AR_N00236_003135
ALAMEDA POINT
SSIC NO. 5090.3.A

4005 Port Chicago Highway
Concord, CA 94520
(925) 288-9898 (Main Line)
(925) 288-0888 (Fax)

Shaw® Shaw Environmental, Inc.

April 20, 2007

Mr. Doug DeLong
Environmental Compliance Manager
U.S. Department of the Navy – Caretaker Site Office
San Francisco Bay Area
410 Palm Avenue, Building 1 – Suite 161
San Francisco, California 94130-1806

Contract Number: N62474-98-D-2076, Environmental Remedial Action

Contract Task Order Multiple CTOs at Alameda Point, Alameda, California
Document Control Numbers 0133_dcn_10202_0 and NAV011-012H

Subject: **Self-Monitoring Report – 1st Quarter 2007**
Wastewater Discharge Permit No. 5024981 2
Alameda Point, Alameda, California

Dear Mr. DeLong:

This letter report has been prepared pursuant to the Self-Monitoring Reporting Requirements of the East Bay Municipal Utility District (EBMUD) Wastewater Discharge Permit No. 5024981 2. This letter summarizes the discharge activities conducted and data collected during the first quarter of 2007 (January 1 to March 31, 2007) for the pretreatment systems (Plume 4-2 [Building 360] and Building 5) at Alameda Point, Alameda, California. Attached is Table 1, which summarizes the analytical results for the wastewater discharge samples collected during this reporting period for the Plume 4-2 (Building 360) and Building 5 pretreatment systems.

Building 397 Pretreatment System

The Building 397 pretreatment system stopped operations on December 1, 2006 as described in the *Self-Monitoring Report - 4th Quarter 2006 Waste Discharge Permit No. 5024981 2, Alameda Point, Alameda, California* dated January 15, 2007. The Self-Monitoring Report also mentioned that the Navy planned to move the pretreatment system from Building 397 to Building 112 in the second quarter of 2007, which is still anticipated. A response from the EBMUD is pending on

the application, *Permit Modification Request, Re-Location of the Pretreatment Plant at Building 397, Waste Discharge Permit No. 5024981 2, Alameda Point, Alameda, California,* dated March 26, 2007.

Plume 4-2 (Building 360) Pretreatment System

The Plume 4-2 treatment system at Building 360 continued operation during this quarter (from January 1 to April 2, 2007). Condensate generated from the treatment system continued to be pre-treated in the liquid phase granular activated carbon (GAC) vessels. Pre-treatment was conducted prior to discharge to the Publicly-Owned Treatment Works (POTW), via the permitted outfall (manhole 2-14) located within the system compound at Building 360. In addition to the condensate, water generated from maintenance of the condensate management system was processed through the GAC vessels before joining the treated condensate in the discharge to the POTW. In this reporting period, the total volume of condensate discharged from the system to the POTW was approximately 356,250 gallons.

General maintenance activities included periodic cleaning of the condensate filters to remove solid buildup in the filter vessels. The GAC vessels were changed out once in this quarter, during the week of January 22, 2007. Due to frequent solid buildup in the condensate management system, few extra condensate filters were added to the system to handle the excessive solid buildup issues. No other system modification was made in this quarter.

Monthly sampling of the treated effluent from the GAC vessels was also performed in compliance with the EBMUD discharge permit requirements. In this quarter, the effluent stream was sampled on January 9th, February 23rd, and March 22nd.

All effluent samples were submitted to Severn Trent Laboratory for analysis of volatile organic compounds, semivolatile organic compounds, and oil and grease. The volatile organic compound list specifically included benzene, toluene, ethyl benzene, and xylenes. All effluent discharge sample results show that the regulated parameters were within the discharge limits.

Site 5 Pretreatment System

The Six-Phase Heating/Vacuum Extraction and associated wastewater pretreatment system at Site 5 operated approximately 1,035 hours during this reporting period. Discharge sampling was conducted on January 18 and February 20, 2007 for monthly compliance monitoring. The system did not operate during the month of March. The analytical results, summarized in the attached Table 2, indicate compliance with EBMUD Wastewater Discharge Permit Number 5024981 2 wastewater discharge limitations.

During this reporting period, a total of 40,419 gallons of groundwater were extracted or collected from the Six-Phase Heating/Vacuum Extraction system, processed through the associated wastewater pretreatment system at Site 5, and discharged to the sanitary sewer system.

Should you have any questions or need additional information, please contact the undersigned at (925) 288-2023.

Sincerely,
SHAW ENVIRONMENTAL, INC.

Kim MacFarlane

Kim MacFarlane
Environmental Engineer

Attachments:
Table 1
Table 2

cc: Gregory Grace, U.S. Navy ROICC
Michelle Hurst, U.S. Navy RPM
Steven Peck, U.S. Navy RPM
John McGuire, Shaw
John McMillan, Shaw
U.S. Navy Basic Contract File (w/o enclosure)
Shaw Project Files

TABLES

Table 1
Plume 4-2 (Bldg 360) Pretreatment System
Effluent Water Analytical Summary - First Quarter 2007
CTO# 133, Alameda Pt., Alameda, CA

Constituents [1]	Discharge Limits [2] (µg/l)	Effluent Concentration (µg/l) for Sample Collected on		
		1/9/07	2/23/07	3/22/07
VOCs [3]				
Benzene	5	ND<0.5 [4]	ND<0.5	ND<0.5
Toluene	5	ND<0.5	1.1	ND<0.5
Ethylbenzene	5	ND<0.5	ND<0.5	ND<0.5
Total Xylenes	5	ND<1	ND<1	ND<1
TICH[5]	500	2.2	0.7	2.3
SVOCs [6]				
All parameters	None [7]	ND	ND	ND
Others				
Hydrocarbon - Oil & Grease[8]	100,000	ND<2,000	ND<2,000	ND<2,000

Notes:

1) The non-listed constituents were not detected at or above their reported practical quantitation limit (PQL).
2) Discharge limits as defined in EBMUD Wastewater Discharge Permit No. 5024981 2 and EBMUD Ordinance No. 311.
3) The samples were analyzed by US EPA Method 8260B.
4) ND<0.5 - Constituent not detected at or above the reported PQL (0.5 ug/l in this case).
5) TICH - Total Identifiable Chlorinated Hydrocarbons
6) The samples were analyzed by US EPA Method 8270C.
7) No discharge limit defined in EBMUD Wastewater Discharge Permit No. 5024981 2 or EBMUD Ordinance No. 311.
8) The samples were analyzed by US EPA Method 1664-SGT.

Table 2
Site 5 Pretreatment System
Effluent Water Analytical Summary - First Quarter 2007
CTO# 133, Alameda Pt., Alameda, CA

Constituents [1]	Discharge Limits [2] (µg/l)	Effluent Concentration (µg/l)	
		1/18/2007	2/15/2007
VOCs [3]			
Benzene	5	ND<0.5 [4]	ND<0.5
Isopropyl Benzene	n/a [5]	0.35J	0.42J
2-Butanone	n/a [5]	ND<10	ND<10
Naphthalene	n/a [5]	ND<0.5 [4]	0.82
TICH[6]	500	0.26 [7]	1.07 [8]
SVOCs [9]			
Butylbenzylphthalate	n/a [5]	ND<9.4	ND<9.4
Others			
Hydrocarbon Oil & Grease [10]	100,000	ND<5,000	ND<5,000

Notes:

1) The non-listed constituents were not detected at or above their reported practical quantitation limit (PQL).
2) Discharge limits as defined in EBMUD Wastewater Discharge Permit No. 5024981 2 and EBMUD Ordinance No. 311.
3) The samples were analyzed by US EPA Method 624/8260B.
4) ND<0.5 - Constituent not detected at or above the reported PQL of 0.5 ug/l.
5) n/a - No discharge limit defined in EBMUD Wastewater Discharge Permit No. 5024981 2 or EBMUD Ordinance No. 311.
6) TICH - Total Identifiable Chlorinated Hydrocarbons
7) Constituent detected was cis-1,2-Dichloroethene (0.26J µg/L).
8) Constituents detected were 1,1-Dichloroethane (0.27J µg/L), cis-1,2-Dichloroethene (0.49J µg/L), and vinyl chloride (0.31J µg/L).
9) The samples were analyzed by US EPA Method 3520C/8270C.
10) The samples were analyzed by US EPA Method 1664-SGT/413.1.

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CLIENT: **SHAW E&I**

PROJECT: **ALAMEDA POINT, CTO 133**

SDG: **07A051**

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GC/MS-SVOA	**	3000 –
GC-VOA	**	4000 –
GC-SVOA	**	5000 –
HPLC	**	6000 –
METALS	**	7000 –
WET	**	8000 –
OTHERS	**	9000 –

** - Not Requested

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

Date: 01-22-2007
EMAX Batch No.: 07A051

Attn: Rose Condit

Shaw E&I
4005 Port Chicago Hwy
Concord CA 94520

Subject: Laboratory Report
Project: Alameda Point, CTO 133

Enclosed is the Laboratory report for samples received on 01/10/07.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
133-4-2INF(01/09/07)	A051-01	01/09/07	WATER	VOLATILE ORGANICS BY GC/MS

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

07A051

CHAIN OF CUSTODY

Ref. Document # 133-0[illegible]

Page 1 of 1

Shaw

Shaw Environmental and Infrastructure Inc.

4005 Port Chicago Hwy
Concord, CA 94520

Project Number: 108816
Project Name / Location: Alameda CTO 133
Purchase Order #: 41926

Project Manager: John McGuire (Name & phone #)

Shipment Date: 1/9/2007
Waybill Number: 102650572
Lab Destination: EMAX, 1835 205th St., Torrance, 90501
Lab Contact Name / ph. #: Ye-Myint, 310-618-8889

Send Report To: Rose Condit
Phone/Fax Number: 925-288-2151
Address: 4005 Port Chicago Hwy
City: Concord, CA, 94520

Sampler's Name(s): Norman Hanelt

	Sample ID Number	Sample Description	Collection Information Date	Time	Method	Matrix	# of containers	Container Type	VOCs (8260B)- Full 8260 list					Cooler Temp				
								Preservative (water)	HCL									
								Preservative (soil)	Ice									
								Container Type	3-VOA									
1	133-4-2-inf(01/09/07)	Influent to GAC - 4-2	01/09/07	15:10	G	WW	3		X									
	Temp Blank													X				

Analyses Requested

Special Instructions:

Turnaround Time: 10 day ☐ 24-hr ☐ 48-hr ☐ 5-day

Level Of QC Required: I II III Project Specific:

Relinquished By: Norman Hanelt Date: 1/9/2007 Time: 1530

Received By: [illegible] alcantara Date: 1/10/07 Time: 1030

Relinquished By: Date: Time:

Received By: Date: Time:

Method Codes
C = Composite G = Grab

Matrix Codes
DW = Drinking Water SO = Soil
GW = Ground Water SL = Sludge
WW = Waste Water CP = Chip Samples

T = 3.0°

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN	C7A051
☐ EMAX Courier		Recepient	J. Cucantara
☐ Client Delivery		Date	1/10/07
☑ Third Party UPS		Time	1030

COC Inspection

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

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

Safety Issues

☑ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☑ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☑ Sufficient	☐ _____
Temperatures	☐ Cooler 1 2.2 °C	☐ Cooler 2 ____ °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C

Comments: ☐ **PM was informed on non-compliant coolers imediately.**

DISCREPANCIES

LSID	LSCID	Sample Label ID/COC ID	Discrepancy Code	Corrective Action Code

REVIEWS

Sample Labeling [signature] Date 1/10/07 1/10/07

SRF [signature] Date 1/10/07

PM [signature] Date 1/11/07

LEGEND:

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Project Management
A1	Analysis is not indicated in COC	E1	Preservative needed; sample has no preservative	R1	Hold sample(s); wait for further instructions
A2	Analysis is not indicated in label	E2	Preservative not needed but sample is preserved	R2	Proceed as indicated in COC
A3	Analysis is inconsistent in COC vis-à-vis label	F1	Not enough quantity of samples	R3	Refer to attached instruction
B1	Sample ID is not indicated in COC	F2	Bubble is> 6mm	R4	Cancel the analysis
B2	Sample ID is not indicated in label	G1	Temperature is out of range (4 +_ 2°C)	R5	_____
B3	Sample ID is inconsistent in COC vis-à-vis label	G2	Out of Holding Time	R6	_____
C1	Wrong container	G3	>20 % solid particle		
C2	Broken container	H1	_____		
C3	Leaking container	H2	_____		
D1	Date and/or time is not indicated in COC				
D2	Date and/or time is not indicated in label				
D3	Date and/or time is inconsistent in COC vis-à-vis label				

UPS CampusShip: View/Print Label

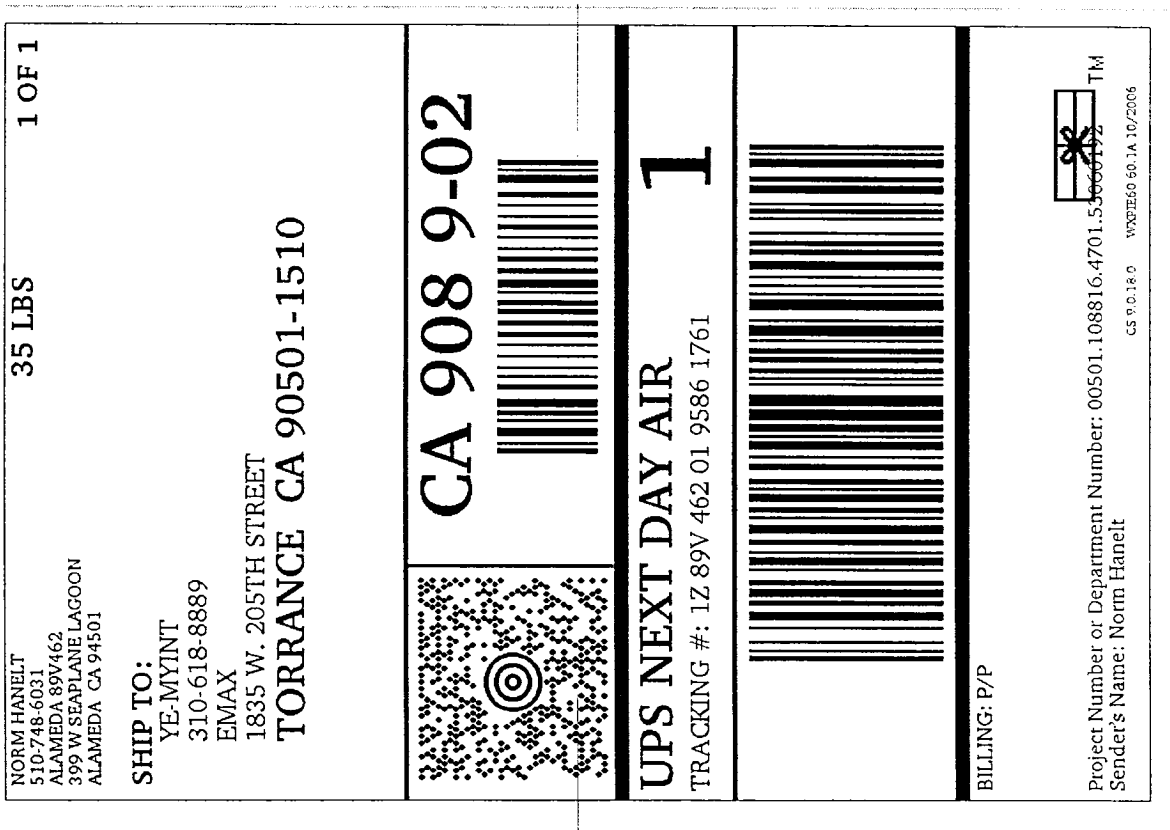
1. **Print the label(s):** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the dotted line.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers without a Daily Pickup
   - Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   - Hand the package to any UPS driver in your area.
   - Take your package to a location of The UPS Store®, UPS Drop Box, UPS Customer Center or Authorized Shipping Outlet near you. Items sent via UPS Return Services (including Ground Returns) are accepted at any UPS Drop Box.
   - To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

   Customers with a Daily Pickup
   - Your driver will pickup your shipment(s) as usual.

FOLD HERE



07 A051

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

SHAW E&I

ALAMEDA POINT, CTO 133

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

SDG#: 07A051

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07A051

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

One (1) water sample was received on 01/10/07 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 blanks were 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 CHRONI
VOLATILE ORGANICS BY GC/MS

Client : SHAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07A051
Instrument ID : T-001

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V001A19Q	1	NA	01/16/0714:56	01/16/0714:56	RAV200	RAV045	V001A19	Method Blank
LCS1W	V001A19L	1	NA	01/16/0712:14	01/16/0712:14	RAV197	RAV045	V001A19	Lab Control Sample (LCS)
133-4-2INF(01/09/07)	A051-01	1	NA	01/16/0715:35	01/16/0715:35	RAV201	RAV045	V001A19	Field Sample
MBLK2W	V001A22Q	1	NA	01/17/0714:07	01/17/0714:07	RAV233	RAV045	V001A22	Method Blank
LCS2W	V001A22L	1	NA	01/17/0712:12	01/17/0712:12	RAV230	RAV045	V001A22	Lab Control Sample (LCS)
LCD2W	V001A22C	1	NA	01/17/0712:50	01/17/0712:50	RAV231	RAV045	V001A22	LCS Duplicate
133-4-2INF(01/09/07)DL	A051-01T	10	NA	01/17/0719:24	01/17/0719:24	RAV241	RAV045	V001A22	Diluted Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: SHAW E&I	Date Collected:	01/09/07
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/10/07
Batch No.	: 07A051	Date Extracted:	01/16/07 15:35
Sample ID:	133-4-2INF(01/09/07)	Date Analyzed:	01/16/07 15:35
Lab Sample ID:	A051-01	Dilution Factor:	1
Lab File ID:	RAV201	Matrix :	WATER
Ext Btch ID:	V001A19	% Moisture :	NA
Calib. Ref.:	RAV045	Instrument ID :	T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	35	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	0.56	0.50	0.20
1,1-DICHLOROETHANE	5.0	0.50	0.20
1,1-DICHLOROETHENE	67E	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	0.32J	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	0.81	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	5.8	0.50	0.20
TRANS-1,2-DICHLOROETHENE	0.52	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	28	10	5.0
2-BUTANONE	11	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	91	70-140
TOLUENE-D8	96	70-140
4-BROMOFLUOROBENZENE	115	70-130

RL: Reporting Limit

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

Client	: SHAW E&I	Date Collected:	01/09/07
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/10/07
Batch No.	: 07A051	Date Extracted:	01/17/07 19:24
Sample ID:	133-4-2INF(01/09/07)DL	Date Analyzed:	01/17/07 19:24
Lab Sample ID:	A051-01T	Dilution Factor:	10
Lab File ID:	RAV241	Matrix	: WATER
Ext Btch ID:	V001A22	% Moisture	: NA
Calib. Ref.:	RAV045	Instrument ID	: T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	5.0	2.0
1,1,1-TRICHLOROETHANE	37	5.0	2.0
1,1,2,2-TETRACHLOROETHANE	ND	5.0	2.0
1,1,2-TRICHLOROETHANE	ND	5.0	2.0
1,1-DICHLOROETHANE	5.4	5.0	2.0
1,1-DICHLOROETHENE	91	5.0	2.0
1,1-DICHLOROPROPENE	ND	5.0	2.0
1,2,3-TRICHLOROBENZENE	ND	5.0	2.0
1,2,3-TRICHLOROPROPANE	ND	5.0	5.0
1,2,4-TRICHLOROBENZENE	ND	5.0	2.0
1,2,4-TRIMETHYLBENZENE	ND	5.0	2.0
1,2-DIBROMO-3-CHLOROPROPANE	ND	20	5.0
1,2-DICHLOROBENZENE	ND	5.0	2.0
1,2-DICHLOROETHANE	ND	5.0	2.0
1,2-DICHLOROPROPANE	ND	5.0	2.0
1,2-ETHYLENEDIBROMIDE	ND	10	2.0
1,3,5-TRIMETHYLBENZENE	ND	5.0	2.0
1,3-DICHLOROBENZENE	ND	5.0	2.0
1,3-DICHLOROPROPANE	ND	5.0	2.0
1,4-DICHLOROBENZENE	ND	5.0	2.0
2,2-DICHLOROPROPANE	ND	5.0	2.0
2-CHLOROTOLUENE	ND	5.0	2.0
4-CHLOROTOLUENE	ND	5.0	2.0
BENZENE	ND	5.0	2.0
BROMOBENZENE	ND	5.0	2.0
BROMOCHLOROMETHANE	ND	10	2.0
BROMODICHLOROMETHANE	ND	5.0	2.0
BROMOFORM	ND	5.0	3.0
BROMOMETHANE	ND	5.0	2.0
CARBON TETRACHLORIDE	ND	5.0	2.0
CHLOROBENZENE	ND	5.0	2.0
CHLOROETHANE	ND	5.0	2.0
CHLOROFORM	ND	5.0	2.0
CHLOROMETHANE	ND	5.0	2.0
CIS-1,2-DICHLOROETHENE	ND	5.0	2.0
DIBROMOCHLOROMETHANE	ND	5.0	2.0
DIBROMOMETHANE	ND	5.0	2.0
DICHLORODIFLUOROMETHANE	ND	5.0	3.0
ETHYLBENZENE	ND	5.0	2.0
HEXACHLOROBUTADIENE	ND	10	2.0
ISOPROPYL BENZENE	ND	5.0	2.0
M/P-XYLENES	ND	10	5.0
METHYLENE CHLORIDE	ND	10	5.0
N-BUTYLBENZENE	ND	5.0	2.0
N-PROPYLBENZENE	ND	5.0	2.0
NAPHTHALENE	ND	5.0	5.0
O-XYLENE	ND	5.0	2.0
P-ISOPROPYLTOLUENE	ND	5.0	2.0
SEC-BUTYLBENZENE	ND	5.0	2.0
STYRENE	ND	5.0	2.0
TERT-BUTYLBENZENE	ND	5.0	2.0
TETRACHLOROETHYLENE	ND	5.0	2.0
TOLUENE	5.5	5.0	2.0
TRANS-1,2-DICHLOROETHENE	ND	5.0	2.0
TRICHLOROETHENE	ND	5.0	2.0
TRICHLOROFLUOROMETHANE	ND	5.0	2.0
VINYL CHLORIDE	ND	5.0	2.0
ACETONE	ND	100	50
2-BUTANONE	ND	100	50
MTBE	ND	10	2.0
TERT-BUTANOL	ND	200	50
4-METHYL-2-PENTANONE	ND	100	50
2-HEXANONE	ND	100	50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	70-140
TOLUENE-D8	100	70-140
4-BROMOFLUOROBENZENE	119	70-130

RL: Reporting Limit

QC SUMMARIES

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

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/16/07
Batch No.	: 07A051	Date Extracted:	01/16/07 14:56
Sample ID:	MBLK1W	Date Analyzed:	01/16/07 14:56
Lab Samp ID:	V001A19Q	Dilution Factor:	1
Lab File ID:	RAV200	Matrix	: WATER
Ext Btch ID:	V001A19	% Moisture	: NA
Calib. Ref.:	RAV045	Instrument ID	: T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	70-140
TOLUENE-D8	92	70-130
4-BROMOFLUOROBENZENE	101	70-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07A051
METHOD: SW 5030B/8260B

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MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	MBLK1W			
LAB SAMP ID:	V001A19Q	V001A19L		
LAB FILE ID:	RAV200	RAV197		
DATE EXTRACTED:	01/16/0714:56	01/16/0712:14	DATE COLLECTED:	NA
DATE ANALYZED:	01/16/0714:56	01/16/0712:14	DATE RECEIVED:	01/16/07
PREP. BATCH:	V001A19	V001A19		
CALIB. REF:	RAV045	RAV045		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
1,1-Dichloroethene	ND	10.0	9.66	97	60-130
Benzene	ND	10.0	9.06	91	70-130
Chlorobenzene	ND	10.0	9.45	95	70-130
Toluene	ND	10.0	8.91	89	70-130
Trichloroethene	ND	10.0	8.79	88	70-130

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SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	7.94	79	70-140
Toluene-d8	10.0	9.30	93	70-130
4-Bromofluorobenzene	10.0	9.28	93	70-130

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

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/17/07
Batch No.	: 07A051	Date Extracted:	01/17/07 14:07
Sample ID:	MBLK2W	Date Analyzed:	01/17/07 14:07
Lab Samp ID:	V001A22Q	Dilution Factor:	1
Lab File ID:	RAV233	Matrix :	WATER
Ext Btch ID:	V001A22	% Moisture :	NA
Calib. Ref.:	RAV045	Instrument ID :	T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	113	70-140
TOLUENE-D8	103	70-130
4-BROMOFLUOROBENZENE	104	70-130

RL Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07A051
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2W				
LAB SAMP ID:	V001A22Q	V001A22L	V001A22C		
LAB FILE ID:	RAV233	RAV230	RAV231		
DATE EXTRACTED:	01/17/0714:07	01/17/0712:12	01/17/0712:50	DATE COLLECTED:	NA
DATE ANALYZED:	01/17/0714:07	01/17/0712:12	01/17/0712:50	DATE RECEIVED:	01/17/07
PREP. BATCH:	V001A22	V001A22	V001A22		
CALIB. REF:	RAV045	RAV045	RAV045		

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-Dichloroethene	ND	10.0	11.6	116	10.0	11.8	118	2	60-130	30
Benzene	ND	10.0	10.4	104	10.0	9.89	99	5	70-130	30
Chlorobenzene	ND	10.0	10.8	108	10.0	10.3	103	5	70-130	30
Toluene	ND	10.0	10.4	104	10.0	9.88	99	5	70-130	30
Trichloroethene	ND	10.0	9.71	97	10.0	9.39	94	3	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	9.00	90	10.0	8.99	90	70-140
Toluene-d8	10.0	9.80	98	10.0	9.49	95	70-130
4-Bromofluorobenzene	10.0	10.5	105	10.0	10.4	104	70-130

INITIAL CALIBRATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV039
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A051
BFB Injection Date : 01/04/07
BFB Injection Time : 19:38
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	30.30
75	30.0 - 60.0% of mass 95	52.22
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.05
173	Less than 2.0% of mass 174	0.37(0.6)1
174	Greater than 50% of mass 95	67.01
175	5.0 - 9.0% of mass 174	4.79(7.1)1
176	95.0 - 101.0% of mass 174	64.27(95.9)1
177	5.0 - 9.0% of mass 176	4.18(6.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	V001A0401	RAV040	01/04/07	20:17
2	VSTD0.5	V001A0402	RAV041	01/04/07	20:55
3	VSTD01	V001A0403	RAV042	01/04/07	21:33
4	VSTD02	V001A0404	RAV043	01/04/07	22:11
5	VSTD05	V001A0405	RAV044	01/04/07	22:50
6	VSTD010	V001A0406	RAV045	01/04/07	23:28
7	VSTD020	V001A0407	RAV046	01/05/07	00:07
8	VSTD030	V001A0408	RAV047	01/05/07	00:45
9	VSTD040	V001A0409	RAV048	01/05/07	01:23
10	VSTD050	V001A0410	RAV049	01/05/07	02:02

FORM V VOA OLM02.0

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV073
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A051
BFB Injection Date : 01/09/07
BFB Injection Time : 10:04
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.69
75	30.0 - 60.0% of mass 95	49.39
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.01
173	Less than 2.0% of mass 174	0.47(0.6)1
174	Greater than 50% of mass 95	73.28
175	5.0 - 9.0% of mass 174	5.70(7.8)1
176	95.0 - 101.0% of mass 174	73.35(100.1)1
177	5.0 - 9.0% of mass 176	4.65(6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	IV001A0403	RAV075	01/09/07	11:21

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T001
Beginning DateTime :01/04/07 20:17
Spike Units :PPB
IC File :RAV045

Column Spec :RTX502.2 ID :0.
Ending DateTime :01/05/07 02
HPChem Method :V001A04

	IDX	Parameters	3 20:17 RAV040	5 20:55 RAV041	1 21:33 RAV042	2 22:11 RAV043	5 22:50 RAV044	10 23:28 RAV045	20 00:07 RAV046	30 00:45 RAV047	40 01:23 RAV048	50 02:02 RAV049	Av RRF	% RSD	Av R
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	11.1
	2	Dichlorodifluoromethane	0.343	0.334	0.325	0.258	0.332	0.329	0.317	0.282	------	------	0.315	9.35	3.2
	3	Chloromethane	------	0.391	0.361	0.322	0.337	0.338	0.322	0.296	0.276	0.253	0.322	13.14	3.6
	4	Vinyl chloride	------	0.392	0.392	0.341	0.352	0.344	0.299	0.258	------	------	0.340	14.23	3.8
	5	Bromomethane	0.289	0.419	0.296	0.265	0.283	0.293	0.301	0.281	0.290	0.281	0.300	14.33	4.5
	6	Chloroethane	0.393	0.317	0.289	0.220	0.218	0.219	0.209	0.190	0.181	0.171	0.241	29.31	4.9
	7	Dichlorofluoromethane	0.706	0.787	0.799	0.809	0.797	0.827	0.761	0.681	0.653	0.620	0.744	9.31	4.9
	8	Trichlorofluoromethane	0.512	0.460	0.474	0.423	0.461	0.478	0.479	0.427	0.434	0.400	0.455	7.98	5.0
	9	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
2	10	Acrolein	------	------	0.015	0.017	0.018	0.017	0.018	0.015	0.014	0.013	0.016	10.88	0.0
	11	1,1,2-Trichloro-1,2,2-trifluoroethane	0.266	0.265	0.260	0.270	0.268	0.273	0.281	0.271	0.272	0.269	0.268	2.18	5.7
2	12	Acetone	------	------	------	0.030	0.033	0.032	0.031	0.025	0.024	0.022	0.031	30.16	5.8
	13	1,1-Dichloroethene	0.548	0.564	0.502	0.511	0.595	0.566	0.573	0.427	0.458	0.424	0.517	12.02	6.1
5	14	tert-Butyl alcohol	------	------	0.009	0.009	0.010	0.011	0.011	0.011	0.010	0.010	0.010	9.39	6.2
	15	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
	16	Methyl acetate	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
	17	Iodomethane	0.395	0.430	0.443	0.486	0.495	0.517	0.529	0.518	0.544	0.535	0.489	10.32	6.6
	18	Methylene chloride	------	0.854	0.671	0.610	0.559	0.524	0.479	------	------	------	0.616	21.82	6.9
	19	Carbon disulfide	1.289	1.334	1.352	1.430	1.399	1.399	1.347	1.233	1.196	1.158	1.314	6.81	6.9
3	20	Acrylonitrile	------	------	0.047	0.047	0.055	0.054	0.053	0.046	0.042	0.041	0.048	11.22	7.0
	21	tert-Butyl methyl ether (MTBE)	0.412	0.431	0.434	0.428	0.441	0.462	0.469	0.433	0.414	0.404	0.433	4.27	7.1
	22	trans-1,2-Dichloroethene	0.576	0.577	0.618	0.645	0.644	0.637	0.603	0.528	0.478	0.444	0.575	13.27	7.1
	23	Isopropyl ether (DIPE)	1.154	1.228	1.243	1.259	1.305	1.323	1.267	1.067	0.950	0.885	1.168	15.03	7.8
	24	Vinyl acetate	------	------	0.378	0.382	0.414	0.423	0.418	0.350	0.313	0.287	0.369	13.97	7.9
	25	1,1-Dichloroethane	0.749	0.773	0.786	0.813	0.803	0.798	0.765	0.673	0.664	0.588	0.747	10.87	8.0
	26	tert-Butyl ethyl ether (ETBE)	0.713	0.778	0.777	0.798	0.832	0.871	0.866	0.765	0.705	0.667	0.776	8.76	8.1
2	27	2-Butanone	------	------	0.077	0.060	0.066	0.068	0.069	0.061	0.056	0.054	0.064	12.00	8.8
	28	2,2-Dichloropropane	0.464	0.453	0.484	0.466	0.472	0.476	0.460	0.460	0.397	0.368	0.442	8.22	8.8
	29	cis-1,2-Dichlorbethene	0.693	0.679	0.698	0.716	0.721	0.716	0.679	0.525	0.537	0.500	0.654	12.28	9.1
	30	Chloroform	0.584	0.595	0.615	0.624	0.636	0.635	0.623	0.557	0.527	0.507	0.590	7.72	9.3
	31	Bromochloromethane	0.318	0.324	0.315	0.337	0.339	0.338	0.321	0.268	0.237	0.218	0.302	14.66	9.6
	32	Tetrahydrofuran	------	------	------	0.053	0.044	0.046	0.044	0.039	0.036	------	0.044	13.74	9.7
	33	1,1,1-Trichloroethane	0.471	0.486	0.490	0.511	0.515	0.529	0.517	0.474	0.449	0.422	0.486	6.90	10.0
	34	Cyclohexane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
	35	tert-Amyl methyl ether (TAME)	0.487	0.505	0.508	0.495	0.510	0.547	0.561	0.515	0.493	0.483	0.510	4.95	10.4
	36	1,2-Dichloroethane-d4	0.329	0.314	0.318	0.282	0.290	0.303	0.293	0.242	------	------	0.296	9.11	10.5
	37	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	12.3
	38	1,1-Dichloropropene	0.216	0.211	0.208	0.209	0.213	0.214	0.215	0.192	0.185	0.177	0.204	6.95	10.3
	39	Carbon tetrachloride	0.508	0.505	0.523	0.529	0.555	0.560	0.569	0.515	0.507	0.490	0.528	3.12	10.4
	40	1,2-Dichloroethane	0.286	0.285	0.298	0.277	0.301	0.289	0.269	0.408	0.339	0.339	0.330	13.63	10.6
	41	Benzene	1.762	1.762	1.743	1.637	1.697	1.632	1.629	1.479	1.427	1.414	1.622	8.16	10.7
	42	Trichloroethene	0.422	0.456	0.425	0.430	0.438	0.453	0.476	0.456	0.469	0.471	0.450	4.38	11.7
	43	Methylcyclohexane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
	44	1,2-Dichloropropane	0.498	0.526	0.502	0.508	0.535	0.537	0.537	0.475	0.454	0.430	0.501	7.41	11.9
	45	Bromodichlromethane	0.479	0.482	0.495	0.504	0.532	0.558	0.557	0.505	0.477	0.463	0.505	6.63	12.3
	46	Dibromomethane	0.175	0.181	0.189	0.186	0.200	0.203	0.204	0.180	0.173	0.169	0.186	6.97	12.4
2	47	4-Methyl-2-pentanone	------	------	0.175	0.157	0.205	0.217	0.236	0.203	0.187	0.179	0.195	13.07	12.8
	48	2-Chloroethyl vinyl ether	------	------	------	0.009	0.013	0.015	0.017	0.018	0.018	0.019	0.016	23.89	12.7
	49	cis-1,3-Dichloropropene	0.437	0.461	0.512	0.504	0.579	0.588	0.620	0.569	0.547	0.541	0.536	10.41	13.2
	50	Toluene-d8	1.264	1.349	1.297	1.099	1.327	1.375	1.429	1.271	1.245	1.208	1.306	8.26	13.6
	51	Toluene	1.666	1.679	1.703	1.597	1.673	1.643	1.655	1.511	1.480	1.425	1.605	5.78	13.8
	52	Ethyl methacrylate	------	0.198	0.214	0.232	0.273	0.301	0.322	0.299	0.282	0.282	0.269	7.21	13.8
	53	trans-1,3-Dichloropropene	0.293	0.318	0.324	0.326	0.393	0.418	0.434	0.395	0.380	0.373	0.368	10.21	14.0
	54	1,1,2-Trichloroethane	0.206	0.218	0.223	0.209	0.237	0.249	0.248	0.228	0.220	0.218	0.399	8.21	14.3
	55	2-Hexanone	------	------	------	------	0.110	0.129	0.141	0.129	0.117	0.111	0.123	8.63	14.3
	56	1,3-Dichloropropane	0.377	0.422	0.427	0.402	0.451	0.467	0.475	0.455	0.414	0.412	0.429	7.23	14.3
	57	Tetrachloroethene	0.328	0.311	0.302	0.297	0.364	0.330	0.345	0.326	0.329	0.331	0.322	4.47	14.5
	58	Dibromochloromethane	------	0.225	0.240	0.265	0.237	0.318	0.341	0.328	0.323	0.328	0.297	13.83	15.2
	59	1,2-Dibromoethane	0.193	0.219	0.260	0.212	0.237	0.254	0.273	0.250	0.245	0.243	0.235	9.98	15.6
	60	1-Chlorohexane	0.579	0.573	0.586	0.613	0.660	0.703	0.721	0.661	0.665	0.648	0.641	8.02	15.8
	61	Chlorobenzene	0.921	0.988	0.964	0.946	1.037	1.037	1.104	1.036	1.039	1.049	1.014	5.61	16.4
	62	1,1,1,2-Tetrachloroethane	0.265	0.281	0.299	0.281	0.311	0.336	0.353	0.338	0.341	0.347	0.315	10.13	16.4
	63	Ethylbenzene	1.663	1.674	1.719	1.727	1.835	1.859	1.856	1.663	1.610	1.550	1.716	6.16	16.4
2	64	m-Xylene & p-Xylene	1.297	1.354	1.332	1.336	1.419	1.413	1.415	1.262	1.184	1.056	1.307	8.81	16.6
	65	o-Xylene	1.241	1.301	1.282	1.348	1.483	1.481	1.495	1.341	1.298	1.252	1.352	7.28	17.4
	66	Styrene	0.746	0.788	0.814	0.878	1.002	1.037	1.069	0.996	1.009	1.008	0.935	12.49	17.5
	67	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	21.8
	68	Isopropylbenzene	6.533	6.687	6.666	6.673	6.412	6.663	6.378	5.710	5.936	5.682	6.334	6.40	18.1
	69	Bromoform	------	0.213	0.218	0.228	0.266	0.519	0.514	0.484	0.501	0.498	0.374	8.40	18.2
	70	1,1,2,2-Tetrachloroethane	0.827	0.925	0.928	0.828	0.859	0.926	0.887	0.788	0.800	0.770	0.860	8.30	18.4
	71	4-Bromofluorobenzene	------	------	0.557	0.582	0.653	0.569	0.607	0.729	0.728	0.728	0.669	8.30	18.5
	72	1,2,3-Trichloropropane	------	0.805	0.519	0.596	0.477	0.729	0.757	0.756	0.742	0.581	0.761	26.07	18.6
	73	trans-1,4-Dichloro-2-butene	------	------	------	0.184	0.144	0.485	0.482	0.420	0.406	0.389	0.351	38.62	18.7
	74	n-Propylbenzene	7.705	7.592	7.761	7.800	7.733	7.943	7.504	6.875	6.886	6.263	7.389	7.88	18.9
	75	Bromobenzene	1.006	1.105	1.073	1.055	1.077	1.099	1.082	1.017	1.066	1.058	1.064	2.99	19.0
	76	1,3,5-Trimethylbenzene	4.341	4.453	4.563	4.338	4.512	4.550	4.442	3.875	4.163	4.004	4.355	5.21	19.2
	77	2-Chlorotoluene	5.126	5.023	5.067	4.924	4.680	4.598	4.355	3.960	4.020	3.994	4.575	10.18	19.3
	78	4-Chlorotoluene	3.864	4.132	4.035	3.772	3.890	3.961	3.838	3.253	3.306	3.043	3.769	10.01	19.4
	79	tert-Butylbenzene	4.350	4.407	4.551	4.586	4.531	4.655	4.665	4.308	4.619	4.487	4.516	2.78	19.8
	80	1,2,4-Trimethylbenzene	3.711	3.934	3.775	4.016	3.983	4.084	4.076	3.618	3.826	3.692	3.872	4.37	20.0
	81	sec-Butylbenzene	6.636	6.553	6.673	6.820	6.607	6.872	6.767	6.101	6.444	6.073	6.555	4.22	20.4
	82	p-Isopropyltoluene	2.001	2.134	2.118	2.334	2.398	2.558	2.749	2.396	2.746	2.676	2.411	6.12	20.7
	83	1,3-Dichlorobenzene	1.796	1.761	1.730	1.874	1.893	1.975	2.053	1.814	2.037	2.026	1.906	6.14	20.9
	84	1,4-Dichlorobenzene	1.558	1.538	1.628	1.774	1.791	1.863	1.951	1.843	1.904	1.901	1.778	8.17	21.1
	85	n-Butylbenzene	3.313	3.729	3.978	3.805	3.905	4.116	4.306	3.855	4.058	3.938	3.846	8.43	21.5
	86	1,2-Dichlorobenzene	1.411	1.545	1.614	1.667	1.731	1.812	1.902	1.673	1.821	1.829	1.648	8.25	21.7
	87	1,2-Dibromo-3-chloropropane	------	------	0.073	0.081	0.075	0.088	0.101	0.100	0.102	0.090	0.089	38.65	22.6
	88	1,2,4-Trichlorobenzene	------	0.415	0.403	0.496	0.547	0.697	0.835	0.778	0.853	0.837	0.641	28.27	22.8
	89	Hexachlorobutadiene	------	0.586	0.556	0.578	0.581	0.668	0.805	0.743	0.785	0.803	0.680	12.67	22.9
	90	Naphthalene	------	------	0.325	0.338	0.448	0.588	0.804	0.756	0.806	0.835	0.609	35.56	26.2
	91	1,2,3-Trichlorobenzene	------	0.290	0.336	0.397	0.416	0.504	0.646	0.584	0.618	0.622	0.490	27.45	26.87

Spike Amount = Nominal Amount * M
Ave_%RSD : 11.1 Max_%RSD : 38.6

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

IDX	Parameter	x0	x1	CCF
6	Chloroethane	0.00785	0.18376	0.9967
12	Acetone	0.01252	0.02263	0.9991*
18	Methylene chloride	0.02027	0.28503	0.9988
48	2-Chloroethyl vinyl ether	-0.00250	0.01900	0.9983
52	Ethyl methacrylate	-0.00631	0.22245	0.9991
67	1,2,3-Trichloropropane	0.08034	0.10376	0.9979
87	1,2-Dibromo-3-chloropropane	-0.00853	0.10310	0.9998
	1,2,4-Trichlorobenzene	-0.03969	0.81369	0.9970
	Hexachlorobutadiene	-0.02316	0.78117	0.9986
	Naphthalene	-0.08353	0.81035	0.9998
91	1,2,3-Trichlorobenzene	-0.02813	0.61317	0.9974

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
12	Acetone	0.00673	0.03124	-0.00100	0.9984

1/8/07

SECOND SOURCE VERIFICATION

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A09\RAV075.D Vial: 4
Acq On : 9 Jan 2007 11:21 am Operator: AS
Sample : IV001A0403 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	136	-0.01	
2	T	Dichlorodifluoromethane	10.000	10.085	-0.9	131	0.00	
3	P,T	Chloromethane	10.000	9.670	3.3	125	0.00	
4	C,T	Vinyl chloride	10.000	8.568	14.3	115	-0.01	
5	T	Bromomethane	10.000	9.904	1.0	137	-0.01	
6	T	Chloroethane	10.000	10.287	-2.9	122	-0.01	
7	T	Dichlorofluoromethane	10.000	9.170	8.3	112	-0.01	
8	T	Trichlorofluoromethane	10.000	10.335	-3.4	133	-0.01	
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	3	0.05	
10	T	Acrolein	20.000	11.215	43.9#	69	-0.01	not valid!
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	9.286	7.1	124	-0.01	
12	T	Acetone	20.000	15.569	22.2#	107	-0.01	
13	C,T	1,1-Dichloroethene	10.000	10.260	-2.6	127	-0.01	
14	T	tert-Butyl alcohol	50.000	42.741	14.5	102	0.00	
15	T	Acetonitrile	-1.000	0.000	0.0	41	-0.06	NIS
16	T	Methyl acetate	-1.000	0.000	0.0	55	-0.01	NIS
17	T	Iodomethane	10.000	11.399	-14.0	146	-0.01	
18	T	Methylene chloride	10.000	8.434	15.7	111	-0.01	
19	T	Carbon disulfide	10.000	10.189	-1.9	130	-0.03	
20	T	Acrylonitrile	20.000	15.550	~~48.2#~~	63	-0.01	
21	T	tert-Butyl methyl ether (MT	10.000	9.373	6.3	119	-0.01	
22	T	trans-1,2-Dichloroethene	10.000	9.340	6.6	114	-0.01	
23	T	Isopropyl ether (DIPE)	10.000	8.779	12.2	105	-0.01	
24	T	Vinyl acetate	10.000	8.689	13.1	103	-0.01	
25	P,T	1,1-Dichloroethane	10.000	9.179	8.2	115	-0.03	
26	T	tert-Butyl ethyl ether (ETB	10.000	9.115	8.8	110	-0.01	
27	T	2-Butanone	20.000	15.287	23.6#	97	-0.01	
28	T	2,2-Dichloropropane	10.000	9.728	2.7	123	-0.01	
29	T	cis-1,2-Dichloroethene	10.000	9.269	7.3	115	-0.01	
30	C,T	Chloroform	10.000	9.576	4.2	121	-0.01	
31	T	Bromochloromethane	10.000	9.134	8.7	111	-0.01	
32	T	Tetrahydrofuran	10.000	0.357	96.4#	5	0.00	NIS
33	T	1,1,1-Trichloroethane	10.000	9.553	4.5	119	-0.01	
34	T	Cyclohexane	-1.000	0.000	0.0	84	-0.14	NIS
35	T	tert-Amyl methyl ether (TAM	10.000	9.395	6.1	119	-0.01	
36	S	1,2-Dichloroethane-d4	10.000	7.764	22.4#	103	-0.01	
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	133	-0.03	
38	T	1,1-Dichloropropene	10.000	9.433	5.7	119	-0.01	
39	T	Carbon tetrachloride	10.000	10.113	-1.1	127	-0.01	
40	T	1,2-Dichloroethane	10.000	8.792	12.1	108	-0.01	

(#) = Out of Range

2016

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A09\RAV075.D Vial: 4
Acq On : 9 Jan 2007 11:21 am Operator: AS
Sample : IVO01A0403 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	9.937	0.6	131	-0.03
42	T	Trichloroethene	10.000	9.654	3.5	127	-0.01
43	T	Methylcyclohexane	-1.000	0.000	0.0	498	-0.14 MIS
44	C,T	1,2-Dichloropropane	10.000	9.346	6.5	116	-0.01
45	T	Bromodichloromethane	10.000	9.722	2.8	117	-0.03
46	T	Dibromomethane	10.000	9.714	2.9	118	-0.01
47	T	4-Methyl-2-pentanone	20.000	17.662	11.7	105	-0.01
48	T	2-Chloroethyl vinyl ether	10.000	7.535	24.6#	106	-0.01
49	T	cis-1,3-Dichloropropene	10.000	10.737	-7.4	130	-0.03
50	S	Toluene-d8	10.000	9.322	6.8	118	-0.01
51	C,T	Toluene	10.000	9.425	5.7	122	-0.01
52	T	Ethyl methacrylate	10.000	8.831	11.7	114	-0.01
53	T	trans-1,3-Dichloropropene	10.000	10.414	-4.1	122	-0.01
54	T	1,1,2-Trichloroethane	10.000	9.293	7.1	113	-0.03
[illegible]	T	2-Hexanone	20.000	15.678	21.6#	98	-0.03
56	T	1,3-Dichloropropane	10.000	9.629	3.7	119	-0.01
57	T	Tetrachloroethene	10.000	9.739	2.6	126	-0.01
58	T	Dibromochloromethane	10.000	9.949	0.5	123	0.00
59	T	1,2-Dibromoethane	10.000	10.010	-0.1	123	-0.01
60	T	1-Chlorohexane	10.000	9.617	3.8	117	-0.01
61	P	Chlorobenzene	10.000	9.905	1.0	126	-0.03
62	T	1,1,1,2-Tetrachloroethane	10.000	10.022	-0.2	126	-0.01
63	C,T	Ethylbenzene	10.000	9.494	5.1	116	-0.01
64	T	m-Xylene & p-Xylene	20.000	18.843	5.8	116	-0.01
65	T	o-Xylene	10.000	9.559	4.4	116	-0.01
66	T	Styrene	10.000	9.992	0.1	120	-0.03
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	129	-0.03
68	T	Isopropylbenzene	10.000	9.441	5.6	116	-0.01
69	P,T	Bromoform	10.000	9.656	3.4	114	-0.01
70	P,T	1,1,2,2-Tetrachloroethane	10.000	9.395	6.1	113	-0.03
71	S	4-Bromofluorobenzene	10.000	9.477	5.2	109	-0.03
72	T	1,2,3-Trichloropropane	10.000	11.158	-11.6	131	-0.06
73	T	trans-1,4-Dichloro-2-butene	10.000	7.646	23.5#	91	-0.02
74	T	n-Propylbenzene	10.000	9.314	6.9	112	-0.01
75	T	Bromobenzene	10.000	9.868	1.3	124	-0.01
76	T	1,3,5-Trimethylbenzene	10.000	9.280	7.2	115	-0.03
77	T	2-Chlorotoluene	10.000	9.358	6.4	120	-0.01
78	T	4-Chlorotoluene	10.000	9.067	9.3	110	-0.01
79	T	tert-Butylbenzene	10.000	9.299	7.0	117	-0.01
[illegible]	T	1,2,4-Trimethylbenzene	10.000	9.136	8.6	112	-0.03

(#) = Out of Range

2017

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A09\RAV075.D Vial: 4
Acq On : 9 Jan 2007 11:21 am Operator: AS
Sample : IVO01A0403 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	8.700	13.0	107	-0.01
82	T	p-Isopropyltoluene	10.000	9.389	6.1	118	-0.03
83	T	1,3-Dichlorobenzene	10.000	9.677	3.2	121	-0.03
84	T	1,4-Dichlorobenzene	10.000	9.646	3.5	119	-0.03
85	T	n-Butylbenzene	10.000	9.416	5.8	114	-0.01
86	T	1,2-Dichlorobenzene	10.000	9.790	2.1	123	-0.03
87	T	1,2-Dibromo-3-chloropropane	10.000	9.476	5.2	128	-0.03
88	T	1,2,4-Trichlorobenzene	10.000	8.127	18.7	122	-0.01
89	T	Hexachlorobutadiene	10.000	8.903	11.0	127	-0.03
90	T	Naphthalene	10.000	8.421	15.8	137	-0.03
91	T	1,2,3-Trichlorobenzene	10.000	8.277	17.2	123	-0.01

2018

DAILY CALIBRATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV194
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A051
BFB Injection Date : 01/16/07
BFB Injection Time : 10:16
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	30.02
75	30.0 - 60.0% of mass 95	49.74
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.65
173	Less than 2.0% of mass 174	0.78(1.2)1
174	Greater than 50% of mass 95	67.42
175	5.0 - 9.0% of mass 174	5.02(7.4)1
176	95.0 - 101.0% of mass 174	67.61(100.3)1
177	5.0 - 9.0% of mass 176	4.40(6.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV001A0414	RAV195	01/16/07	10:55
2	MBLK1W	V001A19Q	RAV200	01/16/07	14:56
3	LCS1W	V001A19L	RAV197	01/16/07	12:14
4	133-4-2INF(01/09/07)	A051-01	RAV201	01/16/07	15:35

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAV045
Instrument ID: T-001
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A051
Date Analyzed: 01/04/07
Time Analyzed: 23:28
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2182174	11.13	1785030	16.35	520638	21.94
	UPPER LIMIT	4364348	11.63	3570060	16.85	1041276	22.44
	LOWER LIMIT	1091087	10.63	892515	15.85	260319	21.44
	SAMPLE ID						
1	VSTD010	2239610	11.10	1897891	16.31	554883	21.88
2	MBLK1W	2885387	11.12	2195941	16.32	528947	21.90
3	LCS1W	2626266	11.12	2182931	16.32	656654	21.90
4	133-4-2INF(01/09/07)	2499518	11.12	2131323	16.32	503120	21.91

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A16\RAV195.D Vial: 3
Acq On : 16 Jan 2007 10:55 am Operator: AS
Sample : CVO01A0414 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	103	-0.03
2	T	Dichlorodifluoromethane	10.000	8.233	17.7	81	-0.02
3	P,T	Chloromethane	10.000	9.897	1.0	97	-0.02
4	C,T	Vinyl chloride	10.000	9.224	7.8	94	-0.02
5	T	Bromomethane	10.000	9.605	3.9	101	-0.03
6	T	Chloroethane	10.000	10.541	-5.4	94	-0.03
7	T	Dichlorofluoromethane	10.000	9.163	8.4	85	-0.03
8	T	Trichlorofluoromethane	10.000	10.137	-1.4	99	-0.02
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	80	-0.03
10	T	Acrolein	20.000	18.969	5.2	88	-0.03
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	8.930	10.7	90	-0.03
12	T	Acetone	20.000	20.563	-2.8	102	-0.02
13	C,T	1,1-Dichloroethene	10.000	9.736	2.6	91	-0.03
[illegible]	T	tert-Butyl alcohol	50.000	50.692	-1.4	92	-0.03
[illegible]	T	Acetonitrile	-1.000	0.000	0.0	90	-0.02
16	T	Methyl acetate	-1.000	0.000	0.0	83	-0.03
17	T	Iodomethane	10.000	9.803	2.0	95	-0.03
18	T	Methylene chloride	10.000	8.899	11.0	89	-0.03
19	T	Carbon disulfide	10.000	8.156	18.4	79	-0.03
20	T	Acrylonitrile	30.000	29.112	3.0	89	-0.03
21	T	tert-Butyl methyl ether (MT	10.000	10.154	-1.5	98	-0.03
22	T	trans-1,2-Dichloroethene	10.000	9.325	6.8	86	-0.03
23	T	Isopropyl ether (DIPE)	10.000	9.975	0.3	90	-0.03
24	T	Vinyl acetate	10.000	10.697	-7.0	96	-0.03
25	P,T	1,1-Dichloroethane	10.000	9.731	2.7	92	-0.03
26	T	tert-Butyl ethyl ether (ETB	10.000	10.613	-6.1	97	-0.03
27	T	2-Butanone	20.000	17.576	12.1	84	-0.03
28	T	2,2-Dichloropropane	10.000	10.460	-4.6	100	-0.03
29	T	cis-1,2-Dichloroethene	10.000	9.845	1.5	92	-0.03
30	C,T	Chloroform	10.000	10.009	-0.1	95	-0.03
31	T	Bromochloromethane	10.000	9.975	0.3	91	-0.03
32	T	Tetrahydrofuran	10.000	9.455	5.4	91	-0.03
33	T	1,1,1-Trichloroethane	10.000	9.898	1.0	93	-0.03
34	T	Cyclohexane	-1.000	0.000	0.0	69	-0.05
35	T	tert-Amyl methyl ether (TAM	10.000	10.512	-5.1	101	-0.05
36	S	1,2-Dichloroethane-d4	10.000	9.337	6.6	94	-0.03
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	106	-0.05
38	T	1,1-Dichloropropene	10.000	9.067	9.3	92	-0.03
[illegible]	T	Carbon tetrachloride	10.000	9.413	5.9	94	-0.03
40	T	1,2-Dichloroethane	10.000	9.121	8.8	90	-0.03

(#) = Out of Range

2022

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A16\RAV195.D Vial: 3
Acq On : 16 Jan 2007 10:55 am Operator: AS
Sample : CVO01A0414 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	9.023	9.8	95	-0.05
42	T	Trichloroethene	10.000	8.978	10.2	95	-0.03
43	T	Methylcyclohexane	-1.000	0.000	0.0	120	-0.03
44	C,T	1,2-Dichloropropane	10.000	9.948	0.5	99	-0.03
45	T	Bromodichloromethane	10.000	10.056	-0.6	97	-0.05
46	T	Dibromomethane	10.000	9.927	0.7	97	-0.05
47	T	4-Methyl-2-pentanone	20.000	18.632	6.8	89	-0.03
48	T	2-Chloroethyl vinyl ether	10.000	6.502	35.0#	70	-0.03 NTC
49	T	cis-1,3-Dichloropropene	10.000	10.270	-2.7	100	-0.05
50	S	Toluene-d8	10.000	9.911	0.9	100	-0.03
51	C,T	Toluene	10.000	9.407	5.9	98	-0.03
52	T	Ethyl methacrylate	10.000	9.685	3.1	100	-0.03
53	T	trans-1,3-Dichloropropene	10.000	10.799	-8.0	101	-0.03
54	T	1,1,2-Trichloroethane	10.000	10.370	-3.7	101	-0.05
[illegible]	T	2-Hexanone	20.000	17.469	12.7	88	-0.05
56	T	1,3-Dichloropropane	10.000	9.899	1.0	98	-0.03
57	T	Tetrachloroethene	10.000	9.415	5.9	98	-0.05
58	T	Dibromochloromethane	10.000	10.446	-4.5	104	-0.05
59	T	1,2-Dibromoethane	10.000	10.249	-2.5	101	-0.05
60	T	1-Chlorohexane	10.000	10.245	-2.4	99	-0.05
61	P	Chlorobenzene	10.000	9.851	1.5	100	-0.05
62	T	1,1,1,2-Tetrachloroethane	10.000	10.356	-3.6	105	-0.05
63	C,T	Ethylbenzene	10.000	9.932	0.7	97	-0.05
64	T	m-Xylene & p-Xylene	20.000	19.748	1.3	97	-0.05
65	T	o-Xylene	10.000	10.140	-1.4	98	-0.05
66	T	Styrene	10.000	10.487	-4.9	100	-0.05
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	107	-0.06
68	T	Isopropylbenzene	10.000	9.752	2.5	99	-0.05
69	P,T	Bromoform	10.000	10.306	-3.1	100	-0.05
70	P,T	1,1,2,2-Tetrachloroethane	10.000	10.282	-2.8	102	-0.05
71	S	4-Bromofluorobenzene	10.000	10.551	-5.5	100	-0.05
72	T	1,2,3-Trichloropropane	10.000	10.511	-5.1	102	-0.09
73	T	trans-1,4-Dichloro-2-butene	10.000	9.543	4.6	94	-0.05
74	T	n-Propylbenzene	10.000	9.887	1.1	98	-0.05
75	T	Bromobenzene	10.000	9.543	4.6	98	-0.05
76	T	1,3,5-Trimethylbenzene	10.000	9.555	4.5	97	-0.05
77	T	2-Chlorotoluene	10.000	9.351	6.5	99	-0.05
78	T	4-Chlorotoluene	10.000	9.742	2.6	97	-0.05
[illegible]	T	tert-Butylbenzene	10.000	9.669	3.3	100	-0.05
[illegible]	T	1,2,4-Trimethylbenzene	10.000	9.496	5.0	96	-0.05

(#) = Out of Range

2023

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A16\RAV195.D Vial: 3
Acq On : 16 Jan 2007 10:55 am Operator: AS
Sample : CVO01A0414 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	9.628	3.7	98	-0.05
82	T	p-Isopropyltoluene	10.000	9.636	3.6	99	-0.05
83	T	1,3-Dichlorobenzene	10.000	9.814	1.9	101	-0.06
84	T	1,4-Dichlorobenzene	10.000	9.744	2.6	99	-0.05
85	T	n-Butylbenzene	10.000	9.673	3.3	96	-0.05
86	T	1,2-Dichlorobenzene	10.000	9.837	1.6	102	-0.06
87	T	1,2-Dibromo-3-chloropropane	10.000	9.810	1.9	110	-0.05
88	T	1,2,4-Trichlorobenzene	10.000	8.282	17.2	103	-0.05
89	T	Hexachlorobutadiene	10.000	9.276	7.2	109	-0.06
90	T	Naphthalene	10.000	7.971	20.3#	106	-0.05
91	T	1,2,3-Trichlorobenzene	10.000	8.469	15.3	104	-0.05

