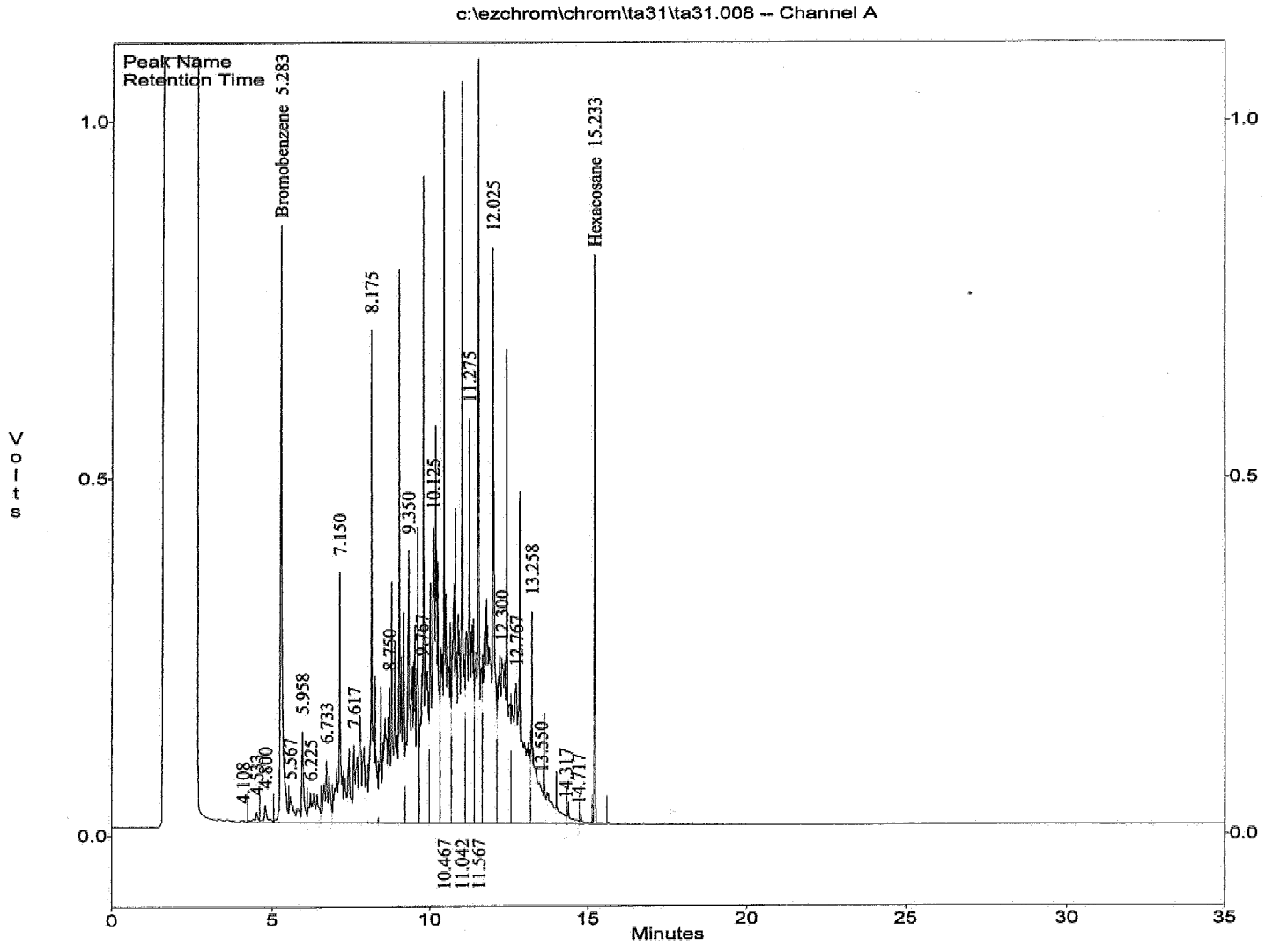
5028

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.008
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : DS50A3107 3000/220/
Acquired : Jan 31, 2006 19:15:30
Printed : Feb 01, 2006 09:35:51
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
4	Bromobenzene	5.283	3175897	14214.3	220.0
27	Hexacosane	15.233	1545839	28984.5	55.0
G1	Diesel(TOTAL)		77682664	26500.7	3000.0
G2	Diesel(C10-C24)		77324912	26460.6	3000.0
G3	Diesel(C10-C28)		77399448	26478.8	3000.0



2/01/06

5021

INITIAL CALIBRATION
METHOD M8015

Lab Name : EMAX Inc
Instrument ID : GCTO50
GC Columm : DB-5
Column size ID : 30MX0.25MM
LFID & Datetime: TA05019A 01/05/06 23:55
LFID & Datetime: TA05020A 01/06/06 00:37
LFID & Datetime: TA05021A 01/06/06 01:19
LFID & Datetime: TA05022A 01/06/06 02:01
LFID & Datetime: TA05023A 01/06/06 02:43
LFID & Datetime: TA05024A 01/06/06 03:25
LFID & Datetime: TA05025A 01/06/06 04:07
CONC UNIT: ppm

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.00X	5.00X	50.00X	100.00X	150.00X	300.00X	MEAN	%RSD
JP5	10.00	19089	21129	20033	24716	24172	25573	26612	23046.2	12.7
5W30	10.00	33589	31968	34659	32099	30917	30603	31346	32168.8	4.6

J550A05M.MET

1/9/06

INITIAL CALIBRATION
METHOD M8015

Lab Name : EMAX Inc
Instrument ID : GCT050
GC Column : DB-5
Column size ID : 30MX0.25MM
LFID & Datetime: TA05019A 01/05/06 23:55
LFID & Datetime: TA05020A 01/06/06 00:37
LFID & Datetime: TA05021A 01/06/06 01:19
LFID & Datetime: TA05022A 01/06/06 02:01
LFID & Datetime: TA05023A 01/06/06 02:43
LFID & Datetime: TA05024A 01/06/06 03:25
LFID & Datetime: TA05025A 01/06/06 04:07

COMPOUND	RT OF STANDARDS (MIN) 1.0X	2.0X	5.0X	50.0X	100.0X	150.0X	300.0X	MEAN RT	RT WINDOW FROM	TO	RTWINDOW WIDTH
JP5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.500
5W30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.500

NB AS 1/9/06

J550A05M.MET

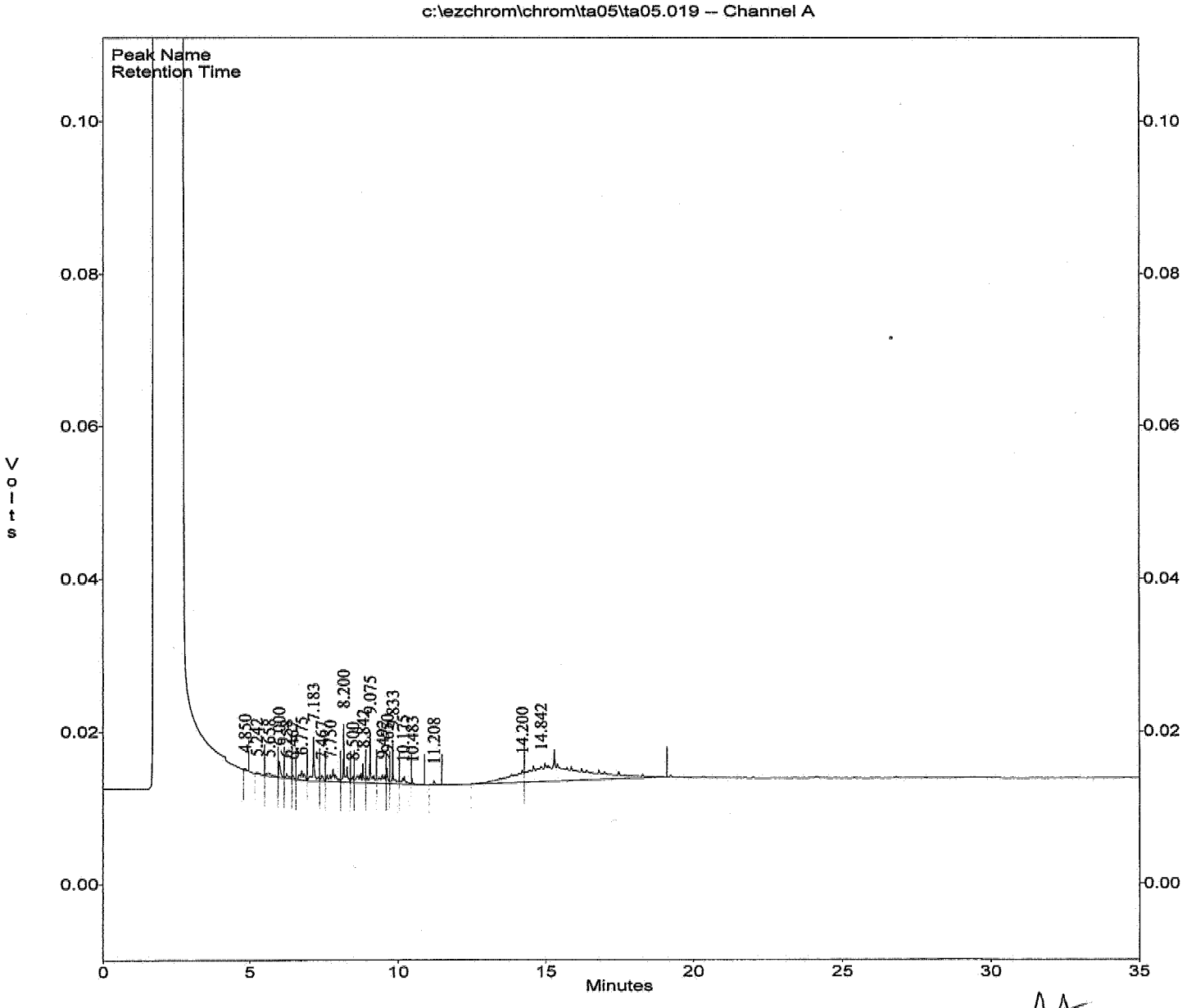
AA 1/9/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.019 ✓
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M01 10PPM
Acquired : Jan 05, 2006 23:55:57 ✓
Printed : Jan 06, 2006 09:55:49
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		190889 ✓	23046.2	10.0
G2	5W30		335894 ✓	32168.8	10.0



1/9/06

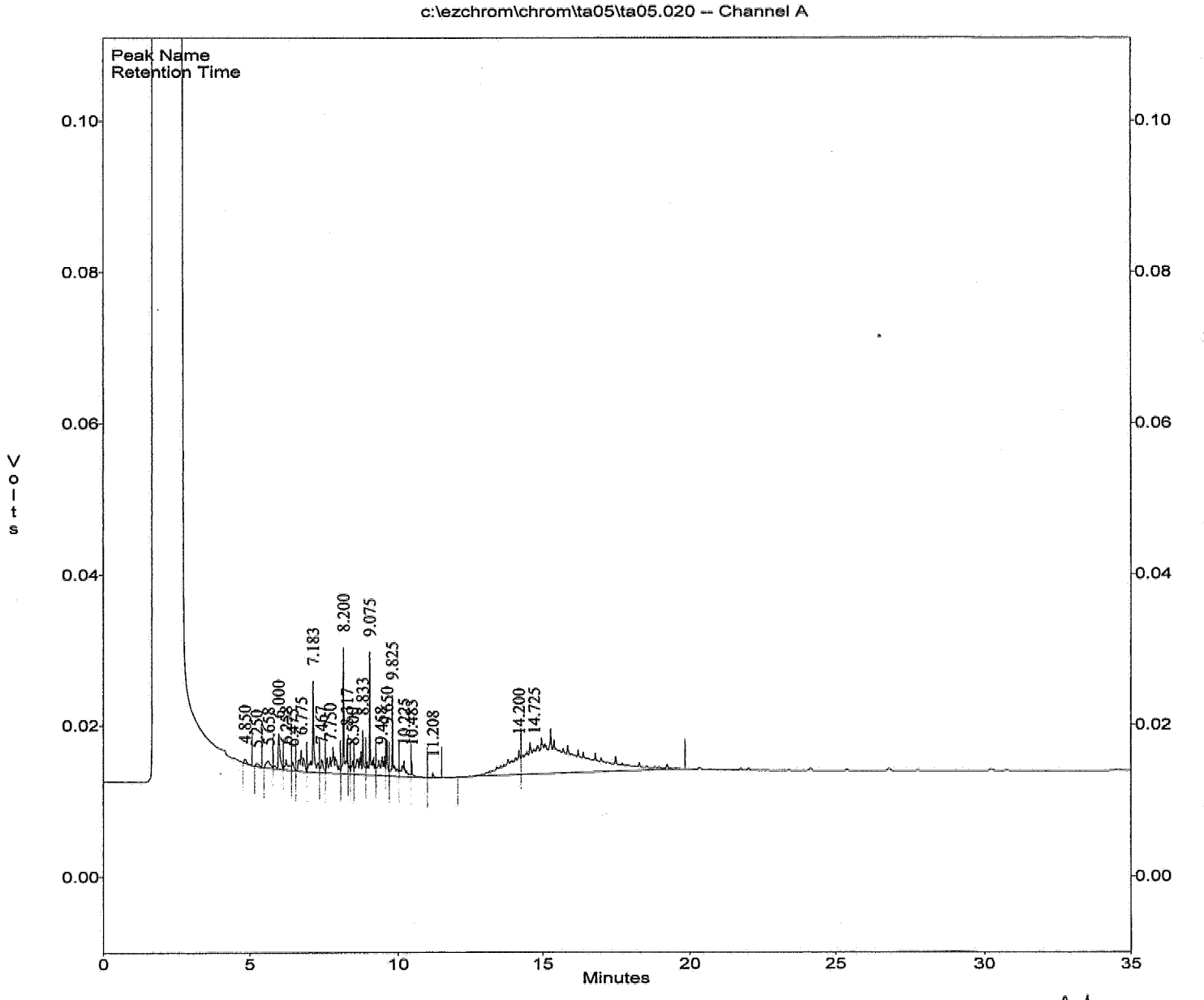
5824

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.020
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M02 20PPM
Acquired : Jan 06, 2006 00:37:56
Printed : Jan 06, 2006 09:55:55
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		422586	23046.2	20.0
G2	5W30		639352	32168.8	20.0



1/9/06

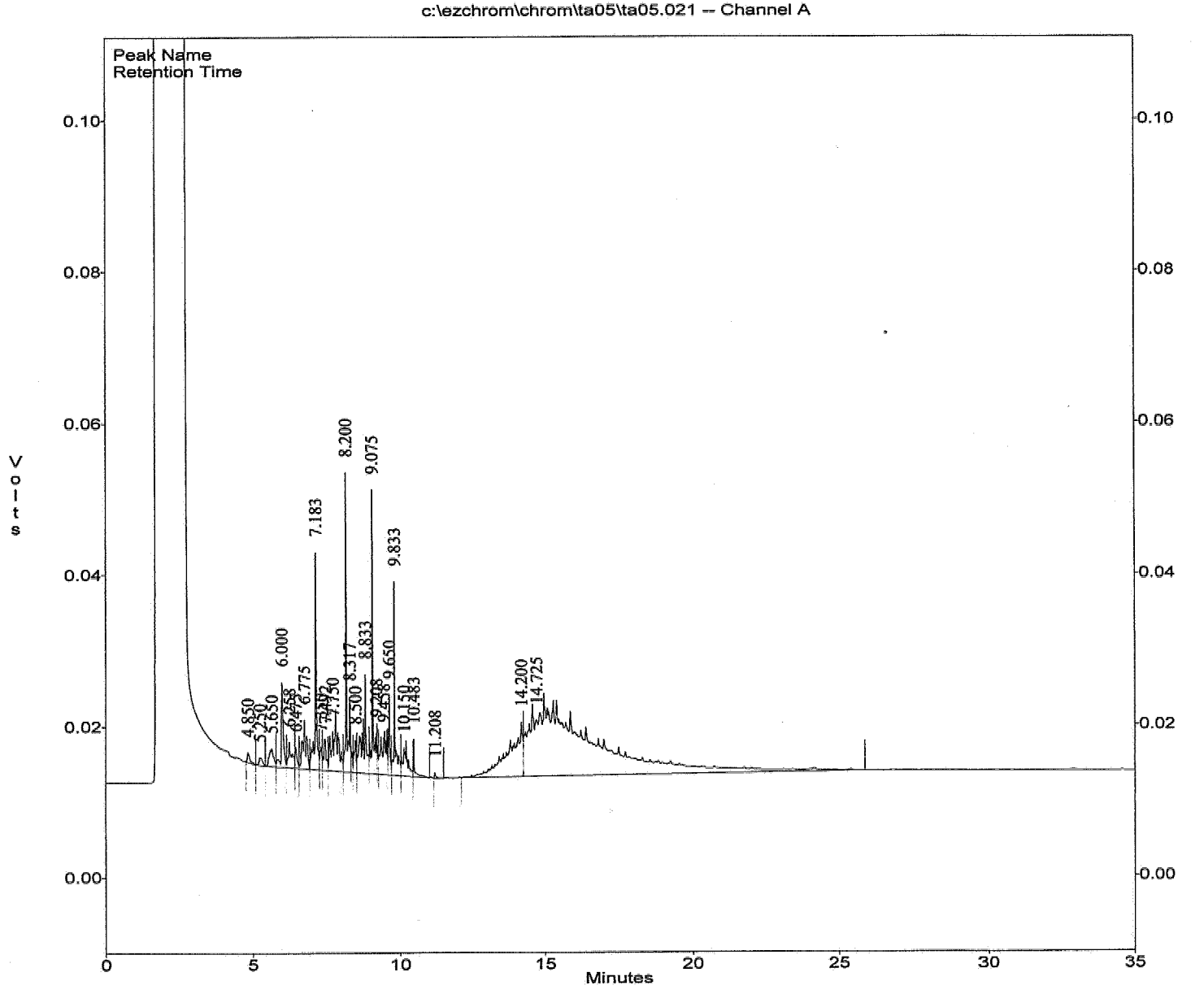
5025

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.021
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M03 50PPM
Acquired : Jan 06, 2006 01:19:54
Printed : Jan 06, 2006 09:56:08
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		1001658	23046.2	50.0
G2	5W30		1732935	32168.8	50.0



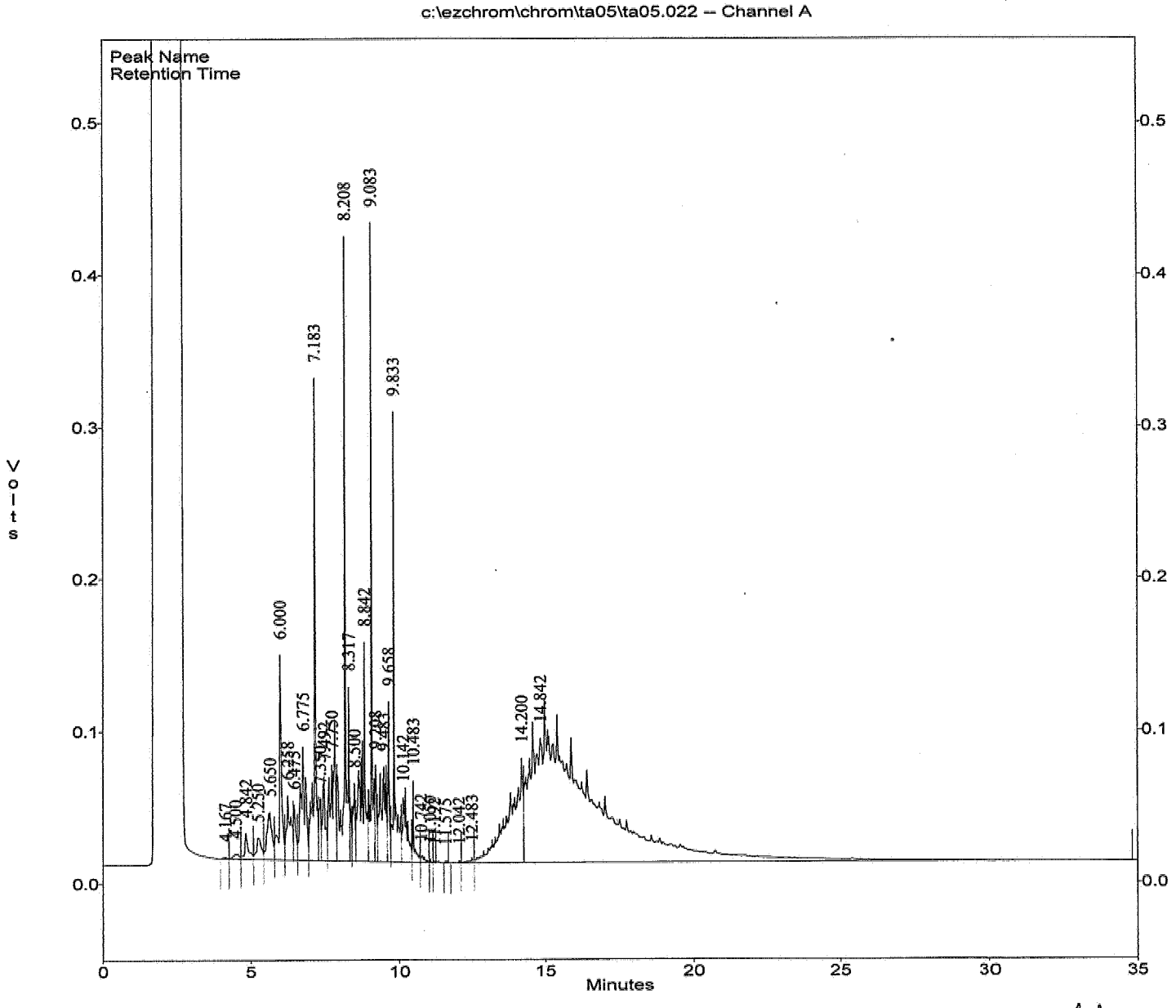
1/9/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.022
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M04 500PPM
Acquired : Jan 06, 2006 02:01:52
Printed : Jan 06, 2006 09:56:41
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		12357981	23046.2	500.0
G2	5W30		16049524	32168.8	500.0



1/9/06

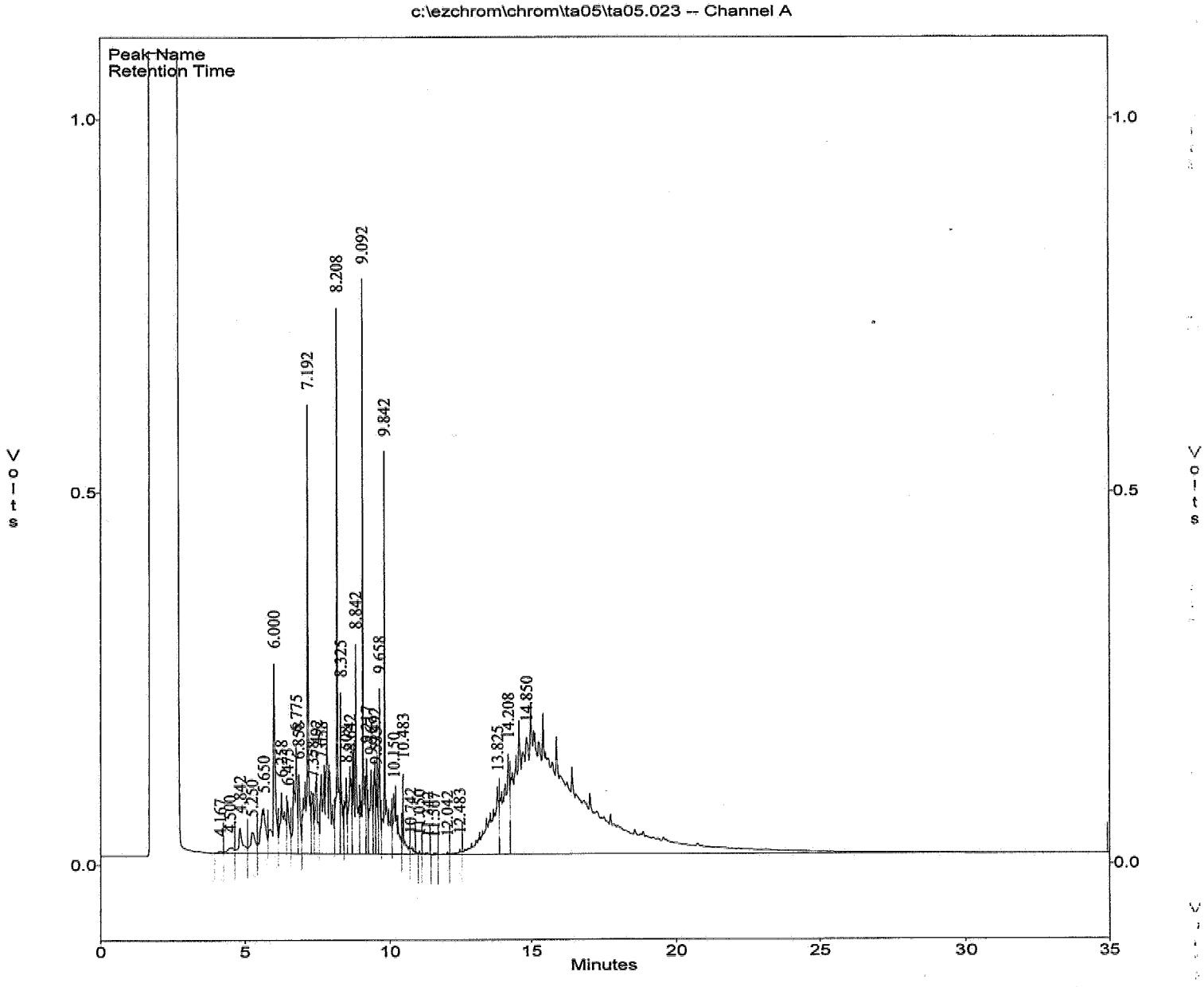
5027

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.023
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M05 1000PPM
Acquired : Jan 06, 2006 02:43:50
Printed : Jan 06, 2006 09:57:19
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		24171588	23046.2	1000.0
G2	5W30		30917232	32168.8	1000.0