2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A16\RAV195.D Vial: 3
Acq On : 16 Jan 2007 10:55 am Operator: AS
Sample : CVO01A0414 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	103	-0.03
2	T	Dichlorodifluoromethane	0.315	0.259	17.8	81	-0.02
3	P,T	Chloromethane	0.322	0.318	1.2	97	-0.02
4	C,T	Vinyl chloride	0.340	0.314	7.6	94	-0.02
5	T	Bromomethane	0.300	0.288	4.0	101	-0.03
6	T	Chloroethane	0.241	0.202	16.2	94	-0.03
7	T	Dichlorofluoromethane	0.744	0.682	8.3	85	-0.03
8	T	Trichlorofluoromethane	0.455	0.461	-1.3	99	-0.02
9	T	sec-Propyl alcohol	0.000	0.000	0.0	80	-0.03
10	T	Acrolein	0.016	0.015	6.3	88	-0.03
11	T	1,1,2-Trichloro-1,2,2-trifl	0.269	0.240	10.8	90	-0.03
12	T	Acetone	0.031	0.033	-6.5	102	-0.02
13	C,T	1,1-Dichloroethene	0.517	0.503	2.7	91	-0.03
14	T	tert-Butyl alcohol	0.010	0.010	0.0	92	-0.03
[illegible]	T	Acetonitrile	0.000	0.000	0.0	90	-0.02
16	T	Methyl acetate	0.000	0.000	0.0	83	-0.03
17	T	Iodomethane	0.489	0.479	2.0	95	-0.03
18	T	Methylene chloride	0.616	0.453	26.5#	89	-0.03
19	T	Carbon disulfide	1.314	1.071	18.5	79	-0.03
20	T	Acrylonitrile	0.048	0.047	2.1	89	-0.03
21	T	tert-Butyl methyl ether (MT	0.433	0.440	-1.6	98	-0.03
22	T	trans-1,2-Dichloroethene	0.575	0.536	6.8	86	-0.03
23	T	Isopropyl ether (DIPE)	1.168	1.165	0.3	90	-0.03
24	T	Vinyl acetate	0.371	0.397	-7.0	96	-0.03
25	P,T	1,1-Dichloroethane	0.737	0.717	2.7	92	-0.03
26	T	tert-Butyl ethyl ether (ETB	0.776	0.824	-6.2	97	-0.03
27	T	2-Butanone	0.064	0.056	12.5	84	-0.03
28	T	2,2-Dichloropropane	0.444	0.465	-4.7	100	-0.03
29	T	cis-1,2-Dichloroethene	0.654	0.643	1.7	92	-0.03
30	C,T	Chloroform	0.590	0.590	0.0	95	-0.03
31	T	Bromochloromethane	0.302	0.301	0.3	91	-0.03
32	T	Tetrahydrofuran	0.044	0.041	6.8	91	-0.03
33	T	1,1,1-Trichloroethane	0.486	0.481	1.0	93	-0.03
34	T	Cyclohexane	0.000	0.000	0.0	69	-0.05
35	T	tert-Amyl methyl ether (TAM	0.510	0.536	-5.1	101	-0.05
36	S	1,2-Dichloroethane-d4	0.296	0.277	6.4	94	-0.03
37	I	CHLOROBENZENE-D5	1.000	1.000	0.0	106	-0.05
38	T	1,1-Dichloropropene	0.204	0.185	9.3	92	-0.03
[illegible]	T	Carbon tetrachloride	0.528	0.497	5.9	94	-0.03
[illegible]	T	1,2-Dichloroethane	0.450	0.410	8.9	90	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A16\RAV195.D Vial: 3
Acq On : 16 Jan 2007 10:55 am Operator: AS
Sample : CVO01A0414 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	1.622	1.464	9.7	95	-0.05
42	T	Trichloroethene	0.450	0.404	10.2	95	-0.03
43	T	Methylcyclohexane	0.000	0.000	0.0	120	-0.03
44	C,T	1,2-Dichloropropane	0.501	0.498	0.6	99	-0.03
45	T	Bromodichloromethane	0.505	0.508	-0.6	97	-0.05
46	T	Dibromomethane	0.186	0.185	0.5	97	-0.05
47	T	4-Methyl-2-pentanone	0.195	0.181	7.2	89	-0.03
48	T	2-Chloroethyl vinyl ether	0.016	0.010	37.5#	70	-0.03
49	T	cis-1,3-Dichloropropene	0.536	0.550	-2.6	100	-0.05
50	S	Toluene-d8	1.306	1.295	0.8	100	-0.03
51	C,T	Toluene	1.605	1.510	5.9	98	-0.03
52	T	Ethyl methacrylate	0.269	0.283	-5.2	100	-0.03
53	T	trans-1,3-Dichloropropene	0.368	0.397	-7.9	101	-0.03
54	T	1,1,2-Trichloroethane	0.225	0.234	-4.0	101	-0.05
[illegible]	T	2-Hexanone	0.122	0.106	13.1	88	-0.05
56	T	1,3-Dichloropropane	0.426	0.422	0.9	98	-0.03
57	T	Tetrachloroethene	0.322	0.303	5.9	98	-0.05
58	T	Dibromochloromethane	0.297	0.310	-4.4	104	-0.05
59	T	1,2-Dibromoethane	0.235	0.241	-2.6	101	-0.05
60	T	1-Chlorohexane	0.641	0.656	-2.3	99	-0.05
61	P	Chlorobenzene	1.014	0.999	1.5	100	-0.05
62	T	1,1,1,2-Tetrachloroethane	0.315	0.326	-3.5	105	-0.05
63	C,T	Ethylbenzene	1.716	1.704	0.7	97	-0.05
64	T	m-Xylene & p-Xylene	1.307	1.290	1.3	97	-0.05
65	T	o-Xylene	1.352	1.371	-1.4	98	-0.05
66	T	Styrene	0.935	0.980	-4.8	100	-0.05
67	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	107	-0.06
68	T	Isopropylbenzene	6.334	6.177	2.5	99	-0.05
69	P,T	Bromoform	0.474	0.488	-3.0	100	-0.05
70	P,T	1,1,2,2-Tetrachloroethane	0.860	0.884	-2.8	102	-0.05
71	S	4-Bromofluorobenzene	1.422	1.501	-5.6	100	-0.05
72	T	1,2,3-Trichloropropane	0.491	0.443	9.8	102	-0.09
73	T	trans-1,4-Dichloro-2-butene	0.178	0.170	4.5	94	-0.05
74	T	n-Propylbenzene	7.389	7.305	1.1	98	-0.05
75	T	Bromobenzene	1.064	1.015	4.6	98	-0.05
76	T	1,3,5-Trimethylbenzene	4.355	4.161	4.5	97	-0.05
77	T	2-Chlorotoluene	4.575	4.278	6.5	99	-0.05
78	T	4-Chlorotoluene	3.709	3.614	2.6	97	-0.05
7[illegible]	T	tert-Butylbenzene	4.516	4.367	3.3	100	-0.05
[illegible]	T	1,2,4-Trimethylbenzene	3.872	3.676	5.1	96	-0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A16\RAV195.D Vial: 3
Acq On : 16 Jan 2007 10:55 am Operator: AS
Sample : CVO01A0414 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	6.555	6.311	3.7	98	-0.05
82	T	p-Isopropyltoluene	4.411	4.250	3.6	99	-0.05
83	T	1,3-Dichlorobenzene	1.906	1.870	1.9	101	-0.06
84	T	1,4-Dichlorobenzene	1.779	1.734	2.5	99	-0.05
85	T	n-Butylbenzene	3.846	3.720	3.3	96	-0.05
86	T	1,2-Dichlorobenzene	1.572	1.546	1.7	102	-0.06
87	T	1,2-Dibromo-3-chloropropane	0.080	0.092	-15.0	110	-0.05
88	T	1,2,4-Trichlorobenzene	0.641	0.634	1.1	103	-0.05
89	T	Hexachlorobutadiene	0.680	0.701	-3.1	109	-0.06
90	T	Naphthalene	0.609	0.562	7.7	106	-0.05
91	T	1,2,3-Trichlorobenzene	0.490	0.491	-0.2	104	-0.05

2027

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV228
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A051
BFB Injection Date : 01/17/07
BFB Injection Time : 09:39
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	30.11
75	30.0 - 60.0% of mass 95	51.10
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.42
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	68.78
175	5.0 - 9.0% of mass 174	6.15(8.9)1
176	95.0 - 101.0% of mass 174	68.38(99.4)1
177	5.0 - 9.0% of mass 176	4.29(6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV001A0418	RAV229	01/17/07	11:34
2	MBLK2W	V001A22Q	RAV233	01/17/07	14:07
3	LCS2W	V001A22L	RAV230	01/17/07	12:12
4	LCD2W	V001A22C	RAV231	01/17/07	12:50
5	133-4-2INF(01/09/07)DL	A051-01T	RAV241	01/17/07	19:24

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAV045
Instrument ID: T-001
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A051
Date Analyzed: 01/04/07
Time Analyzed: 23:28
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2182174	11.13	1785030	16.35	520638	21.94
	UPPER LIMIT	4364348	11.63	3570060	16.85	1041276	22.44
	LOWER LIMIT	1091087	10.63	892515	15.85	260319	21.44
	SAMPLE ID						
1	VSTD010	1788194	11.12	1562220	16.32	462651	21.91
2	MBLK2W	1671706	11.13	1533145	16.34	510644	21.93
3	LCS2W	1866723	11.12	1602597	16.33	469453	21.91
4	LCD2W	1918964	11.12	1717712	16.33	503334	21.91
5	133-4-2INF(01/09/07)DL	1507159	11.12	1264205	16.34	295242	21.91

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A17\RAV229.D Vial: 2
Acq On : 17 Jan 2007 11:34 am Operator: AS
Sample : CVO01A0418 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	82	-0.02
2	T	Dichlorodifluoromethane	10.000	10.037	-0.4	79	0.00
3	P,T	Chloromethane	10.000	9.978	0.2	78	0.00
4	C,T	Vinyl chloride	10.000	9.867	1.3	80	0.00
5	T	Bromomethane	10.000	10.543	-5.4	88	-0.02
6	T	Chloroethane	10.000	11.205	-12.1	80	-0.02
7	T	Dichlorofluoromethane	10.000	10.373	-3.7	76	-0.02
8	T	Trichlorofluoromethane	10.000	11.146	-11.5	87	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	72	0.00
10	T	Acrolein	20.000	18.585	7.1	69	-0.02
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	9.904	1.0	80	-0.02
12	T	Acetone	20.000	18.095	9.5	73	0.00
13	C,T	1,1-Dichloroethene	10.000	10.978	-9.8	82	-0.02
14	T	tert-Butyl alcohol	50.000	47.125	5.8	68	-0.02
[illegible]	T	Acetonitrile	-1.000	0.000	0.0	74	0.00
16	T	Methyl acetate	-1.000	0.000	0.0	73	-0.02
17	T	Iodomethane	10.000	10.767	-7.7	83	-0.02
18	T	Methylene chloride	10.000	9.864	1.4	78	-0.02
19	T	Carbon disulfide	10.000	8.753	12.5	67	-0.02
20	T	Acrylonitrile	30.000	30.830	-2.8	75	-0.02
21	T	tert-Butyl methyl ether (MT	10.000	10.320	-3.2	79	-0.02
22	T	trans-1,2-Dichloroethene	10.000	10.308	-3.1	76	-0.02
23	T	Isopropyl ether (DIPE)	10.000	10.995	-9.9	80	-0.02
24	T	Vinyl acetate	10.000	10.868	-8.7	78	-0.02
25	P,T	1,1-Dichloroethane	10.000	10.801	-8.0	82	-0.02
26	T	tert-Butyl ethyl ether (ETB	10.000	11.063	-10.6	81	-0.02
27	T	2-Butanone	20.000	17.617	11.9	67	-0.02
28	T	2,2-Dichloropropane	10.000	11.256	-12.6	86	-0.02
29	T	cis-1,2-Dichloroethene	10.000	10.886	-8.9	81	-0.02
30	C,T	Chloroform	10.000	10.842	-8.4	82	-0.02
31	T	Bromochloromethane	10.000	10.842	-8.4	79	-0.02
32	T	Tetrahydrofuran	10.000	10.666	-6.7	82	-0.02
33	T	1,1,1-Trichloroethane	10.000	10.837	-8.4	82	-0.02
34	T	Cyclohexane	-1.000	0.000	0.0	570	-0.02
35	T	tert-Amyl methyl ether (TAM	10.000	10.428	-4.3	80	-0.02
36	S	1,2-Dichloroethane-d4	10.000	8.830	11.7	71	-0.02
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	88	-0.03
38	T	1,1-Dichloropropene	10.000	9.342	6.6	78	-0.02
[illegible]	T	Carbon tetrachloride	10.000	9.842	1.6	81	-0.02
4[illegible]	T	1,2-Dichloroethane	10.000	9.633	3.7	78	-0.02

(#) = Out of Range

2030

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A17\RAV229.D Vial: 2
Acq On : 17 Jan 2007 11:34 am Operator: AS
Sample : CVO01A0418 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	9.456	5.4	82	-0.03
42	T	Trichloroethene	10.000	9.393	6.1	82	-0.02
43	T	Methylcyclohexane	-1.000	0.000	0.0	60	-0.02
44	C,T	1,2-Dichloropropane	10.000	10.528	-5.3	86	-0.02
45	T	Bromodichloromethane	10.000	10.396	-4.0	82	-0.03
46	T	Dibromomethane	10.000	10.267	-2.7	82	-0.02
47	T	4-Methyl-2-pentanone	20.000	18.440	7.8	72	-0.02
48	T	2-Chloroethyl vinyl ether	10.000	5.485	45.1#	47	-0.02
49	T	cis-1,3-Dichloropropene	10.000	10.617	-6.2	85	-0.03
50	S	Toluene-d8	10.000	9.693	3.1	81	-0.02
51	C,T	Toluene	10.000	9.945	0.5	85	-0.02
52	T	Ethyl methacrylate	10.000	9.405	6.0	80	-0.02
53	T	trans-1,3-Dichloropropene	10.000	10.525	-5.3	81	-0.02
54	T	1,1,2-Trichloroethane	10.000	10.528	-5.3	84	-0.03
[illegible]	T	2-Hexanone	20.000	17.210	13.9	71	-0.02
56	T	1,3-Dichloropropane	10.000	9.915	0.9	81	-0.02
57	T	Tetrachloroethene	10.000	9.482	5.2	81	-0.02
58	T	Dibromochloromethane	10.000	10.381	-3.8	85	-0.03
59	T	1,2-Dibromoethane	10.000	10.510	-5.1	85	-0.02
60	T	1-Chlorohexane	10.000	10.521	-5.2	84	-0.02
61	P	Chlorobenzene	10.000	10.091	-0.9	85	-0.03
62	T	1,1,1,2-Tetrachloroethane	10.000	10.157	-1.6	84	-0.02
63	C,T	Ethylbenzene	10.000	10.485	-4.8	85	-0.02
64	T	m-Xylene & p-Xylene	20.000	20.514	-2.6	83	-0.03
65	T	o-Xylene	10.000	10.574	-5.7	84	-0.02
66	T	Styrene	10.000	10.698	-7.0	84	-0.03
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	89	-0.03
68	T	Isopropylbenzene	10.000	9.902	1.0	84	-0.02
69	P,T	Bromoform	10.000	10.092	-0.9	82	-0.02
70	P,T	1,1,2,2-Tetrachloroethane	10.000	9.870	1.3	81	-0.03
71	S	4-Bromofluorobenzene	10.000	10.520	-5.2	83	-0.03
72	T	1,2,3-Trichloropropane	10.000	10.736	-7.4	87	-0.07
73	T	trans-1,4-Dichloro-2-butene	10.000	9.406	5.9	77	-0.03
74	T	n-Propylbenzene	10.000	10.113	-1.1	84	-0.02
75	T	Bromobenzene	10.000	9.778	2.2	84	-0.02
76	T	1,3,5-Trimethylbenzene	10.000	9.744	2.6	83	-0.03
77	T	2-Chlorotoluene	10.000	10.071	-0.7	89	-0.02
78	T	4-Chlorotoluene	10.000	9.623	3.8	80	-0.02
[illegible]	T	tert-Butylbenzene	10.000	9.847	1.5	85	-0.02
[illegible]	T	1,2,4-Trimethylbenzene	10.000	9.671	3.3	81	-0.03

(#) = Out of Range

2031

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A17\RAV229.D Vial: 2
Acq On : 17 Jan 2007 11:34 am Operator: AS
Sample : CVO01A0418 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	10.003	-0.0	85	-0.02
82	T	p-Isopropyltoluene	10.000	9.661	3.4	83	-0.03
83	T	1,3-Dichlorobenzene	10.000	10.306	-3.1	88	-0.03
84	T	1,4-Dichlorobenzene	10.000	10.178	-1.8	86	-0.03
85	T	n-Butylbenzene	10.000	10.045	-0.4	83	-0.02
86	T	1,2-Dichlorobenzene	10.000	10.317	-3.2	89	-0.03
87	T	1,2-Dibromo-3-chloropropane	10.000	9.384	6.2	87	-0.03
88	T	1,2,4-Trichlorobenzene	10.000	8.684	13.2	90	-0.02
89	T	Hexachlorobutadiene	10.000	9.867	1.3	97	-0.03
90	T	Naphthalene	10.000	8.826	11.7	99	-0.03
91	T	1,2,3-Trichlorobenzene	10.000	9.032	9.7	93	-0.03

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A17\RAV229.D Vial: 2
Acq On : 17 Jan 2007 11:34 am Operator: AS
Sample : CVO01A0418 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	82	-0.02
2	T	Dichlorodifluoromethane	0.315	0.316	-0.3	79	0.00
3	P,T	Chloromethane	0.322	0.321	0.3	78	0.00
4	C,T	Vinyl chloride	0.340	0.335	1.5	80	0.00
5	T	Bromomethane	0.300	0.316	-5.3	88	-0.02
6	T	Chloroethane	0.241	0.214	11.2	80	-0.02
7	T	Dichlorofluoromethane	0.744	0.772	-3.8	76	-0.02
8	T	Trichlorofluoromethane	0.455	0.507	-11.4	87	0.00
9	T	sec-Propyl alcohol	0.000	0.000	0.0	72	0.00
10	T	Acrolein	0.016	0.015	6.3	69	-0.02
11	T	1,1,2-Trichloro-1,2,2-trifl	0.269	0.266	1.1	80	-0.02
12	T	Acetone	0.031	0.030	3.2	73	0.00
13	C,T	1,1-Dichloroethene	0.517	0.568	-9.9	82	-0.02
14	T	tert-Butyl alcohol	0.010	0.010	0.0	68	-0.02
[illegible]	T	Acetonitrile	0.000	0.000	0.0	74	0.00
16	T	Methyl acetate	0.000	0.000	0.0	73	-0.02
17	T	Iodomethane	0.489	0.527	-7.8	83	-0.02
18	T	Methylene chloride	0.616	0.500	18.8	78	-0.02
19	T	Carbon disulfide	1.314	1.150	12.5	67	-0.02
20	T	Acrylonitrile	0.048	0.049	-2.1	75	-0.02
21	T	tert-Butyl methyl ether (MT	0.433	0.447	-3.2	79	-0.02
22	T	trans-1,2-Dichloroethene	0.575	0.593	-3.1	76	-0.02
23	T	Isopropyl ether (DIPE)	1.168	1.284	-9.9	80	-0.02
24	T	Vinyl acetate	0.371	0.403	-8.6	78	-0.02
25	P,T	1,1-Dichloroethane	0.737	0.796	-8.0	82	-0.02
26	T	tert-Butyl ethyl ether (ETB	0.776	0.859	-10.7	81	-0.02
27	T	2-Butanone	0.064	0.056	12.5	67	-0.02
28	T	2,2-Dichloropropane	0.444	0.500	-12.6	86	-0.02
29	T	cis-1,2-Dichloroethene	0.654	0.711	-8.7	81	-0.02
30	C,T	Chloroform	0.590	0.640	-8.5	82	-0.02
31	T	Bromochloromethane	0.302	0.327	-8.3	79	-0.02
32	T	Tetrahydrofuran	0.044	0.047	-6.8	82	-0.02
33	T	1,1,1-Trichloroethane	0.486	0.527	-8.4	82	-0.02
34	T	Cyclohexane	0.000	0.000	0.0	570#	-0.02
35	T	tert-Amyl methyl ether (TAM	0.510	0.532	-4.3	80	-0.02
36	S	1,2-Dichloroethane-d4	0.296	0.262	11.5	71	-0.02
37	I	CHLOROBENZENE-D5	1.000	1.000	0.0	88	-0.03
38	T	1,1-Dichloropropene	0.204	0.191	6.4	78	-0.02
[illegible]	T	Carbon tetrachloride	0.528	0.520	1.5	81	-0.02
[illegible]	T	1,2-Dichloroethane	0.450	0.433	3.8	78	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A17\RAV229.D Vial: 2
Acq On : 17 Jan 2007 11:34 am Operator: AS
Sample : CVO01A0418 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	1.622	1.534	5.4	82	-0.03
42	T	Trichloroethene	0.450	0.422	6.2	82	-0.02
43	T	Methylcyclohexane	0.000	0.000	0.0	60	-0.02
44	C,T	1,2-Dichloropropane	0.501	0.527	-5.2	86	-0.02
45	T	Bromodichloromethane	0.505	0.525	-4.0	82	-0.03
46	T	Dibromomethane	0.186	0.191	-2.7	82	-0.02
47	T	4-Methyl-2-pentanone	0.195	0.180	7.7	72	-0.02
48	T	2-Chloroethyl vinyl ether	0.016	0.008	50.0#	47#	-0.02
49	T	cis-1,3-Dichloropropene	0.536	0.569	-6.2	85	-0.03
50	S	Toluene-d8	1.306	1.266	3.1	81	-0.02
51	C,T	Toluene	1.605	1.597	0.5	85	-0.02
52	T	Ethyl methacrylate	0.269	0.275	-2.2	80	-0.02
53	T	trans-1,3-Dichloropropene	0.368	0.387	-5.2	81	-0.02
54	T	1,1,2-Trichloroethane	0.225	0.237	-5.3	84	-0.03
[illegible]	T	2-Hexanone	0.122	0.105	13.9	71	-0.02
56	T	1,3-Dichloropropane	0.426	0.423	0.7	81	-0.02
57	T	Tetrachloroethene	0.322	0.306	5.0	81	-0.02
58	T	Dibromochloromethane	0.297	0.308	-3.7	85	-0.03
59	T	1,2-Dibromoethane	0.235	0.247	-5.1	85	-0.02
60	T	1-Chlorohexane	0.641	0.674	-5.1	84	-0.02
61	P	Chlorobenzene	1.014	1.023	-0.9	85	-0.03
62	T	1,1,1,2-Tetrachloroethane	0.315	0.320	-1.6	84	-0.02
63	C,T	Ethylbenzene	1.716	1.799	-4.8	85	-0.02
64	T	m-Xylene & p-Xylene	1.307	1.340	-2.5	83	-0.03
65	T	o-Xylene	1.352	1.430	-5.8	84	-0.02
66	T	Styrene	0.935	1.000	-7.0	84	-0.03
67	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	89	-0.03
68	T	Isopropylbenzene	6.334	6.272	1.0	84	-0.02
69	P,T	Bromoform	0.474	0.478	-0.8	82	-0.02
70	P,T	1,1,2,2-Tetrachloroethane	0.860	0.848	1.4	81	-0.03
71	S	4-Bromofluorobenzene	1.422	1.496	-5.2	83	-0.03
72	T	1,2,3-Trichloropropane	0.491	0.452	7.9	87	-0.07
73	T	trans-1,4-Dichloro-2-butene	0.178	0.168	5.6	77	-0.03
74	T	n-Propylbenzene	7.389	7.472	-1.1	84	-0.02
75	T	Bromobenzene	1.064	1.040	2.3	84	-0.02
76	T	1,3,5-Trimethylbenzene	4.355	4.243	2.6	83	-0.03
77	T	2-Chlorotoluene	4.575	4.607	-0.7	89	-0.02
78	T	4-Chlorotoluene	3.709	3.569	3.8	80	-0.02
[illegible]	T	tert-Butylbenzene	4.516	4.447	1.5	85	-0.02
[illegible]	T	1,2,4-Trimethylbenzene	3.872	3.744	3.3	81	-0.03

(#) = Out of Range

2034

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A17\RAV229.D Vial: 2
Acq On : 17 Jan 2007 11:34 am Operator: AS
Sample : CVO01A0418 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	6.555	6.557	-0.0	85	-0.02
82	T	p-Isopropyltoluene	4.411	4.262	3.4	83	-0.03
83	T	1,3-Dichlorobenzene	1.906	1.964	-3.0	88	-0.03
84	T	1,4-Dichlorobenzene	1.779	1.811	-1.8	86	-0.03
85	T	n-Butylbenzene	3.846	3.864	-0.5	83	-0.02
86	T	1,2-Dichlorobenzene	1.572	1.622	-3.2	89	-0.03
87	T	1,2-Dibromo-3-chloropropane	0.080	0.087	-8.7	87	-0.03
88	T	1,2,4-Trichlorobenzene	0.641	0.667	-4.1	90	-0.02
89	T	Hexachlorobutadiene	0.680	0.748	-10.0	97	-0.03
90	T	Naphthalene	0.609	0.632	-3.8	99	-0.03
91	T	1,2,3-Trichlorobenzene	0.490	0.526	-7.3	93	-0.03

ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1/4/07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A01 -023

BATCH VØ1A04Ø5

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAVØ39	BFBØ1AØ5	2µL				T/CHECK 19:38
02	4Ø	VØ1AØ4Ø1	Ø3/.15/.9µL				3ppb 8260/6 Ket-AA/.1ppm/GTCA
03	41	Ø2	.05/.25/1.1µL				.5 /1 /1.5 /2.5
04	42	Ø3	.1/.5/2µL				1 /2 /3 /5
05	43	Ø4	.2/1/4µL				2 /4 /6 /10
06	44	Ø5	.5/2.5/1µL				5 /10 /15 /25
07	45	Ø6	1/5/2µL				10 /20 /30 /50
08	46	Ø7	2/10/4µL				20 /40 /60 /80
09	47	Ø8	3/15/6µL				30 /60 /90 /150
10	48	Ø9	4/20/8µL				40 /80 /120 /200
11	49	1Ø	5/25/10µL				50 /100 /150 /250
12	5Ø	Rinse					
13	51	VØ1AØ5B					
14	52	IVØ1AØ4Ø1*	1/5/25µL				10 /20 /50
15	53	Ø2					
16	54	15/55					
17							
18							
19							
20							
21							
22							
23							
24							
25							AS 1/5/06

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	VØ1AØ4

STANDARDS

NAME	ID	CONC (ng/L)
DCC gases	SVIC-11-56-3	25Ø
DCC 826Ø	55-3	5Ø/25Ø
DCC Ket-AA	56-2	25Ø
BFB	-49-3	5Ø
IS/SURR.	-51-2 -52-1	25Ø
LCS gases	-57-1	25Ø
LCS 826Ø	-58-2	5Ø/25Ø
LCS Ket-AA DCFM	-49-1 SVIA-11-73	25Ø 1ØØ

SOLVENT	ID
METHANOL	
DATA FILE	ØØ7AØ4

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments: * not validated for: DCFM, acrylonitrile, Vinyl acetate, 2CEVE, THF

Analyzed By: AS

Date Disposed: 1/5/06

Disposed By: AS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1-9-07 ☐ 5-ml Purge ☒ 25-ml Purge Book # A01 -023

BATCH CV07/A04Ø4

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAV07-2	BFB01A08	2 µL				TICHECK
02	073	↓ 09-	↓				↓ 10:04
03	074	CV01A0401-	1/5/2µL				10/20/50/200/500/1000/50TOA
04	075	IV01A0403-	1/5/2/2.5µL				10 20 150
05	076	CV01A0405	2/4/4µL				20 40 100
06	077	DCC	1/5/2µL				10 20 150
07	078	V01A09L-	1/5/2/2.5µL				3 ±3SD Full List
08	079	C	↓				
09	080	B	25ml	1			
10	081	G-					
11	082	BLOA0026-12			<2		
12	083	-01					
13	084	-02					
14	085	-03					
15	086	-04					
16	087	-06					
17	088	-07					
18	089	-08					
19	090	-09					
20	091	-10			↓		21:32
21	092	Rinse					
22	093	↓	↓	↓			
23							
24							
25							AS

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	V01A04

STANDARDS		
NAME	ID	CONC (mg/L)
DCC gases	SVCC-11-56-3	
DCC 8260	-55-3	
DCC Kt-1AA	-54-2	
BFB	-49-3	50/100/150
IS/SURR. IS SS	-54-2 -55-1	
LCS gases	-57-1	
LCS 8260	-54-2	
LCS Kt-1AA BCFM	-49-1 SVIA-11-155	
SOLVENT	ID	
METHANOL		
DATA FILE	07A04	

Electronic Data Archival	
Location	Date
HPCHEM_VOA/T001	

Comments: ICV: SVCC 11-57-2

Analyzed By: CV / AS

Date Disposed:

Disposed By:

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1-16-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A01 -023

BATCH CV001A0414

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAV193	BFB01A18	2µl				T/CHECK
02	194	19					10:16
03	195	CV001A0414	1/5/2µl				
04	196	15					
05	197	V001A19L	1/5/2/2.5µl				"L" only
06	198	C					Vial Jam "L", R/R "Y"
07	199	B	25mls	1			
08	200	Q					
09	201	07A051-01					R/R @ x10 ~~before~~ AS 1/18
10	202	07A038-09I	10mls	2.5			
11	203	-09T	12.5mls	2			use "I"
12	204	-10	25mls	1			
13	205	-11					T @ x10
14	206	-12					X1 c/over?
15	207	Rinse					
16	208	07A051-01T	2.5mls	10			N/Good, R/R x10, 1st surrad
17	209	V001A19Y	1/5/2/2.5µl	1			" , 20:44
18	210	Rinse	25mls				
19							
20							
21							
22							
23							
24							
25							AS 1/17/07

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	V001A04

STANDARDS

NAME	ID	CONC. (mg/L)
DCC gases	SVIC-11-56-3	
DCC 8260	-55-3	
DCC Ket-AA	-56-2	
BFB	-49-3	50/100/200
IS/SURR.	-54-3	
LCS gases	-57-1	
LCS 8260	-57-2	
LCS Ket-AA DCFM	-49-1 SVIA-11-155	

SOLVENT	ID
METHANOL	
DATA FILE	07A16

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments:

Analyzed By: AS

Date Disposed: 1/17/07

Disposed By: AS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1-17-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A01 -023

BATCH CV001A0418

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAV228	BFB01A22	2 µl				T/CHECK 09:39
02	229	CV001A0418	1/5/2 µl				
03	230	V001A22L	1/5/2/2.5 µl				
04	231	C					
05	232	B	25 mls	1			
06	233	Q					
07	234	07A038-12R			<2		
08	235	Rinse					
09	236						
10	237	07A038-11T	2.5 mls	10	<2		
11	238	Rinse	25 mls	1			
12	239	07A061-04			<2		
13	240	07A069-05					
14	241	07A051-01T	2.5 mls	10			
15	242	07A061-01	25 mls	1			
16	243	-02					
17	244	-03					21:19
18	245	Rinse					
19	246						
20	247						
21							
22							
23							
24							
25							AS 1/18/07

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	V001A04

STANDARDS

NAME	ID	CONC. (mg/L)
DCC gases	SVIC-11-56-3	
DCC 8260	-55-3	
DCC Kit-AA	-56-2	
BFB	-49-3	50/100/250
IS/SURR.	-54-3	
LCS gases	-57-1	
LCS 8260	-57-2	
LCS Kit-AA DCFM	-49-1 SVIA-11-155	

SOLVENT	ID
METHANOL	
DATA FILE	07A17

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments:

Analyzed By: AS

Date Disposed: 1/18/07

Disposed By: AS

TABLE OF CONTENTS

CLIENT: **SHAW E&I**

PROJECT: **ALAMEDA POINT, CTO 133**

SDG: **07B268**

SECTION		PAGE
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GC/MS-VOA	METHOD 5030B/8260B	2000 – 2040
GC/MS-SVOA	**	3000 –
GC-VOA	**	4000 –
GC-SVOA	**	5000 –
HPLC	**	6000 –
METALS	**	7000 –
WET	**	8000 –
OTHERS	**	9000 –

** - Not Requested

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

Date: 03-08-2007
EMAX Batch No.: 07B268

Attn: Rose Condit

Shaw E&I
4005 Port Chicago Hwy
Concord CA 94520

Subject: Laboratory Report
Project: Alameda Point, CTO 133

Enclosed is the Laboratory report for samples received on 02/24/07.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
133-4-2-INF(02/23/07)	B268-01	02/23/07	WATER	VOLATILE ORGANICS BY GC/MS

The results are summarized on the following pages.

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

Sincerely yours,

for

Kam Y. Pang, Ph.D.
Laboratory Director

CHAIN OF CUSTODY

Shaw

Shaw Environmental and Infrastructure Inc.

4005 Port Chicago Hwy
Concord, CA 94520

Ref. Document # 073268 133-0

Page 1 of 1

Project Number: 108816
Project Name / Location: Alameda CTO 133
Purchase Order #: 41926
Shipment Date: ~~6/22/2007~~ 2/23/07
Waybill Number: 102650572
Lab Destination: EMAX, 1835 205th St., Torrance, 90501
Lab Contact Name / ph. #: Ye-Myint, 310-618-8889

Project Manager: John McGuire (Name & phone #)

Send Report To: Rose Condit
Phone/Fax Number: 925-288-2151
Address: 4005 Port Chicago Hwy
City: Concord, CA, 94520

Sampler's Name(s): Nathan Kong

Sample ID Number	Sample Description	Collection Information Date	Time	Method	Matrix	# of containers	Container Type	VOCs (8260B)- Full 8260 list					Cooler Temp				
							Preservative (water)	HCL									
							Preservative (soil)	Ice									
								3-VOA									
~~133-4-2-inf(02/22/07)~~	~~Influent to GAC-4-2~~	~~02/22/07~~	~~0900~~		~~WW~~	~~3~~		~~X~~									
133-4-2-inf (02/23/07)	Influent to GAC-4-2	02/23/07	0900	G	WW	3		X									
Temp Blank													X				
							T-3.0										

Special Instructions:

Turnaround Time: 10 day ☐ 24-hr ☐ 48-hr ☐ 5-day

Level Of QC Required: I II III Project Specific:

Relinquished By: Nathan Kong Date: ~~2/22/2007~~ 2/23/07 Time: 0900

Received By: Date: 2/24/07 Time: 1300

Relinquished By: Date: Time:

Received By: Date: Time:

Method Codes
C = Composite G = Grab

Matrix Codes
DW = Drinking Water SO = Soil
GW = Ground Water SL = Sludge
WW = Waste Water CP = Chip Samples

SAMPLE RECEIPT FORM 1

LABORATORIES, INC.

Type of Delivery	Delivered By/Airbill		
		ECN	078268
☐ EMAX Courier		Recepient	A. FLORENDO
☐ Client Delivery		Date	022407
☑ Third Party	UPS	Time	1300

COC Inspection

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

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

Safety Issues

☐ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☑ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☑ Sufficient	Plastic bag
Temperatures	☑ Cooler 1 3.0 °C	☐ Cooler 2 ____ °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C

Comments: ☐ PM was informed on non-compliant coolers imediately.

DISCREPANCIES

LSID	LSCID	Sample Label ID/COC ID	Discrepancy Code	Corrective Action Code

REVIEWS

Sample Labeling ____ SRF ____ PM ____

Date 022407 Date ____ Date 2/26/07

LEGEND

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Project Management
A1	Analysis is not indicated in COC	E1	Preservative needed; sample has no preservative	R1	Hold sample(s); wait for further instructions
A2	Analysis is not indicated in label	E2	Preservative not needed but sample is preserved	R2	Proceed as indicated in COC
A3	Analysis is inconsistent in COC vis-a-vis label	F1	Not enough quantity of samples	R3	Refer to attached instruction
B1	Sample ID is not indicated in COC	F2	Bubble is> 6mm	R4	Cancel the analysis
B2	Sample ID is not indicated in label	G1	Temperature is out of range (4 +_ 2°C)	R5	____
B3	Sample ID is inconsistent in COC vis-a-vis label	G2	Out of Holding Time	R6	____
C1	Wrong container	G3	>20 % solid particle		
C2	Broken container	H1	____		
C3	Leaking container	H2	____		
D1	Date and/or time is not indicated in COC				
D2	Date and/or time is not indicated in label				
D3	Date and/or time is inconsistent in COC vis-a-vis label				

UPS CampusShip: View/Print Label

1. **Print the label(s):** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the dotted line.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**

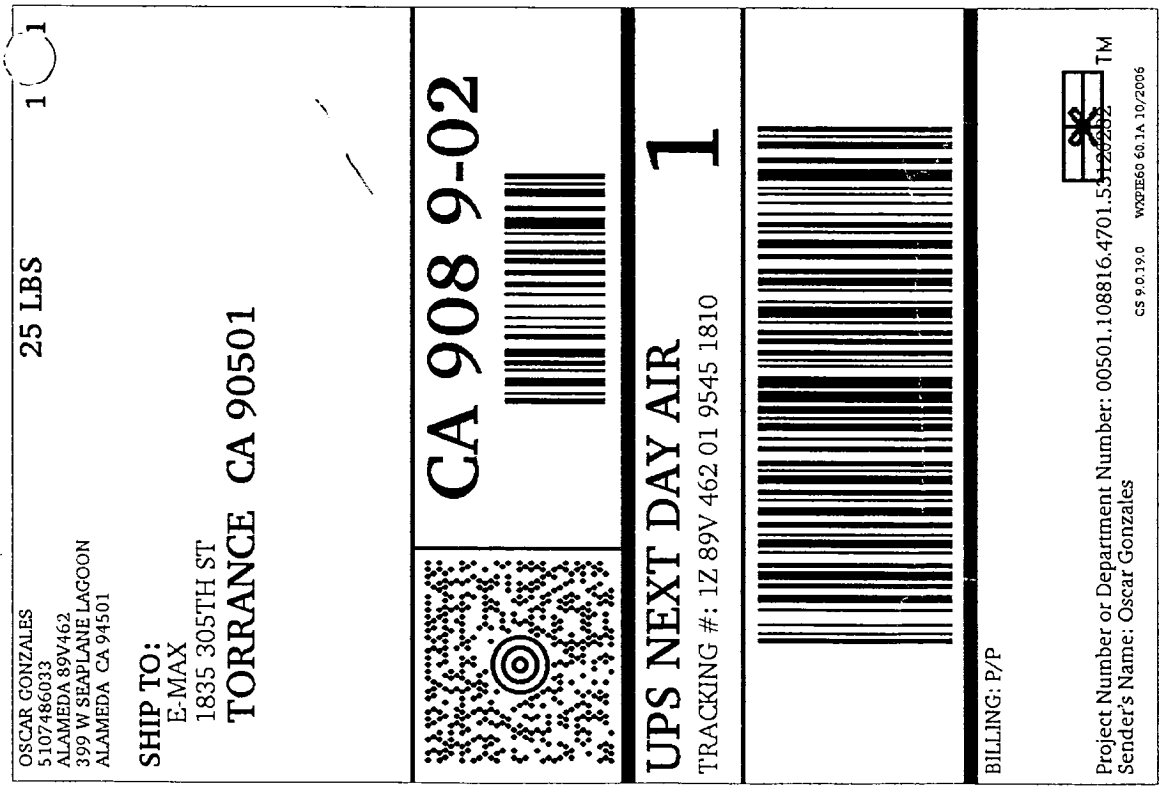
Customers without a Daily Pickup

- Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
- Hand the package to any UPS driver in your area.
- Take your package to a location of The UPS Store®, UPS Drop Box, UPS Customer Center or Authorized Shipping Outlet near you. Items sent via UPS Return Services (including Ground Returns) are accepted at any UPS Drop Box.
- To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

Customers with a Daily Pickup

- Your driver will pickup your shipment(s) as usual.

FOLD HERE



073268

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

SHAW E&I

ALAMEDA POINT, CTO 133

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

SDG#: 07B268

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07B268

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

One (1) water sample was received on 02/24/07 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 blanks were 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**

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

LAB CHRONI
VOLATILE ORGANICS BY GC/MS

Client : SHAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07B268
Instrument ID : T-094

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V094C08Q	1	NA	03/05/0716:41	03/05/0716:41	RCD081	RLD389	V094C08	Method Blank
LCS1W	V094C08L	1	NA	03/05/0714:46	03/05/0714:46	RCD078	RLD389	V094C08	Lab Control Sample (LCS)
LCD1W	V094C08C	1	NA	03/05/0715:24	03/05/0715:24	RCD079	RLD389	V094C08	LCS Duplicate
133-4-2-INF(02/23/07)	B268-01	1	NA	03/05/0718:36	03/05/0718:36	RCD084	RLD389	V094C08	Field Sample
MBLK2W	V094C10Q	1	NA	03/06/0706:44	03/06/0706:44	RCD103	RLD389	V094C10	Method Blank
LCS2W	V094C10X	1	NA	03/06/0713:47	03/06/0713:47	RCD112	RLD389	V094C10	Lab Control Sample (LCS)
LCD2W	V094C10Y	1	NA	03/06/0714:25	03/06/0714:25	RCD113	RLD389	V094C10	LCS Duplicate
133-4-2-INF(02/23/07)DL	B268-01T	25	NA	03/06/0711:14	03/06/0711:14	RCD108	RLD389	V094C10	Diluted Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

:lient	: SHAW E&I	Date Collected:	02/23/07
'roject	: ALAMEDA POINT, CTO 133	Date Received:	02/24/07
!atch No.	: 078268	Date Extracted:	03/05/07 18:36
!am' ID	: 133-4-2-INF(02/23/07)	Date Analyzed:	03/05/07 18:36
.at p ID	: B268-01	Dilution Factor:	1
.ab. e ID	: RCD084	Matrix	: WATER
:xt Btch ID	: V094C08	% Moisture	: NA
:alib. Ref.	: RLD389	Instrument ID	: T-094

'ARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
,1,1-TRICHLOROETHANE	21	0.50	0.20
,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
,1,2-TRICHLOROETHANE	ND	0.50	0.20
,1-DICHLOROETHANE	3.3	0.50	0.20
,1-DICHLOROETHENE	82E	0.50	0.20
,1-DICHLOROPROPENE	ND	0.50	0.20
,2,3-TRICHLOROBENZENE	ND	0.50	0.20
,2,3-TRICHLOROPROPANE	ND	0.50	0.50
,2,4-TRICHLOROBENZENE	ND	0.50	0.20
,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
,2-DICHLOROBENZENE	ND	0.50	0.20
,2-DICHLOROETHANE	0.29J	0.50	0.20
,2-DICHLOROPROPANE	ND	0.50	0.20
,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
,3-DICHLOROBENZENE	ND	0.50	0.20
,3-DICHLOROPROPANE	ND	0.50	0.20
,4-DICHLOROBENZENE	ND	0.50	0.20
!,2-DICHLOROPROPANE	ND	0.50	0.20
!-CHLOROTOLUENE	ND	0.50	0.20
.-CHLOROTOLUENE	ND	0.50	0.20
:ENZENE	ND	0.50	0.20
:ROMOBENZENE	ND	0.50	0.20
:ROMOCHLOROMETHANE	ND	1.0	0.20
:ROMODICHLOROMETHANE	ND	0.50	0.20
:ROMOFORM	ND	0.50	0.30
:ROMOMETHANE	ND	0.50	0.20
:ARBON TETRACHLORIDE	ND	0.50	0.20
:HLOROBENZENE	ND	0.50	0.20
:HLOROETHANE	ND	0.50	0.20
:HLOROFORM	ND	0.50	0.20
:HLOROMETHANE	ND	0.50	0.20
:IS-1,2-DICHLOROETHENE	1.2	0.50	0.20
:IB CHLOROMETHANE	ND	0.50	0.20
:IB METHANE	ND	0.50	0.20
:ICh RODIFLUOROMETHANE	ND	0.50	0.30
:THYLBENZENE	ND	0.50	0.20
:EXACHLOROBUTADIENE	ND	1.0	0.20
SOPROPYL BENZENE	ND	0.50	0.20
/P-XYLENES	ND	1.0	0.50
:ETHYLENE CHLORIDE	ND	1.0	0.50
-BUTYLBENZENE	ND	0.50	0.20
-PROPYLBENZENE	ND	0.50	0.20
:APHTHALENE	ND	0.50	0.50
)-XYLENE	ND	0.50	0.20
-ISOPROPYLTOLUENE	ND	0.50	0.20
:EC-BUTYLBENZENE	ND	0.50	0.20
:TYRENE	ND	0.50	0.20
'ERT-BUTYLBENZENE	ND	0.50	0.20
'ETRACHLOROETHYLENE	ND	0.50	0.20
'OLUENE	1.3	0.50	0.20
'RANS-1,2-DICHLOROETHENE	0.87	0.50	0.20
'RICHLOROETHENE	0.44J	0.50	0.20
'RICHLOROFLUOROMETHANE	ND	0.50	0.20
'INYL CHLORIDE	ND	0.50	0.20
:CETONE	9.9J	10	5.0
!-BUTANONE	ND	10	5.0
:TBE	ND	1.0	0.20
'ERT-BUTANOL	ND	20	5.0
-METHYL-2-PENTANONE	ND	10	5.0
!-HEXANONE	ND	10	5.0

:URROGATE PARAMETERS	% RECOVERY	QC LIMIT
,2-DICHLOROETHANE-D4	85	70-140
'OLUENE-D8	94	70-140
-BROMOFLUOROBENZENE	109	70-130

:L: Reporting Limit

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

Client	: SHAW E&I	Date Collected:	02/23/07
Project	: ALAMEDA POINT, CTO 133	Date Received:	02/24/07
Batch No.	: 078268	Date Extracted:	03/06/07 11:14
Sample ID	: 133-4-2-INF(02/23/07)DL	Date Analyzed:	03/06/07 11:14
Lab Sample ID	: B268-01T	Dilution Factor:	25
Lab File ID	: RCD108	Matrix	: WATER
Ext Btch ID	: V094C10	% Moisture	: NA
Calib. Ref.	: RLD389	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	12	5.0
1,1,1-TRICHLOROETHANE	24	12	5.0
1,1,2,2-TETRACHLOROETHANE	ND	12	5.0
1,1,2-TRICHLOROETHANE	ND	12	5.0
1,1-DICHLOROETHANE	ND	12	5.0
1,1-DICHLOROETHENE	99	12	5.0
1,1-DICHLOROPROPENE	ND	12	5.0
1,2,3-TRICHLOROBENZENE	ND	12	5.0
1,2,3-TRICHLOROPROPANE	ND	12	12
1,2,4-TRICHLOROBENZENE	ND	12	5.0
1,2,4-TRIMETHYLBENZENE	ND	12	5.0
1,2-DIBROMO-3-CHLOROPROPANE	ND	50	12
1,2-DICHLOROBENZENE	ND	12	5.0
1,2-DICHLOROETHANE	ND	12	5.0
1,2-DICHLOROPROPANE	ND	12	5.0
1,2-ETHYLENEDIBROMIDE	ND	25	5.0
1,3,5-TRIMETHYLBENZENE	ND	12	5.0
1,3-DICHLOROBENZENE	ND	12	5.0
1,3-DICHLOROPROPANE	ND	12	5.0
1,4-DICHLOROBENZENE	ND	12	5.0
2,2-DICHLOROPROPANE	ND	12	5.0
2-CHLOROTOLUENE	ND	12	5.0
4-CHLOROTOLUENE	ND	12	5.0
BENZENE	ND	12	5.0
BROMOBENZENE	ND	12	5.0
BROMOCHLOROMETHANE	ND	25	5.0
BROMODICHLOROMETHANE	ND	12	5.0
BROMOFORM	ND	12	7.5
BROMOMETHANE	ND	12	5.0
CARBON TETRACHLORIDE	ND	12	5.0
CHLOROBENZENE	ND	12	5.0
CHLOROETHANE	ND	12	5.0
CHLOROFORM	ND	12	5.0
CHLOROMETHANE	ND	12	5.0
CIS-1,2-DICHLOROETHENE	ND	12	5.0
DIBROMOCHLOROMETHANE	ND	12	5.0
DIBROMOMETHANE	ND	12	5.0
DICHLORODIFLUOROMETHANE	ND	12	7.5
ETHYLBENZENE	ND	12	5.0
HEXACHLOROBUTADIENE	ND	25	5.0
ISOPROPYL BENZENE	ND	12	5.0
M/P-XYLENES	ND	25	12
METHYLENE CHLORIDE	ND	25	12
N-BUTYLBENZENE	ND	12	5.0
N-PROPYLBENZENE	ND	12	5.0
NAPHTHALENE	ND	12	12
O-XYLENE	ND	12	5.0
P-ISOPROPYLTOLUENE	ND	12	5.0
SEC-BUTYLBENZENE	ND	12	5.0
STYRENE	ND	12	5.0
TERT-BUTYLBENZENE	ND	12	5.0
TETRACHLOROETHYLENE	ND	12	5.0
TOLUENE	ND	12	5.0
TRANS-1,2-DICHLOROETHENE	ND	12	5.0
TRICHLOROETHENE	ND	12	5.0
TRICHLOROFLUOROMETHANE	ND	12	5.0
VINYL CHLORIDE	ND	12	5.0
ACETONE	ND	250	120
2-BUTANONE	ND	250	120
MTBE	ND	25	5.0
TERT-BUTANOL	ND	500	120
4-METHYL-2-PENTANONE	ND	250	120
2-HEXANONE	ND	250	120

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	70-140
TOLUENE-D8	104	70-140
4-BROMOFLUOROBENZENE	120	70-130

RL: Reporting Limit

QC SUMMARIES

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

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	03/05/07
Batch No.	: 078268	Date Extracted:	03/05/07 16:41
Sam[illegible] ID:	MBLK1W	Date Analyzed:	03/05/07 16:41
Lab[illegible]p ID:	VO94C08Q	Dilution Factor:	1
Lab[illegible]e ID:	RC0081	Matrix	: WATER
Ext Btch ID:	VO94C08	% Moisture	: NA
Calib. Ref.:	RL0389	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIE[illegible]CHLOROMETHANE	ND	0.50	0.20
DIB[illegible]OMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	84	70-140
TOLUENE-D8	93	70-130
4-BROMOFLUOROBENZENE	102	70-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07B268
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V094C08Q	V094C08L	V094C08C		
LAB FILE ID:	RCD081	RCD078	RCD079		
DATE EXTRACTED:	03/05/0716:41	03/05/0714:46	03/05/0715:24	DATE COLLECTED:	NA
DATE ANALYZED:	03/05/0716:41	03/05/0714:46	03/05/0715:24	DATE RECEIVED:	03/05/07
PREP. BATCH:	V094C08	V094C08	V094C08		
CALIB. REF:	RLD389	RLD389	RLD389		

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-Dichloroethene	ND	10.0	9.04	90	10.0	9.10	91	1	60-130	30
Benzene	ND	10.0	8.66	87	10.0	8.62	86	0	70-130	30
Chlorobenzene	ND	10.0	10.5	105	10.0	10.4	104	1	70-130	30
Toluene	ND	10.0	9.66	97	10.0	9.55	96	1	70-130	30
Trichloroethene	ND	10.0	9.83	98	10.0	9.86	99	0	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	9.07	91	10.0	8.71	87	70-140
Toluene-d8	10.0	9.08	91	10.0	8.87	89	70-130
4-Bromofluorobenzene	10.0	10.1	101	10.0	10.0	100	70-130

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

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	03/06/07
Batch No.	: 07B268	Date Extracted:	03/06/07 06:44
Sample ID	: MBLK2W	Date Analyzed:	03/06/07 06:44
Lab Sample ID	: V094C10Q	Dilution Factor:	1
Lab File ID	: RCD103	Matrix	: WATER
Ext Btch ID	: V094C10	% Moisture	: NA
Calib. Ref.	: RLD389	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	79	70-140
TOLUENE-D8	89	70-130
4-BROMOFLUOROBENZENE	105	70-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07B268
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2W				
LAB SAMP ID:	V094C10Q	V094C10X	V094C10Y		
LAB FILE ID:	RCD103	RCD112	RCD113		
DATE EXTRACTED:	03/06/0706:44	03/06/0713:47	03/06/0714:25	DATE COLLECTED:	NA
DATE ANALYZED:	03/06/0706:44	03/06/0713:47	03/06/0714:25	DATE RECEIVED:	03/06/07
PREP. BATCH:	V094C10	V094C10	V094C10		
CALIB. REF:	RLD389	RLD389	RLD389		

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-Dichloroethene	ND	10.0	9.15	92	10.0	8.87	89	3	60-130	30
Benzene	ND	10.0	9.18	92	10.0	8.49	85	8	70-130	30
Chlorobenzene	ND	10.0	10.9	109	10.0	10.6	106	2	70-130	30
Toluene	ND	10.0	9.80	98	10.0	9.58	96	2	70-130	30
Trichloroethene	ND	10.0	10.5	105	10.0	9.82	98	7	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	9.61	96	10.0	9.10	91	70-140
Toluene-d8	10.0	9.14	91	10.0	8.81	88	70-130
4-Bromofluorobenzene	10.0	10.4	104	10.0	9.64	96	70-130

INITIAL CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

.ab Name: EMAX Inc
.ab Code: EMXT Case No.:
.ab File ID: RLD383
Inst ment ID: T-094
GC mn:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 078268
BFB Injection Date : 12/18/06
BFB Injection Time : 15:01
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.27
75	30.0 - 60.0% of mass 95	46.40
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.61
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	73.27
175	5.0 - 9.0% of mass 174	5.55(7.6)1
176	95.0 - 101.0% of mass 174	71.42(97.5)1
177	5.0 - 9.0% of mass 176	4.48(6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	V094L1801	RLD384	12/18/06	15:41
2	VSTD0.5	V094L1802	RLD385	12/18/06	16:20
3	VSTD01	V094L1803	RLD386	12/18/06	16:58
4	VSTD02	V094L1804	RLD387	12/18/06	17:36
5	VSTD05	V094L1805	RLD388	12/18/06	18:15
6	VSTD010	V094L1806	RLD389	12/18/06	18:54
7	VSTD020	V094L1807	RLD390	12/18/06	19:33
8	VSTD030	V094L1808	RLD391	12/18/06	20:23
9	VSTD040	V094L1809	RLD392	12/18/06	21:02
10	VSTD050	V094L1810	RLD393	12/18/06	21:41
11	VSTD010	IV094L1801	RLD396	12/18/06	23:37

FORM V VOA OLM02.0

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

.ab Name: EMAX Inc
.ab Code: EMXT Case No.:
.ab File ID: RBD692
Ins[illegible]ment ID: T-094
GC[illegible]mn:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 078268
BFB Injection Date : 02/28/07
BFB Injection Time : 18:09
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.56
75	30.0 - 60.0% of mass 95	41.95
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.96
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	86.26
175	5.0 - 9.0% of mass 174	6.37(7.4)1
176	95.0 - 101.0% of mass 174	82.44(95.6)1
177	5.0 - 9.0% of mass 176	5.34(6.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	IV094L1803	RBD693	02/28/07	18:47

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T094
Beginning DateTime :12/18/06 15:41
Ve Units :PPB
File :RLD389

Column Spec :RTX502.2 ID :0.
Ending DateTime :12/18/06 21
HPChem Method :V094L18

M	IDX	Parameters	3 15:41 RLD384	5 16:20 RLD385	1 16:58 RLD386	2 17:36 RLD387	5 18:15 RLD388	10 18:54 RLD389	20 19:33 RLD390	30 20:23 RLD391	40 21:02 RLD392	50 21:41 RLD393	Av_RRF	%_RSD	Av_R
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	11.8
	2	Dichlorodifluoromethane	0.193	0.188	0.229	0.231	0.216	0.224	0.224	0.213	0.219	0.181	0.212	8.41	4.2
	3	Chloromethane	0.394	0.446	0.359	0.405	0.328	0.364	0.346	0.306	0.324	0.317	0.359	12.43	4.7
	4	Vinyl chloride	0.347	0.360	0.350	0.346	0.312	0.309	0.274	0.228	------	------	0.316	14.47	4.9
	5	Bromomethane	------	0.235	0.228	0.221	0.200	0.224	0.222	0.228	0.224	0.219	0.222	4.35	5.6
	6	Chloroethane	0.266	0.268	0.247	0.237	0.215	0.232	0.226	0.210	0.213	0.212	0.233	9.34	5.8
	7	Dichlorofluoromethane	0.655	0.586	0.625	0.665	0.570	0.615	0.581	0.558	0.570	0.580	0.601	6.25	5.8
	8	Trichlorofluoromethane	0.434	0.447	0.474	0.468	0.456	0.477	0.486	0.468	0.478	0.475	0.466	3.43	6.2
	9	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
2	10	Acrolein	------	------	0.008	0.008	0.009	0.011	0.010	0.010	0.011	0.010	0.010	9.86	6.8
	11	1,1,2-Trichloro-1,2,2-trifluoroethane	0.244	0.224	0.238	0.251	0.227	0.241	0.230	0.225	0.226	0.229	0.233	3.97	6.8
2	12	Acetone	------	------	------	0.038	0.032	0.034	0.033	0.030	0.032	0.031	0.033	7.81	6.9
	13	1,1-Dichloroethene	0.481	0.437	0.459	0.494	0.431	0.466	0.443	0.433	0.434	0.442	0.452	4.89	7.1
5	14	tert-Butyl alcohol	0.012	0.012	0.012	0.014	0.012	0.013	0.013	0.012	0.013	0.013	0.013	5.16	7.2
	15	Methyl acetate	0.029	0.030	0.029	0.025	0.024	0.025	0.024	0.023	0.024	0.024	0.026	11.08	7.5
	16	Iodomethane	0.428	0.403	0.412	0.441	0.404	0.445	0.433	0.401	0.427	0.442	0.424	4.09	7.7
	17	Methylene chloride	0.421	0.360	0.372	0.383	0.326	0.353	0.335	0.322	0.334	0.338	0.354	8.72	7.9
	18	Carbon disulfide	1.186	1.062	1.098	1.174	1.037	1.105	1.044	1.009	1.011	1.032	1.076	5.92	8.0
3	19	Acrylonitrile	0.047	0.041	0.041	0.043	0.037	0.040	0.039	0.037	0.039	0.039	0.040	7.60	8.0
	20	tert-Butyl methyl ether (MTBE)	0.441	0.423	0.440	0.471	0.399	0.437	0.427	0.416	0.438	0.435	0.433	4.34	8.0
	21	trans-1,2-Dichloroethene	0.524	0.471	0.494	0.534	0.469	0.502	0.477	0.467	0.469	0.478	0.489	4.95	8.3
	22	Isopropyl ether (DIPE)	1.022	0.959	1.001	1.069	0.924	1.002	0.970	0.936	0.976	0.972	0.983	4.32	8.7
	23	Vinyl acetate	0.342	0.318	0.332	0.357	0.296	0.335	0.325	0.313	0.333	0.331	0.328	5.07	8.8
	24	1,1-Dichloroethane	0.658	0.619	0.630	0.668	0.582	0.620	0.592	0.575	0.583	0.592	0.612	5.33	8.9
	25	tert-Butyl ethyl ether (ETBE)	0.654	0.617	0.654	0.716	0.614	0.668	0.656	0.643	0.679	0.673	0.657	4.53	9.3
2	26	2-Butanone	0.062	0.055	0.053	0.050	0.048	0.050	0.051	0.048	0.052	0.050	0.052	8.14	9.5
	27	2,2-Dichloropropane	0.517	0.507	0.483	0.500	0.444	0.472	0.448	0.438	0.440	0.444	0.469	6.50	9.8
	28	cis-1,2-Dichloroethene	0.548	0.515	0.551	0.587	0.505	0.537	0.519	0.504	0.514	0.517	0.530	4.91	9.9
	29	tert-Butyl formate (TBF)	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
	30	Chloroform	0.548	0.510	0.533	0.579	0.509	0.546	0.528	0.514	0.530	0.538	0.533	3.97	10.1
	31	Bromochloromethane	0.227	0.207	0.223	0.238	0.205	0.219	0.214	0.204	0.211	0.210	0.216	5.06	10.4
	32	Tetrahydrofuran	------	------	0.039	0.038	0.031	0.033	0.032	0.031	0.033	0.032	0.034	9.16	10.4
	33	1,1,1-Trichloroethane	0.495	0.464	0.490	0.525	0.467	0.500	0.485	0.474	0.486	0.495	0.488	3.63	10.7
	34	Cyclohexane	0.121	0.120	0.137	0.150	0.133	0.154	0.147	0.145	0.145	0.145	0.140	8.40	10.8
	35	tert-Amyl methyl ether (TAME)	0.550	0.543	0.554	0.601	0.524	0.574	0.568	0.555	0.592	0.585	0.565	4.24	11.0
	36	1,2-Dichloroethane-d4	------	------	0.260	0.204	0.193	0.206	0.204	0.189	0.199	0.202	0.207	10.72	11.2
	37	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	17.9
	38	1,1-Dichloropropene	0.282	0.240	0.229	0.235	0.204	0.215	0.201	0.199	0.198	0.203	0.221	12.16	11.0
	39	Carbon tetrachloride	0.512	0.467	0.517	0.553	0.513	0.542	0.517	0.519	0.520	0.544	0.520	4.58	11.2
	40	1,2-Dichloroethane	0.346	0.328	0.333	0.356	0.309	0.329	0.319	0.314	0.326	0.336	0.330	4.29	11.3
	41	Benzene	1.719	1.550	1.617	1.706	1.547	1.620	1.537	1.530	1.536	1.583	1.595	4.41	11.4
	42	Trichloroethene	0.508	0.454	0.484	0.506	0.465	0.490	0.459	0.456	0.457	0.468	0.475	4.39	12.4
	43	Methylcyclohexane	0.140	0.138	0.154	0.165	0.159	0.182	0.171	0.167	0.169	0.174	0.162	8.80	12.6
	44	1,2-Dichloropropane	0.485	0.413	0.429	0.452	0.392	0.411	0.389	0.382	0.386	0.395	0.413	8.08	12.7
	45	Bromodichloromethane	0.428	0.404	0.423	0.456	0.415	0.444	0.432	0.429	0.438	0.453	0.432	3.79	13.2
	46	Dibromomethane	0.150	0.147	0.158	0.165	0.146	0.156	0.152	0.149	0.155	0.160	0.154	3.92	13.3
	47	2-Chloroethyl vinyl ether	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0
2	48	4-Methyl-2-pentanone	0.143	0.146	0.142	0.139	0.133	0.141	0.140	0.138	0.149	0.148	0.142	3.31	13.6
	49	cis-1,3-Dichloropropene	0.559	0.499	0.522	0.545	0.493	0.524	0.505	0.497	0.510	0.519	0.517	4.12	14.1
	50	Toluene-d8	1.455	1.308	1.204	1.260	1.211	1.318	1.257	1.202	1.224	1.268	1.271	6.04	14.7
	51	Toluene	1.762	1.586	1.617	1.710	1.541	1.637	1.559	1.524	1.559	1.595	1.609	4.72	14.8
	52	Ethyl methacrylate	0.224	0.234	0.226	0.252	0.221	0.246	0.245	0.239	0.257	0.257	0.240	5.65	14.9
	53	trans-1,3-Dichloropropene	0.353	0.329	0.357	0.381	0.337	0.364	0.359	0.352	0.366	0.376	0.357	4.43	15.0
2	54	2-Hexanone	0.101	0.089	0.083	0.090	0.084	0.091	0.093	0.091	0.097	0.097	0.092	6.19	15.3
	55	1,1,2-Trichloroethane	0.200	0.188	0.206	0.219	0.191	0.203	0.198	0.193	0.201	0.203	0.200	4.42	15.4
	56	1,3-Dichloropropane	0.424	0.387	0.399	0.414	0.371	0.385	0.377	0.370	0.383	0.391	0.390	4.54	15.9
	57	Tetrachloroethene	0.383	0.317	0.335	0.361	0.332	0.353	0.332	0.325	0.331	0.340	0.341	5.72	16.2
	58	Dibromochloromethane	0.251	0.251	0.254	0.282	0.252	0.275	0.270	0.264	0.277	0.285	0.266	5.11	16.6
	59	1,2-Dibromoethane	0.198	0.190	0.193	0.208	0.186	0.201	0.195	0.189	0.200	0.204	0.196	3.44	17.1
	60	1-Chlorohexane	0.784	0.642	0.688	0.734	0.665	0.713	0.669	0.659	0.665	0.683	0.690	6.17	17.2
	61	Chlorobenzene	0.979	0.897	0.952	1.022	0.905	0.974	0.916	0.891	0.913	0.929	0.938	4.55	18.0
	62	1,1,1,2-Tetrachloroethane	0.297	0.311	0.331	0.354	0.322	0.340	0.328	0.320	0.329	0.333	0.327	4.75	18.0
	63	Ethylbenzene	1.987	1.760	1.854	2.004	1.749	1.878	1.769	1.735	1.732	1.766	1.823	5.65	18.0
2	64	m-Xylene & p-Xylene	1.440	1.244	1.321	1.407	1.254	1.342	1.297	1.298	1.298	1.304	1.320	4.67	18.2
	65	o-Xylene	1.331	1.229	1.281	1.366	1.211	1.299	1.261	1.261	1.267	1.289	1.280	3.55	19.2
	66	Styrene	0.893	0.824	0.871	0.957	0.881	0.955	0.936	0.934	0.947	0.963	0.916	5.06	19.2
	67	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	24.4
	68	Isopropylbenzene	6.657	5.728	6.065	6.488	5.769	5.911	5.587	5.322	5.449	5.550	5.853	7.49	20.0
	69	Bromoform	0.342	0.348	0.384	0.438	0.412	0.434	0.427	0.401	0.444	0.442	0.407	9.33	20.1
	70	1,1,2,2-Tetrachloroethane	0.718	0.716	0.726	0.759	0.666	0.702	0.678	0.630	0.693	0.681	0.697	5.13	20.3
	71	4-Bromofluorobenzene	------	------	1.336	1.407	1.280	1.359	1.288	1.178	1.231	1.256	1.292	5.69	20.6
	72	1,2,3-Trichloropropane	------	0.134	0.133	0.153	0.124	0.118	0.110	0.105	0.116	0.113	0.123	12.22	20.7
	73	trans-1,4-Dichloro-2-butene	------	0.114	0.129	0.142	0.122	0.132	0.132	0.126	0.141	0.142	0.131	7.37	20.8
	74	n-Propylbenzene	6.880	5.839	6.239	6.580	6.171	6.580	6.414	6.291	6.545	6.604	6.414	4.53	20.9
	75	Bromobenzene	1.256	1.144	1.158	1.235	1.073	1.119	1.042	0.975	1.038	1.051	1.109	8.15	21.1
	76	1,3,5-Trimethylbenzene	3.128	2.683	2.851	2.968	2.759	2.978	2.893	2.894	2.986	3.053	2.919	4.56	21.3
	77	2-Chlorotoluene	4.454	3.860	3.745	4.036	3.484	3.688	3.624	3.269	3.721	3.715	3.760	8.47	21.4
	78	4-Chlorotoluene	3.631	3.059	3.391	3.489	3.247	3.348	3.115	3.292	3.139	3.189	3.290	5.44	21.5
	79	tert-Butylbenzene	3.638	3.181	3.404	3.666	3.392	3.654	3.544	3.440	3.607	3.643	3.517	4.52	22.1
	80	1,2,4-Trimethylbenzene	2.523	2.168	2.248	2.282	2.255	2.458	2.431	2.463	2.525	2.644	2.400	6.37	22.2
	81	sec-Butylbenzene	5.261	4.437	4.848	5.139	4.975	5.453	5.360	5.323	5.549	5.578	5.192	6.84	22.6
	82	p-Isopropyltoluene	3.205	2.718	2.853	2.953	2.995	3.350	3.368	3.449	3.586	3.661	3.214	9.99	22.9
	83	1,3-Dichlorobenzene	2.276	1.929	2.034	2.155	1.936	2.043	1.956	1.887	1.978	1.986	2.018	5.82	23.3
	84	1,4-Dichlorobenzene	1.951	1.632	1.782	1.891	1.724	1.849	1.795	1.744	1.842	1.841	1.805	5.03	23.5
	85	n-Butylbenzene	2.475	2.055	2.007	1.991	2.175	2.522	2.586	2.695	2.792	2.973	2.427	14.46	23.9
	86	1,2-Dichlorobenzene	1.672	1.434	1.549	1.657	1.474	1.563	1.529	1.465	1.558	1.557	1.546	4.98	24.5
	87	1,2-Dibromo-3-chloropropane	------	0.096	0.089	0.104	0.087	0.101	0.095	0.092	0.101	0.099	0.096	6.11	26.4
	88	1,2,4-Trichlorobenzene	0.545	0.436	0.426	0.446	0.437	0.532	0.537	0.560	0.555	0.608	0.508	12.86	28.6
	89	Hexachlorobutadiene	0.794	0.654	0.700	0.769	0.743	0.828	0.802	0.802	0.835	0.859	0.779	8.17	28.9
	90	Naphthalene	0.669	0.497	0.499	0.496	0.456	0.565	0.596	0.656	0.638	0.691	0.576	14.84	29.3
	91	1,2,3-Trichlorobenzene	0.360	0.334	0.348	0.337	0.337	0.408	0.416	0.434	0.434	0.468	0.388	12.83	29.9

Spike Amount = Nominal Amount * M
Ave_%RSD : 6.6 Max_%RSD : 14.8

12-26-06

SECOND SOURCE VERIFICATION

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B28\RBD693.D Vial: 3
Acq On : 28 Feb 2007 6:47 pm Operator: AS
Sample : IVO94L1803 10ppb/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Feb 13 14:53:13 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	114	-0.01	
2	T	Dichlorodifluoromethane	10.000	12.189	-21.9#	132	-0.01	
3	P,T	Chloromethane	10.000	9.971	0.3	113	-0.13	
4	C,T	Vinyl chloride	10.000	10.181	-1.8	119	-0.01	
5	T	Bromomethane	10.000	9.750	2.5	111	-0.01	
6	T	Chloroethane	10.000	9.927	0.7	114	0.00	
7	T	Dichlorofluoromethane	10.000	8.895	11.1	99	-0.01	
8	T	Trichlorofluoromethane	10.000	8.864	11.4	99	0.00	
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	0	-0.01	
10	T	Acrolein	20.000	26.617	-33.1#	141	-0.01	cmpd. not validated
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	10.829	-8.3	120	-0.01	
12	T	Acetone	20.000	20.168	-0.8	111	-0.01	
13	C,T,M	1,1-Dichloroethene	10.000	9.212	7.9	102	-0.01	
[illegible]	T	tert-Butyl alcohol	50.000	44.231	11.5	99	-0.01	
[illegible]	T	Methyl acetate	10.000	2.229	77.7#	26	-0.01	cmpd. not validated
16	T	Iodomethane	10.000	9.782	2.2	106	-0.01	
17	T	Methylene chloride	10.000	9.938	0.6	114	-0.01	
18	T	Carbon disulfide	10.000	9.491	5.1	106	0.00	
19	T	Acrylonitrile	30.000	28.133	6.2	109	-0.03	
20	T	tert-Butyl methyl ether (MT	10.000	10.268	-2.7	116	-0.01	
21	T	trans-1,2-Dichloroethene	10.000	9.473	5.3	105	-0.01	
22	T	Isopropyl ether (DIPE)	10.000	10.026	-0.3	113	-0.01	
23	T	Vinyl acetate	10.000	9.015	9.8	101	-0.03	
24	P,T	1,1-Dichloroethane	10.000	9.907	0.9	112	-0.01	
25	T	tert-Butyl ethyl ether (ETB	10.000	10.801	-8.0	122	-0.01	
26	T	2-Butanone	20.000	19.211	3.9	114	-0.01	
27	T	2,2-Dichloropropane	10.000	9.700	3.0	110	-0.01	
28	T	cis-1,2-Dichloroethene	10.000	9.813	1.9	111	-0.03	
29	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	0	0.00	
30	C,T	Chloroform	10.000	9.961	0.4	111	-0.03	
31	T	Bromochloromethane	10.000	10.016	-0.2	113	-0.03	
32	T	Tetrahydrofuran	10.000	10.607	-6.1	122	-0.01	
33	T	1,1,1-Trichloroethane	10.000	9.618	3.8	107	-0.01	
34	T	Cyclohexane	10.000	1.048	89.5#	11	-0.03	cmpd. not validated
35	T	tert-Amyl methyl ether (TAM	10.000	10.880	-8.8	122	-0.01	
36	S	1,2-Dichloroethane-d4	10.000	9.146	8.5	105	-0.03	
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	126	-0.01	
38	T	1,1-Dichloropropene	10.000	8.781	12.2	114	-0.03	
[illegible]	T	Carbon tetrachloride	10.000	8.642	13.6	105	-0.03	
40	T	1,2-Dichloroethane	10.000	8.565	14.4	108	-0.01	

(#) = Out of Range

3/1/07

2815

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B28\RBD693.D Vial: 3
Acq On : 28 Feb 2007 6:47 pm Operator: AS
Sample : IVO94L1803 10ppb/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Feb 13 14:53:13 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
41	T,M	Benzene	10.000	8.989	10.1	112	-0.01	
42	T,M	Trichloroethene	10.000	10.172	-1.7	124	-0.03	
43	T	Methylcyclohexane	10.000	0.111	98.9#	1	-0.03	cmpd not valid
44	C,T	1,2-Dichloropropane	10.000	9.085	9.1	115	-0.03	
45	T	Bromodichloromethane	10.000	9.233	7.7	113	-0.01	
46	T	Dibromomethane	10.000	9.494	5.1	118	-0.03	
47	T	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-0.03	cmpd not valid
48	T	4-Methyl-2-pentanone	20.000	16.922	15.4	107	-0.03	
49	T	cis-1,3-Dichloropropene	10.000	9.075	9.3	113	-0.03	
50	S	Toluene-d8	10.000	9.089	9.1	111	-0.01	
51	C,T,M	Toluene	10.000	9.714	2.9	120	-0.03	
52	T	Ethyl methacrylate	10.000	8.526	14.7	105	-0.03	
53	T	trans-1,3-Dichloropropene	10.000	9.076	9.2	112	-0.03	
54	T	2-Hexanone	20.000	15.572	22.1#	98	-0.03	
[illegible]	T	1,1,2-Trichloroethane	10.000	9.966	0.3	124	-0.01	
56	T	1,3-Dichloropropane	10.000	9.292	7.1	119	-0.03	
57	T	Tetrachloroethene	10.000	10.355	-3.6	126	-0.03	
58	T	Dibromochloromethane	10.000	9.660	3.4	118	-0.03	
59	T	1,2-Dibromoethane	10.000	9.742	2.6	120	-0.03	
60	T	1-Chlorohexane	10.000	10.183	-1.8	124	-0.03	
61	P,M	Chlorobenzene	10.000	10.599	-6.0	129	-0.01	
62	T	1,1,1,2-Tetrachloroethane	10.000	9.483	5.2	115	-0.03	
63	C,T	Ethylbenzene	10.000	10.242	-2.4	125	-0.03	
64	T	m-Xylene & p-Xylene	20.000	16.889	15.6	105	-0.03	
65	T	o-Xylene	10.000	8.419	15.8	105	-0.03	
66	T	Styrene	10.000	9.082	9.2	110	-0.01	
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	108	-0.03	
68	T	Isopropylbenzene	10.000	10.340	-3.4	110	-0.01	
69	P,T	Bromoform	10.000	11.822	-18.2	119	-0.03	
70	P,T	1,1,2,2-Tetrachloroethane	10.000	10.886	-8.9	116	-0.03	
71	S	4-Bromofluorobenzene	10.000	10.627	-6.3	109	-0.03	
72	T	1,2,3-Trichloropropane	10.000	10.848	-8.5	122	-0.04	
73	T	trans-1,4-Dichloro-2-butene	10.000	11.493	-14.9	123	-0.03	
74	T	n-Propylbenzene	10.000	8.950	10.5	94	-0.03	
75	T	Bromobenzene	10.000	12.135	-21.3#	129	-0.03	
76	T	1,3,5-Trimethylbenzene	10.000	8.481	15.2	89	-0.03	
77	T	2-Chlorotoluene	10.000	9.079	9.2	100	-0.03	
78	T	4-Chlorotoluene	10.000	9.616	3.8	102	-0.03	
[illegible]	T	tert-Butylbenzene	10.000	9.432	5.7	98	-0.03	
[illegible]	T	1,2,4-Trimethylbenzene	10.000	8.873	11.3	93	-0.03	

(#) = Out of Range

3/1/07

2017

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B28\RBD693.D Vial: 3
Acq On : 28 Feb 2007 6:47 pm Operator: AS
Sample : IVO94L1803 10ppb/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Feb 13 14:53:13 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	10.000	9.261	7.4	95	-0.03
82	T	p-Isopropyltoluene	10.000	9.404	6.0	97	-0.03
83	T	1,3-Dichlorobenzene	10.000	10.100	-1.0	107	-0.03
84	T	1,4-Dichlorobenzene	10.000	10.059	-0.6	106	-0.03
85	T	n-Butylbenzene	10.000	9.468	5.3	98	-0.03
86	T	1,2-Dichlorobenzene	10.000	10.228	-2.3	109	-0.03
87	T	1,2-Dibromo-3-chloropropane	10.000	10.860	-8.6	111	-0.03
88	T	1,2,4-Trichlorobenzene	10.000	10.127	-1.3	104	-0.03
89	T	Hexachlorobutadiene	10.000	10.387	-3.9	105	-0.03
90	T	Naphthalene	10.000	8.366	16.3	92	-0.03
91	T	1,2,3-Trichlorobenzene	10.000	10.297	-3.0	105	-0.03

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

3/1/07

DAILY CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

.ab Name: EMAX Inc
.ab Code: EMXT Case No.:
.ab File ID: RCD075
Inst ment ID: T-094
GC mn:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07B268
BFB Injection Date : 03/05/07
BFB Injection Time : 12:51
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.11
75	30.0 - 60.0% of mass 95	42.92
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.39
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	89.74
175	5.0 - 9.0% of mass 174	6.45(7.2)1
176	95.0 - 101.0% of mass 174	85.74(95.5)1
177	5.0 - 9.0% of mass 176	5.80(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	VSTD010	CV094L18152	RCD077	03/05/07	14:07
2	MBLK1W	V094C08Q	RCD081	03/05/07	16:41
3	LCS1W	V094C08L	RCD078	03/05/07	14:46
4	LCD1W	V094C08C	RCD079	03/05/07	15:24
5	133-4-2-INF(02/23/07)	B268-01	RCD084	03/05/07	18:36

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RLD389
Instrument ID: T-094
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: ALAMEDA POINT, CTO 133
SDG No.: 078268
Date Analyzed: 12/18/06
Time Analyzed: 18:54
Heated Purge: (Y/N) N

		IS1(DFB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2507559	11.80	1951729	17.91	594205	24.46
	UPPER LIMIT	5015118	12.30	3903458	18.41	1188410	24.96
	LOWER LIMIT	1253780	11.30	975865	17.41	297103	23.96
	SAMPLE ID						
1	VSTD010	2430208	11.85	2103289	17.98	599557	24.52
2	MBLK1W	2608979	11.86	2260439	17.98	590881	24.53
3	LCS1W	2508712	11.85	2196213	17.98	614622	24.53
4	LCD1W	2560868	11.85	2201758	17.98	610269	24.53
5	133-4-2-INF(02/23/07)	2467190	11.85	2117849	17.98	518297	24.53

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD077.D Vial: 4
Acq On : 5 Mar 2007 2:07 pm Operator: AS
Sample : CVO94L18152 10/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	97	-0.01
2	T	Dichlorodifluoromethane	10.000	12.729	-27.3#	117	-0.01
3	P,T	Chloromethane	10.000	11.009	-10.1	105	-0.13
4	C,T	Vinyl chloride	10.000	11.234	-12.3	111	-0.01
5	T	Bromomethane	10.000	11.518	-15.2	111	-0.01
6	T	Chloroethane	10.000	10.606	-6.1	103	-0.01
7	T	Dichlorofluoromethane	10.000	8.905	11.0	84	-0.01
8	T	Trichlorofluoromethane	10.000	9.017	9.8	85	-0.01
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	0	-0.01
10	T	Acrolein	20.000	28.224	-41.1#	127	-0.01 NTC
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	10.856	-8.6	102	-0.01
12	T	Acetone	20.000	22.116	-10.6	103	-0.01
13	C,T,M	1,1-Dichloroethene	10.000	9.043	9.6	85	-0.01
14	T	tert-Butyl alcohol	50.000	49.659	0.7	94	-0.02
[illegible]	T	Methyl acetate	10.000	4.777	52.2#	48	0.02 NTC
16	T	Iodomethane	10.000	11.441	-14.4	106	-0.01
17	T	Methylene chloride	10.000	9.729	2.7	95	-0.01
18	T	Carbon disulfide	10.000	9.114	8.9	86	-0.01
19	T	Acrylonitrile	30.000	29.075	3.1	96	-0.02
20	T	tert-Butyl methyl ether (MT	10.000	9.779	2.2	94	-0.02
21	T	trans-1,2-Dichloroethene	10.000	9.446	5.5	89	-0.01
22	T	Isopropyl ether (DIPE)	10.000	10.043	-0.4	96	-0.01
23	T	Vinyl acetate	10.000	10.230	-2.3	97	-0.02
24	P,T	1,1-Dichloroethane	10.000	9.904	1.0	95	-0.02
25	T	tert-Butyl ethyl ether (ETB	10.000	10.010	-0.1	95	-0.02
26	T	2-Butanone	20.000	19.768	1.2	99	-0.01
27	T	2,2-Dichloropropane	10.000	10.102	-1.0	97	-0.01
28	T	cis-1,2-Dichloroethene	10.000	9.847	1.5	94	-0.02
29	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	0	-0.01
30	C,T	Chloroform	10.000	9.838	1.6	93	-0.02
31	T	Bromochloromethane	10.000	9.594	4.1	92	-0.02
32	T	Tetrahydrofuran	10.000	10.659	-6.6	104	-0.01
33	T	1,1,1-Trichloroethane	10.000	9.704	3.0	92	-0.02
34	T	Cyclohexane	10.000	5.615	43.9#	49	-0.02 NTC
35	T	tert-Amyl methyl ether (TAM	10.000	9.953	0.5	95	-0.01
36	S	1,2-Dichloroethane-d4	10.000	8.749	12.5	85	-0.02
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	108	-0.01
38	T	1,1-Dichloropropene	10.000	8.576	14.2	95	-0.02
[illegible]	T	Carbon tetrachloride	10.000	8.682	13.2	90	-0.02
[illegible]	T	1,2-Dichloroethane	10.000	8.332	16.7	90	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD077.D
Acq On : 5 Mar 2007 2:07 pm
Sample : CVO94L18152 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	T,M	Benzene	10.000	8.840	11.6	94	-0.01
42	T,M	Trichloroethene	10.000	10.041	-0.4	105	-0.02
43	T	Methylcyclohexane	10.000	0.102	99.0#	1	-0.01 NTC
44	C,T	1,2-Dichloropropane	10.000	8.963	10.4	97	-0.02
45	T	Bromodichloromethane	10.000	9.086	9.1	95	-0.01
46	T	Dibromomethane	10.000	9.276	7.2	98	-0.02
47	T	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	0.03 NTC
48	T	4-Methyl-2-pentanone	20.000	18.152	9.2	98	-0.02
49	T	cis-1,3-Dichloropropene	10.000	9.126	8.7	97	-0.02
50	S	Toluene-d8	10.000	8.776	12.2	91	-0.01
51	C,T,M	Toluene	10.000	9.801	2.0	104	-0.02
52	T	Ethyl methacrylate	10.000	9.119	8.8	96	-0.02
53	T	trans-1,3-Dichloropropene	10.000	9.083	9.2	96	-0.02
54	T	2-Hexanone	20.000	17.542	12.3	95	-0.02
[illegible]	T	1,1,2-Trichloroethane	10.000	9.704	3.0	103	-0.01
56	T	1,3-Dichloropropane	10.000	9.152	8.5	100	-0.02
57	T	Tetrachloroethene	10.000	10.480	-4.8	109	-0.02
58	T	Dibromochloromethane	10.000	9.472	5.3	99	-0.02
59	T	1,2-Dibromoethane	10.000	9.511	4.9	100	-0.02
60	T	1-Chlorohexane	10.000	10.584	-5.8	110	-0.02
61	P,M	Chlorobenzene	10.000	10.712	-7.1	111	-0.01
62	T	1,1,1,2-Tetrachloroethane	10.000	9.565	4.4	99	-0.02
63	C,T	Ethylbenzene	10.000	10.183	-1.8	107	-0.02
64	T	m-Xylene & p-Xylene	20.000	18.473	7.6	98	-0.02
65	T	o-Xylene	10.000	9.180	8.2	97	-0.02
66	T	Styrene	10.000	9.826	1.7	102	-0.01
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	101	-0.02
68	T	Isopropylbenzene	10.000	10.441	-4.4	104	-0.01
69	P,T	Bromoform	10.000	10.754	-7.5	102	-0.02
70	P,T	1,1,2,2-Tetrachloroethane	10.000	10.089	-0.9	101	-0.02
71	S	4-Bromofluorobenzene	10.000	9.781	2.2	94	-0.02
72	T	1,2,3-Trichloropropane	10.000	9.560	4.4	101	-0.02
73	T	trans-1,4-Dichloro-2-butene	10.000	9.781	2.2	98	-0.02
74	T	n-Propylbenzene	10.000	9.607	3.9	95	-0.02
75	T	Bromobenzene	10.000	11.497	-15.0	115	-0.02
76	T	1,3,5-Trimethylbenzene	10.000	8.811	11.9	87	-0.02
77	T	2-Chlorotoluene	10.000	9.194	8.1	95	-0.02
78	T	4-Chlorotoluene	10.000	9.992	0.1	99	-0.02
[illegible]	T	tert-Butylbenzene	10.000	10.038	-0.4	97	-0.02
[illegible]	T	1,2,4-Trimethylbenzene	10.000	9.443	5.6	93	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD077.D Vial: 4
Acq On : 5 Mar 2007 2:07 pm Operator: AS
Sample : CVO94L18152 10/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	10.000	10.253	-2.5	99	-0.02
82	T	p-Isopropyltoluene	10.000	10.402	-4.0	101	-0.02
83	T	1,3-Dichlorobenzene	10.000	10.416	-4.2	104	-0.02
84	T	1,4-Dichlorobenzene	10.000	10.475	-4.7	103	-0.02
85	T	n-Butylbenzene	10.000	10.698	-7.0	104	-0.02
86	T	1,2-Dichlorobenzene	10.000	10.425	-4.3	104	-0.02
87	T	1,2-Dibromo-3-chloropropane	10.000	11.315	-13.1	108	-0.01
88	T	1,2,4-Trichlorobenzene	10.000	10.793	-7.9	104	-0.02
89	T	Hexachlorobutadiene	10.000	11.673	-16.7	111	-0.02
90	T	Naphthalene	10.000	8.034	19.7	83	-0.02
91	T	1,2,3-Trichlorobenzene	10.000	10.965	-9.6	105	-0.02

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD077.D
Acq On : 5 Mar 2007 2:07 pm
Sample : CVO94L18152 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	97	-0.01
2	T	Dichlorodifluoromethane	0.212	0.269	-26.9#	117	-0.01
3	P,T	Chloromethane	0.359	0.395	-10.0	105	-0.13
4	C,T	Vinyl chloride	0.316	0.355	-12.3	111	-0.01
5	T	Bromomethane	0.222	0.256	-15.3	111	-0.01
6	T	Chloroethane	0.233	0.247	-6.0	103	-0.01
7	T	Dichlorofluoromethane	0.601	0.535	11.0	84	-0.01
8	T	Trichlorofluoromethane	0.466	0.421	9.7	85	-0.01
9	T	sec-Propyl alcohol	0.000	0.000#	0.0	0#	-0.01
10	T	Acrolein	0.010	0.014	-40.0#	127	-0.01
11	T	1,1,2-Trichloro-1,2,2-trifl	0.233	0.253	-8.6	102	-0.01
12	T	Acetone	0.033	0.036	-9.1	103	-0.01
13	C,T,M	1,1-Dichloroethene	0.452	0.409	9.5	85	-0.01
[illegible]	T	tert-Butyl alcohol	0.013	0.012	7.7	94	-0.02
[illegible]	T	Methyl acetate	0.026	0.012	53.8#	48#	0.02
16	T	Iodomethane	0.424	0.485	-14.4	106	-0.01
17	T	Methylene chloride	0.354	0.345	2.5	95	-0.01
18	T	Carbon disulfide	1.076	0.981	8.8	86	-0.01
19	T	Acrylonitrile	0.040	0.039	2.5	96	-0.02
20	T	tert-Butyl methyl ether (MT	0.433	0.423	2.3	94	-0.02
21	T	trans-1,2-Dichloroethene	0.489	0.461	5.7	89	-0.01
22	T	Isopropyl ether (DIPE)	0.983	0.987	-0.4	96	-0.01
23	T	Vinyl acetate	0.328	0.336	-2.4	97	-0.02
24	P,T	1,1-Dichloroethane	0.612	0.606	1.0	95	-0.02
25	T	tert-Butyl ethyl ether (ETB	0.657	0.658	-0.2	95	-0.02
26	T	2-Butanone	0.052	0.051	1.9	99	-0.01
27	T	2,2-Dichloropropane	0.469	0.474	-1.1	97	-0.01
28	T	cis-1,2-Dichloroethene	0.530	0.521	1.7	94	-0.02
29	T	tert-Butyl formate (TBF)	0.000	0.000#	0.0	0#	-0.01
30	C,T	Chloroform	0.533	0.525	1.5	93	-0.02
31	T	Bromochloromethane	0.216	0.207	4.2	92	-0.02
32	T	Tetrahydrofuran	0.034	0.036	-5.9	104	-0.01
33	T	1,1,1-Trichloroethane	0.488	0.474	2.9	92	-0.02
34	T	Cyclohexane	0.140	0.078	44.3#	49#	-0.02
35	T	tert-Amyl methyl ether (TAM	0.565	0.562	0.5	95	-0.01
36	S	1,2-Dichloroethane-d4	0.207	0.181	12.6	85	-0.02
37	I	CHLOROBENZENE-D5	1.000	1.000	0.0	108	-0.01
38	T	1,1-Dichloropropene	0.221	0.189	14.5	95	-0.02
[illegible]	T	Carbon tetrachloride	0.520	0.452	13.1	90	-0.02
40	T	1,2-Dichloroethane	0.330	0.275	16.7	90	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD077.D Vial: 4
Acq On : 5 Mar 2007 2:07 pm Operator: AS
Sample : CVO94L18152 10/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	T,M	Benzene	1.595	1.410	11.6	94	-0.01
42	T,M	Trichloroethene	0.475	0.477	-0.4	105	-0.02
43	T	Methylcyclohexane	0.162	0.002#	98.8#	1#	-0.01
44	C,T	1,2-Dichloropropane	0.413	0.371	10.2	97	-0.02
45	T	Bromodichloromethane	0.432	0.393	9.0	95	-0.01
46	T	Dibromomethane	0.154	0.143	7.1	98	-0.02
47	T	2-Chloroethyl vinyl ether	0.000	0.002#	0.0	0#	0.03
48	T	4-Methyl-2-pentanone	0.142	0.129	9.2	98	-0.02
49	T	cis-1,3-Dichloropropene	0.517	0.472	8.7	97	-0.02
50	S	Toluene-d8	1.271	1.115	12.3	91	-0.01
51	C,T,M	Toluene	1.609	1.577	2.0	104	-0.02
52	T	Ethyl methacrylate	0.240	0.219	8.7	96	-0.02
53	T	trans-1,3-Dichloropropene	0.357	0.325	9.0	96	-0.02
[illegible]	T	2-Hexanone	0.092	0.080	13.0	95	-0.02
[illegible]	T	1,1,2-Trichloroethane	0.200	0.194	3.0	103	-0.01
56	T	1,3-Dichloropropane	0.390	0.357	8.5	100	-0.02
57	T	Tetrachloroethene	0.341	0.357	-4.7	109	-0.02
58	T	Dibromochloromethane	0.266	0.252	5.3	99	-0.02
59	T	1,2-Dibromoethane	0.196	0.187	4.6	100	-0.02
60	T	1-Chlorohexane	0.690	0.731	-5.9	110	-0.02
61	P,M	Chlorobenzene	0.938	1.005	-7.1	111	-0.01
62	T	1,1,1,2-Tetrachloroethane	0.327	0.312	4.6	99	-0.02
63	C,T	Ethylbenzene	1.823	1.857	-1.9	107	-0.02
64	T	m-Xylene & p-Xylene	1.320	1.220	7.6	98	-0.02
65	T	o-Xylene	1.280	1.175	8.2	97	-0.02
66	T	Styrene	0.916	0.900	1.7	102	-0.01
67	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	101	-0.02
68	T	Isopropylbenzene	5.853	6.111	-4.4	104	-0.01
69	P,T	Bromoform	0.407	0.438	-7.6	102	-0.02
70	P,T	1,1,2,2-Tetrachloroethane	0.697	0.703	-0.9	101	-0.02
71	S	4-Bromofluorobenzene	1.292	1.264	2.2	94	-0.02
72	T	1,2,3-Trichloropropane	0.123	0.117	4.9	101	-0.02
73	T	trans-1,4-Dichloro-2-butene	0.131	0.128	2.3	98	-0.02
74	T	n-Propylbenzene	6.414	6.163	3.9	95	-0.02
75	T	Bromobenzene	1.109	1.275	-15.0	115	-0.02
76	T	1,3,5-Trimethylbenzene	2.919	2.572	11.9	87	-0.02
77	T	2-Chlorotoluene	3.760	3.457	8.1	95	-0.02
78	T	4-Chlorotoluene	3.290	3.287	0.1	99	-0.02
[illegible]	T	tert-Butylbenzene	3.517	3.530	-0.4	97	-0.02
80	T	1,2,4-Trimethylbenzene	2.400	2.266	5.6	93	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD077.D Vial: 4
Acq On : 5 Mar 2007 2:07 pm Operator: AS
Sample : CVO94L18152 10/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	5.192	5.324	-2.5	99	-0.02
82	T	p-Isopropyltoluene	3.214	3.343	-4.0	101	-0.02
83	T	1,3-Dichlorobenzene	2.018	2.102	-4.2	104	-0.02
84	T	1,4-Dichlorobenzene	1.805	1.891	-4.8	103	-0.02
85	T	n-Butylbenzene	2.427	2.597	-7.0	104	-0.02
86	T	1,2-Dichlorobenzene	1.546	1.611	-4.2	104	-0.02
87	T	1,2-Dibromo-3-chloropropane	0.096	0.109	-13.5	108	-0.01
88	T	1,2,4-Trichlorobenzene	0.508	0.549	-8.1	104	-0.02
89	T	Hexachlorobutadiene	0.779	0.909	-16.7	111	-0.02
90	T	Naphthalene	0.576	0.463	19.6	83	-0.02
91	T	1,2,3-Trichlorobenzene	0.388	0.425	-9.5	105	-0.02

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

.ab Name: EMAX Inc
.ab Code: EMXT Case No.:
.ab File ID: RCD097
nst ent ID: T-094
iC mn:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07B268
BFB Injection Date : 03/06/07
BFB Injection Time : 02:54
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.49
75	30.0 - 60.0% of mass 95	44.54
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.39
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	83.49
175	5.0 - 9.0% of mass 174	5.96(7.1)1
176	95.0 - 101.0% of mass 174	80.69(96.6)1
177	5.0 - 9.0% of mass 176	5.78(7.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV094L18154	RCD099	03/06/07	04:11
2	MBLK2W	V094C10Q	RCD103	03/06/07	06:44
3	LCS2W	V094C10X	RCD112	03/06/07	13:47
4	LCD2W	V094C10Y	RCD113	03/06/07	14:25
5	133-4-2-INF(02/23/07)DL	B268-01T	RCD108	03/06/07	11:14

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RLD389
Instrument ID: T-094
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: ALAMEDA POINT, CTO 133
SDG No.: 07B268
Date Analyzed: 12/18/06
Time Analyzed: 18:54
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2507559	11.80	1951729	17.91	594205	24.46
	UPPER LIMIT	5015118	12.30	3903458	18.41	1188410	24.96
	LOWER LIMIT	1253780	11.30	975865	17.41	297103	23.96
	SAMPLE ID						
1	VSTD010	2506519	11.86	2111479	17.99	593915	24.54
2	MBLK2W	2598719	11.86	2249078	17.99	546976	24.54
3	LCS2W	2631744	11.88	2263353	18.01	635687	24.54
4	LCD2W	2710340	11.88	2401020	18.01	692008	24.54
5	133-4-2-INF(02/23/07)DL	2163145	11.86	1921065	17.99	488574	24.53

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD099.D
Acq On : 6 Mar 2007 4:11 am
Sample : CVO94L18154 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	10.000	13.248	-32.5#	125	0.00
3	P,T	Chloromethane	10.000	10.601	-6.0	105	-0.12
4	C,T	Vinyl chloride	10.000	11.004	-10.0	112	0.00
5	T	Bromomethane	10.000	11.414	-14.1	113	-0.01
6	T	Chloroethane	10.000	10.233	-2.3	103	0.00
7	T	Dichlorofluoromethane	10.000	9.324	6.8	91	0.00
8	T	Trichlorofluoromethane	10.000	9.273	7.3	91	0.01
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	0	0.00
10	T	Acrolein	20.000	23.451	-17.3	109	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	12.110	-21.1#	117	0.00
12	T	Acetone	20.000	22.605	-13.0	109	0.00
13	C,T,M	1,1-Dichloroethene	10.000	9.664	3.4	94	0.00
	T	tert-Butyl alcohol	50.000	51.742	-3.5	102	-0.01
	T	Methyl acetate	10.000	3.287	67.1#	34	0.00 NTC
16	T	Iodomethane	10.000	11.759	-17.6	112	0.00
17	T	Methylene chloride	10.000	10.568	-5.7	106	0.00
18	T	Carbon disulfide	10.000	9.476	5.2	92	0.01
19	T	Acrylonitrile	30.000	30.110	-0.4	102	-0.01
20	T	tert-Butyl methyl ether (MT	10.000	10.871	-8.7	108	0.00
21	T	trans-1,2-Dichloroethene	10.000	10.107	-1.1	98	0.00
22	T	Isopropyl ether (DIPE)	10.000	10.797	-8.0	106	0.00
23	T	Vinyl acetate	10.000	9.685	3.1	95	-0.01
24	P,T	1,1-Dichloroethane	10.000	10.663	-6.6	105	0.00
25	T	tert-Butyl ethyl ether (ETB	10.000	11.264	-12.6	111	0.00
26	T	2-Butanone	20.000	20.721	-3.6	107	0.00
27	T	2,2-Dichloropropane	10.000	9.169	8.3	91	0.00
28	T	cis-1,2-Dichloroethene	10.000	10.314	-3.1	102	-0.01
29	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	0	0.01
30	C,T	Chloroform	10.000	10.692	-6.9	104	-0.01
31	T	Bromochloromethane	10.000	10.039	-0.4	99	0.00
32	T	Tetrahydrofuran	10.000	11.995	-19.9	121	0.00
33	T	1,1,1-Trichloroethane	10.000	10.576	-5.8	103	0.00
34	T	Cyclohexane	10.000	0.223	97.8#	2	-0.01 NTC
35	T	tert-Amyl methyl ether (TAM	10.000	11.365	-13.7	112	0.00
36	S	1,2-Dichloroethane-d4	10.000	9.808	1.9	99	0.00
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	108	0.00
38	T	1,1-Dichloropropene	10.000	9.402	6.0	104	0.00
	T	Carbon tetrachloride	10.000	9.699	3.0	101	-0.01
40	T	1,2-Dichloroethane	10.000	9.262	7.4	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD099.D
Acq On : 6 Mar 2007 4:11 am
Sample : CVO94L18154 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	T,M	Benzene	10.000	9.737	2.6	104	0.00
42	T,M	Trichloroethene	10.000	11.336	-13.4	119	-0.01
43	T	Methylcyclohexane	10.000	0.108	98.9#	1	-0.01 NTC
44	C,T	1,2-Dichloropropane	10.000	9.840	1.6	107	-0.01
45	T	Bromodichloromethane	10.000	10.025	-0.3	106	0.00
46	T	Dibromomethane	10.000	10.352	-3.5	110	0.00
47	T	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	0.06 NTC
48	T	4-Methyl-2-pentanone	20.000	19.220	3.9	104	-0.01
49	T	cis-1,3-Dichloropropene	10.000	9.716	2.8	104	-0.01
50	S	Toluene-d8	10.000	9.588	4.1	100	0.00
51	C,T,M	Toluene	10.000	10.313	-3.1	110	-0.01
52	T	Ethyl methacrylate	10.000	9.584	4.2	101	-0.01
53	T	trans-1,3-Dichloropropene	10.000	9.674	3.3	103	-0.01
	T	2-Hexanone	20.000	18.485	7.6	100	-0.01
	T	1,1,2-Trichloroethane	10.000	10.806	-8.1	115	0.00
56	T	1,3-Dichloropropane	10.000	10.112	-1.1	111	-0.01
57	T	Tetrachloroethene	10.000	11.175	-11.8	117	-0.01
58	T	Dibromochloromethane	10.000	10.492	-4.9	110	-0.01
59	T	1,2-Dibromoethane	10.000	10.521	-5.2	111	0.00
60	T	1-Chlorohexane	10.000	11.178	-11.8	117	0.00
61	P,M	Chlorobenzene	10.000	11.298	-13.0	118	0.00
62	T	1,1,1,2-Tetrachloroethane	10.000	10.516	-5.2	109	-0.01
63	C,T	Ethylbenzene	10.000	10.787	-7.9	113	-0.01
64	T	m-Xylene & p-Xylene	20.000	19.406	3.0	103	0.00
65	T	o-Xylene	10.000	9.657	3.4	103	-0.01
66	T	Styrene	10.000	10.340	-3.4	107	0.00
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	100	0.00
68	T	Isopropylbenzene	10.000	11.227	-12.3	111	0.00
69	P,T	Bromoform	10.000	12.159	-21.6#	114	0.00
70	P,T	1,1,2,2-Tetrachloroethane	10.000	10.657	-6.6	106	0.00
71	S	4-Bromofluorobenzene	10.000	10.833	-8.3	103	0.00
72	T	1,2,3-Trichloropropane	10.000	9.909	0.9	103	-0.01
73	T	trans-1,4-Dichloro-2-butene	10.000	12.568	-25.7#	125	-0.01
74	T	n-Propylbenzene	10.000	10.005	-0.1	97	0.00
75	T	Bromobenzene	10.000	12.362	-23.6#	122	-0.01
76	T	1,3,5-Trimethylbenzene	10.000	9.196	8.0	90	0.00
77	T	2-Chlorotoluene	10.000	10.413	-4.1	106	0.00
78	T	4-Chlorotoluene	10.000	9.536	4.6	94	0.00
	T	tert-Butylbenzene	10.000	10.643	-6.4	102	-0.01
80	T	1,2,4-Trimethylbenzene	10.000	9.635	3.7	94	-0.01

(#) = Out of Range

2031

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD099.D Vial: 4
Acq On : 6 Mar 2007 4:11 am Operator: AS
Sample : CVO94L18154 10/20/50ppb Inst : TO94
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	10.000	10.688	-6.9	102	-0.01
82	T	p-Isopropyltoluene	10.000	10.617	-6.2	102	-0.01
83	T	1,3-Dichlorobenzene	10.000	10.921	-9.2	108	0.00
84	T	1,4-Dichlorobenzene	10.000	10.896	-9.0	106	-0.01
85	T	n-Butylbenzene	10.000	10.547	-5.5	101	0.00
86	T	1,2-Dichlorobenzene	10.000	11.100	-11.0	110	-0.01
87	T	1,2-Dibromo-3-chloropropane	10.000	12.404	-24.0#	118	0.00
88	T	1,2,4-Trichlorobenzene	10.000	10.793	-7.9	103	-0.01
89	T	Hexachlorobutadiene	10.000	12.057	-20.6#	113	-0.01
90	T	Naphthalene	10.000	8.239	17.6	84	0.00
91	T	1,2,3-Trichlorobenzene	10.000	10.867	-8.7	103	0.00

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD099.D
Acq On : 6 Mar 2007 4:11 am
Sample : CVO94L18154 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	100	0.00
2	T	Dichlorodifluoromethane	0.212	0.280	-32.1#	125	0.00
3	P,T	Chloromethane	0.359	0.380	-5.8	105	-0.12
4	C,T	Vinyl chloride	0.316	0.347	-9.8	112	0.00
5	T	Bromomethane	0.222	0.254	-14.4	113	-0.01
6	T	Chloroethane	0.233	0.238	-2.1	103	0.00
7	T	Dichlorofluoromethane	0.601	0.560	6.8	91	0.00
8	T	Trichlorofluoromethane	0.466	0.433	7.1	91	0.01
9	T	sec-Propyl alcohol	0.000	0.000#	0.0	0#	0.00
10	T	Acrolein	0.010	0.012	-20.0	109	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	0.233	0.283	-21.5#	117	0.00
12	T	Acetone	0.033	0.037	-12.1	109	0.00
13	C,T,M	1,1-Dichloroethene	0.452	0.437	3.3	94	0.00
[illegible]	T	tert-Butyl alcohol	0.013	0.013	0.0	102	-0.01
15	T	Methyl acetate	0.026	0.008#	69.2#	34#	0.00
16	T	Iodomethane	0.424	0.498	-17.5	112	0.00
17	T	Methylene chloride	0.354	0.375	-5.9	106	0.00
18	T	Carbon disulfide	1.076	1.019	5.3	92	0.01
19	T	Acrylonitrile	0.040	0.040	0.0	102	-0.01
20	T	tert-Butyl methyl ether (MT	0.433	0.470	-8.5	108	0.00
21	T	trans-1,2-Dichloroethene	0.489	0.494	-1.0	98	0.00
22	T	Isopropyl ether (DIPE)	0.983	1.061	-7.9	106	0.00
23	T	Vinyl acetate	0.328	0.318	3.0	95	-0.01
24	P,T	1,1-Dichloroethane	0.612	0.652	-6.5	105	0.00
25	T	tert-Butyl ethyl ether (ETB	0.657	0.740	-12.6	111	0.00
26	T	2-Butanone	0.052	0.054	-3.8	107	0.00
27	T	2,2-Dichloropropane	0.469	0.430	8.3	91	0.00
28	T	cis-1,2-Dichloroethene	0.530	0.546	-3.0	102	-0.01
29	T	tert-Butyl formate (TBF)	0.000	0.000#	0.0	0#	0.01
30	C,T	Chloroform	0.533	0.570	-6.9	104	-0.01
31	T	Bromochloromethane	0.216	0.217	-0.5	99	0.00
32	T	Tetrahydrofuran	0.034	0.040	-17.6	121	0.00
33	T	1,1,1-Trichloroethane	0.488	0.516	-5.7	103	0.00
34	T	Cyclohexane	0.140	0.003#	97.9#	2#	-0.01
35	T	tert-Amyl methyl ether (TAM	0.565	0.642	-13.6	112	0.00
36	S	1,2-Dichloroethane-d4	0.207	0.203	1.9	99	0.00
37	I	CHLOROBENZENE-D5	1.000	1.000	0.0	108	0.00
[illegible]	T	1,1-Dichloropropene	0.221	0.207	6.3	104	0.00
[illegible]	T	Carbon tetrachloride	0.520	0.505	2.9	101	-0.01
40	T	1,2-Dichloroethane	0.330	0.305	7.6	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD099.D
Acq On : 6 Mar 2007 4:11 am
Sample : CVO94L18154 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	T,M	Benzene	1.595	1.553	2.6	104	0.00
42	T,M	Trichloroethene	0.475	0.538	-13.3	119	-0.01
43	T	Methylcyclohexane	0.162	0.002#	98.8#	1#	-0.01
44	C,T	1,2-Dichloropropane	0.413	0.407	1.5	107	-0.01
45	T	Bromodichloromethane	0.432	0.433	-0.2	106	0.00
46	T	Dibromomethane	0.154	0.159	-3.2	110	0.00
47	T	2-Chloroethyl vinyl ether	0.000	0.002#	0.0	0#	0.06
48	T	4-Methyl-2-pentanone	0.142	0.136	4.2	104	-0.01
49	T	cis-1,3-Dichloropropene	0.517	0.503	2.7	104	-0.01
50	S	Toluene-d8	1.271	1.218	4.2	100	0.00
51	C,T,M	Toluene	1.609	1.660	-3.2	110	-0.01
52	T	Ethyl methacrylate	0.240	0.230	4.2	101	-0.01
53	T	trans-1,3-Dichloropropene	0.357	0.346	3.1	103	-0.01
[illegible]	T	2-Hexanone	0.092	0.085	7.6	100	-0.01
[illegible]	T	1,1,2-Trichloroethane	0.200	0.216	-8.0	115	0.00
56	T	1,3-Dichloropropane	0.390	0.394	-1.0	111	-0.01
57	T	Tetrachloroethene	0.341	0.381	-11.7	117	-0.01
58	T	Dibromochloromethane	0.266	0.279	-4.9	110	-0.01
59	T	1,2-Dibromoethane	0.196	0.207	-5.6	111	0.00
60	T	1-Chlorohexane	0.690	0.772	-11.9	117	0.00
61	P,M	Chlorobenzene	0.938	1.060	-13.0	118	0.00
62	T	1,1,1,2-Tetrachloroethane	0.327	0.343	-4.9	109	-0.01
63	C,T	Ethylbenzene	1.823	1.967	-7.9	113	-0.01
64	T	m-Xylene & p-Xylene	1.320	1.281	3.0	103	0.00
65	T	o-Xylene	1.280	1.236	3.4	103	-0.01
66	T	Styrene	0.916	0.947	-3.4	107	0.00
67	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	100	0.00
68	T	Isopropylbenzene	5.853	6.570	-12.3	111	0.00
69	P,T	Bromoform	0.407	0.495	-21.6#	114	0.00
70	P,T	1,1,2,2-Tetrachloroethane	0.697	0.743	-6.6	106	0.00
71	S	4-Bromofluorobenzene	1.292	1.399	-8.3	103	0.00
72	T	1,2,3-Trichloropropane	0.123	0.122	0.8	103	-0.01
73	T	trans-1,4-Dichloro-2-butene	0.131	0.165	-26.0#	125	-0.01
74	T	n-Propylbenzene	6.414	6.418	-0.1	97	0.00
75	T	Bromobenzene	1.109	1.371	-23.6#	122	-0.01
76	T	1,3,5-Trimethylbenzene	2.919	2.685	8.0	90	0.00
77	T	2-Chlorotoluene	3.760	3.915	-4.1	106	0.00
[illegible]	T	4-Chlorotoluene	3.290	3.137	4.7	94	0.00
[illegible]	T	tert-Butylbenzene	3.517	3.743	-6.4	102	-0.01
80	T	1,2,4-Trimethylbenzene	2.400	2.312	3.7	94	-0.01

(#) = Out of Range

2034

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C05\RCD099.D
Acq On : 6 Mar 2007 4:11 am
Sample : CVO94L18154 10/20/50ppb
Misc : 10ppb 8260/20ppbKET-AA/50ppbTBA
MS Integration Params: 524TAIL.P

Vial: 4
Operator: AS
Inst : TO94
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO94L18.M (RTE Integrator)
Title : METHOD 8260
Last Update : Thu Mar 01 09:14:04 2007
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	5.192	5.550	-6.9	102	-0.01
82	T	p-Isopropyltoluene	3.214	3.412	-6.2	102	-0.01
83	T	1,3-Dichlorobenzene	2.018	2.204	-9.2	108	0.00
84	T	1,4-Dichlorobenzene	1.805	1.967	-9.0	106	-0.01
85	T	n-Butylbenzene	2.427	2.560	-5.5	101	0.00
86	T	1,2-Dichlorobenzene	1.546	1.716	-11.0	110	-0.01
87	T	1,2-Dibromo-3-chloropropane	0.096	0.119	-24.0#	118	0.00
88	T	1,2,4-Trichlorobenzene	0.508	0.549	-8.1	103	-0.01
89	T	Hexachlorobutadiene	0.779	0.939	-20.5#	113	-0.01
90	T	Naphthalene	0.576	0.475	17.5	84	0.00
91	T	1,2,3-Trichlorobenzene	0.388	0.421	-8.5	103	0.00

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

ANALYTICAL LOG

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: 12-18-06 ☐ 5-ml Purge ☒ 25-ml Purge **Book # A94 -015**

BATCH V094L18Ø10

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RLD382	BFB94L35	2µl				TICHECK
02	383	36					15:01
03	384	V094L18Ø1	.03/.15/.3µl				.3ppb 8260 / .6ppb Ket AA / 1.5ppb TBA
04	385	Ø2	.05/.25/.1µl				.5 / 1 / 2.5
05	386	Ø3	.1/.5/.2µl				1 / 2 / 5
06	387	Ø4	.2/1/.4µl				2 / 4 / 16
07	388	Ø5	.5/2.5/1µl				5 / 10 / 25
08	389	Ø6	1/5/2µl				10 / 20 / 50
09	390	Ø7	2/10/4µl				20 / 40 / 100
10	391	Ø8	3/15/6µl				30 / 60 / 150
11	392	Ø9	4/20/8µl				40 / 80 / 200
12	393	10	5/25/10µl				50 / 100 / 250
13	394	Rinse	25ml	1			
14	395	V094L36B					
15	396	IV094L18Ø1	1/5/2/2.5µl	1			10 / 20 / 50
16	397	Ø2					
17	398	IS/GS	25ml	1			
18	399	Rinse					01:35
19							
20							
21							
22							
23							
24							
25							AS 12-19-Ø6

Instrument No.	94
INITIAL CALIBRATION REFERENCE	
DATE	12-18-Ø6
ICAL ID	V094L18 (826Ø)

STANDARDS

NAME	ID	CONC. (mg/L)
DCC GCS	SVIC-11-44-1	25Ø
DCC 826Ø	-4Ø-3	5Ø/25Ø
DCC Ket-AA 3 Add'l Mix	-48-1 / -19-2	25Ø / 5Ø
BFB	-21-1	5Ø
IS/SURR. IS / SS	-45-1 / -49-2	25Ø
LCS GCS	-47-3	25Ø
LCS 826Ø	-5Ø-2	5Ø/25Ø
LCS Ket-AA DCFM	-48-1 / SVIA-11-73	25Ø / 1ØØ
SOLVENT	ID	
METHANOL		
DATA FILE	Ø6L18	

Electronic Data Archival

Location	Date
HPCHEM_VOA/T094	

Comments:

Analyzed By: AS

Date Disposed: 12-19-Ø6

Disposed By: AS

EMAX Laboratories, Inc. 1835 W. 205th, Torrance, CA 90501

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 2-28-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A94 -017

BATCH VO94L18142

Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RBD691	BFB94B67	2 µl				T/CHECK
02	692	68					18:09
03	693	IVD94L1803	1/5/2 µl				
04	694	THF MDL VERF 1ppb	1 µl				TETRAHYDROFURAN
05	695	2ppb	2 µl				
06	696	CVO94L18142	1/5/2 µl				
07	697	143					
08	698	VO94B68L					
09	699	C					
10	700	B	25ml	1			
11	701	D					
12	702	07B199-14R			<2		
13	703	07B275-07					TB
14	704	-01					
15	705	-02					R/R x1, x5
16	706	-03					
17	707	-04					
18	708	Rinse					
19	709	07B275-01M	1/5/2 µl		<2		MS
20	710	-01S					MSD 5:4/3-1
21	711	Rinse	25ml				
22	712						
23							
24							
25							AS 3-1-07

Instrument No.	94
INITIAL CALIBRATION REFERENCE	
DATE	12-18-07
ICAL ID	VO94L18

STANDARDS

NAME	ID	CONC (mg/L)
DCC 995	SVIC-11-60-3	
DCC 8260	-60-1	
DCC Ket-AA	-58-3	
BFB	-49-3	50/250
IS/SURR. IS	-62-1	
SS	-62-3	
LCS 995	-61-3	
LCS 8260	-63-2	
LCS Ket-AA	-59-3	
LCS THF	-68-3	

SOLVENT	ID
METHANOL	
DATA FILE	07B28

Electronic Data Archival	
Location	Date
HPCHEM_VOA/TO94	

Comments: Validate THF. Compds Not Validated: acrolein, methylacetate, cyclohexane, methylcyclohexane & 2-CEVE

Analyzed By: AS

Date Disposed: 3-1-07

Disposed By: AS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 3-5-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A94 -017

BATCH CVO94L18/152

Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RCD074	BFBA4C07	2 µl				T/CHECK
02	75	08					12:51
03	76	CVC94L18151	1/5 µl				
04	77	152					
05	78	VC94C08L					
06	79	C					
07	80	B	25ml	1.0			
08	81	G					
09	82	07B301-04			<2		TB
10	83	07C014-01					TB
11	84	07B268-01					R/R@x10
12	85	07B301-01I	500µl	50			R/R@x25
13	86	-02	25ml	1.0			
14	87	07C014-02					
15	88	-03					
16	89	07B301-01T	5ml	5.0			R/R@x1
17	90	Rinse	25ml	1.0			
18	91	07B301-03			<2		
19	92	-03M	1/5 µl				
20	93	-03S					06-20 3-6
21	94	Rinse	25ml				
22	95						
23							
24							
25							AS 3-6-07

Instrument No.	94
INITIAL CALIBRATION REFERENCE	
DATE	12-18-07
ICAL ID	V094L18

STANDARDS

NAME	ID	CONC (mg/L)
DCC gas	SVC-11-66-3	
DCC 8260	-60-1	
DCC Ket-HA	-58-3	
BFB	-49-3	50/250
IS/SURR. IS	-62-1	
Surr	-67-3	
LCS gas	-61-3	
LCS 8260	-63-2	
LCS Ket-HA	-59-3	
SOLVENT	ID	
METHANOL		
DATA FILE	07C05	

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO94	

Comments:

Analyzed By: AS

Date Disposed 3-6-07

Disposed By: AS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 3-6-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A94 -017

BATCH V094L18154

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RCD096	BFB94C09	2µl				TICHECK
02	097	10					2:54
03	098	CV094L18153	1/5/2µl				
04	099	154					
05	100	V094C10L					gas 5ppb
06	101	C					
07	102	B	25ml	1			
08	103	D					
09	104	07C014-04			<2		
10	105	-05					Needle LEAKING
11	106	-05M	1/5/2µl				R/R
12	107	Rinse	25ml	1			
13	108	07B268-01T	1ml	25	<2		
14	109	07C014-05R	25ml	1			
15	110	-05W	1/5/2µl				MS
16	111	-05S					MSD
17	112	V094C10X	1/5/2µl				
18	113	Y					14:25
19	114	Rinse	25ml				
20							
21							
22							
23							
24							
25							AS 3-6-07

Instrument No.	94
INITIAL CALIBRATION REFERENCE	
DATE	12-18-06
ICAL ID	V094L18

STANDARDS

NAME	ID	CONC. (mg/L)
DCC gas	SVC-11-60-3	
DCC 8260	-60-1	
DCC KetAA	-58-3	
BFB	-49-3	.50/250
IS/SURR. IS	-42-1	
SS	-67-3	
LCS gas	-61-3	
LCS 8260	-63-2	
LCS KetAA	-59-3	

SOLVENT	ID
METHANOL	
DATA FILE	07C05

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO94	

Comments:

Analyzed By: AS

Date Disposed 3-6-07

Disposed By: AS

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CLIENT: **SHAW E&I**

PROJECT: **ALAMEDA POINT, CTO 133**

SDG: **07C240**

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GC-SVOA	**	5000 –
HPLC	**	6000 –
METALS	**	7000 –
WET	**	8000 –
OTHERS	**	9000 –

** - Not Requested

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

Date: 04-05-2007
EMAX Batch No.: 07C240

Attn: Rose Condit

Shaw E&I
4005 Port Chicago Hwy
Concord CA 94520

Subject: Laboratory Report
Project: Alameda Point, CTO 133

Enclosed is the Laboratory report for samples received on 03/23/07.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
133-4-2-INF(03/22/07)	C240-01	03/22/07	WATER	VOLATILE ORGANICS BY GC/MS

The results are summarized on the following pages.

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

Sincerely yours,

for

Kam Y. Pang, Ph.D.
Laboratory Director

SH-0629 -

07C240

CHAIN OF CUSTODY

Ref. Document # 133-

Page 1 of 1

Shaw

Shaw Environmental and Infrastructure Inc.

4005 Port Chicago Hwy
Concord, CA 94520

Project Number: 108816
Project Name / Location: Alameda CTO 133
Purchase Order #: 41926

Project Manager: John McGuire (Name & phone #)

Shipment Date: 3/22/2007
Waybill Number: 102650572
Lab Destination: EMAX, 1835 205th St., Torrance, 90501
Lab Contact Name / ph. #: Ye-Myint, 310-618-8889

Send Report To: Rose Condit
Phone/Fax Number: 925-288-2151
Address: 4005 Port Chicago Hwy
City: Concord, CA, 94520

Sampler's Name(s): ~~Norman Hanelt~~ Nathan Kong

Sample ID Number	Sample Description	Collection Information Date	Time	Method	Matrix	# of containers	Container Type	VOCs (8260B)- Full 8260 list					Cooler Temp				
							Preservative (water)	HCL									
							Preservative (soil)	Ice									
							Container Type	3-VOA									
1 133-4-2-inf(03/22/07)	Influent to GAC - 4-2	03/22/07	7:30	G	WW	3		X									
Temp Blank													X				
UPS 1Z89V 462 019037 5779																	

Special Instructions: T= 2.9°C

Turnaround Time: 10 day ☐ 24-hr ☐ 48-hr ☐ 5-day

Level Of QC Required: I II III Project Specific:

Relinquished By: Nathan Kong Date: 3/22/2007 Time:

Received By: Date: 3/23/07 Time: 0930

Relinquished By: Date: Time:

Received By: Date: Time:

Method Codes
C = Composite G = Grab

Matrix Codes
DW = Drinking Water SO = Soil
GW = Ground Water SL = Sludge
WW = Waste Water CP = Chip Samples

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN 07C240
☐ EMAX Courier		Recepient jluna
☐ Client Delivery		Date 3/23/07
☑ Third Party UPS	1289V 9620 1903 7 3779	Time 0930

COC Inspection

☑ Client Name ☑ Client PM/FC ☑ Sampler Name ☑ Sampling Date/Time/Location ☑ Sample ID ☑ Matrix
☑ Address ☑ Tel # / Fax # ☑ Courier Signature ☑ Analysis Required ☑ Preservative (if any) ☑ TAT

Safety Issues

☐ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☑ Custody Seal	☑ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☑ Sufficient	☐
Temperatures	☐ Cooler 1 2.9 °C	☐ Cooler 2 ____ °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C

Comments: ☐ **PM was informed on non-compliant coolers imediately.**

DISCREPANCIES

LSID	LSCID	Sample Label ID/COC ID	Discrepancy Code	Corrective Action Code

REVIEWS

Sample Labeling _____ Date 3/23/07

SRF _____ Date 3/23/07

PM _____ Date 3/26/07

LEGEND:

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Project Management
A1	Analysis is not indicated in COC	E1	Preservative needed; sample has no preservative	R1	Hold sample(s); wait for further instructions
A2	Analysis is not indicated in label	E2	Preservative not needed but sample is preserved	R2	Proceed as indicated in COC
A3	Analysis is inconsistent in COC vis-à-vis label	F1	Not enough quantity of samples	R3	Refer to attached instruction
B1	Sample ID is not indicated in COC	F2	Bubble is> 6mm	R4	Cancel the analysis
B2	Sample ID is not indicated in label	G1	Temperature is out of range (4 +_ 2°C)	R5	
B3	Sample ID is inconsistent in COC vis-à-vis label	G2	Out of Holding Time	R6	
C1	Wrong container	G3	>20 % solid particle		
C2	Broken container	H1			
C3	Leaking container	H2			
D1	Date and/or time is not indicated in COC				
D2	Date and/or time is not indicated in label				
D3	Date and/or time is inconsistent in COC vis-à-vis label				

UPS CampusShip: View/Print Label

1. **Print the label(s):** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the dotted line.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers without a Daily Pickup
   - Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   - Hand the package to any UPS driver in your area.
   - Take your package to a location of The UPS Store®, UPS Drop Box, UPS Customer Center or Authorized Shipping Outlet near you. Items sent via UPS Return Services (including Ground Returns) are accepted at any UPS Drop Box.
   - To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

   Customers with a Daily Pickup
   - Your driver will pickup your shipment(s) as usual.