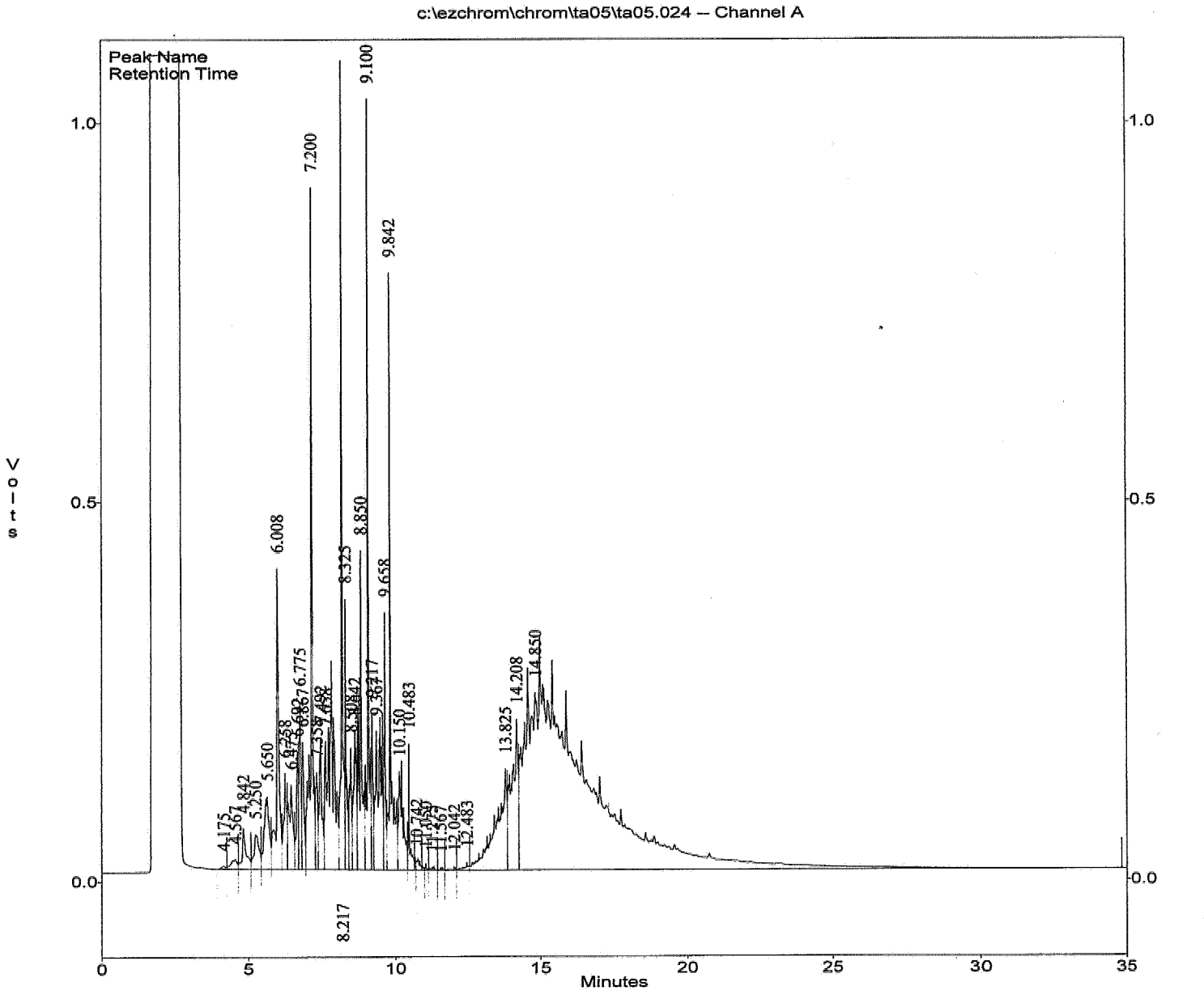
AA 1/9/06
5823

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.024
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M06 1500PPM
Acquired : Jan 06, 2006 03:25:48
Printed : Jan 06, 2006 09:57:24
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		38358784	23046.2	1500.0
G2	5W30		45905100	32168.8	1500.0



9/06

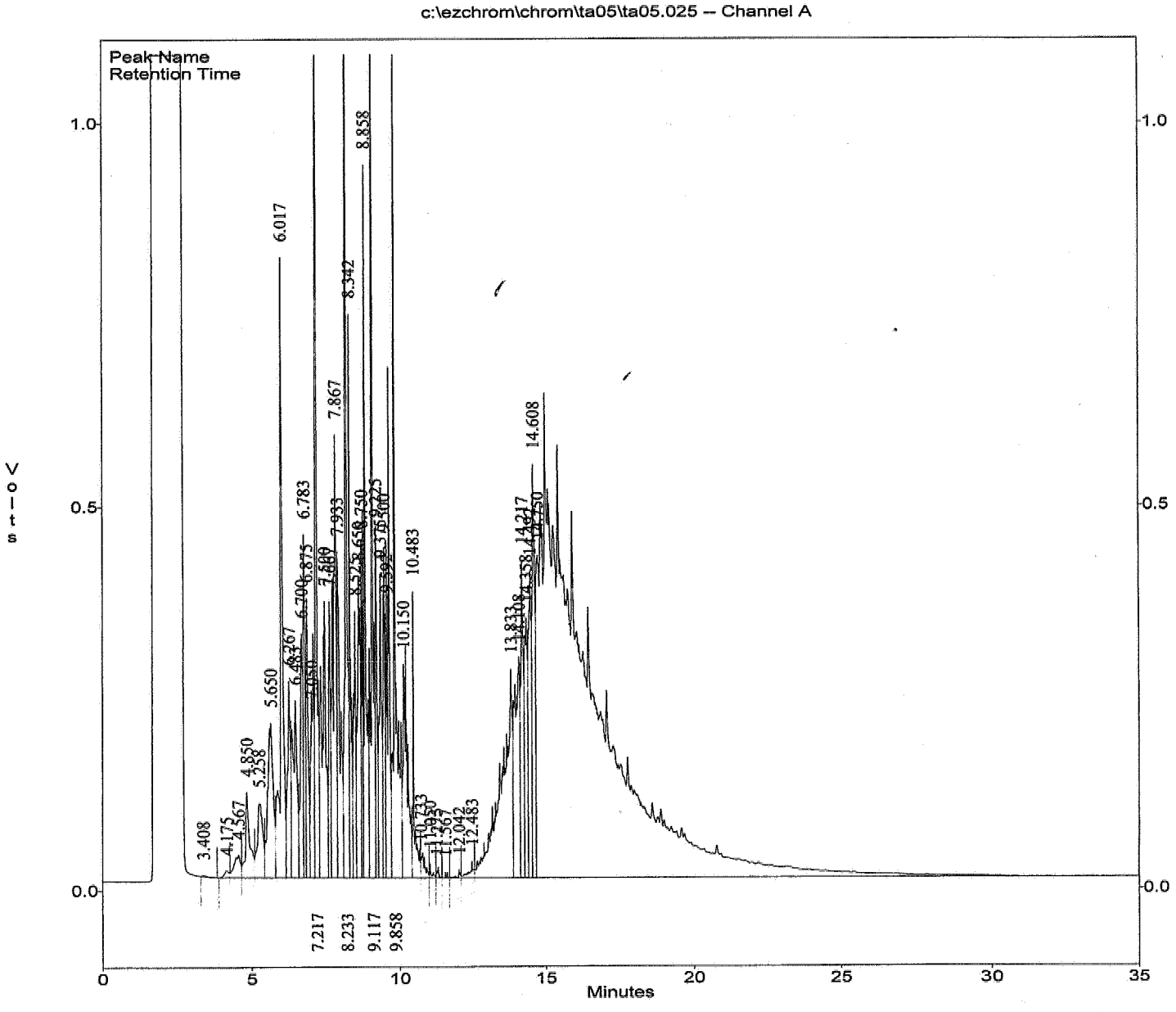
5625

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.025
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : J550A05M07 3000PPM
Acquired : Jan 06, 2006 04:07:45
Printed : Jan 06, 2006 09:57:28
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		79836656	23046.2	3000.0
G2	5W30		94039104	32168.8	3000.0



RA 9/06
5030

SECOND SOURCE

INITIAL CALIBRATION VERIFICATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO50
GC Columm : DB-5
Column size ID : 30MX0.25MM
Mid Conc Init LFID & Datetime: TA31006A 01/31/2006 17:51
Conc Cont LFID & Datetime: TA31011A 01/31/2006 21:21
CONC UNIT : ppm

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
DIESEL(TOTAL)	0.000	0.000	0.000	500.0	26500.7	13255810	500.21	0		15
DIESEL(C10-C24)	0.000	0.000	0.000	500.0	26460.6	13131692	496.27	-1		15
DIESEL(C10-C28)	0.000	0.000	0.000	500.0	26478.8	13174570	497.55	-0		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
BROMOBENZENE	5.275	5.188	5.362	100.0	14214.3	1337667	94.11	-6		15
HEXACOSANE	15.225	14.892	15.558	25.0	28984.5	687118	23.71	-5		15

DS50A31.MET

02/01/06

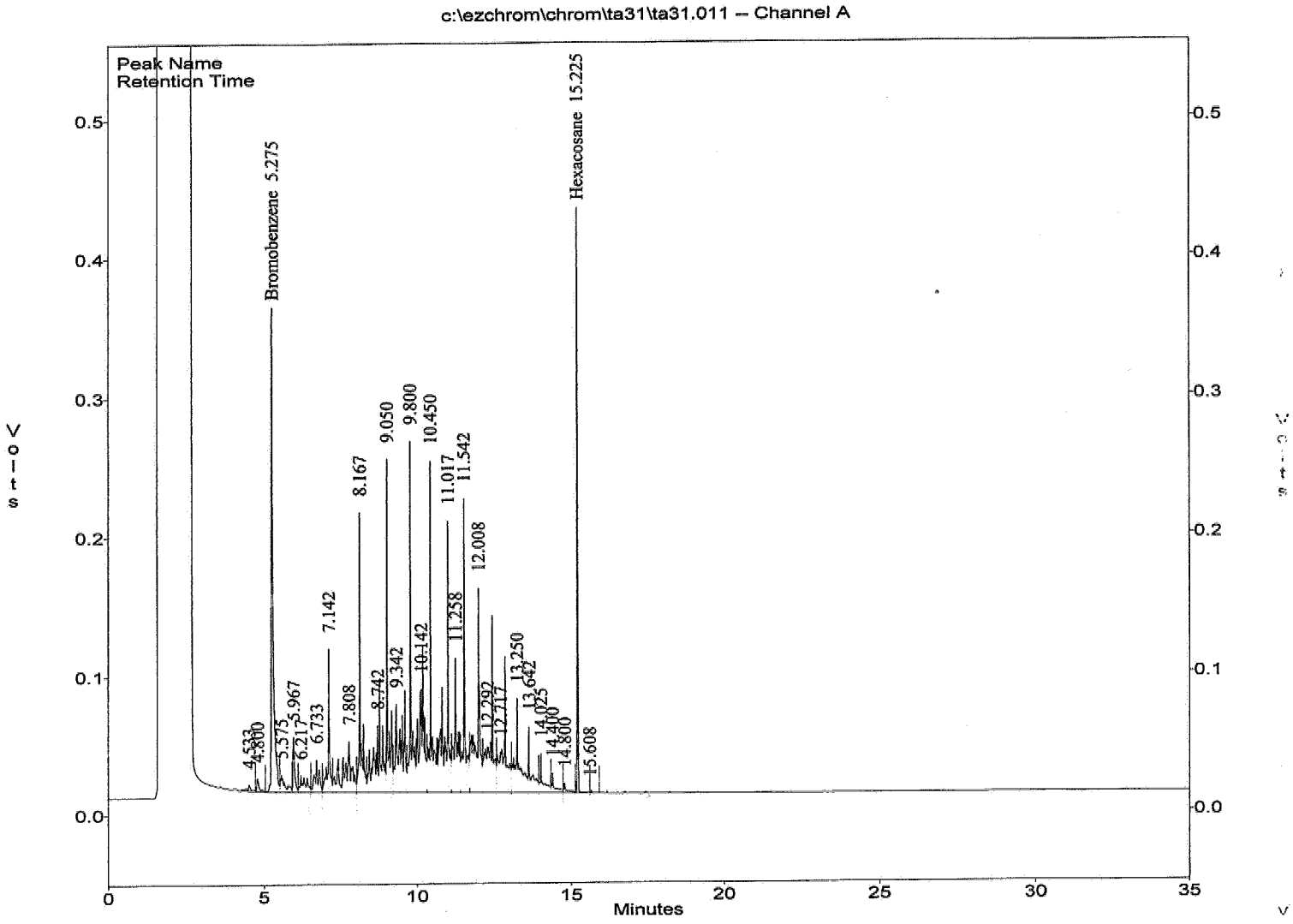
5032

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.011
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : IDS50A3101 500PPM
Acquired : Jan 31, 2006 21:21:44
Printed : Feb 01, 2006 09:36:17
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
3	Bromobenzene	5.275	1337667	14214.3	94.1
28	Hexacosane	15.225	687118	28984.5	23.7
G1	Diesel(TOTAL)		13255810	26500.7	500.2
G2	Diesel(C10-C24)		13131692	26460.6	496.3
G3	Diesel(C10-C28)		13174570	26478.8	497.6



02/01/06

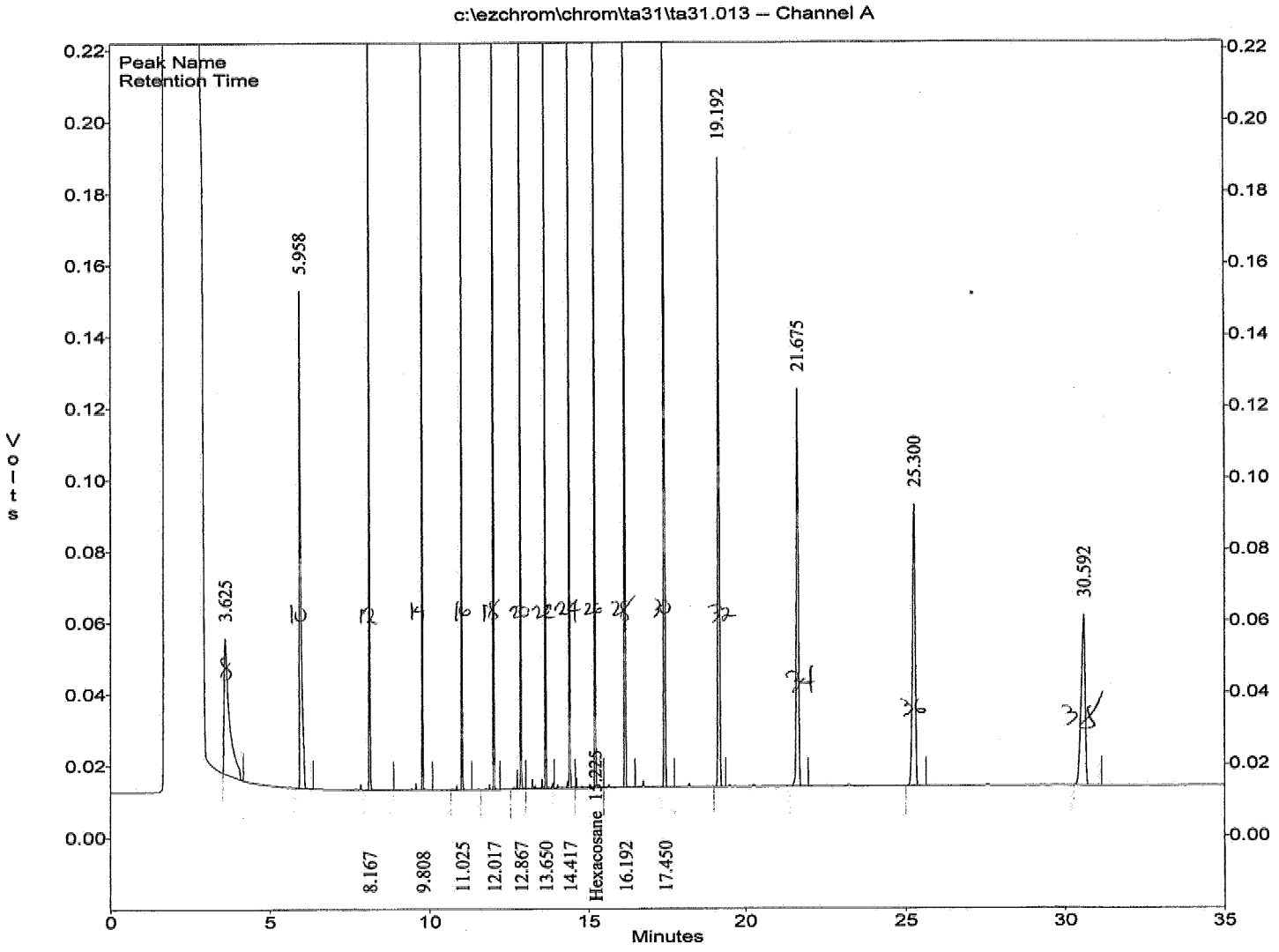
5033

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta31\ta31.013
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : HC-CHAIN
Acquired : Jan 31, 2006 22:45:44
Printed : Feb 01, 2006 09:38:59
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
--	Bromobenzene	5.283	0	0.0	0.0
10	Hexacosane	15.225	612551	28984.5	21.1
G1	Diesel(TOTAL)		7808933	26500.7	294.7
G2	Diesel(C10-C24)		4312145	26460.6	163.0
G3	Diesel(C10-C28)		4904687	26478.8	185.2



02/01/06

INITIAL CALIBRATION VERIFICATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO50
GC Columm : DB-5
Column size ID : 30MX0.25MM
Mid Conc Init LFID & Datetime: TA05022A 01/06/2006 02:01
Conc Cont LFID & Datetime: TA05026A 01/06/2006 04:49
CONC UNIT : ppm

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
JP5	0.000	0.000	0.000	500.0	23046.2	11649619	505.49	1		15
5W30	0.000	0.000	0.000	500.0	32168.8	16021303	498.04	-0		15

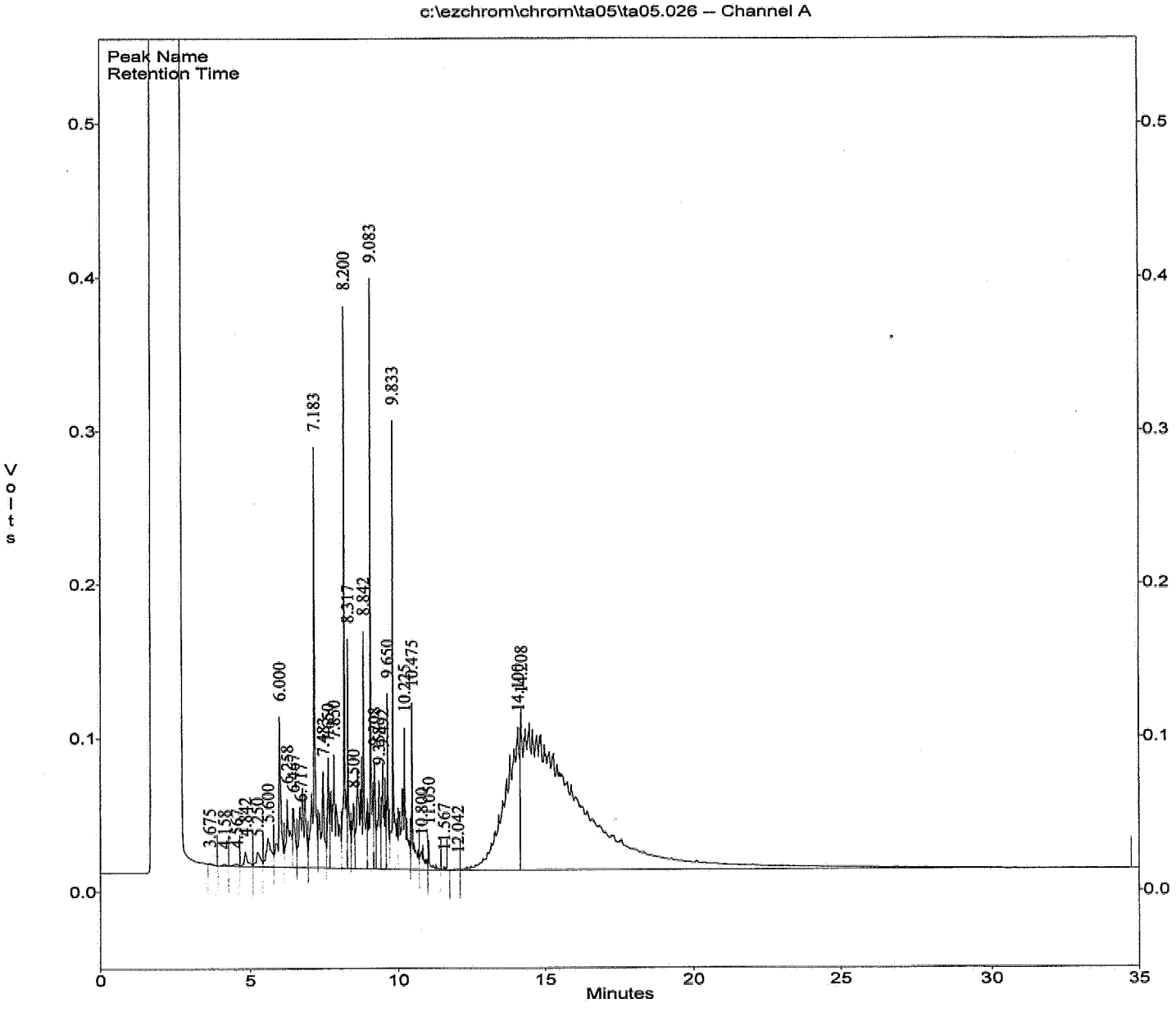
J550A05M.MET

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.026
Method : c:\ezchrom\methods\j550a05m.met
Sample ID : IJ550A05M01 500PPM
Acquired : Jan 06, 2006 04:49:39
Printed : Jan 06, 2006 09:57:56
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		11649619	23046.2	505.5
G2	5W30		16021303	32168.8	498.0

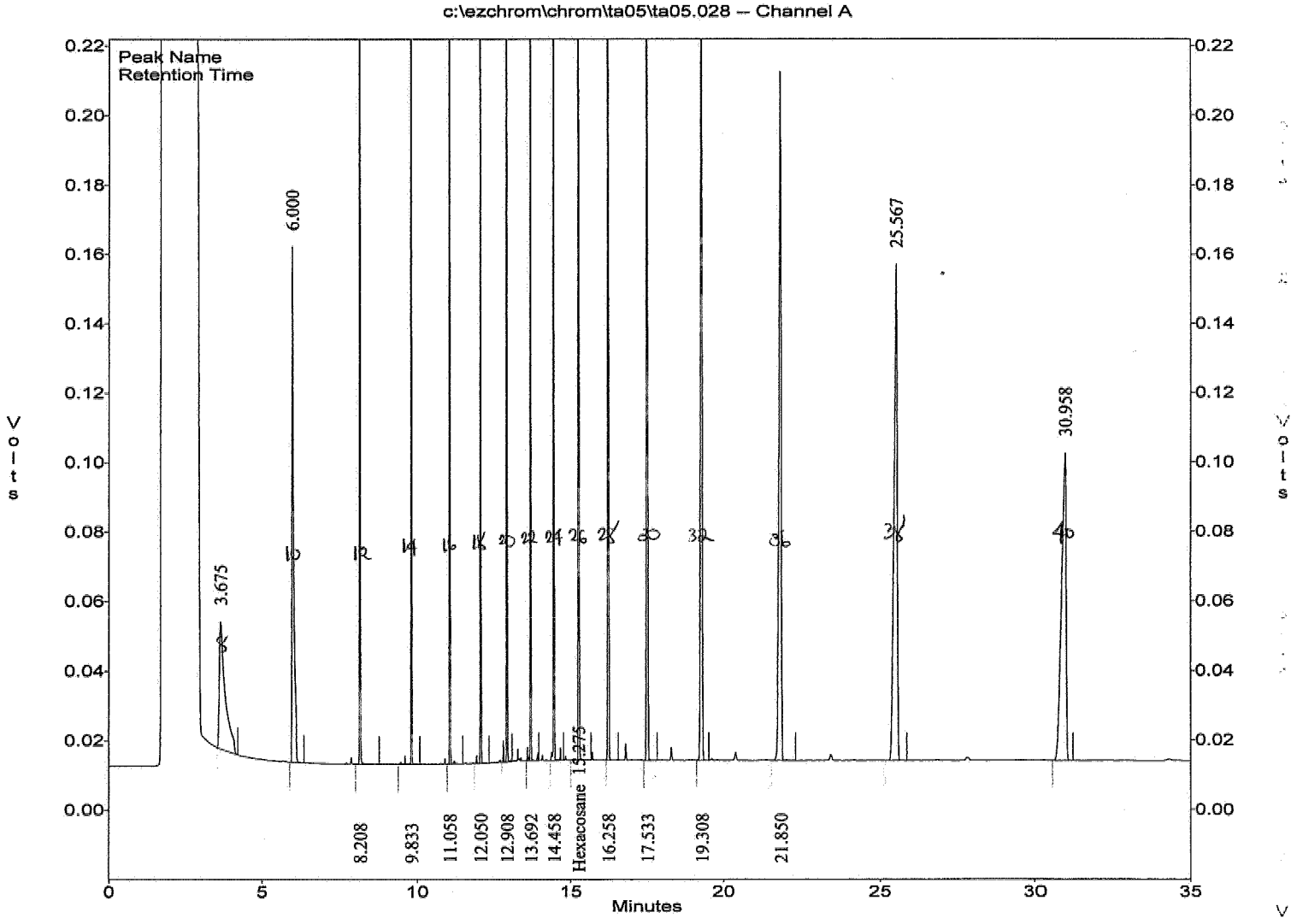


METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\ta05\ta05.028
Method : c:\ezchrom\methods\ds50k28.met
Sample ID : HC-CHAIN
Acquired : Jan 06, 2006 06:13:28
Printed : Jan 06, 2006 09:49:23
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
--	Bromobenzene	5.350	0	0.0	0.0
10	Hexacosane	15.275	785899	31441.2	25.0
G1	Diesel(TOTAL)		10840643	25617.3	423.2
G2	Diesel(C10-C24)		5027696	25569.5	196.6
G3	Diesel(C10-C28)		5789143	25586.1	226.3