FOLD HERE

NATHAN KONG
510-748-6030
ALAMEDA 89V462
399 W SEAPLANE LAGOON
ALAMEDA CA 94501

20 LBS 1 OF 1

SHIP TO:
YE-MYINT
3106188889
EMAX
1835 205TH STREET
TORRANCE CA 90501-1510

CA 908 9-02

UPS NEXT DAY AIR 1
TRACKING #: 1Z 89V 462 01 9037 5779

BILLING: P/P

Project Number or Department Number: 00501.108816.4701.42010290
Sender's Name: Nathan Kong

CS 9.0.19.0 W00ZE55 64 0A 02/2007

1003

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

SHAW E&I

ALAMEDA POINT, CTO 133

METHOD 5030/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 07C240

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07C240

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

One (1) water sample was received on 03/23/07 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 : SHAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07C240
Instrument ID : T-005

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V005C64Q	1	NA	03/27/0714:45	03/27/0714:45	RCQ768	RCQ351	V005C64	Method Blank
LCS1W	V005C64L	1	NA	03/27/0712:54	03/27/0712:54	RCQ765	RCQ351	V005C64	Lab Control Sample (LCS)
LCD1W	V005C64C	1	NA	03/27/0713:31	03/27/0713:31	RCQ766	RCQ351	V005C64	LCS Duplicate
133-4-2-INF(03/22/07)	C240-01	1	NA	03/27/0719:40	03/27/0719:40	RCQ776	RCQ351	V005C64	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: SHAW E&I	Date Collected:	03/22/07
Project	: ALAMEDA POINT, CTO 133	Date Received:	03/23/07
Batch No.	: 07C240	Date Extracted:	03/27/07 19:40
Sample ID	: 133-4-2-INF(03/22/07)	Date Analyzed:	03/27/07 19:40
Lab Sample ID	: C240-01	Dilution Factor:	1
Lab File ID	: RCQ776	Matrix	: WATER
Ext Btch ID	: V005C64	% Moisture	: NA
Calib. Ref.	: RCQ351	Instrument ID	: T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	0.92	0.50	0.20
1,1-DICHLOROETHENE	7.4	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	0.72	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	54J	10	5.0
2-BUTANONE	9.5J	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	70-140
TOLUENE-D8	93	70-140
4-BROMOFLUOROBENZENE	91	70-130

RL Reporting Limit

QC SUMMARIES

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

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	03/27/07
Batch No.	: 07C240	Date Extracted:	03/27/07 14:45
Sample ID:	MBLK1W	Date Analyzed:	03/27/07 14:45
Lab Sample ID:	V005C64Q	Dilution Factor:	1
Lab File ID:	RCQ768	Matrix	: WATER
Ext Btch ID:	V005C64	% Moisture	: NA
Calib. Ref.:	RCQ351	Instrument ID	: T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	70-140
TOLUENE-D8	91	70-130
4-BROMOFLUOROBENZENE	91	70-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
CH NO.: 07C240
OD: SW 5030B/8260B

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V005C64Q	V005C64L	V005C64C		
LAB FILE ID:	RCQ768	RCQ765	RCQ766		
DATE EXTRACTED:	03/27/0714:45	03/27/0712:54	03/27/0713:31	DATE COLLECTED:	NA
DATE ANALYZED:	03/27/0714:45	03/27/0712:54	03/27/0713:31	DATE RECEIVED:	03/27/07
PREP. BATCH:	V005C64	V005C64	V005C64		
CALIB. REF:	RCQ351	RCQ351	RCQ351		

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-Dichloroethene	ND	10.0	9.17	92	10.0	9.56	96	4	60-130	30
Benzene	ND	10.0	9.90	99	10.0	10.3	103	4	70-130	30
Chlorobenzene	ND	10.0	10.3	103	10.0	10.6	106	2	70-130	30
Toluene	ND	10.0	10.4	104	10.0	10.6	106	2	70-130	30
Trichloroethene	ND	10.0	9.86	99	10.0	10.2	102	3	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	8.27	83	10.0	8.38	84	70-140
ene-d8	10.0	8.89	89	10.0	8.81	88	70-130
omofluorobenzene	10.0	8.85	88	10.0	8.96	90	70-130

INITIAL CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RCQ345
Instrument ID: T-005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07C240
BFB Injection Date : 03/13/07
BFB Injection Time : 11:30
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.15
75	30.0 - 60.0% of mass 95	42.20
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.24
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	80.58
175	5.0 - 9.0% of mass 174	6.36(7.9)1
176	95.0 - 101.0% of mass 174	81.33(100.9)1
177	5.0 - 9.0% of mass 176	4.89(6.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	V005C131	RCQ346	03/13/07	12:08
2	VSTD0.5	V005C132	RCQ347	03/13/07	12:46
3	VSTD01	V005C133	RCQ348	03/13/07	13:22
4	VSTD02	V005C134	RCQ349	03/13/07	14:00
5	VSTD05	V005C135	RCQ350	03/13/07	14:38
6	VSTD010	V005C136	RCQ351	03/13/07	15:16
7	VSTD020	V005C137	RCQ352	03/13/07	15:53
8	VSTD030	V005C138	RCQ353	03/13/07	16:31
9	VSTD040	V005C139	RCQ354	03/13/07	17:08
10	VSTD050	V005C1310	RCQ355	03/13/07	17:45
11	VSTD010	IV005C1302	RCQ359	03/13/07	20:13

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T005
Beginning DateTime :03/13/07 12:08
Spike Units :PPB
IC File :RCQ351

Column Spec :RTX502.2 ID :0.32MM
Ending DateTime :03/13/07 17:45
HPChem Method :V005C13

M	IDX	Parameters	.3 12:08 RCQ346	.5 12:46 RCQ347	1 13:22 RCQ348	2 14:00 RCQ349	5 14:38 RCQ350	10 15:16 RCQ351	20 15:53 RCQ352	30 16:31 RCQ353	40 17:08 RCQ354	50 17:45 RCQ355	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5154
	2	Dichlorodifluoromethane	0.285	0.240	0.300	0.262	0.291	0.276	0.266	0.265	0.266	0.258	0.271	6.46	1.6793
	3	Chloromethane	0.323	0.272	0.335	0.294	0.315	0.318	0.321	0.310	0.314	0.305	0.311	5.60	1.9305
	4	Vinyl chloride	0.317	0.270	0.338	0.310	0.334	0.325	0.306	0.311	0.304	0.296	0.311	6.31	2.0569
	5	Bromomethane	0.424	0.362	0.382	0.308	0.258	0.229	0.237	0.245	0.248	0.253	0.294	23.88	2.5660
	6	Chloroethane	0.232	0.171	0.260	0.192	0.217	0.200	0.199	0.198	0.194	0.196	0.206	12.05	2.6671
	7	Dichlorofluoromethane	0.629	0.616	0.664	0.647	0.648	0.602	0.610	0.631	0.615	0.644	0.631	3.16	2.7228
	8	Trichlorofluoromethane	0.515	0.427	0.563	0.488	0.526	0.516	0.491	0.495	0.495	0.486	0.500	6.96	2.9832
	9	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
2	10	Acrolein	------	------	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	1.65	3.5367
	11	1,1,2-Trichloro-1,2,2-trifluoroethane	0.257	0.251	0.261	0.257	0.260	0.250	0.249	0.252	0.240	0.249	0.252	2.48	3.5504
2	12	Acetone	------	------	0.051	0.032	0.035	0.035	0.040	0.039	0.040	0.043	0.039	14.72	3.6326
	13	1,1-Dichloroethene	0.416	0.411	0.438	0.418	0.418	0.394	0.399	0.407	0.393	0.410	0.410	3.27	3.7628
5	14	tert-Butyl alcohol	------	------	------	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	3.92	3.9309
	15	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	16	Iodomethane	------	------	0.055	0.128	0.337	0.337	0.329	0.321	0.288	0.306	0.263	41.37	4.1573
	17	Methyl acetate	------	------	0.075	0.047	0.073	0.057	0.064	0.061	0.065	0.065	0.063	13.68	4.2552
	18	Methylene chloride	0.394	0.344	0.335	0.307	0.307	0.276	0.284	0.275	0.278	0.289	0.309	12.43	4.4219
	19	Carbon disulfide	1.058	1.082	1.143	1.042	1.063	0.973	1.030	1.038	1.012	1.088	1.053	4.40	4.3966
3	20	Acrylonitrile	0.040	0.033	0.039	0.035	0.038	0.036	0.036	0.035	0.034	0.035	0.036	6.28	4.6216
	21	tert-Butyl methyl ether (MTBE)	0.337	0.329	0.358	0.329	0.358	0.336	0.343	0.333	0.327	0.345	0.339	3.41	4.6840
	22	trans-1,2-Dichloroethene	0.442	0.425	0.446	0.441	0.438	0.415	0.419	0.423	0.408	0.416	0.427	3.13	4.8399
	23	Isopropyl ether (DIPE)	0.755	0.768	0.811	0.717	0.746	0.797	0.712	0.819	0.812	0.755	0.769	5.09	5.3641
	24	1,1-Dichloroethane	0.583	0.546	0.565	0.539	0.534	0.536	0.518	0.564	0.545	0.571	0.550	3.62	5.4670
	25	Vinyl acetate	0.289	0.277	0.286	0.234	0.271	0.273	0.270	0.282	0.282	0.293	0.276	5.96	5.5142
	26	tert-Butyl ethyl ether (ETBE)	0.416	0.427	0.466	0.466	0.497	0.473	0.493	0.487	0.485	0.506	0.472	6.23	5.9802
2	27	2-Butanone	------	0.038	0.051	0.037	0.040	0.041	0.042	0.042	0.043	0.042	0.042	9.49	6.1624
	28	2,2-Dichloropropane	0.334	0.330	0.344	0.356	0.353	0.309	0.299	0.300	0.265	0.266	0.315	10.57	6.3258
	29	cis-1,2-Dichloroethene	0.396	0.457	0.486	0.486	0.495	0.468	0.471	0.471	0.456	0.467	0.465	5.91	6.3966
2	30	tert-Butyl formate (TBF)	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	31	Chloroform	0.562	0.548	0.573	0.559	0.555	0.529	0.534	0.533	0.525	0.541	0.546	2.93	6.6469
	32	Bromochloromethane	0.186	0.193	0.204	0.194	0.198	0.182	0.183	0.177	0.174	0.177	0.187	5.36	6.8980
2	33	Tetrahydrofuran	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	34	1,1,1-Trichloroethane	0.425	0.476	0.484	0.476	0.491	0.464	0.467	0.475	0.457	0.476	0.469	3.89	7.2832
	35	Cyclohexane	------	0.340	0.448	0.284	0.452	0.363	0.415	0.428	0.416	0.409	0.395	14.05	7.2955
	36	tert-Amyl methyl ether (TAME)	0.277	0.260	0.308	0.319	0.322	0.308	0.322	0.317	0.325	0.337	0.309	7.60	7.7999
	37	1,2-Dichloroethane-d4	0.197	0.221	0.221	0.203	0.229	0.214	0.195	0.197	0.202	0.213	0.209	5.71	7.8176
	38	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	14.4185
	39	1,1-Dichloropropene	0.193	0.180	0.198	0.197	0.196	0.189	0.186	0.191	0.186	0.196	0.191	3.16	7.5470
	40	Carbon tetrachloride	0.559	0.552	0.567	0.584	0.573	0.552	0.544	0.559	0.539	0.569	0.560	2.44	7.6962
	41	1,2-Dichloroethane	0.351	0.331	0.355	0.354	0.360	0.350	0.346	0.342	0.339	0.353	0.348	2.47	7.9769
	42	Benzene	1.377	1.359	1.426	1.456	1.439	1.382	1.368	1.403	1.353	1.434	1.400	2.64	7.9853
	43	Trichloroethene	0.451	0.427	0.459	0.465	0.463	0.446	0.443	0.457	0.440	0.465	0.452	2.79	9.0624
	44	Methylcyclohexane	------	------	0.510	0.338	0.547	0.435	0.512	0.548	0.529	0.532	0.494	14.64	9.1657
	45	1,2-Dichloropropane	0.349	0.337	0.345	0.359	0.355	0.341	0.346	0.349	0.342	0.359	0.348	2.18	9.3869
	46	Bromodichloromethane	0.414	0.427	0.446	0.459	0.453	0.440	0.439	0.443	0.435	0.459	0.441	3.20	9.8050
	47	Dibromomethane	0.159	0.156	0.169	0.183	0.171	0.173	0.174	0.158	0.171	0.179	0.169	5.44	9.8858
N	48	2-Chloroethyl vinyl ether	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
G	49	4-Methyl-2-pentanone	------	------	0.104	0.095	0.113	0.114	0.122	0.124	0.128	0.129	0.116	10.25	10.5374
	50	cis-1,3-Dichloropropene	0.360	0.339	0.369	0.393	0.415	0.417	0.429	0.436	0.432	0.456	0.405	9.34	10.8711
	51	Toluene-d8	1.131	1.097	1.216	1.140	1.292	1.234	1.076	1.131	1.166	1.312	1.179	6.84	11.3178
G	52	Toluene	0.856	0.819	0.887	0.945	0.941	0.898	0.905	0.917	0.899	0.939	0.901	4.42	11.4687
	53	Ethyl methacrylate	------	0.134	0.175	0.201	0.223	0.224	0.236	0.238	0.241	0.250	0.214	17.67	11.9385
	54	trans-1,3-Dichloropropene	------	0.198	0.244	0.267	0.292	0.290	0.307	0.314	0.315	0.335	0.285	14.93	11.8767
	55	1,1,2-Trichloroethane	0.194	0.185	0.206	0.203	0.212	0.201	0.205	0.204	0.205	0.209	0.202	3.81	12.1691
2	56	2-Hexanone	------	------	------	0.044	0.063	0.066	0.074	0.076	0.079	0.080	0.069	18.36	12.2772
	57	1,3-Dichloropropane	0.316	0.315	0.332	0.342	0.357	0.348	0.350	0.349	0.349	0.362	0.342	4.67	12.6916
	58	Tetrachloroethene	0.304	0.308	0.323	0.344	0.339	0.330	0.331	0.341	0.324	0.343	0.329	4.27	12.7734

3/14/A

59	Dibromochloromethane	0.259	0.245	0.283	0.278	0.285	0.281	0.282	0.281	0.282	0.293	0.277	5.04	13.1728
60	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
61	1,2-Dibromoethane	0.157	0.160	0.176	0.189	0.205	0.197	0.200	0.198	0.197	0.202	0.188	9.34	13.5884
62	1-Chlorohexane	0.436	0.448	0.466	0.556	0.587	0.576	0.588	0.614	0.589	0.611	0.547	12.67	14.0629
63	Chlorobenzene	0.954	0.943	0.955	1.004	0.999	0.950	0.974	0.985	0.955	0.988	0.971	2.27	14.5003
64	1,1,1,2-Tetrachloroethane	0.300	0.289	0.310	0.325	0.320	0.309	0.314	0.323	0.314	0.322	0.313	3.55	14.6158
65	Ethylbenzene	1.561	1.555	1.613	1.749	1.764	1.711	1.725	1.777	1.698	1.768	1.692	5.02	14.6579
2 66	m-Xylene & p-Xylene	1.221	1.208	1.257	1.344	1.339	1.309	1.321	1.384	1.327	------	1.301	4.58	14.8308
67	o-Xylene	1.065	1.099	1.138	1.262	1.296	1.263	1.282	1.328	1.259	1.304	1.229	7.57	15.7714
68	Styrene	0.683	0.663	0.805	0.881	0.923	0.920	0.949	0.979	0.947	0.974	0.872	13.38	15.8624
69	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	20.7052
70	Bromoform	0.339	0.197	0.390	0.384	0.414	0.383	0.413	0.413	0.412	0.418	0.376	17.94	16.5265
71	Isopropylbenzene	4.237	4.158	4.635	5.067	5.042	4.746	4.970	5.236	4.882	5.080	4.805	7.58	16.6125
72	1,1,2,2-Tetrachloroethane	0.585	0.590	0.630	0.624	0.634	0.600	0.618	0.616	0.605	0.612	0.611	2.66	17.0061
73	4-Bromofluorobenzene	1.063	0.914	1.085	0.977	1.106	1.072	0.946	1.011	1.032	1.137	1.034	6.96	17.1410
74	1,2,3-Trichloropropane	------	0.061	0.093	0.106	0.112	0.103	0.111	0.107	0.106	0.105	0.100	15.80	17.3354
75	trans-1,4-Dichloro-2-butene	------	------	------	0.122	0.141	0.141	0.147	0.149	0.148	0.149	0.142	6.87	17.5498
76	n-Propylbenzene	5.179	5.200	5.606	6.098	6.217	5.910	6.145	6.507	6.101	6.267	5.923	7.62	17.5295
77	Bromobenzene	0.775	0.834	0.909	0.968	0.980	0.930	0.973	1.004	0.962	0.978	0.931	7.88	17.5236
78	2-Chlorotoluene	3.362	3.321	3.492	3.672	3.666	3.462	3.525	3.652	3.470	3.526	3.515	3.46	17.8649
79	1,3,5-Trimethylbenzene	3.334	3.447	3.647	3.968	3.889	3.694	3.763	3.935	3.726	3.816	3.722	5.50	17.9054
80	4-Chlorotoluene	3.120	3.083	3.022	3.207	3.276	3.125	3.272	3.426	3.201	3.347	3.208	3.89	17.9914
81	tert-Butylbenzene	3.407	3.385	3.502	3.935	3.916	3.755	3.873	4.054	3.799	3.913	3.754	6.34	18.7162
82	1,2,4-Trimethylbenzene	3.066	3.118	3.378	3.690	3.730	3.546	3.657	3.810	3.620	3.725	3.534	7.39	18.7945
83	sec-Butylbenzene	4.722	4.779	4.832	5.487	5.429	5.281	5.407	5.679	5.355	5.563	5.253	6.60	19.2176
84	p-Isopropyltoluene	3.414	3.479	3.587	4.213	4.296	4.214	4.271	4.475	4.273	4.427	4.065	9.97	19.5657
85	1,3-Dichlorobenzene	1.609	1.622	1.794	1.877	1.880	1.817	1.868	1.932	1.853	1.909	1.816	6.23	19.6761
86	1,4-Dichlorobenzene	1.593	1.593	1.717	1.768	1.737	1.682	1.749	1.802	1.749	1.810	1.720	4.44	19.9366
87	n-Butylbenzene	3.074	2.553	3.096	3.626	3.809	3.818	3.943	4.159	3.956	4.124	3.616	14.71	20.5341
88	1,2-Dichlorobenzene	1.530	1.513	1.522	1.585	1.589	1.503	1.511	1.541	1.498	1.521	1.531	2.09	20.7684
89	1,2-Dibromo-3-chloropropane	------	------	------	0.058	0.058	0.072	0.080	0.081	0.082	0.085	0.074	15.94	22.6765
90	1,2,4-Trichlorobenzene	0.666	0.605	0.645	0.776	0.869	0.887	0.944	0.966	0.962	1.018	0.834	18.06	24.8814
91	Hexachlorobutadiene	0.541	0.614	0.643	0.733	0.718	0.695	0.695	0.708	0.676	0.704	0.673	8.65	25.2952
92	Naphthalene	------	0.501	0.573	0.764	0.928	0.986	1.126	1.170	1.210	1.289	0.950	29.82	25.4565
93	1,2,3-Trichlorobenzene	0.602	0.559	0.575	0.682	0.746	0.737	0.768	0.778	0.778	0.817	0.704	13.32	26.0504

Spike Amount = Nominal Amount * M
Ave_%RSD : 8.2 Max_%RSD : 41.4

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
5	Bromomethane	0.00687	0.24458	0.9990
16	Iodomethane	-0.02293	0.31783	0.9964
53	Ethyl methacrylate	-0.00695	0.24395	0.9996
56	2-Hexanone	-0.01700	0.08005	0.9994
70	Bromoform	-0.00526	0.41455	0.9996
74	1,2,3-Trichloropropane	-0.00155	0.10721	0.9996
89	1,2-Dibromo-3-chloropropane	-0.00831	0.08471	0.9990
90	1,2,4-Trichlorobenzene	-0.01973	0.97697	0.9990
92	Naphthalene	-0.06112	1.21651	0.9974

3/14/04

SECOND SOURCE VERIFICATION

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C13\RCQ359.D Vial: 16
Acq On : 13 Mar 2007 8:13 pm Operator: DN
Sample : IV005C1302 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET-A/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007 * Not evaluated
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	103	0.00
2	T	Dichlorodifluoromethane	10.000	10.123	-1.2	102	0.00
3	P,T	Chloromethane	10.000	10.411	-4.1	104	0.00
4	C,T	Vinyl chloride	10.000	10.642	-6.4	105	0.00
5	T	Bromomethane	10.000	10.312	-3.1	116	0.00
6	T	Chloroethane	10.000	10.173	-1.7	108	0.00
7	T	Dichlorofluoromethane	10.000	9.612	3.9	103	0.00
8	T	Trichlorofluoromethane	10.000	10.296	-3.0	103	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	100	0.00
10	T	Acrolein	20.000	18.864	5.7	98	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	9.867	1.3	102	0.00
12	T	Acetone	20.000	17.342	13.3	100	0.00
13	C,TM	1,1-Dichloroethene	10.000	9.579	4.2	102	0.00
14	T	tert-Butyl alcohol	50.000	43.701	12.6	88	0.00
	T	Acetonitrile	-1.000	0.000	0.0	91	0.00
16	T	Iodomethane	10.000	10.338	-3.4	93	0.00
17	T	Methyl acetate *	10.000	0.964	90.4#	11	0.00
18	T	Methylene chloride	10.000	9.595	4.0	110	0.00
19	T	Carbon disulfide	10.000	9.674	3.3	108	0.00
20	T	Acrylonitrile	30.000	28.837	3.9	99	0.00
21	T	tert-Butyl methyl ether (MT	10.000	9.460	5.4	98	0.00
22	T	trans-1,2-Dichloroethene	10.000	9.667	3.3	102	0.00
23	T	Isopropyl ether (DIPE)	10.000	10.128	-1.3	100	0.00
24	P,T	1,1-Dichloroethane	10.000	9.926	0.7	105	0.00
25	T	Vinyl acetate	10.000	10.073	-0.7	104	0.00
26	T	tert-Butyl ethyl ether (ETB	10.000	9.857	1.4	101	0.02
27	T	2-Butanone	20.000	19.069	4.7	99	0.00
28	T	2,2-Dichloropropane	10.000	10.322	-3.2	108	0.00
29	T	cis-1,2-Dichloroethene	10.000	10.052	-0.5	103	0.00
30	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	110	0.00
31	C,T	Chloroform	10.000	9.642	3.6	102	0.00
32	T	Bromochloromethane	10.000	9.543	4.6	100	0.00
33	T	Tetrahydrofuran	-1.000	0.000	0.0	91	0.00
34	T	1,1,1-Trichloroethane	10.000	9.902	1.0	103	0.00
35	T	Cyclohexane *	10.000	0.148	98.5#	2	0.03
36	T	tert-Amyl methyl ether (TAM	10.000	9.761	2.4	101	0.00
37	S	1,2-Dichloroethane-d4	10.000	9.854	1.5	99	0.00
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
	T	1,1-Dichloropropene	10.000	9.915	0.9	102	0.00
	T	Carbon tetrachloride	10.000	9.811	1.9	102	0.00

(#) = Out of Range

2013

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C13\RCQ359.D Vial: 16
Acq On : 13 Mar 2007 8:13 pm Operator: DN
Sample : IV005C1302 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET-A/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
Response via : Multiple Level Calibration * Not evaluated

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	1,2-Dichloroethane	10.000	9.791	2.1	99	0.00
42	M,T	Benzene	10.000	9.956	0.4	103	0.00
43	M,T	Trichloroethene	10.000	10.001	-0.0	103	0.00
44	T	Methylcyclohexane *	10.000	0.195	98.0#	2	-0.10
45	C,T	1,2-Dichloropropane	10.000	9.864	1.4	103	0.00
46	T	Bromodichloromethane	10.000	9.873	1.3	101	0.00
47	T	Dibromomethane	10.000	9.228	7.7	93	0.00
48	T	2-Chloroethyl vinyl ether	-1.000	0.000	0.0	120	-0.02
49	T	4-Methyl-2-pentanone	20.000	19.507	2.5	102	0.00
50	T	cis-1,3-Dichloropropene	10.000	10.322	-3.2	102	0.00
51	S	Toluene-d8	10.000	10.766	-7.7	105	0.00
52	C,TM	Toluene	10.000	10.155	-1.5	104	0.00
53	T	Ethyl methacrylate	10.000	9.213	7.9	99	0.00
54	T	trans-1,3-Dichloropropene	10.000	10.199	-2.0	102	0.00
[illegible]	T	1,1,2-Trichloroethane	10.000	9.773	2.3	101	0.00
56	T	2-Hexanone	20.000	18.943	5.3	104	0.00
57	T	1,3-Dichloropropane	10.000	9.920	0.8	100	0.00
58	T	Tetrachloroethene	10.000	10.178	-1.8	104	0.00
59	T	Dibromochloromethane	10.000	9.887	1.1	100	0.00
60	T	2-Ethyl-1-butanol	-1.000	0.000	0.0	107	0.00
61	T	1,2-Dibromoethane	10.000	10.419	-4.2	101	0.00
62	T	1-Chlorohexane	10.000	10.740	-7.4	104	0.00
63	P,M	Chlorobenzene	10.000	10.023	-0.2	105	0.00
64	T	1,1,1,2-Tetrachloroethane	10.000	10.003	-0.0	103	0.00
65	C,T	Ethylbenzene	10.000	10.245	-2.4	104	0.00
66	T	m-Xylene & p-Xylene	20.000	20.554	-2.8	104	0.00
67	T	o-Xylene	10.000	10.307	-3.1	103	0.00
68	T	Styrene	10.000	10.766	-7.7	104	0.00
69	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	101	0.00
70	P,T	Bromoform	10.000	9.262	7.4	99	0.00
71	T	Isopropylbenzene	10.000	10.300	-3.0	105	0.00
72	P,T	1,1,2,2-Tetrachloroethane	10.000	9.752	2.5	100	0.00
73	S	4-Bromofluorobenzene	10.000	10.851	-8.5	105	0.00
74	T	1,2,3-Trichloropropane	10.000	9.632	3.7	99	0.00
75	T	trans-1,4-Dichloro-2-butene	10.000	9.624	3.8	98	0.00
76	T	n-Propylbenzene	10.000	10.416	-4.2	105	0.00
77	T	Bromobenzene	10.000	10.256	-2.6	103	0.00
78	T	2-Chlorotoluene	10.000	10.183	-1.8	104	0.00
[illegible]	T	1,3,5-Trimethylbenzene	10.000	10.233	-2.3	104	0.00
[illegible]	T	4-Chlorotoluene	10.000	10.033	-0.3	104	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C13\RCQ359.D Vial: 16
Acq On : 13 Mar 2007 8:13 pm Operator: DN
Sample : IV005C1302 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET-A/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
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	tert-Butylbenzene	10.000	10.341	-3.4	104	0.00
82	T	1,2,4-Trimethylbenzene	10.000	10.341	-3.4	104	0.00
83	T	sec-Butylbenzene	10.000	10.310	-3.1	103	0.00
84	T	p-Isopropyltoluene	10.000	10.525	-5.3	102	0.00
85	T	1,3-Dichlorobenzene	10.000	10.211	-2.1	103	0.00
86	T	1,4-Dichlorobenzene	10.000	10.087	-0.9	104	0.00
87	T	n-Butylbenzene	10.000	10.920	-9.2	104	0.00
88	T	1,2-Dichlorobenzene	10.000	9.964	0.4	102	0.00
89	T	1,2-Dibromo-3-chloropropane	10.000	9.091	9.1	96	0.00
90	T	1,2,4-Trichlorobenzene	10.000	9.537	4.6	103	0.00
91	T	Hexachlorobutadiene	10.000	10.664	-6.6	104	0.00
92	T	Naphthalene	10.000	9.363	6.4	110	0.00
93	T	1,2,3-Trichlorobenzene	10.000	10.899	-9.0	105	0.00

3/14/07

2015

DAILY CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RCQ762
Instrument ID: T-005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07C240
BFB Injection Date : 03/27/07
BFB Injection Time : 11:04
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.54
75	30.0 - 60.0% of mass 95	44.96
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.82
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	89.06
175	5.0 - 9.0% of mass 174	6.27(7.0)1
176	95.0 - 101.0% of mass 174	84.76(95.2)1
177	5.0 - 9.0% of mass 176	4.61(5.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV005C1338	RCQ764	03/27/07	12:18
2	MBLK1W	V005C64Q	RCQ768	03/27/07	14:45
3	LCS1W	V005C64L	RCQ765	03/27/07	12:54
4	LCD1W	V005C64C	RCQ766	03/27/07	13:31
5	133-4-2-INF(03/22/07)	C240-01	RCQ776	03/27/07	19:40

FORM V VOA OLM02.0

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RCQ351
Instrument ID: T-005
GC Column: RTX502.2 ID: 0.32mm (mm)

Project:ALAMEDA POINT, CTO 133
SDG No.: 07C240
Date Analyzed: 03/13/07
Time Analyzed: 15:16
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2368350	8.52	1826080	14.42	641602	20.71
	UPPER LIMIT	4736700	9.02	3652160	14.92	1283204	21.21
	LOWER LIMIT	1184175	8.02	913040	13.92	320801	20.21
	SAMPLE ID						
1	VSTD010	1701272	8.52	1340617	14.42	493609	20.71
2	MBLK1W	1946276	8.52	1446487	14.42	461066	20.72
3	LCS1W	1777530	8.51	1394932	14.42	499223	20.71
4	LCD1W	1748232	8.51	1373336	14.42	488385	20.71
5	133-4-2-INF(03/22/07)	1909159	8.51	1420594	14.41	458917	20.71

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C27\RCQ764.D Vial: 4
Acq On : 27 Mar 2007 12:18 pm Operator: DN
Sample : CVO05C1338 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	72	0.00
2	T	Dichlorodifluoromethane	10.000	9.989	0.1	70	0.00
3	P,T	Chloromethane	10.000	10.082	-0.8	71	0.00
4	C,T	Vinyl chloride	10.000	10.439	-4.4	72	0.00
5	T	Bromomethane	10.000	8.985	10.2	71	0.00
6	T	Chloroethane	10.000	10.404	-4.0	77	0.00
7	T	Dichlorofluoromethane	10.000	10.197	-2.0	77	0.00
8	T	Trichlorofluoromethane	10.000	10.474	-4.7	73	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	77	0.00
10	T	Acrolein	20.000	19.277	3.6	70	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	10.455	-4.6	76	-0.01
12	T	Acetone	20.000	18.949	5.3	77	0.00
13	C,TM	1,1-Dichloroethene	10.000	9.726	2.7	73	0.00
14	T	tert-Butyl alcohol	50.000	50.640	-1.3	72	0.00
15	T	Acetonitrile	-1.000	0.000	0.0	85	-0.01
16	T	Iodomethane	10.000	9.860	1.4	62	0.00
17	T	Methyl acetate	10.000	0.799	92.0#	6	0.00
18	T	Methylene chloride	10.000	9.709	2.9	78	0.00
19	T	Carbon disulfide	10.000	8.914	10.9	69	0.00
20	T	Acrylonitrile	30.000	33.561	-11.9	81	0.00
21	T	tert-Butyl methyl ether (MT	10.000	9.576	4.2	70	0.00
22	T	trans-1,2-Dichloroethene	10.000	9.200	8.0	68	0.00
23	T	Isopropyl ether (DIPE)	10.000	11.219	-12.2	78	0.00
24	P,T	1,1-Dichloroethane	10.000	11.093	-10.9	82	-0.01
25	T	Vinyl acetate	10.000	11.834	-18.3	86	0.00
26	T	tert-Butyl ethyl ether (ETB	10.000	10.255	-2.6	73	0.00
27	T	2-Butanone	20.000	25.672	-28.4#	94	-0.01
28	T	2,2-Dichloropropane	10.000	12.212	-22.1#	90	0.00
29	T	cis-1,2-Dichloroethene	10.000	10.844	-8.4	77	0.00
30	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	79	-0.01
31	C,T	Chloroform	10.000	10.638	-6.4	79	0.00
32	T	Bromochloromethane	10.000	10.803	-8.0	80	0.00
33	T	Tetrahydrofuran	-1.000	0.000	0.0	79	0.00
34	T	1,1,1-Trichloroethane	10.000	10.522	-5.2	76	0.00
35	T	Cyclohexane	10.000	0.222	97.8#	2	0.11
36	T	tert-Amyl methyl ether (TAM	10.000	10.330	-3.3	74	0.00
37	S	1,2-Dichloroethane-d4	10.000	8.252	17.5	58	0.00
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	73	0.00
39	T	1,1-Dichloropropene	10.000	10.197	-2.0	76	-0.01
40	T	Carbon tetrachloride	10.000	9.854	1.5	73	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C27\RCQ764.D Vial: 4
Acq On : 27 Mar 2007 12:18 pm Operator: DN
Sample : CVO05C1338 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
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	1,2-Dichloroethane	10.000	10.137	-1.4	74	0.00
42	M,T	Benzene	10.000	10.575	-5.7	79	0.00
43	M,T	Trichloroethene	10.000	10.660	-6.6	79	-0.01
44	T	Methylcyclohexane	10.000	0.052	99.5#	0	0.00
45	C,T	1,2-Dichloropropane	10.000	10.810	-8.1	81	0.00
46	T	Bromodichloromethane	10.000	10.776	-7.8	79	0.00
47	T	Dibromomethane	10.000	11.367	-13.7	82	0.00
48	T	2-Chloroethyl vinyl ether	-1.000	0.000	0.0	126	0.15
49	T	4-Methyl-2-pentanone	20.000	24.112	-20.6#	90	0.00
50	T	cis-1,3-Dichloropropene	10.000	11.394	-13.9	81	0.00
51	S	Toluene-d8	10.000	8.766	12.3	62	0.00
52	C,TM	Toluene	10.000	11.142	-11.4	82	0.00
53	T	Ethyl methacrylate	10.000	10.707	-7.1	83	0.00
54	T	trans-1,3-Dichloropropene	10.000	11.402	-14.0	82	0.00
55	T	1,1,2-Trichloroethane	10.000	11.825	-18.2	88	0.00
5[illegible]	T	2-Hexanone	20.000	22.654	-13.3	91	0.00
57	T	1,3-Dichloropropane	10.000	11.331	-13.3	82	0.00
58	T	Tetrachloroethene	10.000	11.007	-10.1	81	0.00
59	T	Dibromochloromethane	10.000	11.337	-13.4	82	0.00
60	T	2-Ethyl-1-butanol	-1.000	0.000	0.0	78	0.00
61	T	1,2-Dibromoethane	10.000	12.198	-22.0#	85	0.00
62	T	1-Chlorohexane	10.000	11.513	-15.1	80	0.00
63	P,M	Chlorobenzene	10.000	11.190	-11.9	84	0.00
64	T	1,1,1,2-Tetrachloroethane	10.000	11.148	-11.5	83	0.00
65	C,T	Ethylbenzene	10.000	11.242	-12.4	82	0.00
66	T	m-Xylene & p-Xylene	20.000	21.886	-9.4	80	0.00
67	T	o-Xylene	10.000	11.317	-13.2	81	0.00
68	T	Styrene	10.000	11.428	-14.3	80	0.00
69	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	77	0.00
70	P,T	Bromoform	10.000	10.812	-8.1	89	0.00
71	T	Isopropylbenzene	10.000	10.555	-5.5	82	0.00
72	P,T	1,1,2,2-Tetrachloroethane	10.000	11.214	-12.1	88	0.00
73	S	4-Bromofluorobenzene	10.000	8.828	11.7	66	0.00
74	T	1,2,3-Trichloropropane	10.000	10.643	-6.4	84	0.00
75	T	trans-1,4-Dichloro-2-butene	10.000	10.274	-2.7	80	0.00
76	T	n-Propylbenzene	10.000	10.557	-5.6	81	0.00
77	T	Bromobenzene	10.000	11.006	-10.1	85	0.00
78	T	2-Chlorotoluene	10.000	10.318	-3.2	81	0.00
79	T	1,3,5-Trimethylbenzene	10.000	10.450	-4.5	81	0.00
8[illegible]	T	4-Chlorotoluene	10.000	10.257	-2.6	81	0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\07C27\RCQ764.D Vial: 4
Acq On : 27 Mar 2007 12:18 pm Operator: DN
Sample : CVO05C1338 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
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	tert-Butylbenzene	10.000	10.551	-5.5	81	0.00
82	T	1,2,4-Trimethylbenzene	10.000	10.481	-4.8	80	0.00
83	T	sec-Butylbenzene	10.000	10.618	-6.2	81	0.00
84	T	p-Isopropyltoluene	10.000	10.690	-6.9	79	0.00
85	T	1,3-Dichlorobenzene	10.000	10.922	-9.2	84	0.00
86	T	1,4-Dichlorobenzene	10.000	10.793	-7.9	85	0.00
87	T	n-Butylbenzene	10.000	11.290	-12.9	82	0.00
88	T	1,2-Dichlorobenzene	10.000	10.919	-9.2	86	0.00
89	T	1,2-Dibromo-3-chloropropane	10.000	10.994	-9.9	91	0.01
90	T	1,2,4-Trichlorobenzene	10.000	10.509	-5.1	87	0.00
91	T	Hexachlorobutadiene	10.000	11.188	-11.9	83	0.00
92	T	Naphthalene	10.000	9.757	2.4	88	0.00
93	T	1,2,3-Trichlorobenzene	10.000	12.265	-22.7#	90	0.00

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07C27\RCQ764.D Vial: 4
Acq On : 27 Mar 2007 12:18 pm Operator: DN
Sample : CVO05C1338 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
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	72	0.00
2	T	Dichlorodifluoromethane	0.271	0.271	0.0	70	0.00
3	P,T	Chloromethane	0.311	0.313	-0.6	71	0.00
4	C,T	Vinyl chloride	0.311	0.325	-4.5	72	0.00
5	T	Bromomethane	0.294	0.227	22.8#	71	0.00
6	T	Chloroethane	0.206	0.214	-3.9	77	0.00
7	T	Dichlorofluoromethane	0.631	0.643	-1.9	77	0.00
8	T	Trichlorofluoromethane	0.500	0.524	-4.8	73	0.00
9	T	sec-Propyl alcohol	0.000	0.000	0.0	77	0.00
10	T	Acrolein	0.015	0.015	0.0	70	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	0.252	0.264	-4.8	76	-0.01
12	T	Acetone	0.039	0.037	5.1	77	0.00
13	C,TM	1,1-Dichloroethene	0.410	0.399	2.7	73	0.00
14	T	tert-Butyl alcohol	0.007	0.007	0.0	72	0.00
15	T	Acetonitrile	0.000	0.000	0.0	85	-0.01
[illegible]	T	Iodomethane	0.263	0.290	-10.3	62	0.00
17	T	Methyl acetate	0.063	0.005	92.1#	6#	0.00
18	T	Methylene chloride	0.309	0.300	2.9	78	0.00
19	T	Carbon disulfide	1.053	0.939	10.8	69	0.00
20	T	Acrylonitrile	0.036	0.040	-11.1	81	0.00
21	T	tert-Butyl methyl ether (MT	0.339	0.325	4.1	70	0.00
22	T	trans-1,2-Dichloroethene	0.427	0.393	8.0	68	0.00
23	T	Isopropyl ether (DIPE)	0.769	0.863	-12.2	78	0.00
24	P,T	1,1-Dichloroethane	0.550	0.610	-10.9	82	-0.01
25	T	Vinyl acetate	0.276	0.326	-18.1	86	0.00
26	T	tert-Butyl ethyl ether (ETB	0.472	0.484	-2.5	73	0.00
27	T	2-Butanone	0.042	0.054	-28.6#	94	-0.01
28	T	2,2-Dichloropropane	0.315	0.385	-22.2#	90	0.00
29	T	cis-1,2-Dichloroethene	0.465	0.505	-8.6	77	0.00
30	T	tert-Butyl formate (TBF)	0.000	0.000	0.0	79	-0.01
31	C,T	Chloroform	0.546	0.581	-6.4	79	0.00
32	T	Bromochloromethane	0.187	0.202	-8.0	80	0.00
33	T	Tetrahydrofuran	0.000	0.000	0.0	79	0.00
34	T	1,1,1-Trichloroethane	0.469	0.494	-5.3	76	0.00
35	T	Cyclohexane	0.395	0.009	97.7#	2#	0.11
36	T	tert-Amyl methyl ether (TAM	0.309	0.320	-3.6	74	0.00
37	S	1,2-Dichloroethane-d4	0.209	0.173	17.2	58	0.00
38	I	CHLOROBENZENE-D5	1.000	1.000	0.0	73	0.00
39	T	1,1-Dichloropropene	0.191	0.195	-2.1	76	-0.01
[illegible]	T	Carbon tetrachloride	0.560	0.552	1.4	73	0.00

(#) = Out of Range

2022

Data File : D:\HPCHEM\1\DATA\07C27\RCQ764.D Vial: 4
Acq On : 27 Mar 2007 12:18 pm Operator: DN
Sample : CVO05C1338 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
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	1,2-Dichloroethane	0.348	0.353	-1.4	74	0.00
42	M,T	Benzene	1.400	1.480	-5.7	79	0.00
43	M,T	Trichloroethene	0.452	0.481	-6.4	79	-0.01
44	T	Methylcyclohexane	0.494	0.003	99.4#	0#	0.00
45	C,T	1,2-Dichloropropane	0.348	0.377	-8.3	81	0.00
46	T	Bromodichloromethane	0.441	0.476	-7.9	79	0.00
47	T	Dibromomethane	0.169	0.193	-14.2	82	0.00
48	T	2-Chloroethyl vinyl ether	0.000	0.000	0.0	126	0.15
49	T	4-Methyl-2-pentanone	0.116	0.140	-20.7#	90	0.00
50	T	cis-1,3-Dichloropropene	0.405	0.461	-13.8	81	0.00
51	S	Toluene-d8	1.179	1.034	12.3	62	0.00
52	C,TM	Toluene	0.901	1.003	-11.3	82	0.00
53	T	Ethyl methacrylate	0.214	0.254	-18.7	83	0.00
54	T	trans-1,3-Dichloropropene	0.285	0.325	-14.0	82	0.00
55	T	1,1,2-Trichloroethane	0.202	0.239	-18.3	88	0.00
[illegible]	T	2-Hexanone	0.069	0.082	-18.8	91	0.00
57	T	1,3-Dichloropropane	0.342	0.388	-13.5	82	0.00
58	T	Tetrachloroethene	0.329	0.362	-10.0	81	0.00
59	T	Dibromochloromethane	0.277	0.314	-13.4	82	0.00
60	T	2-Ethyl-1-butanol	0.000	0.000	0.0	78	0.00
61	T	1,2-Dibromoethane	0.188	0.229	-21.8#	85	0.00
62	T	1-Chlorohexane	0.547	0.630	-15.2	80	0.00
63	P,M	Chlorobenzene	0.971	1.086	-11.8	84	0.00
64	T	1,1,1,2-Tetrachloroethane	0.313	0.349	-11.5	83	0.00
65	C,T	Ethylbenzene	1.692	1.902	-12.4	82	0.00
66	T	m-Xylene & p-Xylene	1.301	1.424	-9.5	80	0.00
67	T	o-Xylene	1.229	1.391	-13.2	81	0.00
68	T	Styrene	0.872	0.997	-14.3	80	0.00
69	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	77	0.00
70	P,T	Bromoform	0.376	0.443	-17.8	89	0.00
71	T	Isopropylbenzene	4.805	5.072	-5.6	82	0.00
72	P,T	1,1,2,2-Tetrachloroethane	0.611	0.686	-12.3	88	0.00
73	S	4-Bromofluorobenzene	1.034	0.913	11.7	66	0.00
74	T	1,2,3-Trichloropropane	0.100	0.113	-13.0	84	0.00
75	T	trans-1,4-Dichloro-2-butene	0.142	0.146	-2.8	80	0.00
76	T	n-Propylbenzene	5.923	6.253	-5.6	81	0.00
77	T	Bromobenzene	0.931	1.025	-10.1	85	0.00
78	T	2-Chlorotoluene	3.515	3.627	-3.2	81	0.00
79	T	1,3,5-Trimethylbenzene	3.722	3.889	-4.5	81	0.00
[illegible]	T	4-Chlorotoluene	3.208	3.290	-2.6	81	0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\07C27\RCQ764.D Vial: 4
Acq On : 27 Mar 2007 12:18 pm Operator: DN
Sample : CVO05C1338 Inst : TO05
Misc : 10.0ppb 8260/20.0ppb KET/50.0ppb TBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05C13.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue Mar 13 18:48:04 2007
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	tert-Butylbenzene	3.754	3.961	-5.5	81	0.00
82	T	1,2,4-Trimethylbenzene	3.534	3.704	-4.8	80	0.00
83	T	sec-Butylbenzene	5.253	5.578	-6.2	81	0.00
84	T	p-Isopropyltoluene	4.065	4.345	-6.9	79	0.00
85	T	1,3-Dichlorobenzene	1.816	1.984	-9.3	84	0.00
86	T	1,4-Dichlorobenzene	1.720	1.856	-7.9	85	0.00
87	T	n-Butylbenzene	3.616	4.082	-12.9	82	0.00
88	T	1,2-Dichlorobenzene	1.531	1.672	-9.2	86	0.00
89	T	1,2-Dibromo-3-chloropropane	0.074	0.085	-14.9	91	0.01
90	T	1,2,4-Trichlorobenzene	0.834	1.007	-20.7#	87	0.00
91	T	Hexachlorobutadiene	0.673	0.752	-11.7	83	0.00
92	T	Naphthalene	0.950	1.126	-18.5	88	0.00
93	T	1,2,3-Trichlorobenzene	0.704	0.864	-22.7#	90	0.00

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

ANALYTICAL LOG

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 3.13.07 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A05 -036

BATCH V005C13 6

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RCQ 344	BFB05 C29	5ml	NA	NA		10:53 am
02	345	30					
03	346	V005C13 1	.03/.06 .15ml				8260, bas/Ket-A/TBA/ACN .3/.6/1.5/.9 ppb
04	347	2	.05/.1 .25ml				.5/1/2.5/15
05	348	3	.1/.2/.5ml				1/2/5/3
06	349	4	.2/.4/1ml				2/4/10/6
07	350	5	.5/1/2.5ml				5/10/25/15
08	351	6	1/2/5ml				10/20/50/30
09	352	7	2/4/10ml				20/40/100/60
10	353	8	3/6/15ml				30/60/150/80
11	354	9	4/8/20ml				40/80/200/100
12	355	10	5/10/25ml				50/100/250/150
13	356	IS/SS	25mL				
14	357	V005C30B					
15	358	IV005C13 01	1/2/5ml				
16	359	02					10/20/50/30 ppb
17	360	03	5ml				10ppb for 3 add emp's
18	361	04					9:28 pm
19							
20							
21							
22							
23							DN 3.14.07
24							
25							

Instrument No.		05
INITIAL CALIBRATION REFERENCE		
DATE	3/13/07	
ICAL ID	V005C13	
STANDARDS		
NAME	ID	CONC. (mg/L)
DCC 8260	GVIC-11.60.2	50/150
DCC Ket-AA 6025	.58.3 .60.3	250 250
DCC 3 add	.31.3	250
BFB	.58.1	50
IS/SURR. IS SS	.62-1 .62-3	250 250
LCS 8260	.63.2	50/150
LCS Ket-AA 6025	.59.2 .61.3	250 250
LCS 624	.37.3	50
SOLVENT	ID	
METHANOL		
DATA FILE	07C13	
Electronic Data Archival		
Location		Date
HPCHEM_VOA/T005		

Comments:

Analyzed By: DN

Date Disposed: 3/14/07

Disposed By: DN

2525

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 3.27.07 ☐ 5-ml Purge ☑ 25-ml Purge **Book # A05 -036**

BATCH CV05C1338

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RCQ761	BFB 05 C64	2µl				
02	762	65 ✓	↓				11:04am
03	763	CV05C1337	1/2/5ml				
04	764	38 ✓					
05	765	V005 C64L ✓					
06	766	C ✓	↓				
07	767	B	25ml				
08	768	Q ✓	↓				
09	769	07C215-03 ✓	25ml	1	<2		3:21pm
10	770	07C240-01T	0.5ml	50			
11	771	07C219-05 I	100µl	250			
12	772	-03I	↓	↓			
13	773	07C209-10J	50µl	500			
14	774	-11J	↓	↓			
15	775	-12R	25ml	1			
16	776	07C240-01		↓	↓		
17	777	RINSE	↓				8:17pm
18							
19							
20							
21							
22							DN 3/28/07
23							
24							
25							

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	3/13/07
ICAL ID	V005C13

STANDARDS

NAME	ID	CONC. (mg/L)
DCC	SVIC.11.60.2	
DCC	.58.3	
DCC	.60.3	
BFB	.58.1	50/250
IS/SURR.	.62.2	
LCS	.63.2	
LCS	.59.2	
LCS	.61.3	

SOLVENT	ID
METHANOL	
DATA FILE	07C27

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO05	

Comments:

Analyzed By: DN

Date Disposed: 3/28/07

Disposed By: DN

2027

TABLE OF CONTENTS

CLIENT: **SHAW E&I**

PROJECT: **ALAMEDA POINT, CTO 133**

SDG: **07A138**

SECTION		PAGE
Cover Letter, COC/Sample Receipt Form		1000 – 1003
GC/MS-VOA	METHOD 5030B/8260B	2000 – 2028
GC/MS-SVOA	METHOD 3520C/8270C	3000 – 3032
GC-VOA	**	4000 –
GC-SVOA	METHOD 1664	5000 – 5006
HPLC	**	6000 –
METALS	**	7000 –
WET	**	8000 –
OTHERS	**	9000 –

** - Not Requested

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

Date: 01-30-2007
EMAX Batch No.: 07A138

Attn: Rose Condit

Shaw E&I
4005 Port Chicago Hwy
Concord CA 94520

Subject: Laboratory Report
Project: Alameda Point, CTO 133

Enclosed is the Laboratory report for samples received on 01/19/07.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
133-5-3-WW(1/18/2007)	A138-01	01/18/07	WATER	VOLATILE ORGANICS BY GC/MS SEMIVOLATILE ORGANICS BY GCMS HEM, OIL & GREASE & SGT-HEM

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

07A 138

CHAIN OF CUSTODY

Ref. Document # 133-075

Page 1 of 1

Shaw

Shaw Environmental and Infrastructure Inc.

4005 Port Chicago Hwy
Concord, CA 94520

Project Number: 108816
Project Name / Location: Alameda CTO 133 - Site 5-3
Purchase Order #: 41926

Project Manager: John McGuire
(Name & phone #)

Shipment Date: 1/18/2007
Waybill Number:
Lab Destination: EMAX, 1835 205th St., Torrance, 90501
Lab Contact Name / ph. #: Ye-Myint, 310-618-8889

Send Report To: Rose Condit
Phone/Fax Number: 925-288-2151
Address: 4005 Port Chicago Hwy
City: Concord, CA, 94520

Sampler's Name(s):

Sample ID Number	Sample Description	Collection Information: Date	Time	Method	Matrix	# of containers	Container Type	VOCs (8260B)- Full 8260 list	SVOC (EPA 8270C)	Oil & Grease (EPA 1664 HEM w/ silica gel)			Cooler Temp				
							Preservative (water)	HCl	ice	H_2SO_4							
							Preservative (soil)	Ice	ice	ice							
							Container Type	3-VOA	2-1 L amber	2-1 L amber							
133-5-3-WW(1/18/2007)	waste water sample for POTW discharge	01/18/07	8:45	G	WW	7		X	X	X							
Temperature Blank		01/18/07	8:45										X				

Special Instructions: T= 2.3°C

Turnaround Time: ☐ 24-hr ☐ 48-hr ☐ 3-day ☐ 5-day X Normal

Level Of QC Required: I II III Project Specific:

Relinquished By: Jesse Acedillo Date: 1/18/2007 Time: 11:00

Received By: Date: 1/19/07 Time: 0930

Relinquished By: Date: Time:

Received By: Date: Time:

Method Codes
C = Composite G = Grab

Matrix Codes
DW = Drinking Water SO = Soil
GW = Ground Water SL = Sludge
WW = Waste Water CP = Chip Samples

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN 07A138
☐ EMAX Courier		Receipient JONLUNA
☐ Client Delivery		Date 01/19/07
☑ Third Party	UPS # 1Z 89V 462 01 9400 7598	Time 0930

COC Inspection

☑ Client Name ☑ Client PM/FC ☑ Sampler Name ☑ Sampling Date/Time/Location ☑ Sample ID ☐ Matrix
☑ Address ☑ Tel # / Fax # ☐ Courier Signature ☑ Analysis Required ☐ Preservative (if any) ☑ TAT

Safety Issues
☑ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☑ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☑ Sufficient	☐ _____
Temperatures	☑ Cooler 1 2.3 °C	☐ Cooler 2 _____ °C	☐ Cooler 3 _____ °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C

Comments: ☐ **PM was informed on non-compliant coolers imediately.**

DISCREPANCIES

LSID	LSCID	Sample Label ID/COC ID	Discrepancy Code	Corrective Action Code
-01	002, 007		D2	R2

REVIEWS

Sample Labeling [illegible] Date 1/19/07 1/19/07

SRF [illegible] Date 1/19/07

PM [illegible] Date 1/19/07

LEGEND:

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Project Management
A1	Analysis is not indicated in COC	E1	Preservative needed; sample has no preservative	R1	Hold sample(s); wait for further instructions
A2	Analysis is not indicated in label	E2	Preservative not needed but sample is preserved	R2	Proceed as indicated in COC
A3	Analysis is inconsistent in COC vis-a-vis label	F1	Not enough quantity of samples	R3	Refer to attached instruction
B1	Sample ID is not indicated in COC	F2	Bubble is> 6mm	R4	Cancel the analysis
B2	Sample ID is not indicated in label	G1	Temperature is out of range (4 +_ 2°C)	R5	_____
B3	Sample ID is inconsistent in COC vis-a-vis label	G2	Out of Holding Time	R6	_____
C1	Wrong container	G3	>20 % solid particle		
C2	Broken container	H1	_____		
C3	Leaking container	H2	_____		
D1	Date and/or time is not indicated in COC				
D2	Date and/or time is not indicated in label				
D3	Date and/or time is inconsistent in COC vis-a-vis label				

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

SHAW E&I

ALAMEDA POINT, CTO 133

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

SDG#: 07A138

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07A138

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

One (1) water sample was received on 01/19/07 for Volatile Organic analysis by Method 5030B//8260B in accordance with USEPA SW846, 3rd edition.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour intervals. 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 : SHAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07A138
Instrument ID : T-001

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V001A30Q	1	NA	01/22/0714:49	01/22/0714:49	RAV332	RAV045	V001A30	Method Blank
LCS1W	V001A30X	1	NA	01/22/0713:32	01/22/0713:32	RAV330	RAV045	V001A30	Lab Control Sample (LCS)
LCD1W	V001A30C	1	NA	01/22/0712:54	01/22/0712:54	RAV329	RAV045	V001A30	LCS Duplicate
133-5-3-WW(1/18/2007)	A138-01	1	NA	01/22/0718:38	01/22/0718:38	RAV338	RAV045	V001A30	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

ient	: SHAW E&I	Date Collected:	01/18/07
oject	: ALAMEDA POINT, CTO 133	Date Received:	01/19/07
Batch No.	: 07A138	Date Extracted:	01/22/07 18:38
Sample ID:	133-5-3-WW(1/18/2007)	Date Analyzed:	01/22/07 18:38
Lab Samp ID:	A138-01	Dilution Factor:	1
Lab File ID:	RAV338	Matrix :	WATER
Ext Btch ID:	V001A30	% Moisture :	NA
Calib. Ref.:	RAV045	Instrument ID :	T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
RBON TETRACHLORIDE	ND	0.50	0.20
LOROBENZENE	ND	0.50	0.20
LOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	0.26J	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	0.35J	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	70-140
TOLUENE-D8	100	70-140
4-BROMOFLUOROBENZENE	120	70-130

RL: Reporting Limit

QC SUMMARIES

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

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/22/07
Batch No.	: 07A138	Date Extracted:	01/22/07 14:49
Sample ID:	MBLK1W	Date Analyzed:	01/22/07 14:49
Lab Samp ID:	V001A30Q	Dilution Factor:	1
Lab File ID:	RAV332	Matrix :	WATER
Ext Btch ID:	V001A30	% Moisture :	NA
Calib. Ref.:	RAV045	Instrument ID :	T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	96	70-140
TOLUENE-D8	96	70-130
4-BROMOFLUOROBENZENE	111	70-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07A138
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V001A30Q	V001A30X	V001A30C		
LAB FILE ID:	RAV332	RAV330	RAV329		
DATE EXTRACTED:	01/22/0714:49	01/22/0713:32	01/22/0712:54	DATE COLLECTED:	NA
DATE ANALYZED:	01/22/0714:49	01/22/0713:32	01/22/0712:54	DATE RECEIVED:	01/22/07
PREP. BATCH:	V001A30	V001A30	V001A30		
CALIB. REF:	RAV045	RAV045	RAV045		

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-Dichloroethene	ND	10.0	8.90	89	10.0	10.7	107	18	60-130	30
Benzene	ND	10.0	9.98	100	10.0	9.64	96	3	70-130	30
Chlorobenzene	ND	10.0	10.5	105	10.0	9.96	100	5	70-130	30
Toluene	ND	10.0	9.91	99	10.0	9.41	94	5	70-130	30
Trichloroethene	ND	10.0	9.76	98	10.0	8.99	90	8	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	8.31	83	10.0	9.46	95	70-140
Toluene-d8	10.0	9.31	93	10.0	9.32	93	70-130
4-Bromofluorobenzene	10.0	10.2	102	10.0	10.1	101	70-130

INITIAL CALIBRATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV039
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A138
BFB Injection Date : 01/04/07
BFB Injection Time : 19:38
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	30.30
75	30.0 - 60.0% of mass 95	52.22
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.05
173	Less than 2.0% of mass 174	0.37(0.6)1
174	Greater than 50% of mass 95	67.01
175	5.0 - 9.0% of mass 174	4.79(7.1)1
176	95.0 - 101.0% of mass 174	64.27(95.9)1
177	5.0 - 9.0% of mass 176	4.18(6.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	V001A0401	RAV040	01/04/07	20:17
2	VSTD0.5	V001A0402	RAV041	01/04/07	20:55
3	VSTD01	V001A0403	RAV042	01/04/07	21:33
4	VSTD02	V001A0404	RAV043	01/04/07	22:11
5	VSTD05	V001A0405	RAV044	01/04/07	22:50
6	VSTD010	V001A0406	RAV045	01/04/07	23:28
7	VSTD020	V001A0407	RAV046	01/05/07	00:07
8	VSTD030	V001A0408	RAV047	01/05/07	00:45
9	VSTD040	V001A0409	RAV048	01/05/07	01:23
10	VSTD050	V001A0410	RAV049	01/05/07	02:02

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV073
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A138
BFB Injection Date : 01/09/07
BFB Injection Time : 10:04
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.69
75	30.0 - 60.0% of mass 95	49.39
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.01
173	Less than 2.0% of mass 174	0.47(0.6)1
174	Greater than 50% of mass 95	73.28
175	5.0 - 9.0% of mass 174	5.70(7.8)1
176	95.0 - 101.0% of mass 174	73.35(100.1)1
177	5.0 - 9.0% of mass 176	4.65(6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	IV001A0403	RAV075	01/09/07	11:21

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :I001
Beginning DateTime :01/04/07 20:17
Spike Units :PPB
IC File :RAV045

Column Spec :RTX502.2 ID :0.3
Ending DateTime :01/05/07 02:
HPChem Method :V001A04

M	IDX	Parameters	3 20:17 RAV040	5 20:55 RAV041	1 21:33 RAV042	2 22:11 RAV043	5 22:50 RAV044	10 23:28 RAV045	20 00:07 RAV046	30 00:25 RAV047	40 01:23 RAV048	50 02:02 RAV049	Av_RRF	% RSD	Av_Rt
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	11.13
	2	Dichlorodifluoromethane	0.343	0.334	0.325	0.258	0.332	0.329	0.317	0.282	------	------	0.315	9.35	3.27
	3	Chloromethane	------	0.381	0.357	0.322	0.337	0.338	0.322	0.286	0.276	0.253	0.322	13.14	3.28
	4	Vinyl chloride	------	0.361	0.382	0.341	0.352	0.344	0.366	0.358	------	------	0.360	12.23	3.83
	5	Bromomethane	0.289	0.216	0.266	0.325	0.285	0.293	0.301	0.281	0.290	0.281	0.300	14.33	4.57
	6	Chloroethane	0.283	0.312	0.288	0.260	0.218	0.219	0.209	0.190	0.181	0.171	0.241	20.33	4.74
	7	Dichlorofluoromethane	0.302	0.347	0.288	0.809	0.707	0.827	0.761	0.681	0.683	0.620	0.721	9.85	4.69
	8	Trichlorofluoromethane	0.209	0.187	0.172	0.223	0.171	0.178	0.179	0.227	0.232	0.232	0.195	7.36	5.08
	9	sec-Propyl alcohol	0.512	0.460	0.474	0.423	0.461	0.478	0.479	0.427	0.434	0.400	0.455	7.58	5.16
2	10	Acrolein	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
	11	1,1,2-Trichloro-1,2,2-trifluoroethane	0.266	0.265	0.015	0.017	0.018	0.017	0.018	0.015	0.014	0.013	0.016	10.86	5.74
2	12	Acetone	------	------	0.260	0.270	0.268	0.273	0.280	0.263	0.262	0.267	0.268	2.98	5.61
	13	1,1-Dichloroethene	0.548	0.564	0.050	0.053	0.053	0.057	0.031	0.025	0.026	0.022	0.031	30.70	5.84
5	14	tert-Butyl alcohol	------	------	0.502	0.511	0.505	0.569	0.573	0.529	0.528	0.452	0.517	12.02	6.10
	15	Acetonitrile	------	------	0.009	0.010	0.010	0.011	0.011	0.011	0.010	0.010	0.010	6.36	6.24
	16	Methyl acetate	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
	17	Iodomethane	0.395	0.430	0.443	0.486	0.495	0.517	0.529	0.518	0.544	0.535	0.489	10.32	6.24
	18	Methylene chloride	0.713	0.834	0.677	0.658	0.559	0.537	0.479	------	------	------	0.676	21.82	6.31
	19	Carbon disulfide	1.289	1.334	1.210	1.210	1.300	1.369	1.347	1.233	1.196	1.158	1.316	7.01	6.99
3	20	Acrylonitrile	------	------	0.077	0.074	0.055	0.057	0.053	0.046	0.041	0.048	0.059	17.22	7.08
	21	tert-Butyl methyl ether (MTBE)	0.412	0.431	0.431	0.428	0.227	0.224	0.228	0.239	0.242	0.204	0.329	32.19	7.18
	22	trans-1,2-Dichloroethene	0.576	0.576	0.619	0.658	0.244	0.232	0.262	0.263	0.238	0.244	0.432	32.24	7.13
	23	Isopropyl ether (DIPE)	1.154	1.228	1.250	1.282	1.297	1.253	1.267	1.227	0.868	0.885	1.168	13.03	7.35
	24	Vinyl acetate	------	------	0.367	0.353	0.302	0.293	0.278	0.360	0.333	0.287	0.329	13.57	7.09
	25	1,1-Dichloroethane	0.749	0.773	0.766	0.813	0.803	0.788	0.818	0.737	0.737	0.588	0.757	10.87	7.12
	26	tert-Butyl ethyl ether (ETBE)	0.713	0.778	0.777	0.778	0.822	0.871	0.862	0.873	0.865	0.869	0.817	8.76	8.43
2	27	2-Butanone	------	------	0.077	0.060	0.069	0.069	0.060	0.063	0.059	0.057	0.062	13.00	8.80
	28	2,2-Dichloropropane	0.464	0.453	0.284	0.492	0.425	0.419	0.400	0.350	0.328	0.324	0.377	8.92	8.07
	29	cis-1,2-Dichlorbethene	0.693	0.672	0.676	0.716	0.721	0.716	0.693	0.561	0.537	0.507	0.644	12.58	8.13
	30	Chloroform	0.384	0.397	0.615	0.664	0.936	0.938	0.957	0.522	0.537	0.507	0.634	12.29	8.19
	31	Bromochloromethane	0.318	0.324	0.315	0.337	0.327	0.349	0.327	0.298	0.257	0.218	0.302	13.66	8.25
	32	Tetrahydrofuran	------	------	------	0.053	0.044	0.048	0.043	0.038	0.037	0.028	0.042	13.72	8.63
	33	1,1,1-Trichloroethane	0.471	0.486	0.490	0.511	0.515	0.529	0.517	0.474	0.449	0.422	0.482	8.90	10.06
	34	Cyclohexane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	10.09
	35	tert-Amyl methyl ether (TAME)	0.487	0.505	0.508	0.495	0.510	0.547	0.561	0.515	0.493	0.483	0.510	5.11	10.53
	36	1,2-Dichloroethane-d4	0.327	0.314	0.318	0.282	0.290	0.303	0.293	0.242	------	------	0.296	9.11	10.35
	37	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	18.32
	38	1,1-Dichloropropene	0.218	0.211	0.208	0.209	0.213	0.214	0.215	0.192	0.185	0.177	0.204	6.95	10.26
	39	Carbon tetrachloride	0.509	0.505	0.523	0.522	0.551	0.560	0.568	0.515	0.507	0.460	0.528	5.73	10.26
	40	1,2-Dichloroethane	0.489	0.485	0.476	0.477	0.387	0.389	0.402	0.340	0.350	0.330	0.368	13.13	10.28
	41	Benzene	1.762	1.762	1.735	1.637	0.691	0.637	0.670	0.428	0.476	0.477	0.950	42.09	10.42
	42	Trichloroethene	0.422	0.456	0.425	0.430	0.438	0.453	0.476	0.456	0.469	0.471	0.447	4.38	11.71
	43	Methylcyclohexane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	11.01
	44	1,2-Dichloropropane	0.498	0.466	0.509	0.508	0.535	0.537	0.537	0.475	0.454	0.430	0.501	7.21	11.37
	45	Bromodichloromethane	0.472	0.482	0.502	0.502	0.533	0.558	0.557	0.505	0.477	0.469	0.505	7.21	11.42
	46	Dibromomethane	0.175	0.181	0.182	0.189	0.200	0.203	0.204	0.180	0.177	0.168	0.187	8.82	11.74
2	47	4-Methyl-2-pentanone	------	------	0.175	0.176	0.203	0.209	0.232	0.203	0.187	0.199	0.198	12.07	11.85
	48	2-Chloroethyl vinyl ether	------	------	------	0.007	0.013	0.015	0.019	0.018	0.019	0.019	0.015	23.86	11.98
	49	cis-1,3-Dichloropropene	0.437	0.461	0.512	0.508	0.527	0.548	0.530	0.518	0.518	0.471	0.506	10.21	12.20
	50	Toluene-d8	1.262	1.249	1.207	1.082	1.321	1.348	1.228	0.391	0.325	0.208	1.306	8.26	12.60
	51	Toluene	1.666	1.672	1.703	1.337	1.673	1.643	1.655	1.511	1.230	1.225	1.605	7.29	12.80
	52	Ethyl methacrylate	------	0.398	0.414	0.376	0.401	0.401	0.436	0.399	0.380	0.365	0.396	10.21	12.88
	53	trans-1,3-Dichloropropene	0.493	0.518	0.563	0.562	0.593	0.619	0.628	0.595	0.580	0.573	0.568	7.21	12.93
	54	1,1,2-Trichloroethane	0.206	0.218	0.223	0.209	0.232	0.219	0.228	0.228	0.198	0.218	0.209	5.21	13.20
2	55	2-Hexanone	------	------	------	------	0.150	0.162	0.141	0.150	0.114	0.112	0.152	8.93	13.30
	56	1,3-Dichloropropane	0.377	0.422	0.427	0.402	0.437	0.447	0.473	0.452	0.414	0.411	0.429	7.33	13.42
	57	Tetrachloroethene	0.328	0.311	0.302	0.327	0.364	0.378	0.371	0.352	0.328	0.331	0.339	6.27	13.45
	58	Dibromochloromethane	------	0.295	0.230	0.593	0.537	0.537	0.373	0.350	0.225	0.223	0.365	13.83	13.58
	59	1,2-Dibromoethane	0.193	0.513	0.580	0.215	0.270	0.703	0.721	0.271	0.225	0.223	0.271	8.02	13.88
	60	1-Chlorohexane	0.374	0.368	0.386	0.612	0.667	0.663	0.704	0.691	0.693	0.648	0.641	7.09	13.95
	61	Chlorobenzene	0.321	0.289	0.284	0.249	0.331	0.337	0.364	0.338	0.321	0.327	0.315	10.13	13.97
	62	1,1,1,2-Tetrachloroethane	0.263	0.261	0.216	0.287	0.335	0.356	0.352	0.339	0.310	0.250	0.302	9.17	14.28
2	63	Ethylbenzene	1.983	1.967	1.112	1.151	1.836	1.813	1.816	1.663	1.587	1.550	1.719	8.91	14.29
	64	m-Xylene & p-Xylene	1.577	1.431	1.385	1.328	1.483	1.493	1.705	1.551	1.388	1.359	1.507	9.28	14.63
	65	o-Xylene	1.271	1.301	1.097	0.878	1.082	1.097	1.070	0.996	1.009	1.008	0.935	12.48	14.82
	66	Styrene	0.746	0.788	0.814	0.672	1.002	1.037	1.067	1	1	1	1	0	21.85
	67	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	6.710	5.936	5.682	6.334	6.40	18.14
	68	Isopropylbenzene	6.533	6.687	6.668	6.673	6.412	6.663	6.378	0.484	0.509	0.486	0.474	8.40	18.21
	69	Bromoform	------	0.415	0.318	0.348	0.398	0.832	0.512	0.788	0.800	0.770	0.840	8.40	18.27
	70	1,1,2,2-Tetrachloroethane	0.827	0.925	0.927	0.885	0.823	1.566	0.887	0.429	0.428	0.428	0.699	8.30	18.34
	71	4-Bromofluorobenzene	------	------	1.576	1.590	1.777	1.729	1.745	0.750	0.703	0.381	1.267	26.07	18.43
	72	1,2,3-Trichloropropane	------	0.805	0.519	0.788	0.158	0.183	0.186	0.172	0.170	0.159	0.178	7.28	18.63
	73	trans-1,4-Dichloro-2-butene	------	------	------	0.108	0.136	0.173	0.170	0.195	0.186	0.175	0.166	7.28	18.67
	74	n-Propylbenzene	7.705	7.592	7.761	7.800	7.733	7.785	7.783	9.012	9.060	9.058	7.987	7.88	18.69
	75	Bromobenzene	1.006	1.103	1.073	1.038	1.077	1.027	1.026	1.076	1.069	1.002	1.062	5.21	18.76
	76	1,3,5-Trimethylbenzene	4.341	4.453	4.064	4.090	2.740	2.508	2.552	3.820	3.090	3.087	2.575	10.18	19.32
	77	2-Chlorotoluene	3.126	2.023	2.062	3.223	3.880	3.829	3.838	3.253	3.202	3.043	3.209	10.01	19.23
	78	4-Chlorotoluene	3.004	2.126	2.023	2.166	2.831	2.801	2.829	2.508	2.218	2.287	2.575	9.78	19.38
	79	tert-Butylbenzene	4.330	4.407	3.321	2.562	3.583	2.687	2.692	3.018	3.826	3.282	3.872	2.37	20.08
	80	1,2,4-Trimethylbenzene	3.711	3.254	3.273	3.018	2.987	2.984	2.979	3.019	3.220	3.023	3.255	4.32	20.43
	81	sec-Butylbenzene	6.636	6.332	6.013	6.920	6.602	6.626	6.267	6.181	6.472	6.272	6.311	2.15	20.50
	82	p-Isopropyltoluene	4.001	4.124	4.118	4.382	4.087	4.095	4.046	3.053	3.012	3.039	3.626	1.26	20.97
	83	1,3-Dichlorobenzene	1.628	1.261	1.238	1.872	1.883	1.863	1.857	1.843	1.804	1.801	1.779	8.17	21.18
	84	1,4-Dichlorobenzene	1.332	1.338	1.062	1.324	1.291	1.292	1.292	1.327	1.326	1.326	1.327	8.43	21.37
	85	n-Butylbenzene	3.213	3.426	3.278	3.002	3.297	3.112	3.366	3.173	3.079	3.039	3.249	5.42	21.66
	86	1,2-Dichlorobenzene	1.411	1.545	1.314	1.267	1.031	1.008	1.001	0.901	0.903	0.900	0.980	33.25	23.26
	87	1,2-Dibromo-3-chloropropane	------	0.415	0.013	0.083	0.072	0.089	0.101	0.100	0.097	0.097	0.077	38.62	23.68
	88	1,2,4-Trichlorobenzene	------	0.432	0.401	0.498	0.587	0.682	0.832	0.779	0.783	0.840	0.641	18.27	25.09
	89	Hexachlorobutadiene	------	0.586	0.336	0.338	0.583	0.658	0.807	0.747	0.805	0.833	0.680	35.96	25.29
	90	Naphthalene	------	------	0.367	0.399	0.448	0.568	0.646	0.584	0.618	0.622	0.490	27.45	26.87
	91	1,2,3-Trichlorobenzene	------	0.290	0.336	0.397	0.416	0.504	0.646						

Spike Amount = Nominal Amount * M
Ave_%RSD : 11.1 Max_%RSD : 38.6

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

IDX	Parameter	x0	x1	CCF
6	Chloroethane	0.00785	0.18376	0.9967
12	Acetone	0.03032	0.28563	0.9881*
18	Methylene chloride	0.06512	0.19800	0.9883
48	2-Chloroethyl vinyl ether	-0.00250	0.29842	0.9661
52	Ethyl methacrylate	-0.00621	0.20235	0.9679
72	1,2,3-Trichloropropane	-0.00524	0.10316	0.9966
87	1,2-Dibromo-3-chloropropane	-0.00528	0.81389	0.9970
88	1,2,4-Trichlorobenzene	-0.03397	0.78117	0.9982
89	Hexachlorobutadiene	-0.03319	0.81035	0.9958
90	Naphthalene	-0.00853	0.61317	0.9974
91	1,2,3-Trichlorobenzene	-0.02813		

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
12	Acetone	0.00673	0.03124	-0.00100	0.9984

CR 1/8/07

2011

SECOND SOURCE VERIFICATION

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A09\RAV075.D Vial: 4
Acq On : 9 Jan 2007 11:21 am Operator: AS
Sample : IVO01A0403 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	136	-0.01	
2	T	Dichlorodifluoromethane	10.000	10.085	-0.9	131	0.00	
3	P,T	Chloromethane	10.000	9.670	3.3	125	0.00	
4	C,T	Vinyl chloride	10.000	8.568	14.3	115	-0.01	
5	T	Bromomethane	10.000	9.904	1.0	137	-0.01	
6	T	Chloroethane	10.000	10.287	-2.9	122	-0.01	
7	T	Dichlorofluoromethane	10.000	9.170	8.3	112	-0.01	
8	T	Trichlorofluoromethane	10.000	10.335	-3.4	133	-0.01	
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	3	0.05	
10	T	Acrolein	20.000	11.215	43.9#	69	-0.01	NOT valid'd
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	9.286	7.1	124	-0.01	
12	T	Acetone	20.000	15.569	22.2#	107	-0.01	
13	C,T	1,1-Dichloroethene	10.000	10.260	-2.6	127	-0.01	
14	T	tert-Butyl alcohol	50.000	42.741	14.5	102	0.00	
15	T	Acetonitrile	-1.000	0.000	0.0	41	-0.06	NIS
16	T	Methyl acetate	-1.000	0.000	0.0	55	-0.01	
17	T	Iodomethane	10.000	11.399	-14.0	146	-0.01	
18	T	Methylene chloride	10.000	8.434	15.7	111	-0.01	
19	T	Carbon disulfide	10.000	10.189	-1.9	130	-0.03	
20	T	Acrylonitrile	AS 1/9/07 ~~30~~ 20.000	15.550	~~48.2#~~ 22	63	-0.01	
21	T	tert-Butyl methyl ether (MT	10.000	9.373	6.3	119	-0.01	
22	T	trans-1,2-Dichloroethene	10.000	9.340	6.6	114	-0.01	
23	T	Isopropyl ether (DIPE)	10.000	8.779	12.2	105	-0.01	
24	T	Vinyl acetate	10.000	8.689	13.1	103	-0.01	
25	P,T	1,1-Dichloroethane	10.000	9.179	8.2	115	-0.03	
26	T	tert-Butyl ethyl ether (ETB	10.000	9.115	8.8	110	-0.01	
27	T	2-Butanone	20.000	15.287	23.6#	97	-0.01	
28	T	2,2-Dichloropropane	10.000	9.728	2.7	123	-0.01	
29	T	cis-1,2-Dichloroethene	10.000	9.269	7.3	115	-0.01	
30	C,T	Chloroform	10.000	9.576	4.2	121	-0.01	
31	T	Bromochloromethane	10.000	9.134	8.7	111	-0.01	
32	T	Tetrahydrofuran	10.000	0.357	96.4#	5	0.00	NIS
33	T	1,1,1-Trichloroethane	10.000	9.553	4.5	119	-0.01	
34	T	Cyclohexane	-1.000	0.000	0.0	84	-0.14	NIS
35	T	tert-Amyl methyl ether (TAM	10.000	9.395	6.1	119	-0.01	
36	S	1,2-Dichloroethane-d4	10.000	7.764	22.4#	103	-0.01	
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	133	-0.03	
38	T	1,1-Dichloropropene	10.000	9.433	5.7	119	-0.01	
39	T	Carbon tetrachloride	10.000	10.113	-1.1	127	-0.01	
40	T	1,2-Dichloroethane	10.000	8.792	12.1	108	-0.01	

(#) = Out of Range

2013

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A09\RAV075.D Vial: 4
Acq On : 9 Jan 2007 11:21 am Operator: AS
Sample : IVO01A0403 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	9.937	0.6	131	-0.03
42	T	Trichloroethene	10.000	9.654	3.5	127	-0.01
43	T	Methylcyclohexane	-1.000	0.000	0.0	498	-0.14 NIS
44	C,T	1,2-Dichloropropane	10.000	9.346	6.5	116	-0.01
45	T	Bromodichloromethane	10.000	9.722	2.8	117	-0.03
46	T	Dibromomethane	10.000	9.714	2.9	118	-0.01
47	T	4-Methyl-2-pentanone	20.000	17.662	11.7	105	-0.01
48	T	2-Chloroethyl vinyl ether	10.000	7.535	24.6#	106	-0.01
49	T	cis-1,3-Dichloropropene	10.000	10.737	-7.4	130	-0.03
50	S	Toluene-d8	10.000	9.322	6.8	118	-0.01
51	C,T	Toluene	10.000	9.425	5.7	122	-0.01
52	T	Ethyl methacrylate	10.000	8.831	11.7	114	-0.01
53	T	trans-1,3-Dichloropropene	10.000	10.414	-4.1	122	-0.01
54	T	1,1,2-Trichloroethane	10.000	9.293	7.1	113	-0.03
55	T	2-Hexanone	20.000	15.678	21.6#	98	-0.03
56	T	1,3-Dichloropropane	10.000	9.629	3.7	119	-0.01
57	T	Tetrachloroethene	10.000	9.739	2.6	126	-0.01
58	T	Dibromochloromethane	10.000	9.949	0.5	123	0.00
59	T	1,2-Dibromoethane	10.000	10.010	-0.1	123	-0.01
60	T	1-Chlorohexane	10.000	9.617	3.8	117	-0.01
61	P	Chlorobenzene	10.000	9.905	1.0	126	-0.03
62	T	1,1,1,2-Tetrachloroethane	10.000	10.022	-0.2	126	-0.01
63	C,T	Ethylbenzene	10.000	9.494	5.1	116	-0.01
64	T	m-Xylene & p-Xylene	20.000	18.843	5.8	116	-0.01
65	T	o-Xylene	10.000	9.559	4.4	116	-0.01
66	T	Styrene	10.000	9.992	0.1	120	-0.03
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	129	-0.03
68	T	Isopropylbenzene	10.000	9.441	5.6	116	-0.01
69	P,T	Bromoform	10.000	9.656	3.4	114	-0.01
70	P,T	1,1,2,2-Tetrachloroethane	10.000	9.395	6.1	113	-0.03
71	S	4-Bromofluorobenzene	10.000	9.477	5.2	109	-0.03
72	T	1,2,3-Trichloropropane	10.000	11.158	-11.6	131	-0.06
73	T	trans-1,4-Dichloro-2-butene	10.000	7.646	23.5#	91	-0.02
74	T	n-Propylbenzene	10.000	9.314	6.9	112	-0.01
75	T	Bromobenzene	10.000	9.868	1.3	124	-0.01
76	T	1,3,5-Trimethylbenzene	10.000	9.280	7.2	115	-0.03
77	T	2-Chlorotoluene	10.000	9.358	6.4	120	-0.01
78	T	4-Chlorotoluene	10.000	9.067	9.3	110	-0.01
79	T	tert-Butylbenzene	10.000	9.299	7.0	117	-0.01
80	T	1,2,4-Trimethylbenzene	10.000	9.136	8.6	112	-0.03

(#) = Out of Range

2014

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A09\RAV075.D Vial: 4
Acq On : 9 Jan 2007 11:21 am Operator: AS
Sample : IVO01A0403 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	8.700	13.0	107	-0.01
82	T	p-Isopropyltoluene	10.000	9.389	6.1	118	-0.03
83	T	1,3-Dichlorobenzene	10.000	9.677	3.2	121	-0.03
84	T	1,4-Dichlorobenzene	10.000	9.646	3.5	119	-0.03
85	T	n-Butylbenzene	10.000	9.416	5.8	114	-0.01
86	T	1,2-Dichlorobenzene	10.000	9.790	2.1	123	-0.03
87	T	1,2-Dibromo-3-chloropropane	10.000	9.476	5.2	128	-0.03
88	T	1,2,4-Trichlorobenzene	10.000	8.127	18.7	122	-0.01
89	T	Hexachlorobutadiene	10.000	8.903	11.0	127	-0.03
90	T	Naphthalene	10.000	8.421	15.8	137	-0.03
91	T	1,2,3-Trichlorobenzene	10.000	8.277	17.2	123	-0.01

DAILY CALIBRATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAV325
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07A138
BFB Injection Date : 01/22/07
BFB Injection Time : 09:46
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.81
75	30.0 - 60.0% of mass 95	53.44
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.21
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	66.66
175	5.0 - 9.0% of mass 174	5.09(7.6)1
176	95.0 - 101.0% of mass 174	64.89(97.3)1
177	5.0 - 9.0% of mass 176	4.59(7.1)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV001A0429	RAV327	01/22/07	11:03
2	MBLK1W	V001A30Q	RAV332	01/22/07	14:49
3	LCS1W	V001A30X	RAV330	01/22/07	13:32
4	LCD1W	V001A30C	RAV329	01/22/07	12:54
5	133-5-3-WW(1/18/2007)	A138-01	RAV338	01/22/07	18:38

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAV045
Instrument ID: T-001
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A138
Date Analyzed: 01/04/07
Time Analyzed: 23:28
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2182174	11.13	1785030	16.35	520638	21.94
	UPPER LIMIT	4364348	11.63	3570060	16.85	1041276	22.44
	LOWER LIMIT	1091087	10.63	892515	15.85	260319	21.44
	SAMPLE ID						
1	VSTD010	2988035	11.11	2604885	16.31	819261	21.89
2	MBLK1W	3546586	11.12	2914139	16.32	727185	21.90
3	LCS1W	3362510	11.11	2914658	16.31	857165	21.90
4	LCD1W	3342844	11.10	2989033	16.31	903293	21.90
5	133-5-3-WW(1/18/2007)	2765208	11.11	2209052	16.33	516590	21.90

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A22\RAV327.D Vial: 4
Acq On : 22 Jan 2007 11:03 am Operator: AS
Sample : CVO01A0429 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	137	-0.02
2	T	Dichlorodifluoromethane	10.000	8.080	19.2	106	0.00
3	P,T	Chloromethane	10.000	9.729	2.7	127	-0.02
4	C,T	Vinyl chloride	10.000	9.601	4.0	130	-0.02
5	T	Bromomethane	10.000	10.126	-1.3	142	-0.04
6	T	Chloroethane	10.000	10.919	-9.2	130	-0.02
7	T	Dichlorofluoromethane	10.000	9.930	0.7	122	-0.02
8	T	Trichlorofluoromethane	10.000	10.763	-7.6	140	-0.02
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	122	-0.04
10	T	Acrolein	20.000	18.872	5.6	117	-0.04
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	9.284	7.2	125	-0.02
12	T	Acetone	20.000	18.427	7.9	124	-0.02
13	C,T	1,1-Dichloroethene	10.000	9.738	2.6	122	-0.04
14	T	tert-Butyl alcohol	50.000	59.071	-18.1	143	-0.04
15	T	Acetonitrile	-1.000	0.000	0.0	141	-0.02
16	T	Methyl acetate	-1.000	0.000	0.0	118	-0.02
17	T	Iodomethane	10.000	10.677	-6.8	138	-0.02
18	T	Methylene chloride	10.000	9.274	7.3	123	-0.02
19	T	Carbon disulfide	10.000	7.668	23.3#	99	-0.04
20	T	Acrylonitrile	30.000	33.211	-10.7	135	-0.04
21	T	tert-Butyl methyl ether (MT	10.000	10.761	-7.6	138	-0.04
22	T	trans-1,2-Dichloroethene	10.000	9.448	5.5	117	-0.02
23	T	Isopropyl ether (DIPE)	10.000	10.868	-8.7	131	-0.04
24	T	Vinyl acetate	10.000	11.225	-12.2	135	-0.04
25	P,T	1,1-Dichloroethane	10.000	10.104	-1.0	128	-0.04
26	T	tert-Butyl ethyl ether (ETB	10.000	11.092	-10.9	135	-0.02
27	T	2-Butanone	20.000	20.585	-2.9	132	-0.02
28	T	2,2-Dichloropropane	10.000	10.492	-4.9	134	-0.04
29	T	cis-1,2-Dichloroethene	10.000	10.236	-2.4	128	-0.02
30	C,T	Chloroform	10.000	10.366	-3.7	132	-0.04
31	T	Bromochloromethane	10.000	11.063	-10.6	135	-0.02
32	T	Tetrahydrofuran	10.000	10.778	-7.8	139	-0.04
33	T	1,1,1-Trichloroethane	10.000	10.223	-2.2	129	-0.04
34	T	Cyclohexane	-1.000	0.000	0.0	186	-0.05
35	T	tert-Amyl methyl ether (TAM	10.000	11.015	-10.2	141	-0.04
36	S	1,2-Dichloroethane-d4	10.000	9.164	8.4	123	-0.04
37	I	CHLOROBENZENE-D5	10.000	10.000	0.0	146	-0.04
38	T	1,1-Dichloropropene	10.000	8.806	11.9	122	-0.04
39	T	Carbon tetrachloride	10.000	9.337	6.6	129	-0.04
40	T	1,2-Dichloroethane	10.000	9.768	2.3	132	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A22\RAV327.D Vial: 4
Acq On : 22 Jan 2007 11:03 am Operator: AS
Sample : CVO01A0429 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	8.926	10.7	129	-0.04
42	T	Trichloroethene	10.000	9.001	10.0	130	-0.04
43	T	Methylcyclohexane	-1.000	0.000	0.0	140	-0.02
44	C,T	1,2-Dichloropropane	10.000	10.205	-2.1	139	-0.04
45	T	Bromodichloromethane	10.000	10.411	-4.1	137	-0.04
46	T	Dibromomethane	10.000	10.311	-3.1	138	-0.04
47	T	4-Methyl-2-pentanone	20.000	21.511	-7.6	141	-0.02
48	T	2-Chloroethyl vinyl ether	10.000	6.307	36.9#	93	-0.04 VTC
49	T	cis-1,3-Dichloropropene	10.000	10.529	-5.3	140	-0.04
50	S	Toluene-d8	10.000	9.572	4.3	133	-0.04
51	C,T	Toluene	10.000	9.531	4.7	136	-0.04
52	T	Ethyl methacrylate	10.000	9.920	0.8	141	-0.04
53	T	trans-1,3-Dichloropropene	10.000	10.871	-8.7	140	-0.04
54	T	1,1,2-Trichloroethane	10.000	10.838	-8.4	144	-0.04
55	T	2-Hexanone	20.000	19.371	3.1	133	-0.04
56	T	1,3-Dichloropropane	10.000	10.390	-3.9	142	-0.04
57	T	Tetrachloroethene	10.000	9.211	7.9	131	-0.04
58	T	Dibromochloromethane	10.000	10.775	-7.8	147	-0.04
59	T	1,2-Dibromoethane	10.000	10.969	-9.7	148	-0.04
60	T	1-Chlorohexane	10.000	9.995	0.1	133	-0.04
61	P	Chlorobenzene	10.000	9.663	3.4	135	-0.04
62	T	1,1,1,2-Tetrachloroethane	10.000	10.043	-0.4	139	-0.04
63	C,T	Ethylbenzene	10.000	9.707	2.9	131	-0.04
64	T	m-Xylene & p-Xylene	20.000	19.436	2.8	131	-0.04
65	T	o-Xylene	10.000	9.995	0.1	133	-0.04
66	T	Styrene	10.000	10.180	-1.8	134	-0.04
67	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	157	-0.05
68	T	Isopropylbenzene	10.000	8.719	12.8	130	-0.04
69	P,T	Bromoform	10.000	9.984	0.2	143	-0.04
70	P,T	1,1,2,2-Tetrachloroethane	10.000	9.983	0.2	146	-0.05
71	S	4-Bromofluorobenzene	10.000	9.972	0.3	140	-0.05
72	T	1,2,3-Trichloropropane	10.000	11.315	-13.1	162	-0.09
73	T	trans-1,4-Dichloro-2-butene	10.000	9.106	8.9	132	-0.05
74	T	n-Propylbenzene	10.000	8.870	11.3	130	-0.04
75	T	Bromobenzene	10.000	9.224	7.8	140	-0.04
76	T	1,3,5-Trimethylbenzene	10.000	8.502	15.0	128	-0.05
77	T	2-Chlorotoluene	10.000	8.816	11.8	138	-0.04
78	T	4-Chlorotoluene	10.000	8.611	13.9	127	-0.04
79	T	tert-Butylbenzene	10.000	8.627	13.7	132	-0.04
80	T	1,2,4-Trimethylbenzene	10.000	8.617	13.8	129	-0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A22\RAV327.D Vial: 4
Acq On : 22 Jan 2007 11:03 am Operator: AS
Sample : CVO01A0429 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	10.000	8.719	12.8	131	-0.04
82	T	p-Isopropyltoluene	10.000	8.430	15.7	128	-0.05
83	T	1,3-Dichlorobenzene	10.000	9.451	5.5	144	-0.05
84	T	1,4-Dichlorobenzene	10.000	9.442	5.6	142	-0.05
85	T	n-Butylbenzene	10.000	8.947	10.5	132	-0.04
86	T	1,2-Dichlorobenzene	10.000	9.679	3.2	148	-0.05
87	T	1,2-Dibromo-3-chloropropane	10.000	10.252	-2.5	170	-0.05
88	T	1,2,4-Trichlorobenzene	10.000	8.492	15.1	156	-0.05
89	T	Hexachlorobutadiene	10.000	8.886	11.1	154	-0.05
90	T	Naphthalene	10.000	8.523	14.8	168	-0.05
91	T	1,2,3-Trichlorobenzene	10.000	9.005	9.9	164	-0.04

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A22\RAV327.D Vial: 4
Acq On : 22 Jan 2007 11:03 am Operator: AS
Sample : CVO01A0429 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	137	-0.02
2	T	Dichlorodifluoromethane	0.315	0.254	19.4	106	0.00
3	P,T	Chloromethane	0.322	0.313	2.8	127	-0.02
4	C,T	Vinyl chloride	0.340	0.326	4.1	130	-0.02
5	T	Bromomethane	0.300	0.303	-1.0	142	-0.04
6	T	Chloroethane	0.241	0.208	13.7	130	-0.02
7	T	Dichlorofluoromethane	0.744	0.739	0.7	122	-0.02
8	T	Trichlorofluoromethane	0.455	0.489	-7.5	140	-0.02
9	T	sec-Propyl alcohol	0.000	0.000	0.0	122	-0.04
10	T	Acrolein	0.016	0.015	6.3	117	-0.04
11	T	1,1,2-Trichloro-1,2,2-trifl	0.269	0.249	7.4	125	-0.02
12	T	Acetone	0.031	0.030	3.2	124	-0.02
13	C,T	1,1-Dichloroethene	0.517	0.503	2.7	122	-0.04
14	T	tert-Butyl alcohol	0.010	0.012	-20.0	143	-0.04
15	T	Acetonitrile	0.000	0.000	0.0	141	-0.02
16	T	Methyl acetate	0.000	0.000	0.0	118	-0.02
17	T	Iodomethane	0.489	0.522	-6.7	138	-0.02
18	T	Methylene chloride	0.616	0.471	23.5#	123	-0.02
19	T	Carbon disulfide	1.314	1.007	23.4#	99	-0.04
20	T	Acrylonitrile	0.048	0.053	-10.4	135	-0.04
21	T	tert-Butyl methyl ether (MT	0.433	0.466	-7.6	138	-0.04
22	T	trans-1,2-Dichloroethene	0.575	0.543	5.6	117	-0.02
23	T	Isopropyl ether (DIPE)	1.168	1.270	-8.7	131	-0.04
24	T	Vinyl acetate	0.371	0.416	-12.1	135	-0.04
25	P,T	1,1-Dichloroethane	0.737	0.745	-1.1	128	-0.04
26	T	tert-Butyl ethyl ether (ETB	0.776	0.861	-11.0	135	-0.02
27	T	2-Butanone	0.064	0.066	-3.1	132	-0.02
28	T	2,2-Dichloropropane	0.444	0.466	-5.0	134	-0.04
29	T	cis-1,2-Dichloroethene	0.654	0.669	-2.3	128	-0.02
30	C,T	Chloroform	0.590	0.611	-3.6	132	-0.04
31	T	Bromochloromethane	0.302	0.334	-10.6	135	-0.02
32	T	Tetrahydrofuran	0.044	0.047	-6.8	139	-0.04
33	T	1,1,1-Trichloroethane	0.486	0.497	-2.3	129	-0.04
34	T	Cyclohexane	0.000	0.000	0.0	186	-0.05
35	T	tert-Amyl methyl ether (TAM	0.510	0.562	-10.2	141	-0.04
36	S	1,2-Dichloroethane-d4	0.296	0.272	8.1	123	-0.04
37	I	CHLOROBENZENE-D5	1.000	1.000	0.0	146	-0.04
38	T	1,1-Dichloropropene	0.204	0.180	11.8	122	-0.04
39	T	Carbon tetrachloride	0.528	0.493	6.6	129	-0.04
40	T	1,2-Dichloroethane	0.450	0.440	2.2	132	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A22\RAV327.D Vial: 4
Acq On : 22 Jan 2007 11:03 am Operator: AS
Sample : CVO01A0429 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	1.622	1.448	10.7	129	-0.04
42	T	Trichloroethene	0.450	0.405	10.0	130	-0.04
43	T	Methylcyclohexane	0.000	0.000	0.0	140	-0.02
44	C,T	1,2-Dichloropropane	0.501	0.511	-2.0	139	-0.04
45	T	Bromodichloromethane	0.505	0.526	-4.2	137	-0.04
46	T	Dibromomethane	0.186	0.192	-3.2	138	-0.04
47	T	4-Methyl-2-pentanone	0.195	0.209	-7.2	141	-0.02
48	T	2-Chloroethyl vinyl ether	0.016	0.009	43.8#	93	-0.04
49	T	cis-1,3-Dichloropropene	0.536	0.564	-5.2	140	-0.04
50	S	Toluene-d8	1.306	1.251	4.2	133	-0.04
51	C,T	Toluene	1.605	1.530	4.7	136	-0.04
52	T	Ethyl methacrylate	0.269	0.290	-7.8	141	-0.04
53	T	trans-1,3-Dichloropropene	0.368	0.400	-8.7	140	-0.04
54	T	1,1,2-Trichloroethane	0.225	0.244	-8.4	144	-0.04
55	T	2-Hexanone	0.122	0.118	3.3	133	-0.04
56	T	1,3-Dichloropropane	0.426	0.443	-4.0	142	-0.04
57	T	Tetrachloroethene	0.322	0.297	7.8	131	-0.04
58	T	Dibromochloromethane	0.297	0.320	-7.7	147	-0.04
59	T	1,2-Dibromoethane	0.235	0.257	-9.4	148	-0.04
60	T	1-Chlorohexane	0.641	0.640	0.2	133	-0.04
61	P	Chlorobenzene	1.014	0.980	3.4	135	-0.04
62	T	1,1,1,2-Tetrachloroethane	0.315	0.316	-0.3	139	-0.04
63	C,T	Ethylbenzene	1.716	1.666	2.9	131	-0.04
64	T	m-Xylene & p-Xylene	1.307	1.270	2.8	131	-0.04
65	T	o-Xylene	1.352	1.351	0.1	133	-0.04
66	T	Styrene	0.935	0.952	-1.8	134	-0.04
67	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	157	-0.05
68	T	Isopropylbenzene	6.334	5.523	12.8	130	-0.04
69	P,T	Bromoform	0.474	0.473	0.2	143	-0.04
70	P,T	1,1,2,2-Tetrachloroethane	0.860	0.858	0.2	146	-0.05
71	S	4-Bromofluorobenzene	1.422	1.418	0.3	140	-0.05
72	T	1,2,3-Trichloropropane	0.491	0.476	3.1	162	-0.09
73	T	trans-1,4-Dichloro-2-butene	0.178	0.162	9.0	132	-0.05
74	T	n-Propylbenzene	7.389	6.554	11.3	130	-0.04
75	T	Bromobenzene	1.064	0.981	7.8	140	-0.04
76	T	1,3,5-Trimethylbenzene	4.355	3.702	15.0	128	-0.05
77	T	2-Chlorotoluene	4.575	4.033	11.8	138	-0.04
78	T	4-Chlorotoluene	3.709	3.194	13.9	127	-0.04
79	T	tert-Butylbenzene	4.516	3.896	13.7	132	-0.04
80	T	1,2,4-Trimethylbenzene	3.872	3.336	13.8	129	-0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07A22\RAV327.D Vial: 4
Acq On : 22 Jan 2007 11:03 am Operator: AS
Sample : CV001A0429 10/20/30/50ppb Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01A04.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Fri Jan 05 11:21:58 2007
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	6.555	5.715	12.8	131	-0.04
82	T	p-Isopropyltoluene	4.411	3.718	15.7	128	-0.05
83	T	1,3-Dichlorobenzene	1.906	1.801	5.5	144	-0.05
84	T	1,4-Dichlorobenzene	1.779	1.680	5.6	142	-0.05
85	T	n-Butylbenzene	3.846	3.441	10.5	132	-0.04
86	T	1,2-Dichlorobenzene	1.572	1.521	3.2	148	-0.05
87	T	1,2-Dibromo-3-chloropropane	0.080	0.096	-20.0	170	-0.05
88	T	1,2,4-Trichlorobenzene	0.641	0.651	-1.6	156	-0.05
89	T	Hexachlorobutadiene	0.680	0.671	1.3	154	-0.05
90	T	Naphthalene	0.609	0.607	0.3	168	-0.05
91	T	1,2,3-Trichlorobenzene	0.490	0.524	-6.9	164	-0.04

ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1/4/07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A01 -023

BATCH V001A04016

Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAV039	BFB01A05	2µl				T/CHECK 19:38
02	40	V001A0401	.03/.15/.04µl				3ppb 8260/.6 KetA/.1 AN/.15 TOA
03	41	02	.05/.25/.1µl				.5 /1 /1.5 /2.5
04	42	03	.1/.5/.2µl				1 /2 /3 /5
05	43	04	.2/1/.4µl				2 /4 /6 /10
06	44	05	.5/2.5/1µl				5 /10 /15 /25
07	45	06	1/5/2µl				10 /20 /30/50
08	46	07	2/10/4µl				20 /40 /60/100
09	47	08	3/15/6µl				30 /60 /90/150
10	48	09	4/20/8µl				40 /80 /120/200
11	49	10	5/25/10µl				50 /100 /150/250
12	50	Rinse					
13	51	V001A05B					
14	52	IV001A0401*	1/5/2/5µl				10 /20 /50
15	53	02					
16	54	15/55					
17							
18							
19							
20							
21							
22							
23							
24							
25							AS 1/5/06

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	V001A04

STANDARDS

NAME	ID	CONC (mg/L)
DCC gases	SVIC-11-56-3	250
DCC 8260	55-3	50/250
DCC Ket-AA	56-2	250
BFB	-49-3	50
IS/SURR.	-51-2 / -55-1	250
LCS gases	-57-1	250
LCS 8260	-50-2	50/250
LCS Ket-AA / DCFM	-49-1 / SVIA-11-73	250 / 100

SOLVENT	ID
METHANOL	
DATA FILE	07A04

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments: * Not validated for: DCFM, acrylonitrile, vinyl acetate, 2CLVE, THF

Analyzed By: AS

Date Disposed: 1/5/06

Disposed By: AS

2026

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1-9-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A01 -023

BATCH CV01/A0464

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAV072	BFB01A08	2µL				TICHECK
02	073	04					10:04
03	074	CV01A0404	1/5/2µL				10/100/200/200/500/500
04	075	IV01A0403	1/5/2/2.5µL				10 / 20 / 50
05	076	CV01A0405	2/4/4µL				20 / 40 / 100
06	077	DCC	1/5/2µL				10 / 20 / 50
07	078	V01A09L	1/5/2/2.5µL				±30% Failing
08	079	C					
09	080	B	25mL	1			
10	081	G					
11	082	PLOA0026-12			<2		
12	083	-01					
13	084	-02					
14	085	-03					
15	086	-04					
16	087	-06					
17	088	-07					
18	089	-08					
19	090	-09					
20	091	-10					21:32
21	092	Rinse					
22	093						
23							
24							
25							AS

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	V01A04

STANDARDS		
NAME	ID	CONC. (mg/L)
DCC gases	SVLC-11-56-3	
DCC 8260	-55-3	
DCC Kit-AA	-56-2	
BFB	-49-3	50/100/250
IS/SURR. IS	-54-2	
SS	-55-1	
LCS gases	-57-1	
LCS 8260	-54-2	
LCS Kit-AA BCFM	-49-1	
	SVIA-11-155	

SOLVENT	ID
METHANOL	
DATA FILE	07A04

Electronic Data Archival	
Location	Date
HPCHEM_VOA/T001	

Comments: ICV: SVLC 11-57-2

Analyzed By: CV/AS

Date Disposed:

Disposed By:

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 1-2-07 ☐ 5-ml Purge ☒ 25-ml Purge

Book # A01 -023

BATCH CVO01A0429

Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAV324	BFB01A29	2 µL				T/CHECK
02	325	30-					09:46
03	326	CVO01A0428	1/5/2 µL				
04	327	29					
05	328	VC01A30L	1/5/2.5 µL				
06	329	C-					
07	330	X-					
08	331	B	25 µL	1			
09	332	D-					
10	333	07A129-07-			22		TB
11	334	07A112-04					EB
12	335	-05-					TB
13	336	07A069-01I	10 µL	250			
14	337	-02I					
15	338	07A136-01-	25 µL	1			
16	339	07A117-01-					EEGL
17	340	-02					INFL. 3/15 con 7, X1 EIKE 20:32
18	341	Rinse					
19	342						
20							
21							
22							
23							
24							
25							AS 1/23/07

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	1/4/07
ICAL ID	VO01A04

STANDARDS		
NAME	ID	CONC (mg/L)
DCC 90527	SVIC-11-56-3	
DCC 8260	-55-3	
DCC Ketone	-56-2	
BFB	-49-3	50/100/250
IS/SURR.	-54-3	
LCS 90527	-57-1	
LCS 8260	-57-2	
LCS Ketone	-49-1	
	SVIC-11-55	

SOLVENT	ID
METHANOL	
DATA FILE	07A22

Electronic Data Archival	
Location	Date
HPCHEM_VOA/TO01	

Comments:

Analyzed By: AS

Date Disposed: 1/23/07

Disposed By: AG

LABORATORY REPORT FOR

SHAW E&I

ALAMEDA POINT, CTO 133

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY BC/MS

SDG#: 07A138

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07A138

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

One (1) water sample was received on 01/19/07 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd edition.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour intervals. 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
SEMI VOLATILE ORGANICS BY GC/MS

Client : SHAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07A138
Instrument ID : T-041

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVA024WB	1	NA	01/25/0721:16	01/22/0713:00	RAH117	RAH054	SVA024W	Method Blank
LCS1W	SVA024WL	1	NA	01/25/0721:41	01/22/0713:00	RAH118	RAH054	SVA024W	Lab Control Sample (LCS)
LCD1W	SVA024WC	1	NA	01/25/0722:06	01/22/0713:00	RAH119	RAH054	SVA024W	LCS Duplicate
133-5-3-WW(1/18/2007)	A138-01	.94	NA	01/26/0700:59	01/22/0713:00	RAH126	RAH054	SVA024W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	01/18/07
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/19/07
Batch No.	: 07A138	Date Extracted:	01/22/07 13:00
Sample ID:	133-5-3-WW(1/18/2007)	Date Analyzed:	01/26/07 00:59
Lab Samp ID:	A138-01	Dilution Factor:	.94
Lab File ID:	RAH126	Matrix	: WATER
Ext Btch ID:	SVA024W	% Moisture	: NA
Calib. Ref.:	RAH054	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	9.4	4.7
1,2-DICHLOROBENZENE	ND	9.4	4.7
1,3-DICHLOROBENZENE	ND	9.4	4.7
1,4-DICHLOROBENZENE	ND	9.4	4.7
2,4,5-TRICHLOROPHENOL	ND	47	4.7
2,4,6-TRICHLOROPHENOL	ND	9.4	4.7
2,4-DICHLOROPHENOL	ND	9.4	4.7
2,4-DIMETHYLPHENOL	ND	9.4	4.7
2,4-DINITROPHENOL	ND	47	4.7
2,4-DINITROTOLUENE	ND	9.4	4.7
2,6-DINITROTOLUENE	ND	9.4	4.7
2-CHLORONAPHTHALENE	ND	9.4	4.7
2-CHLOROPHENOL	ND	9.4	4.7
2-METHYLNAPHTHALENE	ND	9.4	4.7
2-METHYLPHENOL	ND	9.4	4.7
2-NITROANILINE	ND	47	4.7
2-NITROPHENOL	ND	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	19	4.7
3-NITROANILINE	ND	47	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	47	4.7
4-BROMOPHENYL-PHENYL ETHER	ND	9.4	4.7
4-CHLORO-3-METHYLPHENOL	ND	9.4	4.7
4-CHLOROANILINE	ND	9.4	4.7
4-CHLOROPHENYL-PHENYL ETHER	ND	9.4	4.7
4-METHYLPHENOL (1)	ND	9.4	4.7
4-NITROANILINE	ND	47	4.7
4-NITROPHENOL	ND	47	4.7
ACENAPHTHENE	ND	9.4	4.7
ACENAPHTHYLENE	ND	9.4	4.7
ANTHRACENE	ND	9.4	4.7
BENZO(A)ANTHRACENE	ND	9.4	4.7
BENZO(A)PYRENE	ND	9.4	4.7
BENZO(B)FLUORANTHENE	ND	9.4	4.7
BENZO(K)FLUORANTHENE	ND	9.4	4.7
BENZO(G,H,I)PERYLENE	ND	9.4	4.7
BIS(2-CHLOROETHOXY)METHANE	ND	9.4	4.7
BIS(2-CHLOROETHYL)ETHER	ND	9.4	4.7
BIS(2-CHLOROISOPROPYL)ETHER	ND	9.4	4.7
BIS(2-ETHYLHEXYL)PHTHALATE	ND	9.4	4.7
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	ND	9.4	4.7
DI-N-OCTYLPHTHALATE	ND	9.4	4.7
DIBENZO(A,H)ANTHRACENE	ND	9.4	4.7
DIBENZOFURAN	ND	9.4	4.7
DIETHYLPHTHALATE	ND	9.4	4.7
DIMETHYLPHTHALATE	ND	9.4	4.7
FLUORANTHENE	ND	9.4	4.7
FLUORENE	ND	9.4	4.7
HEXACHLOROBENZENE	ND	9.4	4.7
HEXACHLOROBUTADIENE	ND	9.4	4.7
HEXACHLOROCYCLOPENTADIENE	ND	9.4	4.7
HEXACHLOROETHANE	ND	9.4	4.7
INDENO(1,2,3-CD)PYRENE	ND	9.4	4.7
ISOPHORONE	ND	9.4	4.7
N-NITROSO-DIMETHYLAMINE	ND	9.4	4.7
N-NITROSO-DI-N-PROPYLAMINE	ND	9.4	4.7
N-NITROSODIPHENYLAMINE (2)	ND	9.4	4.7
NAPHTHALENE	ND	9.4	4.7
NITROBENZENE	ND	9.4	4.7
PENTACHLOROPHENOL	ND	47	9.4
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
BENZOIC ACID	ND	47	9.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	67	36-143
2-FLUOROBIPHENYL	72	36-143
2-FLUOROPHENOL	64	36-143
NITROBENZENE-D5	75	36-143
PHENOL-D5	58	36-143
TERPHENYL-D14	95	45-143

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

QC SUMMARY

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	01/22/07
Batch No.	: 07A138	Date Extracted:	01/22/07 13:00
Sample ID:	MBLK1W	Date Analyzed:	01/25/07 21:16
Lab Samp ID:	SVA024WB	Dilution Factor:	1
Lab File ID:	RAH117	Matrix	: WATER
Ext Btch ID:	SVA024W	% Moisture	: NA
Calib. Ref.:	RAH054	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5.0
1,2-DICHLOROBENZENE	ND	10	5.0
1,3-DICHLOROBENZENE	ND	10	5.0
1,4-DICHLOROBENZENE	ND	10	5.0
2,4,5-TRICHLOROPHENOL	ND	50	5.0
2,4,6-TRICHLOROPHENOL	ND	10	5.0
2,4-DICHLOROPHENOL	ND	10	5.0
2,4-DIMETHYLPHENOL	ND	10	5.0
2,4-DINITROPHENOL	ND	50	5.0
2,4-DINITROTOLUENE	ND	10	5.0
2,6-DINITROTOLUENE	ND	10	5.0
2-CHLORONAPHTHALENE	ND	10	5.0
2-CHLOROPHENOL	ND	10	5.0
2-METHYLNAPHTHALENE	ND	10	5.0
2-METHYLPHENOL	ND	10	5.0
2-NITROANILINE	ND	50	5.0
2-NITROPHENOL	ND	10	5.0
3,3'-DICHLOROBENZIDINE	ND	20	5.0
3-NITROANILINE	ND	50	5.0
4,6-DINITRO-2-METHYLPHENOL	ND	50	5.0
4-BROMOPHENYL-PHENYL ETHER	ND	10	5.0
4-CHLORO-3-METHYLPHENOL	ND	10	5.0
4-CHLOROANILINE	ND	10	5.0
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5.0
4-METHYLPHENOL (1)	ND	10	5.0
4-NITROANILINE	ND	50	5.0
4-NITROPHENOL	ND	50	5.0
ACENAPHTHENE	ND	10	5.0
ACENAPHTHYLENE	ND	10	5.0
ANTHRACENE	ND	10	5.0
BENZO(A)ANTHRACENE	ND	10	5.0
BENZO(A)PYRENE	ND	10	5.0
BENZO(B)FLUORANTHENE	ND	10	5.0
BENZO(K)FLUORANTHENE	ND	10	5.0
BENZO(G,H,I)PERYLENE	ND	10	5.0
BIS(2-CHLOROETHOXY)METHANE	ND	10	5.0
BIS(2-CHLOROETHYL)ETHER	ND	10	5.0
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5.0
BIS(2-ETHYLHEXYL)PHTHALATE	ND	10	5.0
BUTYLBENZYLPHTHALATE	ND	10	5.0
CHRYSENE	ND	10	5.0
DI-N-BUTYLPHTHALATE	ND	10	5.0
DI-N-OCTYLPHTHALATE	ND	10	5.0
DIBENZO(A,H)ANTHRACENE	ND	10	5.0
DIBENZOFURAN	ND	10	5.0
DIETHYLPHTHALATE	ND	10	5.0
DIMETHYLPHTHALATE	ND	10	5.0
FLUORANTHENE	ND	10	5.0
FLUORENE	ND	10	5.0
HEXACHLOROBENZENE	ND	10	5.0
HEXACHLOROBUTADIENE	ND	10	5.0
HEXACHLOROCYCLOPENTADIENE	ND	10	5.0
HEXACHLOROETHANE	ND	10	5.0
INDENO(1,2,3-CD)PYRENE	ND	10	5.0
ISOPHORONE	ND	10	5.0
N-NITROSO-DIMETHYLAMINE	ND	10	5.0
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5.0
N-NITROSODIPHENYLAMINE (2)	ND	10	5.0
NAPHTHALENE	ND	10	5.0
NITROBENZENE	ND	10	5.0
PENTACHLOROPHENOL	ND	50	10
PHENANTHRENE	ND	10	5.0
PHENOL	ND	10	5.0
PYRENE	ND	10	5.0
BENZOIC ACID	ND	50	10

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	81	40-130
2-FLUOROBIPHENYL	79	40-130
2-FLUOROPHENOL	69	40-130
NITROBENZENE-D5	77	40-130
PHENOL-D5	70	40-130
TERPHENYL-D14	96	50-130

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07A138
METHOD: SW 3520C/8270C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVA024WB	SVA024WL	SVA024WC		
LAB FILE ID:	RAH117	RAH118	RAH119		
DATE EXTRACTED:	01/22/0713:00	01/22/0713:00	01/22/0713:00	DATE COLLECTED:	NA
DATE ANALYZED:	01/25/0721:16	01/25/0721:41	01/25/0722:06	DATE RECEIVED:	01/22/07
PREP. BATCH:	SVA024W	SVA024W	SVA024W		
CALIB. REF:	RAH054	RAH054	RAH054		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	80.0	55.5	69	80.0	57.4	72	3	30-130	30
1,4-Dichlorobenzene	ND	80.0	50.8	64	80.0	51.4	64	1	30-130	30
2,4-Dinitrotoluene	ND	80.0	66.6	83	80.0	66.3	83	0	50-130	30
2-Chlorophenol	ND	80.0	59.5	74	80.0	61.5	77	3	30-130	30
4-Chloro-3-Methylphenol	ND	80.0	60.6	76	80.0	59.3	74	2	40-130	30
4-Nitrophenol	ND	80.0	46.6J	58	80.0	48.8J	61	5	40-130	30
Acenaphthene	ND	80.0	63.1	79	80.0	62.2	78	1	40-130	30
n-Nitroso-di-n-propylamine	ND	80.0	62.6	78	80.0	62.3	78	1	40-130	30
Pentachlorophenol	ND	80.0	63.1	79	80.0	59.3	74	6	40-130	30
Phenol	ND	80.0	58.7	73	80.0	59.1	74	1	30-130	30
Pyrene	ND	80.0	78.9	99	80.0	76.3	95	3	40-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	150	129	86	150	135	90	40-130
2-Fluorobiphenyl	50.0	41.8	84	50.0	41.6	83	40-130
2-Fluorophenol	150	112	74	150	117	78	40-130
Nitrobenzene-d5	50.0	40.7	81	50.0	42.6	85	40-130
Phenol-d5	150	112	74	150	117	78	40-130
Terphenyl-d14	50.0	50.3	101	50.0	50.2	100	50-130

INITIAL CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

ab Name: EMAX Inc
ab Code: EMXT
ab File ID: RAH049
Instrument ID: T-041

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A13B
DFTPP Injection Date: 01/23/07
DFTPP Injection Time: 17:10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.60
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	53.75
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	40.90
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.03
275	10.0 - 30.0% of mass 198	27.42
365	Greater than 1.00% of mass 198	2.80
441	Present, but less than mass 443	14.36
442	Greater than 40.0% of mass 198	82.22
443	17.0 - 23.0% of mass 442	17.16(20.9)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD05	SV41A231	RAH050	01/23/07	18:27
2	SSTD010	SV41A232	RAH051	01/23/07	18:52
3	SSTD020	SV41A233	RAH052	01/23/07	19:17
4	SSTD040	SV41A234	RAH053	01/23/07	19:42
5	SSTD050	SV41A235	RAH054	01/23/07	20:07
6	SSTD080	SV41A236	RAH055	01/23/07	20:32
7	SSTD100	SV41A237	RAH056	01/23/07	20:57
8	SSTD120	SV41A238	RAH057	01/23/07	21:22
9	SSTD160	SV41A239	RAH058	01/23/07	21:46
10	SSTD050	ISV41A231	RAH059	01/23/07	22:11

FORM V SV OLM02.0

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH054
Instrument ID: T041

Project:ICAL
SDG No.:
Date Analyzed: 01/23/07
Time Analyzed: 20:07

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	328424	3.95	1222259	5.42	824339	7.69
	UPPER LIMIT	656848	4.45	2444518	5.92	1648678	8.19
	LOWER LIMIT	164212	3.45	611130	4.92	412170	7.19
	SAMPLE ID						
1	SV41A231	349623	3.94	1279692	5.42	866170	7.70
2	SV41A232	327001	3.94	1180665	5.42	804905	7.70
3	SV41A233	335248	3.94	1250206	5.42	864505	7.70
4	SV41A234	384314	3.95	1436207	5.43	960721	7.70
5	SV41A236	322936	3.95	1216454	5.43	808878	7.70
6	SV41A237	317973	3.95	1165911	5.43	765248	7.70
7	SV41A238	344676	3.95	1300625	5.43	856920	7.70
8	SV41A239	278402	3.96	1025558	5.43	686551	7.70
9	ISV41A231	318576	3.95	1210130	5.42	789043	7.69

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

FORM VIII SV-1 OLM02.0

KMP 1/24/07

3010

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH054
Instrument ID: T041

Project:ICAL
SDG No.:
Date Analyzed: 01/23/07
Time Analyzed: 20:07

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	1333756	9.79	1174435	13.18	994566	14.87
	UPPER LIMIT	2667512	10.29	2348870	13.68	1989132	15.37
	LOWER LIMIT	666878	9.29	587218	12.68	497283	14.37
	SAMPLE ID						
1	SV41A231	1439944	9.78	1380787	13.16	1200509	14.86
2	SV41A232	1308527	9.78	1277211	13.16	1095287	14.86
3	SV41A233	1400884	9.79	1295004	13.16	1115117	14.86
4	SV41A234	1580661	9.79	1467812	13.17	1250372	14.87
5	SV41A236	1311113	9.79	1120161	13.18	940324	14.87
6	SV41A237	1209755	9.80	1035098	13.18	873996	14.87
7	SV41A238	1401802	9.81	1150583	13.19	934227	14.88
8	SV41A239	1158290	9.81	1030383	13.20	807847	14.88
9	ISV41A231	1249921	9.79	1081072	13.17	907224	14.87

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

FORM VIII SV-2 OLM02.0

KLD 1/25/07

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :TO41
Beginning DateTime :01/23/07 18:27
Spike Units :PPM
IC File :RAH054

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :01/23/07 21:46
HPChem Method :SV41A23

IDX	Parameters	5 18:27 RAH050	10 18:52 RAH051	20 19:17 RAH052	40 19:42 RAH053	50 20:07 RAH054	80 20:32 RAH055	100 20:57 RAH056	120 21:22 RAH057	160 21:46 RAH058	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	0	3.9467
2	N-Nitrosodimethylamine	0.889	0.853	0.835	0.814	0.825	0.839	0.852	0.864	0.849	0.847	2.58	1.9942
3	Pyridine	1.403	1.398	1.361	1.392	1.396	1.418	1.410	1.417	1.416	1.401	1.29	2.0043
4	2-Fluorophenol	1.028	1.025	1.065	1.057	1.116	1.159	1.172	1.175	1.181	1.109	5.91	2.7713
5	Phenol	1.631	1.559	1.638	1.627	1.740	1.726	1.685	1.706	1.697	1.668	3.49	3.5744
6	Aniline	1.684	1.774	1.693	1.525	1.410	1.395	------	------	------	1.580	10.10	3.6174
7	Bis(2-chloroethyl)ether	1.394	1.487	1.541	1.629	1.733	1.754	2.100	------	------	1.663	13.95	3.6665
8	Phenol-d5	1.305	1.345	1.419	1.440	1.484	1.525	1.525	1.543	1.510	1.455	5.83	3.5598
9	2-Chlorophenol	1.284	1.208	1.271	1.274	1.293	1.318	1.313	1.321	1.283	1.285	2.69	3.7352
10	1,3-Dichlorobenzene	1.506	1.445	1.421	1.374	1.453	1.347	1.373	1.360	1.341	1.402	4.05	3.8859
11	1,4-Dichlorobenzene	1.426	1.353	1.321	1.306	1.309	1.323	1.328	1.238	1.281	1.321	3.87	3.9613
12	Benzyl alcohol	0.823	0.795	0.839	0.854	0.892	0.902	0.898	0.896	0.878	0.864	4.44	4.0951
13	1,2-Dichlorobenzene-d4	0.927	0.983	0.917	0.881	0.873	0.865	0.859	0.825	0.817	0.883	5.92	4.1075
14	1,2-Dichlorobenzene	1.330	1.373	1.355	1.276	1.307	1.274	1.273	1.238	1.204	1.292	4.23	4.1210
15	2-Methylphenol	1.002	1.020	1.004	1.004	1.068	1.049	0.994	1.023	1.018	1.020	2.38	4.1964
16	Bis(2-chloroisopropyl)ether	3.191	3.081	3.098	2.979	3.097	3.073	3.006	2.969	2.888	3.042	2.97	4.2368
17	4-Methylphenol	1.376	1.415	1.441	1.436	1.511	1.489	1.473	1.539	1.496	1.464	3.49	4.3808
18	N-Nitroso-di-n-propylamine	1.033	1.090	1.143	1.093	1.126	1.094	1.096	1.098	1.092	1.096	2.74	4.4078
19	Hexachloroethane	0.511	0.517	0.541	0.533	0.545	0.552	0.544	0.544	0.533	0.535	2.60	4.4910
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	0	5.4257
21	Nitrobenzene-d5	0.298	0.324	0.342	0.360	0.368	0.368	0.379	0.373	0.378	0.354	7.78	4.5641
22	Nitrobenzene	0.370	0.359	0.371	0.363	0.381	0.375	0.375	0.372	0.373	0.371	1.76	4.5844
23	Isophorone	0.676	0.677	0.689	0.676	0.708	0.702	0.692	0.692	0.686	0.689	1.66	4.8869
24	2-Nitrophenol	0.116	0.144	0.159	0.176	0.191	0.197	0.215	0.211	0.213	0.180	19.17	4.9533
25	2,4-Dimethylphenol	0.275	0.325	0.325	0.303	0.338	0.327	0.316	0.318	0.325	0.317	5.78	5.0106
26	bis(2-Chloroethoxy)methane	0.467	0.457	0.476	0.462	0.471	0.469	0.459	0.453	0.447	0.462	2.01	5.1388
27	Benzoic Acid	0.025	0.064	0.107	0.142	0.164	0.161	0.185	0.197	0.201	0.138	44.32	5.2142
28	2,4-Dichlorophenol	0.295	0.296	0.305	0.312	0.324	0.323	0.317	0.321	0.324	0.313	3.71	5.2480
29	1,2,4-Trichlorobenzene	0.346	0.366	0.342	0.338	0.340	0.334	0.338	0.334	0.330	0.341	3.09	5.3525
30	Naphthalene	1.044	1.006	0.981	0.941	0.956	0.927	0.925	0.895	0.900	0.953	5.19	5.4549
31	4-Chloroaniline	0.457	0.455	0.452	0.433	0.451	0.446	0.441	0.441	0.437	0.446	1.86	5.5314
32	Hexachlorobutadiene	0.234	0.223	0.221	0.208	0.217	0.213	0.210	0.205	0.202	0.215	4.76	5.6079
33	4-Chloro-3-methylphenol	0.301	0.312	0.320	0.331	0.336	0.337	0.332	0.336	0.343	0.328	4.19	6.1455
34	2-Methylnaphthalene	0.726	0.738	0.726	0.693	0.698	0.685	0.682	0.658	0.651	0.695	4.37	6.3299
35	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	0	7.6964
36	Hexachlorocyclopentadiene	0.116	0.155	0.180	0.215	0.219	0.232	0.237	0.232	0.214	0.200	20.69	6.5211
37	2,4,6-Trichlorophenol	0.326	0.359	0.349	0.377	0.428	0.428	0.406	0.396	0.437	0.390	10.09	6.6887
38	2,4,5-Trichlorophenol	0.342	0.381	0.386	0.389	0.369	0.359	0.392	0.392	0.351	0.373	5.08	6.7292
39	2-Fluorobiphenyl	1.265	1.237	1.197	1.169	1.204	1.163	1.145	1.124	1.122	1.181	4.17	6.8090
40	2-Chloronaphthalene	1.070	1.035	1.010	1.003	1.009	1.003	1.002	0.986	0.958	1.009	3.08	6.9530
41	2-Nitroaniline	0.295	0.311	0.355	0.393	0.401	0.419	0.414	0.427	0.422	0.382	13.06	7.1048
42	Dimethylphthalate	1.301	1.336	1.313	1.285	1.311	1.295	1.271	1.274	1.278	1.296	1.65	7.3815
43	2,6-Dinitrotoluene	0.178	0.218	0.262	0.275	0.312	0.309	0.307	0.312	0.317	0.277	17.85	7.4580
44	Acenaphthylene	1.587	1.553	1.568	1.531	1.555	1.519	1.505	1.486	1.464	1.530	2.61	7.5030
45	3-Nitroaniline	0.241	0.257	0.277	0.299	0.300	0.302	0.306	0.322	0.332	0.293	10.07	7.6762
46	Acenaphthene	1.112	1.037	0.984	0.961	0.976	0.945	0.934	0.928	0.926	0.978	6.25	7.7482
47	2,4-Dinitrophenol	0.012	0.031	0.061	0.108	0.122	0.151	0.165	0.181	0.191	0.114	57.72	7.8157
48	4-Nitrophenol	0.078	0.114	0.127	0.146	0.148	0.149	0.160	0.171	0.176	0.141	21.78	7.9214
49	Dibenzofuran	1.723	1.604	1.552	1.536	1.562	1.507	1.471	1.475	1.475	1.545	5.24	7.9855
50	2,4-Dinitrotoluene	0.238	0.287	0.345	0.389	0.395	0.399	0.411	0.429	0.437	0.370	18.20	8.0024
51	2,3,4,6-Tetrachlorophenol	0.182	0.220	0.258	0.274	0.287	0.283	0.285	0.295	0.291	0.264	14.56	8.1564
52	Diethylphthalate	1.337	1.318	1.299	1.263	1.303	1.269	1.206	1.212	1.227	1.270	3.76	8.3679
53	Fluorene	1.280	1.297	1.224	1.220	1.222	1.176	1.156	1.135	1.128	1.204	5.00	8.4635
54	4-Chlorophenyl-phenylether	0.785	0.708	0.701	0.663	0.679	0.652	0.635	0.619	0.622	0.674	7.78	8.4837
55	4-Nitroaniline	0.248	0.295	0.283	0.301	0.292	0.297	0.297	0.316	0.328	0.295	7.49	8.5535
56	4,6-Dinitro-2-methylphenol	0.083	0.094	0.139	0.199	0.217	0.239	0.253	0.268	0.283	0.197	37.96	8.5805
57	N-Nitrosodiphenylamine	0.950	0.913	0.873	0.850	0.883	0.855	0.831	0.836	0.843	0.871	4.52	8.6682
58	Azobenzene	1.421	1.390	1.385	1.489	1.489	1.419	1.414	1.397	1.421	1.425	2.71	8.7098
59	2,4,6-Tribromophenol	0.206	0.223	0.247	0.269	0.280	0.279	0.272	0.281	0.293	0.261	11.28	8.8065