5687

DAILY CALIBRATION

CONTINUE CALIBRATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO50
GC Column : DB-5
Column size ID : 30MX0.25MM
Mid Conc Init LFID & Datetime: TA31006A 01/31/2006 17:51
Conc Cont LFID & Datetime: TC15002A 03/15/2006 12:15
CONC UNIT : ppm

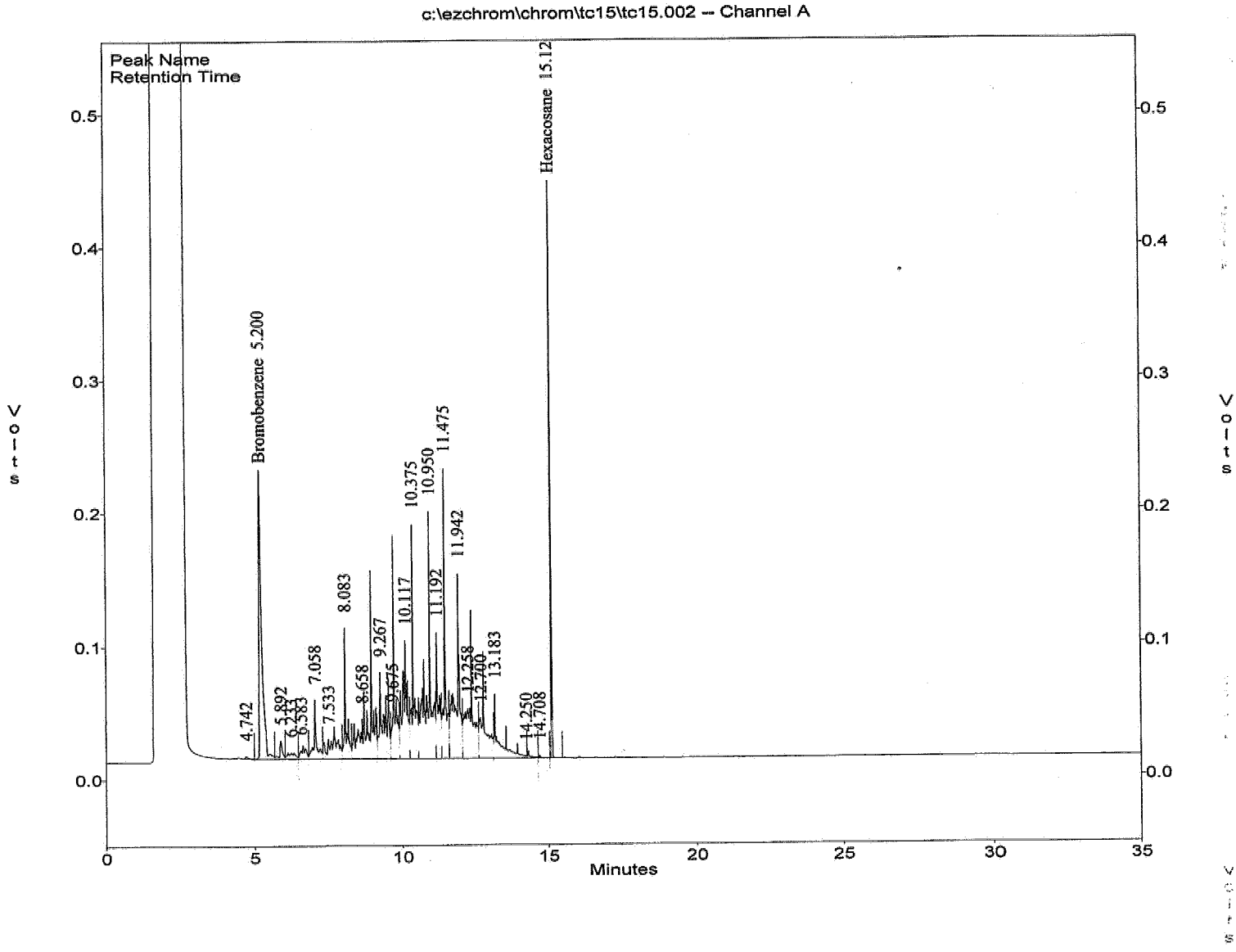
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
DIESEL(TOTAL)	0.000	0.000	0.000	500.0	26500.7	11877105	448.18	-10		15
DIESEL(C10-C24)	0.000	0.000	0.000	500.0	26460.6	11765525	444.64	-11		15
DIESEL(C10-C28)	0.000	0.000	0.000	500.0	26478.8	11776168	444.74	-11		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
BROMOBENZENE	5.200	5.113	5.287	100.0	14214.3	1334949	93.92	-6		15
HEXACOSANE	15.125	14.792	15.458	25.0	28984.5	723807	24.97	-0		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\tc15.002
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : CDS50A31512 D500
Acquired : Mar 15, 2006 12:15:37
Printed : Mar 16, 2006 11:28:57
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
2	Bromobenzene	5.200	1334949	14214.3	93.9
23	Hexacosane	15.125	723807	28984.5	25.0
G1	Diesel(TOTAL)		11877105	26500.7	448.2
G2	Diesel(C10-C24)		11765525	26460.6	444.6
G3	Diesel(C10-C28)		11776168	26478.8	444.7



CONTINUE CALIBRATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO50
GC Columm : DB-5
Column size ID : 30MX0.25MM
Mid Conc Init LFID & Datetime: TA05022A 01/06/2006 02:01
Conc Cont LFID & Datetime: TC15003A 03/15/2006 12:57
CONC UNIT : ppm

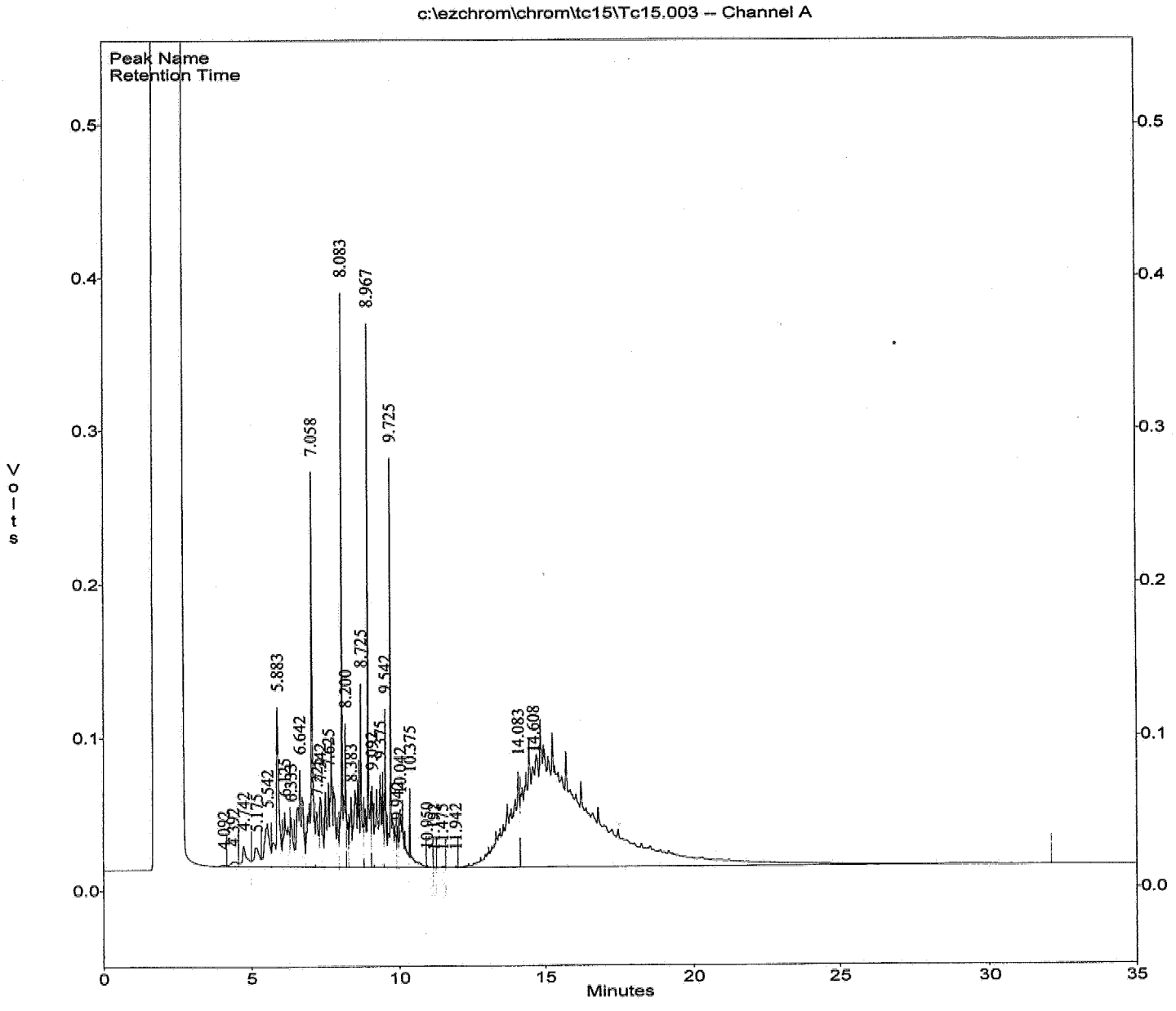
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
JP5	0.000	0.000	0.000	500.0	23046.2	11191907	485.63	-3		15
5W30	0.000	0.000	0.000	500.0	32168.8	13977435	434.50	-13		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\Tc15.003
Method : c:\ezchrom\methods\J550a05m.met
Sample ID : CJ550A05M513 JP5/MO
Acquired : Mar 15, 2006 12:57:33
Printed : Mar 15, 2006 13:32:35
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		11191907	23046.2	485.6
G2	5W30		13977435	32168.8	434.5



CONTINUE CALIBRATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO50
GC Column : DB-5
Column size ID : 30MX0.25MM
Mid Conc Init LFID & Datetime: TA31006A 01/31/2006 17:51
Conc Cont LFID & Datetime: TC15015A 03/15/2006 21:21 ✓
CONC UNIT : ppm

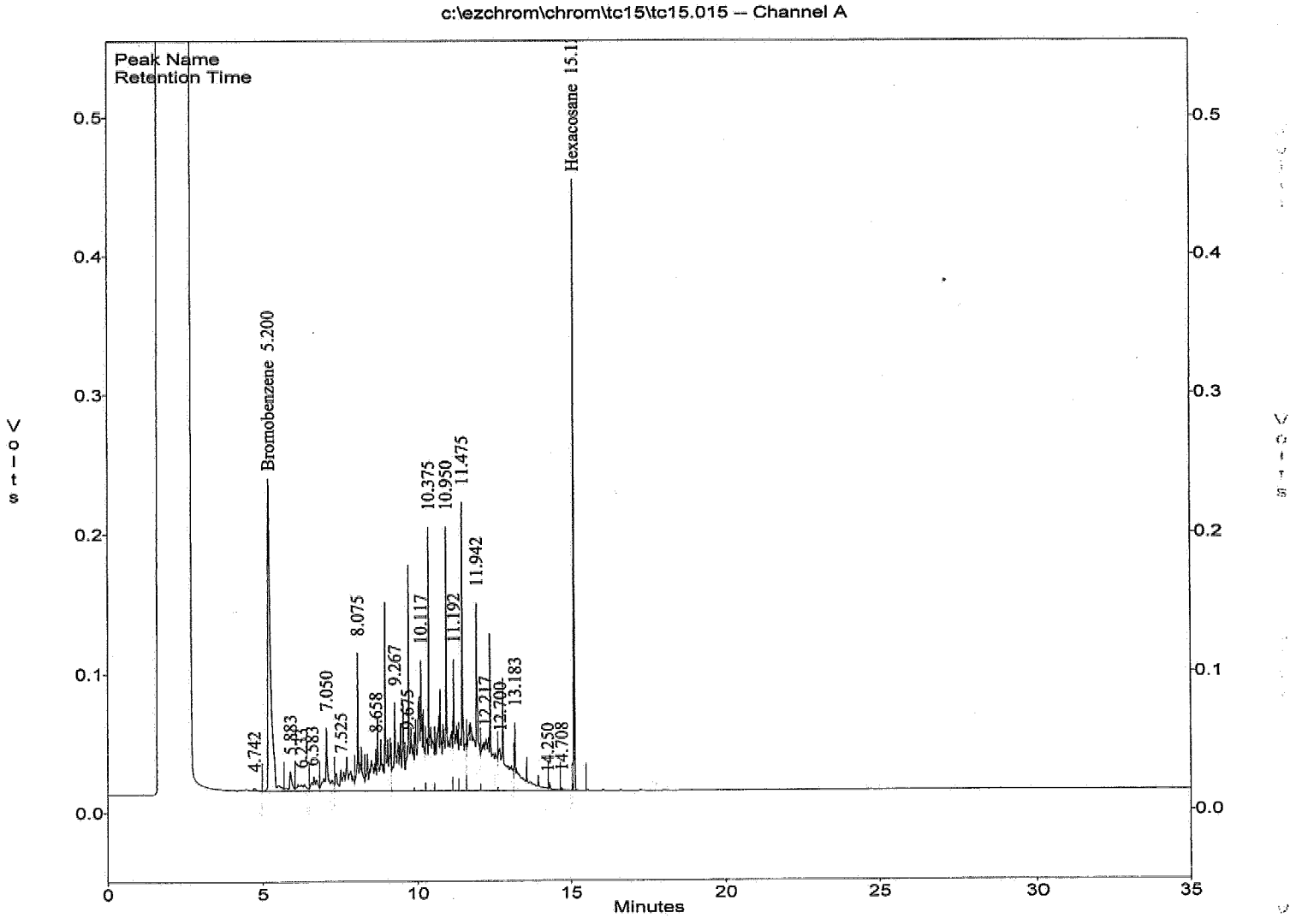
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
DIESEL(TOTAL)	0.000	0.000	0.000	500.0	26500.7	11991961	452.52	-9		15
DIESEL(C10-C24)	0.000	0.000	0.000	500.0	26460.6	11879087	448.93	-10		15
DIESEL(C10-C28)	0.000	0.000	0.000	500.0	26478.8	11889687	449.03	-10		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
BROMOBENZENE	5.200	5.113	5.287	100.0	14214.3	1356681	95.44	-5		15
HEXACOSANE	15.125	14.792	15.458	25.0	28984.5	722209	24.92	-0		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\tc15.015
Method : c:\ezchrom\methods\ds50a31.met
Sample ID : CDS50A31514 D500
Acquired : Mar 15, 2006 21:21:36
Printed : Mar 16, 2006 11:41:24
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
2	Bromobenzene	5.200	1356681	14214.3	95.4
23	Hexacosane	15.125	722209	28984.5	24.9
G1	Diesel(TOTAL)		11991961	26500.7	452.5
G2	Diesel(C10-C24)		11879087	26460.6	448.9
G3	Diesel(C10-C28)		11889687	26478.8	449.0



CONTINUE CALIBRATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO50
GC Column : DB-5
Column size ID : 30MX0.25MM
Mid Conc Init LFID & Datetime: TA05022A 01/06/2006 02:01
Conc Cont LFID & Datetime: TC15016A 03/15/2006 22:03
CONC UNIT : ppm

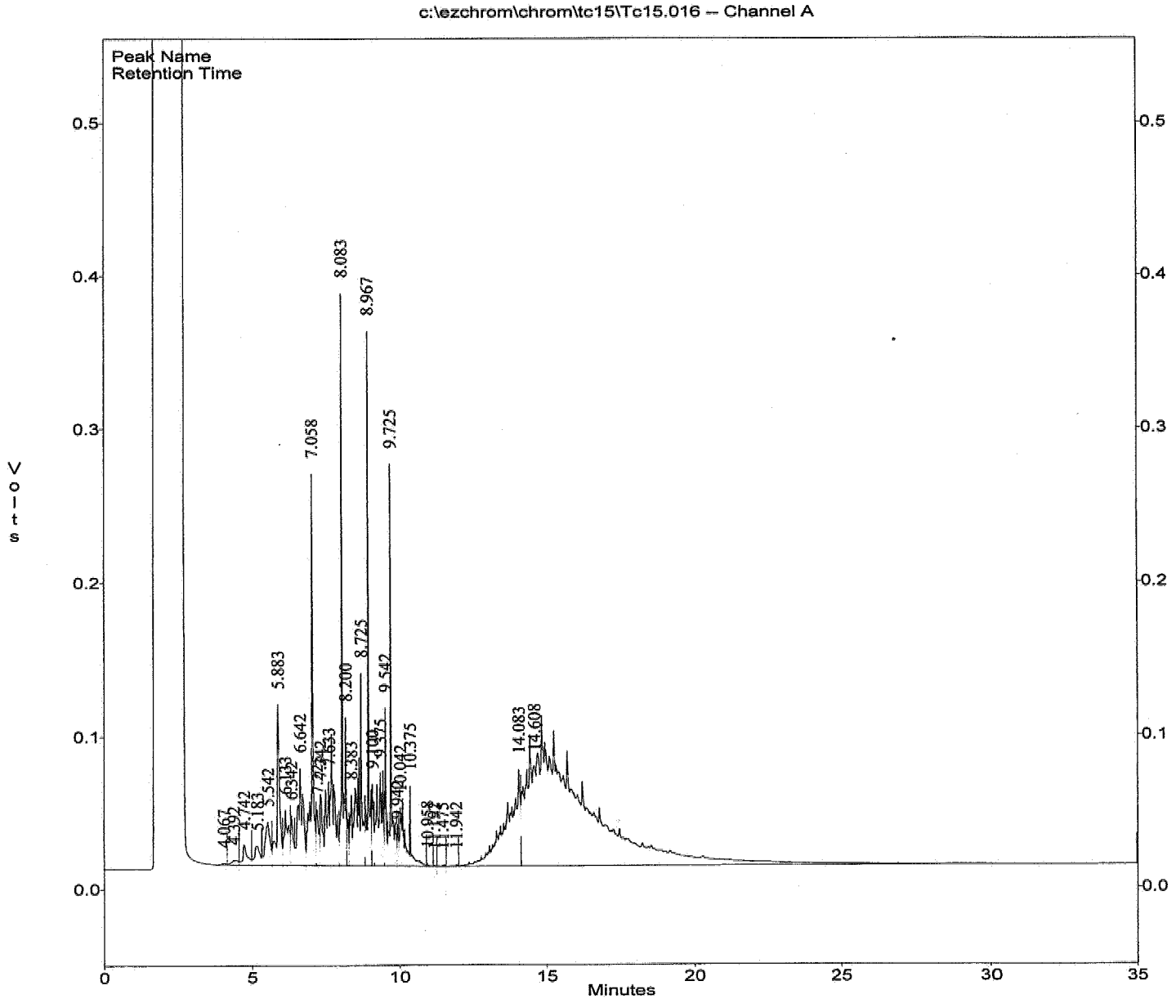
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
JP5	0.000	0.000	0.000	500.0	23046.2	11304249	490.50	-2		15
5W30	0.000	0.000	0.000	500.0	32168.8	14003957	435.33	-13		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\tc15\Tc15.016
Method : c:\ezchrom\methods\J550a05m.met
Sample ID : CJ550A05M515 JP5/MO
Acquired : Mar 15, 2006 22:03:28
Printed : Mar 15, 2006 22:38:29
User : JANE

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
G1	JP5		11304249	23046.2	490.5
G2	5W30		14003957	32168.8	435.3



ANALYTICAL LOGS

ANALYSIS RUN LOG FOR TPH

SOP ☑ EMAX-M8015D Revision No. 3 ☐ EMAX-LUFTE Revision No. 3 ☐ Book # A50-021

Starting Date: 01-05-06 Time: 22:31 Ending Date: 01-06-06 Time: 07:37

ANALYTICAL BATCH MK

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	TA05-017	TEST				
	.018	IB30A233				
	.019	U330A05M01				10 PPM
	.020	02				20
	.021	03				50
	.022	04				500
	.023	05				1000
	.024	06				1500
	.025	07				3000
	.026	IU330A05M01				500 J JP5+5W30 ICV
	.027	02				1500
	.028	HC-CHAIN				
	.029	MeCl2				
	.030	MeCl2				

Instrument No:		50
INITIAL CALIBRATION REFERENCE		
	ID	Date
Diesel		
Motor oil		
JP5		
JP5+5W30	U330A05M	01-05-06

Standards		
Name	ID	Conc. (mg/L)
CH_2Cl_2	45209	pure
DCC		
JP5+5W30 ICAL	553B-07-01-1	10-3000
JP5 ICV	553B-06-55-3	50,000
5W30 ICV	553B-06-69-3	50,000

Electronic Data Archival	
Location	Date
☐ EZC_1_Diesel	
☐	

Comments:

Analyzed By: JD

Disposed on: 01.06.06 By: JD

01-06-06

EMAX LABORATORIES, INC., 1835 W. 205th St., Torrance, CA 90501

ANALYSIS RUN LOG FOR TPH

SOP ☑ EMAX-M8015D Revision No. 3 ☐ EMAX-LUFTE Revision No. 3 ☐ Book # A50-021

Starting Date: 01.31.06 Time: 14:20 Ending Date: 01.31.06 Time: 23:27

ANALYTICAL BATCH n/a

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	TA31-001	IBSOA336				DSL (PPM) SURR
	.002	DS50A3101				> bad injection
	.003	02				
	.004	03				50 40/10
	.005	04				100 60/15
	.006	05				500 100/25
	.007	06				1500 140/35
	.008	07				3000 220/55
	.009	01				5
	.010	↓ 02				10 20/5
	.011	IDS50A31 01				500 100/25 ; DSL ICV
	.012	↓ 02				1500 140/35 ↓
	.013	HC-CHAIN				
	.014	MeCl2				

Instrument No:	50
INITIAL CALIBRATION REFERENCE	

	ID	Date
Diesel	DS50A31	01.31.06
Motor oil		
JP 5		

Standards

Name	ID	Conc. (mg/L)
CH_2Cl_2	45257	pure
DCC		
DSL 1GAL	SS3C-07-04-2	5-3000
+ SURR		20/5 - 220/55
DSL ICV	SS3C-07-03-3	5000

Electronic Data Archival

Location	Date
☐ EZC_1_Diesel	
☐	

Comments:

Analyzed By: GO

Disposed on: 02.01.06 By: GO

01/31/06

EMAX LABORATORIES, INC. 1835 W. 205th St. Torrance, CA 90501

5616

ANALYSIS RUN LOG FOR TPH

SOP ☑ EMAX-M8015D Revision No. 3 ☐ EMAX-LUFTE Revision No. 3 ☐ Book # A50-023

Starting Date: 03.15.06 Time: 11:33 Ending Date: 03.16.06 Time: 04:19

ANALYTICAL BATCH DSEA3156

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	TCL5.001	IBSDC512				
	.002	CDSSDA31512				DSD
	.003	CUSSDAOSM513				JP5/SW30; 500 PPM
	.004	RINSE				
DSC009W	.005	DSC009W3	1		✓	
	.006	L				
	.007	C				
	.008	06C070.01				
	.009	.02				
	.010	06C090.02				
	.011	.05				
	.012	.08				
	.013	.10				
	.014	06C096.01				
	.015	CDSSDA31514				DSD
	.016	CUSSDAOSM515				JP5/SW30; 500 PPM
DSC009W	.017	06C098.02	1		✓	
	.018	.04				
	.019	.06				
	.020	.08				
	.021	.10				
	.022	.12				
	.023	.14				
	.024	.16				
	.025	.18				

Instrument No:	50
INITIAL CALIBRATION REFERENCE	

	ID	Date
Diesel	DSSDA31	9.1.06
Motor oil		
JP 5/SW30	USSDAOSM	9.05.06

Standards

Name	ID	Conc. (mg/L)
CH_2Cl_2	45257	June
DCC DSL	SSZC-07-10-1	500
JP5/SW30DCC	SSZC-09-09-3	500

Electronic Data Archival

Location	Date
☐ EZC_1_Diesel	
☐	

Comments:

Analyzed By: JP

Disposed on: 03.16.06 By: JP

EMAX LABORATORIES, INC. 1835 W. 205th St. Torrance, CA 90501

EXTRACTION LOGS

EXTRACTION LOG FOR TPH

SOP ☐ EMAX-3550 Rev. No.1 ☒ EMAX-3520 Rev. No.1 ☐ EMAX-LUFT E Rev. No.1 ☐ EMAX-3540 Rev. No.0 ☐ EMAX-3510Rev.No. 1

Matrix: WATER Start Date: 3/14/06 Time: 15:30 End Date: 3/15/06 Time: 9:30 Book # EDS-026

PREPARATION BATCH # DSC 009 W

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g / ml)	Extract Volume (ml)	Silica Gel Clean-up	Notes
01	DSC009 - WB	N/A	1000	10		
02	- WL		1000	10		
03	- WC		1000	10		
04	06C070 - 01		1040	10		
05	- 02		1030	10		
06	06C089 - 01		740	10		light yellow with oily sediments
07	06C090 - 02		1050	10		light yellow
08	- 05		1040	10		
09	- 08		1040	10		
10	- 10		1040	10		
11	- 12		200	5		oily soln. dark orange
12	06C098 - 02		1030	10		light yellow soln.
13	- 04		1030	10		
14	- 06		980	10		
15	- 08		1030	10		light yellow soln.
16	- 10		1010	10		
17	- 12		1060	10		light yellow soln.
18	- 14		1010	10		light green soln.
19	- 16		1010	10		light yellow soln.
20	- 18		950	10		
21	06C081 - 11		1060	10		
22	06C096 - 01		1060	10		
23						
24						
25			JR	3/15/06		
26						
27						

Standards	ID	Amount Added (ml)
Surrogate	SS3C-07-04-1	1.0
LCS/MS	SS3C-07-04-3	1.0

Reagent	Lot# / ID
CH_2Cl_2	45342
Na_2SO4	45045
HCl	45105
Silica Sand	—

TUNING

Sonicator #	Reading
	N/A
	↓

Concentrator Water Bath Temp. (C)

1	35°	35°
2	35°	35°
3	35°	35
4	35°	35°
5		
6		

Comments: Test thermometer = T_1

Prepared By: JM Standard Added By: JM

Witnessed By: AB Checked By: ML

Extract Received by: JR 03.15.06 Extract Location: SE06-7

Disposal Date: Disposed By:

This page is checked during data review.