60	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	0	9.7929
61	4-Bromophenyl-phenylether	0.282	0.292	0.287	0.284	0.287	0.281	0.284	0.272	0.274	0.282	2.27	9.1788
62	Hexachlorobenzene	0.376	0.350	0.356	0.340	0.344	0.344	0.340	0.330	0.325	0.345	4.35	9.2317
63	Pentachlorophenol	0.127	0.172	0.204	0.233	0.247	0.251	0.261	0.264	0.259	0.224	21.19	9.5218
64	Phenanthrene	1.178	1.207	1.142	1.083	1.113	1.056	1.064	1.024	1.032	1.100	5.86	9.8322
65	Anthracene	1.127	1.191	1.080	1.050	1.071	1.037	1.042	0.988	0.983	1.063	6.15	9.9054
66	Carbazole	1.079	1.032	0.965	0.892	0.854	0.821	0.833	0.867	0.884	0.914	9.93	10.1460
67	Di-n-butylphthalate	1.255	1.388	1.398	1.378	1.398	1.345	1.355	1.303	1.322	1.349	3.60	10.7028
68	Fluoranthene	1.125	1.161	1.128	1.112	1.131	1.077	1.057	1.048	1.061	1.100	3.65	11.4754
69	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	0	13.1760
70	Benzidine	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
71	Pyrene	1.273	1.259	1.265	1.225	1.258	1.244	1.259	1.266	1.191	1.249	2.08	11.7195
72	Terphenyl-d14	0.990	0.964	0.973	0.955	0.999	0.981	0.993	1.002	0.927	0.976	2.49	11:9175
73	Butylbenzylphthalate	0.448	0.532	0.549	0.591	0.601	0.604	0.614	0.629	0.591	0.573	9.77	12.5147
74	3,3'-Dichlorobenzidine	0.300	0.321	0.322	0.323	0.336	0.326	0.391	0.364	0.371	0.339	8.72	13.1547
75	Benzo(a)anthracene	1.152	1.131	1.125	1.102	1.099	1.079	1.119	1.084	1.043	1.104	2.96	13.1547
76	Chrysene	1.151	1.150	1.129	1.053	1.085	1.104	1.053	1.082	1.066	1.097	3.52	13.2120
77	bis(2-Ethylhexyl)phthalate	0.562	0.665	0.732	0.794	0.824	0.825	0.823	0.834	0.774	0.759	12.14	13.2570
78	Perylene-d12	1	1	1	1	1	1	1	1	1	1	0	14.8698
79	Di-n-octylphthalate	0.839	1.068	1.257	1.477	1.499	1.555	1.590	1.663	1.711	1.406	20.83	14.0825
80	Benzo(b)fluoranthene	1.068	1.039	1.201	1.236	1.413	1.309	1.483	------	------	1.250	13.23	14.4627
81	Benzo(k)fluoranthene	1.363	1.365	1.208	1.177	1.082	1.130	0.970	------	------	1.185	12.16	14.4960
82	Benzo(a)pyrene	1.199	1.200	1.143	1.138	1.148	1.147	1.160	1.167	1.151	1.162	1.99	14.8125
83	Indeno(1,2,3-cd)pyrene	0.989	1.070	1.110	1.174	1.211	1.192	1.185	1.138	1.128	1.133	6.17	16.0215
84	Dibenzo(a,h)anthracene	0.767	0.873	0.916	0.959	0.994	0.986	0.968	0.934	0.943	0.927	7.61	16.0451
85	Benzo(g,h,i)perylene	0.962	0.889	0.927	0.935	0.969	0.933	0.922	0.867	0.845	0.917	4.56	16.3308

Ave_%RSD : 8.3 Max_%RSD : 57.7

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
24	2-Nitrophenol	-0.01707	0.21318	0.9986
27	Benzoic Acid	-0.03014	0.19624	0.9954
36	Hexachlorocyclopentadiene	-0.01660	0.23191	0.9986
43	2,6-Dinitrotoluene	-0.02184	0.31873	0.9995
47	2,4-Dinitrophenol	-0.03459	0.18012	0.9884*
48	4-Nitrophenol	-0.01499	0.16966	0.9977
50	2,4-Dinitrotoluene	-0.03171	0.43078	0.9993
56	4,6-Dinitro-2-methylphenol	-0.03862	0.27131	0.9947*
63	Pentachlorophenol	-0.02122	0.26483	0.9996
79	Di-n-octylphthalate	-0.14137	1.67793	0.9989

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

IDX	Parameter	x0	x1	x2	CCF2
47	2,4-Dinitrophenol	-0.02943	0.13091	0.01765	0.9991
56	4,6-Dinitro-2-methylphenol	-0.03158	0.21844	0.01861	0.9998

CMP 1/25/07

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :T041 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :01/23/07 18:27 Ending DateTime :01/23/07 21:46
IC File :RAH054 HPChem Method :SV41A23

WATER Init. Vol. (ml) : 1000 Final Vol. (ml) : 1
SOIL Init. Weight (gm) : 30 Final Vol. (ml) : 1

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R_FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-Nitrosodimethylamine	5	5	.1667	RAH050
3	Pyridine	5	5	.1667	RAH050
4	2-Fluorophenol	5	5	.1667	RAH050
5	Phenol	5	5	.1667	RAH050
6	Aniline	5	5	.1667	RAH050
7	Bis(2-chloroethyl)ether	5	5	.1667	RAH050
8	Phenol-d5	5	5	.1667	RAH050
9	2-Chlorophenol	5	5	.1667	RAH050
10	1,3-Dichlorobenzene	5	5	.1667	RAH050
11	1,4-Dichlorobenzene	5	5	.1667	RAH050
12	Benzyl alcohol	5	5	.1667	RAH050
13	1,2-Dichlorobenzene-d4	5	5	.1667	RAH050
14	1,2-Dichlorobenzene	5	5	.1667	RAH050
15	2-Methylphenol	5	5	.1667	RAH050
16	Bis(2-chloroisopropyl)ether	5	5	.1667	RAH050
17	4-Methylphenol	5	5	.1667	RAH050
18	N-Nitroso-di-n-propylamine	5	5	.1667	RAH050
19	Hexachloroethane	5	5	.1667	RAH050
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	5	5	.1667	RAH050
22	Nitrobenzene	5	5	.1667	RAH050
23	Isophorone	5	5	.1667	RAH050
24	2-Nitrophenol	5	5	.1667	RAH050
25	2,4-Dimethylphenol	5	5	.1667	RAH050
26	bis(2-Chloroethoxy)methane	5	5	.1667	RAH050
27	Benzoic Acid	5	5	.1667	RAH050
28	2,4-Dichlorophenol	5	5	.1667	RAH050
29	1,2,4-Trichlorobenzene	5	5	.1667	RAH050
30	Naphthalene	5	5	.1667	RAH050
31	4-Chloroaniline	5	5	.1667	RAH050
32	Hexachlorobutadiene	5	5	.1667	RAH050
33	4-Chloro-3-methylphenol	5	5	.1667	RAH050
34	2-Methylnaphthalene	5	5	.1667	RAH050
35	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
36	Hexachlorocyclopentadiene	5	5	.1667	RAH050
37	2,4,6-Trichlorophenol	5	5	.1667	RAH050
38	2,4,5-Trichlorophenol	5	5	.1667	RAH050
39	2-Fluorobiphenyl	5	5	.1667	RAH050
40	2-Chloronaphthalene	5	5	.1667	RAH050
41	2-Nitroaniline	5	5	.1667	RAH050
42	Dimethylphthalate	5	5	.1667	RAH050
43	2,6-Dinitrotoluene	5	5	.1667	RAH050
44	Acenaphthylene	5	5	.1667	RAH050
45	3-Nitroaniline	5	5	.1667	RAH050
46	Acenaphthene	5	5	.1667	RAH050
47	2,4-Dinitrophenol	5	5	.1667	RAH050
48	4-Nitrophenol	5	5	.1667	RAH050
49	Dibenzofuran	5	5	.1667	RAH050
50	2,4-Dinitrotoluene	5	5	.1667	RAH050
51	2,3,4,6-Tetrachlorophenol	5	5	.1667	RAH050
52	Diethylphthalate	5	5	.1667	RAH050
53	Fluorene	5	5	.1667	RAH050
54	4-Chlorophenyl-phenylether	5	5	.1667	RAH050
55	4-Nitroaniline	5	5	.1667	RAH050
56	4,6-Dinitro-2-methylphenol	5	5	.1667	RAH050
57	N-Nitrosodiphenylamine	5	5	.1667	RAH050
58	Azobenzene	5	5	.1667	RAH050
59	2,4,6-Tribromophenol	5	5	.1667	RAH050
60	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
61	4-Bromophenyl-phenylether	5	5	.1667	RAH050
62	Hexachlorobenzene	5	5	.1667	RAH050
63	Pentachlorophenol	5	5	.1667	RAH050
64	Phenanthrene	5	5	.1667	RAH050
65	Anthracene	5	5	.1667	RAH050
66	Carbazole	5	5	.1667	RAH050
67	Di-n-butylphthalate	5	5	.1667	RAH050
68	Fluoranthene	5	5	.1667	RAH050
69	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
70	Benzidine	NA	NA	NA	NA
71	Pyrene	5	5	.1667	RAH050
72	Terphenyl-d14	5	5	.1667	RAH050
73	Butylbenzylphthalate	5	5	.1667	RAH050
74	3,3'-Dichlorobenzidine	5	5	.1667	RAH050
75	Benzo(a)anthracene	5	5	.1667	RAH050
76	Chrysene	5	5	.1667	RAH050
77	bis(2-Ethylhexyl)phthalate	5	5	.1667	RAH050
78	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
79	Di-n-octylphthalate	5	5	.1667	RAH050
80	Benzo(b)fluoranthene	5	5	.1667	RAH050
81	Benzo(k)fluoranthene	5	5	.1667	RAH050
82	Benzo(a)pyrene	5	5	.1667	RAH050
83	Indeno(1,2,3-cd)pyrene	5	5	.1667	RAH050
84	Dibenzo(a,h)anthracene	5	5	.1667	RAH050
85	Benzo(g,h,i)perylene	5	5	.1667	RAH050

DMD
1/26/07

PROGRAM: ICALMAX

Input: RAH054.ICL Output: RAH054.MAX

IDX	Parameter	x0	x1	x2	CCF2	MaxMinAmtRatio	MaxMinRespRatio	MaxMinRRF	MaxMinConc
47	2,4-Dinitrophenol	-0.02943	0.13091	0.01765	0.9991	-3.70850	-0.27217	0.07339	-148.3
56	4,6-Dinitro-2-methylphenol	-0.03158	0.21844	0.01861	0.9998	-5.86889	-0.67258	0.11460	-234.8

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T041
IC_Beginning DateTime :01/23/07 18:27
Spike Amount :50 PPM
CC/CV File :RAH059
IC File :RAH054

Column Spec :ZB-5MS ID :0.18MM
IC_Ending DateTime :01/23/07 21:46
HPChem Method :SV41A23
Date_Time :01/23/07 22:11

M IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,4-Dichlorobenzene-d4	40.000	0	318576	1	1	3.947	3.947	0				
2	N-Nitrosodimethylamine	49.064	-1.9	330833	0.831	0.847	1.983	1.994	2.58				
3	Pyridine	48.834	-2.3	544915	1.368	1.401	1.973	2.004	1.29				
4	2-Fluorophenol												
5	Phenol	50.049	0.1	664706	1.669	1.668	3.562	3.574	3.49				
6	Aniline	44.682	-10.6	562333	1.412	1.580	3.623	3.617	10.10				
7	Bis(2-chloroethyl)ether	51.493	3.0	681867	1.712	1.663	3.663	3.667	13.95				
8	Phenol-d5												
9	2-Chlorophenol	48.510	-3.0	496460	1.247	1.285	3.724	3.735	2.69				
10	1,3-Dichlorobenzene	49.492	-1.0	552727	1.388	1.402	3.886	3.886	4.05				
11	1,4-Dichlorobenzene	51.491	3.0	541557	1.360	1.321	3.957	3.961	3.87				
12	Benzyl alcohol	51.888	3.8	357023	0.897	0.864	4.088	4.095	4.44				
13	1,2-Dichlorobenzene-d4												
14	1,2-Dichlorobenzene	52.078	4.2	536011	1.346	1.292	4.119	4.121	4.23				
15	2-Methylphenol	51.211	2.4	416110	1.045	1.020	4.190	4.196	2.38				
16	Bis(2-chloroisopropyl)ether	50.462	0.9	1222756	3.071	3.042	4.240	4.237	2.97				
17	4-Methylphenol	50.933	1.9	593950	1.492	1.464	4.382	4.381	3.49				
18	N-Nitroso-di-n-propylamine	52.222	4.4	455892	1.145	1.096	4.402	4.408	2.74				
19	Hexachloroethane	50.807	1.6	216685	0.544	0.535	4.493	4.491	2.60				
20	Naphthalene-d8	40.000	0	1210130	1	1	5.425	5.426	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	49.438	-1.1	555214	0.367	0.371	4.574	4.584	1.76				
23	Isophorone	48.749	-2.5	1015757	0.672	0.689	4.868	4.887	1.66				
24	2-Nitrophenol	46.553	-6.9	279593	0.185	0.180	4.949	4.953	19.17	-0.0171	0.2132		0.9986
25	2,4-Dimethylphenol	50.005	0.0	479315	0.317	0.317	4.999	5.011	5.78				
26	bis(2-Chloroethoxy)methane	49.936	-0.1	698090	0.461	0.462	5.131	5.139	2.01				
27	Benzoic Acid	46.343	-7.3	238667	0.158	0.138	5.222	5.214	44.32	-0.0301	0.1962		0.9954
28	2,4-Dichlorophenol	49.704	-0.6	470540	0.311	0.313	5.242	5.248	3.71				
29	1,2,4-Trichlorobenzene	49.152	-1.7	507120	0.335	0.341	5.354	5.352	3.09				
30	Naphthalene	49.031	-1.9	1413306	0.934	0.953	5.455	5.455	5.19				
31	4-Chloroaniline	49.183	-1.6	663801	0.439	0.446	5.526	5.531	1.86				
32	Hexachlorobutadiene	49.137	-1.7	319357	0.211	0.215	5.607	5.608	4.76				
33	4-Chloro-3-methylphenol	47.621	-4.8	471862	0.312	0.328	6.143	6.146	4.19				
34	2-Methylnaphthalene	47.564	-4.9	1000451	0.661	0.695	6.326	6.330	4.37				
35	Acenaphthene-d10	40.000	0	789043	1	1	7.692	7.696	0				
36	Hexachlorocyclopentadiene	48.226	-3.5	207520	0.210	0.200	6.518	6.521	20.69	-0.0166	0.2319		0.9986
37	2,4,6-Trichlorophenol	45.840	-8.3	352234	0.357	0.390	6.690	6.689	10.09				
38	2,4,5-Trichlorophenol	54.794	9.6	403559	0.409	0.373	6.720	6.729	5.08				
39	2-Fluorobiphenyl												
40	2-Chloronaphthalene	49.782	-0.4	990494	1.004	1.009	6.953	6.953	3.08				
41	2-Nitroaniline	51.837	3.7	390435	0.396	0.382	7.105	7.105	13.06				
42	Dimethylphthalate	49.272	-1.5	1259528	1.277	1.296	7.378	7.381	1.65				
43	2,6-Dinitrotoluene	49.785	-0.4	295780	0.300	0.277	7.449	7.458	17.85	-0.0218	0.3187		0.9995
44	Acenaphthylene	50.655	1.3	1528547	1.550	1.530	7.500	7.503	2.61				
45	3-Nitroaniline	52.381	4.8	302788	0.307	0.293	7.672	7.676	10.07				
46	Acenaphthene	48.676	-2.6	939145	0.952	0.978	7.743	7.748	6.25				
47	2,4-Dinitrophenol	50.079	0.2	127931	0.130	0.114	7.813	7.816	57.72	-0.0294	0.1309	0.0177	0.9991
48	4-Nitrophenol	44.926	-10.1	138524	0.140	0.141	7.915	7.921	21.78	-0.0150	0.1697		0.9977
49	Dibenzofuran	48.720	-2.6	1484811	1.505	1.545	7.985	7.985	5.24				
50	2,4-Dinitrotoluene	49.657	-0.7	396952	0.402	0.370	7.996	8.002	18.20	-0.0317	0.4308		0.9993
51	2,3,4,6-Tetrachlorophenol	52.123	4.2	271370	0.275	0.264	8.158	8.156	14.56				
52	Diethylphthalate	48.832	-2.3	1223581	1.241	1.270	8.360	8.368	3.76				
53	Fluorene	50.521	1.0	1200219	1.217	1.204	8.461	8.464	5.00				
54	4-Chlorophenyl-phenylether	50.878	1.8	676214	0.686	0.674	8.481	8.484	7.78				
55	4-Nitroaniline	48.059	-3.9	279779	0.284	0.295	8.542	8.554	7.49				
56	4,6-Dinitro-2-methylphenol	50.273	0.5	214902	0.218	0.197	8.573	8.580	37.96	-0.0316	0.2184	0.0186	0.9998
57	N-Nitrosodiphenylamine	50.203	0.4	862073	0.874	0.871	8.664	8.668	4.52				
58	Azobenzene	51.406	2.8	1445056	1.465	1.425	8.704	8.710	2.71				
59	2,4,6-Tribromophenol												
60	Phenanthrene-d10	40.000	0	1249921	1	1	9.787	9.793	0				
61	4-Bromophenyl-phenylether	50.971	1.9	449753	0.288	0.282	9.170	9.179	2.27				
62	Hexachlorobenzene	50.407	0.8	543558	0.348	0.345	9.231	9.232	4.35				
63	Pentachlorophenol	48.422	-3.2	374193	0.239	0.224	9.514	9.522	21.19	-0.0212	0.2648		0.9996
64	Phenanthrene	50.203	0.4	1725460	1.104	1.100	9.828	9.832	5.86				
65	Anthracene	49.848	-0.3	1656244	1.060	1.063	9.899	9.905	6.15				
66	Carbazole	47.683	-4.6	1362165	0.872	0.914	10.142	10.146	9.93				
67	Di-n-butylphthalate	50.780	1.6	2140769	1.370	1.349	10.698	10.703	3.60				
68	Fluoranthene	49.647	-0.7	1706539	1.092	1.100	11.468	11.475	3.65				
69	Chrysene-d12	40.000	0	1081072	1	1	13.168	13.176	0				
70	Benzidine												
71	Pyrene	51.531	3.1	1739391	1.287	1.249	11.721	11.719	2.08				
72	Terphenyl-d14												
73	Butylbenzylphthalate	50.589	1.2	783870	0.580	0.573	12.510	12.515	9.77				
74	3,3'-Dichlorobenzidine	51.072	2.1	468203	0.346	0.339	13.148	13.155	8.72				
75	Benzo(a)anthracene	49.570	-0.9	1478715	1.094	1.104	13.158	13.155	2.96				
76	Chrysene	45.325	-9.3	1343895	0.994	1.097	13.209	13.212	3.52				
77	bis(2-Ethylhexyl)phthalate	52.418	4.8	1075776	0.796	0.759	13.249	13.257	12.14				
78	Perylene-d12	40.000	0	907224	1	1	14.869	14.870	0				
79	Di-n-octylphthalate	48.935	-2.1	1734044	1.529	1.406	14.079	14.083	20.83	-0.1414	1.6779		0.9989
80	Benzo(b)fluoranthene	47.161	-5.7	1336913	1.179	1.250	14.464	14.463	13.23				
81	Benzo(k)fluoranthene	52.842	5.7	1420556	1.253	1.185	14.494	14.496	12.16				
82	Benzo(a)pyrene	47.311	-5.4	1246374	1.099	1.162	14.808	14.813	1.99				
83	Indeno(1,2,3-cd)pyrene	48.600	-2.8	1248842	1.101	1.133	16.013	16.021	6.17				
84	Dibenzo(a,h)anthracene	49.207	-1.6	1034314	0.912	0.927	16.033	16.045	7.61				
85	Benzo(g,h,i)perylene	46.862	-6.3	974252	0.859	0.917	16.326	16.331	4.56				

3817 1/24/07

DAILY CALIBRATIONS

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXI
Lab File ID: RAH100
Instrument ID: T-041

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A138
DFTPP Injection Date: 01/25/07
DFTPP Injection Time: 13:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.23
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	56.22
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	40.93
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.59
275	10.0 - 30.0% of mass 198	25.72
365	Greater than 1.00% of mass 198	2.90
441	Present, but less than mass 443	14.45
442	Greater than 40.0% of mass 198	83.66
443	17.0 - 23.0% of mass 442	16.93(20.2)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD050	CSV41A2303	RAH101	01/25/07	14:12
2	MBLK1W	SVA024WB	RAH117	01/25/07	21:16
3	LCS1W	SVA024WL	RAH118	01/25/07	21:41
4	LCD1W	SVA024WC	RAH119	01/25/07	22:06
5	133-5-3-WW(1/18/2007)	A138-01	RAH126	01/26/07	00:59

FORM V SV OLM02.0

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH054
Instrument ID: T-041

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A138
Date Analyzed: 01/23/07
Time Analyzed: 20:07

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	328424	3.95	1222259	5.42	824339	7.69
	UPPER LIMIT	656848	4.45	2444518	5.92	1648678	8.19
	LOWER LIMIT	164212	3.45	611130	4.92	412170	7.19
	SAMPLE ID						
1	SSTD050	322877	3.95	1139332	5.43	726026	7.70
2	MBLK1W	322094	3.95	1191431	5.42	756046	7.70
3	LCS1W	323604	3.95	1171122	5.43	747157	7.71
4	LCD1W	322292	3.95	1170298	5.43	738931	7.71
5	133-5-3-WW(1/18/2007)	289332	3.95	1030531	5.42	658267	7.69

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

FORM VIII SV-1 OLM02.0

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH054
Instrument ID: T-041

Project: ALAMEDA POINT, CTO 133
SDG No.: 07A138
Date Analyzed: 01/23/07
Time Analyzed: 20:07

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	1333756	9.79	1174435	13.18	994566	14.87
	UPPER LIMIT	2667512	10.29	2348870	13.68	1989132	15.37
	LOWER LIMIT	666878	9.29	587218	12.68	497283	14.37
	SAMPLE ID						
1	SSTD050	1120464	9.79	1096151	13.17	906836	14.87
2	MBLK1W	1183364	9.79	1026741	13.16	905828	14.86
3	LCS1W	1092573	9.79	926366	13.18	797501	14.87
4	LCD1W	1146334	9.80	950074	13.17	784890	14.87
5	133-5-3-WW(1/18/2007)	981827	9.79	853556	13.17	713164	14.87

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A25\RAH101.D Vial: 3
Acq On : 25 Jan 2007 14:12 Operator: SG
Sample : CSV41A2303 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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-Dichlorobenzene-d4	40.000	40.000	0.0	98	0.00
2	T	N-Nitrosodimethylamine	50.000	51.585	-3.2	104	0.01
3	T	Pyridine	50.000	52.416	-4.8	103	-0.03
4	S	2-Fluorophenol	50.000	50.416	-0.8	98	0.00
5	C	Phenol	50.000	50.836	-1.7	96	0.00
6	T	Aniline	50.000	43.336	13.3	95	0.00
7	T	Bis(2-chloroethyl)ether	50.000	53.302	-6.6	101	0.00
8	S	Phenol-d5	50.000	51.407	-2.8	99	0.01
9	T	2-Chlorophenol	50.000	50.049	-0.1	98	0.01
10	T	1,3-Dichlorobenzene	50.000	52.821	-5.6	100	0.01
11	C	1,4-Dichlorobenzene	50.000	49.344	1.3	98	0.01
12	T	Benzyl alcohol	50.000	48.702	2.6	93	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	50.678	-1.4	101	0.00
14	T	1,2-Dichlorobenzene	50.000	51.543	-3.1	100	0.00
15	T	2-Methylphenol	50.000	48.954	2.1	92	0.01
16	T	Bis(2-chloroisopropyl)ether	50.000	48.681	2.6	94	0.00
17	T	4-Methylphenol	50.000	48.759	2.5	93	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	46.473	7.1	89	0.00
19	T	Hexachloroethane	50.000	51.950	-3.9	100	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	93	0.00
21	S	Nitrobenzene-d5	50.000	53.501	-7.0	96	0.00
22	T	Nitrobenzene	50.000	51.863	-3.7	94	0.00
23	T	Isophorone	50.000	49.271	1.5	89	0.00
24	C	2-Nitrophenol	50.000	49.811	0.4	97	0.00
25	T	2,4-Dimethylphenol	50.000	52.156	-4.3	91	0.00
26	T	bis(2-Chloroethoxy)methane	50.000	49.598	0.8	91	0.00
27	T	Benzoic Acid	50.000	44.811	10.4	86	0.00
28	C	2,4-Dichlorophenol	50.000	51.390	-2.8	93	0.00
29	T	1,2,4-Trichlorobenzene	50.000	51.493	-3.0	96	0.00
30	T	Naphthalene	50.000	51.079	-2.2	95	0.00
31	T	4-Chloroaniline	50.000	49.415	1.2	91	0.00
32	C	Hexachlorobutadiene	50.000	50.805	-1.6	94	0.00
33	C	4-Chloro-3-methylphenol	50.000	48.721	2.6	89	0.00
34	T	2-Methylnaphthalene	50.000	48.408	3.2	90	0.00
35	I	Acenaphthene-d10	40.000	40.000	0.0	88	0.00
36	P	Hexachlorocyclopentadiene	50.000	55.530	-11.1	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A25\RAH101.D
Acq On : 25 Jan 2007 14:12
Sample : CSV41A2303
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: SG
Inst : TO41
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
37	C	2,4,6-Trichlorophenol	50.000	54.382	-8.8	87	0.00
38	T	2,4,5-Trichlorophenol	50.000	50.490	-1.0	90	0.00
39	S	2-Fluorobiphenyl	50.000	50.532	-1.1	87	0.00
40	T	2-Chloronaphthalene	50.000	51.161	-2.3	90	0.00
41	T	2-Nitroaniline	50.000	52.848	-5.7	89	0.00
42	T	Dimethylphthalate	50.000	47.262	5.5	82	0.00
43	T	2,6-Dinitrotoluene	50.000	49.638	0.7	84	0.00
44	T	Acenaphthylene	50.000	50.658	-1.3	88	0.00
45	T	3-Nitroaniline	50.000	50.296	-0.6	86	0.00
46	C	Acenaphthene	50.000	50.196	-0.4	89	0.00
47	P	2,4-Dinitrophenol	50.000	51.695	-3.4	98	0.00
48	P	4-Nitrophenol	50.000	44.433	11.1	83	0.00
49	T	Dibenzofuran	50.000	49.500	1.0	86	0.00
50	T	2,4-Dinitrotoluene	50.000	50.087	-0.2	90	0.00
51	T	2,3,4,6-Tetrachlorophenol	50.000	51.951	-3.9	84	0.00
52	T	Diethylphthalate	50.000	48.106	3.8	83	0.00
53	T	Fluorene	50.000	50.069	-0.1	87	0.00
54	T	4-Chlorophenyl-phenylether	50.000	50.345	-0.7	88	0.00
55	T	4-Nitroaniline	50.000	49.579	0.8	88	0.00
56	T	4,6-Dinitro-2-methylphenol	50.000	54.249	-8.5	97	0.00
57	C	N-Nitrosodiphenylamine	50.000	49.124	1.8	85	0.00
58	T	Azobenzene	50.000	50.399	-0.8	85	0.00
59	S	2,4,6-Tribromophenol	50.000	53.018	-6.0	87	0.00
60	I	Phenanthrene-d10	40.000	40.000	0.0	84	0.00
61	T	4-Bromophenyl-phenylether	50.000	52.194	-4.4	86	0.00
62	T	Hexachlorobenzene	50.000	50.517	-1.0	85	0.00
63	C	Pentachlorophenol	50.000	50.647	-1.3	85	0.02
64	T	Phenanthrene	50.000	52.206	-4.4	87	0.00
65	T	Anthracene	50.000	52.092	-4.2	87	0.00
66	T	Carbazole	50.000	49.686	0.6	89	0.00
67	T	Di-n-butylphthalate	50.000	50.361	-0.7	82	0.00
68	C	Fluoranthene	50.000	51.805	-3.6	85	0.00
69	I	Chrysene-d12	40.000	40.000	0.0	93	0.00
70	T	Benzidine	-1.000	0.000	0.0	0	0.00
71	T	Pyrene	50.000	48.989	2.0	91	0.00
72	S	Terphenyl-d14	50.000	47.548	4.9	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A25\RAH101.D Vial: 3
Acq On : 25 Jan 2007 14:12 Operator: SG
Sample : CSV41A2303 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
73	T	Butylbenzylphthalate	50.000	48.610	2.8	87	0.00
74	T	3,3'-Dichlorobenzidine	50.000	47.525	5.0	90	0.00
75	T	Benzo(a)anthracene	50.000	48.422	3.2	91	0.00
76	T	Chrysene	50.000	48.873	2.3	92	0.00
77	T	bis(2-Ethylhexyl)phthalate	50.000	51.427	-2.9	88	0.00
78	I	Perylene-d12	40.000	40.000	0.0	91	0.00
79	C	Di-n-octylphthalate	50.000	48.701	2.6	93	0.00
80	T	Benzo(b)fluoranthene	50.000	59.598	-19.2	96	0.00
81	T	Benzo(k)fluoranthene	50.000	46.996	6.0	94	0.00
82	C	Benzo(a)pyrene	50.000	52.199	-4.4	96	0.00
83	T	Indeno(1,2,3-cd)pyrene	50.000	54.736	-9.5	93	0.00
84	T	Dibenzo(a,h)anthracene	50.000	56.031	-12.1	95	0.00
85	T	Benzo(g,h,i)perylene	50.000	54.806	-9.6	95	0.00

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A25\RAH101.D Vial: 3
Acq On : 25 Jan 2007 14:12 Operator: SG
Sample : CSV41A2303 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
2	T	N-Nitrosodimethylamine	0.847	0.873	-3.1	104	0.01
3	T	Pyridine	1.401	1.469	-4.9	103	-0.03
4	S	2-Fluorophenol	1.109	1.118	-0.8	98	0.00
5	C	Phenol	1.668	1.695	-1.6	96	0.00
6	T	Aniline	1.580	1.370	13.3	95	0.00
7	T	Bis(2-chloroethyl)ether	1.663	1.772	-6.6	101	0.00
8	S	Phenol-d5	1.455	1.496	-2.8	99	0.01
9	T	2-Chlorophenol	1.285	1.286	-0.1	98	0.01
10	T	1,3-Dichlorobenzene	1.402	1.481	-5.6	100	0.01
11	C	1,4-Dichlorobenzene	1.321	1.303	1.4	98	0.01
12	T	Benzyl alcohol	0.864	0.841	2.7	93	0.00
13	S	1,2-Dichlorobenzene-d4	0.883	0.895	-1.4	101	0.00
14	T	1,2-Dichlorobenzene	1.292	1.332	-3.1	100	0.00
15	T	2-Methylphenol	1.020	0.999	2.1	92	0.01
16	T	Bis(2-chloroisopropyl)ether	3.042	2.962	2.6	94	0.00
17	T	4-Methylphenol	1.464	1.428	2.5	93	0.00
18	P	N-Nitroso-di-n-propylamine	1.096	1.019	7.0	89	0.00
19	T	Hexachloroethane	0.535	0.556	-3.9	100	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	93	0.00
21	S	Nitrobenzene-d5	0.354	0.379	-7.1	96	0.00
22	T	Nitrobenzene	0.371	0.385	-3.8	94	0.00
23	T	Isophorone	0.689	0.679	1.5	89	0.00
24	C	2-Nitrophenol	0.180	0.199	-10.6	97	0.00
25	T	2,4-Dimethylphenol	0.317	0.330	-4.1	91	0.00
26	T	bis(2-Chloroethoxy)methane	0.462	0.458	0.9	91	0.00
27	T	Benzoic Acid	0.138	0.152	-10.1	86	0.00
28	C	2,4-Dichlorophenol	0.313	0.322	-2.9	93	0.00
29	T	1,2,4-Trichlorobenzene	0.341	0.351	-2.9	96	0.00
30	T	Naphthalene	0.953	0.973	-2.1	95	0.00
31	T	4-Chloroaniline	0.446	0.441	1.1	91	0.00
32	C	Hexachlorobutadiene	0.215	0.218	-1.4	94	0.00
33	C	4-Chloro-3-methylphenol	0.328	0.319	2.7	89	0.00
34	T	2-Methylnaphthalene	0.695	0.673	3.2	90	0.00
35	I	Acenaphthene-d10	1.000	1.000	0.0	88	0.00
36	P	Hexachlorocyclopentadiene	0.200	0.244	-22.0#	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A25\RAH101.D
Acq On : 25 Jan 2007 14:12
Sample : CSV41A2303
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: SG
Inst : TO41
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
37	C	2,4,6-Trichlorophenol	0.390	0.424	-8.7	87	0.00
38	T	2,4,5-Trichlorophenol	0.373	0.377	-1.1	90	0.00
39	S	2-Fluorobiphenyl	1.181	1.193	-1.0	87	0.00
40	T	2-Chloronaphthalene	1.009	1.032	-2.3	90	0.00
41	T	2-Nitroaniline	0.382	0.404	-5.8	89	0.00
42	T	Dimethylphthalate	1.296	1.225	5.5	82	0.00
43	T	2,6-Dinitrotoluene	0.277	0.299	-7.9	84	0.00
44	T	Acenaphthylene	1.530	1.550	-1.3	88	0.00
45	T	3-Nitroaniline	0.293	0.295	-0.7	86	0.00
46	C	Acenaphthene	0.978	0.982	-0.4	89	0.00
47	P	2,4-Dinitrophenol	0.114	0.135	-18.4	98	0.00
48	P	4-Nitrophenol	0.141	0.139	1.4	83	0.00
49	T	Dibenzofuran	1.545	1.530	1.0	86	0.00
50	T	2,4-Dinitrotoluene	0.370	0.406	-9.7	90	0.00
51	T	2,3,4,6-Tetrachlorophenol	0.264	0.274	-3.8	84	0.00
52	T	Diethylphthalate	1.270	1.222	3.8	83	0.00
53	T	Fluorene	1.204	1.206	-0.2	87	0.00
54	T	4-Chlorophenyl-phenylether	0.674	0.678	-0.6	88	0.00
55	T	4-Nitroaniline	0.295	0.293	0.7	88	0.00
56	T	4,6-Dinitro-2-methylphenol	0.197	0.239	-21.3#	97	0.00
57	C	N-Nitrosodiphenylamine	0.871	0.855	1.8	85	0.00
58	T	Azobenzene	1.425	1.436	-0.8	85	0.00
59	S	2,4,6-Tribromophenol	0.261	0.277	-6.1	87	0.00
60	I	Phenanthrene-d10	1.000	1.000	0.0	84	0.00
61	T	4-Bromophenyl-phenylether	0.282	0.295	-4.6	86	0.00
62	T	Hexachlorobenzene	0.345	0.349	-1.2	85	0.00
63	C	Pentachlorophenol	0.224	0.251	-12.1	85	0.02
64	T	Phenanthrene	1.100	1.148	-4.4	87	0.00
65	T	Anthracene	1.063	1.108	-4.2	87	0.00
66	T	Carbazole	0.914	0.908	0.7	89	0.00
67	T	Di-n-butylphthalate	1.349	1.359	-0.7	82	0.00
68	C	Fluoranthene	1.100	1.140	-3.6	85	0.00
69	I	Chrysene-d12	1.000	1.000	0.0	93	0.00
70	T	Benzidine	0.000	0.000#	0.0	0#	0.00
71	T	Pyrene	1.249	1.224	2.0	91	0.00
72	S	Terphenyl-d14	0.976	0.928	4.9	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A25\RAH101.D Vial: 3
Acq On : 25 Jan 2007 14:12 Operator: SG
Sample : CSV41A2303 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
73	T	Butylbenzylphthalate	0.573	0.557	2.8	87	0.00
74	T	3,3'-Dichlorobenzidine	0.339	0.322	5.0	90	0.00
75	T	Benzo(a)anthracene	1.104	1.069	3.2	91	0.00
76	T	Chrysene	1.097	1.072	2.3	92	0.00
77	T	bis(2-Ethylhexyl)phthalate	0.759	0.781	-2.9	88	0.00
78	I	Perylene-d12	1.000	1.000	0.0	91	0.00
79	C	Di-n-octylphthalate	1.406	1.521	-8.2	93	0.00
80	T	Benzo(b)fluoranthene	1.250	1.490	-19.2	96	0.00
81	T	Benzo(k)fluoranthene	1.185	1.114	6.0	94	0.00
82	C	Benzo(a)pyrene	1.162	1.213	-4.4	96	0.00
83	T	Indeno(1,2,3-cd)pyrene	1.133	1.240	-9.4	93	0.00
84	T	Dibenzo(a,h)anthracene	0.927	1.039	-12.1	95	0.00
85	T	Benzo(g,h,i)perylene	0.917	1.005	-9.6	95	0.00

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

ANALYTICAL LOG

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 2 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A41-014

Method File: SV41A23 Tune File: DFTPP Start Date/Time: 1/23/07 17:10 End Date/Time: 1/24/07 1:54

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RAH 048	IB41A23 01				
	049	DFT41A2301				
NA	050	SV 41A23 1	NA			5ppm, 8270c
	051	2				10ppm
	052	3				20ppm
	053	4				40ppm
	054	5				50ppm
	055	6				80ppm
	056	7				100ppm
	057	8				120ppm
	058	9				160ppm
	059	ISV41A231				2nd Source-50ppm
	060	SS2C-05-3-3				50ppm
NA	061	SV41A23A 1	NA			5 ppm, benzidine
	062	2				10ppm
	063	3				50ppm
	064	4				100ppm
	065	5				120ppm
	066	6				160ppm
	067	ISV41A23A 1				2nd Source-50ppm
	068	ISV41A23A 2				are Recd.

SA 1/23/07

Instrument No:	41

INITIAL CALIBRATION REFERENCE

Date	1/23/07
ICAL ID	SV41A23 - SV41A23A (8270) - (benzidine)

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-2-3	50
DCC	SS2C-05-4-1	50
INT. STD.	SS2B-05-4-1	2000
ICV	SS2C-05-3-1	50

Solvent	ID
CH_2Cl_2	46110

DATA FILE	07A23

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T041	

Comments:
benzidine, DCC (SS2C-05-2-1) 50 ppm
benzidine, ICV (SS2C-05-2-2) 50 ppm

Analyzed By: SC
Date Disposed: NA
Disposed by: NA

This page is checked during data review.

ANALYTICAL BATCH SV41A235

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

3029

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 2 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A41- 014

Method File: SV41A23 Tune File: DFTPP Start Date/Time: 1/25/07 13:56 End Date/Time: 1/26/07 1:23

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RAH 099	IB41A2303				
	100	DFT41A2303				
	101	CSV41A2303				
	102	CSV41A23A03				benzidine
	103	10 ppm, DCC, 8270				(SS2C-05-2-3)
	104	10 ppm, DCC, benzidine				
SVA 010W	105	Mdl venf. -01	NA		X	3520C - 5 ppm
	106	-02				3520C - 10 ppm
	107	-03				3520C * 20 ppm
	108	-04				3520C * 40 ppm
SVA 012S	109	Mdl verif - 07	NA	X		3550B - 5 ppm / * 20 ppm
	110	-08				3550B - 10 ppm / * 40 ppm
SVA017W	111	SVA 017 WB	NA		X	
	112	WL				
	113	WC				
	114	07A088-01				
	115	-03				
	116	07A074-01				
SVA024W	117	SVA024WB	NA		X	
	118	WL				
	119	WC				
	120	07A112-04				
	121	07A128-02				
	122	-03				
	123	-04				
	124	-05				
	125	-06				
	126	07A138-01				
	127	13 lank				
					Su	1/25/07

ANALYTICAL BATCH CSV41A2303

Instrument No:	41

INITIAL CALIBRATION REFERENCE

Date	1/23/07
ICAL ID	SV41A23 - SV 41A23A 8270 - benzidine

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-2-3	50
DCC	SS2C-05-4-1	50
INT. STD.	SS2B-05-4-1	2000
benzidine	SS2C-05-2-1	50

Solvent	ID
CH_2Cl_2	46110

DATA FILE	07A25

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T041	

Comments:

8270 DCC (10/20 ppm) (SS2C-05-2-3)

* conc. for benzidine/benzoic acid/pyridine

Analyzed By: Su

Date Disposed: 1/26/07

Disposed by: Su

This page is checked during data review.

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

3333

EXTRACTION LOG

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR SEMIVOLATILES

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 2 ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-034

Matrix: WATER Init.Start Date/Time: 1/22/07 13:00 End Date/Time: 1/23/07 7:00 Final Start Date/Time: 1/23/07 15:00 End Date/Time: 1/24/07 9:00

PREPARATION BATCH: *SVA024W

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVA024 -WB	N/A	1000	-	1		
*02	-WL		1000	-	1		
*03	-WC		1000	-	1		
*04	07A112 - -04		1000	6	1		
*05	07A115 -02		1060	7	1		
*06	-03		1050	7	1		
*07	-04		1060	7	1		
*08	-04M		1060	7	1		
*09	-04S		1060	7	1		
*10	-05		1060	7	1		
*11	-06		1060	7	1		orange solb
*12	-07		1060	7	1		
*13	07A121 -06		1030	7	1		
*14	-07		1030	6	1		
*15	07A128 -02		1060	7	1		
*16	-03		1060	7	1		w/black sediment
*17	-04		1060	7	1		
*18	-05		1060	7	1		
*19	-06		1060	7	1		
*20	07A138 -01		1060	6	1		
*21							
*22							
*23							
*24						YK	1/22/07
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SS2A-04-165	1.0
LCS/MS	SS2A-04-177	0.4

Reagent	Lot# / ID
CH_2Cl_2	46331
Na_2SO_4	46080619
H_2SO_4	46023
NaOH	SPIB-01-387
Silica Sand	—

TUNING

Sonicator #	Reading
	N/A

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3	35	35
4	35	35
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JM/JC Witnessed By: JC

Standard Added By: JM

Checked By: ML

Extract Received by: SL 1/24/07 Location: SE03-12

Disposed by: Disposed on:

Clean-up Legend: [G]=GPC [A]=Acid [F]=Florisil [S]=Silica

LABORATORY REPORT FOR

SHAW E&I

ALAMEDA POINT, CTO 133

METHOD 1664
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

SDG#: 07A138

5000

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07A138

METHOD EPA 1664
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

One (1) water sample was received on 01/19/07 for Total Recoverable Petroleum Hydrocarbons analysis by Method EPA 1664 and SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Matrix Spike/Matrix Spike Duplicate**

   MS/MSD sample was not designated in this SDG.

5. **Sample Analysis**

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

METHOD 1664 STG-HEM
OIL & GREASE

Client : SHAW E&I
Project : ALAMEDA POINT, CTO 133
Batch No. : 07A138

Matrix : WATER
Instrument ID : I40706360

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	OGA010WB	ND	1	NA	5.00	1.40	01/22/0711:38	01/19/0714:43	OGA010-01	NA	OGA010W	NA	01/19/07
LCS1W	OGA010WL	17.5	1	NA	5.00	1.40	01/22/0711:39	01/19/0714:43	OGA010-02	NA	OGA010W	NA	01/19/07
LCD1W	OGA010WC	18.1	1	NA	5.00	1.40	01/22/0711:39	01/19/0714:43	OGA010-03	NA	OGA010W	NA	01/19/07
133-5-3-WW(1/18/2007)	A138-01	ND	1	NA	5.00	1.40	01/22/0711:43	01/19/0714:43	OGA010-04	NA	OGA010W	01/18/07	01/19/07

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
METHOD: METHOD 1664, STG-HEM
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 07A138
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: OGA010WL/C

DATE RECEIVED: 01/19/07
DATE EXTRACTED: 01/19/07 14:43
DATE ANALYZED: 01/22/07 11:39/11:39

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 %	RPD LIMIT %
Oil & Grease	ND	20.0	17.5	88	20.0	18.1	90	3	64-132	24

ANALYSIS LOG
for
OIL GREASE

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

Comments:

Book #: ~~AGV-021~~ AOG-008 SD 1/17/07

Balance ID: ☑ 40706360

Analytical Batch: OGA010W

SOP #	Rev. #
☑ EMAX-1664	3
☐ EMAX-413.1	2
☐ EMAX-	

STANDARDS ID	CONC. (mg/L)
LCS 553B-04-26-1	8000

Analyzed By: SD

Date: 1/22/07

OIL & GREASE ANALYSIS

Analytical Batch: OGA010W Start Date/Time: 01/19/07 14:43 Page: 14

Instrument ID: 40706360 End Date/Time: 01/22/07 11:43 Book#: OG-008

DATA FILE ID	Sample ID	SGT	Wt. of Dish (g)	Dry Wt + Dish (g)	Oil & Grease (mg)	Sample Amount	Unit	Result	
OGA010W01	OGA010WB	YES	16.5767	16.5767	0	1000	ml	ND	mg/L
OGA010W02	OGA010WL	YES	16.1735	16.191	17.5	1000	ml	17.5	mg/L
OGA010W03	OGA010WC	YES	16.4977	16.5158	18.1	1000	ml	18.1	mg/L
OGA010W04	07A138-01	YES	16.1131	16.1132	0.1	1050	ml	ND	mg/L
OGA010W05	PAR-11		16.2978	16.3373	39.5	5	ml	39.5	mg/L

Comments

Initial Reading by: SD

Final Reading by: SD

Reviewed by: ML

RAW DATA

OIL & GREASE ANALYSIS

Analytical Batch: OGA010W SOP: EMAX-1664 Rev.3 Instrument ID: 40706360 Book#: OG-008

DATA FILE ID	Sample ID	Sample Amount	Unit	SGT	Dish #	Dish (g)	Date	Time	1st Dry Weight + Dish (g)	Date	Time	2nd Dry Weight + Dish (g)	Date	Time	3rd Dry Weight + Dish (g)	Date	Time	Difference of last two reading (<0.01g)
GA010W01	OGA010WB	1000	ml	YES	1	16.5767	01/19/07	14:43:56	16.5767	01/22/07	9:56:09	16.5767	01/22/07	11:38:36	16.5767	01/22/07	11:38:39	0.000
GA010W02	OGA010WL	1000	ml	YES	2	16.1735	01/19/07	14:44:28	16.191	01/22/07	9:56:32	16.191	01/22/07	11:39:03	16.191	01/22/07	11:39:06	0.000
GA010W03	OGA010WC	1000	ml	YES	3	16.4977	01/19/07	14:44:54	16.5158	01/22/07	9:56:55	16.5158	01/22/07	11:39:29	16.5158	01/22/07	11:39:32	0.000
GA010W04	07A138-01	1050	ml	YES	4	16.1131	01/19/07	14:45:20	16.1133	01/22/07	9:58:25	16.1132	01/22/07	11:42:57	16.1132	01/22/07	11:43:01	0.000
GA010W05	PAR-11	5	ml		5	16.2978	01/19/07	14:45:46	16.3373	01/22/07	9:58:49	16.3373	01/22/07	11:40:20	16.3373	01/22/07	11:40:25	0.000

Beginning Balance Check

Std Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	01/19/07	14:40:40	PASSED
1	0.9999	01/19/07	14:41:33	PASSED

Ending Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	01/19/07	14:46:33	PASSED
1	0.9999	01/19/07	14:47:19	PASSED

Beginning Balance Check

Std Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	01/22/07	9:51:35	PASSED
1	1	01/22/07	9:52:13	PASSED

Ending Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	01/22/07	11:44:08	PASSED
1	0.9999	01/22/07	11:45:10	PASSED

Comments

Initial Reading by: SD SD

Final Reading by: SD SD

Reviewed by: ML

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CLIENT: **SHAW E&I**

PROJECT: **ALAMEDA POINT, CTO 133**

SDG: **07B171**

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GC-SVOA	METHOD 1664 STG-HEM	5000 – 5007
HPLC	**	6000 –
METALS	**	7000 –
WET	**	8000 –
OTHERS	**	9000 –

** - Not Requested

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

Date: 03-05-2007
EMAX Batch No.: 07B171

Attn: Rose Condit

Shaw E&I
4005 Port Chicago Hwy
Concord CA 94520

Subject: Laboratory Report
Project: Alameda Point, CTO 133

Enclosed is the Laboratory report for samples received on 02/16/07.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
133-5-3-WW(2/15/2007)	B171-01	02/15/07	WATER	VOLATILE ORGANICS BY GC/MS SEMIVOLATILE ORGANICS BY GCMS HEM, OIL & GREASE & SGT-HEM

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

CHAIN OF CUSTODY

07B171

Ref. Document # 133-081

Page 1 of 1

Shaw

Shaw Environmental and Infrastructure Inc.

4005 Port Chicago Hwy
Concord, CA 94520

L1 | M2 |

Project Number: 108816
Project Name / Location: Alameda CTO 133 - Site 5-3
Purchase Order #: 41926

Project Manager: John McGuire
(Name & phone #)

Shipment Date: 2/15/2007
Waybill Number:
Lab Destination: EMAX, 1835 205th St., Torrance, 90501
Lab Contact Name / ph. #: Ye-Myint, 310-618-8889

Send Report To: Rose Condit
Phone/Fax Number: 925-288-2151
Address: 4005 Port Chicago Hwy
City: Concord, CA, 94520

Sampler's Name(s):

Sample ID Number	Sample Description	Collection Information: Date	Time	Method	Matrix	# of containers	Analyses Requested: VOCs (8260B)- Full 8260 list	SVOC (EPA 8270C)	Oil & Grease (EPA 1664 HEM w/ silica gel)			Cooler Temp				
						Preservative (water)	HCl	ice	H_2SO_4							
						Preservative (soil)	Ice	ice	ice							
						Container Type	3 -VOA	2-1 L amber	2-1 L amber							
1 133-5-3-WW(2/15/2007)	waste water sample for POTW discharge	02/15/07	0930	G	WW	7		X	X	X						
Temperature Blank		02/15/07										X				

Special Instructions: T=2.8°C

Turnaround Time: ☐ 24-hr ☐ 48-hr ☐ 3-day ☐ 5-day
X Normal

Level Of QC Required: I II III Project Specific:

Relinquished By:	Date: 2/15/2007 Time: 1100	Received By:	Date: 2-15-07 Time: 10:30
Relinquished By:	Date: Time:	Received By:	Date: Time:

Method Codes
C = Composite G = Grab

Matrix Codes
DW = Drinking Water SO = Soil
GW = Ground Water SL = Sludge
WW = Waste Water CP = Chip Samples

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN 07B171
☐ EMAX Courier		Receipient I PATEL
☐ Client Delivery		Date 2-16-07
☑ Third Party UPS-	1Z 89V 46201 9260 7694	Time 10:35

COC Inspection

☑ Client Name	☑ Client PM/PC	☑ Sampler Name	☑ Sampling Date/Time/Location	☑ Sample ID	☑ Matrix
☑ Address	☑ Tel# / Fax #	☐ Courier Signature	☑ Analysis Required	☑ Preservative (if any)	☑ TAT

Safety Issues

☑ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☑ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☑ Sufficient	☑ plastic Bag
Temperatures	☑ Cooler 2.8 °C	☐ Cooler 2 ____ °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C

Comments: ☐ PM was informed on non-compliant coolers imediately.

DISCREPANCIES

LSID	LSCID	Sample Label ID/COC ID	Discrepancy Code	Corrective Action Code
01			Red one Vial for Vol	R5
			and one Amber for	
			oil & Grease Broken	
			Inside the Cooler	

REVIEWS

Sample Labeling [signature] Date 2-16-07 2/16/07

SRF [signature] Date 2/16/07

PM [signature] Date 2/20/07

LEGEND:

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Project Management
A1	Analysis is not indicated in COC	E1	Preservative needed; sample has no preservative	R1	Hold sample(s); wait for further instructions
A2	Analysis is not indicated in label	E2	Preservative not needed but sample is preserved	R2	Proceed as indicated in COC
A3	Analysis is inconsistent in COC vis-à-vis label	F1	Not enough quantity of samples	R3	Refer to attached instruction
B1	Sample ID is not indicated in COC	F2	Bubble is> 6mm	R4	Cancel the analysis
B2	Sample ID is not indicated in label	G1	Temperature is out of range (4 +_ 2°C)	R5	Analyze remaining intact container
B3	Sample ID is inconsistent in COC vis-à-vis label	G2	Out of Holding Time	R6	
C1	Wrong container	G3	>20 % solid particle		
C2	Broken container	H1			
C3	Leaking container	H2			
D1	Date and/or time is not indicated in COC				
D2	Date and/or time is not indicated in label				
D3	Date and/or time is inconsistent in COC vis-à-vis label				

UPS CampusShip: View/Print Label

1. **Print the label(s):** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the dotted line.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers without a Daily Pickup
   - Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   - Hand the package to any UPS driver in your area.
   - Take your package to a location of The UPS Store®, UPS Drop Box, UPS Customer Center or Authorized Shipping Outlet near you. Items sent via UPS Return Services (including Ground Returns) are accepted at any UPS Drop Box.
   - To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

   Customers with a Daily Pickup
   - Your driver will pickup your shipment(s) as usual.

FOLD HERE

JESSE ACEDILLO
925-567-6315
ALAMEDA 89V462
399 W. SEAPLANE LAGOON
ALAMEDA CA 94501

40 LBS 2 OF 2

07 B 170 } 2-16-07
07 B 171 } 10:35

SHIP TO:
YE-MYINT
310.618.8889
EMAX
1835 W. 205TH ST.
TORRANCE CA 90501-1510

CA 908 9-02

UPS NEXT DAY AIR 1
TRACKING #: 1Z 89V 462 01 9260 7694

BILLING: P/P

Project Number or Department Number: 00501.108816.4701.5312[illegible] TM
Sender's Name: Jesse Acedillo
CS 9.0.19.0 W00E55 60.1A 10/2006

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

SHAW E&I

ALAMEDA POINT, CTO 133

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

SDG#: 07B171

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07B171

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

One (1) water sample was received on 02/16/07 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd edition.

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.

Sample	Surrogate	%Rec	QC Limit
B171-01	BFB	133	70-130

Data from reanalysis was unable due to carry over from foaming sample.

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 with the aforementioned exception.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : SHAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07B171
Instrument ID : T-001

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V001B42Q	1	NA	02/23/0713:09	02/23/0713:09	RBV438	RBV212	V001B42	Method Blank
LCS1W	V001B42L	1	NA	02/23/0711:14	02/23/0711:14	RBV435	RBV212	V001B42	Lab Control Sample (LCS)
LCD1W	V001B42Y	1	NA	02/23/0720:51	02/23/0720:51	RBV450	RBV212	V001B42	LCS Duplicate
133-5-3-WW(2/15/2007)	B171-01	1	NA	02/23/0715:40	02/23/0715:40	RBV442	RBV212	V001B42	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client : SHAW E&I	Date Collected: 02/15/07
Project : ALAMEDA POINT, CTO 133	Date Received: 02/16/07
Batch No. : 07B171	Date Extracted: 02/23/07 15:40
Sample ID: 133-5-3-WW(2/15/2007)	Date Analyzed: 02/23/07 15:40
Lab Samp ID: B171-01	Dilution Factor: 1
Lab File ID: RBV442	Matrix : WATER
Ext Btch ID: V001B42	% Moisture : NA
Calib. Ref.: RBV212	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	0.27J	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
CARBON TETRACHLORIDE	ND	0.50	0.20
CHLOROBENZENE	ND	0.50	0.20
CHLOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	0.49J	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	0.42J	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	0.82	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	0.31J	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	116	70-140
TOLUENE-D8	104	70-140
4-BROMOFLUOROBENZENE	133*	70-130

RL: Reporting Limit

QC SUMMARIES

2005

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

ent	: SHAW E&I	Date Collected:	NA
ject	: ALAMEDA POINT, CTO 133	Date Received:	02/23/07
Batch No.	: 07B171	Date Extracted:	02/23/07 13:09
Sample ID:	MBLK1W	Date Analyzed:	02/23/07 13:09
Lab Samp ID:	V001B42Q	Dilution Factor:	1
Lab File ID:	RBV438	Matrix	: WATER
Ext Btch ID:	V001B42	% Moisture	: NA
Calib. Ref.:	RBV212	Instrument ID	: T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,1-TRICHLOROETHANE	ND	0.50	0.20
1,1,2,2-TETRACHLOROETHANE	ND	0.50	0.20
1,1,2-TRICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHANE	ND	0.50	0.20
1,1-DICHLOROETHENE	ND	0.50	0.20
1,1-DICHLOROPROPENE	ND	0.50	0.20
1,2,3-TRICHLOROBENZENE	ND	0.50	0.20
1,2,3-TRICHLOROPROPANE	ND	0.50	0.50
1,2,4-TRICHLOROBENZENE	ND	0.50	0.20
1,2,4-TRIMETHYLBENZENE	ND	0.50	0.20
1,2-DIBROMO-3-CHLOROPROPANE	ND	2.0	0.50
1,2-DICHLOROBENZENE	ND	0.50	0.20
1,2-DICHLOROETHANE	ND	0.50	0.20
1,2-DICHLOROPROPANE	ND	0.50	0.20
1,2-ETHYLENEDIBROMIDE	ND	1.0	0.20
1,3,5-TRIMETHYLBENZENE	ND	0.50	0.20
1,3-DICHLOROBENZENE	ND	0.50	0.20
1,3-DICHLOROPROPANE	ND	0.50	0.20
1,4-DICHLOROBENZENE	ND	0.50	0.20
2,2-DICHLOROPROPANE	ND	0.50	0.20
2-CHLOROTOLUENE	ND	0.50	0.20
4-CHLOROTOLUENE	ND	0.50	0.20
BENZENE	ND	0.50	0.20
BROMOBENZENE	ND	0.50	0.20
BROMOCHLOROMETHANE	ND	1.0	0.20
BROMODICHLOROMETHANE	ND	0.50	0.20
BROMOFORM	ND	0.50	0.30
BROMOMETHANE	ND	0.50	0.20
RBON TETRACHLORIDE	ND	0.50	0.20
OROBENZENE	ND	0.50	0.20
LOROETHANE	ND	0.50	0.20
CHLOROFORM	ND	0.50	0.20
CHLOROMETHANE	ND	0.50	0.20
CIS-1,2-DICHLOROETHENE	ND	0.50	0.20
DIBROMOCHLOROMETHANE	ND	0.50	0.20
DIBROMOMETHANE	ND	0.50	0.20
DICHLORODIFLUOROMETHANE	ND	0.50	0.30
ETHYLBENZENE	ND	0.50	0.20
HEXACHLOROBUTADIENE	ND	1.0	0.20
ISOPROPYL BENZENE	ND	0.50	0.20
M/P-XYLENES	ND	1.0	0.50
METHYLENE CHLORIDE	ND	1.0	0.50
N-BUTYLBENZENE	ND	0.50	0.20
N-PROPYLBENZENE	ND	0.50	0.20
NAPHTHALENE	ND	0.50	0.50
O-XYLENE	ND	0.50	0.20
P-ISOPROPYLTOLUENE	ND	0.50	0.20
SEC-BUTYLBENZENE	ND	0.50	0.20
STYRENE	ND	0.50	0.20
TERT-BUTYLBENZENE	ND	0.50	0.20
TETRACHLOROETHYLENE	ND	0.50	0.20
TOLUENE	ND	0.50	0.20
TRANS-1,2-DICHLOROETHENE	ND	0.50	0.20
TRICHLOROETHENE	ND	0.50	0.20
TRICHLOROFLUOROMETHANE	ND	0.50	0.20
VINYL CHLORIDE	ND	0.50	0.20
ACETONE	ND	10	5.0
2-BUTANONE	ND	10	5.0
MTBE	ND	1.0	0.20
TERT-BUTANOL	ND	20	5.0
4-METHYL-2-PENTANONE	ND	10	5.0
2-HEXANONE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	91	70-140
TOLUENE-D8	91	70-130
4-BROMOFLUOROBENZENE	123	70-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07B171
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V001B42Q	V001B42L	V001B42Y		
LAB FILE ID:	RBV438	RBV435	RBV450		
DATE EXTRACTED:	02/23/0713:09	02/23/0711:14	02/23/0720:51	DATE COLLECTED:	NA
DATE ANALYZED:	02/23/0713:09	02/23/0711:14	02/23/0720:51	DATE RECEIVED:	02/23/07
PREP. BATCH:	V001B42	V001B42	V001B42		
CALIB. REF:	RBV212	RBV212	RBV212		

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-Dichloroethene	ND	10.0	9.26	93	10.0	9.03	90	2	60-130	30
Benzene	ND	10.0	9.31	93	10.0	8.40	84	10	70-130	30
Chlorobenzene	ND	10.0	10.2	102	10.0	10.4	104	1	70-130	30
Toluene	ND	10.0	9.80	98	10.0	9.36	94	5	70-130	30
Trichloroethene	ND	10.0	9.09	91	10.0	8.35	83	9	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10.0	8.31	83	10.0	10.5	105	70-140
Toluene-d8	10.0	8.19	82	10.0	9.00	90	70-130
4-Bromofluorobenzene	10.0	8.78	88	10.0	9.89	99	70-130

INITIAL CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RBV206
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07B171
BFB Injection Date : 02/12/07
BFB Injection Time : 14:21
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.93
75	30.0 - 60.0% of mass 95	45.40
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.16
173	Less than 2.0% of mass 174	0.24(0.3)1
174	Greater than 50% of mass 95	86.50
175	5.0 - 9.0% of mass 174	5.74(6.6)1
176	95.0 - 101.0% of mass 174	83.25(96.2)1
177	5.0 - 9.0% of mass 176	5.23(6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	V001B1201	RBV207	02/12/07	15:00
2	VSTD0.5	V001B1202	RBV208	02/12/07	15:38
3	VSTD01	V001B1203	RBV209	02/12/07	16:16
4	VSTD02	V001B1204	RBV210	02/12/07	16:53
5	VSTD05	V001B1205	RBV211	02/12/07	17:32
6	VSTD010	V001B1206	RBV212	02/12/07	18:10
7	VSTD020	V001B1207	RBV213	02/12/07	18:48
8	VSTD030	V001B1208	RBV214	02/12/07	19:27
9	VSTD040	V001B1209	RBV215	02/12/07	20:05
10	VSTD050	V001B1210	RBV216	02/12/07	20:43

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T001
Beginning DateTime :02/12/07 15:00
Spike Units :PPB
IC File :RBV212

Column Spec :RTX502.2 ID :0.32MM
Ending DateTime :02/12/07 20:43
HPChem Method :V001B12

M	IDX	Parameters	.3 15:00 RBV207	.5 15:38 RBV208	1 16:16 RBV209	2 16:53 RBV210	5 17:32 RBV211	10 18:10 RBV212	20 18:48 RBV213	30 19:27 RBV214	40 20:05 RBV215	50 20:43 RBV216	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	11.1304
	2	Dichlorodifluoromethane	0.121	0.084	0.129	0.156	0.170	0.162	0.182	0.159	0.157	0.144	0.146	19.31	3.2241
	3	Dichlorotetrafluoroethane	0.276	0.259	0.247	0.290	0.289	0.312	0.307	0.271	0.275	0.248	0.277	8.15	3.4144
	4	Chloromethane	0.218	0.174	0.189	0.247	0.242	0.255	0.270	0.226	0.233	0.216	0.227	12.91	3.6806
	5	Vinyl chloride	0.184	0.172	0.192	0.248	0.258	0.248	0.252	------	------	------	0.222	16.84	3.8198
	6	Bromomethane	------	0.148	0.147	0.178	0.183	0.190	0.216	0.200	0.208	0.198	0.185	13.15	4.5210
	7	Chloroethane	0.108	0.105	0.142	0.135	0.143	0.144	0.161	0.139	0.143	0.131	0.135	12.69	4.6472
	8	Dichlorofluoromethane	0.535	0.494	0.637	0.622	0.566	0.577	0.583	0.532	0.522	0.491	0.556	8.99	4.7066
	9	Trichlorofluoromethane	0.226	0.175	0.259	0.299	0.339	0.317	0.354	0.302	0.315	0.286	0.287	18.78	5.0680
	10	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
2	11	Acrolein	------	------	------	0.011	0.011	0.013	0.014	0.014	0.014	0.013	0.013	11.31	5.7227
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.157	0.146	0.165	0.188	0.176	0.176	0.177	0.178	0.183	0.177	0.172	7.39	5.7966
2	13	Acetone	------	------	------	------	0.025	0.025	0.026	0.024	0.024	0.023	0.024	4.69	5.8265
	14	1,1-Dichloroethene	0.313	0.315	0.342	0.348	0.365	0.362	0.322	0.339	0.346	0.329	0.338	5.39	6.0925
5	15	tert-Butyl alcohol	------	------	------	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.007	4.68	6.2240
	16	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	17	Methyl acetate	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	18	Iodomethane	0.301	0.309	0.339	0.412	0.389	0.410	0.426	0.426	0.447	0.432	0.389	13.66	6.6308
	19	Methylene chloride	0.305	0.299	0.291	0.340	0.306	0.313	0.300	0.280	0.281	0.267	0.298	6.85	6.8985
	20	Carbon disulfide	0.785	0.740	0.824	0.944	0.887	0.866	0.855	0.825	0.839	0.802	0.837	6.76	6.9758
3	21	Acrylonitrile	------	0.027	0.025	0.034	0.031	0.035	0.036	0.035	0.036	0.034	0.033	11.72	7.0803
	22	tert-Butyl methyl ether (MTBE)	0.508	0.411	0.387	0.443	0.368	0.389	0.387	0.369	0.383	0.369	0.401	10.94	7.1825
	23	trans-1,2-Dichloroethene	0.338	0.344	0.375	0.441	0.409	0.404	0.397	0.368	0.366	0.350	0.379	8.68	7.4234
	24	Isopropyl ether (DIPE)	0.730	0.710	0.758	0.944	0.850	0.880	0.869	0.809	0.818	0.788	0.816	8.91	7.9423
	25	Vinyl acetate	------	0.264	0.191	0.293	0.264	0.289	0.297	0.278	0.290	0.279	0.272	12.02	8.0865
	26	1,1-Dichloroethane	0.468	0.451	0.496	0.579	0.535	0.534	0.516	0.479	0.480	0.456	0.499	8.22	8.1148
	27	tert-Butyl ethyl ether (ETBE)	0.557	0.535	0.594	0.717	0.629	0.677	0.669	0.617	0.632	0.596	0.622	8.91	8.6159
2	28	2-Butanone	------	0.054	0.039	0.045	0.039	0.047	0.050	0.048	0.050	0.048	0.047	10.61	8.8052
	29	2,2-Dichloropropane	0.313	0.310	0.331	0.385	0.353	0.363	0.355	0.330	0.327	0.314	0.338	7.35	9.0561
	30	cis-1,2-Dichloroethene	0.435	0.409	0.442	0.534	0.488	0.488	0.471	0.434	0.428	0.407	0.454	8.96	9.1185
	31	Chloroform	0.389	0.384	0.416	0.493	0.451	0.453	0.447	0.414	0.419	0.401	0.427	7.93	9.3802
	32	Bromochloromethane	0.193	0.179	0.194	0.235	0.209	0.219	0.216	0.198	0.199	0.189	0.203	8.11	9.6449
	33	Tetrahydrofuran	------	------	------	0.035	0.029	0.032	0.033	0.032	0.033	0.031	0.032	6.25	9.7248
	34	1,1,1-Trichloroethane	0.315	0.318	0.351	0.399	0.372	0.370	0.371	0.347	0.347	0.331	0.352	7.54	10.0509
	35	Cyclohexane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	36	tert-Amyl methyl ether (TAME)	0.435	0.413	0.469	0.526	0.484	0.506	0.509	0.472	0.478	0.460	0.475	7.20	10.4806
	37	1,2-Dichloroethane-d4	------	------	------	0.237	0.215	0.233	0.223	0.187	------	------	0.219	9.13	10.5175
	38	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	16.3408
	39	1,1-Dichloropropene	0.122	0.113	0.124	0.139	0.133	0.129	0.129	0.124	0.126	0.120	0.126	5.57	10.3037
	40	Carbon tetrachloride	0.318	0.307	0.333	0.377	0.379	0.360	0.354	0.340	0.339	0.326	0.343	7.01	10.4821
	41	1,2-Dichloroethane	0.272	0.252	0.280	0.299	0.285	0.284	0.278	0.261	0.260	0.249	0.272	5.95	10.6635
	42	Benzene	1.123	1.044	1.106	1.168	1.085	1.031	1.012	0.983	0.992	0.965	1.051	6.38	10.7304
	43	Trichloroethene	0.304	0.315	0.334	0.364	0.352	0.341	0.343	0.339	0.346	0.336	0.337	5.15	11.7074
	44	Methylcyclohexane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	45	1,2-Dichloropropane	0.301	0.299	0.322	0.358	0.347	0.342	0.334	0.322	0.323	0.304	0.325	6.19	11.9572
	46	Bromodichloromethane	0.267	0.279	0.307	0.350	0.344	0.347	0.350	0.333	0.340	0.327	0.324	9.23	12.3423
	47	Dibromomethane	0.094	0.112	0.111	0.127	0.126	0.125	0.126	0.121	0.123	0.118	0.118	8.57	12.4301
12	48	4-Methyl-2-pentanone	------	------	0.111	0.141	0.132	0.155	0.167	0.163	0.168	0.159	0.149	13.43	12.8432
5	49	2-Chloroethyl vinyl ether	------	------	------	0.044	0.042	0.044	0.047	0.046	0.044	0.044	0.044	3.84	12.7753
5	50	cis-1,3-Dichloropropene	0.316	0.335	0.368	0.429	0.421	0.421	0.432	0.422	0.429	0.411	0.398	10.68	13.2063
	51	Toluene-d8	------	------	------	1.018	0.993	0.987	0.960	0.862	------	------	0.964	6.31	13.6551
5	52	Toluene	1.099	1.048	1.116	1.227	1.170	1.118	1.097	1.044	1.046	1.000	1.096	6.12	13.7892
	53	Ethyl methacrylate	------	0.139	0.158	0.218	0.207	0.234	0.247	0.242	0.251	0.240	0.215	18.85	13.9766
	54	trans-1,3-Dichloropropene	0.218	0.204	0.232	0.292	0.293	0.301	0.310	0.299	0.306	0.292	0.275	14.64	14.0301
	55	1,1,2-Trichloroethane	0.146	0.153	0.154	0.183	0.168	0.176	0.172	0.164	0.167	0.160	0.164	6.90	14.3185
2	56	2-Hexanone	------	------	------	0.069	0.069	0.087	0.097	0.095	0.099	0.094	0.087	14.73	14.2984
	57	1,3-Dichloropropane	0.290	0.292	0.311	0.371	0.343	0.350	0.351	0.337	0.341	0.327	0.331	7.98	14.7408
	58	Tetrachloroethene	0.238	0.219	0.252	0.268	0.265	0.252	0.254	0.242	0.245	0.234	0.247	5.98	14.9475

cr
2/20/07

59	Dibromochloromethane	0.184	0.188	0.218	0.254	0.255	0.268	0.277	0.267	0.276	0.268	0.245	14.53	15.2732
60	1,2-Dibromoethane	0.140	0.141	0.161	0.193	0.187	0.194	0.204	0.194	0.200	0.191	0.180	13.26	15.6464
61	1-Chlorohexane	0.404	0.388	0.438	0.497	0.514	0.500	0.503	0.481	0.478	0.453	0.466	9.34	15.8680
62	Chlorobenzene	0.776	0.741	0.788	0.883	0.867	0.848	0.850	0.812	0.811	0.776	0.815	5.63	16.4152
63	1,1,1,2-Tetrachloroethane	0.226	0.221	0.243	0.286	0.276	0.274	0.275	0.265	0.272	0.263	0.260	8.58	16.4628
64	Ethylbenzene	1.243	1.144	1.216	1.385	1.341	1.285	1.252	1.174	1.151	1.077	1.227	7.70	16.4791
2 65	m-Xylene & p-Xylene	0.888	0.871	0.821	1.034	0.996	0.969	0.946	0.893	0.838	------	0.917	7.94	16.6286
66	o-Xylene	0.911	0.898	0.862	1.084	1.085	1.061	1.050	0.985	0.965	0.916	0.982	8.53	17.4620
67	Styrene	0.550	0.557	0.566	0.770	0.783	0.790	0.797	0.755	0.751	0.719	0.704	14.66	17.5215
68	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	21.9289
69	Isopropylbenzene	4.036	3.976	4.847	5.104	4.524	4.226	4.074	3.963	3.949	3.647	4.235	10.70	18.1312
70	Bromoform	0.276	0.270	0.389	0.421	0.375	0.391	0.386	0.382	0.399	0.381	0.367	13.95	18.2025
71	1,1,2,2-Tetrachloroethane	0.661	0.623	0.818	0.786	0.669	0.687	0.667	0.646	0.666	0.626	0.685	9.52	18.4375
72	4-Bromofluorobenzene	------	------	------	1.250	1.105	1.117	1.038	0.937	------	------	1.090	10.55	18.6484
73	1,2,3-Trichloropropane	------	0.317	0.444	0.462	0.315	0.331	0.320	0.321	0.322	0.301	0.348	17.27	18.7251
74	trans-1,4-Dichloro-2-butene	------	------	0.066	0.136	0.099	0.112	0.120	0.117	0.122	0.118	0.111	18.71	18.8227
75	n-Propylbenzene	4.073	3.975	4.486	5.210	5.039	4.853	4.718	4.619	4.564	4.067	4.560	9.23	18.9356
76	Bromobenzene	0.851	0.896	1.069	1.011	0.905	0.873	0.842	0.820	0.844	0.800	0.891	9.62	19.0843
77	1,3,5-Trimethylbenzene	2.419	2.375	2.511	3.192	3.008	2.878	2.853	2.781	2.777	2.672	2.746	9.43	19.2568
78	2-Chlorotoluene	3.329	3.190	3.527	3.771	3.508	3.034	2.871	2.985	2.731	2.799	3.174	11.02	19.3386
79	4-Chlorotoluene	2.285	2.250	2.538	2.779	2.451	2.607	2.542	2.250	2.480	2.125	2.431	8.22	19.4248
80	tert-Butylbenzene	2.737	2.670	2.927	3.582	3.437	3.314	3.265	3.197	3.229	3.095	3.145	9.30	19.9780
81	1,2,4-Trimethylbenzene	2.095	1.914	2.106	2.571	2.549	2.523	2.560	2.522	2.530	2.465	2.383	10.29	20.0762
82	sec-Butylbenzene	3.412	3.287	3.553	4.400	4.340	4.269	4.227	4.166	4.166	3.838	3.966	10.37	20.4256
83	p-Isopropyltoluene	2.244	2.041	2.258	2.945	3.103	3.115	3.233	3.231	3.284	3.204	2.866	16.93	20.7007
84	1,3-Dichlorobenzene	1.617	1.497	1.640	1.866	1.731	1.691	1.709	1.643	1.655	1.594	1.664	5.80	20.9683
85	1,4-Dichlorobenzene	1.410	1.360	1.415	1.624	1.574	1.577	1.597	1.555	1.566	1.523	1.520	6.00	21.1750
86	n-Butylbenzene	1.430	1.325	1.407	1.912	2.218	2.320	2.549	2.554	2.567	2.496	2.078	24.87	21.5661
87	1,2-Dichlorobenzene	1.326	1.305	1.353	1.590	1.460	1.451	1.444	1.401	1.423	1.354	1.411	5.91	21.9869
88	1,2-Dibromo-3-chloropropane	------	0.040	0.049	0.072	0.073	0.088	0.095	0.095	0.099	0.094	0.078	27.57	23.6585
89	1,2,4-Trichlorobenzene	0.431	0.352	0.305	0.502	0.580	0.629	0.748	0.759	0.766	0.775	0.585	30.77	25.6865
90	Hexachlorobutadiene	0.533	0.484	0.503	0.685	0.706	0.702	0.725	0.705	0.696	0.672	0.641	14.77	25.9869
91	Naphthalene	0.762	0.503	0.310	0.486	0.508	0.594	0.749	0.821	0.842	0.881	0.646	29.63	26.2947
92	1,2,3-Trichlorobenzene	0.331	0.301	0.243	0.433	0.477	0.519	0.602	0.613	0.613	0.616	0.475	30.01	26.8628

Spike Amount = Nominal Amount * M
Ave_%RSD : 10.9 Max_%RSD : 30.8

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

IDX	Parameter	x0	x1	CCF
2	Dichlorodifluoromethane	-0.00153	0.15757	0.9967
5	Vinyl chloride	-0.00311	0.25401	0.9994
9	Trichlorofluoromethane	-0.00315	0.30998	0.9971
53	Ethyl methacrylate	-0.00697	0.24560	0.9995
73	1,2,3-Trichloropropane	0.00798	0.31343	0.9980
74	trans-1,4-Dichloro-2-butene	-0.00350	0.11978	0.9988
83	p-Isopropyltoluene	-0.05180	3.24187	0.9998
86	n-Butylbenzene	-0.06242	2.53111	0.9993
88	1,2-Dibromo-3-chloropropane	-0.00408	0.09596	0.9990
89	1,2,4-Trichlorobenzene	-0.02381	0.75766	0.9977
92	1,2,3-Trichlorobenzene	-0.01830	0.60760	0.9982

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
91	Naphthalene	-0.00543	0.58286	0.06439	0.9985

2/20/02

SECOND SOURCE VERIFICATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RBV223
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07B171
BFB Injection Date : 02/13/07
BFB Injection Time : 01:11
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.95
75	30.0 - 60.0% of mass 95	47.22
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.75
173	Less than 2.0% of mass 174	0.25(0.3)1
174	Greater than 50% of mass 95	81.99
175	5.0 - 9.0% of mass 174	5.79(7.1)1
176	95.0 - 101.0% of mass 174	81.47(99.4)1
177	5.0 - 9.0% of mass 176	5.14(6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	IV001B1203	RBV226	02/13/07	03:05

FORM V VOA OLM02.0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B12\RBV226.D Vial: 5
Acq On : 13 Feb 2007 3:05 am Operator: CR
Sample : IVO01B1203 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	107	0.01
2	T	Dichlorodifluoromethane	10.000	10.948	-9.5	113	0.00
3	T	Dichlorotetrafluoroethane	10.000	8.338	16.6	79	0.00
4	P,T	Chloromethane	10.000	12.360	-23.6#	117	0.00
5	C,T	Vinyl chloride	10.000	10.509	-5.1	114	0.00
6	T	Bromomethane	10.000	11.350	-13.5	118	0.01
7	T	Chloroethane	10.000	11.926	-19.3	120	0.01
8	T	Dichlorofluoromethane	10.000	10.537	-5.4	108	0.01
9	T	Trichlorofluoromethane	10.000	12.074	-20.7#	125	0.00
10	T	sec-Propyl alcohol	-1.000	0.000	0.0	116	0.00
11	T	Acrolein	20.000	16.766	16.2	90	0.01
12	T	1,1,2-Trichloro-1,2,2-trifl	10.000	11.009	-10.1	115	0.00
13	T	Acetone	20.000	22.023	-10.1	114	0.01
14	C,T	1,1-Dichloroethene	10.000	12.006	-20.1#	120	0.01
15	T	tert-Butyl alcohol	50.000	50.351	-0.7	110	0.00
16	T	Acetonitrile	-1.000	0.000	0.0	614	0.01
17	T	Methyl acetate	-1.000	0.000	0.0	106	0.00
18	T	Iodomethane	10.000	12.235	-22.3#	124	0.00
19	T	Methylene chloride	10.000	11.853	-18.5	121	0.00
20	T	Carbon disulfide	10.000	12.105	-21.1#	125	0.01
21	T	Acrylonitrile	30.000	35.118	-17.1	116	0.00
22	T	tert-Butyl methyl ether (MT	10.000	9.664	3.4	106	0.01
23	T	trans-1,2-Dichloroethene	10.000	11.872	-18.7	119	0.00
24	T	Isopropyl ether (DIPE)	10.000	10.725	-7.2	106	0.00
25	T	Vinyl acetate	10.000	8.484	15.2	85	0.01
26	P,T	1,1-Dichloroethane	10.000	11.414	-14.1	114	0.01
27	T	tert-Butyl ethyl ether (ETB	10.000	10.408	-4.1	102	0.01
28	T	2-Butanone	20.000	21.215	-6.1	113	0.00
29	T	2,2-Dichloropropane	10.000	9.244	7.6	92	0.00
30	T	cis-1,2-Dichloroethene	10.000	10.925	-9.3	108	0.01
31	C,T	Chloroform	10.000	10.719	-7.2	108	0.00
32	T	Bromochloromethane	10.000	11.545	-15.4	114	0.01
33	T	Tetrahydrofuran	10.000	10.314	-3.1	111	0.00
34	T	1,1,1-Trichloroethane	10.000	10.751	-7.5	109	0.00
35	T	Cyclohexane	-1.000	0.000	0.0	11	0.01
36	T	tert-Amyl methyl ether (TAM	10.000	10.466	-4.7	105	0.01
37	S	1,2-Dichloroethane-d4	10.000	9.710	2.9	97	0.01
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	103	0.00
39	T	1,1-Dichloropropene	10.000	11.130	-11.3	111	0.00
40	T	Carbon tetrachloride	10.000	11.295	-13.0	111	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B12\RBV226.D Vial: 5
Acq On : 13 Feb 2007 3:05 am Operator: CR
Sample : IV001B1203 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007 * Not evaluated
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	1,2-Dichloroethane	10.000	10.932	-9.3	107	0.01
42	T	Benzene	10.000	11.444	-14.4	120	0.01
43	T	Trichloroethene	10.000	11.064	-10.6	112	0.01
44	T	Methylcyclohexane	-1.000	0.000	0.0	159	0.10
45	C,T	1,2-Dichloropropane	10.000	11.161	-11.6	109	0.00
46	T	Bromodichloromethane	10.000	11.259	-12.6	108	0.00
47	T	Dibromomethane	10.000	11.317	-13.2	110	0.00
48	T	4-Methyl-2-pentanone	20.000	21.902	-9.5	108	0.01
49	T	2-Chloroethyl vinyl ether *	10.000	6.550	34.5#	68	0.00
50	T	cis-1,3-Dichloropropene	10.000	11.718	-17.2	114	0.00
51	S	Toluene-d8	10.000	9.947	0.5	100	0.01
52	C,T	Toluene	10.000	11.014	-10.1	111	0.01
53	T	Ethyl methacrylate	10.000	10.700	-7.0	112	0.01
54	T	trans-1,3-Dichloropropene	10.000	11.758	-17.6	110	0.01
55	T	1,1,2-Trichloroethane	10.000	10.737	-7.4	103	0.00
56	T	2-Hexanone	20.000	21.356	-6.8	109	0.01
57	T	1,3-Dichloropropane	10.000	10.874	-8.7	105	0.01
58	T	Tetrachloroethene	10.000	10.974	-9.7	110	0.01
59	T	Dibromochloromethane	10.000	11.339	-13.4	107	0.00
60	T	1,2-Dibromoethane	10.000	11.509	-15.1	110	0.00
61	T	1-Chlorohexane	10.000	10.677	-6.8	102	0.00
62	P	Chlorobenzene	10.000	11.002	-10.0	108	0.00
63	T	1,1,1,2-Tetrachloroethane	10.000	10.684	-6.8	104	0.01
64	C,T	Ethylbenzene	10.000	10.945	-9.5	107	0.01
65	T	m-Xylene & p-Xylene	20.000	22.047	-10.2	107	0.00
66	T	o-Xylene	10.000	11.054	-10.5	105	0.01
67	T	Styrene	10.000	11.813	-18.1	108	0.00
68	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	101	0.01
69	T	Isopropylbenzene	10.000	10.331	-3.3	105	0.01
70	P,T	Bromoform	10.000	10.863	-8.6	103	0.01
71	P,T	1,1,2,2-Tetrachloroethane	10.000	10.035	-0.4	101	0.00
72	S	4-Bromofluorobenzene	10.000	9.515	4.8	94	0.00
73	T	1,2,3-Trichloropropane	10.000	11.379	-13.8	111	0.01
74	T	trans-1,4-Dichloro-2-butene	10.000	10.251	-2.5	107	0.01
75	T	n-Propylbenzene	10.000	10.946	-9.5	104	0.01
76	T	Bromobenzene	10.000	10.075	-0.7	104	0.01
77	T	1,3,5-Trimethylbenzene	10.000	11.101	-11.0	107	0.01
78	T	2-Chlorotoluene	10.000	10.210	-2.1	108	0.01
79	T	4-Chlorotoluene	10.000	10.630	-6.3	100	0.01
80	T	tert-Butylbenzene	10.000	10.900	-9.0	105	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B12\RBV226.D Vial: 5
Acq On : 13 Feb 2007 3:05 am Operator: CR
Sample : IV001B1203 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
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	1,2,4-Trimethylbenzene	10.000	11.450	-14.5	109	0.00
82	T	sec-Butylbenzene	10.000	11.038	-10.4	104	0.01
83	T	p-Isopropyltoluene	10.000	10.289	-2.9	107	0.00
84	T	1,3-Dichlorobenzene	10.000	10.453	-4.5	104	0.00
85	T	1,4-Dichlorobenzene	10.000	10.723	-7.2	104	0.00
86	T	n-Butylbenzene	10.000	9.823	1.8	106	0.01
87	T	1,2-Dichlorobenzene	10.000	10.594	-5.9	104	0.01
88	T	1,2-Dibromo-3-chloropropane	10.000	9.546	4.5	101	0.01
89	T	1,2,4-Trichlorobenzene	10.000	9.390	6.1	110	0.01
90	T	Hexachlorobutadiene	10.000	10.540	-5.4	97	0.01
91	T	Naphthalene	10.000	11.533	-15.3	128	0.00
92	T	1,2,3-Trichlorobenzene	10.000	9.834	1.7	113	0.01

cr 2/20/07 2016

DAILY CALIBRATIONS

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RBV432
Instrument ID: T-001
GC Column:RTX502.2ID:0.32mm (mm)

Contract: ALAMEDA POINT, CTO 133
SAS No.: SDG No.: 07B171
BFB Injection Date : 02/23/07
BFB Injection Time : 09:19
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.24
75	30.0 - 60.0% of mass 95	43.16
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	5.89
173	Less than 2.0% of mass 174	0.33(0.4)1
174	Greater than 50% of mass 95	82.59
175	5.0 - 9.0% of mass 174	5.43(6.6)1
176	95.0 - 101.0% of mass 174	81.91(99.2)1
177	5.0 - 9.0% of mass 176	5.01(6.1)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV001B1222	RBV434	02/23/07	10:35
2	MBLK1W	V001B42Q	RBV438	02/23/07	13:09
3	LCS1W	V001B42L	RBV435	02/23/07	11:14
4	LCD1W	V001B42Y	RBV450	02/23/07	20:51
5	133-5-3-WW(2/15/2007)	B171-01	RBV442	02/23/07	15:40

FORM V VOA OLM02.0

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RBV212
Instrument ID: T-001
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: ALAMEDA POINT, CTO 133
SDG No.: 07B171
Date Analyzed: 02/12/07
Time Analyzed: 18:10
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	3242566	11.12	3247667	16.34	1075504	21.92
	UPPER LIMIT	6485132	11.62	6495334	16.84	2151008	22.42
	LOWER LIMIT	1621283	10.62	1623834	15.84	537752	21.42
	SAMPLE ID						
1	VSTD010	4479014	11.14	4415669	16.36	1378376	21.94
2	MBLK1W	4017020	11.13	3695038	16.34	624832	21.92
3	LCS1W	3904071	11.12	3933532	16.34	1165054	21.93
4	LCD1W	3144093	11.12	3300141	16.33	1046121	21.92
5	133-5-3-WW(2/15/2007)	3485039	11.12	3378543	16.34	727306	21.92

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.

FORM VIII VOA-8260 1/2000

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B23\RBV434.D
Acq On : 23 Feb 2007 10:35 am
Sample : CVO01B1222
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA
MS Integration Params: 524INT.P

Vial: 4
Operator: CR
Inst : TO01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	138	0.02
2	T	Dichlorodifluoromethane	10.000	7.996	20.0#	106	0.00
3	T	Dichlorotetrafluoroethane	10.000	0.032	99.7#	0	0.12
4	P,T	Chloromethane	10.000	9.875	1.3	121	-0.03
5	C,T	Vinyl chloride	10.000	8.569	14.3	120	0.00
6	T	Bromomethane	10.000	9.530	4.7	128	0.02
7	T	Chloroethane	10.000	9.273	7.3	120	0.02
8	T	Dichlorofluoromethane	10.000	9.429	5.7	125	0.02
9	T	Trichlorofluoromethane	10.000	9.445	5.5	126	0.00
10	T	sec-Propyl alcohol	-1.000	0.000	0.0	121	0.00
11	T	Acrolein	20.000	17.727	11.4	123	0.02
12	T	1,1,2-Trichloro-1,2,2-trifl	10.000	8.601	14.0	117	0.00
13	T	Acetone	20.000	20.332	-1.7	136	0.02
14	C,T	1,1-Dichloroethene	10.000	9.222	7.8	119	0.02
15	T	tert-Butyl alcohol	50.000	46.499	7.0	132	0.00
16	T	Acetonitrile	-1.000	0.000	0.0	137	0.02
17	T	Methyl acetate	-1.000	0.000	0.0	148	-0.01
18	T	Iodomethane	10.000	7.297	27.0#	96	0.00
19	T	Methylene chloride	10.000	9.962	0.4	131	0.00
20	T	Carbon disulfide	10.000	8.484	15.2	113	0.02
21	T	Acrylonitrile	30.000	30.102	-0.3	129	0.00
22	T	tert-Butyl methyl ether (MT	10.000	8.059	19.4	115	0.02
23	T	trans-1,2-Dichloroethene	10.000	9.721	2.8	126	0.00
24	T	Isopropyl ether (DIPE)	10.000	9.968	0.3	128	0.00
25	T	Vinyl acetate	10.000	9.364	6.4	121	0.02
26	P,T	1,1-Dichloroethane	10.000	10.044	-0.4	130	0.02
27	T	tert-Butyl ethyl ether (ETB	10.000	9.129	8.7	116	0.02
28	T	2-Butanone	20.000	18.743	6.3	129	0.02
29	T	2,2-Dichloropropane	10.000	9.494	5.1	122	0.00
30	T	cis-1,2-Dichloroethene	10.000	10.149	-1.5	130	0.02
31	C,T	Chloroform	10.000	9.999	0.0	130	0.00
32	T	Bromochloromethane	10.000	10.155	-1.5	130	0.02
33	T	Tetrahydrofuran	10.000	9.750	2.5	136	0.00
34	T	1,1,1-Trichloroethane	10.000	9.831	1.7	129	0.00
35	T	Cyclohexane	-1.000	0.000	0.0	163	0.02
36	T	tert-Amyl methyl ether (TAM	10.000	8.825	11.8	114	0.02
37	S	1,2-Dichloroethane-d4	10.000	8.446	15.5	110	0.02
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	136	0.02
39	T	1,1-Dichloropropene	10.000	9.467	5.3	126	0.00
40	T	Carbon tetrachloride	10.000	9.811	1.9	127	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B23\RBV434.D Vial: 4
Acq On : 23 Feb 2007 10:35 am Operator: CR
Sample : CV001B1222 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
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	1,2-Dichloroethane	10.000	9.854	1.5	128	0.02
42	T	Benzene	10.000	9.211	7.9	128	0.02
43	T	Trichloroethene	10.000	9.213	7.9	124	0.02
44	T	Methylcyclohexane	-1.000	0.000	0.0	110	0.00
45	C,T	1,2-Dichloropropane	10.000	10.461	-4.6	135	0.02
46	T	Bromodichloromethane	10.000	10.548	-5.5	134	0.00
47	T	Dibromomethane	10.000	10.435	-4.4	135	0.00
48	T	4-Methyl-2-pentanone	20.000	18.386	8.1	120	0.02
49	T	2-Chloroethyl vinyl ether	10.000	4.278	57.2#	59	0.00
50	T	cis-1,3-Dichloropropene	10.000	10.043	-0.4	129	0.00
51	S	Toluene-d8	10.000	8.482	15.2	113	0.02
52	C,T	Toluene	10.000	9.756	2.4	130	0.02
53	T	Ethyl methacrylate	10.000	9.142	8.6	126	0.02
54	T	trans-1,3-Dichloropropene	10.000	10.053	-0.5	125	0.02
55	T	1,1,2-Trichloroethane	10.000	10.526	-5.3	134	0.00
56	T	2-Hexanone	20.000	18.188	9.1	124	0.02
57	T	1,3-Dichloropropane	10.000	10.137	-1.4	130	0.02
58	T	Tetrachloroethene	10.000	9.682	3.2	129	0.02
59	T	Dibromochloromethane	10.000	10.421	-4.2	130	0.02
60	T	1,2-Dibromoethane	10.000	10.880	-8.8	138	0.00
61	T	1-Chlorohexane	10.000	10.276	-2.8	130	0.02
62	P	Chlorobenzene	10.000	10.281	-2.8	134	0.00
63	T	1,1,1,2-Tetrachloroethane	10.000	9.859	1.4	127	0.02
64	C,T	Ethylbenzene	10.000	10.074	-0.7	131	0.02
65	T	m-Xylene & p-Xylene	20.000	19.821	0.9	128	0.02
66	T	o-Xylene	10.000	10.211	-2.1	128	0.02
67	T	Styrene	10.000	10.570	-5.7	128	0.00
68	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	128	0.02
69	T	Isopropylbenzene	10.000	10.249	-2.5	132	0.02
70	P,T	Bromoform	10.000	10.849	-8.5	130	0.02
71	P,T	1,1,2,2-Tetrachloroethane	10.000	10.508	-5.1	134	0.00
72	S	4-Bromofluorobenzene	10.000	8.814	11.9	110	0.00
73	T	1,2,3-Trichloropropane	10.000	11.878	-18.8	147	0.02
74	T	trans-1,4-Dichloro-2-butene	10.000	7.878	21.2#	104	0.02
75	T	n-Propylbenzene	10.000	10.256	-2.6	124	0.02
76	T	Bromobenzene	10.000	9.800	2.0	128	0.02
77	T	1,3,5-Trimethylbenzene	10.000	10.142	-1.4	124	0.02
78	T	2-Chlorotoluene	10.000	9.754	2.5	131	0.02
79	T	4-Chlorotoluene	10.000	10.121	-1.2	121	0.02
80	T	tert-Butylbenzene	10.000	9.786	2.1	119	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B23\RBV434.D Vial: 4
Acq On : 23 Feb 2007 10:35 am Operator: CR
Sample : CVO01B1222 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
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	1,2,4-Trimethylbenzene	10.000	9.814	1.9	119	0.00
82	T	sec-Butylbenzene	10.000	10.058	-0.6	120	0.02
83	T	p-Isopropyltoluene	10.000	8.616	13.8	113	0.00
84	T	1,3-Dichlorobenzene	10.000	9.641	3.6	122	0.00
85	T	1,4-Dichlorobenzene	10.000	9.584	4.2	118	0.02
86	T	n-Butylbenzene	10.000	7.991	20.1#	108	0.02
87	T	1,2-Dichlorobenzene	10.000	9.738	2.6	121	0.02
88	T	1,2-Dibromo-3-chloropropane	10.000	9.090	9.1	121	0.00
89	T	1,2,4-Trichlorobenzene	10.000	7.225	27.8#	107	0.02
90	T	Hexachlorobutadiene	10.000	8.763	12.4	103	0.02
91	T	Naphthalene	10.000	7.686	23.1#	104	0.02
92	T	1,2,3-Trichlorobenzene	10.000	7.338	26.6#	106	0.02

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B23\RBV434.D Vial: 4
Acq On : 23 Feb 2007 10:35 am Operator: CR
Sample : CVO01B1222 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
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	138	0.02
2	T	Dichlorodifluoromethane	0.146	0.124	15.1	106	0.00
3	T	Dichlorotetrafluoroethane	0.277	0.001	99.6#	0#	0.12
4	P,T	Chloromethane	0.227	0.224	1.3	121	-0.03
5	C,T	Vinyl chloride	0.222	0.215	3.2	120	0.00
6	T	Bromomethane	0.185	0.177	4.3	128	0.02
7	T	Chloroethane	0.135	0.125	7.4	120	0.02
8	T	Dichlorofluoromethane	0.556	0.524	5.8	125	0.02
9	T	Trichlorofluoromethane	0.287	0.290	-1.0	126	0.00
10	T	sec-Propyl alcohol	0.000	0.000	0.0	121	0.00
11	T	Acrolein	0.013	0.011	15.4	123	0.02
12	T	1,1,2-Trichloro-1,2,2-trifl	0.172	0.148	14.0	117	0.00
13	T	Acetone	0.024	0.025	-4.2	136	0.02
14	C,T	1,1-Dichloroethene	0.338	0.312	7.7	119	0.02
15	T	tert-Butyl alcohol	0.007	0.007	0.0	132	0.00
16	T	Acetonitrile	0.000	0.000	0.0	137	0.02
17	T	Methyl acetate	0.000	0.000	0.0	148	-0.01
18	T	Iodomethane	0.389	0.284	27.0#	96	0.00
19	T	Methylene chloride	0.298	0.297	0.3	131	0.00
20	T	Carbon disulfide	0.837	0.710	15.2	113	0.02
21	T	Acrylonitrile	0.033	0.033	0.0	129	0.00
22	T	tert-Butyl methyl ether (MT	0.401	0.324	19.2	115	0.02
23	T	trans-1,2-Dichloroethene	0.379	0.369	2.6	126	0.00
24	T	Isopropyl ether (DIPE)	0.816	0.813	0.4	128	0.00
25	T	Vinyl acetate	0.272	0.254	6.6	121	0.02
26	P,T	1,1-Dichloroethane	0.499	0.502	-0.6	130	0.02
27	T	tert-Butyl ethyl ether (ETB	0.622	0.568	8.7	116	0.02
28	T	2-Butanone	0.047	0.044	6.4	129	0.02
29	T	2,2-Dichloropropane	0.338	0.321	5.0	122	0.00
30	T	cis-1,2-Dichloroethene	0.454	0.460	-1.3	130	0.02
31	C,T	Chloroform	0.427	0.427	0.0	130	0.00
32	T	Bromochloromethane	0.203	0.206	-1.5	130	0.02
33	T	Tetrahydrofuran	0.032	0.031	3.1	136	0.00
34	T	1,1,1-Trichloroethane	0.352	0.346	1.7	129	0.00
35	T	Cyclohexane	0.000	0.000	0.0	163	0.02
36	T	tert-Amyl methyl ether (TAM	0.475	0.419	11.8	114	0.02
37	S	1,2-Dichloroethane-d4	0.219	0.185	15.5	110	0.02
38	I	CHLOROBENZENE-D5	1.000	1.000	0.0	136	0.02
39	T	1,1-Dichloropropene	0.126	0.119	5.6	126	0.00
40	T	Carbon tetrachloride	0.343	0.337	1.7	127	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B23\RBV434.D Vial: 4
Acq On : 23 Feb 2007 10:35 am Operator: CR
Sample : CV001B1222 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
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	1,2-Dichloroethane	0.272	0.268	1.5	128	0.02
42	T	Benzene	1.051	0.968	7.9	128	0.02
43	T	Trichloroethene	0.337	0.311	7.7	124	0.02
44	T	Methylcyclohexane	0.000	0.000	0.0	110	0.00
45	C,T	1,2-Dichloropropane	0.325	0.340	-4.6	135	0.02
46	T	Bromodichloromethane	0.324	0.342	-5.6	134	0.00
47	T	Dibromomethane	0.118	0.123	-4.2	135	0.00
48	T	4-Methyl-2-pentanone	0.149	0.137	8.1	120	0.02
49	T	2-Chloroethyl vinyl ether	0.044	0.019	56.8#	59	0.00
50	T	cis-1,3-Dichloropropene	0.398	0.400	-0.5	129	0.00
51	S	Toluene-d8	0.964	0.817	15.2	113	0.02
52	C,T	Toluene	1.096	1.070	2.4	130	0.02
53	T	Ethyl methacrylate	0.215	0.218	-1.4	126	0.02
54	T	trans-1,3-Dichloropropene	0.275	0.276	-0.4	125	0.02
55	T	1,1,2-Trichloroethane	0.164	0.173	-5.5	134	0.00
56	T	2-Hexanone	0.087	0.079	9.2	124	0.02
57	T	1,3-Dichloropropane	0.331	0.336	-1.5	130	0.02
58	T	Tetrachloroethene	0.247	0.239	3.2	129	0.02
59	T	Dibromochloromethane	0.245	0.256	-4.5	130	0.02
60	T	1,2-Dibromoethane	0.180	0.196	-8.9	138	0.00
61	T	1-Chlorohexane	0.466	0.478	-2.6	130	0.02
62	P	Chlorobenzene	0.815	0.838	-2.8	134	0.00
63	T	1,1,1,2-Tetrachloroethane	0.260	0.256	1.5	127	0.02
64	C,T	Ethylbenzene	1.227	1.236	-0.7	131	0.02
65	T	m-Xylene & p-Xylene	0.917	0.909	0.9	128	0.02
66	T	o-Xylene	0.982	1.002	-2.0	128	0.02
67	T	Styrene	0.704	0.744	-5.7	128	0.00
68	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	128	0.02
69	T	Isopropylbenzene	4.235	4.340	-2.5	132	0.02
70	P,T	Bromoform	0.367	0.398	-8.4	130	0.02
71	P,T	1,1,2,2-Tetrachloroethane	0.685	0.720	-5.1	134	0.00
72	S	4-Bromofluorobenzene	1.090	0.960	11.9	110	0.00
73	T	1,2,3-Trichloropropane	0.348	0.380	-9.2	147	0.02
74	T	trans-1,4-Dichloro-2-butene	0.111	0.091	18.0	104	0.02
75	T	n-Propylbenzene	4.560	4.677	-2.6	124	0.02
76	T	Bromobenzene	0.891	0.873	2.0	128	0.02
77	T	1,3,5-Trimethylbenzene	2.746	2.786	-1.5	124	0.02
78	T	2-Chlorotoluene	3.174	3.096	2.5	131	0.02
79	T	4-Chlorotoluene	2.431	2.460	-1.2	121	0.02
80	T	tert-Butylbenzene	3.145	3.078	2.1	119	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\07B23\RBV434.D Vial: 4
Acq On : 23 Feb 2007 10:35 am Operator: CR
Sample : CVO01B1222 Inst : TO01
Misc : 10ppb 8260/20 KET-A/30 AN/50 TBA Multiplr: 1.00
MS Integration Params: 524INT.P

Method : D:\HPCHEM\1\METHODS\VO01B12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Tue Feb 13 15:16:10 2007
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	1,2,4-Trimethylbenzene	2.383	2.339	1.8	119	0.00
82	T	sec-Butylbenzene	3.966	3.989	-0.6	120	0.02
83	T	p-Isopropyltoluene	2.866	2.741	4.4	113	0.00
84	T	1,3-Dichlorobenzene	1.664	1.605	3.5	122	0.00
85	T	1,4-Dichlorobenzene	1.520	1.457	4.1	118	0.02
86	T	n-Butylbenzene	2.078	1.960	5.7	108	0.02
87	T	1,2-Dichlorobenzene	1.411	1.374	2.6	121	0.02
88	T	1,2-Dibromo-3-chloropropane	0.078	0.083	-6.4	121	0.00
89	T	1,2,4-Trichlorobenzene	0.585	0.524	10.4	107	0.02
90	T	Hexachlorobutadiene	0.641	0.562	12.3	103	0.02
91	T	Naphthalene	0.646	0.481	25.5#	104	0.02
92	T	1,2,3-Trichlorobenzene	0.475	0.428	9.9	106	0.02

ANALYTICAL LOG

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 2.12.07 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A01 -023

BATCH V001B12-6

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RBV204	BFB01B 19	2µl				
02	205	20					
03	207	21					2:21 pm
04	201	V001B1201	.03/.06 .15µl				8260, 6ms/Ket-A/AN/TBA .3/.6/.9/1.5 ppb
05	208	02	.05/.1 .25µl				.5/1/1.5/2.5
06	209	03	.1/.2/5µl				1/2/3/5
07	210	04	.2/.4/1µl				2/4/6/10
08	211	05	.5/1/2.5µl				5/10/15/25
09	212	06	1/2/5µl				10/20/30/50
10	213	07	2/4/10µl				20/40/60/100
11	214	08	3/6/15µl				30/60/90/150
12	215	09	4/8/20µl				40/80/120/200
13	216	10	5/10/25µl				50/100/150/250
14	217	RINSE	25ml				
15	218	V001B21B					
16	219	IV001B1201	1/2/5µl				
17	220	02					11:16 pm
18	221	RINSE	25ml				
19							
20							
21							
22							
23							DN 2/13/07
24							
25							

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	2/12/07
ICAL ID	V001B12

STANDARDS

NAME	ID	CONC. (mg/L)
DCC 8260 Ket-AA	SVIC 11. 60.1 .63.1	50/250 250
DCC Gases	.60.3	250
DCC From 114	.64.1	250
BFB	.581	50
IS/SURR. IS SS	.62.1 .62.3	250 250
LCS 8260	.63.2	50/250
LCS Ket-AA Gases	.59.3 .61.3	250 250
LCS From 114	.64.2	250

SOLVENT	ID
METHANOL	
DATA FILE	07B12

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments: NOT VALID FOR 2-CLEVE

Analyzed By: CL / DN

Date Disposed: 2/13/07

Disposed By: DN

2027

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 2.13.07 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A01 -023

BATCH CV001B1201

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RBV222	BFB01B22	2µl				
02	223	23 ✓	↓				1:11 am
03	224	CV001B1201 ✓	1/2/5µl				
04	225	02	↓				
05	226	IV001B1203 ~~V001B24L~~ ✓	1/2/5µl				
06	227	V001B24C L ✓	1/2/5µl				
07	228	B	25ml				
08	229	Q ✓	↓				
09	230	07B042-07T	1ml	25	<2		No IS.
10	231	-02T	100µl	250			SS out → RR @ 100x
11	232	-05T ✓	50µl	500			1000x
12	233	-03T	50µl	500			2500x
13	234	-04T ✓	100µl	250			
14	235	-06T	50µl	500			10,000x
15	236	-07R	25ml	1			1x
16	237	-04T ✓	1ml	25			
17	238	-03T ✓	250µl	100			
18	239	-06T	250µl	100			No IS.
19	240	V001B24C	1/2/5µl				
20	241	Y ✓	↓				12:47 pm
21	242	X	↓				
22							
23							
24							DN 2/13/07
25							

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	2/12/07
ICAL ID	V001B12

STANDARDS

NAME	ID	CONC. (mg/L)
DCC	SVIC.11.60.1	
DCC	.63.1 .60.3	
DCC	.64.1	
BFB	.58.1	50/40
IS/SURR.	.62.2	
LCS	.63.2	
LCS	.59.3 .61.3	
LCS	.64.2	

SOLVENT	ID
METHANOL	
DATA FILE	07B12

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments:

Analyzed By: CL/DN

Date Disposed: 2/13/07

Disposed By: DN

2028

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 2/23/07 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A01 -023

BATCH CV001B12 23

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RBV431	BFB01B41	2ml				
02	432	BFB01B42	2ml				9:19 AM
03	433	CV001B1221	1/2/5ml				
04	434	CV001B1222					
05	435	V001B42L					
06	436	C	1/2/5ml 25ml				
07	437	B 2/24/07	25ml				
08	438	Q	25ml				
09	439	07B138-15	25ml	1	12.0		
10	440	-13	25ml	1			55 ml, RR
11	441	-14	25ml	10			FOAMER
12	442	07B170-01 2/24/07	25ml	1			55 ml, RR
13	443	07B210-01	25ml	1			
14	444	-04T 2/24/07	100ml	250			
15	445	07B170-04R2T	10ml	2500			
16	446	-04T	10ml	2500			
17	447	-03T	250ml	100			
18	448	07B210-01R	25ml	1			
19	449	V001B42X	1/2/5ml				
20	450	4	1/2/5ml				8:57 PM
21							
22							
23							
24							
25							

Instrument No.	01
INITIAL CALIBRATION REFERENCE	
DATE	2/12/07
ICAL ID	V001B12

STANDARDS

NAME	ID	CONC. (ug/L)
DCC	5UIC-11-60-1	
DCC	-63-1	
DCC	-64-1	
BFB	-58-1	
IS/SURR.	-62-2	50/25D
LCS	-63-2	
LCS	-59-3	
LCS	-64-2	

SOLVENT	ID
METHANOL	
DATA FILE	07B23

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO01	

Comments:

Analyzed By: CW

Date Disposed: 2/26/07

Disposed By: CW

CW 2/26/07

2929

LABORATORY REPORT FOR

SHAW E&I

ALAMEDA POINT, CTO 133

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

SDG#: 07B171

CASE NARRATIVE

CLIENT: SHAW E&I

PROJECT: ALAMEDA POINT, CTO 133

SDG: 07B171

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

One (1) water sample was received on 02/16/07 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd edition.

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.

   4-Nitrophenol in LCD1W was manually reintegrated to correct for improper integration. Chromatograms of before and after manual integration were kept on file for review.

LAB CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

Client : SKAW E&I
Project : ALAMEDA POINT, CTO 133

SDG NO. : 07B171
Instrument ID : T-041

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVB023WB	1	NA	02/23/0715:58	02/20/0716:30	RBH276	RAH054	SVB023W	Method Blank
LCS1W	SVB023WL	1	NA	02/23/0716:22	02/20/0716:30	RBH277	RAH054	SVB023W	Lab Control Sample (LCS)
LCD1W	SVB023WC	1	NA	02/23/0716:47	02/20/0716:30	RBH278	RAH054	SVB023W	LCS Duplicate
133-5-3-WW(2/15/2007)	B171-01	.94	NA	02/23/0717:29	02/20/0716:30	RBH279	RAH054	SVB023W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	02/15/07
Project	: ALAMEDA POINT, CTO 133	Date Received:	02/16/07
Batch No.	: 07B171	Date Extracted:	02/20/07 16:30
Sample ID	: 133-5-3-WW(2/15/2007)	Date Analyzed:	02/23/07 17:29
Lab Samp ID	: B171-01	Dilution Factor:	.94
Lab File ID	: BBH279	Matrix	: WATER
Ext Btch ID	: SVB023W	% Moisture	: NA
Calib. Ref.	: RAH054	Instrument ID	: T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	9.4	4.7
1,2-DICHLOROBENZENE	ND	9.4	4.7
1,3-DICHLOROBENZENE	ND	9.4	4.7
1,4-DICHLOROBENZENE	ND	9.4	4.7
2,4,5-TRICHLOROPHENOL	ND	47	4.7
2,4,6-TRICHLOROPHENOL	ND	9.4	4.7
2,4-DICHLOROPHENOL	ND	9.4	4.7
2,4-DIMETHYLPHENOL	ND	9.4	4.7
2,4-DINITROPHENOL	ND	47	4.7
2,4-DINITROTOLUENE	ND	9.4	4.7
2,6-DINITROTOLUENE	ND	9.4	4.7
2-CHLORONAPHTHALENE	ND	9.4	4.7
2-CHLOROPHENOL	ND	9.4	4.7
2-METHYLNAPHTHALENE	ND	9.4	4.7
2-METHYLPHENOL	ND	9.4	4.7
2-NITROANILINE	ND	47	4.7
2-NITROPHENOL	ND	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	19	4.7
3-NITROANILINE	ND	47	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	47	4.7
4-BROMOPHENYL-PHENYL ETHER	ND	9.4	4.7
4-CHLORO-3-METHYLPHENOL	ND	9.4	4.7
4-CHLOROANILINE	ND	9.4	4.7
4-CHLOROPHENYL-PHENYL ETHER	ND	9.4	4.7
4-METHYLPHENOL (1)	ND	9.4	4.7
4-NITROANILINE	ND	47	4.7
4-NITROPHENOL	ND	47	4.7
ACENAPHTHENE	ND	9.4	4.7
ACENAPHTHYLENE	ND	9.4	4.7
ANTHRACENE	ND	9.4	4.7
BENZO(A)ANTHRACENE	ND	9.4	4.7
BENZO(A)PYRENE	ND	9.4	4.7
BENZO(B)FLUORANTHENE	ND	9.4	4.7
BENZO(K)FLUORANTHENE	ND	9.4	4.7
BENZO(G,H,I)PERYLENE	ND	9.4	4.7
BIS(2-CHLOROETHOXY)METHANE	ND	9.4	4.7
BIS(2-CHLOROETHYL)ETHER	ND	9.4	4.7
BIS(2-CHLOROISOPROPYL)ETHER	ND	9.4	4.7
BIS(2-ETHYLHEXYL)PHTHALATE	ND	9.4	4.7
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	ND	9.4	4.7
DI-N-OCTYLPHTHALATE	ND	9.4	4.7
DIBENZO(A,H)ANTHRACENE	ND	9.4	4.7
DIBENZOFURAN	ND	9.4	4.7
DIETHYLPHTHALATE	ND	9.4	4.7
DIMETHYLPHTHALATE	ND	9.4	4.7
FLUORANTHENE	ND	9.4	4.7
FLUORENE	ND	9.4	4.7
HEXACHLOROBENZENE	ND	9.4	4.7
HEXACHLOROBUTADIENE	ND	9.4	4.7
HEXACHLOROCYCLOPENTADIENE	ND	9.4	4.7
HEXACHLOROETHANE	ND	9.4	4.7
INDENO(1,2,3-CD)PYRENE	ND	9.4	4.7
ISOPHORONE	ND	9.4	4.7
N-NITROSO-DIMETHYLAMINE	ND	9.4	4.7
N-NITROSO-DI-N-PROPYLAMINE	ND	9.4	4.7
N-NITROSODIPHENYLAMINE (2)	ND	9.4	4.7
NAPHTHALENE	ND	9.4	4.7
NITROBENZENE	ND	9.4	4.7
PENTACHLOROPHENOL	ND	47	9.4
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
BENZOIC ACID	ND	47	9.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	92	36-143
2-FLUOROBIPHENYL	93	36-143
2-FLUOROPHENOL	80	36-143
NITROBENZENE-D5	97	36-143
PHENOL-D5	80	36-143
TERPHENYL-D14	95	45-143

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

QC SUMMARY

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: ALAMEDA POINT, CTO 133	Date Received:	02/20/07
Batch No.	: 07B171	Date Extracted:	02/20/07 16:30
Sample ID:	MBLK1W	Date Analyzed:	02/23/07 15:58
Lab Samp ID:	SVB023WB	Dilution Factor:	1
Lab File ID:	RBH276	Matrix :	WATER
Ext Btch ID:	SVB023W	% Moisture :	NA
Calib. Ref.:	RAH054	Instrument ID :	T-041

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5.0
1,2-DICHLOROBENZENE	ND	10	5.0
1,3-DICHLOROBENZENE	ND	10	5.0
1,4-DICHLOROBENZENE	ND	10	5.0
2,4,5-TRICHLOROPHENOL	ND	50	5.0
2,4,6-TRICHLOROPHENOL	ND	10	5.0
2,4-DICHLOROPHENOL	ND	10	5.0
2,4-DIMETHYLPHENOL	ND	10	5.0
2,4-DINITROPHENOL	ND	50	5.0
2,4-DINITROTOLUENE	ND	10	5.0
2,6-DINITROTOLUENE	ND	10	5.0
2-CHLORONAPHTHALENE	ND	10	5.0
2-CHLOROPHENOL	ND	10	5.0
2-METHYLNAPHTHALENE	ND	10	5.0
2-METHYLPHENOL	ND	10	5.0
2-NITROANILINE	ND	50	5.0
2-NITROPHENOL	ND	10	5.0
3,3'-DICHLOROBENZIDINE	ND	20	5.0
3-NITROANILINE	ND	50	5.0
4,6-DINITRO-2-METHYLPHENOL	ND	50	5.0
4-BROMOPHENYL-PHENYL ETHER	ND	10	5.0
4-CHLORO-3-METHYLPHENOL	ND	10	5.0
4-CHLOROANILINE	ND	10	5.0
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5.0
4-METHYLPHENOL (1)	ND	10	5.0
4-NITROANILINE	ND	50	5.0
4-NITROPHENOL	ND	50	5.0
ACENAPHTHENE	ND	10	5.0
ACENAPHTHYLENE	ND	10	5.0
ANTHRACENE	ND	10	5.0
BENZO(A)ANTHRACENE	ND	10	5.0
BENZO(A)PYRENE	ND	10	5.0
BENZO(B)FLUORANTHENE	ND	10	5.0
BENZO(K)FLUORANTHENE	ND	10	5.0
BENZO(G,H,I)PERYLENE	ND	10	5.0
BIS(2-CHLOROETHOXY)METHANE	ND	10	5.0
BIS(2-CHLOROETHYL)ETHER	ND	10	5.0
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5.0
BIS(2-ETHYLHEXYL)PHTHALATE	ND	10	5.0
BUTYLBENZYLPHTHALATE	ND	10	5.0
CHRYSENE	ND	10	5.0
DI-N-BUTYLPHTHALATE	ND	10	5.0
DI-N-OCTYLPHTHALATE	ND	10	5.0
DIBENZO(A,H)ANTHRACENE	ND	10	5.0
DIBENZOFURAN	ND	10	5.0
DIETHYLPHTHALATE	ND	10	5.0
DIMETHYLPHTHALATE	ND	10	5.0
FLUORANTHENE	ND	10	5.0
FLUORENE	ND	10	5.0
HEXACHLOROBENZENE	ND	10	5.0
HEXACHLOROBUTADIENE	ND	10	5.0
HEXACHLOROCYCLOPENTADIENE	ND	10	5.0
HEXACHLOROETHANE	ND	10	5.0
INDENO(1,2,3-CD)PYRENE	ND	10	5.0
ISOPHORONE	ND	10	5.0
N-NITROSO-DIMETHYLAMINE	ND	10	5.0
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5.0
N-NITROSODIPHENYLAMINE (2)	ND	10	5.0
NAPHTHALENE	ND	10	5.0
NITROBENZENE	ND	10	5.0
PENTACHLOROPHENOL	ND	50	10
PHENANTHRENE	ND	10	5.0
PHENOL	ND	10	5.0
PYRENE	ND	10	5.0
BENZOIC ACID	ND	50	10

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	82	40-130
2-FLUOROBIPHENYL	88	40-130
2-FLUOROPHENOL	78	40-130
NITROBENZENE-D5	91	40-130
PHENOL-D5	79	40-130
TERPHENYL-D14	107	50-130

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
BATCH NO.: 07B171
METHOD: SW 3520C/8270C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVB023WB	SVB023WL	SVB023WC		
LAB FILE ID:	RBH276	RBH277	RBH278		
DATE EXTRACTED:	02/20/0716:30	02/20/0716:30	02/20/0716:30	DATE COLLECTED:	NA
DATE ANALYZED:	02/23/0715:58	02/23/0716:22	02/23/0716:47	DATE RECEIVED:	02/20/07
PREP. BATCH:	SVB023W	SVB023W	SVB023W		
CALIB. REF:	RAH054	RAH054	RAH054		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	80.0	60.3	75	80.0	69.4	87	14	30-130	30
1,4-Dichlorobenzene	ND	80.0	55.5	69	80.0	63.5	79	14	30-130	30
2,4-Dinitrotoluene	ND	80.0	83.4	104	80.0	88.2	110	6	50-130	30
2-Chlorophenol	ND	80.0	66.2	83	80.0	75.4	94	13	30-130	30
4-Chloro-3-Methylphenol	ND	80.0	69.9	87	80.0	77.9	97	11	40-130	30
4-Nitrophenol	ND	80.0	46.0J	57	80.0	48.5J	61	5	40-130	30
Acenaphthene	ND	80.0	79.0	99	80.0	85.1	106	7	40-130	30
n-Nitroso-di-n-propylamine	ND	80.0	72.6	91	80.0	81.5	102	12	40-130	30
Pentachlorophenol	ND	80.0	56.6	71	80.0	63.2	79	11	40-130	30
Phenol	ND	80.0	62.5	78	80.0	69.7	87	11	30-130	30
Pyrene	ND	80.0	84.9	106	80.0	95.4	119	12	40-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	150	148	99	150	151	101	40-130
2-Fluorobiphenyl	50.0	46.0	92	50.0	52.4	105	40-130
2-Fluorophenol	150	121	80	150	132	88	40-130
Nitrobenzene-d5	50.0	46.7	93	50.0	53.2	106	40-130
Phenol-d5	150	120	80	150	130	86	40-130
Terphenyl-d14	50.0	49.9	100	50.0	53.5	107	50-130

INITIAL CALIBRATIONS

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH049
Instrument ID: T-041

Project: ALAMEDA POINT, CTO 133
SDG No.: 07B171
DFTPP Injection Date: 01/23/07
DFTPP Injection Time: 17:10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.60
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	53.75
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	40.90
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.03
275	10.0 - 30.0% of mass 198	27.42
365	Greater than 1.00% of mass 198	2.80
441	Present, but less than mass 443	14.36
442	Greater than 40.0% of mass 198	82.22
443	17.0 - 23.0% of mass 442	17.16(20.9)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD05	SV41A231	RAH050	01/23/07	18:27
2	SSTD010	SV41A232	RAH051	01/23/07	18:52
3	SSTD020	SV41A233	RAH052	01/23/07	19:17
4	SSTD040	SV41A234	RAH053	01/23/07	19:42
5	SSTD050	SV41A235	RAH054	01/23/07	20:07
6	SSTD080	SV41A236	RAH055	01/23/07	20:32
7	SSTD100	SV41A237	RAH056	01/23/07	20:57
8	SSTD120	SV41A238	RAH057	01/23/07	21:22
9	SSTD160	SV41A239	RAH058	01/23/07	21:46
10	SSTD050	ISV41A231	RAH059	01/23/07	22:11

FORM V SV OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T041
Beginning DateTime :01/23/07 18:27
Spike Units :PPM
IC File :RAH054

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :01/23/07 21:46
HPChem Method :SV4-1A23