LABORATORY REPORT FOR

ENSR

UPGRADIENT INVESTIGATION , TRONOX

METHOD M8015
ALCOHOLS BY GC

SDG#: 06C096

CASE NARRATIVE

CLIENT: ENSR

PROJECT: UPGRADIENT INVESTIGATION, TRONOX

SDG: 06C096

METHOD M8015
ALCOHOLS BY GC

One (1) water sample was received on 03/10/06 for Alcohols by GC analysis by Method M8015 in accordance with USEPA SW846, 3rd Ed.

1. **Holding Time**

   Analytical holding time was met. Water sample was not preserved.

2. **Calibration**

   Initial calibration was five points. %RSD was within 20%. Continuing calibrations were carried out within 10-sample interval. All recoveries were within 85-115%.

3. **Method Blank**

   Method blank was free of contamination at the reporting limit.

4. **Lab Control Sample/Lab Control Sample Duplicate**

   All recoveries were within QC limits.

5. **Matrix Spike/Matrix Spike Duplicate**

   No MS/MSD sample was designated in this SDG.

6. **Sample Analysis**

   Sample was analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
ALCOHOLS BY GC

Client : ENSR
Project : UPGRADIENT INVESTIGATION, TRONOX

SDG NO. : 06C096
Instrument ID : GCT043

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	MEC005WB	1	NA	03/13/0612:01	03/13/0612:01	DC13005A	DC13004A	MEC005W	Method Blank
LCS1W	MEC005WL	1	NA	03/13/0612:18	03/13/0612:18	DC13006A	DC13004A	MEC005W	Lab Control Sample (LCS)
LCD1W	MEC005WC	1	NA	03/13/0613:11	03/13/0613:11	DC13007A	DC13004A	MEC005W	LCS Duplicate
EB-1	C096-01	1	NA	03/13/0613:48	03/13/0613:48	DC13009A	DC13004A	MEC005W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD M8015
ALCOHOLS BY GC

Client	: ENSR	Date Collected:	03/09/06
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/10/06
Batch No.	: 06C096	Date Extracted:	03/13/06 13:48
Sample ID:	EB-1	Date Analyzed:	03/13/06 13:48
Lab Samp ID:	C096-01	Dilution Factor:	1
Lab File ID:	DC13009A	Matrix :	WATER
Ext Btch ID:	MEC005W	% Moisture :	NA
Calib. Ref.:	DC13004A	Instrument ID :	GCT043

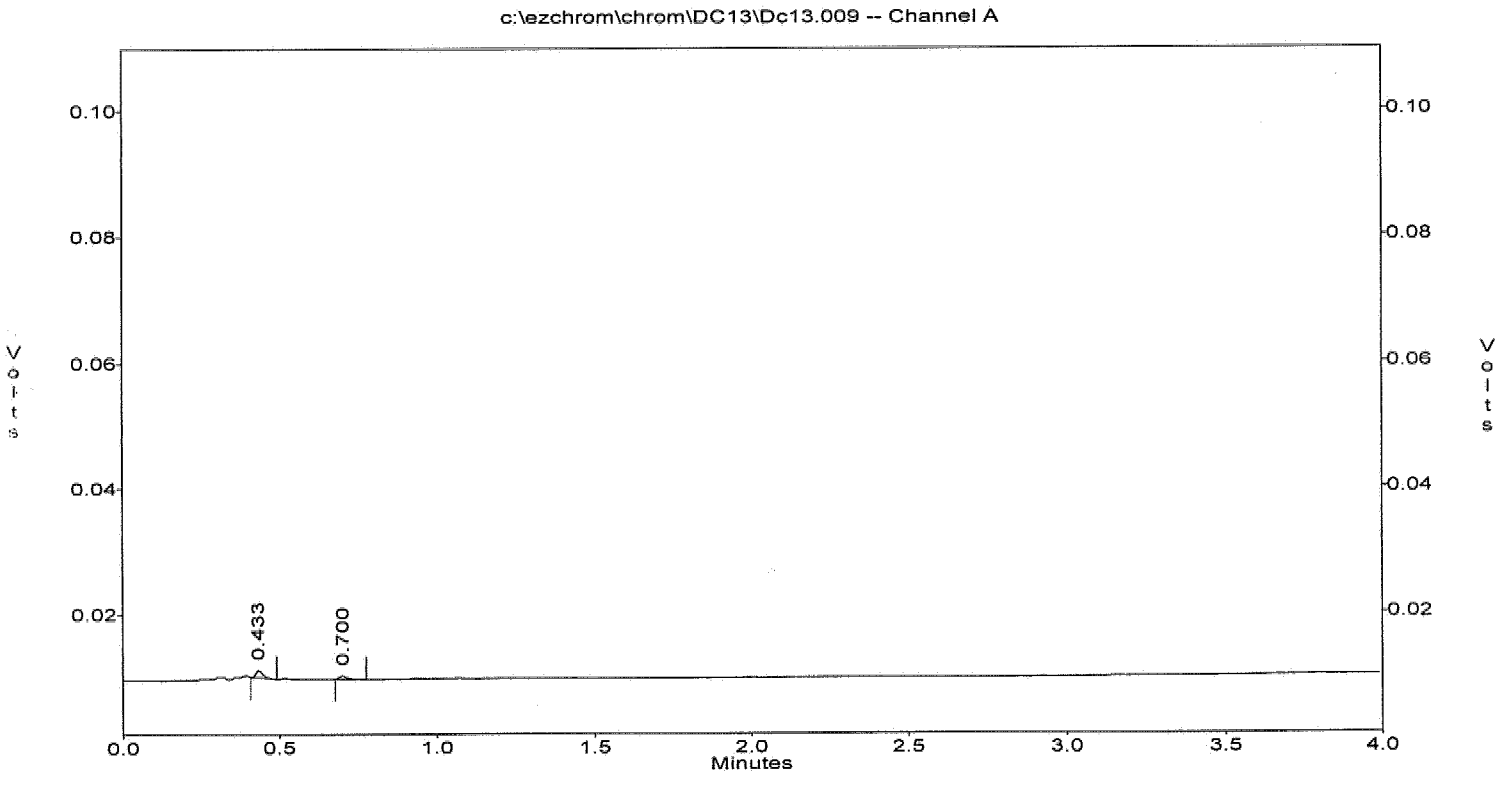
PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
METHANOL	ND	1	.5
ETHANOL	ND	1	.5

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\DC13\Dc13.009
Method : c:\ezchrom\methods\Me43c06.met
Sample ID : 06C096-01
Acquired : Mar 13, 2006 13:48:02
Printed : Mar 13, 2006 13:52:04
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
--	METHANOL	0.992	0	0.0	0.0
--	ETHANOL	1.208	0	0.0	0.0



QC SUMMARIES

METHOD M8015
ALCOHOLS BY GC

Client	: ENSR	Date Collected:	NA
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/13/06
Batch No.	: 06C096	Date Extracted:	03/13/06 12:01
Sample ID	: MBLK1W	Date Analyzed:	03/13/06 12:01
Lab Samp ID	: MEC005WB	Dilution Factor:	1
Lab File ID	: DC13005A	Matrix :	WATER
Ext Btch ID	: MEC005W	% Moisture :	NA
Calib. Ref.	: DC13004A	Instrument ID :	GCT043

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
METHANOL	ND	1	.5
ETHANOL	ND	1	.5

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ENSR
PROJECT: UPGRADIENT INVESTIGATION, TRONOX
BATCH NO.: 06C096
METHOD: METHOD M8015

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	MEC005WB	MEC005WL	MEC005WC		
LAB FILE ID:	DC13005A	DC13006A	DC13007A		
DATE EXTRACTED:	03/13/0612:01	03/13/0612:18	03/13/0613:11	DATE COLLECTED:	NA
DATE ANALYZED:	03/13/0612:01	03/13/0612:18	03/13/0613:11	DATE RECEIVED:	03/13/06
PREP. BATCH:	MEC005W	MEC005W	MEC005W		
CALIB. REF:	DC13004A	DC13004A	DC13004A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Methanol	ND	10	11.7	117	10	11.3	113	4	60-130	30
Ethanol	ND	10	9.82	98	10	9.86	99	0	60-130	30

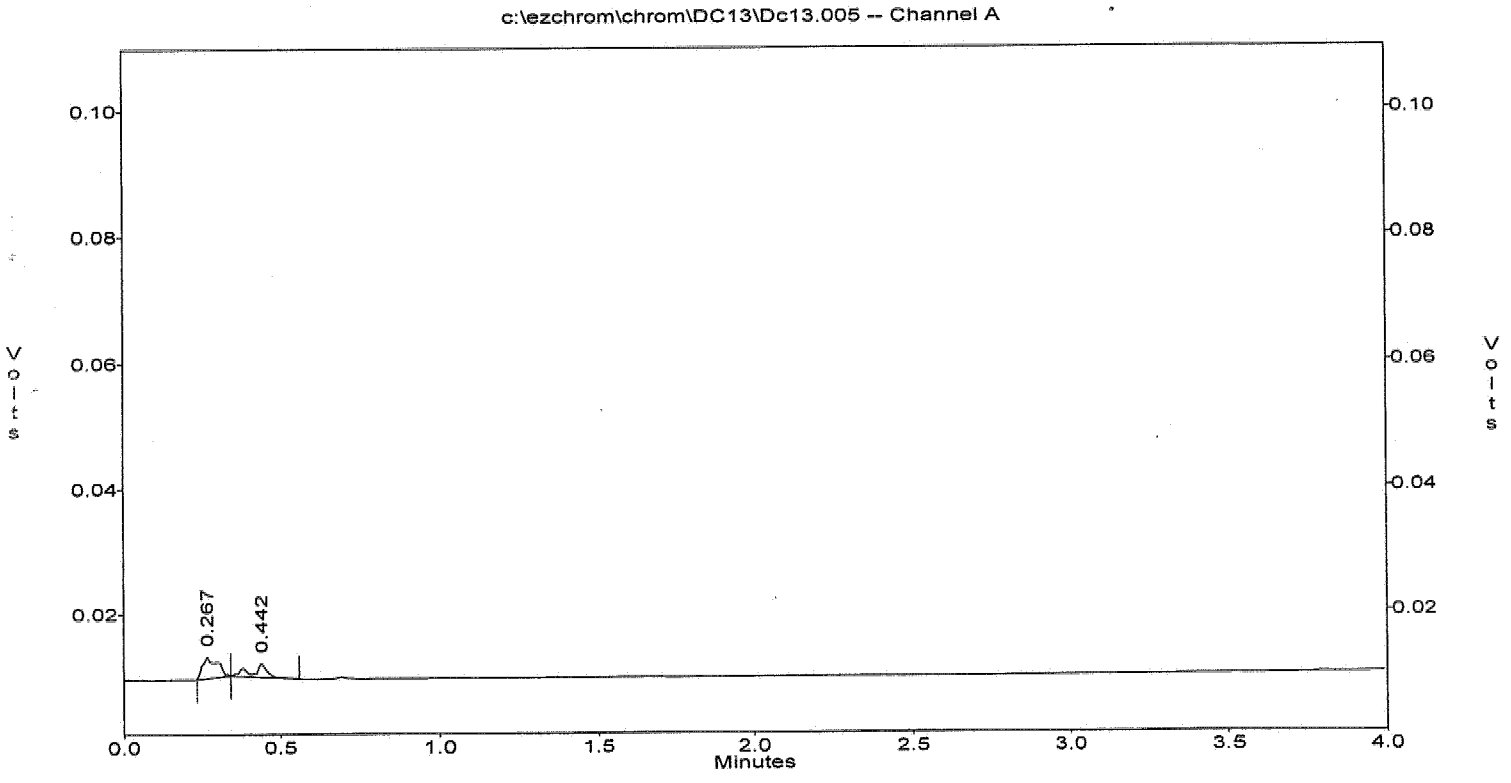
QC DATA

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\DC13\Dc13.005
Method : c:\ezchrom\methods\Me43c06.met
Sample ID : MEC005WB
Acquired : Mar 13, 2006 12:01:35
Printed : Mar 13, 2006 12:05:36
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc. (ppm)
--	METHANOL	0.992	0	0.0	0.0
--	ETHANOL	1.208	0	0.0	0.0

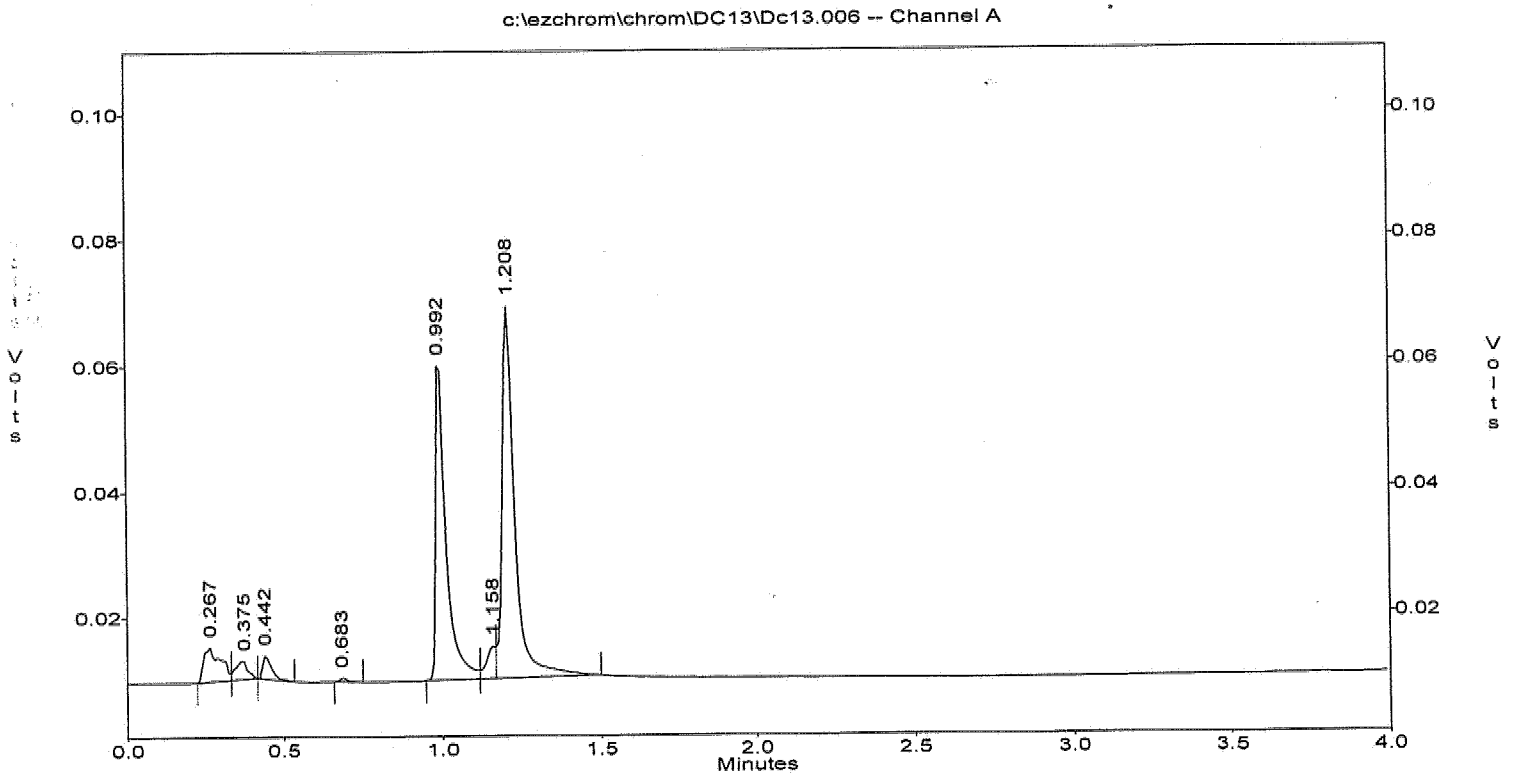


EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\DC13\Dc13.006
Method : c:\ezchrom\methods\Me43c06.met
Sample ID : MEC005WL
Acquired : Mar 13, 2006 12:18:09
Printed : Mar 13, 2006 12:22:11
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
5	METHANOL	0.992	113677	9735.5	11.7
7	ETHANOL	1.208	160258	16319.3	9.8

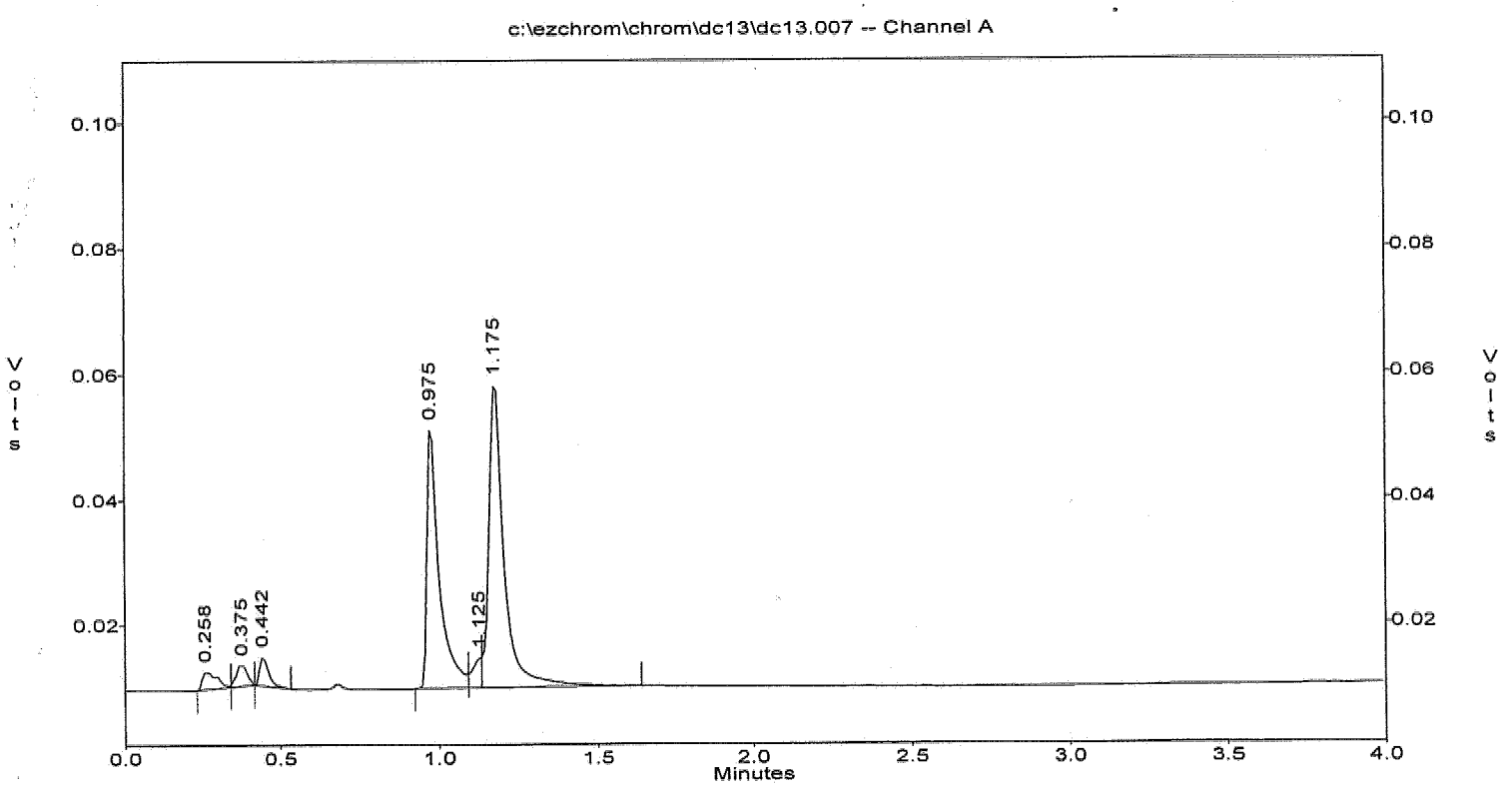


EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc13\dc13.007
Method : c:\ezchrom\methods\me43c06.met
Sample ID : MEC005WC
Acquired : Mar 13, 2006 13:11:34
Printed : Mar 13, 2006 13:17:27
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
4	METHANOL	0.975	109699	9735.5	11.3
6	ETHANOL	1.175	160846	16319.3	9.9



INITIAL CALIBRATION

INITIAL CALIBRATION
METHOD M8015

Lab Name : EMAX Inc
Instrument ID : GCTO43
GC Column : SUPELCO WAX 10
Column size ID : 30MX0.53MMX0.25UM
LFID & Datetime: DC06002A 03/06/06 13:33 ✓
LFID & Datetime: DC06003A 03/06/06 13:53 ✓
LFID & Datetime: DC06004A 03/06/06 14:11 ✓
LFID & Datetime: DC06005A 03/06/06 14:29 ✓
LFID & Datetime: DC06006A 03/06/06 14:47 ✓
CONC UNIT: ppm

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	5.00X	10.00X	15.00X	20.00X	MEAN	%RSD	
METHANOL	1.00	9358.00	9968.80	9945.50	9619.93	9785.45	9735.54	2.6	✓
ETHANOL	1.00	14498	16802	17403	17481	15412	16319	8.0	✓

ME43C06.MET

DA
03/08/06

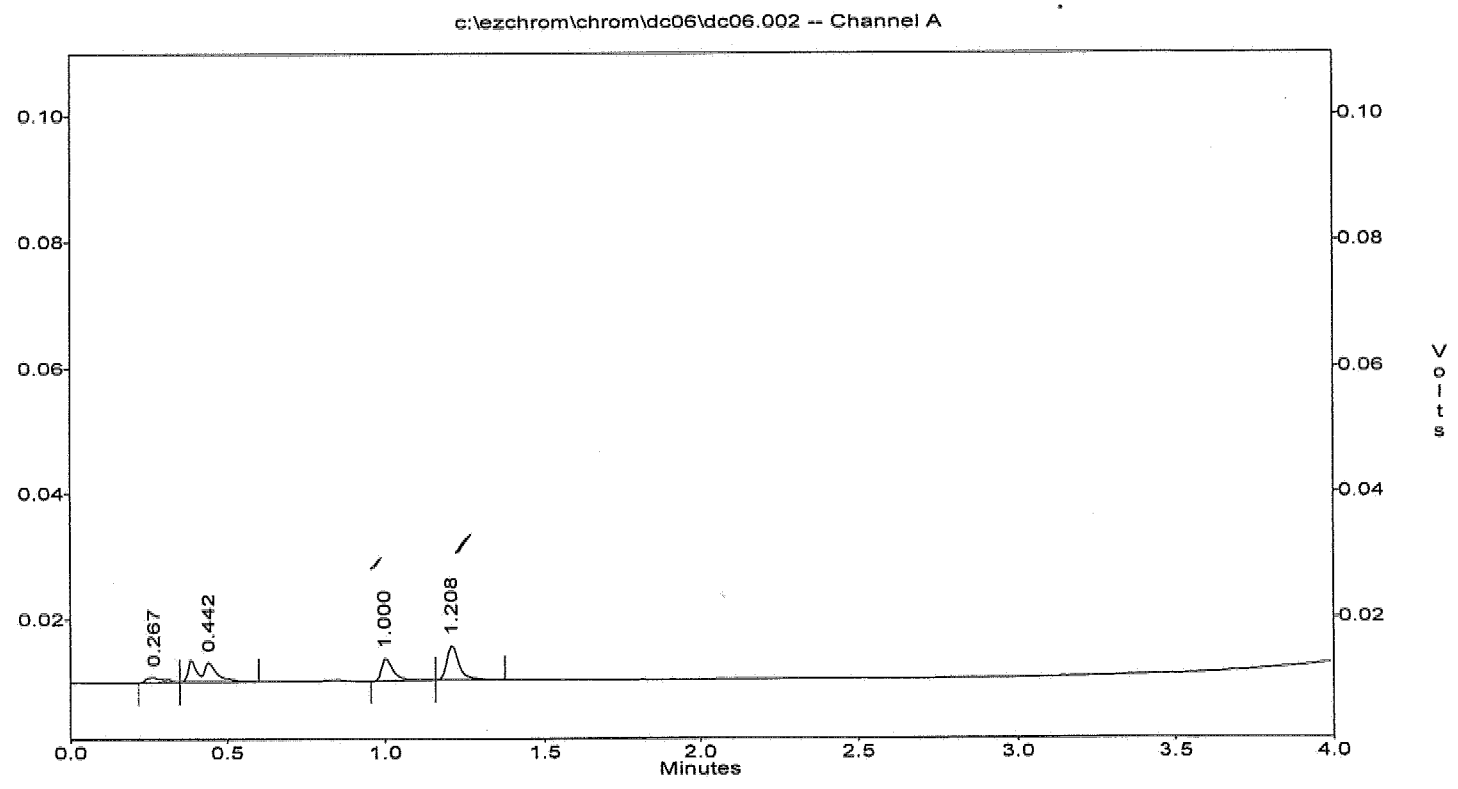
5867

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc06\dc06.002
Method : c:\ezchrom\methods\me43c06.met
Sample ID : ME43C0601 1PPM
Acquired : Mar 06, 2006 13:33:28
Printed : Mar 06, 2006 15:11:10
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc. (ppm)
3	METHANOL	1.000	9358	9735.5	1.0
4	ETHANOL	1.208	14498	16319.3	1.0



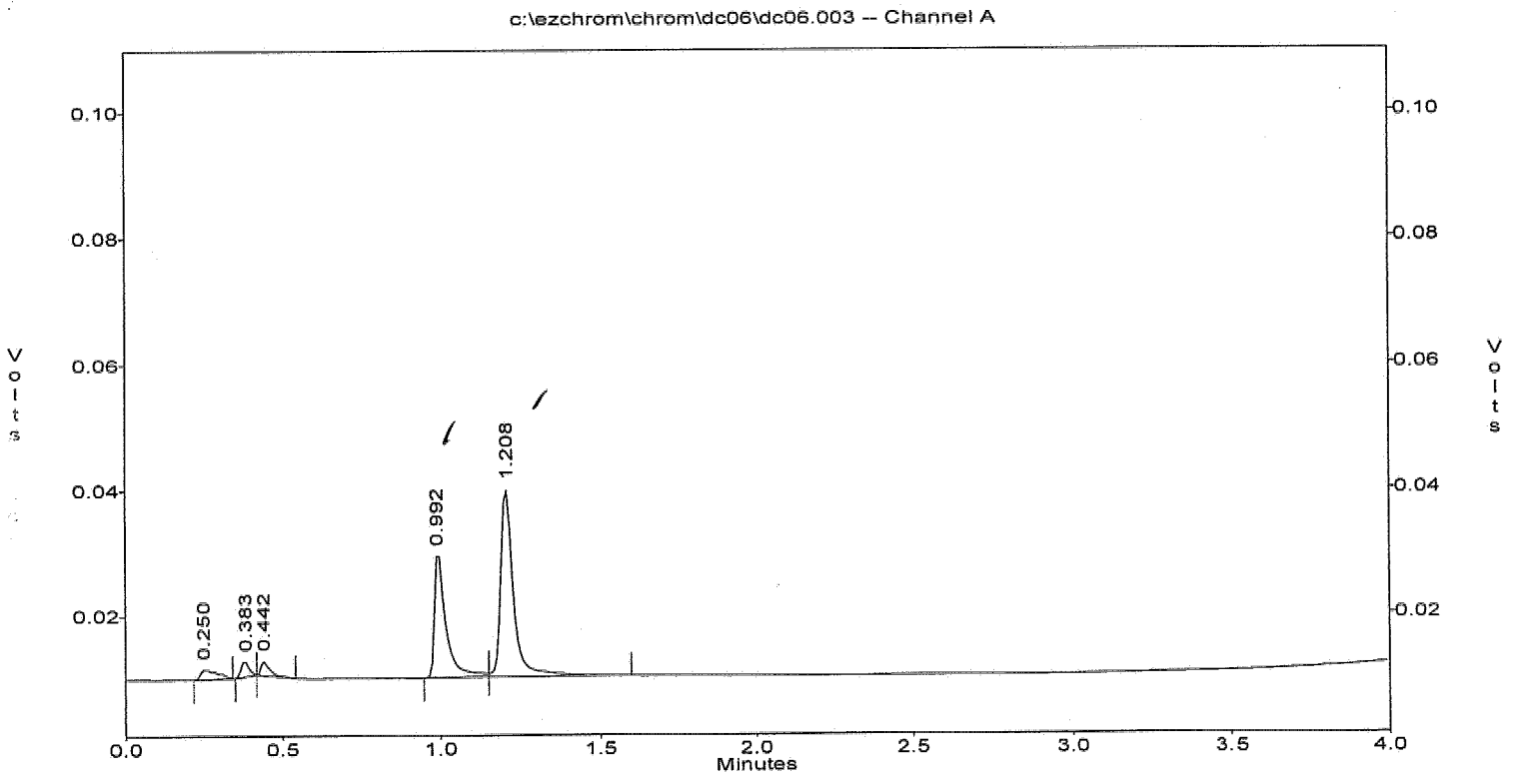
AS
03/08/06
5868

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc06\dc06.003
Method : c:\ezchrom\methods\me43c06.met
Sample ID : ME43C0602 5PPM
Acquired : Mar 06, 2006 13:53:42
Printed : Mar 06, 2006 15:11:14
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
4	METHANOL	0.992	49844	9735.5	5.0
5	ETHANOL	1.208	84012	16319.3	5.0



03/08/06

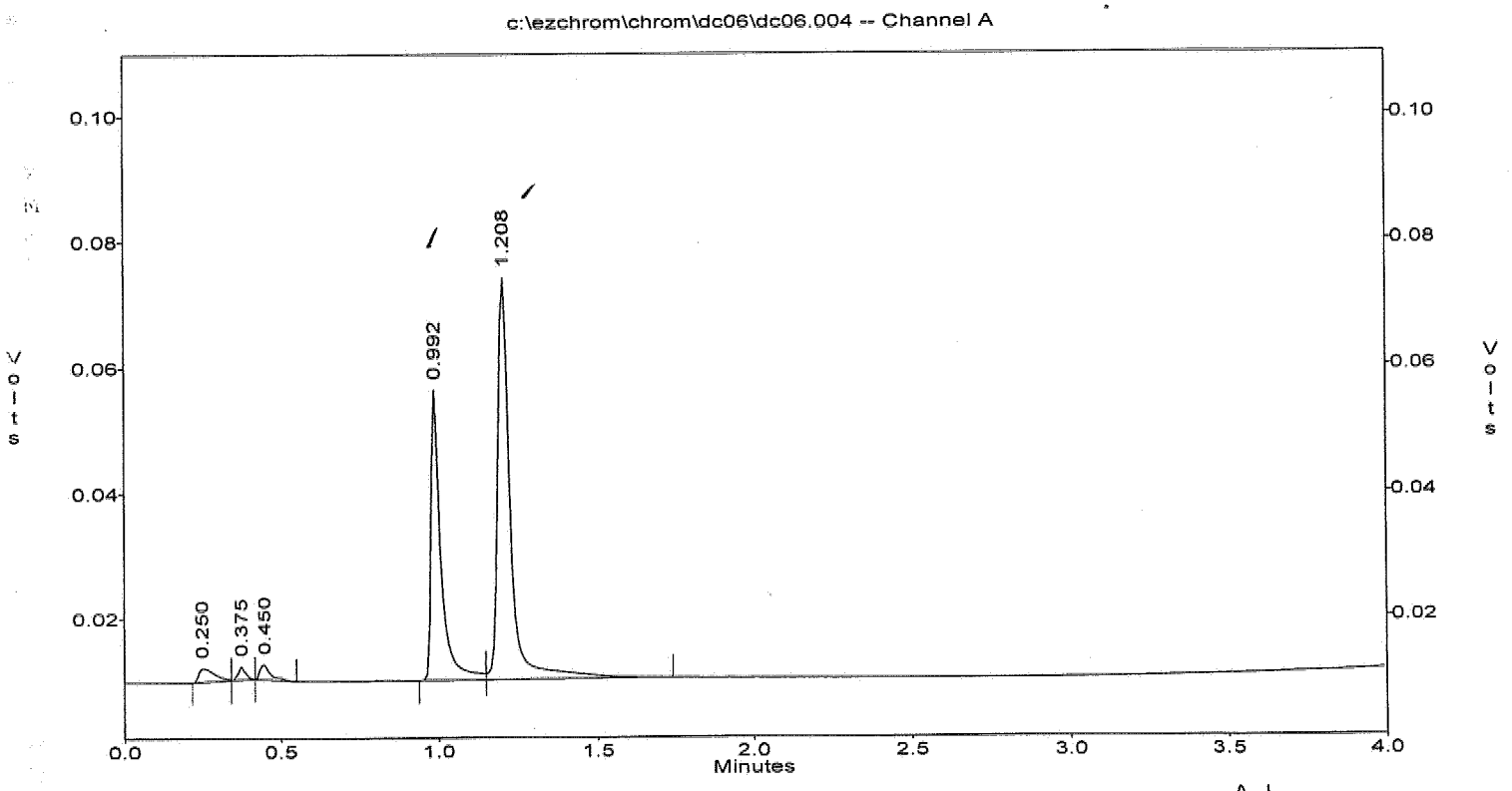
5869

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc06\dc06.004
Method : c:\ezchrom\methods\me43c06.met
Sample ID : ME43C0603 10PPM
Acquired : Mar 06, 2006 14:11:39
Printed : Mar 06, 2006 15:11:18
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc. (ppm)
4	METHANOL	0.992	99455	9735.5	10.0
5	ETHANOL	1.208	174031	16319.3	10.0



RA
03/08/06

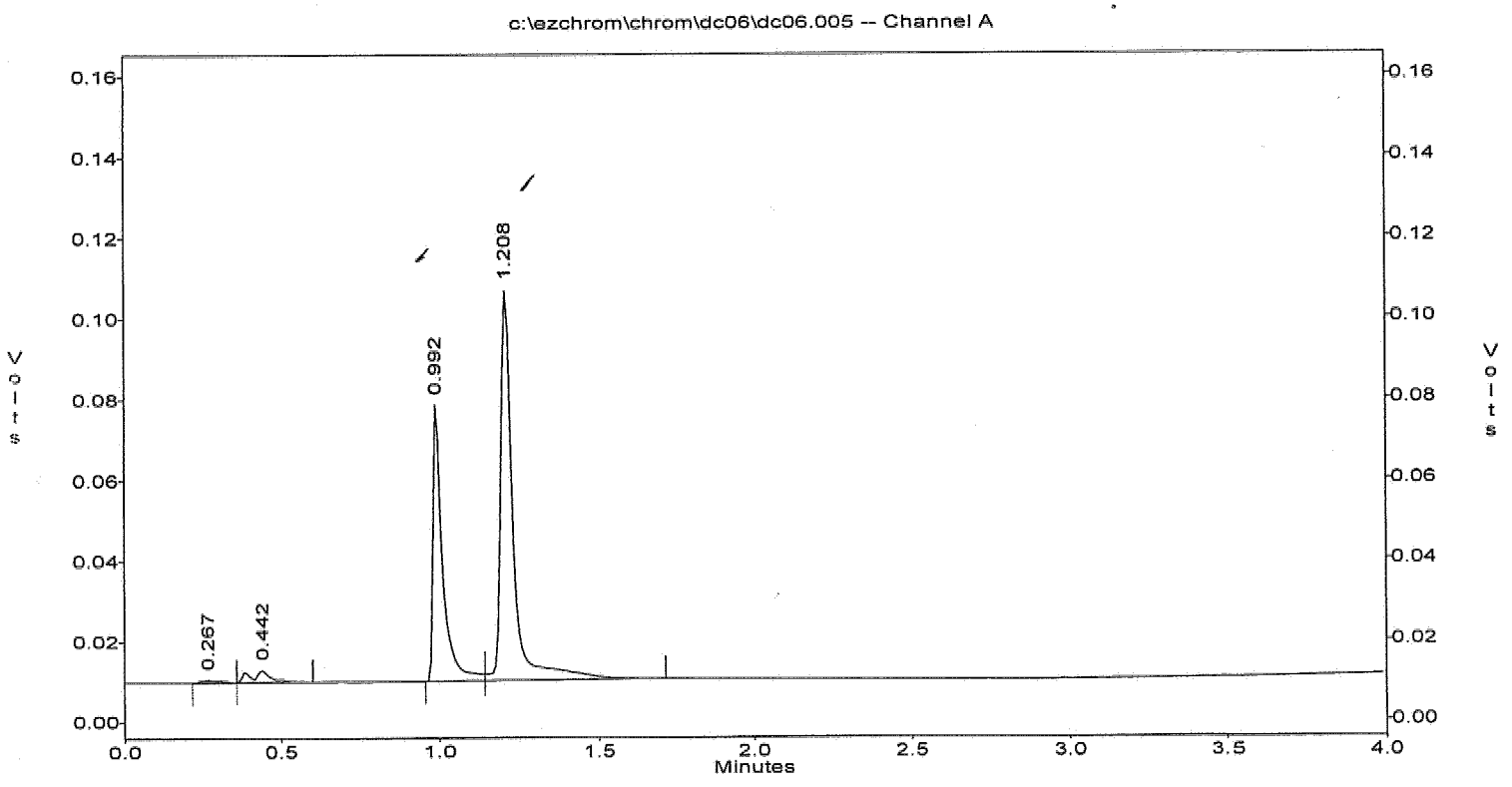
5070

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc06\dc06.005
Method : c:\ezchrom\methods\me43c06.met
Sample ID : ME43C0604 15PPM
Acquired : Mar 06, 2006 14:29:43
Printed : Mar 06, 2006 15:11:28
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
3	METHANOL	0.992	144299	9735.5	15.0
4	ETHANOL	1.208	262213	16319.3	15.0



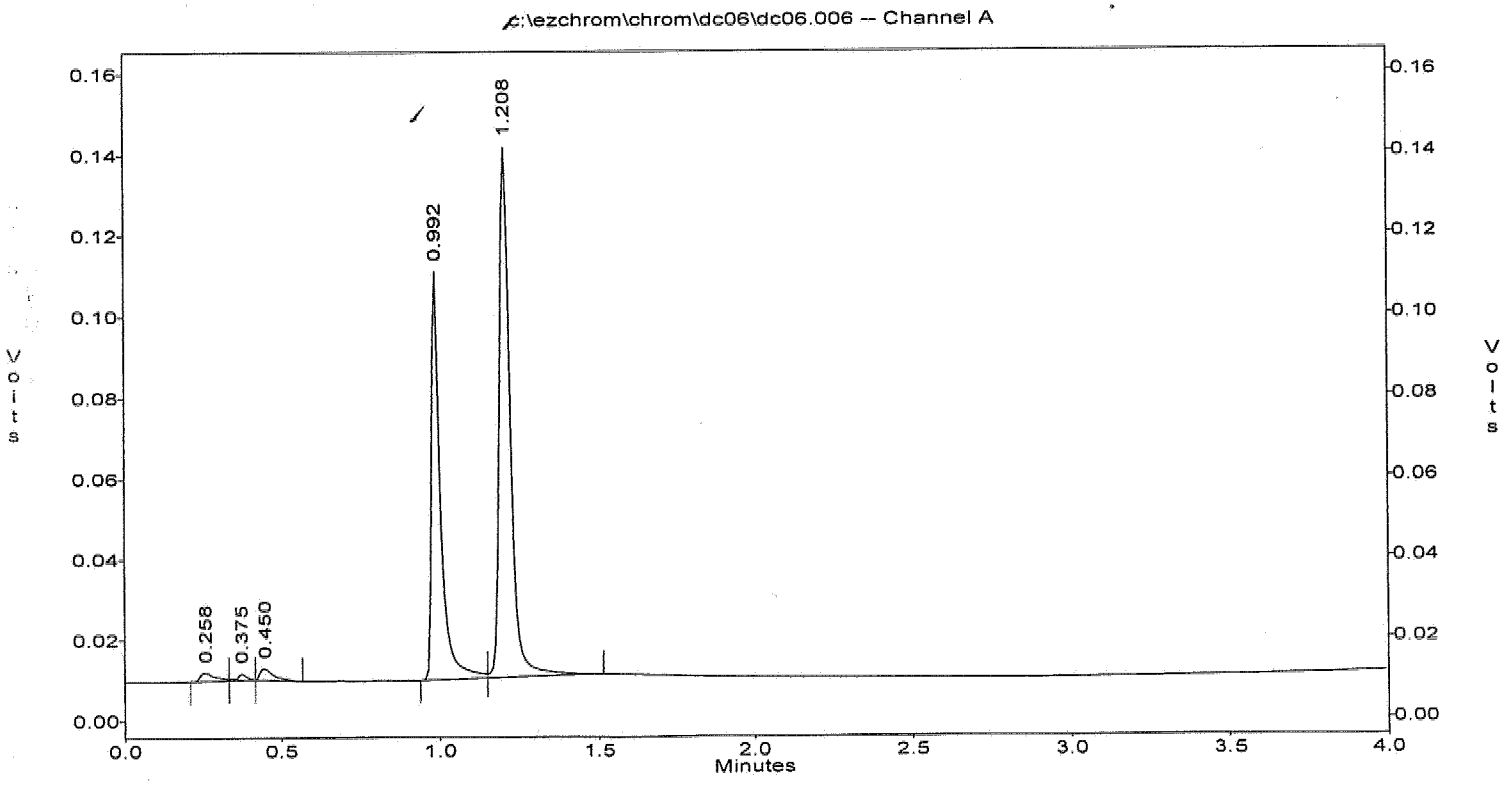
RA
03/08/06
5071

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc06\dc06.006
Method : c:\ezchrom\methods\me43c06.met
Sample ID : ME43C0605 20PPM
Acquired : Mar 06, 2006 14:47:41
Printed : Mar 06, 2006 15:11:33
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc. (ppm)
4	METHANOL	0.992	195709	9735.5	20.0
5	ETHANOL	1.208	308245	16319.3	20.0



03/08/06
5072

SECOND SOURCE

INITIAL CALIBRATION VERIFICATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO43
GC Column : SUPELCO WAX 10
Column size ID : 30MX0.53MMX0.25UM
Mid Conc Init LFID & Datetime: DC06004A 03/06/2006 14:11
Conc Cont LFID & Datetime: DC06007A 03/06/2006 15:04
CONC UNIT : ppm

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
METHANOL	1.008	0.982	1.034	10.0	9735.5	103117	10.59	6		15
ETHANOL	1.225	1.196	1.254	10.0	16319.3	164274	10.07	1		15

ME43C06.MET

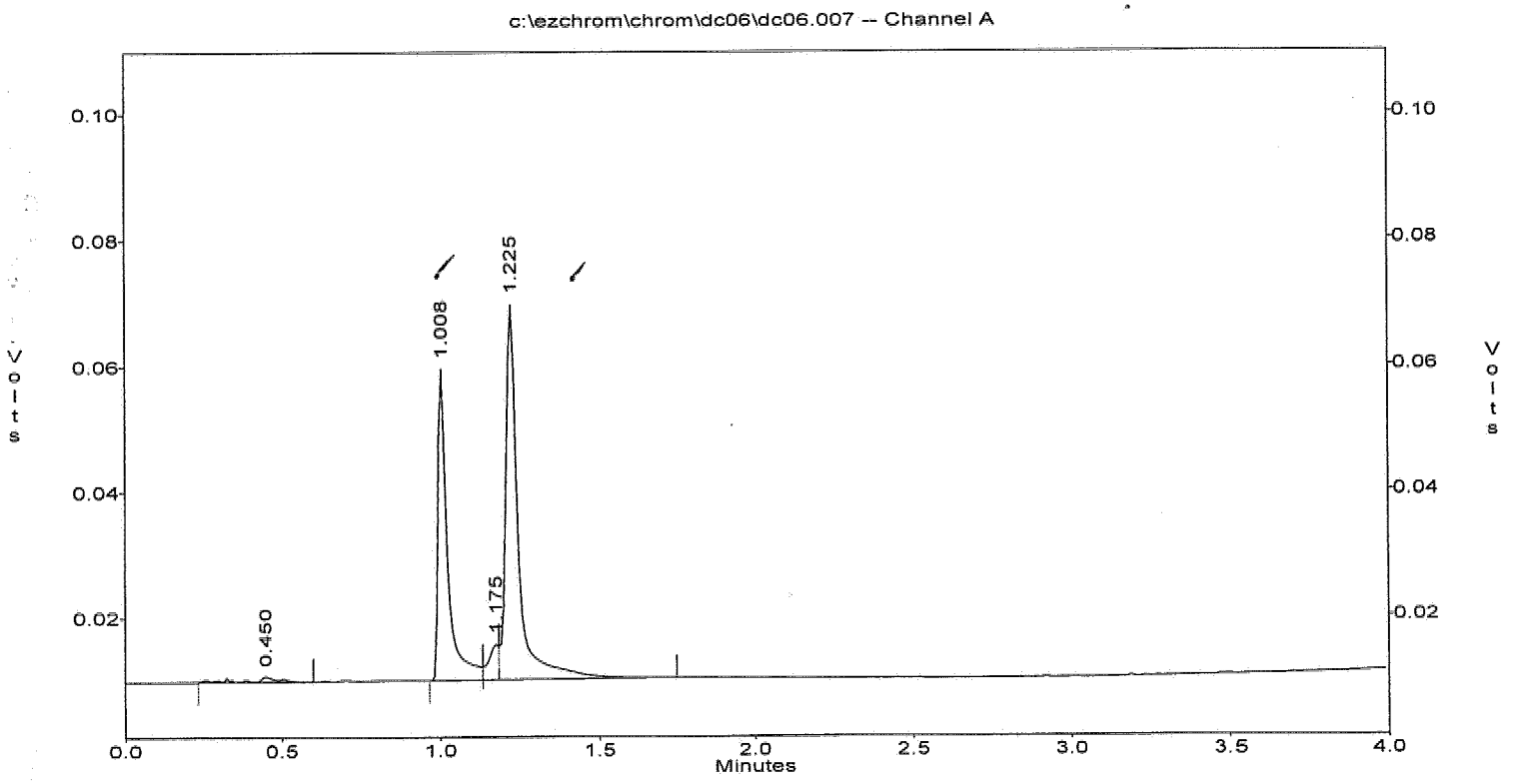
03/08/06

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc06\dc06.007
Method : c:\ezchrom\methods\me43c06.met
Sample ID : IME43C0601 10PPM
Acquired : Mar 06, 2006 15:04:40
Printed : Mar 06, 2006 15:11:45
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc. (ppm)
2	METHANOL	1.008	103117	9735.5	10.6
4	ETHANOL	1.225	164274	16319.3	10.1



03/08

5875

DAILY CALIBRATION

CONTINUE CALIBRATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO43
GC Columm : SUPELCO WAX 10
Column size ID : 30MX0.53MMX0.25UM
Mid Conc Init LFID & Datetime: DC06004A 03/06/2006 14:11
Conc Cont LFID & Datetime: DC13004A 03/13/2006 11:44
CONC UNIT : ppm

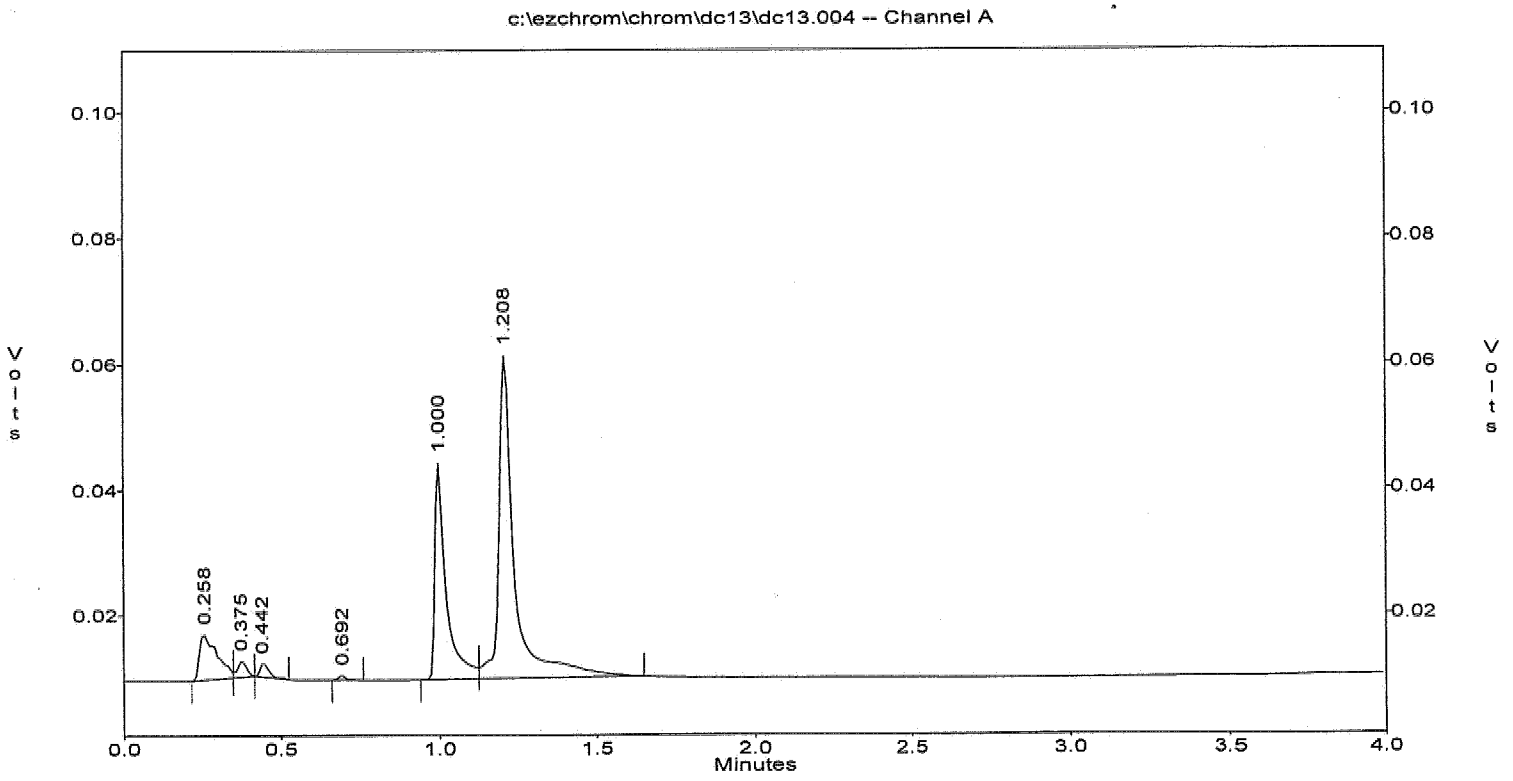
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
METHANOL	1.000	0.974	1.026	10.0	9735.5	84332	8.66	-13		15
ETHANOL	1.208	1.179	1.237	10.0	16319.3	176480	10.81	8		15

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc13\dc13.004
Method : c:\ezchrom\methods\me43c06.met
Sample ID : CME43C06021 10PPM
Acquired : Mar 13, 2006 11:44:51
Printed : Mar 13, 2006 12:01:04
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
5	METHANOL	1.000	84332	9735.5	8.7
6	ETHANOL	1.208	176480	16319.3	10.8



CONTINUE CALIBRATION
METHOD M8015

Lab Name : EMAX
Instrument ID : GCTO43
GC Columm : SUPELCO WAX 10
Column size ID : 30MX0.53MMX0.25UM
Mid Conc Init LFID & Datetime: DC06004A 03/06/2006 14:11
Conc Cont LFID & Datetime: DC13013A 03/13/2006 15:34
CONC UNIT : ppm