IDX	Parameters	5 18:27 RAH050	10 18:52 RAH051	20 19:17 RAH052	40 19:42 RAH053	50 20:07 RAH054	80 20:32 RAH055	100 20:57 RAH056	120 21:22 RAH057	160 21:46 RAH058	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	0	3.9467
2	N-Nitrosodimethylamine	0.889	0.853	0.835	0.814	0.825	0.839	0.852	0.864	0.849	0.847	2.58	1.9942
3	Pyridine	1.403	1.398	1.361	1.392	1.396	1.418	1.410	1.417	1.416	1.401	1.29	2.0043
4	2-Fluorophenol	1.028	1.025	1.065	1.057	1.116	1.159	1.172	1.175	1.181	1.109	5.91	2.7713
5	Phenol	1.631	1.559	1.638	1.627	1.740	1.726	1.685	1.706	1.697	1.668	3.49	3.5744
6	Aniline	1.684	1.774	1.693	1.525	1.410	1.395	------	------	------	1.580	10.10	3.6174
7	Bis(2-chloroethyl)ether	1.394	1.487	1.541	1.629	1.733	1.754	2.100	------	------	1.663	13.95	3.6665
8	Phenol-d5	1.305	1.345	1.419	1.440	1.484	1.525	1.525	1.543	1.510	1.455	5.83	3.5598
9	2-Chlorophenol	1.284	1.208	1.271	1.274	1.293	1.318	1.313	1.321	1.283	1.285	2.69	3.7352
10	1,3-Dichlorobenzene	1.506	1.445	1.421	1.374	1.453	1.347	1.373	1.360	1.341	1.402	4.05	3.8859
11	1,4-Dichlorobenzene	1.426	1.353	1.321	1.306	1.309	1.323	1.328	1.238	1.281	1.321	3.87	3.9613
12	Benzyl alcohol	0.823	0.795	0.839	0.854	0.892	0.902	0.898	0.896	0.878	0.864	4.44	4.0951
13	1,2-Dichlorobenzene-d4	0.927	0.983	0.917	0.881	0.873	0.865	0.859	0.825	0.817	0.883	5.92	4.1075
14	1,2-Dichlorobenzene	1.330	1.373	1.355	1.276	1.307	1.274	1.273	1.238	1.204	1.292	4.23	4.1210
15	2-Methylphenol	1.002	1.020	1.004	1.004	1.068	1.049	0.994	1.023	1.018	1.020	2.38	4.1964
16	Bis(2-chloroisopropyl)ether	3.191	3.081	3.098	2.979	3.097	3.073	3.006	2.969	2.888	3.042	2.97	4.2368
17	4-Methylphenol	1.376	1.415	1.441	1.436	1.511	1.489	1.473	1.539	1.496	1.464	3.49	4.3808
18	N-Nitroso-di-n-propylamine	1.033	1.090	1.143	1.093	1.126	1.094	1.096	1.098	1.092	1.096	2.74	4.4078
19	Hexachloroethane	0.511	0.517	0.541	0.533	0.545	0.552	0.544	0.544	0.533	0.535	2.60	4.4910
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	0	5.4257
21	Nitrobenzene-d5	0.298	0.324	0.342	0.360	0.368	0.368	0.379	0.373	0.378	0.354	7.78	4.5641
22	Nitrobenzene	0.370	0.359	0.371	0.363	0.381	0.375	0.375	0.372	0.373	0.371	1.76	4.5844
23	Isophorone	0.676	0.677	0.689	0.676	0.708	0.702	0.692	0.692	0.686	0.689	1.66	4.8869
24	2-Nitrophenol	0.116	0.144	0.159	0.176	0.191	0.197	0.215	0.211	0.213	0.180	19.17	4.9533
25	2,4-Dimethylphenol	0.275	0.325	0.325	0.303	0.338	0.327	0.316	0.318	0.325	0.317	5.78	5.0106
26	bis(2-Chloroethoxy)methane	0.467	0.457	0.476	0.462	0.471	0.469	0.459	0.453	0.447	0.462	2.01	5.1388
27	Benzoic Acid	0.025	0.064	0.107	0.142	0.164	0.161	0.185	0.197	0.201	0.138	44.32	5.2142
28	2,4-Dichlorophenol	0.295	0.296	0.305	0.312	0.324	0.323	0.317	0.321	0.324	0.313	3.71	5.2480
29	1,2,4-Trichlorobenzene	0.346	0.366	0.342	0.338	0.340	0.334	0.338	0.334	0.330	0.341	3.09	5.3525
30	Naphthalene	1.044	1.006	0.981	0.941	0.956	0.927	0.925	0.895	0.900	0.953	5.19	5.4549
31	4-Chloroaniline	0.457	0.455	0.452	0.433	0.451	0.446	0.441	0.441	0.437	0.446	1.86	5.5314
32	Hexachlorobutadiene	0.234	0.223	0.221	0.208	0.217	0.213	0.210	0.205	0.202	0.215	4.76	5.6079
33	4-Chloro-3-methylphenol	0.301	0.312	0.320	0.331	0.336	0.337	0.332	0.336	0.343	0.328	4.19	6.1455
34	2-Methylnaphthalene	0.726	0.738	0.726	0.693	0.698	0.685	0.682	0.658	0.651	0.695	4.37	6.3299
35	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	0	7.6964
36	Hexachlorocyclopentadiene	0.116	0.155	0.180	0.215	0.219	0.232	0.237	0.232	0.214	0.200	20.69	6.5211
37	2,4,6-Trichlorophenol	0.326	0.359	0.349	0.377	0.428	0.428	0.406	0.396	0.437	0.390	10.09	6.6887
38	2,4,5-Trichlorophenol	0.342	0.381	0.386	0.389	0.369	0.359	0.392	0.392	0.351	0.373	5.08	6.7292
39	2-Fluorobiphenyl	1.265	1.237	1.197	1.169	1.204	1.163	1.145	1.124	1.122	1.181	4.17	6.8090
40	2-Chloronaphthalene	1.070	1.035	1.010	1.003	1.009	1.003	1.002	0.986	0.958	1.009	3.08	6.9530
41	2-Nitroaniline	0.295	0.311	0.355	0.393	0.401	0.419	0.414	0.427	0.422	0.382	13.06	7.1048
42	Dimethylphthalate	1.301	1.336	1.313	1.285	1.311	1.295	1.271	1.274	1.278	1.296	1.65	7.3815
43	2,6-Dinitrotoluene	0.178	0.218	0.262	0.275	0.312	0.309	0.307	0.312	0.317	0.277	17.85	7.4580
44	Acenaphthylene	1.587	1.553	1.568	1.531	1.555	1.519	1.505	1.486	1.464	1.530	2.61	7.5030
45	3-Nitroaniline	0.241	0.257	0.277	0.299	0.300	0.302	0.306	0.322	0.332	0.293	10.07	7.6762
46	Acenaphthene	1.112	1.037	0.984	0.961	0.976	0.945	0.934	0.928	0.926	0.978	6.25	7.7482
47	2,4-Dinitrophenol	0.012	0.031	0.061	0.108	0.122	0.151	0.165	0.181	0.191	0.114	57.72	7.8157
48	4-Nitrophenol	0.078	0.114	0.127	0.146	0.148	0.149	0.160	0.171	0.176	0.141	21.78	7.9214
49	Dibenzofuran	1.723	1.604	1.552	1.536	1.562	1.507	1.471	1.475	1.475	1.545	5.24	7.9855
50	2,4-Dinitrotoluene	0.238	0.287	0.345	0.389	0.395	0.399	0.411	0.429	0.437	0.370	18.20	8.0024
51	2,3,4,6-Tetrachlorophenol	0.182	0.220	0.258	0.274	0.287	0.283	0.285	0.295	0.291	0.264	14.56	8.1564
52	Diethylphthalate	1.337	1.318	1.299	1.263	1.303	1.269	1.206	1.212	1.227	1.270	3.76	8.3679
53	Fluorene	1.280	1.297	1.224	1.220	1.222	1.176	1.156	1.135	1.128	1.204	5.00	8.4635
54	4-Chlorophenyl-phenylether	0.785	0.708	0.701	0.663	0.679	0.652	0.635	0.619	0.622	0.674	7.78	8.4837
55	4-Nitroaniline	0.248	0.295	0.283	0.301	0.292	0.297	0.297	0.316	0.328	0.295	7.49	8.5535
56	4,6-Dinitro-2-methylphenol	0.083	0.094	0.139	0.199	0.217	0.239	0.253	0.268	0.283	0.197	37.96	8.5805
57	N-Nitrosodiphenylamine	0.950	0.913	0.873	0.850	0.883	0.855	0.831	0.836	0.843	0.871	4.52	8.6682
58	Azobenzene	1.421	1.390	1.385	1.489	1.489	1.419	1.414	1.397	1.421	1.425	2.71	8.7098
59	2,4,6-Tribromophenol	0.206	0.223	0.247	0.269	0.280	0.279	0.272	0.281	0.293	0.261	11.28	8.8065

KMT 1/26/07

60	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	0	9.7929
61	4-Bromophenyl-phenylether	0.282	0.292	0.287	0.284	0.287	0.281	0.284	0.272	0.274	0.282	2.27	9.1788
62	Hexachlorobenzene	0.376	0.350	0.356	0.340	0.344	0.344	0.340	0.330	0.325	0.345	4.35	9.2317
63	Pentachlorophenol	0.127	0.172	0.204	0.233	0.247	0.251	0.261	0.264	0.259	0.224	21.19	9.5218
64	Phenanthrene	1.178	1.207	1.142	1.083	1.113	1.056	1.064	1.024	1.032	1.100	5.86	9.8322
65	Anthracene	1.127	1.191	1.080	1.050	1.071	1.037	1.042	0.988	0.983	1.063	6.15	9.9054
66	Carbazole	1.079	1.032	0.965	0.892	0.854	0.821	0.833	0.867	0.884	0.914	9.93	10.1460
67	Di-n-butylphthalate	1.255	1.388	1.398	1.378	1.398	1.345	1.355	1.303	1.322	1.349	3.60	10.7028
68	Fluoranthene	1.125	1.161	1.128	1.112	1.131	1.077	1.057	1.048	1.061	1.100	3.65	11.4754
69	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	0	13.1760
70	Benzidine	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
71	Pyrene	1.273	1.259	1.265	1.225	1.258	1.244	1.259	1.266	1.191	1.249	2.08	11.7195
72	Terphenyl-d14	0.990	0.964	0.973	0.955	0.999	0.981	0.993	1.002	0.927	0.976	2.49	11.9175
73	Butylbenzylphthalate	0.448	0.532	0.549	0.591	0.601	0.604	0.614	0.629	0.591	0.573	9.77	12.5147
74	3,3'-Dichlorobenzidine	0.300	0.321	0.322	0.323	0.336	0.326	0.391	0.364	0.371	0.339	8.72	13.1547
75	Benzo(a)anthracene	1.152	1.131	1.125	1.102	1.099	1.079	1.119	1.084	1.043	1.104	2.96	13.1547
76	Chrysene	1.151	1.150	1.129	1.053	1.085	1.104	1.053	1.082	1.066	1.097	3.52	13.2120
77	bis(2-Ethylhexyl)phthalate	0.562	0.665	0.732	0.794	0.824	0.825	0.823	0.834	0.774	0.759	12.14	13.2570
78	Perylene-d12	1	1	1	1	1	1	1	1	1	1	0	14.8698
79	Di-n-octylphthalate	0.839	1.068	1.257	1.477	1.499	1.555	1.590	1.663	1.711	1.406	20.83	14.0825
80	Benzo(b)fluoranthene	1.068	1.039	1.201	1.236	1.413	1.309	1.483	------	------	1.250	13.23	14.4627
81	Benzo(k)fluoranthene	1.363	1.365	1.208	1.177	1.082	1.130	0.970	------	------	1.185	12.16	14.4960
82	Benzo(a)pyrene	1.199	1.200	1.143	1.138	1.148	1.147	1.160	1.167	1.151	1.162	1.99	14.8125
83	Indeno(1,2,3-cd)pyrene	0.989	1.070	1.110	1.174	1.211	1.192	1.185	1.138	1.128	1.133	6.17	16.0215
84	Dibenzo(a,h)anthracene	0.767	0.873	0.916	0.959	0.994	0.986	0.968	0.934	0.943	0.927	7.61	16.0451
85	Benzo(g,h,i)perylene	0.962	0.889	0.927	0.935	0.969	0.933	0.922	0.867	0.845	0.917	4.56	16.3308

Ave_%RSD : 8.3 Max_%RSD : 57.7

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
24	2-Nitrophenol	-0.01707	0.21318	0.9986
27	Benzoic Acid	-0.03014	0.19624	0.9954
36	Hexachlorocyclopentadiene	-0.01660	0.23191	0.9986
43	2,6-Dinitrotoluene	-0.02184	0.31873	0.9995
[illegible]	2,4-Dinitrophenol	-0.03459	0.18012	0.9884*
[illegible]	4-Nitrophenol	-0.01499	0.16966	0.9977
50	2,4-Dinitrotoluene	-0.03171	0.43078	0.9993
56	4,6-Dinitro-2-methylphenol	-0.03862	0.27131	0.9947*
63	Pentachlorophenol	-0.02122	0.26483	0.9996
79	Di-n-octylphthalate	-0.14137	1.67793	0.9989

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

IDX	Parameter	x0	x1	x2	CCF2
47	2,4-Dinitrophenol	-0.02943	0.13091	0.01765	0.9991
56	4,6-Dinitro-2-methylphenol	-0.03158	0.21844	0.01861	0.9998

KMD 1/25/07

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :T041 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :01/23/07 18:27 Ending DateTime :01/23/07 21:46
IC File :RAH054 HPChem Method :SV41A23

WATER Init. Vol. (ml) : 1000 Final Vol. (ml) : 1
SOIL Init. Weight (gm) : 30 Final Vol. (ml) : 1

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-Nitrosodimethylamine	5	5	.1667	RAH050
3	Pyridine	5	5	.1667	RAH050
4	2-Fluorophenol	5	5	.1667	RAH050
5	Phenol	5	5	.1667	RAH050
6	Aniline	5	5	.1667	RAH050
7	Bis(2-chloroethyl)ether	5	5	.1667	RAH050
8	Phenol-d5	5	5	.1667	RAH050
9	2-Chlorophenol	5	5	.1667	RAH050
10	1,3-Dichlorobenzene	5	5	.1667	RAH050
11	1,4-Dichlorobenzene	5	5	.1667	RAH050
12	Benzyl alcohol	5	5	.1667	RAH050
13	1,2-Dichlorobenzene-d4	5	5	.1667	RAH050
14	1,2-Dichlorobenzene	5	5	.1667	RAH050
15	2-Methylphenol	5	5	.1667	RAH050
16	Bis(2-chloroisopropyl)ether	5	5	.1667	RAH050
17	4-Methylphenol	5	5	.1667	RAH050
18	N-Nitroso-di-n-propylamine	5	5	.1667	RAH050
19	Hexachloroethane	5	5	.1667	RAH050
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	5	5	.1667	RAH050
22	Nitrobenzene	5	5	.1667	RAH050
23	Isophorone	5	5	.1667	RAH050
24	2-Nitrophenol	5	5	.1667	RAH050
25	2,4-Dimethylphenol	5	5	.1667	RAH050
26	bis(2-Chloroethoxy)methane	5	5	.1667	RAH050
27	Benzoic Acid	5	5	.1667	RAH050
28	2,4-Dichlorophenol	5	5	.1667	RAH050
29	1,2,4-Trichlorobenzene	5	5	.1667	RAH050
30	Naphthalene	5	5	.1667	RAH050
31	4-Chloroaniline	5	5	.1667	RAH050
32	Hexachlorobutadiene	5	5	.1667	RAH050
33	4-Chloro-3-methylphenol	5	5	.1667	RAH050
34	2-Methylnaphthalene	5	5	.1667	RAH050
35	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
36	Hexachlorocyclopentadiene	5	5	.1667	RAH050
37	2,4,6-Trichlorophenol	5	5	.1667	RAH050
38	2,4,5-Trichlorophenol	5	5	.1667	RAH050
39	2-Fluorobiphenyl	5	5	.1667	RAH050
40	2-Chloronaphthalene	5	5	.1667	RAH050
41	2-Nitroaniline	5	5	.1667	RAH050
42	Dimethylphthalate	5	5	.1667	RAH050
43	2,6-Dinitrotoluene	5	5	.1667	RAH050
44	Acenaphthylene	5	5	.1667	RAH050
45	3-Nitroaniline	5	5	.1667	RAH050
46	Acenaphthene	5	5	.1667	RAH050
47	2,4-Dinitrophenol	5	5	.1667	RAH050
48	4-Nitrophenol	5	5	.1667	RAH050
49	Dibenzofuran	5	5	.1667	RAH050
50	2,4-Dinitrotoluene	5	5	.1667	RAH050
51	2,3,4,6-Tetrachlorophenol	5	5	.1667	RAH050
52	Diethylphthalate	5	5	.1667	RAH050
53	Fluorene	5	5	.1667	RAH050
54	4-Chlorophenyl-phenylether	5	5	.1667	RAH050
55	4-Nitroaniline	5	5	.1667	RAH050
56	4,6-Dinitro-2-methylphenol	5	5	.1667	RAH050
57	N-Nitrosodiphenylamine	5	5	.1667	RAH050
58	Azobenzene	5	5	.1667	RAH050
59	2,4,6-Tribromophenol	5	5	.1667	RAH050
60	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
61	4-Bromophenyl-phenylether	5	5	.1667	RAH050
62	Hexachlorobenzene	5	5	.1667	RAH050
63	Pentachlorophenol	5	5	.1667	RAH050
64	Phenanthrene	5	5	.1667	RAH050
65	Anthracene	5	5	.1667	RAH050
66	Carbazole	5	5	.1667	RAH050
67	Di-n-butylphthalate	5	5	.1667	RAH050
68	Fluoranthene	5	5	.1667	RAH050
69	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
70	Benzidine	NA	NA	NA	NA
71	Pyrene	5	5	.1667	RAH050
72	Terphenyl-d14	5	5	.1667	RAH050
73	Butylbenzylphthalate	5	5	.1667	RAH050
74	3,3'-Dichlorobenzidine	5	5	.1667	RAH050
75	Benzo(a)anthracene	5	5	.1667	RAH050
76	Chrysene	5	5	.1667	RAH050
77	bis(2-Ethylhexyl)phthalate	5	5	.1667	RAH050
78	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
79	Di-n-octylphthalate	5	5	.1667	RAH050
80	Benzo(b)fluoranthene	5	5	.1667	RAH050
81	Benzo(k)fluoranthene	5	5	.1667	RAH050
82	Benzo(a)pyrene	5	5	.1667	RAH050
83	Indeno(1,2,3-cd)pyrene	5	5	.1667	RAH050
84	Dibenzo(a,h)anthracene	5	5	.1667	RAH050
85	Benzo(g,h,i)perylene	5	5	.1667	RAH050

DMD
1/25/07

PROGRAM: ICALMAX

Input: RAH054.ICL Output: RAH054.MAX

IDX	Parameter	x0	x1	x2	CCF2	MaxMinAmtRatio	MaxMinRespRatio	MaxMinRRF	MaxMinConc
47	2,4-Dinitrophenol	-0.02943	0.13091	0.01765	0.9991	-3.70850	-0.27217	0.07339	-148.3
56	4,6-Dinitro-2-methylphenol	-0.03158	0.21844	0.01861	0.9998	-5.86889	-0.67258	0.11460	-234.8

3013

Verified 1/25/07

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T041
IC_Beginning DateTime :01/23/07 18:27
Spike Amount :50 PPM
CC/CV File :RAH059
IC File :RAH054

Column Spec :ZB-5MS ID :0.18MM
IC Ending DateTime :01/23/07 21:46
HPChem Method :SV41A23
Date_Time :01/23/07 22:11

M_IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,4-Dichlorobenzene-d4	40.000	0	318576	1	1	3.947	3.947	0				
2	N-Nitrosodimethylamine	49.064	-1.9	330833	0.831	0.847	1.983	1.994	2.58				
3	Pyridine	48.834	-2.3	544915	1.368	1.401	1.973	2.004	1.29				
4	2-Fluorophenol												
5	Phenol	50.049	0.1	664706	1.669	1.668	3.562	3.574	3.49				
6	Aniline	44.682	-10.6	562333	1.412	1.580	3.623	3.617	10.10				
7	Bis(2-chloroethyl)ether	51.493	3.0	681867	1.712	1.663	3.663	3.667	13.95				
8	Phenol-d5												
9	2-Chlorophenol	48.510	-3.0	496460	1.247	1.285	3.724	3.735	2.69				
10	1,3-Dichlorobenzene	49.492	-1.0	552727	1.388	1.402	3.886	3.886	4.05				
11	1,4-Dichlorobenzene	51.491	3.0	541557	1.360	1.321	3.957	3.961	3.87				
12	Benzyl alcohol	51.888	3.8	357023	0.897	0.864	4.088	4.095	4.44				
13	1,2-Dichlorobenzene-d4												
14	1,2-Dichlorobenzene	52.078	4.2	536011	1.346	1.292	4.119	4.121	4.23				
15	2-Methylphenol	51.211	2.4	416110	1.045	1.020	4.190	4.196	2.38				
16	Bis(2-chloroisopropyl)ether	50.462	0.9	1222756	3.071	3.042	4.240	4.237	2.97				
17	4-Methylphenol	50.933	1.9	593950	1.492	1.464	4.382	4.381	3.49				
18	N-Nitroso-di-n-propylamine	52.222	4.4	455892	1.145	1.096	4.402	4.408	2.74				
19	Hexachloroethane	50.807	1.6	216685	0.544	0.535	4.493	4.491	2.60				
20	Naphthalene-d8	40.000	0	1210130	1	1	5.425	5.426	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	49.438	-1.1	555214	0.367	0.371	4.574	4.584	1.76				
23	Isophorone	48.749	-2.5	1015757	0.672	0.689	4.868	4.887	1.66				
24	2-Nitrophenol	46.553	-6.9	279593	0.185	0.180	4.949	4.953	19.17	-0.0171	0.2132		0.9986
25	2,4-Dimethylphenol	50.005	0.0	479315	0.317	0.317	4.999	5.011	5.78				
26	bis(2-Chloroethoxy)methane	49.936	-0.1	698090	0.461	0.462	5.131	5.139	2.01				
27	Benzoic Acid	46.343	-7.3	238667	0.158	0.138	5.222	5.214	44.32	-0.0301	0.1962		0.9954
28	2,4-Dichlorophenol	49.704	-0.6	470540	0.311	0.313	5.242	5.248	3.71				
29	1,2,4-Trichlorobenzene	49.152	-1.7	507120	0.335	0.341	5.354	5.352	3.09				
30	Naphthalene	49.031	-1.9	1413306	0.934	0.953	5.455	5.455	5.19				
31	4-Chloroaniline	49.183	-1.6	663801	0.439	0.446	5.526	5.531	1.86				
32	Hexachlorobutadiene	49.137	-1.7	319357	0.211	0.215	5.607	5.608	4.76				
33	4-Chloro-3-methylphenol	47.621	-4.8	471862	0.312	0.328	6.143	6.146	4.19				
34	2-Methylnaphthalene	47.564	-4.9	1000451	0.661	0.695	6.326	6.330	4.37				
35	Acenaphthene-d10	40.000	0	789043	1	1	7.692	7.696	0				
36	Hexachlorocyclopentadiene	48.226	-3.5	207520	0.210	0.200	6.518	6.521	20.69	-0.0166	0.2319		0.9986
37	2,4,6-Trichlorophenol	45.840	-8.3	352234	0.357	0.390	6.690	6.689	10.09				
38	2,4,5-Trichlorophenol	54.794	9.6	403559	0.409	0.373	6.720	6.729	5.08				
39	2-Fluorobiphenyl												
40	2-Chloronaphthalene	49.782	-0.4	990494	1.004	1.009	6.953	6.953	3.08				
41	2-Nitroaniline	51.837	3.7	390435	0.396	0.382	7.105	7.105	13.06				
42	Dimethylphthalate	49.272	-1.5	1259528	1.277	1.296	7.378	7.381	1.65				
43	2,6-Dinitrotoluene	49.785	-0.4	295780	0.300	0.277	7.449	7.458	17.85	-0.0218	0.3187		0.9995
44	Acenaphthylene	50.655	1.3	1528547	1.550	1.530	7.500	7.503	2.61				
45	3-Nitroaniline	52.381	4.8	302788	0.307	0.293	7.672	7.676	10.07				
46	Acenaphthene	48.676	-2.6	939145	0.952	0.978	7.743	7.748	6.25				
47	2,4-Dinitrophenol	50.079	0.2	127931	0.130	0.114	7.813	7.816	57.72	-0.0294	0.1309	0.0177	0.9991
48	4-Nitrophenol	44.926	-10.1	138524	0.140	0.141	7.915	7.921	21.78	-0.0150	0.1697		0.9977
49	Dibenzofuran	48.720	-2.6	1484811	1.505	1.545	7.985	7.985	5.24				
50	2,4-Dinitrotoluene	49.657	-0.7	396952	0.402	0.370	7.996	8.002	18.20	-0.0317	0.4308		0.9993
51	2,3,4,6-Tetrachlorophenol	52.123	4.2	271370	0.275	0.264	8.158	8.156	14.56				
52	Diethylphthalate	48.832	-2.3	1223581	1.241	1.270	8.360	8.368	3.76				
53	Fluorene	50.521	1.0	1200219	1.217	1.204	8.461	8.464	5.00				
54	4-Chlorophenyl-phenylether	50.878	1.8	676214	0.686	0.674	8.481	8.484	7.78				
55	4-Nitroaniline	48.059	-3.9	279779	0.284	0.295	8.542	8.554	7.49				
56	4,6-Dinitro-2-methylphenol	50.273	0.5	214902	0.218	0.197	8.573	8.580	37.96	-0.0316	0.2184	0.0186	0.9998
57	N-Nitrosodiphenylamine	50.203	0.4	862073	0.874	0.871	8.664	8.668	4.52				
58	Azobenzene	51.406	2.8	1445056	1.465	1.425	8.704	8.710	2.71				
59	2,4,6-Tribromophenol												
60	Phenanthrene-d10	40.000	0	1249921	1	1	9.787	9.793	0				
61	4-Bromophenyl-phenylether	50.971	1.9	449753	0.288	0.282	9.170	9.179	2.27				
62	Hexachlorobenzene	50.407	0.8	543558	0.348	0.345	9.231	9.232	4.35				
63	Pentachlorophenol	48.422	-3.2	374193	0.239	0.224	9.514	9.522	21.19	-0.0212	0.2648		0.9996
64	Phenanthrene	50.203	0.4	1725460	1.104	1.100	9.828	9.832	5.86				
65	Anthracene	49.848	-0.3	1656244	1.060	1.063	9.899	9.905	6.15				
66	Carbazole	47.683	-4.6	1362165	0.872	0.914	10.142	10.146	9.93				
67	Di-n-butylphthalate	50.780	1.6	2140769	1.370	1.349	10.698	10.703	3.60				
68	Fluoranthene	49.647	-0.7	1706539	1.092	1.100	11.468	11.475	3.65				
69	Chrysene-d12	40.000	0	1081072	1	1	13.168	13.176	0				
70	Benzidine												
71	Pyrene	51.531	3.1	1739391	1.287	1.249	11.721	11.719	2.08				
72	Terphenyl-d14												
73	Butylbenzylphthalate	50.589	1.2	783870	0.580	0.573	12.510	12.515	9.77				
74	3,3'-Dichlorobenzidine	51.072	2.1	468203	0.346	0.339	13.148	13.155	8.72				
75	Benzo(a)anthracene	49.570	-0.9	1478715	1.094	1.104	13.158	13.155	2.96				
76	Chrysene	45.325	-9.3	1343895	0.994	1.097	13.209	13.212	3.52				
77	bis(2-Ethylhexyl)phthalate	52.418	4.8	1075776	0.796	0.759	13.249	13.257	12.14				
78	Perylene-d12	40.000	0	907224	1	1	14.869	14.870	0				
79	Di-n-octylphthalate	48.935	-2.1	1734044	1.529	1.406	14.079	14.083	20.83	-0.1414	1.6779		0.9989
80	Benzo(b)fluoranthene	47.161	-5.7	1336913	1.179	1.250	14.464	14.463	13.23				
81	Benzo(k)fluoranthene	52.842	5.7	1420556	1.253	1.185	14.494	14.496	12.16				
82	Benzo(a)pyrene	47.311	-5.4	1246374	1.099	1.162	14.808	14.813	1.99				
83	Indeno(1,2,3-cd)pyrene	48.600	-2.8	1248842	1.101	1.133	16.013	16.021	6.17				
84	Dibenzo(a,h)anthracene	49.207	-1.6	1034314	0.912	0.927	16.033	16.045	7.61				
85	Benzo(g,h,i)perylene	46.862	-6.3	974252	0.859	0.917	16.326	16.331	4.56				

3815 1/24/07

Data File : C:\HPCHEM\1\DATA\07A23\RAH059.D
Acq On : 23 Jan 2007 22:11
Sample : ISV41A23 1
Misc : 2ND SOURCE-50PPM
MS Integration Params: RTEINT.P

Vial : 12
Operator : SG
Inst : TO41
Multiplier : 1.00

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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-Dichlorobenzene-d4	40.000	40.000	0.0	97	0.00
2	T	N-Nitrosodimethylamine	50.000	49.064	1.9	98	-0.02
3	T	Pyridine	50.000	48.834	2.3	95	-0.05
4	S	2-Fluorophenol	50.000	0.000	100.0#	0	-2.77#
5	C	Phenol	50.000	50.049	-0.1	93	0.00
6	T	Aniline	50.000	44.682	10.6	97	0.00
7	T	Bis(2-chloroethyl)ether	50.000	51.493	-3.0	96	0.00
8	S	Phenol-d5	50.000	0.000	100.0#	0	-3.55#
9	T	2-Chlorophenol	50.000	48.510	3.0	94	0.00
10	T	1,3-Dichlorobenzene	50.000	49.492	1.0	93	0.00
11	C	1,4-Dichlorobenzene	50.000	51.492	-3.0	101	0.00
12	T	Benzyl alcohol	50.000	51.889	-3.8	98	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	0.000	100.0#	0	-4.11#
14	T	1,2-Dichlorobenzene	50.000	52.078	-4.2	100	0.00
15	T	2-Methylphenol	50.000	51.212	-2.4	95	0.00
16	T	Bis(2-chloroisopropyl)ether	50.000	50.462	-0.9	96	0.00
17	T	4-Methylphenol	50.000	50.933	-1.9	96	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	52.222	-4.4	99	0.00
19	T	Hexachloroethane	50.000	50.808	-1.6	97	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	99	0.00
21	S	Nitrobenzene-d5	50.000	0.000	100.0#	0	-4.56#
22	T	Nitrobenzene	50.000	49.439	1.1	95	0.00
23	T	Isophorone	50.000	48.750	2.5	94	0.00
24	C	2-Nitrophenol	50.000	46.553	6.9	96	0.00
25	T	2,4-Dimethylphenol	50.000	50.006	-0.0	93	0.00
26	T	bis(2-Chloroethoxy)methane	50.000	49.937	0.1	97	0.00
27	T	Benzoic Acid	50.000	46.344	7.3	96	0.00
28	C	2,4-Dichlorophenol	50.000	49.704	0.6	95	0.00
29	T	1,2,4-Trichlorobenzene	50.000	49.153	1.7	98	0.00
30	T	Naphthalene	50.000	49.031	1.9	97	0.00
31	T	4-Chloroaniline	50.000	49.183	1.6	96	0.00
32	C	Hexachlorobutadiene	50.000	49.137	1.7	96	0.00
33	C	4-Chloro-3-methylphenol	50.000	47.622	4.8	92	0.00
34	T	2-Methylnaphthalene	50.000	47.564	4.9	94	0.00
35	I	Acenaphthene-d10	40.000	40.000	0.0	96	0.00
36	P	Hexachlorocyclopentadiene	50.000	48.227	3.5	92	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\07A23\RAH059.D
Acq On : 23 Jan 2007 22:11
Sample : ISV41A23 1
Misc : 2ND SOURCE-50PPM
MS Integration Params: RTEINT.P

Vial: 12
Operator: SG
Inst : TO41
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
37	C	2,4,6-Trichlorophenol	50.000	45.841	8.3	80	0.00
38	T	2,4,5-Trichlorophenol	50.000	54.795	-9.6	106	0.00
39	S	2-Fluorobiphenyl	50.000	0.000	100.0#	0	-6.81#
40	T	2-Chloronaphthalene	50.000	49.782	0.4	95	0.00
41	T	2-Nitroaniline	50.000	51.837	-3.7	95	0.00
42	T	Dimethylphthalate	50.000	49.273	1.5	93	0.00
43	T	2,6-Dinitrotoluene	50.000	49.785	0.4	92	0.00
44	T	Acenaphthylene	50.000	50.656	-1.3	95	0.00
45	T	3-Nitroaniline	50.000	52.382	-4.8	98	0.00
46	C	Acenaphthene	50.000	48.677	2.6	93	0.00
47	P	2,4-Dinitrophenol	50.000	50.079	-0.2	102	0.00
48	P	4-Nitrophenol	50.000	44.926	10.1	91	0.00
49	T	Dibenzofuran	50.000	48.721	2.6	92	0.00
50	T	2,4-Dinitrotoluene	50.000	49.658	0.7	97	0.00
51	T	2,3,4,6-Tetrachlorophenol	50.000	52.123	-4.2	92	0.00
52	T	Diethylphthalate	50.000	48.832	2.3	91	0.00
53	T	Fluorene	50.000	50.521	-1.0	95	0.00
54	T	4-Chlorophenyl-phenylether	50.000	50.879	-1.8	97	0.00
55	T	4-Nitroaniline	50.000	48.059	3.9	93	0.00
56	T	4,6-Dinitro-2-methylphenol	50.000	50.273	-0.5	96	0.00
57	C	N-Nitrosodiphenylamine	50.000	50.203	-0.4	95	0.00
58	T	Azobenzene	50.000	51.406	-2.8	94	0.00
59	S	2,4,6-Tribromophenol	50.000	0.000	100.0#	0	-8.80#
60	I	Phenanthrene-d10	40.000	40.000	0.0	94	0.00
61	T	4-Bromophenyl-phenylether	50.000	50.971	-1.9	94	0.00
62	T	Hexachlorobenzene	50.000	50.408	-0.8	95	0.00
63	C	Pentachlorophenol	50.000	48.422	3.2	91	0.00
64	T	Phenanthrene	50.000	50.203	-0.4	93	0.00
65	T	Anthracene	50.000	49.848	0.3	93	0.00
66	T	Carbazole	50.000	47.683	4.6	96	0.00
67	T	Di-n-butylphthalate	50.000	50.780	-1.6	92	0.00
68	C	Fluoranthene	50.000	49.648	0.7	90	0.00
69	I	Chrysene-d12	40.000	40.000	0.0	92	0.00
70	T	Benzidine	-1.000	0.000	0.0	0	0.00
71	T	Pyrene	50.000	51.532	-3.1	94	0.00
72	S	Terphenyl-d14	50.000	0.000	100.0#	0	-11.91#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07A23\RAH059.D
Acq On : 23 Jan 2007 22:11
Sample : ISV41A23 1
Misc : 2ND SOURCE-50PPM
MS Integration Params: RTEINT.P

Vial: 12
Operator: SG
Inst : TO41
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
73	T	Butylbenzylphthalate	50.000	50.589	-1.2	89	0.00
74	T	3,3'-Dichlorobenzidine	50.000	51.073	-2.1	95	0.00
75	T	Benzo(a)anthracene	50.000	49.571	0.9	92	0.01
76	T	Chrysene	50.000	45.325	9.3	84	0.00
77	T	bis(2-Ethylhexyl)phthalate	50.000	52.418	-4.8	89	0.00
78	I	Perylene-d12	40.000	40.000	0.0	91	0.00
79	C	Di-n-octylphthalate	50.000	48.935	2.1	93	0.00
80	T	Benzo(b)fluoranthene	50.000	47.161	5.7	76	0.00
81	T	Benzo(k)fluoranthene	50.000	52.842	-5.7	106	0.00
82	C	Benzo(a)pyrene	50.000	47.312	5.4	87	0.00
83	T	Indeno(1,2,3-cd)pyrene	50.000	48.601	2.8	83	0.00
84	T	Dibenzo(a,h)anthracene	50.000	49.207	1.6	84	0.00
85	T	Benzo(g,h,i)perylene	50.000	46.862	6.3	81	0.00

VMO 1/25/07

DAILY CALIBRATIONS

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RBH269
Instrument ID: T-041

Project: ALAMEDA POINT, CTO 133
SDG No.: 07B171
DFTPP Injection Date: 02/23/07
DFTPP Injection Time: 10:38

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.76
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	55.06
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	41.19
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.10
275	10.0 - 30.0% of mass 198	25.23
365	Greater than 1.00% of mass 198	1.91
441	Present, but less than mass 443	12.00
442	Greater than 40.0% of mass 198	77.41
443	17.0 - 23.0% of mass 442	15.17(19.6)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD050	CSV41A2326	RBH271	02/23/07	12:20
2	MBLK1W	SVB023WB	RBH276	02/23/07	15:58
3	LCS1W	SVB023WL	RBH277	02/23/07	16:22
4	LCD1W	SVB023WC	RBH278	02/23/07	16:47
5	133-5-3-WW(2/15/2007)	B171-01	RBH279	02/23/07	17:29

FORM V SV OLM02.0

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH054
Instrument ID: T-041

Project:ALAMEDA POINT, CTO 133
SDG No.: 07B171
Date Analyzed: 01/23/07
Time Analyzed: 20:07

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	328424	3.95	1222259	5.42	824339	7.69
	UPPER LIMIT	656848	4.45	2444518	5.92	1648678	8.19
	LOWER LIMIT	164212	3.45	611130	4.92	412170	7.19
	SAMPLE ID						
1	SSTD050	317197	3.95	1141648	5.43	679201	7.71
2	MBLK1W	252010	3.95	887427	5.43	547262	7.70
3	LCS1W	269099	3.95	970732	5.43	554843	7.71
4	LCD1W	256959	3.95	888886	5.42	511803	7.69
5	133-5-3-WW(2/15/2007)	358842	3.95	1301669	5.42	825256	7.70

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

FORM VIII SV-1

OLM02.0

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAH054
Instrument ID: T-041

Project:ALAMEDA POINT, CTO 133
SDG No.: 07B171
Date Analyzed: 01/23/07
Time Analyzed: 20:07

	IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
12 HOUR STD	1333756	9.79	1174435	13.18	994566	14.87
UPPER LIMIT	2667512	10.29	2348870	13.68	1989132	15.37
LOWER LIMIT	666878	9.29	587218	12.68	497283	14.37
SAMPLE ID						
1 SSTD050	1030480	9.81	937027	13.20	814356	14.90
2 MBLK1W	819230	9.79	745923	13.18	736263	14.88
3 LCS1W	876723	9.80	764202	13.19	704629	14.89
4 LCD1W	787906	9.80	660724	13.19	578409	14.88
5 133-5-3-WW(2/15/2007)	1391953	9.80	1361581	13.18	1377875	14.89

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07B23\RBH271.D
Acq On : 23 Feb 2007 12:20
Sample : CSV41A2326
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: SG
Inst : TO41
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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-Dichlorobenzene-d4	40.000	40.000	0.0	97	0.00
2	T	N-Nitrosodimethylamine	50.000	53.072	-6.1	105	0.00
3	T	Pyridine	50.000	54.725	-9.5	106	-0.01
4	S	2-Fluorophenol	50.000	54.391	-8.8	104	0.02
5	C	Phenol	50.000	50.808	-1.6	94	0.02
6	T	Aniline	50.000	49.060	1.9	106	0.01
7	T	Bis(2-chloroethyl)ether	50.000	62.241	-24.5#	115	0.01
8	S	Phenol-d5	50.000	52.910	-5.8	100	0.03
9	T	2-Chlorophenol	50.000	51.852	-3.7	100	0.01
10	T	1,3-Dichlorobenzene	50.000	52.793	-5.6	98	0.00
11	C	1,4-Dichlorobenzene	50.000	47.102	5.8	92	0.01
12	T	Benzyl alcohol	50.000	51.135	-2.3	96	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	49.524	1.0	97	0.00
14	T	1,2-Dichlorobenzene	50.000	51.315	-2.6	98	0.01
15	T	2-Methylphenol	50.000	51.141	-2.3	94	0.03
16	T	Bis(2-chloroisopropyl)ether	50.000	50.868	-1.7	97	0.00
17	T	4-Methylphenol	50.000	49.929	0.1	93	0.02
18	P	N-Nitroso-di-n-propylamine	50.000	48.855	2.3	92	0.01
19	T	Hexachloroethane	50.000	52.280	-4.6	99	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	93	0.01
21	S	Nitrobenzene-d5	50.000	55.063	-10.1	99	0.00
22	T	Nitrobenzene	50.000	53.280	-6.6	97	0.01
23	T	Isophorone	50.000	49.740	0.5	90	0.00
24	C	2-Nitrophenol	50.000	51.576	-3.2	101	0.01
25	T	2,4-Dimethylphenol	50.000	50.912	-1.8	89	0.01
26	T	bis(2-Chloroethoxy)methane	50.000	48.006	4.0	88	0.01
27	T	Benzoic Acid	50.000	40.591	18.8	77	0.02
28	C	2,4-Dichlorophenol	50.000	49.449	1.1	89	0.02
29	T	1,2,4-Trichlorobenzene	50.000	48.348	3.3	90	0.01
30	T	Naphthalene	50.000	50.354	-0.7	94	0.01
31	T	4-Chloroaniline	50.000	43.976	12.0	81	0.02
32	C	Hexachlorobutadiene	50.000	48.063	3.9	89	0.01
33	C	4-Chloro-3-methylphenol	50.000	48.799	2.4	89	0.03
34	T	2-Methylnaphthalene	50.000	47.481	5.0	88	0.01
35	I	Acenaphthene-d10	40.000	40.000	0.0	82	0.02
36	P	Hexachlorocyclopentadiene	50.000	35.719	28.6#	57	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07B23\RBH271.D Vial: 3
Acq On : 23 Feb 2007 12:20 Operator: SG
Sample : CSV41A2326 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
37	C	2,4,6-Trichlorophenol	50.000	50.022	-0.0	75	0.02
38	T	2,4,5-Trichlorophenol	50.000	54.670	-9.3	91	0.03
39	S	2-Fluorobiphenyl	50.000	52.873	-5.7	85	0.01
40	T	2-Chloronaphthalene	50.000	51.247	-2.5	84	0.01
41	T	2-Nitroaniline	50.000	57.989	-16.0	91	0.02
42	T	Dimethylphthalate	50.000	49.014	2.0	80	0.01
43	T	2,6-Dinitrotoluene	50.000	50.825	-1.7	81	0.02
44	T	Acenaphthylene	50.000	51.330	-2.7	83	0.01
45	T	3-Nitroaniline	50.000	51.880	-3.8	83	0.02
46	C	Acenaphthene	50.000	50.570	-1.1	84	0.01
47	P	2,4-Dinitrophenol	50.000	50.262	-0.5	88	0.03
48	P	4-Nitrophenol	50.000	41.849	16.3	73	0.06
49	T	Dibenzofuran	50.000	49.822	0.4	81	0.01
50	T	2,4-Dinitrotoluene	50.000	50.634	-1.3	86	0.02
51	T	2,3,4,6-Tetrachlorophenol	50.000	49.498	1.0	75	0.02
52	T	Diethylphthalate	50.000	48.750	2.5	78	0.01
53	T	Fluorene	50.000	49.829	0.3	81	0.01
54	T	4-Chlorophenyl-phenylether	50.000	48.815	2.4	80	0.01
55	T	4-Nitroaniline	50.000	50.244	-0.5	84	0.01
56	T	4,6-Dinitro-2-methylphenol	50.000	55.698	-11.4	94	0.02
57	C	N-Nitrosodiphenylamine	50.000	48.429	3.1	79	0.01
58	T	Azobenzene	50.000	51.725	-3.5	82	0.01
59	S	2,4,6-Tribromophenol	50.000	47.675	4.7	73	0.02
60	I	Phenanthrene-d10	40.000	40.000	0.0	77	0.02
61	T	4-Bromophenyl-phenylether	50.000	51.061	-2.1	78	0.01
62	T	Hexachlorobenzene	50.000	49.592	0.8	77	0.02
63	C	Pentachlorophenol	50.000	41.497	17.0	63	0.04
64	T	Phenanthrene	50.000	51.521	-3.0	79	0.02
65	T	Anthracene	50.000	52.238	-4.5	80	0.02
66	T	Carbazole	50.000	56.556	-13.1	94	0.03
67	T	Di-n-butylphthalate	50.000	51.069	-2.1	76	0.01
68	C	Fluoranthene	50.000	50.726	-1.5	76	0.01
69	I	Chrysene-d12	40.000	40.000	0.0	80	0.02
70	T	Benzidine	-1.000	0.000	0.0	0	0.02
71	T	Pyrene	50.000	50.195	-0.4	80	0.01
72	S	Terphenyl-d14	50.000	49.051	1.9	76	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07B23\RBH271.D Vial: 3
Acq On : 23 Feb 2007 12:20 Operator: SG
Sample : CSV41A2326 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
73	T	Butylbenzylphthalate	50.000	52.996	-6.0	81	0.02
74	T	3,3'-Dichlorobenzidine	50.000	48.648	2.7	78	0.03
75	T	Benzo(a)anthracene	50.000	49.410	1.2	79	0.03
76	T	Chrysene	50.000	47.222	5.6	76	0.02
77	T	bis(2-Ethylhexyl)phthalate	50.000	54.673	-9.3	80	0.01
78	I	Perylene-d12	40.000	40.000	0.0	82	0.03
79	C	Di-n-octylphthalate	50.000	50.140	-0.3	86	0.01
80	T	Benzo(b)fluoranthene	50.000	54.494	-9.0	79	0.03
81	T	Benzo(k)fluoranthene	50.000	46.167	7.7	83	0.02
82	C	Benzo(a)pyrene	50.000	51.027	-2.1	85	0.04
83	T	Indeno(1,2,3-cd)pyrene	50.000	53.765	-7.5	82	0.05
84	T	Dibenzo(a,h)anthracene	50.000	55.151	-10.3	84	0.04
85	T	Benzo(g,h,i)perylene	50.000	53.623	-7.2	83	0.06

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07B23\RBH271.D Vial: 3
Acq On : 23 Feb 2007 12:20 Operator: SG
Sample : CSV41A2326 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2	T	N-Nitrosodimethylamine	0.847	0.899	-6.1	105	0.00
3	T	Pyridine	1.401	1.533	-9.4	106	-0.01
4	S	2-Fluorophenol	1.109	1.206	-8.7	104	0.02
5	C	Phenol	1.668	1.695	-1.6	94	0.02
6	T	Aniline	1.580	1.550	1.9	106	0.01
7	T	Bis(2-chloroethyl)ether	1.663	2.070	-24.5#	115	0.01
8	S	Phenol-d5	1.455	1.540	-5.8	100	0.03
9	T	2-Chlorophenol	1.285	1.333	-3.7	100	0.01
10	T	1,3-Dichlorobenzene	1.402	1.481	-5.6	98	0.00
11	C	1,4-Dichlorobenzene	1.321	1.244	5.8	92	0.01
12	T	Benzyl alcohol	0.864	0.884	-2.3	96	0.00
13	S	1,2-Dichlorobenzene-d4	0.883	0.875	0.9	97	0.00
14	T	1,2-Dichlorobenzene	1.292	1.326	-2.6	98	0.01
15	T	2-Methylphenol	1.020	1.043	-2.3	94	0.03
16	T	Bis(2-chloroisopropyl)ether	3.042	3.095	-1.7	97	0.00
17	T	4-Methylphenol	1.464	1.462	0.1	93	0.02
18	P	N-Nitroso-di-n-propylamine	1.096	1.071	2.3	92	0.01
19	T	Hexachloroethane	0.535	0.560	-4.7	99	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	93	0.01
21	S	Nitrobenzene-d5	0.354	0.390	-10.2	99	0.00
22	T	Nitrobenzene	0.371	0.396	-6.7	97	0.01
23	T	Isophorone	0.689	0.685	0.6	90	0.00
24	C	2-Nitrophenol	0.180	0.206	-14.4	101	0.01
25	T	2,4-Dimethylphenol	0.317	0.323	-1.9	89	0.01
26	T	bis(2-Chloroethoxy)methane	0.462	0.444	3.9	88	0.01
27	T	Benzoic Acid	0.138	0.135	2.2	77	0.02
28	C	2,4-Dichlorophenol	0.313	0.309	1.3	89	0.02
29	T	1,2,4-Trichlorobenzene	0.341	0.330	3.2	90	0.01
30	T	Naphthalene	0.953	0.960	-0.7	94	0.01
31	T	4-Chloroaniline	0.446	0.392	12.1	81	0.02
32	C	Hexachlorobutadiene	0.215	0.207	3.7	89	0.01
33	C	4-Chloro-3-methylphenol	0.328	0.320	2.4	89	0.03
34	T	2-Methylnaphthalene	0.695	0.660	5.0	88	0.01
35	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.02
36	P	Hexachlorocyclopentadiene	0.200	0.152	24.0#	57	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07B23\RBH271.D Vial: 3
Acq On : 23 Feb 2007 12:20 Operator: SG
Sample : CSV41A2326 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
37	C	2,4,6-Trichlorophenol	0.390	0.390	0.0	75	0.02
38	T	2,4,5-Trichlorophenol	0.373	0.408	-9.4	91	0.03
39	S	2-Fluorobiphenyl	1.181	1.248	-5.7	85	0.01
40	T	2-Chloronaphthalene	1.009	1.034	-2.5	84	0.01
41	T	2-Nitroaniline	0.382	0.443	-16.0	91	0.02
42	T	Dimethylphthalate	1.296	1.270	2.0	80	0.01
43	T	2,6-Dinitrotoluene	0.277	0.307	-10.8	81	0.02
44	T	Acenaphthylene	1.530	1.570	-2.6	83	0.01
45	T	3-Nitroaniline	0.293	0.304	-3.8	83	0.02
46	C	Acenaphthene	0.978	0.989	-1.1	84	0.01
47	P	2,4-Dinitrophenol	0.114	0.130	-14.0	88	0.03
48	P	4-Nitrophenol	0.141	0.130	7.8	73	0.06
49	T	Dibenzofuran	1.545	1.539	0.4	81	0.01
50	T	2,4-Dinitrotoluene	0.370	0.411	-11.1	86	0.02
51	T	2,3,4,6-Tetrachlorophenol	0.264	0.261	1.1	75	0.02
52	T	Diethylphthalate	1.270	1.238	2.5	78	0.01
53	T	Fluorene	1.204	1.200	0.3	81	0.01
54	T	4-Chlorophenyl-phenylether	0.674	0.658	2.4	80	0.01
55	T	4-Nitroaniline	0.295	0.297	-0.7	84	0.01
56	T	4,6-Dinitro-2-methylphenol	0.197	0.247	-25.4#	94	0.02
57	C	N-Nitrosodiphenylamine	0.871	0.843	3.2	79	0.01
58	T	Azobenzene	1.425	1.474	-3.4	82	0.01
59	S	2,4,6-Tribromophenol	0.261	0.249	4.6	73	0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	77	0.02
61	T	4-Bromophenyl-phenylether	0.282	0.288	-2.1	78	0.01
62	T	Hexachlorobenzene	0.345	0.342	0.9	77	0.02
63	C	Pentachlorophenol	0.224	0.203	9.4	63	0.04
64	T	Phenanthrene	1.100	1.133	-3.0	79	0.02
65	T	Anthracene	1.063	1.111	-4.5	80	0.02
66	T	Carbazole	0.914	1.034	-13.1	94	0.03
67	T	Di-n-butylphthalate	1.349	1.378	-2.1	76	0.01
68	C	Fluoranthene	1.100	1.116	-1.5	76	0.01
69	I	Chrysene-d12	1.000	1.000	0.0	80	0.02
70	T	Benzidine	0.000	0.000#	0.0	0#	0.02
71	T	Pyrene	1.249	1.254	-0.4	80	0.01
72	S	Terphenyl-d14	0.976	0.958	1.8	76	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\07B23\RBH271.D Vial: 3
Acq On : 23 Feb 2007 12:20 Operator: SG
Sample : CSV41A2326 Inst : TO41
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV41A23.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jan 24 14:11:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)
73	T	Butylbenzylphthalate	0.573	0.608	-6.1	81	0.02
74	T	3,3'-Dichlorobenzidine	0.339	0.330	2.7	78	0.03
75	T	Benzo(a)anthracene	1.104	1.091	1.2	79	0.03
76	T	Chrysene	1.097	1.036	5.6	76	0.02
77	T	bis(2-Ethylhexyl)phthalate	0.759	0.830	-9.4	80	0.01
78	I	Perylene-d12	1.000	1.000	0.0	82	0.03
79	C	Di-n-octylphthalate	1.406	1.570	-11.7	86	0.01
80	T	Benzo(b)fluoranthene	1.250	1.362	-9.0	79	0.03
81	T	Benzo(k)fluoranthene	1.185	1.094	7.7	83	0.02
82	C	Benzo(a)pyrene	1.162	1.185	-2.0	85	0.04
83	T	Indeno(1,2,3-cd)pyrene	1.133	1.218	-7.5	82	0.05
84	T	Dibenzo(a,h)anthracene	0.927	1.022	-10.2	84	0.04
85	T	Benzo(g,h,i)perylene	0.917	0.983	-7.2	83	0.06

ANALYTICAL LOG

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 2 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A41- 014

Method File: SV41A23 Tune File: DFTPP Start Date/Time: 1/23/07 17:10 End Date/Time: 1/24/07 1:54

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RAH 048	IB41A23 01				
	049	DFT41A2301				
NA	050	SV 41A23 1	NA			5ppm, 8270c
	051	2				10ppm
	052	3				20ppm
	053	4				40ppm
	054	5				50ppm
	055	6				80ppm
	056	7				100ppm
	057	8				120ppm
	058	9				160ppm
	059	ISV41A23 1				2nd Source-5ppm
	060	SS2C-05-3-3				50ppm
NA	061	SV41A23A 1	NA			5 ppm, benzidine
	062	2				10ppm
	063	3				50ppm
	064	4				100ppm
	065	5				120ppm
	066	6				160ppm
	067	ISV41A23A 1				2nd Source-50ppm
	068	ISV41A23A 2				ave Recvd.

SA 1/23/07

Instrument No:	41

INITIAL CALIBRATION REFERENCE

Date	1/23/07
ICAL ID	SV41A23 - SV41A23A (8270) - (benzidine)

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-2-3	50
DCC	SS2C-05-4-1	50
INT. STD.	SS2B-05-4-1	2000
ICV	SS2C-05-3-1	50

Solvent	ID
CH_2Cl_2	46110

DATA FILE	07A23

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T041	

Comments:
benzidine, DCC (SS2C-05-2-1) 50 ppm
benzidine, ICV (SS2C-05-2-2) 50 ppm

Analyzed By: SC
Date Disposed: N/A
Disposed by: NA

This page is checked during data review.

ANALYTICAL BATCH SV41A23 5

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

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A41-015

Method File: SV41A23 Tune File: DFTPP Start Date/Time: 2/23/07 10:38 End Date/Time: 2/23/07 20:24

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RBH 268	IB41A23 25				
	269	DFT41A23 25				
	270	CSV41A23 25				Reanalyze, leak.
	271	CSV41A23 26				
SVB027S	272	SVB027 SB	NA	X		
	273	SL				
	274	SC				
	275	07B236-01				
SVB023W	276	SVB023WB	NA		X	
	277	WL				
	278	WC				
	279	07B171-01				
SVB025S	280	SVB025SB	NA	X		low T's. injection error.
	281	SL				
	282	07B223-06				
	283	-19				
	284	-01				
	285	-01M				
	286	-01S				

SU 2/23/07

ANALYTICAL BATCH CSV41A2326

Instrument No:	41

INITIAL CALIBRATION REFERENCE

Date	1/23/07
ICAL ID	SV41A23 - SV41A23A

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-2-3	50
DCC	SS2C-05-4-1	50
INT. STD.	SS2B-05-4-1	2000
benzidine	SS2C-05-2-1	50

Solvent	ID	
CH_2Cl_2	46331	

DATA FILE	07B23

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T041	

Comments:

Analyzed By: SU

Date Disposed: 2/24/07

Disposed by: SU

This page is checked during data review.

EXTRACTION LOG

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR SEMIVOLATILES

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 2 ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-034

Matrix: WATER Init.Start Date/Time: 2/20/07 ~~14:30~~ 16:30 End Date/Time: 2/21/07 10:30 Final Start Date/Time: 2/21/07 11:30 End Date/Time: 2/22/07 5:30

PREPARATION BATCH: * SVB023W

Sample Prep ID	Lab Sample ID 2/20/07 JM	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVB023 - WB	N/A	1000	-	1		
*02	- WL		1000	-	1		
*03	- WC		1000	-	1		
*04	07B156 - 06		920	6	1		lots of soil/sediments
*05	- 07		940	6	1		
*06	07B171 - 01		1060	6	1		Yellow soil
*07	07B174 - 01		1020	6	1		
*08	07B177 - 01		1030	5	1		
*09							
*10							
*11							
*12							
*13							
*14							
*15							
*16							
*17							
*18							
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

= 2/21/07 JM

Standards	ID	Amount Added (ml)
Surrogate	SS2A-05-5	1.0
LCS/MS (FULL LIST)	SS2A-04-177	0.4

Reagent	Lot# / ID
CH_2Cl_2	46331
Na_2SO_4	46080619
H_2SO_4	46137
NaOH	SP1B-01-387
Silica Sand	

TUNING

Sonicator #	Reading
	N/A

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3		
4		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JM Witnessed By: VP

Standard Added By: JM

Checked By: ML

Extract Received by: GA 2/22/07 Location: SE03-7

Disposed by: Disposed on:

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

3033

LABORATORY REPORT FOR

SHAW E&I

ALAMEDA POINT, CTO 133

METHOD 1664 STG-HEM
OIL & GREASE

SDG#: 07B171

5000

CASE NARRATIVE

CLIENT: **SHAW E&I**

PROJECT: **ALAMEDA POINT, CTO 133**

SDG: **07B171**

METHOD 1664 STG-HEM
OIL & GREASE

One (1) water sample was received on 02/16//07 for Oil and Grease analysis by Method 1664.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Matrix Spike/Matrix Spike Duplicate**

   MS/MSD sample was not designated in this SDG.

5. **Sample Analysis**

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

METHOD 1664 STG-HEM
OIL & GREASE

Client : SHAW E&I
Project : ALAMEDA POINT, CTO 133
Batch No. : 07B171

Matrix : WATER
Instrument ID : I40706360

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	TRB009WB	ND	1	NA	5.00	1.40	02/23/0718:38	02/22/0717:41	TRB009-01	NA	TRB009W	NA	02/22/07
LCS1W	TRB009WL	19.2	1	NA	5.00	1.40	02/23/0718:39	02/22/0717:41	TRB009-02	NA	TRB009W	NA	02/22/07
LCD1W	TRB009WC	18.2	1	NA	5.00	1.40	02/23/0718:39	02/22/0717:41	TRB009-03	NA	TRB009W	NA	02/22/07
133-5-3-WW(2/15/2007)	B171-01	ND	1	NA	5.00	1.40	02/23/0718:40	02/22/0717:41	TRB009-04	NA	TRB009W	02/15/07	02/16/07

5002

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: ALAMEDA POINT, CTO 133
METHOD: METHOD 1664. STG-HEM
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 078171
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: TRB009WL/C

DATE RECEIVED: 02/22/07
DATE EXTRACTED: 02/22/07 17:41
DATE ANALYZED: 02/23/07 18:39/18:39

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 %	RPD LIMIT %
Oil & Grease	ND	20.0	19.2	96	20.0	18.2	91	5	64-132	24

ANALYSIS LOG
for
OIL GREASE

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

Comments:

Book #: AOG-008 ~~AGV-021~~ SS 2/22/7

Balance ID: ☑ 40706360

Analytical Batch: TRB009W

SOP #	Rev. #
☑ EMAX-1664	3
☐ EMAX-413.1	2
☐ EMAX-	

STANDARDS ID	CONC. (mg/L)
LCS 5536-04-27-3	8000

Analyzed By: SS

Date: 2/26/07

OIL & GREASE ANALYSIS

Analytical Batch: TRB009W Start Date/Time: ~~02/26/07~~ ~~10:08~~ 02/22/07 17:41 SS 2/26/7 Page: 26

Instrument ID: 40706360 End Date/Time: 02/23/07 18:40 Book#: OG-008

DATA FILE ID	Sample ID	SGT	Wt. of Dish (g)	Dry Wt + Dish (g)	Oil & Grease (mg)	Sample Amount	Unit	Result	
TRB009W01	TRB009WB	YES	16.0283	16.0286	0.3	1000	ml	ND	mg/L
TRB009W02	TRB009WL	YES	16.3131	16.3323	19.2	1000	ml	19.2	mg/L
TRB009W03	TRB009WC	YES	16.3327	16.3509	18.2	1000	ml	18.2	mg/L
TRB009W04	07B171-01	YES	16.305	16.3051	0.1	1050	ml	ND	mg/L
TRB009W05	PAR-10	YES	16.6243	16.664	39.7	5	ml	39.7	mg/L

Comments

Initial Reading by: SS

Final Reading by: SS

Reviewed by: ML

RAW DATA

OIL & GREASE ANALYSIS

Analytical Batch: TRB009W SOP: EMAX-1664 Rev.3 Instrument ID: 40706360 Book#: OG-008

02/22/07 SS 2/26/7

DATA FILE ID	Sample ID	Sample Amount	Unit	SGT	Dish #	Dish (g)	Date	Time	1st Dry Weight + Dish (g)	Date	Time	2nd Dry Weight + Dish (g)	Date	Time	3rd Dry Weight + Dish (g)	Date	Time	Difference of last two reading (<0.01g)
TRB009W01	TRB009WB	1000	ml	YES	1	16.0283	02/26/07	10:08:13	16.0286	02/23/07	15:25:49	16.0286	02/23/07	18:38:38	16.0286	02/23/07	18:38:41	0.000
TRB009W02	TRB009WL	1000	ml	YES	2	16.3131	02/26/07	10:08:36	16.3328	02/23/07	15:26:18	16.3323	02/23/07	18:39:09	16.3323	02/23/07	18:39:04	0.000
TRB009W03	TRB009WC	1000	ml	YES	3	16.3327	02/26/07	10:08:59	16.3513	02/23/07	15:26:40	16.3509	02/23/07	18:39:34	16.3509	02/23/07	18:39:36	0.000
TRB009W04	07B171-01	1050	ml	YES	4	16.305	02/26/07	10:09:21	16.3056	02/23/07	15:27:02	16.3051	02/23/07	18:40:12	16.3051	02/23/07	18:40:15	0.000
TRB009W05	PAR-10	5	ml	YES	5	16.6243	02/26/07	10:09:43	16.6645	02/23/07	15:27:23	16.664	02/23/07	18:40:44	16.664	02/23/07	18:40:39	0.000

Beginning Balance Check

Std. Weight (g)	Balance Rdg (g/)	Date	Time	Comments
0.002	0.002	02/22/07	17:40:07	PASSED
1	1	02/22/07	17:40:36	PASSED

Ending Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/26/07	11:05:21	PASSED
1	1	02/26/07	11:05:32	PASSED

Beginning Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/23/07	15:24:27	PASSED
1	1	02/23/07	15:24:58	PASSED

Ending Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/23/07	15:29:22	PASSED
1	1	02/23/07	15:29:51	PASSED

Comments

Initial Reading by: SS SS

Final Reading by: SS SS

Reviewed by: ML

5985

QUALITY CONTROL REPORT
OIL & GREASE ANALYSIS

Analytical Batch: TRB009W

Page: 26

Book#: OG-008

ANALYTICAL STANDARDS	Expected Value	METHOD REQUIREMENT HEM	SGT-HEM
Precision & Recovery /QCS	40 mg	40±1 mg	20±1 mg
On-going Precision & Recovery/LCS	20 mg/L	%Rec.: 78-114% RPD : 18%	%Rec.: 64-132% RPD : 24%
Lab Fortified Matrix/MS	20 mg/L	%Rec.: 78-114% RPD : 18%	%Rec.: 64-132% RPD : 24%

Precision & Recovery /QCS			Expected Value	Difference	COMMENTS
PAR-10	39.7	mg	40 mg	0.3	Passed

On-going Precision & Recovery/LCS			Expected Value	RPD/% Rec.	COMMENTS
TRB009WB	ND	mg/L	0 mg/L	5%	RPD Passed
TRB009WL	19.2	mg/L	20 mg/L	96%	%Rec. Passed
TRB009WC	18.2	mg/L	20 mg/L	91%	%Rec. Passed

Sample Duplicate			RPD/% Rec.	COMMENTS

Lab Fortified Matrix/MS			Expected Value	RPD/% Rec.	COMMENTS
			0		
			20 mg/L		
			20 mg/L		

Comments: WATER

MDL 1.4 mg/L

RL 5 mg/L

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/22/07	17:40:07	PASSED
1	1	02/22/07	17:40:36	PASSED

Ending Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/22/07 ~~02/26/07~~	11:05:21	PASSED
1	1	02/22/07 ~~02/26/07~~	11:05:32	PASSED

Beginning Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/23/07	15:24:27	PASSED
1	1	02/23/07	15:24:58	PASSED

Ending Balance Check

Std. Weight (g)	Balance Rdg. (g/)	Date	Time	Comments
0.002	0.002	02/23/07	15:29:22	PASSED
1	1	02/23/07	15:29:51	PASSED

Analyzed by: SS

Reviewed by: ML

Date: 2/26/07

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