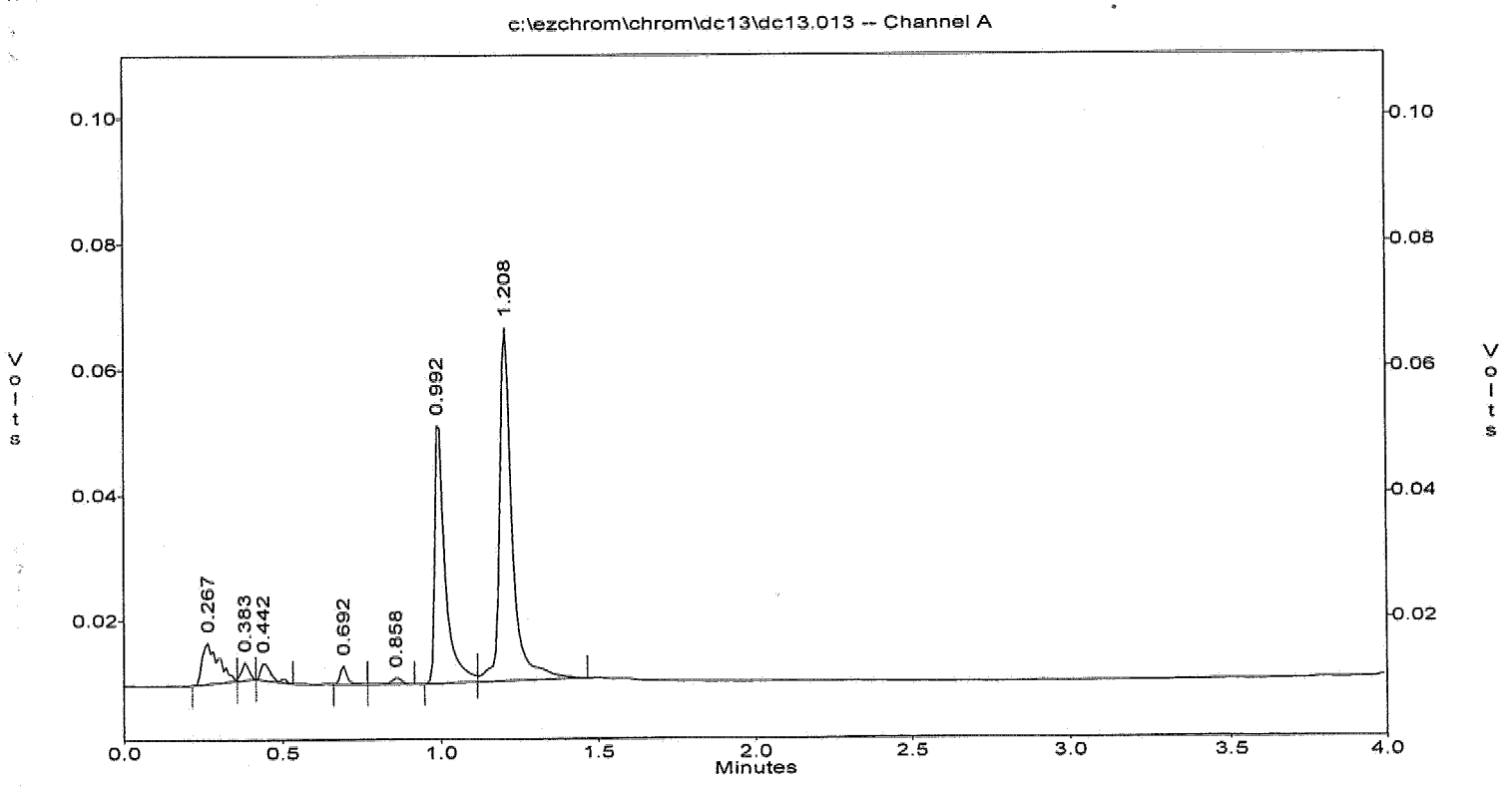
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
METHANOL	0.992	0.966	1.018	10.0	9735.5	94873	9.74	-3		15
ETHANOL	1.208	1.179	1.237	10.0	16319.3	157210	9.63	-4		15

EPA 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\dc13\dc13.013
Method : c:\ezchrom\methods\me43c06.met
Sample ID : CME43C06022 10PPM
Acquired : Mar 13, 2006 15:34:34
Printed : Mar 13, 2006 15:40:43
User : XUYEN

Channel A Results

#	Peak Name	Ret.Time(min)	Area	Ave. CF	ESTD Conc.(ppm)
6	METHANOL	0.992	94873	9735.5	9.7
7	ETHANOL	1.208	157210	16319.3	9.6



5888

ANALYTICAL LOGS

ANALYSIS RUN LOG FOR TPH

SOP ☐ EMAX-M8015D Revision No. 3 ☐ EMAX-LUFTE Revision No. 3 ☑ Alcohols Book # A43-012

Starting Date: 3/6/06 Time: 13:13 Ending Date: 3/6/06 Time: 17:41

ANALYTICAL BATCH DC06C07

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	DC06.001	IB43C012				
	2	ME43C0601				~~10ppm~~ XP 3/6/06
	3	2				5
	4	3				10
	5	4				15
	6	5				20
	7	IME43C0601				10
MEC002W	8	MEC002WB	1		✓	
	9	L				
	10	C				
	11	MBLVER-01				1ppm
	12	02				0.5ppm
	13	06C032-04				
	14	04D				
	15	CME43C06012				Bad inj.
	16	NO Injection				
	17	CME43C06012				10ppm

XP 3/6/06

Instrument No:		43
INITIAL CALIBRATION REFERENCE		
	ID	Date
Diesel		
Motor oil		
JP 5		
Alcohols	ME43C06	3/6/06
Standards		
Name	ID	Conc. (mg/L)
CH_2Cl_2 XP 3/6/06	—	—
~~Dec~~/Ical	SS3C-07-11-1	1-200ppm
~~LCS~~/ICV	SS3C-07-11-2	10ppm
Dec	SS3C-07-10-2	100
LCS	SS3C-07-10-3	↓
Electronic Data Archival		
Location		Date
☐ EZC_2_Diesel		
☐		

Comments:

Analyzed By: XP

Disposed on: 3/6/06 By: XP

This page is checked during the data review process.

ANALYSIS RUN LOG FOR TPH

SOP ☐ EMAX-M8015D Revision No. 3 ☐ EMAX-LUFTE Revision No. 3 ☑ Ethanol / Methanol Book # A43-012

Starting Date: 3/13/06 Time: 10:52 Ending Date: 3/13/06 Time: 18:24

ANALYTICAL BATCH DC13004

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	DC13.001	TEST				
	2	↓				
	3	IB43C021				
	4	CME43C06021				10ppm
MEC005W	5	MEC005WB	1		✓	
	6	↓ C	↓		↓	
	7	↓ C				
	8	06C081-11				pH 7
	9	06C096-01				pH 5
	10	06C090-12	↓			RR high pH 4 *
	11	↓ 12T	5			RR high
↓	12	↓ 12D	20		↓	
	13	CME43C06022				10ppm
	14	TEST				
MEC009S	15	MEC009SB	1	✓		
	16	↓ C	↓	↓		
	17	↓ C				
	18	06C081-01				
	19	↓ 02				
↓	20	↓ 03	↓	↓		
	21	CME43C06023				10ppm
		XP 3/13/06				

Instrument No:		43
INITIAL CALIBRATION REFERENCE		
	ID	Date
Diesel		
Motor oil		
JP 5		
Alcohols	XP 3/13/06 ~~43C06~~ ME43C06	3/16/06

Standards		
Name	ID	Conc. (mg/L)
CH_2Cl_2	—	—
DCC	SS3C-07-10-2	100
LCS	SS3C-07-10-3	↓

Electronic Data Archival	
Location	Date
☐ EZC_2_Diesel	
☐	

Comments: (*) adjusted to pH 7 w/ 50% NaOH (SL07A-06-255)

Analyzed By: XP

Disposed on: 3/14/06 By: XP

This page is checked during the data review process.

LABORATORY REPORT FOR

ENSR

UPGRADIENT INVESTIGATION , TRONOX

METHOD M8015
ETHYLENE GLYCOL BY GC

SDG#: 06C096

CASE NARRATIVE

CLIENT: ENSR

PROJECT: UPGRADIENT INVESTIGATION, TRONOX

SDG: 06C096

METHOD M8015
ETHYLENE GLYCOL BY GC

One (1) water sample was received on 03/10/06 for Ethylene Glycol by GC analysis by Method M8015 in accordance with USEPA SW846, 3rd Ed.

1. Holding Time

Analytical holding time was met. Sample was not preserved.

2. Calibration

Initial calibration was five points and quantitation was done using linear regression ($r^2 \geq 0.999$). Continuing calibrations were carried out within 10-sample interval. All recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

5. Matrix Spike/Matrix Spike Duplicate

No sample was spiked.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
ETHYLENE GLYCOL

Client : ENSR
Project : UPGRADIENT INVESTIGATION, TRONOX

SDG NO. : 06C096
Instrument ID : GCT072

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	EGC001WB	1	NA	03/14/0614:55	03/14/0614:55	BC14020A	BC14014A	EGC001W	Method Blank
LCS1W	EGC001WL	1	NA	03/14/0613:54	03/14/0613:54	BC14016A	BC14014A	EGC001W	Lab Control Sample (LCS)
LCD1W	EGC001WC	1	NA	03/14/0614:11	03/14/0614:11	BC14017A	BC14014A	EGC001W	LCS Duplicate
EB-1	C096-01	1	NA	03/14/0617:49	03/14/0617:49	BC14032A	BC14030A	EGC001W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD M8015
ETHYLENE GLYCOL

Client	: ENSR	Date Collected:	03/09/06
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/10/06
Batch No.	: 06C096	Date Extracted:	03/14/06 17:49
Sample ID	: EB-1	Date Analyzed:	03/14/06 17:49
Lab Samp ID	: C096-01	Dilution Factor:	1
Lab File ID	: BC14032A	Matrix	: WATER
Ext Btch ID	: EGC001W	% Moisture	: NA
Calib. Ref.	: BC14030A	Instrument ID	: GCT072

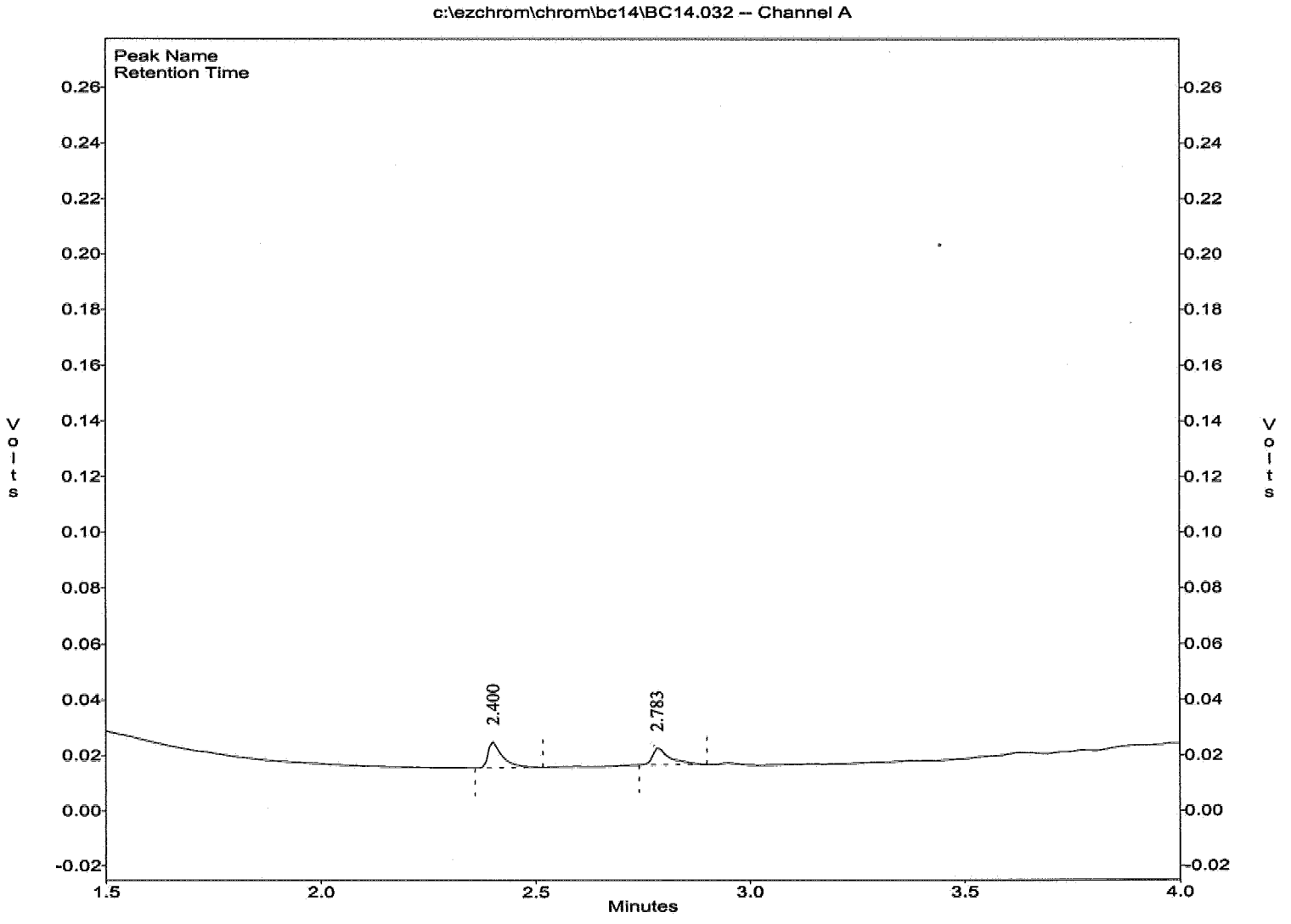
PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
ETHYLENE GLYCOL	ND	10	5

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\BC14.032
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : 06C096-01
Acquired : Mar 14, 2006 17:49:59
Printed : Mar 15, 2006 16:38:32
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
--	Ethylene Glycol	2.508	0	0.0	0.0



QC SUMMARIES

METHOD M8015
ETHYLENE GLYCOL

Client	: ENSR	Date Collected:	NA
Project	: UPGRADIENT INVESTIGATION, TRONOX	Date Received:	03/14/06
Batch No.	: 06C096	Date Extracted:	03/14/06 14:55
Sample ID:	MBLK1W	Date Analyzed:	03/14/06 14:55
Lab Samp ID:	EGC001WB	Dilution Factor:	1
Lab File ID:	BC14020A	Matrix :	WATER
Ext Btch ID:	EGC001W	% Moisture :	NA
Calib. Ref.:	BC14014A	Instrument ID :	GCT072

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
ETHYLENE GLYCOL	ND	10	5

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ENSR
PROJECT: UPGRADIENT INVESTIGATION, TRONOX
BATCH NO.: 06C096
METHOD: METHOD M8015

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	EGC001WB	EGC001WL	EGC001WC		
LAB FILE ID:	BC14020A	BC14016A	BC14017A		
DATE EXTRACTED:	03/14/0614:55	03/14/0613:54	03/14/0614:11	DATE COLLECTED:	NA
DATE ANALYZED:	03/14/0614:55	03/14/0613:54	03/14/0614:11	DATE RECEIVED:	03/14/06
PREP. BATCH:	EGC001W	EGC001W	EGC001W		
CALIB. REF:	BC14014A	BC14014A	BC14014A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethylene Glycol	ND	100	82.5	82	100	106	106	25	40-140	50

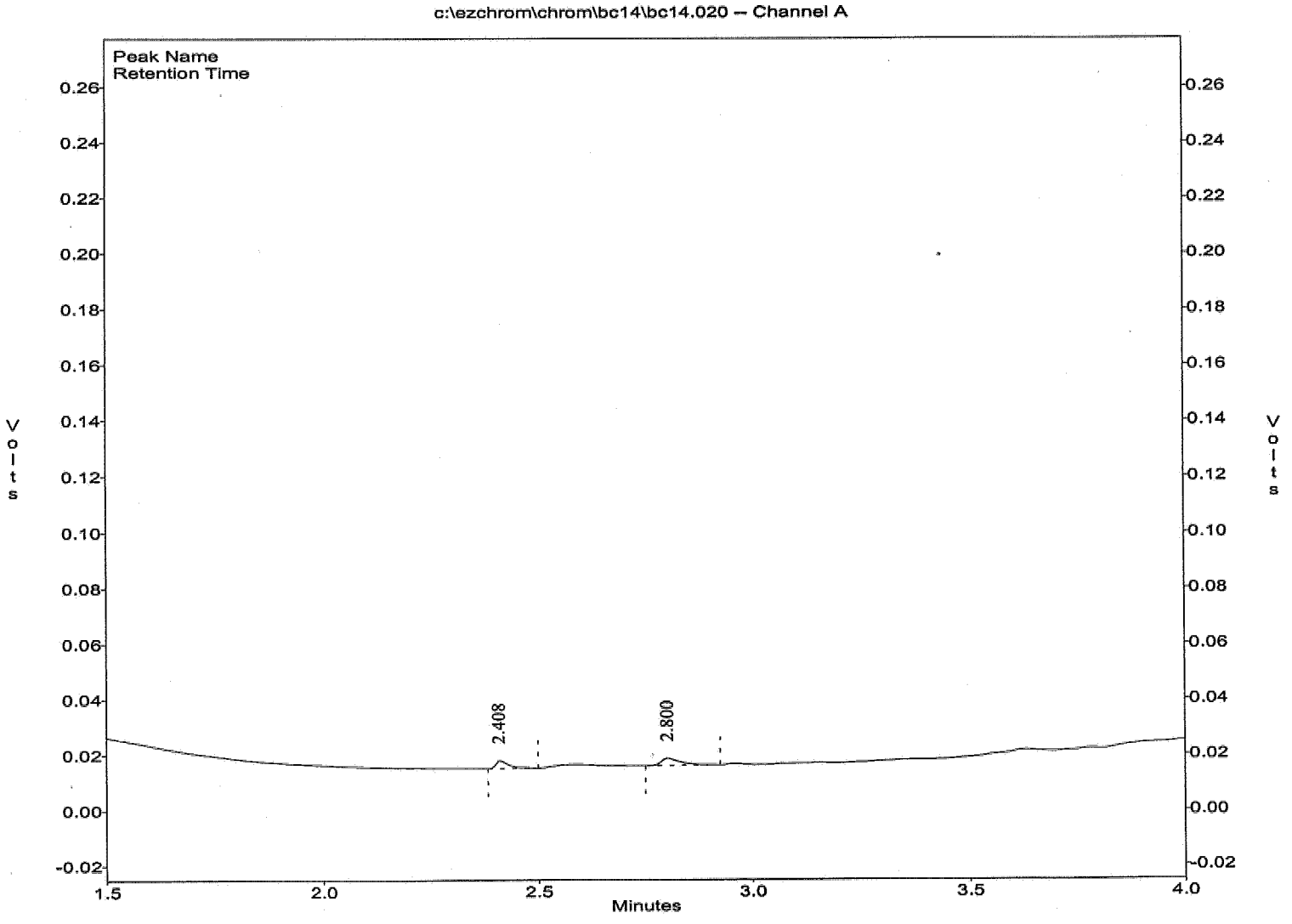
QC DATA

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\bc14.020
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EGC001WB
Acquired : Mar 14, 2006 14:55:39
Printed : Mar 15, 2006 12:40:51
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
--	Ethylene Glycol	2.508	0	0.0	0.0

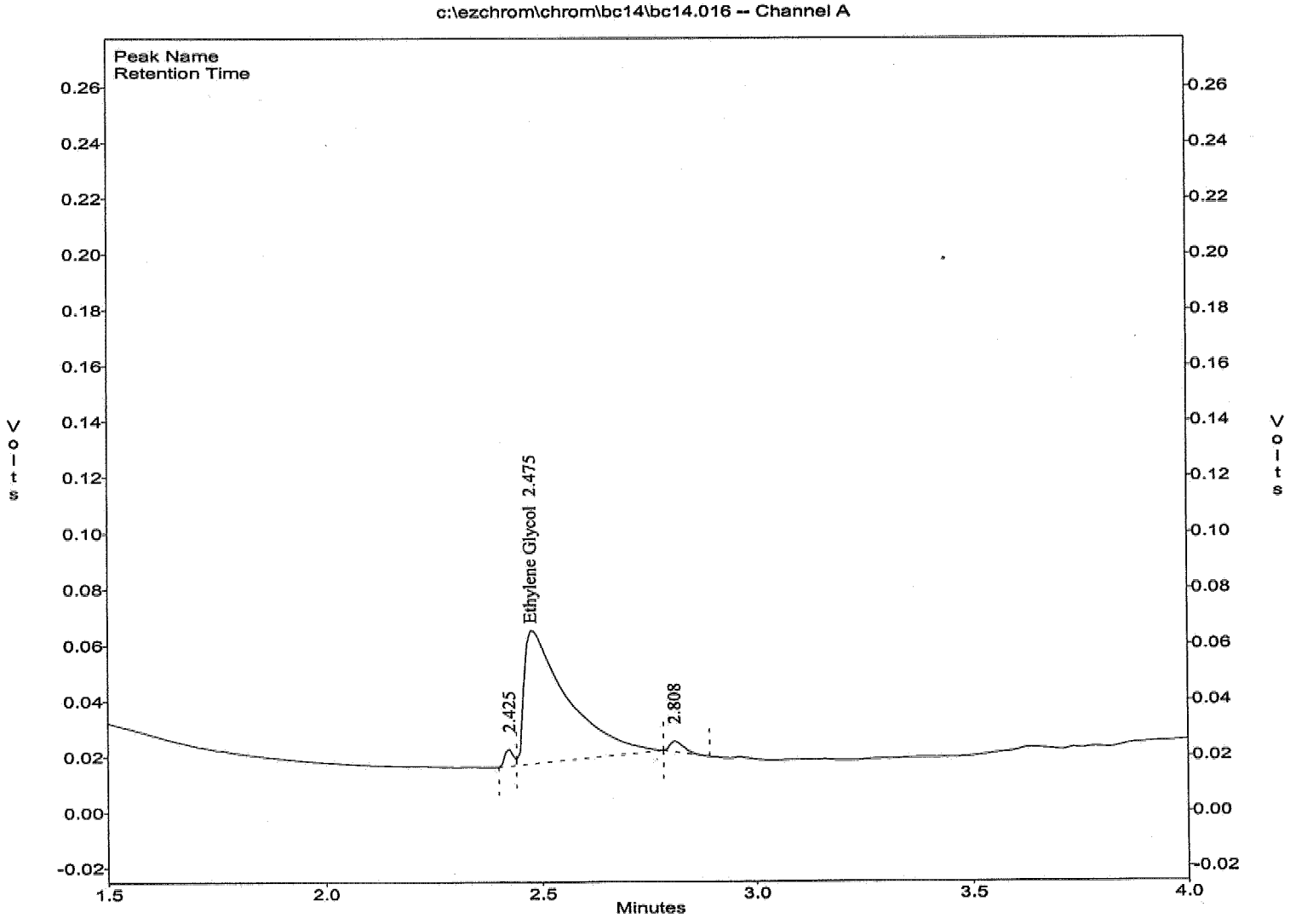


METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\bc14.016
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EGC001WL
Acquired : Mar 14, 2006 13:54:54
Printed : Mar 15, 2006 12:36:52
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
2	Ethylene Glycol	2.475	333695	3535.8	82.5

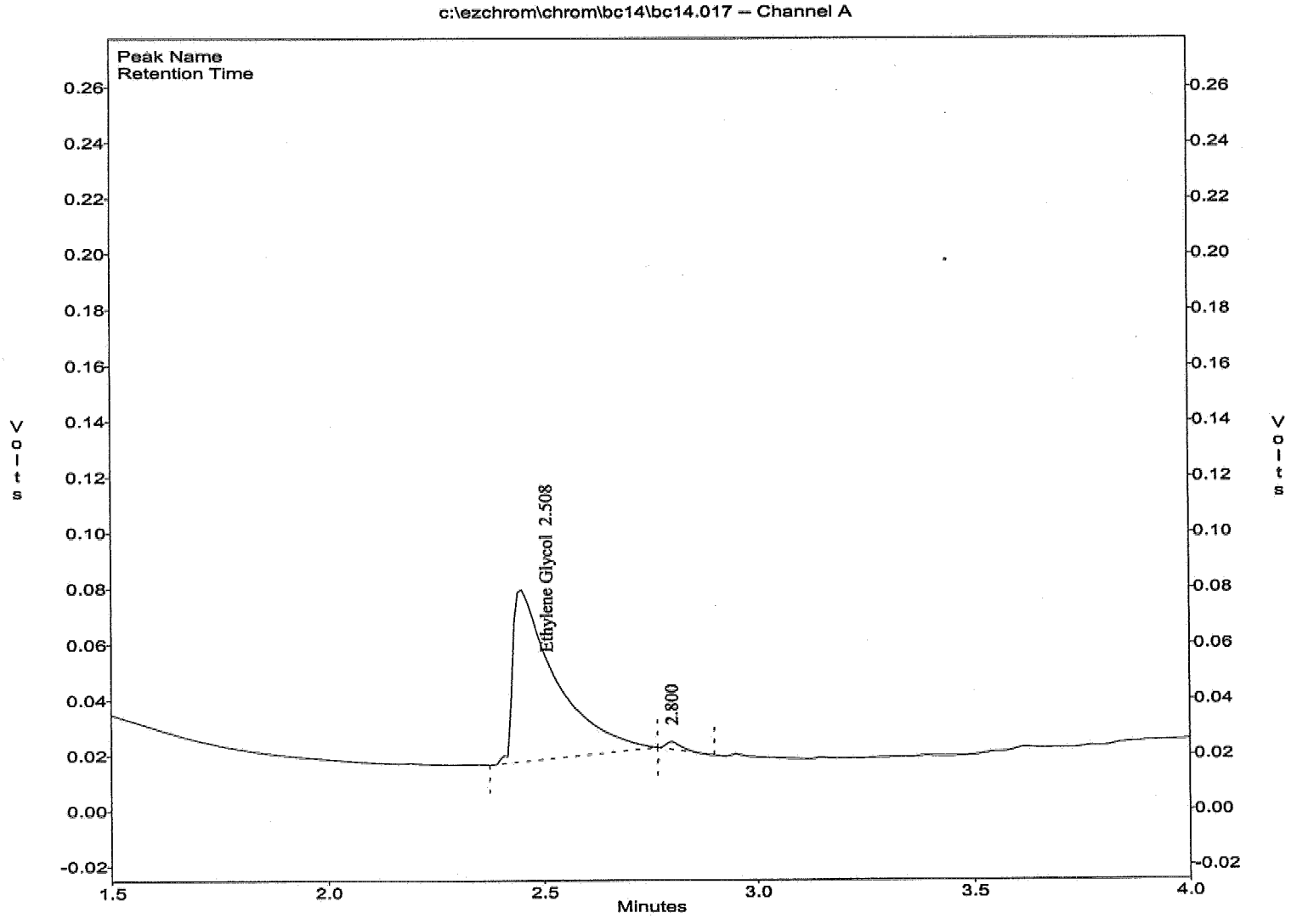


METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\bc14.017
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EGC001WC
Acquired : Mar 14, 2006 14:11:58
Printed : Mar 15, 2006 12:35:13
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.508	434117	3535.8	106.2



INITIAL CALIBRATION

INITIAL CALIBRATION
METHOD M8015EG

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : SUPELCO WAX 10
Column size ID : 30MX0.53MM 0.5UM
LFID & Datetime: BC10002A 03/10/06 08:22
LFID & Datetime: BC10003A 03/10/06 08:37
LFID & Datetime: BC10004A 03/10/06 08:53
LFID & Datetime: BC10005A 03/10/06 09:07
LFID & Datetime: BC10006A 03/10/06 09:22
CONC UNIT: ppm

COMPOUND	CONC X	CALIBRATION FACTORS 1.00X	2.00X	5.00X	(AREA)/UNIT 10.00X	20.00X	MEAN	%RSD
Ethylene Glycol	10.00	2453.80	2726.00	4230.76	4135.36	4133.07	3535.80	24.6

EG72C10.MET

Max %RSD = 24.59764 Limit for Linear or Quadratic Regression = .999
Selected Least Sqare Linear Regression for comps with %_RSD > .999
Amount = x0 + x1 * Area

IDX	Parameter	x0	x1	CorCoeF
1	Ethylene Glycol	3.868	2.3561E-04	.99941

4w 3/17/06

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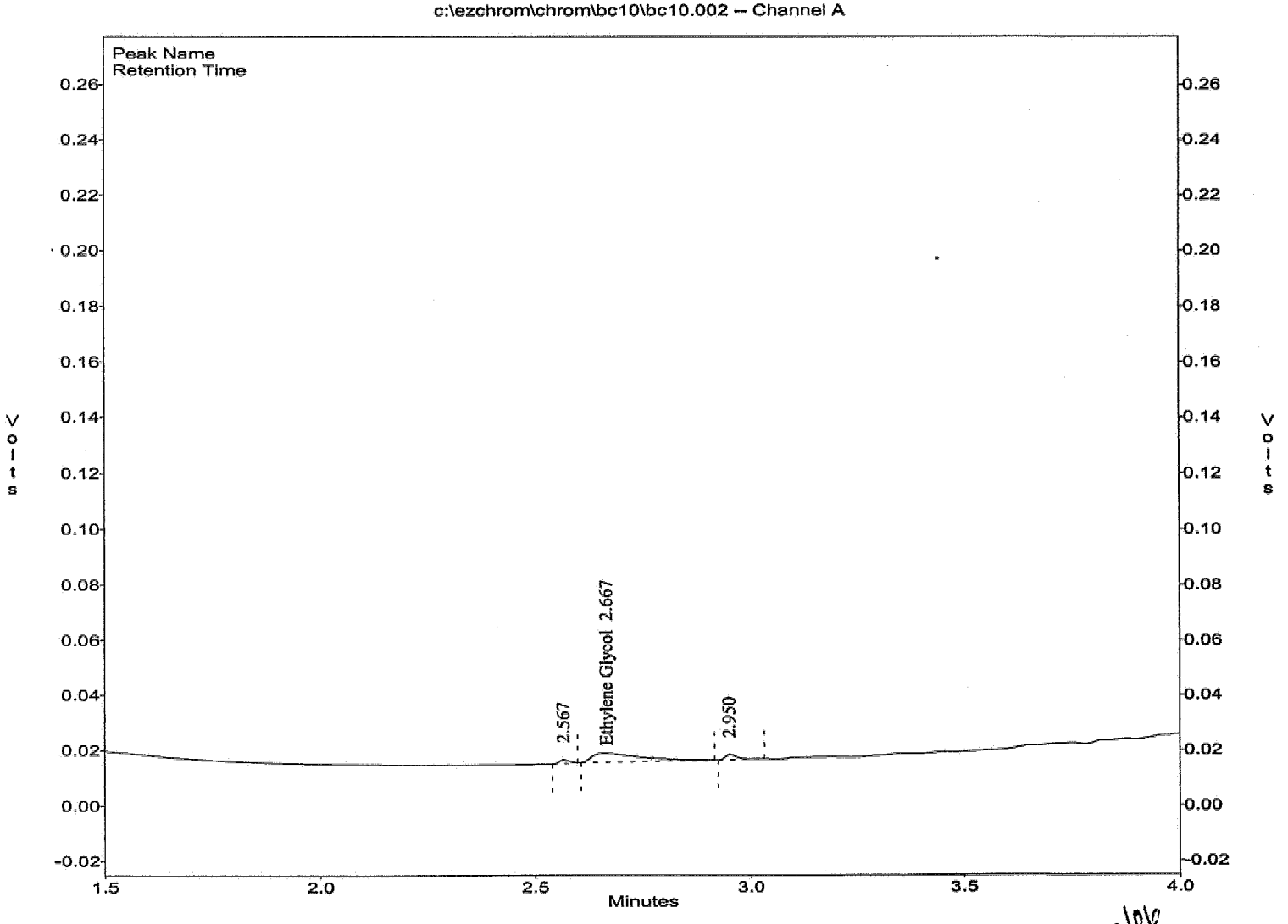
METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.002
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EG72C1001 10PPM
Acquired : Mar 10, 2006 08:22:48
Printed : Mar 15, 2006 11:29:34
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
2	Ethylene Glycol	2.667	24538	3535.8	10.0



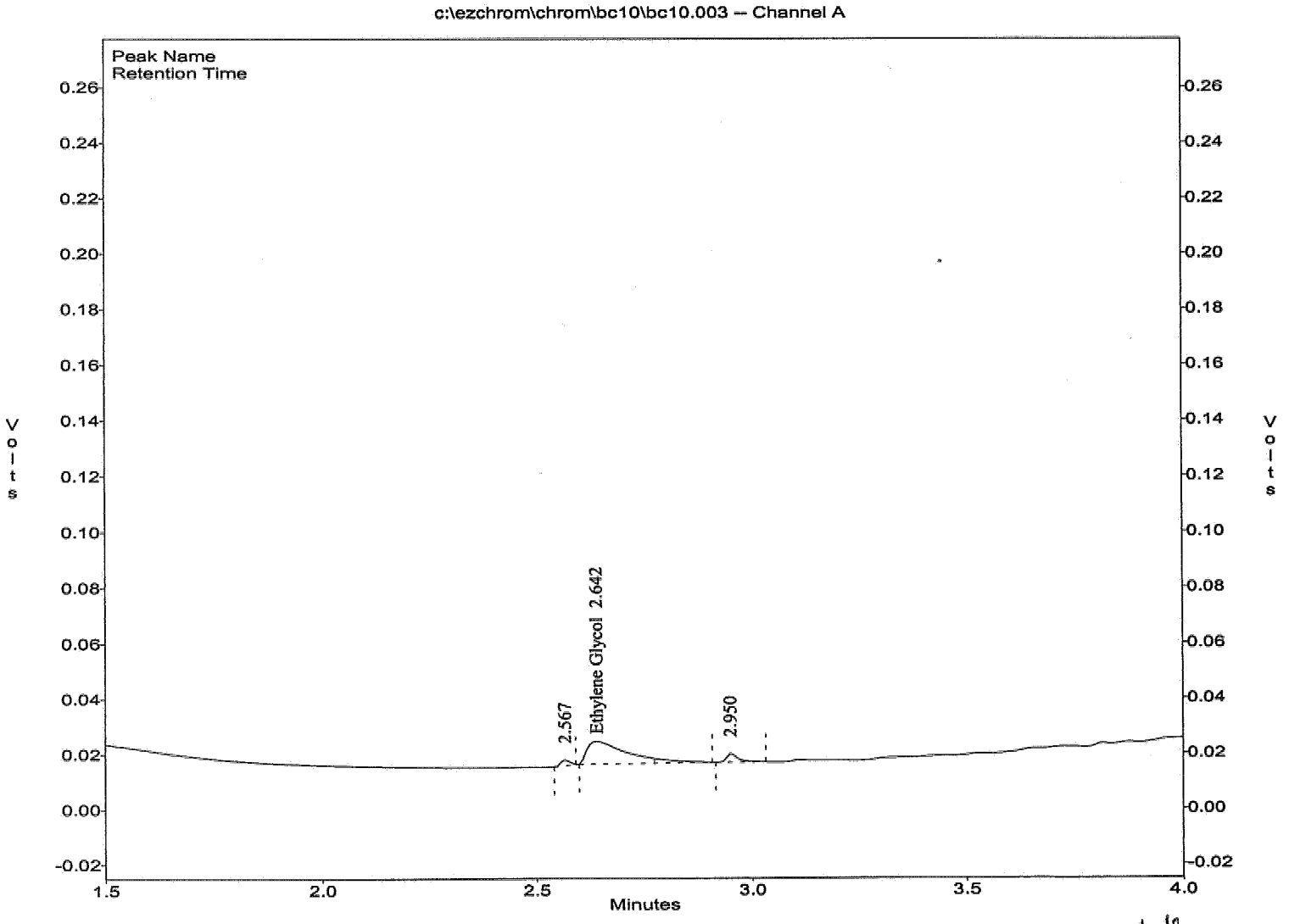
3/17/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.003
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EG72C1002 20PPM
Acquired : Mar 10, 2006 08:37:57
Printed : Mar 15, 2006 11:29:55
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
2	Ethylene Glycol	2.642	54520	3535.8	20.0



4C 3/17/06

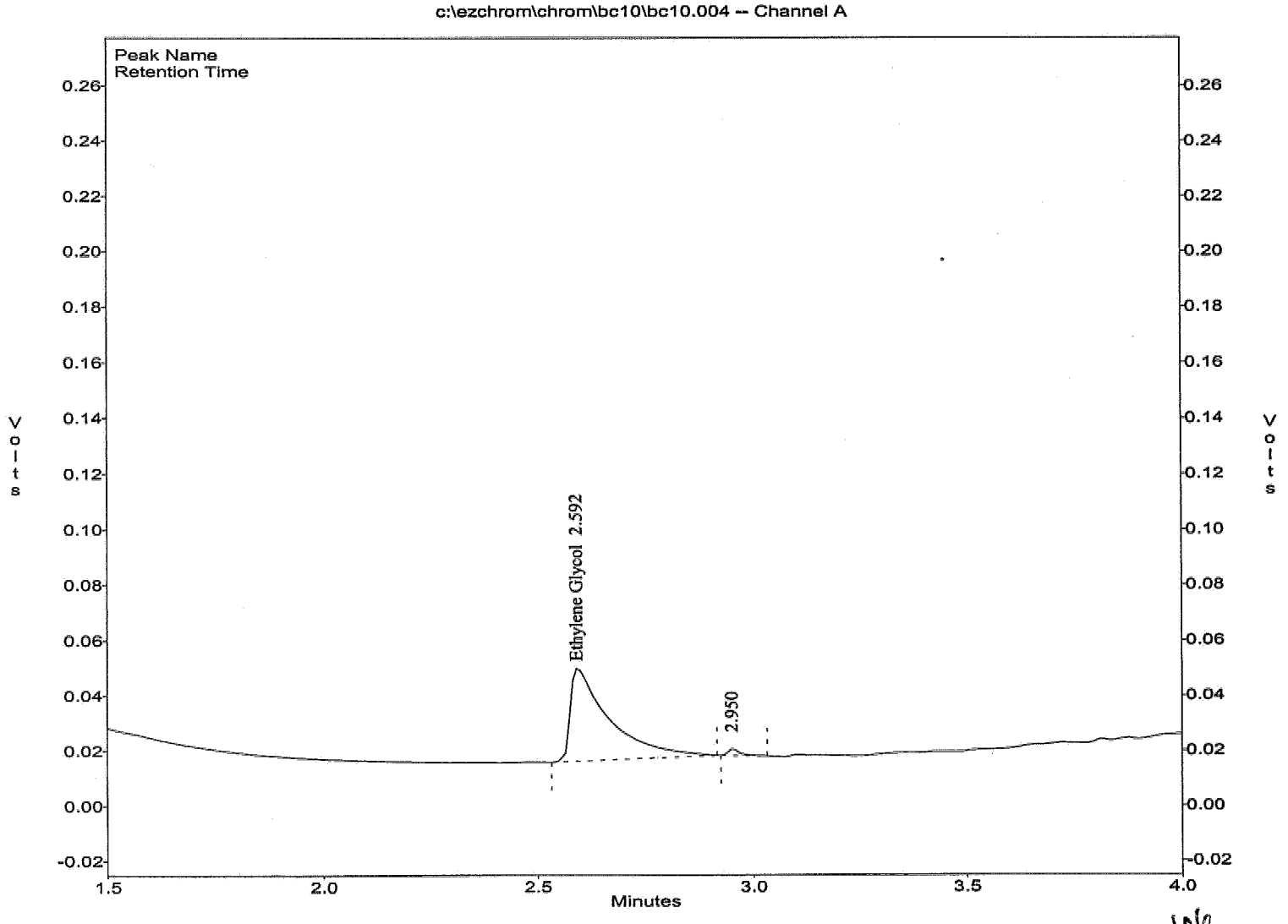
5168

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.004
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EG72C1003 50PPM
Acquired : Mar 10, 2006 08:53:04
Printed : Mar 15, 2006 11:30:03
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.592	211538	3535.8	50.0



3/17/06

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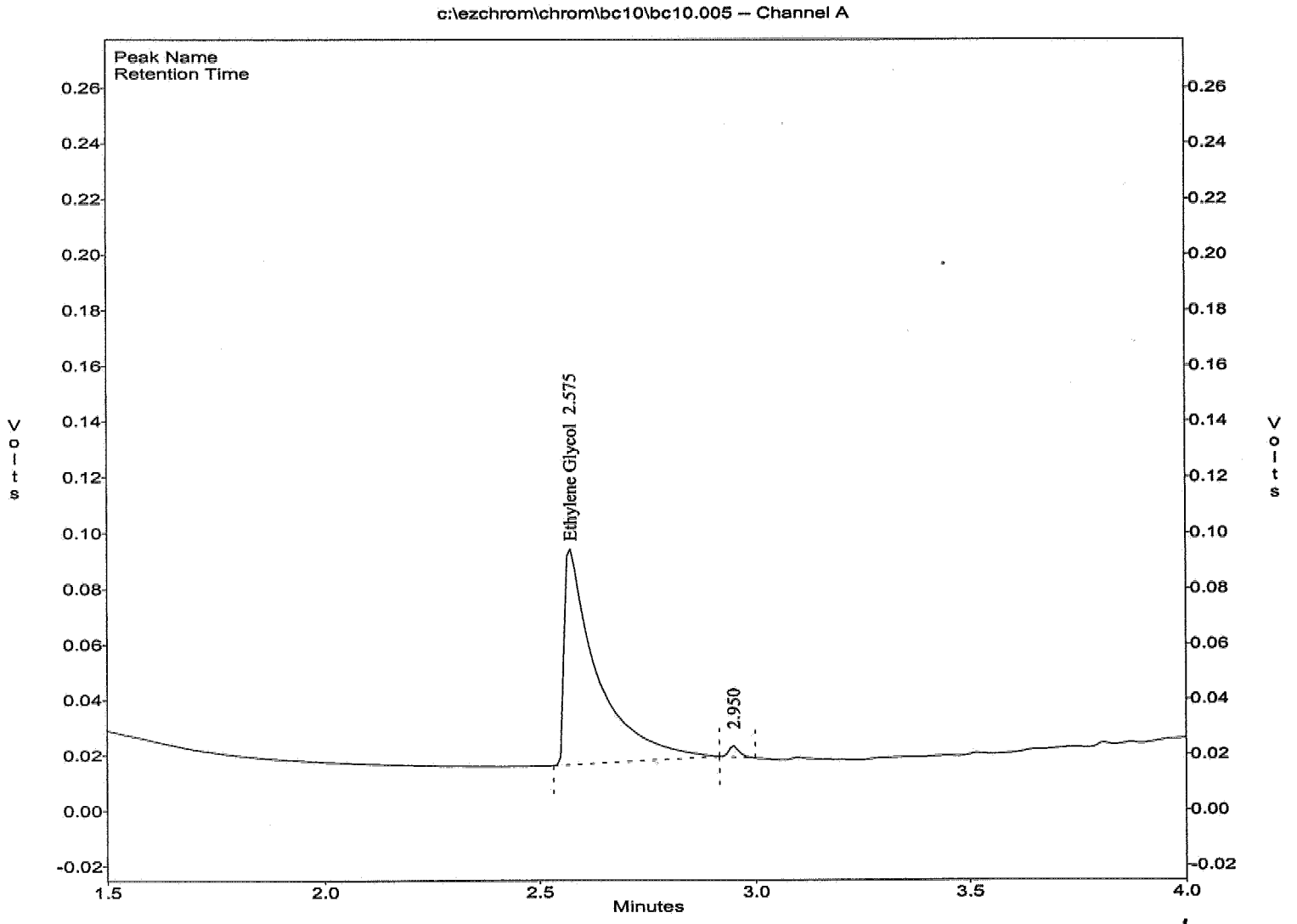
METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.005
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EG72C1004 100PPM
Acquired : Mar 10, 2006 09:07:46
Printed : Mar 15, 2006 11:30:11
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.575	413536	3535.8	100.0



3/17/06

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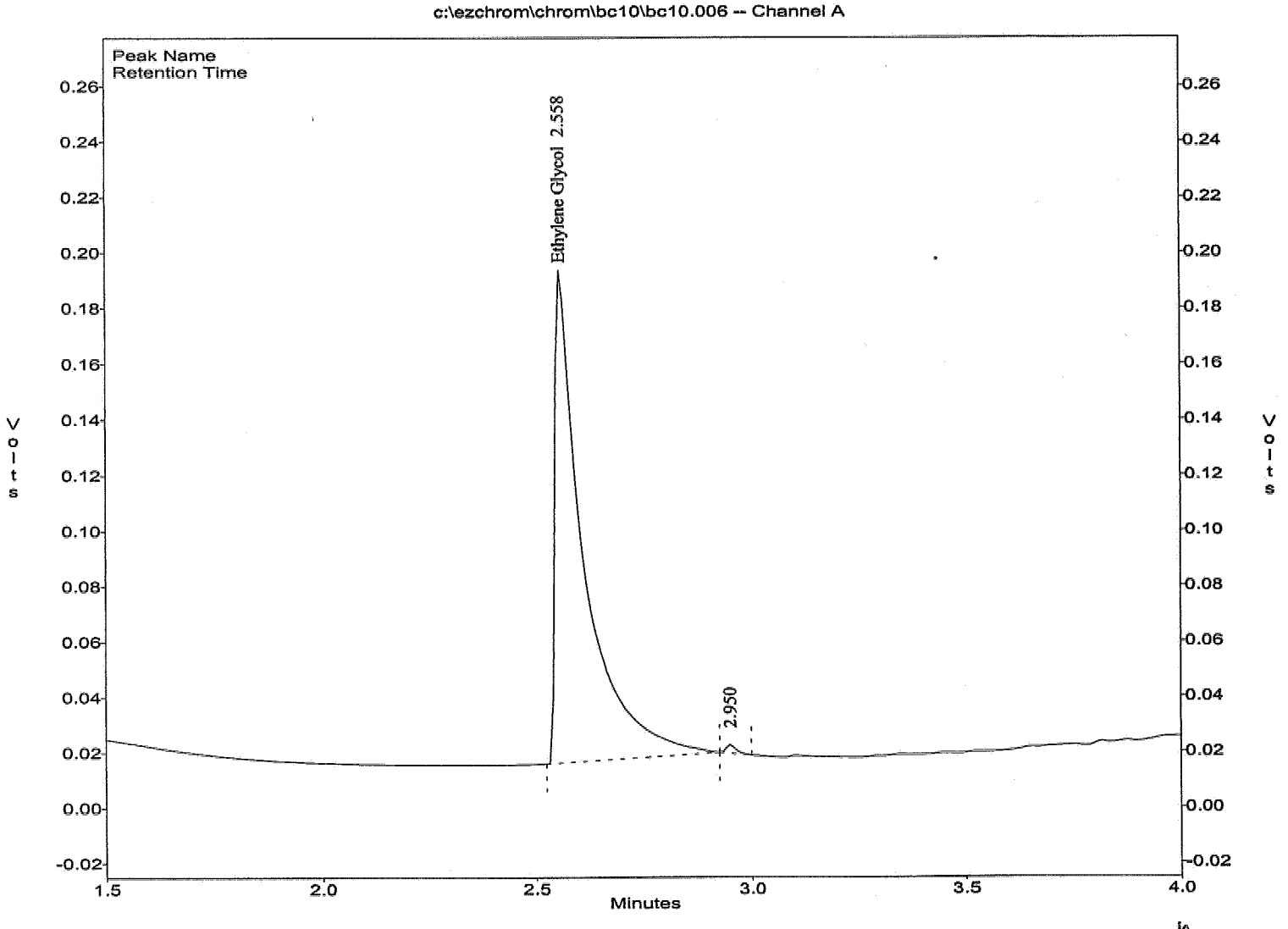
METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.006
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : EG72C1005 200PPM
Acquired : Mar 10, 2006 09:22:03
Printed : Mar 15, 2006 11:30:17
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.558	826614	3535.8	200.0



3/17/06

5103

SECOND SOURCE

INITIAL CALIBRATION VERIFICATION
METHOD M8015EG

Lab Name : EMAX
Instrument ID : GCT072
GC Columm : SUPELCO WAX 10
Column size ID : 30MX0.53MM 0.5UM
Mid Conc Init LFID & Datetime: BC10004A 03/10/2006 08:53
Conc Cont LFID & Datetime: BC10007A 03/10/2006 09:36
CONC UNIT : ppm

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Ethylene Glycol	2.592	2.363	2.821	50.0	3535.8	222870	56.38	13		15

EG72C10.MET

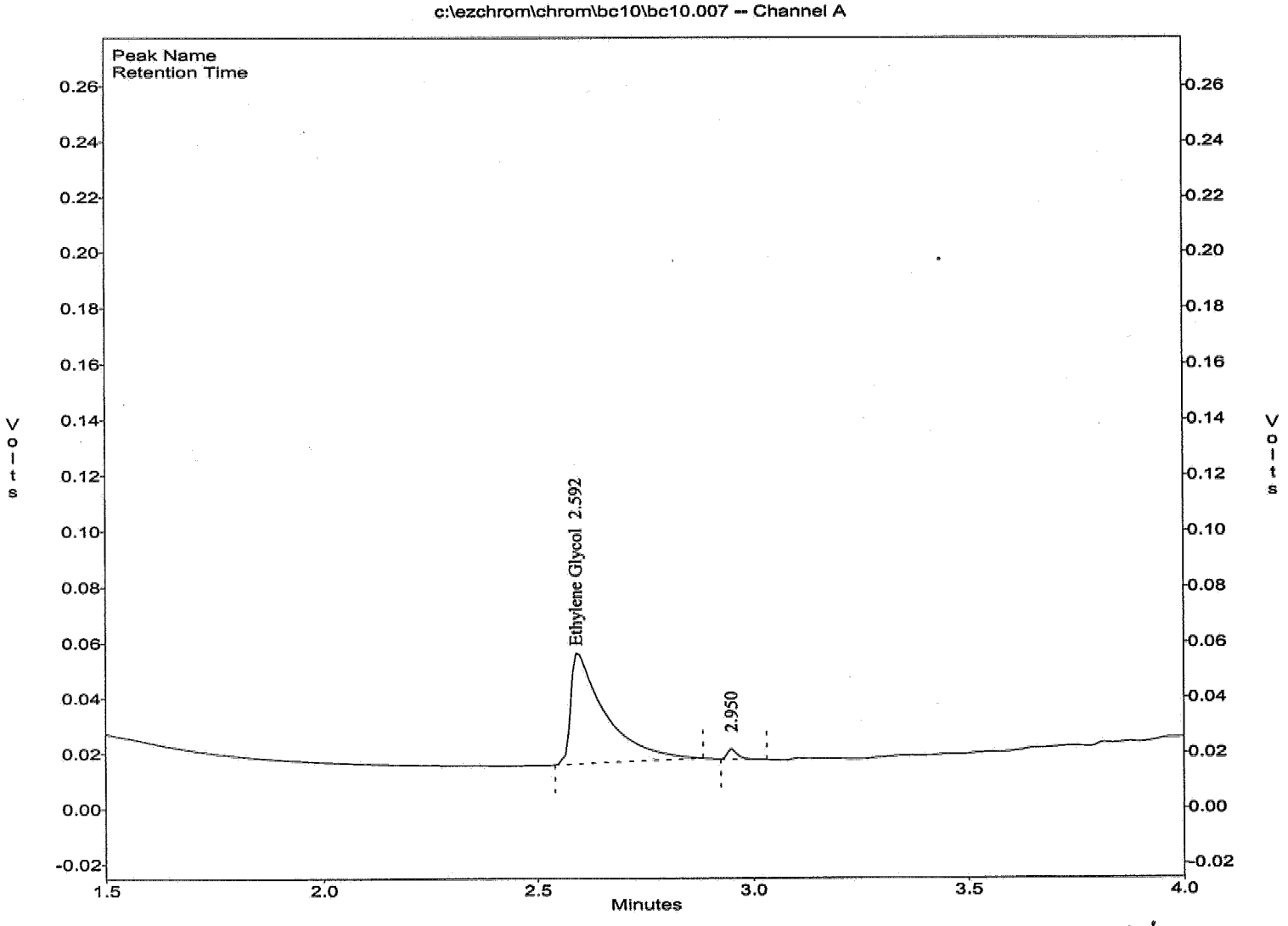
3/17/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.007
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : IEG72C1001 50PPM
Acquired : Mar 10, 2006 09:36:08
Printed : Mar 15, 2006 11:32:32
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.592	222870	3535.8	56.4



3/17/06

5185

INITIAL CALIBRATION VERIFICATION
METHOD M8015EG

Lab Name : EMAX
Instrument ID : GCT072
GC Column : SUPELCO WAX 10
Column size ID : 30MX0.53MM 0.5UM
Mid Conc Init LFID & Datetime: BC10005A 03/10/2006 09:07
Conc Cont LFID & Datetime: BC10008A 03/10/2006 09:50
CONC UNIT : ppm

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Ethylene Glycol	2.575	2.346	2.804	100.0	3535.8	404979	99.29	-1		15

EG72C10.MET

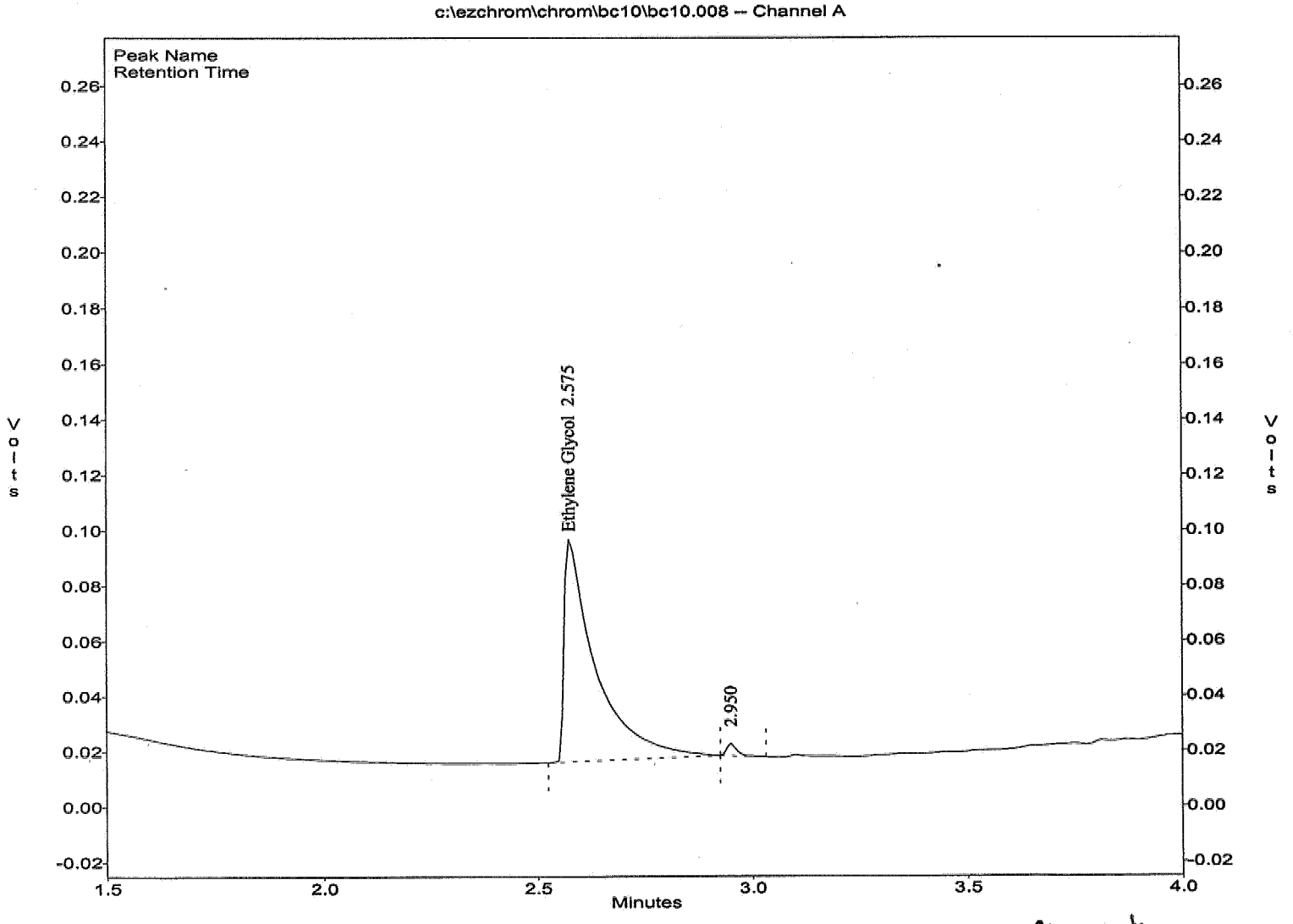
3/17/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.008
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : IEG72C1002 100PPM
Acquired : Mar 10, 2006 09:50:13
Printed : Mar 15, 2006 11:32:37
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.575	404979	3535.8	99.3



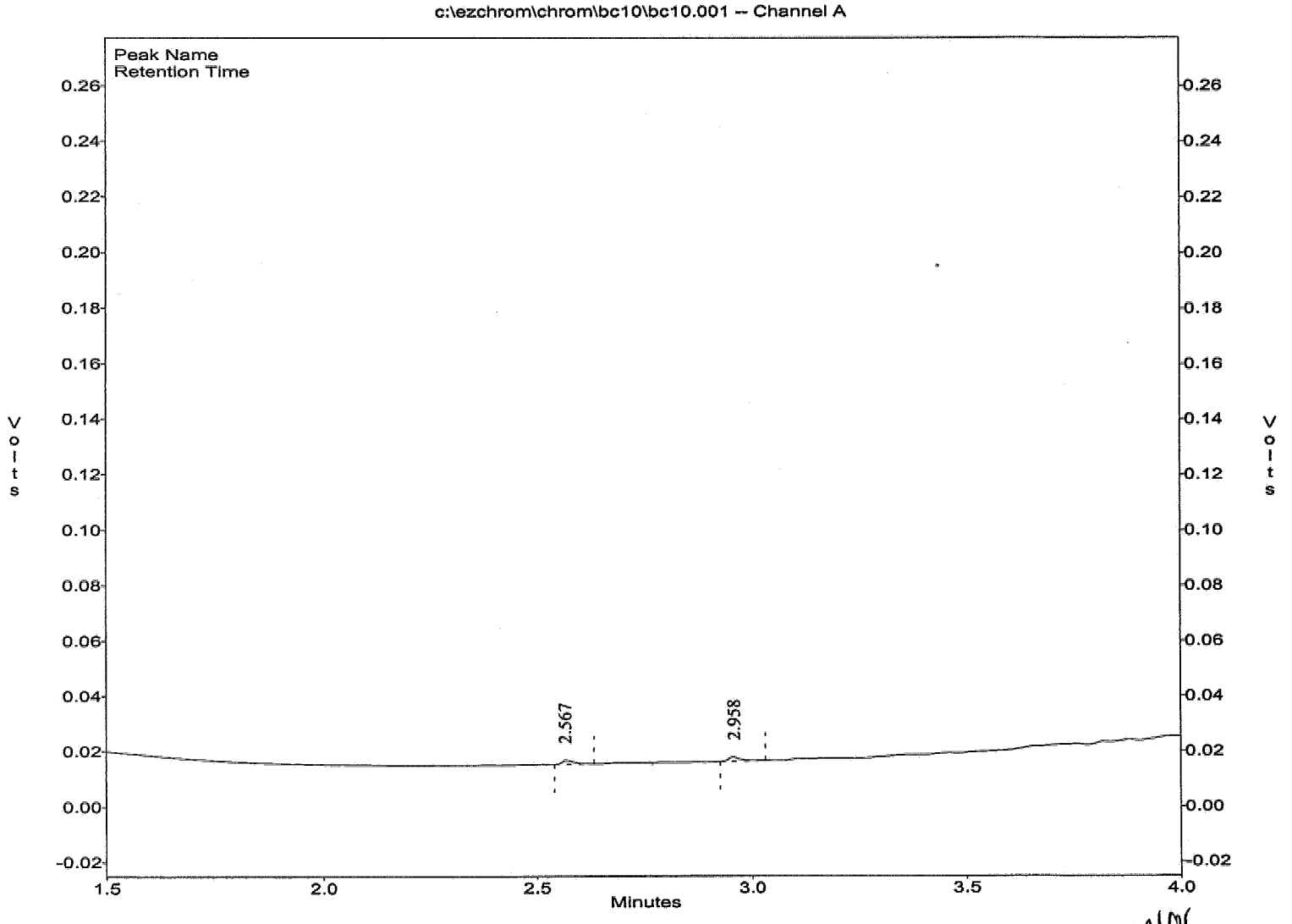
3/17/06

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc10\bc10.001
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : IB72C001
Acquired : Mar 10, 2006 08:08:48
Printed : Mar 15, 2006 11:33:28
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
--	Ethylene Glycol	2.558	0	0.0	0.0



3/17/06

5189

DAILY CALIBRATION

CONTINUE CALIBRATION
METHOD M8015EG

Lab Name : EMAX
Instrument ID : GCT072
GC Column : SUPELCO WAX 10
Column size ID : 30MX0.53MM 0.5UM
Mid Conc Init LFID & Datetime: BC10005A 03/10/2006 09:07
Conc Cont LFID & Datetime: BC14014A 03/14/2006 13:12
CONC UNIT : ppm

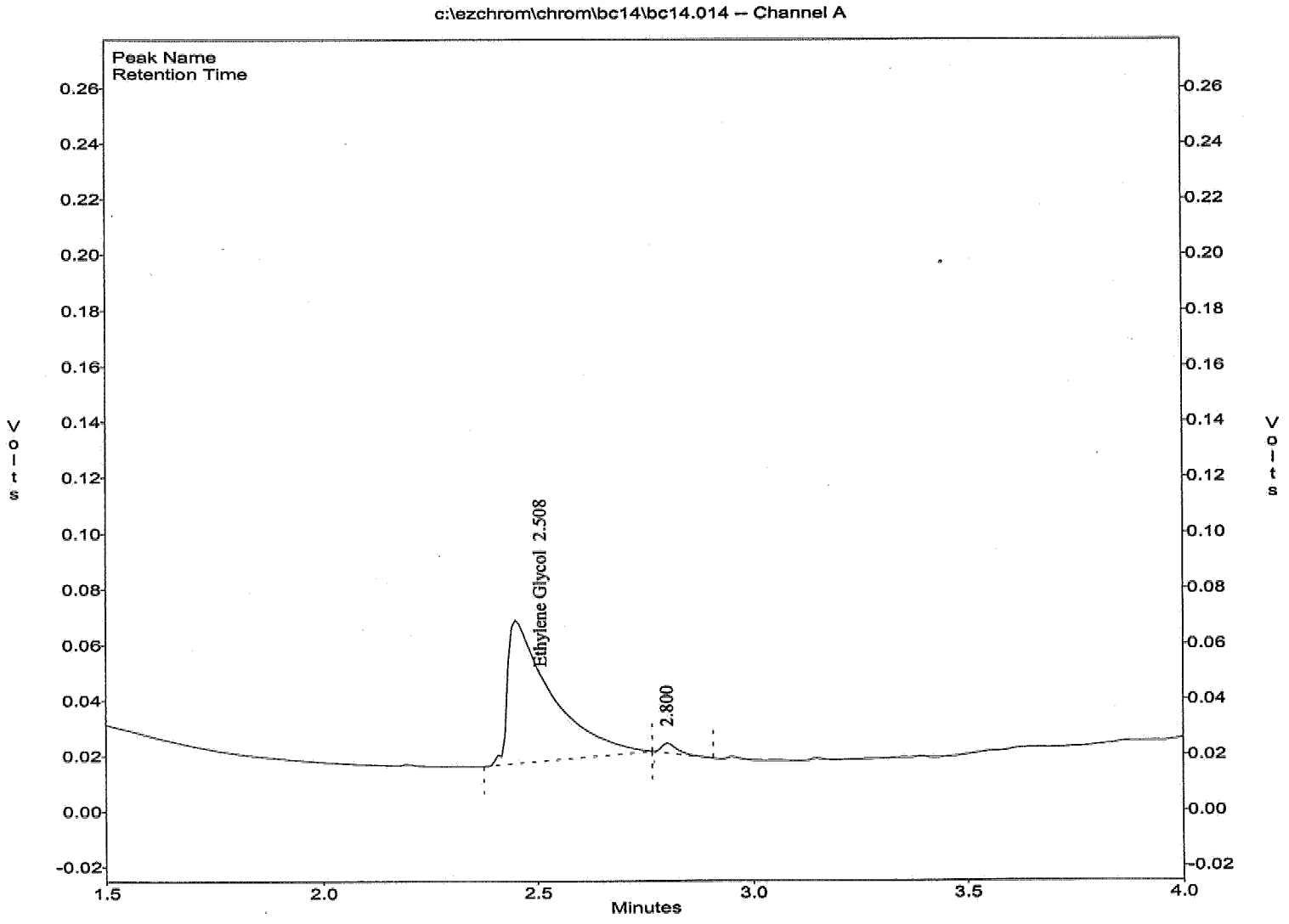
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Ethylene Glycol	2.508	2.279	2.737	100.0	3535.8	368681	90.73	-9		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\bc14.014
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : CEG72C10008 100PPM
Acquired : Mar 14, 2006 13:12:35
Printed : Mar 15, 2006 12:29:39
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc. (ppm)
1	Ethylene Glycol	2.508	368681	3535.8	90.7



CONTINUE CALIBRATION
METHOD M8015EG

Lab Name : EMAX
Instrument ID : GCT072
GC Columm : SUPELCO WAX 10
Column size ID : 30MX0.53MM 0.5UM
Mid Conc Init LFID & Datetime: BC10005A 03/10/2006 09:07
Conc Cont LFID & Datetime: BC14030A 03/14/2006 17:22
CONC UNIT : ppm

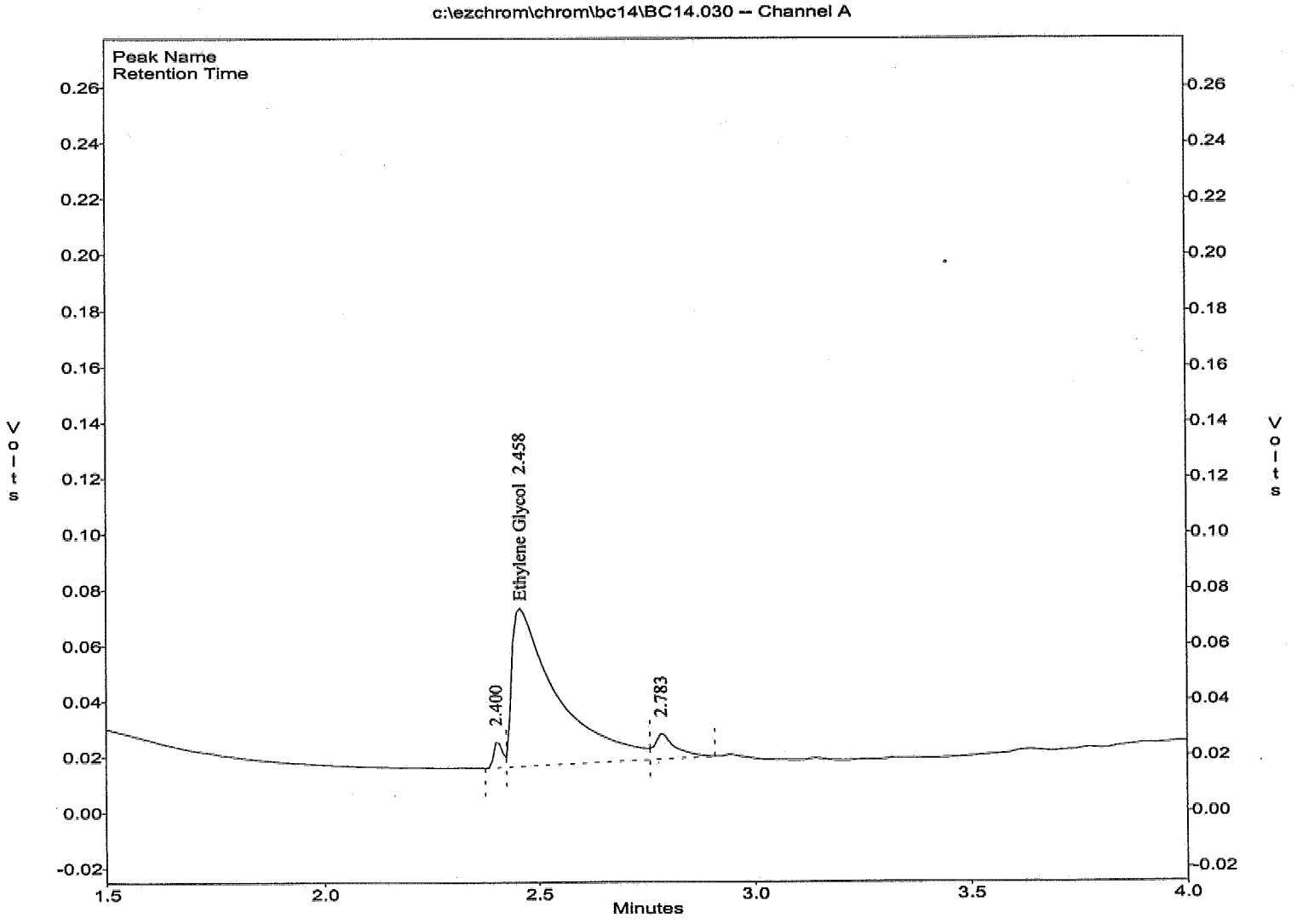
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Ethylene Glycol	2.458	2.229	2.687	100.0	3535.8	420401	102.92	3		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\BC14.030
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : CEG72C10009 100PPM
Acquired : Mar 14, 2006 17:22:55
Printed : Mar 15, 2006 12:45:58
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
2	Ethylene Glycol	2.458	420401	3535.8	102.9



CONTINUE CALIBRATION
METHOD M8015EG

Lab Name : EMAX
Instrument ID : GCT072
GC Columm : SUPELCO WAX 10
Column size ID : 30MX0.53MM 0.5UM
Mid Conc Init LFID & Datetime: BC10005A 03/10/2006 09:07
Conc Cont LFID & Datetime: BC14034A 03/14/2006 18:17
CONC UNIT : ppm

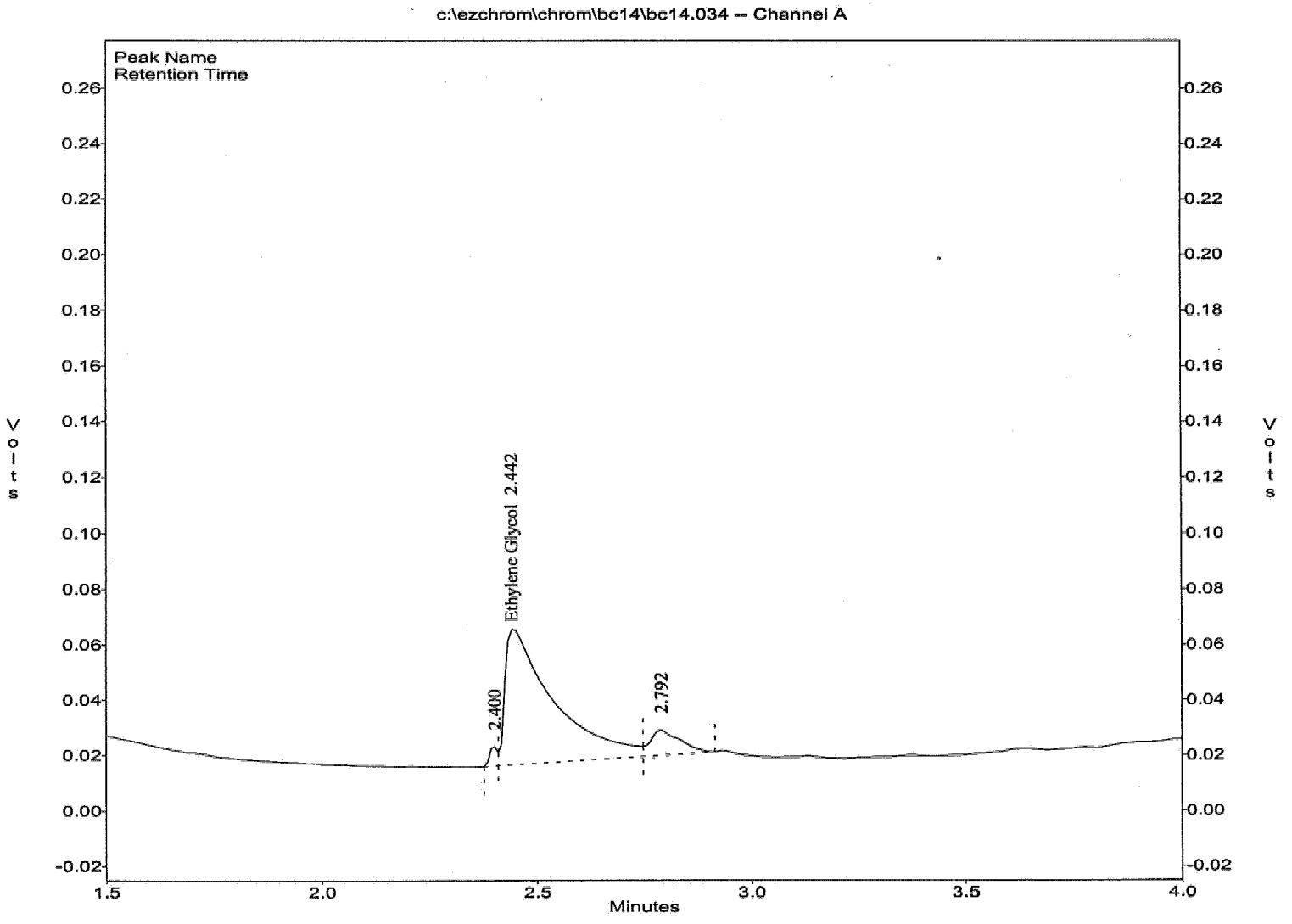
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Ethylene Glycol	2.442	2.213	2.671	100.0	3535.8	390826	95.95	-4		15

METHOD 8015 by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bc14\bc14.034
Method : c:\ezchrom\methods\eg72c10.met
Sample ID : CEG72C10010 100PPM
Acquired : Mar 14, 2006 18:17:40
Printed : Mar 15, 2006 13:39:05
User : LUCY

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppm)
2	Ethylene Glycol	2.442	390826	3535.8	96.0



ANALYTICAL LOGS

ANALYSIS RUN LOG FOR TPH

SOP ☐ EMAX-M8015 ☑ 8015 Ethylene Glycol Starting Date 3/10/06 Time 08:08 Ending Date 03/10/06 Time 16:25 Book # RA72-003

ANALYTICAL BATCH BC10023

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	BC10.001	IB72C001				
	.002	EG72C10001 (RA 3/10/06)				10ppm ICAL
	.003	EG72C1002				20
	.004	03				50
	.005	04				100
	.006	05				200
	.007	IEG72C1001				50ppm
	.008	02				100ppm
	.009	(3) EVIAN TEST				IB72C002
	.010	BAKE START GC				
	.011	(5) VOA H2O				
	.012	TEST				
	.013					
	.014					
	.015					
	.016					
	.017					
	.018					
	.019					
	.020					
	.021					
	.022	IB72C003				
	.023	CEG72C10001				100ppm
EGC006S	.024	EGC006SB	1	✓		
	.025	SL				
	.026	SC				
	.027	EGC007SL				

Instrument No:		72
INITIAL CALIBRATION REFERENCE		
	ID	Date
Diesel		
Motor oil		
JP 5		
Ethylene glycol	EG72C10	03/10/06

Standards		
Name	ID	Conc. (mg/L)
CH_2Cl_2	—	—
H_2O	organic free	NA
~~DCC Ethylene glycol~~	~~SS3C-07-12-3~~	~~100~~
ICAL Ethylene glycol	SS3C-07-13-1	10-200
ICV EG	SS3C-07-13-2	50-100ppm

Electronic Data Archival	
Location	Date
☐ EZC_10_Pesticides/Diesel	
☐	

Comments:

Analyzed By: XP / CA

Disposed on: 03/13/06 By: CA

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ANALYSIS RUN LOG FOR TPH

SOP ☐ EMAX-M8015 ☑ 8015M ethylene diesel Starting Date 03/14/06 Time 09:51 Ending Date 03/14/06 Time 16:40 Book # RA72-003

ANALYTICAL BATCH BC14002

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	BC14.001	IB72C006				
	.002	CEG72C10006				100ppm
EGC008S	.003	EGC008SX	1	✓		
	.004	SY				
	.005	SQ				
	.006	06BC081-01				
	.007	MW06 -02				
	.008	-03				
	.009	-06				
	.010	-10				
	.011	-08				
	~~.012~~	~~-08~~				wrong entry
	.013 12	-08A				
	.014 13	-08S				
	.015 14	CEG72C10008				100ppm
EGC008S	.016 15	06BC081-08S MS/MSD 14/07	1	✓		
EGC001W	.017 16	EGC001WL	1		✓	
	.018 17	1WC				
	.019 18	2WL				
	.020 19	2WC				
	.021 20	EGC002WB				
	.022 21	MDL-1				*20ppm MDL STUDY
	.023 22	-2				
	.024 23	-3				
	.025 24	-4				
	.026 25	-5				
	.027 26	-6				

Instrument No:	72

INITIAL CALIBRATION REFERENCE

	ID	Date
Diesel		
Motor oil		
JP 5		
Ethylene Diesel	EG72C10	03/10/06

Standards

Name	ID	Conc. (mg/L)
CH_2Cl_2	—	—
H_2O	organic free	NA
Ethylene Diesel DRC	SS3C-07-12-3	100
LCS/LCSD	SS3C-07-12-2	1000

Electronic Data Archival

Location	Date
☐ EZC_10_Pesticides/Diesel	
☐	

Comments:

* MDL Source → SS3C-07-12-2 (1000ppm)

Analyzed By: [signature]

Disposed on: 03/15/06 By: [signature]

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ANALYSIS RUN LOG FOR TPH

SOP ☐ EMAX-M8015 ☒ Ethylene Glycol (BOWM) Starting Date 03/14/08 Time 16:40 Ending Date 03/14/08 Time 18:17 Book # RA72-003

ANALYTICAL BATCH BC14007

Preparative Batch	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
	BC14 0282 7	MDL-7	1		✓	
	0283 8	MDL VER1	↓		↓	10ppm
	0302 9	TEST				
	0303 0	CEG72C10009				100ppm
EGC001W	0323 1	06B0081-MI	1		✓	
↓	0323 2	06B0096-01	↓		↓	100ppm
	033	CEG72C10010				BRO INJ.
	034	CEG72C10010				100ppm

RS

Instrument No:	72

INITIAL CALIBRATION REFERENCE

	ID	Date
Diesel		
Motor oil		
JP 5		
Ethylene Glycol	EG72C10	03/10/08

Standards

Name	ID	Conc. (mg/L)
CH_2Cl_2	—	—
H2O	organic free	NA
Ethylene Glycol	8S3C-07-12-3	100

Electronic Data Archival

Location	Date
☐ EZC_10_Pesticides/Diesel	
☐	

Comments:

* MDL Source - 8S3C-07-12-2 (1000ppm)

Analyzed By: RS

Disposed on: 03/15/08 By: RS

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EMAX LABORATORIES, INC. 1835 W. 205th St. Torrance, CA 90501